ENSOLUM

January 7, 2025
New Mexico Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

Re: Remediation Work Plan
South Hobbs GSA Unit 238O04
API: 30-025-31424
Incident Number: nAPP2410037098
32.6840661°N, 103.152430°W
Lea County, New Mexico

To Whom It May Concern:

Ensolum, LLC (Ensolum), on behalf of Oxy USA, Inc. (Oxy), has prepared the following *Remediation Work Plan* (*Work Plan*) to document the site assessment activities completed to date and propose a work plan to address impacted soil identified at the South Hobbs GSA Unit 238O04 (Site). The purpose of the site assessment activities was to delineate the vertical and horizontal extent of impacted soil resulting from a release of produced water at the Site. The following Work Plan proposes to excavate impacted soil within the top 2 feet to 6 feet of the release extent.

SITE DESCRIPTION AND RELEASE SUMMARY

The Site is located in Unit O, Section 04, Township 19 South, Range 38 East, in Lea County, New Mexico (32.6840661°N, 103.152430°W) and is in a pasture not associated with oil and gas exploration and production operations on State Trust Land (STL) managed by the New Mexico State Land Office (SLO).

On April 8, 2024, a leak on an injection line due to equipment failure resulted in the release of 2,220 barrels (bbls) of produced water into the pasture. Approximately 1,850 bbls of produced water was recovered via the use of vacuum trucks. Oxy verbally reported the release via email to the New Mexico Oil Conservation Division (NMOCD) and the New Mexico State Land Office (SLO) on April 9, 2024 submitted a notification of release (NOR) on the NMOCD portal. The release was subsequently assigned Incident Number nAPP2410037098.

SITE CHARACTERIZATION AND CLOSURE CRITERIA

The Site was characterized to assess the applicability of Table I, Closure Criteria for Soils Impacted by a Release, of Title 19, Chapter 15, Part 29 (19.15.29) of the New Mexico Administrative Code (NMAC). Results from the characterization desktop review are presented on NMOCD Portal of the Form C-141, Site Assessment/Characterization submitted on April 18, 2024. Potential site receptors are identified on **Figure 2** in **Appendix A**.

Depth to groundwater at the Site is less than 50 feet below ground surface (bgs) based on the nearest groundwater well data. The Well Records for the water wells located within 0.5-mile of the Site are included in **Appendix B**.

The closest continuously flowing or significant watercourse to the Site is a man-made riverine located approximately 129 feet northwest of the Site that is utilized for the stormwater runoff from the nearby city of Hobbs, New Mexico. The Site is greater than 200 feet from a lakebed, sinkhole, or playa lake and greater than 300 feet from an occupied residence, school, hospital, institution, church, or wetland. The Site is greater than 1,000 feet to a freshwater well or spring and is not within a 100-year floodplain or overlying a subsurface mine. The Site is underlain by stable geology (low potential karst designation area).

Based on the results of the Site Characterization, the following NMOCD Table I Closure Criteria (Closure Criteria) apply:

- Benzene: 10 milligrams per kilogram (mg/kg)
- Benzene, toluene, ethylbenzene, and total xylenes (BTEX): 50 mg/kg
- Total petroleum hydrocarbons (TPH): 100 mg/kg
- Chloride: 600 mg/kg

CULTURAL PROPERTIES PROTECTION RULE

The release was identified in the pasture and as a result, the release location was assessed for determination of whether the release encroached into undisturbed areas to comply with the Cultural Properties Protection Rule (CPP) prior to disturbing the surface with mechanical equipment. An Archaeological Records Management System (ARMS) review was performed for the right-of-way prior to construction. No cultural resources were identified within and/or around the release extent requiring remediation efforts. An approved CPP Rule cover sheet showing the area was previously surveyed is attached as Supporting Documentation in **Appendix B** and will be included in the final Closure Request.

BIOLOGICAL COMPLIANCE AND REPORTING

Ensolum personnel conducted a desktop review to establish if the Site is within an area of possible threatened, endangered, and sensitive wildlife and plant species, environmentally sensitive areas, surface waters, and sensitive soils. The desktop review results can be found in the Supporting Documentation in **Appendix B**.

- The Site is not located within an area of possible threatened, endangered, and sensitive wildlife and plant species.
- No environmentally sensitive receptors were located near the Site as mentioned in the Site Characterization.
- The soil type is classified as Kimbrough-Lea complex, dry 0 to 3 percent slopes (KU), according to the Web Soil Survey. KU is considered a sensitive soil by the SLO definition. The release occurred directly onto the pasture potentially containing sensitive soils and will be remediated accordingly to minimize impacts.

SITE ASSESSMENT AND DELINEATION ACTIVITIES

On September 5, 2024 and September 6, 2024, Ensolum personnel conducted a Site visit to evaluate the release extent based on information provided on the C-141 and visual observations. At this time, initial delineation pothole samples were advanced by Diamondback Disposal Services (Diamondback) and were collected by Ensolum throughout the release extent with the use of a trackhoe. Based on these delineation results, the entire release extent was initially excavated down to depths varying from 1-foot to 3 feet bgs.

From October 28, 2024 to November 1, 2024. Subsequent to excavation activities, Ensolum personnel attempted to collect initial excavation floor and sidewall samples, but due to high field screenings noted throughout the excavation extent, it was decided that additional pothole delineation was needed.

From November 13, 2024 to November 15, 2024, Ensolum and Diamondback collected 70 delineation pothole soil samples from 42 locations (PH01 through PH42) within the excavation extent from depths varying from 2 foot to 6 feet bgs utilizing a trackhoe to assess the vertical extent of the release. Since chloride concentrations were determined to be the main concern after the initial pothole delineation and attempted sampling activities, the soil samples were field screened for chloride using Hach® chloride QuanTab® test strips. The release extent and soil sample locations were mapped utilizing a handheld Global Positioning System (GPS) unit and are depicted on **Figure 1** (**Appendix A**). Photographic documentation was completed during the Site visit and a Photographic Log is included in **Appendix C**.

FIELD SCREENING AND LABORATORY ANALYTICAL RESULTS

Field screening results for the delineation soil samples (PH01 through PH42) indicated that chloride concentrations exceeded the Closure Criteria at depths ranging from 2 feet to 6 feet bgs for various pothole soil sample locations. The terminal depth sample from each delineation pothole, located in **Table A** (**Appendix D**), indicated chloride concentrations were compliant with the Closure Criteria and successfully defined the vertical extent of impacted soil.

Once excavation activities are completed, official excavation composite floor and sidewall soil samples will be collected every 200 square feet. Samples will be placed in pre-cleaned glass jars labeled with the location, date, time, sampler name, method of analysis, and immediately placed on ice. The samples will be transported under strict chain-of-custody procedures to Cardinal Laboratories (Cardinal) in Hobbs, New Mexico, for analysis of BTEX, following United States Environmental Protection Agency (EPA) Method 8021B; TPH-gasoline range organics (GRO), TPH-diesel range organics (DRO), and TPH-oil range organics (ORO) following EPA Method 8015M/D; and chloride following Standard Method SM-4500 Cl-B.

PROPOSED REMEDIATION WORK PLAN

The delineation soil sampling results indicate soils containing elevated chloride concentrations exist across an approximate 72,743 square foot area and extends to a maximum depth of 6 feet bgs. Oxy proposes to complete the following remediation activities:

- Excavation of impacted soil to varying depths of 2 foot to 6 feet bgs based on the pothole delineation field screening soil sample results. Excavation will proceed vertically and laterally until the excavation floor and sidewall samples confirm benzene, total BTEX, TPH, and chloride concentrations are compliant with the applicable Closure Criteria.
- An estimated 8,208 cubic yards (cy) of impacted soil will be excavated. The excavated soil will be transferred to a New Mexico approved landfill facility for disposal.
- The excavation will be backfilled and recontoured to match pre-existing conditions

Oxy will proceed with the excavation and soil sampling activities and will submit a Closure Report within 90 days of the date of approval of this Work Plan by the SLO and NMOCD.

If you have any questions or comments, please contact Ms. Kelly Lowery at (214) 733-3165 or klowery@ensolum.com.

Sincerely,
Ensolum, LLC

Kelly Lowery, GIT
Project Geologist

Beaux Jennings
Associate Principal

cc: Wade Dittrich, Oxy USA, Inc.
Tyson Pierce, Oxy USA, Inc.
SLO

Appendices:

Appendix A Figures
Appendix B Supporting Documentation
Appendix C Photographic Log
Appendix D Field Screening Soil Sample Results Table

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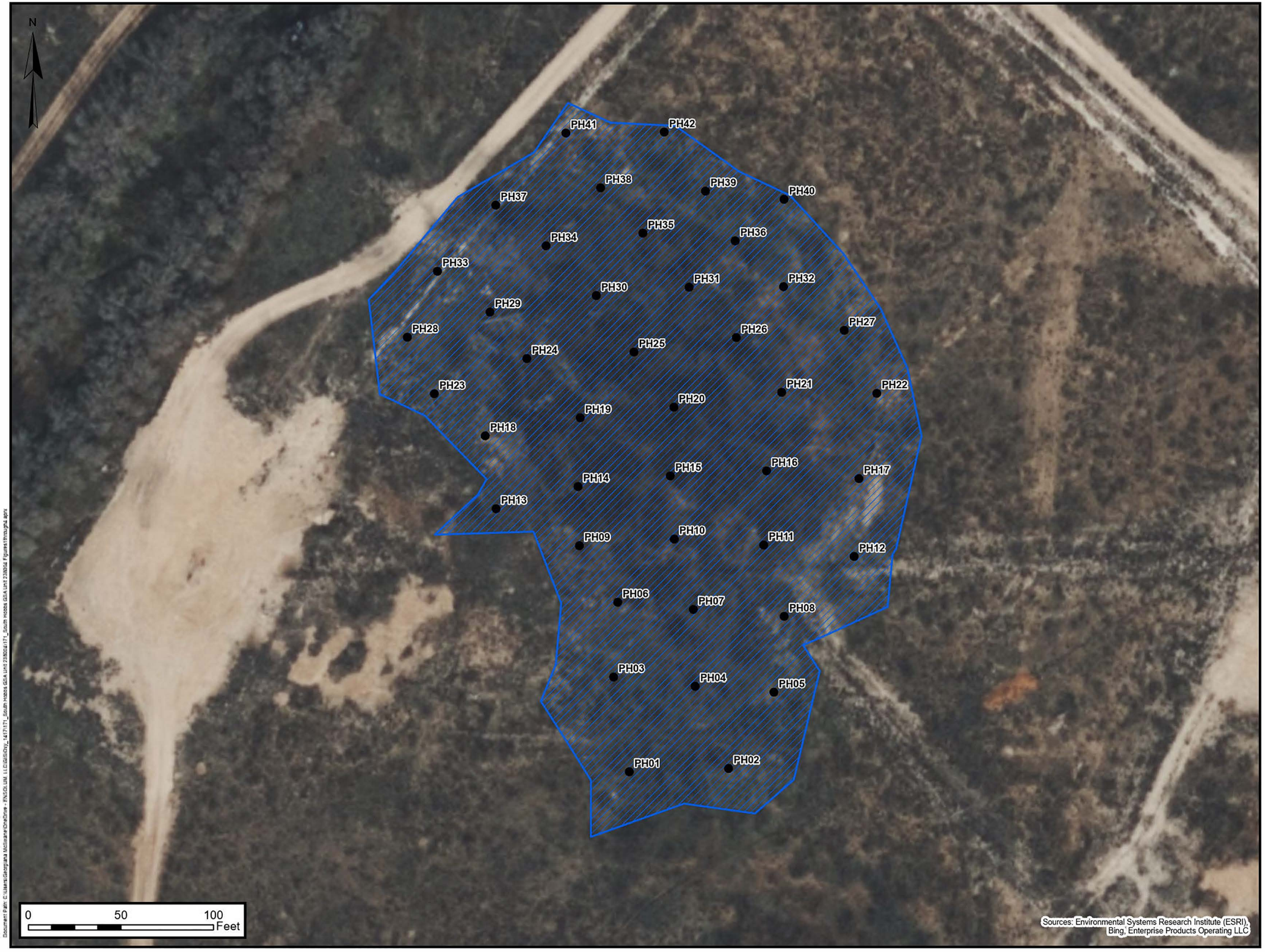
APPENDIX A

Figures



Legend

- Pothole Soil Sample Location
- Excavation Extent

Pothole Delineation Site Map

Oxy USA Inc.
South Hobbs GSA Unit 238O04

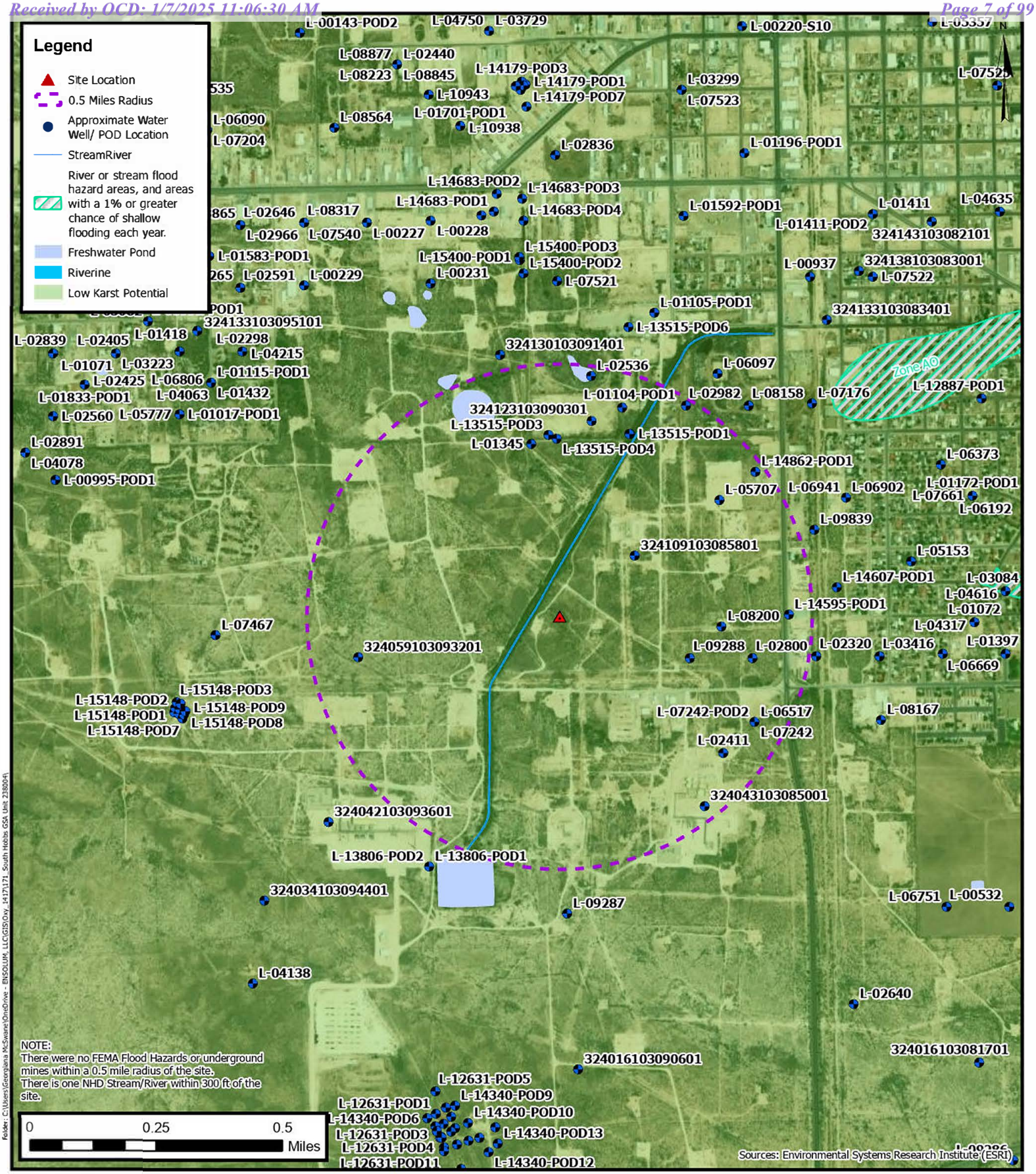
32.6840661° N, 103.152430° W
Lea County, New Mexico

FIGURE

1

PROJECT NUMBER: 03B1417171

ENSOLUM
Environmental, Engineering and Hydrogeologic Consultants



ENSOLUM
Environmental, Engineering and Hydrogeologic Consultants

Closure Criteria Map

Oxy USA Inc.
South Hobbs GSA Unit 238O04
32.6840661° N, 103.152430° W
Lea County, New Mexico

PROJECT NUMBER: 03B1417171

FIGURE 2

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APPENDIX B

Supporting Documentation

Kelly Lowery

From: Raina Hanley <RHanley@bcarch.org>
Sent: Thursday, June 20, 2024 10:33 AM
To: Kelly Lowery; Beaux Jennings; Wade Burns; Marc Seamands
Subject: Fw: Remediation ARMS Cover Sheet for Ensolum (BCA24-1723)

[**EXTERNAL EMAIL**]

From: Curry, Anne R. <acurry@slo.state.nm.us>
Sent: Thursday, June 20, 2024 9:02 AM
To: Raina Hanley <RHanley@bcarch.org>; CRO Info <croinfo@slo.state.nm.us>
Subject: RE: Remediation ARMS Cover Sheet for Ensolum (BCA24-1723)

Good morning Raina,

Thank you for the submission of the attached Cover Sheet. Since the proposed remediation activities will take place in an area that has been covered by archaeological survey, Ensolum is free to move forward with remediation. Please reach out if you have additional questions-

Anne Curry
Archaeologist
Cultural Resources Office
Office: 505.827.1276
Cell: 505.469.5582
New Mexico State Land Office
310 Old Santa Fe Trail
P.O. Box 1148
Santa Fe, NM 87504-1148
acurry@slo.state.nm.us
nmstatelands.org
……

From: Raina Hanley <RHanley@bcarch.org>
Sent: Thursday, April 25, 2024 5:26 PM
To: CRO Info <croinfo@slo.state.nm.us>
Subject: [EXTERNAL] Remediation ARMS Cover Sheet for Ensolum (BCA24-1723)

Good Evening,

Attached please find the following ARMS review Cultural Resources Cover Sheet for Ensolum on behalf Oxy USA:

- Oxy's South Hobbs GSA Unit 238O04 Remediation

The associated ARMS review materials have been submitted through the CPP site. Please let us know if you have any questions or need any additional information.

Thank you!

Raina Hanley
Chief Operating Officer

Beaver Creek Archaeology & Environmental
1632 Capitol Way
Bismarck, ND 58501
Ph: (701) 663-5521 | Fx: (701) 663-5589

Beaver Creek Archaeology & Environmental
712 West Quay Avenue
Artesia, NM 88210
Ph: (575) 746-6142 | Fx: (701) 663-5589

Stephanie Garcia Richard, Commissioner of Public Lands
State of New Mexico

NMSLO Cultural Resources Cover Sheet Exhibit

NMCRIS Activity Number:
(if applicable)

Exhibit Type (select one)

ARMS Inspection/Review - Summarize the results (select one):

(A) The entire area of potential effect or project area has been previously surveyed to current standards and **no cultural properties** were found within the survey area.
(B) The entire area of potential effect or project area has been previously surveyed to current standards and **cultural properties were found** within the survey area.
(C) The entire area of potential effect or project area has **not** been previously surveyed or **has not been surveyed** to current standards. A complete archaeological survey will be conducted and submitted for review.

Archaeological Survey

Findings:

Negative - No further archaeological review is required.

Positive - Have avoidance and protection measures been devised? Select one:

Comments:

Project Details:

NMSLO Lease Number (if available):

Cultural Resources Consultant:

Project Proponent (Applicant):

Project Title/Description:

Project Location:

County(ies):

PLSS/Section/Township/Range):

For NMSLO Agency Use Only:

NMSLO Lease Number:

Acknowledgment-Only:

Lease Analyst:

Date Exhibit Routed to Cultural Resources Office:

No person may alter the wording of the questions or layout of the cover sheet. The completion of this cover sheet by itself does not authorize anyone to engage in new surface disturbing activity before the review and approvals required by the Cultural Properties Protections Rule.

Form Revised 12 22

United States Department of the Interior

FISH AND WILDLIFE SERVICE
New Mexico Ecological Services Field Office
2105 Osuna Road Ne
Albuquerque, NM 87113-1001
Phone: (505) 346-2525 Fax: (505) 346-2542

In Reply Refer To: 12/31/2024 17:27:52 UTC
Project Code: 2025-0036903
Project Name: South Hobbs GSA Unit 238O04

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

Thank you for your recent request for information on federally listed species and important wildlife habitats that may occur in your project area. The U.S. Fish and Wildlife Service (Service) has responsibility for certain species of New Mexico wildlife under the Endangered Species Act (ESA) of 1973 as amended (16 USC 1531 et seq.), the Migratory Bird Treaty Act as amended (16 USC 701-715), and the Bald and Golden Eagle Protection Act as amended (16 USC 668-668(c)). We are providing the following guidance to assist you in determining which federally imperiled species may or may not occur within your project area, and to recommend some conservation measures that can be included in your project design.

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the ESA of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the ESA, the accuracy of this species list should be verified after 90 days. The Service recommends that verification be completed by visiting the IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the IPaC system by completing the same process used to receive the enclosed list.

