From:
 Montgomery, Kelley A

 To:
 Murphy, Kathleen A, EMNRD

 Cc:
 Gago, Jose L

Subject: [EXT] RE: OXY PMXs

Date: Wednesday, June 9, 2021 1:37:05 PM

Will do.

From: Murphy, Kathleen A, EMNRD < Kathleen A. Murphy@state.nm.us>

Sent: Wednesday, June 9, 2021 2:35 PM

To: Montgomery, Kelley A < Kelley_Montgomery@oxy.com>

Cc: Gago, Jose L < Jose_Gago@oxy.com> **Subject:** [EXTERNAL] RE: OXY PMXs

WARNING - This message is from an EXTERNAL SENDER - be CAUTIOUS, particularly with links and attachments.

So is there someplace in previous NHU case exhibits where the water wells are discussed, and samples taken of wells in the unit, or a discussion of the wells being on city water systems? This would be similar to how you reference the geology section. I just don't know specifically where to find this and it would be useful for the review of the rest of the PMXs.

From: Montgomery, Kelley A < Kelley_Montgomery@oxy.com>

Sent: Wednesday, June 9, 2021 1:30 PM

To: Murphy, Kathleen A, EMNRD < KathleenA.Murphy@state.nm.us>

Cc: Gago, Jose L < <u>Jose_Gago@oxy.com</u>>

Subject: [EXT] RE: OXY PMXs

Hi Kathleen,

We pulled all of the historical water wells within 1 mile on the engineering website and attached two excel files. There is a lot of overlap between the two wells as they are located near each other. The majority of these wells are within the city limits or very close and the residents are all on city water. A 2014 city ordinance (below) required all domestic water wells within the city and those residences on city water to be P&A'd. I spoke with our operations personnel and they do not know of any active water wells within 1 mile of the wells. I found two wells on the list (highlighted) that were drilled after 2014 that could potentially still be active. I can have our operations folks check on these two if necessary? Please let me know. Kelley

Chapter 13.28 - WATER WELLS

13.28.010 - Restrictions upon drilling of water wells within the City limits.

A.

It shall be unlawful for any person, firm, or entity to drill, deepen, or cause to be drilled, any water well or any well capable of producing water within the City of Hobbs without written consent of the Hobbs City Commission for good and sufficient cause shown.

В.

Pursuant to the Safe Drinking Water Act (SDWA) and applicable State and Federal rules and regulations governing cross connections, cross contamination, and physical separation of conflicting water systems, all water wells located on premises or property connected to the City's water distribution system shall be properly

plugged and abandoned in accordance with New Mexico Environment Department (NMED) rules and regulations. It shall be unlawful for the owner of any premises or property connected to the City's water distribution system to allow any water well to remain in operation and not properly plugged and abandoned.

C.

Upon violation of this section, any person, firm or entity found guilty shall be punishable by fine not to exceed five hundred dollars (\$500.00) per violation and the City of Hobbs may, at its discretion, seek injunctive relief in a court of competent jurisdiction against any person violating this section.

(Ord. No. 1079, 11-3-2014)

From: Murphy, Kathleen A, EMNRD < Kathleen A. Murphy@state.nm.us>

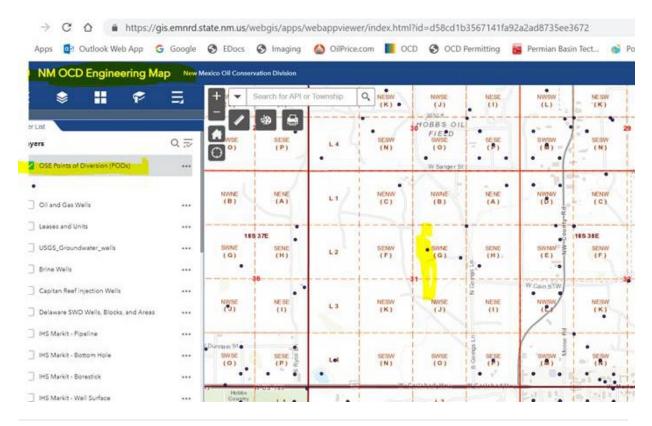
Sent: Tuesday, June 8, 2021 10:48 AM

To: Montgomery, Kelley A < Kelley_Montgomery@oxy.com>

Subject: [EXTERNAL] RE: OXY PMXs

WARNING - This message is from an EXTERNAL SENDER - be CAUTIOUS, particularly with links and attachments.

