



Standard Wellpath Report
Sandridge
Sec 12 - 34S - 20W, Kansas
Comanche County
Wellbore: Sally 3420 2-12H (Actual)

Wellbore

| Name | Created | Last Revised |
|---------------------------|-------------|--------------|
| Sally 3420 2-12H (Actual) | 22-Apr-2013 | 10-May-2013 |

Well

| Name | Government ID | Last Revised |
|------------------|---------------|--------------|
| Sally 3420 2-12H | | 22-Apr-2013 |

Slot

| Name | Grid Northing | Grid Easting | Latitude | Longitude | North | East |
|------------------|---------------|--------------|---------------|----------------|---------|----------|
| Sally 3420 2-12H | 160946.0000 | 1724718.0000 | N37 6 17.4739 | W99 26 38.0359 | 221.99S | 2199.93E |

Installation

| Name | Easting | Northing | Coord System Name | North Alignment |
|-----------------|--------------|-------------|---|-----------------|
| Comanche County | 1722518.0000 | 161168.0001 | KS-S on NORTH AMERICAN DATUM 1927 datum | Grid |

Field

| Name | Easting | Northing | Coord System Name | North Alignment |
|--------------------|--------------|-------------|---|-----------------|
| Sec 12 - 34S - 20W | 1722518.0000 | 161168.0001 | KS-S on NORTH AMERICAN DATUM 1927 datum | Grid |

Created By

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Comments

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| FINAL Surveys MD 9599 is a projection to bit @ TD |
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Standard Wellpath Report
Sandridge
Sec 12 - 34S - 20W, Kansas
Comanche County
Wellbore: Sally 3420 2-12H (Actual)

