

ABOVE THIS LINE FOR DIVISION USE ONLY

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NEW MEXICO OIL CONSERVATION DIVISION

MAN

ENGINEER



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DSCMO500445

- 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] [PLC-Pool/Lease Commingling] [DHC-Downhole Commingling] [CTB-Lease Commingling] [PC-Pool Commingling] [OLS - Off-Lease Storage] [OLM-Off-Lease Measurement] [WFX-Waterflood Expansion] [PMX-Pressure Maintenance Expansion] [PPR-Positive Production Response] [SWD-Salt Water Disposal] [IPI-Injection Pressure Increase] [EOR-Qualified Enhanced Oil Recovery Certification] NY Fed Fel Jover 51, 660 FEL 660 F51, 195/31E TYPE OF APPLICATION - Check Those Which Apply for [A] [1] Location - Spacing Unit - Simultaneous Dedication [A] \square NSL \square NSP SD Check One Only for [B] or [C] Commingling - Storage - Measurement [B] DHC CTB PLC PC OLS OLM Injection - Disposal - Pressure Increase - Enhanced Oil Recovery 7/2 [C] LOGS M V Ů WFX Ů PMX Ⅳ SWD □ IPI □ EOR □ PPR [D] Other: Specify 30-015-10394 tar' [2] **NOTIFICATION REQUIRED TO:** - Check Those Which Apply, or \Box Does Not Apply Working, Royalty or Overriding Royalty Interest Owners [A] Offset Operators, Leaseholders or Surface Owner [B] [C] Application is One Which Requires Published Legal Notice Notification and/or Concurrent Approval by BLM or SLO [D] 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

[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.

Date

STATE OF NEW MEXICO ENERGY, MINERALS AND NATURAL **RESOURCES DEPARTMENT**

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

APPLICATION FOR	AUTHORIZATION TO	INJECT

	APPLICATION FOR AUTHORIZATION TO INJECT
I.	PURPOSE: Secondary Recovery Pressure Maintenance X Disposal Storage Application qualifies for administrative approval? Yes No
II.	OPERATOR: Lynx Petroleum Consultants, Inc.
	ADDRESS: P.O. Box 1708, Hobbs, NM 88241
	CONTACT PARTY: Larry R. Scott PHONE: (505) 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 of a schematic of any plugged well illustrating all plugging detail.
VII.	Attach data on the proposed operation, including:
	 Proposed average and maximum daily rate and volume of fluids to be injected; Whether the system is open or closed; Proposed average and maximum injection pressure; Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and, If injection is for disposal purposes into a zone not productive of oil or gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature, studies, nearby wells, etc.).
*VIII.	Attach appropriate geologic data on the injection zone including appropriate lithologic detail, geologic name, thickness, and depth. Give the geologic name, and depth to bottom of all underground sources of drinking water (aquifers containing waters with total dissolved solids concentrations of 10,000 mg/l or less) overlying the proposed injection zone as well as any such sources known to be immediately underlying the injection interval.
IX.	Describe the proposed stimulation program, if any.
*X.	Attach appropriate logging and test data on the well. (If well logs have been filed with the Division, they need not be resubmitted).
*XI.	Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken.
XII.	Applicants for disposal wells must make an affirmative statement that they have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground sources of drinking water.
XIII.	Applicants must complete the "Proof of Notice" section on the reverse side of this form.
XIV.	Certification: I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.
	NAME: Larry R. Scott
	SIGNATURE: Mary R. Scott DATE: 12/03/04
*	E-MAIL ADDRESS: <u>lrscott@leaco.net</u> 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.

Side 2

INJECTION WELL DATA SHEET

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Tuł	Tubing Size: 2 3/8" Lining Material: Plastic
Tyj	Type of Packer: Nickel-plated Arrow (or equivalent) tension
Рас	Packer Setting Depth: 2300'
Oth	Other Type of Tubing/Casing Seal (if applicable):
	Additional Data
1.	Is this a new well drilled for injection? $Yes X No$
	If no, for what purpose was the well originally drilled? Lusk Strawn Oil
c	
n i	Name of Field or Dool (if onnlinetic). Turek
	0
	intervals and give plugging detail, i.e. sacks of cement or plug(s) used.
	See attached schematic
5.	Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area: <u>Yates 2375' Delaware Sands 5400'</u>
	Bone Springs 7090'

