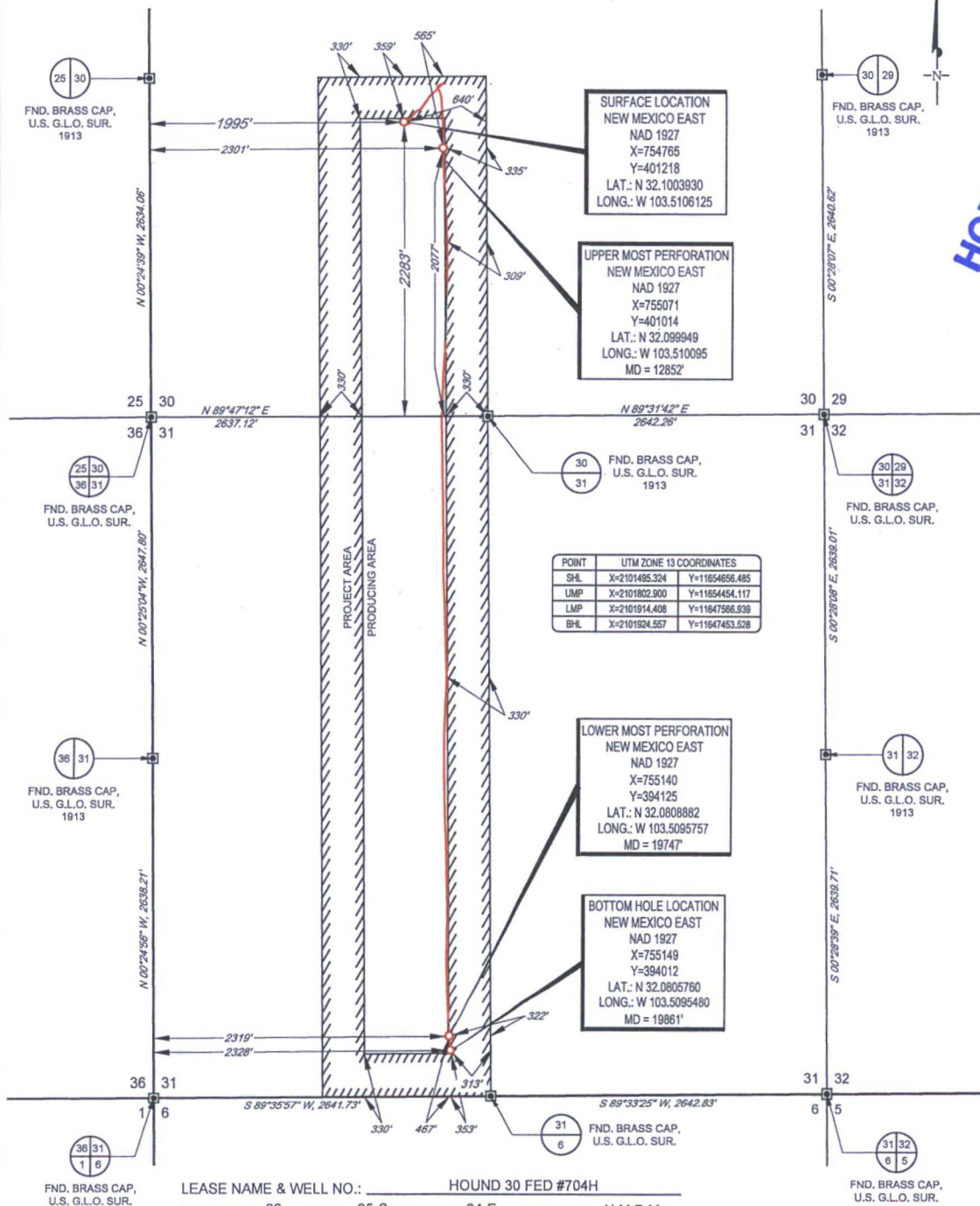


SCALE: 1" = 1000'
0' 500' 1000'

SECTIONS 30 & 31, TOWNSHIP 25-S, RANGE 34-E, N.M.P.M.
LEA COUNTY, NEW MEXICO



HOBBS OCD
JUL 13 2017
RECEIVED

LEASE NAME & WELL NO.: HOUND 30 FED #704H
SECTION 30 TWP 25-S RGE 34-E SURVEY N.M.P.M.
COUNTY LEA STATE NM ELEVATION 3323'
DESCRIPTION 2283' FSL & 1995' FVL

TOPOGRAPHIC
LOYALTY INNOVATION LEGACY

1400 EVERMAN
PARKWAY, Ste. 197 • FT. WORTH, TEXAS 76140 TELEPHONE:
(817) 744-7512 • FAX (817) 744-7548
2903 NORTH BIG SPRING • MIDLAND, TEXAS 79705
TELEPHONE: (432) 682-1653 OR (800) 767-1653 • FAX (432) 682-1743
WWW.TOPOGRAPHIC.COM

ecog resources, Inc.

MICHAEL B. BROWN
NEW MEXICO
18329
PROFESSIONAL SURVEYOR

Michael Blake Brown, P.S. No. 18329
JUNE 12, 2017

HOUND 30 FED #704H AS-COMPLETED	REVISION:	
	A.C.C.	A.C.C.
DATE: 06/12/17		
FILE: AD_HOUND_30_FED_704H_REV1		
DRAWN BY: A.C.C.		
SHEET: 1 OF 1		

NOTES:
1. ORIGINAL DOCUMENT SIZE: 8.5" X 14"
2. ALL BEARINGS, DISTANCES, AND COORDINATE VALUES CONTAINED HEREIN ARE GRID BASED UPON THE NEW MEXICO STATE PLANE COORDINATE SYSTEM, EAST ZONE, U.S. SURVEY FEET, NORTH AMERICAN DATUM 1927.
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.

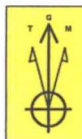


Lea County, NM (NAD 27 NME)

Hound 30 Fed #704H

H&P #647

Plan #1



Azimuths to Grid North
True North: -0.44°
Magnetic North: 6.50°
Magnetic Field
Strength: 47892.8nT
Dip Angle: 59.96°
Date: 4/4/2017
Model: IGRF2015

To convert a Magnetic Direction to a Grid Direction, Add 6.50°
To convert a Magnetic Direction to a True Direction, Add 6.94° East
To convert a True Direction to a Grid Direction, Subtract 0.44°

PROJECT DETAILS: Lea County, NM (NAD 27 NME)

Geodetic System: US State Plane 1927 (Exact solution)
Datum: NAD 1927 (NADCON CONUS)
Ellipsoid: Clarke 1866
Zone: New Mexico East 3001
System Datum: Mean Sea Level

WELL DETAILS: #704H

Ground Level: 3323.0
KB = 25' @ 3348.0usft (H&P #647)
Northing: 401218.00 Easting: 754765.00
Latitude: 32° 30' 1.412 N Longitude: 103° 30' 38.201 W

SECTION DETAILS

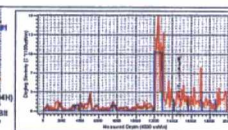
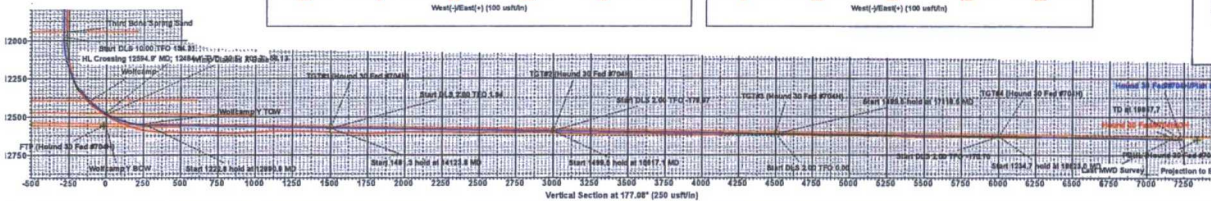
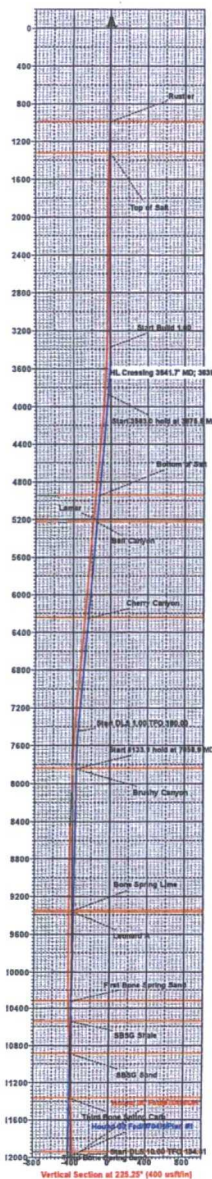
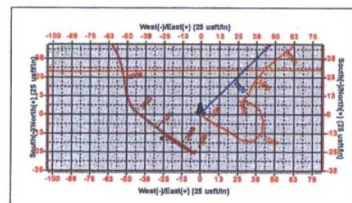
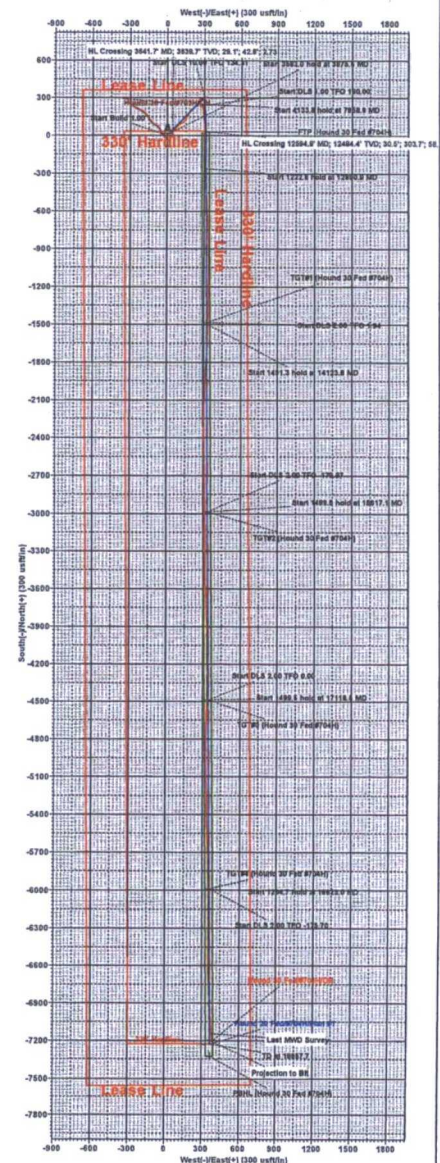
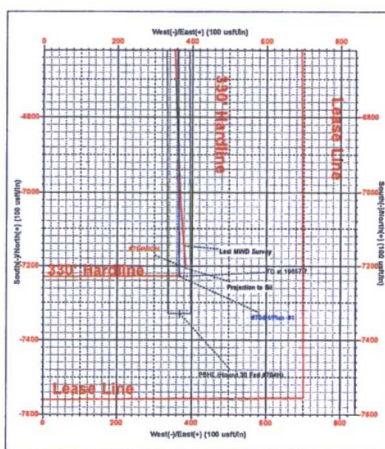
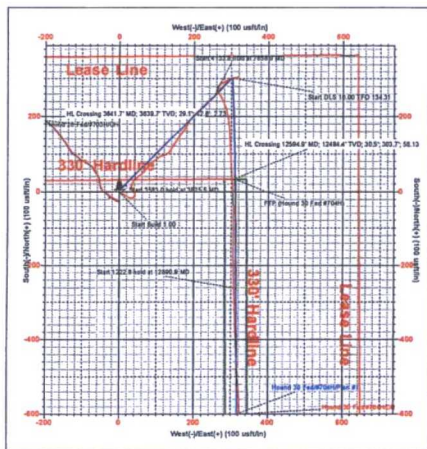
Sec	MD	Inc	Azi	TVD	+N-S	+E-W	Dleg	TFace	VSec	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	3375.0	0.00	0.00	3375.0	0.0	0.0	0.00	0.00	0.0	
3	3875.5	5.00	45.25	3874.8	15.4	15.5	1.00	45.25	-14.6	
4	7458.5	5.00	45.25	7444.2	235.4	237.5	0.00	0.00	-223.1	
5	7858.9	1.00	45.25	7844.0	250.2	252.4	1.00	180.00	-237.0	
6	11992.8	1.00	45.25	11977.2	301.0	303.6	0.00	0.00	-285.2	
7	12890.9	89.11	179.56	12557.0	-263.0	315.1	10.00	134.31	278.7	
8	14113.7	89.11	179.56	12576.0	-1485.6	324.5	0.00	0.00	1500.2	TGT#1 (Hound 30 Fed #704H)
9	14123.8	89.31	179.56	12576.1	-1495.7	324.6	2.00	1.94	1510.3	TGT#2 (Hound 30 Fed #704H)
10	15615.1	89.31	179.56	12594.0	-2988.9	336.0	0.00	0.00	3000.1	TGT#3 (Hound 30 Fed #704H)
11	15617.1	89.27	179.56	12594.0	-2988.8	336.0	2.00	-179.97	3002.1	TGT#4 (Hound 30 Fed #704H)
12	17116.6	89.27	179.56	12613.0	-4488.2	347.4	0.00	0.00	4500.1	
13	17118.5	89.31	179.56	12613.0	-4490.1	347.4	2.00	0.00	4502.0	
14	18618.0	89.31	179.56	12631.0	-5989.5	358.8	0.00	0.00	6000.0	
15	18623.0	89.21	179.56	12631.1	-5994.5	358.8	2.00	-175.70	6005.0	
16	19857.7	89.21	179.56	12648.0	-7229.0	368.4	0.00	0.00	7238.4	PBHL (Hound 30 Fed #704H)

