DATE IN	SUSPENSE	ENGINEER	LOGGED IN	TYPE	APP NO

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]

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SEP 07 2010
NMOCD ARTESIA

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

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

Check One Only for [B] or [C]

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

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

[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

[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.

Kim Tyson	Kim Tyson	Regulatory Analyst	9-2-2010
Print or Type Name	Signature	Title	Date

kimt@forl.com
e-mail Address

STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL
RESOURCES DEPARTMENT

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

FORM C-108
Revised June 10, 2003

APPLICATION FOR AUTHORIZATION TO INJECT

I. PURPOSE: _____ Secondary Recovery _____ Pressure Maintenance __X__ Disposal _____ Storage
Application qualifies for administrative approval? __X__ Yes _____ No

II. OPERATOR: Fasken Oil and Ranch, Ltd.

ADDRESS: 303 W. Wall St., Ste. 1800, Midland, TX 79701

CONTACT PARTY: Kim Tyson PHONE: 432-687-1777

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: Kim Tyson TITLE: Regulatory Analyst

SIGNATURE: Kim Tyson DATE: 9-2-2010

E-MAIL ADDRESS: kimt@forl.com

* 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: _____

DISTRIBUTION: Original and one copy to Santa Fe with one copy to the appropriate District Office

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 1

INJECTION WELL DATA SHEET

OPERATOR: Fasken Oil and Ranch, Ltd.

WELL NAME & NUMBER: Shell Federal No. 2

WELL LOCATION:	3300' FSL & 660' FWL	M	5	21S	24E
	FOOTAGE LOCATION	UNIT LETTER	SECTION	TOWNSHIP	RANGE

WELLBORE SCHEMATIC

WELL CONSTRUCTION DATA

Surface Casing

Hole Size: 17 1/2" Casing Size: 13 3/8", 54.5# @ 400'

Cemented with: 600 sx. *or* _____ ft³

Top of Cement: Surface Method Determined: Circulated

Intermediate Casing

Hole Size: 12 1/4" Casing Size: 8 5/8", 24 & 32# @ 3000'

Cemented with: 1125 sx. *or* _____ ft³

Top of Cement: Surface Method Determined: Circulated

Production Casing

Hole Size: 7 7/8" Casing Size: * 5 1/2", 17# @ 10,250'
DV Tool @ 7000'

Cemented with: 1650 sx. *or* _____ ft³

Top of Cement: ** Surface Method Determined: _____

Total Depth: *** 11,000'

Injection Interval

10,250' feet to 11,000'

(~~Perforated~~ or Open Hole; indicate which)

* The 5 1/2" casing is new casing that will be run in the hole when the well is re-entered.

** Fasken plans to circulate cement to surface.

*** The well will be deepened from it's original TD @ 10,020' to 11,000' when it is re-entered.

INJECTION WELL DATA SHEET

Tubing Size: 3 1/2" N-80 IPC Lining Material: Internally Plastic Coated

Type of Packer: Arrowset I 10K Nickel Plated

Packer Setting Depth: 10,000'

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? Gas well in the Cemetery; Morrow Pool. Dry and abandoned.

2. Name of the Injection Formation: Devonian

3. Name of Field or Pool (if applicable): SWD; Devonian

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. No

5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area: Morrow +/- 9600', Atoka +/- 9200', Strawn +/- 8700', Penn. +/- 7800', Wolfcamp +/- 7000', Yeso +/- 2800', Glorietta +/- 2500', and San Andres +/- 1000'.

FASKEN OIL AND RANCH, LTD.
APPLICATION FOR AUTHORITY TO INJECT

III Proposed Salt Water Disposal Well Data:

A.

1) Shell Federal No. 2
   3300' FSL & 660' FWL
   Section 5, T21S, R24E
   Eddy County, NM

2) Surface Casing: 13-3/8" 54.5#/ft set @ 400', cemented to surface with 400 sx Halliburton Lite "C" w/2% CaCl2 (13.6 lbs/gal) + 200 sx "C" w/2% CaCl2 (14.8 lb/gal).

3) Intermediate Casing: 8-5/8" 32&24#/ft set at 3000', cemented to surface with 925 sx Halliburton Lite (13.1-13.6 lb/gal) + 200 sx "C" w/2% CaCl2 (14.8 lb/gal).

