

Archer Survey Report

Company: Sandridge Energy , Inc

Location: Sec 07-T35S-R07W

Well: Patricia 3507 1-7H

Rig: Horizon 15

API or UWI: 15077219050000

Job Number: 04118-431-22

State: KS

Operator: Archer Directional Services

County: Harper

Magnetic Declination: 0.00

Comment

Proposed Azimuth: 357.82

North Reference: GRID

Tiein Survey Data:

| MD | Inclination | Azimuth | TVD | NS | EW |
|------|-------------|---------|------|------|------|
| 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

| MD | Inclination | Azimuth | TVD | NS | EW | CA | CD | VS | DLS |
|---------|-------------|---------|---------|--------|--------|--------|--------|--------|-------|
| 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 250.00 | 0.50 | 279.00 | 250.00 | 0.17 | -1.08 | 279.00 | 1.09 | 0.21 | 0.20 |
| 500.00 | 0.30 | 279.00 | 499.99 | 0.44 | -2.80 | 279.00 | 2.84 | 0.55 | 0.08 |
| 750.00 | 0.20 | 279.00 | 749.99 | 0.61 | -3.88 | 279.00 | 3.93 | 0.76 | 0.04 |
| 860.00 | 0.40 | 279.00 | 859.99 | 0.70 | -4.45 | 279.00 | 4.50 | 0.87 | 0.18 |
| 1319.00 | 0.40 | 251.00 | 1318.98 | 0.43 | -7.54 | 273.29 | 7.56 | 0.72 | 0.04 |
| 1793.00 | 0.40 | 338.60 | 1792.97 | 1.44 | -9.71 | 278.41 | 9.82 | 1.80 | 0.12 |
| 2267.00 | 0.70 | 324.30 | 2266.95 | 5.33 | -12.01 | 293.93 | 13.14 | 5.78 | 0.07 |
| 2740.00 | 0.40 | 321.30 | 2739.92 | 8.96 | -14.72 | 301.33 | 17.24 | 9.52 | 0.06 |
| 3213.00 | 0.30 | 5.40 | 3212.92 | 11.48 | -15.64 | 306.29 | 19.40 | 12.07 | 0.06 |
| 3687.00 | 0.70 | 332.50 | 3686.90 | 15.29 | -16.86 | 312.20 | 22.76 | 15.92 | 0.10 |
| 3908.00 | 0.70 | 10.90 | 3907.88 | 17.81 | -17.23 | 315.95 | 24.78 | 18.45 | 0.21 |
| 3941.00 | 0.80 | 358.30 | 3940.88 | 18.24 | -17.20 | 316.68 | 25.07 | 18.88 | 0.58 |
| 3972.00 | 2.10 | 343.90 | 3971.87 | 19.00 | -17.36 | 317.58 | 25.74 | 19.65 | 4.32 |
| 4004.00 | 4.40 | 340.50 | 4003.81 | 20.72 | -17.93 | 319.12 | 27.40 | 21.39 | 7.21 |
| 4036.00 | 6.60 | 343.10 | 4035.67 | 23.64 | -18.88 | 321.39 | 30.25 | 24.34 | 6.92 |
| 4067.00 | 8.80 | 345.00 | 4066.38 | 27.63 | -20.01 | 324.09 | 34.12 | 28.37 | 7.14 |
| 4099.00 | 10.90 | 345.00 | 4097.91 | 32.92 | -21.43 | 326.94 | 39.28 | 33.71 | 6.56 |
| 4130.00 | 12.80 | 344.60 | 4128.25 | 39.06 | -23.10 | 329.40 | 45.38 | 39.91 | 6.13 |
| 4162.00 | 14.70 | 344.70 | 4159.33 | 46.40 | -25.11 | 331.58 | 52.76 | 47.32 | 5.94 |
| 4194.00 | 16.70 | 345.50 | 4190.13 | 54.77 | -27.33 | 333.48 | 61.21 | 55.77 | 6.29 |
| 4225.00 | 19.20 | 345.10 | 4219.62 | 64.01 | -29.76 | 335.06 | 70.59 | 65.09 | 8.07 |
| 4257.00 | 21.60 | 345.60 | 4249.61 | 74.80 | -32.58 | 336.46 | 81.58 | 75.98 | 7.52 |
| 4288.00 | 24.40 | 347.10 | 4278.15 | 86.57 | -35.43 | 337.74 | 93.54 | 87.85 | 9.23 |
| 4320.00 | 27.30 | 348.90 | 4306.94 | 100.22 | -38.32 | 339.08 | 107.29 | 101.60 | 9.39 |
| 4352.00 | 30.70 | 349.50 | 4334.93 | 115.45 | -41.22 | 340.35 | 122.59 | 116.94 | 10.66 |
| 4383.00 | 33.30 | 350.70 | 4361.21 | 131.63 | -44.04 | 341.50 | 138.80 | 133.21 | 8.63 |
| 4415.00 | 35.30 | 351.40 | 4387.65 | 149.45 | -46.84 | 342.60 | 156.62 | 151.12 | 6.37 |
| 4446.00 | 36.90 | 352.50 | 4412.70 | 167.53 | -49.39 | 343.57 | 174.66 | 169.29 | 5.57 |
| 4477.00 | 38.70 | 353.90 | 4437.19 | 186.40 | -51.64 | 344.52 | 193.42 | 188.23 | 6.43 |
| 4508.00 | 39.90 | 354.90 | 4461.18 | 205.94 | -53.55 | 345.42 | 212.79 | 207.83 | 4.38 |
| 4539.00 | 41.10 | 356.20 | 4484.75 | 226.01 | -55.11 | 346.30 | 232.63 | 227.94 | 4.73 |
| 4570.00 | 42.60 | 356.90 | 4507.84 | 246.65 | -56.35 | 347.13 | 253.01 | 248.62 | 5.07 |
| 4602.00 | 44.80 | 357.20 | 4530.98 | 268.73 | -57.49 | 347.92 | 274.81 | 270.72 | 6.91 |
| 4633.00 | 47.40 | 358.00 | 4552.47 | 291.05 | -58.42 | 348.65 | 296.85 | 293.06 | 8.59 |

