

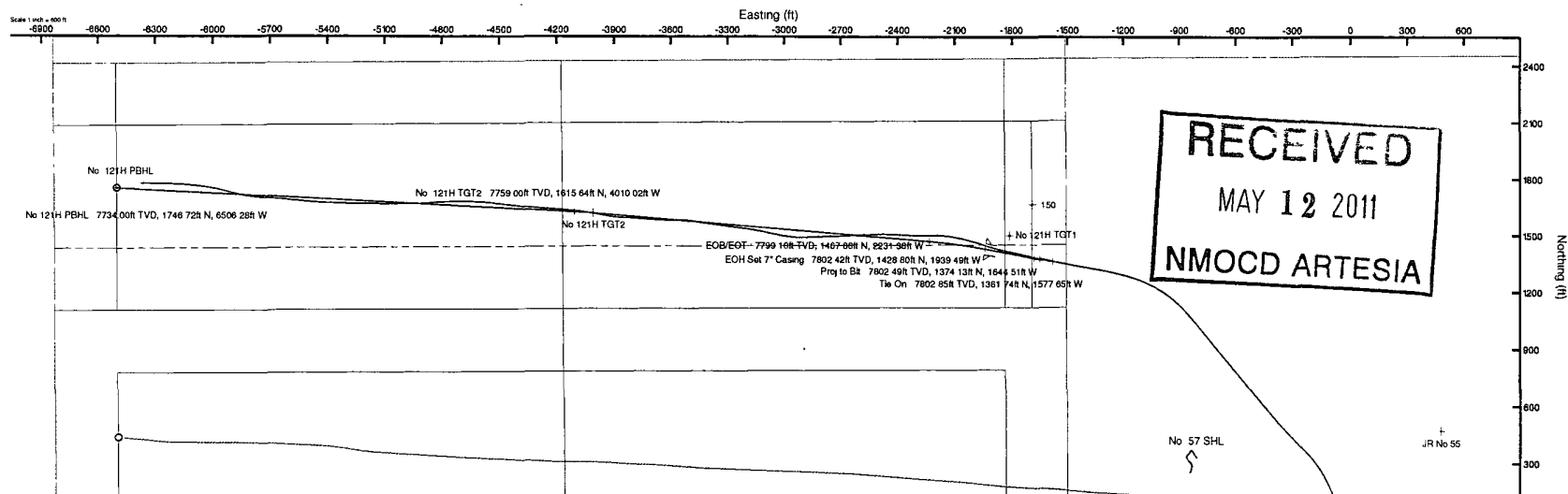
BOPCO, L.P.

Location Eddy County, NM
Field JRU Project
Facility JRU No. 121H

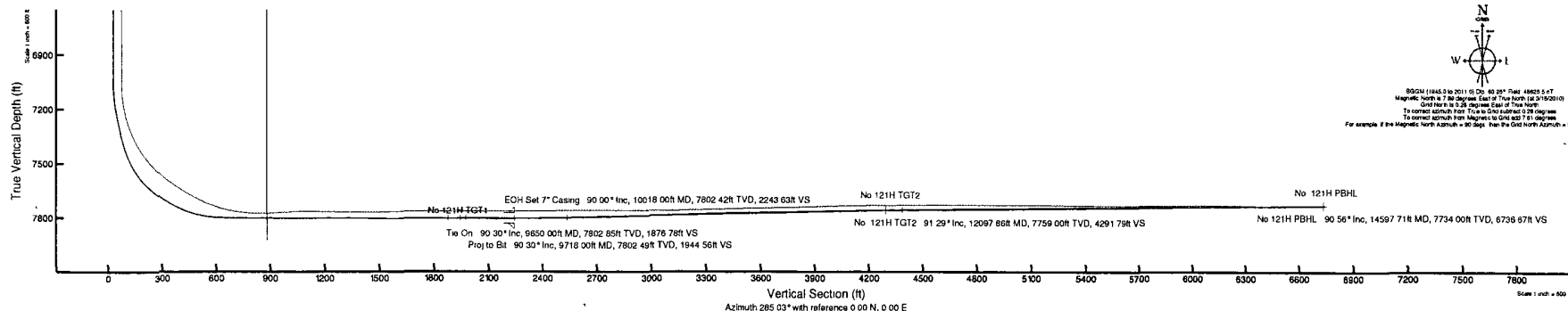
Slot	No	121H SHL
Well	No	121H
Wellbore	No.	121H PWB

**BAKER
HUGHE**
INTEO

Well Profile Data								
Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
Tie On	9650.00	90.300	280.500	7802.85	1361.74	-1577.65	0.79	1876.78
Proj to Bit	9718.00	90.300	280.500	7802.49	1374.13	-1644.51	0.00	1944.56
EOD	9748.00	90.000	280.500	7802.42	1379.60	-1674.01	1.00	1974.47
EOH Set 7" Casing	10018.00	90.000	280.500	7802.42	1428.80	-1939.49	0.00	2243.63
EOB/EOT	10312.64	91.287	274.749	7799.10	1467.88	-2231.38	2.00	2535.67
No 12 1/8 TGT2	12097.86	91.287	274.749	7759.00	1615.64	-4010.02	0.00	4291.79
EOD/EOT	12193.88	90.559	272.972	7757.45	1622.10	-4105.80	2.00	4385.97
No 12 1/8 PBHL	14597.71	90.559	272.972	7734.00	1746.72	-6506.28	0.00	6736.67



Plot reference wellpath is Plan #4	
True vertical depths are referenced to Rig on No. 121H SHL (RT)	Grid System NAD83 / TM New Mexico State Planes, Eastern Zone (3001), US feet
Measured depths are referenced to Rig on No. 121H SHL (RT)	North Reference Grid north
Rig on No. 121H SHL (RT) to Mean Sea Level 3334 feet	Scale True distance
Mean Sea Level to Mud line (Facility JRU No. 121H) -3315 feet	Depths are in feet
Coordinates are in feet referenced to Surface Location	Created by: gomesior on 2/3/2011





Actual Wellpath Report

No.121H AWP

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INTEQ

REFERENCE WELLPATH IDENTIFICATION

Operator	BOPCO, L.P.	Slot	No. 121H SHL
Area	Eddy County, NM	Well	No. 121H
Field	JRU Project	Wellbore	No.121H AWB
Facility	JRU No. 121H		

REPORT SETUP INFORMATION

Projection System	NAD83 / TM New Mexico State Planes, Eastern Zone (3001), US feet	Software System	WellArchitect® 2.0
North Reference	Grid	User	Gentbry
Scale	0.99994	Report Generated	2/18/2011 at 8:15:58 AM
Convergence at slot	0.28° East	Database/Source file	WA_Midland/No.121H_AWB.xml

WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[USft]	Northing[USft]	Latitude	Longitude
Slot Location	0.00	0.00	705022.33	475092.74	32°18'17.969"N	103°48'12.742"W
Facility Reference Pt			705022.33	475092.74	32°18'17.969"N	103°48'12.742"W
Field Reference Pt			697621.65	485218.03	32°19'58.517"N	103°49'38.415"W

WELLPATH DATUM

Calculation method	Minimum curvature	Rig on No. 121H SHL (RT) to GL	19.00ft
Horizontal Reference Pt	Surface Location	Rig on No. 121H SHL (RT) to Mean Sea Level	3334.00ft
Vertical Reference Pt	Rig on No. 121H SHL (RT)	GL to Mud Line (Facility)	0.00ft
MD Reference Pt	Rig on No. 121H SHL (RT)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	285.03°



Actual Wellpath Report

No.121H AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	BOPCO, L.P.	Slot	No. 121H SHL
Area	Eddy County, NM	Well	No. 121H
Field	JRU Project	Wellbore	No.121H AWB
Facility	JRU No. 121H		

WELLPATH DATA (179 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	DLS [°/100ft]	Comments
0.00	0.000	299.560	0.00	0.00	0.00	0.00	705022.33	475092.74	32°18'17.969"N	103°48'12.742"W	0.00	
100.00	0.410	299.560	100.00	0.35	0.18	-0.31	705022.02	475092.92	32°18'17.970"N	103°48'12.746"W	0.41	
200.00	0.430	287.590	200.00	1.07	0.47	-0.98	705021.35	475093.21	32°18'17.973"N	103°48'12.753"W	0.09	
300.00	0.450	278.520	299.99	1.83	0.64	-1.73	705020.60	475093.38	32°18'17.975"N	103°48'12.762"W	0.07	
400.00	0.910	253.670	399.99	2.90	0.47	-2.88	705019.45	475093.21	32°18'17.973"N	103°48'12.776"W	0.54	
500.00	1.380	242.610	499.97	4.47	-0.30	-4.71	705017.62	475092.44	32°18'17.966"N	103°48'12.797"W	0.52	
600.00	1.390	242.760	599.94	6.25	-1.41	-6.86	705015.48	475091.33	32°18'17.955"N	103°48'12.822"W	0.01	
700.00	1.210	245.200	699.91	7.96	-2.41	-8.89	705013.44	475090.33	32°18'17.945"N	103°48'12.846"W	0.19	
800.00	1.220	241.370	799.89	9.54	-3.36	-10.79	705011.55	475089.38	32°18'17.936"N	103°48'12.868"W	0.08	
900.00	1.290	242.780	899.86	11.15	-4.39	-12.72	705009.61	475088.35	32°18'17.926"N	103°48'12.890"W	0.08	
1000.00	1.220	243.610	999.84	12.78	-5.38	-14.68	705007.66	475087.36	32°18'17.916"N	103°48'12.913"W	0.07	
1100.00	1.050	242.980	1099.82	14.26	-6.27	-16.45	705005.89	475086.47	32°18'17.907"N	103°48'12.934"W	0.17	
1200.00	0.990	243.680	1199.81	15.59	-7.07	-18.04	705004.30	475085.67	32°18'17.900"N	103°48'12.953"W	0.06	
1300.00	0.870	251.650	1299.79	16.87	-7.69	-19.53	705002.80	475085.05	32°18'17.894"N	103°48'12.970"W	0.18	
1400.00	0.740	243.550	1399.78	17.99	-8.21	-20.83	705001.50	475084.53	32°18'17.888"N	103°48'12.985"W	0.17	
1500.00	0.530	242.030	1499.78	18.81	-8.72	-21.82	705000.52	475084.02	32°18'17.883"N	103°48'12.997"W	0.21	
1600.00	0.290	237.330	1599.77	19.32	-9.07	-22.44	704999.89	475083.67	32°18'17.880"N	103°48'13.004"W	0.24	
1700.00	0.310	214.970	1699.77	19.58	-9.43	-22.81	704999.53	475083.31	32°18'17.876"N	103°48'13.008"W	0.12	
1800.00	0.160	225.680	1799.77	19.74	-9.75	-23.06	704999.27	475082.99	32°18'17.873"N	103°48'13.011"W	0.16	
1900.00	0.140	192.830	1899.77	19.81	-9.97	-23.19	704999.14	475082.77	32°18'17.871"N	103°48'13.013"W	0.09	
2000.00	0.120	238.810	1999.77	19.88	-10.14	-23.30	704999.03	475082.60	32°18'17.869"N	103°48'13.014"W	0.10	
2100.00	0.120	261.570	2099.77	20.05	-10.21	-23.50	704998.83	475082.53	32°18'17.869"N	103°48'13.016"W	0.05	
2200.00	0.070	196.910	2199.77	20.14	-10.28	-23.62	704998.71	475082.46	32°18'17.868"N	103°48'13.018"W	0.11	
2300.00	0.160	300.170	2299.77	20.28	-10.27	-23.76	704998.57	475082.47	32°18'17.868"N	103°48'13.019"W	0.19	
2400.00	0.010	29.960	2399.77	20.41	-10.19	-23.87	704998.46	475082.55	32°18'17.869"N	103°48'13.021"W	0.16	
2500.00	0.070	327.560	2499.77	20.46	-10.14	-23.90	704998.43	475082.61	32°18'17.870"N	103°48'13.021"W	0.07	
2600.00	0.090	87.500	2599.77	20.43	-10.08	-23.86	704998.48	475082.66	32°18'17.870"N	103°48'13.021"W	0.14	
2700.00	0.080	64.760	2699.77	20.30	-10.05	-23.71	704998.62	475082.69	32°18'17.870"N	103°48'13.019"W	0.03	
2800.00	0.090	84.190	2799.77	20.17	-10.01	-23.57	704998.76	475082.73	32°18'17.871"N	103°48'13.017"W	0.03	
2900.00	0.160	172.740	2899.77	20.05	-10.14	-23.48	704998.85	475082.60	32°18'17.869"N	103°48'13.016"W	0.18	
3000.00	0.250	182.000	2999.77	19.94	-10.50	-23.47	704998.86	475082.24	32°18'17.866"N	103°48'13.016"W	0.10	
3100.00	0.300	171.650	3099.77	19.79	-10.97	-23.44	704998.89	475081.77	32°18'17.861"N	103°48'13.016"W	0.07	
3200.00	0.370	163.840	3199.77	19.52	-11.54	-23.31	704999.02	475081.20	32°18'17.856"N	103°48'13.014"W	0.08	
3300.00	0.570	141.400	3299.76	18.95	-12.24	-22.91	704999.42	475080.50	32°18'17.849"N	103°48'13.010"W	0.27	
3400.00	0.680	142.990	3399.76	18.08	-13.10	-22.24	705000.09	475079.64	32°18'17.840"N	103°48'13.002"W	0.11	
3500.00	0.550	282.340	3499.75	18.09	-13.48	-22.35	704999.98	475079.27	32°18'17.836"N	103°48'13.003"W	1.15	
3600.00	0.550	276.860	3599.75	19.05	-13.32	-23.30	704999.03	475079.43	32°18'17.838"N	103°48'13.014"W	0.05	
3700.00	0.450	238.760	3699.75	19.80	-13.46	-24.11	704998.22	475079.28	32°18'17.837"N	103°48'13.024"W	0.34	
3800.00	0.460	232.910	3799.74	20.31	-13.91	-24.77	704997.56	475078.83	32°18'17.832"N	103°48'13.031"W	0.05	
3900.00	0.430	223.100	3899.74	20.74	-14.42	-25.34	704996.99	475078.32	32°18'17.827"N	103°48'13.038"W	0.08	
4000.00	0.410	226.960	3999.74	21.10	-14.94	-25.86	704996.47	475077.80	32°18'17.822"N	103°48'13.044"W	0.03	
4100.00	0.380	241.810	4099.74	21.53	-15.34	-26.42	704995.92	475077.40	32°18'17.818"N	103°48'13.051"W	0.11	
4200.00	0.470	240.720	4199.73	22.07	-15.70	-27.07	704995.27	475077.04	32°18'17.815"N	103°48'13.058"W	0.09	
4300.00	0.700	258.250	4299.73	22.91	-16.03	-28.02	704994.31	475076.72	32°18'17.811"N	103°48'13.069"W	0.29	
4400.00	0.660	258.640	4399.72	23.97	-16.26	-29.18	704993.15	475076.48	32°18'17.809"N	103°48'13.083"W	0.04	



Actual Wellpath Report

No.121H AWP

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INTEQ

REFERENCE WELLPATH IDENTIFICATION

Operator	BOPCO, L.P.	Slot	No. 121H SHL
Area	Eddy County, NM	Well	No. 121H
Field	JRU Project	Wellbore	No.121H AWB
Facility	JRU No. 121H		

WELLPATH DATA (179 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	DLS [°/100ft]	Comments
4500.00	0.440	233.680	4499.72	24.72	-16.60	-30.06	704992.27	475076.14	32°18'17.806"N	103°48'13.093"W	0.32	
4600.00	0.420	219.060	4599.71	25.11	-17.12	-30.60	704991.73	475075.63	32°18'17.801"N	103°48'13.099"W	0.11	
4700.00	0.370	210.580	4699.71	25.35	-17.68	-30.99	704991.34	475075.06	32°18'17.795"N	103°48'13.104"W	0.08	
4800.00	0.420	214.790	4799.71	25.56	-18.26	-31.37	704990.97	475074.48	32°18'17.790"N	103°48'13.109"W	0.06	
4900.00	0.400	208.020	4899.71	25.76	-18.87	-31.74	704990.59	475073.87	32°18'17.783"N	103°48'13.113"W	0.05	
5000.00	0.240	206.120	4999.70	25.88	-19.36	-32.00	704990.34	475073.38	32°18'17.779"N	103°48'13.116"W	0.16	
5100.00	0.160	218.580	5099.70	25.98	-19.66	-32.18	704990.16	475073.08	32°18'17.776"N	103°48'13.118"W	0.09	
5200.00	0.200	254.430	5199.70	26.18	-19.82	-32.43	704989.90	475072.93	32°18'17.774"N	103°48'13.121"W	0.12	
5300.00	0.130	251.140	5299.70	26.43	-19.90	-32.71	704989.63	475072.84	32°18'17.773"N	103°48'13.124"W	0.07	
5400.00	0.160	291.160	5399.70	26.66	-19.89	-32.94	704989.39	475072.86	32°18'17.773"N	103°48'13.127"W	0.10	
5500.00	0.210	2.990	5499.70	26.84	-19.65	-33.06	704989.27	475073.09	32°18'17.776"N	103°48'13.128"W	0.22	
5600.00	0.140	311.050	5599.70	26.99	-19.39	-33.15	704989.19	475073.35	32°18'17.778"N	103°48'13.129"W	0.17	
5700.00	0.140	311.450	5699.70	27.21	-19.23	-33.33	704989.00	475073.51	32°18'17.780"N	103°48'13.131"W	0.00	
5800.00	0.150	86.520	5799.70	27.19	-19.14	-33.29	704989.04	475073.60	32°18'17.781"N	103°48'13.131"W	0.27	
5900.00	0.260	42.160	5899.70	26.96	-18.96	-33.01	704989.32	475073.78	32°18'17.783"N	103°48'13.128"W	0.19	
6000.00	0.300	33.540	5999.70	26.78	-18.58	-32.71	704989.62	475074.16	32°18'17.786"N	103°48'13.124"W	0.06	
6100.00	0.280	51.870	6099.70	26.55	-18.21	-32.37	704989.96	475074.53	32°18'17.790"N	103°48'13.120"W	0.09	
6200.00	0.270	92.110	6199.70	26.17	-18.07	-31.95	704990.39	475074.68	32°18'17.791"N	103°48'13.115"W	0.19	
6300.00	0.170	94.930	6299.70	25.79	-18.09	-31.56	704990.77	475074.65	32°18'17.791"N	103°48'13.111"W	0.10	
6400.00	0.360	182.240	6399.70	25.58	-18.41	-31.43	704990.90	475074.33	32°18'17.788"N	103°48'13.109"W	0.39	
6500.00	0.790	164.760	6499.69	25.16	-19.39	-31.26	704991.07	475073.35	32°18'17.778"N	103°48'13.107"W	0.46	
6600.00	1.230	181.480	6599.67	24.56	-21.13	-31.11	704991.23	475071.61	32°18'17.761"N	103°48'13.106"W	0.53	
6700.00	1.470	191.520	6699.65	24.23	-23.46	-31.39	704990.94	475069.28	32°18'17.738"N	103°48'13.109"W	0.34	
6800.00	1.430	191.100	6799.61	24.07	-25.94	-31.89	704990.45	475066.80	32°18'17.713"N	103°48'13.115"W	0.04	
6900.00	1.300	193.270	6899.59	23.95	-28.27	-32.39	704989.95	475064.47	32°18'17.690"N	103°48'13.121"W	0.14	
6974.00	1.400	198.870	6973.57	23.98	-29.94	-32.87	704989.46	475062.80	32°18'17.674"N	103°48'13.127"W	0.22	
7059.00	1.000	272.500	7058.55	24.78	-30.89	-33.95	704988.38	475061.85	32°18'17.665"N	103°48'13.139"W	1.73	
7091.00	3.200	322.600	7090.53	25.76	-30.17	-34.77	704987.56	475062.57	32°18'17.672"N	103°48'13.149"W	8.35	
7122.00	6.400	331.800	7121.42	27.63	-27.96	-36.11	704986.22	475064.78	32°18'17.694"N	103°48'13.164"W	10.58	
7154.00	10.200	336.300	7153.08	30.62	-23.79	-38.09	704984.24	475068.95	32°18'17.735"N	103°48'13.187"W	12.04	
7186.00	13.800	337.300	7184.37	34.73	-17.68	-40.71	704981.63	475075.07	32°18'17.796"N	103°48'13.217"W	11.27	
7218.00	16.500	338.800	7215.26	39.75	-9.92	-43.82	704978.51	475082.82	32°18'17.873"N	103°48'13.253"W	8.53	
7249.00	18.900	341.000	7244.79	45.17	-1.06	-47.05	704975.28	475091.68	32°18'17.960"N	103°48'13.290"W	8.04	
7281.00	20.500	342.700	7274.91	51.06	9.19	-50.41	704971.93	475101.93	32°18'18.062"N	103°48'13.329"W	5.31	
7312.00	22.200	344.300	7303.79	56.96	20.01	-53.60	704968.73	475112.75	32°18'18.169"N	103°48'13.365"W	5.80	
7342.00	23.300	344.000	7331.45	62.91	31.17	-56.77	704965.56	475123.91	32°18'18.280"N	103°48'13.402"W	3.69	
7374.00	25.100	344.200	7360.64	69.65	43.78	-60.37	704961.97	475136.52	32°18'18.405"N	103°48'13.443"W	5.63	
7405.00	27.500	343.100	7388.43	76.81	56.96	-64.24	704958.10	475149.70	32°18'18.535"N	103°48'13.487"W	7.90	
7437.00	30.300	342.300	7416.44	85.08	71.72	-68.84	704953.49	475164.46	32°18'18.682"N	103°48'13.540"W	8.83	
7468.00	33.100	341.400	7442.81	94.00	87.20	-73.92	704948.42	475179.93	32°18'18.835"N	103°48'13.598"W	9.16	
7499.00	35.800	339.600	7468.37	103.95	103.72	-79.78	704942.55	475196.46	32°18'18.999"N	103°48'13.666"W	9.31	
7530.00	39.600	339.000	7492.90	115.02	121.45	-86.48	704935.85	475214.18	32°18'19.175"N	103°48'13.743"W	12.31	
7562.00	42.100	337.100	7517.10	127.61	140.86	-94.31	704928.02	475233.59	32°18'19.367"N	103°48'13.833"W	8.72	
7594.00	46.100	336.100	7540.08	141.46	161.29	-103.16	704919.17	475254.02	32°18'19.570"N	103°48'13.935"W	12.69	
7626.00	48.100	335.300	7561.86	156.31	182.65	-112.81	704909.53	475275.38	32°18'19.781"N	103°48'14.046"W	6.51	



Actual Wellpath Report

No.121H AWP

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INTEQ

REFERENCE WELLPATH IDENTIFICATION

Operator	BOPCO, L.P.	Slot	No. 121H SHL
Area	Eddy County, NM	Well	No. 121H
Field	JRU Project	Wellbore	No.121H AWB
Facility	JRU No. 121H		

WELLPATH DATA (179 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	DLS [°/100ft]	Comments
7658.00	50.100	334.000	7582.81	171.98	204.51	-123.17	704899.17	475297.23	32°18'19.998"N	103°48'14.165"W	6.96	
7689.00	52.900	331.500	7602.11	188.31	226.06	-134.28	704888.05	475318.79	32°18'20.212"N	103°48'14.294"W	11.02	
7720.00	55.300	328.700	7620.29	206.04	247.82	-146.81	704875.53	475340.55	32°18'20.428"N	103°48'14.438"W	10.65	
7751.00	56.000	326.800	7637.78	224.85	269.47	-160.47	704861.87	475362.19	32°18'20.643"N	103°48'14.596"W	5.54	
7783.00	57.400	324.300	7655.35	245.18	291.51	-175.60	704846.74	475384.24	32°18'20.862"N	103°48'14.771"W	7.86	
7813.00	59.200	321.800	7671.12	265.28	311.91	-190.94	704831.40	475404.63	32°18'21.064"N	103°48'14.949"W	9.29	
7845.00	60.800	318.900	7687.12	287.89	333.24	-208.63	704813.72	475425.96	32°18'21.276"N	103°48'15.154"W	9.31	
7877.00	62.000	317.100	7702.44	311.46	354.11	-227.43	704794.92	475446.83	32°18'21.484"N	103°48'15.371"W	6.20	
7908.00	62.500	316.600	7716.87	334.77	374.13	-246.19	704776.16	475466.84	32°18'21.683"N	103°48'15.589"W	2.15	
7939.00	64.600	316.700	7730.68	358.41	394.31	-265.24	704757.11	475487.02	32°18'21.883"N	103°48'15.810"W	6.78	
7970.00	67.200	316.700	7743.34	382.49	414.90	-284.65	704737.70	475507.62	32°18'22.088"N	103°48'16.035"W	8.39	
8001.00	70.500	317.100	7754.52	407.04	436.01	-304.40	704717.95	475528.72	32°18'22.298"N	103°48'16.263"W	10.71	
8033.00	72.900	316.800	7764.57	432.82	458.21	-325.14	704697.22	475550.92	32°18'22.518"N	103°48'16.504"W	7.55	
8064.00	75.100	317.300	7773.11	458.09	480.02	-345.44	704676.91	475572.73	32°18'22.735"N	103°48'16.739"W	7.26	
8096.00	77.600	317.900	7780.66	484.29	502.98	-366.40	704655.95	475595.69	32°18'22.963"N	103°48'16.982"W	8.02	
8128.00	80.300	319.600	7786.79	510.41	526.59	-387.11	704635.25	475619.30	32°18'23.198"N	103°48'17.222"W	9.92	
8160.00	81.900	319.300	7791.74	536.48	550.61	-407.66	704614.70	475643.32	32°18'23.437"N	103°48'17.460"W	5.09	
8191.00	84.000	319.600	7795.55	561.86	573.99	-427.66	704594.70	475666.69	32°18'23.669"N	103°48'17.692"W	6.84	
8222.00	87.400	320.100	7797.87	587.23	597.61	-447.59	704574.77	475690.32	32°18'23.904"N	103°48'17.922"W	11.09	
8253.00	87.800	320.300	7799.17	612.55	621.41	-467.41	704554.95	475714.11	32°18'24.140"N	103°48'18.152"W	1.44	
8285.00	87.900	320.100	7800.37	638.69	645.98	-487.88	704534.48	475738.68	32°18'24.384"N	103°48'18.389"W	0.70	
