	4 67 20 5 USPEN	ISE ENGINEERARG 04/09/2015 TYPE SUB PRG1518747746
		ABOVE THIS LINE FOR DIVISION USE ONLY
		NEW MEXICO OIL CONSERVATION DIVISION - Engineering Bureau - 1220 South St. Francis Drive, Santa Fe, NM 87505
		ADMINISTRATIVE APPLICATION CHECKLIST
ſ	THIS CHECKLIST IS N	IANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS WHICH REQUIRE PROCESSING AT THE DIVISION LEVEL IN SANTA FE
Арри	[NSL-Non-Sta [DHC-Dow [PC-Pc [EOR-Qua	is: ndard Location] [NSP-Non-Standard Proration Unit] [SD-Simultaneous Dedication] inhole Commingling] [CTB-Lease Commingling] [PLC-Pool/Lease Commingling] ool Commingling] [OLS - Off-Lease Storage] [OLM-Off-Lease Measurement] [WFX-Waterflood Expansion] [PMX-Pressure Maintenance Expansion] [SWD-Salt Water Disposal] [IPI-Injection Pressure Increase] Ilified Enhanced Oil Recovery Certification] [PPR-Positive Production Response]
[1]	TYPE OF AI [A]	PPLICATION - Check Those Which Apply for [A] Location - Spacing Unit - Simultaneous Dedication NSL NSP SD No. 2
	Check [B]	Cone Only for [B] or [C] Commingling - Storage - Measurement $\square$ DHC $\square$ CTB $\square$ PLC $\square$ PC $\square$ OLS $\square$ OLM UN $\bigcirc$ $=$ $\square$ = 106 = 28F
	[C]	Injection - Disposal - Pressure Increase - Enhanced Oil Recovery WFX PMX SWD IPI EOR PPR API - pendug
	[D]	Other: Specify See R-7876 Duke AGI No. 1/SWD-838
[2]	NOTIFICAT [A]	ION REQUIRED TO: - Check Those Which Apply, or  Does Not Apply Working, Royalty or Overriding Royalty Interest Owners
	[B]	Offset Operators, Leaseholders or Surface Owner SEE ATTACHMENT 1
	[C]	Application is One Which Requires Published Legal Notice SEE ATTACHMENT 2
	[D]	Notification and/or Concurrent Approval by BLM or SLO U.S. Bureau of Land Management - Commissioner of Public Lands, State Land Office
	[E]	For all of the above, Proof of Notification or Publication is Attached, and/or, SEE ATTACHMENTS 1 AND 2
	[F]	Waivers are Attached

### [3] SUBMIT ACCURATE AND COMPLETE INFORMATION REQUIRED TO PROCESS THE TYPE OF APPLICATION INDICATED ABOVE.

[4] **CERTIFICATION:** I hereby certify that the information submitted with this application for administrative approval is **accurate** and **complete** to the best of my knowledge. I also understand that **no action** will be taken on this application until the required information and notifications are submitted to the Division.

Note: Statement must be completed by an individual with managerial and/or supervisory capacity.



Geolex President/Consultant to DCP 4/7/2015

Print or Type Name

Alberto A. Gutierrez

Signature

Title

Date

aag@geolex.com e-mail Address Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, New Mexico 87505

## APPLICATION FOR AUTHORIZATION TO INJECT

	AT LICATION FOR AUTHORIZATION TO INJECT			
I.	PURPOSE:       Disposal       Storage         Application qualifies for administrative approval?       X       Yes       No			
II.	OPERATOR: <u>DCP Midstream LP</u>			
	ADDRESS: 370 17 <sup>TH</sup> Street, #2500, Denver, CO 80202			
	CONTACT PARTY: Alberto A. Gutierrez, R.G GEOLEX, INC. (Consultant to DCP) PHONE: (505) 842-8000			
III.	WELL DATA: Complete the data required on the reverse side of this form for each well proposed for injection. Additional sheets may be attached if necessary.			
IV.	Is this an expansion of an existing project? Yes X No			
V.	If yes, give the Division order number authorizing the project: <u>NA</u> Attach a map that identifies all wells and leases within two miles of any proposed injection well with a one-half mile radius circle drawn around cach proposed injection well. This circle identifies the well's area of review. SWD #2 is located to the west of the Artesia Gas Plant (Figure 1). Wells within two miles of the proposed SWD #2 surface location are plotted on Figure 2. SWD #2 is proposed as a vertical well (Figure 3).			
VI.	Attach a tabulation of data on all wells of public record within the area of review which penetrate the proposed injection zone. Such data shall include a description of each well's type, construction, date drilled, location, depth, record of completion, and a schematic of any plugged well illustrating all plugging detail. Well data of public record within the ½ mile area of review is shown on Table 1. Wells within the area of review (AOR) include 4 active producers of which none contain perforations in the proposed injection zone. SWDW #2 is a direct offset to, and replacement for DCP SWDW #1, which was approved as a salt water disposal well in the same interval that we propose to perforate in SWDW #2. There are only 4 wells within the Area of Review that penetrate the proposed injection interval; the SWDW #1, a salt water injection well in the deeper Canyon Formation, DCP's AGI #1 well that injects into the Devonian, and a Morrow gas producer; all four wells have adequate cement coverage behind production casing across the proposed injection interval. All the other wells in the AOR are either completed or plugged shallower than the proposed SWDW #2.			
VII.	Attach data on the proposed operation, including:			
<	<ol> <li>Proposed average and maximum daily rate and volume of fluids to be injected; Average daily injection rate = 600 bpd</li> <li>Proposed maximum daily rate = 1,000 bpd.</li> <li>Whether the system is open or closed; The system is closed.</li> <li>Proposed average and maximum injection pressure; The calculated maximum allowable injection pressure would be approximately 2132 psi (using 1.04 as SG for injection fluid). We have used the following method approved by NMOCD to calculate the preliminary proposed maximum injection pressure. The final maximum permitted surface injection pressure should be based on the final specific gravity of the injection stream according to the following formula:</li> </ol>			
	IPmax = PG (Dtop) where:       IPmax= maximum surface injection pressure (psi)         IPmax= maximum surface injection fluid (psi/ft)       IPI-338 (for SuP*I)         PG = pressure gradient of injection fluid (psi/ft)       810 p5i Max         Dtop = depth at top of perforated interval of injection zone (ft)       810 p5i Max         and PG = 0.2 + 0.433 (SGww) where: SGww = average specific gravity of injection fluid in the tubing       910 p5i			
	For the maximum requested injection volume, case it is assumed that: SGww = 1.04 Dtop = 3280 ft			
	Therefore: PG = 0.2 + 0.433 (1.04) = 0.65 psi/ft IPmax = PG (Dtop) = 0.65 * 3280 = 2132 psi			
	<ol> <li>Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; The purpose of SWD #2 is for injecting produced water and plant wastewater which are currently being injected into SWD #1 (API # 30015-2527100) which will be plugged and abandoned and replaced by this well.</li> <li>If injection is for disposal purposes into a zone not productive of oil or gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature, studies, nearby wells, etc.).</li> </ol>			

\*VIII. Attach appropriate geologic data on the injection zone including appropriate lithologic detail, geologic name, thickness, and depth. Give the geologic name, and depth to bottom of all underground sources of drinking water (aquifers containing waters with total dissolved solids concentrations of 10,000 mg/l or less) overlying the proposed injection zone as well as any such sources known to be immediately underlying the injection interval. Describe the proposed stimulation program, if any.

Structural features of the Permian Basin are shown on Figure 4. The upper Permian to surface stratigraphy and primary lithologies in the area of the investigation are shown and discussed on Figure 5.

The interval from the lower 300 feet of the San Andres to the upper 200 feet of the Yeso Formation is the preferred injection zone (Figure 5). The well and well status for wells within the ½ mile area of review are shown on Figure 6. Perforated zones within the area of review are shown on Figure 6. Three wells are perforated in the Grayburg Formation, one well is perforated in the Penrose, one well is perforated in the Upper San Andres, one well in the lower San Andres, one in the Canyon Formation, one in the Morrow, and one in the Devonian. Figure 8 shows that the top of the injection interval gently dips to the south.

The proposed primary injection zone is anticipated to be discrete sections of porous carbonate within the greater injection interval. The cross section A – A' is shown on Figure 8 and the location of the cross section is shown on figure 7. The cross section shows the development of porous carbonates in the interval between the lower San Andres and the upper Yeso, which includes the Glorieta Formation. The porosity of the interval ranges from approximately 5% to 12%.

Groundwater in the area of the well is sparse and found in shallow, unconfined aquifers hosted by Quaternary alluvial and acolian surficial deposits. The upper 200-feet of the subsurface are composed of Quaternary alluvial deposits that unconformably overlie red shale, sand and anhydrite of the upper Permian. These shallow units host minor groundwater in the vicinity of the plant. Groundwater is also found in local, shallow confined sandstone beds in the red beds of the Triassic Dockum Group. The DCP Artesia SWD #2 well design includes surface casing to a depth of 500 feet to protect fresh water in the alluvial aquifer and red beds.

A review of the New Mexico State Engineer's database identified three water wells within one-half mile of the SWD #2 (Table 2, Figure 10). These three wells include a monitor well and two shallow alluvial wells with windmills, one cast and one west of the plant that supply stock tanks (Figure 10). All of these wells are completed in very shallow alluvial units. Due to their shallow completions, there is no potential for impacts from the operation of SWD #2. This has been demonstrated by the lack of any impact from the existing SWD#1.

The stimulation program will consists of routine acidizing of perforations, as needed.

- \*X. Attach appropriate logging and test data on the well. (If well logs have been filed with the Division, they need not be resubmitted). Well has not been drilled. Logs will be provided after the well is drilled and completed.
- \*XI. Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken. Water well locations in the vicinity of the Artesia plant are shown on Figure 10 with details shown on Table 2. No fresh water chemical analysis is available for the four identified shallow water wells.
- XII. Applicants for disposal wells must make an affirmative statement that they have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground sources of drinking water.
  - As part of the work performed to support this application, a detailed investigation of the structure, stratigraphy and hydrogeology of the area surrounding the proposed DCP Artesia SWD #2 has been performed. The investigation included the analysis of available geologic data and hydrogeologic data from wells. Based on this investigation and analysis of these data, I certify that there are no open fractures, faults or other structures which could potentially result in the communication of the proposed injection zone with any known sources of drinking water in the vicinity.
- XIII. Applicants must complete the "Proof of Notice" section on the reverse side of this form. Will be submitted with application checklist with proof of notice publication and copies of individual notice letters on April 7, 2015 when received from Artesia Daily Press.
- XIV. Certification: Thereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.

NAME: Alberto A, Gutierrez, C.P.G.

