

## CONFIDENTIAL - TIGHT HOLE

Form 3160-5  
(August 2007)UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENTFORM APPROVED  
OMB No 1004-0137  
Expires: July 31, 2010

## SUNDRY NOTICES AND REPORTS ON WELLS

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

SUBMIT IN TRIPLICATE - Other instructions on page 2.

RECEIVED

NOV 05 2007

1. Type of Well

☐ Oil Well ☐ Gas Well ☒ Other

2. Name of Operator

BOLACK MINERALS COMPANY

Bureau of Land Management  
Farmington Field Office

3a. Address

3901 BLOOMFIELD HIGHWAY  
FARMINGTON, NM 87401

3b. Phone No. (include area code)

505-325-4275

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

1935' FSL and 806' FEL, Section 3  
Township 30 North, Range 16 West, N.M.P.M.

5. Lease Serial No.

NM SF 0081226

6. If Indian, Allottee or Tribe Name

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

8. Well Name and No

THOMAS F. BOLACK #1 WELL

9. API Well No.

3004532X583

10. Field and Pool or Exploratory Area

WILDCAT McCracken

11. Country or Parish, State

SAN JUAN COUNTY, NEW MEXICO

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

## TYPE OF SUBMISSION

## TYPE OF ACTION

☐ Notice of Intent☐ Acidize☐ Deepen☐ Production (Start/Resume)☐ Water Shut-Off☒ Subsequent Report☐ Alter Casing☐ Fracture Treat☐ Reclamation☐ Well Integrity☐ Final Abandonment Notice☐ Casing Repair☐ New Construction☐ Recomplete☒ Other Drilling☐ Change Plans☐ Plug and Abandon☐ Temporarily AbandonDeviation Surveys☐ Convert to Injection☐ Plug Back☐ 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 recompleat 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 recompleat 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.)

Attached hereto are the following drilling deviation surveys:

(a) Aztec Well Servicing Co., Inc. dated October 30, 2007 (One page)

(b) Weatherford International, Inc. dated January 12, 2007 (Eight pages)

RCVD DEC 26 '07

OIL CONS. DIV.

DIST. 3

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

TOMMY BOLACK

Title GENERAL PARTNER

Signature

Date November 2, 2007

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

ACCEPTED FOR RECORD

Approved by

Title

Date

NOV 05 2007

FARMINGTON FIELD OFFICE

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.

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any 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.

(Instructions on page 2)

NMOC





Weatherford

Client : Bolack Minerals  
 Well : Thomas F. Bolack #1  
 Location : San Juan County, NM  
 License : API# 30-045-32583  
 Comment : EM MWD Surveys

Page : 1  
 Date : 1/12/2007  
 File :

UWI #:

## Vertical Section Calculated Along Azimuth 0.00°

KB Elevation = 5714.00ft GR. Elevation = 5700.00ft

|    | MD      | Inc  | Azi    | TVD     | North | East | V'Sect | D'Leg | Bulld | Turn   |
|----|---------|------|--------|---------|-------|------|--------|-------|-------|--------|
|    | ft      | deg  | deg    | ft      | ft    | ft   | ft     | %/100 | %/100 | %/100  |
| 0  | 0.00    | 0.00 | 0.00   | 0.00    | 0.00  | 0.00 | 0.00   | 0.00  | 0.00  | 0.00   |
| 1  | 539.00  | 0.89 | 30.71  | 538.99  | 2.79  | 1.66 | 2.79   | 0.13  | 0.13  | 5.70   |
| 2  | 568.00  | 0.58 | 25.21  | 567.99  | 3.07  | 1.81 | 3.07   | 0.49  | -0.45 | -18.97 |
| 3  | 597.00  | 0.63 | 18.34  | 596.98  | 3.35  | 1.92 | 3.35   | 0.34  | 0.24  | -23.69 |
| 4  | 627.00  | 0.50 | 18.94  | 626.98  | 3.63  | 2.01 | 3.63   | 0.43  | -0.43 | 1.67   |
| 5  | 656.00  | 0.44 | 15.48  | 655.98  | 3.86  | 2.08 | 3.86   | 0.23  | -0.21 | -11.68 |
| 6  | 685.00  | 0.56 | 16.59  | 684.98  | 4.10  | 2.15 | 4.10   | 0.42  | 0.41  | 3.90   |
| 7  | 714.00  | 0.44 | 6.71   | 713.98  | 4.35  | 2.21 | 4.35   | 0.51  | -0.41 | -34.07 |
| 8  | 744.00  | 0.44 | 10.84  | 743.98  | 4.57  | 2.26 | 4.57   | 0.28  | 0.00  | 33.77  |
| 9  | 775.00  | 0.44 | 3.71   | 775.98  | 4.81  | 2.30 | 4.81   | 0.31  | 0.00  | -41.03 |
| 10 | 808.00  | 0.56 | 16.34  | 807.98  | 5.08  | 2.35 | 5.08   | 0.51  | 0.37  | 39.47  |
| 11 | 839.00  | 0.56 | 13.96  | 838.97  | 5.36  | 2.43 | 5.38   | 0.08  | 0.00  | -7.68  |
| 12 | 871.00  | 0.44 | 3.46   | 870.97  | 5.65  | 2.47 | 5.65   | 0.47  | -0.37 | -32.81 |
| 13 | 903.00  | 0.44 | 1.33   | 902.97  | 5.90  | 2.48 | 5.90   | 0.05  | 0.00  | -6.66  |
| 14 | 934.00  | 0.63 | 7.46   | 933.97  | 6.18  | 2.51 | 6.18   | 0.64  | 0.61  | 19.77  |
| 15 | 968.00  | 0.50 | 4.21   | 965.97  | 6.50  | 2.54 | 6.50   | 0.42  | -0.41 | -10.16 |
| 16 | 997.00  | 0.56 | 8.71   | 996.97  | 6.78  | 2.57 | 6.78   | 0.24  | 0.19  | 14.52  |
| 17 | 1029.00 | 0.44 | 353.84 | 1028.97 | 7.06  | 2.58 | 7.06   | 0.55  | -0.37 | -48.47 |
| 18 | 1060.00 | 0.44 | 4.84   | 1059.97 | 7.30  | 2.58 | 7.30   | 0.27  | 0.00  | 35.48  |
| 19 | 1092.00 | 0.38 | 346.21 | 1091.97 | 7.52  | 2.57 | 7.52   | 0.45  | -0.19 | -58.22 |
| 20 | 1124.00 | 0.44 | 357.71 | 1123.98 | 7.75  | 2.54 | 7.75   | 0.32  | 0.19  | 35.94  |
| 21 | 1155.00 | 0.44 | 341.98 | 1154.98 | 7.98  | 2.49 | 7.98   | 0.39  | 0.00  | -50.81 |
| 22 | 1187.00 | 0.56 | 334.84 | 1186.98 | 8.24  | 2.39 | 8.24   | 0.42  | 0.37  | -22.25 |
| 23 | 1219.00 | 0.56 | 346.84 | 1218.98 | 8.53  | 2.29 | 8.53   | 0.37  | 0.00  | 37.50  |
| 24 | 1250.00 | 0.56 | 342.46 | 1249.98 | 8.82  | 2.21 | 8.82   | 0.14  | 0.00  | -14.13 |
| 25 | 1282.00 | 0.44 | 356.21 | 1281.98 | 9.09  | 2.15 | 9.09   | 0.53  | -0.37 | 42.97  |
| 26 | 1313.00 | 0.50 | 334.84 | 1312.98 | 9.34  | 2.09 | 9.34   | 0.59  | 0.19  | -68.94 |
| 27 | 1345.00 | 0.50 | 353.84 | 1344.98 | 9.60  | 2.01 | 9.60   | 0.52  | 0.00  | 59.38  |
| 28 | 1378.00 | 0.31 | 359.09 | 1376.98 | 9.82  | 2.00 | 9.82   | 0.62  | -0.61 | 18.94  |
| 29 | 1408.00 | 0.31 | 349.58 | 1407.95 | 9.99  | 1.98 | 9.99   | 0.16  | 0.00  | -29.89 |
| 30 | 1440.00 | 0.38 | 335.71 | 1439.95 | 10.17 | 1.92 | 10.17  | 0.34  | 0.22  | -43.38 |
| 31 | 1471.00 | 0.38 | 2.59   | 1470.95 | 10.37 | 1.88 | 10.37  | 0.57  | 0.00  | 86.71  |
| 32 | 1503.00 | 0.38 | 0.33   | 1502.95 | 10.58 | 1.89 | 10.58  | 0.05  | 0.00  | -7.06  |
| 33 | 1534.00 | 0.38 | 7.96   | 1533.95 | 10.79 | 1.80 | 10.79  | 0.16  | 0.00  | 24.61  |
| 34 | 1566.00 | 0.44 | 351.21 | 1565.95 | 11.01 | 1.80 | 11.01  | 0.42  | 0.19  | -52.34 |



