

3/09/2015 DATE IN	SUSPENSE	PN6 ENGINEER	3/10/2015 LOGGED IN	SCD TYPE	PM441506935352 APP NO.
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ABOVE THIS LINE FOR DIVISION USE ONLY

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



ADMINISTRATIVE APPLICATION CHECKLIST

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

Application Acronyms:

[NSL-Non-Standard Location] [NSP-Non-Standard Proration Unit] [SD-Simultaneous Dedication]
[DHC-Downhole Commingling] [CTB-Lease Commingling] [PLC-Pool/Lease Commingling]
[PC-Pool Commingling] [OLS - Off-Lease Storage] [OLM-Off-Lease Measurement]
[WFX-Waterflood Expansion] [PMX-Pressure Maintenance Expansion]
[SWD-Salt Water Disposal] [IPI-Injection Pressure Increase]
[EOR-Qualified Enhanced Oil Recovery Certification] [PPR-Positive Production Response]

*PM 4/8/15 - 1220
Dev 2/14/15*

[1] **TYPE OF APPLICATION** - Check Those Which Apply for [A]

[A] Location - Spacing Unit - Simultaneous Dedication
☐ NSL ☐ NSP ☐ SD

*- SCD - 1544
- LYNX Petroleum Consultants Inc
13645*

Check One Only for [B] or [C]

[B] Commingling - Storage - Measurement
☐ DHC ☐ CTB ☐ PLC ☐ PC ☐ OLS ☐ OLM

- well

[C] Injection - Disposal - Pressure Increase - Enhanced Oil Recovery
☐ WFX ☐ PMX ☐ SWD ☐ IPI ☐ EOR ☐ PPR

*- Moonshine State Unit #1
30025-31395*

[D] Other: Specify _____

[2] **NOTIFICATION REQUIRED TO:** - Check Those Which Apply, or Does Not Apply

[A] ☐ Working, Royalty or Overriding Royalty Interest Owners

[B] ☐ Offset Operators, Leaseholders or Surface Owner

[C] ☐ Application is One Which Requires Published Legal Notice

[D] ☐ Notification and/or Concurrent Approval by BLM or SLO
U.S. Bureau of Land Management - Commissioner of Public Lands, State Land Office

[E] ☐ For all of the above, Proof of Notification or Publication is Attached, and/or,

[F] ☐ Waivers are Attached

*Pool
- SCD, Devonian
96101*

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

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

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

LARRY B. SCOTT
Print or Type Name

SEE APPLICATION FOR AUTHORIZATION TO INJECT
Signature

President
Title

JANUARY 14, 2015
Date

e-mail Address

APPLICATION FOR AUTHORIZATION TO INJECT

RECEIVED OOD

- I. PURPOSE: Secondary Recovery Pressure Maintenance X Disposal Storage
Application qualifies for administrative approval? Yes No 2015 MAR -9 P 3:17
- II. OPERATOR: Lynx Petroleum Consultants, Inc.
ADDRESS: P.O. Box 1708 Hobbs, NM 88241
CONTACT PARTY: Wes Shields PHONE: 575-392-6950
- III. WELL DATA: Complete the data required on the reverse side of this form for each well proposed for injection.
Additional sheets may be attached if necessary.
- IV. Is this an expansion of an existing project? Yes X No
If yes, give the Division order number authorizing the project: _____
- V. Attach a map that identifies all wells and leases within two miles of any proposed injection well with a one-half mile radius circle drawn around each proposed injection well. This circle identifies the well's area of review.
- VI. Attach a tabulation of data on all wells of public record within the area of review which penetrate the proposed injection zone. Such data shall include a description of each well's type, construction, date drilled, location, depth, record of completion, and a schematic of any plugged well illustrating all plugging detail.
- VII. Attach data on the proposed operation, including:
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.
- 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: Larry R. Scott TITLE: President
SIGNATURE: *Larry R. Scott* DATE: 01/14/2015
E-MAIL ADDRESS: weshields@leaco.net or lrscott@leaco.net
- * 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.

Moonshine State No. 1
Form C-108 Additional Data

- III. Data sheet is attached as Exhibit 'A'. A schematic of the current wellbore status is attached as Exhibit 'B'. A schematic of the "as completed" disposal well is attached as Exhibit 'C'.
- IV. This is a new project
- V. Map is attached as Exhibit 'D'.
- VI. No other wells penetrate the proposed injection interval within the area of review.
- VII. Data on the proposed operations:
1. Average daily rate: 7500 bbls.; Maximum daily rate: 15000 bbls.
 2. The system will be closed
 3. Average injection pressure: 300 psig; Maximum injection pressure: 1500 psig
 4. As this is proposed to be a commercial operation the source of injected fluid could be water produced from any of the formations in the vicinity including but not limited to Yates, Sever Rivers, Queen, Grayburg, San Andres, Delaware, and Bone Springs.
 5. The South Vacuum Devonian field is located approximately 4 miles northwest in Township 18S, Range 35E. The producing interval is 11,550' to 11,750'. A water analysis published by the Roswell Geological Society for the South Vacuum Devonian field is attached as Exhibit 'E'.
- VIII. Injection will be into the Devonian horizon in the interval 11,850'-12,250'. The interval consists of limestone and dolomite. A well log with formation tops named above the injection interval is attached as Exhibit 'F'. A search of the New Mexico State Engineer's Waters database reveals water wells as shown in Exhibit 'G'. Sample analyses from two wells in the immediate vicinity are shown in Exhibits "H1" and "H2".
- IX. The open hole interval 11,850'-12,250' will be stimulated with 5000 gallons 15% HCL-NE-FE acid.
- X. Logs and test data for this wellbore have been previously submitted.
- XI. Please see VIII above.
- XII. I have examined all available geologic and engineering data surrounding this wellbore and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground sources of drinking water.
- XIII. Proof of notice return receipts are attached.

