SWD-1858

Revised March 23, 2017

RECEIVED: 11/26/18	REVIEWER:	TYPE: SWD	APP NO: pLEL1833055107

ABOVE THIS TABLE FOR OCD DIVISION USE ONLY

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

ADMINISTRATIVE APPLICATION CHECKLIST

THIS CHECKLIST IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS WHICH REQUIRE PROCESSING AT THE DIVISION LEVEL IN SANTA FE

Applicant: LIME ROCK RESOURCES II-A, L.P. **OGRID Number:** 277558
Well Name: CHOATE DAVIS 23 STATE #4 **Pool:** SWD; BASAL ABO-WOLFCAMP-CISCO **API:** 30-015-45445
Pool Code: 97967

SUBMIT ACCURATE AND COMPLETE INFORMATION REQUIRED TO PROCESS THE TYPE OF APPLICATION INDICATED BELOW

NOV 26 2018 AM 11:12

1) **TYPE OF APPLICATION:** Check those which apply for [A]
A. Location – Spacing Unit – Simultaneous Dedication
☐NSL ☐NSP(PROJECT AREA) ☐NSP(PRORATION UNIT) ☐SD

B. Check one only for [I] or [II]
[I] Commingling – Storage – Measurement
☐DHC ☐CTB ☐PLC ☐PC ☐OLS ☐OLM
[II] Injection – Disposal – Pressure Increase – Enhanced Oil Recovery
☐WFX ☐PMX ☒SWD ☐IPI ☐EOR ☐PPR

FOR OCD ONLY
☐ Notice Complete
☐ Application Content Complete

2) **NOTIFICATION REQUIRED TO:** Check those which apply.
A. ☒ Offset operators or lease holders
B. ☐ Royalty, overriding royalty owners, revenue owners
C. ☒ Application requires published notice
D. ☐ Notification and/or concurrent approval by SLO
E. ☒ Notification and/or concurrent approval by BLM
F. ☒ Surface owner
G. ☐ For all of the above, proof of notification or publication is attached, and/or,
H. ☐ No notice required

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

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

Mike Pippin
Print or Type Name

Mike Pippin
Signature

Date 11/19/18

505-327-4573
Phone Number

e-mail Address: mike@pippinllc.com

LIME ROCK RESOURCES II-A, L.P.
Mike Pippin PE
3104 N. Sullivan Avenue
Farmington, NM 87401
505-327-4573 (phone) mike@pippinllc.com

November 19, 2018

Mike McMillan
NMOCD
1220 South St. Francis Drive
Santa Fe, NM 87505

RE: C-108, SWD APPLICATION
CHOATE DAVIS 23 STATE #4 – API#: 30-015-45445
Unit Letter "D" Section 23 T18S R27E
Eddy County, New Mexico

Dear Mr. McMillan,

LIME ROCK RESOURCES II-A, L.P. as operator of the above-referenced well, is submitting this application to permit the referenced well for produced water disposal in the Lower Abo-Wolfcamp-Cisco (97967).

An APD (C-101) for this well has been submitted to the State for approval. There are two wells in the area of review that penetrated the proposed disposal interval and both have been P&Aed. See the attached list and their wellbore diagrams.

The State of New Mexico as the surface owner and all offsetting operators have been notified.

Attached is the necessary C-108 information, data, maps, and proof of notices for the application.

Should you have any questions, please contact me at 505-327-4573.

Very truly yours,

Mike Pippin

Petroleum Engineer

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720
District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

1 API Number	2 Pool Code	3 Pool Name
30-015-45445	97967	SWD; BASAL ABO-WOLFCAMP-CISCO

4 Property Code	5 Property Name	6 Well Number
	CHOATE DAVIS 23 STATE	4

7 OGRID No.	8 Operator Name	9 Elevation
277558	LIME ROCK RESOURCES II-A, L.P.	3459.5

10 Surface Location

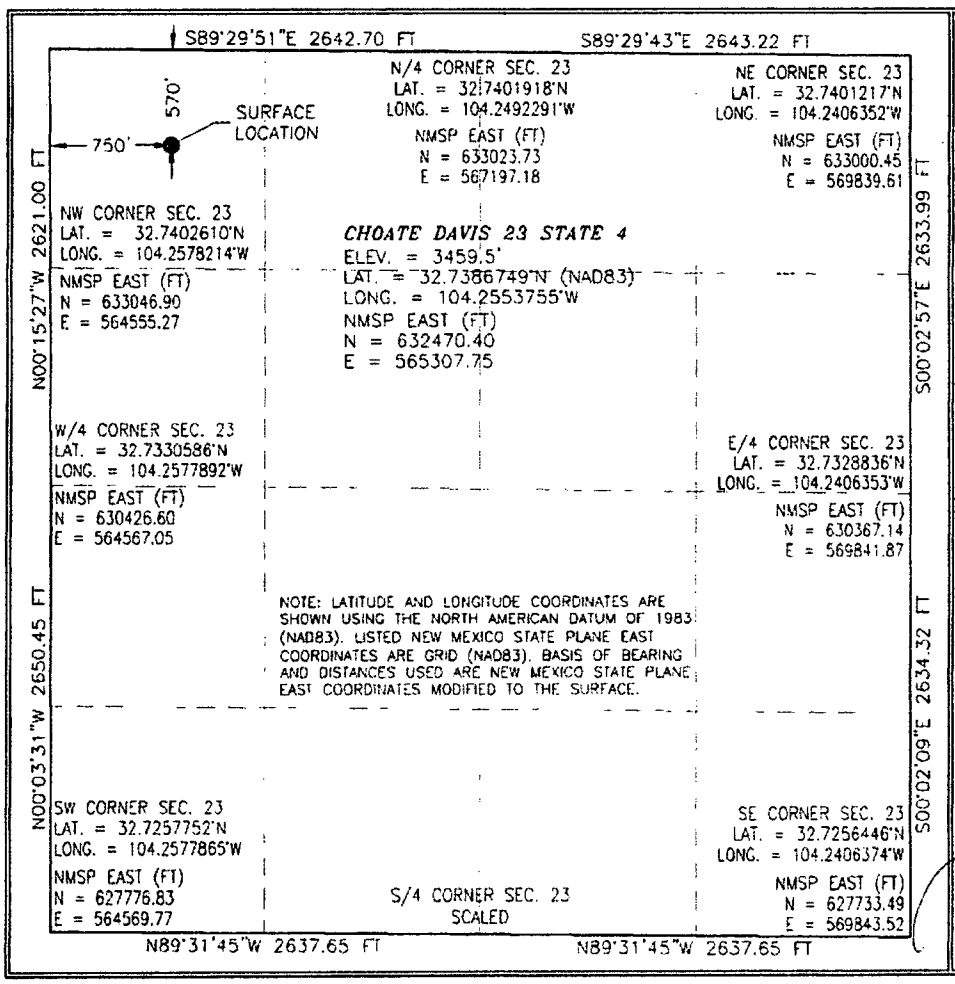
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
D	23	18 S	27 E		570	NORTH	750	WEST	EDDY

11 Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

12 Dedicated Acres	13 Joint or Infill	14 Consolidation Code	15 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.



17 OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Mike Pippin 11/19/18
Signature Date

MIKE PIPPIN
Printed Name

MIKE@PIPPINLLC.COM
E-mail Address

18 SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

OCTOBER 2, 2018
Date of Survey

FILIMON F. JARAMILLO
NEW MEXICO
12797
REGISTERED PROFESSIONAL SURVEYOR

Signature and Seal of Professional Surveyor

Certificate Number FILIMON F. JARAMILLO, PLS 12797

SURVEY NO. 6577

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? __X__ Yes _____ No

II. OPERATOR: **LIME ROCK RESOURCES II-A, L.P.**

ADDRESS: 1111 Bagby Street, Houston, TX 77002

CONTACT PARTY: Mike Pippin PHONE: 505-327-4573

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. **SEE ATTACHED**

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. **There are two wells in the area of review that penetrated this well's proposed injection zones and they are both P&Aed. See attached list and wellbore diagrams.**

