

DATE IN 1/28/09	SUSPENSE	ENGINEER W. Jones	LOGGED IN 1/28/09	TYPE WFX	APP NO. DKAA 0902851853
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RECEIVED

ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION  
- Engineering Bureau -  
1220 South St. Francis Drive, Santa Fe, NM 87505

2009 JAN 28 PM 12 59



30-015-31668  
Avalon 10 Federal SWD #043  
Fasken Oil & Ranch Ltd.  
151416

**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]

- [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.**

<u>Kim Tyson</u> Print or Type Name	<u>Kim Tyson</u> Signature	<u>Regulatory Analyst</u> Title	<u>1-23-09</u> Date
		<u>kimt@forl.com</u> e-mail Address	

**APPLICATION FOR AUTHORIZATION TO INJECT**

I. PURPOSE:  Secondary Recovery  Pressure Maintenance  Disposal  Storage  
Application qualifies for administrative approval?  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  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: 1-23-09

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: \_\_\_\_\_

### 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.

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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.

INJECTION WELL DATA SHEET

OPERATOR: Fasken Oil and Ranch, Ltd.

WELL NAME & NUMBER: Avalon "10" Federal No. 43

WELL LOCATION: 1817' FSL & 837' FEL      I      10      21S      26E  
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# @ 625'

Cemented with: 625      sx.      or      ft<sup>3</sup>

Top of Cement: Surfaced      Method Determined: Circulated

Intermediate Casing

Hole Size: 12 1/4"      Casing Size: 8 5/8", 32# @ 1843'

Cemented with: 600      sx.      or      ft<sup>3</sup>

Top of Cement: Surface      Method Determined: Circulated

Production Casing

Hole Size: 7 7/8"      Casing Size: 5 1/2", 17# @ 4560'

Cemented with: 450      sx.      or      ft<sup>3</sup>

Top of Cement: 1674'      Method Determined: CBL 8-31-01

Total Depth: 4560'

Injection Interval

2510'      feet      to      2660'

(Perforated or ~~surfaced~~; indicate which)

**INJECTION WELL DATA SHEET**

*[Handwritten Signature]*

Tubing Size: 2 7/8" Lining Material: Poly Lined

Type of Packer: Arrowset I 10K Nickel Plated

Packer Setting Depth: 2450'

Other Type of Tubing/Casing Seal (if applicable): N/A

Additional Data

1. Is this a new well drilled for injection?        Yes  No

If no, for what purpose was the well originally drilled? Delaware Oil Producer

2. Name of the Injection Formation: Cherry Canyon Delaware

3. Name of Field or Pool (if applicable): Catclaw Draw East

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. CIBP @ 2954' Delaware perms 2996' - 3004' & 3232' - 3242'.

5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area: Above: None, Below: Wolfcamp + or - 8300'.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

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

**III Proposed Injection Well Data:**

A.

- 1) Avalon "10" Federal No. 43  
1817' FSL & 837' FEL  
Section 10, T21S, R26E  
Eddy County, NM
- 2) Surface Casing: 13-3/8" 54.5#/ft set @ 625', cement to surface with 200 sx  
CI "H" w/2% CaCl<sub>2</sub> + 340 sx "C" w/ 2%CaCl<sub>2</sub> + 225 sx  
"C" w/ 4% CaCl<sub>2</sub> (last 225 sx via 1" tubing)  
  
Intermediate Casing: 8-5/8" 32#/ft J-55 set at 1843', cement to surface with  
400 sx "C"+ 200 sx "C" w/ 2% CaCl<sub>2</sub>; circ 129 sx.  
  
Production Casing: 5-1/2" 17#/ft J-55 set @ 4560', cement with 450 sx "C"  
w/ 5# salt. TOC 1674' by CBL dated 8-31-01
- 3) Total Depth: 4560'
- 4) Tubing: ~~2-7/8"~~ 2-7/8" EUE 8rd J-55 IPC tubing
- 5) Packer: Weatherford Arrowset IX10K nickel plated with 1.5" "F" profile on-off  
tool @ 2450'  
Cast Iron Bridge Plug: 5-1/2" 6K CIBP @ 2954' – set by wireline 5-24-06.

B.

- 1) Injection Formation: Delaware  
Field: Catclaw Draw Delaware East
- 2) Injection interval : Lower Cherry Canyon Delaware 2510' – 2660'
- 3) Original purpose of well: Delaware Oil Well
- 4) Other perms: 2996'-3004' & 3232'-3242'
- 5) Depths & names of higher or lower oil or gas zones:  
Above: None  
Below: Wolfcamp +/- 8300'

**VII Proposed Operation Data:**

- 1) Average daily injection rate – 500 bwpd  
Maximum daily injection rate – 1000 bwpd
- 2) Type of injection system – closed system
- 3) Average injection pressure – 400 psi

Maximum injection pressure – ~~900-psi estimated closure pressure from fracture treatment of pens 2510'-20' 11-7-08 after ISIP 1140 psi.~~ An injection step-rate test will be conducted to more clearly determine the actual fracture pressure.

- 4) Injection water will be produced Delaware water from wells in the Catclaw Draw Delaware East Field and Morrow water from the Avalon Morrow Field - produced water analyses are attached. Minimal tendencies for barium sulfate precipitate exist in mixing these waters. A chemical treating program will be initiated to inhibit against barium sulfate precipitation when the Morrow and Delaware waters are mixed.
- 5) Injection zone water analysis is the same as the produced Delaware water.

**VIII Geological Data:**

Geological Name: Delaware

Lithological Detail: Sand

Formation top: 2353

Thickness: 1793'

Geological Data of Drinking Water Zones:

Yates formation: Surface to 490'

Capitan Reef: 490' to 550'

**IX Stimulation Program:**

The proposed injection interval 2510'-20' has been acidized with 7-1/2% HCL acid and fracture stimulated with 19,500 gallons of 30# gel containing 29,300# of 16/30 mesh White Sand and 17,560# 16/30 Super LC resin-coated sand. Additional perforations proposed 2520'-2660' will acidized with 7-1/2% HCL acid.

**X Well Logs:**

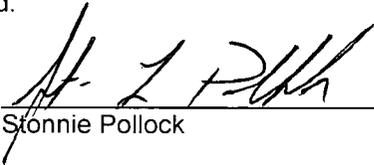
Copies of current well logs are on file with the Oil Conservation Division.

**XI Chemical Analysis of Fresh Water:**

There is one fresh water well within one mile of the proposed SWD injection well. A fresh water analysis is attached.

**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

**Fasken Oil and Ranch, Ltd.  
Avalon "10" Federal No. 43  
1817' FSL & 837' FEL  
Sec 10, T21S R26E**

<b>OBJECTIVE:</b>	Convert to Injection
<b>WELL DATA:</b>	
13-3/8" 40# J-55 casing:	Set at 625', Cmt 200 sx "H" + 200 Sx "C" w/2% CaCl <sub>2</sub> + 1" w/225 sx "C" 7stgs, TOC surf.
8-5/8" 32# J-55 casing:	Set at 1843', Cmt 400 sx 50:50" 10 "C" +200 sx "C" w/2% CaCl <sub>2</sub> , TOC surf, circ 129 sx
5-1/2" 17# J-55 casing:	Set at 4470, Cmt 450 sx 15:61; 11 Poz "C" w/5#salt/sack, TOC 1674' (Burst - 5,320 * 0.8 = 4,256 psi)
Tubing:	Laid down 1-13-09
Rods:	Laid down 1-13-09
Current Perfs:	2,510'-2,520'
PBTD:	2954' CIBP. 10-20-08 tested casing and CIBP to 3000 psi, held ok. 11-10-08 tagged fill at 2941' after frac.
Inactive Perfs:	2996'-3004' (32h), 3232'-3242' (20h)
KB:	17'
TD:	4560'

Well TA'd 1-13-09; attempted to circulate with 100 bbls 3% kcl water with corrosion inhibitor; well would not circulate. NUWH with 2000 psi ball valve on top.

1. Notify New Mexico OCD office 48 hours prior to rigging up on well. Notify plans to convert to injection well per NMOCD Administrative Orders.
2. Set rig matting boards, 2 sets of pipe racks, cat walk and steel half-frac open top workover tank on location. Build flow line from wellhead to workover tank.
3. RUPU, NDWH, and NU 3000K manual BOP (have 2-7/8" pipe rams available). Receive 2800' of 2-3/8' EUE 8rd workstring.
4. RIW with 4 joints of 2-3/8" tailpipe, 5-1/2" 32-A tension packer with unloader, mechanical collar locator, 2-3/8" seating nipple, and 2-3/8" workstring with EOT @ 2660'.
5. Spot 250 gallons of 7-1/2" NEFE HCl acid containing clay stabilizer @ 2660'. Displace acid with 3% KCl water containing clay stabilizer.
6. POW and reset packer at +/-2350' with 12-14,000# tension. Pressure test tubing/casing annulus to 500 psi for 15". POW with tubing and packer.
7. RUWL lubricator and RIW with 3-1/8" slick casing gun and perforate Cherry Canyon Delaware top down as follows:

2510' - 2520' 2JSPF, 0.42" EH, 120° phasing, 11 holes (reperf)  
2568' - 2572' 2JSPF, 0.42" EH, 120° phasing, 5 holes  
2586' - 2593' 2JSPF, 0.42" EH, 120° phasing, 8 holes

Pressure Test  
CIBP

2602' – 2605' 2JSPF, 0.42" EH, 120° phasing, 4 holes  
2607' – 2609' 2JSPF, 0.42" EH, 120° phasing, 3 holes  
2618' – 2629' 2JSPF, 0.42" EH, 120° phasing, 12 holes  
2634' – 2660' 2JSPF, 0.42" EH, 120° phasing, 27 holes

Total 70 perfs correlated to Schlumberger Platform Express Three Detector Lito-Density Gamma Ray log dated 9-May-2001.

8. RIW with 5-1/2" tension packer , SN, and 2-3/8" workstring and set packer at 2540'.
9. RU pump truck on tubing/casing annulus and pressure up to 500 psi and attempt to maintain constant pressure during acid ball job. RU service company acid pump truck and acidize Delaware perforations 2568'-2660' (total 70 holes) with 4,000 gallons of 7-1/2% HCL DI acid w/ gal clay stabilizer.
10. Swab back load and acid water to workover tank.
11. RIW with packer to PBTD ± 2675' and POW laying down workstring and packer.
12. Receive and unload 2,500' of 2-7/8" poly lined tubing.
13. RIW with Weatherford 2-7/8" x 5-1/2" Arrowset 1X10 K packer with 1.500" "F" profile nipple, TOSSD and poly lined tubing and set packer at ± 2450' in 10 pts of tension. (All wetted parts of packer need to be nickel plated.) Release TOSSD from packer and displace tubing/casing annulus with 2% KCl water containing corrosion inhibitor and O2 scavenger. Engage TOSSD onto packer, ND BOP and NU 2-7/8" slip type hanger & IPC well head with aluminum-bronze full open gate valve dressed for sour conditions and injection hookup.
14. Notify NMOCD office of intent to run pressure test on annulus. Pressure annulus to 500 psi and record on chart recorder for 30". RDPU.
15. Prepare well for injection.

# Avalon "10" Federal No. 43

**Temporarily Abandoned**

asof 1-13-09

GL: 3181'

KB: 3198'

**Operator:** Fasken Oil and Ranch, Ltd.

**Location:** 1817' FSL and 837' FEL  
Sec 10, T-21-S, R-26-E  
Eddy County, New Mexico

**Compl.:** 5/11/2001 released rig

**API #:** 30-015-31668

**IP:**

**TD:** 4560'

**PBTD:** 4520' FC

**Casing:** **13-3/8", 54.5#/ft J-55 @ 625'**

w/200sx"H"+340sx w/6%gel,5#salt,  
+200 sx "C" w/2% CaCl2

1" w/225 sx "C" w/4% CaCl2, 7stgs

TOC surf

**8-5/8", 32#/ft, J-55 @ 1843'**

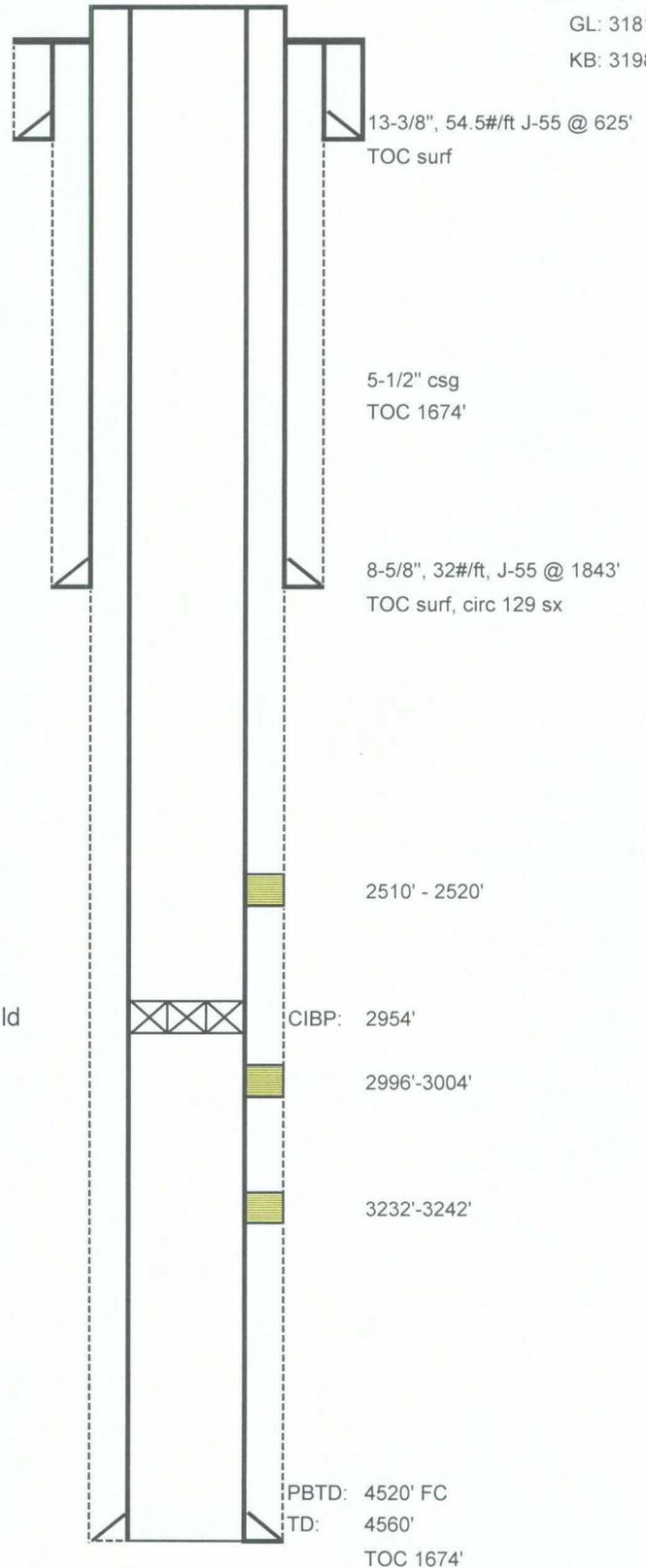
w/400sx 50:50:10 "C"+200sx"C" w/2% CaCl2

TOC surf, circ 129 sx

**5-1/2" 17#/ft, J-55 @ 4560'**

w/450sx 15:61;11 Poz "C" w/5#salt

TOC 1674'



**RODS:** Layed down rods and pump 1-13-09

**TUBING:** Layed down 2-7/8" tubing 1-13-09

Attempted to circulate well with 100 bbls  
3% KCl water with corrosion inhibitor; well would  
not circulate.

**CIBP** 2954' by wireline

**Perfs:**  
2996'-3004' 32 holes  
3232'-3242' 20 holes  
2510' - 2520' 11 holes

**Hole Sizes**  
17-1/2" Surf-625'  
12-1/4" 625-1843'  
7-7/8" 1843'-4560'

PBTD: 4520' FC

TD: 4560'

TOC 1674'

2510' - 2520'

CIBP: 2954'

2996'-3004'

3232'-3242'

13-3/8", 54.5#/ft J-55 @ 625'  
TOC surf

5-1/2" csg  
TOC 1674'

8-5/8", 32#/ft, J-55 @ 1843'  
TOC surf, circ 129 sx

cwb

1/23/2009

Av10Fed43 wb diagram\_WIWI.xls

# Avalon "10" Federal No. 43

**Proposed**

asof 12-12-08

GL: 3181'

KB: 3198'

**Operator:** Fasken Oil and Ranch, Ltd.

**Location:** 1817' FSL and 837' FEL  
Sec 10, T-21-S, R-26-E  
Eddy County, New Mexico

**Compl.:** 5/11/2001 released rig

**API #:** 30-015-31668

**IP:**

**TD:** 4560'

**PBTD:** 4520' FC

**Casing:** **13-3/8", 54.5#/ft J-55 @ 625'**

w/200sx"H"+340sx w/6%gel,5#salt,

+200 sx "C" w/2% CaCl2

1" w/225 sx "C" w/4% CaCl2, 7stgs

TOC surf

**8-5/8", 32#/ft, J-55 @ 1843'**

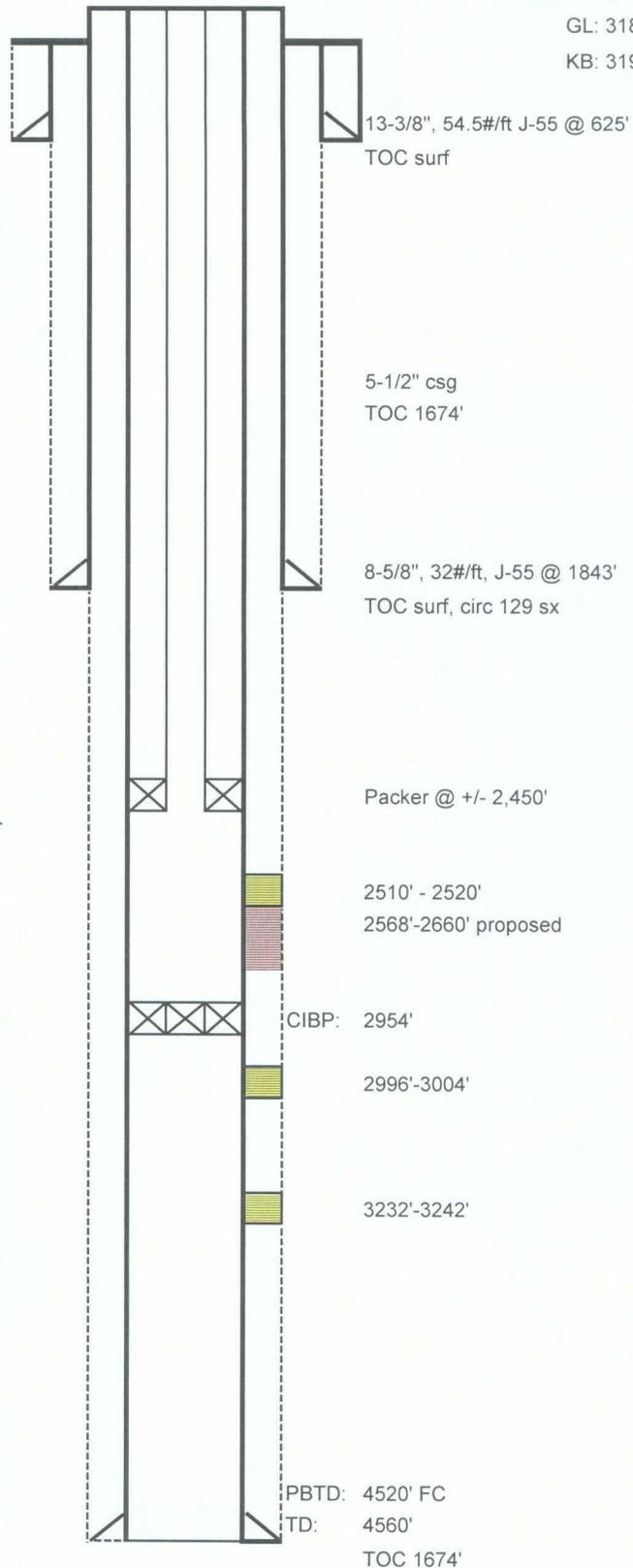
w/400sx 50:50:10 "C"+200sx"C"w/2% CaCl2

TOC surf, circ 129 sx

**5-1/2" 17#/ft, J-55 @ 4560'**

w/450sx 15:61;11 Poz "C" w/5#salt

TOC 1674'



13-3/8", 54.5#/ft J-55 @ 625'  
TOC surf

5-1/2" csg  
TOC 1674'

8-5/8", 32#/ft, J-55 @ 1843'  
TOC surf, circ 129 sx

Packer @ +/- 2,450'

2510' - 2520'  
2568'-2660' proposed

CIBP: 2954'

2996'-3004'

3232'-3242'

PBTD: 4520' FC

TD: 4560'

TOC 1674'

## Proposed

**Tubing:** 2-7/8" poly-lined

**Packer:** Weatherford 2-7/8" x 5-1/2" Arrowset 1X10 K packer  
with 1.500" "F" profile nipple  
set @ +/- 2,450'

## Perfs:

2510' - 2520' 11 holes

Current

2568'-2572'

**Proposed**

2586'-2593'

**Proposed**

2602'-2605'

**Proposed**

2607'-2609'

**Proposed**

2618'-2629'

**Proposed**

2634'-2660'

**Proposed**

CIBP 2954' by wireline

2996'-3004' 32 holes

3232'-3242' 20 holes

## Hole Sizes

17-1/2" Surf-625'

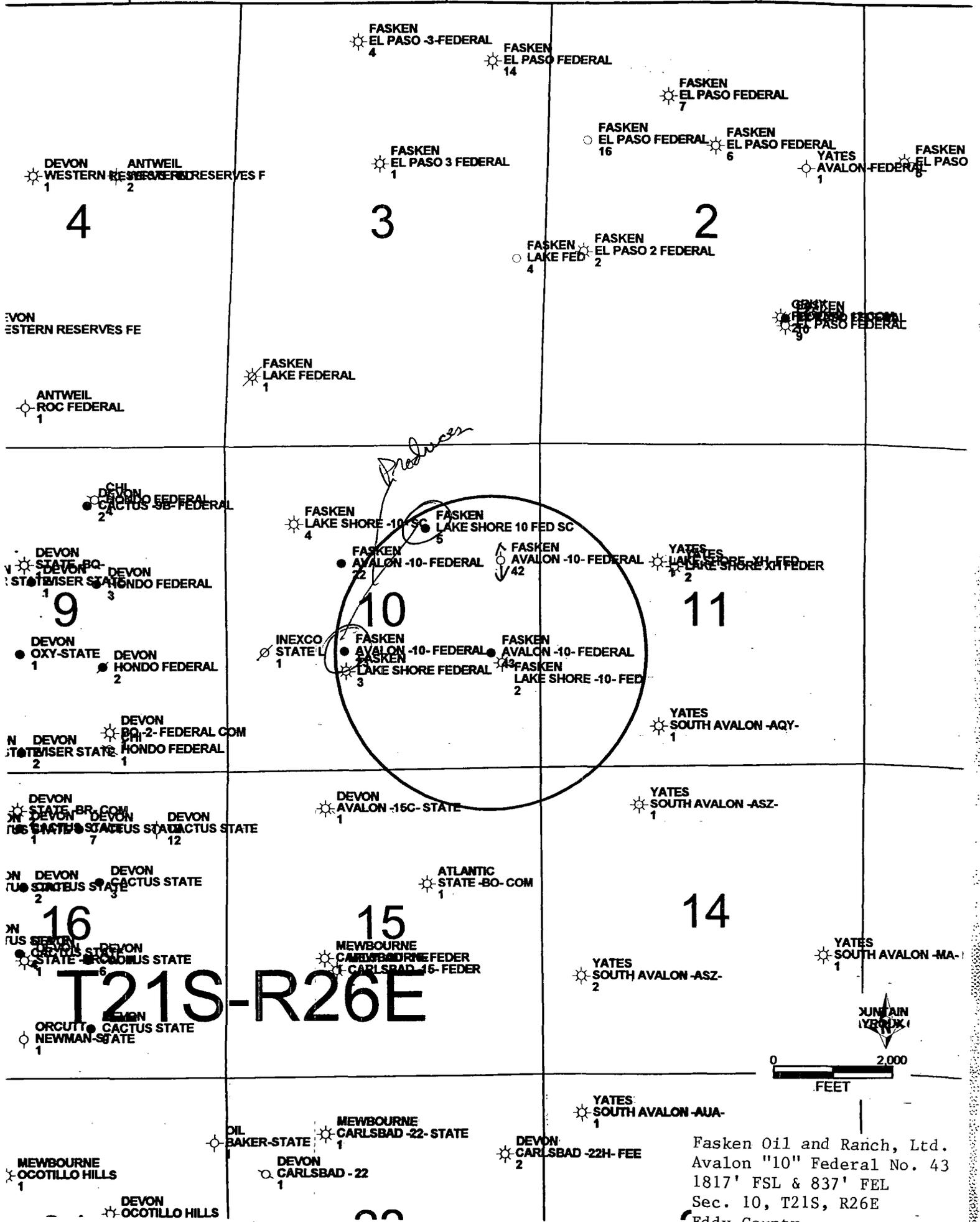
12-1/4" 625-1843'

7-7/8" 1843'-4560'

cwb

1/23/2009

Av10Fed43 wb diagram\_WIWI.xls



FASKEN  
EL PASO -3-FEDERAL  
4

FASKEN  
EL PASO FEDERAL  
14

FASKEN  
EL PASO FEDERAL  
7

DEVON WESTERN RESERVES FE 1  
ANTWEIL RESERVES FE 2

FASKEN  
EL PASO 3 FEDERAL  
1

FASKEN  
EL PASO FEDERAL  
16

FASKEN  
EL PASO FEDERAL  
6

YATES  
AVALON-FEDERAL  
1

4

3

2

FASKEN  
EL PASO 2 FEDERAL  
2

DEVON  
WESTERN RESERVES FE

FASKEN  
EL PASO FEDERAL  
3

FASKEN  
LAKE FEDERAL  
1

ANTWEIL  
ROC FEDERAL  
1

*Producers*

DEVON  
CACTUS STATE FEDERAL  
2

FASKEN  
LAKE SHORE -10- SC  
4

FASKEN  
LAKE SHORE 10 FED SC  
5

DEVON STATE BO-  
STATERISER STATE  
1

FASKEN  
AVALON -10- FEDERAL  
2

FASKEN  
AVALON -10- FEDERAL  
4

YATES  
LAKE SHORE -10- FEDER  
2

9

10

11

DEVON OXY-STATE 1  
DEVON HONDO FEDERAL 2

INEXCO STATE L  
1

FASKEN  
AVALON -10- FEDERAL  
3

FASKEN  
AVALON -10- FEDERAL  
2

YATES  
SOUTH AVALON -AQY-  
1

DEVON BO-2- FEDERAL COM  
DEVON HONDO FEDERAL  
2

DEVON  
AVALON -15C- STATE  
1

YATES  
SOUTH AVALON -ASZ-  
1

DEVON STATE BR- COM  
DEVON CACTUS STATE  
1

ATLANTIC  
STATE -BO- COM  
1

14

DEVON CACTUS STATE  
2

15

MEWBOURNE  
CARLSBAD -16- FEDER  
1

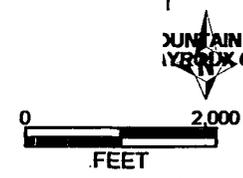
YATES  
SOUTH AVALON -ASZ-  
2

YATES  
SOUTH AVALON -MA-  
1

T21S-R26E

DEVON STATE BR- COM  
DEVON CACTUS STATE  
1

ORCUTT  
NEWMAN STATE  
1



OIL BAKER-STATE  
MEWBOURNE CARLSBAD -22- STATE  
1

YATES  
SOUTH AVALON -AUA-  
1

MEWBOURNE  
OCOTILLO HILLS  
1

DEVON  
CARLSBAD -22H- FEE  
2

DEVON  
CARLSBAD -22  
1

Fasken Oil and Ranch, Ltd.  
Avalon "10" Federal No. 43  
1817' FSL & 837' FEL  
Sec. 10, T21S, R26E  
Eddy County

DEVON  
OCOTILLO HILLS

Fasken Oil and Ranch, Ltd.

