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INTEQ

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NMOCD ARTESIA

INTEQ

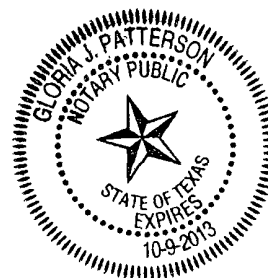
2105 MARKET STREET
MIDLAND, TX 79703
24 HR (432) 694-9517

STATE OF NEW MEXICO

COUNTY OF Eddy County, NM

I, Beau Jones, Operations Coordinator certify that I am employed by INTEQ; did conduct or supervise on the day(s) of Dec 9, 2009 through Dec 28, 2009 the taking of MWD surveys from a depth of 6,724 to a depth of 14,087 that the data is true, correct, complete and within the limitations of the tool as set forth by Baker Hughes INTEQ; that I am authorized and qualified to make this report; that this survey was conducted at the request of BOPCO, L.P. for the James Ranch Unit No. 108H well, in Eddy County, New Mexico and that I have reviewed this report and find that it conforms to the principles and procedures as set forth by INTEQ.

A handwritten signature in cursive script, appearing to read "Beau Jones", written over a horizontal line.



mw

BJH



BOPCO, L.P.

Location Eddy County, NM
Field (JRU) Quahada Ridge, SE (Delaware)
Facility James Ranch Unit No. 108H

Slot No 108H SHL
Well No 108H
Wellbore No 108H PWB



Plot reference wellpath as Plan 24 vs Actual <FINAL>

True vertical depths are referenced to Rig on No. 108H SHL (RT)

Measured depths are referenced to Rig on No. 108H SHL (RT)