I would look at the OCD Engineering webpage and turn on the OSE PODs. I would determine how many water wells are within a mile and then determine if any are active. I thought I saw a couple that were domestic and active.



From: Montgomery, Kelley A < Kelley_Montgomery@oxy.com>

Sent: Tuesday, June 8, 2021 9:26 AM

To: Murphy, Kathleen A, EMNRD < KathleenA.Murphy@state.nm.us

Cc: Gago, Jose L < Jose L <a href="ma

Subject: [EXT] RE: OXY PMXs

Hi Kathleen,

We pulled up the GIS map and did not see any active water wells. Can you tell how you pulled up water well information?

Thank you for your help.

Kelley

From: Murphy, Kathleen A, EMNRD < KathleenA.Murphy@state.nm.us>

Sent: Monday, June 7, 2021 4:22 PM

To: Montgomery, Kelley A < <u>Kelley Montgomery@oxy.com</u>>

Subject: [EXTERNAL] RE: OXY PMXs

WARNING - This message is from an EXTERNAL SENDER - be CAUTIOUS, particularly with links and attachments.

Kelly,

I am reviewing PMX 294 which are the NHU SA/G 632 and 312 wells, and applied for in October 2020.

Questions thus far:

On P 9 of the application, the 632 well will need to be edited that it is located in unit J, not B.

Also, the application states (pages 4, 8) there are no fresh water wells within a mile of the injection wells per field personnel. When I look on GIS at the OSE pods there are many wells within a mile, and several that are domestic. Please review this and advise.

Sincerely,

Kathleen Murphy

From: Murphy, Kathleen A, EMNRD Sent: Thursday, June 3, 2021 1:40 PM

To: Montgomery, Kelley A < Kelley_Montgomery@oxy.com>

Subject: OXY PMXs

Kelly,

I am going to start working on the OXY PMXs—there are 10 I believe. I will do the NHU 312 and 632 first—PMX-294-- as it was submitted in October of last year. Is there any preferred order of the batch that you submitted in April, I believe.

thanks

Kathleen Murphy

Petroleum Specialist- Advanced Geologist/GIS Analyst New Mexico Oil Conservation Division 1200 South St Francis Drive Santa Fe, New Mexico 87505

505-365-3161

Email: kathleena.murphy@state.nm.us

** Please use email during this stressful time**



From: Gago, Jose L

To: Murphy, Kathleen A, EMNRD
Cc: Goetze, Phillip, EMNRD

Subject: [EXTERNAL] RE: Sent from Snipping Tool

Date: Wednesday, December 8, 2021 11:12:53 AM

Attachments: image002.png

CAUTION: This email originated outside of our organization. Exercise caution prior to clicking on links or opening attachments.

Kathleen,

I had used the OSE POD Locations tool (https://gis.ose.state.nm.us/gisapps/ose_pod_locations/) to find active water wells to sample within 1 mile of all the wells we had sent back in April. Our Hobbs field manager contacted the city of Hobbs and he was told none of the wells within the city limits are active, and the specific ones I had selected have probably been plugged (there are baseball fields and parks there now and no well is present). Also, the tool shows active water wells in Oxy's property that don't exist anymore. In the case of all the wells we submitted back in April that are located in section 33 the language indicating that "per field personnel, no fresh water wells were found within 1 mile of this well" is accurate.

Thanks,

Jose.

From: Murphy, Kathleen A, EMNRD < Kathleen A. Murphy@state.nm.us>

Sent: Wednesday, December 1, 2021 10:57 AM

To: Gago, Jose L < Jose_Gago@oxy.com>

Cc: Goetze, Phillip, EMNRD < Phillip.Goetze@state.nm.us>

Subject: [EXTERNAL] Sent from Snipping Tool

WARNING - This message is from an EXTERNAL SENDER - be CAUTIOUS, particularly with links and attachments.

Jose,

I am working on PMX-298 for the NHU #213 well. 30-025-29065

I have a question regarding the water wells and fresh water well sampling. Two analyses were used for previous PMX orders: The Goins well and the Sprinkler well (green dots).