Avalon "10" Federal No. 43

Table of Well Data within 1/2 Mile

<u>Operator</u>	<u>Well Name and Number</u>	<u>API Number</u>	<u>Oil or Gas</u>	<u>Spud Date</u>	<u>Total Depth</u>	<u>Formation and Perfs</u>
Fasken Oil and Ranch, Ltd.	Lake Shore "10" Federal No. 5	30-015-33234	Oil	3-3-04	11,075'	<p>Delaware 2339' - 2509'</p> <p>Cisco 9280' - 9328' CIBP @ 9285' w/35' of cnt. on top.</p> <p>Lower Morrow 10,938' - 10,944' CIBP @ 10,900' w/35' of cnt. on top.</p>
	<b>Location:</b> 1500' FNL 1980' FEL Sec. 10, T21S, R26E					
	<b>Casing:</b> 13 3/8" at 414' w/ 576 sx - TOC @ Surface 9 5/8" at 1910' w/ 1130 sx - TOC @ Surface 5 1/2" at 11,074', DV Tool @ 4488' w/ 1650 sx - TOC @ 1470' CBL					

Fasken Oil and Ranch, Ltd.	Avalon "10" Federal No. 42	30-015-31654	Injection	4-15-01	4470'	<p>Upper Cherry Canyon 2304' - 2412' Delaware 2488' - 2533'</p>
	<b>Location:</b> 1980 FNL 660 FEL Sec. 10, T21S, R26E					
	<b>Casing:</b> 13 3/8" at 622' w/ 750 sx - TOC @ Surface 8 5/8" at 1832' w/ 1320 sx - TOC @ Surface 5 1/2" at 4470' w/ 320 sx - TOC @ 1216' CBL					

<u>Operator</u>	<u>Well Name and Number</u>	<u>API Number</u>	<u>Oil or Gas</u>	<u>Spud Date</u>	<u>Total Depth</u>	<u>Formation and Perfs</u>
Fasken Oil and Ranch, Ltd.	Avalon "10" Federal No. 23	30-015-31545	Oil	2-8-01	4361'	Upper Cherry Canyon 2282' - 2848' Brushy Canyon
<b>Location:</b>	1980' FSL 1980' FWL Sec. 10, T21S, R26E					
<b>Casing:</b>	13 3/8" at 640' w/ 550 sx - TOC @ Surface 8 5/8" at 1845' w/ 848 sx - TOC @ Surface 5 1/2" at 4361' w/ 450 sx - TOC @ 932' CBL ✓					

Fasken Oil and Ranch, Ltd.	Lake Shore 10 Federal Com No. 3	30-015-30480	Gas	11-24-98	11,100'	Strawn 9724' - 9923'
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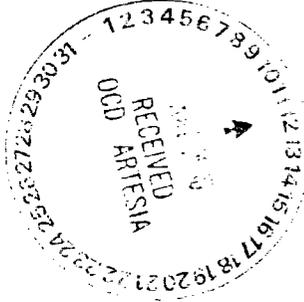
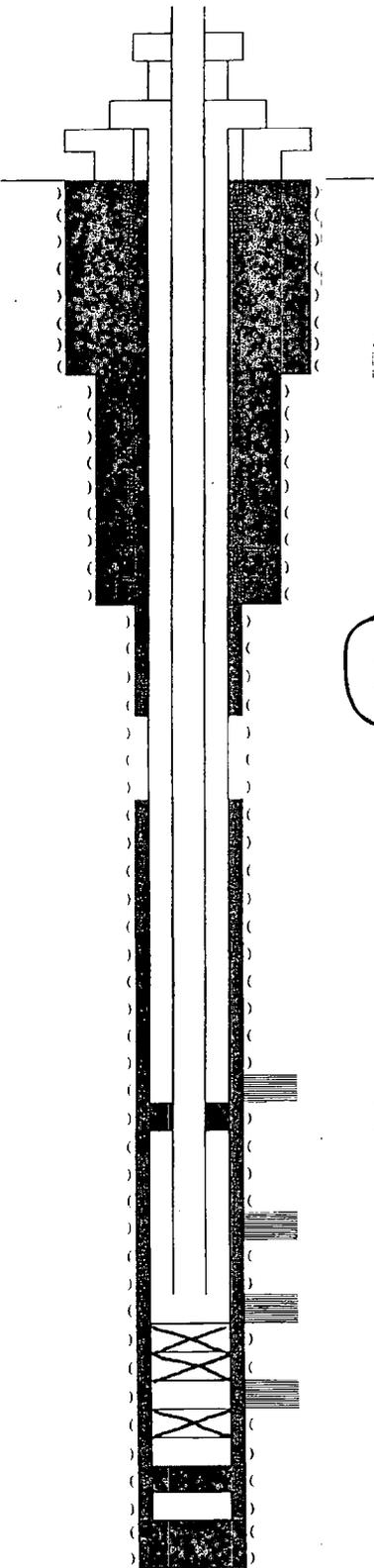
**Location:** 1650' FSL 1997' FWL  
Sec. 10, T21S, R26E

**Casing:** 13 3/8" at 775' w/ 760 sx - TOC @ Surface  
9 5/8" at 2275' w/ 1190 sx - TOC @ Surface  
7" at 10,012', DV Tool @ 7864' w/ 1370 sx - TOC @ 1975' CBL ✓

<u>Operator</u>	<u>Well Name and Number</u>	<u>API Number</u>	<u>Oil or Gas</u>	<u>Spud Date</u>	<u>Total Depth</u>	<u>Formation and Perfs</u>
Fasken Oil and Ranch, Ltd.	Lake Shore 10 Federal Com No. 2	30-015-29879	Gas	1-21-98	11,348	Strawn 9724' - 9952' Morrow 10,743' - 10,848' Cisco 9336' - 9373' Packer @ 9650' Canyon 9530' - 9546' Packer @ 9650' Morrow 10,924' - 10,942' CIBP @ 10,910' CIBP @ 10,900'
<b>Location:</b>	1750' FSL 660' FEL Sec. 10, T21S, R26E					
<b>Casing:</b>	13 3/8" at 471' w/ 925 sx - TOC @ Surface 8 5/8" at 2276' w/ 1200 sx - TOC @ Surface 5 1/2" at 11,344' , DV Tool @ 7700' w/ 1765 sx - TOC @ 4990' Temp Survey Braden Head Squeeze, 830 sx between the 8 5/8" & 5 1/2" annulus; Bottom of cmt. @ 4430' Temp. Survey - See attached wellbore diagram ✓					

**PROPOSED WELLBORE CONFIRMATION**

Operator: Bonneville Fuels  
 Lease Name: Lakeshore Federal Com #10-2  
 API Number: 30-045-28486  
 Location: 1750' FSL 660' FEL Sec. 10, T21S, R26E  
 County/ST: Eddy, NM  
 Date: 4/26/00 Gr Elev - Gr/KB: 3180' - 18'



**Bradenhead Sqze**  
**Btm. Of Cmt 4430'**

Perforated Interval



9336'-9546' OA  
Packer @ 9650'

9725'-9952' OA

10743'-10848' OA  
CIBP @ 10,900'  
CIBP @ 10,910'  
10924'-10942' OA  
CIBP @ 10,980'

Spud Date: 1/21/98

Surface Pipe Size/Depth: 13 3/8" @ 471'

Surface Cement: 1050 sx

Intermediate TOC: surface

Production TOC: surface/4990'

Int. Pipe Size/Depth: 8 5/8"-32# @ 2276'

Intermediate Cement: 1200 sx

Production Cement:  
1st Stage: 585 sx Halliburton Super H  
2nd Stage: 550 sx Super C, 280 sx Interfill H,  
350 sx 50/50 Poz  
DV Tool @ 7700'

Tubing Size / Landed: 2 3/8" 4.7# J-55 tubing tailpipe,  
packer, sliding sleeve, 2 7/8"  
6.5# N-80 tubing. EOT @ 10800'

Productive Formation(s): Cisco, Cnyn, Strwn, Mrrw

Casing Size / Depth: 5 1/2"- 17.0#/11334'

Total Depth / PBTD: 11348'/10910'

TD Date: 2/21/98

Attn: Jimmy Carilli  
 Fax # 1-432-687-1570

### B J Services Water Analysis

Artesia District Laboratory  
 (505)-746-3140

Date: 31-Mar-04 Test #:   
 Company: Fasken Oil & Ranch Well #: #23   
 Lease: Avalon 10 Federal County: Eddy   
 State: NM Formation:   
 Depth: Source:

*Delaware*

pH	8.11	Temp (F):	71.6
Specific Gravity	1.120		

CATIONS	mg/l	me/l	ppm
Sodium (calc.)	51389	2235.7	45892
Calcium	10025	500.2	8951
Magnesium	3159	259.9	2821
Barium	< 25	---	---
Potassium	< 10	---	---
Iron	1	0.0	1

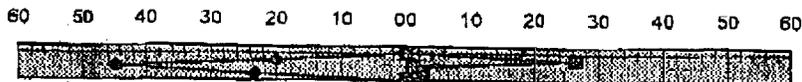
ANIONS	mg/l	me/l	ppm
Chloride	105000	2961.9	93750
Sulfate	1420	29.7	1276
Carbonate	< 1	---	---
Bicarbonate	793	13.0	708
Total Dissolved Solids(calc.)	171805		153397
Total Hardness as CaCO3	38041	760.1	33965

**COMMENTS:** Resistivity (ohm-meters--calc.) 0.059027

**SCALE ANALYSIS:**

CaCO3 Factor 7949825 Calcium Carbonate Scale Probability-> Probable  
 CaSO4 Factor 16040000 Calcium Sulfate Scale Probability --> Probable

Stiff Plot





Laboratory Services, Inc.

