



30-015-39506

EOG Resources

Eddy County, NM (NAD27 NME)

Parkway "23" State Com #6H

Parkway "23" State Com #6H

OH - Job #32D0312299

Design: Actual

Standard Survey Report

05 April, 2012



Scientific Drilling
Directional Drilling Operations

Scientific Drilling International, Inc.

Survey Report

eog resources



Company:	EOG Resources	Local Co-ordinate Reference:	Well Parkway "23" State Com #6H
Project:	Eddy County, NM (NAD27 NME)	TVD Reference:	RF @ 3328 10usft (Precision #523)
Site:	Parkway "23" State Com #6H	MD Reference:	RF @ 3328.10usft (Precision #523)
Well:	Parkway "23" State Com #6H	North Reference:	Grid
Wellbore:	OH - Job #32D0312299	Survey Calculation Method:	Minimum Curvature
Design:	Actual	Database:	EDM 5000.1 Single User Db

Project	Eddy County, NM (NAD27 NME), USA		
Map System:	US State Plane 1927 (Exact solution)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico East 3001		

Site	Parkway "23" State Com #6H			
Site Position:		Northing:	599,349.70 usft	Latitude: 32° 38' 50.648 N
From:	Map	Easting:	586,157.50 usft	Longitude: 104° 3' 12.301 W
Position Uncertainty:	0 00 usft	Slot Radius:	13-3/16 "	Grid Convergence: 0 15 °

Well	Parkway "23" State Com #6H			
Well Position	+N/-S	0.00 usft	Northing:	599,349.70 usft
	+E/-W	0.00 usft	Easting:	586,157.50 usft
Position Uncertainty	0.00 usft		Wellhead Elevation:	usft
			Ground Level:	3,310.10 usft

Wellbore	OH - Job #32D0312299				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	03/25/12	7.74	60.48	48,741

Design	Actual			
Audit Notes:				
Version:	1.0	Phase:	ACTUAL	Tie On Depth: 0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.00	0.00	0.00	89.93

Survey Program	Date	04/05/12		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
100.00	239.00	Gyro (OH - Job #32D0312299)	Keeper	Keeper Standard Rate Gyro
415.00	12,636.00	MWD (OH - Job #32D0312299)	MWD	MWD - Standard ISCWSA

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.93	333.51	100.00	0.73	-0.36	-0.36	0.93	0.93	0.00
200.00	1.60	322.39	199.97	2.56	-1.58	-1.57	0.71	0.67	-11.12
239.00	1.70	319.60	238.95	3.43	-2.28	-2.28	0.33	0.26	-7.15
Gyro Tie-in									
415.00	2.29	290.69	414.85	6.66	-7.26	-7.26	0.65	0.34	-16.43
507.00	0.70	284.19	506.82	7.45	-9.53	-9.52	1.74	-1.73	-7.07
598.00	0.53	291.92	597.81	7.74	-10.46	-10.45	0.21	-0.19	8.49
691.00	0.44	176.61	690.81	7.55	-10.84	-10.83	0.88	-0.10	-123.99
781.00	0.35	152.70	780.81	6.96	-10.69	-10.68	0.21	-0.10	-26.57

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Well:	Parkway "23" State Com #6H	North Reference:	Grid
Wellbore:	OH - Job #32D0312299	Survey Calculation Method:	Minimum Curvature
Design:	Actual	Database:	EDM 5000.1 Single User Db

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
872.00	0.44	88.63	871.81	6.72	-10.21	-10.21	0.47	0.10	-70.41
962.00	0.97	72.20	961.80	6.96	-9.14	-9.13	0.62	0.59	-18.26
1,053.00	1.23	75.98	1,052.78	7.43	-7.46	-7.45	0.30	0.29	4.15
1,144.00	1.58	82.59	1,143.76	7.83	-5.27	-5.26	0.42	0.38	7.26
1,235.00	2.11	85.38	1,234.71	8.13	-2.36	-2.35	0.59	0.58	3.07
1,325.00	2.11	87.67	1,324.65	8.33	0.95	0.96	0.09	0.00	2.54
1,416.00	1.85	77.56	1,415.59	8.71	4.06	4.07	0.48	-0.29	-11.11
1,511.00	1.69	72.13	1,510.55	9.47	6.89	6.90	0.24	-0.17	-5.72
1,606.00	1.49	58.49	1,605.51	10.55	9.28	9.29	0.45	-0.21	-14.36
1,701.00	0.53	43.98	1,700.50	11.51	10.63	10.65	1.04	-1.01	-15.27
1,797.00	0.62	260.11	1,796.49	11.74	10.43	10.45	1.14	0.09	-149.86
1,892.00	0.97	258.00	1,891.48	11.48	9.14	9.15	0.37	0.37	-2.22
1,988.00	0.79	259.40	1,987.47	11.19	7.69	7.71	0.19	-0.19	1.46
2,083.00	0.62	276.19	2,082.47	11.13	6.54	6.55	0.28	-0.18	17.67
2,178.00	0.70	279.88	2,177.46	11.28	5.46	5.47	0.10	0.08	3.88
2,274.00	1.32	222.67	2,273.45	10.57	4.13	4.14	1.16	0.65	-59.59
2,369.00	1.23	223.37	2,368.42	9.02	2.69	2.70	0.10	-0.09	0.74
2,465.00	1.32	215.20	2,464.40	7.37	1.34	1.35	0.21	0.09	-8.51
2,560.00	1.58	222.58	2,559.37	5.51	-0.18	-0.17	0.34	0.27	7.77
2,656.00	1.58	229.52	2,655.33	3.68	-2.08	-2.07	0.20	0.00	7.23
2,752.00	1.67	226.62	2,751.29	1.86	-4.10	-4.10	0.13	0.09	-3.02
2,847.00	1.76	231.19	2,846.25	-0.01	-6.24	-6.24	0.17	0.09	4.81
2,942.00	1.67	231.98	2,941.21	-1.77	-8.47	-8.47	0.10	-0.09	0.83
3,037.00	0.88	234.70	3,036.18	-3.05	-10.16	-10.16	0.83	-0.83	2.86
3,133.00	0.35	219.68	3,132.18	-3.70	-10.95	-10.95	0.57	-0.55	-15.65
3,228.00	0.62	213.26	3,227.17	-4.35	-11.41	-11.42	0.29	0.28	-6.76
3,269.00	0.35	213.88	3,268.17	-4.64	-11.60	-11.61	0.66	-0.66	1.51
3,383.00	0.70	205.00	3,382.17	-5.56	-12.09	-12.10	0.31	0.31	-7.79
3,447.00	0.79	206.20	3,446.16	-6.31	-12.45	-12.46	0.14	0.14	1.88
3,543.00	0.44	59.37	3,542.16	-6.72	-12.43	-12.44	1.23	-0.36	-152.95
3,638.00	0.26	353.10	3,637.16	-6.32	-12.14	-12.15	0.43	-0.19	-69.76
3,733.00	0.35	18.50	3,732.16	-5.83	-12.07	-12.08	0.17	0.09	26.74
3,829.00	0.88	340.97	3,828.15	-4.85	-12.22	-12.23	0.67	0.55	-39.09
3,924.00	0.97	332.60	3,923.14	-3.45	-12.83	-12.83	0.17	0.09	-8.81
4,020.00	0.35	21.57	4,019.13	-2.46	-13.10	-13.10	0.82	-0.65	51.01
4,116.00	1.06	313.28	4,115.13	-1.57	-13.63	-13.64	1.03	0.74	-71.14
4,211.00	0.53	337.19	4,210.12	-0.57	-14.44	-14.44	0.65	-0.56	25.17
4,306.00	0.62	312.58	4,305.11	0.19	-14.99	-14.99	0.27	0.09	-25.91
4,401.00	0.26	21.84	4,400.11	0.73	-15.29	-15.29	0.61	-0.38	72.91
4,496.00	0.79	327.61	4,495.11	1.49	-15.56	-15.56	0.71	0.56	-57.08
4,591.00	0.35	49.52	4,590.10	2.23	-15.69	-15.69	0.86	-0.46	86.22
4,686.00	0.44	324.00	4,685.10	2.71	-15.69	-15.68	0.57	0.09	-90.02
4,782.00	1.06	50.14	4,781.09	3.58	-15.22	-15.22	1.17	0.65	89.73

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Survey Report



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Wellbore:	OH - Job #32D0312299	Survey Calculation Method:	Minimum Curvature
Design:	Actual	Database:	EDM 5000.1 Single User Db

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
4,877.00	1.06	23.59	4,876.08	4.95	-14.19	-14.19	0.51	0.00	-27.95
4,973.00	1.06	21.31	4,972.06	6.59	-13.52	-13.51	0.04	0.00	-2.38
5,069.00	1.58	30.71	5,068.04	8.55	-12.52	-12.51	0.58	0.54	9.79
5,164.00	1.76	51.89	5,163.00	10.58	-10.70	-10.69	0.67	0.19	22.29
5,260.00	1.76	54.79	5,258.95	12.34	-8.34	-8.32	0.09	0.00	3.02
5,355.00	1.67	62.79	5,353.91	13.81	-5.91	-5.90	0.27	-0.09	8.42
5,451.00	2.20	115.35	5,449.86	13.67	-3.00	-2.99	1.85	0.55	54.75
5,546.00	1.93	125.99	5,544.80	11.94	-0.06	-0.05	0.49	-0.28	11.20
5,642.00	0.79	163.42	5,640.77	10.36	1.43	1.45	1.45	-1.19	38.99
5,737.00	0.35	165.62	5,735.77	9.45	1.69	1.71	0.46	-0.46	2.32
5,833.00	0.35	64.11	5,831.77	9.30	2.03	2.04	0.56	0.00	-105.74
5,928.00	0.44	74.13	5,926.76	9.52	2.64	2.65	0.12	0.09	10.55
6,024.00	0.97	222.93	6,022.76	9.03	2.44	2.45	1.42	0.55	155.00
6,119.00	0.88	261.51	6,117.75	8.33	1.17	1.18	0.65	-0.09	40.61
6,215.00	0.88	252.20	6,213.74	8.00	-0.26	-0.25	0.15	0.00	-9.70
6,310.00	0.26	75.54	6,308.73	7.83	-0.74	-0.73	1.20	-0.65	-185.96
6,405.00	0.26	139.87	6,403.73	7.72	-0.40	-0.39	0.29	0.00	67.72
6,501.00	0.44	190.50	6,499.73	7.19	-0.32	-0.31	0.35	0.19	52.74
6,596.00	0.35	210.10	6,594.73	6.58	-0.53	-0.53	0.17	-0.09	20.63
6,692.00	0.18	63.67	6,690.73	6.39	-0.55	-0.54	0.53	-0.18	-152.53
6,788.00	1.06	194.19	6,786.72	5.60	-0.63	-0.62	1.23	0.92	135.96
6,883.00	0.53	183.03	6,881.72	4.31	-0.87	-0.86	0.58	-0.56	-11.75
6,978.00	0.53	102.87	6,976.71	3.77	-0.46	-0.46	0.72	0.00	-84.38
7,073.00	0.62	103.22	7,071.71	3.55	0.47	0.47	0.09	0.09	0.37
7,169.00	0.26	122.82	7,167.70	3.32	1.16	1.16	0.40	-0.38	20.42
7,264.00	1.41	135.74	7,262.69	2.36	2.15	2.16	1.22	1.21	13.60
7,360.00	1.58	120.54	7,358.66	0.85	4.12	4.12	0.45	0.18	-15.83
7,456.00	3.08	105.24	7,454.58	-0.50	7.75	7.74	1.68	1.56	-15.94
7,469.00	3.34	103.66	7,467.56	-0.69	8.45	8.45	2.11	2.00	-12.15
7,475.00	3.34	102.96	7,473.55	-0.77	8.79	8.79	0.68	0.00	-11.67
7,506.00	3.34	98.56	7,504.50	-1.10	10.56	10.56	0.83	0.00	-14.19
7,538.00	6.68	85.03	7,536.37	-1.08	13.34	13.34	11.00	10.44	-42.28
7,570.00	10.99	83.18	7,567.98	-0.56	18.23	18.22	13.50	13.47	-5.78
7,601.00	15.56	84.59	7,598.15	0.19	25.30	25.30	14.78	14.74	4.55
7,633.00	19.26	87.67	7,628.68	0.81	34.85	34.85	11.91	11.56	9.63
7,664.00	23.30	93.38	7,657.56	0.65	46.09	46.09	14.63	13.03	18.42
7,696.00	27.52	95.66	7,686.46	-0.45	59.77	59.77	13.53	13.19	7.13
7,728.00	31.39	95.40	7,714.32	-1.97	75.43	75.43	12.10	12.09	-0.81
7,760.00	34.82	94.96	7,741.12	-3.54	92.83	92.83	10.74	10.72	-1.38
7,791.00	36.93	93.38	7,766.24	-4.85	110.95	110.94	7.43	6.81	-5.10
7,823.00	38.87	91.53	7,791.49	-5.69	130.58	130.58	7.03	6.06	-5.78
7,855.00	40.63	89.86	7,816.09	-5.93	151.04	151.04	6.43	5.50	-5.22
7,887.00	42.85	89.95	7,839.97	-5.90	172.35	172.34	6.94	6.94	0.28

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eogresources

Survey Report



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Project:	Eddy County, NM (NAD27 NME)	TVD Reference:	RF @ 3328.10usft (Precision #523)
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7,919.00	45.90	90.83	7,862.84	-6.05	194.72	194.71	9.72	9.53	2.75
7,951.00	49.86	91.27	7,884.29	-6.49	218.45	218.44	12.42	12.38	1.38
7,983.00	52.41	91.01	7,904.37	-6.99	243.36	243.35	7.99	7.97	-0.81
8,014.00	56.63	91.71	7,922.36	-7.59	268.59	268.58	13.74	13.61	2.26
8,046.00	59.62	92.06	7,939.26	-8.48	295.74	295.73	9.39	9.34	1.09
8,078.00	61.99	92.41	7,954.87	-9.57	323.66	323.64	7.47	7.41	1.09
8,111.00	64.98	93.38	7,969.60	-11.07	353.14	353.13	9.43	9.06	2.94
8,142.00	68.94	93.55	7,981.73	-12.79	381.61	381.60	12.78	12.77	0.55
8,174.00	73.16	93.55	7,992.12	-14.67	411.81	411.79	13.19	13.19	0.00
8,206.00	77.82	92.76	8,000.13	-16.37	442.74	442.72	14.76	14.56	-2.47
8,237.00	81.78	91.18	8,005.62	-17.42	473.22	473.20	13.72	12.77	-5.10
8,269.00	84.15	90.92	8,009.54	-18.00	504.97	504.95	7.45	7.41	-0.81
8,301.00	85.21	90.30	8,012.51	-18.34	536.83	536.81	3.83	3.31	-1.94
8,328.00	85.30	89.25	8,014.74	-18.23	563.74	563.72	3.89	0.33	-3.89
8,423.00	87.49	88.72	8,020.71	-16.55	658.53	658.51	2.37	2.31	-0.56
8,518.00	87.14	90.30	8,025.16	-15.74	753.42	753.40	1.70	-0.37	1.66
8,613.00	87.85	89.69	8,029.32	-15.73	848.33	848.31	0.98	0.75	-0.64
8,709.00	88.69	88.90	8,032.21	-14.55	944.28	944.26	1.20	0.88	-0.82
8,805.00	88.11	88.81	8,034.89	-12.63	1,040.22	1,040.20	0.61	-0.60	-0.09
8,900.00	87.67	88.37	8,038.39	-10.30	1,135.12	1,135.11	0.65	-0.46	-0.46
8,995.00	87.93	87.23	8,042.04	-6.65	1,229.98	1,229.97	1.23	0.27	-1.20
9,091.00	91.54	87.67	8,042.48	-2.38	1,325.87	1,325.87	3.79	3.76	0.46
9,186.00	90.75	90.21	8,040.58	-0.63	1,420.83	1,420.83	2.80	-0.83	2.67
9,281.00	89.69	88.28	8,040.22	0.63	1,515.81	1,515.81	2.32	-1.12	-2.03
9,377.00	89.77	87.84	8,040.67	3.88	1,611.76	1,611.76	0.47	0.08	-0.46
9,473.00	89.78	91.01	8,041.05	4.84	1,707.74	1,707.74	3.30	0.01	3.30
9,568.00	89.52	91.58	8,041.63	2.69	1,802.71	1,802.71	0.66	-0.27	0.60
9,664.00	89.34	89.60	8,042.58	1.70	1,898.70	1,898.70	2.07	-0.19	-2.06
9,759.00	89.52	88.72	8,043.53	3.10	1,993.68	1,993.68	0.95	0.19	-0.93
9,855.00	89.52	88.72	8,044.33	5.24	2,089.65	2,089.66	0.00	0.00	0.00
9,950.00	89.87	90.30	8,044.84	6.05	2,184.65	2,184.65	1.70	0.37	1.66
10,046.00	90.04	89.51	8,044.91	6.21	2,280.65	2,280.65	0.84	0.18	-0.82
10,141.00	89.96	89.42	8,044.91	7.10	2,375.64	2,375.65	0.13	-0.08	-0.09
10,237.00	90.17	89.52	8,044.81	7.99	2,471.64	2,471.64	0.24	0.22	0.10
10,332.00	90.66	89.78	8,044.12	8.57	2,566.63	2,566.64	0.58	0.52	0.27
10,428.00	90.66	89.69	8,043.01	9.01	2,662.62	2,662.63	0.09	0.00	-0.09
10,523.00	89.34	89.42	8,043.01	9.75	2,757.62	2,757.63	1.42	-1.39	-0.28
10,714.00	87.05	88.72	8,049.03	12.85	2,948.49	2,948.50	1.25	-1.20	-0.37
10,810.00	86.79	88.81	8,054.19	14.91	3,044.32	3,044.34	0.29	-0.27	0.09
10,906.00	87.67	91.09	8,058.83	15.00	3,140.21	3,140.22	2.54	0.92	2.38
11,002.00	87.58	90.65	8,062.80	13.54	3,236.11	3,236.13	0.47	-0.09	-0.46
11,098.00	87.67	90.92	8,066.78	12.23	3,332.02	3,332.03	0.30	0.09	0.28
11,194.00	86.70	91.18	8,071.50	10.47	3,427.89	3,427.90	1.05	-1.01	0.27
11,290.00	86.53	90.65	8,077.17	8.94	3,523.71	3,523.71	0.58	-0.18	-0.55

Company:	EOG Resources	Local Co-ordinate Reference:	Well Parkway "23" State Com #6H
Project:	Eddy County, NM (NAD27 NME)	TVD Reference:	RF @ 3328.10usft (Precision #523)
Site:	Parkway "23" State Com #6H	MD Reference:	RF @ 3328.10usft (Precision #523)
Well:	Parkway "23" State Com #6H	North Reference:	Grid
Wellbore:	OH - Job #32D0312299	Survey Calculation Method:	Minimum Curvature
Design:	Actual	Database:	EDM 5000.1 Single User Db

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
11,389.00	88.02	90.13	8,081.87	8.27	3,622.59	3,622.60	1.59	1.51	-0.53
11,482.00	90.40	89.42	8,083.15	8.63	3,715.57	3,715.58	2.67	2.56	-0.76
11,578.00	90.66	88.81	8,082.27	10.11	3,811.56	3,811.57	0.69	0.27	-0.64
11,673.00	90.84	88.46	8,081.02	12.38	3,906.52	3,906.53	0.41	0.19	-0.37
11,769.00	91.01	89.42	8,079.47	14.15	4,002.49	4,002.51	1.02	0.18	1.00
11,865.00	91.01	89.42	8,077.78	15.12	4,098.47	4,098.49	0.00	0.00	0.00
11,961.00	90.84	89.69	8,076.23	15.87	4,194.46	4,194.47	0.33	-0.18	0.28
12,055.00	91.01	90.39	8,074.71	15.80	4,288.44	4,288.46	0.77	0.18	0.74
12,247.00	91.98	90.57	8,069.70	14.20	4,480.37	4,480.38	0.51	0.51	0.09
12,343.00	92.33	89.86	8,066.09	13.84	4,576.30	4,576.31	0.82	0.36	-0.74
12,439.00	91.63	91.09	8,062.78	13.04	4,672.24	4,672.25	1.47	-0.73	1.28
12,535.00	91.54	90.57	8,060.12	11.65	4,768.19	4,768.20	0.55	-0.09	-0.54
12,581.00	91.45	91.09	8,058.92	10.98	4,814.17	4,814.18	1.15	-0.20	1.13
Last MWD Survey									
12,636.00	91.45	91.09	8,057.53	9.94	4,869.14	4,869.15	0.00	0.00	0.00
Projection to bit									

Design Annotations

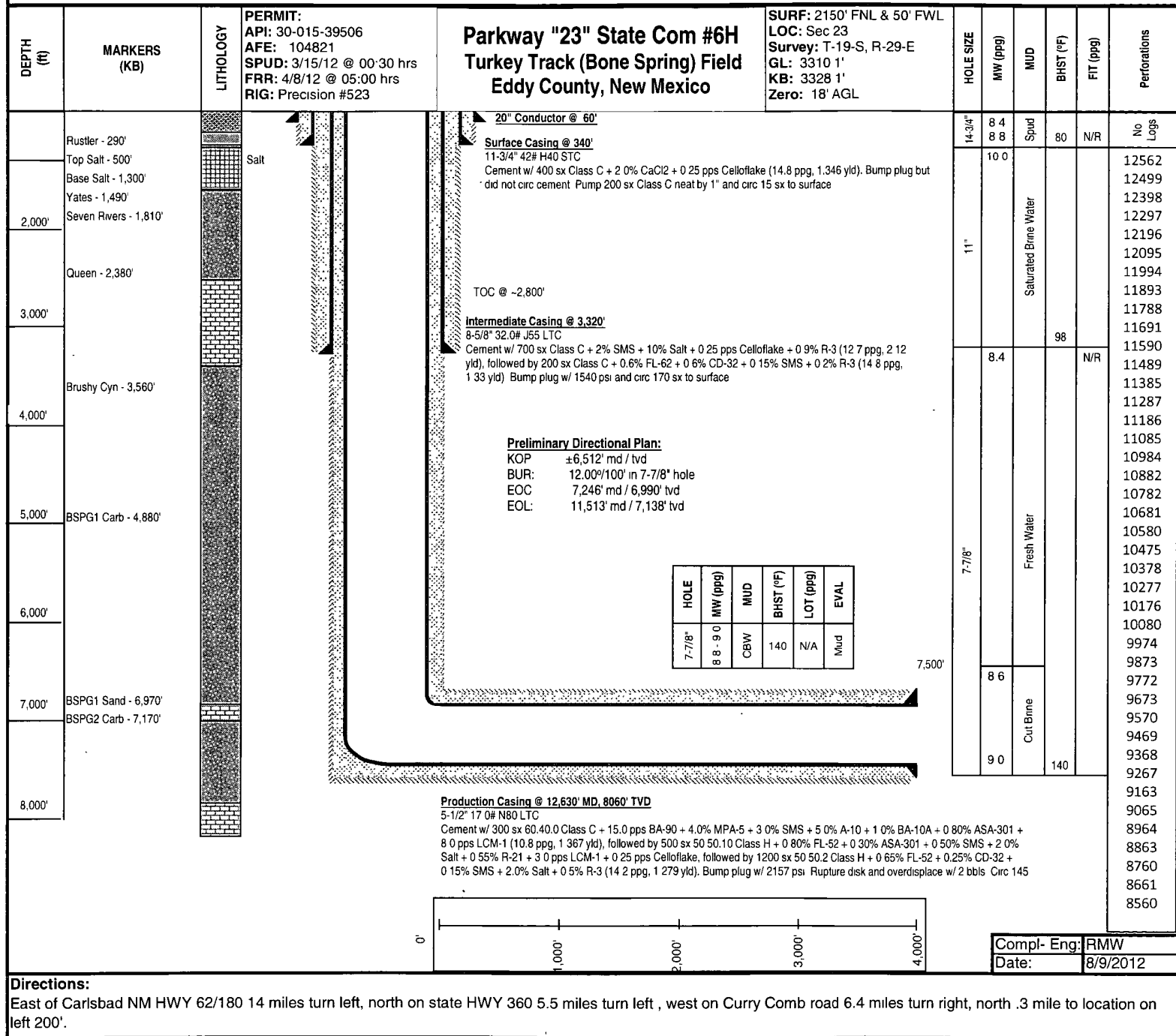
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
239.00	238.95	3.43	-2.28	Gyro Tie-in
12,581.00	8,058.92	10.98	4,814.17	Last MWD Survey
12,636.00	8,057.53	9.94	4,869.14	Projection to bit

Checked By: _____

Approved By: _____

Date: _____

COMPLETED WELLBORE



Directions:

East of Carlsbad NM HWY 62/180 14 miles turn left, north on state HWY 360 5.5 miles turn left, west on Curry Comb road 6.4 miles turn right, north .3 mile to location on left 200'.