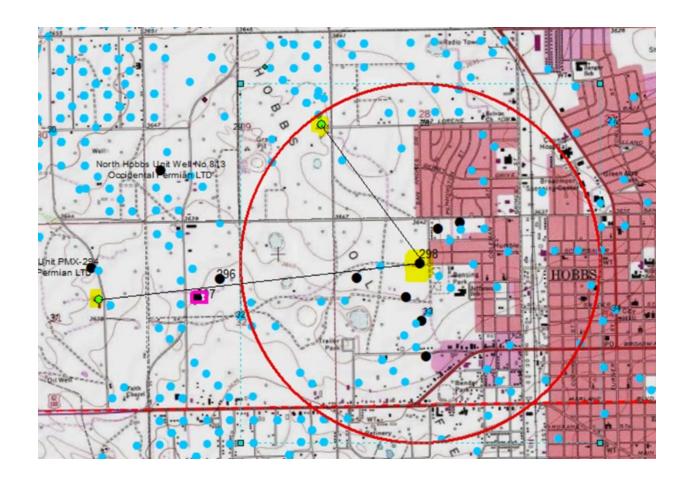
One of the wells is within the 1 mile and one is outside. There are many OSE well pods within the 1 mile area (blue dots).

I understand that many of these wells may no longer be in use as the City of Hobbs is on a water system.

Can you please research and see if any of the water wells within the one mile are active and if another water well within the 1 mile buffer can be sampled.

The Office of the State Engineer has a webpage with this data for PODs. https://geospatialdata-ose.opendata.arcgis.com/

Please let me know if you have any qestions.



Kathleen Murphy

Petroleum Specialist- Advanced Geologist/GIS Analyst New Mexico Oil Conservation Division 1200 South St Francis Drive Santa Fe, New Mexico 87505

505-365-3161

Email: kathleena.murphy@state.nm.us

** Please use email during this stressful time**



<u>District I</u>
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 Plane: (3/3) Pro-Leo S a... (8/3) Pro-Leo S a... (8/3) Pro-Leo S a... (8/4) Plane: (3/5) 334-6178 Fax: (5/5) 334-6170 District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505 Phone: (5/05) 476-3460 Fax: (5/05) 476-3462

API Number

State of New Mexico Energy, Minerals & Natural Resources Department OIL CONSERVATION DIVISION 1220 South St. Francis Dr. Santa Fe, NM 87505

Form C-102 Revised August 1, 2011 Submit one copy to appropriate District Office

☐ AMENDED REPORT

15079 WO# 210902WL-d (KA)

WELL LOCATION AND ACREAGE DEDICATION PLAT

Pool Code

30-025-			31920 HOBBS; GRAYBURG-SAN ANDRES									
Property Code 19520			Property Name NORTH HOBBS G/SA UNIT					Well Number 965				
OGRID No.					Operator	Name					Elevation	
157984			<i>C</i>	CCIDENT	TAL P	PERMIAN	LTD.			3645.1		
				Surf	ace Lo	cation						
UL or lot no. Section		wnship	Range		Lot Idn	Feet from the			East/W		County	
F 33	18	SOUTH	38 EAST, 1	V. M. P. M.		1488'	NORTH	2027'	WES	ST	LEA	
			Bottom He	ole Locati	on If L	Different l	From Surfac	ee				
UL or lot no. Section	To	wnship	Range		Lot Idn	Feet from the	North/South line	Feet from the	East/W	est line	County	
G 33	18	SOUTH	38 EAST, N	V. M. P. M.		1584'	NORTH	1439'	EAS	ST	LEA	
Dedicated Acres	Join	t or Infill	Consolidation Code	Order No.								
No allowable w. division.	rill be a	ssigned to	this completion	until all inter	rests hav	ve been con	solidated or a	non-standard	unit has i	been appr	roved by the	
	2027'		1488,			1584.	1439'	I hereby cer complete to organization interest in th has a right I with an own voluntary pe heretofore e Roni I Printed Nam roni_r E-mail Addi	the best of my known either owns a work of and including to drill this well as were of such a mine wooling agreement mitered by the divided b	mation contained oveledge and beliver the proposed bot the proposed bot this location pural or working in or a compulsory disting the thing the containing the compulsory disting the thing the thing the containing the	it herein is true and lef, and that this unleased mineral tion hole location or resuant to a contract sterest, or to a pooling order 19 10/13/2021 Date	
SURFACE LOCA NEW MEXICO E NAD 1927 Y=622909.28 L LAT:: N 32.7066 LONG:: W 103.15 NAD 1983 Y=622968.94 L X=903653.15 L LAT:: N 32.7076 LONG:: W 103.15	JS FT JS FT 9379* 49491* JS FT JS FT 0506*		Z = 92°14'11" 1830.18'			Y=6 X=8 LAT. LONG. Y=6	M HOLE LOCATIO W MEXICO EAST NAD 1927 :22838.00 US FT :N 32.70668861' :W 103.1490073 NAD 1983 :22897.52 US FT :N 32.7067984' :W 103.1494923	I hereby plat was made by same is a Date of Signature Profession	plotted from me or under rue and corre EPTEMB	ie well looking field to the best to the best 15079	on shown on this factual surveys on and that the of mutetief.	