4018 Fiesta Drive  
 Hobbs, New Mexico 88240  
 Telephone: (505) 397-3713

*Morrow Water*

Water Analysis

COMPANY *Fasken*  
~~Bonneville Fuels Corp.~~

*Perfs 10743-10848*

*C13P @ 10910'*

SAMPLE *Lake Shore 10 #2*  
 SAMPLED BY

*Suspect C13P leak, wtr from*

*Perfs. 10924-31, 10934-42*

DATE TAKEN *4/19/00*

REMARKS *Sec 10 T215 R26E*

Barium as Ba	5	
Carbonate alkalinity PPM	0	
Bicarbonate alkalinity PPM	792	
pH at Lab	6.85	
Specific Gravity @ 60°F	1.029	
Magnesium as Mg	1,914	
Total Hardness as CaCO3	3,300	
Chlorides as Cl	27,887	
Sulfate as SO4	0	
Iron as Fe	73.5	
Potassium	8.5	
Hydrogen Sulfide	0	
Rw	0.22	@ 26° C
Total Dissolved Solids	32,150	
Calcium as Ca	1,386	
Nitrate	22	

Results reported as Parts per Million unless stated

Langelier Saturation Index 0.85

Analysis by: *Vickie Walker*  
 Date: *4/19/00*

# B J Services Water Analysis

Ariesia District Laboratory  
(505)-746-3140

Date: 11-Aug-01      Test #: *Sec 10 T215 R26E*  
 Company: Bonneville Fuels      Well #: #42  
 Lease: Avalon 10 Fed.      County: Eddy  
 State: N.M.      Formation: Delaware  
 Depth: 2304-2412      Source:

pH:	6.85	Temp (F):	82.6
Specific Gravity	1.1		

CATIONS	mg/l	me/l	ppm
Sodium (calc.)	39542	1720.0	35848
Calcium	7619	380.2	6926
Magnesium	1468	120.0	1325
Barium	< 25	—	—
Potassium	< 10	—	—
Iron	1	0.0	1

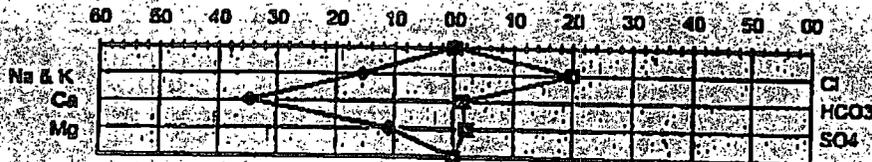
ANIONS	mg/l	me/l	ppm
Chloride	77600	2189.0	70545
Sulfate	1091	22.7	992
Carbonate	< 1	—	—
Bicarbonate	927	16.2	843
<b>Total Dissolved Solids(calc.)</b>	<b>128238</b>		<b>116580</b>
<b>Total Hardness as CaCO3</b>	<b>25030</b>	<b>500.1</b>	<b>22754</b>

**COMMENTS:**

**SCALE ANALYSIS:**

CaCO3 Factor      7064337 Calcium Carbonate Scale Probability →      Probable  
 CaSO4 Factor      9142800 Calcium Sulfate Scale Probability →      Possible

Stiff Plot



# Endura Products Corporation

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

Fresh Water Well

## WATER ANALYSIS

Date 3/22/2004 Endura Rep Greg Archer Code 101012143  
Sampling Point/Date Fresh H2O Well 3/18/2004 State New Mexico  
Company Fasken Oil & Ranch, LTD County Eddy  
Formation Lease Lake Shore 10 Federal SC Well #3 Fresh H2O Well

### DISSOLVED SOLIDS

#### CATIONS

	mg/l	me/l
Sodium, Na+ (Calc.)	230	10
Total Hardness as Ca++	250	0
Calcium Ca++	189	9
Magnesium, Mg++	37	3
Barium, Ba++	0	0
Iron (Total) Fe+++*	1	0

#### ANIONS

Chlorides, Cl-	200	6
Sulfate, SO4-	525	11
Carbonate, CO3-	0	0
Bicarbonates, HCO3-	293	5
Sulfide, S-*	0	0
Total Dissolved Solid	1,475	

### OTHER PROPERTIES

pH*	7.252
Specific Gravity, 60/60 F.	1.001
Turbidity	0

### SCALING INDICIES

<u>TEMP, F</u>	<u>CA CO3</u>	<u>ASO4*2H2O</u>	<u>CA SO4</u>	<u>BA SO4</u>
80	0.2425	-0.7755	-0.9177	-27.8588
120	0.4788	-0.7906	-0.7525	-28.0676
160	0.7355	-0.7522	-0.5413	-28.1841

### PERFORATIONS

**Fasken Oil and Ranch, Ltd.  
Avalon "10" Federal No. 43  
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

Devon Energy Production Co., LP  
20 North Broadway, Ste. 1500  
Oklahoma, OK 73102

Yates Petroleum Corporation  
105 South 4<sup>th</sup> Street  
Artesia, NM 88201-2177

**Surface Owner:**

Bureau of Reclamation  
Albuquerque Area Office  
555 Broadway NE Street, Suite 100  
Albuquerque, NM 87102-2352

**Other Notified  
Parties:**

New Mexico Oil Conservation Division  
1301 West Grand Avenue  
Artesia, NM 88210-1729

# Affidavit of Publication

NO. 20536

STATE OF NEW MEXICO

County of Eddy:

GARY D. SCOTT 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 county and state, and that the here to 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 week/days on the same day as follows:

First Publication January 18, 2009

Second Publication \_\_\_\_\_

Third Publication \_\_\_\_\_

Fourth Publication \_\_\_\_\_

Fifth Publication \_\_\_\_\_

Subscribed and sworn to before me this

19 Day January 2009



OFFICIAL SEAL  
Jo Morgan  
NOTARY PUBLIC-STATE OF NEW MEXICO

My commission expires: 6/26/2012

Notary Public, Eddy County, New Mexico

# Copy of Publication:

LEGAL NOTICE  
January 16, 2009  
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 and  
Conservation Division  
seeking administrative  
approval for an injection  
well in the Catclaw Draw,  
Delaware, East pool. The  
proposed well, Avalon "10"  
Federal No. 43, is located  
1817 FSL, 837 FEL,  
Section 10, T21S, R26E,  
Eddy County, New Mexico.  
Injection water will be  
sourced from area wells  
producing from the  
Delaware formation in the  
Catclaw Draw Delaware  
East Field and the Morrow  
formation in the Avalon  
Morrow Field. Water will be  
injected into the Delaware  
formation at a depth of  
2510' - 2660', at a maxi-  
mum surface pressure of  
900 psi and a maximum  
rate of 1000 BHPD. Any  
interested party who has  
an objection to this applica-  
tion must give notice in  
writing to the Oil  
Conservation Division,  
1220 South Saint Francis  
Street, Santa Fe, New  
Mexico, 87505, within fif-  
teen (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, and Suite 1800,  
Midland, Texas 79701, or  
call (432) 687-1777.  
Published in the Artesia  
Daily Press, Artesia, NM  
January 18, 2009  
Legal No. 20536



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PS Form 3800, January 2001 See Reverse for Instructions

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**20 N BROADWAY STE 1500**  
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PS Form 3800, January 2001 See Reverse for Instructions

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**DIVISION**  
**1301 W GRAND AVE**  
 City, State, ZIP+ **ARTESIA NM 88210-1729**

PS Form 3800, January 2001 See Reverse for Instructions

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 JAN 23 2000

Sent To  
 Street, Apt. No., or PO Box No. **BUREAU OF RECLAMATION**  
**ALBUQUERQUE AREA OFFICE**  
**555 BROADWAY NE ST STE 100**  
 City, State, ZIP+ **ALBUQUERQUE NM 87102-2352**

PS Form 3800, January 2001 See Reverse for Instructions

4. PROPOSED PRODUCTION FACILITIES:

Bonneville Fuels Corporation has NO existing production facilities on this well-site at this time. Exhibit 'D' shows the location of a proposed tank battery and production facilities for the proposed Avalon "10" Federal #43 well and the existing/adjacent tank battery and production facilities for the Lake Shore Fed. S.C. 10-#2 gas well.

The Special Lease Stipulations for NM 3606 (4 Pages with appropriate portions highlighted) are attached as Exhibit 'E', pages 1 thru 4. The surface use regulation of the lands on which this proposed wellsite lies has been 'withdrawn' from the BLM to the administration of the Bureau of Reclamation because of the proximity of the Avalon Lake and Dam Sites. There are two basic stipulations in the lease (attached) - that all storage tanks be located at or above an elevation of 3194' MSL and that all drill pads be above 3180' MSL.

