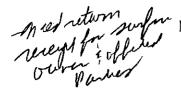
ENGINEER

7/20/20/6"

e-mail Address

DMAM162025187

ABOVE THIS LINE FOR DIVISION USE ONLY



# NEW MEXICO OIL CONSERVATION DIVISION - Engineering Bureau 1220 South St. Francis Drive, Santa Fe, NM 87505



	ADMINISTRATIVE APPLICA	ATION CHECKLIS	
THIS CHECKLIST I	S MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS WHICH REQUIRE PROCESSING AT THE DI		ES AND REGULATIONS
[DHC-De	tandard Location] [NSP-Non-Standard Prora ownhole Commingling] [CTB-Lease Commi -Pool Commingling] [OLS - Off-Lease Stora	ngling] [PLC-Pool/Lease Co ge] [OLM-Off-Lease Measur ssure Maintenance Expansion ection Pressure Increase] ] [PPR-Positive Production	mmingling] rement] ] Response]
[1] TYPE OF [A]	APPLICATION - Check Those Which Apply Location - Spacing Unit - Simultaneous D  NSL NSP SD	Dedication Choate Davis 30-015-43628	esources 27755 14 State SWD 2
Che [B]		• •	Pod -SLD', CISCO 96099
[C]	Injection - Disposal - Pressure Increase - E  WFX PMX X SWD	Enhanced Oil Recovery IPI	96099
[D]	Other: Specify		
[2] NOTIFICA	ATION REQUIRED TO: - Check Those White X Working, Royalty or Overriding Royalty		7 = 1
[B]	X Offset Operators, Leaseholders or Sur	rface Owner	
[C]	X Application is One Which Requires F	Published Legal Notice	
[D]	X Notification and/or Concurrent Appro U.S. Bureau of Land Management - Commissioner of Put	oval by BLM or SLO	
[E]	X For all of the above, Proof of Notifica	ation or Publication is Attached	1.
[F]	☐ Waivers are Attached		·
· -	ACCURATE AND COMPLETE INFORMA CATION INDICATED ABOVE.	TION REQUIRED TO PRO	CESS THE TYPE
approval is accurate application until the	CATION: I hereby certify that the information e and complete to the best of my knowledge. I required information and notifications are subs	also understand that <b>no action</b> mitted to the Division.	will be taken on this
Nood Brian Wood	ote: Statement must be completed by an individual with	, , ,	•
Print or Type Name	Signature	Consultant  Title	7-18-16 Date
Time of Type Hume	o.g.a.a.c	brian@permitswest.	

#### 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

	MILLIONION TORNOLOGICAL CONTROL OF THE SECTION OF T
I.	PURPOSE: Secondary Recovery Pressure Maintenance XXX Disposal Storage Application qualifies for administrative approval? Yes No
II.	OPERATOR: LIME ROCK RESOURCES II-A, L. P.
	ADDRESS: 1111 BAGBY, SUITE 4600, HOUSTON, TX 77002
	CONTACT PARTY: BRIAN WOOD (PERMITS WEST, INC.) PHONE: 505 466-8120
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 XXX 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.  Choate Davis 14 State SWD 2
VII.	Attach data on the proposed operation, including:  1. Proposed average and maximum daily rate and volume of fluids to be injected; SWD; CISCO
	<ol> <li>Whether the system is open or closed;</li> <li>Proposed average and maximum injection pressure;</li> <li>Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and,</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.
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: BRIAN WOOD
	SIGNATURE: DATE: JULY 14 2016
*	E-MAIL ADDRESS: brian@permitswest.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.

### INJECTION WELL DATA SHEET

WELL NAME & NUMBER:CHOP	ATE DAVIS 14 STAT	E SWD 2			
WELL LOCATION: 1760 FNL &	880 FWL	E	14	18 S	27 E
FOOTAGE I	LOCATION	UNIT LETTER	SECTION	TOWNSHIP	RANGE
WELLBORE SCHEMA (not to scale)	1 <u>TIC</u>		WELL Consumation Surface	ONSTRUCTION DAT Casing	<u>A</u>
	13.375" 48# in	Hole Size:	17.5"	Casing Size: 13	.375"
. 7530'	17.5" hole @ 300' TOC (350 sx) = GL	Cemented with: _	350 sx.	or	ft <sup>3</sup>
@ 7430' - 7530'		Top of Cement:	SURFACE	Method Determined	: CIRCULATE
(8)			<u>Intermedia</u>	te Casing	
4.5" Duoline tbg set @ 7430' - 7530	9.625" 36# in 12.25" hole @ 2800' TOC (845 sx) = GL	Hole Size:	12.25"	Casing Size: 9.	625"
		Cemented with: _	845 sx.	or	ft <sup>3</sup>
		Top of Cement: _	SURFACE	Method Determined	: CIRCULATE
7″ 26 8.75″	# in hole @ 7530'		<u>Productio</u>	n Casing	
7474.	1150 sx) = 2600'	Hole Size:	8.75"	Casing Size:	7"
set pa	acker @ 7430 - 7530'	Cemented with: _	1150 sx.	or	ft <sup>3</sup>
		Top of Cement:	2600'	Method Determined	I: TEMP. SURVEY
<b>■</b> 6.5" open ho	ole	Total Depth:	7530' for ca	asing (8700' fo	or well)
7530' - 8700' Cisco			<u>Injection</u>	Interval	
TD 8700'			7530 fee	t to 8700'	

(Perforated or Open Hole; indicate which)

### INJECTION WELL DATA SHEET

Other Type of Tubing/Casing Seal (if applicable):  Additional Data  1. Is this a new well drilled for injection?  If no, for what purpose was the well originally drilled?  2. Name of the Injection Formation:  CISCO  3. Name of Field or Pool (if applicable):  SWD; CISCO (96099)  4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e. sacks of cement or plug(s) used.  N/A (not yet dri	Γut	bing Size: 4.5" Lining Material: FIBERGLASS
1. Is this a new well drilled for injection?	Туј	pe of Packer: BAKER 85FA47
Additional Data  1. Is this a new well drilled for injection?	Pac	cker Setting Depth: 7430' TO 7530'
1. Is this a new well drilled for injection?	Otł	her Type of Tubing/Casing Seal (if applicable):
If no, for what purpose was the well originally drilled?  2. Name of the Injection Formation:CISCO  3. Name of Field or Pool (if applicable): _SWD; CISCO (96099)  4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e. sacks of cement or plug(s) usedN/A (not yet dri  5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area:		Additional Data
2. Name of the Injection Formation: CISCO  3. Name of Field or Pool (if applicable): SWD; CISCO (96099)  4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e. sacks of cement or plug(s) used. N/A (not yet dri  5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area:  OVER: QUEEN (1000') & SAN ANDRES (1810')	1.	Is this a new well drilled for injection?XXX_YesNo
Name of Field or Pool (if applicable): SWD; CISCO (96099)  4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e. sacks of cement or plug(s) used. N/A (not yet dri  5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area:  OVER: QUEEN (1000') & SAN ANDRES (1810')		If no, for what purpose was the well originally drilled?
<ul> <li>4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e. sacks of cement or plug(s) used. N/A (not yet dri  Simplified to the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area:  OVER: QUEEN (1000') &amp; SAN ANDRES (1810')</li> </ul>	2.	Name of the Injection Formation: CISCO
intervals and give plugging detail, i.e. sacks of cement or plug(s) used. N/A (not yet dri  Sive the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area:  OVER: QUEEN (1000') & SAN ANDRES (1810')	3.	Name of Field or Pool (if applicable): SWD; CISCO (96099)
5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area:  OVER: QUEEN (1000') & SAN ANDRES (1810')	4.	intervals and give plugging detail, i.e. sacks of cement or plug(s) used. N/A (not yet drilled
	5.	Give the name and depths of any oil or gas zones underlying or overlying the proposed
UNDER: STRAWN (8750') & MORROW (9550')		
		UNDER: STRAWN (8750') & MORROW (9550')

30-015-43628

I. Goal is to drill an 8700' deep Cisco saltwater disposal well (SWD; Cisco (code 96099)). Disposal interval will be 7530' - 8700'. Well will be for exclusive use of Lime Rock.

II. Operator: Lime Rock Resources II-A, L. P. (OGRID #277558)

Operator phone number: (713) 292-9528 Operator address: 1111 Bagby St., Suite 4600

Houston, TX 77002

Contact for Application: Brian Wood (Permits West, Inc.)

Phone: (505) 466-8120

III. A. (1) Lease: NM State Land Office lease V0-9675-0000 Lease: SWNW & NWSW Section 14, T. 18 S., R. 27 E. Lease Size: 80 acres (see Exhibit A for C-102 and maps) Closest Lease Line: 440'

A. (2) Surface casing (13.375", 48#, H-40) will be set at 300' in a 17.5" hole and cemented to the surface with 350 sacks.

Intermediate casing (9.625", 36#, J-55) will be set at 2800' in a 12.25" hole and cemented to the surface with 845 sacks.

Production casing (7", 26#, L-80) will be set at 7530' in an 8.75" hole and cemented to 2600' (200' overlap with intermediate casing) with 1150 sacks. A temperature survey will be run to verify cement top.

A 6.5" hole will be drilled to 8700' (TD) and left open hole.

A. (3) Tubing will be Duoline® (fiberglass lined) 4.5", 11.6#, L-80, LT&C. Setting depth will be ≥7430'. (Open hole top will be at 7530'.)



30-015-43628

- A. (4) A Baker 85FA47 packer or its equivalent will be set between 7430' and 7530' (≤100' above the open hole top of 7530').
- B. (1) Disposal zone will be the Cisco, which is in the SWD; Cisco Pool (OCD pool code number 96099).
- B. (2) Disposal interval will be 7530' to 8700', all open hole.
- B. (3) Well will be drilled as a saltwater disposal well.
- B. (4) All of the disposal interval (7530' 8700') will be an open hole. Packer will be set between 7430' and 7530'.
- B. (5) Higher and lower potential oil or gas zones in the area of review are:

Queen (tested, but did not produce)
San Andres (tested, but did not produce)
Proposed Disposal Interval: Cisco
Strawn (produced)
Morrow (produced)

- IV. This proposal is similar to Lime Rock's Choate Davis 14 State SWD 1 (30-015-40629). That saltwater disposal well (SWD-1352 & SWD-1352-A) is 3,004' southeast and has disposed of 4,606,213 barrels of water to date.
- V. Exhibit B shows 2 existing wells (1 plugged & abandoned + 1 active gas well) within a half-mile radius. Both wells penetrated the Cisco. Exhibit C shows 292 existing wells (146 producing oil or gas + 131 plugged & abandoned + 13 water injectors or disposals + 2 water wells) within a two-mile radius.

