

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

EMNRD-OCD ARTESIA
REC'D: 6/15/2020 Form C-102
Revised August 1, 2011
Submit one copy to appropriate
District Office
☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-015-46299	² Pool Code 65010	³ Pool Name WINCHESTER; BONE SPRING
⁴ Property Code 326127	⁵ Property Name LADY FRANKLIN 25 STATE	⁶ Well Number 131H
⁷ OGRID No. 371449	⁸ Operator Name COLGATE ENERGY LLC	⁹ Elevation 3358.8

¹⁰ Surface Location

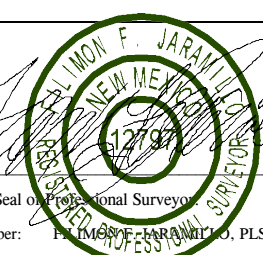
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
D	25	19 S	28 E		1045	NORTH	265	WEST	EDDY

¹¹ Bottom 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
A	25	19 S	28 E		956	NORTH	24	EAST	EDDY

¹² Dedicated Acres	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.

N89°25'05"E 2611.74 FT N89°23'56"E 2612.13 FT NW CORNER SEC. 25 LAT. = 32.6391151°N LONG. = 104.1389225°W NMSP EAST (FT) N = 596295.72 E = 601180.81 KOP N/4 CORNER SEC. 25 LAT. = 32.6391746°N LONG. = 104.1304402°W NMSP EAST (FT) N = 596322.24 E = 603791.78 NE CORNER SEC. 25 LAT. = 32.6392359°N LONG. = 104.1219567°W NMSP EAST (FT) N = 596349.64 E = 606403.13 AS-DRILLED BORE PATH (FTP TO BHL) N89°24'26"E 5101.02 FT LTP (13427.38 MD) BHL AS-DRILLED KOP 955' FNL, 101' FWL (13427.38 MD) LAT. = 32.6366093°N LONG. = 104.1222791°W NMSP EAST (FT) N = 595393.89 E = 606305.79 AS-DRILLED BOTTOM OF HOLE (13505 MD) LAT. = 32.6366078°N LONG. = 104.1220277°W NMSP EAST (FT) N = 595393.50 E = 606383.18 W/4 CORNER SEC. 25 LAT. = 32.6318567°N LONG. = 104.1389127°W NMSP EAST (FT) N = 593655.08 E = 601188.65 AS-DRILLED KOP 955' FNL, 109' FWL (8118 MD) LAT. = 32.6364924°N LONG. = 104.1385639°W NMSP EAST (FT) N = 595341.76 E = 601292.96 AS-DRILLED FIRST TAKE POINT 956' FNL, 100' FWL (7990.59 MD) LAT. = 32.6364896°N LONG. = 104.1385940°W NMSP EAST (FT) N = 595340.75 E = 601283.69 E/4 CORNER SEC. 25 LAT. = 32.6319766°N LONG. = 104.1219393°W NMSP EAST (FT) N = 593708.69 E = 606413.74 NOTE: LATITUDE AND LONGITUDE COORDINATES ARE SHOWN USING THE NORTH AMERICAN DATUM OF 1983 (NAD83) LISTED NEW MEXICO STATE PLANE EAST COORDINATES ARE GRID (NAD83). BASIS OF BEARING AND DISTANCES USED ARE NEW MEXICO STATE PLANE EAST COORDINATES MODIFIED TO THE SURFACE. VERTICAL DATUM NAVD88. SW CORNER SEC. 25 LAT. = 32.6245986°N LONG. = 104.1388945°W NMSP EAST (FT) N = 591014.56 E = 601199.10 S/4 CORNER SEC. 25 LAT. = 32.6246368°N LONG. = 104.1304029°W NMSP EAST (FT) N = 591033.35 E = 603813.37 SE CORNER SEC. 25 LAT. = 32.6246728°N LONG. = 104.1219115°W NMSP EAST (FT) N = 591051.52 E = 606427.58			¹⁷ OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.  06/12/2020 Signature Date Mikah Thomas Printed Name mthomas@colgateenergy.com E-mail Address
S89°35'18"W 2614.97 FT S89°36'06"W 2614.91 FT S00°10'12"W 2641.30 FT S00°13'37"W 2641.18 FT S00°13'49"E 2641.62 FT S00°17'54"E 2657.86 FT			¹⁸ SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief. MAY 5, 2020 Date of Survey  Signature and Seal of Professional Surveyor Certificate Number: WILLIAM F. JARAMILA, PLS 12797 SURVEY NO. 7383A

