

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720
District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources
Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Revised August 1, 2011

Submit one copy to appropriate

District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-025-46927	² Pool Code 98094	³ Pool Name BOBCAT DRAW; UPPER WOLFCAMP
⁴ Property Code 39180	⁵ Property Name VACA 24 FED COM	⁶ Well Number 701H
⁷ UGRID No. 7377	⁸ Operator Name EOG RESOURCES, INC.	⁹ Elevation 3342'

¹⁰Surface Location

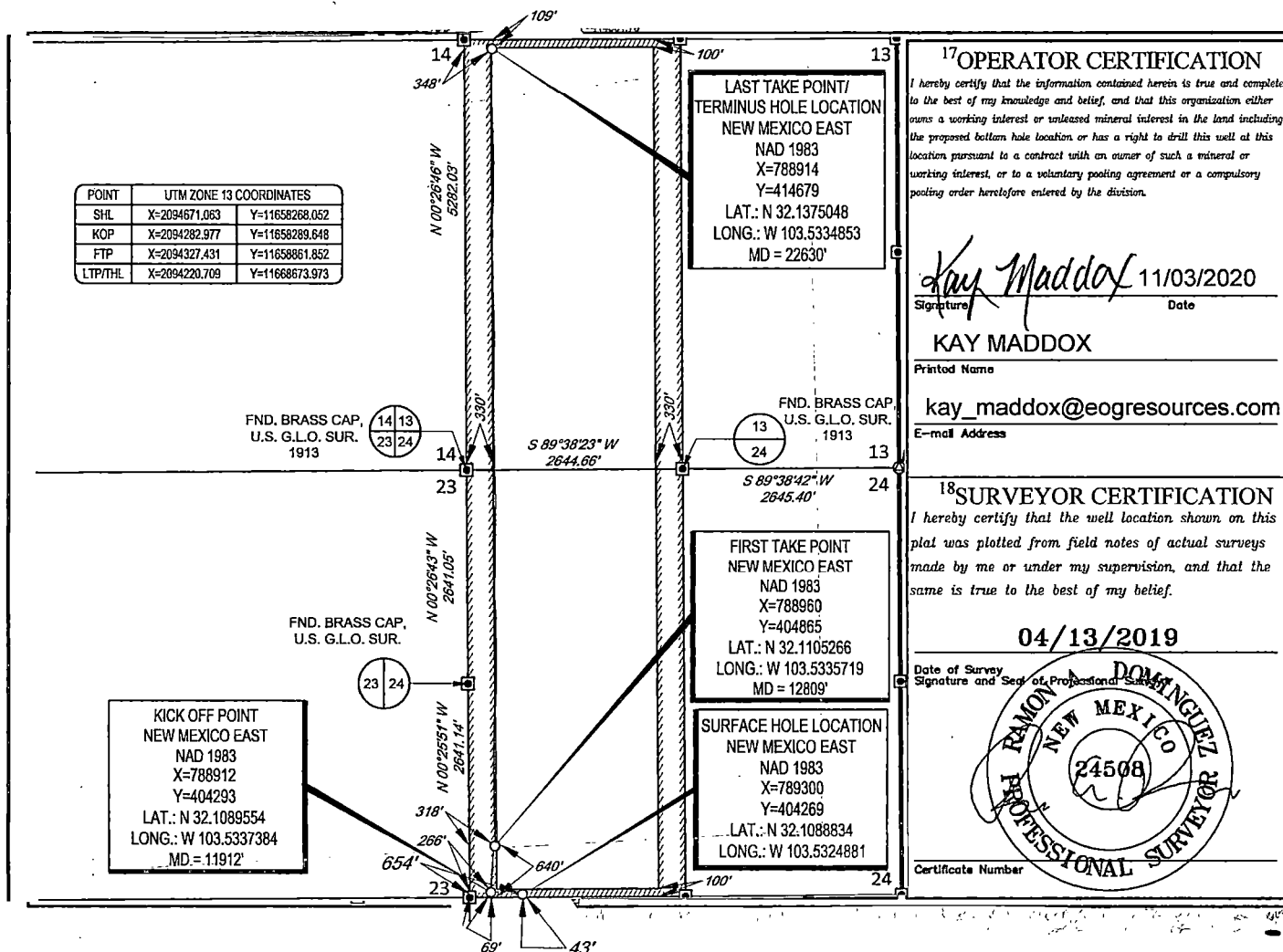
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	24	25-S	33-E	-	43'	SOUTH	654'	WEST	LEA

¹¹Bottom 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	13	25-S	33-E	-	109'	NORTH	348'	WEST	LEA

¹² Dedicated Acres 641.53	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ 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.



SECTION 24, TOWNSHIP 25-S, RANGE 33-E, N.M.P.M.
LEA COUNTY, NEW MEXICO

SCALE: 1" = 2000'
0' 1000' 2000'

POINT	UTM ZONE 13 COORDINATES	
SHL	X=2094671.063	Y=11658268.052
KOP	X=2094282.977	Y=11658289.648
FTP	X=2094327.431	Y=11658861.852
LTP/THL	X=2094220.709	Y=11668673.973

KICK OFF POINT
NEW MEXICO EAST
NAD 1983
X=788912
Y=404293
LAT.: N 32.1089554
LONG.: W 103.5337384
MD = 11912'

LAST TAKE POINT/
TERMINUS HOLE LOCATION
NEW MEXICO EAST
NAD 1983
X=788914
Y=414679
LAT.: N 32.1375048
LONG.: W 103.5334853
MD = 22630'

FIRST TAKE POINT
NEW MEXICO EAST
NAD 1983
X=788960
Y=404865
LAT.: N 32.1105266
LONG.: W 103.5335719
MD = 12809'

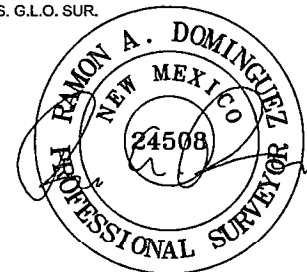
SURFACE HOLE LOCATION
NEW MEXICO EAST
NAD 1983
X=789300
Y=404269
LAT.: N 32.1088834
LONG.: W 103.5324881

LEASE NAME & WELL NO.: VACA 24 FED COM #701H
SECTION 24 TWP 25-S RGE 33-E SURVEY N.M.P.M.
COUNTY LEA STATE NM ELEVATION 3342'
DESCRIPTION 43' FSL & 654' FWL



TOPOGRAPHIC
LOYALTY INNOVATION LEGACY

1400 EVERMAN PARKWAY, Ste. 145 • FT. WORTH, TEXAS 76140
TELEPHONE: (817) 744-7512 • FAX (817) 744-7554
2903 NORTH BIG SPRING • MIDLAND, TEXAS 79705
TELEPHONE: (432) 682-1653 OR (800) 767-1653 • FAX (432) 682-1743
WWW.TOPOGRAPHIC.COM



Ramon A. Dominguez, P.S. No. 24508
SEPTEMBER 23, 2020

Geog resources, inc.

