BW – 38

PERMIT **APPLICATIONS**, RENEWALS, & MODS (1 of 2)2018

	Cash Remitta	nce Report (CRR)	
	Energy, Minerals & Na CASH REMITTA	Appendix Appendix NCE REPORT (CRR)	x 8-14 revised 11/27/01 * *
OLD	Location Name ① - Environment	Location Code ② 0140	R 0 0
oday's Date:	2 5 DNTH DAY	3 20 <u>18</u>	6 H C
Collection Period:	// th	rough //(4)	с- *
Cost Center 5	Revenue Code	Receipt Amount Colle	ected Amount ®
0740		1700.00	
Total	+	20000	•
Total		Ψιστισσ	
		0	
Over/Short Amount	nt \$	(1)	
Over/Short Amoun	nt \$ mount	(1) (1)	
Over/Short Amoun	nt \$ mount c Deverges 13	1) Signature: Lorreire De	12 Kerge 13
Over/Short Amoun CRR Deposit A Print Name: Print Name: Distribution: White and Yello Pink copy retain	nt \$ mount c Deverges 13 13 w copy to Accounts Receivable-ASD. ned at CRR submitting location.	1) Signature: De Signature:	12 Kuze 13 13
Over/Short Amoun CRR Deposit A Print Name: Print Name: Distribution: White and Yello Pink copy retain Official Use Only Completed by the Access	nt \$ mount c Deverges 13 13 w copy to Accounts Receivable-ASD. red at CRR submitting location.	(1) Signature: De Signature: Date Received:	12 Kuze 13 13
Over/Short Amoun CRR Deposit A Print Name: Print Name: Distribution: White and Yello Pink copy retain Official Use Only Completed by the Acco Notes:	nt \$ mount c Deverges 13 (13) w copy to Accounts Receivable-ASD. hed at CRR submitting location.	(1) Signature: De Signature: Date Received:	12 Kuze 13 13
Over/Short Amoun CRR Deposit A Print Name: Print Name: Distribution: White and Yello Pink copy retain Official Use Only Completed by the Acco Notes:	nt \$ mount c Deverges 13 13 w copy to Accounts Receivable-ASD. red at CRR submitting location.	(1) Signature: Date Received: Date Received: Amount Received:	12 Kuze 13 (13
Over/Short Amoun CRR Deposit A Print Name: Print Name: Distribution: White and Yello Pink copy retain Official Use Only Completed by the Acco Notes: State Treasurer Deposit	nt \$ mount C Deverges (3) (3) w copy to Accounts Receivable-ASD. hed at CRR submitting location. bunts Receivable it Number:	(1) Signature:	12 Kuze (3 (3)

...

Llano Brine, LLC PO Box 250 Lovington, NM 88260		Valley Bank of 217 W Se Roswell, NM 95-312/1	Commerce cond 1 88201 122	1539 11/26/2018
PAYTOTHE Water Quality Management Fund One Thousand Seven Hundred and 00/100***** Water Quality Management Fund New Mexico Oil Conservation Division 1220 South St Francis Drive Santa Fe, New Mexico 87505 MEMO PERMIT FEE	×*************************************		Signature	**1,700.00 *********************************
Liano Brine, LLC Water Quality Management Fund Date Type Reference 11/26/2018 Bill BW-038	Original Amt. 1,700.00	Balance Due 1,700.00	11/26/2018 Discount Check Amount	1539 Payment 1,700.00 1,700.00

Checking Account - V PERMIT FEE

1,700.00

Llano Brine, LLC

ACKNOWLEDGEMENT OF RECEIPT OF CHECK/CASH

4

I hereby acknowledge receipt of Check No	1539	dated 11/26/2018
or cash received on 12/05/2018	in the amount	of \$ 1,700.00
from Llans Brine, LLC		
for parmit Tee BW-038		
Submitted by: Carl Chavez	Da	ate: 12/5/2018
Submitted to ASD by: Lorraine De	Nargas Da	nte: 12/5/2018
Received in ASD by:	Da	ite:
Filing Fee New	Facility:	Renewal:
Modification Othe	* x permit Fee	
Organization Code <u>521.07</u>	Applicable FY	119
To be deposited in the Water Quality Man	agement Fund.	
Full Payment	or Annual Incre	ment

IPT LOG	DEPOSITED BY:												
CHECK RECE	D'ATE DEPOSITEI								Amount				0
FICE DAILY	AMOUNT	1,705.00					1,700.00		Sub Acct				232902900
E FIELD OF	PROGRAM ACCOUNT CODE							AL SHEET	Share Acct	496402	496402	496402	
LBUQUERQUI	CHECK/MONEY ORDER#	1539						E TRANSMITT	Dept.	Z3200	28501	Z2600	232900
TMENT - A	DATE OF CHECK	11/26/18			•			REVENU	Fund	34000	40000	99100	34100
CO ENVIRONMENT DEPAR	NAME ON CHECK	Hano Brine, LLC							Description	Liquid Waste	Water Recreation Facilities	Food Permit Fees	OTHER
VEW MEXI	WALK- IN MAIL	*											
	DATE	12/5/18					TOTAL						

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: CarlJ.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. November 7, 2018 Page 2

Sincerely, Heat OCD Director

HR/cc

Enclosure: Discharge Permit BW-38

3

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

Llano Disposal, LCC State '27' Brine Supply Well No. 1

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; 20.6.2.51011 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; 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.

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.

Llano Disposal, LCC State '27' Brine Supply Well No. 1

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 twentyfour (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.

Llano Disposal, LCC State '27' Brine Supply Well No. 1

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.

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 in ection 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;
 - 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 ¹/₂-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 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.
- 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
То:	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

om:	Marvin <burrowsmarvin@gmail.com></burrowsmarvin@gmail.com>
ent:	Thursday, November 1, 2018 9:39 AM
o:	Estes, Bob, DCA
c:	Chavez, Carl J, EMNRD; darrangell@gmail.com
ubject:	[EXT] Llano Disposal, LLC, BSW38
ttachments:	image1.png; ATT00001.txt
ant: o: c: ubject: ttachments:	Estes, Bob, DCA Estes, Carl J, EMNRD; darrangell@gmail.co [EXT] Llano Disposal, LLC, BSW38 image1.png; ATT00001.txt

> 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 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

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



STATE OF NEW MEXICO DEPARTMENT OF CULTURAL AFFAIRS HISTORIC PRESERVATION DIVISION

Susana Martinez Governor 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 <u>www.nmhistoricpreservation.org</u>.

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 <u>bob.estes@state.nm.us</u>.

Sincerely,

Bob Ceta

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,

Holcomb

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

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 <u>public notice by signage</u> (2' x 3' minimum size) in a conspicuous place on or near the proposed discharge site was posted by me on $\cancel{O(2)}$, $\cancel{O(2)}$, 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.

min Burrowe

Marvin Burrows Agent for Llano Disposal, LLC

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

Notary

My commission expires 4-11-2020



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 $\underline{10/2000}$, 2018. The posting is scheduled to be posted for a minimum of 30 days.

Ucum Burrows)

Marvin Burrows Agent for Llano Disposal, LLC

Sworn and subscribed to before me this <u>and</u>day of <u>DCtober</u>, 2018.

elli Terguson Notary

My commission expires <u>4-1-3</u>A2D



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.

Danny J. Holcomb Agent for Llano Disposal, LLC

Notary

My commission expires



Affidavit of Publication

STATE OF NEW MEXICO

COUNTY OF LEA

) ss.

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.

Vemena 12ence

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

Juna tort

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



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) for 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 i 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 (NaCi) would then be proing 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, New station is located approximately 18.7 miles west of Lovington, New Mexico the intersection of US Hwy 82 and County Road L-122 (Hummingbird F would be transferred/sold by delivery into water trucks on a concrete load ment curbing and a sump to prevent spills. There would be a synthetic line tainment underneath the brine storage tanks. All of this infrastructure is lo owned by the applicant.

Brine water is used in the oil and gas industry to supply concentrated salt with a total dissolved concentration of approximately 320,000 mg/l and a 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 through 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 fee located on private land and provides a minimum of 2150 feet separation 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 of 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 prove 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 informaments 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

AC as submitted on and operp 16 South, o. The pro-New Mexico ease road to

to be drilled 82°, Long. -Id, the fresh et northwest approximate 20 GPM and jection presthe well tub-

olyethylene s at the prop 16 South, This brine iles south of brine water vith containondary conprivate land

brine water) that is 20% e increased outs in high les typically

water over all has been significant

of approxial dissolved e Engineer, y will be desurface or loading pad ills or leaks bing strings

LLC c/o Mr. onsultant to roject.

nents of inis who wish nitting comitact:

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 (NaCI) 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

rivabitte

A WEN PLIE NEW N

Joyon Channels be anth derecase ar Advertiong Manage LEADER, a onco someral paid circu Frideh language at the March and circu and a march paid circu for the corr that st paint of the corr for the corr that are paint of the form of the corr form

> bins hinds bins hinds

A president for the second sec

Chavez, Carl J, EMNRD

From:	danny@pwllc.net
Sent:	Wednesday, October 17, 2018 2:59 PM
То:	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: <u>danny@pwllc.net</u> 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) <u>UL 'L', Sec 27, T16S, R33E, 1980 FSL x 660 FWL, Lea County, New Mexico</u>

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,

olcomb

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

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 <u>public notice by signage</u> (2' x 3' minimum size) in a conspicuous place on or near the proposed discharge site was posted by me on \cancel{clzl} , 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.

in Burrow Marvin Burrows

Agent for Llano Disposal, LLC

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

Notary

My commission expires



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



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

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.

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 brine water will be produced at a rate of less than 1900 barrels per day with a total dissolved concentration water". This brine water is used in the oilfield primarily for drilling and completion operations. It is anticipated 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 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

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

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

Page 1 of Detailed Notification	Page 2 of Detailed Notification	W	ap of A	rea of F	Review	
		S	tate '27' #1 and	Hummingbird B.	rine Station	
ano Disposal, L.L.C. (Mr. Dart Angel), 783 Highway 443, Lovington, MM 48250 has submitted an one-science that Mines Manimers Commendation Division MM/OCD1 formantificition and contailore of a	The brins station will have a concrete hading pad for trocks and will have a synthetic link undermash tants areas to prevent any splite or lasks from reaching the ground surface. The brins well will have contacted a stang and brings in protect groundwate.		#	8		. B
prevention or the rest of the contract of the Later L of Section 21, Theory of the Cash Range 33 East (Lat 2.8506/8.54°, Luog 1.03, 2575/37), Lat 2.040%, Markaco, The proposed brain injection well is casted adjoints of 17.8 mills west of Lowidgion, New Nexico, mills proposed brain injection well is used so Roomy Pid, then east 0.3 mills on Lase road (o well contrior).	The owner and operator of the proposed facility will be Lano Disposal LLC 783 H3404 and 933 Lonoroton, Mid Res 2830			π		
The application propose to produce there water from a proposed water source wall to be fullical in Unit starts L splications 77, from the p 55 south, Range 33 East (Jair 2 2 800752), Long - 103.657470), Laa a starts L for the Matoric From times to the water but in the easter, the free has a start source data for a starts p, foreivance or eaches a accordinate 75 feat rochhowst to the brine wall. The freeh water world cf	Comments and inquiries about the application muck is discribed to Liano Disposal. LLC of o M. Danny, Reformable and March 2008 or event Simon Dana March 2004. A beforming a consistant to Liano Disposal. 1.1.C. monthema assistances the monthema metadation certains for this monitor.		1	State 27's	1 Brine Well	
numped down the welf's caring to an approximate dispth of 1780 feet to 2300 feet befow ground level a state of approximately of -320 SMM and a normal potenting pressure of 200 to 250 paig. The maximum (lowable state ingelion pressure would be 336 psig. Dissolution bure water (NaC) would then be voduced up the welt tubing to auritate.	The few Mexico OI Conservation Durision COV will accept comments and statements of indexet regarding this application and/or outer a lacky-specific multiple bit for percensishon with for reveiva future nockets: Percensi netwertain of columny plantim in formation, advintang comments or inquesting to be on a factory-specific making bits for future indexes must contact the plant control outer or inquesting to	-	*			Ŕ
The produced brain water and the metaned thin transportation as a second brend polyticilyme perform approximately 5928 for a water to interve (1000 barrel (dargas storage) and water the proposed billound() from Stational Coard of Unit Litter L of Section 32, Tornship 65 South Range 13 East Litt 22 583721 coard -105 615507 for Litt Coardy, Haveon This Jane Halon (15 Hay 52 and Coard) Faralies used of Longagon, here haveces or 32 miles sound of the intervences of 125 Hay 52 and Coardy Faral L 25, Rohmminghold (37). The how water would be transmission of 125 Hay 52 and Coardy Faral L correcte for long past which coarding and a surpling prevent splits. There would be a synthet in and secondary contensing to referent the brine storage tanks. All of Dills in Alface and the a synthet in private later and comed by the appletant.	Environmental Bueau Cher Neuro UC conferenciation Division 1220 Secuti Sant Fancta Division Stata Fe, New Mexico 19305 Teleptone: 392475-340	-	Numminglief Fit	Dirid Brine Station	4	8
Bine water is used in the oil and gas industry to supply concentrated sait water (i.e. brine water) with a call dissolved concentration of approximately 320,000 mg/l and a density that is 20% higher than fresh that. Typicat bine water is 10 pounds by galon (ppg) with the increased waght due to disolved tha teacy brine water is essential in preventing by pounds in this processure gas wells and provide loss of increased with that and principal static sets typically found in scottheraster New Mexico.		-	10	a na	z .	5
The brine well will be designed to produce approximately 13 million barries of brine water over a 20 yes the priod. The amtoprod cavement reason will not exceed 150 feet. The well has been focuated on privat and and provides a minimum of 2150 feet expandion from any significant features; such as houses. Tater supplies buildings, editority, builtiensesses, and and priod priod and private and and private and and and private and private and and and private and private and private and and private and private and private and private and private and and private a		•	5	3	10 10 10 10 10 10 10 10 10 10 10 10 10 1	*
Doundwater possibly affected by an uniteritorial spill or leak is located at a depth of approximately 1- 1-90 feat blow ground level. Typical groundwater mills are and an an of distalend set block communa of approximately 400 mgL. According to the Office of this State Engineer, average water we'd eight in Li area a 222 feat block ground viewl. The block flack profile designed and provided to have no state a 222 feat block ground viewl. The block will be designed and provided to have no state and a state contaminants discharged to the surface or extraval for the protection of groundwate statements of scharged to the surface or evolutions for the protection of groundwate.			T Lea Cou	t6S, R33E nty, New Mexico		

1

El División de Conservación de Petroléo de Nuevo Méxicano se aceptan comentarios y declaraciones de interés respecto este signo. Una descripción detallada y un mapa de las instalaciones propuestas por para operaciones de perforación y terminación. Se prevé que se producirán salmuera agua a una velocidad de menos de Llano Disposal, LLC, 783 Highway 483, Lovington, NM 88260, Sr. Darr Angell ha presentado una solicitud con el División asociados las operaciones deben ser construidas y operadas en un asunto que no afectará negativamente la calidad de 1900 barriles por día con una concentración disuelta total de 320.000 mg/l (principalmente NaCI). Agua subterránea en agua salada llamado "agua de la salmuera". Esta agua de la salmuera se utiliza en el campo petrolífero principalmente La nueva estación de salmuera será situados aproximadamente 1140 pies sur de de Conservación de Petroléo de Nuevo Méxicano para instalar y operar así una salmuera de clase III y estación de la para crear agua de la salmuera. Agua dulce es bombeado en zonas profundas sal tal modo produciendo concentrado Pozos de salmuera son pozos completados en formaciones de sal con el propósito de la solución de minería de la sal disueltos en esta agua subterránea es generalmente cerca de 400 mg/l. El permiso requiere que la salmuera bien y Notificación legal de 2' X 3' (min) señalización por Reglamento de Comisión de Control de Calidad de Agua esta área está presente en aproximadamente 140 a 190 pies de profundidad. La concentración de sólidos totales EXHIBIT "A.4" – Wording of Onsite Public Notice Sign (Spanish) State 27 BSW #1 (BW-38) Public Notice este medio se unen por debajo. Notificación Aviso 20.6.2.3108.B.1 NMAC as aguas subterráneas. salmuera

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:

División de Conservación de Petroléo de Nuevo Méxicano 1220 South Saint Francis Drive Santa Fe, New México 87505 Jefe de la Oficina Ambiental Teléfono: 505-476-3440
EXHIBIT "A.4" – Wording of Onsite Public Notice Sign (Spanish) State 27 BSW #1 (BW-38) Public Notice

--. z .0 Mapa del área de revisión 106112 State '27' #1 and Hummingbird Brine Station State '27' #1 Brine Well . --No T 16S, R33E Lea County, New Mexico T HANT IL Laminado los archivos adjuntos (8-1/2 "x 11") publicado a parte inferior de la señal -. -Página 2 de notificación detallada prótuncidad de aproximadamente 140–180 presideação de nivel del subio. Típica apura subferialmes en esta a fara terma terma concensaciando dino de subido delos presidencias de la concensaciamente do mujar Seguin a oficiona delingereteo de subido profundadar moda del super en la conce acta 222 presidencia de mujar del subio. La interpreteo de subido profundadar moda del super en la conce acta 222 presidencia de la cupar delinge de la superficio del sa subido profundadar moda del super en la conce acta del presidencia de la cupar subido a la superficio de subido profundadar moda del super en la conce acta 2022 presidencia de aqua dela cupara de la superficio de subido della profesción de las aguas suberánesus. La estatación federa estimurar tendencia de acta del de cupara de actura para estimator a la cupar de la cupara de actura de subinar de de depationa para entra cubar cupara estimator antecida de la cupar de subinar una deladoren cala del cupara de la cupara de la cupara de la cupara de la cupara a subido de áreas de de política subido de la cupara de actura de la cupara de la cupara de de la servar La solmune a biolo natorence comentado curcara y lubos cadenas para protegor las aguas de la servar La solmune a biol natorence comentado curcara y lubos cadenas para protegor la sa aguar de la servar de la cupación natorence comentado curcara y lubos cadenas para protegor la sa aguas de la servar de la cupación de las develos de la cupación de la servar de la cupación de la de la servar de la develos la servar cupación de la servar de la cupación de la de la servar de la develos la servar cupacian estatura de la cupación de la servar de la cupacia de la cupacia de la servar de la develos la servar de la cupacian de la cupacian de la servar La solmune de la cupación de la servar de la cupacian de la servar de la cupacian de la cupacian de la cupacian de la servar de la cupacian de la cupacian de la cupacian de la servar de la cupacian de la cupacian de la servar de la cupacian de la cupacian declaraciones de interés respecto a esta aplicación y creará una lista de correo de instañaciones sesecticas paras paresionas de esseren recher hunaras notificaciones. Paue do contaciar a las personas indresadas en obtener más información envíar comentarios o soluciar estar en una lista de correo de risca acordes especificas para fiduros avidos comentarios o soluciar estar en una lista de correo de Comeritanos y consultas sobre la aplicación pueden ser dingúais a Llano Dispotal LLC do Sr. Danny Hericomis en electar 1963a por conce extendinos <u>Stantegorabus da EL</u> ES: Hivione es consultar para proposociona instituica de Llano Disposal. LLC oténet los formissas inglamentantes para este provisci La División de Conservación de Petroléo de Nuevo Méxicano (NMOCD) se aceptan comentarios y ligua subterránea posibilemente afectado por un derramo accidental o escape se encuentra a una protructidad de aproximadamente 140 – 190 pies debajo de nivel del suelo. Típico agua subterráne División de Constructón de Patroleó de Nuevo Méxicano 1220 Suht's Saint Fancia Dine Sanda Fe, ven Mexico 51905 Telidiono: 505-476: 3440 Llano Disposal, LLC 783 Highway 483 Lovington, NM 88260 statación propuesta será. El propietario y operador de la ins subterraneas. Página 1 de notificación detallada La aplicación propere producir agua fresca de una fuerte da agua propuesta para taladarse en unidad Centra L dela secondar: Zmanolo del 55.47, para 23.88.48, Lui 2.3802782, Lui 2.0136557427); Centra L dela secondar: Zmanolo del 55.47, genormandarente 25.880278, Lui 2.01365574707); Entra de dua lucero dela fonda contarciada es rescatas asimulera, el ajua culora ransportarse a la revise de una luceria de políticacione relativada de concominadamente 7.580266, Lui 2.0106, Lui 2.0108, L Ellen la salmuena se cilochará para producit aproximadamente 13 millornes de barrites de salmuera duranteuro preciódos de vicida dos 20 milos. El rasjono evera a minopada no exceedada de 150 pres. El pozo se tra situado en terrenso privados 20 milional de separación de 2150 pies de cualiquie terarcheristicas. Importantes, islaes comocatas suministros de agua, ediricos, escuelas, empresa, ele. y operación de una clase III del 18 salimenta bien que se encuentar en la humala trade Gela sescion 32, numericipo de 18 sur, gama 38 seta (a.H. 32.809645°, Long.-103.657157°), Condado Lea Muero México, L.H.ryección de salimena propuedo está bien sluada a provinadamiente 17, jamilisa a loste de L'ano Dispos ai, L. L. C. (Sr. Darr Angell), 783 Highway 483, Lovingion, NM 82260 ha presentado una solictud para La División de Corservación de Petroléo de Nuevo Méxicano (NMCOD) para la Instalación segurard a aproximationnet B202 prior al octate tes totobarist intergres of animatrominente of text a d segurard a proximationnet b202 prior al octate tes totobarist intergres of animatrominente of text a d unitorie en text productie attached a sammer Collection control and a large coll a sector 23. Use disconcer de sammer active de la substance a suprimation de la sector 28. Exist estachord estantement estances a suprimation control and a large coll and sector 28. Exist estachord estantement estances as approximationnet en la control and control favor. Nexis Exist estachord estantement estances as approximationnet estate and a sector 28. El agua de la salmuera seria transferido/vendizo en eritopa ne raminera de agua sobre una amonhada confredar de confereidora e estapa de hormigány un coledor de aceite para evitar derames hakute un trons oridecoy confereións econdaña debido de los tanopas de amiaceramiento de la covington. Nuevo Méculos en Mighrey S2, entitorosa del sur O (2 millas en Roomey Road, entitoros este ol 0,3 millas en carrefera arrendamiento de ubicación bien. igua de la salimuera se utiliza en el acette y la industina del gas para suministrar concentrado sal agua es decir, salimuera) con una consentración dísueta total de aproximadamente 320.000 mg/f y una errio de peso debido a NaCi disueito. Agua de salmuera pesada es esencial en la prevención de las de gobe en pocos de gas de alta presión y previene la pérdida de circulación durante la El agua de la salmuera producida se mide entonces transportado por una tubería de polietileno enter salmuera. Toda esta infraestructura se encuentra en terrenos privados propiedad de la demandante. mayor de agua duice. Salmuera típica está 10 libras por galón (ppg) con el salidas de goipe en pozos de gas de alta presión y previene la pérdida de circulación dura perforación a través de zonas de sal suelen encontradas en el sureste de Nuevo México. lensidad que es 20%

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 $10/2/18^{\circ}$, 2018. The posting is scheduled to be posted for a minimum of 30 days.

al MI Burrow

Marvin Burrows Agent for Llano Disposal, LLC

Sworn and subscribed to before me this and day of DCtober, 2018.

