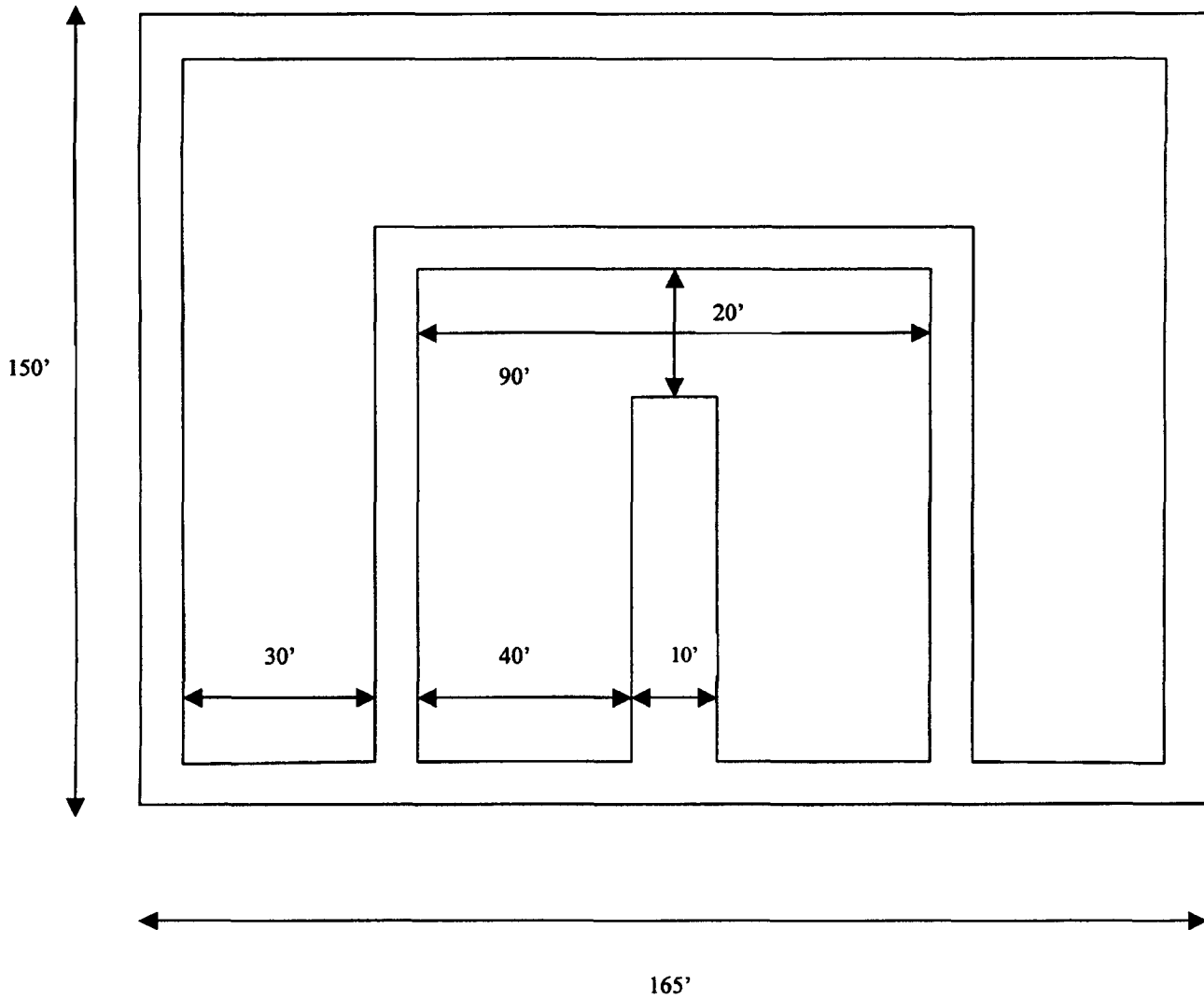


# New Mexico Double Horseshoe Reserve Pit Design

30-015<sup>1</sup> ~~706~~ 35406



Approximate Inside Reserve Volume: 4500 bbls  
Approximate Outside Reserve Volume: 5800 bbls



(432) 686-3642 Office  
(432) 770-0602 Cell  
Donny\_Glanton@eogresources.com

**EOG Resources, Inc.**  
P.O. Box 2267  
Midland, TX 79702  
(432) 686-3600

January 26, 2007

OCD-Artesia  
Att: Mr. Bryan Arrent  
1301 W. Grand Avenue  
Artesia, NM 88210



**Re: MERAMEC "C" 4 FEE No. 1H**

Dear Mr. Arrent:

As per the submittal comments of the C-101 (Electronic Permitting Application) for the above captioned well, please find the following additional information submitted for your review and processing.

- Well Plat
- Detailed Casing
- Mud
- Cement
- Drilling Plan
- H<sub>2</sub>S Letter

Should you have any additional questions, please feel to give me a call.

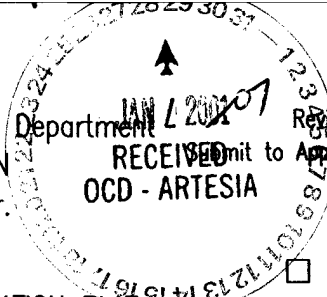
Thanks and best regards.

Very truly yours,

Donny G. Glanton  
Sr. ROW Lease Operations Representative

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 <b>30-015-35406</b>	Pool Code 75250	Pool Name Cottonwood Creek Wolfcamp (Gas)
Property Code <b>36046</b>	Property Name <b>MERAMEC C "4" FEE</b>	Well Number <b>1H</b>
OGRID No. 7377	Operator Name <b>EOG RESOURCES, INC.</b>	Elevation <b>3469'</b>

Surface Location

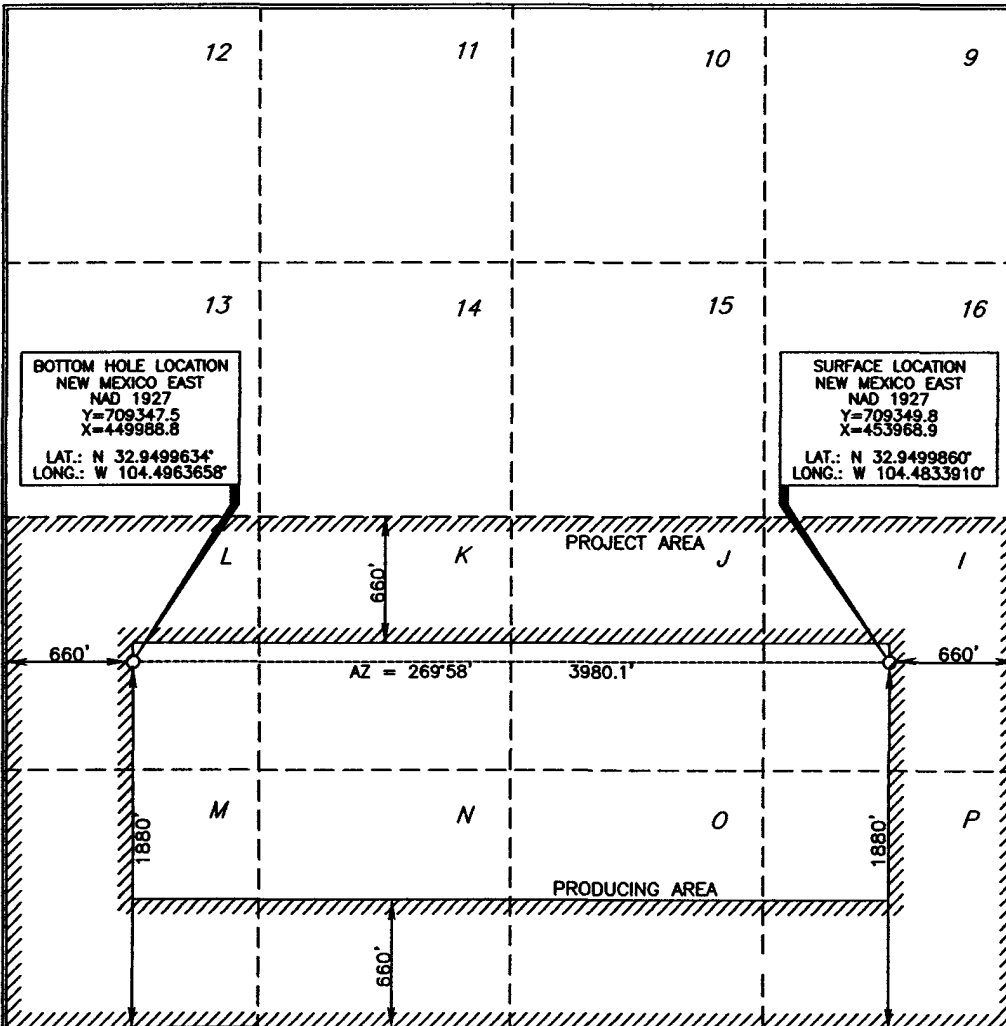
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
<b>I</b>	<b>4</b>	<b>16 SOUTH</b>	<b>25 EAST, N.M.P.M.</b>		<b>1880</b>	<b>SOUTH</b>	<b>660</b>	<b>EAST</b>	<b>EDDY</b>

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
<b>L</b>	<b>4</b>	<b>16 SOUTH</b>	<b>25 EAST, N.M.P.M.</b>		<b>1880</b>	<b>SOUTH</b>	<b>660</b>	<b>WEST</b>	<b>EDDY</b>

Dedicated Acres <b>320</b>	Joint or Infill	Consolidation Code	Order No.
-------------------------------	-----------------	--------------------	-----------

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* 1/26/07  
Signature Date

Donny G. Glanton  
Printed Name

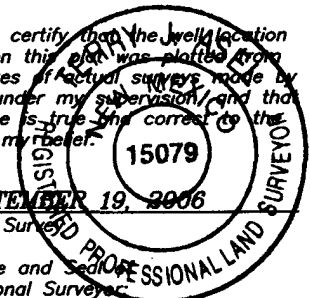
SURVEYOR CERTIFICATION

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

SEPTEMBER 19, 2006  
Date of Survey

*Terry J. Abel*  
Signature and Seal of Professional Surveyor

*Terry J. Abel* 9/21/2006  
Certificate Number 15079



**Permit Information:**

Well Name: Meramec C 4 Fee #1H

## Location:

SL 1880' FSL & 660' FEL, Section 4, T-16-S, R-25-E, Eddy Co., N.M.  
 BHL 1880' FSL & 660' FWL, Section 4, T-16-S, R-25-E, Eddy Co., N.M.

**Casing Program:**

Casing	Setting Depth	Hole Size	Casing Size	Casing Weight	Casing Grade	Desired TOC
Surface	950'	12-1/4"	8-5/8"	32#	J-55	Surface
Production	8,550'	7-7/8"	5 1/2"	17#	N-80	Surface

**Cement Program:**

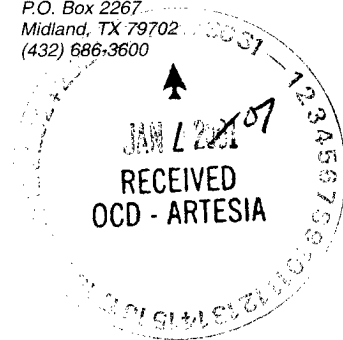
Depth	No. Sacks	Slurries:
950'	150	Lead: Premium Plus + 2% CaCl <sub>2</sub> + 3% Econolite + 1/4 pps Flocele
	175	Tail: Premium Plus + 2% CaCl <sub>2</sub> + 1/4 pps Flocele
8,550'	400	Lead: Interfill C + 1/4 pps Flocele
	300	Tail: Premium Cement + 100% Acid Soluble Additive + 0.6% Halad®-344 + 0.8% Econolite + 0.2% HR-55

**Mud Program:**

Depth	Type	Weight (ppg)	Viscosity	Water Loss
0 - 950'	Fresh - Gel	8.6-8.8	55-65	N/C
950' - 4,293'	Cut Brine	8.8-9.2	28-34	N/C
4,293' - 8,550'	Polymer (Lateral)	9.0-9.4	40-45	10-20



**EOG Resources, Inc.**  
P.O. Box 2267  
Midland, TX 79702  
(432) 686-3600



January 25, 2007

State of New Mexico Energy, Minerals and Natural Resources  
Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

To Whom It May Concern:

I am writing to request a waiver for the inclusion of an H<sub>2</sub>S Contingency Plan for the Meramec C 4 Fee #1H. The current plan is to complete this well in the Wolfcamp, which is sweet, and I do not anticipate encountering any H<sub>2</sub>S bearing formations during drilling operations.

Sincerely,

A handwritten signature in black ink, appearing to read "Jason LaGrega".

Jason LaGrega  
Drilling Engineer

# EOG RESOURCES INC.

## Planning Report

<b>Database:</b>	EDM	<b>Local Co-ordinate Reference:</b>	Well Meramec C 4 Fee #1H
<b>Company:</b>	EOG - Midland (3)	<b>TVD Reference:</b>	WELL @ 3487.00ft (Original Well Elev)
<b>Project:</b>	Thames	<b>MD Reference:</b>	WELL @ 3487.00ft (Original Well Elev)
<b>Site:</b>	Meramec C 4 Fee #1H	<b>North Reference:</b>	Grid
<b>Well:</b>	Meramec C 4 Fee #1H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Meramec C 4 Fee #1H		
<b>Design:</b>	Original Plan		

<b>Project</b> Thames	
<b>Map System:</b>	US State Plane 1927 (Exact solution)
<b>Geo Datum:</b>	NAD 1927 (NADCON CONUS)
<b>Map Zone:</b>	New Mexico East 3001
<b>System Datum:</b>	Ground Level

<b>Site</b> Meramec C 4 Fee #1H		
<b>Site Position:</b>	<b>Northing:</b> 709,349.80 ft	<b>Latitude:</b> 32° 56' 59.949 N
<b>From:</b> Map	<b>Easting:</b> 453,968.90 ft	<b>Longitude:</b> 104° 29' 0.207 W
<b>Position Uncertainty:</b> 0.00 ft	<b>Slot Radius:</b> "	<b>Grid Convergence:</b> -0.08 °

<b>Well</b> Meramec C 4 Fee #1H			
<b>Well Position</b> +N/-S	0.00 ft	<b>Northing:</b> 709,349.80 ft	<b>Latitude:</b> 32° 56' 59.949 N
+E/-W	0.00 ft	<b>Easting:</b> 453,968.90 ft	<b>Longitude:</b> 104° 29' 0.207 W
<b>Position Uncertainty</b>	0.00 ft	<b>Wellhead Elevation:</b> ft	<b>Ground Level:</b> 3,469.00 ft

<b>Wellbore</b> Meramec C 4 Fee #1H					
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2005	1/25/2007	8.56	60.78	49,344

<b>Design</b> Original Plan				
<b>Audit Notes:</b>				
<b>Version:</b>	<b>Phase:</b> PROTOTYPE	<b>Tie On Depth:</b> 0.00		
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	4,689.00	0.00	0.00	269.97

<b>Plan Sections</b>										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate ("/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
4,293.00	0.00	0.00	4,293.00	0.00	0.00	0.00	0.00	0.00	0.00	
5,050.12	90.00	269.96	4,775.00	-0.34	-482.00	11.89	11.89	0.00	269.96	
6,068.12	90.00	269.96	4,775.00	-1.05	-1,500.00	0.00	0.00	0.00	0.00	
6,135.23	92.01	269.97	4,773.82	-1.09	-1,567.09	3.00	3.00	0.02	0.32	
8,549.29	92.01	269.97	4,689.02	-2.30	-3,979.66	0.00	0.00	0.00	0.00	
8,549.73	92.00	269.97	4,689.00	-2.30	-3,980.10	3.00	-2.99	-0.27	-174.77	BHL (Meramec C #

# EOG RESOURCES INC.

## Planning Report

**Database:** EDM  
**Company:** EOG - Midland (3)  
**Project:** Thames  
**Site:** Meramec C 4 Fee #1H  
**Well:** Meramec C 4 Fee #1H  
**Wellbore:** Meramec C 4 Fee #1H  
**Design:** Original Plan

**Local Co-ordinate Reference:** Well Meramec C 4 Fee #1H  
**TVD Reference:** WELL @ 3487.00ft (Original Well Elev)  
**MD Reference:** WELL @ 3487.00ft (Original Well Elev)  
**North Reference:** Grid  
**Survey Calculation Method:** Minimum Curvature

### Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00
1,100.00	0.00	0.00	1,100.00	0.00	0.00	0.00	0.00	0.00	0.00
1,200.00	0.00	0.00	1,200.00	0.00	0.00	0.00	0.00	0.00	0.00
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00	0.00
1,400.00	0.00	0.00	1,400.00	0.00	0.00	0.00	0.00	0.00	0.00
1,500.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00	0.00
1,600.00	0.00	0.00	1,600.00	0.00	0.00	0.00	0.00	0.00	0.00
1,700.00	0.00	0.00	1,700.00	0.00	0.00	0.00	0.00	0.00	0.00
1,800.00	0.00	0.00	1,800.00	0.00	0.00	0.00	0.00	0.00	0.00
1,900.00	0.00	0.00	1,900.00	0.00	0.00	0.00	0.00	0.00	0.00
2,000.00	0.00	0.00	2,000.00	0.00	0.00	0.00	0.00	0.00	0.00
2,100.00	0.00	0.00	2,100.00	0.00	0.00	0.00	0.00	0.00	0.00
2,200.00	0.00	0.00	2,200.00	0.00	0.00	0.00	0.00	0.00	0.00
2,300.00	0.00	0.00	2,300.00	0.00	0.00	0.00	0.00	0.00	0.00
2,400.00	0.00	0.00	2,400.00	0.00	0.00	0.00	0.00	0.00	0.00
2,500.00	0.00	0.00	2,500.00	0.00	0.00	0.00	0.00	0.00	0.00
2,600.00	0.00	0.00	2,600.00	0.00	0.00	0.00	0.00	0.00	0.00
2,700.00	0.00	0.00	2,700.00	0.00	0.00	0.00	0.00	0.00	0.00
2,800.00	0.00	0.00	2,800.00	0.00	0.00	0.00	0.00	0.00	0.00
2,900.00	0.00	0.00	2,900.00	0.00	0.00	0.00	0.00	0.00	0.00
3,000.00	0.00	0.00	3,000.00	0.00	0.00	0.00	0.00	0.00	0.00
3,100.00	0.00	0.00	3,100.00	0.00	0.00	0.00	0.00	0.00	0.00
3,200.00	0.00	0.00	3,200.00	0.00	0.00	0.00	0.00	0.00	0.00
3,300.00	0.00	0.00	3,300.00	0.00	0.00	0.00	0.00	0.00	0.00
3,400.00	0.00	0.00	3,400.00	0.00	0.00	0.00	0.00	0.00	0.00
3,500.00	0.00	0.00	3,500.00	0.00	0.00	0.00	0.00	0.00	0.00
3,600.00	0.00	0.00	3,600.00	0.00	0.00	0.00	0.00	0.00	0.00
3,700.00	0.00	0.00	3,700.00	0.00	0.00	0.00	0.00	0.00	0.00
3,800.00	0.00	0.00	3,800.00	0.00	0.00	0.00	0.00	0.00	0.00
3,900.00	0.00	0.00	3,900.00	0.00	0.00	0.00	0.00	0.00	0.00
4,000.00	0.00	0.00	4,000.00	0.00	0.00	0.00	0.00	0.00	0.00
4,100.00	0.00	0.00	4,100.00	0.00	0.00	0.00	0.00	0.00	0.00
4,200.00	0.00	0.00	4,200.00	0.00	0.00	0.00	0.00	0.00	0.00
4,293.00	0.00	0.00	4,293.00	0.00	0.00	0.00	0.00	0.00	0.00
4,300.00	0.83	269.96	4,300.00	0.00	-0.05	0.05	11.89	11.89	0.00
4,400.00	12.72	269.96	4,399.12	-0.01	-11.83	11.83	11.89	11.89	0.00
4,500.00	24.61	269.96	4,493.70	-0.03	-43.77	43.77	11.89	11.89	0.00
4,600.00	36.49	269.96	4,579.66	-0.07	-94.51	94.51	11.89	11.89	0.00
4,700.00	48.38	269.96	4,653.33	-0.11	-161.86	161.86	11.89	11.89	0.00
4,800.00	60.27	269.96	4,711.55	-0.17	-242.95	242.95	11.89	11.89	0.00
4,900.00	72.15	269.96	4,751.81	-0.23	-334.29	334.29	11.89	11.89	0.00
5,000.00	84.04	269.96	4,772.40	-0.30	-431.97	431.97	11.89	11.89	0.00
5,050.12	90.00	269.96	4,775.00	-0.34	-482.00	482.00	11.89	11.89	0.00
5,100.00	90.00	269.96	4,775.00	-0.37	-531.88	531.88	0.00	0.00	0.00

# EOG RESOURCES INC.

## Planning Report

<b>Database:</b>	EDM	<b>Local Co-ordinate Reference:</b>	Well Meramec C 4 Fee #1H
<b>Company:</b>	EOG - Midland (3)	<b>TVD Reference:</b>	WELL @ 3487.00ft (Original Well Elev)
<b>Project:</b>	Thames	<b>MD Reference:</b>	WELL @ 3487.00ft (Original Well Elev)
<b>Site:</b>	Meramec C 4 Fee #1H	<b>North Reference:</b>	Grid
<b>Well:</b>	Meramec C 4 Fee #1H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Meramec C 4 Fee #1H		
<b>Design:</b>	Original Plan		

### Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
5,200.00	90.00	269.96	4,775.00	-0.44	-631.88	631.88	0.00	0.00	0.00
5,300.00	90.00	269.96	4,775.00	-0.51	-731.88	731.88	0.00	0.00	0.00
5,400.00	90.00	269.96	4,775.00	-0.58	-831.88	831.88	0.00	0.00	0.00
5,500.00	90.00	269.96	4,775.00	-0.65	-931.88	931.88	0.00	0.00	0.00
5,600.00	90.00	269.96	4,775.00	-0.72	-1,031.88	1,031.88	0.00	0.00	0.00
5,700.00	90.00	269.96	4,775.00	-0.79	-1,131.88	1,131.88	0.00	0.00	0.00
5,800.00	90.00	269.96	4,775.00	-0.86	-1,231.88	1,231.88	0.00	0.00	0.00
5,900.00	90.00	269.96	4,775.00	-0.93	-1,331.88	1,331.88	0.00	0.00	0.00
6,000.00	90.00	269.96	4,775.00	-1.00	-1,431.88	1,431.88	0.00	0.00	0.00
6,068.12	90.00	269.96	4,775.00	-1.05	-1,500.00	1,500.00	0.00	0.00	0.00
6,100.00	90.96	269.97	4,774.73	-1.07	-1,531.87	1,531.87	3.00	3.00	0.02
6,135.23	92.01	269.97	4,773.82	-1.09	-1,567.09	1,567.09	3.00	3.00	0.02
6,200.00	92.01	269.97	4,771.55	-1.12	-1,631.82	1,631.82	0.00	0.00	0.00
6,300.00	92.01	269.97	4,768.03	-1.17	-1,731.76	1,731.76	0.00	0.00	0.00
6,400.00	92.01	269.97	4,764.52	-1.22	-1,831.70	1,831.70	0.00	0.00	0.00
6,500.00	92.01	269.97	4,761.01	-1.27	-1,931.64	1,931.64	0.00	0.00	0.00
6,600.00	92.01	269.97	4,757.49	-1.32	-2,031.58	2,031.58	0.00	0.00	0.00
6,700.00	92.01	269.97	4,753.98	-1.37	-2,131.51	2,131.51	0.00	0.00	0.00
6,800.00	92.01	269.97	4,750.47	-1.42	-2,231.45	2,231.45	0.00	0.00	0.00
6,900.00	92.01	269.97	4,746.95	-1.47	-2,331.39	2,331.39	0.00	0.00	0.00
7,000.00	92.01	269.97	4,743.44	-1.52	-2,431.33	2,431.33	0.00	0.00	0.00
7,100.00	92.01	269.97	4,739.93	-1.57	-2,531.27	2,531.27	0.00	0.00	0.00
7,200.00	92.01	269.97	4,736.42	-1.62	-2,631.20	2,631.21	0.00	0.00	0.00
7,300.00	92.01	269.97	4,732.90	-1.67	-2,731.14	2,731.14	0.00	0.00	0.00
7,400.00	92.01	269.97	4,729.39	-1.72	-2,831.08	2,831.08	0.00	0.00	0.00
7,500.00	92.01	269.97	4,725.88	-1.77	-2,931.02	2,931.02	0.00	0.00	0.00
7,600.00	92.01	269.97	4,722.36	-1.82	-3,030.96	3,030.96	0.00	0.00	0.00
7,700.00	92.01	269.97	4,718.85	-1.87	-3,130.90	3,130.90	0.00	0.00	0.00
7,800.00	92.01	269.97	4,715.34	-1.92	-3,230.83	3,230.83	0.00	0.00	0.00
7,900.00	92.01	269.97	4,711.82	-1.97	-3,330.77	3,330.77	0.00	0.00	0.00
8,000.00	92.01	269.97	4,708.31	-2.02	-3,430.71	3,430.71	0.00	0.00	0.00
8,100.00	92.01	269.97	4,704.80	-2.07	-3,530.65	3,530.65	0.00	0.00	0.00
8,200.00	92.01	269.97	4,701.29	-2.12	-3,630.59	3,630.59	0.00	0.00	0.00
8,300.00	92.01	269.97	4,697.77	-2.17	-3,730.53	3,730.53	0.00	0.00	0.00
8,400.00	92.01	269.97	4,694.26	-2.22	-3,830.46	3,830.46	0.00	0.00	0.00
8,500.00	92.01	269.97	4,690.75	-2.28	-3,930.40	3,930.40	0.00	0.00	0.00
8,549.29	92.01	269.97	4,689.02	-2.30	-3,979.66	3,979.66	0.00	0.00	0.00
8,549.73	92.00	269.97	4,689.00	-2.30	-3,980.10	3,980.10	3.00	-2.99	-0.27

### Targets

Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
BHL (Meramec C #1H) - hit/miss target - Shape - Point	0.00	0.00	4,689.00	-2.30	-3,980.10	709,347.50	449,988.80	32° 56' 59.868 N	104° 29' 46.916 W



WELL DETAILS: Meramec C 4 Fee #1H

			Ground Level:	3469.00			
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot	
0.00	0.00	709349.80	453968.90	32° 56' 59.949 N	104° 29' 0.207 W		

SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
4293.00	0.00	0.00	4293.00	0.00	0.00	0.00	0.00	0.00	
5050.12	90.00	269.96	4775.00	-0.34	-482.00	11.89	269.96	482.00	
6068.12	90.00	269.96	4775.00	-1.05	-1500.00	0.00	0.00	1500.00	
6135.23	92.01	269.97	4773.82	-1.09	-1567.09	3.00	0.32	1567.09	
8549.29	92.01	269.97	4689.02	-2.30	-3979.66	0.00	0.00	3979.66	
8549.73	92.00	269.97	4689.00	-2.30	-3980.10	3.00	-174.77	3980.10	BHL (Meramec C #1H)

