



Standard Wellpath Report
Sandridge
Sec 13 - 31S - 20W, Kansas
Comanche County
Wellbore: Hazel 3120 1-24H (Actual)

Wellbore

Name	Created	Last Revised
Hazel 3120 1-24H (Actual)	29-Jan-2013	25-Feb-2013

Well

Name	Government ID	Last Revised
Hazel 3120 1-24H		29-Jan-2013

Slot

Name	Grid Northing	Grid Easting	Latitude	Longitude	North	East
Hazel 3120 1-24H	248101.0000	1727361.0000	N37 20 39.4106	W99 26 16.2346	337.01S	669.01W

Installation

Name	Easting	Northing	Coord System Name	North Alignment
Comanche County	1728030.0000	248438.0001	KS-S on NORTH AMERICAN DATUM 1927 datum	Grid

Field

Name	Easting	Northing	Coord System Name	North Alignment
Sec 13 - 31S - 20W	1728030.0000	248438.0001	KS-S on NORTH AMERICAN DATUM 1927 datum	Grid

Created By

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Comments

FINAL Surveys. MD 10773 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	1727361.00	248101.00
1244.00	0.70	3.600	1243.97	7.58N	0.48E	0.06	-7.59	1727361.48	248108.58
1429.00	0.90	19.100	1428.95	10.08N	1.02E	0.16	-10.11	1727362.02	248111.08
1704.00	0.70	272.000	1703.94	12.18N	0.05E	0.47	-12.18	1727361.05	248113.18
1887.00	1.30	250.700	1886.91	11.54N	3.03W	0.38	-11.47	1727357.97	248112.54
2077.00	1.20	258.700	2076.86	10.44N	7.01W	0.11	-10.28	1727353.99	248111.43
2362.00	1.20	248.700	2361.80	8.77N	12.72W	0.07	-8.48	1727348.28	248109.77
2647.00	1.20	248.900	2646.74	6.61N	18.28W	==>	-6.20	1727342.72	248107.61
2837.00	0.90	246.400	2836.71	5.29N	21.51W	0.16	-4.82	1727339.50	248106.29
3312.00	0.40	265.700	3311.67	3.68N	26.58W	0.11	-3.09	1727334.42	248104.68
3786.00	0.20	313.300	3785.67	4.12N	28.83W	0.06	-3.48	1727332.17	248105.12
4134.00	0.80	339.700	4133.65	6.81N	30.11W	0.18	-6.15	1727330.89	248107.81
4166.00	0.90	320.100	4165.65	7.22N	30.35W	0.96	-6.54	1727330.65	248108.22
4198.00	0.90	176.100	4197.65	7.16N	30.50W	5.35	-6.48	1727330.50	248108.16
4230.00	3.00	177.200	4229.63	6.07N	30.44W	6.56	-5.40	1727330.56	248107.07
4261.00	5.50	187.500	4260.54	3.79N	30.59W	8.40	-3.11	1727330.41	248104.79
4293.00	8.10	190.100	4292.31	0.05N	31.19W	8.18	0.64	1727329.81	248101.05
4325.00	9.90	192.900	4323.92	4.85S	32.20W	5.79	5.57	1727328.80	248096.15
4356.00	11.70	188.200	4354.37	10.56S	33.24W	6.46	11.30	1727327.76	248090.44
4388.00	14.10	185.100	4385.56	17.66S	34.05W	7.80	18.41	1727326.95	248083.34
4419.00	16.80	181.900	4415.44	25.90S	34.54W	9.13	26.66	1727326.47	248075.10
4451.00	19.60	178.300	4445.83	35.89S	34.53W	9.43	36.64	1727326.47	248065.11
4483.00	21.90	175.200	4475.76	47.20S	33.87W	7.96	47.94	1727327.13	248053.80
4514.00	24.30	174.400	4504.27	59.31S	32.76W	7.81	60.02	1727328.24	248041.69
4546.00	26.40	174.600	4533.19	72.95S	31.45W	6.57	73.63	1727329.55	248028.05
4577.00	28.00	174.500	4560.76	87.05S	30.11W	5.16	87.70	1727330.89	248013.95
4609.00	30.10	175.100	4588.73	102.53S	28.70W	6.63	103.14	1727332.30	247998.47
4641.00	32.40	175.700	4616.09	119.07S	27.37W	7.25	119.65	1727333.63	247981.93
4672.00	34.40	175.500	4641.96	136.09S	26.06W	6.46	136.63	1727334.94	247964.91
4704.00	35.90	175.400	4668.13	154.45S	24.60W	4.69	154.96	1727336.40	247946.55
4736.00	37.10	174.200	4693.85	173.41S	22.87W	4.36	173.87	1727338.13	247927.60
4767.00	38.50	173.300	4718.35	192.29S	20.80W	4.85	192.71	1727340.20	247908.71
4799.00	40.10	172.700	4743.11	212.41S	18.33W	5.14	212.76	1727342.67	247888.60
4830.00	41.90	173.700	4766.50	232.60S	15.93W	6.18	232.90	1727345.07	247868.40
4862.00	43.90	175.800	4789.94	254.29S	13.94W	7.68	254.54	1727347.06	247846.71
4894.00	45.10	176.800	4812.77	276.67S	12.49W	4.34	276.88	1727348.51	247824.33
4925.00	46.70	177.400	4834.34	298.91S	11.37W	5.35	299.08	1727349.63	247802.10
4957.00	48.30	177.600	4855.96	322.47S	10.34W	5.02	322.62	1727350.66	247778.53
4988.00	49.20	178.200	4876.40	345.77S	9.49W	3.25	345.89	1727351.51	247755.24
5020.00	50.20	178.700	4897.10	370.16S	8.83W	3.34	370.27	1727352.17	247730.84
5052.00	50.80	179.100	4917.45	394.85S	8.36W	2.11	394.94	1727352.64	247706.16
5083.00	50.50	179.100	4937.11	418.82S	7.98W	0.97	418.89	1727353.02	247682.19
5115.00	51.90	179.100	4957.16	443.75S	7.59W	4.37	443.81	1727353.41	247657.25
5146.00	55.30	179.200	4975.55	468.70S	7.22W	10.97	468.74	1727353.78	247632.31
5178.00	58.80	180.000	4992.95	495.55S	7.03W	11.14	495.58	1727353.97	247605.46
5209.00	61.70	180.700	5008.33	522.46S	7.20W	9.56	522.49	1727353.80	247578.55
5241.00	64.50	180.800	5022.81	550.99S	7.57W	8.75	551.02	1727353.43	247550.02
5273.00	67.10	180.800	5035.93	580.17S	7.98W	8.13	580.21	1727353.02	247520.84
5304.00	69.50	181.400	5047.39	608.97S	8.54W	7.95	609.01	1727352.46	247492.04
5336.00	72.50	182.000	5057.81	639.21S	9.44W	9.54	639.26	1727351.57	247461.80
5368.00	75.70	181.800	5066.57	669.96S	10.45W	10.02	670.03	1727350.55	247431.05
5399.00	79.40	181.300	5073.25	700.22S	11.27W	12.04	700.29	1727349.73	247400.80
5431.00	82.80	181.100	5078.20	731.82S	11.93W	10.64	731.90	1727349.07	247369.19
5452.00	84.10	180.900	5080.60	752.68S	12.30W	6.26	752.77	1727348.70	247348.33
5522.00	87.60	180.300	5087.83	852.39S	13.34W	3.55	852.48	1727347.66	247248.62
5615.00	89.50	179.600	5089.43	915.37S	13.29W	3.21	915.44	1727347.71	247185.64
5647.00	87.30	177.600	5090.32	947.35S	12.51W	9.29	947.39	1727348.49	247153.67
5742.00	89.30	178.100	5093.14	1042.23S	8.94W	2.17	1042.17	1727352.06	247058.79
5837.00	89.90	180.200	5093.80	1137.21S	7.53W	2.30	1137.10	1727353.47	246963.81
5931.00	89.70	181.300	5094.13	1231.20S	8.76W	1.19	1231.09	1727352.24	246869.82
6026.00	89.40	181.500	5094.88	1326.17S	11.09W	0.38	1326.09	1727349.91	246774.85
6121.00	90.40	182.200	5095.04	1421.12S	14.15W	1.28	1421.08	1727346.85	246679.90
6216.00	88.70	180.800	5095.79	1516.08S	16.64W	2.32	1516.07	1727344.36	246584.95
6311.00	89.00	181.100	5097.70	1611.05S	18.21W	0.45	1611.05	1727342.79	246489.98
6406.00	90.20	181.900	5098.36	1706.01S	20.70W	1.52	1706.05	1727340.30	246395.02
6501.00	89.60	181.300	5098.53	1800.97S	23.35W	0.89	1801.05	1727337.65	246300.06
6596.00	91.90	181.600	5097.28	1895.93S	25.76W	2.44	1896.03	1727335.24	246205.11
6691.00	91.80	181.600	5094.21	1990.84S	28.41W	0.11	1990.98	1727332.59	246110.19
6782.00	91.70	182.500	5091.44	2081.74S	31.66W	0.99	2081.93	1727329.34	246019.30
6874.00	90.30	182.500	5089.83	2173.63S	35.67W	1.52	2173.89	1727325.33	245927.40

All data is in Feet unless otherwise stated
Coordinates are from Slot MD's are from Slot and TVD's are from Slot (Hazel 3120 1-24H 0.00ft above Mean Sea Level)
Vertical Section is from 0.00N 0.00E on azimuth 181.270 degrees
Bottom hole distance is 6071.38 Feet on azimuth 181.30 degrees from Wellhead
Calculation method uses Minimum Curvature method
Prepared by
Date Printed: 25-Feb-2013



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Sec 13 - 31S - 20W, Kansas
Comanche County
Wellbore: Hazel 3120 1-24H (Actual)

Wellpath (Grid) Report

MD[ft]	Inc[deg]	Azi[deg]	TVD[ft]	North[ft]	East[ft]	Dogleg [deg/100ft]	Vertical Section[ft]	Easting	Northing
6967.00	89.80	182.300	5089.75	2266.55S	39.57W	0.58	2266.87	1727321.43	245834.49
7058.00	89.80	182.300	5090.07	2357.48S	43.22W	==>	2357.86	1727317.78	245743.56
7150.00	89.40	182.300	5090.71	2449.40S	46.91W	0.43	2449.84	1727314.09	245651.64
7243.00	89.20	182.500	5091.85	2542.31S	50.81W	0.30	2542.81	1727310.19	245558.73
7335.00	89.70	182.700	5092.73	2634.21S	54.98W	0.59	2634.78	1727306.02	245466.83
7426.00	89.70	182.100	5093.20	2725.13S	58.79W	0.66	2725.77	1727302.21	245375.91
7518.00	89.50	181.500	5093.85	2817.08S	61.68W	0.69	2817.76	1727299.32	245283.96
7611.00	89.30	181.400	5094.82	2910.05S	64.03W	0.24	2910.75	1727296.97	245191.00
7702.00	89.20	181.400	5096.01	3001.01S	66.26W	0.11	3001.75	1727294.74	245100.04
7795.00	89.60	181.100	5096.99	3093.99S	68.28W	0.54	3094.74	1727292.72	245007.06
7887.00	89.70	181.500	5097.55	3185.96S	70.37W	0.45	3186.74	1727290.63	244915.09
7979.00	90.20	181.500	5097.63	3277.93S	72.78W	0.54	3278.74	1727288.22	244823.12
8072.00	89.60	181.900	5097.79	3370.89S	75.54W	0.78	3371.73	1727285.46	244730.17
8165.00	88.00	181.600	5099.74	3463.82S	78.38W	1.75	3464.71	1727282.62	244637.24
8256.00	88.70	181.200	5102.36	3554.75S	80.60W	0.89	3555.67	1727280.40	244546.30
8347.00	88.40	181.200	5104.66	3645.71S	82.51W	0.33	3646.64	1727278.50	244455.35
8439.00	88.60	180.900	5107.07	3737.66S	84.19W	0.39	3738.61	1727276.81	244363.40
8532.00	89.60	180.800	5108.53	3830.64S	85.57W	1.08	3831.59	1727275.43	244270.43
8627.00	89.00	180.800	5109.69	3925.62S	86.90W	0.63	3926.58	1727274.10	244175.45