Intent ☐ As Drilled ☒

API #

Operator Name:	Property Name:	Well Number
COLGATE ENERGY LLC	LADY FRANKLIN 25 STATE	131H

Kick Off Point (KOP)

UL D	Section 25	Township 19S	Range 28E	Lot	Feet 955	From N/S NORTH	Feet 109	From E/W WEST	County EDDY
Latitude 32.6364924					Longitude 104.1385639			NAD 83	

First Take Point (FTP)

UL D	Section 25	Township 19S	Range 28E	Lot	Feet 956	From N/S NORTH	Feet 100	From E/W WEST	County EDDY
Latitude 32.6364896					Longitude 104.1385940			NAD 83	

Last Take Point (LTP)

UL A	Section 25	Township 19S	Range 28E	Lot	Feet 955	From N/S NORTH	Feet 101	From E/W EAST	County EDDY
Latitude 32.6366093					Longitude 104.1222791			NAD 83	

Is this well the defining well for the Horizontal Spacing Unit?

Is this well an infill well?

If infill is yes please provide API if available, Operator Name and well number for Defining well for Horizontal Spacing Unit.

API #

Operator Name:	Property Name:	Well Number

KZ 06/29/2018



Colgate Energy

Eddy County, NM (N83-NME)

Lady Franklin 25

Lady Franklin 25 State 131H - Slot N02

30-015-46299

131H

Design: 131H

Standard Survey Report

04 May, 2020

Company:	Colgate Energy	Local Co-ordinate Reference:	Well Lady Franklin 25 State 131H - Slot N02
Project:	Eddy County, NM (N83-NME)	TVD Reference:	3358.8+26 @ 3384.80usft (HP481)
Site:	Lady Franklin 25	MD Reference:	3358.8+26 @ 3384.80usft (HP481)
Well:	Lady Franklin 25 State 131H	North Reference:	Grid
Wellbore:	131H	Survey Calculation Method:	Minimum Curvature
Design:	131H	Database:	EDM 5000.14 Single User Db

Project	Eddy County, NM (N83-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		Lady Franklin 25			
Site Position:		Northing:		596,295.72 usft	
From:		Easting:		601,180.81 usft	
Position Uncertainty:		Slot Radius:		Grid Convergence:	
Map		0.00 usft		13-3/16 "	
				32.63911509	
				-104.13892250	
				0.10 °	

Well		Lady Franklin 25 State 131H - Slot N02				
Well Position	+N/-S	0.00 usft	Northing:	595,253.63 usft	Latitude:	32.63624934
	+E/-W	0.00 usft	Easting:	601,448.90 usft	Longitude:	-104.13805779
Position Uncertainty		0.00 usft	Wellhead Elevation:	usft	Ground Level:	3,358.80 usft

Wellbore	131H				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	User Defined	3/15/2020	7.29	60.44	47,934.00000000

Design	131H				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)	
	0.00	0.00	0.00	89.41	

Survey Program	Date	5/4/2020			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
199.00	13,434.00	Survey #4 - FDIR Thru TD (131H)	MWD+IFR1+FDIR (SQC)	OWSG MWD + IFR1 + FDIR Correction	
13,434.00	13,505.00	Survey #5 - PTB (131H)	BLIND	BLIND	

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)	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
199.00	0.23	271.21	199.00	0.01	-0.40	-0.40	0.12	0.12	0.00	
232.00	0.38	251.31	232.00	-0.03	-0.57	-0.57	0.55	0.45	-60.30	
428.00	0.61	289.40	427.99	0.11	-2.17	-2.17	0.20	0.12	19.43	
522.00	0.42	296.50	521.99	0.43	-2.95	-2.94	0.21	-0.20	7.55	
616.00	0.21	45.11	615.99	0.71	-3.14	-3.13	0.56	-0.22	115.54	
662.00	0.38	62.26	661.99	0.84	-2.94	-2.93	0.41	0.37	37.28	
756.00	0.38	63.33	755.98	1.12	-2.39	-2.37	0.01	0.00	1.14	
851.00	0.38	40.75	850.98	1.50	-1.90	-1.88	0.16	0.00	-23.77	
945.00	0.61	15.23	944.98	2.22	-1.56	-1.54	0.33	0.24	-27.15	

Company:	Colgate Energy	Local Co-ordinate Reference:	Well Lady Franklin 25 State 131H - Slot N02
Project:	Eddy County, NM (N83-NME)	TVD Reference:	3358.8+26 @ 3384.80usft (HP481)
Site:	Lady Franklin 25	MD Reference:	3358.8+26 @ 3384.80usft (HP481)
Well:	Lady Franklin 25 State 131H	North Reference:	Grid
Wellbore:	131H	Survey Calculation Method:	Minimum Curvature
Design:	131H	Database:	EDM 5000.14 Single User Db

