



Standard Wellpath Report
 Sandridge
 Sec 20 - 31S - 19W, Kansas
 Comanche County
 Wellbore: Ruby 3119 2-20H (Actual)

Wellbore

Name	Created	Last Revised
Ruby 3119 2-20H (Actual)	16-Aug-2012	4-Sep-2012

Well

Name	Government ID	Last Revised
Ruby 3119 2-20H		16-Aug-2012

Slot

Name	Grid Northing	Grid Easting	Latitude	Longitude	North	East
Ruby 3119 2-20H	245517.0000	1736440.0000	N37 20 14.7512	W99 24 23.5005	185.00S	1883.03W

Installation

Name	Easting	Northing	Coord System Name	North Alignment
Comanche County	1738323.0000	245702.0001	KS-S on NORTH AMERICAN DATUM 1927 datum	Grid

Field

Name	Easting	Northing	Coord System Name	North Alignment
Sec 20 - 31S - 19W	1738323.0000	245702.0001	KS-S on NORTH AMERICAN DATUM 1927 datum	Grid

Created By

Comments
FINAL surveys MD 9600 is a projection to bit @ TD



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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	1736440.00	245517.00
1249.00	0.50	204.500	1248.98	4.96S	2.26W	0.04	5.04	1736437.74	245512.04
1722.00	0.70	332.800	1721.97	4.27S	4.44W	0.23	4.43	1736435.56	245512.73
2200.00	0.90	333.900	2199.92	1.70N	7.42W	0.04	-1.41	1736432.58	245518.70
2679.00	0.60	336.700	2678.88	7.38N	10.07W	0.06	-6.99	1736429.93	245524.38
3154.00	0.80	23.800	3153.85	12.70N	9.72W	0.12	-12.32	1736430.28	245529.70
3629.00	0.60	75.700	3628.82	16.35N	5.97W	0.13	-16.11	1736434.03	245533.35
4198.00	0.40	34.000	4197.80	18.73N	1.97W	0.07	-18.64	1736438.03	245535.73
4263.00	0.60	71.700	4262.80	19.03N	1.52W	0.58	-18.95	1736438.48	245536.03
4295.00	1.30	164.500	4294.79	18.73N	1.26W	4.56	-18.67	1736438.74	245535.73
4326.00	3.30	175.300	4325.77	17.50N	1.10W	6.57	-17.45	1736438.90	245534.50
4358.00	5.70	180.700	4357.67	14.99N	1.04W	7.61	-14.94	1736438.96	245531.99
4390.00	7.30	180.200	4389.46	11.37N	1.07W	5.00	-11.32	1736438.93	245528.37
4421.00	8.70	180.700	4420.16	7.06N	1.10W	4.52	-7.01	1736438.90	245524.06
4453.00	10.40	180.500	4451.71	1.75N	1.16W	5.31	-1.70	1736438.84	245518.75
4485.00	12.50	181.000	4483.07	4.60S	1.24W	6.57	4.65	1736438.76	245512.40
4516.00	14.90	179.900	4513.19	11.94S	1.29W	7.79	11.98	1736438.71	245505.06
4548.00	17.00	179.800	4543.96	20.74S	1.27W	6.56	20.77	1736438.73	245496.26
4580.00	19.30	181.200	4574.36	30.70S	1.37W	7.32	30.73	1736438.63	245486.30
4611.00	21.20	181.400	4603.45	41.43S	1.61W	6.13	41.46	1736438.39	245475.57
4643.00	23.40	181.400	4633.05	53.57S	1.91W	6.88	53.60	1736438.09	245463.43
4675.00	25.40	182.900	4662.19	66.78S	2.41W	6.54	66.82	1736437.59	245450.23
4707.00	26.80	184.500	4690.93	80.82S	3.32W	4.90	80.89	1736436.68	245436.18
4738.00	28.80	185.000	4718.35	95.23S	4.52W	6.50	95.33	1736435.48	245421.77
4770.00	31.10	184.100	4746.07	111.15S	5.78W	7.32	111.29	1736434.22	245405.85
4801.00	34.20	182.800	4772.17	127.85S	6.78W	10.25	128.01	1736433.22	245389.16
4833.00	37.10	182.000	4798.17	146.48S	7.56W	9.18	146.66	1736432.44	245370.52
4865.00	39.20	181.900	4823.34	166.23S	8.23W	6.57	166.43	1736431.77	245350.77
4897.00	41.10	181.400	4847.79	186.86S	8.82W	6.02	187.06	1736431.18	245330.15
4928.00	43.00	181.100	4870.81	207.61S	9.28W	6.16	207.82	1736430.72	245309.39
4960.00	44.70	180.900	4893.89	229.78S	9.66W	5.33	229.98	1736430.34	245287.23
4992.00	46.80	181.400	4916.22	252.69S	10.12W	6.66	252.90	1736429.88	245264.31
5023.00	48.70	182.000	4937.06	275.63S	10.81W	6.29	275.84	1736429.19	245241.38
5055.00	49.30	182.400	4958.05	299.76S	11.73W	2.10	299.99	1736428.27	245217.24
5087.00	49.40	182.200	4978.90	324.02S	12.71W	0.57	324.27	1736427.29	245192.98
5118.00	49.50	182.000	4999.05	347.56S	13.57W	0.59	347.82	1736426.43	245169.45
5150.00	49.60	182.200	5019.81	371.89S	14.46W	0.57	372.18	1736425.54	245145.11
5182.00	49.80	181.500	5040.51	396.29S	15.25W	1.78	396.58	1736424.75	245120.72
5213.00	50.00	181.800	5060.48	419.99S	15.93W	0.98	420.29	1736424.07	245097.02
5245.00	51.60	182.500	5080.70	444.77S	16.87W	5.28	445.09	1736423.13	245072.24
5277.00	55.10	182.200	5099.80	470.42S	17.92W	10.96	470.76	1736422.08	245046.59
5309.00	59.10	182.200	5117.18	497.26S	18.95W	12.50	497.62	1736421.05	245019.75
5340.00	62.00	182.400	5132.42	524.23S	20.03W	9.37	524.61	1736419.97	244992.78
5372.00	62.80	183.200	5147.25	552.55S	21.42W	3.34	552.97	1736418.58	244964.46
5404.00	64.50	183.700	5161.45	581.18S	23.14W	5.49	581.64	1736416.86	244935.83
5435.00	66.80	183.700	5174.23	609.36S	24.97W	7.42	609.87	1736415.03	244907.65
5467.00	70.60	183.200	5185.85	639.11S	26.76W	11.96	639.67	1736413.24	244877.90
5499.00	75.00	182.700	5195.31	669.63S	28.33W	13.83	670.23	1736411.67	244847.38
5530.00	78.90	182.000	5202.31	699.80S	29.57W	12.77	700.42	1736410.43	244817.21
5562.00	81.70	182.100	5207.70	731.32S	30.69W	8.76	731.96	1736409.31	244785.69
5582.00	83.20	181.800	5210.33	751.13S	31.37W	7.65	751.78	1736408.63	244765.88
5630.00	86.20	181.500	5214.76	798.90S	32.75W	6.28	799.57	1736407.26	244718.11
5662.00	88.60	180.900	5216.21	830.86S	33.41W	7.73	831.53	1736406.59	244686.15
5754.00	90.80	181.500	5216.69	922.83S	35.34W	2.48	923.51	1736404.66	244594.18
5847.00	89.20	182.000	5216.69	1015.79S	38.18W	1.80	1016.50	1736401.82	244501.23
5940.00	89.10	182.200	5218.07	1108.71S	41.59W	0.24	1109.49	1736398.41	244408.30
6032.00	89.80	182.200	5218.96	1200.64S	45.12W	0.76	1201.49	1736394.88	244316.38
6124.00	90.00	182.100	5219.12	1292.58S	48.57W	0.24	1293.49	1736391.43	244224.44
6218.00	89.90	181.800	5219.20	1386.52S	51.77W	0.34	1387.49	1736388.23	244130.50
6311.00	90.60	181.400	5218.79	1479.48S	54.37W	0.87	1480.48	1736385.63	244037.54
6403.00	89.90	181.900	5218.39	1571.44S	57.02W	0.94	1572.47	1736382.99	243945.58
6497.00	88.80	181.500	5219.46	1665.40S	59.80W	1.25	1666.46	1736380.20	243851.63
6591.00	89.10	182.500	5221.18	1759.32S	63.08W	1.11	1760.45	1736376.92	243757.71
6683.00	89.70	182.000	5222.15	1851.24S	66.70W	0.85	1852.44	1736373.31	243665.78
6776.00	89.20	181.900	5223.04	1944.19S	69.86W	0.55	1945.43	1736370.14	243572.84
6870.00	89.20	182.700	5224.35	2038.10S	73.63W	0.85	2039.42	1736366.37	243478.93
6963.00	90.10	182.400	5224.92	2131.01S	77.77W	1.02	2132.42	1736362.23	243386.03
7055.00	90.20	182.500	5224.68	2222.92S	81.70W	0.15	2224.42	1736358.30	243294.11
7150.00	90.10	182.300	5224.43	2317.84S	85.68W	0.24	2319.42	1736354.32	243199.20
7245.00	90.10	182.300	5224.26	2412.76S	89.49W	==>	2414.42	1736350.51	243104.28

All data is in Feet unless otherwise stated
 Coordinates are from Slot MD's are from Slot and TVD's are from Slot (Ruby 3119 2-20H 0.00ft above Mean Sea Level)
 Vertical Section is from 0.00N 0.00E on azimuth 182.200 degrees
 Bottom hole distance is 4767.98 Feet on azimuth 182.09 degrees from Wellhead
 Calculation method uses Minimum Curvature method
 Prepared by
 Date Printed: 4-Sep-2012



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 Comanche County
 Wellbore: Ruby 3119 2-20H (Actual)

Wellpath (Grid) Report

MD[ft]	Inc[deg]	Azi[deg]	TVD[ft]	North[ft]	East[ft]	Dogleg [deg/100ft]	Vertical Section[ft]	Easting	Northing
7340.00	89.40	182.300	5224.68	2507.68S	93.31W	0.74	2509.42	1736346.70	243009.36
7435.00	89.70	182.300	5225.42	2602.60S	97.12W	0.32	2604.41	1736342.88	242914.44
7530.00	91.10	182.300	5224.76	2697.52S	100.93W	1.47	2699.41	1736339.07	242819.52
7625.00	91.70	182.300	5222.44	2792.42S	104.74W	0.63	2794.38	1736335.26	242724.63
7720.00	90.80	183.000	5220.37	2887.29S	109.13W	1.20	2889.35	1736330.87	242629.75
7816.00	89.70	183.400	5219.95	2983.14S	114.49W	1.22	2985.33	1736325.51	242533.91
7911.00	87.50	181.900	5222.27	3078.00S	118.88W	2.80	3080.29	1736321.12	242439.05
8006.00	87.80	182.000	5226.16	3172.86S	122.11W	0.33	3175.21	1736317.89	242344.18
8101.00	88.50	181.600	5229.23	3267.77S	125.10W	0.85	3270.16	1736314.91	242249.28
8196.00	88.90	182.300	5231.39	3362.69S	128.33W	0.85	3365.13	1736311.68	242154.36
8291.00	89.90	181.900	5232.38	3457.62S	131.81W	1.13	3460.13	1736308.19	242059.44
8386.00	90.80	182.000	5231.80	3552.56S	135.04W	0.95	3555.12	1736304.96	241964.49
8481.00	91.10	181.700	5230.23	3647.50S	138.11W	0.45	3650.11	1736301.90	241869.56
8576.00	91.00	182.600	5228.49	3742.41S	141.67W	0.95	3745.09	1736298.33	241774.64
8671.00	92.10	182.600	5225.92	3837.28S	145.98W	1.16	3840.05	1736294.02	241679.78
8766.00	90.40	182.800	5223.84	3932.15S	150.45W	1.80	3935.02	1736289.55	241584.91
8861.00	89.30	182.900	5224.09	4027.03S	155.18W	1.16	4030.02	1736284.83	241490.03
8956.00	90.00	182.700	5224.67	4121.91S	159.82W	0.77	4125.01	1736280.19	241395.15
9051.00	87.30	181.900	5226.91	4216.80S	163.63W	2.96	4219.97	1736276.38	241300.26
9146.00	87.50	181.000	5231.22	4311.67S	166.03W	0.97	4314.87	1736273.97	241205.40
9241.00	87.50	180.900	5235.36	4406.57S	167.60W	0.11	4409.75	1736272.40	241110.50
9336.00	88.00	180.800	5239.09	4501.48S	169.01W	0.54	4504.65	1736270.99	241015.59
9431.00	86.90	181.600	5243.32	4596.37S	171.00W	1.43	4599.54	1736269.00	240920.70
9526.00	85.10	180.600	5249.95	4691.11S	172.82W	2.17	4694.29	1736267.18	240825.96
9600.00	84.70	180.600	5256.53	4764.81S	173.59W	0.54	4767.97	1736266.41	240752.26

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Wellbore: Ruby 3119 2-20H (Actual)

Comments

MD[ft]	TVD[ft]	North[ft]	East[ft]	Comment
9600.00	5256.53	4764.81S	173.59W	Projection to bit @ TD

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