Rig on No. 108H SHL (RT) to Mean Sea Level 3308 feet

Mean Sea Level to Mud level (Facility James Ranch Unit No. 108H) 3289 feet

Coordinates are in feet referenced to Facility Center

Grid System NAD83 / TM New Mexico State Planes, Eastern Zone (3001) US feet

North Reference Grid north

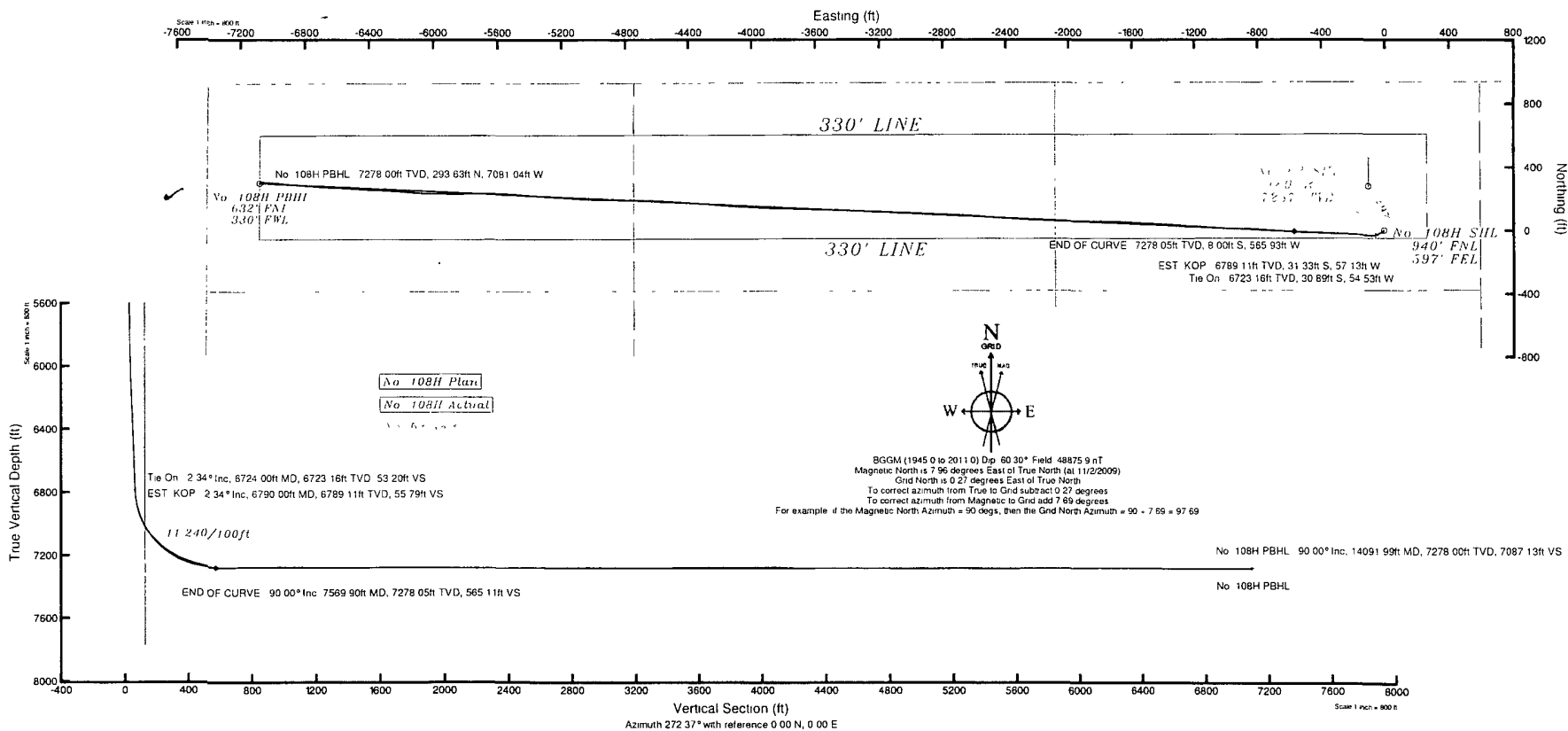
Scale True distance

Depths are in feet

Created by Victor Hernandez on 12/10/2009

Well Profile Data

Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
Tie On	6724.00	2.340	248.850	6723.16	-30.89	-54.53	1.29	53.20
EST KOP	6790.00	2.340	272.000	6789.11	-31.33	-57.13	1.42	55.79
END OF CURVE	7569.90	90.000	272.651	7278.05	-8.00	-565.93	11.24	565.11
No 108H PBHL	14091.99	90.000	272.651	7278.00	293.63	-7081.04	0.00	7087.13





Actual Wellpath Report

No. 108H AWP

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INTEQ

REFERENCE WELLPATH IDENTIFICATION

Operator	BOPCO, L.P.	Slot	No. 108H SHL
Area	Eddy County, NM	Well	No. 108H
Field	(JRU) Quahada Ridge, SE (Delaware)	Wellbore	No. 108H AWB
Facility	James Ranch Unit No. 108H		

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	Victor Hernandez
Scale	0.999936	Report Generated	12/30/2009 at 10:45:39 AM
Convergence at slot	0.27° East	Database/Source file	WA_Midland/No. 108H_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	694868.40	487321.00	32°20'19.455"N	103°50'10.391"W
Facility Reference Pt			694868.40	487321.00	32°20'19.455"N	103°50'10.391"W
Field Reference Pt			696627.35	492798.47	32°21'13.576"N	103°49'49.589"W

WELLPATH DATUM

Calculation method	Minimum curvature	Rig on No. 108H SHL (RT) to Facility Vertical Datum	19.00ft
Horizontal Reference Pt	Facility Center	Rig on No. 108H SHL (RT) to Mean Sea Level	3308.00ft
Vertical Reference Pt	Rig on No. 108H SHL (RT)	Facility Vertical Datum to Mud Line (Facility)	0.00ft
MD Reference Pt	Rig on No. 108H SHL (RT)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	272.37°



Actual Wellpath Report

No. 108H AWP

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INTEQ

REFERENCE WELLPATH IDENTIFICATION

Operator	BOPCO, L.P.	Slot	No. 108H SHL
Area	Eddy County, NM	Well	No. 108H
Field	(JRU) Quahada Ridge, SE (Delaware)	Wellbore	No. 108H AWB
Facility	James Ranch Unit No. 108H		