| | | | | | | | | | |
|---------|-------|--------|---------|---------|---------|--------|---------|---------|-------|
| 4665.00 | 50.00 | 359.20 | 4573.59 | 315.08 | -59.00 | 349.39 | 320.55 | 317.09 | 8.60 |
| 4697.00 | 50.80 | 359.60 | 4593.99 | 339.73 | -59.26 | 350.11 | 344.86 | 341.74 | 2.68 |
| 4728.00 | 51.10 | 0.00 | 4613.52 | 363.81 | -59.35 | 350.74 | 368.61 | 365.80 | 1.39 |
| 4759.00 | 51.30 | 359.80 | 4632.94 | 387.96 | -59.39 | 351.30 | 392.48 | 389.94 | 0.82 |
| 4791.00 | 51.50 | 359.20 | 4652.91 | 412.97 | -59.61 | 351.79 | 417.25 | 414.94 | 1.59 |
| 4822.00 | 51.80 | 359.20 | 4672.14 | 437.28 | -59.95 | 352.19 | 441.37 | 439.24 | 0.97 |
| 4853.00 | 52.00 | 358.80 | 4691.27 | 461.67 | -60.37 | 352.55 | 465.60 | 463.63 | 1.20 |
| 4885.00 | 53.40 | 358.90 | 4710.66 | 487.12 | -60.88 | 352.88 | 490.91 | 489.08 | 4.38 |
| 4916.00 | 56.00 | 0.00 | 4728.57 | 512.42 | -61.12 | 353.20 | 516.05 | 514.37 | 8.87 |
| 4947.00 | 57.80 | 0.90 | 4745.50 | 538.38 | -60.91 | 353.54 | 541.82 | 540.31 | 6.30 |
| 4979.00 | 60.00 | 1.10 | 4762.03 | 565.78 | -60.44 | 353.90 | 569.00 | 567.67 | 6.90 |
| 5011.00 | 62.00 | 1.70 | 4777.54 | 593.76 | -59.75 | 354.25 | 596.76 | 595.60 | 6.46 |
| 5042.00 | 65.20 | 2.00 | 4791.32 | 621.51 | -58.85 | 354.59 | 624.29 | 623.30 | 10.36 |
| 5074.00 | 67.60 | 1.40 | 4804.13 | 650.81 | -57.99 | 354.91 | 653.39 | 652.55 | 7.69 |
| 5105.00 | 70.20 | 0.60 | 4815.29 | 679.73 | -57.48 | 355.17 | 682.16 | 681.42 | 8.73 |
| 5137.00 | 73.00 | 0.70 | 4825.39 | 710.09 | -57.14 | 355.40 | 712.38 | 711.75 | 8.76 |
| 5168.00 | 75.40 | 0.60 | 4833.83 | 739.91 | -56.80 | 355.61 | 742.09 | 741.54 | 7.75 |
| 5200.00 | 77.90 | 0.90 | 4841.22 | 771.04 | -56.39 | 355.82 | 773.10 | 772.63 | 7.87 |
| 5232.00 | 79.40 | 0.50 | 4847.52 | 802.41 | -56.01 | 356.01 | 804.36 | 803.96 | 4.85 |
| 5264.00 | 80.70 | 359.80 | 4853.05 | 833.93 | -55.93 | 356.16 | 835.80 | 835.45 | 4.60 |
| 5295.00 | 82.20 | 359.40 | 4857.66 | 864.59 | -56.14 | 356.28 | 866.41 | 866.10 | 5.00 |
| 5352.00 | 86.50 | 358.90 | 4863.27 | 921.29 | -56.98 | 356.46 | 923.05 | 922.79 | 7.59 |
| 5384.00 | 88.80 | 359.80 | 4864.58 | 953.26 | -57.35 | 356.56 | 954.98 | 954.75 | 7.72 |
| 5415.00 | 90.50 | 1.50 | 4864.77 | 984.25 | -56.99 | 356.69 | 985.90 | 985.70 | 7.76 |
| 5447.00 | 91.20 | 2.10 | 4864.29 | 1016.23 | -55.99 | 356.85 | 1017.77 | 1017.62 | 2.88 |
| 5479.00 | 91.30 | 2.00 | 4863.59 | 1048.20 | -54.84 | 357.00 | 1049.64 | 1049.53 | 0.44 |
| 5575.00 | 92.50 | 1.50 | 4860.41 | 1144.10 | -51.91 | 357.40 | 1145.28 | 1145.25 | 1.35 |
| 5669.00 | 90.50 | 0.10 | 4857.95 | 1238.06 | -50.60 | 357.66 | 1239.09 | 1239.08 | 2.60 |
| 5764.00 | 89.80 | 359.20 | 4857.70 | 1333.05 | -51.18 | 357.80 | 1334.03 | 1334.03 | 1.20 |
| 5859.00 | 90.30 | 358.20 | 4857.62 | 1428.03 | -53.34 | 357.86 | 1429.02 | 1429.02 | 1.18 |
| 5953.00 | 88.80 | 358.00 | 4858.36 | 1521.97 | -56.45 | 357.88 | 1523.01 | 1523.01 | 1.61 |
| 6049.00 | 90.90 | 357.90 | 4858.61 | 1617.90 | -59.89 | 357.88 | 1619.02 | 1619.02 | 2.19 |
| 6143.00 | 88.70 | 357.40 | 4858.94 | 1711.82 | -63.74 | 357.87 | 1713.01 | 1713.01 | 2.40 |
| 6238.00 | 88.10 | 356.90 | 4861.59 | 1806.66 | -68.46 | 357.83 | 1807.95 | 1807.95 | 0.82 |
| 6333.00 | 87.70 | 356.60 | 4865.07 | 1901.44 | -73.85 | 357.78 | 1902.89 | 1902.89 | 0.53 |
| 6428.00 | 89.60 | 357.70 | 4867.31 | 1996.29 | -78.57 | 357.75 | 1997.84 | 1997.84 | 2.31 |
| 6523.00 | 91.80 | 358.20 | 4866.15 | 2091.22 | -81.97 | 357.76 | 2092.81 | 2092.81 | 2.37 |
| 6619.00 | 90.10 | 357.70 | 4864.56 | 2187.14 | -85.40 | 357.76 | 2188.82 | 2188.82 | 1.85 |
| 6713.00 | 90.10 | 356.90 | 4864.39 | 2281.04 | -89.83 | 357.74 | 2282.79 | 2282.79 | 0.85 |
| 6808.00 | 91.30 | 357.00 | 4863.23 | 2375.89 | -94.88 | 357.71 | 2377.78 | 2377.78 | 1.27 |
| 6903.00 | 91.10 | 357.30 | 4861.24 | 2470.76 | -99.60 | 357.69 | 2472.78 | 2472.77 | 0.38 |
| 6997.00 | 91.00 | 356.90 | 4859.52 | 2564.62 | -104.36 | 357.67 | 2566.75 | 2566.74 | 0.44 |
| 7092.00 | 91.00 | 356.90 | 4857.86 | 2659.47 | -109.50 | 357.64 | 2661.71 | 2661.69 | 0.00 |
| 7187.00 | 90.00 | 356.80 | 4857.03 | 2754.32 | -114.72 | 357.62 | 2756.71 | 2756.69 | 1.06 |
| 7282.00 | 90.50 | 357.50 | 4856.62 | 2849.20 | -119.44 | 357.60 | 2851.70 | 2851.68 | 0.91 |
| 7377.00 | 90.50 | 356.90 | 4855.79 | 2944.08 | -124.08 | 357.59 | 2946.68 | 2946.65 | 0.63 |
| 7471.00 | 88.70 | 355.50 | 4856.44 | 3037.87 | -130.31 | 357.54 | 3040.67 | 3040.63 | 2.43 |
| 7565.00 | 90.00 | 356.10 | 4857.51 | 3131.60 | -137.19 | 357.49 | 3134.60 | 3134.55 | 1.52 |
| 7660.00 | 89.80 | 356.20 | 4857.68 | 3226.39 | -143.57 | 357.45 | 3229.58 | 3229.51 | 0.24 |
| 7756.00 | 92.20 | 357.30 | 4856.00 | 3322.21 | -149.01 | 357.43 | 3325.55 | 3325.47 | 2.75 |
| 7851.00 | 91.90 | 357.30 | 4852.60 | 3417.05 | -153.48 | 357.43 | 3420.48 | 3420.40 | 0.32 |
| 7946.00 | 91.50 | 357.00 | 4849.79 | 3511.89 | -158.21 | 357.42 | 3515.44 | 3515.35 | 0.53 |
| 8065.00 | 91.80 | 357.20 | 4846.36 | 3630.68 | -164.22 | 357.41 | 3634.39 | 3634.30 | 0.30 |
| 8159.00 | 92.80 | 358.10 | 4842.59 | 3724.53 | -168.08 | 357.42 | 3728.31 | 3728.22 | 1.43 |
| 8254.00 | 88.60 | 358.90 | 4841.43 | 3819.47 | -170.56 | 357.44 | 3823.29 | 3823.20 | 4.50 |
| 8348.00 | 88.30 | 359.80 | 4843.97 | 3913.42 | -171.63 | 357.49 | 3917.20 | 3917.14 | 1.01 |
| 8443.00 | 86.90 | 359.90 | 4847.95 | 4008.34 | -171.88 | 357.54 | 4012.04 | 4011.99 | 1.48 |

