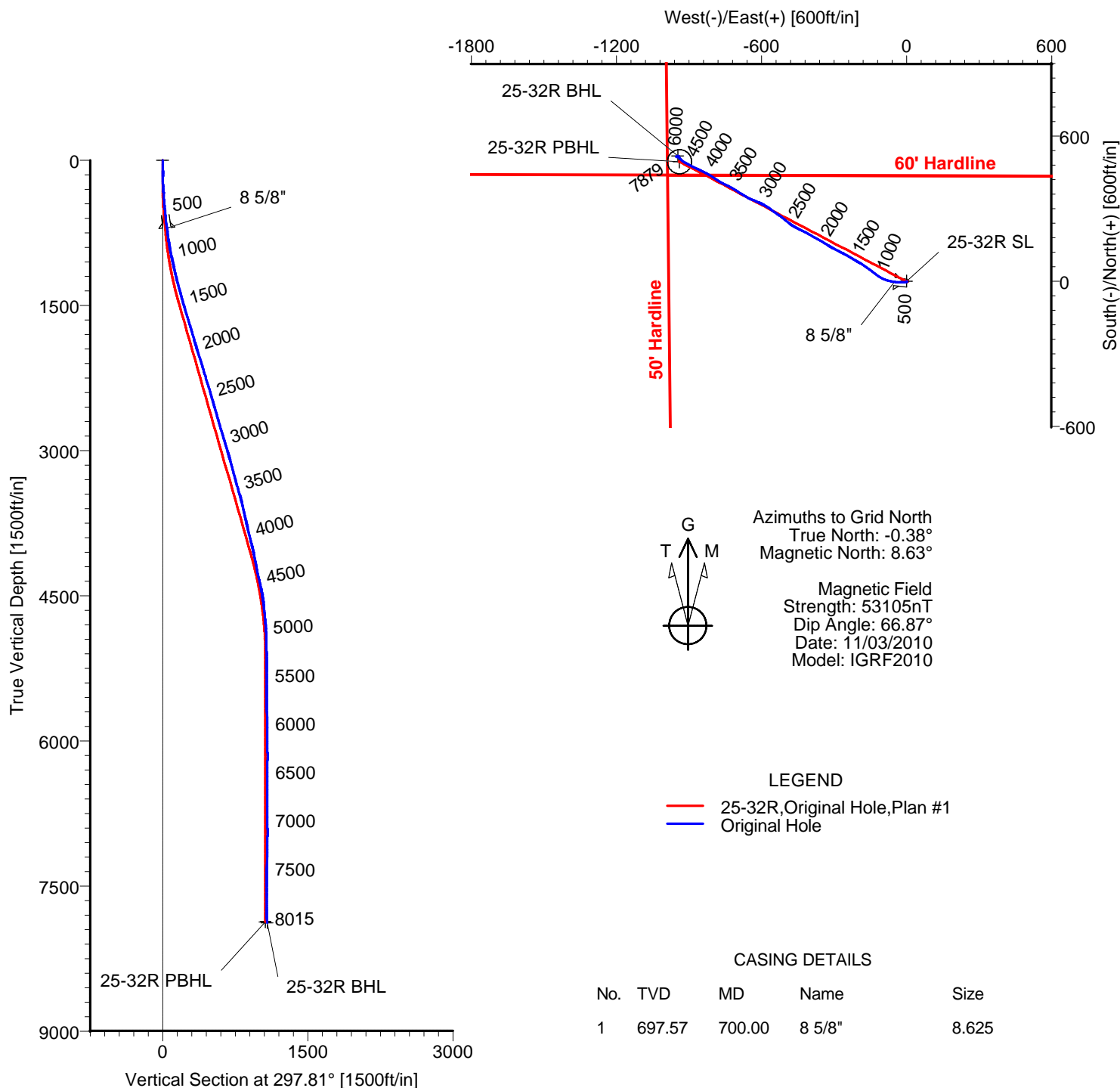


ANADARKO PETROLEUM

Field: Weld County, CO
 Site: Everist 10-32 Pad
 Well: 25-32R
 Wellpath: Original Hole
 Planned as 25-32X



Azimuths to Grid North
 True North: -0.38°
 Magnetic North: 8.63°

Magnetic Field
 Strength: 53105nT
 Dip Angle: 66.87°
 Date: 11/03/2010
 Model: IGRF2010