Exhibit D shows all leases and lessors (only State and BLM) within a half-mile. Exhibit E shows all leases and lessors (only private, State, and BLM) within a two-mile radius. Details on the leases within a half-mile are:



30-015-43628

		<del></del>	
Aliquot Parts in Area of Review (T18S, R27E)	Lessor	Lease	Lessee(s) of Record
SESE Sec. 10	BLM	NMNM-029271	Apache
S2SW4 Sec. 11	BLM	NMNM-029272	Apache
SWSE Sec. 11	BLM	NMNM-051832	Abo, Myco, Oxy Y-1, & Yates Pet.
NWNE & SWSW Sec. 14	NMSLO	E0-5313-0000	Chevron
NWNE & SWSW Sec. 14	NMSLO	E0-5313-0003	Yates Pet.
N2NW4, NWSE, & E2SW4 Sec. 14	NMSLO	B1-0456-0006	Apache
SWNW & NWSW Sec. 14	NMSLO	V0-9675-0000	Dakota
SENW & SWNE Sec. 14	NMSLO	X0-0648-0131	Marathon
SENW & SWNE Sec. 14	NMSLO	X0-0648-0150	Khody
NE4, N2SE4, & SESE Sec. 15	BLM	NMNM-029272	Apache

VI. Both wells that are within a half-mile penetrated the Cisco. No production has occurred from the Cisco in the area of review. One of the penetrators is plugged and abandoned. A table abstracting construction details and history of the penetrators and a diagram of the plugged penetrator are in Exhibit F. The 3 existing wells that are within, or near, a half-mile (regardless of depth) are:

АРІ	who	WELL	STATUS	UNIT- SECTION (T18S, R27E)	TVD	ZONE(S)	FEET FROM CHOATE DAVIS 14 STATE SWD 2
3001527448	Yates	Beauregard ANM State Com 001	P&A	L-14	10100	Red Lake; Atoka- Morrow	1,605



30-015-43628

3001524857	Chevron	Federal DH Gas Com 001	G	M-11	11915	Scoggin Draw; Morrow & Strawn	2,448
3001500893	Resler	State 001	P&A	G-14	2575	Artesia; Queen- Grayburg- San Andres	2,730

- VII. 1. Average injection rate will be 15,000 bwpd. Maximum injection rate will be 20,000 bwpd.
  - 2. System will be closed.
  - 3. Average injection pressure will be 1200 psi.

    Maximum injection pressure will be 1506 psi (= 0.2 psi/foot x 7530' (top of open hole)).
  - 4. Injection source will be produced water only from Lime Rock wells, mainly from the Queen, Grayburg, San Andres, Glorieta, and Yeso formations. Lime Rock has 464 oil wells in Eddy County. Water analyses are in Exhibit G. No compatibility problems have been reported from the Choate Davis 14 State SWD 1. Over 4,606,213 barrels from those same formations have been disposed into that well which is 3,004' southeast and has one (Cisco) of the same receiving zones as the proposed Choate Davis 14 State SWD 2.
  - 5. There is no Cisco production within a >4 mile radius.

VIII. The Cisco consists of limestone and dolomite. Lost circulation and 20% porosity have been reported elsewhere in the basin.

Closest possible underground source of drinking water above the proposed disposal interval are the shallower red beds. Water sands were found from 225' to 228' and from 800' to 815' in a now P&A oil well (30-015-00893) test that is 2,730' east.

Three water wells are within a 2-mile radius according to the State Engineer (Exhibit H). Two are plugged and one could not be definitively found. Exhibit H contains photographs of the referenced water sources.



30-015-43628

According to the State Engineer, closest water well (RA 04048) is 4303' southeast. It was drilled as an 1883' deep oil well (30-015-00894) in 1945, later converted to a water well, and subsequently plugged and abandoned in 1975. Water sands were found from 110' to 140' and from 1160' to 1185'.

Next closest (6546' northwest) water well (RA 03917) appears to be near a now P&A oil well (30-015-00853). The water well was completed 1 day before the oil well was spudded. The latter was drilled as a 6039' deep oil well in 1958 and plugged in 2003. State Engineer records indicate water was found at 50' in the 130' deep water well.

Only other water well (RA 02996) within 2 miles is 10,512' north. It was drilled as a 441' deep oil well (30-015-00739) in 1941. Water was found between 145' and 150'. It was P & A in 1948. It was re-entered in 1953 and used for domestic purposes. It was a plugged a second time and is now abandoned.

No other water wells were found during a January 28, 2015 field inspection. Chalk Bluff Spring, 1.7 miles southwest in the NE4 Section 21, was dry during the inspection. Closest water found during the inspection was a windmill 2-1/3 miles northeast in 7-18s-28e. No underground source of drinking water is below the proposed disposal interval.

Formation tops are:

Salado = 0'
Seven Rivers = 405'
Queen = 1000'
San Andres = 1810'
Glorieta = 3425'
Yeso = 3620'
Abo = 5055'
Wolfcamp = 6500'
Cisco & top of disposal zone = 7530'
bottom disposal zone & TD = 8700'

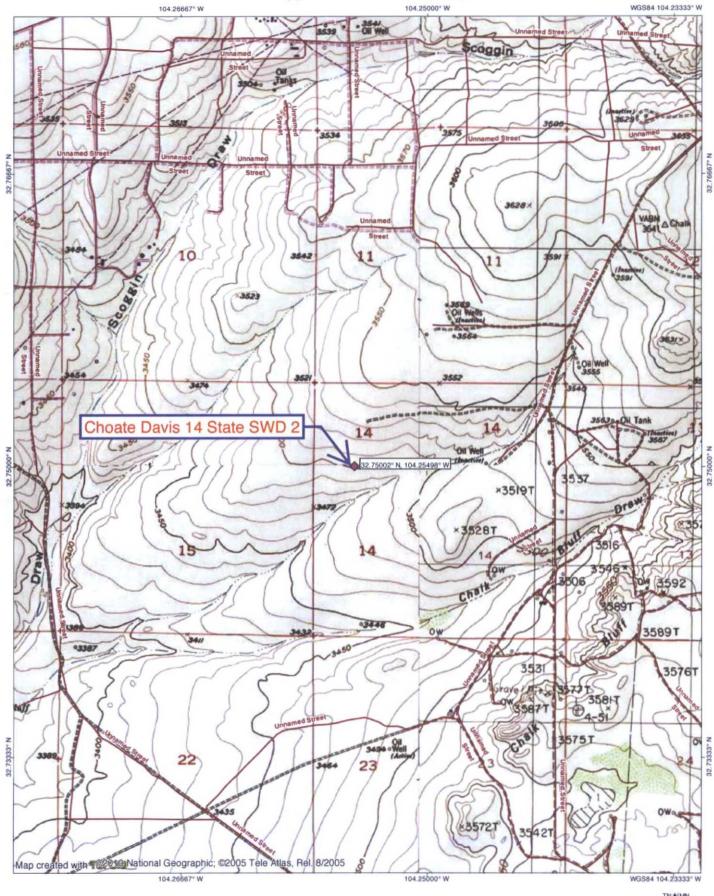
There will be >6000' of vertical separation between the bottom of the only possible underground water source (red beds) and the top of the Cisco. Produced water has been injected or disposed into zones (Queen, Grayburg, and San Andres) above the proposed disposal interval in 3 wells within a 1-mile radius.



30-015-43628

- IX. The well will be stimulated with acid to clean out scale or fill.
- X. SGR-DLL-CDL-CNL quad combo logs will be run from 7530' (base long string) to 2800' (base intermediate) and from 8700' (TD) to 7530' (base long string) and filed with NMOCD.
- XI. According to the State Engineer's records and a January 28, 2015 field inspection, no active water wells are within a one-mile radius.
- XII. Lime Rock is not aware of any geologic or engineering data that may indicate that the Cisco is in hydrologic connection with any underground sources of water. Closest Quaternary fault is 54 miles southwest (Exhibit I). There are 49 saltwater disposal wells in the Cisco in New Mexico.
- XIII. A legal ad (see Exhibit J) was published on July 14, 2016. Notice (this application) has been sent (Exhibit K) to the surface owner (NM State Land Office), all oil and gas lessees (Abo Petroleum, Apache, Chevron USA, Dakota Resources, Khody Land & Minerals, Marathon Oil, MYCO Industries, Oxy Y-1, Yates (Martin), Yates Petroleum, & ZPZ) or operating right holders (Alamo, Anadarko, Chevron USA, COG, Dominion, Marbob, Mewbourne, Occidental Permian, Pitch Energy, RKI, RSE Partners, WPX, ZPZ), and all oil and gas lessors (only New Mexico State Land Office and BLM) within a half-mile.













District 1
1025 N. French Dr., Hobbs, NM 88240
Phone: (575) 303-6161 Fax: (575) 393-0720
<u>District 11</u>
11 S. First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720
<u>District III</u>
1000 Rio Brazos Road, Aztec, NM 37410
Phone: (505) 334-6178 Fax: (505) 334-6170
<u>District IV</u>
1220 S. St. Francis Dr., Santa Fe, 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, NM 87505

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

X AMENDED REPORT (pool change)

