

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
S OIL CONSERVATION DIVISION
1220 South St. Francis Dr. FEB 15 2008
Santa Fe, NM 87505
OCD-ARTESIA

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 30-015-36129	Pool Code	Pool Name Undesignated; Wolfcamp (Gas)
Property Code 37011	Property Name PEMBINA "A" 33 STATE	Well Number 1H
OGRID No. 1377	Operator Name EOG RESOURCES, INC.	Elevation 3949'

Surface Location

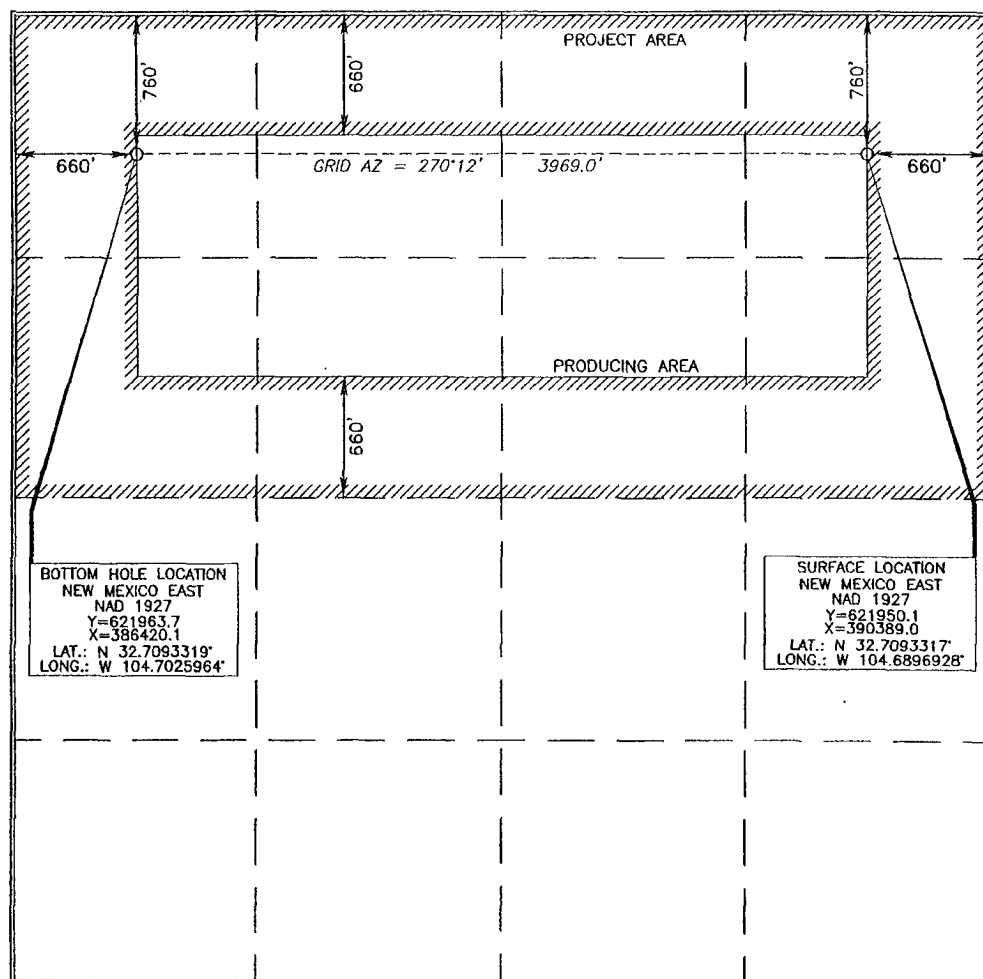
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	33	18 SOUTH	23 EAST, N.M.P.M.		760	NORTH	660	EAST	EDDY

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
D	33	18 SOUTH	23 EAST, N.M.P.M.		760	NORTH	660	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 2/12/08
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.

15079
JANUARY 15 2008
Date of Survey
Terry J. Paul 2/4/2008
Signature and Seal of Professional Surveyor
Certificate Number **15079**

WO# 080115WL-a (KA)

Permit Information:

Well Name: Pembina A 33 State #1H

Location:

SL 760' FNL & 660' FEL, Section 33, T-18-S, R-23-E, Eddy Co., N.M.

BHL 760' FNL & 660' FWL, Section 33, T-18-S, R-23-E, Eddy 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	8,364'	7-7/8"	5 1/2"	17#	N-80	Surface

Cement Program:

Depth	No. Sacks	Slurries:
900' 1200'	345	Lead: 35:65 Poz C + 6% Bentonite + 0.005 gps FP-6L + 0.005 pps Static Free + 10 pps LCM-1 + 2% CaCl ₂
	400	Tail: Class C + 0.005 gps FP-6L + 0.005 pps Static Free + 0.125 pps CelloFlake
8,364'	630	Lead: 50:50 Poz:Class C + 0.005 gps FP-6L + 10% Bentonite + 0.005 pps Static Free + 0.125 pps CelloFlake
	745	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' – 4,300'	Cut Brine	8.8-9.2	28-34	N/c
4,300' – 5,000'	Cut Brine	8.8-9.2	28-34	10-15
4,118' – 8,364'	Polymer (Lateral)	9.0-9.4	40-45	10-25



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

FEB 15 2008
OCD-ARTESIA

February 6, 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 Pembina A 33 State #1H. 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,

A handwritten signature in black ink, appearing to read "Jason LaGrega", written over a horizontal line.

Jason LaGrega
Drilling Engineer

EOG RESOURCES INC.

Planning Report

Database:	EDM	Local Co-ordinate Reference:	Well Pembina A 33 State #1H
Company:	EOG - Midland (3)	TVD Reference:	WELL @ 3968.00ft (Original Well Elev)
Project:	Thames	MD Reference:	WELL @ 3968.00ft (Original Well Elev)
Site:	Pembina A 33 State #1H	North Reference:	Grid
Well:	Pembina A 33 State #1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Pembina A 33 State #1H		
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						Pembina A 33 State #1H											
Site Position:			Northing:			621,950.10ft			Latitude:			32° 42' 33.595 N					
From:			Map			Easting:			390,389.00ft			Longitude:			104° 41' 22.895 W		
Position Uncertainty:			0.00 ft			Slot Radius:			"			Grid Convergence:			-0.19 °		

Well	Pembina A 33 State #1H					
Well Position	+N/-S	0.00 ft	Northing:	621,950.10 ft	Latitude:	32° 42' 33.595 N
	+E/-W	0.00 ft	Easting:	390,389.00 ft	Longitude:	104° 41' 22.895 W
Position Uncertainty		0.00 ft	Wellhead Elevation:	ft	Ground Level:	3,949.00 ft

Wellbore	Pembina A.33.State #1H				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2005	2/5/2008	8.52	60.50	49,065

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)	(°)
	4,514.00	0.00	0 00	270 20

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	
4,118.00	0 00	0 00	4,118 00	0 00	0.00	0 00	0.00	0 00	0 00	
4,875.12	90 00	270.20	4,600 00	1 68	-482 00	11 89	11.89	0.00	270.20	
5,875.12	90 00	270.20	4,600 00	5 17	-1,481.99	0.00	0 00	0 00	0 00	
5,942.04	92 01	270 19	4,598.83	5.40	-1,548.90	3.00	3.00	-0.01	-0.17	
8,363 26	92 01	270.19	4,514.01	13.60	-3,968 61	0.00	0 00	0 00	0 00	
8,363 55	92.00	270.19	4,514.00	13.60	-3,968.90	3.00	-2.64	-1 42	0 00	BHL (Pembina A #

EOG RESOURCES INC.

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Company:	EOG - Midland (3)	TVD Reference:	WELL @ 3968.00ft (Original Well Elev)
Project:	Thames	MD Reference:	WELL @ 3968 00ft (Original Well Elev)
Site:	Pembina A 33 State #1H	North Reference:	Grid
Well:	Pembina A 33 State #1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Pembina A 33 State #1H		
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
4,118.00	0.00	0.00	4,118.00	0.00	0.00	0.00	0.00	0.00	0.00
4,200.00	9.75	270.20	4,199.61	0.02	-6.96	6.96	11.89	11.89	0.00
4,300.00	21.63	270.20	4,295.71	0.12	-33.95	33.95	11.89	11.89	0.00
4,400.00	33.52	270.20	4,384.19	0.28	-80.17	80.17	11.89	11.89	0.00
4,500.00	45.41	270.20	4,461.25	0.50	-143.61	143.61	11.89	11.89	0.00
4,600.00	57.30	270.20	4,523.59	0.77	-221.57	221.57	11.89	11.89	0.00
4,700.00	69.18	270.20	4,568.53	1.08	-310.70	310.70	11.89	11.89	0.00
4,800.00	81.07	270.20	4,594.16	1.42	-407.18	407.18	11.89	11.89	0.00
4,875.12	90.00	270.20	4,600.00	1.68	-482.00	482.00	11.89	11.89	0.00
4,900.00	90.00	270.20	4,600.00	1.77	-506.87	506.88	0.00	0.00	0.00
5,000.00	90.00	270.20	4,600.00	2.12	-606.87	606.88	0.00	0.00	0.00
5,100.00	90.00	270.20	4,600.00	2.47	-706.87	706.88	0.00	0.00	0.00

EOG RESOURCES INC.

Planning Report

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Company:	EOG - Midland (3)	TVD Reference:	WELL @ 3968 00ft (Original Well Elev)
Project:	Thames	MD Reference:	WELL @ 3968 00ft (Original Well Elev)
Site:	Pembina A 33 State #1H	North Reference:	Grid
Well:	Pembina A 33 State #1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Pembina A 33 State #1H		
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	270.20	4,600.00	2.82	-806.87	806.88	0.00	0.00	0.00	
5,300.00	90.00	270.20	4,600.00	3.17	-906.87	906.88	0.00	0.00	0.00	
5,400.00	90.00	270.20	4,600.00	3.51	-1,006.87	1,006.88	0.00	0.00	0.00	
5,500.00	90.00	270.20	4,600.00	3.86	-1,106.87	1,106.88	0.00	0.00	0.00	
5,600.00	90.00	270.20	4,600.00	4.21	-1,206.87	1,206.88	0.00	0.00	0.00	
5,700.00	90.00	270.20	4,600.00	4.56	-1,306.87	1,306.88	0.00	0.00	0.00	
5,800.00	90.00	270.20	4,600.00	4.91	-1,406.87	1,406.88	0.00	0.00	0.00	
5,875.12	90.00	270.20	4,600.00	5.17	-1,481.99	1,482.00	0.00	0.00	0.00	
5,900.00	90.75	270.20	4,599.84	5.26	-1,506.87	1,506.88	3.00	3.00	-0.01	
5,942.04	92.01	270.19	4,598.83	5.40	-1,548.90	1,548.90	3.00	3.00	-0.01	
6,000.00	92.01	270.19	4,596.80	5.60	-1,606.82	1,606.83	0.00	0.00	0.00	
6,100.00	92.01	270.19	4,593.29	5.94	-1,706.76	1,706.77	0.00	0.00	0.00	
6,200.00	92.01	270.19	4,589.79	6.28	-1,806.69	1,806.70	0.00	0.00	0.00	
6,300.00	92.01	270.19	4,586.29	6.61	-1,906.63	1,906.64	0.00	0.00	0.00	
6,400.00	92.01	270.19	4,582.79	6.95	-2,006.57	2,006.58	0.00	0.00	0.00	
6,500.00	92.01	270.19	4,579.28	7.29	-2,106.51	2,106.52	0.00	0.00	0.00	
6,600.00	92.01	270.19	4,575.78	7.63	-2,206.45	2,206.46	0.00	0.00	0.00	
6,700.00	92.01	270.19	4,572.28	7.97	-2,306.38	2,306.40	0.00	0.00	0.00	
6,800.00	92.01	270.19	4,568.77	8.31	-2,406.32	2,406.34	0.00	0.00	0.00	
6,900.00	92.01	270.19	4,565.27	8.65	-2,506.26	2,506.27	0.00	0.00	0.00	
7,000.00	92.01	270.19	4,561.77	8.98	-2,606.20	2,606.21	0.00	0.00	0.00	
7,100.00	92.01	270.19	4,558.26	9.32	-2,706.14	2,706.15	0.00	0.00	0.00	
7,200.00	92.01	270.19	4,554.76	9.66	-2,806.07	2,806.09	0.00	0.00	0.00	
7,300.00	92.01	270.19	4,551.26	10.00	-2,906.01	2,906.03	0.00	0.00	0.00	
7,400.00	92.01	270.19	4,547.75	10.34	-3,005.95	3,005.97	0.00	0.00	0.00	
7,500.00	92.01	270.19	4,544.25	10.68	-3,105.89	3,105.91	0.00	0.00	0.00	
7,600.00	92.01	270.19	4,540.75	11.02	-3,205.83	3,205.84	0.00	0.00	0.00	
7,700.00	92.01	270.19	4,537.24	11.35	-3,305.76	3,305.78	0.00	0.00	0.00	
7,800.00	92.01	270.19	4,533.74	11.69	-3,405.70	3,405.72	0.00	0.00	0.00	
7,900.00	92.01	270.19	4,530.24	12.03	-3,505.64	3,505.66	0.00	0.00	0.00	
8,000.00	92.01	270.19	4,526.74	12.37	-3,605.58	3,605.60	0.00	0.00	0.00	
8,100.00	92.01	270.19	4,523.23	12.71	-3,705.52	3,705.54	0.00	0.00	0.00	
8,200.00	92.01	270.19	4,519.73	13.05	-3,805.45	3,805.48	0.00	0.00	0.00	
8,300.00	92.01	270.19	4,516.23	13.38	-3,905.39	3,905.42	0.00	0.00	0.00	
8,363.26	92.01	270.19	4,514.01	13.60	-3,968.61	3,968.64	0.00	0.00	0.00	
8,363.55	92.00	270.19	4,514.00	13.60	-3,968.90	3,968.92	3.00	-2.64	-1.42	
BHL (Pembina A #1H)										

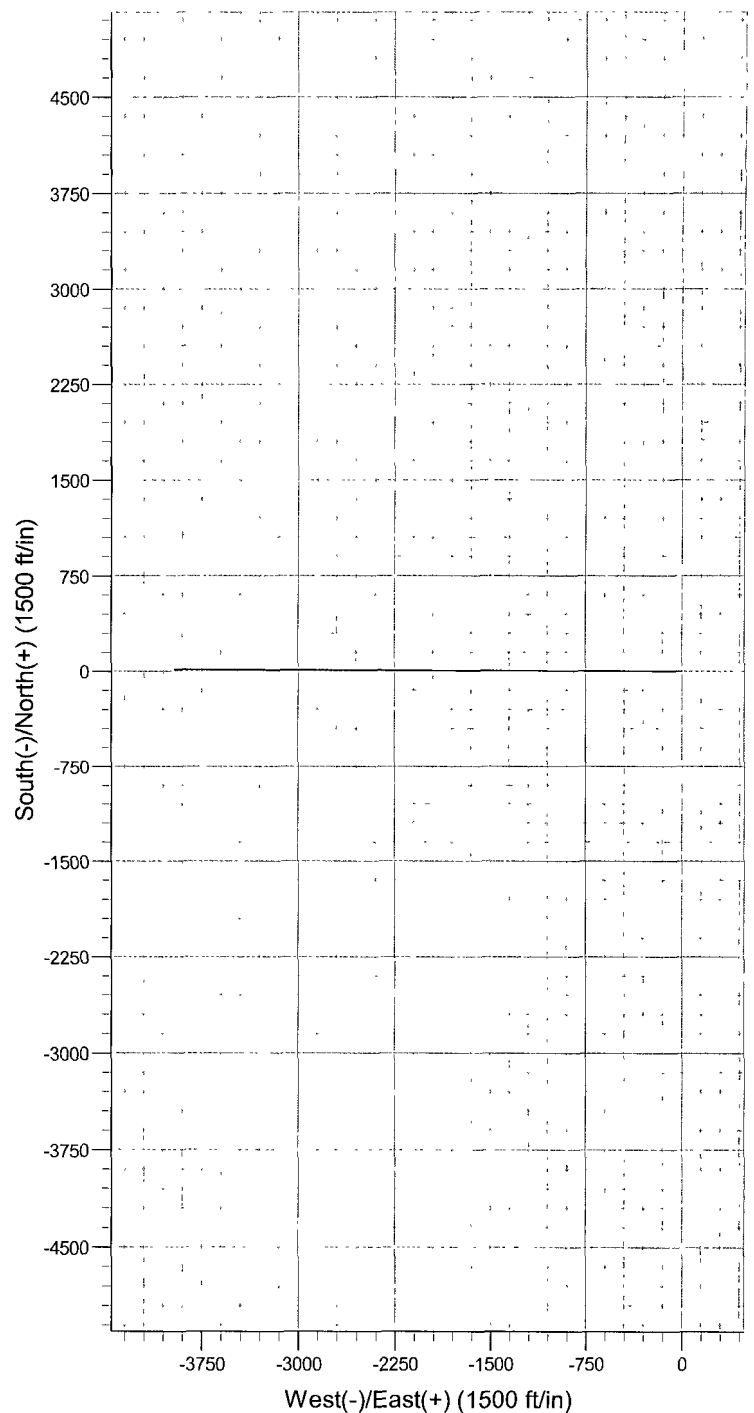
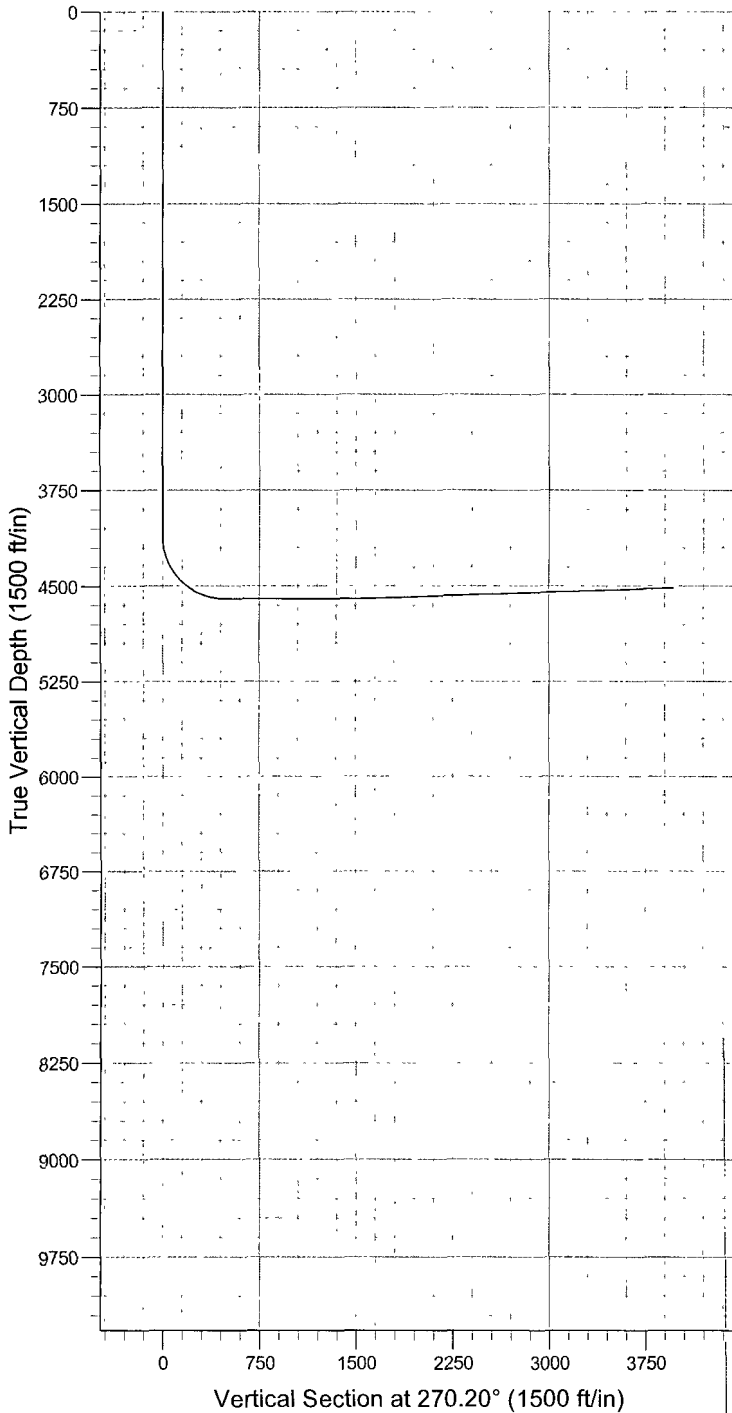
Targets										
Target Name	hit/miss target	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
BHL (Pembina A #1H)	- plan hits target	0.00	360.00	4,514.00	13.60	-3,968.90	621,963.70	386,420.10	32° 42' 33.595 N	104° 42' 9.347 W
- Point										

WELL DETAILS: Pembina A 33 State #1H

+N/-S	+E/-W	Northing	Ground Level:	3949.00			
0.00	0.00	621950.10	Easting	390389.00	Latitude	Longitude	Slot
					32° 42' 33.595 N	104° 41' 22.895 W	

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	Target	Sec
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	4118.00	0.00	0.00	4118.00	0.00	0.00	0.00	0.00	0.00	
3	4875.12	90.00	270.20	4600.00	1.68	-482.00	11.89	270.20	482.00	
4	5875.12	90.00	270.20	4600.00	5.17	-1481.99	0.00	0.00	1482.00	
5	5942.04	92.01	270.19	4598.83	5.40	-1548.90	3.00	-0.17	1548.90	
6	8363.26	92.01	270.19	4514.01	13.60	-3968.61	0.00	0.00	3968.64	
7	8363.55	92.00	270.19	4514.00	13.60	-3968.90	0.00	0.00	3968.92	



Permit Conditions of Approval

Operator: EOG RESOURCES INC , 7377

Well: SALMON B 32 STATE #002H

API: 30-015-35912

OCD Reviewer	Condition	
BArrant	Pit construction and closure must satisfy all requirements of your approved plan, O.C.D. Rule 19.15 2.50, and the Pit and Below-Grade Tank Guidelines	
BArrant	Will require a directional survey with the C-104	
BArrant	As noted, operator to drill surface hole w/fresh water mud.	
BArrant	Please notify OCD time of spud and time to witness the cementing to surface of all strings of casing.	



(432) 686-3642 Office
(432) 770-0602 Cell
Donny_Glanton@eogresources.com

FEB 15 2008
OCD-ARTESIA

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

2/12/2008

OCD-Artesia
1301 W. Grand Avenue
Artesia, NM 88210

Re: PEMBINA A 33 STATE 1H
SOURIS 29 STATE 2H

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