Morrow 11,900'

Strawn 11,300'

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Side 2

OPERATOR: Lynx Petroleum Consultants_LInc. WELL.NAME & NUMBER:
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LYNX PETROLEUM CONSULTANTS, INC. APPLICATION FOR AUTHORIZATION TO INJECT Jones Federal 'B' No. 3 Supporting Documentation

III. Well Data: Schematic Attached

VI. Wells in Area of Review

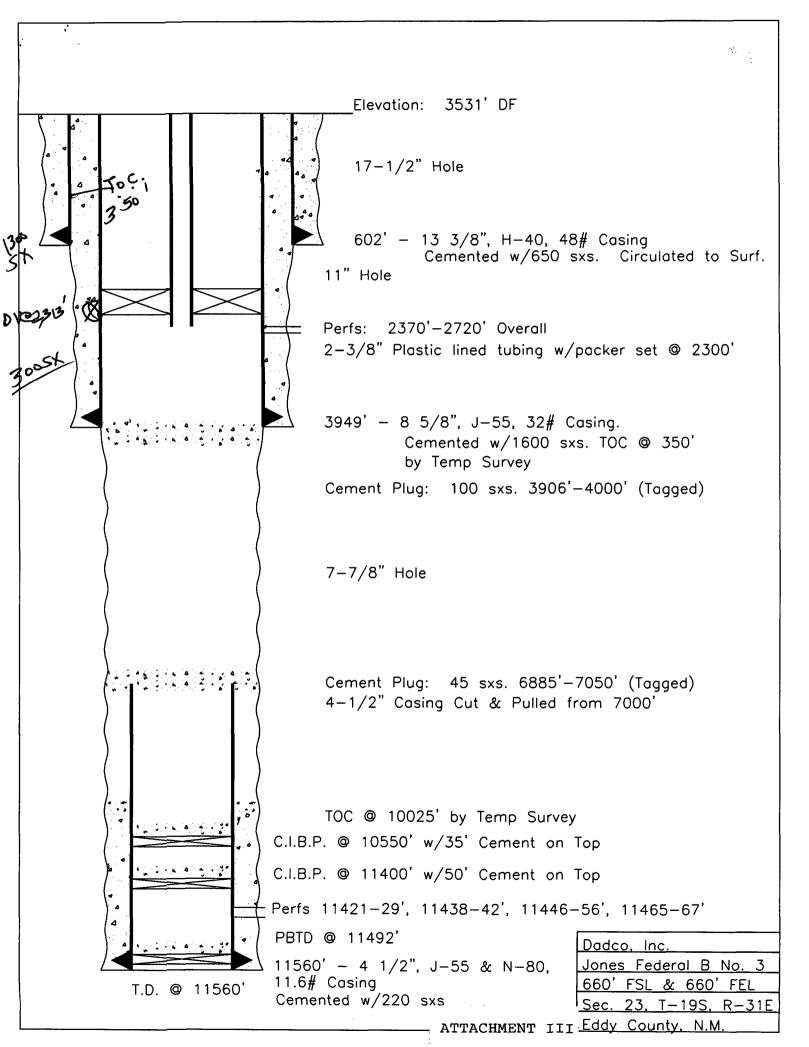
1. Well Name: Jones Federal 'E' No. 1 Type: Oil (Plugged and Abandoned) Casing & Cement: 13-3/8" @ 653' cemented w/650 sxs. Circulated 8-5/8" @ 3925' cemented w/400 sxs. TOC @ 2160' by Temp Svv. 4-1/2" @ 11,600' cemented w/380 sxs. Estimated TOC @ 9400' Date Drilled: November 14, 1964 Location: 1980' FNL & 660' FEL Section 23, T-19S, R-31E, Eddy Cty, NM Total Depth: 11,600' Perforations: 11,530-540' Schematic: Attached 2. Well Name: Jones Federal 3-23 Type: Dry hole (Plugged and Abandoned) Casing & Cement: 8-5/8" @ 745' cemented w/50 sxs. Estimated TOC @ 578' Date Drilled: July 30, 1963 Location: 1980' FSL & 660' FEL Section 23, T-19S, R-31E, Eddy Cty, NM Perforations: None Schematic: Attached 3. Well Name: Jones Federal No. 3 Type: Oil (Plugged and Abandoned) Casing & Cement: 13-3/8" @ 701' cemented w/650 sxs. Circulated 8-5/8" @ 3991' cemented w/500 sxs. TOC @ 2145' by Temp Svy. 4-1/2" @ 11,570' cemented w/550 sxs. TOC @ 9320' by Temp Svy. Date Drilled: June 18, 1965 Location: 660' FNL & 660' FEL Section 26, T-19S, R-31E, Eddy Cty, NM Perforations: 11,440-450' Schematic: Attached

