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Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Page 1 of 36

## Site Assessment/Characterization

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?	(ft bgs)
Did this release impact groundwater or surface water?	🗌 Yes 🖌 No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	🗌 Yes 🖌 No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	🗌 Yes 🖌 No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	🗌 Yes 🖌 No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	🗌 Yes 🖌 No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	🗌 Yes 🖌 No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	🗌 Yes 🖌 No
Are the lateral extents of the release within 300 feet of a wetland?	🗌 Yes 🖌 No
Are the lateral extents of the release overlying a subsurface mine?	🗌 Yes 🖌 No
Are the lateral extents of the release overlying an unstable area such as karst geology?	🗌 Yes 🖌 No
Are the lateral extents of the release within a 100-year floodplain?	🗌 Yes 🖌 No
Did the release impact areas <b>not</b> on an exploration, development, production, or storage site?	🗌 Yes 🖌 No

Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.

#### Characterization Report Checklist: Each of the following items must be included in the report.

- Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
- ✓ Field data
- Data table of soil contaminant concentration data
- $\checkmark$  Depth to water determination
- Determination of water sources and significant watercourses within <sup>1</sup>/<sub>2</sub>-mile of the lateral extents of the release
- Boring or excavation logs
- $\checkmark$  Photographs including date and GIS information
- ✓ Topographic/Aerial maps
- ✓ Laboratory data including chain of custody

If the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation plan. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan and methods, anticipated timelines for beginning and completing the remediation. The closure criteria for a release are contained in Table 1 of 19.15.29.12 NMAC, however, use of the table is modified by site- and release-specific parameters.

Page 3

	Facility ID Application ID	
on given above is true and complete to the be red to report and/or file certain release notific The acceptance of a C-141 report by the OC id remediate contamination that pose a threat 141 report does not relieve the operator of re o (as Agent of OXY)	est of my knowledge and understand that pursual cations and perform corrective actions for release CD does not relieve the operator of liability shoul t to groundwater, surface water, human health or esponsibility for compliance with any other feder Title: Environmental Project Manager	nt to OCD rules and es which may endanger d their operations have the environment. In al, state, or local laws
vices.com	Date:	
	Deter	
	on given above is true and complete to the b red to report and/or file certain release notifi The acceptance of a C-141 report by the OC d remediate contamination that pose a threa 141 report does not relieve the operator of re o (as Agent of OXY)	on given above is true and complete to the best of my knowledge and understand that pursuar         red to report and/or file certain release notifications and perform corrective actions for release         The acceptance of a C-141 report by the OCD does not relieve the operator of liability shoul         id remediate contamination that pose a threat to groundwater, surface water, human health or         141 report does not relieve the operator of responsibility for compliance with any other feder         o (as Agent of OXY)       Title: Environmental Project Manager         Date: <u>4/17/2020</u> vices.com       Telephone: (575)390-7208

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Form C-141	State of New Mexico	Incident ID	
Page 5	Oil Conservation Division	District RP	
		Facility ID	
		Application ID	

## **Remediation Plan**

Remediation Plan Checklist: Each of the following items must be included in the plan.

Detailed description of proposed remediation technique
 Scaled sitemap with GPS coordinates showing delineation

Scaled sitemap with GPS coordinates showing delineation points

1 Estimated volume of material to be remediated

1 Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC

1 Proposed schedule for remediation (note if remediation plan timeline is more than 90 days OCD approval is required)

Deferral Requests Only: Each of the following items must be confirmed as part of any request for deferral of remediation.

Contamination must be in areas immediately under or around production equipment where remediation could cause a major facility deconstruction.

Extents of contamination must be fully delineated.

Contamination does not cause an imminent risk to human health, the environment, or groundwater.

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.

