Initial

Application

Part I

Received: 11/14/2019

This application is placed in file for record. It MAY or MAY NOT have been reviewed to be determined Administratively Complete

MEWBOURNE OIL COMPANY FREEDOM 36 STATE SWD #1 SWD PERMIT APPLICATION November 12, 2019

LIST OF ATTACHMENTS:

Proof of SWD application fee payment

Administrative Checklist

Form C-108

Freedom 36 State SWD #1 well schematic

Freedom 36 State SWD #1 survey plat

Well Plat

Tabulation of wells within 1-mile radius (NOTE: one well penetrates the Devonian)

- Well schematic for the Fannie Lou Federal #1 (Devonian penetration)
- Pertinent completion documents for the Fannie Lou Federal #1

Fresh Water well map

Tabulation of nearby fresh water wells – (Source: NM Office of the State Engineer)

Fresh Water Well Water Analysis

Producing Well Water Analysis - Wolfcamp, & Bone Spring

Offset Operator Map (Midland Map)

Offset Operator Map (Enerdeq)

Offsetting Federal and New Mexico State Minerals Map

Listing of Notified Persons

Affidavit of Publication – Carlsbad Current-Argus

Hydrologic Affirmation

Seismicity Statement

Historical Seismicity, Fault Map and Devonian SWD Offset Map

Distance to Offsetting Devonian SWD Well Map

Geological Cross Section

Plugging Assessment

State of New Mexico **Energy, Minerals and Natural Resources Department Oil Conservation Division**

Receipt of Fee Application Payment



PO Number: UT48U-191112-C-1080

Payment Date:

11/12/2019 7:20:46 AM

Payment Amount:

\$500.00

Payment Type:

Credit Card

Application Type: Application for a fluid injection well permit.

Fee Amount:

\$500.00

Application Status: Pending Document Delivery

OGRID:

14744

First Name:

Faralyn

Last Name:

King

Email:

fking@mewbourne.com

IMPORTANT: If you are mailing or delivering your application, you must print and include your receipt of payment as the first page on your application. All mailed and delivered applications must be sent to the following address: 1220 S. St. Francis Dr., Santa Fe, NM 87505. For inquiries, reference the PO Number listed above.

RECEIVED:

11/14/19

REVIEWER: BLL

APP NO:

pBL1933054715

ABOVE THIS TABLE FOR OCD DIVISION USE ONLY



NEW MEX	ICO OIL CONSERVATIO	N DIVISION	ALL OF THE PARTY O
	gical & Engineering Bur		(·(\$\frac{1}{2}1
1220 South St.	Francis Drive, Santa Fe	, NM 8/505	S CONTROL OF
	TRATIVE APPLICATION		
	R ALL ADMINISTRATIVE APPLICATIONS I REQUIRE PROCESSING AT THE DIVISION		SION RULES AND
Applicant: Mewboure Oil Company		OGRID NO	ımber: <u>14744</u>
Vell Name: Freedom 36 State SWD #1		API: 30-015-p	
ool: SWD; DEVONIAN		Pool Code	96101
SUBMIT ACCURATE AND COMPLETE I	NFORMATION REQUIRED TO INDICATED BELOW	O PROCESS THE T	YPE OF APPLICATION
1) TYPE OF APPLICATION: Check thos A. Location – Spacing Unit – Sim		ration unit) SD	SWD-2332
[II] Injection – Disposal – Pres	Measurement PLC □ PC □ OLS	□OLM d Oil Recovery □ PPR	FOR OCD ONLY
2) NOTIFICATION REQUIRED TO: Checo A. Offset operators or lease has a Royalty, overriding royalty C. Application requires published D. Notification and/or concurst. Surface owner G. For all of the above, proof	olders owners, revenue owners shed notice orrent approval by SLO orrent approval by BLM	ation is attached,	Notice Complete Application Content Complete
H. No notice required 3) CERTIFICATION: I hereby certify the administrative approval is accurate understand that no action will be a notifications are submitted to the Design of the D	at the information submitt e and complete to the b taken on this application	ed with this applicest of my knowled	cation for dge. I also
Note: Statement must be com	pleted by an individual with mana	gerial and/or supervisor	y capacity.
	N	lovember 12, 2019	
Timothy R. Harrington		ate	
Print or Type Name	2		
3 60 60 8		03-534-7647	1).
~ 11 001 -1	F	hone Number	

mothy K. Hungton Signature

tharrington@mewbourne.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: Mewbourne Oil Company
	ADDRESS: 3620 Old Bullard Road Tyler, TX 79701
	CONTACT PARTY: Tim Harrington PHONE: 903-534-7647
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 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:
	 Proposed average and maximum daily rate and volume of fluids to be injected; Whether the system is open or closed; Proposed average and maximum injection pressure; Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and, 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: Tim Harrington TITLE: Reservoir Engineer
	SIGNATURE:
*	E-MAIL ADDRESS: tharrington@mewbourne.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.

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.

OPERATOR: Mewbourne Oil Company

WELL NAME & NUMBER: Freedom 36 State SWD #1

WELL LOCATION: 1285' FSL & 925' FEL

36

20S

28E

FOOTAGE LOCATION

UNIT LETTER

SECTION

TOWNSHIP

RANGE

WELLBORE SCHEMATIC (See Attached)

WELL CONSTRUCTION DATA

Surface Casing

Hole Size: 26"

Casing Size: 20" (94 #) @ 330'

Cement with: 545 sx (100% excess)

Top of Cement: Surface

Intermediate Casing

Hole Size: 17 1/2"

Casing Size: 13 3/8" (54.5#) @ 1,350'

Stage 1: 695 sx (25% excess)

Top of Cement: Surface

(Calculated)

Intermediate Casing

Hole Size: 12 1/4"

Casing Size: 9 5/8" (36#) @ 3,015'

Stage 1: 375 sx

Top of Cement: Surface

(Calculated)

Stage 2: 350 sx

DV Tool @1,400'

Top of Cement: Surface (Calculated)

Production Casing

Hole Size: 8 1/2"

Casing Size: 7 5/8" (33.7#) @ 12,625'

Stage 1: 385 sx

Top of Cement: Surface

(Calculated)

Stage 2: 550 sx

DV Tool @ 9,100

Top of Cement: 1,420'

(Calculated)

ESTIMATED TOP OF DEVONIAN =

12,625

TD @ 13,650'

Permitted Injection Interval 12,625'-13,650'

INJECTION WELL DATA SHEET

Tubing Size: 5 1/2", P110 UFJ GB to 12,545'

Lining Material: Duoline

Type of Packer: 3 1/2" x 7 5/8" Model R Packer (Nickel-Plated)

Packer Setting Depth: +/- 12,545'

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

Additional Data

Is this a new well drilled for injection? Yes
 If no, for what purpose was the well originally drilled? NA

- 2. Name of the Injection Formation: **Devonian Open Hole Completion**
- 3. Name of Field or Pool (if applicable): 96101 SWD; Devonian
- 4. Has the well ever been perforated in any other zone(s)? No.
- 5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area:

Overlying potentially productive zone tops – Delaware (3,010'), Bone Spring (5,580'), Wolfcamp (9,130'), & Morrow (10,010')

Underlying producing zone – N/A

FREEDOM 36 STATE SWD #1

Additional Details

- VI. There is one well that penetrated the proposed disposal formation within the 1-mile area of review. A well schematic and copies of pertinent completion documents area attached.
- VII. 1. Proposed average rate of 20,000 bwpd and maximum rate of 30,000 bwpd.
 - 2. Non-commercial SWD (closed system).
 - 3. Proposed average injection pressure is approximately 2,000 psi and the maximum injection pressure is approximately 2,525 psi (0.2 psi/ft x 12,625 ft).
 - 4. This well is being permitted as a private SWD, therefore all the injected fluid will be formation water from Mewbourne Oil Company operated wells currently producing or planned in the area. Representative water samples from the Wolfcamp and Bone Spring formations are attached.
 - 5. We will be injecting into the Devonian formation. Devonian formation water is known to be compatible with the formation water of the Bone Spring and Wolfcamp. No Devonian water analysis are available within the immediate area. The following data is the closest produced water analysis that is available on the USGS

IDUSGS	IDUSGS IDORIG IDDB SOURCE		LATITUDE	LONGITUDE	API	COUNTY	PIELD	WELLNAME	TOWNRANGE		
35292	30000310	USGSBREIT	Pan American Petroleum Corporation	32.183	-103.7766	30015108590000	Eddy	Poker Lake South	Poker Lake Unit #36	S 24 E 31 28	
			·								
DATESAMPLE	METHOD	FORMATION	DEPTHUPPER	DEPTHLOWER	5 G	SPORAV	RESIS	RESIST	PH	TDSUSGS	TDS
1967-04-06	Canada	Devonlan	16578	16660	1.086	1.086	0.067	77	6.6	120326	120326
1307-04-00	Separator	Devonian	103/6	T0000	7.000	1.000	U.UO/	"	0.0	120320	120320

VIII. 1. The proposed injection interval is within the Devonian formation which is a porous dolomitic limestone from 12,625' to 13,650'. It is estimated that the base of the injection interval should be approximately 650' above the top of the Ellenburger.

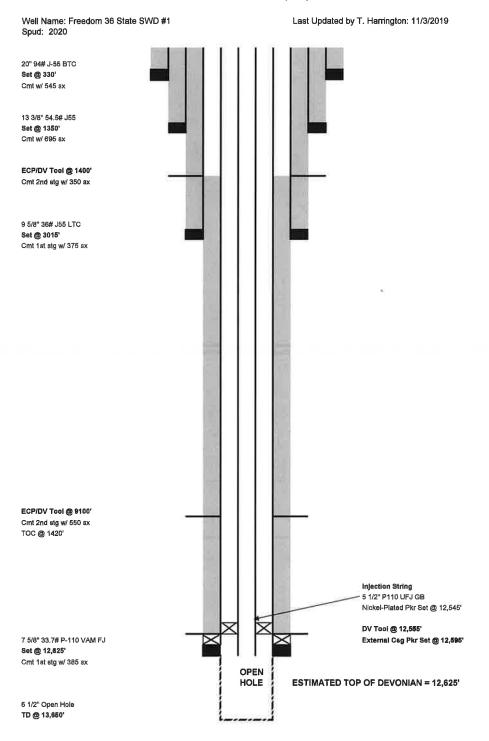
Other Projected Formation Tops:

Mississippian	12,100'
Woodford	12,600'
Devonian	12,625'
EST TOTAL DEPTH	13,650'
Montoya	13,700'
C 1	
Simpson	14,000'

2. The underground fresh water aquifers (unnamed) are present at shallow depths (per review of well records, within 2 miles of the proposed SWD, on the NM Office of the State Engineers website) with the deepest water being encountered at a depth of 186', the shallowest water at a depth of 8' and the average water depth at 52'. There are no known fresh water intervals underlying the injecting formation.

- IX. The proposed stimulation is an open-hole acid treatment of 30,000 gallons of 15% HCL.
- **IX.** A gamma-ray / neutron log will be run from TD to surface upon the drilling and completion of proposed well.
- X. There were numerous fresh water wells on record with the NM State Engineers Office that are within 2 miles of the proposed SWD. A fresh water sample taken from a well located in the SE/4, NW/4 of Section 36, Twp 20S, Rge 28E, and the analysis is attached.
- XI. Mewbourne Oil Company has examined geologic and engineering data and has found that there is no evidence of faulting between the proposed disposal zone and any underground sources of drinking water. A signed affidavit is attached.
- XII. See attached Proof of Notice

Mewbourne Oil Company



District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720
District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

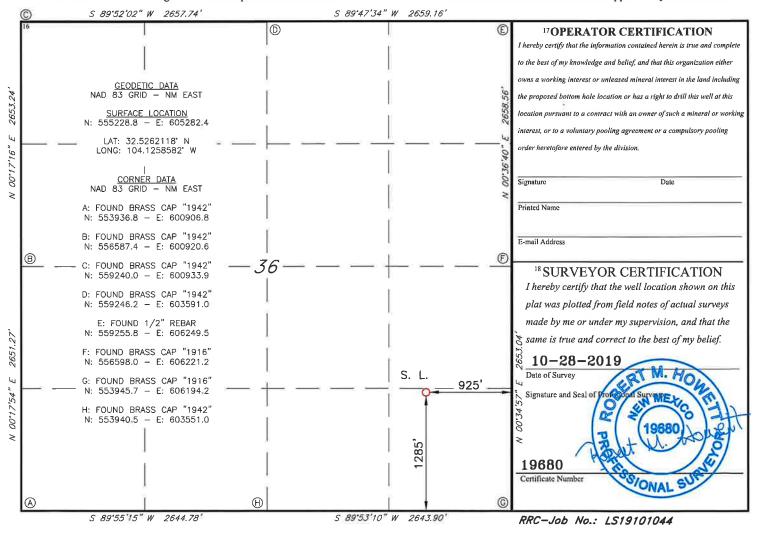
State of New Mexico Energy, Minerals & Natural Resources Department OIL CONSERVATION DIVISION 1220 South St. Francis Dr. Santa Fe, NM 87505

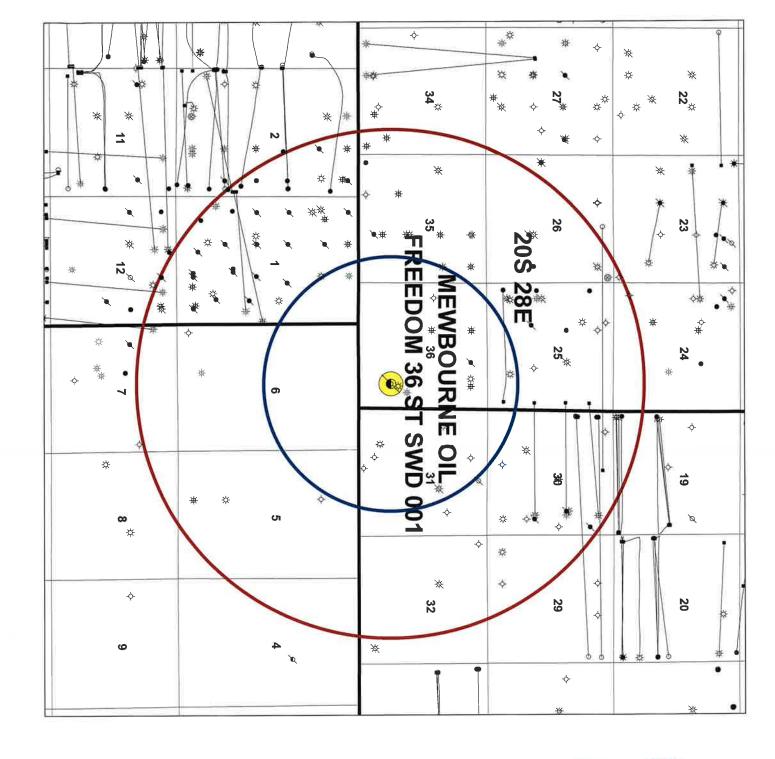
Form C-102 Revised August 1, 2011 Submit one copy to appropriate District Office

☐ AMENDED REPORT

			WELL L	OCATIO	N AND ACE	REAGE DEDIC	CATION PLA	T		
1	API Number			² Pool Code ³ Pool Name						
4Property Co	de			EDE	5 Property N				·	Well Number
FREEDOM 36 STATE SWD 1										
7 OGRID NO. 8 Operator Name								9 Elevation		
	MEWBOURNE OIL COMPANY 3228'						3228			
	¹⁰ Surface Location									
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet From the	East/W	est line	County
P	36	20S 28E 1285 SOUTH 925 EAST						EDDY		
	,		11	Bottom H	Iole Location	If Different Fr	om Surface			
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/W	est line	County
12 Dedicated Acres	s 13 Joint	or Infill	Consolidation	Code 15 (Order No.					

No allowable will be assigned to this completion until all interest have been consolidated or a non-standard unit has been approved by the division.

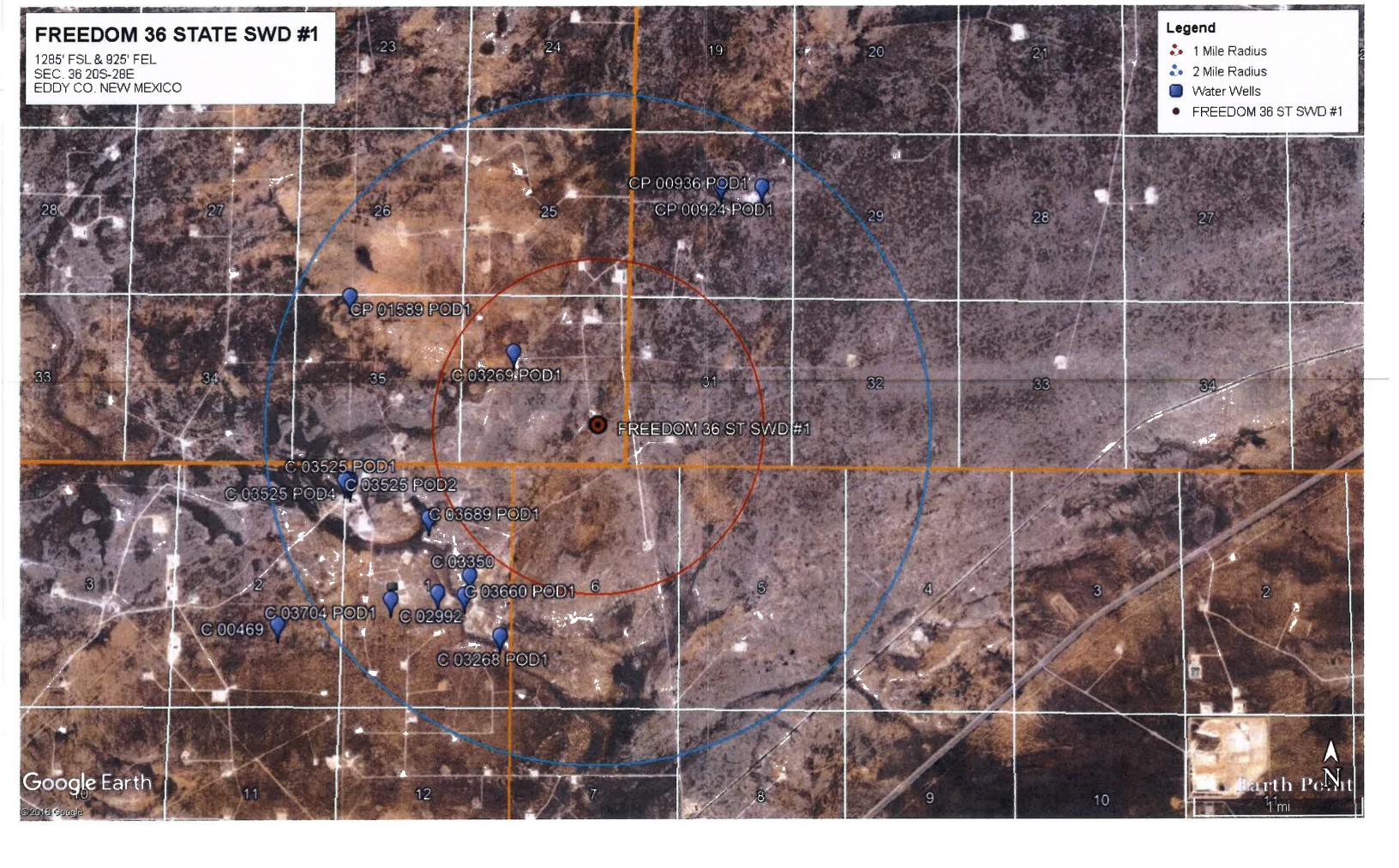


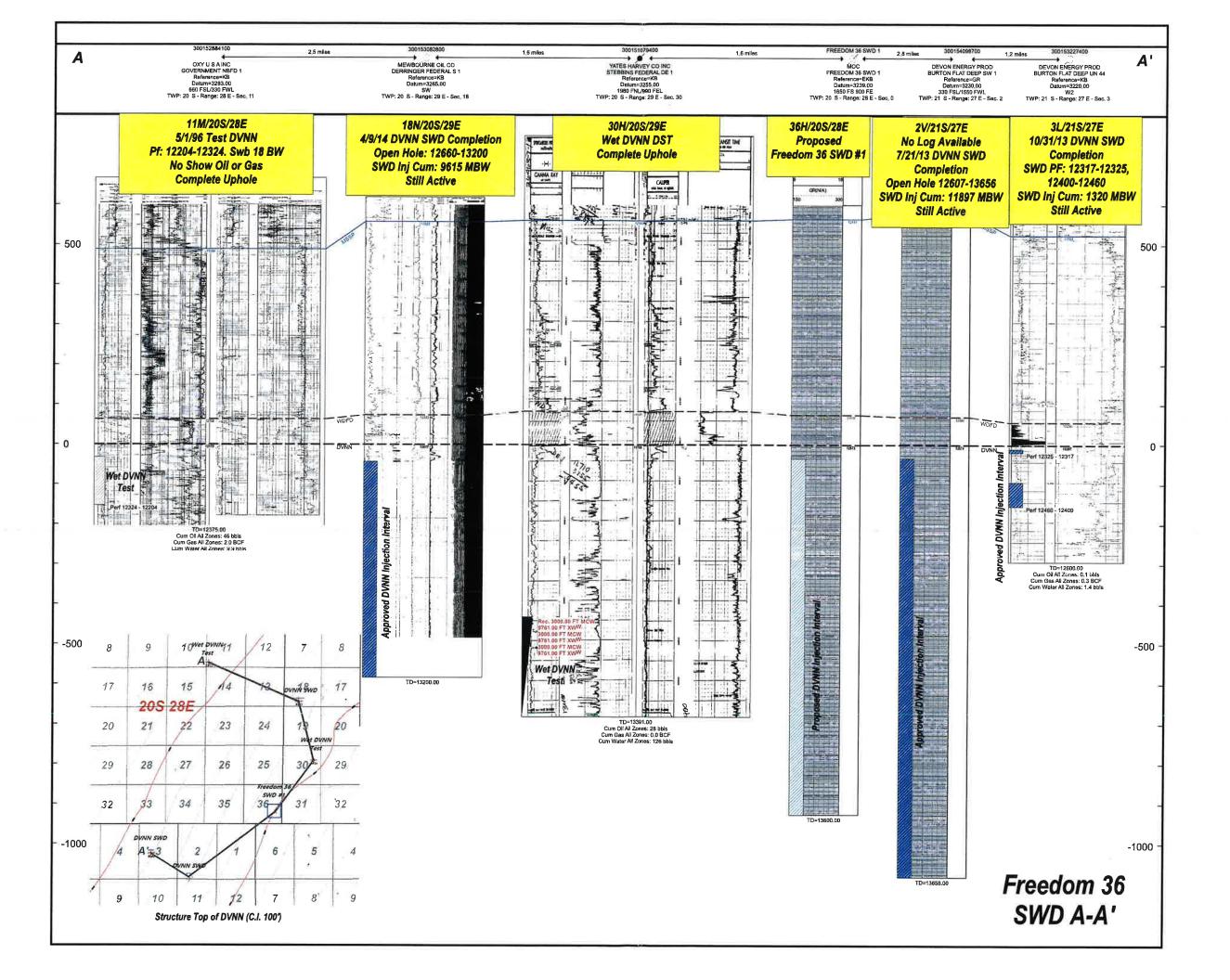


2 MILE AOR

1 MILE AOR









Ship From

Mewbourne Oil Company, Kimberly Ripka 3901 South Broadway, Tyler, TX 75701 rmcdaniel@mewbourne.com, 903-561-2900 Ship To New Mexico Oil Conservation Div., Phillip Goetze-Engineernig Bureau 1220 South St. Francis Drive, SANTA FE, NM 87505 (505) 476-3440

What

Package 1 - 1ZF698E80195716688

Weight

Dimensions UPS Letter

0.5 lbs

Service Details - UPS Next Day Air

Estimated Delivery Friday November 15, 2019, 10:30 AM

Payment

Bill Shipping Charges To: Shipper - F698E8

Shipping Total

Shipping Fees

Package 1 UPS Next Day Air

Fuel Surcharge

Transportation Charges: for services listed as guaranteed, refunds apply to transportation charges only. See Terms and Conditions in the Service Guide for details. Certain commodities and high value shipments may require additional transit time for customs clearance.

Subtotals

Shipping Fees Combined Charges Contract Rate

Rate includes a fuel Surcharge, but excludes taxes, duties and other charges that may apply to the shipment.

Your invoice may vary from the displayed reference rates

Note: This document is not an invoice.

Dear Customer,

This notice serves as proof of delivery for the shipment listed below.

Tracking Number

1ZF698E80195716688

Weight

0.50 LBS

Service

UPS Next Day Air®

Shipped / Billed On

11/14/2019

Delivered On

11/15/2019 10:02 A.M.

Delivered To

SANTA FE, NM, US

Received By

MARTINEZ

Left At

Receiver

Thank you for giving us this opportunity to serve you. Details are only available for shipments delivered within the last 120 days. Please print for your records if you require this information after 120 days.

Sincerely,

UPS

Tracking results provided by UPS: 11/15/2019 12:32 P.M. EST



Ship From

Mewbourne Oil Company, Kimberly Ripka 3901 South Broadway, Tyler, TX 75701 rmcdaniel@mewbourne.com, 903-561-2900 Ship To

New Mexico State Land Office, Melissa Armijo 310 Old Santa Fe Trail, SANTA FE, NM 87501 505-827-5760

What

Package 1 - 1ZF698E80193242729

Weight 0.5 lbs Dimensions UPS Letter

Service Details - UPS Next Day Air

Estimated Delivery Friday November 15, 2019, 10:30 AM

Payment

Bill Shipping Charges To: Shipper - F698E8

Shipping Total

Shipping Fees

Package 1

UPS Next Day Air

Fuel Surcharge

Transportation Charges: for services listed as guaranteed, refunds apply to transportation charges only. See Terms and Conditions in the Service Guide for details. Certain commodities and high value shipments may require additional transit time for customs clearance.

Subtotals

Shipping Fees

Combined Charges

Contract Rate

Rate includes a fuel Surcharge, but excludes taxes, duties and other charges that may apply to the shipment.
Your invoice may vary from the displayed reference rates

Note: This document is not an invoice.

Dear Customer,

This notice serves as proof of delivery for the shipment listed below.

Tracking Number

1ZF698E80193242729

Weight

0.50 LBS

Service

UPS Next Day Air®

Shipped / Billed On

11/14/2019

Delivered On

11/15/2019 10:14 A.M.

Delivered To

SANTA FE, NM, US

Received By

ARMIJO

Left At

Mail Room

Thank you for giving us this opportunity to serve you. Details are only available for shipments delivered within the last 120 days. Please print for your records if you require this information after 120 days.

Sincerely,

UPS

Tracking results provided by UPS: 11/15/2019 2:13 P.M. EST



Ship From

Mewbourne Oil Company, Kimberly Ripka 3901 South Broadway, Tyler, TX 75701 mcdaniel@mewbourne.com, 903-561-2900 Ship To Bureau of Land Management 620 East Greene Street, CARLSBAD, NM 88220

What

Package 1 - 1ZF698E80190905698

Weight

Dimensions

0.5 lbs

UPS Letter

Service Details - UPS Next Day Air

Estimated Delivery Friday November 15, 2019, End of Day

Payment

Bill Shipping Charges To: Shipper - F698E8

Shipping Total

Shipping Fees

Package 1

UPS Next Day Air

Delivery Area Surcharge

Fuel Surcharge

Transportation Charges: for services listed as guaranteed, refunds apply to transportation charges only. See Terms and Conditions in the Service Guide for details. Certain commodities and high value shipments may require additional transit time for customs clearance.

Subtotals

Shipping Fees

Combined Charges

Contract Rate

Rate includes a fuel Surcharge, but excludes taxes, duties and other charges that may apply to the shipment. Your invoice may vary from the displayed reference rates

Note: This document is not an invoice.

Dear Customer,

This notice serves as proof of delivery for the shipment listed below.

Tracking Number

1ZF698E80190905698

Weight

0.50 LBS

Service

UPS Next Day Air®

Shipped / Billed On

11/14/2019

Delivered On

11/15/2019 11:35 A.M.

Delivered To

CARLSBAD, NM, US

Received By

WILLIAMS

Left At

Front Desk

Thank you for giving us this opportunity to serve you. Details are only available for shipments delivered within the last 120 days. Please print for your records if you require this information after 120 days.

Sincerely,

UPS

Tracking results provided by UPS: 11/15/2019 2:11 P.M. EST



Ship From

Mewbourne Oil Company, Kimberly Ripka 3901 South Broadway, Tyler, TX 75701 rmcdaniel@mewbourne.com, 903-561-2900 Ship To MRC PERMIAN COMPANY, MR. GREGG KRUG ONE LINCOLN CENTRE, 5400 LBJ FREEWAY, SUITE 1500, DALLAS, TX 75240

What

Package 1 - 1ZF698E80190135118

Weight

Dimensions

0.5 lbs

UPS Letter

Service Details - UPS Next Day Air

Estimated Delivery Friday November 15, 2019, 10:30 AM

Payment

Bill Shipping Charges To: Shipper - F698E8

Shipping Total

Shipping Fees

Package 1 UPS Next Day Air

Fuel Surcharge

Transportation Charges: for services listed as guaranteed, refunds apply to transportation charges only. See Terms and Conditions in the Service Guide for details. Certain commodities and high value shipments may require additional transit time for customs clearance.

Subtotals

Shipping Fees Combined Charges Contract Rate

Rate includes a fuel Surcharge, but excludes taxes, duties and other charges that may apply to the shipment.

Your invoice may vary from the displayed reference rates

Note: This document is not an invoice.

Dear Customer,

This notice serves as proof of delivery for the shipment listed below.

Tracking Number

1ZF698E80190135118

Weight

0.50 LBS

Service

UPS Next Day Air®

Shipped / Billed On

11/14/2019

Delivered On

11/15/2019 10:16 A.M.

Delivered To

DALLAS, TX, US

Received By

BURNS

Left At

Office

Thank you for giving us this opportunity to serve you. Details are only available for shipments delivered within the last 120 days. Please print for your records if you require this information after 120 days.

Sincerely,

UPS

Tracking results provided by UPS: 11/15/2019 11:42 A.M. EST



Ship From

Mewbourne Oil Company, Kimberly Ripka 3901 South Broadway, Tyler, TX 75701 mcdaniel@mewbourne.com, 903-561-2900 Ship To EOG Resources, Inc. 5509 Champions Dr., MIDLAND, TX 79706

What

Package 1 - 1ZF698E80192806934

Weight

Dimensions

0.5 lbs

UPS Letter

Service Details - UPS Next Day Air

Estimated Delivery Friday November 15, 2019, 10:30 AM

Payment

Bill Shipping Charges To: Shipper - F698E8

Shipping Total

Shipping Fees

Package 1

UPS Next Day Air

Fuel Surcharge

Transportation Charges: for services listed as guaranteed, refunds apply to transportation charges only. See Terms and Conditions in the Service Guide for details. Certain commodities and high value shipments may require additional transit time for customs clearance.

Subtotals

Shipping Fees Combined Charges Contract Rate

Rate includes a fuel Surcharge, but excludes taxes, duties and other charges that may apply to the shipment. Your invoice may vary from the displayed reference rates

Note: This document is not an invoice.

Dear Customer,

This notice serves as proof of delivery for the shipment listed below.

Tracking Number

1ZF698E80192806934

Weight

0.50 LBS

Service

UPS Next Day Air®

Shipped / Billed On

11/14/2019

Delivered On

11/15/2019 9:51 A.M.

Delivered To

MIDLAND, TX, US

Received By

SOTO

Left At

Mail Room

Thank you for giving us this opportunity to serve you. Details are only available for shipments delivered within the last 120 days. Please print for your records if you require this information after 120 days.

Sincerely,

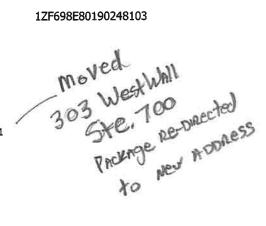
UPS

Tracking results provided by UPS: 11/15/2019 11:45 A.M. EST



Ship From

Mewbourne Oil Company, Kimberly Ripka 3901 South Broadway, Tyler, TX 75701 rmcdaniel@mewbourne.com, 903-561-2900 Ship To Colgate Operating, LLC 306 West Wall, Suite 500, MIDLAND, TX 79701



What

Package 1 - 1ZF698E80190248103

Weight 0.5 lbs

Dimensions UPS Letter

Service Details - UPS Next Day Air

Estimated Delivery Friday November 15, 2019, 10:30 AM

Payment

Bill Shipping Charges To: Shipper - F698E8

Shipping Total

Shipping Fees

Package 1 UPS Next Day Air

Fuel Surcharge

Transportation Charges: for services listed as guaranteed, refunds apply to transportation charges only. See Terms and Conditions in the Service Guide for details. Certain commodities and high value shipments may require additional transit time for customs clearance.

Subtotals

Shipping Fees Combined Charges Contract Rate

Rate includes a fuel Surcharge, but excludes taxes, duties and other charges that may apply to the shipment. Your invoice may vary from the displayed reference rates

Note: This document is not an invoice.

Dear Customer,

This notice serves as proof of delivery for the shipment listed below.

Tracking Number

1ZF698E80190248103

Weight

0.50 LBS

Service

UPS Next Day Air®

Shipped / Billed On

11/14/2019

Delivered On

11/15/2019 11:08 A.M.

Ship To

MIDLAND, TX, US

Received By

OFFICE

Left At

Office

Thank you for giving us this opportunity to serve you. Details are only available for shipments delivered within the last 120 days. Please print for your records if you require this information after 120 days.

Sincerely,

UPS

Tracking results provided by UPS: 11/15/2019 12:18 P.M. EST



Ship From

Mewbourne Oil Company, Kimberly Ripka 3901 South Broadway, Tyler, TX 75701 mcdaniel@mewbourne.com, 903-561-2900 Ship To XTO Permian Operating, LLC 6401 Holiday Hill Road, Bldg 5, MIDLAND, TX 79707

What

Package 1 - 1ZF698E80191223744

Weight

Dimensions

0.5 lbs

UPS Letter

Service Details - UPS Next Day Air

Estimated Delivery Friday November 15, 2019, 10:30 AM

Payment

Bill Shipping Charges To: Shipper - F698E8

Shipping Total

Shipping Fees

Package 1

UPS Next Day Air Fuel Surcharge

Transportation Charges: for services listed as guaranteed, refunds apply to transportation charges only. See Terms and Conditions in the Service Guide for details. Certain commodities and high value shipments may require additional transit time for customs clearance.

Subtotals

Shipping Fees
Combined Charges
Contract Rate

Rate includes a fuel Surcharge, but excludes taxes, duties and other charges that may apply to the shipment.
Your invoice may vary from the displayed reference rates

Note: This document is not an invoice.

Dear Customer,

This notice serves as proof of delivery for the shipment listed below.

Tracking Number

1ZF698E80191223744

Weight

0.50 LBS

Service

UPS Next Day Air®

Shipped / Billed On

11/14/2019

Delivered On

11/15/2019 10:23 A.M.

Delivered To

MIDLAND, TX, US

Received By

PENA

Left At

Front Desk

Thank you for giving us this opportunity to serve you. Details are only available for shipments delivered within the last 120 days. Please print for your records if you require this information after 120 days.

Sincerely,

UPS

Tracking results provided by UPS: 11/15/2019 11:46 A.M. EST



Ship From

Mewbourne Oil Company, Kimberly Ripka 3901 South Broadway, Tyler, TX 75701 rmcdaniel@mewbourne.com, 903-561-2900 Ship To Fasken Oil and Ranch LTD 6101 Holiday Hill Road, MIDLAND, TX 79707

What

Package 1 - 1ZF698E80198279879

Weight

Dimensions

0.5 lbs

UPS Letter

Service Details - UPS Next Day Air

Estimated Delivery Friday November 15, 2019, 10:30 AM

Payment

Bill Shipping Charges To: Shipper - F698E8

Shipping Total

Shipping Fees

Package 1

UPS Next Day Air

Fuel Surcharge

Transportation Charges: for services listed as guaranteed, refunds apply to transportation charges only. See Terms and Conditions in the Service Guide for details. Certain commodities and high value shipments may require additional transit time for customs clearance.

Subtotals

Shipping Fees
Combined Charges

Contract Rate

Rate includes a fuel Surcharge, but excludes taxes, duties and other charges that may apply to the shipment.

Your invoice may vary from the displayed reference rates

Note: This document is not an invoice.

Dear Customer,

This notice serves as proof of delivery for the shipment listed below.

Tracking Number

1ZF698E80198279879

Weight

0.50 LBS

Service

UPS Next Day Air®

Shipped / Billed On

11/14/2019

Delivered On

11/15/2019 10:18 A.M.

Delivered To

MIDLAND, TX, US

Received By

MORENO

Left At

Front Desk

Thank you for giving us this opportunity to serve you. Details are only available for shipments delivered within the last 120 days. Please print for your records if you require this information after 120 days.

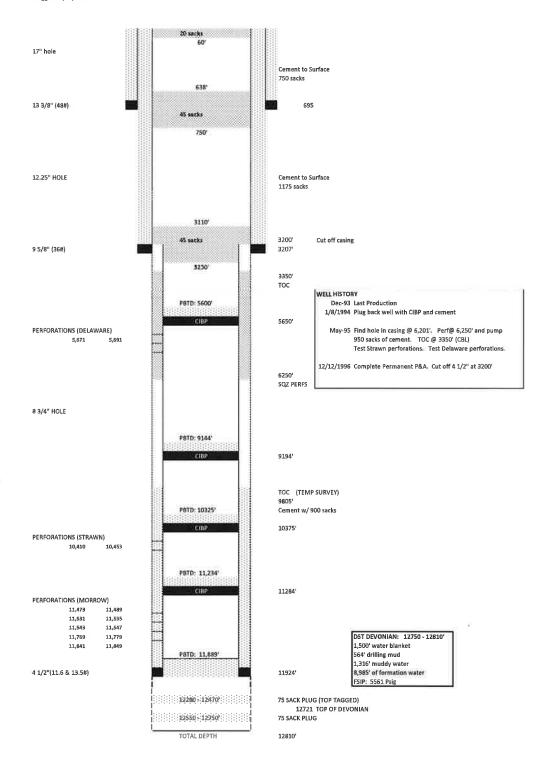
Sincerely,

UPS

Tracking results provided by UPS: 11/15/2019 11:49 A.M. EST

Harvey E. Yates Co., Inc. Fannie Lou Federal #1 30-015-21617 1980 FNL, 1980 FEL Sec 31, Twp 20S, Rge 29E Eddy County, NM

Spud 8/27/1975 Plugged 12/12/1996



Scout Ticket



30015216170000

General Information

1 FANNIE LOU FEDERAL Data Source:

30015216170000

API/UWI: State/Prov:

NEW MEXICO

PR Mar 31, 1993

on Aug 17, 1975

PERMIAN BASIN

Apr 15, 1976

11,750 FT

NEW FIELD WILDCAT (WF)

Field:

SCANLON

Current Status:

Reg. Well Status/Date:

Initial Class:

ABD-GW

Final Status: Permit:

First Report Date:

Projected TD:

Basin:

Play Name:

IP Summary:

Oil:

Gas: 1,295 MCFD Water:

Condensate:

Spud Date Code:

PlugBack Depth:

KB. Elevation:

Final Drilling:

Formation Name TD:

PRODFit Form Name TD:

TD Date:

LTD:

Rig#:

Country:

County:

Operator:

Current Operator:

Final Well Class:

Target Objective: **Hole Direction:**

Abandonment Date:

Projected Formation:

PRODFit Form at TD:

Formation at TD:

Play Type:

IC:

Top Form:

Form:

11,889 FT

3,254 FT

DEVONIAN

PRODFit Top

402MRRW

UNITED STATES

YATES HARVEY E CO INC

YATES HARVEY E CO INC

300157001075

VERTICAL

Dec 12, 1996

MORROW

DEVONIAN

EDDY

PRODFit Base

Data Source:

Base Form: Form:

NEW FIELD WILDCAT-DISCOVERY (WFD

Location

Section, Twp., Range: Spot Code:

31 20S 29E

Footage NS EW Origin:

NEW MEXICO

12,810 FT

309DVNN

3,254 FT KB

3,236 FT GR

MORANCO

Nov 19, 1975

Principal Meridian:

Lat/Long:

+32.5316181 -104.1116777

1980 FNL 1980 FEL CONGRESS SECTION

Lat/Long Source:

IH

Datum:

NAD27

PΙ

402MRRW

Dates and Depths

Data Source:

Spud: Aug 27, 1975

TD:

TVD:

Formation Code TD:

PRODFit Form Code TD:

Ref. Elevation:

Ground Elevation:

Contractor:

Completed:

Rig Release Date:

Tool: ROTARY

Initial Potential Tests

IP: 001

MORROW

MORROW

Data Source: PI

Top Formation Name:

Top PRODFit Form Name:

Base Formation Name:

Base PRODFit Form Name:

Oil:

Gas:

1,295 MCFD

Top Formation Code:

Top PRODFit Form Code:

Base Formation Code:

402MRRW

402MRRW

Base PRODFit Form Code:

Condensate:

Water:

Scout Ticket



Interval:

11,473 - 11,849 GROSS

Hours

Method: Choke:

FLOWING 10/64

Oil Gravity:

Cond Gravity:

Duration of Test:

GOR:

Cond Ratio:

Pressures

Data Test Source

PΙ

FTP

FCP

SITP

SICP

3,648 PSIG

BH

CAOF

001

Data Test Source Calc

4 Point

Flow

Shut-in

1975 **MCFD**

Four-point Tests

Data Test Source **Point** Choke Rate Pressure 001 PΙ 08/64 1,132 MCFD 2,941 PSIG 001 ΡI 2 09/64 1,193 MCFD 2,415 PSIG 001 PΙ 3 10/64 1,295 MCFD 2,104 PSIG 001 Ы 11/64 1,186 MCFD 1,602 PSIG

Gas Analysis

Data Source

Gravity

Hydrogen Temp Sulfide

PRODFit Top Form Code

PRODFit Top Form Name

PRODFit Base Form Code

PRODFit Base Form Name

PI API DEG

Perforations

Data

Test Source Interval Count Type Status Ft 11473 -ΡI 11849

Top Shots/ Prod Form Method Code 402MR PERF RW

Top Form Name MORROW

Base Form Name MORROW

PRODFit PRODFit Top Form Top Form Code Name

PRODFit Base Form Code

PRODFit Base Form Name

Field Data

Test: 001 Top Pay: 11,473 FT

Data Source: PI Sub Horizon: 1

Discovery Well: N Field Code: 03080300B Curr. Operator: A

Field Name: SCANLON MORROW

Lease:

Production Tests

PT: 001

Name:

Name: Oil:

Gas:

Interval:

Data Source:

ΡI

Top Formation Name: PRODFit Top Formation

Base Formation Name:

PRODFit Base Formation

MORROW

Top Formation Code: PRODFit Top Formation 402MRRW

Code:

MORROW

Base Formation Code:

402MRRW

PRODFit Base Formation

Condensate:

Water:

Method:

FLOWING 48/64

Duration of Test: Oil Gravity:

Hours

1,275 MCFD

11,473 - 11,849 GROSS

Choke: GOR:

Cond Ratio:

Cond Gravity:

Prod Method:

PERF

Main Fluid Code:

G

Pressures

Scout Ticket



Test	Data Source	I	TP			FCP		SITP		SICP
001	PI		75 PSIC	3						
Perf	orations									
	Data					Shots/	Prod	Top Form	Top Form	
Test	Source	Interval	Count	Туре	Status	Ft	Method	Code	Name	
001	PI	11473 - 11479	4		Α		PERF	402MRRW	MORROW	
001	PI	11531 - 11535	4		Α		PERF	402MRRW	MORROW	
001	PI	11543 - 11547	4		A		PERF	402MRRW	MORROW	
001	PI	11769 - 11779	4		A		PERF	402MRRW	MORROW	
001	PI	11841 - 11849	4		A		PERF	402MRRW	MORROW	
	tments									
	ent: 001									
Interv			173 - 11,84	19						
Fluid:		400	GAL			ACID		Type:	Α	
Additi							\$			
Prop A	_					Amount:				
	Break Down Pr					I=+44-01	A in Description			
	ge Injection Rat		na-ka-			instant Shi	ıt-in Pressure:			
Stages	: ent: 001	Ren	narks:							
Ireatm		11 /	173 - 11,84	10						
Fluid:		•	173 - 11,64 00 GAL	•		ACID		Туре:	Α	
Additi		8,00	// UAL			ACID		ı ype.	A	
Prop A						Amount:				
_	Break Down Pi	ressure:								
	ge Injection Rat					Instant Shi	ıt-in Pressure:			
Stages			narks:							
Drill DST: 0 Show:		8					Data Source: Formation:	PI DELAWA	DE	
	Fit Top Form (ode:					RODFit Base Fo		KL	
	Fit Top Form N						RODFit Base Fo			
Interv	-	5336 - 569:	5				внт:	122 FAR		
Choke	е: Тор:					I	Bottom:			
DST: 0	-					I	Data Source:	PI		
Show:		S				I	Formation:	STRAWN		
PROD	Fit Top Form (Code:				F	RODFit Base Fo	rm Code:		
PROD	Fit Top Form N	Name:				F	RODFit Base Fo	rm Name:		
Interv	al:	10348 - 104	470			I	внт:	165 FAR		
Choke	e: Top:					I	Bottom:			
DST: 0	03					I	Data Source:	PI		
Show:							formation:	STRAWN		
	Fit Top Form (F	PRODFit Base Fo	rm Code:		
PROD	Fit Top Form N	Name:					PRODFit Base Fo			
Interv		10562 - 10	685				внт:	172 FAR		
	е: Тор:						Bottom:			
DST: 0							Data Source:	PI		
Show:							formation:	ATOKA		
	Fit Top Form (RODFit Base Fo			
		Vame:				F	PRODFit Base Fo	rm Name:		
	Fit Top Form N	10888 - 110					внт:	174 FAR		

Scout Ticket



Choke: Top:		Bottom:	
DST: 005		Data Source:	PI
Show:		Formation:	MORROW
PRODFit Top Form Code:		PRODFit Base Form Code:	
PRODFit Top Form Name:		PRODFit Base Form Name:	
Interval:	11305 - 11470	BHT:	175 FAR
Choke: Top:		Bottom:	
DST: 006		Data Source:	PI
Show:		Formation:	MORROW
PRODFit Top Form Code:		PRODFit Base Form Code:	
PRODFit Top Form Name:		PRODFit Base Form Name:	
Interval:	11510 - 11640	BHT:	175 FAR
Choke: Top:		Bottom:	
DST: 007		Data Source:	PI
Show:		Formation:	MORROW
PRODFit Top Form Code:		PRODFit Base Form Code:	
PRODFit Top Form Name:		PRODFit Base Form Name:	
Interval:	11736 - 11906	внт:	185 FAR
Choke: Top:		Bottom:	
DST: 008		Data Source:	PI
Show:		Formation:	DEVONIAN
PRODFit Top Form Code:		PRODFit Base Form Code:	
PRODFit Top Form Name:		PRODFit Base Form Name:	
Interval:	12750 - 12810	внт:	204 FAR
Choke: Top:		Bottom:	
Dina Dagarran			

Pipe Recovery

Test	Data Source	Recovery	1	ype	Type Desc	Rec Method
001	PI	529	FT >	M		PIPE
002	PI	190	FT S	GCM		PIPE
003	PI	470	FT N	[PIPE
004	PI	465	FT N	I		PIPE
005	PI	365	FT N	I		PIPE
006	PI	650	FT N	[PIPE
007	PI	155	FT N	[PIPE
008	PI	8,985	FT F	W		PIPE

Materials to Surface

Test	Observation	Data Source	Fluid	To Surface	Amount	
002	2	PI	GAS	25 MIN	36 MCFD	

Pressure and Time

Test	Data Source	Hydro Init	Hydro Final	Init Flow Init	Init Flow Final	Final Flow Init	Final Flow Final	Shutin Init	Shutin Final	Open Time Init	Open Time Final	Shutin Time Init	Shutin Time Final
001	PI	2465	2465			199	279	2465	1916		180	90	180
002	PI	5497	5476			86	150	1665	4157		90	90	240
003	PI	5538	5538			257	300	515	515		90	105	240
004	PI	5748	5748			262	305	393	349		60	60	120
005	PI	5954	5954			258	322	386	601		90	90	180
006	PΙ	5948	5837			286	265	530	2120		120	90	180
007	PI	6202	6182			193	193	6202	1136		180	120	240
008	PI	6129	6042			5549	5549	5549	5561	1	68	90	120

Scout Ticket



Cores

CORE ID: 001

Formation:

453DLWR DELAWARE

PRODFit Top Form:

Interval:

3224-3287

CONV

Core Type: CORE ID: 002

Formation:

453DLWR DELAWARE

PRODFit Top Form:

Interval: Core Type: 3287-3347 CONV Data Source: PI

PRODFit Base Form:

Rec: 63 FT

Show Type:

Data Source: PI

PRODFit Base Form:

Rec: 60 FT

Show Type:

Casing, Liner, Tubing

Casing	Data Source	Size	Base Depth		Cement		PRODFit Top Formation Code	PRODFit Base Formation Code	
CASING	PI	13 3/8 IN	695	FT	750	SACK			
CASING	PI	4 1/2 IN	11,924	FT	900	SACK			
CASING	PI	9 5/8 IN	3,207	FT	1,175	SACK			

Drilling JournalMud Records

Data Source	Depth	Unit	Weight	Unit
PI	11,905	FT	9,8	PPG

Formations

Form Code	Top Source	Interpreter	Form Name	Top Depth	Base Depth	Base TVD	Desc	Lithology	Age Code
453DLWR	PI		DELAWARE	3,260			LOG		453
452BSPG	PI		BONE SPRING	5,826			LOG		452
452BSPG3	PI		BONE SPRING 3 /SD/	8,788			LOG		452
451WFMP	PI		WOLFCAMP	9,190			LOG		451
404STRN	PI		STRAWN	10,410			LOG		404
403ATOK	PΙ		ATOKA	10,651			LOG		403
402MRRW	PΙ		MORROW	11,284	11,710		LOG		402
354BRNT	PI		BARNETT /SH/	12,030			LOG		354
359MSSP	PI		MISSISSIPPIAN	12,160			LOG		359
319WDFSH	PI		WOODFORD /SH/	12,630			LOG		319
319WDFSH	PI		WOODFORD /SH/	12,650			SPL		319
309DVNN	PI		DEVONIAN	12,721			LOG		309
309DVNN	PI		DEVONIAN	12,721			SPL		309

Logs

Log	Data Source	Туре	Top Depth	Base Depth	Logging Co.	ВНТ	since circ.
1	PI	NPL			153789		
2	PI	NE			153789		
3	ΡΙ	DN			153789		

Dwights Energydata Narrative

Accumulated through 1997

Data Source Dwights Number PI 300157001075

Harvey E. Yates Co., Inc. Fannie Lou Federal No. 1 Eddy County, New Mexico

- 12,345' drilling, lime & shale, visc. 38, mud wt. 9.5, water loss 7, filter cake 1/32. Bit #14 is 7 7/8" J44 in @ 11,900' made 445' in 76 hrs. Had 1/4 hr. BOP, 1/2 hr. checking Kelly, 23 1/4 hr. drilling, Running 40,000# wt., 44 RPM, 2000# pump pressure, 125 SPM. Made 140'/24 hrs.
- 10-23-75

 12,418' drilling, lime, shale & chert. Visc. 37., mud wt.
 9.4, water loss 7, filter cake 1/32. Totco @ 12,342' is 1 1/4°.

 Bit #14 is 7 7/8" J44 in @ 11,900' out @ 12,342', made
 442' in 75 1/4 hrs. Bit #15 is 7 7/8" J55 in @ 12,342'

 made 76' in 15 1/4 hrs. Had 7 3/4 hr. washing to btm. and reaming,
 15 1/4 hr. drilling. Made 76'/24 hrs. Running 40,000# wt.,
 44 PRM, 2000# pump pressure, 125 SPM.
- 10-24-75

 12,550' drilling, lime & shale, visc. 37, mud wt. 9.4, water loss
 7, filter cake 1/32. Bit #15 is 7 7/8" J55 R in @ 12,342' made
 208' in 39 hrs. 1/4 hr. BOP, 23 3/4 hr. drilling. Running 40,000#
 wt., 44 RPM, 2000# pump pressure, 125 SPM. Made 132'/24 hrs.
- 10-25-75 l2,635' drilling, lime and shale. Visc. 37, mud wt. 9.3, water loss 7, filter cake 1/32. Bit #15 is J55R in @ 12,342' made293'/62 3/4 hrs. 1/4 hr. BOP, 23 3/4 hr. drilling, 85'/24 hrs. 40,000# wt., 44 RPM, 2000pp, 125 SPM.
- 10-26-75

 12,664' drilling, lime and shale. Visc. 37, mud wt. 9.2, water loss 8, filter cake 1/32. Bit #15 is 7 7/8" J55R in @ 12,342' out @ 12,645' made 303/64 1/4 hrs., Bit #16 is 7 7/8" J55 in @ 12,645' made 19'/11 hrs. 1/4 hr. BOP, 9 1/4 hr. trip, 13 1/2 hr. drilling, 29'/24 hrs. 40,000wt, 40 RPM, 2000pp, 125 SPM.
- 10-27-75

 12,720' drilling, shale. Visc. 36, mud wt. 9, water loss 7, filter cake 1/32. Bit #16 is 7 7/8" J55 in @ 12,645' 75'/34 3/4 hrs. 1/4 hr. BCP, 23 3/4 hr. drilling 56'/24 hrs. 40,000wt, 44 RPM, 2000pp, 125 SPM.
- DST #8, 12,810' shale & dolomite. Visc. 36, mud wt. 9.1, water loss 6.5, Totco @ 12,810 is 4°. Bit #16 is 7 7/8"

 J55 in @ 12,645', out @ 12,810', 165'/41 3/4 hrs. Had 1/4 hr. BOP, 7 hr. drilling, 4 hr. circ., 4 hr. trip out, 6 1/4 hr. in w/test tool. 2 1/2 hr. DST #8 from 12,750' to 12,810'.

 Tool opened @ 4:25 a.m. with strong blow in 30 mins. No gas. 90'/24 hrs.

Harvey E. Yates Co., Inc. Fannie Lou Federal No. 1 Eddy County, New Mexico

	352
10-29-75	12,810' Circ. to set cmt. plug. 1 1/2 hr. DST #8, 8 1/2 hr. trip out to lay down tool, 1 hr. hooking up to reverse out, 4 1/2 hr. trip in hole open ended to 10,750', 9 hr. circ. & mxg. mud.
10-30-75	Plugged back to 12,280'. Visc. 36, wt. 9, water loss 6.5, 1 hr. plugging hole from 12,550' to 12,750' lst plug - 75 sx. Class H 1/4# flocele , 4/10 of 1% HR-4 2nd plug, 12,270' to 12,470' 75 sx. Class H. 8:00 a.m. 10-29-75 Completed. 12 hr. WOC & WOO. 3 hr. TIH and tag plug. @ 12,280', 8 hr. LD DP & DC's. RU to run 4 1/2" csg.
10-31-75	Plug back to 12,280'. 2 hr. LD DC's, 9 hr. run 4 1/2" csg. 3 hr. circ. 1 hr. cmtg. 9 hr. WOC. Ran 373 jts. 13.5# and 11.6# N-80 ST&C 4 1/2" csg. 11,927'. Set @ 11,924' RTM. Cmtd. W/900 sx. Class H w/5% KCL and 3/4 of 1% CFR-2. Plug down @ 10:15 p.m. 10-30-75.
11-1-75	Rig released 11:00 a.m. 10-31-75. Run temp. survey.
11-2-75 to 11-6-7	75 WO completion unit.
11-7-75 to 11-10-	75 WO completion unit.
11-11-75	RU. WO tbg. Too late to unload. A.M. Unloaded tbg. & prep to run.
11-12-75	Unloaded & tallied 381 jts. of 11,890.13' of 2 $3/8$ " OD N-80 tbg. Ran 350 jts. of tbg. in hole and SDON.
11-13-75	Finished running tbg. in hole. Tagged PBTC w/ll,889'. RU Western Co. Displaced hole w/3% KCL water. Spotted X 300 gals. acetic acid from 1158' to 11,408'. POH. Tested BOP to 2500 psig. RU Schlumberger. Ran GR-Collar log from PBTD to 9800'. Ran gauge ring, 13.5# per ft. X 4 1/2" csg. from surface to 1185'. SDON.
11-14-75	Perforated Morrow formation @ 11,473', 11,479' (4 shots) 11,531' 11,535' (4 shots), 11,543' - 11,547' (4 shots), 11,769' to 11,779' (4 shots), 11,841' to 11,849' (4 shots) Total 20 shots, Ran Baker Packer and RBP. 300 jts. tbg. SDON. A.M. Continued to run tbg. & pkr. Prep to acidize.
11-15-75	Released BP @ 11,868'. Sptd. 100 gal. acid @ 11,850', across perfs. 11,841' - 849'. Set pkr. @ 11,812' fromation broke @ 4000#. Treated 1/2 bbl./min ISDP 3600#, 5" SDP 2150#. Released pressure and pkr. PU BP and released @ 11,810'. Pumped 100 gal. acetic across perfs. 11,769' to 11,779'. Set pkr. @ 11,688'. Treated formation @ 3/10 bbls/min. @ 4100 psig. Increased rate to 1/2 bbl/min. @ 4400 psig. ISDP

3800 5" SDP 2550. Released pressure & pkr. PU RBP and released

EDDY MED WI			"NM	L5-21617
YATES, HARVEY E. CO., II 1 Fannie Lou Fer Sec 31, T-20-S, R-29-F 1980' FNL, 1980' FEL cf	deral		SERIAL 12=2	2-13 NM
6 mi N & 6 mi E/Carlsba	WELL CLASS: INT	WF	FIN WFD	Las
8-27-75 as 11-19-75 13 3/8" at 695' w/750 sx 9 5/8" at 3207' w/1175 sx	FDRMATION	DATUM	FORMATION	DATUM
4 1/2" at 11,924' w/900 sx		(I-721)	<u>11,889</u>	

IP (Morrow) Perfs 11,473-849 (ACT 1973 M TOPP), COR Dry: Grav (Gas) .600; SIMHP 3:484

		THE PERIOD BY
COR'S FLEV	3295 G	* 11,750' R.T
Moranco		

F.R. 8-11-75
(Morrow)

9-2-75
Drlg 2545' lm

9-8-75
Drlg 3715'
Cored (Delaware) 3224-87'; rec 63'; no descr
Cored (Delaware) 3287-3347'; rec 60'; no descr

9-16-75
Drlg 7095' lm & sh
DST (Delaware) 5336-5695'; open 3 hrs, rec 529'
Sli salty DF, 1 hr 30 min ISIP 2465#, FP 199-279#,
3 hr FSIP 1916#, HP 2465-2465#, BHT 122 deg

9-22-75
Drlg 9070'
9-29-75
TD 10,470'; On DST

12-2-13 MM

10-6-75 Drlg 11,174 1m, sh & cht DST (Strawn) 10,348-470', open 1 hr 30 mins, GTS in 25 mins @ 36 MCFGPD, rec 190' sli GCM, 1 hr 30 min ISIP 1665#, FP 86-150#, 4 hr FSIP 4157#, HP 5497-5476#, BHT 165 deg DST (Strawn) 10,562-685', open 1 hr 30 mins, rec 470' DM, 1 hr 45 min ISIP 515#, FP 257~ 300#, 4 hr FSIP 515#, HP 5538-5538#, BHT 172 deg DST (Atoka) 10,888-11,015; open I hr, rac 465' DM, I by ISIP 393#, PP 262-305#, 2 br FSTP 349#, HP 5748-5748#, Bury 174 deg 10-13-75 TD 11,640'; On DST 11,510-640' DST (Morrow) 11,305-470', open 1 hr 30 mins,

to the section between

10-13-75

Continued

12-2-13 NM

rec 365' PF, 1 hr 30 min TSIP 386#, FP 258-322#, 3 hr FSTP 601#, HP 5954~5954#, BHT 175 deg 10-20-75 Dr 1g 12,038' DST (Morrow) 11,510-640', open 2 hrs, rec 650' M, NS, 1 hr 30 min ISIP 530#, FP 286-265#, 3 he FSIP 2120#, HF 5948-5837#, BHT 175 deg DST (Morrow) 11,736-906', open 3 hrs, rec 155' DM, 2 hr ISLF 665#, FF 193-193#, 4 hr FSIP 1136#, HP 6202-6182#, BHT 185 dag Drlg 12,746' dolo 10-27-75 11-3-75 TD 12,810'; PBD 11,924'; WOCU DST (Devonian) 12,750-810', open 1 hr 8 mins, rec 1500' WB + 564' DM / 1316' muddy wtr + 8985 FW, I hr 30 min ISIP 5549#, EP 5549~ 5549#, 2 hr FSIP 5561#, HP 6129-6042#, FHT 204 deg 12-2-13 NM

8					3 5 5		(open le	·21-
Form 9-330 (Rev. 5-68)		NI .D.S	TATES	SUBMIT	D DUPLICA	1	Form approved. Budget Bureau No. 42	
w /	DEPARTM			ERIOR	(See otu struction	ns on S TEARE DE	SIGNATION AND SE	
8/		LOGICAL		- Fall Prints (1994) 24	reverse	NM-19		The second second
WELL COL	MPLETION OF	PECOME	I FTION R	FPORT.	10 LOG	# . 6. IF INDIAN	, ALLOTTEE OR TRIE	BE NAME
18. TYPE OF WELL	VIPLETION OIL WELL	GAS WELL (X)		When &	-1 ^C > -4		EEMINT NAME	
b. TYPE OF COM	PLETION:	MELL OZI	- DAT - S	4	S. S. SIENE	3		
MEN XX	WORK DEEP-	PLOG DACK	DIFF. CESVR.	ther	CHI STATO	S. FARM OB	LEASE NAME	a 1
2. NAME OF OPERAT	on Vatos Co. In	C \	2	14.0	OCITEM III	9. WELL NO.	e Lou Feder	<u> </u>
3. ADDRESS OF OPER	ATOR			- 1 5 465	No.		11	
Suite 1000	, Security Na	tional Ba	nk Bldg.,	Roswe	NCW.E 1 /	LE D FIELD AL	no Poot, or WILDCA	T
4. LOCATION OF WEL	L (Report location cle	980' FEL	raance win any	Diate requirem	cm)	11. SEC., T.,	R., M., OR BLOCK AND	SURVEY
At ton prod. Into	PLETION: WELL PLETION: WORK DEEP- ON Yates Co., In ATOB , Security Na L (Report location cle 1980' FNL & 1 Perval reported below			D	EC . 1 1	975		
At total depth					_ ~ ~	Sec. 3	11, T-20-S,	K-29-E
Mt total nehtu		Ĭ	14. PERMIT NO.	API DAT	RTESIA, DF	FICE 12. COUNTY		
			30-015-21	1617 1	X_/_/\	BEB, RT, GR, ETC.)*	1 19. ELEV. CABING	Mexico
8-27-75	16. DATE T.D. REACH		-19-75) 18. E	3235	GL	3237'	
20. TOTAL DEPTH, MD	A TVD 21. PLUG, BAC	K T.D., MD & TVD		IPLE COMPL.,	23. INTERV			one
12,810'		1,889'				0-12,81	25. WAS DIREC	TIONAL
	VAL(8), OF THIS COMI 0 11,849' - MC		PITOM, MAME (M	U AND 110)			NO NO	
11,475 00	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,						27. WAS WELL CO	
26. TIPE ELECTRIC	ger Comp. Neut	tuan Farm	Donsity:	SDLL w/R:	xo: GR- C	ollar	Delaware 3	224'-3347'
Schlumberg	ger comp. Neu	CASING	RECORD (Repo	ort all strings se	t in well)			
CASING SIZE	WEIGHT, LB./FT.	DEPTH SET	MD) HOL	Z SIZE		Class C - 2%	AMOUNT P	None
13_3/8"	48	695 3207		17 12 1/4	975 sx.	HLW & 200 s	cs "¢" 2% Ca	
9 5/8" 4 1/2"	36 13.5-11.6-1			12 17	900 sx.	Class "H"		None
		272077			1 30.	TUBING REC	ORD	
29. BIZE		TOM (MD) 8	CKB CEMENT	BCREEN (MD)	SIZE	DEPTH BET (1		r (MD)
NON					2 3/8"	11,370	0' 11,37	0'
	CORD (Interval, size an	d number)		1 82.	ACID, SHOT, F	RACTURE, CEMEN	T SQUEEZE, ETC.	
11473' to 114	79' - 0.43" d	ia 4 h	oles	DEPTH INTER			ND OF MATERIAL US	ED
	35' - 0.43" d 47' - 0.43" d	ia 4 ho ia - 4 ho	oles oles	114731	to 11849'	400 gal	s 10% aceti s. 7 1/2% MS	c &
11769' to 117	79' - 0.43" d	ia. – 4 h	oles			8000 ga 1	5. / I/L# TIE	7 0010
11841' to 118	49' - 0.43" d	ia 4 h	oles=20 ho					
Multipoi	nt & one poin	t back pr	essure PROD wing, gas lift, pu	mping—size an	st attach) WELL	STATUS (Producing	or or
11-21-75		Flowing					"Shut in	110
DATE OF TEST	HOURS TESTED	CHOKE BIZE	PROD'N. FOR TEST PERIOD	OIL—BBL.	GAB-MCF	, WATER—BB	L. GAS-OIL RAT	10
11-25-75 FLOW, TUBING PRESS.	CASING PRESSURE	CALCULATED	OIL-BBL.	GASMC	25.55	ATER-BBL.	OIL GRAVITY-API (CORR.)
		24-HOUR RATE	0	1975	.82 (AdF)	O TEST WITH	SRED BY	1
34. DISPOSITION OF	Vented							P12
35. LIST OF ATTACE		nt & one	point back	pressure	test at	tached. Not	e: Schlumb	erger
Comp. Neutr	on Formation	Danastu	O Dual lat	A DOLONG	Monnston	1331 MO. O III	allea to jo	u 110
36. I hereby certify	1) 01/	. 0	rmation is comp	Consulta			E _11-26-75	11-26-75
SIGNED	Jak / Jan	APP VA		LODSULTA	1/11	70 4 77	D 11-/D-/D	
			Spaces for A				B	

INSTRUCTIONS

General: This form is designed for submitting a complete and correct well completion report and log on all types of lands and leases to either a Federal agency or a State agency. or both, pursuant to applicable Federal and/or State laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from the local Federal and/or State office. See instructions on items 22 and 24, and 33, below regarding separate reports for separate completions.

If not filed prior to the time this summary record is submitted, copies of all currently available logs (drillers, geologists, sample and core analysis, all types electric, etc.), formation and pressure tests, and directional surveys, should be attached hereto, to the extent required by applicable Federal and/or State laws and regulations. All attachments

should be listed on this form, see item 35.

Item 4: If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State

or Federal office for specific instructions.

Item 18: Indicate which elevation is used as reference (where not otherwise shown) for depth measurements given in other spaces on this form and in any attachments. Items 22 and 24: If this well is completed for separate production from more than one interval zone (multiple completion), so state in item 22, and in item 24 show the producing interval, or intervals, top(s), bottom(s) and name(s) (if any) for only the interval reported in item 33. Submit a separate report (page) on this form, adequately identified, for each additional interval to be separately produced, showing the additional data pertinent to such interval.

Item 29: "Sacks Cement": Attached supplemental records for this well should show the details of any multiple stage cementing and the location of the cementing tool.

Item 33: Submit a separate completion report on this form for each interval to be separately produced. (See instruction for items 22 and 24 above.)

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.	NAME	T	0P
		-		NASIA.	MEAS. DEPTH	TRUE VEST. DEPTE
Delaware Sand	3224	3347	Hard dense, white to gray fine crystaline dolomite w/shale partings. No shows.	Delaware Sd.	3260	
Strawn	10410	10470	DST's No. 1 thru 7 filed 11/24/75 w/ Form 9-331	Bone Spr. 3rd Sand	5826 8788	
Morrow Devonian	11284 12721	11710 12810		Wolfcamp Strawn Atoka Top Morrow Base Morrow Top Barnett Mississippian Woodford Devonian	9190 10410 10651 11284 11710 12030 12160 12630 12721	

UNITED STATES

NM OIL	CONS COMMISSION
	DD a. NM 88210 a. FORM APPROVED
Artes	Budget Bureau No. 1004-0135

Form 3160-5 (June 1990)	DEPARTMEN BUREAU OF I	ED STATES T OF THE INTERIOR AND MANAGEMENT	3+5 A 3	NM 88210 TeBia: FORM APPROVED Budget Bureau No. 1004-0135 Expires: March 31, 1993 5. Lease Designation and Serial No. NM-19672
Do not use thi	s form for proposals to dri	AND REPORTS ON WELL II or to deepen or reentry to R PERMIT—" for such propo	a different reservoir	6. If Indian, Allottee or Tribe Name
	SUBMIT	IN TRIPLICATE	3	7. If Unit or CA, Agreement Designation
1. Type of Well Oil Well	ous Vell Other		DEC 27:94	8. Well Name and No.
	Yates Company	· V	e C D.	Fannie Iou Federal #1
P.O. Box	one No. 1933, Roswell, N.M. Footage, Sec., T., R., M., or Survey Do	88202 505/623-6601		30-015-21617 10. Field and Pool, or Exploratory Area Scanlon Bone Spring
Unit G.	1980' FNL & 1980' F			11. County or Parish, State
	T20S, R29E	s) TO INDICATE NATURE	OF NOTICE, REPO	Eddy Co., NM RT, OR OTHER DATA
	OF SUBMISSION	3) 10 110101121111011	TYPE OF ACTION	
	tice of Intent	Abandonment		Change of Plans New Construction
X su	bsequent Report	Recompletion Plugging Back Casing Repair		Non-Routine Fracturing Water Shut-Off
∍ ☐ Fir	nal Abandonment Notice	Altering Casing Other		Conversion to Injection Dispose Water (Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)
13. Describe Proposed give subsurfac	or Completed Operations (Clearly state a e locations and measured and true verti	pertinent details, and give pertinent dates, all depths for all markers and zones pertin	, including estimated date of startin nent to this work.)*	g any proposed work. If well is directionally drilled,
1/5/94	RU Completion Unit Strap out of hole			
1/6/94	possible hole @ b.			
1/7/94		to 11,290' to 7000#		
1/8/94	RTH w/tbt, ND BOP	; Set CIBP @ 11,284 , NU WH; RD Comp Uni	' w/50 sks cmt; I t	New PBTD (d 11,234';
	SI well for evalu	ation	A STATE OF THE STA	CEPTED FOR RECERD Fig. 2 1994
100	nat the foregoing is true and correct	Teel Production		12/6/94
	Vickie	Title Floduction		Onte
	ederal or State office use)	Title		Date
Approved by Conditions of app	proval, if any:			

Form 3160-5 (June 1990)

1. Type of Well

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

SUNDRY NOTICES AND REPORTS ON WELLS Do not use this form for proposals to drill or to despen or reentry to a different res Use "APPLICATION FOR PERMIT -- " for such proposals SUBMIT IN TRIPLICATE

, oil	cons commission 015
Drawer	
	Expires: March 31, 1993
	5. Lease Designation and Social No. NM-19672
ervolr	6. If Indian, Alistic or Tribe Name
	7. If Unit or CA, Agreement Designation
	8. Well Name and No. FANNIE LOU FEDERAL #1
1000	9. API Well No. 30-015-21617
* 119	10. Field and Pool, or Exploratory Area SCANLON MORROW
# 11 5 - :14 7	11. County or Perish, State EDDY CO., NM
	R OTHER DATA
CTION	
Change in Pia	

Oll Well X Gas Well Other	S. Well Name and No.
Harvey E. Yates Company	FANNIE LOU FEDERAL (9. API Well No. 30-015-21617
P.O. Box 1993 , Roswell, NM 88202 1-505-623-6601	10. Field and Pool, or Exploratory Area SCANLON MORROW
Location of Well (Footage, Sec., T., R., M. or Survey Description) G. 1980' FN & EL	11. County or Perish, State EDDY CO., NM
SW/NE SEC. 31, T-20S, R-29E	
TYPE OF SUBMISSION	Change in Pietre

give substitute locations and measured and true vertical depths for all markers and raises petitizent to this work.)

- 1. 5-25-95 SET PKR @ 6230'. TEST CASING BELOW PKR TO 1000# FOR 15 MIN. HELD OK. PULL PKR TO 6170' & SET. TEST CASING ABOVE PKR TO 500# FOR 15 MIN. HELD OK. PUMP DOWN TBG AND BROKE CIRC BETWEEN 4 1/2" AND 9 5/8" CASING. PULL OUT OF HOLE. PERF 4 SQZ HOLES @ 6250' (HOLE @ 6201'). SET HOWCO RETAINER @ 6100'.
- 2. 5-26-95 CMT 4 1/2" ANNULUS w/ 300 SKS HOWCO LITE & 650 SKS CL "H" w/ .5% HALAD 9 AND 2.5#/GAL SALT.
- 3. 5-31 & 6-1-95 DRILL OUT CMT RETAINER AND CEMENT. TEST CASING TO 500# FOR 15 MIN. HELD OK.
- 4. 6-2-95 RAN CBL. TOC @ 3350'. 6-3-95 PERF STRAWN 10410-10453 (OA). 6-6-95 ACIDIZE w/ 3000 GALS 15% SRA. SWAB TO TEST.
- 5. 6-8-95 SET CIBP @ 10375' + 50' CMT. ALSO SET CIBP @ 9194' (TOP OF WOLFCAMP) PLUS 50' CEMENT.
- 6. 6-9-95 PERF DELAWARE 5671-5690.5' (OA). ACIDIZE w/ 2000 GALS 15% SRA. SWAB TO TEST.
- 7. WELL SWABBED. CUTTING SLIGHT SHOW OF OIL. SI PENDING EVALUATION.
- 8. 6-15-95 HOLE CIRC. w/ OXYGEN SCAVENGER & CORROSION INHIBITOR TO PROTECT CASING & TBG. REQUEST APPROVAL FOR FENCED PIT ON LOCATION NORTH OF WELL HEAD TO BE USED FOR ADDITIONAL OPERATION OR PLUGGING.

Signed RAY F. NOKES	7'IIIe	PROD. MGR./ ENG.	Date	6/26/95
(This space for Federal or State office use)			×	
Approved by	Title		Dale	y Lara
Conditions of approval, if may:		36		1100

This 18 U.S.C. Section 1981, makes it a crises for any person knowingly and willfully to make to any department or agency of the United States any false, firtitions or framible

L CONSERVATION DIV 811 S. 181 ST. ARTESIA, NM 88210-2834

Form 3160-5 (June 1990)

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

FORM APPROVED

5. Lease Designation and Serial No.

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

SUNDRY NOTICES AND REPORTS ON WELLS	NM-19672
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	6. If Indian, Aliotle or Tribe Name
	7. If Unit or CA, Agreement Design

SUBMIT IN TRIPLICATE	7, If Unit or CA, Agreement Designation
1. Type of Well Oil Well X Gas Well Other	a d)
2. Name of Operator Harvey E. Yates Company	8. Well Name and No. FANNIE LOU FEDERAL #1
	9. API Well No. 30-015-21617
3. Address and Telephone No. P.O. Box 1993, Roswell, NM 88202 1-505-623-6601	10. Field and Pool, or Exploratory Area SCANLON MORROW
4. Location of Well (Footage, Sec., T., R., M, or Survey Description) G, 1980' FN & EL SW/NE SEC. 31, T-20S, R-29E	11. County or Parish, State EDDY CO., NM

TYPE OF SUBMISSION		F NOTICE, REPORT, OR OTHER DATA TYPE OF ACTION		
X Notice of Intent	Abandonment Recompletion	Change in Plans New Construction		
Subsequent Report	Plugging Beck Casing Repair	Non-Routina Fracturing Water Shut-Off		
Final Abandoment	Altering Caring X Other P&A	Conversion to Injection Dispose Water		
E .		(Yete: Report results of multiple completion on Well Completion or Recompletion Report and Log Ferm.)		

13. Describe Proposed of Completed Operations (Clearly state all particent details, and give parti

give rehearface incutions and measured and true vartical depths for all markets and must partiasen to this work.)

SURFACE PIPE @ 695'

INTERMEDIATE CASING @ 3207'

CURRENT PERFS 5671-90. 5' DELAWARE.

- 1. SET CIBP @ 5650' PLUS 50' CMT
- 2. ATTEMPT CUTOFF @ 3200'. IF SUCCESSFUL THEN PULL 4 1/2" CSG. SPOT CMT PLUG 50' IN AND 50' OUT ACROSS STUB. TAG!!!!! IF NOT SUCCESSFUL MAKE HIGHER CUT TAG PLUG. AND PULL CSG. SPOTTING CMT PLUG ACROSS BOTH CUTS. (NOTE: MAKE SURE CMT PLUG IS IN PLACE ACROSS 3207' INTERVAL.
- 3. AFTER PULLING CASING. PUMP 100' CMT PLUG FROM 750 TO 650' (ACROSS SURFACE SHOE.
- 4. PUMP 50' SURFACE PLUG. CUT OFF WH AND INSTALL DRY HOLE MARKER. TAG PLUG).
- 5. BACKFILL PITS AND CLEAN LOCATION.

ABOVE APPROVED BY JOE LARA (BLM-CARLSBAD) 7-1-96.

CALL BLM CARLSBAD 24 HOURS PRIOR TO COMMENCEMENT @ 1-505-887-6544

Signed and		ect	Title	PROD. MGR./ ENG.	Dute_	7/1/96
(This space for Federal or	r State office use)					-1 104
Approved by	100	¥.	Title	Service	Duke	811/96

Form 3160-5 (June 1990)

1. Type of Well

2. Name of Operator

3. Address and Telephone No.

G. 1980' FN & EL

Oil Well X Gas Well

Harvey E. Yates Company

SW/NE SEC. 31, T-20S, R-29E

4 Location of Well (Footage, Sec., T., R., M, or Survey Description)

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

Do not use this form for proposals to drill or to deepen or reentry to

P.O. Box 1993 , Roswell, NM 88202 1-505-623-6601

N.M. Oil Cons. Divi

015F FORM APPROVED

	Budget	Burenu	No.	1004-013
012	F. Fani	res: Mai	rch 3	1. 1993

EDDY CO., NM

SUNDRY NOTICES AND REPORTS ON WELLs s form for proposals to drill or to deepen or reentry to a Use "APPLICATION FOR PERMIT" for such prop	S Artesia, NM 38210. different reservoir	5. Lease Designation and Serial No. NM-19672 6. Il Indian, Allotte or Tribe Name
SUBMIT IN TRIPLICATE		7. If Unit or CA, Agreement Designation
(Gas Well Other	* * * * * * * * * * * * * * * * * * *	
ates Company	3 N FE	8. Well Name and No. FANNIE LOU FEDERAL # 1
		9. API Well No. 30-015-21617
o. 3 , Roswell, NM 88202 1-505-623-6601	is 98	10. Field and Pool, or Exploratory Area SCANLON MORROW
		11 County or Parish State

CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA TYPE OF ACTION TYPE OF SUBMISSION Change in Plans Abantingment Notice of Intent New Construction Recompletion Non-Routine Fructuring Plugging Back X Subsequent Report Water Shut-Off Casing Repair Conversion to Injection Altering Casing Final Abandoment Dispose Water Other (Note: Report results of multiple completion on Well Completion or Recompletion Report and Log Form.)

13. Describe Proposed of Completed Operations (Cirarty 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.)

SURFACE PIPE @ 695'

INTERMEDIATE CASING @ 3207'

CURRENT PERFS 5671-90. 5' DELAWARE.

- 1. 12-10-96 SET CIBP @ 5650' PLUS 25 SXS CMT ON TOP.
- 2. 12-11-96 CUTOFF 4 1/2" CSG @ 3200'. SPOT 45 SXS PLUG @ 3250'.
- 3. 12-12-96 TAG PLUG @ 3110'. PUMP 45 SXS CMT @ 750', TAG @ 638'.

PUMP 20 SXS SURFACE PLUG @ 60'. CUT OFF WH AND INSTALL DRY HOLE MARKER. BACKFILL PITS AND CLEAN LOCATION.

SURFACE EQUIPMENT TO BE LEFT ON LOCATION UNTIL PARTNER APPROVAL FOR CREDIT.

Title

P&A COMPLETE: 12-12-96 14. I hereby certify that the 1/8/97 PROD. MGR./ ENG. RAY F. NOKES

(This space for Federal or State office use)

(ORIG. SGD.) DAVID R. GLASS

DETINOLEUM ENGINEER

JAN 13 1997 Date

Approved by Conditions of approval, if any:

> Approved as to played up of the well book. Liables early band is retained until surface restoration is completed.

MEWBOURNE OIL COMPANY

FREEDOM 36 STATE SWD #1 - PERMIT APPLICATION FRESH WATER WELL TABULATION

11/4/2019

POD Number	POD Subbasin	County	Source	q64	q16	q4	Sec	Tws	Rng	Х	Y	Start Date	Finish Date	Log File Date	Depth Well	Depth Water
CP 01589 POD1	СР	ED	Shallow	NW	NE	NW	35	208	28E	579674	3600121	03/15/2016	03/16/2016	04/05/2016	109	70
C 03269 POD1	CUB	ED		SW	SE	NW	36	208	28E	581268	3599609					
CP 00924 POD1	СР	LE	Shallow	SW	SW	NE	30	20S	29E	583259	3601235					
CP 00936 POD1	CP	ED		SW	SE	NE	30	208	29E	583661	3601238					
0.00000		ED.	Obelless	0)14	0144	NE	04	040	075	500504	0507044	00/04/0000	44/44/0000	44/47/0000	250	400
C 02992	С	ED	Shallow		SW		01	21S		580594	3597311	09/01/2003	11/11/2003	11/17/2003	250	186
C 03350	C	ED	Shallow	NW	SE	NE	01	218		580896	3597476	11/01/2007	11/08/2007	02/17/2009	76	8
C 03525 POD1	CUB	ED	Shallow			NW	01	21S		579702	3598362	11/30/2011	11/30/2011	12/12/2011	31	20
C 03525 POD3	CUB	ED	Shallow	NW	NW	NW	01	218	27E	579728	3598332	12/01/2011	12/01/2011	12/12/2011	30	
C 03525 POD4	CUB	ED	Shallow	NW	NW	NW	01	215	27E	579728	3598362	12/02/2011	12/02/2011	12/12/2011	29	
C 03689 POD1	С	ED	Shallow	NW	NW	NE	01	21\$	27E	580490	3598014	10/31/2013	11/01/2013	11/08/2013	95	10
C 03268 POD1	CUB	ED		SE	NE	SE	01	21\$	27E	581201	3596915					
C 03660 POD1	С	ED		SE	SW	NE	01	218	27E	580850	3597291					
C 03704 POD1	С	ED		SW	SE	NW	01	218	27E	580147	3597242					
C 00469	CUB	ED			NW	SE	02	218	27E	579078	3596994	08/06/1953	09/07/1953	08/11/1958	767	
C 03525 POD2	CUB	ED	Shallow	NE	NE	NE	02	218	27E	579676	3598362	11/30/2011	11/30/2011	12/12/2011	29	20
CP 00633	CP	ED		SE	NW	NE	26	215	28E	588908	3591350					
																n
														AVG		52

NOTE: source New Mexico Office of the State Engineer

water analysis attached

Imperative Water Analysis Report

SYSTEM IDENTIFICATION

Company: Mewbourne Oil NM Location: Freedom 36 SWD 1 Sample Source: Wellhead Account Rep: Danny Gonzales

Sample ID#:

W-16546

Sample Date:

11-07-2019

Report Date:

11-13-2019

WATER CHEMISTRY

CATIONS		ANIONS
Calcium(as Ca)	592.40	Chloride(as Cl)
Magnesium(as Mg)	155.10	Sulfate(as SO ₄)
Barium(as Ba)	0.00	Dissolved CO ₂ (as CO ₂)
Strontium(as Sr)	4.85	Bicarbonate(as HCO ₃)
Sodium(as Na)	226.42	H ₂ S (as H ₂ S)
Potassium(as K)	66.98	Boron(as B)
Lithium(as Li)	0.915	
Iron(as Fe)	0.00	
Manganese(as Mn)	0.00	

MANITIE			
Temperature(OF)	77.00	Sample pH	8.21
Conductivity	3458	Sp.Gr.(g/mL)	1.00
Resistivity	289 16	T.D.S.	3390

900.00

1293

10.00

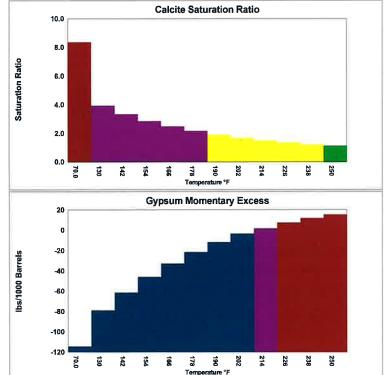
85.54 12.00 9.82

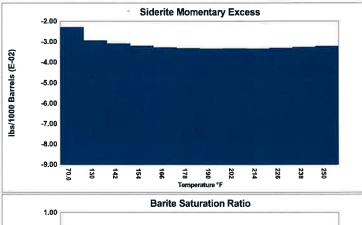
SCALE AND CORROSION POTENTIAL

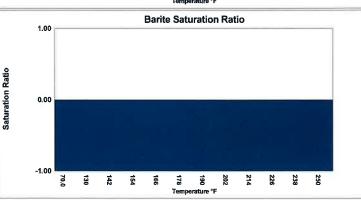
IMDESALINE

Temp.	Press.	С	alcite	Anl	hydrite	Gy	psum	В	arite	Ce	lestite	Sid	derite	Mack	awenite	CO ₂	pCO ₂
(OF)	(atm)	C	aCO ₃	С	aSO ₄	CaSO	4*2H ₂ O	В	SO ₄	S	rSO ₄	Fe	CO3		FeS	(mpy)	(atm)
70.00	1.000	8.35	0.556	0.394	-274.92	0.673	-114.64	0.00	-0.00488	0.363	-6.11	0.00	-0.0229	0.00	>-0.001	0.00371	< 0.001
130.00	10.000	3.92	0.141	0.560	-142.60	0.737	-78.99	0.00	-0.0156	0.395	-5.34	0.00	-0.0294	0.00	-0.00206	0.0171	0.00468
142.00	19.000	3.32	0.105	0.635	-105.87	0.782	-61.38	0.00	-0.0193	0.396	-5.30	0.00	-0.0309	0.00	-0.00287	0.0173	0.00888
154.00	28.000	2.85	0.0794	0.735	-67.84	0.826	-46.07	0.00	-0.0237	0.397	-5.29	0.00	-0.0320	0.00	-0.00391	0.0193	0.0131
166.00	37.000	2.47	0.0599	0.865	-29.91	0.869	-32.85	0.00	-0.0289	0.396	-5.30	0.00	-0.0327	0.00	-0.00523	0.00416	0.0173
178.00	46.000	2.16	0.0453	1.04	6.88	0.910	-21.44	0.00	-0.0351	0.394	-5.34	0.00	-0.0332	0.00	-0.00687	0.0102	0.0215
190.00	55.000	1.91	0.0340	1.26	41.65	0.949	-11.69	0.00	-0.0424	0.391	-5.40	0.00	-0.0334	0.00	-0.00886	0.00817	0.0257
202.00	64.000	1.70	0.0254	1.55	73.77	0.984	-3.45	0.00	-0.0511	0.387	-5.48	0.00	-0.0333	0.00	-0.0112	0.00918	0.0299
214.00	73.000	1.52	0.0183	1.92	102.44	1.01	1.86	0.00	-0.0620	0.378	-5.69	0.00	-0.0334	0.00	-0.0142	0.0134	0.0341
226.00	82.000	1.37	0.0129	2.42	128.56	1.04	7.48	0.00	-0.0743	0.372	-5.84	0.00	-0.0331	0.00	-0.0174	0.0182	0.0383
238.00	91.000	1.25	0.00834	3.07	151.26	1.06	11.89	0.00	-0.0888	0.364	-6.03	0.00	-0.0326	0.00	-0.0211	0.0239	0.0426
250.00	100.000	1.14	0.00465	3.93	170.66	1.08	15.27	0.00	-0.106	0.356	-6.24	0.00	-0.0321	0.00	-0.0253	0.0294	0.0468
			Lbs per		Lbs per		Lbs per		Lbs per		Lbs per		Lbs per		Lbs per		
		xSAT	1000	xSAT	1000	xSAT	1000	xSAT	1000	xSAT	1000	xSAT	1000	xSAT	1000		
			Barrels		Barrels		Barrels		Barrels		Barrels		Barrels		Barrels		

Saturation Ratios (xSAT) are the ratio of ion activity to solubility, e.g. {Ca}{Co₃}/K_{sp}. pCO₂ (atm) is the partial pressure of CO₂ in the gas phase. Lbs/1000 Barrels scale is the quantity of precipitation (or dissolution) required to instantaneously bring the water to equilibrium.







MEWBOURNE OIL COMPANY

FREEDOM 36 STATE SWD #1 PERMIT APPLICATION

TABULATION OF PRODUCED WATER ANALYSIS

3rd Bone Spring Formation

	Roscoe 6 B3AD Fed Com #1H
Formation:	Bone Spring
Section	6
Township	215
Range	27E
Sample #	W-6358
Date Caught	3/14/2019
Process Date	3/15/2019
<u>Analysis</u>	
pН	5.8
Temp	118.1
Specific Gravity	1.1
CO2	700.0
Calcium	4,909.0
Magnesium	799.1
Sodium	47,178.0
Barium	1.69
Manganese	0.78
Strontium	536.6
Potassium	1,401
Bicarbonate	61
Sulfate	259
Chlorides	86,000
Iron	22.6
TDS	138,049

Derringer 18 B3DA Fed #2H – 18, 20S, 29E

4/18/2016:

Water analysis: SG @ 1.152, Temp 60°F, pH 5.44, Na 56,741, Ca 11,070, Mg 8,848,

Fe 41, CL 133,150, SO₄ 325, HCO₃ 122 (all in Mg/L).

2nd Bone Spring Formation

Derringer 18 Fed Com #2H – 18, 20S, 29E

4/10/2013:

Water analysis: Water analysis from 04/10/13: SG @ 1.170, Temp 70°,

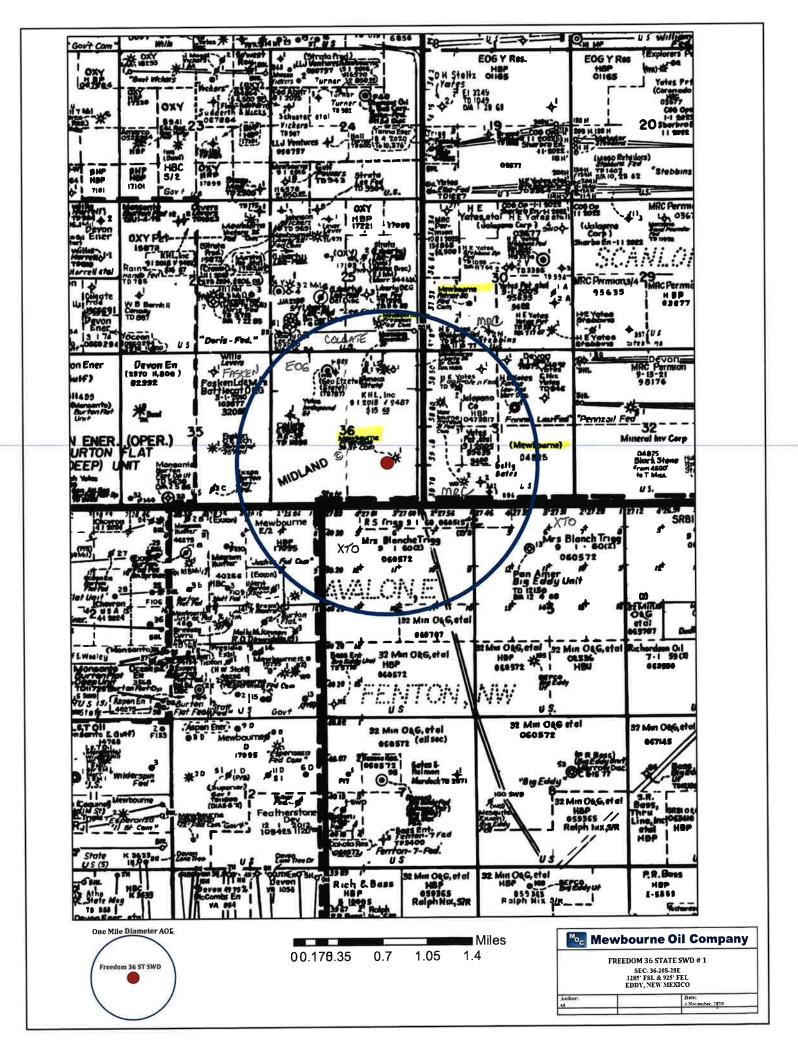
pH 6.79, Na 67,801, Ca 8,000, Mg 4,800, Fe 0.3, CL 132,000, SO₄ 350, HCO₃ 73

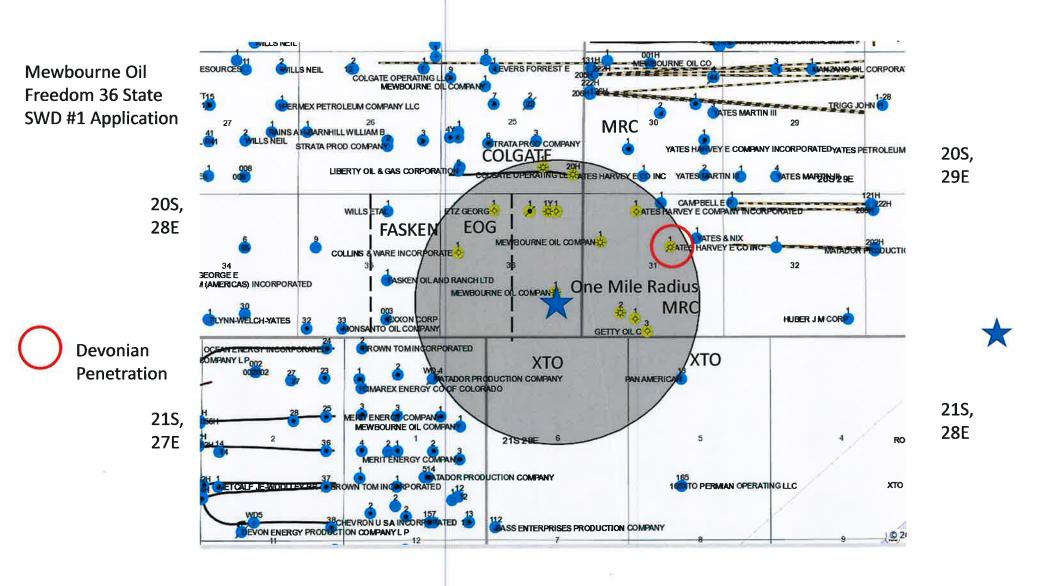
(all in Mg/L)

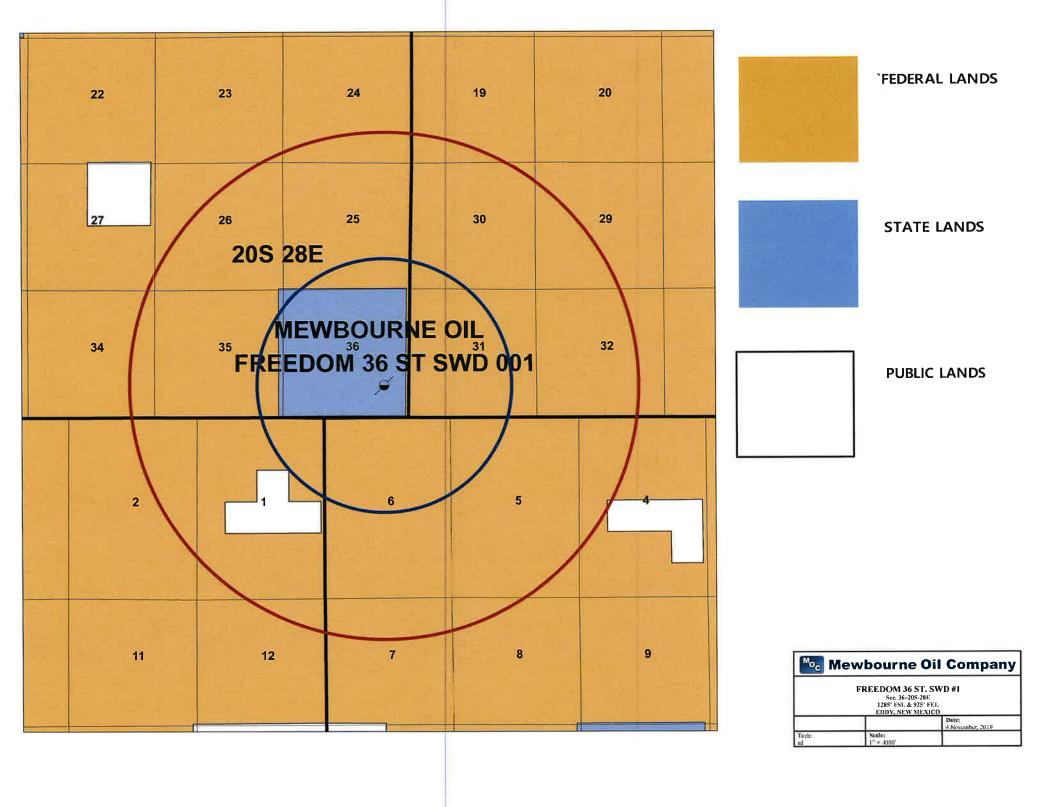
Wolfcamp Formation

Dala 🗟	Compeny	Lease	M Well# ■	Frac Date -	Sample Date •	Days Since Frac	pH •	H25 -	Lab Chloride •	Lab Total Iron •	Lab TOS 💌	Lab pH	uab Specific Gravity 60F
-		Styx 17 W2PA Fee Com	1H	3/31/2017	4/11/2018	376	6.01	8	62,669	25.29	104,530	6.01	1.073
W-3755	Mewbourne Oil NM	Styx 17 W2PA Fee Com	1H	3/31/2017	9/7/2018	525	5.16	17.1	61,267	247.46	101,474	5.16	1.071
		Loving Townsite 21 WOPA Fee	2H	5/15/2017	9/7/2018	480	7.16	17.1	68,675	11.22	112,445	7.16	1.078
		Slider 18 WODM Fed Com	14	7/6/2017	9/7/2018	428	6.59	8.55	67,574	2.71	110.832	6.59	1.077
		Viper 29 32 W0LM Fed Com	1H	2/20/2016	11/9/2018	993	6.58	0.34	80,000	25.61	128,781	6.58	1.09
		White Snake 20/21 WOBC Fee	2H	6/13/2018	11/9/2018	149	6.59	0.34	81,000	12.25	130,470	6.59	1.09
		White Snake 20/21 W28C Fee	18	6/13/2018	11/9/2018	149	6.34	0.34	69,000	57.84	111,964	6.34	1.08
		Speedwagon 27 W2DM	114	3/11/2016	11/12/2018	976	6.13	1.71	70,000	13.94	113.697	6.13	1.08
		Loving Townsite 21 W2PA Fee	114	5/15/2017	11/12/2018	546	6.69	3.42	69,000	72.99	111,798	6.69	1.08
		Speedwagon 27 W2PA	1h		11/12/2018		6.45	1.71	71,000	101.5	115,051	6.13	1.08
		Speedwagon 27 WOPA	2H		11/12/2018		6.78	1.71	77,000	39.9	124,062	5.57	1.09

ALL SAMPLES FROM MEWBOURNE OPERATED WELLS IN TOWNSHIP 23S, RANGE 27E & 23S, RANGE 28E







Listing of Notified Persons

Freedom 36 State SWD #1 Application 1285' FSL &' 925' FEL, Unit P Section 36, T20S, R28E, Eddy County, NM

Surface Owner

New Mexico State Land Office 310 Old Santa Fe Trail Santa Fe, NM 87501

Federal or New Mexico State Minerals Within 1 Mile

Bureau of Land Management 620 E. Greene St. Carlsbad, NM 88220

New Mexico State Land Office 310 Old Santa Fe Trail Santa Fe, NM 87501

Offsetting Operators Or Leasehold Owners Within 1 Mile

Section 25, 205, 28E

Colgate Operating, LLC 306 West Wall, Suite 500 Midland, TX 79701

Mewbourne Oil Company

E/2, Section 35, 20S, 28E

Fasken Oil & Ranch LTD 6101 Holiday Hill Road Midland, TX 79707

E/2, Section 36, 20S, 28E

Mewbourne Oil Company

W/2, Section 36, 20S, 28E

EOG Resources 5509 Champions Dr. Midland, TX 79706

Section 30, 20S, 29E

MRC Permian Company 5400 LBJ Freeway, Suite 1500 Dallas, TX 75240

Mewbourne Oil Company

Section 31, 20S, 29E

MRC Permian Company 5400 LBJ Freeway, Suite 1500 Dallas, TX 75240

Mewbourne Oil Company

Section 1, 21S, 27E

Mewbourne Oil Company

Sections 5&6, 21S, 28E

XTO Permian Operating LLC. 6401 Holiday Hill Road, Building 5 Midland, TX 79707

Carlsbad Current Argus.

Affidavit of Publication

Ad No. 0003874407

MEWBOURNE OIL COMPAN Y 3901 S BROADWAY AVE

TYLER, TX 75701

I, legal clerk - ELP-CA Current-Argus, a newspaper published weekly in the county of Luna, state of New Mexico and of general paid circulation in said county; that the same is a duly qualified newspaper under the laws of the State wherein legal notices and advertisements may be published; that the printed notice attached hereto was published in the regular and entire edition of said newspaper and not in supplement thereof on the date as follows, to wit:

November 1, 2019

Despondent further states this newspaper is duly qualified to publish legal notice or advertisements within the meaning of Sec. Chapter 167, Laws of 1937.

Legal Clerk

Subscribed and aworn before me this November 5, 2019:

State of WI, County of Brown

2/2001

My commission expires

Ad# 0003874407

PO#: Freedom 36 # of Affidavits : 1 NOTICE

Mewbourne Oil Company has tiled a form C-108 (Application for Authorization to Inject) with the New Mexico Oil Consorvation Division seeking administrative approval to drill and complete the Freedom 36 State SWD #1 is located 1285' FSL and 925' FEL Unit Letter P, Section 36, Township 20 South, Range 28 East, NMPM, Eddy County, New Moxico. The well will dispose of water produced from nearby operated oil and gas wells into the Devonlan formation into an open-hole interval from a depth of 12,625 feet to 13,650 feet. Expected maximum injection rates are 30,000 BWPD at a maximum injection pressure of 2,525 psi.

imum injection pressure of 2,525 psi. Interested parties must tile objections or requests for hearing with the Oil Conservation Division, 1220 South St. Francis Drive, Santa Fe, New Mexico 87505, within 15 days. The name and address of the contact party for the applicant is Tim Harrington, Mewbourne Oil Company, 3620 Old Bullard Road, Tyler, Texas 75701, (903)-534-7647. The well is located approximately 10 miles northeast of Carlsbad, New Mexico.

Mexico. #3874407 11/1/2019

Current

Agrus

ROMAILIE CO.



November 11, 2019

Engineering and Geological Services Bureau, Oil Conservation Division 1220 South St. Francis Drive Santa Fe, NM 87505 Attn: Mr. Phillip Goetze

tttii. ivii. i iiiip Goet

Re:

Freedom 36 State SWD #1 Sec 36, Twp 20S, Rge 28E Eddy County, NM

Mr. Goetze,

In accordance with item XII on Mewbourne Oil Company's C-108 filed for the captioned salt water disposal well, Mewbourne Oil Company has examined geologic and engineering data and has found that there is no evidence of faulting or any other hydrologic connection between the proposed disposal zone and any underground sources of drinking water.

Should you have any questions, please email me at tharrington@mewbourne.com or call me at (903) 534-7647.

Sincerely yours,

MEWBOURNE OIL COMPANY

Tinto R. Dangter

Tim Harrington Reservoir Engineer

tharrington@mewbourne.com

STATEMENTS REGARDING SEISMICITY AND WELL SPACING

Historically, the area nearby our proposed Freedom 36 State SWD #1 has not seen a significant amount of seismic activity. The closest recorded seismic event (per USGS database) in this area occurred in 1979 (magnitude 3.9) and was located 15 miles south of our proposed SWD (see attached map).

Mewbourne Oil Company does not own 2D or 3D seismic data near our proposed SWD therefore our fault interpretation is based on subsurface mapping and data obtained from public technical sources. Our publicly sourced faults data is from a 2005 paper by Ruppel etal. (map attached). Based off our subsurface mapping of the deep formations, Mewbourne has not interpreted any faults in the immediate area. The closest known mapped "deep" fault, that is documented in public data, is approximately 16.7 miles southwest of our proposed SWD.

A very recent technical paper written by Snee and Zoback, "State of Stress in the Permian, Basin, Texas and New Mexico: Implications for induced seismicity", that was published in the February 2018 edition of The Leading Edge, evaluates the strike-slip probability, using probabilistic FSP analysis, of known Permian Basin faults. This study predicts that the Precambrian fault located on our map has a 15-25% chance of being critically stressed so as to create an induced seismicity event. Injection into the Freedom 36 State SWD will have no impact on the stress of this fault since the proposed SWD is located almost 17 miles away.

The Freedom 36 State SWD #1 is located greater than 2.3 miles away from any active, permitted or pending Devonian SWD application (see map), to meet current OCD and industry recommended practices.

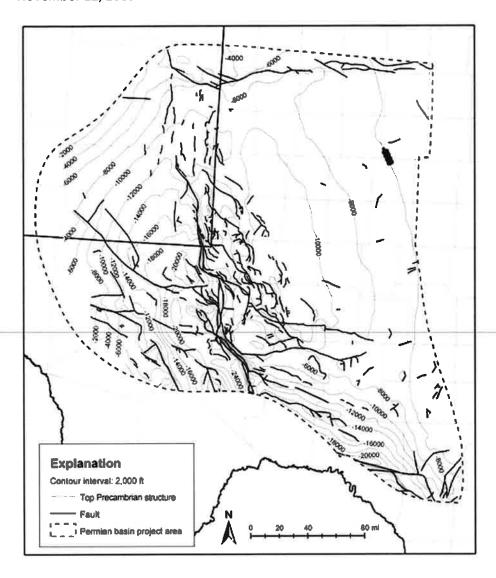
Operator	Well Name	Status	Distance from Freedom
			36 SWD (miles)
Mewbourne Oil Company	Derringer Fed SWD #1	Active	2.97
San Mateo Stebbins Water Mgmt	Jim Pat SWD #4	Permit	2.31
Devon Energy Production Co., LP	Burton Flat Deep SWD #1	Active	2.67

Timothy R. Harrington

Reservoir Engineer

tharrington@mewbourne.com

903-534-7647



Precambrian Structure Map In the Permian Basin (Ruppel etal.)

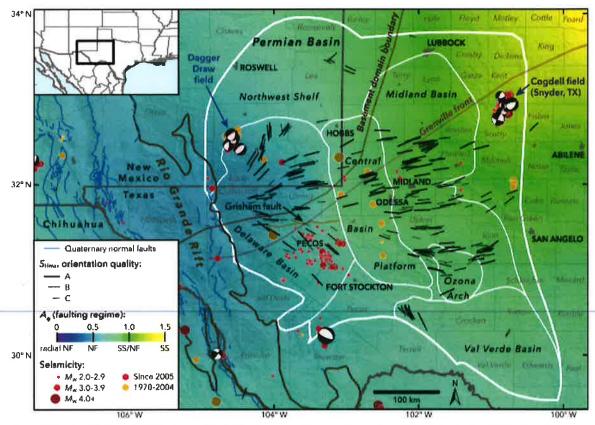


Figure 1. State of stress in the Permian Basin, Texas and New Mexico. Black lines are the measured orientations of S_____ with line length scaled by data quality. The colored background is an interpolation of measured relative principal stress magnitudes (faulting regime) expressed using the A_s parameter (see text for details) of Simpson (1997). Blue lines are fault traces known to have experienced normal-sense offset within the past 1.6 Ma, from the USGS Qualernary Faults and Folds Database (Crone and Wheeler, 2000). The boundary between the Shawnee and Mazatzal basement domains is from Lund et al. (2015), and the Precambrian Grenville Front is from Thomas (2006). The Permian Basin boundary is from the U.S. Energy Information Administration, and the subbasin boundaries are from the Texas Bureau of Economic Geology Permian Basin Geological Synthesis Project. Earthquakes are from the USGS National Earthquake Information Center, the Texhet Seismic Monitoring Program, and Can and Frohlich (2013), Focal mechanisms are from Saint Louis University (Herrmann et al., 2011).

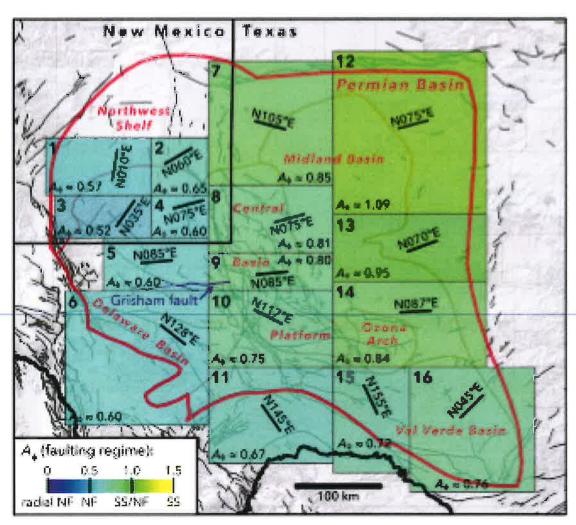


Figure 2. Map of study areas chosen for FSP analysis on the basis of broadly similar stress conditions. Text annotations indicate representative S_{tress} orientation and relative principal stress magnitudes (A_p parameter) for each study area based on the data presented in Figure 1. Gray lines in the background indicate fault traces compiled from Ewing et al. (1990), Green and Jones (1997), Ruppel et al. (2005), and the USGS Quaternary Faults and Folds Database (Crone and Wheeler, 2000), to which we apply FSP analysis.

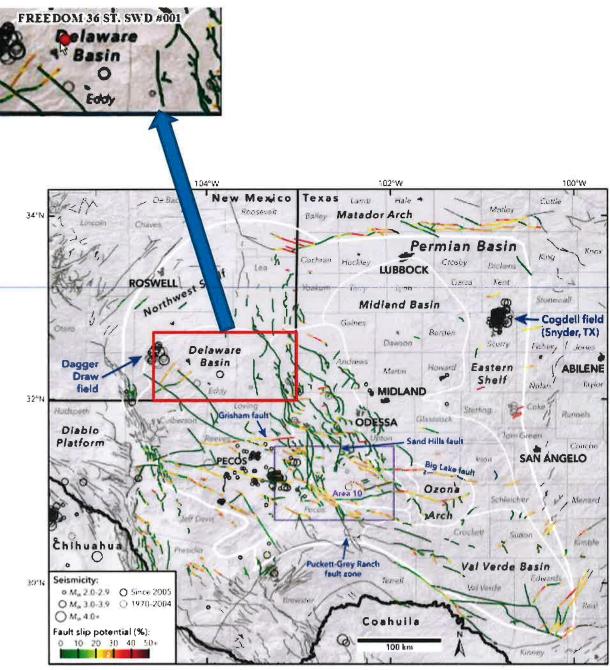


Figure 3. Results of our probabilistic FSP analysis across the Permian Basin. Data sources are as in Figures 1 and 2.

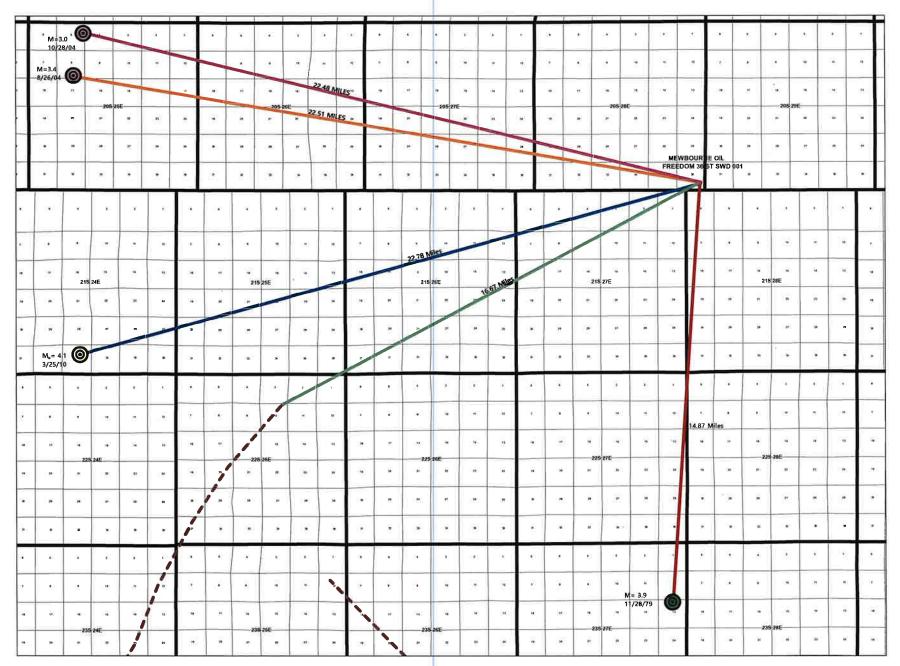
References

Ewing, T.E., R.T. Budnik, J.T. Ames, and D.M. Ridner, 1990, Tectonic Map of Texas: Bureau of Economic Geology, University of Texas at Austin.

Green, G.N., and G.E. Jones, 1997, The digital geologic map of New Mexico in ARC/INFO format: U.S. Geological Survey Open-File Report.

Jens-Erik Lund Snee and Mark D. Zoback, 2018, State of stress in the Permian Basin, Texas and New Mexico: Implications for induced seismicity: The Leading Edge, February 2018.

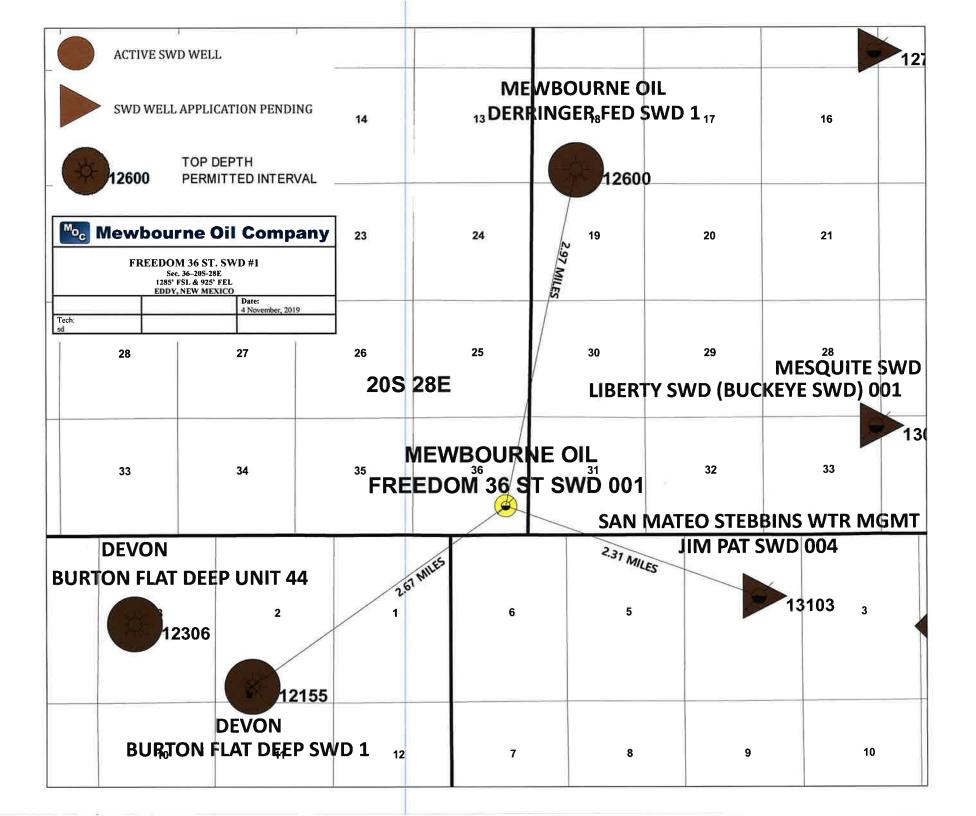
Ruppel, S.C., R.H. Jones, C.L. Breton, and J.A. Kane, 2005 Preparation of maps depicting geothermal gradient and Precambrian structure in the Permian Basin: Bureau of Economic Geology, Jackson School of Geosciences, The University of Texas at Austin, Austin, TX.

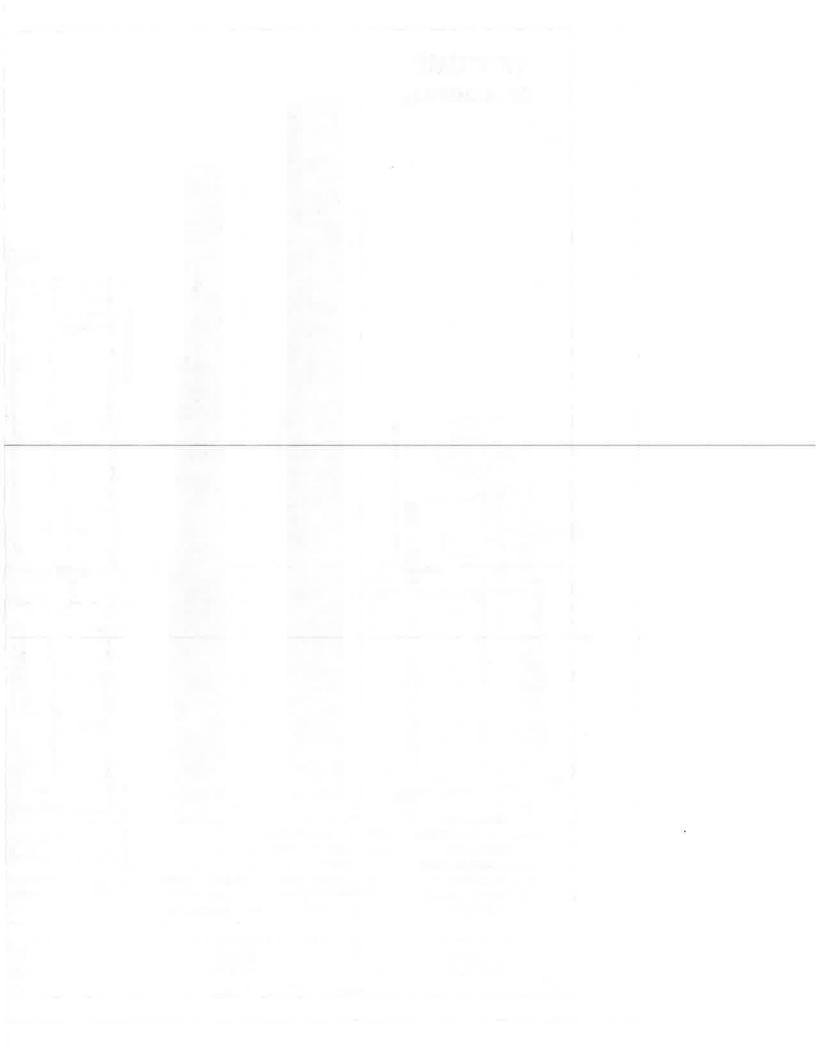


Earthquake Locations provided by USGS

Fault Locations sourced from the University of Texas Bureau of Economic Geology

Mo _c M	lewbourne	Oil Company
	FREEDOM 36 S Sec. 36-20S 1285' FSI, & 9 EDDY, NEW 3	-29E 25' FEL
		Date: 31 October, 2019
Tech:	Scale: 1" = 12000'	





MEWBOURNE OIL COMPANY Freedom 36 State SWD #1

PLUGGING RISK ASSESSMENT

5 ½" Flush Joint Injection Tubing Inside of 7 %" Casing

Specs

5 ½" 17# P110 Flush Joint Tubing	OD (in)	ID (in)	Drift (in)	LINED ID (in)	FLARE DRIFT (in)
Coupling	N/A	N/A	N/A	N/A	N/A
Body	5.500	4.892	4.767	4.520	4.275
7 %" 33.7# P110 Casing	OD (in)	ID (in)	Drift (in)	Wall Thickness (in)	5 ½" Flush Jt. Clearance (in)
	7.625	6.765	6.640	0.430	0.6325

^{*}All fishing procedures are subject to well conditions. Determinations are made onsite on a case by case scenario.

Overshot Fishing Procedure

A 6.625" O.D. Bowen Series 150 overshot (Assembly 8625) with a spiral grapple will be utilized to perform this overshot operation. Details on the overshot are noted below.

Series 150 Overshots Tools are listed in order of maximum catch size. The following table shows only a partial listing of available NOV Dowhole Bowen® overshots. NOTE: Nitralioy Grappies are available upon request. Bowen Beries 150 Releasing and Circulation Overshots Medimum Catch Size 4%" to 5%" inclusive Maximum Catch See (Spiral) Maximum Catch Size (Baokel) abot 0.0 5% 5% 5% S.F.6. 5898 5898 G-9188 8875 C-5171 C-4825 8625 (Dressed Spiral Parts) 185 Top Sub 5897 5099 A-5160 8978 A-5172 8-4820 8826 Part No. 5898 B-5170 8977 B-5173 B-4827 8617 Part No. 109 1140 B-2199 8114 L-5950 L-4565 6616 Spiral Grapple Part No. 185 1135 B-2201 8112 B-4389 M-1071 8619 188 Part No. 1137 B-2202 6113 B-4370 M-1072 8820 Part No. B-2203 8121 B-4371 L-1074 Part No. 1135 B-2201 6112 B-4369 M-1071 8819 Part No. B-2202 6113 B-4370 M-1072 B-2199-R 8114-R L-5950-R M-4505 L-8618-R

In the Event of a Connection Break

- 1. If dressing is needed, trip in hole with a mill and mill connection to allow for (above listed) turned-down overshot to be latched onto the body of the tubing. If no milling is required, trip in hole with (above listed) turned-down overshot and latch onto fish.
- 2. Once latched onto fish, pick up string weight and straight pull to release Model R packer.
- 3. Once packer is released, trip out of hole with fish.

In the Event of a Body Break

- If dressing is needed, trip in hole with a mill and mill tubing to allow for (above listed) turned-down overshot to be latched onto the body of the tubing. If no milling is required, trip in hole with (above listed) turned-down overshot and latch onto fish.
- 2. Once latched onto fish, pick up string weight and straight pull to release Model R packer.
- 3. Once packer is released, trip out of hole with fish.

*NOTE: (Wash pipe with a mill may be substituted for dressing off a break instead of a standard mill to ensure pipe stabilization and to ensure that the casing is not damaged due to milling.)

In the Event a Mill Cannot be Used

If an inadequate fishing neck is looking up and a mill cannot be used to dress the fish, a cutting tool may be utilized to cut off the damaged portion of tubing and a spear used to retrieve the cut-off piece. Once the cut-off piece is retrieved, the (above listed) turned-down overshot may be utilized to retrieve the fish and release the packer.

Spear Fishing Procedure

In the event the (above listed) turned-down overshot cannot be used or the fishing neck is inadequate, a spear may be used to spear into the fish. In the case of insert lined pipe, a smaller spear will be utilized to go inside the insert liner and pull out the lining. Once the lining has been removed, trip out of hole with insert liner. Pick up the proper sized spear for the pipe ID. Trip in hole with tubing spear, spear the fish, pick up string weight and straight pull to release the packer. Trip out of hole with fish and packer assembly.

Abandonment Procedure in-the-Event that Injection Tubing Cannot be Fished

The operator will need to ensure that geological formations are properly isolated to prevent future fluid communication. The operator will first insure that the injection tubing I.D. is open and clear. Once injection tubing I.D. is confirmed to be open and clear, run in hole with a wireline set profile plug and set plug inside of the packer assembly. This plug would allow for cement to fill both the I.D. of the injection tubing and the tubing-to-casing annulus to provide isolation between the different geological formations. Next, run in hole with wireline conveyed perforating guns and shoot perforations at the deepest depth that the injection tubing is still in the wellbore. Trip in hole with a workstring and latch onto the injection tubing with an overshot, spear, cement retainer or any other tool that would ensure a work string-to-injection tubing seal and allow the operator to pump cement down the remaining injection tubing. Rig up cement truck and cement the annulus between the injection tubing and casing to surface.

MEWBOURNE OIL COMPANY
TABULATION OF WELLS WITHIN 1 MILE AREA OF REVIEW
FREEDOM 36 STATE SWD #1 - C-108 APPLICATION
11/4/2019

								Current												
Dir API	Lease Name	Well Num	Operator Name	Current Operator	Section Township	Range	Footage	Status	Final Status	IP Prod Form	Driller Td	TVD (ft)	Form at TD Name	Prod Zone	Proj Depth	Proj Form	Permit Date	Spud Date	Comp Date	Plugged Date
V 30015248900000	LEE FEDERAL	5	LIBERTY OIL & GAS CORP	LIBERTY OIL & GAS CORP	25 205	28E	860 FSL 660 FWL	P&A	D&A		5040	5040	DELAWARE MOUNT	A	6600	BONE SPRING	1984-07-18	1984-07-28	1984-09-14	9/1/1984
V 30015248910000	LEE FEDERAL	6	LIBERTY OIL & GAS CORPORATION	STRATA PROD COMPANY	25 205	28E	1875 FSL 1765 FWL	P&A	P&A OIL	DELAWARE	6619	6619	BONE SPRING	DELAWARE	6600	BONE SPRING	1984-08-09	1984-08-19	1984-11-20	4/15/2000
V 30015249950000	LEE FEDERAL	5Y	LIBERTY OIL & GAS CORPORATION	COLGATE OPERATING LLC	25 205	28E	990 FSL 712 FWL	ACTIVE GAS	GAS	DELAWARE	6410	6410	BONE SPRING	BONE SPRING	6600	BONE SPRING	1984-09-05	1984-09-15	1984-10-30	Alexandra .
V 30015244210000	LEE FEDERAL	3	LIBERTY OIL & GAS LOUISIANA	LIBERTY OIL & GAS LOUISIANA	25 205	28E	1975 FSL 1765 FEL	P&A	D&A		1295	1295	YATES		1400	YATES	1983-02-15	1983-02-25	1986-03-17	1986-03-17
V 30015324490000	FREEDOM 25 FEDERAL COM	1	MEWBOURNE OIL COMPANY	MEWBOURNE OIL COMPANY	25 205	28E	990 FSL 1510 FEL	ACTIVE GAS	GAS	MORROW	11775	11775	BARNETT /SH/	MORROW	11900	MORROW	2002-09-17	2002-10-01	2002-12-09	
HZ 30015399170000	LEE FEDERAL	20H	CIMAREX ENERGY CO OF COLO	CIMAREX ENERGY CO OF COLO	25 205	28E	660 FSL 330 FEL	ACTIVE GAS	GAS	BONE SPRING	12126	7634	BONE SPRING	BONE SPRING	12214	BONE SPRING	2012-02-06	2014-05-25	2014-08-27	
V 30015024580000	STATE	1	ETZ GEORGE	ETZ GEORGE	36 20S	28E	661 FNL 1981 FWL	P&A	D&A		787	787	UNKNOWN				1935-03-18	1935-03-28	1935-05-07	1935-05-07
V 30015238740000	STATE 'LS'COM	1	AMOCO PRODUCTION COMPANY	MANZANO OIL CORP	36 205	28E	660 FNL 1980 FEL	P&A	P&A GAS	STRAWN	11860	11860	MORROW	STRAWN	11950	MORROW	1981-09-03	1981-09-13	1982-03-02	
V 30015238740001	GREENHILL STATE	1	MANZANO OIL CORPORATION	MANZANO OIL CORPORATION	36 20S	28E	660 FNL 1980 FEL	P&A	P&A OIL	BONE SPRING 1	11860	11860	MORROW	BONE SPRING 1	7800	BONE SPRING	1987-10-12	1987-10-22	1988-01-25	1/15/1996
V 30015270050000	A E '36' STATE	1	COLLINS & WARE INCORPORATED	COLLINS & WARE INC	36 20S	28E	2180 FNL 660 FWL	P&A	DRY W PIPE		11696	11696	MORROW		11800	MORROW	1992-05-26	1992-06-05	1993-07-29	9/1/1993
V 30015321110000	LIBERTY '36' STATE COM	1	MEWBOURNE OIL COMPANY	MEWBOURNE OIL COMPANY	3€ 205	28E	660 FNL 990 FEL	P&A	D&A		1685	1685	RUSTLER ANHY		11900	MORROW	2001-11-28	2001-12-31	2002-01-07	1/8/2002
V 30015321560000	LIBERTY '36' STATE COM	1Y	MEWBOURNE OIL COMPANY	MEWBOURNE OIL COMPANY	36 205	28E	660 FNL 1300 FEL	ACTIVE GAS	GAS	MORROW	11815	11815	BARNETT /SH/	MORROW	11900	MORROW	2002-01-10	2002-01-15	2002-03-28	
V 30015329300000	FREEDOM 36 STATE COM	1	MEWBOURNE OIL COMPANY	MEWBOURNE OIL COMPANY	36 205	28E	1650 FSL 990 FEL	ACTIVE GAS	GAS	MORROW	11930	11930	BARNETT /SH/	MORROW	11900	MORROW	2003-08-07	2003-10-08	2003-12-24	
V 30015334710000	PATRIOT 30 FEDERAL COM	1	MEWBOURNE OIL COMPANY	MEWBOURNE OIL COMPANY	30 20S	29E	1650 FSL 1650 FWL	P&A	GAS	MORROW	11890	11890	BARNETT /SH/	MORROW	11900	MORROW	2004-07-02	2004-10-11	2004-12-20	
V 30015334710001	PATRIOT 30 FEDERAL COM	1	MEWBOURNE OIL COMPANY	MEWBOURNE OIL COMPANY	30 205	29E	1650 FSL 1650 FWL	P&A	OIL	BONE SPRING	11890	11890	BARNETT /SH/	BONE SPRING	11900	BONE SPRING	2004-10-06	2009-12-06	2010-01-06	10/11/2004
V 30015223240000	STEBBENS FEDERAL N	1	YATES HARVEY E CO INC	YATES HARVEY E CO INC	30 205	29E	660 FSL 2970 FEL	P&A	D&A		3615	3615	DELAWARE		3500	DELAWARE	1977-10-22	1977-11-01	1977-11-10	11/10/1977
V 30015036710000	MARTIN-BATES	1	GETTY OIL CO	GETTY OIL CO	31 205	29E	660 FSL 1980 FWL	P&A	D&A		342	342	UNKNOWN				1928-11-23	1928-12-03	1929-01-30	1929-01-30
V 30015036720000	MARTIN-BATES	3	GETTY OIL CO	GETTY OIL CO	31 205	29E	210 FSL 2430 FWL	P&A	D&A		1096	1096	UNKNOWN				1929-02-04	1979-07-14	1929-04-20	1929-04-20
V 30015036730000	LILLIE M YATES	1	YATES & NIX	YATES & NIX	31 205	29E	1650 FNL 990 FEL	P&A	D&A		950	950	UNKNOWN	1		UNKNOWN	1948-04-30	1948-05-10	1948-06-01	1948-06-01
V 30015200710000	YATES PET CORP	1	YATES HARVEY E COMPANY INC	YATES HARVEY E COMPANY INC	31 205	29E	330 FNL 2310 FEL	P&A	P&A		3500	3500	UNKNOWN			UNKNOWN	1967-06-26	1967-07-06	1967-07-17	10/7/1967
V 30015210110000	FLAG-REDFERN	1	YATES HARVEY E COMPANY INC	YATES HARVEY E COMPANY INC	31 205	29E	660 FNL 1980 FWL	P&A	D&A	T ₁	860	860	YATES		900	YATES	1973-11-17	1973-11-27	1974-03-20	3/15/1974
2 30015216170000	FAMILE LOU FEDERAL		VATES HARVEY F DO DRE	YATES MANUEL DO HIG	23 205	215	1000 Ftg 1000 FEE	PAA	PARCAS	MODELEW	32310	12310	DEVOIDAN	MORROW	23750	MORROW	1975-08-17	1075-06-27	1975-11-10	12/12/1996
V 30015325460000	FREEDOM 31 FEDERAL COM	1	MEWBOURNE OIL COMPANY	MEWBOURNE OIL COMPANY	31 205	29E	1800 FNL 660 FWL	ACTIVE GAS	GAS	MORROW	11900	11900	BARNETT /SH/	MORROW	12100	MORROW	2002-10-16	2003-01-28	2003-03-16	
V 30015327940000	FREEDOM 31 FEDERAL COM	2	MEWBOURNE OIL COMPANY	MEWBOURNE OIL COMPANY	31 205	29E	885 FSL 1425 FWL	PLUGGED	GAS	MORROW	11980	11980	BARNETT /SH/	MORROW	12050	MORROW	2003-05-06	2003-05-28	2003-07-20	
V 30015327940001	FREEDOM 31 FEDERAL COM	2	MEWBOURNE OIL COMPANY	MEWBOURNE OIL COMPANY	31 20S	29E	885 FSL 1425 FWL	ACTIVE GAS	GAS	STRAWN	11980	11980	BARNETT /SH/	STRAWN	11300	STRAWN	2003-05-19	2003-05-29	2003-12-24	- 11
V 30015249210000	GOVERNMENT 'D'	WD-4	MOBIL PRODUCING TX & NM INC	MATADOR PRODUCTION CO	1 215	27E	1554 FNL 1980 FEL	ACTIVE SWD	5WD		5712	5712	DELAWARE		6000	BONE SPRING	1984-07-28	1984-08-07	1986-11-26	
30015201750000	BIG EDDY UNIT-FEDER	13	PAN AMERICAN	PAN AMERICAN	5 215	28E	1565 FNL 1980 FWL	P&A	D&A		12150	12150	BARNETT /SH/			UNKNOWN	1968-09-18	1968-09-28	1968-12-04	1968-12-04

THERE IS ONE WELL WITHIN THE 1 MILE AREA OF REVIEW THAT PENETRATED THE DEVONIAN FORMATION - (HIGHLIGHTED IN GREEN)

ESTIMATED TOP OF DEVONIAN = 12,625'