Notary

My commission expires

(Seal)



EXHIBIT "B.2" – Photos of Offsite Public Posting (Lea County Courthouse) State 27 BSW #1 (BW-38) Public Notice



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 (NaCI) 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

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

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 <u>danny@pwllc.net</u>. 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

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 (NaCI) 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 <u>danny@pwllc.net</u>. 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.

Danny J. Holcomb Agent for Llano Disposal, LLC

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

Notary

My commission expires

(Seal)

MADELYNN D. VANDAGRIFF Notary Public, State of Texas Notary ID #1316375-4 Commission Expires 11-28-202

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

NOTIFICATION LIST - SITE PROPERTY OWNER AND ADJOINING PROPERTY OWNER

	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
State of New Mexico Commissioner of Public Land	P. O. Box 1148	Santa Fe, NM 87504	Adjoining Property Owner
Commissioner of Public Land	P. O. Box 1148	Santa Fe, NM 87504	Adjo

NAME	ADDRESS	CITY STATE ZIP	TYPE
ate of New Mexico	P O Box 1148	Santa Fa NM 87504	Mineral Owner
	2		Mineral Lessee
narex Energy Company	600 N. Marienfeld St, Suite 600	Midland, TX 79701	(VC-0071-0000)

DINITED STATES

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: Status Date / Time: Location: Postal Product: Extra Services:	Delivered, Individual Picked Up at Postal Facility September 28, 2018, 6:56 am SANTA FE, NM 87501 First-Class Mail [®] Certified Mail [™] Beturn Receipt Electropic		
Shipment Details	Netani Necelpi Liectionic		
Weight:	1.0oz		
Recipient Signature			
Signature of Recipient:	* Semantya tomen		
Address of Recipient:	m //48		

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

ne	CERTIFIED MAIL [®] RECEIPT Domestic Mail Only
LT TS/8 0000 0892 2TO2	For delivery information, visit our website at www.usps.com SANJA HE-F HI 8/504 Cartified Mail Fee \$3.45 S Cartified Mail Fee \$3.45 S S Cartified Mail Fee \$3.45 S Cartified Mail Fee \$3.45 S Control Mail Bestricted Delivery \$ Postmark //// Aduit Signature Restricted Delivery \$ Aduit Signature Restricted Delivery \$ Postmark //// Postmark ///// Postmark ///// Postmark ///// Postmark ///// Postmark ////// Postmark /////

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 (NaCI) 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 spitls. 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 NaCI. 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 <u>danny@pwllc.net</u>. 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,

fromly

Danny J. Holcomb Agent for Llano Disposal, LLC

Attachment (map of area)

.



Angell #2 Family LP, P. O. Box 190, Lovington, NM 88260 State of New Mexico, P. O. Box 1148, Santa Fe, NM 87504

Lea County, New Mexico

DINITED STATES

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:	SPecz
Address of Recipient:	600-1000

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

Domestic	Wail Only	EVENT
For delivery HIDLAND Certified Mail Fee Stra Sorvices & Return Receipt Certified Mail Receipt Certified Mail Re Aduit Synatree Aduit Synatree Postago S Total Postage ai Sent To Street and Apr. N City, State, 2194	Information, visit our we TX_7970b \$3.45 \$0.00 ocs (check box, adv fee services hardcopy) \$ \$0.00 Prostrond \$ \$0.00 Prostrond \$ \$0.00 \$0.50 *\$5.45 Cimarex Ene \$ 600 N. Marie Midland, TX	A 0203 10 10 10 10 10 10 10 10 10 10

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 <u>NMAC to State of New Mexico mineral lessee(s) of record at the proposed discharge</u> <u>site.</u>

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 (NaCI) 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

State 27 BSW #1 (BW-38)

EXHIBIT "C.3" – Letters to Noticees and Certified Mail Receipts

water. Typical brine water is 10 pounds per gallon (ppg) with the increased weight due to dissolved NaCI. 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 <u>danny@pwllc.net</u>. 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,

Offolcombr

Danny J. Holcomb Agent for Llano Disposal, LLC

Attachment (map of area)



Angell #2 Family LP, P. O. Box 190, Lovington, NM 88260 State of New Mexico, P. O. Box 1148, Santa Fe, NM 87504

Lea County, New Mexico

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

El agua de la sultruera protocida se ruto entonces transportado por una tubería de polietifeno anter tada segundo aprotimatiamente 522 para al oeste a tres 1000barril tanques de atmacensamiento de bar de vinico en protimatiamente 522 para al oeste a tres 1000barril tanques de atmacensamiento de 28, muniopo de 16 sur para 33 este (uz. 32,8007.40°, Long. -105,07695.0°). Condedo Lian, Nuevo 8, muniopo de 16 sur para 33 este (uz. 32,8007.40°, Long. -105,07695.0°). Tantas al oeste de La Nuevo 18, muniopo de 16 sur para 33 este atalando as aportamente 12, misuas o tende de La Nuevo Morto Cista estalorio de samere astra al una sección de Hoffway 82 y County Phosit L. 122 (Haumminghi de Nuevo Métro O 27 misias al suadas e antonicado por antrega en caminen de la commonidad amontalita con measte contrectión e supa estala a valada esta a vala deste en una amontalita con transfero y contención e supa de suga de Jonnigon y Un colector de escrita as avitad este una amontalita un forro sintético y contractión e sonte ana escrita de activativa esta esta en la sufficiente. Toda este indirectos enclarina de alto de los tangues do atmacentementen de la sufficiente. Toda este infraestructura se encuentra en terrencio providos propeidad de la demandante. La aplicatión propore produci agual resoa de una tuente de agua propreeda para talacturare en unidad eren La le la sección 27, municipio de 16 sur, gama 33 este (Lat. 52,890782°, Long. - (105,657470°), condado Lan. Nevo Mérico, De ve cu cardio do an reseita, adamontar a aqua dúcta transportare a travée de una tuberta de prostidano enternada aproximadamente 35 ples dei nonsela a la samunar a travée de una tuberta de prostidano enternada aproximadamente 35 ples dei nonsela a la samunar a travée de una tuberta de prostidano enternada aproximadamente 35 ples dei nonsela a la samunar debio dei media sueta una tasade aproximadamente 40-150 GPM y una presidin norma de 200 ta 250 psi. La presión de la sueta una tasade aprovinadamente 40-150 GPM y una presidin norma de 200 ta 250 psi. La presión de insección supericicia permisible máxima santa 366 psi. Agua de desoución samuera (NaCr) enforces se producida por el bien de la tuberta a la supericio. Liano Dispotati, L.L.C. (Sr. Darr Argali), 733 Highway 463, Lovington, NM 68260 ha presentatio unal solicitod parte La Disilion de Conservación de presione de Nuevo Máxicano (NMOCD) para la instalación y operación da var clasa III de la samuera bien que se encuentra en la antida fasta E de la sección 27. municipo de 18 sur garra 33 este (Lati 32.680645°, Lorig.-100.685/6157°), Conduct. La Nuevo Máxico. La inyección de salmera propuesto está ben sfueda aproximadamente 17.8 millas al oesta de Lovington. Nuevo México. en Highway 82, entinences del sur 0.82 millas en Rooney Road, entinences este 0.3 millas en carredamiento de ubicación bien. La División de Conservación de Petreleci de Nuevo Méxicano (NMOCD) se aceptan comentantos y de-ciaraciones da interés respecto a está aplicación y creará una tista da correo de instalaciones espoci-ficos para las personas que desem fin cholar induzas notificaciones. Puede contactar a las personas instalaciones appecidantes an obtinente más dimensión, enviar comentantos o solicitar estar entura las personas instalaciones para futures quices. Agua de la satimuera se utiliza en el aceire y la industria del gas para suministrar concentrado sal agua (es decir satimuera) con una concentración disuelta total de aproximadamente 320.000 mg/l y una den-sidad que es 20% insyor de agua du/e. Satimuera tipeca esta 10 librais por agúar (pgp) con el aumento de peso debicio a MGC disuelta Agua da satimura a pesada es sencial en la prevención de salidas da golipe en pozos de gas de alta pesón y prevene la portida de obruación durante la performación a través de zonas de sati abaséan y prevenen la portida de obruación durante la performación a través de zonas de sati suelen encontracias en el sureste de Nuevo Mexico. Aguis subterrânea posiblemente alectado por un demante accidental o escape se encuentra a una pro-hundude aproximadamente 160 – 130 pes dehajo de nivel del sujero. Tipico aguia aubiendarea en esta leva tera tene una concentrate 160 – 130 pes dehajo de nivel del sujero. Tipico aguia aubiendarea en esta leva tera tene una concentrate sudo media del agua en la zona es 223 pes debajo de nivel del suito. La instalación de la salmete suda surá superioda y puede no sterer contaminantes intendona de suito. La instalación de la salmete surá superioda y puede no sterer contaminantes intendonal de suelo. La instalación de la salmete surá superioda y puede con sterer contaminantes intendonal de suelo. La instalación de la salmete surá superioda y puede contro bara ramiones y tendrá un reves timens antecidos delavea de ceptistos para envitar cualquier vertido o denama accidental do porteger las aquetidos delaveas de ceptistos para envitar cualquier vertido o denama accidente do porteger las aquetidas una superiora. Comentarios y consultas sobre la aplicación pueden ser dirigidas a Llano Disposal. LLC clo Sr. Darriny Holcomb en 806-471-5628 o por correo electrónico danny @prelic.net. El Sr. Holcomb es consultor para proporcionar asistencia de Llano Disposal. LLC obtener los permisos reglamentarios para este proyecto. Bien la saimuera se diseñará para producir aptroximadamente 13 miliones de barnies da saimuera du-runte un periodo de vida de Sa eños. Erado os antima anticipadar no excedera de 150 paíss. El poros se in a situado en trensos phrádedy um minimo de soparación de 2150 paíss de cuarqueir características importantes, tales como casas, sumismor de agua, exitíncios, escuelas, empresas, eác. Anuncios de Pantaila de Aviso Público Por Replamento de Comisión de Control de Cañdad de Agua 20.6.2.3106.8.4 NMAC Unisión de Coria Oficina Ambiental División de Corrección de Patroleo da Nuevo Méxicano 2001: Sant Francis Dive Santa Fe, New Mexico 37505 Telefono: 505-476-3440 Liano Disposal, LLC 783 Highway 483 Lovington, NM 88250 El propietario y operador de la instalación propuesta será: 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. 22.890782°, Long. 103 657470°), Lea County, New Maxko, From thine to theme sine home is needed, the tresh water would be transproted via a burried polyeithylena pipeline approximately 75 feet northwest optime of 1780 et to 330 to 120 GM and a normal operating pressure of 200 to 250 paig. The maximum allowable surface injection pre-sure would be 355 paig. Dissolution brine water (NaC) would then be produced up the weitub-sure would be as 55 paig. Dissolution brine water (NaC) would then be produced up the weitub-sure would be as 55 paig. The maximum allowable surface injection pre-sure would be as 55 paig. Dissolution brine water (NaC) would then be produced up the weitub-Lano Disposal, L.L.C. (Mr. Darr Angelly, 783 Highway 483, Lovington, NM 88260 has submitted an application to the New Mexico Oli Conservation Division (NMOCD) for installation and oper adrin of a Class III brine well to be located in Unit Letter L of Secton 27, Township 16 South Pange 33 East (Lat. 22, 890945*, Long. -103, 6575157*), Lea Courty, New Mexico. The pro-posed 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 produced brine water would be metered then transported via a second burled polyethylene ppeline approximately 5928 feet west to three 1000 barrel (berglass storage tanks at the pro-posed Humminghird Brine Station located in Unit Letter L of Section 281, fourwhip 15 South Flange 33 East (Latt 2020) 2010, 1031, 2010, 1030, 2010, 20 Brine water is used in the oil and gas industry to supply concentrated saft water (i.e. brine water with a total dissolved concentration of approximately \$20% higher than freek water. Typicial brine water is 10 pounds per gallon (pop) with the increased weight due to dissolved NaCl. Heavy brine water is essential in proventing blow-outs in high pressure gas wells and prevents loss of circulation when drilling through saft zones typically found in southastern types. The brine well will be designed to produce approximately 13 million barrels of brine water over a 20 year life period. The ambibated cavern radius will not acceded 150 fetr. The well has been located on privite land and provides a minimum of 2150 fear separation from any significant features, such as houses, water supplies, buildings, schools, businesses, etc. Groundwater possibly affected by an uninertional spill or leak is located at a depth of approximately 140 – 140 feet below ground level. It typesd groundwater in this area has a clast discolved softs and the State Eronner average water well depth in the area is 223 feet below ground level. It he brine facility will be designed and perturbed to make the area is 223 feet below ground level. If the brine facility will be designed and perturbed to make the theory operand level in the brine facility will be designed and perturbed to have no interfortion water make discharged and be surface. The brine state on the surface to the protection of groundwater. The brine state on will have a concrete loading performance areas to prevent any spills or lexis to prevent and will have a synthetic liner underneath tanks areas to prevent any spills or lexis to predect groundwater. Comments and inquiries about the application may be directed to Llano Disposal, LLC c/o Mr. Dariny Holdomb at 806-471-5628 or email dariny@pwllc.net. Mr. Holdomb 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 in-terest regarding this application and will create at addiny-specific mating list to preserve who wish to reserve Muure notices. Persons interested in obtaining further information, submitting com-ments or requesting to be on a facility-specific mating list for future notices may contact. Per Water Quality Control Commission Regulations 20.6.2.3108 B.4 NMAC Environmental Bureau Chief ex Mexico Oli Conservation Division razo Souto Sant Francis Drive Santa Fe, New Mexico 87565 Telephone: 505-476-3440 Llano Disposal, LLC 783 Highway 483 Lovington, NM 88260 The owner and operator of the proposed facility will be: New owned by the applicant. And that the cost of publishing said notice is the sum of \$ 506.76 which sum has been entitled Public Notice was published in a regular and entire issue of THE beginning with the issue of October 4, 2018 general paid circulation published in the English language at Lovington, Lea County, in any supplement thereof, for one (1) day(s), and ending with the issue of October 4, Advertising Manager of THE LOVINGTON New Mexico; that said newspaper has been That the notice which is hereto attached, Joyce Clemens, Advertising Manager Subscribed and sworn to before me this 8th Joyce Clemens being first duly sworn on LEADER, a once a week newspaper of Twenty-six (26) consecutive weeks next hereto attached as hereinafter shown; and qualified to publish legal notices within the meaning of Chapter 167 of the 1937 Session deposes and says that she is so published in such county continuously and uninterruptedly for a period in excess of prior to the first publication of the notice is in all things duly Notary Public, Lea County, New Mexico My Commission Expires June 30, 2022 LOVINGTON LEADER and not Affidavit of Publication SS. Laws of the State of New Mexico. Sthes Weight (22. STATE OF NEW MEXICO that said newspaper day of October , 2018. (Paid) as Court Costs Uma tert COUNTY OF LEA DUNC Gina Fort oath 2018.

Chavez, Carl J, EMNRD

From:	Chavez, Carl J, EMNRD
Sent:	Tuesday, October 16, 2018 11:48 AM
То:	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

For more information on Xerox products and solutions, please visit http://www.xerox.com



STATE OF NEW MEXICO DEPARTMENT OF CULTURAL AFFAIRS HISTORIC PRESERVATION DIVISION

Susana Martinez Governor 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 <u>www.nmhistoricpreservation.org</u>.

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 <u>bob.estes@state.nm.us</u>.

Sincerely,

Bob Ceta

Bob Estes Ph.D. HPD Staff Archaeologist

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) talipipe 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- $\frac{1}{2}$ 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 proximately 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.emrd.state.nm.us/ocd/. Persons interested in obtaining a copy of the application and draft 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

Heather Riley, Director

SEAL #33277 01101546

00218882

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

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.

black

Business Manager



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

Cash Remittance Report (CRR)

	Energy, Minerals & Nat CASH REMITTA	ural Resou NCE REP	rces Departr ORT (CRR	Appendix 8-14 revised 11/27/01	*
	Location Name ①	Lo	ocation Code	2	
0CD	- Epyranment	-	0740		
Today's Date:	1 <u>19</u>	3 20 <u>1</u>	8		L.
• · · · • • · ·			-An		
Collection Period: _	// th	rough	_ / //	<u></u> (4)	*
Cost Center	Revenue Code	Receipt	t Amount	Collected Amou	Int
5	5	(7	8	
0740			100.00		
		J			
Total	======+	\$	10000 9	\$	10
	J			L :	
Over/Short Amou	int \$	(11)			
			٦. ٣		
CRR Deposit A	mount		\$		_12
Print Name:	ne DeNarges 13	Signature:	Loran	~ DeVarya	_13
Print Name:		Signature:		¥	13
Distribution: White and Yello	ow copy to Accounts Receivable-ASD.				
Pink copy retai	ined at CRR submitting location.				===
Official Use Only	ounte Receivable		Date Rec	eived:	•
Completed by the Acc	ounts necelvable				
Notes:		2			
			Amount F	eceived:	
					3
State Treasurer Depos	sit Number:	4	Verified b	y:	6
Deposit Date:	5			EMNRDCRR Re	vised 4/01
	-				



www.happybank.com

REMITTER LLANO DISPOSAL LLC

PAY ONE HUNDRED AND 00/100

TO THE WATER QUALITY MANAGEMENT FUND ORDER OF

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.

CASHIER'S CHECK

<u>88-1087</u> 1113

DATE July 16, 2018

\$*****100.00

NON NEGOTIABLE

CUSTOMER COPY

PURPOSE



ACKNOWLEDGEMENT OF RECEIPT OF CHECK/CASH

.

I hereby acknowledge receipt of Cheel	k No. 1021269	dated 07/16/2018				
or cash received on 07 / 18 / 20 18	in the amou	int of \$ 100.00				
from Happy State Ban	K - Mano Di	sposal LLC				
for BW-38						
Submitted by: Carl Chavez		Date: 07/18/2018				
Submitted to ASD by: Larraine	Devargas	Date: 07/19/2018				
Received in ASD by:		Date:				
Filing Fee 🔶 🗡	New Facility:	Renewal:				
Modification 0	Other					
Organization Code 521.07 Applicable FY9						
To be deposited in the Water Quality I	Management Fund.					
Full Payment	or Annual Inc	crement				

DATE RECEIVED	NEW M WALK-	MAIL	CO ENVIRONMENT DEPART NAME ON CHECK	MENT - A DATE OF CHECK	LBUQUERQUE CHECK/MONEY ORDER#	FIELD OFF PROGRAM ACCOUNT CODE	ICE DAILY AMOUNT OF CHECK	CHECK RECEIPT LOG DATE DEPOSITED DEPOSITED BY:
TOTAL							1000	
				REVENU	E TRANSMITTA	L SHEET		
			Description	Fund	Dept.	Share Acct	Sub Acct	Amount
			Liquid Waste	34000	Z3200	496402		
			Water Recreation Facilities	40000	28501	496402		
			Food Permit Fees	99100	Z2600	496402		
			OTHER	34100	232900		232902900	

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 <u>danny@pwllc.net</u>. Thank you for your consideration of this application.

Sincerely,

DHolcomb

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
- The address of the person making the discharge: <u>P. O. Box 190 (783 Highway 483)</u> <u>Lovington, New Mexico 88260</u>
- 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: <u>Injection Water:</u> fresh water from nearby fresh water well with approximately 400 mg/I TDS <u>Produced Brine Water:</u> approximately 320,000 mg/I TDS
- 5) The quantity of the discharge: <u>Estimated Instantaneous Flow Rate: 1 – 3 barrels per minute</u> <u>Estimated Monthly Total: 0 – 58,000 barrels per month</u>

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 <u>danny@pwllc.net</u>. Thank you for your consideration of this application.

