

HOBBS OCD
JAN 11 2019
RECEIVED



EOG Resources - Midland

Lea County, NM (NAD 83 NME)
Audacious 19 Federal
#711H
OH

Design: OH

Midland PVA

16 September, 2018





Midland PVA

Company: EOG Resources - Midland	Local Co-ordinate Reference:	Well #711H
Project: Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 25' @ 3487.0usft
Site: Audacious 19 Federal	MD Reference:	KB = 25' @ 3487.0usft
Well: #711H	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 Audacious 19 Federal		
Site Position:	Northing: 406,251.00 usft	Latitude: 32° 6' 53.415 N
From: Map	Easting: 763,097.00 usft	Longitude: 103° 37' 1.440 W
Position Uncertainty: 0.0 usft	Slot Radius: 13-3/16 "	Grid Convergence: 0.38 °

Well #711H		
Well Position +N-S 0.0 usft	Northing: 406,250.00 usft	Latitude: 32° 6' 53.409 N
+E-W 0.0 usft	Easting: 763,029.00 usft	Longitude: 103° 37' 2.230 W
Position Uncertainty 0.0 usft	Wellhead Elevation: usft	Ground Level: 3,462.0 usft

Wellbore OH					
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	2/13/2018	6.90	59.95	47,800.32342798

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	183.39

Survey Program	Date 9/16/2018			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
160.0	19,895.0	Newsco MWD (OH)	MWD	OWSG MWD - Standard



Midland PVA

Company: EOG Resources - Midland	Local Co-ordinate Reference: Well #711H
Project: Lea County, NM (NAD 83 NME)	TVD Reference: KB = 25' @ 3487.0usft
Site: Audacious 19 Federal	MD Reference: KB = 25' @ 3487.0usft
Well: #711H	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)	
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	
160.0	0.90	57.40	160.0	0.7	1.1	0.56	0.56	0.00	-1.3	0.0	
423.0	2.00	45.70	422.9	5.0	6.1	0.43	0.42	-4.45	-7.8	-0.7	
612.0	0.60	34.40	611.9	8.1	9.0	0.75	-0.74	-5.98	-11.8	-2.8	
791.0	1.50	23.90	790.8	11.0	10.5	0.51	0.50	-5.87	-14.3	-5.1	
885.0	0.30	285.80	884.8	12.2	10.7	1.67	-1.28	-104.36	7.0	-14.7	
966.0	1.60	248.50	965.8	11.9	9.5	1.70	1.60	-46.05	13.2	-7.6	
1,076.0	1.70	250.50	1,075.8	10.8	6.5	0.10	0.09	1.82	9.7	-8.0	
1,264.0	1.90	245.70	1,263.7	8.5	1.1	0.13	0.11	-2.55	4.8	-6.7	
1,452.0	3.00	286.50	1,451.5	8.7	-6.5	1.06	0.59	21.70	1.0	-2.3	
1,639.0	4.00	299.30	1,638.1	13.2	-16.9	0.68	0.53	6.84	2.0	1.0	
1,827.0	4.20	304.90	1,825.7	20.4	-28.3	0.24	0.11	2.98	1.8	2.5	
2,015.0	4.30	307.60	2,013.2	28.6	-39.5	0.12	0.05	1.44	1.1	3.2	
2,202.0	4.50	297.50	2,199.6	36.3	-51.5	0.43	0.11	-5.40	-1.0	4.9	
2,390.0	4.30	298.40	2,387.0	43.1	-64.3	0.11	-0.11	0.48	-2.5	7.6	
2,578.0	4.10	303.10	2,574.5	50.1	-76.1	0.21	-0.11	2.50	-2.6	9.9	
2,766.0	4.10	307.00	2,762.1	57.8	-87.1	0.15	0.00	2.07	-2.2	11.1	
2,954.0	4.00	312.20	2,949.6	66.2	-97.3	0.20	-0.05	2.77	-1.4	11.3	
3,142.0	3.80	329.40	3,137.2	76.0	-105.4	0.63	-0.11	9.15	1.9	8.7	
3,330.0	3.70	336.50	3,324.8	86.9	-111.0	0.25	-0.05	3.78	2.4	3.3	
3,516.0	3.90	321.80	3,510.4	97.4	-117.3	0.53	0.11	-7.90	2.1	-0.5	
3,704.0	3.80	323.40	3,697.9	107.4	-124.9	0.08	-0.05	0.85	2.2	-3.4	
3,891.0	3.40	332.90	3,884.6	117.3	-131.2	0.38	-0.21	5.08	1.9	-7.9	
4,079.0	5.80	315.70	4,072.0	129.1	-140.3	1.46	1.28	-9.15	2.4	-10.0	
4,267.0	5.00	307.70	4,259.1	140.9	-153.4	0.58	-0.43	-4.26	-0.8	-10.4	
4,455.0	6.00	294.60	4,446.3	150.0	-168.9	0.85	0.53	-6.97	-3.6	-8.7	
4,642.0	4.30	293.00	4,632.5	156.8	-184.2	0.91	-0.91	-0.86	-7.6	-5.4	



