• Form 3160-5		FORM APPROVED	
(August 2007) UNITED STATES	OCD HORRS	Budget Bureau No 1004-0137 Expires July 31, 2010	
(Adgust 2007) DEPARTMENT OF THE INTER BUREAU OF LAND MANAGEM	IENT HOBBS OCD	5 Lease Serial No. NM 23006	
SUNDRY NOTICES AND REPORTS ON	WELLS 11 18 2011	6. If Indian, Allottee or Tribe Name	
Do not use this form for proposals to drill or abandoned well. Use Form 3160-3 (APD) for	to re-enter un		
SUBMIT IN TRIPLICATE – Other instructions 1 Type of Well	s on page 2. RECEIVED	7. If Unit or CA, Agreement, Name and/	or No.
		8. Well Name and No. Lusk '31' Federal No. 3	· .
2. Name of Operator Lynx Petroleum Consultants, Inc. 7		9. API Well No. 30-025-39593	
	Phone No (include area code) 75-392-6950	10. Field and Pool, or Exploratory Area Lusk North Bone Spring/Wolfcam	
4 Location of Well (Footage, Sec., T.,R.,M., or Survey Description) 1880' FSL & 2080' FEL, Section 31, T-18S, R-32E		11. County or Parish, State Lea, New Mexico	
12. CHECK APPROPRIATE BOX(es) TO INDICA	TE NATURE OF NOTICE		<u>\</u>
TYPE OF SUBMISSION TYPE OF		, KLI OKI, OK OTTILK DATA	1
Notice of Intent Acidize X Alter Casing Casing Repair Change Plans	Deepen Produ Fracture Treat Recl New Construction Recc Plug and Abandon Tem	amation (Start/Resume) Water Si amation Well Int omplete Other porarily Abandon	
Subsequent Report Convert to Injection Final Abandonment Notice '	Plug Back X Wate	er Disposal	
 Onshore Oil & Gas Order #7 Producing formation: Bone Spring Daily water production from formation: 35 BWPl Water analysis attached Water is stored in fiberglass tank Water is trucked by Basin Energy Services LP. Disposal Facility: Basic Energy Services LP, Stat Lea Co., NM, API 30-025-28468. 		t 2 - 7-19S-36E,	
7. Salt water disposal permit, SWD-977-B, is attache	d		
		CEPTED FOR RECORI)
SEE ATTACHED FOR CONDITIONS OF APPROVAL		JUL 1 4 2011 /s/ JD Whitlock Jr	4
14 I hereby certify that the foregoing is true and correct Name (<i>Printed/Typed</i>)		URFAIL OF LAND MANAGEMENT CARLSBAD FIELD OFFICE	
	Title AGENT		
Signature Albie McKelwey	Date 7/6/11		
THIS SPACE FOR FEDERAL	L OR STATE OFFICE USE	······································	
Approved by	Title	Date	******
Conditions of approval, if any, are attached Approval of this notice does not warrant or certify that the holds legal or equitable title to those rights in the subject lease which would entitle the applicant to consoperations thereon	applicant tuct Office	÷	
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any Fictitious or fraudulent statements or representations as to any matter within its jurisdictions.	person knowingly and willfully to make to on	o any department or agency of the United States a	nd false,
Instruction on page 2)	······	19 2011	

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CAPITAN CHEMICAL WATER ANALYSIS REPORT

