 `	ad P	
 DATE	e in \$1,5,10 suspensi	E ENGINEER WY LOGGED IN / . 5, 10 TYPE SWD APP NO. 1030947420
		ABOVE THIS LINE FOR DIVISION USE ONLY THE MEXICO OIL CONSERVATION DEVISION
	N	- Engineering Bureau -
		1220 South St. Francis Drive, Santa Fe, NM 87505
		2010 NOV - 5 P 12: 57
		NDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS
	lication Acronyms	WHICH REQUIRE PROCESSING AT THE DIVISION LEVEL IN SANTA FE
	[NSL-Non-Star [DHC-Down [PC-Po [	<pre>indard Location] [NSP-Non-Standard Proration Unit] [SD-Simultaneous Dedication] Unit # hhole Commingling] [CTB-Lease Commingling] [PLC-Pool/Lease Commingling] ol Commingling] [OLS - Off-Lease Storage] [OLM-Off-Lease Measurement] WFX-Waterflood Expansion] [PMX-Pressure Maintenance Expansion] [SWD-Salt Water Disposal] [IPI-Injection Pressure Increase] ified Enhanced Oil Recovery Certification] [PPR-Positive Production Response]</pre>
[1]		PLICATION - Check Those Which Apply for [A]
	[A]	Location - Spacing Unit - Simultaneous Dedication
		One Only for [B] or [C]
	[B]	Commingling - Storage - Measurement
	[C]	Injection - Disposal - Pressure Increase - Enhanced Oil Recovery
	[D]	Other: Specify
[21	NOTIFICATI [A]	ON REQUIRED TO: - Check Those Which Apply, or □ Does Not Apply 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
[31		CURATE AND COMPLETE INFORMATION REQUIRED TO PROCESS THE TYPE TION 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. Shenel

Production Clerk Title

<u>11-4-2010</u> Date

jerrys@mec.com e-mail Address

#### 'STATE OF NEW MEXICO ENERGY, MINERALS AND NATURAL 'RESOURCES DEPARTMENT

and belief.

#### OIL CONSERVATION DIVISION 2040 SOUTH PACHECO SANTA FE, NEW MEXICO 87505

FORM C- 108 Revised 4-1-98

### APPLICATION FOR AUTHORIZATION TO INJECT

I.	PURPOSE:       Secondary Recovery       Pressure Maintenance       X       Disposal       Storage         Application qualifies for administrative approval'?       X       Yes       No
IL	OPERATOR: Mack Energy Corporation
	ADDRESS: P.O. Box 960 Artesia, NM 88211-0960
	CONTACTPARTY: Jerry W. Sherrell PHONE: (575)748-1288
111.	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.
V1.	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.
VIL	Attach data on the proposed operation, including:
	<ol> <li>Proposed average and maximum daily rate and volume of fluids to be injected;</li> <li>Whether the system is open or closed;</li> <li>Proposed average and maximum injection pressure;</li> <li>Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and,</li> <li>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.).</li> </ol>
*V11	1. 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/I 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. A	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. C	Certification: I hereby certify that the information submitted with this application is true and correct to the best of my knowledge

NAME: Jerry W. Sherrell		TITLE: Production Clerk
SIGNATURE: Jemy W. Shenell	· ·	DATE: //- 4-2010