4) Production Casing: None current. Proposed 5-1/2" 17#/ft N-80 & J-55 casing at +/-10250' w/DV tool at +/-7000'. Cement 1st stage w/+/-300 sx "H" 50:50 Poz (14.2 lb/gal, 1.24 ft^3/sk yld)+350 sx Super "H" (13.2 lb/gal, 1.62 ft^3/sk yld). 2nd stage +/-750 sx Class "C" (12.4 lb/gal, 2.0 ft^3/sk yld)+250 sx Class "H" (15.6 ppg, 1.18 ft^3/sk yld).

5) Total Depth: 10,020' (proposed 11,000')

6) Tubing: 3-1/2" EUE 8rd 9.3 #/ft, N-80 IPC tubing

7) Packer: Arrowset I 10K nickel plated w1.875" "F" profile TOSSD @ 10,000'

B.

1) Injection Formation: Devonian
   Field: SWD Devonian; Pool Code 96101

2) Injection interval : Devonian 10250' – 11000'

3) Original purpose of well: Drilled for Morrow Gas; D&A

4) Other perfs: none

5) Depths & names of higher or lower oil or gas zones:
   Above: Morrow +/- 9600'
   Atoka +/- 9200'
   Strawn +/- 8700'
   Penn +/- 7800'
   Wolfcamp +/-7000'
   Yeso +/-2800'
   Glorietta +/-2500'
   San Andres +/-1000'
   Below: None

VII Proposed Operation Data:

1) Average daily injection rate – 7500 bwpd
   Maximum daily injection rate – 15000 bwpd

2) Type of injection system – closed system

3) Average injection pressure – 500 psi
   Maximum injection pressure – 2000 psi

4) Injection water will be mostly produced Glorietta-Yeso water with some Morrow, Penn, Wolfcamp from offsetting Fasken operated leases. The San Andres is not currently productive, but is potential in the area. Compatibility with the receiving formation has been demonstrated in nearby Devonian zone SWD operations injecting Morrow, Penn, Wolfcamp, and Glorietta-Yeso waters in various mix concentrations.

   Representative Morrow and Wolfcamp water analyses are attached. A represented Eddy CountyYeso analysis is as follows:

Sp Gr	1.122
PH	6 5
Resistivity	0.0537 @ 75°
Chlorides (Cl)	107118
Bicarbonate	244
Sulfates (SO4)	800
Calcium (Ca)	10581
Magnesium (Mg)	1757
Iron (Fe)	2 8
Sodium (Na)	54473
Sulfides (H2S)	negl.

5) Disposal zone water analysis attached is from the Marathon Oil Company North Indian Basin Well No. 1 (Sec 9, T21S, R23E, Eddy Co., NM) in1963, Devonian DST interval 10009'-10100'; an excerpt from the Marathon Oil Company SWD application for the Indian Hills Comm Well No. 7 approved as Administrative Order SWD -570.

VIII Geological Data

Injection Zone.

Geological Name: Devonian

Lithological Detail: Dolomite/Limestone

Formation top: +/-10230'

Thickness: +/-1000'

Drinking water - Overlying:

Alluvian:
Depth to bottom: 50 ft (?)
Lower Queen.
Depth To bottom 900 ft

Above data based on publication: *Geology and Ground Water Resources of Eddy County New Mexico.*

Drinking water - Underlying:

None

IX **Stimulation Program**:

The proposed injection interval will be acidized with +/-5000 gal 15% HCL acid.

X **Well Logs**:

Forms C-103 and C-105, along with an inclination report and well logs were filed on this well.

XI **Chemical Analysis of Fresh Water:**

XII **Affirmative Statement**:

Upon examination of the available geologic and engineering data, no evidence of open faults or any other hydraulic connection between the disposal zones and an underground source of drinking water was found.

