

|                       |          |     |                         |             |                           |
|-----------------------|----------|-----|-------------------------|-------------|---------------------------|
| 10/09/2014<br>DATE IN | SUSPENSE | MAM | 10/09/2014<br>LOGGED IN | NSL<br>TYPE | PMAM1428258099<br>APP NO. |
|-----------------------|----------|-----|-------------------------|-------------|---------------------------|

ABOVE THIS LINE FOR DIVISION USE ONLY

## NEW MEXICO OIL CONSERVATION DIVISION

### - Engineering Bureau -

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



## ADMINISTRATIVE APPLICATION CHECKLIST

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

### Application Acronyms:

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

- NSL 7181  
 - MACK Energy  
 13837

### [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 \_\_\_\_\_

- well  
 - Robin Rodenry  
 well #1  
 2014 OCT - 9 P 3:31  
 RECEIVED OOD  
 30-015-  
 35198

### [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

POOL  
 - Wildcat, Bone  
 Springs  
 96403

### [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.

Deana Weaver  
 Print or Type Name

*Deana Weaver*  
 Signature

Production Clerk  
 Title

10.6.2014  
 Date

dweaver@mec.com  
 e-mail Address



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

October 6, 2014

Oil Conservation Division  
Attn: Phillip Goetze  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Dear Mr. Goetze:

Mack Energy respectfully requests an administrative approval without notice and hearing of the following unorthodox well location.

The well location and legal description is as follows:

Robin Federal #1 NM-114960  
310 FNL & 2530 FWL  
Sec. 9, T23S, R25E  
Eddy County, New Mexico

The well was originally drilled and completed in the Strawn Pool.

Attached to this application are the following exhibits.

- A.) Well location and acreage dedication plat (form C-102) (Exhibit A).
- B.) Well Location Site Map (Exhibit B).

This well was drilled and completed as a Strawn well. It was proven to be unproductive and at this time we are proposing to re-complete this well within the Bone Spring formation at 310' FNL 2574' FWL. The well is located in the NENW Sec. 9 T23S R25E and is encroaching the NWNE Sec. 9 T23S R25E, SE/SW & SW/SE Sec. 4 T23S R25E offset owners have been notified. Due to the desire of produce this well, we do request that approval be expedited.

Thank you for your assistance in this matter. If you have any questions, please feel free to call.

Sincerely,

MACK ENERGY CORPORATION

  
Deana Weaver  
Production Clerk

DW/  
Enclosures

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**M E M O**

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DATE: September 30, 2014

TO: NMOCD

FROM: STACI SANDERS  
MACK ENERGY CORPORATION

RE: **NON-STANDARD LOCATION**  
ROBIN FEDERAL #1 WELL  
USA LEASE NMNM-114960  
W/2, W/2SE/4 SEC. 9, T23S, R25E  
EDDY COUNTY, NEW MEXICO

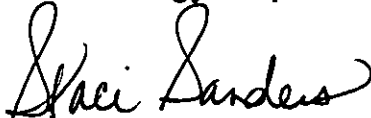
The Robin Federal #1 well is on Federal Lease NMNM-114960. This lease covers the W/2 and W/2SE/4 of Section 9, T23S, R25E, Eddy County, NM (as well as acreage in other sections), as to all depths.

The ownership in this lease is common as to all depths.

Please do not hesitate to contact me should you require any further information.

Sincerely,

**Mack Energy Corporation**



Staci Sanders  
Land Department

DISTRICT I  
1625 N. FRENCH DR., BOBBS, 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-102  
Revised October 12, 2005  
Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

|                            |                                          |                          |
|----------------------------|------------------------------------------|--------------------------|
| API Number<br>30-015-35198 | Pool Code                                | Pool Name<br>bone spring |
| Property Code              | Property Name<br>ROBIN FEDERAL           | Well Number<br>1         |
| OGRID No.<br>013837        | Operator Name<br>MACK ENERGY CORPORATION | Elevation<br>3715'       |

Surface Location

| UL or lot No. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County |
|---------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|--------|
| C             | 9       | 23-S     | 25-E  |         | 310           | NORTH            | 2530          | WEST           | EDDY   |

Bottom Hole Location If Different From Surface

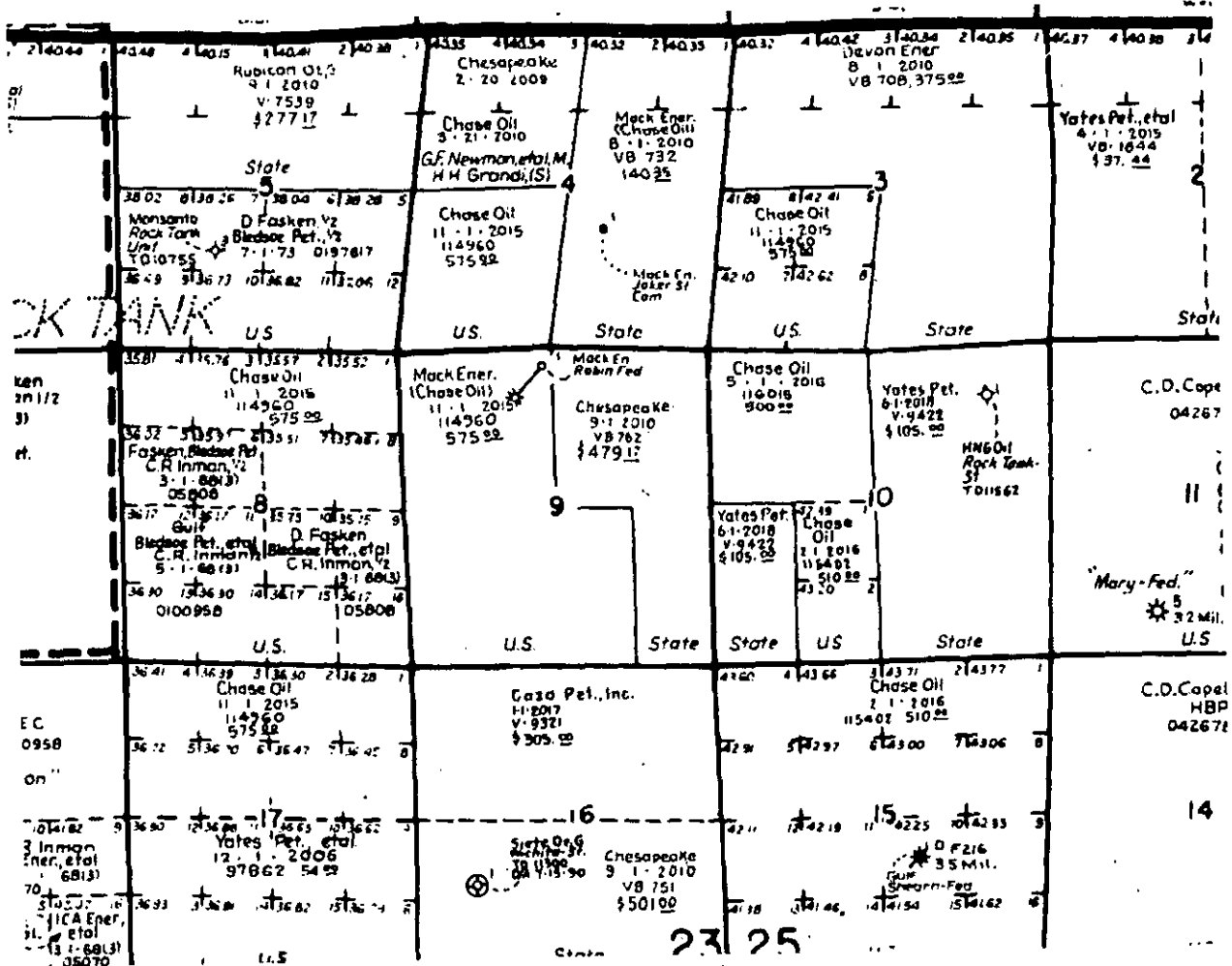
| UL or lot No. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County |
|---------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|--------|
| C             | 9       | 23-S     | 25-E  |         | 678           | NORTH            | 1995          | WEST           | EDDY   |

| Dedicated Acres | Joint or Infill | Consolidation Code | Order No. |
|-----------------|-----------------|--------------------|-----------|
|                 |                 |                    |           |

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

|                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>2530'<br/>1995'<br/>678'<br/>310'<br/>SURF. SEE DETAIL<br/>B.H.<br/>GRID AZ. = 236°09'44"<br/>GRID DIST. = 655.2'<br/>DETAIL<br/>3729.5'<br/>3723.9'<br/>600'<br/>600'<br/>3719.0'<br/>3705.3'</p> | <p>OPERATOR CERTIFICATION</p> <p>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.</p> <p><i>Deana Weaver 10/6/14</i><br/>Signature Date<br/>Deana Weaver<br/>Printed Name</p> |
| <p>BOTTOM HOLE LOCATION<br/>Y=481722.2 N<br/>X=478245.4 E</p> <p>GEODETIC COORDINATES<br/>NAD 27 NME<br/>Y=482087.0 N<br/>X=478789.5 E<br/>LAT.=32°19'31.28" N<br/>LONG.=104°24'07.20" W</p>          | <p>SURVEYOR CERTIFICATION</p> <p>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.</p> <p>APRIL 3, 2006</p> <p>Date Surveyed LA<br/>Signature &amp; Seal of Professional Surveyor<br/>GARY EIDSON<br/>4/12/06<br/>06.11.0589<br/>Certificate No. GARY EIDSON 12841</p>                                                                                                                                                                                       |

SCANNED





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

October 6, 2014

**VIA CERTIFIED MAIL 7014 1200 0001 9123 1389**

Crown Oil Partners V, L.P.  
Brain Arnold, JR.  
303 Veterans Airpark Ln., Suite 6101  
Midland, TX 79705

*Dear Sir or Madam:*

*This letter will serve as a notice that Mack Energy Corporation has requested administrative approval from the NMOCD for an unorthodox Bone Spring oil well location for the Robin Federal #1 under Rule 104.F. (3). The location for this well is 310 FNL & 2530 FWL of Section 9-T23S-R25E, Eddy County, New Mexico.*

*Should your company have any objection, it must be filed in writing within twenty (20) days from the date of this notice. The Division Director may approve the unorthodox location if no objection to the unorthodox location has been made within the 20 days after the application has been received.*

*Sincerely,*

A handwritten signature in cursive script that reads "Deana Weaver".

Deana Weaver  
Production Clerk

DW/

Enclosures



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

October 6, 2014

**VIA CERTIFIED MAIL 7014 1200 0001 9123 1396**

Bureau of Land Management  
620 E. Greene Street  
Carlsbad, NM 88220

*Dear Sir or Madam:*

*This letter will serve as a notice that Mack Energy Corporation has requested administrative approval from the NMOCD for an unorthodox Bone Spring oil well location for the Robin Federal #1 under Rule 104.F. (3). The location for this well is 310 FNL & 2574 FWL of Section 9-T23S-R25E, Eddy County, New Mexico.*

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A handwritten signature in cursive script that reads "Deana Weaver".

Deana Weaver  
Production Clerk

DW/

Enclosures

UNITED STATES--  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
OMB No. 1004-0137  
Expires: July 31, 2010

**SUNDRY NOTICES AND REPORTS ON WELLS**  
*Do not use this form proposals to drill or to re-enter an  
abandoned well. Use Form 3160-3 (APD) for such proposals.*

5. Lease Serial No.  
**NM-114960**  
6. If Indian, Allottee or Tribe Name

*SUBMIT IN TRIPLICATE - Other instructions on page 2.*

1. Type of Well

☒ Oil Well ☐ Gas Well ☐ Other

2. Name of Operator

**Mack Energy Corporation**

3a. Address

**P.O. Box 960 Artesia, NM 88210-0960**

3b. Phone No. (include area code)

**(575) 748-1288**

4. Location of Well (Footage, Sec., T.R.M., or Survey Description)

**310 FNL & 2530 FWL, Sec. 9 T23S R25E**

7. If Unit of CA/Agreement, Name and/or No.

8. Well Name and No.  
**Robin Federal #1**

9. API Well No.  
**30-015-35198**

10. Field and Pool or Exploratory Area  
**Bone Spring**

11. Country or Parish, State  
**Eddy, NM**

**12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA**

| TYPE OF SUBMISSION                                   | TYPE OF ACTION                                |                                           |                                                    |                                                                  |
|------------------------------------------------------|-----------------------------------------------|-------------------------------------------|----------------------------------------------------|------------------------------------------------------------------|
| <input checked="" type="checkbox"/> Notice of Intent | <input type="checkbox"/> Acidize              | <input type="checkbox"/> Deepen           | <input type="checkbox"/> Production (Start/Resume) | <input type="checkbox"/> Water Shut-Off                          |
| <input type="checkbox"/> Subsequent Report           | <input type="checkbox"/> Alter Casing         | <input type="checkbox"/> Fracture Treat   | <input type="checkbox"/> Reclamation               | <input type="checkbox"/> Well Integrity                          |
| <input type="checkbox"/> Final Abandonment Notice    | <input type="checkbox"/> Casing Repair        | <input type="checkbox"/> New Construction | <input type="checkbox"/> Recomplete                | <input checked="" type="checkbox"/> Other <b>NSL Application</b> |
|                                                      | <input type="checkbox"/> Change Plans         | <input type="checkbox"/> Plug and Abandon | <input type="checkbox"/> Temporarily Abandon       |                                                                  |
|                                                      | <input type="checkbox"/> Convert to Injection | <input type="checkbox"/> Plug Back        | <input type="checkbox"/> Water Disposal            |                                                                  |

13. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.)

Mack Energy Corporation is requesting approval to produce the Robin Federal #1 in the Bone Spring formation, at a non-standard location. Attached is a copy of the NSL application sent to the OCD.

14. I hereby certify that the foregoing is true and correct. Name (Printed Typed)

**Deana Weaver**

Title **Production Clerk**

Signature

*Deana Weaver*

Date

*10-6-14*

**THIS SPACE FOR FEDERAL OR STATE OFFICE USE**

Approved by

Title

Date

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for my person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
OMB No. 1004-0137  
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30-015-35198

10. Field and Pool or Exploratory Area  
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Eddy, NM

12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA

| TYPE OF SUBMISSION                                   | TYPE OF ACTION                                |                                               |                                                    |                                         |
|------------------------------------------------------|-----------------------------------------------|-----------------------------------------------|----------------------------------------------------|-----------------------------------------|
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| <input type="checkbox"/> Subsequent Report           | <input type="checkbox"/> Alter Casing         | <input type="checkbox"/> Fracture Treat       | <input type="checkbox"/> Reclamation               | <input type="checkbox"/> Well Integrity |
| <input type="checkbox"/> Final Abandonment Notice    | <input type="checkbox"/> Casing Repair        | <input type="checkbox"/> New Construction     | <input checked="" type="checkbox"/> Recomplete     | <input type="checkbox"/> Other _____    |
|                                                      | <input type="checkbox"/> Change Plans         | <input type="checkbox"/> Plug and Abandon     | <input type="checkbox"/> Temporarily Abandon       |                                         |
|                                                      | <input type="checkbox"/> Convert to Injection | <input checked="" type="checkbox"/> Plug Back | <input type="checkbox"/> Water Disposal            |                                         |

13. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleate horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleation in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.)

Mack Energy Corporation proposes to do the following work:

1. MIRU PU
2. NU 5K Hydraulic BOP
3. PU 6 1/8" tooth bit, 7" scrapper & RIH on 2 7/8" L-80 Prod. Tbg. To 8620'
5. RU wireline w/5K pack off & wireline 7" CIBP in hole set @ 8606' & cap w/35' cmt. Perf 2nd set 7962'-8178'
6. RIH w/ RTTS and 2 7/8" L-80 Prod. tbg
7. Close bypass & pump 2000gal 15% ball job.
8. Swab and evaluate
9. If zone looks productive proceed w/ slickwater stage frac according to design
10. POH laydown tbg. ND hydraulic BOP & NU 10K frac valves & goathead for 4 stage frac job. Double check B section make sure it is 10K.
11. After shooting perfs 7762-7894', 5590-5774' & 5182-5380' and setting Halliburton 10K Obsedian caged ball plug, Pump 1500gal 15% bioball job before starting 3rd thru 5th stage frac job.
12. Put well back on production.

14. I hereby certify that the foregoing is true and correct. Name (Printed Typed)

Deana Weaver

Title Production Clerk

Signature

*Deana Weaver*

Date

10. 6. 14

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

Title

Date

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for my person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.



Scientific  
Drilling

# Scientific Drilling International Survey Report

Company: MACK ENERGY  
Field: Undesignated  
Site: Eddy County, NM  
Well: Robin Federal #1  
Wellpath: VH - Job #32K1206987

Date: 02/19/2007 Time: 19:44:15 Page: 1  
Co-ordinate(NE) Reference: Site: Eddy County, NM, Grid North  
Vertical (TVD) Reference: SITE 0.0  
Section (VS) Reference: Well (0.00N,0.00E,235.93Azi)  
Survey Calculation Method: Minimum Curvature Db: Sybase

Survey: 12/03/08 Start Date: 12/03/2008  
Company: Scientific Drilling International Engineer: Gonzales/Pena w/P&M  
Tool: Keeper, Keeper Gyro Tied-to: From Surface

## Survey

| MD<br>ft | Incl<br>deg | Azim<br>deg | TVD<br>ft | VS<br>ft | N/S<br>ft | E/W<br>ft | DLS<br>deg/100ft | ClsD<br>ft | ClsA<br>deg |
|----------|-------------|-------------|-----------|----------|-----------|-----------|------------------|------------|-------------|
| 0.00     | 0.00        | 0.04        | 0.00      | 0.00     | 0.00      | 0.00      | 0.00             | 0.00       | 0.00        |
| 100.00   | 0.26        | 23.63       | 100.00    | -0.19    | 0.21      | 0.08      | 0.28             | 0.23       | 23.63       |
| 200.00   | 0.20        | 36.79       | 200.00    | -0.55    | 0.56      | 0.29      | 0.08             | 0.62       | 27.28       |
| 300.00   | 0.14        | 123.87      | 300.00    | -0.76    | 0.63      | 0.49      | 0.24             | 0.80       | 38.13       |
| 400.00   | 0.17        | 104.43      | 400.00    | -0.90    | 0.52      | 0.74      | 0.06             | 0.90       | 54.70       |
| 500.00   | 0.26        | 0.39        | 500.00    | -1.13    | 0.71      | 0.88      | 0.34             | 1.13       | 51.11       |
| 600.00   | 0.53        | 6.33        | 600.00    | -1.56    | 1.40      | 0.94      | 0.27             | 1.68       | 33.77       |
| 700.00   | 0.39        | 349.82      | 699.99    | -2.00    | 2.19      | 0.93      | 0.19             | 2.38       | 22.89       |
| 800.00   | 0.25        | 344.98      | 799.99    | -2.20    | 2.74      | 0.81      | 0.14             | 2.86       | 16.46       |
| 900.00   | 0.27        | 332.54      | 899.99    | -2.30    | 3.16      | 0.64      | 0.06             | 3.22       | 11.53       |
| 1000.00  | 0.56        | 297.18      | 999.99    | -2.10    | 3.59      | 0.10      | 0.37             | 3.59       | 1.81        |
| 1100.00  | 0.62        | 295.50      | 1099.98   | -1.59    | 4.05      | -0.82     | 0.06             | 4.13       | 348.52      |
| 1200.00  | 0.58        | 299.95      | 1199.98   | -1.09    | 4.53      | -1.75     | 0.06             | 4.86       | 338.90      |
| 1300.00  | 0.45        | 317.72      | 1299.97   | -0.81    | 5.08      | -2.45     | 0.20             | 5.64       | 334.22      |
| 1400.00  | 0.42        | 320.64      | 1399.97   | -0.72    | 5.65      | -2.95     | 0.04             | 6.37       | 332.44      |
| 1500.00  | 0.56        | 338.01      | 1499.97   | -0.79    | 6.39      | -3.36     | 0.20             | 7.22       | 332.22      |
| 1600.00  | 0.62        | 350.94      | 1599.96   | -1.12    | 7.37      | -3.63     | 0.15             | 8.22       | 333.78      |
| 1700.00  | 0.66        | 358.34      | 1699.95   | -1.66    | 8.48      | -3.73     | 0.09             | 9.27       | 336.24      |
| 1800.00  | 0.70        | 358.40      | 1799.95   | -2.30    | 9.67      | -3.77     | 0.04             | 10.38      | 338.71      |
| 1900.00  | 0.64        | 354.95      | 1899.94   | -2.90    | 10.84     | -3.83     | 0.07             | 11.50      | 340.52      |
| 2000.00  | 0.57        | 337.73      | 1999.93   | -3.27    | 11.85     | -4.07     | 0.19             | 12.53      | 341.04      |
| 2100.00  | 0.51        | 329.28      | 2099.93   | -3.40    | 12.70     | -4.49     | 0.10             | 13.47      | 340.53      |
| 2200.00  | 0.59        | 328.26      | 2199.93   | -3.44    | 13.52     | -4.99     | 0.08             | 14.41      | 339.75      |
| 2300.00  | 0.64        | 294.00      | 2299.92   | -3.17    | 14.18     | -5.77     | 0.37             | 15.31      | 337.87      |
| 2400.00  | 0.71        | 268.71      | 2399.91   | -2.35    | 14.40     | -6.90     | 0.30             | 15.98      | 334.40      |
| 2500.00  | 0.54        | 257.01      | 2499.91   | -1.39    | 14.28     | -7.97     | 0.21             | 16.35      | 330.81      |
| 2600.00  | 0.74        | 255.61      | 2599.90   | -0.34    | 14.01     | -9.06     | 0.20             | 16.68      | 327.11      |
| 2700.00  | 0.37        | 244.19      | 2699.90   | 0.58     | 13.71     | -9.98     | 0.38             | 16.95      | 323.96      |
| 2800.00  | 0.50        | 231.31      | 2799.89   | 1.34     | 13.29     | -10.61    | 0.16             | 17.01      | 321.42      |
| 2900.00  | 0.48        | 231.68      | 2899.89   | 2.19     | 12.76     | -11.28    | 0.02             | 17.03      | 318.54      |
| 3000.00  | 0.35        | 224.54      | 2999.89   | 2.91     | 12.28     | -11.82    | 0.14             | 17.05      | 316.11      |
| 3100.00  | 0.38        | 242.63      | 3099.89   | 3.54     | 11.91     | -12.33    | 0.12             | 17.14      | 314.02      |
| 3200.00  | 0.52        | 252.64      | 3199.88   | 4.30     | 11.63     | -13.06    | 0.16             | 17.48      | 311.69      |
| 3300.00  | 0.47        | 266.40      | 3299.88   | 5.09     | 11.47     | -13.90    | 0.13             | 18.02      | 309.52      |
| 3400.00  | 0.39        | 263.50      | 3399.88   | 5.74     | 11.40     | -14.65    | 0.08             | 18.56      | 307.80      |
| 3500.00  | 0.32        | 272.70      | 3499.87   | 6.27     | 11.38     | -15.26    | 0.09             | 19.04      | 306.70      |
| 3600.00  | 0.24        | 282.41      | 3599.87   | 6.64     | 11.43     | -15.75    | 0.09             | 19.46      | 305.99      |
| 3700.00  | 0.35        | 264.03      | 3699.87   | 7.05     | 11.45     | -16.25    | 0.14             | 19.88      | 305.16      |
| 3800.00  | 0.52        | 237.04      | 3799.87   | 7.77     | 11.17     | -16.94    | 0.26             | 20.29      | 303.40      |
| 3900.00  | 0.72        | 234.35      | 3899.86   | 8.86     | 10.56     | -17.83    | 0.20             | 20.72      | 300.63      |
| 4000.00  | 0.74        | 235.04      | 3999.85   | 10.13    | 9.82      | -18.87    | 0.02             | 21.27      | 297.49      |
| 4100.00  | 0.82        | 232.64      | 4099.85   | 11.49    | 9.02      | -19.97    | 0.09             | 21.91      | 294.30      |
| 4200.00  | 0.90        | 230.16      | 4199.83   | 12.99    | 8.08      | -21.14    | 0.09             | 22.63      | 290.91      |
| 4300.00  | 0.90        | 232.19      | 4299.82   | 14.55    | 7.09      | -22.36    | 0.03             | 23.46      | 287.80      |
| 4400.00  | 0.87        | 245.22      | 4399.81   | 16.08    | 6.29      | -23.67    | 0.20             | 24.50      | 284.89      |
| 4500.00  | 1.22        | 235.98      | 4499.79   | 17.90    | 5.38      | -25.24    | 0.39             | 25.81      | 282.03      |
| 4600.00  | 1.09        | 232.38      | 4599.77   | 19.91    | 4.20      | -26.88    | 0.15             | 27.21      | 278.89      |
| 4700.00  | 0.99        | 269.39      | 4699.76   | 21.58    | 3.61      | -28.50    | 0.67             | 28.73      | 277.23      |
| 4800.00  | 1.91        | 276.59      | 4799.72   | 23.57    | 3.80      | -31.02    | 0.94             | 31.25      | 276.88      |



Scientific  
Drilling

## Scientific Drilling International Survey Report

Company: MACK ENERGY  
Field: Undesignated  
Site: Eddy County, NM  
Well: Robin Federal #1  
Wellpath: VH - Job #32K1206987

Date: 02/19/2007 Time: 19:44:15 Page: 2  
Co-ordinate(NE) Reference: Site: Eddy County, NM, Grid North  
Vertical (TYD) Reference: SITE 0.0  
Section (VS) Reference: Well (0.00N,0.00E,235.93Azi)  
Survey Calculation Method: Minimum Curvature Db: Sybase

### Survey

| MD<br>ft | Incl<br>deg | Azlm<br>deg | TVD<br>ft | VS<br>ft | N/S<br>ft | E/W<br>ft | DLS<br>deg/100ft | ClbD<br>ft | ClbA<br>deg |
|----------|-------------|-------------|-----------|----------|-----------|-----------|------------------|------------|-------------|
| 4900.00  | 2.38        | 262.38      | 4899.65   | 26.69    | 3.71      | -34.73    | 0.71             | 34.93      | 276.10      |
| 5000.00  | 2.17        | 253.75      | 4999.58   | 30.35    | 2.91      | -38.81    | 0.40             | 38.71      | 274.30      |
| 5100.00  | 1.73        | 242.95      | 5099.52   | 33.65    | 1.69      | -41.77    | 0.57             | 41.80      | 272.32      |
| 5200.00  | 1.75        | 243.44      | 5199.47   | 36.66    | 0.32      | -44.48    | 0.02             | 44.48      | 270.41      |
| 5300.00  | 1.57        | 246.29      | 5299.43   | 39.53    | -0.91     | -47.10    | 0.20             | 47.11      | 268.89      |
| 5400.00  | 1.41        | 247.22      | 5399.40   | 42.08    | -1.94     | -49.49    | 0.16             | 49.52      | 267.75      |
| 5500.00  | 1.26        | 253.54      | 5499.37   | 44.33    | -2.73     | -51.68    | 0.21             | 51.75      | 266.98      |
| 5600.00  | 1.16        | 246.71      | 5599.35   | 46.38    | -3.44     | -53.66    | 0.10             | 53.77      | 266.33      |
| 5700.00  | 1.22        | 251.86      | 5699.33   | 48.39    | -4.17     | -55.60    | 0.12             | 55.76      | 265.71      |
| 5800.00  | 1.19        | 255.79      | 5799.30   | 50.39    | -4.76     | -57.82    | 0.09             | 57.82      | 265.28      |
| 5900.00  | 0.68        | 273.10      | 5899.29   | 51.84    | -4.98     | -59.22    | 0.58             | 59.43      | 265.19      |



Scientific  
Drilling

# Scientific Drilling International Survey Report

|                                |                            |                                   |            |
|--------------------------------|----------------------------|-----------------------------------|------------|
| Company: MACK ENERGY           | Date: 02/19/2007           | Time: 19:44:33                    | Page: 1    |
| Field: Undesignated            | Co-ordinate(NE) Reference: | Site: Eddy County, NM, Grid North |            |
| Site: Eddy County, NM          | Vertical (TVD) Reference:  | SITE 0.0                          |            |
| Well: Robin Federal #1         | Section (VS) Reference:    | Well (0.00N,0.00E,235.93Azi)      |            |
| Wellpath: DH - Job #32D1206983 | Survey Calculation Method: | Minimum Curvature                 | Db: Sybase |

|                                         |                                   |
|-----------------------------------------|-----------------------------------|
| Survey: 12/03/06-01/07/07               | Start Date: 12/03/2006            |
| MWD 5948'-11300'                        |                                   |
| Company: Scientific Drilling Internatio | Engineer: Calvert/Lopez/McCormick |
| Tool: MWD;MWD                           | Tied-to: From: Definitive Path    |

## Survey

| MD<br>ft | Incl<br>deg | Azim<br>deg | TVD<br>ft | VS<br>ft | N/S<br>ft | E/W<br>ft | DLS<br>deg/100ft | ClsD<br>ft | ClsA<br>deg |
|----------|-------------|-------------|-----------|----------|-----------|-----------|------------------|------------|-------------|
| 5900.00  | 0.68        | 273.10      | 5899.29   | 51.84    | -4.98     | -59.22    | 0.00             | 59.43      | 265.19      |
| 5948.00  | 0.44        | 261.80      | 5947.29   | 52.24    | -4.99     | -59.69    | 0.55             | 59.89      | 265.22      |
| 6034.00  | 1.44        | 264.90      | 6033.27   | 53.48    | -5.13     | -61.09    | 1.16             | 61.30      | 265.20      |
| 6128.00  | 3.45        | 247.80      | 6127.19   | 57.28    | -6.31     | -64.88    | 2.25             | 65.19      | 264.45      |
| 6223.00  | 5.68        | 250.80      | 6221.88   | 64.62    | -8.93     | -71.97    | 2.36             | 72.52      | 262.92      |
| 6318.00  | 7.49        | 245.90      | 6316.25   | 75.27    | -13.01    | -82.06    | 1.99             | 83.09      | 260.99      |
| 6413.00  | 8.40        | 237.20      | 6410.34   | 88.30    | -19.30    | -93.55    | 1.58             | 95.52      | 258.34      |
| 6508.00  | 9.23        | 237.80      | 6504.22   | 102.85   | -27.12    | -105.83   | 0.88             | 109.25     | 255.63      |
| 6603.00  | 10.96       | 239.40      | 6597.74   | 119.48   | -35.77    | -120.05   | 1.84             | 125.27     | 253.41      |
| 6698.00  | 12.52       | 232.50      | 6690.76   | 138.78   | -46.64    | -135.99   | 2.21             | 143.77     | 251.07      |
| 6793.00  | 15.12       | 233.20      | 6783.00   | 161.44   | -60.33    | -154.09   | 2.74             | 165.48     | 248.62      |
| 6888.00  | 16.62       | 231.10      | 6874.38   | 187.35   | -76.29    | -174.58   | 1.69             | 190.52     | 246.40      |
| 6983.00  | 16.92       | 231.50      | 6965.34   | 214.67   | -93.43    | -195.88   | 0.34             | 217.11     | 244.51      |
| 7078.00  | 16.85       | 236.40      | 7056.24   | 242.23   | -109.65   | -218.26   | 1.50             | 244.26     | 243.33      |
| 7174.00  | 17.77       | 237.80      | 7147.90   | 270.78   | -125.16   | -242.25   | 1.05             | 272.67     | 242.68      |
| 7204.00  | 17.72       | 238.80      | 7178.47   | 279.92   | -129.98   | -250.03   | 1.03             | 281.79     | 242.54      |
| 7300.00  | 17.78       | 238.60      | 7267.90   | 309.15   | -145.17   | -275.04   | 0.09             | 311.00     | 242.17      |
| 7394.00  | 18.32       | 231.20      | 7357.28   | 338.21   | -161.90   | -298.80   | 2.50             | 339.85     | 241.55      |
| 7489.00  | 17.54       | 220.04      | 7447.70   | 366.87   | -182.23   | -319.65   | 3.70             | 367.95     | 240.31      |
| 7552.00  | 16.78       | 218.96      | 7507.89   | 384.70   | -196.56   | -331.48   | 1.31             | 385.38     | 239.33      |
| 7647.00  | 16.38       | 224.83      | 7598.95   | 410.98   | -216.73   | -349.55   | 1.81             | 411.29     | 238.20      |
| 7742.00  | 18.23       | 224.20      | 7689.64   | 438.66   | -236.88   | -369.35   | 1.96             | 438.79     | 237.33      |
| 7837.00  | 18.26       | 225.10      | 7779.87   | 467.83   | -258.04   | -390.26   | 0.30             | 467.85     | 236.53      |
| 7995.00  | 17.52       | 224.60      | 7930.23   | 515.46   | -292.45   | -424.49   | 0.48             | 515.48     | 235.44      |
| 8090.00  | 16.90       | 232.50      | 8020.99   | 543.27   | -311.04   | -445.49   | 2.54             | 543.33     | 235.08      |
| 8154.00  | 15.76       | 235.08      | 8082.40   | 561.24   | -321.68   | -459.99   | 2.11             | 561.31     | 235.03      |
| 8249.00  | 14.17       | 235.71      | 8174.18   | 585.77   | -335.62   | -480.18   | 1.68             | 585.84     | 235.05      |
| 8342.00  | 11.94       | 243.35      | 8264.78   | 606.70   | -346.35   | -498.18   | 3.03             | 606.75     | 235.19      |
| 8405.00  | 10.96       | 243.35      | 8326.52   | 619.10   | -351.96   | -509.38   | 1.56             | 619.13     | 235.36      |
| 8468.00  | 10.16       | 245.86      | 8388.46   | 630.51   | -358.91   | -519.79   | 1.46             | 630.53     | 235.52      |
| 8500.00  | 9.99        | 246.21      | 8419.96   | 638.02   | -369.19   | -524.90   | 0.56             | 636.03     | 235.62      |
| 8563.00  | 9.94        | 246.21      | 8482.01   | 646.75   | -363.59   | -534.88   | 0.08             | 646.75     | 235.79      |
| 8627.00  | 10.36       | 245.57      | 8545.01   | 657.86   | -368.19   | -545.17   | 0.68             | 657.86     | 235.97      |
| 8690.00  | 9.90        | 239.59      | 8607.03   | 688.85   | -373.28   | -555.00   | 1.82             | 688.85     | 236.08      |
| 8752.00  | 8.94        | 236.32      | 8668.19   | 678.99   | -378.65   | -563.61   | 1.77             | 678.99     | 236.11      |
| 8848.00  | 5.85        | 235.22      | 8763.37   | 691.42   | -385.62   | -573.90   | 3.12             | 691.43     | 236.10      |
| 8943.00  | 4.79        | 236.07      | 8857.95   | 700.31   | -390.65   | -581.24   | 1.22             | 700.32     | 236.10      |
| 9098.00  | 3.58        | 241.71      | 9012.54   | 711.60   | -396.55   | -590.87   | 0.82             | 711.60     | 236.13      |
| 9206.00  | 3.62        | 246.28      | 9120.33   | 718.31   | -399.52   | -596.96   | 0.27             | 718.32     | 236.21      |
| 9301.00  | 0.51        | 317.10      | 9215.26   | 721.33   | -400.42   | -598.99   | 3.67             | 721.34     | 236.28      |
| 9397.00  | 0.17        | 235.08      | 9311.26   | 721.53   | -400.19   | -600.40   | 0.54             | 721.55     | 236.32      |
| 9492.00  | 0.68        | 309.00      | 9406.25   | 721.84   | -399.91   | -600.96   | 0.69             | 721.86     | 236.36      |
| 9586.00  | 1.21        | 310.17      | 9500.24   | 722.27   | -398.92   | -602.15   | 0.56             | 722.30     | 236.48      |
| 9683.00  | 1.37        | 306.10      | 9597.22   | 722.94   | -397.58   | -603.87   | 0.19             | 723.00     | 236.64      |
| 9778.00  | 0.57        | 118.77      | 9692.21   | 723.11   | -397.14   | -604.37   | 2.04             | 723.18     | 236.69      |
| 9873.00  | 0.29        | 153.01      | 9787.21   | 722.93   | -397.58   | -603.85   | 0.39             | 722.98     | 236.64      |
| 9968.00  | 0.22        | 159.00      | 9882.21   | 723.00   | -397.96   | -603.67   | 0.08             | 723.05     | 236.81      |
| 10063.00 | 0.17        | 169.76      | 9977.21   | 723.09   | -398.27   | -603.58   | 0.07             | 723.14     | 236.58      |
| 10159.00 | 0.80        | 155.64      | 10073.20  | 723.26   | -399.02   | -603.28   | 0.66             | 723.30     | 236.52      |



Scientific  
Drilling

## Scientific Drilling International Survey Report

Company: MACK ENERGY  
Field: Undesignated  
Site: Eddy County, NM  
Well: Robin Federal #1  
Wellpath: DH - Job #32D1208983

Date: 02/19/2007 Time: 19:44:33 Page: 2  
Co-ordinate(NE) Reference: Site: Eddy County, NM, Grid North  
Vertical (TVD) Reference: SITE 0.0  
Section (VS) Reference: Well (0.00N,0.00E,235.93Azi)  
Survey Calculation Method: Minimum Curvature Db: Sybase

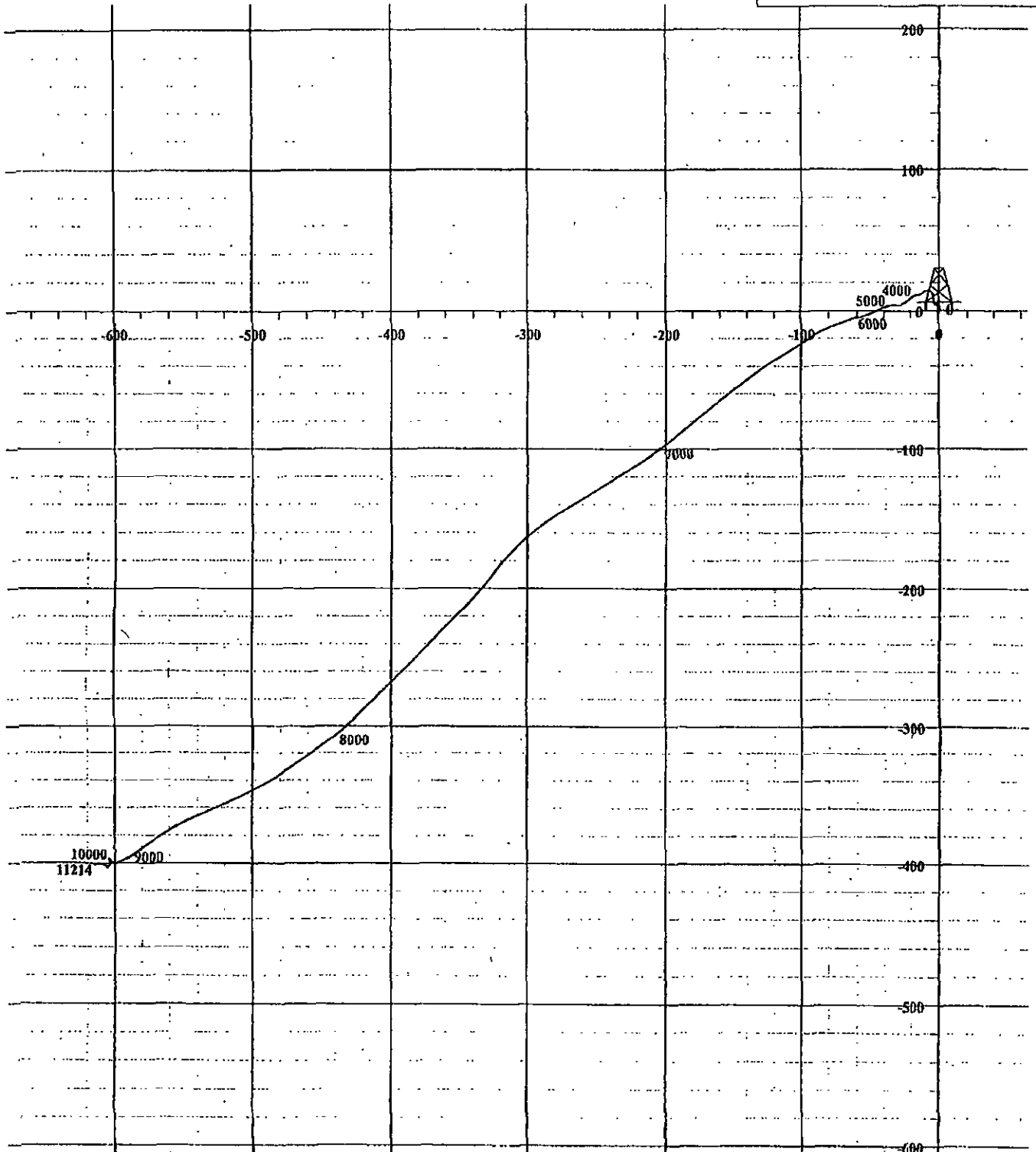
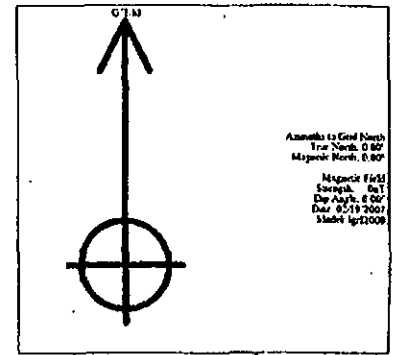
### Survey

| MD<br>ft | Incl<br>deg | Azim<br>deg | TVD<br>ft | VS<br>ft | N/S<br>ft | E/W<br>ft | DLS<br>deg/100ft | ClsD<br>ft | ClsA<br>deg |
|----------|-------------|-------------|-----------|----------|-----------|-----------|------------------|------------|-------------|
| 10255.00 | 0.48        | 195.78      | 10169.20  | 723.69   | -400.02   | -603.11   | 0.55             | 723.71     | 236.45      |
| 10350.00 | 0.17        | 176.00      | 10264.19  | 724.06   | -400.54   | -603.21   | 0.34             | 724.09     | 236.42      |
| 10444.00 | 0.80        | 233.76      | 10358.19  | 724.79   | -401.07   | -603.73   | 0.77             | 724.81     | 236.40      |
| 10541.00 | 0.98        | 222.16      | 10455.18  | 726.27   | -402.09   | -604.83   | 0.26             | 726.29     | 236.38      |
| 10636.00 | 1.04        | 189.65      | 10550.16  | 727.75   | -403.50   | -605.67   | 0.42             | 727.77     | 236.33      |
| 10731.00 | 0.76        | 24.30       | 10645.16  | 727.91   | -403.74   | -605.70   | 1.89             | 727.93     | 236.31      |
| 10827.00 | 0.61        | 336.97      | 10741.15  | 727.27   | -402.69   | -605.64   | 0.59             | 727.29     | 236.38      |
| 11019.00 | 1.34        | 284.93      | 10933.13  | 728.55   | -401.17   | -608.21   | 0.56             | 728.60     | 236.59      |
| 11113.00 | 1.06        | 254.36      | 11027.11  | 730.09   | -401.12   | -610.11   | 0.73             | 730.16     | 236.68      |
| 11209.00 | 1.57        | 292.91      | 11123.08  | 731.65   | -400.85   | -612.17   | 1.03             | 731.73     | 236.78      |
| 11269.00 | 1.88        | 256.25      | 11183.06  | 733.02   | -400.76   | -613.89   | 1.87             | 733.12     | 236.86      |
| 11300.00 | 1.88        | 256.25      | 11214.04  | 733.98   | -401.00   | -614.87   | 0.00             | 734.08     | 236.89      |



Scientific  
Drilling

Field: Undesignated  
Site: Eddy County, NM  
Well: Robin Federal #1  
Wellpath: DH - Job #32D1206983  
Survey: 12/03/06-01/07/07



West(-)/East(+) [100ft/in]

## McMillan, Michael, EMNRD

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**From:** Shapard, Craig, EMNRD  
**Sent:** Wednesday, October 29, 2014 10:19 AM  
**To:** McMillan, Michael, EMNRD  
**Subject:** RE: Mack Energy Robin Federal Sec 9 23S 25E Bone Spring pool designation

(96403) Wildcat; Bone Spring. The closet B.S. discovery is 5.5 miles east.

T.C. Shapard  
District II Geologist  
Energy Minerals & Natural Resource Department  
811 S. First Street  
Artesia, New Mexico 88202  
Office: (575) 748-1283 Ext. 103  
Fax: (575) 748-9120  
E-MAIL: [Craig.Shapard@state.nm.us](mailto:Craig.Shapard@state.nm.us)



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**From:** McMillan, Michael, EMNRD  
**Sent:** Wednesday, October 29, 2014 10:12 AM  
**To:** Shapard, Craig, EMNRD  
**Subject:** Mack Energy Robin Federal Sec 9 23S 25E Bone Spring pool designation

TC:  
Can you give me the pool designation for the Mack Energy Robin Federal Sec 9 23S 25E Bone Spring pool? API 30-015-35198.

Also Paul Kautz has designated the Wolfcamp on the Texas/NM border as oil, and not gas pools, based on surrounding wells.

Thanks  
Mike