The purpose of the ESA is to provide a means whereby threatened and endangered species and

the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the ESA and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (NEPA; 42 USC 4332(2) (c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at https://www.fws.gov/sites/default/files/documents/endangered-species-consultation-handbook.pdf.

Candidate Species and Other Sensitive Species

A list of candidate and other sensitive species in your area is also attached. Candidate species and other sensitive species are species that have no legal protection under the ESA, although we recommend that candidate and other sensitive species be included in your surveys and considered for planning purposes. The Service monitors the status of these species. If significant declines occur, these species could potentially be listed. Therefore, actions that may contribute to their decline should be avoided.

Lists of sensitive species including State-listed endangered and threatened species are compiled by New Mexico State agencies. These lists, along with species information, can be found at the following websites.

Biota Information System of New Mexico (BISON-M): www.bison-m.org

New Mexico State Forestry. The New Mexico Endangered Plant Program: https://www.emnrd.nm.gov/sfd/rare-plants/

New Mexico Rare Plant Technical Council, New Mexico Rare Plants: nmrareplants.unm.edu

Natural Heritage New Mexico, online species database: nhnm.unm.edu

WETLANDS AND FLOODPLAINS

Under Executive Orders 11988 and 11990, Federal agencies are required to minimize the destruction, loss, or degradation of wetlands and floodplains, and preserve and enhance their natural and beneficial values. These habitats should be conserved through avoidance, or mitigated to ensure that there would be no net loss of wetlands function and value.

We encourage you to use the National Wetland Inventory (NWI) maps in conjunction with ground-truthing to identify wetlands occurring in your project area. The Service's NWI program website, www.fws.gov/wetlands/Data/Mapper.html, integrates digital map data with other resource information. We also recommend you contact the U.S. Army Corps of Engineers for permitting requirements under section 404 of the Clean Water Act if your proposed action could impact floodplains or wetlands.

MIGRATORY BIRDS

In addition to responsibilities to protect threatened and endangered species under the ESA, there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the Service (50 CFR 10.12 and 16 USC 668(a)). For more information regarding these Acts, see https://www.fws.gov/program/migratory-bird-permit/what-we-do.

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a Federal nexus) or a Bird/Eagle Conservation Plan (when there is no Federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures, see https://www.fws.gov/library/collections/threats-birds. We also recommend review of the Birds of Conservation Concern list (https://www.fws.gov/media/birds-conservation-concern-2021) to fully evaluate the effects to the birds at your site. This list identifies migratory and non-migratory bird species (beyond those already designated as federally threatened or endangered) that represent top conservation priorities for the Service, and are potentially threatened by disturbance, habitat impacts, or other project development activities.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 thereby provides additional protection for both migratory birds and migratory bird habitat. Please visit https://www.fws.gov/partner/council-conservation-migratory-birds for information regarding the implementation of Executive Order 13186.

We suggest you contact the New Mexico Department of Game and Fish, and the New Mexico Energy, Minerals, and Natural Resources Department, Forestry Division for information regarding State protected and at-risk species fish, wildlife, and plants.

For further consultation with the Service we recommend submitting inquiries or assessments electronically to our incoming email box at nmesfo@fws.gov, where it will be more promptly routed to the appropriate biologist for review.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

OFFICIAL SPECIES LIST

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

New Mexico Ecological Services Field Office
2105 Osuna Road Ne
Albuquerque, NM 87113-1001
(505) 346-2525

PROJECT SUMMARY

Project Code: 2025-0036903
Project Name: South Hobbs GSA Unit 238O04
Project Type: Surface Reclamation - Non Energy Materials
Project Description: An excavation for a spill at the South Hobbs GSA Unit 238O04 facility. Excavation is ongoing
Project Location:

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@32.684116,-103.15257258674677,14z

Counties: Lea County, New Mexico

ENDANGERED SPECIES ACT SPECIES

There is a total of 3 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

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1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

BIRDS

NAME	STATUS
Lesser Prairie-chicken *Tympanuchus pallidicinctus* Population: Southern DPS No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/1924	Endangered
Northern Aplomado Falcon *Falco femoralis septentrionalis* Population: U.S.A (AZ, NM) No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/1923	Experimental Population, Non-Essential

INSECTS

NAME	STATUS
Monarch Butterfly *Danaus plexippus* There is **proposed** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/9743	Proposed Threatened

CRITICAL HABITATS

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

IPAC USER CONTACT INFORMATION

Agency: Private Entity
Name: Trevor Hartwig
Address: 11049 West 44th Avenue
City: Wheat Ridge
State: CO
Zip: 80033
Email thartwig@ensolum.com
Phone: 3038172989

PROJECT INFORMATION

Project Title:	South Hobbs GSA Unit 238O04
Project Type:	(NO PROJECT REVIEW) SPECIES LIST ONLY
Latitude/Longitude (DMS):	32.684052 / -103.152587
County(s):	LEA
Project Description:	This project is to explore potential impacts from the excavation of spill at the South Hobbs GSA Unit 238O04 facility in Hobbs, New Mexico. The current excavation is on going and there is no date yet when it will be completed

REQUESTOR INFORMATION

Project Organization:	
Contact Name:	Trevor Hartwig
Email Address:	thartwig@ensolum.com
Organization:	Ensolum, LLC
Address:	11049 West 44th Avenue, Wheat Ridge CO 80033
Phone:	3038172989

OVERALL STATUS

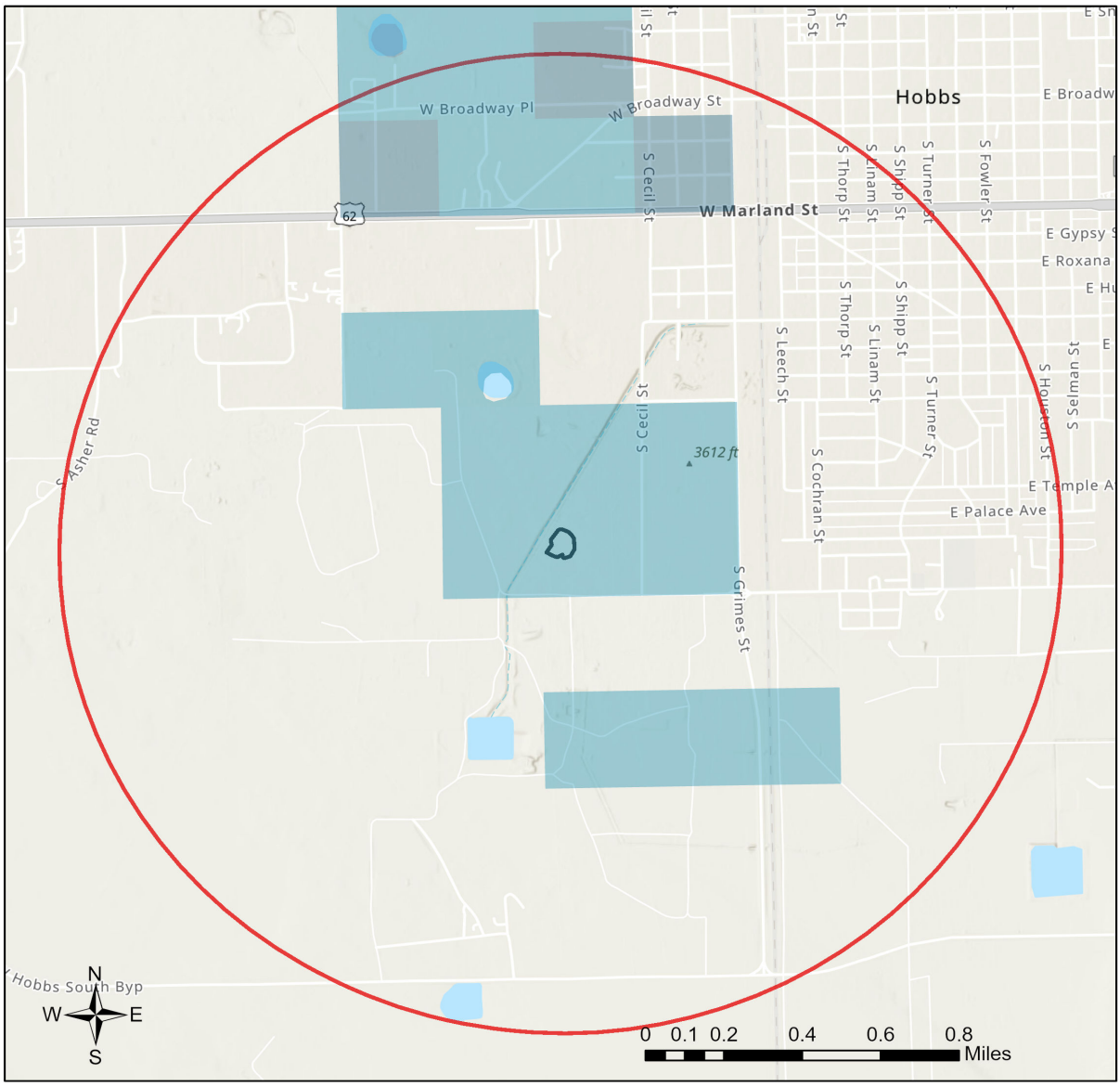
The information contained within this report comprises the recommendations of the New Mexico Department of Game and Fish (Department) for management and mitigation of proposed project impacts to wildlife and habitat resources; see the Project Recommendations section below for further details. No further consultation with the Department is required based on the project's location and, with implementation of mitigation measures described in the Project Recommendations section below, no adverse effects to wildlife or important habitats are anticipated. However, a Department biologist may be in touch within 30 days if they determine that further review is required.

About this report:

- This environmental review is based on the project description and location that was entered. The report must be updated if the project type, area, or operational components are modified.
- This is a preliminary environmental screening assessment and report. It is not a substitute for the potential wildlife knowledge gained by having a biologist conduct a field survey of the project area. Federal status and plant data are provided as a courtesy to users. The review is also not intended to replace consultation required under the federal Endangered Species Act (ESA), including impact analyses for federal resources from the U.S. Fish and Wildlife Service (USFWS) using their Information for Planning and Consultation tool.
- This report contains information on wildlife species protected under the ESA and the Wildlife Conservation Act (WCA), Species of Greatest Conservation Need (SGCN), and Species of Economic and Recreational Importance (SERI). Species listed under the ESA are protected from take at the federal level and under the WCA are protected from take at the state level. SGCN are identified in the State Wildlife Action Plan (SWAP) for New Mexico; all of these species are considered to be of conservation concern but not all of them are protected from take at the state or federal level. The harvest of all SERI is regulated at the state level. The Department has no authority to designate critical habitat for species listed under the WCA; only the USFWS can designate critical habitat for species listed under the ESA.
- The New Mexico Environmental Review Tool (ERT) utilizes species observation locations and species habitat suitability models, both of which are subject to ongoing change and refinement. Inclusion or omission of a species within a report cannot guarantee species presence or absence within your project area. To determine occurrence of any species listed in this report, or other wildlife that may be present within your project area, onsite surveys conducted by a qualified biologist during appropriate, species-specific survey timelines may be necessary.
- The Department encourages use of the ERT to modify proposed projects for avoidance, minimization, or mitigation of wildlife impacts. However, the ERT is not intended to be used in a repeatedly iterative fashion to adjust project attributes until a previously determined recommendation is generated. The ERT serves to assess impacts once project details are developed. The New Mexico Crucial Habitat Assessment Tool, the data layers from which are included in the ERT, is the appropriate system for advising early-stage project planning and design to avoid areas of anticipated wildlife concerns and associated regulatory requirements.

New Mexico Department of Game and Fish
Project ID: NMERT-4099

South Hobbs GSA Unit 238O04



- Buffered Project Boundary
- Project_Boundary
- Bureau of Land Management
- City Land
- County Land
- Department of Defense
- Department of Energy
- NM Department of Game & Fish
- NM State Forestry Division
- NM State Parks
- National Park Service
- Other Federal Agency
- Other Federal Agency
- State Land Office
- State of New Mexico
- Tribal Land
- U.S. Army Corps of Engineers
- U.S. Bureau of Reclamation
- U.S. Department of Agriculture
- U.S. Fish and Wildlife Service
- U.S. Forest Service
- U.S. Natural Resources Conservation Service

NHNM, USGS, USFS, US Census Bureau, NMDGF
Esri, NASA, NGA, USGS, FEMA
Texas Parks & Wildlife, CONANP, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA, USFWS

Special Status Animal Species Potentially within 2000 Meters of Project Area

Common Name	Scientific Name	USFWS (ESA)	NMDGF (WCA)	NMDGF SGCN/SERI	USFS	USFS SCC	BLM
Plains Leopard Frog	Lithobates blairi			SGCN			BLM WATCH
Eared Grebe	Podiceps nigricollis			SGCN			
Clark's Grebe	Aechmophorus clarkii			SGCN			
American Bittern	Botaurus lentiginosus			SGCN			BLM WATCH
Peregrine Falcon	Falco peregrinus		T	SGCN			BLM WATCH
Yellow-Billed Cuckoo	Coccyzus americanus	LT		SGCN			
Elf Owl	Micrathene whitneyi			SGCN			BLM WATCH
Western Burrowing Owl	Athene cunicularia hypugaea			SGCN	Sensitive Species	USFS R3 SCC	BLM SENSITIVE
Common Nighthawk	Chordeiles minor			SGCN			
Mountain Bluebird	Sialia currucoides			SGCN			
Loggerhead Shrike	Lanius ludovicianus			SGCN		USFS R3 SCC	BLM WATCH
Vesper Sparrow	Pooecetes gramineus			SGCN			
Thick-billed Longspur	Rhynchophanes mccownii			SGCN			BLM SENSITIVE
Chestnut-Collared Longspur	Calcarius ornatus			SGCN			BLM SENSITIVE
Black-Tailed Prairie Dog	Cynomys ludovicianus			SGCN	Sensitive Species		BLM SENSITIVE
Pronghorn	Antilocapra americana			SGCN			
Desert Massasauga	Sistrurus catenatus edwardsii			SGCN			

Common Name hyperlink takes you to species account in bison-m.org; Scientific Name hyperlink takes you to information in NatureServe Explorer; ESA = Endangered Species Act, C = Candidate, LE = Listed Endangered, LT = Listed Threatened, XN = Non-essential Experimental Population, for other ESA codes see this website; WCA = Wildlife Conservation Act, E = Endangered, T = Threatened; SERI = Species of Economic and Recreational Importance; SGCN = Species of Greatest Conservation Need; USFS = U.S. Forest Service, Sensitive Species = A species likely to occur on USFS lands that is of concern for a potential reduction in population viability; SCC = Species of Conservation Concern; BLM = Bureau of Land Management, BLM SENSITIVE = A species that occurs on BLM lands and whose viability is at risk, BLM WATCH = Species that may be added to the sensitive species list in future pending new information regarding species status.

Project Recommendations

This report includes a preliminary species list that may be used during early stages of project or conservation planning. Even if this report indicates that your proposed project location would require a custom review from a biologist, **no review will be returned** until additional project details are provided. **To obtain a project review**, please submit additional details regarding the **type** of project, project **objectives**, anticipated project **duration**, **timing** of project construction, the composition and dimensions/quantities of **materials** that will be utilized for project implementation, any **equipment** that will be used, anticipated **ground disturbance** that will occur, wildlife surveys or observations that have occurred on or near the project site, and **any other relevant details** regarding potential effects of project activities on wildlife or wildlife habitat. **Photographs** of the project site are especially useful.

Although this project report may include management recommendations based on the project location, additional conservation measures may be needed. The Department can not fully assess potential effects and associated management recommendations until a **project type and description** have been submitted and an appropriate **impact buffer** for that project type has been applied. Also, the species list within this report represents an estimation of special status species that could be present at the site of a small-scale project. Species lists for projects that occur across **broader geographic scales** (e.g., one or more counties, multiple habitat types) are more appropriately obtained from the **Department's Biota Information System of New Mexico (BISON-M) database**. Species lists generated by the ERT may contain modeled species distributions in order to predict species occurrences within areas that lack previous wildlife inventories or surveys. This list can be refined using occurrence-based information within BISON-M regarding wildlife-habitat relationships and biological needs for species that might be present within the project footprint.

The Lesser Prairie-chicken (*Tympanuchus pallidicintus*) (LPC) was designated as a SGCN in New Mexico and the southern Distinct Population Segment, including populations in New Mexico and Texas, is federally listed as Endangered. The LPC Interstate Working Group has developed the Southern Great Plains Crucial Habitat Assessment Tool (SGP-CHAT) to designate and prioritize areas for LPC conservation activities and development. Our preliminary assessment indicates your project occurs in LPC habitat. For more information on the SGP-CHAT, contact Chanda Pettie, Industry LPC Program Contact with the Western Association of Fish and Wildlife Agencies, at (719) 207-5053 or chanda.pettie@wafwa.org.
If your project has potential to lead to take (including harassment, harm, pursuit, hunting, shooting, wounding, killing, trapping, capturing, collecting, or attempting to engage in these activities) of a LPC and you entered into the Candidate Conservation Agreement (CCA) or CCA with Assurances (CCAA) for the LPC with CEHMM, the Department recommends you contact CEHMM (575-885-3700). If your project may lead to take of a LPC and you did not enter the CCA/A with CEHMM, the Department recommends you contact Lauren Rangel, at 505-761-4745 or lauren_rangel@fws.gov, who is the species lead for the LPC in the Ecological Services Office with USFWS. She is also the contact for the rangewide renewable energy Habitat Conservation Plan (HCP) if relevant for your project. The Department recommends a qualified, permitted biologist conduct surveys for the LPC according to these Lesser Prairie-chicken Survey Protocols (or others recommended by USFWS) and following any training as required by USFWS.

Burrowing owl (*Athene cunicularia*) may occur within your project area. Burrowing owls are protected from take by the Migratory Bird Treaty Act and under New Mexico state statute. Before any ground disturbing activities occur, the Department recommends that a preliminary burrowing owl survey be conducted by a qualified biologist using the Department's Burrowing Owl Survey Protocol. Should burrowing owls be documented in the project area, please contact the Department or USFWS for further recommendations regarding relocation or avoidance of impacts.

Prairie dog colonies may occur within the vicinity of your project area. Both black-tailed prairie dogs (*Cynomys ludovicianus*) and Gunnison's prairie dogs (*Cynomys gunnisoni*) are designated as New Mexico SGCN, and their colonies provide important habitat for other grassland wildlife. Wherever possible, occupied prairie dog colonies should be left undisturbed, and all project activities should be directed off the colony. Any burrows that are located on the project site should be surveyed by a qualified biologist to determine whether burrows are active or inactive and whether burrowing owls may be utilizing the site. Colonies within the range of the black-tailed prairie dog can be surveyed by a qualified biologist diurnally, year-round using binoculars. Colonies within the range of the Gunnison's prairie dog can be surveyed by a qualified biologist diurnally, using binoculars during the warmer months from April through October and by searching for fairly fresh scat and lack of cobwebs or debris at the mouths of burrows during the cold months (November through March). If ground-disturbing activities cannot be relocated off the prairie dog colony, or if project activities involve control of prairie dogs, the Department recommends live-trapping and relocation of prairie dogs. The Department can provide recommendations regarding suitability of potential translocation areas and procedures.

Disclaimers regarding recommendations:

- The Department provides technical guidance to support the persistence of all protected species of native fish and wildlife, including game and nongame wildlife species. Species listed within this report include those that have been documented to occur within the project area, and others that may not have been documented but are projected to occur within the project vicinity.
- Recommendations are provided by the Department under the authority of § 17-1-5.1 New Mexico Statutes Annotated 1978, to provide "communication and consultation with federal and other state agencies, local governments and communities, private organizations and affected interests responsible for habitat, wilderness, recreation, water quality and environmental protection to ensure comprehensive conservation services for hunters, anglers and nonconsumptive wildlife users".
- The Department has no authority for management of plants or Important Plant Areas. The New Mexico Endangered Plant Program, under the Energy, Minerals, and Natural Resources Department's Forestry Division, identifies and develops conservation measures necessary to ensure the survival of plant species within New Mexico. Plant status information is provided within this report as a courtesy to users. Recommendations provided within the ERT may not be sufficient to preclude impacts to rare or sensitive plants, unless conservation measures are identified in coordination with the Endangered Plant Program.
- Additional coordination and/or consultation may also be necessary under the federal ESA or National Environmental Policy Act (NEPA). Further site-specific mitigation recommendations may be proposed during ESA consultation and/or NEPA analyses or through coordination with affected federal agencies.

WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

www.ose.state.nm.us

1. GENERAL AND WELL LOCATION

OSE POD NUMBER (WELL NUMBER): (POD1) CB&I SB-1	OSE FILE NUMBER(S): L-13515
WELL OWNER NAME(S): CB&I ENVIRONMENTAL & INFRASTRUCTURE, INC	PHONE (OPTIONAL):
WELL OWNER MAILING ADDRESS: 9201 E DRY CREEK ROAD	CITY: CENTENNIAL STATE: CO ZIP: 80112

WELL LOCATION (FROM GPS)	DEGREES	MINUTES	SECONDS	
LATITUDE	32	41	22	N
LONGITUDE	103	9	06	W

* ACCURACY REQUIRED: ONE TENTH OF A SECOND
* DATUM REQUIRED: WGS 84

DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS - PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE:
FROM GRIMES & MARLIN GO W TURN L ON CECIL & GO S TO DEAD END. NE1/4, SW1/4, NE1/4, SEC 4. TWP 19S, RANGE 38E

2. DRILLING & CASING INFORMATION

LICENSE NUMBER	NAME OF LICENSED DRILLER	NAME OF WELL DRILLING COMPANY
WD-1711	EDWARD BRYAN	STRAUB CORPORATION

DRILLING STARTED	DRILLING ENDED	DEPTH OF COMPLETED WELL (FT)	BORE HOLE DEPTH (FT)	DEPTH WATER FIRST ENCOUNTERED (FT)
3-3-14	3-3-14	50'	50'	NA

COMPLETED WELL IS: ( ) ARTESIAN (•) DRY HOLE ( ) SHALLOW (UNCONFINED)

STATIC WATER LEVEL IN COMPLETED WELL (FT): 43'

DRILLING FLUID: (•) AIR ( ) MUD ADDITIVES – SPECIFY:

DRILLING METHOD: (•) ROTARY ( ) HAMMER ( ) CABLE TOOL ( ) OTHER – SPECIFY:

DEPTH (feet bgl) FROM	TO	BORE HOLE DIAM (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)	CASING CONNECTION TYPE	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)	SLOT SIZE (inches)
0	50'	5"	N/A	N/A	N/A	N/A	N/A

STATE ENGINEER OFFICE
MAR 0 7 2014 PM 1:18

3. ANNULAR MATERIAL

DEPTH (feet bgl) FROM	TO	BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL	AMOUNT (cubic feet)	METHOD OF PLACEMENT
0	50'	5"	6 BAGS OF CEMENT, BENTONITE, GROUT		TREMIE

FOR OSE INTERNAL USE

WR-20 WELL RECORD & LOG (Version 06/08/2012)

FILE NUMBER	L-13515	POD NUMBER	1	TRN NUMBER	540797
LOCATION	19S.38E.4.2.3.4				PAGE 1 OF 2

4. HYDROGEOLOGIC LOG OF WELL

DEPTH (feet bgl) FROM	TO	THICKNESS (feet)	COLOR AND TYPE OF MATERIAL ENCOUNTERED - INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES (attach supplemental sheets to fully describe all units)	WATER BEARING? (YES / NO)	ESTIMATED YIELD FOR WATER-BEARING ZONES (gpm)
0	1'	1'	BROWNISH TAN VERY FINE SAND - CALICHE	○ Y ● N	N/A
1'	3'	2'	TAN FINE SAND - CALICHE - CEMENT - SANDSTONE	○ Y ● N	N/A
3'	14'	11'	TAN FINE CEMENT SANDSTONE- SAND	○ Y ● N	N/A
14'	16'	2'	LIGHT TAN VERY FINE SAND SILICEOUS SANDSTONE	○ Y ● N	N/A
16'	22'	6'	TAN VERY FINE SAND - CEMENT SANDSTONE	○ Y ● N	N/A
22'	26'	4'	BEIGE SILTY SAND - SILT STONE	○ Y ● N	N/A
26'	27'	1'	SILICEOUS SANDSTONE TAN	○ Y ● N	N/A
27'	33'	6'	TAN SILTY SAND - SILT STONE	○ Y ● N	N/A
33'	37'	4'	SILICEOUS SANDSTONE TAN	○ Y ● N	N/A
37'	44'	7'	REDDISH TAN SILTY SAND	● Y ○ N	N/A
44'	50'	6'	REDDISH FINE SAND - CEMENT SANDSTONE	● Y ○ N	N/A
TD	50'			○ Y ○ N	
				○ Y ○ N	
				○ Y ○ N	
				○ Y ○ N	
				○ Y ○ N	
				○ Y ○ N	
				○ Y ○ N	
				○ Y ○ N	
				○ Y ○ N	
				○ Y ○ N	

METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA: ○ PUMP ○ AIR LIFT ○ BAILER ○ OTHER – SPECIFY:

TOTAL ESTIMATED WELL YIELD (gpm):

5. TEST; RIG SUPERVISION

WELL TEST: TEST RESULTS - ATTACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUDING DISCHARGE METHOD, START TIME, END TIME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER THE TESTING PERIOD.

MISCELLANEOUS INFORMATION:

SOIL BORING ONLY-SOIL BORING WAS PLUGGED AND ABANDONED UPON COMPLETION OF SAMPLING.
LEA CO, NM

PRINT NAME(S) OF DRILL RIG SUPERVISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONSTRUCTION OTHER THAN LICENSEE:

6. SIGNATURE

THE UNDERSIGNED HEREBY CERTIFIES THAT, TO THE BEST OF HIS OR HER KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT RECORD OF THE ABOVE DESCRIBED HOLE AND THAT HE OR SHE WILL FILE THIS WELL RECORD WITH THE STATE ENGINEER AND THE PERMIT HOLDER WITHIN 20 DAYS AFTER COMPLETION OF WELL DRILLING:

[signature] Edward Boyd — SIGNATURE OF DRILLER / PRINT SIGNEE NAME

3-7-14 — DATE

FOR OSE INTERNAL USE — WR-20 WELL RECORD & LOG (Version 06/08/2012)

FILE NUMBER	L13515	POD NUMBER	1	TRN NUMBER	540797
LOCATION	19S.38E.4.2.3.4			PAGE 2 OF 2	

Scott A. Verhines, P.E.
State Engineer

Roswell Office
1900 WEST SECOND STREET
ROSWELL, NM 88201

STATE OF NEW MEXICO
OFFICE OF THE STATE ENGINEER

Trn Nbr: 540797
File Nbr: L 13515
Well File Nbr: L 13515 POD1

Jul. 22, 2014

MICHAEL JENNINGS
CB&I ENVIRONMENTAL & INFR INC
9201 EAST DRY CREEK ROAD
CENTENNIAL, CO 80112

Greetings:

The above numbered permit was issued in your name on 02/10/2014.

The Well Record was received in this office on 03/10/2014, stating that it had been completed on 03/03/2014, and was a dry well. The well is to be plugged or capped or otherwise maintained in a manner satisfactory to the State Engineer.

Please note that another well can be drilled under this permit if the well is completed and the well log filed on or before 02/28/2015.

If you have any questions, please feel free to contact us.

Sincerely,

Yolanda Mendiola
(575)622-6521

drywell

WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

www.ose.state.nm.us

1. GENERAL AND WELL LOCATION

OSE POD NUMBER (WELL NUMBER): (POD2) CB&I SB-2	OSE FILE NUMBER(S): L-13515
WELL OWNER NAME(S): CB&I ENVIRONMENTAL & INFRASTRUCTURE, INC	PHONE (OPTIONAL):
WELL OWNER MAILING ADDRESS: 9201 E DRY CREEK ROAD	CITY: CENTENNIAL STATE: CO ZIP: 80112

WELL LOCATION (FROM GPS)	DEGREES	MINUTES	SECONDS	
LATITUDE	32	41	22	N
LONGITUDE	103	09	09	W

* ACCURACY REQUIRED: ONE TENTH OF A SECOND
* DATUM REQUIRED: WGS 84

DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS - PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE:
FROM GRIMES & MARLIN GO W TURN L ON CECIL & GO S TO DEAD END. NE1/4, SW1/4, NE1/4, SEC 4. TWP 19S, RANGE 38E

2. DRILLING & CASING INFORMATION

LICENSE NUMBER	NAME OF LICENSED DRILLER	NAME OF WELL DRILLING COMPANY
WD-1711	EDWARD BRYAN	STRAUB CORPORATION

DRILLING STARTED	DRILLING ENDED	DEPTH OF COMPLETED WELL (FT)	BORE HOLE DEPTH (FT)	DEPTH WATER FIRST ENCOUNTERED (FT)
3-3-14	3-3-14	55'	55'	NA

COMPLETED WELL IS: ( ) ARTESIAN (●) DRY HOLE ( ) SHALLOW (UNCONFINED)

STATIC WATER LEVEL IN COMPLETED WELL (FT): 43'

DRILLING FLUID: (●) AIR ( ) MUD ADDITIVES – SPECIFY:

DRILLING METHOD: (●) ROTARY ( ) HAMMER ( ) CABLE TOOL ( ) OTHER – SPECIFY:

DEPTH (feet bgl) FROM	TO	BORE HOLE DIAM (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)	CASING CONNECTION TYPE	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)	SLOT SIZE (inches)
0	55'	5"	N/A	N/A	N/A	N/A	N/A

STATE ENGINEER OFFICE 2014 JAN 10 PM 4:43

3. ANNULAR MATERIAL

DEPTH (feet bgl) FROM	TO	BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL	AMOUNT (cubic feet)	METHOD OF PLACEMENT
0	55'	5"	6 BAGS OF CEMENT, BENTONITE, GROUT		TREMIE

FOR OSE INTERNAL USE

WR-20 WELL RECORD & LOG (Version 06/08/2012)

FILE NUMBER: L 13515	POD NUMBER 2	TRN NUMBER 540797
LOCATION 19S. 38E. 4. 2. 3. 4		PAGE 1 OF 2

4. HYDROGEOLOGIC LOG OF WELL

DEPTH (feet bgl) FROM	TO	THICKNESS (feet)	COLOR AND TYPE OF MATERIAL ENCOUNTERED - INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES (attach supplemental sheets to fully describe all units)	WATER BEARING? (YES / NO)	ESTIMATED YIELD FOR WATER-BEARING ZONES (gpm)
0	14'	14'	TAN VERY FINE SAND - CALICHE - CEMENT SANDSTONE	○ Y ● N	N/A
14'	15'	1'	TAN SILICEOUS SANDSTONE - TAN FINE SAND	○ Y ● N	N/A
15'	31'	16'	TAN VERY FINE SAND - CEMENT SANDSTONE	○ Y ● N	N/A
31'	35'	4'	TAN SILTY SAND	○ Y ● N	N/A
35'	39'	4'	TAN SILICEOUS SANDSTONE - VERY FINE SAND	○ Y ● N	N/A
39'	55'	16'	TAN VERY FINE SAND	● Y ○ N	N/A
TD	55'			● Y ○ N	
				○ Y ○ N	
				○ Y ○ N	
				○ Y ○ N	
				○ Y ○ N	
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				○ Y ○ N	
				○ Y ○ N	
				○ Y ○ N	

METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA: ○ PUMP ○ AIR LIFT ○ BAILER ○ OTHER – SPECIFY:

TOTAL ESTIMATED WELL YIELD (gpm):

5. TEST; RIG SUPERVISION

WELL TEST: TEST RESULTS - ATTACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUDING DISCHARGE METHOD, START TIME, END TIME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER THE TESTING PERIOD.

MISCELLANEOUS INFORMATION:

SOIL BORING ONLY-SOIL BORING WAS PLUGGED AND ABANDONED UPON COMPLETION OF SAMPLING.
LEA CO, NM

PRINT NAME(S) OF DRILL RIG SUPERVISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONSTRUCTION OTHER THAN LICENSEE:

6. SIGNATURE

THE UNDERSIGNED HEREBY CERTIFIES THAT, TO THE BEST OF HIS OR HER KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT RECORD OF THE ABOVE DESCRIBED HOLE AND THAT HE OR SHE WILL FILE THIS WELL RECORD WITH THE STATE ENGINEER AND THE PERMIT HOLDER WITHIN 20 DAYS AFTER COMPLETION OF WELL DRILLING:

[signature] Edward Brown 3-7-2014

SIGNATURE OF DRILLER / PRINT SIGNEE NAME DATE

FOR OSE INTERNAL USE WR-20 WELL RECORD & LOG (Version 06/08/2012)

FILE NUMBER	L-13515	POD NUMBER	2	TRN NUMBER	540797
LOCATION	19S.38E.4.2.3.4				PAGE 2 OF 2

Scott A. Verhines, P.E.
State Engineer

Roswell Office
1900 WEST SECOND STREET
ROSWELL, NM 88201

STATE OF NEW MEXICO
OFFICE OF THE STATE ENGINEER

Trn Nbr: 540797
File Nbr: L 13515
Well File Nbr: L 13515 POD2

Jul. 22, 2014

MICHAEL JENNINGS
CB&I ENVIRONMENTAL & INFR INC
9201 EAST DRY CREEK ROAD
CENTENNIAL, CO 80112

Greetings:

The above numbered permit was issued in your name on 02/10/2014.

The Well Record was received in this office on 03/10/2014, stating that it had been completed on 03/03/2014, and was a dry well. The well is to be plugged or capped or otherwise maintained in a manner satisfactory to the State Engineer.

Please note that another well can be drilled under this permit if the well is completed and the well log filed on or before 02/28/2015.

If you have any questions, please feel free to contact us.

Sincerely,

Yolanda Mendiola
(575)622-6521

drywell

WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

www.ose.state.nm.us

1. GENERAL AND WELL LOCATION

OSE POD NUMBER (WELL NUMBER): (POD3) CB&I SB-3	OSE FILE NUMBER(S): L-13515
WELL OWNER NAME(S): CB&I ENVIRONMENTAL & INFRASTRUCTURE, INC	PHONE (OPTIONAL):
WELL OWNER MAILING ADDRESS: 9201 E DRY CREEK ROAD	CITY: CENTENNIAL STATE: CO ZIP: 80112

WELL LOCATION (FROM GPS)	DEGREES	MINUTES	SECONDS	
LATITUDE	32	41	22	N
LONGITUDE	103	09	10	W

* ACCURACY REQUIRED: ONE TENTH OF A SECOND
* DATUM REQUIRED: WGS 84

DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS - PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE:
FROM GRIMES & MARLIN GO W TURN L ON CECIL & GO S TO DEAD END. NE1/4, SW1/4, NE1/4, SEC 4. TWP 19S, RANGE 38E

2. DRILLING & CASING INFORMATION

LICENSE NUMBER	NAME OF LICENSED DRILLER	NAME OF WELL DRILLING COMPANY
WD-1711	EDWARD BRYAN	STRAUB CORPORATION

DRILLING STARTED	DRILLING ENDED	DEPTH OF COMPLETED WELL (FT)	BORE HOLE DEPTH (FT)	DEPTH WATER FIRST ENCOUNTERED (FT)
3-3-14	3-3-14	50'	50'	NA

COMPLETED WELL IS: ( ) ARTESIAN (●) DRY HOLE ( ) SHALLOW (UNCONFINED) — STATIC WATER LEVEL IN COMPLETED WELL (FT): 43'

DRILLING FLUID: (●) AIR ( ) MUD ADDITIVES – SPECIFY:

DRILLING METHOD: (●) ROTARY ( ) HAMMER ( ) CABLE TOOL ( ) OTHER – SPECIFY:

DEPTH (feet bgl) FROM	TO	BORE HOLE DIAM (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)	CASING CONNECTION TYPE	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)	SLOT SIZE (inches)
0	50'	5"	N/A	N/A	N/A	N/A	N/A

STATE ENGINEER OFFICE 2014 MAR 10 PM 4:18

3. ANNULAR MATERIAL

DEPTH (feet bgl) FROM	TO	BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL	AMOUNT (cubic feet)	METHOD OF PLACEMENT
0	50'	5"	6 BAGS OF CEMENT, BENTONITE, GROUT		TREMIE

FOR OSE INTERNAL USE

WR-20 WELL RECORD & LOG (Version 06/08/2012)

FILE NUMBER	L-13515	POD NUMBER	3	TRN NUMBER	540797
LOCATION	19S.38E.4.2.3.4				PAGE 1 OF 2

4. HYDROGEOLOGIC LOG OF WELL

DEPTH (feet bgl) FROM	TO	THICKNESS (feet)	COLOR AND TYPE OF MATERIAL ENCOUNTERED - INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES (attach supplemental sheets to fully describe all units)	WATER BEARING? (YES / NO)	ESTIMATED YIELD FOR WATER-BEARING ZONES (gpm)
0	5'	5'	TAN FINE SAND - CALICHE - SANDSTONE	○ Y ● N	N/A
5'	14'	9'	TAN SAND - CEMENT SANDSTONE	○ Y ● N	N/A
14'	15'	1'	TAN SILICEOUS SANDSTONE - TAN VERY FINE SAND	○ Y ● N	N/A
15'	36'	21'	TAN VERY FINE SAND - CEMENT SANDSTONE	○ Y ● N	N/A
36'	39'	3'	TAN SILICEOUS SANDSTONE - TAN SILTY SAND	○ Y ● N	N/A
39'	50'	11'	TAN VERY FINE SAND CEMENT SANDSTONE	● Y ○ N	N/A
TD	50'			● Y ○ N	
				○ Y ○ N	
				○ Y ○ N	
				○ Y ○ N	
				○ Y ○ N	
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				○ Y ○ N	
				○ Y ○ N	
				○ Y ○ N	
				○ Y ○ N	
				○ Y ○ N	

METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA: ○ PUMP ○ AIR LIFT ○ BAILER ○ OTHER – SPECIFY:

TOTAL ESTIMATED WELL YIELD (gpm):

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WELL TEST: TEST RESULTS - ATTACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUDING DISCHARGE METHOD, START TIME, END TIME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER THE TESTING PERIOD.

MISCELLANEOUS INFORMATION:

SOIL BORING ONLY-SOIL BORING WAS PLUGGED AND ABANDONED UPON COMPLETION OF SAMPLING.
LEA CO, NM

PRINT NAME(S) OF DRILL RIG SUPERVISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONSTRUCTION OTHER THAN LICENSEE:

6. SIGNATURE

THE UNDERSIGNED HEREBY CERTIFIES THAT, TO THE BEST OF HIS OR HER KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT RECORD OF THE ABOVE DESCRIBED HOLE AND THAT HE OR SHE WILL FILE THIS WELL RECORD WITH THE STATE ENGINEER AND THE PERMIT HOLDER WITHIN 20 DAYS AFTER COMPLETION OF WELL DRILLING:

Edward Bryan — SIGNATURE OF DRILLER / PRINT SIGNEE NAME

3-7-14 — DATE

FOR OSE INTERNAL USE

WR-20 WELL RECORD & LOG (Version 06/08/2012)

FILE NUMBER	L 13515	POD NUMBER	3	TRN NUMBER	540797
LOCATION	19S.38E.4.2.3.4				PAGE 2 OF 2

Scott A. Verhines, P.E.
State Engineer

Roswell Office
1900 WEST SECOND STREET
ROSWELL, NM 88201

STATE OF NEW MEXICO
OFFICE OF THE STATE ENGINEER

Trn Nbr: 540797
File Nbr: L 13515
Well File Nbr: L 13515 POD3

Jul. 22, 2014

MICHAEL JENNINGS
CB&I ENVIRONMENTAL & INFR INC
9201 EAST DRY CREEK ROAD
CENTENNIAL, CO 80112

Greetings:

The above numbered permit was issued in your name on 02/10/2014.

The Well Record was received in this office on 03/10/2014, stating that it had been completed on 03/03/2014, and was a dry well. The well is to be plugged or capped or otherwise maintained in a manner satisfactory to the State Engineer.

Please note that another well can be drilled under this permit if the well is completed and the well log filed on or before 02/28/2015.

If you have any questions, please feel free to contact us.