Sincerely,

DOHolcomb

Danny J Holcomb Holcomb Consultants Agent for Llano Disposal, LLC

Attachments



CASHIER'S CHECK

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. <u>88-1087</u> 1113

DATE July 16, 2018

\$*****100.00

REMITTER LLANO DISPOSAL LLC

PAY ONE HUNDRED AND 00/100

TO THE WATER QUALITY MANAGEMENT FUND ORDER OF

NON NEGOTIABLE

PURPOSE



"01021269" #111310870" #116378"

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

Distric 1625 1 Distric 811 S. Distric 1000 F Distric 1220 S	<u>et I</u> N. French Dr., Hobbs, NM 88240 <u>et II</u> First St., Artesia, NM 88210 <u>et III</u> Rio Brazos Road, Aztec, NM 87410 <u>et IV</u> S. St. Francis Dr., Santa Fc, NM 87505	State of New Energy, Minerals and Natur Oil Conservati 1220 South St. Santa Fe, N	w Mexico al Resources Depar ion Division . Francis Dr. M 87505	tment tment Revised August 1, 2011 Submit Original Plus 1 Copy to Santa Fe 1 Copy to Appropriate District Office
	DISCHARGE PLAN A (Refer to the	PPLICATION FOR BE OCD Guidelines for assistance i	RINE EXTRAC	CTION FACILITES
		🛛 New 🗌 Ren	newal	4
•	Facility Name:Hummingbir	d Brine Station - State '27' BSW	#1	
I.	Operator:Llano Disposal, 1	LC		
	Address:P. O. Box 190 (783	Highway 483), Lovington, NM	88260	
	Contact Person:Marvin Bur	rows	Phone:	575-631-8067
п.	Location:NW/4 Sub	SW/4 Section mit large scale topographic map	27Township _ showing exact loca	16SRange33E tion.
V.	Attach the name and address o	f the landowner of the facility sit	c. See section IV o	f attached discharge plan.
t.	Attach a description of the type	es and quantities of fluids at the	facility. See section	N V of attached discharge plan.
VI.	Attach a description of all fluid discharge plan.	l transfer and storage and fluid ar	nd solid disposal fac	cilities. See section VI of attache
VII.	Attach a description of underg	round facilities (i.e. brine extract	ion well). See secti	on VII of attached discharge plar
VIII.	Attach a contingency plan for r	eporting and clean-up of spills or	releases. See section	on VIII of attached discharge plar
X.	Attach geological/hydrologica fresh water. See section IX of	evidence demonstrating that bri attached discharge plan.	ne extraction opera	tions will not adversely impact
х.	Attach such other information and/or orders. See section X of	as is necessary to demonstrate co f attached discharge plan.	ompliance with any	other OCD rules, regulations
XI.	CERTIFICATION:			
	I hereby certify under penalty in this document and all attack obtaining the information, I be significant penalties for submi	of law that I have personally exa ments and that, based on my inq lieve that the information is true tting false information including	mined and am famil quiry of those indivi- , accurate and com the possibility of fi	liar with the information submitte duals immediately responsible fo plete. I am aware that there are ne and imprisonment.
Nan	ne:Darr Angell	<u></u>	Title:Owner	
C:	1000)	Date: 7-5-	18

E-mail Address:__darrangell@gmail.com___

i

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.

 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 $\pm 1\%$ 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 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 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 aguifer 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/I 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:

 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.

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/ft² Storactivity -0.2Specific 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
А	Overview Map of General Area – USGS Topo Map of Area (Small Scale)
В	USGS Topo Map of Area (Large Scale)
С	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
Е	Brine Well Location Site Plan
F	Brine Station Site Plan
G	USGS Drainage Map of Project Area
н	Plugging Records for Offset Well Within the 0.5 Mile Area of Review (2 pgs)
1	NMOCD Drilling, Comp, P&A Records for State '27' #1 (17 pgs)
J	Water Analysis Test Results on Area Fresh Water Wells (3 pgs)
к	Emergency Contingency and Response Plan (2 pgs)
L	Schematics for Brine Station and Brine Well Location (3 pgs)
М	Area Geology Map and General Lithology (2 pgs)
Ν	Cross-sections of Geologic Structure at State '27' #1 (3 pgs)
0	FEMA Flood Plain Map of Project Area
Р	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)
т	Public Notice in Lovington Leader Newspaper (4 pgs)

Attachment A - Small Scale Topo Map



Lea County, New Mexico

Attachment B – Large Scale Topo Map



Attachment C – Aerial Photo with Ground Water Monitoring Wells



T16S, R33E Lea County, New Mexico

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



T16S, R33E Lea County, New Mexico 0.5 miles

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

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



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





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



Attachment G – USGS Drainage Map of Project Area

Map Source - USGS Drainage Map

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

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 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.)	WELL API NO. 25-2/324 5. Indicate Type of Lease STATE FEE 6. State Oil & Gas Lease No 6666 7. Lease Name or Unit Agreement Name N-M-5494
DISTRICT III P.O. Drawer DD, Artesia, NM 88210 DISTRICT III 1000 Rio Brazos Rd., Aztec, NM 87410 SUNDRY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.) 1. Type of Well: OE. WELL OE. WELL OF. MAS MAS MAS MAS MAS MAS MAS MAS	5. Indicate Type of Lease STATE FEE 6. State Oil & Gas Lease No 6666 7. Lease Name or Unit Agreement Name N.M. State Transment
DISTRICT III 1000 Ruo Brazos Rd., Aztec, NM 87410 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. Type of Well: OR. (DX WELL) (DX WELL) 0. (DX WELL) (DX WELL)	 6. State Oil & Gas Lease No 6666 7. Lease Name or Unit Agreement Name
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
WEL XX WEL OTHER	Heragon Nm 28 state
2. Name of Operator Heyagon 011 & Gas Inc.	8. Well No. 1
3. Address of Operator	9. Pool same or Wildcat
F10 Houston St. Fort Worth tx. 76102	Kemstz-Lower Wolfream
4. Well Location 1980 BEE	East.
10. Elevation (Show whether DF, RKB, RT, GR, etc.) 4207.4 GR 11. Check Appropriate Box to Indicate Nature of Notice, Reg NOTICE OF INTENTION TO: SUBS PERFORM REMEDIAL WORK PLUG AND ABANDON REMEDIAL WORK TEMPORABILY ABANDON CHANGE PLANS COMMENCE DRILLING (PORT, or Other Data EQUENT REPORT OF:
PULL OR ALTER CASING	
12. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, includin work) SEE RULE 1103.	ng estimated date of starting any proposed
<pre>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 sx5 © 385'-285 perforates © 385 4-10-1991 Spot 45 sxs @ 115'-59' 4-10-1991 Spot 10 sxs @ surface</pre>	d
Install dry hole marker Hole circulated with 10# mud Pulled 5000' of 4 1/2' casing	
I hereby certify that the information above is true and complete to the best of my knowledge and belief.	A lan lan
SKONATURE Jel Athen TITLE VICE PRESIDEN	T DATE 4/24/91
TYPE OR PRINT NAME JOHN G. BURKE	TELEPHONE NO. 817 / 870-12
(This space for State Use) APPROVED BY CAMPY M. Hill TITLE DIL. C	DATE DATE

CURRENT WELLBORE DIAGRAM - OFFSET WELL

P&A Well

Hexagon Oil and Gas Inc Hexagon NM 28 State #1 API # 30-025-27324

OFFSET WELL 30-025-27324

1980' FSL x 660' FEL, UL 'I', Sec 28, T16S, R33E, Lea County, NM



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



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



						30-025-20592
D23						Prove C-101
	1		NEW	M ICO OIL CONSERVATION COM	ML ON	FORM GALL
PILE						Hevised (12/1/22)
		-		Santa Fe, New Mexico		
LANG CAFICE						7 3 C.C.
	611		1	OT MENTENE	DITT	
PROBLTICH DPPI			- NO	TICE OF INTENTION TO J	JKILL	1.76 100
				귀엽 집에 걸려 안 없어요. 그는 것이 많이 많이 했다.	1. 25. 2 5	3 M D9.
begins. If ch Submit this tions of the	notice in Commissi	the propo QUINTU on.	upLICATE.	e considered advisable, a copy of this notice show . One copy will be returned following approval. . and submit 6 Copies Attach Form C- 128 in	See additional in triplicate to	s will be returned to the sender. structions in Rules and Regula- first 3 copies of form 0-101
	Rosvel	1, New	Maxico		June 24,	1964
			(Place)		(Date)	
OIL CONS SANTA FE	ERVATI , NEW M	ON COM	MISSION			
Gentlemen:						
Vou at	. hereby	notified th	hat it is our	r intention to commence the Drilling of a well	to be known as	
Tou at	e nereby	nounce e				
	Th	e Atlar	tic llef:	ining Company		
				(CompaL, or OF. I)	1	· · · · · · · · · · · · · · · · · · ·
	St	ate "Al	C#	Well No	in	(Unit)
	000		(Lease)	South	Pro and	660 feet from the
located	1900		t from the.	Doute	and.	22.2
	est		****************	ine of Section	, R	22-S. NMPM.
CIVE LO	CATION	FROMS	ECTION I	LINE) Wildcet Pool		County
101112 20	UNITON			If Same I and the Oil and Gas Lease is No	C 5718	
		_		If State Land the On and Oas Load in House	00-37.10	
		1		If patented land the owner is		***************************************
D	С	B	A	Address		
-	U.	- 1		Addres		
				We propose to drill well with drilling equipin	ent as follows:	** · · · · · · · · · · · · · · · · · ·
		1	1	Rotery tools from 0 - T.D.	1	
1 .	F	6	н	LOODAJ		
E	r	0	n	The status of plugging bond is Bond No	.8. Casualty	Company of
	1	1		impeden is in offent		
				ALICITOR TO TH OTTODO	*****	***************************************
1 4	*		7	Drilling Contractor To be reporte	d	
×	A			Drining Conductor International	C	
			D	***************************************	**********************	
M	N	0	r	We intend to complete this well in the Ke	mnits or Set	aman. Zones
				formation at an approximate depth of	11.600	feet
-				formation at an approximate depth of anti-		

CASING PROGRAM

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

Bise of Main	Sise of Casing	Weight par Foot	New or Second Hand	Depth	Backs Cement
17-1/2	13-3/8	48		350	Circulate
12-1/4	9-5/8	32.3 & 36		4550	Girculate
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.)

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

OIL CONSERVATION COMMISSION

Sincerely yours,

The Atlantic By

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

Name.A. D. Klorin

Address P.O. Rox 1078, Rosuall, New Monda

Attachment I

pungit br 2004 (ch a 8 (ch 4 5 pungit br 2004 (ch 4	EW MEXIC	O OIL CONSERVATI	ON AMISSION	FGKM C-128 Revised 5/1/57
445 445 445 445 445	3	30-025-20592	40813477751	9. C. C.
	51	CTION A	OUN Ly to JJ	11 09
perator	11	esse	and the second states and the second states and	Well No.
The Atlantic Refi	ning Company	State AT		1
ait Letter Section	Township	Range Co	Noty	
L 27	ic South	3.3 EASC	16.1	
tual rootsge Location of well:	Courth line and	660 last last	west.	line
round Level Eley. Producing For	mation F	and /	Dedu	and Accesses
1	e	-h/ Excloratory		LO Actes
another. (65-3-29 (e) NMSA 193; If the answer to question one is "" wise? YESNO If If the answer to question two is ""	5 Comp.) no," have the interesta of answer is "yes," Type of no," list all the owners an	all the owners been conso Consolidation d their respective interest	lidated by communitization	agreement or other-
W2 CI		Land Description		
	R 33E			
	SECTION B		CER	TIFICATION
E Texaco	•r	Texaco	H Position H Position H Position H Position H Position Dist. Drl Company The Atlan Date 6-24-64	what the information above is true and com- at of my knowledge and <u>Claffin</u> oxin g. & Prod. Supt tic Refining Co
,086/	SEC. 27 Atlantic NM-1197 NM-1197 Att	achment I	I I hereby certify shown on the p plotted from file surveys made b supervision, an and correct to t and belief. D The Atientic Ref	that the well location lat in SECTION B was id notes of actual y me or under my d that the same is true he best of my knowled Surveyor ming Compony
1	Statel IV	1		
<u>+.</u>	State AY		Date Sur	veyed: 6-23-64

										~~~	
- HUWBER DF COPIE 013 24.57.57 715.2 0.56.5 1.5.60 OFFICE 175.500 OFFICE 175.500 OFFICE 175.500 OFFICE 175.500 OFFICE 175.500 OFFICE 175.500 OFFICE	014 68 68 68 68		(5u	NEW M MIS	CELLAN	NEOUS	REP(	ATION C	WELLS	DN . C. C.	FORM C-103 (Rev 3-55)
Name of Comps	ay					Address		100. 2	1. 30 1		
The	Atlanti	a Ref:	Ining Comp	any la	10.5	P. (	D. Box	1978,	Roswell,	Hew H	exico
Stat	"AT"			1 1		Letter	27	Township	16-8	Rang	33-E
Date Work Perf	ormed 6/90/64		Pool	ldest			C	County	Les		
	SUP II S		THIS	S IS A REI	PORT OF:	(Cbeck at	propriat	e block)			
Beginning Plugging	Drilling O	peration	s 🚺	Casing T Remedial	est and Cem Work	ent Job	C	Other (E	xplain):		
Witnessed by				Pos	ition		C	Company			0
Witnessed by T. E.	, Sheets		611 1 13 1	Pos Dr:	ition	nginee	F	The Atl	antic Bef	ining	; Сомрану
Witaessed by T. E.	. Sheets		FILL IN E	Pos Dr.	ILIING E OR REMEI ORIGINAL	Mginee DIAL WO WELL DA	I CORK RE	Company The Atl PORTS 01	antis Ref	ining	с Сожралу
Witnessed by T. E. D F Elev.	, Sheets	TD	FILL IN E	Pos Dr: BELOW F	OR REMEI	DIAL WO	T DRK RE	Producing	antis Bef VLY Laterval	ining Co	g Company mpletion Date
Witnessed by <b>T. E.</b> D F Elev. Tubing Diamete	, Sheets	TD	FILL IN E	Pos Dr: BELOW F	ILIING E OR REMEI ORIGINAL PBTD	DIAL WO WELL DA	P DRK RE TA g Diamet	PORTS Of Producing	antic Ref NLY Interval Oil Stri	Co ing Dep	mpletion Date
Witnessed by <b>T. E.</b> D F Elev. Tubing Diamet. Perforated Inte	er er	TD	FILL IN E Tubing Depth	Pos Dr: BELOW F	ITION OR REME ORIGINAL OBTD	Oil String	P DRK RE TA g Diamet	Company The Atl PORTS Of Producing	antic Ref NLY Loterval Oil Stri	Co ing Dep	mpletion Date
Witnessed by T. E. D F Elev. Tubing Diamet. Perforated Inte Open Hole Inte	er er tval(s)	TD	FILL IN E	Pos Dr: BELOW F	ITION ITING E OR REME ORIGINAL D DTD	Oil String	g Diamet	Company The Atl PORTS Of Producing ter	antic Ref NLY laterval Oil Stri	Co ing Dep	mpletion Date
Witnessed by T. E. D F Elev. Tubing Diamete Perforated Inte Open Hole Inte	er er erval(s)	TD	FILL IN E	Pos Dr BELOW F	OR REME OR REME ORIGINAL BTD	DIAL WO WELL DA Oil String Producion	g Format OVER	Company <b>The Atl</b> <b>PORTS</b> Of Producing ter tion(s)	antic Bef NLY Interval Oil Stri	Co	mpletion Date
Witnessed by <b>T. E.</b> D F Elev. Tubing Diamete Perforated Inte Open Hole Inte Test	er er rval(s) rval Date c Test	T D	FILL IN E Tubing Depth Oil Produc BPD	Pos Dr BELOW F	Illing E OR REME ORIGINAL PBTD SULTS OF Gas Produc MCFP	DIAL WO WELL DA Oil String Producing F WORK (	g Diamet g Format OVER Water Pi B	Company The Atl PORTS Of Producing er tion(s) roduction PD	Interval Oil Scri GOR Cubic feet,	Co ing Dep	mpletion Date th Gas Well Potential MCFPD
Witnessed by <b>T. E.</b> D F Elev. Tubing Diamete Perforated Inte Open Hole Inte Test Before Workover	er er erval(s) rval Date c Test	T D	FILL IN E Tubing Depth Oil Produc BPD	Pos Dr BELOW F	ILLING E OR REME ORIGINAL OBTD BTD SULTS OF Gas Produc MCFPI	Oil String Producing	g Diamet g Format OVER Water Pi B	Company The Atl PORTS Of Producing cr tion(s) roduction PD	Interval Oil Stri	Co ing Dep /Bbl	gas Well Potential
Witnessed by T. E. D F Elev. Tubing Diamete Perforated Inte Open Hole Inte Test Before Workover After Workover	er rval(s) rval Date c Test	T D	FILL IN E	Pos Dr BELOW F	ILLING E OR REME ORIGINAL OBTD SULTS OF Gas Produc MCFPI	Oil String Producing	g Diamet g Format OVER Water Pr B	Company The Atl PORTS Of Producing cr tion(s) roduction PD	antic Bef NLY laterval Oil Stri GOR Cubic feet,	Co ing Dep	mpletion Date th Gas Well Potential MCFPD
Witnessed by T. E. D F Elev. Tubing Diameter Perforated Inte Open Hole Inte Test Before Workower After Workower	er er rval(s) Date c Test OIL CON	T D of	FILL IN E Tubing Depth Oil Produc BPD	Pos Dr BELOW F	ition 111188 E OR REMEI ORIGINAL PBTD SULTS OF Gas Produc MCFPI	DIAL WO WELL DA Oil String Producing F WORK ( Cition D	g Format oVER Water Pr B	Ports of Producing Producing tion(s) roduction PD	antic Ref NLY Interval Oil Stri GOR Cubic feet, formation giv	Co Ing Dep /Bbl	gas Well Potential MCFPD
Witnessed by T. E. D F Elev. Tubing Diameter Perforated Inte Open Hole Inte Test Before Workover After Workover	er er rval(s) Date c Test OIL CON		FILL IN E Tubing Depth Oil Produc BPD	Pos Dr BELOW F	ition 1111ng E OR REMEI ORIGINAL PBTD SULTS OF Gas Produc MCFPI	DIAL WO WELL DA Oil String Producing F WORK ( ction D I hereb to the Name	g Format g Format g Format over Py B best of t	Company The Atl PORTS Of Producing er tion(s) roduction PD y that the in my knowledg	antic Bef NLY Interval Oil Stri GOR Cubic feet, formation giv ge.	Co ing Dep /Bbl	Gas Well Potential MCFPD
Witnessed by T. E. D F Elev. Tubing Diameter Perforated Inter Open Hole Inter Test Before Workover After Workover Approved by Title	er rval(s) rval Date c Test OIL CON	T D	FILL IN E	Pos Dr BELOW F	ition 1111ng E OR REMEI ORIGINAL PBTD SULTS OF Gas Produc MCFPI	DIAL WO WELL DA Oil String Producing F WORKO tion D I hereb to the Name Position D	g Diamet g Diamet g Format OVER Water Pi B best of t	Company The Atl PORTS OF Producing er tion(s) roduction PD y that the in my knowledge CLCS at Drill	Interval Oil Stri Oil Stri GOR Cubic feet, formation giv se.	Co ing Dep /Bbl en abov	Gas Well Potential MCFPD