Printed Name: Ben J. Arguijo (as Agent of OXY)	Title: Environmental Project Manager	
Signature:	Date: 4/7/2020	
email: ben@trinityoilfieldservices.com	Telephone: (575)390-7208	
OCD Only		
Received by:	Date:	
Approved Approved with Attached Conditions of	Approval 🗌 Denied 🗌 Defe	rral Approved
Signature:	Date:	

## **Trinity Oilfield Services & Rentals, LLC**

Environmental Site Summary & Spill Remediation Proposal



Company:_OXY USA, Inc	_Address: P.O. Box 4294, Houston, TX 77210Telephone #:(575) 390-282	8
Site Name: East Eumont Battery	NMOCD Reference#:	
Surface Owner: Private	Mineral Owner: Private	
Unit Letter: <u>M (SW/SW)</u> Section: <u>3</u> Townshi	p: <u>198</u> Range: <u>37</u> E County: Lea GPS Coordinates: <u>32.684471</u> N <u>-103.245658</u>	_w
Date/Time of Release: 2/18/2020	Type of Release: 🗹 Crude Oil 🛛 Produced Water	
Volume(s) Released: 10 bbls Crude Oil & 140 b	bls Produced Water Volume(s) Recovered: 120 bbls	
Closure Criteria for Impacted Soil (mg/kg; Se	Appendix C, "Closure Criteria Justification"):	
Benzene: <u>10</u> BTEX: <u>50</u> GRO+DRO: <u>1,0</u>	<u>00</u> TPH: 🗹 100 Chloride: 🗹 600	
	2,500 10,000	
Deckground Information	□ 20,000	
Background information:		
On February 18, 2020, OXY USA, Inc. (C discharge line for a transfer pump failed, bbls of produced water. The release was	XY), discovered a release at the East Eumont Battery. A 2-inch hose on a esulting in the release of approximately 10 barrels (bbls) of crude oil and 140 confined to the containment area surrounding the battery and affected a total	)

area measuring approximately 1,945 square feet. During initial response activities, the damaged hose was replaced, and a vacuum truck was utilized to recover approximately 120 bbls of free-standing liquid. The release was reported to the New Mexico Oil Conservation Division's (NMOCD) Hobbs District Office on February 20,

The release was reported to the New Mexico Oil Conservation Division's (NMOCD) Hobbs District Office on February 20, 2020. The NMOCD "Release Notification & Corrective Action" form (C-141) is provided as Appendix A. General photographs of the release site are provided in Appendix B. A "Site Location Map" is provided as Figure 1.

#### Summary of Field Activities:

On March 17, 2020, a hand auger was utilized to advance a series of 4 boreholes (SP-1 through SP-4) inside the containment area to investigate the vertical extent of impacted soil. The auger holes were advanced to the extents practicable, with total depths of approximately 2 feet below ground surface (bgs). Soil samples were collected at 1-foot vertical intervals and field-screened with a chloride test kit and/or olfactory/visual senses. Representative confirmation samples were submitted to Xenco Laboratories in Midland, Texas, for analysis of chloride concentrations using Environmental Protection Agency (EPA) Method 300. Laboratory analytical results are pending. Field-screens indicate additional delineation to determine the extent of impacted soil is required. However, additional delineation was deemed impracticable without heavy equipment.

Locations of the auger holes are depicted in Figure 2, "Site Plan". Field test results are provided in Appendix D.

#### Proposed Activities:

OXY proposes to conduct the following activities to progress the East Eumont Battery release site to an NMOCDapproved closure:

• Additional delineation to determine the horizontal and vertical extent of impacted soil will be conducted forthwith.

• Based on heavy petroleum staining and odor observed at 2' bgs in all four (4) auger holes, the entire impacted area will be excavated vertically to 4 feet bgs, to the extent practicable, as depicted in Figure 2, "Site Plan". OXY hereby requests a variance from the requirements of Section 19.15.29.12.D(2) of the New Mexico Administrative Code (NMAC) and permission to install a 20-mil liner in the excavation upon completion. Felt padding will be installed on the floor of the excavation prior to installation of the liner, and a 6-inch cushion of sand will be installed atop the liner once it is in place to protect it from damage during backfilling.

## **Trinity Oilfield Services & Rentals, LLC**

Environmental Site Summary & Spill Remediation Proposal



#### Proposed Activities (cont.):

• To preserve the structural integrity of the on-site storage tanks, any excavation required immediately around the tanks will be limited to a surface scrape of heavily saturated, visibly stained soil. Excavation in other impacted areas may be hindered by the presence of active pipes, appurtenances, electrical lines, etc. Impacted soil remaining in-situ will be remediated upon decommissioning and/or abandonment of the facility.

• The total volume of soil to be excavated is approximately 288 cubic yards.

• Representative 5-point composite soil samples will be collected from the floor and sidewalls of the excavation and submitted to Xenco Laboratories for confirmatory analysis of chloride, TPH, and/or BTEX concentrations using EPA Methods 300, SW 846-8015 Mod, and SW 846-8021B, respectively. Each composite sample will represent an area no larger than 200 square feet.

• All excavated soil will be stockpiled on-site on 6-mil plastic, pending transfer to Lea Land, Inc., for disposal.

• The excavation will be fenced off during periods of inactivity to prevent injury to oilfield personnel, livestock, and/or wildlife.

• Following remediation activities, the excavation will be backfilled with locally acquired, non-impacted material, compacted, and contoured to fit the needs of the facility.

• The aforementioned corrective actions will be completed within 45 days of receipt of approval of this proposal by the NMOCD. Upon completion of the proposed tasks, a "Remediation Summary & Closure Request" will be submitted, documenting remediation activities and results of confirmation soil samples.

Enclosures: Figure 1: Site Location Map Figure 2: Site Plan Appendix A: Release Notification & Corrective Action (Form C-141) Appendix B: Photographs Appendix C: Closure Criteria Justification Appendix D: Field Notes

4/7/2020 Ben J. Arguijo Project Manager

Figures

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# Appendices

## Appendix A Release Notification & Corrective Action (Form C-141)

District I 1625 N. French Dr., Hobbs, NM 88240 District II 811 S. First St., Artesia, NM 88210 District III 1000 Rio Brazos Road, Aztec, NM 87410 District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505 State of New Mexico Energy Minerals and Natural Resources Department

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 **Page 11 of 36** 

Form C-141 Revised August 24, 2018 Submit to appropriate OCD District office

)

Incident ID	
District RP	
Facility ID	
Application ID	

## **Release Notification**

### **Responsible Party**

Responsible Party: OXY USA Inc.	OGRID: 16696
Contact Name: Wade Dittrich	Contact Telephone: (575) 390-2828
Contact email: Wade_Dittrich@oxy.com	Incident # (assigned by OCD)
Contact mailing address P. O. Box 4295, Houston, TX 77210	

### **Location of Release Source**

Latitude 32.684471

(NAD 83 in decimal degrees to 5 decimal places)

Site Name: East Eumont Battery	Site Type: E&P
Date Release Discovered: February 18, 2020	API# (if applicable)

Unit Letter	Section	Township	Range	County
	03	T19S	37E	Lea

Surface Owner: State Federal Tribal Private (Name: \_

### Nature and Volume of Release

Material(s) Released (Select all that apply and attach calculations or specific justification for the volumes provided below)

Crude Oil	Volume Released (bbls) 10 bbls	Volume Recovered (bbls)
Produced Water	Volume Released (bbls) 140 bbls	Volume Recovered (bbls) 120
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	Yes No
Condensate	Volume Released (bbls)	Volume Recovered (bbls)
Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)
Cause of Release: A two	-inch dia. discharge line hose failed on a transfer pump	