FORM C-108 Technical Review Summary (Prepared by reviewer and included with application; V17] DATE RECORD: First Rec: _____ Admin Complete: _____ or Suspended: _____ Add. Request/Reply:_ ORDER TYPE: PMX Number: 306 Order Date: Legacy Permits/Orders: 16-6199 Well No. 965 Well Name(s) North Ltobbs 6/SA (New drill API : 30-025 - Pending Spud Date: 1011 Onll New or Old (EPA): ____ (UIC Class II Primacy 03/07/1982) Footages 1488 FNC 2027 FWC DiagLot or Unit F Sec 37 Tsp 185 Rge 38E County (QQ Lattitude 39 7070 SD6 Longitude 03 1951341 Pool: Hobbs/ Granburg Plot No.: 319 OGRID: 157984 Contact: K. Morttgomery Email: Operator: N IS 5.9 OK? Date: 12-29-21 COMPLIANCE RULE 5.9: Total Wells: 606 Inactive: Finc Assur: V Compl. Order? WELL FILE REVIEWED ______ Current Status: new drill - dia sonal WELL DIAGRAMS: NEW: Proposed Or RE-ENTER: Before Conv. After Conv. Logs in Imaging: Planned Rehab Work to Well: New ONII Sizes (in) Setting Cement **Cement Top and Well Construction Details** Borehole / Pipe **Determination Method** Depths (ft) Sx or Cf Planned Or Existing Surface Stage Tool circ to sus Planned or Existing Internit Prod 925 10 Planned or Existing Interm/Prod Planned or Existing Prod/Liner Planned or Existing Liner Inj Length 3950 TVD 4000-4500 Planned or Existing OH (PERF) Completion/Operation Details: Injection or Confining ___ PBTD __ Injection Lithostratigraphic Units: Depths (ft) Tops Drilled TD ___ Units NEW TD 5025_ NEW PBTD __ Adjacent Unit:Litho Struc Por. NEW Open Hole NEW Perfs Confining Unit:Litho Struc Por. Tubing Size 27 in. Inter Coated? Proposed Inj Interval TOP: Proposed Packer Depth 3900 TVDft 4330 MD Proposed Inj Interval BOTTOM: Confining Unit:Litho Struc Por. Min. Packer Depth _____ (100-ft limit) Adjacent Unit:Litho Struc Por. Proposed Max. Surface Press. [100] psi **AOR: Hydrologic and Geologic Information** _ (0.2 psi per ft) Admin. Inj. Press. POTASH: R-111-P Noticed? BLM Sec Ord WIPP Noticed? Salt/Salado T: B: NW: Cliff House fm USDW: Aquifer(s)_ Max Depth_ HYDRO AFFIRM STATEMENT By Qualified Person NMOSE Basin: NII) Stalle CAPITAN REEF: throw adj NA No. GW Wells in 1-Mile Radius? _____ FW Analysis?__ Disposal Fluid: Formation Source(s) San Andres - Cast 14981 On Lease Operator Only Commercia Disposal Interval: Inject Rate (Avg/Max BWPD): 9000 Protectable Waters? Source: System: Closed or Oper HC Potential: Producing Interval? ✓ Formerly Producing? Method:Logs☑/DST□/P&A□/Other 2-Mi Radius Pool Map AOR Wells: 1/2-M or ONE-M RADIUS MAP/WELL LIST: Total Penetrating Wells: 1/2-M [AOR Hor: ___ AOR SWDs:___] Penetrating Wells: No. Active Wells____ No. Corrective?___on which well(s)?____OPD/7 New Penetrating Wells: No. P&A Wells____ No. Corrective?____on which well(s)? __ Diagrams? Induced-Seismicity Risk Assess: analysis submitted historical/catalog review fault-slip model probability NOTICE: 1/2-M or ONE-M : Newspaper Date Mineral Owner* Surface Owner N. Date RULE 26.7(A): Identified Tracts? ____ Affected Persons*: new definition as of 12/28/2018 [any the mineral estate of United States or state of New Mexico; SWD operators within the notice radius] Order Conditions: Issues: ports 4410 to 5025 MD - mayona HILLIAM COAS: ALL SULKACE INI