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)
1,039.00	0.50	20.26	1,038.97	3.09	-1.29	-1.26	0.13	-0.12	5.35
1,133.00	0.64	34.41	1,132.97	3.91	-0.85	-0.81	0.21	0.15	15.05
1,228.00	0.65	12.91	1,227.96	4.87	-0.43	-0.38	0.25	0.01	-22.63
1,323.00	0.90	21.35	1,322.96	6.09	-0.04	0.02	0.29	0.26	8.88
1,418.00	0.94	25.70	1,417.94	7.49	0.57	0.65	0.08	0.04	4.58
1,512.00	1.07	21.36	1,511.93	9.00	1.22	1.32	0.16	0.14	-4.62
1,607.00	0.93	28.58	1,606.91	10.50	1.92	2.02	0.20	-0.15	7.60
1,702.00	1.05	25.99	1,701.90	11.96	2.67	2.79	0.13	0.13	-2.73
1,796.00	0.78	315.52	1,795.89	13.19	2.59	2.73	1.15	-0.29	-74.97
1,891.00	1.56	282.35	1,890.87	13.93	0.88	1.02	1.06	0.82	-34.92
1,986.00	1.55	281.83	1,985.84	14.47	-1.64	-1.49	0.02	-0.01	-0.55
2,081.00	1.57	283.13	2,080.80	15.03	-4.17	-4.01	0.04	0.02	1.37
2,175.00	1.70	286.04	2,174.76	15.71	-6.76	-6.60	0.16	0.14	3.10
2,270.00	1.91	278.18	2,269.72	16.32	-9.68	-9.51	0.34	0.22	-8.27
2,365.00	2.58	280.87	2,364.64	16.95	-13.35	-13.17	0.71	0.71	2.83
2,459.00	3.22	280.86	2,458.52	17.85	-18.02	-17.84	0.68	0.68	-0.01
2,554.00	3.19	280.92	2,553.37	18.85	-23.24	-23.04	0.03	-0.03	0.06
2,649.00	3.28	279.57	2,648.22	19.80	-28.51	-28.31	0.12	0.09	-1.42
2,744.00	3.58	279.44	2,743.05	20.74	-34.12	-33.90	0.32	0.32	-0.14
2,838.00	3.94	277.74	2,836.85	21.66	-40.21	-39.99	0.40	0.38	-1.81
2,933.00	4.08	275.87	2,931.62	22.44	-46.81	-46.57	0.20	0.15	-1.97
2,954.00	4.02	278.45	2,952.56	22.63	-48.28	-48.04	0.91	-0.29	12.29
3,061.00	4.86	277.62	3,059.24	23.78	-56.48	-56.23	0.79	0.79	-0.78
3,156.00	4.68	278.28	3,153.91	24.87	-64.31	-64.05	0.20	-0.19	0.69
3,251.00	4.52	279.74	3,248.61	26.06	-71.83	-71.56	0.21	-0.17	1.54
3,346.00	4.47	300.48	3,343.32	28.58	-78.71	-78.41	1.70	-0.05	21.83
3,441.00	4.40	298.86	3,438.04	32.21	-85.09	-84.76	0.15	-0.07	-1.71
3,535.00	4.14	304.64	3,531.78	35.88	-91.04	-90.67	0.53	-0.28	6.15
3,630.00	3.89	309.35	3,626.54	39.87	-96.36	-95.94	0.44	-0.26	4.96
3,725.00	3.56	304.35	3,721.34	43.58	-101.28	-100.83	0.49	-0.35	-5.26
3,819.00	4.16	299.30	3,815.13	46.90	-106.66	-106.18	0.73	0.64	-5.37
3,914.00	4.10	300.84	3,909.88	50.32	-112.59	-112.06	0.13	-0.06	1.62
4,008.00	2.81	303.36	4,003.71	53.31	-117.40	-116.84	1.38	-1.37	2.68
4,103.00	2.80	303.39	4,098.60	55.87	-121.28	-120.70	0.01	-0.01	0.03
4,197.00	2.79	304.67	4,192.48	58.44	-125.08	-124.47	0.07	-0.01	1.36
4,292.00	2.50	301.22	4,287.38	60.82	-128.75	-128.12	0.35	-0.31	-3.63
4,387.00	2.45	301.60	4,382.29	62.96	-132.25	-131.60	0.06	-0.05	0.40
4,481.00	2.19	293.81	4,476.22	64.74	-135.61	-134.93	0.43	-0.28	-8.29
4,576.00	1.97	295.43	4,571.15	66.17	-138.74	-138.05	0.24	-0.23	1.71
4,671.00	2.18	290.11	4,666.09	67.50	-141.91	-141.21	0.30	0.22	-5.60
4,765.00	2.34	288.92	4,760.02	68.73	-145.41	-144.69	0.18	0.17	-1.27
4,860.00	2.59	286.99	4,854.93	69.99	-149.29	-148.57	0.28	0.26	-2.03
4,954.00	2.74	295.65	4,948.83	71.58	-153.35	-152.61	0.46	0.16	9.21

Company:	Colgate Energy	Local Co-ordinate Reference:	Well Lady Franklin 25 State 131H - Slot N02
Project:	Eddy County, NM (N83-NME)	TVD Reference:	3358.8+26 @ 3384.80usft (HP481)
Site:	Lady Franklin 25	MD Reference:	3358.8+26 @ 3384.80usft (HP481)
Well:	Lady Franklin 25 State 131H	North Reference:	Grid
Wellbore:	131H	Survey Calculation Method:	Minimum Curvature
Design:	131H	Database:	EDM 5000.14 Single User Db