CASING DETAILS

No casing data is available

WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

Name	TVD	+N-S	+E-W	Northing	Easting
TGT#1 (Hound 30 Fed #704H)	12576.0	-1485.6	324.5	399732.40	755089.64
TGT#2 (Hound 30 Fed #704H)	12694.0	-2988.9	336.0	399231.10	755100.98
TGT#3 (Hound 30 Fed #704H)	12613.0	-4488.2	347.4	399729.80	755112.39
TGT#4 (Hound 30 Fed #704H)	12631.0	-5989.5	358.8	399228.60	755123.81
PBHL (Hound 30 Fed #704H)	12648.0	-7229.0	368.0	398889.00	755134.00
FTP (Hound 30 Fed #704H)	12557.0	31.0	312.0	401249.00	755078.00





EOG Resources - Midland

Lea County, NM (NAD 27 NME)

Hound 30 Fed

#704H

OH

Survey: Intrepid MWD

EOG PVA

15 April, 2017



EOG Resources, Inc.
EOG PVA

Company: EOG Resources - Midland
Project: Lea County, NM (NAD 27 NME)
Site: Hound 30 Fed
Well: #704H
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well #704H
TVD Reference: KB = 25' @ 3348.0usft (H&P #647)
MD Reference: KB = 25' @ 3348.0usft (H&P #647)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 5000.1 Single User Db

Project Lea County, NM (NAD 27 NME)

Map System: US State Plane 1927 (Exact solution)
Geo Datum: NAD 1927 (NADCON CONUS)
Map Zone: New Mexico East 3001

System Datum: Mean Sea Level

Site Hound 30 Fed

Site Position:		Northing:	401,122.00 usft	Latitude:	32° 6' 0.564 N
From: Map		Easting:	753,414.00 usft	Longitude:	103° 30' 53.914 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.43 °

Well #704H

Well Position	+N/-S	0.0 usft	Northing:	401,218.00 usft	Latitude:	32° 6' 1.412 N
	+E/-W	0.0 usft	Easting:	754,765.00 usft	Longitude:	103° 30' 38.201 W
Position Uncertainty		0.0 usft	Wellhead Elevation:	0.0 usft	Ground Level:	3,323.0 usft

Wellbore OH

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	4/4/2017	6.94	59.96	47,893

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	177.12



EOG Resources, Inc.
EOG PVA

Company: EOG Resources - Midland
Project: Lea County, NM (NAD 27 NME)
Site: Hound 30 Fed
Well: #704H
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well #704H
TVD Reference: KB = 25' @ 3348.0usft (H&P #647)
MD Reference: KB = 25' @ 3348.0usft (H&P #647)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 5000.1 Single User Db

Survey Program		Date 4/15/2017			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
140.0	1,092.0	True Shot Gyro (OH)	CT_GYRO_MS	Continuous Gyro Multishot	
1,159.0	19,862.0	Intrepid MWD (OH)	MWD	MWD - Standard	

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)
1,092.0	2.70	123.00	1,091.4	-16.1	25.0	0.00	0.00	0.00	-29.7	0.1
1,159.0	2.60	122.00	1,158.3	-17.8	27.6	0.16	-0.15	-1.49	-32.8	-0.5
1,344.0	3.10	72.70	1,343.1	-18.5	35.9	1.31	0.27	-26.65	-28.8	-28.4
1,532.0	2.50	12.50	1,531.0	-13.0	41.7	1.52	-0.32	-32.02	3.7	-43.5
1,720.0	2.90	356.60	1,718.8	-4.3	42.3	0.45	0.21	-8.46	6.8	-42.0
1,908.0	1.80	312.40	1,906.6	2.5	39.8	1.09	-0.59	-23.51	27.7	-28.7
2,096.0	1.20	303.00	2,094.5	5.5	36.0	0.34	-0.32	-5.00	27.2	-24.2
2,284.0	0.80	292.10	2,282.5	7.1	33.1	0.23	-0.21	-5.80	28.0	-19.0
2,471.0	0.70	292.30	2,469.5	8.0	30.9	0.05	-0.05	0.11	25.5	-19.1
2,659.0	0.40	294.70	2,657.5	8.7	29.2	0.16	-0.16	1.28	22.9	-20.1
2,846.0	0.30	351.50	2,844.5	9.5	28.5	0.18	-0.05	30.37	-5.2	-29.6
3,033.0	1.00	78.20	3,031.5	10.3	30.1	0.55	0.37	46.36	-31.5	3.9
3,221.0	1.90	18.10	3,219.4	13.6	32.6	0.88	0.48	-31.97	-23.1	-26.8
3,408.0	2.70	31.50	3,406.3	20.3	35.9	0.51	0.43	7.17	-36.0	-20.0
3,596.0	2.80	42.20	3,594.1	27.5	41.3	0.28	0.05	5.69	-43.9	-11.9
3,641.7	2.73	43.38	3,639.7	29.1	42.8	0.21	-0.16	2.58	-44.4	-10.9
HL Crossing 3641.7' MD; 3639.7' TVD; 29.1'; 42.8'; 2.73										
3,784.0	2.50	47.50	3,781.9	33.7	47.4	0.21	-0.16	2.89	-43.1	-7.8
3,971.0	4.70	53.20	3,968.5	41.0	56.5	1.19	1.18	3.05	-39.9	-5.2
4,158.0	5.60	39.10	4,154.7	52.7	68.4	0.83	0.48	-7.54	-37.8	-14.9
4,345.0	5.10	41.70	4,340.9	66.0	79.7	0.30	-0.27	1.39	-39.6	-11.7



EOG Resources, Inc.
EOG PVA

Company: EOG Resources - Midland
Project: Lea County, NM (NAD 27 NME)
Site: Hound 30 Fed
Well: #704H
Wellbore: OH
Design: OH

Local Co-ordinate Reference:
TVD Reference:
MD Reference:
North Reference:
Survey Calculation Method:
Database:

Well #704H
KB = 25' @ 3348.0usft (H&P #647)
KB = 25' @ 3348.0usft (H&P #647)
Grid
Minimum Curvature
EDM 5000.1 Single User Db