VII. Attach data on the proposed operation, including: **SEE ATTACHED**
1. Proposed average and maximum daily rate and volume of fluids to be injected;
2. Whether the system is open or closed;
3. Proposed average and maximum injection pressure;
4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and,
5. 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. **SEE ATTACHED**

IX. Describe the proposed stimulation program, if any. **SEE ATTACHED**

*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. **SEE ATTACHED**

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. **SEE ATTACHED**

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: Mike Pippin TITLE: Petroleum Engineer

SIGNATURE: Mike Pippin DATE: 11/19/18

E-MAIL ADDRESS: mike@pippinllc.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: _____

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

CHOATE DAVIS 23 STATE #4
APPLICATION FOR INJECTION
Form C-108 Section III

III Well Data-On Injection Well

A. Injection Well Information

(1) **Lease**	CHOATE DAVIS 23 STATE
Well No	*#4*
Location	570' FNL & 750' FWL
Sec.Twn.Rnge	Sec 23, T18S-R27E, Unit Letter D
Cnty, State	Eddy County, New Mexico
(2) **Casing**	13-3/8", 48# J-55 @ 300' in 17-1/2" hole. Cmt w/ 350 sx
	9-5/8", 36#, J-55 @ 2800'. Cmt w/ 845 sx.
	7", 26#, L-80 @ 7530'. Cmt w/1250 sx
	OPEN HOLE 7530'-8700'
(3) **Injection Tubing**	4-1/2", 11.6#, Duolined coated tubing at 6325'.
(4) **Packer**	7" IPC Packer set at 6325'

B. Other Well Information

(1) Injection Formation:	Lower Abo, Wolfcamp and Cisco
Field Name:	*SWD Lower Abo-WOLFCAMP-CISCO (97967)*
(2) Injection Interval:	6375' - 8700'
(3) Original Purpose of Wellbore:	SWD

(4) Other Perforated intervals: NONE

(5) Give the depth to and the name of the next higher and next lower oil or gas zone in the area of the well if any.
The top of the Atoka-Morrow zone is noted at 10,000'.
The next lower oil zone top is the Grayburg at 2000'.

Atoka-Morrow 10,000'
Grayburg 2000'

CHOATE DAVIS 23 STATE #4
APPLICATION FOR PRODUCED WATER DISPOSAL
Form C-108 Section VII to XII

VII Attach data on the proposed operation, including:

(1) Proposed average injection rate: 8,000 BWPD
Proposed maximum injection rate: 10,000 BWPD
(2) The system will be a closed system.
(3) Proposed average injection pressure: 1200 psi
Proposed max injection pressure: 1506 psi
(4) The proposed injection fluid is produced water from the San Andres and Yeso that will be re-injected into the Lower Abo, Wolfcamp and Cisco zones (6375'-8700'). Attached is a water analysis of San Andres and Yeso produced water that will go into this SWD well. No water compatibility issues have occurred in the other SWD wells injecting into the same zones.
(5) We plan to submit an analysis of the disposal zone formation water during drilling operations.

VIII Geologic Injection Zone Data

The proposed injection zones are the Lower Abo (6375'-6725'), Wolfcamp (6725'-7775') and Cisco (7775'-8700') formations. These zones are porous dolomitic carbonates interbedded with tight limestones & shales intersparsed. The targeted disposal zones are basically all dolomitic porosity with porosities ranging from 4%-12% on a dolomite matrix scaling. The proposed injection interval is 2325' thick. See the attached wellbore diagram.
The proposed saltwater disposal zone, the non-productive Lower Abo, Wolfcamp, & Cisco formations, are present between the vertical depths of 6375' (Top Lower Abo) and 8700' open hole TD in the subject well.
No sources of underground drinking water exist below the Cisco Formation and the deepest potential sources of underground drinking water above the Wolfcamp are less than 250' deep.
The top of the Lower Abo Formation is approximately 6125' below the lowest possible source of underground drinking water and is separated from that potential underground source of drinking water by thousands of feet of interbedded shales, sandstones, anhydrites, salts, limestones, and dolomites.
The average depth of water report notes aquifers at an average depth of 90'. Surface casing will be set at 300' and cemented to surface.

IX Proposed Stimulation

20,000 gal 15% HCL

X Log Data

No logging program is scheduled for this well.

XI Fresh Water Analysis

Only one fresh water well was listed within one mile using the office of the State Engineer website. Stanley Jones drilled a fresh water well on 11/5/1947, but after an extensive field search, the well could not be found, and nearby current surface owners had never seen or heard of the well. We assume the well has been P&Aed.

XII Geologic / Engineering Statement

An examination of this area has determined there are no open faults or other hydrologic connection between the disposal zone and any underground drinking water. SEE ATTACHED SIGNED AFFIRMATION

XIII Proof of Notice

Proof of notice to surface owner, leasehold operators, and public legal notification is attached

Side 1

INJECTION WELL DATA SHEET

OPERATOR: LIME ROCK RESOURCES II-A, L.P.

WELL NAME & NUMBER: CHOATE DAVIS 23 STATE #4

WELL LOCATION:	570' FNL 750' FWL	D	23	T18S	R27E
	FOOTAGE LOCATION	UNIT LETTER	SECTION	TOWNSHIP	RANGE

WELLBORE SCHEMATIC (SEE ATTACHED)

WELL CONSTRUCTION DATA

Surface Casing

Hole Size: 17-1/2" Casing Size: 13-3/8"

Cemented with: 350 sx. *or* _____ ft^3

Top of Cement: SURFACE Method Determined: Observation

Intermediate Casing

Hole Size: 12-1/4" Casing Size: 9-5/8"

Cemented with: 845 sx. *or* _____ ft^3

Top of Cement: SURFACE Method Determined: Observation

Production Casing

Hole Size: 8-3/4" Casing Size: 7"

Cemented with: 1250 sx. *or* _____ ft^3

Top of Cement: SURFACE Method Determined: Observation

Total Depth: 8700'

Injection Interval Perforations

6375' feet to 7530' Perfs

7530' feet to 8700' Open Hole

(Perforated or Open Hole; indicate which)

2

INJECTION WELL DATA SHEET

Tubing Size: 4-1/2" 11.6# Lining Material: IPC duolined

Type of Packer: 7" IPC

Packer Setting Depth: 6325'

Other Type of Tubing/Casing Seal (if applicable): _____

Additional Data

1. Is this a new well drilled for injection? X Yes _____ No

   If no, for what purpose was the well originally drilled? ___

2. Name of the Injection Formation: Lower Abo-Wolfcamp-Cisco

3. Name of Field or Pool (if applicable): SWD; BASAN ABO-WOLFCAMP-CISCO

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. NO

5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area: _____

Atoka-Morrow at 10,000
Grayburg at 2000'

Side 2

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.