8291.00	88.000	319.500	7800.59	643.62	650.56	-491.75	704530.61	475743.26	32°18'24.430"N	103°48'18.434"W	10.13	
8342.00	89.900	320.900	7801.52	685.29	689.73	-524.39	704497.97	475782.43	32°18'24.819"N	103°48'18.812"W	4.63	
8434.00	89.700	320.300	7801.84	760.12	760.82	-582.79	704439.58	475853.51	32°18'25.525"N	103°48'19.488"W	0.69	
8528.00	89.800	320.400	7802.25	836.82	833.20	-642.77	704379.60	475925.88	32°18'26.244"N	103°48'20.183"W	0.15	
8623.00	89.800	320.300	7802.58	914.33	906.34	-703.38	704318.99	475999.03	32°18'26.971"N	103°48'20.885"W	0.11	
8717.00	89.800	320.400	7802.91	991.03	978.72	-763.37	704259.01	476071.40	32°18'27.690"N	103°48'21.580"W	0.11	
8811.00	89.800	320.100	7803.24	1067.82	1050.99	-823.47	704198.91	476143.66	32°18'28.408"N	103°48'22.276"W	0.32	
8905.00	89.900	315.000	7803.49	1147.05	1120.32	-886.90	704135.49	476212.99	32°18'29.097"N	103°48'23.011"W	5.43	
8998.00	89.700	306.000	7803.81	1230.92	1180.66	-957.54	704064.85	476273.33	32°18'29.698"N	103°48'23.831"W	9.68	
9091.00	89.800	297.400	7804.22	1319.93	1229.48	-1036.59	703985.80	476322.15	32°18'30.185"N	103°48'24.749"W	9.25	
9186.00	89.900	288.600	7804.47	1413.92	1266.57	-1123.95	703898.45	476359.23	32°18'30.556"N	103°48'25.765"W	9.26	
9279.00	89.800	283.600	7804.71	1506.87	1292.35	-1213.28	703809.13	476385.01	32°18'30.815"N	103°48'26.804"W	5.38	
9372.00	90.400	281.000	7804.55	1599.76	1312.16	-1304.13	703718.28	476404.82	32°18'31.016"N	103°48'27.861"W	2.87	
9467.00	90.300	278.900	7803.97	1694.38	1328.57	-1397.70	703624.72	476421.23	32°18'31.183"N	103°48'28.951"W	2.21	
9560.00	90.400	281.200	7803.40	1787.02	1344.80	-1489.26	703533.16	476437.46	32°18'31.348"N	103°48'30.016"W	2.48	
9655.00	90.300	280.500	7802.82	1881.76	1362.68	-1582.56	703439.87	476455.34	32°18'31.529"N	103°48'31.103"W	0.74	
9747.00	89.800	283.000	7802.74	1973.61	1381.42	-1672.63	703349.81	476474.07	32°18'31.719"N	103°48'32.151"W	2.77	
9841.00	89.800	282.100	7803.07	2067.52	1401.84	-1764.38	703258.06	476494.49	32°18'31.926"N	103°48'33.219"W	0.96	
9897.00	89.800	281.900	7803.26	2123.44	1413.48	-1819.16	703203.29	476506.14	32°18'32.043"N	103°48'33.856"W	0.36	
9975.00	90.600	285.900	7802.99	2201.41	1432.22	-1894.85	703127.59	476524.87	32°18'32.232"N	103°48'34.737"W	5.23	
10039.00	90.300	288.800	7802.49	2265.34	1451.30	-1955.93	703066.52	476543.95	32°18'32.424"N	103°48'35.448"W	4.56	
10134.00	90.600	283.600	7801.74	2360.29	1477.79	-2047.13	702975.33	476570.44	32°18'32.691"N	103°48'36.509"W	5.48	
10229.00	90.700	276.900	7800.66	2454.90	1494.69	-2140.55	702881.91	476587.33	32°18'32.862"N	103°48'37.596"W	7.05	
10324.00	90.700	267.900	7799.50	2547.50	1498.66	-2235.36	702787.10	476591.31	32°18'32.906"N	103°48'38.701"W	9.47	



Actual Wellpath Report

No.121H AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	BOPCO, L.P.	Slot	No. 121H SHL
Area	Eddy County, NM	Well	No. 121H
Field	JRU Project	Wellbore	No.121H AWB
Facility	JRU No. 121H		

WELLPATH DATA (179 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	DLS [°/100ft]	Comments
10419.00	90.700	272.400	7798.34	2639.28	1498.91	-2330.33	702692.14	476591.56	32°18'32.913"N	103°48'39.807"W	4.74	
10515.00	91.600	272.900	7796.41	2733.03	1503.35	-2426.21	702596.27	476595.99	32°18'32.962"N	103°48'40.924"W	1.07	
10610.00	91.800	267.500	7793.59	2824.79	1503.68	-2521.13	702501.36	476596.33	32°18'32.970"N	103°48'42.030"W	5.69	
10707.00	91.700	267.300	7790.63	2917.20	1499.28	-2617.99	702404.51	476591.93	32°18'32.931"N	103°48'43.159"W	0.23	
10803.00	91.600	267.800	7787.87	3008.73	1495.18	-2713.86	702308.64	476587.83	32°18'32.895"N	103°48'44.276"W	0.53	
10898.00	91.700	267.200	7785.13	3099.28	1491.04	-2808.73	702213.78	476583.68	32°18'32.858"N	103°48'45.382"W	0.64	
10993.00	91.300	269.100	7782.64	3190.15	1487.97	-2903.64	702118.87	476580.62	32°18'32.833"N	103°48'46.488"W	2.04	
11088.00	91.600	279.400	7780.23	3283.32	1495.00	-2998.22	702024.29	476587.65	32°18'32.907"N	103°48'47.589"W	10.84	
11185.00	91.700	283.400	7777.44	3380.06	1514.16	-3093.25	701929.27	476606.81	32°18'33.101"N	103°48'48.696"W	4.12	
11281.00	91.700	277.900	7774.59	3475.70	1531.89	-3187.52	701835.01	476624.53	32°18'33.281"N	103°48'49.793"W	5.73	
11378.00	91.100	277.200	7772.22	3571.85	1544.63	-3283.65	701738.89	476637.27	32°18'33.412"N	103°48'50.912"W	0.95	
11474.00	91.200	277.100	7770.29	3666.92	1556.57	-3378.88	701643.66	476649.22	32°18'33.534"N	103°48'52.021"W	0.15	
11569.00	91.200	280.000	7768.30	3761.29	1570.69	-3472.80	701549.75	476663.34	32°18'33.679"N	103°48'53.115"W	3.05	
11666.00	91.100	269.000	7766.35	3856.49	1578.29	-3569.33	701453.22	476670.93	32°18'33.758"N	103°48'54.239"W	11.34	
11762.00	91.100	272.600	7764.50	3949.51	1579.63	-3665.29	701357.27	476672.27	32°18'33.776"N	103°48'55.357"W	3.75	
11856.00	91.000	274.500	7762.78	4041.61	1585.45	-3759.09	701263.48	476678.09	32°18'33.838"N	103°48'56.449"W	2.02	
11951.00	91.100	272.500	7761.04	4134.68	1591.25	-3853.89	701168.68	476683.89	32°18'33.900"N	103°48'57.554"W	2.11	
12047.00	91.100	281.100	7759.19	4229.58	1602.60	-3949.11	701073.47	476695.24	32°18'34.017"N	103°48'58.663"W	8.96	
12144.00	91.100	278.400	7757.33	4326.14	1619.02	-4044.68	700977.90	476711.66	32°18'34.184"N	103°48'59.775"W	2.78	
12240.00	91.100	275.300	7755.49	4421.14	1630.47	-4139.96	700882.62	476723.11	32°18'34.302"N	103°49'00.885"W	3.23	
12336.00	91.000	273.200	7753.73	4515.42	1637.58	-4235.68	700786.92	476730.22	32°18'34.377"N	103°49'02.000"W	2.19	
12433.00	90.700	275.500	7752.29	4610.73	1644.94	-4332.38	700690.22	476737.58	32°18'34.454"N	103°49'03.126"W	2.39	
12527.00	91.000	276.000	7750.90	4703.49	1654.36	-4425.90	700596.71	476746.99	32°18'34.552"N	103°49'04.215"W	0.62	
12622.00	90.500	277.500	7749.65	4797.49	1665.52	-4520.23	700502.38	476758.16	32°18'34.667"N	103°49'05.313"W	1.66	
12719.00	90.300	272.600	7748.97	4892.99	1674.06	-4616.82	700405.80	476766.69	32°18'34.756"N	103°49'06.438"W	5.06	
12814.00	90.500	269.700	7748.31	4985.20	1675.96	-4711.79	700310.84	476768.60	32°18'34.779"N	103°49'07.545"W	3.06	
12959.00	90.700	264.900	7746.79	5123.27	1669.14	-4856.58	700166.06	476761.77	32°18'34.719"N	103°49'09.232"W	3.31	
13054.00	90.700	269.600	7745.63	5213.70	1664.58	-4951.43	700071.20	476757.22	32°18'34.678"N	103°49'10.338"W	4.95	
13149.00	90.600	269.100	7744.55	5305.16	1663.50	-5046.42	699976.22	476756.14	32°18'34.672"N	103°49'11.444"W	0.54	
13245.00	90.700	271.200	7743.46	5397.93	1663.75	-5142.41	699880.24	476756.39	32°18'34.679"N	103°49'12.563"W	2.19	
13341.00	90.200	269.500	7742.71	5490.79	1664.34	-5238.40	699784.26	476756.98	32°18'34.689"N	103°49'13.681"W	1.85	
13437.00	90.300	273.000	7742.29	5584.01	1666.43	-5334.36	699688.30	476759.07	32°18'34.714"N	103°49'14.799"W	3.65	
13532.00	90.200	272.600	7741.88	5676.86	1671.07	-5429.25	699593.42	476763.71	32°18'34.765"N	103°49'15.905"W	0.43	
13627.00	90.100	275.200	7741.63	5770.06	1677.53	-5524.02	699498.65	476770.17	32°18'34.833"N	103°49'17.008"W	2.74	
13722.00	90.100	275.900	7741.46	5863.76	1686.72	-5618.57	699404.11	476779.36	32°18'34.929"N	103°49'18.110"W	0.74	
13818.00	90.100	273.900	7741.29	5958.26	1694.92	-5714.22	699308.47	476787.56	32°18'35.014"N	103°49'19.224"W	2.08	
13913.00	90.500	277.300	7740.80	6051.97	1704.19	-5808.75	699213.94	476796.83	32°18'35.110"N	103°49'20.324"W	3.60	
14007.00	90.500	285.700	7739.97	6145.70	1722.91	-5900.77	699121.92	476815.55	32°18'35.300"N	103°49'21.396"W	8.94	
14103.00	90.100	281.500	7739.47	6241.65	1745.48	-5994.06	699028.64	476838.11	32°18'35.528"N	103°49'22.481"W	4.39	
14199.00	90.100	276.200	7739.30	6337.05	1760.25	-6088.88	698933.82	476852.88	32°18'35.678"N	103°49'23.585"W	5.52	
14295.00	90.700	272.700	7738.63	6431.41	1767.69	-6184.58	698838.14	476860.32	32°18'35.757"N	103°49'24.700"W	3.70	
14392.00	90.600	272.100	7737.53	6526.05	1771.76	-6281.49	698741.24	476864.39	32°18'35.801"N	103°49'25.829"W	0.63	
14489.00	90.700	267.900	7736.43	6619.71	1771.76	-6378.46	698644.27	476864.39	32°18'35.806"N	103°49'26.959"W	4.33	
14562.00	90.700	267.900	7735.54	6689.47	1769.08	-6451.40	698571.33	476861.71	32°18'35.783"N	103°49'27.809"W	0.00	Proj to Bit

TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	Shape
JR No.55		-2.00	470.00	480.00	705502.30	475562.71	32°18'22.596"N	103°48'07.122"W	circle
150		7734.00	1665.26	-1688.74	703333.70	476757.90	32°18'34.528"N	103°48'32.322"W	point
No. 121H PBHL		7734.00	1746.72	-6506.28	698516.45	476839.35	32°18'35.564"N	103°49'28.449"W	point
No.121H TGT2		7759.00	1615.64	-4010.02	701012.56	476708.28	32°18'34.149"N	103°48'59.372"W	point
No.121H TGT1		7804.00	1499.67	-1813.20	703209.24	476592.32	32°18'32.896"N	103°48'33.782"W	point

WELLPATH COMPOSITION					Ref Wellbore: No.121H AWB		Ref Wellpath: No.121H AWP	
Start MD [ft]	End MD [ft]	Positional Uncertainty Model			Log Name/Comment		Wellbore	
0.00	6974.00	Generic gyro - northseeking (Standard)			Gyro		No.121H AWB	
6974.00	14562.00	NaviTrak (Standard)			MWD2		No.121H AWB	