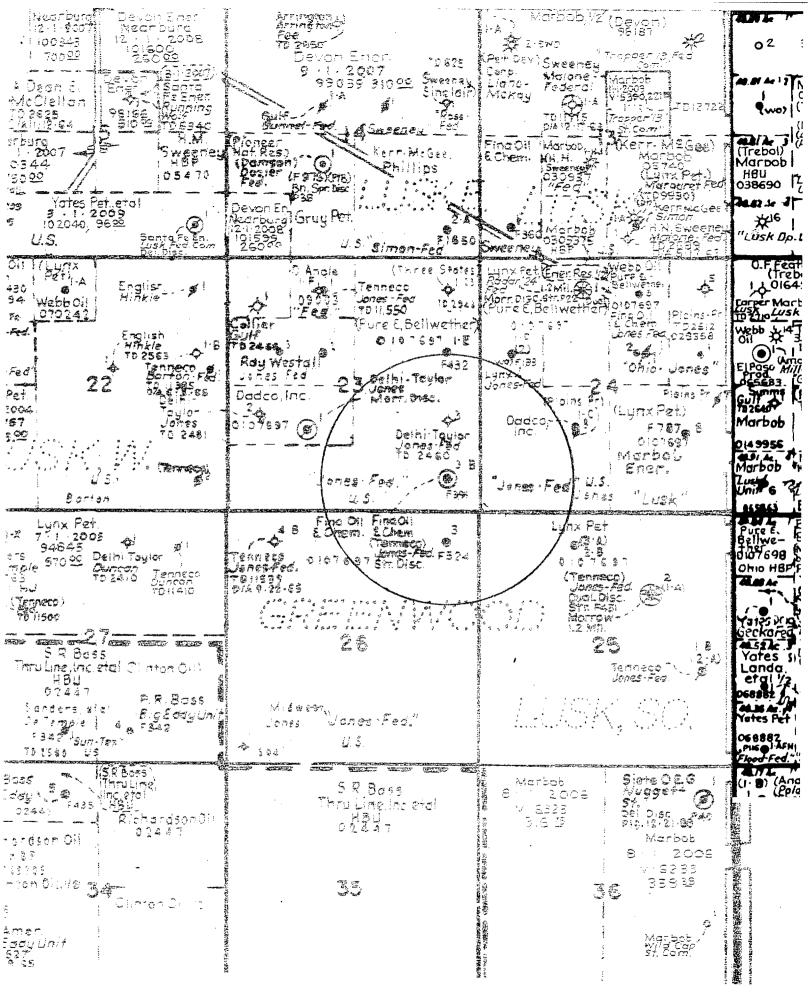
VII. Proposed Operation

- Average Daily Rate: 500 Barrels Maximum Daily Rate: 1000 Barrels Average Daily Volume: 500 Barrels Maximum Daily Volume: 1000 Barrels
- 2. System will be closed

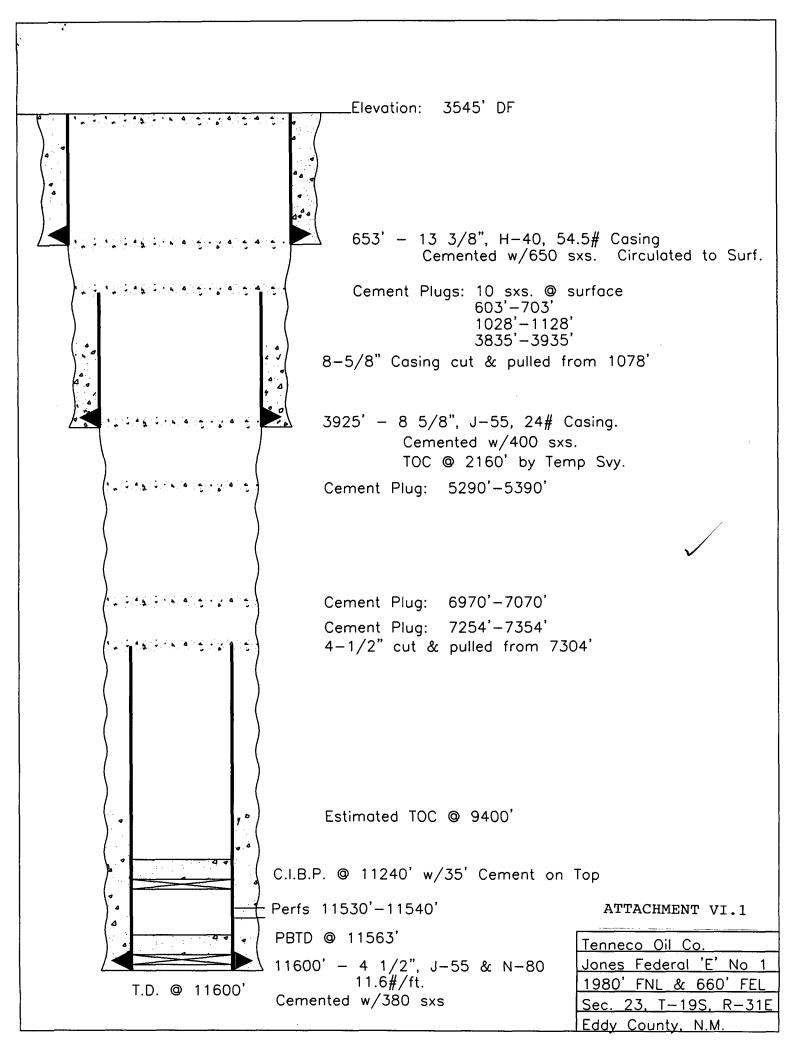
FORM C-108 Supporting Documentation Page 2

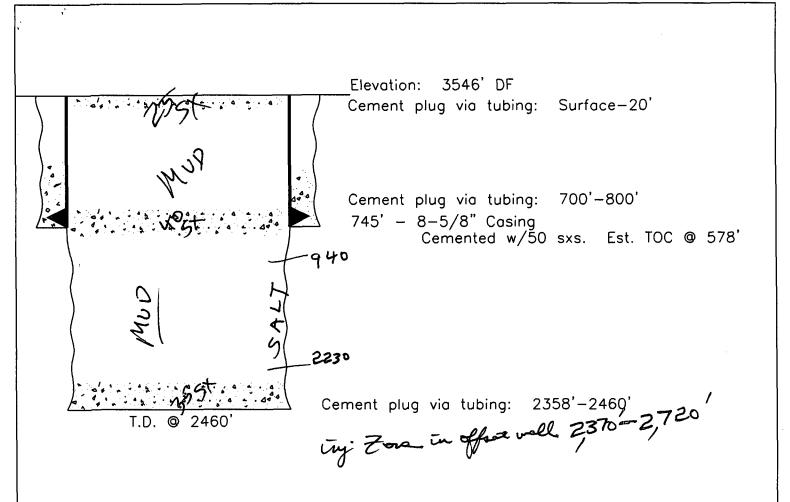
- 3. Average Injection Pressure: 500 psig Maximum Injection Pressure: 800 psig
- 4. Sources of injected water will be leases in the immediate vicinity including:
 - A. Jones 'D' Federal No. 1 (E-24-19S-31E) Bone Springs
 - B. Radar 24 Federal No. 1 (C-24-19S-31E) Delaware/Bone Springs
 - C. Hawkeye Federal 7 Nos. 1&2 (P-7-19S-32E) Bone Springs
 - A water sample from the Hawkeye Federal 7 No. 1 is attached.
- 5. Proposed disposal zone is productive of oil and gas within one mile (Lusk Yates-Seven Rivers pool).
- VIII. The proposed injection zone is the Yates-Seven Rivers formation which consists of interbedded layers of sandstone and dolomite. Injection will be through perforations (scattered) from 2370' to 2720'. An upper portion of the interval (2370'-2412') was perforated, fracture stimulated, and tested non-commercial for oil production at 1 BO plus 105 BWPD.
- IX. Stimulation will consist of 2000 gallons of 15%-HCL-NE-FE acid.
- **X.** Logs are previously on file.
- XI. The only fresh water well listed in the State Engineer's database for Sections 23, 24, 25, and 26 is located in the NE/4 NE/4 of Section 25, T-19S, R-31E. No water sample is available. The well depth is 250'.
- **XII.** I have examined the 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.
- **XIV.** Application has been mailed via certified mail to the Bureau of Land Management (surface owner) and a copy of the return receipt is attached. Lynx Petroleum Consultants, Inc. is the only leasehold operator within one-half mile of the well location so notification to offset operators is not required. Proof of publication in the Carlsbad CURRENT-ARGUS is attached.





