

DATE IN <u>8/10/12</u>	SUSPENSE	ENGINEER <u>W Jones</u>	LOGGED IN <u>8/13/12</u>	TYPE <u>SWD</u>	APP NO. <u>PKVR/222629819</u>
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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



RECEIVED OGD

2012 AUG 10 P 12:41

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]

*Mack Energy Corp
Shetland SWD#1*

- [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.

Jerry W. Sherrell
Print or Type Name

Jerry W. Sherrell
Signature

Production Clerk
Title

8/9/12
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: (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.).

*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: Jerry W. Sherrell

DATE: 8/8/12

* 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 CorporationWELL NAME & NUMBER: Shetland SWD #1

WELL LOCATION: <u>1980 FSL & 1980 FWL</u>	<u>K</u>	<u>18</u>	<u>18S</u>	<u>35E</u>
FOOTAGE LOCATION	UNIT LETTER	SECTION	TOWNSHIP	RANGE

WELLBORE SCHEMATICWELL CONSTRUCTION DATASurface Casing

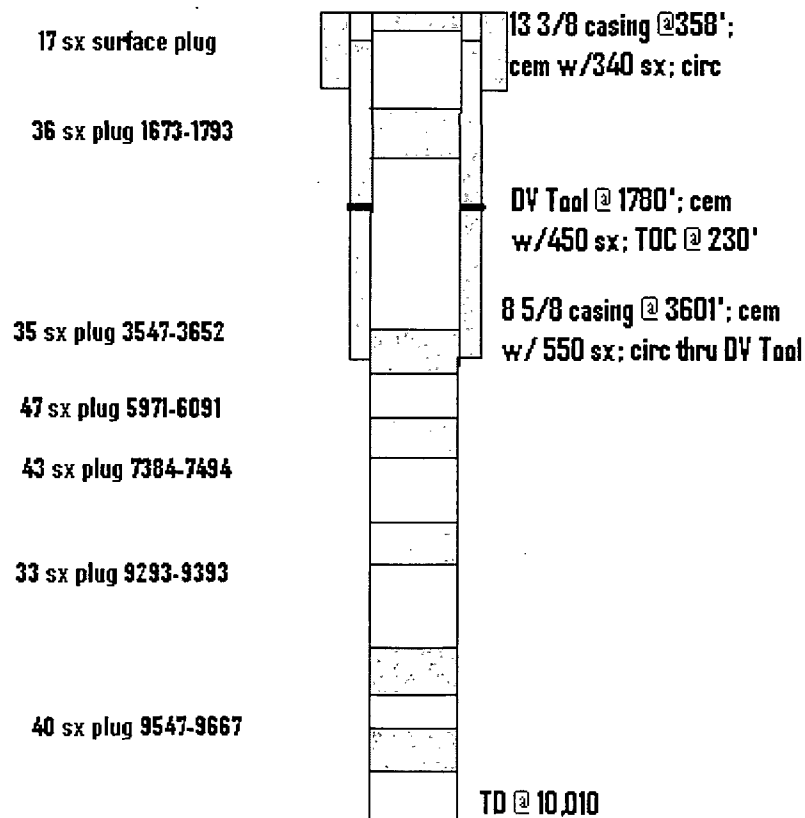
Shetland SWD #1

30-025-25991

Sec 18-T18S-R35E

Hole Size: 17 1/2 Casing Size: 13 3/8 @ 358'Cemented with: 340 sx. or _____ ftTop of Cement: Surface Method Determined: CirculatedIntermediate CasingHole Size: 11 Casing Size: 8 5/8 @ 3601'Cemented with: 1000 sx. or _____ ftTop of Cement: 230' Method Determined: temp surveyProduction CasingHole Size: 7 7/8 Casing Size: NoneCemented with: N/A sx. or _____ ftTop of Cement: 0' P & A'd Method Determined: _____Total Depth: 10,010'Injection Interval9700 feet to 11,050' perforated

(Perforated or Open Hole; indicate which)



INJECTION WELL DATA SHEETTubing Size: 2 7/8" Lining Material: Plastic CoatedType of Packer: Halliburton Trump PackerPacker Setting Depth: 9650'

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

Additional Data

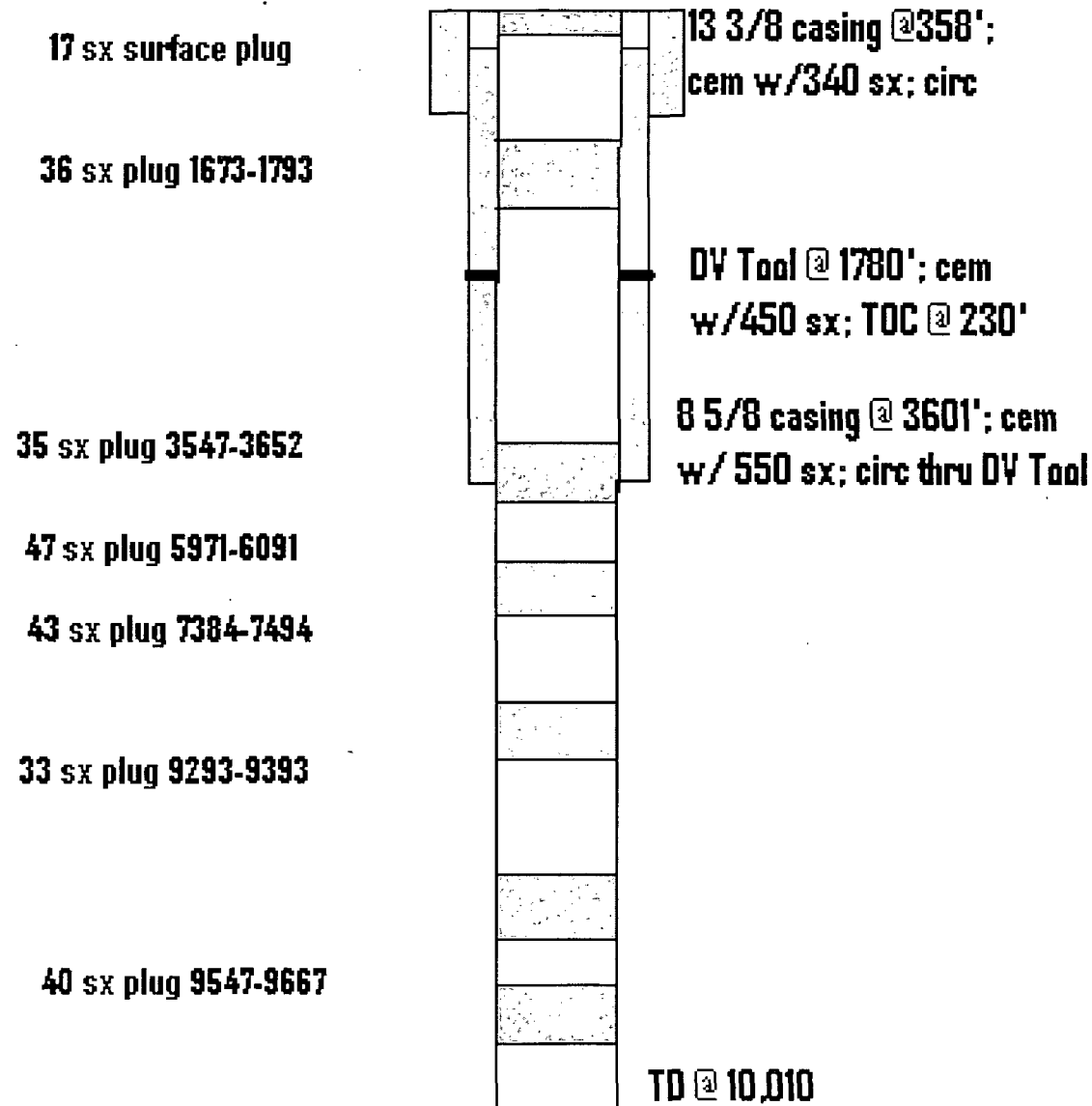
1. Is this a new well drilled for injection? ☐ Yes ☒ No

If no, for what purpose was the well originally drilled? Abo2. Name of the Injection Formation: Wolfcamp3. Name of Field or Pool (if applicable): SWD; Wolfcamp4. 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. N/A5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area: Overlying-Bone Spring, Underlying-Pennsylvanian

Shetland SWD #1

30-025-25991

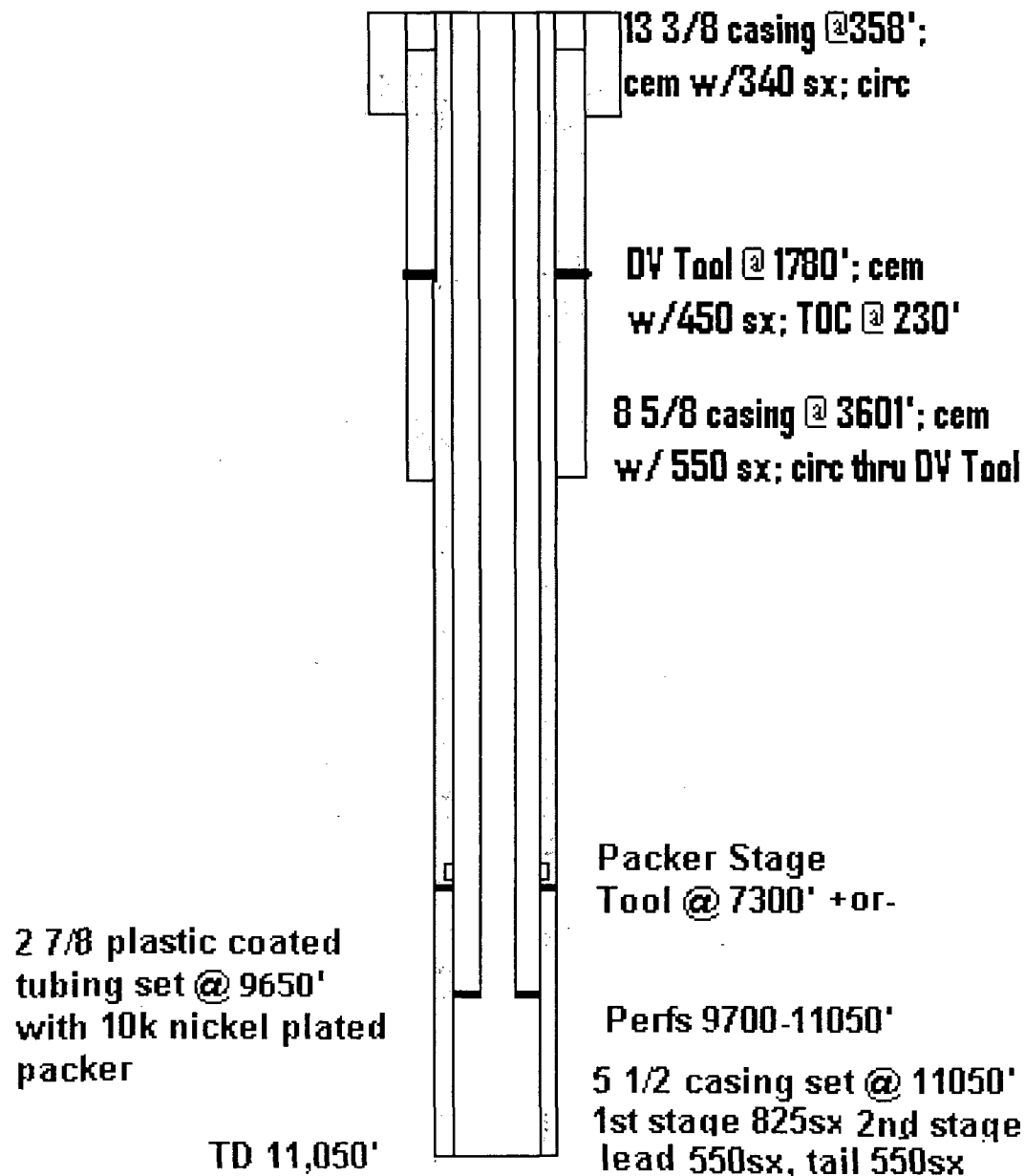
Sec 18-T18S-R35E



Shetland SWD #1

30-025-25991

Sec 18-T18S-R35E



District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 South First, Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
EnerRy, Minerals & Natural Resources

Form C-102
Revised March 17, 1999

OIL CONSERVATION DIVISION
2040 South Pacheco
Santa Fe, NM 87505

Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-025-25991		Pool Code 96135		Pool Name SWD;Wolfcamp	
Property Code		Property Name Shetland SWD			Well Number 1
OGRID No. 013837		Operator Name Mack Energy Corporation			Elevation 3964

Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
K	18	18S	35E		1980	South	1980	West	Lea

" Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

" Dedicated Acres 40	" joint or Infill	" Consolidation Code	" Order No.
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NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL XL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

16					OPERATOR CERTIFICATION <i>I hereby certify that the information herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</i>	
					Signature <i>Jerry W. Sherrell</i> Printed Name Jerry W. Sherrell	
					Title Production Clerk	
					Date 3/14/08	
1980'					"SURVEYOR CERTIFICATION <i>I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.</i>	
					Date of Survey	
					Signature and Seal of Professional Surveyor.	
					Certificate Number	



NEW MEXICO STATE LAND OFFICE
Rights of Way and Water Resources Bureau
APPLICATION FOR SALT WATER DISPOSAL EASEMENT

New / Renewal (SWD-____)

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

Dear Commissioner:

Applicant: Mack Energy Corporation
Address: PO Box 960 Artesia, NM 88211-0960
Contact: Jerry W. Sherrell

hereby applies for a salt water disposal easement.

Ownership status: Private _____ % State 100 % Federal _____ %

Ownership of Produced Water: 100 %

Approximate # of barrels injected 4000 Formation Wolfcamp

Name of well(s) produced water is to be injected Shetland SWD #1

OCD Order # Pending

Also, enclosed is the legal description of the proposed salt water disposal easement allocated by 40-acre tracts and a computation of the number of acres included in the proposed salt water disposal (OCD Form C- 102).

One of the following is enclosed to cover payment for damages that might occur to the state land improvements of a surface lessee:

☐ A bond in the amount of \$10,000.00 for a single Salt Water Disposal. Bond # _____

☐ A megabond in the amount of \$25,000.00. Bond# B004848

☐ Sufficient bonding requirements have been met. Single / Megabond Bond# _____

Enclosed is a check in the amount of \$ 90.00 for _____ acres at \$ _____ per acre, plus \$60.00 (\$50.00 Renewals) application fee and \$30.00 appraisal fee. (If applicable)

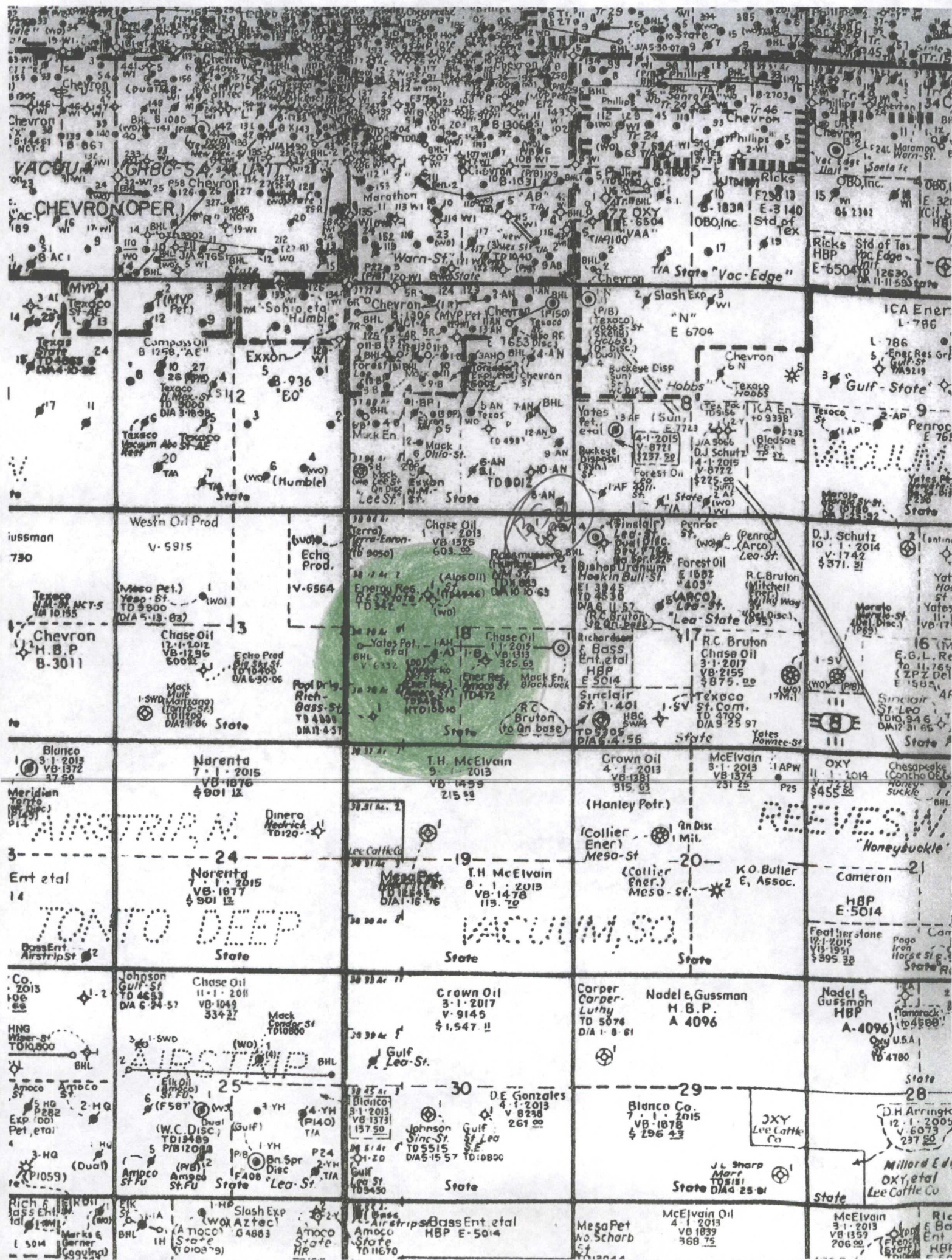
The approximate dates for construction of facilities on the Salt Water Disposal are from
When approved _____ to _____

Applicant covenants and agree to abide by all laws and regulations of the Land Office and to hold harmless, indemnify, and defend the Commissioner, his agents and lessees, in their official and individual capacities of and from any and all liability, claims, losses, or damages arising out of or alleged to arise out of or indirectly connected with operations under any grant made by the Commissioner.

Applicant

By: Jerry W. Sherrell

Title: Production Clerk



AREA OF REVIEW WELL DATA

[illegible]

AREA OF REVIEW WELL DATA

LEASE/API	WELL#	LOCATION	ID (PBTB)	TYPE & DATE DRILLED	HOLE SIZE	CASING SIZE & WEIGHT	SETTING DEPTH	SX CMT	TOC	PERFS
Shetland SWD 30-025-25991	1	1980' FSL 1980' FWL 18-18S-35E	10,010' CIBP @ 0'	Oil 6/29/1978	17 11 7 7/8	13 3/8, 48 8 5/8, 32 / DV Tool NA	358 3601 NA	340 1000 NA	Circ 230' NA	Plugged
Pre Oguard 30-025-03122	1	660' FSL 632' FWL 18-18S-35E	5100' 0' P&A	Oil 11/30/1957	12 1/4 7 7/8	8 5/8, 29	334	250	N/A	None
Pre Oguard 30-025-25992	1	1980' FSL 1980' FEL 18-18S-35E	472' 0' P&A	Oil 8/21/1978	17 1/2	8 5/8, 32	341-Pulled	None	N/A	None
Pre Oguard 30-025-26047	1	1980' FNL 1980' FWL 18-18S-35E	342' 0' P&A	Oil 8/21/1978	17 1/2	8 5/8, 32	236-Pulled	None	N/A	None
State 18 30- 025-03122	1	1915' FNL 1915' FWL 18-18S-35E	4950' 0' P&A	Oil 3/30/1983	12 1/4 7 7/8	8 5/8, 24 5 1/2, 17	1761' 4938'-Pulled 2000'	955 300	Circ 3190'	4664-4738

Received 9/28/12

VII. DATA SHEET: PROPOSED OPERATIONS

1. Proposed average and maximum daily rate and volume of fluids to be injected;
Respectively, 2000 BWPD and 4000 BWPD
2. The system is closed or open;
Closed
3. Proposed average and maximum injection pressure;
0-1940#
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

Wolfcamp

1. Lithologic Detail; **Carbonate**
2. Geological Name; **Wolfcamp**
3. Thickness; **1350'**
4. Depth; **9700-11050'**

IX. PROPOSED STIMULATION PROGRAM

1. To be treated with 10000 gallons 15% acid

X. LOGS AND TEST DATA

1. Well data has been previously filed with the OCD, new data will be filed with OCD.

XI. ANALYSIS OF FRESHWATER WELLS

1. Attached

Additional Information

Waters Injected: Bone Spring, Abo, Blinbry, Yeso, Drinkard and San Andres

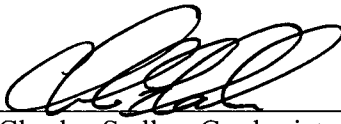
XII. AFFIRMATIVE STATEMENT

RE: Shetland 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: 8/9/12



Charles Sadler, Geologist

(Hanley
Collier
Ener)
Mesa-S

E/2NE/4 Sec. 13 T18S R34E

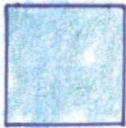


The Allar Company PO Box 1567 Graham, TX 76450

Echo Production Inc. PO Box 1210 Graham, TX 76450

W.O. "Buck" Dollar 710 Austin Road Graham, TX 76450

Floyd H. Joyer 1328 Corvadura Graham, TX 76450



E/2SE/4 Sec. 13 T18S R34E

Chase Oil



All Sec. 18 T18S R35E

Chase Oil



N/2N/2 Sec. 19 T18S R35E

McElvain Energy, Inc. 1050 17th Street, Ste 2500 Denver, CO 80265

Devon Energy Production Company L.P. 20 N. Broadway OKC, OK 73102

Jerry Sherrell

From: Ron Lanning
Sent: Wednesday, March 12, 2008 10:30 AM
To: Jerry Sherrell
Cc: Charles Sadler; Matt Brewer; Chris Lanning
Subject: Shetland SWD

E/2NE/4 13-18-34: Echo Production Inc., PO Box 1210, Graham, TX 76450 *ok ✓*
E/2SE/4 13-18-34, All 18-18-35: Chase Oil Corporation *ok*
N/2N/2 19-18-35: State of New Mexico (unleased), PO Box 1148, Santa Fe, NM *ok ✓*
87504

Surface: State of New Mexico *ok*
Grazing Lessee: Lee Cattle Company Limited Partnership *ok ✓*
HC 60, Box 465
Lovington, NM 88260

Ronald W. Lanning
Land Manager
Mack Energy Corporation
Chase Oil Corporation
Chase Farms LLC
575-748-1288 office
575-748-7374 fax
575-746-7608 cell

4/25/2008



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

August 9, 2012

VIA CERTIFIED MAIL 7010 2780 0002 5883 2148
RETURN RECEIPT REQUESTED

Devon Energy Production Company
20 North Broadway
Oklahoma City, OK 73102

Gentlemen:

Enclosed for your review, is a copy of Mack Energy Corporation's application for a Wolfcamp SWD well. Produced water will be injected at a proposed depth of 9700-11,050'. The Shetland SWD #1 located 1980 FSL & 1980 FWL, Sec. 18 T18S R35E, Lea County.