8722.00	89.30	181.000	5111.10	4020.60S	88.39W	0.38	4021.57	1727272.61	244080.47
8817.00	90.70	181.100	5111.10	4115.58S	90.13W	1.48	4116.56	1727270.87	243985.49
8912.00	90.70	181.600	5109.94	4210.54S	92.37W	0.53	4211.56	1727268.63	243890.52
9007.00	91.30	181.500	5108.28	4305.49S	94.94W	0.64	4306.54	1727266.06	243795.58
9102.00	91.40	181.200	5106.04	4400.44S	97.17W	0.33	4401.51	1727263.83	243700.63
9197.00	91.10	182.000	5103.97	4495.38S	99.83W	0.90	4496.49	1727261.17	243605.69
9292.00	90.40	182.100	5102.73	4590.31S	103.22W	0.74	4591.47	1727257.78	243510.76
9387.00	90.80	182.000	5101.73	4685.25S	106.62W	0.43	4686.46	1727254.38	243415.83
9482.00	91.10	181.500	5100.16	4780.19S	109.52W	0.61	4781.44	1727251.48	243320.89
9577.00	89.50	181.400	5099.66	4875.15S	111.93W	1.69	4876.44	1727249.07	243225.93
9672.00	90.10	182.500	5099.99	4970.10S	115.16W	1.32	4971.43	1727245.84	243130.99
9767.00	89.40	182.300	5100.41	5065.01S	119.14W	0.77	5066.41	1727241.86	243036.07
9862.00	87.90	181.200	5102.64	5159.94S	122.04W	1.96	5161.37	1727238.96	242941.15
9957.00	87.20	179.400	5106.71	5254.84S	122.54W	2.03	5256.27	1727238.47	242846.24
10057.00	89.70	178.600	5109.41	5354.78S	120.79W	2.62	5356.14	1727240.21	242746.30
10152.00	92.10	179.900	5107.92	5449.75S	119.55W	2.87	5451.06	1727241.45	242651.34
10247.00	93.10	181.400	5103.61	5544.65S	120.62W	1.90	5545.96	1727240.38	242556.44
10342.00	93.10	181.400	5098.47	5639.48S	122.94W	==>	5640.82	1727238.06	242461.61
10437.00	92.40	181.900	5093.91	5734.33S	125.67W	0.91	5735.71	1727235.33	242366.76
10532.00	91.80	181.800	5090.43	5829.22S	128.74W	0.64	5830.64	1727232.26	242271.88
10627.00	92.30	182.200	5087.03	5924.10S	132.05W	0.67	5925.57	1727228.95	242177.00
10724.00	92.90	182.500	5082.63	6020.91S	136.02W	0.69	6022.45	1727224.98	242080.18
10773.00	92.90	182.500	5080.15	6069.80S	138.16W	==>	6071.38	1727222.84	242031.29

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Sandridge
Sec 13 - 31S - 20W, Kansas
Comanche County
Wellbore: Hazel 3120 1-24H (Actual)

Comments

MD[ft]	TVD[ft]	North[ft]	East[ft]	Comment
10773.00	5080.15	6069.80S	138.16W	Projection to bit @ TD

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