

Lea County, NM (NAD 83 NME)
Dogwood 23 Fed Com #706H
H&P 621
Plan #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: #706H

Ground Level: 3304.0
KB = 25' @ 3329.5surf (H&P 621)
Northing: 372720.00
Easting: 785985.00
Latitude: 32° 1' 20.030 N
Longitude: 103° 32' 38.177 W

SECTION DETAILS

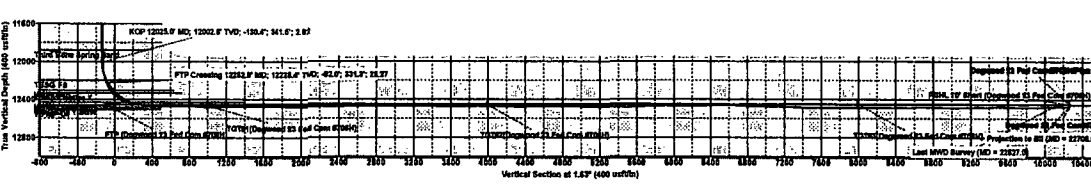
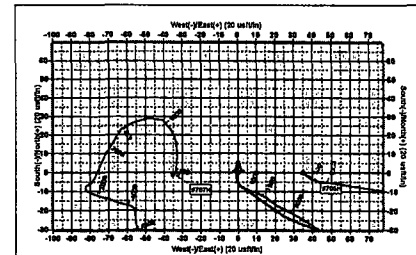
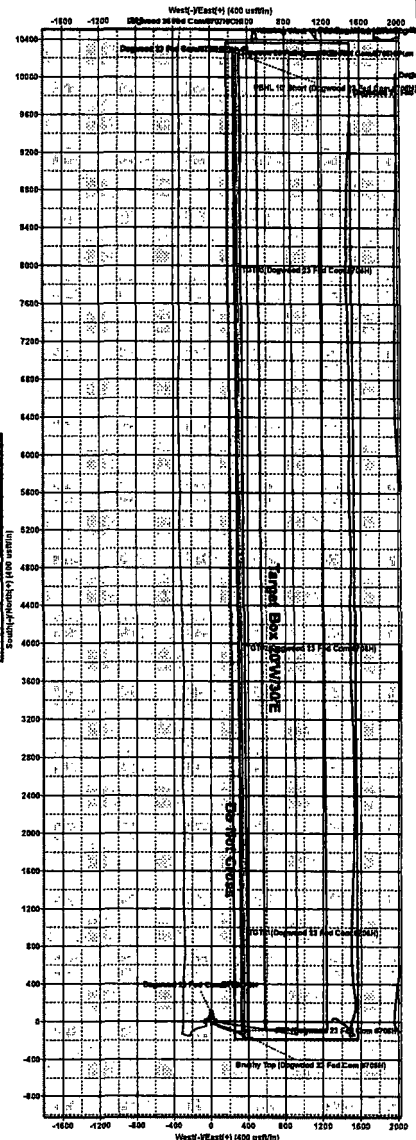
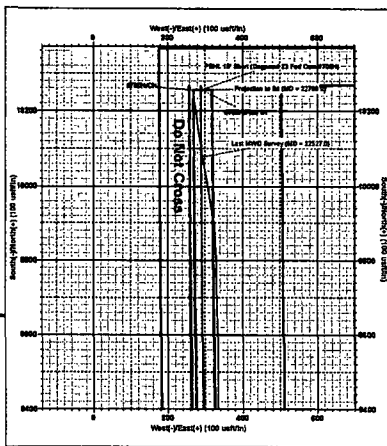
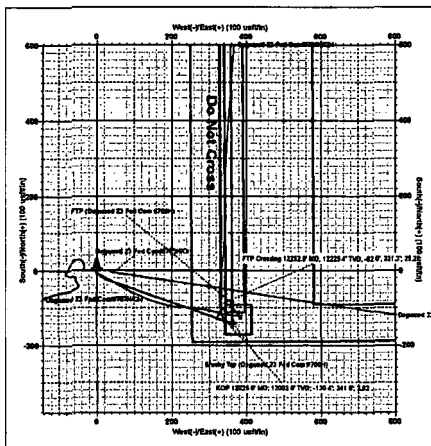
Sec	MD	Inc	Azi	TVD	+N-S	+E-W	Dleg	TFace	Vsect	Target
1	914.0	1.59	124.02	913.9	-7.7	2.5	0.00	0.00	-7.6	
2	1914.0	1.59	124.02	1913.5	-23.2	26.5	0.00	0.00	-22.5	
3	2138.1	6.00	109.16	2137.1	-28.8	36.1	2.00	-20.07	-27.7	
4	5288.6	6.00	109.16	5270.6	-136.9	350.2	0.00	0.00	-126.9	
5	5598.8	0.00	0.00	5579.0	-142.0	365.0	2.00	180.00	-131.8	
6	12004.3	0.00	0.00	11983.5	-142.0	365.0	0.00	0.00	-131.8	
7	12754.3	90.00	359.84	12463.0	335.4	362.0	12.00	359.64	345.6	
8	13409.2	90.00	359.84	12463.0	990.3	357.8	0.00	0.00	1000.1	TGT#1(Dogwood 23 Fed Com #706H)
9	13411.9	90.02	359.69	12463.0	993.0	357.8	2.00	-68.67	1002.8	
10	18411.0	90.02	359.59	12462.0	3992.1	336.2	0.00	0.00	4000.0	TGT#2(Dogwood 23 Fed Com #706H)
11	18419.4	90.19	359.53	12462.0	4000.5	336.1	2.00	0.01	4008.4	
12	20413.6	90.19	359.59	12449.0	7994.5	307.3	0.00	0.00	8000.0	TGT#3(Dogwood 23 Fed Com #706H)
13	20422.9	90.00	359.59	12449.0	8003.8	307.2	2.00	-180.00	8009.3	
14	22874.1	90.00	359.59	12449.0	10265.0	291.0	0.00	0.00	10259.1	PBHL 10' Short (Dogwood 23 Fed Com #706H)

CASING DETAILS

No casing data is available

WELLSBORE TARGET DETAILS (MAP CO-ORDINATES)

Name	TVD	+N-S	+E-W	Northing	Easting
Brushy Top (Dogwood 23 Fed Com #706H)	7807.0	-142.0	366.0	372878.00	786351.00
PBHL 10' Short (Dogwood 23 Fed Com #706H)	12449.0	10265.0	291.0	362978.00	786278.00
TGT#1(Dogwood 23 Fed Com #706H)	12463.0	7994.5	307.3	380714.50	786292.31
TGT#2(Dogwood 23 Fed Com #706H)	12462.0	3992.1	336.2	378712.10	786321.18
TGT#3(Dogwood 23 Fed Com #706H)	12463.0	990.3	357.8	373710.30	786342.83
FTP (Dogwood 23 Fed Com #706H)	12463.0	-62.0	366.0	372828.00	786351.00





EOG Resources - Midland

Lea County, NM (NAD 83 NME)
Dogwood 23 Fed Com
#706H
OH

Design: OH

Midland PVA

19 October, 2018

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DEC 11 2018
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Midland PVA

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #706H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 25' @ 3329.0usft (H&P 621)
Site:	Dogwood 23 Fed Com	MD Reference:	KB = 25' @ 3329.0usft (H&P 621)
Well:	#706H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.14

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
From:	Map	Easting:	788,311.00 usft
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 1' 20.069 N
		Longitude:	103° 32' 11.158 W
		Grid Convergence:	0.42 "

Well	#706H		
Well Position	+N-S	0.0 usft	Northing:
	+E-W	0.0 usft	Easting:
Position Uncertainty	0.0 usft	Wellhead Elevation:	0.0 usft
		Latitude:	32° 1' 20.030 N
		Longitude:	103° 32' 38.177 W
		Ground Level:	3,304.0 usft

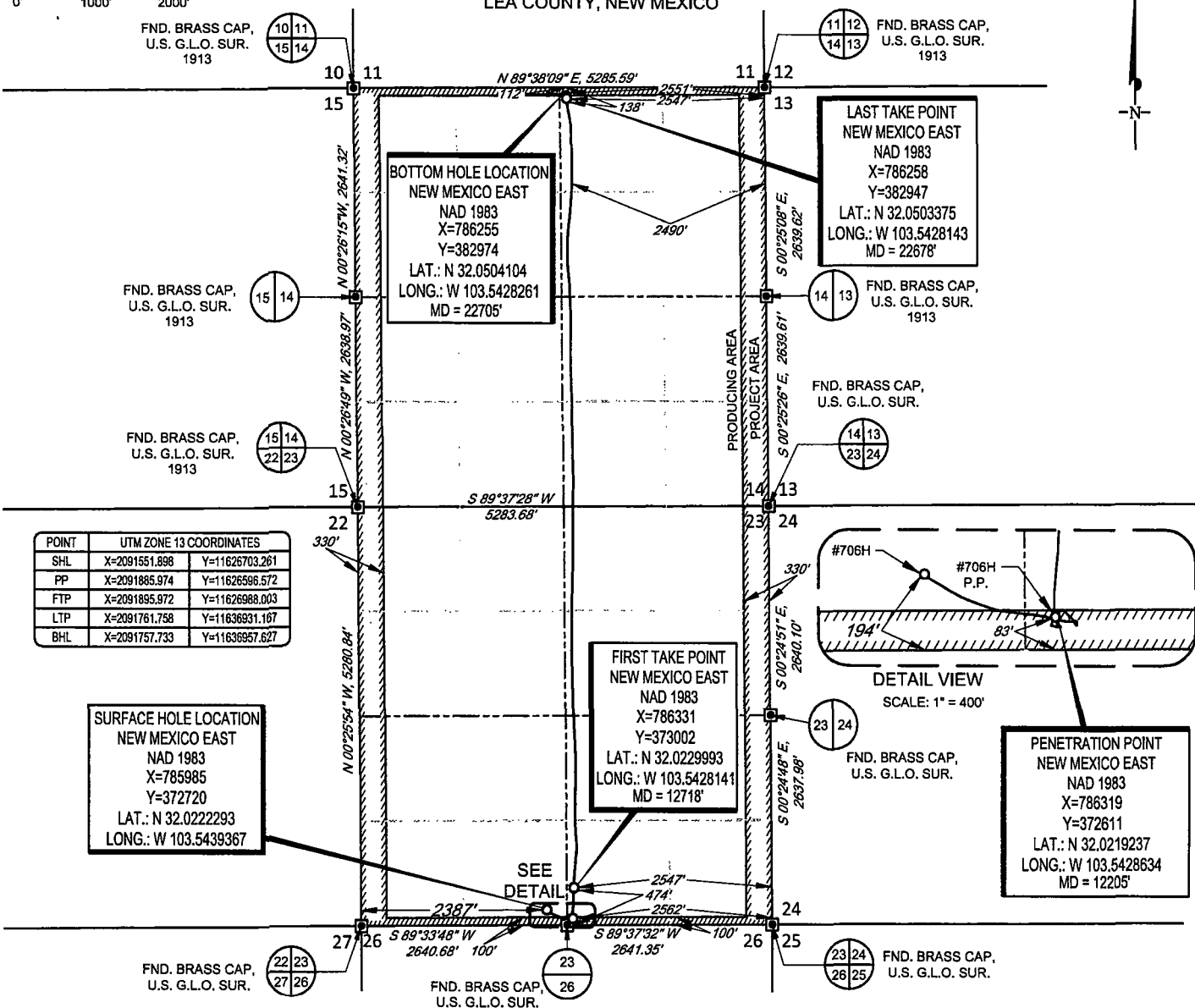
Wellbore	OH		
Magnetics	Model Name	Sample Date	Declination (°)
	IGRF2015	2/17/2017	6.96
			Dip Angle (°)
			59.89
			Field Strength (nT)
			47,855.57539438

Design	OH		
Audit Notes:			
Version:	1.0	Phase:	ACTUAL
		Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (usft)	+N-S (usft)	+E-W (usft)
	0.0	0.0	0.0
			Direction (°)
			1.53

SCALE: 1" = 2000'

0' 1000' 2000'

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

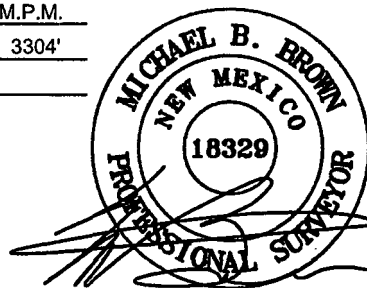


LEASE NAME & WELL NO.: DOGWOOD 23 FED COM #706H
SECTION 23 TWP 26-S RGE 33-E SURVEY N.M.P.M.
COUNTY LEA STATE NM ELEVATION 3304'
DESCRIPTION 194' FSL & 2387' FWL



TOPOGRAPHIC
LOYALTY INNOVATION LEGACY

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TELEPHONE: (817) 744-7512 • FAX (817) 744-7554
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Michael Blake Brown, P.S. No. 18329
NOVEMBER 16, 2018

EOG resources, Inc.

DOGWOOD 23 FED COM #706H AS-COMPLETED	REVISION:	NOTES: 1. ORIGINAL DOCUMENT SIZE: 8.5" X 11" 2. ALL BEARINGS, DISTANCES, AND COORDINATE VALUES CONTAINED HEREIN ARE GRID BASED UPON THE NEW MEXICO COORDINATE SYSTEM OF 1983, EAST ZONE, U.S. SURVEY FEET. 3. THIS WELL 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.
DATE: 11/16/18		
FILE:AD_DOGWOOD_23_FED_COM_706H		
DRAWN BY: AMD		
SHEET: 1 OF 1		



Midland PVA

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #706H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 25' @ 3329.0usft (H&P 621)
Site:	Dogwood 23 Fed Com	MD Reference:	KB = 25' @ 3329.0usft (H&P 621)
Well:	#706H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.14

Survey Program		Date	10/19/2018	
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
147.0	19,719.0	Gordon MWD (OH)	MWD	OWSG MWD - Standard
19,816.0	22,706.0	Dritech MWD (OH)	MWD	OWSG MWD - Standard

MD (usft)	Inc (")	Azi (azimuth) (")	TVD (usft)	N/S (usft)	EW (usft)	DLog (*/100usft)	Build (*/100usft)	Turn (*/100usft)	High to Plan (usft)	Right to Plan (usft)
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0
147.0	0.21	230.16	147.0	-0.2	-0.2	0.14	0.14	0.00	0.0	0.0
326.0	0.28	208.54	326.0	-0.8	-0.7	0.06	0.04	-12.08	0.0	0.0
504.0	0.43	160.68	504.0	-1.8	-0.7	0.18	0.08	-26.89	0.0	0.0
676.0	0.76	176.89	676.0	-3.5	-0.4	0.21	0.19	9.42	0.0	0.0
865.0	1.61	138.74	864.9	-6.8	1.4	0.59	0.45	-20.19	0.0	0.0
914.0	1.59	124.02	913.9	-7.7	2.5	0.84	-0.04	-30.04	0.0	0.0
1,056.0	0.96	110.27	1,055.9	-9.2	5.2	0.49	-0.44	-9.68	0.7	0.5
1,241.0	0.95	108.15	1,240.9	-10.2	8.1	0.02	-0.01	-1.15	2.6	1.8
1,426.0	1.35	109.09	1,425.8	-11.4	11.6	0.22	0.22	0.51	3.8	3.1
1,611.0	1.41	124.95	1,610.8	-13.4	15.6	0.21	0.03	8.57	5.3	2.5
1,798.0	1.55	125.34	1,797.7	-16.2	19.5	0.08	0.07	0.21	5.7	2.3
1,984.0	3.86	115.75	1,983.5	-20.4	27.3	1.31	1.30	-5.16	2.3	3.4
2,172.0	6.29	123.50	2,170.7	-28.9	41.8	1.29	1.24	4.12	1.1	0.5
2,359.0	6.12	117.36	2,356.6	-39.2	59.2	0.37	-0.09	-3.28	0.2	-3.3
2,547.0	5.91	121.11	2,543.6	-48.8	76.4	0.24	-0.11	1.99	-0.4	-6.7
2,735.0	6.18	114.51	2,730.6	-58.0	93.9	0.40	0.14	-3.51	0.2	-9.7
2,922.0	6.09	112.75	2,916.5	-66.0	112.2	0.11	-0.05	-0.94	0.0	-11.2
3,109.0	6.66	111.55	3,102.3	-73.8	131.4	0.31	0.30	-0.64	-1.0	-12.2
3,296.0	6.02	110.18	3,288.2	-81.2	150.7	0.35	-0.34	-0.73	-1.8	-12.8
3,483.0	5.46	105.15	3,474.2	-86.9	168.5	0.40	-0.30	-2.69	0.1	-12.5



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Site:	Dogwood 23 Fed Com	MD Reference:	KB = 25' @ 3329.0usft (H&P 621)
Well:	#706H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.14

Survey											
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)	
3,670.0	5.43	105.23	3,660.4	-91.5	185.6	0.02	-0.02	0.04	1.9	-11.1	
3,857.0	6.03	97.15	3,846.5	-95.1	203.9	0.54	0.32	-4.32	3.9	-7.9	
4,042.0	6.01	96.88	4,030.4	-97.5	223.1	0.02	-0.01	-0.15	3.5	-3.8	
4,229.0	5.96	94.58	4,216.4	-99.4	242.5	0.13	-0.03	-1.23	3.0	0.8	
4,417.0	5.81	96.26	4,403.4	-101.2	261.7	0.12	-0.08	0.89	3.0	5.4	
4,604.0	6.10	96.22	4,589.4	-103.3	281.0	0.16	0.16	-0.02	2.6	9.8	
4,792.0	6.65	101.93	4,776.3	-106.7	301.6	0.45	0.29	3.04	2.2	13.0	
4,959.0	6.81	104.01	4,942.1	-111.1	320.7	0.17	0.10	1.25	0.5	14.8	
5,146.0	5.51	102.08	5,128.0	-115.6	340.2	0.70	-0.70	-1.03	-0.7	16.8	
5,334.0	6.11	100.66	5,315.1	-119.4	358.9	0.33	0.32	-0.76	-1.0	19.4	
5,522.0	4.38	78.34	5,502.3	-119.8	375.7	1.41	-0.92	-11.87	-15.7	19.2	
5,709.0	1.87	97.96	5,689.0	-118.7	385.7	1.44	-1.34	10.49	-17.3	25.9	
5,897.0	1.21	187.25	5,877.0	-121.1	388.5	1.18	-0.35	47.49	23.7	20.7	
6,084.0	1.15	183.59	6,063.9	-125.0	388.2	0.05	-0.03	-1.96	18.5	22.1	
6,271.0	1.23	183.24	6,250.9	-128.8	387.9	0.04	0.04	-0.19	14.4	22.2	
6,459.0	0.34	332.12	6,438.9	-130.4	387.6	0.81	-0.47	79.19	0.3	-25.4	
6,647.0	2.22	325.61	6,626.8	-126.9	385.2	1.00	1.00	-3.46	-1.1	-25.3	
6,834.0	2.27	328.84	6,813.7	-120.7	381.3	0.07	0.03	1.73	-9.8	-25.0	
7,022.0	2.21	325.45	7,001.5	-114.5	377.3	0.08	-0.03	-1.80	-15.6	-25.7	
7,210.0	1.80	316.82	7,189.4	-109.4	373.2	0.27	-0.22	-4.59	-18.1	-28.3	
7,396.0	1.26	300.63	7,375.3	-106.2	369.5	0.37	-0.29	-8.70	-14.4	-33.1	
7,583.0	2.25	323.22	7,562.2	-102.2	365.5	0.64	0.53	12.08	-31.5	-24.2	
7,770.0	2.22	317.94	7,749.1	-96.6	360.9	0.11	-0.02	-2.82	-36.5	-27.4	
7,957.0	1.41	312.40	7,936.0	-92.4	356.7	0.44	-0.43	-2.96	-39.6	-31.1	
8,144.0	0.63	284.72	8,123.0	-90.5	353.7	0.42	-0.31	-14.80	-24.0	-47.0	
8,331.0	0.60	285.01	8,310.0	-89.9	351.5	0.12	-0.12	0.16	-26.6	-46.8	
8,518.0	0.63	245.92	8,497.0	-90.0	349.6	0.22	0.02	-20.90	7.1	-53.7	



Midland PVA

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Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 25' @ 3329.0usft (H&P 621)
Site:	Dogwood 23 Fad Com	MD Reference:	KB = 25' @ 3329.0usft (H&P 621)
Well:	#706H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.14

Survey												
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	EW (usft)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)		
8,705.0	1.07	213.75	8,683.9	-91.9	347.7	0.34	0.24	-17.20	32.0	-42.2		
8,893.0	1.29	215.14	8,871.9	-95.1	345.5	0.12	0.12	0.74	27.1	-42.9		
9,080.0	1.47	221.49	9,058.8	-98.6	342.7	0.13	0.10	3.40	17.7	-45.5		
9,268.0	1.58	223.55	9,246.8	-102.3	339.3	0.07	0.06	1.10	11.1	-46.0		
9,454.0	1.62	238.35	9,432.7	-105.5	335.3	0.22	0.02	7.96	-6.1	-46.6		
9,641.0	2.26	221.59	9,619.6	-109.7	330.6	0.45	0.34	-8.96	1.3	-47.2		
9,828.0	3.23	185.14	9,806.4	-117.5	326.8	0.84	0.52	-14.14	13.6	-43.3		
10,016.0	2.46	207.00	9,994.2	-126.2	323.6	0.51	-0.41	6.31	-4.8	-44.1		
10,203.0	0.56	136.27	10,181.1	-130.5	322.4	1.25	-1.02	-37.82	37.8	-22.8		
10,297.0	1.71	91.71	10,275.1	-130.8	324.1	1.46	1.22	-47.40	41.2	9.9		
10,485.0	1.10	104.64	10,463.0	-131.4	328.6	0.36	-0.32	6.88	37.9	1.1		
10,671.0	0.40	110.98	10,649.0	-132.1	331.0	0.38	-0.38	3.41	35.3	-2.9		
10,765.0	1.47	91.27	10,743.0	-132.2	332.5	1.17	1.14	-20.97	32.7	9.1		
10,953.0	1.04	149.75	10,930.9	-133.7	335.8	0.68	-0.23	31.11	21.9	-21.1		
11,047.0	2.09	73.89	11,024.9	-134.0	337.8	2.23	1.12	-80.70	23.9	15.2		
11,235.0	1.94	79.10	11,212.8	-132.4	344.3	0.13	-0.08	2.77	18.6	13.3		
11,423.0	0.30	231.33	11,400.8	-132.2	347.0	1.18	-0.87	80.97	-7.9	-18.9		
11,610.0	0.48	173.53	11,587.8	-133.2	346.7	0.22	0.10	-30.91	10.8	-17.2		
11,751.0	0.80	203.50	11,728.8	-134.7	346.4	0.32	0.23	21.26	-0.8	-20.0		
11,832.0	0.75	240.94	11,809.7	-135.5	345.7	0.62	-0.06	46.22	-13.7	-15.1		
11,926.0	2.50	324.30	11,903.7	-134.1	344.0	2.69	1.86	88.68	-18.7	12.5		
12,019.0	2.64	327.78	11,996.6	-130.7	341.6	0.23	0.15	3.74	-21.9	13.8		
12,025.0	2.82	327.11	12,002.6	-130.4	341.5	3.01	2.96	-11.09	-22.2	13.7		
KOP 12025.0' MD; 12002.6' TVD; -130.4°; 341.5°; 2.82												
12,066.0	4.04	324.14	12,043.5	-128.4	340.1	3.01	2.98	-7.25	-22.6	14.4		
12,112.0	6.19	329.48	12,089.4	-125.0	337.9	4.78	4.67	11.61	-18.4	20.6		
12,159.0	9.68	345.84	12,135.9	-119.0	335.6	8.77	7.43	34.81	-5.9	28.6		

Company: EOG Resources - Midland
 Project: Lea County, NM (NAD 83 NME)
 Site: Dogwood 23 Fed Com
 Well: #706H
 Wellbore: OH
 Design: OH

Local Coordinate Reference:
 NAD Reference:
 North Reference:
 Survey Calculation Method:
 Database:

Well #706H
 KB = 25' @ 3329.0usft (H&P 621)
 Gnd
 Minimum Curvature
 EDM 5000.14

Survey	MD (usft)	Inc (")	Ad (exmuth) (")	TVD (usft)	N/S (usft)	EW (usft)	Drag ("/100usft)	Build ("/100usft)	Turn ("/100usft)	High to Plan (usft)	Right to Plan (usft)
	12,205.0	16.33	349.30	12,180.7	-108.8	333.5	14.55	14.46	7.52	2.1	32.2
	12,252.0	25.12	354.70	12,224.6	-82.4	331.3	18.12	18.70	11.49	8.8	34.2
	12,252.9	25.27	354.82	12,225.4	-82.0	331.3	18.00	17.04	13.69	10.0	34.3
FTP Crossing 12252.9' MD: -12225.4' TVD: -82.0' 331.3' 28.27'											
	12,299.0	33.23	359.70	12,265.6	-69.5	330.3	18.00	17.26	10.58	14.8	34.2
	12,346.0	38.79	4.06	12,303.6	-41.9	331.3	13.02	11.83	9.28	17.9	32.0
	12,393.0	43.71	5.37	12,339.0	-11.1	333.9	10.63	10.47	2.79	19.5	28.0
	12,440.0	53.16	6.31	12,370.1	23.9	337.5	20.16	20.11	2.00	19.3	25.2
	12,486.0	61.22	3.81	12,385.0	62.4	340.8	18.11	17.52	-5.43	15.5	22.3
	12,533.0	63.08	0.75	12,417.0	103.9	342.5	6.99	3.96	-6.51	12.4	20.9
	12,580.0	68.94	358.84	12,436.1	146.8	342.3	13.01	12.47	-4.06	10.9	20.9
	12,627.0	77.17	0.76	12,449.8	191.7	342.2	17.94	17.51	4.09	8.6	20.7
	12,673.0	87.39	2.65	12,455.9	237.2	343.5	22.59	22.22	4.11	3.1	18.1
	12,766.0	93.70	3.26	12,455.1	330.0	348.3	6.82	6.78	0.66	-7.9	13.7
	12,796.0	90.56	4.99	12,453.9	359.9	350.5	11.95	-10.47	5.77	-9.1	11.3
	12,859.0	88.40	3.70	12,454.5	422.7	355.2	3.99	-3.43	-2.05	-8.5	6.2
	12,953.0	90.53	4.14	12,455.4	516.5	361.7	2.31	2.27	0.47	-7.6	-0.8
	13,046.0	88.88	5.19	12,455.9	609.2	369.2	2.10	-1.77	1.13	-7.1	-9.0
	13,139.0	89.92	3.92	12,456.8	701.9	376.6	1.76	1.12	-1.37	-6.1	-17.0
	13,186.0	84.87	3.09	12,458.9	749.7	379.5	10.68	-10.53	-1.77	-4.1	-20.1
	13,279.0	84.02	357.52	12,467.9	841.3	380.0	6.05	-1.02	-5.99	4.9	-21.2
	13,325.0	84.61	356.57	12,472.4	887.0	377.6	2.42	1.28	-2.07	9.5	-19.1
	13,372.0	88.60	355.26	12,475.2	933.8	374.3	8.93	8.49	-2.79	12.3	-16.1
	13,419.0	89.10	355.25	12,476.1	980.6	370.4	1.06	1.06	-0.02	13.2	-12.5
	13,512.0	92.30	358.11	12,475.0	1,073.4	365.0	4.61	3.44	3.08	12.1	-7.8
	13,606.0	90.93	359.87	12,472.4	1,167.4	363.4	2.37	-1.46	1.87	9.4	-6.8
	13,699.0	89.72	359.78	12,471.8	1,260.4	363.1	1.30	-1.30	-0.10	8.9	-7.2



Midland PVA

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #706H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 25' @ 3329.0usft (H&P 621)
Site:	Dogwood 23 Fed Com	MD Reference:	KB = 25' @ 3329.0usft (H&P 621)
Well:	#706H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.14

MD (usft)	Inc (°)	Adj (azimuth) (°)	TVD (usft)	N/S (usft)	EW (usft)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)
13,783.0	90.25	0.33	12,471.9	1,354.4	363.2	0.81	0.56	0.59	9.0	-8.0
13,886.0	90.25	1.17	12,471.5	1,447.3	364.4	0.90	0.00	0.80	8.6	-9.8
13,979.0	91.43	1.57	12,470.1	1,540.3	366.6	1.34	1.27	0.43	7.3	-12.7
14,073.0	88.88	0.35	12,469.8	1,634.3	368.2	3.01	-2.71	-1.30	7.1	-15.0
14,166.0	88.85	0.48	12,471.7	1,727.3	368.9	0.14	-0.03	0.14	8.9	-16.3
14,260.0	89.33	0.56	12,473.2	1,821.2	369.7	0.52	0.51	0.09	10.5	-17.9
14,353.0	89.24	0.17	12,474.3	1,914.2	370.3	0.43	-0.10	-0.42	11.7	-19.1
14,446.0	90.59	357.11	12,474.5	2,007.2	368.1	3.60	1.45	-3.29	11.8	-17.6
14,539.0	90.95	357.01	12,473.2	2,100.1	363.3	0.40	0.39	-0.11	10.6	-13.5
14,632.0	91.12	356.53	12,471.5	2,192.9	358.1	0.55	0.18	-0.52	9.0	-8.9
14,726.0	90.03	358.41	12,470.6	2,286.8	353.9	2.31	-1.16	2.00	8.0	-5.5
14,819.0	90.03	358.11	12,470.5	2,379.8	351.1	0.32	0.00	-0.32	8.0	-3.3
14,913.0	90.34	357.96	12,470.2	2,473.7	347.9	0.37	0.33	-0.16	7.7	-0.8
15,007.0	91.23	357.74	12,469.0	2,567.6	344.4	0.98	0.95	-0.23	6.5	2.1
15,131.0	90.31	359.61	12,467.3	2,691.6	341.5	1.68	-0.74	1.51	4.9	4.1
15,224.0	91.04	358.73	12,466.2	2,784.6	340.1	1.23	0.78	-0.95	3.8	4.7
15,318.0	89.50	359.72	12,465.8	2,878.5	338.9	1.95	-1.64	1.05	3.4	5.3
15,412.0	89.05	359.70	12,466.9	2,972.5	338.4	0.48	-0.48	-0.02	4.6	5.1
15,506.0	88.96	357.28	12,468.6	3,066.5	335.9	2.58	-0.10	-2.57	6.3	6.9
15,599.0	89.83	358.25	12,469.6	3,159.4	332.3	1.40	0.94	1.04	7.3	9.9
15,693.0	91.54	358.27	12,468.4	3,253.4	329.4	1.82	1.82	0.02	6.2	12.1
15,787.0	89.33	359.44	12,467.7	3,347.3	327.6	2.66	-2.35	1.24	5.5	13.3
15,880.0	88.23	0.03	12,469.7	3,440.3	327.1	1.34	-1.18	0.63	7.5	13.0
15,974.0	90.03	0.08	12,471.1	3,534.3	327.2	1.92	1.91	0.05	9.0	12.3
16,068.0	91.48	0.46	12,469.9	3,628.3	327.7	1.59	1.54	0.40	7.8	11.1
16,162.0	90.90	0.48	12,467.9	3,722.2	328.4	0.62	-0.62	0.02	5.8	9.7
16,255.0	88.85	0.94	12,468.1	3,815.2	329.6	2.26	-2.20	0.49	6.1	7.9



Midland PVA

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #706H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 25' @ 3329.0usft (H&P 621)
Site:	Dogwood 23 Fed Com	MD Reference:	KB = 25' @ 3329.0usft (H&P 621)
Well:	#706H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.14

Survey											
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)	
16,348.0	91.68	0.89	12,467.7	3,809.2	331.1	3.01	3.01	-0.05	5.7	5.7	
16,443.0	89.80	2.46	12,466.5	4,003.2	333.8	2.61	-2.00	1.67	4.5	2.3	
16,536.0	87.22	1.28	12,468.9	4,096.1	336.9	3.05	-2.77	-1.27	7.2	-1.4	
16,629.0	88.18	1.21	12,472.6	4,189.0	338.9	1.03	1.03	-0.08	11.3	-4.1	
16,722.0	89.05	0.87	12,474.9	4,281.9	340.6	1.00	0.94	-0.37	13.8	-6.5	
16,816.0	91.43	0.70	12,474.5	4,375.9	341.9	2.54	2.53	-0.18	13.7	-8.5	
16,910.0	90.70	359.74	12,472.7	4,469.9	342.2	1.28	-0.78	-1.02	12.3	-9.5	
17,002.0	91.12	359.40	12,471.3	4,561.9	341.5	0.59	0.46	-0.37	11.1	-9.5	
17,096.0	92.41	359.88	12,468.4	4,655.8	340.9	1.46	1.37	0.51	8.5	-9.6	
17,189.0	90.00	359.58	12,466.4	4,748.8	340.5	2.61	-2.59	-0.32	6.9	-9.8	
17,282.0	87.50	359.67	12,468.5	4,841.8	339.9	2.69	-2.69	0.10	9.2	-9.9	
17,376.0	87.93	0.44	12,472.2	4,935.7	340.0	0.94	0.46	0.82	13.3	-10.6	
17,470.0	89.36	1.02	12,474.4	5,029.7	341.2	1.64	1.52	0.62	15.8	-12.5	
17,563.0	89.52	1.38	12,475.3	5,122.6	343.1	0.42	0.17	0.39	17.0	-15.1	
17,658.0	88.09	1.76	12,477.3	5,217.6	345.7	1.56	-1.51	0.40	19.3	-18.4	
17,751.0	91.63	2.47	12,477.6	5,310.5	349.2	3.88	3.81	0.76	19.9	-22.5	
17,845.0	87.90	359.31	12,477.9	5,404.5	350.6	5.20	-3.97	-3.36	20.5	-24.6	
17,939.0	90.17	357.63	12,479.5	5,498.4	348.1	3.00	2.41	-1.79	22.4	-22.8	
18,032.0	91.68	356.76	12,478.0	5,591.3	343.6	1.87	1.62	-0.94	21.2	-18.9	
18,126.0	93.33	358.61	12,473.9	5,685.1	339.8	2.64	1.76	1.97	17.4	-15.8	
18,220.0	93.02	359.67	12,468.7	5,778.9	338.4	1.17	-0.33	1.13	12.5	-15.1	
18,314.0	92.16	358.76	12,464.5	5,872.8	337.1	1.33	-0.91	-0.97	8.5	-14.5	
18,407.0	89.41	359.71	12,463.2	5,965.8	335.8	3.13	-2.96	1.02	7.6	-13.9	
18,501.0	88.54	359.63	12,464.9	6,059.8	335.3	0.93	-0.93	-0.09	9.6	-14.0	
18,595.0	89.80	0.32	12,466.2	6,153.8	335.3	1.53	1.34	0.73	11.2	-14.7	
18,688.0	91.63	1.43	12,465.1	6,246.8	336.7	2.30	1.97	1.19	10.4	-16.8	
18,782.0	91.12	359.46	12,462.8	6,340.7	337.4	2.16	-0.54	-2.10	8.4	-18.2	



Midland PVA

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #706H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 25' @ 3329.0usft (H&P 621)
Site:	Dogwood 23 Fed Com	MD Reference:	KB = 25' @ 3329.0usft (H&P 621)
Well:	#706H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.14

MD (usft)	Inc. (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	EW (usft)	OLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)
18,876.0	93.05	0.18	12,459.4	6,434.6	337.1	2.19	2.05	0.77	5.3	-18.6
18,969.0	90.11	355.94	12,456.8	6,527.5	334.0	5.55	-3.16	-4.56	3.1	-16.1
19,063.0	87.84	356.62	12,458.7	6,621.3	327.9	2.73	-2.63	0.72	5.2	-10.6
19,157.0	86.16	357.43	12,463.8	6,715.0	323.0	1.79	-1.57	0.86	10.6	-6.5
19,251.0	87.93	358.43	12,468.6	6,808.8	319.6	2.16	1.88	1.06	15.7	-3.7
19,345.0	88.85	359.41	12,471.2	6,902.8	317.8	1.43	0.98	1.04	18.7	-2.7
19,438.0	89.81	0.27	12,472.5	6,995.8	317.6	1.23	0.82	0.92	20.2	-3.1
19,532.0	88.38	359.46	12,474.1	7,089.8	317.4	1.57	-1.31	-0.86	22.2	-3.5
19,625.0	88.68	0.59	12,476.5	7,182.7	317.4	1.26	0.32	1.22	24.9	-4.2
19,719.0	89.16	1.44	12,478.3	7,276.7	319.1	1.04	0.51	0.90	27.0	-6.6
19,816.0	86.17	359.18	12,482.2	7,373.6	319.6	3.86	-3.08	-2.33	31.2	-7.8
19,909.0	89.78	0.32	12,485.5	7,466.5	319.2	4.07	3.88	1.23	34.8	-8.1
20,002.0	90.57	358.65	12,485.2	7,559.5	318.3	1.99	0.85	-1.80	34.8	-7.9
20,096.0	90.13	357.68	12,484.7	7,653.5	315.3	1.13	-0.47	-1.03	34.6	-5.6
20,189.0	90.22	357.68	12,484.4	7,746.4	311.6	0.10	0.10	0.00	34.6	-2.5
20,283.0	90.13	356.54	12,484.1	7,840.3	306.8	1.22	-0.10	-1.21	34.6	1.6
20,376.0	90.04	355.13	12,484.0	7,933.0	300.1	1.52	-0.10	-1.52	34.8	7.6
20,470.0	89.34	354.43	12,484.5	8,026.6	291.5	1.05	-0.74	-0.74	35.5	15.5
20,563.0	90.40	355.48	12,484.7	8,119.3	283.3	1.60	1.14	1.13	35.7	23.0
20,712.0	89.87	359.44	12,484.3	8,268.1	276.7	2.68	-0.36	2.66	35.3	28.6
20,786.0	88.99	0.23	12,485.1	8,342.1	276.5	1.60	-1.19	1.07	36.1	28.3
20,844.0	90.40	2.43	12,485.4	8,400.1	277.9	4.51	2.43	3.79	36.4	26.5
20,938.0	90.48	3.83	12,484.7	8,493.9	283.0	1.49	0.09	1.49	35.7	20.7
21,031.0	90.22	6.91	12,484.1	8,586.5	291.7	3.32	-0.28	3.31	35.1	11.2
21,125.0	91.54	5.68	12,482.6	8,679.9	302.0	1.92	1.40	-1.31	33.7	0.3
21,219.0	89.52	5.94	12,481.8	8,773.4	311.5	2.17	-2.15	0.28	32.8	-9.8
21,406.0	88.46	4.18	12,485.1	8,959.6	328.0	1.10	-0.57	-0.94	36.1	-27.7



Midland PVA

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #706H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 25' @ 3329.0usft (H&P 621)
Site:	Dogwood 23 Fed Cam	MD Reference:	KB = 25' @ 3329.0usft (H&P 621)
Well:	#706H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.14

MD (usft)	Inc (")	Azi (azimuth) (")	TVD (usft)	N/S (usft)	E/W (usft)	DLeg ("/100usft)	Build ("/100usft)	Turn ("/100usft)	High to Plan (usft)	Right to Plan (usft)
21,500.0	88.72	3.92	12,487.4	9,053.4	334.7	0.39	0.28	-0.28	38.4	-35.0
21,594.0	92.51	0.32	12,486.4	9,147.3	338.1	5.56	4.03	-3.83	37.4	-39.2
21,687.0	92.07	358.47	12,482.7	9,240.2	337.2	2.04	-0.47	-1.99	33.6	-38.9
21,780.0	90.22	359.70	12,480.8	9,333.2	335.7	2.39	-1.99	1.32	31.8	-38.0
21,874.0	91.01	359.53	12,479.8	9,427.2	335.0	0.86	0.84	-0.18	30.8	-38.1
21,967.0	90.75	0.58	12,478.4	9,520.1	335.1	1.16	-0.28	1.13	29.4	-38.8
22,061.0	88.90	358.91	12,478.7	9,614.1	334.7	2.65	-1.97	-1.78	29.7	-39.1
22,154.0	89.78	358.30	12,479.7	9,707.1	332.4	1.15	0.95	-0.66	30.7	-37.5
22,247.0	90.13	359.79	12,479.8	9,800.1	330.9	1.65	0.38	1.60	30.8	-36.6
22,341.0	90.13	353.46	12,479.6	9,893.9	325.4	6.73	0.00	-6.73	30.7	-31.7
22,434.0	89.43	348.63	12,479.9	9,985.7	310.9	5.25	-0.75	-5.19	31.1	-17.7
22,527.0	91.63	351.70	12,479.1	10,077.3	295.0	4.06	2.37	3.30	30.1	-2.7
Last MWD Survey (MD = 22527.0)										
22,706.0	91.63	351.70	12,474.0	10,254.4	289.2	0.00	0.00	0.00	25.1	21.7
Projection to Bit (MD = 22706.0)										

Design Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
12,025.0	12,002.6	-130.4	341.5	KOP 12025.0' MD; 12002.6' TVD; -130.4'; 341.5'; 2.82
12,252.9	12,225.4	-92.0	331.3	FTP Crossing 12252.9' MD; 12225.4' TVD; -92.0'; 331.3'; 25.27
22,527.0	12,479.1	10,077.3	295.0	Last MWD Survey (MD = 22527.0)
22,706.0	12,474.0	10,254.4	289.2	Projection to Bit (MD = 22706.0)

Checked By: _____ Approved By: _____ Date: _____