Stonnie Pollock

Shell Federal Com No. 2

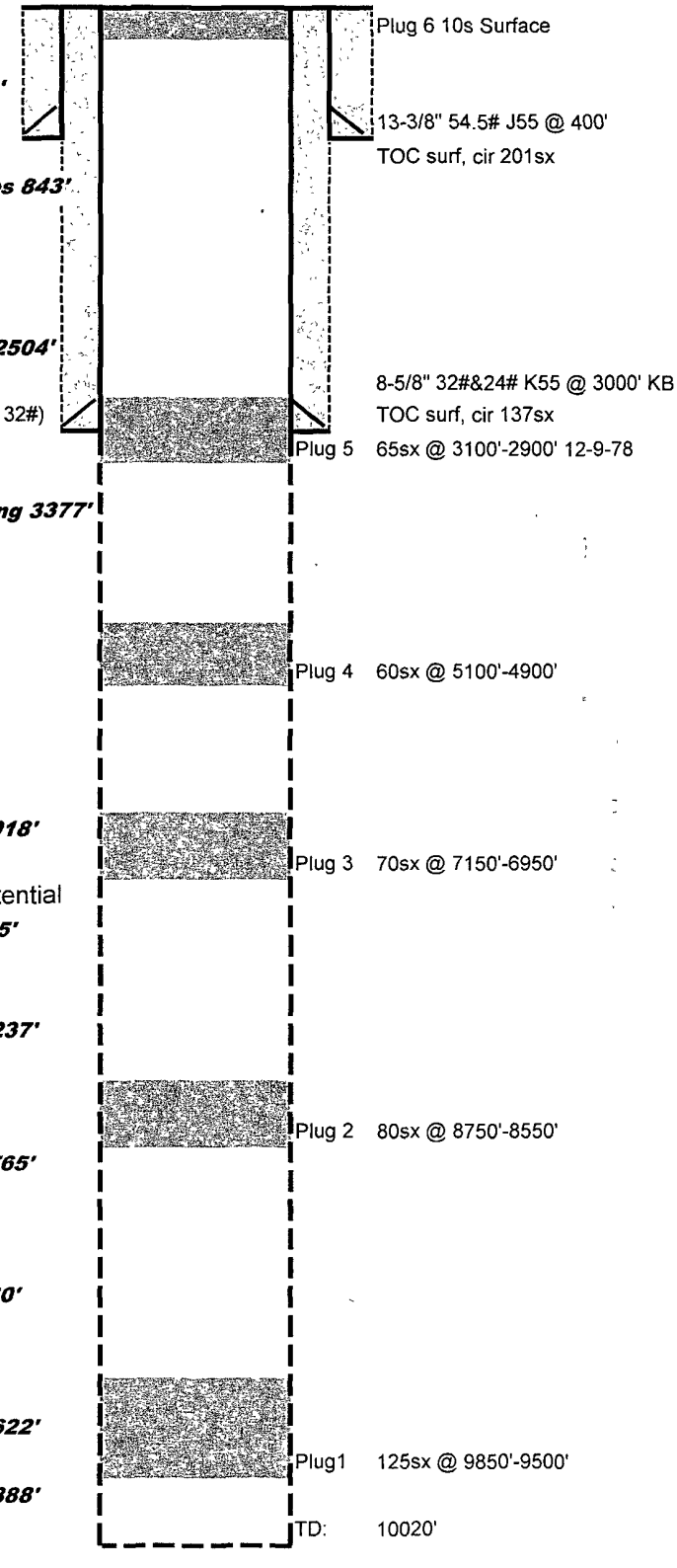
D&A 12-9-78

GL: 3765.70'; KB: 3781.7'

Operator: **Fasken Oil and Ranch, Ltd.**
Location: 3300' FSL and 660' FWL
Sec 5, T21S, R24
Eddy County, NM
Compl.: 12/10/1978 Rig Released
API #: 30-015-22717
TD: 10020'
PBTD: D&A 12-9-1978; set 10sx surf plug 6-15-79
Casing: **13-3/8" 54.5# J55 @ 400'**
w/400sx Lite w/2%CaCl2, 13.6ppg
+200 sx "C" w/2%CaCl2, 14.8ppg.
TOC surf, cir 201sx
8-5/8" 32#&24# K55 @ 3000' KB
w/925sx Lite, 13.1-13.6 ppg
+200 sx "C" w/2%CaCl2, 14.8ppg.
TOC surf, cir 137sx