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)
5,049.00	1.96	287.27	5,043.75	73.05	-156.95	-156.19	0.90	-0.82	-8.82
5,143.00	0.89	253.39	5,137.72	73.32	-159.18	-158.42	1.40	-1.14	-36.04
5,237.00	1.42	278.74	5,231.70	73.29	-161.03	-160.27	0.77	0.56	26.97
5,332.00	1.57	282.16	5,326.67	73.74	-163.47	-162.70	0.18	0.16	3.60
5,427.00	1.85	290.61	5,421.63	74.55	-166.18	-165.40	0.40	0.29	8.89
5,505.28	2.09	298.78	5,499.86	75.68	-168.61	-167.82	0.47	0.30	10.44
00-LF25-131H-EON									
5,521.00	2.14	300.20	5,515.57	75.97	-169.11	-168.32	0.47	0.33	9.00
5,616.00	2.39	304.42	5,610.50	77.98	-172.28	-171.47	0.32	0.26	4.44
5,711.00	2.80	303.20	5,705.40	80.37	-175.86	-175.02	0.44	0.43	-1.28
5,806.00	1.08	314.65	5,800.34	82.27	-178.44	-177.58	1.85	-1.81	12.05
5,900.00	1.55	307.78	5,894.32	83.67	-180.07	-179.20	0.53	0.50	-7.31
5,995.00	1.74	300.57	5,989.28	85.19	-182.33	-181.44	0.30	0.20	-7.59
6,090.00	1.12	291.55	6,084.25	86.27	-184.43	-183.54	0.69	-0.65	-9.49
6,169.00	0.42	256.43	6,163.24	86.48	-185.43	-184.53	1.03	-0.89	-44.46
6,279.00	0.27	239.44	6,273.24	86.26	-186.05	-185.15	0.16	-0.14	-15.45
6,374.00	0.87	250.09	6,368.23	85.90	-186.92	-186.02	0.64	0.63	11.21
6,468.00	0.96	270.36	6,462.22	85.66	-188.38	-187.49	0.36	0.10	21.56
6,563.00	0.95	278.48	6,557.21	85.78	-189.95	-189.06	0.14	-0.01	8.55
6,658.00	1.64	287.10	6,652.18	86.30	-192.03	-191.13	0.75	0.73	9.07
6,753.00	1.79	289.35	6,747.14	87.19	-194.73	-193.82	0.17	0.16	2.37
6,848.00	1.81	278.69	6,842.09	87.91	-197.61	-196.70	0.35	0.02	-11.22
6,942.00	1.58	257.78	6,936.05	87.86	-200.35	-199.43	0.70	-0.24	-22.24
7,037.00	1.23	219.09	7,031.03	86.79	-202.27	-201.37	1.04	-0.37	-40.73
7,131.00	1.14	195.64	7,125.01	85.10	-203.16	-202.27	0.52	-0.10	-24.95
7,226.00	2.55	108.82	7,219.97	83.51	-201.41	-200.54	2.88	1.48	-91.39
7,321.00	3.68	79.58	7,314.83	83.38	-196.41	-195.54	2.02	1.19	-30.78
7,415.00	4.47	65.73	7,408.60	85.43	-190.11	-189.22	1.34	0.84	-14.73
7,510.00	3.05	69.97	7,503.39	87.82	-184.36	-183.44	1.52	-1.49	4.46
7,605.00	2.28	100.23	7,598.29	88.35	-180.12	-179.20	1.66	-0.81	31.85
7,699.00	2.40	104.02	7,692.21	87.54	-176.37	-175.46	0.21	0.13	4.03
7,794.00	2.19	96.15	7,787.14	86.87	-172.64	-171.73	0.40	-0.22	-8.28
7,889.00	1.64	86.91	7,882.08	86.74	-169.48	-168.57	0.66	-0.58	-9.73
7,983.00	3.03	83.59	7,976.00	87.09	-165.66	-164.76	1.49	1.48	-3.53
7,990.59	3.20	83.54	7,983.58	87.14	-165.25	-164.35	2.25	2.25	-0.72
100'FWL/956'FNL: 7990.59' MD, -164.35' VS,7983.58' TVD									
8,031.00	4.11	83.32	8,023.91	87.44	-162.69	-161.79	2.25	2.25	-0.53
8,110.00	4.66	84.11	8,102.68	88.09	-156.69	-155.78	0.70	0.70	1.00
8,118.00	5.62	85.51	8,110.64	88.16	-155.98	-155.06	12.08	11.97	17.55
KOP: 8118.00' MD, -155.06' VS,8110.64' TVD									
8,157.00	10.31	88.62	8,149.26	88.39	-150.58	-149.66	12.08	12.03	7.96
8,205.00	17.22	91.44	8,195.85	88.32	-139.17	-138.25	14.46	14.40	5.88
8,252.00	20.20	90.81	8,240.36	88.03	-124.10	-123.19	6.35	6.34	-1.34
8,299.00	24.69	92.58	8,283.79	87.47	-106.17	-105.26	9.66	9.55	3.77