By: Larry R. Scott
Larry R. Scott

Date: 1-14-2015

INJECTION WELL DATA SHEET

OPERATOR: Lynx Petroleum Consultants, Inc.WELL NAME & NUMBER: Moonshine State No. 1

WELL LOCATION: <u>990'FNL & 1650'FWL</u>	<u>C</u>	<u>10</u>	<u>19S</u>	<u>36E</u>
FOOTAGE LOCATION	UNIT LETTER	SECTION	TOWNSHIP	RANGE

WELLBORE SCHEMATIC

Please see Exhibits 'B' and 'C'
for current and projected
"as completed" wellbore schematics.

WELL CONSTRUCTION DATASurface Casing

Hole Size: 17" Casing Size: 13-3/8"
 Cemented with: 400 sx. *or* _____ ft³
 Top of Cement: Surface Method Determined: Circulated

Intermediate Casing

Hole Size: 11" Casing Size: 8-5/8"
 Cemented with: 1250 sx. *or* _____ ft³
 Top of Cement: Surface Method Determined: Circulated

Production Casing

Hole Size: 7-7/8" Casing Size: 5-1/2"
 Cemented with: _____ sx. *or* _____ ft³
 Top of Cement: _____ Method Determined: _____
 Total Depth: _____

Injection Interval

must clarify depths → 11,550 feet to 11,750

INJECTION WELL DATA SHEET

Tubing Size: 3-1/2" Lining Material: Plastic

Type of Packer: Nickel Plated AS-1X or equivalent

Packer Setting Depth: 11,900'

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

Additional Data

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

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

2. Name of the Injection Formation: Devonian

3. Name of Field or Pool (if applicable): Well originally drilled as wildcat

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; No production pipe run on dry hole

5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area: None underlying; None overlying within area of review

Exhibit 'B'
Existing Plugged & Abandoned Wellbore
01/12/2015

Elevation: 3784'GL KB: +17'

17-1/2" Hole

378' - 13 3/8", J-55, 54.5#, ST&C Casing
Cemented w/400 sxs. Circulated to Surf.

11" Hole

4001' - 8-5/8", HC-80 & J-55, 32#, ST&C Casing.
Cemented w/1250 sxs. Circulated to Surface

7-7/8" Hole

Cement Plugs 12,000'-12,100', 9,411'-9,511',
6,548'-6,648', 3,950'-4,050', 1,686'-1,786',
& Surface

T.D. @ 12100'

Exhibit B

Lynx Petroleum Cons.
Moonshine St. No. 1
990' FNL & 1650' FWL
Sec. 10, T-19S, R-36E
Lea County, N.M.

Exhibit 'C'
As Completed Disposal Wellbore
01/25/2015

Elevation: 3784'GL KB: +17'

17-1/2" Hole

378' - 13 3/8", J-55, 54.5#, ST&C Casing
Cemented w/400 sxs. Circulated to Surf.

11" Hole

4100' - 8-5/8", HC-80 & J-55, 32#, ST&C Casing.
Cemented w/1250 sxs. Circulated to Surface