\* 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

Side I	INJECT	TION WE	INJECTION WELL DATA SHEET			
OPERATOR: <u>N</u>	OPERATOR: Mack Energy Corporation					~ *
WELL NAME	WELL NAME & NUMBER: Dino SWD #1					
WELL LOCAT	WELL LOCATION: 1680 FSL & 705 FWL	Γ		30	15S	<b>30E</b>
	FOOTAGE LOCATION		UNIT LETTER	SECTION	TOWNSHIP	RANGE
	WELLBORE SCHEMATIC			WELL CONSTRUCTION DATA Surface Casing	<u>CTION DATA</u> asing	
	調調調		Hole Size: 17 1/2"		Casing Size: <u>13 3/8 @ 450'</u>	450'
	13 3/8" casing @ 450'. cem w/ 450sx: circ		Cemented with: 450sx	SX.	or	ft
			Top of Cement: Surface	4	Method Determined: Circulated	Circulated
				Intermediate Casing	e Casing	
			Hole Size: 12 1/4"		Casing Size: <u>8 5/8 @ 2900'</u>	-006
2004	8 5/8" casing @ 2900', cem w/800sx, circ.		Cemented with: 800sx	SX.	or	ft
			Top of Cement: Surface	9	Method Determined: Circulated	Circulated
	) 7/8" DC tuhing @ 11 125'			Production Casing	ı Casing	
	set w/ 10k nickel plated pkr		Hole Size: 77/8"		Casing Size: <u>5 1/2" @ 12,750'</u>	12,750'
	Perfs @ 11,150-12,525'	. 1	Cemented with: 2500sx	SX.	or	ft
		< D	Top of Cement: Surface	e	Method Determined: Circulated	Circulated
	5 112" casomg @ 12750', cem w/2500sx, circ	$' \not\sim$	Total Depth: 12,750'			
				Injection Interval	<u>Interval</u>	
TD @ 12,750'	50'	2 =	11,150	fee	feet to 12,525' Perforated	
		,27		rforated or Open H	(Perforated or Open Hole; indicate which)	
			20			
			)			

INJECTION WELL DATA SHEET

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Side I

		INJECTION W	INJECTION WELL DATA SHEET		
[n]	Lubing Size:	2 7/8"	Lining Material:	Plastic Coated	
$\overline{\Sigma}$	Fype of Packer:	Arrow Set 10K	Arrow Set 10K Nickel Plated Packer		
Da(	acker Setting Depth:	11,125'	1		
Ot	her Type of Tubing/Ca	Other Type of Tubing/Casing Seal (if applicable):	):		
		Addit	Additional Data		
<u> </u>	Is this a new well drilled for injection?	lled for injection?	X Yes		
	If no, for what purpo	If no, for what purpose was the well originally drilled?	ully drilled?		
					• •
~i	Name of the Injection Formation:	n Formation:	Devonian, Montoya and Ellenburger	nd Ellenburger	•
<u>.</u>	Name of Field or Pool (if applicable):	ol (if applicable):	Little Lucky Lake	ky Lake	1
<del></del>	Has the well ever be intervals and give pl	en perforated in any ot ugging detail, i.e. sacks	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.	perforated No	
S.	Give the name and depths injection zone in this area:	lepths of any oil or gas area:	Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area: Morrow Gas-10,000'	ving the proposed	

## 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

- 1. Lithologic Detail; Dolomite
- 2. Geological Name; SWD; Devonian, Montoya and Ellenburger
- 3. Thickness; 800', 200', 300'
- 4. Depth; 11,150-11,950', 11,950-12,150', 12,225'-12,525'

## **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: Dino 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: 11/4/10

Charles Sadler, Geologist

	PERFS		11,150-12,525'	3666-3738'	9334-9359'	9894-9946'		~		
	TOC	Circ Circ	Circ	Circ Circ	2835	8500				
SX	CMT	450 800	2500	500 1400	275	425				
SETTING	DEPTH	450' 2900'	12,750'	493' 2929'	4406'	10.032'				
CASING SIZE	& WEIGHT	13 3/8, 48# 8 5/8. 32#	5 1/2, 17#	13 3/8, 48# 8 5/8. 32#	5 1/2, 15.5#	4", 12.93#				
	SIZE	17 1/2 12 1/4	7 7/8	17 1/2	12 1/4	7 7/8				
	DRILLED	SWD	Pending		Oil	5-3-1962				
	(PBTD)		12,750'		11,250'	(P & A)	1997 			
	LOCATION	1680' FSL 705' FWL	30-15S-30E	660' FNL	1980' FWL	31-15S-30E				
	WELL#		1			1				
	LEASE		Dino SWD			Champeau Fed				

**AREA OF REVIEW WELL DATA** 

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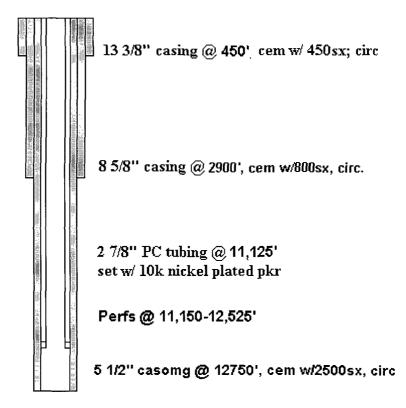
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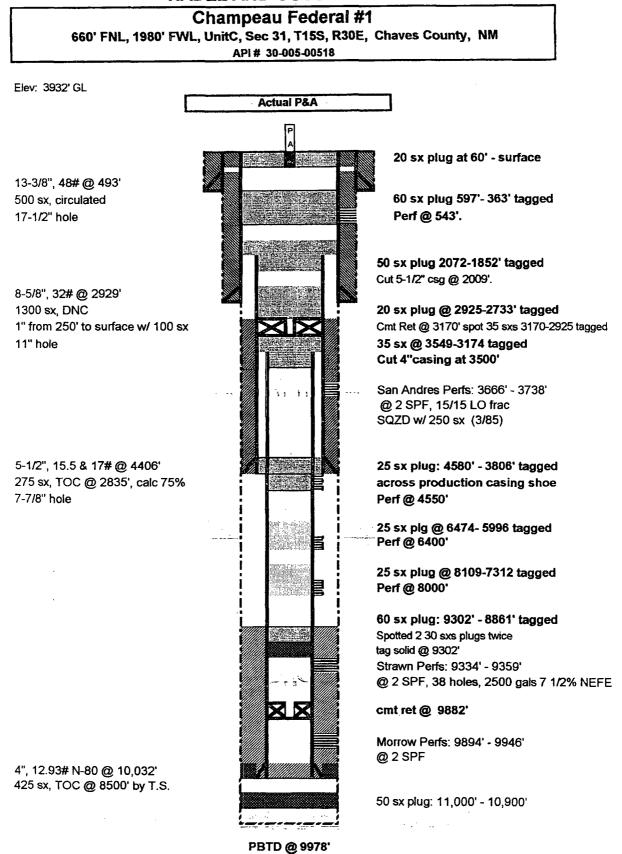
Dino SWD #1 1680 FSL & 705 FWL Sec. 30 T15S R30E

. .



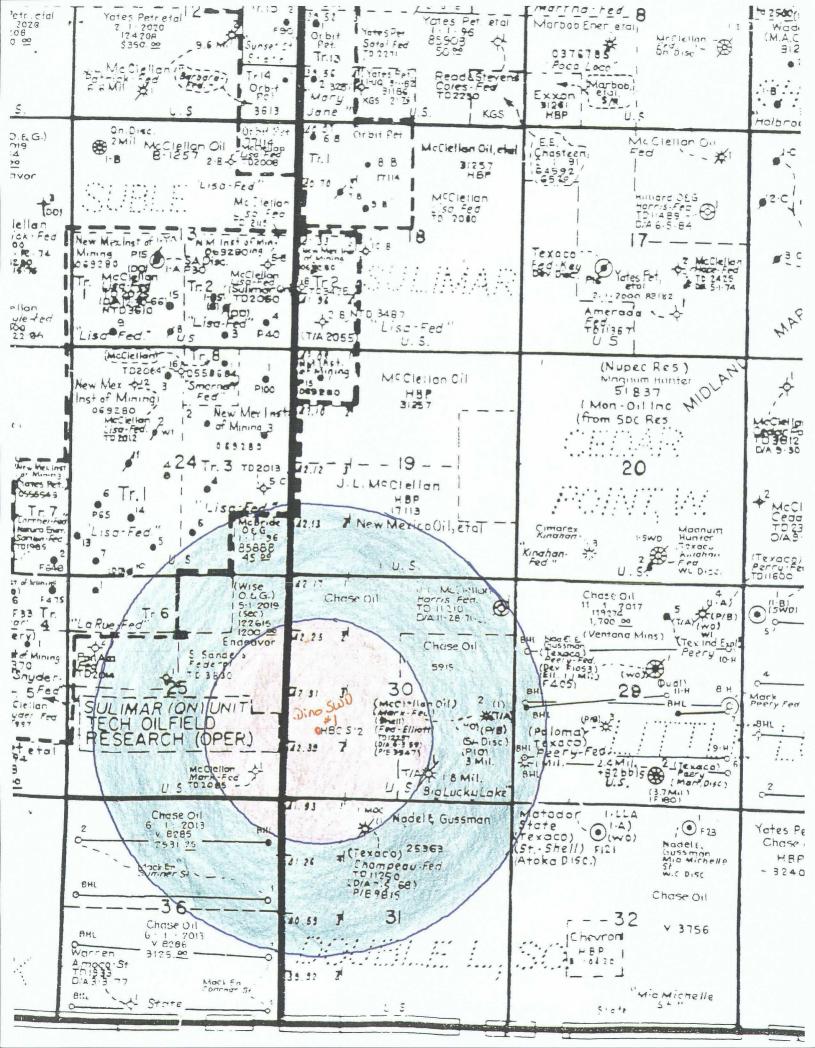
TD @ 12,750'

## NADEL AND GUSSMAN PERMIAN



TD @ 11,250'

Former Well Name:Texaco - Shell Champeau Federal #1RTMSpud Date: 05/03/62, P&A 7/05/68, reentered 3/27/85



#### AFFIDAVIT OF PUBLICATION STATE OF NEW MEXICO

I, Corinna Martinez Legals Clerk

Of the Roswell Daily Record, a daily newspaper published at Roswell, New Mexico do solemnly swear that the clipping hereto attached was published in the regular and entire issue of said paper and not in a supplement thereof for a period of:

one time with the issue dated

October 22, 2010

Clerk

Sworn and subscribed to before me

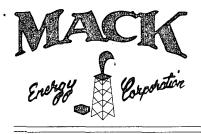
this 26th October, 2010 **Notary Public** 

My Commission expires June 13, 2014

(SEAL)

Publish October 22, 2010 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 Dinc SWD #1 1680 FSL & 705 FWL of Section 30, T15S R30E, NMPM Chaves County, New Mexico. Water will be injected into the Devonian Montoya and Ellenburger formations at a depth of 11, 150-12,525 Water will be injected at a maximum surface pressure of 2230 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 fifteer days of the date of the publication of this notice. 

. .



November 4, 2010

### VIA CERTIFIED MAIL 7009 2820 0004 4193 0072 RETURN RECEIPT REQUESTED

Bureau of Land Management 2909 W. 2<sup>nd</sup>. Street Roswell, NM 88202

Gentlemen:

Enclosed for your review, is a copy of Mack Energy Corporation's application for a Devonian, Montoya and Ellenburger SWD well. Produced water will be injected at a proposed depth of 11,150-12,525'. The Dino S WD #1, located 1680 FSL & 705 FWL, Sec. 30, T15S R30E, Chaves 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

eng W. Shenell

Jérry W. Sherrell Production Clerk

JWSI



November 4, 2010

### VIA CERTIFIED MAIL 7009 2820 0004 4193 5534 RETURN RECEIPT REQUESTED

Caza Petroleum Inc. 2002 Timberloch P., #500 The Woodlands, TX 77380

Gentlemen:

Enclosed for your review, is a copy of Mack Energy Corporation's application for a Devonian, Montoya amd Ellenburger SWD well. Produced water will be injected at a proposed depth of 11,150-12,525'. The Dino S WD #1, located 1680 FSL & 705 FWL, Sec. 30, T15S R30E, Chaves 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

4 W. Shenell

Jerry W. Sherrell Production Clerk

JWSI



November 4, 2010

### VIA CERTIFIED MAIL 7008 1140 0004 0380 9328 RETURN RECEIPT REQUESTED

Endeavor Energy Resources 110 N Marienfeld, #200 Midland, TX 79701

Gentlemen:

Enclosed for your review is a copy of Mack Energy Corporation's application for a Devonian, Montoya amd Ellenburger SWD well. Produced water will be injected at a proposed depth of 11,150-12,525'. The Dino S WD #1, located 1680 FSL & 705 FWL, Sec. 30, T15S R30E, Chaves 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.

and a second second

Sincerely,

MACK ENERGY CORPORATION

- W. Shenell

Jerry W. Sherrell Production Clerk

JWS1



November 4, 2010

### VIA CERTIFIED MAIL 7008 1140 0004 0380 9267 RETURN RECEIPT REQUESTED

Wise Oil & Gas 6851 NE Loop 820, Suite 110 North Richland Hills, TX 76180

Gentlemen:

Enclosed for your review is a copy of Mack Energy Corporation's application for a Devonian, Montoya amd Ellenburger SWD well. Produced water will be injected at a proposed depth of 11,150-12,525'. The Dino S WD #1, located 1680 FSL & 705 FWL, Sec. 30, T15S R30E, Chaves 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.

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Sincerely,

MACK ENERGY CORPORATION

W. Shened

Jérry W. Sherrell Production Clerk

JWSI

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From:Jerry Sherrell [jerrys@mec.com]Sent:Wednesday, December 08, 2010 8:37 AMTo:Jones, William V., EMNRDCc:Deana WeaverSubject:Dino SWD #1Attachments:Peery Wolfcamp water analysis.pdf

Will,

I have attached the water analysis for the waters to be disposed of at the Dino SWD #1.

Thanks,

Jerry W. Sherrell Mack Energy Corporation P.O. Box 960 Artesia, NM 88211-0960 Office 575-748-1288 Cell 575-703-8383 jerrys@mec.com



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

# Water Analysis Report

Company:	Mack Energy Corporation		Sample #:	3121	
Area:	Artesia		Analysis ID #:	5506	
Lease:	Peery				
Location:	Battery	0			
Sample Point:	Wolfcamp Battery				

Sampling Date:	11/12/2010	Anions	mg/l	meq/l	Cations	mg/l	meq/l
•	11/30/2010	Chloride:	18168.3	512.46	Sodium:	11480.0	499.35
Analyst:	Catalyst	Bicarbonate:	518.5	8.5	Magnesium:	263.8	21.7
Sampling Date: Analysis Date: Analyst: TDS (mg/l or g/m3): Density (g/cm3): Hydrogen Sulfide: Carbon Dioxide: Comments:	43156.4	Carbonate:			Calcium:	807.8	40.31
	1.023	Sulfate:	2100.0	43.72	Strontium:	35.1	0.8
Density (ground)	1.020				Barium:	0.4	0.01
					Potassium:	99.8	2.55
Hydrogen Sulfide:	367				Iron:	0.0	0.
Carbon Dioxide:	29				Manganese:	0.000	0.
0		pH at time of sampling	:	7			
Comments:		pH at time of analysis:					
	:	pH used in Calculation:		7			
		Temperature @ lab c	onditions (F):	75	Conductivity (min Resistivity (ohm	•	57400 .1742

		Values C	alculated	at the Give	n Conditi	ons - Amou	ints of Sc	ale in lb/10	00 bbl		
Temp	Calcite CaCO <sub>3</sub>			sum 9 <sup>*2H</sup> 2 <sup>0</sup>		aso <sub>4</sub>		estite rSO <sub>4</sub>		rite ISO <sub>4</sub>	
°F	Index	Amount	Index	Amount	Index	Amount	Index	Amount	Index	Amount	
80	0.08	1.36	-1.06	0.00	-1.11	0.00	-0.32	0.00	1.29	4.07	
100	0.18	3.39	-1.09	0.00	-1.07	0.00	-0.33	0.00	1.13	3.73	
120	0.29	5.76	-1.10	0.00	-1.01	0.00	-0.31	0.00	0.98	3.73	
140	0.39	8.14	-1.11	0.00	-0.92	0.00	-0.30	0.00	0.86	3.39	
160	0.50	10.51	-1.11	0.00	-0.82	0.00	-0.27	0.00	0.76	3.39	
180	0.62	13.22	-1.10	0.00	-0.70	0.00	-0.24	0.00	0.68	3.39	
200	0.73	15.93	-1.09	0.00	-0.57	0.00	-0.20	0.00	0.62	3.05	
220	0.84	18.65	-1.08	0.00	-0.43	0.00	-0.17	0.00	0.57	3.05	

From:Jones, William V., EMNRDSent:Thursday, December 16, 2010 5:07 PMTo:'Jerry Sherrell'Cc:Ezeanyim, Richard, EMNRD; Hill, Larry, EMNRDSubject:Disposal application from Mack Energy Corp: Dino SWD #1 30-005-00000 Devonian,<br/>Montoya, Ellenburger

Hello Jerry:

Would you send a quick writeup from a geo as to why you are drilling a deep disposal well in this particular spot? Do you have a Devonian structure map of this area? Will you mudlog this interval or swab test it?

When you get any Fresh Water well info let me know?

What step is this in the BLM permitting process?

Is the BLM the surface owner?

Take Care,

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



From: Sent:	Jerry Sherrell [jerrys@mec.com] Tuesday, December 21, 2010 1:34 PM
To:	Jones, William V., EMNRD
Cc:	Deana Weaver
Subject:	FW: Disposal application from Mack Energy Corp: Dino SWD #1 30-005-00000 Devonian, Montoya, Ellenburger

From: Jerry Sherrell
Sent: Friday, December 17, 2010 7:04 AM
To: Charles Sadler
Cc: Deana Weaver
Subject: FW: Disposal application from Mack Energy Corp: Dino SWD #1 30-005-00000 Devonian, Montoya, Ellenburger

Charles, can you help me out with this, please?

From: Jones, William V., EMNRD [mailto:William,V.Jones@state.nm.us]
Sent: Thursday, December 16, 2010 5:07 PM
To: Jerry Sherrell
Cc: Ezeanyim, Richard, EMNRD; Hill, Larry, EMNRD
Subject: Disposal application from Mack Energy Corp: Dino SWD #1 30-005-00000 Devonian, Montoya, Ellenburger

Hello Jerry:

Would you send a quick writeup from a geo as to why you are drilling a deep disposal well in this particular spot? Do you have a Devonian structure map of this area? Will you mudlog this interval or swab test it?

When you get any Fresh Water well info let me know? There are no fresh water wells close to this area.

What step is this in the BLM permitting process? Permit sent, working on Plan of Development, Sand Dune Lizard Survey Complete.

Is the BLM the surface owner? Yes(grazing lessee Bogel).

Take Care,

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



Confidentiality Notice: This e-mail, including all attachments is for the sole use of the intended recipient(s) and

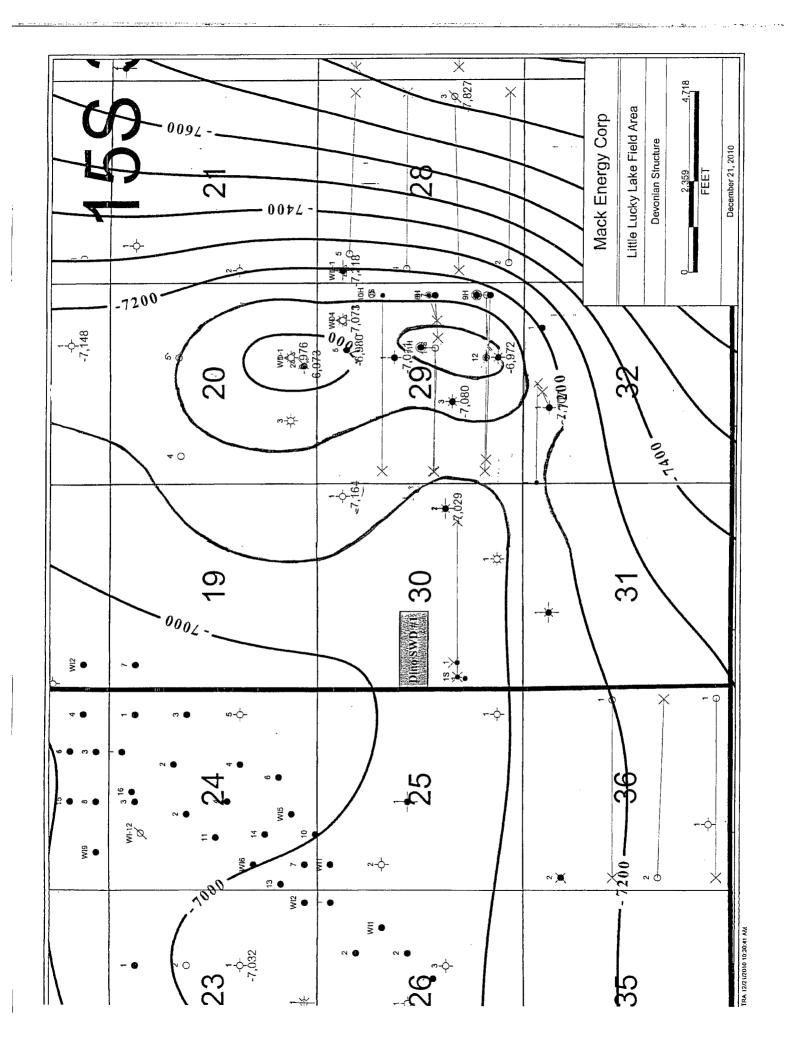
may contain confidential and privileged information. Any unauthorized review, use, disclosure or distribution is prohibited unless specifically provided under the New Mexico Inspection of Public Records Act. If you are not the intended recipient, please contact the sender and destroy all copies of this message. -- This email has been scanned by the Sybari - Antigen Email System.

From: Sent: To: Cc: Subject: Attachments: Jerry Sherrell [jerrys@mec.com] Tuesday, December 21, 2010 1:35 PM Jones, William V., EMNRD Deana Weaver FW: Dino SWD #1 Geology Comments Little Lucky Lake Dev Str.pdf

From: Charles Sadler
Sent: Tuesday, December 21, 2010 1:21 PM
To: Jerry Sherrell
Cc: Matt Brewer; Cari Sadler; Chris Moreno; Deana Weaver
Subject: Dino SWD #1 Geology Comments

The Dino SWD #1 is a proposed Devonian, Montoya, and Ellenburger disposal well located in the SW/4 of Section 30, T15S R30E. The Devonian, Montoya, and Ellenburger are not prospective for oil and gas at the proposed location. There is no structural closure at the Devonian horizon to support trapping of hydrocarbons in the Paleozoic (See Attached). This location was also chosen because of proposed Wolfcamp horizontal drilling potential in Section 30. The Barney Fed Com #1 is a proposed horizontal Wolfcamp test and is located on the same 40 acre tract as the proposed Dino SWD #1

Electric logs and mudlogs will be run across all proposed disposal zones.



			(	No	APT	12/23/5	7
	Injection Permit Checklis	:(11/15/2010)	. [	10	C.S.	1	
	WFXPMX	swd 1260	Permit Date 1212	<u>3/1 UIC Q</u>		2	
	# Wells Well Name(s): D	INO Swo		#			
	API Num: 30-0 05-00	<b>© OO</b> Spud [	Date: not Drag	New/Old:	N_(UIC primacy March	7, 1982)	
	Footages 16 80 FSL/ 70	5FWL Uni	t L Sec 30 Tsp	155	Rge 30E County	Chaves	
	General Location:					0	
	Operator: MACK EN	ERGY Co	ration	Contact	Jerry S.	harrall	
		5.9 Compliance (Wells	9/356	(Finan As	isur) IS 5.9 OK	20K	
		Status: Nor D	ild				
	~	IL, EQU	IN, FAT				
	Diagrams: Before Conversion	After Conversion	Elogs in Imaging File:	New	uell		
	Well Details:	Sizes HolePipe	Setting Depths	Stage Tool	Cement Sx or Cf	Determination Method	
	New Existing Surface	17/2 1398	450		450	CIRCI	NA
	New_Existing _Interm	718 52	2900		800	CIRCIT	
	New_Existing LongSt	110 _ 51-	16,750		2500 95	CIRC	
	NewExisting Liner NewExisting OpenHole			· · · · · · · · · · · · · · · · · · ·			
	Depths/Formations:	Depths, Ft.	Formation	Tops?	LITLE	LUCKY LAKE PUSON TEEH Resea	5
				- 	Sumar	proon	
	Formation(s) Above		1			TEAL Raise	and
	Injection TOP:	1450			230 OpenHole	Perfs	
	Injection BOTTOM:	12500	Elading	Tubing Size	218 Packer Depth	1,23	
	Formation(s) Below						
	Capitan Reef?(Potash?	_Noticed?) [WIP	P?Neticed?	Salado Top	/Bot		
	Fresh Water: Depths:	Formation	Wells?	An	alysis?Affirmative S	Statement	
Ø	-Disposal Fluid Analysis?	Sources: TDL	and ex.				
V	Disposal Interval: Analysis?	Production Potentia	WTeeting:				
	, ſ	ſ.	BLM				
	Notice: Newspaper Date 0 2	Surface Owner	1- de	1-	Mineral Owner(s)		
	RULE 26.7(A) Affected Persons	Hada	/ Eudocum	/ Ca	za/Wiseon	ý Col	
	AOR: Maps? Well List?	Producing in Interval?	Wellbore Diagra	ims? i		·	
	Active Wells O Repair	s? WhichWells?			······································		
	P&A Wells Repair	$\partial_{\text{Which Wells?}}$	<u>}</u>		·		
	sues:				Request Sent	Reply:	
		· · · · · · · · · · · · · · · · · · ·		· · ····			