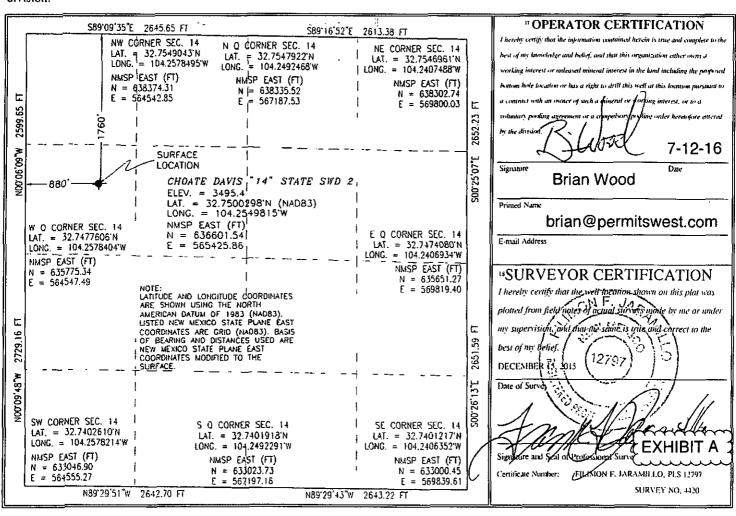
#### WELL LOCATION AND ACREAGE DEDICATION PLAT

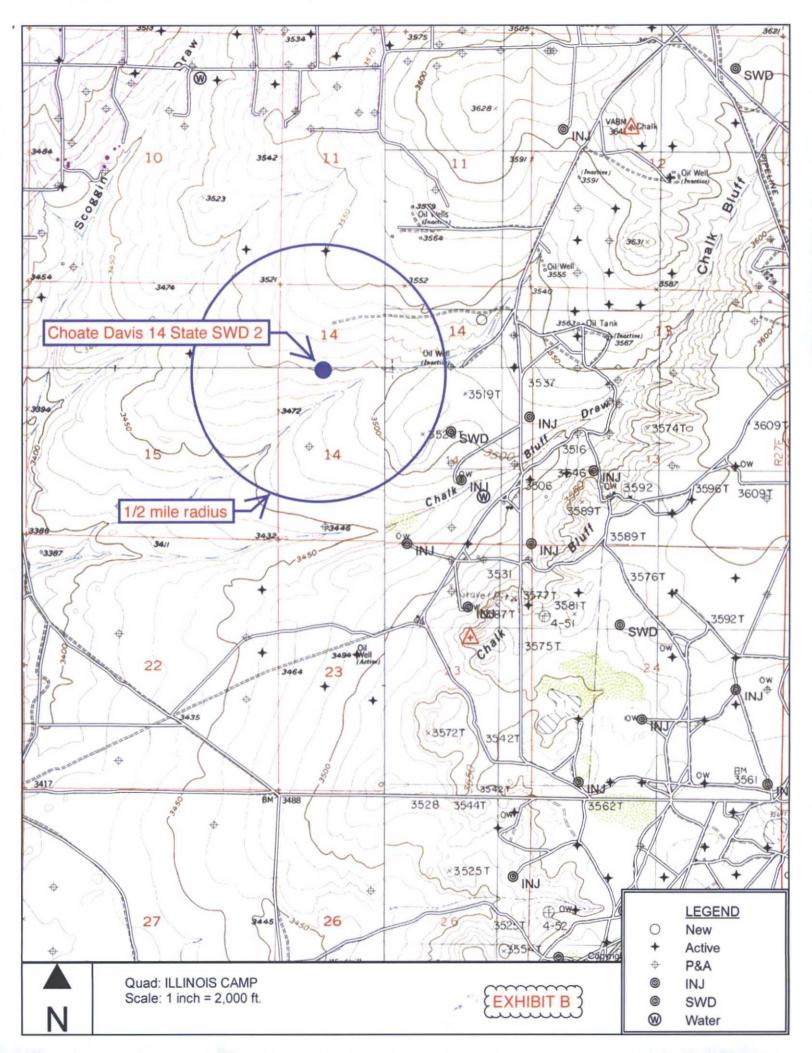
<sup>1</sup> AP1 Number 30-015-43628	1 Pool Code 96099	<sup>3</sup> Pool Name SWD; Cis	
Property Code 315992	Property CHOATE DAVIS 1		* Well Number
OGRID No.	* Operator	' Elevation	
277558	LIME ROCK RESOL	3495.4	

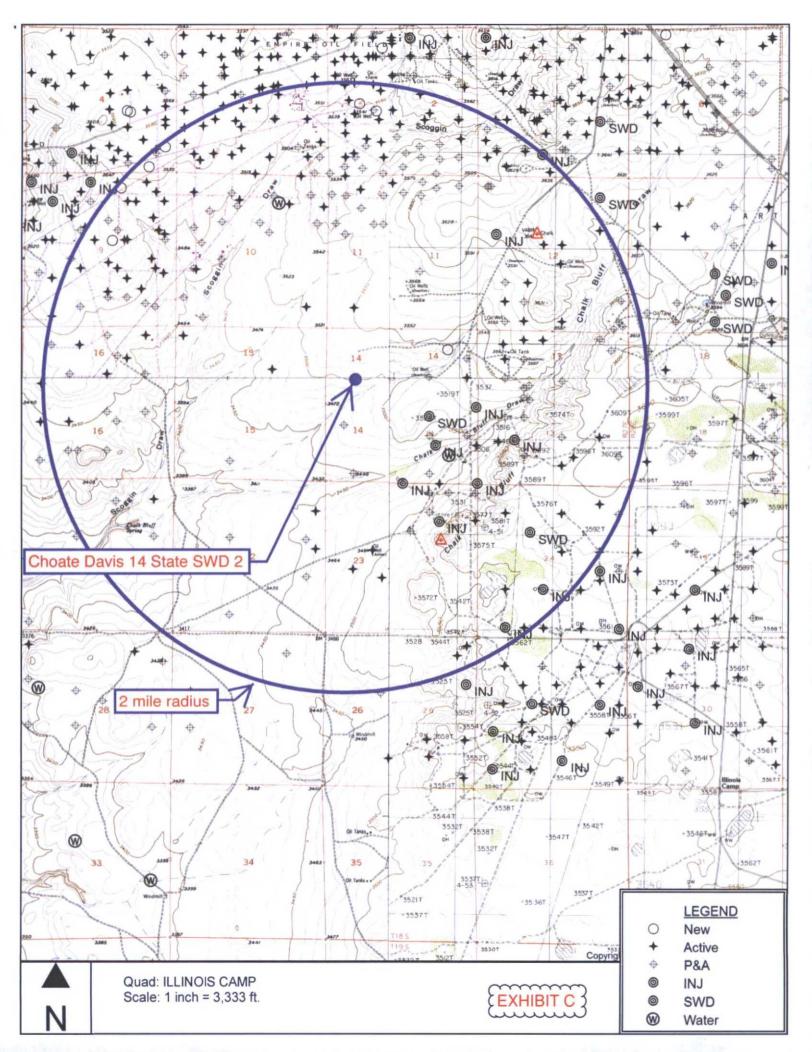
Surface Location

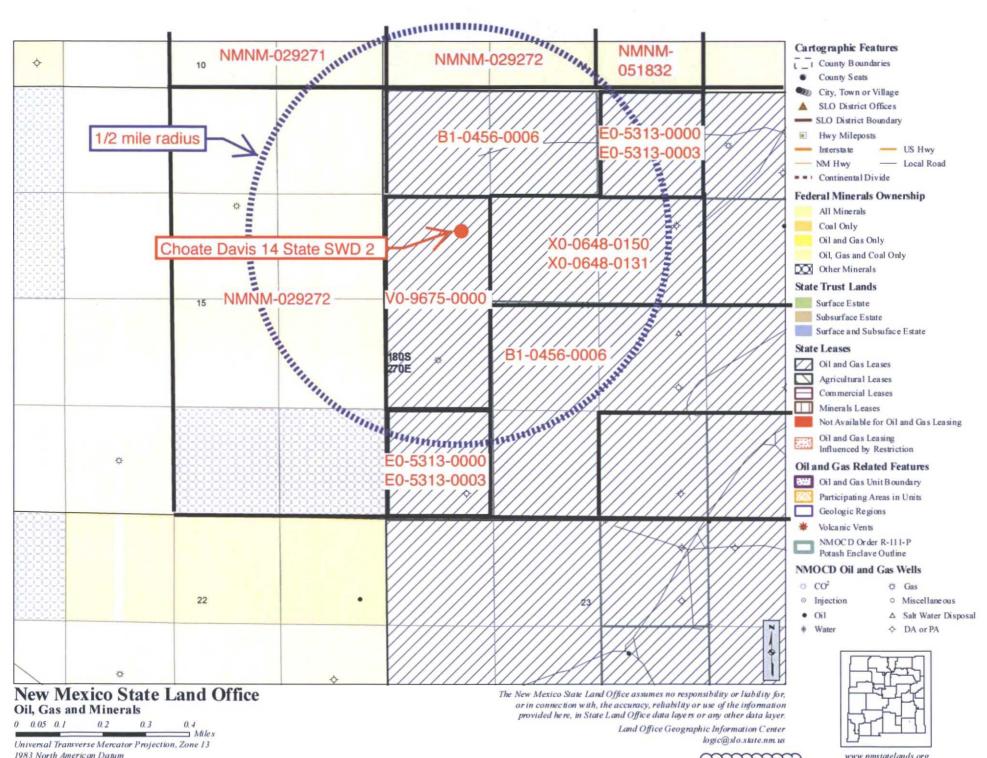
UL or lot 100. E	Section 14	Township 18 S	Range 27 E	Lot Idn	Feet from the 1760	North/South line NORTH	Feet from the 880	East/West line WEST	County EDDY	
" Bottom Hole Location If Different From Surface										
UL or lot no.	Section	Township	Range	Let Idn	Feet from the	North/South line	Feet from the	East/West line	County	
Dedicated Acre	s <sup>13</sup> Joint	or Infili	Consolidation	Code			<sup>15</sup> Order No.			

No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.