LEGEND

— 25-32R, Original Hole, Plan #1
 — Original Hole

CASING DETAILS

| No. | TVD | MD | Name | Size |
|-----|--------|--------|--------|-------|
| 1 | 697.57 | 700.00 | 8 5/8" | 8.625 |

TARGET DETAILS

| Name | TVD | +N/-S | +E/-W | Latitude | Longitude | Shape |
|-------------|---------|--------|---------|---------------|----------------|---------------------|
| 25-32R SL | 0.00 | 0.00 | 0.00 | 40°10'52.296N | 104°54'36.980W | Point |
| 25-32R PBHL | 7868.00 | 495.36 | -939.14 | 40°10'57.253N | 104°54'49.038W | Circle (Radius: 50) |
| 25-32R BHL | 7879.47 | 518.49 | -945.03 | 40°10'57.482N | 104°54'49.112W | Point |

Wellpath: (25-32R/Original Hole)

ALLIS-CHALMERS DIRECTIONAL DRILLING SERVICES
 911 Regional Park Drive Houston, Texas 77060
 Phone: 713-934-9600 Fax: 713-934-9067



**DIRECTIONAL
 DRILLING SERVICES**

Allis-Chalmers Energy, Inc.

Survey Report

| | | | |
|--|---|--|-------------------------------------|
| Company: ANADARKO PETROLEUM Field: Weld County, CO Site: Everist 10-32 Pad Well: 25-32R Wellpath: Original Hole | Date: 11/08/2010 Co-ordinate(NE) Reference: Vertical (TVD) Reference: Section (VS) Reference: Survey Calculation Method: | Time: 08:21:52 Well: 25-32R, Grid North 4803'GL+13'KB 4816.0 Well (0.00N,0.00E,297.81Azi) Minimum Curvature | Page: 1 Db: Adapti |
|--|---|--|-------------------------------------|

| | |
|---|---|
| Field: Weld County, CO Map System: US State Plane Coordinate System 1983 Geo Datum: GRS 1980 Sys Datum: Mean Sea Level | Map Zone: Colorado, Northern Zone Coordinate System: Well Centre Geomagnetic Model: IGRF2010 |
|---|---|

| | |
|--|--|
| Site: Everist 10-32 Pad Centered on 25-32X Site Position: From: Map Position Uncertainty: 0.00 ft Ground Level: 4803.00 ft | Northing: 1309402.05 ft Easting: 3164780.50 ft Latitude: 40 10 52.296 N Longitude: 104 54 36.980 W North Reference: Grid Grid Convergence: 0.38 deg |
|--|--|

| | |
|---|--|
| Well: 25-32R Well Position: +N/-S 0.00 ft +E/-W 0.00 ft Position Uncertainty: 0.00 ft | Slot Name: 25-32R Latitude: 40 10 52.296 N Longitude: 104 54 36.980 W |
|---|--|

| | |
|--|--|
| Wellpath: Original Hole Current Datum: 4803'GL+13'KB Magnetic Data: 11/03/2010 Field Strength: 53105 nT Vertical Section: Depth From (TVD) ft | Drilled From: Surface Tie-on Depth: 0.00 ft Above System Datum: Mean Sea Level Declination: 9.01 deg Mag Dip Angle: 66.87 deg +N/-S ft +E/-W ft Direction deg |
| 0.00 | 0.00 |

| | | | | | |
|---|----------------------|-----------------------------|-----------------|------------------|--|
| Survey Program for Definitive Wellpath | | | | | |
| Date: 11/08/2010 | Validated: No | Version: 1 | | | |
| Actual From ft | To ft | Survey | Toolcode | Tool Name | |
| 44.00 | 7970.00 | Survey #1 (44.00-7970.00) | MWD | Std MWD | |
| 8015.00 | 8015.00 | Survey #2 (8015.00-8015.00) | Project | Projection | |

| Survey | | | | | | | | | | |
|----------|-------------|-------------|-----------|-------------|-------------|----------|------------------|--------------------|-------------------|--------------|
| MD ft | Incl deg | Azim deg | TVD ft | +N/-S ft | +E/-W ft | VS ft | DLS deg/100ft | Build deg/100ft | Turn deg/100ft | Tool/Comment |
| 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | TIE LINE |
| 44.00 | 0.50 | 146.10 | 44.00 | -0.16 | 0.11 | -0.17 | 1.14 | 1.14 | 0.00 | MWD |
| 105.00 | 0.90 | 170.40 | 104.99 | -0.85 | 0.34 | -0.69 | 0.80 | 0.66 | 39.84 | MWD |
| 166.00 | 2.30 | 243.50 | 165.97 | -1.87 | -0.68 | -0.27 | 3.63 | 2.30 | 119.84 | MWD |
| 226.00 | 3.20 | 258.30 | 225.91 | -2.75 | -3.40 | 1.72 | 1.90 | 1.50 | 24.67 | MWD |
| 286.00 | 3.70 | 265.00 | 285.80 | -3.26 | -6.97 | 4.64 | 1.07 | 0.83 | 11.17 | MWD |
| 347.00 | 4.90 | 266.00 | 346.62 | -3.61 | -11.53 | 8.51 | 1.97 | 1.97 | 1.64 | MWD |
| 425.00 | 5.30 | 270.20 | 424.31 | -3.83 | -18.45 | 14.53 | 0.70 | 0.51 | 5.38 | MWD |
| 516.00 | 6.00 | 272.30 | 514.87 | -3.62 | -27.41 | 22.55 | 0.80 | 0.77 | 2.31 | MWD |
| 607.00 | 6.90 | 275.90 | 605.30 | -2.87 | -37.60 | 31.91 | 1.08 | 0.99 | 3.96 | MWD |
| 650.00 | 7.20 | 278.30 | 647.97 | -2.22 | -42.83 | 36.85 | 0.98 | 0.70 | 5.58 | MWD |
| 700.00 | 7.31 | 278.13 | 697.57 | -1.31 | -49.08 | 42.80 | 0.23 | 0.22 | -0.34 | 8 5/8" |
| 739.00 | 7.40 | 278.00 | 736.25 | -0.61 | -54.03 | 47.50 | 0.23 | 0.22 | -0.33 | MWD |
| 830.00 | 8.80 | 280.80 | 826.34 | 1.51 | -66.67 | 59.67 | 1.60 | 1.54 | 3.08 | MWD |
| 920.00 | 10.70 | 287.70 | 915.04 | 5.34 | -81.39 | 74.48 | 2.47 | 2.11 | 7.67 | MWD |
| 1011.00 | 12.10 | 293.10 | 1004.24 | 11.65 | -98.21 | 92.30 | 1.93 | 1.54 | 5.93 | MWD |
| 1102.00 | 12.80 | 303.60 | 1093.11 | 20.97 | -115.39 | 111.84 | 2.60 | 0.77 | 11.54 | MWD |
| 1193.00 | 13.60 | 311.00 | 1181.72 | 33.57 | -131.86 | 132.29 | 2.05 | 0.88 | 8.13 | MWD |
| 1283.00 | 15.10 | 305.70 | 1268.91 | 47.35 | -149.37 | 154.21 | 2.21 | 1.67 | -5.89 | MWD |
| 1374.00 | 16.20 | 303.60 | 1356.54 | 61.29 | -169.56 | 178.58 | 1.36 | 1.21 | -2.31 | MWD |
| 1465.00 | 15.00 | 299.40 | 1444.18 | 74.10 | -190.40 | 202.98 | 1.81 | -1.32 | -4.62 | MWD |
| 1556.00 | 16.50 | 302.60 | 1531.77 | 86.85 | -211.55 | 227.63 | 1.90 | 1.65 | 3.52 | MWD |

Allis-Chalmers Energy, Inc.

Survey Report

Company: ANADARKO PETROLEUM
Field: Weld County, CO
Site: Everist 10-32 Pad
Well: 25-32R
Wellpath: Original Hole

| | | | | | |
|-----------------------------------|------------------------------|--------------|----------|--------------|--------|
| Date: | 11/08/2010 | Time: | 08:21:52 | Page: | 2 |
| Co-ordinate(NE) Reference: | Well: 25-32R, Grid North | | | | |
| Vertical (TVD) Reference: | 4803'GL+13'KB 4816.0 | | | | |
| Section (VS) Reference: | Well (0.00N,0.00E,297.81Azi) | | | | |
| Survey Calculation Method: | Minimum Curvature | | | Db: | Adapti |