Wellpath (Grid) Report

| MD[ft] | Inc[deg] | Azi[deg] | TVD[ft] | North[ft] | East[ft] | Dogleg [deg/100ft] | Vertical Section[ft] | Easting | Northing |
|---------|----------|----------|---------|-----------|----------|-----------------------|-------------------------|------------|-----------|
| 0.00 | 0.00 | 0.000 | 0.00 | 0.00N | 0.00E | | 0.00 | 1724718.00 | 160946.00 |
| 1243.00 | 1.19 | 204.660 | 1242.91 | 11.73S | 5.39W | 0.10 | 11.98 | 1724712.61 | 160934.27 |
| 1427.00 | 1.19 | 188.750 | 1426.87 | 15.36S | 6.47W | 0.18 | 15.65 | 1724711.53 | 160930.64 |
| 1795.00 | 1.19 | 202.370 | 1794.79 | 22.67S | 8.51W | 0.08 | 23.06 | 1724709.49 | 160923.33 |
| 2270.00 | 0.88 | 216.380 | 2269.72 | 30.16S | 12.55W | 0.08 | 30.74 | 1724705.45 | 160915.84 |
| 2745.00 | 0.71 | 212.060 | 2744.67 | 35.59S | 16.28W | 0.04 | 36.35 | 1724701.72 | 160910.40 |
| 3219.00 | 0.71 | 224.270 | 3218.63 | 40.19S | 19.88W | 0.03 | 41.11 | 1724698.12 | 160905.81 |
| 3693.00 | 0.80 | 236.480 | 3692.59 | 44.12S | 24.69W | 0.04 | 45.27 | 1724693.31 | 160901.88 |
| 4168.00 | 0.31 | 274.550 | 4167.57 | 45.85S | 28.74W | 0.12 | 47.20 | 1724689.26 | 160900.15 |
| 4307.00 | 0.09 | 223.560 | 4306.57 | 45.90S | 29.19W | 0.19 | 47.27 | 1724688.81 | 160900.10 |
| 4327.00 | 0.31 | 226.250 | 4326.57 | 45.94S | 29.24W | 1.10 | 47.32 | 1724688.76 | 160900.05 |
| 4358.00 | 1.19 | 207.740 | 4357.57 | 46.29S | 29.45W | 2.91 | 47.67 | 1724688.55 | 160899.71 |
| 4390.00 | 3.58 | 199.940 | 4389.54 | 47.52S | 29.94W | 7.52 | 48.93 | 1724688.05 | 160898.48 |
| 4422.00 | 6.10 | 209.770 | 4421.42 | 49.94S | 31.13W | 8.26 | 51.40 | 1724686.87 | 160896.06 |
| 4453.00 | 8.40 | 211.580 | 4452.17 | 53.30S | 33.13W | 7.45 | 54.85 | 1724684.87 | 160892.70 |
| 4485.00 | 10.78 | 211.750 | 4483.72 | 57.83S | 35.93W | 7.44 | 59.52 | 1724682.07 | 160888.17 |
| 4517.00 | 12.59 | 210.560 | 4515.06 | 63.38S | 39.28W | 5.71 | 65.23 | 1724678.72 | 160882.62 |
| 4548.00 | 14.49 | 208.980 | 4545.19 | 69.68S | 42.88W | 6.24 | 71.70 | 1724675.12 | 160876.32 |
| 4580.00 | 16.79 | 207.350 | 4576.01 | 77.29S | 46.94W | 7.32 | 79.50 | 1724671.06 | 160868.71 |
| 4612.00 | 19.18 | 204.880 | 4606.44 | 86.17S | 51.28W | 7.84 | 88.58 | 1724666.72 | 160859.83 |
| 4643.00 | 20.99 | 203.560 | 4635.56 | 95.88S | 55.64W | 6.02 | 98.49 | 1724662.36 | 160850.12 |
| 4675.00 | 22.98 | 202.940 | 4665.23 | 106.88S | 60.37W | 6.26 | 109.71 | 1724657.63 | 160839.11 |