Company:	Colgate Energy	Local Co-ordinate Reference:	Well Lady Franklin 25 State 131H - Slot N02
Project:	Eddy County, NM (N83-NME)	TVD Reference:	3358.8+26 @ 3384.80usft (HP481)
Site:	Lady Franklin 25	MD Reference:	3358.8+26 @ 3384.80usft (HP481)
Well:	Lady Franklin 25 State 131H	North Reference:	Grid
Wellbore:	131H	Survey Calculation Method:	Minimum Curvature
Design:	131H	Database:	EDM 5000.14 Single User Db

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)	
8,346.00	30.60	93.71	8,325.41	86.25	-84.41	-83.51	12.62	12.57	2.40	
8,394.00	34.20	94.20	8,365.93	84.47	-58.75	-57.88	7.52	7.50	1.02	
8,441.00	36.89	93.44	8,404.17	82.66	-31.49	-30.64	5.80	5.72	-1.62	
8,488.00	40.62	93.19	8,440.81	80.96	-2.13	-1.29	7.94	7.94	-0.53	
8,583.00	50.37	89.11	8,507.34	79.81	65.51	66.33	10.71	10.26	-4.29	
01-LF25-131H-FTP										
8,678.00	58.51	85.57	8,562.55	83.51	142.62	143.47	9.09	8.57	-3.73	
8,772.00	62.89	85.21	8,608.54	90.10	224.30	225.22	4.67	4.66	-0.38	
8,867.00	66.68	86.34	8,649.01	96.42	310.00	310.98	4.13	3.99	1.19	
8,962.00	72.39	93.43	8,682.25	96.50	398.90	399.87	9.22	6.01	7.46	
9,056.00	85.88	95.33	8,699.93	89.43	490.72	491.62	14.49	14.35	2.02	
9,124.00	87.55	94.53	8,703.82	83.59	558.36	559.19	2.72	2.45	-1.18	
EOC: 9124.00' MD, 559.19' VS,8703.82' TVD										
9,151.00	88.21	94.21	8,704.82	81.54	585.26	586.07	2.72	2.45	-1.18	
9,245.00	87.79	91.84	8,708.11	76.58	679.07	679.82	2.56	-0.45	-2.52	
9,340.00	87.85	91.25	8,711.72	74.02	773.96	774.68	0.62	0.06	-0.62	
9,435.00	87.49	91.08	8,715.58	72.09	868.86	869.56	0.42	-0.38	-0.18	
9,530.00	89.53	90.79	8,718.05	70.54	963.82	964.49	2.17	2.15	-0.31	
9,624.00	89.69	90.57	8,718.69	69.43	1,057.81	1,058.46	0.29	0.17	-0.23	
9,719.00	89.32	90.75	8,719.51	68.33	1,152.80	1,153.44	0.43	-0.39	0.19	
9,814.00	89.14	90.49	8,720.79	67.31	1,247.78	1,248.41	0.33	-0.19	-0.27	
9,908.00	89.07	90.08	8,722.26	66.84	1,341.77	1,342.39	0.44	-0.07	-0.44	
10,003.00	90.42	89.72	8,722.68	67.00	1,436.77	1,437.38	1.47	1.42	-0.38	
10,098.00	90.80	88.83	8,721.67	68.21	1,531.75	1,532.37	1.02	0.40	-0.94	
10,193.00	90.89	88.47	8,720.27	70.44	1,626.71	1,627.35	0.39	0.09	-0.38	
10,287.00	90.85	88.32	8,718.84	73.08	1,720.67	1,721.33	0.17	-0.04	-0.16	
10,382.00	90.55	88.42	8,717.68	75.78	1,815.62	1,816.31	0.33	-0.32	0.11	
10,476.00	88.64	87.51	8,718.34	79.12	1,909.55	1,910.27	2.25	-2.03	-0.97	
10,571.00	88.15	87.28	8,721.00	83.43	2,004.42	2,005.17	0.57	-0.52	-0.24	
10,666.00	88.38	87.48	8,723.88	87.77	2,099.28	2,100.07	0.32	0.24	0.21	
10,760.00	89.06	88.23	8,725.98	91.29	2,193.19	2,194.01	1.08	0.72	0.80	
10,855.00	89.45	88.56	8,727.22	93.95	2,288.14	2,288.99	0.54	0.41	0.35	
10,949.00	89.18	88.31	8,728.34	96.52	2,382.10	2,382.97	0.39	-0.29	-0.27	
11,044.00	89.56	88.05	8,729.38	99.53	2,477.04	2,477.94	0.48	0.40	-0.27	
11,139.00	89.17	87.80	8,730.44	102.97	2,571.98	2,572.90	0.49	-0.41	-0.26	
11,233.00	89.30	87.98	8,731.69	106.43	2,665.90	2,666.86	0.24	0.14	0.19	
11,328.00	88.94	88.97	8,733.15	108.96	2,760.86	2,761.83	1.11	-0.38	1.04	
11,423.00	89.55	88.52	8,734.40	111.04	2,855.83	2,856.82	0.80	0.64	-0.47	
11,517.00	89.58	88.46	8,735.12	113.52	2,949.79	2,950.80	0.07	0.03	-0.06	
11,612.00	89.49	88.39	8,735.89	116.13	3,044.75	3,045.79	0.12	-0.09	-0.07	
11,707.00	89.40	88.14	8,736.81	119.01	3,139.70	3,140.76	0.28	-0.09	-0.26	
11,801.00	89.00	90.08	8,738.12	120.47	3,233.68	3,234.75	2.11	-0.43	2.06	
11,896.00	89.20	89.98	8,739.61	120.42	3,328.67	3,329.73	0.24	0.21	-0.11	