CHOATE DAVIS 23 STATE SWD #4

Proposed new SWD Well

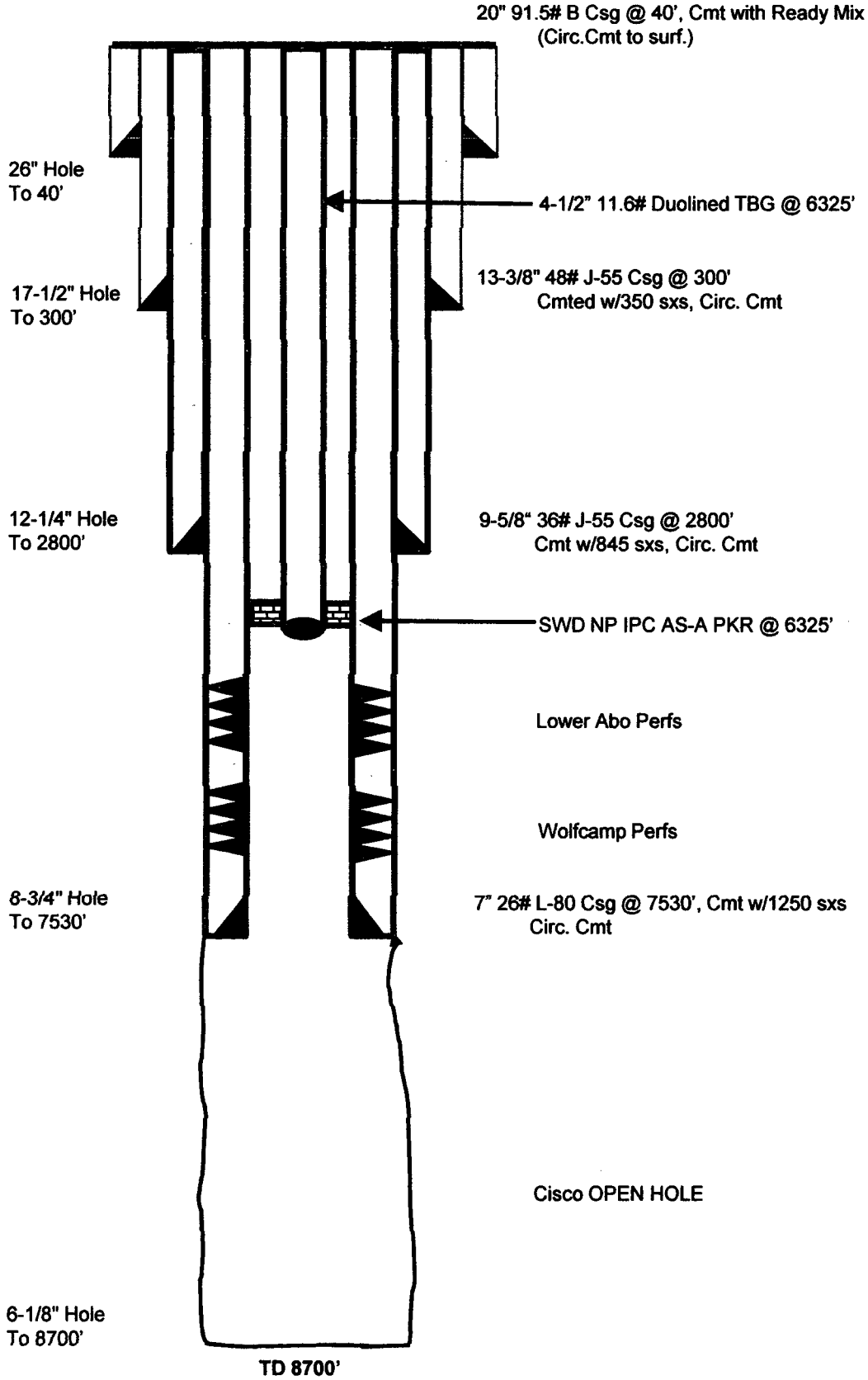
Lower Abo, Wolfcamp, & Cisco

(D) Section 23, T-18-S, R-27-E, Eddy County, NM

Today's Date: 11/19/18
M. Pippin

Lat N 32.7528547 / Long W 104.2387836

Elevation: 3557' GL



Statement of Affirmation

I, *Stan Bishop*, affirm that Lime Rock Resources has examined available geologic and engineering data, and find no evidence of open faults or any other hydrologic connection between disposal zones and any underground sources of drinking water.

Signed: Stan Bishop

Date: 11/1/2018

New Mexico Office of the State Engineer
Point of Diversion Summary

Well Tag	POD Number	(quarters are 1=NW 2=NE 3=SW 4=SE) (quarters are smallest to largest) Q64	Q16	Q4	Sec	Twp	Rng	(NAD83 UTM in meters) X	Y
	RA 04048	1	4	4	14	18S	27E	570841	3623030*

Driller License: **Driller Company:**

Driller Name: STANLEY JONES

Drill Start Date:	11/05/1947	**Drill Finish Date:**	01/03/1948	**Plug Date:**	
Log File Date:	06/02/1959	**PCW Rcv Date:**		**Source:**	Artesian
Pump Type:		**Pipe Discharge Size:**		**Estimated Yield:**	
Casing Size:		**Depth Well:**	2096 feet	**Depth Water:**	

*UTM location was derived from PLSS - see Help

BAKER HUGHES

Permian Basin Area Laboratory
2101 Market Street
Midland, Texas 79703

Upstream Chemicals

REPORT DATE: 5/21/2018

COMPLETE WATER ANALYSIS REPORT SSP v 2010

PRODUCED WATER TO BE INJECTED INTO SWD

CUSTOMER:	LIMEROCK RESOURCES	ACCOUNT REP:	GENE ROGERS
DISTRICT:	NEW MEXICO	SAMPLE ID:	20180518WW226
AREA/LEASE:	SENM	SAMPLE DATE:	5/17/2018
SAMPLE POINT NAME	OXY PESO 1	ANALYSIS DATE:	5/21/2018
SITE TYPE:	WELL SITES	ANALYST:	DG
SAMPLE POINT DESCRIPTION:	H2S AND CO2 CHECKED		

LIMEROCK RESOURCES, SENM, OXY PESO 1

FIELD DATA		ANALYSIS OF SAMPLE					
		ANIONS:	mg/L	meq/L	CATIONS:	mg/L	meq/L
Initial Temperature (°F):		150 Chloride (Cl^-):	119110.4	3354.2	Sodium (Na^+):	69210.4	3012.2
Final Temperature (°F):		89 Sulfate (SO_4^{2-}):	4928.2	102.6	Potassium (K^+):	625.3	16.0
Initial Pressure (psi):		100 Borate (H_3BO_3):	62.3	1.0	Magnesium (Mg^{2+}):	760.0	62.5
Final Pressure (psi):		15 Fluoride (F^-):	ND		Calcium (Ca^{2+}):	3664.2	182.8
		Bromide (Br^-):	ND		Strontium (Sr^{2+}):	71.0	1.6
pH:		Nitrite (NO_2^-):	ND		Barium (Ba^{2+}):	0.0	0.0
pH at time of sampling:		7.2 Nitrate (NO_3^-):	ND		Iron (Fe^{2+}):	2.2	0.1
		Phosphate (PO_4^{3-}):	ND		Manganese (Mn^{2+}):	0.0	0.0
		Silica (SiO_2):	ND		Lead (Pb^{2+}):	0.0	0.0
					Zinc (Zn^{2+}):	0.0	0.0
ALKALINITY BY TITRATION:	mg/L	meq/L					
Bicarbonate (HCO_3^-):	500.2	8.2			Aluminum (Al^{3+}):	0.0	0.0
Carbonate (CO_3^{2-}):	ND				Chromium (Cr^{3+}):	ND	
Hydroxide (OH^-):	ND				Cobalt (Co^{2+}):	ND	
		ORGANIC ACIDS:	mg/L	meq/L	Copper (Cu^{2+}):	0.0	0.0
aqueous CO_2 (ppm):	1.0	Formic Acid:	ND		Molybdenum (Mo^{2+}):	0.0	0.0
aqueous H_2S (ppm):	68.0	Acetic Acid:	ND		Nickel (Ni^{2+}):	ND	
aqueous O2 (ppb):	ND	Propionic Acid:	ND		Tin (Sn^{2+}):	ND	
		Butyric Acid:	ND		Titanium (Ti^{2+}):	ND	
Calculated TDS (mg/L):	191965	Valeric Acid:	ND		Vanadium (V^{2+}):	ND	
Density/Specific Gravity (g/cm³):	1.1200				Zirconium (Zr^{2+}):	ND	
Measured Specific Gravity	1.1259				Lithium (Li^+):	ND	
Conductivity (mmhos):	ND						
Resistivity:	ND				Total Hardness:	12373	N/A
SRC Fe:	No Data						
BOPD:	No Data						
BWPD:	No Data	Anion/Cation Ratio:		1.00	ND = Not Determined		

SCALE PREDICTIONS BASED ON FIELD PROVIDED DATA; FUTHER MODELING MAY BE REQUIRED FOR VALIDATION OF SCALE PREDICTION RESULTS.