| 4707.00 | 25.19 | 202.680 | 4694.44 | 118.92S | 65.43W | 6.91 | 121.98 | 1724652.57 | 160827.08 |
| 4738.00 | 27.09 | 201.840 | 4722.27 | 131.56S | 70.60W | 6.24 | 134.86 | 1724647.40 | 160814.43 |
| 4770.00 | 28.10 | 201.180 | 4750.63 | 145.35S | 76.03W | 3.30 | 148.90 | 1724641.97 | 160800.64 |
| 4801.00 | 29.78 | 201.660 | 4777.75 | 159.32S | 81.51W | 5.47 | 163.12 | 1724636.49 | 160786.68 |
| 4833.00 | 31.42 | 201.440 | 4805.30 | 174.47S | 87.49W | 5.14 | 178.54 | 1724630.50 | 160771.53 |
| 4865.00 | 32.92 | 200.780 | 4832.38 | 190.36S | 93.63W | 4.81 | 194.72 | 1724624.37 | 160755.63 |
| 4896.00 | 35.31 | 199.370 | 4858.05 | 206.69S | 99.59W | 8.12 | 211.32 | 1724618.41 | 160739.30 |
| 4928.00 | 37.78 | 200.340 | 4883.75 | 224.61S | 106.06W | 7.93 | 229.54 | 1724611.93 | 160721.38 |
| 4960.00 | 41.01 | 200.080 | 4908.48 | 243.67S | 113.08W | 10.11 | 248.91 | 1724604.92 | 160702.33 |
| 4991.00 | 43.88 | 200.870 | 4931.35 | 263.26S | 120.40W | 9.42 | 268.85 | 1724597.60 | 160682.73 |
| 5023.00 | 47.02 | 199.940 | 4953.80 | 284.63S | 128.34W | 10.03 | 290.58 | 1724589.65 | 160661.36 |
| 5055.00 | 50.20 | 200.560 | 4974.96 | 307.15S | 136.65W | 10.04 | 313.48 | 1724581.34 | 160638.84 |
| 5086.00 | 50.91 | 200.340 | 4994.65 | 329.58S | 145.02W | 2.35 | 336.29 | 1724572.98 | 160616.41 |
| 5118.00 | 50.91 | 198.840 | 5014.83 | 352.98S | 153.34W | 3.64 | 360.07 | 1724564.65 | 160593.01 |
| 5150.00 | 50.99 | 199.940 | 5034.99 | 376.42S | 161.59W | 2.68 | 383.89 | 1724556.40 | 160569.57 |
| 5181.00 | 50.82 | 198.840 | 5054.54 | 399.12S | 169.58W | 2.81 | 406.95 | 1724548.41 | 160546.87 |
| 5213.00 | 50.60 | 199.550 | 5074.80 | 422.51S | 177.73W | 1.85 | 430.71 | 1724540.27 | 160523.48 |
| 5245.00 | 50.29 | 199.060 | 5095.18 | 445.79S | 185.88W | 1.53 | 454.36 | 1724532.11 | 160500.19 |
| 5276.00 | 51.08 | 199.240 | 5114.82 | 468.45S | 193.75W | 2.59 | 477.38 | 1724524.24 | 160477.54 |
| 5308.00 | 54.22 | 197.260 | 5134.23 | 492.60S | 201.71W | 10.98 | 501.90 | 1724516.29 | 160453.38 |
| 5339.00 | 57.18 | 197.740 | 5151.70 | 517.02S | 209.41W | 9.63 | 526.66 | 1724508.59 | 160428.96 |
| 5371.00 | 60.10 | 195.980 | 5168.35 | 543.17S | 217.32W | 10.26 | 553.17 | 1724500.67 | 160402.81 |
| 5403.00 | 62.62 | 195.140 | 5183.69 | 570.23S | 224.86W | 8.20 | 580.56 | 1724493.14 | 160375.76 |
| 5435.00 | 64.69 | 193.780 | 5197.89 | 597.99S | 232.01W | 7.51 | 608.64 | 1724485.98 | 160347.99 |
| 5466.00 | 66.90 | 189.460 | 5210.61 | 625.68S | 237.70W | 14.57 | 636.57 | 1724480.30 | 160320.30 |
| 5498.00 | 68.98 | 188.970 | 5222.62 | 654.95S | 242.44W | 6.65 | 666.04 | 1724475.55 | 160291.03 |
| 5529.00 | 71.59 | 186.860 | 5233.08 | 683.85S | 246.46W | 10.58 | 695.11 | 1724471.53 | 160262.12 |
| 5561.00 | 74.11 | 184.740 | 5242.52 | 714.27S | 249.54W | 10.10 | 725.64 | 1724468.45 | 160231.71 |
| 5593.00 | 76.89 | 181.480 | 5250.53 | 745.20S | 251.22W | 13.14 | 756.61 | 1724466.77 | 160200.78 |
| 5624.00 | 79.89 | 181.040 | 5256.77 | 775.55S | 251.89W | 9.78 | 786.96 | 1724466.11 | 160170.42 |
| 5667.00 | 84.31 | 178.750 | 5262.68 | 818.13S | 251.80W | 11.55 | 829.49 | 1724466.19 | 160127.84 |
| 5734.00 | 87.01 | 178.260 | 5267.75 | 884.91S | 250.06W | 4.10 | 896.10 | 1724467.93 | 160061.06 |
| 5828.00 | 88.20 | 178.040 | 5271.68 | 978.78S | 247.03W | 1.29 | 989.70 | 1724470.96 | 159967.19 |
| 5919.00 | 90.10 | 178.350 | 5273.03 | 1069.72S | 244.16W | 2.12 | 1080.40 | 1724473.83 | 159876.25 |
| 6011.00 | 90.90 | 179.280 | 5272.22 | 1161.69S | 242.26W | 1.33 | 1172.17 | 1724475.73 | 159784.27 |
| 6102.00 | 91.30 | 179.280 | 5270.48 | 1252.67S | 241.12W | 0.44 | 1262.98 | 1724476.88 | 159693.29 |
| 6194.00 | 91.78 | 179.060 | 5268.00 | 1344.62S | 239.78W | 0.57 | 1354.76 | 1724478.21 | 159601.33 |
| 6286.00 | 90.59 | 179.670 | 5266.10 | 1436.60S | 238.76W | 1.45 | 1446.57 | 1724479.23 | 159509.36 |
| 6378.00 | 89.70 | 179.140 | 5265.87 | 1528.59S | 237.81W | 1.13 | 1538.41 | 1724480.18 | 159417.36 |
| 6469.00 | 90.50 | 179.280 | 5265.71 | 1619.58S | 236.55W | 0.89 | 1629.23 | 1724481.44 | 159326.37 |
| 6560.00 | 90.19 | 179.670 | 5265.16 | 1710.57S | 235.72W | 0.55 | 1720.07 | 1724482.27 | 159235.37 |
| 6652.00 | 89.48 | 179.060 | 5265.43 | 1802.57S | 234.70W | 1.02 | 1811.90 | 1724483.29 | 159143.37 |
| 6743.00 | 89.48 | 178.970 | 5266.25 | 1893.55S | 233.14W | 0.10 | 1902.70 | 1724484.86 | 159052.39 |
| 6836.00 | 89.79 | 179.670 | 5266.84 | 1986.54S | 232.03W | 0.82 | 1995.52 | 1724485.96 | 158959.39 |
| 6928.00 | 90.19 | 178.750 | 5266.86 | 2078.53S | 230.76W | 1.09 | 2087.34 | 1724487.23 | 158867.40 |
| 7020.00 | 90.72 | 180.160 | 5266.13 | 2170.52S | 229.89W | 1.64 | 2179.18 | 1724488.10 | 158775.41 |
| 7112.00 | 90.28 | 178.970 | 5265.33 | 2262.51S | 229.19W | 1.38 | 2271.03 | 1724488.80 | 158683.41 |
| 7207.00 | 90.41 | 179.540 | 5264.76 | 2357.50S | 227.96W | 0.62 | 2365.84 | 1724490.04 | 158588.42 |

All data is in Feet unless otherwise stated
Coordinates are from Slot MD's are from Slot and TVD's are from Slot (Sally 3420 2-12H 0.00ft above Mean Sea Level)
Vertical Section is from 0.00N 0.00E on azimuth 182.810 degrees
Bottom hole distance is 4754.84 Feet on azimuth 182.89 degrees from Wellhead
Calculation method uses Minimum Curvature method
Prepared by
Date Printed: 10-May-2013



Standard Wellpath Report
 Sandridge
 Sec 12 - 34S - 20W, Kansas
 Comanche County
 Wellbore: Sally 3420 2-12H (Actual)

Wellpath (Grid) Report

| MD[ft] | Inc[deg] | Azi[deg] | TVD[ft] | North[ft] | East[ft] | Dogleg [deg/100ft] | Vertical Section[ft] | Easting | Northing |
|---------|----------|----------|---------|-----------|----------|--------------------|----------------------|------------|-----------|
| 7302.00 | 90.19 | 178.260 | 5264.26 | 2452.48S | 226.13W | 1.37 | 2460.62 | 1724491.86 | 158493.43 |
| 7397.00 | 90.01 | 179.140 | 5264.09 | 2547.46S | 223.98W | 0.95 | 2555.37 | 1724494.02 | 158398.46 |
| 7492.00 | 90.28 | 180.360 | 5263.85 | 2642.45S | 223.56W | 1.32 | 2650.23 | 1724494.43 | 158303.46 |
| 7587.00 | 90.19 | 180.860 | 5263.46 | 2737.45S | 224.57W | 0.53 | 2745.16 | 1724493.42 | 158208.46 |
| 7682.00 | 88.69 | 181.740 | 5264.39 | 2832.41S | 226.73W | 1.83 | 2840.12 | 1724491.26 | 158113.49 |
| 7776.00 | 89.00 | 181.350 | 5266.29 | 2926.36S | 229.26W | 0.53 | 2934.08 | 1724488.73 | 158019.54 |
| 7871.00 | 89.31 | 180.070 | 5267.69 | 3021.34S | 230.44W | 1.39 | 3029.00 | 1724487.55 | 157924.56 |
| 7966.00 | 89.70 | 180.160 | 5268.51 | 3116.34S | 230.63W | 0.42 | 3123.90 | 1724487.36 | 157829.56 |
| 8061.00 | 90.28 | 179.450 | 5268.52 | 3211.34S | 230.31W | 0.97 | 3218.76 | 1724487.68 | 157734.56 |
| 8156.00 | 90.50 | 179.850 | 5267.88 | 3306.33S | 229.73W | 0.48 | 3313.62 | 1724488.27 | 157639.56 |
| 8251.00 | 89.48 | 179.670 | 5267.89 | 3401.33S | 229.33W | 1.09 | 3408.48 | 1724488.66 | 157544.56 |
| 8346.00 | 90.10 | 181.040 | 5268.24 | 3496.32S | 229.92W | 1.58 | 3503.39 | 1724488.07 | 157449.56 |
| 8441.00 | 89.09 | 179.760 | 5268.91 | 3591.32S | 230.58W | 1.72 | 3598.30 | 1724487.41 | 157354.56 |
| 8536.00 | 90.28 | 179.760 | 5269.44 | 3686.31S | 230.18W | 1.25 | 3693.16 | 1724487.81 | 157259.56 |
| 8631.00 | 92.00 | 179.670 | 5267.55 | 3781.29S | 229.71W | 1.81 | 3788.00 | 1724488.28 | 157164.58 |
| 8726.00 | 90.99 | 179.850 | 5265.07 | 3876.25S | 229.31W | 1.08 | 3882.83 | 1724488.68 | 157069.61 |
| 8820.00 | 91.91 | 179.450 | 5262.69 | 3970.22S | 228.74W | 1.07 | 3976.66 | 1724489.25 | 156975.64 |
| 8915.00 | 89.79 | 180.160 | 5261.28 | 4065.20S | 228.42W | 2.35 | 4071.51 | 1724489.58 | 156880.66 |
| 9010.00 | 89.00 | 181.660 | 5262.28 | 4160.18S | 229.92W | 1.78 | 4166.45 | 1724488.07 | 156785.68 |
| 9105.00 | 89.00 | 179.670 | 5263.94 | 4255.16S | 231.03W | 2.09 | 4261.37 | 1724486.97 | 156690.70 |
| 9200.00 | 88.29 | 179.450 | 5266.19 | 4350.13S | 230.30W | 0.78 | 4356.19 | 1724487.69 | 156595.73 |
| 9295.00 | 91.38 | 181.740 | 5266.46 | 4445.10S | 231.28W | 4.05 | 4451.10 | 1724486.71 | 156500.75 |
| 9390.00 | 89.22 | 182.450 | 5265.96 | 4540.03S | 234.76W | 2.39 | 4546.08 | 1724483.24 | 156405.81 |
| 9485.00 | 87.50 | 181.480 | 5268.68 | 4634.93S | 238.01W | 2.08 | 4641.03 | 1724479.98 | 156310.91 |
| 9551.00 | 87.10 | 180.780 | 5271.79 | 4700.85S | 239.31W | 1.22 | 4706.93 | 1724478.68 | 156244.99 |
| 9599.00 | 87.10 | 180.780 | 5274.22 | 4748.78S | 239.97W | ==> | 4754.84 | 1724478.03 | 156197.06 |

All data is in Feet unless otherwise stated
 Coordinates are from Slot MD's are from Slot and TVD's are from Slot (Sally 3420 2-12H 0.00ft above Mean Sea Level)
 Vertical Section is from 0.00N 0.00E on azimuth 182.810 degrees
 Bottom hole distance is 4754.84 Feet on azimuth 182.89 degrees from Wellhead
 Calculation method uses Minimum Curvature method
 Prepared by
 Date Printed: 10-May-2013



Standard Wellpath Report
Sandridge
Sec 12 - 34S - 20W, Kansas
Comanche County
Wellbore: Sally 3420 2-12H (Actual)

Comments

| MD[ft] | TVD[ft] | North[ft] | East[ft] | Comment |
|---------|---------|-----------|----------|------------------------|
| 9599.00 | 5274.22 | 4748.78S | 239.97W | Projection to bit @ TD |

All data is in Feet unless otherwise stated
Coordinates are from Slot MD's are from Slot and TVD's are from Slot (Sally 3420 2-12H 0.00ft above Mean Sea Level)
Vertical Section is from 0.00N 0.00E on azimuth 182.810 degrees
Bottom hole distance is 4754.84 Feet on azimuth 182.89 degrees from Wellhead
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