Form 3160-5 (February 2005)

UNITED STATES DEPARTMENT OF THE INTERIOR **BUREAU OF LAND MANAGEMENT**

FORM APPROVED OMB No 1004-0137

Expires March 31, 2007

SUNDRY NOTICES AND REPORTS ON WELL

Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals

5 Lease Serial No. NM-14496 & NM-10474 6 If Indian, Allottee or Tribe Name

	T IN TRIPLICATE Othe	•			7 If Unit of CA/Agre	eement, Name and/or No
1 Type of Well				,		
Oil Well Gas W	ell Other				8 Well Name and No Ling Federal Nos.	
2. Name of Operator Fasken Oil and Ranch, Ltd.			\		9. API Well No. 30-025-38608, 387	48, 39121, 39122, & 39454
3a Address 303 West Wall St , Suite 1800, Midland, TX 797		432-687-177	(include area co 7	ode)	10 Field and Pool or Apache Ridge; Bor	
4. Location of Well (Footage, Sec., T , Please see remarks section	R ,M , or Survey Description	1)			11 Country or Parish Lea, New Mexico	· /
12 CHEC	K THE APPROPRIATE BO	OX(ES) TO IND	OICATE NATUR	E OF NOTI	CE, REPORT OR OTH	HER DATA
TYPE OF SUBMISSION			TY	PE OF AC	TION	
✓ Notice of Intent	Acidize Alter Casing	Deep	oen ture Treat	=	duction (Start/Resume)	Water Shut-Off Well Integrity
Subsequent Report	Casing Repair Change Plans		Construction and Abandon	_	omplete iporarily Abandon	Other Dispose produced water
Final Abandonment Notice	Convert to Injection		Back		er Disposal	
Fasken Oil and Ranch, Ltd. is requel Item 4 - Location of Well Ling Federal #3 - 660' FNL & 1980' ILing Federal #4'1660' FSL & 2310' Ling Federal #6'- 2130' FNL & 660' FL & 660' FL & 660' FSL & 1980' FNL & 660' FSL & 1980' FSL & 19	FEL, Unit Letter B, Sec. 3 FEL, Unit Letter J, Sec. 3 WL, Unit Letter D, Sec. 3 FWL, Unit Letter E, Sec. 5 FWL, Unit Letter C, Sec. 5 for the Ling Federal #1 G, Sec. 31, T19S, R34E; ired information before di	31, T19S, R34E 31, T19S, R34 1, T19S, R34E 31, T19S, R34 31, T19S, R34 API Number 3	ENM 1449 ENM 14496 ENM 14496 ENM 14496 ENM 1047	4	APP NOV /s/ JD BUREAU OF L	ROVED 1 7 2009 Whitlock Jr AND MANAGEMENT D FIELD OFFICE
APPROVAL BY ST				L		
14 I hereby certify that the foregoing is true and correct Name (Printed/Typed) Kim Tyson Title Regulatory Analyst						
Signature Kim Byun		·	Date 11/05/2			
	THIS SPACE	FOR FEDE	RAL OR ST	ATE OF	FICE USE	3 33
Approved by			DICTOR	T + QI	PERMISOL	NOV 2 2 2000

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction

Office

٠,

entitle the applicant to conduct operations thereon

Conditions of approval, if any, are attached Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would

The following information is needed before your disposal of produced water can be approved, Onshore Oil & Gas Order #7.

1. Name (s) of all formation (s) producing water on the lease.

Apache Ridge; Bone Springs

Tonto; Wolfcamp

2. Amount of water produced from all formations in barrels per day.

125 barrels per day

3. A current water analysis of produced water from all zones showing at least the total dissolved solids, ph, and the concentrations of chlorides and sulfates.

See attached water analysis for the Ling Federal #3, 4, 5, and 6. Ling Federal #9 is currently awaiting well completion.

4. How water is stored on the lease.

The water is stored in tanks.

5. How water is moved to the disposal facility.

The water is moved by injection pump at the Ling Federal #3 Battery.

- 6. Identify the Disposal Facility by:
 - A. Operators Name.

Fasken Oil and Ranch, Ltd.

B. Well Name.

Ling Federal

C. Well type and well number. (SWDW) (WIW)

Well #1. This is a water injection well.

C. Location by 1/4 1/4, section, township, & range.

SW 1/4 of the NE 1/4, Lot G, Section 31, T19S, R34E

7. A copy of the Underground Injection Control Permit – issued for the injection well by the Environmental Protection Agency or New Mexico Oil Conservation Division where the State has achieved primacy.