# Attachment I

						30-(	)25-20592
HUMBER DF COFIES		NE (Submit	W MEXICO	OIL CON	REPORTSBON	FWEEDSC. C.	FORM C-103 (Rev 3-55)
ame of Company	y Buffanta	- Comment		Address	11	01 111 01	
TRO AGIAD	R	a combanda	ell No. Ur	ait Letter	Section Township	6 R.	33
Ant Asth Prin	712/64	Pool Wildert			County Los		
		THIS IS A	REPORT OF	: (Cbeck a	propriate block)		
Beginning Plugging	Drilling Operation	ns 🔁 Casi	edial Work	ement Job	Us obtained.	xplain):	
Witnessed by							
0. D. B			Position	ala Sum	Company	lantic Refi	ing Company
	retches	FILL IN BEL	Position Dist. Di	rlg. Sup	Company The At	lantic Refin	ing Company
	retches	FILL IN BEL	Position Dist. Di OW FOR REI ORIGIN/	rlg. Sup MEDIAL W AL WELL D	Company The At ORK REPORTS O	lantic Refin	Ling Company
D F Elev.	TD	FILL IN BEL	Position Dimt. Di OW FOR REJ ORIGINA PBTD	rlg. Sup MEDIAL W AL WELL D	Company The At ORK REPORTS O ATA Producing	lantic Refin	Completion Date
D F Elev. Tubing Diamete	T D	FILL IN BEL	Position Dist. Dr OW FOR REP ORIGINA PBTD	rlg. Sup MEDIAL W AL WELL D Oil Strin	Company The At DRK REPORTS O ATA Producing g Diameter	lantic Refin NLY Interval Oil String	Completion Date
D F Elev. Tubing Diamete Perforated Inte	retches T D er rval(s)	FILL IN BEL	Position Dist. Dr OW FOR REP ORIGINA PBTD	Producia	Company The At DRK REPORTS O ATA Producing g Diameter	lantic Refin NLY Interval Oil String	Completion Date
D F Elev. Tubing Diamete Perforated Inte Open Hole Inte	retches T D er rval(s) erval	FILL IN BEL	Position Dist. Dr OW FOR REP ORIGINA PBTD	Producia	Company The At DRK REPORTS O ATA Producing g Diameter ag Formation(s)	Iantic Refin NLY Interval Oil String	Completion Date
D F Elev. Tubing Diamete Perforated Inte Open Hole Inte	T D T D er rval(s) rval	FILL IN BEL Tubing Depth	Position Dist. Dr OW FOR REL ORIGINA PBTD PBTD RESULTS	Producia OF WORK	Company The At DRK REPORTS O ATA Producing g Diameter ag Formation(s) OVER Water Production	Iantic Refin NLY Interval Oil String	Completion Date Depth Gas Well Potential
D F Elev. Tubing Diamete Perforated Inte Open Hole Inte Test Before	T D T D er rval(s) rval Date of Test	FILL IN BEL Tubing Depth Oil Production BPD	Position Dist. Dr OW FOR REPORT ORIGINA PBTD PBTD PBTD CRIGINA PBTD CRIGINA	Producia Oil Strin	Company The At ORK REPORTS O ATA Producing g Diameter ag Formation(s) OVER Water Production B P D	Cubic feet/Bt	Completion Date Depth Gas Well Potential MCFPD
D F Elev. Tubing Diamete Perforated Inte Open Hole Inte Test Before Workover After	T D T D T D T D T D T D T D T D	FILL IN BEL Tubing Depth Oil Production BPD	Position Dist. Dr OW FOR REJ ORIGIN/ PBTD PBTD PBTD RESULTS Gas Pro MCI	Producion FPD	Company The At DRK REPORTS O ATA Producing g Diameter ag Formation(s) OVER Water Production B P D	Cubic feet/Br	Completion Date Depth
D F Elev. Tubing Diamete Perforated Inte Open Hole Inte Test Before Workover After Workover	T D T D T D T D T D T D T D T D T D T D	FILL IN BEL Tubing Depth Oil Production BPD	Position Dist. Dr OW FOR REJ ORIGIN/ PBTD PBTD RESULTS Gas Pro MCI	Producia Oil Strin Producia OF WORK oduction FPD	Company The At DRK REPORTS O ATA Producing g Diameter ag Formation(s) OVER Water Production B P D	Iantic Refin	Completion Date Depth Gas Well Potential MCFPD above is true and complete
D F Elev. Tubing Diamete Perforated Inte Open Hole Inte Test Before Workover After Workover	T D T D er rval(a) rval Date of Test	FILL IN BEL Tubing Depth Oil Production BPD	Position Dist. Dr OW FOR REPORT ORIGINA PBTD PBTD PBTD Gas Pro MCI	Producia Oil Strin	Company The At DRK REPORTS O ATA Producing g Diameter ag Formation(s) OVER Water Production B P D by certify that the i best of my knowled	Interval Oil String Cubic feet/Bi nformation given lge.	Completion Date Depth Gas Well Potential MCFPD above is true and comple
D F Elev. Tubing Diamete Perforated Inte Open Hole Inte Test Before Workover After Workover After Title	T D T D er rval(s) frval Date of Test	FILL IN BEL Tubing Depth Oil Production BPD	Position Dist. Dr OW FOR REJ ORIGIN/ PBTD PBTD RESULTS Gas Pro MCI	Producis Oil Strin Producis OF WORK oduction FPD I here to the Name Positi Din	Company The At DRK REPORTS O ATA Producing g Diameter ag Formation(s) OVER Water Production B P D by certify that the i best of my knowled Con Dirrict Drillin	Iantic Refin	Completion Date Depth Gas Well Potential MCFPD above is true and comple

# Attachment I

			30-025-20592	(Berry C.189)
UNBER TUPIES RECEIVED				(Revised 7/1/83)
AND A FR			A COLO MARION	
ut d	NEW	MEXICO OIL CONSERVATIO	N COMPLISION E J. C. C.	
INCOPPICE		Santa Fe, New Mexic	0	
AAND CANERAL DIL			See .1 3 10 2% 'Sd	
ACAATION OFFICE		MISCELLANEOUS N	OTTCES	
or agent, of the plan submit tional instructions in the Ru	ted. The plan a les and Regular	trict Office, Oil Conservation Comment en the approval, with any modification approved should be followed, and we ions of the Commission. Indicate Nature of Notice by Cher	stion, before the work specific is to equilate a considered advisable, or the rejection by rk should not begin until approval is obt	the Commission ained. See addi-
NOTICE OF INTENTION TO CHANGE PLANS		NOTICE OF INTENTION TO TEMPORARILY ABANDON WELL	TO DAILE DESPER	
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 (NETO)	
NOTICE OF INTENTION TO GUN PERFORATE		NOTICE OF INTENTION (OTHER)	NOTICE OF INTENTION (OTHER)	
OIL CONSERVATION C	OMMISSION	Rosvell, New Mexico	August 25, 1964	******
The Atlantic Ba	Company or Operat 4 of Sec. 27	T. 16-8 R. 33-E	Well No. 1 in NMPM., Wildeat	(Unit) Poc
Les		ounty.		
	FU (FOLLO	LL DETAILS OF PROPOSED	PLAN OF WORK and Regulations)	
This well was d of oil and gas.	we propo	11647" T.D. without encour se to plug and abanden by	intering commercial quantities setting the following commercial	es at plugs:
10		1582 25 ax from	5900-5970	
AU BE LE	OH 10755-1	0881 25 mm from	4543-4613	
40 sx fr 25 sx fr	on 7930-80	785 10 sr In to 00	op of surface pipe.	
9.3#/gal. gel a remain intact.	nd will be	laft between all plugs.	9-5/8" & 13-3/8" casing st	ring will
Verbal permissi	lon for abo	we obtained from Mr. J.D	. Ramey on 8/25/64.	
Approved	يىنى ئى سىرى ئى	, 19 <b>The</b>	Atlantic Refining Company	
Except as tonows:		Ву	abklalin	8
/		Position	Dist. Drilling & Production Send Communications remarding well	bupe.
Approved OIL CONSERVATION	COMMISSION		A. D. Florin	
By francis	Sector 1	Name	P.O. Box 1978. Resvell. H	ev Mari so
Title		Addres.	anners an affer and a state of the state of	

44

Attachment I

Title

Mail to Dist and the second Mail to Dist later than tw of the Count The Atlan Under 19 Vell in 1980. (Section 19 Section 19 and of Distling derm	North States Sta	XI Conservati re completion t is QUINT aing Comp ator or Completion My	WELL Santa Fe, WELL 30-02 tion Commission, a of well Pollow UPLICATE panay	RECORD 5-2059 to which Porm instructions in P If State Land	2 C-101 was sent submit & Copie State		APERA DED ACTERS
bial to Dist internet internet internet internet internet internet internet internet internet internet internet internet internet internet internet internet internet	arice Office, Concepty days after attice Refin (Composition, Submit (Composition, Submit granted 	XI Conservat re completion t is QUINT aing Comp any or Completion Nu set from 16 autom	WELL 30-02 tion Commission, a of well Follow UPLICATE panay	RECORD 5-2059 to which Porm instructions in P If State Land	2 C-101 was sent : submit & Copie State		AREA OND ACTES
Mail to Dist inter that to of the Conso The Atlan Under 19 (ell in 1980, Section 19 are of Drilling derra	ariet Office, C meany days affer attice Baffir (Comp gnated 	XI Conservations of the completion of the QUINTI aing Completion of the QUINTI aing Completion of the	WELL 30-02 tion Commission, a of well Follow UPLICATE plany cf	RECORD 5-2059 to which Poem instructions in P If State Land	2 C-101 was prot tules and Repulse submit \$ Copie State		AREA 640 ACRES TE WELL CORRECTLY.
Mail to Dist inter than tw of the Count The Atlan Vell No	arice Office, C meany days after attic Rafir (Comp gnated 	XI Conservations re completions t is QUINT aing Comp and or Quentus NU	WELL 30-02 tion Commission, a of well Pollow UPLICATE pathy **	RECORD 5-2059 to which Porm impructions in P If State Land	2 C-101 was sent : submit & Copie State		APIA 600 ACRES TE WELL CORRECTLY.
Mail to Dist later than tw of the Course The Atlan Underlig ell in 1980. Section I rilling Courses ame of Drilling	arice Office, C meany days affer atsice Submit (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (	XI Conservat rr completion t is QUINT aing Comp ary or Operation BMS eet fromS	30-02 tion Commission, a of well Follow UPLICATE phility cf () ofSN	5-2059 to which Porm instructions in P If State Land	2 C-101 was prot tules and Regulari submit \$ Copie State		AREA 640 ACRES TE WELL CORRECTLY.
Mail to Dist later than tw of the Counce The Atlan Index14 cil No	ariet Office, C reaty days after attic Rafin (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Co	Di Conservat er completion t la QUINTA aing Comp ary er Completion BM?	tion Commission, a of well Follow UPLICATE paugy ct () of	to which Porm instructions in F If State Land	C-101 was sent udes and Regulari submit & Copie State	Rot LOCA	ARTA 640 ACRES
The Atlan The Atlan Undertig	menty days after ministen Submit (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Comp (Co	er completion t is QUINT aing Comp and or Quentus 	of well. Follow UPLICATE pany // of SV	instructions in F	tules and Regulation submit & Copie State	0003 8 8 8 4 4 7 8 10 10 10 10 10 10 10 10 10 10 10 10 10	AREA 640 ACRES
The Atlan on No	gnated	aing Comp and or Operation IN} eet from	n n 14 ol <u>SVI</u>	1968,	State	(Lana)	TE WELL CORRECTLY.
ell No	(Comp in gnated 	ert from 8	r)  4 alSVL			40	
Undertig	gnated 27	act from 8		16 of Sec. 27	T.14		33-1
ell in 1950. Section	27	ert from 8	and the second second second	Pool	Les		Com
ell in 1984. Section	27. 	Ti fireta	Reath	line and	660	feet from	
Section	wind Jun		a Land the Oil at	d Gas Lease No.	L		
tilling Commun time of Delling	MOLU TITICA	e 26	C Line on -	19.64_ Drillin	g was Completed	August 27	19.6
ame of Drilling		Eable D	willing Cor	matation			
deva	Gontractor	P. 0. 0	vever 550.	Midland. To	TERS.		
		Groun	d Level	201	The infe	emation given is t	o be kept confidential u
levation above a	sea level at Toj	o of Takana	. 19				
()))	*******************	AND A DESCRIPTION					
			01	IL BANDS OR 2	N N N N N N N N N N N N N N N N N N N		
o. 1, from	loso		110 ¹¹	No.	, from		
o. 2, from		to			, feam		
o. 3, from				No. 6	, from		
0. 2, 1000			to	Water For Li by	le.	Jeet	
o. 3, from	and a subscription of the second		10 10 10		le.	Jeet	
io. 3, from io. 4, from	sanı Martin		10 10 10		le.	Jeet	
io. 3, from			10 10 10 10 10 10	CASING BECK	le.	Jeet	
io. 3, from io. 4, from	WEIGHT PER FOOT	NEW GR	10 10 10 10 10 10	CASING BECK	DED CCT AND FULLED FROM	Jeet	FCKPOSE
sazz 13-1/2	WEIGHT PRE FOOT	NEW OR TEED	то	CASING BECC	DED COT AND FULLED FROM Intest	Jeet.	PERFORE Surfage
o. 3, from o. 4, from suze 13-3/8 9-5/8	WEIGHT PER FOOT	Stew on Used New New	то 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10	CASING BECC INTE OF BROS Cuide Fleat	DED COT AND FULLED FROM Intest	Jeet.	FCHFORE Surface Intermediate
o. 3, from o. 4, from strr 13-3/8 9-5/8	1007 1007 1007	New call	то	CASING BECC END OF END Cuide Fleat	DED COF AND PULLED FROM Intest Intest	Jeet.	FUEFORE Surface Intermediate
o. 3, from o. 4, from suzz 13-3/8 9-5/8	WEIGHT PRE FOOT	XEW OR URED New See	то 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10	CASING BEOG RIND OF SHOR Calife Fleat	DED CCT AND FULLED FROM Intest Intest	Jeet.	rckrose Surface Intermediate
o. 3, from o. 4, from stzz 13-3/8 9-5/8	WEIGHT PHE FOOT	Sew on Used New Sea	то	CASING RECO CASING RECO SIND OF ENOT Coulde Fleat G AND GENEN MITEO	DED COT AND PULLED FROM Intest Latest TING RECORD	Jeet	PERFORE Surface Intermediate
6. 3, from 6. 4, from 8428 13-3/8 9-5/8 8452 07 204.2	WEIGHT PRE FOOT	XEW OR USED New New New New New New New	10	CASING BECC LIND OF BROE Pleat G AND CREMEN LIND OF	DED CCT AND PULLED FROM Intest Intest TING RECORD	Jeet.	PCRPOSE Surface Intermediate AMOUNT OF MUD USED
a. 3, from a. 4, from suzz 13-3/8 9-5/8 9-5/8 17-1/2 13	WELGHT PER FOOT 48	NEW GI	то	CASING BECK XIND OF BROX Guide Fleat G AND CEMEN WEEP COMP & Fley	In test	Jeet	PURFORE Surface Intermediate AMOUNT OF MUD USED

# Attachment I

_____
#### SECOND OF DEILL-STEM AND SPECIAL TESTS

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

	TOOLS USED
Rotary tools w	rere used from feet to feet, and from feet to fee
	FRODUCTION
Put to Produc	ing P&A 19
OIL WELL	The production during the first 24 hours was harrels of liquid of which
	was oil;
	Gravity

30-025-20592

. harrels of 

Length of Time Shut in.....

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

		Southeastern N	w Mex	ico		Northwestern New Mexico
T,	Anhy.	1480	T, D	evonian	T	Oin Alamo
T.	Salt.	1700	T. Si	lurian.	т	Kinland-Fruitland
B.	Salt.	2600	T. M	fontoya	T	Faminetion
T.	Yates.	2795	T. Si	mpson.	Τ.	Pictured Cliffs
T.	7 Rivers	and the second s	T. M	lcKre.	Т.	Menuler
T.	Queen		T. El	Urnburger	T.	Point Lookout
T.	Grayburg		T. G.	r. Wash	T.	Mancin
T.	San Andres	4450	T. G	ranite	Т.	Dakota
Τ.	Glorieta	5932	т. 40	lfeamp 9725	Τ.	Morrison
T.	Drinkar		T. Ke	manits Line (Penn) 10775	Т.	Peno
Τ.	Tubbs	7215	T. S.	(Pann) 11520	T	· · · · · · · · · · · · · · · · · · ·
T.	Abo	7964	Ť		T.	
T.	Penn		T	Construction of the second	T.	······
T.	Miss.	and the second sec	Ť	and	T.	

#### FORMATION RECORD

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

ATTACH SEPARATE SHEET IF ADDITIONAL SPACE IS NEEDED

I hereby wear or affirm that the information given herewish 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
Company or Operator The Atlantic Refining Company	Address P. O. Box 1978, Roswell, New Merico
Name AL Protoco	Post-in - Titl District Drilling Supervisor
Attac	chment I

								30-0	025-20592
NO. OF COPIES RECEIVED							100	0.101	
DISTRIBUTION		NEW M	EXICO OIL CONSE	RVATI	ON COMMISS	ION	R	evised 14-65	
SANTA FE							5	A. Indicate T	ype of Lease
FILE								STATE X	FEE
U.S.G.S.								. State OII &	Gas Loase No.
LAND OFFICE								L 3392,	L 4089, LG 3819
OPERATOR							5	mm	MMMM
			ANT DEEDEN	00.0	LUC BACK			1111111	
APPLICATIO	IN FOR PER	MIT TO D	RILL, DEEPEN,	UKF	LUG BACK			7. Unit Agreen	nent Name
a. Type of Work									1
DRILL	1	1	DEEPEN X		PL	UGBA	CKDF	8. Farm of Les	sse Name
b. Type of Well	-			SINGL		MULTI		Stat	e 27
WELL WELL X	OTHER			ZON	6 L	20	OHE	9, Well No.	1
L. Name of Operator	1000							1-23	
W. 4	A. Moncrie	f, Jr.						10. Field and	Pool, or Wildcat
1, Address of Operator	10.0 million (1997)		2 10 123 Sec. 1		m	0.0		Wild	cat
Moncrief Buildi	ng, Ninth	at Com	erce, Ft. Wor	ch.	Texas To	th		101111	1111111111KB
4. Location of Welt UNIT LET	TER L	LOCA	1980.	PEST P	TON THE DU	LC II	LINE	111124	11111111111 <del>1177.</del>
			07		169	338	K HMPM		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
AND 660 FLET FRO	M THE West	LINE	or sec. Li	TTTT	1111111	IIII	ann	12. County	- VIIIIIIII
	21111112	MMM		111		1111	111111	Lea	VIIIIII
	<u>IIIIII</u>	ШЩ	<del>HHHHH</del>	+++	HHHH	44	ttttt	mm	MMMMM
<u> </u>	uum.	MM		Illi	mm	111	um.	(11111)	
	MIM	1111).	<del>HHHHHH</del>	19. Pr	oposed Depth	119	A. Formatio		20, Hotary of C.T.
1111111111111111	MMM	IIIII			13 600		Morr	WO	Rotary
	<u> IIIIII</u>	IIII.	mmm	110	Drilling Contra	ctor		22. Approx	Date Work will start
21. Elevations (Show whether I	DF, RT, etc.)	21A. Kind	6 Status Plag. Bond	61D. 1	Moranc	0		4-5	-77
4201 ground	(	10,00	0 Blanket *	-	PIOLANC			-	
23.		P	ROPOSED CASING A	ND CE	MENT PROGR	AM			Contraction of the second
				ante	ETTING DE	PTH	SACKSO	FCEMENT	EST. TOP
SIZE OF HOLE	SIZE OF	CASING	WEIGHT PER FOO	515	415'	A TH	370	)	
	13-3	/8"			45771		2940	)	
	9-5	/8"		-	4311	NECH	SARY		
	43" or	or 5½". AS				MOL	T		•

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.

eby certify that the information above is true and com	THE BOOK TION MANAGER	Date 3-31-77
This space for State Use)	SUPERVISOR DISTRICT	ing 1977