C-108 APPLICATION FOR AUTHORIZATION TO INJECT ADMINISTRATIVE COMPLETENESS FORM

Well Name:	
Applicant:	
PO Number:	
min Ann No:	

C-108 Item	Description of Required Content	Yes	No
I. PURPOSE	Selection of proper application type.		
II. OPERATOR	Name; address; contact information.		
	Well name and number; STR location; footage location within section.		
	Each casing string to be used, including size, setting depth, sacks of cement, hole size, top of cement, and basis for determining top of cement.		
	Description of tubing to be used including size, lining material, and setting depth.		
III. WELL DATA	Name, model, and setting depth of packer to be used, or description of other seal system or assembly to be used.		
	Well diagram: Existing (if applicable).		
	Well diagram: Proposed (either Applicant's template or Division's Injection Well Data Sheet).		
IV. EXISTING PROJECT	For an expansion of existing well, Division order number authorizing existing well (if applicable).		
V. LEASE AND WELL MAP	AOR map identifying all wells and leases within 2 mile radius of proposed well, and depicting a 1/2 mile radius circle around any another projected injection well and a 1 mile radius circle around any other projected injection well in the Devonian formation.		
VI. AOR WELLS	Tabulation of data for all wells of public record within AOR which penetrate the proposed injection zone, including well type, construction, date drilled, location, depth, and record of completion.		
	Schematic of each plugged well within AOR showing all plugging detail.		
	Proposed average and maximum daily rate and volume of fluids to be injected.		
	Statement that the system is open or closed.		
	Proposed average and maximum injection pressure.		
VII. PROPOSED OPERATION	Sources and analysis of injection fluid, and compatibility with receiving formation if injection fluid is not produced water.		
	A chemical analysis of the disposal zone formation water if the injection is for disposal and oil or gas is not produced or cannot be produced from the formation within 1 mile of proposed well. Chemical analysis may be based on sample, existing literature, studies, or nearby well.		
	Proposed injection interval, including appropriate lithologic detail, geologic name, thickness, and depth.		
VIII. GEOLOGIC DATA	USDW of all aquifers overlying the proposed injection interval, including geologic name and depth to bottom.		
	USDW of all aquifers underlying the proposed injection interval, including including the geologic name and depth to bottom.		



C-108 (SWD) APPLICATION FOR AUTHORIZATION TO INJECT ADMINISTRATIVE COMPLETENESS FORM

ONSEDWICH ONS	7.5		
Well Name:		-	
Applicant:		_	
PO Number:			
Admin. App. No:		<u>'</u>	
C-108 Item	Description of Required Content	Yes	No
X. PROPOSED TIMULATION	Description of stimulation process or statement that none will be conducted.		
. LOGS/WELL TESTS	Appropriate logging and test data on the proposed well or identification of well logs already filed with OCD.		
I. FRESH WATER	Chemical analysis of fresh water from two or more fresh water wells (if available and producing) within 1 mile of the proposed well, including location and sampling date(s).		
II. AFFIRMATION TATEMENT	Statement of qualified person endorsing the application, including name, title, and qualifications.		
	Identify of all "affected persons" identified on AOR map in Section V, including all affected persons within 1/2 mile radius circle around any another projected injection well and a 1 mile radius circle around any other projected injection well in the Devonian formation.		
	Identification and notification of all surface owners.		
	BLM and/or NMSLO notified per 19.15.2.7(A)(8)(d) NMAC.		
III. PROOF OF OTICE	Notice of publication in local newspaper in county where proposed well is located with the following specific content:		
	Name, address, phone number, and contact party for Applicant;		
	Intended purpose of proposed injection wel, including exact location of a single well, or the section, township, and range location of multiple wells;		
	 Formation name and depth, and expected maximum injection rates and pressures; and 		
	Notation that interested parties shall file objections or requests for hearing with OCD no later than 15 days after the admin completeness determination.		
IV. CERTIFICATION	Signature by operator or designated agent, including date and contact information.		
eview Date*:	Reviewer:		
\ Administrativaly (COMPLETE		

\bigcirc	Administratively COMPLETE
\bigcirc	Administratively INCOMPLETE
NC	OTES:

^{*} The Review Date is the date of administrative completeness determination that commences the 15 day protest period in 19.15.26.8 (C)(2) NMAC.