Plug 6 10sx Surface 6-15-79
Delay to evaluate re-entry, deviated hole potential
Plug 5 65sx @ 3100'-2900' 12-9-78
Plug 4 60sx @ 5100'-4900'
Plug 3 70sx @ 7150'-6950'
Plug 2 80sx @ 8750'-8550'
Plug1 125sx @ 9850'-9500'

Hole Sizes:
17-1/2" 0-400', 12-14/" 400-3000" , 7/7/8" 3000'-10020'



dak
8/20/2010
ShellFed2 wb diagram.xls

Shell Federal No. 2 SWD

Proposed SWD

GL: 3765 70'; KB: 3781.7'

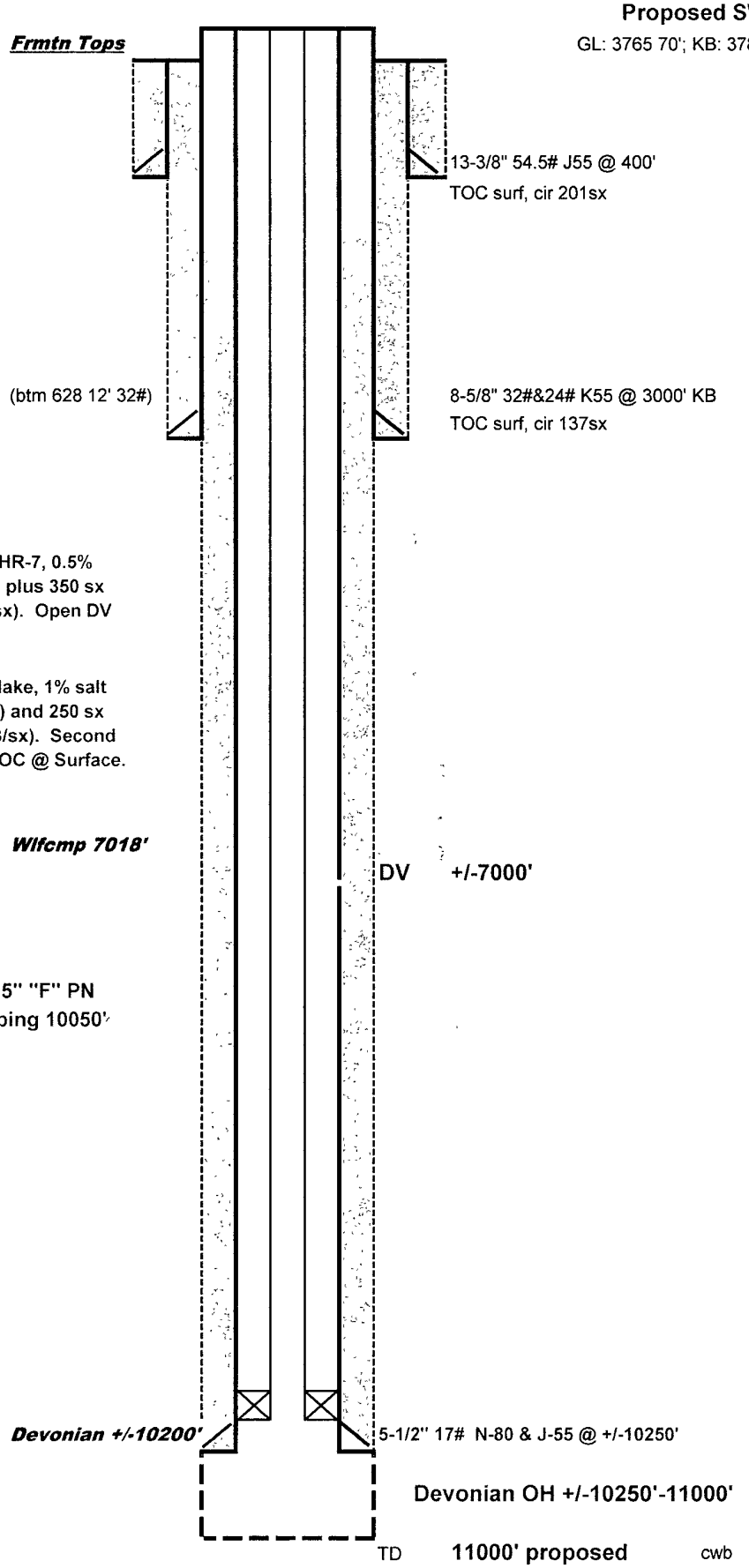
Operator: **Fasken Oil and Ranch, Ltd.**
Location: 3300' FSL and 660' FWL
Sec 5, T21S, R24
Eddy County, NM
Compl.: 12/10/1978 Rig Released
API #: 30-015-22717
TD: 10020'
Casing: **13-3/8" 54.5# J55 @ 400'**
w/400sx Lite w/2%CaCl2, 13.6ppg
+200 sx "C" w/2%CaCl2, 14.8ppg.
TOC surf, cir 201sx
8-5/8" 32#&24# K55 @ 3000' KB
w/925 sx Lite, 13.1-13 6 ppg
+200 sx "C" w/2%CaCl2, 14.8ppg
TOC surf, cir 137sx