Midland PVA

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #711H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 25' @ 3487.0usft
Site:	Audacious 19 Federal	MD Reference:	KB = 25' @ 3487.0usft
Well:	#711H	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)	
4,779.0	5.30	310.80	4,769.0	163.0	-193.7	1.30	0.73	12.99	-10.5	-1.4	
4,915.0	4.90	309.30	4,904.5	170.7	-203.0	0.31	-0.29	-1.10	-8.9	-1.7	
5,102.0	8.80	309.40	5,090.1	184.9	-220.2	2.09	2.09	0.05	-3.4	-1.6	
5,289.0	10.30	307.60	5,274.5	204.2	-244.5	0.82	0.80	-0.96	-5.2	-1.0	
5,477.0	10.00	306.90	5,459.6	224.2	-270.9	0.17	-0.16	-0.37	-9.0	0.1	
5,665.0	10.00	303.70	5,644.7	243.1	-297.5	0.30	0.00	-1.70	-12.4	1.8	
5,853.0	10.00	302.30	5,829.9	260.9	-324.9	0.13	0.00	-0.74	-16.0	4.9	
6,040.0	8.90	298.20	6,014.3	276.4	-351.4	0.69	-0.59	-2.19	-18.3	8.4	
6,228.0	8.00	303.70	6,200.3	290.5	-375.1	0.64	-0.48	2.93	-15.7	14.6	
6,416.0	7.90	306.70	6,386.5	305.5	-396.3	0.23	-0.05	1.60	-11.5	17.6	
6,603.0	7.70	305.80	6,571.8	320.5	-416.8	0.13	-0.11	-0.48	-7.9	19.2	
6,790.0	7.00	310.30	6,757.2	335.2	-435.6	0.48	-0.37	2.41	-1.0	20.5	
6,978.0	6.20	310.80	6,944.0	349.2	-452.0	0.43	-0.43	0.27	7.0	20.0	
7,165.0	6.00	322.50	7,129.9	363.6	-465.6	0.67	-0.11	6.26	18.7	14.0	
7,353.0	5.50	323.30	7,317.0	378.6	-477.0	0.27	-0.27	0.43	17.5	9.7	
7,541.0	4.70	316.10	7,504.2	391.4	-487.7	0.54	-0.43	-3.63	5.0	10.1	
7,729.0	3.00	321.50	7,691.8	400.8	-496.1	0.92	-0.90	2.87	-6.6	10.3	
7,917.0	3.50	358.10	7,879.5	410.4	-499.4	1.11	0.27	19.47	-8.9	15.1	
8,105.0	2.50	41.10	8,067.3	419.2	-496.9	1.27	-0.53	22.87	-4.5	21.0	
8,293.0	1.40	101.80	8,255.2	421.8	-491.9	1.16	-0.59	32.18	11.8	17.8	
8,481.0	1.70	125.90	8,443.1	419.7	-487.4	0.38	0.16	12.93	13.2	12.4	
8,668.0	1.80	140.20	8,630.0	415.8	-483.3	0.24	0.05	7.65	10.2	9.4	
8,856.0	1.60	156.80	8,817.9	411.2	-480.4	0.28	-0.11	8.83	7.0	6.9	
9,044.0	1.20	175.80	9,005.9	406.8	-479.2	0.32	-0.21	10.11	4.4	5.1	
9,231.0	0.70	103.30	9,192.9	404.6	-477.9	0.64	-0.27	-38.77	-5.3	3.9	
9,419.0	0.70	226.40	9,380.9	403.5	-477.7	0.65	0.00	65.48	5.6	3.3	
9,606.0	1.30	258.40	9,567.8	402.3	-480.6	0.43	0.32	17.11	3.4	0.4	



Midland PVA

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #711H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 25' @ 3487.0usft
Site:	Audacious 19 Federal	MD Reference:	KB = 25' @ 3487.0usft
Well:	#711H	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)	OLeg ("/100usft)	Build ("/100usft)	Turn ("/100usft)	High to Plan (usft)	Right to Plan (usft)
9,794.0	0.00	290.70	9,755.8	401.9	-482.7	0.69	-0.69	0.00	0.1	-1.3
9,982.0	0.40	289.80	9,943.8	402.1	-483.3	0.21	0.21	0.00	0.7	-0.3
10,170.0	1.90	354.50	10,131.8	405.4	-484.2	0.94	0.80	34.41	-3.4	-0.1
10,358.0	1.80	348.90	10,319.7	411.4	-485.1	0.11	-0.05	-2.98	-9.4	-0.8
10,545.0	1.00	52.50	10,506.6	415.3	-484.3	0.87	-0.43	34.01	-7.8	10.7
10,733.0	2.20	79.30	10,694.6	417.0	-479.5	0.74	0.64	14.26	-7.2	13.9
10,920.0	1.30	47.70	10,881.5	419.1	-474.4	0.69	-0.48	-16.90	-18.6	6.1
11,107.0	1.80	35.70	11,068.4	422.9	-471.1	0.32	0.27	-6.42	-24.5	1.7
11,296.0	2.70	2.20	11,257.3	429.7	-469.2	0.82	0.48	-17.72	-28.3	-13.7
11,483.0	2.40	283.20	11,444.1	435.0	-472.8	1.74	-0.16	-42.25	3.3	-34.7
11,637.0	1.60	281.50	11,598.0	436.2	-478.1	0.52	-0.52	-1.10	-1.0	-34.7
11,700.0	1.36	253.66	11,661.0	436.2	-479.7	1.19	-0.38	-44.18	13.8	-31.6
KOP 11700.0' MD; 11661.0' TVD; 436.2'; -479.7'; 1.36										
11,780.0	1.60	217.30	11,741.0	435.0	-481.3	1.19	0.30	-45.46	27.9	-17.8
11,874.0	11.40	189.90	11,834.3	424.8	-483.6	10.64	10.43	-29.15	24.0	-3.9
11,968.0	21.00	191.50	11,924.4	399.1	-488.6	10.22	10.21	1.70	13.2	-7.4
12,062.0	31.00	189.90	12,008.8	358.6	-496.2	10.66	10.64	-1.70	4.5	-13.3
12,074.8	32.46	189.52	12,019.7	352.0	-497.3	11.52	11.42	-2.95	3.5	-14.3
FTP Crossing 12074.8' MD; 12019.7' TVD; 352.0'; -497.3'; 32.46										
12,111.0	36.60	188.60	12,049.5	331.7	-500.5	11.52	11.43	-2.55	0.7	-17.2
12,155.0	39.00	185.80	12,084.3	305.0	-503.9	6.70	5.45	-6.36	-1.1	-20.4
12,206.0	42.70	184.60	12,122.9	271.7	-506.9	7.42	7.25	-2.35	-1.3	-23.7
12,249.0	46.60	185.00	12,153.5	241.6	-509.4	9.09	9.07	0.93	-0.5	-26.4
12,299.0	52.50	185.30	12,185.9	203.8	-512.8	11.81	11.80	0.60	1.2	-30.2
12,343.0	56.00	181.30	12,211.6	168.1	-514.9	10.85	7.95	-9.09	4.7	-32.4
12,437.0	66.80	179.70	12,256.5	85.7	-515.5	11.59	11.49	-1.70	11.4	-33.5
12,531.0	78.90	177.80	12,284.2	-3.9	-513.5	13.02	12.87	-2.02	17.1	-31.9



Midland PVA

Company: EOG Resources - Midland	Local Co-ordinate Reference: Well #711H
Project: Lea County, NM (NAD 83 NME)	TVD Reference: KB = 25' @ 3487.0usft
Site: Audacious 19 Federal	MD Reference: KB = 25' @ 3487.0usft
Well: #711H	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)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)
12,625.0	84.00	178.90	12,298.2	-96.8	-510.8	5.55	5.43	1.17	25.5	-30.0
12,672.0	84.30	177.50	12,302.9	-143.5	-509.4	3.03	0.64	-2.98	30.1	-28.7
12,718.0	84.00	177.60	12,307.6	-189.2	-507.4	0.69	-0.65	0.22	34.6	-27.1
12,812.0	85.80	175.70	12,316.0	-282.7	-501.9	2.78	1.91	-2.02	42.5	-22.1
12,906.0	88.80	175.20	12,320.4	-376.3	-494.5	3.24	3.19	-0.53	46.4	-15.2
13,000.0	89.80	174.80	12,321.6	-469.9	-486.3	1.15	1.06	-0.43	47.1	-7.6
13,094.0	90.30	178.10	12,321.5	-563.7	-480.5	3.55	0.53	3.51	46.5	-2.4
13,188.0	88.60	176.90	12,322.4	-657.6	-476.4	2.21	-1.81	-1.28	47.0	1.1
13,282.0	90.80	179.10	12,322.9	-751.6	-473.1	3.31	2.34	2.34	47.0	3.8
13,376.0	89.50	179.60	12,322.8	-845.5	-472.0	1.48	-1.38	0.53	46.3	4.3
13,469.0	90.20	178.90	12,322.9	-938.5	-470.8	1.06	0.75	-0.75	46.0	4.9
13,563.0	89.80	179.20	12,322.9	-1,032.5	-469.3	0.53	-0.43	0.32	45.6	5.9
13,657.0	89.00	178.00	12,323.9	-1,126.5	-467.0	1.53	-0.85	-1.28	46.1	7.6
13,751.0	89.80	179.30	12,324.8	-1,220.5	-464.8	1.62	0.85	1.38	46.6	9.2
13,844.0	90.00	180.20	12,325.0	-1,313.4	-464.4	0.99	0.22	0.97	46.3	9.1
13,938.0	91.10	180.90	12,324.1	-1,407.4	-465.3	1.39	1.17	0.74	44.9	7.6
14,032.0	91.70	181.30	12,321.8	-1,501.4	-467.1	0.77	0.64	0.43	42.1	5.2
14,126.0	87.30	178.00	12,322.6	-1,595.4	-466.5	5.85	-4.68	-3.51	42.5	5.2
14,220.0	90.60	178.10	12,324.4	-1,689.3	-463.3	3.51	3.51	0.11	43.7	7.8
14,314.0	91.30	179.60	12,322.8	-1,783.2	-461.4	1.76	0.74	1.60	41.7	9.1
14,408.0	91.00	178.60	12,320.9	-1,877.2	-459.9	1.11	-0.32	-1.06	39.3	10.0
14,502.0	89.70	177.40	12,320.3	-1,971.1	-456.6	1.88	-1.38	-1.28	38.2	12.7
14,596.0	89.10	177.10	12,321.3	-2,065.0	-452.1	0.71	-0.64	-0.32	38.8	16.6
14,690.0	91.50	182.80	12,320.8	-2,159.0	-452.1	6.58	2.55	6.06	37.8	16.1
14,783.0	91.60	184.10	12,318.3	-2,251.8	-457.6	1.40	0.11	1.40	34.8	9.9
14,877.0	90.30	184.00	12,316.8	-2,345.5	-464.3	1.39	-1.38	-0.11	32.8	2.7
14,971.0	88.10	182.90	12,318.1	-2,439.3	-469.9	2.62	-2.34	-1.17	33.6	-3.5



Midland PVA

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #711H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 25' @ 3487.0usft
Site:	Audacious 19 Federal	MD Reference:	KB = 25' @ 3487.0usft
Well:	#711H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.14

