



Lea County, NM (NAD 83 NME)

Dogwood 23 Fed Com #708H

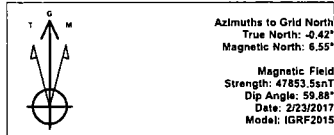
Plan #0.1

PROJECT DETAILS: Lea County, NM (NAD 83 NME)

Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: New Mexico Eastern Zone
System Datum: Mean Sea Level

WELL DETAILS: #708H

Ground Level: 3288.00
KB = 25' @ 3313.00u/sft
Northing: 372709.00 Easting: 784481.00 Latitude: 32.02223047 Longitude: -103.54879073



To convert a Magnetic Direction to a Grid Direction, Add 0.42°
To convert a Magnetic Direction to a True Direction, Add 6.90° East
To convert a True Direction to a Grid Direction, Subtract 0.42°

SECTION DETAILS

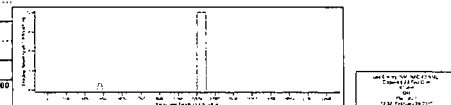
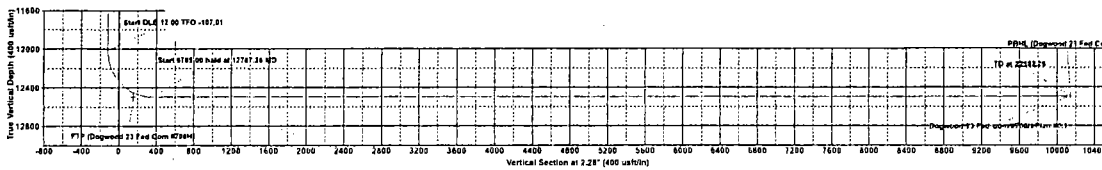
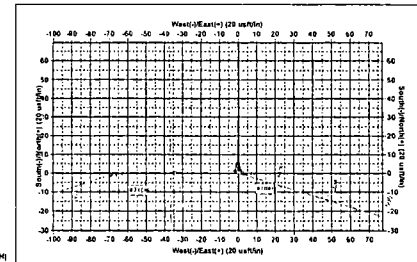
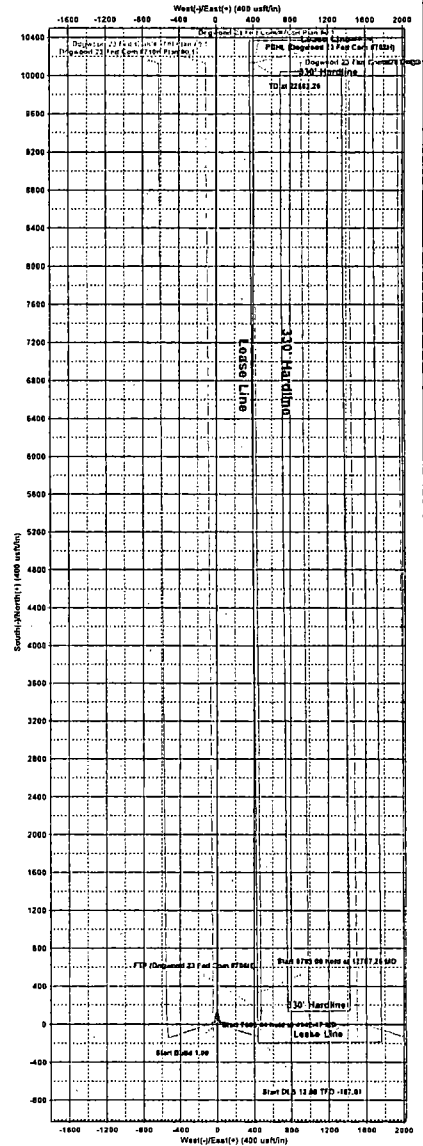
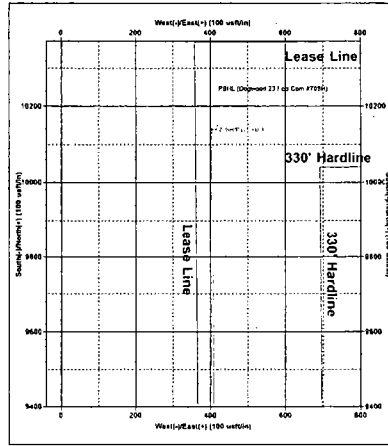
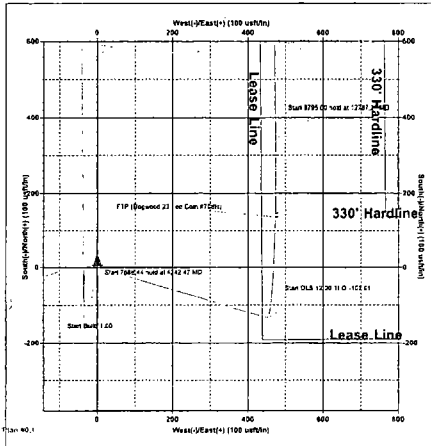
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
1	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	
2	4000.00	0.00	0.00	4000.00	0.01	0.00	0.00	0.00	0.00	
3	4342.47	3.42	106.63	4342.26	-2.92	9.80	1.00	106.63	-2.54	
4	12028.90	3.42	106.63	12014.97	-134.32	449.76	0.00	0.00	-116.31	
5	12787.26	90.00	359.59	12500.00	343.26	474.09	12.00	-107.01	361.86	
6	22582.26	90.00	359.59	12500.00	10138.01	404.00	0.00	0.00	10146.05	PBHL (Dogwood 23 Fed Com #708H)

CASING DETAILS

No casing data is available

WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

Name	TVD	+N/-S	+E/-W	Northing	Easting
FTP (Dogwood 23 Fed Com #708H)	12500.00	139.01	478.00	372849.00	784959.00
PBHL (Dogwood 23 Fed Com #708H)	12500.00	10138.01	404.00	362847.00	784985.00





EOG Resources - Midland

Lea County, NM (NAD 83 NME)

Dogwood 23 Fed Com

#708H

OH

Plan: Plan #0.1

Standard Planning Report

28 February, 2017

HOBBS OCD

OCT 03 2017

RECEIVED



EOG Resources, Inc.
Planning Report

Database: EDM 5000.1 Single User Db
Company: EOG Resources - Midland
Project: Lea County, NM (NAD 83 NME)
Site: Dogwood 23 Fed Com
Well: #708H
Wellbore: OH
Design: Plan #0.1

Local Co-ordinate Reference: Well #708H
TVD Reference: KB = 25' @ 3313.00usft
MD Reference: KB = 25' @ 3313.00usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature

Project	Lea County, NM (NAD 83 NME)		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site		Dogwood 23 Fed Com			
Site Position:		Northing:	372,741.00 usft	Latitude:	32.02224139
From:	Map	Easting:	788,311.00 usft	Longitude:	-103.53643286
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.42 °

Well	#708H					
Well Position	+N/-S	-32.00 usft	Northing:	372,709.00 usft	Latitude:	32.02223048
	+E/-W	-3,830.00 usft	Easting:	784,481.00 usft	Longitude:	-103.54879073
Position Uncertainty	0.00 usft	Wellhead Elevation:	0.00 usft	Ground Level:	3,288.00 usft	

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	2/23/2017	6.96	59.88	47.853

Design	Plan #0.1			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.00	0.01	0.00	2.28

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	
4,000.00	0.00	0.00	4,000.00	0.01	0.00	0.00	0.00	0.00	0.00	
4,342.47	3.42	106.63	4,342.26	-2.92	9.80	1.00	1.00	0.00	106.63	
12,028.90	3.42	106.63	12,014.97	-134.32	449.76	0.00	0.00	0.00	0.00	
12,787.26	90.00	359.59	12,500.00	343.26	474.09	12.00	11.42	-14.11	-107.01	
22,582.26	90.00	359.59	12,500.00	10,138.01	404.00	0.00	0.00	0.00	0.00	PBHL (Dogwood 23 F



EOG Resources, Inc.

Planning Report

Database: EDM 5000.1 Single User Db
 Company: EOG Resources - Midland
 Project: Lea County, NM (NAD 83 NME)
 Site: Dogwood 23 Fed Com
 Well: #708H
 Wellbore: OH
 Design: Plan #0.1

Local Co-ordinate Reference: Well #708H
 TVD Reference: KB = 25' @ 3313.00usft
 MD Reference: KB = 25' @ 3313.00usft
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature

Planned 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	0.01	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	0.01	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.01	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.01	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.01	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.01	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	0.01	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	0.01	0.00	0.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	0.01	0.00	0.00	0.00	0.00	0.00
900.00	0.00	0.00	900.00	0.01	0.00	0.00	0.00	0.00	0.00
1,000.00	0.00	0.00	1,000.00	0.01	0.00	0.00	0.00	0.00	0.00
1,100.00	0.00	0.00	1,100.00	0.01	0.00	0.00	0.00	0.00	0.00
1,200.00	0.00	0.00	1,200.00	0.01	0.00	0.00	0.00	0.00	0.00
1,300.00	0.00	0.00	1,300.00	0.01	0.00	0.00	0.00	0.00	0.00
1,400.00	0.00	0.00	1,400.00	0.01	0.00	0.00	0.00	0.00	0.00
1,500.00	0.00	0.00	1,500.00	0.01	0.00	0.00	0.00	0.00	0.00
1,600.00	0.00	0.00	1,600.00	0.01	0.00	0.00	0.00	0.00	0.00
1,700.00	0.00	0.00	1,700.00	0.01	0.00	0.00	0.00	0.00	0.00
1,800.00	0.00	0.00	1,800.00	0.01	0.00	0.00	0.00	0.00	0.00
1,900.00	0.00	0.00	1,900.00	0.01	0.00	0.00	0.00	0.00	0.00
2,000.00	0.00	0.00	2,000.00	0.01	0.00	0.00	0.00	0.00	0.00
2,100.00	0.00	0.00	2,100.00	0.01	0.00	0.00	0.00	0.00	0.00
2,200.00	0.00	0.00	2,200.00	0.01	0.00	0.00	0.00	0.00	0.00
2,300.00	0.00	0.00	2,300.00	0.01	0.00	0.00	0.00	0.00	0.00
2,400.00	0.00	0.00	2,400.00	0.01	0.00	0.00	0.00	0.00	0.00
2,500.00	0.00	0.00	2,500.00	0.01	0.00	0.00	0.00	0.00	0.00
2,600.00	0.00	0.00	2,600.00	0.01	0.00	0.00	0.00	0.00	0.00
2,700.00	0.00	0.00	2,700.00	0.01	0.00	0.00	0.00	0.00	0.00
2,800.00	0.00	0.00	2,800.00	0.01	0.00	0.00	0.00	0.00	0.00
2,900.00	0.00	0.00	2,900.00	0.01	0.00	0.00	0.00	0.00	0.00
3,000.00	0.00	0.00	3,000.00	0.01	0.00	0.00	0.00	0.00	0.00
3,100.00	0.00	0.00	3,100.00	0.01	0.00	0.00	0.00	0.00	0.00
3,200.00	0.00	0.00	3,200.00	0.01	0.00	0.00	0.00	0.00	0.00
3,300.00	0.00	0.00	3,300.00	0.01	0.00	0.00	0.00	0.00	0.00
3,400.00	0.00	0.00	3,400.00	0.01	0.00	0.00	0.00	0.00	0.00
3,500.00	0.00	0.00	3,500.00	0.01	0.00	0.00	0.00	0.00	0.00
3,600.00	0.00	0.00	3,600.00	0.01	0.00	0.00	0.00	0.00	0.00
3,700.00	0.00	0.00	3,700.00	0.01	0.00	0.00	0.00	0.00	0.00
3,800.00	0.00	0.00	3,800.00	0.01	0.00	0.00	0.00	0.00	0.00
3,900.00	0.00	0.00	3,900.00	0.01	0.00	0.00	0.00	0.00	0.00
4,000.00	0.00	0.00	4,000.00	0.01	0.00	0.00	0.00	0.00	0.00
4,100.00	1.00	106.63	4,100.00	-0.24	0.84	-0.22	1.00	1.00	0.00
4,200.00	2.00	106.63	4,199.96	-0.99	3.34	-0.86	1.00	1.00	0.00
4,300.00	3.00	106.63	4,299.86	-2.24	7.52	-1.95	1.00	1.00	0.00
4,342.47	3.42	106.63	4,342.26	-2.92	9.80	-2.54	1.00	1.00	0.00
4,400.00	3.42	106.63	4,399.69	-3.90	13.10	-3.39	0.00	0.00	0.00
4,500.00	3.42	106.63	4,499.51	-5.61	18.82	-4.87	0.00	0.00	0.00
4,600.00	3.42	106.63	4,599.34	-7.32	24.54	-6.35	0.00	0.00	0.00
4,700.00	3.42	106.63	4,699.16	-9.03	30.27	-7.83	0.00	0.00	0.00
4,800.00	3.42	106.63	4,798.98	-10.74	35.99	-9.31	0.00	0.00	0.00
4,900.00	3.42	106.63	4,898.80	-12.45	41.72	-10.79	0.00	0.00	0.00
5,000.00	3.42	106.63	4,998.62	-14.16	47.44	-12.27	0.00	0.00	0.00
5,100.00	3.42	106.63	5,098.44	-15.87	53.16	-13.75	0.00	0.00	0.00
5,200.00	3.42	106.63	5,198.26	-17.58	58.89	-15.23	0.00	0.00	0.00



EOG Resources, Inc.

Planning Report

Database: EDM 5000.1 Single User Db
Company: EOG Resources - Midland
Project: Lea County, NM (NAD 83 NME)
Site: Dogwood 23 Fed Com
Well: #708H
Wellbore: OH
Design: Plan #0.1

Local Co-ordinate Reference: Well #708H
TVD Reference: KB = 25' @ 3313.00usft
MD Reference: KB = 25' @ 3313.00usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature

Planned 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)
5,300.00	3.42	106.63	5,298.09	-19.29	64.61	-16.71	0.00	0.00	0.00
5,400.00	3.42	106.63	5,397.91	-21.00	70.33	-18.19	0.00	0.00	0.00
5,500.00	3.42	106.63	5,497.73	-22.71	76.06	-19.67	0.00	0.00	0.00
5,600.00	3.42	106.63	5,597.55	-24.42	81.78	-21.15	0.00	0.00	0.00
5,700.00	3.42	106.63	5,697.37	-26.13	87.51	-22.63	0.00	0.00	0.00
5,800.00	3.42	106.63	5,797.19	-27.84	93.23	-24.11	0.00	0.00	0.00
5,900.00	3.42	106.63	5,897.01	-29.55	98.95	-25.59	0.00	0.00	0.00
6,000.00	3.42	106.63	5,996.84	-31.26	104.68	-27.07	0.00	0.00	0.00
6,100.00	3.42	106.63	6,096.66	-32.97	110.40	-28.55	0.00	0.00	0.00
6,200.00	3.42	106.63	6,196.48	-34.68	116.12	-30.03	0.00	0.00	0.00
6,300.00	3.42	106.63	6,296.30	-36.38	121.85	-31.51	0.00	0.00	0.00
6,400.00	3.42	106.63	6,396.12	-38.09	127.57	-32.99	0.00	0.00	0.00
6,500.00	3.42	106.63	6,495.94	-39.80	133.30	-34.47	0.00	0.00	0.00
6,600.00	3.42	106.63	6,595.76	-41.51	139.02	-35.95	0.00	0.00	0.00
6,700.00	3.42	106.63	6,695.59	-43.22	144.74	-37.43	0.00	0.00	0.00
6,800.00	3.42	106.63	6,795.41	-44.93	150.47	-38.91	0.00	0.00	0.00
6,900.00	3.42	106.63	6,895.23	-46.64	156.19	-40.39	0.00	0.00	0.00
7,000.00	3.42	106.63	6,995.05	-48.35	161.91	-41.87	0.00	0.00	0.00
7,100.00	3.42	106.63	7,094.87	-50.06	167.64	-43.35	0.00	0.00	0.00
7,200.00	3.42	106.63	7,194.69	-51.77	173.36	-44.83	0.00	0.00	0.00
7,300.00	3.42	106.63	7,294.51	-53.48	179.09	-46.31	0.00	0.00	0.00
7,400.00	3.42	106.63	7,394.34	-55.19	184.81	-47.79	0.00	0.00	0.00
7,500.00	3.42	106.63	7,494.16	-56.90	190.53	-49.27	0.00	0.00	0.00
7,600.00	3.42	106.63	7,593.98	-58.61	196.26	-50.75	0.00	0.00	0.00
7,700.00	3.42	106.63	7,693.80	-60.32	201.98	-52.23	0.00	0.00	0.00
7,800.00	3.42	106.63	7,793.62	-62.03	207.70	-53.71	0.00	0.00	0.00
7,900.00	3.42	106.63	7,893.44	-63.74	213.43	-55.19	0.00	0.00	0.00
8,000.00	3.42	106.63	7,993.26	-65.45	219.15	-56.68	0.00	0.00	0.00
8,100.00	3.42	106.63	8,093.09	-67.16	224.88	-58.16	0.00	0.00	0.00
8,200.00	3.42	106.63	8,192.91	-68.87	230.60	-59.64	0.00	0.00	0.00
8,300.00	3.42	106.63	8,292.73	-70.57	236.32	-61.12	0.00	0.00	0.00
8,400.00	3.42	106.63	8,392.55	-72.28	242.05	-62.60	0.00	0.00	0.00
8,500.00	3.42	106.63	8,492.37	-73.99	247.77	-64.08	0.00	0.00	0.00
8,600.00	3.42	106.63	8,592.19	-75.70	253.49	-65.56	0.00	0.00	0.00
8,700.00	3.42	106.63	8,692.01	-77.41	259.22	-67.04	0.00	0.00	0.00
8,800.00	3.42	106.63	8,791.84	-79.12	264.94	-68.52	0.00	0.00	0.00
8,900.00	3.42	106.63	8,891.66	-80.83	270.67	-70.00	0.00	0.00	0.00
9,000.00	3.42	106.63	8,991.48	-82.54	276.39	-71.48	0.00	0.00	0.00
9,100.00	3.42	106.63	9,091.30	-84.25	282.11	-72.96	0.00	0.00	0.00
9,200.00	3.42	106.63	9,191.12	-85.96	287.84	-74.44	0.00	0.00	0.00
9,300.00	3.42	106.63	9,290.94	-87.67	293.56	-75.92	0.00	0.00	0.00
9,400.00	3.42	106.63	9,390.76	-89.38	299.28	-77.40	0.00	0.00	0.00
9,500.00	3.42	106.63	9,490.59	-91.09	305.01	-78.88	0.00	0.00	0.00
9,600.00	3.42	106.63	9,590.41	-92.80	310.73	-80.36	0.00	0.00	0.00
9,700.00	3.42	106.63	9,690.23	-94.51	316.46	-81.84	0.00	0.00	0.00
9,800.00	3.42	106.63	9,790.05	-96.22	322.18	-83.32	0.00	0.00	0.00
9,900.00	3.42	106.63	9,889.87	-97.93	327.90	-84.80	0.00	0.00	0.00
10,000.00	3.42	106.63	9,989.69	-99.64	333.63	-86.28	0.00	0.00	0.00
10,100.00	3.42	106.63	10,089.51	-101.35	339.35	-87.76	0.00	0.00	0.00
10,200.00	3.42	106.63	10,189.34	-103.05	345.07	-89.24	0.00	0.00	0.00
10,300.00	3.42	106.63	10,289.16	-104.76	350.80	-90.72	0.00	0.00	0.00
10,400.00	3.42	106.63	10,388.98	-106.47	356.52	-92.20	0.00	0.00	0.00
10,500.00	3.42	106.63	10,488.80	-108.18	362.25	-93.68	0.00	0.00	0.00
10,600.00	3.42	106.63	10,588.62	-109.89	367.97	-95.16	0.00	0.00	0.00



EOG Resources, Inc.

Planning Report

Database: EDM 5000.1 Single User Db
 Company: EOG Resources - Midland
 Project: Lea County, NM (NAD 83 NME)
 Site: Dogwood 23 Fed Com
 Well: #708H
 Wellbore: OH
 Design: Plan #0.1

Local Co-ordinate Reference: Well #708H
 TVD Reference: KB = 25' @ 3313.00usft
 MD Reference: KB = 25' @ 3313.00usft
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature

Planned 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)
10,700.00	3.42	106.63	10,688.44	-111.60	373.69	-96.64	0.00	0.00	0.00
10,800.00	3.42	106.63	10,788.26	-113.31	379.42	-98.12	0.00	0.00	0.00
10,900.00	3.42	106.63	10,888.09	-115.02	385.14	-99.60	0.00	0.00	0.00
11,000.00	3.42	106.63	10,987.91	-116.73	390.86	-101.08	0.00	0.00	0.00
11,100.00	3.42	106.63	11,087.73	-118.44	396.59	-102.56	0.00	0.00	0.00
11,200.00	3.42	106.63	11,187.55	-120.15	402.31	-104.04	0.00	0.00	0.00
11,300.00	3.42	106.63	11,287.37	-121.86	408.04	-105.52	0.00	0.00	0.00
11,400.00	3.42	106.63	11,387.19	-123.57	413.76	-107.00	0.00	0.00	0.00
11,500.00	3.42	106.63	11,487.01	-125.28	419.48	-108.48	0.00	0.00	0.00
11,600.00	3.42	106.63	11,586.84	-126.99	425.21	-109.96	0.00	0.00	0.00
11,700.00	3.42	106.63	11,686.66	-128.70	430.93	-111.44	0.00	0.00	0.00
11,800.00	3.42	106.63	11,786.48	-130.41	436.65	-112.92	0.00	0.00	0.00
11,900.00	3.42	106.63	11,886.30	-132.12	442.38	-114.40	0.00	0.00	0.00
12,000.00	3.42	106.63	11,986.12	-133.83	448.10	-115.88	0.00	0.00	0.00
12,028.90	3.42	106.63	12,014.97	-134.32	449.76	-116.31	0.00	0.00	0.00
12,050.00	3.61	64.55	12,036.03	-134.21	450.96	-116.16	12.00	0.90	-199.46
12,075.00	5.59	35.39	12,060.96	-132.88	452.38	-114.77	12.00	7.89	-116.63
12,100.00	8.21	22.96	12,085.77	-130.25	453.78	-112.08	12.00	10.48	-49.69
12,125.00	11.02	16.67	12,110.42	-126.32	455.16	-108.10	12.00	11.26	-25.16
12,150.00	13.91	12.95	12,134.83	-121.10	456.52	-102.83	12.00	11.57	-14.92
12,175.00	16.84	10.49	12,158.93	-114.60	457.85	-96.29	12.00	11.72	-9.84
12,200.00	19.79	8.74	12,182.66	-106.86	459.15	-88.50	12.00	11.80	-6.99
12,225.00	22.75	7.43	12,205.96	-97.88	460.42	-79.48	12.00	11.85	-5.23
12,250.00	25.72	6.41	12,228.75	-87.69	461.65	-69.25	12.00	11.88	-4.08
12,275.00	28.70	5.59	12,250.98	-76.32	462.85	-57.84	12.00	11.91	-3.29
12,300.00	31.68	4.91	12,272.59	-63.80	463.99	-45.29	12.00	11.92	-2.72
12,325.00	34.66	4.34	12,293.51	-50.17	465.09	-31.62	12.00	11.93	-2.29
12,350.00	37.65	3.84	12,313.69	-35.46	466.14	-16.88	12.00	11.94	-1.97
12,375.00	40.64	3.41	12,333.08	-19.71	467.14	-1.10	12.00	11.95	-1.72
12,400.00	43.63	3.03	12,351.62	-2.97	468.08	15.66	12.00	11.96	-1.52
12,425.00	46.62	2.69	12,369.26	14.72	468.96	33.38	12.00	11.96	-1.37
12,450.00	49.61	2.38	12,385.95	33.31	469.78	51.99	12.00	11.96	-1.24
12,475.00	52.60	2.10	12,401.64	52.75	470.54	71.44	12.00	11.97	-1.13
12,500.00	55.59	1.84	12,416.30	72.99	471.24	91.69	12.00	11.97	-1.05
12,525.00	58.59	1.59	12,429.88	93.97	471.86	112.67	12.00	11.97	-0.97
12,550.00	61.58	1.36	12,442.35	115.63	472.42	134.34	12.00	11.97	-0.91
12,575.00	64.57	1.15	12,453.67	137.91	472.91	156.62	12.00	11.98	-0.86
12,594.89	66.95	0.98	12,461.83	156.04	473.25	174.75	12.00	11.98	-0.82
FTP (Dogwood 23 Fed Com #708H)									
12,600.00	67.57	0.94	12,463.81	160.75	473.33	179.47	12.00	11.98	-0.81
12,625.00	70.56	0.75	12,472.74	184.10	473.67	202.80	12.00	11.98	-0.79
12,650.00	73.56	0.56	12,480.44	207.88	473.94	226.58	12.00	11.98	-0.76
12,675.00	76.55	0.37	12,486.89	232.03	474.14	250.72	12.00	11.98	-0.73
12,700.00	79.55	0.19	12,492.06	256.48	474.26	275.16	12.00	11.98	-0.72
12,725.00	82.54	0.02	12,495.95	281.18	474.30	299.83	12.00	11.98	-0.70
12,750.00	85.54	359.85	12,498.55	306.04	474.27	324.67	12.00	11.98	-0.69
12,775.00	88.53	359.67	12,499.84	331.00	474.17	349.61	12.00	11.98	-0.69
12,787.26	90.00	359.59	12,500.00	343.26	474.09	361.86	12.00	11.98	-0.69
12,800.00	90.00	359.59	12,500.00	356.00	474.00	374.58	0.00	0.00	0.00
12,900.00	90.00	359.59	12,500.00	456.00	473.28	474.47	0.00	0.00	0.00
13,000.00	90.00	359.59	12,500.00	555.99	472.57	574.36	0.00	0.00	0.00
13,100.00	90.00	359.59	12,500.00	655.99	471.85	674.25	0.00	0.00	0.00
13,200.00	90.00	359.59	12,500.00	755.99	471.14	774.14	0.00	0.00	0.00



EOG Resources, Inc.

Planning Report

Database: EDM 5000.1 Single User Db
Company: EOG Resources - Midland
Project: Lea County, NM (NAD 83 NME)
Site: Dogwood 23 Fed Com
Well: #708H
Wellbore: OH
Design: Plan #0.1

Local Co-ordinate Reference: Well #708H
TVD Reference: KB = 25' @ 3313.00usft
MD Reference: KB = 25' @ 3313.00usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature

Planned 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)
13,300.00	90.00	359.59	12,500.00	855.99	470.42	874.03	0.00	0.00	0.00
13,400.00	90.00	359.59	12,500.00	955.98	469.71	973.92	0.00	0.00	0.00
13,500.00	90.00	359.59	12,500.00	1,055.98	468.99	1,073.81	0.00	0.00	0.00
13,600.00	90.00	359.59	12,500.00	1,155.98	468.28	1,173.70	0.00	0.00	0.00
13,700.00	90.00	359.59	12,500.00	1,255.98	467.56	1,273.59	0.00	0.00	0.00
13,800.00	90.00	359.59	12,500.00	1,355.97	466.84	1,373.48	0.00	0.00	0.00
13,900.00	90.00	359.59	12,500.00	1,455.97	466.13	1,473.37	0.00	0.00	0.00
14,000.00	90.00	359.59	12,500.00	1,555.97	465.41	1,573.26	0.00	0.00	0.00
14,100.00	90.00	359.59	12,500.00	1,655.97	464.70	1,673.15	0.00	0.00	0.00
14,200.00	90.00	359.59	12,500.00	1,755.96	463.98	1,773.04	0.00	0.00	0.00
14,300.00	90.00	359.59	12,500.00	1,855.96	463.27	1,872.93	0.00	0.00	0.00
14,400.00	90.00	359.59	12,500.00	1,955.96	462.55	1,972.82	0.00	0.00	0.00
14,500.00	90.00	359.59	12,500.00	2,055.96	461.83	2,072.71	0.00	0.00	0.00
14,600.00	90.00	359.59	12,500.00	2,155.95	461.12	2,172.60	0.00	0.00	0.00
14,700.00	90.00	359.59	12,500.00	2,255.95	460.40	2,272.49	0.00	0.00	0.00
14,800.00	90.00	359.59	12,500.00	2,355.95	459.69	2,372.38	0.00	0.00	0.00
14,900.00	90.00	359.59	12,500.00	2,455.95	458.97	2,472.27	0.00	0.00	0.00
15,000.00	90.00	359.59	12,500.00	2,555.94	458.26	2,572.16	0.00	0.00	0.00
15,100.00	90.00	359.59	12,500.00	2,655.94	457.54	2,672.04	0.00	0.00	0.00
15,200.00	90.00	359.59	12,500.00	2,755.94	456.83	2,771.93	0.00	0.00	0.00
15,300.00	90.00	359.59	12,500.00	2,855.93	456.11	2,871.82	0.00	0.00	0.00
15,400.00	90.00	359.59	12,500.00	2,955.93	455.39	2,971.71	0.00	0.00	0.00
15,500.00	90.00	359.59	12,500.00	3,055.93	454.68	3,071.60	0.00	0.00	0.00
15,600.00	90.00	359.59	12,500.00	3,155.93	453.96	3,171.49	0.00	0.00	0.00
15,700.00	90.00	359.59	12,500.00	3,255.92	453.25	3,271.38	0.00	0.00	0.00
15,800.00	90.00	359.59	12,500.00	3,355.92	452.53	3,371.27	0.00	0.00	0.00
15,900.00	90.00	359.59	12,500.00	3,455.92	451.82	3,471.16	0.00	0.00	0.00
16,000.00	90.00	359.59	12,500.00	3,555.92	451.10	3,571.05	0.00	0.00	0.00
16,100.00	90.00	359.59	12,500.00	3,655.91	450.39	3,670.94	0.00	0.00	0.00
16,200.00	90.00	359.59	12,500.00	3,755.91	449.67	3,770.83	0.00	0.00	0.00
16,300.00	90.00	359.59	12,500.00	3,855.91	448.95	3,870.72	0.00	0.00	0.00
16,400.00	90.00	359.59	12,500.00	3,955.91	448.24	3,970.61	0.00	0.00	0.00
16,500.00	90.00	359.59	12,500.00	4,055.90	447.52	4,070.50	0.00	0.00	0.00
16,600.00	90.00	359.59	12,500.00	4,155.90	446.81	4,170.39	0.00	0.00	0.00
16,700.00	90.00	359.59	12,500.00	4,255.90	446.09	4,270.28	0.00	0.00	0.00
16,800.00	90.00	359.59	12,500.00	4,355.90	445.38	4,370.17	0.00	0.00	0.00
16,900.00	90.00	359.59	12,500.00	4,455.89	444.66	4,470.06	0.00	0.00	0.00
17,000.00	90.00	359.59	12,500.00	4,555.89	443.95	4,569.95	0.00	0.00	0.00
17,100.00	90.00	359.59	12,500.00	4,655.89	443.23	4,669.84	0.00	0.00	0.00
17,200.00	90.00	359.59	12,500.00	4,755.89	442.51	4,769.73	0.00	0.00	0.00
17,300.00	90.00	359.59	12,500.00	4,855.88	441.80	4,869.62	0.00	0.00	0.00
17,400.00	90.00	359.59	12,500.00	4,955.88	441.08	4,969.51	0.00	0.00	0.00
17,500.00	90.00	359.59	12,500.00	5,055.88	440.37	5,069.40	0.00	0.00	0.00
17,600.00	90.00	359.59	12,500.00	5,155.88	439.65	5,169.29	0.00	0.00	0.00
17,700.00	90.00	359.59	12,500.00	5,255.87	438.94	5,269.18	0.00	0.00	0.00
17,800.00	90.00	359.59	12,500.00	5,355.87	438.22	5,369.07	0.00	0.00	0.00
17,900.00	90.00	359.59	12,500.00	5,455.87	437.51	5,468.95	0.00	0.00	0.00
18,000.00	90.00	359.59	12,500.00	5,555.87	436.79	5,568.84	0.00	0.00	0.00
18,100.00	90.00	359.59	12,500.00	5,655.86	436.07	5,668.73	0.00	0.00	0.00
18,200.00	90.00	359.59	12,500.00	5,755.86	435.36	5,768.62	0.00	0.00	0.00
18,300.00	90.00	359.59	12,500.00	5,855.86	434.64	5,868.51	0.00	0.00	0.00
18,400.00	90.00	359.59	12,500.00	5,955.86	433.93	5,968.40	0.00	0.00	0.00
18,500.00	90.00	359.59	12,500.00	6,055.85	433.21	6,068.29	0.00	0.00	0.00
18,600.00	90.00	359.59	12,500.00	6,155.85	432.50	6,168.18	0.00	0.00	0.00



EOG Resources, Inc.
Planning Report

Database: EDM 5000.1 Single User Db
Company: EOG Resources - Midland
Project: Lea County, NM (NAD 83 NME)
Site: Dogwood 23 Fed Com
Well: #708H
Wellbore: OH
Design: Plan #0.1

Local Co-ordinate Reference: Well #708H
TVD Reference: KB = 25' @ 3313.00usft
MD Reference: KB = 25' @ 3313.00usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature

Planned 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)
18,700.00	90.00	359.59	12,500.00	6,255.85	431.78	6,268.07	0.00	0.00	0.00
18,800.00	90.00	359.59	12,500.00	6,355.85	431.07	6,367.96	0.00	0.00	0.00
18,900.00	90.00	359.59	12,500.00	6,455.84	430.35	6,467.85	0.00	0.00	0.00
19,000.00	90.00	359.59	12,500.00	6,555.84	429.63	6,567.74	0.00	0.00	0.00
19,100.00	90.00	359.59	12,500.00	6,655.84	428.92	6,667.63	0.00	0.00	0.00
19,200.00	90.00	359.59	12,500.00	6,755.84	428.20	6,767.52	0.00	0.00	0.00
19,300.00	90.00	359.59	12,500.00	6,855.83	427.49	6,867.41	0.00	0.00	0.00
19,400.00	90.00	359.59	12,500.00	6,955.83	426.77	6,967.30	0.00	0.00	0.00
19,500.00	90.00	359.59	12,500.00	7,055.83	426.06	7,067.19	0.00	0.00	0.00
19,600.00	90.00	359.59	12,500.00	7,155.82	425.34	7,167.08	0.00	0.00	0.00
19,700.00	90.00	359.59	12,500.00	7,255.82	424.62	7,266.97	0.00	0.00	0.00
19,800.00	90.00	359.59	12,500.00	7,355.82	423.91	7,366.86	0.00	0.00	0.00
19,900.00	90.00	359.59	12,500.00	7,455.82	423.19	7,466.75	0.00	0.00	0.00
20,000.00	90.00	359.59	12,500.00	7,555.81	422.48	7,566.64	0.00	0.00	0.00
20,100.00	90.00	359.59	12,500.00	7,655.81	421.76	7,666.53	0.00	0.00	0.00
20,200.00	90.00	359.59	12,500.00	7,755.81	421.05	7,766.42	0.00	0.00	0.00
20,300.00	90.00	359.59	12,500.00	7,855.81	420.33	7,866.31	0.00	0.00	0.00
20,400.00	90.00	359.59	12,500.00	7,955.80	419.62	7,966.20	0.00	0.00	0.00
20,500.00	90.00	359.59	12,500.00	8,055.80	418.90	8,066.09	0.00	0.00	0.00
20,600.00	90.00	359.59	12,500.00	8,155.80	418.18	8,165.98	0.00	0.00	0.00
20,700.00	90.00	359.59	12,500.00	8,255.80	417.47	8,265.86	0.00	0.00	0.00
20,800.00	90.00	359.59	12,500.00	8,355.79	416.75	8,365.75	0.00	0.00	0.00
20,900.00	90.00	359.59	12,500.00	8,455.79	416.04	8,465.64	0.00	0.00	0.00
21,000.00	90.00	359.59	12,500.00	8,555.79	415.32	8,565.53	0.00	0.00	0.00
21,100.00	90.00	359.59	12,500.00	8,655.79	414.61	8,665.42	0.00	0.00	0.00
21,200.00	90.00	359.59	12,500.00	8,755.78	413.89	8,765.31	0.00	0.00	0.00
21,300.00	90.00	359.59	12,500.00	8,855.78	413.18	8,865.20	0.00	0.00	0.00
21,400.00	90.00	359.59	12,500.00	8,955.78	412.46	8,965.09	0.00	0.00	0.00
21,500.00	90.00	359.59	12,500.00	9,055.78	411.74	9,064.98	0.00	0.00	0.00
21,600.00	90.00	359.59	12,500.00	9,155.77	411.03	9,164.87	0.00	0.00	0.00
21,700.00	90.00	359.59	12,500.00	9,255.77	410.31	9,264.76	0.00	0.00	0.00
21,800.00	90.00	359.59	12,500.00	9,355.77	409.60	9,364.65	0.00	0.00	0.00
21,900.00	90.00	359.59	12,500.00	9,455.77	408.88	9,464.54	0.00	0.00	0.00
22,000.00	90.00	359.59	12,500.00	9,555.76	408.17	9,564.43	0.00	0.00	0.00
22,100.00	90.00	359.59	12,500.00	9,655.76	407.45	9,664.32	0.00	0.00	0.00
22,200.00	90.00	359.59	12,500.00	9,755.76	406.74	9,764.21	0.00	0.00	0.00
22,300.00	90.00	359.59	12,500.00	9,855.76	406.02	9,864.10	0.00	0.00	0.00
22,400.00	90.00	359.59	12,500.00	9,955.75	405.30	9,963.99	0.00	0.00	0.00
22,500.00	90.00	359.59	12,500.00	10,055.75	404.59	10,063.88	0.00	0.00	0.00
22,582.26	90.00	359.59	12,500.00	10,138.01	404.00	10,146.05	0.00	0.00	0.00

PBHL (Dogwood 23 Fed Com #708H)



EOG Resources, Inc.
Planning Report

Database: EDM 5000.1 Single User Db
Company: EOG Resources - Midland
Project: Lea County, NM (NAD 83 NME)
Site: Dogwood 23 Fed Com
Well: #708H
Wellbore: OH
Design: Plan #0.1

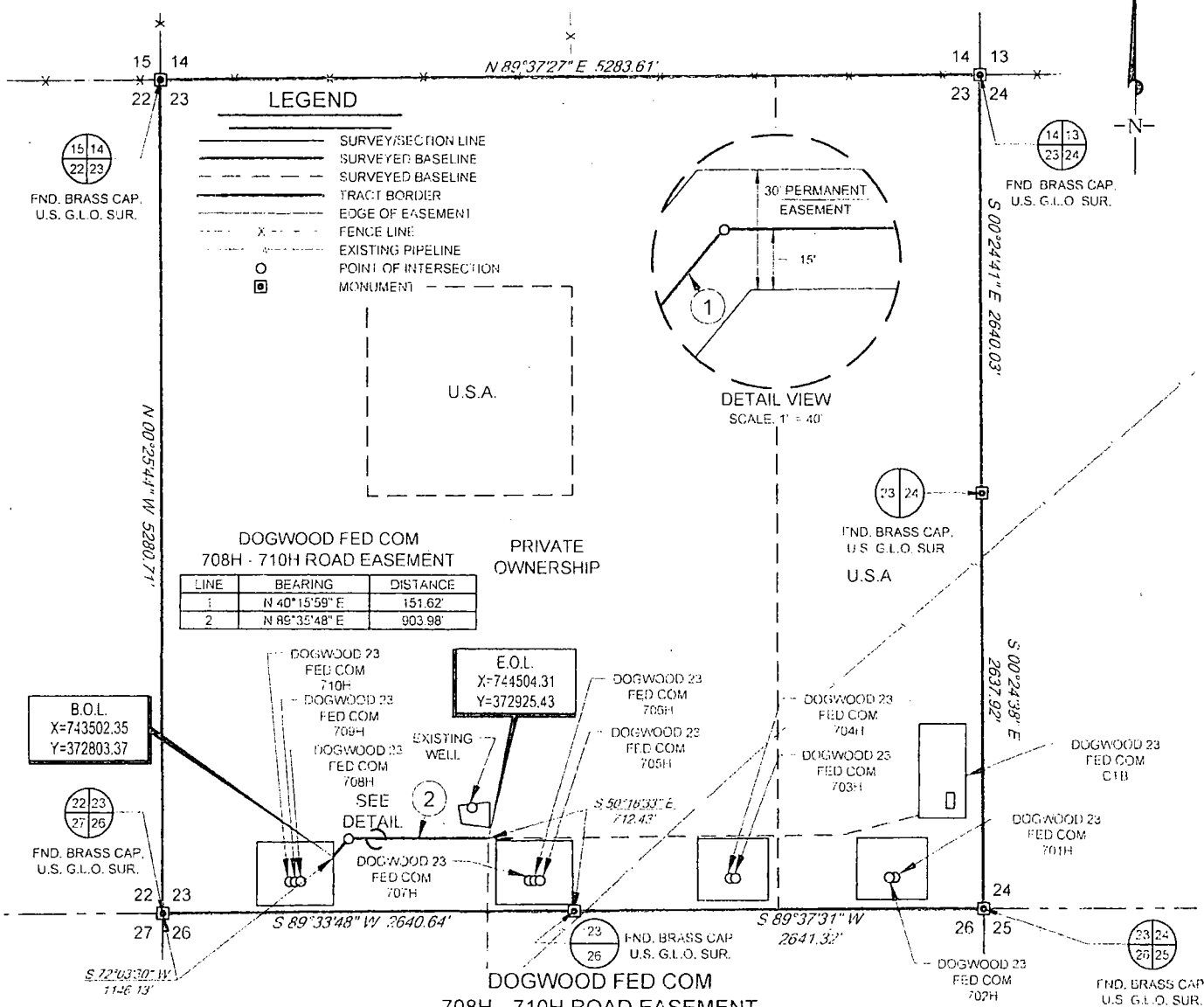
Local Co-ordinate Reference: Well #708H
TVD Reference: KB = 25' @ 3313.00usft
MD Reference: KB = 25' @ 3313.00usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature

Design Targets

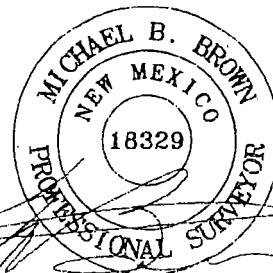
Target Name

- hit/miss target	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
- Shape									
PBHL (Dogwood 23 Fed	0.00	0.00	12,500.00	10,138.01	404.00	382,847.00	784,885.00	32.05008902	-103.54724920
- plan hits target center									
- Point									
FTP (Dogwood 23 Fed C	0.00	0.00	12,500.00	139.01	478.00	372,848.00	784,959.00	32.02260300	-103.54724524
- plan misses target center by 42.07usft at 12594.88usft MD (12461.83 TVD, 156.04 N, 473.25 E)									
- Point									

SECTION 23, TOWNSHIP 26-S, RANGE 33-E, N.M.P.M.
LEA COUNTY, NEW MEXICO



Bring a proposed road easement being 30 feet in width: 15 feet left and 15 feet right of the above platted centerline
total line footage containing 1055.60 feet or 63.98 rods containing 0.73 acres more or less



Michael Blake Brown, P.S. No 18329

JANUARY 16, 2017



TOPOGRAPHIC
LOYALTY INNOVATION LEGACY

1400 EVERMAN
PARKWAY, Ste. 197 • Ft. WORTH, TEXAS 76149 TELEPHONE
(817) 744-7512 • FAX (817) 744-754E
7903 NORTH BIG SPRING • MIDLAND, TEXAS 79705
TELEPHONE (432) 862-1053 OR (802) 767-1053 • FAX (432) 682-1743
HARRIS TO CONSUMERS ONLY



Geog resources, Inc.

DOGWOOD FED COM 708H - 710H ROAD EASEMENT	REVISION:	
	INT	DATE
DATE: 01/16/17		
FILE: F:\DOGWOOD 21 FED COM\708-710 ROAD		
DRAWN BY: EAH		
SHEET: 1 OF 1		

NOTES

- 2 ORIGINAL DOCUMENT SIZE: 8 5/8 x 11"
3 ALL BEARINGS, DISTANCES, AND COORDINATE VALUES CONTAINED HEREIN ARE GRF-BASED UPON THE NEW MEXICO STATE PLANE
4 COORDINATE SYSTEM, EAST ZONE, U.S. SURVEY FEET, NORTH AMERICAN DATUM 1927.
5 CERTIFICATION IS MADE ONLY TO THE LOCATION OF THIS EASEMENT IN RELATION TO THE EVIDENCE FOUND DURING A FIELD SURVEY,
6 MADE ON THE GROUND, UNDER MY SUPERVISION, AND USING DOCUMENTATION PROVIDED BY EOG RESOURCES, INC. ONLY.
7 UNLESS OTHERWISE STATED, THIS CERTIFICATION IS LIMITED TO THE DATE OF THIS SURVEY. WITHIN ADJOINING THIS EASEMENT, HAVE BEEN LOCATED AS
8 SHOWN HEREON OF WHICH I HAVE KNOWLEDGE. THIS CERTIFICATION IS LIMITED TO THOSE PERSONS OR ENTITIES SHOWN ON THE
9 FACE OF THIS PLAT AND IS NOT TRANSFERABLE, AND MADE FOR THIS TRANSACTION ONLY.
10 B.O.L.P.O.B. = BEGINNING OF LINE/POINT OF BEGINNING
11 E.O.L.P.O.B. = END OF LINE/POINT OF EXIT
12 ADJOINING INFORMATION SHOWN FOR INFORMATIONAL PURPOSES ONLY.

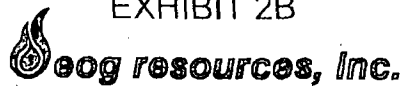
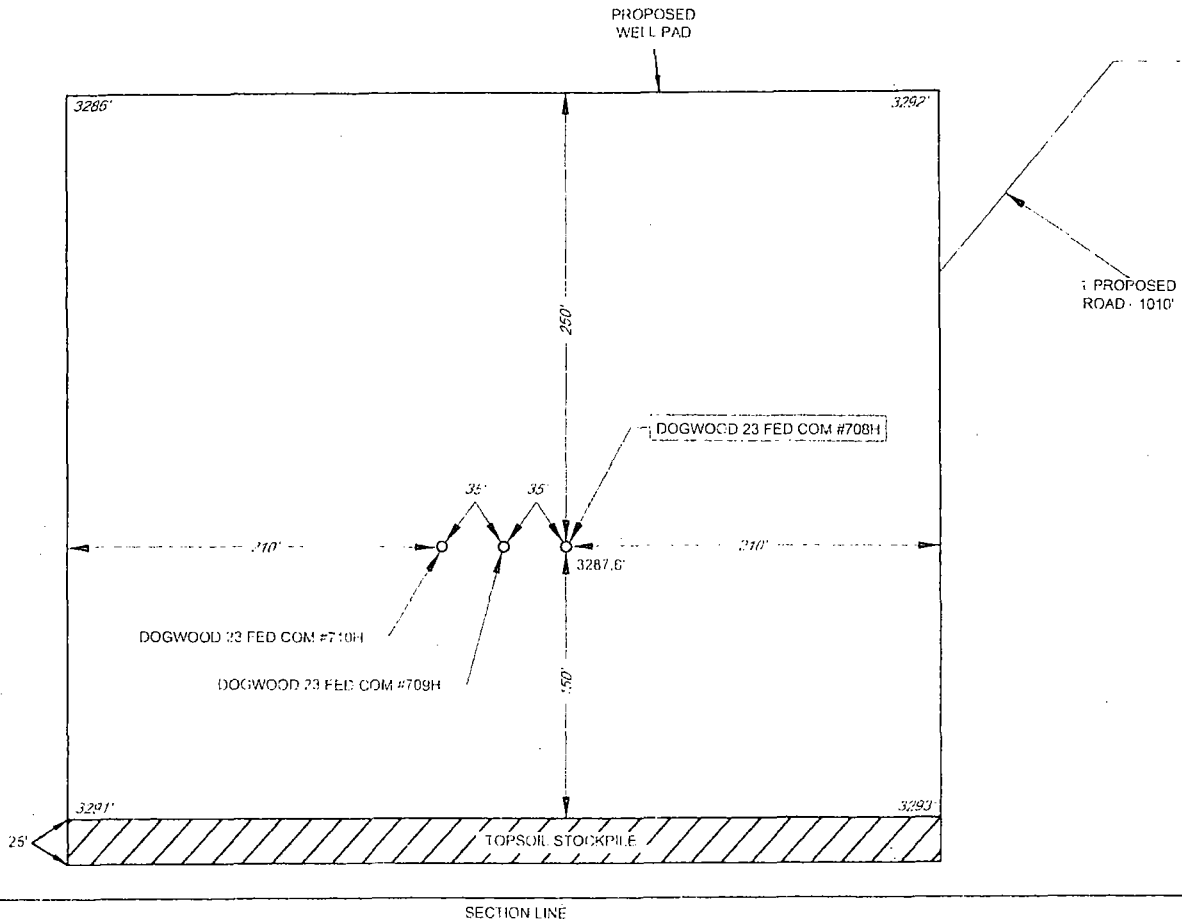


EXHIBIT 2B

SECTION 23, TOWNSHIP 26-S, RANGE 33-E, N.M.P.M.
LEA COUNTY, NEW MEXICO

DETAIL VIEW
SCALE 1" = 100'



LEASE NAME & WELL NO.: DOGWOOD 23 FED COM #708H
#708H LATITUDE N 32.0221044 #708H LONGITUDE W 103.5483246

LEGEND

SECTION LINE
PROPOSED ROAD

SCALE 1" = 100'
0' 50' 100'

ALL BEARINGS, DISTANCES, AND COORDINATE VALUES CONTAINED HEREON ARE GRID
BASED UPON THE NEW MEXICO STATE PLANE COORDINATE SYSTEM, EAST ZONE OF THE
NORTH AMERICAN DATUM 1927, U.S. SURVEY FEET

THIS PROPOSED PAD SILL LOCATION SHOWN HEREON HAS BEEN SURVEYED ON THE GROUND UNDER
MY SUPERVISION AND PREPARED ACCORDING TO THE EVIDENCE FOUND AT THE TIME OF SURVEY,
AND DATA PROVIDED BY EOG RESOURCES, INC. THIS CERTIFICATION IS MADE AND LIMITED TO THOSE
PERSONS OR ENTITIES SHOWN ON THE FACE OF THIS PLAT AND IS NON-TRANSFERABLE. THIS
SURVEY IS CERTIFIED FOR THIS TRANSACTION ONLY.



TOPOGRAPHIC
LOYALTY INNOVATION LEGACY

1400 EVERMAN PARKWAY, Ste. 187 • FT. WORTH, TEXAS 76140
TELEPHONE: (817) 754-7512 • FAX: (817) 744-7546
2803 NORTH BIG SPRING • MIDLAND, TEXAS 79705
TELEPHONE: (409) 682-1653 OR (800) 767-4253 • FAX: (409) 682-1743
WWW.TOPOGRAPHIC.COM

ORIGINAL DOCUMENT SIZE: 8.5" X 11"

S:\SURV\ME-OG, AND AHEAD\DOGWOOD_23_FED_COM\FINAL_PROD\EXHIBIT_2B\DOGWOOD23_FEDCOM_708H_REV1.DWG 11/13/2014 11:05:07 PM gmm/evc