VACA 24 FED COM #701H
AS-COMplete

DATE: 09/23/2020
FILE: AD_VACA_24_FED_COM_701H
DRAWN BY: A.V.F.
SHEET: 1 OF 1

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.
4. ADJOINER INFORMATION SHOWN FOR INFORMATIONAL PURPOSES ONLY.



EOG Resources - Midland

Lea County, NM (NAD 83 NME)

Vaca 24 Fed Com

#701H

140183

OH

Design: OH

Standard Survey Report

28 August, 2020

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #701H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 32' @ 3374.0usft
Site:	Vaca 24 Fed Com	MD Reference:	KB = 32' @ 3374.0usft
Well:	#701H	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	Vaca 24 Fed Com		
Site Position:		Northing:	404,270.00 usft
From:	Map	Easting:	789,366.00 usft
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 6' 31.982 N
		Longitude:	103° 31' 56.186 W
		Grid Convergence:	0.43 °

Well	#701H		
Well Position	+N/-S	0.0 usft	Northing:
	+E/-W	0.0 usft	Easting:
Position Uncertainty	0.0 usft	Wellhead Elevation:	usft
		Latitude:	32° 6' 31.977 N
		Longitude:	103° 31' 56.953 W
		Ground Level:	3,342.0 usft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	8/9/2019	6.69	59.93	47,654.10651290

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)	Direction (°)	
	0.0	0.0	0.0	357.78	

Survey Program	Date	8/28/2020			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
124.0	22,630.0	Total MWD #1 (OH)	EOG MWD+IFR1	MWD + IFR1	

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	
124.0	0.30	201.10	124.0	-0.3	-0.1	-0.3	0.24	0.24	0.00	
309.0	0.10	271.80	309.0	-0.7	-0.5	-0.7	0.15	-0.11	38.22	
492.0	0.50	259.90	492.0	-0.9	-1.4	-0.8	0.22	0.22	-6.50	
584.0	0.60	248.70	584.0	-1.1	-2.2	-1.0	0.16	0.11	-12.17	
676.0	0.70	273.10	676.0	-1.3	-3.3	-1.1	0.32	0.11	26.52	
771.0	0.90	255.40	771.0	-1.4	-4.6	-1.3	0.33	0.21	-18.63	
867.0	1.30	258.90	867.0	-1.8	-6.4	-1.6	0.42	0.42	3.65	
962.0	1.30	254.30	961.9	-2.3	-8.4	-2.0	0.11	0.00	-4.84	
1,056.0	0.90	263.90	1,055.9	-2.7	-10.2	-2.3	0.47	-0.43	10.21	

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Well:	#701H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.14

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)	
1,133.0	0.60	287.50	1,132.9	-2.6	-11.2	-2.2	0.55	-0.39	30.65	
1,167.0	0.40	205.10	1,166.9	-2.7	-11.4	-2.2	1.99	-0.59	-242.35	
1,262.0	0.90	251.70	1,261.9	-3.2	-12.3	-2.8	0.73	0.53	49.05	
1,452.0	1.00	242.10	1,451.9	-4.5	-15.1	-3.9	0.10	0.05	-5.05	
1,547.0	0.80	244.80	1,546.9	-5.1	-16.5	-4.5	0.22	-0.21	2.84	
1,642.0	2.90	283.70	1,641.8	-4.9	-19.4	-4.1	2.45	2.21	40.95	
1,737.0	6.10	284.70	1,736.5	-3.0	-26.6	-2.0	3.37	3.37	1.05	
1,832.0	6.60	282.80	1,830.9	-0.5	-36.8	0.9	0.57	0.53	-2.00	
1,927.0	6.60	280.80	1,925.3	1.7	-47.5	3.6	0.24	0.00	-2.11	
2,022.0	6.80	281.10	2,019.6	3.8	-58.4	6.1	0.21	0.21	0.32	
2,118.0	6.70	280.50	2,115.0	5.9	-69.5	8.6	0.13	-0.10	-0.63	
2,213.0	7.70	286.70	2,209.2	8.8	-81.0	11.9	1.33	1.05	6.53	
2,308.0	8.10	288.30	2,303.3	12.7	-93.5	16.3	0.48	0.42	1.68	
2,402.0	7.70	287.70	2,396.4	16.7	-105.8	20.8	0.43	-0.43	-0.64	
2,497.0	7.50	289.40	2,490.6	20.7	-117.7	25.2	0.32	-0.21	1.79	
2,592.0	7.40	289.60	2,584.8	24.8	-129.3	29.8	0.11	-0.11	0.21	
2,687.0	6.90	291.20	2,679.1	28.9	-140.4	34.3	0.57	-0.53	1.68	
2,782.0	6.80	292.20	2,773.4	33.1	-150.9	38.9	0.16	-0.11	1.05	
2,877.0	6.80	281.40	2,867.7	36.3	-161.6	42.6	1.34	0.00	-11.37	
2,972.0	6.60	278.50	2,962.1	38.3	-172.5	44.9	0.41	-0.21	-3.05	
3,067.0	6.00	280.70	3,056.5	40.0	-182.8	47.1	0.68	-0.63	2.32	
3,162.0	5.40	285.50	3,151.0	42.1	-192.0	49.5	0.81	-0.63	5.05	
3,257.0	4.80	273.50	3,245.7	43.5	-200.3	51.3	1.28	-0.63	-12.63	
3,353.0	4.10	265.10	3,341.4	43.5	-207.7	51.5	0.99	-0.73	-8.75	
3,447.0	4.60	267.10	3,435.1	43.0	-214.8	51.3	0.56	0.53	2.13	
3,542.0	4.60	266.30	3,529.8	42.6	-222.4	51.2	0.07	0.00	-0.84	
3,637.0	5.90	272.50	3,624.4	42.6	-231.1	51.5	1.49	1.37	6.53	
3,732.0	6.10	274.20	3,718.9	43.1	-241.0	52.5	0.28	0.21	1.79	
3,828.0	5.80	273.80	3,814.4	43.8	-250.9	53.5	0.32	-0.31	-0.42	
3,923.0	5.60	264.90	3,908.9	43.7	-260.4	53.8	0.95	-0.21	-9.37	
4,018.0	4.60	249.40	4,003.5	42.0	-268.5	52.4	1.78	-1.05	-16.32	
4,113.0	4.40	250.50	4,098.2	39.4	-275.5	50.1	0.23	-0.21	1.16	
4,208.0	4.80	254.20	4,192.9	37.1	-282.8	48.1	0.52	0.42	3.89	
4,303.0	4.70	252.80	4,287.6	34.9	-290.3	46.1	0.16	-0.11	-1.47	
4,398.0	2.80	236.10	4,382.4	32.4	-296.0	43.9	2.29	-2.00	-17.58	
4,493.0	2.20	230.00	4,477.3	30.0	-299.3	41.6	0.69	-0.63	-6.42	
4,588.0	4.20	258.10	4,572.1	28.1	-304.1	39.9	2.62	2.11	29.58	
4,684.0	4.30	252.00	4,667.9	26.3	-311.0	38.3	0.48	0.10	-6.35	
4,779.0	3.60	221.90	4,762.7	22.9	-316.4	35.2	2.27	-0.74	-31.68	
4,874.0	5.30	217.70	4,857.4	17.2	-321.0	29.7	1.82	1.79	-4.42	
4,969.0	5.80	241.30	4,951.9	11.5	-327.9	24.2	2.44	0.53	24.84	
5,063.0	5.10	249.00	5,045.5	7.7	-336.0	20.7	1.08	-0.74	8.19	
5,158.0	5.30	269.90	5,140.1	6.2	-344.3	19.5	1.99	0.21	22.00	
5,253.0	5.00	270.50	5,234.7	6.2	-352.8	19.9	0.32	-0.32	0.63	

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Well:	#701H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.14

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)	
5,348.0	5.10	270.40	5,329.4	6.3	-361.2	20.3	0.11	0.11	-0.11	
5,443.0	3.10	275.60	5,424.1	6.5	-368.0	20.8	2.14	-2.11	5.47	
5,538.0	1.50	292.90	5,519.1	7.3	-371.7	21.7	1.82	-1.68	18.21	
5,633.0	1.50	315.10	5,614.0	8.6	-373.7	23.1	0.61	0.00	23.37	
5,728.0	1.60	320.10	5,709.0	10.5	-375.4	25.1	0.18	0.11	5.26	
5,823.0	1.50	310.70	5,804.0	12.4	-377.2	27.0	0.29	-0.11	-9.89	
6,013.0	1.00	54.50	5,993.9	15.0	-377.8	29.6	1.05	-0.26	54.63	
6,109.0	1.20	49.80	6,089.9	16.1	-376.3	30.7	0.23	0.21	-4.90	
6,203.0	1.20	47.40	6,183.9	17.4	-374.8	31.9	0.05	0.00	-2.55	
6,298.0	0.50	281.40	6,278.9	18.1	-374.5	32.7	1.63	-0.74	-132.63	
6,393.0	0.90	243.20	6,373.9	17.9	-375.6	32.4	0.63	0.42	-40.21	
6,488.0	1.20	248.60	6,468.9	17.2	-377.2	31.8	0.33	0.32	5.68	
6,583.0	1.20	239.70	6,563.8	16.3	-379.0	31.0	0.20	0.00	-9.37	
6,678.0	0.90	359.20	6,658.8	16.6	-379.8	31.3	1.92	-0.32	125.79	
6,773.0	1.20	359.00	6,753.8	18.3	-379.9	33.0	0.32	0.32	-0.21	
6,868.0	1.50	359.30	6,848.8	20.5	-379.9	35.3	0.32	0.32	0.32	
6,963.0	1.10	20.70	6,943.8	22.6	-379.6	37.3	0.66	-0.42	22.53	
7,058.0	1.00	9.30	7,038.7	24.3	-379.1	39.0	0.24	-0.11	-12.00	
7,153.0	1.10	106.90	7,133.7	24.9	-378.1	39.5	1.66	0.11	102.74	
7,248.0	1.70	105.60	7,228.7	24.2	-375.9	38.8	0.63	0.63	-1.37	
7,343.0	1.80	117.80	7,323.7	23.1	-373.2	37.6	0.41	0.11	12.84	
7,438.0	0.30	111.40	7,418.6	22.4	-371.7	36.8	1.58	-1.58	-6.74	
7,628.0	0.70	85.70	7,608.6	22.3	-370.0	36.6	0.24	0.21	-13.53	
7,723.0	0.60	124.50	7,703.6	22.0	-369.1	36.3	0.47	-0.11	40.84	
7,818.0	0.70	116.00	7,798.6	21.5	-368.1	35.8	0.15	0.11	-8.95	
7,913.0	1.00	163.90	7,893.6	20.4	-367.4	34.7	0.78	0.32	50.42	
8,008.0	1.10	258.90	7,988.6	19.5	-368.0	33.7	1.63	0.11	100.00	
8,103.0	0.70	302.50	8,083.6	19.6	-369.4	33.9	0.80	-0.42	45.89	
8,198.0	0.60	331.90	8,178.6	20.4	-370.1	34.7	0.36	-0.11	30.95	
8,293.0	0.30	270.80	8,273.6	20.8	-370.6	35.2	0.55	-0.32	-64.32	
8,388.0	0.10	270.50	8,368.6	20.8	-371.0	35.2	0.21	-0.21	-0.32	
8,483.0	0.20	68.50	8,463.6	20.9	-370.9	35.2	0.31	0.11	166.32	
8,578.0	0.80	144.30	8,558.6	20.4	-370.4	34.7	0.82	0.63	79.79	
8,673.0	0.80	189.80	8,653.6	19.2	-370.1	33.5	0.65	0.00	47.89	
8,769.0	0.80	195.10	8,749.6	17.9	-370.4	32.2	0.08	0.00	5.52	
8,863.0	1.00	183.50	8,843.6	16.4	-370.6	30.8	0.29	0.21	-12.34	
8,959.0	0.80	117.10	8,939.5	15.3	-370.0	29.6	1.04	-0.21	-69.17	
9,054.0	0.90	215.90	9,034.5	14.4	-369.9	28.7	1.36	0.11	104.00	
9,149.0	1.30	207.00	9,129.5	12.8	-370.8	27.2	0.46	0.42	-9.37	
9,244.0	0.50	286.80	9,224.5	12.0	-371.7	26.4	1.38	-0.84	84.00	
9,339.0	0.90	328.20	9,319.5	12.7	-372.5	27.2	0.65	0.42	43.58	
9,529.0	0.90	291.40	9,509.5	14.5	-374.7	29.1	0.30	0.00	-19.37	
9,624.0	1.80	238.70	9,604.5	14.0	-376.6	28.6	1.52	0.95	-55.47	

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Well:	#701H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.14

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)	
9,719.0	0.30	262.60	9,699.4	13.2	-378.2	27.9	1.61	-1.58	25.16	
9,813.0	0.60	233.90	9,793.4	12.9	-378.8	27.6	0.39	0.32	-30.53	
9,908.0	0.90	249.70	9,888.4	12.4	-379.9	27.1	0.38	0.32	16.63	
10,003.0	0.80	312.70	9,983.4	12.6	-381.1	27.3	0.94	-0.11	66.32	
10,099.0	0.40	350.40	10,079.4	13.3	-381.6	28.1	0.56	-0.42	39.27	
10,193.0	0.20	332.80	10,173.4	13.8	-381.8	28.6	0.23	-0.21	-18.72	
10,288.0	1.00	260.80	10,268.4	13.8	-382.7	28.7	1.01	0.84	-75.79	
10,383.0	1.40	299.70	10,363.4	14.3	-384.5	29.2	0.93	0.42	40.95	
10,478.0	0.40	312.10	10,458.4	15.1	-385.7	30.0	1.07	-1.05	13.05	
10,573.0	0.90	258.20	10,553.4	15.1	-386.7	30.1	0.78	0.53	-56.74	
10,668.0	1.50	234.80	10,648.3	14.3	-388.5	29.3	0.80	0.63	-24.63	
10,763.0	0.80	284.60	10,743.3	13.7	-390.1	28.8	1.22	-0.74	52.42	
10,858.0	0.90	245.10	10,838.3	13.6	-391.4	28.7	0.61	0.11	-41.58	
10,953.0	1.30	213.30	10,933.3	12.4	-392.7	27.6	0.75	0.42	-33.47	
11,047.0	0.80	45.90	11,027.3	11.9	-392.8	27.1	2.22	-0.53	-178.09	
11,142.0	2.10	340.60	11,122.3	14.0	-392.9	29.3	2.01	1.37	-68.74	
11,237.0	2.50	277.60	11,217.2	15.9	-395.6	31.3	2.55	0.42	-66.32	
11,333.0	1.20	350.90	11,313.2	17.2	-397.8	32.6	2.54	-1.35	76.35	
11,428.0	1.80	44.60	11,408.1	19.3	-396.9	34.6	1.53	0.63	56.53	
11,522.0	1.80	60.90	11,502.1	21.0	-394.6	36.3	0.54	0.00	17.34	
11,618.0	0.90	65.90	11,598.1	22.1	-392.6	37.3	0.94	-0.94	5.21	
11,713.0	1.40	73.30	11,693.0	22.7	-390.8	37.8	0.55	0.53	7.79	
11,830.0	1.10	118.70	11,810.0	22.6	-388.4	37.6	0.86	-0.26	38.80	
11,912.0	1.61	19.80	11,892.0	23.3	-387.3	38.3	2.54	0.62	-120.60	
KOP, MD:11912.0', TVD:11892.0',N/S:23.3', E/W:-387.3', INC:1.61										
11,925.0	1.90	14.60	11,905.0	23.7	-387.2	38.7	2.54	2.23	-40.03	
11,943.4	4.50	10.52	11,923.3	24.7	-387.0	39.7	14.22	14.18	-22.25	
KOP (Vaca 24 Fed Com #701H)										
12,020.0	15.40	8.40	11,998.7	37.7	-385.0	52.6	14.22	14.22	-2.76	
12,115.0	25.90	1.40	12,087.5	71.0	-382.6	85.8	11.34	11.05	-7.37	
12,210.0	39.40	1.40	12,167.3	122.2	-381.4	136.9	14.21	14.21	0.00	
12,305.0	37.30	1.30	12,241.8	181.1	-380.0	195.7	2.21	-2.21	-0.11	
12,400.0	40.30	3.90	12,315.8	240.5	-377.2	255.0	3.59	3.16	2.74	
12,415.2	42.05	4.41	12,327.2	250.5	-376.5	264.9	11.75	11.55	3.33	
FTP (Vaca 24 Fed Com #701H)										
12,429.0	43.65	4.84	12,337.4	259.9	-375.8	274.2	11.75	11.56	3.12	
HL Crossing, MD:12429.0', TVD:12337.4',N/S:259.9', E/W:-375.8', INC:43.65										
12,495.0	51.30	6.60	12,382.0	308.2	-370.9	322.4	11.75	11.59	2.67	
12,590.0	61.80	2.70	12,434.3	387.1	-364.6	401.0	11.57	11.05	-4.11	
12,685.0	70.10	7.10	12,473.0	473.4	-357.1	486.9	9.70	8.74	4.63	
12,738.0	80.80	9.30	12,486.3	524.1	-349.8	537.3	20.58	20.19	4.15	
12,780.0	88.60	9.10	12,490.1	565.4	-343.1	578.3	18.58	18.57	-0.48	
12,875.0	87.30	2.70	12,493.5	659.8	-333.3	672.2	6.87	-1.37	-6.74	
12,970.0	89.80	357.60	12,495.9	754.7	-333.1	767.0	5.98	2.63	-5.37	

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #701H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 32' @ 3374.0usft
Site:	Vaca 24 Fed Com	MD Reference:	KB = 32' @ 3374.0usft
Well:	#701H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.14

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)
13,065.0	91.30	357.60	12,495.0	849.6	-337.1	862.0	1.58	1.58	0.00
13,160.0	92.80	359.30	12,491.6	944.5	-339.6	957.0	2.39	1.58	1.79
13,254.0	89.50	0.10	12,489.7	1,038.5	-340.1	1,050.9	3.61	-3.51	0.85
13,349.0	89.10	359.20	12,490.9	1,133.5	-340.7	1,145.8	1.04	-0.42	-0.95
13,444.0	90.80	359.00	12,491.0	1,228.4	-342.2	1,240.8	1.80	1.79	-0.21
13,539.0	90.40	359.80	12,490.0	1,323.4	-343.2	1,335.7	0.94	-0.42	0.84
13,634.0	91.30	359.90	12,488.6	1,418.4	-343.4	1,430.7	0.95	0.95	0.11
13,729.0	91.10	358.90	12,486.6	1,513.4	-344.4	1,525.6	1.07	-0.21	-1.05
13,824.0	89.00	0.10	12,486.5	1,608.4	-345.3	1,620.6	2.55	-2.21	1.26
13,903.8	90.33	359.19	12,487.0	1,688.1	-345.8	1,700.3	2.02	1.67	-1.15
TGT 1 (Vaca 24 Fed Com #701H)									
13,920.0	90.60	359.00	12,486.8	1,704.4	-346.0	1,716.5	2.02	1.67	-1.15
14,015.0	89.90	0.70	12,486.4	1,799.4	-346.3	1,811.4	1.94	-0.74	1.79
14,110.0	91.00	2.20	12,485.7	1,894.3	-343.9	1,906.2	1.96	1.16	1.58
14,205.0	88.30	1.40	12,486.3	1,989.3	-340.9	2,001.0	2.96	-2.84	-0.84
14,300.0	88.70	0.60	12,488.8	2,084.2	-339.2	2,095.8	0.94	0.42	-0.84
14,395.0	91.10	0.50	12,488.9	2,179.2	-338.3	2,190.7	2.53	2.53	-0.11
14,490.0	89.70	1.00	12,488.3	2,274.2	-337.1	2,285.6	1.56	-1.47	0.53
14,585.0	92.80	2.80	12,486.2	2,369.1	-333.9	2,380.3	3.77	3.26	1.89
14,680.0	88.30	2.40	12,485.3	2,464.0	-329.6	2,474.9	4.76	-4.74	-0.42
14,775.0	90.20	2.00	12,486.5	2,558.9	-326.0	2,569.6	2.04	2.00	-0.42
14,870.0	90.80	1.30	12,485.7	2,653.9	-323.2	2,664.4	0.97	0.63	-0.74
14,965.0	88.60	0.30	12,486.2	2,748.8	-321.9	2,759.3	2.54	-2.32	-1.05
15,084.0	89.80	0.20	12,487.8	2,867.8	-321.4	2,878.1	1.01	1.01	-0.08
15,179.0	90.60	358.80	12,487.5	2,962.8	-322.2	2,973.1	1.70	0.84	-1.47
15,270.0	90.70	359.00	12,486.5	3,053.8	-324.0	3,064.1	0.25	0.11	0.22
15,366.0	88.40	358.80	12,487.2	3,149.8	-325.8	3,160.0	2.40	-2.40	-0.21
15,460.0	88.90	358.40	12,489.4	3,243.7	-328.1	3,254.0	0.68	0.53	-0.43
15,555.0	89.70	358.40	12,490.6	3,338.7	-330.8	3,349.0	0.84	0.84	0.00
15,650.0	91.60	358.60	12,489.5	3,433.6	-333.2	3,444.0	2.01	2.00	0.21
15,745.0	92.30	356.90	12,486.3	3,528.5	-337.0	3,538.9	1.93	0.74	-1.79
15,840.0	89.80	358.80	12,484.6	3,623.4	-340.5	3,633.9	3.31	-2.63	2.00
15,905.3	89.73	359.42	12,484.8	3,688.7	-341.5	3,699.2	0.95	-0.11	0.95
TGT 2 (Vaca 24 Fed Com #701H)									
15,935.0	89.70	359.70	12,485.0	3,718.4	-341.8	3,728.8	0.95	-0.11	0.95
16,030.0	90.60	359.90	12,484.7	3,813.4	-342.1	3,823.8	0.97	0.95	0.21
16,125.0	89.90	0.60	12,484.3	3,908.4	-341.7	3,918.7	1.04	-0.74	0.74
16,220.0	87.40	0.50	12,486.5	4,003.3	-340.8	4,013.5	2.63	-2.63	-0.11
16,315.0	88.00	0.50	12,490.4	4,098.3	-340.0	4,108.4	0.63	0.63	0.00
16,410.0	89.00	1.20	12,492.8	4,193.2	-338.5	4,203.2	1.28	1.05	0.74
16,505.0	90.60	1.60	12,493.2	4,288.2	-336.2	4,298.0	1.74	1.68	0.42
16,600.0	88.10	0.10	12,494.3	4,383.2	-334.8	4,392.8	3.07	-2.63	-1.58
16,695.0	89.00	359.70	12,496.7	4,478.1	-335.0	4,487.7	1.04	0.95	-0.42
16,790.0	90.20	359.90	12,497.3	4,573.1	-335.3	4,582.7	1.28	1.26	0.21

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #701H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 32' @ 3374.0usft
Site:	Vaca 24 Fed Com	MD Reference:	KB = 32' @ 3374.0usft
Well:	#701H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.14

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)
16,885.0	91.30	0.30	12,496.1	4,668.1	-335.1	4,677.6	1.23	1.16	0.42
16,980.0	91.70	0.60	12,493.6	4,763.1	-334.4	4,772.5	0.53	0.42	0.32
17,075.0	90.70	359.70	12,491.6	4,858.1	-334.2	4,867.4	1.42	-1.05	-0.95
17,170.0	90.40	357.90	12,490.7	4,953.0	-336.1	4,962.3	1.92	-0.32	-1.89
17,265.0	92.00	358.00	12,488.7	5,047.9	-339.5	5,057.3	1.69	1.68	0.11
17,360.0	88.40	357.60	12,488.4	5,142.9	-343.2	5,152.3	3.81	-3.79	-0.42
17,455.0	89.30	358.40	12,490.3	5,237.8	-346.5	5,247.3	1.27	0.95	0.84
17,550.0	95.30	359.50	12,486.5	5,332.6	-348.2	5,342.1	6.42	6.32	1.16
17,575.0	95.30	359.80	12,484.2	5,357.5	-348.4	5,367.0	1.19	0.00	1.20
17,605.0	95.10	359.70	12,481.4	5,387.4	-348.5	5,396.9	0.74	-0.67	-0.33
17,645.0	91.50	0.50	12,479.1	5,427.3	-348.5	5,436.8	9.22	-9.00	2.00
17,740.0	86.10	358.40	12,481.1	5,522.3	-349.4	5,531.7	6.10	-5.68	-2.21
17,835.0	85.60	356.00	12,488.0	5,616.9	-354.0	5,626.4	2.57	-0.53	-2.53
17,908.7	89.09	358.79	12,491.4	5,690.4	-357.3	5,700.0	6.06	4.74	3.79
TGT 3 (Vaca 24 Fed Com #701H)									
17,930.0	90.10	359.60	12,491.6	5,711.7	-357.6	5,721.3	6.06	4.74	3.78
18,025.0	88.60	359.40	12,492.6	5,806.7	-358.5	5,816.2	1.59	-1.58	-0.21
18,119.0	87.30	359.90	12,496.0	5,900.6	-359.0	5,910.1	1.48	-1.38	0.53
18,215.0	92.30	359.50	12,496.3	5,996.6	-359.5	6,006.0	5.22	5.21	-0.42
18,310.0	90.20	0.00	12,494.3	6,091.6	-359.9	6,101.0	2.27	-2.21	0.53
18,405.0	90.10	0.20	12,494.0	6,186.6	-359.8	6,195.9	0.24	-0.11	0.21
18,499.0	89.70	0.50	12,494.2	6,280.6	-359.2	6,289.8	0.53	-0.43	0.32
18,594.0	90.00	0.30	12,494.4	6,375.6	-358.5	6,384.7	0.38	0.32	-0.21
18,689.0	90.60	1.30	12,493.9	6,470.6	-357.2	6,479.5	1.23	0.63	1.05
18,784.0	86.60	0.00	12,496.3	6,565.5	-356.1	6,574.4	4.43	-4.21	-1.37
18,879.0	89.10	0.70	12,499.8	6,660.4	-355.6	6,669.2	2.73	2.63	0.74
18,974.0	90.30	1.20	12,500.3	6,755.4	-354.0	6,764.1	1.37	1.26	0.53
19,069.0	91.60	1.10	12,498.7	6,850.4	-352.1	6,858.9	1.37	1.37	-0.11
19,164.0	89.80	358.20	12,497.6	6,945.4	-352.7	6,953.8	3.59	-1.89	-3.05
19,259.0	88.30	358.30	12,499.2	7,040.3	-355.6	7,048.8	1.58	-1.58	0.11
19,354.0	90.00	357.80	12,500.6	7,135.2	-358.8	7,143.8	1.87	1.79	-0.53
19,410.2	90.42	357.92	12,500.4	7,191.4	-360.9	7,200.0	0.77	0.74	0.21
TGT 4 (Vaca 24 Fed Com #701H)									
19,448.0	90.70	358.00	12,500.0	7,229.2	-362.2	7,237.8	0.77	0.74	0.21
19,543.0	92.10	358.40	12,497.7	7,324.1	-365.2	7,332.7	1.53	1.47	0.42
19,639.0	90.80	359.10	12,495.2	7,420.0	-367.3	7,428.7	1.54	-1.35	0.73
19,734.0	88.60	358.40	12,495.7	7,515.0	-369.4	7,523.7	2.43	-2.32	-0.74
19,829.0	88.60	359.10	12,498.1	7,609.9	-371.5	7,618.6	0.74	0.00	0.74
19,924.0	86.80	358.90	12,501.9	7,704.9	-373.1	7,713.5	1.91	-1.89	-0.21
20,018.0	90.10	358.00	12,504.4	7,798.8	-375.7	7,807.5	3.64	3.51	-0.96
20,114.0	89.50	358.90	12,504.7	7,894.7	-378.3	7,903.5	1.13	-0.63	0.94
20,209.0	93.50	357.70	12,502.3	7,989.6	-381.1	7,998.4	4.40	4.21	-1.26
20,304.0	96.30	358.30	12,494.1	8,084.2	-384.4	8,093.0	3.01	2.95	0.63

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #701H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 32' @ 3374.0usft
Site:	Vaca 24 Fed Com	MD Reference:	KB = 32' @ 3374.0usft
Well:	#701H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.14

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)	
20,399.0	94.00	1.30	12,485.6	8,178.8	-384.7	8,187.6	3.97	-2.42	3.16	
20,425.0	90.20	1.40	12,484.7	8,204.8	-384.1	8,213.5	14.62	-14.62	0.38	
20,494.0	90.10	1.50	12,484.5	8,273.8	-382.3	8,282.4	0.20	-0.14	0.14	
20,589.0	90.70	1.80	12,483.8	8,368.7	-379.6	8,377.2	0.71	0.63	0.32	
20,684.0	94.90	3.50	12,479.2	8,463.5	-375.2	8,471.7	4.77	4.42	1.79	
20,779.0	91.10	2.80	12,474.2	8,558.2	-370.0	8,566.1	4.07	-4.00	-0.74	
20,825.0	88.50	359.30	12,474.4	8,604.2	-369.2	8,612.0	9.48	-5.65	-7.61	
20,875.0	88.90	359.20	12,475.5	8,654.2	-369.8	8,662.0	0.82	0.80	-0.20	
20,912.3	90.12	359.55	12,475.8	8,691.4	-370.2	8,699.2	3.40	3.26	0.95	
TGT 5 (Vaca 24 Fed Com #701H)										
20,970.0	92.00	0.10	12,474.8	8,749.1	-370.4	8,756.9	3.40	3.26	0.95	
21,065.0	88.90	2.00	12,474.0	8,844.1	-368.7	8,851.8	3.83	-3.26	2.00	
21,160.0	90.20	1.10	12,474.8	8,939.1	-366.1	8,946.5	1.66	1.37	-0.95	
21,255.0	88.60	359.70	12,475.8	9,034.1	-365.4	9,041.4	2.24	-1.68	-1.47	
21,350.0	87.40	357.60	12,479.1	9,129.0	-367.7	9,136.4	2.54	-1.26	-2.21	
21,445.0	91.30	356.90	12,480.1	9,223.8	-372.2	9,231.3	4.17	4.11	-0.74	
21,540.0	90.70	358.10	12,478.5	9,318.7	-376.4	9,326.3	1.41	-0.63	1.26	
21,635.0	90.00	358.00	12,477.9	9,413.7	-379.6	9,421.3	0.74	-0.74	-0.11	
21,730.0	92.00	358.40	12,476.3	9,508.6	-382.6	9,516.3	2.15	2.11	0.42	
21,825.0	88.30	358.70	12,476.0	9,603.5	-385.0	9,611.3	3.91	-3.89	0.32	
21,920.0	90.10	359.00	12,477.3	9,698.5	-386.9	9,706.2	1.92	1.89	0.32	
22,015.0	91.50	359.40	12,476.0	9,793.5	-388.2	9,801.2	1.53	1.47	0.42	
22,110.0	88.10	0.00	12,476.3	9,888.5	-388.7	9,896.1	3.63	-3.58	0.63	
22,205.0	89.40	0.90	12,478.4	9,983.5	-388.0	9,991.0	1.66	1.37	0.95	
22,300.0	88.50	1.00	12,480.1	10,078.4	-386.4	10,085.8	0.95	-0.95	0.11	
22,395.0	90.70	0.30	12,480.8	10,173.4	-385.3	10,180.7	2.43	2.32	-0.74	
22,490.0	93.70	359.70	12,477.2	10,268.3	-385.3	10,275.5	3.22	3.16	-0.63	
22,508.0	93.70	359.70	12,476.0	10,286.3	-385.4	10,293.5	0.00	0.00	0.00	
Last MWD Survey (MD=22508.0')										
22,629.9	93.70	359.70	12,468.1	10,407.9	-386.0	10,415.1	0.00	0.00	0.00	
PBHL (Vaca 24 Fed Com #701H)										
22,630.0	93.70	359.70	12,468.1	10,408.0	-386.0	10,415.2	0.00	0.00	0.00	
Projection to Bit (MD=22630.0')										

Design Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates			
		+N/-S (usft)	+E/-W (usft)	Comment	
11,912.0	11,892.0	23.3	-387.3	KOP, MD:11912.0', TVD:11892.0',N/S:23.3', E/W:-387.3', INC:1.61	
12,429.0	12,337.4	259.9	-375.8	HL Crossing, MD:12429.0', TVD:12337.4',N/S:259.9', E/W:-375.8', INC:43.65	
22,508.0	12,476.0	10,286.3	-385.4	Last MWD Survey (MD=22508.0')	
22,630.0	12,468.1	10,408.0	-386.0	Projection to Bit (MD=22630.0')	



EOG Resources
Survey Report

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #701H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 32' @ 3374.0usft
Site:	Vaca 24 Fed Com	MD Reference:	KB = 32' @ 3374.0usft
Well:	#701H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.14

Checked By: _____	Approved By: _____	Date: _____
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Lea County, NM (NAD 83 NME)

Vaca 24 Fed Com #701H

Plan #2

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: #701H

Ground Level: 3342.0
KB = 32' @ 3374.0usft
Northing: 404269.00
Easting: 789300.00
Latitude: 32° 6' 31.977 N
Longitude: 103° 31' 56.953 W

Azimuths to Grid North
True North: -0.43°
Magnetic North: 6.27°

Magnetic Field
Strength: 47654.1nT
Dip Angle: 59.93°
Date: 8/9/2019
Model: IGRF2015

To convert a Magnetic Direction to a Grid Direction, Add 6.27°
To convert a Magnetic Direction to a True Direction, Add 6.69° East
To convert a True Direction to a Grid Direction, Subtract 0.43°

SECTION DETAILS

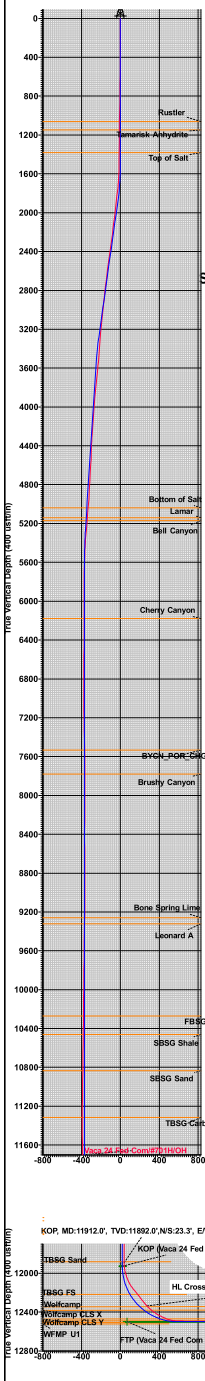
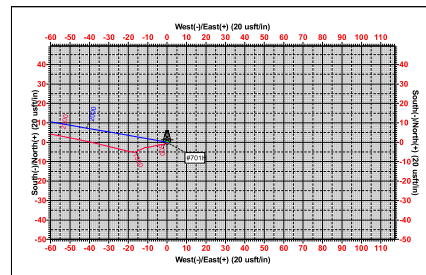
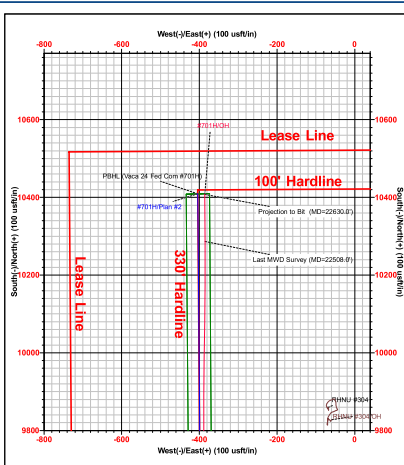
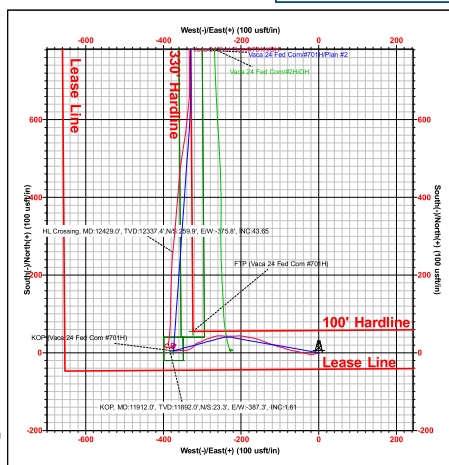
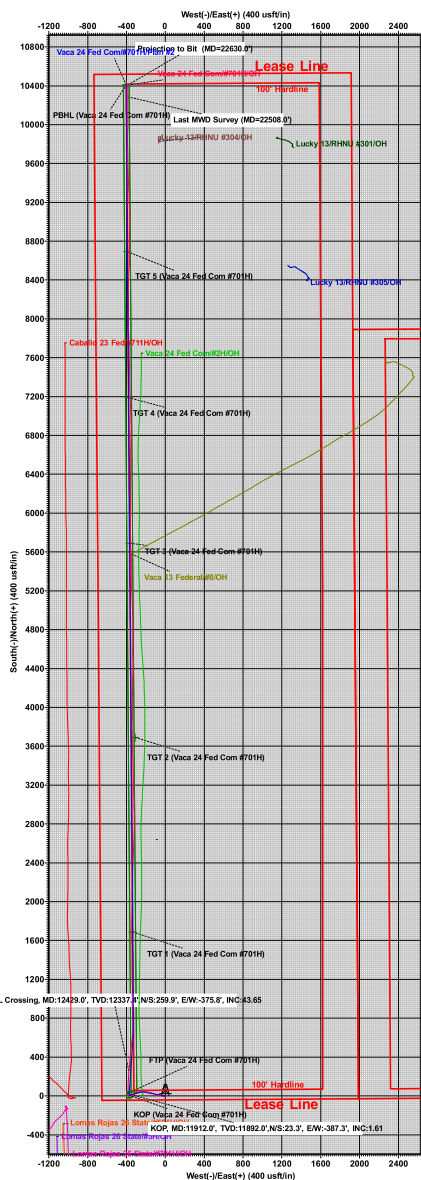
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VFace	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	1500.0	0.00	0.00	1500.0	0.0	0.0	0.00	0.00	0.0	
3	1900.0	8.00	280.00	1898.7	4.8	-27.5	2.00	280.00	5.9	
4	3315.1	8.00	280.00	3300.0	39.0	-221.4	0.00	0.00	47.6	
5	3546.8	4.08	254.92	3530.4	39.7	-245.3	2.00	-158.06	49.2	
6	5316.8	4.08	254.92	5296.0	6.9	-367.0	0.00	0.00	21.1	
7	5521.0	0.00	359.56	5500.0	5.0	-374.0	2.00	180.00	19.5	
8	11947.0	0.00	359.56	11926.0	5.0	-374.0	0.00	0.00	19.5	KOP (Vaca 24 Fed Com #701H)
9	12850.6	90.36	4.09	12498.9	580.1	-332.9	10.00	4.09	592.6	
10	12963.9	90.36	359.56	12498.2	693.3	-329.3	4.00	-90.00	705.5	TGT 1 (Vaca 24 Fed Com #701H)
11	13958.9	90.36	359.56	12492.0	1688.2	-336.9	0.00	0.00	1700.0	
12	13968.3	90.17	359.56	12492.0	1697.6	-337.0	2.00	179.65	1709.4	
13	15959.9	90.17	359.56	12486.0	3689.1	-352.3	0.00	0.00	3700.0	
14	15975.6	89.86	359.56	12486.0	3704.9	-352.4	2.00	-180.00	3715.8	TGT 3 (Vaca 24 Fed Com #701H)
15	17960.8	89.86	359.56	12491.0	5690.0	-367.7	0.00	0.00	5700.0	
16	17961.2	89.85	359.56	12491.0	5690.4	-367.7	2.00	180.00	5700.4	
17	19461.6	89.85	359.56	12495.0	7190.7	-379.3	0.00	0.00	7200.0	TGT 4 (Vaca 24 Fed Com #701H)
18	19480.8	90.23	359.56	12495.0	7209.9	-379.4	2.00	0.00	7219.2	
19	20962.3	90.23	359.56	12489.0	8691.4	-390.8	0.00	0.00	8700.0	TGT 5 (Vaca 24 Fed Com #701H)
20	20968.9	90.10	359.56	12489.0	8698.0	-390.8	2.00	-180.00	8706.6	
21	22680.0	90.10	359.56	12486.0	10409.0	-404.0	0.00	0.00	10416.8	PBHL (Vaca 24 Fed Com #701H)

CASING DETAILS

No casing data is available

WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

Name	TVD	+N/-S	+E/-W	Northing	Easting
KOP (Vaca 24 Fed Com #701H)	11926.0	5.0	-374.0	404274.00	788926.00
PBHL (Vaca 24 Fed Com #701H)	12486.0	10409.0	-404.0	414678.00	788996.00
TGT 2 (Vaca 24 Fed Com #701H)	12486.0	3689.1	-312.0	407958.10	788968.00
TGT 5 (Vaca 24 Fed Com #701H)	12489.0	8691.4	-390.8	412960.40	788909.21
TGT 3 (Vaca 24 Fed Com #701H)	12491.0	5690.0	-367.7	409959.20	788932.29
TGT 1 (Vaca 24 Fed Com #701H)	12492.0	1688.2	-336.9	405957.20	788963.06
TGT 4 (Vaca 24 Fed Com #701H)	12495.0	7190.7	-379.3	411459.70	788920.75
FTP (Vaca 24 Fed Com #701H)	12499.0	55.0	-324.0	404324.00	788976.00



Vertical Section at 357.78° (400 usft/in)