MD (usft)	Inc (°)	Asd (azimuth) (°)	TVD (usft)	N/S (usft)	EW (usft)	DLeg (*100usft)	Build (*100usft)	Turn (*100usft)	High to Plan (usft)	Right to Plan (usft)
15,065.0	92.60	184.50	12,317.5	-2,533.1	-476.0	5.08	4.79	1.70	32.6	-10.1
15,159.0	90.30	181.10	12,315.1	-2,626.9	-480.6	4.37	-2.45	-3.62	29.7	-15.3
15,253.0	88.60	178.00	12,316.0	-2,720.9	-479.9	3.76	-1.81	-3.30	30.1	-15.1
15,346.0	89.70	178.80	12,317.4	-2,813.9	-477.3	1.46	1.18	0.86	31.0	-13.1
15,440.0	89.60	179.60	12,318.0	-2,907.9	-475.9	0.86	-0.11	0.85	31.1	-12.4
15,534.0	91.20	180.10	12,317.3	-3,001.9	-475.7	1.78	1.70	0.53	30.0	-12.7
15,628.0	88.40	178.70	12,317.6	-3,095.8	-474.7	3.33	-2.98	-1.49	29.9	-12.3
15,721.0	88.10	179.00	12,320.5	-3,188.8	-472.8	0.46	-0.32	0.32	32.2	-11.0
15,815.0	91.40	181.10	12,320.9	-3,282.8	-472.9	4.16	3.51	2.23	32.2	-11.7
15,909.0	89.20	178.80	12,320.4	-3,376.7	-472.8	3.39	-2.34	-2.45	31.2	-12.2
16,003.0	88.20	178.00	12,322.5	-3,470.7	-470.2	1.36	-1.06	-0.85	32.8	-10.1
16,097.0	87.80	178.50	12,325.8	-3,564.6	-467.4	0.68	-0.43	0.53	35.6	-7.9
16,190.0	91.30	180.10	12,326.5	-3,657.6	-466.2	4.14	3.76	1.72	35.9	-7.3
16,284.0	89.20	179.40	12,326.1	-3,751.5	-465.8	2.35	-2.23	-0.74	35.0	-7.5
16,378.0	88.60	178.90	12,327.9	-3,845.5	-464.4	0.83	-0.64	-0.53	36.3	-6.7
16,472.0	91.00	177.20	12,328.3	-3,939.5	-461.2	3.13	2.55	-1.81	36.2	-4.0
16,565.0	92.20	169.00	12,325.7	-4,031.7	-450.1	8.91	1.29	-8.82	33.1	6.5
16,658.0	89.00	174.80	12,324.7	-4,123.7	-437.0	7.12	-3.44	6.24	31.7	19.1
16,751.0	93.50	180.50	12,322.7	-4,216.5	-433.2	7.81	4.84	6.13	29.2	22.4
16,845.0	94.40	181.50	12,316.2	-4,310.3	-434.8	1.43	0.96	1.06	22.2	20.2
16,939.0	89.40	180.10	12,313.1	-4,404.2	-436.1	5.52	-5.32	-1.49	18.6	18.2
17,032.0	90.60	179.30	12,313.1	-4,497.2	-435.6	1.55	1.29	-0.86	18.2	18.1
17,126.0	92.50	178.70	12,310.5	-4,591.1	-434.0	2.12	2.02	-0.64	15.1	19.2
17,220.0	91.20	179.60	12,307.5	-4,685.1	-432.6	1.68	-1.38	0.96	11.6	20.0
17,313.0	90.80	179.30	12,305.9	-4,778.0	-431.7	0.54	-0.43	-0.32	9.5	20.3
17,407.0	89.50	180.40	12,305.6	-4,872.0	-431.4	1.81	-1.38	1.17	8.8	20.0
17,500.0	89.00	179.70	12,306.8	-4,965.0	-431.5	0.82	-0.54	-0.75	9.6	19.3



Midland PVA

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #711H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 25' @ 3487.0usft
Site:	Audacious 19 Federal	MD Reference:	KB = 25' @ 3487.0usft
Well:	#711H	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)		
17,594.0	89.80	180.10	12,307.8	-5,059.0	-431.4	0.95	0.85	0.43	10.1	18.9		
17,688.0	91.10	179.60	12,307.1	-5,153.0	-431.1	1.48	1.38	-0.53	8.9	18.6		
17,781.0	91.00	179.30	12,305.4	-5,246.0	-430.2	0.34	-0.11	-0.32	6.7	18.9		
17,875.0	91.20	178.40	12,303.6	-5,340.0	-428.3	0.98	0.21	-0.96	4.4	20.2		
17,969.0	90.30	181.20	12,302.3	-5,433.9	-428.0	3.13	-0.96	2.98	2.7	19.9		
18,063.0	90.70	181.20	12,301.5	-5,527.9	-430.0	0.43	0.43	0.00	1.4	17.4		
18,157.0	89.80	181.10	12,301.1	-5,621.9	-431.9	0.96	-0.96	-0.11	0.5	14.9		
18,251.0	89.70	181.70	12,301.5	-5,715.9	-434.2	0.65	-0.11	0.64	0.5	12.1		
18,345.0	88.80	182.00	12,302.8	-5,809.8	-437.2	1.01	-0.96	0.32	1.3	8.4		
18,438.0	89.10	181.60	12,304.5	-5,902.8	-440.1	0.54	0.32	-0.43	2.6	4.9		
18,532.0	90.20	182.00	12,305.0	-5,996.7	-443.1	1.25	1.17	0.43	2.8	1.4		
18,625.0	89.60	179.60	12,305.2	-6,089.7	-444.4	2.66	-0.65	-2.58	2.6	-0.5		
18,719.0	90.00	179.80	12,305.5	-6,183.7	-443.9	0.48	0.43	0.21	2.5	-0.5		
18,812.0	90.20	179.60	12,305.4	-6,276.7	-443.4	0.30	0.22	-0.22	1.9	-0.6		
18,906.0	90.20	179.60	12,305.0	-6,370.7	-442.7	0.00	0.00	0.00	1.2	-0.6		
18,999.0	90.40	179.40	12,304.5	-6,463.7	-441.9	0.30	0.22	-0.22	0.3	-0.3		
19,093.0	90.70	179.10	12,303.6	-6,557.7	-440.7	0.45	0.32	-0.32	-1.0	0.3		
19,187.0	88.90	181.50	12,304.0	-6,651.6	-441.2	3.19	-1.91	2.55	-1.0	-0.7		
19,280.0	88.50	182.00	12,306.1	-6,744.6	-444.0	0.69	-0.43	0.54	0.7	-4.2		
19,374.0	87.60	181.60	12,309.3	-6,838.5	-447.0	1.05	-0.96	-0.43	3.5	-7.7		
19,468.0	92.40	180.20	12,309.3	-6,932.4	-448.4	5.32	5.11	-1.49	3.1	-9.7		
19,562.0	93.70	179.60	12,304.3	-7,026.3	-448.3	1.52	1.38	-0.64	-2.3	-10.2		
19,655.0	91.60	178.80	12,300.0	-7,119.2	-447.0	2.42	-2.26	-0.86	-7.0	-8.4		
19,749.0	90.60	177.40	12,298.2	-7,213.1	-443.9	1.83	-1.06	-1.49	-9.2	-6.9		
19,828.0	90.60	176.30	12,297.3	-7,292.0	-439.5	1.39	0.00	-1.39	-10.3	-3.0		