District OW       Sector			30-025-20592	Form C-101
SANTA FE	DISTRIBUTION	]	JU UNJ-20572	Supersedes Old
File	SANTA FE	NEW MEXICO OIL CONSERVATI	ON COMMISSION	C-102 and C-103 Effective 1-1-65
U.4.0.6.1. LAND OFFICE       State Difference Type of Levies Bote Bote State Type of Levies Bote Bote State St	FILE			
LAND OFFICE       Both WE Not the second state of my hardward and state of my hardward and state.       State Z Tell         Dependence       SUNDERY NOTICES AND REPORTS ON WELLS       State Z Tell         State Z Tell       State Z Tell       Tell C Constant State Tell Tell Tell Tell Tell Tell Tell Te	U.S.G.S.			5a, Indicate Type of Lease
OPERATOR	LAND OFFICE			Stote X Fee
L 3392     Bundle of user user reserverse in produce of part of the second	OPERATOR	]		5. State Oil & Gas Lease No.
SUNDER' NOTICES AND REPORTS ON WELLS.				L 3392
Succe X and Coperator     V. Add Addressing Source A Coperator     V. Add Addressing Source A Coperator     V. Add MNORTEF, JR.     Addressing Strate X Coperator     V. Add MNORTEF, JR.     State 27     V. Add MNORTEF, JR.     V. Addressing Source A Commerce, Fort Worth, Texas 76102     V. Addressing Source A Commerce A Commerce, Fort Worth, Texas 76102     V. Addressing Commerce A Commer	DO NOT USE THIS FORM FOR PA	RY NOTICES AND REPORTS ON WELLS OPOSALS TO DRILL OR TO DEEPEN ON PLUE BACK TO A FION FOR PERMIT (FORM C-101) FOR BUCK PROPOS.	DIFFERENT RESERVOIR. ALS.)	
h. Add Operator h. A. MONCRIEF, JR. h. Moncrief Building, Ninth at Commerce, Fort Worth, Texas 76102 h. Location of Weil h. Location of Meil h. Location of Weil h. Location h. Location h. Location h. Loc	WELL X SAS	0TH E#-		7. Ubit Agreement Name
Waters of Comparison       State 27         Monerief Building, Ninth at Commerce, Fort Worth, Texas 76102       1         Unit define a Local and Well       1980         The	. Name of Operator			8. Farm or Lease Name
Montrief Building, Ninth at Commerce, Fort Worth, Texas 76102       1         Norrisef Building, Ninth at Commerce, Fort Worth, Texas 76102       1         Nurrestate       1980         ret       1980         Tex       1980         10.       1000         11.       1980         12.       1000         13.       Elevation (3600 whether DF, RT, CR, etc.)         13.       Elevation (3600 whether DF, RT, CR, etc.)         13.       Elevation (3600 whether DF, RT, CR, etc.)         14.       Local         16.       Check Appropriate Box To Indicate Nature of Notice, Report or Other Data SUBSCUENT REPORT OF:         Notice or INTENTION TO:       SUBSCUENT REPORT OF:         Networkshy textendes       Recipitate and the cashes         17.       Ceases Trans         17.       Ceases Trans         17.       Cease or Completed Operations (Clearly state all perintent details, and give perintent dates, including estimated date of staning any properties whether the following the w/510 of 1%, CFR-2 + 1275 sax Trinity Lite Wate + 200 sax Trinity Lite Wate + 200 sax Trinity Lite Wate w/510 of 1%, CFR-2 + 1275 sax Trinity Lite Wate + 200 sax Checks 1000 PSI for 15 minutes. Held ok.         18.1 hereby certify that the information above is the and complete to the best of my knowledge and bellef.         19.1 hereby certify that the information above is the	W. A. MONCRIEF, JI	R.		State 27
I Define the billing, within at commerces, for working, texas 70102  I Define the billing, within at commerces, for working, texas 70102  I Define the billing, within at commerces, for working, texas 70102  I Define the billing of	Managiaf Building	Ninth at Commonos Font Van	th Town 76100	9. Well No.
Image: Line in the information minore is true and complete to the best of my knowledge and bellef.	Moncrier Building	, winth at commerce, Fort wor	ch, lexas /6102	10. Field and Pool, or Wildom
THE	UNIT LETTER L	1980 FEET FROM THE South LINE	660 FEET FROM	UNDESIGNATED
The				
15. Elevation (Show whether DF, RT, CR, etc.)       12. County         16.       Check Appropriate Box To Indicate Nature of Notice, Report or Other Data NOTICE OF INTENTION TO:       SUBSEQUENT REPORT OF:         Prove AND ARANDON       Revealed and the County       Actor ince Chaine       Actor ince Chaine         Prove AND ARANDON       Revealed and County       Actor ince Chaine       Actor ince Chaine         Prove AND ARANDON       Revealed and County       Actor ince Chaine       Actor ince Chaine         Prove AND ARANDON       Revealed and County in the Chaine of the County of the Chaine of the County of the Chaine of the County of the Chaine of the Chaine of the County of the Chaine of the Chaine of the County of the Chaine of the County of the Chaine of	THE West LINE, SECTI	он <u>27</u> точизнір <u>165</u> ни	нае <u>33Е</u> нмрм.	
Check Appropriate Box To Indicate Nature of Notice, Report or Other Data NOTICE OF INTENTION TO:		4201 GD 422	GR, etc.) O KB	Lea Alle
NOTICE OF INTENTION TO: NOTICE OF INTENTION TO: PLUE AND ARABDON	15. Check	Appropriate Box To Indicate Nature of	Notice Report or Oth	ler Data
PLUE AND ARANDOM ALANDOM ALAND	NOTICE OF I	NTENTION TO:	SUBSEQUENT	REPORT OF:
Results databon       CHARGE PLANS       COMMENCE OFFICE OPEN.       PLUE AND ADABODNEET         OTHER       CHARGE PLANS       CHARGE PLANS       COMMENCE OFFICE OPEN.       PLUE AND ADABODNEET         OTHER       OTHER       CHARGE PLANS       CHARGE PLANS       CHARGE PLANS       PLUE AND ADABODNEET         OTHER       OTHER       CHARGE PLANS       CHARGE PLANS       CHARGE OPEN.       PLUE AND ADABODNEET         OTHER       OTHER       CHARGE PLANS       CHARGE PLANS       CARGE PLANS       CARGE PLANS       PLUE AND ADABODNEET         OTHER       Commented       Commented       Commented       Commented       Commented         The component of the proposed or Completed Operations (Clearly state all perithent details, and give perithent dates, including estimated date of starting any proper work (SOO sax Trinity Lite Wate + 200 sax Class "H" w/ 6/10 of 17, Allied 22 Halad + 5/10 of 17, CFR-2 + 1275 sax Trinity Lite Wate + 200 sax Class "H" w/ 6/10 of 15, Allied 22 Halad + 5/10 of 17, CFR-2 + 5# KCL per sack.         Tested to 2000 PSI for 15 Adminutes. Held ok.       30 mmi mi       30 mmi mi         S. Increasing the information above is true and complete to the best of my knowledge and bellef.       Stre	PERFORM REMEDIAL WORK	PLUS AND ABANDON REMEDI	AL WORK	ALTERING CASING
PULL OF ALTER CASING       CHANGE PLANS       CASING TERT AND COMMENT AD EXAMPLE AND COMMENT AD EXAMPLE ADD COMMENT AD EXAMPLE ADD COMMENT AD EXAMPLE ADD COMMENT ADD EXAMPLE ADD COMPLEXATION ADD COMPLE	TEMPORARILY ABANDON	COMMEN	CE DRILLING OPHS.	PLUS AND ABANDONMENT
OTHER         7. Describe Proposed or Completed Operations (Clearly state all perinent details, and give perinent dates, including estimated date of starting any properties in the user of the start of the sta	PULL OR ALTER CASING	CHANGE PLANS CASING	TEST AND CEMENT JOB	
OTHER         7. Describe Proposed or Completed Operations (Clearly state all perinent details, and give perinent dates, including estimated date of starting any proposed work) SEE RULE 1153.         Operator ran 13,797.69' of 20# and 17# 5½" casing and set at 13,797.69'. Cemented w/500 sax Trinity Lite Wate + 200 sax Class "H" w/ 6/10 of 1%, CFR-2 + 1275 sax Trinity Lite Wate + 200 sax Class "H" w/ 6/10 of 1%, DITA Allied 22 Halad + 5/10 of 1%, CFR-2 + 5# KCL per sack. Tested to 2000 PSI for 15 minutes. Held ok.         Tested to 2000 PSI for 15 minutes. Held ok.         30 mm< mm		отна	LR	
17. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposition of the start of the	OTHEN			
18, 1 hereby certify that the information above is true and complete to the best of my knowledge and belief. HEARTO Menty E. Sheraton Tire Exploration Manager DATE 6-1-77 Control Ea Deproved by PATE PATE PATE	7. Describe Proposed or Completed O work) SEE RULE 1 103.	perations (Clearly state all pertinent details, and	give pertinent dates, including	estimated date of starting any propo.
18, 1 hereby certily that the information above is true and complete to the best of my knowledge and belief. HIGHED <u>Merethon</u> TITLE Exploration Manager DATE <u>6-1-77</u> One Ed DATE <u>1977</u> PATE	17. Describe Proposed or Completed O work) SEE HULE'163. Operator ran 13,79 w/500 sax Trinity sax Class "H" w/ 6 Tested to 2000 PS1	perations (Clearly state all pertinent details, and 97.69' of 20# and 17# 5½" casin Lite Wate w/5/10 of 1% CFR-2 5/10 of 1% Allied 22 Halad + 5 1 for 15 minutes. Held ok. 30 mm mm	give pertiment dates, including ng and set at 13,79 + 1275 sax Trinity /10 of 1% CFR-2 + 5	estimated date of starting any propo. 97.69'. Cemented Lite Wate + 200 5# KCL per sack.
18, 1 hereby certify that the information above is true and complete to the best of my knowledge and belief. HIGHED <u>Menuly E. Meruton</u> TITLE Exploration Manager DATE 6-1-77 GREE ER APPROVED ST PATE PATE PATE	17. Describe Proposed or Completed O work) SEE HULE'1103. Operator ran 13,79 w/500 sax Trinity sax Class "H" w/ 6 Tested to 2000 PS1	perations (Clearly state all pertinent details, and 97.69' of 20# and 17# 5½" casin Lite Wate w/5/10 of 1% CFR-2 5/10 of 1% Allied 22 Halad + 5 1 for 15 minutes. Held ok. 30 mm mm	give pertiment dates, including ng and set at 13,79 + 1275 sax Trinity /10 of 1% CFR-2 + 9	estimated date of starting any propo 97.69'. Cemented Lite Wate + 200 5# KCL per sack.
18, 1 hereby certify that the information above is true and complete to the best of my knowledge and belief. Inter Aluming & Charaton pare 6-1-77 Inter Exploration Manager pare 6-1-77 Inter 6-1-77	7. Describe Proposed or Completed O work) SEE RULE 1103. Operator ran 13,79 w/500 sax Trinity sax Class "H" w/ 6 Tested to 2000 PS1	perations (Clearly state all pertinent details, and 97.69' of 20# and 17# 5½" casin Lite Wate w/5/10 of 1% CFR-2 - 5/10 of 1% Allied 22 Halad + 5 I for 15 minutes. Held ok. 30 mm mm	give pertiment dates, including ng and set at 13,79 + 1275 sax Trinity /10 of 1% CFR-2 + 5	estimated date of starting any propo 07.69'. Cemented Lite Wate + 200 5# KCL per sack.
B. 1 hereby certify that the information above is true and complete to the best of my knowledge and belief. HERE <u>Acceptor</u> TITLE Exploration Manager DATE 6-1-77 DATE 6-1-77 DATE 6-1-77 DATE 01977 DATE DATE	7. Describe Proposed or Completed O work) SEE RULE 1103. Operator ran 13,79 w/500 sax Trinity sax Class "H" w/ 6 Tested to 2000 PS)	perations (Clearly state all pertinent details, and 97.69' of 20# and 17# 5½" casin Lite Wate w/5/10 of 1% CFR-2 5/10 of 1% Allied 22 Halad + 5 1 for 15 minutes. Held ok. 30 mm mm	give pertiment dates, including ng and set at 13,79 + 1275 sax Trinity /10 of 1% CFR-2 + 9	estimated date of starting any propo 97.69'. Cemented Lite Wate + 200 5# KCL per sack.
Interes Meurey E. Sheraton Title Exploration Manager DATE 6-1-77	7. Describe Proposed or Completed O work) SEE RULE 1103. Operator ran 13,79 w/500 sax Trinity sax Class "H" w/ 6 Tested to 2000 PS1	perations (Clearly state all pertinent details, and 97.69' of 20# and 17# 5½" casin Lite Wate w/5/10 of 1% CFR-2 5/10 of 1% Allied 22 Halad + 5 I for 15 minutes. Held ok. 30 min min	give pertiment dates, including ng and set at 13,79 + 1275 sax Trinity /10 of 1% CFR-2 + 9	estimated date of starting any propo 07.69'. Cemented Lite Wate + 200 5# KCL per sack.
	17. Describe Proposed or Completed O work) SEE RULE 1103. Operator ran 13,79 w/500 sax Trinity sax Class "H" w/ 6 Tested to 2000 PS)	perations (Clearly state all pertinent details, and 97.69' of 20# and 17# 5½" casin Lite Wate w/5/10 of 1% CFR-2 5/10 of 1% Allied 22 Halad + 5 1 for 15 minutes. Held ok. 30 mm mm	give pertinent dates, including ng and set at 13,79 + 1275 sax Trinity /10 of 1% CFR-2 + 5	estimated date of starting any propo 07.69'. Cemented Lite Wate + 200 5# KCL per sack.
	17. Describe Proposed or Completed O work) SEE RULE 1103. Operator ran 13,79 w/500 sax Trinity sax Class "H" w/ 6 Tested to 2000 PS) 18. 1 hereby certify that the information	perations (Clearly state all pertinent details, and 97.69' of 20# and 17# 5½" casin Lite Wate w/5/10 of 1% CFR-2 5/10 of 1% Allied 22 Halad + 5 1 for 15 minutes. Held ok. 30 mm mm	give pertinent dates, including ng and set at 13,79 + 1275 sax Trinity /10 of 1% CFR-2 + 9 wiedge and belief.	estimated date of starting any proposed 07.69'. Cemented Lite Wate + 200 5# KCL per sack.
APPROVED BY DATE	17. Describe Proposed or Completed O work) SEE HULE 1103. Operator ran 13,79 w/500 sax Trinity sax Class "H" w/ 6 Tested to 2000 PS1 18. 1 hereby certify that the information	n above is true and complete to the best of my kno	give pertiment dates, including ng and set at 13,79 + 1275 sax Trinity /10 of 1% CFR-2 + 5 /10 of 1% CFR-2 + 5	estimated date of starting any propose 07.69'. Cemented Lite Wate + 200 5# KCL per sack. DATE <u>6-1-77</u>
A REAL PROPERTY AND A REAL PROPERTY AND A REAL PROPERTY.	17. Describe Proposed or Completed O work) SEE RULE 1103. Operator ran 13,79 w/500 sax Trinity sax Class "H" w/ 6 Tested to 2000 PS) Tested to 2000 PS)	perations (Clearly state all pertinent details, and 97.69' of 20# and 17# 5½" casin Lite Wate w/5/10 of 1% CFR-2 - 5/10 of 1% Allied 22 Halad + 5 1 for 15 minutes. Held ok. 30 mm mm Action men Action Market State and complete to the best of my know Market State	give pertiment dates, including ng and set at 13,79 + 1275 sax Trinity /10 of 1% CFR-2 + 9 /10 of 1% CFR-2 + 9	estimated date of starting any proposed 07.69'. Cemented Lite Wate + 200 5# KCL per sack. MCL per sack.