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TITLE: President, Geolex, Inc.<sup>®</sup>: Consultant to DPC Midstream Services

DATE: April 6, 2015

E-MAIL ADDRESS: aag@geolex.com

SIGNATURE:

\* If the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not be resubmitted. Please show the date and circumstances of the earlier submittal:

DISTRIBUTION: Original and one copy to Santa Fe with one copy to the appropriate District Office

#### III. WELL DATA

A. The following well data must be submitted for each injection well covered by this application. The data must be both in tabular and schematic form and shall include:

(1) Lease name; Well No.; Location by Section, Township and Range; and footage location within the section. DCP ARTESIA SWD #2: SECTION 7, T18S, R28E, 400' FSL, 2310' FEL. Well is a vertical well. See Figures 1 and 3.

(2) Each casing string used with its size, setting depth, sacks of cement used, hole size, top of cement, and how such top was determined. Well has not been drilled. See Figure 3. The final cement tops will be submitted after the proposed well is drilled and completed.

Proposed casing strings:

Conductor Casing – 16", LP Conductor or equivalent at 40' – cement to surface Surface Casing - 9 5/8", 40.0 #/ft, J55, LTC or equivalent at 500' – cement to surface Production Casing - 5 1/2", 26 #/ft, L-80, USF or equivalent at 4210' – cement to surface

(3) A description of the tubing to be used including its size, lining material, and setting depth. See Figure 3 for proposed well design schematic. The proposed designed includes the following tubing materials. Tubing - 2 7/8", 9.3#/ft, L-80, USF or equivalent to packer depth of approximately 3,100'.

(4) The name, model, and setting depth of the packer used or a description of any other seal system or assembly used. Halliburton 5 1/2" EZSVB Packer will be set at approximately 3100' which is ~60 to 70' above the first perforation.

Division District Offices have supplies of Well Data Sheets which may be used or which may be used as models for this purpose. Applicants for several identical wells may submit a "typical data sheet" rather than submitting the data for each well.

- B. The following must be submitted for each injection well covered by this application. All items must be addressed for the initial well. Responses for additional wells need be shown only when different. Information shown on schematics need not be repeated.
  - (1) The name of the injection formation and, if applicable, the field or pool name. Lower San Andres to Upper Yeso Formations
  - (2) The injection interval and whether it is perforated or open-hole. The injection interval is anticipated to be perforated with six shots per foot at 60° approximately from 3,280 to 4,105'. The exact depths will be determined during drilling and logging depending on lithology encountered.
  - (3) State if the well was drilled for injection or, if not, the original purpose of the well. Well is not yet drilled but the well's purpose is for injection.
  - (4) Give the depths of any other perforated intervals and detail on the sacks of cement or bridge plugs used to seal off such perforations. N/A, SWD #2 is proposed and has not been drilled.
  - (5) Give the depth to and the name of the next higher and next lower oil or gas zone in the area of the well, if any. The next producing zone above the injection interval is the upper San Andres, at approximately 950' above the top of the injection interval. The next producing zone below the bottom of SWD #2 is the Morrow Formation, approximately 5,800' below the base of the injection interval.

### XIV. PROOF OF NOTICE

All applicants must furnish proof that a copy of the application has been furnished, by certified or registered mail, to the owner of the surface of the land on which the well is to be located and to each leasehold operator within one-half mile of the well location. WE HAVE NOTIFIED OPERATORS WITHIN THE AREA OF REVIEW AND HEREIN ARE INCLUDED THE CERTIFIED MAIL RECEIPTS AND DRAFT PUBLIC NOTICE.

Where an application is subject to administrative approval, a proof of publication must be submitted. Such proof shall consist of a copy of the legal advertisement which was published in the county in which the well is located. The contents of such advertisement must include: AFFIDAVIT OF PUBLICATION OF NOTICE FROM NEWSPAPER WILL BE SUBMITTED AS SOON AS NOTICE IS PUBLISHED IN NEWSPAPER.

- (1) The name, address, phone number, and contact party for the applicant;
- (2) The intended purpose of the injection well; with the exact location of single wells or the Section, Township, and Range location of multiple wells;

(3) The formation name and depth with expected maximum injection rates and pressures; and,

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(4) A notation that interested parties must file objections or requests for hearing with the Oil Conservation Division, 1220 South St. Francis Dr., Santa Fe, New Mexico 87505, within 15 days.

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NO ACTION WILL BE TAKEN ON THE APPLICATION UNTIL PROPER PROOF OF NOTICE HAS BEEN SUBMITTED.

NOTICE: Surface owners or offset operators must file any objections or requests for hearing of administrative applications within 15 days from the date this application was mailed to them.

# **DCP ARTESIA SWDW #2 (PROPOSED)**

# Sec. 7- Twp. 18S-28E Eddy County, New Mexico TABLES AND FIGURES IN SUPPORT OF C-108 APPLICATION

Prepared by:

Geolex, Inc. 500 Marquette Av. NW, Suite 1350 Albuquerque, NM 87102

April 6, 2015



TABLE 1

API#	Current or Last Operator	Well Name	Status	Producing/	Original	Datum	TD	FC	DOTA	GE CAL	LS	SEC
				Injection Fm.	Completion							
00152527100	DCP MIDSTREAM, LP	ARTESIA SWD #1*	Inject	LSanAnd to Yeso	2/28/1986	3618	4100	330	FSL	2310	FEL	7
00152536100	RAY WESTALL	STATE CG #1	Inject	Canyon	10/30/2006	3614	10380	1980	FSL	2310	FEL	7
00153222700	CONOCO-PHILLIPS CO.	LEATHERSTOCKING 18#1	Active	Morrow	6/11/2002	3602	10450	1310	FNL	1310	FWL	18
0153232400	DUKE ENERGY FLD SER	DUKE 'AGI' #1	AGInject	Devonian	7/10/2003	3629	11520	1232	FSL	1927	FEL	7
00152006600	WELCH V S	SIMPSON #2	Dry		7/25/1967	3604	/1795	990	FSL	3630	FEL	7
00150263500	ALAMO PERMIAN RES.	W ARTESIA GU #14	Active	Grayburg	8/29/1958	3612	2225	990	FSL	330	FEL	7
00150263400	MARBOB ENERGY CORP	W ARTESIA SA GRBG #15	Plugged	Grayburg	9/1/1950	3608	2236	400	FSL	330	FEL	7
00150263100	COLLIER R D	TEXACO-STATE #2	Dry		12/21/1961	3602	2285	660	FSL	660	FWL	7
00150263300	KERSEY & COMPANY	TEXACO-STATE #2	Plugged	Grayburg	2/20/1962	3611	2362	1650	FSL	1650	FEL	7
00150264100	ALAMO PERMIAN RES.	W ARTESIA GU #16	Active	Grayburg	7/10/1950	3604	2493	400	FSL	330	FWL	8
00152374100	MARBOB ENERGY CORP	W ARTESIA GU #25	Plugged	Gybg-San And	7/4/1981	3619	2530	1650	FSL	940	FEL	7
00150263200	WELCH MARION C	SIMPSON-FEDERAL #1	Plugged	Queen	6/16/1925	3595	2620	450	FSL	1650	FWL	7
00152384200	ALAMO PERMIAN RES.	JENNINGS #1	Active	Qn-Gybg-SA	8/5/1981	3603	2634	406	FNL	330	FEL	18
00150192800	MCKEE ROBERT E	STATE E #1	Dry		3/3/1950	3590	3020	660	FNL	722	FWL	18

THERE ARE ONLY FOUR WELLS WITHIN THE ½ MILE AREA OF REVIEW, ALL ACTIVE, THAT PENETRATE THROUGH THE PROPOSED INJECTION INTERVAL. TWO OF THESE WELLS ARE OPERATED BY DCP MIDSTREAM (the applicant), AND TWO BY OTHER OPERATORS. ALL FOUR WELLS HAVE PRODUCTION CASING COVERING THE INJECTION INTERVAL, WITH CEMENT BEHIND PIPE WELL ABOVE THE TOP OF THE INJECTION INTERVAL. THE PROPOSED SALT WATER DISPOSAL WELL (SWDW) IS A REPLACEMENT FOR THE DCP MIDSTREAM ARTESIA SWD #1 WELL, AND WILL BE DRILLED ON THE SAME PAD LOCATION AS THE SWD #1, 70 FEET TO THE NORTH; THE REPLACEMENT WELL WILL INJECT INTO THE SAME INTERVAL AS THE SWD #1, WHICH IS AN APPROVED SALT WATER DISPOSAL WELL.

# Table 2 Water Wells Within One-Half Mile of Proposed DCP SWDW #2

Öwner	Туре	Location	Distance (feet)	TD (feet)	Depth to Water (feet)	
DCP Midstream	Monitor Well	Sec.7,T18S, R28E	570	Unknown	55	
Bogle Farms Windmill	Stock Tank	Sec.7,T18S, R28E	600	Unknown	Unknown	
Bogle Farms Windmill	Stock Tank	Sec.8, T18S, R28E	2740	Unknown	Unknown	

Note: While specific depths of the wells is unknown and depth to water is variable, shallow alluvial wells in the area are usually less than 150' deep



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FIGURE 1: SATELLITE PHOTOGRAPH SHOWING THE PROPOSED LOCATION FOR THE DCP FIELD SERVICES SWDW #2.



FIGURE 2: THE LOCATION OF THE PROPOSED SWDW #2 IS SHOWN BY THE RED DOT. ALL WELLS WITHIN A 2-MILE RADIUS OF THIS LOCATION ARE SHOWN.

INCORPORATED







FIGURE 4: STRUCTURAL FEATURES OF THE PERMIAN BASIN DURING THE LATE PERMIAN; MODIFIED FROM WARD, ET AL (1968). LOCATION OF THE DCP ARTESIA GAS PLANT IS SHOWN BY THE BLUE ARROW.

INCORPORATED



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FIGURE 5: UPPER PERMIAN TO SURFACE STRATIGRAPHY AND PRIMARY LITHOLOGIES IN THE AREA OF INVESTIGATION. THE PRIMARY PROPOSED SALT WATER DISPOSAL INTERVAL IS THE LOWER SAN ANDRES TO UPPER YESO, AND IS INDICATED BY THE BLUE BAR. HISTORICAL AND CURRENT PAY ZONES IN THE AREA ARE SHOWN BY THE RED STARS. THE PROPOSED INJECTION INTERVAL DOES NOT PRODUCE HYDROCARBONS IN THE AREA, AND IT IS THE SAME INTERVAL CURRENTLY BEING USED FOR SALT WATER DISPOSAL IN THE WELL SHOWN HERE, WHICH IS THE WELL BEING REPLACED.

FIGURE 6: PERFORATED (PRODUCING AND SERVICE WELLS) ZONES IN ACTIVE WELLS WITHIN THE ½-MILE AREA OF REVIEW. THE PROPOSED SWDW #2 WILL INJECT INTO THE SAME INTERVAL AS THE SWDW #1 AND THE PROPOSED AGI #2 WELL.

INCORPORATED



FIGURE 7: MAP SHOWING WELLS THAT PENETRATE THROUGH THE PROPOSED INJECTION INTERVAL WITHIN THE ½-MILE AREA OF REVIEW. THERE ARE ONLY 4 SUCH WELLS IN THIS AREA, WHICH MAKES IT IMPOSSIBLE TO PROVIDE A MEANINGFUL STRUCTURE MAP ON TOP OF THE INJECTION ZONE. CROSS-SECTION A-A', INDEXED HERE AND SHOWN ON THE NEXT PAGE, ILLUSTRATES THE INJECTION INTERVAL.

INCORPORATED





FIGURE 8: STRUCTURE SECTION ACROSS PROPOSED SWDW #2 LOCATION (DASHED RED TRACK). POROSITY >6% IS HIGHLIGHTED IN YELLOW. THE SWDW #2 WILL BE A DIRECT OFFSET TO SWDW #1, AND PERFORATED IN THE SAME GENERAL INTERVAL AS THE SWDW #1. THE CURRENT PERFORATIONS IN THE SWDW #1 ARE SHOWN IN BLUE; THE PROPOSED PERFS IN THE SWDW #2 WILL COVER A SLIGHTLY LONGER INTERVAL (RED BAR) TO PICK UP ANY ADDITIONAL POROSITY THAT MAY BE ENCOUNTERED.





Page 11



FIGURE 10: WATER WELLS WITHIN ½-MILE OF THE PROPOSED DCP ARTESIA SWDW #2

INCORPORATED

# **ATTACHMENT 1**

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# **PROOF OF NOTICE**

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### DCP MIDSTREAM ARTESIA SWD #2

## LIST OF NOTICES

Alamo Permian Resources, LLC 415 W. Wall St. #500 Midland, TX 79701

DCP Midstream, LP 370 17<sup>th</sup> St. #2500 Denver, CO 80202

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Ray Westall Operating, Inc. P.O. Box 4 Loco Hills, NM 88255

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These parties are provided notices by mail as required by the "Proof of Notice" section (XIV)

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P:\14-020\Notices\List of Notices.docx

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GALERIA POSTAL STORE ALBUQUERQUE, New Mexi 871029711 3401500129-0099	ico
04/06/2015 (505)346-0854 11	:07:12 AM
Sales Receipt	
Description Oty Price	Final Price
MIDLAND TX 79701-4585 Zone- First-Class Mail Large Env 3.70 oz.	4 \$1.61
Expected Delivery: Thu 04/ Return Rcpt (Green	09/15 \$2.70
00 Certified USPS Certified Mail #: 70063450000222632275	\$3.30
Issue Postage:	\$7.61
DENVER CO 80202-1370 Zone-4 First-Class Mail Large Env 3 70 oz	\$1.61
Expected Delivery: Thu O4/( Return Rcpt (Green Card)	09/15 \$2.70
@@ Certified USPS Certified Mail #: 70081300000128376976	\$3.30
Issue Postage:	======== \$7.61
LOCO HILLS NM 88255-0004 Zone-3	\$1.61
First-Class Mail Large Env 3.70 pz.	
Expected Delivery: Thu 04/0 Return Rcpt (Green	9/15 \$2.70
00 Certified USPS Certified Mail #: 70100290000194206735	\$3.30
Issue Postage:	\$7.61
iotal:	\$22.83
Paid by:	
Cash Change Due:	\$40.00 ~\$17.17



April 2, 2015

Mr. Tyler Woodruff Alamo Permian Resources, LLC 415 W. Wall St. #500 Midland, TX 79701

### VIA CERTIFIED MAIL RETURN RECEIPT REQUESTED

RE: DCP Midstream Application for SWD Well

This letter is to advise you that DCP Midstream LP ("Agave") filed the enclosed application on April 2, 2015 with the New Mexico Oil Conservation Division ("NMOCD" or "the Division"). The application requests authority to inject produced water and plant wastewater into a proposed SWD located at DCP's Artesia Gas Plant located in Section 7, T18S, R28E, 400 FSL, 2310 FEL, Eddy Co. NM.

DCP proposes to drill and complete the Artesia SWD #2 in a manner that will ensure safe injection. The proposed injection would be into the lower San Andres, Glorieta and Upper Yeso Formations through an injection interval from approximately 3280'-4105' with a total depth of 4125 feet. DCP proposes a maximum injection pressure of 2132 psi and a maximum daily injection rate of 1000 barrels per day (bpd) with an average rate of 600 bpd. The well will offset and replace the existing SWD#1 well for injecting produced water and plant wastewater into the same zone. The existing SWD#1 will be plugged and abandoned after the SWD#2 is drilled and completed.

Any interested parties must file objections or requests for hearing with the Oil Conservation Division, 1220 South St. Francis Dr., Santa Fe, New Mexico 87505, within 15 days of the date this application was mailed to you (date of this letter.). If you have any questions concerning this application, you may contact DCPs representative in this matter, Mr. Alberto Gutierrez at (505) 842-8000 at Geolex, Inc. 500 Marquette Avenue NW, Suite 1350, Albuquerque, New Mexico 87102.