Last MWD Survey (MD = 19828.0)



Midland PVA

Company: EOG Resources - Midland	Local Co-ordinate Reference:	Well #711H
Project: Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 25' @ 3487.0usft
Site: Audacious 19 Federal	MD Reference:	KB = 25' @ 3487.0usft
Well: #711H	North Reference:	Grid
Wellbore: OH	Survey Calculation Method:	Minimum Curvature
Design: OH	Database:	EDM 5000.14

MD (usft)	Inc (")	Azl (azimuth) (")	TVD (usft)	N/S (usft)	E/W (usft)	DLeg (°/100usft)	Gall (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)
19,895.0	90.60	176.30	12,296.6	-7,358.8	-435.2	0.00	0.00	0.00	-11.3	0.9
Projection to Bit (MD = 19895.0)										

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N-S (usft)	+E-W (usft)	
11,700.0	11,661.0	436.2	-479.7	KOP 11700.0' MD; 11661.0' TVD; 436.2'; -479.7'; 1.36
12,074.8	12,019.7	352.0	-497.3	FTP Crossing 12074.8' MD; 12019.7' TVD; 352.0'; -497.3'; 32.46
19,828.0	12,297.3	-7,292.0	-439.5	Last MWD Survey (MD = 19828.0)
19,895.0	12,296.6	-7,358.8	-435.2	Projection to Bit (MD = 19895.0)

Checked By: _____ Approved By: _____ Date: _____



Lea County, NM (NAD 83 NME)

Audacious 19 Federal #711H

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: #711H

KB = 25' @ 3487.0usft 3482.0
 Northing 406250.00 Easting 763029.00 Latitude 32° 6' 53.409 N Longitude 103° 37' 2.330 W

SECTION DETAILS

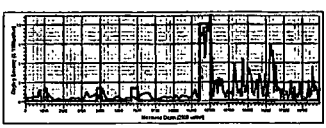
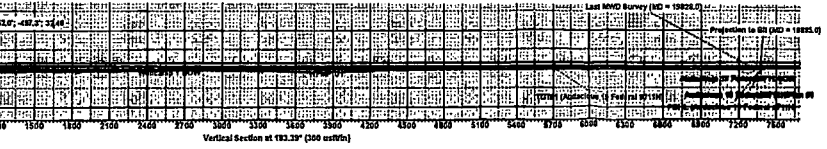
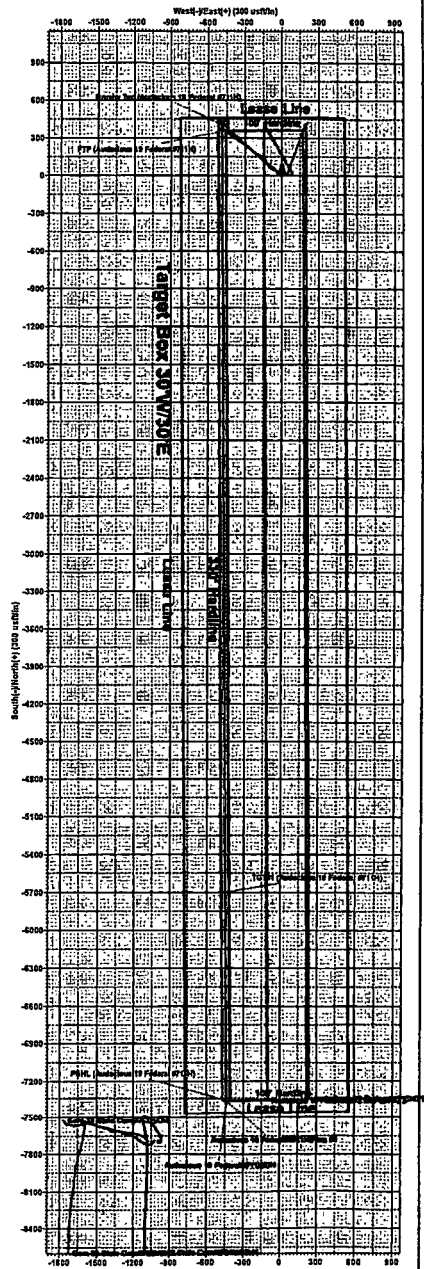
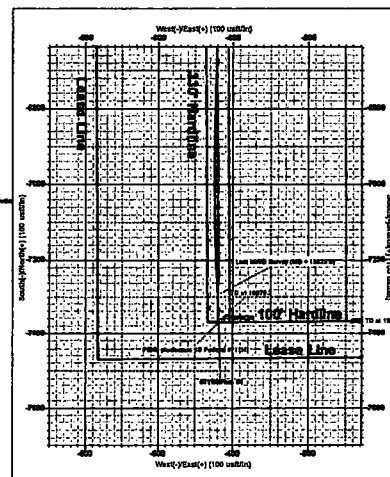
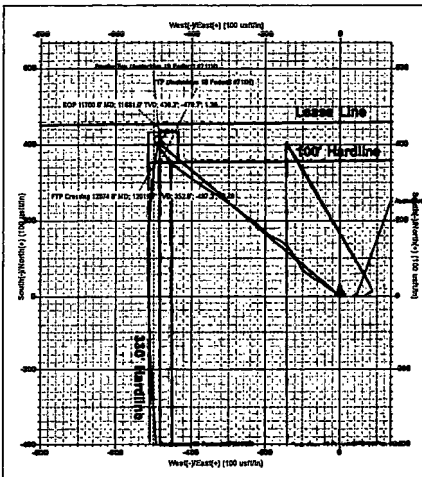
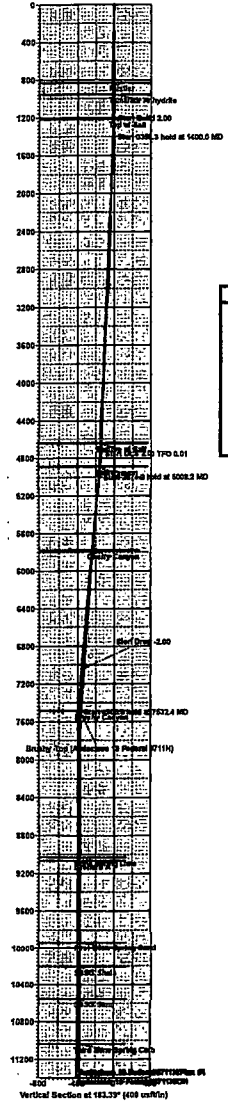
Sec	MD	Inc	Ad	TVD	+N-S	+E-W	Diag	TFace	VSecl	Target	Annotation
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0		
2	1200.0	0.00	0.00	1200.0	0.0	0.0	0.00	0.00	0.0		
3	1400.0	4.00	309.71	1399.8	4.5	-5.4	2.00	309.71	-4.1		
4	4768.3	4.00	309.71	4760.0	164.1	-185.6	0.00	0.00	-142.9		
5	5008.2	9.00	309.71	4998.2	172.2	-207.3	2.00	0.01	-159.6		
6	7092.5	9.00	309.71	7047.0	378.5	-458.9	0.00	0.00	-351.8		
7	7532.4	0.00	0.00	7435.0	422.9	-494.0	2.00	190.00	-372.7		
8	11932.4	0.00	0.00	11795.0	422.0	-484.0	0.00	0.00	-372.7		
9	12580.0	89.71	178.65	12272.5	73.0	-81.1	12.00	178.65	101.3		TOTM (Audacious 19 Federal #711H)
10	18207.7	89.71	178.65	12301.0	-5700.8	-446.3	0.00	0.00	5719.5		PBHL (Audacious 19 Federal #711H)
11	18210.2	89.76	178.65	12301.0	-5703.1	-446.3	2.00	0.00	5719.5		
12	18878.2	89.76	178.65	12308.0	-7369.0	-438.0	0.00	0.00	7381.9		

CASING DETAILS

No casing data is available

WELLDROP TARGET DETAILS (MAP CO-ORDINATES)

Name	TVD	+N-S	+E-W	Northing	Easting
Brusby Top (Audacious 19 Federal #711H)	7635.0	422.9	-484.0	406652.00	762545.00
FTP (Audacious 19 Federal #711H)	12272.0	352.0	-484.0	406602.00	762545.00
TOTM (Audacious 19 Federal #711H)	12301.0	-5700.8	-446.3	406549.40	762582.69
PBHL (Audacious 19 Federal #711H)	12308.0	-7369.0	-438.0	396881.00	762593.00



10/11/2011
 12:00:00 PM
 12/16/2011
 12:00:00 PM

Bureau of Land Management
WATER PRODUCTION & DISPOSAL INFORMATION

LEASE: AUDACIOUS 19 FEDERAL

Lease no NMNM 110838

SECTION 19, T25S, R33E

**Wells: Audacious 19 Federal #708H 30-025-45044 Audacious 19 Federal #711H 30-025-45047
Audacious 19 Federal #709H 30-025-45045 Audacious 19 Federal #721H 30-025-45039
Audacious 19 Federal #710H 30-025-45046 Audacious 19 Federal #722H 30-025-45040**

1. Name of formation producing water on lease: **WOLFCAMP**
2. Amount of water produced from all formations in barrels per day **3000-8000 BWPD**
3. How water is stored on lease **4 - 400 BBL Tanks**
4. How water is moved to disposal facility **Pipeline/Trucked**
5. Disposal Facility:
EOG Red Hills Gathering System - 97% of water, 3% water

a. Name of Operator/facility well name & number

MESQUITE SWD, INC	OWL SWD OPERATING, LLC
Cotton Draw SWD #66	Maralo Shoals B #2
30-025-22024	30-025-09806
E-10-25S-32E	P-25-25S-36E
Permit No SWD 1306-0	Permit No SWD 1127-0

DACO OPERATING, LLC






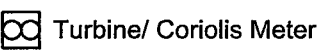







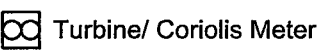







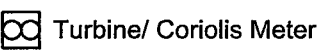



Challenger Fortress

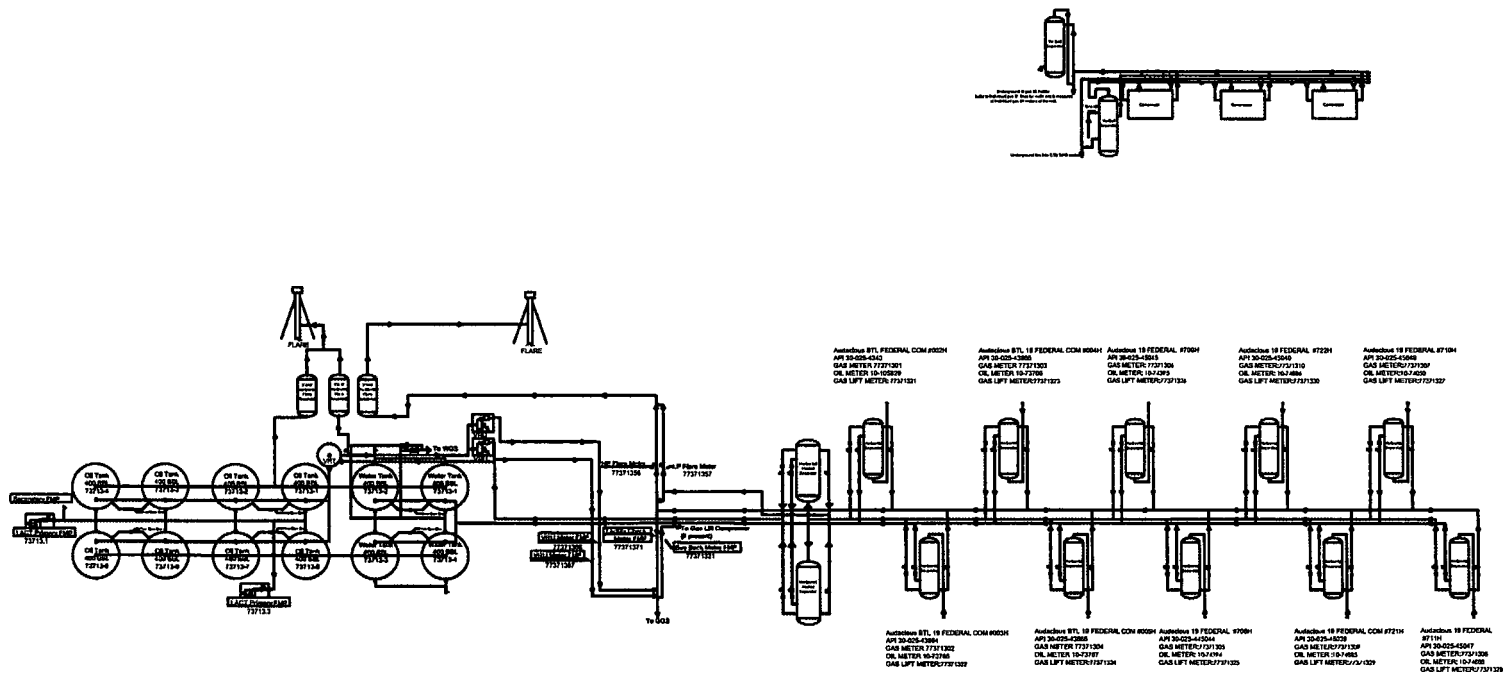
42-301-32997

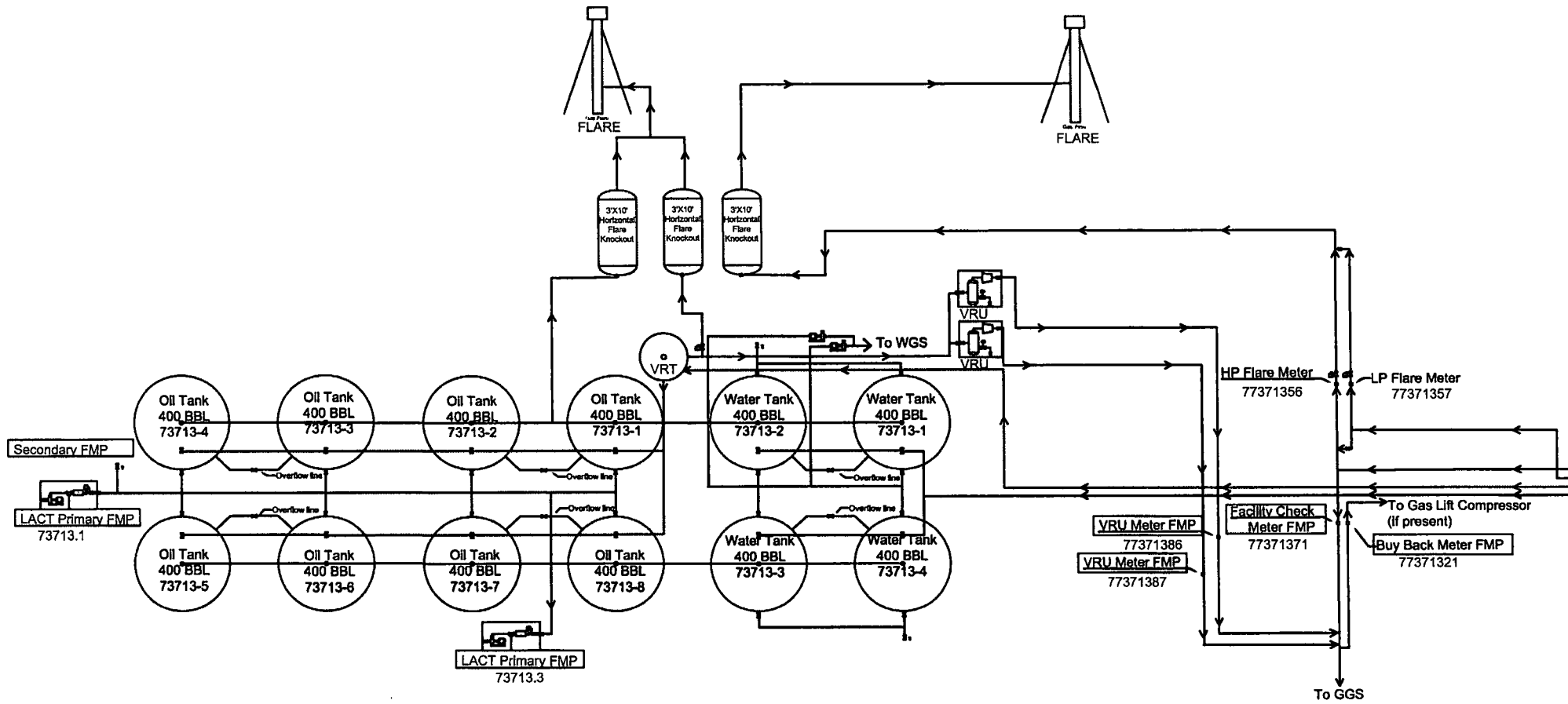
Loving County, Texas

UIC NO 114148

Type of facility or wells **SWD**

<div style="text-align: center;">  <p>EOG Resources, Inc.</p> <p>Audacious BTL Federal Com #2H</p> <p>Sec. 19-T25S-R33E Unit J</p> <p>1/9/2019</p> </div>	<p style="text-align: center;">LEGEND</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 50%; vertical-align: top;"> <p> Valve Open</p> <p> Valve Closed</p> <p> Valve Sealed</p> <p> Orifice Meter</p> </td> <td style="width: 50%; vertical-align: top;"> <p> Turbine/ Coriolis Meter</p> <p> Oil</p> <p> Gas</p> <p> Water</p> </td> </tr> </table>	<p> Valve Open</p> <p> Valve Closed</p> <p> Valve Sealed</p> <p> Orifice Meter</p>	<p> Turbine/ Coriolis Meter</p> <p> Oil</p> <p> Gas</p> <p> Water</p>	<p>FACILITY DIAGRAM</p> <p>Shown: Major equipment, vessels, process piping, and valves Not shown: Auxiliary process systems such as fuel/ pilot gas system, gas lift system, roll lines, recirculating lines, vent lines, and small drain lines</p> <p>PRODUCTION PHASE: All valves that provide access to production are effectively sealed in the closed position.</p> <p>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.</p> <p>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.</p>
<p> Valve Open</p> <p> Valve Closed</p> <p> Valve Sealed</p> <p> Orifice Meter</p>	<p> Turbine/ Coriolis Meter</p> <p> Oil</p> <p> Gas</p> <p> Water</p>			





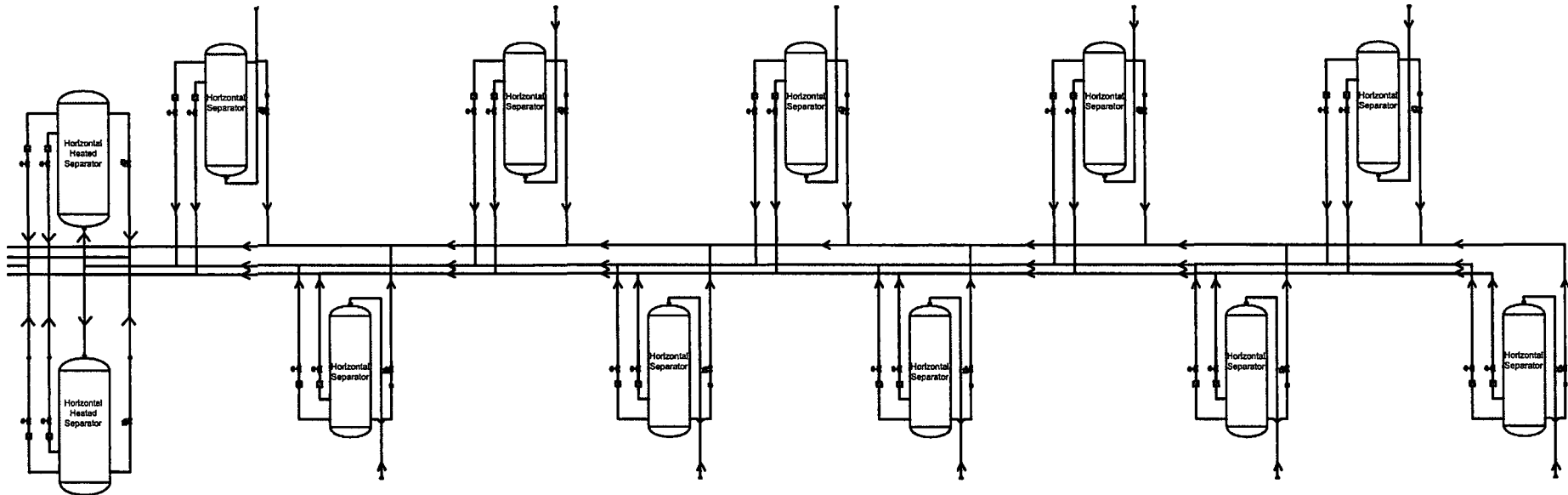
Audacious BTL FEDERAL COM #002H
 API 30-025-4343
 GAS METER 77371301
 OIL METER 10-105829
 GAS LIFT METER: 77371321

Audacious BTL 19 FEDERAL COM #004H
 API 30-025-43865
 GAS METER 77371303
 OIL METER 10-73766
 GAS LIFT METER:77371323

Audacious 19 FEDERAL #709H
 API 30-025-45045
 GAS METER: 77371306
 OIL METER: 10-74395
 GAS LIFT METER:77371326

Audacious 19 FEDERAL #722H
 API 30-025-45040
 GAS METER:77371310
 OIL METER: 10-74886
 GAS LIFT METER:77371330

Audacious 19 FEDERAL #710H
 API 30-025-45046
 GAS METER:77371307
 OIL METER:10-74050
 GAS LIFT METER:77371327



Audacious BTL 19 FEDERAL COM #003H
 API 30-025-43864
 GAS METER 77371302
 OIL METER 10-73765
 GAS LIFT METER:77371322

Audacious BTL 19 FEDERAL COM #005H
 API 30-025-43866
 GAS METER 77371304
 OIL METER 10-73767
 GAS LIFT METER:77371324

Audacious 19 FEDERAL #708H
 API 30-025-445044
 GAS METER:77371305
 OIL METER: 10-74394
 GAS LIFT METER:77371325

Audacious 19 FEDERAL COM #721H
 API 30-025-45039
 GAS METER:77371309
 OIL METER :10-74885
 GAS LIFT METER:77371329

Audacious 19 FEDERAL #711H
 API 30-025-45047
 GAS METER:77371308
 OIL METER: 10-74888
 GAS LIFT METER:77371328

