PMAM1428132514

ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION

- Engineering Bureau -1220 South St. Francis Drive, Santa Fe, NM 87505



		<u>ADMINISTRATIV</u>	E APPLICATION	CHECKLIS'	T
т	HIS CHECKLIST IS MA	ANDATORY FOR ALL ADMINISTRAT	TIVE APPLICATIONS FOR EXCEPTI CESSING AT THE DIVISION LEVEL		ES AND REGULATIONS
\ppii	cation Acronyme	3:			
	-	idard Location] [NSP-Non- hole Commingling] [CTE		(SD-Simultaneous PLC-Pool/Lease Co	_
	[PC-Po	ol Commingling] [OLS - (Off-Lease Storage] [OLM	l-Off-Lease Measu	rement]
		[WFX-Waterflood Expansion [WFX-Waterflood Expansion [WFX-Water Dispension [WFX-WFX-WFX-WFX-WFX-WFX-WFX-WFX-WFX-WFX-	n]		1]
	[EOR-Qual	ified Enhanced Oil Recove	ry Certification] [PPR-Po	sitive Production	4
[1]		PLICATION - Check Thos		-5 n t	<u>,</u>
	[A]	Location - Spacing Unit - NSL NSP		-4 pack	he Conporation 873
	Check	One Only for [B] or [C]			
	[B]	Commingling - Storage - I	Measurement	S 🗍 OLM	Apache State Sud #5
	•	□ DHC □ CIB □		3 C OLIVI	5 aD #5
	[C]		sure Increase - Enhanced Oi SWD		30-015-42519
	[D]	Other: Specify			Poul Sao DevoniAn
					-Sad DevoviAn
[2]	NOTIFICATI [A]	ION REQUIRED TO: - Ch Working, Royalty or 0	neck Those Which Apply, of Overriding Royalty Interest	r ⊔ Does Not App Owners	98044
	[B]	Offset Operators, Lea	seholders or Surface Owner	•	all states and
	[C]	Application is One W	hich Requires Published Le	gal Notice	711 0CT -8 d, and/or,
	[D]	Notification and/or Co	oncurrent Approval by BLM nt - Commissioner of Public Lands, State L	1 or SLO and Office	
	[E]	For all of the above, F	Proof of Notification or Publ	lication is Attached	d, and/or,
	[F]	Waivers are Attached			
		Name of Street, Street			22 0
[3]		CURATE AND COMPLE ATION INDICATED ABO		QUIRED TO PRO	OCESS THE TYPE
[4]	CERTIFICAT	ΓΙΟΝ: I hereby certify that	the information submitted v	with this applicatio	n for administrative
		nd complete to the best of magnification and notification			n will be taken on this
	Note:	Statement must be completed t	y an individual with managerial	and/or supervisory ca	apacity.
	d Catanach or Type Name	Statement must be completed to David Cafan. Signature 10/8/14	Age Title	nt-Apache Corpo	<u>oration</u>
		10/8/14 Date	drca	ntanach@netscape.	com
		1 12114	F.siVt	ALL MURDENS	

Energy, Minerals and Natural Resources Department Oil Conservation Division 1220 South St. Francis Drive Santa Fe, New Mexico 87505

Attention: Ms. Jami Bailey, CPG **Division Director**

Re: Form C-108

> Apache Corporation Apache State SWD No. 5 API No. (30-015-42519)

430' FNL & 150' FWL, (Lot 1/Unit D) Section 30, T-17S, R-31E, NMPM, Eddy County, New Mexico

Dear Ms. Bailey,

Enclosed please find a Division Form C-108 (Application for Authorization to Inject) for the Apache Corporation Apache State SWD No. 5. Apache Corporation proposes to drill and utilize this well as a produced water disposal well, injection to occur into the Devonian and Ellenburger formations through the perforated interval from approximately 12,261 feet to 14,135 feet. Produced water from the Glorieta and Yeso formations originating from Apache Corporation operated wells in this area will be injected into the well.

I believe that all the information necessary to approve the application is enclosed. If additional information is needed, please contact me at (505) 690-9453.

Sincerely,

David Catanach-Agent Apache Corporation 303 Veterans Airpark Lane, Suite 3000

Midland, Texas 79705

Xc: OCD-Artesia STATE OF NEW MEXICO ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, New Mexico 87505

FORM C-108 Revised June 10, 2003

APPLICATION FOR AUTHORIZATION TO INJECT

I.	PURPOSE: Secondary Recovery Pressure Maintenance X Disposal Storage Application qualifies for administrative approval? Yes No
II.	OPERATOR: Apache Corporation (OGRID-873)
	ADDRESS: 303 Veterans Airpark Lane, Suite 3000 Midland, Texas 79705
	CONTACT PARTY: David Catanach-Agent PHONE: (505) 690-9453
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 If yes, give the Division order number authorizing the project:
V.	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 each proposed injection well. This circle identifies the well's area of review.
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.
VII.	Attach data on the proposed operation, including:
	 Proposed average and maximum daily rate and volume of fluids to be injected; Whether the system is open or closed; Proposed average and maximum injection pressure; Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and, 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.).
*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.
IX.	Describe the proposed stimulation program, if any.
*X.	Attach appropriate logging and test data on the well. (If well logs have been filed with the Division, they need not be resubmitted
*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.
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.
XIII.	Applicants must complete the "Proof of Notice" section on the reverse side of this form.
XIV.	Certification: I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.
	NAME:
	SIGNATURE: David Catamac DATE: 10/8/14
*	E-MAIL ADDRESS: drcatanach@netscape.com 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:

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.
 - (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.
 - (3) A description of the tubing to be used including its size, lining material, and setting depth.
 - (4) The name, model, and setting depth of the packer used or a description of any other seal system or assembly used.

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.
 - (2) The injection interval and whether it is perforated or open-hole.
 - (3) State if the well was drilled for injection or, if not, the original purpose of the well.
 - (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.
 - (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.

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.

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:

- (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,
- (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.

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.

District II
1625 N. Franch Dr., Hobbs. NM 89240
Prone(575) 363-6161 Fax.(575) 393-0720
District III
811 S. Fras St., Anesia, NM 88210
Prone(575) 749-1233 Fax (575) 748-6720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Prone(505) 334-6178 Fax (505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87503
Prone(505) 476-3470 Fax (505) 476-3462

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

Form C-101 August 1, 2011

Permt 189452

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	03 Veterans A lidland, TX 79		ine								3.	API Number 30	, -015-4251!	•	
4. Preperty Co 38	oce 8598		5 Prop	rny Name APACHE	STATE	SWD					6.	Well No. 00	5		
			•			7. Surfi	ice Location		-		-				
UL - Lot D	Section	30	Township 17S	Range	31E	Lot Idn	Feet From 430		N'S tine N	Feet Fron	150	EW	W.	County	Eddy
						8. Proposed Be	ottom Hole Loca	atior	 D			_			
UL - Los	Section	30	Township 17S	Range 3	1E	Let ldn D	Feet From 430		N'S Line N	Feet Fro	m 150	EW	Line W	County	Eddy
			•			9. Pool	Information								
SWD.DEVC	ONIAN-ELLEI	VBERGE	R										98044		
						Additional	Well Informatio	n					•		
11, Work Type	ev Well		12. Well Type OIL		13. Ca	b'e/Rotary		14.1	Lesse Type State		15. Grou	nd Leve! Ele 3603	PVATOR		
16. Multiple	\$11 TIGH		17. Proposed Depth		18. Fc	xmaten		19.	Contractor	-	20. Spud				
N Depth to Grou			14135		ļ	Ellenburger					A		surface water		
Depth to Grou	und water				Distar	ice from nearest fres	h water wes			1	Listance	to nearest	surrace water	•	
X We will be	e using a clo	sed-loo	system in tieu of i	ined pits				S							
Туре	Hole S	-Ze	Casing Size			. Proposed Cash	ng and Cement Setting			Sacki	of Cerry	ent	1	Estmated	TÓC
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Prod	1 0.73		1	l		26	<u></u>		J		2300				
					Castr	ng/Cement Progr	am: Additional	Соп	nments						
<u> </u>					22.	Proposed Blow	out Prevention	Рго	gram				-,		
	Туре		Wo	rking Pressure					est Pressure				Manuf	ecturer	
Н	iyanı	L		3000		1			2000		Ш				
23 I hereby	certify that th	e inform	ation given above is	true and cor	nolete t	o the hest of my			0	IL CONSE	RVATI	ON DIVIS	ION		
knowledge i I further ce	and belief.		with 19.15.14.9 (A)		-	-			ŭ	0 0 14 3 2		011 01110			
Printed Name:	: Elec	tronically	filed by Bobby Smit	h			Approved By:		Randy Dad	e					
Tele:							Tite.		Oistrict Sup	ervisor					
Email Address			gapachecorp.com				Approved Date	¢	7/23/2014			Express	on Date: 7/2	3/2016	
Date:	7/22	/2014		Phone 432	-818-10	020	Conditions o	f Ap	proval Attached	1					