Sincerely,

Yolanda Mendiola
(575)622-6521

drywell

WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

www.ose.state.nm.us

1. GENERAL AND WELL LOCATION

OSE POD NUMBER (WELL NUMBER): (POD4) CB&I SB-4	OSE FILE NUMBER(S): L-13515
WELL OWNER NAME(S): CB&I ENVIRONMENTAL & INFRASTRUCTURE, INC	PHONE (OPTIONAL):
WELL OWNER MAILING ADDRESS: 9201 E DRY CREEK ROAD	CITY: CENTENNIAL STATE: CO ZIP: 80112

WELL LOCATION (FROM GPS)	DEGREES	MINUTES	SECONDS	
LATITUDE	32	41	33	N
LONGITUDE	103	08	57	W

* ACCURACY REQUIRED: ONE TENTH OF A SECOND
* DATUM REQUIRED: WGS 84

DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS - PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE:
FROM GRIMES & MARLIN GO W TURN L ON CECIL & GO S TO DEAD END. NE1/4, SW1/4, NE1/4, SEC 4. TWP 19S, RANGE 38E

2. DRILLING & CASING INFORMATION

LICENSE NUMBER	NAME OF LICENSED DRILLER	NAME OF WELL DRILLING COMPANY
WD-1711	EDWARD BRYAN	STRAUB CORPORATION

DRILLING STARTED	DRILLING ENDED	DEPTH OF COMPLETED WELL (FT)	BORE HOLE DEPTH (FT)	DEPTH WATER FIRST ENCOUNTERED (FT)
3-3-14	3-3-14	50'	50'	NA

STATIC WATER LEVEL IN COMPLETED WELL (FT): N/A

COMPLETED WELL IS: ( ) ARTESIAN (●) DRY HOLE ( ) SHALLOW (UNCONFINED)

DRILLING FLUID: (●) AIR ( ) MUD ADDITIVES – SPECIFY:

DRILLING METHOD: (●) ROTARY ( ) HAMMER ( ) CABLE TOOL ( ) OTHER – SPECIFY:

DEPTH (feet bgl) FROM	TO	BORE HOLE DIAM (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)	CASING CONNECTION TYPE	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)	SLOT SIZE (inches)
0	50'	5"	N/A	N/A	N/A	N/A	N/A

3. ANNULAR MATERIAL

DEPTH (feet bgl) FROM	TO	BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL	AMOUNT (cubic feet)	METHOD OF PLACEMENT
0	50'	5"	6 BAGS OF CEMENT, BENTONITE, GROUT		TREMIE

FOR OSE INTERNAL USE

WR-20 WELL RECORD & LOG (Version 06/08/2012)

FILE NUMBER	L 13515	POD NUMBER	4	TRN NUMBER	540797
LOCATION	19S.38E.4.2.3.2				PAGE 1 OF 2

4. HYDROGEOLOGIC LOG OF WELL

DEPTH (feet bgl) FROM	TO	THICKNESS (feet)	COLOR AND TYPE OF MATERIAL ENCOUNTERED - INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES (attach supplemental sheets to fully describe all units)	WATER BEARING? (YES / NO)	ESTIMATED YIELD FOR WATER-BEARING ZONES (gpm)
0	2'	2'	TAN FINE SAND - CALICHE - CEMENT SANDSTONE	○ Y ● N	N/A
2'	7'	5'	TAN VERY FINE SAND - CEMENT SANDSTONE	○ Y ● N	N/A
7'	18'	11'	BEIGE SILTY SAND SILT STONE	○ Y ● N	N/A
18'	19'	1'	TAN SILTY SAND - SILICEOUS SANDSTONE	○ Y ● N	N/A
19'	34'	15'	BEIGE SILTY SAND - SILT STONE	○ Y ● N	N/A
34'	39'	5'	TAN VERY FINE SAND - SILICEOUS SANDSTONE	○ Y ● N	N/A
39'	50'	11'	TAN VERY FINE SAND - CEMENT SANDSTONE	○ Y ● N	N/A
TD	50'			○ Y ○ N	
				○ Y ○ N	
				○ Y ○ N	
				○ Y ○ N	
				○ Y ○ N	
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				○ Y ○ N	
				○ Y ○ N	
				○ Y ○ N	
				○ Y ○ N	
				○ Y ○ N	

METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA: ○ PUMP ○ AIR LIFT ○ BAILER ○ OTHER – SPECIFY:

TOTAL ESTIMATED WELL YIELD (gpm):

5. TEST; RIG SUPERVISION

WELL TEST: TEST RESULTS - ATTACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUDING DISCHARGE METHOD, START TIME, END TIME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER THE TESTING PERIOD.

MISCELLANEOUS INFORMATION:

SOIL BORING ONLY-SOIL BORING WAS PLUGGED AND ABANDONED UPON COMPLETION OF SAMPLING.
LEA CO, NM

PRINT NAME(S) OF DRILL RIG SUPERVISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONSTRUCTION OTHER THAN LICENSEE:

6. SIGNATURE

THE UNDERSIGNED HEREBY CERTIFIES THAT, TO THE BEST OF HIS OR HER KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT RECORD OF THE ABOVE DESCRIBED HOLE AND THAT HE OR SHE WILL FILE THIS WELL RECORD WITH THE STATE ENGINEER AND THE PERMIT HOLDER WITHIN 20 DAYS AFTER COMPLETION OF WELL DRILLING:

[signature] EDWARD BAKER — SIGNATURE OF DRILLER / PRINT SIGNEE NAME

3-7-14 — DATE

FOR OSE INTERNAL USE

WR-20 WELL RECORD & LOG (Version 06/08/2012)

FILE NUMBER	L 13515	POD NUMBER	4	TRN NUMBER	540797
LOCATION	19S.38E.4.2.3.2				PAGE 2 OF 2

Scott A. Verhines, P.E.
State Engineer

Roswell Office
1900 WEST SECOND STREET
ROSWELL, NM 88201

STATE OF NEW MEXICO
OFFICE OF THE STATE ENGINEER

Trn Nbr: 540797
File Nbr: L 13515
Well File Nbr: L 13515 POD4

Jul. 15, 2014

MICHAEL JENNINGS
CB&I ENVIRONMENTAL & INFR. INC
9201 EAST DRY CREEK ROAD
CENTENNIAL, CO 80112

Greetings:

The above numbered permit was issued in your name on 02/10/2014.

The Well Record was received in this office on 03/10/2014, stating that it had been completed on 03/03/2014, and was a dry well. The well is to be plugged or capped or otherwise maintained in a manner satisfactory to the State Engineer.

Please note that another well can be drilled under this permit if the well is completed and the well log filed on or before 02/28/2015.

If you have any questions, please feel free to contact us.

Sincerely,

Yolanda Mendiola
(575)622-6521

WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

www.ose.state.nm.us

1. GENERAL AND WELL LOCATION

OSE POD NUMBER (WELL NUMBER): (POD5) CB&I SB-5	OSE FILE NUMBER(S): L-13515
WELL OWNER NAME(S): CB&I ENVIRONMENTAL & INFRASTRUCTURE, INC	PHONE (OPTIONAL):
WELL OWNER MAILING ADDRESS: 9201 E DRY CREEK ROAD	CITY: CENTENNIAL STATE: CO ZIP: 80112

WELL LOCATION (FROM GPS)	DEGREES	MINUTES	SECONDS	
LATITUDE	32	41	33	N
LONGITUDE	103	08	59	W

* ACCURACY REQUIRED: ONE TENTH OF A SECOND
* DATUM REQUIRED: WGS 84

DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS - PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE:
FROM GRIMES & MARLIN GO W TURN L ON CECIL & GO S TO DEAD END. NE1/4, SW1/4, NE1/4, SEC 4. TWP 19S, RANGE 38E

2. DRILLING & CASING INFORMATION

LICENSE NUMBER	NAME OF LICENSED DRILLER	NAME OF WELL DRILLING COMPANY
WD-1711	EDWARD BRYAN	STRAUB CORPORATION

DRILLING STARTED	DRILLING ENDED	DEPTH OF COMPLETED WELL (FT)	BORE HOLE DEPTH (FT)	DEPTH WATER FIRST ENCOUNTERED (FT)
3-4-14	3-4-14	60'	60'	NA

COMPLETED WELL IS: ( ) ARTESIAN (•) DRY HOLE ( ) SHALLOW (UNCONFINED)

STATIC WATER LEVEL IN COMPLETED WELL (FT): N/A

DRILLING FLUID: (•) AIR ( ) MUD ADDITIVES - SPECIFY:

DRILLING METHOD: ( ) ROTARY ( ) HAMMER ( ) CABLE TOOL ( ) OTHER - SPECIFY:

DEPTH (feet bgl) FROM	TO	BORE HOLE DIAM (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)	CASING CONNECTION TYPE	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)	SLOT SIZE (inches)
0	60'	5"	N/A	N/A	N/A	N/A	N/A

3. ANNULAR MATERIAL

DEPTH (feet bgl) FROM	TO	BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL	AMOUNT (cubic feet)	METHOD OF PLACEMENT
0	60'	5"	6 BAGS OF CEMENT, BENTONITE, GROUT		TREMIE

FOR OSE INTERNAL USE

WR-20 WELL RECORD & LOG (Version 06/08/2012)

FILE NUMBER	L 13515	POD NUMBER	5	TRN NUMBER	540797
LOCATION	19S.38E.4.23.2				PAGE 1 OF 2

4. HYDROGEOLOGIC LOG OF WELL

DEPTH (feet bgl) FROM	TO	THICKNESS (feet)	COLOR AND TYPE OF MATERIAL ENCOUNTERED - INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES (attach supplemental sheets to fully describe all units)	WATER BEARING? (YES / NO)	ESTIMATED YIELD FOR WATER-BEARING ZONES (gpm)
0	2'	2'	CALICHE - TAN FINE SAND - CEMENT SANDSTONE	○ Y ● N	N/A
2'	35'	33'	TAN VERY FINE SAND CEMENT SANDSTONE	○ Y ● N	N/A
35	40'	5'	TAN SILICEOUS SANDSTONE (VERY DENSE)	○ Y ● N	N/A
40'	60'	20'	TAN VERY FINE SAND - CEMENT SANDSTONE	○ Y ● N	N/A
TD	60'			○ Y ○ N	
				○ Y ○ N	
				○ Y ○ N	
				○ Y ○ N	
				○ Y ○ N	
				○ Y ○ N	
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				○ Y ○ N	
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				○ Y ○ N	
				○ Y ○ N	

METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA: ○ PUMP ○ AIR LIFT ○ BAILER ○ OTHER – SPECIFY:

TOTAL ESTIMATED WELL YIELD (gpm):

5. TEST; RIG SUPERVISION

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LEA CO, NM

PRINT NAME(S) OF DRILL RIG SUPERVISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONSTRUCTION OTHER THAN LICENSEE:

6. SIGNATURE

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Elaine Zayas — Elaine Zayas — 8-7-14

SIGNATURE OF DRILLER / PRINT SIGNEE NAME — DATE

FOR OSE INTERNAL USE — WR-20 WELL RECORD & LOG (Version 06/08/2012)

FILE NUMBER	L13515	POD NUMBER	S	TRN NUMBER	540797
LOCATION	19S.38E.4.2.3.2				PAGE 2 OF 2

Scott A. Verhines, P.E.
State Engineer

Roswell Office
1900 WEST SECOND STREET
ROSWELL, NM 88201

STATE OF NEW MEXICO
OFFICE OF THE STATE ENGINEER

Trn Nbr: 540797
File Nbr: L 13515
Well File Nbr: L 13515 POD5

Jul. 15, 2014

MICHAEL JENNINGS
CB&I ENVIRONMENTAL & INFR. INC
9201 EAST DRY CREEK ROAD
CENTENNIAL, CO 80112

Greetings:

The above numbered permit was issued in your name on 02/10/2014.

The Well Record was received in this office on 03/10/2014, stating that it had been completed on 03/04/2014, and was a dry well. The well is to be plugged or capped or otherwise maintained in a manner satisfactory to the State Engineer.

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If you have any questions, please feel free to contact us.

Sincerely,

Yolanda Mendiola
(575)622-6521

drywell

WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

www.ose.state.nm.us

1. GENERAL AND WELL LOCATION

OSE POD NUMBER (WELL NUMBER): (POD6) CB&I SB-6	OSE FILE NUMBER(S): L-13515
WELL OWNER NAME(S): CB&I ENVIRONMENTAL & INFRASTRUCTURE, INC	PHONE (OPTIONAL):
WELL OWNER MAILING ADDRESS: 9201 E DRY CREEK ROAD	CITY: CENTENNIAL STATE: CO ZIP: 80112

WELL LOCATION (FROM GPS)	DEGREES	MINUTES	SECONDS	
LATITUDE	32	41	33	N
LONGITUDE	103	09	00	W

* ACCURACY REQUIRED: ONE TENTH OF A SECOND
* DATUM REQUIRED: WGS 84

DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS - PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE

FROM GRIMES & MARLIN GO W TURN L ON CECIL & GO S TO DEAD END. NE1/4, SW1/4, NE1/4, SEC 4. TWP 19S, RANGE 38E

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LICENSE NUMBER	NAME OF LICENSED DRILLER	NAME OF WELL DRILLING COMPANY
WD-1711	EDWARD BRYAN	STRAUB CORPORATION

DRILLING STARTED	DRILLING ENDED	DEPTH OF COMPLETED WELL (FT)	BORE HOLE DEPTH (FT)	DEPTH WATER FIRST ENCOUNTERED (FT)
3-4-14	3-4-14	50'	50'	NA

COMPLETED WELL IS: ( ) ARTESIAN (●) DRY HOLE ( ) SHALLOW (UNCONFINED) — STATIC WATER LEVEL IN COMPLETED WELL (FT): N/A

DRILLING FLUID: (●) AIR ( ) MUD ADDITIVES – SPECIFY:

DRILLING METHOD: (●) ROTARY ( ) HAMMER ( ) CABLE TOOL ( ) OTHER – SPECIFY:

DEPTH (feet bgl) FROM	TO	BORE HOLE DIAM (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)	CASING CONNECTION TYPE	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)	SLOT SIZE (inches)
0	50'	5"	N/A	N/A	N/A	N/A	N/A

3. ANNULAR MATERIAL

DEPTH (feet bgl) FROM	TO	BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL	AMOUNT (cubic feet)	METHOD OF PLACEMENT
0	50'	5"	6 BAGS OF CEMENT, BENTONITE, GROUT		TREMIE

STATE ENGINEER OFFICE 2014 MAR 10 P 3:58

FOR OSE INTERNAL USE — WR-20 WELL RECORD & LOG (Version 06/08/2012)

FILE NUMBER	L13515	POD NUMBER	6	TRN NUMBER	540797
LOCATION	19S.38E.4.2.3.2			PAGE 1 OF 2	

4. HYDROGEOLOGIC LOG OF WELL

DEPTH (feet bgl) FROM	TO	THICKNESS (feet)	COLOR AND TYPE OF MATERIAL ENCOUNTERED - INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES (attach supplemental sheets to fully describe all units)	WATER BEARING? (YES / NO)	ESTIMATED YIELD FOR WATER-BEARING ZONES (gpm)
0	2'	2'	CALICHE - TAN FINE SAND - CEMENT SANDSTONE	○ Y ● N	N/A
2'	19'	17'	TAN FINE SAND CEMENT SANDSTONE	○ Y ● N	N/A
19'	21'	2'	TAN SILICEOUS SANDSTONE (VERY DENSE)	○ Y ● N	N/A
21'	34'	13'	TAN VERY FINE SAND - CEMENT SANDSTONE	○ Y ● N	N/A
34'	44'	10'	TAN SILICEOUS SANDSTONE (VERY DENSE)	○ Y ● N	N/A
44'	50'	6'	TAN VERY FINE SAND - CEMENT SANDSTONE	○ Y ● N	N/A
TD	50'			○ Y ○ N	
				○ Y ○ N	
				○ Y ○ N	
				○ Y ○ N	
				○ Y ○ N	
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				○ Y ○ N	

METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA: ○ PUMP ○ AIR LIFT ○ BAILER ○ OTHER – SPECIFY:

TOTAL ESTIMATED WELL YIELD (gpm):

5. TEST; RIG SUPERVISION

WELL TEST: TEST RESULTS - ATTACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUDING DISCHARGE METHOD, START TIME, END TIME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER THE TESTING PERIOD.

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SOIL BORING ONLY-SOIL BORING WAS PLUGGED AND ABANDONED UPON COMPLETION OF SAMPLING.
LEA CO, NM

PRINT NAME(S) OF DRILL RIG SUPERVISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONSTRUCTION OTHER THAN LICENSEE:

6. SIGNATURE

THE UNDERSIGNED HEREBY CERTIFIES THAT, TO THE BEST OF HIS OR HER KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT RECORD OF THE ABOVE DESCRIBED HOLE AND THAT HE OR SHE WILL FILE THIS WELL RECORD WITH THE STATE ENGINEER AND THE PERMIT HOLDER WITHIN 20 DAYS AFTER COMPLETION OF WELL DRILLING:

Edward Bryan — Edward Bryan — 3-7-14

SIGNATURE OF DRILLER / PRINT SIGNEE NAME — DATE

FOR OSE INTERNAL USE — WR-20 WELL RECORD & LOG (Version 06/08/2012)

FILE NUMBER	L 13515	POD NUMBER	6	TRN NUMBER	540797
LOCATION	19S.38E.4.2.3.2				PAGE 2 OF 2

Scott A. Verhines, P.E.
State Engineer

Roswell Office
1900 WEST SECOND STREET
ROSWELL, NM 88201

STATE OF NEW MEXICO
OFFICE OF THE STATE ENGINEER

Trn Nbr: 540797
File Nbr: L 13515
Well File Nbr: L 13515 POD6

Jul. 22, 2014

MICHAEL JENNINGS
CB&I ENVIRONMENTAL & INFR INC
9201 EAST DRY CREEK ROAD
CENTENNIAL, CO 80112

Greetings:

The above numbered permit was issued in your name on 02/10/2014.

The Well Record was received in this office on 03/10/2014, stating that it had been completed on 03/04/2014, and was a dry well. The well is to be plugged or capped or otherwise maintained in a manner satisfactory to the State Engineer.

Please note that another well can be drilled under this permit if the well is completed and the well log filed on or before 02/28/2015.

If you have any questions, please feel free to contact us.

Sincerely,

Yolanda Mendiola
(575)622-6521

drywell

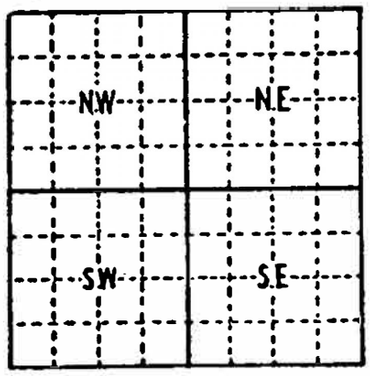
2010 4

WELL RECORD

File No. L 1104
485190

INSTRUCTIONS: This form should be typewritten, and filed in the office of the State Engineer, P. O. Box 1079, Santa Fe, New Mexico, or in the office of the Artesian Well Supervisor, Roswell, New Mexico. Section 5 should be answered only if an old artesian well has been plugged. All other sections should be answered in full in every case regardless of whether the well drilled is shallow or artesian in character. This report must be subscribed and sworn to before a Notary Public.

RECEIVED
JUN 29 1951
STATE ENGINEER
BY



(Plat of 640 Acres)
Locate Well Accurately

Owner of well W E Granath
Street and Number
Post Office Hobbs NM
Well was drilled under Permit No. L 1104 and
is located in the se ¼ sw ¼ ne ¼ of Section 4
Township 19 s, Range 38e
Drilling Contractor J E Barton
Street and Number 920 E Gypsy
Post Office Hobbs NM

Drilling was commenced 6 20, 19 51 Drilling was completed 6 23, 19 51
Elevation at top of casing in feet above sea level
State whether well is shallow or artesian Shallow
Total depth of well 60 feet. Water level upon completion of well 33 feet below land surface.

Sec. 2 PRINCIPAL WATER-BEARING STRATA

No. 1, from 33 to 60, Thickness in feet 27, Formation sand
No. 2, from to, Thickness in feet, Formation
No. 3, from to, Thickness in feet, Formation
No. 4, from to, Thickness in feet, Formation
No. 5, from to, Thickness in feet, Formation

Sec. 3 RECORD OF CASING

Diameter in Inches	Pounds per Foot	Threads per Inch	Name of Manufacturer	Feet of Casing	Type of Shoe	Perforated From	Perforated To	Purpose

Sec. 4 RECORD OF MUDDING AND CEMENTING

Diameter of Hole in Inches	Number of Sacks of Cement	Methods Used	Specific Gravity of Mud	Tons of Clay Used

FILED
JUN 27 1951
OFFICE
ARTESIAN WELL SUPERVISOR
ROSWELL, NEW MEXICO

Sec. 5 PLUGGING RECORD OF OLD WELL

Well is located in the ¼ ¼ ¼ of Section Township
Range Name of plugging contractor
Street and Number Post Office
Tons of clay used Tons of roughage used Type of roughage
Was plugging approved by Artesian Well Supervisor?

Cement plugs were placed as follows:

No. 1 was placed at feet. Number of sacks of cement used
No. 2 was placed at feet. Number of sacks of cement used
No. 3 was placed at feet. Number of sacks of cement used
No. 4 was placed at feet. Number of sacks of cement used
No. 5 was placed at feet. Number of sacks of cement used

(over)

L-1104

Sec. 6

LOG OF WELL

FROM (Depth in Feet)	TO (Depth in Feet)	THICKNESS IN FEET	CLASSIFICATION OF FORMATION
0	20	20	caliche
20	33	13	sand rock
33	60	27	water sand

I, J E Barton, do solemnly swear that, to the best of my knowledge and belief, the foregoing information is a true and correct record of the well for which report is hereby made, insofar as can be determined from all available records.

SUBSCRIBED AND SWORN TO BEFORE ME this 25 day of June, A.D., 1951

Ernest C Darnell
Notary Public

My Commission Expires Nov. 28-1953

Signed J E Barton

Position Driller

Street and Number Box 42

Post Office Hobbs NM

RECEIVED
FEB 9 1953
STATE ENGINEER
BY 485190

This form to be executed in triplicate.

PROOF OF COMPLETION OF WORKS
UNDERGROUND WATERS

Permit No. L-1104

State of New Mexico
County of Lea } ss.

I, W E Granath

of Hobbs, County of Lea

State of New Mexico, being first duly sworn, do hereby certify that I am the owner and holder of a permit to appropriate (appropriate water, repair well, change of location of well) in the Lea County Water Basin (name of underground reservoir, artesian basin, etc.), the waters from such source to be used for domestic purposes under said permit; that said application has been filed and approved in the office of the State Engineer under No. L-1104; that the works necessary to accomplish the appropriation of water in accordance with the terms of said permit have been completed; that all provisions and conditions under which said permit was approved by the State Engineer have been fully complied with; that the following statement of facts is submitted in proof of the completion of said works; and that the said statement and each and all of the items contained therein are true to the best of my knowledge and belief.

W. E. Granath

Subscribed and sworn to before me this 25 day of January 1953

Notary Public.

My commission expires:
My Commission Expires Sept. 24, 1956

STATEMENT

1. Name of appropriator W E GRANATH
2. Postoffice address
3. Underground water supply LEA COUNTY WATER BASIN
4. The well is located in the SE 1/4 quarter of the SW 1/4 quarter of the NE 1/4 quarter of Section 4, Township 19S, Range 38E, N.M.P.M., in LEA COUNTY County.