Proposed:

5-1/2" 17# N-80 & J-55 @ +/-10250'
1st stg:300 sx "H" 50:50 Poz with 1% HR-7, 0.5% LAP-1 (s.w. 14.2 ppg, yield 1.24 ft3/sx) plus 350 sx Super H (s.w. 13.2 ppg, 1.62 yield ft3/sx). Open DV tool and circulate for 6 hrs.

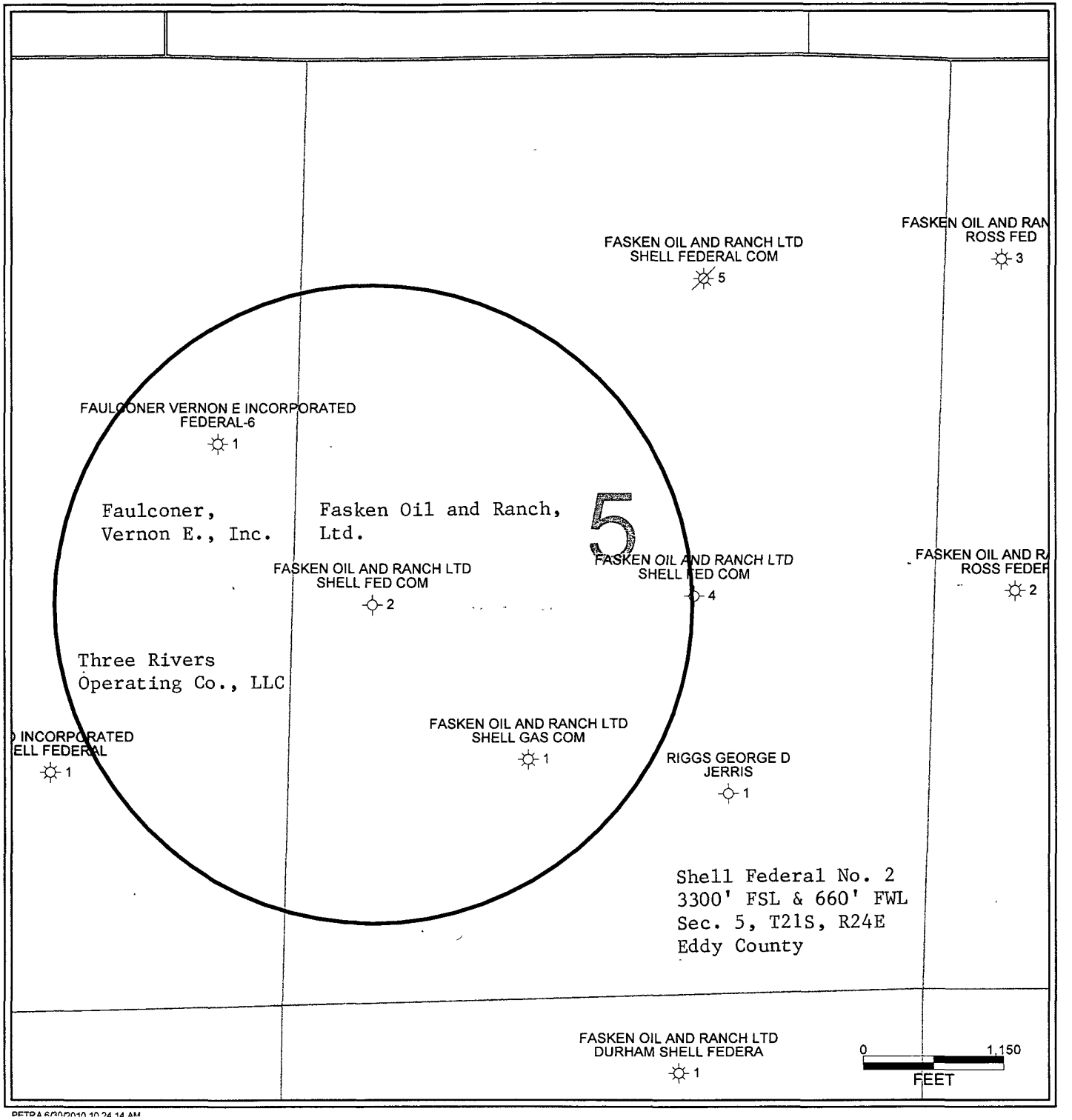
2nd stg:750 sx "C" with 1/8# Poly-E-Flake, 1% salt and 6% gel (s.w. 12.4, yield 2.00 ft3/sx) and 250 sx Class "H" (s.w. 15.6 ppg, yield 1.18 ft3/sx). Second stage cement volume calculated for TOC @ Surface.