Although the war of states an expension and the testings	0		~				30-	025-2	20592	2	I'brm C	-105
DISTRIBUTION											lievice	([ ]]+h/h
SANTA FE			NEWA	EXICO	OIL CON	SERVATIO	ON CO	MMISSIO	N	5.0.	Indicate	e Type of Leonae VI
FILE		WELL	COMPLE	TION O	RRECO	OMPLETIC	ON R	EPORT	AND LC	G	State [	A i'ee
U.S.G.S.	1									5. 5	ente OI	A Chin Leano No.
LAND OFFICE		1										L 3392
OPERATOR										11	1111	THINN THIN THIN THE
		1								112	111	
U. TYPE OF WELL										7.1	Init Agr	cement Linne
	a	1. NT	GAS									
. TYPE OF COMPLET	W	err [A]	WELL		ONT	OTHER				- 18,1	urm or	Lease Mane
NEW WOR	· []		PLUG	0 01	rr. 🗖						CH	ata 112711
WELL OVER	n Dec	PENLI	BACK	AL AL	SVR.	OTHER			-	0 19	OL De	ace 2/
a, then of effective										1	-	
W. A. Moncrief	, Jr.									_	1	Lat. A statut
3. Address of Cperulor										10.	t leld u	nd Fool, or Wildcal
Moncrief Build	ing, Nint	h at	Commerce	e, For	t Wort	th, Texa	18 76	5102		ten	1-HA	LASS ANTED
t, Locution of Well										01	111	11111111111
										11	1111	
L	1074750	1980		ON THE	South	LINE AN		660		11.	111	///////////////////////////////////////
ALL CLITCH AND		Survey and	reel en		and the local distance of the second s	111115	111	11111	11111	11.	County	<del>,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,</del>
West	27		169	335		11111	111	11111	11111	N	Lea	
A Date Staldak	IE Date T.D.	TWP.	100 RGC	Count /B	endy to 1	ATTT	711	177777	KAR RI	GR et	c /1 10	Flow Cashinghood
Re-entered			- In Date	- or -	-	110.	1.201	00	1.000	WD.		1001
old hole 4-11-	11 5-	13-11	T IN	5-31-7	T	- Curral IV	4201	. GD	4220	KD To	_	4201
20, total Lepth	61. 5	Tug Buck	6 1.6.	22.	Many	e compil, Hi	DW	23, interv Drille	d By	tory 100	ola I	Cable Tools
13,804	13	5, 769.				(			-> :0-	13,80	14	-
24. Producing Interval(s)	), of this comp	iellon -	Top, Bottom	, Name 1	1,522-	-24 & 11	,528	3-32 Up	per Se	aman		25. Was Directional Surv. Made
11,566-74, 11,	604-06, 1	1,610	)-12 & 1	1,620-	22 Mid	idle Sea	man					
11,678-86 and	11,690-96	Lowe	er Seaman	n								No
26. Type Electric and Ol	ther Logs Aun	Schl	umberger	r Comp	ensate	ed Neutr	on-F	ormati	on Den	sity	27. V	fas Well Cored
		log	and Dua	1 Late	ralog	& Micro	SF	L				No
28			C.L.E.				a second and a second					110
£ Q ,			CAS	ING RECO	ORD (Rep	ort all string	s set	in well)				
CASING SIZE	WEIGHT LI	B. FT.	DEPTH	SET	ND (Rep	ert all string	s set	In well)	NTING R	ECORD		AMOUNT PULLED
CASING SIZE	WEIGHT LI	B./FT.	DEPTH	SET	HOL	ort all string E SIZE	370	CEME	NTING R	ECORD		AMOUNT PULLED
CASING SIZE	WEIGHT LI	в./ FT. -40 36.#	DEPTH 415'	SET	ноц 174	ert all string E SIZE	370	In well) CEME	NTING R	ECORD		AMOUNT PULLED
CASING SIZE 13-3/8" 9-5/8"	WEIGHT LI 48# H- 32# &	в./ FT. -40 36#	рертн 415' 4577'	SET	но 171 121	E SIZE	370 294	CEME	NTING R	ECORD	75 1	AMOUNT PULLED None 11
CASING SIZE 13-3/8" 9-5/8" 5½"	weight Li 48# H- 32# & 20# &	в./ гт. -40 -36# 17#	415' 4577' 13,79	SET	но 171 121 8-3/	ert all string E SIZE	370 294 200	in well) CEME 0 5ax C	NTING R	+ 17	75 L	AMOUNT PULLED None 11 ite - "
CASING SIZE 13-3/8" 9-5/8" 5 ² 2"	wEiGHT LI 48# H- 32# & 20# &	9.√FT. -40 36# 17#	0EPTH 415' 4577' 13,79	SET	но 173 123 8-3/	ort all string E SIZE S ¹¹ (4 ¹¹	370 294 200	in well) CEME 0 0 sax C	lass H	ECORD	75 L W	AMOUNT PULLED None 11 ite - " ate
CASING SIZE 13-3/8" 9-5/8" 5 ¹ / ₂ "	wEiGHT LI 48# H- 32# & 20# &	40 36# 17#	0EPTH 415' 4577' 13,79' RECORD	SET 7.69'	но 17 12 8-3/	ort all string E SIZE 2 ¹¹ 2 ¹¹ 2 ¹¹ 4 ¹¹	370 294 200	in well) СЕМЕ 0 0 sax C 30,	Iass H	ECORD	75 L W	AMOUNT PULLED None " ite - " ate ORD
CASING SIZE 13-3/8" 9-5/8" 5 ² / ₂ " 19. SIZE	wEiGHT LI 48# H- 32# & 20# &	40 36# 17# LINER J	САЗ ФЕРТН 415' 4577' 13,79' RECORD ОТТОМ	SACKS C	ОRD (Rep HOL 17 12 8-3/	ort all string E SIZE 11 41 41 SCREEN	370 294 200	in well) CEME 0 0 5 30, SIZE	Iass H	TUBIN	75 L W IG REC SET	AMOUNT PULLED None " ite - " ate ORD PACKER SET
CASING SIZE 13-3/8" 9-5/8" 5½" 29.	wEiGHT LI 48# H- 32# & 20# &	40 36# 17#	САЗ ФЕРТН 415' 4577' 13,79' RECORD ОТТОМ	SACKS C	но 173 123 8-3/	ort all string	370 294 200	in well) CEME 0 0 30, 512E 2-3/8	lass H	TUBIN TUBIN 308	75 L W IG REC SET	AMOUNT PULLED None " ite - " ate ORD PACKER SET 11,303'
CASING SIZE 13-3/8" 9-5/8" 5 ² ₂ " 29. SIZE	wEight Li 48# H- 32# & 20# &	40 36# 17#	САЗ ФЕРТН 415' 4577' 13,79' RECORD ОТТОМ	SET	но 173 123 8-3/	ort all string E SIZE 11 41 41 SCREEN	370 294 200	in well) CEME 0 0 Sax C 30, SIZE 2-3/8	lass H	TUBIN 308	75 L Ward Rec Set	AMOUNT PULLED None " ite - " ate ORD PACKER SET 11,303'
CASING SIZE 13-3/8" 9-5/8" 5½" 19. SIZE 11. Perforation Record (1	WEIGHT LI 48# H- 32# & 20# & TOP	40 36# 17# LINER I B(	САЗ DEPTH 415' 4577' 13,79' RECORD оттом	SET	но 17 12 8-3/	ort all string E SIZE 11 41 SCREEN 32.	370 294 200	in well) CEME 0 30, 512E 2-3/8 0, SHOT, F	lass H	есово 1 + 17 тивім рертн , 308 ¹ е, семе	75 L W IG REC SET	AMOUNT PULLED None " ite - " ate ORD PACKER SET 11,303' UEEZE, ETC.
CASING SIZE 13-3/8" 9-5/8" 5½" 29. SIZE 31. Perforation Record (/ 11,522-24, 11,	WEIGHT LI 48# H- 32# & 20# & TOP	40 36# 17# LINER D B(	СКЗ DEPTH 415' 4577' 13,79' RECORD ОТТОМ	SACKS C	ркр (Rep ноц 17 12 8-3/ емент 8" 12	ort all string E SIZE 11 411 SCREEN 32, DEPTH	370 294 200 4 ACID	in well) CEME 0 0 5 30, 5 12E 2-3/8 0, SHOT, F	Iass H	TUBIN TUBIN 308'	TT SQ	AMOUNT PULLED None " ite - " ate ORD PACKER SET 11,303' UEEZE, ETC. NO MATERIAL USED
CASING SIZE 13-3/8" 9-5/8" 5½" 29. SIZE 11. Performation Record // 11,522-24, 11, 11,566-74, 11,	wEiGHT LI 48# H- 32# & 20# & TOP Interval, size a 528-32 604-06, 1	40 36# 17# LINER D nd number	САЗ DEPTH 415' 4577' 13,79' RECORD оттом er/ 0-12 &	5ET 7.69' SACKS C	ркр (Rep ноц 17 12 8-3/ Емент 8" 12	ort all string E SIZE 11 411 SCREEN 32. DEPTH	370 294 200 4 ACID	in well) CEME 0 0 5 0 5 1 5 1 2 - 3 0, 5 1 2 - 3 / 8 0, 5 1 2 - 3 / 8 0, 5 1 2 - 3 / 8 1 5 1 2 - 3 / 8 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1	Iass H Iass H III RACTUR	TUBIN TUBIN ,308' E, CEME	75 L Wing REC SET	AMOUNT PULLED None " ite - " ate ORD PACKER SET 11,303' UEEZE, ETC. NO MATERIAL USED NEA. Reacidize
CASING SIZE 13-3/8" 9-5/8" 5½" 19. SIZE 11. Performation Record (1) 11,522-24, 11, 11,566-74, 11,	wEiGHT L1 48# H- 32# & 20# & TOP	40 36# 17# LINER 1 B( ad aumber 1,610 11	САЗ DEPTH 415' 4577' 13,79' RECORD оттом er/ 0-12 & .620-22	5ET 7.69' SACKS C	ноц 171 123 8-3/ семент 8" 12 8" 28	SCREEN	370 294 200 4 ACID H INTE	in well) CEME 0 0 5 0 5 1 2 - 3 0, 5 1 2 - 3 0, 5 1 2 - 3 / 8 0, 5 1 2 - 3 / 8 0, 5 1 2 - 3 / 8 0, 5 1 2 - 3 / 8 0, 5 1 2 - 3 0, 5 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1 5	Iass H Iass H III RACTUR A/300 W/10.	TUBIN TUBIN ,308' E, CEME 10UNT A 0 gal	75 L Wild REC SET NT SQ ND KII 15%	AMOUNT PULLED None " ite - " ate ORD PACKER SET 11,303' UEEZE, ETC. NO MATERIAL USED NEA. Reacidize
CASING SIZE 13-3/8" 9-5/8" 5 ² / ₂ " 9. SIZE 11,522-24, 11, 11,566-74, 11, 11,678-86, 11	wEiGHT LI 48# H- 32# & 20# & TOP Interval, size a 528-32 604-06, 1 690-96	40 36# 17# LINER 1 B( nd number 1,610 11	САЗ DEPTH 415' 4577' 13,79' RECORD ОТТОМ er) -12 & ,620-22	5ET 7.69' SACKS C	ркр (Rep ноц 171 123 8-3/ кемент 8" 12 8" 28 8" 28	SCREEN	370 294 200 4 ACID H INTE	in well) CEME 0 0 0 sax C 30, 512E 2-3/8 0, SHOT, F ERVAL ,696	Iass H Iass H III RACTUR A/300 W/10, Benzo	TUBIN TUBIN DEPTH ,308' E, CEME O gal 000 gal	75 L W IG REC SET NT SQ ID KII 15% al 20 id F	AMOUNT PULLED None " ite - " ate ORD PACKER SET 11,303' UEEZE, ETC. NO MATERIAL USED NEA. Reacidize X in 4 stages 1 lakes & ball
CASING SIZE 13-3/8" 9-5/8" 5 ² 2" 19. SIZE 11,522-24, 11, 11,566-74, 11, 11,678-86, 11,	wEiGHT LI 48# H- 32# & 20# & TOP Interval, size a 528-32 604-06, 1 690-96	40 36# 17# LINER J nd number 1,610 11	САЗ DEPTH 415' 4577' 13,79' RECORD оттом er) -12 & ,620-22	5ET 7.69' SACKS C .3	ряр (Rep ноц 171 123 8-3/ семент 8" 12 8" 12 8" 28 8" 28	SCREEN	370 294 200 4 ACID 4	in well) CEME 0 0 0 sax C 30, 512E 2-3/8 0, SHOT, F ERVAL ,696	Iass H Iass H Iass H RACTUR A/300 W/10, Benzo	TUBIN TUBIN ,308' E, CEME OUNT A O gal 000 g ic Ac	75 L Wild REC SET NT SQ ND KII 15% al 20 id F	AMOUNT PULLED None " ite - " ate ORD PACKER SET 11,303' UEEZE, ETC. NO MATERIAL USED NEA. Reacidize D% in 4 stages 1 lakes & ball
CASING SIZE 13-3/8" 9-5/8" 5 ² / ₂ " 19. SIZE 11. Performation Record (/ 11,522-24, 11, 11,566-74, 11, 11,678-86, 11,	wEiGHT Li 48# H- 32# & 20# & тор 528-32 604-06, 1 690-96	B./FT. 40 36# 17# LINER I B( nd number 1,610 11	САЗ DEPTH 415' 4577' 13,79' RECORD ОТТОМ 0-12 & ,620-22	5ET 7.69' SACKS C .3 .3	В" 12 8" 28 8" 28	SCREEN	370 294 200 4 ACID ACID	in well) CEME 0 30, 512E 2-3/8 0, SHOT, F RVAL ,696	nTING R 1ass H " 11 RACTUR A/300 w/10, Benzo seale	TUBIN TUBIN ,308 ¹ E, CEME NOUNT A O gal 000 g ic Ac rs	75 L W IG REC SET NT SQ 15% al 20 id F	AMOUNT PULLED None " ite - " ate ORD PACKER SET 11,303' UEEZE, ETC. NO MATERIAL USED NEA. Reacidize D% in 4 stages 1 lakes & ball
CASING SIZE 13-3/8" 9-5/8" 5½" 29. SIZE 11. Performation Record (/ 11,522-24, 11, 11,566-74, 11, 11,678-86, 11,	wEiGHT LI 48# H- 32# & 20# & тор 528-32 604-06, 1 690-96	B./FT. 40 36# 17# LINER I B( nd number 1,610 11	Слаз DEPTH 415' 4577' 13,79' RECORD ОТТОМ 0-12 & ,620-22	5ET 7.69' SACKS C .3 .3	ркр (Rep ноц 171 125 8-3/ семент 8" 12 8" 28 8" 28 8" 28 8" 28	SCREEN	370 294 200 4 ACID ACID	in well) CEME 0 50 50 512E 2-3/8 0, SHOT, F ERVAL ,696	Iass H Iass H Ia	TUBIN TUBIN ,308' E, CEME O gal 000 g ic Ac rs	75 L W IG REC SET NT SQ IS ND KII 15% al 20 id F	AMOUNT PULLED None " ite - " ate ORD PACKER SET 11,303' UEEZE, ETC. NO MATERIAL USED NEA. Reacidize D% in 4 stages 1 lakes & ball
CASING SIZE 13-3/8" 9-5/8" 5½" 29. SIZE 31. Performation Record (1 11,522-24, 11, 11,566-74, 11, 11,678-86, 11, 11,678-86, 11, 13.	wEiGHT LI 48# H- 32# & 20# & TOP Interval, size a 528-32 604-06, 1 690-96	B. / FT. 40 36# 17# LINER I B( 1,610 11 duction h	слаз DEPTH 415' 4577' 13,79' RECORD оттом er/ 0-12 & ,620-22	5ET 7.69' SACKS C .3 .3	ркр (Rep ноц 173 123 8-3/ емент 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/	ort all string E SIZE 2" 4" 4" SCREEN 32. DEPTH 11,52: UCTION ing - Size all	ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 AC	in well) CEME 0 50 50 50 512E 2-3/8 5, SHOT, F 5RVAL , 696	HTING R 1ass H 1ass H 11 RACTUR A/300 w/10, Benzo seale	TUBIN TUBIN DEPTH ,308' E, CEME NOUNT A 0 gal 000 g ic Ac rs	75 L Wild REC SET NT SQ ND KII 15% al 20 id F	AMOUNT PULLED None " ite - " ate ORD PACKER SET 11,303' UEEZE, ETC. NO MATERIAL USED NEA. Reacidize D% in 4 stages 1 lakes & ball
CASING SIZE 13-3/8" 9-5/8" 5½" 29. SIZE 31. Performation Record (/ 11,522-24, 11, 11,566-74, 11, 11,678-86, 11, 33. Date First Production 5-31-77	wEiGHT LI 48# H- 32# & 20# & TOP Interval, size a 528-32 604-06, 1 690-96 Pr∞ F	B./FT. 40 36# 17# LINER I BC ad aumbo 1,610 11 duction h 'lowin	CAS DEPTH 415' 4577' 13,79' RECORD OTTOM 0TTOM 0-12 & .,620-22	54CKS C .3 .3	ркр (Rep ноц 17 ¹ 12 ³ 8-3/ емент 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/	ort all string E SIZE 2" 4" SCREEN 32. DEPTH 11,52 UCTION ing - Size all	ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 AC	in well) CEME 0 50 50 50 512E 2-3/8 512E 2-3/8 512E 2-3/8 512E 2-3/8 512E 2-3/8 512E 2-3/8 512E 2-3/8 512E 2-3/8 512E 512E 512E 512E 512E 512E 512E 512E	HTING R 1ass H 1ass H 11 RACTUR A/300 W/10, Benzo seale	ECORD 1 + 17 TUBIN DEPTH , 308 ¹ E, CEME NOUNT A 0 gal 000 g 1c Ac rs Ve. S	75 L W IG REC SET INT SQ IND KII 15% al 20 id F	AMOUNT PULLED None " ite - " ate ORD PACKER SET 11,303' UEEZE, ETC. NO MATERIAL USED NEA. Reacidize D% in 4 stages t lakes & ball s (Prod. or Shut-in) in
CASING SIZE 13-3/8" 9-5/8" 5½" 19. SIZE 11,522-24, 11, 11,566-74, 11, 11,678-86, 11, 11,678-86, 11, 03. Date First Production 5-31-77 Date of Test	wEiGHT LI 48# H- 32# & 20# & тор леекия, size a 528-32 604-06, 1 690-96 Ресс F Hours Tested	B./FT. 40 36# 17# LINER I BO nd aumbo 1,610 11 duction h 'lowin City	сля DEPTH 415' 4577' 13,79' RECORD оттом er/ 0-12 & ,620-22 Juthod (Flow g hoke Size	5ET 7.69' SACKS C .3 .3 .3 .3 .3 .3 .3 .3 .3 .3	РКО (Rep ноц 173 123 8-3/ ЕМЕНТ В" 12 8" 12 8" 28 РКОДО Гог гог	ort all string E SIZE 2" 4" SCREEN 32. DEPTH 11,52 UCTION ing - Size an OIL - Bbl.	ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 ACID 4 AC	in well) CEME 0 0 sax C 30, 51ZE 2-3/8 0, SHOT, F RVAL ,696	HTING R 1ass H 1ass H 1as H	ECORD 1 + 17 TUBIN DEPTH , 308' E, CEME NOUNT A 0 gal 000 g 1c Ac rs We. S ater - B	75 L Wing REC SET ENT SQ NO KII 15% al 20 id F	AMOUNT PULLED None " ite - " ate ORD PACKER SET 11,303' UEEZE, ETC. NO MATERIAL USED NEA. Reacidize D% in 4 stages lakes & ball s (Prod. or Shut-in) in Gas-Cil Haue
CASING SIZE 13-3/8" 9-5/8" 5 ² /" 19. SIZE 11,522-24, 11, 11,566-74, 11, 11,678-86, 11, 11,77	wEiGHT LI 48# H- 32# & 20# & TOP Aterval, size a 528-32 604-06, 1 690-96 Proc F Hours Tested 3 hrs	B./FT. 40 36# 17# LINER I Bo nd aumbo 1,610 11 duction h 'lowin	CAS DEPTH 415' 4577' 13,79' RECORD OTTOM OTTOM er/ 0-12 & ,620-22 Jurbod (Flow B hoke Size 24/64"	ACKS C SACKS C .3 .3 .3 .3 .3 .3 .3 .3	РКО (Rep ноц 173 123 8-3/ ЕМЕНТ В" 12 8" 12 8" 28 РКОДО Гог ггод	ort all string E SIZE 2" 4" SCREEN 32. DEPTH 11,52 UCTION ing - Size an OIL - Bbl. 60	370 294 200 4 ACID H INTE 2-11	in well) CEME 0 0 sax C 30, 51ZE 2-3/8 0, SHOT, F RVAL ,696 c pump) Gas - MC 120	Iass H Iass H Iass H RACTUR A/300 W/10, Benzo seale	ECORD 1 + 17 TUBIN DEPTH , 308' E, CEME NOUNT A 0 gal 000 g 1c Ac rs Ve. S ater – B race	75 L Wing REC SET ENT SQ al 2( id F Il Statu hut bl.	AMOUNT PULLED None " ite - " ate ORD PACKER SET 11,303' UEEZE, ETC. NO MATERIAL USED NEA. Reacidize D% in 4 stages 1 lakes & ball s (Prod. or Shut-in) in Gas-Cil Haue 2000-1
CASING SIZE 13-3/8" 9-5/8" 52" 9. SIZE 11,522-24, 11, 11,566-74, 11, 11,678-86, 11, 11,678-86, 11, 11,678-86, 11, 5-31-77 Tow Tubing Press.	WEIGHT LI 48# H- 32# & 20# & TOP Interval, size a 528-32 604-06, 1 690-96 Proc F Hours Tested 3 hrs Casing Frees	B./FT. 40 36# 17# LINER I B( ad ausobe 1,610 11 duction h 10win Cn ure C.	CAS DEPTH 415' 4577' 13,79' RECORD OTTOM OTTOM er/ 0-12 & ,620-22 dethod (Flow g hoke Size 24/64" alculuted 24-	100 RECC SET 7.69' SACKS C .3 .3 .3 .3 .3 .3 .3 .3 .3 .3 .3 .3 .3	РКО (Rep ноц 17 ¹ / ₂ 12 ³ / ₂ 8-3/ ЕМЕНТ 8" 12 8" 12 8" 28 РКОДО Гог relod PRODI	ort all string E SIZE 2" 4" SCREEN 32. DEPT+ 11,52: UCTION ing - Size an OII - Bbl. 60 Cas -	ACID 4 ACID 4 ACID 4 MCF	in well) CEME 0 0 sax C 30, 51ZE 2-3/8 0, SHOT, F RVAL ,696 c pump) Gas - MC 120	Iass H Iass H Iass H Iass H Iass H RACTUR A/300 W/10, Benzo Seale	ECORD TUBIN DEPTH ,308' E, CEME OUNT A 0 gal 000 g ic Ac rs Ve. S ater – B race	75 L Wing REC SET INT SQ IND KII 15% al 20 id F Il Statu hut bl.	AMOUNT PULLED None " ite - " ate ORD PACKER SET 11,303' UEEZE, ETC. NO MATERIAL USED NEA. Reacidize D% in 4 stages lakes & ball s (Prod. or Shut-in) in Gas-Cil Haue 2000-1 Gravity - API (Corr.)
CASING SIZE 13-3/8" 9-5/8" 5 ² / ₂ " 9. SIZE 11,522-24, 11, 11,566-74, 11, 11,678-86, 11, 11,678-86, 11, 0. Date First Production 5-31-77 Tow Tubing Press. 405#	WEIGHT LI 48# H- 32# & 20# & TOP Intercul, size a 528-32 604-06, 1 690-96 Pro F Hours Tested 3 hrs Cusing Freas Packer	B./FT. 40 36# 17# LINER I BC ad number 1,610 11 duction h 10win Co Here Here	CAS DEPTH 415' 4577' 13,79' RECORD OTTOM er/ 0-12 & ,620-22 Sethod (I'low B hoke Size 24/64" alculated 24- our Hate		PRD (Rep ноL 17½ 12½ 8-3/ ЕМЕНТ 8" 12 8" 28 РКОДО К/П, ритр Гог vitod Ы. 0	ort all string E SIZE 2" 4" SCREEN 32. DEPTH 11,52 UCTION ing - Size an OII - Bbl. 60 Cas - 96	ACID ACID H IN TE	in well) CEME 0 0 sax C 30, size 2-3/8 0, shot, F RVAL ,696 Gas - MC 120	Iass H Iass H Iass H Iass H Iass H RACTUR A/300 W/10, Benzo seale F V Trace	ECORD TUBIN DEPTH ,308 ¹ E, CEME NOUNT A 0 gal 000 g 1c Ac rs Ve. S ater - B race	75 L Wild REC SET INT SQ IND KII 15% al 20 id F Il Statu hut bl.	AMOUNT PULLED None " ite - " ate ORD PACKER SET 11,303' UEEZE, ETC. NO MATERIAL USED NEA. Reacidize D% in 4 stages NEA. Reacidize D% in 4 stages lakes & ball Gas-Cil Haue 2000-1 Gravity - API (Corr.) 42.20
CASING SIZE 13-3/8" 9-5/8" 5 ² /2" 9. SIZE 9. SIZE 9. SIZE 9. 11,522-24, 11, 11,566-74, 11, 11,678-86, 11, 11,678-86, 11, 9. Date First Production 5-31-77 Date of Test 5-31-77 Flow Tubing Press. 405# 40. Disposition of Gas (S	WEIGHT LI 48# H- 32# & 20# & TOP Interval, size a 528-32 604-06, 1 690-96 Prox F Hours Tested 3 hrs Cusing Freas Packer Sold, used for f	B./FT. 40 36# 17# LINER J BC ad number 1,610 11 duction h 10win Co ure BC Co	CAS DEPTH 415' 4577' 13,79' RECORD OTTOM OTTOM er) 1-12 & .,620-22 Sethod (l'low B boke Size 24/64" alculated 24- our Hate Street J	ING RECC SET 7.69' SACKS C .3 .3 .3 .3 .3 .3 .3 .3 .3 .3 .3 .3 .3	РКО (Rep ноц 171 123 8-3/ ЕМЕНТ В" 12 8" 28 РКОД Мин. ритр Гог relod bl. 0	ort all string E SIZE 2" 4" SCREEN 32. DEPTH 11,52 UCTION ing - Size al OII - Bbl. 60 Cas - 96	ACID ACID ACID MCF 0	in well) CEME 0 0 sax C 30, 51ZE 2-3/8 0, SHOT, F ERVAL ,696 c pump) Gas - MC 120	Iass H Iass H Ia	ECORD TUBIN DEPTH ,308' E, CEME NOUNT A 0 gal 000 g 1c Ac rs Ve. S ater - B race	75 L Wild REC SET INT SQ IND KII 15% al 20 id F Il Statu hut bl.	AMOUNT PULLED None " ite - " ate ORD PACKER SET 11,303' UEEZE, ETC. ND MATERIAL USED NEA. Reacidize D% in 4 stages to lakes & ball s (Prod. or Shut-in) in Gas-Cil Haue 2000-1 Gravity - API (Corr.) 42.2° by
CASING SIZE 13-3/8" 9-5/8" 5 ² / ₂ " 9. SIZE 9. SIZE 9. 9. 11,522-24, 11, 11,566-74, 11, 11,678-86, 11, 12,678-86, 11, 13,77 14,078-86, 11, 14,678-86, 11, 14,678-86, 11, 15,512-77 10,070 10,070 10,070 10,070 10,070 10,070 10,070 10,070 10,070 10,070 10,070 10,070 10,070 10,070 10,070 10,070 10,070 10,070 10,070 10,070 10,070 10,070 10,070 10,070 10,070 10,070 10,070 10,070 10,070 10,070 10,070 10,070 10,070 10,070 10,070 10,070 10,070 10,070 10,070 10,070 10,070 10,070 10,070 10,070 10,070 10,070 10,070 10,070 10,070 10,070 10,070 10,070 10,070 10,070 10,070 10,070 10,070 10,070 10,070 10,070 10,070 10,070 10,070 10,070 10,070 10,070 10,070 10,070 10,070 10,070 10,070 10,070 10,070 10,070 10,070 10,070 10,070 10,070 10,070 10,070 10,070 10,070 10,070 10,070 10,070 10,070 10,070 10,070 10,070 10,070 10,070 10,070 10,070 10,070 10,070 10,070 10,070 10,070 10,070 10,070 10,070 10,070 10,070 10,070 10,070 10,070 10,070 10,070 10,070 10,070 10,070 10,070 10,070 10,070 10,070 10,070 10,070 10,070 10,070 10,070 10,070 10,070 10,070 10,070 10,070 10,070 10,070 10,070 10,070 10,070 10,070 10,070 1	WEIGHT LI 48# H- 32# & 20# & TOP Interval, size a 528-32 604-06, 1 690-96 Prov F Hours Tested 3 hrs Custog Freas Packer Sold, used for f	All Colored in Colored	CAS DEPTH 415' 4577' 13,79' RECORD OTTOM OTTOM er) 1-12 & .,620-22 dethod (l ⁻¹ low g hoke Size 24/64" alculated 24- our Hate cod, etc.)	ING RECC SET 7.69' SACKS C .3 .3 .3 .3 .3 .3 .3 .3 .3 .3 .3 .3 .3	РКО (Rep ноц 171 123 8-3/ Кемент 8-3/ Кемент 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/	ort all string E SIZE 2" 4" SCREEN 32. DEPTH 11,52 UCTION ing - Size al OII - Bbl. 60 Cas - 96	370 294 200 4 ACID H INTE 2-11 nd type MCF 0	in well) CEME 0 0 sax C 30, 512E 2-3/8 0, SHOT, F ERVAL ,696 6 0 120 W	Iass H Iass H Iass H I RACTUR A/300 W/10, Benzo seale F V Trace	ECORD TUBIN DEPTH ,308' E, CEME NOUNT A 0 gal 000 g 1c Ac rs Ve. S ater - B race est With-	75 L Wild REC SET INT SQ IND KII 15% al 20 id F Il Statu hut bl. OIL Coll Coll Coll	AMOUNT PULLED None " ite - " ate ORD PACKER SET 11,303' UEEZE, ETC. ND MATERIAL USED NEA. Reacidize D% in 4 stages to lakes & ball S (Prod. or Shut-in) in Gas-Cil Haus 2000-1 Gravity - API (Corr.) 42.2° By eates
CASING SIZE 13-3/8" 9-5/8" 5 ² / ₂ " 9. SIZE 9. SIZE 9. 9. 11,522-24, 11, 11,566-74, 11, 11,678-86, 11, 12,678-86, 11, 13,678-86, 11, 14,678-86, 11, 15,512-77 10,512-77 10,512-77 10,512-77 10,512-77 10,512-77 10,512-77 10,512-77 10,512-77 10,512-77 10,512-77 10,512-77 10,512-77 10,512-77 10,512-77 10,512-77 10,512-77 10,512-77 10,512-77 10,512-77 10,512-77 10,512-77 10,512-77 10,512-77 10,512-77 10,512-77 10,512-77 10,512-77 10,512-77 10,512-77 10,512-77 10,512-77 10,512-77 10,512-77 10,512-77 10,512-77 10,512-77 10,512-77 10,512-77 10,512-77 10,512-77 10,512-77 10,512-77 10,512-77 10,512-77 10,512-77 10,512-77 10,512-77 10,512-77 10,512-77 10,512-77 10,512-77 10,512-77 10,512-77 10,512-77 10,512-77 10,512-77 10,512-77 10,512-77 10,512-77 10,512-77 10,512-77 10,512-77 10,512-77 10,512-77 10,512-77 10,512-77 10,512-77 10,512-77 10,512-77 10,512-77 10,512-77 10,512-77 10,512-77 10,512-77 10,512-77 10,512-77 10,512-77 10,512-77 10,512-77 10,512-77 10,512-77 10,512-77 10,512-77 10,512-77 10,512-77 10,512-77 10,512-77 10,512-77 10,512-77 10,512-77 10,512-77 10,512-77 10,512-77 10,512-77 10,512-77 10,512-77 10,512-77 10,512-77 10,512-77 10,512-77 10,512-77 10,512-77 10,512-77 10,512-77 10,512-77 10,512-77 10,512-77 10,51	WEIGHT LI 48# H- 32# & 20# & TOP Interval, size a 528-32 604-06, 1 690-96 Prov F Hours Tested 3 hrs Cusing Freas Packer Sold, used for f	B./FT. 40 36# 17# LINER I BO nd number 1,610 11 duction h 'lowin Ci ure Co Here Co Here Co	CAS DEPTH 415' 4577' 13,79' RECORD OTTOM OTTOM er) 1-12 & .,620-22 	ING RECC SET 7.69' SACKS C .3 .3 .3 .3 .3 .3 .3 .3 .3 .3 .3 .3 .3	PRD (Rep ноL 171 123 8-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3	ort all string E SIZE 2" 4" SCREEN 32. DEPTH 11,52 UCTION ing - Size al OII - Bbl. 60 Cas - 96	ACID ACID H INTE	in well) CEME 0 0 5 30, 5 12E 2-3/8 0, SHOT, F ERVAL ,696 6 6 9 6 9 6 9 6 9 6 9 6 9 6 9 6 9	Iass H Iass H I II RACTUR A/300 w/10, Benzo seale	ECORD TUBIN DEPTH ,308' E, CEME NOUNT A 0 gal 000 g 1c Ac rs Ve. S ater - B race L est With-	75 L Wild REC SET INT SQ IND KII 15% al 20 id F II Statu hut bl.	AMOUNT PULLED None " ite - " ate ORD PACKER SET 11,303' UEEZE, ETC. NO MATERIAL USED NEA. Reacidize D% in 4 stages t lakes & ball Gas-Cil Haue 2000-1 Gravity - API (Corr.) 42.2° By eates
CASING SIZE 13-3/8" 9-5/8" $5\frac{2}{2}"$ 19. SIZE 11,522-24, 11, 11,566-74, 11, 11,678-86, 11, 12,000 Tubing Press. 405# 14, Disposition of Gas (3) Vented. Gas c	WEIGHT LI 48# H- 32# & 20# & TOP Interval, size a 528-32 604-06, 1 690-96 Prov F Hours Tested 3 hrs Cusing Press Packer Sold, used for f	B./FT. 40 36# 17# LINER I BO nd number 1,610 11 duction h 'lowin Cl wre Cd ure Cd ure Cd ure Cd ure Cd Cd Cd Cd Cd Cd Cd Cd Cd Cd	CAS DEPTH 415' 4577' 13,79' RECORD OTTOM OTTOM -12 & .,620-22 	ING RECC SET 7.69' SACKS C .3 .3 .3 .3 .3 .3 .3 .3 .3 .3 .3 .3 .3	PRD (Rep ноL 171 123 8-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3	ort all string E SIZE 2" 4" SCREEN 32. DEPTH 11,52 UCTION ing - Size al OII - Bbl. 60 Cas - 96	ACID H INTE 2-11 MCF 0	in well) CEME 0 0 5 30, 5 12E 2-3/8 0, SHOT, F ERVAL ,696 6 9 6 9 6 9 6 9 6 9 6 9 6 9 6 9 6	Iass H Iass H Iass H I RACTUR A/300 w/10, Benzo seale F Trace	ECORD TUBIN DEPTH ,308' E, CEME NOUNT A 0 gal 000 g 1c Ac rs Ve. S ater - B race est With- R.	75 L Wild REC SET INT SQ IND KII 15% al 20 id F II Statu hut bl.	AMOUNT PULLEC None " ite - " ate ORD PACKER SET 11,303' UEEZE, ETC. ND MATERIAL USED NEA. Reacidize D% in 4 stages lakes & ball s (Prod. or Shut-in) in Gas-Cil Haue 2000-1 Gravity - API (Corr.) 42.2° By eates
CASING SIZE 13-3/8" 9-5/8" 52" 29. SIZE 11,522-24, 11, 11,566-74, 11, 11,678-86, 11, 13,000 (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000) (10,000)	WEIGHT LI 48# H- 32# & 20# & TOP Interval, size a 528-32 604-06, 1 690-96 Proc F Hours Tested 3 hrs Cusing Press Packer Sold, used for f	B./FT. 40 36# 17# LINER I BC ad aumber 1,610 11 duction h 10win Cl wre Control of the second s	CAS DEPTH 415' 4577' 13,79' RECORD OTTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0TTOM 0	ING RECC           SET           7.69'           SACKS C           .3           .3           .3           .3           .3           .3           .3           .3           .3           .3           .3           .3           .3           .3           .3           .3           .3           .3           .3           .3           .3           .3           .3           .3           .3           .3           .3           .3           .3           .3           .3           .3           .3           .3           .3           .3           .3           .3           .3           .3           .3           .3           .3           .3           .3           .3           .3           .3  <	ркр (Rep ноц 174 125 8-3/ В-3/ Семент 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-3/ 8-	ort all string E SIZE 2" (4" SCREEN 32. DEPTH 11,52 UCTION ing - Size al OIL - Bbl. 60 Cas - 96	370 294 200 4 ACID H INTE 2-11 nd type MCF 0	in well) CEME 0 0 0 50 512E 2-3/8 0, SHOT, F ERVAL ,696 120 W	Iass H Iass H Iass H III RACTUR A/300 w/10, Benzo seale F Trace T	ECORD + 17 TUBIN DEPTH ,308' E, CEME OUNT A O gal OOO g ic Ac rs Ve. S ater - B race R.	75 L Wild REC SET INT SQ IND KII 15% al 20 id F II Statu hut bl.	AMOUNT PULLEC None " ite - " ate ORD PACKER SET 11,303' UEEZE, ETC. NO MATERIAL USED NEA. Reacidize 7% in 4 stages lakes & ball s (Prod. or Shut-in) in Cas-Cil Haue 2000-1 Gravity - API (Corr.) 42.2° By eates
CASING SIZE 13-3/8" 9-5/8" $5\frac{1}{2}$ " 29. SIZE 91. Performition Record (1 11,522-24, 11, 11,566-74, 11, 11,678-86, 11, 13,000 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (1,600 (	WEIGHT LI 48# H- 32# & 20# & TOP Interval, size a 528-32 604-06, 1 690-96 Proc F Hours Testod 3 hrs Cusing Freas Cusing Freas Sold, used for f contract p the information	B./FT. 40 36# 17# LINER I BO ad aumbo 1,610 11 duction h 10win Ci wre Ci wre Ci wre Ci wre Ci wre Ci bo ci bo ci bo ci bo ci bo ci bo ci bo ci bo ci bo ci bo ci bo ci bo ci bo ci bo ci bo ci bo ci bo ci bo ci bo ci bo ci bo ci bo ci bo ci bo ci bo ci bo ci bo ci bo ci bo ci bo ci bo ci bo ci bo ci bo ci bo ci bo ci bo ci bo ci bo ci bo ci bo ci bo ci bo ci bo ci bo ci bo ci bo ci bo ci bo ci bo ci bo ci bo ci bo ci bo ci bo ci bo ci bo ci bo ci bo ci bo ci bo ci bo ci bo ci bo ci bo ci bo ci bo ci bo ci bo ci bo ci bo ci bo ci bo ci bo ci bo ci bo ci bo ci bo ci ci ci ci ci ci ci ci ci ci	DEPTH 415' 4577' 13,79' RECORD OTTOM er) 0-12 & ,620-22 Julta & ,700-22 Julta & ,700-20 Julta & ,700-20 Julta & ,700-20 Julta & ,700-20 Julta & ,700-20 Julta & ,700-20 J	ING RECC         SET         7.69'         SACKS C         .3:         .3:         .3:         .3:         .3:         .3:         .3:         .3:         .3:         .3:         .3:         .3:         .3:         .3:         .3:         .3:         .3:         .3:         .3:         .3:         .3:         .3:         .3:         .3:         .3:         .3:         .3:         .3:         .3:         .3:         .3:         .3:         .3:         .3:         .3:         .3:         .3:         .3:         .3:         .3:         .3:         .3:         .3:         .3:         .3:         .3:         .3:         .3:         .3:      .	радо (Rep ноц 173 123 8-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3/ В-3	e and comple	370 294 200 4 ACID H INTE 2-11 nd type MCF 0	in well) CEME CEME CEME CEME CEME Solution SIZE 2-3/8 CASE CASE CASE CEME SIZE 2-3/8 CASE CASE CASE CEME SIZE 2-3/8 CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE CASE C	Iass H Iass H I II RACTUR A/300 w/10, Benzo seale F W Trace Trace	TUBIN TUBIN DEPTH ,308' E, CEME OUNT A O gal OOO g ic Ac rs Ve. S ater - B Tace est With R.	75 L Wild REC SET INT SQ IND KII 15% al 20 id F II Statu hut bl. OII D. Yi d belief	AMOUNT PULLEC None " ite - " ate ORD PACKER SET 11,303' UEEZE, ETC. ND MATERIAL USED NEA. Reacidize D% in 4 stages lakes & ball S (Prod. or Shut-in) in Cas-Cil Haue 2000-1 Gravity - API (Corr.) 42.20 By eates
CASING SIZE 13-3/8" 9-5/8" 5 ² / ₂ " 13. SIZE 11. Perforation Record (1 11,522-24, 11, 11,566-74, 11, 11,566-74, 11, 11,678-86, 11, 13, 14,678-86, 11, 14,678-86, 11, 15,21-77 Flow Tubing Press. 405# 16, Disposition of Gas (2 Vented. Gas c	WEIGHT LI 48# H- 32# & 20# & TOP Interval, size a 528-32 604-06, 1 690-96 Proc F Hours Tested 3 hrs Cusing Freas Cusing Freas Sold, used for f ontract p the information	B./FT. 40 36# 17# LINER I BO nd number 1,610 11 duction 1 10win Co wre Co wel, vent pendin	DEPTH 415' 4577' 13,79' RECORD OTTOM OTTOM er) 0-12 & ,620-22 Jethod (Flow B hoke Size 24/64'' alculated 24- our hate icd, etc.) IS-	ING RECC         SET         7.69'         SACKS C         .3:         .3:         .3:         .3:         .3:         .3:         .3:         .3:         .3:         .3:         .3:         .3:         .3:         .3:         .3:         .3:         .3:         .3:         .3:         .3:         .3:         .3:         .3:         .3:         .3:         .3:         .3:         .3:         .3:         .3:         .3:         .3:         .3:         .3:         .3:         .3:         .3:         .3:         .3:         .3:         .3:         .3:         .3:         .3:         .3:         .3:         .3:         .3:         .3:      .	PRD (Rep         HOL         171         123         8=3/         EEMENT         8" 12         8" 12         8" 28         PRODI         For         *rlod         PRODI         PRODI         For         *rlod         PRODI         PRODI         Prod         PRODI         Prod         Pro	ort all string E SIZE 2" (4" SCREEN 32. DEPT+ 11,52: UCTION ing - Size an OIL - Bbl. 60 Cas - 96: 96:	370 294 200 4 ACID ACID ACID ACID ACID ACID ACID ACID	in well) CEME CEME CEME CEME CEME Solution SIZE 2-3/8 CAL SIZE 2-3/8 CAL SIZE 2-3/8 CAL SIZE 2-3/8 CAL SIZE 2-3/8 CAL SIZE 2-3/8 CAL SIZE 2-3/8 CAL CAL CAL CAL CAL CAL CAL CAL	Iass H Iass H I II RACTUR A/300 w/10, Benzo seale F w Trace Trace	TUBIN TUBIN DEPTH ,308' E, CEME OUNT A O gal OOO ga ic Ac rs Ve. S ater - B Tace R. est Without R.	75 L Wild REC SET INT SQ ND KII 15% al 20 id F Il Statu hut bl. OII cased E D. Yi d belief	AMOUNT PULLED None " ite - " ate ORD PACKER SET 11,303' UEEZE, ETC. NO MATERIAL USED NEA. Reacidize D% in 4 stages lakes & ball S (Prod. or Shut-in) in Cos-Cil Hallo 2000-1 Gravity - API (Corr.) 42.20 By eates
CASING SIZE 13-3/8" 9-5/8" 52" 9. 51ZE 11,522-24, 11, 11,522-24, 11, 11,566-74, 11, 11,566-74, 11, 11,678-86, 11, 12,678-86, 11, 13,678-86, 11, 14,678-86, 11, 14,678-86, 11, 15,618-77 16,018-77 16,018-77 16,018-77 16,018-77 16,018-77 16,018-77 16,018-77 16,018-77 16,018-77 16,018-77 16,018-77 16,018-77 16,018-77 16,018-77 16,018-77 16,018-77 16,018-77 16,018-77 16,018-77 16,018-77 16,018-77 16,018-77 16,018-77 16,018-77 16,018-77 16,018-77 16,018-77 16,018-77 16,018-77 16,018-77 16,018-77 16,018-77 16,018-77 16,018-77 16,018-77 16,018-77 16,018-77 16,018-77 16,018-77 16,018-77 17,018-77 17,018-77 17,018-77 17,018-77 17,018-77 17,018-77 17,018-77 17,018-77 17,018-77 17,018-77 17,018-77 17,018-77 17,018-77 17,018-77 17,018-77 17,018-77 17,018-77 17,018-77 17,018-77 17,018-77 17,018-77 17,018-77 17,018-77 17,018-77 17,018-77 17,018-77 17,018-77 17,018-77 17,018-77 17,018-77 17,018-77 17,018-77 17,018-77 17,018-77 17,018-77 17,018-77 17,018-77 17,018-77 17,018-77 17,018-77 17,018-77 17,018-77 17,018-77 17,018-77 17,018-77	WEIGHT LI 48# H- 32# & 20# & TOP Interval, size a 528-32 604-06, 1 690-96 Proc F Hours Tested 3 hrs Cusing Freas Cusing Freas Sold, used for f ontract p the information	B./FT. 40 36# 17# LINER I BO nd number 1,610 11 duction h 1,610 11 duction h 1,610 11 duction h 1 owin Cliner I 10 win Cliner I 10 win 10 win	CAS DEPTH 415' 4577' 13,79' RECORD OTTOM 0-12 & ,620-22 Jethod (Flow B hoke Size 24/64'' alculated 24- our hate icd, etc.) IS-	ING RECC         SET         7.69'         SACKS C         .31         .32         .33         .34         .35         .35         .36         .37         .38         .39         .31         .32         .33         .34         .35         .36         .37         .31         .32         .33         .33         .34         .35         .36         .37         .38         .39         .31         .32         .33         .34         .35         .36         .37         .38         .39         .31         .33         .34         .35         .36         .37         .38         .39         .31         .32         .33         .34         .35	PRD (Rep         HOL         171         123         8-3/         EEMENT         8" 12         8" 28         PRODI         For         *clod         PRODI         For         *clod         PRODI         Prod         *bl.         O         Prim is true         EX	ort all string E SIZE 2" (4" SCREEN 32. DEPT+ 11,52 UCTION ing - Size an OII - Bbl. 60 Cas - 96 e and comple	ACID ACID ACID ACID ACID ACID ACID ACID	in well) CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CEME CE	HTING R 1ass H 1ass H 1ass H RACTUR A/300 W/10, Benzo seale F W T ater - Bb Trace T	ECORD + 17 TUBIN DEPTH ,308' E, CEME OUNT A 0 gal 000 gal 10 AC rs Ve. S ater - B Tace est Wither R. edge unit	75 L Wild REC SET INT SQ ND KII 15% al 20 id F Il Statu hut bl. OIL D. Yild bl. E	AMOUNT PULLED None " ite - " ate ORD PACKER SET 11,303' UEEZE, ETC. NO MATERIAL USED NEA. Reacidize 0% in 4 stages lakes & ball s (Prod. or Shut-in) in Gravity - API (Corr.) 42.20 By eates 6-1-77