Lynx Petroleum				Dats Sampled : 07/27/10					
ase Name : Lusk 31				Capitan Rep. : J. Hughes					
all Nur	nber	:	4 3		Co	mpany Re	эр.:V	Ves Sheilds	
cation	I	:	Lea County, N.M.						
	AN/	ALYSIS							
1.	pН			6.4					
2.	\$pe	cific Grav	ity @ 60/60 F.	1.128					
З.	CaC	CO3 Satur	ation Index @ 80 F.	+0.027	'(Calcium C	Carbor	nate Scale P	'ossibl o '
			@ 140 F.	+0.987	'n	Caicium C	Carbor	nate Scale P	ossible'
	Dis	solvad Gi	A8865						
4.	4. Hydrogen Sulfide		0	F	PPM				
5. Carbon Dioxide		804	F	PM					
6.	Diss	solved Ox	ygen	Not Determined					
	Cat	lons		mg/L	1	Eq. Wt.	Ξ	MEQ/L	
7.	Cald	ium (Ça+	+)	3,400	1	20.1	=	169.15	
8.	Maç	nesium (i	Mg++)	2,795	1	12.2	=	229.06	
9.	Sod	ium (Na+)) Calculated	62,334	1	23.0	=	2,710.19	
10.	Bari	um (Ba++	-)	Not Determined	1	68.7	=	0.00	
	Anl	ons							
11.	Hyd	roxyl (OH	-)	0	1	17.0	a	0.00	
12.	Carl	bonate (C	O3=)	0	1	30.0	=	0.00	
13.	8ica	irbonate (HCO3-)	259	1	61.1	=	4.23	
14,	Sulf	ate (SO4=	=)	272	1	48.8	=	5.57	
15.	Chic	onde (Cl-)		110,0 00	1	35.5	=	3,098.59	
	Oth	and the second se							
16.	Solu	ıble Iron (Fe)	35	1	18.2	Ħ	1.92	
17.	Tota	l Dissolve	ed Solids	179,059					
18.	Tota	il Hardnes	ss As CaCO3	20,000					
			ite Solubility @ 90 F.	3,798					
26.	Res	istivity (Mi	easured)	0.074	¢)hm/Mete	ITŞ	@ 79	Degrees (F

Logarithmic Water Pattern



PROBABLE MINERAL COMPOSITION							
COMPOUND	Eq. Wt.	X	MEQ/L	-	mg/L		
Ca(HCO3)2	81.04	X	4.23	=	343		
CaSO4	68.07	х	5.57	=	379		
CaCl2	55.50	х	15 9.35	=	8,844		
Mg(HCO3)2	73.17	х	0.00	=	D		
MgSO4	60.19	х	0.00	=	0		
MgCl2	47.62	х	229.06	=	10,908		
NaHCO3	84.00	х	0.00	=	0		
NaSO4	71.03	х	0.00	=	0		
NaCi	58.46	х	2,710.19	=	158,438		

New Mexico Energy, Minerals and Natural Resources Department

Bill Richardson Governor

Joanna Prukop Cabinet Secretary Reese Fullerton Deputy Cabinet Secretary Mark Fesmire Division Director Oil Conservation Division



Administrative Order SWD-977-B July 24, 2008

APPLICATION OF RAY WESTALL FOR PRODUCED WATER DISPOSAL, LEA COUNTY, NEW MEXICO

ADMINISTRATIVE ORDER OF THE OIL CONSERVATION DIVISION

Under the provisions of Rule 701(B), Ray Westall (OGRID 18862) made application to the New Mexico Oil Conservation Division for permission to utilize for produced water disposal its State NO Well No. 1 (API No. 30-025-28468) located 1980 feet from the North line and 660 feet from the West line of Section 7, Township 19 South, Range 36 East, NMPM, Lea County, New Mexico.

THE DIVISION DIRECTOR FINDS THAT:

The application has been duly filed under the provisions of Rule 701(B) of the Division Rules and Regulations. Satisfactory information has been provided that affected parties as defined in Rule 701B(2) have been notified and no objections have been received within the prescribed waiting period. The applicant has presented satisfactory evidence that all requirements prescribed in Rule 701 will be met and the operator is in compliance with the Division's Rule 40.

IT IS THEREFORE ORDERED THAT:

Ray Westall is hereby authorized to utilize its State NO Well No. 1 (API No. 30-025-28468) located 1980 feet from the North line and 660 feet from the West line of Section 7, Township 19 South, Range 36 East, NMPM, Lea County, New Mexico, in such manner as to permit the injection of produced water for disposal purposes into the Cherry Canyon and Brushy Canyon members of the Delaware Mountain Group through perforations from 5775 feet to 7248 feet and through plastic-lined tubing set with a packer located within 100 feet of the top of the injection interval.

IT IS FURTHER ORDERED THAT:

The operator shall take all steps necessary to ensure that the injected water



enters only the proposed injection interval and is not permitted to escape to other formations or onto the surface.

After installing injection tubing, the casing-tubing annulus shall be loaded with an inert fluid and equipped with a pressure gauge or an approved leak detection device in order to determine leakage in the casing, tubing, or packer. The casing shall be pressure tested from the surface to the packer setting depth to assure casing integrity.

The wellhead injection pressure on the well shall be limited to **no more than 1,155 psi.** In addition, the injection well or system shall be equipped with a pressure limiting device in workable condition which shall, at all times, limit surface injection pressure to the maximum allowable pressure for this well.

The Director of the Division may authorize an increase in injection pressure upon a proper showing by the operator that such higher pressure will not fracture the injection formation or result in migration of the injected fluid from the injection formation. Such proper showing shall consist of a valid step-rate test run in accordance with and acceptable to this office.

The operator shall notify the supervisor of the Division's district office of the date and time of the installation of disposal equipment and of any mechanical integrity test so that the same may be inspected and witnessed. The operator shall provide written notice of the date of commencement of injection to the Division's district office. The operator shall submit monthly reports of the disposal operations on Division Form C-115, in accordance with Rule Nos. 706 and 1115 of the Division Rules and Regulations.

Without limitation on the duties of the operator as provided in Division Rules 19 and 116, or otherwise, the operator shall immediately notify the Division's district office of any failure of the tubing, casing or packer in the well, or of any leakage or release of water, oil or gas from around any produced or plugged and abandoned well in the area, and shall take such measures as may be timely and necessary to correct such failure or leakage.

In accordance with Rule No 705.C, the injection authority granted herein shall terminate one year after the effective date of this order if the operator has not commenced injection operations into the subject well, provided however, the Division, upon written request, mailed by the operator prior to the termination date, may grant an extension thereof for good cause shown. One year after injection operations into the well has ceased, the injection authority will terminate *ipso facto.*

Compliance with this order does not relieve the operator of the obligation to comply with other applicable federal, state or local laws or rules, or to exercise due care for the protection of fresh water, public health and safety and the environment.

Jurisdiction is retained by the Division for the entry of such further orders as may be necessary for the prevention of waste and/or protection of correlative rights or upon Administrative Order SWD-977-B Ray Westall July 24, 2008 Page 3 of 3

failure of the operator to conduct operations (1) to protect fresh or protectable waters or (2) consistent with the requirements in this order, whereupon the Division may, after notice and hearing, terminate the injection authority granted herein.

MARK E. FESMIRE, P.E. Director

MEF/wvjj

cc: Oil Conservation Division – Hobbs State Land Office – Oil, Gas, and Minerals Division

BUREAU OF LAND MANAGEMENT Carlsbad Field Office 620 East Greene Street Carlsbad, New Mexico 88220 575-234-5972

Disposal of Produced Water From Federal Wells Conditions of Approval

Approval of the produced water disposal methodology is subject to the following conditions of approval:

- 1. This agency shall be notified of any change in your method or location of disposal.
- 2. Compliance with all provisions of Onshore Order No. 7.
- 3. This agency shall be notified of any spill or discharge as required by NTL-3A.
- 4. This agency reserves the right to modify or rescind approval whenever it determines continued use of the approved method may adversely affect the surface or subsurface environments.
- 5. All above ground structures on the lease shall be painted Shale Green (5Y 4/2), or as per approved APD stipulations. This is to be done within 90 days, if you have not already done so.
- 6. Any on-lease open top storage tanks shall be covered with a protective cover to prevent entry by birds and other wildlife.
- 7. This approval should not constitute the granting of any right-of-way or construction rights not granted by the lease instrument.
- 8. If water is transported via a pipeline that extends beyond the lease boundary, then you need to submit within 30 days an application for right-of-way approval to the Realty Section in this office if you have not already done so.
- 9. Disposal at any other site will require prior approval.
- 10. Subject to like approval by NMOCD.

6/17/2011

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