REQUEST FOR SPECIAL CONSIDERATION AND EXEMPTION FROM SPECIAL LEASE STIPULATIONS: Field inspection of the drainage scaled in on Exhibit 'A' clearly indicates that **the surface drainage from the Avalon '10' Federal #43 and the adjacent Lake Shore Fed. S.C. 10-#2 well-sites and production facilities is SE into the Pecos River downstream of the Avalon Lake and Avalon Dam.** The proposed storage tanks and production facility will be at a planned finished grade elevation equal to that of the existing Lake Shore Fed. S.C. 10-#2 production facilities at 3180' MSL. **It is physically impossible for effluent from this well to run up-hill into the catchment for the Avalon Reservoir.** The 3194' Storage Facility stipulation for the proposed Avalon '10' Fed. #43 well should be relaxed to allow the battery to be on-site.

- a. Should the well prove productive then necessary gas handling facilities (a three phase separator and a meter facility) will be placed on the production pad as shown on Exhibit 'D'. The production pad finished grade will be at 3180' MSL. This production pad is planned to be 20' wide by 40' long and will be underlined with a 30-mil liner and bermed with a 2' tall caliche berm to contain any potential spills and to prevent soil and/or groundwater contamination.
- b. Should the well be productive of oil and/or water then the storage facilities will be placed on the tank battery pad as shown on Exhibit 'D'. The tank battery pad finished grade will be at 3180' MSL and will be 40' wide by 60' long with a 30-mil liner and bermed with a 4' tall caliche berm to contain any potential spills and to prevent soil and/or groundwater contamination. Actual well productivity, safety, and environmental considerations will determine the constructed configuration/size of tanks in the proposed tank battery facility. Tank battery fire walls will be a minimum height above the Tank Battery Pad grade in order to contain sufficient volume to provide storage for ALL tank contents with 1' of free board.

## **EIGHT POINT DRILLING PLAN**

Attached to Application For Permit To Drill: Form 3160-3:  
Operator: Bonneville Fuels Corporation

Avalon 10 Federal #43  
Surface Location: 1817' FSL & 837' FEL, Unit 'I'  
Section 10, T.21S., R.26E. N.M.P.M.  
Eddy County, New Mexico

### **1. ESTIMATED TOPS: IMPORTANT GEOLOGIC MARKERS** **ALL DEPTHS REF. Est. KB @ 10' above Fin. GL:**

Permian:	Depth:
Yates Fm.:	Surface
Capitan Reef Fm.:	490'
Goat Seep Reef Fm.:	2175'
Delaware Fm.:	
Cherry Canyon Mbr.:	2320'
Brushy Canyon Mbr.:	3390'
Bone Springs Fm.:	4350'
T.D. in Bone Springs Fm.:	4550'

### **2. ESTIMATED DEPTHS OF ANTICIPATED WATER, OIL, GAS OR MINERALS:**

	Formation	Depth:
	OR Sand:	
Fresh Water:	Yates Fm.:	Surf. To 450'
	Capitan Reef:	500' to 550'
Oil and Gas Targets:		
	Delaware Fm.:	2320'
	Cherry Canyon Mbr.:	2605'
	Brushy Canyon Mbr.:	4124'
	Bone Springs Fm.:	4350'

**Projected Maximum Total Depth @ 4550' in the Bone Springs Fm.**

### **3. MINIMUM SPECS FOR PRESSURE CONTROL:**

- a. No Surface Blowout Preventer Stack is required to drill the Surface 17-1/2" hole to 600' or the Intermediate 12-1/4" hole to 1,800'. Both intervals will be drilled with a conductor. The 8-5/8" Intermediate Casing will be set and successfully cemented to surface @ 1800'

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

CSF

SUNDRY NOTICES AND REPORTS ON WELLS

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

Oil Cons  
N.M. DIV-Dist 2  
1301 W. Grand Avenue  
Artesia, NM 88210

Case Serial No.  
NM 5006  
Bureau Office or Tribe Name

**SUBMIT IN TRIPLICATE - Other instructions on reverse side**

1. Type of Well <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other		7. If Unit or CA/Agreement, Name and/or No.
2. Name of Operator Bonneville Fuels Corporation ✓		8. Well Name and No. Avalon 10 Federal #43
3a. Address 1700 Broadway, Suite 1150 Denver, CO 80290	3b. Phone No. (include area code) 303 863-1555 x 213	9. API Well No. 30-015-31668
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) 1817' FSL, 837' FEL Sec 10 T21S R26E NMPM		10. Field and Pool, or Exploratory Area Catclaw Draw Delaware E.
		11. County or Parish, State Eddy, NM

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize <input type="checkbox"/> Deepen <input type="checkbox"/> Production (Start/Resume) <input type="checkbox"/> Water Shut-Off
<input checked="" type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing <input type="checkbox"/> Fracture Treat <input type="checkbox"/> Reclamation <input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair <input type="checkbox"/> New Construction <input type="checkbox"/> Recomplete <input checked="" type="checkbox"/> Other Status
	<input type="checkbox"/> Change Plans <input type="checkbox"/> Plug and Abandon <input type="checkbox"/> Temporarily Abandon
	<input type="checkbox"/> Convert to Injection <input type="checkbox"/> Plug Back <input type="checkbox"/> Water Disposal

13. Describe Proposed or Completed Operations (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplate horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

Spud well 6:00 AM 4/29/01. Drill 17 1/2" hole to 625'. 5/01-5/02 RU & ran 14 jts 13 3/8" surface csg & cemented w/ 200 sx Thixset, 340 sx BJ lite & 200 sx Cl'C' w/2% cacl2. Did not circ to surface. Did 1" top job in 7 batches total 225 sx Cl'C' cmt + 4% calc2. WOC. Drill 12 1/4" hole to 1843'. 5/04 Ran 41 jts 8 5/8" 32# J-55 sT&C csg set @ 1843'. Cement intermediate csg with 400 sx 50:50:10 cl-"C'w 1% cc, 1/4#/sx cello & 30# LCM. Tailed by 200 sx Cl'C' w/2% cacl2. Circ 129 sx to surface. WOC. Drill 7 7/8" hole to TD of 4560' on 5/10/01. Ran Platform Express log. RU & ran 103 jts 5 1/2" 17# J-55 LT&C csg landed @ 4560'. Cement production csg w/ 450 sx 15:61:11 Mod 'C' cmt. Rig released 5/11/01. WOCU. MIRU Completion Rig 9/01/01. Tag PBTD @ 4515'. Ran CBL/R TOC @ 1674'. Test csg to 3000 psi. Perf Upper Cherry Canyon 3232-3242' w/ 2 jspf total of 20 0.34" holes. Acidize perms w/1000 gal 7 1/2% NEFE acid & 40 gal sealers. Frac zone w/ 19,250 gal 35# linear gel, 11,200# 16:30 sd. Flow & swab to clean up. Set RBP @ 3195'. Perf 2996-3004' w/ 4 jspf total 32 0.34" holes. Acidize w/ 1000 gal 7 1/2% NEFE acid. Frac zone w/ 24,578 gal 35# linear gel & 25,280# 16:30 sd. RIH release & POOH w/ RBP. 10/2/01 la & rods. Turned to production 10/3/01.

14. I hereby certify that the foregoing is true and correct

Name (Printed/Typed) Doris Maly	Title Engineering Technician
Signature <i>Doris Maly</i>	Date October 25, 2001

THIS SPACE FOR FEDERAL OR STATE USE

Approved by	Title ACCEPTED FOR RECORD	Date
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 entitle the applicant to conduct operations thereon.	Office SGD DAVID E. GLASS	Date NOV 19 2001
Title 18 U.S.C. Section 1001, makes 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.		
DAVID R. GLASS PETROLEUM ENGINEER		

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

OCD-ARTESIA

FORM APPROVED  
Budget Bureau No. 1004-0135  
Expires: March 31, 1993

**SUNDRY NOTICES AND REPORTS ON WELLS**

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.  
Use "APPLICATION FOR PERMIT—" for such proposals

**SUBMIT IN TRIPLICATE**

1. Type of Well <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other	<b>RECEIVED</b> MAY 25 2006 OCD-ARTESIA	5. Lease Designation and Serial No. NM3606
2. Name of Operator Fasken Oil and Ranch, Ltd.		6. If Indian, Allottee or Tribe Name
3. Address and Telephone No. 303 W. Wall, Suite 1800, Midland, TX 79701   (915) 687-1777		7. If Unit or CA, Agreement Designation 27125
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) 1817' FSL & 837' FEL <i>Section 10, T21S R26E</i>		8. Well Name and No. Avalon 10 Federal #43
		9. API Well No. 30-015-31668
		10. Field and Pool, or Exploratory Area Catclaw Draw Delaware East
		11. County or Parish, State Eddy, NM

12. CHECK APPROPRIATE BOX(S) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Abandonment
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Recompletion
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Plugging Back
	<input type="checkbox"/> Casing Repair
	<input type="checkbox"/> Altering Casing
	<input checked="" type="checkbox"/> Other <u>Temporarily Abandon</u>
	<input type="checkbox"/> Change of Plans
	<input type="checkbox"/> New Construction
	<input type="checkbox"/> Non-Routine Fracturing
	<input type="checkbox"/> Water Shut-Off
	<input type="checkbox"/> Conversion to Injection
	<input type="checkbox"/> Dispose Water

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

1. RU wireline truck and mast. RIW with 4.5" gauge ring to 2950'. Run and set 5 1/2" CIBP at 2950' in 5 1/2" 17#/ft. casing. RD wireline.
2. Fill casing with fresh water containing oxygen scavenger and packer fluid.
3. Pressure test casing to 500 psi for 30 minutes with a pressure recorder for NMOCD mechanical integrity test.
4. RDPU.