Company:	Colgate Energy	Local Co-ordinate Reference:	Well Lady Franklin 25 State 131H - Slot N02
Project:	Eddy County, NM (N83-NME)	TVD Reference:	3358.8+26 @ 3384.80usft (HP481)
Site:	Lady Franklin 25	MD Reference:	3358.8+26 @ 3384.80usft (HP481)
Well:	Lady Franklin 25 State 131H	North Reference:	Grid
Wellbore:	131H	Survey Calculation Method:	Minimum Curvature
Design:	131H	Database:	EDM 5000.14 Single User Db

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)	
11,990.00	89.24	89.62	8,740.89	120.75	3,422.66	3,423.72	0.39	0.04	-0.38	
12,085.00	89.71	89.50	8,741.76	121.47	3,517.65	3,518.71	0.51	0.49	-0.13	
12,179.00	90.46	89.22	8,741.62	122.52	3,611.64	3,612.71	0.85	0.80	-0.30	
12,274.00	89.10	88.96	8,741.99	124.03	3,706.63	3,707.71	1.46	-1.43	-0.27	
12,368.00	87.18	88.94	8,745.04	125.76	3,800.56	3,801.65	2.04	-2.04	-0.02	
12,416.00	86.89	88.79	8,747.52	126.70	3,848.48	3,849.58	0.68	-0.60	-0.31	
12,463.00	87.06	88.87	8,750.00	127.66	3,895.41	3,896.52	0.40	0.36	0.17	
12,558.00	86.65	88.78	8,755.21	129.61	3,990.25	3,991.37	0.44	-0.43	-0.09	
12,653.00	86.84	88.73	8,760.61	131.67	4,085.07	4,086.21	0.21	0.20	-0.05	
12,747.00	87.32	88.55	8,765.40	133.90	4,178.92	4,180.08	0.55	0.51	-0.19	
12,842.00	87.26	88.27	8,769.89	136.53	4,273.78	4,274.96	0.30	-0.06	-0.29	
12,937.00	86.89	88.04	8,774.74	139.58	4,368.60	4,369.81	0.46	-0.39	-0.24	
13,031.00	87.19	89.56	8,779.59	141.55	4,462.46	4,463.68	1.65	0.32	1.62	
13,126.00	86.77	89.29	8,784.60	142.50	4,557.32	4,558.54	0.53	-0.44	-0.28	
13,221.00	86.49	90.75	8,790.18	142.47	4,652.15	4,653.37	1.56	-0.29	1.54	
13,316.00	86.22	90.77	8,796.22	141.21	4,746.95	4,748.15	0.28	-0.28	0.02	
13,410.00	86.03	90.26	8,802.57	140.37	4,840.73	4,841.92	0.58	-0.20	-0.54	
13,427.38	85.86	90.28	8,803.80	140.29	4,858.07	4,859.26	1.01	-1.00	0.12	
100FEL: 13427.38' MD, 4859.26' VS, 8803.80' TVD										
13,427.49	85.86	90.28	8,803.81	140.29	4,858.18	4,859.37	0.00	0.00	0.00	
02-LF25-131H-PBHL										