Weatherford

Client Bolack Minerals  
 Well Thomas F. Bolack #1  
 Location San Juan County, NM  
 License API# 30-045-32583  
 Comment EM MWD Surveys

Page: 2  
 Date: 1/12/2007  
 File:

UWI #:

## Vertical Section Calculated Along Azimuth 0.00°

KB Elevation = 5714.00ft GR. Elevation = 5700.00ft

|    | MD      | Inc  | Azi    | TVD     | North | East  | V'Sect | D'Leg | Build | Turn    |
|----|---------|------|--------|---------|-------|-------|--------|-------|-------|---------|
|    | ft      | deg  | deg    | ft      | ft    | ft    | ft     | °/100 | °/100 | °/100   |
| 35 | 1597.00 | 0.31 | 5.46   | 1598.95 | 11.21 | 1.89  | 11.21  | 0.51  | -0.42 | 45.97   |
| 36 | 1629.00 | 0.38 | 2.08   | 1628.95 | 11.41 | 1.90  | 11.41  | 0.23  | 0.22  | -10.58  |
| 37 | 1659.00 | 0.19 | 2.21   | 1658.95 | 11.55 | 1.91  | 11.55  | 0.63  | -0.63 | 0.43    |
| 38 | 1690.00 | 0.19 | 342.08 | 1689.95 | 11.66 | 1.89  | 11.66  | 0.21  | 0.00  | -64.94  |
| 39 | 1722.00 | 0.13 | 355.71 | 1721.95 | 11.74 | 1.87  | 11.74  | 0.22  | -0.18 | 42.58   |
| 40 | 1754.00 | 0.19 | 18.59  | 1753.95 | 11.83 | 1.89  | 11.83  | 0.27  | 0.19  | 71.50   |
| 41 | 1785.00 | 0.19 | 3.08   | 1784.95 | 11.93 | 1.91  | 11.93  | 0.17  | 0.00  | -50.03  |
| 42 | 1817.00 | 0.19 | 50.84  | 1816.95 | 12.01 | 1.95  | 12.01  | 0.48  | 0.00  | 149.25  |
| 43 | 1848.00 | 0.38 | 57.09  | 1848.95 | 12.11 | 2.08  | 12.11  | 0.60  | 0.59  | 19.63   |
| 44 | 1880.00 | 0.25 | 50.21  | 1879.95 | 12.21 | 2.22  | 12.21  | 0.44  | -0.42 | -22.19  |
| 45 | 1912.00 | 0.19 | 33.84  | 1911.95 | 12.29 | 2.30  | 12.29  | 0.27  | -0.19 | -51.16  |
| 46 | 1944.00 | 0.25 | 8.71   | 1943.96 | 12.41 | 2.34  | 12.41  | 0.35  | 0.19  | -78.53  |
| 47 | 1975.00 | 0.25 | 355.96 | 1974.95 | 12.54 | 2.35  | 12.54  | 0.18  | 0.00  | -41.13  |
| 48 | 2007.00 | 0.19 | 56.21  | 2006.95 | 12.64 | 2.39  | 12.64  | 0.71  | -0.19 | 188.28  |
| 49 | 2038.00 | 0.44 | 0.34   | 2037.95 | 12.79 | 2.43  | 12.79  | 1.19  | 0.81  | -180.23 |
| 50 | 2070.00 | 0.25 | 7.98   | 2069.95 | 12.98 | 2.44  | 12.96  | 0.61  | -0.59 | 23.81   |
| 51 | 2101.00 | 0.38 | 10.21  | 2100.95 | 13.15 | 2.47  | 13.15  | 0.42  | 0.42  | 7.26    |
| 52 | 2133.00 | 0.25 | 26.71  | 2132.94 | 13.31 | 2.52  | 13.31  | 0.49  | -0.41 | 51.56   |
| 53 | 2163.00 | 0.25 | 349.21 | 2162.94 | 13.44 | 2.54  | 13.44  | 0.54  | 0.00  | -125.00 |
| 54 | 2195.00 | 0.25 | 4.59   | 2194.94 | 13.58 | 2.53  | 13.58  | 0.21  | 0.00  | 48.08   |
| 55 | 2226.00 | 0.31 | 350.34 | 2225.94 | 13.73 | 2.52  | 13.73  | 0.30  | 0.19  | -45.97  |
| 56 | 2257.00 | 0.31 | 336.71 | 2256.94 | 13.89 | 2.47  | 13.89  | 0.25  | 0.00  | -47.19  |
| 57 | 2289.00 | 0.25 | 349.46 | 2288.94 | 14.03 | 2.42  | 14.03  | 0.28  | -0.19 | 42.97   |
| 58 | 2320.00 | 0.38 | 302.71 | 2319.94 | 14.15 | 2.32  | 14.15  | 0.89  | 0.42  | -150.81 |
| 59 | 2352.00 | 0.44 | 301.96 | 2351.94 | 14.28 | 2.13  | 14.28  | 0.19  | 0.19  | -2.34   |
| 60 | 2384.00 | 0.44 | 298.21 | 2383.94 | 14.40 | 1.92  | 14.40  | 0.09  | 0.00  | -11.72  |
| 61 | 2415.00 | 0.50 | 283.58 | 2414.94 | 14.49 | 1.68  | 14.49  | 0.43  | 0.19  | -47.19  |
| 62 | 2445.00 | 0.50 | 285.34 | 2444.94 | 14.55 | 1.43  | 14.55  | 0.05  | 0.00  | 5.87    |
| 63 | 2477.00 | 0.58 | 292.09 | 2476.94 | 14.65 | 1.15  | 14.65  | 0.27  | 0.19  | 21.09   |
| 64 | 2509.00 | 0.58 | 283.71 | 2508.94 | 14.75 | 0.85  | 14.75  | 0.26  | 0.00  | -26.19  |
| 65 | 2540.00 | 0.50 | 273.08 | 2539.93 | 14.79 | 0.57  | 14.79  | 0.37  | -0.19 | -34.29  |
| 66 | 2572.00 | 0.44 | 271.71 | 2571.93 | 14.80 | 0.31  | 14.80  | 0.19  | -0.19 | -4.28   |
| 67 | 2604.00 | 0.44 | 274.58 | 2603.93 | 14.81 | 0.08  | 14.81  | 0.07  | 0.00  | 9.97    |
| 68 | 2636.00 | 0.44 | 265.48 | 2635.93 | 14.81 | -0.18 | 14.81  | 0.22  | 0.00  | -29.50  |
| 69 | 2668.00 | 0.50 | 264.46 | 2667.93 | 14.79 | -0.44 | 14.79  | 0.19  | 0.19  | -3.12   |



Weatherford

Client : Bolack Minerals  
 Well : Thomas F. Bolack #1  
 Location : San Juan County, NM  
 License : API# 30-045-32583  
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UWI #:

## Vertical Section Calculated Along Azimuth 0.00°

KB Elevation = 5714.00ft GR. Elevation = 5700.00ft

|     | MD      | Inc  | Azi    | TVD     | North | East   | V'Sect | D'Leg | Build | Turn   |
|-----|---------|------|--------|---------|-------|--------|--------|-------|-------|--------|
|     | ft      | deg  | deg    | ft      | ft    | ft     | ft     | %/100 | %/100 | %/100  |
| 70  | 2700.00 | 0.63 | 265.71 | 2689.93 | 14.76 | -0.76  | 14.76  | 0.41  | 0.41  | 3.91   |
| 71  | 2732.00 | 0.89 | 266.00 | 2731.93 | 14.74 | -1.13  | 14.74  | 0.19  | 0.19  | 0.91   |
| 72  | 2784.00 | 0.63 | 269.09 | 2763.92 | 14.72 | -1.49  | 14.72  | 0.22  | -0.19 | 9.66   |
| 73  | 2795.00 | 0.75 | 273.34 | 2794.92 | 14.73 | -1.87  | 14.73  | 0.42  | 0.39  | 13.71  |
| 74  | 2827.00 | 0.75 | 272.69 | 2826.92 | 14.75 | -2.28  | 14.75  | 0.03  | 0.00  | -2.03  |
| 75  | 2859.00 | 0.69 | 276.59 | 2858.92 | 14.78 | -2.69  | 14.78  | 0.24  | -0.19 | 12.19  |
| 76  | 2922.00 | 0.69 | 275.34 | 2921.91 | 14.86 | -3.44  | 14.86  | 0.02  | 0.00  | -1.98  |
| 77  | 2954.00 | 0.69 | 277.08 | 2953.91 | 14.90 | -3.82  | 14.90  | 0.07  | 0.00  | 5.44   |
| 78  | 2986.00 | 0.75 | 281.96 | 2985.91 | 14.97 | -4.22  | 14.97  | 0.27  | 0.19  | 15.25  |
| 79  | 3016.00 | 0.75 | 274.21 | 3015.91 | 15.03 | -4.61  | 15.03  | 0.34  | 0.00  | -25.83 |
| 80  | 3048.00 | 0.81 | 277.09 | 3047.90 | 15.07 | -5.04  | 15.07  | 0.22  | 0.19  | 9.00   |
| 81  | 3079.00 | 0.94 | 284.59 | 3078.90 | 15.16 | -5.60  | 15.16  | 0.56  | 0.42  | 24.19  |
| 82  | 3111.00 | 0.75 | 277.59 | 3110.90 | 15.25 | -5.97  | 15.25  | 0.67  | -0.59 | -21.87 |
| 83  | 3142.00 | 0.75 | 277.34 | 3141.89 | 15.31 | -6.37  | 15.31  | 0.01  | 0.00  | -0.81  |
| 84  | 3174.00 | 0.75 | 274.95 | 3173.89 | 15.35 | -6.78  | 15.35  | 0.10  | 0.00  | -7.44  |
| 85  | 3205.00 | 0.69 | 270.09 | 3204.89 | 15.37 | -7.17  | 15.37  | 0.28  | -0.19 | -16.71 |
| 86  | 3237.00 | 0.69 | 275.59 | 3236.89 | 15.39 | -7.58  | 15.39  | 0.21  | 0.00  | 17.19  |
| 87  | 3269.00 | 0.81 | 278.71 | 3268.88 | 15.44 | -7.97  | 15.44  | 0.40  | 0.37  | 9.75   |
| 88  | 3300.00 | 0.81 | 280.48 | 3299.88 | 15.51 | -8.41  | 15.51  | 0.08  | 0.00  | 5.65   |
| 89  | 3331.00 | 0.81 | 277.83 | 3330.88 | 15.58 | -8.84  | 15.58  | 0.12  | 0.00  | -8.48  |
| 90  | 3363.00 | 0.88 | 279.84 | 3362.87 | 15.66 | -9.30  | 15.66  | 0.24  | 0.22  | 6.28   |
| 91  | 3394.00 | 0.88 | 275.96 | 3393.87 | 15.72 | -9.78  | 15.72  | 0.19  | 0.00  | -12.52 |
| 92  | 3426.00 | 0.81 | 272.21 | 3425.87 | 15.76 | -10.25 | 15.76  | 0.28  | -0.22 | -11.72 |
| 93  | 3458.00 | 0.81 | 273.71 | 3455.86 | 15.78 | -10.67 | 15.78  | 0.07  | 0.00  | 5.00   |
| 94  | 3488.00 | 0.88 | 279.09 | 3485.86 | 15.83 | -11.11 | 15.83  | 0.35  | 0.23  | 17.95  |
| 95  | 3517.00 | 0.88 | 272.71 | 3516.86 | 15.88 | -11.58 | 15.88  | 0.32  | 0.00  | -20.58 |
| 96  | 3548.00 | 0.88 | 284.59 | 3547.85 | 15.95 | -12.05 | 15.95  | 0.59  | 0.00  | 38.32  |
| 97  | 3580.00 | 0.81 | 275.34 | 3579.85 | 16.03 | -12.51 | 16.03  | 0.48  | -0.22 | -28.91 |
| 98  | 3611.00 | 0.81 | 274.09 | 3610.85 | 16.07 | -12.95 | 16.07  | 0.06  | 0.00  | -4.03  |
| 99  | 3643.00 | 0.81 | 284.09 | 3642.84 | 16.14 | -13.39 | 16.14  | 0.44  | 0.00  | 31.25  |
| 100 | 3675.00 | 0.75 | 285.21 | 3674.84 | 16.26 | -13.62 | 16.26  | 0.16  | -0.19 | 3.60   |
| 101 | 3706.00 | 0.75 | 289.83 | 3705.84 | 16.37 | -14.20 | 16.37  | 0.20  | 0.00  | 14.90  |
| 102 | 3738.00 | 0.81 | 281.09 | 3737.83 | 16.49 | -14.62 | 16.49  | 0.42  | 0.19  | -27.31 |
| 103 | 3770.00 | 0.81 | 281.59 | 3769.83 | 16.67 | -15.06 | 16.67  | 0.02  | 0.00  | 1.56   |
| 104 | 3800.00 | 0.75 | 277.34 | 3799.83 | 16.64 | -15.47 | 16.64  | 0.28  | -0.20 | -14.17 |



Weatherford

Client : Bolack Minerals  
 Well : Thomas F. Bolack #1  
 Location : San Juan County, NM  
 License : API# 30-045-32583  
 Comment : EM MWD Surveys

Page: 4  
 Date: 1/12/2007  
 File:

UWI #.

## Vertical Section Calculated Along Azimuth 0.00°

KB Elevation = 5714.00ft GR. Elevation = 5700.00ft

|     | MD<br>ft | Inc<br>deg | Azi<br>deg | TVD<br>ft | North<br>ft | East<br>ft | V'Sect<br>ft | D'Log<br>°/100 | Build<br>°/100 | Turn<br>°/100 |
|-----|----------|------------|------------|-----------|-------------|------------|--------------|----------------|----------------|---------------|
| 105 | 3831.00  | 0.75       | 279.59     | 3830.82   | 16.70       | -15.87     | 16.70        | 0.09           | 0.00           | 7.26          |
| 106 | 3864.00  | 0.81       | 286.46     | 3863.82   | 16.80       | -16.31     | 16.80        | 0.34           | 0.18           | 20.82         |
| 107 | 3895.00  | 0.75       | 273.71     | 3894.82   | 16.88       | -16.72     | 16.88        | 0.59           | -0.19          | -41.13        |
| 108 | 3927.00  | 0.88       | 277.96     | 3926.82   | 16.93       | -17.17     | 16.93        | 0.45           | 0.41           | 13.28         |
| 109 | 3959.00  | 0.88       | 279.59     | 3958.81   | 17.00       | -17.66     | 17.00        | 0.08           | 0.00           | 5.09          |
| 110 | 3990.00  | 0.81       | 273.09     | 3989.81   | 17.05       | -18.11     | 17.05        | 0.38           | -0.23          | -20.97        |
| 111 | 4022.00  | 0.75       | 285.34     | 4021.81   | 17.12       | -18.54     | 17.12        | 0.55           | -0.19          | 38.28         |
| 112 | 4053.00  | 0.75       | 276.71     | 4052.80   | 17.20       | -18.93     | 17.20        | 0.36           | 0.00           | -27.84        |
| 113 | 4085.00  | 0.81       | 276.21     | 4084.80   | 17.25       | -19.37     | 17.25        | 0.19           | 0.19           | -1.56         |
| 114 | 4116.00  | 0.81       | 274.96     | 4115.80   | 17.29       | -19.80     | 17.29        | 0.06           | 0.00           | -4.03         |
| 115 | 4148.00  | 0.81       | 283.21     | 4147.79   | 17.36       | -20.25     | 17.36        | 0.35           | 0.00           | 25.78         |
| 116 | 4180.00  | 0.81       | 281.21     | 4179.79   | 17.46       | -20.69     | 17.46        | 0.09           | 0.00           | -6.25         |
| 117 | 4211.00  | 0.75       | 280.09     | 4210.79   | 17.54       | -21.11     | 17.54        | 0.20           | -0.19          | -3.81         |
| 118 | 4243.00  | 0.75       | 278.84     | 4242.79   | 17.60       | -21.52     | 17.60        | 0.05           | 0.00           | -3.91         |
| 119 | 4275.00  | 0.81       | 272.84     | 4274.78   | 17.65       | -21.95     | 17.65        | 0.32           | 0.19           | -18.75        |
| 120 | 4306.00  | 0.75       | 267.59     | 4305.78   | 17.65       | -22.37     | 17.65        | 0.30           | -0.19          | -16.94        |
| 121 | 4338.00  | 0.75       | 263.96     | 4337.78   | 17.62       | -22.79     | 17.62        | 0.15           | 0.00           | -11.34        |
| 122 | 4369.00  | 0.75       | 266.84     | 4368.77   | 17.59       | -23.20     | 17.59        | 0.12           | 0.00           | 9.29          |
| 123 | 4401.00  | 0.69       | 273.96     | 4400.77   | 17.59       | -23.60     | 17.59        | 0.34           | -0.19          | 22.25         |
| 124 | 4433.00  | 0.75       | 266.71     | 4432.77   | 17.59       | -24.00     | 17.59        | 0.34           | 0.19           | -22.66        |
| 125 | 4464.00  | 0.75       | 263.21     | 4463.77   | 17.55       | -24.40     | 17.55        | 0.15           | 0.00           | -11.28        |
| 126 | 4496.00  | 0.88       | 268.71     | 4495.76   | 17.52       | -24.88     | 17.52        | 0.47           | 0.41           | 17.19         |
| 127 | 4527.00  | 0.88       | 284.71     | 4526.76   | 17.58       | -25.32     | 17.58        | 0.79           | 0.00           | 51.61         |
| 128 | 4559.00  | 0.94       | 268.71     | 4558.76   | 17.64       | -25.82     | 17.64        | 0.81           | 0.19           | -50.00        |
| 129 | 4591.00  | 0.88       | 269.09     | 4590.75   | 17.63       | -26.33     | 17.63        | 0.19           | -0.19          | 1.19          |
| 130 | 4596.00  | 1.00       | 271.59     | 4595.75   | 17.63       | -26.41     | 17.63        | 2.54           | 2.40           | 50.00         |
| 131 | 4622.00  | 0.88       | 273.09     | 4621.75   | 17.64       | -26.84     | 17.64        | 0.47           | -0.46          | 5.77          |
| 132 | 4653.00  | 0.81       | 268.09     | 4652.74   | 17.64       | -27.30     | 17.64        | 0.40           | -0.23          | -22.58        |
| 133 | 4685.00  | 0.69       | 271.34     | 4684.74   | 17.63       | -27.71     | 17.63        | 0.43           | -0.37          | 16.41         |
| 134 | 4717.00  | 0.69       | 267.84     | 4716.74   | 17.63       | -28.10     | 17.63        | 0.13           | 0.00           | -10.94        |
| 135 | 4748.00  | 0.81       | 271.09     | 4747.74   | 17.62       | -28.51     | 17.62        | 0.41           | 0.39           | 10.48         |
| 136 | 4780.00  | 0.88       | 270.34     | 4779.73   | 17.63       | -28.98     | 17.63        | 0.22           | 0.22           | -2.34         |
| 137 | 4811.00  | 0.88       | 271.09     | 4810.73   | 17.64       | -29.45     | 17.64        | 0.04           | 0.00           | 2.42          |
| 138 | 4843.00  | 0.88       | 274.84     | 4842.73   | 17.66       | -29.94     | 17.66        | 0.18           | 0.00           | 11.72         |
| 139 | 4874.00  | 0.88       | 273.46     | 4873.72   | 17.70       | -30.42     | 17.70        | 0.07           | 0.00           | -4.45         |



Weatherford

Client : Bolack Minerals  
 Well : Thomas F. Bolack #1  
 Location : San Juan County, NM  
 License : API# 30-045-32583  
 Comment : EM MWD Surveys

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 Date 1/12/2007  
 File

UWI#:

## Vertical Section Calculated Along Azimuth 0.00°

KB Elevation = 5714.00ft GR Elevation = 5700.00ft

|     | MD      | Inc  | Azi    | TVD     | North | East   | V'Sect | D'Leg | Bulld | Turn   |
|-----|---------|------|--------|---------|-------|--------|--------|-------|-------|--------|
|     | ft      | deg  | deg    | ft      | ft    | ft     | ft     | °/100 | °/100 | °/100  |
| 140 | 4906.00 | 0.88 | 287.58 | 4905.72 | 17.70 | -30.81 | 17.70  | 0.28  | 0.00  | -18.34 |
| 141 | 4938.00 | 0.75 | 285.71 | 4937.71 | 17.67 | -31.38 | 17.67  | 0.41  | -0.41 | -5.87  |
| 142 | 4970.00 | 0.75 | 261.08 | 4969.71 | 17.63 | -31.78 | 17.63  | 0.18  | 0.00  | -14.44 |
| 143 | 5001.00 | 0.63 | 261.48 | 5000.71 | 17.57 | -32.15 | 17.57  | 0.39  | -0.39 | 1.19   |
| 144 | 5033.00 | 0.63 | 267.96 | 5032.71 | 17.54 | -32.50 | 17.54  | 0.22  | 0.00  | 20.31  |
| 145 | 5065.00 | 0.56 | 273.71 | 5064.71 | 17.54 | -32.83 | 17.54  | 0.28  | -0.22 | 17.97  |
| 146 | 5096.00 | 0.56 | 271.71 | 5095.70 | 17.58 | -33.13 | 17.56  | 0.06  | 0.00  | -6.45  |
| 147 | 5128.00 | 0.56 | 270.34 | 5127.70 | 17.58 | -33.43 | 17.56  | 0.04  | 0.00  | -4.28  |
| 148 | 5160.00 | 0.58 | 270.58 | 5159.70 | 17.56 | -33.76 | 17.56  | 0.01  | 0.00  | 0.78   |
| 149 | 5190.00 | 0.58 | 257.71 | 5189.70 | 17.53 | -34.05 | 17.53  | 0.42  | 0.00  | -42.83 |
| 150 | 5219.00 | 0.56 | 257.34 | 5218.70 | 17.47 | -34.32 | 17.47  | 0.01  | 0.00  | -1.28  |
| 151 | 5232.00 | 0.50 | 252.71 | 5231.70 | 17.44 | -34.44 | 17.44  | 0.57  | -0.48 | -35.62 |
| 152 | 5263.00 | 0.50 | 253.59 | 5262.70 | 17.36 | -34.70 | 17.38  | 0.02  | 0.00  | 2.84   |
| 153 | 5295.00 | 0.44 | 255.34 | 5294.70 | 17.29 | -34.95 | 17.28  | 0.19  | -0.19 | 5.47   |
| 154 | 5327.00 | 0.50 | 281.98 | 5326.69 | 17.29 | -35.21 | 17.28  | 0.70  | 0.18  | 83.19  |
| 155 | 5359.00 | 0.44 | 262.48 | 5358.68 | 17.30 | -35.47 | 17.30  | 0.53  | -0.19 | -60.94 |
| 156 | 5391.00 | 0.56 | 261.71 | 5390.68 | 17.26 | -35.74 | 17.28  | 0.38  | 0.37  | -2.34  |
| 157 | 5422.00 | 0.69 | 273.09 | 5421.68 | 17.25 | -36.08 | 17.25  | 0.58  | 0.42  | 38.71  |
| 158 | 5454.00 | 0.69 | 271.48 | 5453.68 | 17.27 | -36.48 | 17.27  | 0.08  | 0.00  | -5.09  |
| 159 | 5486.00 | 0.63 | 278.34 | 5485.69 | 17.29 | -36.83 | 17.29  | 0.28  | -0.18 | 15.25  |
| 160 | 5518.00 | 0.56 | 284.34 | 5517.68 | 17.30 | -37.18 | 17.30  | 0.45  | -0.22 | -37.50 |
| 161 | 5550.00 | 0.50 | 284.71 | 5549.68 | 17.32 | -37.45 | 17.32  | 0.61  | -0.19 | 83.68  |
| 162 | 5582.00 | 0.68 | 282.71 | 5581.68 | 17.33 | -37.78 | 17.33  | 0.92  | 0.59  | -88.75 |
| 163 | 5614.00 | 0.56 | 258.08 | 5613.68 | 17.27 | -38.12 | 17.27  | 0.44  | -0.41 | -14.44 |
| 164 | 5645.00 | 0.58 | 274.58 | 5644.68 | 17.25 | -38.42 | 17.25  | 0.52  | 0.00  | 53.23  |
| 165 | 5677.00 | 0.58 | 273.48 | 5676.68 | 17.27 | -38.73 | 17.27  | 0.03  | 0.00  | -3.53  |
| 166 | 5709.00 | 0.58 | 272.84 | 5708.67 | 17.29 | -39.05 | 17.29  | 0.02  | 0.00  | -1.84  |
| 167 | 5740.00 | 0.63 | 268.34 | 5739.67 | 17.28 | -39.37 | 17.29  | 0.27  | 0.23  | -14.52 |
| 168 | 5772.00 | 0.89 | 248.98 | 5771.67 | 17.22 | -39.72 | 17.22  | 0.72  | 0.19  | -60.56 |
| 169 | 5804.00 | 0.63 | 248.71 | 5803.67 | 17.08 | -40.07 | 17.09  | 0.19  | -0.18 | -0.78  |
| 170 | 5836.00 | 0.58 | 264.48 | 5835.67 | 16.98 | -40.38 | 16.98  | 0.29  | -0.22 | 17.97  |
| 171 | 5868.00 | 0.69 | 258.40 | 5867.67 | 16.90 | -40.72 | 16.90  | 0.43  | 0.41  | 12.31  |
| 172 | 5900.00 | 0.56 | 269.59 | 5899.68 | 16.88 | -41.07 | 16.88  | 0.58  | -0.41 | 34.97  |
| 173 | 5931.00 | 0.69 | 252.71 | 5930.66 | 16.80 | -41.40 | 16.80  | 0.72  | 0.42  | -54.45 |
| 174 | 5963.00 | 0.56 | 268.59 | 5962.66 | 16.74 | -41.74 | 16.74  | 0.67  | -0.41 | 49.62  |



Weatherford

Client : Bolack Minerals  
 Well : Thomas F. Bolack #1  
 Location : San Juan County, NM  
 License : API# 30-045-32563  
 Comment : EM MWD Surveys

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 Date: 1/12/2007  
 File:

UWI #:

## Vertical Section Calculated Along Azimuth 0.00°

KB Elevation = 5714.00ft

GR. Elevation = 5700.00ft

|     | MD      | Inc  | Azi    | TVD     | North | East   | V'Sect | D'Leg | Build | Turn   |
|-----|---------|------|--------|---------|-------|--------|--------|-------|-------|--------|
|     | ft      | deg  | deg    | ft      | ft    | ft     | ft     | %100  | %100  | %100   |
| 175 | 5995.00 | 0.56 | 246.59 | 5994.86 | 16.68 | -42.04 | 16.68  | 0.67  | 0.00  | -68.76 |
| 176 | 6028.00 | 0.69 | 262.34 | 6025.66 | 16.59 | -42.36 | 16.59  | 0.69  | 0.42  | -50.81 |
| 177 | 6058.00 | 0.63 | 262.34 | 6057.65 | 16.54 | -42.73 | 16.54  | 0.19  | -0.19 | 0.00   |
| 178 | 6090.00 | 0.63 | 261.34 | 6089.66 | 16.49 | -43.07 | 16.49  | 0.03  | 0.00  | -3.12  |
| 179 | 6122.00 | 0.56 | 268.46 | 6121.65 | 16.46 | -43.40 | 16.46  | 0.34  | -0.22 | -25.36 |
| 180 | 6154.00 | 0.50 | 268.59 | 6153.65 | 16.45 | -43.70 | 16.45  | 0.20  | -0.19 | -8.97  |
| 181 | 6185.00 | 0.63 | 262.21 | 6184.65 | 16.42 | -44.00 | 16.42  | 0.44  | 0.42  | -14.13 |
| 182 | 6217.00 | 0.50 | 243.21 | 6216.65 | 16.34 | -44.30 | 16.34  | 0.71  | -0.41 | -69.37 |
| 183 | 6249.00 | 0.63 | 251.46 | 6248.64 | 16.22 | -44.59 | 16.22  | 0.46  | 0.41  | -25.78 |
| 184 | 6281.00 | 0.60 | 270.84 | 6280.64 | 16.16 | -44.90 | 16.16  | 0.72  | -0.41 | -60.58 |
| 185 | 6313.00 | 0.56 | 252.09 | 6312.64 | 16.12 | -45.19 | 16.12  | 0.57  | 0.19  | -58.59 |
| 186 | 6344.00 | 0.50 | 275.71 | 6343.64 | 16.08 | -45.47 | 16.08  | 0.73  | -0.19 | -78.16 |
| 187 | 6376.00 | 0.50 | 272.34 | 6375.64 | 16.10 | -45.75 | 16.10  | 0.09  | 0.00  | -10.53 |
| 188 | 6408.00 | 0.50 | 272.84 | 6407.64 | 16.12 | -46.03 | 16.12  | 0.01  | 0.00  | 1.66   |
| 189 | 6440.00 | 0.56 | 254.21 | 6439.64 | 16.08 | -46.32 | 16.08  | 0.57  | 0.19  | -58.22 |
| 190 | 6472.00 | 0.50 | 252.84 | 6471.64 | 16.00 | -46.60 | 16.00  | 0.19  | -0.19 | -4.28  |
| 191 | 6504.00 | 0.44 | 245.48 | 6503.63 | 16.91 | -46.84 | 16.91  | 0.27  | -0.19 | -23.06 |
| 192 | 6536.00 | 0.50 | 267.69 | 6535.63 | 15.82 | -47.09 | 15.82  | 0.36  | 0.19  | 37.91  |
| 193 | 6568.00 | 0.56 | 261.09 | 6567.63 | 15.77 | -47.37 | 15.77  | 0.23  | 0.20  | 11.67  |
| 194 | 6599.00 | 0.56 | 258.34 | 6597.63 | 15.72 | -47.67 | 15.72  | 0.08  | 0.00  | -8.59  |
| 195 | 6630.00 | 0.44 | 251.09 | 6629.63 | 15.65 | -47.94 | 15.65  | 0.42  | -0.37 | -22.66 |
| 196 | 6662.00 | 0.66 | 269.09 | 6661.63 | 15.60 | -48.22 | 15.60  | 0.61  | 0.37  | 58.25  |
| 197 | 6693.00 | 0.44 | 270.09 | 6692.63 | 15.60 | -48.49 | 15.60  | 0.39  | -0.39 | 3.23   |
| 198 | 6724.00 | 0.56 | 253.84 | 6723.63 | 15.56 | -48.75 | 15.56  | 0.60  | 0.39  | -52.42 |
| 199 | 6793.00 | 0.75 | 279.34 | 6792.82 | 15.54 | -49.62 | 15.54  | 0.50  | 0.28  | 30.98  |
| 200 | 6823.00 | 0.69 | 265.71 | 6822.62 | 15.56 | -49.89 | 15.56  | 0.60  | -0.20 | -45.43 |
| 201 | 6865.00 | 0.44 | 281.96 | 6864.82 | 15.57 | -50.21 | 15.57  | 0.92  | -0.78 | 50.78  |
| 202 | 6887.00 | 0.63 | 278.84 | 6886.82 | 15.61 | -50.60 | 15.61  | 0.61  | 0.59  | -16.00 |
| 203 | 6919.00 | 0.56 | 283.08 | 6918.61 | 15.67 | -50.83 | 15.67  | 0.30  | -0.22 | 19.53  |
| 204 | 6951.00 | 0.50 | 258.96 | 6950.61 | 15.68 | -51.12 | 15.66  | 0.72  | -0.19 | -75.41 |
| 205 | 6982.00 | 0.44 | 278.33 | 6981.61 | 15.67 | -51.37 | 15.67  | 0.54  | -0.19 | 62.48  |
| 206 | 7014.00 | 0.44 | 270.58 | 7013.61 | 15.69 | -51.61 | 15.69  | 0.19  | 0.00  | -24.22 |
| 207 | 7046.00 | 0.50 | 263.09 | 7045.61 | 15.67 | -51.87 | 15.67  | 0.27  | 0.19  | -23.41 |
| 208 | 7078.00 | 0.44 | 282.71 | 7077.61 | 15.68 | -52.13 | 15.68  | 0.53  | -0.19 | 61.31  |
| 209 | 7110.00 | 0.69 | 280.21 | 7109.61 | 15.75 | -52.44 | 15.75  | 0.76  | 0.78  | -7.81  |





