

PATHFINDER

5" = 100'
FEET TVD

COMPANY : EOG RESOURCES WELL : CONGO B 10 FEE #2H FIELD : COTTONWOOD CREEK COUNTY : EDDY STATE : NM COUNTRY : USA API WELL No.: 30-015-34598		COMPANY : EOG RESOURCES WELL : CONGO B 10 FEE #2H FIELD : COTTONWOOD CREEK COUNTY : EDDY STATE : NM COUNTRY : USA API No.: 30-015-34598			
WELL LOCATION 660' FSL 180' FEL SEC:10 TWP:16S RANGE:25E		OTHER SERVICES DIRECTIONAL ROP			
DEPTH REF. : ROTARY TABLE ELEVATION : 18.50 ft (ROTARY TABLE - GROUND LEVEL) ALTITUDE : 3452.00 ft (GROUND LEVEL - MEAN SEA LEVEL)					
BOREHOLE RECORD		DEVIATION RECORD			
HOLE SIZE in	FROM ft	TO ft	INCLINATION deg	FROM ft	TO ft
12 1/4	0	953	01 - 32	4400	4670
7 7/8	953	8701	32 - 60	4670	4956
			60 - 92	4956	5814
			92 - 87	5814	6132
			87 - 93	6132	6325
			93 - 89	6325	6576
			89 - 92	6576	6827
			92 - 89	6827	6983
			89 - 93	6983	8701
CASING RECORD				DRILLING Co.: J W	
CASING SIZE in	FROM ft	TO ft	RIG : #3		
8 5/8	0	953	LWD UNIT No.: RENTAL DISTRICT : WEST TEXAS		
			SPUD DATE :		
			LWD START DATE : 24-APR-06 DEPTH : 4382 ft		
			LWD END DATE : 05-MAY-06 DEPTH : 8701 ft		
			TOTAL DEPTH : 8701 ft		

Survey Report

Vertical Section Plane: 271.27°

Total Correction: 8.73° East to True

Calculation Method: Minimum Curvature

Survey Reference: Wellhead

North Aligned to: True North

Well: CONGO B 10 FEE #2H

RKB: 18.5' ROTARY TO GROUND LEVEL

FIELD: COTTONWOOD CRREK

Measured Depth (ft)	Inclination (deg)	Azimuth (deg)	TVD (ft)	Course Length (ft)	Vertical Section (ft)	Rect Co-ord North (ft)	Rect Co-ord East (ft)	Closure Distance (ft)	Closure Direction (deg)	Dog-leg Severity (dg/hft)	Temp (deg F)
TIE-IN TO GYRODATA											
4400.00	1.36	14.74	4399.70		23.86	25.71 N	23.30 W	34.70	317.82		
THE FOLLOWING ARE PATHFINDER MWD SURVEYS											
4448.00	8.71	279.39	4447.51	48.00	27.33	26.86 N	26.75 W	37.90	315.12	18.61	101.02
4480.00	12.93	276.80	4478.94	32.00	33.30	27.68 N	32.69 W	42.83	310.25	13.27	93.80
4511.00	16.97	276.97	4508.88	31.00	41.25	28.64 N	40.63 W	49.71	305.18	13.05	93.80
4543.00	19.70	278.29	4539.25	32.00	51.25	29.98 N	50.60 W	58.82	300.64	8.62	97.41
4575.00	22.16	280.05	4569.14	32.00	62.57	31.81 N	61.88 W	69.58	297.21	7.94	97.41
4607.00	25.06	279.35	4598.46	32.00	75.25	33.96 N	74.52 W	81.89	294.50	9.11	97.41
4638.00	28.58	278.64	4626.12	31.00	89.11	36.15 N	88.33 W	95.44	292.26	11.39	97.41
4670.00	32.10	278.03	4653.74	32.00	105.15	38.48 N	104.32 W	111.19	290.25	11.03	101.02
4702.00	36.05	276.88	4680.24	32.00	122.97	40.80 N	122.09 W	128.73	288.48	12.53	101.02
4734.00	39.39	278.03	4705.54	32.00	142.43	43.35 N	141.50 W	147.99	287.03	10.67	101.02
4765.00	42.74	278.91	4728.91	31.00	162.63	46.35 N	161.64 W	168.15	286.00	10.94	101.02
4797.00	45.99	279.96	4751.79	32.00	184.77	50.02 N	183.71 W	190.40	285.23	10.42	101.02
4829.00	48.54	279.26	4773.50	32.00	208.02	53.94 N	206.88 W	213.80	284.61	8.13	101.02
4861.00	51.09	279.08	4794.15	32.00	232.24	57.84 N	231.01 W	238.14	284.06	7.98	101.02
4892.00	53.82	278.64	4813.04	31.00	256.60	61.62 N	255.30 W	262.63	283.57	8.86	101.02
4924.00	56.81	278.12	4831.25	32.00	282.71	65.45 N	281.32 W	288.84	283.10	9.44	101.02
4956.00	60.06	277.41	4848.00	32.00	309.79	69.13 N	308.33 W	315.99	282.64	10.34	101.02
4988.00	63.31	276.71	4863.18	32.00	337.82	72.59 N	336.29 W	344.03	282.18	10.35	101.02
5019.00	66.83	276.80	4876.24	31.00	365.79	75.90 N	364.20 W	372.03	281.77	11.35	101.02
5051.00	69.73	276.71	4888.08	32.00	395.38	79.39 N	393.72 W	401.64	281.40	9.07	101.02
5083.00	72.81	276.09	4898.36	32.00	425.56	82.77 N	423.83 W	431.84	281.05	9.79	101.02
5115.00	76.15	276.18	4906.92	32.00	456.28	86.07 N	454.48 W	462.56	280.72	10.45	101.02
5147.00	79.58	276.18	4913.64	32.00	487.45	89.43 N	485.58 W	493.75	280.44	10.72	101.02
5178.00	82.48	275.30	4918.48	31.00	517.97	92.50 N	516.05 W	524.27	280.16	9.77	101.02
5210.00	85.38	274.16	4921.86	32.00	549.73	95.12 N	547.76 W	555.95	279.85	9.74	101.02
5226.00	86.53	273.46	4922.99	16.00	565.67	96.18 N	563.68 W	571.83	279.68	8.38	101.02
5242.00	87.05	271.79	4923.88	16.00	581.64	96.91 N	579.64 W	587.68	279.49	10.93	101.02
5274.00	88.20	271.52	4925.21	32.00	613.61	97.83 N	611.60 W	619.37	279.09	3.67	101.02
5305.00	88.90	271.35	4925.99	31.00	644.60	98.61 N	642.58 W	650.10	278.72	2.34	101.02
5337.00	89.69	271.79	4926.39	32.00	676.60	99.48 N	674.56 W	681.86	278.39	2.83	101.02
5369.00	89.96	271.96	4926.49	32.00	708.60	100.53 N	706.54 W	713.66	278.10	0.99	101.02
5401.00	89.87	272.05	4926.53	32.00	740.60	101.65 N	738.52 W	745.49	277.84	0.39	101.02
5432.00	89.96	272.49	4926.58	31.00	771.59	102.88 N	769.50 W	776.35	277.61	1.45	101.02
5464.00	90.57	271.96	4926.43	32.00	803.59	104.12 N	801.48 W	808.21	277.40	2.53	101.02
5496.00	90.92	271.79	4926.02	32.00	835.58	105.17 N	833.46 W	840.06	277.19	1.23	101.02
5528.00	90.84	271.26	4925.53	32.00	867.58	106.02 N	865.44 W	871.91	276.98	1.67	101.02
5559.00	90.48	271.26	4925.17	31.00	898.58	106.70 N	896.43 W	902.76	276.79	1.14	101.02
5623.00	91.63	270.73	4923.99	64.00	962.56	107.81 N	960.41 W	966.44	276.40	1.97	104.64
5655.00	92.33	270.64	4922.89	32.00	994.54	108.20 N	992.39 W	998.27	276.22	2.21	101.02
5687.00	92.15	270.73	4921.63	32.00	1026.52	108.58 N	1024.36 W	1030.10	276.05	0.61	101.02
5718.00	92.33	271.08	4920.42	31.00	1057.49	109.07 N	1055.33 W	1060.95	275.90	1.27	101.02
5750.00	92.07	271.00	4919.19	32.00	1089.47	109.65 N	1087.30 W	1092.82	275.76	0.87	104.64
5814.00	91.71	271.00	4917.08	64.00	1153.43	110.76 N	1151.26 W	1156.58	275.50	0.55	104.64
5845.00	91.45	270.56	4916.23	31.00	1184.42	111.18 N	1182.24 W	1187.46	275.37	1.65	104.64
5877.00	90.22	270.73	4915.76	32.00	1216.41	111.54 N	1214.24 W	1219.35	275.25	3.89	104.64
5909.00	89.78	270.73	4915.76	32.00	1248.41	111.95 N	1246.24 W	1251.25	275.13	1.37	104.64
5941.00	90.13	270.47	4915.78	32.00	1280.41	112.29 N	1278.23 W	1283.16	275.02	1.37	104.64
5972.00	87.93	270.12	4916.31	31.00	1311.40	112.44 N	1309.23 W	1314.05	274.91	7.18	104.64
6004.00	88.11	270.03	4917.41	32.00	1343.37	112.48 N	1341.21 W	1345.92	274.79	0.61	104.60
6036.00	87.85	269.76	4918.54	32.00	1375.34	112.43 N	1373.19 W	1377.78	274.68	1.17	104.64
6068.00	87.67	269.85	4919.79	32.00	1407.31	112.32 N	1405.16 W	1409.65	274.57	0.61	104.64
6100.00	87.41	270.12	4921.17	32.00	1439.27	112.31 N	1437.13 W	1441.52	274.47	1.17	104.64
6132.00	87.23	269.94	4922.67	32.00	1471.23	112.33 N	1469.10 W	1473.39	274.37	0.78	104.64
6168.00	88.37	269.94	4924.05	36.00	1507.19	112.29 N	1505.07 W	1509.25	274.27	3.17	104.64
6200.00	89.69	269.85	4924.59	32.00	1539.18	112.23 N	1537.07 W	1541.16	274.18	4.13	104.64
6231.00	91.28	269.85	4924.32	31.00	1570.16	112.15 N	1568.06 W	1572.07	274.09	5.11	104.64
6262.00	92.86	269.06	4923.21	31.00	1602.13	111.86 N	1599.04 W	1602.95	274.00	5.71	104.64
6294.00	92.77	268.89	4921.64	32.00	1633.06	111.29 N	1631.00 W	1634.79	273.90	0.61	104.64
6325.00	93.12	268.18	4920.04	31.00	1663.99	110.50 N	1661.95 W	1665.62	273.80	2.54	104.60
6356.00	92.42	268.54	4918.55	31.00	1694.91	109.61 N	1692.90 W	1696.44	273.70	2.54	101.02
6388.00	90.92	267.92	4917.61	32.00	1726.85	108.62 N	1724.87 W	1728.28	273.60	5.05	101.02
6420.00	90.04	267.74	4917.34	32.00	1758.79	107.41 N	1756.84 W	1760.12	273.50	2.80	101.02
6451.00	89.96	268.01	4917.34	31.00	1789.74	106.26 N	1787.82 W	1790.98	273.40	0.89	104.64
6482.00	89.60	268.10	4917.45	31.00	1820.69	105.20 N	1818.80 W	1821.84	273.31	1.17	104.64
6514.00	89.34	268.45	4917.75	32.00	1852.64	104.24 N	1850.79 W	1853.72	273.22	1.37	104.64
6545.00	89.25	268.54	4918.14	31.00	1883.60	103.42 N	1881.77 W	1884.61	273.15	0.40	104.64
6576.00	89.08	268.10	4918.59	31.00	1914.56	102.51 N	1912.76 W	1915.50	273.07	1.53	101.02
6608.00	89.69	268.54	4918.93	32.00	1946.52	101.57 N	1944.74 W	1947.39	272.99	2.36	104.64

Survey Report

Vertical Section Plane: 271.27°

Total Correction: 8.73° East to True

Calculation Method: Minimum Curvature

Survey Reference: Wellhead

North Aligned to: True North

Well: CONGO B 10 FEE #2H

RKB: 18.5' ROTARY TO GROUND LEVEL

FIELD: COTTONWOOD CRREK

Measured Depth (ft)	Inclination (deg)	Azimuth (deg)	TVD (ft)	Course Length (ft)	Vertical Section (ft)	Rect Co-ord North (ft)	Rect Co-ord East (ft)	Closure Distance (ft)	Closure Direction (deg)	Dog-leg Severity (dg/hft)	Temp (deg F)
6639.00	89.78	268.36	4919.07	31.00	1977.48	100.73 N	1975.73 W	1978.30	272.92	0.63	104.64
6670.00	91.28	269.24	4918.79	31.00	2008.45	100.08 N	2006.72 W	2009.21	272.86	5.59	104.64
6702.00	92.07	269.94	4917.86	32.00	2040.42	99.85 N	2038.71 W	2041.15	272.80	3.31	101.02
6733.00	91.28	269.15	4916.95	31.00	2071.39	99.61 N	2069.69 W	2072.09	272.76	3.61	104.64
6764.00	91.10	269.15	4916.31	31.00	2102.36	99.15 N	2100.68 W	2103.02	272.70	0.57	101.02
6795.00	92.33	269.24	4915.38	31.00	2133.33	98.71 N	2131.66 W	2133.95	272.65	3.98	101.02
6827.00	91.98	269.15	4914.18	32.00	2165.28	98.26 N	2163.64 W	2165.87	272.60	1.13	101.02
6858.00	90.13	268.89	4913.61	31.00	2196.25	97.73 N	2194.63 W	2196.80	272.55	6.02	104.64
6889.00	89.16	269.15	4913.80	31.00	2227.23	97.20 N	2225.62 W	2227.74	272.50	3.23	104.64
6920.00	89.08	269.15	4914.27	31.00	2258.20	96.74 N	2256.61 W	2258.69	272.45	0.28	104.64
6951.00	90.04	270.12	4914.51	31.00	2289.19	96.54 N	2287.61 W	2289.65	272.42	4.41	104.64
6983.00	89.43	269.24	4914.66	32.00	2321.18	96.36 N	2319.61 W	2321.61	272.38	3.35	104.64
7014.00	90.48	270.56	4914.68	31.00	2352.17	96.30 N	2350.61 W	2352.58	272.35	5.45	104.64
7046.00	91.36	270.91	4914.17	32.00	2384.16	96.71 N	2382.60 W	2384.56	272.32	2.96	104.64
7077.00	91.98	271.52	4913.26	31.00	2415.15	97.37 N	2413.58 W	2415.54	272.31	2.81	108.25
7108.00	92.68	271.61	4912.00	31.00	2446.12	98.22 N	2444.54 W	2446.52	272.30	2.29	108.25
7139.00	92.86	272.14	4910.51	31.00	2477.08	99.23 N	2475.49 W	2477.48	272.30	1.79	108.25
7170.00	91.28	271.17	4909.39	31.00	2508.06	100.12 N	2506.46 W	2508.46	272.29	5.98	108.25
7202.00	90.40	271.35	4908.92	32.00	2540.06	100.83 N	2538.45 W	2540.45	272.27	2.80	108.25
7233.00	90.75	271.43	4908.61	31.00	2571.05	101.58 N	2569.43 W	2571.44	272.26	1.17	108.25
7264.00	90.75	271.52	4908.21	31.00	2602.05	102.38 N	2600.42 W	2602.44	272.25	0.28	108.25
7295.00	91.01	271.70	4907.73	31.00	2633.05	103.25 N	2631.41 W	2633.43	272.25	1.02	108.25
7326.00	90.92	272.14	4907.21	31.00	2664.04	104.29 N	2662.38 W	2664.43	272.24	1.44	108.25
7357.00	90.84	272.40	4906.73	31.00	2695.03	105.52 N	2693.36 W	2695.42	272.24	0.90	108.25
7389.00	90.92	272.31	4906.24	32.00	2727.02	106.83 N	2725.33 W	2727.42	272.24	0.39	108.30
7420.00	92.15	272.84	4905.41	31.00	2758.00	108.22 N	2756.28 W	2758.41	272.25	4.33	108.25
7451.00	93.21	272.05	4903.96	31.00	2788.96	109.55 N	2787.22 W	2789.37	272.25	4.25	108.25
7482.00	93.12	272.05	4902.25	31.00	2819.91	110.65 N	2818.15 W	2820.32	272.25	0.28	108.25
7514.00	92.95	273.11	4900.56	32.00	2851.86	112.09 N	2850.07 W	2852.28	272.25	3.34	104.64
7545.00	93.12	273.37	4898.91	31.00	2882.80	113.84 N	2880.98 W	2883.23	272.26	1.02	108.25
7576.00	92.68	273.46	4897.35	31.00	2913.74	115.68 N	2911.89 W	2914.18	272.27	1.45	108.25
7607.00	92.77	273.02	4895.87	31.00	2944.68	117.43 N	2942.80 W	2945.14	272.29	1.45	108.25
7639.00	91.10	273.02	4894.79	32.00	2976.65	119.11 N	2974.74 W	2977.12	272.29	5.22	108.25
7670.00	91.01	273.46	4894.22	31.00	3007.62	120.86 N	3005.68 W	3008.11	272.30	1.45	108.25
7701.00	91.71	273.37	4893.48	31.00	3038.59	122.71 N	3036.62 W	3039.10	272.31	2.29	111.87
7733.00	90.13	272.67	4892.97	32.00	3070.57	124.39 N	3068.57 W	3071.09	272.32	5.41	111.87
7764.00	92.33	273.19	4892.30	31.00	3101.55	125.98 N	3099.52 W	3102.08	272.33	7.29	111.87
7795.00	93.91	273.63	4890.61	31.00	3132.48	127.82 N	3130.42 W	3133.03	272.34	5.30	111.87
7826.00	95.06	272.84	4888.19	31.00	3163.37	129.56 N	3161.27 W	3163.93	272.35	4.48	111.87
7858.00	95.50	272.31	4885.25	32.00	3195.22	131.00 N	3193.11 W	3195.79	272.35	2.14	111.87
7889.00	95.41	272.40	4882.30	31.00	3226.08	132.27 N	3223.94 W	3226.65	272.35	0.40	111.87
7920.00	94.09	272.14	4879.74	31.00	3256.97	133.49 N	3254.81 W	3257.54	272.35	4.34	111.87
7951.00	93.21	272.14	4877.76	31.00	3287.90	134.64 N	3285.72 W	3288.48	272.35	2.84	115.48
7982.00	92.86	272.14	4876.12	31.00	3318.85	135.80 N	3316.66 W	3319.44	272.34	1.14	115.48
8014.00	92.77	272.40	4874.55	32.00	3350.81	137.06 N	3348.59 W	3351.40	272.34	0.87	111.87
8045.00	93.12	272.58	4872.96	31.00	3381.76	138.41 N	3379.52 W	3382.36	272.35	1.27	115.48
8076.00	92.51	272.31	4871.44	31.00	3412.72	139.73 N	3410.46 W	3413.32	272.35	2.16	115.48
8107.00	90.75	272.05	4870.56	31.00	3443.70	140.91 N	3441.42 W	3444.31	272.34	5.74	115.48
8139.00	90.13	272.05	4870.31	32.00	3475.70	142.05 N	3473.40 W	3476.30	272.34	1.92	111.87
8170.00	90.57	271.96	4870.12	31.00	3506.69	143.14 N	3504.38 W	3507.30	272.34	1.45	111.87
8201.00	90.22	270.91	4869.91	31.00	3537.69	143.92 N	3535.37 W	3538.30	272.33	3.58	115.48
8232.00	90.04	270.38	4869.83	31.00	3568.69	144.26 N	3566.37 W	3569.28	272.32	1.80	111.87
8263.00	89.78	269.85	4869.88	31.00	3599.68	144.33 N	3597.37 W	3600.26	272.30	1.90	111.87
8295.00	89.87	269.94	4869.98	32.00	3631.67	144.27 N	3629.37 W	3632.23	272.28	0.39	111.87
8326.00	90.66	269.76	4869.84	31.00	3662.66	144.19 N	3660.37 W	3663.21	272.26	2.62	111.87
8357.00	91.28	268.97	4869.31	31.00	3693.64	143.85 N	3691.36 W	3694.16	272.23	3.23	111.87
8388.00	92.51	269.15	4868.29	31.00	3724.60	143.34 N	3722.34 W	3725.10	272.21	4.01	111.87
8420.00	93.12	269.15	4866.72	32.00	3756.54	142.87 N	3754.30 W	3757.01	272.18	1.92	111.87
8451.00	94.09	269.50	4864.77	31.00	3787.46	142.50 N	3785.23 W	3787.91	272.16	3.32	111.87
8483.00	93.47	269.24	4862.66	32.00	3819.37	142.15 N	3817.16 W	3819.81	272.13	2.09	111.87
8514.00	92.68	269.24	4861.00	31.00	3850.31	141.74 N	3848.11 W	3850.72	272.11	2.55	115.48
8545.00	92.59	270.20	4859.57	31.00	3881.26	141.59 N	3879.08 W	3881.66	272.09	3.13	115.48
8577.00	89.96	268.62	4858.86	32.00	3913.24	141.26 N	3911.07 W	3913.62	272.07	9.61	115.48
8608.00	89.60	268.80	4858.98	31.00	3944.20	140.57 N	3942.06 W	3944.56	272.04	1.27	115.48
8639.00	89.52	268.54	4859.21	31.00	3975.17	139.84 N	3973.05 W	3975.51	272.02	0.89	115.48
STRAIGHT LINE PROJECTION TO BIT											
8701.00	89.52	268.54	4859.74	62.00	4037.10	138.26 N	4035.03 W	4037.39	271.96	0.01	