Survey

| MD ft | Incl deg | Azim deg | TVD ft | +N/-S ft | +E/-W ft | VS ft | DLS deg/100ft | Build deg/100ft | Turn deg/100ft | Tool/Comment |
|----------|-------------|-------------|-----------|-------------|-------------|----------|------------------|--------------------|-------------------|--------------|
| 1646.00 | 17.20 | 300.10 | 1617.90 | 100.41 | -233.83 | 253.66 | 1.12 | 0.78 | -2.78 | MWD |
| 1737.00 | 17.20 | 297.30 | 1704.84 | 113.32 | -257.42 | 280.56 | 0.91 | 0.00 | -3.08 | MWD |
| 1828.00 | 16.00 | 296.20 | 1792.04 | 125.03 | -280.63 | 306.55 | 1.36 | -1.32 | -1.21 | MWD |
| 1919.00 | 15.80 | 298.00 | 1879.56 | 136.39 | -302.83 | 331.48 | 0.58 | -0.22 | 1.98 | MWD |
| 2010.00 | 17.60 | 302.60 | 1966.72 | 149.62 | -325.36 | 357.58 | 2.45 | 1.98 | 5.05 | MWD |
| 2101.00 | 18.00 | 299.80 | 2053.37 | 164.02 | -349.15 | 385.34 | 1.04 | 0.44 | -3.08 | MWD |
| 2191.00 | 16.90 | 299.80 | 2139.22 | 177.43 | -372.57 | 412.31 | 1.22 | -1.22 | 0.00 | MWD |
| 2282.00 | 16.70 | 298.70 | 2226.34 | 190.28 | -395.52 | 438.61 | 0.41 | -0.22 | -1.21 | MWD |
| 2373.00 | 17.20 | 298.00 | 2313.39 | 202.88 | -418.86 | 465.14 | 0.59 | 0.55 | -0.77 | MWD |
| 2464.00 | 16.50 | 296.20 | 2400.48 | 214.90 | -442.34 | 491.51 | 0.96 | -0.77 | -1.98 | MWD |
| 2555.00 | 15.80 | 299.80 | 2487.89 | 226.76 | -464.69 | 516.81 | 1.34 | -0.77 | 3.96 | MWD |
| 2645.00 | 16.20 | 306.80 | 2574.41 | 240.37 | -485.37 | 541.46 | 2.19 | 0.44 | 7.78 | MWD |
| 2736.00 | 16.70 | 310.00 | 2661.69 | 256.38 | -505.55 | 566.78 | 1.14 | 0.55 | 3.52 | MWD |
| 2827.00 | 16.40 | 305.70 | 2748.92 | 272.28 | -526.00 | 592.28 | 1.39 | -0.33 | -4.73 | MWD |
| 2918.00 | 17.40 | 306.40 | 2835.99 | 287.85 | -547.39 | 618.46 | 1.12 | 1.10 | 0.77 | MWD |
| 3009.00 | 16.20 | 302.90 | 2923.11 | 302.82 | -569.00 | 644.56 | 1.72 | -1.32 | -3.85 | MWD |
| 3099.00 | 16.70 | 299.80 | 3009.43 | 316.07 | -590.76 | 669.99 | 1.12 | 0.56 | -3.44 | MWD |
| 3190.00 | 15.10 | 292.40 | 3096.95 | 327.09 | -613.07 | 694.86 | 2.83 | -1.76 | -8.13 | MWD |
| 3281.00 | 15.50 | 293.40 | 3184.73 | 336.43 | -635.19 | 718.78 | 0.53 | 0.44 | 1.10 | MWD |
| 3372.00 | 15.30 | 297.30 | 3272.46 | 346.77 | -657.02 | 742.91 | 1.16 | -0.22 | 4.29 | MWD |
| 3462.00 | 16.20 | 301.50 | 3359.08 | 358.78 | -678.27 | 767.32 | 1.61 | 1.00 | 4.67 | MWD |
| 3553.00 | 16.00 | 302.60 | 3446.51 | 372.17 | -699.66 | 792.48 | 0.40 | -0.22 | 1.21 | MWD |
| 3644.00 | 13.70 | 301.90 | 3534.47 | 384.62 | -719.38 | 815.73 | 2.54 | -2.53 | -0.77 | MWD |
| 3735.00 | 13.20 | 297.30 | 3622.98 | 395.08 | -737.76 | 836.87 | 1.30 | -0.55 | -5.05 | MWD |
| 3826.00 | 11.80 | 293.80 | 3711.82 | 403.60 | -755.51 | 856.54 | 1.75 | -1.54 | -3.85 | MWD |
| 3916.00 | 13.60 | 300.80 | 3799.62 | 412.73 | -773.02 | 876.29 | 2.63 | 2.00 | 7.78 | MWD |
| 4007.00 | 14.40 | 303.60 | 3887.91 | 424.47 | -791.64 | 898.24 | 1.15 | 0.88 | 3.08 | MWD |
| 4098.00 | 13.70 | 302.90 | 3976.19 | 436.59 | -810.11 | 920.23 | 0.79 | -0.77 | -0.77 | MWD |
| 4189.00 | 11.60 | 299.10 | 4064.98 | 446.89 | -827.15 | 940.11 | 2.48 | -2.31 | -4.18 | MWD |
| 4280.00 | 11.60 | 293.80 | 4154.12 | 455.03 | -843.52 | 958.38 | 1.17 | 0.00 | -5.82 | MWD |
| 4371.00 | 12.30 | 295.50 | 4243.15 | 462.90 | -860.64 | 977.20 | 0.86 | 0.77 | 1.87 | MWD |
| 4462.00 | 12.30 | 295.90 | 4332.06 | 471.31 | -878.11 | 996.57 | 0.09 | 0.00 | 0.44 | MWD |
| 4552.00 | 11.30 | 295.90 | 4420.16 | 479.35 | -894.66 | 1014.96 | 1.11 | -1.11 | 0.00 | MWD |
| 4643.00 | 8.80 | 297.60 | 4509.76 | 486.47 | -908.85 | 1030.84 | 2.77 | -2.75 | 1.87 | MWD |
| 4734.00 | 6.50 | 305.70 | 4599.94 | 492.70 | -919.21 | 1042.90 | 2.79 | -2.53 | 8.90 | MWD |
| 4825.00 | 6.20 | 308.50 | 4690.38 | 498.76 | -927.24 | 1052.83 | 0.47 | -0.33 | 3.08 | MWD |
| 4916.00 | 4.80 | 310.00 | 4780.96 | 504.27 | -934.00 | 1061.38 | 1.55 | -1.54 | 1.65 | MWD |
| 5006.00 | 3.00 | 318.40 | 4870.75 | 508.45 | -938.45 | 1067.27 | 2.09 | -2.00 | 9.33 | MWD |
| 5097.00 | 1.40 | 324.70 | 4961.68 | 511.14 | -940.67 | 1070.49 | 1.78 | -1.76 | 6.92 | MWD |
| 5188.00 | 0.90 | 315.60 | 5052.66 | 512.56 | -941.81 | 1072.16 | 0.58 | -0.55 | -10.00 | MWD |
| 5279.00 | 0.30 | 348.30 | 5143.66 | 513.30 | -942.36 | 1072.99 | 0.73 | -0.66 | 35.93 | MWD |
| 5415.00 | 0.30 | 333.50 | 5279.66 | 513.97 | -942.59 | 1073.51 | 0.06 | 0.00 | -10.88 | MWD |
| 5551.00 | 0.70 | 277.60 | 5415.65 | 514.40 | -943.58 | 1074.58 | 0.43 | 0.29 | -41.10 | MWD |
| 5687.00 | 0.70 | 286.00 | 5551.64 | 514.74 | -945.20 | 1076.17 | 0.08 | 0.00 | 6.18 | MWD |
| 5823.00 | 0.30 | 281.10 | 5687.64 | 515.03 | -946.35 | 1077.33 | 0.30 | -0.29 | -3.60 | MWD |
| 5959.00 | 0.50 | 282.20 | 5823.63 | 515.23 | -947.27 | 1078.24 | 0.15 | 0.15 | 0.81 | MWD |
| 6095.00 | 1.20 | 280.10 | 5959.62 | 515.60 | -949.26 | 1080.17 | 0.52 | 0.51 | -1.54 | MWD |
| 6231.00 | 0.90 | 252.30 | 6095.59 | 515.53 | -951.68 | 1082.27 | 0.43 | -0.22 | -20.44 | MWD |
| 6368.00 | 0.70 | 132.80 | 6232.59 | 514.63 | -952.09 | 1082.22 | 1.01 | -0.15 | -87.23 | MWD |
| 6504.00 | 0.50 | 84.20 | 6368.58 | 514.13 | -950.89 | 1080.92 | 0.39 | -0.15 | -35.74 | MWD |
| 6641.00 | 0.30 | 73.30 | 6505.58 | 514.29 | -949.95 | 1080.17 | 0.16 | -0.15 | -7.96 | MWD |
| 6777.00 | 1.10 | 313.80 | 6641.57 | 515.30 | -950.55 | 1081.17 | 0.94 | 0.59 | -87.87 | MWD |
| 6913.00 | 0.30 | 56.80 | 6777.56 | 516.39 | -951.19 | 1082.25 | 0.88 | -0.59 | 75.74 | MWD |

Allis-Chalmers Energy, Inc.