rm C-141				Page 1
•	State of New Mexico		Incident ID	
e 2	Oil Conservation Division	n	District RP	
			Facility ID	
			Application ID	
Was this a major	If YES, for what reason(s) does the res	sponsible party cons	ider this a major release?	
19.15.29.7(A) NMAC?	This is a major release because the vol	lume released was gr	eater than 25 barrels equ	ivalent.
🛛 Yes 🗌 No				
If YES, was immediate r	notice given to the OCD? By whom? To	whom? When and	by what means (phone, e	email, etc)?
Wade Dittrich notified er	omrd-ocd-district1spills@state.nm.us on	February 20, 2020 a	t 9:05 AM.	
	Initial	Response		
The responsible	party must undertake the following actions immed	liately unless they could c	reate a safety hazard that would	d result in injury
$\overline{X}$ The source of the rel	ease has been stonned			
The immediate dames have	a been seen stopped.			
$\preceq$ The impacted area ha	as been secured to protect human health a	and the environment		
Released materials have	ave been contained via the use of berms	or dikes, absorbent p	oads, or other containmen	it devices.
🛛 All free liquids and re	ecoverable materials have been removed	and managed appro	priately.	
All free liquids and r	ecoverable materials have been removed d above have <u>not</u> been undertaken, expla	and managed appro	priately.	
All free liquids and r	ecoverable materials have been removed d above have <u>not</u> been undertaken, expla	and managed appro	priately.	
All free liquids and r If all the actions describe Per 19.15.29.8 B. (4) NM uas begun, please attach vithin a lined containmer	ecoverable materials have been removed d above have <u>not</u> been undertaken, expla IAC the responsible party may commend a narrative of actions to date. If remed nt area (see 19.15.29.11(A)(5)(a) NMAC	and managed appro ain why: ce remediation imme ial efforts have beer C), please attach all in	priately. ediately after discovery of successfully completed aformation needed for clo	f a release. If remediation or if the release occurro osure evaluation.
All free liquids and r f all the actions describe Per 19.15.29.8 B. (4) NM has begun, please attach vithin a lined containmer hereby certify that the info egulations all operators are ublic health or the environn ailed to adequately investig ddition, OCD acceptance o nd/or regulations.	A above have <u>not</u> been undertaken, explained above have <u>not</u> been undertaken, explained above have <u>not</u> been undertaken, explained a narrative of actions to date. If remed an arrative of actions to date. If remed at area (see 19.15.29.11(A)(5)(a) NMACC required to report and/or file certain release to required to report and/or file certain release to ment. The acceptance of a C-141 report by the ate and remediate contamination that pose at f a C-141 report does not relieve the operator	and managed appro ain why: ce remediation immedial efforts have been ial efforts have been c), please attach all in the best of my knowled notifications and perfo- ne OCD does not reliev threat to groundwater, r of responsibility for c	priately. ediately after discovery of a successfully completed aformation needed for clo dge and understand that pur- rm corrective actions for rel ve the operator of liability sh surface water, human health ompliance with any other for	f a release. If remediation or if the release occurr osure evaluation. suant to OCD rules and leases which may endanger hould their operations have h or the environment. In ederal, state, or local laws
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### \*\*\*\*\*\* LIQUID SPILLS - VOLUME CALCULATIONS \*\*\*\*\*\*