Weatherford

Client : Bolack Minerals  
 Well : Thomas F. Bolack #1  
 Location : San Juan County, NM  
 License : API# 30-045-32583  
 Comment : EM MWD Surveys

UWI #:

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 Date: 1/12/2007  
 File:

## Vertical Section Calculated Along Azimuth 0.00°

KB Elevation = 5714.00ft GR. Elevation = 5700.00ft

|     | MD      | Inc  | Azi    | TVD     | North | East   | V'Sect | D'Leg | Buile | Turn    |
|-----|---------|------|--------|---------|-------|--------|--------|-------|-------|---------|
|     | ft      | deg  | deg    | ft      | ft    | ft     | ft     | %100  | %100  | %100    |
| 210 | 7142.00 | 0.63 | 273.71 | 7141.60 | 15.79 | -52.81 | 15.79  | 0.30  | -0.19 | -20.31  |
| 211 | 7174.00 | 0.63 | 267.34 | 7173.60 | 15.79 | -53.16 | 15.79  | 0.22  | 0.00  | -19.91  |
| 212 | 7208.00 | 0.56 | 291.09 | 7205.60 | 15.84 | -53.48 | 15.84  | 0.79  | -0.22 | 74.22   |
| 213 | 7237.00 | 0.44 | 273.84 | 7236.60 | 15.91 | -53.74 | 15.91  | 0.62  | -0.39 | -55.85  |
| 214 | 7270.00 | 0.66 | 289.83 | 7269.60 | 15.97 | -54.02 | 15.97  | 0.55  | 0.38  | 48.45   |
| 215 | 7302.00 | 0.69 | 262.21 | 7301.60 | 15.96 | -54.35 | 15.96  | 1.32  | 0.41  | -117.68 |
| 216 | 7334.00 | 0.63 | 249.84 | 7333.60 | 15.84 | -54.70 | 15.84  | 0.21  | -0.19 | -7.41   |
| 217 | 7365.00 | 0.63 | 250.21 | 7364.69 | 15.73 | -55.02 | 15.73  | 0.01  | 0.00  | 1.19    |
| 218 | 7397.00 | 0.44 | 268.34 | 7396.59 | 15.66 | -55.31 | 15.66  | 0.79  | -0.59 | 56.66   |
| 219 | 7429.00 | 0.61 | 264.96 | 7428.59 | 15.64 | -55.65 | 15.64  | 1.16  | 1.18  | -10.56  |
| 220 | 7461.00 | 0.38 | 287.34 | 7460.59 | 15.82 | -55.99 | 15.82  | 1.35  | -1.34 | 7.44    |
| 221 | 7492.00 | 0.50 | 236.08 | 7491.59 | 15.54 | -56.20 | 15.54  | 0.85  | 0.39  | -100.81 |
| 222 | 7523.00 | 0.63 | 234.34 | 7522.59 | 15.38 | -56.45 | 15.36  | 0.42  | 0.42  | -5.65   |
| 223 | 7554.00 | 0.31 | 244.98 | 7553.58 | 15.23 | -56.67 | 15.23  | 1.07  | -1.03 | 34.26   |
| 224 | 7586.00 | 0.63 | 229.34 | 7585.68 | 15.07 | -56.88 | 15.07  | 1.07  | 1.00  | -48.81  |
| 225 | 7618.00 | 0.44 | 265.59 | 7617.58 | 14.95 | -57.13 | 14.95  | 1.18  | -0.59 | 113.28  |
| 226 | 7650.00 | 0.63 | 217.98 | 7649.58 | 14.80 | -57.36 | 14.80  | 1.46  | 0.59  | -148.84 |
| 227 | 7682.00 | 0.69 | 207.46 | 7681.58 | 14.49 | -57.56 | 14.49  | 0.42  | 0.19  | -32.81  |
| 228 | 7713.00 | 0.31 | 216.84 | 7712.68 | 14.26 | -57.70 | 14.26  | 1.25  | -1.23 | 30.26   |
| 229 | 7743.00 | 0.50 | 197.09 | 7742.58 | 14.07 | -57.78 | 14.07  | 0.78  | 0.63  | -85.83  |
| 230 | 7775.00 | 0.31 | 225.34 | 7774.68 | 13.88 | -57.89 | 13.88  | 0.84  | -0.59 | 88.28   |
| 231 | 7807.00 | 0.69 | 233.34 | 7806.67 | 13.70 | -58.10 | 13.70  | 1.20  | 1.19  | 25.00   |
| 232 | 7839.00 | 0.63 | 191.96 | 7838.57 | 13.41 | -58.29 | 13.41  | 1.47  | -0.19 | -129.31 |
| 233 | 7870.00 | 0.69 | 201.59 | 7869.67 | 13.07 | -58.40 | 13.07  | 0.41  | 0.19  | 31.06   |
| 234 | 7902.00 | 0.60 | 247.21 | 7901.67 | 12.84 | -58.60 | 12.84  | 1.64  | -0.69 | 142.56  |
| 235 | 7934.00 | 0.63 | 244.96 | 7933.57 | 12.71 | -58.89 | 12.71  | 0.41  | 0.41  | -7.03   |
| 236 | 7966.00 | 0.25 | 242.71 | 7965.57 | 12.60 | -59.11 | 12.60  | 1.19  | -1.19 | -7.03   |
| 237 | 7997.00 | 0.63 | 229.71 | 7996.57 | 12.48 | -59.30 | 12.48  | 1.26  | 1.23  | -41.94  |
| 238 | 8028.00 | 0.50 | 251.84 | 8028.56 | 12.31 | -59.56 | 12.31  | 0.79  | -0.41 | 69.16   |
| 239 | 8061.00 | 0.63 | 251.96 | 8060.56 | 12.21 | -59.86 | 12.21  | 0.41  | 0.41  | 0.38    |
| 240 | 8093.00 | 0.44 | 250.46 | 8092.56 | 12.11 | -60.15 | 12.11  | 0.60  | -0.59 | -4.69   |
| 241 | 8125.00 | 0.38 | 238.59 | 8124.66 | 12.02 | -60.35 | 12.02  | 0.32  | -0.19 | -37.09  |
| 242 | 8167.00 | 0.44 | 206.46 | 8166.56 | 11.85 | -60.50 | 11.85  | 0.73  | 0.19  | -100.41 |
| 243 | 8188.00 | 0.61 | 223.34 | 8187.56 | 11.58 | -60.70 | 11.58  | 1.32  | 1.19  | 54.45   |
| 244 | 8220.00 | 0.61 | 235.59 | 8219.55 | 11.29 | -61.04 | 11.29  | 0.54  | 0.00  | 38.28   |



Weatherford

Client Bolack Minerals  
 Well Thomas F. Bolack #1  
 Location San Juan County, NM  
 License API# 30-046-32583  
 Comment EM MWD Surveys

Page: 8  
 Date: 1/12/2007  
 File:

UWI #:

## Vertical Section Calculated Along Azimuth 0.00°

KB Elevation = 5714.00ft GR. Elevation = 5700.00ft

|     | MD      | Inc  | Azi    | TVD     | North | East   | V'Sect | D'Leg | Bulld | Turn    |
|-----|---------|------|--------|---------|-------|--------|--------|-------|-------|---------|
|     | ft      | deg  | deg    | ft      | ft    | ft     | ft     | °/100 | °/100 | °/100   |
| 245 | 8252.00 | 0.31 | 258.71 | 8251.55 | 11.15 | -61.32 | 11.15  | 1.68  | -1.58 | 72.25   |
| 246 | 8264.00 | 0.63 | 272.59 | 8283.55 | 11.14 | -61.68 | 11.14  | 1.05  | 1.00  | 43.38   |
| 247 | 8318.00 | 0.69 | 277.59 | 8315.55 | 11.17 | -61.84 | 11.17  | 0.28  | 0.19  | 15.82   |
| 248 | 8347.00 | 0.75 | 314.96 | 8348.55 | 11.34 | -62.27 | 11.34  | 1.50  | 0.19  | 120.55  |
| 249 | 8378.00 | 0.58 | 328.08 | 8378.55 | 11.62 | -62.50 | 11.62  | 0.78  | -0.59 | 44.18   |
| 250 | 8410.00 | 0.88 | 307.09 | 8409.54 | 11.89 | -62.77 | 11.89  | 1.35  | 1.03  | -70.97  |
| 251 | 8442.00 | 0.94 | 313.09 | 8441.54 | 12.22 | -63.18 | 12.22  | 0.35  | 0.19  | 19.75   |
| 252 | 8474.00 | 0.56 | 337.09 | 8473.54 | 12.55 | -63.41 | 12.55  | 1.52  | -1.19 | 75.00   |
| 253 | 8506.00 | 0.44 | 303.21 | 8505.53 | 12.76 | -63.57 | 12.76  | 0.88  | -0.38 | -105.88 |
| 254 | 8538.00 | 0.56 | 350.48 | 8537.53 | 12.98 | -63.70 | 12.98  | 1.30  | 0.38  | 147.68  |
| 255 | 8570.00 | 0.44 | 0.21   | 8569.53 | 13.26 | -63.73 | 13.26  | 0.48  | -0.38 | 30.47   |
| 256 | 8601.00 | 0.89 | 321.46 | 8600.53 | 13.52 | -63.84 | 13.52  | 1.43  | 0.81  | -125.00 |
| 257 | 8633.00 | 0.56 | 307.59 | 8632.53 | 13.77 | -64.09 | 13.77  | 0.82  | -0.41 | -43.34  |
| 258 | 8664.00 | 0.69 | 300.21 | 8663.53 | 13.95 | -64.37 | 13.95  | 0.49  | 0.42  | -23.81  |
| 259 | 8696.00 | 0.50 | 326.46 | 8695.53 | 14.17 | -64.61 | 14.17  | 1.02  | -0.59 | 62.03   |
| 260 | 8722.00 | 0.94 | 323.09 | 8721.52 | 14.43 | -64.80 | 14.43  | 1.70  | 1.69  | -12.96  |
| 261 | 8759.00 | 1.19 | 352.84 | 8758.52 | 15.06 | -65.03 | 15.06  | 1.62  | 0.68  | 80.41   |
| 262 | 8791.00 | 1.63 | 353.71 | 8790.51 | 15.84 | -65.12 | 15.84  | 1.38  | 1.37  | 2.72    |
| 263 | 8823.00 | 0.88 | 21.34  | 8822.50 | 16.52 | -65.08 | 16.52  | 2.85  | -2.34 | 86.34   |
| 264 | 8853.00 | 0.50 | 53.34  | 8852.50 | 16.81 | -64.89 | 16.81  | 1.76  | -1.27 | 106.67  |
| 265 | 8885.00 | 0.38 | 45.96  | 8884.50 | 16.97 | -64.71 | 16.97  | 0.41  | -0.38 | -23.08  |
| 266 | 8917.00 | 0.56 | 341.96 | 8916.50 | 17.19 | -64.68 | 17.19  | 1.53  | 0.58  | -200.00 |
| 267 | 8949.00 | 0.63 | 322.84 | 8948.49 | 17.48 | -64.83 | 17.48  | 0.65  | 0.22  | -59.75  |
| 268 | 8980.00 | 0.50 | 2.46   | 8979.49 | 17.75 | -64.93 | 17.75  | 1.30  | -0.42 | 127.81  |
| EXT | 9220.00 | 0.50 | 2.46   | 9219.48 | 19.84 | -64.84 | 19.84  | 0.00  | 0.00  | 0.00    |

Bottom Hole Closure 87.81ft Along Azimuth 287.02°