

ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION

- Engineering Bureau -

1220 South St. Francis Drive, Santa Fe, NM 87505



ADMINISTRATIVE APPLICATION CHECKLIST

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

Application Acronyms:

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

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

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

Check One Only for [B] or [C]

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

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

[D] Other: Specify \_\_\_\_\_

[2] NOTIFICATION REQUIRED TO: - Check Those Which Apply, or ☐ Does Not Apply

- [A] ☐ Working, Royalty or Overriding Royalty Interest Owners
- [B] ☐ Offset Operators, Leaseholders or Surface Owner
- [C] ☐ Application is One Which Requires Published Legal Notice
- [D] ☐ Notification and/or Concurrent Approval by BLM or SLO  
U.S. Bureau of Land Management - Commissioner of Public Lands, State Land Office
- [E] ☐ For all of the above, Proof of Notification or Publication is Attached, and/or,
- [F] ☐ Waivers are Attached

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

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

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

Print or Type Name

Signature

Title

Date

e-mail Address

# Injection Permit Checklist

SWD Order Number 1016 Dates: Division Approved 12/29/05 District Approved ?

Well Name/Num: SHARK STATE #1 Date Spudded: 9/21/05

API Num: (30-) 025-37427 County: Lea

Footages 330FWL/990FEL Sec 30 Tsp 6S Rge 33E

Operator Name: MACK ENERGY CORP Contact Jerry W. Sharrell

Operator Address: PO BOX 960 ARTESIA NM 88211-0960

	Hole/Pipe Sizes	Depths	Cement	Top/Method
Surface	17 1/2 13 3/8	360	448	CIRC
Intermediate	12 1/4 8 5/8	<del>400</del> 2670'	<del>448</del> 1100	CIRC
Production	7 7/8 5 1/2	5366	1270	2750 CBL
Last DV Tool				
Open Hole/Liner				
Plug Back Depth				

Diagrams Included (Y/N): Before Conversion POOR After Conversion POOR

Checks (Y/N): ELogs in Imaging NO Well File Reviewed ✓

Intervals:	Depths	Formation	Producing (Yes/No)
<u>Salt/Potash</u>			
<u>Capitan Reef</u>			
<u>In Reef, Cliff House, Etc:</u>			
Formation Above		TRURS	
Top Inj Interval	3902	Queen (GND)	
Bottom Inj Interval	4957	SA (Gnd)	
Formation Below		GLORIA	

Deepen?  
Poor Images in Well File online

780 PSI Max. WHIP  
Open Hole (Y/N)  
Deviated Hole (Y/N)

Water Analysis Included (Y/N): Fresh Water      Injection Zone      Disposal Waters QNG BG

Affirmative Statement Included (Y/N): ✓

Surface Owner SLO Mineral Owner(s)     

Checks (Y/N): Newspaper Notice ✓ Well Table      Adequate Well Table     

Adequate Certified Notice: Surface Owner LAOR Owners ✓ CID/Potash/Others     

AOR Num Active Wells 0 Repairs?      Producing in Injection Interval     

AOR Number of P&A Wells 0 Diagrams Included?      Repairs Required?     

Data to Generate New AOR Table New Table Generated? (Y/N)

	STR	E-W Footages	N-S Footages
Wellsite			
Northeast			
North			
Northwest			
West			
Southwest			
South			
Southeast			
East			

Conditions of Approval:

1. Turn in LOGS
2.
3.

RBDMS Updated (Y/N) ✓

UIC Form Completed (Y/N) ✓

This Form completed 12/29/05

**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: (505)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.).

\*V111. 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: Mack C. Chase

TITLE: President

SIGNATURE: Mack C. Chase

DATE: 12/1/2005

\* if the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not be resubmitted.  
Please show the date and circumstances of the earlier submittal: \_\_\_\_\_

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

### III. WELL DATA

- A. The following well data must be submitted for each injection well covered by this application. The data must be both in tabular and schematic form and shall include:

- (1) Lease name; Well No.; Location by Section, Township and Range; and footage location within the section.
- (2) Each casing string used with its size, setting depth, sacks of cement used, hole size, top of cement, and how such top was determined.
- (3) A description of the tubing to be used including its size, lining material, and setting depth.
- (4) The name, model, and setting depth of the packer used or a description of any other seal system or assembly used.

Division District Offices have supplies of Well Data Sheets which may be used or which may be used as models for this purpose. Applicants for several identical wells may submit a "typical data sheet" rather than submitting the data for each well.

