



HOBBS OCD
AUG 21 2019
RECEIVED

EOG Resources - Midland

Lea County, NM (NAD 83 NME)

Fruit Loop 29 State

#602H

74029

OH

RECEIVED
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HOBBS OCD

Plan: Plan #1

Standard Planning Report

15 August, 2019

Database:	EDM 5000.14	Local Co-ordinate Reference:	Well #602H
Company:	EOG Resources - Midland	TVD Reference:	KB = 25' @ 3777.0usft
Project:	Lea County, NM (NAD 83 NME)	MD Reference:	KB = 25' @ 3777.0usft
Site:	Fruit Loop 29 State	North Reference:	Grid
Well:	#602H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

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	Fruit Loop 29 State		
Site Position:		Northing:	530,503.00 usft
From:	Map	Easting:	767,378.00 usft
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 27' 22.624 N
		Longitude:	103° 36' 1.794 W
		Grid Convergence:	0.39 °

Well	#602H		
Well Position	+N/-S	0.0 usft	Northing: 530,503.00 usft
	+E/-W	0.0 usft	Easting: 767,378.00 usft
Position Uncertainty	0.0 usft	Wellhead Elevation:	Ground Level: 3,752.0 usft
		Latitude:	32° 27' 22.624 N
		Longitude:	103° 36' 1.794 W

Wellbore	OH		
Magnetics	Model Name	Sample Date	Declination (°)
	IGRF2015	8/15/2019	6.75
			Dip Angle (°)
			60.24
			Field Strength (nT)
			47,847.54954925

Design	Plan #1		
Audit Notes:			
Version:	Phase:	PLAN	Tie On Depth: 0.0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)
	0.0	0.0	0.0
			Direction (°)
			170.99

Plan Survey Tool Program	Date 8/15/2019		
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name
1	0.0	16,878.6 Plan #1 (OH)	MWD
			OWSG MWD - Standard
			Remarks

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
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,750.0	0.00	0.00	1,750.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,225.2	9.50	70.14	2,223.0	13.4	37.0	2.00	2.00	0.00	70.14	
6,437.0	9.50	70.14	6,377.0	249.6	691.0	0.00	0.00	0.00	0.00	
6,912.2	0.00	0.00	6,850.0	263.0	728.0	2.00	-2.00	0.00	180.00	
11,433.2	0.00	0.00	11,371.0	263.0	728.0	0.00	0.00	0.00	0.00	KOP (Fruit Loop 29 #
12,327.4	89.42	179.53	11,943.9	-304.1	732.7	10.00	10.00	20.08	179.53	
16,878.6	89.42	179.53	11,990.0	-4,855.0	770.0	0.00	0.00	0.00	0.00	PBHL (Fruit Loop 29 #



Planning Report

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Well: #602H
Wellbore: OH
Design: Plan #1

Local Co-ordinate Reference: Well #602H
TVD Reference: KB = 25' @ 3777.0usft
MD Reference: KB = 25' @ 3777.0usft
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)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	0.00
1,600.0	0.00	0.00	1,600.0	0.0	0.0	0.0	0.00	0.00	0.00
1,605.0	0.00	0.00	1,605.0	0.0	0.0	0.0	0.00	0.00	0.00
Rustler									
1,697.0	0.00	0.00	1,697.0	0.0	0.0	0.0	0.00	0.00	0.00
Tamarisk Anhydrite									
1,700.0	0.00	0.00	1,700.0	0.0	0.0	0.0	0.00	0.00	0.00
1,750.0	0.00	0.00	1,750.0	0.0	0.0	0.0	0.00	0.00	0.00
1,800.0	1.00	70.14	1,800.0	0.1	0.4	-0.1	2.00	2.00	0.00
1,900.0	3.00	70.14	1,899.9	1.3	3.7	-0.7	2.00	2.00	0.00
2,000.0	5.00	70.14	1,999.7	3.7	10.3	-2.1	2.00	2.00	0.00
2,012.4	5.25	70.14	2,012.0	4.1	11.3	-2.3	2.00	2.00	0.00
Top of Salt									
2,100.0	7.00	70.14	2,099.1	7.3	20.1	-4.0	2.00	2.00	0.00
2,200.0	9.00	70.14	2,198.2	12.0	33.2	-6.6	2.00	2.00	0.00
2,225.2	9.50	70.14	2,223.0	13.4	37.0	-7.4	2.00	2.00	0.00
2,300.0	9.50	70.14	2,296.8	17.6	48.6	-9.7	0.00	0.00	0.00
2,400.0	9.50	70.14	2,395.4	23.2	64.1	-12.8	0.00	0.00	0.00
2,500.0	9.50	70.14	2,494.1	28.8	79.7	-15.9	0.00	0.00	0.00
2,600.0	9.50	70.14	2,592.7	34.4	95.2	-19.1	0.00	0.00	0.00
2,700.0	9.50	70.14	2,691.3	40.0	110.7	-22.2	0.00	0.00	0.00
2,800.0	9.50	70.14	2,789.9	45.6	126.2	-25.3	0.00	0.00	0.00
2,900.0	9.50	70.14	2,888.6	51.2	141.8	-28.4	0.00	0.00	0.00
3,000.0	9.50	70.14	2,987.2	56.8	157.3	-31.5	0.00	0.00	0.00
3,100.0	9.50	70.14	3,085.8	62.4	172.8	-34.6	0.00	0.00	0.00
3,200.0	9.50	70.14	3,184.4	68.0	188.4	-37.7	0.00	0.00	0.00
3,300.0	9.50	70.14	3,283.1	73.7	203.9	-40.8	0.00	0.00	0.00
3,400.0	9.50	70.14	3,381.7	79.3	219.4	-43.9	0.00	0.00	0.00
3,500.0	9.50	70.14	3,480.3	84.9	234.9	-47.0	0.00	0.00	0.00
3,600.0	9.50	70.14	3,579.0	90.5	250.5	-50.1	0.00	0.00	0.00
3,700.0	9.50	70.14	3,677.6	96.1	266.0	-53.2	0.00	0.00	0.00
3,800.0	9.50	70.14	3,776.2	101.7	281.5	-56.4	0.00	0.00	0.00
3,900.0	9.50	70.14	3,874.8	107.3	297.1	-59.5	0.00	0.00	0.00
4,000.0	9.50	70.14	3,973.5	112.9	312.6	-62.6	0.00	0.00	0.00
4,100.0	9.50	70.14	4,072.1	118.5	328.1	-65.7	0.00	0.00	0.00
4,155.7	9.50	70.14	4,127.0	121.7	336.8	-67.4	0.00	0.00	0.00
Capitan									
4,200.0	9.50	70.14	4,170.7	124.1	343.6	-68.8	0.00	0.00	0.00

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4,300.0	9.50	70.14	4,269.3	129.8	359.2	-71.9	0.00	0.00	0.00
4,400.0	9.50	70.14	4,368.0	135.4	374.7	-75.0	0.00	0.00	0.00
4,500.0	9.50	70.14	4,466.6	141.0	390.2	-78.1	0.00	0.00	0.00
4,600.0	9.50	70.14	4,565.2	146.6	405.8	-81.2	0.00	0.00	0.00
4,700.0	9.50	70.14	4,663.9	152.2	421.3	-84.3	0.00	0.00	0.00
4,800.0	9.50	70.14	4,762.5	157.8	436.8	-87.4	0.00	0.00	0.00
4,900.0	9.50	70.14	4,861.1	163.4	452.3	-90.5	0.00	0.00	0.00
5,000.0	9.50	70.14	4,959.7	169.0	467.9	-93.7	0.00	0.00	0.00
5,100.0	9.50	70.14	5,058.4	174.6	483.4	-96.8	0.00	0.00	0.00
5,200.0	9.50	70.14	5,157.0	180.2	498.9	-99.9	0.00	0.00	0.00
5,300.0	9.50	70.14	5,255.6	185.9	514.5	-103.0	0.00	0.00	0.00
5,303.4	9.50	70.14	5,259.0	186.0	515.0	-103.1	0.00	0.00	0.00
Bell Canyon									
5,400.0	9.50	70.14	5,354.2	191.5	530.0	-106.1	0.00	0.00	0.00
5,500.0	9.50	70.14	5,452.9	197.1	545.5	-109.2	0.00	0.00	0.00
5,600.0	9.50	70.14	5,551.5	202.7	561.0	-112.3	0.00	0.00	0.00
5,700.0	9.50	70.14	5,650.1	208.3	576.6	-115.4	0.00	0.00	0.00
5,800.0	9.50	70.14	5,748.8	213.9	592.1	-118.5	0.00	0.00	0.00
5,879.3	9.50	70.14	5,827.0	218.4	604.4	-121.0	0.00	0.00	0.00
Cherry Canyon									
5,900.0	9.50	70.14	5,847.4	219.5	607.6	-121.6	0.00	0.00	0.00
6,000.0	9.50	70.14	5,946.0	225.1	623.2	-124.7	0.00	0.00	0.00
6,100.0	9.50	70.14	6,044.6	230.7	638.7	-127.8	0.00	0.00	0.00
6,200.0	9.50	70.14	6,143.3	236.3	654.2	-131.0	0.00	0.00	0.00
6,300.0	9.50	70.14	6,241.9	242.0	669.7	-134.1	0.00	0.00	0.00
6,400.0	9.50	70.14	6,340.5	247.6	685.3	-137.2	0.00	0.00	0.00
6,437.0	9.50	70.14	6,377.0	249.6	691.0	-138.3	0.00	0.00	0.00
6,500.0	8.24	70.14	6,439.3	252.9	700.2	-140.1	2.00	-2.00	0.00
6,600.0	6.24	70.14	6,538.5	257.2	712.0	-142.5	2.00	-2.00	0.00
6,700.0	4.24	70.14	6,638.0	260.3	720.6	-144.2	2.00	-2.00	0.00
6,800.0	2.24	70.14	6,737.9	262.3	725.9	-145.3	2.00	-2.00	0.00
6,900.0	0.24	70.14	6,837.8	263.0	728.0	-145.7	2.00	-2.00	0.00
6,912.2	0.00	0.00	6,850.0	263.0	728.0	-145.7	2.00	-2.00	0.00
6,987.2	0.00	0.00	6,925.0	263.0	728.0	-145.7	0.00	0.00	0.00
Brushy Canyon									
7,000.0	0.00	0.00	6,937.8	263.0	728.0	-145.7	0.00	0.00	0.00
7,100.0	0.00	0.00	7,037.8	263.0	728.0	-145.7	0.00	0.00	0.00
7,200.0	0.00	0.00	7,137.8	263.0	728.0	-145.7	0.00	0.00	0.00
7,300.0	0.00	0.00	7,237.8	263.0	728.0	-145.7	0.00	0.00	0.00
7,400.0	0.00	0.00	7,337.8	263.0	728.0	-145.7	0.00	0.00	0.00
7,500.0	0.00	0.00	7,437.8	263.0	728.0	-145.7	0.00	0.00	0.00
7,600.0	0.00	0.00	7,537.8	263.0	728.0	-145.7	0.00	0.00	0.00
7,700.0	0.00	0.00	7,637.8	263.0	728.0	-145.7	0.00	0.00	0.00
7,800.0	0.00	0.00	7,737.8	263.0	728.0	-145.7	0.00	0.00	0.00
7,900.0	0.00	0.00	7,837.8	263.0	728.0	-145.7	0.00	0.00	0.00
8,000.0	0.00	0.00	7,937.8	263.0	728.0	-145.7	0.00	0.00	0.00
8,100.0	0.00	0.00	8,037.8	263.0	728.0	-145.7	0.00	0.00	0.00
8,200.0	0.00	0.00	8,137.8	263.0	728.0	-145.7	0.00	0.00	0.00
8,300.0	0.00	0.00	8,237.8	263.0	728.0	-145.7	0.00	0.00	0.00
8,400.0	0.00	0.00	8,337.8	263.0	728.0	-145.7	0.00	0.00	0.00
8,500.0	0.00	0.00	8,437.8	263.0	728.0	-145.7	0.00	0.00	0.00
8,600.0	0.00	0.00	8,537.8	263.0	728.0	-145.7	0.00	0.00	0.00
8,700.0	0.00	0.00	8,637.8	263.0	728.0	-145.7	0.00	0.00	0.00



Planning Report

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8,800.0	0.00	0.00	8,737.8	263.0	728.0	-145.7	0.00	0.00	0.00
8,879.2	0.00	0.00	8,817.0	263.0	728.0	-145.7	0.00	0.00	0.00
Bone Spring Lime									
8,900.0	0.00	0.00	8,837.8	263.0	728.0	-145.7	0.00	0.00	0.00
9,000.0	0.00	0.00	8,937.8	263.0	728.0	-145.7	0.00	0.00	0.00
9,026.2	0.00	0.00	8,964.0	263.0	728.0	-145.7	0.00	0.00	0.00
Leonard A									
9,100.0	0.00	0.00	9,037.8	263.0	728.0	-145.7	0.00	0.00	0.00
9,200.0	0.00	0.00	9,137.8	263.0	728.0	-145.7	0.00	0.00	0.00
9,300.0	0.00	0.00	9,237.8	263.0	728.0	-145.7	0.00	0.00	0.00
9,364.2	0.00	0.00	9,302.0	263.0	728.0	-145.7	0.00	0.00	0.00
Leonard B									
9,400.0	0.00	0.00	9,337.8	263.0	728.0	-145.7	0.00	0.00	0.00
9,500.0	0.00	0.00	9,437.8	263.0	728.0	-145.7	0.00	0.00	0.00
9,600.0	0.00	0.00	9,537.8	263.0	728.0	-145.7	0.00	0.00	0.00
9,700.0	0.00	0.00	9,637.8	263.0	728.0	-145.7	0.00	0.00	0.00
9,800.0	0.00	0.00	9,737.8	263.0	728.0	-145.7	0.00	0.00	0.00
9,900.0	0.00	0.00	9,837.8	263.0	728.0	-145.7	0.00	0.00	0.00
10,000.0	0.00	0.00	9,937.8	263.0	728.0	-145.7	0.00	0.00	0.00
10,008.2	0.00	0.00	9,946.0	263.0	728.0	-145.7	0.00	0.00	0.00
First Bone Spring Sand									
10,100.0	0.00	0.00	10,037.8	263.0	728.0	-145.7	0.00	0.00	0.00
10,200.0	0.00	0.00	10,137.8	263.0	728.0	-145.7	0.00	0.00	0.00
10,277.2	0.00	0.00	10,215.0	263.0	728.0	-145.7	0.00	0.00	0.00
SBSG Shale									
10,300.0	0.00	0.00	10,237.8	263.0	728.0	-145.7	0.00	0.00	0.00
10,400.0	0.00	0.00	10,337.8	263.0	728.0	-145.7	0.00	0.00	0.00
10,500.0	0.00	0.00	10,437.8	263.0	728.0	-145.7	0.00	0.00	0.00
10,600.0	0.00	0.00	10,537.8	263.0	728.0	-145.7	0.00	0.00	0.00
10,615.2	0.00	0.00	10,553.0	263.0	728.0	-145.7	0.00	0.00	0.00
SBSG Sand									
10,700.0	0.00	0.00	10,637.8	263.0	728.0	-145.7	0.00	0.00	0.00
10,800.0	0.00	0.00	10,737.8	263.0	728.0	-145.7	0.00	0.00	0.00
10,900.0	0.00	0.00	10,837.8	263.0	728.0	-145.7	0.00	0.00	0.00
11,000.0	0.00	0.00	10,937.8	263.0	728.0	-145.7	0.00	0.00	0.00
11,100.0	0.00	0.00	11,037.8	263.0	728.0	-145.7	0.00	0.00	0.00
11,187.2	0.00	0.00	11,125.0	263.0	728.0	-145.7	0.00	0.00	0.00
Thrd Bone Spring Carb									
11,200.0	0.00	0.00	11,137.8	263.0	728.0	-145.7	0.00	0.00	0.00
11,300.0	0.00	0.00	11,237.8	263.0	728.0	-145.7	0.00	0.00	0.00
11,400.0	0.00	0.00	11,337.8	263.0	728.0	-145.7	0.00	0.00	0.00
11,433.2	0.00	0.00	11,371.0	263.0	728.0	-145.7	0.00	0.00	0.00
11,450.0	1.68	179.53	11,387.8	262.8	728.0	-145.5	10.00	10.00	0.00
11,500.0	6.68	179.53	11,437.7	259.1	728.0	-141.9	10.00	10.00	0.00
11,550.0	11.68	179.53	11,487.0	251.1	728.1	-134.0	10.00	10.00	0.00
11,600.0	16.68	179.53	11,535.5	238.9	728.2	-121.9	10.00	10.00	0.00
11,650.0	21.68	179.53	11,582.7	222.5	728.3	-105.6	10.00	10.00	0.00
11,700.0	26.68	179.53	11,628.3	202.0	728.5	-85.4	10.00	10.00	0.00
11,750.0	31.68	179.53	11,671.9	177.6	728.7	-61.3	10.00	10.00	0.00
11,753.6	32.04	179.53	11,675.0	175.7	728.7	-59.4	10.00	10.00	0.00
Third Bone Spring Sand									
11,800.0	36.68	179.53	11,713.3	149.5	728.9	-33.5	10.00	10.00	0.00
11,850.0	41.68	179.53	11,752.0	117.9	729.2	-2.3	10.00	10.00	0.00



Planning Report

Database: EDM 5000.14
Company: EOG Resources - Midland
Project: Lea County, NM (NAD 83 NME)
Site: Fruit Loop 29 State
Well: #602H
Wellbore: OH
Design: Plan #1

Local Co-ordinate Reference: Well #602H
TVD Reference: KB = 25' @ 3777.0usft
MD Reference: KB = 25' @ 3777.0usft
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)
11,900.0	46.68	179.53	11,787.9	83.1	729.5	32.2	10.00	10.00	0.00
11,950.0	51.68	179.53	11,820.5	45.3	729.8	69.6	10.00	10.00	0.00
12,000.0	56.68	179.53	11,849.8	4.8	730.1	109.7	10.00	10.00	0.00
12,050.0	61.68	179.53	11,875.4	-38.2	730.5	152.1	10.00	10.00	0.00
12,055.5	62.24	179.53	11,878.0	-43.1	730.5	157.0	10.00	10.00	0.00
TBSG FS									
12,100.0	66.68	179.53	11,897.2	-83.2	730.8	196.6	10.00	10.00	0.00
12,150.0	71.68	179.53	11,914.9	-129.9	731.2	242.8	10.00	10.00	0.00
12,163.4	73.03	179.53	11,919.0	-142.7	731.3	255.5	10.00	10.00	0.00
TOW TBSG SD									
12,200.0	76.68	179.53	11,928.6	-178.0	731.6	290.4	10.00	10.00	0.00
12,250.0	81.68	179.53	11,937.9	-227.1	732.0	338.9	10.00	10.00	0.00
12,300.0	86.68	179.53	11,943.0	-276.8	732.4	388.1	10.00	10.00	0.00
12,327.4	89.42	179.53	11,943.9	-304.1	732.7	415.1	10.00	10.00	0.00
12,400.0	89.42	179.53	11,944.7	-376.8	733.3	487.0	0.00	0.00	0.00
12,500.0	89.42	179.53	11,945.7	-476.8	734.1	585.9	0.00	0.00	0.00
12,600.0	89.42	179.53	11,946.7	-576.8	734.9	684.8	0.00	0.00	0.00
12,700.0	89.42	179.53	11,947.7	-676.7	735.7	783.6	0.00	0.00	0.00
12,800.0	89.42	179.53	11,948.7	-776.7	736.5	882.5	0.00	0.00	0.00
12,900.0	89.42	179.53	11,949.7	-876.7	737.4	981.4	0.00	0.00	0.00
13,000.0	89.42	179.53	11,950.7	-976.7	738.2	1,080.3	0.00	0.00	0.00
13,100.0	89.42	179.53	11,951.7	-1,076.7	739.0	1,179.2	0.00	0.00	0.00
13,200.0	89.42	179.53	11,952.8	-1,176.7	739.8	1,278.1	0.00	0.00	0.00
13,300.0	89.42	179.53	11,953.8	-1,276.7	740.6	1,377.0	0.00	0.00	0.00
13,400.0	89.42	179.53	11,954.8	-1,376.7	741.5	1,475.8	0.00	0.00	0.00
13,500.0	89.42	179.53	11,955.8	-1,476.7	742.3	1,574.7	0.00	0.00	0.00
13,600.0	89.42	179.53	11,956.8	-1,576.7	743.1	1,673.6	0.00	0.00	0.00
13,700.0	89.42	179.53	11,957.8	-1,676.7	743.9	1,772.5	0.00	0.00	0.00
13,800.0	89.42	179.53	11,958.8	-1,776.7	744.7	1,871.4	0.00	0.00	0.00
13,900.0	89.42	179.53	11,959.8	-1,876.6	745.6	1,970.3	0.00	0.00	0.00
14,000.0	89.42	179.53	11,960.9	-1,976.6	746.4	2,069.2	0.00	0.00	0.00
14,100.0	89.42	179.53	11,961.9	-2,076.6	747.2	2,168.0	0.00	0.00	0.00
14,200.0	89.42	179.53	11,962.8	-2,176.6	748.0	2,266.9	0.00	0.00	0.00
14,300.0	89.42	179.53	11,963.9	-2,276.6	748.8	2,365.8	0.00	0.00	0.00
14,400.0	89.42	179.53	11,964.9	-2,376.6	749.7	2,464.7	0.00	0.00	0.00
14,500.0	89.42	179.53	11,965.9	-2,476.6	750.5	2,563.6	0.00	0.00	0.00
14,600.0	89.42	179.53	11,966.9	-2,576.6	751.3	2,662.5	0.00	0.00	0.00
14,700.0	89.42	179.53	11,967.9	-2,676.6	752.1	2,761.4	0.00	0.00	0.00
14,800.0	89.42	179.53	11,969.0	-2,776.6	752.9	2,860.2	0.00	0.00	0.00
14,804.1	89.42	179.53	11,969.0	-2,780.7	753.0	2,864.3	0.00	0.00	0.00
BOW TBSG SD									
14,900.0	89.42	179.53	11,970.0	-2,876.6	753.8	2,959.1	0.00	0.00	0.00
15,000.0	89.42	179.53	11,971.0	-2,976.6	754.6	3,058.0	0.00	0.00	0.00
15,100.0	89.42	179.53	11,972.0	-3,076.5	755.4	3,156.9	0.00	0.00	0.00
15,199.2	89.42	179.53	11,973.0	-3,175.8	756.2	3,255.0	0.00	0.00	0.00
WFMP									
15,200.0	89.42	179.53	11,973.0	-3,176.5	756.2	3,255.8	0.00	0.00	0.00
15,300.0	89.42	179.53	11,974.0	-3,276.5	757.0	3,354.7	0.00	0.00	0.00
15,400.0	89.42	179.53	11,975.0	-3,376.5	757.9	3,453.6	0.00	0.00	0.00
15,500.0	89.42	179.53	11,976.0	-3,476.5	758.7	3,552.4	0.00	0.00	0.00
15,600.0	89.42	179.53	11,977.1	-3,576.5	759.5	3,651.3	0.00	0.00	0.00
15,700.0	89.42	179.53	11,978.1	-3,676.5	760.3	3,750.2	0.00	0.00	0.00
15,800.0	89.42	179.53	11,979.1	-3,776.5	761.1	3,849.1	0.00	0.00	0.00



Planning Report

Database:	EDM 5000.14	Local Co-ordinate Reference:	Well #602H
Company:	EOG Resources - Midland	TVD Reference:	KB = 25' @ 3777.0usft
Project:	Lea County, NM (NAD 83 NME)	MD Reference:	KB = 25' @ 3777.0usft
Site:	Fruit Loop 29 State	North Reference:	Grid
Well:	#602H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

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)	
15,900.0	89.42	179.53	11,980.1	-3,876.5	762.0	3,948.0	0.00	0.00	0.00	
16,000.0	89.42	179.53	11,981.1	-3,976.5	762.8	4,046.9	0.00	0.00	0.00	
16,100.0	89.42	179.53	11,982.1	-4,076.5	763.6	4,145.8	0.00	0.00	0.00	
16,200.0	89.42	179.53	11,983.1	-4,176.5	764.4	4,244.6	0.00	0.00	0.00	
16,300.0	89.42	179.53	11,984.1	-4,276.4	765.3	4,343.5	0.00	0.00	0.00	
16,400.0	89.42	179.53	11,985.2	-4,376.4	766.1	4,442.4	0.00	0.00	0.00	
16,500.0	89.42	179.53	11,986.2	-4,476.4	766.9	4,541.3	0.00	0.00	0.00	
16,600.0	89.42	179.53	11,987.2	-4,576.4	767.7	4,640.2	0.00	0.00	0.00	
16,700.0	89.42	179.53	11,988.2	-4,676.4	768.5	4,739.1	0.00	0.00	0.00	
16,800.0	89.42	179.53	11,989.2	-4,776.4	769.4	4,838.0	0.00	0.00	0.00	
16,878.6	89.42	179.53	11,990.0	-4,855.0	770.0	4,915.7	0.00	0.00	0.00	

Design Targets									
Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
KOP (Fruit Loop 29 #60; - plan hits target center - Point	0.00	0.00	11,371.0	263.0	728.0	530,766.00	768,106.00	32° 27' 25.176 N	103° 35' 53.277 W
FTP (Fruit Loop 29 #602 - plan misses target center by 202.9usft at 11903.7usft MD (11790.4 TVD, 80.4 N, 729.5 E) - Point	0.00	0.00	11,944.0	213.0	728.0	530,716.00	768,106.00	32° 27' 24.682 N	103° 35' 53.281 W
PBHL (Fruit Loop 29 #60 - plan hits target center - Point	0.00	0.00	11,990.0	-4,855.0	770.0	525,648.00	768,148.00	32° 26' 34.532 N	103° 35' 53.198 W



Planning Report

Database:	EDM 5000.14	Local Co-ordinate Reference:	Well #602H
Company:	EOG Resources - Midland	TVD Reference:	KB = 25' @ 3777.0usft
Project:	Lea County, NM (NAD 83 NME)	MD Reference:	KB = 25' @ 3777.0usft
Site:	Fruit Loop 29 State	North Reference:	Grid
Well:	#602H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
1,605.0	1,605.0	Rustler			
1,697.0	1,697.0	Tamarisk Anhydrite			
2,012.4	2,012.0	Top of Salt			
4,155.7	4,127.0	Capitan			
5,303.4	5,259.0	Bell Canyon			
5,879.3	5,827.0	Cherry Canyon			
6,987.2	6,925.0	Brushy Canyon			
8,879.2	8,817.0	Bone Spring Lime			
9,026.2	8,964.0	Leonard A			
9,364.2	9,302.0	Leonard B			
10,008.2	9,946.0	First Bone Spring Sand			
10,277.2	10,215.0	SBSG Shale			
10,615.2	10,553.0	SBSG Sand			
11,187.2	11,125.0	Third Bone Spring Carb			
11,753.6	11,675.0	Third Bone Spring Sand			
12,055.5	11,878.0	TBSG FS			
12,163.4	11,919.0	TOW TBSG SD			
14,804.1	11,969.0	BOW TBSG SD			
15,199.2	11,973.0	WFMP			



Lea County, NM (NAD 83 NME)

Fruit Loop 29 State #602H

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: #602H

KB = 25' @ 3777.0usd 3782.0
Northing 530503.00 Easting 767378.00 Latitude 32° 27' 22.624 N Longitude 102° 35' 1.794 W



SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	1750.0	0.00	0.00	1750.0	0.0	0.0	0.00	0.00	0.0	
3	2225.2	9.50	70.14	2223.0	13.4	37.0	2.00	70.14	-7.4	
4	8437.0	9.50	70.14	8377.0	249.6	691.0	0.00	0.00	-138.3	
5	6912.2	0.00	0.00	6850.0	263.0	728.0	2.00	180.00	-145.7	
6	11433.2	0.00	0.00	11371.0	263.0	728.0	0.00	0.00	-145.7	KOP (Fruit Loop 29 #602H)
7	12327.4	89.42	179.53	11943.9	-304.1	732.7	10.00	179.53	415.1	
8	16876.8	89.42	179.53	11990.0	-4855.0	770.0	0.00	0.00	4915.7	PBHL (Fruit Loop 29 #602H)

WELLSBORT TARGET DETAILS (MAP CO-ORDINATES)

Name	TVD	+N/-S	+E/-W	Northing	Easting
KOP (Fruit Loop 29 #602H)	11371.0	263.0	728.0	630768.00	769106.00
PBHL (Fruit Loop 29 #602H)	11990.0	-4855.0	770.0	625648.00	769148.00
FTP (Fruit Loop 29 #602H)	11944.0	213.0	729.0	630718.00	769106.00

