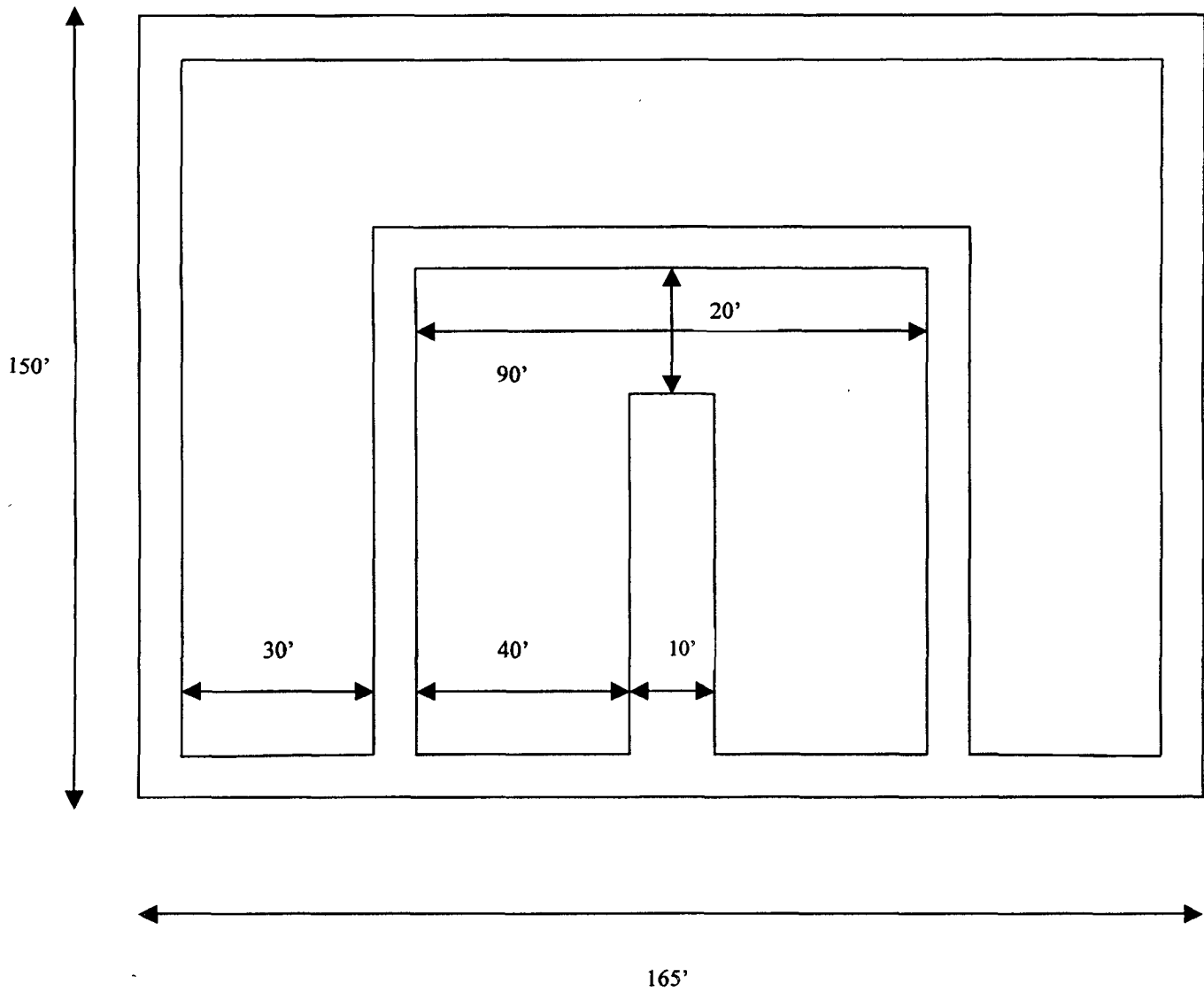


New Mexico Double Horseshoe Reserve Pit Design

30 005 64004



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



JAN 16 2008
OCD-ARTESIA

(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 14, 2008

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

Re: Mississippi B 31 Fee 2H

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
- H₂S Letter

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

Thanks and best regards.

Very truly yours,

A handwritten signature in black ink, appearing to read "Donny G. Glanton".

Donny G. Glanton
Sr. Lease Operations ROW 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-402
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	Pool Code	Pool Name
	75250	Cottonwood Creek ; Wolfcamp (Gas)
Property Code	Property Name	Well Number
	MISSISSIPPI "B" 31 FEE	2H
OGRID No.	Operator Name	Elevation
7377	EOG RESOURCES, INC.	3490'

Surface Location

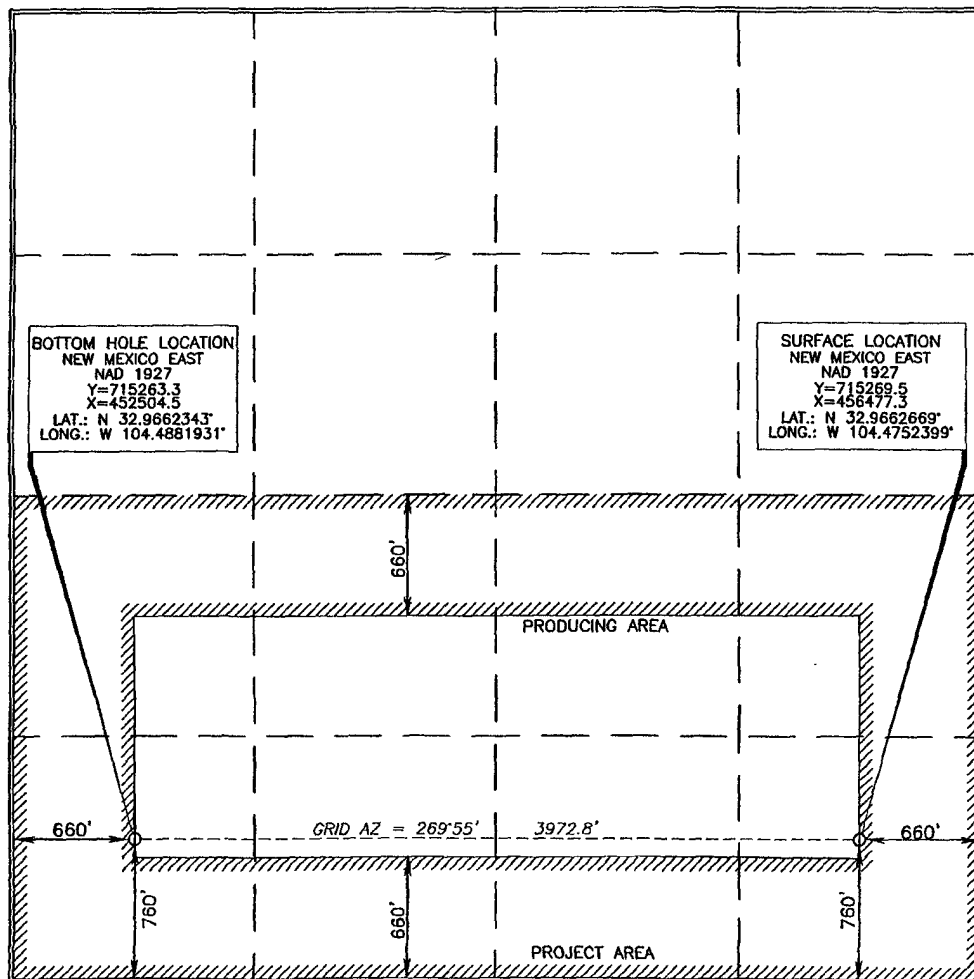
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	31	15 SOUTH	25 EAST, N.M.P.M.		760'	SOUTH	660'	EAST	CHAVES

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	31	15 SOUTH	25 EAST, N.M.P.M.		760'	SOUTH	660'	WEST	CHAVES

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
319.63			

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.

Don D. Mch 1/14/08
Signature Date
Donny G. Ganton
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.

15079
DECEMBER 10, 2007
Date of Survey
Signature and Seal of Professional Surveyor
Terry J. Abel 1/8/2008
Certificate Number 15079

WO# 071210WL (KA)

Permit Information:

Well Name: Mississippi B 31 Fee #2H

Location:

SL 760' FSL & 660' FEL, Section 31, T-15-S, R-25-E, Chaves Co., N.M.

BHL 760' FSL & 660' FWL, Section 31, T-15-S, R-25-E, Chaves Co., N.M.

Casing Program:

Casing	Setting Depth	Hole Size	Casing Size	Casing Weight	Casing Grade	Desired TOC
Surface	900'	12-1/4"	8-5/8"	32#	J-55	Surface
Production	8,617'	7-7/8"	5 1/2"	17#	N-80	Surface

Cement Program:

Depth	No. Sacks	Slurries:
900'	345	Lead: 35:65 Poz C + 6% Bentonite + 0.005 gps FP-6L + 0.005 pps Static Free + 5 pps LCM-1 + 2% CaCl ₂
	400	Tail: Class C + 0.005 gps FP-6L + 0.005 pps Static Free + 0.125 pps CelloFlake
8,617'	500	Lead: 50:50 Poz:Class C + 0.005 gps FP-6L + 10% Bentonite + 0.005 pps Static Free + 0.125 pps CelloFlake
	700	Tail: 50:50 Poz:Class C + 2% Bentonite + 0.005 gps FP-6L + 0.005 pps Static Free + 5% NaCl + 0.3% FL-2A + 0.2% CD-32 + 0.05% R-3

Mud Program:

Depth	Type	Weight (ppg)	Viscosity	Water Loss
0 – 900'	Fresh - Gel	8.6-8.8	28-34	N/c
900' – 4,400'	Cut Brine	8.8-9.2	28-34	N/c
4,400' – 5,100'	Cut Brine	8.8-9.2	28-34	10-15
4,368' – 8,617'	Polymer (Lateral)	9.0-9.4	40-45	10-25



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

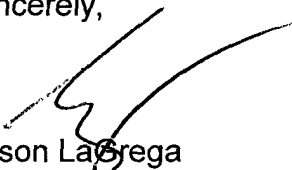
January 14, 2008

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 H₂S Contingency Plan for the Mississippi B 31 Fee #2H. The current plan is to complete this well in the Wolfcamp, which is sweet, and I do not anticipate encountering any H₂S bearing formations during drilling operations.

Sincerely,



Jason LaBrega
Drilling Engineer

EOG RESOURCES INC.

Planning Report

Database:	EDM	Local Co-ordinate Reference:	Well Mississippi B 31 Fee #2H
Company:	EOG - Midland (3)	TVD Reference:	WELL @ 3508 00ft (Original Well Elev)
Project:	Thames	MD Reference:	WELL @ 3508 00ft (Original Well Elev)
Site:	Mississippi B 31 Fee #2H	North Reference:	Grid
Well:	Mississippi B 31 Fee #2H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Mississippi B 31 Fee #2H		
Design:	Original Plan		

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

Site		Mississippi B 31 Fee #2H			
Site Position:		Northing:	715,269.50ft	Latitude:	32° 57' 58 560 N
From:	Map	Easting:	456,477.30ft	Longitude:	104° 28' 30.863 W
Position Uncertainty:	0 00 ft	Slot Radius:	"	Grid Convergence:	-0 08 °

Well	Mississippi B 31 Fee #2H					
Well Position	+N/-S	0.00 ft	Northing:	715,269.50 ft	Latitude:	32° 57' 58 560 N
	+E/-W	0 00 ft	Easting:	456,477 30 ft	Longitude:	104° 28' 30.863 W
Position Uncertainty	0.00 ft	Wellhead Elevation:	ft	Ground Level:	3,490.00 ft	

Wellbore		Mississippi B 31 Fee #2H			
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2005	1/14/2008	8.45	60.78	49,256

Design:	Original Plan			
Audit Notes:				
Version:	Phase:	PROTOTYPE	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W	Direction
	(ft)	(ft)	(ft)	(°)
	4,764 00	0.00	0.00	269 91

Plan Sections										
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	
4,368 00	0.00	0 00	4,368 00	0.00	0 00	0.00	0.00	0.00	0 00	
5,125.12	90.00	269 92	4,850.00	-0.67	-482.00	11 89	11.89	0 00	269 92	
6,125.12	90 00	269 92	4,850.00	-2.07	-1,482.00	0 00	0 00	0 00	0 00	
6,191 94	92.00	269.90	4,848 83	-2 17	-1,548 80	3.00	3 00	-0 02	-0 44	
8,616.90	92 00	269.90	4,764 02	-6 20	-3,972.27	0.00	0.00	0.00	0.00	
8,617 43	92.00	269.92	4,764 00	-6.20	-3,972.80	3.00	-0 82	2 89	105 88	BHL (Mississippi B

EOG RESOURCES INC.

Planning Report

Database:	EDM	Local Co-ordinate Reference:	Well Mississippi B 31 Fee #2H
Company:	EOG - Midland (3)	TVD Reference:	WELL @ 3508'00ft (Original Well Elev)
Project:	Thames	MD Reference:	WELL @ 3508'00ft (Original Well Elev)
Site:	Mississippi B 31 Fee #2H	North Reference:	Grid
Well:	Mississippi B 31 Fee #2H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Mississippi B 31 Fee #2H		
Design:	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)
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
4,300.00	0.00	0.00	4,300.00	0.00	0.00	0.00	0.00	0.00	0.00
4,368.00	0.00	0.00	4,368.00	0.00	0.00	0.00	0.00	0.00	0.00
4,400.00	3.80	269.92	4,399.98	0.00	-1.06	1.06	11.89	11.89	0.00
4,500.00	15.69	269.92	4,498.36	-0.03	-17.96	17.96	11.89	11.89	0.00
4,600.00	27.58	269.92	4,591.15	-0.08	-54.76	54.76	11.89	11.89	0.00
4,700.00	39.47	269.92	4,674.36	-0.15	-109.89	109.89	11.89	11.89	0.00
4,800.00	51.35	269.92	4,744.44	-0.25	-180.98	180.98	11.89	11.89	0.00
4,900.00	63.24	269.92	4,798.38	-0.37	-264.97	264.97	11.89	11.89	0.00
5,000.00	75.13	269.92	4,833.85	-0.50	-358.28	358.28	11.89	11.89	0.00
5,100.00	87.01	269.92	4,849.35	-0.64	-456.89	456.89	11.89	11.89	0.00
5,125.12	90.00	269.92	4,850.00	-0.67	-482.00	482.00	11.89	11.89	0.00

EOG RESOURCES INC.

Planning Report

Database:	EDM	Local Co-ordinate Reference:	Well Mississippi B 31 Fee #2H
Company:	EOG - Midland (3)	TVD Reference:	WELL @ 3508.00ft (Original Well Elev)
Project:	Thames	MD Reference:	WELL @ 3508 00ft (Original Well Elev)
Site:	Mississippi B 31 Fee #2H	North Reference:	Grid
Well:	Mississippi B 31 Fee #2H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Mississippi B 31 Fee #2H		
Design:	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	269.92	4,850.00	-0.78	-556.88	556.88	0.00	0.00	0.00	
5,300.00	90.00	269.92	4,850.00	-0.92	-656.88	656.88	0.00	0.00	0.00	
5,400.00	90.00	269.92	4,850.00	-1.06	-756.88	756.88	0.00	0.00	0.00	
5,500.00	90.00	269.92	4,850.00	-1.20	-856.88	856.88	0.00	0.00	0.00	
5,600.00	90.00	269.92	4,850.00	-1.34	-956.88	956.88	0.00	0.00	0.00	
5,700.00	90.00	269.92	4,850.00	-1.48	-1,056.88	1,056.88	0.00	0.00	0.00	
5,800.00	90.00	269.92	4,850.00	-1.62	-1,156.88	1,156.88	0.00	0.00	0.00	
5,900.00	90.00	269.92	4,850.00	-1.75	-1,256.87	1,256.88	0.00	0.00	0.00	
6,000.00	90.00	269.92	4,850.00	-1.89	-1,356.87	1,356.88	0.00	0.00	0.00	
6,100.00	90.00	269.92	4,850.00	-2.03	-1,456.87	1,456.88	0.00	0.00	0.00	
6,125.12	90.00	269.92	4,850.00	-2.07	-1,482.00	1,482.00	0.00	0.00	0.00	
6,191.94	92.00	269.90	4,848.83	-2.17	-1,548.80	1,548.80	3.00	3.00	-0.02	
6,200.00	92.00	269.90	4,848.55	-2.18	-1,556.86	1,556.86	0.00	0.00	0.00	
6,300.00	92.00	269.90	4,845.05	-2.35	-1,656.79	1,656.80	0.00	0.00	0.00	
6,400.00	92.00	269.90	4,841.55	-2.52	-1,756.73	1,756.74	0.00	0.00	0.00	
6,500.00	92.00	269.90	4,838.06	-2.68	-1,856.67	1,856.67	0.00	0.00	0.00	
6,600.00	92.00	269.90	4,834.56	-2.85	-1,956.61	1,956.61	0.00	0.00	0.00	
6,700.00	92.00	269.90	4,831.06	-3.02	-2,056.55	2,056.55	0.00	0.00	0.00	
6,800.00	92.00	269.90	4,827.56	-3.18	-2,156.49	2,156.49	0.00	0.00	0.00	
6,900.00	92.00	269.90	4,824.07	-3.35	-2,256.43	2,256.43	0.00	0.00	0.00	
7,000.00	92.00	269.90	4,820.57	-3.51	-2,356.37	2,356.37	0.00	0.00	0.00	
7,100.00	92.00	269.90	4,817.07	-3.68	-2,456.30	2,456.31	0.00	0.00	0.00	
7,200.00	92.00	269.90	4,813.57	-3.85	-2,556.24	2,556.25	0.00	0.00	0.00	
7,300.00	92.00	269.90	4,810.08	-4.01	-2,656.18	2,656.18	0.00	0.00	0.00	
7,400.00	92.00	269.90	4,806.58	-4.18	-2,756.12	2,756.12	0.00	0.00	0.00	
7,500.00	92.00	269.90	4,803.08	-4.34	-2,856.06	2,856.06	0.00	0.00	0.00	
7,600.00	92.00	269.90	4,799.58	-4.51	-2,956.00	2,956.00	0.00	0.00	0.00	
7,700.00	92.00	269.90	4,796.09	-4.68	-3,055.94	3,055.94	0.00	0.00	0.00	
7,800.00	92.00	269.90	4,792.59	-4.84	-3,155.87	3,155.88	0.00	0.00	0.00	
7,900.00	92.00	269.90	4,789.09	-5.01	-3,255.81	3,255.82	0.00	0.00	0.00	
8,000.00	92.00	269.90	4,785.59	-5.17	-3,355.75	3,355.76	0.00	0.00	0.00	
8,100.00	92.00	269.90	4,782.10	-5.34	-3,455.69	3,455.70	0.00	0.00	0.00	
8,200.00	92.00	269.90	4,778.60	-5.51	-3,555.63	3,555.63	0.00	0.00	0.00	
8,300.00	92.00	269.90	4,775.10	-5.67	-3,655.57	3,655.57	0.00	0.00	0.00	
8,400.00	92.00	269.90	4,771.60	-5.84	-3,755.51	3,755.51	0.00	0.00	0.00	
8,500.00	92.00	269.90	4,768.11	-6.01	-3,855.45	3,855.45	0.00	0.00	0.00	
8,600.00	92.00	269.90	4,764.61	-6.17	-3,955.38	3,955.39	0.00	0.00	0.00	
8,616.90	92.00	269.90	4,764.02	-6.20	-3,972.27	3,972.28	0.00	0.00	0.00	
8,617.43	92.00	269.92	4,764.00	-6.20	-3,972.80	3,972.80	3.00	-0.82	2.89	
BHL (Mississippi B #2H)										

Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude	
- hit/miss target										
- Shape										
BHL (Mississippi B #2	0.00	0.00	4,764.00	-6.20	-3,972.80	715,263.30	452,504.50	32° 57' 58.444 N	104° 29' 17.495 W	
- plan hits target										
- Point										

WELL DETAILS: Mississippi B 31 Fee #2H

+N/-S	+E/-W	Northing	Ground Level:	3490.00			
0.00	0.00	715269.50	Easting	456477.30	Latitude	Longitude	Slot
				32° 57' 58.560 N	104° 28' 30.863 W		

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFac	Target	Sec
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	4368.00	0.00	0.00	4368.00	0.00	0.00	0.00	0.00	0.00	
3	5125.12	90.00	269.92	4850.00	-0.67	-482.00	11.89	269.92	482.00	
4	6125.12	90.00	269.92	4850.00	-2.07	-1482.00	0.00	0.00	1482.00	
5	6191.94	92.00	269.90	4848.83	-2.17	-1548.80	3.00	-0.44	1548.80	
6	8616.90	92.00	269.90	4764.02	-6.20	-3972.27	0.00	0.00	3972.28	
7	8617.43	92.00	269.92	4764.00	-6.20	-3972.80	0.00	0.00	3972.80	