| | | | | | | | | | |
|---------|-------|--------|---------|---------|---------|--------|---------|---------|------|
| 8537.00 | 89.60 | 2.10 | 4850.82 | 4102.27 | -170.24 | 357.62 | 4105.79 | 4105.76 | 3.70 |
| 8632.00 | 91.80 | 2.40 | 4849.66 | 4197.18 | -166.51 | 357.73 | 4200.47 | 4200.47 | 2.34 |
| 8727.00 | 90.80 | 2.90 | 4847.50 | 4292.05 | -162.12 | 357.84 | 4295.12 | 4295.12 | 1.18 |
| 8821.00 | 90.60 | 1.60 | 4846.35 | 4385.97 | -158.42 | 357.93 | 4388.85 | 4388.84 | 1.40 |
| 8916.00 | 93.10 | 1.40 | 4843.29 | 4480.88 | -155.94 | 358.01 | 4483.60 | 4483.58 | 2.64 |
| 9012.00 | 93.80 | 0.10 | 4837.51 | 4576.70 | -154.68 | 358.06 | 4579.29 | 4579.25 | 1.54 |
| 9107.00 | 93.20 | 359.00 | 4831.71 | 4671.51 | -155.43 | 358.09 | 4674.08 | 4674.03 | 1.32 |
| 9129.00 | 93.10 | 358.70 | 4830.50 | 4693.48 | -155.87 | 358.10 | 4696.09 | 4696.03 | 1.44 |