- B. The following must be submitted for each injection well covered by this application. All items must be addressed for the initial well. Responses for additional wells need be shown only when different. Information shown on schematics need not be repeated.

- (1) The name of the injection formation and, if applicable, the field or pool name.
- (2) The injection interval and whether it is perforated or open-hole.
- (3) State if the well was drilled for injection or, if not, the original purpose of the well.
- (4) Give the depths of any other perforated intervals and detail on the sacks of cement or bridge plugs used to seal off such perforations.
- (5) Give the depth to and the name of the next higher and next lower oil or gas zone in the area of the well, if any.

### XIV. PROOF OF NOTICE

All applicants must furnish proof that a copy of the application has been furnished, by certified or registered mail, to the owner of the surface of the land on which the well is to be located and to each leasehold operator within one-half mile of the well location.

Where an application is subject to administrative approval, a proof of publication must be submitted. Such proof shall consist of a copy of the legal advertisement which was published in the county in which the well is located. The contents of such advertisement must include:

- (1) The name, address, phone number, and contact party for the applicant;
- (2) The intended purpose of the injection well; with the exact location of single wells or the Section, Township, and Range location of multiple wells;
- (3) The formation name and depth with expected maximum injection rates and pressures; and,
- (4) A notation that interested parties must file objections or requests for hearing with the Oil Conservation Division, 1220 South St. Francis Dr., Santa Fe, New Mexico 87505, within 15 days.

NO ACTION WILL BE TAKEN ON THE APPLICATION UNTIL PROPER PROOF OF NOTICE HAS BEEN SUBMITTED.

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NOTICE: Surface owners or offset operators must file any objections or requests for hearing of administrative applications within 15 days from the date this application was mailed to them.

INJECTION WELL DATA SHEET

OPERATOR: Mack Energy Corporation

WELL NAME & NUMBER: Shark State #1

WELL LOCATION: 330 FNL & 990 FEL A UNIT LETTER 30 SECTION 16S TOWNSHIP 33E RANGE

WELL CONSTRUCTION DATA  
Surface Casing

WELLBORE SCHEMATIC

Hole Size: 17 1/2 Casing Size: 13 3/8 set @ 360'  
Cemented with: 448 sx. or ft  
Top of Cement: Surface Method Determined: Circulated

Intermediate Casing

Hole Size: 12 1/4 Casing Size: 8 5/8 set @ 2649'  
Cemented with: 1100 sx. or ft  
Top of Cement: Surface Method Determined: Circulated

Production Casing

Proposed Casing

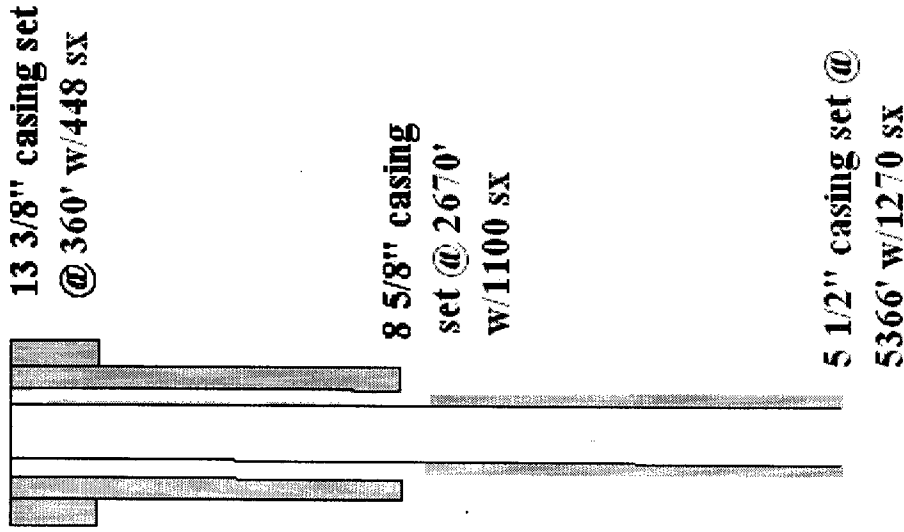
Hole Size: 7 7/8 Casing Size: 5 1/2 set @ 5366'  
Cemented with: 1270 sx. or ft  
Top of Cement: 2750 Method Determined: CBL

Total Depth: 5375'

