



EOG Resources, Inc.

Eddy County

Brazos B 11 Fee #2

Brazos B 11 Fee

OH

Survey: MWD #1

Pathfinder X & Y Survey Report

21 November, 2008

PATHFINDER
ENERGY SERVICES

36 8/15 34482



Pathfinder Energy Services
Pathfinder X & Y Survey Report



Company:	EOG Resources, Inc.	Local Co-ordinate Reference:	Well Brazos B 11 Fee
Project:	Eddy County	TVD Reference:	Well #1 @ 3588.70ft (JL Plan)
Site:	Brazos B 11 Fee #2	MD Reference:	Well #1 @ 3588.70ft (JL Plan)
Well:	Brazos B 11 Fee	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	Midland DB

Project		Eddy County	
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		Brazos B 11 Fee #2									
Site Position:		Northing:		702,713.800 ft		Latitude:		32° 55' 53.927 N			
From:		Map		Easting:		433,257.000 ft		Longitude:		104° 33' 3.114 W	
Position Uncertainty:		0.00 ft		Slot Radius:		"		Grid Convergence:		-0 12 °	

Well	Brazos B 11 Fee					
Well Position	+N/-S	0.00 ft	Northing:	702,713.800 ft	Latitude:	32° 55' 53.927 N
	+E/-W	0.00 ft	Easting:	433,257.000 ft	Longitude:	104° 33' 3.114 W
Position Uncertainty		0.00 ft	Wellhead Elevation:	ft	Ground Level:	3,569.70 ft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	11/11/2008	8.39	60.74	49,240

Design	OH			
Audit Notes:				
Version:	1.0	Phase:	ACTUAL	Tie On Depth: 0.00
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W	Direction
	(ft)	(ft)	(ft)	(°)
	0.00	0.00	0.00	271.80



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Design: OH

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Survey Program		Date 11/21/2008			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
100.00	3,100.00	GYRO (OH)	NS-GYRO-MS	North sensing gyrocompassing m/s	
3,200.00	8,630.00	MWD #1 (OH)	MWD	MWD - Standard	

Survey											
MD (ft)	Inc (°)	Azi (°)	TVD (ft)	TVDSS (ft)	N/S (ft)	E/W (ft)	V. Sec (ft)	DLeg (°/100ft)	Northing (ft)	Easting (ft)	
3,100.00	0 20	263.42	3,099.86	-488.84	-14.75	-18.55	18.08	0.00	702,699.05	433,238.45	
3,200.00	0 26	244.48	3,199.85	-388.85	-14.86	-18.93	18.45	0 10	702,698.94	433,238.07	
3,394.00	0 09	300.28	3,393.85	-194.85	-14.98	-19.46	18.98	0 11	702,698.82	433,237.54	
3,549.00	0 35	42.99	3,548.85	-39.85	-14.57	-19.24	18.77	0.25	702,699.23	433,237.76	
3,734.00	1.06	72.43	3,733.84	145.14	-13.64	-17.22	16.79	0.42	702,700.16	433,239.78	
3,858.00	0 44	41.83	3,857.83	269.13	-12.94	-15.81	15.40	0.58	702,700.86	433,241.19	
3,889.00	2 64	291.56	3,888.82	300.12	-12.59	-16.40	15.99	9.11	702,701.21	433,240.60	
3,920.00	6 16	289.49	3,919.72	331.02	-11.77	-18.63	18.25	11.36	702,702.03	433,238.37	
3,950.00	9.58	289.14	3,949.43	360.73	-10.41	-22.51	22.17	11.40	702,703.39	433,234.49	
3,981.00	13 01	288.15	3,979.83	391.13	-8.48	-28.26	27.98	11.08	702,705.32	433,228.74	
4,012.00	16.44	287.53	4,009.81	421.11	-6.07	-35.76	35.55	11 08	702,707.73	433,221.24	
4,043.00	19.43	287.78	4,039.30	450.60	-3.18	-44.86	44.74	9 65	702,710.62	433,212.14	
4,074.00	21.90	287.93	4,068.30	479.60	0.18	-55.27	55.25	7.97	702,713.98	433,201.73	
4,105.00	24 36	287.55	4,096.81	508.11	3.89	-66.87	66.96	7.95	702,717.69	433,190.13	
4,136.00	26.82	285.22	4,124.76	536.06	7.65	-79.71	79.91	8.57	702,721.45	433,177.29	
4,167.00	29 19	284.45	4,152.13	563.43	11.37	-93.78	94.09	7.73	702,725.17	433,163.22	
4,198.00	31.30	280.09	4,178.91	590.21	14.67	-109.04	109.44	9.82	702,728.47	433,147.96	
4,229.00	34.21	282.22	4,204.98	616.28	17.93	-125.48	125.99	10.10	702,731.73	433,131.52	
4,259.00	36.67	282.01	4,229.42	640.72	21.58	-142.49	143.10	8.21	702,735.38	433,114.51	
4,291.00	39 22	282.69	4,254.66	665.96	25.79	-161.71	162.44	8.08	702,739.59	433,095.29	
4,321.00	42.12	282.58	4,277.41	688.71	30.07	-180.79	181.64	9.67	702,743.87	433,076.21	



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Database: Midland DB

Survey

MD (ft)	Inc (°)	Azi (°)	TVD (ft)	TVDSS (ft)	N/S (ft)	E/W (ft)	V. Sec (ft)	DLeg (°/100ft)	Northing (ft)	Easting (ft)
4,352.00	44.05	283.45	4,300.05	711.35	34.84	-201.42	202.41	6.51	702,748.64	433,055.58
4,383.00	45.64	283.67	4,322.03	733.33	39.96	-222.67	223.81	5.15	702,753.76	433,034.33
4,414.00	46.34	283.90	4,343.56	754.86	45.28	-244.32	245.62	2.32	702,759.08	433,012.68
4,445.00	48.54	284.12	4,364.53	775.83	50.80	-266.47	267.94	7.12	702,764.60	432,990.53
4,476.00	50.83	284.18	4,384.59	795.89	56.58	-289.39	291.03	7.39	702,770.38	432,967.61
4,507.00	52.94	284.29	4,403.72	815.02	62.58	-313.03	314.84	6.81	702,776.38	432,943.97
4,538.00	55.40	283.86	4,421.86	833.16	68.69	-337.41	339.40	8.01	702,782.49	432,919.59
4,569.00	57.86	283.47	4,438.91	850.21	74.80	-362.56	364.73	8.00	702,788.60	432,894.44
4,600.00	61.64	283.20	4,454.53	865.83	80.98	-388.62	390.97	12.22	702,794.78	432,868.38
4,631.00	65.95	282.65	4,468.21	879.51	87.20	-415.72	418.25	13.99	702,801.00	432,841.28
4,661.00	70.70	282.72	4,479.29	890.59	93.32	-442.91	445.62	15.83	702,807.12	432,814.09
4,692.00	75.01	283.64	4,488.43	899.73	100.07	-471.74	474.65	14.19	702,813.87	432,785.26
4,723.00	76.24	284.00	4,496.12	907.42	107.24	-500.90	504.02	4.12	702,821.04	432,756.10
4,754.00	77.03	280.79	4,503.29	914.59	113.72	-530.36	533.67	10.39	702,827.52	432,726.64
4,785.00	78.26	277.05	4,509.93	921.23	118.41	-560.27	563.71	12.43	702,832.21	432,696.73
4,816.00	79.40	273.46	4,515.93	927.23	121.19	-590.55	594.06	11.94	702,834.99	432,666.45
4,847.00	80.99	270.05	4,521.21	932.51	122.12	-621.07	624.60	11.99	702,835.92	432,635.93
4,878.00	82.66	269.17	4,525.62	936.92	121.92	-651.76	655.26	6.08	702,835.72	432,605.24
4,909.00	83.45	268.92	4,529.37	940.67	121.40	-682.52	686.00	2.67	702,835.20	432,574.48
4,940.00	83.36	269.21	4,532.93	944.23	120.90	-713.31	716.76	0.97	702,834.70	432,543.69
4,971.00	83.36	268.80	4,536.52	947.82	120.37	-744.10	747.52	1.31	702,834.17	432,512.90
5,002.00	85.21	269.50	4,539.60	950.90	119.91	-774.94	778.33	6.38	702,833.71	432,482.06
5,033.00	87.58	269.72	4,541.55	952.85	119.70	-805.88	809.24	7.68	702,833.50	432,451.12
5,126.00	92.07	269.64	4,541.84	953.14	119.18	-898.85	902.15	4.83	702,832.98	432,358.15
5,218.00	91.19	270.33	4,539.22	950.52	119.15	-990.81	994.07	1.22	702,832.95	432,266.19
5,311.00	91.28	271.05	4,537.21	948.51	120.27	-1,083.78	1,087.03	0.78	702,834.07	432,173.22
5,404.00	91.89	271.65	4,534.64	945.94	122.46	-1,176.72	1,179.99	0.92	702,836.26	432,080.28



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Survey

MD (ft)	Inc (°)	Azi (°)	TVD (ft)	TVDSS (ft)	N/S (ft)	E/W (ft)	V. Sec (ft)	DLeg (°/100ft)	Northing (ft)	Easting (ft)
5,497.00	92.52	271.02	4,531.06	942.36	124.63	-1,269.63	1,272.92	0.96	702,838.43	431,987.37
5,590.00	89.16	269.47	4,529.70	941.00	125.03	-1,362.60	1,365.86	3.98	702,838.83	431,894.40
5,683.00	90.22	269.74	4,530.20	941.50	124.39	-1,455.60	1,458.78	1.18	702,838.19	431,801.40
5,776.00	89.78	269.02	4,530.20	941.50	123.38	-1,548.59	1,551.70	0.91	702,837.18	431,708.41
5,867.00	90.84	269.75	4,529.71	941.01	122.40	-1,639.58	1,642.62	1.41	702,836.20	431,617.42
5,961.00	91.63	269.66	4,527.69	938.99	121.92	-1,733.56	1,736.53	0.85	702,835.72	431,523.44
6,055.00	90.31	271.00	4,526.09	937.39	122.46	-1,827.54	1,830.48	2.00	702,836.26	431,429.46
6,149.00	91.63	271.31	4,524.50	935.80	124.35	-1,921.50	1,924.46	1.44	702,838.15	431,335.50
6,242.00	91.71	270.69	4,521.79	933.09	125.98	-2,014.45	2,017.41	0.67	702,839.78	431,242.55
6,336.00	88.99	271.89	4,521.22	932.52	128.09	-2,108.41	2,111.40	3.16	702,841.89	431,148.59
6,429.00	90.04	273.20	4,522.01	933.31	132.22	-2,201.31	2,204.38	1.81	702,846.02	431,055.69
6,523.00	91.71	274.42	4,520.57	931.87	138.47	-2,295.09	2,298.31	2.20	702,852.27	430,961.91
6,617.00	91.19	272.85	4,518.19	929.49	144.42	-2,388.87	2,392.23	1.76	702,858.22	430,868.13
6,710.00	90.22	272.91	4,517.05	928.35	149.10	-2,481.74	2,485.20	1.05	702,862.90	430,775.26
6,803.00	91.36	273.40	4,515.76	927.06	154.21	-2,574.59	2,578.16	1.33	702,868.01	430,682.41
6,896.00	91.63	273.62	4,513.34	924.64	159.91	-2,667.38	2,671.09	0.37	702,873.71	430,589.62
6,991.00	92.51	274.46	4,509.91	921.21	166.59	-2,762.09	2,765.96	1.28	702,880.39	430,494.91
7,084.00	90.48	273.57	4,507.48	918.78	173.10	-2,854.82	2,858.85	2.38	702,886.90	430,402.18
7,178.00	90.84	274.63	4,506.40	917.70	179.82	-2,948.57	2,952.76	1.19	702,893.62	430,308.43
7,272.00	91.63	274.15	4,504.37	915.67	187.02	-3,042.27	3,046.65	0.98	702,900.82	430,214.73
7,366.00	91.10	272.97	4,502.13	913.43	192.85	-3,136.06	3,140.57	1.38	702,906.65	430,120.94
7,458.00	90.75	272.02	4,500.65	911.95	196.86	-3,227.96	3,232.55	1.10	702,910.66	430,029.04
7,553.00	88.20	270.25	4,501.52	912.82	198.74	-3,322.93	3,327.53	3.27	702,912.54	429,934.07
7,646.00	87.93	270.30	4,504.66	915.96	199.18	-3,415.87	3,420.44	0.30	702,912.98	429,841.13
7,739.00	87.67	270.15	4,508.23	919.53	199.55	-3,508.80	3,513.34	0.32	702,913.35	429,748.20
7,833.00	88.72	269.65	4,511.19	922.49	199.38	-3,602.76	3,607.24	1.24	702,913.18	429,654.24
7,927.00	88.72	269.14	4,513.29	924.59	198.39	-3,696.73	3,701.13	0.54	702,912.19	429,560.27



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8,019.00	89.52	269.25	4,514.70	926.00	197.10	-3,788.71	3,793.03	0.88	702,910.90	429,468.29
8,111.00	93.39	270.28	4,512.37	923.67	196.72	-3,880.66	3,884.92	4.35	702,910.52	429,376.34
8,205.00	94.35	270.57	4,506.02	917.32	197.42	-3,974.44	3,978.68	1.07	702,911.22	429,282.56
8,298.00	88.11	266.46	4,504.03	915.33	195.01	-4,067.32	4,071.44	8.03	702,908.81	429,189.68
8,423.00	89.43	266.35	4,506.71	918.01	187.17	-4,192.04	4,195.85	1.06	702,900.97	429,064.96
8,554.00	89.87	267.47	4,507.51	918.81	180.11	-4,322.85	4,326.37	0.92	702,893.91	428,934.15
8,630.00	89.87	267.47	4,507.68	918.98	176.75	-4,398.77	4,402.15	0.00	702,890.55	428,858.23

Projection to Bit @ 8630'MD

Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
PBHL(Brazos B 11) - survey misses by 60.84ft at 8630.00ft MD (4507.68 TVD, 176.75 N, -4398.77 E) - Point	0.00	0.00	4,514.70	139.30	-4,446.20	702,853.100	428,810.800	32° 55' 55.212 N	104° 33' 55.286 W

Survey Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
+N/-S (ft)	+E/-W (ft)			
8,630.00	4,507.68	176.75	-4,398.77	Projection to Bit @ 8630'MD

Checked By: _____ Approved By: _____ Date: _____

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-102
Revised October 12, 2005
Submit to Appropriate District Office
State Lease- 4 Copies
Fee Lease- 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-015-34482	Pool Code 75260	Pool Name Cottonwood Creek ; We West (Gas)
Property Code 35318	Property Name BRAZOS "B" 11 FEE	Well Number 2H
OGRID No. 7377	Operator Name EOG RESOURCES, INC.	Elevation 3569.7'

Surface Location

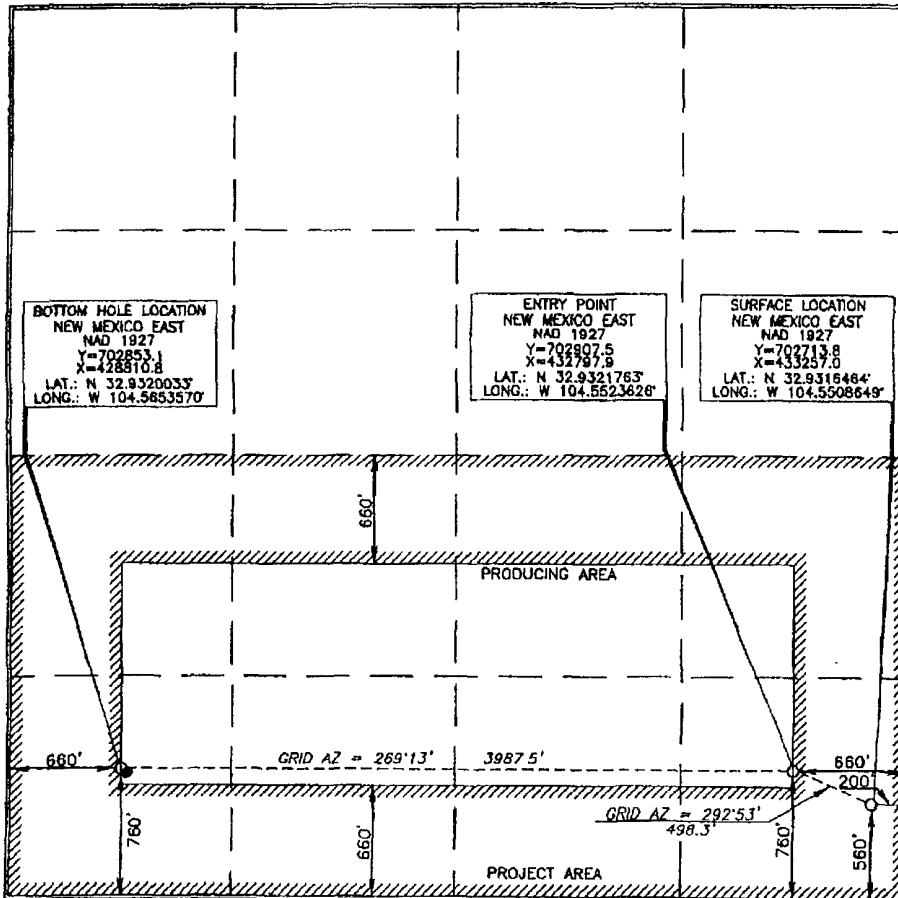
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	11	16 SOUTH	24 EAST, N.M.P.M.		560'	SOUTH	200'	EAST	EDDY

Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	11	16 SOUTH	24 EAST, N.M.P.M.		736	SOUTH	681	WEST	EDDY

Dedicated Acres 320	Joint or Infill	Consolidation Code	Order No.
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No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.



OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Donny G. Glanton 7/9/08
Signature Date
Donny G. Glanton
Printed Name

SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was located from field notes and actual survey made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Tommy J. Carl 7/9/2008
Date of Survey
15079
Certificate Number
Professional Surveyor
WO# 080702WL (KA)