

DATE: 3/18/09	SUSPENSE	ENGINEER: W. Jones	LOGGED IN: 3/18/09	TYPE: SWD	APP NO: PKAA0901751355
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ABOVE THIS LINE FOR DIVISION USE ONLY

RECEIVED

NEW MEXICO OIL CONSERVATION DIVISION

- Engineering Bureau -

2009 MAR 18 PM 1:28 South St. Francis Drive, Santa Fe, NM 87505



30-005 64109
Runway SWD 001
Mack Energy
013 837

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.

Jerry W. Sherrell
Print or Type Name

Jerry W. Sherrell
Signature

Production Clerk
Title

3-13-09
Date

jerrys@mackenergycorp.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: Jerry W. Sherrell

DATE: 3-13-09

* 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

INJECTION WELL DATA SHEET

OPERATOR: Mack Energy CorporationWELL NAME & NUMBER: Runway SWD #1WELL LOCATION: 660 FNL & 1980 FEL

B

FOOTAGE LOCATION

UNIT LETTER

20

SECTION

14S

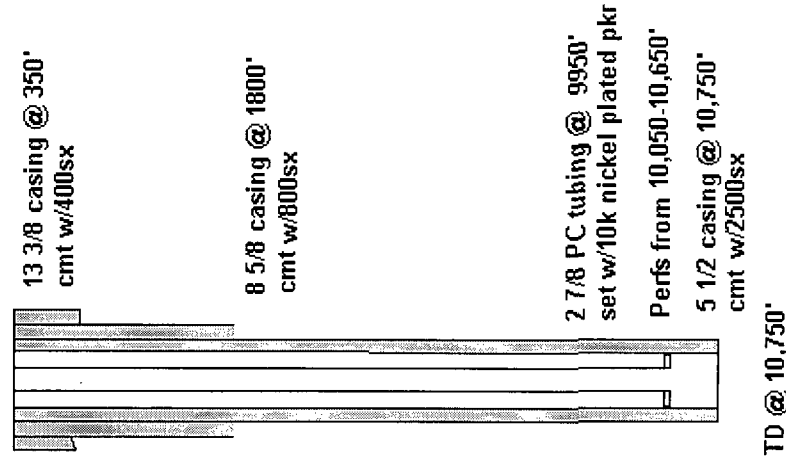
TOWNSHIP

29E

RANGE

WELL CONSTRUCTION DATA
Surface CasingWELLBORE SCHEMATICHole Size: 17 1/2 Casing Size: 13 3/8 @ 350'Cemented with: 400sx sx. or ftTop of Cement: Surface Method Determined: CirculatedIntermediate CasingHole Size: 12 1/4 Casing Size: 8 5/8 @ 1800Cemented with: 800sx sx. or ftTop of Cement: Surface Method Determined: CirculatedProduction CasingHole Size: 7 7/8 Casing Size: 5 1/2 @ 10,750'Cemented with: 2500sx sx. or ftTop of Cement: Surface Method Determined: CirculatedTotal Depth: 10,750'Injection Interval10,050 feet to 10,650' Perforated

(Perforated or Open Hole; indicate which)



INJECTION WELL DATA SHEETTubing Size: 2 7/8" Lining Material: Plastic CoatedType of Packer: Arrow Set 10K Nickel Plated PackerPacker Setting Depth: 9950'

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: Devonian3. Name of Field or Pool (if applicable): SWD;Devonian4. 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. No5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area: Overlying-Woodford, Underlying-Montoya

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;
0-2010#
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;Devonian**
3. Thickness; **600'**
4. Depth; **10,050-10,650'**

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. N/A.