Sincerely, Geolex, Inc.

Alberto A. Gutiérrez, RG President Consultant to DCP Midstream LP

Enclosure

AAG/lh

C:\ Projects\14-020\Reports\ Notices\ DCP Artesia SWD#2 Notice Letter.docx

April 2, 2015

DCP Midstream, LP 370 17<sup>th</sup> St. #2500 Denver, CO 80202

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Sincerely, Geolex, Inc.

Alberto A. Gutiérrez, RG President Consultant to DCP Midstream LP

Enclosure

April 2, 2014

Ray Westall Operating, Inc. P.O. Box 4 Loco Hills, NM 88255

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RE: DCP Midstream Application for SWD Well

This letter is to advise you that DCP Midstream LP ("Agave") filed the enclosed application on April 2, 2015 with the New Mexico Oil Conservation Division ("NMOCD" or "the Division"). The application requests authority to inject produced water and plant wastewater into a proposed SWD located at DCP's Artesia Gas Plant located in Section 7, T18S, R28E, 400 FSL, 2310 FEL, Eddy Co. NM.

DCP proposes to drill and complete the Artesia SWD #2 in a manner that will ensure safe injection. The proposed injection would be into the lower San Andres, Glorieta and Upper Yeso Formations through an injection interval from approximately 3280'-4105' with a total depth of 4125 feet. DCP proposes a maximum injection pressure of 2132 psi and a maximum daily injection rate of 1000 barrels per day (bpd) with an average rate of 600 bpd. The well will offset and replace the existing SWD#1 well for injecting produced water and plant wastewater into the same zone. The existing SWD#1 will be plugged and abandoned after the SWD#2 is drilled and completed.

Any interested parties must file objections or requests for hearing with the Oil Conservation Division, 1220 South St. Francis Dr., Santa Fe, New Mexico 87505, within 15 days of the date this application was mailed to you (date of this letter.). If you have any questions concerning this application, you may contact DCPs representative in this matter, Mr. Alberto Gutierrez at (505) 842-8000 at Geolex, Inc. 500 Marquette Avenue NW, Suite 1350, Albuquerque, New Mexico 87102.

Sincerely, Geolex, Inc.

Alberto A. Gutiérrez, RG President Consultant to DCP Midstream LP

Enclosure

AAG/lh

C:\ Projects\14-020\Reports\ Notices\ DCP Artesia SWD#2 Notice Letter.docx

# ATTACHMENT 2

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# AFFIDAVIT OF NOTICE PUBLISHED ARTESIA DAILY PRESS April 7, 2015

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# **Affidavit of Publication**

No.

State of New Mexico

County of Eddy:

Danny Scott

being duly sworn, sayes that he is the

Publisher

23420

of the Artesia Daily Press, a daily newspaper of General

circulation, published in English at Artesia, said county

and state, and that the hereto attached

### Legal Notice

was published in a regular and entire issue of the said Artesia Daily Press, a daily newspaper duly qualified for that purpose within the meaning of Chapter 167 of the 1937 Session Laws of the state of New Mexico for

1 Consecutive weeks/day on the same

day as follows:

First Publication	April 7, 2015		
Second Publication			
Third Publication			
Fourth Publication			
Fifth Publication			
Sixth Publication			
Subscribed and sworn be	fore me this		
7th day of Apri	1 2015		



Latisha Romine Notary Public, Eddy County, New Mexico

# **Copy of Publication:**

### the state of the state

PUBLIC NOTICE FOR SWD APPLICATION

DCP Midstream LP has field an application with NMOCD on April 6, 2015 that requests authority to infact produced weter and plant waitewater into a proposed SWD located at DCP's Assess Ges Ptant located in Section 7, 1185, R28E, 400 FSL, 2310 FEL, Eddy Co. NM. The proposed infaction well would be completed to at to inject into the lower Sen Andres, Glorista and Copie Yeso Formations through an injection internal from approximately 3280-4105 with a total depth of 4125 feet. DCP proposes a madmum injection pressure of 2132 psi and a madmum daily injection rate of 1000 terwis per day (bpd) with an average rate of 600 bpd. The well will replace the easting SWDF1 well for injecting produced water and plaint wastewater into the same approved zone.

Any interested parties, must file objections or requests for hearing with the OP Conservation Division, 1220 South St. Francis Dr., Sents Fe, New Meddoo 87505; within 15 days. If you have any questions concerning this application, you may context DCP:s representative in this matter, Mr. Alberto Gulferrez at (505) 842-8000 at Geotax, Inc. 500 Marquelle Avenue NW, Suffee 1350, Albuquerque, New Medico 67102.