#### INSTRUCTIONS

This turn is to be filed with the upperful District Differ of the Communition net later the days after the completion of any newly-differed as a summary of all executivity logins the well and a summary of all executivity logins the well and a summary of all executivity logins the well and a summary of all executive abalt about the reported to the cone of directionally drilled wolls, true vertical depths abalt also be reported. For mattice completions, items 30 through 34 shall be reported for each zone. The form is to be filed in quintuplicate except on state hand, where six explose are regarded. See half 105.

### INDICATE FORMATION TOPS IN CONFORMANCE WITH GEOGRAPHICAL SECTION OF STATE

#### Southeastern New Mexico

#### Northwestern New Mexico

		14.90	-	12.023	т	Qia Aluma	T.	Penn. "13"
Т.	Anhy	1593	4.	12 336	-	Kirthash Fmitland	T.	Penn. "C"
Т.	Salt	2606	1. 	12 / 70	T	Pietured Cliffe	т	Penn. "D"
п.	Sult	2764	T.	Aloka 12,470	**	Pictures Cinis	7"	Leadville
Τ.	Yistes	2704	т.	Chester 13,707	T.	Cliff House	i.	Leadvine
Т.	7 Rivers		Τ.	Devonian	T.	Menefee	1.	Madison
Т.	Queen	3714	Т.	Silurian	Т.	Point Lookout	T.	Elbert
T.	Grayburg	4120	Т.	Montoya	T.	Mancos	T.	McCracken
T	San Andres	4460	T.	Simpson	Т.	Gallup	T.	Ignacio Qizte
	Clorunta	5936	т.	McKee	Rus	e Greenhorn	T.	Granite
**	Deddark	- Karley Harden	T	Ellenburger	Τ.	Dakota	T.	
1.	Paddock		-	C. Wash	T	Norrison	T.	
т.	Ininebry	7100	1.	Cir, wash	-	Todillo	Т.	
Τ.	Tubb	7100	1.	Granite	-	Found -	T	
т.	Drinkard	/305	Т.	Delaware Sand	1.	Entrada		
т.	Abo	7856	Т.	Bone Springs	T.	Wingate	1.	
Т.	Wolfcamp	9720	Т.	Bursum Marker 10,510	T.	Chinle	T.	
7	Kemnitz	10.770	Τ.	Atoka Sand 13,068	Τ.	Permion	T.	
T	Ciero	- 11.486	T.	Morrow Sand 13,640	Τ.	Penn. "A"	T.	
*	CISCO		-	243 90 110	SI	NDS OR ZONES		
No.	1, from10	,383	******	to 10, 389 (Wolfcamp)	No	. 4, from		
No.	2, from 10	,771		to 10,848 (Kemnitz)	No	. 5, from	*******	
No.	3, from	,640		to 13,864 (Morrow)	No	. 6, from		

## IMPORTANT WATER SANDS

Include data on rate of water inflow and elevation to which water rose in noic.	
No. 1, from None feet	
No. 2, fromfeet.	**************************************
No. 3, from	
No. 4, fromfeet.	