Additional Information
Waters Injected: San Andres ✓


XII. AFFIRMATIVE STATEMENT

RE: Runway 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: 3/13/09



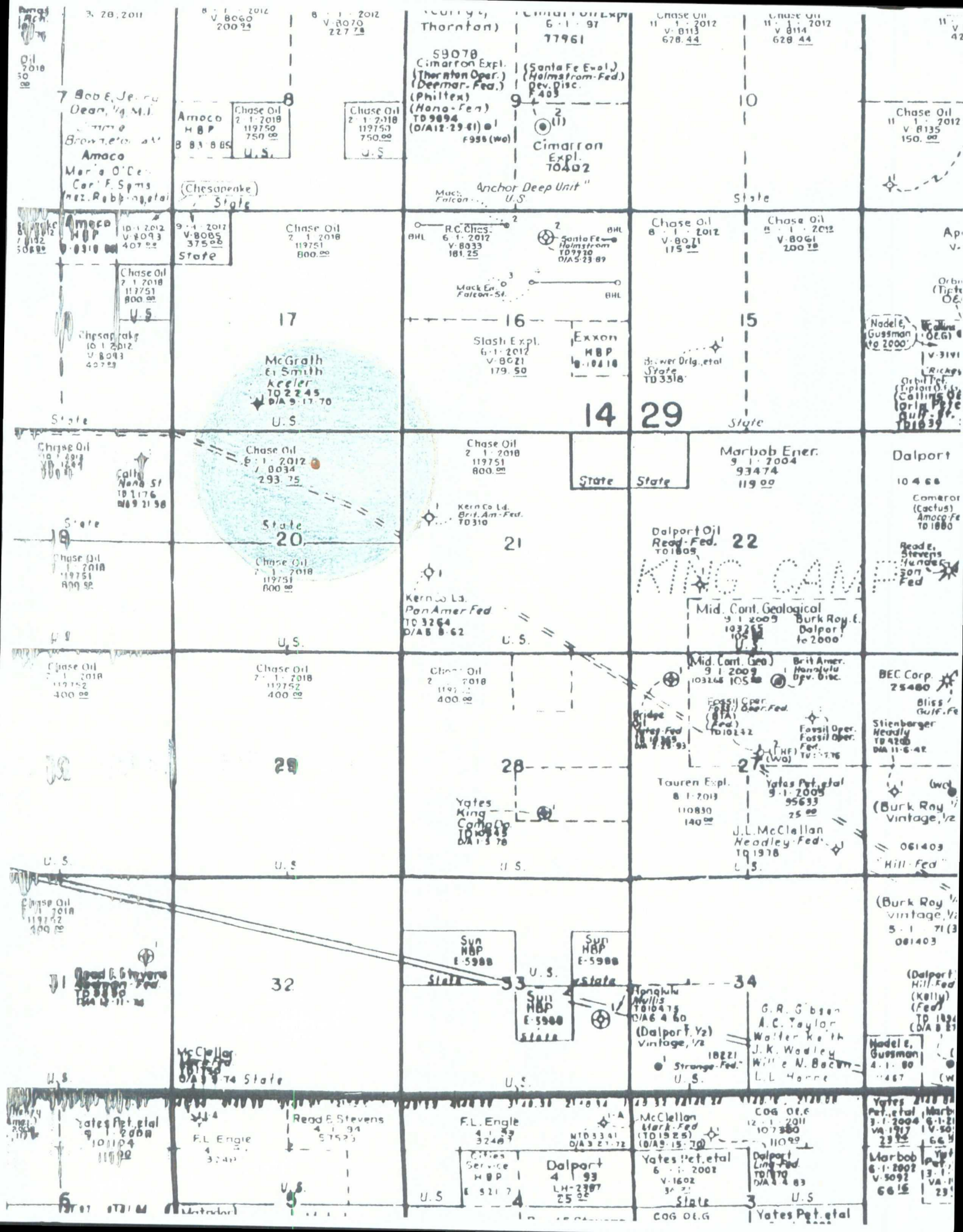
Charles Sadler, Geologist

Runway SWD #1
660 FNL & 1980 FEL, Sec. 20 T14S R29E
Formation Tops

Quaternary	Surface	Wolfcamp	7000'
Yates	890'	Cisco	7800'
Queen	1625'	Strawn	8750'
Grayburg	1950'	Atoka	9050'
San Andres	2260'	Chester	9460'
Glorieta	3675'	Woodford	9950'
Tubb	5100'	Devonian	10,050'
Abo	5825'	Montoya	10,650'

AREA OF REVIEW WELL DATA

[illegible]



District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Form C-101
May 27, 2004

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Submit to appropriate District Office

☐ AMENDED REPORT

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

Operator Name and Address Mack Energy Corporation P.O. Box 960 Artesia, NM 88211-0960		OGRID Number 013837
		API Number 30-
Property Code	Property Name Runway SWD	Well No. 1
Proposed Pool 1 SWD; Devonian		Proposed Pool 2

7 Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
B	20	14S	29E		660	North	1980	East	Chaves

8 Proposed 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
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Additional Well Information

Work Type Code N	Well Type Code S	Cable/Rotary Rotary	Lease Type Code S	Ground Level Elevation 3764' GR
Multiple No	Proposed Depth 11,750	Formation Devonian	Contractor	Spud Date 4/15/09
Depth to Groundwater 65'		Distance from nearest fresh water well 1000'		Distance from nearest surface water 1000'
Pit Liner: Synthetic <input type="checkbox"/> _____mils thick Clay <input type="checkbox"/> Pit Volume: _____ bbls Drilling Method - Closed-Loop System <input checked="" type="checkbox"/> Fresh Water <input checked="" type="checkbox"/> Brine <input type="checkbox"/> Diesel/Oil-based <input type="checkbox"/> Gas/Air <input type="checkbox"/>				

21 Proposed Casing and Cement Program

Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
17 1/2	13 3/8	48	350	400sx	Surface
12 1/4	8 5/8	32	1800	800sx	Surface
7 7/8	5 1/2	17	10,750'	2500sx	Surface

Describe the proposed program. If this application is to DEEPEN or PLUG BACK, give the data on the present productive zone and proposed new productive zone.
Describe the blowout prevention program, if any. Use additional sheets if necessary.
Mack Energy proposes to drill a 17 1/2 hole to 350', run 13 3/8 casing and cement. Drill a 12 1/4 hole to 1800', run 8 5/8 casing and cement. Drill a 7 7/8 hole to 10,750', run 5 1/2 casing and cement.

I hereby certify that the information given above is true and complete to the best of my knowledge and belief. I further certify that the drilling pit will be constructed according to NMOCD guidelines <input checked="" type="checkbox"/> a general permit <input type="checkbox"/> , or an (attached) alternative OCD-approved plan. <input type="checkbox"/>		OIL CONSERVATION DIVISION	
Signature <i>Jerry W. Sherrell</i>		Approved by:	
Printed name: Jerry W. Sherrell		Title:	
Title: Production Clerk		Approval Date:	
E-mail Address: jerrys@mackenergycorp.com		Expiration Date:	
Date: 3/13/09	Phone: (575)748-1288	Conditions of Approval Attached <input type="checkbox"/>	

DISTRICT I
1625 N. FRENCH DR., HOBBS, NM 88240

State of New Mexico
Energy, Minerals and Natural Resources Department

DISTRICT II
1301 W. GRAND AVENUE, ARTESIA, NM 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

DISTRICT IV
1220 S. ST. FRANCIS DR., SANTA FE, NM 87505

OIL CONSERVATION DIVISION
1220 SOUTH ST. FRANCIS DR.
Santa Fe, New Mexico 87505

Form C-10
Revised October 12, 2001
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number	Pool Code 96101	Pool Name SWD; Devonian
Property Code	Property Name RUNWAY SWD	Well Number 1
OGRID No. 013837	Operator Name MACK ENERGY CORPORATION	Elevation 3764'

Surface Location

UL or lot No. B	Section 20	Township 14-S	Range 29-E	Lot Idn	Feet from the 660	North/South line NORTH	Feet from the 1980	East/West line EAST	County CHAVES
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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
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Dedicated Acres 40	Joint or Infill	Consolidation Code	Order No.
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NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

GEODETIC COORDINATES NAD 27 NME Y=761820.5 N X=587432.7 E LAT.=33.093972° N LONG.=104.047847° W	
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OPERATOR CERTIFICATION

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.