FILED
FEB 6 1953
OFFICE
ARTESIAN WELL SUPERVISOR
ROSWELL, NEW MEXICO

RECEIVED
JAN 29 1953
STATE ENGINEER
BY

Bill

L-1104

5. Nominal size (outside diameter) of casing or liner six inches.

6. Depth of well 70 feet. 7. Approximate pumping depth 55 feet.

8. Description of pump: make wind mill; type ;

suction lift feet; size and length of column ;

size and number of bowls ; total length feet.

9. Make, type, horsepower, etc., of power plant

10. Capacity of well gals. per min. 11. Is well equipped with gate valve?

12. Name of driller J E Barton

13. Has log of this well been filed with State Engineer or his representative? yes

14. The distribution work consists of reservoirs feet of ditch,

feet of flume, feet of pipe.

15. Size of reservoir feet wide, feet long, feet average

depth, cubic feet capacity, located in the ¼, ¼,

¼ of Section Township, Range

16. Lands to be irrigated acres, located in

17. If there are other sources of water supply for these lands, describe giving file Nos., etc.

18. Works were completed 4/19/ 51 19

19. If above construction replaces an old well to be plugged or abandoned, fill out following:

a. The well abandoned is located in the ¼, ¼, ¼

of Section Township, Range

b. Name of plugging contractor

c. Well was plugged in accordance with terms of permit 19

I hereby certify that I have duly inspected the above works and find them adequate and properly constructed according to the terms and conditions of this permit.

E. S. Minton Jr.
Artesian Well Supervisor (or representative of State Engineer)

Date 2-6-53

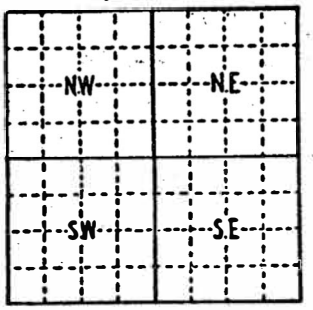
SOUTHWESTERN PUBLISHING CO.

WELL RECORD

File No. 488911

INSTRUCTIONS: This form should be typewritten, and filed in the office of the State Engineer, P. O. Box 1079, Santa Fe, New Mexico, or in the office of the Artesian Well Supervisor, Roswell, New Mexico. Section 5 should be answered only if an old artesian well has been plugged. All other sections should be answered in full in every case, regardless of whether the well drilled is shallow or artesian in character. This report must be subscribed and sworn to before a Notary Public.

Byers Hts Add. Lots 4 & 5



(Plat of 640 Acres)
Locate Well Accurately

Owner of well: Laren & Audie Parrit 323 West Pecana St

Street and Number: box 846

Post Office: Hobbs N M.

Well was drilled under Permit No. L-1345 and

is located in the Lots 4 & 5 ¼ ¼ of Section 4

Township 19s, Range 38e

Drilling Contractor: J E Barton WD14

Street and Number: Box 42

Post Office: Hobbs N M.

Drilling was commenced Feb. 4 -, 19 52 Drilling was completed Feb. 7 -, 19 52

Elevation at top of casing in feet above sea level

State whether well is shallow or artesian: shallow

Total depth of well 76 feet. Water level upon completion of well 56 feet below land surface.

Sec. 2 PRINCIPAL WATER-BEARING STRATA

No. 1, from ... to ..., Thickness in feet ..., Formation ...

No. 2, from 56 to 76, Thickness in feet 20, Formation watersand

No. 3, from ... to ..., Thickness in feet ..., Formation Loose rock

No. 4, from ... to ..., Thickness in feet ..., Formation ...

No. 5, from ... to ..., Thickness in feet ..., Formation ...

Sec. 3 RECORD OF CASING

Diameter in Inches	Pounds per Foot	Threads per Inch	Name of Manufacturer	Feet of Casing	Type of Shoe	Perforated From	Perforated To	Purpose
6				8				curb

Sec. 4 RECORD OF MUDDING AND CEMENTING

Diameter of Hole in Inches	Number of Sacks of Cement	Methods Used	Specific Gravity of Mud	Tons of Clay Used

FILED
FEB 5 1953
OFFICE
ARTESIAN WELL SUPERVISOR
ROSWELL, NEW MEXICO

Sec. 5 PLUGGING RECORD OF OLD WELL

Well is located in the ... ¼ ... ¼ ... ¼ of Section ..., Township ...

Range ... Name of plugging contractor ...

Street and Number ... Post Office ...

Tons of clay used ... Tons of roughage used ... Type of roughage ...

... Was plugging approved by Artesian Well Supervisor? ...

Cement plugs were placed as follows:

No. 1 was placed at ... feet. Number of sacks of cement used ...

No. 2 was placed at ... feet. Number of sacks of cement used ...

No. 3 was placed at ... feet. Number of sacks of cement used ...

No. 4 was placed at ... feet. Number of sacks of cement used ...

No. 5 was placed at ... feet. Number of sacks of cement used ...

FILED
FEB 4 1953
OFFICE
ARTESIAN WELL SUPERVISOR
ROSWELL, NEW MEXICO

(over)

L-1345

19.38.4 2232

Sec. 6

LOG OF WELL

FROM (Depth in Feet)	TO (Depth in Feet)	THICKNESS IN FEET	CLASSIFICATION OF FORMATION
0	2	2	tight soil
2	30	28	caliche
30	46	16	rocksand
46	56	10	sandrock
56	76	20	watersand loose rock

I, _____, do solemnly swear that, to the best of my knowledge and belief, the foregoing information is a true and correct record of the well for which report is hereby made, insofar as can be determined from all available records.

SUBSCRIBED AND SWORN TO BEFORE ME this _____ day of _____, A.D., 19____

_____ Notary Public

My Commission Expires _____

Signed J E Barton WD14

Position Driller

Street and Number Box 42

Post Office Hobbs NM

48991

RECEIVED
FEB 17 1953
STATE ENGINEER
BY

(This form to be executed in triplicate)

PROOF OF COMPLETION OF WORKS

UNDERGROUND WATERS

Date of Receipt February 5, 1952 Permit No. L - 1345

1. Name of permittee Laren and Audrie Parrott

P. O. address Box 846, City and State Hobbs, New Mexico

Permit No. L - 1345 to Drill
(appropriate, repair well, change location of well)

in the UNDERGROUND STREAM
(name of underground reservoir, artesian basin, etc.)

2. Description of well: location, ¼, Lots 4 & 5 ¼, of Section ~~Byers Hights~~ 4

Township ~~Hobbs~~ 19, Range 38 E; total depth, 76 feet; outside diameter of top casing (or hole, if uncased) 7" inches; if artesian, is well equipped with gate valve? jet pump; name and address of driller, J. E. Barton, Hobbs, New Mexico;

Date drilled, February 7, 19 52

3. Record of Pumping Test (to be supplied by person or firm making test; Name and address of person making test, None;

date of test, ..., 19....; depth to water before test, ...feet, and immediately afterward ....feet; Length of test, ...hours; average discharge, ...G.P.M.;

Specific capacity of well, ... gal. per min. per ft. of drawdown.

4. Description of pump: Make, ½ H. P. Jet Water Pump-Wards Centrifugal Jet System;

type, ...; if turbine type, give size of column, ...inches; diameter of bowls....inches; number of bowls....; length of suction pipe, 56 feet; total length of column, bowls and suction pipe, ...feet; if centrifugal type, give size of pump....inches; if other type, describe, 1" Pressure Pipe - 1¼" Suction Pipe

rated capacity of pump (if known)....G.P.M., at....rev. per min., from a depth of ....feet.

5. Description of power plant: make, ~~ELECTRIC MOTOR~~ WARDS;

type, 220 Volts A C; rated horsepower (if available) ½ H.P.; type of drive connection to pump, DIRECT; date of installation of power plant, 2-15-52, 19....

FILED
FEB 5 1953
ARTESIAN WELL SUPERVISOR
ROSWELL, NEW MEXICO

6. Actual discharge of pump, 9 G.P.M., at....rev. per min., from a depth of 56 feet;

Date of test....., 19....; Name and address of dealer supplying pump and power plant, MONTGOMERY WARD

FORT WORTH, TEXAS

FILED
FEB 16 1953
OFFICE
ARTESIAN WELL SUPERVISOR
ROSWELL, NEW MEXICO

FILED
FEB 4 1953
ARTESIAN WELL SUPERVISOR
ROSWELL, NEW MEXICO

L-1345

7. Permit acreage to be served by well, 1 acres, to receive a total of 3 acre feet of water allowed by permit.

8. The distribution system consists of overnight storage reservoir..... (yes or no), and ..... feet of main canal; give approximate capacity of reservoir or tank (if any)..... cubic feet.

9. If above construction replaces an old well to be plugged or abandoned, fill out the following: the well abandoned is located in the ..... ¼ ..... ¼, ... ¼ of Section ....., Township ....., Range .....;

Name of plugging contractor, ...;

Well was plugged in accordance with terms of permit ....., 19.....

10. Give date "Well Record" was filed with State Engineer's Office, 2 – 5, 1953

11. Pump and power plant were installed and works completed 2 – 15, 1952

The undersigned, owner and holder of Permit No. L-1345, being first duly sworn upon his oath, states that he has read the foregoing statements and that the same are true to the best of his knowledge and belief.

Lorenz Kennett

Subscribed and sworn to before me this 4th day of February, 1953

My commission expires July 15, 1954

John Dillman
Notary Public

Affidavit of State Engineer's Representative

I hereby certify that I have duly inspected the above Works and find them adequate and properly constructed according to the terms and conditions of the permit. Note any exceptions.....

.....

.....

Delbert W. Nelson
Groundwater Supervisor or other representative of State Engineer

Date, 2-16, 1953

L-2411

488561

(This form to be executed in triplicate)

WELL RECORD

Date of Receipt..... Permit No. L-2411

Name of permittee, Stanolind Oil and Gas Company

Street or P.O., Box 68, City and State Hobbs, New Mexico

1. Well location and description: The Shallow (shallow or artesian) well is located in NE ¼, NE ¼, NE ¼ of Section 9, Township T-19-S, Range R-38-E; Elevation of top of casing above sea level, 3600 feet; diameter of hole, 7" inches; total depth, 92 feet; depth to water upon completion, 44 feet; drilling was commenced May 29, 19 54, and completed May 31, 19 54; name of drilling contractor Edward B. Burke Box 306; Address, Hobbs, New Mexico; Driller's License No. WD 111

2. Principal Water-bearing Strata:

	Depth in Feet From	To	Thickness	Description of Water-bearing Formation
No. 1	46	52	6 Ft.	Sand
No. 2	62	88	26 Ft.	Sand
No. 3				
No. 4				
No. 5				

3. Casing Record:

Diameter in Inches	Pounds per ft.	Threads per inch	Depth of Casing or Liner Top	Bottom	Feet of Casing	Type of Shoe	Perforations From	To
7"	21	10			50	No	No	

4. If above construction replaces old well to be abandoned, give location: ¼, ¼, ¼ of Section, Township, Range; name and address of plugging contractor,

date of plugging, 19; describe how well was plugged:

L-2411

19 - 222

5. Log of Well:

Depth in feet From	To	Thickness in feet	Description of Formation
0	1	1	Top Soil
1	24	23	Caliche
24	32	8	Pack Sand
32	37	5	Hard Sand Rock
37	46	9	Light Sand
46	52	6	Water Sand
52	62	10	Hard Sand Rock
62	88	26	Water Sand
88	92	4	Light Sand

The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described well.

Edward B Burke

Licensed Well Driller

Instructions

This form shall be executed, preferably typewritten, in triplicate and filed with the State Engineer's Office at Roswell, New Mexico, within 10 days after drilling has been completed. Data on water-bearing strata and on all formations encountered should be as complete and accurate as possible.

488857

(This form to be executed in triplicate)

WELL RECORD

Date of Receipt May 5, 1954 Permit No. L-2536

Name of permittee, Gackle Drilling Co.

Street or P. O. Box 296, City and State Hobbs, New Mexico

1. Well location and description: The Shallow (shallow or artesian) well is located in ____ ¼, SW ¼, NE ¼ of Section 4, Township 19 S, Range 38 E; Elevation of top of casing above sea level, ____ feet; diameter of hole, 8 inches; total depth, 96 feet; depth to water upon completion, 42 feet; drilling was commenced April 27 19 54 and completed April 28, 1954; name of drilling contractor Ed Burke ____; Address, Hobbs, New Mexico; Driller's License No. WD-111

2. Principal Water-bearing Strata:

	Depth in Feet From	To	Thickness	Description of Water-bearing Formation
No. 1	52	65	13	Water Sand
No. 2	78	96	18	Water Sand
No. 3				
No. 4				
No. 5				

3. Casing Record:

Diameter in Inches	Pounds per ft.	Threads per inch	Depth of Casing or Liner Top	Bottom	Feet of Casing	Type of Shoe	Perforation From	To
7	22	10	0	85	85	None	51	85

4. If above construction replaces old well to be abandoned, give location: ____ ¼, ____ ¼, ____ ¼ of Section ____, Township ____, Range ____; name and address of plugging contractor, ____

date of plugging ____, 19____; describe how well was plugged: ____

STATE ENGINEER-Santa Fe, N. M.
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MAY 17 1954
AM PM
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FILED
MAY 5 1954
OFFICE
GROUND WATER SUPERVISOR
ROSWELL, NEW MEXICO

5. Log of Well:

Depth in Feet From	To	Thickness in feet	Description of Formation
0	23	23	Caliche
23	24	1	Hard Sand Shell
24	39	15	Pack Sand
39	45	6	Hard Shell
45	52	7	Tight Sand
52	65	13	Water Sand
65	78	13	Tight Sand
78	96	18	Water Sand

The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described well.

Edward B Burk
Licensed Well Driller

Instructions

This form shall be executed, preferably typewritten, in triplicate and filed with the State Engineer's Office at Roswell, New Mexico, within 10 days after drilling has been completed. Data on water-bearing strata and on all formations encountered should be as complete and accurate as possible.

(This form to be executed in triplicate)

PROOF OF COMPLETION OF WORKS

UNDERGROUND WATERS

Date of Receipt May 5, 1954 Permit No. L-2536

1. Name of permittee Gackle Drilling Co.

P. O. address Box 296, City and State Hobbs, New Mexico

Permit No. L- to Appropriate water
(appropriate, repair well, change location of well)

in the LEA COUNTY UNDERGROUND BASIN
(name of underground reservoir, artesian basin, etc.)

2. Description of well: location, ¼, ¼, SW ¼, NE of Section 4, Township 19 S, Range 38 E; total depth, 96 feet; outside diameter of top casing (or hole, if uncased) 7" casing inches; if artesian, is well equipped with gate valve? ; name and address of driller, Ed Burke, Hobbs, New Mexico;

Date drilled, April 27 & 28, 19 54

3. Record of Pumping Test (to be supplied by person or firm making test; Name and address of person making test, NONE;

date of test, , 19; depth to water before test, feet, and immediately afterward feet; Length of test, hours; average discharge, G.P.M.;

Specific capacity of well, gal. per min. per ft. of drawdown.

4. Description of pump: Make; Peerless;

type, Turbine; if turbine type, give size of column; 4 inches; diameter of bowls 6 inches; number of bowls 10; length of suction pipe, foot valve feet; total length of column, bowls and suction pipe, 75 feet; if centrifugal type, give size of pump inches; if other type, describe,

;

rated capacity of pump (if known) G.P.M., at rev. per min., from a depth of feet.

5. Description of power plant; make, International ~~Mo~~ U-2;

type, Industrial; rated horsepower (if available) 20; type of drive connection to pump, Belt; date of installation of power plant, April 28, 19 54

6. Actual discharge of pump, Est. 125 G.P.M., at rev. per min., from a depth of feet;

Date of test None, 19; Name and address of dealer supplying pump and power plant, Company owned units

STATE ENGINEER-Santa Fe, N. M.
RECEIVED
MAY 17 1954
AM PM
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FILED
MAY 5 1954
OFFICE
GROUND WATER SUPERVISOR
ROSWELL, NEW MEXICO

L2536

7. Permit acreage to be served by well, ... acres, to receive a total of ..... acre feet of water allowed by permit.

8. The distribution system consists of overnight storage reservoir ....., and ..... feet of main canal; (yes or no)
give approximate capacity of reservoir or tank (if any) ..... cubic feet.

9. If above construction replaces an old well to be plugged or abandoned, fill out the following: the well abandoned is located in the .....¼ ..... ¼ .....¼ of Section....., Township....., Range.....;
Name of plugging contractor, ...;
Well was plugged in accordance with terms of permit....., 19.....

10. Give date "Well Record" was filed with State Engineer's Office, ...April 29....., 19....54

11. Pump and power plant were installed and works completed .....April 28....., 19....54

The undersigned, owner and holder of Permit No....L-....., being first duly sworn upon his oath, states that he has read the foregoing statements and that the same are true to the best of his knowledge and belief.

Gackle Drilling Co.
By: Edward B Burke

Subscribed and sworn to before me this ....29th.... day of ....April....., 19....54.

My commission expires ..Sept. 26, 1957

John W. Sheaman
Notary Public

Affidavit of State Engineer's Representative

I hereby certify that I have duly inspected the above Works and find them adequate and property constructed according to the terms and conditions of the permit. Note any exceptions .....

.....

.....

.....

Jim Wilson
Groundwater Supervisor or other representative of State Engineer

Date, ...May 14..... 19....54

Form WR-23

STATE ENGINEER OFFICE

WELL RECORD

~~203754~~ 490189

INSTRUCTIONS: This form should be executed in triplicate, preferably typewritten, and submitted to the nearest district office of the State Engineer. All sections, except Section 5, shall be answered as completely and accurately as possible when any well is drilled, repaired or deepened. When this form is used as a plugging record, only Section 1A and Section 5 need be completed.

Section 1

(Plat of 640 acres)

(A) Owner of well Curtis V. Myers

Street and Number Box 21

City Hobbs State New Mexico

Well was drilled under Permit No. L-2800 and is located in the SE ¼ SE ¼ SE ¼ of Section 4 Twp. 19S Rge. 38E

(B) Drilling Contractor O. R. Musslewhite License No. WD99

Street and Number Box 56

City Hobbs State New Mexico

Drilling was commenced April 13 19 55

Drilling was completed April 14 19 55

Elevation at top of casing in feet above sea level _____ Total depth of well 85

State whether well is shallow or artesian Shallow Depth to water upon completion 40

Section 2 PRINCIPAL WATER-BEARING STRATA

No.	Depth in Feet From	Depth in Feet To	Thickness in Feet	Description of Water-Bearing Formation
1	60	85	25	Red sand and sand rock
2				
3				
4				
5				

Section 3 RECORD OF CASING

Dia in.	Pounds ft.	Threads in	Depth Top	Depth Bottom	Feet	Type Shoe	Perforations From	Perforations To
6 5/8	20	None	0	85	85	None	60	85

Section 4 RECORD OF MUDDING AND CEMENTING

Depth in Feet From	Depth in Feet To	Diameter Hole in in.	Tons Clay	No. Sacks of Cement	Methods Used

FILED
MAY 2 1955
OFFICE
GROUND WATER SUPERVISOR

Section 5 PLUGGING RECORD

Name of Plugging Contractor _____ License No. _____

Street and Number _____ City _____ State _____

Tons of Clay used _____ Tons of Roughage used _____ Type of roughage _____

Plugging method used _____ Date Plugged _____ 19____

Plugging approved by:

_____ Basin Supervisor

Cement Plugs were placed as follows:

No.	Depth of Plug From	Depth of Plug To	No. of Sacks Used

FOR USE OF STATE ENGINEER ONLY

Date Received 5-2-55

2800 Use Dom Location No. 19.38.4.844

Section 6

LOG OF WELL

Depth in Feet From	Depth in Feet To	Thickness in Feet	Color	Type of Material Encountered
0	1	1		Soil
1	36	35	White	Caliche and rock
35	60	25	Grey	Sandy Shale
60	85	25	Red	Sand-and-Rock

The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above-described well.

O.R. Musselwhite
Well Driller

(This form to be executed in triplicate)

PROOF OF COMPLETION OF WORKS

UNDERGROUND WATERS

Date of Receipt May 2, 1955 Permit No. L-2800

1. Name of permittee Curtis V. Myers

P. O. address Box 21, City and State Hobbs, New Mexico

Permit No. L-2800 to Appropriate
(appropriate, repair well, change location of well)

in the Lea County
(name of underground reservoir, artesian basin, etc.)

2. Description of well: location, ¼, SE ¼, SE ¼, SE of Section 4,

Township 19S, Range 38E; total depth, 85 feet; outside diameter of top casing

(or hole, if uncased) 6 5/8 inches; if artesian, is well equipped with gate valve? ; name

and address of driller, O. R. Musslewhite Box 56 Hobbs, New Mexico;

Date drilled, April 13 & 14, 19 55

3. Record of Pumping Test (to be supplied by person or firm making test; Name and address of person making

test, None;

date of test, , 19 ; depth to water before test, feet, and im-

mediately afterward feet; Length of test, hours; average discharge, G.P.M.;

Specific capacity of well, gal. per min. per ft. of drawdown.

4. Description of pump: Make, 1 HP Jet;

type, ; if turbine type, give size of column, inches; diameter of

bowls inches; number of bowls ; length of suction pipe, feet; total

length of column, bowls and suction pipe, feet; if centrifugal type, give size of pump

inches; if other type, describe,

;

rated capacity of pump (if known) G.P.M., at rev. per min., from a depth of feet.

5. Description of power plant: make, ;

type, ; rated horsepower (if available) ; type of drive connection

to pump, ; date of installation of power plant, , 19

6. Actual discharge of pump, G.P.M., at rev. per min., from a depth of feet;

Date of test, , 19 ; Name and address of dealer supplying pump and power

plant,

RECEIVED
MAY 5 - 1955
AM
7 8 9 10 11 12 1 2 3 4 5 6

FILED
MAY 2 1955
OFFICE
GROUND WATER SUPERVISOR
ROSWELL, NEW MEXICO

7. Permit acreage to be served by well, 1 acres, to receive a total of 3 acre feet of water allowed by permit.

8. The distribution system consists of overnight storage reservoir ..... (yes or no), and ..... feet of main canal; give approximate capacity of reservoir or tank (if any) ..... cubic feet.

9. If above construction replaces an old well to be plugged or abandoned, fill out the following: the well abandoned is located in the ..... ¼ ..... ¼, ... ¼ of Section ....., Township ....., Range .....;

Name of plugging contractor, ...;

Well was plugged in accordance with terms of permit ....., 19.....

10. Give date "Well Record" was filed with State Engineer's Office, April 27, 19 55

11. Pump and power plant were installed and works completed April 26, 19 55

The undersigned, owner and holder of Permit No. L-2800, being first duly sworn upon his oath, states that he has read the foregoing statements and that the same are true to the best of his knowledge and belief.

Curtis V. Myers
By O. R. Musselwhite

Subscribed and sworn to before me this 28th day of April, 19 55

My commission expires 4-16-1958

R. O. Minton
Notary Public

Affidavit of State Engineer's Representative

I hereby certify that I have duly inspected the above Works and find them adequate and properly constructed according to the terms and conditions of the permit. Note any exceptions .....

Lonnie Jasper
Groundwater Supervisor or other representative of State Engineer

Date, 5-2, 1955

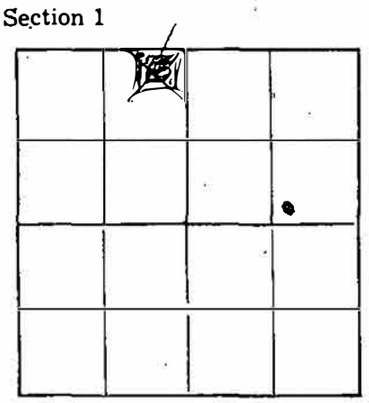
Form WR-23 STATE ENGINEER OFFICE

4917 ~~703563~~

WELL RECORD

INSTRUCTIONS: This form should be executed in triplicate, preferably typewritten, and submitted to the nearest district office of the State Engineer. All sections, except Section 5, shall be answered as completely and accurately as possible when any well is drilled, repaired or deepened. When this form is used as a plugging record, only Section 1A and Section 5 need be completed.

Section 1



(Plat of 640 acres)

(A) Owner of well Henry Easton

Street and Number

City Hobbs State N M.

Well was drilled under Permit No. L-2982 and is located in the sw ¼ se ¼ ne ¼ of Section 4 Twp. 19s Rge. 38e

(B) Drilling Contractor J E Barton License No. WD14

Street and Number Box 42

City Hobbs State N M.

Drilling was commenced sept 15- 1955

Drilling was completed Sept-18- 1955

Elevation at top of casing in feet above sea level Total depth of well 100

State whether well is shallow or artesian shallow Depth to water upon completion 35

Section 2 PRINCIPAL WATER-BEARING STRATA

No.	Depth in Feet From	Depth in Feet To	Thickness in Feet	Description of Water-Bearing Formation
1	35	60	25	watersand and loose rock
2	85	100	15	watersand
3				
4				
5				

Section 3 RECORD OF CASING

Dia in.	Pounds ft.	Threads in	Depth Top	Depth Bottom	Feet	Type Shoe	Perforations From	Perforations To
7		none	0	6	6		for curb	

Section 4 RECORD OF MUDDING AND CEMENTING

Depth in Feet From	Depth in Feet To	Diameter Hole in in.	Tons Clay	No. Sacks of Cement	Methods Used

Section 5 PLUGGING RECORD

Name of Plugging Contractor License No.

Street and Number City State

Tons of Clay used Tons of Roughage used Type of roughage

Plugging method used Date Plugged 19

Plugging approved by:

Basin Supervisor

Cement Plugs were placed as follows:

No.	Depth of Plug From	Depth of Plug To	No. of Sacks Used

FOR USE OF STATE ENGINEER ONLY

RECEIVED

Date Received JUN 19 1956

OFFICE

GROUND WATER SUPERVISOR

ROSWELL, NEW MEXICO

File No. L-2982 Use Dom Location No. 19.38.4.243

1 2982

Section 6

LOG OF WELL

Depth in Feet From	Depth in Feet To	Thickness in Feet	Color	Type of Material Encountered
0	1	1	dark	soil
1	30	29	white	caliche
30	35	5	brown	hard rock
35	60	25	brown	watersand and loose rock
60	85	15	gray	tight sand
85	100	15	brown	watersand

The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described well.

J. E. Barton
Well Driller

1956 JUN 25 AM 9:
STATE ENGINEER OFFICE
SANTA FE, N. M.

Form WR-23

SANTA FE

STATE ENGINEER OFFICE

WELL RECORD

504006

INSTRUCTIONS: This form should be executed in triplicate, preferably typewritten, and submitted to the nearest district office of the State Engineer. All sections, except Section 5, shall be answered as completely and accurately as possible when any well is drilled, repaired or deepened. When this form is used as a plugging record, only Section 1A and Section 5 need be completed.

Section 1

(Plat of 640 acres).

(A) Owner of well Paul Wallach

Street and Number 2734 N. Northwest Dr.

City Hobbs, New Mexico

Well was drilled under Permit No. L-5707 and is located in the ¼ NE ¼ SE ¼ of Section 4 Twp. 19S Rge. 38E

(B) Drilling Contractor O. R. Musslewhite License No. WD99

Street and Number Box 56

City Hobbs, State New Mexico

Drilling was commenced Aug. 15, 1965

Drilling was completed Aug. 16, 1965

Elevation at top of casing in feet above sea level ____ Total depth of well 121

State whether well is shallow or artesian Shallow Depth to water upon completion 50

Section 2 PRINCIPAL WATER-BEARING STRATA

No.	Depth in Feet From	Depth in Feet To	Thickness in Feet	Description of Water-Bearing Formation
1	80	121	41	Sand, sand rock
2				
3				
4				
5				

Section 3 RECORD OF CASING

Dia in.	Pounds ft.	Threads in	Depth Top	Depth Bottom	Feet	Type Shoe	Perforations From	Perforations To
7	22	10	0	121	122	None	91	121

Section 4 RECORD OF MUDDING AND CEMENTING

Depth in Feet From	Depth in Feet To	Diameter Hole in in.	Tons Clay	No. Sacks of Cement	Methods Used

Section 5 PLUGGING RECORD

Name of Plugging Contractor ____ License No. ____

Street and Number ____ City ____ State ____

Tons of Clay used ____ Tons of Roughage used ____ Type of roughage ____

Plugging method used ____ Date Plugged ____ 19____

Plugging approved by:

Basin Supervisor

Cement Plugs were placed as follows:

No.	Depth of Plug From	Depth of Plug To	No. of Sacks Used

FOR USE OF STATE ENGINEER ONLY

Date Received 1965 SEP -2 AM 8:22 STATE ENGINEER OFFICE DISTRICT II

File No. L-5707 Use Dom & Stock Location No. 19.38.4.420

1965 SEP 1 AM 10:34 STATE ENGINEER OFFICE SANTA FE N.M.

L-5707

Section 6

LOG OF WELL

Depth in Feet From	Depth in Feet To	Thickness in Feet	Color	Type of Material Encountered
0	1	1	Brown	Soil & rock
1	36	35	White	Caliche & rock
36	40	4	Grey	Sandy shale
40	60	20	"	Sand rock, hard
60	80	20	"	Sandy shale
80	121	41	"	Sand, Sand rock

The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described well.

C. R. Musslewhite
Well Driller

Form WR-23

SANTA FE

STATE ENGINEER OFFICE

WELL RECORD

504006

INSTRUCTIONS: This form should be executed in triplicate, preferably typewritten, and submitted to the nearest district office of the State Engineer. All sections, except Section 5, shall be answered as completely and accurately as possible when any well is drilled, repaired or deepened. When this form is used as a plugging record, only Section 1A and Section 5 need be completed.

Section 1

(Plat of 640 acres)

(A) Owner of well Paul Wallach

Street and Number 2734 N. Northwest Dr.

City Hobbs, New Mexico

Well was drilled under Permit No. L-5707 and is located in the ¼ NE ¼ SE ¼ of Section 4 Twp. 19S Rge. 38E

(B) Drilling Contractor O. R. Musslewhite License No. WD99

Street and Number Box 56

City Hobbs, State New Mexico

Drilling was commenced Aug. 15, 1965

Drilling was completed Aug. 16, 1965

Elevation at top of casing in feet above sea level ____ Total depth of well 121

State whether well is shallow or artesian Shallow Depth to water upon completion 50

Section 2 PRINCIPAL WATER-BEARING STRATA

No.	Depth in Feet From	Depth in Feet To	Thickness in Feet	Description of Water-Bearing Formation
1	80	121	41	Sand, sand rock
2				
3				
4				
5				

Section 3 RECORD OF CASING

Dia in.	Pounds ft.	Threads in	Depth Top	Depth Bottom	Feet	Type Shoe	Perforations From	Perforations To
7	22	10	0	121	122	None	91	121

1965 SEP 1 PM 10:34 STATE ENGINEER OFFICE SANTA FE N.M.

Section 4 RECORD OF MUDDING AND CEMENTING

Depth in Feet From	Depth in Feet To	Diameter Hole in in.	Tons Clay	No. Sacks of Cement	Methods Used

Section 5 PLUGGING RECORD

Name of Plugging Contractor ____ License No. ____

Street and Number ____ City ____ State ____

Tons of Clay used ____ Tons of Roughage used ____ Type of roughage ____

Plugging method used ____ Date Plugged ____ 19____

Plugging approved by:

____ Basin Supervisor

Cement Plugs were placed as follows:

No.	Depth of Plug From	Depth of Plug To	No. of Sacks Used

FOR USE OF STATE ENGINEER ONLY

Date Received ____

1965 SEP -2 AM 8:22 STATE ENGINEER OFFICE DISTRICT II ROSWELL, N.MEX.

File No. L-5707 Use Dom + Stock Location No. 19.38.4.420

L-5707

Section 6

LOG OF WELL

Depth in Feet From	Depth in Feet To	Thickness in Feet	Color	Type of Material Encountered
0	1	1	Brown	Soil & rock
1	36	35	White	Caliche & rock
36	40	4	Grey	Sandy shale
40	60	20	"	Sand rock, hard
60	80	20	"	Sandy shale
80	121	41	"	Sand, Sand rock

The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described well.

O. R. Musselwhite
Well Driller

Revised June 1972

512274

STATE ENGINEER OFFICE

WELL RECORD

Section 1. GENERAL INFORMATION

(A) Owner of well Amoco Owner's Well No. _____
Street or Post Office Address Box 68
City and State Hobbs, New Mexico 88240

Well was drilled under Permit No. L-7242 and is located in the:

a. SW ¼ ~~NE~~ NW ¼ NE ¼ NE ¼ of Section 9 Township 19S Range 38E N.M.P.M.

b. Tract No. _____ of Map No. _____ of the _____

c. Lot No. _____ of Block No. _____ of the _____
Subdivision, recorded in _____ County.

d. X= _____ feet, Y= _____ feet, N.M. Coordinate System _____ Zone in the _____ Grant.

(B) Drilling Contractor Gene Fades License No. WD 982

Address 1335 Katy Lane, Hobbs, New Mexico 88240

Drilling Began 4-7-86 Completed 4-7-86 Type tools Rotary Size of hole 8 in.

Elevation of land surface or _____ at well is _____ ft. Total depth of well 141 ft.

Completed well is ☒ shallow ☐ artesian. Depth to water upon completion of well 65 ft.

Section 2. PRINCIPAL WATER-BEARING STRATA

Depth in Feet From	Depth in Feet To	Thickness in Feet	Description of Water-Bearing Formation	Estimated Yield (gallons per minute)
65	141	76	Water Sand	35

Section 3. RECORD OF CASING

Diameter (inches)	Pounds per foot	Threads per in.	Depth in Feet Top	Depth in Feet Bottom	Length (feet)	Type of Shoe	Perforations From	Perforations To
4 3/4	160psi				131		121	141
5 3/4	160psi	fo pitless adapter			10			

Section 4. RECORD OF MUDDING AND CEMENTING

Depth in Feet From	Depth in Feet To	Hole Diameter	Sacks of Mud	Cubic Feet of Cement	Method of Placement

Section 5. PLUGGING RECORD

Plugging Contractor _____
Address _____
Plugging Method _____
Date Well Plugged _____
Plugging approved by:

_____
State Engineer Representative

No.	Depth in Feet Top	Depth in Feet Bottom	Cubic Feet of Cement
1			
2			
3			
4			

FOR USE OF STATE ENGINEER ONLY

Date Received April 24, 1986

Quad _____ FWL _____ FSL _____

File No. L-7242 Use D & S Location No. 19.38.9.22133

19.38.9.22133

Section 6. LOG OF HOLE

Depth in Feet From	Depth in Feet To	Thickness in Feet	Color and Type of Material Encountered
0	3	3	Top Soil
3	35	32	Rock
35	48	13	Sandy Clay
48	54	6	Rock
54	65	9	Sand
65	141	76	Water Sand

Section 7. REMARKS AND ADDITIONAL INFORMATION

The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described hole.

Gene Eckes
Driller

INSTRUCTIONS: This form should be executed in triplicate, preferably typewritten, and submitted to the appropriate district office of the State Engineer. All blanks, except Section 5, shall be answered as completely and accurately as possible when any well is drilled regardless of depth. When this form is used as a plugging record, only Section 1(a) and Section 5 need be completed.

512274

ROUTING SLIP

To: Field Supervisor

(Basin) or (County) LEA

From:

Applicant AMOCO PRODUCTION CO.

Land Location

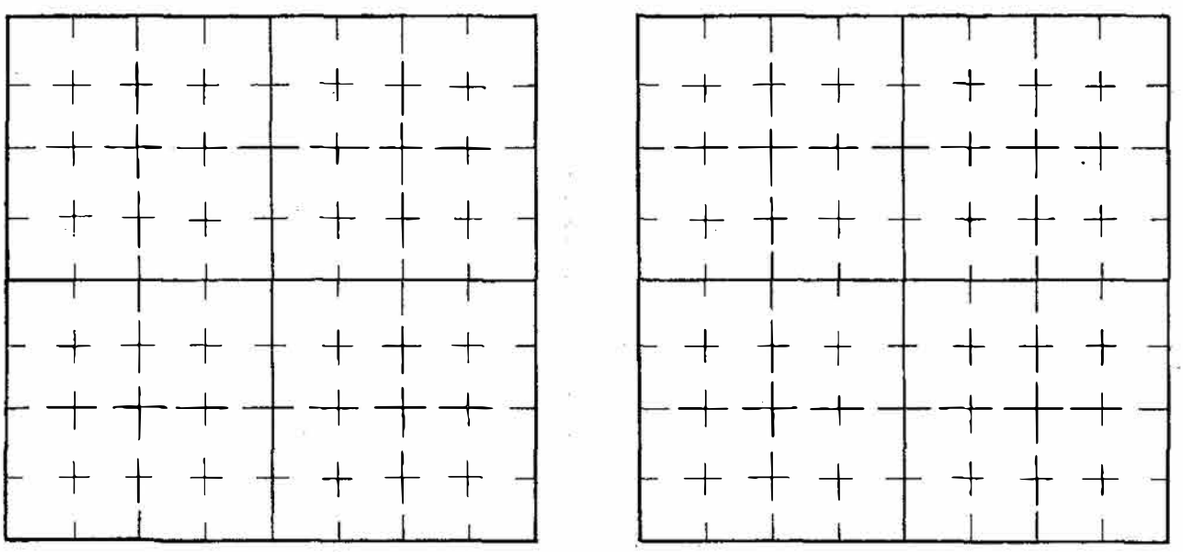
Field Check Requested For the Following Reasons

Date: 4/24/86

Proof of Completion of Works ☐
Proof of Beneficial Use ☐
Declaration ☐
Extension of Time ☐
Illegal Irrigation ☐
Supplemental Well ☐
Leakage Test ☐
Cementing (water-oil) ☐
Reduction from Irr. or Dom. ☐
Pressure Test ☐
Inspect Casing ☐
Others WELL RECORD ☒

Sec. T. R.

Sec. T. R.



Old Well (plugged-retained-reduced)

REMARKS: CLOW ON D & S PERMIT FOR NE¼NE¼NE¼ 9-19-38

OLD WELL LOCATED AT SAME LOCATION - new well 8' east of old well

CHECK TO SEE IF OLD WELL PLUGGED

old well capped

SW SW NW NE NE

cy to

Date: 6/11/86

By: J.R. Kennedy

File No. L-7242

Location No. 19.38.9.222

22133

WR-36

FIELD REPORT FOR CEMENTING OF WELLS

Name of Applicant _____

Name of Well _____

Driller's Name _____

Drilling Method _____

CASING DATA:
Surface _____ feet of _____ inch. Grade _____

Inspected by _____ on _____

(Approved)(Rejected) _____

Water string _____ feet of _____ inch. Grade _____

Inspected by _____ on _____

(Approved)(Rejected) _____

Oil string _____ feet of _____ inch. Grade _____

Inspected by _____ on _____

(Approved)(Rejected) _____

CEMENTING PROGRAM:
Cemented by _____ Supervised by _____

Type of shoe used _____ Float collar used _____

Bottom three joints welded _____ Cement: around shoe _____ sks. _____

around casing _____ sks. _____ Additives _____

_____ _____ _____

Size of hole _____ Size of casing _____ sks. of cement required ____

Plug pumped down _____ (a.m.)(p.m.) _____

Cement circulated _____ No. of sacks _____

Temp. survey ran _____ (a.m.)(p.m.) _____ Cement at _____ feet

Temp. survey ran _____ (a.m.)(p.m.) _____ Cement at _____ feet

Checked for shut off _____ (a.m.) (p.m.) _____

Method used _____ Supervised by _____

Checked for shut off _____ (a.m.) (p.m.) _____

Method used _____ Supervised by _____

REMARKS: _____

_____

_____

_____

_____

_____

_____

Job approved by _____

File No. _____ Location No. _____

WR—46

APPLICATION TO APPROPRIATE UNDERGROUND WATERS IN ACCORDANCE WITH SECTION 75-11-1 NEW MEXICO STATUTES

(Three Acre Feet Per Annum)

83560
517193

1. Name and Address of Applicant: File No. L-8200

Amoco Production Company

P. O. Box 68

Hobbs, NM 88240

RECEIVED: January 10, 1980

2. Describe well location under one of the following subheadings:

a. SE ¼ SE ¼ ¼ of Sec. 4 Twp. 19-S Rge. 38-E N. M. P. M., in Lea County.

b. Tract No. _____ of Map No. _____ of the _____ District.

c. Lot No. _____ of Block No. _____ of the _____ Subdivision, of record in _____ County.

d. (Describe location by direction and distance from known land marks.)

Well is located approximately 1000' NE of Amoco's Hobbs Sub-District Office located on West Stanolind Road, Hobbs.

3. Give street address or route and box No. of property upon which well is to be located, if possible: _____

4. Name of driller, if known: _____

5. Approximate depth of well (if known) 88 feet; outside diameter of casing 8-5/8 inches.

6. Use of water (check appropriate box or boxes):

- [ ] Household, trees, lawn and non-commercial garden not to exceed 1 acre.
- [ ] Livestock watering.
- [ ] Drinking and sanitary purposes or the irrigation of non-commercial trees, shrubs and lawns in conjunction with a commercial operation.
- [X] Prospecting, mining or drilling operations to discover or develop natural resources.
- [ ] Construction of public works, highways and roads.

If any of the last three were marked, give name and nature of business under Remarks. (Item 7)

STATE ENGINEER OFFICE ROSWELL, N. M. 80 JAN 10 AM 8 13

7. Remarks: Existing water well will be re-entered and the water will be used by Amoco to drill additional oil wells. Water well was originally drilled in 1940 and capped in 1948.

I, V. E. Staley affirm that the foregoing statements are true to the best of my knowledge and belief and that development shall not commence until approval of the permit has been obtained.

