BW-035

PERMIT, APPLICATIONS, RENEWALS, & MODS

2022

From:	Chavez, Carl J, EMNRD
To:	Wunder, Matthew, DGF; ddapr@nmda.nmsu.edu; Richard, StephanieGarcia; James_Amos@blm.gov; psisneros@nmag.gov; r@rthicksconsult.com; sric.chris@earthlink.net; nmparks@state.nm.us; Tom.Blaine@state.nm.us; marieg@nmoga.org; william.fetner@state.nm.us; lazarus@glorietageo.com; perry@glorietageo.com; cjoyner@fs.fed.us; kevin.pierard@state.nm.us; bsg@garbhall.com; claudette.horn@pnm.com; dortiz@montand.com; pam@ipanm.org; Kautz, Paul, EMNRD; Robinson, Gary, EMNRD; Kerry EMNRD Fortner (Kerry.Fortner@state.nm.us); Adrienne EMNRD Sandoval (Adrienne.Sandoval@state.nm.us); Richard, StephanieGarcia; Cordero, Gilbert, EMNRD
Cc:	Goetze, Phillip, EMNRD; Powell, Brandon, EMNRD; Wrinkle, Justin, EMNRD
Bcc:	Philana Thompson; Jeff Davis; Darr Angell; Laura Angell; Gary Schubert; Ben Donahue; Marcus, Ramona, EMNRD; Tulk, Laura, EMNRD
Subject:	NM Oil Conservation Division- OCD WQCC UIC Class I (Non-hazardous) Injection Well & Class III (Solution Mining- Brine) Injection Well Discharge Permit Public Notices
Date:	Friday, July 29, 2022 2:52:00 PM

Ladies and Gentlemen:

Please find below the New Mexico Oil Conservation Division (OCD) initial Public Notices for the above subject Underground Injection Control (UIC) Class I (Non-hazardous) Injection Well (San Juan County) and Class III (Solution Mining- Brine) Injection Well (Lea County) Facilities.

The OCD Public Notices are scheduled to be posted in the Albuquerque Journal and Hobbs-Sun News on Sunday, July 31, 2022.

The OCD Draft Website for public notice information and updated postings is at https://www.emnrd.nm.gov/ocd/permitting-resources-how-tos/ (see “Discharge Plans” section).

WQCC Public Notices

Discharge Permit Application – Agua Moss, LLC. (7/29/2022):
Discharge Permit (UICI-5/Facility ID# fCJC2115960695)
The Underground Injection Control (UIC) Class I (Non-hazardous) Injection Well “Sunco Disposal Well No. 1- WDW-1″ (API No. 30-045-28653) is located at UL: E, Section 2, Township 29 North, Range 12 West, 1,595 FNL, 1,005 FWL, Latitude: N 36.75737º Longitude: W -108.07279°, NMPM, San Juan County. The well/facility is approximately 6 miles southwest of Aztec, NM at the intersection of County Roads 3500 and 3773.
Administratively Complete (7/29/2022)
Application (6/6/2022)
Discharge Permit (7/31/2022)
Public Notice (Estimated OCD Post Date: Sunday 7/31/2022)

Discharge Permit Application – Llano Disposal, LLC (7/29/2022):
Discharge Permit (BW-35/Facility ID# fCJC2134952911)
The Underground Injection Control (UIC) Class III Solution Mining Well “Siringo ACS State Well No. 1” (API# 30-025-30701) is located at UL: D, Section 26, Township 17 South, Range 36 East, Latitude: N 32.81150º Longitude: W -103.33178°, NMPM, Lea County. The injection well is located approximately 8.3 miles south of Lovington, or 1.1 miles east of the intersection of Hwy-483 (Arkansas Jct.) and Hwy-50 (Buckeye Rd.).
Administratively Complete (7/29/2022)
Application (6/14/2022)
Discharge Permit (7/31/2022)

Public Notice (Estimated OCD date: Sunday 7/31/2022)

Discharge Permit Application – H.R.C., Inc. (7/29/2022):
Discharge Permit (BW-36/Facility ID# fCJC2116031873)
The Underground Injection Control (UIC) Class III Brine or Solution Mining Injection Well "Schubert Farms Brine Well No.1" (API No. 30-025-37548) is located at UL: B, Section 25 Township 19 South, Range 38 East, 330 FNL, 1650 FEL, Lat. 32.63760°, Long. -103.09880°, NMPM, Lea County, New Mexico. The injection well is located approximately 1.9 miles E-NE of Nadine, NM or 1.7 miles E of the intersection of Hwy- 18 (S. Eunice Hwy.) and 0.95-mile N of Hwy- 56.
Administratively Complete (7/29/2022)
Application (5/26/2022)
Discharge Permit (7/31/2022)
Public Notice (Estimated OCD date: Sunday 7/31/2022

Please share this message with others and contact me if you have questions. Thank you.

Carl J. Chavez ● UIC Group
Engineering Bureau
EMNRD - Oil Conservation Division
5200 Oakland Avenue, N.E. Suite 100 | Albuquerque, NM 87113
505.660.7923
www.emnrd.nm.gov

Discharge Permit (BW-35) Llano Disposal, LLC (07/29/2022):
The Underground Injection Control (UIC) Class III Solution Mining Well "Siringo ACS State Well No. 1" (API# 30-025-30701) is located at UL: D, Section 26, Township 17 South, Range 36 East, Latitude: N 32.81150º Longitude: W -103.33178°, NMPM, Lea County. The injection well is located approximately 8.3 miles south of Lovington, or 1.1 miles east of the intersection of Hwy-483 (Arkansas Jct.) and Hwy-50 (Buckeye Rd.).

Administratively Complete (7/29/2022)
Application (6/14/2022)
Discharge Permit (7/31/2022)
Public Notice (Estimated OCD date: Sunday 7/31/2022)

State of New Mexico
Energy, Minerals and Natural Resources Department

Michelle Lujan Grisham A
Governor

Sarah Cottrell Propst
Cabinet Secretary

Todd E. Leahy, JD, PhD
Deputy Secretary

Adrienne Sandoval, Director
Oil Conservation Division

Sent via E-mail only

JULY 29, 2022

Mr. Darr Angell
Llano Disposal, L.L.C.
P.O. Box 250 (783 Highway 483)
Lovington, New Mexico 88260

Re: Discharge Plan Permit (BW-035) Llano Disposal, LLC
UIC Class III Brine Well
Siringo ACS State Brine Well No.1, API No. 30-025-30701
UL: D Section 26 Township 17 South, Range 36 East, 660 FNL, 660 FWL, Lat. 32.81150°, Long. 103.33178°, NMPM, Lea County, New Mexico

Dear Mr. Angell,

The New Mexico Oil Conservation Division (OCD) is in receipt of Llano Disposal, LLC's (Llano) new application dated June 14, 2022 for the Siringo ACS State Well No. 1 Brine Well at the above referenced location. After review of the application, the OCD has determined Llano's application is **"administratively complete"** in accordance with the New Mexico Water Quality Control Commission Regulations (20.6.2.3108 NMAC).

Llano's obligations to provide public notice should commence and be demonstrated to the OCD in a timely manner. The OCD will also provide notice to various governmental groups. Depending upon the level of public interest, a hearing may be scheduled on this matter. OCD will continue its review of the application and may request additional technical information.

If you have any questions, please do not hesitate to contact me by phone at (505) 660-7923, U.S. Mail at the address below, or e-mail at CarlJ.Chavez@state.nm.us. On behalf of the OCD, I wish to thank you and your staff for your continued cooperation in this process.

Sincerely,

Carl J. Chavez
Engineering Bureau- UIC Group

CC: Phillip Goetze
Southern District Office

Llano Disposal, LLC
P.O. Box 250
Lovington, NM 88260

Date: June 14, 2022

To: Jim Griswold -Environmental Bureau Chief
Carl Chavez -Environmental Engineer
1220 South St. Francis
Santa Fe, New Mexico 87505

Re: NOTICE OF INTENT TO DISCHARGE
WQCC 20.6.2.1201 NMAC

Dear Sirs:

I, Darr Angell, Owner, Llano Disposal, LLC, am formally notifying the New Mexico Oil Conservation Division of Llano's intent to permit a Class Ill brine well located in Lea County, New Mexico. Pursuant to the Water Quality Control Commission Regulations 0/VQCC)

20.6.2.1201.B and C. NMAC, the following information is provided:

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

2) The address of the person making the discharge:
P.0. Box 250 (783 Highway 483)
Lovington, NM 88260

3) The location of the discharge:
Brine Well Location: NW/4 NW/4, UL 'D', Section 26, T17S, R36E
Proposed Brine Station Location: SW/4 SW/4, UL 'M', Section 27, T17S, R36E

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

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

Pursuant to 20.6.2.3114 NMAC attached is Llano's check number 3308 in the amount of $100 made payable to the "Water Quality Management Fund" as filing fee for the discharge permit application. Two copies of the discharge permit application along with pertinent attachments and a completed form C108 are attached.

If OCD requires additional information concerning this notice of intent or discharge permit application, please contact me at 575-704-2777 or email darrangell@gmail.com. Thank you for your consideration of this application.

Sincerely,

Darr Angell

Darr Angell
Llano Disposal, LLC
575-704-2777

Attachments

3308

Llano Disposal, LLC
PO Box 250
Lovington, NM 88260

VALLEY BANK OF COMMERCE
623-2265
217 West Second · Roswell, New Mexico 8820
95-312/1122

6/7/2022

PAY TO THE ORDER OF Water Quality Management Fund

$ **100.00

One Hundred and 00/100********** DOLLARS

Security features. Details on back.

Water Quality Management Fund
New Mexico Oil Conservation Division
1220 South St Francis Drive
Santa Fe, New Mexico 87505

MEMO Filing fee for Brine Well BW-35

AUTHORIZED SIGNATURE

Llano Disposal, LLC

3308

Water Quality Management Fund 6/7/2022

100.00

Checking Account - V	Filing fee for Brine Well BW-35	100.00

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

State of New Mexico
Energy, Minerals and Natural Resources Department

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

Revised August 1, 2011

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

DISCHARGE PLAN APPLICATION FOR BRINE EXTRACTION FACILITES

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

☒ New ☐ Renewal

I. Facility Name: Siringo ACS State

II. Operator: Llano Disposal, LLC

Address: P.O Box 250 (783 HWY 483), Lovington, NM 88260

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

III. Location: NW /4 NW /4 Section 26 Township 17S Range 36E
Submit large scale topographic map showing exact location.

IV. Attach the name and address of the landowner of the facility site.

V. Attach a description of the types and quantities of fluids at the facility.

VI. Attach a description of all fluid transfer and storage and fluid and solid disposal facilities.

VII. Attach a description of underground facilities (i.e. brine extraction well).

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

IX. Attach geological/hydrological evidence demonstrating that brine extraction operations will not adversely impact fresh water.

X. Attach such other information as is necessary to demonstrate compliance with any other OCD rules, regulations and/or orders.

XI. CERTIFICATION:

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

Name: Darr Angell Title: Owner

Signature: Darr Angell Date: 6/14/22

E-mail Address: darrangell@gmail.com

Siringo ACS State #1 and Siringo Brine Station
Discharge Plan

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

Answer – This is a new application. The proposed brine well name is Siringo ACS State #1 and the proposed surface facility name is Siringo 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 250 (783 Highway 483), Lovington, NM 88260. The operator's OGRID number is 370661. The owner of Llano Disposal, LLC is also the owner of all the surface lands that the brine well and brine station will be situated upon. Additionally, the owner's personal residence is within a mile of the proposed brine well and brine station. Llano Disposal's office will be at 783 Highway 483, Lovington, NM 88260. The local representative is 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 brine well was originally drilled and abandoned in 1989. It is named the Siringo ACS State #1 (API # 30-025-30701) located at 660 FNL X 660 FWL, Unit Letter 'D', Section 26, T17S, R36E, Lea County, New Mexico. It has been re-completed as a brine well in the Salado (Salt) Formation between 2063' – 3253'. The brine station is located in the SE corner of UL 'M', Section 27, T17S, R36E, Lea County, New Mexico at latitude 32.798816°, longitude -103.347123°. The water source well is located approximately 0.62 miles SW of the proposed brine well. The water source well is located in UL 'J', Section 27, T17S, R36E, Lea County, New Mexico at latitude 32.804305°, longitude -103.338230°. See maps, facility site plan and aerial photographs in Attachments "A" – "F" and Attachment "O".

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, water source well and brine station location is the Angell #2 Family LP, P. O. Box 250 (783 Highway 483), Lovington, NM 88260. Mr. Darr Angell of the Angell #2 Family LP is also the principal owner of Llano Disposal, LLC, the proposed brine well owner and operator.

Siringo ACS State #1 and Siringo Brine Station
Discharge Plan

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.

Anticipated daily average volumes produced are 1500 BWPD of brine water and 1550 BWPD of fresh water. Anticipated volumes stored are 1500 bbls of brine water, 300 bbls of fresh water and 100 gallons of Baker Techni-Hib 606 corrosion chemical. An MSDS for the corrosion chemical is included in Attachment "H".

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 six interconnected 500 bbl fiberglass brine water storage tanks and one 210 bbl steel catch tank. All seven tanks will be located within a secondary containment. Each tank will have an isolation valve and will remain unpressurized. The secondary containment consists of an earthen berm with a 20 mil string reinforced LLDPE liner capable of holding a minimum of 4000 bbls. There will be a 32' X 60' concrete loading pad with a concrete sump that is situated on top of the concrete loading pad. Any fluids entering the sump will be pumped to the 210 bbl catch tank inside the lined secondary containment. At the proposed well location, there will be a poly chemical storage tank with a poly secondary containment below it capable of holding a minimum of one-third more than the size of the chemical tank. The chemical tank

will remain unpressurized. See schematics 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 unpressurized while pumps are 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 bermed area will then be lined with a 20 mil LLDPE liner with UV protection. Although, storm water run-on/run-off is expected to be minimal due to the level nature of the surrounding terrain, an earthen berm of topsoil dirt will be installed along the western, northern and eastern boundaries of the brine station. This storm water berm will contain or divert any storm water run-on from entering the brine station area.

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 one-third more than the combination of interconnected tanks within. The 32 foot by 60 foot concrete loading pad will be curbed on the edges and sloped to a grating covered 20" wide by 55' 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 steel catch/slop tank located within the secondary containment area. All process piping at the brine station will be installed above-ground.

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

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

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

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

Upon permit approval, a ground water quality monitoring program will be initiated on three existing fresh water wells near the proposed brine well and brine station. These wells are located southeast of the brine well and brine station. These water wells were selected due to their proximity to the facilities and the southeasterly flow of the aquifer. See Attachment "C" for location of the three proposed ground water 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 tank, will be transported by third party trucking companies to an approved Class II SWD well permitted by the NMOCD. Any contaminated soil waste will be transported by third party trucking companies to an approved NMOCD surface waste management facility (i.e. Sundance, et al).

D. Proposed Modifications

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

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

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

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

E. Underground Piping

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

Answer – This plan would include approximately 6600 feet of new 3" SDR-11 HDPE pipeline for transportation of brine water to be installed 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 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 3250 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 source 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 located southeast of the brine well and brine station would also be tested for the same parameters on a quarterly basis. This would establish the baseline ground water conditions over time. These wells were selected due to their proximity to the facilities and the southeasterly flow of the aquifer. 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 – As discussed in section VI.A.2 above, a storm water run-on berm will be installed around the western, northern and eastern side of the brine station to protect from storm water run-on at the brine station. As for run-off, the facility will contain all precipitation that occurs inside the tankage secondary containment. 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 tank. Any water collected in this catch 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 "O" for USGS 7.5 minute quadrangle drainage map of the impacted area.

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 6600 foot SDR-11 polyethylene brine pipeline will initially be hydrostatically pressure tested upon installation to insure mechanical integrity. It will be hydrostatically retested annually as long as no leakage is suspected. If leakage is ever suspected, the pipeline would be removed from service and tested. All pipeline tests will be logged into the inspection logs onsite. Storage tanks will be visually inspected internally when emptied for maintenance. Tanks will be visually inspected externally during daily routine inspections.

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

a. Removal of all fluids, contaminants and equipment.

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

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

Answer – After all surface equipment and concrete is removed, the brine station surface area and the brine well location will be re-contoured to original slope 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 – Forms C-101, C-102 and C-103 for the Siringo ACS State #1 (API #30-025-30701) were submitted to the NMOCD District 1 Office on July 9, 2015. They were approved January 19, 2016.

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

Answer – Llano 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 starts toward a final discharge permit 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 one mile area of review. This map also indicates the general topography of the area. The area elevation is relatively flat with a slight slope from northwest to southeast. There are no identifiable surface bodies of water, 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 – Underground aquifers in this area are the Ogallala and Quaternary Alluvium formations. The ground water in these formations is unconfined where the underlying red beds are relatively impermeable. This underlying layer prevents further vertical movement within the aquifer. Based on information reviewed, the ground water flow within the Ogallala is generally to the southeast. According to OSE records in the subject section and contiguous 8 sections, water depths range in a band at approximately 50 – 70 feet below ground level with average depth of water wells in this area being 107'. With the base of the reported red beds being at 1547' in the proposed brine well, the nearest ground water would be a minimum vertical distance of 496' above the proposed injection zone. The primary water bearing depth of 50 – 70 feet would be a minimum vertical distance of 1973' above the proposed injection zone. No additional ground water zones are evident in the area.

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

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

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

Answer – See Attachment "D" for a map of all oil and gas wells within the area of review that penetrate the injection zone (2043' – 3253' MD). There are six plugged and abandoned wells and one permitted, but yet undrilled well in the area of review. They are listed below:

API Well Number	Well Status	Location	TD	Plugs Near Salt
30-025-31473	P&A	G-26-17S-36E	11,150	@ 1504', 3100'
30-025-03950	P&A	B-26-17S-36E	8,298	@ 774', 4873'
30-025-20616	P&A	I-22-17S-36E	5,525	@ 2100', 3300'
30-025-27108	P&A	P-23-17S-36E	5,140	@ 1900', 3180'
30-025-20775	P&A	D-25-17S-36E	11,305	@ 950', 4655'
30-025-30110	P&A	B-27-17S-36E	12,355	@ 2945', 4530'
30-025-42319	Permitted, Not Drilled	L-26-17S-36E	Proposed 8,833 TVD	N/A

All of these plugged wells have cement plugs above and below the salt formation which should eliminate any pathway for migration. The nearest of these offset wells is located ½ mile away from the subject well. Plugging records for these offset wells within the 1 mile area of review are provided in Attachment "G".

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

Answer – See North-South and East-West cross-sections 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 schematics.

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

Answer – This information exists in NMOCD files. See Attachment "I" for copies. Llano Disposal reports all well completion information via Form C-105 and provide new logs run. In early February, 2016, at the NMOCD's request, Llano obtained approval and drilled out the top two cement plugs in this well. This allowed a cement bond log to be obtained which indicated the well has good cement behind casing. The lower cement plugs remain in place pending approval of this discharge permit application.

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 and circulate brine water up the tubing/casing annulus. The brine water will be transported by pipeline to a nearby brine station and stored in surface tanks for subsequent sale.

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, then setting a cast iron bridge plug at 10 feet above the casing shoe 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 currently has single well plugging bond number RLB0016073 issued by RLI Insurance Company accepted and approved by the NMOCD. However, as discussed in section X.C below, additional bonding will be required for adequate well plugging, surface restoration and surface subsidence monitoring. Llano will obtain additional bonding as outlined in section X.C.

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-103 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.

Siringo ACS State #1 and Siringo Brine Station Discharge Plan

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. 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 and circulate brine water up the tubing-casing annulus. Below are our proposed injection pressures and volumes which are well below the fracture gradient of 0.75 psi/ft:

Maximum injection pressure – 408 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 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 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 fresh water wells within the area of review. These tests represent the aquifer quality in the area of review. 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 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 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 – Due to the flat nature of the terrain within the 1 mile area of review, there are no bodies of water, streams, arroyos, canals, drains, seeps, springs, marshes or swamps evident. Six fresh water wells have been identified on the ground and via the OSE data base. Three of them are utilized for cattle production and three are used for domestic household supply by the landowner who is also the principal owner of Llano Disposal, LLC. See Attachment "D" for location of these water wells.

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 1 mile area of review. See Attachment "J" for test results. The results for the well titled "House", is located west of the subject brine well and used for domestic household supply by the principal owner of Llano Disposal, LLC. The results for the well titled "Windmill" is located east of the subject brine well and used for cattle production. OSE data base indicates the average depth to water in the area of review is 50 – 70 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, red beds and anhydrite per C-105 Formation data on wells within the 1 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 – Alluvium medium sand.

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

Answer - The aquifer is generally located at a depth of 50 – 70 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 1550' 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 10-12" 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. New Mexico Highway 483 runs north/south on the western edge of the proposed site. This highway with developed barrow ditches helps control runoff events coming from the west and northwest.

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

Answer – The brine station will have a storm water runoff berm installed on the uphill western and northern edges plus the eastern edge of the site. This berm should direct any approaching runoff events away from the station. The brine well location will be graded so that rain water will not pond around the well head.

B. Additional Information

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

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

Answer – The location of the proposed brine well is near the geologic region known as the San Simon Channel of the Permian Basin. This channel separated the Central Basin Platform from the Northwestern Shelf during Leonardian and early Guadalupian times. The subsurface formations are transitional between the Northwestern Shelf, Central Basin Platform and the Midland Basin. The brine well target formation is the Salado formation of the Ochoa series. This series is part of the upper Permian Age and extends across the 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 around 1000'. The Triassic rock overlying the 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 formation and ranges in thickness from 0' to 300' within this general area. It is primarily made up of calcareous, unconsolidated sand, clay, silt and gravel. This formation is the primary ground water source within this area. See Attachment "M" for area geology and general lithology.

2. Generalized maps and cross-sections;

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

3. Potentiometric maps for aquifers potentially affected;

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

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

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

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

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

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 records in the well file indicating that the Salado formation contained any water when this well was 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 which will have secondary containment protection. 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 – A C-108 Application to Inject has been prepared and will be submitted to the NMOCD Engineering Bureau with this proposed Discharge Plan. Additionally, new forms C-101, C-102 and C-103 for the subject well have already been approved by the NMOCD District 1 Office.

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 well will 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 casing shoe 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 currently has a single well plugging bond for the proposed brine well approved by the NMOCD in the amount of $10,450. However, Llano proposes to provide financial assurance for the Siringo Brine Well and Station via a single surety bond in the amount of $102,836 covering well plugging and abandonment, surface restoration and surface subsidence monitoring for 5 years after ceasing operations as detailed below. Upon acceptance and approval by the NMOCD/WQCC of this

$102,836 bond that is in place, Llano will keep it active for the duration of the well.

1. Well Plugging - $39,500

Based on recently obtained bids and experience in plugging wells, Llano proposes a well plugging bond amount of $39,500. See cost breakdown below.

$16,569	**Well plugging contractor labor/equipment including cement**
$8,500	**Equipment rental (workstring, flowback tanks, BOPE, porta-john, etc)**
$4,500	**Transportation of equipment**
$3,000	**Supervision**
$2,600	**Purchase/transportation of brine and fresh water**
$2,000	**Disposal of tank fluids**
$1,200	**Excavate/cutoff wellhead and anchors; weld on flat plate and PxA marker**
$1,131	**Miscellaneous**

2. Surface Restoration - $45,336

Based on recently obtained surface restoration cost quotes, these costs total $45,336 as detailed below:

$8,000	Equipment/Labor – washout tanks for disposal, haul fluids and solids to disposal
$2,100	Backhoe/Labor - 2 days to crush fiberglass tanks and PVC components at brine station
$2,400	35 Yd Roll-off Dumpsters - delivery, rental and hauling to landfill
$536	Lea County Landfill Charges – 3 ea 35 yd dumpsters = 105 cy x 300 lbs = 15.75 tons @ $34/ton
$1,600	Onsite Supervision
$19,100	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
$2,200	Trucking/Disposal – of concrete to Lea County Landfill @ $34/ton
$3,500	Trucking – haul metal components to Hobbs Iron & Metal for recycle
$4,500	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
$1,400	Reseeding BLM mix grass on estimated 2 acres at well location and brine station

3. Surface Subsidence Monitoring - $18,000

Based on recently obtained surface subsidence survey cost quotes, these costs total $18,000 for 5 years of follow-on subsidence monument monitoring. Cost estimate is $1200 per year per monument surveyed. Annual cost to survey three monuments is $3600 per year or $18,000 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.

Siringo ACS State #1 and Siringo Brine Station
Discharge Plan

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 eastern right-of-way of Hwy 483 (Arkansas Jct) at the southwest corner of Section 27, T17S, 36E. This site is approximately 900 feet west 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. 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. There are seven adjacent property owners identified in property tax records. 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 owner of Llano is also the owner of the discharge site surface property. 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. In addition, Llano will notice the current mineral lessee of the State owned minerals since there are no offset wells within 1/3 mile of the proposed class III brine well. As of April 20, 2016, the State mineral lessee of record is Devon Energy Production Co, LP. Llano will provide written notice in English to Devon by certified mail, return receipt requested. Text of both of these 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.

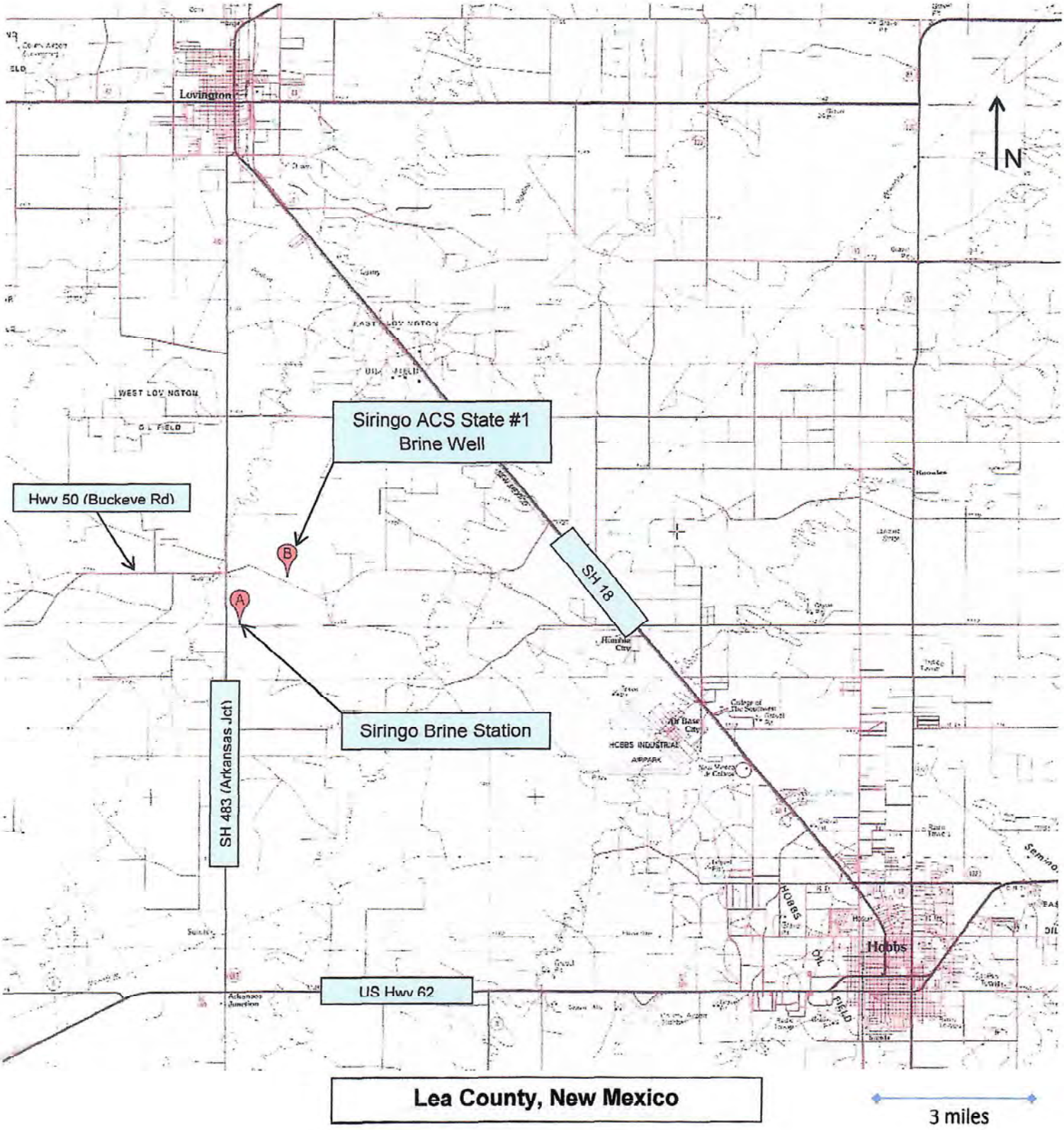
Llano Disposal, LLC
Siringo ACS State #1
Discharge Plan

Attachment Index

Attachment	Description
A	Overview Map of General Area
B	USGS Topo Map of Area
C	Aerial Photo with Ground Water Monitor Wells
D	1 Mile Area of Review with Oil/Gas Wells and Fresh Water Wells
E	Brine Well Location Site Plan
F	Brine Station Site Plan
G	Plugging Records for Offset Wells Within the 1 Mile Area of Review
H	MSDS for Corrosion Inhibitor Utilized on Brine Well Location
I	NMOCD Drilling, Comp, P&A Records for Siringo ACS State #1
J	Water Analysis Test Results on Area Fresh Water Wells
K	Siringo Emergency Contingency and Response Plan
L	Schematics for Brine Station, Brine Well Location and Brine Well
M	Area Geology Map and General Lithology
N	Cross-sections of Geologic Structure at Siringo ACS State #1
O	USGS Drainage Map of Project Area
P	Subsidence Monument Design and Installation Procedure
Q	Public Notice for Onsite Sign Posting
R	Public Notice for Offsite Posting (Lea County Courthouse)
S	Public Notice Letters to Adjoining Property Owners, SLO, Mineral Lessee
T	Public Notice in Lovington Leader Newspaper

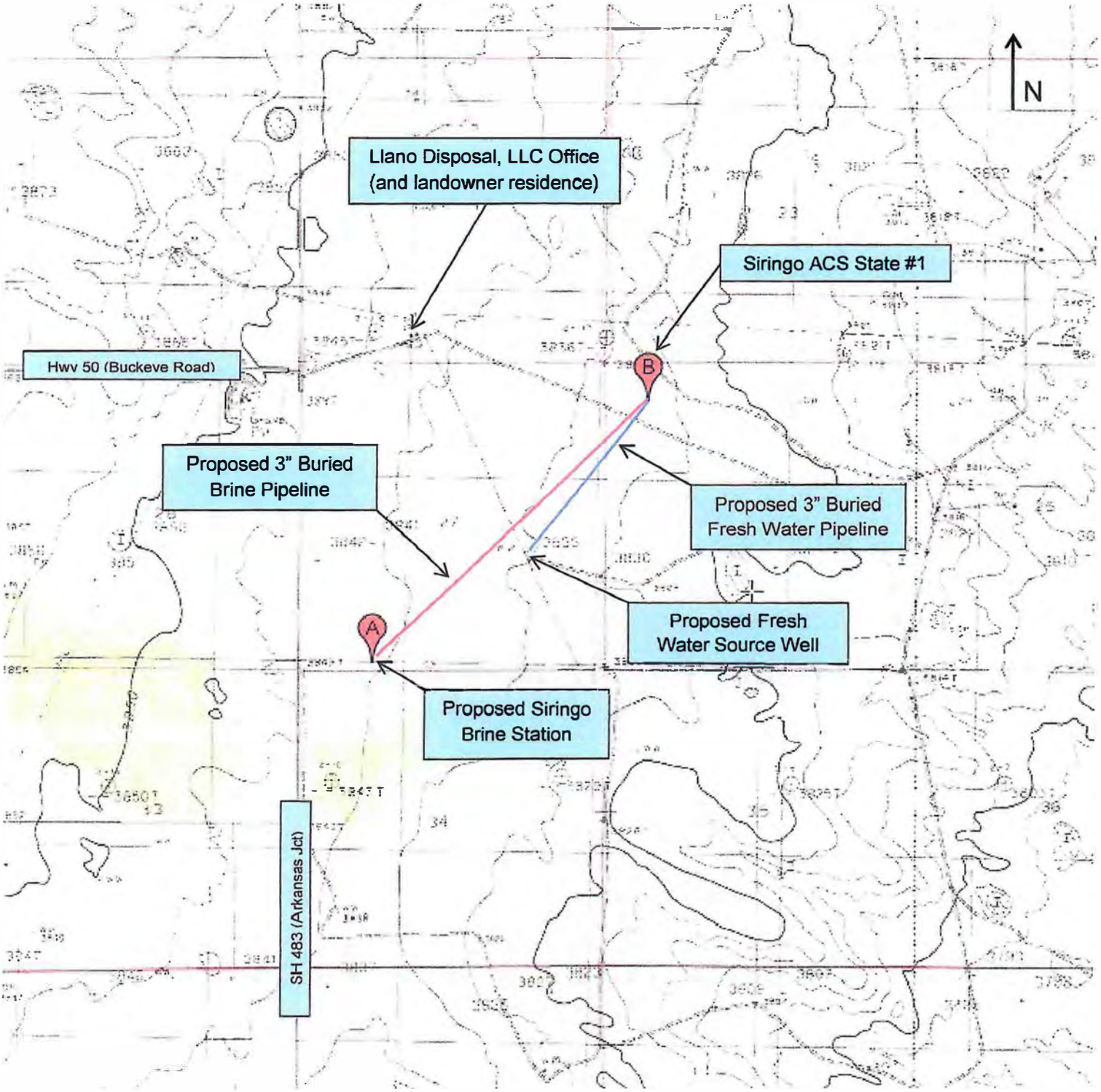
Siringo ACS State #1
API # 30-025-30701
Discharge Plan Attachments