Location of spill:		East Eumont Battery (32.684471,-103.245658)						Date of Spill:	:2	
								Site Soil Type:	Kimbro-Lea Comple p	
Estimated	Daily Production Loss:	10	BBL Oil	140	BBL Water					
	Total A	Area Calc	ulations							
Total Surface Area	width		length		wet soil dep	oth oil (%)				
Rectangle Area #1	74.0 ft	Х	26 ft	Х	3.35	in 0%				
Rectangle Area #2	24 ft	Х	14 ft	Х	3.35	in <mark>0%</mark>				
Rectangle Area #3	28 ft	Х	10.5 ft	Х	3.35	in <mark>0%</mark>				
Rectangle Area #4	0 ft	Х	<mark>0</mark> ft	Х	<b>0</b> i	in <mark>0%</mark>				
Rectangle Area #5	0 ft	Х	0 ft	Х	0	in 0%				
Rectangle Area #6	0 ft	Х	0 ft	Х	<b>0</b> i	in 0%				
Rectangle Area #7	0 ft	Х	0 ft	Х	0	in 0%				
Rectangle Area #8	0 ft	X	0 ft	X	0	in 0%				
Porosity	0.19 gal per gal	(interpolate	ed between a sand	ly clay and	a gravelly sand	)				
Saturatod S	ail Volumo Calculation	nc:								
Saturated St		<u>115.</u>			<b></b>			Coll Trues	Devesity	
			<u>H2O</u>		OIL			Soli Type	Porosity	
Area #1	1,924 sq. ft.		537 cu. ft.			cu. ft.		Clay	0.15	
Area #2	336 sq. ft.		<mark>94</mark> cu. ft.			cu. ft.		Peat	0.40	
Area #3	294 sq. ft.		82 cu. ft.			cu. ft.		Glacial Sediments	0.13	
Area #4	0 sg. ft.		cu. ft.			cu. ft.		Sandy Clay	0.12	
Area #5	0 sq. ft.		cu. ft.			cu. ft.		Silt	0.16	
Area #6	, 0 sa ft		cu ft			cu ft		Loess	0.25	
	0 sq. ft		cu. ft.			ou ft		Eine Sand	0.16	
	0 sq. ft.		cu. n.					Madium Sand	0.10	
Area #8	0 sq. π.		cu. π.			cu. ft.		Medium Sand	0.25	
Total Solid/Liquid Volume:	2,554 sq. ft.		713 cu. ft.			cu. ft.		Coarse Sand	0.26	
								Gravely Sand	0.26	
									0.20	
Estimated V	olumes Spilled							Fine Graver	0.26	
			<u>H2O</u>		<u>OIL</u>			Medium Gravel	0.25	
Liquid i	n Soil:		24.1 BBL		0.0	BBL		Coarse Gravel	0.18	
Liquid Recov	vered :		<u>4.0</u> BBL		<u>2.0</u>	BBL		Sandstone	0.25	
								Siltstone	0.18	
Spill	Liquid		28.1 BBL		2.0	BBL		Shale	0.05	
Total Spill	iquid:			30.1				Limestone	0.13	
								Recelt	0.10	
_									0.19	
Recover	ed Volumes							voicanic lutt	0.20	

	Recov	ered Volumes
Estimat	ited oil recovered:	2.00 BBL
Estimated	water recovered:	118.0 BBL

#### 2/18/2020

plex sandy clay and gravelly sand, 0%-3% percent slopes, eroded

Standing Liquids

.

# Appendix B Photographs



Release (Looking North)



Release (Looking Northwest)

#### **OXY USA, Inc. – East Eumont Battery** Unit Letter "M" (SW/SW), Section 3, Township 19S, Range 37E



Release (Looking West-Northwest)



Release (Looking West)



Release (Looking Northwest)



Release (Looking Northwest)



Release (Looking West)



Release (Looking Southwest)



Release (Looking West-Southwest)



Release (Looking Southwest)

#### **OXY USA, Inc. – East Eumont Battery** Unit Letter "M" (SW/SW), Section 3, Township 19S, Range 37E



Release (Looking Southeast)



Release (Looking South-Southeast)



Release (Looking South)



Release (Looking East-Southeast)



Release (Looking South-Southeast)



Release (Looking East-Northeast)

![](_page_22_Picture_4.jpeg)

Release (Looking East)

![](_page_22_Picture_6.jpeg)

Release (Looking Southeast)

### **OXY USA, Inc. – East Eumont Battery** Unit Letter "M" (SW/SW), Section 3, Township 19S, Range 37E

![](_page_23_Picture_3.jpeg)

Release (East-Southeast)

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## **Appendix C Closure Criteria Justification**

#### **CLOSURE CRITERIA JUSTIFICATION**

#### OXY USA, INC. EAST EUMONT BATTERY LEA COUNTY, NEW MEXICO

![](_page_25_Picture_4.jpeg)

Groundwater, Water Wells & Other Water Sources	
Depth to groundwater (ft)?	25
Horizontal distance (ft) from all water sources within 0.5 miles?	2,230 - 2,400
Within 500' of a spring or a private, domestic fresh water well used by less than 5 households for domestic or stock watering purposes?	No
Within 1000' of any fresh water well or spring?	No
Surface Water	
Horizontal distance (ft) to nearest significant watercourse?	>1,000
Within 300' of any continuously flowing watercourse or any other significant watercourse?	No
Within 200' of any lakebed, sinkhole or playa lake?	No
Human-Occupied, Environmental & Other Areas	
Within incorporated municipal boundaries or within a defined municipal fresh water well field?	No
Within 300' of an occupied permanent residence, school, hospital, institution or church?	No
Within 300' of a wetland?	No
Within the area overlying a subsurface mine?	No
Within an unstable area?	No
Within a 100-year floodplain?	No

Closure Criteria (mg/kg)*							
Benzene	BTEX	GRO + DRO	ТРН	Chloride			
10	50	N/A	100	600			

\*Numerical limits or natural background level, whichever is greater

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Page 27 of 36

![](_page_26_Figure_2.jpeg)

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Page 28 of 36

![](_page_27_Figure_2.jpeg)

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

Easting (X): 6644	90.47		<u>, -</u>	Νοι	rthi	n <b>g ('</b>	Y):	361	7682.9	5	Radi	<b>us:</b> 1610			
Record Count: 18	Search (ir	metere													
												Maximum	Depth:	65	feet
											Ave	erage Depth to Minimum	Water: Depth:	40 20	feet feet
L 03181		LL	E	2	3	31	0 1	9S	37E	664591	3616080* 🤇	1606	130	35	95
<u>L 03190</u>		L L	E		4	43	3 1	8S	37E	664055	3619221*	1598	112	43	69
L 03516		LL	E		3	33	64 1	8S	37E	664457	3619226*	) 1543	106	45	61
L 06216	R	L L	E	1	1	2 0	)4 1	98	37E	663544	3618885*	9 1529	166	46	120
L 12029 POD1		L L	E	3	3	3 0	)2 1	17S	37E	665881	3618292	) 1518	202		
<u>L 01752</u>		L L	E		4	2 1	0 1	9S	37E	665686	3616805*	1483	133	30	103
L 06125 POD1		L L	E	3	2	31	0 1	9S	37E	664787	3616289*	1425	150	65	85
L 13109 POD1		L L	E	4	2	1 0	3 1	98	37E	665052	3618818	1267	20		
L 08559		LL	E	1	1	1 0	3 1	98	37E	664348	3618897*	1222	121	40	81
L 11313		L L	.E	1	2	1 0	3 1	9S	37E	664838	3618851	) 1218	180		
L 06814		L L	E	4	2	1 0	3 1	98	37E	664950	3618703*	) 1118	100	30	70
L 07256		LL	.E			2 0	94 1	9S	37E	663852	3618584*	1104	137	65	72
L 04917		L L	E	1	1	4 0	)4 1	98	37E	663556	3618080* 🧲	- ) 1015	120	50	70
L 03103		L L	E			1 0	3 1	9S	37E	664655	3618597* 🧲	928	110	42	68
L 03403		LL	E		3	1 1	0 1	98	37E	664479	3616785* 🧲	898	85	35	50
L 03208		L L	.E		3	1 1	0 1	95	37E	664479	3616785*	898	100	35	65
L 04466 POD1		 L L	E		1	4 0	9 ·	195	37E	663657	3617981*	885	145	20	125
POD Number	ا ج Code b	Sub- Sub- Dasin Cou	unty F	Q 64	Q( 16~ 1	Q 4 Se	<b>ec T</b>	<b>ws</b>	Rng 37E	<b>X</b>	<b>Y</b> 3617188*	Distance	Depth Well	Depth Water	Water Column
water right file.)	closed)		(	quar	ters	are	sma	alles	t to larg	est) (N	AD83 UTM in	meters)	(	In feet)	_
POD suffix indicates the POD has been replaced & no longer serves a	0=orph C=the fi	placed, aned, ile is	(1	quar	ters	are	1=N	NW 2	2=NE 3:	=SW 4=SE	)				

#### \*UTM location was derived from PLSS - see Help

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

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![](_page_29_Picture_2.jpeg)