WELLPATH DATA (166 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	DLS [°/100ft]
0.00	0.000	290.770	0.00	0.00	0.00	0.00	694868.40	487321.00	0.00
100.00	0.160	290.770	100.00	0.13	0.05	-0.13	694868.27	487321.05	0.16
200.00	0.200	261.940	200.00	0.44	0.07	-0.43	694867.97	487321.07	0.10
300.00	0.090	247.180	300.00	0.68	0.02	-0.68	694867.72	487321.02	0.12
400.00	0.150	305.120	400.00	0.86	0.06	-0.86	694867.54	487321.06	0.13
500.00	0.190	263.340	500.00	1.13	0.12	-1.13	694867.27	487321.12	0.13
600.00	0.110	342.580	600.00	1.33	0.19	-1.32	694867.08	487321.19	0.20
700.00	0.150	283.790	700.00	1.49	0.32	-1.48	694866.92	487321.32	0.13
800.00	0.100	331.790	800.00	1.66	0.42	-1.65	694866.75	487321.42	0.11
900.00	0.100	316.100	900.00	1.77	0.56	-1.75	694866.65	487321.56	0.03
1000.00	0.100	47.350	1000.00	1.77	0.69	-1.75	694866.65	487321.69	0.14
1100.00	0.050	246.850	1100.00	1.75	0.73	-1.72	694866.68	487321.73	0.15
1200.00	0.070	164.650	1200.00	1.77	0.65	-1.75	694866.65	487321.65	0.08
1300.00	0.020	130.920	1300.00	1.74	0.58	-1.72	694866.68	487321.58	0.05
1400.00	0.110	152.840	1400.00	1.68	0.48	-1.66	694866.74	487321.48	0.09
1500.00	0.080	258.620	1500.00	1.70	0.39	-1.68	694866.72	487321.39	0.15
1600.00	0.110	210.480	1600.00	1.81	0.29	-1.80	694866.60	487321.29	0.08
1700.00	0.120	138.870	1700.00	1.78	0.13	-1.78	694866.62	487321.13	0.13
1800.00	0.060	186.590	1800.00	1.72	0.00	-1.72	694866.68	487321.00	0.09
1900.00	0.160	207.920	1900.00	1.78	0.18	-1.79	694866.61	487320.82	0.11
2000.00	0.160	178.110	2000.00	1.83	-0.44	-1.85	694866.55	487320.56	0.08
2100.00	0.100	245.930	2100.00	1.90	-0.62	-1.93	694866.47	487320.38	0.15
2200.00	0.140	213.060	2200.00	2.04	-0.76	-2.07	694866.33	487320.24	0.08
2300.00	0.170	220.380	2300.00	2.19	-0.97	-2.23	694866.17	487320.03	0.04
2400.00	0.230	229.310	2399.99	2.43	-1.21	-2.43	694865.92	487319.79	0.07
2500.00	0.390	235.030	2499.99	2.85	-1.54	-2.91	694865.49	487319.46	0.16
2600.00	0.600	207.670	2599.99	3.34	-2.20	-3.44	694864.96	487318.80	0.31
2700.00	0.740	215.540	2699.98	3.92	-3.19	-4.05	694864.35	487317.81	0.17
2800.00	1.070	201.510	2799.97	4.58	-4.58	-4.77	694863.63	487316.42	0.40
2900.00	1.260	202.120	2899.95	5.26	-6.47	-5.53	694862.87	487314.53	0.19



Actual Wellpath Report

No. 108H AWP

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INTEQ

REFERENCE WELLPATH IDENTIFICATION

Operator	BOPCO, L.P.	Slot	No. 108H SHL
Area	Eddy County, NM	Well	No. 108H
Field	(JRU) Quahada Ridge, SE (Delaware)	Wellbore	No. 108H AWB
Facility	James Ranch Unit No. 108H		