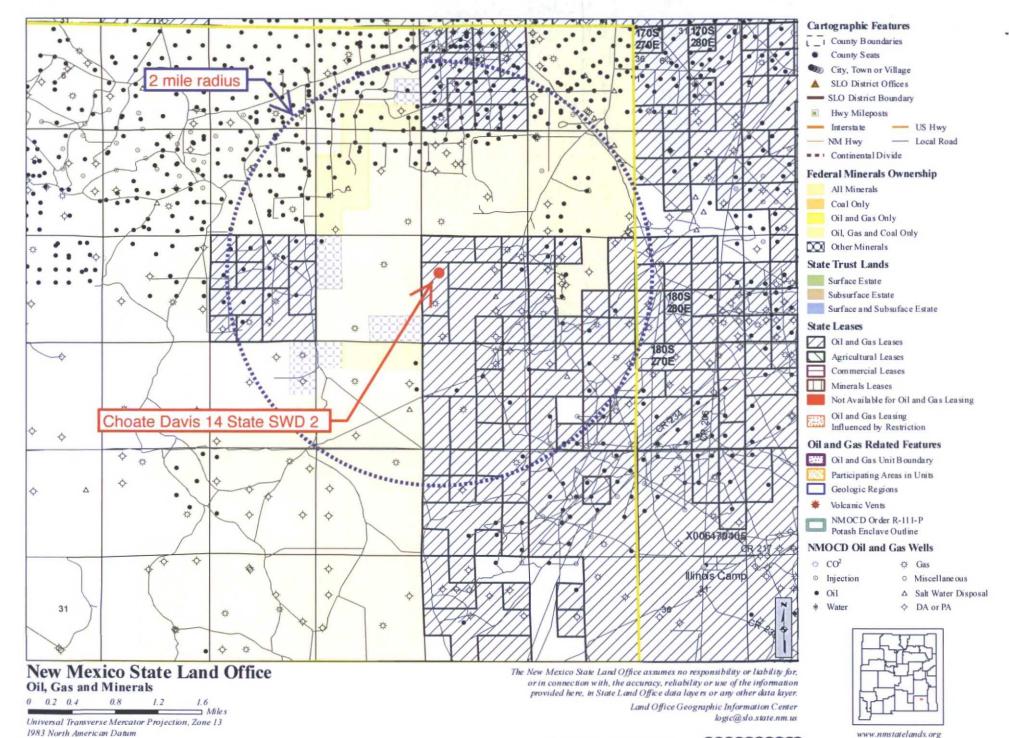


EXHIBIT E

### SORTED BY DISTANCE FROM CHOATE DAVIS 14 STATE SWD 2

WELL	SPUD	TD	POOL	WELL TYPE	HOLE O.D.	CASING O.D.	SET	CEMENT	тос	HOW DETERMINED
Beauregard ANM State Com 1	7/25/97	10100	Red Lake; Atoka-Morrow	P&A	26	20	40	redi-mix	GL	no report
3001527448					17.5	13.375	370	750 sx	GL	80' per TS, then top job
L-14 18S 27E					12.25	9.625	2190	850 sx	GL	Circ 130 sx
					8.75	7	7559	300 sx	(6620)	temp. survey
					6.125	4.5	10095	365 sx	7311	TOL
Federal DH Gas Com 1	5/19/88	11915	Scoggin Draw; Morrow & Strawn	G	26	20	33	3 yds -	no report	no report
3001524857					17.5	13.375	502	700 sx	GL	Circ 270 sx
M-11 18S 27E					12.25	9.625	2200	1400 sx	GL	Circ 305 sx
					7.875	5.5	11915	2720 sx	GL	Circ 218 sx
State 1	11/26/48	2575	Artesia; Queen- Grayburg-San Andres	P&A	no report	, 10	264	no report	no report	no report
3001500893	-				no report	8	860	no report	no report	no report
G-14 18S 27E					no report	7	1700	no report	no report	no report

# Pro-Kem, Inc. WATER ANALYSIS REPORT

SYMPL	<u>.E</u>			•	•
Lease	D.: LimeRock Resources Enron No.: ST ion:	from Glorieta-Yeso	Date Sampled : Date Analyzed: Lab ID Number Salesperson :	: 15-July-2010 28-July-2010 : Jul2810.001-9	
Attent			File Name : Jul	2810.001	
ANALY	<u> </u>				
1.	Ph	5,600			
2.	Specific Gravity 60/60 F.	1,138			
3.	CACO3 Saturation Index	@ 80F <b>@140</b> F		Negligible Mild	
<u>D</u>	issolved Gasses		MG/L.	EQ. WT.	*MEQ/L
4.	Hydrogen Sulfide		100		•
<b>5</b> .	Carbon Dioxide		80		
6.	Dissolved Oxygen	Not	t Determined		
<u>C</u>	<u>ations</u>				
7.	Calcium (Ca++)		2,166	/ 20.1 =	107.76
8.	Magnesium (Mg++)	•	971	/ 12.2 =	79.59
9.	Sodium (Na+)	(Calculated)	65,383	/ 23.0 =	2,842.74
10.	Barium (Ba++)	Not	Determined		
A	<u>nions</u>				
11.	Hydroxyl (OH-)	•	0	/ 17.0 =	0.00
12.	Carbonate (CO3=)	•	0	/ 30.0 =	0.00
13.	Bicarbonate (HCO3-)		714	/ 61.1 =	11.69
14.	Sulfate (SO4=).	•	4,200	/ 48.8 =	86.07
5.	Chloride (CI-)		103,977	/ 35.5 =	2,928.93
16.	Total Dissolved Solids		177,411		•
17.	Total Iron (Fe)		1.50	/ 18.2 =	80.0
18.	Manganese (Mn++)	Not	Determined		
19.	Total Hardness as CaCO3		9,408		
<b>20</b> .	Resistivity @ 75 F. (Calculat	ed)	0.017	7 Ohm · meters	
	LOGARITHMIC WATER P	ATTERN	PPOS	BABLE MINERAL (	COMPOSITION
	*meg/L	ALIERN	COMPOUNI		EQ. WT. = mg/L.
Na	والمطافعا أيفيقين ووفيق والمتعارب والمتعارب والمتعارب	Hiller Cl	Ca(HCO3)2	11.69	81.04 947
110	The state of the s		CaSO4	86.07	68.07 5,858
Ca	Maria Maria Maria	HC03	CaCl2	10.01	55.50 <b>556</b>
			Mg(HCO3)2		73.17 0
Mg	AND THE PROPERTY OF THE PARTY O	<del>                                      </del>	MgSO4	0.00	60.19 0
_			MgCl2	79.59	47.62 3,790
Fe	10000 1000 100 10 1 10	100 1000 1000	NaHCO3	0.00	84.00 0
• '	Calcium Sulfate Solubilit		NaSO4	0.00	71.03
	4740	y	NaCl	2,839.33	.58.46 <b>165,987</b>
m	4732 4724	<del></del>		* milliequivalents	
0	4716	<del>_</del>			
- 1	4708 4700	<del></del>			
	4692				
-	4884 4676	<u> </u>			
	4660		Tony Abernat	hy Analyst	<del></del>
	7 Temp °F. 50 70 90 110 130	150 170	Tony records	nil inimilar	

## Pro-Kem, Inc. WATER ANALYSIS REPORT

SAMPL	F					
	o. : LimeRock Resources	from	Date Sampled	: 15-July-2010		
_486	e : Kersey	Glorieta-Yeso	Date Analyzed	l: 28-July-2010		
Well	No.: ST	Giorieta-Teso		er: Jul2810.001-6		
Locat Atten			Salesperson: File Name: Ju			
	· -		i ne Haine . Ju	112010.001		
ANALY					•	
1.	Ph	5.600				
2. 3.	Specific Gravity 60/60 F. CACO3 Saturation Index	1.143	0.406	Nogliaibla		
ა.	CACOS Saturation index	@ 80F <b>@140F</b>	-0.496 <b>0.494</b>	Negligible Mild		
_	Dissolved Gasses	@140F	0.494 MG/L.	EQ. WT.	*MEQ/L	
4.	Hydrogen Sulfide		30	LU. TII.	med/L	
5.	Carbon Dioxide		50 50			
6.	Dissolved Oxygen	No	t Determined			
= -	Sations		,			
· 7.	Calcium (Ca++)		2,072	/ 20.1 =	103.08	
8.	Magnesium (Mg++)		1,143	/ 12.2 =	93.69	
9.	Sodium (Na+)	(Calculated)	69,836	/ 23.0 =	3,036.35	
10.	Barium (Ba++)	•	t Determined		-,	
А	nions	U				
11.	Hydroxyl (OH-)		0	/ 17.0 =	0.00	
12.	Carbonate (CO3=)	* -**	0	/ 30.0 =	0.00	
13.	Bicarbonate (HCO3-	)	686	/ 61.1 =	11.23	
14.	Sulfate (SO4=)	• •	4,500	/ 48.8 =	92.21	
5.	Chloride (CI-)		110,975	/ 35.5 =	3,126.06	
16.	Total Dissolved Solids		189,212			
17.	Total Iron (Fe)		14.50	/ 18.2 =	0.80 <sup>-</sup>	
18.	Manganese (Mn++)	Not	Determined			
19.	Total Hardness as CaCO3		9,879			
20.	Resistivity @ 75 F. (Calcula	ted)	0.00	)8 Ohm · meters		
	LOGARITHMIC WATER	PATTERN	PRO	BABLE MINERAL	COMPOSITION	
	*meq/L.		COMPOUN	ID *meq/L X	EQ. WT. = mg/L.	
Na		<del>भागाम् ।</del> Cl	Ca(HCO3)2	2 11.23	81.04 <b>910</b>	
_		ucoa	CaSO4	91.86	68.07 6,253	
Ca	The state of the s	HC03	CaCl2	0.00	55.50	
Mg	mark hope a loss of many and	SO4	Mg(HCO3)2		73.17 0	
អេអូ		304	MgSO4	0.36	60.19 21	
Fe	Part of the second seco	<del>ां ्राच्यं सक्</del> CO3	MgCl2 NaHCO3	93.33 0.00	47.62 4,444 84.00 <b>0</b>	
	10000 1000 100 10 10	100 1000 <b>1000</b> 0	NaSO4	0.00	71.03	
	Calcium Sulfate Solubilit	y Profile	NaCl	3,032.72	58.46 <b>177,293</b>	
	4810		11441	* milliequivalents		
m	4800		•	**************************************		
8	4790					
	4785					
L	4775					
	4765 -	<del></del>	Tony Aberna	athy Anglyet	<del></del>	
	780 Tamp *F, 50 70 90 110 130	150 170	, rony months	auty, retalyst		



### Pro-Kem WATER ANALYSIS REPORT

		WAI	ER ANA	LYSIS R	FPORI		
r `MPL	<u>E</u> b. : Lime Rock Resou	urces	,	Date Sampled :	15-July-2010		
Lease	: Staley ST A		from	Date Analyzed:	28-July-2010		
Well			Glorieta-Yeso		: Jul2810.003- 5		
Locati Attent				Salesperson: File Name: Jul	2810.003		
ANALY	SIS						
1.			5.600				•
2.	Specific Gravity 60/	60 F.	1:118				
3.	CACO3 Saturation		@ 80F		Negligible		
			@140F		Moderate		
D	issolved Gasses			MG/L.	EQ. WT.	*MEQ/L	
4.	Hydrogen Sulfide			80			
5.	Carbon Dioxide			160			
6.	Dissolved Oxygen		No	ot Determined			
C	ations						
7.	Calcium	(Ca++)	• •	3,391	/ 20.1 =	168.71	
8.	Magnesium	(Mg++)	•	1,371	/ 12.2 =	112.38	
9.	Sodium	(Na+)	(Calculated)	58,430	/ 23.0 =	2,540.44	
·· 10 ·	- Barium	(Ba++)	No	ot Determined			
<u>A</u>	<u>nions</u>		•				
11.	Hydroxyi	(OH-)		0	/ 17.0 =	0.00	
12.		(CO3=)	• •	0	/ 30.0 =	0.00	
13.		(HCO3-)	•	1,060	/ 61.1 =	17.35	
14.		(SO4=)	- * i <del>i</del> *	3,400	/ 48.8 =	<b>6</b> 9.67	
j.	Chloride	(CI-)		96,978	/ 35.5 =	2,731.77	
16.	<b>Total Dissolved Solid</b>	ds		164,630			
17.	Total Iron	(Fe)		18.00	/ 18.2 =	0.99	
18.	Manganese	(Mn++)	No	ot Determined			
19.	Total Hardness as C		•	14,113			
<b>20</b> .	Resistivity @ 75 F.	(Calculated	i)	0.027	7 Ohm · meters		
	LOGARITHMIC W	ATER PA	TTERN	PROB	ABLE MINERAL	COMPOSITION	
	*med	7/L.		COMPOUNT	D *meq/L X	EQ. WT. = 1	mg/L.
Na	Him the state of t	+	<del>्राक्षिक Cl</del>	Ca(HCO3)2	17.35		,406
_		<u>.</u>	HC03	CaSO4	69.67		1,743
Ca		· · · · · · · · · · · · · · · · · · ·	<del>१ ।∤% (   11    </del> HC03		81.69	55.50 4	1,534
Mg	mar in the same in a		504	Mg(HCO3)2	0.00	73.17	0
wy			1	MgSO4	0.00	60.19	0.
Fe	Enter the second	والبربيب وسنبطأ		MgCl2	112.38		5,351
	10000 1000 100 10	1 10 16	1000 10000	NaHCO3 NaSO4	0.00	84.00 71.03	U
	Calcium Sulfate	Solubility	Profile	NaCI	0.00 2,537.71		0 3,355,
	3750			11001	* milliequivalents		-,
का	3738	1 1			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	F	
9	3726		<del></del>				
1	3720	<u> </u>					
ι	3708	4	<del></del>				