7-7/8" Hole

11,750' 3-1/2", 10.3#, N-80 Hydril CS or equivalent
Plastic coated

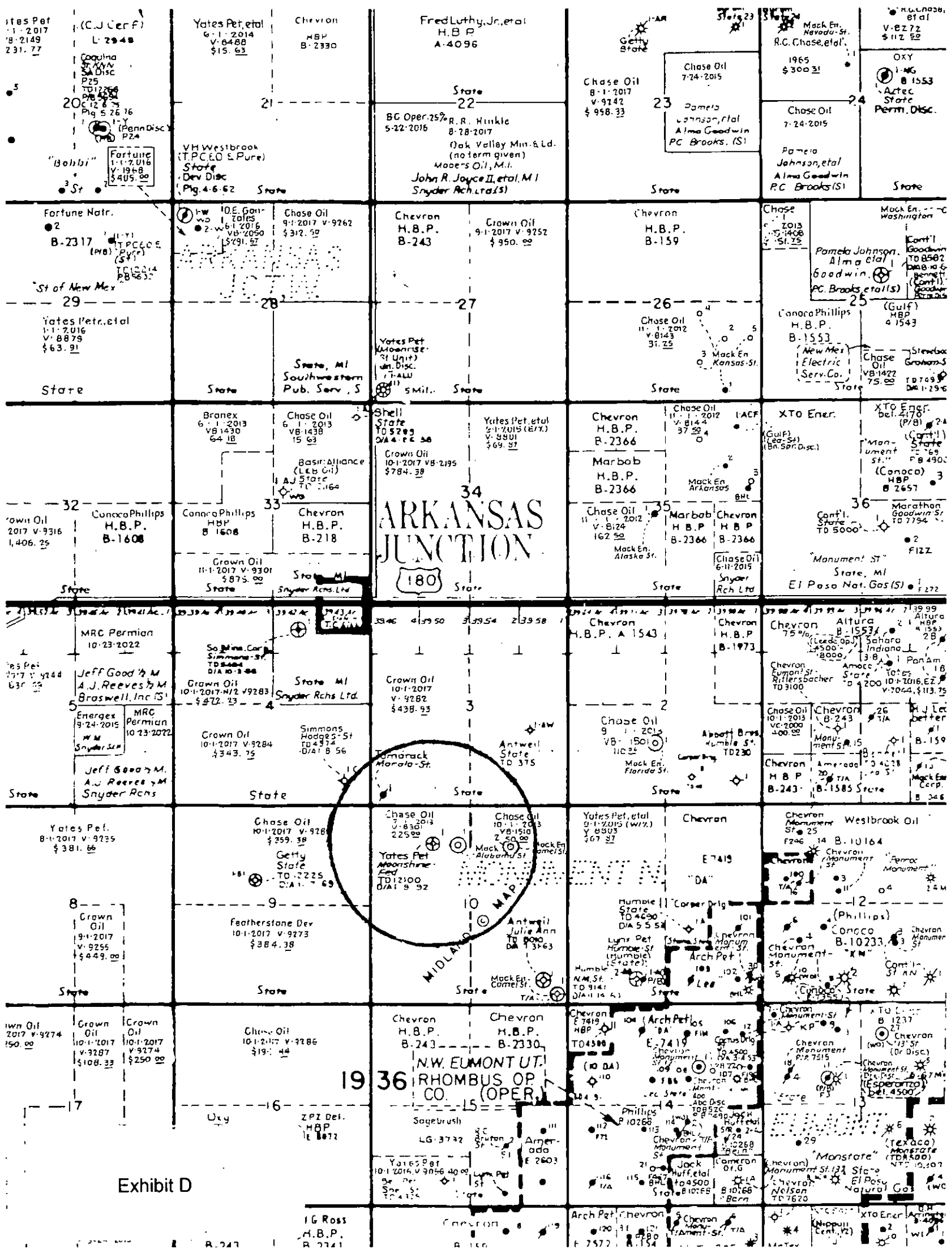
AS-1X Nickel plated packer or equivalent

11850' - 5 1/2", 17#, N-80, LT&C
Cement w/1400 sx. to tie back into 8-5/8" casing
TOC @ 3500'

T.D. @ 12250'

Exhibit C

Lynx Petroleum Cons.
Moonshine St. No. 1
990' FNL & 1650' FWL
Sec. 10, T-19S, R-36E
Lea County, N.M.



Data prepared by: G. E. Upp
 Affiliation: Mobil Oil Company
 Date: July 15, 1960

Field Name: South Vacuum Devonian
 Location: T.18 S., R. 35 E.
 County & State: Lea Co., N. Mex.
 Unit

DISCOVERY WELL: Union of Calif. #1-35 South Vacuum/COMPLETION DATE: Jan 26, 1958
 PAY ZONE: Devonian dolomite, fine to coarse crystalline, light gray to white, fractured, with vuggy and intercrystalline porosity.

TYPICAL CORE ANALYSIS OF A PAY INTERVAL IN THIS FIELD:

Perm. in millidarcys		% Porosity	Liquid Saturation (% of pore space)	
Horizontal	Vertical		Water	Oil
116	86	5.9	32.3	25.3

OTHER SHOWS ENCOUNTERED IN THIS FIELD: Bone Spring (See South Vacuum-Bone Spring data sheet), Wolfcamp, Pennsylvanian, McKee.

TRAP TYPE: Faulted Anticline
 NATURE OF OIL: Gravity 48° API
 NATURE OF GAS: Sweet
 NATURE OF PRODUCING ZONE WATER:

						Resistivity: 0.26		ohm-meters @ 68 °F.			
	Total Solids	Na+K	Ca	Mg	Fe	SO ₄	Cl	CO ₂	HCO ₃	OH	H ₂ S
ppm	27121	4868	3996	783	2	1444	15504				

INITIAL FIELD PRESSURE: 4800 psi

TYPE OF DRIVE: Water Drive

NORMAL COMPLETION PRACTICES: Set casing through pay zone, perforate and acidize if necessary.

PRODUCTION DATA:

Year	Type	No. of wells @ yr. end		Production Oil in barrels Gas in MMCF	
		Producing	Shut in or Abnd.	Annual	Cumulative
1956	oil				
	gas				
1957	oil				
	gas				
1958	oil	4		139,773	139,773
	gas			7.6	7.6
1959	oil	10		442,257	592,663
	gas			35.9	43.5
1960*	oil	13		335,173	927,836
	gas			26.5	70.0

* 1960 Figure is production to July 1, 1960.

Lynx Petroleum Consultants, Inc.

P.O. Box 1708

3325 Enterprise Drive

Hobbs, New Mexico 88241

575 392-6950

Fax: 575 392-7886

January 15, 2015

Moonshine State No. 1

Offset Operators/Leaseholders/Surface Owners

Re: Application for Authority to Inject

Moonshine State No. 1

Unit Letter C, Section 10, T-19S, R-36E

Lea County, New Mexico

Gentlemen:

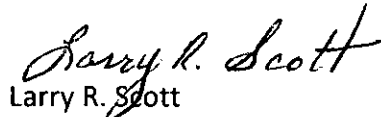
Lynx Petroleum Consultants, Inc. is submitting an application to the New Mexico Oil Conservation Division for an Authorization to Inject produced water into the above referenced wellbore which is currently plugged and abandoned.