Attachment A – General Area Overview Map



Siringo ACS State #1
API # 30-025-30701
Discharge Plan Attachments

Attachment B – Area USGS Topo Map

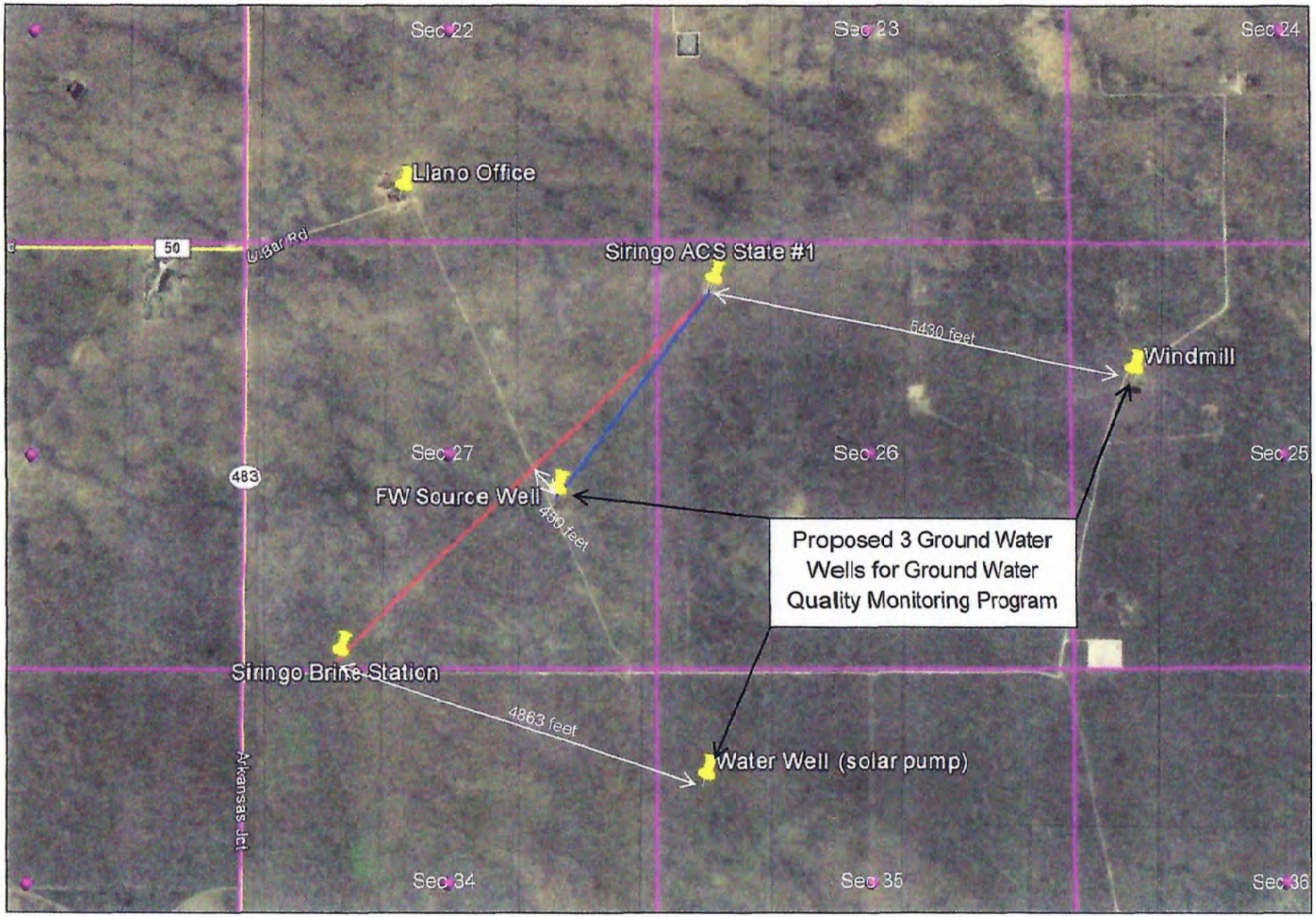


T17S, R36E, NMPM
Lea County, New Mexico

1 mile

Siringo ACS State #1
API # 30-025-30701
Discharge Plan Attachments

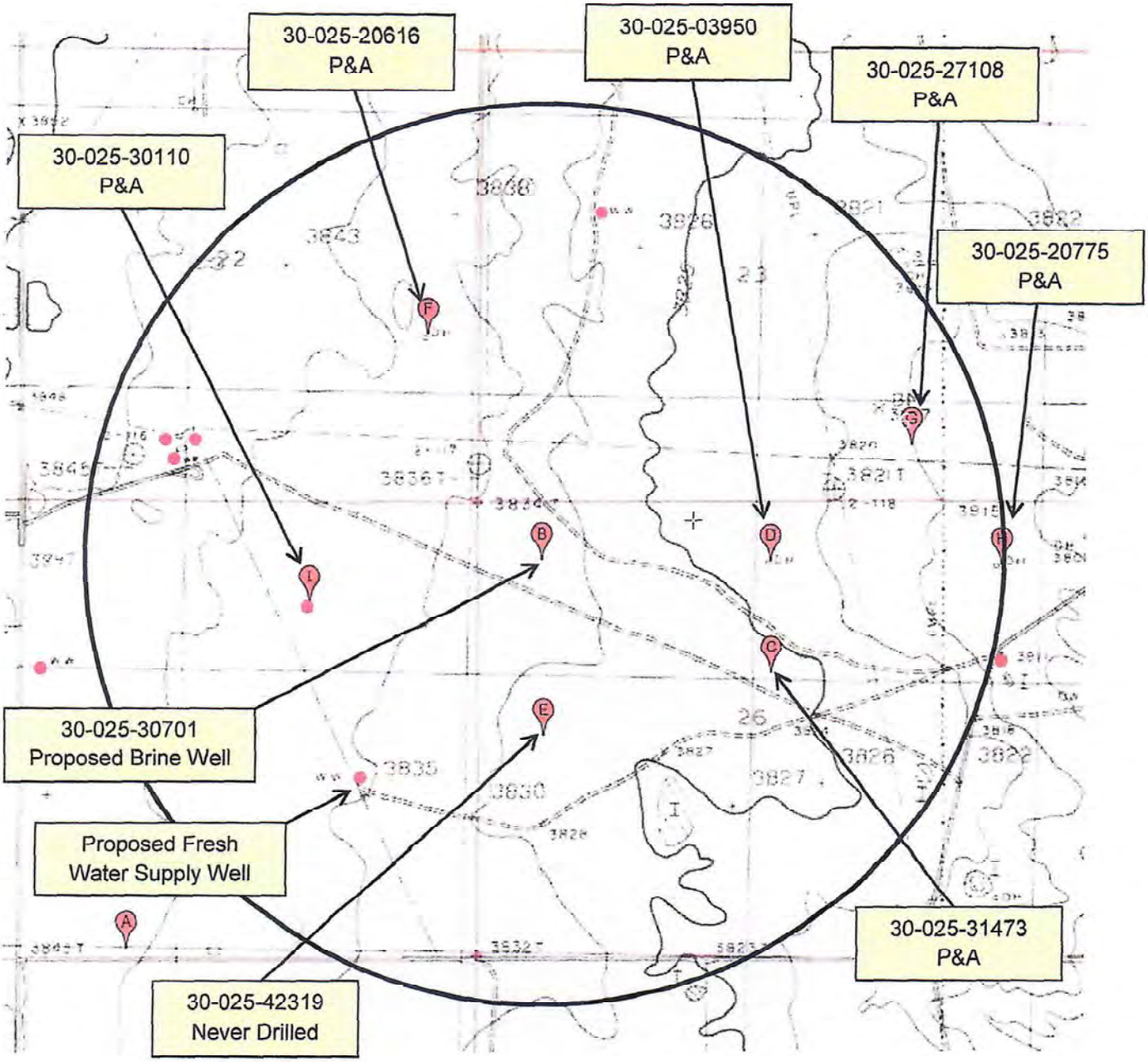
Attachment C – Aerial Photo with Ground Water Monitoring Wells



T17S, R36E, NMPM
Lea County, New Mexico

Siringo ACS State #1
API # 30-025-30701
Discharge Plan Attachments

Attachment D – 1 Mile AOR with Oil/Gas Wells and Fresh Water Wells

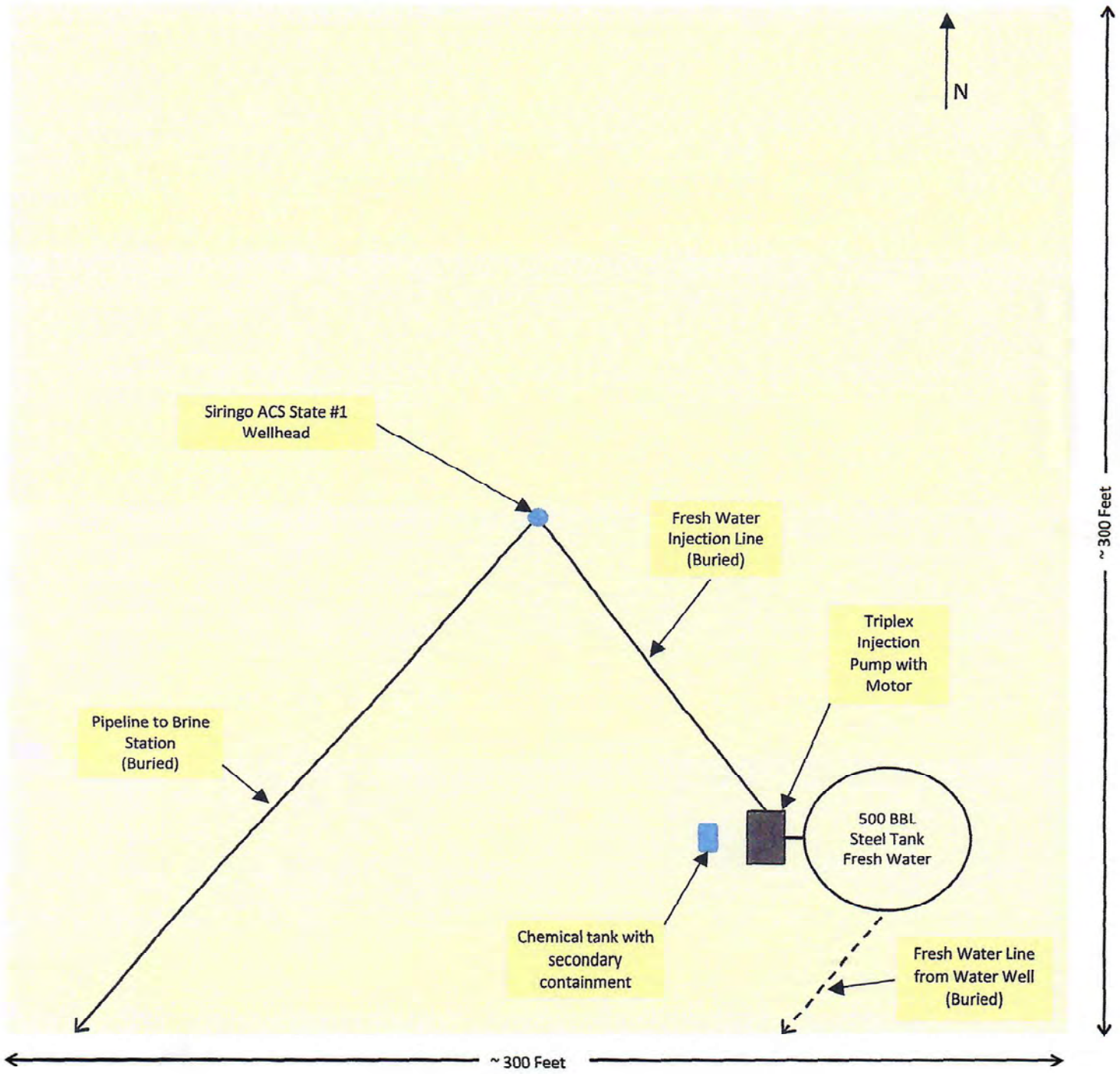


Fresh Water Wells

T17S, R36E, NMPM
Lea County, New Mexico

Siringo ACS State #1
API # 30-025-30701
Discharge Plan Attachments

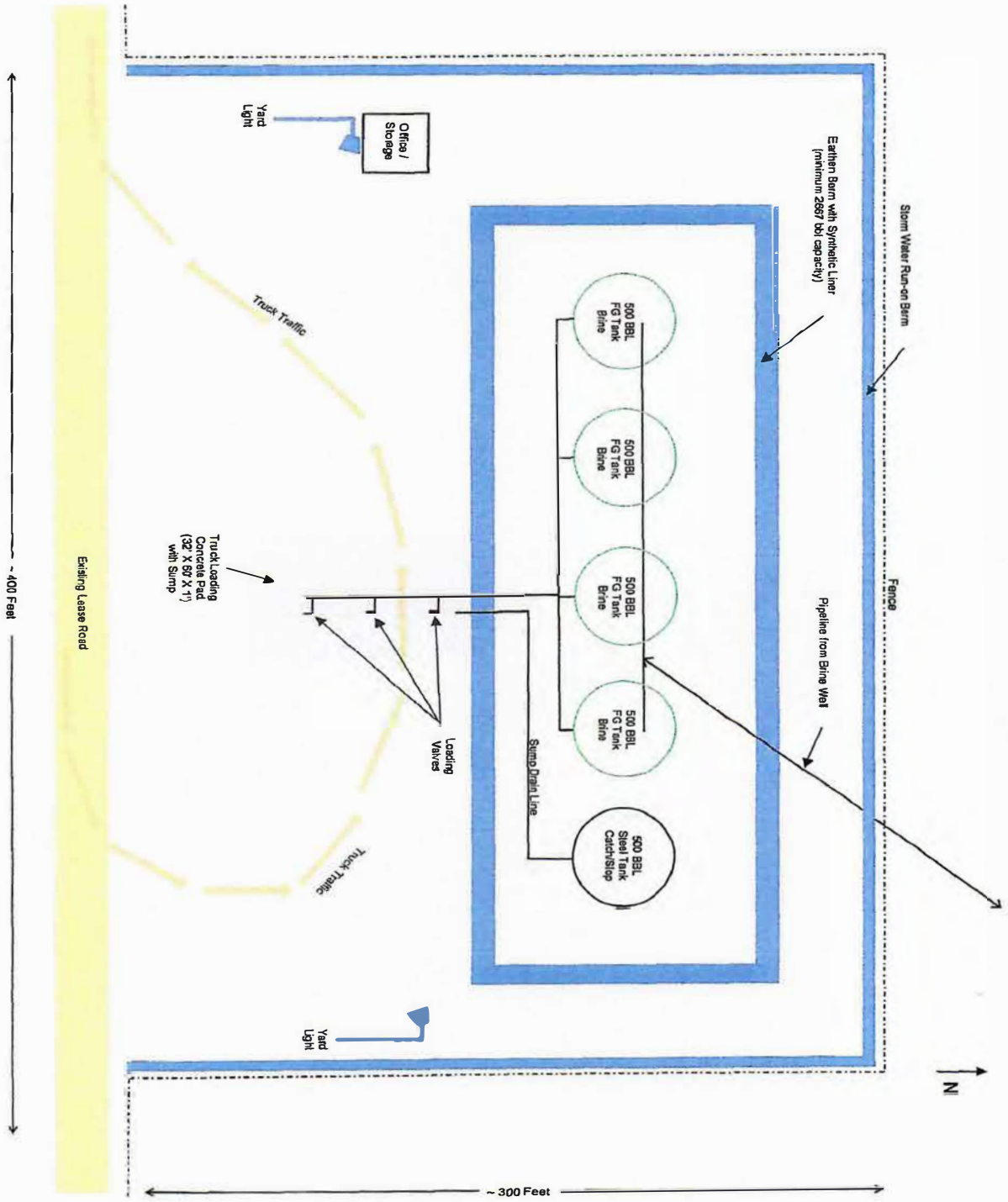
Attachment E – Well Location Site Plan



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

Siringo ACS State #1
API # 30-025-30701
Discharge Plan Attachments

Attachment F – Brine Station Site Plan



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

Submit 3 Copies to Appropriate District Office

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

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

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

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

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

Form C-103
Revised 1-1-89

WELL API NO.
30-025-31473

5. Indicate Type of Lease STATE X FEE

6. State Oil & Gas Lease No.
V-3702

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
Perseus 26 State

1. Type of Well:
OIL WELL X GAS WELL ___ OTHER

2. Name of Operator
Marbob, Inc.

8. Well No.
1

3. Address of Operator
P. O. Box 832, Midland, TX 79702

9. Pool name or Wildcat
Spencer (Penn)

4. Well Location
Unit Letter G : 1980 Feet From The East Line and 1980 Feet From The North Line

Section 26 Township 17S Range 36E NMPM Lea County

10. Elevation (Show whether DF, RKB, RT, GR, etc.)
3827'

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

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

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

2-3-93 PU & GIH w/ 156 jts tbg CIBP @ 10,010. Mix & circ 10# mud laden fluid. Jack Griffin, OCD on location.
2-4-93 POH w/ 2 7/8" tbg to 7512'. Load hole w/10# mud laden fluid. Mix & pump 25 sx Cl. "C" cemt & displace w/43 bbls. 10# mud. RU WL. Set CIBP @ 4900' & dump 35' cemt on top of plug. GIH w/ 2 7/8" tbg to 4800'. Load & circ hole w/10# mud laden fluid. Pull tbg up hole to 4500'.
2-5-93 Pump 25 sx Cl. "C" cemt @ 4537'. Displace hole w/26 bbls 10# mud laden fluid. RU WL. GIH w/GL charge & cut csg @ 3137'. TOH w/76 jts 5 1/2" csg. GIH w/100 jts 2 7/8" tbg to 3172'. Pump 50 sx Cl. "C" cemt plug @ csg stub 50' in & 50' out. Buddy Hill, OCD witnessed 1st plug.
2-8-93 GIH w/20 jts. 2 7/8" tbg. Tag csg stub plug @ 3078'. OCD rep ok'd. Pumped 50 sx plug @ 1504'. Displaced hole w/8.5 bbls 10# mud laden fluid. TOH in singles. Pumped 50 sx plug @ 450'. Displaced hole w/2.5 bbls 10# mud laden fluid. TOH in singles. Cut 13 3/8" + 8 5/8" wellheads off. Set 5 sx plug @ surface. Installed dry hole marker. Cut off dead men. Well P & A'd.

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

SIGNATURE Dorothea Owens TITLE Agent DATE February 16, 1993

TYPE OR PRINT NAME Dorothea Owens TELEPHONE NO. 915 684-7441

(This space for State Use)

APPROVED BY Gary L. Hill TITLE ___ DATE MAR 25 1993

CONDITIONS OF APPROVAL, IF ANY:

ATTACHMENT "G"

Page 1 of 7

ATTACHMENT "G"

Page 2 of 7

Form C-103
(Revised 3-55)

30-025-03950

NEW MEXICO OIL CONSERVATION COMMISSION
MISCELLANEOUS REPORTS ON WELLS
(Submit to appropriate District Office as per Commission Rule 1106)

COMPANY Monsanto Chemical Company P. O. Box 492, Snyder, Texas
(Address)

LEASE State "O" WELL NO. 1 UNIT B S 26 T 17 S R 36 E

DATE WORK PERFORMED 9-13-57 POOL Undesignated
Lea County, New Mexico

This is a Report of: (Check appropriate block)

[ ] Beginning Drilling Operations
[X] Plugging
[ ] Results of Test of Casing Shut-off
[ ] Remedial Work
[X] Other Drill Stem Test

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

9-12-57 DST #3 8414 to 8298, Recovered 4050' Brackish Sulfur Water, FP 425#-1995#, SIP (30 min.) 2225#.

9-13-57 Plugged and abandoned well - cement plugs as follows:

8162-8298 w/40 sxs., total depth 8298
6062-6190 w/40 sxs.
5175-5365 w/60 sxs.
4873-4923 w/20 sxs., bottom of 9-5/8" csg. @ 4898'.
729-779 w/30 sxs., Rec. 754' 9-5/8" csg. T/Salt @ 2130'
291-341 w/40 sxs., bottom of 13-3/8" csg. @ 316'
0-30 w/30 sxs.

A 4" pipe marker extending 4' above ground w/location description and name was placed in top of well.

FILL IN BELOW FOR REMEDIAL WORK REPORTS ONLY

Original Well Data:

DF Elev. _____ TD _____ PBD _____ Prod. Int. _____ Compl Date _____

Tbng. Dia _____ Tbng Depth _____ Oil String Dia _____ Oil String Depth _____

Perf Interval (s) _____

Open Hole Interval _____ Producing Formation (s) _____

RESULTS OF WORKOVER:	BEFORE	AFTER
Date of Test		
Oil Production, bbls. per day		
Gas Production, Mcf per day		
Water Production, bbls. per day		
Gas Oil Ratio, cu. ft. per bbl.		
Gas Well Potential, Mcf per day		

Witnessed by T. H. Foster, Prod. Foreman Monsanto Chemical Company
(Company)

OIL CONSERVATION COMMISSION

I hereby certify that the information given above is true and complete to the best of

30-025-20616

NEW MEXICO OIL CONSERVATION COMMISSION

FORM C-103
(Rev 3-55)

MISCELLANEOUS REPORTS ON WELLS

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

Name of Company: Campana Petroleum Company				Address: P.O. Box 1652, Midland, Texas		
Lease: Humble - State	Well No.: 1	Unit Letter: I	Section: 22	Township: 17-S	Range: 36-E	
Date Work Performed: July 1, 1964	Pool: Wildcat			County: Lea		

THIS IS A REPORT OF: (Check appropriate block)

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

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

T. D. 5525 Dolomite.
Plugged and abandoned well as follows:

Spotted 40 sack plug 5300 to T. D. across San Andres.
Spotted 25 sack plug 3300 to 3400 across base of Salt.
Spotted 25 sack plug 2000 to 2100 across top of Salt.
Spotted 25 sack plug 250 to 350 in and out of surface casing.
Spotted 10 sack plug at surface, installed proper dry hole marker.
Spotted drilling mud between all plugs and back filled pits and cleaned up location.

This work was performed by Dowell, Hobbs New Mexico Office.

Witnessed by: A. D. Ball	Position: Partner	Company: Campana Petroleum Company

FILL IN BELOW FOR REMEDIAL WORK REPORTS ONLY

ORIGINAL WELL DATA

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

Tubing Diameter	Tubing Depth	Oil String Diameter	Oil String Depth

Perforated Interval(s)

Open Hole Interval	Producing Formation(s)

RESULTS OF WORKOVER

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

OIL CONSERVATION COMMISSION

Approved by: John W. Runyan

Title:

Date:

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

Name: (A. D. Ball) A. D. Ball

Position: Partner

Company: Campana Petroleum Company

ATTACHMENT "G"

Page 3 of 7

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

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OIL CONSERVATION DIVISION
P. O. BOX 2088
SANTA FE, NEW MEXICO 87501

30-025-27108

Form C-103
Revised 10-1-

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

5. State Oil & Gas Lease No.: NM-5411-01

SUNDRY NOTICES AND REPORTS ON WELLS

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

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

7. Unit Agreement Name: NA

2. Name of Operator: Cotton Petroleum Corporation

8. Farm or Lease Name: Scharbauer State

3. Address of Operator: One Petroleum Center, Suite 201, Bldg. 6, Midland, Texas 79701

9. Well No.: 1

4. Location of Well
UNIT LETTER P, 660 FEET FROM THE South LINE AND 330 FEET FROM THE East LINE, SECTION 23 TOWNSHIP 17-S RANGE 36-E NMPM.

10. Field and Pool, or Wildcat: Spencer (San Andres

15. Elevation (Show whether DF, RT, GR, etc.): 3814' GR

12. County: Lea

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

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

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

(1) Set CIBP @ 3180' and cap with 5 sxs.

(2) Spot the following neat cement plugs: 1900'-2000' 20 sxs.; surface 10 sxs.

(3) Erect P&A Marker, clear and level location.

THIS WELL WAS PLUGGED ON MAY 1, 1982.

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

SIGNED [signature] TITLE Production Engineer DATE June 15, 1982

APPROVED BY [signature] TITLE OIL & GAS INSPECTOR DATE NOV 3 1982

CONDITIONS OF APPROVAL, IF ANY:

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Page 4 of 7

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LAND OFFICE	
OPERATOR	

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

NEW MEXICO OIL CONSERVATION COMMISSION

30-025-20775

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

5. State Oil & Gas Lease No.: LG-498

RE - ENTRY

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. Unit Agreement Name:

OIL WELL [X] GAS WELL [ ] OTHER-

2. Name of Operator: TEXAS CRUDE, INC.,

8. Farm or Lease Name: C.W.Trainer"25" State

3. Address of Operator: 508 Wall Towers East, Midland, Texas 79701

9. Well No.: One

4. Location of Well: UNIT LETTER D, 660 FEET FROM THE North LINE AND 660 FEET FROM THE West LINE, SEC. 25, TOWNSHIP 17 S, RANGE 36 E, NMPM.

10. Field and Pool, or Wildcat: Wildcat

15. Elevation (Show whether DF, RT, GR, etc.): 3805.55' GR

12. County: LEA

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

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK [ ]	PLUG AND ABANDON [ ]	REMEDIAL WORK [ ]	ALTERING CASING [ ]
TEMPORARILY ABANDON [ ]		COMMENCE DRILLING OPNS. [ ]	PLUG AND ABANDONMENT [X]
PULL OR ALTER CASING [ ]	CHANGE PLANS [ ]	CASING TEST AND CEMENT JOB [ ]	
OTHER [ ]		OTHER Re-Entry of Pernzoil United - State 25 Well #1 (drilled in 1964, P&A 3-23-72) [ ]	

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

12-1-72 - The following procedure was approved by OCC Office in Hobbs, N.M., before work wa done: Cleaned out to 7226' - Straddle Tested from 6845-7010 and 6645-6845. No Oil or Gas recovered. Spotted the following cement plugs:
40 sacks from 6600-6455; 40 sacks from 5600-5465; 40 sacks in bottom of 8 5/8" 4790-4655.
Pulled 8 5/8" casing from approximately 1020', set 50 sacks from 1050-950'; 50 sacks in bottt of 13 3/8" from 340-240; 10 sack plug in top of 13 3/8" casing.
Welded plat in top of 13 3/8" casing.
Erected dry hole marker.
Work completed 12-1-72

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

SIGNED [signature] TITLE Dist. Supt DATE 12-1-72

APPROVED BY [signature] TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

ATTACHMENT "G"

Page 5 of 7

Submit 3 Copies to Appropriate District Office

State of New Mexico
Energy, Minerals and Natural Resources Department

30-025-30110

Form C-103
Revised 1-1-89

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

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

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

OIL CONSERVATION DIVISION

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

WELL API NO
30-025-30110

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

6. State Oil & Gas Lease No.
V-1687

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
Marathon State

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

2. Name of Operator
Tom Schneider

8. Well No.
1

3. Address of Operator
505 N Big Spring St., Suite204 Energy So. Midland, TX

9. Pool name or Wildcat
Wildcat

4. Well Location
Unit Letter B : 1300 Feet From The North Line and 1980 Feet From The East Line

Section 27 Township 17-S Range 36-E NMPM Lea County

10. Elevation (Show whether DF, RKB, RT, GR, etc.)
3835.8 GL

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

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

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

6/25/90...Laid down rods and pump. Pumped 25 sx. of C cement at 5169 feet. Pulled up and WOC.

6/26/90...Trip into hole with tubing and tagged plug at 4,936. Circulated hole and mixed mud. Pumped 25 sx. of C cementat 4,530. Cut and pulled 2,994 feet of 5 1/2" casing. Trip into hole, circulate and mix mud, pumped 40 sx. of C cement at 3,050 feet. SIFN.

6/27/90...Trip into hole with tubing and tagged plug at 2,945 feet. Pulled to surface and set 10 sx. of C cement at Surface.

Ray Smith with Commission witness all operations. Cementing by Triple "N" Services, Inc. Midland, Texas.

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

SIGNATURE Thomas Schneider TITLE operator representative DATE 7/17/90

TYPE OR PRINT NAME Thomas Schneider TELEPHONE NO. 915(682-63

(This space for State Use)

APPROVED BY TITLE DATE

CONDITIONS OF APPROVAL, IF ANY:

ATTACHMENT "G"

Page 6 of 7

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

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OIL CONSERVATION DIVISION
P. O. BOX 2088
SANTA FE, NEW MEXICO 87501

30-025-30110

Form C-103
Revised 10-1-78

5a. Indicate Type of Lease: State [X] Fee [ ]
5. State Oil & Gas Lease No.: V-1687

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

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

7. Unit Agreement Name: Arkansas Junction Voluntary WI Unit

2. Name of Operator: Marathon Oil Company

8. Farm or Lease Name: Marathon ~~Sears~~ V-1687

3. Address of Operator: P.O. Box 552 Midland, Texas 79702

9. Well No.: 1

4. Location of Well: UNIT LETTER B, 1330 FEET FROM THE North LINE AND 1980 FEET FROM

10. Field and Pool, or Wildcat: Wildcat

THE East LINE, SECTION 27, TOWNSHIP 17-S, RANGE 36-E, NMPM

15. Elevation (Show whether DF, RT, GR, etc.): 3835.6' GL

12. County: Lea

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

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK [ ] PLUG AND ABANDON [ ]
TEMPORARILY ABANDON [ ] CHANGE PLANS [ ]
PULL OR ALTER CASING [ ]
OTHER [ ]

SUBSEQUENT REPORT OF:

REMEDIAL WORK [ ] ALTERING CASING [ ]
COMMENCE DRILLING OPS. [ ] PLUG AND ABANDONMENT [X]
CASING TEST AND CEMENT JOB [ ]
OTHER [ ]

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

Verbal approval received from Jerry Sexton for P & A procedure on 12-31-87.

1-1-88: RIH open-ended. Set Plug #1 from 12,355'-12,255' w/50 sxs Class "H" Neat, Set Plug #2 from 11,910'-11,777' w/50 sxs Class "H" Neat, Set Plug #3 from 10,270'-10,162' w/50 sxs Class "H", Set Plug #4 from 7100'-6992' w/50 sxs Class "H" Neat, Set Plug #5 from 5285'-5045' w/100 sxs Class "H" Neat, Set Plug #6 from 4525'-4387' w/50 sxs Class "H" Neat, Set Plug #7 from 2070'-1932' w/50 sxs Class "H" Neat, & Plug #8 from 30'-0' w/20 sxs Class "H" Neat.

1-2-88 ND BOPE & install dry-hole marker.

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

SIGNED Jerry D. Lucas TITLE Dist. Drlg Superintendent DATE 1-7-88

APPROVED BY [signature] TITLE OIL & GAS INSPECTOR DATE OCT 16 1989

CONDITIONS OF APPROVAL, IF ANY:

ATTACHMENT "G"

Page 7 of 7

TECHNI-HIB™ 606 Corrosion Inhibitor

CHEMICAL PRODUCTS AND SERVICES

Product Information

Description

TECHNI-HIB 606 corrosion inhibitor is a water-soluble combination of a cationic filming corrosion inhibitor and sulfite-based oxygen scavenger.