EXHIBIT G

Tony Abernathy, Analyst

### Pro-Kem WATER ANALYSIS REPORT

SAMPL			_				
	o. : Lime Rock Reso	urces	from		: 15-July-2010		
	e : Staley ST	·	Glorieta-Yeso		1: 28-July-2010		
Well Local				Salesperson :	er: Jul2810.003- 4		
Atten				File Name : Ju			
ANALY	_						
1.	Ph		5.500				
2.	Specific Gravity 60		1.178			•	
3.	CACO3 Saturation	Index	@ 80F	-2.905	Negligible		
_		,	@140F	-1.145	Negligible	****	
	Dissolved Gasses		•	MG/L.	EQ. WT.	*MEQ/L	
4.	Hydrogen Sulfide			0			
5.	Carbon Dioxide		N/-	U 4 Determined			•
6.	Dissolved Oxygen	`,	NO	t Determined			
_	Cations				1.55.4		
, <b>7.</b>	Calcium	(Ca++)	· · · · · · · · · · · · · · · · · · ·	1,884	/ 20.1 =	93.73	
8.	Magnesium	(Mg++)		5,371	/ 12.2 =	440.25	
9.	Sodium	(Na+)	(Calculated)	80,438	/ 23.0 =	3,497.30	ł
_ 10	Barium	(Ba++)	No	t Determined			
A	<u>nions</u>						
11.	Hydroxyl	-(OH-)		0	/ 17.0 =	0.00	
12.	Carbonate	(CO3≈)		0	/ 30.0 =	0.00	
13.	Bicarbonate :	(HCO3-)		0	/ 61.1 =	0.00	
14.	Sulfate	(SO4=)	7 7	15,000	/ 48.8 =	307.38	
j	Chloride "*	(CI-)		131,970	/ 35.5 =	3,717.46	'
16.	Total Dissolved Sol	ids		234,663			
17.	Total Iron	(Fe)		2,500.00	/ 18.2 ≈	137.36	
18.	Manganese	(Mn++)	No	t Determined			
19.	Total Hardness as			26,814			
20.	Resistivity @ 75 F.	(Calculate	ed)	0.00	1 Ohm meters		
	LOGARITHMIC V	NATED D	ATTERN	PRO	BABLE MINERAL	COMPOSITI	ON
		eq/L.	TO THE INIT	COMPOUN			= mg/L.
Na			Cl market	Ca(HCO3)2		81.04	0
, 10		سنا ا		CaSO4	93,73	68.07	6,380
Ca	i <del>de la Maria</del>		<del>क्षित्र के HC</del> 03	CaCl2	0.00	55.50	0
				Mg(HCO3)		73.17	Ö
Mg	1 10 10 10 10 10 10 10 10 10 10 10 10 10		SO4	MgSO4	213.65	60.19	12,859
_	In the State of State	1		MgCl2	226.60	47.62	10,791
Fe	10000 1000 100 10	1 10	100 1000 10000	NaHCO3	0,00	84.00	0
	Calcium Sulfate	Solubility	Profile	NaSO4	0.00	71.03	0
	4820	<del></del>	· · · · · · · · · · · · · · · · · · ·	NaCl	3,490.86	58.46	204,076
m	4802 <del></del>				* milliequivalents	per Liter	
9	4768	1	<del>-/</del> -				
,	4748						•
Ĺ	4712	1/	· • • 1 · · · · · · · · · · · · · · · ·		•		
-	4694	Z			•		
	1050						



Tony Abernathy, Analyst

# Pro-Kem, Inc. WATER ANALYSIS REPORT

SAMPLE		•		
il Co. : LimeRock Resources	from Queen,	Date Sampled	: 15-July-2010	
Lease : Jeffery 01	Grayburg,		d: 28-July-2010	
Well No.: ST Location:	San Andres	Salesperson	er: <b>Jul2810.001-8</b>	
Attention:		File Name : Ji	ul2810.001	
ANALYSIS				
1. Ph	E 60	in		
2. Specific Gravity 60/60 F.	5.60 1.13			
3. CACO3 Saturation Index	@ 80F	-0.527	Negligible	
5. CAÇOS Saldialion Index	@140F	0.463	Mild	
Dissolved Gasses	@1401	MG/L.	EQ. WT.	*MEQ/L
4. Hydrogen Sulfide	•	<u>,</u>		
5. Carbon Dioxide		90		
6. Dissolved Oxygen	1	Not Determined		
Cations				
7. Calcium (Ca++)		1,884	/ 20.1 = ·	93.73
8. Magnesium (Mg++)		1,428	/ 12.2 =	117.05
9. Sodium (Na+)	(Calculated)	67,431	/ 23.0 =	2,931.78
10. Barium (Ba++)		Not Determined		
<u>Anions</u>				•
11. Hydroxyl (OH-)	•	0	/ 17.0 =	0.00
12. Carbonate (CO3=)		0	/ 30.0 =	0.00
13. Bicarbonate (HCO3-)	;	703	/ 61.1 ≈	11.51
14. Sulfate (SO4=)	. ,	4,200	/ 48.8 =	86.07
5. Chloride (CI-)		107,976	/ 35.5 =	3,041.58
<ol><li>Total Dissolved Solids</li></ol>		183,622		
17. Total Iron (Fe)		1.50	) / 18.2 =	80.0
18. Manganese (Mn++)	ı	Not Determined		
19. Total Hardness as CaCO3	ń	10,584	48 Oh	
20. Resistivity @ 75 F. (Calculated	a)	0.0	12 Ohm · meters	
LOGARITHMIC WATER PA	TTERN		BABLE MINERAL (	
*meq / L. ,		COMPOU	•	EQ. WT. $=$ mg/L.
Na hada a sa	······································	Ca(HCO3)		81.04 932
The same of the sa		CaSO4	82.23	68.07 <b>5,597</b>
Ca Ca	HC(		0.00	55.50 0
Mg	<del>े प्राप्त भक्क</del> <b>SO</b> 4	Mg(HCO3) MgSO4	2 0.00 3.84	73.17 0 60.19 231
		MgCl2	113.21	47.62 <b>5,391</b>
Fe Francisco	<del>ं कर्ना कि</del> CO3	NaHCO3	0.00	84.00 0
•	100 1000 10000 Drawfile	NaSO4	0.00	71.03
Calcium Sulfate Solubility	rionie :-	NaCl	2,928.37	58.46 171,192
4995 m 4990	<u> </u>	•	* milliequivalents	
4985				
4980				
4970	1	•		
4965				



Tony Abemathy, Analyst

### Pro-Kem, Inc. WATER ANALYSIS REPORT

from Queen, Date Sampled: 15-July-2010 I Co.: LimeRock Resources Grayburg, Date Analyzed: 28-July-2010 Lease : Jeffery 36 Lab ID Number: Jul2810.001-7 Well No.: ST San Andres Salesperson: Location: File Name: Jul2810.001 Attention: ANALYSIS 1. 5,600 2. Specific Gravity 60/60 F. 1.143 3. CACO3 Saturation Index @ 80F -0.400Negligible Mild 0.590 @140F \*MEQ/L **Dissolved Gasses** EQ. WT MG/L 30 4. Hydrogen Sulfide 100 5. Carbon Dioxide **Dissolved Oxygen** Not Determined 6. Cations 2.072 / 20.1 =103.08 7. Calcium (Ca++) / 12.2 = 79.59 8. Magnesium (Mg++) 971 69.530 / 23.0 =3,023.04 9. Sodium (Na+) (Calculated) Not Determined **Barium** 10. (Ba++) Anions 0 / 17.0 = 0.00 11. Hydroxyl (OH-) Carbonate ٥ / 30.0 =0.00 (CO3=)12. 13. Bicarbonate (HCO3-) 857 /61.1 =14.03 Sulfate (SO4=) 4.400 / 48.8 = 90.16 14. 109.975 / 35.5 = 3,097.89 5. Chloride (CI-) **Total Dissolved Solids** 187,805 16. 0.05 17. Total Iron / 18.2 = (Fe) 18. Manganese (Mn++)Not Determined Total Hardness as CaCO3 19. 9,173 20. Resistivity @ 75 F. (Calculated) 0.009 Ohm · meters LOGARITHMIC WATER PATTERN PROBABLE MINERAL COMPOSITION EQ. WT. = \*meq / L. COMPOUND \*mea/L Х mg/L. ·# CI Ca(HCO3)2 14.03 81.04 1,137 CaSO4 89.06 68.07 6,062 **HC03** Ca CaCl2 0.00 55.50 0 Mg(HCO3)2 0.00 73.17 0 **SO4** Mg 60.19 MgSO4 1.11 67 47.62 3,737 MgCl2 78.48 ············ CO3 Fe 👚 NaHCO3 84.00 0.00 NaSO4 71.03 0.00 Calcium Sulfate Solubility Profile 3,019.40 176.514 NaCl 58.46 4505 \* milliequivalents per Liter 4800 4795 4790 4785 4780 4775 4770 47B5 Tony Abemathy, Analyst