See attached permit.

RECEIVED_{Martin Water Laboratories, Inc.}

P.O. BOX 98 MIDLAND, TX. 79702 PHONE (432) 683-4521

NUV 9 7 2008

709 W. INDIANA MIDLAND, TEXAS 79701 FAX (432) 682-8819

RESULT OF WATER ANALYSES 1108-51 FASKEN OIL AND LABORATORY NO. 11-5-08 Mr. Carl HRANCH, LTD. SAMPLE RECEIVED 303 W. Wall, Suite 1800, Midland, TX 79701 11-6-08 RESULTS REPORTED_ Ling#3 Fasken Oil & Ranch LEASE _ COMPANY. FIELD OR POOL NMLea STATE -_ BLOCK ____ SURVEY _ COUNTY. SECTION SOURCE OF SAMPLE AND DATE TAKEN: NO.1 Submitted water sample - taken 11-4-08. NO. 2 ___ NO. 3 ___ NO. 4 **Bone Springs** REMARKS: _ CHEMICAL AND PHYSICAL PROPERTIES NO. 3 NO. 4 NO. 1 1.0980 Specific Gravity at 60° F pH When Sampled 7.16 pH When Received 3,026 Bicarbonate as HCO₃ Supersaturation as CaCO, Undersaturation as CaCO, 1.550 Total Hardness as CaCO, 460 Calcium as Ca 97 Magnesium as Mg 60,787 Sodium and/or Potassium 1.031 Sulfate as SO. 92,300 Chloride as Cl 2.5 Iron as Fe 0 Barium as Ba Turbidity, Electric Color as Pt 157,701 Total Solids, Calculated Temperature *F. Carbon Dioxide, Calculated Dissolved Oxygen. 0.0Hydrogen Sulfide 0.068 Resistivity, ohms/m at 77° F Suspended Oil Flitrable Solids as mg/l Volume Filtered, ml Results Reported As Milligrams Per Liter This water shows characteristics that are similar to some of our Bone Additional Determinations And Remarks Springs records in central Lea county.

Form No. 3

Greg Ogden, B.S.

Endura Products Corporation P.O. Box 3394, Midland, Texas 79702

Phone (432) 684-4233 Fax (432) 684-4277

WATER ANALYSIS

Date	9/17/2009	Endura Rep Norman Smiley	Code	10113410
Sampling	Point/Date W/I	I 9/15/2009	State	New Mexico
Company	Fasken Oil an	d Ranch	County	Lea
Formation		Lease Ling Federal	Well	#4

DISSOLVED SOLIDS

<u>CATIONS</u>	mg/l	me/l
Sodium, Na+ (Calc.)	39,146	1,702
Total Hardness as Ca++	6,088	0
Calcium Ca++	5,568	278
Magnesium, Mg+	317	26
Barium, Ba++	0	0
Iron (Total) Fe+++*	36	2

ANIONS

Chlorides, Cl-	71,000	2,000
Sulfate, SO4-	300	6
Carbonate, CO3-	0	0
Bicarbonates, HCO3-	122	2
Sulfide, S-*	0	. 0
Total Dissolved Solid	116,489	

OTHER PROPERTIES

pH*	6.910
Specific Gravity,60/60 F.	1.072
Turbidity	592

SCALING INDICIES

TEMP, F	CA CO3	CASO4*2H2O	CA SO4	BA SO4
80	0.0518	-0.7885	-1.0006	-29.2009
120	0.3840	-0.7962	-0.8278	-29.4176
160	0.8983	-0.8021	-0.6611	-29.6473

PERFORATIONS

Endura Products Corporation

P.O. Box 3394, Midland, Texas 79702 Phone (432) 684-4233 Fax (432) 684-4277

WATER ANALYSIS

Date 7/30/200 Sampling Point/Date Company Fasken 6 Formation	Separator 7. Oil and Ranch			
DISSOLVED SOI	LIDS			•
CATIONS Sodium, Na+ (Calc.) Total Hardness as Car Calcium Ca++ Magnesium, Mg+ Barium, Ba++ Iron (Total) Fe+++*	† †	mg/l 51,566 4,152 3,480 410 0 60	me/l 2,242 0 174 34 0 3	
ANIONS Chlorides, Cl- Sulfate, SO4- Carbonate, CO3- Bicarbonates, HCO3- Sulfide, S-* Total Dissolved Solid		86,000 1,350 0 122 0 142,988	2,423 28 0 2 0	
other proper pH* Specific Gravity,60/6 Turbidity		6.940 1.097 148		
<u>TEMP, F</u> 80	CA CO3 -0.0110	SCALING INDICIES <u>CASO4*2H2O</u> -0.3617	<u>CA SO4</u> -0.5901	BA SO4 -29.2520