Injection Interval

3902' feet to 4951.5'

(Perforated or Open Hole; indicate which)



Perfs from  
3902-3926'

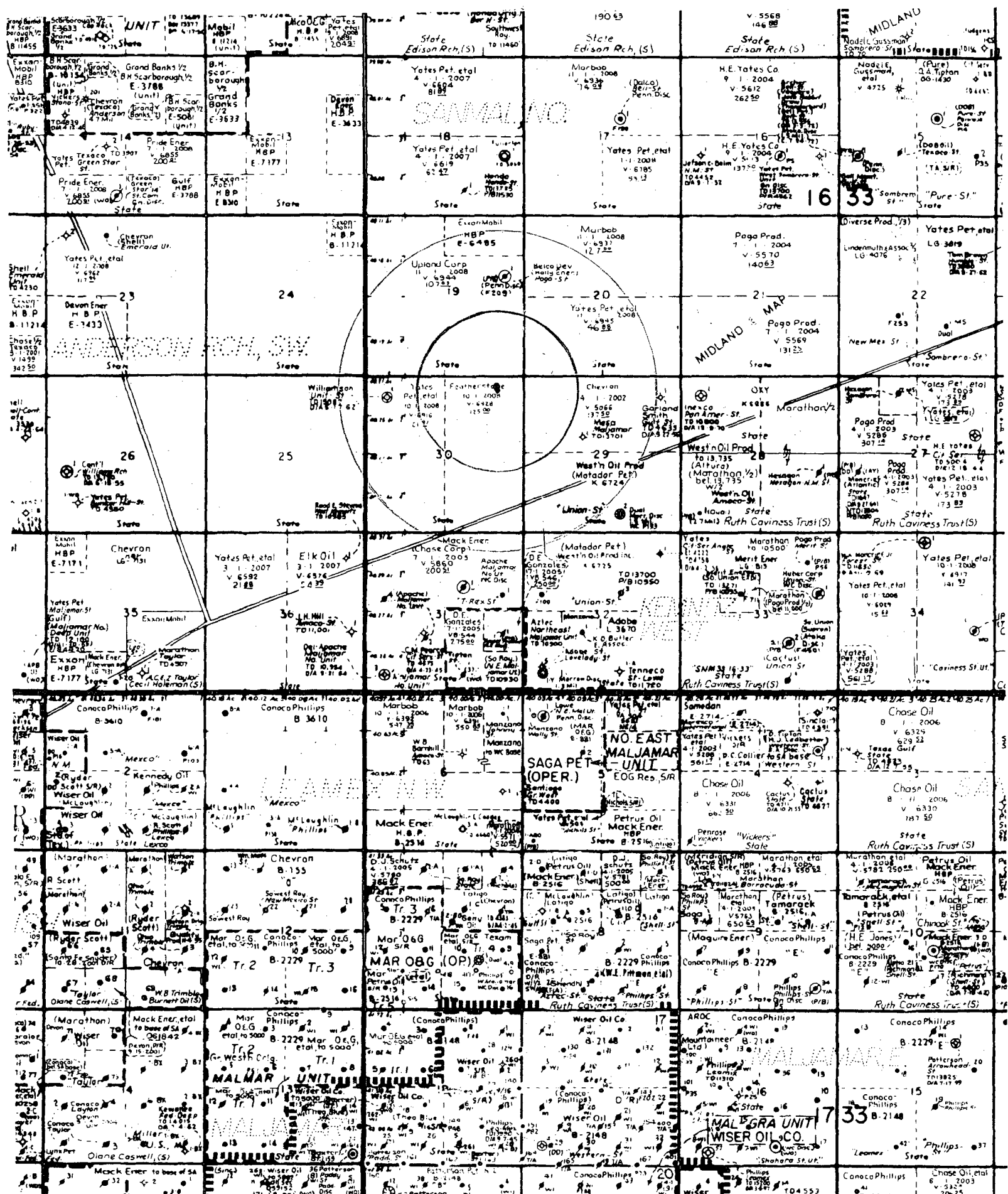
Perfs from  
4926.5-4951.5'

**INJECTION WELL DATA SHEET**Tubing Size: 2 7/8" Lining Material: Plastic CoatedType of Packer: Halliburton Trump PackerPacker Setting Depth: 3800'

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

**Additional Data**1. Is this a new well drilled for injection? ☐ Yes ☒ NoIf no, for what purpose was the well originally drilled? Queen/San Andres2. Name of the Injection Formation: Queen/San Andres3. Name of Field or Pool (if applicable): Hume Queen West/Wildcat San Andres4. 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. Queen Formation  
3902-3926', San Andres 4826.5-4951.5'.5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area: Overlying Seven Rivers Underlying Glorietta  
\_\_\_\_\_  
\_\_\_\_\_

[illegible][illegible]



## **VII. DATA SHEET: PROPOSED OPERATIONS**

1. Proposed average and maximum daily rate and volume of fluids to be injected;  
**Respectively, 2000 BWPD and 3000 BWPD**
2. The system is closed or open;  
**Closed**
3. Proposed average and maximum injection pressure;  
**100-360#**
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**

- | <b><u>Queen</u></b>               | <b><u>San Andres</u></b>               |
|-----------------------------------|--|
| 1. Lithologic Detail; <b>Sand</b> | 1. Lithologic Detail; <b>Carbonate</b> |
| 2. Geological Name; <b>Queen</b>  | 2. Geological Name; <b>San Andres</b>  |
| 3. Thickness; <b>24'</b>          | 3. Thickness; <b>125'</b>              |
| 4. Depth; <b>3902-3926'</b>       | 4. Depth; <b>4826.5-4951.5'</b>        |

## **IX. PROPOSED STIMULATION PROGRAM**

1. To be treated with 1000 gallons 15% acid

## **X. LOGS AND TEST DATA**

1. Well data has been filed with the OCD

## **XI. ANALYSIS OF FRESHWATER WELLS**

1. Attached

Additional Information  
Waters Injected Queen, Grayburg

## **XII. AFFIRMATIVE STATEMENT**

RE: Shark State #1 SWD

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: 12-1-2005

Mack C. Chase  
Mack C Chase, President



P.O. Box 960  
Artesia, NM 88211-0960  
Office (505) 748-1288  
Fax (505) 746-9539

December 1, 2005

John Norris  
HCR 70 Box 57B  
Lovington, NM 88260

Gentlemen:

*Enclosed for your review is a copy of Mack Energy Corporation's application for approval to complete the Shark State #1, Sec. 30 T16S R33E well as a produced water disposal well in the Queen and San Andres formation.*

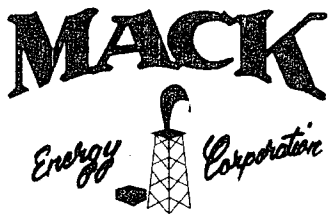
*This letter will serve as a notice that Mack Energy Corporation has requested administrative approval from the NMOCD to convert this well into a water disposal well. If you have any objections, you must notify the Oil Conservation Division in Santa Fe in writing within fifteen (15) days of receiving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

Sincerely,

MACK ENERGY CORPORATION

Jerry W. Sherrell  
Production Clerk

JWS\



P.O. Box 960  
Artesia, NM 88211-0960  
Office (505) 748-1288  
Fax (505) 746-9539

December 1, 2005

**VIA CERTIFIED MAIL 7004 2510 0004 3033 1997**  
**RETURN RECEIPT REQUESTED**

Charles Ray  
PO Box 51608  
Midland, TX 79710

Gentlemen:

Enclosed for your review is a copy of Mack Energy Corporation's application for approval to complete the Shark State #1, Sec. 30 T16S R33E well as a produced water disposal well in the Queen and San Andres formation.

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

Sincerely,

MACK ENERGY CORPORATION

Jerry W. Sherrell  
Production Clerk

JWS\



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Artesia, NM 88211-0960  
Office (505) 748-1288  
Fax (505) 746-9539

December 1, 2005

**VIA CERTIFIED MAIL 7004 2510 0004 3033 1980**  
**RETURN RECEIPT REQUESTED**

Chesapeake Energy Corporation  
PO Box 18496  
OKC, OK 73154-0496

Gentlemen:

*Enclosed for your review is a copy of Mack Energy Corporation's application for approval to complete the Shark State #1, Sec. 30 T16S R33E well as a produced water disposal well in the Queen and San Andres formation.*

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

Sincerely,

MACK ENERGY CORPORATION

Jerry W. Sherrell  
Production Clerk

JWS\



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Artesia, NM 88211-0960  
Office (505) 748-1288  
Fax (505) 746-9539

