

Standard Wellpath Report
Nadel & Gussman Energy
Sec 16 - 32S - 9E, Kansas
Chautauqua County
Wellbore: DJK 1A-16-32 9H (Actual)

Wellbore

Name	Created	Last Revised
DJK 1A-16-32 9H (Actual)	29-Dec-2011	16-Jan-2012

Well

Name	Government ID	Last Revised
DJK 1A-16-32 9H		29-Dec-2011

Slot

Name	Grid Northing	Grid Easting	Latitude	Longitude	North	East
DJK 1A-16-32 9H	222526.0000	2604855.0000	N37 15 33.4441	W96 25 17.8054	242.00N	1307.00W

Installation

Name	Easting	Northing	Coord System Name	North Alignment
Chautauqua County	2606162.0000	222284.0001	KS-S on NORTH AMERICAN DATUM 1927 datum	Grid

Field

Name	Easting	Northing	Coord System Name	North Alignment
Sec 16 - 32S - 9E	2606162.0000	222284.0001	KS-S on NORTH AMERICAN DATUM 1927 datum	Grid

Created By

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Comments

FINAL Surveys MD 4516 is a projection to bit @ TD
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 Sec 16 - 32S - 9E, Kansas
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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	2604855.00	222526.00
354.00	0.40	108.700	354.00	0.40S	1.17E	0.11	-0.42	2604856.17	222525.60
673.00	0.70	111.300	672.98	1.46S	4.04E	0.09	-1.56	2604859.04	222524.54
989.00	0.90	145.500	988.95	4.21S	7.24E	0.16	-4.38	2604862.24	222521.79
1348.00	0.20	10.900	1347.94	5.92S	8.96E	0.29	-6.13	2604863.96	222520.08
1648.00	0.80	68.800	1647.93	4.64S	11.01E	0.24	-4.91	2604866.01	222521.36
1690.00	1.30	44.300	1689.92	4.20S	11.62E	1.57	-4.48	2604866.62	222521.80
1712.00	3.20	14.400	1711.90	3.42S	11.95E	9.87	-3.72	2604866.95	222522.58
1743.00	5.00	9.200	1742.82	1.25S	12.38E	5.92	-1.56	2604867.38	222524.75
1775.00	7.50	9.300	1774.63	2.19N	12.94E	7.81	1.87	2604867.94	222528.19
1806.00	10.40	10.600	1805.25	6.93N	13.78E	9.38	6.59	2604868.78	222532.93
1838.00	13.20	10.900	1836.57	13.36N	15.00E	8.75	12.99	2604870.00	222539.36
1870.00	15.90	9.600	1867.54	21.27N	16.42E	8.50	20.86	2604871.42	222547.27
1901.00	18.60	7.900	1897.14	30.36N	17.81E	8.86	29.91	2604872.81	222556.36
1933.00	21.10	5.900	1927.24	41.14N	19.10E	8.09	40.66	2604874.10	222567.14
1964.00	23.50	5.500	1955.92	52.85N	20.27E	7.76	52.34	2604875.27	222578.85
1996.00	26.50	4.200	1984.92	66.32N	21.41E	9.53	65.78	2604876.41	222592.32
2027.00	29.30	2.600	2012.31	80.80N	22.26E	9.35	80.23	2604877.26	222606.80
2058.00	31.40	0.900	2039.06	96.46N	22.73E	7.32	95.87	2604877.73	222622.46
2090.00	33.70	359.900	2066.04	113.67N	22.84E	7.38	113.08	2604877.84	222639.67
2121.00	36.00	359.000	2091.47	131.38N	22.67E	7.60	130.79	2604877.67	222657.38
2153.00	38.60	358.500	2116.93	150.77N	22.24E	8.18	150.18	2604877.24	222676.77
2185.00	40.80	358.100	2141.55	171.20N	21.64E	6.92	170.61	2604876.64	222697.20
2216.00	43.40	357.900	2164.55	191.97N	20.91E	8.40	191.40	2604875.91	222717.97
2248.00	46.00	358.000	2187.29	214.46N	20.10E	8.13	213.90	2604875.10	222740.46
2279.00	48.90	358.300	2208.25	237.28N	19.37E	9.38	236.73	2604874.37	222763.28
2311.00	50.10	358.600	2229.03	261.61N	18.71E	3.82	261.07	2604873.71	222787.61
2342.00	50.50	358.500	2248.83	285.45N	18.11E	1.31	284.92	2604873.11	222811.45
2374.00	50.70	1.000	2269.15	310.17N	18.00E	6.07	309.64	2604873.00	222836.17
2406.00	52.10	0.400	2289.11	335.18N	18.30E	4.61	334.63	2604873.30	222861.18
2437.00	54.60	358.800	2307.62	360.05N	18.13E	9.07	359.49	2604873.13	222886.05
2469.00	58.00	357.300	2325.37	386.65N	17.21E	11.32	386.11	2604872.21	222912.65
2486.00	59.90	357.000	2334.14	401.19N	16.49E	11.28	400.67	2604871.49	222927.19
2517.00	63.00	356.000	2348.95	428.37N	14.82E	10.39	427.88	2604869.82	222954.37
2549.00	64.30	357.700	2363.15	457.00N	13.25E	6.26	456.54	2604868.25	222983.00
2580.00	67.40	357.900	2375.84	485.26N	12.16E	10.02	484.82	2604867.16	223011.26
2612.00	71.30	357.600	2387.12	515.18N	10.99E	12.22	514.75	2604865.99	223041.18
2643.00	75.30	356.600	2396.03	544.82N	9.48E	13.27	544.43	2604864.48	223070.82
2675.00	78.80	355.800	2403.20	575.94N	7.42E	11.21	575.58	2604862.42	223101.94
2706.00	81.00	355.900	2408.63	606.37N	5.21E	7.10	606.06	2604860.21	223132.37
2738.00	82.70	355.700	2413.17	637.96N	2.89E	5.35	637.70	2604857.89	223163.96
2770.00	83.90	357.700	2416.90	669.69N	1.06E	7.25	669.46	2604856.06	223195.69
2801.00	84.60	358.600	2420.01	700.52N	0.06E	3.67	700.31	2604855.06	223226.52
2833.00	87.30	358.900	2422.27	732.43N	0.63W	8.49	732.22	2604854.37	223258.43
2864.00	88.30	358.600	2423.46	763.40N	1.31W	3.37	763.20	2604853.69	223289.40
2896.00	89.60	358.700	2424.04	795.38N	2.06W	4.07	795.19	2604852.94	223321.38
2928.00	90.40	358.600	2424.04	827.37N	2.82W	2.52	827.19	2604852.18	223353.37
2959.00	89.90	358.700	2423.96	858.36N	3.55W	1.64	858.19	2604851.45	223384.36
2991.00	89.70	358.400	2424.07	890.35N	4.36W	1.13	890.19	2604850.64	223416.35
3023.00	89.90	358.000	2424.19	922.34N	5.36W	1.40	922.19	2604849.64	223448.34
3054.00	90.00	357.900	2424.21	953.32N	6.47W	0.46	953.19	2604848.53	223479.32
3085.00	90.10	357.800	2424.19	984.30N	7.63W	0.46	984.19	2604847.37	223510.30
3117.00	90.30	357.700	2424.07	1016.27N	8.89W	0.70	1016.18	2604846.11	223542.27
3148.00	90.30	357.700	2423.91	1047.25N	10.13W	==>	1047.18	2604844.87	223573.25
3179.00	90.20	357.100	2423.78	1078.21N	11.54W	1.96	1078.17	2604843.46	223604.21
3211.00	90.20	356.800	2423.67	1110.17N	13.24W	0.94	1110.16	2604841.76	223636.17
3243.00	90.00	357.300	2423.61	1142.13N	14.89W	1.68	1142.15	2604840.11	223668.12
3274.00	90.50	357.000	2423.47	1173.09N	16.43W	1.88	1173.14	2604838.57	223699.09
3306.00	90.80	357.000	2423.11	1205.04N	18.11W	0.94	1205.12	2604836.89	223731.04
3337.00	89.20	357.500	2423.11	1236.00N	19.59W	5.41	1236.11	2604835.41	223762.00
3369.00	86.30	358.000	2424.37	1267.95N	20.85W	9.20	1268.08	2604834.15	223793.95
3401.00	85.70	358.100	2426.60	1299.85N	21.93W	1.90	1300.00	2604833.07	223825.85
3432.00	86.20	357.900	2428.79	1330.76N	23.01W	1.74	1330.92	2604831.99	223856.76
3464.00	86.70	358.200	2430.77	1362.68N	24.10W	1.82	1362.86	2604830.90	223888.68
3495.00	86.80	358.300	2432.53	1393.61N	25.05W	0.46	1393.81	2604829.95	223919.61
3527.00	88.10	358.400	2433.95	1425.57N	25.97W	4.07	1425.78	2604829.03	223951.57
3558.00	88.20	358.800	2434.95	1456.54N	26.72W	1.33	1456.76	2604828.28	223982.54
3590.00	88.30	358.400	2435.93	1488.52N	27.50W	1.29	1488.74	2604827.50	224014.52
3621.00	89.70	359.000	2436.47	1519.50N	28.21W	4.91	1519.74	2604826.79	224045.50

All data is in Feet unless otherwise stated
 Coordinates are from Slot MD's are from Slot and TVD's are from Slot (DJK 1A-16-32 9H 0.00ft above Mean Sea Level)
 Vertical Section is from 0.00N 0.00E on azimuth 358.590 degrees
 Bottom hole distance is 2414.42 Feet on azimuth 358.51 degrees from Wellhead
 Calculation method uses Minimum Curvature method
 Prepared by
 Date Printed: 16-Jan-2012

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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
3653.00	91.60	359.500	2436.11	1551.50N	28.63W	6.14	1551.73	2604826.37	224077.50
3685.00	91.80	359.100	2435.16	1583.48N	29.02W	1.40	1583.72	2604825.98	224109.48
3716.00	91.20	358.400	2434.35	1614.46N	29.69W	2.97	1614.71	2604825.31	224140.46
3748.00	91.30	358.500	2433.65	1646.44N	30.56W	0.44	1646.70	2604824.44	224172.44
3779.00	90.20	358.300	2433.24	1677.43N	31.42W	3.61	1677.69	2604823.58	224203.43
3810.00	89.70	357.800	2433.27	1708.41N	32.48W	2.28	1708.69	2604822.52	224234.41
3842.00	89.50	357.600	2433.49	1740.38N	33.76W	0.88	1740.69	2604821.24	224266.38
3874.00	91.10	357.800	2433.33	1772.36N	35.05W	5.04	1772.68	2604819.95	224298.36
3906.00	91.70	357.800	2432.54	1804.32N	36.28W	1.87	1804.67	2604818.72	224330.32
3937.00	91.10	357.700	2431.79	1835.29N	37.49W	1.96	1835.66	2604817.51	224361.29
3967.00	91.30	357.400	2431.16	1865.26N	38.77W	1.20	1865.65	2604816.23	224391.26
3998.00	91.60	357.600	2430.37	1896.22N	40.13W	1.16	1896.63	2604814.87	224422.22
4030.00	91.00	357.700	2429.65	1928.18N	41.44W	1.90	1928.62	2604813.56	224454.18
4062.00	91.00	358.100	2429.09	1960.15N	42.61W	1.25	1960.61	2604812.39	224486.15
4093.00	91.10	358.100	2428.52	1991.13N	43.64W	0.32	1991.60	2604811.36	224517.13
4125.00	90.20	357.400	2428.16	2023.11N	44.89W	3.56	2023.60	2604810.11	224549.10
4157.00	89.80	357.300	2428.16	2055.07N	46.37W	1.29	2055.59	2604808.63	224581.07
4188.00	89.50	357.100	2428.35	2086.03N	47.89W	1.16	2086.58	2604807.11	224612.03
4220.00	89.70	357.600	2428.57	2118.00N	49.37W	1.68	2118.57	2604805.63	224644.00
4251.00	89.80	357.400	2428.71	2148.97N	50.72W	0.72	2149.57	2604804.28	224674.97
4283.00	90.10	357.900	2428.73	2180.94N	52.03W	1.82	2181.56	2604802.97	224706.94
4315.00	90.10	357.600	2428.68	2212.92N	53.29W	0.94	2213.56	2604801.71	224738.92
4346.00	90.30	357.500	2428.57	2243.89N	54.61W	0.72	2244.55	2604800.39	224769.89
4378.00	90.60	357.200	2428.32	2275.85N	56.09W	1.33	2276.54	2604798.91	224801.85
4409.00	90.70	357.100	2427.97	2306.81N	57.63W	0.46	2307.53	2604797.37	224832.81
4441.00	92.00	357.200	2427.21	2338.76N	59.22W	4.07	2339.51	2604795.78	224864.76
4473.00	92.50	357.100	2425.96	2370.70N	60.81W	1.59	2371.48	2604794.19	224896.70
4516.00	92.50	357.100	2424.08	2413.60N	62.99W	==>	2414.42	2604792.01	224939.60

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