

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: 670624  
File Nbr: C 04423

Apr. 01, 2020

~~JASON SHUBERT~~  
~~TALON LPE~~  
~~921 N BIVINS~~  
~~AMARILLO, TX 79107~~

Greetings:

Your approved copy of the above numbered permit to drill a well for non-consumptive purposes is enclosed. You must obtain an additional permit if you intend to use the water. It is your responsibility to provide the contracted well driller with a copy of the permit that must be made available during well drilling activities.

Carefully review the attached conditions of approval for all specific permit requirements.

- \* If use of this well is temporary in nature and the well will be plugged at the end of the well usage, the OSE must initially approve of the plugging. If plugging approval is not conditioned in this permit, the applicant must submit a Plugging Plan of Operations for approval prior to the well being plugged. The Plugging Record must be properly completed and submitted to the OSE within 30 days of the well plugging.
- \* If the final intended purpose and condition requires a well ID tag and meter installation, the applicant must immediately send a completed meter report form to this office.
- \* The well record and log must be submitted within 30 days of the completion of the well or if the attempt was a dry hole.
- \* This permit expires and will be cancelled if no well is drilled and/or a well log is not received by the date set forth in the conditions of approval.

Appropriate forms can be downloaded from the OSE website [www.ose.state.nm.us](http://www.ose.state.nm.us).

Sincerely,

A handwritten signature in cursive script, appearing to read "C. Guillen".

Claudia Guillen  
(575) 622-6521

Enclosure

explore

File No. L-14872

## NEW MEXICO OFFICE OF THE STATE ENGINEER



## WR-07 APPLICATION FOR PERMIT TO DRILL

## A WELL WITH NO WATER RIGHT

(check applicable box):

For fees, see State Engineer website: <http://www.ose.state.nm.us/>

Purpose:	<input type="checkbox"/> Pollution Control And/Or Recovery	<input type="checkbox"/> Ground Source Heat Pump
<input type="checkbox"/> Exploratory Well (Pump test)	<input type="checkbox"/> Construction Site/Public Works Dewatering	<input type="checkbox"/> Other(Describe):
<input checked="" type="checkbox"/> Monitoring Well	<input type="checkbox"/> Mine Dewatering	

A separate permit will be required to apply water to beneficial use regardless if use is consumptive or nonconsumptive.

☐ Temporary Request - Requested Start Date: March 23, 2020 Requested End Date: March 25, 2020

Plugging Plan of Operations Submitted? ☐ Yes ☒ No

## 1. APPLICANT(S)

Name: Permian EOR	Name: Ensolum, LLC
Contact or Agent: <input type="checkbox"/> check here if Agent Mr. Dusty Wilson	Contact or Agent: <input checked="" type="checkbox"/> check here if Agent Elizabeth Scaggs
Mailing Address: 6001 Deauville Blvd	Mailing Address: 2351 W. Northwest Highway, Ste. 1203
City: Midland	City: Dallas
State: <input type="checkbox"/> Zip Code: Texas 79706	State: <input type="checkbox"/> Zip Code: Texas 75220
Phone: 432-254-2336 <input type="checkbox"/> Home <input type="checkbox"/> Cell Phone (Work):	Phone: 972-467-0838 <input type="checkbox"/> Home <input type="checkbox"/> Cell Phone (Work):
E-mail (optional): dusty_wilson@oxy.com	E-mail (optional): lscaggs@ensolum.com

OSE DJT MAR 15 2020 PM 3:07

FOR OSE INTERNAL USE

Application for Permit, Form WR-07, Rev 11/17/16

File No.: <u>L-14872</u>	Trn. No.: <u>670505</u>	Receipt No.: <u>2-41828</u>
Trans Description (optional): <u>Mon</u>		
Sub-Basin: <u>L</u>	PCW/LOG Due Date: <u>3/31/2021</u>	

Page 1 of 3



**2. WELL(S)** Describe the well(s) applicable to this application.

**Location Required:** Coordinate location must be reported in NM State Plane (NAD 83), UTM (NAD 83), or Latitude/Longitude (Lat/Long - WGS84).

District II (Roswell) and District VII (Cimarron) customers, provide a PLSS location in addition to above.

- ☐ NM State Plane (NAD83) (Feet)
 ☐ UTM (NAD83) (Meters)
 ☐ Lat/Long (WGS84) (to the nearest 1/10<sup>th</sup> of second)
- ☐ NM West Zone
 ☐ Zone 12N
- ☐ NM East Zone
 ☐ Zone 13N
- ☐ NM Central Zone

Well Number (if known):	X or Easting or Longitude:	Y or Northing or Latitude:	Provide if known: -Public Land Survey System (PLSS) (Quarters or Halves, Section, Township, Range) OR -Hydrographic Survey Map & Tract; OR -Lot, Block & Subdivision; OR -Land Grant Name
MW-1	-103.173126	32.690608	SE 1/4 of the NW 1/4, Sec 5, T19S, R38E
MW-2	-103.174188	32.689766	SE 1/4 of the NW 1/4, Sec 5, T19S, R38E

**NOTE:** If more well locations need to be described, complete form WR-08 (Attachment 1 – POD Descriptions)

**Additional well descriptions are attached:** ☐ Yes ☒ No **If yes, how many** \_\_\_\_\_

Other description relating well to common landmarks, streets, or other:

Area where the monitoring wells are to be installed is west of Hobbs, approximately 0.43 miles south of US Highway 62 and 0.32 miles east of SW County Road/South Bypass.

Well is on land owned by: Permain EOR

**Well Information:** **NOTE:** If more than one (1) well needs to be described, provide attachment. Attached? ☐ Yes ☒ No  
If yes, how many \_\_\_\_\_

Approximate depth of well (feet): 110

Outside diameter of well casing (inches): 2

Driller Name: West Texas Water Well Service, Ronny Keith

Driller License Number: 1184

**3. ADDITIONAL STATEMENTS OR EXPLANATIONS**

The monitoring wells are being installed at the request of the NM Oil Conservation Division, the February 26, 2020 request letter is attached for reference.

OSE HIT MAR 16 2020 #3107

FOR OSE INTERNAL USE

Application for Permit, Form WR-07

File No.: L-14872

Tm No.: 670505

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**4. SPECIFIC REQUIREMENTS:** The applicant must include the following, as applicable to each well type. Please check the appropriate boxes, to indicate the information has been included and/or attached to this application:

<b>Exploratory:</b> <input type="checkbox"/> Include a description of any proposed pump test, if applicable.	<b>Pollution Control and/or Recovery:</b> <input type="checkbox"/> Include a plan for pollution control/recovery, that includes the following: <input type="checkbox"/> A description of the need for the pollution control or recovery operation. <input type="checkbox"/> The estimated maximum period of time for completion of the operation. <input type="checkbox"/> The annual diversion amount. <input type="checkbox"/> The annual consumptive use amount. <input type="checkbox"/> The maximum amount of water to be diverted and injected for the duration of the operation. <input type="checkbox"/> The method and place of discharge. <input type="checkbox"/> The method of measurement of water produced and discharged. <input type="checkbox"/> The source of water to be injected. <input type="checkbox"/> The method of measurement of water injected. <input type="checkbox"/> The characteristics of the aquifer. <input type="checkbox"/> The method of determining the resulting annual consumptive use of water and depletion from any related stream system. <input type="checkbox"/> Proof of any permit required from the New Mexico Environment Department. <input type="checkbox"/> An access agreement if the applicant is not the owner of the land on which the pollution plume control or recovery well is to be located.	<b>Construction De-Watering:</b> <input type="checkbox"/> Include a description of the proposed dewatering operation. <input type="checkbox"/> The estimated duration of the operation. <input type="checkbox"/> The maximum amount of water to be diverted. <input type="checkbox"/> A description of the need for the dewatering operation, and, <input type="checkbox"/> A description of how the diverted water will be disposed of.	<b>Mine De-Watering:</b> <input type="checkbox"/> Include a plan for pollution control/recovery, that includes the following: <input type="checkbox"/> A description of the need for mine dewatering. <input type="checkbox"/> The estimated maximum period of time for completion of the operation. <input type="checkbox"/> The source(s) of the water to be diverted. <input type="checkbox"/> The geohydrologic characteristics of the aquifer(s). <input type="checkbox"/> The maximum amount of water to be diverted per annum. <input type="checkbox"/> The maximum amount of water to be diverted for the duration of the operation. <input type="checkbox"/> The quality of the water. <input type="checkbox"/> The method of measurement of water diverted. <input type="checkbox"/> The recharge of water to the aquifer. <input type="checkbox"/> Description of the estimated area of hydrologic effect of the project. <input type="checkbox"/> The method and place of discharge. <input type="checkbox"/> An estimation of the effects on surface water rights and underground water rights from the mine dewatering project. <input type="checkbox"/> A description of the methods employed to estimate effects on surface water rights and underground water rights. <input type="checkbox"/> Information on existing wells, rivers, springs, and wetlands within the area of hydrologic effect.
<b>Monitoring:</b> <input checked="" type="checkbox"/> Include the reason for the monitoring well, and, <input checked="" type="checkbox"/> The duration of the planned monitoring.		<b>Ground Source Heat Pump:</b> <input type="checkbox"/> Include a description of the geothermal heat exchange project, <input type="checkbox"/> The number of boreholes for the completed project and required depths. <input type="checkbox"/> The time frame for constructing the geothermal heat exchange project, and, <input type="checkbox"/> The duration of the project. <input type="checkbox"/> Preliminary surveys, design data, and additional information shall be included to provide all essential facts relating to the request.	

#### ACKNOWLEDGEMENT

I, We (name of applicant(s)), Dusty Wilson, OXY Permian Elizabeth Scaggs, Ensolum LLC  
 Print Name(s)

affirm that the foregoing statements are true to the best of (my, our) knowledge and belief.

*Dusty Wilson*  
 Applicant Signature

*Elizabeth Scaggs*  
 Applicant Signature

#### ACTION OF THE STATE ENGINEER

This application is:

☒ approved ☐ partially approved ☐ denied

provided it is not exercised to the detriment of any others having existing rights, and is not contrary to the conservation of water in New Mexico nor detrimental to the public welfare and further subject to the attached conditions of approval.

Witness my hand and seal this 2<sup>nd</sup> day of April 20 20, for the State Engineer,

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

OSE DTI MAR 16 2020 PM 3:07

By: *Juan Hernandez*  
 Signature

Print

Title: Juan Hernandez, Water Resources Manager I  
 Print



FOR OSE INTERNAL USE

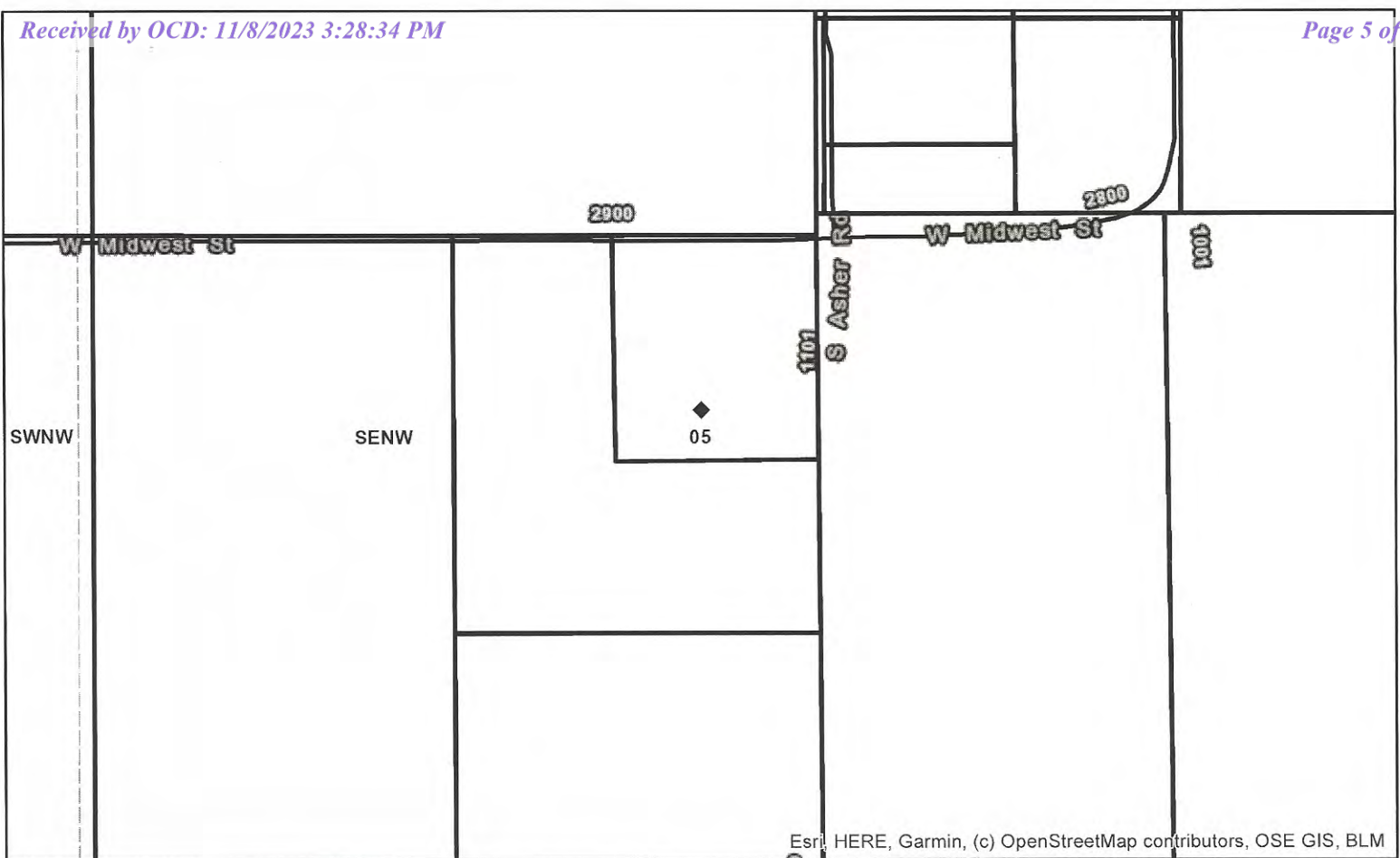
Application for Permit, Form WR-07

File No.: L-14872

Trm No.: 670505

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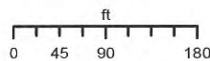




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# NEW MEXICO OFFICE OF THE STATE ENGINEER

1:2,257



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3/31/2020



Reasonable efforts have been made by the New Mexico Office of the State Engineer (OSE) to verify that these maps accurately depict the data used in their preparation. However, a degree of error is inherent in all maps, and these maps may contain omissions and errors in scale, resolution, orientation, positional accuracy, development, nomenclature, interpretation of source data, and other characteristics. These maps are distributed "as is" without warranty of any kind.

## Spatial Information

County: Lea

Groundwater Basin: Lea County

Abstract Area: L

Land Grant:  
Not in Land Grant

### Restrictions:

Lea County Critical Management Area

### PLSS Description

NESWSENW Qtr of Sec 05 of 019S 038E

Derived from CADNSDI- Qtr Sec. locations are calculated and are only approximations

## Parcel Information

UPC/DocNum: 4000001000001

Parcel Owner: LEVY, SIM H SR &amp; LEVY,

Address:

Legal:

## POD Information

Owner: PERMIAN EOR

File Number: L-147872 POD1

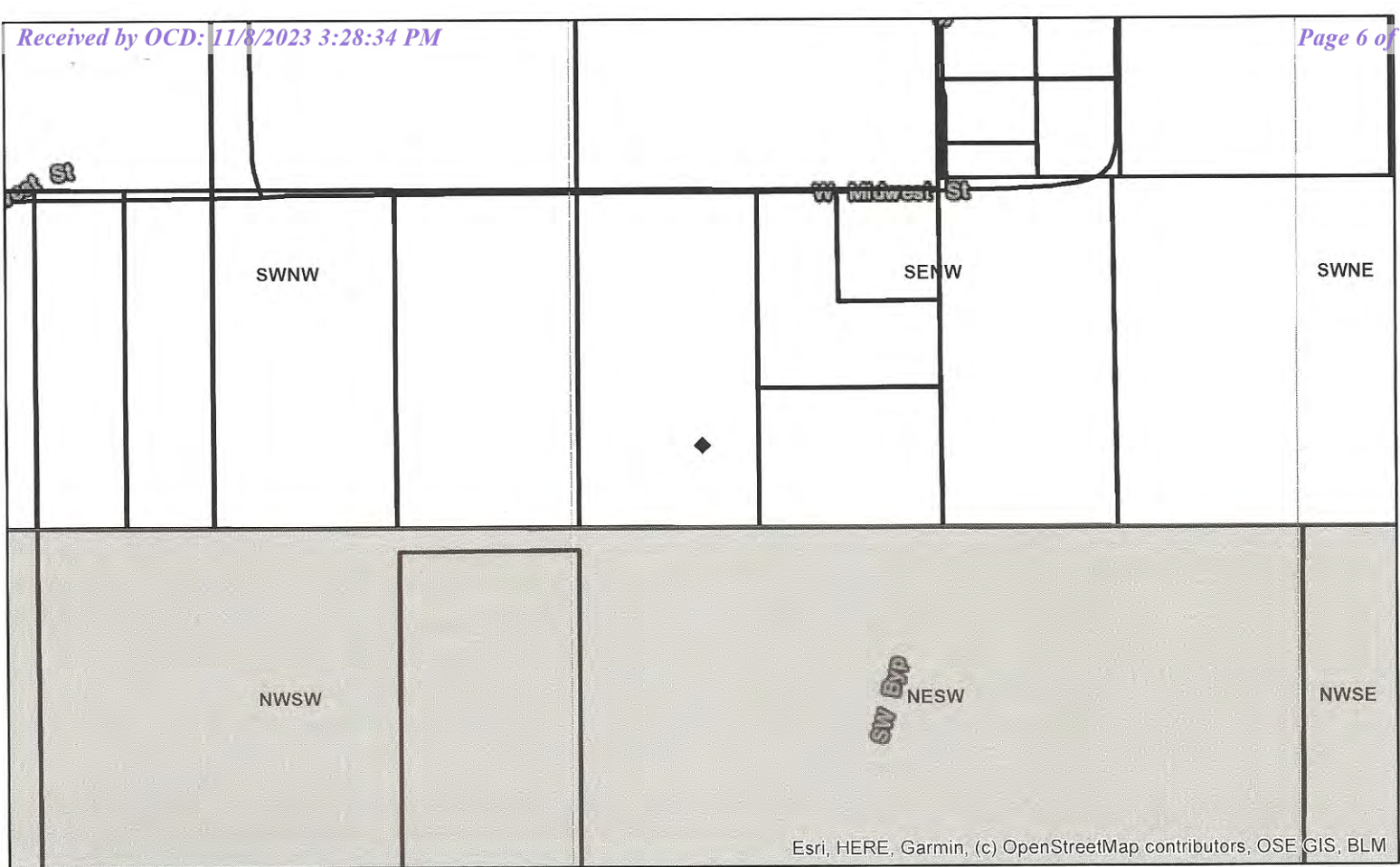
POD Status: NoData

Permit Status: NoData

Permit Use: NoData

Purpose: MON

- ◆ Coord Search Location
- Chaves County Parcels 2018
- Lea County Parcels 2018
- BLM Land Grant
- PLSS Township
- PLSS First Div...
- PLSS Second...



Esri, HERE, Garmin, (c) OpenStreetMap contributors, OSE GIS, BLM

**Coordinates****UTM - NAD 83 (m) - Zone 13**

Easting 671167.175

Northing 3618367.893

**Decimal Degrees**

Latitude 32.689766

Longitude -103.174188

**Degrees Minutes Seconds**

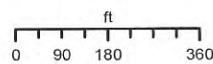
Latitude 32 : 41 : 23.157600

Longitude -103 : 10 : 27.076800

Location pulled from Coordinate Search

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1:4,514



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3/31/2020



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**Spatial Information**

County: Lea

Groundwater Basin: Lea County

Abstract Area:L

Land Grant:  
Not in Land Grant**Restrictions:**

Lea County Critical Management Area

**PLSS Description**

SWSWSENW Qtr of Sec 05 of 019S 038E

Derived from CADNSDI- Qtr Sec. locations are calculated and are only approximations

**Parcel Information**

UPC/DocNum: 4000139450001

Parcel Owner: OCCIDENTAL PERMIAN LTD

Address:

Legal:

**POD Information**

Owner: PERMIAN EOP

File Number: L-14872 POD2

POD Status: NoData

Permit Status: NoData

Permit Use: NoData

Purpose: MON

- ◆ Coord Search Location
- BLM Land Grant
- State Land
- PLSSTownship
- Chaves County Parcels 2018
- PLSSFirstDiv...
- Lea County Parcels 2018
- PLSSSecond...



**NEW MEXICO STATE ENGINEER OFFICE  
PERMIT TO EXPLORE**

**SPECIFIC CONDITIONS OF APPROVAL**

- 17-1B Depth of the well shall not exceed the thickness of the Ogallala formation.
- 17-4 No water shall be appropriated and beneficially used under this permit.
- 17-6 The well authorized by this permit shall be plugged completely using the following method per Rules and Regulations Governing Well Driller Licensing, Construction, Repair and Plugging of Wells; Subsection C of 19.27.4.30 NMAC unless an alternative plugging method is proposed by the well owner and approved by the State Engineer upon completion of the permitted use. All pumping appurtenance shall be removed from the well prior to plugging. To plug a well, the entire well shall be filled from the bottom upwards to ground surface using a tremie pipe. The bottom of the tremie shall remain submerged in the sealant throughout the entire sealing process; other placement methods may be acceptable and approved by the state engineer. The well shall be plugged with an office of the state engineer approved sealant for use in the plugging of non-artesian wells. The well driller shall cut the casing off at least four (4) feet below ground surface and fill the open hole with at least two vertical feet of approved sealant. The driller must fill or cover any open annulus with sealant. Once the sealant has cured, the well driller or well owner may cover the seal with soil. A Plugging Report for said well shall be filed with the Office of the State Engineer in a District Office within 30 days of completion of the plugging.
- 17-7 The Permittee shall utilize the highest and best technology available to ensure conservation of water to the maximum extent practical.

Trn Desc: L 14872 POD1-POD2

File Number: L 14872

Trn Number: 670505

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**NEW MEXICO STATE ENGINEER OFFICE  
PERMIT TO EXPLORE**

**SPECIFIC CONDITIONS OF APPROVAL (Continued)**

- 17-B The well shall be drilled by a driller licensed in the State of New Mexico in accordance with 72-12-12 NMSA 1978. A licensed driller shall not be required for the construction of a well driven without the use of a drill rig, provided that the casing shall not exceed two and three-eighths (2 3/8) inches outside diameter.
- 17-C The well driller must file the well record with the State Engineer and the applicant within 30 days after the well is drilled or driven. It is the well owner's responsibility to ensure that the well driller files the well record.  
The well driller may obtain the well record form from any District Office or the Office of the State Engineer website.
- 17-P The well shall be constructed, maintained, and operated to prevent inter-aquifer exchange of water and to prevent loss of hydraulic head between hydrogeologic zones.
- 17-Q The State Engineer retains jurisdiction over this permit.
- 17-R Pursuant to section 72-8-1 NMSA 1978, the permittee shall allow the State Engineer and OSE representatives entry upon private property for the performance of their respective duties, including access to the ditch or acequia to measure flow and also to the well for meter reading and water level measurement.
- LOG The Point of Diversion L 14872 POD1 must be completed and the Well Log filed on or before 04/02/2021.
- LOG The Point of Diversion L 14872 POD2 must be completed and the Well Log filed on or before 04/02/2021.

Trn Desc: L 14872 POD1-POD2

File Number: L 14872

Trn Number: 670505



NEW MEXICO STATE ENGINEER OFFICE  
PERMIT TO EXPLORE

SPECIFIC CONDITIONS OF APPROVAL (Continued)

IT IS THE PERMITTEES RESPONSIBILITY TO OBTAIN ALL UTHORIZATIONS  
AND PERMISSIONS TO DRILL ON PROPERTY OF OTHER OWNERSHIP BEFORE  
COMMENCING ACTIVITIES UNDER THIS PERMIT.

ACTION OF STATE ENGINEER

Notice of Intention Rcvd:	Date Rcvd. Corrected:
Formal Application Rcvd: 03/16/2020	Pub. of Notice Ordered:
Date Returned - Correction:	Affidavit of Pub. Filed:

This application is approved provided it is not exercised to the detriment of  
any others having existing rights, and is not contrary to the conservation of  
water in New Mexico nor detrimental to the public welfare of the state; and  
further subject to the specific conditions listed previously.

Witness my hand and seal this 02 day of Apr A.D., 2020

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

By:

JUAN HERNANDEZ



Trn Desc: L 14872 POD1-POD2

File Number: L 14872

Trn Number: 670505

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**District I**  
1625 N. French Dr., Hobbs, NM 88240  
Phone:(575) 393-6161 Fax:(575) 393-0720  
**District II**  
811 S. First St., Artesia, NM 88210  
Phone:(575) 748-1283 Fax:(575) 748-9720  
**District III**  
1000 Rio Brazos Rd., Aztec, NM 87410  
Phone:(505) 334-6178 Fax:(505) 334-6170  
**District IV**  
1220 S. St Francis Dr., Santa Fe, NM 87505  
Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS  
  
Action 284101

CONDITIONS

Operator: OCCIDENTAL PERMIAN LTD P.O. Box 4294 Houston, TX 772104294	OGRID:	157984
	Action Number:	284101
	Action Type:	[UF-GWA] Ground Water Abatement (GROUND WATER ABATEMENT)

CONDITIONS

Created By	Condition	Condition Date
michael.buchanan	None	1/2/2024