Uses

TECHNI-HIB 606 corrosion inhibitor has been developed for use as a packer fluid inhibitor, hydrostatic test inhibitor and general purpose filming corrosion inhibitor for water injection systems, water disposal operations, power water pumping systems and high water/oil ratio producing oil wells where a small amount of oxygen is present.

Application

TECHNI-HIB 606 corrosion inhibitor can be injected continuously into a system at a rate of 60 to 120 ppm (1 to 2 quarts per 100 barrels of water). When used as a packer fluid inhibitor, 2500 to 5000 ppm (10 to 20 gallons per 100 barrels of water) is required. When used as a hydrostatic test fluid inhibitor, TECHNI-HIB 606 corrosion inhibitor injected at a rate of 500 to 3500 ppm is typically recommended dependent on conditions.

Technical Data

Specific Gravity @ 60°F	0.991 - 1.027
Pounds Per Gallon @ 60°F	8.26 - 8.56
Freeze Point	-5°F
Flash Point(TCC)	98°F
pH	6 - 6.5
Appearance	Dark Brown Liquid

SOLUBILITIES:

Fresh Water	Soluble
2% Brine	Soluble
15% Brine	Soluble
Crude Oil	Insoluble

Safety Precautions

WARNING! FLAMMABLE. Keep away from heat, sparks, and open flame. Keep container closed when not in use. Do not breathe vapors, use with adequate ventilation. Avoid contact with eyes, skin, and clothing.

References

TECHNI-HIB 606 corrosion inhibitor is available in 55-gallon drums and bulk quantities. Refer to Material Safety Data Sheet for additional information and first aid.

ATTACHMENT "H"

Page 1 of 5

January 12, 2005

BJ Chemical Services

BJ CHEMICAL SERVICES
MATERIAL SAFETY DATA SHEET

Section: 01 PRODUCT IDENTIFICATION

BJ CHEMICAL SERVICES
707 N. LEECH
HOBBS, NM 88241-1499
TELEPHONE:(575)393-7751

Emergency Telephone CHEMTREC (800)424-9300
Previous Version Date 5/20/03
Date Prepared 10/30/03
Version: 0000009

Product Name: TECHNI-HIB 606
Trade Name: Packer Fluid Inhibitor
Chemical Description:
Combination oxygen scavenger/corrosion inhibitor

Section: 02 HAZARDOUS INGREDIENTS

Component Name	CAS#	% Range
methanol	000067-56-1	< 15%
isopropyl alcohol	000067-63-0	< 10%
ammonium bisulfite	010192-30-0	< 10%

Section: 03 PHYSICAL DATA

Freezing Point:- 5 Deg.F. pH: 6 - 6.5
Boiling Point, 760 mm Hg: approx. 200 Deg.F
Specific Gravity(H2O=1) : 1.009 Solubility in water: Soluble
Appearance and Odor: Dark brown liquid; pungent odor.

Section: 04 FIRE AND EXPLOSION HAZARD DATA

Flash Point (Test Method): 98 Deg.F TCC
Extinguishing Media
CO2, dry chemical, water spray or fog, or foam. Use water to keep containers cool. Isolate "fuel" supply from fire. Contain fire fighting liquids for proper disposal.
Special Fire Fighting Procedures
Do not enter confined fire space without proper personal protective equipment including NIOSH approved self-contained breathing apparatus with full facepiece operated in the positive pressure demand mode. Do not inject a solid stream of water or foam into hot, burning pools; this may cause splattering and increase fire intensity. Evacuate personnel to a safe area. Keep unnecessary people away.
Unusual Fire and Explosion Hazards
This material is volatile and readily gives off vapors that may travel along the ground or be moved by ventilation and ignited by pilot lights, other flames, sparks, heaters, smoking, electrical motors, static discharge, or other ignition sources at locations distant from material handling point. Never use welding or cutting torch on or near drum (even empty) because product (even just residue) can ignite explosively. Containers may explode from internal pressure if confined to fire. Keep containers cool. Keep unnecessary people away.

Section: 05 HEALTH HAZARD DATA

Effects of Overexposure

Eye Contact: causes moderate to severe conjunctival irritation, (including burning sensation, tearing, redness or swelling), corneal injury and iritis. Corneal injury may be marked, extensive, and if not promptly treated, may possibly lead to permanent impairment of vision.

Skin Contact: causes local redness, swelling and chemical burns. May cause immediate skin irritation, blistering and/or dermatitis in some individuals. Prolonged or widespread exposure may result in the absorption of potentially harmful amounts of material.

Inhalation: vapors are irritating and may cause excessive tear formation, intoxication, burning sensation of the nose

ATTACHMENT "H"

Page 2 of 5

and throat, coughing, wheezing, shortness of breath, nausea, vomiting, headache, dizziness, narcosis, unconsciousness, cardiac depression or coma. May also cause symptoms of lack of oxygen leading to collapse and possible death. Extremely high vapor concentrations may cause lung damage. Some Some individuals may develop asthma. Repeated exposure may cause liver and kidney injury.

Ingestion: may cause blindness, narcosis, nausea, vomiting, throat and abdominal pain, acidosis, diarrhea, dizziness, weakness, thirst, collapse and possible coma or death. The nature and severity of these signs and symptoms will be dependent on the amount swallowed.

Additional Information: methanol is a component of this product. It can be highly toxic, even lethal, in inhalation exposures, but most of the literature on methanol poisoning deals with accidental or intentional ingestions. There are three stages of toxicity from acute exposures (either by inhalation or ingestion) to methanol: (1) a rapid narcotic effect involving drowsiness or fatigue with mild irritation of the eyes and mucous membranes, (2) a latent period of 10-15 hours, followed by (3) more severe CNS effects including nausea, vomiting, dizziness, headache, failing eyesight, visual disturbances, metabolic acidosis, and deep respiration. The last stage is thought to be due to the formation of toxic metabolite(s) of methanol. Permanent toxic effects can be produce from a single exposure. The effects include damage to both central and motor nerves and blindness due to damage to the optic nerve. Other symptoms to exposure to methanol include roaring in the ears, insomnia, rapid eye movements, tremor, dizziness, loss of coordination, diluted pupils, itching of the skin, skin irritation, and dermatitis caused by removal of skin oils. As little as 15mL can cause blindness and 30-250mL can be fatal. Methanol can be absorbed through the skin in toxic amounts. Since it is eliminated slowly from the body, it can have cumulative toxic effects from daily exposures. Subacute ingestion of methanol has caused liver damage in laboratory animals. It has shown to be a teratogen and a fetotoxin in tests on laboratory animals. It has shown some genetic effects in laboratory tests.

Target Organs: eyes, skin, lungs, CNS, liver and kidneys.

Emergency and First Aid Procedures

SKIN

Wash with soap and water. Remove contaminated clothing and launder contaminated clothing before reuse. Get medical attention if redness or irritation develops.

EYES

Flush eyes immediately with large amounts of water for at least 15 minutes. Lift lower and upper lids occasionally. Get medical attention.

INHALATION

Remove victim to fresh air. Give artificial respiration if not breathing. If breathing is difficult, administer oxygen. Keep person warm, quiet and get medical attention.

INGESTION

Call a physician immediately. Give victim a glass of water. Do NOT induce vomiting unless instructed by a physician or poison control center. Never give anything by mouth to an unconscious person.

Section: 06 REACTIVITY DATA

Stable (Y=Yes/N=No): Y

Stability -- Conditions to Avoid

None known.

Incompatibility (Materials to Avoid)

Avoid contact with strong oxidizing agents, strong alkalies, and strong mineral acids.

Hazardous Decomposition Products

Smoke, carbon dioxide, carbon monoxide, oxides of nitrogen.

Hazardous Polymerization May Occur(Y=Yes/N=No): N

Hazardous Polymerization -- Conditions to Avoid

None

ATTACHMENT "H"

Page 3 of 5

Section: 07 SPILL OR LEAK PROCEDURES

Steps to be Taken if Material is Released or Spilled
Eliminate sources of ignition. Persons not wearing suitable personal protective equipment should be excluded from area of spill until clean-up has been completed. Shut off source of spill if possible to do so without hazard. Prevent material from entering sewers or watercourses. Provide adequate ventilation. Contain spilled materials with sand or earth. Recover undamaged and minimally contaminated material for reuse or reclamation. Place all collected material and spill absorbents into DOT approved containers.
Advise authorities. If this product is an EPA hazardous substance (see Section 10), notify the U.S.EPA and/or the National Response Center. Additional notification pursuant to SARA Section 302/304 (40 CFR 355) may also be required.
Waste Disposal Method
Treatment, storage transportation and disposal must be in accordance with EPA or State regulations under authority of the Resource Conservation and Recovery Act (40 CFR 260-271) If product requires disposal, ignitability (D001) would be applicable.

Section: 08 SPECIAL PROTECTIVE INFORMATION

Respiratory Protection
If workplace exposure limit(s) of product or any component is exceeded, an NIOSH/MSHA approved air supplied respirator is advised in absence of proper environmental control. OSHA regulations also permit other NIOSH/MSHA respirators (negative pressure organic vapor type) under specified conditions. Engineering or administrative controls should be implemented to reduce exposure.
Ventilation
The use of mechanical dilution ventilation is recommended whenever this product is used in confined spaces, is heated above ambient temperatures or is agitated. When applicable, sufficient local ventilation should be provided to maintain employee exposures below safe working limits (TWA's).
Protective Gloves
Neoprene, nitrile, polyvinyl alcohol (PVA), polyvinyl chloride (PVC)
Eye Protection
Chemical splash goggles or face shield in compliance with OSHA regulations is advised; however OSHA regulations also permits safety glasses under certain conditions. The use of contact lenses is not recommended.
Other Protective Equipment
Eye wash and safety shower

Section: 09 SPECIAL PRECAUTIONS

Precautions to be Taken in Handling and Storing
Avoid contact with eyes, skin or clothing. Avoid breathing vapors or mist. Keep away from heat, sparks, and open flames and never use a cutting torch on or near container (even empty) or explosion may result. Vapors may travel to areas away from the work site and ignite.
Other Precautions
Containers of this material may be hazardous when emptied. Since emptied containers retain product residues (vapor, liquid, and/or solid), all hazard precautions given in the data sheet must be observed. Do not transfer to improperly marked container. Do not use pressure to empty container. Do not cut, heat, weld, or expose containers to flame or other sources of ignition. Keep container closed. Use with adequate ventilation. Wash thoroughly after handling. Containers should be grounded and bonded to receiving container(s) when being emptied. Containers should not be washed out and used for other purposes.
FOR INDUSTRIAL USE ONLY

Section: 10 REGULATORY INFORMATION

Superfund Amendments and Reauthorization Act Of 1986(SARA) Title III
Section 302/304-Extremely Hazardous Substances (40 CFR 355)

ATTACHMENT "H"

Page 4 of 5

SARA requires emergency planning based on Threshold Planning Quantities (TPQs) and release reporting based on Reportable Quantities (RQs) in 40 CFR 355 (used for SARA 302, 304, 311 and 312). These values are subject to change and the regulations should be consulted to verify current statutory requirements.

Components present in this product at a level which could require reporting under the statute are:

Component Name	RQ	TPQ	% Range
NONE			

Section 311/312 Chemical Inventory Reporting Requirements (40 CFR 370)

The Superfund Amendments and Reauthorization Act (SARA) may require submission of reports (chemical list, MSDS, Tier I & Tier II) to the State Emergency Response Commission, Local Emergency Response Committee and the local fire department. The SARA physical and health hazards related to this product are:

X Acute Health Hazard — Sudden Release of Pressure — X Fire
X Chronic Health Hazard — Reactive

Section 313-List of Toxic Chemicals (40 CFR 372)

This product contains the following toxic chemicals subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right-to-Know Act of 1986 (40 CFR 372). This information should be included in all MSDSs that are copied and distributed for this material.

Component Name	CAS #	% Range
methanol	000067-56-1	< 15%

CERCLA, 40 CFR 261 AND 302

The Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) requires notification of the National Response Center 1-800-424-8802 of any release of a Hazardous Substances equal to or greater than the reportable quantities (RQs) listed in 40CFR 302.4. Values are given in pounds for the component and not the mixture, if applicable. (These values are subject to change and the regulations should be consulted to verify current statutory levels.)

Component Name	CAS #	CERCLA RQ
methanol	000067-56-1	5000
ammonium bisulfite	010192-30-0	5000

OSHA Exposure Limits

Component Name
methanol
TWA ppm: 200.0 TWA MG/M3: 260.0 STEL ppm: 250.0 STEL MG/M3: 325.0 Skin: X
isopropyl alcohol
TWA ppm: 400.0 TWA MG/M3: 980.0 STEL ppm: 500.0 STEL MG/M3: 1225.0

National Fire Protection Agency

2 Health — 3 Fire
0 Reactive — Other

Department of Transportation Shipping Information

Proper Shipping Name: Flammable liquids, n.o.s.
Hazard Class: 3 — Identification: UN1993
Packaging Group: PG III
Contains: methanol, isopropyl alcohol
Hazardous Substance RQ: 33333# — Emergency Response Guide Number: 128
Labels: Flammable liquid

Toxic Substances Control Act (TSCA), 40 CFR 261

This product, or components if product is a mixture, is/are listed on the Toxic Substances Control Act (TSCA) inventory.

Section 10 information is to remain attached to the material safety data sheet for this product.

While BJ CHEMICAL SERVICES believes that the above data is correct, BJ CHEMICAL SERVICES expressly disclaims liability for any loss or injury arising out of the use of this information or the use of any materials designated.

END OF MSDS

ATTACHMENT "H"

Page 5 of 5

Submit to Appropriate
District Office
State Lease – 6 copies
Fee Lease – 5 copies

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

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

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

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

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

Form C-101
Revised 1-1-89

API NO. (assigned by OCD on New Wells) 30-025-30701

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

6. State Oil & Gas Lease No. LG 7270

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. Type of Work:
DRILL [X] RE-ENTER [ ] DEEPEN [ ] PLUG BACK [ ]

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

7. Lease Name or Unit Agreement Name: SIRINGO "ACS" STATE

2. Name of Operator: YATES PETROLEUM CORPORATION

8. Well No. 1

3. Address of Operator: 105 South Fourth Street, Artesia, NM 88210

9. Pool name or Wildcat: Spence San Andres

4. Well Location
Unit Letter D : 660 Feet From The North Line and 660 Feet From The West L

Section 26 Township 17 South Range 36 East NMPM Lea County

10. Proposed Depth	11. Formation	12. Rotary or C.T.
5500'	San Andreas	Rotary

13. Elevations (Show whether DF, RT, GR, etc.)	14. Kind & Status Plug. Bond	15. Drilling Contractor	16. Approx. Date Work will start
3830.6' GR	Blanket	Undesignated	ASAP

17. PROPOSED CASING AND CEMENT PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	SACKS OF CEMENT	EST. TOP
12¼"	8 5/8"	32# J-55	350'	300 SX	Circulate
7 7/8"	5½"	15.5# J-55	TD	400 SX-AS	Warranted

We propose to drill and test the San Andres and Intermediate formations approximately 350' of surface casing will be set and cement circulated to surface. If commercial, production casing will be run and cemented with adequate cover, perforated, and stimulated as needed for production.

MUD PROGRAM: FW GEL/ICM to 350', Brine to TD

BOP PROGRAM: BOP's will be installed on 8 5/8" casing and test daily for operational.

[illegible] casing must be [illegible] the top of the salt or [illegible] to the surface casing by either circulating [illegible] cement or a DV tool at the top of the salt.

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

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

SIGNATURE Clifton R. May TITLE Permit Agent DATE 10-11-89

TYPE OR PRINT NAME Clifton R. May TELEPHONE NO. 748-1471

(This space for State Use)

APPROVED BY ORIGINAL SIGNED BY JERRY SEXTON DISTRICT I SUPERVISOR TITLE DATE OCT 12 1989

CONDITIONS OF APPROVAL, IF ANY:

ATTACHMENT "I"

Permit Expires 6 Months From Approval Date Unless Drilling Underway.

Submit to Appropriate District Office
State Lease - 4 copies
Fee Lease - 3 copies

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

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

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

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-102
Revised 1-1-89

OIL CONSERVATION DIVISION

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

WELL LOCATION AND ACREAGE DEDICATION PLAT

All Distances must be from the outer boundaries of the section

Operator	Lease	Well No.
YATES PETROLEUM CORPORATION	ACS SIRINGO "ACE" STATE	1

Unit Letter	Section	Township	Range	County
D	26	17 South	36 East NMPM	Lea

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

Ground level Elev.	Producing Formation	Pool	Dedicated Acreage:
3830.6	SAN ANDRES	SPENCE SAN ANDRES	40 Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.

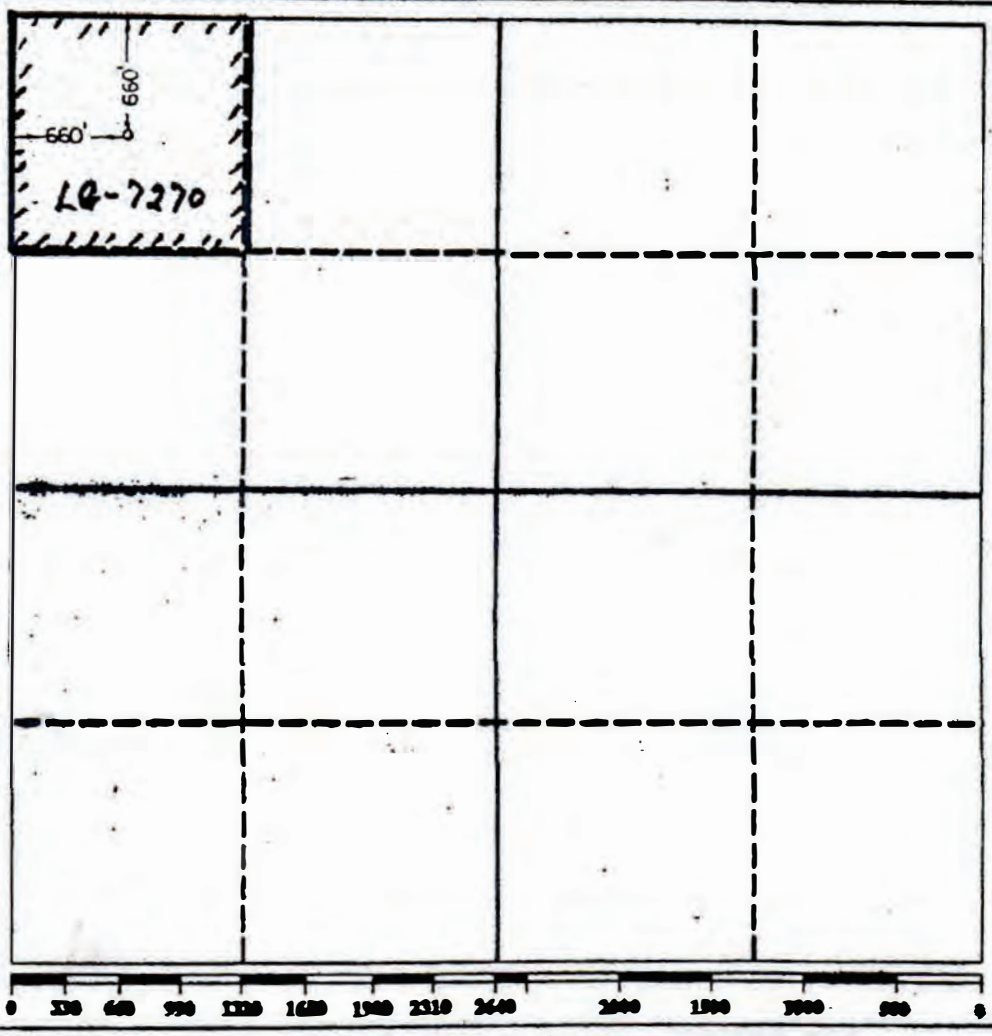
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc.?

☐ Yes ☐ No If answer is "yes" type of consolidation _____

If answer is "no" list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary. _____

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interest, has been approved by the Division.



OPERATOR CERTIFICATION

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

Signature: Clifton R. May
Printed Name: Clifton R. May
Position: Permit Agent
Company: Yates Petroleum Corp.
Date: 10-11-89

SURVEYOR CERTIFICATION

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

Date Surveyed: 10/6/89
Signature & Seal of Professional Surveyor: NEW MEXICO, HERSCHEL L JONES, 3640, REGISTERED LAND SURVEYOR
Certificate No. 3640

ATTACHMENT "I"

Submit 3 Copies to Appropriate District Office

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-103
Revised 1-1-89

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

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

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

OIL CONSERVATION DIVISION

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

WELL API NO.
30-025-30701

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

6. State Oil & Gas Lease No.
LG-7270

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
SIRINGO "ACS" STATE

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

2. Name of Operator
YATES PETROLEUM CORPORATION

8. Well No.
1

3. Address of Operator
105 South Fourth Street

9. Pool name or Wildcat
SPENCE SAN ANDRES

4. Well Location
Unit Letter D : 660 Feet From The North Line and 660 Feet From The West Line

Section 26 Township 17 South Range 36 East NMPM Lea County

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

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

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

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

Yates Petroleum Corporation request permission to extend the setting depth of the 8 5/8" casing from 350' to 2125'. The cement will be circulated to surface. Tim Russell with Yates discussed this with Paul Kortz of the OCD.

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

SIGNATURE Clifton R. May TITLE Permit Agent DATE 10-23-89

TYPE OR PRINT NAME Clifton R. May TELEPHONE NO. (505)748-14

(This space for State Use)
ORIGINAL SIGNED BY JERRY SEXTON
DISTRICT I SUPERVISOR

APPROVED BY _____ TITLE _____ DATE OCT 25 1989

CONDITIONS OF APPROVAL, IF ANY:

ATTACHMENT "I"

Submit 3 Copies to Appropriate District Office

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-103
Revised 1-1-89

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

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

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

OIL CONSERVATION DIVISION

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

WELL API NO.
30-025-30701

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

6. State Oil & Gas Lease No.
LG-7270

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
SIRINGO ACS STATE

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

2. Name of Operator
YATES PETROLEUM CORPORATION

8. Well No.
1

3. Address of Operator
105 South 4th St., Artesia, NM 88210

9. Pool name or Wildcat
Und. Spence San Andres

4. Well Location
Unit Letter D : 660 Feet From The North Line and 660 Feet From The West Line

Section 26 Township 17S Range 36E NMPM Lea County

10. Elevation (Show whether DF, RKB, RT, GR, etc.)
3830.6' GR

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

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

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

Spudded 26" hole 8:15 AM 10-27-89. Set 40' of 20" conductor. Notified Evelyn (Answering Service) with OCD, Hobbs, NM of spud. Resumed drilling 12¼" hole 4:30 AM 10-28-89. Notified, OCD, Hobbs, NM. Ran 47 joints 8-5/8" 24# J-55 casing set 2043'. Guide shoe set 2043', insert float set 1999'. Cemented w/900 sx Pacesetter Lite w/5#/sx Hyseal, 1/2#/sx Celloseal and 3% CaCl2 (yield 1.97, wt 12.6). Followed w/200 sx Class "C" w/2% CaCl2 (yield 1.32, wt 14.8). PD 3:30 AM 11-1-89. Bumped plug to 1000 psi, float held okay. Cement circulated 100 sx to pit. WOC. NU and tested to 1000 psi, OK. Drilled out 10:00 PM 11-1-89. WOC 18 hrs and 30 minutes. Reduced hole to 7-7/8". Drilled plug and resumed drilling.
Note: Notified Eddie Seay, OCD, Hobbs, NM, to witness surface casing, did not witness.

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

SIGNATURE Juanita Goodlett TITLE Production Supervisor DATE 11-6-89

TYPE OR PRINT NAME Juanita Goodlett TELEPHONE NO. 505/748-1471

(This space for State Use)

APPROVED BY Orig. Signed by Paul Kautz TITLE DATE NOV 8 1989

CONDITIONS OF APPROVAL, IF ANY:

ATTACHMENT "I"

30-025-30701

ARTESIA FISHING TOOL COMPANY

P. O. BOX 470 PHONE (505) 746-6651
ARTESIA, NEW MEXICO 88210

November 22, 1989

Yates Petroleum Corporation
105 South Fourth Street
Artesia, NM 88210

Re: Siringo ACS State #1
660' FNL & 660' FWL
Sec. 26, T17S, R36E
Lea County, New Mexico

Gentlemen:

The following is a Deviation Survey for the above captioned well.

DEPTH	DEVIATION
465'	1/2°
970'	1/4°
1470'	1/2°
1939'	1/2°
2043'	3/4°
2655'	1/2°
3150'	1°
3650'	2°
4190'	1 1/2°
4456'	1 1/2°
4980'	1 1/4°
5450'	1 3/4°

Very truly yours,

B. N. Muncy Jr.
Secretary

STATE OF NEW MEXICO §
COUNTY OF EDDY §

The foregoing was acknowledged before me this 22nd day of November, 1989.

NOTARY PUBLIC

OFFICIAL SEAL
REGINIA L. GARNER
NOTARY PUBLIC - NEW MEXICO
NOTARY BOND FILED WITH SECRETARY OF STATE
My Commission Expires 8-30-92

ATTACHMENT "I"

Submit 3 Copies to Appropriate District Office

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-103
Revised 1-1-89

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

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

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

OIL CONSERVATION DIVISION

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

WELL API NO.
30-025-30701

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

6. State Oil & Gas Lease No.
LG-7270

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
SIRINGO ACS STATE

1. Type of Well:
OIL WELL [ ] GAS WELL OTHER P&A

2. Name of Operator
YATES PETROLEUM CORPORATION

8. Well No.
1

3. Address of Operator
105 South 4th St., Artesia, NM 88210

9. Pool name or Wildcat
Und. Spence San Andres

4. Well Location
Unit Letter D : 660 Feet From The North Line and 660 Feet From The West Line

Section 26 Township 17S Range 36E NMPM Lea County

10. Elevation (Show whether DF, RKB, RT, GR, etc.)
3830.6' GR

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

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

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

TD 5450'. Reached TD 11-10-89.
Received verbal permission from Eddie Seay, NMOCD, Hobbs, NM, to plug well as follows:
Plug #1 5350-5450' w/25 sx Class C Neat
#2 4514-4614' w/35 sx Class C Neat
#3 3253-3353' w/55 sx Class C Neat
#4 1933-2093' w/30 sx Class C Neat
#5 Surface-63' w/25 sx Class C Neat

Cement yield 1.32, weight 14.8. Last plug down at 3:45 AM 11-16-89. Installed dry hole marker. Released rig 4:00 AM 11-16-89.

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

SIGNATURE Juanita Goodlett TITLE Production Supervisor DATE 11-21-89

TYPE OR PRINT NAME Juanita Goodlett TELEPHONE NO. 505/748-14

(This space for State Use)

APPROVED BY OIL & GAS INSPECTOR TITLE DATE

CONDITIONS OF APPROVAL, IF ANY:

ATTACHMENT "I"

WRS COMPLETION REPORT

COMPLETIONS SEC 26 TWP 17S RGE 36E
P1# 30-F-0011 12/08/89 30-025-30701-0000 PAGE 1

NMEX LEA * 660FNL 660FWL SEC NW NW

YATES PET D D

1 SIRINGO "ACS" STATE

3889KB 3881GR SPENCER

API 30-025-30701-0000

10/27/1989 11/16/1989 ROTARY VERT D&A-OG

5500 SN ANDRS ARTESIA FSHG TOOL 2 RIG SUB 7

DTD 5450 PM/TD SN ANDRS

LOCATION DESCRIPTION

6 MI W HUMBLE CITY, NM

CASING/LINER DATA

CSG 20 @ 40
CSG 8 5/8 @ 2043 W/ 1100 SACKS
CMT PLUGS @ 5350-5450 W/25 SX, 4514-4614 W/35 SX,
3253-3353 W/55 SX, 1933-2093 W/30 SX, SURF-63 W/25 SX

TYPE	FORMATION	LTH	TOP DEPTH/SUB	BSE DEPTH/SUB
LOG	RUSTLER		2052 1837	
LOG	YATES		3353 536	
LOG	QUEEN		4392 -503	
LOG	GRAYBURG		4614 -725	
LOG	SN ANDRS		5210 -1321	

SUBSEA MEASUREMENTS FROM KB

FORMATION TEST DATA

DST 1 5298- 5450 SN ANDRS S
REC 2914.0 FT OG&MCW .5 CFT GAS
REC 80.0 CC OIL 1340.0 CC FWTR
INIT OP 20M IFP 244 FFP 621 OP W/GD BLOW
FINAL OP 1H IFP 658 FFP 1402 GD BLOW
ISIP 1825 1H FSIP 1825 3H IHP 2964 FHP 2973
SPL CHAM PRESS FINAL 30
WS 33000 PPM CL
OP W/GD BLOW ON BTM OF BUCKET, INCR TO 2.5 PSI IN 10

CONTINUED IC# 300257029689

ATTACHMENT "I"

YATES PET D D
1 SIRINGO "ACS" STATE

FORMATION TEST DATA

MINS
RE-OP W/GD BLOW, INCR TO 2.25 PSI IN 30 MINS

DST 2 - SN ANDRS MISRUN

DST 3 5054- 5084 SN ANDRS
REC 150.0 FT FLUD 2600.0 CC FLUD
INIT OP 30M IFP 83 FFP 95 OP W/WK BLOW
FINAL OP 1H IFP 95 FFP 95 WK BLOW
ISIP 95 1H IHP 2808 FHP 2808
SPL CHAM PRESS FINAL 60
WS170000 PPM CL
OP W/WK BLOW, DECR TO V-WK BLOW IN 30 MINS
RE-OP ON 2ND FLOW W/WK BLOW, DIED IN 5 MINS
RE-OP ON 3RD FLOW W/WK BLOW, DIED IN 5 MINS
OP 30 MINS SI 1 HR; OP 1 HR SI 3 HRS; OP 1 HR
IFP 82-95, 95-95, 95-95
ISIP 95, 95

DST 4 5269- 5362 SN ANDRS S
REC 570.0 FT O&GCW 2100.0 CC O&GCW
REC .3 CFT GAS
INIT OP 30M IFP 69 FFP 120 OP W/FAIR BLOW
FINAL OP 1H IFP 188 FFP 222 FAIR BLOW
ISIP 1436 1H FSIP 1604 2H IHP 2819 FHP 2853
SPL CHAM PRESS FINAL 220
WS115000 PPM CL
OP W/FAIR BLOW, INCR TO BTM OF BUCKET IN 8 MINS, INCR TO 13 OZ IN 30 MINS
RE-OP W/FAIR BLOW, INCR TO 7.25 OZ IN 1 HR
SPL REC 2100 CC O&GCDFLUD + .34 CFT GAS
DP REC 570 FT O&GCDFLUD
WS 115000 PPM CL @ TOP OF SPL

LOGS AND SURVEYS /INTERVAL,TYPE/

LOGS CNL FDC DLL
LOGS MSFL

DRILLING PROGRESS DETAILS
YATES PET

CONTINUED

ATTACHMENT "I"

COMPLETIONS SEC 26 TWP 17S RGE 36E
PI# 30-T-0011 12/08/89 30-025-30701-0000 PAGE 3

YATES PET D D
SIRINGO "ACS" STATE

DRILLING PROGRESS DETAILS

105 S 4TH ST
ARTESIA, NM 88210
505-748-1471

10/12 LOC/1989/
10/31 DRLG SURF
11/03 DRLG 2231
11/06 DRLG 4375
11/15 5450 TD, HOLDING FOR DATA
11/15 DEVIATION SURVEYS @ 465 (1/2 DEG), 970 (1/4 DEG) 1470 (1/2 DEG), 1939 (1/2 DEG), 2043 (3/4 DEG), 2655 (1/2 DEG), 3150 (1 DEG), 3650 (2 DEG) 4190 (1 1/2 DEG), 4456 (1 1/2 DEG), 4980 (1 1/4 DEG), 5450 (1 3/4 DEG)
TD REACHED 11/10/89 RIG REL 11/16/89
12/05 5450 TD
COMP 11/16/89, D&A
NO CORES, FOUR DSTS RPTD

ATTACHMENT "I"

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

June 06, 2022

ELIZABETH PICKEREL

LLANO DISPOSAL, LLC

125 W. ST. ANNE

HOBBS, NM 88240

RE: SIRINGO ACS STATE #1

Enclosed are the results of analyses for samples received by the laboratory on 05/20/22 14:27.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-21-14. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