#### TOPO! map printed on 02/08/16 from "Untitled.tpo"

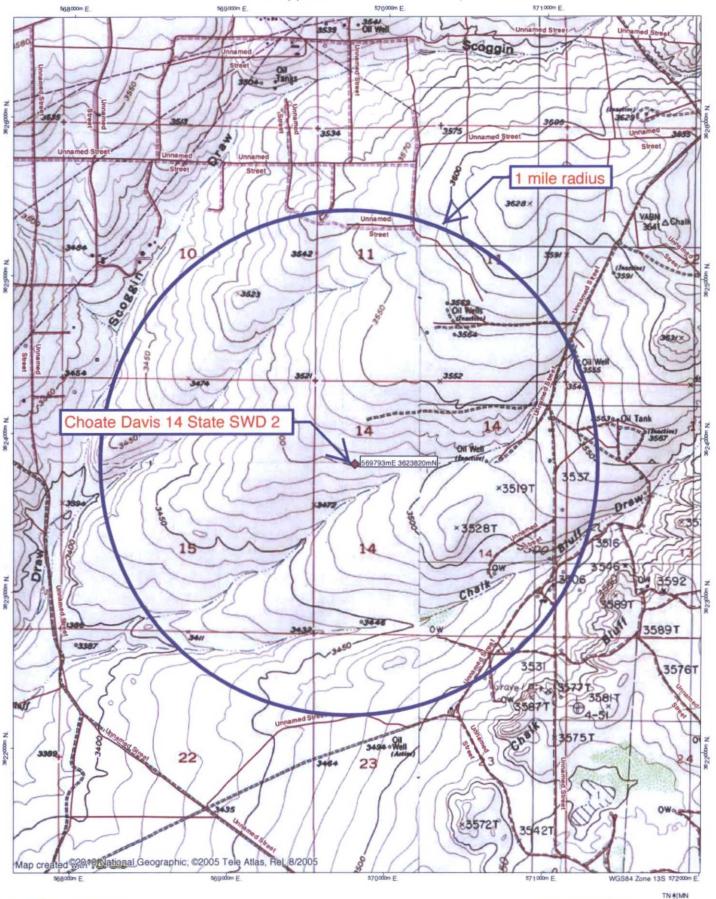




EXHIBIT H





### New Mexico Office of the State Engineer

### **Active & Inactive Points of Diversion**

(with Ownership Information)

(R=POD has been replaced

and no longer serves this file, (quarters are 1=NW 2=NE 3=SW 4=SE)

C=the file is closed)

(quarters are smallest to largest) (NAD83 UTM in meters)

	Sub			-			999		-			
File Nbr	basin Use Dive	rsion Owner	County	y POD Number	Code Grant	Source	6416 4	Sec	Tws Rng	Х	Y	Distance
)4048	OBS	0 INC. WESTERN OIL FIELDS	LE	RA 04048	1610 meters	Artesian	1 4 4	14	18S 27E	570841	3623030* 🚱	1312
)3917	PRO	0 PAN AMERICAN PETROLEUM CORP.	LE	RA 03917	= 5280 feet	Artesian	4 1 2	10	18S 27E	569019	3625660*	1996
)2996	DOM	3 PATON BROTHERS	ED	RA 02996			2 3 1	02	18S 27E	569808	3627025* 🚱	3205

ord Count: 3

UTMNAD83 Radius Search (in meters):

(acre ft per annum)

**Easting (X):** 569793

Northing (Y): 3623820

Radius: 3220

Sorted by: Distance



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

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.) (R=POD has been replaced, O=orphaned,

C=the file is

closed)

(quarters are 1=NW 2=NE 3=SW 4=SE)

(quarters are smallest to largest)

(NAD83 UTM in meters)

(In feet)

		POD					- · · · · · · · · · · · · · · · · · · ·								
		Sub-		Q	Q	Q							Depth	Depth	Water
POD Number	Code	basin	County	64	16	4	Sec	Tws	Rng	X	Υ	Distance	Well	Water	Column
RA 04048	_1610 meters		LE	1	4	4	14	18S	27E	570841	3623030* 🚱	1312	2096		
RA 03917	= 5280 feet		LE	4	1	2	10	18S	27E	569019	3625660* 🚱	1996	130	50	80

Average Depth to Water:

50 feet

Minimum Depth:

50 feet

Maximum Depth:

50 feet

Record Count: 2

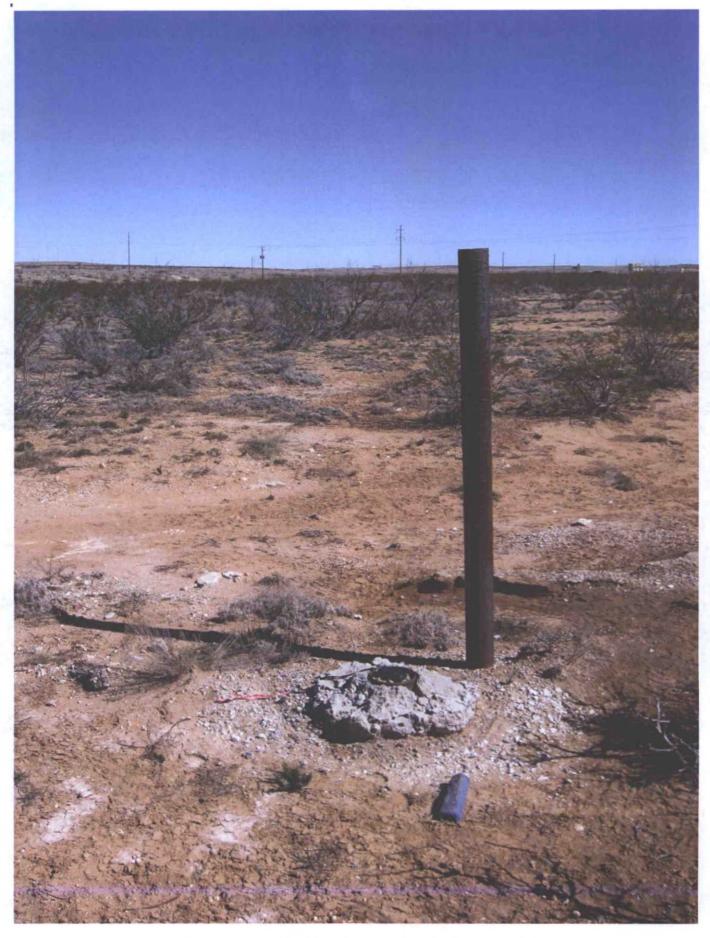
UTMNAD83 Radius Search (in meters):

Easting (X): 569793

Northing (Y): 3623820

Radius: 3220





Well RA 04048, aka 30-015-00894 on Feb. 10, 2016





Well 30-015-00853 at RA 03917 on Feb. 10, 2016





Well RA 02996, aka 30-015-00739 on Feb. 10, 2016



Chalk Bluff Spring (dry) in 21-18s-27e on Jan. 28, 2016



### Form C-108

### **Affirmative Statement**

Lime Rock Resources II-A, L.P.

Choate-Davis 14 State Com No. 2 SWD

Section 14, T-18 South, R-27 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.

Stanley Bishop

Date

Geologist

Lime Rock Resources II-A, L.P.





### **Affidavit of Publication**

24003 State of New Mexico County of Eddy: **Danny Scott** being duly s sworn sayes the that she is the Publisher 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 Ad 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 Consecutive weeks/day on the same day as follows: First Publication July 14, 2016 Second Publication Third Publication Fourth Publication Fifth Publication Sixth Publication Subscribed and sworn before me this 14th day of July 2016 OFFICIAL SEAL atisha Romine OTARY PUBLIC-STATE OF NEW MEXICO My commission expires

Latisha Romine

Notary Public, Eddy County, New Mexico

### **Copy of Publication:**

### LEGAL NOTICE"

Lime Rock Resources II-A, L. P. will apply to drill the Choate Davis 14 State SWD 2 as a saltwater disposal well. The well will dispose into the Cisco formation from 7,530' to 8,700'. It is staked 10 miles southeast of Artesia, NM at 1760 FNL & 880 FWL Sec. 14, T. 18 S., R. 27 E., Eddy County, NM. Maximum disposal rate will be 20,000 bwpd. Maximum injection pressure will be 1,506 psi. Interested parties must file objections or requests for hearing with the NM Oil Conservation Division, 1220 South Saint Francis Dr., Santa Fe, NM 87505 within 15 days. Additional information can be obtained by contacting: Brian Wood, Permits West, Inc., 37 Verano Loop, Santa Fe, NM 87508. Phone number is (505) 466-8120.





July 14, 2016

NM State Land Office PO Box 1148 Santa Fe NM 87504

#### TYPICAL LETTER

Lime Rock Resources II-A, L. P. is applying (see attached application) to drill the Choate Davis 14 State SWD 2 well as a saltwater disposal well. As required by NM Oil Conservation Division (NMOCD) rules, I am notifying you of the following proposed saltwater disposal well. This letter is a notice only. No action is needed unless you have questions or objections.

Well Name: Choate Davis 14 State SWD 2 (state lease) TD = 8,700'

Proposed Disposal Zone: Cisco (from 7,530' to 8,700')

Location: 1760' FNL & 880' FWL Sec. 14, T. 18 S., R. 27 E., Eddy County, NM

Approximate Location: 10 air miles southeast of Artesia, NM

Applicant Name: Lime Rock Resources II-A, L. P. (713) 292-9528 Applicant's Address: 1111 Bagby St., Suite 4600, Houston, TX 77002

Submittal Information: Application for a saltwater disposal well will be filed with the NMOCD. If you have an objection, or wish to request a hearing, then it must be filed with the NMOCD within 15 days of receipt of this letter. The New Mexico Oil Conservation Division address is 1220 South St. Francis Dr. Santa Fe, NM 87505. Their phone number is (505) 476-3440.

Please call me if you have any questions.

Sincerely,

Brian Wood

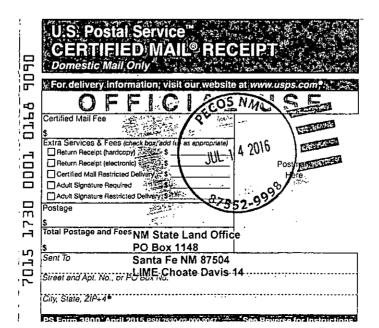
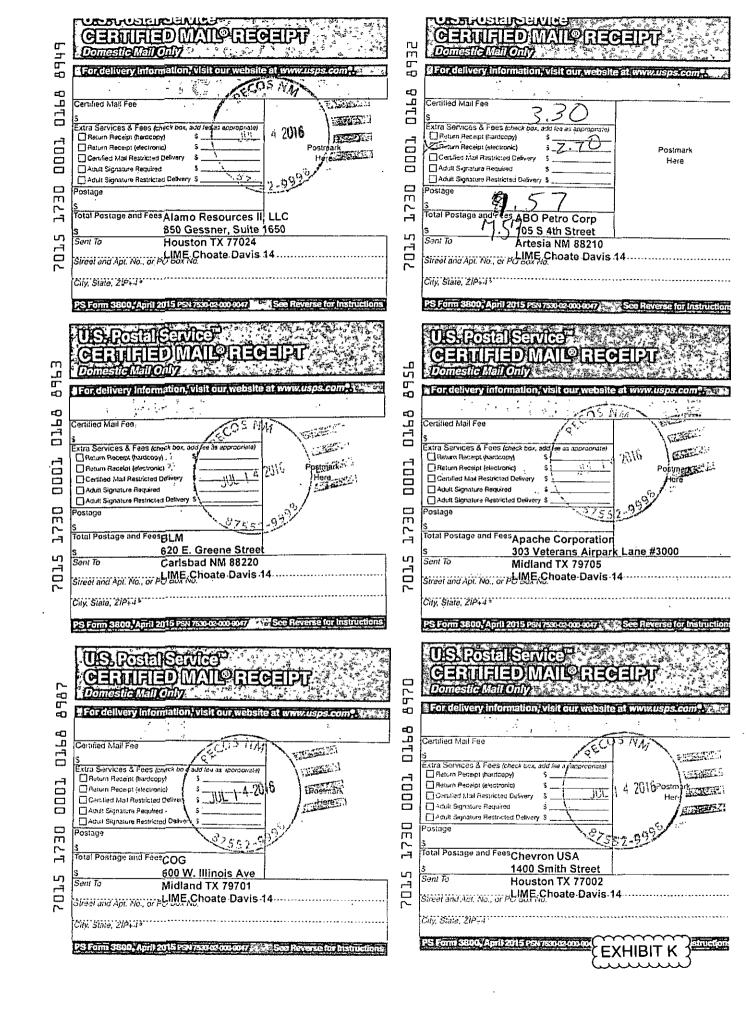
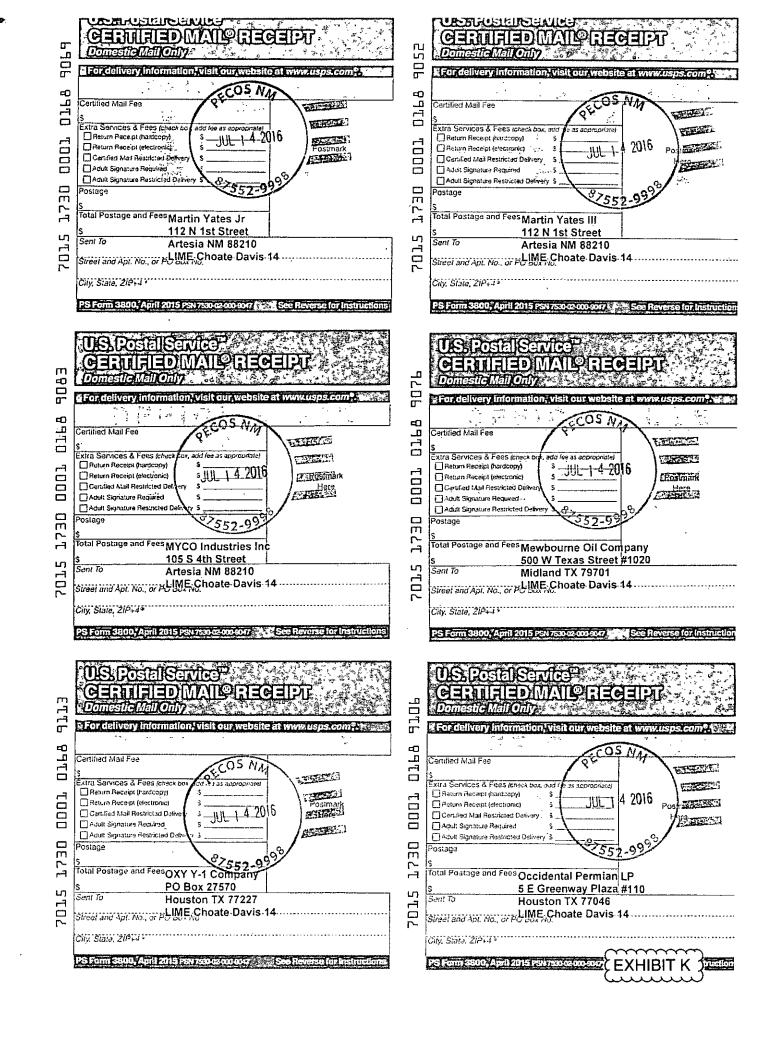
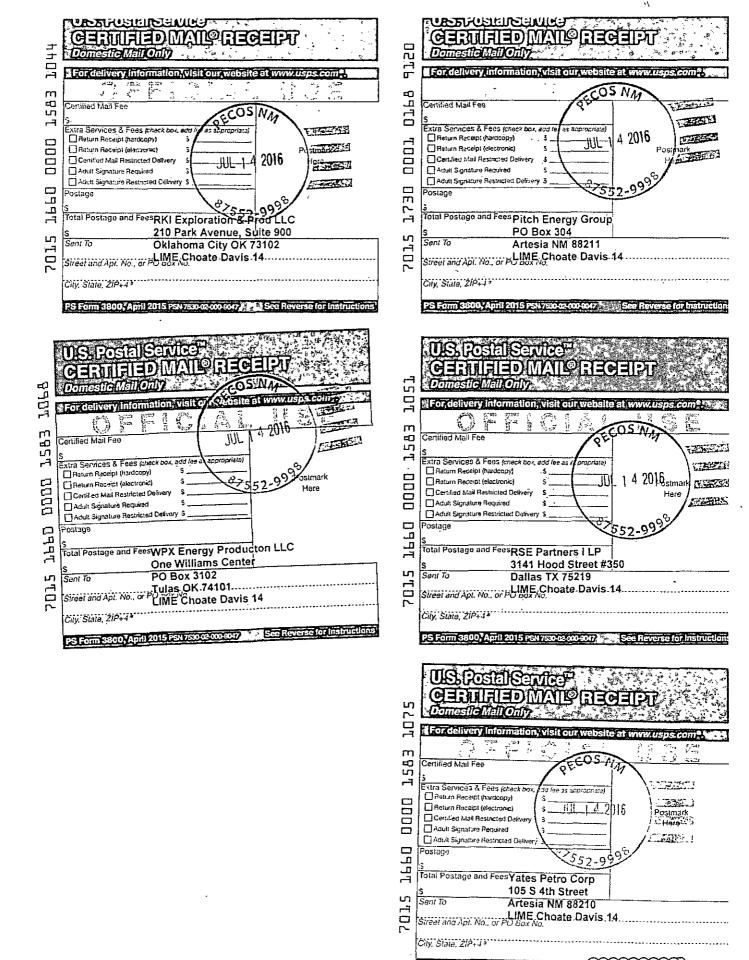


EXHIBIT K

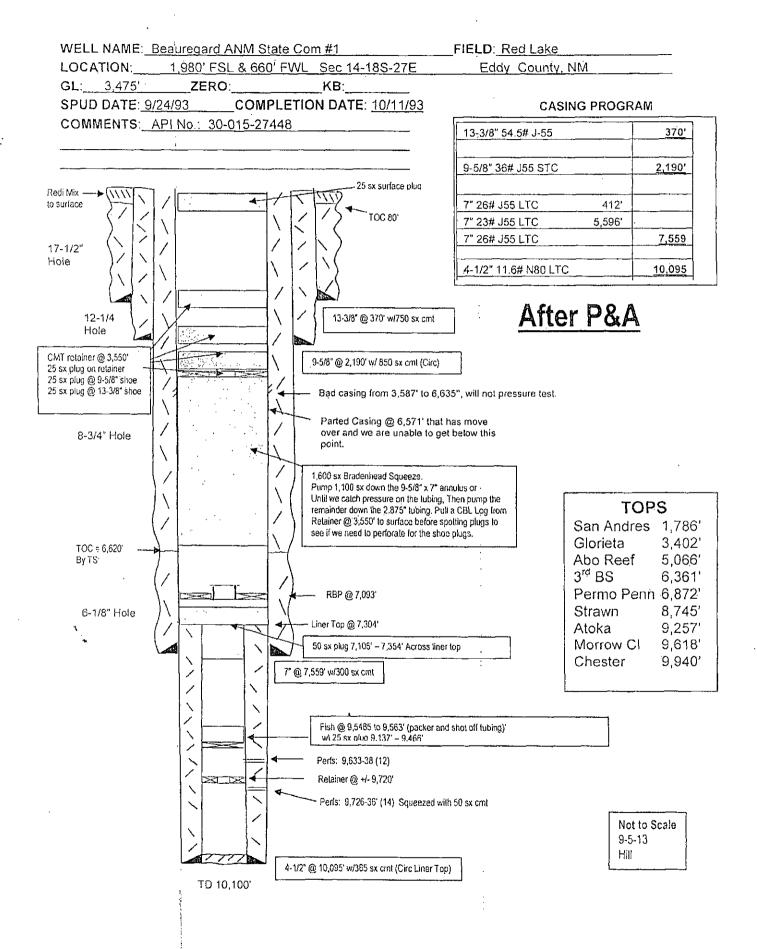


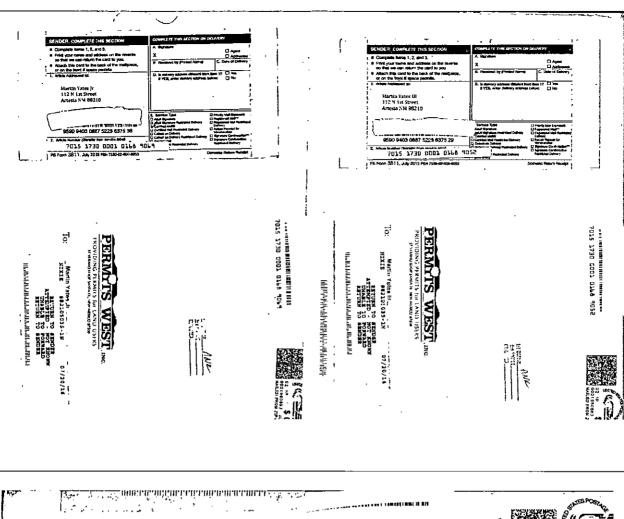






**EXHIBIT K** 

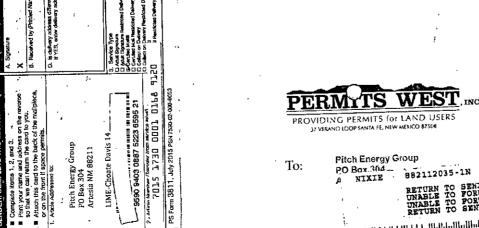




7015 1730 0001 0168 9120







07/20/16 882112035-1N RETURN TO SENDER UNABLE TO FORWARD UNABLE TO FORWARD RETURN TO SENDER

Midhibhdallibhdallidlallialliallialliallid

to
ALT IN
AMOCO.