13,434.00	85.79	90.29	8,804.28	140.25	4,864.67	4,865.86	1.03	-1.02	0.13	
Final MWD Survey: 13434.00' MD, 85.79°INC, 90.29°AZ										
13,505.00	85.79	90.29	8,809.50	139.90	4,935.48	4,936.66	0.00	0.00	0.00	
PTB: 13505.00' MD, 4936.66' VS, 8809.50' TVD										

Design Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude	
00-LF25-131H-EON	0.00	0.00	5,500.00	73.28	-165.18	595,326.91	601,283.72	32.63645160	-104.13859395	
- hit/miss target										
- Shape										
- Point										
01-LF25-131H-FTP	0.00	0.00	8,783.00	73.28	-165.18	595,326.91	601,283.72	32.63645160	-104.13859395	
- actual wellpath misses target center by 359.51usft at 8583.00usft MD (8507.34 TVD, 79.81 N, 65.51 E)										
- Point										
02-LF25-131H-PBHL	2.00	89.41	8,803.19	125.19	4,858.15	595,378.82	606,307.05	32.63656791	-104.12227508	
- actual wellpath misses target center by 15.11usft at 13427.49usft MD (8803.81 TVD, 140.29 N, 4858.18 E)										
- Rectangle (sides W0.00 H1,246.40 D20.00)										

Company:	Colgate Energy	Local Co-ordinate Reference:	Well Lady Franklin 25 State 131H - Slot N02
Project:	Eddy County, NM (N83-NME)	TVD Reference:	3358.8+26 @ 3384.80usft (HP481)
Site:	Lady Franklin 25	MD Reference:	3358.8+26 @ 3384.80usft (HP481)
Well:	Lady Franklin 25 State 131H	North Reference:	Grid
Wellbore:	131H	Survey Calculation Method:	Minimum Curvature
Design:	131H	Database:	EDM 5000.14 Single User Db

Design Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
7,990.59	7,983.58	87.14	-165.25	100'FWL/956 'FNL: 7990.59' MD, -164.35' VS,7983.58' TVD
8,118.00	8,110.64	88.16	-155.98	KOP: 8118.00' MD, -155.06' VS,8110.64' TVD
9,124.00	8,703.82	83.59	558.36	EOC: 9124.00' MD, 559.19' VS,8703.82' TVD
13,427.38	8,803.80	140.29	4,858.07	100FEL: 13427.38' MD, 4859.26' VS,8803.80' TVD
13,434.00	8,804.28	140.25	4,864.67	Final MWD Survey: 13434.00' MD, 85.79°INC, 90.29°AZ
13,505.00	8,809.50	139.90	4,935.48	PTB: 13505.00' MD, 4936.66' VS,8809.50' TVD

Checked By: _____ Approved By: _____ Date: _____