Cardinal Laboratories is accreditated through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Total Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Cardinal Laboratories is accredited through the State of New Mexico Environment Department for:

Method SM 9223-B	Total Coliform and E. coli (Colilert MMO-MUG)
Method EPA 524.2	Regulated VOCs and Total Trihalomethanes (TTHM)
Method EPA 552.2	Total Haloacetic Acids (HAA-5)

Accreditation applies to public drinking water matrices for State of Colorado and New Mexico.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keene

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

LLANO DISPOSAL, LLC 125 W. ST. ANNE HOBBS NM, 88240	Project: SIRINGO ACS STATE #1 Project Number: U BAR BRINE STATION D-26-17S- Project Manager: ELIZABETH PICKEREL Fax To: NONE	Reported: 06-Jun-22 10:57

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
U - BAR BRINE	H222168-01	Water	20-May-22 06:32	20-May-22 14:27
U - BAR FRESH	H222168-02	Water	20-May-22 06:40	20-May-22 14:27
U - BAR MONITOR WELL	H222168-03	Water	20-May-22 06:42	20-May-22 14:27

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

LLANO DISPOSAL, LLC 125 W. ST. ANNE HOBBS NM, 88240	Project: SIRINGO ACS STATE #1 Project Number: U BAR BRINE STATION D-26-17S- Project Manager: ELIZABETH PICKEREL Fax To: NONE	Reported: 06-Jun-22 10:57

U - BAR BRINE

H222168-01 (Water)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Cardinal Laboratories										
Inorganic Compounds										
Chloride*	**180000**		4.00	mg/L	1	2051801	AC	23-May-22	4500-Cl-B	
pH*	**1.04**		0.100	pH Units	1	2052039	GM	20-May-22	150.1	
Temperature °C	**20.0**			pH Units	1	2052039	GM	20-May-22	150.1	
Specific Gravity @ 60° F	**1.194**		0.000	[blank]	1	2052301	GM	23-May-22	SM 2710F	
TDS*	**305000**		5.00	mg/L	1	2051303	GM	24-May-22	160.1	
Green Analytical Laboratories										
Total Recoverable Metals by ICP (E200.7)										
Sodium*	**107000**		500	mg/L	500	B221383	AES	31-May-22	EPA200.7	

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

LLANO DISPOSAL, LLC 125 W. ST. ANNE HOBBS NM, 88240	Project: SIRINGO ACS STATE #1 Project Number: U BAR BRINE STATION D-26-17S- Project Manager: ELIZABETH PICKEREL Fax To: NONE	Reported: 06-Jun-22 10:57

U - BAR FRESH

H222168-02 (Water)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Cardinal Laboratories										
Inorganic Compounds										
Chloride*	**96.0**		4.00	mg/L	1	2051801	AC	23-May-22	4500-Cl-B	
pH*	**7.65**		0.100	pH Units	1	2052039	GM	20-May-22	150.1	
Temperature °C	**20.3**			pH Units	1	2052039	GM	20-May-22	150.1	
Specific Gravity @ 60° F	**0.9991**		0.000	[blank]	1	2052301	GM	23-May-22	SM 2710F	
TDS*	**449**		5.00	mg/L	1	2051303	GM	25-May-22	160.1	

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

LLANO DISPOSAL, LLC 125 W. ST. ANNE HOBBS NM, 88240	Project: SIRINGO ACS STATE #1 Project Number: U BAR BRINE STATION D-26-17S- Project Manager: ELIZABETH PICKEREL Fax To: NONE	Reported: 06-Jun-22 10:57

U - BAR MONITOR WELL

H222168-03 (Water)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Cardinal Laboratories										
Inorganic Compounds										
Chloride*	**92.0**		4.00	mg/L	1	2051801	AC	23-May-22	4500-Cl-B	
pH*	**7.61**		0.100	pH Units	1	2052039	GM	20-May-22	150.1	
Temperature °C	**20.3**			pH Units	1	2052039	GM	20-May-22	150.1	
Specific Gravity @ 60° F	**0.9998**		0.000	[blank]	1	2052301	GM	23-May-22	SM 2710F	
TDS*	**429**		5.00	mg/L	1	2051303	GM	25-May-22	160.1	

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

LLANO DISPOSAL, LLC 125 W. ST. ANNE HOBBS NM, 88240	Project: SIRINGO ACS STATE #1 Project Number: U BAR BRINE STATION D-26-17S- Project Manager: ELIZABETH PICKEREL Fax To: NONE	Reported: 06-Jun-22 10:57

Inorganic Compounds - Quality Control

Cardinal Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2051303 - Filtration										
Blank (2051303-BLK1)				Prepared: 13-May-22 Analyzed: 17-May-22						
TDS	ND	5.00	mg/L							
LCS (2051303-BS1)				Prepared: 13-May-22 Analyzed: 17-May-22						
TDS	492		mg/L	500		98.4	80-120			
Duplicate (2051303-DUP1)	**Source: H222024-01**			Prepared: 13-May-22 Analyzed: 17-May-22						
TDS	1930	5.00	mg/L		1980			2.56	20	
Batch 2051801 - General Prep - Wet Chem										
Blank (2051801-BLK1)				Prepared & Analyzed: 18-May-22						
Chloride	ND	4.00	mg/L							
LCS (2051801-BS1)				Prepared & Analyzed: 18-May-22						
Chloride	104	4.00	mg/L	100		104	80-120			
LCS Dup (2051801-BSD1)				Prepared & Analyzed: 18-May-22						
Chloride	104	4.00	mg/L	100		104	80-120	0.00	20	
Duplicate (2051801-DUP1)	**Source: H222083-01**			Prepared & Analyzed: 18-May-22						
Chloride	3500	4.00	mg/L		3300			5.88	20	
Matrix Spike (2051801-MS1)	**Source: H222083-01**			Prepared & Analyzed: 18-May-22						
Chloride	5800	4.00	mg/L	2500	3300	100	80-120			
Batch 2052039 - General Prep - Wet Chem										
LCS (2052039-BS1)				Prepared & Analyzed: 20-May-22						
pH	2.06		pH Units	2.00		103	90-110			

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

LLANO DISPOSAL, LLC 125 W. ST. ANNE HOBBS NM, 88240	Project: SIRINGO ACS STATE #1 Project Number: U BAR BRINE STATION D-26-17S- Project Manager: ELIZABETH PICKEREL Fax To: NONE	Reported: 06-Jun-22 10:57

Inorganic Compounds - Quality Control

Cardinal Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2052039 - General Prep - Wet Chem										
Duplicate (2052039-DUP1)		**Source: H222168-01**		Prepared & Analyzed: 20-May-22						
pH	1.06	0.100	pH Units		1.04			1.90	20	
Temperature °C	20.1		pH Units		20.0			0.499	200	
Batch 2052301 - General Prep - Wet Chem										
Duplicate (2052301-DUP1)		**Source: H222168-01**		Prepared & Analyzed: 23-May-22						
Specific Gravity @ 60° F	1.199	0.000	[blank]		1.194			0.392	20	

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

LLANO DISPOSAL, LLC 125 W. ST. ANNE HOBBS NM, 88240	Project: SIRINGO ACS STATE #1 Project Number: U BAR BRINE STATION D-26-17S- Project Manager: ELIZABETH PICKEREL Fax To: NONE	Reported: 06-Jun-22 10:57

Total Recoverable Metals by ICP (E200.7) - Quality Control

Green Analytical Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B221383 - Total Recoverable by ICP										
Blank (B221383-BLK1)				Prepared: 26-May-22 Analyzed: 31-May-22						
Sodium	ND	1.00	mg/L							
LCS (B221383-BS1)				Prepared: 26-May-22 Analyzed: 31-May-22						
Sodium	1.72	1.00	mg/L	1.62		106	85-115			
LCS Dup (B221383-BSD1)				Prepared: 26-May-22 Analyzed: 31-May-22						
Sodium	1.64	1.00	mg/L	1.62		101	85-115	4.92	20	

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories
101 East Marland, Hobbs, NM 88240
(575) 393-2326 FAX (575) 393-2476

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: Llano Disposal LLC
Project Manager: Elizabeth Pickerel
Address: PO BOX 250
City: Lovington State: NM Zip: 88260
Phone #: 575-605-6490 Fax #:
Project #: Sirigo ACSSTH1 Project Owner: Llano Disposal
Project Name: U-Bar Brine Station
Project Location: D-26-17S-36E
Sampler Name: Elizabeth Pickerel

BILL TO
P.O. #:
Company: Llano Disposal LLC
Attn:
Address: POBox 250
City: Lovington
State: NM Zip: 88260
Phone #: 575-704-7777
Fax #:

ANALYSIS REQUEST
TDS, spec Grav, CL, PH
TDS, spec Grav, CL, PH, NA

FOR LAB USE ONLY Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	PRESERV.: ACID/BASE:	ICE / COOL	OTHER :	SAMPLING: DATE	TIME
H222168														
1	U-Bar Brine	✓	2									✓	5.20.22	6:32 am
2	U-Bar Fresh	✓	1									✓	5.20.22	6:40am ✓
3	U-Bar monitor well	✓	1									✓	5.20.22	6:42am ✓

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequental damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By: Elizabeth Pickerel Date: 5.20.22 Time: 1427
Received By: S Rodriguez
Relinquished By: Date: Time:
Received By:

Verbal Result: ☐ Yes ☐ No Add'l Phone #:
All Results are emailed. Please provide Email address:
REMARKS:

Delivered By: (Circle One) Sampler - UPS - Bus - Other:
Observed Temp. °C 0.7c
Corrected Temp. °C 0.2c
Sample Condition Cool ☑ Yes ☐ No Intact ☑ Yes ☐ No
CHECKED BY: (Initials) SR

Turnaround Time: Standard ☑ Rush ☐
Thermometer ID #113
Correction Factor -0.5°C
Bacteria (only) Sample Condition Cool ☐ Yes ☐ No Intact ☐ Yes ☐ No Observed Temp. °C Corrected Temp. °C

FORM-006 R 3.2 10/07/21

† Cardinal cannot accept verbal changes. Please email changes to celey.keene@cardinallabsnm.com

Llano Disposal, LLC
Siringo Brine Operations
Emergency Contingency and Response Plan

Location of Facilities:

Both the Siringo ACS State Brine Well #1 and the Siringo Brine Station are located approximately 8.6 miles south of Lovington, New Mexico via SH 483 (Arkansas Jct) then east on dirt roads. See attached map.

Facility	Latitude	Longitude	UL, S, T, N
Siringo ACS State #1	32.811503°	-103.331634°	D-26-17S-36E
Siringo Brine Station	32.798816°	-103.347123°	M-27-17S-36E

Emergency Response Agencies	Emergency	Direct Number
Lovington Fire and EMS	911	575-396-2359
Hobbs Fire and EMS	911	575-397-9308
Lea County Sheriff's Dept	911	575-396-3611
New Mexico State Police	911	575-392-5588

Llano Responder	Cell Phone	Home Phone
Marvin Burrows – Fac. Operator	575-631-8067	575-392-4384
Darr Angell - Owner	575-704-2777	575-396-4418

Reporting Agencies	Phone
NMOCD – Santa Fe	505-476-3440
NMOCD – Hobbs (Emergency Cell)	575-370-3186
National Response Center	800-424-8802
EPA Region 6 Emergency Response	214-665-6428
Chemtrec	800-424-9300

Materials Stored or Transferred Onsite	Location of Anticipated Leaks/Spills
Fresh and brine water (Non-hazardous)	Brine station inside secondary containment, concrete loading pad, pipelines, and at brine well
Corrosion Chemical (Combustible, Oxidizer)	At poly storage tank on brine well location
Contaminated Soil (Non-hazardous)	Sealed drums at brine station
Trash (Non-hazardous)	Trash bins at brine station

Leak/Spill Prevention Actions

Brine water storage tanks have a synthetic liner secondary containment and level controls
Corrosion chemical tank has a poly secondary containment
Concrete loading pad has curbs and an automated concrete sump
Buried brine polyethylene pipeline will be pressure tested annually to insure mechanical integrity

Containment and Clean up Actions

1) Incidental drips, leaks and spills will be picked up routinely and placed back into the system or in waste containers by the facility operator.
2) Releases of more than 5 bbls of brine water or 1 bbl of chemical or 1 bbl of waste outside secondary containment will be handled per the Emergency Procedures/Notification listed below.

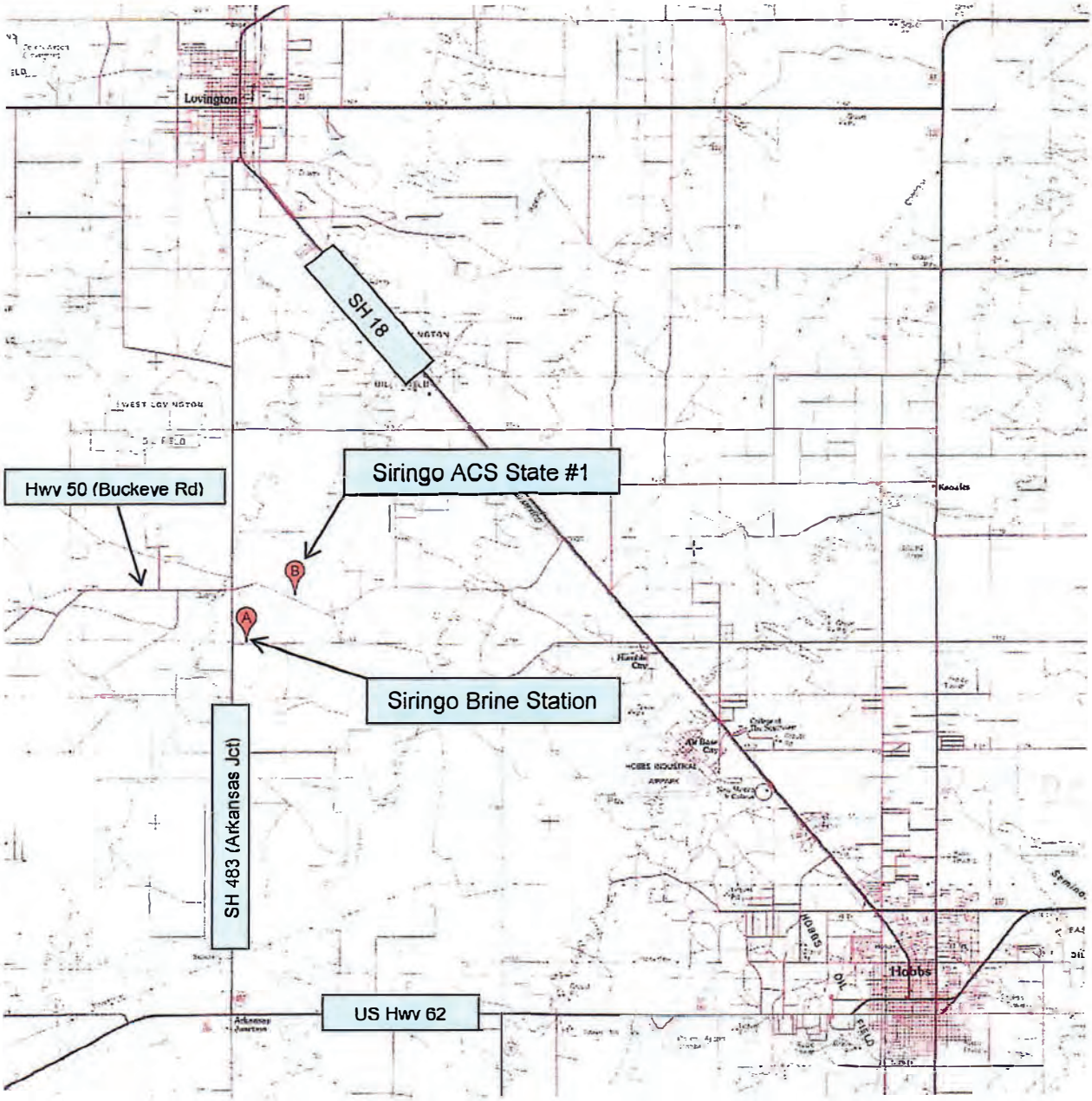
Emergency Procedures and Notification

1) Assess the situation (if it is safe to do so) and notify Llano Supervisor for assistance and additional personnel, if needed. Stop the leak/spill as directed by the Llano Supervisor (if it is safe to do so).
2) Notify one of the Emergency Response Agencies noted above if there is a life threatening situation.
3) Provide assistance to Emergency Responders and/or Llano Supervisor.
4) Barricade any spill area to protect the public, if necessary and if it is safe to do so.
5) Llano Supervisor will direct all available resources to stop, contain and mitigate the emergency situation.
6) Llano Supervisor will notify NMOCD District Office by phone and subsequent form C-141 for brine spills <25 bbls or chemical spills <1 bbl.
7) Llano Supervisor will verbally notify NMOCD Director (Santa Fe) for brine spill >25 bbls or chemical spills >1 bbl.

Posted Date - _____

Attachment K

Emergency Response Map

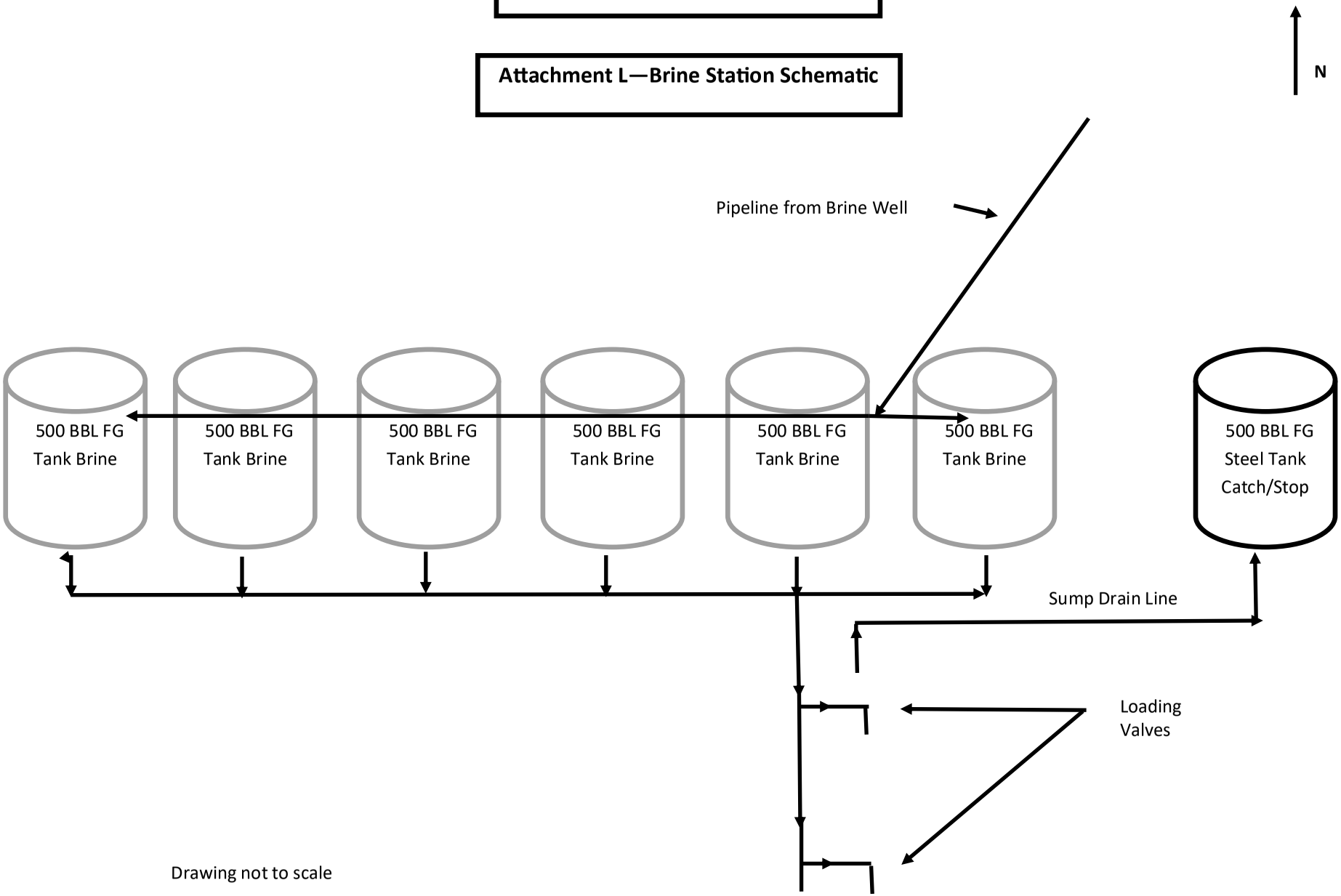


Attachment K

Posted Date - _____

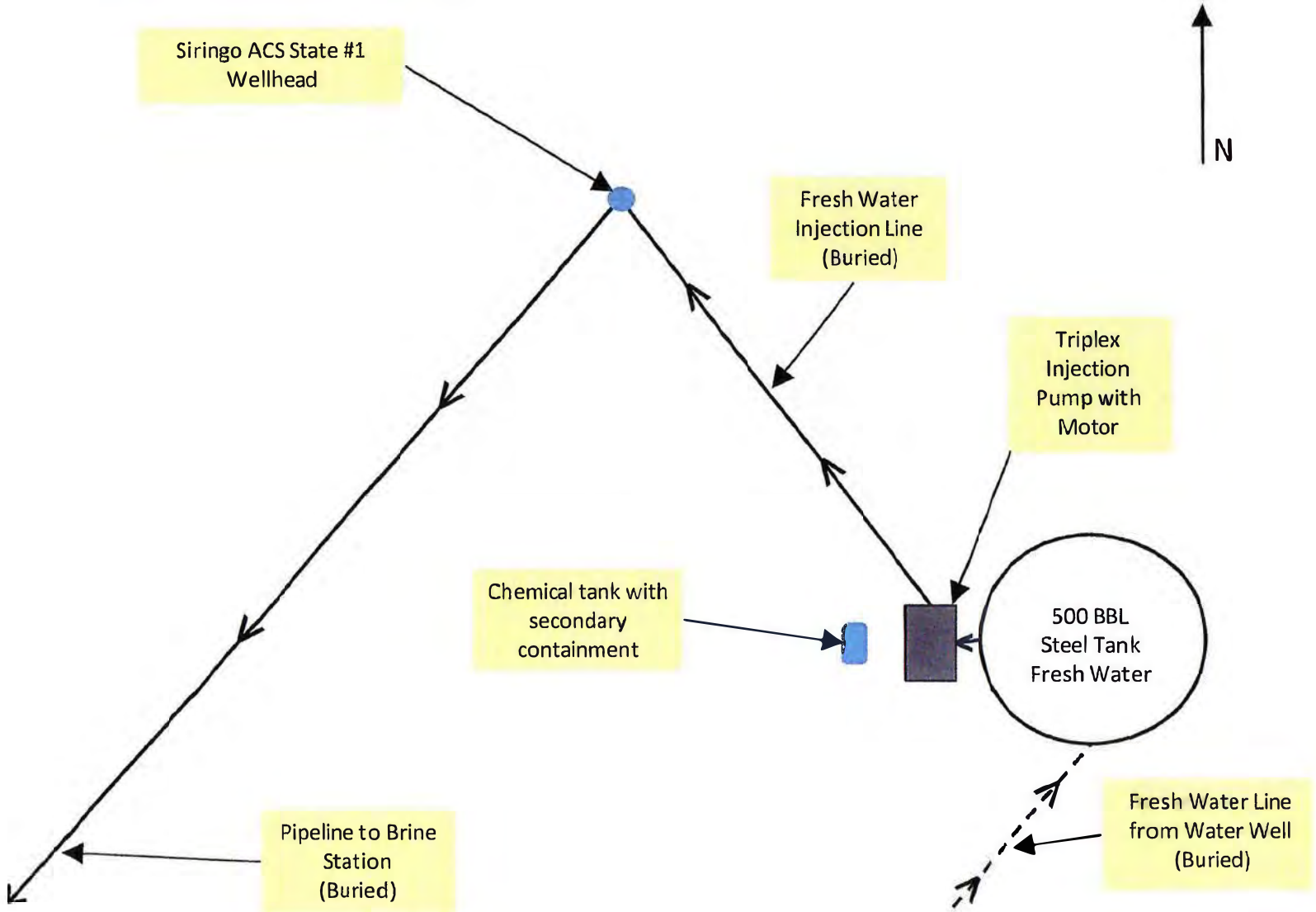
Siringo ACS State # 1
API # 30-025-30701
Discharge Plan Attachments

Attachment L—Brine Station Schematic



Siringo ACS State #1
API # 30-025-30701
Discharge Plan

Attachment L - Well Location Schematic

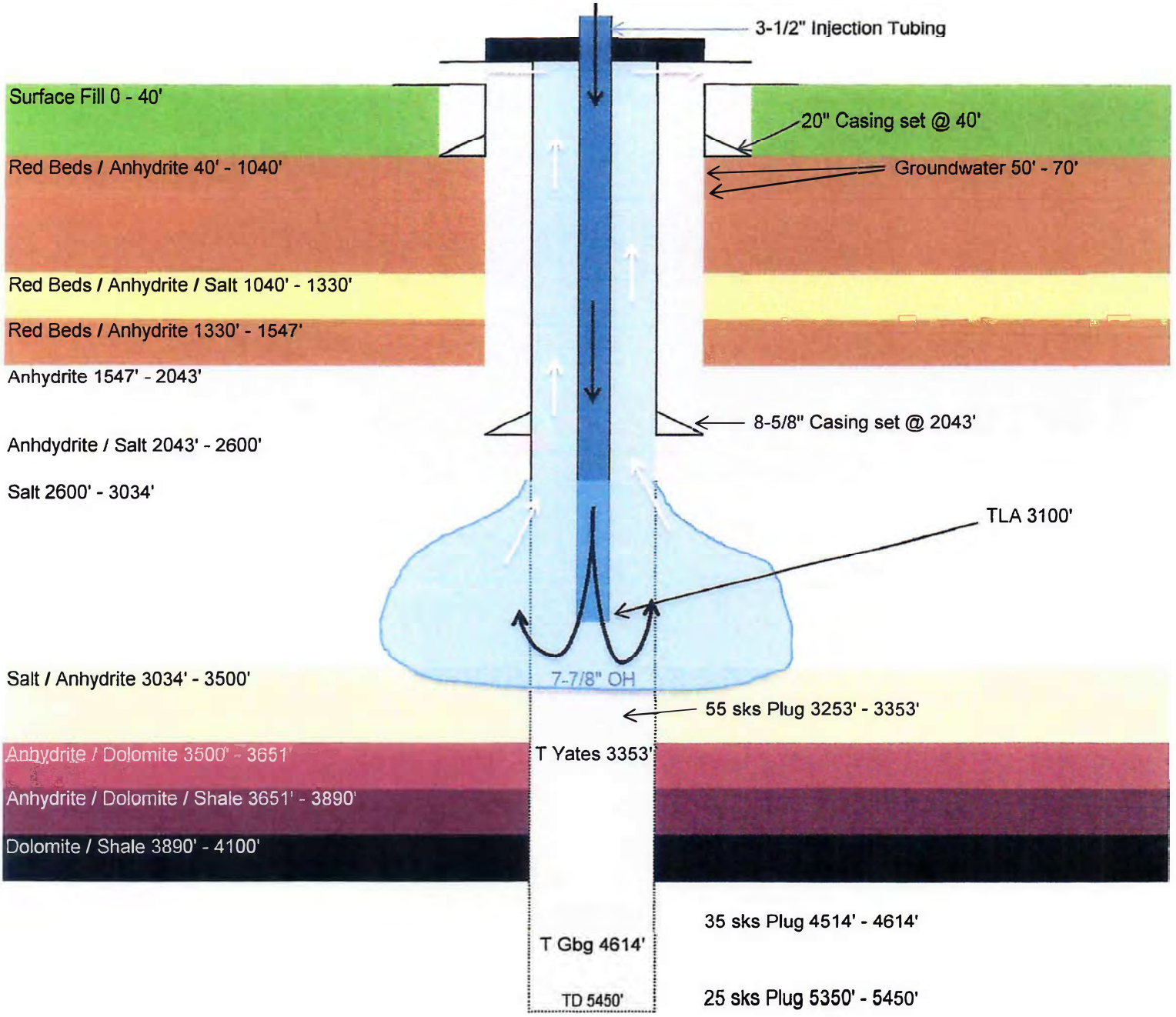


Drawing Not to Scale

PROPOSED WELLBORE

Configured for Brine Well

Llano Disposal, LLC
Siringo ACS State #1
API # 30-025-30701
660' FNL x 660' FWL, UL 'D', Sec 26, T17S, R36E, Lea County, NM

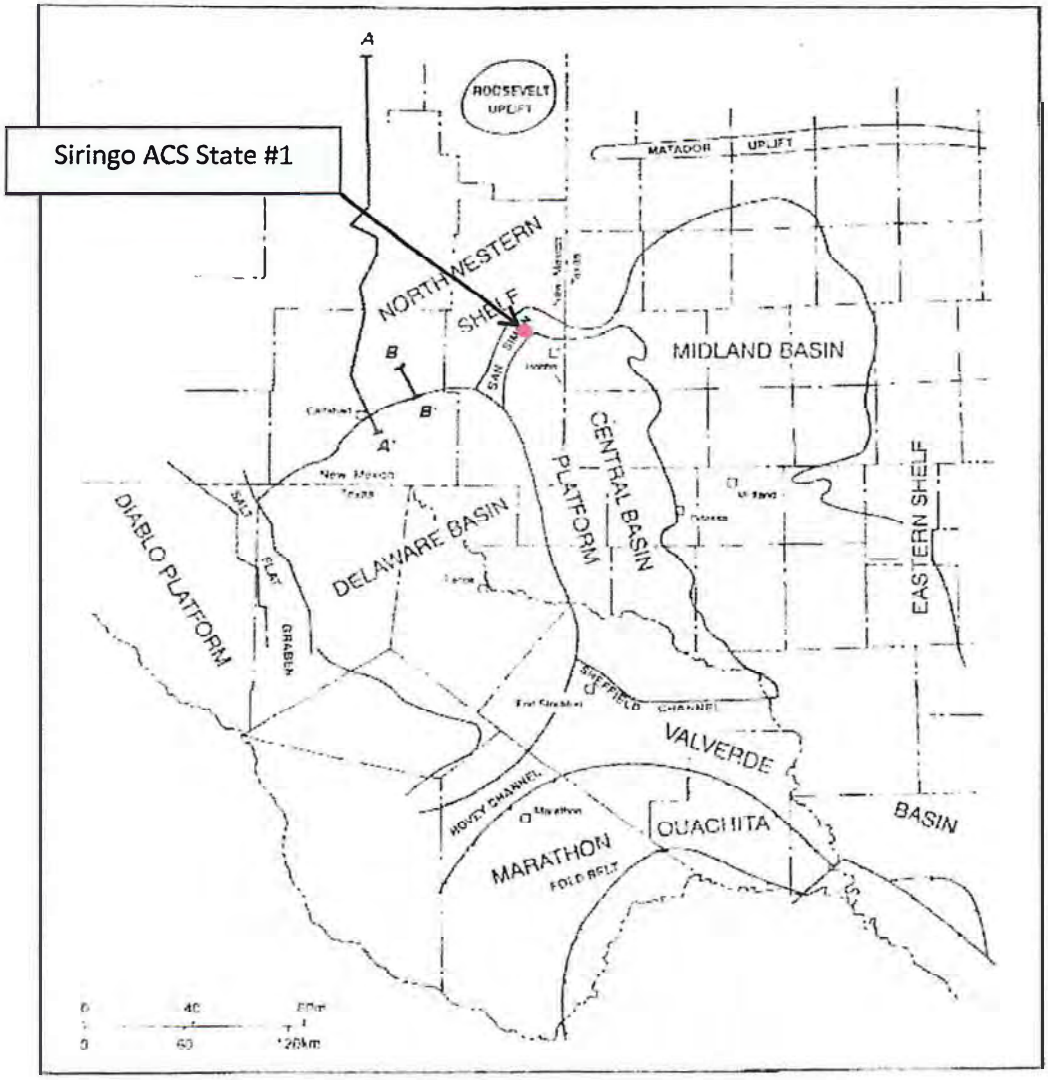


Attachment L
Drawing Not to Scale

Siringo ACS State #1
API # 30-025-30701
Discharge Plan Attachments

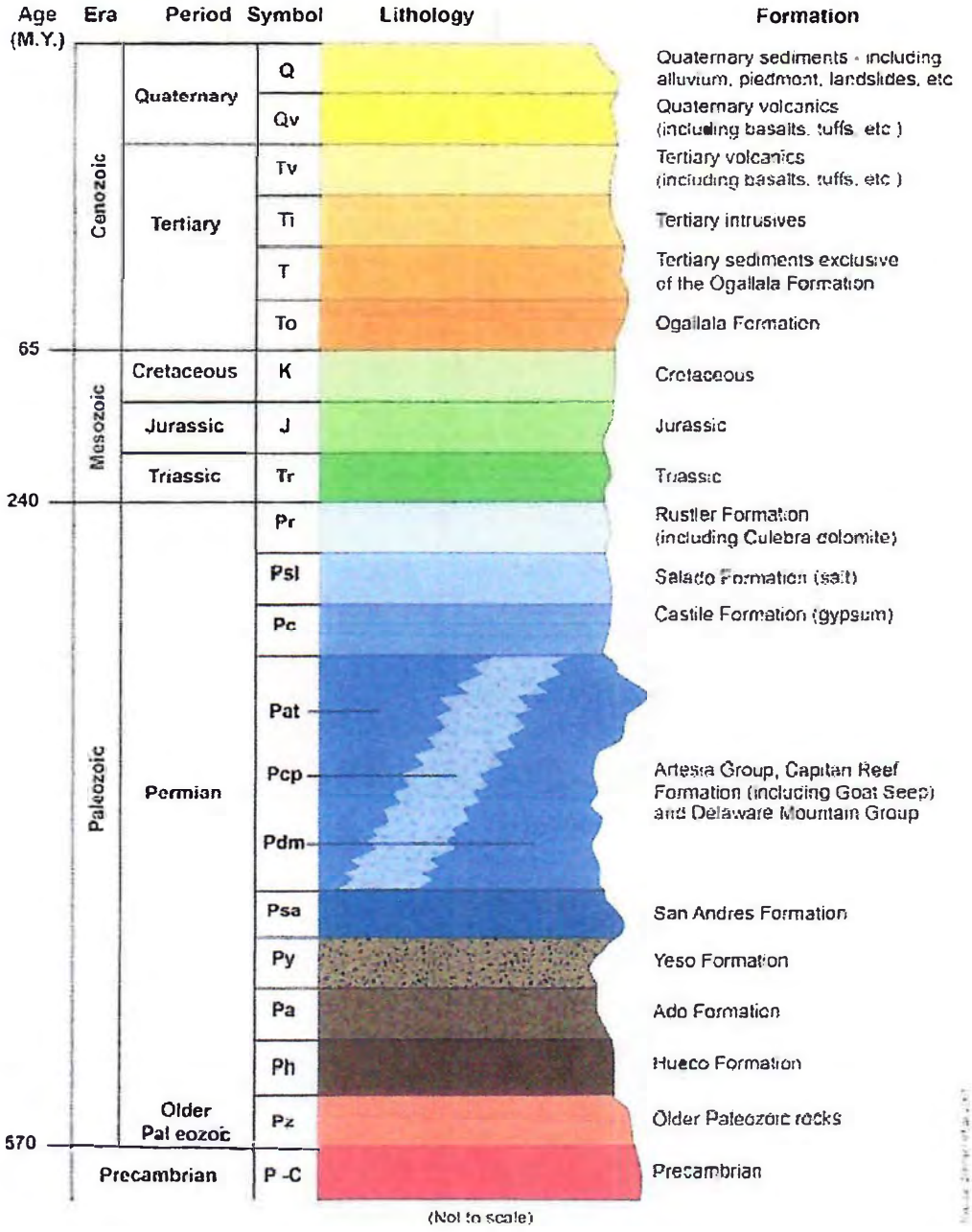
Attachment M – Area Geology

BROADHEAD and SPEER

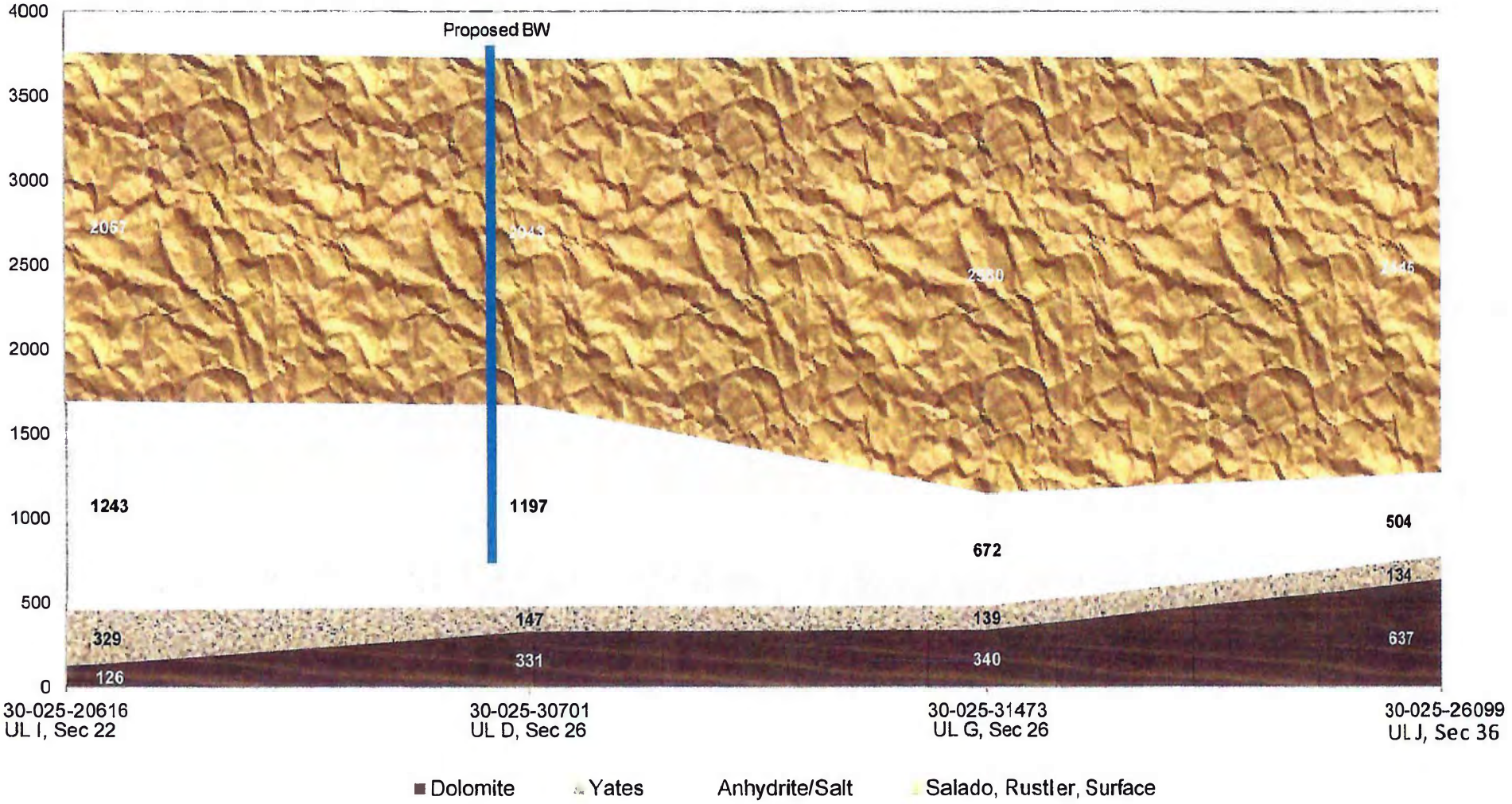


Siringo ACS State #1
API # 30-025-30701
Discharge Plan Attachments

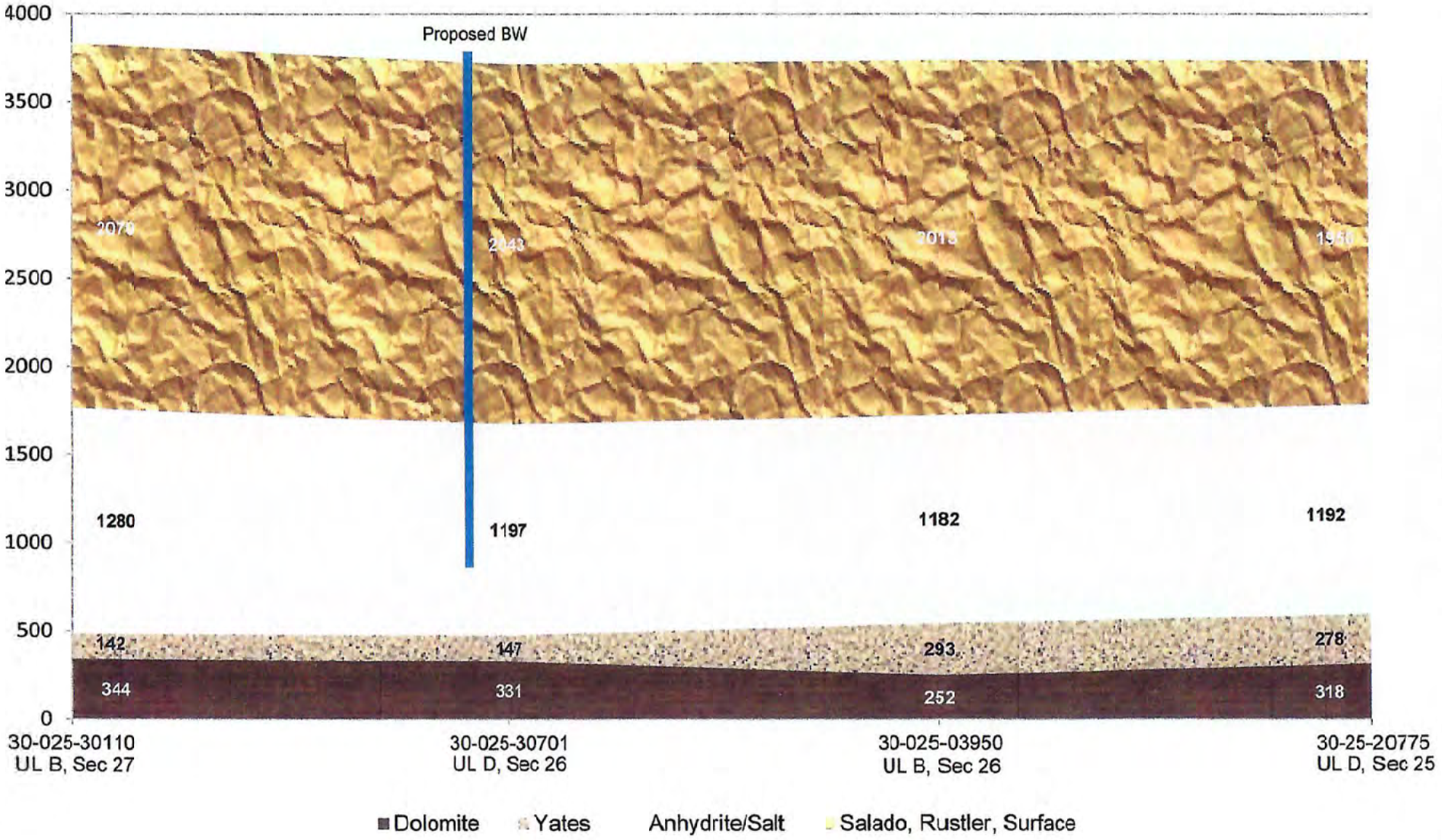
Attachment M – General Lithology



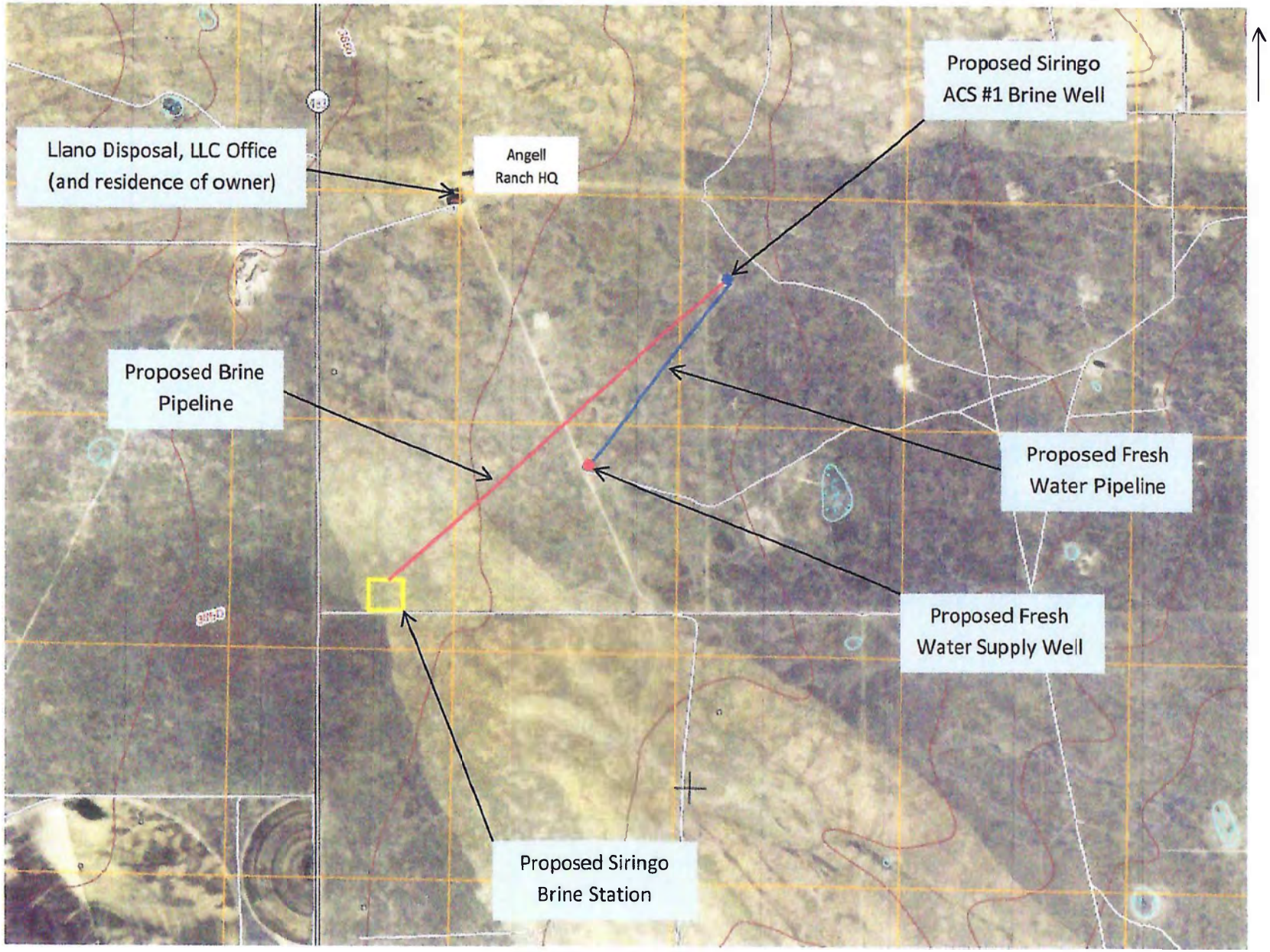
Siringo ACS State #1
North to South Cross Section
Attachment N



Siringo ACS State #1
East to West Cross Section
Attachment N



Siringo ACS State #1
API # 30-025-30701
Discharge Plan Attachments



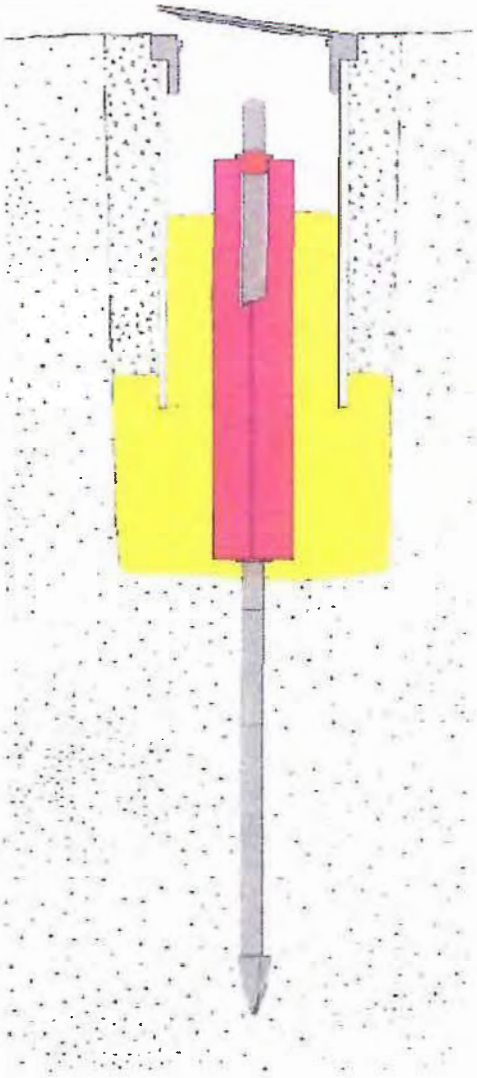
Attachment O – USGS Drainage Map of Project Area

Sectional Rod Monuments

Berntsen Survey Markers

Monument Design

SLEEVED ROD MONUMENT WITH FLOATING SLEEVE



Monument Installation Procedure

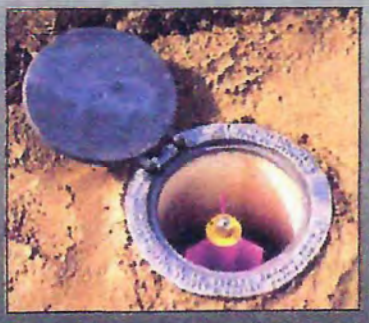
A 12 inch (300 mm) hole is augered to a depth of about 3 1/2 feet (1050 mm).

The rod monument is driven into the ground, a section at a time, to refusal*. The top of the last rod should be about 6 inches (150 mm) below the surface. *See page 15

The finned sleeve (filled with grease) is placed over the rod and the datum point added (or filed onto the rod end).

A 6 inch (150 mm) diameter PVC pipe 3 feet (915 mm) long, with access cover glued on, is placed over the finned sleeve (pipe should not touch the fins). Back-fill (INSIDE the PVC Pipe) with sand.

The hole and pipe are carefully back-filled with sand. The top 12 inches (300 mm) of the hole (OUTSIDE of the PVC Pipe) are back-filled with concrete.



The finished mark - a well protected first-order benchmark.

Attachment P –Subsidence Monument Rod Design and Installation Procedure

Siringo ACS State #1
API # 30-025-30701
Discharge Plan Attachments – Attachment Q

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 900 feet east of this sign. A detailed description and map of the proposed facilities are hereby attached below.

Brine wells are wells completed into salt formations for the purpose of solution mining the salt to create brine water. Fresh water is pumped into deep salt zones thereby producing concentrated salt water called "brine water". This brine water is used in the oilfield primarily for drilling and completion operations. It is anticipated that brine water will be produced at a rate of less than 1900 barrels per day with a total dissolved concentration of 320,000 mg/l (primarily NaCl). Groundwater in this area is present at depths of approximately 40 – 80 feet. The concentration of total dissolved solids in this groundwater is generally about 400 mg/l. The permit requires that the brine well and associated operations must be constructed and operated in a matter that will not adversely affect groundwater quality.

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

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

Siringo ACS State #1
API # 30-025-30701
Discharge Plan Attachments - Attachment Q

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

Page 1 of Detailed Notification

Llano Disposal, L.L.C. (Mr. Darr Angel), 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 II brine well to be located in Unit Letter D of Section 26, Township 17 South, Range 36 East (Lat. 32.8115005°, Long. -103.3317795°), Lea County, New Mexico. The brine injection well is located approximately 8.3 miles south of Lovington, New Mexico or 1.1 miles east of the intersection of State Hwy 483 (Arkansas Jct.) and County Road 50 (Buckeye Rd).

The application proposes to produce fresh water from an existing water source well located in Unit Letter J of Section 27, Township 17 South, Range 36 East (Lat. 32.804305°, Long. -103.338230°), Lea County, New Mexico. This fresh water would be transported via a buried polyethylene pipeline approximately 3250 feet north east to a 500 barrel steel water tank located at the brine well location detailed above. From time to time when brine is needed, the fresh water in this tank would be pumped down the tubing within the proposed brine well casing to an approximate depth of 2043 feet to 3253 feet below ground level at a rate of approximately 40 - 120 GPM and a normal operating pressure of 200 to 250 psi. The maximum allowable surface injection pressure would be 410 psig. Dissolution brine water (NaCl) would then be produced up the well casing backed by cement to surface. This "normal flow" routine fluid flow process is required by the NMOCD to maintain proper salt cavern configuration and development over the operational life of the brine well.

The produced brine water would be metered then transported via a second buried polyethylene pipeline approximately 6600 feet southwest to four 500 barrel fiberglass storage tanks at the proposed Siringo Brine Station located in Unit Letter M of Section 27, Township 17 South, Range 36 East (Lat. 32.798816°, Long. -103.347129°), Lea County, New Mexico. This brine station is located approximately 9.3 miles south of Lovington, New Mexico or 1 mile south-south-east of the intersection of State Hwy 483 (Arkansas Jct.) and County Road 50 (Buckeye Rd) and ¼ mile east of SH 483. 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 above listed 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 2000 feet separation from any significant features, such as houses, roads, utilities, pipelines, water supplies, buildings, schools, businesses, etc.

Groundwater possibly affected by an unintentional spill or leak is located at a depth of approximately 40 – 80 feet below ground level. Typical groundwater in this area has a total dissolved solids concentration of

Page 2 of Detailed Notification

approximately 400 mg/l. According to the Office of the State Engineer, average water well depths in the area are 107 feet below ground level. The brine facility will be designed and permitted to have no intentional water contaminants discharged to the surface or subsurface for the protection of groundwater. The brine station will have a concrete loading pad for trucks and will have a synthetic liner underneath tanks areas to prevent any spills or leaks from reaching the ground surface. The brine well will have cemented casing and tubing strings to protect groundwater.

The owner and operator of the proposed facility will be:

Llano Disposal, LLC
783 Highway 483
Lovington, NM 88260

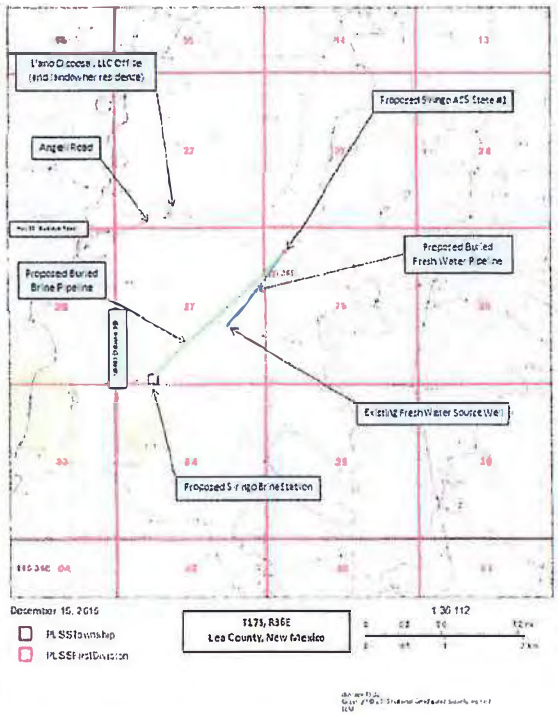
Comments and inquiries about the application may be directed to Llano Disposal, LLC c/o Mr. Danny Holcomb at 806-471-5628 or email danny@cwlc.net. Mr. Holcomb is a consultant to Llano Disposal providing assistance obtaining the regulatory permits for this project.

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

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

Map of Area of Review

Siringo State SW and Facility



Siringo ACS State #1
API # 30-025-30701
Discharge Plan Attachments – Attachment Q

Notificación Aviso

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

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

La nueva estación de salmuera será situados aproximadamente 900 pies al este de este signo. Una descripción detallada y un mapa de las instalaciones propuestas por este medio se unen por debajo.

Pozos de salmuera son pozos completados en formaciones de sal con el propósito de la solución de minería de la sal para crear agua de la salmuera. Agua dulce es bombeado en zonas profundas sal tal modo produciendo concentrado agua salada llamado "agua de la salmuera". Esta agua de la salmuera se utiliza en el campo petrolífero principalmente para operaciones de perforación y terminación. Se prevé que se producirán salmuera agua a una velocidad de menos de 1900 barriles por día con una concentración disuelta total de 320.000 mg/l (principalmente NaCl). Agua subterránea en esta área está presente en aproximadamente 40 a 80 pies de profundidad. La concentración de sólidos totales disueltos en esta agua subterránea es generalmente cerca de 400 mg/l. El permiso requiere que la salmuera bien y asociados las operaciones deben ser construidas y operadas en un asunto que no afectará negativamente la calidad de las aguas subterráneas.

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

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

Siringo ACS State #1
API # 30-025-30701
Discharge Plan Attachments-Attachment Q

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

Página 1 de notificación detallada

Llano Disposal, L.L.C. (Sr. Dan Angel), 783 Highway 483, Lovington, NM 88260 ha presentado una solicitud para La División de Conservación de Petróleo de Nuevo México (NMOCD) para la instalación y operación de una clase III de la salmuera bien que se encuentra en la unidad letra D de la sección 26, municipio de 17 sur, gama 36 Oriente (Lat. 32.8115005°, Long. -103.3317795°), Condado Lea, Nuevo México. La inyección de salmuera es bien situados aproximadamente 8,3 millas al sur de Lovington, Nuevo México o 1,1 millas al este de la intersección de estado Hwy 483 (Jct de Arkansas) y County Road 50 (Buckeye Rd).

La aplicación propone producir agua fresca de una fuente existente de agua bien ubicada en unidad letra J de la sección 27, municipio de 17 sur, gama 36 Oriente (Lat. 32.804305°, Long. -103.336230°), Condado Lea, Nuevo México. Este agua dulce transportarse a través de una tubería de polietileno enterrada aproximadamente 3250 pies al noreste para un tanque de agua 500 barril de acero situado en la salmuera bien ubicación detallada anteriormente. De vez en cuando se necesita salmuera, el agua en este tanque se bombea hasta abajo de la tubería dentro de la salmuera propuesta entubado del pozo a una profundidad aproximadade pies 2043 a 3253 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 410 psig. Agua de disolución salmuera (NaCl) entonces se produciría hasta la carcasa bien respaldada por el cemento a superficie. Este proceso de flujo rutinario flujo normal es requerido por la NMOCD para mantener la configuración de caverna de sal adecuada y desarrollo durante la vida operativa de la salmuera bien.

El agua de la salmuera producida se mide entonces transportado por una tubería de polietileno enterrada segundo aproximadamente 6600 pies sudoeste cuatro barril 500 tanques de almacenamiento de fibra de vidrio en la estación de salmuera Siringo propuesto ubicado en unidad letra M de la sección 27, municipio de 17 sur, gama 36 Oriente (Lat. 32,798816°, Long. -103.347123°), Condado Lea, Nuevo México. Esta estación de salmuera está situados aproximadamente 9,3 millas al sur de Lovington, Nuevo México o 1 milla sur-sureste de la intersección de estado Hwy 483 (Jct de Arkansas) y County Road 50 (Buckeye Rd) y ¼ milla al este de 483 SH. El agua de la salmuera sería transferido/vendido por entrega en camiones de agua sobre un almohadilla con frenar de contención de carga de cemento 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 la Infraestructura lista anterior 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 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.

El 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

Página 2 de notificación detallada

ha situado en terrenos privados y un mínimo de 2000 pies de separación de las características importantes, tales como casas, caminos, utilidades, tuberías, suministro de agua, edificios, escuelas, empresas, etc.

Agua subterránea a posiblemente afectado por un derrame accidental o escape se encuentra a una profundidad de aproximadamente 40 – 80 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, profundidades bien media del agua en la zona son 107 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 protegerlas aguas subterráneas.

El propietario y operador de la instalación propuesta será:

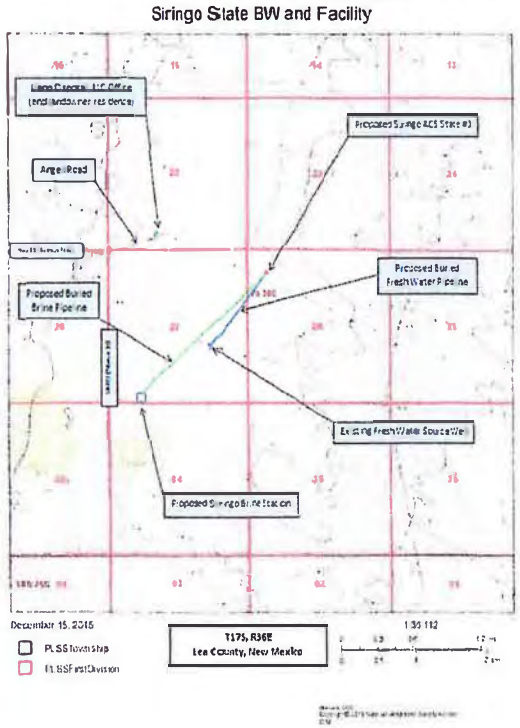
Llano Disposal, LLC
783 Highway 483
Lovington, NM 88260

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

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

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

Mapa del área de revisión



Siringo ACS State #1
API #30-025-30701
Discharge Plan Attachments - Attachment R

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 D of Section 26, Township 17 South, Range 36 East (Lat. 32.8115005°, Long. -103.3317795°), Lea County, New Mexico. The brine injection well is located approximately 8.3 miles south of Lovington, New Mexico or 1.1 miles east of the intersection of State Hwy 483 (Arkansas Jct.) and County Road 50 (Buckeye Rd).

The application proposes to produce fresh water from an existing water source well located in Unit Letter J of Section 27, Township 17 South, Range 36 East (Lat. 32.804305°, Long. -103.338230°), Lea County, New Mexico. This fresh water would be transported via a buried polyethylene pipeline approximately 3250 feet northeast to a 500 barrel steel water tank located at the brine well location detailed above. From time to time when brine is needed, the fresh water in this tank would be pumped down the tubing within the proposed brine well casing to an approximate depth of 2043 feet to 3253 feet below ground level at a rate of approximately 40 - 120 GPM and a normal operating pressure of 200 to 250 psi. The maximum allowable surface injection pressure would be 410 psig. Dissolution brine water (NaCl) would then be produced up the well casing backed by cement to surface. This "normal flow" routine fluid flow process is required by the NMOCD to maintain proper salt cavern configuration and development over the operational life of the brine well.

The produced brine water would be metered then transported via a second buried polyethylene pipeline approximately 6600 feet southwest to six, 500 barrel fiberglass storage tanks at the proposed Siringo Brine Station located in Unit Letter M of Section 27, Township 17 South, Range 36 East (Lat. 32.798816°, Long. -103.347123°), Lea County, New Mexico. This brine station is located approximately 9.3 miles south of Lovington, New Mexico or 1 mile south-south-east of the intersection of State Hwy 483 (Arkansas Jct.) and County Road 50 (Buckeye Rd) and ¼ mile east of SH 483. 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 above listed 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 2000 feet separation from any significant features, such as houses, roads, utilities, pipelines, water supplies, buildings, schools, businesses, etc.

Siringo ACS State #1
API #30-025-30701
Discharge Plan Attachments - Attachment R

Groundwater possibly affected by an unintentional spill or leak is located at a depth of approximately 40 – 80 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 depths in the area are 107 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. Marvin Burrows 575–631–8067 or email ch2o.fresh@gmail.com. Mr. Burrows is a consultant to Llano Disposal providing assistance with 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

Siringo ACS State #1
API #30-025-30701
Discharge Plan Attachments - Attachment R

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 Ángell), 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 D de la sección 26, municipio de 17 sur, gama 36 Oriente (Lat. 32.8115005°, Long. -103.3317795°), Condado Lea, Nuevo México. La inyección de salmuera es bien situados aproximadamente 8,3 millas al sur de Lovington, Nuevo México o 1,1 millas al este de la intersección de estado Hwy 483 (Jct de Arkansas) y County Road 50 (Buckeye Rd).

La aplicación propone producir agua fresca de una fuente existente de agua bien ubicada en unidad letra J de la sección 27, municipio de 17 sur, gama 36 Oriente (Lat. 32,804305°, Long. -103.338230°), Condado Lea, Nuevo México. Este agua dulce transportarse a través de una tubería de polietileno enterrada aproximadamente 3250 pies al noreste para un tanque de agua 500 barril de acero situado en la salmuera bien ubicación detallada anteriormente. De vez en cuando se necesita salmuera, el agua en este tanque se bombea hacia abajo de la tubería dentro de la salmuera propuesta entubado del pozo a una profundidad aproximada de pies 2043 a 3253 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 410 psig. Agua de disolución salmuera (NaCl) entonces se produciría hasta la carcasa bien respaldada por el cemento a superficie. Este proceso de flujo rutinario "flujo normal" es requerido por la NMOCD para mantener la configuración de caverna de sal adecuada y desarrollo durante la vida operativa de la salmuera bien.

El agua de la salmuera producida se mide entonces transportado por una tubería de polietileno enterrada segundo aproximadamente 6600 pies sudoeste cuatro barril 500 tanques de almacenamiento de fibra de vidrio en la estación de salmuera Siringo propuesto ubicado en unidad letra M de la sección 27, municipio de 17 sur, gama 36 Oriente (Lat. 32,798816°, Long. -103.347123°), Condado Lea, Nuevo México. Esta estación de salmuera está situados aproximadamente 9,3 millas al sur de Lovington, Nuevo México o 1 milla sur-sureste de la intersección de estado Hwy 483 (Jct de Arkansas) y County Road 50 (Buckeye Rd) y ¼ milla al este de 483 SH. El agua de la salmuera sería transferido/vendido por entrega en camiones de agua sobre una almohadilla con frenar de contención de carga de cemento 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 la infraestructura lista anterior 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 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 2000 pies de separación de las características importantes, tales como casas, caminos, utilidades, tuberías, suministro de agua, edificios, escuelas, empresas, etc.

Agua subterránea posiblemente afectado por un derrame accidental o escape se encuentra a una profundidad de aproximadamente 40 – 80 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, profundidades bien media del agua en la zona son 107 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

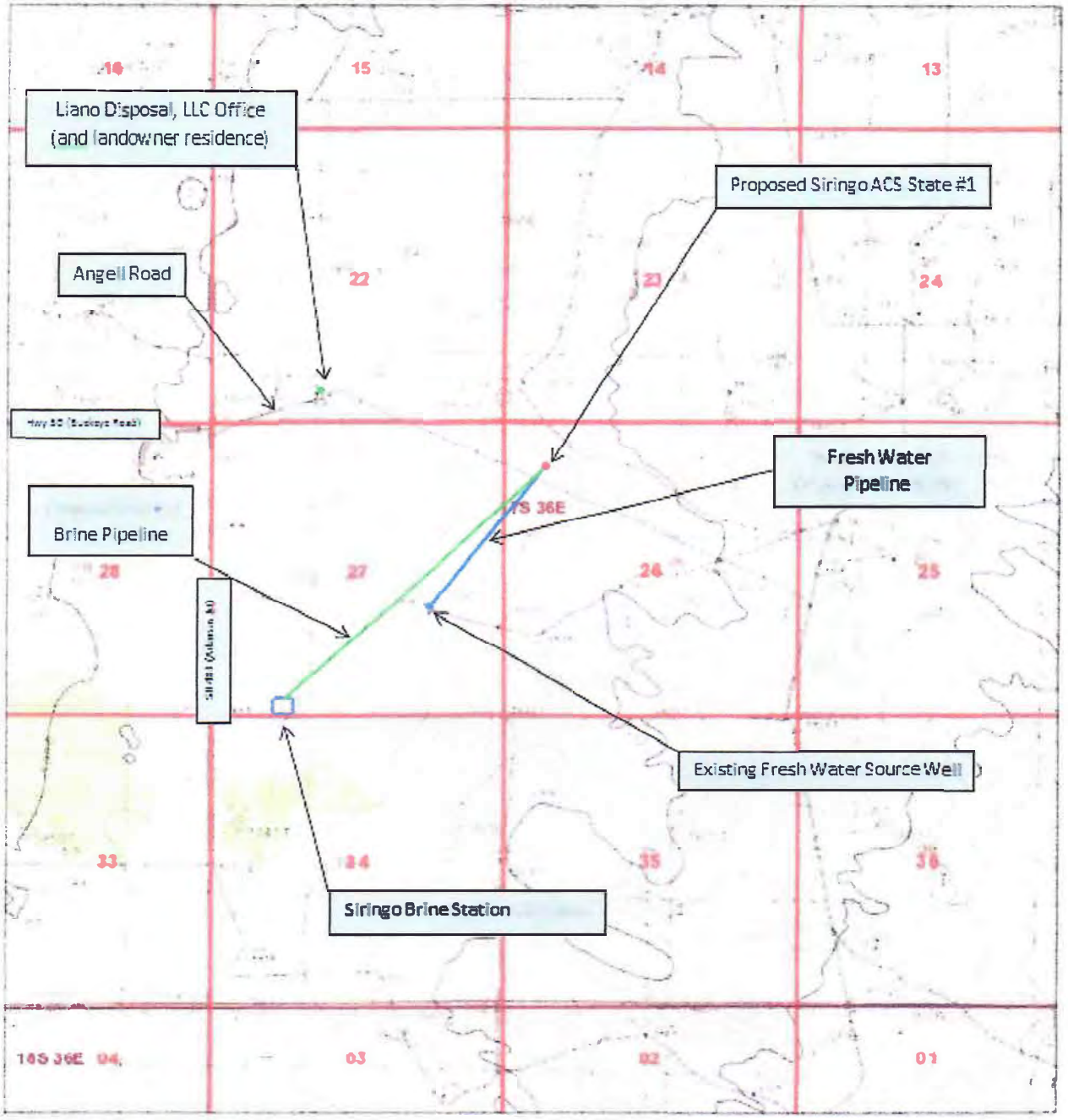
Comentarios y consultas sobre la aplicación pueden ser dirigidas a disposición Llano, LLC c/o Sr. Marvin Burrows en 575-631-8067 o por correo electrónico ch2o.fresh@gmail.com . El Sr. Burrows es consultor para proporcionar asistencia de Llano Disposal obtener los permisos reglamentarios para este proyecto.

La División de Conservación de Petroléo de Nuevo Méxicano se aceptan comentarios y declaraciones de interés respecto a esta aplicación y creará una lista de correo de instalaciones específicas para las personas que deseen recibir futuras notificaciones. 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

Siringo ACS State #1
API #30-025-30701
Discharge Plan Attachments - Attachment R

Siringo ACS State #1 BW and Facility



Siringo ACS State #1
API # 30-025-30701
Discharge Plan Attachments - Attachment S

Public Notice Letter

Certified Mail

Date: _____

Property Owner of Record

Name:

Address:

City/State:

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, LLC, 783 Highway 483, Lovington, NM 88260, Mr. Darr Angell has filed an application with the New Mexico Oil Conservation Division (OCD) to operate a Class III brine well to be located in Unit Letter D of Section 26, Township 17 South, Range 36 East (Lat. 32.8115005°, Long. -103.3317795°), Lea County, New Mexico. The brine well is located on the Angell Ranch approximately 8.3 miles south of Lovington, New Mexico or 1.1 miles east of the intersection of State Hwy 483 (Arkansas Jct) and County Road 50 (Buckeye Rd).

The application proposes to produce fresh water from an existing water source well located in Unit Letter J of Section 27, Township 17 South, Range 36 East (Lat. 32.804305°, Long. -103.338230°), Lea County, New Mexico. This fresh water would be transported from the well via a buried polyethylene pipeline approximately 3250 feet northeast to a 500 barrel steel water tank located at the brine well location detailed above. From time to time when brine was needed, the fresh water in this tank would be pumped down the tubing within the proposed brine well casing to an approximate depth of 2043 feet to 3253 feet below ground level at a rate of approximately 40 - 120 GPM and a normal operating pressure of 200 to 250 psi. The maximum allowable surface injection pressure would be 410 psig. Dissolution brine water (NaCl) is then produced up the well casing backed by cement to surface. This "normal flow" routine fluid flow process is required by the NMOCD to maintain proper salt cavern configuration and development over the operational life of the brine well.

The produced brine water would be metered then transported via another buried polyethylene pipeline approximately 6600 feet southwest to six 500 barrel fiberglass storage tanks at the proposed Siringo Brine Station located in Unit Letter M of Section 27, Township 17 South, Range 36 East (Lat. 32.798816°, Long. -103.347123°), Lea County, New Mexico. This brine station is located approximately 9.3 miles south of Lovington, New Mexico or 1 mile south-south-east of the intersection of State Hwy 483 (Arkansas Jct) and County Road 50 (Buckeye Rd) and ¼ mile east of SH 483. 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 above listed infrastructure is located on private land owned by the applicant.

Siringo ACS State #1
API # 30-025-30701
Discharge Plan Attachments - Attachment S

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 to provide a minimum of 2000 feet separation from any significant features, such as houses, roads, utilities, pipelines, water supplies, buildings, schools, businesses, etc.

Groundwater possibly affected by an unintentional spill or leak is at a depth of approximately 40 – 80 feet below ground level with a total dissolved solids concentration of approximately 400 mg/l. According to the Office of the State Engineer, average water well depths in the area are 107 feet below ground level. This 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 and 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 or inquiries about this application may be directed to Llano Disposal, LLC c/o Mr. Marvin Burrows at 575-631-8067 or email ch2o.fresh@gmail.com Mr. Burrows is a consultant to Llano Disposal providing assistance with this project.

The New Mexico Oil Conservation Division (NMOCD) 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
Oil Conservation Division
1220 South Saint Francis Drive
Santa Fe, New Mexico 87505
Telephone: 505-476-3440

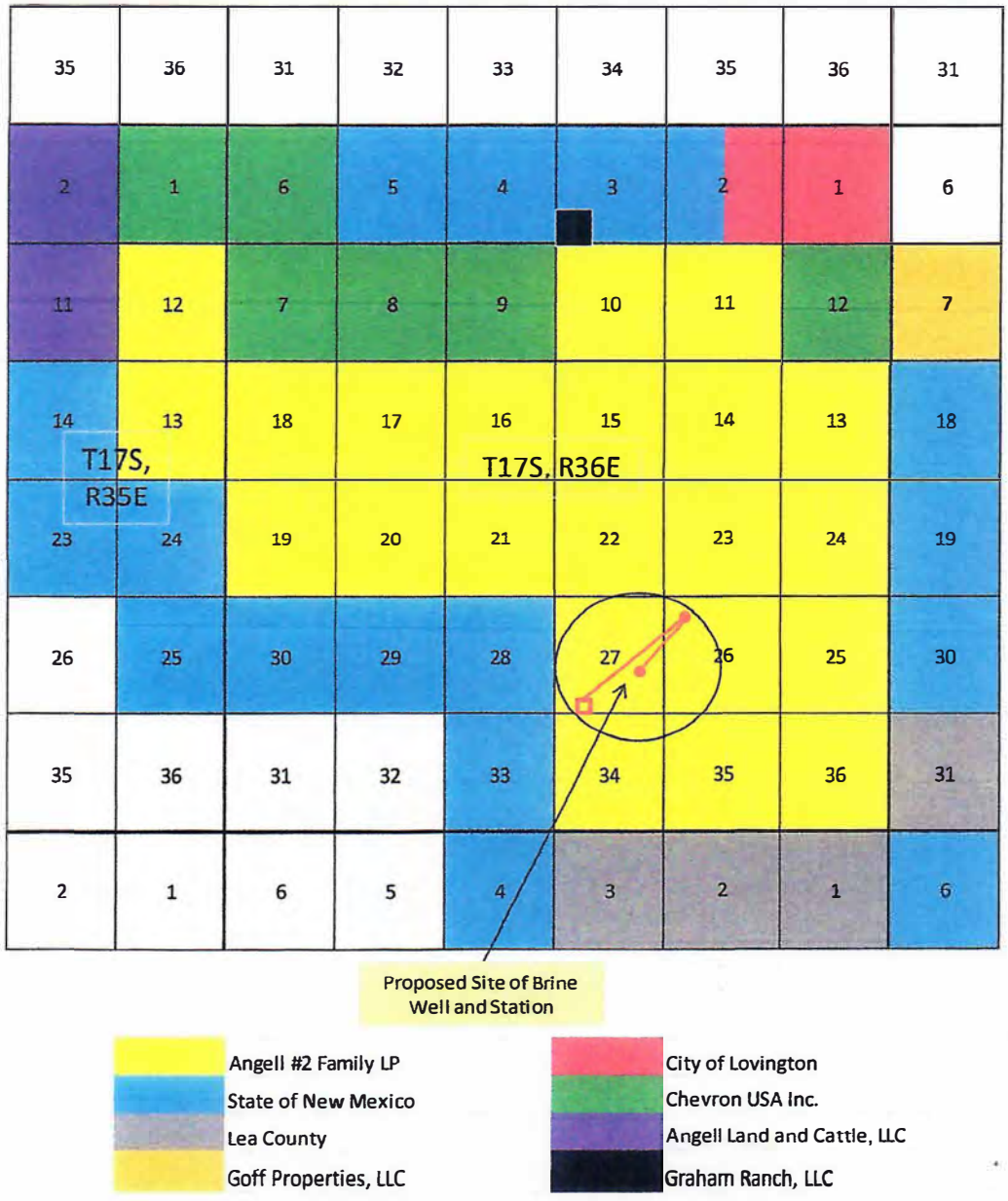
Sincerely,

Marvin Burrows
Agent for Llano Disposal, LLC

Attachment (map of area)

Siringo ACS State #1
API # 30-025-30701
Discharge Plan Attachments - Attachment S

Siringo ACS State #1 Brine Well
Adjoining Property Owners



Siringo ACS State #1
API # 30-025-30701
Discharge Plan Attachments - Attachment S

NOTIFICATION LIST - ADJOINING PROPERTY OWNERS

#	NAME	ADDRESS	CITY STATE ZIP	TYPE
1	Angell #2 Family LP c/o Mr. Darr Angell	P. O. Box 250	Lovington, NM 88260	Surface Owner

#	NAME	ADDRESS	CITY STATE ZIP	TYPE
2	State of New Mexico Commissioner of Public Land	P. O. Box 1148	Santa Fe, NM 87504	Adjoining Property Owner
3	Lea County	100 N. Main St.	Lovington, NM 88260	Adjoining Property Owner
4	Goff Properties, LLC	9800 W. Goff Road	Hobbs, NM 88242	Adjoining Property Owner
5	City of Lovington	P. O. Box 1268	Lovington, NM 88260	Adjoining Property Owner
6	Chevron USA Inc.	P. O. Box 285	Houston, TX 77001	Adjoining Property Owner
7	Angell Land and Cattle, LLC	P. O. Box 250	Lovington, NM 88260	Adjoining Property Owner
8	Graham Ranch, LLC	P. O. Box 1117	Lovington, NM 88260	Adjoining Property Owner

NOTIFICATION LIST - MINERAL OWNER AND LESSEE

#	NAME	ADDRESS	CITY STATE ZIP	TYPE
	State of New Mexico Commissioner of Public Land	P. O. Box 1148	Santa Fe, NM 87504	Mineral Owner
9	Devon Energy Production Co, LP	333 W. Sheridan Ave.	Oklahoma City, OK 73102	Mineral Lessee

Siringo ACS State #1
API # 30-025-30701
Discharge Plan Attachments - Attachment T

Public Notice Display Ad

Legal notification for 3" X 4" (min) newspaper display ad per Water Quality Control Commission Regulations 20.6.2.3108.B.4 NMAC

Llano Disposal, L.L.C. (Mr. Darr Angell), 783 Highway 483, Lovington, NM 88260 has submitted an application to the New Mexico Oil Conservation Division (NMOCD) for installation and operation of a Class III brine well to be located in Unit Letter D of Section 26, Township 17 South, Range 36 East (Lat. 32.8115005°, Long. -103.3317795°), Lea County, New Mexico. The brine injection well is located approximately 8.3 miles south of Lovington, New Mexico or 1.1 miles east of the intersection of State Hwy 483 (Arkansas Jct.) and County Road 50 (Buckeye Rd).

The application proposes to produce fresh water from an existing water source well located in Unit Letter J of Section 27, Township 17 South, Range 36 East (Lat. 32.804305°, Long. -103.338230°), Lea County, New Mexico. This fresh water would be transported via a buried polyethylene pipeline approximately 3250 feet northeast to a 500 barrel steel water tank located at the brine well location detailed above. From time to time when brine is needed, the fresh water in this tank would be pumped down the tubing within the proposed brine well casing to an approximate depth of 2043 feet to 3253 feet below ground level at a rate of approximately 40 - 120 GPM and a normal operating pressure of 200 to 250 psi. The maximum allowable surface injection pressure would be 410 psig. Dissolution brine water (NaCl) would then be produced up the well casing backed by cement to surface. This "normal flow" routine fluid flow process is required by the NMOCD to maintain proper salt cavern configuration and development over the operational life of the brine well.

The produced brine water would be metered then transported via a second buried polyethylene pipeline approximately 6600 feet southwest to four 500 barrel fiberglass storage tanks at the proposed Siringo Brine Station located in Unit Letter M of Section 27, Township 17 South, Range 36 East (Lat. 32.798816°, Long. -103.347123°), Lea County, New Mexico. This brine station is located approximately 9.3 miles south of Lovington, New Mexico or 1 mile south-south-east of the intersection of State Hwy 483 (Arkansas Jct.) and County Road 50 (Buckeye Rd) and ¼ mile east of SH 483. 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 above listed 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 2000 feet separation from any significant features, such as houses, roads, utilities, pipelines, water supplies, buildings, schools, businesses, etc.

Siringo ACS State #1
API # 30-025-30701
Discharge Plan Attachments - Attachment T

Groundwater possibly affected by an unintentional spill or leak is located at a depth of approximately 40 – 80 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 depths in the area are 107 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. Marvin Burrows at 575631-8067 or email ch2o.fresh@gmail.com. Mr. Burrows is a consultant to Llano Disposal providing assistance 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

Siringo ACS State #1
API # 30-025-30701
Discharge Plan Attachments - Attachment T

Anuncios de Pantalla de Aviso Público

Notificación legal de 3" X 4" (min) anuncio de la exhibición del periódico por Reglamento de Comisión de Control de Calidad de Agua 20.6.2.3108.B.4 NMAC

Llano Disposal, L.L.C. (Sr. Darr Ángell), 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 D de la sección 26, municipio de 17 sur, gama 36 Oriente (Lat. 32.8115005°, Long. -103.3317795°), Condado Lea, Nuevo México. La inyección de salmuera es bien situados aproximadamente 8,3 millas al sur de Lovington, Nuevo México o 1,1 millas al este de la intersección de estado Hwy 483 (Jct de Arkansas) y County Road 50 (Buckeye Rd).

La aplicación propone producir agua fresca de una fuente existente de agua bien ubicada en unidad letra J de la sección 27, municipio de 17 sur, gama 36 Oriente (Lat. 32,804305°, Long. -103.338230°), Condado Lea, Nuevo México. Este agua dulce transportarse a través de una tubería de polietileno enterrada aproximadamente 3250 pies al noreste para un tanque de agua 500 barril de acero situado en la salmuera bien ubicación detallada anteriormente. De vez en cuando se necesita salmuera, el agua en este tanque se bombea hacia abajo de la tubería dentro de la salmuera propuesta entubado del pozo a una profundidad aproximada de pies 2043 a 3253 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 410 psig. Agua de disolución salmuera (NaCl) entonces se produciría hasta la carcasa bien respaldada por el cemento a superficie. Este proceso de flujo rutinario "flujo normal" es requerido por la NMOCD para mantener la configuración de caverna de sal adecuada y desarrollo durante la vida operativa de la salmuera bien.

El agua de la salmuera producida se mide entonces transportado por una tubería de polietileno enterrada segundo aproximadamente 6600 pies sudoeste cuatro barril 500 tanques de almacenamiento de fibra de vidrio en la estación de salmuera Siringo propuesto ubicado en unidad letra M de la sección 27, municipio de 17 sur, gama 36 Oriente (Lat. 32,798816°, Long. -103.347123°), Condado Lea, Nuevo México. Esta estación de salmuera está situados aproximadamente 9,3 millas al sur de Lovington, Nuevo México o 1 milla sur-sureste de la intersección de estado Hwy 483 (Jct de Arkansas) y County Road 50 (Buckeye Rd) y ¼ milla al este de 483 SH. El agua de la salmuera sería transferido/vendido por entrega en camiones de agua sobre una almohadilla con frenar de contención de carga de cemento 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 la infraestructura lista anterior 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 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 2000 pies de separación de las características importantes, tales como casas, caminos, utilidades, tuberías, suministro de agua, edificios, escuelas, empresas, etc.

Agua subterránea posiblemente afectado por un derrame accidental o escape se encuentra a una profundidad de aproximadamente 40 – 80 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, profundidades bien media del agua en la zona son 107 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 disposición Llano, LLC c/o Sr. Marvin Burrows en 575-631-8067 o por correo electrónico ch2o.fresh@gmail.com. El Sr. Burrows es consultor para proporcionar asistencia de Llano Disposal obtener los permisos reglamentarios para este proyecto.

La División de Conservación de Petroléo de Nuevo Méxicano se aceptan comentarios y declaraciones de interés respecto a esta aplicación y creará una lista de correo de instalaciones específicas para las personas que deseen recibir futuras notificaciones. 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

Pueblo West Resources, LLC
125 Greathouse Village
Decatur, Texas 76234
432-934-7680

April 28, 2016

Per the rules and regulations of the New Mexico Oil Conservation Division, please find enclosed a copy of NMOCD form C108.

Llano Disposal, LLC, P. O. Box 190, Lovington, NM 88260 has filed form C108 (Application for Authorization to Inject) with the New Mexico Oil Conservation Division seeking administrative approval to convert the Siringo ACS State #1, API 30-025-30701, 660 FNL x 660 FWL, Unit Letter "D", Section 26, T17S, R36E, Lea County, New Mexico to a commercial brine production well. The proposed production interval would be the Salado formation through open hole completion between 2043' – 3253'. Injection fluid will be fresh water from nearby water wells. Anticipated average daily injection volume is 1550 BWPD with a maximum daily injection volume of 1900 BWPD. Anticipated average injection pressure is 250 psi with a maximum injection pressure of 408 psi. The well is located approximately 8.6 miles south of Lovington, New Mexico.

No notices of this C108 application were made since WQCC rules concerning the notifications required for the Discharge Permit Application will apply.

Sincerely,

D Holcomb

Danny J. Holcomb
Agent for Llano Disposal,
LLC Email: danny@pwllc.net

www.pwllc.net

Llano Disposal, L.L.C.
Siringo ACS State #1
API # 30-025-30701
660 FNL x 660 FWL
Unit Letter 'D', Section 26, T17S, R36E
Lea County, New Mexico
C108 Application for Authorization to Inject

I.

The purpose of this application is seeking administrative approval for the conversion of the Siringo ACS State #1 from a plugged and abandoned well to a commercial brine production well.

II.

Operator: Llano Disposal, L.L.C. OGRID: 370661
Address: P. O. Box 190 (783 Highway 483), Lovington, NM 88260
Contact Party: Marvin Burrows 575-361-8067 email: burrowsmarvin@gmail.com

III.

Please see Exhibit "A" for proposed well data.

IV.

This is not an expansion of an existing project.

V.

Please see Exhibit "B" of lease map.

VI.

There are 6 P&A wells identified within the 1 mile Area of Review that penetrate the proposed injection interval. There is also 1 new drill permitted, but not yet drilled. Please see Exhibit "C" for offset well data and wellbore diagrams.

VII.

1. **Anticipated daily injection volume of 1,550 BWPD with a maximum daily injection volume of 1,900 BWPD.**
2. **System will be closed. It will include a fresh water supply well, fresh water pipeline, brine pipeline and a brine station. Fresh water will be produced from the supply well and pumped into the injection well for salt solution mining. Brine water will be produced from the injection well and transported to the brine station via a brine pipeline. Brine will be commercially sold from the brine station.**
3. **Anticipated injection pressure: Average 250 psig, Maximum 408 psig.**
4. **Please see Exhibit "D" for analysis of fresh water injected for brine production.**

VIII.

Formation	Anticipated Depth (ft)
T. Rustler	2052
T. Salt	2043
B. Salt	3034
T. Yates	3353
T. Grayburg	4614
Proposed injection zone	2043 – 3253

The proposed well is not located within the Capitan Reef Area.

Llano Disposal, L.L.C.
Siringo ACS State #1
API # 30-025-30701
660 FNL x 660 FWL
Unit Letter 'D', Section 26, T17S, R36E
Lea County, New Mexico
C108 Application for Authorization to Inject

IX.

After drilling out cement plug #5 and the top 67' of plug #4, the hole will be circulated clean and a cement bond log obtained. If good cement is found behind casing, discharge permit application will be submitted. Upon approval, the remaining portion of plug #4 would be drilled out and wellbore cleaned out to top of plug #3 at 3253'. No additional completion work is planned.

X.

Any additional logs performed will be submitted after completion.

XI.

NM OSE records indicate there are 6 fresh water wells within the 1 mile Area of Review and 10 fresh water wells identified in the 9 square line area of review. Fresh water is contained in the Alluvial fill to top of the Red Beds.

XII.

Available geological and engineering data have been examined and no evidence of open faults or hydrological connection between the disposal zone and any underground sources of drinking water has been found.

XIII.

No notice of this C108 application will be made since WQCC rules provide for required notifications of the Discharge Plan. See Exhibit "F" for a map indicating mineral owners and lessees.

Danny J. Holcomb _____
Agent for Llano Disposal, LLC

Date: 4/27/2016

www.pwllc.net

DJH

Llano Disposal, L.LC.
Siringo State SWD # 1
Originally Siringo ACS State # 1
API # 30-025-30701
660 FNL X 660 FWL
Unit Letter "D", Section 26, T17S, R36E
Lea County, New Mexico
C108(Application for Authorization to Inject)

Well Data
Data obtained from records maintained by the NMOCD

Spudded 10/27/1989 as test of San Andres formation

20" casing was set in 26" hole at 40ft. Cemented with Redi-Mix to surface

8 5/8" 24# casing was set in 12 1/4" hole at 2043ft. Cemented with 1100 sks as follows;
900 sks Pacesetter Lite with 5 #/sks Hyseal, ½ # Celloseal & 3% CaCL
200 sks Class "C" with 2% CaCL
Cement circulated to surface.

7 7/8" hole drilled to TD 5450ft.

Plugged and abandoned 11/16/1989

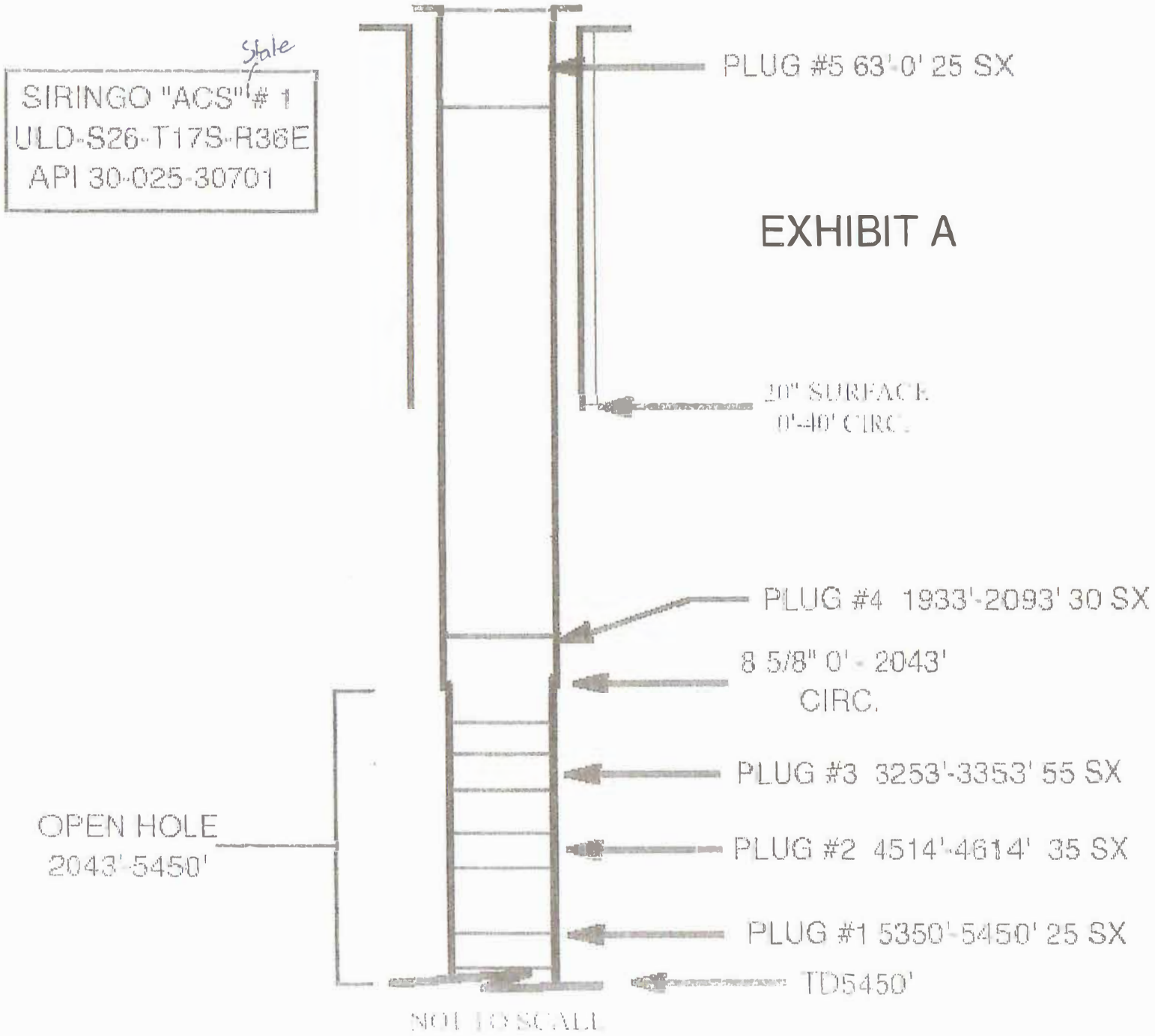
Plug #1	5350-5450'	w/25 sx Class C Neat
#2	4514-4614'	w/35 sx Class C Neat
#3	3253-3353'	w/55 sx Class C Neat
#4	1933-2093'	w/30 sx Class C Neat
#5	Surface-63'	w/25 sx Class C Neat

Exhibit "A"

SIRINGO "ACS" # 1
ULD-S26-T17S-R36E
API 30-025-30701

State

EXHIBIT A



Llano Disposal, L.L.C.
Siringo State AGI # 1
API 30-025-30701
Unit Letter "D", Section 26, T17S, R36E
Lea County, New Mexico

660 FNL X 660 FWL

20" Casing set 40 feet
Cemented to surface

8 5/8"24# CSA 2043' in 12 1/4"hole
Cmt w/ 1100 sks Cmt
Cement circulated to surface

2043' x 0.2= 408.6
Max Pressure

TLA 3100'