Conditions		Barite ($BaSO_4$)		Calcite ($CaCO_3$)		Gypsum ($CaSO_4 \cdot 2H_2O$)		Anhydrite ($CaSO_4$)	
Temp	Press.	Index	Amt (pptb)	Index	Amt (pptb)	Index	Amt (pptb)	Index	Amt (pptb)
80°F	15 psi		0.000	1.61	108.195	0.22	893.228	0.09	314.291
99°F	24 psi		0.000	1.64	108.414	0.24	930.418	0.18	587.676
118°F	34 psi		0.000	1.68	109.112	0.24	936.783	0.27	821.848
137°F	43 psi		0.000	1.73	109.881	0.24	928.540	0.36	1031.518
156°F	53 psi		0.000	1.79	110.664	0.23	913.204	0.44	1221.834
174°F	62 psi		0.000	1.84	111.477	0.23	894.158	0.53	1394.313
193°F	72 psi		0.000	1.89	112.345	0.22	872.320	0.63	1549.119
212°F	81 psi		0.000	1.94	113.381	0.21	846.884	0.72	1686.120
231°F	91 psi		0.000	2.00	114.574	0.20	815.697	0.81	1805.379
250°F	100 psi		0.000	2.05	115.831	0.19	775.441	0.91	1907.368

Conditions		Celestite ($SrSO_4$)		Siderite ($FeCO_3$)		Iron Sulfide (FeS)		Iron Carbonate ($FeCO_3$)	
Temp	Press.	Index	Amt (pptb)	Index	Amt (pptb)	Index	Amt (pptb)	Index	Amt (pptb)
80°F	15 psi	0.25	22.927	-0.79	0.000	2.95	1.832	0.17	0.762
99°F	24 psi	0.26	23.437	-0.80	0.000	2.78	1.831	0.25	1.022
118°F	34 psi	0.26	23.547	-0.81	0.000	2.67	1.830	0.33	1.262
137°F	43 psi	0.26	23.497	-0.81	0.000	2.60	1.829	0.41	1.448
156°F	53 psi	0.26	23.458	-0.82	0.000	2.54	1.829	0.48	1.584
174°F	62 psi	0.26	23.546	-0.83	0.000	2.50	1.828	0.53	1.680
193°F	72 psi	0.27	23.829	-0.83	0.000	2.47	1.828	0.57	1.744
212°F	81 psi	0.28	24.327	-0.84	0.000	2.46	1.827	0.60	1.791
231°F	91 psi	0.29	25.021	-0.84	0.000	2.46	1.827	0.62	1.820
250°F	100 psi	0.30	25.862	-0.85	0.000	2.46	1.828	0.63	1.830

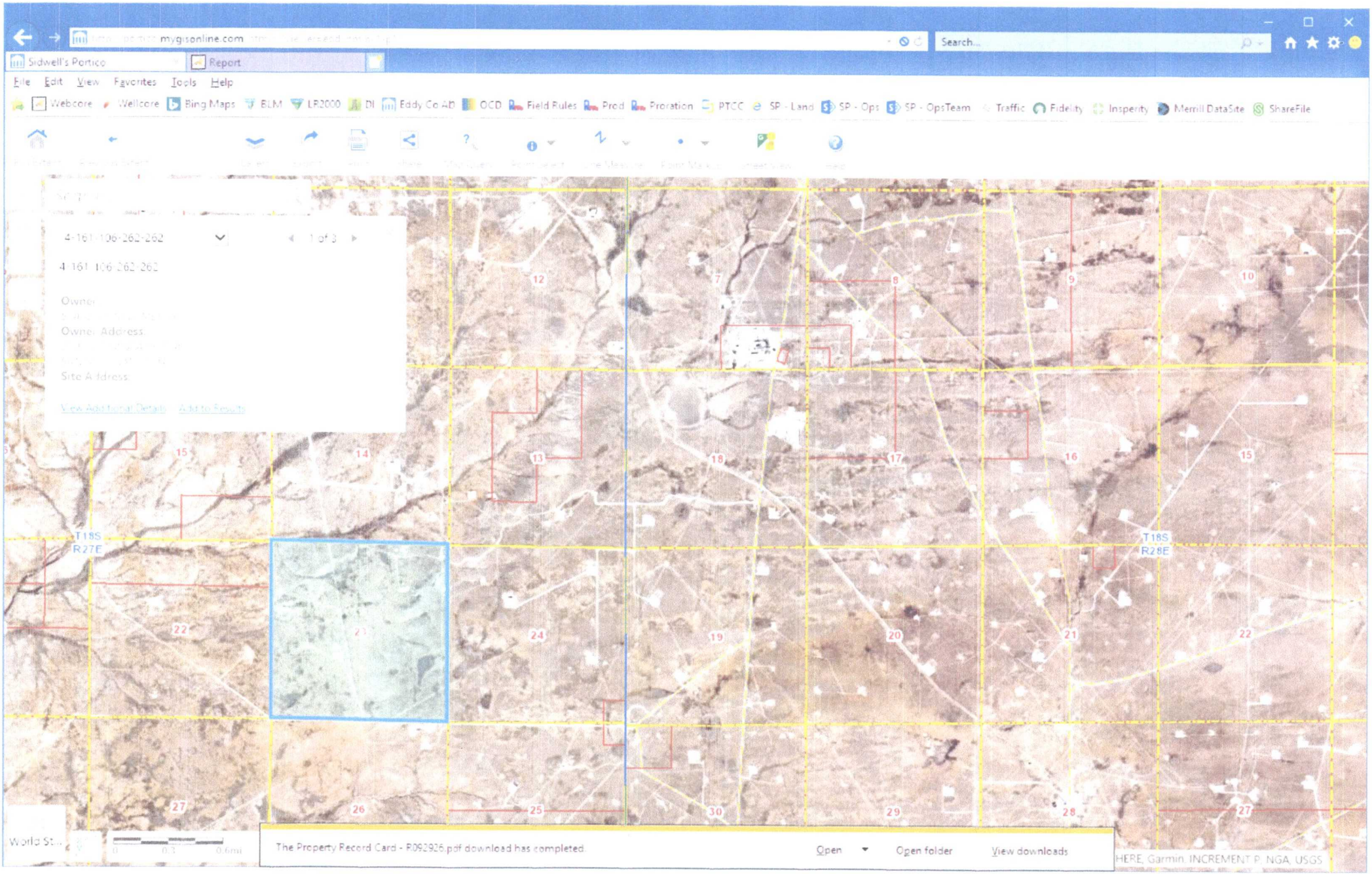
Note 1: When assessing the severity of the scale problem, both the saturation index (SI) and amount of scale must be considered

Note 2: Precipitation of each scale is considered separately. Total scale will be less than the sum of the amounts of the eight (8) scales.

Note 3: Saturation index predictions on this sheet use pH and alkalinity. $\%CO_2$ is not included in the calculations.

* ScaleSoftPitzer™ SSP2010

Comments: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Property Record Card

Eddy Assessor

STATE OF NEW MEXICO
310 OLD SANTA FE TRAIL
SANTA FE, NM 87504

Account: R092926
Tax Area: 16O_NR - ARTESIA-OUT (Nonresidential)
Acres: 0.000

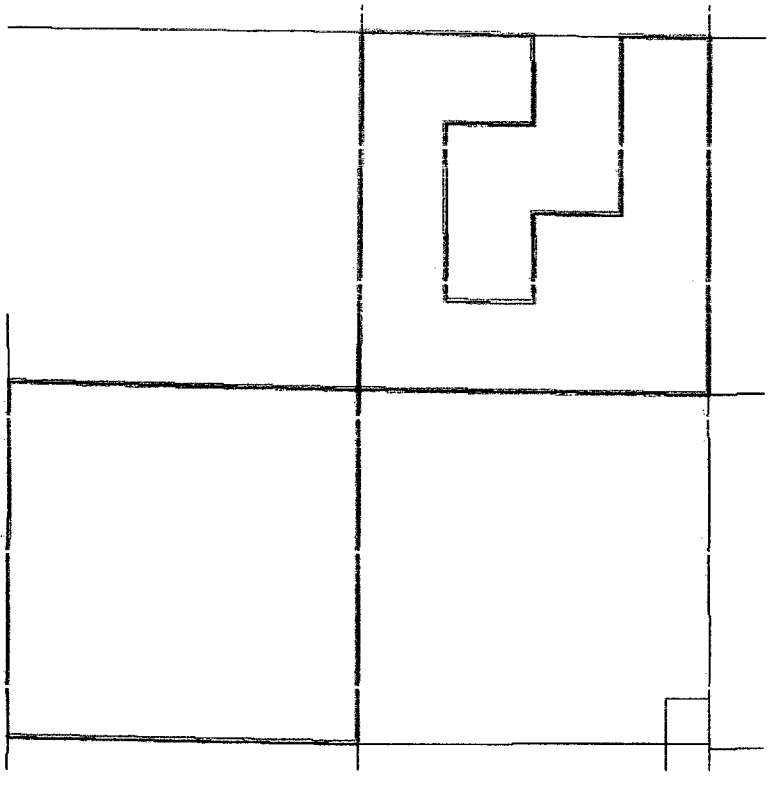
Parcel: 4-161-106-262-262
Situs Address:

Value Summary

Value By:	Market	Override
Land (1)	$1,719	N/A
Total	**$1,719**	**$1,719**

Legal Description

Quarter: NE S: 23 T: 18S R: 27E Quarter: NW S: 23 T: 18S R: 27E Quarter: SW S: 23 T: 18S R: 27E Quarter: SE S: 23 T: 18S R: 27E ALL MAP# 130-23 LOC ARTESIA EXEMPT



Land Occurrence 1

Property Code	9200 - EXEMPT NON-RESIDENTIAL LAND	Land Code	152_2_7 - Grazing D NM - 2.7

Abstract Summary

Code	Classification	Actual Value Value	Taxable Value	Actual Value Override	Taxable Override
9200	EXEMPT NON-RESIDENTIAL LAND	$1,719	$573	NA	NA
Total		**$1,719**	**$573**	**NA**	**NA**

CHOATE DAVIS 23 STATE #4

C-108 Item VI - Well Tabulation Penetrating Injection Zone in Review Area
Lime Rock Resources II-A, L.P.
Proposed Disposal Well

Operator	Well Name	API #	Cty	Footage	Sec	Twn	Rnge	Type	Status	Spud Date	Comp Date	TD	PBTD	Comp Zone	Comp Interval-Ft	Casing Program	Cement
MARBOB ENERGY CORP.	SCOGGINS DRAW FED #1	30-015-25750	Eddy	1980' FNL 1980' FWL	23	18S	27E	GAS	P&A 9/28/1994	5/27/87	7/9/87	10000	9923	RED LAKE ATOKA MORROW	9732'-78'	13-3/8" 54.5# @ 500' 8-5/8" 24# @ 2900' 5-1/2" 17# @ 10,PPP'	525 SX 1230 SX 1000 SX-TOC =6000' TS
YATES PETR. CORP.	BEAUREGARD ANM ST COM #1	30-015-27448	Eddy	1980' FSL 660' FWL	14	182	27E	GAS	P&A 9/2/2013	7/24/93	10/11/93	10100	10013	RED LAKE ATOKA MORROW	9633'-38'	13-3/8" 59.5# @ 370' 9-5/8" 36# @ 2190' 7" 26# @ 7559' 4-1/2"@7304'-10095'	750 sx 850 sx Circ 300 sx 365 sx

SCOGGINS DRAW FEDERAL COM #1

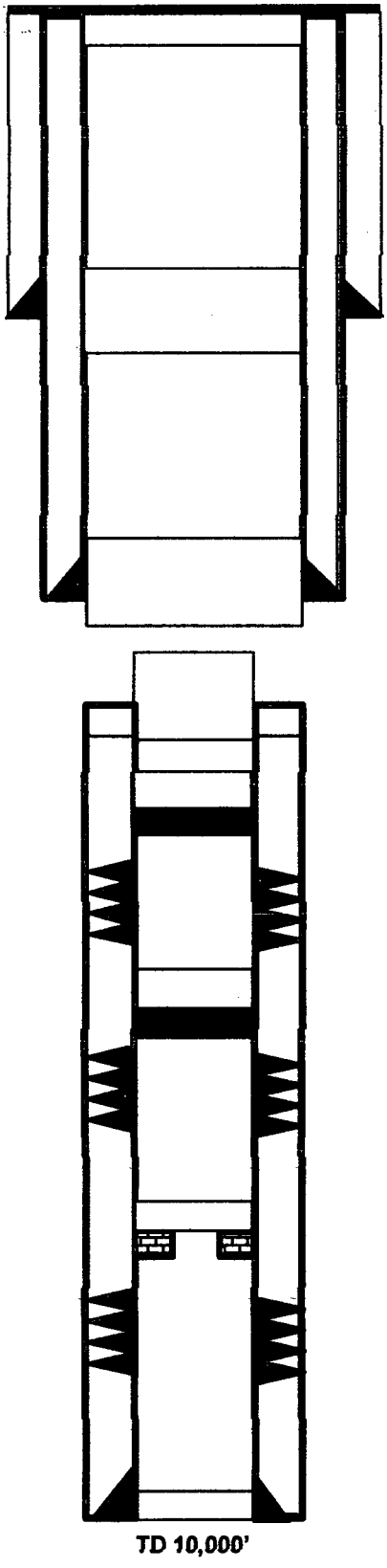
P&A 9/28/94

(F) Section 22, T-18-S, R-27-E, Eddy County, NM

Today's Date: 11/12/18
M. Pippin

OPERATOR – MARBOB ENERGY CORP

Elevation: 3417' GL



Spotted 15 sx @ Surface.

Spotted 30 sx across 13-3/8 shoe

13-3/8" 54.5# Csg @ 500'
Cmted w/525 sx, Circ. Cmt

Queen @ 1012'

Grayburg @ 1548'

San Andres @ 1810'

Spotted 30 sx across 8-5/8 shoe
2843'-2962'.

8-5/8" 24# Csg @ 2900'
Cmt w/1200 sx, Circ. Cmt

Glorieta @ 3511'

Cut & pull 5-1/2" csg from 5590'.
Spotted 30 sx cmt across 5-1/2" csg
stub 5527'-5643'.

Wolfcamp @ 6832'

Set 5-1/2" CIBP @ 8100' &
top w/35' cmt.

Canyon @ 8119'

Canyon Perfs @ 8142'-86'.
Not productive.

Strawn @ 8648'

Set 5-1/2" CIBP @ 8925' & top w/30' cmt.
TOC @ 8895'.

Strawn Perfs @ 8986'-9010'.
Not productive.

Atoka @ 9243'

Baker "F" PKR @ 9670' topped w/cmt to
9534'.

Morrow @ 9386'

Morrow Perfs @ 9732'-78'

Chester @ 9956'

5-1/2" 17# L-80 @ 10,000'
Cmt w/1000 sx.
TOC @ 6000'- TS

BEAUREGARD ANM STATE COM #1

P&A 9/2/13

(L) Section 14, T-18-S, R-27-E, Eddy County, NM

Today's Date: 11/12/18
M. Pippin

OPERATOR – YATES PETR CORP

Elevation: 3475' GL

17-1/2" Hole
To 370'

13-3/8" 54.5# J-55 Csg @ 370'
Cmted w/750 sx, No Circ.
TS @ 80', Filled w/ready mix

Spotted 72 sx cmt -~396' to Surface

San Andres @ 1786'

9-5/8" 36# J-55 Csg @ 2190'
Cmt w/850 sx, Circ. Cmt

Spotted 30 sx cmt across 9-5/8" shoe
TOC @ 2066'

12-1/4" Hole
To 2190'

Spotted 25 sx cmt on top of cmt ret
TOC @ 3399'

Glorieta @ 3402'

7" cmt ret @ 3548' & SQ w/ 1100 cmt +
26 bbls cmt + 404 sx cmt

Abo @ 5066'

Tight spot @ 6635'

TOC @ 6620' - TS

Spotted 50 sx "H" cmt across liner top.
TOC @ 7105' TS

8-3/4" Hole
To 7559'

4-1/2" Liner Top @ 7312'

7" 26# L-80 Csg @ 7559', Cmt w/300 sx

Strawn @ 8745'

Spotted 25 sx "H" cmt 9466'-
9137'. Per Randy Dade
w/NMOCD

Atoka @ 9257'

Morrow @ 9618'

Cut 2-3/8" tbg @ 9485'. Left 78'
tbg & pkr in hole.

Morrow Perfs @ 9633'-38'

Morrow Perfs @ 9726'-36'
SQ w/50 sx cmt

Chester @ 9940'

6-1/8" Hole
To 10,100'

4-1/2" 11.6# N-80 Liner @ 10,095',
Cmt w/365 sx, Circ Cmt

TD 10,100'

LIME ROCK RESOURCES II-A, L.P.
Mike Pippin
3104 N. Sullivan Avenue
Farmington, NM 87401
505-327-4573 (phone) mike@pippinllc.com

November 19, 2018

RE: C-108 Application for SWD Well
CHOATE DAVIS 23 STATE #4, 30-015-45445
Unit Letter D Section 23 T18S R27E
Eddy County, New Mexico

VIA CERTIFIED MAIL
To all Interest Owners:

In accordance with the New Mexico Oil Conservation Division Rule 19.15.26.8 governing water disposal wells, you are hereby notified that LIME ROCK RESOURCES II-A, L.P. as operator of the above-referenced well, has submitted an application to permit the referenced well for produced water disposal in the Lower Abo, Wolfcamp, and Cisco.

An APD (C-101) for this well has been submitted to the State for approval. All wells in the area of review that penetrated the proposed disposal interval (2 wells) have been P&Aed and have good cement throughout.

Any objections or requests that a hearing be held regarding this application must be submitted within 15 days to the NMOCD at 1220 South St. Frances Drive, Santa Fe, NM 87505.

Should you have any questions or concerns, please contact me at 505-327-4573 and/or the NMOCD at 505-476-3467.

Sincerely,
LIME ROCK RESOURCES II-A, L.P.

Mike Pippin PE
Petroleum Engineer

Enclosures

APPLICATION FOR SWD
OFFSET OPERATORS WITHIN 1/2 MILE OF
CHOATE DAVIS 23 STATE COM #4
LIME ROCK RESOURCES II-A, L.P.

OGRID	OPERATOR	ADDDRESS
371978	SELLERS&FULTON OIL LLC	422 W MAIN, STE. 5, PO BOX 1176, ARTESIA, NM 88210
371484	ROVER OPERATING, LLC	55 OLD SANTA FE TRAIL, SANTA FE, NM 87501
25575	EOG Y RESOURCES, INC.	104 S 4TH ST., ARTESIA, NM 88210
280554	CFM OIL, LLC	PO BOX 1176, ARTESIA, NM 88210

Affidavit of Publication

No. 24912

State of New Mexico

County of Eddy:

Danny Scott Danny Scott

being duly sworn says that he 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 1 Consecutive weeks/day on the same day as follows:

First Publication: November 16, 2018

Second Publication:

Third Publication:

Fourth Publication:

Fifth Publication:

Sixth Publication:

Seventh Publication:

Subscribed and sworn before me this

16th day of November 2018

OFFICIAL SEAL
Latisha Romine
NOTARY PUBLIC-STATE OF NEW MEXICO
My commission expires: 5/12/2019

Latisha Romine

Latisha Romine

Notary Public, Eddy County, New Mexico

Copy of Publication:

Legal Notice

CHOATE DAVIS 23 STATE SWD #4 --
SWD Application – Form C-108

LIME ROCK RESOURCES II-A, L.P., 1111 Bagby St, Suite 4600, Houston, TX 77002, contact: Mike Pippin 505-327-4573 is seeking administrative approval from the NMOCD for produced water disposal: CHOATE DAVIS 23 STATE #4 is located in Sec 23, T18S, R27E, 570' FNL & 750' FWL, Eddy County, NM. Proposed injection interval is the Abo, Wolfcamp and Cisco formations with perforations from about 5055' through the open hole to a TD of 8700' with an estimated maximum daily injection volume of produced formation water of 10,000 bbls per day and a maximum injection pressure of 1506 psi. Any objections regarding this application must file their objections or request for hearing with the NMOCD, 1220 South St. Frances Drive, Santa Fe, NM 87505 within 15 days.

Published in the Artesia Daily Press, Artesia, N.M., Nov. 16, 2018 Legal No. 24912.

LIME ROCK RESOURCES II-A, L.P.
c/o Mike Pippin LLC
505-327-4573 (phone)
Email: mike@ pippinllc.com

LEGAL NOTICE

CHOATE DAVIS 23 STATE SWD #4 -- SWD Application – Form C-108

LIME ROCK RESOURCES II-A, L.P., 1111 Bagby St, Suite 4600, Houston, TX 77002, contact: Mike Pippin 505-327-4573 is seeking administrative approval from the NMOCD for produced water disposal: CHOATE DAVIS 23 STATE #4 is located in Sec 23, T18S, R27E, 570' FNL & 750' FWL, Eddy County, NM. Proposed injection interval is the Abo, Wolfcamp and Cisco formations with perforations from about 5055' through the open hole to a TD of 8700' with an estimated maximum daily injection volume of produced formation water of 10,000 bbls per day and a maximum injection pressure of 1506 psi. Any objections regarding this application must file their objections or request for hearing with the NMOCD, 1220 South St. Frances Drive, Santa Fe, NM 87505 within 15 days.

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City, State, ZIP+4®: Artesia NM 88210

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HOLLYFRONTIER.

June 27, 2017

Mr. David Catanach
Division Director
NMOCD
1220 South St. Francis Drive
Santa Fe, NM 87501

Via Email and Federal Express

RE: REQUEST BY HOLLYFRONTIER TO DENY LIME ROCK'S REQUEST TO INCREASE INJECTION PRESSURES AT FEDERAL T SWD#1 (API # 30-015-26404)

Dear Director Catanach,

On May 8, 2017 Lime Rock Resources II-A L.P. (Lime Rock) requested from the New Mexico Oil Conservation Department (NMOCD) an injection pressure increase for their existing permitted (Order SWD-1135, approved July 16, 2008) salt water disposal well (Federal T SWD #1; API # 3001526404). Their request asks for an increase from the original maximum allowable operating pressure (MAOP) of 1,480 psig to 2,681 psig. Lime Rock's injection pressure increase (IPI) request is based on and relies on the results of a step rate test performed on this well on May 3, 2017. For the reasons detailed below, HollyFrontier Navajo Refining LLC (HFNR) objects to the requested pressure increase and respectfully requests that NMOCD deny Lime Rock's request.

BACKGROUND

On June 23, 2004 Navajo Refining Company (now HFNR) received from the NMOCD their Approval for Discharge Permit UIC-CLI-008-3 for a Class I non-hazardous waste disposal well (WDW-3; API # 3001526575) to dispose of wastewater from the Navajo Refinery in Artesia, New Mexico. This well is located 790 FSL and 2250 FWL of Section 1, T18S, R27E in Eddy County, New Mexico.

As seen in Figure 1, there are only approximately 2,500 feet separating HNFR's WDW-3 from Lime Rock's Federal T SWD #1, and both wells have completions in the same Cisco zone. The Federal T SWD #1 perforations in the Cisco Formation range from 7,685' to 8,060', and the WDW-3 Cisco perforations run from 7,666' to 8,620'. This overlap allows pressure fronts (and fluids) to migrate from the Lime Rock SWD to HNFR's WDW-3, potentially impairing the function of WDW-3.

HNFR's permit has a maximum allowable operational pressure (MAOP) of 1,550 psig, with no specific limit on the amounts of wastewater injected. From 2008 to 2016, the well (WDW-3; API# 3001526575) has injected an average of approximately 152,000 barrels of wastewater per month. The WDW-3 well is a group of three Class I wells operated by HNFR (WDW-1; API # 3001527592 and WDW-2; API # 3001520894) that also receive non-hazardous wastewater from the HFNR Refinery.

3: Significantly Higher Effort and Expense by the Regulators and the Operator are Required to Permit a Class I Non-Hazardous Well versus a Standard Class II SWD Well

The NMOCD, USEPA Region 6, and HFNR spent significant technical effort, professional time, and costs to perform the analyses required to permit this Class I non-hazardous injection well. This level of investment far exceeds the efforts required to permit a SWD such as Federal T SWD#1.

4: WDW-3 Is Critical to the HFNR Refinery Operations

HFNR operates, in addition to WDW-3, two additional Class I disposal wells (WDW-1 and WDW-2), all permitted under the NMOCD UIC program. These wells accept non-exempt, non-hazardous wastewaters from the Refinery, at average total amounts of approximately 15,000 barrels per day, roughly equally distributed among the 3 wells. HFNR has no other current options for disposing of this wastewater, and loss of service of even one of these wells would severely reduce refinery throughput leading to losses of jobs, and diminished revenues for HFNR, contracted operators, and the State.

5: Both the Lime Rock and HFNR Injection Wells Share the Same, Continuous Reservoir

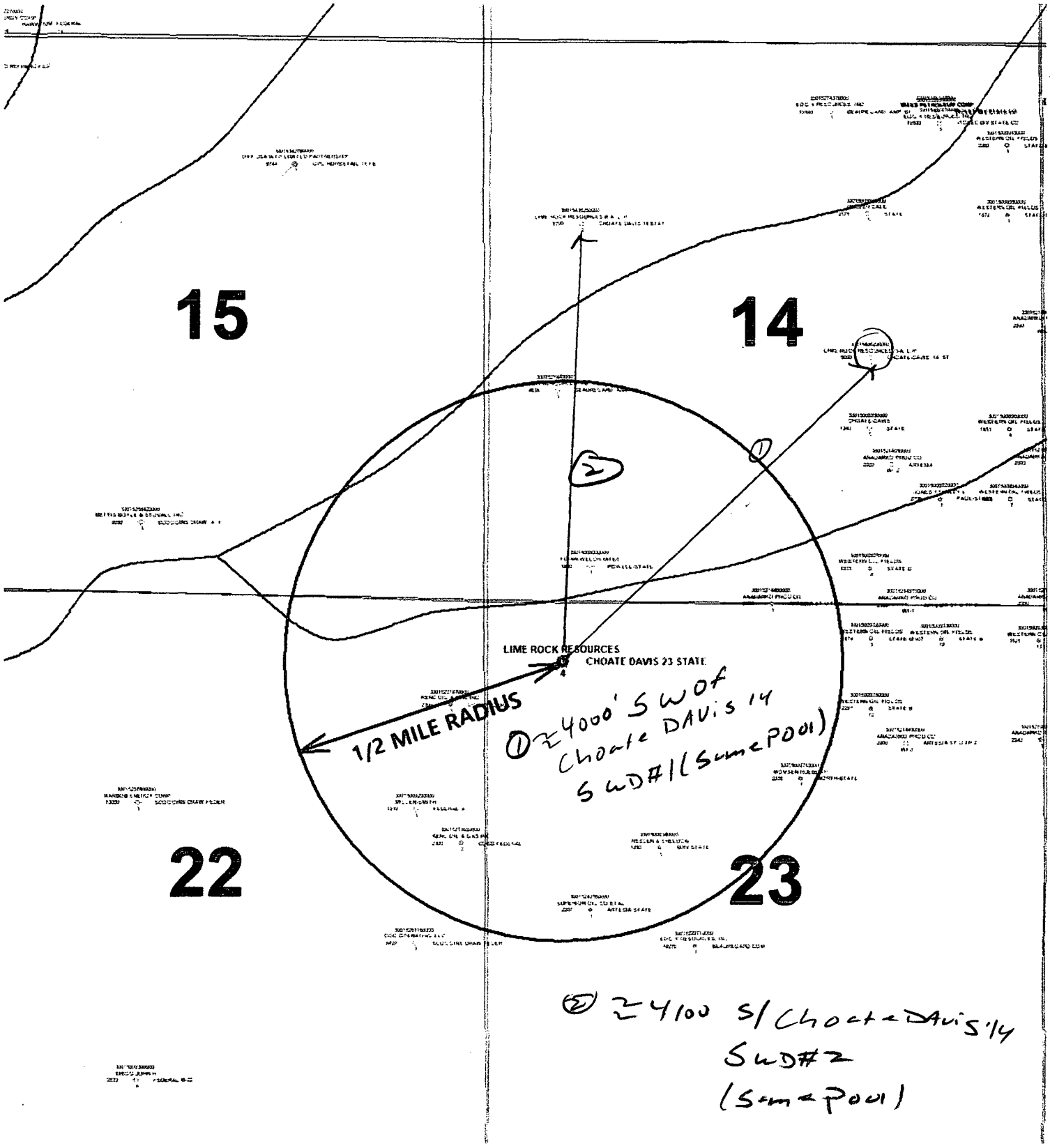
Figure 2 is a cross-section showing the geology of injection zones of WDW-3 and Federal T SWD#1. There is clearly an overlap of the injection zones in the Cisco Formation, the lithologies of the Cisco are very similar, and it is clear that there are no stratigraphic or structural barriers between the wells. This direct connection will ensure that increased injection pressure in the Federal T SWD #1 will result in the migration of a pressure wave to WDW-3 that will negatively affect HFNR's ability to stay within their approved MAOP of 1,550 psig surface.

6: Increased Injection Pressure by Lime Rock will Raise Reservoir Pressure at WDW-3

Lime Rock proposes to increase the MAOP of their Federal T SWD #1 from 1,480 to 2,681 psig, an increase of approximately 1,200 psig, or over 180% of the current limit. Currently, the HFNR well WDW-3 has seen an annual injection average of 1,315 psig, only 235 psig below their MAOP of 1,550 psig. Only approximately 20% of Lime Rock's requested increase would push reservoir pressures above HFNR's MAOP, making WDW-3 inoperable. If the requested pressure increase is approved, the overlapping perforations in the Cisco Formation, 7,685' to 8,060' in the Federal T SWD #1, and 7,666' to 8,620' in the WDW-3, will allow pressure fronts (and fluids) to migrate from the Lime Rock SWD to HFNR's WDW-3, impairing or precluding successful injection in the WDW-3.

CONCLUSIONS

In summary, HFNR respectfully requests the NMOCD deny Lime Rock's application for an injection pressure increase for their Federal T SWD #1 for the reasons detailed above. However, should NMOCD see fit to grant this pressure increase, HFNR requests that a corresponding pressure increase be immediately granted to wells WDW-1, WDW-2, and WDW-3, that are completed in the same injection zone.



1 inch = 1320 feet

1320 0 1320 ft

LIME ROCK RESOURCES

EAST ARTESIA AREA
CHOATE DAVIS 23 STATE 4

Author: <name>		Date: 5 November 2015
	Scale: <scale>	

LIME ROCK RESOURCES II-A, L.P.
Mike Pippin PE
3104 N. Sullivan Avenue
Farmington, NM 87401
505-327-4573 (phone) mike@pippinllc.com

December 17, 2018

Mike McMillan
NMOCD
1220 South St. Francis Drive
Santa Fe, NM 87505

RE: C-108, SWD APPLICATIONS
CHOATE DAVIS 13 STATE #3 – API#: 30-015-45444
CHOATE DAVIS 23 STATE #4 – API#: 30-015-45445
Eddy County, New Mexico

Dear Mr. McMillan,

LIME ROCK RESOURCES II-A, L.P. as operator of the above-referenced wells, is submitting these applications to permit the referenced wells for produced water disposal in the Lower Abo-Wolfcamp-Cisco (97967).

As you requested, the NMSLO has now been notified. In addition, I have emailed a copy of the applications to Faith Crosby with the NMSLO as per her request.

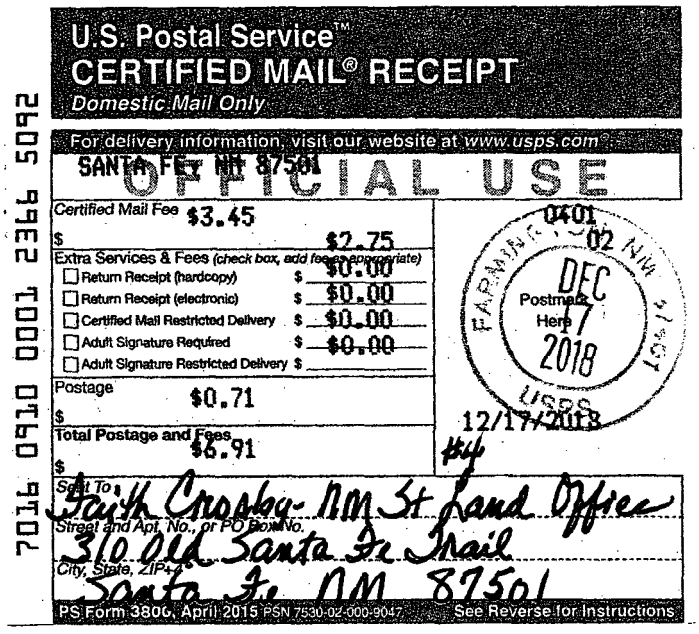
An APDs (C-101) for these wells have been approved.