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)
4,533.0	5.20	50.10	4,528.2	77.7	91.8	0.40	0.05	4.47	-41.3	-6.0
4,720.0	5.40	55.30	4,714.4	88.1	105.5	0.28	0.11	2.78	-42.9	-4.4
4,907.0	5.50	75.20	4,900.5	95.4	121.4	1.01	0.05	10.64	-44.9	5.3
5,094.0	5.50	35.50	5,086.7	105.0	135.3	1.99	0.00	-21.23	-37.8	-27.5
5,280.0	5.10	33.00	5,271.9	119.2	145.0	0.25	-0.22	-1.34	-37.9	-26.0
5,468.0	5.30	32.60	5,459.2	133.5	154.2	0.11	0.11	-0.21	-38.7	-22.8
5,657.0	5.10	35.20	5,647.4	147.7	163.8	0.16	-0.11	1.38	-40.6	-17.7
5,845.0	5.10	34.20	5,834.6	161.5	173.3	0.05	0.00	-0.53	-40.9	-15.4
6,032.0	4.90	32.60	6,020.9	175.1	182.3	0.13	-0.11	-0.86	-40.8	-13.2
6,219.0	4.80	31.60	6,207.3	188.5	190.7	0.07	-0.05	-0.53	-40.6	-10.2
6,406.0	4.80	44.40	6,393.6	200.7	200.2	0.57	0.00	6.84	-41.0	0.9
6,593.0	5.10	49.50	6,579.9	211.7	212.0	0.28	0.16	2.73	-40.6	4.1
6,781.0	4.80	49.00	6,767.2	222.3	224.3	0.16	-0.16	-0.27	-40.4	2.6
6,968.0	5.80	43.40	6,953.4	234.3	236.7	0.60	0.53	-2.99	-41.4	-1.6
7,156.0	5.90	45.30	7,140.4	248.0	250.1	0.12	0.05	1.01	-44.2	0.0
7,343.0	4.70	35.10	7,326.6	261.0	261.4	0.81	-0.64	-5.45	-44.6	-6.6
7,530.0	3.40	55.10	7,513.2	270.5	270.3	1.02	-0.70	10.70	-41.3	8.9
7,717.0	2.90	44.30	7,699.9	277.0	278.2	0.41	-0.27	-5.78	-41.5	0.2
7,904.0	2.60	40.80	7,886.7	283.6	284.2	0.18	-0.16	-1.87	-45.4	-2.2
8,092.0	2.30	40.80	8,074.5	289.7	289.5	0.16	-0.16	0.00	-50.1	-2.0
8,279.0	1.90	41.70	8,261.4	294.8	294.0	0.21	-0.21	0.48	-53.7	-0.9
8,468.0	1.20	71.50	8,450.3	297.8	298.0	0.55	-0.37	15.77	-48.8	26.0
8,655.0	1.20	77.70	8,637.3	298.9	301.7	0.07	0.00	3.32	-46.9	29.6
8,842.0	1.30	80.90	8,824.2	299.6	305.7	0.07	0.05	1.71	-46.6	30.4
9,030.0	1.10	74.10	9,012.2	300.4	309.6	0.13	-0.11	-3.62	-50.9	22.8
9,217.0	0.80	83.60	9,199.2	301.1	312.6	0.18	-0.16	5.08	-47.0	29.1
9,404.0	0.50	72.80	9,386.1	301.5	314.7	0.17	-0.16	-5.78	-50.8	18.1



EOG Resources, Inc.
EOG PVA

Company: EOG Resources - Midland
Project: Lea County, NM (NAD 27 NME)
Site: Hound 30 Fed
Well: #704H
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well #704H
TVD Reference: KB = 25' @ 3348.0usft (H&P #647)
MD Reference: KB = 25' @ 3348.0usft (H&P #647)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 5000.1 Single User Db

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)
9,592.0	0.30	67.80	9,574.1	301.9	315.9	0.11	-0.11	-2.66	-50.5	12.3
9,780.0	0.70	71.70	9,762.1	302.4	317.5	0.21	0.21	2.07	-48.2	14.2
9,967.0	0.70	90.00	9,949.1	302.8	319.7	0.12	0.00	9.79	-41.2	26.7
10,154.0	1.50	249.20	10,136.1	301.9	318.5	1.16	0.43	85.13	43.7	-8.6
10,342.0	2.20	252.90	10,324.0	300.0	312.8	0.38	0.37	1.97	34.0	-9.7
10,531.0	2.40	267.60	10,512.8	298.8	305.4	0.33	0.11	7.78	20.6	-14.9
10,719.0	3.30	249.50	10,700.6	296.7	296.4	0.67	0.48	-9.63	12.0	-7.7
10,907.0	0.70	226.80	10,888.5	294.0	290.5	1.42	-1.38	-12.07	4.6	-4.4
11,093.0	1.00	236.70	11,074.5	292.4	288.3	0.18	0.16	5.32	-2.1	-4.3
11,282.0	3.20	240.50	11,263.3	288.8	282.3	1.17	1.16	2.01	-12.5	-3.2
11,470.0	1.10	268.30	11,451.2	286.2	275.9	1.22	-1.12	14.79	-21.4	7.7
11,657.0	2.50	239.10	11,638.1	284.1	270.6	0.87	0.75	-15.61	-31.2	-3.8
11,831.0	1.90	224.20	11,812.0	280.0	265.4	0.47	-0.34	-8.56	-38.8	-12.8
11,948.0	1.90	205.10	11,928.9	276.9	263.2	0.54	0.00	-16.32	-38.1	-26.1
12,042.0	1.90	202.00	12,022.9	274.0	262.0	0.11	0.00	-3.30	-39.6	-29.6
12,136.0	6.30	159.30	12,116.6	267.8	263.2	5.39	4.68	-45.43	-1.3	-45.7
12,183.0	11.90	149.70	12,163.0	261.2	266.6	12.30	11.91	-20.43	10.3	-39.7
12,230.0	16.80	149.80	12,208.5	251.1	272.4	10.43	10.43	0.21	13.3	-32.0
12,277.0	21.80	156.80	12,252.9	237.2	279.3	11.70	10.64	14.89	12.9	-25.3
12,324.0	28.20	162.20	12,295.4	218.6	286.1	14.44	13.62	11.49	13.6	-19.1
12,370.0	34.20	168.70	12,334.8	195.5	292.0	14.94	13.04	14.13	13.9	-14.8
12,417.0	40.20	176.10	12,372.2	167.4	295.6	15.91	12.77	15.74	13.9	-13.2
12,464.0	47.00	177.10	12,406.2	135.1	297.5	14.54	14.47	2.13	13.8	-12.2
12,511.0	51.80	177.00	12,436.8	99.4	299.4	10.21	10.21	-0.21	12.9	-11.0
12,557.0	56.20	175.90	12,463.9	62.3	301.7	9.76	9.57	-2.39	12.1	-9.3
12,594.9	58.13	176.79	12,484.4	30.5	303.7	5.47	5.10	2.35	11.8	-7.9

HL Crossing 12594.9' MD; 12484.4' TVD; 30.5'; 303.7'; 58.13



EOG Resources, Inc.
EOG PVA

Company: EOG Resources - Midland
Project: Lea County, NM (NAD 27 NME)
Site: Hound 30 Fed
Well: #704H
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well #704H
TVD Reference: KB = 25' @ 3348.0usft (H&P #647)
MD Reference: KB = 25' @ 3348.0usft (H&P #647)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 5000.1 Single User Db

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)
12,604.0	58.60	177.00	12,489.2	22.8	304.1	5.47	5.11	2.29	11.9	-7.6
12,632.1	59.21	177.74	12,503.7	-1.3	305.2	3.12	2.17	2.62	13.0	-6.9
FTP (Hound 30 Fed #704H)										
12,650.0	59.60	178.20	12,512.8	-16.6	305.8	3.12	2.18	2.59	14.2	-6.6
12,697.0	64.80	179.90	12,534.7	-58.2	306.4	11.52	11.06	3.62	17.6	-6.7
12,744.0	68.50	180.70	12,553.3	-101.3	306.2	8.03	7.87	1.70	21.2	-7.5
12,791.0	71.60	179.90	12,569.4	-145.5	306.0	6.79	6.60	-1.70	25.7	-8.1
12,837.0	75.20	178.90	12,582.5	-189.6	306.4	8.10	7.83	-2.17	31.0	-8.0
12,884.0	80.20	178.10	12,592.5	-235.5	307.6	10.77	10.64	-1.70	36.5	-7.2
12,931.0	82.20	178.20	12,599.7	-281.9	309.1	4.26	4.26	0.21	42.4	-6.1
12,978.0	88.40	177.70	12,603.6	-328.7	310.8	13.23	13.19	-1.06	45.5	-4.7
13,018.0	89.50	177.80	12,604.3	-368.6	312.4	2.76	2.75	0.25	45.6	-3.5
13,111.0	88.40	176.60	12,606.0	-461.5	316.9	1.75	-1.18	-1.29	45.9	0.3
13,204.0	89.80	177.00	12,607.5	-554.4	322.1	1.57	1.51	0.43	45.9	4.8
13,299.0	89.90	178.10	12,607.7	-649.3	326.2	1.16	0.11	1.16	44.7	8.1
13,393.0	87.60	176.50	12,609.8	-743.1	330.6	2.98	-2.45	-1.70	45.3	11.8
13,486.0	89.20	177.60	12,612.4	-836.0	335.4	2.09	1.72	1.18	46.4	15.9
13,580.0	93.60	179.50	12,610.1	-929.9	337.8	5.10	4.68	2.02	42.7	17.6
13,674.0	93.80	179.00	12,604.0	-1,023.7	339.0	0.57	0.21	-0.53	35.1	18.1
13,768.0	92.50	180.70	12,598.8	-1,117.5	339.2	2.27	-1.38	1.81	28.5	17.6
13,861.0	89.10	181.10	12,597.5	-1,210.5	337.8	3.68	-3.66	0.43	25.8	15.4
13,955.0	88.00	180.30	12,599.9	-1,304.5	336.6	1.45	-1.17	-0.85	26.7	13.5
14,048.0	88.70	182.00	12,602.6	-1,397.4	334.8	1.98	0.75	1.83	28.0	10.9
14,135.5	87.41	181.17	12,605.6	-1,484.8	332.4	1.75	-1.47	-0.95	29.6	7.8
TGT#1 (Hound 30 Fed #704H)										
14,143.0	87.30	181.10	12,605.9	-1,492.3	332.2	1.75	-1.47	-0.95	29.8	7.6
14,237.0	88.00	180.70	12,609.8	-1,586.2	330.7	0.86	0.74	-0.43	32.5	5.4



EOG Resources, Inc.
EOG PVA

Company: EOG Resources - Midland
Project: Lea County, NM (NAD 27 NME)
Site: Hound 30 Fed
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Wellbore: OH
Design: OH

Local Co-ordinate Reference:
TVD Reference: KB = 25' @ 3348.0usft (H&P #647)
MD Reference: KB = 25' @ 3348.0usft (H&P #647)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 5000.1 Single User Db

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)
14,331.0	88.20	181.70	12,612.9	-1,680.1	328.8	1.08	0.21	1.06	34.5	2.7
14,424.0	90.50	182.90	12,613.9	-1,773.0	325.0	2.79	2.47	1.29	34.5	-1.7
14,519.0	93.40	184.00	12,610.7	-1,867.8	319.3	3.26	3.05	1.16	30.1	-8.1
14,613.0	91.70	183.30	12,606.5	-1,961.5	313.3	1.96	-1.81	-0.74	24.8	-14.8
14,706.0	89.70	181.60	12,605.4	-2,054.4	309.4	2.82	-2.15	-1.83	22.5	-19.5
14,799.0	90.50	181.90	12,605.2	-2,147.4	306.5	0.92	0.86	0.32	21.3	-23.0
14,893.0	89.80	182.40	12,605.0	-2,241.3	303.0	0.92	-0.74	0.53	19.9	-27.3
14,987.0	88.10	179.40	12,606.7	-2,335.3	301.5	3.67	-1.81	-3.19	20.5	-29.5
15,081.0	88.10	177.60	12,609.8	-2,429.2	304.0	1.91	0.00	-1.91	22.5	-27.7
15,175.0	91.60	179.60	12,610.1	-2,523.1	306.3	4.29	3.72	2.13	21.6	-26.2
15,268.0	90.20	179.30	12,608.6	-2,616.1	307.2	1.54	-1.51	-0.32	19.0	-26.0
15,362.0	91.70	179.50	12,607.0	-2,710.1	308.2	1.61	1.60	0.21	16.3	-25.7
15,456.0	89.70	178.20	12,605.9	-2,804.1	310.0	2.54	-2.13	-1.38	14.1	-24.5
15,550.0	89.10	179.00	12,606.9	-2,898.0	312.3	1.06	-0.64	0.85	13.9	-22.9
15,638.7	86.91	179.19	12,610.0	-2,986.7	313.7	2.48	-2.47	0.22	16.0	-22.2
TGT#2 (Hound 30 Fed #704H)										
15,643.0	86.80	179.20	12,610.2	-2,990.9	313.8	2.48	-2.47	0.22	16.1	-22.2
15,737.0	88.90	179.40	12,613.7	-3,084.9	314.9	2.24	2.23	0.21	18.5	-21.8
15,831.0	89.70	179.10	12,614.9	-3,178.9	316.2	0.91	0.85	-0.32	18.4	-21.2
15,924.0	90.10	181.10	12,615.0	-3,271.8	316.0	2.19	0.43	2.15	17.4	-22.1
16,018.0	91.10	179.00	12,614.0	-3,365.8	315.9	2.47	1.06	-2.23	15.2	-22.9
16,111.0	89.70	179.30	12,613.4	-3,458.8	317.3	1.54	-1.51	0.32	13.4	-22.2
16,205.0	90.40	178.80	12,613.3	-3,552.8	318.9	0.92	0.74	-0.53	12.2	-21.4
16,300.0	87.50	176.40	12,615.1	-3,647.7	322.8	3.96	-3.05	-2.53	12.7	-18.1
16,393.0	88.90	178.20	12,618.0	-3,740.5	327.2	2.45	1.51	1.94	14.4	-14.5
16,487.0	88.10	177.50	12,620.4	-3,834.4	330.7	1.13	-0.85	-0.74	15.7	-11.6
16,580.0	88.90	178.60	12,622.9	-3,927.3	333.9	1.46	0.86	1.18	17.0	-9.2



EOG Resources, Inc.
EOG PVA

Company: EOG Resources - Midland
Project: Lea County, NM (NAD 27 NME)
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Design: OH

Local Co-ordinate Reference: Well #704H
TVD Reference: KB = 25' @ 3348.0usft (H&P #647)
MD Reference: KB = 25' @ 3348.0usft (H&P #647)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 5000.1 Single User Db

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)
16,674.0	90.40	178.50	12,623.4	-4,021.3	336.3	1.60	1.60	-0.11	16.4	-7.5
16,768.0	92.10	178.20	12,621.4	-4,115.2	339.0	1.84	1.81	-0.32	13.1	-5.6
16,862.0	91.40	178.00	12,618.5	-4,209.1	342.1	0.77	-0.74	-0.21	9.1	-3.1
16,956.0	92.60	179.40	12,615.2	-4,303.1	344.2	1.96	1.28	1.49	4.6	-1.7
17,050.0	86.80	183.00	12,615.7	-4,397.0	342.3	7.26	-6.17	3.83	3.9	-4.4
17,140.6	87.76	182.81	12,620.0	-4,487.4	337.7	1.08	1.06	-0.21	7.0	-9.7
TGT#3 (Hound 30 Fed #704H)										
17,144.0	87.80	182.80	12,620.2	-4,490.8	337.5	1.08	1.06	-0.21	7.1	-9.9
17,237.0	89.10	182.30	12,622.7	-4,583.6	333.4	1.50	1.40	-0.54	8.5	-14.7
17,332.0	88.80	181.80	12,624.4	-4,678.6	330.0	0.61	-0.32	-0.53	9.1	-18.8
17,425.0	89.10	180.70	12,626.1	-4,771.5	328.0	1.23	0.32	-1.18	9.7	-21.6
17,519.0	90.90	180.50	12,626.1	-4,865.5	327.0	1.93	1.91	-0.21	8.6	-23.3
17,613.0	89.10	179.80	12,626.1	-4,959.5	326.7	2.05	-1.91	-0.74	7.5	-24.2
17,707.0	89.70	179.20	12,627.1	-5,053.5	327.6	0.90	0.64	-0.64	7.3	-24.1
17,801.0	88.70	178.60	12,628.4	-5,147.5	329.4	1.24	-1.06	-0.64	7.5	-23.0
17,895.0	87.30	178.00	12,631.7	-5,241.4	332.1	1.62	-1.49	-0.64	9.7	-21.0
17,989.0	88.80	178.90	12,634.9	-5,335.3	334.7	1.86	1.60	0.96	11.8	-19.1
18,082.0	89.70	177.90	12,636.1	-5,428.2	337.3	1.45	0.97	-1.08	11.9	-17.3
18,175.0	89.90	177.60	12,636.4	-5,521.2	340.9	0.39	0.22	-0.32	11.1	-14.3
18,269.0	90.70	178.40	12,636.0	-5,615.1	344.2	1.20	0.85	0.85	9.4	-11.7
18,363.0	90.50	178.40	12,635.0	-5,709.1	346.8	0.21	-0.21	0.00	7.3	-9.8
18,457.0	89.60	178.20	12,634.9	-5,803.0	349.6	0.98	-0.96	-0.21	6.1	-7.8
18,551.0	88.60	178.70	12,636.4	-5,897.0	352.2	1.19	-1.06	0.53	6.5	-5.9
18,643.5	89.39	179.29	12,638.0	-5,989.5	353.8	1.06	0.85	0.64	7.0	-5.0
TGT#4 (Hound 30 Fed #704H)										
18,645.0	89.40	179.30	12,638.0	-5,990.9	353.8	1.06	0.85	0.64	7.0	-5.0
18,739.0	89.30	178.90	12,639.1	-6,084.9	355.3	0.44	-0.11	-0.43	6.8	-4.3



EOG Resources, Inc.
EOG PVA

Company: EOG Resources - Midland
Project: Lea County, NM (NAD 27 NME)
Site: Hound 30 Fed
Well: #704H
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well #704H
TVD Reference: KB = 25' @ 3348.0usft (H&P #647)
MD Reference: KB = 25' @ 3348.0usft (H&P #647)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 5000.1 Single User Db

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)
18,833.0	91.30	180.90	12,638.6	-6,178.9	355.4	3.01	2.13	2.13	5.0	-4.8
18,926.0	91.90	180.40	12,636.0	-6,271.9	354.4	0.84	0.65	-0.54	1.1	-6.6
19,020.0	88.40	181.10	12,635.7	-6,365.8	353.2	3.80	-3.72	0.74	-0.4	-8.6
19,114.0	87.70	180.30	12,638.9	-6,459.8	352.0	1.13	-0.74	-0.85	1.5	-10.4
19,208.0	89.20	179.20	12,641.5	-6,553.7	352.4	1.98	1.60	-1.17	2.7	-10.7
19,302.0	89.20	177.30	12,642.8	-6,647.7	355.3	2.02	0.00	-2.02	2.8	-8.6
19,396.0	90.50	178.30	12,643.0	-6,741.6	358.9	1.74	1.38	1.06	1.7	-5.7
19,490.0	89.40	176.70	12,643.1	-6,835.5	363.0	2.07	-1.17	-1.70	0.5	-2.3
19,583.0	90.70	178.80	12,643.0	-6,928.4	366.7	2.66	1.40	2.26	-0.8	0.6
19,677.0	88.30	176.70	12,643.9	-7,022.3	370.3	3.39	-2.55	-2.23	-1.3	3.5
19,770.0	86.40	175.30	12,648.2	-7,115.0	376.8	2.54	-2.04	-1.51	1.7	9.3
19,802.0	86.30	175.00	12,650.2	-7,146.8	379.5	0.99	-0.31	-0.94	3.3	11.8
Last MWD Survey										
19,862.0	86.30	175.00	12,654.1	-7,206.5	384.7	0.00	0.00	0.00	6.3	16.5
Projection to Bit - PBHL (Hound 30 Fed #704H)										

Survey Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
3,641.7	3,639.7	29.1	42.8	HL Crossing 3641.7' MD; 3639.7' TVD; 29.1'; 42.8'; 2.73
12,594.9	12,484.4	30.5	303.7	HL Crossing 12594.9' MD; 12484.4' TVD; 30.5'; 303.7'; 58.13
19,802.0	12,650.2	-7,146.8	379.5	Last MWD Survey
19,862.0	12,654.1	-7,206.5	384.7	Projection to Bit

Checked By: _____ Approved By: _____ Date: _____



EOG Resources, Inc.
Hound 30 CTB
3-30-25S-34E

6/15/2017

LEGEND

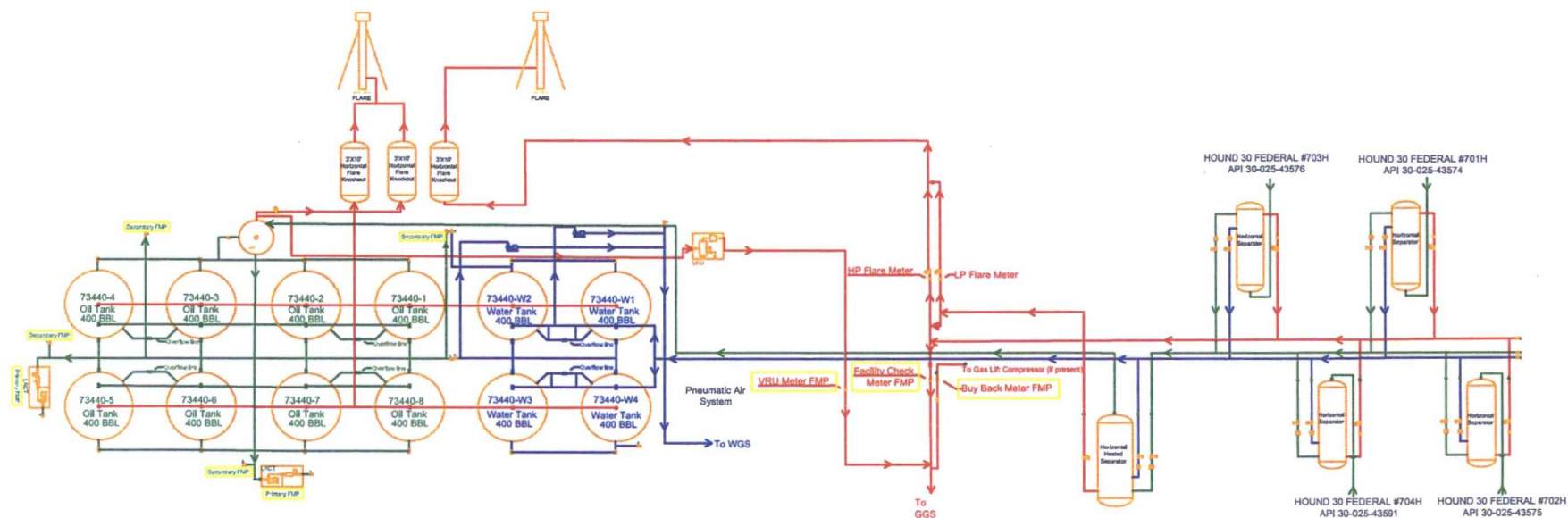
Valve Open	Turbine/ Coriolis Meter
Valve Closed	Oil
Valve Sealed	Gas
Orifice Meter	Water

FACILITY DIAGRAM
Shown: Major equipment, vessels, process piping, and valves
Not shown: Auxiliary process systems such as pneumatic air system, gas lift system, roll lines, recirculating lines, vent lines, and small drain lines

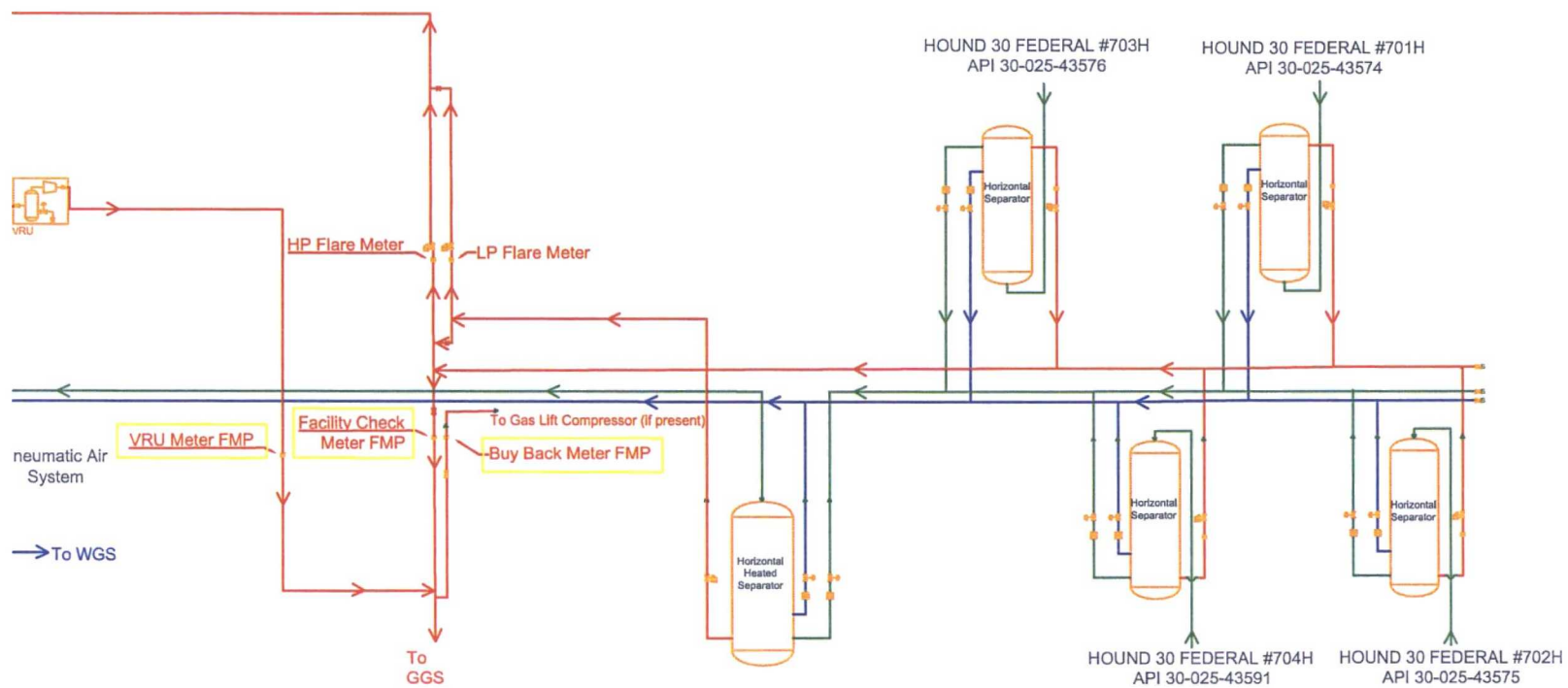
PRODUCTION PHASE: All valves that provide access to production are effectively sealed in the closed position. **SALES THROUGH LACT UNITS:** Sale is measured through LACT units. All other valves that provide access to production (load-out valves) are effectively sealed in the closed position.

WATER TANKS: If the possibility for oil to enter water tanks exists through common recirculating or equalizing lines, oil tanks are isolated from water tanks by valves effectively sealed in the closed position.

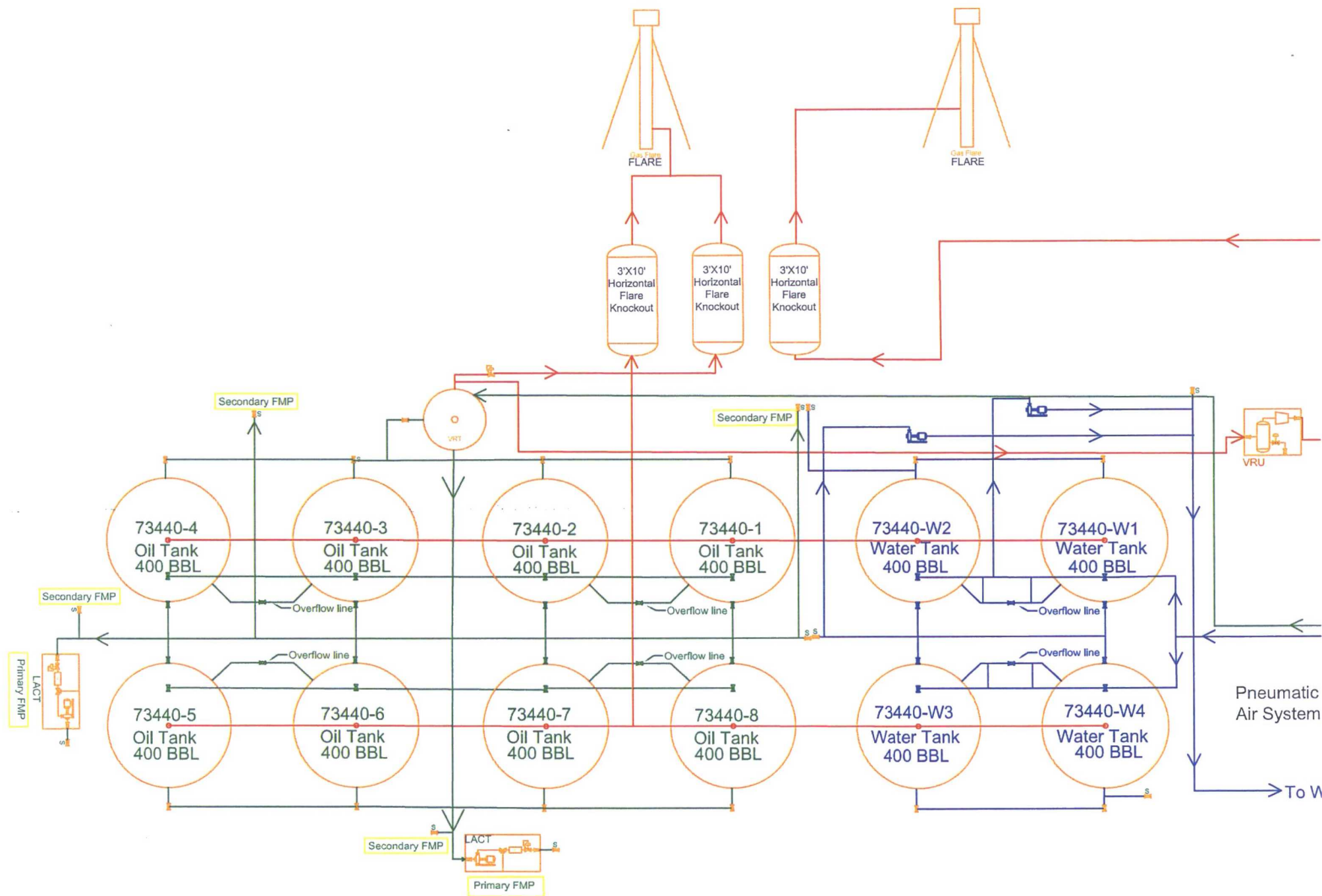
WELL SPECIFIC MEASUREMENT: The production from each well will flow into a dedicated 3-phase separator. The production stream will be separated into 3 independent streams (gas, oil, and water) by the separator. The gas will be measured using a senior orifice meter and used to allocate total volume measured at the facility check meter, high pressure flare meter, and low pressure flare meter.



Facility Overview: Please see pages 2 and 3 for details.



HOBBES OCD
JUL 13 2017
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Bureau of Land Management

Hobbs Field Office

414 W. Taylor

Hobbs, New Mexico

505.393.3612

WATER PRODUCTION & DISPOSAL INFORMATION

Well: Hound 30 Fed 704H

NWSW Sec 30 T25S, R34E

30-025-43591

1. Name of formations producing water on lease: WOLFCAMP
2. Amount of water produced from all formations in barrels per day 2000-7000 BWPD
3. How water is stored on lease Tanks 4-400 bbl tanks
4. How water is moved to disposal facility Pipeline/Trucked
5. Disposal Facility:
 - a. Facility Operators name EOG RESOURCES, INC
 - b. Name of facility or well name & number
Black Bear 36 State #5
30-025-40585
H-36-25S-33E
 - c. Type of facility or wells WDW
 - d. Permit No SWD -1359