7 7 /8" Open Hole

Salt & Anhy

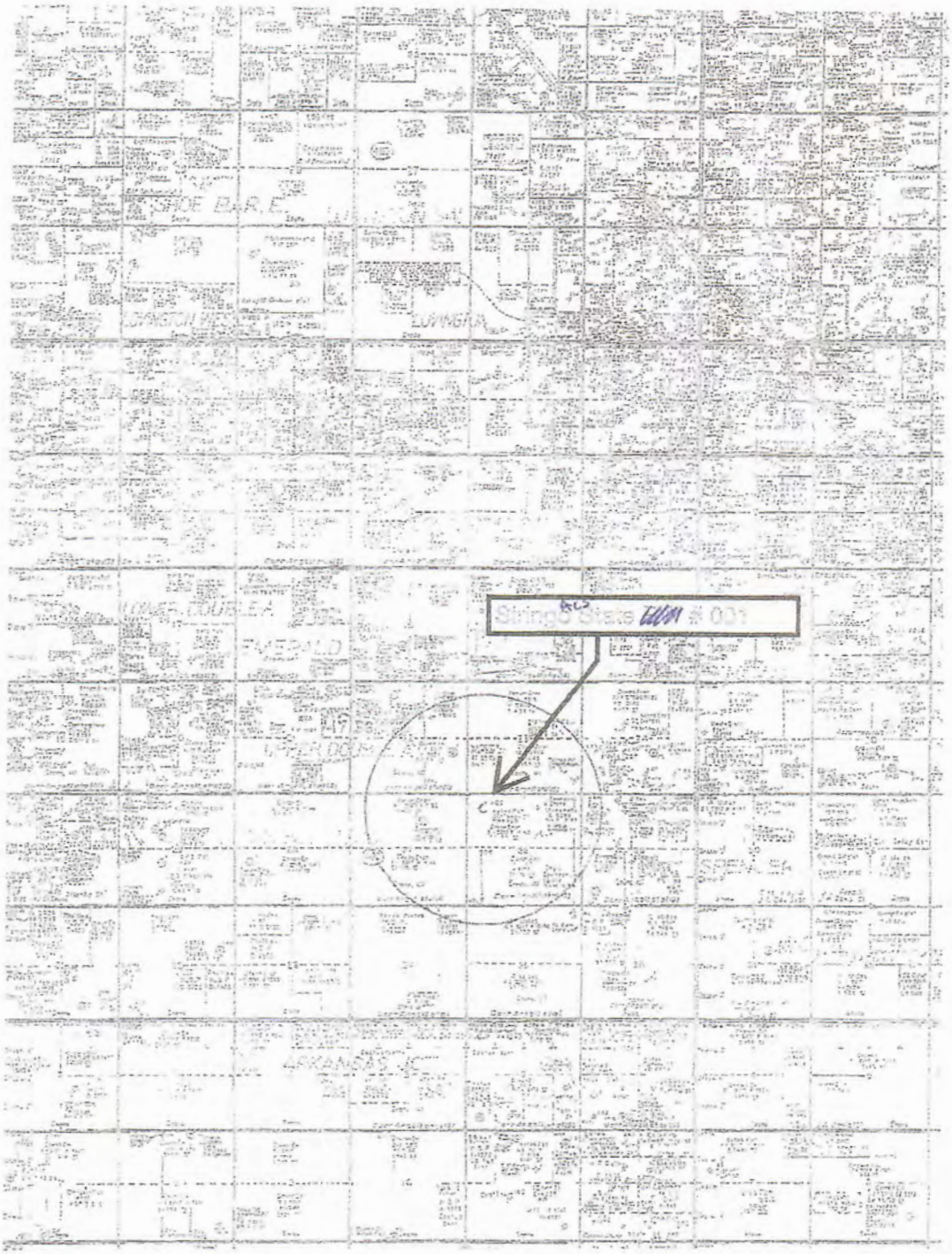
55 sks Plug 3253-3353'

35 sks Plug 4514-4614'

25 sks Plug 5350-5450'

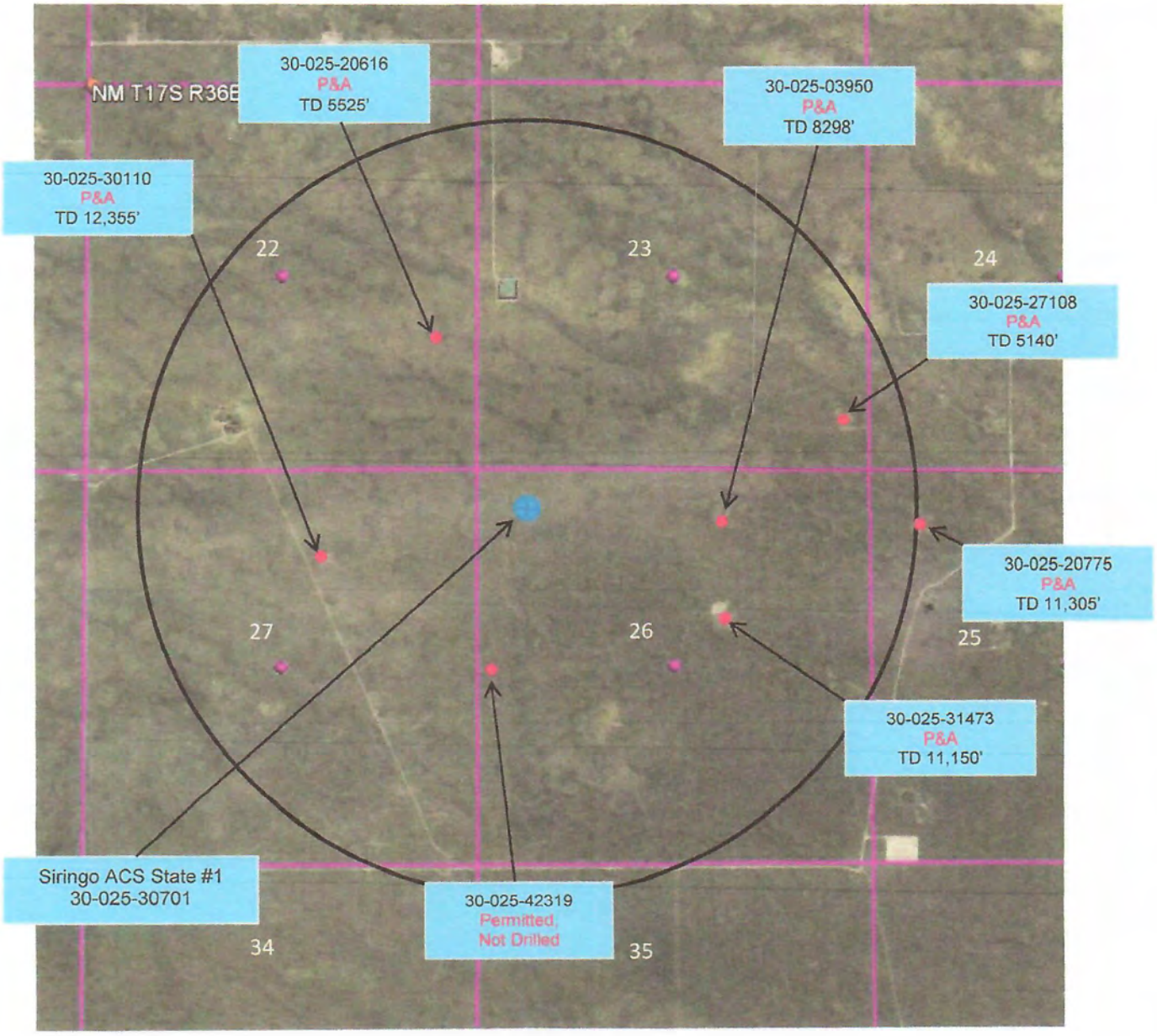
BEP

EXHIBIT A



Llano Disposal, L.L.C.
Sting5 State WIW # 1
API 30-025-30701
980 FNL X 980 FWL
Unit Letter "D", Section 28, T17S, R36E
Lea County, New Mexico
Exhibit "B"

Llano Disposal, LLC
Siringo ACS State #1
API # 30-025-30701
1 Mile AOR



T17S, R36E

This location 660 FNL x 660 FWL, UL 'D',
Section 26, T17S, R36E, Lea County, NM
Drawing Not to Scale

www.pwllc.net

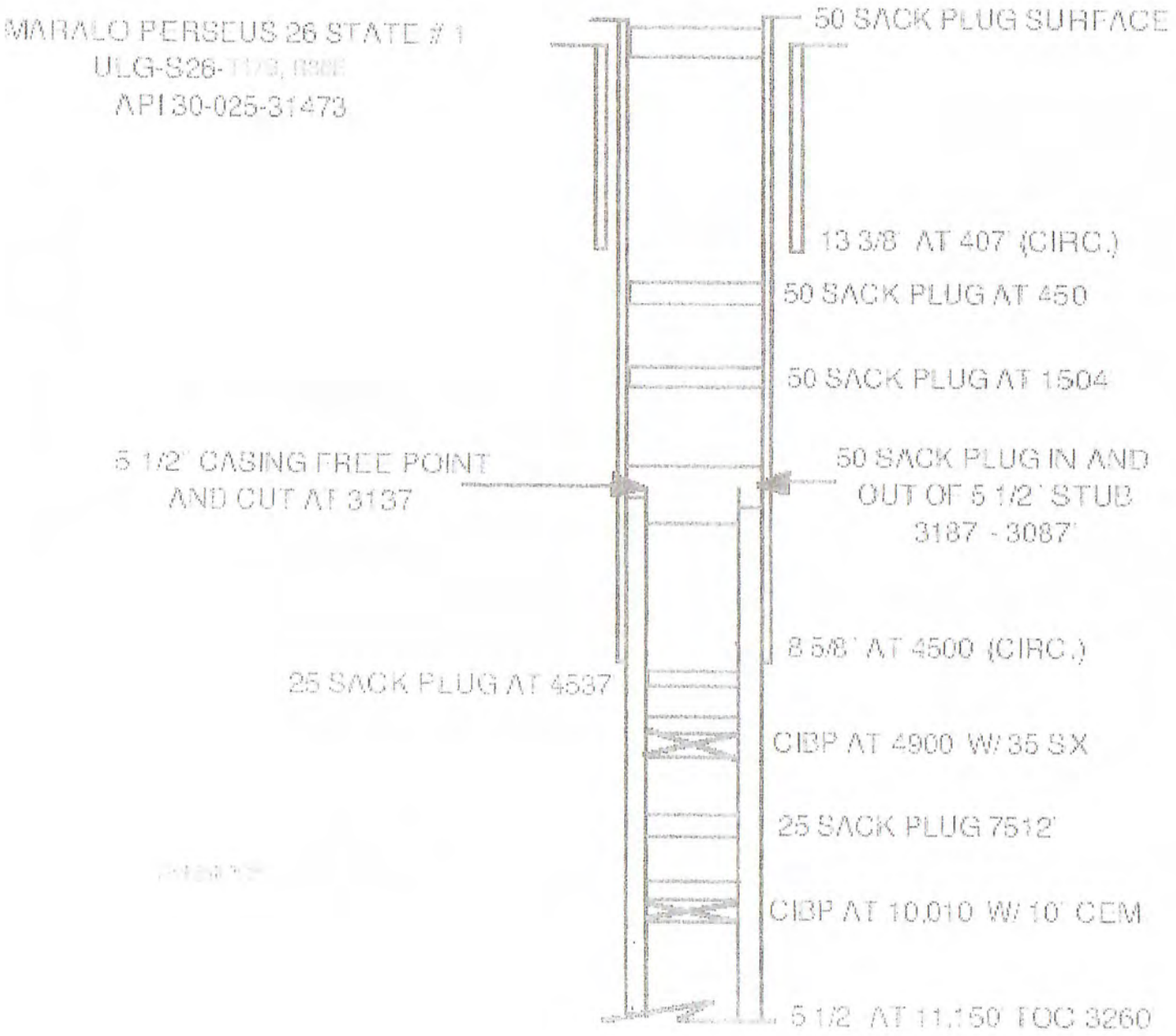
EXHIBIT "C"

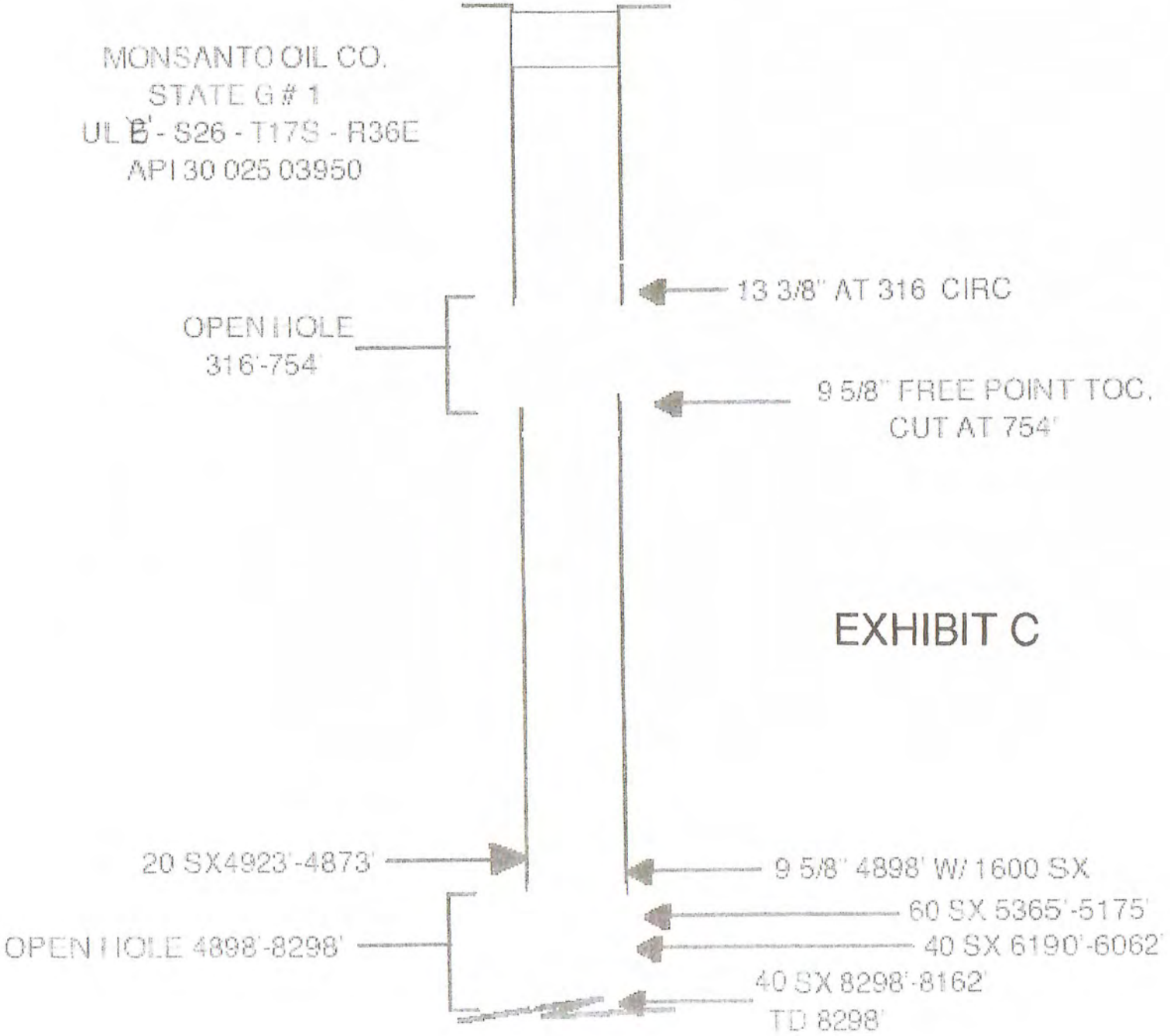
Llano Disposal, LLC
Siringo State ~~BW~~ ACS # 1
30-025-30701
660 FNL X 660 FWL
UL"D", Sec 26, T17S,
R36E Lea County, NM
Wells in 1 mile AOR

	API	Well Name	Well#	Type	Lease	Status	UL	Sec	TS	RG	TD	Current Operator
1	[illegible]	HEPEWEIZEN 26 35 STATE COM	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	DEVON ENERGY PRODUCTION
2	30-025-31473	PERSEUS 26 STATE	#001	Oil	State	PA	G	26	17S	36E	11150	MARALO LLC
3	30-025-03950	PRE-ONGARD WELL	#001	Oil	State	PA	B	26	17S	36E	8298	PRE-ONGARD WELL OPERATOR
4	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
5	30-025-20616	PRE-ONGARD WELL	#001	Oil	State	PA	I	22	17S	36E	8525	PRE-ONGARD WELL OPERATOR
6	30-025-27108	PRE-ONGARD WELL	#001	Oil	State	PA	P	23	17S	36E	5140	PRE-ONGARD WELL OPERATOR
7	30-025-20775	PRE-ONGARD WELL	#001	Oil	State	PA	D	25	17S	36E	11305	PRE-ONGARD WELL OPERATOR
8	30-025-30110	PRE-ONGARD WELL	#001	Oil	State	PA	B	27	17S	36E	12,355	PRE-ONGARD WELL OPERATOR

Not drilled
Proposed BW

Exhibit"C"


MARALO PERSEUS 26 STATE # 1
ULG-S26-T17S, R38E
API 30-025-31473
50 SACK PLUG SURFACE
13 3/8" AT 407' (CIRC.)
50 SACK PLUG AT 450
50 SACK PLUG AT 1504
5 1/2" CASING FREE POINT
AND CUT AT 3137
50 SACK PLUG IN AND
OUT OF 5 1/2" STUB
3137 - 3087'
8 5/8" AT 4500 (CIRC.)
25 SACK PLUG AT 4537
CIBP AT 4900 W/ 35 SX
25 SACK PLUG 7512'
CIBP AT 10,010 W/ 10' CEM
5 1/2" AT 11,150 TOC 3260


MONSANTO OIL CO.
STATE G # 1
UL B - S26 - T17S - R36E
API 30 025 03950
13 3/8" AT 316 CIRC
OPEN HOLE
316'-754'
9 5/8" FREE POINT TOC.
CUT AT 754'
EXHIBIT C
20 SX4923'-4873'
9 5/8" 4898' W/ 1600 SX
60 SX 5365'-5175'
OPEN HOLE 4898'-8298'
40 SX 6190'-6062'
40 SX 8298'-8162'
TD 8298'

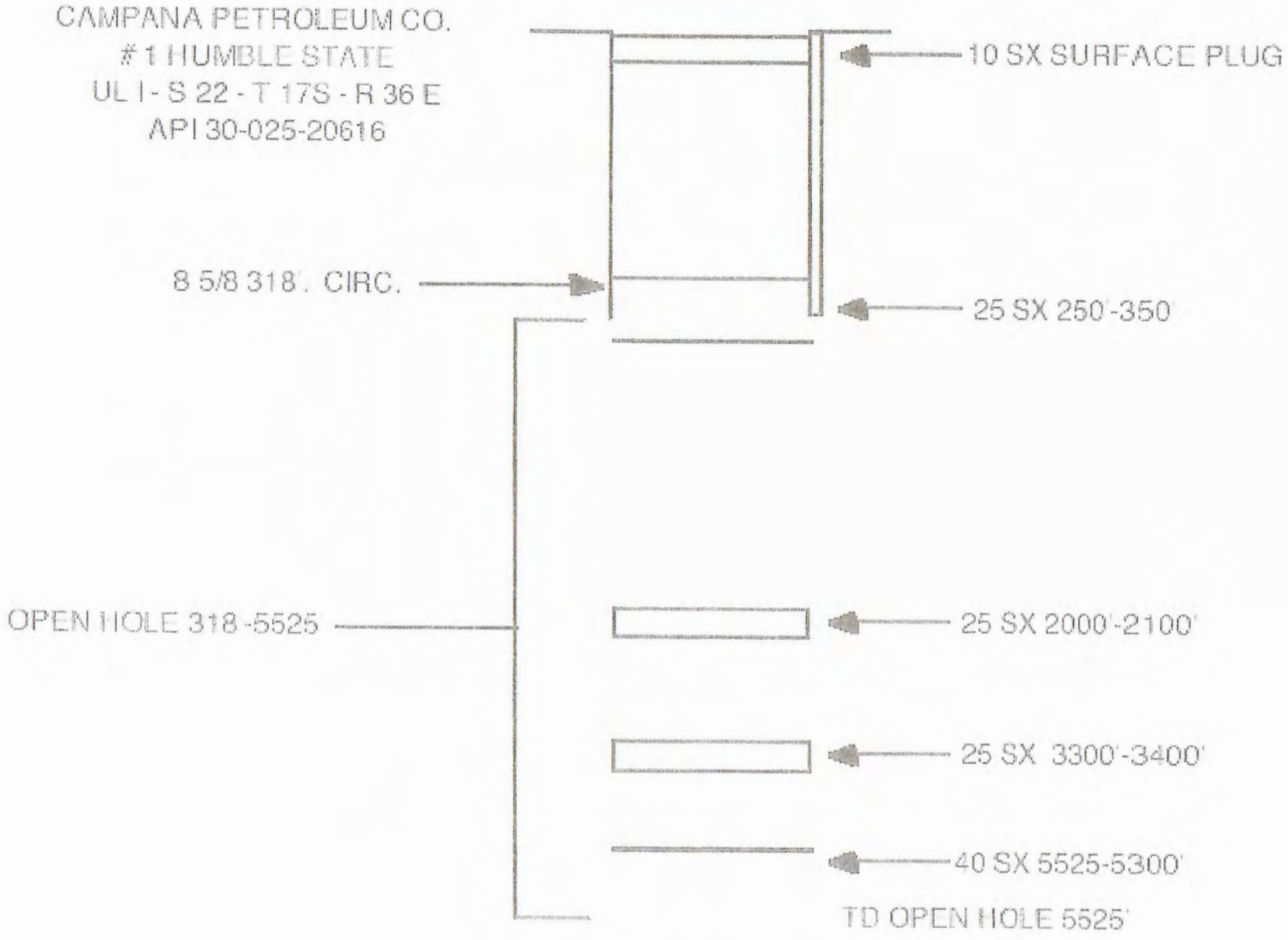
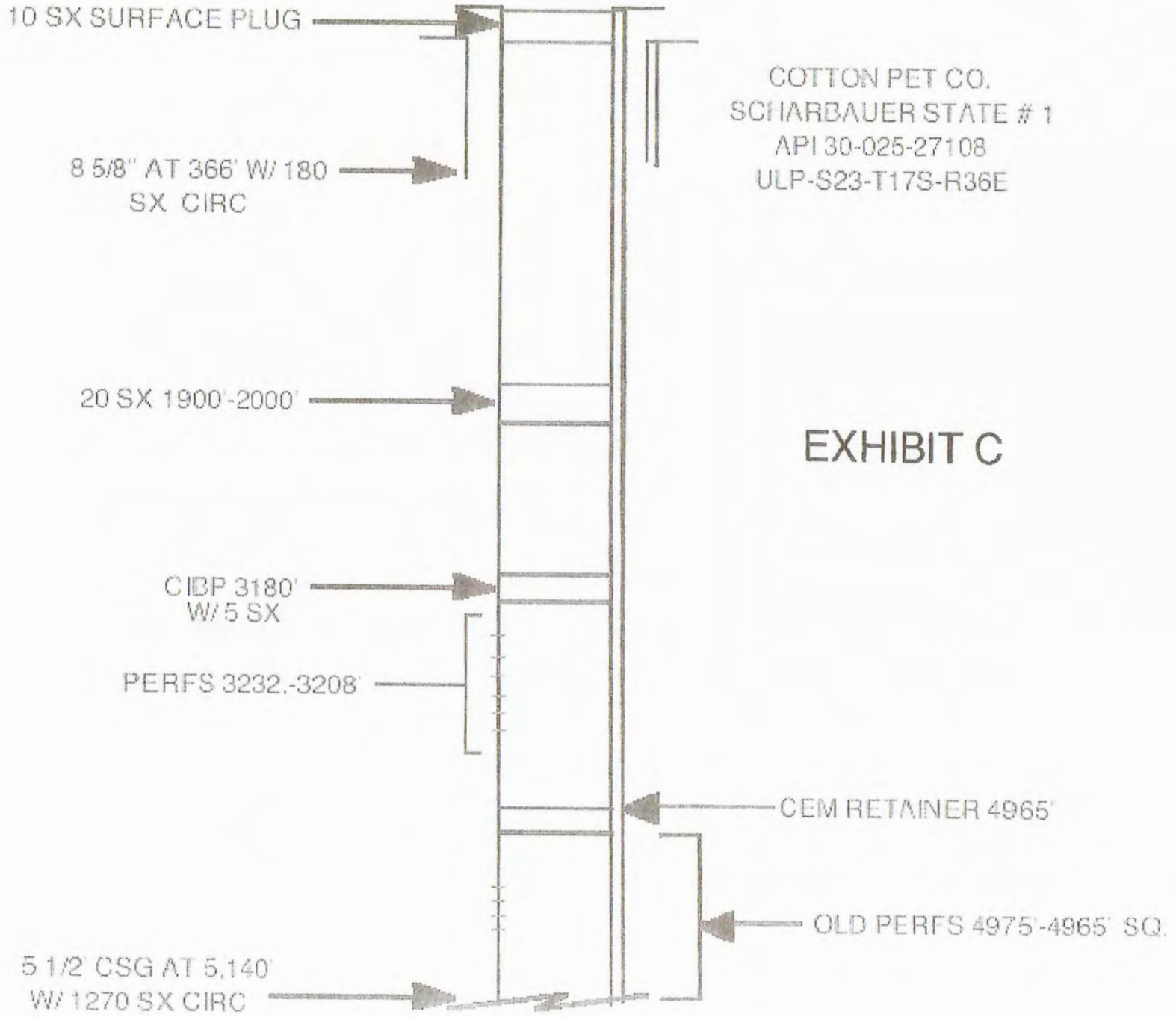
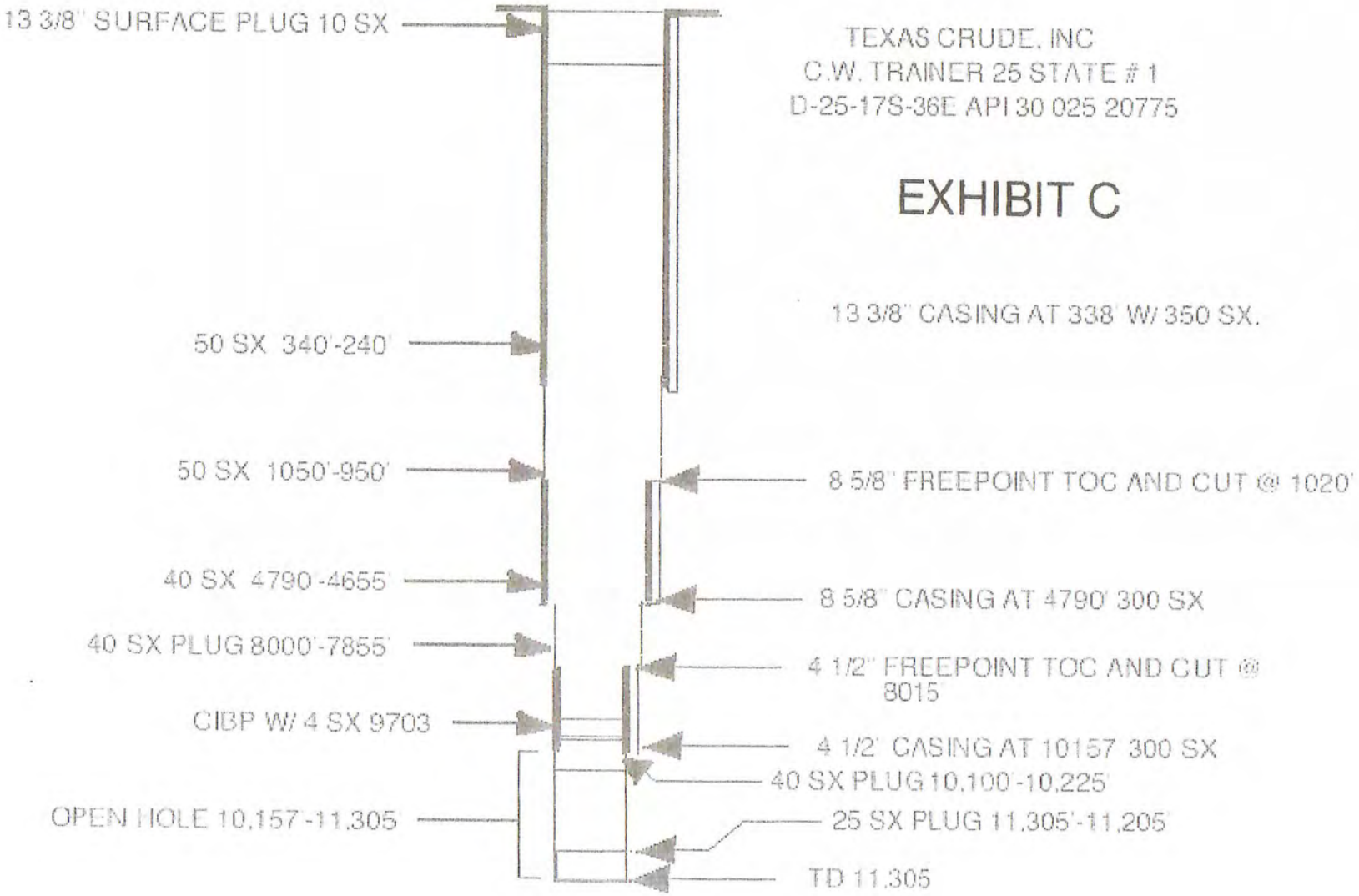

CAMPANA PETROLEUM CO.
1 HUMBLE STATE
UL I - S 22 - T 17S - R 36 E
API 30-025-20616
10 SX SURFACE PLUG
8 5/8 318'. CIRC.
25 SX 250'-350
OPEN HOLE 318-5525
25 SX 2000'-2100'
25 SX 3300'-3400'
40 SX 5525-5300'
TD OPEN HOLE 5525'

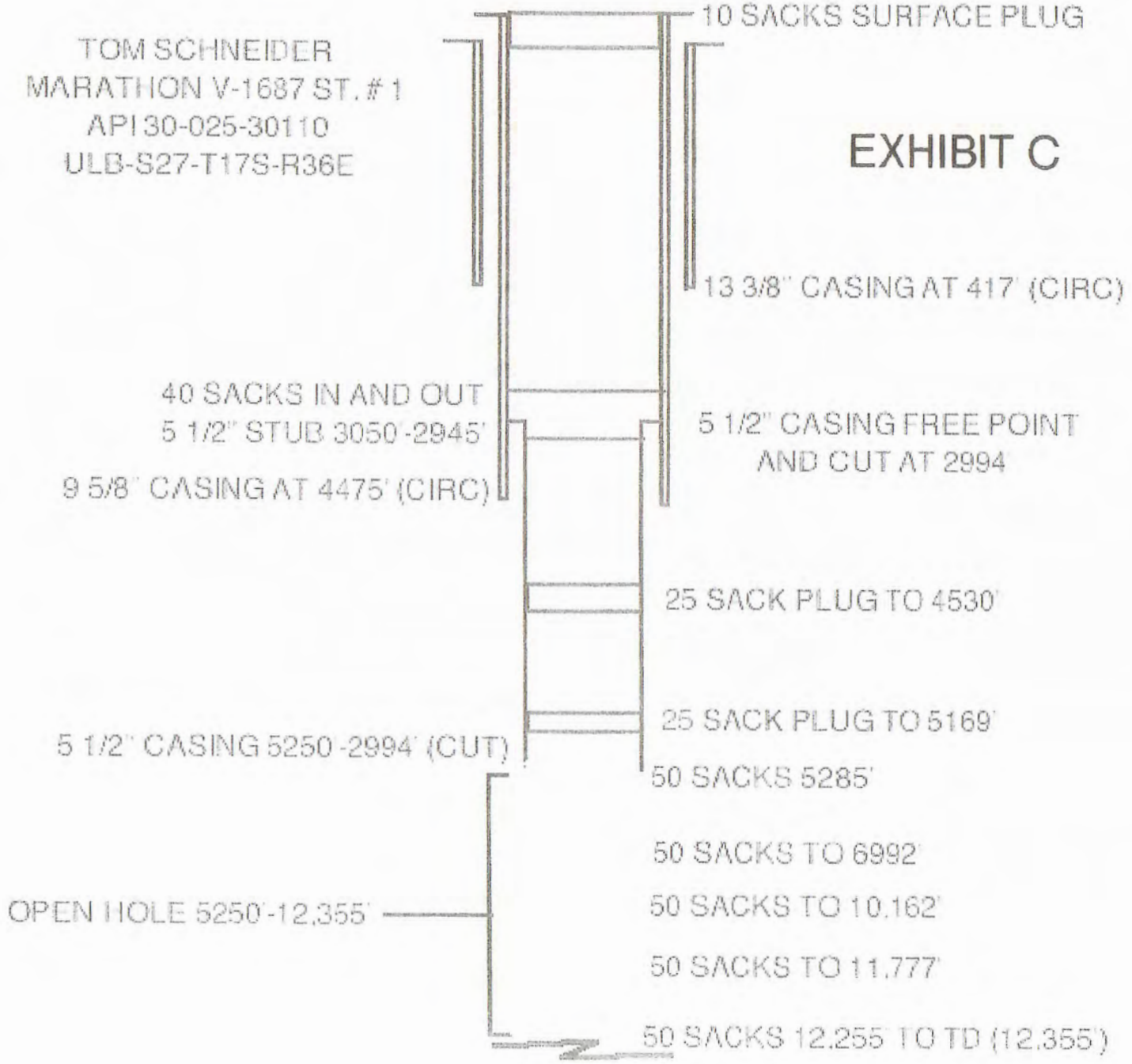
EXHIBIT C


10 SX SURFACE PLUG
8 5/8" AT 366' W/ 180 SX CIRC
COTTON PET CO.
SCHARBAUER STATE # 1
API 30-025-27108
ULP-S23-T17S-R36E
20 SX 1900'-2000'
EXHIBIT C
CIBP 3180' W/ 5 SX
PERFS 3232'-3208'
CEM RETAINER 4965'
OLD PERFS 4975'-4965' SQ.
5 1/2' CSG AT 5,140' W/ 1270 SX CIRC

TEXAS CRUDE, INC
C.W. TRAINER 25 STATE # 1
D-25-17S-36E API 30 025 20775

EXHIBIT C




TOM SCHNEIDER
MARATHON V-1687 ST. # 1
API 30-025-30110
ULB-S27-T17S-R36E
EXHIBIT C
10 SACKS SURFACE PLUG
13 3/8" CASING AT 417' (CIRC)
40 SACKS IN AND OUT
5 1/2" STUB 3050'-2945'
9 5/8" CASING AT 4475' (CIRC)
5 1/2" CASING FREE POINT
AND CUT AT 2994'
25 SACK PLUG TO 4530'
25 SACK PLUG TO 5169'
5 1/2" CASING 5250'-2994' (CUT)
50 SACKS 5285'
50 SACKS TO 6992'
OPEN HOLE 5250'-12,355'
50 SACKS TO 10,162'
50 SACKS TO 11,777'
50 SACKS 12,255' TO TD (12,355')

New Mexico Office of the State Engineer
Water Column/Average Depth to Water

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.)