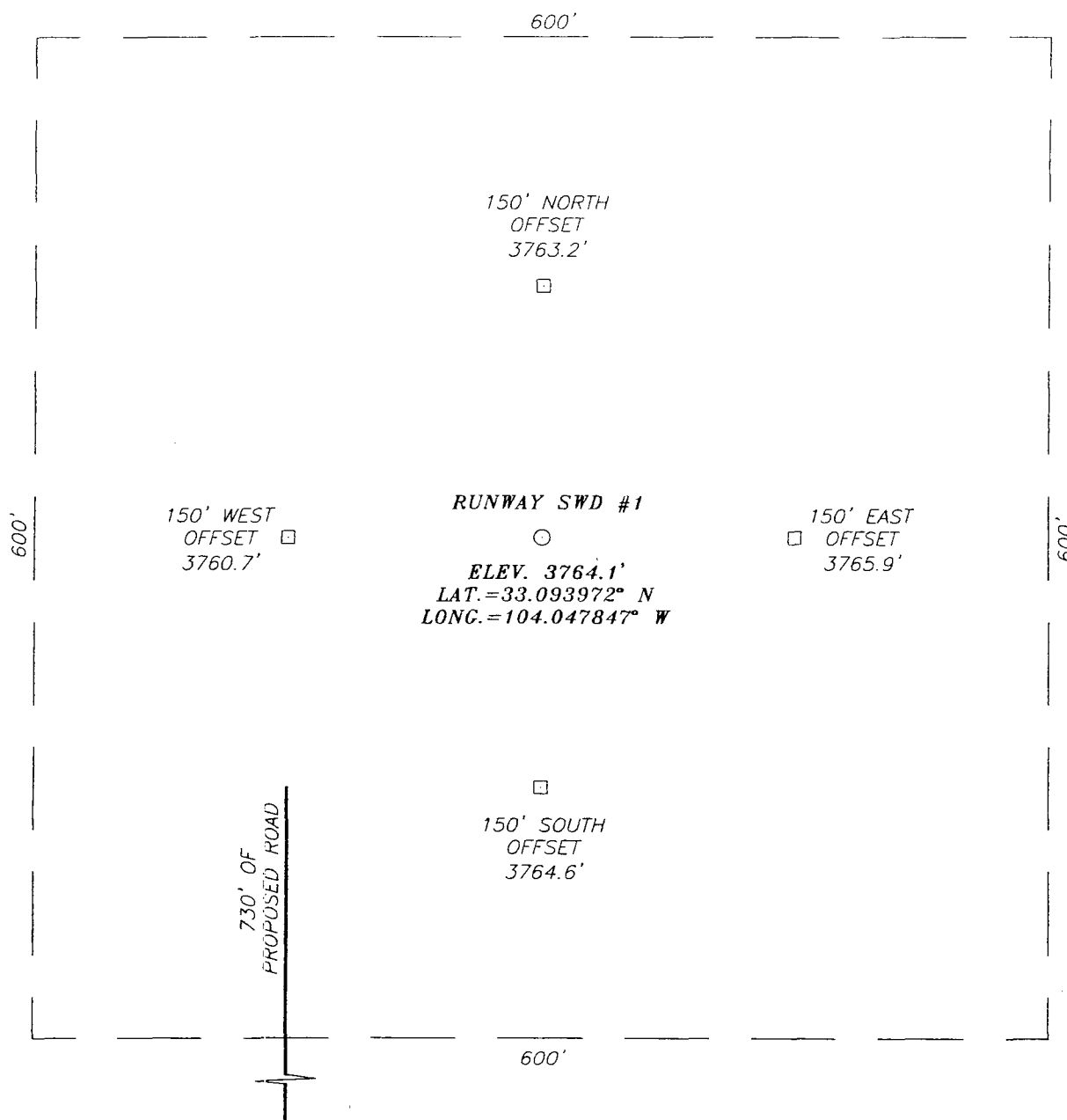
Jerry W. Sherrell 3/13/09
Signature Date
Jerry W. Sherrell
Printed Name

SURVEYOR CERTIFICATION

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.

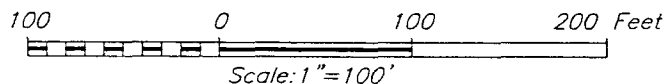
Ronald J. Eidson 3/11/09
Date Surveyed
Signature & Seal of Professional Surveyor
Certificate No. RONALD EIDSON 3239

SECTION 20, TOWNSHIP 14 SOUTH, RANGE 29 EAST, N.M.P.M.,
CHAVES COUNTY, NEW MEXICO



DIRECTIONS TO LOCATION

FROM THE INTERSECTION OF KATRINA ROAD AND TERESA ROAD GO NORTHWEST ON KATRINA ROAD APPROX. 1.5 MILES TO A PROPOSED ROAD SURVEY. FOLLOW ROAD SURVEY APPROX. 730 FEET NORTH TO THIS WELL.



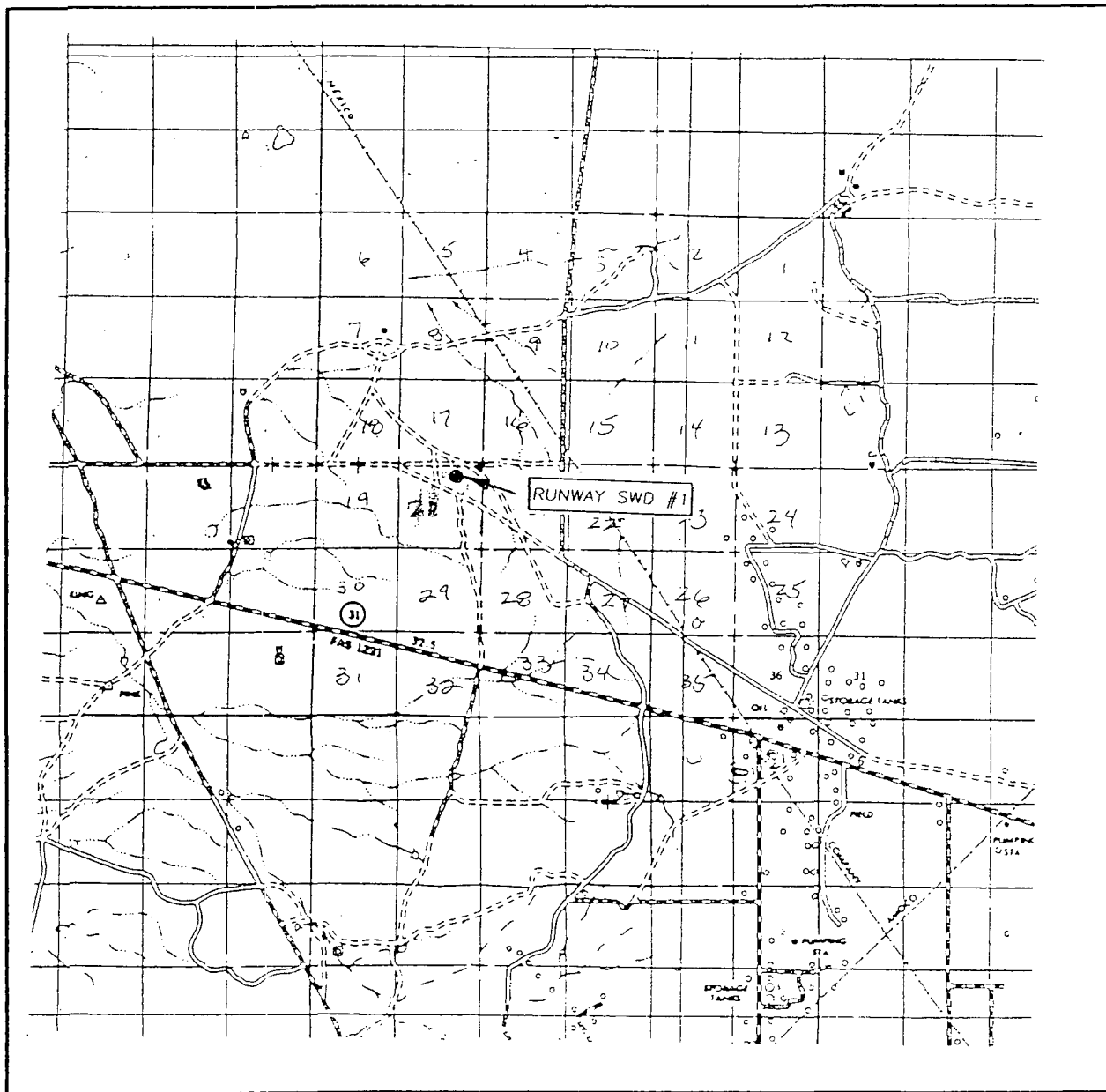
PROVIDING SURVEYING SERVICES
SINCE 1946
JOHN WEST SURVEYING COMPANY
412 N. DAL PASO
HOBBS, N.M. 88240
(575) 393-3117

MACK ENERGY CORPORATION

RUNWAY SWD #1 WELL
LOCATED 660 FEET FROM THE NORTH LINE
AND 1980 FEET FROM THE EAST LINE OF SECTION 20,
TOWNSHIP 14 SOUTH, RANGE 29 EAST, N.M.P.M.,
CHAVES COUNTY, NEW MEXICO.

Survey Date: 3/4/09	Sheet 1 of 1 Sheets
W.O. Number: 09.11.0202	Dr By: LA
Date: 3/11/09	09110202
	Scale: 1"=100'

VICINITY MAP



SCALE: 1" = 2 MILES

SEC. 20 TWP. 14-S RGE. 29-E

SURVEY N.M.P.M.


COUNTY CHAVES STATE NEW MEXICO

DESCRIPTION 660' FNL & 1980' FEL

ELEVATION 3764'

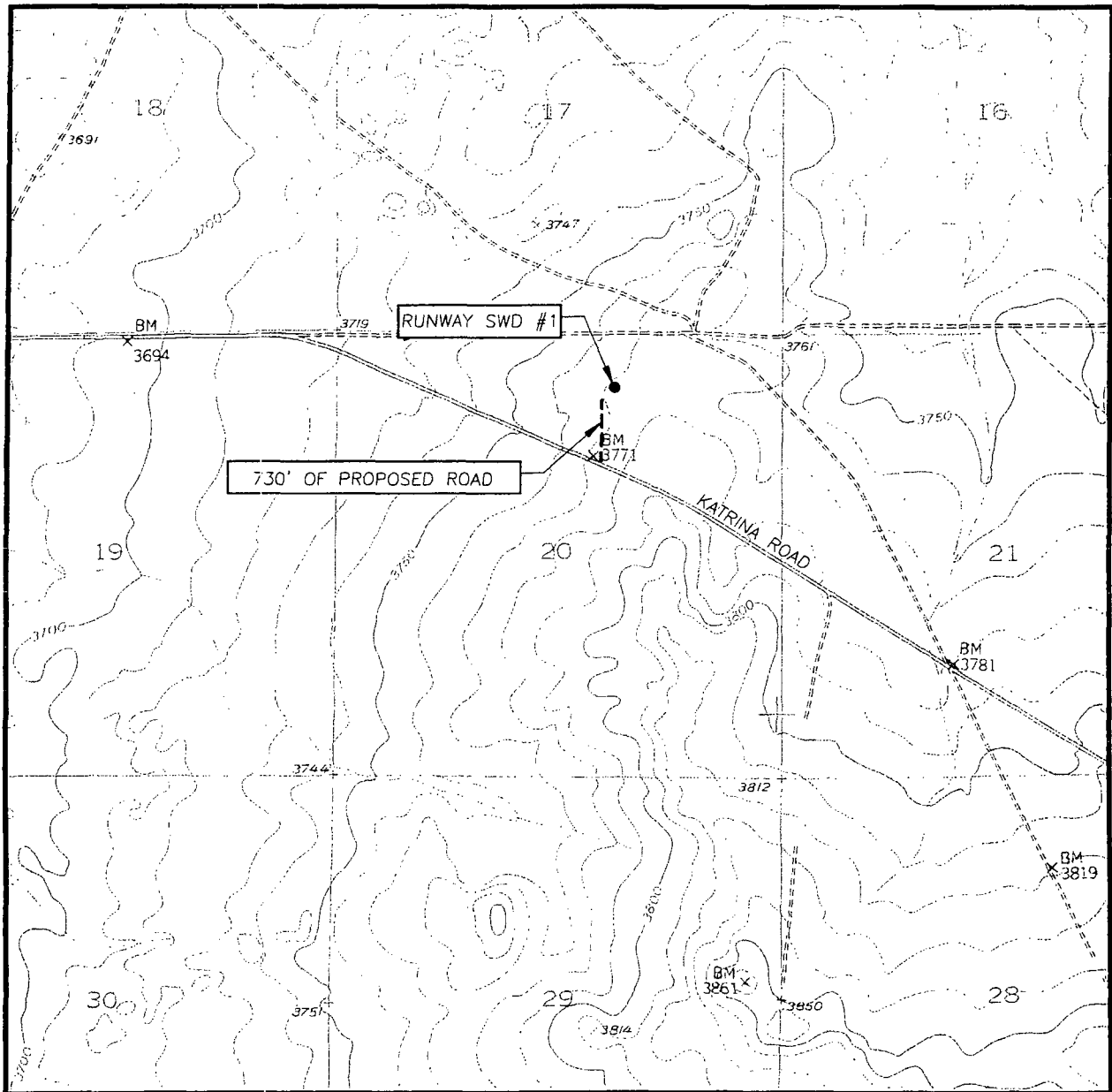
OPERATOR MACK ENERGY CORPORATION

LEASE RUNWAY SWD



PROVIDING SURVEYING SERVICES
SINCE 1946
JOHN WEST SURVEYING COMPANY
412 N. DAL PASO
HOBBS, N.M. 88240
(575) 393-3117

LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL:
KING CAMP, N.M. - 10'

SEC. 20 TWP. 14-S RGE. 29-E

SURVEY N.M.P.M.

COUNTY CHAVES STATE NEW MEXICO


DESCRIPTION 660' FNL & 1980' FEL

ELEVATION 3764'

OPERATOR MACK ENERGY CORPORATION

LEASE RUNWAY SWD

U.S.G.S. TOPOGRAPHIC MAP
KING CAMP, N.M.



PROVIDING SURVEYING SERVICES
SINCE 1946
JOHN WEST SURVEYING COMPANY
412 N. DAL PASO
HOBBS, N.M. 88240
(575) 393-3117

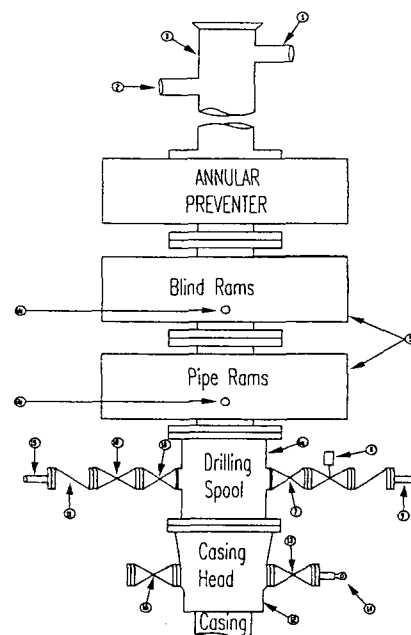
Mack Energy Corporation
Minimum Blowout Preventer Requirements
 3000 psi Working Pressure
 3 MWP
 EXHIBIT #1-A

Stack Requirements

NO.	Items	Min. I.D.	Min. Nominal
1	Flowline		2"
2	Fill up line		2"
3	Drilling nipple		
4	Annular preventer		
5	Two single or one dual hydraulically operated rams		
6a	Drilling spool with 2" min. kill line and 3" min choke line outlets		2" Choke
6b	2" min. kill line and 3" min. choke line outlets in ram. (Alternate to 6a above)		
7	Valve Gate Plug	3 1/8	
8	Gate valve-power operated	3 1/8	
9	Line to choke manifold		3"
10	Valve Gate Plug	2 1/16	
11	Check valve	2 1/16	
12	Casing head		
13	Valve Gate Plug	1 13/16	
14	Pressure gauge with needle valve		
15	Kill line to rig mud pump manifold		2"

OPTIONAL

16	Flanged Valve	1 13/16	
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CONTRACTOR'S OPTION TO FURNISH:

1. All equipment and connections above bradenhead or casinghead. Working pressure of preventers to be 3000 psi minimum.
2. Automatic accumulator (80 gallon, minimum) capable of closing BOP in 30 seconds or less and, holding them closed against full rated working pressure.
3. BOP controls, to be located near drillers' position.
4. Kelly equipped with Kelly cock.
5. Inside blowout preventer or its equivalent on derrick floor at all times with proper threads to fit pipe being used.
6. Kelly saver-sub equipped with rubber casing protector at all times.
7. Plug type blowout preventer tester.
8. Extra set pipe rams to fit drill pipe in use on location at all times.
9. Type R.X ring gaskets in place of Type R.

MEC TO FURNISH:

1. Bradenhead or casing head and side valves.
2. Wear bushing. If required.

GENERAL NOTES:

1. Deviations from this drawing may be made only with the express permission of MEC's Drilling Manager.
2. All connections, valves, fittings, piping, etc., subject to well or pump pressure must be flanged (suitable clamp connections acceptable) and have minimum working pressure equal to rated working pressure of preventers up through choke valves must be full opening and suitable for high pressure mud service.
3. Controls to be of standard design and each marked, showing opening and closing position
4. Chokes will be positioned so as not to hamper or delay changing of choke beans. Replaceable parts for adjustable choke, or bean sizes, retainers, and choke wrenches to be conveniently located for immediate use.
5. All valves to be equipped with handwheels or handles ready for immediate use.
6. Choke lines must be suitably anchored.

7. Handwheels and extensions to be connected and ready for use.
8. Valves adjacent to drilling spool to be kept open. Use outside valves except for emergency.
9. All seamless steel control piping (3000 psi working pressure) to have flexible joints to avoid stress. Hoses will be permitted.
10. Casinghead connections shall not be used except in case of emergency.
11. Do not use kill line for routine fill up operations.

Mack Energy Corporation

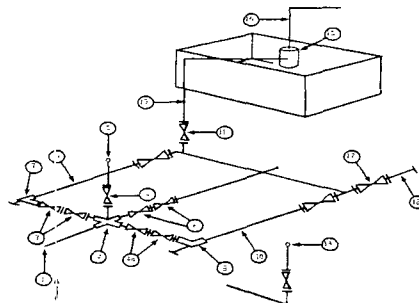
Exhibit #1-A

MINIMUM CHOKE MANIFOLD

3,000, 5,000, and 10,000 PSI Working Pressure

3 M will be used or greater

3 MWP - 5 MWP - 10 MWP



Mud Pit

Reserve Pit

* Location of separator optional

Below Substructure

Minimum requirements

No.		3,000 MWP			5,000 MWP			10,000 MWP		
		I.D.	NOMINAL	Rating	I.D.	Nominal	Rating	I.D.	Nominal	Rating
1	Line from drilling Spool		3"	3,000		3"	5,000		3"	10,000
2	Cross 3" x 3" x 3" x 2"			3,000			5,000			
2	Cross 3" x 3" x 3" x 2"									10,000
3	Valve Gate Plug	3 1/8		3,000	3 1/8		5,000	3 1/8		10,000
4	Valve Gate Plug	1 13/16		3,000	1 13/16		5,000	1 13/16		10,000
4a	Valves (1)	2 1/16		3,000	2 1/16		5,000	2 1/16		10,000
5	Pressure Gauge			3,000			5,000			10,000
6	Valve Gate Plug	3 1/3		3,000	3 1/8		5,000	3 1/8		10,000
7	Adjustable Choke (3)	2"		3,000	2"		5,000	2"		10,000
8	Adjustable Choke	1"		3,000	1"		5,000	2"		10,000
9	Line		3"	3,000		3"	5,000		3"	10,000
10	Line		2"	3,000		2"	5,000		2"	10,000
11	Valve Gate Plug	3 1/8		3,000	3 1/8		5,000	3 1/8		10,000
12	Line		3"	1,000		3"	1,000		3"	2,000
13	Line		3"	1,000		3"	1,000		3"	2,000
14	Remote reading compound Standpipe pressure quage			3,000			5,000			10,000
15	Gas Separator		2' x 5'			2' x 5'			2' x 5'	
16	Line		4"	1,000		4"	1,000		4"	2,000
17	Valve Gate Plug	3 1/8		3,000	3 1/8		5,000	3 1/8		10,000

- (1) Only one required in Class 3M
- (2) Gate valves only shall be used for Class 10 M
- (3) Remote operated hydraulic choke required on 5,000 psi and 10,000 psi for drilling.

EQUIPMENT SPECIFICATIONS AND INSTALLATION INSTRUCTION

1. All connections in choke manifold shall be welded, studded, flanged or Cameron clamp of comparable rating.
2. All flanges shall be API 6B or 6BX and ring gaskets shall be API RX or BX. Use only BX for 10 MWP.
3. All lines shall be securely anchored.
4. Chokes shall be equipped with tungsten carbide seats and needles, and replacements shall be available.
5. Choke manifold pressure and standpipe pressure gauges shall be available at the choke manifold to assist in regulating chokes. As an alternate with automatic chokes, a choke manifold pressure gauge shall be located on the rig floor in conjunction with the standpipe pressure gauge.
6. Line from drilling spool to choke manifold should be as straight as possible. Lines downstream from chokes shall make turns by large bends or 90 degree bends using bull plugged tees.

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 Runway SWD #1 660 FNL & 1980 FEL of Section 20, T14S R29E, NMPM, Chaves County, New Mexico. The water will be injected into the Devonian formation at a disposal depth of 10,050-10,650'. Water will be injected at a maximum surface pressure of 2010 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.

Contacts

Chase Oil owns all affected leasehold except the SW/4 of 16-14-29 which is owned by:

Slash Exploration Limited Partnership
PO Box 1973
Roswell, NM 88202

Surface is owned by the State of New Mexico.

Grazing Lessee is:

Bogle Ltd Co LLC
PO Box 460
Dexter, NM 88230



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

March 16, 2009

VIA CERTIFIED MAIL 7008 1140 0004 0380 8260
RETURN RECEIPT REQUESTED

Bogle Farms Ltd, Co., LLC
P.O. Box 460
Dexter, NM 88230

Gentlemen:

Enclosed for your review, is a copy of Mack Energy Corporation's application for a Devonian SWD well. Produced water will be injected at a proposed depth of 10,050-10,650'. The Runway SWD #1, located 660 FNL & 1980 FEL, Sec. 20, T14S R29E, Chaves County.

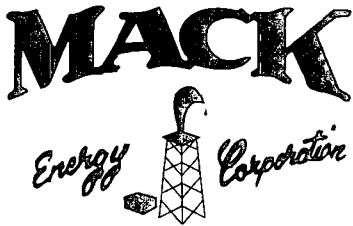
This letter will serve as a notice that Mack Energy Corporation has requested administrative approval from the NMOCD to drill this water disposal well. If you have any objections, you must notify the Oil Conservation Division in Santa Fe in writing at 1220 South St. Francis Drive, Santa Fe, NM 87505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

Sincerely,

MACK ENERGY CORPORATION

Jerry W. Sherrell
Production Clerk

JWS\



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

March 16, 2009

VIA CERTIFIED MAIL 7008 1140 0004 0380 8246
RETURN RECEIPT REQUESTED

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 Devonian SWD well. Produced water will be injected at a proposed depth of 10,050-10,650'. The Runway SWD #1, located 660 FNL & 1980 FEL, Sec. 20, T14S R29E, Chaves County.

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Office (575) 748-1288
Fax (575) 746-9539

March 16, 2009

VIA CERTIFIED MAIL 7008 1140 0004 0380 8253
RETURN RECEIPT REQUESTED

Slash Exploration, L.P.
PO Box 1973
Roswell, NM 88202

Gentlemen:

Enclosed for your review, is a copy of Mack Energy Corporation's application for a Devonian SWD well. Produced water will be injected at a proposed depth of 10,050-10,650'. The Runway SWD #1, located 660 FNL & 1980 FEL, Sec. 20, T14S R29E, Chaves County.

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MACK ENERGY CORPORATION

Jerry W. Sherrell
Production Clerk

JWS\

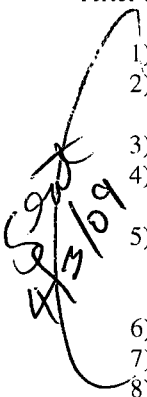
Jones, William V., EMNRD

From: Jerry Sherrell [jerrys@mackenergycorp.com]
Sent: Monday, April 13, 2009 2:52 PM
To: Jones, William V., EMNRD
Cc: Deana Weaver
Subject: Disposal Application from Mack Energy Corp: Proposed Runway SWD #1 30-005- Unit B, Sec 20, T14S, R29E Chaves County
Attachments: MX-7000N_20090413_144753.pdf

Hello Will,
If you have any other questions, let me know.

- #1) Attached
- #2) 30-005-64109
- #3) Attached State Engineers Office Data (60')
- #4) There is a windmill further than a mile, but we took a sample anyway(waiting on results)
- #5) At this time only SA
- #6) Attached
- #7) We will mudlog the well to TD for evaluation of the Devonian.
- #8) The tops are estimates based on available well control.

Hello Jerry:
After reviewing this application:

- 
- 1) Send a copy of the actual newspaper notice and the date published.
 - 2) Send the API number or let me know when to expect it – looks like this is on State lands, so permitting of the drilling will be from OCD.
 - 3) What are the approx depths of any fresh waters in this area?
 - 4) Let me know if any windmills exist or other ground water wells – if within 1 mile, send a fresh water analysis (or let me know when one will arrive).
 - 5) Application says the San Andres waters will be disposed into the Devonian. Are there any other types of waters anticipated to be disposed into this well? If any other formations or Pools begin contributing water to this well in the future – please send a water analysis at that time.
 - 6) Send a typical San Andres water analysis from this area.
 - 7) Let us know how you will evaluate or test the Devonian for hydrocarbon productivity.
 - 8) Are the Devonian tops “approximate”?

Thanks for this,

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

This inbound email has been scanned by the MessageLabs Email Security System.

Jones, William V., EMNRD

From: Jerry Sherrell [jerrys@mackenergycorp.com]
Sent: Tuesday, April 14, 2009 8:23 AM
To: Jones, William V., EMNRD
Subject: FW: RUNWAY WATER ANALISYS
Attachments: RUNWAY # 1 FW(3-13-09).pdf

Will,

This is the sample of the nearest fresh water well in the area. It is well over a mile away, but we caught a sample anyway:

Thanks,

Jerry W. Sherrell
Mack Energy Corporation
Office 575-748-1288
Cell 575-703-8383
jerrys@mackenergycorp.com

From: Mike Jorren [mailto:mike.jorren@catalystoilfield.com]
Sent: Monday, April 13, 2009 5:16 PM
To: Jerry Sherrell
Subject: RUNWAY WATER ANALISYS

This inbound email has been scanned by the MessageLabs Email Security System.



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 #:	12217
Area:	Artesia	Analysis ID #:	1473
Lease:	Runway		
Location:	1		0
Sample Point:	Other		

		Anions		mg/l	meq/l	Cations		mg/l	meq/l
Sampling Date:	3/13/2009	Chloride:		250.0	7.05	Sodium:		103.0	4.48
Analysis Date:	3/24/2009	Bicarbonate:		161.0	2.64	Magnesium:		166.0	13.66
Analyst:	Mitchell	Carbonate:				Calcium:		249.0	12.43
TDS (mg/l or g/m3):	1529	Sulfate:		600.0	12.49	Strontium:			
Density (g/cm3):	1.001					Barium:			
						Iron:			
Hydrogen Sulfide:						Manganese:			
Carbon Dioxide:									
Comments:		pH at time of sampling:			7				
		pH at time of analysis:			7				
		pH used in Calculation:			7				
		Temperature @ lab conditions (F):			70	Conductivity (micro-ohms/cm):		2980	
						Resistivity (ohm meter):		3.3557	

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	-0.14	0.00	-0.68	0.00	-0.75	0.00	0.00	0.00	0.00	0.00
100	-0.01	0.00	-0.68	0.00	-0.69	0.00	0.00	0.00	0.00	0.00
120	0.13	3.15	-0.67	0.00	-0.60	0.00	0.00	0.00	0.00	0.00
140	0.28	6.65	-0.65	0.00	-0.49	0.00	0.00	0.00	0.00	0.00

New Mexico Office of the State Engineer
POD Reports and Downloads

Township:	14S	Range:	29E	Sections:					
NAD27	X:		Y:		Zone:		Search Radius:		
County:		Basin:		Number:		Suffix:			
Owner Name: (First)		(Last)		<input type="radio"/> Non-Domestic		<input type="radio"/> Domestic			
				<input checked="" type="radio"/> All					
POD / Surface Data Report				Avg Depth to Water Report					
Water Column Report									
Clear Form			iWATERS Menu			Help			

AVERAGE DEPTH OF WATER REPORT 04/06/2009

Bsn	Tw	Rng	Sec	Zone	X	Y	Wells	(Depth Water in Feet)		
								Min	Max	Avg
RA	14S	29E	07				1	60	60	60

Record Count: 1

AFFIDAVIT OF PUBLICATION
STATE OF NEW MEXICO

I, Janice Bounds
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

beginning with the issue dated

April 9th 2009

and ending with the issue dated

April 9th 2009

Janice Bounds

Clerk

Sworn and subscribed to before me

this 13th day of April, 2009

Notary Public

My Commission expires
June 13, 2010

(SEAL)

Published April 9, 2009

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 Runway SWD #1 660 PM 6, 1830 FEL of Section 20, T14S R26E, NMPM, Chaves County, New Mexico. The water will be injected into the Devonian formation at a disposal depth of 10,050-10,650' Water will be injected at a maximum surface pressure of 2010 pounds and a maximum injection rate of 4000 BWP/D. Any interested party with questions or comments may contact Jerry W. Sherrill at Mack Energy Corporation, Post Office Box 960, Artesia, New Mexico 88211-0960 or call (576) 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 87508, within fifteen days of the date of the publication of this notice.



Water Analysis Report

Company: Mack Energy Corporation Sample #: 9198
 Area: Artesia Analysis ID #: 648
 Lease: Falcon
 Location: 1 0
 Sample Point: Wellhead

		mg/l		meq/l	mg/l		meq/l
Sampling Date:	12/27/07	Anions			Cations		
Analysis Date:	1/2/08	Chloride:	80588.6	2273.11	Sodium:	44021.2	1914.81
Analyst:	Mitchell Labs	Bicarbonate:	476.6	7.81	Magnesium:	2254.6	185.47
TDS (mg/l or g/m3):	135000.6	Carbonate:			Calcium:	4807.9	239.92
Density (g/cm3):	1.094	Sulfate:	2850.0	59.34	Strontium:		
					Barium:		
Hydrogen Sulfide:	93				Iron:	1.1	0.04
Carbon Dioxide:	51				Manganese:	0.550	0.02
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):		172900
					Resistivity (ohm meter):		.0578

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	1.00	48.85	0.10	286.36	0.09	212.01	0.00	0.00	0.00	0.00	
100	1.06	54.38	0.04	128.43	0.10	232.28	0.00	0.00	0.00	0.00	
120	1.12	60.22	0.00	0.00	0.14	303.87	0.00	0.00	0.00	0.00	
140	1.17	66.06	-0.04	0.00	0.19	410.18	0.00	0.00	0.00	0.00	

Case _____ R- _____ SWD 1175 WFX _____ PMX _____ IPI _____ Permit Date _____ UIC Qt. (A, M, June)

Wells _____ Well Name: RUNWAY SWD #1

API Num: (30-) 0059-064709 Spud Date: not yet New/Old: N (UIC primacy March 7, 1982)

Footages 660 FWL / 1980 FEL Unit B Sec 20 Tsp 145 Rge 29E County CHaves

Operator: MACK ENERGY CORP Contact Jerry W. Sterrall

OGRID: 013837 RULE 40 Compliance (Wells) 3/325 (Finan Assur) OK

Operator Address: PO Box 960, ARTESIA, NM 88211-0960

Current Status of Well: New Proposed well

Planned Work to Well: Drill 2" inf Planned Tubing Size/Depth: 2 7/8 @ 9950

	Sizes Hole.....Pipe	Setting Depths	Cement Sx or Cf	Cement Top and Determination Method
Existing <input checked="" type="checkbox"/> Surface	17 1/2 13 3/8	350	400	CIRC
Existing <input checked="" type="checkbox"/> Intermediate	12 1/2 8 5/8	1800	800	CIRC
Existing <input checked="" type="checkbox"/> Long String	7 7/8 5 1/2	10,750	2500	CIRC

DV Tool 1 Liner Open Hole Total Depth 1850 PBD ---

Well File Reviewed

Diagrams: Before Conversion After Conversion ✓ Elogs in Imaging File: New well

Intervals:	Depths	Formation	Producing (Yes/No)
Above (Name and Top)			
Above (Name and Top)	9950	WOODWARD	
Injection.....			
APPROX Interval TOP:	10050	Dev	
Injection.....			
Interval BOTTOM:	10,650	Dev	
Below (Name and Top)	110,650	Montana	

2010 PSI Max. WHIP

Open_Hole (Y/N)

~~Deviated Hole?~~

Sensitive Areas: Capitan Reef Cliff House Salt Depths

.... Potash Area (R-111-P)	Potash Lessee	Noticed?
----------------------------	---------------	----------

Fresh Water: Depths: _____ Wells(Y/N) _____ Analysis Included (Y/N): _____ Affirmative Statement ✓

Salt Water: Injection Water Types: SA₁ Analysis?

Injection Interval.....**Water Analysis:**.....**Hydrocarbon Potential**

Notice: Newspaper(Y/N) Surface Owner SLO/BOGLE Mineral Owner(s)

RULE 701B(2) Affected Parties: SLASH / Chase

Area of Review: Adequate Map (Y/N) ✓ and Well List (Y/N)

Active Wells 0 Num Repairs 1 Producing in Injection Interval in AOR

..P&A Wells 0 Num Repairs — All Wellbore Diagrams Included?

Questions to be Answered:

Required Work on This Well: LOG & Test in DIAGNOSTICS Request Sent _____ Reply: _____

AOR Repairs Needed: _____ Request Sent _____ Reply: _____

Request Sent Reply: