

Sidetrack
C/SK

Marathon Oil Company
Indian Hills Unit 42

slot #1
INDIAN BASIN
Eddy County New Mexico

SURVEY LISTING

by
Baker Hughes INTEQ

Your ref : SIDETRACK
Our ref : svy1963
License :

Date printed : 31-May-2002
Date created : 31-May-2002
Last revised : 31-May-2002

Field is centred on n32 30 0.000,w104 30 0
Structure is centred on 442227.100,535039.500,999.00000,N

Slot location is n32 28 14.866,w104 31 14.391
Slot Grid coordinates are N 535039.500, E 442227.100
Slot local coordinates are 0.00 N 0.00 E

Projection type: mercator - New Mexico East (3001), Spheroid: Clarke - 1866

Reference North is Grid North



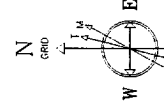
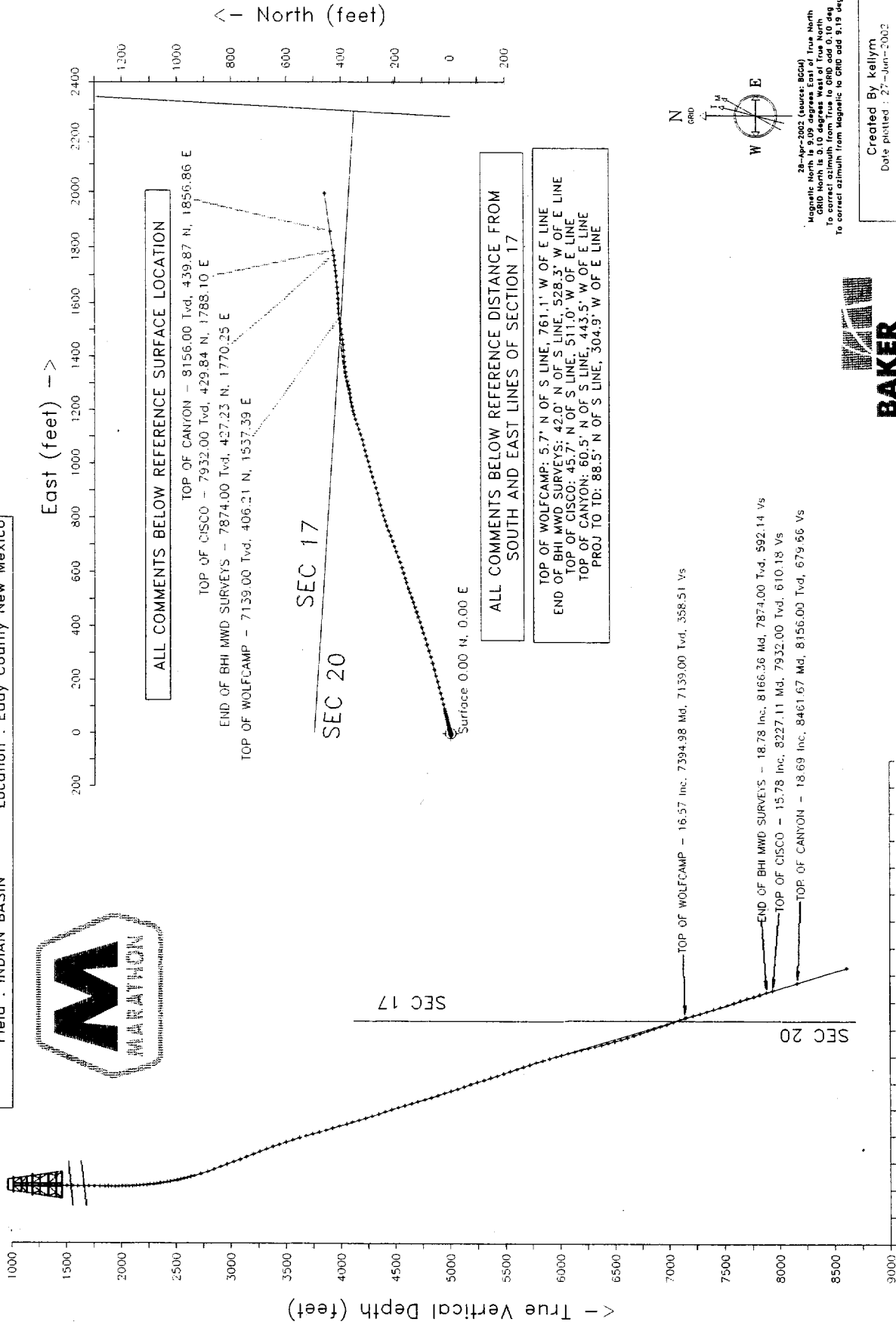
Marathon Oil Company

Structure : Indian Hills Unit 42

Slot : slot #1

Field : INDIAN BASIN

Location : Eddy County New Mexico



28-Apr-2002 (Source: BGS)
Magnetic North is 9.10 degrees West of True North
GRID North is 0.10 degrees West of True North
To correct azimuth from True to GRID add 0.10 deg
To correct azimuth from Magnetic to GRID add 9.19 deg

Created By Kellym
Date plotted : 27-Jun-2002
Plot Reference is FORM.

Coordinates are in feet reference slot #1.
True Vertical Depths are reference rotary table.

ihu42form

--- Baker Hughes INTEQ ---



INTEQ

Azimuth 82.62 with reference 352.55 N, 1182.83 E from slot #1

Marathon Oil Company
Indian Hills Unit 42, slot #1
INDIAN BASIN, Eddy County New Mexico

SURVEY LISTING Page 1
Your ref : SIDETRACK
Last revised : 31-May-2002

Measured Depth	Inclin Degrees	Azimuth Degrees	True Vert Depth	R E C T A N G U L A R C O O R D I N A T E S		Dogleg Deg/100ft	Vert Sect	G R I D Easting	C O O R D S Northing
0.00	0.00	0.00	0.00	0.00N	0.00E	0.00	0.00	442227.10	535039.50
50.00	0.24	26.23	50.00	0.09N	0.05E	0.48	0.07	442227.15	535039.59
100.00	0.19	0.62	100.00	0.27N	0.09E	0.21	0.15	442227.19	535039.77
150.00	0.14	4.27	150.00	0.41N	0.10E	0.10	0.19	442227.20	535039.91
200.00	0.11	337.93	200.00	0.52N	0.09E	0.13	0.21	442227.19	535040.02
250.00	0.05	345.32	250.00	0.59N	0.06E	0.12	0.20	442227.16	535040.09
300.00	0.24	359.63	300.00	0.71N	0.06E	0.38	0.22	442227.16	535040.21
350.00	0.06	330.42	350.00	0.84N	0.04E	0.38	0.24	442227.14	535040.34
400.00	0.02	41.97	400.00	0.87N	0.03E	0.11	0.24	442227.13	535040.37
450.00	0.11	186.56	450.00	0.83N	0.04E	0.25	0.23	442227.14	535040.33
500.00	0.13	201.76	500.00	0.73N	0.01E	0.07	0.18	442227.11	535040.23
550.00	0.18	207.57	550.00	0.60N	0.05W	0.10	0.10	442227.05	535040.10
600.00	0.16	200.28	600.00	0.47N	0.11W	0.06	0.01	442226.99	535039.97
650.00	0.19	183.93	650.00	0.32N	0.14W	0.12	-0.06	442226.96	535039.82
700.00	0.13	208.21	700.00	0.19N	0.17W	0.18	-0.12	442226.93	535039.69
750.00	0.15	219.96	750.00	0.09N	0.24W	0.07	-0.21	442226.86	535039.59
800.00	0.17	218.13	800.00	0.02S	0.33W	0.04	-0.32	442226.77	535039.48
850.00	0.16	235.46	850.00	0.12S	0.43W	0.10	-0.45	442226.67	535039.38
900.00	0.14	232.59	900.00	0.20S	0.54W	0.04	-0.57	442226.56	535039.30
950.00	0.11	233.14	950.00	0.26S	0.62W	0.06	-0.67	442226.48	535039.24
1000.00	0.13	237.51	1000.00	0.32S	0.71W	0.04	-0.77	442226.39	535039.18
1050.00	0.05	287.62	1050.00	0.34S	0.78W	0.21	-0.84	442226.32	535039.16
1100.00	0.05	290.46	1100.00	0.33S	0.82W	0.00	-0.88	442226.28	535039.17
1150.00	0.06	99.88	1150.00	0.33S	0.82W	0.22	-0.87	442226.28	535039.17
1200.00	0.05	225.68	1200.00	0.35S	0.81W	0.20	-0.86	442226.29	535039.15
1250.00	0.27	281.51	1250.00	0.34S	0.94W	0.49	-0.99	442226.16	535039.16
1300.00	0.36	276.01	1300.00	0.30S	1.21W	0.19	-1.24	442225.89	535039.20
1350.00	0.40	278.92	1349.99	0.25S	1.54W	0.09	-1.55	442225.56	535039.25
1400.00	0.45	275.46	1399.99	0.21S	1.90W	0.11	-1.90	442225.20	535039.29
1450.00	0.52	274.55	1449.99	0.17S	2.33W	0.14	-2.30	442224.77	535039.33
1500.00	0.61	272.61	1499.99	0.14S	2.82W	0.18	-2.77	442224.28	535039.36
1550.00	0.58	265.04	1549.99	0.15S	3.34W	0.17	-3.28	442223.76	535039.35
1600.00	0.67	256.46	1599.98	0.24S	3.87W	0.26	-3.82	442223.23	535039.26
1650.00	0.48	241.92	1649.98	0.41S	4.34W	0.48	-4.31	442222.76	535039.09
1700.00	0.46	237.27	1699.98	0.62S	4.69W	0.09	-4.71	442222.41	535038.88
1750.00	0.40	248.01	1749.98	0.79S	5.03W	0.20	-5.07	442222.07	535038.71
1800.00	0.40	240.53	1799.98	0.94S	5.34W	0.10	-5.41	442221.76	535038.56
1845.00	0.80	254.30	1844.97	1.10S	5.78W	0.94	-5.88	442221.32	535038.40
1877.00	0.30	226.50	1876.97	1.22S	6.05W	1.73	-6.17	442221.05	535038.28
1909.00	0.20	191.40	1908.97	1.33S	6.13W	0.56	-6.27	442220.97	535038.17
1941.00	0.35	101.70	1940.97	1.41S	6.04W	1.26	-6.20	442221.06	535038.09
1973.00	0.62	77.80	1972.97	1.39S	5.78W	1.04	-5.94	442221.32	535038.11
2005.00	1.58	79.50	2004.96	1.28S	5.17W	3.00	-5.33	442221.93	535038.22
2037.00	1.80	76.40	2036.95	1.08S	4.25W	0.74	-4.39	442222.85	535038.42
2069.00	2.70	78.80	2068.93	0.81S	3.02W	2.83	-3.13	442224.08	535038.69
2101.00	3.40	74.30	2100.88	0.41S	1.37W	2.31	-1.43	442225.73	535039.09
2133.00	4.00	69.30	2132.81	0.24N	0.59E	2.13	0.63	442227.69	535039.74
2165.00	4.70	74.90	2164.72	0.98N	2.90E	2.56	3.05	442230.00	535040.48
2198.00	5.30	72.20	2197.60	1.80N	5.65E	1.95	5.92	442232.75	535041.30
2230.00	6.00	75.00	2229.44	2.68N	8.68E	2.35	9.06	442235.78	535042.18

All data in feet unless otherwise stated. Calculation uses minimum curvature method.

Coordinates from slot #1 and TVD from rotary table.

Bottom hole distance is 1821.08 on azimuth 76.43 degrees from wellhead.

Vertical section is from N 0.00 E 0.00 on azimuth 76.22 degrees.

Grid is mercator - New Mexico East (3001).

Grid coordinates in FEET and computed using the Clarke - 1866 spheroid
Presented by Baker Hughes INTEQ

Measured Depth	Inclin Degrees	Azimuth Degrees	True Vert Depth	RECTANGULAR COORDINATES		Dogleg Deg/100ft	Vert Sect	GRID Easting	C O O R D S Northing
2262.00	6.24	75.70	2261.26	3.54N	11.98E	0.79	12.48	442239.08	535043.04
2293.00	7.00	78.50	2292.05	4.34N	15.46E	2.66	16.05	442242.56	535043.84
2325.00	8.00	75.70	2323.78	5.28N	19.53E	3.33	20.22	442246.63	535044.78
2356.00	8.90	76.70	2354.44	6.36N	23.95E	2.94	24.78	442251.05	535045.86
2388.00	9.50	77.40	2386.03	7.51N	28.94E	1.91	29.89	442256.04	535047.01
2420.00	10.50	76.40	2417.54	8.77N	34.35E	3.17	35.45	442261.45	535048.27
2451.00	11.10	77.10	2447.99	10.10N	40.00E	1.98	41.26	442267.10	535049.60
2482.00	12.00	75.70	2478.36	11.56N	46.04E	3.04	47.46	442273.14	535051.06
2514.00	12.70	77.80	2509.62	13.12N	52.70E	2.60	54.31	442279.80	535052.62
2546.00	13.50	77.10	2540.79	14.70N	59.78E	2.55	61.56	442286.88	535054.20
2577.00	14.20	76.70	2570.89	16.38N	67.00E	2.28	68.98	442294.10	535055.88
2609.00	15.10	77.40	2601.85	18.20N	74.89E	2.87	77.07	442301.99	535057.70
2641.00	15.80	77.80	2632.69	20.03N	83.22E	2.21	85.59	442310.32	535059.53
2673.00	16.60	77.40	2663.42	21.94N	91.94E	2.52	94.52	442319.04	535061.44
2736.00	18.40	77.00	2723.50	26.14N	110.41E	2.86	113.46	442337.51	535065.64
2800.00	19.60	76.70	2784.02	30.89N	130.70E	1.88	134.29	442357.80	535070.39
2862.00	20.50	75.70	2842.26	35.96N	151.34E	1.55	155.55	442378.44	535075.46
2926.00	20.90	75.70	2902.13	41.55N	173.26E	0.63	178.17	442400.36	535081.05
2989.00	20.70	75.30	2961.02	47.15N	194.92E	0.39	200.54	442422.02	535086.65
3053.00	21.40	74.60	3020.75	53.12N	217.12E	1.16	223.52	442444.22	535092.62
3117.00	22.20	74.60	3080.17	59.43N	240.03E	1.25	247.28	442467.13	535098.93
3180.00	21.80	75.70	3138.58	65.48N	262.84E	0.91	270.87	442489.94	535104.98
3245.00	22.10	73.60	3198.87	71.92N	286.27E	1.29	295.16	442513.37	535111.42
3309.00	22.20	74.30	3258.15	78.59N	309.46E	0.44	319.27	442536.56	535118.09
3372.00	21.60	73.60	3316.60	85.08N	332.04E	1.04	342.75	442559.14	535124.58
3435.00	21.20	72.90	3375.26	91.70N	354.05E	0.75	365.70	442581.15	535131.20
3499.00	20.30	72.50	3435.11	98.45N	375.70E	1.42	388.34	442602.80	535137.95
3562.00	19.60	72.20	3494.33	104.96N	396.18E	1.12	409.78	442623.28	535144.46
3625.00	18.80	72.50	3553.82	111.25N	415.93E	1.28	430.45	442643.03	535150.75
3689.00	17.90	71.10	3614.57	117.53N	435.07E	1.57	450.54	442662.17	535157.03
3752.00	16.90	71.80	3674.68	123.53N	452.93E	1.62	469.31	442680.03	535163.03
3816.00	16.90	71.50	3735.92	129.39N	470.59E	0.14	487.86	442697.69	535168.89
3880.00	17.20	70.70	3797.11	135.47N	488.34E	0.60	506.55	442715.44	535174.97
3943.00	17.10	70.70	3857.31	141.61N	505.87E	0.16	525.04	442732.97	535181.11
4007.00	17.10	70.10	3918.48	147.92N	523.60E	0.28	543.76	442750.70	535187.42
4070.00	17.40	71.50	3978.64	154.06N	541.24E	0.81	562.36	442768.34	535193.56
4143.00	17.80	71.80	4048.23	161.01N	562.19E	0.56	584.36	442789.29	535200.51
4197.00	17.80	73.80	4099.64	165.89N	577.96E	1.13	600.84	442805.06	535205.39
4261.00	18.50	73.20	4160.46	171.55N	597.07E	1.13	620.75	442824.17	535211.05
4324.00	19.00	71.80	4220.11	177.64N	616.39E	1.07	640.96	442843.49	535217.14
4388.00	18.80	71.10	4280.66	184.24N	636.04E	0.47	661.62	442863.14	535223.74
4451.00	18.90	70.70	4340.28	190.90N	655.27E	0.26	681.88	442882.37	535230.40
4515.00	18.90	70.40	4400.83	197.80N	674.82E	0.15	702.51	442901.92	535237.30
4578.00	18.70	70.80	4460.47	204.55N	693.97E	0.38	722.72	442921.07	535244.05
4642.00	18.50	70.80	4521.13	211.26N	713.25E	0.31	743.04	442940.35	535250.76
4706.00	18.90	69.00	4581.75	218.31N	732.51E	1.10	763.43	442959.61	535257.81
4769.00	18.50	69.00	4641.43	225.55N	751.37E	0.63	783.47	442978.47	535265.05
4832.00	18.40	71.10	4701.19	232.35N	770.11E	1.07	803.29	442997.21	535271.85
4895.00	17.70	71.10	4761.09	238.68N	788.58E	1.11	822.73	443015.68	535278.18
4958.00	18.60	72.90	4820.95	244.73N	807.24E	1.68	842.30	443034.34	535284.23

All data in feet unless otherwise stated. Calculation uses minimum curvature method.
Coordinates from slot #1 and TVD from rotary table.
Bottom hole distance is 1821.08 on azimuth 76.43 degrees from wellhead.
Vertical section is from N 0.00 E 0.00 on azimuth 76.22 degrees.
Grid is mercator - New Mexico East (3001).
Grid coordinates in FEET and computed using the Clarke - 1866 spheroid
Presented by Baker Hughes INTEQ

Marathon Oil Company
Indian Hills Unit 42, slot #1
INDIAN BASIN, Eddy County New Mexico

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Measured Depth	Inclin Degrees	Azimuth Degrees	True Vert Depth	R E C T A N G U L A R C O O R D I N A T E S		Dogleg Deg/100ft	Vert Sect	G R I D Easting	C O O R D S Northing
5022.00	19.10	75.00	4881.52	250.45N	827.11E	1.32	862.96	443054.21	535289.95
5085.00	19.60	75.70	4940.96	255.72N	847.31E	0.87	883.83	443074.41	535295.22
5148.00	20.00	75.30	5000.24	261.07N	867.97E	0.67	905.17	443095.07	535300.57
5212.00	20.60	74.30	5060.26	266.89N	889.39E	1.08	927.37	443116.49	535306.39
5275.00	20.20	73.20	5119.31	273.03N	910.48E	0.88	949.30	443137.58	535312.53
5338.00	19.30	72.80	5178.60	279.26N	930.83E	1.44	970.56	443157.93	535318.76
5401.00	18.90	73.60	5238.14	285.22N	950.57E	0.76	991.15	443177.67	535324.72
5464.00	18.60	74.60	5297.79	290.77N	970.04E	0.70	1011.38	443197.14	535330.27
5527.00	18.30	74.30	5357.55	296.11N	989.25E	0.50	1031.31	443216.35	535335.61
5591.00	18.70	73.90	5418.25	301.67N	1008.78E	0.66	1051.60	443235.88	535341.17
5654.00	19.20	74.30	5477.83	307.28N	1028.46E	0.82	1072.05	443255.56	535346.78
5717.00	19.20	75.70	5537.33	312.64N	1048.47E	0.73	1092.76	443275.57	535352.14
5781.00	19.30	76.40	5597.75	317.73N	1068.95E	0.39	1113.86	443296.05	535357.23
5844.00	18.90	74.60	5657.28	322.88N	1088.90E	1.13	1134.47	443316.00	535362.38
5907.00	18.90	72.80	5716.89	328.61N	1108.49E	0.93	1154.86	443335.59	535368.11
5970.00	18.40	70.00	5776.58	335.03N	1127.58E	1.63	1174.93	443354.68	535374.53
6033.00	18.20	71.80	5836.39	341.50N	1146.27E	0.95	1194.62	443373.37	535381.00
6096.00	17.50	73.20	5896.36	347.31N	1164.68E	1.30	1213.89	443391.78	535386.81
6159.00	17.40	74.60	5956.46	352.55N	1182.83E	0.69	1232.76	443409.93	535392.05
6211.00	16.30	76.74	6006.23	356.29N	1197.43E	2.43	1247.83	443424.53	535395.79
6273.00	15.30	80.30	6065.89	359.67N	1213.96E	2.25	1264.69	443441.06	535399.17
6337.00	14.90	79.20	6127.68	362.63N	1230.37E	0.77	1281.33	443457.47	535402.13
6400.00	14.70	80.90	6188.59	365.41N	1246.22E	0.76	1297.39	443473.32	535404.91
6464.00	14.20	82.00	6250.56	367.79N	1262.01E	0.89	1313.29	443489.11	535407.29
6527.00	14.10	80.20	6311.65	370.17N	1277.22E	0.72	1328.64	443504.32	535409.67
6589.00	14.60	77.80	6371.72	373.11N	1292.30E	1.25	1343.98	443519.40	535412.61
6650.00	15.80	76.00	6430.58	376.74N	1307.88E	2.11	1359.97	443534.98	535416.24
6713.00	16.90	78.20	6491.03	380.69N	1325.16E	2.00	1377.70	443552.26	535420.19
6776.00	16.70	82.70	6551.35	383.71N	1343.11E	2.09	1395.85	443570.21	535423.21
6837.00	17.50	83.40	6609.65	385.88N	1360.91E	1.35	1413.65	443588.01	535425.38
6898.00	18.40	85.90	6667.68	387.62N	1379.63E	1.94	1432.25	443606.73	535427.12
6962.00	18.60	86.20	6728.37	389.02N	1399.88E	0.35	1452.25	443626.98	535428.52
7034.00	18.10	85.90	6796.71	390.58N	1422.50E	0.71	1474.59	443649.60	535430.08
7098.00	18.50	84.50	6857.48	392.27N	1442.52E	0.93	1494.44	443669.62	535431.77
7159.00	19.10	82.70	6915.22	394.46N	1462.05E	1.37	1513.93	443689.15	535433.96
7221.00	19.00	82.40	6973.83	397.08N	1482.12E	0.23	1534.04	443709.22	535436.58
7283.00	19.20	80.10	7032.42	400.17N	1502.17E	1.26	1554.25	443729.27	535439.67
7347.00	18.60	79.90	7092.96	403.77N	1522.58E	0.94	1574.93	443749.68	535443.27
7411.00	17.60	82.00	7153.80	406.91N	1542.21E	1.87	1594.75	443769.31	535446.41
7475.00	16.60	85.20	7214.97	409.02N	1560.91E	2.14	1613.41	443788.01	535448.52
7538.00	16.50	86.90	7275.36	410.26N	1578.81E	0.78	1631.09	443805.91	535449.76
7602.00	16.80	88.00	7336.68	411.07N	1597.13E	0.68	1649.07	443824.23	535450.57
7665.00	17.30	88.30	7396.91	411.67N	1615.59E	0.81	1667.14	443842.69	535451.17
7729.00	18.10	86.90	7457.88	412.49N	1635.03E	1.42	1686.22	443862.13	535451.99
7793.00	19.10	84.10	7518.53	414.10N	1655.37E	2.09	1706.36	443882.47	535453.60
7857.00	18.70	85.20	7579.08	416.04N	1676.01E	0.84	1726.87	443903.11	535455.54
7920.00	18.20	85.50	7638.85	417.65N	1695.88E	0.81	1746.55	443922.98	535457.15
7983.00	18.20	83.80	7698.69	419.49N	1715.47E	0.84	1766.02	443942.57	535458.99
8046.00	17.80	82.70	7758.61	421.77N	1734.80E	0.83	1785.34	443961.90	535461.27
8103.00	17.30	80.30	7812.96	424.31N	1751.80E	1.54	1802.45	443978.90	535463.81

All data in feet unless otherwise stated. Calculation uses minimum curvature method.
Coordinates from slot #1 and TVD from rotary table.
Bottom hole distance is 1821.08 on azimuth 76.43 degrees from wellhead.
Vertical section is from N 0.00 E 0.00 on azimuth 76.22 degrees.
Grid is mercator - New Mexico East (3001).
Grid coordinates in FEET and computed using the Clarke - 1866 spheroid
Presented by Baker Hughes INTEQ

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Measured Depth	Inclin Degrees	Azimuth Degrees	True Vert Depth	RECTANGULAR COORDINATES	Dogleg Deg/100ft	Vert Sect	GRID COORDS Easting	North
8166.00	17.20	81.70	7873.12	427.23N 1770.25E	0.68	1821.06	443997.35	535466.73

All data in feet unless otherwise stated. Calculation uses minimum curvature method.
Coordinates from slot #1 and TVD from rotary table.
Bottom hole distance is 1821.08 on azimuth 76.43 degrees from wellhead.
Vertical section is from N 0.00 E 0.00 on azimuth 76.22 degrees.
Grid is mercator - New Mexico East (3001).
Grid coordinates in FEET and computed using the Clarke - 1866 spheroid
Presented by Baker Hughes INTEQ

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Targets associated with this wellpath

Target name	Geographic Location	T.V.D.	Rectangular Coordinates		Revised
TOP OF UPPER PENN	443990.700,535547.900,0.00000	7750.00	508.40N	1763.60E	7-Nov-2001
BASE OF UPPER PENN		8350.00	556.70N	1977.97E	7-Nov-2001