### Amoco Production Company Diagrammatic Sketch

Well: Federal DH" Gas Com Well No. 1

=	ı	¥	9	ţ	0	Π	8	

KB: 3566

DF: 3565' GL: 35467

Location: 100/3 x 9-0/w ( M-11-18-11	(of first com	pletion
	· · · · · · · · · · · · · · · · · · ·	
	T. 8 6 6 8 1	
5-18-84 Well spudded.		
334 of 20"52:74#1		
csg cemented with	M.	
3 yards redimer.		
GZL8411 /3:30" CSA 500" 1		
in 17 " hale "7700 5x		
Class C consent.		
E1-84, 95% " CSA Z 200" in		
125" hole, DV tool at 9731. 8	DV TOOL AT 973'	
Cost 1st stage with 950 so		
Class C Nast Displace entit		
17/160 but, Cira 199 sx. to: pits		
Open DV tool. Propo 100 1681 att		
14.4 mud and 450 sx Class Cont	Ni i i i i i i i i i i i i i i i i i i	:
with 2% calcium chlorida, Circ		<del></del> _
106 Sx cont. Nisa 477316 fur.		:
9-4-8415 13 " CSA 11915 1 278 11 !		,
hole DV tool at 6447.	DVI TOOL ATT GHIP'	
Cont 1st stage with 420 sx		
Class H Lite with additives	012-Strawn Perfs 9295'-9308	8
and with 900 sx class Hwith	Packer set at 9627'	
additives & Open DV took and	1 0 2-Morrow Perfs 9789-9795	
rice 73 5x Cont 2" stage	and 9835 - 9876	<del></del>
with 1000 sx Closes H with	CIBP @ 10700 Cap =/ 35 C	mT
additives and with 400 sx	Silarian	
Closes H Neat- Circ 218 x to pit	Perfs 10774-10792	
mon		——— м Т
	Ellenburger 1	
	Pert 11645-11908 Spon Continue	ous)
	! ! ! ! ! ! ! ! ! ! ! ! ! ! ! ! ! ! !	
700	9100	
	9151	<del></del>

Companies and 1,5 and 1  The profession of special profession of s	Construction Domination Designation (Construction (Constru	1955 Control (1967) I Control (1967)	Dentation Of the Transport of the Control of the Co	ESSO 643 0087 5222 6378 42    Committee   Committee	SENSES CONNETT FOR METADO.  CONSTRUCTION OF THE PROPERTY OF TH	Middand TX79701  Middan	EXPLICE IN COLUMN 27 THIS EXCELLANCE AND COLUMN 27 THIS EXCELLANCE
The Control Permit II.  In the Control Permit II	2	a va malumen.	And althous description of Class Community  Land description of Class Community  WITE SCHOOL CHIEF PORTION OF CHIEF PORTION OF CHIEF COMMUNITY	DATE Charter Days 1.4   Date of the control of th	STANGER COLLEGE THE SECTION AND ADMINISTRATION OF THE SECTION OF T	A thrown the control of the control	SENDER ECONOMIS FOR 1.2 AND SECTION  CONTRACT OF THE PLANT SEC

District 1

1625 N. French Dr., Hobbs, NM 83240 Phone: (575) 393-6161 Fax: (575) 393-0720 State of New Mexico

Form C-102 Revised August 1, 2011

Districted 811 S. First St., Artesia, NM \$8210 Phone: (575) 748-1283 Fax; (575) 748-9720

NM OIL CONSTRUCT CONSTRUCTION OF THE PROPERTY CONTROL ARTESIA DISTOFL CONSERVATION DIVISION JUL 16 2016 1220 South St. Francis Dr.

Submit one copy to appropriate District Office

District III 1000 Ris Brazos Road, Aziec, NM \$7410 Phone: (505) 334-6178 Fax: (505) 334-6170 1220 S. St. Francis Dr., Santa Fe, NM 87505

Phone: (505) 476-3460 Fax: (505) 476-3462

Santa Fe, NM 87505

X AMENDED REPORT (pool change)

RECEIVED

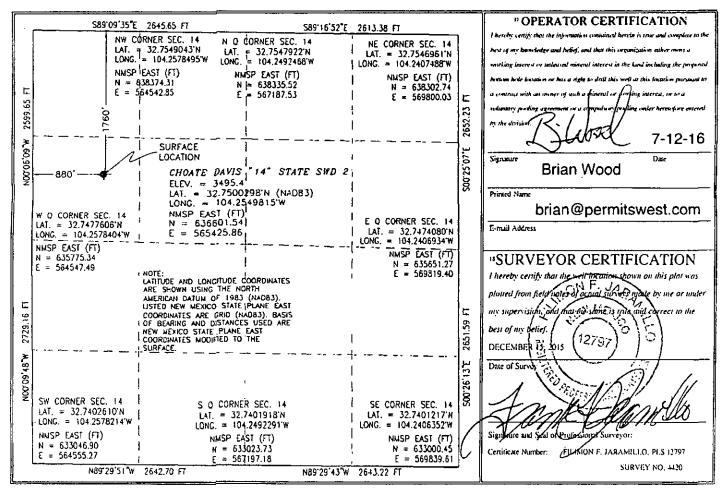
WELL LOCATION AND ACREAGE DEDICATION PLAT

'API Number 30-015-43628	' Pool Code 96099	SWD; Cisco
Property Code 315992	'Property Name CHOATE DAVIS 14 ST	ATE SWD 2
<sup>†</sup> OGRID No. 277558	Operator Name	'Elevation ES 11-A, L.P. 3495.4

Surface Location

UL or lut no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
E	14	18 S	27 E		1760	NORTH	880	WEST	EDDY
			" B	ottom Ho	le Location	If Different Fr	om Surface		
UL or lot no.	Section	Township	Range	Lot ldn	Feet frum the	North/South line	Feet from the	East/West line	County
	1								
11 Dedicated Acre	s <sup>13</sup> Joint	or (affil)   " (	Consolidation	Code			" Order No.		

No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.



STE OF NEW METER	C-108 Revie	w Checklist: Re	ceived: 7/14/2 UAfd. Red	ıuest:	Reply Date:	/70/6 Suspended:	[Ver 15]
		_				nits/Orders:	
Well No.	Well Name	(s): Chock	ebeurs	ShD	کے	·	
					•	II Primacy 03/07/1982)	_
API : 30-0 <b></b>	760FNL	Spud Date	e:	New or Old:	(UIC Class	II Primacy 03/07/1982)	
Footages	880 FWL	Lot	or Unit E Sec /		<u>、</u> Rge <u> </u>	County Edd	<u></u>
General Location	on: 21532	IAOHLSI -	Pool:	540'56	1560	Pool No .: 460 9	7
BLM 100K Map	Artesir	レール Operator: <u>RとSの</u>	unces-II-A	OGRID	BriAm as C : <u>wool</u> Cont	Pool No.: 460 9  277558  act:  55.9 OK? Date:	
COMPLIANCE	RULE 5.9: Total We	ils: <u>55/</u> Inactive	Fincl Assur:	Compl	. Order?MA	5.9 OK? Date:	12-2016
WELL FILE RE	EVIEWED ( Curren	t Status: Prof	20520				
			Before Conv. O After (	Conv. 🔘 L	ogs in Imaging:	V/A	
			-				
Planned Henad	Work to Well:	· · · · · · · · · · · · · · · · · · ·	Patting		C	Compani Top and Date	
Well Cons	truction Details	Sizes (in) Borehole / Pipe	Setting Depths (ft)		Cement Sx or Cf	Cement Top and Dete Method	mination
Planned	or ExistingSurface	17451746	300	Stage Tool	350	Surcel 1	1154
4	existingInterm/Prod		7800		845	Suprece/	115441
Planned_or I	ExistingInterm/Prod	8347	753000		1150	2600/63	<u> </u>
Planned_or	Existing Prod/Liner						
Plann	ed_or Existing Liner					<u> </u>	
Planned_or	Existing OH PERF	7530/07	<b>&gt;</b>	Inj Length	Comple	tion/Operation Details	<u>::</u>
Injection Litho	ostratigraphic Units:	Depths (ft)	njection or Confining	Tops	Drilled TD 874	PBTD	
Adjacent Unit	: Litho. Struc. Por.		Units NC	6500	NEW TD 4	NEW PBTD	_
·	t: Litho. Struc. Por.		6540	700		NEW Perfs	,
Propos	sed Inj Interval TOP:			75000		in. Inter Coated?	_
Proposed In	nj Interval BOTTOM:			870	Proposed Packer I		
	t: Litho. Struc. Por.					7450 (100-it limit)	}
					Proposed Max. Su	rface Press. 1500 ps	
	OR: Hydrologic a					/ <b>506</b> (0.2 psi per	
	, , , , , , , , , , , , , , , , , , ,					NW: Cliff House fm_	
FRESH WAT	ER: Aquifer _	sternery	Max Depth	HYDRO	AFFIRM STATEM	ENT By Qualified Persor	10-
NMOSE Basi	n: floswell Arte	CAPITAN REEF: t	hru adj. NA	No. Wells v	vithin 1-Mile Radiu	s? 3 FW Analysis	4
Disposal Flui	d: Formation Source(	(s) Sun Aud	- Analysis	s? <b>- 'Y</b>	. On Lease 🤛 Opera	ator Only ( ) or Commerci	al()
Disposal Int:	Inject Rate (Avg/Max	BWPD): 1942	Protectable Wate	rs? <b>////</b> S	ource:	System Close or Op-	en
HC Potentia	<u>al</u> : Producing Interva	il? MFormerly Pro	ducing?Method:	Logs/DST/P	&A/Other\$	2-Mile Radius Pool Ma	P○
AOR Wells:	_1/2-M Radius Map?	Well List?	Total No. Wells F	Penetrating In	nterval: 3	Horizontals?	
Penetrating V	Vells: No. Active We	IlsNum Repairs	?on which well(s)?	<del></del>		Diagrams?	-
Penetrating V	Vells: No. P&A Wells	Num Repairs?_	on which well(s)?	<del></del>		Diagrams?_	_
NOTICE: Ne	wspaper Date 1-1	1136 Mineral C	Owner NMSLD	Surface C	Owner A M SLi	N. Date 8	シトンログ
RULE 26.7(A):	Identified Tracts?	Affected Pers	ons: YAtes, C	heuro	MALAmo,	N. Date 8 Leuron N. Date	-if-u
Order Cond	itions: Issues:	C-B-L	OF 7" CI	tsing	+0200V		
Add Order Cor		<u>, , , , , , , , , , , , , , , , , , , </u>					_