

DATE IN <b>10.27.10</b>	SUSPENSE	ENGINEER <b>WJ</b>	LOGGED IN <b>10.27.10</b>	TYPE <b>SWD</b> <b>1256</b>	APP NO. <b>1030034046</b>
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ABOVE THIS LINE FOR DIVISION USE ONLY

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



*Mack Energy*  
 ED OCD

2010 OCT 25 P 2:14

## ADMINISTRATIVE APPLICATION CHECKLIST

THIS CHECKLIST IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS WHICH REQUIRE PROCESSING AT THE DIVISION LEVEL IN SANTA FE

**Application Acronyms:**

- [NSL-Non-Standard Location] [NSP-Non-Standard Proration Unit] [SD-Simultaneous Dedication]
- [DHC-Downhole Commingling] [CTB-Lease Commingling] [PLC-Pool/Lease Commingling]
- [PC-Pool Commingling] [OLS - Off-Lease Storage] [OLM-Off-Lease Measurement]
- [WFX-Waterflood Expansion] [PMX-Pressure Maintenance Expansion]
- [SWD-Salt Water Disposal] [IPI-Injection Pressure Increase]
- [EOR-Qualified Enhanced Oil Recovery Certification] [PPR-Positive Production Response]

*Buzzard SWD #*

*30-025-28517*

- [1] **TYPE OF APPLICATION** - Check Those Which Apply for [A]
- [A] Location - Spacing Unit - Simultaneous Dedication  
 NSL  NSP  SD
- Check One Only for [B] or [C]
- [B] Commingling - Storage - Measurement  
 DHC  CTB  PLC  PC  OLS  OLM
- [C] Injection - Disposal - Pressure Increase - Enhanced Oil Recovery  
 WFX  PMX  SWD  IPI  EOR  PPR
- [D] Other: Specify \_\_\_\_\_

*original well above  
 Talk State*

- [2] **NOTIFICATION REQUIRED TO:** - Check Those Which Apply, or  Does Not Apply
- [A]  Working, Royalty or Overriding Royalty Interest Owners
- [B]  Offset Operators, Leaseholders or Surface Owner
- [C]  Application is One Which Requires Published Legal Notice
- [D]  Notification and/or Concurrent Approval by BLM or SLO  
U.S. Bureau of Land Management - Commissioner of Public Lands, State Land Office
- [E]  For all of the above, Proof of Notification or Publication is Attached, and/or,
- [F]  Waivers are Attached

[3] **SUBMIT ACCURATE AND COMPLETE INFORMATION REQUIRED TO PROCESS THE TYPE OF APPLICATION INDICATED ABOVE.**

[4] **CERTIFICATION:** I hereby certify that the information submitted with this application for administrative approval is **accurate** and **complete** to the best of my knowledge. I also understand that no action will be taken on this application until the required information and notifications are submitted to the Division.

Note: Statement must be completed by an individual with managerial and/or supervisory capacity.

Jerry W. Sherrell	<i>Jerry W. Sherrell</i>	Production Clerk	10/20/10
Print or Type Name	Signature	Title	Date

jerrys@mec.com  
 e-mail Address

APPLICATION FOR AUTHORIZATION TO INJECT

I. PURPOSE: \_\_\_\_\_ Secondary Recovery \_\_\_\_\_ Pressure Maintenance X \_\_\_\_\_ Disposal \_\_\_\_\_ Storage  
Application qualifies for administrative approval? X \_\_\_\_\_ Yes \_\_\_\_\_ No

II. OPERATOR: Mack Energy Corporation

ADDRESS: P.O. Box 960 Artesia, NM 88211-0960

CONTACT PARTY: Jerry W. Sherrell PHONE: (575)748-1288

III. WELL DATA: Complete the data required on the reverse side of this form for each well proposed for injection.  
Additional sheets may be attached if necessary.

IV. Is this an expansion of an existing project? \_\_\_\_\_ Yes X \_\_\_\_\_ No  
If yes, give the Division order number authorizing the project: \_\_\_\_\_

V. Attach a map that identifies all wells and leases within two miles of any proposed injection well with a one-half mile radius circle drawn around each proposed injection well. This circle identifies the well's area of review.

VI. Attach a tabulation of data on all wells of public record within the area of review which penetrate the proposed injection zone. Such data shall include a description of each well's type, construction, date drilled, location, depth, record of completion, and a schematic of any plugged well illustrating all plugging detail.

VII. Attach data on the proposed operation, including:  
1. Proposed average and maximum daily rate and volume of fluids to be injected;  
2. Whether the system is open or closed;  
3. Proposed average and maximum injection pressure;  
4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and,  
5. If injection is for disposal purposes into a zone not productive of oil or gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature, studies, nearby wells, etc.).

\*VIII. Attach appropriate geologic data on the injection zone including appropriate lithologic detail, geologic name, thickness, and depth. Give the geologic name, and depth to bottom of all underground sources of drinking water (aquifers containing waters with total dissolved solids concentrations of 10,000 mg/l or less) overlying the proposed injection zone as well as any such sources known to be immediately underlying the injection interval.

IX. Describe the proposed stimulation program, if any.

\*X. Attach appropriate logging and test data on the well. (if well logs have been filed with the Division, they need not be resubmitted).

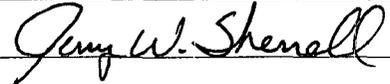
\*XI. Attach a chemical analysis of freshwater from two or more freshwater wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken.