DESTRICT |
1625 N. French Dr., Hobbn, NM 8E240
Phone: (775) 793-6161 Pan: (575) 393-0720
DISTRICT IS
BIT S. Hunt St., Artesia, NM 8E210
Phone: (575) 748-1220 Pan: (575) 748-9720
DISTRICT IN
DOOR (is) Brazum Road, Artes, NM 87410
Phone: (505) 334-6176 Fan: (505) 334-6170
DISTRICT IN
DISTRICT IN
1220 S. B. Francia Dr., Santo Pa., NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

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

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

DAMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

30-0	PI Number 525-			Poel Code	5	WD; De	Pool Nam VONIAn -	Ellen bura	ser .
3859				7	5				
OGRIDI					3603'				
					Surface Locati	ion		· · · · · · · · · · · · · · · · · · ·	
UL or lot No.	Section	Township	ownship Runge		Feet from the	North/South line	Feet from the	Ensi/West line	County
1	30	17-S	31-E	} }	430	NORTH	150	WEST	EDDY
,				Bottom Hold	Location If Diffe	rent From Surface			
UL or loi No.	Section	Township	Range	Lot ldn	Feet from the	Nonh/South line	Feet from the	East/West line	County
Declicated Acres		Infish Co	onsolidation C	ode Ord	er No	<u> </u>	, <u>.</u>	l	i

		·			
23 TO 150	1				OPERATOR CERTIFICATION I hereby credify that the Information forein is true used complete to the best of my knowledge and belief, and that this organization either owns a working interest or unlessed desineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location purrount to a construct with so owner of each mineral or working interest, or to a voluntary pooling suprement or a companyous pooling suprement or a companyous procling cetter
	32,81 AC.	<u> </u>			berutafore entered by the division.
·	2	GEODETIC COORDINATES NAD 27 NME SURFACE LOCATION Y=659154.0° N	!		Mahelle Cogges 7-21 Signature Michelle Cooper Printed Name michelle Cooper Da paches espaçon
		X= 628271.3 E			Printed Name
	32.92 AC.	LAT.=32.811407 N LONG.=103.915831" W	•		E-mail Address
		LAT.=32'48'41" N			SURVEYOR CERTIFICATION
		LONG.=103'54'57" W			I bereby certify that the well location aboves on this plant was plotted from field wases of action surveys made by eas or sweler my supervision, and that the same is true and convex to the hest of my belief.
		 	'	<u>'</u>	MAY 7, 2014
	33.02_AC.]	· 		Date of Scales of Protestinal Surveyor.
	4				O UN ME + O
		1	<u> </u>		13230) 5 07/10/2014
1	•	1			Certification (1264) Introduction (1264) Certification (1264) Certification (1264)
L	33.13 AC.	<u> </u>		L	LSL JWSC W.O : 14 13.0720

C-108 Application Apache Corporation Apache State SWD No. 5 430' FNL & 150' FWL (Lot 1/Unit D) Section 30, T-17S, R-31E, NMPM Eddy County, New Mexico

- I. The purpose of the application is to request approval to utilize the proposed Apache State SWD No. 5 as a produced water disposal well. This is a new well to be drilled for injection.
- II. Apache Corporation
 303 Veterans Airpark Lane
 Suite 3000
 Midland, Texas 79705
 Contact Party: David Catanach (505) 690-9453
- III. Injection well data sheet and wellbore schematic diagram showing the proposed wellbore configuration are attached.
- IV. This is not an expansion of an existing project.
- V. Attached is a map that identifies all wells/leases within a 2-mile radius of the proposed water disposal well and a map that identifies the ½ mile "Area of Review" ("AOR").
- VI. Attached is a list of all wells within the AOR that do not penetrate the injection interval. Well data on this list includes API No., operator, well name & number, well type and status, well location, and total depth. Also attached is a list of wells within the AOR that do penetrate the injection interval. An examination of this AOR data indicates that all wells within the AOR that penetrate the injection interval are constructed and/or plugged and abandoned so as to preclude the migration of fluid from the injection interval.
- VII. 1. The average injection rate is anticipated to be approximately 8,000 BWPD. The maximum rate will be approximately 10,000 BWPD. If the average or maximum rates increase in the future, the Division will be notified.
 - 2. This will be a closed system.
 - 3. Apache Corporation will initially inject water into the subject well at or below a surface injection pressure that is in compliance with the Division's limit of 0.2 psi/ft., or approximately 2,452 psi. If a surface injection pressure above 2,452 psi is necessary, Apache will conduct a

step rate injection test to determine the fracture pressure of the Devonian and Ellenburger formations in this area.

- 4. Produced water from the Glorieta and Yeso formations originating from Apache Corporation operated wells in this area will be injected into the subject well. Attached is a water analysis from Apache's Barnsdall Federal Well No. 1 which produces from the East Empire Glorieta-Yeso Pool, and a water analysis from Apache's D State No. 71 which produces from the Artesia Glorieta-Yeso Pool.
- 5. There are currently no Devonian or Ellenburger pools within one mile of the proposed Apache State SWD No. 5, and consequently, formation water samples are not available. The Devonian and Ellenburger formations are productive in numerous locations in Eddy and Lea Counties, and literature indicates that the water present in these formations is highly saline.

VIII. Geologic Formation: Devonian Estimated Top: 12,261' Thickness: 923' Lithology: Carbonate Geologic Formation: Ellenburger Estimated Top: 13,184 Thickness: 951' Lithology: Dolomitic Limestone/Limestone USDW's: According to data obtained from the New Mexico State Engineer, there are no fresh water well located within one mile of the Apache State SWD No. 5. Fresh water in this area occurs sporadic and is general 250 feet deep or shallower.

- IX. If necessary, the well will be stimulated with a mild acid job.
- X. Logs will be filed subsequent to the completion of drilling operations.
- XI. There are no fresh water wells located within one mile of the Apache State SWD No. 5.
- XII. Affirmative statement is enclosed.
- XIII. Proof of Notice is enclosed.

INJECTION WELL DATA SHEET

·	
API No. 30-015-42519)	
Lot 1/Unit D 30 UNIT LETTER SECTION	17 South 31 East ON TOWNSHIP RANGE
WELL CONSTRUCTION	ON DATA (PROPOSED) Casing
Hole Size: 17 ½"	Casing Size: 13 3/8" @ 450'
Cemented with: 600 Sx.	orft ³
Top of Cement: Surface	Method Determined: Circulate
<u>Intermedi</u>	ate Casing
Hole Size: 12 1/4"	Casing Size: 9 5/8" @ 4,500'
Cemented with: 1015 Sx.	orft ³
Top of Cement: Surface	Method Determined: Circulate
Producti	on Casing
Hole Size: <u>8 3/4"</u>	Casing Size: 7" @ 14,135'
Cement with: 2500 sx.	orfi³
Top of Cement: 3,000'	Method Determined: Calculated
Total Depth: 14,135'	
4	WELL CONSTRUCTION Surface Hole Size: 17 ½" Cemented with: 600 Sx. Top of Cement: Surface Intermedia Hole Size: 12 1/4" Cemented with: 1015 Sx. Top of Cement: Surface Production Hole Size: 8 3/4" Cement with: 2500 sx. Top of Cement: 3,000"

Injection Interval

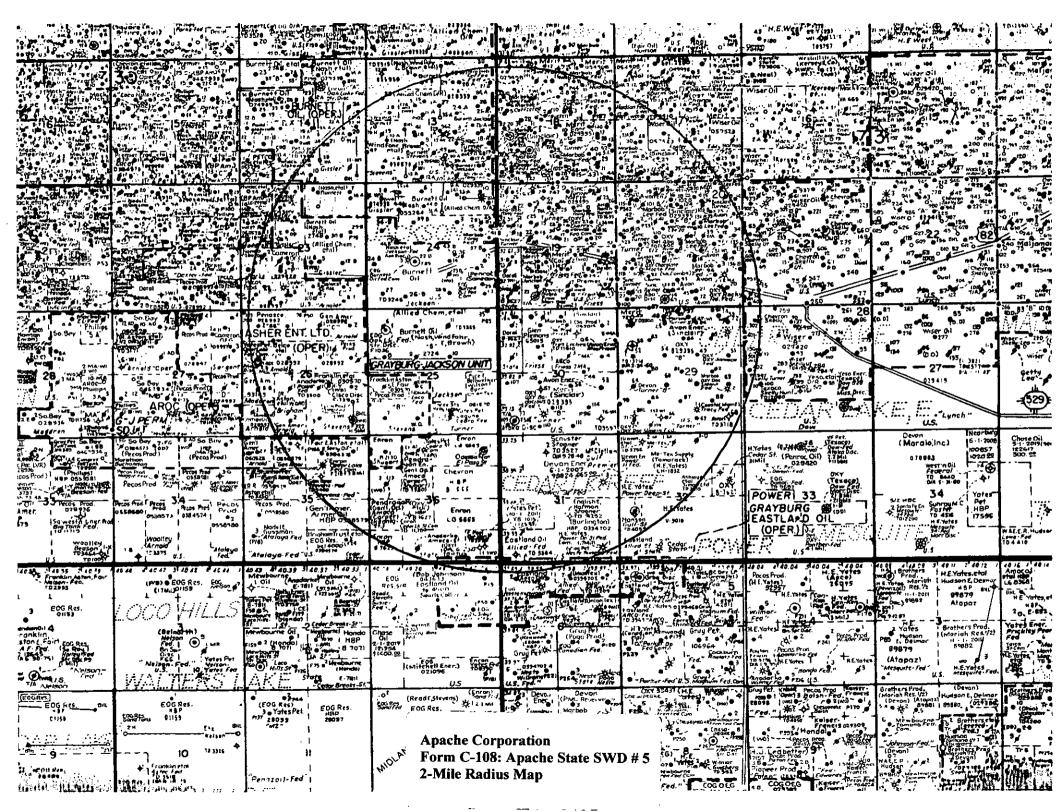
<u>Perforated Interval – 12,261'-14,135'</u>