-0.3688

-0.3807

0.3381

0.8783

-29.4602

-29.6903

-0.4168

-0.2560

PERFORATIONS

120

160

Endura Products Corporation P.O. Box 3394, Midland, Texas 79702

Phone (432) 684-4233 Fax (432) 684-4277

WATER ANALYSIS

Date 3/6/2009	Endura Rep Norman Smiley	Code	10107843
Sampling Point/Date	State	New Mexico	
Company Fasken C	il and Ranch, LTD	County	Lea
Formation	Lease Ling Federal	Well	#6
DISSOLVED SOL	I <u>DS</u>		
<u>CATIONS</u>	mg/l	me/l	
Sodium, Na+ (Calc.)	47,081	2,047	
Total Hardness as Ca+	+ 4,208	0	

Calcium Ca++	2,648	132
Magnesium, Mg++	951	79
Barium, Ba++	0	0
Iron (Total) Fe+++*	12	1

ANIONS

Chlorides, Cl-	77,900	2,194
Sulfate, SO4-	1,275	27
Carbonate, CO3-	0	0
Bicarbonates, HCO3-	2,318	38
Sulfide, S-*	0	0
Total Dissolved Solid	132,185	

OTHER PROPERTIES

pH*	6.740
Specific Gravity,60/60 F.	1.082
Turbidity	136

SCALING INDICIES

TEMP, F	CA CO3	CASO4*2H2O	CA SO4	<u>BA SO4</u>
80	0.8918	-0.5016	-0.7221	-29.2280
120	1.2323	-0.5097	-0.5497	-29.4403
160	1.7596	-0.5208	-0.3883	-29.6705

PERFORATIONS

New Mexico Energy, Minerals and Natural Resources Department

Bill Richardson

Joanna Prukop Cabinet Secretary Mark Fesmire
Division Director
Oil Conservation Division



Administrative Order IPI-346 June 19, 2009

Fasken Oil & Ranch, Ltd. 300 West Wall Ave, Suite 1800 Midland, TX 79701-5116

Attention: Ms. Kim Tyson

RECEIVED

JUN 2 5 2009

FASKEN OIL AND RANCH, LTD.

RE: Injection Pressure Increase Request

Ling Federal Well No. 1 (API No. 30-025-28064) SWD-1142 Unit G, Sec 31, T 19 South, R 34 East, NMPM, Lea County, New Mexico Delaware formation Through perforations from 5679 feet to 8303 feet

Reference is made to your request on behalf of Fasken Oil & Ranch, Ltd. (OGRID 151416) received by the Division June 15, 2009, to increase the surface injection pressure limit on the above named disposal well.

Administrative Order No SWD-1142 approved on September 29, 2008, permitted the Ling Federal Well No. 1 for injection into the Delaware formation from 5679 feet to 8303 feet and allowed a maximum surface injection pressure of 1136 psi.

It is our understanding that this well will not take a sufficient volume of water at this pressure limit and a higher pressure limit is needed to enable increased water disposal.

The basis for granting this pressure increase is the step rate test run by Gray wireline on this well in May, 2009. Gray wireline measured the pressures during this test with surface and downhole pressure gauges.

You are hereby authorized to utilize up to <u>1500 psi</u> as the maximum surface injection pressure on this well provided the tubing, size, type, setting depth and perforation depths do not change. However, you are prohibited from injecting at pressures that would induce fracturing.

This approval is subject to your being in compliance with all other Division rules, including but not limited to Division Rule 5.9.



IPI-346 June 19, 2009 Page 2

The Division Director may rescind this injection pressure increase if it becomes apparent that the injected fluid is not being confined to the injection zone or is endangering any fresh water aquifers.

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 by the operator, may grant an extension thereof for good cause shown.

Sincerely,

Mark E. Fesmire, P.E.

Director

MEF/tw

cc: Oil Conservation Division – Hobbs

Bureau of Land Management-Carlsbad

File: SWD-1136

Bill Richardson Governor

Joanna Prukop Cabinet Secretary Reese Fullerton Deputy Cabinet Secretary RECEIVED

OCT 0 1 2008

FASKEN OIL AND RANCH, LTD. Mark Fesmire
Division Director
Oil Conservation Division



Administrative Order SWD-1142 September 29, 2008

APPLICATION OF FASKEN OIL & RANCH, LTD. FOR PRODUCED WATER DISPOSAL, LEA COUNTY, NEW MEXICO

ADMINISTRATIVE ORDER OF THE OIL CONSERVATION DIVISION

Under the provisions of Rule 701(B), Fasken Oil & Ranch, Ltd. (OGRID 151416) made application to the New Mexico Oil Conservation Division for permission to utilize for produced water disposal its Ling Federal Well No. 1 (API No. 30-025-28064) located 1980 feet from the North line and 1980 feet from the East line of Section 31, Township 19 South, Range 34 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 will be in compliance with the Division's Rule 40 after production wells surrounding this subject injection well are re-activated.

IT IS THEREFORE ORDERED THAT:

Fasken Oil & Ranch, Ltd. is hereby authorized to utilize its Ling Federal Well No. 1 (API No. 30-025-28064) located 1980 feet from the North line and 1980 feet from the East line of Section 31, Township 19 South, Range 34 East, NMPM, Lea County, New Mexico, in such manner as to permit the injection of produced water for disposal purposes into the Delaware Mountain Group through perforations from 5679 feet to 8303 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.

Within 6 months of beginning injection, the operator shall supply the Division with a copy of an injection [temperature and tracer survey] log run while injecting at this well's average injection rate, identifying the injection intervals within the perforated interval.

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 1136 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 of said well that such higher pressure will not 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 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.

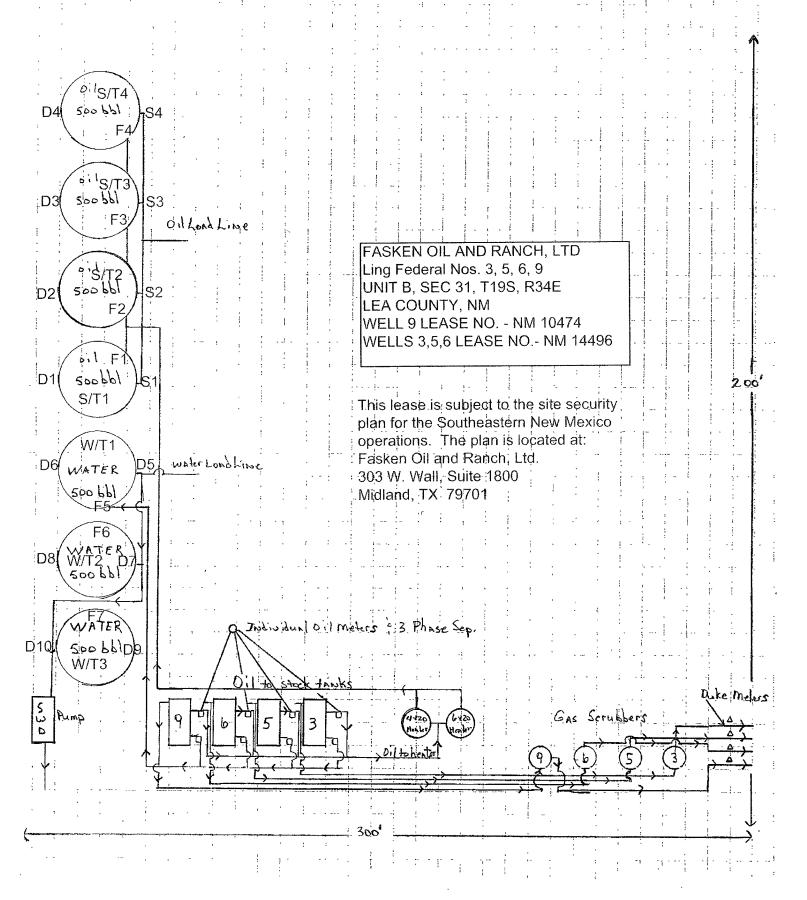
MARK E. FESMIRE, P.E.

Director

MEF/wvjj /

cc: Oil Conservation Division - Hobbs

Bureau of Land Management - Carlsbad



Attachment 1-1 To Site Facility Diagram Ling Federal Nos. 3,5,6 - Lease No NM 14496 Ling Federal No. 9 - Lease No. NM 10474

General sealing of valves, sales by tank gauging and transport truck

Production phase - drain valves D1 through D4, D6, D8, D10 are sealed closed. sales valves S1, S2, S3 and S4 are sealed closed.

Sales phase - Sales are from tanks S/T1, S/T2, S/T3 or S/T4

Sealing of valves:

Tank S/T - valves D1 through D4, F1 through F4 and S1 through S4 sealed closed

Production System - Closed