Should you have any questions, please contact me at 505-327-4573.

Very truly yours,

Mike Pippin

Petroleum Engineer



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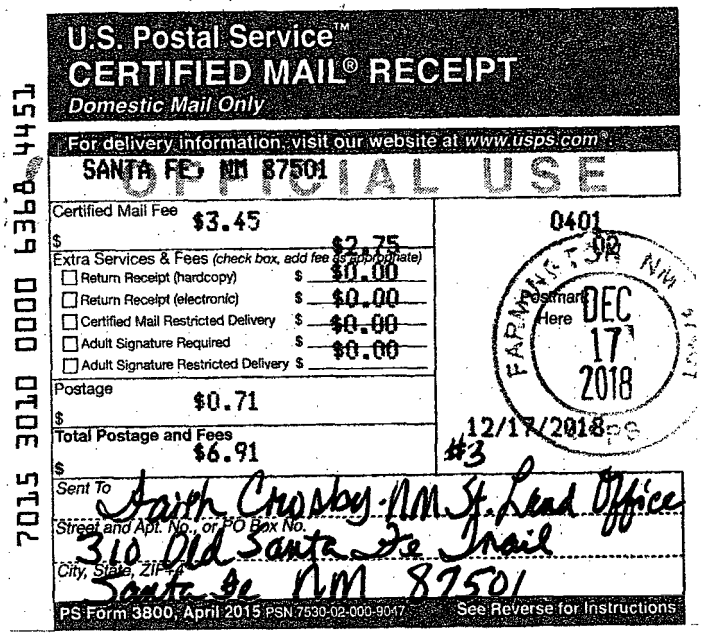
Sent To: Faith Crosby - NM St Land Office
Street and Apt. No., or PO Box No.: 310 Old Santa Fe Trail
City, State, ZIP+4: Santa Fe NM 87501

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

7016 0910 0001 2366 5092



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#3

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City, State, ZIP+4: Santa Fe NM 87501

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

7015 3010 0000 6368 4451

McMillan, Michael, EMNRD

From: McMillan, Michael, EMNRD
Sent: Monday, December 10, 2018 11:26 AM
To: Mike Pippin
Subject: Lime Rock Resources Choate Davis 23 State Well No. 4

Mike:
Based on OCD records, the surface owner is the NMSLO-I did not see proof of mailing to them. You notified BLM.

Your application is suspended until you can provide proof of mailing to the NMSLO

Mike

Michael McMillan
1220 South St. Francis
Santa Fe, New Mexico
505-476-3448
Michael.mcmillan@state.nm.us

FORM C-108 Technical Review Summary [Prepared by reviewer and included with application; V16.2]

DATE RECORD: First Rec:______ **Admin Complete:** ______ **or Suspended:** 12/10/20V Add. Request/Reply:______

ORDER TYPE: WFX / PMX / SWD Number: ______ Order Date: ______ Legacy Permits/Orders: ______

Well No. 4 Well Name(s): Choate Davis 23 State

API : 30-0 15-45445 Spud Date: ______ New or Old (EPA): N (*UIC Class II Primacy 03/07/1982*)

Footages 570 FNL 750 FWL Lot____ or Unit D Sec 23 Tsp 18S Rge 27E County Eddy

General Location: 2.5 miles SE/Artesia Pool: SWD; Abo-Wolfcamp-Cisco Pool No.: 97962

BLM 100K Map: Artesia Operator: Limerock Resources II-A, LP OGRID: 277558 Contact: Mike Pippin, Agent

COMPLIANCE RULE 5.9: Total Wells:______ Inactive:______ **Fincl Assur:**______ Compl. Order?______ **IS 5.9 OK?**____ **Date:**______

WELL FILE REVIEWED ○ Current Status: Proposed

WELL DIAGRAMS: NEW: Proposed ○ or **RE-ENTER:** Before Conv. ○ After Conv. ○ Logs in Imaging: N/A

Planned Rehab Work to Well: ______

Well Construction Details	Sizes (in) Borehole / Pipe	Setting Depths (ft)		Cement Sx or Cf	Cement Top and Determination Method
Planned __or Existing __Surface	17 1/2"/13 3/8"	300	Stage Tool	350	Surface/Visual
Planned__or Existing __ Interm/Prod	12 1/4"/9 5/8"	2800		845	Surface/Visual
Planned__or Existing __Interm/Prod	8 3/4"/7"	7530		~~[illegible]~~ 1250	Surface/Visual
Planned__or Existing __ Prod/Liner					
Planned__or Existing __ Liner					
Planned__or Existing __(2) (1) OH / PERF	(1) 6375/7530 (2) 7530/8700		Inj Length		

Injection Lithostratigraphic Units:	Depths (ft)	Injection or Confining Units	Tops
Adjacent Unit: Litho. Struc. Por.		Abo	5055
Confining Unit: Litho. Struc. Por.		WC	6520
Proposed Inj Interval TOP:		CS	7530
Proposed Inj Interval BOTTOM:			
Confining Unit: Litho. Struc. Por.			
Adjacent Unit: Litho. Struc. Por.			

Completion/Operation Details:

Drilled TD 8700 PBTD ______

NEW TD ______ NEW PBTD ______

NEW Open Hole ○ or NEW Perfs ○

Tubing Size 4 1/2 in. Inter Coated? ______

Proposed Packer Depth ~~[illegible]~~ ft 6325

Min. Packer Depth 6275' (100-ft limit)

Proposed Max. Surface Press. 1506 psi

Admin. Inj. Press. 1275 (0.2 psi per ft)

AOR: Hydrologic and Geologic Information

POTASH: R-111-P N/A Noticed?____ **BLM Sec Ord** ○ **WIPP** ○ *Noticed?*____ **Salt/Salado** T:____B:____ **NW: Cliff House fm**____

FRESH WATER: Aquifer Artesia Max Depth 120' **HYDRO AFFIRM STATEMENT By Qualified Person** ○

NMOSE Basin: Roswell Artesia **CAPITAN REEF:** thru____ adj____ NA____ **No. GW Wells in 1-Mile Radius?** 1 FW Analysis? NA Dublin Ranch Well

Disposal Fluid: Formation Source(s) San Andres Yeso Analysis? Y On Lease ○ Operator Only ⊘ or Commercial ○

Disposal Interval: Inject Rate (Avg/Max BWPD): 8K/10K Protectable Waters? N/A Source:______ System: (Closed) or Open

HC Potential: Producing Interval? N/A Formerly Producing?______ Method: Logs/DST/P&A/Other regional 2-Mi Radius Pool Map ○

AOR Wells: 1/2-M Radius Map and Well List? Y **No. Penetrating Wells:** (2) [AOR Horizontals:______ AOR SWDs:______]

Penetrating Wells: No. Active Wells 2 Num Repairs?____ on which well(s)?______ Diagrams?______

Penetrating Wells: No. P&A Wells 0 Num Repairs?____ on which well(s)?______ Diagrams? X

NOTICE: Newspaper Date NOV 16, 2018 Mineral Owner NMSLO Surface Owner NMSLO N. Date ______

RULE 26.7(A): Identified Tracts? ______ Affected Persons: CFM, EOG-Y, Sellers & Fulton Ranch N. Date 11-14-2018

Order Conditions: Issues: (1) Circulate All strings Surface, SL, Ab test

Additonal COAs:______

HollyFrontier Class 1 Wells: Active Disposal Wells Within One-Mile AORs (All three Class 1 wells)