The full application with all of the details of the proposed operation is included with this letter for your review. Objections to the application should be submitted to the Division Director, Oil Conservation Division, 1220 South St. Francis Drive, Santa Fe, NM 87505 within 15 days of your receipt of this packet.

Questions regarding this proposal may be directed to Wes Shields or me at any of the letterhead contacts.

Sincerely,

LYNX PETROLEUM CONSULTANTS, INC.



Larry R. Scott
President

INSTRUCTIONS

This form is to be filed with the appropriate District Office of the Division not later than 20 days after the completion of any newly-drilled or deepened well. It shall be accompanied by one copy of all electrical and radio-activity logs run on the well and a summary of all special tests conducted, including drill stem tests. All depths reported shall be measured depths. In the case of directionally drilled wells, true vertical depths shall also be reported. For multiple completions, Items 25 through 29 shall be reported for each zone. The form is to be filed in quintuplicate except on state land, where six copies are required. See Rule 1105.

INDICATE FORMATION TOPS IN CONFORMANCE WITH GEOGRAPHICAL SECTION OF STATE

Southeastern New Mexico				Northwestern New Mexico			
T. Rustler	1736	T. Canyon		T. Ojo Alamo		T. Penn. "B"	
T. Anhy		T. Strawn	10515	T. Kirtland-Fruitland		T. Penn. "C"	
T. Salt		T. Atoka		T. Pictured Cliffs		T. Penn. "D"	
B. Salt		T. Miss Lime	11090	T. Cliff House		T. Leadville	
T. Yates	3142	T. Devonian Lime	11934	T. Menefee		T. Madison	
T. 7 Rivers		T. Silurian		T. Point Lookout		T. Elbert	
T. Queen	4277	T. Montoya		T. Mancos		T. McCracken	
T. Grayburg	4650	T. Simpson		T. Gallup		T. Ignacio Otzte	
T. San Andres	5003	T. McKee		Base Greenhorn		T. Granite	
T. Glorieta		T. Ellenburger		T. Dakota		T.	
T. Paddock		T. Gr. Wash		T. Morrison		T.	
T. Blinberry		T. Delaware Sand	5542	T. Todilto		T.	
T. Tubb		T. Bone Springs	6598	T. Entrada		T.	
T. Drinkard		T. 1st B.S. Sd	7992	T. Wingate		T.	
T. Abo		T. 2nd B.S. Sd	8236	T. Chinle		T.	
T. Wolfcamp		T. 3rd B.S. Sd	9211	T. Permian		T.	
T. Penn		T. Austin Cycle	10819	T. Penn "A"		T.	
T. Cisco (Bough C)							

T. Woodford - 11736

T. Devonian Dolomite-11999

OIL OR GAS SANDS OR ZONES

No. 1, from.....to..... No. 3, from.....to.....
 No. 2, from.....to..... No. 4, from.....to.....

IMPORTANT WATER SANDS

Include data on rate of water inflow and elevation to which water rose in hole.

No. 1, from.....to.....feet.....
 No. 2, from.....to.....feet.....
 No. 3, from.....to.....feet.....

LITHOLOGY RECORD (Attach additional sheet if necessary)

From	To	Thickness in Feet	Lithology	From	To	Thickness in Feet	Lithology
0	378	378	Surface, Rock	7940	8300	360	Dolo, SS, Sh
378	3100	2722	Anhy, Salt	8300	8520	220	SS, LS, Dolo, Cht
3100	3190	90	Anhy, Sh, SS, LS	8520	8860	340	SS, Dolo, Cht, Sh
3190	3630	440	Anhy, Sh, Dolo, SS	8860	9492	632	LS, Dolo, Cht, SS
3630	4000	370	Anhy, Sh, Dolo	9492	9940	448	Dolo
4000	4170	170	Anhy, Dolo, Sh, SS	9940	10140	200	Dolo, Sh, LS
4170	4280	110	Anhy, Dolo, Sh	10140	10490	350	Dolo, Cht, Sh, LS
4280	4490	210	SS, Anhy, Dolo, Sh	10490	12040	1550	LS, Sh, Cht
4490	4700	210	SS, Anhy, Dolo	12040	12100	60	Dolo
4700	4820	120	Dolo, SS				
4820	5100	280	Dolo				
5100	5190	90	Dolo, SS				
5190	5668	478	SS, Dolo, Cht				
5668	6160	492	SS, Dolo, Sh				
6160	6600	440	SS, Dolo, Sh, LS				
6600	6900	300	LS, Sh, SS, Cht				
6900	7240	340	LS, Sh, Cht				
7240	7660	420	LS, Sh, SS, Cht				
7660	7810	150	LS, Cht, Sh				
7810	7940	130	LS, Cht				

RECEIVED

JAN 15 1992

HOLE NO. 1



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 Number	Sub-Code	basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Depth Well	Depth Water	Water Column
L 00241	L	LE		1	2	04	19S	36E		653987	3618666*	96	50	46
L 02158	L	LE		1	4	11	19S	36E		657262	3616301*	105	55	50
L 03625	L	LE		2	04		19S	36E		654195	3618471*	107	48	59
L 03784	L	LE			04		19S	36E		653805	3618056*	90	46	44
L 03962	L	LE		1	2	04	19S	36E		653987	3618666*	112	50	62
L 04205	L	LE			04		19S	36E		653805	3618056*	90	65	25
L 04209	L	LE		2	2	2	04	19S	36E	654489	3618772*	162	72	90
L 04209 POD3	R	L	LE	2	2	2	04	19S	36E	654489	3618772*	120	60	60
L 04209 S	L	LE		2	2	2	04	19S	36E	654489	3618772*	120	45	75
L 04530	L	LE			04		19S	36E		653805	3618056*	90	60	30
L 04719 S6	L	LE		3	3	11	19S	36E		656461	3615884*	130	55	75
L 04719 S8	R	L	LE	1	1	11	19S	36E		656440	3617094*	146	65	81
L 05073	L	LE		2	04		19S	36E		654195	3618471*	110	58	52
L 05170	L	LE		2	3	2	03	19S	36E	655707	3618389*	180	51	129
L 05191	L	LE		4	4	4	10	19S	36E	656156	3615778*	95	50	45
L 05902	L	LE		2	2	2	04	19S	36E	654489	3618772*	80	45	35
L 06547	L	LE		2	2	04	19S	36E		654390	3618673*	110	48	62
L 10222	L	LE		3	2	1	10	19S	36E	655126	3616978*	160		
L 10273	R	L	LE	2	2	04	19S	36E		654390	3618673*	110	50	60
L 10368	R	L	LE		03		19S	36E		655419	3618079*	145	60	85
L 10662	L	LE		2	04		19S	36E		654195	3618471*	100		
L 11751	L	LE		1	1	2	04	19S	36E	653886	3618765*	178		

Exhibit G

*UTM location was derived from PLSS - see Help

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

Average Depth to Water: **54 feet**

Minimum Depth: **45 feet**

Maximum Depth: **72 feet**

Record Count: 22

Basin/County Search:

Basin: Lea County

PLSS Search:

Section(s): 3, 4, 9, 10, 11 Township: 19S Range: 36E

February 09, 2015

WES SHIELDS
LYNX PETROLEUM
P. O. BOX 1708
HOBBS, NM 88241

RE: MOONSHINE

Enclosed are the results of analyses for samples received by the laboratory on 02/05/15 10:25.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-13-5. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Celey D. Keene
Lab Director/Quality Manager

Analytical Results For:

 LYNX PETROLEUM
 WES SHIELDS
 P. O. BOX 1708
 HOBBS NM, 88241
 Fax To: (575) 392-7886

 Received: 02/05/2015
 Reported: 02/09/2015
 Project Name: MOONSHINE
 Project Number: NONE GIVEN
 Project Location: LEA COUNTY, NM

 Sampling Date: 02/05/2015
 Sampling Type: Water
 Sampling Condition: ** (See Notes)
 Sample Received By: Jodi Henson

Sample ID: #10 (H500328-01)

Chloride, SM4500Cl-B		mg/L		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride*	44.0	4.00	02/05/2015	ND	104	104	100	3.92		
TPH 8015M		mg/L		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<1.00	1.00	02/06/2015	ND	47.3	94.6	50.0	4.42		
DRO >C10-C28	2.39	1.00	02/06/2015	ND	47.0	94.0	50.0	2.97		
EXT DRO >C28-C35	<1.00	1.00	02/06/2015	ND	ND		0.00			
Surrogate: 1-Chlorooctane	103 %	36.1-161								
Surrogate: 1-Chlorooctadecane	87.1 %	36-171								

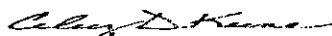
Sample ID: #3 (H500328-02)

Chloride, SM4500Cl-B		mg/L		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride*	28.0	4.00	02/05/2015	ND	104	104	100	3.92		
TPH 8015M		mg/L		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<1.00	1.00	02/06/2015	ND	47.3	94.6	50.0	4.42		
DRO >C10-C28	<1.00	1.00	02/06/2015	ND	47.0	94.0	50.0	2.97		
EXT DRO >C28-C35	<1.00	1.00	02/06/2015	ND	ND		0.00			
Surrogate: 1-Chlorooctane	100 %	36.1-161								
Surrogate: 1-Chlorooctadecane	80.1 %	36-171								

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

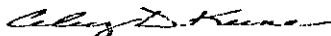
Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240
(575) 393-2326 FAX (575) 393-2476

PLEASE NOTE: *Lustig and Darraghy, Cardinale's loyalty, and other exclusive remedy for any claim arising elsewhere based in contract or tort, will be limited to the amount paid by the client for the analyses.* All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates, or successors, or persons or entities related to the performance of services hereunder. No Cardinal, nor service of whether such claim is based upon any of the above stated reasons or otherwise, shall be liable for any damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates, or successors, or persons or entities related to the performance of services hereunder.

Relinquished By: <i>W. Shiver</i>		Date: <i>2/5/15</i>		Received By: <i>P. Henson</i>		Phone Result: <input type="checkbox"/> Yes <input type="checkbox"/> No Add'l Phone #:	
		Time: <i>10:25</i>				Fax Result: <input type="checkbox"/> Yes <input type="checkbox"/> No Add'l Fax #:	
Relinquished By:		Date:		Received By:		REMARKS:	
		Time:				<i>weshields@leaco.net</i>	
Delivered By: (Circle One)				Sample Condition		CHECKED BY:	
Sampler - UPS - Bus - Other:				<i>11.4°C</i>		<i>(Initials)</i>	
				Cool <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No		<i>W</i>	
<i>samples taken & brought directly to lab. HA</i>							

† Cardinal cannot accept verbal changes. Please fax written changes to (575) 395-2326

SENDER: COMPLETE THIS SECTION

- Complete Items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Cooper Revocable Trust
Adana Hiliker
Star Route A Box 55
Monument, NM 88265

2. Article Number

(Transfer from service label)

7009 2250 0000 1776 5012

PS Form 3811, February 2004

Domestic Return Receipt

102595-02-M-1540

COMPLETE THIS SECTION ON DELIVERY

A. Signature

x Sheryl Cooper ☒ Agent ☐ Addressee

B. Received by (Printed Name)

Sheryl Cooper

C. Date of Delivery

12/15/05

D. Is delivery address different from Item 1? ☐ YesIf YES, enter delivery address below: ☒ No

RECEIVED APR 20 2015

3. Service Type

- ☒ Certified Mail ☐ Express Mail
☐ Registered ☒ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? (Extra Fee)

☐ Yes

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Chase Oil Corporation
P.O. Box 960
Artesia, NM 88211

2.

7014 0510 0002 1950 0173

PS Form 3811, July 2013

Domestic Return Receipt

COMPLETE THIS SECTION ON DELIVERY

A. Signature

Kathy Beauregard ☐ Agent
☐ Addressee
B. Received by (Printed Name) C. Date of Delivery
KATHY BEAUREGARD 2-18-15

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

RECEIVED FEB 20 2015

3. Service Type

☒ Certified Mail® ☐ Priority Mail Express™
☐ Registered ☐ Return Receipt for Merchandise
☐ Insured Mail ☐ Collect on Delivery

4. Restricted Delivery? (Extra Fee) ☐ Yes

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Featherstone Development Corp.
P.O. Box 429
Ruswell, NM 88202

2. Article N
(Transfer)

7014 0510 0002 1950 0166

PS Form 3811, July 2013

Domestic Return Receipt

COMPLETE THIS SECTION ON DELIVERY

A. Signature

Jen Andazola ☐ Agent
☐ Addressee
B. Received by (Printed Name) C. Date of Delivery
Jen Andazola 2-17-15

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

RECEIVED FEB 17 2015

3. Service Type

☒ Certified Mail® ☐ Priority Mail Express™
☐ Registered ☐ Return Receipt for Merchandise
☐ Insured Mail ☐ Collect on Delivery

4. Restricted Delivery? (Extra Fee) ☐ Yes

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Devon Energy Production Co.
333 W. Sheridan Ave
Oklahoma City, OK 73102-5015

2. Article Number
(Transfer from se)

7014 0510 0002 1950 0142

PS Form 3811, July 2013

COMPLETE THIS SECTION ON DELIVERY

A. Signature

David Carrillo ☐ Agent
☐ Addressee
B. Received by (Printed Name) C. Date of Delivery
David Carrillo 2-20-15

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

RECEIVED FEB 20 2015

3. Service Type

☒ Certified Mail® ☐ Priority Mail Express™
☐ Registered ☐ Return Receipt for Merchandise
☐ Insured Mail ☐ Collect on Delivery

4. Restricted Delivery? (Extra Fee) ☐ Yes

Order Receipt

Hobbs Daily News-Sun

201 N Thorp
P. O. Box 936
Hobbs, NM 88241

Phone: 575-393-2123

Fax: 575-397-0610

URL: www.hobbsnews.com

1

LARRY SCOTT
LYNX PETROLEUM
P.O. BOX 1708
HOBBS, NM 88241

Cust#: 67111441
Ad #: 00151699
Phone: (575)392-6950
Date: 02/11/2015
Salesperson: Ad Taker: C2

Sort Line: 29777 Moonshine State No. 1

Class: 671

Description	Start	Stop	Ins.	Cost/Day	Amount
AFF2 Affidavits (Legals)					6.00
BOLD bold					1.00
07 07 Daily News-Sun	02/13/2015	02/13/2015	1	22.47	22.47

Ad Text:

LEGAL NOTICE
February 13, 2015

Pursuant to the rules and regulations of the Oil Conservation Division of the State of New Mexico, Lynx Petroleum Consultants, Inc., is filing a C-108, Application for Salt Water Disposal. The well being applied for is the Moonshine State No. 1, located in Unit Letter C, Section 10, T-19S, R-36E, Lea County, New Mexico. The injection formation is the Devonian from 11,850' below the surface. Expected maximum injection rate is 15,000 BPD, and the maximum injection pressure is 1500 psig. Any questions about the application can be directed to Wes Shields, (575) 342-6950, or any objection or request for hearing

Payment Reference:

575 RECEIVED FEB 17 2015

Total: 29.47
Tax: 2.01
Net: 31.48
Prepaid: 0.00

Total Due 31.48

Affidavit of Publication

STATE OF NEW MEXICO
COUNTY OF LEA


I, Daniel Russell, Publisher of the Hobbs News-Sun, a newspaper published at Hobbs, New Mexico, solemnly swear that the clipping attached hereto was published in the regular and entire issue of said newspaper, and not a supplement thereof for a period of 1 issue(s).

Beginning with the issue dated
February 13, 2015
and ending with the issue dated
February 13, 2015.



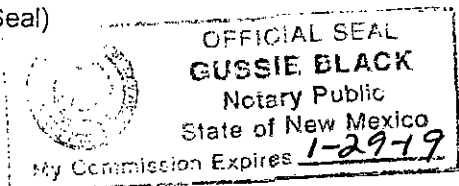
Publisher

Sworn and subscribed to before me this
13th day of February 2015.



Business Manager

My commission expires
January 29, 2019
(Seal)



This newspaper is duly qualified to publish legal notices or advertisements within the meaning of Section 3, Chapter 167, Laws of 1937 and payment of fees for said

LEGALS

LEGAL NOTICE February 13, 2015

Pursuant to the rules and regulations of the Oil Conservation Division of the State of New Mexico, Lynx Petroleum Consultants, Inc. is filing a C-108 Application for Salt Water Disposal. The well being applied for is the Moonshine State, No. 31 located in Unit Letter C, Section 10, T-19S, R-36E, Lea County, New Mexico. The injection formation is the Devonian from 11,850' below the surface. Expected maximum injection rate is 15,000 BPD and the maximum injection pressure is 1500 psig. Any questions about the application can be directed to Wes Shields, (575) 342-6950, or any objection or request for hearing must be directed to the Oil Conservation Division, (505) 476-3440, 1220 South Saint Francis Drive, Santa Fe, NM 87504, within fifteen (15) days. #29777

67111454

00151699

LARRY SCOTT
LYNX PETROLEUM
P.O. BOX 1708
HOBBS, NM 88241

[Wells](#) [Operator Data](#) [OCD Review](#) [OCD Only](#) [Administration](#)

OCD Permitting

[Home](#) [Land Searches](#) [Land Details](#)

Section : 10-19S-36E

Type: Normal

Total Acres: 640

County: Lea (25)

D (D) Fee ¹ State ² (25) 40	C (C) Fee ¹ State ² (25) 40	B (B) State ¹ State ² (25) 40	A (A) State ¹ State ² (25) 40
E (E) Fee ¹ State ² (25) 40	F (F) Fee ¹ State ² (25) 40	G (G) State ¹ State ² (25) 40	H (H) State ¹ State ² (25) 40
L (L) Fee ¹ State ² (25) 40	K (K) Fee ¹ State ² (25) 40	J (J) State ¹ State ² (25) 40	I (I) State ¹ State ² (25) 40
M (M) Fee ¹ State ² (25) 40	N (N) Fee ¹ State ² (25) 40	O (O) State ¹ State ² (25) 40	P (P) State ¹ State ² (25) 40

Note ¹ = Surface Owner RightsNote ² = Sub-Surface Mineral Rights

Land Restrictions

No land restrictions found for this section.

[Return to Search](#)



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 Number	POD			Q Q Q						X	Y	Depth Well	Depth Water	Water Column	
	Sub-Code	basin	County	64	16	4	Sec	Tws	Rng						
<u>L 00119</u>	R	L	LE	2	2	4	13	19S	36E	659402	3614817*		102		
<u>L 00119 POD2</u>		L	LE	2	2	1	13	19S	36E	658584	3615611*		125		
<u>L 00120</u>	R	L	LE	2	4	4	13	19S	36E	659408	3614414*		102		
<u>L 00120 POD2</u>		L	LE	4	3	2	13	19S	36E	658993	3615014*		105		
<u>L 00243 POD2</u>		L	LE	1	1	1	13	19S	36E	657981	3615604*		110	90	20
<u>L 00244 POD2</u>		L	LE	2	4	1	13	19S	36E	658591	3615207*		110		
<u>L 00334</u>		L	LE	2	2	4	13	19S	36E	659402	3614817*		123		
<u>L 02096</u>		L	LE		4	4	12	19S	36E	659282	3615928*		110	40	70
<u>L 02158</u>		L	LE		1	4	11	19S	36E	657262	3616301*		105	55	50
<u>L 02585</u>		L	LE	3	4	2	14	19S	36E	657585	3614994*		103	63	40
<u>L 02881</u>		L	LE				14	19S	36E	657091	3614874*		97	50	47
<u>L 03097</u>		L	LE				14	19S	36E	657091	3614874*		95	50	45
<u>L 04719 S5</u>		L	LE	3	1	14	19S	36E	656474	3615078*		118	55	63	
<u>L 04719 S5</u>	R	L	LE	3	1	14	19S	36E	656474	3615078*		118	55	63	
<u>L 04719 S6</u>		L	LE	3	3	11	19S	36E	656461	3615884*		130	55	75	
<u>L 04719 S8</u>	R	L	LE	1	1	11	19S	36E	656440	3617094*		146	65	81	
<u>L 05191</u>		L	LE	4	4	4	10	19S	36E	656156	3615778*		95	50	45
<u>L 10222</u>		L	LE	3	2	1	10	19S	36E	655126	3616978*		160		

Average Depth to Water: **57 feet**

Minimum Depth: **40 feet**

Maximum Depth: **90 feet**

Record Count: 18

PLSS Search:

Section(s): 8-15

Township: 19S

Range: 36E

*UTM location was derived from PLSS - see Help

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



C-108 Review Checklist: Received 3/09/2015 Add. Request: 4/12/2015 Reply Date: _____ Suspended: _____ [Ver 13]

PERMIT TYPE: WFX / PMX (SWD) Number: 1548 Permit Date: _____ Legacy Permits/Orders: N/A

Well No. 1 Well Name(s): MOONSHINE STATE UNIT

API: 30-0 25-31395 Spud Date: 9/30/1991 New or Old: N (UIC Class II Primacy 03/07/1982)

Footages 990 FNL 660 FNL Lot _____ or Unit C Sec 10 Tsp 19S Rge 36E County Leq

General Location: 210 miles SW / Hobbs Pool: SUD DEVONIAN Pool No.: 96101

BLM 100K Map: Hobbs Operator: LYNX Petroleum Consultants OGRID: 13645 Contact: LARRY R. SCOTT

COMPLIANCE RULE 5.9: Total Wells: 8 Inactive: 1 Fincl Assur: Y Compl. Order? Y IS 5.9 OK? Y Date: 5-11-2015

WELL FILE REVIEWED ☒ Current Status: P&A

WELL DIAGRAMS: NEW: Proposed ☐ or RE-ENTER: Before Conv. ☐ After Conv. ☐ Logs in Imaging: Y

Planned Rehab Work to Well: * CBL / 8 5/8 - 5 1/2

Well Construction Details:		Sizes (in) Borehole / Pipe	Setting Depths (ft)	Cement ⑤ or Cf	Cement Top and Determination Method
Planned ___ or Existing ___ Surface		<u>17 1/2 / 13 3/8</u>	<u>378'</u>	<u>400</u>	<u>SURFACE / 10344</u>
Planned ___ or Existing ___ Interm/Prod					
Planned ___ or Existing ___ Interm/Prod		<u>11" / 8 5/8</u>	<u>4100</u>	<u>1250</u>	
Planned ___ or Existing ___ Prod/Liner				<u>1400</u>	
Planned ___ or Existing ___ Liner		<u>7 7/8 / 5 1/2</u>		<u>4100</u>	<u>350</u>
Planned ___ or Existing <input checked="" type="radio"/> OH / PERF		<u>11850 - 12250</u>			

Injection Stratigraphic Units:		Depths (ft)	Injection or Confining Units	Tops	Completion/Operation Details:
Adjacent Unit: Litho. <input checked="" type="radio"/> Struc. <input type="radio"/> Por. <input type="radio"/>			<u>WD</u>	<u>11734</u>	Drilled TD <u>12100</u> PBTD _____
Confining Unit: Litho. <input type="radio"/> Struc. <input type="radio"/> Por. <input type="radio"/>			<u>DEV</u>	<u>11934</u>	NEW TD <u>12250</u> NEW PBTD _____
Proposed Inj Interval TOP:	<u>11850</u>				NEW Open Hole <input checked="" type="radio"/> or NEW Perfs <input type="radio"/>
Proposed Inj Interval BOTTOM:	<u>12250</u>				Tubing Size <u>32</u> in. Inter Coated? <u>Y</u>
Confining Unit: Litho. <input type="radio"/> Struc. <input type="radio"/> Por. <input type="radio"/>					Proposed Packer Depth <u>11900</u> ft
Adjacent Unit: Litho. <input type="radio"/> Struc. <input type="radio"/> Por. <input type="radio"/>					Min. Packer Depth <u>11750</u> (100-ft limit)
					Proposed Max. Surface Press. <u>1500</u> psi
					Admin. Inj. Press. <u>2370</u> (0.2 psi per ft)

AOR: Hydrologic and Geologic Information

POTASH: R-111-P ☐ Noticed? _____ BLM Sec Ord ☐ WIPP ☐ Noticed? _____ SALT/SALADO T: _____ B: _____ CLIFF HOUSE

FRESH WATER: Aquifer Alluvial Max Depth 90' HYDRO AFFIRM STATEMENT By Qualified Person ☒

NMOSE Basin: Leq CAPITAN REEF: thru ☐ adj ☐ NA ☐ No. Wells within 1-Mile Radius? _____ FW Analysis ☐

Disposal Fluid: Formation Source(s) _____ Analysis? _____ On Lease ☐ Operator Only ☐ or Commercial ☐

Disposal Int: Inject Rate (Avg/Max BWPD): 7500/1500 Protectable Waters? _____ Source: _____ System: Closed ☐ or Open ☐

HC Potential: Producing Interval? _____ Formerly Producing? _____ Method: LOGS / OST / P&A / Other _____ 2-Mile Radius Pool Map ☐

AOR Wells: 1/2-M Radius Map? Y Well List? _____ Total No. Wells Penetrating Interval: _____ Horizontals? _____

Penetrating Wells: No. Active Wells 10 Num Repairs? _____ on which well(s)? _____ Diagrams? _____

Penetrating Wells: No. P&A Wells 11 Num Repairs? _____ on which well(s)? _____ Diagrams? _____

NOTICE: Newspaper Date 2-13-2015 Mineral Owner NMSLO Surface Owner NMSLO N. Date _____

RULE 26.7(A): Identified Tracts? _____ Affected Persons: FEATHERSTONE, DEVON N. Date 2-20-15

Permit Conditions: Issues: tie in existing logs nestivity 10800-7050-25

Add Permit Cond: _____