(R=POD has been replaced, O=orphaned, C=the file is closed)

(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are smallest to largest)

(NAD83 UTM in meters)

(In feet)

POD Number	POD Code	Sub-basin	County	Q 64	Q 16	Q 4	Sec	Twws	Rng	X	Y	Depth Well	Depth Water	Water Column
[redacted]	L		LE	3	1	1	35	17S	36E	656116	3629884*	120		
[redacted]	L		LE	1	3	3	34	17S	36E	654527	3628843*	90		
[redacted]	L		LE	2	1	4	27	17S	36E	655498	3630879*	100		
[redacted]	L		LE	1	3	1	27	17S	36E	654487	3631269*	100		
[redacted]	L		LE	3	3	3	25	17S	36E	657723	3630314*	110	40	70
[redacted]	L		LE		1	1	25	17S	36E	657804	3631628*	122	60	62
[redacted]	L		LE		4	3	25	17S	36E	658227	3630422*	120	40	80
[redacted]	L		LE				26	17S	36E	656813	3630992*	160	60	100
[redacted]	L		LE		2	4	24	17S	36E	659002	3632453*	110	52	58
[redacted]	L		LE	1	4	4	25	17S	36E	658980	3630480	122	107	15

Average Depth to Water: **59 feet**

Minimum Depth: **40 feet**

Maximum Depth: **107 feet**

[redacted] "D"

Record Count: 10

PLSS Search:

[redacted]: 22, 23, 24, 25, 26, 27, 34, 35, 36

[redacted]: 17S

[redacted]: 36E

*UTM location was derived from PLSS - see Help

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

LLANO DISPOSAL, LLC 125 W. ST. ANNE HOBBS NM, 88240	Project: BRINE PROJECT Project Number: NONE GIVEN Project Manager: MARVIN BURROWS Fax To: NONE	Reported: 30-Jun-14 12:02

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
WINDMILL	H401846-01	Water	18-Jun-14 12:00	18-Jun-14 12:50
HOUSE	H401846-02	Water	18-Jun-14 12:00	18-Jun-14 12:50

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

LLANO DISPOSAL, LLC 125 W. ST. ANNE HOBBS NM, 88240	Project: BRINE PROJECT Project Number: NONE GIVEN Project Manager: MARVIN BURROWS Fax To: NONE	Reported: 30-Jun-14 12:02

WINDMILL

H401846-01 (Water)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Cardinal Laboratories										
Inorganic Compounds										
Alkalinity, Bicarbonate	224		5.00	mg/L	1	4062305	AP	23-Jun-14	310.1	
Alkalinity, Carbonate	ND		0.00	mg/L	1	4062305	AP	23-Jun-14	310.1	
Chloride*	32.0		4.00	mg/L	1	4062003	HM	20-Jun-14	4500-Cl-B	
Conductivity*	495		1.00	uS/cm	1	4062609	AP	26-Jun-14	120.1	
pH*	7.84		0.100	pH Units	1	4062610	AP	19-Jun-14	150.1	
Sulfate*	73.3		10.0	mg/L	1	4062404	AP	25-Jun-14	375.4	
TDS*	348		5.00	mg/L	1	4062006	AP	23-Jun-14	160.1	
Alkalinity, Total*	184		4.00	mg/L	1	4062305	AP	23-Jun-14	310.1	
Green Analytical Laboratories										
Total Recoverable Metals by ICP (E200.7)										
Calcium*	89.2		1.00	mg/L	1	B406205	JGS	25-Jun-14	EPA200.7	
Magnesium*	12.0		1.00	mg/L	1	B406205	JGS	25-Jun-14	EPA200.7	
Potassium*	2.45		1.00	mg/L	1	B406205	JGS	25-Jun-14	EPA200.7	
Sodium*	34.4		1.00	mg/L	1	B406205	JGS	25-Jun-14	EPA200.7	

Exhibit "D"

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

LLANO DISPOSAL, LLC 125 W. ST. ANNE HOBBS NM, 88240	Project: BRINE PROJECT Project Number: NONE GIVEN Project Manager: MARVIN BURROWS Fax To: NONE	Reported: 30-Jun-14 12:02

WINDMILL

H401846-01 (Water)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Cardinal Laboratories										
Inorganic Compounds										
Alkalinity, Bicarbonate	224		5.00	mg/L	1	4062305	AP	23-Jun-14	310.1	
Alkalinity, Carbonate	ND		0.00	mg/L	1	4062305	AP	23-Jun-14	310.1	
Chloride*	32.0		4.00	mg/L	1	4062003	HM	20-Jun-14	4500-Cl-B	
Conductivity*	495		1.00	uS/cm	1	4062609	AP	26-Jun-14	120.1	
pH*	7.84		0.100	pH Units	1	4062610	AP	19-Jun-14	150.1	
Sulfate*	73.3		10.0	mg/L	1	4062404	AP	25-Jun-14	375.4	
TDS*	348		5.00	mg/L	1	4062006	AP	23-Jun-14	160.1	
Alkalinity, Total*	184		4.00	mg/L	1	4062305	AP	23-Jun-14	310.1	
Green Analytical Laboratories										
Total Recoverable Metals by ICP (E200.7)										
Calcium*	89.2		1.00	mg/L	1	B406205	JGS	25-Jun-14	EPA200.7	
Magnesium*	12.0		1.00	mg/L	1	B406205	JGS	25-Jun-14	EPA200.7	
Potassium*	2.45		1.00	mg/L	1	B406205	JGS	25-Jun-14	EPA200.7	
Sodium*	34.4		1.00	mg/L	1	B406205	JGS	25-Jun-14	EPA200.7	

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

LLANO DISPOSAL, LLC 125 W. ST. ANNE HOBBS NM, 88240	Project: BRINE PROJECT Project Number: NONE GIVEN Project Manager: MARVIN BURROWS Fax To: NONE	Reported: 30-Jun-14 12:02

HOUSE

H401846-02 (Water)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Cardinal Laboratories										
Inorganic Compounds										
Alkalinity, Bicarbonate	273		5.00	mg/L	1	4062305	AP	23-Jun-14	310.1	
Alkalinity, Carbonate	ND		0.00	mg/L	1	4062305	AP	23-Jun-14	310.1	
Chloride*	60.0		4.00	mg/L	1	4062003	HM	20-Jun-14	4500-Cl-B	
Conductivity*	862		1.00	uS/cm	1	4062609	AP	26-Jun-14	120.1	
pH*	7.45		0.100	pH Units	1	4062610	AP	19-Jun-14	150.1	
Sulfate*	144		25.0	mg/L	2.5	4062404	AP	25-Jun-14	375.4	
TDS*	620		5.00	mg/L	1	4062006	AP	23-Jun-14	160.1	
Alkalinity, Total*	224		4.00	mg/L	1	4062305	AP	23-Jun-14	310.1	
Green Analytical Laboratories										
Total Recoverable Metals by ICP (E200.7)										
Calcium*	111		1.00	mg/L	1	B406205	JGS	25-Jun-14	EPA200.7	
Magnesium*	21.2		1.00	mg/L	1	B406205	JGS	25-Jun-14	EPA200.7	
Potassium*	2.54		1.00	mg/L	1	B406205	JGS	25-Jun-14	EPA200.7	
Sodium*	93.7		1.00	mg/L	1	B406205	JGS	25-Jun-14	EPA200.7	

Exhibit "D"

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

LLANO DISPOSAL, LLC 125 W. ST. ANNE HOBBS NM, 88240	Project: BRINE PROJECT Project Number: NONE GIVEN Project Manager: MARVIN BURROWS Fax To: NONE	Reported: 30-Jun-14 12:02

Inorganic Compounds - Quality Control

Cardinal Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4062003 - General Prep - Wet Chem										
Blank (4062003-BLK1)				Prepared & Analyzed: 20-Jun-14						
Chloride	ND	4.00	mg/L							
LCS (4062003-BS1)				Prepared & Analyzed: 20-Jun-14						
Chloride	104	4.00	mg/L	100		104	80-120			
LCS Dup (4062003-BSD1)				Prepared & Analyzed: 20-Jun-14						
Chloride	100	4.00	mg/L	100		100	80-120	3.92	20	
Batch 4062006 - Filtration										
Blank (4062006-BLK1)				Prepared: 20-Jun-14 Analyzed: 23-Jun-14						
TDS	ND	5.00	mg/L							
LCS (4062006-BS1)				Prepared: 20-Jun-14 Analyzed: 23-Jun-14						
TDS	532	5.00	mg/L	527		101	80-120			
Duplicate (4062006-DUP1)	**Source: H401810-01**			Prepared: 20-Jun-14 Analyzed: 23-Jun-14						
TDS	12500	5.00	mg/L		12600			0.430	20	
Batch 4062305 - General Prep - Wet Chem										
Blank (4062305-BLK1)				Prepared & Analyzed: 23-Jun-14						
Alkalinity, Carbonate	ND	0.00	mg/L							
Alkalinity, Bicarbonate	ND	5.00	mg/L							
Alkalinity, Total	4.00	4.00	mg/L							

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

LLANO DISPOSAL, LLC 125 W. ST. ANNE HOBBS NM, 88240	Project: BRINE PROJECT Project Number: NONE GIVEN Project Manager: MARVIN BURROWS Fax To: NONE	Reported: 30-Jun-14 12:02

Inorganic Compounds - Quality Control

Cardinal Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4062305 - General Prep - Wet Chem										
LCS (4062305-BS1)				Prepared & Analyzed: 23-Jun-14						
Alkalinity, Carbonate	ND	0.00	mg/L				80-120			
Alkalinity, Bicarbonate	126	5.00	mg/L				80-120			
Alkalinity, Total	104	4.00	mg/L	100		104	80-120			
LCS Dup (4062305-BSD1)				Prepared & Analyzed: 23-Jun-14						
Alkalinity, Carbonate	ND	0.00	mg/L				80-120		20	
Alkalinity, Bicarbonate	126	5.00	mg/L				80-120	0.00	20	
Alkalinity, Total	104	4.00	mg/L	100		104	80-120	0.00	20	
Batch 4062404 - General Prep - Wet Chem										
Blank (4062404-BLK1)				Prepared: 24-Jun-14 Analyzed: 25-Jun-14						
Sulfate	ND	10.0	mg/L							
LCS (4062404-BS1)				Prepared: 24-Jun-14 Analyzed: 25-Jun-14						
Sulfate	17.1	10.0	mg/L	20.0		85.6	80-120			
LCS Dup (4062404-BSD1)				Prepared: 24-Jun-14 Analyzed: 25-Jun-14						
Sulfate	17.5	10.0	mg/L	20.0		87.4	80-120	2.02	20	
Batch 4062609 - General Prep - Wet Chem										
LCS (4062609-BS1)				Prepared & Analyzed: 26-Jun-14						
Conductivity	494		uS/cm	500		98.8	80-120			
Duplicate (4062609-DUP1)	Source: H401871-01			Prepared & Analyzed: 26-Jun-14						
Conductivity	65000	1.00	uS/cm		61300			5.86	20	

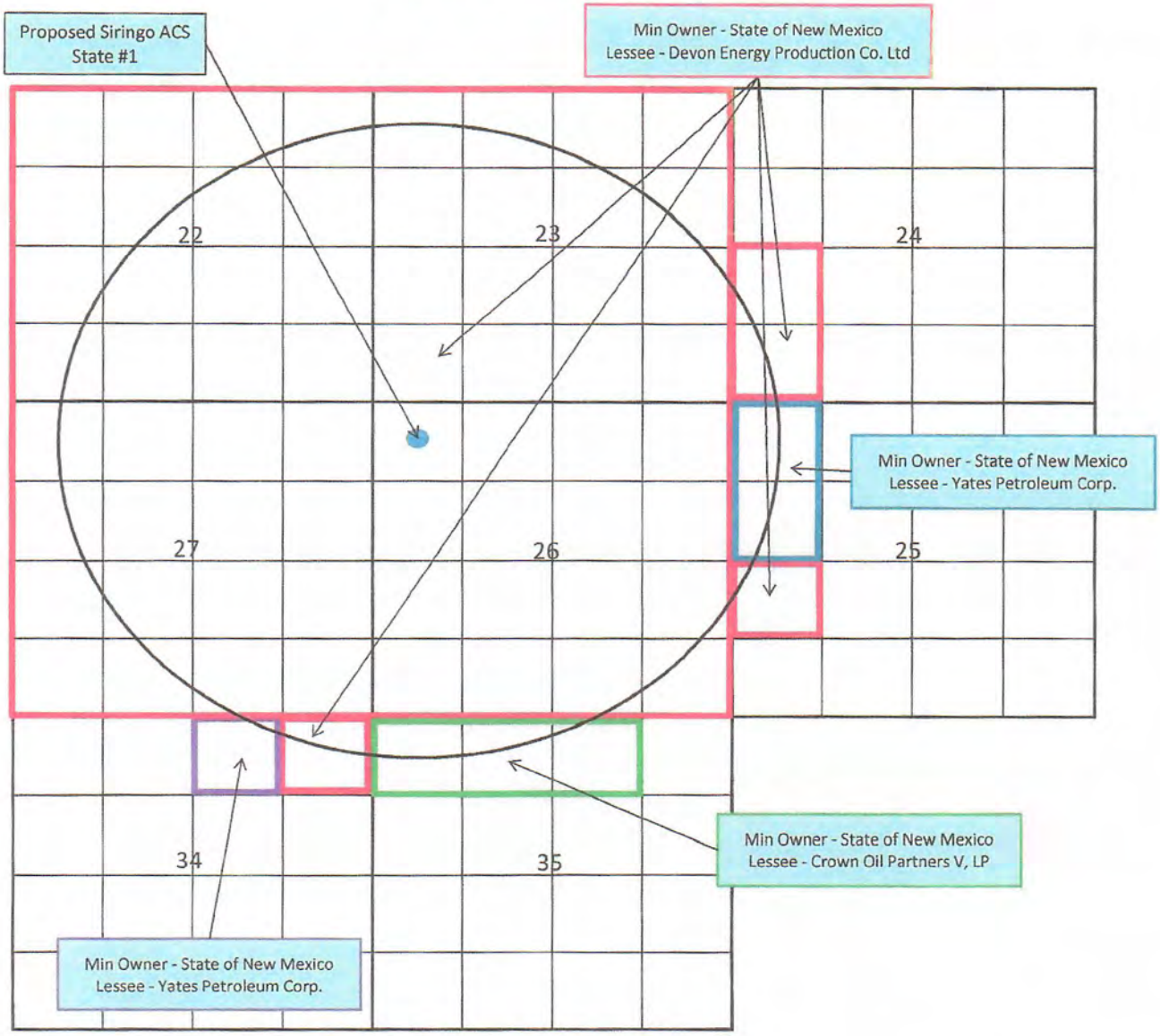
Exhibit "D"

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

Llano Disposal, LLC
Siringo ACS State #1
API # 30-025-30701
1 Mile AOR



T17S, R36E

This location 660 FNL X 660 FWL
Unit Letter D, Section 26, T17S, R36E
Surface Owner - Angell #2 Family Ltd Partnership, PO BOX 190, Lovington, NM 88260
Drawing not to scale

www.pwllc.net

Exhibit "F"

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

LLANO DISPOSAL, LLC 125 W. ST. ANNE HOBBS NM, 88240	Project: BRINE PROJECT Project Number: NONE GIVEN Project Manager: MARVIN BURROWS Fax To: NONE	Reported: 30-Jun-14 12:02

Inorganic Compounds - Quality Control

Cardinal Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4062610 - NO PREP										
LCS (4062610-BS1)				Prepared & Analyzed: 19-Jun-14						
pH	7.10		pH Units	7.00		101	90-110			
Duplicate (4062610-DUP1)		Source: H401810-01		Prepared & Analyzed: 19-Jun-14						
pH	9.87	0.100	pH Units		9.85			0.203	20	

Exhibit "D"

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

LLANO DISPOSAL, LLC 125 W. ST. ANNE HOBBS NM, 88240	Project: BRINE PROJECT Project Number: NONE GIVEN Project Manager: MARVIN BURROWS Fax To: NONE	Reported: 30-Jun-14 12:02

Total Recoverable Metals by ICP (E200.7) - Quality Control

Green Analytical Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B406205 - Total Recoverable. Direct Analysis E200.7/E200.8										
Blank (B406205-BLK1)				Prepared: 23-Jun-14 Analyzed: 24-Jun-14						
Magnesium	ND	1.00	mg/L							
Calcium	ND	1.00	mg/L							
Sodium	ND	1.00	mg/L							
Potassium	ND	1.00	mg/L							
LCS (B406205-BS1)				Prepared: 23-Jun-14 Analyzed: 24-Jun-14						
Magnesium	23.4	1.00	mg/L	25.0		93.5	85-115			
Potassium	9.42	1.00	mg/L	10.0		94.2	85-115			
Sodium	7.38	1.00	mg/L	8.10		91.1	85-115			
Calcium	4.47	1.00	mg/L	5.00		89.4	85-115			
LCS Dup (B406205-BSD1)				Prepared: 23-Jun-14 Analyzed: 24-Jun-14						
Magnesium	23.5	1.00	mg/L	25.0		94.2	85-115	0.640	20	
Potassium	9.14	1.00	mg/L	10.0		91.4	85-115	3.05	20	
Sodium	7.46	1.00	mg/L	8.10		92.0	85-115	1.08	20	
Calcium	4.49	1.00	mg/L	5.00		89.9	85-115	0.484	20	

Exhibit "D"

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

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 new Discharge Permit BW-35 (Discharge Permit) to Llano Disposal, LL.C. (Permittee) to operate a Underground Injection Control (UIC) Class III Brine Well for the solution mining of salt (Siringo State Brine Well No. I API No. 30-025-30701) located 660 FNL and 660 FWL, Unit Letter D (NW/4 NW/4) of Section 26, Township 17 South, Range 36 East, Lat. 32.81150°, Long. 103.33177°, NMPM, Lea County, New Mexico. The brine well is located approximately 8.3 miles South of Lovington, NM or 1.1 miles east of the intersection of Hwy- 483 (Arkansas Jct.) and Hwy- 50 (Buckeye Rd.). Produced brine is metered at surface and transported approximately 6,600 feet southwest by a buried polyethylene pipeline to four 500-barrel fiberglass storage tanks at the proposed Siringo Brine Station located in UL: M of Section 27, Township 17 South, Range 36 East (Lat. 32.79881°, Long. -103.34712°), Lea County, New Mexico. This brine station is located approximately 9.3 miles South of Lovington, New Mexico or 1 mile South-Southeast of the intersection of Hwy 483 (Arkansas Jct.) and County Road 50 (Buckeye Rd.) and ¼ mile east of Hwy 483.

The Permittee is permitted to inject water into the subsurface salt layers and produce brine for use in the oil and gas industry. Groundwater that may be affected by a spill, leak, or accidental discharge of brine occurs at a depth of approximately 50 feet 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 Brine 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 groundwater 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 groundwater 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 groundwater into the same formation from which it was drawn as part of a removal or remedial action.
5. Barrier wells, drainage wells, recharge wells, return flow wells, and motor vehicle waste disposal wells are prohibited.

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

The Permittee shall operate in accordance with the terms and conditions specified in this Discharge Permit to comply with the Water Quality Act and the rules issued pursuant to that Act, so that neither a hazard to public health nor undue risk to property will result (see 20.6.2.3109C NMAC); so that no discharge will cause or may cause any stream standard to be violated (see 20.6.2.3109H(2) NMAC); so that no discharge of any water contaminant will result in a hazard to public health, (see 20.6.23109H(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 20.6.21 through 20.6.25299 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 groundwater having 10,000 mg/1 or less total dissolved solids (IDS).

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) 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 20.6.23109H(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
20.6.21 through 20.6.25299 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 groundwater having 10,000 mg/1 or less total dissolved solids (IDS).

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 July 31, 2027**. 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 Engineering Bureau of any Facility expansion or process modification (See 20.6.23107C NMAC). The OCD Director may require the Permittee to submit a Discharge Permit modification application pursuant to 20.6.23109£ 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 CI.ASS 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;

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(l 7) NMAC.

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

2. GENERAL FACILITY OPERATIONS:

2.A. QUARTERLY MONITORING REQUIREMENTS FOR CLASS ID **WELLS:** The Permittee may use either or both freshwater and/or freshwater from otherwise non-potable sources. Pursuant to 20.6.2.5207C, the Permittee shall provide analysis of the injected fluids and brine at least quarterly 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 or start-up of brine well operations, the Permittee shall install a downgradient monitor well into the water table aquifer and collect a background groundwater sample for general chemistry and WQCC 20.6.2.3103 NMAC groundwater constituents and Methanol (EPA Method 8015B).

Groundwater quality data shall comply with EPA Quality Assurance/Quality Control *(ONOC)* 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 **annually** thereafter for the following characteristics:

- Methanol (Method 8015B);
- pH (Method 9040);
- Eh;
- Specific conductance;
- Specific gravity;
- Temperature; and
- General groundwater 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 semiannually.

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 reaches 0.10 ft. compared to its baseline elevation, then the Permittee shall notify OCD within 30 days of survey completion for further instructions. If survey results continue to demonstrate subsidence over time, and the Permittee cannot demonstrate the integrity of the cavern and well to the satisfaction of OCD, then it shall cease all brine production and submit a corrective action plan to mitigate the subsidence.

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

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

a. The Permittee shall provide an estimate of the size and shape of the solution cavern at least annually in the Annual Report (Section 2.J), based on fluid injection and brine production data.

b. The Permit shall compare the ratio of the volume of injected fluids to the volume of produced brine monthly. If the average ratio of injected fluid to produced brine varies is less than 90% or greater than 110%, the Permittee shall report this to OCD and cease injection and production operations of its Class III well within 24 hours. The Permittee shall begin an investigation to determine the cause of this abnormal ratio within 72 hours. The Permittee shall submit to OCD a report of its investigation within 15 days of cessation of injection and production operations of its Class III well for further instructions.

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

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

implement additional subsidence monitoring and to conduct additional corrective action.

2.C. CONTINGENCY PIAN: 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: Prior to closure of the facility, the Permittee shall submit for OCD's approval, a closure plan including a completed form C-103 for plugging and abandonment of the Class III well. The Permittee shall plug and abandon its well pursuant to 20.6.2.5209 NMAC and as specified in Permit Conditions 21 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 Engineering 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 Engineering 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 Engineering 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, groundwater 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 PIAN: 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 of20.6.23109C NMAC, 20.6.2.5101C NMAC, and 20.6.2.5005 NMAC for protection of groundwater. 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 20.6.25209 NMAC.

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

records available for inspection at the request of an OCD Representative.

2.G. RELEASE REPORTING: The Permittee shall comply with the following Permit Conditions, purs11ant 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 Engineering Bureau.

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

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

2.I. BONDING OR FINANCIAL ASSURANCE: Pursuant to 20.6.2.5210B(17) NMAC, the Permittee shall maintain at a minimum, a single well plugging bond in the amount that it shall determine, 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 groundwater 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.

Methods by which the Permittee shall demonstrate the ability to undertake these measures shall include submission of a surety bond or other adequate assurances, such as financial statements or other materials acceptable to the OCD Director, such as: (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 Engineering 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;
- Cavern characterization information and data results;
- Subsidence monitoring information and data results;
- 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 Engineering Bureau.

3. CIASS III WELL OPERATIONS:

Owner/Operator Commitments: Once a permit is issued, the owner/operator must ensure all operations are consistent with the terms and conditions of the permit and in conformance with all pertinent rules and regulations under both the Water Quality Act. The owner/operator shall abide by all commitments submitted in its discharge permit application including any attachments and/or amendments along with these approval conditions.

Applications which reference previously approved plans on file with the OCD shall be incorporated into this permit and the owner/operator shall abide by all commitments of such plans.

3.A. OPERATING REQUIREMENTS: The Permittee shall comply with the operating requirements specified in 20.6.2.5206A NMAC and 20.6.25206A NMAC to ensure that:

1. Brine Production Method: During the cavern development process and daily brine production, a normal flow configuration consisting of freshwater injection shall occur through the innermost tubing string with brine production through the casing string backed by cement to surface to promote proper cavern development with depth; and to prevent cavern ceiling collapse. Injection and production flow may temporarily be reversed as required periodically to clean the tubing and annulus. However, a normal flow regime is required during daily injection and production must only occur in the intended solution mining interval.

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 m 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 Engineering Bureau and Hobbs 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 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. The pipeline shall be constructed with an Emergency Shut-Down Device with block off locations for pipeline isolation, access, cleaning, testing, etc. 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 Condition 2G 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 ill 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 m 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 Engineering Bureau.

The Permittee shall take all steps necessary to ensure that the injected fluids enter only the proposed injection interval and is not permitted to escape to other formations, freshwater zones, or onto the ground surface. The Permittee shall report to OCD's Engineering 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 two 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.

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

3. The following criteria shall determine if the Class III well has passed the MIT:

a. Passes MIT if zero bleed-off during the test;

b. Passes casing MIT if final test pressure is within +/- 10% of starting pressure, if approved by OCD (Note: Passes +/- 1% of starting pressure for casing/cavern test due to the massive volume of fluid required in the cavern and casing during this test);

c. When the MIT is not witnessed by OCD and fails, the Permittee shall notify OCD within 24 hours of the failure of the MIT.

d. All chart recorder information, charts containing appropriate information, calibration sheets, etc. shall be provided to OCD within *5* working days of completing an MIT.

4. 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.

5. 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 Hobbs Office and the Engineering Bureau in 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 Engineering Bureau and Hobbs 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 via the electronic OCD Form C-115 submittal process (hardcopies to be provided upon request of OCD and in annual reports per Permit Condition 2.J). 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 20.6.2.50028 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 20.6.2.5005NMAC, the Permittee shall close any Class V industrial waste injection well that injects non-hazardous industrial wastes or a mixture of industrial wastes and domestic wastes (e.g., septic systems, leach fields, dry wells, etc.) within 90 calendar days of the issuance of this Discharge Permit. The Permittee shall document the closure of any Class V wells used for the disposal of non-hazardous industrial wastes or a mixture of industrial wastes and domestic wastes other than contaminated groundwater 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. ANNUAL REPORT: The Permittee shall submit its annual report to OCD by June 1st of each year.

5.B. BONDING OR FINANCIAL ASSURANCE: The Permittee shall submit an estimate of the minimum cost to properly close, plug and abandon its UIC Class III well, conduct groundwater restoration if applicable, and any post-operational monitoring as may be needed (see 20.6.2.5210B(l7) NMAC) within 90 days of permit issuance (See 20.6.2.5210B(l7) NMAC), and/or the Closure Plan addresses this requirement and is approved by OCD. The Permittee's cost estimate shall be based on third person estimates and included in the Closure Plan with the application. OCD will require the Permittee to submit a single well plugging bond based on the approved third person cost estimate for OCD approval before OCD may issue approval to drill and construct the well (also see Permit Conditions 2.D and 2.1).

5.C. 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 unless it has already been approved by OCD. Monitoring information and data shall be reported under Permit Condition 2.J.

5.D. 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 unless it has already been approved by OCD. Characterization information and data shall be reported under Permit Condition 2.J.

LEGAL NOTICE

NOTICE OF PUBLICATION

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

Notice is hereby given that purs1,1ant to New Mexico Water Quality Control Commission Regulations (20.6.2.3108 NMAC), the following discharge permit application has been submitted to the Engineering Bureau- Underground Injection Control Group Manager of the New Mexico Oil Conservation Division ("OCD"), 1220 S. Saint Francis Drive, Santa Fe, New Mexico 87505, Telephone (505) 660-8274 or E-mail: Phillip.Goetze@state.nm.us.

(BW-35/Facility ID# fCJC2134952911) Llano Disposal, L.L.C., Darr Angell, Owner, P.O. Box 250, Lovington, New Mexico 88260, has submitted an application for a new Underground lnjection Control (UIC) Class Ill Brine Well Permit for the Siringo- ACS Brine Well No. 1 (API# 30-025-30701) located 660 FNL and 660 FWL (NW/4, NW/4) in Section 26, Township 17 South, Range 36 East (Lat. N 32.81150º Long.: W 103.33178º), NMPM, Lea County, New Mexico. Signage (3 ft. x 5 ft.) will be located on private land adjacent to the eastern right-of-way of Hwy-483 at the southwest corner of Section 27, T17S, 36E, approximately 900 ft west of the brine station.

The injection well is located approximately 8.3 miles south of Lovington, or 1.1 miles east of the intersection of Hwy-483 (Arkansas Jct.) and Hwy-50 (Buckeye Rd.). Produced brine fluid will be metered at surface and transported approximately 1-mile southwest by a buried polyethylene pipeline to six 500-barrel fiberglass storage tanks at the Siringo Brine Station located In Unit Letter M of Section 27, Township 17 South, Range 36 East (Lat. 32.79882°, Long. 103.34712°), NMPM, Lea County, New Mexico. The brine station located approximately 9.3 miles South of Lovington or 1 mile South-Southeast of the Intersection of Hwy-483 (Arkansas Jct.) and County Road 50 (Buckeye Rd.) and 1/4 mile east of Hwy-483. Freshwater, produced water, and/or recycled water will be routed via polyethylene pipelines to the brine well for lnjection into the Salado Salt Formation in the injection interval from 2,043 to 3,253 ft. below ground surface (bgs) through tubing at a rate of approximately 45-55 gpm and at a normal operating pressure from 200-250 psig. The maximum surface injection pressure allowed is 408 psig. Dissolution brine water (320,000 ppm Total Dissolved Solids- TDS) is produced up the well annulus between the injection tubing and well casing. Brine is then pumped through a meter via subsurface polyethylene pipeline to the brine station for sale. The injection fluid is estimated to contain less than 1,000 ppm TDS. Groundwater most likely to be affected by a spill, leak or accidental discharge is at a depth of approximately 50 ft. below ground level with a TDS concentration of approximately 400 ppm. The discharge permit addresses well construction, operation, monitoring, ground subsidence, associated surface facilities, financial assurance, and provides a contingency plan in the event of accidental discharges.

The OCD has determined the application is administratively complete and has prepared a draft permit. The OCD will accept comments and statements of interest regarding this application and will create a facility-specific mailing list for persons who wish to receive future notices. Persons interested in obtaining further information, submitting comments or requesting to be on a facility-specific mailing list may contact the OCD Engineering Bureau- UIC Group Manager at the address given above. The permit may be viewed at the. Above address between 8:00 a.m. and 4:00 p.m., Monday through Friday, or at the OCD web site http://www.emnrd.state.nm.us/ocd/. Persons interested in obtaining a copy of the application and draft permit may contact the OCD at the address given above. Prior to ruling on any proposed permit, the Director shall allow a period of at least thirty (30) days after the date of publication of this notice, during which interested persons may submit comments or request that OCD hold a public hearing. Requests for a hearing shall set forth the reasons why a hearing should be held. A hearing will be held if the Director determines there is a 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 mas informaci6n 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 Mexico), Oil

.Conservation Division (Depto. Conservación Del Petró1eo), 1220 South St. Francis Drive, Santa Fe, New Mexico (Contacto: Laura Tulk, 505-629-6116).

Given under the Seal of New Mexico Oil Conservation Commission at Santa Fe, New Mexico, on this 31st day of July 2022.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

Adrienne Sandoval, Director