FORMATION RECORD (Attach additional sheets if necessary)

From To	Thickness in Feet	Formation	From	To	Thickness in Feet	Formation
Surface 148 480 159 593 260 2606 276 4120 446 4460 718 7180 730 7305 795 8004 972 9720 11,70 11,702 12,02 12,023 12,0 12,072 12,3	0 1480 3 113 6 1013 4 158 0 1356 0 340 0 2720 5 125 6 651 4 48 0 1716 1982 3 21 2 49 6 264	Surface rock & redbeds Anhydrite & redbeds Salt Anhydrite, salt & redbeds Sand, anhydrite & shale Dolomite, anhydrite & shale Dolomite Sand Dolomite Shale & dolomite Dolomite & same shale Lime, Shale & chert Shale & some lime Lime w/shale stringers Shale w/lime stringers	12,336 12,470 12,497 13,068 13,102 13,160 13,640 13,767	12,470 12,497 13,068 13,102 13,160 13,640 13,767 13,804	134 27 571 34 58 480 127 37	Lime & shale Sand & sandy lime Lime, shale & chert Sand Shale, sand & limey sand Lime, shale & chert Sand & shale Chester Lime

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 1 P.O. BOK 1980, HODDE, NM 88240	OIL CONSERVATION DI	VISION WELL API N	10.
DISTRICT II	Santa Fe, New Mexico 87504-	2088 30-025	-20592 -
P.O. Drawer DD, Artesia, NM 38210		3. Indicate	STATE T FEE
1000 Rio Brazos Rd., Aztec, NM 37410		6. State Oil L-339	# Gas Lease No. 2
SUNDRY NO	TICES AND REPORTS ON WELLS	1//////	
( DO NOT USE THIS FORM FOR PI DIFFERENT RES (FORM	ROPOSALS TO DRILL OR TO DEEPEN OR PLU ERVOIR. USE "APPLICATION FOR PERMIT" C-101) FOR SUCH PROPOSALS.)	G BACK TO A 7. Lease Na	ine or Unit Agreement Name
1. Type of Well:	-		
THEM WELL	017-628	STATE	27
A MONORTER TR		S. Well No.	
3. Address of Operator	40 - (s.g. s.)	9. Pool aan	as or Wildon .
MONCRIEF BUILDING, N.	INTH @ COMMERCE, FT. WORTH, T	EXAS 76102 KEMNITZ	LOWER WOLFCAMP
4. Well Locauon	BO SOUTH	. 660 -	WEST Line
Unit Letter :	For peet From the	ine and Fee	Line
Section 27	Township 16S Range 3	3E NMPM LEA	County
	10. Elevation (Show whether DF, RKB, 4201 GR	RT. GR. ##C.)	
11 Check	Appropriate Box to Indicate Nature	of Notice, Report, or C	)ther Data
NOTICE OF IN	ITENTION TO:	SUBSEQUEN	T REPORT OF
		oobocdoc.	
PERFORM REMEDIAL WORK	PLUG AND ABANDON	DIAL WORK	ALTERING CASING
TEMPORARILY ABANDON	CHANGE PLANS	ENCE DRILLING OPHS,	PLUG AND ABANDONMENT
	CASIN	G TEST AND CEMENT JOB	
			-
OTHEH:		4	
12. Describe Proposed or Completed Oper work) SEE RULE 1103.	rations (Clearly state all pertinent details, and give pe	tinent dates, including estimated	date of staming any propased
7-09-97 SET CTR	9 8 10.700' spot 35' cement's	n 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 4	965' of 5 % casing	3
7-16-97 SPOT 45	sxs & 5022'-491/' targed		
7-17-97 SPOT 45	sxs 8 1600'-1465'		13- L
7-17-97 SPOT 50	sxs @ 465'-315'		¢.
7-17-97 SPOT 10	sxs 3 30'- surface		
TAICHIMIT DEV LICE	MOREP		
CIR. HOLE WITH 1	D# MOD		
I hereby certify that the information above a	rue and complete to the best of my imowindge and belief.		8/5/97
SKONATURE Karen J	M Koven me A	DEM.T.	DATE(817)
TYPE OR PROT NAME KAREN MC	GOVERN		TELEPHONE NO. 336-7232
	Q		
(Thus space for State Lise)	01 0		
( )Ohnul	Dolinon		DATE
	The must me		

Distantial #1	Fax (575) 393-0720			State of New Mexico					Form C-101 Revisol July 18, 2013	
District II         District II           Phone (575) 748-1283 Fax (575) 748-0720           District III           1000 Rio Brazos Road, Azrec, NM 37410           Phone (505) 334-5178 Fax: (505) 334-6170           District IV           1220 S. SI, Francis Dr., Sønta Fe, NM 87505           Phone (505) 476-3460 Fax: (505) 476-3462			Energy Minerals and Natural Resources							
				Oil Cons		AMENDED REPORT				
				1220 South St. Francis Dr. Santa Fe, NM 87505					30-025-20592	
APPLICA	TION FO	R PERM	IT TO DRI	LL, RE-EN	TER, DE	EPEN,	PLUGBACI	K, OR AI	DD A ZONE	
* Operator Name and Address Llano Disposal, LLC								² OGRID Nu 37066	nber I	
PO Box 190 Lovington, NM 8826				8260				30-025-20592		
* Property Code				lame 27'			" Well No. 001			
				7. Surface Lo	cation					
UL-Lot S	ection Townshi 27 16S	ip Rang 33F	e Lot kiz	Feet fit	om N3	S Line	Feet From 660	E/W Line	County	
			* Pro	oposed Botton	n Hole Loca	ition				
UL-Lot S	ection Townsh	ip Rang	e Let idr	r Feet fro	am N/	S Line	Feet From	E/W Line	County	
				* Pool Inform	mation			And and a second se		
			B	Pool Name SW; Salado	mation			Pool Code 96173		
			Add	itional Well I	nformation					
11 Work Ty	уре	¹³ Well	Туре	^{13.} Cable/R	Rotary H. Lease Ty		⁴ Lease Type	¹⁵ Ground Level Elevation 4201		
16 Multip	le	17 Proposed	d Depth	¹⁸ Forma	ation ¹² Contractor do Unknown well Distant			²⁸ Spud Date Unknown noe to nearest surface water		
N Depth to Ground	water	4505' (P	Distance from no	salac arest fresh water						
							as in the state	and the set of the set		
60' -	- 190'			~2542 f	eet			Greater tha	n 1 mile	
60°. We will be us	- 190' sing a closed-lo	op system in	lieu of lined pit	~2542 fo	eet			Greater tha	n 1 mile	
60' · ⊠We will be us	- 190' sing a closed-lo	op system in	lieu of lined pit	~2542 fo s d Casing and	Cement Pr	ogram		Greater tha	n 1 mile	
60°. ∑We will be us Type	- 190' sing a closed-lo Hole Size	Casing S	ilieu of lined pit	~2542 fo s d Casing and ng Weight/ft	Cement Pr Settin	ogram	Sacks of 0	Greater tha	n 1 mile Estimated TOC	
60'. We will be us Type Surface Intermed	- 190' sing a closed-lo Hole Size 17-1/2" 12-1/4"	op system in Casing S 13-3/8 9-5/8*	i lieu of lined pit ^{21.} Propose ize Casi **	~2542 fo s d Casing and ng Weight/ft 48 36/32	Cement Pr Settin	ogram g Depth 14	Sacks of 0 37/ 294	Greater tha	n 1 mile Estimated TOC Surface – In Plac Surface – In Plac	
60°. ∑We will be us Type Surface Intermed Production	- 190' sing a closed-lo Hole Size 17-1/2" 12-1/4" 8-3/4"	Casing Si 13-3/8 9-5/8' 5-1/2'	ilieu of lined pit ^{21.} Propose ize Casi "	~2542 fo s d Casing and ng Weight/ft 48 36/32 20/17	Cement Pr Settin 4 4965 -	ogram g Depth 14 578 - 13798	Sacks of ( 37) 294 70	Greater tha	n 1 mile Estimated TOC Surface – In Plac Surface – In Plac 8190' – In Place	
60°. We will be us Type Surface Intermed Production	- 190' sing a closed-lo Hole Size 17-1/2" 12-1/4" 8-3/4"	Casing Si 13-3/8 9-5/8* 5-1/2	ilieu of lined pit ^{21.} Propose ize Casi " " " Casing/Cemer	~2542 fo s d Casing and ng Weight/ft 48 36/32 20/17 nt Program: 4	Cement Pr Settin 4 4965 - Additional C	ogram g Depth 14 578 - 13798 Comment	Sacks of ( 37) 294 70 5	Greater tha Cement 0 0 0	n 1 mile Estimated TOC Surface – In Plac Surface – In Plac 8190' – In Place	
60'. We will be us Type Surface Intermed Production	- 190' sing a closed-lo Hole Size 17-1/2" 12-1/4" 8-3/4"	Casing Si 13-3/8 9-5/8' 5-1/2'	lieu of lined pit ^{21.} Propose ize Casi " " Casing/Cemer Enclosures: C	~2542 fo s d Casing and ng Weight/ft 48 36/32 20/17 nt Program: / Current and F	Cement Pr Setting 4 4965 Additional C Proposed W	ogram g Depth 14 578 - 13798 Comment ellbore D	Sacks of 0 37/ 294 70 s iagrams	Greater tha	n 1 mile Estimated TOC Surface – In Plac Surface – In Plac 8190' – In Place	
60'. We will be us Type Surface Intermed Production	- 190' sing a closed-lo Hole Size 17-1/2" 12-1/4" 8-3/4"	op system in Casing S 13-3/8 9-5/8' 5-1/2'	ilieu of lined pit ^{21.} Propose ize Casi » • • • Casing/Cemer Enclosures: C ^{22.} Propose	~2542 fo s d Casing and ng Weight/ft 48 36/32 20/17 nt Program: / Current and F d Blowout Pr	Cement Pr Setting 4 4965 - Additional C Proposed W revention Pr	ogram g Depth 14 578 - 13798 Comment ellbore D rogram	Sacks of 0 37/ 294 70 s iagrams	Greater tha	n 1 mile Estimated TOC Surface – In Plac Surface – In Plac 8190' – In Place	
60'. We will be us Type Surface Intermed Production	- 190' sing a closed-lo Hole Size 17-1/2" 12-1/4" 8-3/4" Type	Casing Si 13-3/8 9-5/8' 5-1/2'	ilieu of lined pit ^{21.} Propose ize Casi » • • • Casing/Cemer Enclosures: C ^{22.} Propose Working Pr	~2542 fo s d Casing and ng Weight/ft 48 36/32 20/17 nt Program: 4 Current and F d Blowout Pr ressure	Cement Pr Settin 4 4965 - Additional C Proposed W revention Pr	ogram g Depth 14 578 - 13798 Comment ellbore D rogram Test Press	Sacks of ( 37) 294 70 8 iagrams sure	Greater tha	n 1 mile Estimated TOC Surface – In Plac Surface – In Plac 8190' – In Place Manufacturer	
60'. We will be us Type Surface Intermed Production Double	- 190' sing a closed-lo Hole Size 17-1/2" 12-1/4" 8-3/4" Type /Pipe/Blinds	oop system in Casing Si 13-3/8 9-5/8' 5-1/2'	lieu of lined pit ^{21.} Propose ize Casi " " " Casing/Cemer Enclosures: C ^{22.} Propose Working Pr 3000	~2542 fo s d Casing and ng Weight/ft 48 36/32 20/17 nt Program: // Current and F d Blowout Pr ressure	Cement Pr Setting 4 4965 Additional C Proposed W	ogram g Depth 14 578 - 13798 Comment ellbore D rogram Test Press 3000	Sacks of ( 37) 294 70 s iagrams sure )	Greater tha	n 1 mile Estimated TOC Surface – In Plac Surface – In Plac 8190' – In Place Manufacturer heron/Schaffer	
60'. We will be us Type Surface Intermed Production Double	- 190' sing a closed-lo Hole Size 17-1/2" 12-1/4" 8-3/4" Type /Pipc/Blinds	Casing Si 13-3/8 9-5/8' 5-1/2'	lieu of lined pit ^{21.} Propose ize Casi " " " Casing/Cemer Enclosures: C ^{22.} Propose Working Pr 3000	~2542 fo s d Casing and ng Weight/ft 48 36/32 20/17 nt Program: / Current and F d Blowout Prossure	Cement Pr Setting 4 4965 Additional O Proposed W revention Pr	ogram g Depth 14 578 - 13798 Comment ellbore D rogram Test Press 3000	Sacks of 0 37/ 294 70 s iagrams sure )	Greater tha	n 1 mile Estimated TOC Surface – In Plac Surface – In Plac 8190' – In Place Manufacturer neron/Schaffer	
60°. We will be us Type Surface Intermed Production Double ^{23.} 1 hereby certifilitiest of my know	- 190' sing a closed-lo Hole Size 17-1/2" 12-1/4" 8-3/4" Type /Pipe/Blinds	Casing Si 13-3/8 9-5/8' 5-1/2'	lieu of lined pit ^{21.} Propose ize Casi » • • • • • • • • • • • • •	~2542 fo s d Casing and ng Weight/ft 48 36/32 20/17 at Program: 4 Current and F d Blowout Pr ressure ) mplete to the	Cement Pr Settin 4 4965 - Additional C Proposed W revention Pr	ogram g Depth 14 578 - 13798 Comment ellbore D rogram Test Press 3000 OIL	Sacks of ( 37) 294 70 s iagrams sure ) CONSERVA	Greater tha	n 1 mile Estimated TOC Surface – In Plac Surface – In Plac 8190' – In Place Manufacturer neron/Schaffer ISION	
60°. We will be us Type Surface Intermed Production Double ^{23.} 1 hereby certify best of my know I further certify 19.15.14.9 (B) N Signature:	- 190' sing a closed-lo Hole Size 17-1/2" 12-1/4" 8-3/4" Type /Pipe/Blinds fy that the inform ledge and belief. that I have com MAC ⊠, if ap	Casing Si 13-3/8 9-5/8' 5-1/2' nation given ab aplied with 19 plicable.	lieu of lined pit ^{21.} Propose ize Casi " " Casing/Cemer Enclosures: C ^{22.} Propose Working Pr 3000 powe is true and co	~2542 for s d Casing and ng Weight/ft 48 36/32 20/17 nt Program: / Current and F d Blowout Pro- ressure ) mplete to the AC 🖾 and/or	Cement Pr Setting 4 4965 Additional O Proposed W revention Pr	ogram g Depth 14 578 - 13798 Comment ellbore D rogram Test Press 3000 OIL	Sacks of 0 37/ 294 70 s iagrams sure ) CONSERVA	Greater tha	n 1 mile Estimated TOC Surface – In Plac Surface – In Plac 8190' – In Place Manufacturer neron/Schaffer ISION	
60'.	- 190' sing a closed-lo Hole Size 17-1/2" 12-1/4" 8-3/4" Type /Pipe/Blinds fy that the inform ledge and belief. that I have con MAC ⊠, if ap	Casing Si 13-3/8 9-5/8' 5-1/2' nation given ab applied with 19 plicable.	ilieu of lined pit ^{21.} Propose ize Casi "" Casing/Cemer Enclosures: C ^{22.} Propose Working Pr 3000 pove is true and compose 0.15.14.9 (A) NM-	~2542 fo s d Casing and ng Weight/ft 48 36/32 20/17 at Program: // Current and F d Blowout Pr ressure ) mplete to the AC 🖾 and/or	Cement Pr Setting 4 4965 - Additional C Proposed W revention Pr	ogram g Depth 14 578 - 13798 Comment ellbore D rogram Test Press 3000 OIL	Sacks of 0 37/ 294 70 s iagrams sure ) CONSERVA	Greater tha	n 1 mile Estimated TOC Surface – In Plac Surface – In Plac 8190' – In Place Manufacturer heron/Schaffer ISION	
60°. We will be us Type Surface Intermed Production Double ^{23.} 1 hereby certify 19.15.14.9 (B) N Signature: Printed name: D Title: Agent for	- 190' sing a closed-lo Hole Size 17-1/2" 12-1/4" 8-3/4" Type Pipc/Blinds fy that the inform MAC ⊠, if ap DA 5 (20) Danny J. Holeon r Llano Disposal	Casing Si 13-3/8 9-5/8' 5-1/2' 5-1/2' nation given ab applied with 19 plicable.	lieu of lined pit ^{21.} Propose ize Casi " " " Casing/Cemen Enclosures: C ^{22.} Propose Working Pr 3000 pove is true and co	~2542 for s d Casing and ng Weight/ft 48 36/32 20/17 nt Program: / Current and F d Blowout Pr ressure ) mplete to the AC 🖾 and/or	Cement Pr Settin 4 4965 - Additional C Proposed W revention Pr evention Pr Approved B Title: Approved D	ogram g Depth 14 578 - 13798 Comment ellbore D rogram Test Press 3000 OIL y:	Sacks of ( 37) 294 70 s iagrams sure ) CONSERVA	Greater tha	n 1 mile Estimated TOC Surface – In Plac Surface – In Plac 8190' – In Place Manufacturer heron/Schaffer ISION	
60°. We will be us Type Surface Intermed Production Double ^{23.} 1 hereby certify 19.15.14.9 (B) N Signature: Printed name: D Title: Agent for E-mail Address:	- 190' sing a closed-lo Hole Size 17-1/2" 12-1/4" 8-3/4" Type /Pipe/Blinds fy that the inform ledge and belief. that I have con MAC , if ap Danny J. Holcon r Llano Disposal danny@pwllc.	Casing Si 13-3/8 9-5/8' 5-1/2' 5-1/2' nation given ab applied with 19 plicable.	lieu of lined pit ^{21.} Propose ize Casi " " " Casing/Cemer Enclosures: C ^{22.} Propose Working Pr 3000 pove is true and co	~2542 for s d Casing and ng Weight/ft 48 36/32 20/17 nt Program: // Current and F d Blowout Pro- ressure ) mplete to the AC 🖾 and/or	Cement Pr Setting 4 4965 - Additional O Proposed W revention Pr Sevention Pr Approved B Title: Approved D	ogram g Depth 14 578 - 13798 Comment ellbore D rogram Test Press 3000 OIL y:	Sacks of ( 37) 294 70 s iagrams sure ) CONSERVA	Greater tha	n 1 mile Estimated TOC Surface – In Plac Surface – In Plac 8190' – In Place Manufacturer heron/Schaffer ISION	

30-025-20592

District 1 1625 N. French Dr., Hobbs, NM 88240 Phone (573) 393-6161 Fax. (575) 593-0720 District II 811 S. Fran St., Artesia, NM 88210 Phone (575) 748-1283 Fax. (575) 748-9720 District III 1600 Rio Bravon Road, Artee, NM 87410

Phone (505) 334-6178 Fax: (505) 334-6170 District IV 1220 S St. Francis Dr., Santa Fe, NM 87505

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

		V	VELL LC	CATI	ON AND ACR	REAGE DEDIC	ATION PLA	T		
¹ API Number ² Po				² Pool Co	Pool Code Pool Name					
30-0	025-2059	2		9617.	3	N	BSW; Sa	lado	Well Manches	
* Property Co				State	27		601			
OCRID N					¹ Operator	Name	all to the street of the second se		⁵ Elevation	
370661 Ulano Disposal, LLC						sal, LLC	4201*			
				_	" Surface	Location	and a second	As passion	16 C	
UL or iot no. Section L 27		Township	Range	Lot Ida	Feet from the	North/South line S	Feet from the	East/West line	County	
		165	33E		1980		660	w	Lea	
L			" Bo	ttom H	ole Location I	f Different From	n Surface			
UL or lot no.	Section	Township	Range	Lot Ida	Feet from the	North/South line	Feet from the	East/West line	County	
12 Dedicated Acres	13 Joint or	Infill 14	Consulidation	Code 15	Order No.	1	A second se	L		
					(Pend	ing WQCC Disc	harge Permit H	SW-38 approva	1)	
						I hereby certified with the second	fy that the information conto my knowledge and twikef, an	ienal korrein is true and compli d dun dur arganization eidur		
NO allowable w	111 DC 255	10645 .11	nis complet	T MAD	All Interests have	line well file	for a non-statioa	ad ann mis been	appaored by me	
							Availan para owered, or M owke hereig DJ Signature Danny J, Printed Nam <u>danny a</u> E-mail Add	a addressity pending agreen in a addressity pending agreen ine concred by the distant Holcomb – Agent f res pwille.net ress.	mer of arch a montal or over en or a compulsory peeding 4/18/2 Date or Liano Disposal TIFICATION	
660'	980'						I hereby o plat was j mode by same is to See ( Date of Su Signature a	certify that the well lo plotted from field not me or under my supe rue and correct to the Original Survey dated . rvsy and Seal of Professional :	ecation shown on this les of actual surveys rvision, and that the e best of my belief. June 23, 1964 attached Surveyor:	
							See Certificate	Original Survey dated . Number	June 23, 1964 attached	

# Attachment I

Submit I Copy To Appropriate District State of New M	exico 30-025-20592 Form C-103
District 1 - (575) 393-6161 Energy, Minerals and Nati	WELL API NO.
District II - (575) 748-1283 OIL CONSERVATION	30-025-20592
811 S. First St., Artesia, NM 88210 District III - (505) 334-6178 1220 South St. Fra	5. Indicate Type of Lease
1000 Rio Brazos Rd., Aztec, NM 87410 Santa Fe, NM 8	1005 NI STATE OIL & Gas Lease No
District IV = (505) 476-3460 1220 S. St. Francis Dr., Santa Fe, NM 87505	APR IN State Off & Gas Lease No.
SUNDRY NOTICES AND REPORTS ON WELL (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PL	S 7. Lease Name or Unit Agreement Name
DIFFERENT RESERVOIR, USE "APPLICATION FOR PERMIT" (FORM C-101) F PROPOSALS.)	State 27
1. Type of Well: Oil Well 🔲 Gas Well 🛛 Other - PxA Well	Re-entry 8. Well Number 1
2. Name of Operator	9. OGRID Number
Address of Operator	10. Pool name or Wildcat
P.O. Box 190, Lovington, NM 88260	BSW; Salado
4. Well Location	
Unit Letter L : 1980 feet from the So	uthline and660feet from theVestline
Section 27 Township 16S	Range 33E NMPM Lea County
11, Elevation (Snow whether Di 420)	1' GL
	The second se
12. Check Appropriate Box to Indicate 1	Nature of Notice, Report or Other Data
NOTICE OF INTENTION TO:	SUBSEQUENT REPORT OF:
PERFORM REMEDIAL WORK PLUG AND ABANDON	REMEDIAL WORK
TEMPORARILY ABANDON CHANGE PLANS	COMMENCE DRILLING OPNS. PANDA
PULL OR ALTER CASING D MULTIPLE COMPL	CASING/CEMENT JOB
DOWNHOLE COMMINGLE	
CLOSED-LOOP SYSTEM	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 NMA	C. For Multiple Completions: Attach wellbore diagram of
proposed completion or recompletion.	
In accordance with discussions with OCD Environmental Bureau, OCI P&A well to inspect casing for possible conversion to a brine supply w	D District 1 and SLO, Llano Disposal LLC proposes to re-entry this vell 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 gro	ound level.
<ol> <li>MIRU pulling unit, NU BOP, unload and tally 2-7/8" workstring, s and stripping head, RHI with \$-3/4" skirted MT bit, bit sub, four 4-</li> </ol>	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 c	losed loop system.
3) Tag plug #5 at 4505', circulate hole clean, close BOP, test casing to	o 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, KDMO put	(SF) and OCD District I (Hobbs) to determine if well is suitable for
brine well service. Suspend further well work until additional perm	nitting is approved.
Spud Date: Rig Release I	Date:
puese or a contractive	
11	hest of my knowledge and belief
Thereby certify that the information above is true and complete to the	best of my knowledge and benet.
SIGNATURE Delomb TITLE_Ag	ent for Llano Disposal, LLC DATE4/18/2018
Type or print nameDanny J. Holcomb E-mail addre	ess:danny@pwllc.netPHONE:806-471-5628
For State Use Only	1 1
APPROVED BY:	Petroleum Engineer DATE OF/26/18
Conditions of Approval (II any):	
	1
Atta	cnment I