December 1, 2005

**VIA CERTIFIED MAIL 7004 2510 0004 3033 1942**  
**RETURN RECEIPT REQUESTED**

Featherstone Development Corporation  
1801 West Second Street  
Roswell, NM 88201

Gentlemen:

*Enclosed for your review is a copy of Mack Energy Corporation's application for approval to complete the Shark State #1, Sec. 30 T16S R33E well as a produced water disposal well in the Queen and San Andres formation.*

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

Sincerely,

MACK ENERGY CORPORATION

Jerry W. Sherrell  
Production Clerk

JWS\



P.O. Box 960  
Artesia, NM 88211-0960  
Office (505) 748-1288  
Fax (505) 746-9539

September 6, 2005

**VIA CERTIFIED MAIL 7004 2510 0004 3033 1959**  
**RETURN RECEIPT REQUESTED**

Patrick H. Lyons  
State of New Mexico  
Commissioner of Public Lands  
P.O. Box 1148  
Santa Fe, NM 87504-1148

Gentlemen:

Enclosed for your review is a copy of Mack Energy Corporation's application for approval to deepen and complete the Jack Rabbit SWD #1(Formerly Central EK Queen Unit #1), Sec. 9 T18S R34E well into a produced water disposal well in the SWD Delaware formation.

This letter will serve as a notice that Mack Energy Corporation has requested administrative approval from the NMOCD to convert this well into a water disposal well. If you have any objections, you must notify the Oil Conservation Division in Santa Fe in writing 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\



P.O. Box 960  
Artesia, NM 88211-0960  
Office (505) 748-1288  
Fax (505) 746-9539

December 1, 2005

**VIA CERTIFIED MAIL 7004 2510 0004 3033 1966**  
**RETURN RECEIPT REQUESTED**

Western Oil Producers  
PO Box 1498  
Roswell, NM 88202

Gentlemen:

*Enclosed for your review is a copy of Mack Energy Corporation's application for approval to complete the Shark State #1, Sec. 30 T16S R33E well as a produced water disposal well in the Queen and San Andres formation.*

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

Sincerely,

MACK ENERGY CORPORATION

Jerry W. Sherrell  
Production Clerk

JWS\



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Artesia, NM 88211-0960  
Office (505) 748-1288  
Fax (505) 746-9539

December 1, 2005

**VIA CERTIFIED MAIL 7004 2510 0004 3033 1973**  
**RETURN RECEIPT REQUESTED**

Yates Petroleum Corporation  
105 South Fourth Street  
Artesia, NM 88210

Gentlemen:

*Enclosed for your review is a copy of Mack Energy Corporation's application for approval to complete the Shark State #1, Sec. 30 T16S R33E well as a produced water disposal well in the Queen and San Andres formation.*

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

Sincerely,

MACK ENERGY CORPORATION

Jerry W. Sherrell  
Production Clerk

JWS\

# TRANSACTION REPORT

P. 01

DEC-01-2005 THU 12:43 PM

FOR: mack energy

15057469539

SEND

DATE	START	RECEIVER	TX TIME	PAGES	TYPE	NOTE	M#	DP
DEC-01	12:42 PM	915053970610	24"	2	FAX TX	OK	544	

TOTAL : 24S PAGES: 2

P.O. Box 960 Artesia NM 88211-0960 (505)748-1288 Fax (505)746-9539

**Mack Energy  
Corporation**

# Fax

To: Hobbs News Sun/Attn: Bridgette

From: Jerry W. Sherrell

Fax: 505-397-0610

Pages: 2

Phone:

Date: 12/1/2005

Re: Shark State Legal Notice

CC:

☐ Urgent    ☒ For Review    ☐ Please Comment    ☐ Please Reply    ☐ Please Recycle

• **Comments:** Bridgette, attached is a Legal Notice that I would like to have published. Would you please call Mack Energy Corporation (505)748-1288 and ask for Sylvia, when you have a price figured for this ad. If you have any questions give me a call at 505-748-1288.

Thanks

Legal Notice

Mack Energy Corporation, has filed an Application with the New Mexico Oil Conservation Division seeking authorization to inject produced salt water in the Shark State #1, Section 30, Township 16 South, Range 33 East, NMPM, Lea County, New Mexico. The water will be injected into the Queen and San Andres formation at a disposal depth of 3902-4951.5'. Water will be injected at a maximum surface pressure of 300 pounds and a maximum injection rate of 3000 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 (505) 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. Published in the Hobbs News Sun, Hobbs, New Mexico.