Published in the Artesia Daily Proce, Artesia, M.H., April 7 2015 Legal No. 23420

C-108 Review Checklist: Received Add. Request: Reply Date: Suspended:	[Ver 15]
ORDER TYPE: WFX / PMX (SWD) Number: 1564 Order Date: 01/07/14 egacy Permits/Orders: R-7876	— <u> </u>
Well No. 2 Well Name(s): Artesia SWO + Duke AGI Well No. 1 CSW	526) D-839-8)
API: 30-015 - Pendina - Soud Date: TBD New or Old: New	Ze condition
Footsage 400 FSL 12310 FEI Lot = or Unit O Sec 7 Tap 185 Bas 28 E County Eddy	SRT
Poulages <u>recting Zeto rece</u> Loi or onit <u>o sec r rsp roc</u> roce <u>county corr</u>	0 1 1 (7)
General Location: <u>Augulate to 1993 Allesia Gas &amp; late</u> Pool: <u>San Anares - 1850</u> Pool No.: <u>He</u>	R R BOW
BLM YOOK Map: Operator: Operator: OGHID: OGHID: Contact:	<u>-700</u> 0000000000000000000000000000000000
COMPLIANCE RULE 5.9: Total Wells: Inactive: Fincl Assur: Compl. Order? NO IS 5.9 OK (Yes) Date ICS	Http://
WELL FILE REVIEWED & Current Status: No API/ no APD - Supports disposal from DCP's gas plant	
WELL DIAGRAMS: NEW: Proposed or RE-ENTER: Before Conv. After Conv. Logs in Imaging:	
Planned Rehab Work to Well: Replacement well for Artesia SWD * 1 (interval: 3350'to 4000'); 2nd appli	ication
Well Construction Details Sizes (in) Setting Science S	tili. hod¦,∠∂
Planned or Existing Surface 12/2 95/8 0 to 300 Stage Tool ~ 300 Circulate to sur-	ace
Planned for Existing Interm/Prod 17/15/12 To Sur	ace
Planned_or Existinginterm/Prod 6'	/ 
Planned_or Existing Prod/Liner	
Planned_or Existing _ Liner	
Planned Vor Existing OH / ERF 11/8 51/2 3280 to 4105 Completion/Operation Details:	
Injection Lithostratigraphic Units: Depths (ft) Injection or Confining Tops Drilled TD PBTD	2.0.9
Adjacent Units NEW TD 4210 NEW PBTD	
Confining Unit: Litho. Struc (Por.) NA-100 Page Son Andres 2180 NEW Open Hole O or NEW Perfs Of	
Proposed Inj Interval TOP: 32.80 San Avares Graveta. Tubing Size 27/8 in. Inter Coated? Ye	5
Proposed Inj Interval BOTTOM: 4105 Glorieta - 1050 3760 Proposed Packer Depth 3100 it	
Confining Unit: Litho. Struc. (Por.) NA ka pides 1050 4074 Min. Packer Depth 3180 (100-ft.lim	it)
Adjacent Unit: Litho. Struc. Por. Proposed Max. Surface Press. 21.32	ps)
Admin. Inj. Press. <u>656</u> (0.2 psi p	ber ft)
POTASH: R-111-P_No_Noticed? NA BLM Sec Ord W WIPP No Noticed? NA Salt/Salado T:B: NW: Cliff House fr	m <u>N/</u>
FRESH WATER: Aquifer No Swell Ar Testan Max Depth 2450 HYDRO AFFIRM STATEMENT By Qualified Perso	on
NMOSE Basin: Rosuel Artes APITAN REEF: thru() adj() NAC No. Wells within 1-Mile Radius? 3. FW Analysi	is do
Disposal Eluid: Engration Source/e) Drocess- Multiple Analysis? 183 On Lasse Operator Only (Configuration	Preutos
Disposal Huld: I of mallow source(s) <u>process i varpe</u> Analysis: <u>co</u> of Lease Operator only of commenter	
Disposal Int: Inject Hate (Avg/Max BWPD): <u>600 (1000</u> Protectable Waters? <u>NO</u> Source; <del>Foolines</del> Syste <b>n</b> : Closed (For O	pen()
HC Potential: Producing Interval? No Formerly Producing? No Method: Cog DST/P&A Othe Producing Cas disposed Zave	1ap 🕑
AOR Wells: 1/2-M Radius Map? 125 Well List? 25 Total No. Wells Penetrating Interval: 4 Horizontals?	
Penetrating Wells: No. Active Wells 4 Num Repairs? on which well(s)? the OAGI well Diagrams	tom )
Penetrating Wells: No. P&A Wells Num Repairs? On which well(s)? Diagrams	
NOTICE: Newspaper Date 04/07/15 Mineral Owner NMSLO R OF Street Owner Private upplicant N. Date 04	10415
RULE 26.7(A): Identified Tracts? 105 Affected Persons: Alamo Permian (provious protestant)/ Kay N. Data	0/13
Order Conditions: Issues: None Identified	
Add Order Cond: NO Special Requirements 4/24/Add XIPI-338. RBDMS case into shows max surf pressure of 810 psi	

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## Goetze, Phillip, EMNRD

From:	Alberto A.Gutierrez, RG {Geolex} <aag@geolex.com></aag@geolex.com>
Sent:	Monday, April 06, 2015 12:38 PM
To:	Goetze, Phillip, EMNRD
Cc:	'ROBERTO TORRICO'; 'RUSS ORTEGA'
Subject:	RE: Application for DCP Artesia SWD#2
Attachments:	New C-108 Application for new SWDW #2.pdf
Importance:	High
Follow Up Flag:	Follow up
Flag Status:	Flagged

## Phillip

As we discussed today, we have not been able to work out Alamo Permian's objection to the Penrose sand proposed SWD#2. For this reason, DCP is officially withdrawing the application filed on 9/24/14 to which Alamo objected and replacing it with the attached application. This application should present no problems as it is to drill a new well to dispose of the same amount of produced water and wastewater which the plant is currently injecting into the SWD#1 and in the same zone (lower San Andres, Glorieta and Upper Yeso). As you may remember the approved AGI#2 also allowed us to inject this volume of water into the existing zone but with the proviso that the SWD#1 be plugged prior to using the AGI #2. Since DCP and OCD both prefer a dry AGI#2, this well will allow us to segregate the water disposal point from the acid gas injection into the approved AGI#2. The replacement SWD#2 will be a direct offset of SWD#1 (70'North) and the SWD#1 will be plugged according to NMOCD requirements. The bottom hole location approved for the AGI#2 is about 1600' away from this proposed location so that will prevent interference between the wells.

The hard copy is being sent in the mail to you today and the notice is being published in the Artesia Press tomorrow. The completed checklist with the proof of individual notices and the published notice affidavit will be sent to you tomorrow via email and snail mail. If you have any questions or need additional information please call me. Otherwise we anticipate receiving administrative approval after your review since the well is merely a replacement for the already approved SWD#1 in the same zone. Alamo who is the main operator in this area supports this revised application.

Regards Alberto

Alberto A. Gutiérrez, RG Geolex, Incorporated<sup>®</sup> 500 Marquette Avenue, NW Suite 1350 Albuquerque, NM 87102 505-842-8000 Ext. 105 505-842-7380 Fax

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#### STATE OF NEW MEXICO ENERGY AND MINERALS DEPARTMENT OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION DIVISION FOR THE PURPOSE OF CONSIDERING:

> CASE NO. 8526 Order No. R-7876

APPLICATION OF PHILLIPS PETROLEUM COMPANY FOR SALT WATER DISPOSAL, EDDY COUNTY, NEW MEXICO.

### ORDER OF THE DIVISION

#### BY THE DIVISION:

This cause came on for hearing at 8 a.m. on March 13, 1985, at Santa Fe, New Mexico, before Examiner Gilbert P. Quintana.

NOW, on this <u>l6th</u> day of April, 1985, the Division Director, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

### FINDS THAT:

(1) Due public notice having been given as required by law, the Division has jurisdiction of this cause and the subject matter thereof.

(2) The applicant, Phillips Petroleum Company, is the owner and operator of the Artesia Plant SWD Well No. 1, located 330 feet from the South line and 2310 feet from the East line of Section 7, Township 18 South, Range 28 East, NMPM, Eddy County, New Mexico.

(3) The applicant proposes to utilize said well to dispose of produced salt water and gas plant process waste water into the Lower San Andres and Glorieta formations, with injection into the perforated interval from approximately 3370 feet to 3975 feet.

(4) The injection should be accomplished through 2 7/8-inch plastic lined tubing installed in a packer set at approximately 3300 feet; that the casing-tubing annulus should be filled with an inert fluid; and that a pressure gauge or approved leak detection device should be attached to the annulus in order to determine leakage in the casing, tubing, or packer. -2-Case No. 8526 Order No. R-7876

(5) The injection well or system should be equipped with a pressure limiting switch or other acceptable device which will limit the wellhead pressure on the injection well to no more than 675 psi.

(6) The Director of the Division should be authorized to administratively approve an increase in the injection pressure upon a proper showing by the operator that such higher pressure will not result in migration of the injected waters from the Lower San Andres and Glorieta formations.

(7) The operator should notify the supervisor of the Artesia district office of the Division of the date and time of the installation of disposal equipment so that the same may be inspected.

(8) The operator should take all steps necessary to ensure that the injected water enters only the proposed injection interval and is not permitted to escape to other formations or onto the surface.

(9) Approval of the subject application will prevent the drilling of unnecessary wells and otherwise prevent waste and protect correlative rights.

#### IT IS THEREFORE ORDERED THAT:

(1) The applicant, Phillips Petroleum Company, is hereby authorized to utilize its Artesia Plant SWD Well No. 1, located 330 feet from the South line and 2310 feet from the East line of Section 7, Township 18 South, Range 28 East, NMPM, Eddy County, New Mexico, to dispose of produced salt water and gas plant process waste water into the Lower San Andres and Glorieta formations, injection to be accomplished through 2 7/8-inch tubing installed in a packer set at approximately 3300 feet, with injection into the perforated interval from approximately 3370 feet to 3975 feet;

<u>PROVIDED HOWEVER</u>, that the tubing shall be plastic-lined; that the casing-tubing annulus shall be filled with an inert fluid; and that a pressure gauge shall be attached to the annulus or the annulus shall be equipped with an approved leak detection device in order to determine leakage in the casing, tubing, or packer.

(2) The injection well or system shall be equipped with a pressure limiting switch or other acceptable device which will limit the wellhead pressure on the injection well to no more than 675 psi.

-3+ Case No. 8526 Order No. R-7876

(3) The Director of the Division may authorize an increase in injection pressure upon a proper showing by the operator of said well that such higher pressure will not result in migration of the injected fluid from the Lower San Andres and Glorieta formations.

(4) The operator shall notify the supervisor of the Artesia district office of the Division of the date and time of the installation of disposal equipment so that the same may be inspected.

(5) The operator shall immediately notify the supervisor of the Division's Artesia district office of the failure of the tubing, casing, or packer, in said well or the leakage of water from or around said well and shall take such steps as may be timely and necessary to correct such failure or leakage.

(6) The applicant shall conduct disposal operations and submit monthly reports in accordance with Rules 702, 703, 704, 705, 706, 708, and 1120 of the Division Rules and Regulations.

(7) Jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO OIL CONSERVATION DIVISION 9 8 uni

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R. L. STAMETS, Director

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