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

Hobbs
5. Lease Serial No
NM-14496 & NM-10474
Allottee or Tri

6. If Indian, Allottee or Tribe Name SUNDRY NOTICES AND REPORTS ON WEL

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

	orm for proposals t Use Form 3160-3 (A						
SUBMIT IN TRIPLICATE – Other instructions on page 2			7 If Unit of CA/Agree	ement, Name and/or No.			
l Type of Well		,			1		
Oil Well Gas Well Other				8 Well Name and No Ling Federal Nos. 3			
2 Name of Operator Fasken Oil and Ranch, Ltd. 5		9. API Well No. 30-025-38608, 3874	48, 39121, 39122, & 3945	54 ×			
3a Address 3b. Phone No		3b. Phone No (432-687-1777	include area co	de)	10 Field and Pool or Exploratory Area Apache Ridge; Bone Springs		
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	CK THE APPROPRIATE BO	OX(ES) TO INDI	CATE NATUR	E OF NOTIO	CE, REPORT OR OTH	ER DATA	
TYPE OF SUBMISSION			TY	PE OF ACT	ION		
✓ Notice of Intent	Acidize Alter Casing	Deeper Deeper	re Treat	_	uction (Start/Resume) amation	Water Shut-Off Well Integrity	
Subsequent Report	Casing Repair Change Plans	=	onstruction nd Abandon		omplete porarily Abandon	Other Dispose power water	oduced
Final Abandonment Notice	Convert to Injection	Plug B	ack	☐ Wate	er Disposal		
following completion of the involve testing has been completed. Final determined that the site is ready fo Fasken Oil and Ranch, Ltd. is reque	Abandonment Notices must r final inspection)	be filed only after	all requiremen	ts, including	reclamation, have beer	n completed and the operato	r has
Item 4 - Location of Well							
Ling Federal #3 - 660' FNL & 1980' Ling Federal #4'1660' FNL & 2310 Ling Federal #5' - 990' FNL & 660' F Ling Federal #6' - 2130' FNL & 660' Ling Federal #9 - 550' FSL & 1980' Location Information & API number 1980' FNL & 1980' FEL, Unit Letter	I' FEL, Unit Letter J, Sec. 3 WL, Unit Letter D, Sec. 3 FWL, Unit Letter E, Sec. 3 FWL, Unit Letter C, Sec. 3 for the Ling Federal #1	31, T19S, R34E 1, T19S, R34E <i>,</i> 31, T19S, R34E 31, T19 S , R34E	rr 14496 vr 14496 vr 14496 vr1047		NOV	ROVED 1 7 2009 Whitlook Jr	
Please see attached additional required information before disposal of water can be approved. SUBJECT TO LIKE APPROVAL BY STATE			BUREAU OF LA	AND MANAGEMENT O FIELD OFFICE			
AFFROVAL DI 31							
Name (Printed/Typed) Kim Tyson	rae and correct		Title Regulate	ory Analyst			· · · · · · · · · · · · · · · · · · ·
0 (1) (11/05/20	nna			

Signature Rim Jun	Date 11/05/2009	
THIS SPACE FOR FEDER	AL OR STATE OFFICE USE	ν,
Approved by	DISTRICT 1 SUPERVISOR	NOV 2 0 2009
Conditions of approval, if any, are attached Approval of this notice does not warrant or cer that the applicant holds legal or equitable title to those rights in the subject lease which woulentitle the applicant to conduct operations thereon		4.5

(Instructions on page 2)

fictitious or fraudulent statements or representations as to any matter within its jurisdiction

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

NUV (17 2008

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

PHONE (432) 683-4521	RESULT OF WAT	ER ANALYSES			FAX (402) 002-0013	
FASKEN OIL AND Mr. Carl BRANCH, LTD.		LABORATORY NO			1108-51 11-5-08	
303 W. Wall, Suite 1800, Midland, TX	79701		PORTED	1	1-6-08	
COMPANY Fasken Oil & Ranch		LEASE	Ling#	3	- Printernal	
FIELD OR POOL						
SECTION BLOCK SURVEY	COUNTY _	Lea	STATE _	7	M	
SOURCE OF SAMPLE AND DATE TAKEN:			•			
NO. 1 Submitted water sample - take	en 11-4-08.					
NO. 2						
NO. 3						
NO. 4						
REMARKS:	Bone Springs					
C	HEMICAL AND PHYS	SICAL PROPERT	ries			
	NO. 1	NO.	. 2	NO. 3	NO. 4	
Specific Gravity at 60° F.	1.0980	0				
pH When Sampled						
pH When Received	7.10	6				
Bicarbonate as HCO ₃	3,020	6				
Supersaturation as GaCO,						
Undersaturation as CaCO,						
Total Hardness as CaCO ₃	1,550	0				
Calcium as Ca	460	0	* +			
Magnesium as Mg	97				í	
Sodium and/or Potassium	60,787	ſ				
Sulfate as SO.	1,03					
Chloride as Cl	92,300					
fron as Fe	2.5	1				
Barium as Ba	9	0				
Turbidity, Electric						
Color as Pt					`	
Total Solids, Calculated	157,70	1				
Temperaturé °F						
Carbon Dioxide, Calculated						
Dissolved Oxygen,		3			<u> </u>	
Hydrogen Sulfide	0.068					
Resistivity, ohms/m at 77° F	0.000	<u> </u>				
Suspended Oil						
Filtrable Solids as mg/l						
Volume Filtered, ml						
	Results Reported As N	Ailligrams Per Liter				
Additional Determinations And Remarks	This water show	s characteristic	s that are sim	ilar to some of	our Bone	
Springs records in central Lea county.						
Springs records in venture 202						
	-					

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 l	Point/Date W/F	I 9/15/2009	State	New Mexico
Company	Fasken Oil an	d Ranch	County	Lea
Formation		Lease Ling Federal	Well	#4

DISSOLVED SOLIDS

CATIONS	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		

<u>ANIONS</u>

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 7/30/2009 E Sampling Point/Date Separa Company Fasken Oil and I Formation		Code 10111716 State New Mexico County Lea Well #5
DISSOLVED SOLIDS		
<u>CATIONS</u>	mg/l	me/l
Sodium, Na+ (Calc.)	51,566	2,242
Total Hardness as Ca++	4,152	0
Calcium Ca++	3,480	174
Magnesium, Mg+	410	34
Barium, Ba++	0 60	0 3
Iron (Total) Fe+++*	00	3
<u>ANIONS</u>		
Chlorides, Cl-	86,000	2,423
Sulfate, SO4-	1,350	28
Carbonate, CO3-	0	0 .
Bicarbonates, HCO3-	122	2
Sulfide, S-*	0	. 0
Total Dissolved Solid	142,988	
OTHER PROPERTIES		
pH*	6.940	
Specific Gravity,60/60 F.	1.097	
Turbidity	148	
	SCALING INDICIES	

CASO4*2H2O

-0.3617

-0.3688

-0.3807

CA SO4

-0.5901

-0.4168

-0.2560

BA SO4

-29.2520

-29.4602

-29.6903

PERFORATIONS

TEMP, F

80

120

160

CA CO3

-0.0110

0.3381

0.8783

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

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

WATER ANALYSIS

Sampling Point/	Date well head 2/2 ken Oil and Ranch			
DISSOLVED	SOLIDS			
CATIONS Sodium, Na+ (C Total Hardness a Calcium Ca++ Magnesium, Mg Barium, Ba++ Iron (Total) Fe+	us Ca++ ++	mg/l 47,081 4,208 2,648 951 0	me/l 2,047 0 132 79 0	
ANIONS Chlorides, Cl- Sulfate, SO4- Carbonate, CO3 Bicarbonates, He Sulfide, S-* Total Dissolved	- CO3-	77,900 1,275 0 2,318 0 132,185	2,194 27 0 38	
oTHER PRO pH* Specific Gravity Turbidity		6.740 1.082 136 SCALING INDICIES		
TEMP, F	CA CO3	CASO4*2H2O	CA SO4	BA SO4

-0.5016

-0.5097

-0.5208

0.8918

1.2323

1.7596

-0.7221

-0.5497

-0.3883

-29.2280

-29.4403

-29.6705

PERFORATIONS

80

120

160

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: <u>Injection Pressure Increase Request</u>

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

New Mexico Energy, Minerals and Natural Resources Department

Bill Richardson

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.

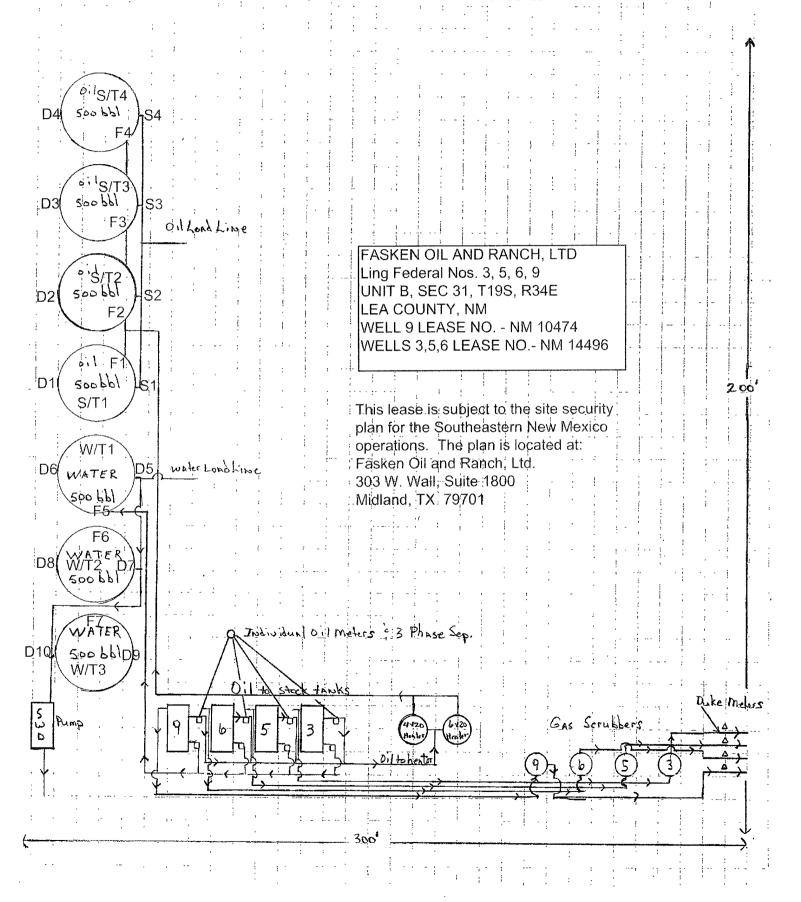
MARK E. FESMIRE, P.E.

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