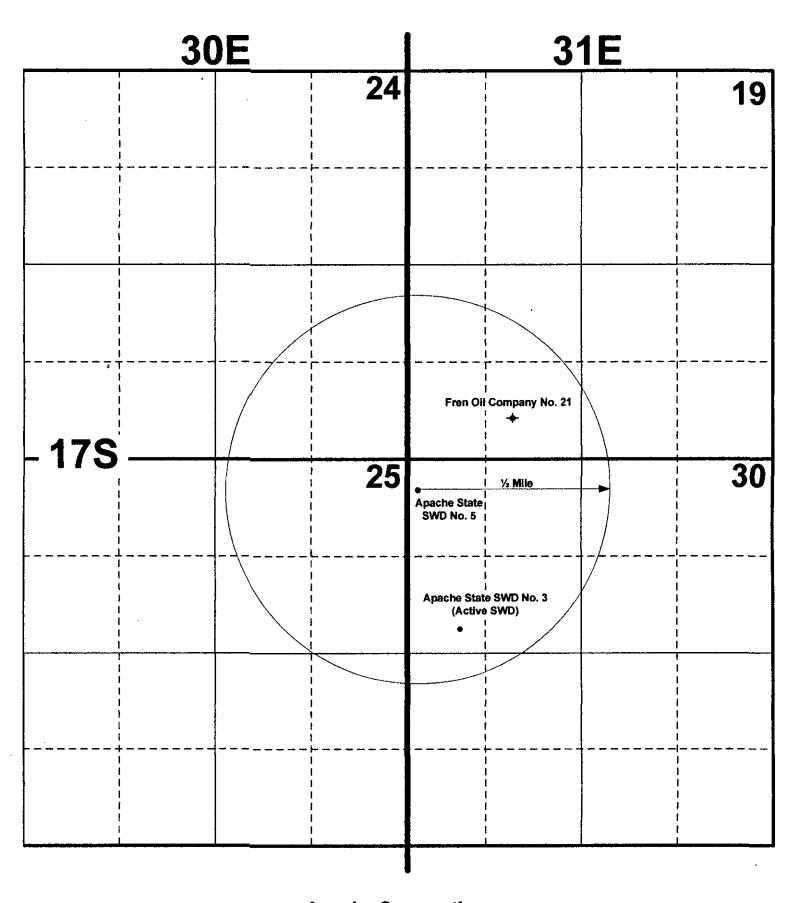
INJECTION WELL DATA SHEET

Tubin	ng Size:4 1/2"	Lining Material:	Duo Lined (Extruded Thermoplastic)
Type	of Packer: Model A Lockset Ir	njection Packer	
Packe	er Setting Depth: 12,161' or y	within 100' of the uppermost in	jection perforations
Other	Type of Tubing/Casing Seal (if applicable)	: None	
		Additional Data	
1.	Is this a new well drilled for injection:	X Yes	No
	If no, for what purpose was the well origin	nally drilled:	· · · · · · · · · · · · · · · · · · ·
2.	Name of the Injection Formation:	Devonian & Ellenburger	see legal
3.	Name of Field or Pool (if applicable):		
4.	Has the well ever been perforated in any of i.e. sacks of cement or plug(s) used.	other zone(s)? List all such perf	forated intervals and give plugging detail,
	None		· · · · · · · · · · · · · · · · · · ·
5.	Give the name and depths of any oil or gain this area:	s zones underlying or overlying	the proposed injection zone
	Grayburg Jackson SR-Qn-GB-SA Pool (3	,600');	

Apache Corporation Proposed Wellbore Configuration Apache State SWD No. 5 API No. 30-015-42519 430' FNL & 150' FWL (Lot 1/Unit D) Section 30, T-17 South, R-31 East, NMPM 17 1/2" Hole; Set 13 3/8" 48# H-40 Csg @ 450' Cement w/600 Sx. Circulate cement to surface TOC @ 3,000' (Proposed) 12 1/4" Hole; Set 9 5/8" 40# J-55 & HCK-55 Csg @ 4,500' Cement w/1015 Sx. Circulate cement to surface. 4 1/2" Duo-Lined Injection Tubing set in a Model A Lockset Packer @ 12,161' Devonian & Ellenburger |3 284 | Devonian & Ellenburger | 13 284 | Devonian 8 3/4" Hole; Set 7" 29# P-110 & HCL-80 Csg. @ 14,135'

Cement w/2500 Sx. Cement to a depth of 3,000'





Apache Corporation
Form C-108: Apache State SWD No. 5
½ Mile Area-of-Review Map

(Note: Only Wells That Penetrate the Injection Interval Are Shown)

APACHE CORPORATION

FORM C-108: APACHE STATE SWD NO. 5

AREA OF REVIEW WELL LIST

WELLS THAT DO NOT PENETRATE INJECTION ZONE

API NUMBER	OPERATOR	LEASE	WELL	WELL	STATUS	FTG.	N/S	FTG.	E/W	UNIT	SEC.	TSHP.	RNG.	TOTAL
		NAME	NO.	TYPE		N/S	<u> </u>	E/W						DEPTH
30-015-05463	Glen Plemons	Friess Federal	1	Р	PA	660'	N	1980'	8	С	30	178	31E	3,202'
30-015-05466	Glen Plemons	Friess Federal	2	P	PA	1980'	N	1980'	8	Į.	30	178	31E	2,100'
30-015-05467	Plemons & Hew	Friess	3	P	PA	336'	N	2970'	ш	С	30	17S	31E	2,033'
30-015-05460	Mack Energy Corp.	Cedar Lake	1	Р	PA	1980'	N	515'	8	E	30	17S	31E	3,336'
30-015-05464	Mack Energy Corp.	Cedar Lake	_2	Р	PA	660'	N	515'	W	D	30	17\$	31E	2,044'
30-015-05465	Glen Plemons	Friess Federal	4	Р	PA	1650'	N	1650'	W	F	30	17S	31E	3,342'
30-015-05477	Alamo Permian Res.	Cedar Lake	3Y	Р	Active	330'	N	731'	W	D	30	17S	31E	3,423'
30-015-23934	Glen Plemons	Friess Federal	5	Р	PA	330'	N.	1411'	W	С	30	178	31E	2,570'
30-015-39722	Alamo Permian Res.	Cedar Lake	4	Р	Active	990,	N	330	٧	D	30	178	31E	4,452'
30-015-41021	Alamo Permian Res.	Cedar Lake	5	Р	NYD	1650'	N	825'	W	Ε	30	17S	31E	3,700'
30-015-04330	Burnett Oil Co., Inc.	Jackson B	10	Р	PA	1980'	N	1980'	Ε	G	25	178	30E	3,266'
30-015-04331	Burnett Oil Co., Inc.	Jackson B	11	1	Active	660'	N	1980'	E	В	25	175	30E	3,355'
30-015-27750	Burnett Oil Co., Inc.	Jackson B	35	Р	Active	100'	N	460'	Ε	Α	25	17S	30E	3,280'
30-015-04314	Burnett Oil Co., Inc.	Jackson B	12	Р	Active	1980'	S	539'	Ε		24	178	30E	3,803'
30-015-04315	Burnett Oil Co., Inc.	Jackson B	13	P	Active	660'	S	539'	ш	P	24	17S	30E	2,034'
30-015-10123	Burnett Oil Co., Inc.	Jackson B	25	Р	Active	990'	S	660'	ш	Ρ	24	17S	30E	7,090'
30-015-20111	Burnett Oil Co., Inc.	Jackson B	28	Р	Active	660'	S	1980'	ш	0	24	178	30E	3,220'
30-015-34586	EOG Resources, Inc.	Burnett Oil 24 Fed	2	Р	PA	1680	S	850'	ш		24	17S	30E	11,562'
30-015-05250	Linn Operating, Inc.	Fren Oil Company	2	P	PA	660'	S	1980'	V	N	19	17\$	31E	3,181'
30-015-05255	Linn Operating, Inc.	Fren Oil Company	7		Active	990'	S	2970'	Е	N	19	17S	31E	3,312'
30-015-05264	Linn Operating, Inc.	Fren Oil Company	18	Р	Active	1650'	S	3530'	ш	K	19	178	31E	7,135'
30-015-05266	Marbob Energy Corp.	Fren Oil Company	20	Р	PA	900'	S	1980'	W	N	19	178	31E	7,115'
30-015-05271	Mack Energy Corp.	State BK	1	Р	PA	1980'	S	539'	W	L	19	178	31E	3,597'
30-015-05272	Mack Energy Corp.	State BK	2	P	PA	660'	S	539'	W	М	19	17S	31E	3,568'
30-015-05274	Mack Energy Corp.	State BK	4	Р	PA	990'	S	906'	W	М	19	17S	31E	1,982'
30-015-10167	Alamo Permian Res.	State BK	5	Р	Active	1650'	S	330'	W	L	19	17S	31E	7,129'
30-015-39721	Alamo Permian Res.	State BK	8	Р	Active	990'	S	330'	W	М	19	17S	31E	4,100'
30-015-41020	Alamo Permian Res.	State BK	9	Р	PA	330'	S	875'	W	М	19	178	31E	930'

APACHE CORPORATION FORM C-108: APACHE STATE SWD NO. 5 AREA OF REVIEW WELL LIST WELLS THAT PENETRATE INJECTION INTERVAL

API NUMBER	OPERATOR	LEASE	WELL	WELL	STATUS	FTG.	N/S	FTG.	EW	JNIT S	SEC.	TSHP.	RNG.	DATE	TOTAL	HOLE	CSG.	SET	SX.	CMT.	MTD.	HOLE	CSG.	SET	SX.	CMT.	MTD.	COMPLETION	REMARKS
1		NAME	NO.	TYPE	İ	N/S		EW		ŀ	1			DRILLED	DEPTH	SIZE	SIZE	AT	CMT.	TOP	1	SIZE	SIZE	AT	CMT.	TOP			
30-015-38978	Apache Corporation	Apache State SWD	3	SWD	Active	2300'	N	725'	W	Ĕ.	30	17\$	31E	Sep-11	13,943	17 1/2*	13 3/8"	496'	922	Surface	Circ.	12 1/4"	9 5/8"	4,453'	1675	Surface	Çirc.	13,045'-13,090' Perf.	Devonian/Ellenburger Completion
			Ī							\neg	\neg										I	8 3/4"	7"	13,520'	1940	1,846'	CBL	13,520'-13,943' O.H.	7" csg. stage cemented. 1st-1360 sx.
							П									Γ	T	Ι											2nd 580 sx. DV Tool @ 6,981'
				1							一									T									
30-015-10610	Premier Oil & Gas, Inc.	Fren Oil Company	21	Р	PA	560	s	1690'	W	N	19	17\$	31E	Mar-65	12,278	17 1/2"	13 3/8"	370	300	Surface	Circ.	12 1/4"	9 5/8*	3,190	300	2,307'	Calc.	11,142'-11,218' Perj.	Well PA'd 9/2007. Schematic Attached
			\top		T	1	1										I				- -	8 3/4"	7°	12,275'	675	5,800' **	CDL		
** 7" csg. perfora	ted @ 5,768'-5,770' & squeez	zed w/250 sx. TOC by	r.s. 🙉	5.100'.	7" csa. p	erforate	od Ø	5.050	5.052	& sau	eeze v	v/795 s	x. Ce	ment circu	lated to	surface.													

Premier Oil & Gas, Inc. Fren Oil Company No. 21 API No. 30-015-10610 25 sx. cmt. plug 560' FSL & 1690' FWL (Unit N) 64'-surface Section 19, T-17 South, R-31 East, NMPM 17 1/2" Hole; Set 13 3/8" csg @ 370' Cemented w/300 Sx. Cement circulated to surface Set 35 sx. cmt. plug 240'-442' Drilled: 3/1965 Set 35 sx. cmt. plug 1,285'-1,502' Set 35 sx. cmt. plug 2,300'-2,496' Plugged: 9/2007 12 1/4" Hole; Set 9 5/8" csg @ 3,190' Cemented w/300 sx. TOC @ 2,307' by calc. Set 35 sx. cmt. plug 3,102'-3,306'. Tagged

Set 35 sx. cmt. plug 4,600'-4,813'

← Original TOC behind 7" csg. @ 5,800' by CBL. 7" csg. perforated @ 5,768'-5,770' & squeezed w/250 sx. TOC @ 5,100' by T.S. 7" csg. perforated @ 5,050'-5,052' & squeezed w/795 sx. cmt. Cement circulated to surface.

Set 52 sx. cmt. plug 6,800'-7,040'

Abo Perforations 6944'-6,996'. Squeezed w/200 sx. cmt.

Set 50 sx. cmt. plug 8,000'-8249'

CIBP @ 8,570' w/25 sx. cmt. on top

Wolfcamp Perforations: 8,606'-8,934'

Morrow Perforations: 11,142'-11,218'. Squeezed w/75 sx. cmt.

Set CIBP @ 11,980' + cmt. on top

8 ¾" Hole; Set 7" csg. @ 12,275' Cemented w/675 Sx. Original TOC @ 5,800' by CBL V

T.D. 12,278'

Apache Corporation Form C-108: Apache State SWD # 5 PA Schematic Fren Oil Company No. 21

Fren Plugging

- 1. Rolled hole w/320 bbls 9.5 gel water
- 2. Spot 25 sx plug on top of plug @ 8570'
- 3. Set tubing @ 8249', spot 50 sx plug (covering top of Wolfcamp 8000-8250')
- 4. Set tubing @ 7039', spot 52 sx plug (covering top of Abo 6800-7040')
- 5. Set tubing @ 4813', spot 35 sx plug (covering top of Glorieta 4600-4813')
- 6. Set tubing @ 3306', spot 35 sx plug (covering interm csg. shoe 3306-3102')
- 7. Tag plug @ 3102'.
- 8. Set tubing @ 2496', spot 35 sx plug (covering top of Queen 2300-2496')
- 9. Set tubing @ 1502', spot 35 sx plug (covering base of salt 1285-1502')
- 10. Tag plug @ 1285'.
- 11. Set tubing @ 442', spot 35 sx plug (covering top of salt 240-442')
- 12. Tag plug @ 240'.
- 13. Set tubing @ 64', spot 25 sx plug to surface.
- 14. Install dry hole mark and clean location

North Permian Basin Region P.O. Box 740 Sundown, TX 79372-0740 (806) 229-8121 Lab Team Leader - Sheila Hernandez (432) 495-7240

Water Analysis Report by Baker Petrolite

Company:	APACHE CORPORATION	Sales RDT:	33512
Region:	PERMIAN BASIN	Account Manager;	WAYNE PETERSON (575) 910-9389
Area:	LOCO HILL, NM	Sample #:	591238
Lease/Platform:	BARNSDALL FED	Analysis ID #:	118007
Entity (or well #):	1	Analysis Cost:	\$90.00
Formation:	LINKNOWN		

Sample Point: WELLHEAD

Summ	ary		Analysis of Sa	mple 591238 @ 75	F	
Sampling Date:	02/29/12	Anions	ng/l meq/l	Cations	mg/l	meq/l
Analysis Date:	03/08/12	Chloride: 19297	73.0 > 5443.07	Sodium:	78507.9	3414.9
Analyst:	LEAH DURAN	Bicarbonate:	0. 0	Magnesium:	5531.0	455.
TDS (mg/l or g/m3):	310752.8	Carbonete:	a o 0.	Calcium:	29849.0	1489.47
Density (g/cm3, tonni		Sulfate: 25	6.16	Strontium:	842.0	19.22
Anion/Cation Ratio:	emisj. ————————————————————————————————————	Phosphate:		Barlum:	0.4	. 0.01
Autom/Cation Rado;	'	Borate:	Î	fron:	20.0	0.72
	:	Silicate:		Potassium:	2733.0	69.89
_				Aluminum:		
Carbon Dioxide:	390 PPM	Hydrogen Sulfide:	34 PPM	Chromium:		
Oxygen:		pH at time of sampling:	5.2	Copper:		
Comments:		1	0.2	Lead:		_
RESISTIVITY: .008 O	HILLIA (A) AOO*	pH at time of analysis:		Manganese:	0.500	0.02
F	71m7m @ 400	pH used in Calculation:	5.2	Nickel:		

Cond	itions		Values Calculated at the Given Conditions - Amounts of Scale in lb/1000 bbl													
Temp	Gauge Press.		alcite CaCO ₃		sum 04*2H ₂ 0		ydrite aSO ₄		estite rSO ₄	Ba Ba	CO ₂ Press					
F	psl	Index	Amount	Index	Amount	Index	Amount	Index	Amount	Index	Amount	psi				
80	0	-5.26	0.00	-0.22	0.00	-0.15	0.00	-0.30	0.00	-0.54	0.00	0				
100	0	-5.23	0.00	-0.30	0.00	-0.17	0.00	-0.32	0.00	-0.73	0.00	0				
120	0	-5.21	0.00	-0.37	0.00	-0.16	0.00	-0.32	0.00	-0.90	0.00	0				
140	0	-5.19	0.00	-0.43	0.00	-0.13	0.00	-0.32	0.00	-1.04	0.00	0				

Note 1: When assessing the severity of the scale problem, both the saturation index (SI) and amount of scale must be considered.