**National Water Information System: Web Interface** 

USGS Water Resources

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- Notice The USGS Water Resources Mission Area's priority is to maintain the safety and well-being of our communities, including providing critical situational awareness in times of flooding in all 50 U.S. states and additional territories. Our hydrologic monitoring stations continue to send data in near real-time to NWISWeb, and we are continuing critical water monitoring activities to protect life and property on a case-by-case basis. The health and safety of the public and our employees are our highest priorities, and we continue to follow guidance from the White House, the CDC, and state and local authorities.
- Introducing The Next Generation of USGS Water Data for the Nation
- Full News

Groundwater levels for the Nation

#### Search Results -- 1 sites found

Agency code = usgs site\_no list = • 324102103150801

**Minimum number of levels =** 1 <u>Save file of selected sites</u> to local disk for future upload

#### USGS 324102103150801 19S.37E.04.412231

Lea County, New Mexico Latitude 32°41'02", Longitude 103°15'08" NAD27 Land-surface elevation 3,681 feet above NAVD88 The depth of the well is 120 feet below land surface. This well is completed in the Ogallala Formation (121OGLL) local aquifer. **Output formats** 

Table of data	
Tab-separated data	
Graph of data	
Reselect period	

Date	Time	? Water- level date- time accuracy	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? Water- level accuracy	? Status	? Method of measurement	? Measuring agency	? S n
1966-02-17		[	22.32			2		L	J	
1971-01-20		Ε	23.02			2		ι	J	
1976-06-10		[	20.26			2		L	J	

Section	Code	Description
Water-level date-time accuracy	D	Date is accurate to the Day
Water-level accuracy	2	Water level accuracy to nearest hundredth of a foot
Status		The reported water-level measurement represents a static level
Method of measurement	U	Unknown method.

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U.S. Department of the Interior | U.S. Geological Survey Title: Groundwater for USA: Water Levels

Plug-Ins

URL: https://nwis.waterdata.usgs.gov/nwis/gwlevels?

FOIA

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![](_page_30_Picture_7.jpeg)

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![](_page_31_Picture_2.jpeg)

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#### Search Results -- 1 sites found

Agency code = usgs site\_no list = • 324102103151001

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#### USGS 324102103151001 19S.37E.04.41200

Lea County, New Mexico Latitude 32°41'02", Longitude 103°15'10" NAD27 Land-surface elevation 3,680 feet above NAVD88 This well is completed in the Ogallala Formation (1210GLL) local aquifer.

**Output formats** 

ble of data	
b-separated data	
aph of data	
select period	

Date	Time	? Water- level date- time accuracy	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? Water- level accuracy	? Status	? Method of measurement	? Measuring agency	? S n
1961-02-27		Г Г	14.67				2			

Explanation							
Section	Code	Description					
Water-level date-time accuracy	D	Date is accurate to the Day					
Water-level accuracy	2	Water level accuracy to nearest hundredth of a foot					
Status		The reported water-level measurement represents a static level					
Method of measurement	U	Unknown method.					
Measuring agency		Not determined					
Source of measurement	U	Source is unknown.					
Water-level approval status	Α	Approved for publication Processing and review completed.					

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U.S. Department of the Interior | U.S. Geological Survey Title: Groundwater for USA: Water Levels URL: https://nwis.waterdata.usgs.gov/nwis/gwlevels?

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![](_page_32_Picture_5.jpeg)

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# Appendix D Field Notes

41110	_				Comparity	Notes/Comments:				
Sample Name	Time	Depth	Chloride	TPH	(Y/N)					
SURF		S	149	Y	(1/14)					
131		1	149	1						
02		2	449						and the second	
2 rung		9	149				2	- 1		
		1	299	6		-			1.8	
202		2	599	3	1				Sit	te Sketch
S & Durface	_	0	-	Y	P					
100'		1	-	Y	N	13				
ns I.		2'	-	Y	P					
1 & mothe		0'	-	y	P			111		
182		1	-	4	N					
C	-	2	-	y_	N					
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![](_page_35_Figure_0.jpeg)