Amoco Production Company, Applicant

By: _____ Date: 10-31-79

ACTION OF STATE ENGINEER

This application is approved for the use indicated, subject to all general conditions and to the specific conditions numbered 1,3,5a & 6 on the reverse side hereof. This permit will automatically expire unless this well is drilled or driven and the ~~well record~~ plugging record filed on or before ~~January 31, 1981~~

S. E. Reynolds, State Engineer

METER REQUIRED
SEE CONDITION OF APPROVAL No. 5a

By: Delbert W. Nelson
Delbert W. Nelson
Assistant District II Supervisor

Date: January 10, 1980 File No. L-8200

old existing well Well capped 11-1-80

GENERAL CONDITIONS OF APPROVAL

A. The maximum amount of water that may be appropriated under this permit is 3 acre feet in any period of one year.

B. Well shall be drilled only by a driller licensed in the State of New Mexico in accordance with Section 75-11-13 New Mexico Statutes. A licensed driller shall not be required for the construction of a driven well; provided, that the casing shall not exceed two and three-eighths (2 3/8) inches outside diameter (Section 75-11-13).

C. Driller's log must be filed in office of the State Engineer within 10 days after well is drilled or driven. Failure to file log within that time shall result in automatic cancellation of the permit. Upon request of the permittee, log forms will be provided by the State Engineer.

D. Diameter of casing limited to 7 inch outside diameter except under specific conditions in which reasons satisfactory to the State Engineer are shown.

E. Any use of water from the well other than as indicated shall automatically cancel this permit unless prior approval is obtained from the State Engineer.

SPECIFIC CONDITIONS OF APPROVAL (Applicable only when so indicated on the other side of this form)

1. Depth of well in no event to exceed the thickness of the valley fill or Ogallala formation.
2. Well to be constructed to artesian well specifications and State Engineer Office to be notified before casing is landed or cemented.
3. Appropriation and use of water under this permit limited for a definite period of not to exceed one year from the date of approval.
4. Limited to household, trees, lawn and non-commercial garden not to exceed one acre and/or stock use.
5. A totalizing meter approved by the State Engineer shall be installed on the discharge line before the first branch line prior to the appropriation of water and pumping records shall be submitted to the District Supervisor (a) for each calendar month, on or before the 30th day of the following month (b) on the 10th of January, April, July and October of each year for the three preceding calendar months (c) for each calendar year on or before the 30th day of January of the following year.
6. Well to be plugged upon completion of permitted use and plugging report filed within 10 days.
7. Final approval for the use of said well dependent upon a leakage test to be made by the State Engineer Office.

GENERAL INSTRUCTIONS

Application shall be executed in triplicate and forwarded with a $1.00 filing fee to the appropriate office of the State Engineer.

A separate application must be filed for each well to be drilled or used.

If well to be used is an existing well to be retained for uses as indicated, an explanation (and file number, if possible) should be given under Remarks. (Item 7).

Applications for appropriation, well logs and request for information in the following basins should be addressed to the State Engineer at the office indicated:

Rio Grande, Bluewater and Estancia Basins
District No. 1, 505 Marquete, N. W., Rm 1023, Albuquerque, New Mexico

Roswell, Lea, Portales, Carlsbad, Hondo, Penasco and Jal Basins
District No. 2, Box 1717, Roswell, New Mexico

Mimbres, Hot Springs, Virden Valley, Animas, Playas, Gila-San Francisco, San Simon, Lordsburg and Nutt-Hockett Basins
District No. 3, Box 844, Deming, New Mexico

SENDER: Complete items 1, 2, and 3. Add your address in the "RETURN TO" space on reverse.

1. The following service is requested (check one.)
- ☐ Show to whom and date delivered.....¢
- ☐ Show to whom, date and address of delivery.....¢
- ☐ RESTRICTED DELIVERY
  - Show to whom and date delivered.....¢
  - ☐ RESTRICTED DELIVERY.
  - Show to whom; date, and address of delivery.$____

(CONSULT POSTMASTER FOR FEES)

2. ARTICLE ADDRESSED TO:
Amoco Production Company
P. O. Box 68
Hobbs, NM 88240

3. ARTICLE DESCRIPTION:
REGISTERED NO. | CERTIFIED NO. P03 8149275 | INSURED NO.

(Always obtain signature of addressee or agent)

I have received the article described above.
SIGNATURE ☐Addressee ☐Authorized agent

4. DATE OF DELIVERY FEB 9 1981

POSTMARK HOBBS

5. ADDRESS (Complete only if requested)

6. UNABLE TO DELIVER BECAUSE:

CLERK

PS Form 3811, Jan.1979 RETURN RECEIPT, REGISTERED, INSURED AND CERTIFIED MAIL ☆GPO : 1979-300-459

L-8200

UNITED STATES POSTAL SERVICE
OFFICIAL BUSINESS

SENDER INSTRUCTIONS
Print your name, address, and ZIP Code in the space below.
- Complete items 1, 2, and 3 on the reverse.
- Attach to front of article if space permits, otherwise affix to back of article.
- Endorse article "Return Receipt Requested" adjacent to number.

PENALTY FOR PRIVATE USE TO AVOID PAYMENT OF POSTAGE, $300

U.S.MAIL

RETURN TO

NEW MEXICO
NATURAL RESOURCES DEPARTMENT
WATER RESOURCES DIVISION
P. O. BOX 1717
ROSWELL, NEW MEXICO 88201

STATE ENGINEER OFFICE
ROSWELL, N. M.

(Name of Sender)

(Street or P.O. Box)

(City, State, and ZIP Code)

February 3, 1981

517193

File: L-8200

Amoco Production Company
P. O. Box 68
Hobbs, NM 88240

Gentlemen:

Your well No. L-8200 located in the SE¼SE¼ of Section 4, Township 19 South, Range 38 East, which was authorized for oil well drilling purposes, should have been plugged and plugging record filed in this office on or before January 31, 1981. This plugging record has not been received.

It is suggested that you take immediate steps to fulfill the requirements and terms of your permit.

Yours very truly,

Dale Berning
Basin Supervisor

DB/fh
cc: Santa Fe
C/RRR # P03 8149275

STATE ENGINEER
SANTA FE
'81 FEB 6 PM 1 08

STATE OF NEW MEXICO

NATURAL RESOURCES DEPARTMENT

WATER RESOURCES DIVISION

S. E. REYNOLDS
STATE ENGINEER

P. O. BOX 1717
ROSWELL, NEW MEXICO
88201

January 10, 1980

File: L-8200
517193

Amoco Production Company
P. O. Box 68
Hobbs, NM 88240

Gentlemen:

Your attention is directed to the following specific conditions of approval as indicated on the permit:

Appropriation and use of water under this permit shall not exceed a period of one year from the date of approval.

A totalizing meter shall be installed before the first branch of the discharge line from the well and the installation shall be acceptable to the State Engineer; the State Engineer shall be advised of the make, model, serial number, date of installation, and initial reading of the meter prior to appropriation of water and pumping records shall be submitted to the District Supervisor for each calendar month, on or before the 30th day of the following month.

The well shall be plugged upon completion of the permitted use and a plugging report shall be filed in the office of the State Engineer within 10 days.

Meter sheets are enclosed for your convenience.

Yours very truly,

Dale Berning
Basin Supervisor

DB/fh
Encls.
cc: Santa Fe

meter sheet made - filed

108803

READ INSTRUCTIONS ON BACK

Revised March 1979

APPLICATION TO APPROPRIATE UNDERGROUND WATERS IN ACCORDANCE WITH SECTION 72-12-1 NEW MEXICO STATUTES

'83 AUG 4 AM 10 48

1. Name and Address of Applicant:

File No. L-9288

Amoco Production Company

P. O. Box 68

Hobbs, New Mexico 88240

STATE ENGINEER SANTA FE, N.M.

Received: August 3, 1983

2. Describe well location under one of the following subheadings:

a. SW ¼ SE ¼ SE ¼ of Sec. 4 Twp. 19-S Rge. 38-E N.M.P.M., in Lea County.

b. Tract No. _____ of Map No. _____ of the _____

c. Lot No. _____ of Block No. _____ of the _____ Subdivision, recorded in _____ County.

d. X = _____ feet, Y = _____ feet, N.M. Coordinate System _____ Zone in the _____ Grant.

e. Give street address or route and box No. of property upon which well is to be located, or location by direction and distance from known landmarks _____

3. Approximate depth (if known) 80' feet; outside diameter of casing 7" inches.

Name of driller (if known) Unknown (Existing Well)

4. Use of water (check appropriate box or boxes):

- ☐ One household, non-commercial trees, lawn and garden not to exceed 1 acre.
- ☐ Livestock watering.
- ☐ More than one household, non-commercial trees, lawns and gardens not to exceed a total of 1 acre.
- ☐ Drinking and sanitary purposes and the irrigation of non-commercial trees, shrubs and lawns in conjunction with a commercial operation.
- ☒ Prospecting, mining or drilling operations to discover or develop natural resources.
- ☐ Construction of public works, highways and roads.

If any of the last four were marked, give name and nature of business under Remarks. (Item 5)

AUG 3 8 32 AM '83 STATE ENGINEER ROSWELL, N.M.

5. Remarks: Amoco Production Company, oil and gas drilling and production. The water is to be used in the drilling of Amoco's South Hobbs /GSA/Unit Well No. 130-140 in Sec 3 & 4, T-19-S, R-38-E, Lea County. Apx. 420,000 gals will be used for 11 oil test wells.

I, Charles M. Herring, affirm that the foregoing statements are true to the best of my knowledge and belief and that development shall not commence until approval of the permit has been obtained.

Amoco Production Company, Applicant

By: Charles M. Herring

Date: 7-28-83

ACTION OF STATE ENGINEER

517905

This application is approved for the use indicated, subject to all general conditions and to the specific conditions numbered 1, 3, 5a & 6 on the reverse side hereof. This permit will automatically expire unless this well is drilled or driven and the ~~well~~ plugging record filed on or before August 31, 1984

S. E. Reynolds, State Engineer

METER REQUIRED

SEE CONDITION OF APPROVAL No. 5a

By: Delbert W. Nelson

Delbert W. Nelson, Assistant District II Supervisor

Date: August 3, 1983

File No. L-9288

Well capped per inter report

GENERAL CONDITIONS OF APPROVAL

A. The maximum amount of water that may be appropriated under this permit is 3 acre feet in any [redacted] year.

B. The well shall be drilled only by a driller licensed in the State of New Mexico in accordance with Section 72-12-12 New Mexico Statutes Annotated. A licensed driller shall not be required for the construction of a driven well; provided, that the casing shall not exceed two and three-eighths (2 3/8) inches outside diameter (Section 72-12-12).

C. Driller's log must be filed with the State Engineer within 10 days after the well is drilled or driven. Failure to file the log within that time shall result in automatic cancellation of the permit. Log forms will be provided by the State Engineer upon request.

D. The casing shall not exceed 7 inches outside diameter except under specific conditions in which reasons satisfactory to the State Engineer are shown.

E. If the well under this permit is used at any time to serve more than one household, livestock in a commercial feed lot operation, [redacted] the permittee shall comply with Specific Condition of Approval number 5(b).

F. In the event this well is combined with other wells permitted under Section 72-12-1 New Mexico Statutes Annotated, the total outdoor use shall not exceed the irrigation of one acre of non-commercial trees, lawn, and garden, or the equivalent outside consumptive use, and the total appropriation for household and outdoor use from the entire water distribution system shall not exceed 3 acre feet per annum.

SPECIFIC CONDITIONS OF APPROVAL

(Applicable only when so indicated on the other side of this form.)

1. Depth of the well shall not exceed the thickness of the (a) the valley fill or (b) Ogallala formation.
2. The well shall be constructed to artesian well specifications and the State Engineer shall be notified before casing is landed or cemented.
3. Appropriation and use of water under this permit shall not exceed a period of one year from the date of approval.
4. Use shall be limited to household, non-commercial trees, lawn and garden not to exceed one acre and/or stock use.
5. A totalizing meter shall be installed before the first branch of the discharge line from the well and the installation shall be acceptable to the State Engineer; the Engineer shall be advised of the make, model, serial number, date of installation, and initial reading of the meter prior to appropriation of water and pumping records shall be submitted to the District Supervisor; (a) for each calendar month, on or before the 30th day of the following month (b) on or before the 10th of January, April, July and October of each year for the three preceding calendar months (c) for each calendar year on or before the 30th day of January of the following year.
6. The well shall be plugged upon completion of the permitted use and a plugging report shall be filed with the State Engineer within 10 days.
7. Final approval for the use of the well shall be dependent upon a leakage test made by the State Engineer.
8. Use shall be limited strictly to household and/or drinking and sanitary purposes; water shall be conveyed from the well to the place of use in closed conduit and the effluent returned to the underground so that it will not appear on the surface. No irrigation of lawns, gardens, trees or use in any type of pool or pond is authorized under this permit.

INSTRUCTIONS

The application shall be made in the name of the actual user of the well for the purpose specified in the application.

The application shall be executed in triplicate and forwarded with a $1.00 filing fee to the State Engineer.

A separate application must be filed for each well to be drilled or used.

If well to be used is an existing well, an explanation (and file number, if possible) should be given under Remarks. (Item 5.)

Applications for appropriation, well logs and request for information in the following basins should be addressed to the State Engineer at the location indicated:

Bluewater, Estancia, Rio Grande, Sandia and San Juan Basins
District No. 1, 2340 Menaul NE, Room 206, Albuquerque, New Mexico 87107

Capitan, Carlsbad, Fort Sumner, Hondo, Jal, Lea, Penasco, Portales, Roswell, and Upper Pecos Basins
District No. 2, Box 1717, Roswell, New Mexico 88201

Animas, Gila-San Francisco, Hot Springs, Las Animas Creek, Lordsburg, Mimbres, Nutt-Hockett, Playas, San Simon, and Virden Valley Basins
District No. 3, Box 844, Deming, New Mexico 88030

Canadian River Basin
State Engineer, State Capitol, Bataan Memorial Bldg., Santa Fe, New Mexico 87503

SF

'84 SEP 5 AM 10 18

September 3, 1984

STATE ENGINEER OFFICE
SANTA FE, N.M. 87501

File: L-9288

Amoco Production Company
P. O. Box 68
Hobbs, NM 88240

Gentlemen:

Your water well No. L-9288 located in the SW¼SE¼SE¼ of Section 4, Township 19 South, Range 38 East, which was authorized for oil well drilling purposes, should have been plugged and plugging record filed in this office on or before August 31, 1984. This plugging record has not been received.

Also, please report water usage.

It is suggested that you take immediate steps to fulfill the requirements and terms of your permit.

Yours very truly,

Johnny R. Hernandez
Basin Supervisor

JRH/fh
cc: Santa Fe

STATE OF NEW MEXICO

STATE ENGINEER OFFICE

ROSWELL

August 3, 1983

S.E. REYNOLDS
STATE ENGINEER

DISTRICT 2
909 EAST 2ND ST.
P.O. BOX 1717
ROSWELL, NEW MEXICO 88201

File: L-9288

Amoco Production Company
P. O. Box 68
Hobbs, NM 88240

Gentlemen:

Your attention is directed to the following specific conditions of approval as indicated on the permit:

Appropriation and use of water under this permit shall not exceed a period of one year from the date of approval.

A totalizing meter shall be installed before the first branch of the discharge line from the well and the installation shall be acceptable to the State Engineer; the State Engineer shall be advised of the make, model, serial number, date of installation, and initial reading of the meter prior to appropriation of water and pumping records shall be submitted to the District Supervisor for each calendar month, on or before the 30th day of the following month.

The well shall be plugged upon completion of the permitted use and a plugging report shall be filed in the office of the State Engineer within 10 days.

Meter sheets are enclosed for your convenience.

Yours very truly,

Frank Bradley
Basin Supervisor

FB/fh
Encl.
cc: Santa Fe

meter sheet made

Amoco Production Company (USA)
Post Office Box 68
Hobbs, New Mexico 88240

S. J. Okerson
District Superintendent

August 1, 1983

File: SJO-1389-WF

Re: Water Well Use Application

STATE ENGINEER
ROSWELL, NM
AUG 3 8 32 AM '83

State Engineer
District No. 2
Box 1717
Roswell, NM 88201

Gentlemen:

Enclosed is an application and filing fee for use of a water well located in SW/4, SE/4, SE/4 of Sec. 4, T-19-S, R-38-E, Lea County, New Mexico. The water from this well will be used to drill the South Hobbs/GSA/Unit No. 130-140 located in Sec. 3 and 4, T-19-S, R-38-E, Lea County, New Mexico.

Yours very truly,

S. J. Okerson

Attachments

WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

www.ose.state.nm.us

1. GENERAL AND WELL LOCATION

OSE POD NO. (WELL NO.)	WELL TAG ID NO.	OSE FILE NO(S).
	22405	L-14862

WELL OWNER NAME(S)	PHONE (OPTIONAL)
STEVEN KENNEDY (WHITE HORSE TRUCKING, LLC)	

WELL OWNER MAILING ADDRESS	CITY	STATE	ZIP
8501 N MARR DR	HOBBS	NM	88242

WELL LOCATION (FROM GPS)		DEGREES	MINUTES	SECONDS	
	LATITUDE	32	41	17.85	N
	LONGITUDE	-103	8	43.79	W

* ACCURACY REQUIRED: ONE TENTH OF A SECOND
* DATUM REQUIRED: WGS 84

DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS – PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE

SECTION 4 TOWNSHIP 19S RANGE 38E

2. DRILLING & CASING INFORMATION

LICENSE NO.	NAME OF LICENSED DRILLER	NAME OF WELL DRILLING COMPANY
WD-1753	JACOB FRIESSEN	VANGUARD

DRILLING STARTED	DRILLING ENDED	DEPTH OF COMPLETED WELL (FT)	BORE HOLE DEPTH (FT)	DEPTH WATER FIRST ENCOUNTERED (FT)
3-24-20	3-24-20	174	174	64

COMPLETED WELL IS: ☐ ARTESIAN ☐ DRY HOLE ☑ SHALLOW (UNCONFINED)

STATIC WATER LEVEL IN COMPLETED WELL (FT): 64

DRILLING FLUID: ☐ AIR ☑ MUD ADDITIVES – SPECIFY:

DRILLING METHOD: ☑ ROTARY ☐ HAMMER ☐ CABLE TOOL ☐ OTHER – SPECIFY:

DEPTH (feet bgl) FROM	TO	BORE HOLE DIAM (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)	CASING CONNECTION TYPE (add coupling diameter)	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)	SLOT SIZE (inches)
-2	144	9.875	BLANK PVC SCH40	6.56	6	.28	
144	174	9.875	SCREEN PVC SCH40	6.56	6	.28	.032

3. ANNULAR MATERIAL

DEPTH (feet bgl) FROM	TO	BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL	AMOUNT (cubic feet)	METHOD OF PLACEMENT
0	20	9.875	BENTONITE CHIP	6	POURED
20	124	9.875	PEA GRAVEL	30	POURED
124	174	9.875	SILCA SAND	15	POURED

FOR OSE INTERNAL USE

WR-20 WELL RECORD & LOG (Version 04/30/19)

FILE NO. L-14862	POD NO. 1	TRN NO. 669814	
LOCATION SAnt. 19. 38. 04. 224		WELL TAG ID NO. 22405	PAGE 1 OF 2

4. HYDROGEOLOGIC LOG OF WELL

DEPTH (feet bgl) FROM	TO	THICKNESS (feet)	COLOR AND TYPE OF MATERIAL ENCOUNTERED - INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES (attach supplemental sheets to fully describe all units)	WATER BEARING? (YES / NO)	ESTIMATED YIELD FOR WATER-BEARING ZONES (gpm)
0	3	3	TOPSOIL	Y ✓ N	
3	32	30	CALICHE	Y ✓ N	
32	45	13	ROCK	Y ✓ N	
45	59	14	SAND & SANDSTONE	Y ✓ N	
59	168	109	SAND	✓ Y N	
168	174	6	RED CLAY	Y ✓ N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	

METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA:

☐ PUMP ☐ AIR LIFT ☐ BAILER ☐ OTHER – SPECIFY:

TOTAL ESTIMATED WELL YIELD (gpm): 0.00

5. TEST; RIG SUPERVISION

WELL TEST: TEST RESULTS - ATTACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUDING DISCHARGE METHOD, START TIME, END TIME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER THE TESTING PERIOD.

MISCELLANEOUS INFORMATION:

PRINT NAME(S) OF DRILL RIG SUPERVISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONSTRUCTION OTHER THAN LICENSEE:

JACOB KNELSEN

6. SIGNATURE

BY SIGNING BELOW, I CERTIFY THAT TO THE BEST OF MY KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT RECORD OF THE ABOVE DESCRIBED WELL. I ALSO CERTIFY THAT THE WELL TAG, IF REQUIRED, HAS BEEN INSTALLED AND THAT THIS WELL RECORD WILL ALSO BE FILED WITH THE PERMIT HOLDER WITHIN 30 DAYS AFTER THE COMPLETION OF WELL DRILLING.

JACOB FRIESSEN — 4-11-20

SIGNATURE OF DRILLER / PRINT SIGNEE NAME — DATE

FOR OSE INTERNAL USE — WR-20 WELL RECORD & LOG (Version 04/30/2019)

FILE NO. L-14862	POD NO. 1	TRN NO. 669814	
LOCATION SAN. 19.38.04.224		WELL TAG ID NO. 22405	PAGE 2 OF 2

John R. D Antonio, Jr., P.E.
State Engineer

Roswell Office
1900 WEST SECOND STREET
ROSWELL, NM 88201

STATE OF NEW MEXICO
OFFICE OF THE STATE ENGINEER

Trn Nbr: 669814
File Nbr: L 14862
Well File Nbr: L 14862 POD1

Apr. 14, 2020

STEVEN KENNEDY
WHITE HORSE TRUCKING LLC
8501 N MARR DR
HOBBS, NM 88242

Greetings:

The well driller's record for the above numbered well has been received in this office indicating your well has been completed.

Your permit was granted with the condition that a meter(s) be installed and meter readings submitted to this office.

Per Condition 5B, please advise this office within 30 days, on the attached form, of the make, model, serial number, date of installation, and initial reading of the meter(s) prior to appropriation of the water.

If you have any questions, please feel free to contact us.

Sincerely,

Maret Amaral
(575)622-6521

Enclosure

wellcon5

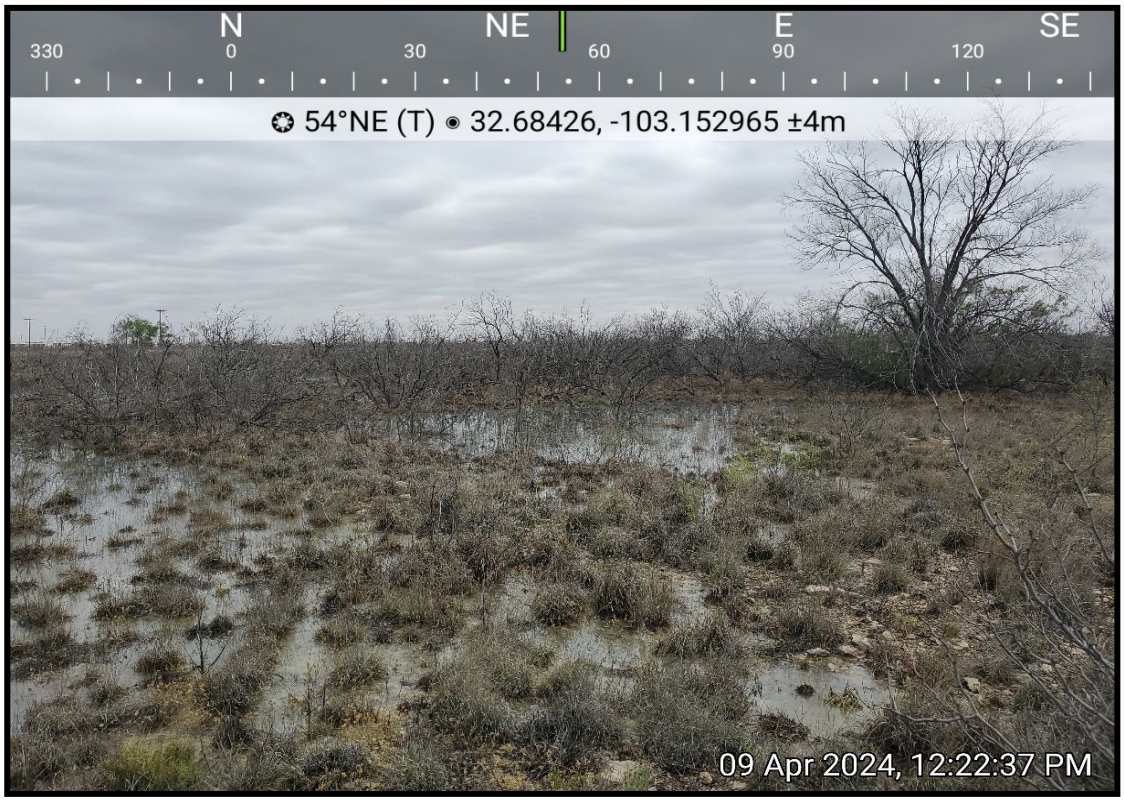
ENSOLUM

APPENDIX C

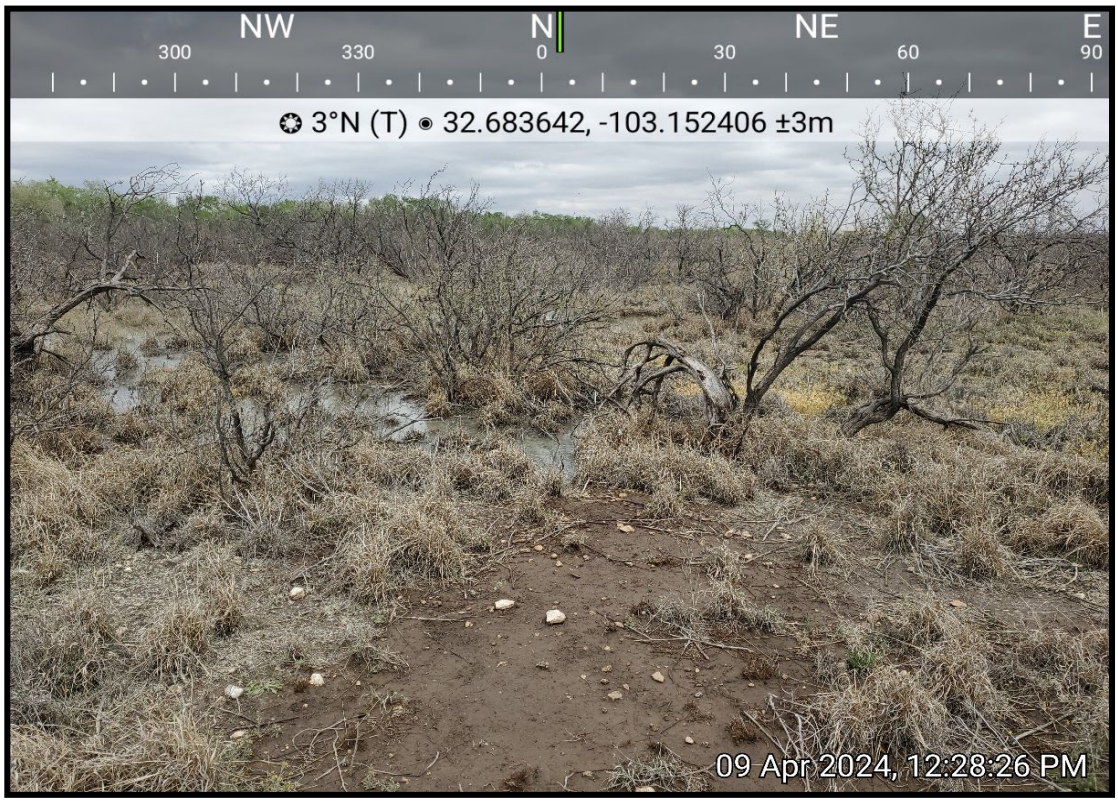
Photographic Log

Project: South Hobbs GSA Unit 238O04
Entity: Oxy USA, Inc.
Incident ID: nAPP2410037098

ENSOLUM



View of release extent prior to site assessment activities, facing northeast (April 9, 2024).



View of release extent prior to site assessment activities, facing north (April 9, 2024).

Project: South Hobbs GSA Unit 238O04
Entity: Oxy USA, Inc.
Incident ID: nAPP2410037098

ENSOLUM

View of excavation extent during initial remediation activities, facing east (November 1, 2024).

View of excavation extent during initial remediation activities, facing north (November 1, 2024).

Project: South Hobbs GSA Unit 238O04
Entity: Oxy USA, Inc.
Incident ID: nAPP2410037098

View of excavation extent during continued remediation activities, facing southeast (November 14, 2024).

View of excavation extent during continued remediation activities, facing northwest (November 14, 2024).

ENSOLUM

APPENDIX D

Field Screening Soil Sample Results Table

ENSOLUM

TABLE A
FIELD SCREENING SOIL SAMPLE RESULTS
South Hobbs GSA Unit 238O04
Oxy USA, Inc.
Eddy County, New Mexico
Ensolum Project No. 03B1417171
Incident ID: nAPP2410037098

Sample Designation	Date	Depth (feet bgs)	Chloride Strips Field Screening Results (mg/kg)
New Mexico Oil Conservation Division Closure Criteria for Soils Impacted by a Release (≤ 50 feet)			Chloride 600 mg/kg
Pothole Soil Sample Field Screening Results			
PH01	11/13/2024	3	**330.4**
	11/14/2024	5	**369**
PH02	11/13/2024	3	**285.6**
PH03	11/13/2024	4	**285.6**
PH04	11/13/2024	3	**403.2**
	11/14/2024	5	**538**
PH05	11/13/2024	3	**252**
PH06	11/13/2024	4	**369.6**
	11/14/2024	6	**426**
PH07	11/13/2024	3	**420**
	11/14/2024	5	**476**
PH08	11/13/2024	3	**420**
	11/14/2024	5	**426**
PH09	11/13/2024	4	**470.4**
	11/14/2024	6	**426**
PH10	11/13/2024	2	**711.2**
	11/14/2024	4	**426**
PH11	11/13/2024	3	**369.6**
	11/14/2024	4.5	**201**
PH12	11/14/2024	2.5	ND
PH13	11/14/2024	3	ND
PH14	11/14/2024	4	**667**
		5	**476**
PH15	11/14/2024	4	**667**
		5	**414.4**
PH16	11/14/2024	2.5	**476**
		3	**369.6**
PH17	11/14/2024	4	**515.2**
	11/15/2024	4.5	**515.2**

ENSOLUM

TABLE A
FIELD SCREENING SOIL SAMPLE RESULTS
South Hobbs GSA Unit 238O04
Oxy USA, Inc.
Eddy County, New Mexico
Ensolum Project No. 03B1417171
Incident ID: nAPP2410037098

Sample Designation	Date	Depth (feet bgs)	Chloride Strips Field Screening Results (mg/kg)
New Mexico Oil Conservation Division Closure Criteria for Soils Impacted by a Release (≤ 50 feet)			Chloride 600 mg/kg
Pothole Soil Sample Field Screening Results			
PH18	11/14/2024	4	**767.2**
		5	**566.8**
PH19	11/15/2024	3	**767.2**
		5	**515.2**
PH20	11/14/2024	4	**666.4**
		6	**425.6**
PH21	11/15/2024	4	**515.2**
		5	**464.8**
PH22	11/15/2024	3	**733.6**
		4	**515.2**
PH23	11/14/2024	2	ND
PH24	11/14/2024	3	**767.2**
	11/15/2024	4	**515.2**
PH25	11/14/2024	3	**734**
		4	**369.6**
PH26	11/14/2024	2	**476**
		5.5	**369.6**
PH27	11/14/2024	3	**767.2**
		5	**576.8**
PH28	11/14/2024	2	ND
PH29	11/14/2024	3	**576.8**
		4	**515.2**
PH30	11/14/2024	3	**700**
	11/15/2024	4	**319.2**
PH31	11/15/2024	3	**364**
PH32	11/14/2024	4.5	**280**
PH33	11/14/2024	4	**370**
		5	**240.8**

ENSOLUM

TABLE A
FIELD SCREENING SOIL SAMPLE RESULTS
South Hobbs GSA Unit 238O04
Oxy USA, Inc.
Eddy County, New Mexico
Ensolum Project No. 03B1417171
Incident ID: nAPP2410037098

Sample Designation	Date	Depth (feet bgs)	Chloride Strips Field Screening Results (mg/kg)
New Mexico Oil Conservation Division Closure Criteria for Soils Impacted by a Release (≤ 50 feet)			Chloride 600 mg/kg
Pothole Soil Sample Field Screening Results			
PH34	11/14/2024	4	**476**
		5	**476**
PH35	11/14/2024	5.5	**476**
PH36	11/15/2024	3	**576.8**
		6	**464.8**
PH37	11/14/2024	2	ND
PH38	11/14/2024	4	**426**
PH39	11/14/2024	4.5	**426**
PH40	11/14/2024	2.5	**280**
PH41	11/14/2024	3	**241**
PH42	11/14/2024	3.5	ND

*Concentrations in **bold** and yellow exceed the NMOCD Closure Criteria for Soils Impacted by a Release (≤50 feet)*

bgs: below ground surface

mg/kg: milligrams per kilogram

ND: Non-Detect

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Phone: (505) 476-3441

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

QUESTIONS

Action 417869

QUESTIONS

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID: 16696
	Action Number: 417869
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

QUESTIONS

Prerequisites	
Incident ID (n#)	**nAPP2410037098**
Incident Name	**NAPP2410037098 SOUTH HOBBS GSA UNIT 238 @ 30-025-31424**
Incident Type	**Produced Water Release**
Incident Status	**Remediation Plan Received**
Incident Well	**[30-025-31424] SOUTH HOBBS G/SA UNIT #238**

Location of Release Source *Please answer all the questions in this group.*	
Site Name	SOUTH HOBBS GSA UNIT 238
Date Release Discovered	04/08/2024
Surface Owner	State

Incident Details *Please answer all the questions in this group.*	
Incident Type	Produced Water Release
Did this release result in a fire or is the result of a fire	No
Did this release result in any injuries	No
Has this release reached or does it have a reasonable probability of reaching a watercourse	No
Has this release endangered or does it have a reasonable probability of endangering public health	No
Has this release substantially damaged or will it substantially damage property or the environment	No
Is this release of a volume that is or may with reasonable probability be detrimental to fresh water	No

Nature and Volume of Release *Material(s) released, please answer all that apply below. Any calculations or specific justifications for the volumes provided should be attached to the follow-up C-141 submission.*	
Crude Oil Released (bbls) Details	*Not answered.*
Produced Water Released (bbls) Details	Cause: Equipment Failure | Flow Line - Injection | Produced Water | Released: 2,220 BBL | Recovered: 1,850 BBL | Lost: 370 BBL.
Is the concentration of chloride in the produced water >10,000 mg/l	No
Condensate Released (bbls) Details	*Not answered.*
Natural Gas Vented (Mcf) Details	*Not answered.*
Natural Gas Flared (Mcf) Details	*Not answered.*
Other Released Details	*Not answered.*
Are there additional details for the questions above (i.e. any answer containing Other, Specify, Unknown, and/or Fire, or any negative lost amounts)	*Not answered.*

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QUESTIONS (continued)

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID: 16696
	Action Number: 417869
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

QUESTIONS

Nature and Volume of Release (continued)	
Is this a gas only submission (i.e. only significant Mcf values reported)	**No, according to supplied volumes this does not appear to be a "gas only" report.**
Was this a major release as defined by Subsection A of 19.15.29.7 NMAC	**Yes**
Reasons why this would be considered a submission for a notification of a major release	**From paragraph A. "Major release" determine using:** **(1) an unauthorized release of a volume, excluding gases, of 25 barrels or more.**
With the implementation of the 19.15.27 NMAC (05/25/2021), venting and/or flaring of natural gas (i.e. gas only) are to be submitted on the C-129 form.	

Initial Response *The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury.*	
The source of the release has been stopped	True
The impacted area has been secured to protect human health and the environment	True
Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices	True
All free liquids and recoverable materials have been removed and managed appropriately	True
If all the actions described above have not been undertaken, explain why	*Not answered.*
Per Paragraph (4) of Subsection B of 19.15.29.8 NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please prepare and attach a narrative of actions to date in the follow-up C-141 submission. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see Subparagraph (a) of Paragraph (5) of Subsection A of 19.15.29.11 NMAC), please prepare and attach all information needed for closure evaluation in the follow-up C-141 submission.	

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

I hereby agree and sign off to the above statement	Name: Wade Dittrich Title: Environmental Coordinator Email: wade_dittrich@oxy.com Date: 01/07/2025

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QUESTIONS (continued)

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID: 16696
	Action Number: 417869
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

QUESTIONS

Site Characterization	
Please answer all the questions in this group (only required when seeking remediation plan approval and beyond). This information must be provided to the appropriate district office no later than 90 days after the release discovery date.	
What is the shallowest depth to groundwater beneath the area affected by the release in feet below ground surface (ft bgs)	Between 26 and 50 (ft.)
What method was used to determine the depth to ground water	NM OSE iWaters Database Search
Did this release impact groundwater or surface water	No
What is the minimum distance, between the closest lateral extents of the release and the following surface areas:	
A continuously flowing watercourse or any other significant watercourse	Between 100 and 200 (ft.)
Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)	Greater than 5 (mi.)
An occupied permanent residence, school, hospital, institution, or church	Between ½ and 1 (mi.)
A spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes	Between 1000 (ft.) and ½ (mi.)
Any other fresh water well or spring	Between 1000 (ft.) and ½ (mi.)
Incorporated municipal boundaries or a defined municipal fresh water well field	Between 1000 (ft.) and ½ (mi.)
A wetland	Between 100 and 200 (ft.)
A subsurface mine	Greater than 5 (mi.)
An (non-karst) unstable area	Greater than 5 (mi.)
Categorize the risk of this well / site being in a karst geology	Low
A 100-year floodplain	Between 1000 (ft.) and ½ (mi.)
Did the release impact areas not on an exploration, development, production, or storage site	Yes

Remediation Plan	
Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.	
Requesting a remediation plan approval with this submission	Yes
Attach a comprehensive report demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined, pursuant to 19.15.29.11 NMAC and 19.15.29.13 NMAC.	
Have the lateral and vertical extents of contamination been fully delineated	Yes
Was this release entirely contained within a lined containment area	No
Soil Contamination Sampling: (Provide the highest observable value for each, in milligrams per kilograms.)	
Chloride (EPA 300.0 or SM4500 Cl B)	767.2
TPH (GRO+DRO+MRO) (EPA SW-846 Method 8015M)	0
GRO+DRO (EPA SW-846 Method 8015M)	0
BTEX (EPA SW-846 Method 8021B or 8260B)	0
Benzene (EPA SW-846 Method 8021B or 8260B)	0
Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.	
On what estimated date will the remediation commence	09/05/2024
On what date will (or did) the final sampling or liner inspection occur	04/07/2025
On what date will (or was) the remediation complete(d)	04/07/2025
What is the estimated surface area (in square feet) that will be reclaimed	72743
What is the estimated volume (in cubic yards) that will be reclaimed	8208
What is the estimated surface area (in square feet) that will be remediated	72743
What is the estimated volume (in cubic yards) that will be remediated	8208
These estimated dates and measurements are recognized to be the best guess or calculation at the time of submission and may (be) change(d) over time as more remediation efforts are completed.	
The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.	

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QUESTIONS (continued)

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID: 16696
	Action Number: 417869
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

QUESTIONS

Remediation Plan (continued)	
Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.	
This remediation will (or is expected to) utilize the following processes to remediate / reduce contaminants:	
(Select all answers below that apply.)	
(Ex Situ) Excavation and **off-site** disposal (i.e. dig and haul, hydrovac, etc.)	Yes
Which OCD approved facility will be used for **off-site** disposal	LEA LAND LANDFILL [fEEM0112342028]
OR which OCD approved well (API) will be used for **off-site** disposal	*Not answered.*
OR is the **off-site** disposal site, to be used, out-of-state	*Not answered.*
OR is the **off-site** disposal site, to be used, an NMED facility	*Not answered.*
(Ex Situ) Excavation and **on-site** remediation (i.e. On-Site Land Farms)	*Not answered.*
(In Situ) Soil Vapor Extraction	*Not answered.*
(In Situ) Chemical processing (i.e. Soil Shredding, Potassium Permanganate, etc.)	*Not answered.*
(In Situ) Biological processing (i.e. Microbes / Fertilizer, etc.)	*Not answered.*
(In Situ) Physical processing (i.e. Soil Washing, Gypsum, Disking, etc.)	*Not answered.*
Ground Water Abatement pursuant to 19.15.30 NMAC	*Not answered.*
OTHER (Non-listed remedial process)	*Not answered.*
Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.	
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.	
I hereby agree and sign off to the above statement	Name: Wade Dittrich Title: Environmental Coordinator Email: wade_dittrich@oxy.com Date: 01/07/2025
The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.	

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QUESTIONS (continued)

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID: 16696
	Action Number: 417869
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

QUESTIONS

Deferral Requests Only	
Only answer the questions in this group if seeking a deferral upon approval this submission. Each of the following items must be confirmed as part of any request for deferral of remediation.	
Requesting a deferral of the remediation closure due date with the approval of this submission	No

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

General Information
Phone: (505) 629-6116

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

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

QUESTIONS (continued)

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID: 16696
	Action Number: 417869
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

QUESTIONS

Sampling Event Information	
Last sampling notification (C-141N) recorded	**423953**
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	**01/29/2025**
What was the (estimated) number of samples that were to be gathered	**337**
What was the sampling surface area in square feet	**67400**

Remediation Closure Request	
Only answer the questions in this group if seeking remediation closure for this release because all remediation steps have been completed.	
Requesting a remediation closure approval with this submission	No

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CONDITIONS

Action 417869

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Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID: 16696
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CONDITIONS

Created By	Condition	Condition Date
nvelez	Remediation plan is approved as written except with the following conditions; 1. OXY must complete the excavation and removal of impacted soils until confirmation samples collected from the bottom and sidewalls of the excavation report NMOCD Closure Criteria per 19.15.29.12 NMAC has been achieved. 2. Prior to backfilling the open excavation per 19.15.29.12D (2) NMAC, OXY must collect a minimum of one (1) 5pcs from the media being used as backfill to verify that it meets non-waste containing, uncontaminated, earthen material with chloride concentrations less than 600 mg/kg as analyzed by EPA Method 300.0, or other test methods approved by the division. This is especially important for the material being used within the top four (4) feet from the ground surface. 3. OXY has 90-days (April 23, 2025) to submit to OCD its appropriate or final remediation closure report.	1/23/2025