WELLPATH DATA (166 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	DLS [°/100ft]
3000.00	0.350	205.170	2999.94	5.75	-7.76	-6.07	694862.33	487313.24	0.91
3100.00	0.680	30.970	3099.94	5.58	-7.53	-5.90	694862.50	487313.47	1.03
3200.00	0.420	58.830	3199.93	4.99	-6.83	-5.28	694863.12	487314.17	0.37
3300.00	0.300	133.410	3299.93	4.49	-6.82	-4.77	694863.63	487314.18	0.45
3400.00	0.480	170.610	3399.93	4.20	-7.42	-4.52	694863.88	487313.58	0.30
3500.00	0.670	188.330	3499.92	4.18	-8.41	-4.53	694863.87	487312.59	0.26
3600.00	0.740	183.210	3599.92	4.25	-9.63	-4.65	694863.75	487311.37	0.09
3700.00	0.380	210.690	3699.91	4.42	-10.56	-4.86	694863.54	487310.44	0.44
3800.00	0.530	210.220	3799.91	4.79	-11.25	-5.26	694863.14	487309.75	0.15
3900.00	0.560	210.840	3899.90	5.24	-12.07	-5.74	694862.66	487308.93	0.03
4000.00	0.500	212.820	3999.90	5.69	-12.85	-6.23	694862.17	487308.15	0.06
4100.00	0.530	211.320	4099.90	6.14	-13.61	-6.71	694861.69	487307.39	0.03
4200.00	0.400	230.710	4199.89	6.62	-14.23	-7.22	694861.18	487306.77	0.20
4300.00	0.340	245.460	4299.89	7.15	-14.57	-7.76	694860.64	487306.43	0.11
4400.00	0.420	247.730	4399.89	7.75	-14.84	-8.37	694860.03	487306.16	0.08
4500.00	0.450	235.500	4499.88	8.39	-15.20	-9.03	694859.37	487305.80	0.10
4600.00	0.440	261.160	4599.88	9.08	-15.48	-9.73	694858.67	487305.52	0.20
4700.00	0.550	252.810	4699.88	9.91	-15.68	-10.57	694857.83	487305.32	0.13
4800.00	1.050	301.870	4799.87	11.16	-15.34	-11.81	694856.59	487305.66	0.81
4900.00	0.920	266.340	4899.86	12.76	-14.91	-13.39	694855.01	487306.09	0.61
5000.00	0.740	263.370	4999.84	14.19	-15.03	-14.83	694853.57	487305.97	0.19
5100.00	0.750	273.440	5099.84	15.49	-15.07	-16.12	694852.28	487305.93	0.13
5200.00	0.790	271.660	5199.83	16.83	-15.01	-17.47	694850.93	487305.99	0.05
5300.00	0.760	269.930	5299.82	18.18	-14.99	-18.82	694849.58	487306.01	0.04
5400.00	0.640	273.660	5399.81	19.40	-14.95	-20.04	694848.36	487306.05	0.13
5500.00	0.660	273.340	5499.80	20.54	-14.88	-21.17	694847.23	487306.12	0.02
5600.00	0.830	259.380	5599.80	21.82	-14.98	-22.46	694845.94	487306.02	0.25
5700.00	0.710	247.820	5699.79	23.09	-15.35	-23.74	694844.66	487305.65	0.20
5800.00	0.990	237.660	5799.78	24.36	-16.05	-25.05	694843.35	487304.95	0.32
5900.00	1.450	234.710	5899.75	26.07	-17.24	-26.81	694841.59	487303.76	0.46



Actual Wellpath Report

No. 108H AWP

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INTEQ

REFERENCE WELLPATH IDENTIFICATION

Operator	BOPCO, L.P.	Slot	No. 108H SHL
Area	Eddy County, NM	Well	No. 108H
Field	(JRU) Quahada Ridge, SE (Delaware)	Wellbore	No. 108H AWP
Facility	James Ranch Unit No. 108H		

WELLPATH DATA (166 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	DLS [°/100ft]
6000.00	1.700	239.300	5999.72	28.32	-18.73	-29.12	694839.28	487302.27	0.28
6100.00	2.310	244.480	6099.65	31.34	-20.35	-32.21	694836.19	487300.65	0.64
6200.00	2.520	246.970	6199.56	35.11	-22.08	-36.05	694832.35	487298.92	0.23
6300.00	2.500	243.120	6299.47	39.00	-23.93	-40.02	694828.38	487297.07	0.17
6400.00	2.100	241.080	6399.39	42.47	-25.80	-43.57	694824.83	487295.20	0.41
6500.00	2.200	245.020	6499.32	45.74	-27.50	-46.92	694821.49	487293.50	0.18
6600.00	2.140	244.770	6599.25	49.10	-29.10	-50.34	694818.06	487291.90	0.06
6700.00	2.030	248.280	6699.18	52.37	-30.56	-53.68	694814.72	487290.45	0.17
6724.00	2.340	248.850	6723.16	53.20	-30.89	-54.53	694813.87	487290.11	1.29
6774.00	2.300	246.300	6773.12	55.04	-31.66	-56.40	694812.00	487289.24	0.22
6805.00	4.200	251.000	6804.07	56.66	-32.28	-58.04	694810.36	487288.72	6.18
6837.00	7.200	255.200	6835.91	59.67	-33.17	-61.09	694807.31	487287.83	9.46
6869.00	10.500	261.800	6867.52	64.45	-34.10	-65.92	694802.49	487286.90	10.77
6900.00	13.900	267.700	6897.82	70.94	-34.66	-72.44	694795.97	487286.35	11.67
6932.00	17.500	270.400	6928.62	79.58	-34.78	-81.09	694787.31	487286.23	11.48
6963.00	21.400	274.400	6957.85	89.90	-34.31	-91.40	694777.01	487286.69	13.29
6994.00	25.800	276.600	6986.25	102.28	-33.10	-103.74	694764.66	487287.90	14.47
7026.00	30.500	278.000	7014.46	117.32	-31.17	-118.71	694749.70	487289.83	14.83
7056.00	34.400	277.600	7039.77	133.34	-28.99	-134.66	694733.75	487292.01	13.02
7087.00	38.500	275.100	7064.70	151.71	-26.97	-152.96	694715.46	487294.03	14.06
7119.00	42.600	274.900	7089.01	172.48	-25.16	-173.68	694694.74	487295.84	12.82
7150.00	45.300	273.500	7111.33	193.98	-23.59	-195.13	694673.28	487297.41	9.26
7180.00	49.200	273.600	7131.69	216.01	-22.23	-217.11	694651.30	487298.78	13.00
7211.00	52.800	273.500	7151.19	240.09	-20.73	-241.15	694627.26	487300.27	11.62
7242.00	56.600	272.700	7169.10	265.38	-19.37	-266.41	694602.00	487301.63	12.44
7272.00	60.000	271.700	7184.86	290.90	-18.40	-291.91	694576.51	487302.61	11.68
7304.00	61.900	271.500	7200.40	318.87	-17.61	-319.88	694548.54	487303.39	5.96
7336.00	65.100	271.300	7214.68	347.50	-16.92	-348.50	694519.92	487304.09	10.02
7367.00	68.300	273.500	7226.94	375.97	-15.72	-376.94	694491.48	487305.28	12.21
7399.00	70.500	273.700	7238.20	405.91	-13.84	-406.84	694461.59	487307.16	6.90



Actual Wellpath Report

No. 108H AWP

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INTEQ

REFERENCE WELLPATH IDENTIFICATION			
Operator	BOPCO, L.P.	Slot	No. 108H SHL
Area	Eddy County, NM	Well	No. 108H
Field	(JRU) Quahada Ridge, SE (Delaware)	Wellbore	No. 108H AWB
Facility	James Ranch Unit No. 108H		

WELLPATH DATA (166 stations)									
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	DLS [°/100ft]
7430.00	72.000	269.100	7248.17	435.25	-13.12	-436.17	694432.26	487307.88	14.86
7463.00	74.400	271.700	7257.71	466.82	-12.90	-467.76	694400.67	487308.10	10.48
7494.00	77.400	271.900	7265.26	496.88	-11.95	-497.80	694370.63	487309.05	9.70
7525.00	80.300	272.400	7271.25	527.29	-10.81	-528.19	694340.24	487310.19	9.49
7555.00	83.900	272.700	7275.37	557.00	-9.49	-557.88	694310.56	487311.51	12.04
7587.00	88.000	272.900	7277.63	588.92	-7.93	-589.75	694278.69	487313.07	12.83
7619.00	90.600	274.100	7278.02	620.90	-5.98	-621.68	694246.76	487315.02	8.95
7692.00	91.800	273.900	7276.50	693.86	-0.89	-694.49	694173.96	487320.11	1.67
7787.00	89.900	273.900	7275.09	788.81	5.57	-789.26	694079.20	487326.57	2.00
7884.00	89.900	269.800	7275.26	885.78	8.70	-886.18	693982.27	487329.70	4.23
7980.00	89.900	273.100	7275.42	981.76	11.13	-982.14	693886.33	487332.13	3.44
8075.00	89.900	274.600	7275.59	1076.72	17.51	-1076.92	693791.55	487338.51	1.58
8171.00	89.800	272.900	7275.84	1172.69	23.79	-1172.71	693695.76	487344.79	1.77
8267.00	90.100	274.200	7275.92	1268.67	29.73	-1268.53	693599.96	487350.73	1.39
8364.00	90.000	273.700	7275.84	1365.63	36.42	-1365.30	693503.19	487357.41	0.53
8460.00	90.000	272.800	7275.84	1461.62	41.86	-1461.14	693407.36	487362.86	0.94
8556.00	89.800	273.200	7276.01	1557.61	46.88	-1557.01	693311.49	487367.88	0.47
8652.00	89.900	272.300	7276.26	1653.61	51.49	-1652.90	693215.61	487372.48	0.94
8748.00	89.900	270.700	7276.43	1749.60	54.00	-1748.86	693119.65	487375.00	1.67
8844.00	89.800	271.200	7276.68	1845.57	55.59	-1844.85	693023.68	487376.59	0.53
8939.00	89.900	271.400	7276.93	1940.55	57.75	-1939.82	692928.71	487378.74	0.24
9034.00	89.800	269.700	7277.18	2035.50	58.66	-2034.81	692833.72	487379.66	1.79
9129.00	89.900	272.700	7277.42	2130.47	60.65	-2129.78	692738.76	487381.65	3.16
9225.00	89.900	271.900	7277.59	2226.46	64.50	-2225.70	692642.84	487385.50	0.83
9322.00	89.900	274.300	7277.76	2323.45	69.75	-2322.55	692546.00	487390.74	2.47
9416.00	89.900	273.200	7277.92	2417.42	75.89	-2416.35	692452.21	487396.89	1.17
9512.00	89.900	275.000	7278.09	2513.37	82.76	-2512.10	692356.46	487403.75	1.87
9608.00	89.900	274.600	7278.26	2609.29	90.79	-2607.76	692260.81	487411.79	0.42
9703.00	89.900	272.100	7278.43	2704.27	96.34	-2702.59	692165.98	487417.34	2.63
9799.00	89.900	272.500	7278.59	2800.26	100.19	-2798.52	692070.07	487421.19	0.42



Actual Wellpath Report

No. 108H AWP

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INTEQ

REFERENCE WELLPATH IDENTIFICATION			
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Field	(JRU) Quahada Ridge, SE (Delaware)	Wellbore	No. 108H AWB
Facility	James Ranch Unit No. 108H		

WELLPATH DATA (166 stations)									
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	DLS [°/100ft]
9895.00	89.800	272.300	7278.84	2896.26	104.21	-2894.43	691974.16	487425.21	0.23
9991.00	89.900	272.100	7279.10	2992.26	107.90	-2990.36	691878.24	487428.89	0.23
10087.00	90.000	272.100	7279.18	3088.26	111.42	-3086.30	691782.31	487432.41	0.10
10183.00	89.900	272.300	7279.26	3184.26	115.10	-3182.23	691686.38	487436.10	0.23
10279.00	90.000	272.100	7279.35	3280.26	118.79	-3278.15	691590.46	487439.78	0.23
10375.00	89.800	271.300	7279.51	3376.25	121.64	-3374.11	691494.51	487442.63	0.86
10470.00	89.800	272.400	7279.85	3471.25	124.70	-3469.06	691399.57	487445.69	1.16
10564.00	89.900	272.200	7280.09	3565.25	128.48	-3562.98	691305.65	487449.47	0.24
10659.00	90.000	271.700	7280.18	3660.24	131.71	-3657.93	691210.71	487452.70	0.54
10755.00	89.800	271.100	7280.34	3756.23	134.05	-3753.90	691114.75	487455.04	0.66
10851.00	89.900	271.500	7280.59	3852.21	136.23	-3849.87	691018.78	487457.22	0.43
10946.00	89.900	272.900	7280.76	3947.21	139.88	-3944.80	690923.86	487460.87	1.47
11042.00	90.500	272.800	7280.43	4043.21	144.65	-4040.68	690827.98	487465.64	0.63
11138.00	90.300	274.600	7279.75	4139.17	150.85	-4136.48	690732.20	487471.84	1.89
11234.00	90.500	274.500	7279.08	4235.10	158.46	-4232.17	690636.51	487479.45	0.23
11327.00	90.400	273.800	7278.35	4328.05	165.19	-4324.92	690543.76	487486.18	0.76
11422.00	90.000	273.700	7278.02	4423.03	171.40	-4419.72	690448.97	487492.39	0.43
11518.00	90.000	274.000	7278.02	4518.99	177.85	-4515.50	690353.20	487498.84	0.31
11613.00	89.900	272.000	7278.11	4613.98	182.82	-4610.37	690258.34	487503.81	2.11
11710.00	89.900	272.100	7278.27	4710.98	186.29	-4707.30	690161.41	487507.28	0.10
11806.00	90.000	270.100	7278.36	4806.95	188.14	-4803.28	690065.43	487509.12	2.09
11902.00	89.900	270.400	7278.44	4902.89	188.55	-4899.28	689969.44	487509.54	0.33
11997.00	89.900	270.700	7278.61	4997.84	189.47	-4994.28	689874.45	487510.45	0.32
12093.00	90.000	275.400	7278.69	5093.80	194.57	-5090.11	689778.62	487515.56	4.90
12189.00	89.800	273.500	7278.86	5189.74	202.02	-5185.82	689682.92	487523.01	1.99
12284.00	89.600	273.600	7279.36	5284.72	207.90	-5280.64	689588.11	487528.89	0.24
12380.00	90.200	274.300	7279.52	5380.68	214.52	-5376.41	689492.35	487535.50	0.96
12476.00	90.400	275.600	7279.02	5476.58	222.80	-5472.05	689396.72	487543.78	1.37
12571.00	90.200	272.300	7278.52	5571.53	229.34	-5566.81	689301.96	487550.33	3.48
12667.00	90.200	268.700	7278.19	5667.46	230.18	-5662.78	689205.99	487551.16	3.75



Actual Wellpath Report

No. 108H AWP

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INTEQ

REFERENCE WELLPATH IDENTIFICATION			
Operator	BOPCO, L.P.	Slot	No. 108H SHL
Area	Eddy County, NM	Well	No. 108H
Field	(JRU) Quahada Ridge, SE (Delaware)	Wellbore	No. 108H AWB
Facility	James Ranch Unit No. 108H		

WELLPATH DATA (166 stations)									
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	DLS [°/100ft]
12763.00	90.200	268.600	7277.85	5763.26	227.92	-5758.76	689110.02	487548.90	0.10
12859.00	90.200	269.900	7277.52	5859.11	226.66	-5854.75	689014.04	487547.65	1.35
12954.00	90.300	271.000	7277.10	5954.05	227.41	-5949.74	688919.05	487548.39	1.16
13051.00	90.200	272.700	7276.68	6051.05	230.54	-6046.69	688822.11	487551.52	1.76
13146.00	90.400	274.400	7276.18	6146.02	236.42	-6141.50	688727.31	487557.41	1.80
13242.00	89.800	273.700	7276.02	6241.98	243.20	-6237.26	688631.55	487564.18	0.96
13338.00	89.800	273.000	7276.35	6337.96	248.81	-6333.09	688535.72	487569.79	0.73
13433.00	89.800	273.800	7276.68	6432.95	254.44	-6427.92	688440.90	487575.43	0.84
13529.00	89.700	273.500	7277.10	6528.92	260.56	-6523.73	688345.10	487581.54	0.33
13622.00	89.700	272.000	7277.59	6621.92	265.02	-6616.62	688252.22	487586.00	1.61
13717.00	89.700	275.100	7278.09	6716.88	270.90	-6711.42	688157.42	487591.88	3.26
13813.00	89.800	274.000	7278.51	6812.81	278.51	-6807.12	688061.73	487599.50	1.15
13908.00	89.900	275.500	7278.75	6907.73	286.38	-6901.79	687967.07	487607.36	1.58
14004.00	89.900	275.200	7278.92	7003.60	295.33	-6997.37	687871.49	487616.31	0.31
14021.00	89.700	275.800	7278.98	7020.57	296.98	-7014.29	687854.57	487617.94	3.72
14087.00	89.700	275.800	7279.33	7086.45	303.63	-7079.95	687788.91	487624.61	0.00



Actual Wellpath Report

No. 108H AWP

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INTEQ

REFERENCE WELLPATH IDENTIFICATION

Operator	BOPCO, L.P.	Slot	No. 108H SHL
Area	Eddy County, NM	Well	No. 108H
Field	(JRU) Quahada Ridge, SE (Delaware)	Wellbore	No. 108H AWB
Facility	James Ranch Unit No. 108H		

TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	Shape
No. 108H PBHL		7278.00	293.63	-7081.04	687787.82	487614.61	32°20'22.678"N	103°51'32.907"W	point

WELLPATH COMPOSITION Ref Wellbore: No. 108H AWB Ref Wellpath: No. 108H AWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
0.00	6724.00	Generic gyro - continuous (Standard)	Gyro - <0 - 6724>	No. 108H AWB
6724.00	14021.00	NaviTrak (Standard)	MWD - <6774 - 14021>	No. 108H AWB
14021.00	14087.00	Blind Drilling (std)	Projection to bit	No. 108H AWB