SEE ATTACHED FOR  
CONDITIONS OF APPROVAL

Accepted for record  
NMOCD *[Signature]*

14. I hereby certify that the foregoing is true and correct

Signed *Alexis C. Swoboda* Title Engineering Tech. Date 5/17/2006

(This space for Federal or State office use)

Approved by (ORIG. SGD.) ALEXIS C. SWOBODA Title PETROLEUM ENGINEER Date MAY 23 2006

Conditions of approval, if any:

Title 18 U.S.C. Section 1001, makes 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.

\*See Instruction on Reverse Side

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

**OCD-ARTESIA**

FORM APPROVED  
OMB No 1004-0137  
Expires March 31 2007

**SUNDRY NOTICES AND REPORTS ON WELLS**  
*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  
NM3606

6. If Indian, Allottee or Tribe Name

*SUBMIT IN TRIPLICATE - Other instructions on page 2*

1. Type of Well  
 Oil Well     Gas Well     Other  
 NOV 06 2007

2. Name of Operator  
Fasken Oil and Ranch, Ltd.    **OCD-ARTESIA**

3a. Address  
303 W Wall, Suite 1800, Midland, TX 79701

3b. Phone No (include area code)  
(432) 687-1777

7. If Unit of CA/Agreement, Name and/or No  
27125

8. Well Name and No.  
Avalon 10 Federal No 43

9. API Well No  
30-015-31668

10. Field and Pool or Exploratory Area  
Catclaw Draw Delaware East

11. Country or Parish, State  
Eddy, New Mexico

12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input checked="" type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input type="checkbox"/> Other _____
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input checked="" type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.)

Fasken Oil and Ranch, Ltd. performed a successful Mechanical Integrity Test (MIT) on 10/24/07. The MIT was witnessed and approved by Darrell Carter with the BLM. A copy of the chart is attached. This well is in TA status effective until 06/05/2008.

**Accepted for record  
NMOCD**

**TA APPROVED FOR 7 MONTH PERIOD  
ENDING JUN 05 2008**

14. I hereby certify that the foregoing is true and correct

Name (Printed/Typed)  
Gloria Holcomb

Title Engineering Tech.

Signature *Gloria Holcomb*

Date 10/29/2007

**THIS SPACE FOR FEDERAL OR STATE OFFICE USE**

Approved by **/S/ DAVID R. GLASS**    **PETROLEUM ENGINEER**    Date **NOV 01 2007**

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 entitle the applicant to conduct operations thereon.

Title \_\_\_\_\_ Office \_\_\_\_\_

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.



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

OCD-ARTESIA

FORM APPROVED  
OMB No 1004-0137  
Expires March 31, 2007

**SUNDRY NOTICES AND REPORTS ON WELLS**  
*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-3606

6. If Indian, Allottee or Tribe Name

**SUBMIT IN TRIPLICATE** - Other instructions on page 2.

7. If Unit of CA/Agreement, Name and/or No.

1. Type of Well  
 Oil Well     Gas Well     Other  
**DEC - 2 2008**

8. Well Name and No  
Avalon "10" Federal No. 43

2. Name of Operator  
Fasken Oil and Ranch, Ltd.

9. API Well No  
30-015-31668

3a. Address  
303 West Wall St., Suite 1800, Midland, TX 79701

3b. Phone No (include area code)  
432-687-1777

10. Field and Pool or Exploratory Area  
Upper Cherry Canyon Delaware

4. Location of Well (Footage, Sec., T, R, M, or Survey Description)  
1817' FSL & 837' FEL, Sec 10, T21S, R26E

11. Country or Parish, State  
Eddy, New Mexico

**12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA**

TYPE OF SUBMISSION	TYPE OF ACTION			
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input checked="" type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other <u>Fracture Job</u>
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operation. Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.)

11-8-08

RU BJ Services. Tested steel lines to 5,500 psi ok. RU pump truck on 5-1/2" x 8-5/8" annulus, pressured to 500 psi, and monitored throughout job. Frac'd Cherry Canyon Delaware perfs 2,510'-2,520' via 5-1/2" casing with 19,500 gal Lightning 3000 frac fluid plus 29,300# of 16/30 mesh White Sand & 17,560# of 16/30 mesh Super LC as follows.

- a) Pumped 6,510 gal Lightning 3000 pad at 25 bpm and 2625 psi.
- b) Pumped 10,500 gal Lightning 3000 while ramping 1-5 ppg 16/30 White Sand at 25 bpm and 2052 psi.
- c) Pumped 4,620 gal Lightning 3000 with 5 ppg 16/30 Super LC Sand at 25 bpm and 2008 psi.
- d) Flushed with 2,394 gal 30# Linear Gel at 25 bpm and 2013 psi.

Finished pumping @ 2:30 CST. Maximum pressure - 2625 psi, minimum pressure - 2008 psi, average pressure - 2316 psi. ISIP 1140 psi, 3" 1092 psi, 4" 1065 psi, 15" 1035 psi. Total load to recover 572 bbl. RD BJ Services and annulus pump truck.

**ACCEPTED FOR RECORD**

**DEC 3 - 2008**

Gerry Guye, Deputy Field Inspector  
NMOCD-District II, ARTESIA

14. I hereby certify that the foregoing is true and correct.  
Name (Printed/Typed)  
Kim Tyson

Title Regulatory Analyst

Signature *Kim Tyson*

Date 11/10/2008

**ACCEPTED FOR RECORD**

**THIS SPACE FOR FEDERAL OR STATE OFFICE USE**

Approved by

Title

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 entitle the applicant to conduct operations thereon.

Office

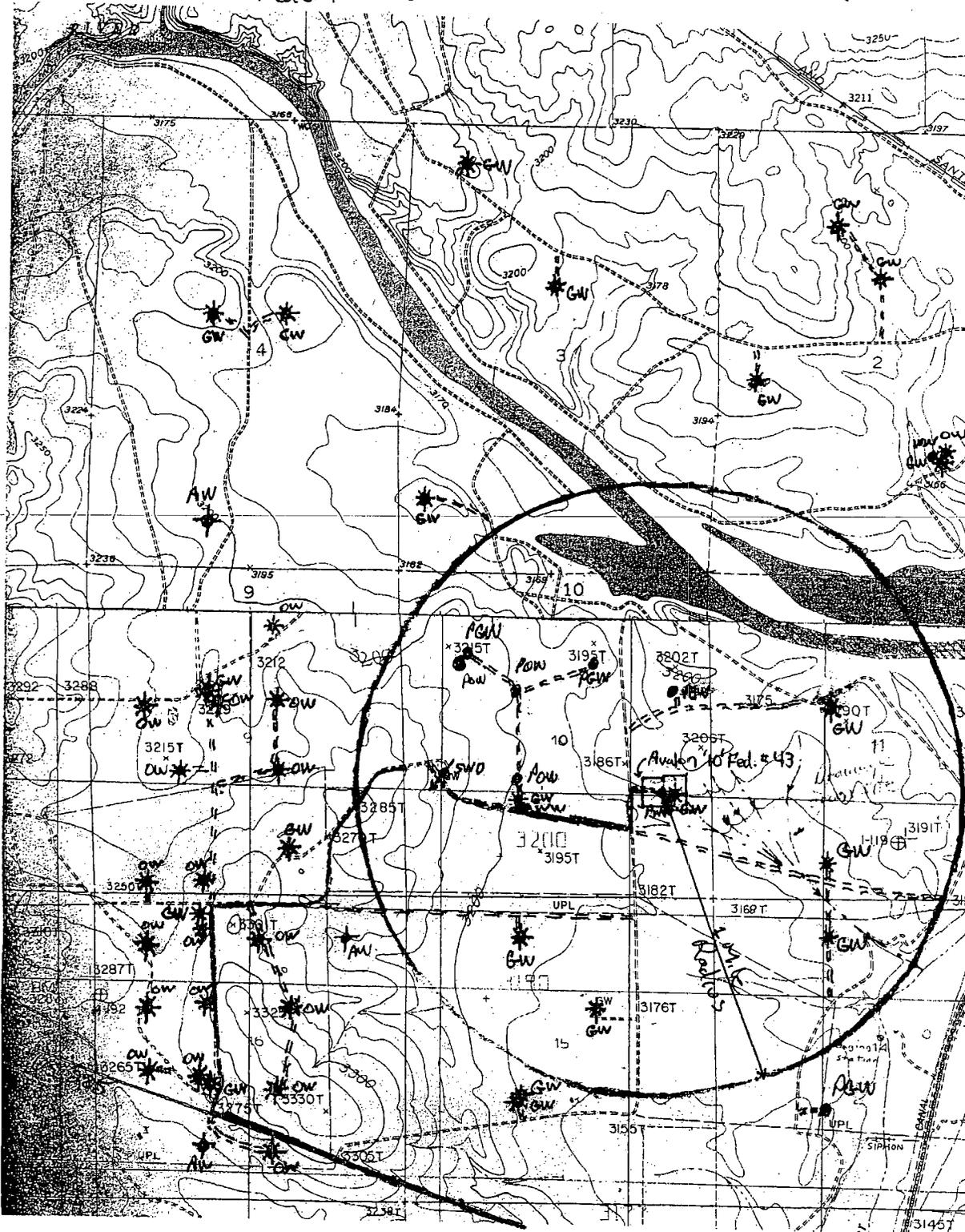
*J. Guye*  
BUREAU OF LAND MANAGEMENT  
CARLSBAD FIELD OFFICE

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.

(Instructions on page 2)

EXHIBIT 'A': Topographic & Vicinity Map -  
 Avalon '10' Federal #43

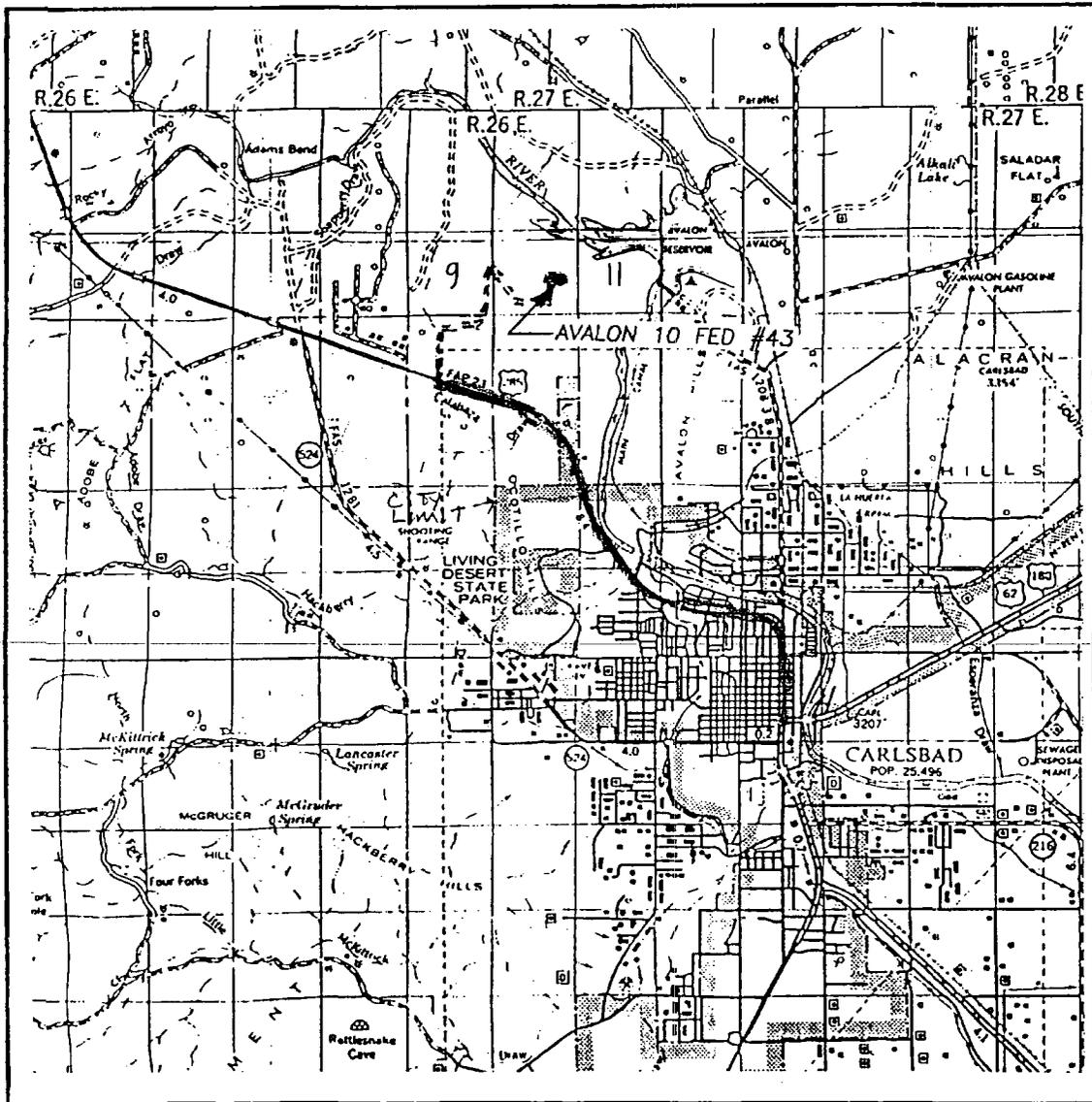
1 Mile



- \* GW: Gas Well
- \* OW: Oil Well
- ww: Water Well
- ◻ SWD: Salt-Water Disposal Injection Well
- ⊕ AW: Abandoned Well
- PGW: Proposed Gas Well
- POW: Proposed Oil Well
- PWW: Proposed Water Well
- Carlsbad City Limit

# VICINITY MAP

EXHIBIT "B"



SCALE: 1" = 2 MILES

SEC. 10 TWP. 21-S RGE. 26-E

SURVEY N.M.P.M.

COUNTY EDDY

DESCRIPTION 1817' FSL & 837' FEL

ELEVATION 3181

OPERATOR BONNEVILLE FUELS

LEASE AVALON 10 FEDERAL #43

JOHN WEST SURVEYING  
HOBBS, NEW MEXICO  
(505) 393-3117

**Injection Permit Checklist (7/8/08)**

Case \_\_\_\_\_ R- SWD 1165 WFX \_\_\_\_\_ PMX \_\_\_\_\_ IPI \_\_\_\_\_ Permit Date \_\_\_\_\_ UIC Ctr (J.F.M)  
 # Wells \_\_\_\_\_ Well Name: ANALON 10" Fed SWD # 43  
 API Num: (30-) 015-31668 Spud Date: 2001 New/Old: N (UIC primacy March 7, 1982)  
 Footages 1817 FSL / 837 FEL Unit I Sec 10 Tsp 215 Rge 26E County Eddy  
 Operator: Fisher OIL RANCH LTD. Contact KIM TYSON  
 OGRID: 151416 RULE 40 Compliance (Wells) 1/134 (Finan Assur) OK  
 Operator Address: 303 W. Wall St, Suite 1800, Midland TX 79701

Current Status of Well: TAED  
 Planned Work to Well: Perf/ACIDIZE Planned Tubing Size/Depth: 27/8 @ 2450'

	Sizes Hole.....Pipe	Setting Depths	Cement Sx or Cf	Cement Top and Determination Method
Existing _____ Surface	<u>17/2 133/8</u>	<u>825</u>	<u>725</u>	<u>CIRC (Needed 1" tubing)</u>
Existing _____ Intermediate	<u>12/4 85/8</u>	<u>1843</u>	<u>600</u>	<u>CIRC</u>
Existing _____ Long String	<u>77/8 5 1/2</u>	<u>4560</u>	<u>450</u>	<u>1674 CBL 8 1/2 160'</u>

Well File Reviewed   
 Diagrams: Before Conversion  After Conversion  Elogs in Imaging File:   
 Total Depth: 4560 PBTE: 2954 CIBP

Intervals:	Depths	Formation	Producing (Yes/No)
Above (Name and Top)			
Above (Name and Top)	<u>2353</u>	<u>Del.</u>	
Injection.....	<u>2510</u>	<u>thony C.</u>	<u>Y/N</u>
Interval TOP:	<u>2510</u>	<u>"O"</u>	
Injection.....	<u>2660</u>		
Interval BOTTOM:	<u>2660</u>		
Below (Name and Top)			

Just North of  
Carlsbad near  
Lake Avalon  
502 PSI Max. WHIP  
 Open Hole (Y/N) \_\_\_\_\_  
 Deviated Hole? \_\_\_\_\_

**Sensitive Areas:** Capitan Reef 490-550' Cliff House \_\_\_\_\_ Salt Depths \_\_\_\_\_  
 .... Potash Area (R-111-P) \_\_\_\_\_ Potash Lessee \_\_\_\_\_ Noticed? \_\_\_\_\_  
**Fresh Water:** Depths: (Yates + Reef) 0 to 550' Wells (Y/N) 1/02 Analysis Included (Y/N):  Affirmative Statement

**Salt Water:** Injection Water Types: Del / manow Analysis? \_\_\_\_\_  
**Injection Interval:** Water Analysis: Del Hydrocarbon Potential depleted in below perf.

**Notice:** Newspaper (Y/N)  Surface Owner Burn Reclonter Mineral Owner(s) \_\_\_\_\_  
 RULE 701B(2) Affected Parties: Devon/Yates PC

**Area of Review:** Adequate Map (Y/N)  and Well List (Y/N)   
 Active Wells 5 Num Repairs 0 Producing in Injection Interval in AOR Yes  
 ..P&A Wells 0 Num Repairs 0 All Wellbore Diagrams Included?

**Questions to be Answered:**  
Pressure Test or Test CIBP - Done already

Required Work on This Well: \_\_\_\_\_ Request Sent \_\_\_\_\_ Reply: \_\_\_\_\_  
 AOR Repairs Needed: \_\_\_\_\_ Request Sent \_\_\_\_\_ Reply: \_\_\_\_\_  
 \_\_\_\_\_ Request Sent \_\_\_\_\_ Reply: \_\_\_\_\_

2510  
5020

4