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: Jerry W. Sherrell TITLE: Production Clerk

SIGNATURE:  DATE: \_\_\_\_\_

\* 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: \_\_\_\_\_

INJECTION WELL DATA SHEET

OPERATOR: Mack Energy Corporation

WELL NAME & NUMBER: Buzzard SWD #1

WELL LOCATION: 1980 FNL & 1980 FWL

**F**

**7**

**15S**

**32E**

FOOTAGE LOCATION

UNIT LETTER

SECTION

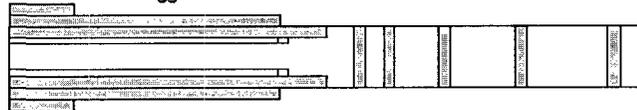
TOWNSHIP

RANGE

WELL CONSTRUCTION DATA  
Surface Casing

WELLBORE SCHEMATIC

Buzzard SWD #1  
Sec. 7 T15S R32E  
1980 FNL 1980 FWL  
After



Hole Size: 17 1/2"

Casing Size: 13 3/8 @ 380'

Cemented with: 350sx sx. or \_\_\_\_\_

ft

Top of Cement: Surface

Method Determined: Circulated

Intermediate Casing

Hole Size: 11"

Casing Size: 8 5/8 @ 4000'

Cemented with: 2630sx sx. or \_\_\_\_\_

ft

Top of Cement: Surface

Method Determined: Circulated

Production Casing

Hole Size: 7 7/8"

Casing Size: 5 1/2 @ 5590'

Cemented with: 800sx sx. or \_\_\_\_\_

ft

Top of Cement: Surface

Method Determined: Circulated

Total Depth: 5600'

Injection Interval

4400'

5550'

feet to \_\_\_\_\_

(Perforated or Open Hole; indicate which)

**INJECTION WELL DATA SHEET**

Tubing Size: 2 7/8" Lining Material: Plastic Coated

Type of Packer: Arrow Set 10K Nickel Plated Packer

Packer Setting Depth: 4375'

Other Type of Tubing/Casing Seal (if applicable): \_\_\_\_\_

Additional Data

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

If no, for what purpose was the well originally drilled? \_\_\_\_\_

2. Name of the Injection Formation: San Andres

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

4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e. sacks of cement or plug(s) used. No

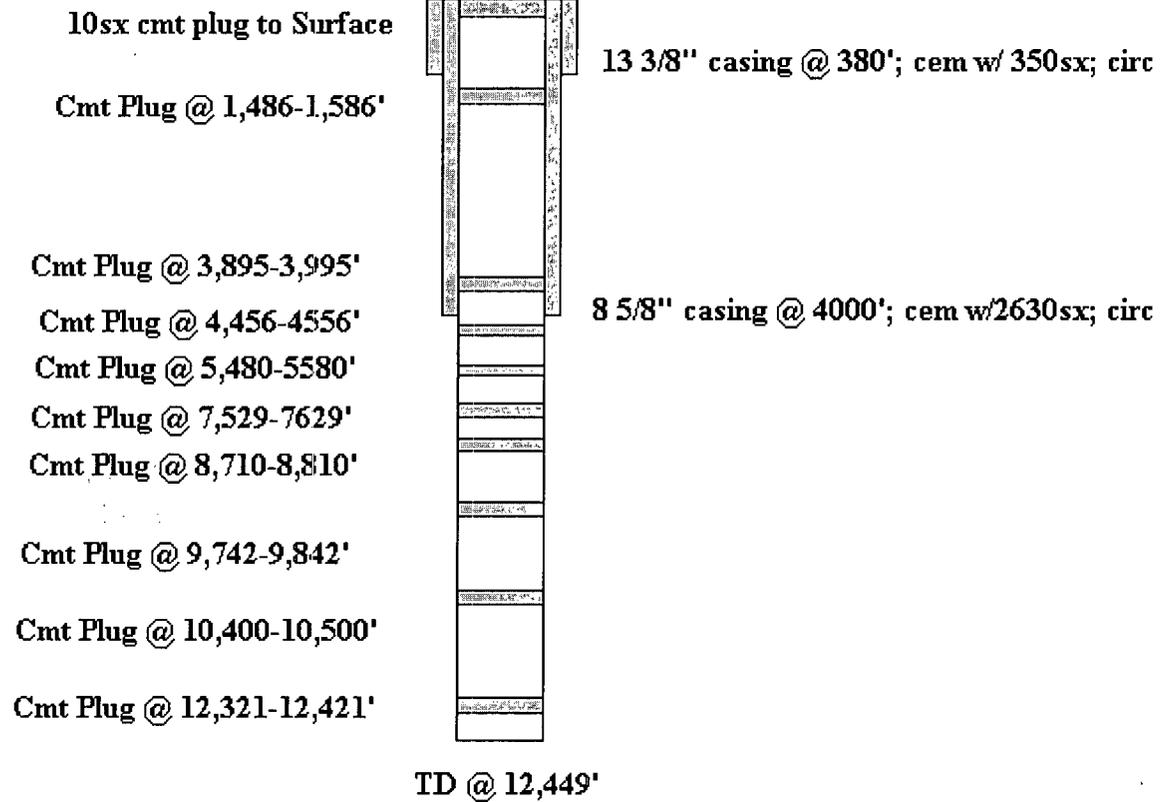
5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area: Overlying- None Underlying- None

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





**Buzzard SWD #1  
Sec. 7 T15S R32E**



Buzzard SWD #1  
Sec. 7 T15S R32E  
1980 FNL 1980 FWL  
After

Packer @ 4375'

Perfs 4,400-5,550'

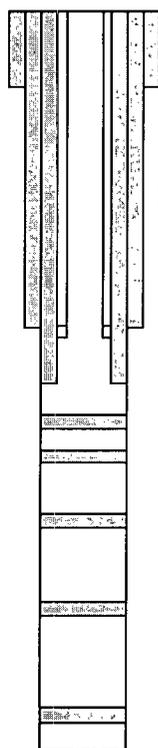
Cmt Plug @ 7,529-7629'

Cmt Plug @ 8,710-8,810'

Cmt Plug @ 9,742-9,842'

Cmt Plug @ 10,400-10,500'

Cmt Plug @ 12,321-12,421'



13 3/8" casing @ 380'; cem w/ 350sx; circ

8 5/8" casing @ 4000'; cem w/2630sx; circ

5 1/2" casing @ 5590'; cem w/ 800sx; circ

TD @ 5,600'