Tubing and packer
Arrowet II 10k pkr @10000' w/1.875" "F" PN
3-1/2" 9.3#/ft EUE 8rd N-80 IPC tubing 10050'



Hole Sizes:
17-1/2" 0-400'; 12-14/" 400-3000" ; 7/7/8" 3000'-10020'
New 7-7/8" 10020'-11000' (OH +/-10250'-11000')

cwb
8/20/2010
ShellFed2 wb diagram xls



PETRA 6/30/2010 10:24:14 AM

Fasken Oil and Ranch, Ltd.

Shell Federal No. 2

Table of Well Data within ½ Mile

Operator	Well Name and Number	API Number	Oil or Gas	Spud Date	Total Depth	Formation and Perfs
Vernon E. Faulconer, Inc.	Federal 6 No. 1	30-015-21915	Gas	10/04/1976	9869'	Morrow 9535' – 9543'
Location:	3193' FNL 660' FEL Sec. 6, T21S, R24E					
Casing:	Well does not penetrate the proposed disposal interval.					
Fasken Oil and Ranch, Ltd.	Shell Federal Com No. 1	30-015-10881	Gas	10/30/1966	9901'	Morrow 9570' – 9592' 9727' – 9731' 9657' – 9662'
Location:	1980' FSL 1980' FWL Sec. 5, T21S, R24E					
Casing:	Well does not penetrate the proposed disposal interval.					

Operator	Well Name and Number	API Number	Oil or Gas	Spud Date	Total Depth	Formation and Perfs
Fasken Oil and Ranch, Ltd.	Shell Federal Com No. 4	30-015-22835	P&A Dry Hole	03/11/1979	10,000'	Morrow

Location: 3300' FSL & 1980' FEL
Sec. 5, T21S, R24E

Casing: Well does not penetrate the proposed disposal interval.

Fasken Oil and Ranch, Ltd.
Shell Federal No. 2
SWD Application
List of Notified Parties

Offset Operators within a ½ mile radius:

Fasken Oil and Ranch, Ltd.
303 W. Wall St., Ste. 1800
Midland, TX 79701

Vernon E. Faulconer, Inc.
P.O. Box 7995
Tyler, TX 75711

Three Rivers Operating Co., LLC
1122 S. Capitol of Texas Hwy., Ste. 325
Austin, TX 78746

Surface Owner:

Bureau of Land Management
620 E. Greene Street
Carlsbad, NM 88220-6292

Other Notified Parties:

New Mexico Oil Conservation Division
1301 W. Grand Avenue
Artesia, NM 88210

CAPROCK LABORATORY, INC.
3312 Bankhead Highway
Midland, Texas 79701
(915) 697-3271

API FORM 45-1

API WATER ANALYSIS REPORT FORM

Company	Sample No.	Date Sampled
David Fasken	8L25	

Field	Legal Description	County or Parish	State
		Eddy	N. M.

Lease or Unit	Well	Depth	Formation	Water, B/D
Shell Fed. Comm.			9775'-9816' Morrow	

Type of Water (Produced, Supply, etc.)	Sampling Point	Sampled By
	DST #4 Sampler	

DISSOLVED SOLIDS

CATIONS	*mg/l*	*me/l*
Sodium, Na (calc.)	22,400	973.0
Calcium, Ca	17.5	0.9
Magnesium, Mg	18.6	1.5
Barium, Ba		

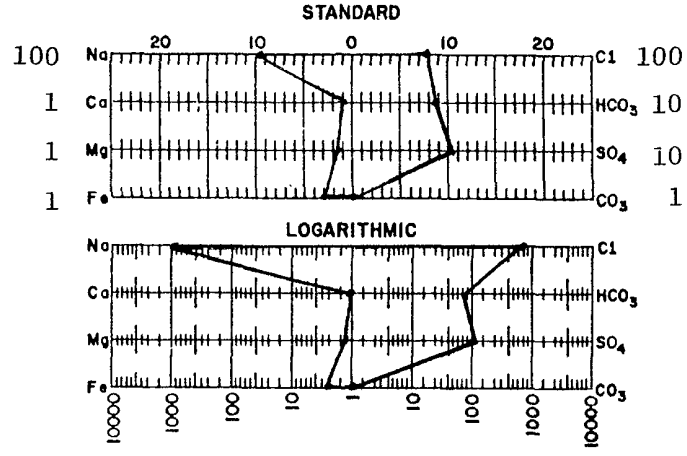
ANIONS		
Chloride, Cl	27,700	780.9
Sulfate, SO_4	4,970	103.5
Carbonate, CO_3	0	0.0
Bicarbonate, HCO_3	5,400	88.6

Total Dissolved Solids (calc.)	60,400
Iron, Fe (total)	3.0
Sulfide, as H_2S	0

OTHER PROPERTIES

pH	9.0
Specific Gravity, 60/60 F.	1.0447
Resistivity (ohm-meters) 77° F.	0.1150
Total Hardness, $CaCO_3$	120
Total Alkalinity, $CaCO_3$	4,430
Supersaturation, $CaCO_3$	

WATER PATTERNS — *me/l*



REMARKS & RECOMMENDATIONS:

PO#: E4691

Received 12-9-78
Reported 12-14-78

Copies — R. Angevine

CAPROCK LABORATORY, INC.
3312 Bankhead Highway
Midland, Texas 79701
(915) 697-3271

DEC 1 '78
well file

API FORM 45-1

API WATER ANALYSIS REPORT FORM

Company		Sample No.	Date Sampled
David Fasken		8K53	
Field	**Legal Description**	**County or Parish**	**State**
Shell Federal Comm.		Eddy	N.M.
Lease or Unit	**Well**	**Depth**	**Formation**	**Water, B/D**
	#2		7076' Wolfcamp 7107'	
Type of Water (Produced, Supply, etc.)	**Sampling Point**		**Sampled By**

D.S.T. #2 Cir Sub 90' 125,000 ppm

DISSOLVED SOLIDS

CATIONS	mg/l	me/l
Sodium, Na (calc.)	67,230	2,924.5
Calcium, Ca	10,573	527.6
Magnesium, Mg	1,990	163.9
Barium, Ba	0	

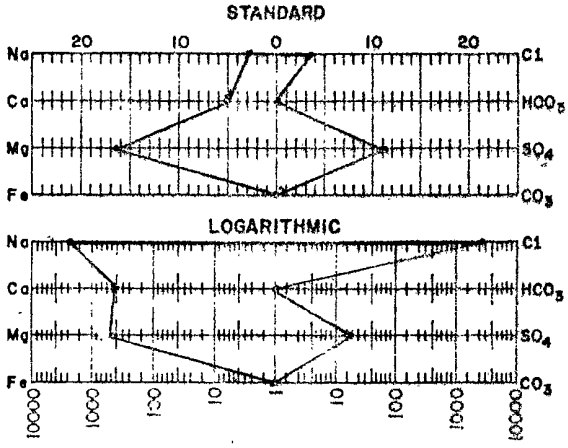
ANIONS		
Chloride, Cl	127,800	3,604.0
Sulfate, SO_4	540	11.2
Carbonate, CO_3	0	0.0
Bicarbonate, HCO_3	48.8	0.8

Total Dissolved Solids (calc.)	208,200
Iron, Fe (total)	31
Sulfide, as H_2S	0

OTHER PROPERTIES

pH	6.2
Specific Gravity, 60/60 F.	1.1249
Resistivity (ohm-meters) 77° F.	0.058
Total Hardness, $CaCO_3$	34,600
Total Alkalinity, $CaCO_3$	40
Supersaturation, $CaCO_3$	

WATER PATTERNS — me/l



REMARKS & RECOMMENDATIONS:

JBH
RHA
~~GES~~
~~JEP~~
SLP
~~BJ~~
~~CL~~
~~JS~~
FILE well

2 cc: Monsanto -- Mr Brown
Shell Oil Co. -- Mr Henning
12-12-78

Received 11-28-78
Reported 11-30-78

Copies — Robert Angevine

Indian Hills State Comm Well No. 7

Proposed Injection Well

Attachment to C - 108
(Part VII)

Proposed Operations - continued

5. ***If injection is for disposal purpose 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.)***

Marathon Oil Company ran a DST test on North Indian Basin Well No. 1 (Section 9, T-21-S, R-23-E, Eddy County New Mexico) in 1963. The DST tested the interval 10,009 ft to 10,100 ft. Based on the DST, the following analysis was reported:

Specific Gravity	1.109	
pH	6.8	
Resistivity	.285	@ 94F
Chlorides (Cl)	11,000	
Sulfates (SO4)	1500	
Alkalinity (HCO3)	610	
Calcium (Ca)	1080	
Magnesium (Mg)	775	
Iron (Fe)	20	
Sodium (Na)	5359	
Sulfides (H2S)	negl.	

SWD 570 Application

Affidavit of Publication

NO. 21348

STATE OF NEW MEXICO

County of Eddy:

Walter L. Green Walter L. Green

being duly sworn, says that he is the **Publisher**

of the Artesia Daily Press, a daily newspaper of general circulation, published in English at Artesia, said county and state, and that the hereto attached

Legal Notice

was published in a regular and entire issue of the said Artesia Daily Press, a daily newspaper duly qualified for that purpose within the meaning of Chapter 167 of the 1937 Session Laws of the state of New Mexico for

1 Consecutive weeks/days on the same day as follows:

First Publication August 24, 2010

Second Publication

Third Publication

Fourth Publication

Fifth Publication

Subscribed and sworn to before me this

20th day of August 2010

OFFICIAL SEAL
Danny Scott
NOTARY PUBLIC-STATE OF NEW MEXICO
My commission expires: 3/18/2014

Danny Scott

Danny Scott
Notary Public, Eddy County, New Mexico

Copy of Publication:

LEGAL NOTICE

Fasken Oil and Ranch, Ltd., 303 West Wall, suite 1800, Midland, Texas 79701, is filing Form C-108 (Application for Authorization to Inject) with the New Mexico Oil Conservation Division seeking administrative approval for a Salt Water Disposal well in the SWD; Devonian pool. The proposed well, Shell Federal No. 2, is located 3300' FSL, 660' FWL, Section 5, T21S, R24E, Eddy County, New Mexico. Disposal water will be sourced from area wells producing from the Glorietta-Yeso, Morrow, Pennsylvanian, Wolfcamp, and San Andres formations. Water will be injected into the Devonian formation at a depth of 10,250' - 11,000', at a maximum surface pressure of 2000 psi, and a maximum rate of 15,000 BWPD. Any interested party who has an objection to this application must give notice in writing to the Oil Conservation Division, 1220 South Saint Francis Street, Santa Fe, New Mexico 87505, within fifteen (15) days of this notice. Any interested party with questions or comments may contact Kim Tyson at Fasken Oil and Ranch, Ltd., 303 West Wall, Suite 1800, Midland, Texas 79701, or call (432) 687-1777. Published in the Artesia Daily Press, Artesia, N.M. August 24, 2010 Legal No. 21348