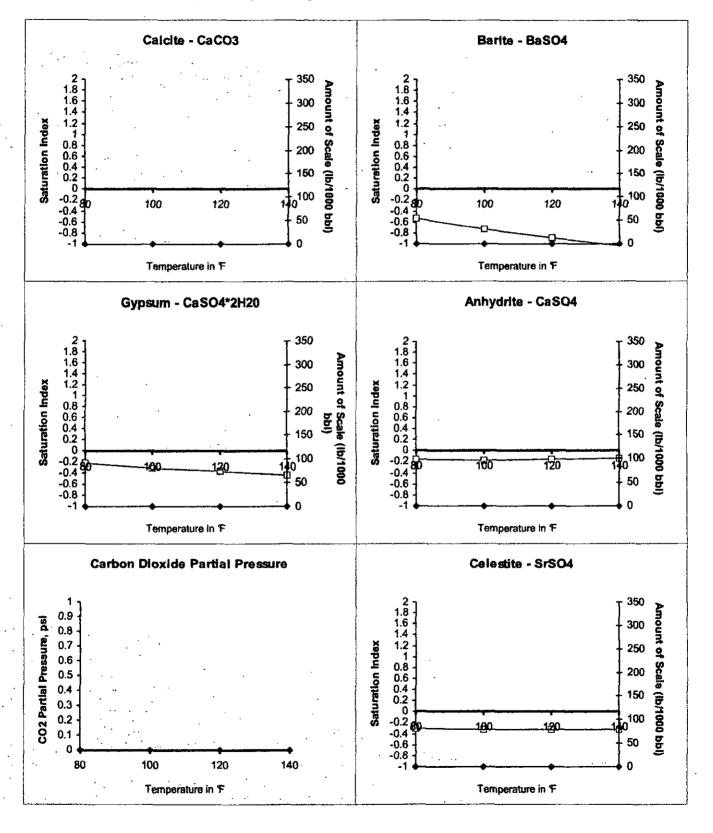
Note 2: Precipitation of each scale is considered separately. Total scale will be less than the sum of the amounts of the five scales.

Note 3: The reported CO2 pressure is actually the calculated CO2 fugacity. It is usually nearly the same as the CO2 partial pressure.

Apache Corporation Form C-108: Apache State SWD # 5 Produced Water Analysis Barnsdall Federal No. 1

Scale Predictions from Baker Petrolite

Analysis of Sample 591238 @ 75 F for APACHE CORPOR ATION, 03/08/12



North Permian Basin Region P.O. Box 740 Sundown, TX 79372-0740 (806) 229-8121 Lab Team Leader - Sheila Hernandez (432) 495-7240

Water Analysis Report by Baker Petrolite

Company: **APACHE CORPORATION** Sales RDT: 33514 Account Manager: REGGIE GUY (575) 513-9135 Region: **PERMIAN BASIN** ARTESIA, NM Sample #: 629369 Area: Lease/Platform: 125753 D STATE Analysis ID #: Entity (or well #): Analysis Cost: \$90.00 Formation: **UNKNOWN**

Sample Point: WELLHEAD

Summa	ary	Analysis of Sample 629369 @ 75 ℉					
Sampling Date:	10/02/12	Anions	mg/l meq/l	Cations	mg/l	meq/l	
Analysis Date:	10/31/12	Chloride: 128	3815.46	Sodium:	71732.3	3120.18	
Analyst: S/	ANDRA GOMEZ	Bicarbonate:	353.8 5.8	Magnesium:	1993.0	163.95	
TDS (mg/l or g/m3): Density (g/cm3, tonne/n Anion/Cation Ratio:	212303.4 e/m3): 1.142	Carbonate:	<u>. 0.</u> 0.	Calcium:	6936.0	346.11	
		Sulfate:	899.0 39.54	Strontium:	187.0	4.27	
		Phosphate:		Barlum:	0.1	0.	
	'	Borate:		tron:	12.0	0.43	
		Silicate:	!	Potassium:	1011.0	25.86	
-				Aluminum:			
Carbon Dioxide:	160 PPM	Hydrogen Sulfide:	17 PPM	Chromium:			
Oxygen:	· 0 PPM	pH at time of sampling:	6.6	Copper:			
Comments:	•	' '	0.0	Lead:			
		pH at time of analysis:		Manganese:	0.200	0.01	
		pH used in Calculation:	6.6	Nickel:			

Cond	itions	<u> </u>	Values C	alculated	at the Give	n Conditi	ons - Amoι	ints of Sc	ale in lb/10	00 bbl		
Temp Gauge		Calcite CaCO ₃		Gypsum CaSO ₄ *2H ₂ 0		Anhydrite CaSO ₄		Celestite SrSO ₄		Barite BaSO ₄		CO ₂ Press
F	psi	Index	Amount	Index	Amount	Index	Amount	Index	Amount	Index	Amount	psi
80	0	0.77	31.10	0.04	89.03	0.07	120.70	0.10	23.68	-0.06	0.00	0.6
100	0	0.84	34.81	-0.04	0.00	0.06	100.44	0.08	17.69	-0.26	0.00	0.75
120	0	0.90	38.24	-0.10	0.00	0.07	118.99	0.06	14.27	-0.44	0.00	0.91
140	0	0.96	42.23	-0.16	0.00	0.11	168.92	0.06	13.13	-0.60	0.00	1.09

Note 1: When assessing the severity of the scale problem, both the saturation index (SI) and amount of scale must be considered.

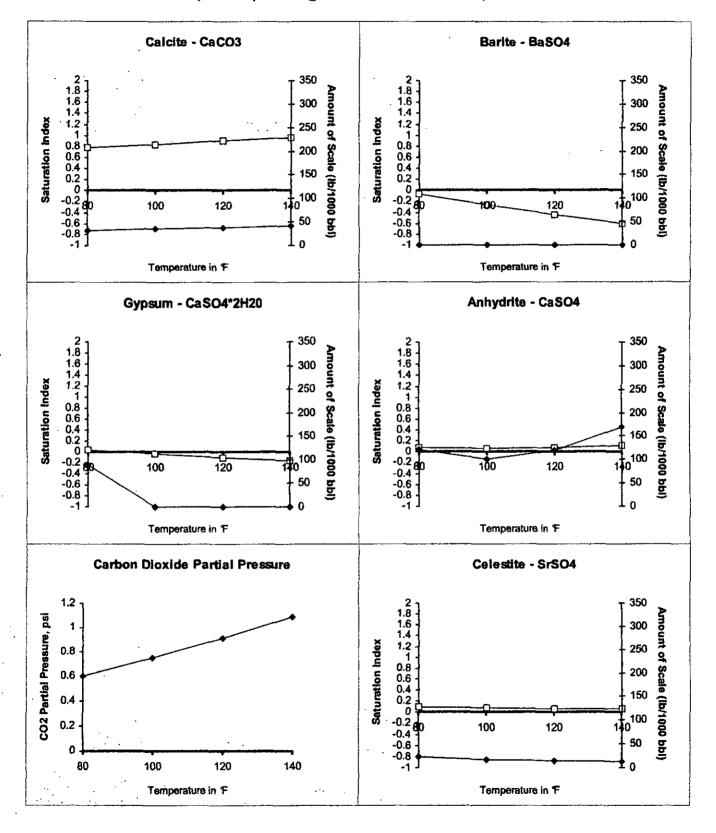
Note 2: Precipitation of each scale is considered separately. Total scale will be less than the sum of the amounts of the five scales.

Note 3: The reported CO2 pressure is actually the calculated CO2 fugacity. It is usually nearly the same as the CO2 partial pressure.

Apache Corporation Form C-108: Apache State SWD # 5 Produced Water Analysis D State No. 71

Scale Predictions from Baker Petrolite

Analysis of Sample 629369 @ 75 F for APACHE CORPOR ATION, 10/31/12





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

No records found.

PLSS Search:

Section(s): 19, 30

Chosest / See 32

SLO wells

Chknown DTW-[55 to 158 ft well TD=]

LA HSA/Ne water

Apache Corporation

Form C-108: Apache State SWD # 5

Fresh Water Well Data

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



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

No records found.

PLSS Search:

Section(s): 24, 25

Township: 17S

Range: 30E

Apache Corporation
Form C-108: Apache State SWD # 5

Fresh Water Well Data

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.

8/15/14 6:58 AM

Page 1 of 1

WATER COLUMN/ AVERAGE DEPTH TO WATER

Form C-108 Affirmative Statement Apache Corporation Apache State SWD No. 5 Section 30, T-17 South, R-31 East, NMPM, Eddy County, New Mexico

Available geologic and engineering data has been examined and no evidence of open faults or hydrological connection between the injection zone and any underground sources of drinking water has been found.

David Catanach

Agent for Apache Corporation

Date

CERTIFIED MAIL RETURN RECEIPT REQUESTED

TO: OFFSET OPERATORS/LEASEHOLD OWNERS & SURFACE OWNER

(SEE ATTACHED NOTICE LIST)

Re: Apache Corporation

Form C-108 (Application for Authorization to Inject)

Apache State SWD No. 5 API No. 30-015-42519

430' FNL & 150' FWL, Lot 1/Unit D, Section 30, T-17S, R-31E, NMPM,

Eddy County, New Mexico

Ladies & Gentlemen:

Enclosed please find a copy of Oil Conservation Division Form C-108 (Application for Authorization to Inject) for the Apache Corporation Apache State SWD No. 5. You are being provided a copy of the application as an offset operator/leaseholder or as the owner of the surface where the proposed well is located. Apache Corporation proposes to drill the Apache State SWD No. 5 and utilize the well as a produced water disposal well, injection to occur into the Devonian and Ellenburger formations through the perforated interval from approximately 12,261 feet to 14,135 feet.

Objections must be filed with the Oil Conservation Division, 1220 South St. Francis Drive, Santa Fe, New Mexico 87505, within 15 days.

If you should have any questions, please contact me at (505) 690-9453.

Sincerely,

David Catanach-Agent Apache Corporation

303 Veterans Airpark Lane, Suite 3000

Midland, Texas 79705

Enclosure

Apache Corporation Form C-108: Apache State SWD No. 5 Notice List

All Leasehold Owners in the Devonian & Ellenburger Formations and all Operators Within a 1/2-Mile Radius of the Apache
State SWD No. 5, and the Surface Owner at the Wellsite Will be Provided Notice of This Application

ConocoPhillips Company Chisos, Ltd. Chase Oil Corporation (P.O. Box 2197 P.O. Box 1787 670 Dona Ana Road SW Houston, Texas 77252 Deming, New Mexico 88030 Artesia, New Mexico 88211-1767 Jack & Glen Plemons Devon Energy Prod. Co., LP Jay K. Armstrong, LP P.O. Box 113 20 N. Broadway # 1500 Box 2193 Wichita Falls, Texas 76307 Lovington, New Mexico 88260 Oklahoma City, OK 73102 Judah Oil McCombs Energy LLC Rorkes Drift, LLC P.O. Box 527 P.O. Box 568 5599 San Felipe, #1220 Houston, Texas 77056-2724 Artesia, New Mexico 88211-0527 Artesia, New Mexico 88211-0568 Lothian Oil, Inc. Paloma Resources, Inc. Larry Jones & Premier Oil & Gas, Inc. P.O. Box 1814 (i) P.O. Box 1246 200 N. Loraine Midland, Texas 79701-4758 Roswell, New Mexico 88202 Artesia, New Mexico 88210 Ollie L. Burnett Trust Texas Reexploration Ltd., 1 **Enervest Energy Institutional Funds** 1001 Fannin Street, Suite 800 Anne B. Tandy Estate & 3025 Maxroy Houston, Texas 77002-6707 Anne B. Windfohr Houston, Texas 77008 Attn: Peter Tower 801 Cherry Street, #1500 Fort Worth, Texas 76102-6869 Burnett Oil Co. Texas Refining & Exploration, LP Yates Petroleum Corp. 801 Cherry Street, #1500 Unit 9 5701 Woodway, #110 Abo Petroleum Corp. Houston, Texas 77057 Myco Industries, Inc. Fort Worth, Texas 76102-6881 105 S. Fourth Street Artesia, New Mexico 88210 Chevron U.S.A, Inc. & EOG Resources, Inc. Bureau of Land Management 620 E. Greene St. Chevron U.S.A. Holdings, Inc. P.O. Box 4362 15 Smith Road Houston, Texas 77210-4362 Carlsbad, New Mexico 88220 Midland, Texas 79705 Alamo Permian Resources Linn Energy Holdings, LLC Oxy Y-1 Company 600 Travis Street, Suite 5100 P.O. Box 27570 415 W. Wall St., Suite 500 Midland, Texas 79701 Houston, Texas 77227-7570 Houston, Texas 77002-3092

Oil Conservation Division

Artesia, New Mexico 88210

811 S. First Street

Hudson Oil Company of Texas

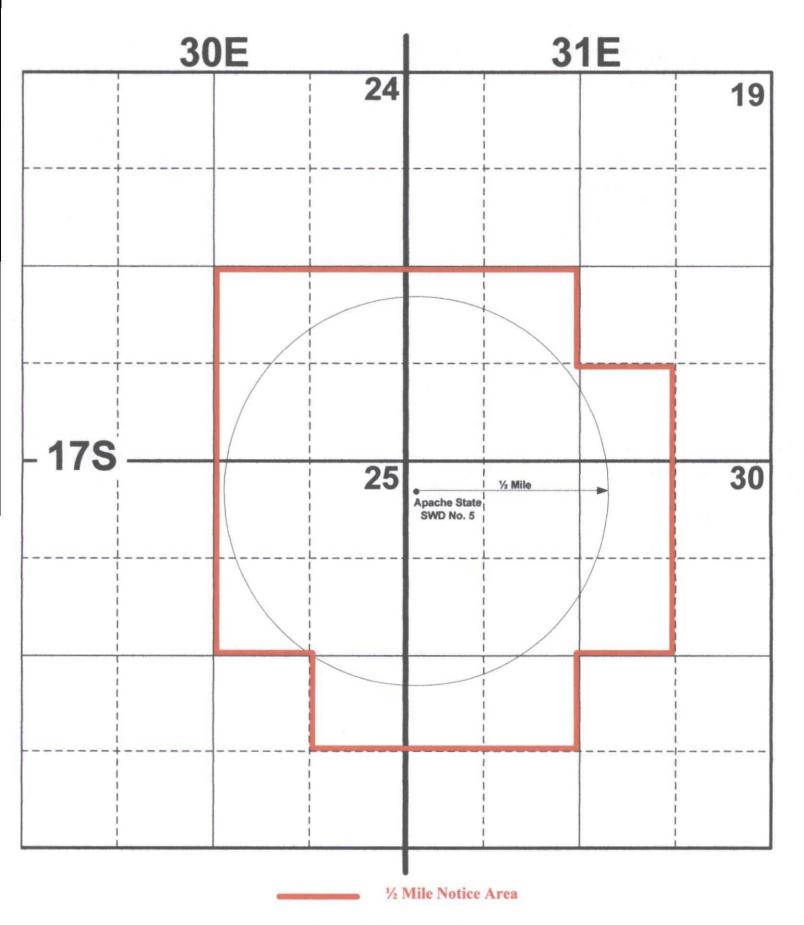
Fort Worth, Texas 76102

616 Texas Street

Commissioner of Public Lands

Santa Fe, New Mexico 87504

P.O. Box 1148



Apache Corporation
Form C-108: Apache State SWD No. 5
½ Mile Notice Area Map

Form C-108 Apache Corporation Apache State SWD No. 5 Section 30, T-17 South, R-31 East, NMPM, Eddy County, New Mexico

The following-described legal notice will be published in the:

Artesia Daily Press 503 W. Main Street Artesia, New Mexico 88210-2067

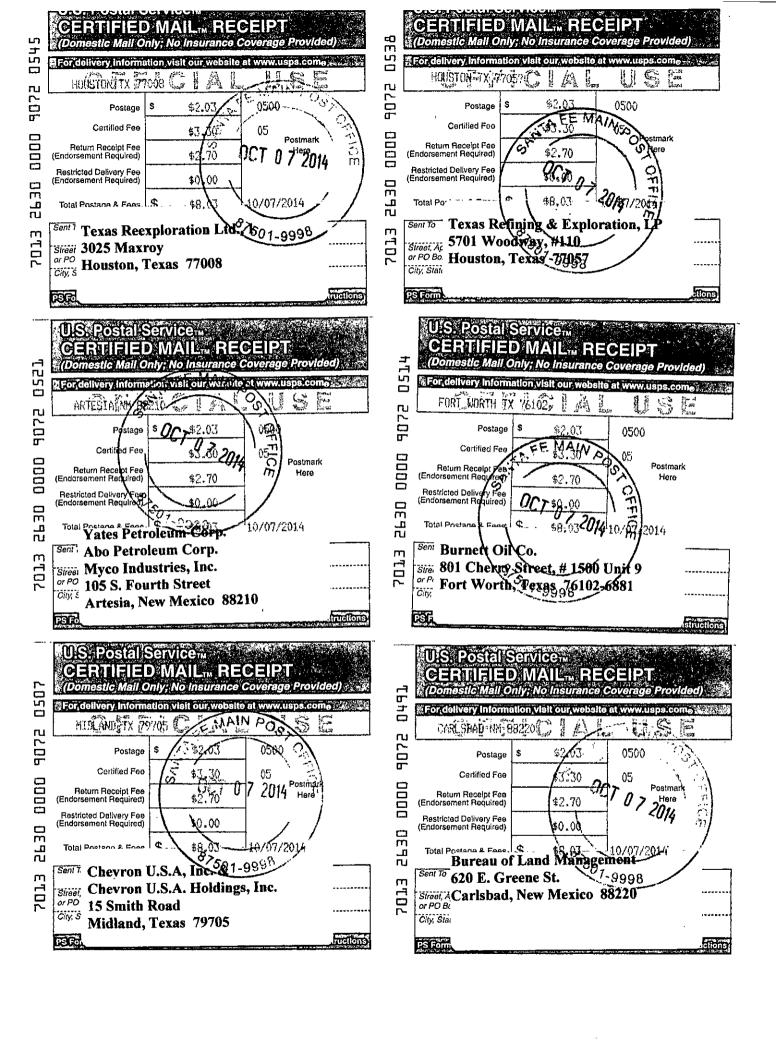
The Affidavit of Publication will be forwarded to the Division upon receipt by Apache Corporation.

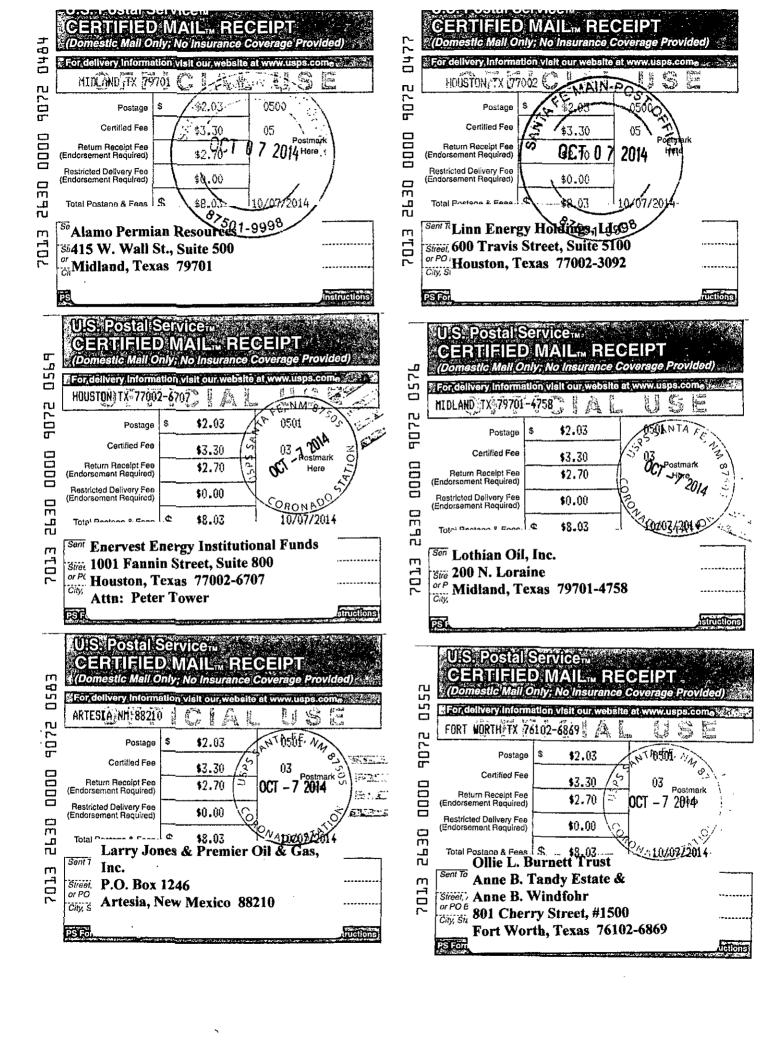
Apache Corporation, 303 Veterans Airpark Lane, Suite 3000, Midland, Texas 79705 has filed a Form C-108 (Application for Authorization to Inject) with the Oil Conservation Division ("Division") seeking administrative approval to utilize its proposed Apache State SWD No. 5 (API No. 30-015-42519) to be drilled 430 feet from the North line and 150 feet from the West line (Lot 1/Unit D) of Section 30, Township 17 South, Range 31 East, NMPM, Eddy County, New Mexico and complete the well as a produced water disposal well in the Devonian and Ellenburger formations. Injection is to occur through the perforated interval from approximately 12,261 feet to 14,135 feet.

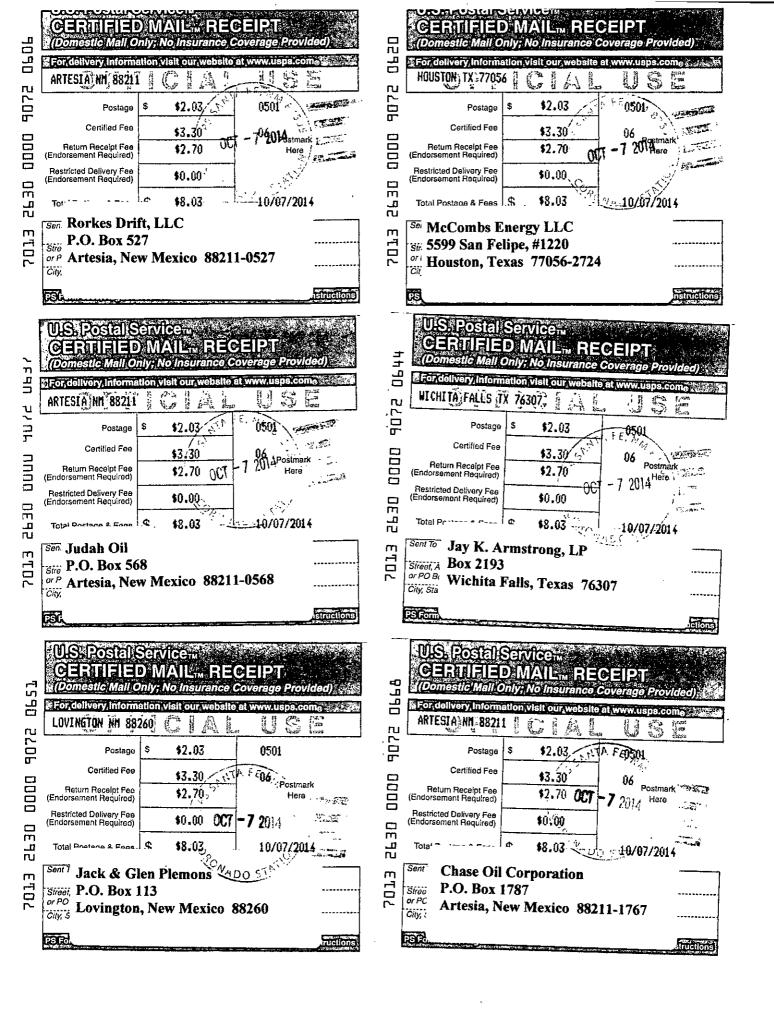
Produced water from the Glorieta & Yeso formations originating from Apache Corporation operated wells in this area will be injected into the Apache State SWD No. 5 at average and maximum rates of 8,000 and 10,000 barrels of water per day, respectively. The initial surface injection pressure for the well is anticipated to be at or below 2,452 psi., which is in compliance with Division regulations. The maximum surface injection pressure will be determined by step rate injection test.