BUZZARD SWD #1  
1980 FNL & 1980 FWL, Sec. 7 T15S R32E  
Formation Tops

Quaternary	Surface
Yates	2470'
Queen	3284'
Grayburg	3660'
San Andres	3995'

## VII. DATA SHEET: PROPOSED OPERATIONS

1. Proposed average and maximum daily rate and volume of fluids to be injected;  
**Average 1000/Maximum 4000 BWPD**
2. The system is closed or open;  
**Closed**
3. Proposed average and maximum injection pressure;  
**0-1670#**
4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than re-injected produced water;  
**We will be re-injecting produced water**
5. If injection is for disposal purposes into a zone not productive of oil or gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water;

N/A

## VIII. GEOLOGICAL DATA

### Devonian

1. Lithologic Detail; **Dolomite**
2. Geological Name; **SWD;San Andres**
3. Thickness; **1,150'**
4. Depth; **4,400-5,550'**

## IX. PROPOSED STIMULATION PROGRAM

1. To be treated with 10,000 gallons 15% acid

## X. LOGS AND TEST DATA

1. Well data will be filed with OCD.

## XI. ANALYSIS OF FRESHWATER WELLS

1. Will send information when available.

## XII. AFFIRMATIVE STATEMENT

RE: Buzzard SWD #1

We have examined the available geologic and engineering data and find no evidence of open faults or any other hydraulic connection between the disposal zone and any underground source of drinking water.

Mack Energy Corporation

Date: 10/20/10

  
\_\_\_\_\_  
Charles Sadler, Geologist

## **Buzzard SWD #1 Notification List**

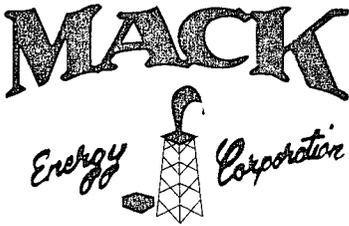
**Yates Petroleum Corporation**  
105 South Fourth Street  
Artesia, NM 88210

**Myco Industries Inc.**  
105 South Fourth Street  
Artesia, NM 88210

**Abo Petroleum Corporation**  
105 South Fourth Street  
Artesia, NM 88210

**Oxy Y-1 Company**  
P.O. Box 4294  
Houston, TX 77210  
Attention: Kate Almeida

**Cimarex Energy Company**  
600 N. Marienfeld, Suite 600  
Midland, TX 79701  
Attention: Hayden Tresner



Post Office Box 960  
Artesia, NM 88211-0960  
Office (575) 748-1288  
Fax (575) 746-9539

October 25, 2010

**VIA CERTIFIED MAIL 7009 2820 0003 6387 5949**  
**RETURN RECEIPT REQUESTED**

Oxy Y-1 Company  
P.O. Box 4294  
Houston, TX 77210  
Attn: Kate Almeida

Gentlemen:

*Enclosed for your review, is a copy of Mack Energy Corporation's application for a San Andres SWD well. Produced water will be injected at a proposed depth of 4,400-5,550'. The Buzzard SWD #1, located 1980 FNL & 1980 FWL, Sec. 7, T15S R32E, Lea County.*

*This letter will serve as a notice that Mack Energy Corporation has requested administrative approval from the NMOCD to drill this water disposal well. If you have any objections, you must notify the Oil Conservation Division in Santa Fe in writing at 1220 South St. Francis Drive, Santa Fe, NM 87505 within fifteen (15) days of receiving this letter.*

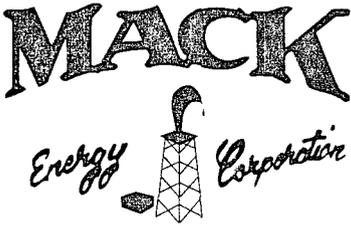
Sincerely,

MACK ENERGY CORPORATION

A handwritten signature in cursive script that reads "Jerry W. Sherrell".

Jerry W. Sherrell  
Production Clerk

JWS\dw



Post Office Box 960  
Artesia, NM 88211-0960  
Office (575) 748-1288  
Fax (575) 746-9539

October 25, 2010

**VIA CERTIFIED MAIL 7009 2820 0004 4193 0423**  
**RETURN RECEIPT REQUESTED**

Myco Industries, Inc.  
105 South Fourth  
Artesia, NM 88210

Gentlemen:

Enclosed for your review, is a copy of Mack Energy Corporation's application for a San Andres SWD well. Produced water will be injected at a proposed depth of 4,400-5,550'. The Buzzard SWD #1, located 1980 FNL & 1980 FWL, Sec. 7, T15S R32E, Lea County.

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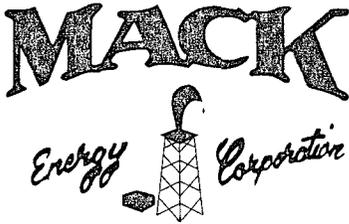
Sincerely,

MACK ENERGY CORPORATION

A handwritten signature in cursive script that reads "Jerry W. Sherrell".

Jerry W. Sherrell  
Production Clerk

JWS\dw



Post Office Box 960  
Artesia, NM 88211-0960  
Office (575) 748-1288  
Fax (575) 746-9539

October 25, 2010

**VIA CERTIFIED MAIL 7009 2820 0004 4193 0416**  
**RETURN RECEIPT REQUESTED**

Cimarex Energy Company  
600 N. Marienfeld, Suite 600  
Midland, TX 79701

Gentlemen:

*Enclosed for your review, is a copy of Mack Energy Corporation's application for a San Andres SWD well. Produced water will be injected at a proposed depth of 4,400-5,550'. The Buzzard SWD #1, located 1980 FNL & 1980 FWL, Sec. 7, T15S R32E, Lea County.*

*This letter will serve as a notice that Mack Energy Corporation has requested administrative approval from the NMOCD to drill this water disposal well. If you have any objections, you must notify the Oil Conservation Division in Santa Fe in writing at 1220 South St. Francis Drive, Santa Fe, NM 87505 within fifteen (15) days of receiving this letter.*

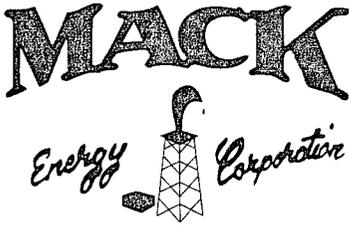
Sincerely,

MACK ENERGY CORPORATION

A handwritten signature in cursive script that reads "Jerry W. Sherrell".