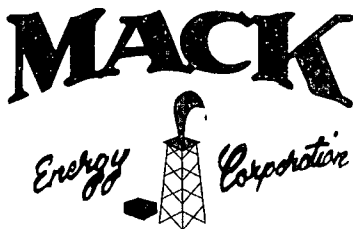
This letter will serve as a notice that Mack Energy Corporation has requested administrative approval from the NMOCD to convert this well into a water disposal well. If you have any objections, you must notify the Oil Conservation Division in Santa Fe in writing at 1220 South St. Francis Drive, Santa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

Sincerely,

MACK ENERGY CORPORATION

Jerry W. Sherrell
Production Clerk

JWS\



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

August 9, 2012

VIA CERTIFIED MAIL 7011 1150 0001 4477 0360
RETURN RECEIPT REQUESTED

Echo Production Inc.
PO Box 1210
Graham, TX 76450

Gentlemen:

Enclosed for your review, is a copy of Mack Energy Corporation's application for a Wolfcamp SWD well. Produced water will be injected at a proposed depth of 9700-11,050'. The Shetland SWD #1 located 1980 FSL & 1980 FWL, Sec. 18 T18S R35E, 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\



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

August 9, 2012

VIA CERTIFIED MAIL 7006 0100 0002 8524 8748
RETURN RECEIPT REQUESTED

Floyd H. Joyer
1328 Corvadura
Graham, TX 76450

Gentlemen:

Enclosed for your review, is a copy of Mack Energy Corporation's application for a Wolfcamp SWD well. Produced water will be injected at a proposed depth of 9700-11,050'. The Shetland SWD #1 located 1980 FSL & 1980 FWL, Sec. 18 T18S R35E, Lea County.

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Sincerely,

MACK ENERGY CORPORATION

Jerry W. Sherrell
Production Clerk

JWS\



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

August 9, 2012

VIA CERTIFIED MAIL 7011 1150 0001 4477 0353
RETURN RECEIPT REQUESTED

Lee Cattle Co.
176 Lee Ranch Road
Lovington, NM 88260
Attn.: Bill Lee

Gentlemen:

Enclosed for your review, is a copy of Mack Energy Corporation's application for a Wolfcamp SWD well. Produced water will be injected at a proposed depth of 9700-11,050'. The Shetland SWD #1 located 1980 FSL & 1980 FWL, Sec. 18 T18S R35E, Lea County.

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Sincerely,

MACK ENERGY CORPORATION

Jerry W. Sherrell
Production Clerk

JWS\dw



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

August 9, 2012

VIA CERTIFIED MAIL 7010 2780 0002 5883 2124
RETURN RECEIPT REQUESTED

McElvain Energy Inc.
1050 17th Street, Ste. 2500
Denver, CO 80265

Gentlemen:

Enclosed for your review, is a copy of Mack Energy Corporation's application for a Wolfcamp SWD well. Produced water will be injected at a proposed depth of 9700-11,050'. The Shetland SWD #1 located 1980 FSL & 1980 FWL, Sec. 18 T18S R35E, Lea County.

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Sincerely,

MACK ENERGY CORPORATION

A handwritten signature in black ink that reads "Jerry W. Sherrell".

Jerry W. Sherrell
Production Clerk

JWS\



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

August 9, 2012

VIA CERTIFIED MAIL 7006 0100 0002 8524 8762
RETURN RECEIPT REQUESTED

The Allar Company
PO Box 1567
Graham, TX 76450

Gentlemen:

Enclosed for your review, is a copy of Mack Energy Corporation's application for a Wolfcamp SWD well. Produced water will be injected at a proposed depth of 9700-11,050'. The Shetland SWD #1 located 1980 FSL & 1980 FWL, Sec. 18 T18S R35E, Lea County.

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Sincerely,

MACK ENERGY CORPORATION

Jerry W. Sherrell
Production Clerk

JWS\



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

August 9, 2012

VIA CERTIFIED MAIL 7006 0100 0002 8524 8755
RETURN RECEIPT REQUESTED

W.O. "Buck" Dollar
710 Austin Road
Graham, TX 76450

Gentlemen:

Enclosed for your review, is a copy of Mack Energy Corporation's application for a Wolfcamp SWD well. Produced water will be injected at a proposed depth of 9700-11,050'. The Shetland SWD #1 located 1980 FSL & 1980 FWL, Sec. 18 T18S R35E, Lea County.

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Sincerely,

MACK ENERGY CORPORATION

Jerry W. Sherrell
Production Clerk

JWS\

Legal Notice
August 11, 2012

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 Shetland SWD #1 NE/4 of the SW/4 of Section 18 T18S R35E, NMPM, Lea County, New Mexico. The water will be injected into the Wolfcamp formation at a disposal depth of 9700 feet to 11,050 feet. Water will be injected at a maximum surface pressure of 1984 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.

#27517

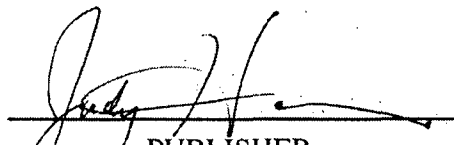
Affidavit of Publication

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

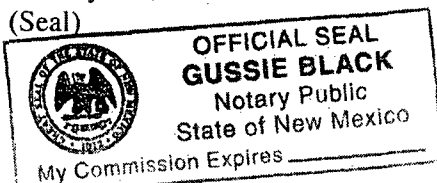
of 1 issue(s).
Beginning with the issue dated
August 11, 2012
and ending with the issue dated
August 11, 2012


PUBLISHER
Sworn and subscribed to before me
this 13th day of
August, 2012

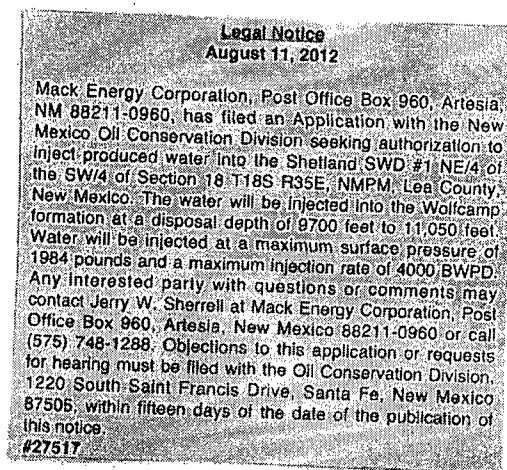


Notary Public

My commission expires
January 29, 2015
(Seal)

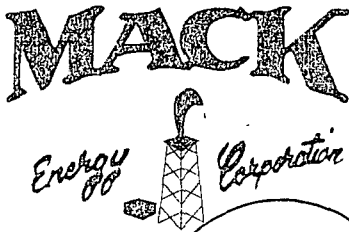


This newspaper is duly qualified to
publish legal notices or
advertisements within the meaning of
Section 3, Chapter 167, Laws of
1937 and payment of fees for said
publication has been made.



67100900 00098437
ATTN: SHAWN
MACK ENERGY CORPORATION
PO BOX 960
ARTESIA,, NM 88211-0960





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

March 14, 2008

VIA CERTIFIED MAIL 7006 0100 0002 8524 6287
RETURN RECEIPT REQUESTED

State of New Mexico
PO Box 1148
Santa Fe, NM 87504

Gentlemen:

Enclosed for your review, is a copy of Mack Energy Corporation's application for a Wolfcamp SWD well. Produced water will be injected at a proposed depth of 9700-11,050'. The Shetland SWD #1 located 1980 FSL & 1980 FWL, Sec. 18 T18S R35E, Lea County.

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 at PO Box 1148, Santa Fe, NM 87504 within fifteen (15) days of receiving this letter.

Sincerely,

MACK ENERGY CORPORATION

Jerry W. Sherrell
Production Clerk

JWS\dw



Water Analysis Report

Company:	Mack Energy Corporation	Sample #:	9502
Area:	Artesia	Analysis ID #:	738
Lease:	B LEE		
Location:	1		0
Sample Point:	Wellhead		

BLUEBRY

Sampling Date:	2/13/08	Anions	mg/l	meq/l	Cations	mg/l	meq/l
Analysis Date:	2/14/08	Chloride:	95304.7	2688.2	Sodium:	56877.4	2474.03
Analyst:	Mitchell Labs	Bicarbonate:	183.3	3.	Magnesium:	1137.0	93.53
TDS (mg/l or g/m3):	158957	Carbonate:			Calcium:	3362.7	167.3
Density (g/cm3):	1.111	Sulfate:	2100.0	43.72	Strontium:		
					Barium:		
Hydrogen Sulfide:	82				Iron:	1.5	0.05
Carbon Dioxide:	22				Manganese:	0.350	0.01
Comments:		pH at time of sampling:		7			
		pH at time of analysis:					
		pH used in Calculation:		7			
		Temperature @ lab conditions (F):		75	Conductivity (micro-ohms/cm):		198200
					Resistivity (ohm meter):		.0505

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

Temp	Calcite CaCO ₃		Gypsum CaSO ₄ ·2H ₂ O		Anhydrite CaSO ₄		Celestite SrSO ₄		Barite BaSO ₄	
	Index	Amount	Index	Amount	Index	Amount	Index	Amount	Index	Amount
80	0.50	7.81	-0.18	0.00	-0.18	0.00	0.00	0.00	0.00	0.00
100	0.55	9.61	-0.25	0.00	-0.18	0.00	0.00	0.00	0.00	0.00
120	0.59	11.41	-0.31	0.00	-0.16	0.00	0.00	0.00	0.00	0.00
140	0.62	13.52	-0.36	0.00	-0.11	0.00	0.00	0.00	0.00	0.00

Mack Energy Corporation
Shetland SWD #1

amended
from
2008

1. I have attached the affidavit of legal notice. Copies of all parties with interest. Letter was sent to the State Land office because the minerals were unleased.
2. Water analysis of Blinbry attached. Yes water will be taken from Mack Energy leases in the area.
3. The Fresh water analysis will be sent ASAP. Depth to groundwater is 85'.
4. Attached "AFTER" wellbore diagram.
5. Top of Pennsylvanian is 11,225'.
6. Producing pools in this area are Blinbry, Grayburg, Abo and Devonian.

(not WOLF CAMP)

Jones, William V., EMNRD

From: Jones, William V., EMNRD
Sent: Tuesday, April 22, 2008 8:54 AM
To: 'Jerry Sherrell'
Cc: Ezeanyim, Richard, EMNRD; Warnell, Terry G, EMNRD
Subject: SWD application on behalf of Mack Energy Corp: Shetland SWD #1 (formerly Amoco "A" State #1 and NM "AH" State #1) (API No. 30-025-25991) Proposed Wolfcamp injection

Hello again Mr. Jerry:

After reviewing this application, I have the following questions:

- 1) Send a copy of the notice as published in the newspaper.
 The notices sent to the three parties have the State Land Office address in them - you should send corrected letters to them, don't have to send them certified. Who controls the minerals in the N/2 N/2 of Section 19? Please let me know who and if they were notified.
- 2) Send a listing of all types of waters (the source Pools) to be disposed into this well and water analysis of each of these. Will you confirm that this well be taking water from "off-lease"? I assume it will from your application.
- 3) Your app said a fresh water analysis was included, but I can't find it. Send a fresh water analysis from the nearest water well (windmill, etc) to this location.
 How deep is the fresh water in this area? 85'
- 4) Send an "AFTER" wellbore diagram showing the planned casing/cement/DV tool and tubing/packer as it will look like after Mack re-enters the well.
- 5) Ask your geologist to pick the top of the Pennsylvanian.
- 6) What Pools are producing in this area or the nearest Pools?

Inactive wells and financial assurance looks OK as of today.

Let me know your schedule on obtaining this requested info.

Thank You,

William V. Jones PE
 New Mexico Oil Conservation Division
 1220 South St. Francis
 Santa Fe, NM 87505
 505-476-3448

Cancel 4/22/08

4/22/2008



Water Analysis Report

Company:	Mack Energy Corporation	Sample #:	9503
Area:	Artesia	Analysis ID #:	739
Lease:	B LEE		
Location:	7		0
Sample Point:	Wellhead		

BLUEBRY

		Anions	mg/l	meq/l	Cations	mg/l	meq/l
Sampling Date:	2/13/08	Chloride:	102813.0	2899.98	Sodium:	61580.1	2678.58
Analysis Date:	2/14/08	Bicarbonate:	537.7	8.81	Magnesium:	595.4	48.98
Analyst:	Mitchell Labs	Carbonate:			Calcium:	4381.8	218.66
TDS (mg/l or g/m3):	171709.5	Sulfate:	1800.0	37.48	Strontium:		
Density (g/cm3):	1.119				Barium:		
					Iron:	1.0	0.04
Hydrogen Sulfide:	61				Manganese:	0.510	0.02
Carbon Dioxide:	42						
Comments:		pH at time of sampling:		7			
		pH at time of analysis:					
		pH used in Calculation:		7			
		Temperature @ lab conditions (F):		75	Conductivity (micro-ohms/cm):		208100
					Resistivity (ohm meter):		.0481

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

Temp	Calcite CaCO ₃		Gypsum CaSO ₄ ·2H ₂ O		Anhydrite CaSO ₄		Celestite SrSO ₄		Barite BaSO ₄	
	Index	Amount	Index	Amount	Index	Amount	Index	Amount	Index	Amount
80	1.10	56.97	-0.15	0.00	-0.14	0.00	0.00	0.00	0.00	0.00
100	1.14	62.31	-0.22	0.00	-0.14	0.00	0.00	0.00	0.00	0.00
120	1.16	67.65	-0.29	0.00	-0.13	0.00	0.00	0.00	0.00	0.00
140	1.19	73.59	-0.34	0.00	-0.09	0.00	0.00	0.00	0.00	0.00



Fresh water
well within
1 mile of the
Shetland SWD#1

Water Analysis Report

Company:	Mack Energy Corporation	Sample #:	10132
Area:	Artesia	Analysis ID #:	920
Lease:	National Well		
Location:	1 FW		0
Sample Point:	Wellhead		

		Anions		Cations	
		mg/l	meq/l	mg/l	meq/l
Sampling Date:	4/29/08	Chloride:	167.2	Sodium:	65.6
Analysis Date:	5/2/08	Bicarbonate:	146.6	Magnesium:	19.7
Analyst:	Mitchell	Carbonate:		Calcium:	65.1
TDS (mg/l or g/m3):	493.2	Sulfate:	29.0	Strontium:	
Density (g/cm3):	1			Barium:	
Hydrogen Sulfide:				Iron:	
Carbon Dioxide:				Manganese:	
Comments:		pH at time of sampling:	7		
		pH at time of analysis:			
		pH used in Calculation:	7		
		Temperature @ lab conditions (F):	75	Conductivity (micro-ohms/cm):	704
				Resistivity (ohm meter):	14.2045

Values Calculated at the Given Conditions - Amounts of Scale in lb/1000 bbl										
Temp	Calcite CaCO ₃		Gypsum CaSO ₄ ·2H ₂ O		Anhydrite CaSO ₄		Celestite SrSO ₄		Barite BaSO ₄	
°F	Index	Amount	Index	Amount	Index	Amount	Index	Amount	Index	Amount
80	-0.50	0.00	-2.16	0.00	-2.23	0.00	0.00	0.00	0.00	0.00
100	-0.38	0.00	-2.16	0.00	-2.16	0.00	0.00	0.00	0.00	0.00
120	-0.21	0.00	-2.14	0.00	-2.07	0.00	0.00	0.00	0.00	0.00
140	-0.04	0.00	-2.11	0.00	-1.95	0.00	0.00	0.00	0.00	0.00



Fresh water
well within
1 mile of the
Shetland SWD*

Water Analysis Report

Company:	Mack Energy Corporation	Sample #:	10132
Area:	Artesia	Analysis ID #:	920
Lease:	National Well		
Location:	1 FW		0
Sample Point:	Wellhead		

		Anions		mg/l		meq/l		Cations		mg/l		meq/l	
Sampling Date:	4/29/08	Chloride:		167.2		4.72		Sodium:		65.6		2.85	
Analysis Date:	5/2/08	Bicarbonate:		146.6		2.4		Magnesium:		19.7		1.62	
Analyst:	Mitchell	Carbonate:						Calcium:		65.1		3.25	
TDS (mg/l or g/m3):	493.2	Sulfate:		29.0		0.6		Strontium:					
Density (g/cm3):	1							Barium:					
								Iron:					
Hydrogen Sulfide:								Manganese:					
Carbon Dioxide:													
Comments:		pH at time of sampling:				7							
		pH at time of analysis:											
		pH used in Calculation:				7							
		Temperature @ lab conditions (F):				75		Conductivity (micro-ohms/cm):		704			
								Resistivity (ohm meter):		14.2045			

Values Calculated at the Given Conditions - Amounts of Scale in lb/1000 bbl											
Temp	Calcite CaCO ₃		Gypsum CaSO ₄ *2H ₂ O		Anhydrite CaSO ₄		Celestite SrSO ₄		Barite BaSO ₄		
°F	Index	Amount	Index	Amount	Index	Amount	Index	Amount	Index	Amount	
80	-0.50	0.00	-2.16	0.00	-2.23	0.00	0.00	0.00	0.00	0.00	
100	-0.36	0.00	-2.16	0.00	-2.16	0.00	0.00	0.00	0.00	0.00	
120	-0.21	0.00	-2.14	0.00	-2.07	0.00	0.00	0.00	0.00	0.00	
140	-0.04	0.00	-2.11	0.00	-1.95	0.00	0.00	0.00	0.00	0.00	

Jones, William V., EMNRD

From: Jones, William V., EMNRD
Sent: Tuesday, August 28, 2012 9:39 AM
To: Jerry Sherrell
Cc: Gonzales, Elidio L, EMNRD; Kautz, Paul, EMNRD
Subject: Disposal application from Mack Energy Corp: Shetland SWD #1 30-025-25991
Wolfcamp perms 9700 to 11050 feet
Attachments: EddyNM_NASH_53_SWD.pdf

Hello Jerry,
Looks like permit SWD-1125 expired and you want to re-permit?

✓ You sent several notices. Would you again send me a list of "who owns what" lands around this well? I am attaching to this email an example of one way to show this. I did find an old document from Ron Lanning in the old permit file, but don't know if it is up to date ... you could print it out from our web site and show it to Ron again and get him to sign and date verifying it is correct?

✓ I see no notice to the SLO, yet the old application says they are the surface owner and mineral owner in this area. Please send proof of notice to the SLO.

✓ Would you please send a simple list of all wells (even shallow wells) in the Area of Review and the maximum total vertical depth of each of these wells? What this does is establish a record of these wells no matter what depth and shows you have looked up the total depths. It appears you guys are going after the Bone Spring in this area with proposed wells.

? If you can find a Wolfcamp water analysis – please send. Even if it is for WC several miles away.

I saw that Anadarko ran a DST over the upper Wolfcamp when they reentered this well in 1989. What sort of logging program will Mack have for this well? ✓

Thanks in advance for the info.

William V. Jones, P.E.
505-476-3448W 505-476-3462F
Engineering Bureau, Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Injection Permit Checklist (11/15/2010)

WFX _____ PMX _____ SWD 125-A Permit Date 9/28/12 UIC Qtr (J A S)

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

API Num: 30-025-25991 Spud Date: 6/29/78 New/Old: 0 (UIC primacy March 7, 1982)

Footages 1980 FSL/1980 FWL Unit K Sec 18 Tsp 18S Rge 35E County LEA

General Location: 1 mi SOUTH of VGSAL

Operator: MAK Energy CORPORATION Contact Jerry W. Sherrill

OGRID: 013837 RULE 5.9 Compliance (Wells) 3/393 (Finan Assur) OK IS 5.9 OK? OK

Well File Reviewed _____ Current Status: PEA

Planned Work to Well: ReEntry, Deepen, Run 5 1/2"

Diagrams: Before Conversion ☒ After Conversion ☒ Elogs in Imaging File: ☒ need deeper logs - ?

Well Details:		Sizes	Setting	Stage	Cement	Cement Top and
		Hole.....Pipe	Depths	Tool	Sx or Cf	Determination Method
New <input type="checkbox"/> Existing <input checked="" type="checkbox"/>	Surface	17 1/2 13 3/8	358'		340 SX	CIRC
New <input type="checkbox"/> Existing <input checked="" type="checkbox"/>	Interm	11 8 5/8	360'	1780'	1000 SX	CIRC 30' T.S.
New <input checked="" type="checkbox"/> Existing <input type="checkbox"/>	LongSt	7 7/8 5 1/2"	11,050 TD	7300'	825/550+550	CIRC/CIRC (PLAN)
New <input type="checkbox"/> Existing <input type="checkbox"/>	Liner					
New <input type="checkbox"/> Existing <input type="checkbox"/>	OpenHole		(9010 TD)	BY ANADARKO	for RE-ENTRY	

Depths/Formations:		Depths, Ft.	Formation	Tops?
Formation(s) Above		9313	ABO	<input checked="" type="checkbox"/>
		9667	WC	<input checked="" type="checkbox"/>
Injection TOP:		9700	WC	Max. PSI 1940
Injection BOTTOM:		11050		OpenHole _____ Perfs <input checked="" type="checkbox"/>
		11225		Tubing Size 27/8
Formation(s) Below		11500	C1500	Packer Depth 9650'

Capitan Reef? _____ (Potash? _____) (WIPP? _____) (Noticed? _____) Salado Top/Bot 1765'-3056' Cliff House? _____

Fresh Water: Depths: 85-90' Formation _____ Wells? yes Analysis? ☒ Affirmative Statement ☒

Disposal Fluid Analysis? Sources: MAK PROD. water BS/ABO/BL./Yaso/DR./SA.

Disposal Interval: Analysis? _____ Production Potential/Testing: Tested by ANADARKO 2/21/89

Notice: Newspaper Date 8/15/12 Surface Owner SLO Mineral Owner(s) SLO

RULE 26.7(A) Affected Persons: Davis/ECH/Joer/Lee/McElvin/Dollar/ where - PH

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

.....Active Wells 0 Repairs? _____ Which Wells? _____

.....P&A Wells 0 Repairs? _____ Which Wells? _____

Issues: Test for Hydrocarbons Request Sent _____ Reply: _____