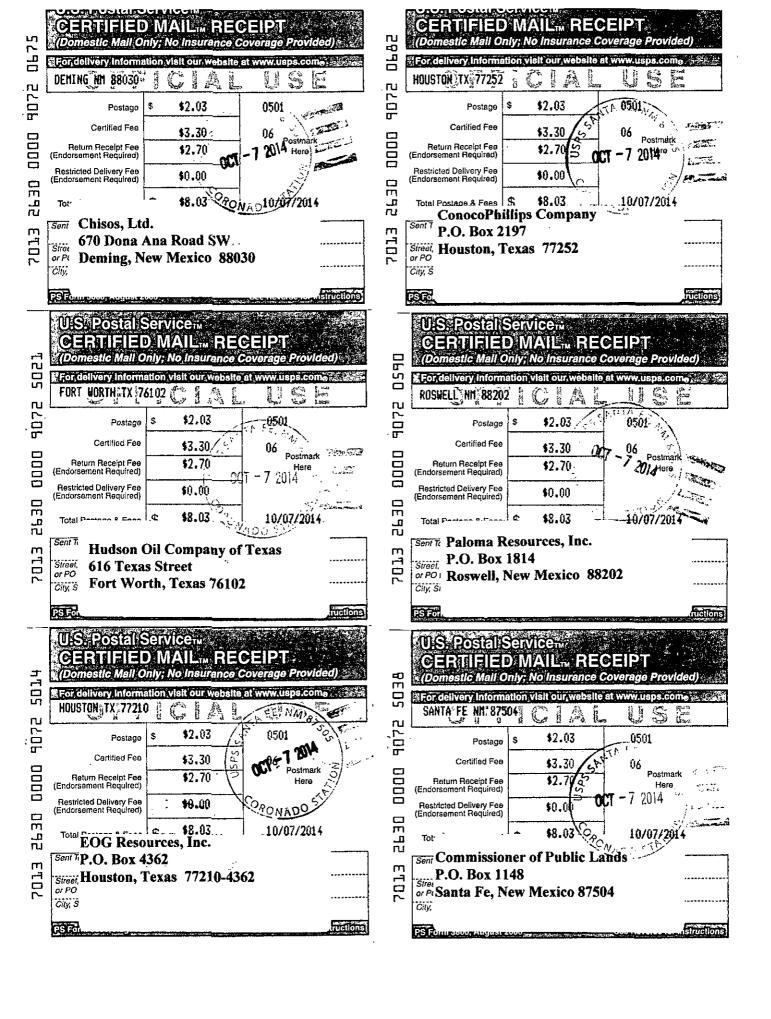
Interested parties must file objections with the New Mexico Oil Conservation Division, 1220 S. St Francis Drive, Santa Fe, New Mexico 87505, within 15 days of the date of this publication.

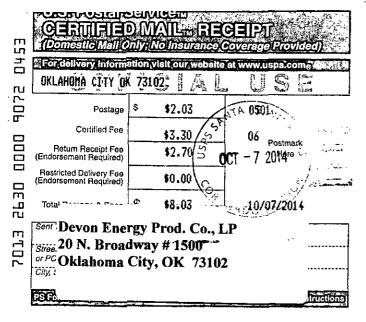
Additional information can be obtained by contacting Mr. David Catanach Agent-Apache Corporation at (505) 690-9453.

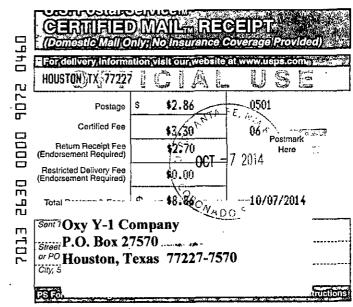












Affidavit of Publication

Amaavit of Pu	oncauon				
No.	23204				
State of New Mexico					
County of Eddy:					
Danny Scott/ James	1/cm				
being duly sworn, sayes that he is the	Publisher				
of the Artesia Daily Press, a daily new	spaper 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	r duly qualified				
for that purpose within the meaning of	f Chapter 167 of				
the 1937 Session Laws of the state of	`New Mexico for				
1 Consecutive weeks/day of	n the same				
day as follows:					
First Publication Oc	etober 7, 2014				
Second Publication					
Third Publication					
Fourth Publication					
Fifth Publication					
Sixth Publication					
Subscribed and sworn before me this 7th day of October	2014 (****				
OFFICIAL SEAL Latishs Romine NOTARY PUBLIC-STATE O My commission expires					
Λ					
State to D					

Latisha Romine

Notary Public, Eddy County, New Mexico

Copy of Publication:

LEGAL NOTICE

Apache Corporation, 303 Veterans Airpark Lane, Suite, 3000, Midland, Texas 79705 has filed a Form C-108 (Application for Authorization to Inject) with the Oil Conservation Division ("Division") seeking administrative approval to utilize its proposed Apache State SWD No. 5 (API No. 30-015-42519) to be drilled 430 feet from the North line and 150 feet from the West line (Lot 1/Unit D) of Section 30 Township 17 South, Range 31 East, NMPM, Eddy County, New Mexico and complete the well as a produced water disposal well in the Devongian and Ellenbürger formations. Injection is to occur through the perforated interval from approximately 12;261 feet to 14,135 feet.

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Additional information can be obtained by contacting Mr. David Catanach Agent-Apache Corporation at (505) 690-9453

Published in the Artesia Daily Press, Artesia, N.M., October 7, 2014 Legal No.

C-108 Review Checklist: Received 10/18/14_ Add. Request: Reply Date: Suspended: [Ver 15]
ORDER TYPE: WFX / PMX/SWD Number: 1515 Order Date: 12/30/14 Legacy Permits/Orders:
Well No. 5 Well Name(s): Apache State SWD
API : 30-0 15-42519 Spud Date: 180 New or Old: New (UIC Class II Primacy 03/07/1982)
Footages 430 FNL 150 FWL Lot 1 or Unit — Sec 30 Tsp 175 Rge 31 E County Eddy
General Location: 4 miles east of Loco Hills/1/2 mis of USBZ Pool: Devonion-Silvian-Ord Pool No.: 98044
BLM 100K Map: Hooks Operator: Apache Corp. OGRID: 973; Contact:
BLM 100K Map: Hook S Operator: A packe Corp. OGRID: 973 Contact: COMPLIANCE RULE 5.9: Total Wells: 298 Inactive: 2 Fincl Assur: Rule Compl. Order? No Is 5.9 OKOK Date: 12/30/14
WELL FILE REVIEWED & Current Status. 711 5 514 115 710 710 710 710 710 710 710 710 710 710
WELL DIAGRAMS: NEW: Proposed or RE-ENTER: Before Conv. After Conv. Logs in Imaging:
Planned Rehab Work to Well: Proposed Ellenburger - limited to top 100ft
Well Construction Details Sizes (in) Setting Cament Cament Cament Sx or Cf Determination Method
Planned or Existing Surface 171/2/133/9 U to 450 Stage Tool 600 Circulate to Surface
Planned Lot ExistingInterm/Prod 12/4/956 0 to 4500 None 1015 Circulate to Soft Planned Lot ExistingInterm/Prod 03/4 7 0 to 13284 None 2500 Calculated?
Planned or Existing Prod/Liner
Planned_or Existing _ Liner
Planned or Existing OH'/ PERF 874 7 12 261 to 13284' Inj Length 1023 Completion/Operation Details:
Injection Lithostratigraphic Units: Depths (ft) Injection or Confining Tops Drilled TD PBTD PBTD
Adjacent Unit: Litho. Struc. Por. Mississipaics NEW TD 13289 NEW PBTD 13289
Proposed Inj Interval TOP: 1226 Davour 1226 NEW Open Hole or NEW Perfs Tubing Size 1/2 in. Inter Coated?
Proposed Inj Interval BOTTOM: Signal Proposed Packer Depth 12/61 ft
Confining Unit: Litho. Struc. Por. 17010 1 mit Elenburger om 13184 Min. Packer Depth 1216 (100-ft limit)
Adjacent Unit: Litho. Struc. Por. Proposed Max. Surface Press. 2452 psi Admin. Inj. Press. 2452 (0.2 psi per ft)
POTASH: R-111-PNA Noticed? NA BLM Sec Ord NAWIPP Noticed? NA Salt/Salado T: B: NW: Cliff House fm NA
FRESH WATER: Aquifer Result Allevial - Max Depth CIOO HYDRO AFFIRM STATEMENT By Qualified Person
NMOSE Basin: No. Wells within 1-Mile Radius? FW Analysis
Disposal Fluid: Formation Source(s) Gloneta & leso Analysis? 185 On Lease Operator Only or Commercial
Disposal Int: Inject Rate (Avg/Max BWPD): 8000/10000 Protectable Waters? UNL Source: assumption Closed or Open O
HC Potential: Producing Interval? NO Formerly Producing? NO Method: Logs/DST/P&A/Other 1/04 \$2-Mile Radius Pool Map ()
AOR Wells: 1/2-M Radius Map? Well List? S Total No. Wells Penetrating Interval: Horizontals?
Penetrating Wells: No. Active Wells Ψ Num Repairs? Ψ on which well(s)?
Penetrating Wells: No. P&A Wells Num Repairs? On which well(s)?
NOTICE: Newspaper Date 10/07/12 Mineral Owner SLO Surface Owner SLO N. Date 10/07/14
RULE 26.7(A): Identified Tracts? Affected Persons: 27 PAGES - 011 Companies 10509 intest curify. Date 1010/117
Order Conditions: Issues: Limit Ellenburger: Unknown HC potential, Protectable
Add Order Cond: Set depth limits; CBL for 7-inch; Salinty Cake; Midling for the potential

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