Jerry W. Sherrell  
Production Clerk

JWS\dw



Post Office Box 960  
Artesia, NM 88211-0960  
Office (575) 748-1288  
Fax (575) 746-9539

October 25, 2010

**VIA CERTIFIED MAIL 7009 2820 0004 4193 0430**  
**RETURN RECEIPT REQUESTED**

*Abo Petroleum Corporation*  
105 South Fourth  
Artesia, NM 88210

Gentlemen:

*Enclosed for your review, is a copy of Mack Energy Corporation's application for a San Andres SWD well. Produced water will be injected at a proposed depth of 4,400-5,550'. The Buzzard SWD #1, located 1980 FNL & 1980 FWL, Sec. 7, T15S R32E, Lea County.*

*This letter will serve as a notice that Mack Energy Corporation has requested administrative approval from the NMOCD to drill this water disposal well. If you have any objections, you must notify the Oil Conservation Division in Santa Fe in writing at 1220 South St. Francis Drive, Santa Fe, NM 87505 within fifteen (15) days of receiving this letter.*

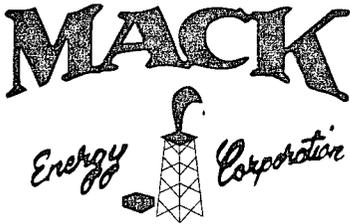
*Sincerely,*

**MACK ENERGY CORPORATION**

A handwritten signature in cursive script that reads "Jerry W. Sherrell".

*Jerry W. Sherrell*  
*Production Clerk*

JWSldw



Post Office Box 960  
Artesia, NM 88211-0960  
Office (575) 748-1288  
Fax (575) 746-9539

October 25, 2010

**VIA CERTIFIED MAIL 7009 2820 0003 6387 5956**  
**RETURN RECEIPT REQUESTED**

Yates Petroleum Corporation  
105 South Fourth  
Artesia, NM 88210

Gentlemen:

Enclosed for your review, is a copy of Mack Energy Corporation's application for a San Andres SWD well. Produced water will be injected at a proposed depth of 4,400-5,550'. The Buzzard SWD #1, located 1980 FNL & 1980 FWL, Sec. 7, T15S R32E, Lea County.

This letter will serve as a notice that Mack Energy Corporation has requested administrative approval from the NMOCD to drill this water disposal well. If you have any objections, you must notify the Oil Conservation Division in Santa Fe in writing at 1220 South St. Francis Drive, Santa Fe, NM 87505 within fifteen (15) days of receiving this letter.

Sincerely,

MACK ENERGY CORPORATION

A handwritten signature in cursive script that reads "Jerry W. Sherrell".

Jerry W. Sherrell  
Production Clerk

JWS\dw

Legal Notice

Mack Energy Corporation, Post Office Box 960, Artesia, NM 88211-0960, has filed an Application with the New Mexico Oil Conservation Division seeking authorization to inject produced water into the Buzzard SWD #1 1980 FNL & 1980 FWL of Section 7, T15S R32E, NMPM, Lea County, New Mexico. The water will be injected into the San Andres formation at a disposal depth of 4400-5550'. Water will be injected at a maximum surface pressure of 1670 pounds and a maximum injection rate of 4000 BWPD. Any interested party with questions or comments may contact Jerry W. Sherrell at Mack Energy Corporation, Post Office Box 960, Artesia, New Mexico 88211-0960 or call (575) 748-1288. Objections to this application or requests for hearing must be filed with the Oil Conservation Division, 1220 South Saint Francis Drive, Santa Fe, New Mexico 87505, within fifteen days of the date of the publication of this notice.

NEW MEXICO OIL CONSERVATION COMMISSION  
WELL LOCATION AND ACREAGE DEDICATION PLAT

Form C-102  
Supersedes C-128  
Effective 1-1-65

All distances must be from the outer boundaries of the Section.