Survey Report

| | | |
|--|--|---|
| Company: ANADARKO PETROLEUM Field: Weld County, CO Site: Everist 10-32 Pad Well: 25-32R Wellpath: Original Hole | Date: 11/08/2010 Co-ordinate(NE) Reference: Well: 25-32R, Grid North Vertical (TVD) Reference: 4803'GL+13'KB 4816.0 Section (VS) Reference: Well (0.00N,0.00E,297.81Azi) Survey Calculation Method: Minimum Curvature | Page: 3 Db: Adapti |
|--|--|---|

Survey

| MD ft | Incl deg | Azim deg | TVD ft | +N/-S ft | +E/-W ft | VS ft | DLS deg/100ft | Build deg/100ft | Turn deg/100ft | Tool/Comment |
|----------|-------------|-------------|-----------|-------------|-------------|----------|------------------|--------------------|-------------------|--------------|
| 7049.00 | 0.40 | 292.40 | 6913.56 | 516.77 | -951.34 | 1082.55 | 0.46 | 0.07 | -91.47 | MWD |
| 7186.00 | 1.20 | 109.90 | 7050.55 | 516.46 | -950.43 | 1081.61 | 1.17 | 0.58 | 129.56 | MWD |
| 7323.00 | 1.10 | 91.60 | 7187.52 | 515.94 | -947.77 | 1079.00 | 0.28 | -0.07 | -13.36 | MWD |
| 7459.00 | 1.10 | 98.70 | 7323.50 | 515.71 | -945.17 | 1076.60 | 0.10 | 0.00 | 5.22 | MWD |
| 7595.00 | 0.30 | 90.60 | 7459.49 | 515.50 | -943.52 | 1075.05 | 0.59 | -0.59 | -5.96 | MWD |
| 7731.00 | 0.20 | 334.20 | 7595.49 | 515.71 | -943.27 | 1074.92 | 0.31 | -0.07 | -85.59 | MWD |
| 7868.00 | 0.90 | 329.30 | 7732.48 | 516.85 | -943.92 | 1076.03 | 0.51 | 0.51 | -3.58 | MWD |
| 7970.00 | 0.70 | 323.70 | 7834.47 | 518.05 | -944.70 | 1077.28 | 0.21 | -0.20 | -5.49 | MWD |
| 8003.53 | 0.70 | 323.70 | 7868.00 | 518.38 | -944.94 | 1077.65 | 0.00 | 0.00 | 0.00 | 25-32R PBHL |
| 8015.00 | 0.70 | 323.70 | 7879.47 | 518.49 | -945.03 | 1077.77 | 0.00 | 0.00 | 0.00 | 25-32R BHL |

Targets

| Name | Description | Dir. | TVD ft | +N/-S ft | +E/-W ft | Map Northing ft | Map Easting ft | <---- Latitude ----> | | | <--- Longitude ---> | | | | |
|----------------------|-------------|------|-----------|-------------|-------------|-----------------------|----------------------|----------------------|-----|--------|---------------------|-----|-----|--------|---|
| | Dip. | | | | | | | Deg | Min | Sec | Deg | Min | Sec | | |
| 25-32R SL | | | 0.00 | 0.00 | 0.00 | 1309402.05 | 3164780.50 | 40 | 10 | 52.296 | N | 104 | 54 | 36.980 | W |
| 25-32R PBHL | | | 7868.00 | 495.36 | -939.14 | 1309897.41 | 3163841.36 | 40 | 10 | 57.253 | N | 104 | 54 | 49.038 | W |
| -Circle (Radius: 50) | | | | | | | | | | | | | | | |
| 25-32R BHL | | | 7879.47 | 518.49 | -945.03 | 1309920.54 | 3163835.47 | 40 | 10 | 57.482 | N | 104 | 54 | 49.112 | W |

Casing Points

| MD ft | TVD ft | Diameter in | Hole Size in | Name |
|----------|-----------|----------------|-----------------|--------|
| 700.00 | 697.57 | 8.625 | 12.250 | 8 5/8" |