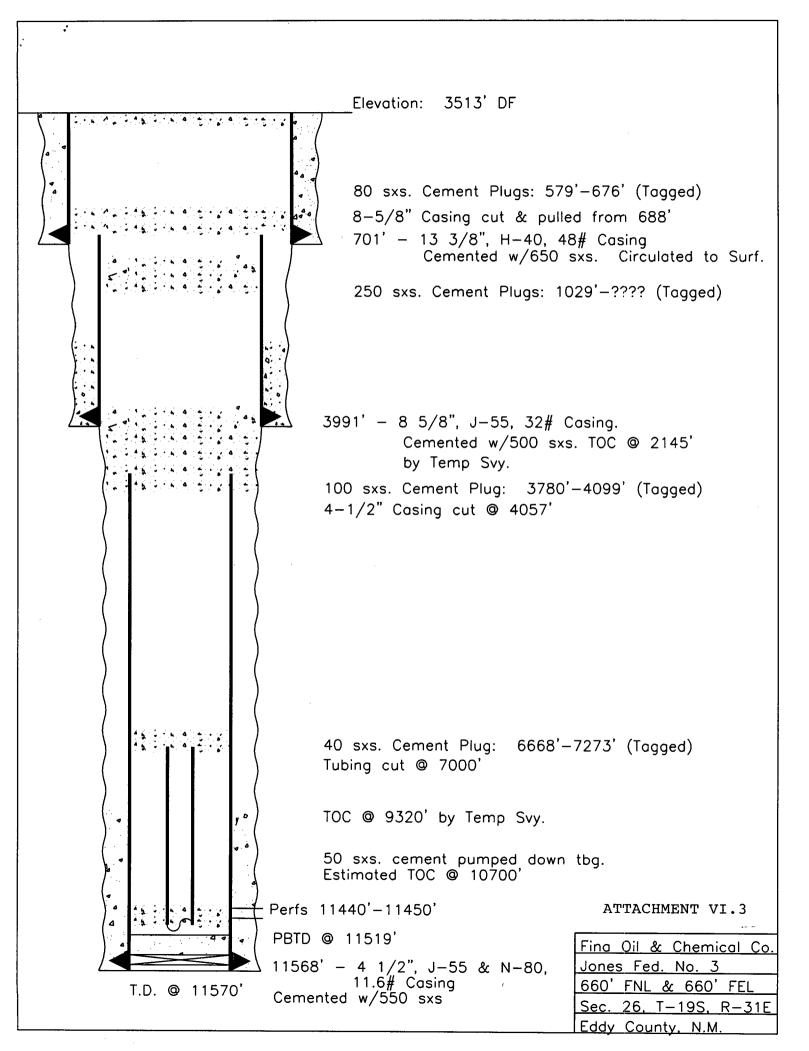
ATTACHMENT V





ATTACHMENT VI.2

Delhi-Taylor Oil Corp.					
Jones Federal 3-23					
1980' FSL & 660' FEL					
Sec. 23, T-19S, R-31E					
Eddy County, N.M.					



CAPITAN CHEMICAL WATER ANALYSIS REPORT

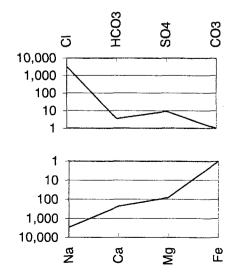
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Company : LYNX PETROLEUM				Date Sampled : 7/18/01					
Lease Name : HAWKEYE 7			Са	pitan Rep.	:				
Well Number : #1				Co	mpany Re	p. :			
Location		:							
	ANA	LYSIS							
1.	pH		······································	6.83					
	•	ific Gravity	@ 60/60 F.	1.131					
З.	CaC	03 Saturat	ion Index @ 80 F.	+0.528		'Calcium C	arbo	nate Scale	Possible'
			@ 140 F.	+1.508		'Calcium C	arbo	onate Scale	e Possible'
	Diss	olved Gas	ses						
4.	Hydr	ogen Sulfic	le	0		PPM			
5.	Carb	on Dioxide		111		PPM			
6.	Diss	olved Oxyg	en	Not Determined					
	Cati	ons		mg/L	1	Eq. Wt.	=	MEQ/L	
7.	Calc	ium (Ca++)		4,500	1	20.1	=	223.88	
8.	Mag	nesium (Mg	g++)	972	- /	12.2	=	79.67	
9.	Sodi	um (Na+) (Calculated	67,171	1	23.0	=	2,920.49	
10.	Bariu	um (Ba++)		Not Determined	1	68.7	=	0.00	
	Anic	ons	····						
	-	oxyl (OH-)		0	1	17.0	=	0.00	
		onate (CO		0	/	30.0	=	0.00	
		rbonate (H	CO3-)	215	/	61.1	=	3.51	
	4. Sulfate (SO4=)		452	1	48.8	=	9.26		
15.		ride (CI-)		114,000	1	35.5	=	3,211.27	
	Othe		· · · · · · · · · · · · · · · · · · ·						
	6. Soluble Iron (Fe)		0	1	18.2	=	0.00		
	7. Total Dissolved Solids		187,310						
			As CaCO3	15,250					
	19. Calcium Sulfate Solubility @ 90 F.		3,177						
20.	Resi	stivity (Mea	asured)	0.060		Ohm/Mete	ers	@ 89	Degrees (F

Logarithmic Water Pattern



PROBABLE MINERAL COMPOSITION

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COMPOUND	Eq. Wt.	Х	MEQ/L	=	mg/Ľ
Ca(HCO3)2	81.04	Х	3.51	=	285
CaSO4	68.07	Х	9.26	=	630
CaCl2	55.50	Х	211.10	=	11,716
Mg(HCO3)2	73.17	Х	0.00	=	0
MgSO4	60.19	Х	0.00	=	0
MgCl2	47.62	Х	79.67	=	3,794
NaHCO3	84.00	Х	0.00	=	0
NaSO4	71.03	Х	0.00	=	0
NaCl	58.46	Х	2,920.49	=	170,732

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SENDER: COMPLETE THIS SECTION		COMPLETE THIS SEC	CTION ON DELIVE	RY
 Complete items 1, 2, and 3. Also completing item 4 if Restricted Delivery is desired. Print your name and address on the reverso that we can return the card to you. Attach this card to the back of the mailpion or on the front if space permits. 	orse	A. Signature X. M. () B. Received by (Printer A. A. A	ABIE	Agent Addresser Date of Delivery 2 - 2 2 - 2
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Carisbad, wm		3. Service Type		
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		4. Restricted Delivery	? (Extra Fee)	Ves
2. Article Number	003 10	70 0005 SP:	12 1503	
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Affidavit of Publication

State of New Mexico, County of Eddy, ss.

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Dawn Higgins, being first duly sworn, on oath says:

That she is Business Manager of the Carlsbad Current-Argus, a newspaper published daily at the City of Carlsbad, in said county of Eddy, state of New Mexico and of general paid circulation in said county; that the same is a duly qualified newspaper under the laws of the State wherein legal notices and advertisements may be published; that the printed notice attached hereto was published in the regular and entire edition of said newspaper and not in supplement thereof on the date as follows, to wit:

December 8	2004
December 15	2004
December 22	2004
	2004

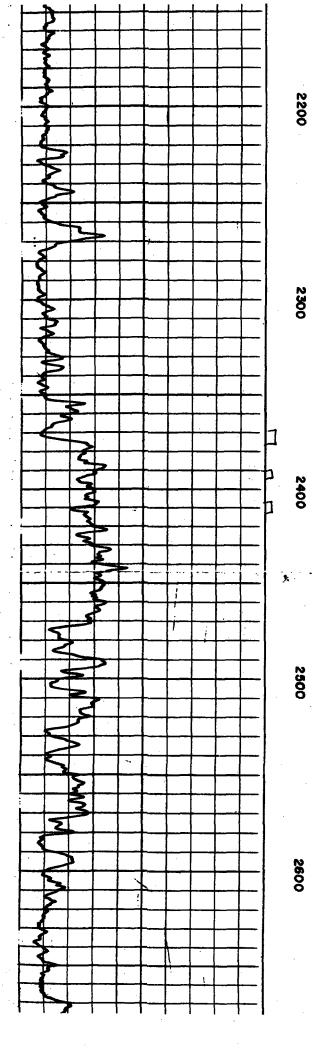
That the cost of publication is \$ 84.19 and that payment thereof has been made and will be assessed as court costs.

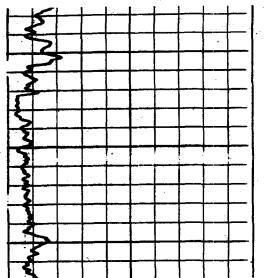
Subscribed and sworn to before me this

 \leq day of $\underline{}$ My commission expires Notary Public

December 8, 15, 22, 2004 Lynx Petroleum Con-

sultants, Inc., P.O. Box 1708, Hobbs, NM 88241, is making application to the New Mexico Oil Conservation Division to convert the Jones Federal 'B' No. 3 well located 660' FSL & 660' FEL of Section 23, Township 19S, Range 31E, Eddy County, New Mexico to a salt water disposal well. The proposed injection interval will be Yates-Seven Rivers formation from 2370' to 2720'. Maximum expected rates and pressures are 1000 BWPD and 800 psi respectively. Interested parties must file objections or request for hearing with the Oil Conservation Division, 1220 South St. Francis Drive, Santa Fe, New Mexico 87505, within 15 days. The contact party for the applicant is Larry R. Scott who may be reached by phone at 505-392-6950.





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Form 3160-5 (June 1990) Do not use this	DEPARTMEN BUREAU OF L		to a different reservoir.	FORM APPROVED Budget Bureau No. 1004-0135 Expires: March 31, 1993 5. Lease Designation and Serial No. NM 0107697 6. If Indian, Allottee or Tribe Name
<u> </u>	SUBMIT	IN TRIPLICATE	- • •0Å	7. If Unit or CA, Agreement Designation
1. Type of Well Dil Dil G Well W	ias Vell Dother		00131.84	8. Well Name and No.
2. Name of Operator Dadco,	· · · · · · · · · · · · · · · · · · ·		ARTE. A. OFFICE	Jones Federal B 3 9. API Well No.
3. Address and Telepho P.O. BO:	one No. X 7288 Odessa, Tex	. 79760 915-33		<u>30-015-10394</u> 10. Field and Pool, or Exploratory Area
4. Location of Well (Fe	ootage, Sec., T., R., M., or Survey De and 660 FEL			Lusk Strawn 11. County or Parish, State
	23 Township 19S,	31E Eddy	County	Eddy New Mexico
12. CHEC) TO INDICATE NATU	RE OF NOTICE, REPOR	
TYPE	OF SUBMISSION		TYPE OF ACTION	
	tice of Intent	Abandonme	nt	Change of Plans
X	nsequent Report	K Recompletio	1	New Construction
		Casing Rep		Water Shut-Off
Fin	al Abandonment Notice	Altering Ca	ling	Conversion to Injection
give subsurface MIRV. Per TIH w/PKI SWAB load FRAC w/20	r Completed Operations (Clearly state all locations and measured and true vertice rf 45JF 2370-76, R set @ 2270', ac d off, 400' entry 8,800 LBS. run Pu F. 1BO, 105 BW	d depths for all markers and zones p 2390-92,2409-12 didize w/2000gal per hr.	ertinent to this work.)*	Completion or Recompletion Report and Log form.) g any proposed work. If well is directionally drilled,
Approved by Conditions of appro	eral or State office use) wal, if any:	Title	ident	Dute Dute States any false, fictitious or fraudulent statements
	any matter within its jurisdiction.	*See instruction on R		