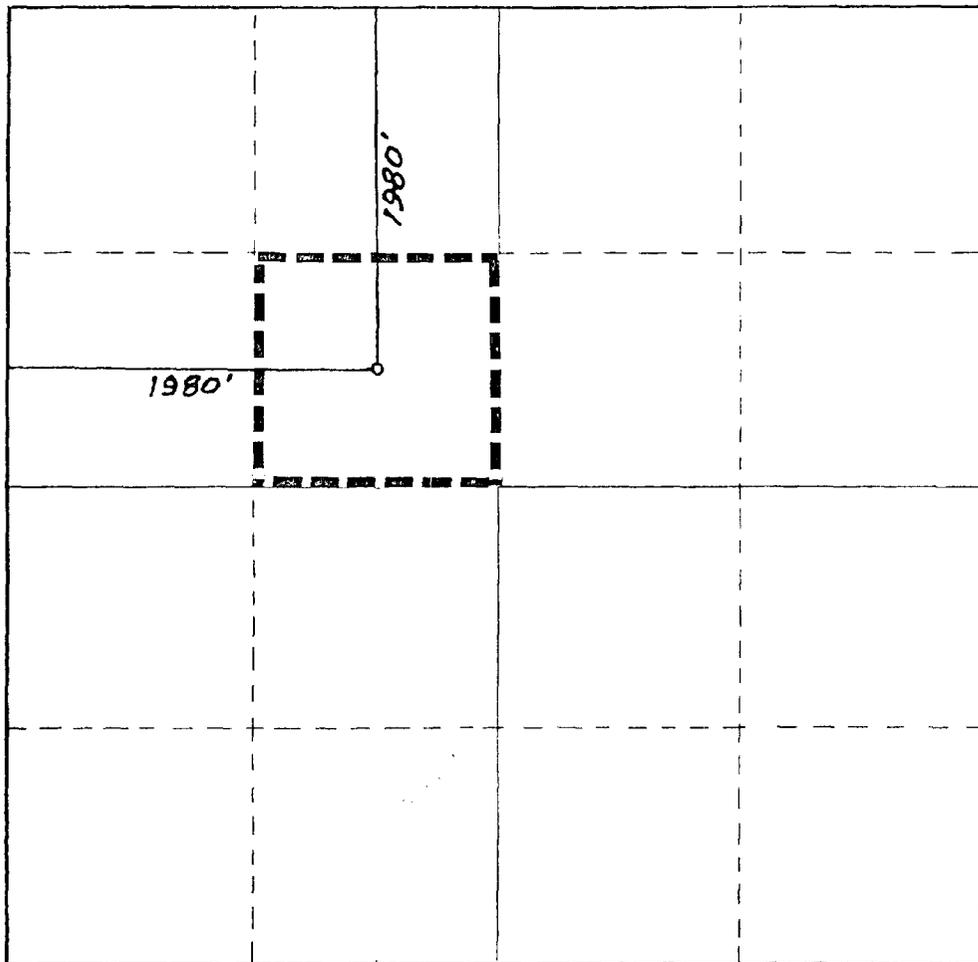
Operator <b>W. A. MONCRIEF JR.</b>			Lease <b>Tulsa State</b>			Well No. <b>1</b>		
Unit Letter <b>F</b>	Section <b>7</b>	Township <b>15 South</b>	Range <b>32 East</b>	County <b>Lea</b>				
Actual Footage Location of Well: <b>1980</b> feet from the <b>North</b> line and <b>1980</b> feet from the <b>West</b> line								
Ground Level Elev. <b>4353.</b>	Producing Formation <b>Atoka</b>		Pool <b>Wildcat</b>			Dedicated Acreage: <b>40</b> Acres		

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

Yes  No If answer is "yes," type of consolidation \_\_\_\_\_

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) \_\_\_\_\_

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

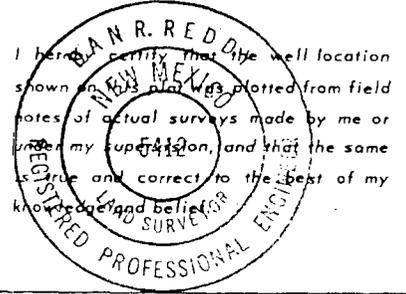
*Dewey E. Thornton*

Name  
**Dewey E. Thornton**

Position  
**Exploration Manager**

Company  
**W.A. Moncrief, Jr.**

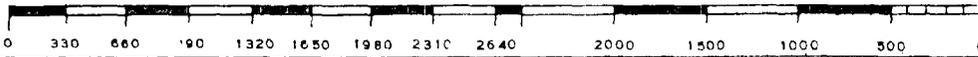
Date  
**12-2-83**



Date Surveyed  
**November 30, 1983**

Registered Professional Engineer and/or Land Surveyor  
*Dan R. Reddy*

Certificate No.  
**NM PE&LS #5412**



INSTRUCTIONS

This form is to be filed with the appropriate District Office of the Commission not later than 30 days after the completion of any newly-drilled or deepened well. It shall be accompanied by one copy of all electrical and radio-activity logs run on the well and a summary of all special tests conducted, including drill stem tests. All depths reported shall be measured depths. In the case of directionally drilled wells, true vertical depths shall also be reported. For multiple completions, Items 30 through 34 shall be reported for each zone. The form is to be filed in quadruplicate except on state land, where six copies are required. See Rule 1105.

INDICATE FORMATION TOPS IN CONFORMANCE WITH GEOGRAPHICAL SECTION OF STATE

Southeastern New Mexico

Northwestern New Mexico

T. Anhy _____ 1486	T. Canyon _____ 10,500	T. Ojo Alamo _____	T. Penn. "B" _____
T. Salt _____ 1586	T. Strawn _____ 11,253	T. Kirtland-Fruitland _____	T. Penn. "C" _____
B. Salt _____ 2395	T. Atoka _____ 11,500	T. Pictured Cliffs _____	T. Penn. "D" _____
T. Yates _____ 2470	T. Miss _____ 12,421	T. Cliff House _____	T. Leadville _____
T. 7 Rivers _____ 2626	T. Devonian _____	T. Menefee _____	T. Madison _____
T. Queen _____ 3284	T. Silurian _____	T. Point Lookout _____	T. Elbert _____
T. Grayburg _____ 3830	T. Montoya _____	T. Mancos _____	T. McCracken _____
T. San Andres _____ 3995	T. Simpson _____	T. Gallup _____	T. Ignacio Qtzte _____
T. Glorieta _____ 5580	T. McKee _____	Base Greenhorn _____	T. Granite _____
T. Paddock _____	T. Ellenburger _____	T. Dakota _____	T. _____
T. Blinebry _____	T. Gr. Wash _____	T. Morrison _____	T. _____
T. Tubb _____ 6855	T. Granite _____	T. Todilto _____	T. _____
T. Drinkard _____ 6984	T. Delaware Sand _____	T. Entrada _____	T. _____
T. Abo _____ 7629	T. Bone Springs _____	T. Wingate _____	T. _____
T. Wolfcamp _____ 8810	T. _____	T. Chinle _____	T. _____
T. Bough "C" _____ 9842	T. _____	T. Permian _____	T. _____
T. Cisco _____ 9991	T. _____	T. Penn. "A" _____	T. _____

OIL OR GAS SANDS OR ZONES

No. 1, from \_\_\_\_\_ to \_\_\_\_\_ No. 4, from \_\_\_\_\_ to \_\_\_\_\_

No. 2, from \_\_\_\_\_ to \_\_\_\_\_ No. 5, from \_\_\_\_\_ to \_\_\_\_\_

No. 3, from \_\_\_\_\_ to \_\_\_\_\_ No. 6, from \_\_\_\_\_ to \_\_\_\_\_

IMPORTANT WATER SANDS

Include data on rate of water inflow and elevation to which water rose in hole.

No. 1, from surface to 360' feet

No. 2, from \_\_\_\_\_ to \_\_\_\_\_ feet

No. 3, from \_\_\_\_\_ to \_\_\_\_\_ feet

No. 4, from \_\_\_\_\_ to \_\_\_\_\_ feet

FORMATION RECORD (Attach additional sheets if necessary)

From	To	Thickness in Feet	Formation	From	To	Thickness in Feet	Formation
surface	360	360	caliche & water sands	8810	9220	410	dolomite, lime & shale
360	1486	1126	redbeds	9920	10,475	1255	lime w/shale stringers
1486	1586	100	anhydrite & redbeds	10,475	10,600	125	shale, sand & lime stringer
1586	2395	809	salt w/any stringers	10,600	10,950	350	lime w/shale stringers
2395	2470	75	any & redbeds	10,950	11,500	550	lime, shale & sand stringer
2470	2626	156	sand, any & redbeds	11,500	12,421	921	shale, sand & lime stringer
2626	3284	658	dol & any stringers	12,421	12,449	28	lime
3284	3800	516	sand & any stringers				
3800	3995	195	dol & any stringers				
3995	5580	1585	dolomite				
5580	6210	630	sand & sandy dolomite				
6210	6855	645	dolomite				
6855	6984	129	sand & sandy dolomite				
6984	7629	645	dolomite				
7629	7656	27	shale				
7656	8810	1154	dolomite w/shale stringers				

RECEIVED  
MAR 5 1984  
O.C.D.  
HOBS OFFICE

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U.S.G.S.	
LAND OFFICE	
OPERATOR	

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-103  
 Supersedes Old  
 C-102 and C-103  
 Effective 1-4-83

5a. Indicate Type of Lease	
State <input checked="" type="checkbox"/>	Fee <input type="checkbox"/>
5. State Oil & Gas Lease No. V-916	
7. Unit Agreement Name	
8. Farm or Lease Name Tulk State	
9. Well No. 1	
10. Field and Pool, or Wildcat Wildcat	
12. County Lea	

**SUNDRY NOTICES AND REPORTS ON WELLS**  
(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE APPLICATION FOR PERMIT - (FORM C-101) FOR SUCH PROPOSALS.)

1. OIL WELL  GAS WELL  OTHER

2. Name of Operator  
W.A. Moncrief, Jr.

3. Address of Operator  
400 Metro Bldg., Midland, Texas 79701

4. Location of Well  
 UNIT LETTER F, 1980 FEET FROM THE north LINE AND 1980 FEET FROM  
 THE west LINE, SECTION 7 TOWNSHIP 15S RANGE 32E NMPM.

11. Elevation (Show whether DF, RT, GR, etc.)  
 4353' gd., 4364.5' KB

Check Appropriate Box To Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK

TEMPORARILY ABANDON

PULL OR ALTER CASING

OTHER

PLUS AND ABANDON

CHANGE PLANS

SUBSEQUENT REPORT OF:

REMEDIAL WORK

COMMENCE DRILLING OPNS.

CASING TEST AND CEMENT JOB

OTHER

ALTERING CASING

PLUS AND ABANDONMENT

17. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1703.

- (1.) Operator spudded at 8am 12-15-83
- (2.) Operator set 9 joints of 61# K-55 ST&C 13-3/8" casing at 380' and cemented w/350 sax Class "C" w/2% CaCl on 12-15-83. Cement circulated. WOC 18 hrs.
- (3.) Operator set 99 joints of 32# J-55 ST&C 8-5/8" casing @ 4000' & cemented w/2430 sax HOWCO lite w/15# salt per sack & 1/2# flocele per sack + 200 sax Class "C" on 12-24-83. Cement circulated. WOC 18 hrs. Pressured 8-5/8" casing to 1,000# for 30 minutes. Held OK.

18. I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNED Dewey E. Sharpton TITLE Exploration Manager DATE 12-27-83

APPROVED BY DISTRICT I SUPERVISOR TITLE \_\_\_\_\_ DATE JAN 3 1984

CONDITIONS OF APPROVAL, IF ANY:



Catalyst Oilfield Services  
 11999 E Hwy 158  
 Garden Dale, TX 79758  
 (432) 563-0727  
 Fax: (432) 224-1038

RECEIVED

2010 NOV 10 P 1:25

### Water Analysis Report

Customer: Mack Energy Corporation      Sample #: 2826  
 Area: Artesia      Analysis ID #: 5141  
 Lease: Buzzard  
 Location: SWD F/W #1      0  
 Sample Point: Windmill

<b>Sampling Date:</b>	10/20/2010	<b>Anions</b>	mg/l	meq/l	<b>Cations</b>	mg/l	meq/l
<b>Analysis Date:</b>	10/22/2010	<b>Chloride:</b>	102.7	2.9	<b>Sodium:</b>	79.2	3.45
<b>Analyst:</b>	Catalyst	<b>Bicarbonate:</b>	103.7	1.7	<b>Magnesium:</b>	6.2	0.51
<b>TDS (mg/l or g/m3):</b>	335.1	<b>Carbonate:</b>			<b>Calcium:</b>	19.3	0.96
<b>Density (g/cm3):</b>	1.003	<b>Sulfate:</b>	20.0	0.42	<b>Potassium:</b>	2.9	0.07
<b>Hydrogen Sulfide:</b>	0				<b>Strontium:</b>	1.0	0.02
<b>Carbon Dioxide:</b>	0				<b>Barium:</b>	0.1	0.
<b>Comments:</b>		<b>pH at time of sampling:</b>		7	<b>Iron:</b>	0.0	0.
		<b>pH at time of analysis:</b>			<b>Manganese:</b>	0.000	0.
		<b>pH used in Calculation:</b>		7	<b>Conductivity (micro-ohms/cm):</b>		496
		<b>Temperature @ lab conditions (F):</b>		75	<b>Resistivity (ohm meter):</b>		20.1613

Values Calculated at the Given Conditions - Amounts of Scale in lb/1000 bbl

Temp	Calcite CaCO <sub>3</sub>		Gypsum CaSO <sub>4</sub> ·2H <sub>2</sub> O		Anhydrite CaSO <sub>4</sub>		Celestite SrSO <sub>4</sub>		Barite BaSO <sub>4</sub>	
	°F	Index	Amount	Index	Amount	Index	Amount	Index	Amount	Index
80	-1.13	0.00	-2.73	0.00	-2.80	0.00	-2.29	0.00	-0.21	0.00
100	-0.98	0.00	-2.72	0.00	-2.72	0.00	-2.26	0.00	-0.34	0.00
120	-0.82	0.00	-2.69	0.00	-2.62	0.00	-2.22	0.00	-0.45	0.00
140	-0.65	0.00	-2.66	0.00	-2.50	0.00	-2.17	0.00	-0.53	0.00
160	-0.48	0.00	-2.63	0.00	-2.36	0.00	-2.11	0.00	-0.58	0.00
180	-0.29	0.00	-2.58	0.00	-2.20	0.00	-2.05	0.00	-0.62	0.00
200	-0.10	0.00	-2.54	0.00	-2.04	0.00	-1.98	0.00	-0.64	0.00
220	0.09	1.05	-2.49	0.00	-1.86	0.00	-1.92	0.00	-0.64	0.00

**Jones, William V., EMNRD**

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**From:** Deana Weaver [dweaver@mec.com]  
**Sent:** Friday, November 12, 2010 11:51 AM  
**To:** Jones, William V., EMNRD  
**Cc:** Jerry Sherrell  
**Subject:** Buzzard SWD #1;  
**Attachments:** Buzzard SWD #1.pdf

<<Buzzard SWD #1.pdf>> Will

Attached is the affidavit of Publication for the Buzzard SWD #1. I'll send a hard copy in the mail.

Thank you

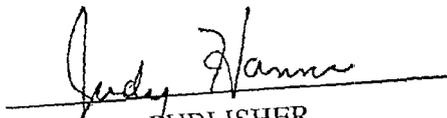
Deana Weaver  
Mack Energy Corporation  
575-748-1288

# Affidavit of Publication

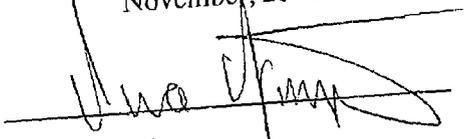
State of New Mexico,  
County of Lea.

I, JUDY HANNA  
PUBLISHER  
of the Hobbs News-Sun, a  
newspaper published at Hobbs, New  
Mexico, do solemnly swear that the  
clipping attached hereto was  
published in the regular and entire  
issue of said newspaper, and not a  
supplement thereof for a period

of 1 issue(s).  
Beginning with the issue dated  
October 21, 2010  
and ending with the issue dated  
October 21, 2010

  
PUBLISHER

Sworn and subscribed to before me  
this 8th day of  
November, 2010

  
Notary Public

My commission expires  
February 09, 2013  
(Seal)



This newspaper is duly qualified to  
publish legal notices or  
advertisements within the meaning of  
Section 3, Chapter 167, Laws of  
1937 and payment of fees for said  
publication has been made.

LEGAL  
OCTOBER 21, 2010

Mack Energy Corporation, Post Office Box 960, Artesia, NM 88211-0960, has filed an Application with the New Mexico Oil Conservation Division seeking authorization to inject produced water into Buzzard SWD #1 1980 FNL & 1980 FWL of Section 7, T15S R32E, NMPM, Lea County, New Mexico. The water will be injected into the San Andres formation at a disposal depth of 4400-5550'. Water will be injected at a maximum surface pressure of 1670 pounds and a maximum injection rate of 4000 BWPD. Any interested party with questions or comments may contact Jerry W. at Mack Energy Corporation Post Office Box 960, Artesia, New Mexico 88211-0960 or call (575) 748-1288. Objections to this application or requests for hearing must be filed with the Oil Conservation Division, 1220 South Saint Francis Drive, Santa Fe, New Mexico 87505, within fifteen days of the date of the publication of this notice.  
#26157

67100900

00061590

ATTN: JERRY  
MACK ENERGY CORPORATION  
PO BOX 960  
ARTESIA,, NM 88211-0960

**Jones, William V., EMNRD**

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**From:** Deana Weaver [dweaver@mec.com]  
**Sent:** Monday, November 22, 2010 3:36 PM  
**To:** Jones, William V., EMNRD  
**Cc:** Jerry Sherrell; Charles Sadler  
**Subject:** Buzzard SWD #1 30-025-28517  
**Attachments:** Buzzard SWD #1.pdf

Mr. Jones,  
Below I have answered some of your questions. As soon as I receive answers to questions B and C, I will send it to you.

Thank you.

- a. Who is the surface owner of the well site? Please send proof of notice to whomever this is. Letter Attached
- b. Please ask your favorite Geo to look at this San Andres interval and do a quick paragraph talking about the oil/gas productive capability - including rough water saturation numbers. If you plan to swab test, let us know. Will send information when I received it. ✓
- c. What formations or pools will be the source water going into this well? Will you estimate the salinities of these or send water analysis of each? Will send information when I received it.
- d. How deep is the fresh water in this area? 200 feet ✓

*Deana Weaver*

Mack Energy Corporation  
575-748-1288 Phone  
575-746-9539 Fax  
[dweaver@mec.com](mailto:dweaver@mec.com)





Post Office Box 960  
Artesia, NM 88211-0960  
Office (575) 748-1288  
Fax (575) 746-9539

November 22, 2010

**VIA CERTIFIED MAIL 7009 2820 0004 4193 0492**  
**RETURN RECEIPT REQUESTED**

Commissioner of Public Lands  
New Mexico State Land Office  
P.O. Box 1148  
Santa Fe, NM 87504-1148

Gentlemen:

Enclosed for your review, is a copy of Mack Energy Corporation's application for a San Andres SWD well. Produced water will be injected at a proposed depth of 4,400-5,550'. The Buzzard SWD #1, located 1980 FNL & 1980 FWL, Sec. 7, T15S R32E, Lea County.

This letter will serve as a notice that Mack Energy Corporation has requested administrative approval from the NMOCD to drill this water disposal well. If you have any objections, you must notify the Oil Conservation Division in Santa Fe in writing at 1220 South St. Francis Drive, Santa Fe, NM 87505 within fifteen (15) days of receiving this letter.

Sincerely,

MACK ENERGY CORPORATION

A handwritten signature in cursive script that reads "Jerry W. Sherrell".

Jerry W. Sherrell  
Production Clerk

JWS\dw

**Jones, William V., EMNRD**

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**From:** Jones, William V., EMNRD  
**Sent:** Wednesday, November 17, 2010 11:52 AM  
**To:** 'Jerry Sherrell'  
**Cc:** Ezeanyim, Richard, EMNRD; Hill, Larry, EMNRD; Kautz, Paul, EMNRD  
**Subject:** Disposal application from Mack Energy Corp: Buzzard SWD #1 30-025-28517 San Andres Perfed Disposal Interval

Hello Jerry:  
Just read over your application:

- SLA*
- 11/22/10 + 15  $\approx$  12/8/10*
- a. Who is the surface owner of the well site? Please send proof of notice to whomever this is.
  - b. Please ask your favorite Geo to look at this San Andres interval and do a quick paragraph talking about the oil/gas productive capability – including rough water saturation numbers. If you plan to swab test, let us know.
  - c. What formations or pools will be the source water going into this well? Will you estimate the salinities of these or send water analysis of each?
  - d. How deep is the fresh water in this area? *20'*

All else looks fine.  
Regards,

*waiting 2 of 11/30/10*

William V Jones, P.E.  
Engineering, Oil Conservation Division  
1220 South St. Francis Drive, Santa Fe, NM 87505  
Tel 505.476.3448 ~ Fax 505.476.3462



**Jones, William V., EMNRD**

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**From:** Deana Weaver [dweaver@mec.com]  
**Sent:** Tuesday, November 30, 2010 4:15 PM  
**To:** Jones, William V., EMNRD  
**Cc:** Jerry Sherrell; Charles Sadler  
**Subject:** Buzzard SWD #1 30-025-28517

Mr. Jones

Below is the answer to your question B. I'm still working on question C and will get it to you soon.

Thank you

b. Please ask your favorite Geo to look at this San Andres interval and do a quick paragraph talking about the oil/gas productive capability – including rough water saturation numbers. If you plan to swab test, let us know. The San Andres is not productive within several miles of the proposed Buzzard SWD #1. Water saturations in the injection interval are in excess of 75%. Sidewall cores from the Mack Energy Eagle State #1, located approximately 4200' south southeast of the proposed Buzzard SWD #1, had water saturations in excess of 90% in the correlative San Andres injection zone.

*Deana Weaver*

Mack Energy Corporation  
575-748-1288 Phone  
575-746-9539 Fax  
[dweaver@mec.com](mailto:dweaver@mec.com)



Injection Permit Checklist (11/15/2010)

WFX \_\_\_\_\_ PMX \_\_\_\_\_ (SWD 1256) Permit Date 12/10/10 UIC Qtr (0/N/D)

# Wells 1 Well Name(s): BUZZARD SWD #1

API Num: 30-0 25-28517 Spud Date: 12/15/1988 New/Old: N (UIC primacy March 7, 1982)

Footages 1980FW/1980FWL Unit F Sec 7 Tsp 15S Rge 32E County LEA

General Location:

Operator: MACK ENERGY CORPORATION Contact: Jerry W. SH errell

OGRID: 13837 RULE 5.9 Compliance (Wells) 0/359 (Finan Assur) OK IS 5.9 OK? OK

Well File Reviewed  Current Status: P&A (was TOLK STATE #1)

Planned Work to Well: Re-annul, run 5 1/2" perf, inject.

Diagrams: Before Conversion  After Conversion  Elogs in Imaging File:

Well Details:	Sizes		Setting Depths	Stage Tool	Cement Sx or Cf	Determination Method
	Hole.....	Pipe				
New ___ Existing <input checked="" type="checkbox"/> Surface	17/2	13 3/8	380		350SX	CIRC
New ___ Existing <input checked="" type="checkbox"/> Interm	11	8 5/8	4000		2630 SX	CIRC
New <input checked="" type="checkbox"/> Existing ___ LongSt	7 7/8	5 1/2	5590		800SX	CIRC
New ___ Existing ___ Liner						
New ___ Existing ___ OpenHole			(5,600' TD)	old TD 12,449		

Depths/Formations: Depths, Ft. Formation Tops?

Formation(s) Above	3995	SA	<input checked="" type="checkbox"/>
Injection TOP:	4400	Sandstone	Max. PSI 880
Injection BOTTOM:	5550	Sandstone	Tubing Size 2 7/8
Formation(s) Below	5580	GWRETA	<input checked="" type="checkbox"/>

OpenHole Perfs   
Packer Depth 4375'

Capitan Reef? (Potaah? Noticed?) [WIPP? Noticed?] Salado Top/Bot 1586-2315 Giff House?

Fresh Water: Depths: Formation: Wells? Analysis? Affirmative Statement

Disposal Fluid Analysis? Sources:

Disposal Interval: Analysis? Production Potential/Testing:

Notice: Newspaper Date 10/21/10 Surface Owner Mineral Owner(s)

RULE 26.7(A) Affected Persons: YPC, MGA, APO, OXY-1, Cimarron

AOR: Maps? Well List? Producing in Interval? NO Wellbore Diagrams?

.....Active Wells Repairs? Which Wells?

.....P&A Wells Repairs? Which Wells?

Issues: Request Sent Reply: