

Conditions of Approval (if any):

DISTRICT I
1825 N. French Dr., Hobbs, N.M. 88240
Phone: (575) 393-6161 Fax: (575) 393-0720

DISTRICT II
811 S. First St., Artesia, N.M. 88210
Phone: (575) 748-1283 Fax: (575) 748-9720

DISTRICT III
1000 Rio Brazos Rd., Aztec, N.M. 87410
Phone: (505) 334-8178 Fax: (505) 334-8170

DISTRICT IV
1220 S. St. Francis Dr., Santa Fe, N.M. 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, N.M. 87505

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 30-015-46354	² Pool Code 65010	³ Pool Name Winchester; Bone Spring
⁴ Property Code 326127	⁵ Property Name LADY FRANKLIN 25 STATE	⁶ Well Number 123H
⁷ GRID No. 371449	⁸ Operator Name COLGATE OPERATING, LLC	⁹ Elevation 3336

¹⁰ Surface Location

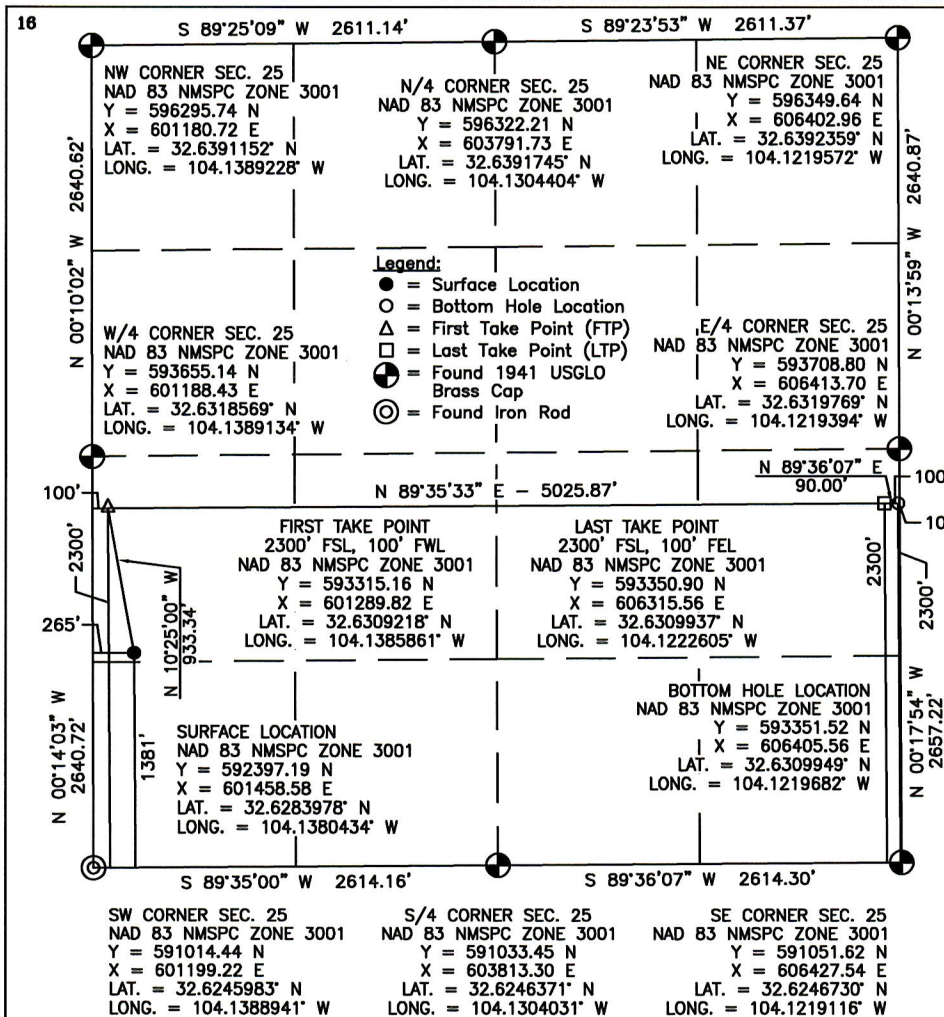
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
L	25	19 S	28 E		1381	SOUTH	265	WEST	EDDY

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
I	25	19 S	28 E		2300	SOUTH	10	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



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.

Mikah Thomas 10/29/2020
Signature Date
Mikah Thomas
Printed Name
mthomas@colgateenergy.com
E-mail Address

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.

08/08/20
Date of Survey
Signature and Seal of Professional Surveyor
Marshall W. Linden
NEW MEXICO
17078
10-20-20
PROFESSIONAL SURVEYOR
17078
Certificate Number



Colgate Energy

Eddy County, NM (N83-NME)

Lady Franklin 25

Lady Franklin 25 State 123H

Permit

APD Rev2

Anticollision Report

21 October, 2020

Company:	Colgate Energy	Local Co-ordinate Reference:	Well Lady Franklin 25 State 123H
Project:	Eddy County, NM (N83-NME)	TVD Reference:	3335.5+26 @ 3361.50usft (Permit)
Reference Site:	Lady Franklin 25	MD Reference:	3335.5+26 @ 3361.50usft (Permit)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Lady Franklin 25 State 123H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Permit	Database:	EDM 5000.14 Single User Db
Reference Design:	APD Rev2	Offset TVD Reference:	Offset Datum

Reference	APD Rev2		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	Stations	Error Model:	ISCWSA
Depth Range:	Unlimited	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum separation factor of 25.00	Error Surface:	Pedal Curve
Warning Levels Evaluated at:	2.00 Sigma	Casing Method:	Not applied

Survey Tool Program	Date	10/21/2020		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.00	12,552.48	APD Rev2 (Permit)	MWD	MWD - Standard

Summary						
Site Name	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
Lady Franklin 25						
Lady Franklin 25 State 121H - 121H - Plan #2	9,100.00	9,055.66	2,217.00	2,126.78	24.573 CC	
Lady Franklin 25 State 121H - 121H - Plan #2	12,552.48	12,526.40	2,229.89	1,968.02	8.515 ES, SF	
Lady Franklin 25 State 124H - Permit - APD Rev 2	1,200.00	1,198.10	89.95	84.84	17.614 CC, ES	
Lady Franklin 25 State 124H - Permit - APD Rev 2	12,552.48	12,506.25	1,320.02	1,042.90	4.763 SF	
Lady Franklin 25 State 131H - Permit - Plan #1	12,552.48	13,595.09	2,298.64	2,052.62	9.343 CC, ES, SF	
Lady Franklin 25 State 132H - Permit - Plan #1	7,431.74	7,512.40	704.55	668.91	19.768 CC	
Lady Franklin 25 State 132H - Permit - Plan #1	7,450.00	7,525.25	704.69	668.90	19.688 ES	
Lady Franklin 25 State 132H - Permit - Plan #1	12,552.48	13,729.85	1,306.98	1,143.77	8.008 SF	
Lady Franklin 25 State 133H - Permit - Plan #1	1,200.00	1,199.50	45.04	39.93	8.814 CC, ES	
Lady Franklin 25 State 133H - Permit - Plan #1	1,300.00	1,299.49	46.33	40.77	8.333 SF	
Lady Franklin 25 State 134H - Permit - Plan #1	1,300.00	1,293.68	137.44	131.92	24.899 CC, ES	
Lady Franklin 25 State 134H - Permit - Plan #1	12,552.48	13,697.85	2,270.24	2,026.09	9.298 SF	
Offset-Exxon State 1H - OH - OH	9,299.32	7,565.86	1,642.39	1,410.30	7.077 CC	
Offset-Exxon State 1H - OH - OH	9,300.00	7,565.87	1,642.39	1,410.29	7.076 ES	
Offset-Exxon State 1H - OH - OH	9,500.00	7,567.43	1,654.60	1,418.58	7.010 SF	
Offset-Exxon State 2H - OH - OH	9,475.27	7,616.11	951.48	719.71	4.105 CC	
Offset-Exxon State 2H - OH - OH	9,500.00	7,616.31	951.80	719.19	4.092 ES	
Offset-Exxon State 2H - OH - OH	9,600.00	7,617.11	959.62	723.95	4.072 SF	

Offset Design	Lady Franklin 25 - Lady Franklin 25 State 121H - 121H - Plan #2												Offset Site Error:	0.00 usft
Survey Program:	171-OWSG MWD Rev 4, 7589-OWSG MWD Rev 4, 8677-OWSG MWD Rev 4												Offset Well Error:	0.00 usft
Reference	Offset	Semi Major Axis		Distance		Minimum Separation		Separation Factor	Warning					
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
9,100.00	7,602.98	9,055.66	7,652.71	46.75	44.27	-90.69	3,146.23	1,452.17	2,217.00	2,126.78	90.22	24.573 CC		
9,200.00	7,603.76	9,174.81	7,654.18	49.26	46.64	-90.71	3,147.84	1,571.31	2,217.63	2,122.56	95.06	23.328		
9,300.00	7,604.55	9,274.80	7,656.19	51.80	48.68	-90.74	3,148.87	1,671.27	2,217.96	2,118.29	99.68	22.252		
9,400.00	7,605.33	9,374.80	7,658.19	54.35	50.75	-90.77	3,149.90	1,771.24	2,218.30	2,113.96	104.34	21.260		
9,500.00	7,606.11	9,474.79	7,660.20	56.93	52.85	-90.80	3,150.93	1,871.21	2,218.63	2,109.58	109.05	20.345		
9,600.00	7,606.89	9,574.78	7,662.21	59.52	54.99	-90.83	3,151.96	1,971.17	2,218.97	2,105.16	113.81	19.498		
9,700.00	7,607.68	9,674.77	7,664.22	62.13	57.14	-90.86	3,152.99	2,071.14	2,219.31	2,100.71	118.60	18.712		
9,800.00	7,608.46	9,774.76	7,666.22	64.75	59.33	-90.90	3,154.02	2,171.11	2,219.64	2,096.22	123.43	17.984		
9,900.00	7,609.24	9,874.76	7,668.23	67.38	61.53	-90.93	3,155.04	2,271.07	2,219.98	2,091.70	128.28	17.306		
10,000.00	7,610.02	9,974.75	7,670.24	70.02	63.75	-90.96	3,156.07	2,371.04	2,220.32	2,087.16	133.16	16.674		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Company:	Colgate Energy	Local Co-ordinate Reference:	Well Lady Franklin 25 State 123H
Project:	Eddy County, NM (N83-NME)	TVD Reference:	3335.5+26 @ 3361.50usft (Permit)
Reference Site:	Lady Franklin 25	MD Reference:	3335.5+26 @ 3361.50usft (Permit)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Lady Franklin 25 State 123H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Permit	Database:	EDM 5000.14 Single User Db
Reference Design:	APD Rev2	Offset TVD Reference:	Offset Datum

Offset Design Lady Franklin 25 - Lady Franklin 25 State 121H - 121H - Plan #2												Offset Site Error:	0.00 usft
Survey Program: 171-OWSG MWD Rev 4, 7589-OWSG MWD Rev 4, 8677-OWSG MWD Rev 4												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance				Separation Factor	Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Centre +E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			Minimum Separation (usft)
10,100.00	7,610.81	10,074.56	7,672.27	72.67	65.98	-90.99	3,157.10	2,470.82	2,220.66	2,082.60	138.06	16.085	
10,200.00	7,611.59	10,174.41	7,675.04	75.33	68.23	-91.04	3,158.13	2,570.63	2,221.02	2,078.03	142.98	15.533	
10,300.00	7,612.37	10,274.39	7,677.84	77.99	70.49	-91.09	3,159.16	2,670.56	2,221.37	2,073.45	147.93	15.017	
10,400.00	7,613.15	10,374.37	7,680.63	80.67	72.77	-91.15	3,160.19	2,770.50	2,221.73	2,068.84	152.89	14.532	
10,500.00	7,613.94	10,474.35	7,683.42	83.34	75.06	-91.20	3,161.22	2,870.43	2,222.09	2,064.23	157.86	14.076	
10,600.00	7,614.72	10,574.33	7,686.22	86.03	77.36	-91.25	3,162.25	2,970.37	2,222.45	2,059.60	162.85	13.647	
10,700.00	7,615.50	10,674.30	7,689.01	88.71	79.66	-91.30	3,163.28	3,070.30	2,222.82	2,054.97	167.85	13.243	
10,800.00	7,616.28	10,774.28	7,691.80	91.40	81.98	-91.35	3,164.31	3,170.24	2,223.18	2,050.32	172.87	12.861	
10,900.00	7,617.07	10,874.26	7,694.60	94.10	84.30	-91.40	3,165.34	3,270.17	2,223.55	2,045.66	177.89	12.500	
11,000.00	7,617.85	10,974.24	7,697.39	96.80	86.63	-91.46	3,166.37	3,370.11	2,223.92	2,041.00	182.92	12.158	
11,100.00	7,618.63	11,074.22	7,700.18	99.50	88.97	-91.51	3,167.40	3,470.04	2,224.29	2,036.33	187.97	11.833	
11,200.00	7,619.42	11,174.20	7,702.97	102.20	91.31	-91.56	3,168.43	3,569.98	2,224.67	2,031.65	193.02	11.526	
11,300.00	7,620.20	11,274.18	7,705.77	104.91	93.66	-91.61	3,169.46	3,669.91	2,225.04	2,026.96	198.08	11.233	
11,400.00	7,620.98	11,374.16	7,708.56	107.62	96.01	-91.66	3,170.48	3,769.85	2,225.42	2,022.28	203.14	10.955	
11,500.00	7,621.76	11,474.14	7,711.35	110.33	98.37	-91.71	3,171.51	3,869.78	2,225.80	2,017.58	208.21	10.690	
11,600.00	7,622.55	11,574.12	7,714.15	113.05	100.73	-91.77	3,172.54	3,969.72	2,226.18	2,012.89	213.29	10.437	
11,700.00	7,623.33	11,674.10	7,716.94	115.77	103.10	-91.82	3,173.57	4,069.65	2,226.56	2,008.19	218.37	10.196	
11,800.00	7,624.11	11,774.08	7,719.73	118.49	105.47	-91.87	3,174.60	4,169.59	2,226.94	2,003.48	223.46	9.966	
11,900.00	7,624.89	11,874.06	7,722.53	121.21	107.85	-91.92	3,175.63	4,269.52	2,227.33	1,998.77	228.55	9.745	
12,000.00	7,625.68	11,974.04	7,725.32	123.93	110.23	-91.97	3,176.66	4,369.46	2,227.72	1,994.07	233.65	9.534	
12,100.00	7,626.46	12,074.01	7,728.11	126.65	112.61	-92.02	3,177.69	4,469.39	2,228.10	1,989.35	238.75	9.332	
12,200.00	7,627.24	12,173.99	7,730.91	129.38	114.99	-92.07	3,178.72	4,569.33	2,228.50	1,984.64	243.85	9.139	
12,300.00	7,628.02	12,273.97	7,733.70	132.11	117.38	-92.13	3,179.75	4,669.26	2,228.89	1,979.93	248.96	8.953	
12,400.00	7,628.81	12,373.95	7,736.49	134.84	119.77	-92.18	3,180.78	4,769.20	2,229.28	1,975.21	254.07	8.774	
12,500.00	7,629.59	12,473.93	7,739.29	137.56	122.16	-92.23	3,181.81	4,869.13	2,229.68	1,970.49	259.19	8.603	
12,552.48	7,630.00	12,526.40	7,740.75	139.00	123.42	-92.25	3,182.35	4,921.58	2,229.89	1,968.02	261.87	8.515 ES, SF	

Company:	Colgate Energy	Local Co-ordinate Reference:	Well Lady Franklin 25 State 123H
Project:	Eddy County, NM (N83-NME)	TVD Reference:	3335.5+26 @ 3361.50usft (Permit)
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Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Lady Franklin 25 State 123H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Permit	Database:	EDM 5000.14 Single User Db
Reference Design:	APD Rev2	Offset TVD Reference:	Offset Datum

Offset Design													Lady Franklin 25 - Lady Franklin 25 State 124H - Permit - APD Rev 2		Offset Site Error:		0.00 usft
Survey Program: 0-MWD														Offset Well Error:		0.00 usft	
Reference		Offset		Semi Major Axis			Distance										
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning				
900.00	900.00	898.10	898.10	1.88	1.88	179.77	-89.95	0.36	89.95	86.19	3.76	23.934					
1,000.00	1,000.00	998.10	998.10	2.11	2.10	179.77	-89.95	0.36	89.95	85.74	4.21	21.377					
1,100.00	1,100.00	1,098.10	1,098.10	2.33	2.33	179.77	-89.95	0.36	89.95	85.29	4.66	19.314					
1,200.00	1,200.00	1,198.10	1,198.10	2.56	2.55	179.77	-89.95	0.36	89.95	84.84	5.11	17.614	CC, ES				
1,300.00	1,299.99	1,298.09	1,298.09	2.78	2.78	-169.95	-89.95	0.36	91.24	85.68	5.56	16.420					
1,400.00	1,399.91	1,398.01	1,398.01	3.01	3.00	-170.36	-89.95	0.36	95.11	89.10	6.01	15.832					
1,500.00	1,499.69	1,497.79	1,497.79	3.23	3.22	-170.96	-89.95	0.36	101.56	95.10	6.46	15.725					
1,600.00	1,599.27	1,597.37	1,597.37	3.46	3.45	-171.68	-89.95	0.36	110.61	103.70	6.91	16.005					
1,700.00	1,698.57	1,694.06	1,694.05	3.71	3.64	-172.16	-90.98	-0.18	123.28	115.94	7.33	16.808					
1,800.00	1,797.54	1,789.69	1,789.61	3.97	3.81	-172.16	-94.12	-1.83	140.66	132.93	7.73	18.187					
1,900.00	1,896.09	1,883.99	1,883.73	4.25	3.98	-171.83	-99.29	-4.54	162.69	154.56	8.13	20.001					
1,958.37	1,953.40	1,938.65	1,938.20	4.43	4.08	-171.55	-103.23	-6.61	177.66	169.29	8.37	21.223					
2,000.00	1,994.21	1,978.75	1,978.16	4.56	4.16	-171.37	-106.29	-8.21	188.82	180.28	8.54	22.098					
2,100.00	2,092.25	2,075.08	2,074.13	4.88	4.35	-171.02	-113.65	-12.07	215.63	206.67	8.96	24.060					
8,300.00	7,596.72	8,256.42	7,620.00	28.58	26.08	91.09	-395.86	704.12	1,320.24	1,267.25	52.99	24.913					
8,400.00	7,597.50	8,356.41	7,620.00	30.52	28.27	91.06	-395.15	804.12	1,320.23	1,262.91	57.32	23.035					
8,500.00	7,598.28	8,456.41	7,620.00	32.61	30.56	91.02	-394.44	904.11	1,320.21	1,258.39	61.83	21.353					
8,600.00	7,599.07	8,556.41	7,620.00	34.81	32.92	90.99	-393.73	1,004.11	1,320.20	1,253.71	66.49	19.855					
8,700.00	7,599.85	8,656.40	7,620.00	37.09	35.33	90.96	-393.02	1,104.10	1,320.19	1,248.91	71.28	18.522					
8,800.00	7,600.63	8,756.40	7,620.00	39.43	37.80	90.92	-392.31	1,204.10	1,320.17	1,244.01	76.16	17.334					
8,900.00	7,601.42	8,856.40	7,620.00	41.83	40.30	90.89	-391.60	1,304.09	1,320.16	1,239.03	81.13	16.273					
9,000.00	7,602.20	8,956.40	7,620.00	44.27	42.83	90.86	-390.89	1,404.08	1,320.15	1,233.99	86.16	15.322					
9,100.00	7,602.98	9,056.39	7,620.00	46.75	45.39	90.82	-390.18	1,504.08	1,320.14	1,228.89	91.25	14.467					
9,200.00	7,603.76	9,156.39	7,620.00	49.26	47.97	90.79	-389.46	1,604.07	1,320.13	1,223.74	96.39	13.696					
9,300.00	7,604.55	9,256.39	7,620.00	51.80	50.57	90.75	-388.75	1,704.07	1,320.12	1,218.55	101.56	12.998					
9,400.00	7,605.33	9,356.38	7,620.00	54.35	53.18	90.72	-388.04	1,804.06	1,320.11	1,213.33	106.78	12.363					
9,500.00	7,606.11	9,456.38	7,620.00	56.93	55.81	90.69	-387.33	1,904.06	1,320.10	1,208.08	112.02	11.785					
9,600.00	7,606.89	9,556.38	7,620.00	59.52	58.46	90.65	-386.62	2,004.05	1,320.09	1,202.80	117.28	11.256					
9,700.00	7,607.68	9,656.37	7,620.00	62.13	61.11	90.62	-385.91	2,104.04	1,320.08	1,197.51	122.57	10.770					
9,800.00	7,608.46	9,756.37	7,620.00	64.75	63.77	90.58	-385.20	2,204.04	1,320.07	1,192.19	127.88	10.323					
9,900.00	7,609.24	9,856.37	7,620.00	67.38	66.44	90.55	-384.49	2,304.03	1,320.06	1,186.86	133.20	9.910					
10,000.00	7,610.02	9,956.36	7,620.00	70.02	69.11	90.52	-383.78	2,404.03	1,320.05	1,181.51	138.54	9.528					
10,100.00	7,610.81	10,056.36	7,620.00	72.67	71.80	90.48	-383.07	2,504.02	1,320.05	1,176.15	143.90	9.174					
10,200.00	7,611.59	10,156.36	7,620.00	75.33	74.48	90.45	-382.36	2,604.02	1,320.04	1,170.78	149.26	8.844					
10,300.00	7,612.37	10,256.36	7,620.00	77.99	77.18	90.41	-381.64	2,704.01	1,320.03	1,165.40	154.64	8.536					
10,400.00	7,613.15	10,356.35	7,620.00	80.67	79.87	90.38	-380.93	2,804.01	1,320.03	1,160.01	160.02	8.249					
10,500.00	7,613.94	10,456.35	7,620.00	83.34	82.58	90.35	-380.22	2,904.00	1,320.02	1,154.61	165.42	7.980					
10,600.00	7,614.72	10,556.35	7,620.00	86.03	85.28	90.31	-379.51	3,003.99	1,320.02	1,149.20	170.82	7.728					
10,700.00	7,615.50	10,656.34	7,620.00	88.71	87.99	90.28	-378.80	3,103.99	1,320.01	1,143.79	176.23	7.490					
10,800.00	7,616.28	10,756.34	7,620.00	91.40	90.70	90.24	-378.09	3,203.98	1,320.01	1,138.37	181.65	7.267					
10,900.00	7,617.07	10,856.34	7,620.00	94.10	93.42	90.21	-377.38	3,303.98	1,320.01	1,132.94	187.07	7.056					
11,000.00	7,617.85	10,956.33	7,620.00	96.80	96.13	90.18	-376.67	3,403.97	1,320.00	1,127.51	192.49	6.857					
11,100.00	7,618.63	11,056.33	7,620.00	99.50	98.85	90.14	-375.96	3,503.97	1,320.00	1,122.08	197.93	6.669					
11,200.00	7,619.42	11,156.33	7,620.00	102.20	101.57	90.11	-375.25	3,603.96	1,320.00	1,116.64	203.36	6.491					
11,300.00	7,620.20	11,256.33	7,620.00	104.91	104.30	90.07	-374.54	3,703.96	1,320.00	1,111.19	208.80	6.322					
11,400.00	7,620.98	11,356.32	7,620.00	107.62	107.02	90.04	-373.83	3,803.95	1,320.00	1,105.75	214.25	6.161					
11,500.00	7,621.76	11,456.32	7,620.00	110.33	109.75	90.01	-373.11	3,903.94	1,320.00	1,100.30	219.70	6.008					
11,557.36	7,622.21	11,513.67	7,620.00	111.89	111.31	89.99	-372.71	3,961.30	1,320.00	1,097.17	222.82	5.924					
11,600.00	7,622.55	11,556.32	7,620.00	113.05	112.48	89.97	-372.40	4,003.94	1,320.00	1,094.85	225.15	5.863					
11,700.00	7,623.33	11,656.31	7,620.00	115.77	115.21	89.94	-371.69	4,103.93	1,320.00	1,089.39	230.60	5.724					
11,800.00	7,624.11	11,756.31	7,620.00	118.49	117.94	89.90	-370.98	4,203.93	1,320.00	1,083.94	236.06	5.592					
11,900.00	7,624.89	11,856.31	7,620.00	121.21	120.67	89.87	-370.27	4,303.92	1,320.00	1,078.48	241.52	5.465					

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Company:	Colgate Energy	Local Co-ordinate Reference:	Well Lady Franklin 25 State 123H
Project:	Eddy County, NM (N83-NME)	TVD Reference:	3335.5+26 @ 3361.50usft (Permit)
Reference Site:	Lady Franklin 25	MD Reference:	3335.5+26 @ 3361.50usft (Permit)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Lady Franklin 25 State 123H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Permit	Database:	EDM 5000.14 Single User Db
Reference Design:	APD Rev2	Offset TVD Reference:	Offset Datum

Offset Design Lady Franklin 25 - Lady Franklin 25 State 124H - Permit - APD Rev 2												Offset Site Error:	0.00 usft
Survey Program: 0-MWD												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (usft)	Separation Factor	Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
12,000.00	7,625.68	11,956.30	7,620.00	123.93	123.41	89.84	-369.56	4,403.92	1,320.00	1,073.02	246.98	5.344	
12,100.00	7,626.46	12,056.30	7,620.00	126.65	126.14	89.80	-368.85	4,503.91	1,320.00	1,067.56	252.45	5.229	
12,200.00	7,627.24	12,156.30	7,620.00	129.38	128.88	89.77	-368.14	4,603.91	1,320.01	1,062.09	257.92	5.118	
12,300.00	7,628.02	12,256.29	7,620.00	132.11	131.61	89.73	-367.43	4,703.90	1,320.01	1,056.63	263.38	5.012	
12,400.00	7,628.81	12,356.29	7,620.00	134.84	134.35	89.70	-366.72	4,803.89	1,320.01	1,051.16	268.86	4.910	
12,500.00	7,629.59	12,456.29	7,620.00	137.56	137.09	89.67	-366.01	4,903.89	1,320.02	1,045.69	274.33	4.812	
12,504.29	7,629.62	12,460.58	7,620.00	137.68	137.21	89.66	-365.97	4,908.18	1,320.02	1,045.46	274.56	4.808	
12,552.48	7,630.00	12,506.25	7,620.00	139.00	138.46	89.65	-365.65	4,953.85	1,320.02	1,042.90	277.12	4.763 SF	

Company:	Colgate Energy	Local Co-ordinate Reference:	Well Lady Franklin 25 State 123H
Project:	Eddy County, NM (N83-NME)	TVD Reference:	3335.5+26 @ 3361.50usft (Permit)
Reference Site:	Lady Franklin 25	MD Reference:	3335.5+26 @ 3361.50usft (Permit)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Lady Franklin 25 State 123H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Permit	Database:	EDM 5000.14 Single User Db
Reference Design:	APD Rev2	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 0-MWD													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
9,400.00	7,605.33	10,442.72	8,735.00	54.35	53.68	-118.73	2,949.86	1,773.82	2,301.42	2,207.11	94.31	24.402		
9,500.00	7,606.11	10,542.72	8,735.00	56.93	56.26	-118.71	2,950.89	1,873.81	2,301.33	2,202.41	98.92	23.264		
9,600.00	7,606.89	10,642.71	8,735.00	59.52	58.86	-118.69	2,951.93	1,973.80	2,301.24	2,197.68	103.56	22.221		
9,700.00	7,607.68	10,742.71	8,735.00	62.13	61.48	-118.67	2,952.96	2,073.79	2,301.15	2,192.92	108.23	21.262		
9,800.00	7,608.46	10,842.71	8,735.00	64.75	64.10	-118.65	2,954.00	2,173.78	2,301.05	2,188.14	112.91	20.379		
9,900.00	7,609.24	10,942.70	8,735.00	67.38	66.74	-118.63	2,955.03	2,273.78	2,300.96	2,183.34	117.62	19.563		
10,000.00	7,610.02	11,042.70	8,735.00	70.02	69.38	-118.61	2,956.06	2,373.77	2,300.87	2,178.53	122.34	18.807		
10,100.00	7,610.81	11,142.69	8,735.00	72.67	72.04	-118.59	2,957.10	2,473.76	2,300.78	2,173.70	127.08	18.105		
10,200.00	7,611.59	11,242.69	8,735.00	75.33	74.70	-118.57	2,958.13	2,573.75	2,300.69	2,168.85	131.84	17.451		
10,300.00	7,612.37	11,342.69	8,735.00	77.99	77.37	-118.55	2,959.16	2,673.74	2,300.60	2,164.00	136.60	16.842		
10,400.00	7,613.15	11,442.68	8,735.00	80.67	80.04	-118.52	2,960.20	2,773.73	2,300.51	2,159.13	141.38	16.272		
10,500.00	7,613.94	11,542.68	8,735.00	83.34	82.72	-118.50	2,961.23	2,873.72	2,300.42	2,154.25	146.17	15.738		
10,600.00	7,614.72	11,642.68	8,735.00	86.03	85.41	-118.48	2,962.26	2,973.71	2,300.33	2,149.36	150.97	15.237		
10,700.00	7,615.50	11,742.67	8,735.00	88.71	88.10	-118.46	2,963.30	3,073.70	2,300.24	2,144.46	155.78	14.766		
10,800.00	7,616.28	11,842.67	8,735.00	91.40	90.79	-118.44	2,964.33	3,173.70	2,300.15	2,139.55	160.60	14.322		
10,900.00	7,617.07	11,942.67	8,735.00	94.10	93.49	-118.42	2,965.36	3,273.69	2,300.06	2,134.64	165.43	13.904		
11,000.00	7,617.85	12,042.66	8,735.00	96.80	96.19	-118.40	2,966.40	3,373.68	2,299.97	2,129.71	170.26	13.509		
11,100.00	7,618.63	12,142.66	8,735.00	99.50	98.89	-118.38	2,967.43	3,473.67	2,299.89	2,124.78	175.10	13.135		
11,200.00	7,619.42	12,242.66	8,735.00	102.20	101.60	-118.36	2,968.46	3,573.66	2,299.80	2,119.85	179.95	12.780		
11,300.00	7,620.20	12,342.65	8,735.00	104.91	104.31	-118.34	2,969.50	3,673.65	2,299.71	2,114.91	184.80	12.444		
11,400.00	7,620.98	12,442.65	8,735.00	107.62	107.02	-118.31	2,970.53	3,773.64	2,299.62	2,109.96	189.66	12.125		
11,500.00	7,621.76	12,542.64	8,735.00	110.33	109.74	-118.29	2,971.56	3,873.63	2,299.54	2,105.01	194.53	11.821		
11,600.00	7,622.55	12,642.64	8,735.00	113.05	112.45	-118.27	2,972.60	3,973.62	2,299.45	2,100.05	199.40	11.532		
11,700.00	7,623.33	12,742.64	8,735.00	115.77	115.17	-118.25	2,973.63	4,073.61	2,299.36	2,095.09	204.28	11.256		
11,800.00	7,624.11	12,842.63	8,735.00	118.49	117.89	-118.23	2,974.66	4,173.61	2,299.28	2,090.12	209.16	10.993		
11,900.00	7,624.89	12,942.63	8,735.00	121.21	120.61	-118.21	2,975.70	4,273.60	2,299.19	2,085.15	214.04	10.742		
12,000.00	7,625.68	13,042.63	8,735.00	123.93	123.34	-118.19	2,976.73	4,373.59	2,299.11	2,080.18	218.93	10.502		
12,100.00	7,626.46	13,142.62	8,735.00	126.65	126.06	-118.17	2,977.77	4,473.58	2,299.02	2,075.20	223.82	10.272		
12,200.00	7,627.24	13,242.62	8,735.00	129.38	128.79	-118.15	2,978.80	4,573.57	2,298.94	2,070.21	228.72	10.051		
12,300.00	7,628.02	13,342.62	8,735.00	132.11	131.52	-118.13	2,979.83	4,673.56	2,298.85	2,065.23	233.62	9.840		
12,400.00	7,628.81	13,442.61	8,735.00	134.84	134.25	-118.10	2,980.87	4,773.55	2,298.77	2,060.24	238.53	9.637		
12,500.00	7,629.59	13,542.61	8,735.00	137.56	136.98	-118.08	2,981.90	4,873.54	2,298.68	2,055.25	243.44	9.443		
12,552.48	7,630.00	13,595.09	8,735.00	139.00	138.41	-118.07	2,982.44	4,926.02	2,298.64	2,052.62	246.02	9.343 CC, ES, SF		

Company:	Colgate Energy	Local Co-ordinate Reference:	Well Lady Franklin 25 State 123H
Project:	Eddy County, NM (N83-NME)	TVD Reference:	3335.5+26 @ 3361.50usft (Permit)
Reference Site:	Lady Franklin 25	MD Reference:	3335.5+26 @ 3361.50usft (Permit)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Lady Franklin 25 State 123H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Permit	Database:	EDM 5000.14 Single User Db
Reference Design:	APD Rev2	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 0-MWD													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
6,800.00	6,712.04	6,989.67	6,885.96	21.99	24.93	0.73	1,690.18	-158.96	786.90	754.25	32.66	24.097		
6,900.00	6,812.04	7,084.25	6,978.76	22.13	25.31	0.55	1,672.11	-161.48	767.76	734.64	33.12	23.180		
7,000.00	6,912.04	7,166.45	7,059.64	22.28	25.56	0.41	1,657.59	-163.49	750.08	716.48	33.60	22.326		
7,109.43	7,021.47	7,257.09	7,149.18	22.44	25.81	0.26	1,643.59	-165.44	733.16	699.06	34.10	21.501		
7,150.00	7,062.01	7,290.81	7,182.56	22.49	25.90	-90.04	1,638.92	-166.09	727.53	693.26	34.27	21.228		
7,200.00	7,111.67	7,332.17	7,223.57	22.55	26.00	-91.13	1,633.59	-166.83	721.11	686.64	34.47	20.921		
7,250.00	7,160.64	7,373.03	7,264.14	22.60	26.10	-92.42	1,628.76	-167.50	715.40	680.74	34.66	20.639		
7,300.00	7,208.55	7,413.06	7,303.93	22.65	26.19	-93.89	1,624.44	-168.10	710.63	675.76	34.87	20.381		
7,350.00	7,255.04	7,451.98	7,342.66	22.68	26.27	-95.46	1,620.64	-168.62	707.04	671.93	35.10	20.141		
7,400.00	7,299.75	7,489.47	7,380.00	22.72	26.35	-97.08	1,617.35	-169.08	704.95	669.54	35.40	19.912		
7,431.74	7,327.05	7,512.40	7,402.86	22.73	26.39	-98.09	1,615.51	-169.34	704.55	668.91	35.64	19.768 CC		
7,450.00	7,342.34	7,525.25	7,415.67	22.75	26.42	-98.66	1,614.55	-169.47	704.69	668.90	35.79	19.688 ES		
7,500.00	7,382.49	7,559.04	7,449.38	22.78	26.48	-100.14	1,612.20	-169.80	706.61	670.31	36.30	19.466		
7,550.00	7,419.89	7,590.57	7,480.85	22.81	26.53	-101.41	1,610.28	-170.06	711.03	674.08	36.95	19.244		
7,600.00	7,454.26	7,619.60	7,509.83	22.85	26.58	-102.40	1,608.74	-170.28	718.26	680.51	37.75	19.027		
7,650.00	7,485.34	7,645.89	7,536.09	22.89	26.62	-103.03	1,607.53	-170.45	728.53	689.83	38.70	18.825		
7,700.00	7,512.89	7,669.23	7,559.41	22.96	26.66	-103.22	1,606.61	-170.57	742.00	702.21	39.79	18.649		
7,750.00	7,536.69	7,689.42	7,579.60	23.04	26.69	-102.91	1,605.93	-170.67	758.72	717.74	40.98	18.515		
7,800.00	7,556.58	7,700.00	7,590.17	23.15	26.71	-101.55	1,605.61	-170.71	778.69	736.45	42.23	18.438		
7,850.00	7,572.39	7,719.75	7,609.92	23.31	26.73	-100.51	1,605.10	-170.78	801.68	758.16	43.52	18.421		
7,900.00	7,584.01	7,729.62	7,619.79	23.52	26.75	-98.30	1,604.88	-170.81	827.57	782.78	44.79	18.476		
7,950.00	7,591.35	7,735.82	7,625.99	23.82	26.76	-95.37	1,604.76	-170.83	856.01	810.00	46.02	18.602		
8,004.94	7,594.41	7,738.34	7,628.50	24.27	26.76	-91.30	1,604.71	-170.84	889.79	842.50	47.28	18.818		
8,100.00	7,595.15	7,738.76	7,628.92	25.34	26.76	-91.34	1,604.71	-170.84	953.04	903.79	49.24	19.353		
8,200.00	7,595.94	7,739.21	7,629.37	26.82	26.76	-91.38	1,604.70	-170.84	1,024.89	973.89	51.00	20.097		
8,300.00	7,596.72	7,739.66	7,629.82	28.58	26.76	-91.41	1,604.69	-170.84	1,101.15	1,048.69	52.46	20.990		
8,400.00	7,597.50	7,740.11	7,630.27	30.52	26.76	-91.45	1,604.68	-170.84	1,180.95	1,127.27	53.68	22.001		
8,500.00	7,598.28	7,740.57	7,630.73	32.61	26.76	-91.49	1,604.67	-170.84	1,263.63	1,208.94	54.69	23.105		
9,000.00	7,602.20	10,177.50	8,755.00	44.27	45.68	-148.55	1,620.15	1,387.56	1,324.50	1,271.47	53.03	24.977		
9,100.00	7,602.98	10,277.50	8,755.00	46.75	48.04	-148.52	1,621.18	1,487.55	1,324.00	1,268.19	55.81	23.724		
9,200.00	7,603.76	10,377.49	8,755.00	49.26	50.45	-148.49	1,622.21	1,587.54	1,323.50	1,264.87	58.63	22.574		
9,300.00	7,604.55	10,477.49	8,755.00	51.80	52.89	-148.46	1,623.25	1,687.53	1,323.00	1,261.51	61.49	21.516		
9,400.00	7,605.33	10,577.48	8,755.00	54.35	55.37	-148.43	1,624.28	1,787.53	1,322.50	1,258.12	64.38	20.542		
9,500.00	7,606.11	10,677.48	8,755.00	56.93	57.87	-148.40	1,625.31	1,887.52	1,322.01	1,254.70	67.30	19.643		
9,600.00	7,606.89	10,777.48	8,755.00	59.52	60.40	-148.37	1,626.34	1,987.51	1,321.51	1,251.26	70.25	18.812		
9,700.00	7,607.68	10,877.47	8,755.00	62.13	62.94	-148.34	1,627.38	2,087.50	1,321.01	1,247.79	73.22	18.042		
9,800.00	7,608.46	10,977.47	8,755.00	64.75	65.51	-148.31	1,628.41	2,187.49	1,320.51	1,244.30	76.21	17.327		
9,900.00	7,609.24	11,077.47	8,755.00	67.38	68.09	-148.28	1,629.44	2,287.48	1,320.02	1,240.80	79.22	16.663		
10,000.00	7,610.02	11,177.46	8,755.00	70.02	70.68	-148.25	1,630.48	2,387.47	1,319.52	1,237.27	82.25	16.043		
10,100.00	7,610.81	11,277.46	8,755.00	72.67	73.29	-148.22	1,631.51	2,487.46	1,319.03	1,233.73	85.29	15.464		
10,200.00	7,611.59	11,377.46	8,755.00	75.33	75.90	-148.19	1,632.54	2,587.45	1,318.53	1,230.18	88.35	14.923		
10,300.00	7,612.37	11,477.45	8,755.00	77.99	78.53	-148.16	1,633.57	2,687.45	1,318.04	1,226.61	91.43	14.416		
10,400.00	7,613.15	11,577.45	8,755.00	80.67	81.17	-148.13	1,634.61	2,787.44	1,317.54	1,223.02	94.52	13.940		
10,500.00	7,613.94	11,677.45	8,755.00	83.34	83.81	-148.10	1,635.64	2,887.43	1,317.05	1,219.43	97.62	13.492		
10,600.00	7,614.72	11,777.44	8,755.00	86.03	86.46	-148.07	1,636.67	2,987.42	1,316.55	1,215.82	100.73	13.070		
10,700.00	7,615.50	11,877.44	8,755.00	88.71	89.12	-148.04	1,637.71	3,087.41	1,316.06	1,212.21	103.85	12.673		
10,800.00	7,616.28	11,977.43	8,755.00	91.40	91.78	-148.01	1,638.74	3,187.40	1,315.57	1,208.58	106.98	12.297		
10,900.00	7,617.07	12,077.43	8,755.00	94.10	94.45	-147.98	1,639.77	3,287.39	1,315.07	1,204.95	110.13	11.942		
11,000.00	7,617.85	12,177.43	8,755.00	96.80	97.13	-147.95	1,640.80	3,387.38	1,314.58	1,201.30	113.28	11.605		
11,100.00	7,618.63	12,277.42	8,755.00	99.50	99.80	-147.92	1,641.84	3,487.37	1,314.09	1,197.65	116.44	11.286		
11,200.00	7,619.42	12,377.42	8,755.00	102.20	102.49	-147.89	1,642.87	3,587.37	1,313.60	1,193.99	119.61	10.982		
11,300.00	7,620.20	12,477.42	8,755.00	104.91	105.17	-147.86	1,643.90	3,687.36	1,313.10	1,190.32	122.79	10.694		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Company:	Colgate Energy	Local Co-ordinate Reference:	Well Lady Franklin 25 State 123H
Project:	Eddy County, NM (N83-NME)	TVD Reference:	3335.5+26 @ 3361.50usft (Permit)
Reference Site:	Lady Franklin 25	MD Reference:	3335.5+26 @ 3361.50usft (Permit)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Lady Franklin 25 State 123H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Permit	Database:	EDM 5000.14 Single User Db
Reference Design:	APD Rev2	Offset TVD Reference:	Offset Datum

Offset Design Lady Franklin 25 - Lady Franklin 25 State 132H - Permit - Plan #1												Offset Site Error:	0.00 usft
Survey Program: 0-MWD												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
11,400.00	7,620.98	12,577.41	8,755.00	107.62	107.87	-147.83	1,644.94	3,787.35	1,312.61	1,186.64	125.97	10.420	
11,500.00	7,621.76	12,677.41	8,755.00	110.33	110.56	-147.80	1,645.97	3,887.34	1,312.12	1,182.96	129.17	10.158	
11,600.00	7,622.55	12,777.41	8,755.00	113.05	113.26	-147.77	1,647.00	3,987.33	1,311.63	1,179.26	132.37	9.909	
11,700.00	7,623.33	12,877.40	8,755.00	115.77	115.96	-147.74	1,648.03	4,087.32	1,311.14	1,175.56	135.58	9.671	
11,800.00	7,624.11	12,977.40	8,755.00	118.49	118.66	-147.71	1,649.07	4,187.31	1,310.65	1,171.86	138.79	9.443	
11,900.00	7,624.89	13,077.40	8,755.00	121.21	121.37	-147.68	1,650.10	4,287.30	1,310.16	1,168.15	142.02	9.225	
12,000.00	7,625.68	13,177.39	8,755.00	123.93	124.07	-147.65	1,651.13	4,387.29	1,309.67	1,164.43	145.25	9.017	
12,100.00	7,626.46	13,277.39	8,755.00	126.65	126.78	-147.62	1,652.16	4,487.28	1,309.19	1,160.70	148.48	8.817	
12,200.00	7,627.24	13,377.38	8,755.00	129.38	129.49	-147.59	1,653.20	4,587.28	1,308.70	1,156.97	151.73	8.625	
12,300.00	7,628.02	13,477.38	8,755.00	132.11	132.21	-147.56	1,654.23	4,687.27	1,308.21	1,153.23	154.97	8.441	
12,400.00	7,628.81	13,577.38	8,755.00	134.84	134.92	-147.53	1,655.26	4,787.26	1,307.72	1,149.49	158.23	8.265	
12,500.00	7,629.59	13,677.37	8,755.00	137.56	137.64	-147.50	1,656.30	4,887.25	1,307.23	1,145.74	161.49	8.095	
12,552.48	7,630.00	13,729.85	8,755.00	139.00	139.07	-147.48	1,656.84	4,939.72	1,306.98	1,143.77	163.21	8.008 SF	

Company:	Colgate Energy	Local Co-ordinate Reference:	Well Lady Franklin 25 State 123H
Project:	Eddy County, NM (N83-NME)	TVD Reference:	3335.5+26 @ 3361.50usft (Permit)
Reference Site:	Lady Franklin 25	MD Reference:	3335.5+26 @ 3361.50usft (Permit)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Lady Franklin 25 State 123H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Permit	Database:	EDM 5000.14 Single User Db
Reference Design:	APD Rev2	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 0-MWD													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
500.00	500.00	499.50	499.50	0.98	0.98	179.73	-45.04	0.21	45.04	43.08	1.96	22.941		
600.00	600.00	599.50	599.50	1.21	1.21	179.73	-45.04	0.21	45.04	42.63	2.41	18.667		
700.00	700.00	699.50	699.50	1.43	1.43	179.73	-45.04	0.21	45.04	42.18	2.86	15.735		
800.00	800.00	799.50	799.50	1.66	1.66	179.73	-45.04	0.21	45.04	41.73	3.31	13.599		
900.00	900.00	899.50	899.50	1.88	1.88	179.73	-45.04	0.21	45.04	41.28	3.76	11.974		
1,000.00	1,000.00	999.50	999.50	2.11	2.10	179.73	-45.04	0.21	45.04	40.83	4.21	10.696		
1,100.00	1,100.00	1,099.50	1,099.50	2.33	2.33	179.73	-45.04	0.21	45.04	40.38	4.66	9.664		
1,200.00	1,200.00	1,199.50	1,199.50	2.56	2.55	179.73	-45.04	0.21	45.04	39.93	5.11	8.814 CC, ES		
1,300.00	1,299.99	1,299.49	1,299.49	2.78	2.78	-170.13	-45.04	0.21	46.33	40.77	5.56	8.333 SF		
1,400.00	1,399.91	1,399.41	1,399.41	3.01	3.00	-170.89	-45.04	0.21	50.20	44.19	6.01	8.353		
1,500.00	1,499.69	1,499.19	1,499.19	3.23	3.23	-171.92	-45.04	0.21	56.67	50.21	6.46	8.770		
1,600.00	1,599.27	1,598.77	1,598.77	3.46	3.45	-173.03	-45.04	0.21	65.74	58.83	6.91	9.508		
1,700.00	1,698.57	1,699.91	1,699.90	3.71	3.68	-173.70	-43.88	-0.39	76.24	68.88	7.37	10.350		
1,800.00	1,797.54	1,801.33	1,801.24	3.97	3.90	-173.69	-40.34	-2.24	86.92	79.10	7.82	11.118		
1,900.00	1,896.09	1,902.15	1,901.85	4.25	4.13	-173.26	-34.59	-5.24	97.90	89.63	8.27	11.834		
1,958.37	1,953.40	1,960.06	1,959.62	4.43	4.26	-173.06	-31.01	-7.11	105.22	96.67	8.54	12.315		
2,000.00	1,994.21	2,001.32	2,000.77	4.56	4.36	-172.96	-28.45	-8.44	110.75	102.01	8.74	12.676		
2,100.00	2,092.25	2,100.43	2,099.65	4.88	4.58	-172.76	-22.31	-11.65	124.03	114.83	9.20	13.482		
2,200.00	2,190.28	2,199.55	2,198.52	5.22	4.82	-172.60	-16.17	-14.85	137.32	127.65	9.67	14.204		
2,300.00	2,288.32	2,298.66	2,297.39	5.57	5.05	-172.47	-10.03	-18.05	150.61	140.47	10.14	14.855		
2,400.00	2,386.35	2,397.77	2,396.26	5.93	5.28	-172.36	-3.89	-21.25	163.89	153.28	10.61	15.445		
2,500.00	2,484.39	2,496.88	2,495.13	6.29	5.52	-172.26	2.25	-24.45	177.18	166.09	11.09	15.980		
2,600.00	2,582.42	2,596.00	2,594.00	6.67	5.76	-172.18	8.39	-27.66	190.47	178.90	11.57	16.468		
2,700.00	2,680.46	2,695.11	2,692.87	7.04	6.00	-172.11	14.53	-30.86	203.76	191.71	12.05	16.915		
2,800.00	2,778.49	2,794.22	2,791.74	7.42	6.24	-172.05	20.67	-34.06	217.05	204.52	12.53	17.325		
2,900.00	2,876.53	2,893.34	2,890.61	7.81	6.48	-171.99	26.80	-37.26	230.34	217.32	13.01	17.702		
3,000.00	2,974.57	2,992.45	2,989.48	8.19	6.72	-171.94	32.94	-40.47	243.62	230.13	13.50	18.051		
3,100.00	3,072.60	3,091.56	3,088.35	8.58	6.96	-171.90	39.08	-43.67	256.91	242.93	13.98	18.374		
3,200.00	3,170.64	3,190.67	3,187.22	8.98	7.21	-171.86	45.22	-46.87	270.20	255.73	14.47	18.674		
3,300.00	3,268.67	3,289.79	3,286.09	9.37	7.45	-171.82	51.36	-50.07	283.49	268.54	14.96	18.953		
3,400.00	3,366.71	3,388.90	3,384.96	9.77	7.70	-171.79	57.50	-53.27	296.78	281.34	15.45	19.213		
3,500.00	3,464.74	3,488.01	3,483.83	10.17	7.94	-171.76	63.64	-56.48	310.07	294.14	15.94	19.457		
3,600.00	3,562.78	3,587.13	3,582.71	10.56	8.19	-171.73	69.78	-59.68	323.36	306.94	16.43	19.685		
3,700.00	3,660.81	3,686.24	3,681.58	10.97	8.43	-171.71	75.92	-62.88	336.65	319.73	16.92	19.898		
3,800.00	3,758.85	3,785.35	3,780.45	11.37	8.68	-171.69	82.06	-66.08	349.94	332.53	17.41	20.100		
3,900.00	3,856.89	3,884.46	3,879.32	11.77	8.93	-171.66	88.20	-69.29	363.23	345.33	17.90	20.289		
4,000.00	3,954.92	3,983.58	3,978.19	12.17	9.18	-171.64	94.34	-72.49	376.52	358.13	18.40	20.468		
4,100.00	4,052.96	4,082.69	4,077.06	12.58	9.42	-171.62	100.48	-75.69	389.81	370.92	18.89	20.637		
4,200.00	4,150.99	4,181.80	4,175.93	12.98	9.67	-171.61	106.62	-78.89	403.10	383.72	19.38	20.796		
4,300.00	4,249.03	4,280.92	4,274.80	13.39	9.92	-171.59	112.76	-82.09	416.39	396.52	19.88	20.948		
4,400.00	4,347.06	4,380.03	4,373.67	13.80	10.17	-171.58	118.89	-85.30	429.68	409.31	20.37	21.091		
4,500.00	4,445.10	4,479.14	4,472.54	14.20	10.42	-171.56	125.03	-88.50	442.97	422.11	20.87	21.228		
4,600.00	4,543.13	4,578.25	4,571.41	14.61	10.67	-171.55	131.17	-91.70	456.26	434.90	21.36	21.358		
4,700.00	4,641.17	4,677.37	4,670.28	15.02	10.92	-171.53	137.31	-94.90	469.55	447.70	21.86	21.481		
4,800.00	4,739.20	4,776.48	4,769.15	15.43	11.16	-171.52	143.45	-98.10	482.85	460.49	22.35	21.599		
4,900.00	4,837.24	4,875.59	4,868.02	15.84	11.41	-171.51	149.59	-101.31	496.14	473.28	22.85	21.712		
5,000.00	4,935.28	4,974.71	4,966.89	16.25	11.66	-171.50	155.73	-104.51	509.43	486.08	23.35	21.819		
5,100.00	5,033.31	5,073.82	5,065.77	16.66	11.91	-171.49	161.87	-107.71	522.72	498.87	23.84	21.922		
5,200.00	5,131.35	5,172.93	5,164.64	17.07	12.16	-171.48	168.01	-110.91	536.01	511.67	24.34	22.020		
5,300.00	5,229.38	5,272.04	5,263.51	17.48	12.41	-171.47	174.15	-114.12	549.30	524.46	24.84	22.114		
5,400.00	5,327.42	5,371.16	5,362.38	17.89	12.66	-171.46	180.29	-117.32	562.59	537.25	25.34	22.204		
5,500.00	5,425.45	5,470.27	5,461.25	18.30	12.91	-171.45	186.43	-120.52	575.88	550.04	25.83	22.291		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Company:	Colgate Energy	Local Co-ordinate Reference:	Well Lady Franklin 25 State 123H
Project:	Eddy County, NM (N83-NME)	TVD Reference:	3335.5+26 @ 3361.50usft (Permit)
Reference Site:	Lady Franklin 25	MD Reference:	3335.5+26 @ 3361.50usft (Permit)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Lady Franklin 25 State 123H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Permit	Database:	EDM 5000.14 Single User Db
Reference Design:	APD Rev2	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 0-MWD													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
5,600.00	5,523.49	5,569.38	5,560.12	18.71	13.16	-171.45	192.57	-123.72	589.17	562.84	26.33	22.374		
5,700.00	5,621.52	5,668.50	5,658.99	19.12	13.42	-171.44	198.71	-126.92	602.46	575.63	26.83	22.454		
5,800.00	5,719.56	5,767.61	5,757.86	19.53	13.67	-171.43	204.85	-130.13	615.75	588.42	27.33	22.531		
5,900.00	5,817.60	5,866.72	5,856.73	19.95	13.92	-171.42	210.98	-133.33	629.04	601.21	27.83	22.605		
5,929.59	5,846.60	5,896.05	5,885.98	20.07	13.99	-171.42	212.80	-134.28	632.97	605.00	27.97	22.627		
6,000.00	5,915.76	5,965.91	5,955.68	20.32	14.17	-171.43	217.13	-136.53	641.69	613.39	28.31	22.670		
6,100.00	6,014.36	6,065.39	6,054.91	20.63	14.42	-171.40	223.29	-139.75	651.89	623.15	28.74	22.679		
6,200.00	6,113.37	6,165.09	6,154.37	20.90	14.67	-171.34	229.47	-142.97	659.51	630.33	29.18	22.602		
6,300.00	6,212.71	6,264.95	6,253.99	21.15	14.92	-171.24	235.65	-146.20	664.54	634.93	29.61	22.443		
6,400.00	6,312.31	6,364.91	6,353.70	21.36	15.18	-171.10	241.84	-149.42	667.00	636.96	30.04	22.207		
6,500.00	6,412.12	6,464.88	6,453.43	21.55	15.43	-170.91	248.04	-152.65	666.87	636.42	30.46	21.897		
6,600.00	6,512.05	6,564.81	6,553.11	21.71	15.68	-170.69	254.23	-155.88	664.17	633.30	30.87	21.515		
6,687.96	6,600.00	6,652.61	6,640.70	21.83	15.91	179.13	259.66	-158.72	659.67	628.44	31.23	21.123		
6,700.00	6,612.04	6,664.63	6,652.69	21.84	15.94	179.16	260.41	-159.11	658.92	627.64	31.28	21.064		
6,800.00	6,712.04	6,761.86	6,749.68	21.99	16.18	179.43	266.40	-162.23	652.72	621.00	31.71	20.581		
6,900.00	6,812.04	6,848.56	6,836.26	22.13	16.35	179.61	270.57	-164.41	647.89	615.83	32.06	20.207		
7,000.00	6,912.04	6,935.44	6,923.09	22.28	16.51	179.73	272.99	-165.67	645.09	612.71	32.38	19.921		
7,109.43	7,021.47	7,033.32	7,020.97	22.44	16.67	179.76	273.68	-166.03	644.30	611.56	32.73	19.683		
7,150.00	7,062.01	7,073.86	7,061.51	22.49	16.75	90.29	273.68	-166.03	644.30	611.41	32.89	19.588		
7,200.00	7,111.67	7,123.52	7,111.17	22.55	16.84	90.79	273.68	-166.03	644.36	611.26	33.10	19.468		
7,250.00	7,160.64	7,172.49	7,160.14	22.60	16.94	91.64	273.68	-166.03	644.57	611.25	33.32	19.344		
7,300.00	7,208.55	7,220.40	7,208.05	22.65	17.04	92.79	273.68	-166.03	645.15	611.59	33.56	19.225		
7,350.00	7,255.04	7,266.89	7,254.54	22.68	17.14	94.18	273.68	-166.03	646.36	612.55	33.81	19.120		
7,400.00	7,299.75	7,311.60	7,299.25	22.72	17.23	95.73	273.68	-166.03	648.52	614.46	34.07	19.036		
7,450.00	7,342.34	7,354.19	7,341.84	22.75	17.32	97.34	273.68	-166.03	652.03	617.68	34.35	18.983		
7,500.00	7,382.49	7,394.34	7,381.99	22.78	17.40	98.90	273.68	-166.03	657.26	622.61	34.65	18.970		
7,550.00	7,419.89	7,431.75	7,419.39	22.81	17.48	100.31	273.68	-166.03	664.61	629.64	34.97	19.007		
7,600.00	7,454.26	7,466.12	7,453.76	22.85	17.55	101.46	273.68	-166.03	674.43	639.12	35.30	19.103		
7,650.00	7,485.34	7,497.19	7,484.84	22.89	17.62	102.26	273.68	-166.03	687.02	651.36	35.66	19.266		
7,700.00	7,512.89	7,524.74	7,512.39	22.96	17.67	102.60	273.68	-166.03	702.59	666.56	36.03	19.501		
7,750.00	7,536.69	7,548.55	7,536.19	23.04	17.72	102.41	273.68	-166.03	721.24	684.84	36.40	19.815		
7,800.00	7,556.58	7,568.43	7,556.08	23.15	17.76	101.60	273.68	-166.03	742.98	706.22	36.77	20.209		
7,850.00	7,572.39	7,584.24	7,571.89	23.31	17.80	100.09	273.68	-166.03	767.70	730.58	37.12	20.683		
7,900.00	7,584.01	7,595.86	7,583.51	23.52	17.82	97.82	273.68	-166.03	795.18	757.74	37.44	21.237		
7,950.00	7,591.35	7,603.20	7,590.85	23.82	17.84	94.74	273.68	-166.03	825.13	787.39	37.74	21.864		
8,004.94	7,594.41	7,606.26	7,593.91	24.27	17.84	90.40	273.68	-166.03	860.45	822.44	38.02	22.633		
8,100.00	7,595.15	7,607.01	7,594.65	25.34	17.84	90.46	273.68	-166.03	926.20	887.77	38.42	24.105		
9,100.00	7,602.98	10,191.76	8,760.00	46.75	46.69	150.90	285.45	1,499.25	1,324.78	1,269.72	55.06	24.060		
9,200.00	7,603.76	10,291.75	8,760.00	49.26	49.20	150.88	286.16	1,599.24	1,324.10	1,266.40	57.71	22.946		
9,300.00	7,604.55	10,391.75	8,760.00	51.80	51.74	150.86	286.86	1,699.24	1,323.42	1,263.03	60.38	21.917		
9,400.00	7,605.33	10,491.75	8,760.00	54.35	54.30	150.85	287.57	1,799.23	1,322.74	1,259.64	63.10	20.964		
9,500.00	7,606.11	10,591.74	8,760.00	56.93	56.87	150.83	288.28	1,899.23	1,322.06	1,256.22	65.83	20.082		
9,600.00	7,606.89	10,691.74	8,760.00	59.52	59.47	150.81	288.98	1,999.22	1,321.37	1,252.78	68.60	19.263		
9,700.00	7,607.68	10,791.74	8,760.00	62.13	62.07	150.80	289.69	2,099.21	1,320.69	1,249.31	71.38	18.502		
9,800.00	7,608.46	10,891.73	8,760.00	64.75	64.69	150.78	290.40	2,199.21	1,320.01	1,245.83	74.19	17.793		
9,900.00	7,609.24	10,991.73	8,760.00	67.38	67.33	150.76	291.10	2,299.20	1,319.33	1,242.32	77.01	17.132		
10,000.00	7,610.02	11,091.73	8,760.00	70.02	69.97	150.75	291.81	2,399.20	1,318.65	1,238.80	79.85	16.514		
10,100.00	7,610.81	11,191.73	8,760.00	72.67	72.62	150.73	292.52	2,499.19	1,317.97	1,235.27	82.70	15.936		
10,200.00	7,611.59	11,291.72	8,760.00	75.33	75.27	150.71	293.22	2,599.19	1,317.29	1,231.72	85.57	15.394		
10,300.00	7,612.37	11,391.72	8,760.00	77.99	77.94	150.70	293.93	2,699.18	1,316.61	1,228.16	88.45	14.885		
10,400.00	7,613.15	11,491.72	8,760.00	80.67	80.61	150.68	294.64	2,799.18	1,315.93	1,224.58	91.35	14.406		
10,500.00	7,613.94	11,591.71	8,760.00	83.34	83.29	150.66	295.34	2,899.17	1,315.25	1,221.00	94.25	13.955		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Company:	Colgate Energy	Local Co-ordinate Reference:	Well Lady Franklin 25 State 123H
Project:	Eddy County, NM (N83-NME)	TVD Reference:	3335.5+26 @ 3361.50usft (Permit)
Reference Site:	Lady Franklin 25	MD Reference:	3335.5+26 @ 3361.50usft (Permit)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Lady Franklin 25 State 123H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Permit	Database:	EDM 5000.14 Single User Db
Reference Design:	APD Rev2	Offset TVD Reference:	Offset Datum

Offset Design Lady Franklin 25 - Lady Franklin 25 State 133H - Permit - Plan #1												Offset Site Error:	0.00 usft
Survey Program: 0-MWD												Offset Well Error:	0.00 usft
Reference	Offset	Semi Major Axis		Distance									
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
10,600.00	7,614.72	11,691.71	8,760.00	86.03	85.97	150.64	296.05	2,999.16	1,314.57	1,217.41	97.16	13.530	
10,700.00	7,615.50	11,791.71	8,760.00	88.71	88.66	150.63	296.76	3,099.16	1,313.89	1,213.80	100.09	13.128	
10,800.00	7,616.28	11,891.70	8,760.00	91.40	91.35	150.61	297.46	3,199.15	1,313.21	1,210.19	103.02	12.748	
10,900.00	7,617.07	11,991.70	8,760.00	94.10	94.04	150.59	298.17	3,299.15	1,312.53	1,206.57	105.96	12.387	
11,000.00	7,617.85	12,091.70	8,760.00	96.80	96.74	150.58	298.88	3,399.14	1,311.85	1,202.94	108.90	12.046	
11,100.00	7,618.63	12,191.69	8,760.00	99.50	99.44	150.56	299.58	3,499.14	1,311.17	1,199.31	111.86	11.721	
11,200.00	7,619.42	12,291.69	8,760.00	102.20	102.15	150.54	300.29	3,599.13	1,310.49	1,195.67	114.82	11.413	
11,300.00	7,620.20	12,391.69	8,760.00	104.91	104.86	150.53	301.00	3,699.13	1,309.81	1,192.02	117.79	11.120	
11,400.00	7,620.98	12,491.69	8,760.00	107.62	107.57	150.51	301.70	3,799.12	1,309.13	1,188.36	120.77	10.840	
11,500.00	7,621.76	12,591.68	8,760.00	110.33	110.28	150.49	302.41	3,899.11	1,308.45	1,184.70	123.75	10.573	
11,600.00	7,622.55	12,691.68	8,760.00	113.05	112.99	150.47	303.12	3,999.11	1,307.77	1,181.04	126.74	10.319	
11,700.00	7,623.33	12,791.68	8,760.00	115.77	115.71	150.46	303.82	4,099.10	1,307.09	1,177.36	129.73	10.075	
11,800.00	7,624.11	12,891.67	8,760.00	118.49	118.43	150.44	304.53	4,199.10	1,306.41	1,173.69	132.73	9.843	
11,900.00	7,624.89	12,991.67	8,760.00	121.21	121.15	150.42	305.24	4,299.09	1,305.74	1,170.00	135.73	9.620	
12,000.00	7,625.68	13,091.67	8,760.00	123.93	123.87	150.41	305.94	4,399.09	1,305.06	1,166.32	138.74	9.406	
12,100.00	7,626.46	13,191.66	8,760.00	126.65	126.60	150.39	306.65	4,499.08	1,304.38	1,162.62	141.76	9.202	
12,200.00	7,627.24	13,291.66	8,760.00	129.38	129.32	150.37	307.36	4,599.08	1,303.70	1,158.93	144.77	9.005	
12,300.00	7,628.02	13,391.66	8,760.00	132.11	132.05	150.36	308.06	4,699.07	1,303.02	1,155.22	147.80	8.816	
12,400.00	7,628.81	13,491.65	8,760.00	134.84	134.78	150.34	308.77	4,799.06	1,302.34	1,151.52	150.83	8.635	
12,500.00	7,629.59	13,591.65	8,760.00	137.56	137.51	150.32	309.48	4,899.06	1,301.67	1,147.81	153.86	8.460	
12,552.48	7,630.00	13,642.97	8,760.00	139.00	138.91	150.31	309.84	4,950.38	1,301.31	1,145.89	155.42	8.373	

Company:	Colgate Energy	Local Co-ordinate Reference:	Well Lady Franklin 25 State 123H
Project:	Eddy County, NM (N83-NME)	TVD Reference:	3335.5+26 @ 3361.50usft (Permit)
Reference Site:	Lady Franklin 25	MD Reference:	3335.5+26 @ 3361.50usft (Permit)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Lady Franklin 25 State 123H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Permit	Database:	EDM 5000.14 Single User Db
Reference Design:	APD Rev2	Offset TVD Reference:	Offset Datum

Offset Design Lady Franklin 25 - Lady Franklin 25 State 134H - Permit - Plan #1													Offset Site Error: 0.00 usft
Survey Program: 0-MWD													Offset Well Error: 0.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)					
1,300.00	1,299.99	1,293.68	1,293.67	2.78	2.74	-169.82	-136.11	0.36	137.44	131.92	5.52	24.899	CC, ES
1,400.00	1,399.91	1,389.90	1,389.82	3.01	2.91	-169.82	-139.63	-0.26	144.95	139.04	5.91	24.509	
1,500.00	1,499.69	1,485.39	1,485.12	3.23	3.08	-169.80	-145.48	-1.29	157.48	151.17	6.31	24.955	
9,400.00	7,605.33	10,549.07	8,755.00	54.35	54.96	120.33	-1,038.04	1,808.58	2,282.45	2,187.56	94.89	24.054	
9,500.00	7,606.11	10,649.06	8,755.00	56.93	57.51	120.31	-1,037.33	1,908.57	2,282.06	2,182.64	99.42	22.954	
9,600.00	7,606.89	10,749.06	8,755.00	59.52	60.07	120.30	-1,036.62	2,008.56	2,281.67	2,177.69	103.98	21.943	
9,700.00	7,607.68	10,849.06	8,755.00	62.13	62.65	120.28	-1,035.92	2,108.56	2,281.28	2,172.71	108.57	21.012	
9,800.00	7,608.46	10,949.06	8,755.00	64.75	65.25	120.26	-1,035.21	2,208.55	2,280.89	2,167.71	113.18	20.153	
9,900.00	7,609.24	11,049.05	8,755.00	67.38	67.86	120.25	-1,034.51	2,308.55	2,280.50	2,162.69	117.81	19.358	
10,000.00	7,610.02	11,149.05	8,755.00	70.02	70.48	120.23	-1,033.80	2,408.54	2,280.11	2,157.65	122.46	18.620	
10,100.00	7,610.81	11,249.05	8,755.00	72.67	73.11	120.21	-1,033.10	2,508.54	2,279.72	2,152.60	127.12	17.933	
10,200.00	7,611.59	11,349.04	8,755.00	75.33	75.75	120.20	-1,032.39	2,608.53	2,279.33	2,147.53	131.80	17.294	
10,300.00	7,612.37	11,449.04	8,755.00	77.99	78.39	120.18	-1,031.69	2,708.53	2,278.94	2,142.45	136.49	16.696	
10,400.00	7,613.15	11,549.04	8,755.00	80.67	81.05	120.16	-1,030.98	2,808.52	2,278.55	2,137.36	141.20	16.137	
10,500.00	7,613.94	11,649.03	8,755.00	83.34	83.71	120.14	-1,030.27	2,908.51	2,278.17	2,132.25	145.91	15.613	
10,600.00	7,614.72	11,749.03	8,755.00	86.03	86.38	120.13	-1,029.57	3,008.51	2,277.78	2,127.14	150.64	15.121	
10,700.00	7,615.50	11,849.03	8,755.00	88.71	89.05	120.11	-1,028.86	3,108.50	2,277.39	2,122.01	155.38	14.657	
10,800.00	7,616.28	11,949.03	8,755.00	91.40	91.73	120.09	-1,028.16	3,208.50	2,277.00	2,116.88	160.12	14.221	
10,900.00	7,617.07	12,049.02	8,755.00	94.10	94.41	120.08	-1,027.45	3,308.49	2,276.61	2,111.74	164.87	13.808	
11,000.00	7,617.85	12,149.02	8,755.00	96.80	97.10	120.06	-1,026.75	3,408.49	2,276.23	2,106.59	169.63	13.419	
11,100.00	7,618.63	12,249.02	8,755.00	99.50	99.79	120.04	-1,026.04	3,508.48	2,275.84	2,101.44	174.40	13.050	
11,200.00	7,619.42	12,349.01	8,755.00	102.20	102.49	120.02	-1,025.34	3,608.48	2,275.45	2,096.28	179.17	12.700	
11,300.00	7,620.20	12,449.01	8,755.00	104.91	105.19	120.01	-1,024.63	3,708.47	2,275.06	2,091.11	183.95	12.368	
11,400.00	7,620.98	12,549.01	8,755.00	107.62	107.89	119.99	-1,023.93	3,808.46	2,274.68	2,085.94	188.74	12.052	
11,500.00	7,621.76	12,649.00	8,755.00	110.33	110.59	119.97	-1,023.22	3,908.46	2,274.29	2,080.76	193.53	11.752	
11,600.00	7,622.55	12,749.00	8,755.00	113.05	113.30	119.96	-1,022.51	4,008.45	2,273.91	2,075.58	198.33	11.465	
11,700.00	7,623.33	12,849.00	8,755.00	115.77	116.01	119.94	-1,021.81	4,108.45	2,273.52	2,070.39	203.13	11.192	
11,800.00	7,624.11	12,948.99	8,755.00	118.49	118.72	119.92	-1,021.10	4,208.44	2,273.13	2,065.20	207.94	10.932	
11,900.00	7,624.89	13,048.99	8,755.00	121.21	121.44	119.90	-1,020.40	4,308.44	2,272.75	2,060.00	212.75	10.683	
12,000.00	7,625.68	13,148.99	8,755.00	123.93	124.15	119.89	-1,019.69	4,408.43	2,272.36	2,054.80	217.56	10.445	
12,100.00	7,626.46	13,248.99	8,755.00	126.65	126.87	119.87	-1,018.99	4,508.43	2,271.98	2,049.59	222.38	10.217	
12,200.00	7,627.24	13,348.98	8,755.00	129.38	129.59	119.85	-1,018.28	4,608.42	2,271.59	2,044.39	227.21	9.998	
12,300.00	7,628.02	13,448.98	8,755.00	132.11	132.31	119.84	-1,017.58	4,708.41	2,271.21	2,039.17	232.03	9.788	
12,400.00	7,628.81	13,548.98	8,755.00	134.84	135.03	119.82	-1,016.87	4,808.41	2,270.82	2,033.96	236.86	9.587	
12,500.00	7,629.59	13,648.97	8,755.00	137.56	137.76	119.80	-1,016.16	4,908.40	2,270.44	2,028.74	241.70	9.394	
12,552.48	7,630.00	13,697.85	8,755.00	139.00	139.09	119.79	-1,015.82	4,957.28	2,270.24	2,026.09	244.15	9.298	SF

Company:	Colgate Energy	Local Co-ordinate Reference:	Well Lady Franklin 25 State 123H
Project:	Eddy County, NM (N83-NME)	TVD Reference:	3335.5+26 @ 3361.50usft (Permit)
Reference Site:	Lady Franklin 25	MD Reference:	3335.5+26 @ 3361.50usft (Permit)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Lady Franklin 25 State 123H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Permit	Database:	EDM 5000.14 Single User Db
Reference Design:	APD Rev2	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 200-INC-ONLY, 11360-INC-ONLY													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
4,000.00	3,954.92	3,907.80	3,907.48	12.17	76.76	133.20	-710.40	1,705.67	2,145.80	2,058.17	87.63	24.487		
4,100.00	4,052.96	4,001.88	4,001.55	12.58	79.03	133.57	-711.03	1,705.67	2,159.86	2,069.64	90.22	23.940		
4,200.00	4,150.99	4,109.97	4,109.49	12.98	81.96	133.98	-711.14	1,705.67	2,173.69	2,080.22	93.48	23.254		
4,300.00	4,249.03	4,193.73	4,193.22	13.39	84.28	134.29	-710.61	1,705.67	2,187.33	2,091.23	96.10	22.761		
4,400.00	4,347.06	4,306.18	4,305.56	13.80	87.60	134.72	-711.14	1,705.67	2,201.55	2,101.80	99.74	22.072		
4,500.00	4,445.10	4,393.40	4,392.76	14.20	90.26	135.02	-710.41	1,705.67	2,215.21	2,112.50	102.71	21.567		
4,600.00	4,543.13	4,494.21	4,493.39	14.61	93.57	135.39	-710.75	1,705.67	2,229.54	2,123.20	106.35	20.965		
4,700.00	4,641.17	4,600.69	4,599.67	15.02	97.66	135.78	-711.14	1,705.67	2,243.98	2,133.23	110.75	20.262		
4,800.00	4,739.20	4,697.07	4,695.91	15.43	101.58	136.10	-710.38	1,705.67	2,257.85	2,142.86	114.98	19.637		
4,900.00	4,837.24	4,781.52	4,780.14	15.84	105.09	136.40	-710.71	1,705.67	2,272.49	2,153.70	118.79	19.130		
5,000.00	4,935.28	4,895.13	4,893.56	16.25	109.41	136.80	-710.75	1,705.67	2,286.92	2,163.49	123.43	18.528		
5,100.00	5,033.31	4,993.53	4,991.81	16.66	112.97	137.14	-711.14	1,705.67	2,301.71	2,174.42	127.29	18.082		
5,200.00	5,131.35	5,091.66	5,089.85	17.07	116.30	137.47	-711.14	1,705.67	2,316.34	2,185.40	130.94	17.691		
5,300.00	5,229.38	5,172.30	5,170.46	17.48	118.99	137.72	-710.67	1,705.67	2,330.82	2,196.90	133.92	17.405		
5,400.00	5,327.42	5,271.71	5,269.76	17.89	122.16	138.05	-710.76	1,705.67	2,345.64	2,208.24	137.39	17.073		
5,500.00	5,425.45	5,377.28	5,375.26	18.30	125.13	138.39	-710.66	1,705.67	2,360.38	2,219.71	140.67	16.779		
5,600.00	5,523.49	5,484.05	5,481.99	18.71	127.84	138.74	-711.14	1,705.67	2,375.58	2,231.90	143.69	16.533		
5,700.00	5,621.52	5,569.06	5,566.98	19.12	129.90	139.00	-710.80	1,705.67	2,390.40	2,244.36	146.04	16.368		
5,800.00	5,719.56	5,680.18	5,678.06	19.53	132.42	139.36	-711.14	1,705.67	2,405.63	2,256.76	148.87	16.160		
5,900.00	5,817.60	5,772.29	5,770.16	19.95	134.46	139.63	-710.53	1,705.67	2,420.37	2,269.17	151.20	16.007		
5,929.59	5,846.60	5,797.88	5,795.74	20.07	135.02	139.71	-710.66	1,705.67	2,424.95	2,273.10	151.85	15.969		
6,000.00	5,915.76	5,876.42	5,874.26	20.32	136.83	140.05	-711.14	1,705.67	2,435.45	2,281.61	153.85	15.830		
6,100.00	6,014.36	5,975.03	5,972.86	20.63	139.31	140.42	-711.14	1,705.67	2,448.30	2,291.75	156.56	15.638		
6,200.00	6,113.37	6,067.55	6,065.37	20.90	141.64	140.71	-710.64	1,705.67	2,458.88	2,299.78	159.10	15.455		
6,300.00	6,212.71	6,173.48	6,171.21	21.15	144.43	140.98	-711.14	1,705.67	2,468.09	2,306.00	162.09	15.227		
6,400.00	6,312.31	6,257.51	6,255.22	21.36	146.90	141.15	-710.70	1,705.67	2,474.73	2,310.01	164.73	15.023		
6,500.00	6,412.12	6,368.39	6,366.02	21.55	150.08	141.30	-710.57	1,705.67	2,479.46	2,311.38	168.08	14.751		
6,600.00	6,512.05	6,472.98	6,470.55	21.71	152.89	141.39	-711.14	1,705.67	2,482.65	2,311.59	171.06	14.513		
6,687.96	6,600.00	6,546.75	6,544.30	21.83	154.75	130.99	-710.74	1,705.67	2,483.22	2,310.18	173.04	14.351		
6,700.00	6,612.04	6,555.87	6,553.42	21.84	154.98	130.99	-710.83	1,705.67	2,483.30	2,310.01	173.28	14.331		
6,800.00	6,712.04	6,673.03	6,670.54	21.99	157.75	130.99	-711.14	1,705.67	2,483.44	2,307.21	176.23	14.092		
6,826.54	6,738.59	6,698.24	6,695.75	22.02	158.33	130.98	-710.54	1,705.67	2,483.05	2,306.19	176.86	14.040		
6,900.00	6,812.04	6,761.50	6,759.00	22.13	159.79	130.99	-710.79	1,705.67	2,483.24	2,304.80	178.44	13.916		
7,000.00	6,912.04	6,873.08	6,870.54	22.28	162.45	130.99	-711.14	1,705.67	2,483.44	2,302.16	181.28	13.699		
7,109.43	7,021.47	6,972.44	6,969.89	22.44	164.86	130.99	-710.73	1,705.67	2,483.20	2,299.33	183.87	13.505		
7,136.33	7,048.36	6,995.60	6,993.04	22.48	165.42	41.43	-710.90	1,705.67	2,482.85	2,298.38	184.48	13.459		
7,150.00	7,062.01	7,023.11	7,020.51	22.49	166.09	41.50	-711.14	1,705.67	2,482.37	2,297.19	185.18	13.405		
7,200.00	7,111.67	7,072.77	7,070.17	22.55	167.39	41.87	-711.14	1,705.67	2,478.09	2,291.51	186.58	13.282		
7,250.00	7,160.64	7,121.74	7,119.14	22.60	168.68	42.53	-711.14	1,705.67	2,470.60	2,282.63	187.97	13.143		
7,300.00	7,208.55	7,163.21	7,160.60	22.65	169.77	43.45	-710.49	1,705.67	2,459.55	2,270.37	189.18	13.001		
7,350.00	7,255.04	7,202.17	7,199.55	22.68	170.79	44.67	-710.73	1,705.67	2,446.10	2,255.78	190.33	12.852		
7,400.00	7,299.75	7,260.94	7,258.25	22.72	172.38	46.38	-711.14	1,705.67	2,429.82	2,237.75	192.07	12.651		
7,450.00	7,342.34	7,300.86	7,298.17	22.75	173.52	48.29	-710.72	1,705.67	2,410.33	2,216.96	193.36	12.465		
7,500.00	7,382.49	7,328.52	7,325.82	22.78	174.30	50.44	-710.88	1,705.67	2,388.77	2,194.45	194.31	12.293		
7,550.00	7,419.89	7,381.14	7,378.39	22.81	175.79	53.33	-711.14	1,705.67	2,364.93	2,168.91	196.02	12.065		
7,600.00	7,454.26	7,415.51	7,412.76	22.85	176.77	56.40	-711.14	1,705.67	2,338.95	2,141.72	197.23	11.859		
7,650.00	7,485.34	7,438.90	7,436.14	22.89	177.44	59.66	-710.57	1,705.67	2,310.86	2,112.71	198.15	11.662		
7,700.00	7,512.89	7,458.50	7,455.73	22.96	177.99	63.24	-710.71	1,705.67	2,281.84	2,082.84	199.00	11.466		
7,750.00	7,536.69	7,498.02	7,495.19	23.04	179.11	67.69	-711.14	1,705.67	2,251.80	2,051.31	200.48	11.232		
7,800.00	7,556.58	7,517.90	7,515.08	23.15	179.68	71.98	-711.14	1,705.67	2,220.68	2,019.23	201.45	11.024		
7,850.00	7,572.39	7,533.71	7,530.89	23.31	180.13	76.39	-711.14	1,705.67	2,189.04	1,986.70	202.34	10.818		
7,900.00	7,584.01	7,545.33	7,542.51	23.52	180.46	80.82	-711.14	1,705.67	2,157.21	1,954.03	203.18	10.617		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Company:	Colgate Energy	Local Co-ordinate Reference:	Well Lady Franklin 25 State 123H
Project:	Eddy County, NM (N83-NME)	TVD Reference:	3335.5+26 @ 3361.50usft (Permit)
Reference Site:	Lady Franklin 25	MD Reference:	3335.5+26 @ 3361.50usft (Permit)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Lady Franklin 25 State 123H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Permit	Database:	EDM 5000.14 Single User Db
Reference Design:	APD Rev2	Offset TVD Reference:	Offset Datum

Offset Design		Lady Franklin 25 - Offset-Exxon State 1H - OH - OH											Offset Site Error:		0.00 usft
Survey Program:		200-INC-ONLY, 11360-INC-ONLY											Offset Well Error:		0.00 usft
Reference		Offset		Semi Major Axis			Distance							Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor			
7,950.00	7,591.35	7,552.67	7,549.85	23.82	180.67	85.14	-711.14	1,705.67	2,125.49	1,921.54	203.95	10.422			
8,004.94	7,594.41	7,555.73	7,552.91	24.27	180.75	89.65	-711.14	1,705.67	2,091.11	1,886.40	204.71	10.215			
8,100.00	7,595.15	7,556.48	7,553.65	25.34	180.78	89.67	-711.14	1,705.67	2,033.65	1,827.61	206.03	9.871			
8,200.00	7,595.94	7,557.26	7,554.44	26.82	180.80	89.70	-711.14	1,705.67	1,976.33	1,768.71	207.61	9.519			
8,300.00	7,596.72	7,558.04	7,555.22	28.58	180.82	89.73	-711.14	1,705.67	1,922.50	1,713.12	209.38	9.182			
8,400.00	7,597.50	7,558.83	7,556.00	30.52	180.84	89.75	-711.14	1,705.67	1,872.48	1,661.15	211.32	8.861			
8,500.00	7,598.28	7,559.61	7,556.78	32.61	180.86	89.78	-711.14	1,705.67	1,826.56	1,613.14	213.41	8.559			
8,600.00	7,599.07	7,560.39	7,557.57	34.81	180.89	89.81	-711.14	1,705.67	1,785.07	1,569.43	215.63	8.278			
8,700.00	7,599.85	7,561.17	7,558.35	37.09	180.91	89.84	-711.14	1,705.67	1,748.31	1,530.36	217.96	8.021			
8,800.00	7,600.63	7,561.96	7,559.13	39.43	180.93	89.86	-711.14	1,705.67	1,716.61	1,496.26	220.35	7.790			
8,900.00	7,601.42	7,562.74	7,559.92	41.83	180.95	89.89	-711.14	1,705.67	1,690.23	1,467.45	222.78	7.587			
9,000.00	7,602.20	7,563.52	7,560.70	44.27	180.98	89.92	-711.14	1,705.67	1,669.44	1,444.23	225.21	7.413			
9,100.00	7,602.98	7,564.30	7,561.48	46.75	181.00	89.95	-711.14	1,705.67	1,654.44	1,426.84	227.60	7.269			
9,200.00	7,603.76	7,565.09	7,562.26	49.26	181.02	89.97	-711.14	1,705.67	1,645.39	1,415.48	229.91	7.157			
9,299.32	7,604.54	7,565.86	7,563.04	51.78	181.04	90.00	-711.14	1,705.67	1,642.39	1,410.30	232.09	7.077 CC			
9,300.00	7,604.55	7,565.87	7,563.05	51.80	181.04	90.00	-711.14	1,705.67	1,642.39	1,410.29	232.10	7.076 ES			
9,400.00	7,605.33	7,566.65	7,563.83	54.35	181.06	90.03	-711.14	1,705.67	1,645.47	1,411.32	234.15	7.027			
9,500.00	7,606.11	7,567.43	7,564.61	56.93	181.09	90.05	-711.14	1,705.67	1,654.60	1,418.58	236.03	7.010 SF			
9,600.00	7,606.89	7,568.22	7,565.39	59.52	181.11	90.08	-711.14	1,705.67	1,669.69	1,431.97	237.71	7.024			
9,700.00	7,607.68	7,569.00	7,566.18	62.13	181.13	90.11	-711.14	1,705.67	1,690.56	1,451.36	239.20	7.068			
9,800.00	7,608.46	7,569.78	7,566.96	64.75	181.15	90.14	-711.14	1,705.67	1,717.01	1,476.53	240.48	7.140			
9,900.00	7,609.24	7,570.56	7,567.74	67.38	181.18	90.16	-711.14	1,705.67	1,748.78	1,507.22	241.57	7.239			
10,000.00	7,610.02	7,571.35	7,568.52	70.02	181.20	90.19	-711.14	1,705.67	1,785.60	1,543.14	242.46	7.365			
10,100.00	7,610.81	7,572.13	7,569.31	72.67	181.22	90.22	-711.14	1,705.67	1,827.16	1,583.98	243.17	7.514			
10,200.00	7,611.59	7,572.91	7,570.09	75.33	181.24	90.25	-711.14	1,705.67	1,873.13	1,629.41	243.72	7.685			
10,300.00	7,612.37	7,573.70	7,570.87	77.99	181.26	90.27	-711.14	1,705.67	1,923.21	1,679.09	244.13	7.878			
10,400.00	7,613.15	7,574.48	7,571.65	80.67	181.29	90.30	-711.14	1,705.67	1,977.09	1,732.68	244.41	8.089			
10,500.00	7,613.94	7,575.26	7,572.44	83.34	181.31	90.33	-711.14	1,705.67	2,034.45	1,789.88	244.57	8.318			
10,600.00	7,614.72	7,576.04	7,573.22	86.03	181.33	90.36	-711.14	1,705.67	2,095.02	1,850.38	244.65	8.564			
10,700.00	7,615.50	7,576.83	7,574.00	88.71	181.35	90.38	-711.14	1,705.67	2,158.53	1,913.89	244.64	8.823			
10,800.00	7,616.28	7,577.61	7,574.78	91.40	181.38	90.41	-711.14	1,705.67	2,224.72	1,980.15	244.56	9.097			
10,900.00	7,617.07	7,578.39	7,575.57	94.10	181.40	90.44	-711.14	1,705.67	2,293.36	2,048.92	244.43	9.382			
11,000.00	7,617.85	7,579.17	7,576.35	96.80	181.42	90.46	-711.14	1,705.67	2,364.23	2,119.97	244.26	9.679			
11,100.00	7,618.63	7,579.96	7,577.13	99.50	181.44	90.49	-711.14	1,705.67	2,437.15	2,193.10	244.05	9.986			
11,200.00	7,619.42	7,580.74	7,577.92	102.20	181.46	90.52	-711.14	1,705.67	2,511.94	2,268.12	243.82	10.303			
11,300.00	7,620.20	7,581.52	7,578.70	104.91	181.49	90.55	-711.14	1,705.67	2,588.42	2,344.86	243.56	10.627			
11,400.00	7,620.98	7,582.30	7,579.48	107.62	181.51	90.57	-711.14	1,705.67	2,666.47	2,423.18	243.29	10.960			
11,500.00	7,621.76	7,583.09	7,580.26	110.33	181.53	90.60	-711.14	1,705.67	2,745.94	2,502.93	243.01	11.300			
11,600.00	7,622.55	7,583.87	7,581.05	113.05	181.55	90.63	-711.14	1,705.67	2,826.71	2,583.99	242.72	11.646			
11,700.00	7,623.33	7,584.65	7,581.83	115.77	181.58	90.66	-711.14	1,705.67	2,908.67	2,666.25	242.42	11.998			
11,800.00	7,624.11	7,585.33	7,582.50	118.49	181.60	90.68	-710.41	1,705.67	2,991.33	2,749.23	242.11	12.356			
11,900.00	7,624.89	7,585.95	7,583.12	121.21	181.61	90.70	-710.41	1,705.67	3,075.42	2,833.61	241.81	12.719			
12,000.00	7,625.68	7,586.57	7,583.73	123.93	181.63	90.72	-710.41	1,705.67	3,160.43	2,918.92	241.51	13.086			
12,100.00	7,626.46	7,587.19	7,584.35	126.65	181.65	90.74	-710.41	1,705.67	3,246.29	3,005.07	241.22	13.458			
12,200.00	7,627.24	7,587.80	7,584.97	129.38	181.67	90.77	-710.41	1,705.67	3,332.94	3,092.01	240.93	13.834			
12,300.00	7,628.02	7,588.42	7,585.59	132.11	181.68	90.79	-710.42	1,705.67	3,420.32	3,179.68	240.64	14.213			
12,400.00	7,628.81	7,589.04	7,586.20	134.84	181.70	90.81	-710.42	1,705.67	3,508.37	3,268.01	240.37	14.596			
12,500.00	7,629.59	7,589.66	7,586.82	137.56	181.72	90.83	-710.42	1,705.67	3,597.05	3,356.96	240.10	14.982			
12,552.48	7,630.00	7,589.98	7,587.14	139.00	181.73	90.84	-710.42	1,705.67	3,643.83	3,403.87	239.96	15.185			

Company:	Colgate Energy	Local Co-ordinate Reference:	Well Lady Franklin 25 State 123H
Project:	Eddy County, NM (N83-NME)	TVD Reference:	3335.5+26 @ 3361.50usft (Permit)
Reference Site:	Lady Franklin 25	MD Reference:	3335.5+26 @ 3361.50usft (Permit)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Lady Franklin 25 State 123H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Permit	Database:	EDM 5000.14 Single User Db
Reference Design:	APD Rev2	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 350-INC-ONLY													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
3,900.00	3,856.89	3,881.05	3,880.17	11.77	86.42	64.58	1,883.76	1,863.12	2,416.92	2,319.18	97.74	24.727		
4,000.00	3,954.92	3,965.59	3,964.60	12.17	88.80	64.94	1,883.78	1,863.12	2,408.28	2,307.75	100.53	23.956		
4,100.00	4,052.96	4,055.29	4,054.26	12.58	91.40	65.33	1,883.46	1,863.12	2,399.65	2,296.12	103.53	23.179		
4,200.00	4,150.99	4,184.61	4,183.52	12.98	95.19	65.90	1,882.97	1,863.12	2,391.26	2,283.56	107.70	22.203		
4,300.00	4,249.03	4,251.47	4,250.33	13.39	97.16	66.18	1,883.46	1,863.12	2,383.18	2,273.09	110.08	21.649		
4,400.00	4,347.06	4,362.60	4,361.43	13.80	100.43	66.65	1,884.24	1,863.12	2,375.62	2,261.87	113.75	20.885		
4,500.00	4,445.10	4,447.70	4,446.40	14.20	102.90	67.04	1,883.46	1,863.12	2,367.25	2,250.62	116.63	20.297		
4,600.00	4,543.13	4,545.73	4,544.43	14.61	105.69	67.47	1,883.46	1,863.12	2,359.49	2,239.67	119.82	19.691		
4,700.00	4,641.17	4,659.76	4,658.42	15.02	108.93	67.97	1,884.06	1,863.12	2,352.26	2,228.79	123.47	19.052		
4,800.00	4,739.20	4,741.95	4,740.50	15.43	111.17	68.35	1,883.46	1,863.12	2,344.40	2,218.27	126.13	18.587		
4,900.00	4,837.24	4,839.99	4,838.54	15.84	113.75	68.79	1,883.46	1,863.12	2,337.07	2,207.95	129.12	18.100		
5,000.00	4,935.28	4,950.59	4,949.11	16.25	116.66	69.28	1,884.09	1,863.12	2,330.25	2,197.81	132.44	17.595		
5,100.00	5,033.31	5,036.18	5,034.61	16.66	118.88	69.68	1,883.46	1,863.12	2,322.84	2,187.77	135.07	17.197		
5,200.00	5,131.35	5,134.22	5,132.65	17.07	121.35	70.13	1,883.46	1,863.12	2,315.94	2,177.98	137.96	16.787		
5,300.00	5,229.38	5,233.17	5,231.58	17.48	123.85	70.55	1,884.90	1,863.12	2,309.92	2,169.04	140.88	16.397		
5,400.00	5,327.42	5,338.39	5,336.79	17.89	126.51	71.05	1,884.49	1,863.12	2,303.12	2,159.16	143.95	15.999		
5,500.00	5,425.45	5,443.37	5,441.76	18.30	129.16	71.56	1,883.42	1,863.12	2,296.17	2,149.15	147.02	15.618		
5,600.00	5,523.49	5,526.51	5,524.79	18.71	131.26	71.95	1,883.46	1,863.12	2,289.85	2,140.30	149.55	15.312		
5,700.00	5,621.52	5,626.67	5,624.93	19.12	133.79	72.40	1,884.50	1,863.12	2,284.20	2,131.70	152.50	14.979		
5,800.00	5,719.56	5,733.92	5,732.17	19.53	136.50	72.92	1,883.83	1,863.12	2,277.91	2,122.29	155.63	14.637		
5,900.00	5,817.60	5,820.73	5,818.90	19.95	138.51	73.35	1,883.46	1,863.12	2,271.88	2,113.81	158.07	14.373		
5,929.59	5,846.60	5,849.73	5,847.90	20.07	139.15	73.48	1,883.46	1,863.12	2,270.18	2,111.35	158.83	14.293		
6,000.00	5,915.76	5,918.89	5,917.06	20.32	140.68	73.75	1,883.46	1,863.12	2,266.38	2,105.76	160.62	14.110		
6,100.00	6,014.36	6,021.01	6,019.16	20.63	142.93	74.06	1,884.70	1,863.12	2,262.27	2,099.08	163.18	13.863		
6,200.00	6,113.37	6,126.84	6,124.98	20.90	145.26	74.38	1,883.97	1,863.12	2,258.11	2,092.31	165.80	13.620		
6,300.00	6,212.71	6,215.92	6,214.01	21.15	147.13	74.59	1,883.46	1,863.12	2,254.78	2,086.86	167.92	13.427		
6,400.00	6,312.31	6,315.53	6,313.61	21.36	149.12	74.78	1,883.46	1,863.12	2,252.44	2,082.30	170.14	13.239		
6,500.00	6,412.12	6,415.74	6,413.82	21.55	151.12	74.89	1,884.22	1,863.12	2,251.13	2,078.80	172.33	13.063		
6,600.00	6,512.05	6,518.49	6,516.57	21.71	153.17	74.97	1,884.02	1,863.12	2,250.11	2,075.57	174.54	12.891		
6,687.96	6,600.00	6,608.93	6,607.01	21.83	154.98	74.58	1,883.61	1,863.12	2,249.67	2,073.21	176.47	12.748		
6,700.00	6,612.04	6,621.31	6,619.39	21.84	155.22	74.58	1,883.53	1,863.12	2,249.64	2,072.91	176.73	12.729		
6,716.66	6,628.70	6,638.44	6,636.52	21.87	155.56	74.59	1,883.42	1,863.12	2,249.60	2,072.50	177.10	12.703		
6,800.00	6,712.04	6,715.31	6,713.34	21.99	157.19	74.58	1,883.46	1,863.12	2,249.61	2,070.76	178.84	12.579		
6,900.00	6,812.04	6,815.31	6,813.34	22.13	159.30	74.58	1,883.46	1,863.12	2,249.61	2,068.51	181.10	12.422		
7,000.00	6,912.04	6,917.84	6,915.87	22.28	161.45	74.56	1,884.34	1,863.12	2,249.98	2,066.58	183.40	12.268		
7,109.43	7,021.47	7,031.66	7,029.68	22.44	163.85	74.58	1,883.78	1,863.12	2,249.75	2,063.79	185.96	12.098		
7,150.00	7,062.01	7,073.83	7,071.84	22.49	164.74	-25.09	1,883.45	1,863.12	2,248.31	2,061.41	186.90	12.029		
7,200.00	7,111.67	7,115.00	7,112.97	22.55	165.61	-25.36	1,883.46	1,863.12	2,243.13	2,055.32	187.82	11.943		
7,250.00	7,160.64	7,163.97	7,161.94	22.60	166.64	-25.87	1,883.46	1,863.12	2,234.07	2,045.19	188.87	11.828		
7,300.00	7,208.55	7,211.88	7,209.85	22.65	167.65	-26.62	1,883.46	1,863.12	2,221.19	2,031.30	189.89	11.697		
7,350.00	7,255.04	7,258.37	7,256.34	22.68	168.63	-27.64	1,883.46	1,863.12	2,204.60	2,013.75	190.85	11.551		
7,400.00	7,299.75	7,303.08	7,301.05	22.72	169.57	-28.95	1,883.46	1,863.12	2,184.46	1,992.71	191.76	11.392		
7,450.00	7,342.34	7,345.67	7,343.64	22.75	170.47	-30.61	1,883.46	1,863.12	2,160.94	1,968.34	192.60	11.220		
7,500.00	7,382.49	7,386.25	7,384.21	22.78	171.32	-32.70	1,884.77	1,863.12	2,134.84	1,941.46	193.38	11.040		
7,550.00	7,419.89	7,424.75	7,422.70	22.81	172.14	-35.24	1,884.73	1,863.12	2,105.20	1,911.10	194.10	10.846		
7,600.00	7,454.26	7,460.12	7,458.07	22.85	172.88	-38.32	1,884.65	1,863.12	2,072.86	1,878.13	194.74	10.644		
7,650.00	7,485.34	7,492.10	7,490.05	22.89	173.56	-42.07	1,884.55	1,863.12	2,038.12	1,842.84	195.29	10.436		
7,700.00	7,512.89	7,520.45	7,518.40	22.96	174.15	-46.56	1,884.44	1,863.12	2,001.29	1,805.54	195.75	10.224		
7,750.00	7,536.69	7,544.95	7,542.90	23.04	174.67	-51.90	1,884.33	1,863.12	1,962.69	1,766.56	196.13	10.007		
7,800.00	7,556.58	7,565.42	7,563.36	23.15	175.10	-58.12	1,884.22	1,863.12	1,922.66	1,726.24	196.42	9.789		
7,850.00	7,572.39	7,581.69	7,579.64	23.31	175.44	-65.18	1,884.12	1,863.12	1,881.56	1,684.94	196.62	9.570		
7,900.00	7,584.01	7,593.65	7,591.59	23.52	175.70	-72.90	1,884.04	1,863.12	1,839.74	1,643.00	196.74	9.351		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

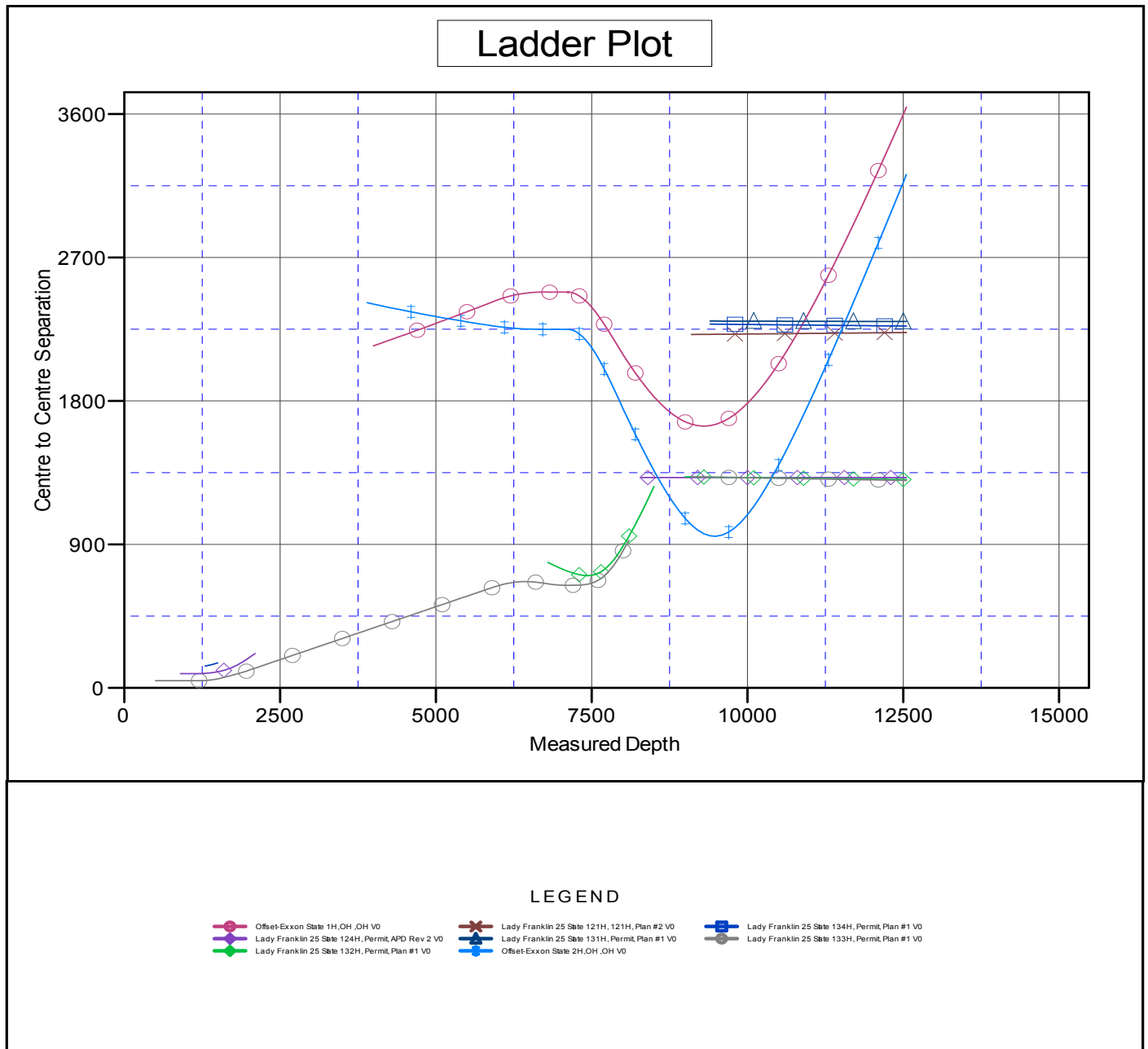
Company:	Colgate Energy	Local Co-ordinate Reference:	Well Lady Franklin 25 State 123H
Project:	Eddy County, NM (N83-NME)	TVD Reference:	3335.5+26 @ 3361.50usft (Permit)
Reference Site:	Lady Franklin 25	MD Reference:	3335.5+26 @ 3361.50usft (Permit)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Lady Franklin 25 State 123H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Permit	Database:	EDM 5000.14 Single User Db
Reference Design:	APD Rev2	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 350-INC-ONLY													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
7,950.00	7,591.35	7,601.20	7,599.14	23.82	175.85	-80.96	1,884.00	1,863.12	1,797.59	1,600.80	196.78	9.135		
8,004.94	7,594.41	7,604.35	7,602.29	24.27	175.92	-89.70	1,883.97	1,863.12	1,751.29	1,554.54	196.75	8.901		
8,100.00	7,595.15	7,605.11	7,603.05	25.34	175.94	-89.75	1,883.97	1,863.12	1,672.29	1,475.59	196.70	8.502		
8,200.00	7,595.94	7,605.91	7,603.85	26.82	175.95	-89.80	1,883.96	1,863.12	1,591.07	1,394.21	196.86	8.082		
8,300.00	7,596.72	7,606.71	7,604.65	28.58	175.97	-89.85	1,883.96	1,863.12	1,512.11	1,314.80	197.31	7.664		
8,400.00	7,597.50	7,607.51	7,605.45	30.52	175.99	-89.89	1,883.95	1,863.12	1,435.77	1,237.65	198.12	7.247		
8,500.00	7,598.28	7,608.31	7,606.25	32.61	176.00	-89.94	1,883.95	1,863.12	1,362.50	1,163.15	199.35	6.835		
8,600.00	7,599.07	7,609.11	7,607.05	34.81	176.02	-89.99	1,883.94	1,863.12	1,292.81	1,091.75	201.06	6.430		
8,700.00	7,599.85	7,609.91	7,607.85	37.09	176.04	-90.04	1,883.94	1,863.12	1,227.32	1,024.05	203.27	6.038		
8,800.00	7,600.63	7,610.71	7,608.65	39.43	176.06	-90.09	1,883.93	1,863.12	1,166.73	960.74	205.99	5.664		
8,900.00	7,601.42	7,611.51	7,609.45	41.83	176.07	-90.13	1,883.92	1,863.12	1,111.86	902.65	209.20	5.315		
9,000.00	7,602.20	7,612.31	7,610.25	44.27	176.09	-90.18	1,883.92	1,863.12	1,063.57	850.73	212.83	4.997		
9,100.00	7,602.98	7,613.11	7,611.05	46.75	176.11	-90.23	1,883.91	1,863.12	1,022.81	806.02	216.79	4.718		
9,200.00	7,603.76	7,613.91	7,611.85	49.26	176.12	-90.28	1,883.91	1,863.12	990.50	769.57	220.92	4.483		
9,300.00	7,604.55	7,614.71	7,613.65	51.80	176.14	-90.33	1,883.90	1,863.12	967.49	742.42	225.07	4.299		
9,400.00	7,605.33	7,615.51	7,613.45	54.35	176.16	-90.38	1,883.90	1,863.12	954.45	725.43	229.02	4.167		
9,475.27	7,605.92	7,616.11	7,614.06	56.29	176.17	-90.41	1,883.89	1,863.12	951.48	719.71	231.77	4.105 CC		
9,500.00	7,606.11	7,616.31	7,614.25	56.93	176.17	-90.42	1,883.89	1,863.12	951.80	719.19	232.61	4.092 ES		
9,600.00	7,606.89	7,617.11	7,615.05	59.52	176.19	-90.47	1,883.88	1,863.12	959.62	723.95	235.67	4.072 SF		
9,700.00	7,607.68	7,617.91	7,615.85	62.13	176.21	-90.52	1,883.88	1,863.12	977.66	739.53	238.13	4.106		
9,800.00	7,608.46	7,618.71	7,616.65	64.75	176.22	-90.57	1,883.87	1,863.12	1,005.37	765.41	239.96	4.190		
9,900.00	7,609.24	7,619.51	7,617.45	67.38	176.24	-90.62	1,883.87	1,863.12	1,041.97	800.78	241.19	4.320		
10,000.00	7,610.02	7,620.31	7,618.25	70.02	176.26	-90.66	1,883.86	1,863.12	1,086.58	844.66	241.91	4.492		
10,100.00	7,610.81	7,621.11	7,619.05	72.67	176.27	-90.71	1,883.86	1,863.12	1,138.24	896.03	242.21	4.699		
10,200.00	7,611.59	7,621.91	7,619.85	75.33	176.29	-90.76	1,883.85	1,863.12	1,196.05	953.87	242.17	4.939		
10,300.00	7,612.37	7,622.71	7,620.65	77.99	176.31	-90.81	1,883.84	1,863.12	1,259.15	1,017.26	241.89	5.205		
10,400.00	7,613.15	7,623.51	7,621.45	80.67	176.33	-90.86	1,883.84	1,863.12	1,326.80	1,085.36	241.44	5.495		
10,500.00	7,613.94	7,624.31	7,622.25	83.34	176.34	-90.91	1,883.83	1,863.12	1,398.33	1,157.45	240.88	5.805		
10,600.00	7,614.72	7,625.11	7,623.05	86.03	176.36	-90.95	1,883.83	1,863.12	1,473.18	1,232.94	240.24	6.132		
10,700.00	7,615.50	7,625.91	7,623.85	88.71	176.38	-91.00	1,883.82	1,863.12	1,550.87	1,311.30	239.57	6.474		
10,800.00	7,616.28	7,626.71	7,624.65	91.40	176.39	-91.05	1,883.81	1,863.12	1,630.99	1,392.11	238.88	6.828		
10,900.00	7,617.07	7,627.51	7,625.45	94.10	176.41	-91.10	1,883.81	1,863.12	1,713.20	1,475.01	238.20	7.192		
11,000.00	7,617.85	7,628.31	7,626.25	96.80	176.43	-91.15	1,883.80	1,863.12	1,797.22	1,559.70	237.52	7.567		
11,100.00	7,618.63	7,629.11	7,627.05	99.50	176.44	-91.19	1,883.80	1,863.12	1,882.79	1,645.93	236.87	7.949		
11,200.00	7,619.42	7,629.91	7,627.85	102.20	176.46	-91.24	1,883.79	1,863.12	1,969.73	1,733.50	236.24	8.338		
11,300.00	7,620.20	7,630.70	7,628.65	104.91	176.48	-91.29	1,883.78	1,863.12	2,057.86	1,822.22	235.63	8.733		
11,400.00	7,620.98	7,631.50	7,629.45	107.62	176.49	-91.34	1,883.78	1,863.12	2,147.02	1,911.96	235.06	9.134		
11,500.00	7,621.76	7,632.30	7,630.24	110.33	176.51	-91.39	1,883.77	1,863.12	2,237.10	2,002.59	234.51	9.539		
11,600.00	7,622.55	7,633.10	7,631.04	113.05	176.53	-91.43	1,883.77	1,863.12	2,327.99	2,094.00	233.99	9.949		
11,700.00	7,623.33	7,633.90	7,631.84	115.77	176.54	-91.48	1,883.76	1,863.12	2,419.60	2,186.10	233.50	10.362		
11,800.00	7,624.11	7,634.70	7,632.64	118.49	176.56	-91.53	1,883.75	1,863.12	2,511.85	2,278.81	233.04	10.779		
11,900.00	7,624.89	7,635.50	7,633.44	121.21	176.58	-91.58	1,883.75	1,863.12	2,604.67	2,372.07	232.60	11.198		
12,000.00	7,625.68	7,636.30	7,634.24	123.93	176.59	-91.63	1,883.74	1,863.12	2,698.00	2,465.82	232.18	11.620		
12,100.00	7,626.46	7,637.10	7,635.04	126.65	176.61	-91.68	1,883.74	1,863.12	2,791.80	2,560.00	231.79	12.044		
12,200.00	7,627.24	7,637.90	7,635.84	129.38	176.63	-91.72	1,883.73	1,863.12	2,886.01	2,654.59	231.42	12.471		
12,300.00	7,628.02	7,638.70	7,636.64	132.11	176.65	-91.77	1,883.72	1,863.12	2,980.60	2,749.53	231.07	12.899		
12,400.00	7,628.81	7,639.50	7,637.44	134.84	176.66	-91.82	1,883.72	1,863.12	3,075.53	2,844.79	230.74	13.329		
12,500.00	7,629.59	7,640.29	7,638.23	137.56	176.68	-91.87	1,883.71	1,863.12	3,170.77	2,940.34	230.43	13.761		
12,552.48	7,630.00	7,640.71	7,638.65	139.00	176.69	-91.89	1,883.71	1,863.12	3,220.87	2,990.60	230.27	13.987		

Company:	Colgate Energy	Local Co-ordinate Reference:	Well Lady Franklin 25 State 123H
Project:	Eddy County, NM (N83-NME)	TVD Reference:	3335.5+26 @ 3361.50usft (Permit)
Reference Site:	Lady Franklin 25	MD Reference:	3335.5+26 @ 3361.50usft (Permit)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Lady Franklin 25 State 123H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Permit	Database:	EDM 5000.14 Single User Db
Reference Design:	APD Rev2	Offset TVD Reference:	Offset Datum

Reference Depths are relative to 3335.5+26 @ 3361.50usft (Permit)
Offset Depths are relative to Offset Datum
Central Meridian is -104.3333334

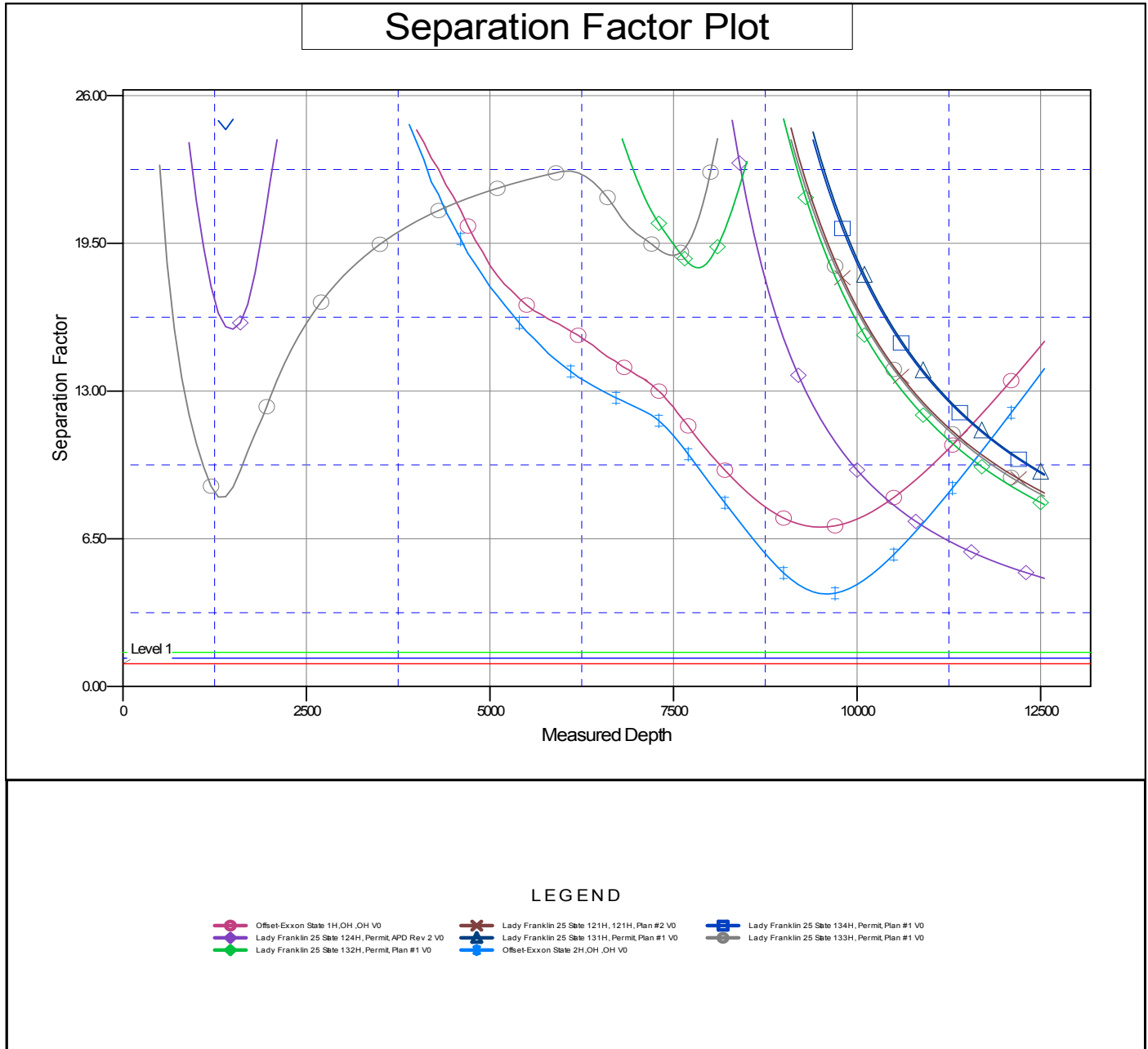
Coordinates are relative to: Lady Franklin 25 State 123H
Coordinate System is US State Plane 1983, New Mexico Eastern Zone
Grid Convergence at Surface is: 0.11°



Company:	Colgate Energy	Local Co-ordinate Reference:	Well Lady Franklin 25 State 123H
Project:	Eddy County, NM (N83-NME)	TVD Reference:	3335.5+26 @ 3361.50usft (Permit)
Reference Site:	Lady Franklin 25	MD Reference:	3335.5+26 @ 3361.50usft (Permit)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Lady Franklin 25 State 123H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Permit	Database:	EDM 5000.14 Single User Db
Reference Design:	APD Rev2	Offset TVD Reference:	Offset Datum

Reference Depths are relative to 3335.5+26 @ 3361.50usft (Permit)
Offset Depths are relative to Offset Datum
Central Meridian is -104.33333334

Coordinates are relative to: Lady Franklin 25 State 123H
Coordinate System is US State Plane 1983, New Mexico Eastern Zone
Grid Convergence at Surface is: 0.11°





Colgate Energy

Eddy County, NM (N83-NME)

Lady Franklin 25

Lady Franklin 25 State 123H

Permit

Plan: APD Rev2

Standard Planning Report

21 October, 2020

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well Lady Franklin 25 State 123H
Company:	Colgate Energy	TVD Reference:	3335.5+26 @ 3361.50usft (Permit)
Project:	Eddy County, NM (N83-NME)	MD Reference:	3335.5+26 @ 3361.50usft (Permit)
Site:	Lady Franklin 25	North Reference:	Grid
Well:	Lady Franklin 25 State 123H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Permit		
Design:	APD Rev2		

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	Latitude:	32.63911509
From:	Map	Easting:	601,180.81 usft	Longitude:	-104.13892250
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.10 °

Well	Lady Franklin 25 State 123H					
Well Position	+N/-S	-3,898.53 usft	Northing:	592,397.19 usft	Latitude:	32.62839775
	+E/-W	277.77 usft	Easting:	601,458.58 usft	Longitude:	-104.13804340
Position Uncertainty	0.00 usft		Wellhead Elevation:		Ground Level:	3,335.50 usft

Wellbore	Permit				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	8/27/2019	7.01	60.31	47,891.65463851

Design	APD Rev2			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.00	0.00	0.00	89.59

Plan Survey Tool Program	Date	10/21/2020		
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.00	12,552.48	APD Rev2 (Permit)	MWD
				MWD - Standard

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,200.00	0.00	0.00	1,200.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,958.37	11.38	349.58	1,953.40	73.80	-13.57	1.50	1.50	0.00	349.58	
5,929.59	11.38	349.58	5,846.60	844.17	-155.19	0.00	0.00	0.00	0.00	
6,687.96	0.00	0.00	6,600.00	917.97	-168.76	1.50	-1.50	0.00	180.00	LF25-123H-EON
7,109.43	0.00	0.00	7,021.47	917.97	-168.76	0.00	0.00	0.00	0.00	
8,004.94	89.55	89.59	7,594.41	922.01	399.70	10.00	10.00	10.00	89.59	
12,552.48	89.55	89.59	7,630.00	954.33	4,946.98	0.00	0.00	0.00	0.00	LF25-123H-PBHL

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well Lady Franklin 25 State 123H
Company:	Colgate Energy	TVD Reference:	3335.5+26 @ 3361.50usft (Permit)
Project:	Eddy County, NM (N83-NME)	MD Reference:	3335.5+26 @ 3361.50usft (Permit)
Site:	Lady Franklin 25	North Reference:	Grid
Well:	Lady Franklin 25 State 123H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Permit		
Design:	APD Rev2		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
SCP									
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00
681.50	0.00	0.00	681.50	0.00	0.00	0.00	0.00	0.00	0.00
Top of Salt									
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00
980.50	0.00	0.00	980.50	0.00	0.00	0.00	0.00	0.00	0.00
Base of Salt									
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00
1,100.00	0.00	0.00	1,100.00	0.00	0.00	0.00	0.00	0.00	0.00
1,200.00	0.00	0.00	1,200.00	0.00	0.00	0.00	0.00	0.00	0.00
Start Build 1.50									
1,300.00	1.50	349.58	1,299.99	1.29	-0.24	-0.23	1.50	1.50	0.00
1,400.00	3.00	349.58	1,399.91	5.15	-0.95	-0.91	1.50	1.50	0.00
1,500.00	4.50	349.58	1,499.69	11.58	-2.13	-2.05	1.50	1.50	0.00
1,600.00	6.00	349.58	1,599.27	20.58	-3.78	-3.64	1.50	1.50	0.00
1,700.00	7.50	349.58	1,698.57	32.14	-5.91	-5.68	1.50	1.50	0.00
1,800.00	9.00	349.58	1,797.54	46.25	-8.50	-8.17	1.50	1.50	0.00
1,900.00	10.50	349.58	1,896.09	62.91	-11.56	-11.11	1.50	1.50	0.00
1,958.37	11.38	349.58	1,953.40	73.80	-13.57	-13.04	1.50	1.50	0.00
2,000.00	11.38	349.58	1,994.21	81.88	-15.05	-14.47	0.00	0.00	0.00
2,090.06	11.38	349.58	2,082.50	99.35	-18.26	-17.55	0.00	0.00	0.00
Yates									
2,100.00	11.38	349.58	2,092.25	101.27	-18.62	-17.89	0.00	0.00	0.00
2,200.00	11.38	349.58	2,190.28	120.67	-22.18	-21.32	0.00	0.00	0.00
2,300.00	11.38	349.58	2,288.32	140.07	-25.75	-24.75	0.00	0.00	0.00
2,400.00	11.38	349.58	2,386.35	159.47	-29.32	-28.18	0.00	0.00	0.00
2,500.00	11.38	349.58	2,484.39	178.87	-32.88	-31.60	0.00	0.00	0.00
2,600.00	11.38	349.58	2,582.42	198.27	-36.45	-35.03	0.00	0.00	0.00
2,698.00	11.38	349.58	2,678.50	217.28	-39.94	-38.39	0.00	0.00	0.00
Capitan									
2,700.00	11.38	349.58	2,680.46	217.67	-40.02	-38.46	0.00	0.00	0.00
2,800.00	11.38	349.58	2,778.49	237.07	-43.58	-41.88	0.00	0.00	0.00
2,900.00	11.38	349.58	2,876.53	256.47	-47.15	-45.31	0.00	0.00	0.00
2,942.81	11.38	349.58	2,918.50	264.77	-48.68	-46.78	0.00	0.00	0.00
Cherry Canyon									
3,000.00	11.38	349.58	2,974.57	275.86	-50.71	-48.74	0.00	0.00	0.00
3,100.00	11.38	349.58	3,072.60	295.26	-54.28	-52.17	0.00	0.00	0.00
3,200.00	11.38	349.58	3,170.64	314.66	-57.85	-55.59	0.00	0.00	0.00
3,221.28	11.38	349.58	3,191.50	318.79	-58.61	-56.32	0.00	0.00	0.00
Brushy Canyon									
3,229.95	11.38	349.58	3,200.00	320.47	-58.92	-56.62	0.00	0.00	0.00
ICP									
3,300.00	11.38	349.58	3,268.67	334.06	-61.41	-59.02	0.00	0.00	0.00
3,400.00	11.38	349.58	3,366.71	353.46	-64.98	-62.45	0.00	0.00	0.00
3,500.00	11.38	349.58	3,464.74	372.86	-68.55	-65.88	0.00	0.00	0.00

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well Lady Franklin 25 State 123H
Company:	Colgate Energy	TVD Reference:	3335.5+26 @ 3361.50usft (Permit)
Project:	Eddy County, NM (N83-NME)	MD Reference:	3335.5+26 @ 3361.50usft (Permit)
Site:	Lady Franklin 25	North Reference:	Grid
Well:	Lady Franklin 25 State 123H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Permit		
Design:	APD Rev2		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
3,600.00	11.38	349.58	3,562.78	392.26	-72.11	-69.30	0.00	0.00	0.00
3,700.00	11.38	349.58	3,660.81	411.66	-75.68	-72.73	0.00	0.00	0.00
3,800.00	11.38	349.58	3,758.85	431.05	-79.25	-76.16	0.00	0.00	0.00
3,900.00	11.38	349.58	3,856.89	450.45	-82.81	-79.59	0.00	0.00	0.00
4,000.00	11.38	349.58	3,954.92	469.85	-86.38	-83.01	0.00	0.00	0.00
4,100.00	11.38	349.58	4,052.96	489.25	-89.94	-86.44	0.00	0.00	0.00
4,200.00	11.38	349.58	4,150.99	508.65	-93.51	-89.87	0.00	0.00	0.00
4,251.52	11.38	349.58	4,201.50	518.64	-95.35	-91.63	0.00	0.00	0.00
Bone Spring LM									
4,300.00	11.38	349.58	4,249.03	528.05	-97.08	-93.30	0.00	0.00	0.00
4,400.00	11.38	349.58	4,347.06	547.45	-100.64	-96.72	0.00	0.00	0.00
4,500.00	11.38	349.58	4,445.10	566.85	-104.21	-100.15	0.00	0.00	0.00
4,600.00	11.38	349.58	4,543.13	586.25	-107.78	-103.58	0.00	0.00	0.00
4,700.00	11.38	349.58	4,641.17	605.64	-111.34	-107.01	0.00	0.00	0.00
4,800.00	11.38	349.58	4,739.20	625.04	-114.91	-110.43	0.00	0.00	0.00
4,900.00	11.38	349.58	4,837.24	644.44	-118.47	-113.86	0.00	0.00	0.00
5,000.00	11.38	349.58	4,935.28	663.84	-122.04	-117.29	0.00	0.00	0.00
5,100.00	11.38	349.58	5,033.31	683.24	-125.61	-120.71	0.00	0.00	0.00
5,200.00	11.38	349.58	5,131.35	702.64	-129.17	-124.14	0.00	0.00	0.00
5,300.00	11.38	349.58	5,229.38	722.04	-132.74	-127.57	0.00	0.00	0.00
5,400.00	11.38	349.58	5,327.42	741.44	-136.31	-131.00	0.00	0.00	0.00
5,500.00	11.38	349.58	5,425.45	760.83	-139.87	-134.42	0.00	0.00	0.00
5,600.00	11.38	349.58	5,523.49	780.23	-143.44	-137.85	0.00	0.00	0.00
5,700.00	11.38	349.58	5,621.52	799.63	-147.00	-141.28	0.00	0.00	0.00
5,800.00	11.38	349.58	5,719.56	819.03	-150.57	-144.71	0.00	0.00	0.00
5,900.00	11.38	349.58	5,817.60	838.43	-154.14	-148.13	0.00	0.00	0.00
5,929.59	11.38	349.58	5,846.60	844.17	-155.19	-149.15	0.00	0.00	0.00
Start Drop -1.50									
6,000.00	10.32	349.58	5,915.76	857.20	-157.59	-151.45	1.50	-1.50	0.00
6,100.00	8.82	349.58	6,014.36	873.55	-160.59	-154.34	1.50	-1.50	0.00
6,200.00	7.32	349.58	6,113.37	887.36	-163.13	-156.78	1.50	-1.50	0.00
6,300.00	5.82	349.58	6,212.71	898.61	-165.20	-158.77	1.50	-1.50	0.00
6,400.00	4.32	349.58	6,312.31	907.30	-166.80	-160.30	1.50	-1.50	0.00
6,500.00	2.82	349.58	6,412.12	913.42	-167.92	-161.38	1.50	-1.50	0.00
6,600.00	1.32	349.58	6,512.05	916.97	-168.58	-162.01	1.50	-1.50	0.00
6,670.46	0.26	349.58	6,582.50	917.93	-168.75	-162.18	1.50	-1.50	0.00
1st Bone Spring Sd									
6,687.96	0.00	0.00	6,600.00	917.97	-168.76	-162.19	1.50	-1.50	0.00
LF25-123H-EON									
6,700.00	0.00	0.00	6,612.04	917.97	-168.76	-162.19	0.00	0.00	0.00
6,800.00	0.00	0.00	6,712.04	917.97	-168.76	-162.19	0.00	0.00	0.00
6,900.00	0.00	0.00	6,812.04	917.97	-168.76	-162.19	0.00	0.00	0.00
7,000.00	0.00	0.00	6,912.04	917.97	-168.76	-162.19	0.00	0.00	0.00
7,109.43	0.00	0.00	7,021.47	917.97	-168.76	-162.19	0.00	0.00	0.00
KOP: 7109.43' MD, -162.19' VS, 7021.47' TVD									
7,150.00	4.06	89.59	7,062.01	917.98	-167.32	-160.75	10.00	10.00	0.00
7,200.00	9.06	89.59	7,111.67	918.02	-161.62	-155.04	10.00	10.00	0.00
7,250.00	14.06	89.59	7,160.64	918.09	-151.60	-145.03	10.00	10.00	0.00
7,300.00	19.06	89.59	7,208.55	918.19	-137.36	-130.78	10.00	10.00	0.00
7,350.00	24.06	89.59	7,255.04	918.32	-118.99	-112.42	10.00	10.00	0.00
7,400.00	29.06	89.59	7,299.75	918.48	-96.65	-90.07	10.00	10.00	0.00
7,450.00	34.06	89.59	7,342.34	918.67	-70.49	-63.91	10.00	10.00	0.00
7,500.00	39.06	89.59	7,382.49	918.88	-40.72	-34.14	10.00	10.00	0.00

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well Lady Franklin 25 State 123H
Company:	Colgate Energy	TVD Reference:	3335.5+26 @ 3361.50usft (Permit)
Project:	Eddy County, NM (N83-NME)	MD Reference:	3335.5+26 @ 3361.50usft (Permit)
Site:	Lady Franklin 25	North Reference:	Grid
Well:	Lady Franklin 25 State 123H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Permit		
Design:	APD Rev2		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
7,550.00	44.06	89.59	7,419.89	919.12	-7.56	-0.98	10.00	10.00	0.00
7,566.38	45.70	89.59	7,431.50	919.20	4.00	10.58	10.00	10.00	0.00
2nd Bone Spring Sd									
7,573.68	46.43	89.59	7,436.57	919.24	9.25	15.83	10.00	10.00	0.00
LF25-123H-FTP									
7,600.00	49.06	89.59	7,454.26	919.37	28.73	35.31	10.00	10.00	0.00
7,650.00	54.06	89.59	7,485.34	919.65	67.88	74.46	10.00	10.00	0.00
7,700.00	59.06	89.59	7,512.89	919.95	109.59	116.17	10.00	10.00	0.00
7,750.00	64.06	89.59	7,536.69	920.26	153.54	160.12	10.00	10.00	0.00
7,800.00	69.06	89.59	7,556.58	920.59	199.39	205.98	10.00	10.00	0.00
7,850.00	74.06	89.59	7,572.39	920.92	246.81	253.39	10.00	10.00	0.00
7,900.00	79.06	89.59	7,584.01	921.27	295.42	302.01	10.00	10.00	0.00
7,950.00	84.06	89.59	7,591.35	921.62	344.86	351.45	10.00	10.00	0.00
8,004.94	89.55	89.59	7,594.41	922.01	399.70	406.28	10.00	10.00	0.00
EOC: 8004.94' MD, 406.28' VS, 7594.41' TVD									
8,100.00	89.55	89.59	7,595.15	922.69	494.75	501.34	0.00	0.00	0.00
8,200.00	89.55	89.59	7,595.94	923.40	594.74	601.34	0.00	0.00	0.00
8,300.00	89.55	89.59	7,596.72	924.11	694.74	701.33	0.00	0.00	0.00
8,400.00	89.55	89.59	7,597.50	924.82	794.73	801.33	0.00	0.00	0.00
8,500.00	89.55	89.59	7,598.28	925.53	894.73	901.33	0.00	0.00	0.00
8,600.00	89.55	89.59	7,599.07	926.24	994.72	1,001.32	0.00	0.00	0.00
8,700.00	89.55	89.59	7,599.85	926.95	1,094.72	1,101.32	0.00	0.00	0.00
8,800.00	89.55	89.59	7,600.63	927.66	1,194.71	1,201.32	0.00	0.00	0.00
8,900.00	89.55	89.59	7,601.42	928.37	1,294.71	1,301.32	0.00	0.00	0.00
9,000.00	89.55	89.59	7,602.20	929.08	1,394.70	1,401.31	0.00	0.00	0.00
9,100.00	89.55	89.59	7,602.98	929.79	1,494.69	1,501.31	0.00	0.00	0.00
9,200.00	89.55	89.59	7,603.76	930.50	1,594.69	1,601.31	0.00	0.00	0.00
9,300.00	89.55	89.59	7,604.55	931.21	1,694.68	1,701.30	0.00	0.00	0.00
9,400.00	89.55	89.59	7,605.33	931.93	1,794.68	1,801.30	0.00	0.00	0.00
9,500.00	89.55	89.59	7,606.11	932.64	1,894.67	1,901.30	0.00	0.00	0.00
9,600.00	89.55	89.59	7,606.89	933.35	1,994.67	2,001.29	0.00	0.00	0.00
9,700.00	89.55	89.59	7,607.68	934.06	2,094.66	2,101.29	0.00	0.00	0.00
9,800.00	89.55	89.59	7,608.46	934.77	2,194.66	2,201.29	0.00	0.00	0.00
9,900.00	89.55	89.59	7,609.24	935.48	2,294.65	2,301.28	0.00	0.00	0.00
10,000.00	89.55	89.59	7,610.02	936.19	2,394.64	2,401.28	0.00	0.00	0.00
10,100.00	89.55	89.59	7,610.81	936.90	2,494.64	2,501.28	0.00	0.00	0.00
10,200.00	89.55	89.59	7,611.59	937.61	2,594.63	2,601.28	0.00	0.00	0.00
10,300.00	89.55	89.59	7,612.37	938.32	2,694.63	2,701.27	0.00	0.00	0.00
10,400.00	89.55	89.59	7,613.15	939.03	2,794.62	2,801.27	0.00	0.00	0.00
10,500.00	89.55	89.59	7,613.94	939.74	2,894.62	2,901.27	0.00	0.00	0.00
10,600.00	89.55	89.59	7,614.72	940.45	2,994.61	3,001.26	0.00	0.00	0.00
10,700.00	89.55	89.59	7,615.50	941.16	3,094.60	3,101.26	0.00	0.00	0.00
10,800.00	89.55	89.59	7,616.28	941.88	3,194.60	3,201.26	0.00	0.00	0.00
10,900.00	89.55	89.59	7,617.07	942.59	3,294.59	3,301.25	0.00	0.00	0.00
11,000.00	89.55	89.59	7,617.85	943.30	3,394.59	3,401.25	0.00	0.00	0.00
11,100.00	89.55	89.59	7,618.63	944.01	3,494.58	3,501.25	0.00	0.00	0.00
11,200.00	89.55	89.59	7,619.42	944.72	3,594.58	3,601.25	0.00	0.00	0.00
11,300.00	89.55	89.59	7,620.20	945.43	3,694.57	3,701.24	0.00	0.00	0.00
11,400.00	89.55	89.59	7,620.98	946.14	3,794.57	3,801.24	0.00	0.00	0.00
11,500.00	89.55	89.59	7,621.76	946.85	3,894.56	3,901.24	0.00	0.00	0.00
11,600.00	89.55	89.59	7,622.55	947.56	3,994.55	4,001.23	0.00	0.00	0.00
11,700.00	89.55	89.59	7,623.33	948.27	4,094.55	4,101.23	0.00	0.00	0.00
11,800.00	89.55	89.59	7,624.11	948.98	4,194.54	4,201.23	0.00	0.00	0.00

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well Lady Franklin 25 State 123H
Company:	Colgate Energy	TVD Reference:	3335.5+26 @ 3361.50usft (Permit)
Project:	Eddy County, NM (N83-NME)	MD Reference:	3335.5+26 @ 3361.50usft (Permit)
Site:	Lady Franklin 25	North Reference:	Grid
Well:	Lady Franklin 25 State 123H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Permit		
Design:	APD Rev2		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
11,900.00	89.55	89.59	7,624.89	949.69	4,294.54	4,301.22	0.00	0.00	0.00	
12,000.00	89.55	89.59	7,625.68	950.40	4,394.53	4,401.22	0.00	0.00	0.00	
12,100.00	89.55	89.59	7,626.46	951.11	4,494.53	4,501.22	0.00	0.00	0.00	
12,200.00	89.55	89.59	7,627.24	951.82	4,594.52	4,601.21	0.00	0.00	0.00	
12,300.00	89.55	89.59	7,628.02	952.54	4,694.52	4,701.21	0.00	0.00	0.00	
12,400.00	89.55	89.59	7,628.81	953.25	4,794.51	4,801.21	0.00	0.00	0.00	
12,462.48	89.55	89.59	7,629.30	953.69	4,856.99	4,863.69	0.00	0.00	0.00	
LF25-123H-LTP										
12,500.00	89.55	89.59	7,629.59	953.96	4,894.50	4,901.21	0.00	0.00	0.00	
12,552.48	89.55	89.59	7,630.00	954.33	4,946.98	4,953.68	0.00	0.00	0.00	
TD: 12552.48' MD, 4953.68' VS, 7630.00' TVD - LF25-123H-PBHL										

Design Targets										
Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude	
LF25-123H-EON - plan hits target center - Point	0.00	0.00	6,600.00	917.97	-168.76	593,315.16	601,289.82	32.63092184	-104.13858611	
LF25-123H-LTP - plan misses target center by 0.70usft at 12462.48usft MD (7629.30 TVD, 953.69 N, 4856.99 E) - Point	0.00	0.00	7,630.00	953.71	4,856.98	593,350.90	606,315.56	32.63099370	-104.12226052	
LF25-123H-PBHL - plan hits target center - Point	0.00	0.00	7,630.00	954.33	4,946.98	593,351.52	606,405.56	32.63099491	-104.12196816	
LF25-123H-FTP - plan misses target center by 262.88usft at 7573.68usft MD (7436.57 TVD, 919.24 N, 9.25 E) - Point	0.00	0.00	7,630.00	917.97	-168.76	593,315.16	601,289.82	32.63092184	-104.13858611	

Casing Points						
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")		
400.00	400.00	SCP	0	0		
3,229.95	3,200.00	ICP	0	0		

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well Lady Franklin 25 State 123H
Company:	Colgate Energy	TVD Reference:	3335.5+26 @ 3361.50usft (Permit)
Project:	Eddy County, NM (N83-NME)	MD Reference:	3335.5+26 @ 3361.50usft (Permit)
Site:	Lady Franklin 25	North Reference:	Grid
Well:	Lady Franklin 25 State 123H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Permit		
Design:	APD Rev2		

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
681.50	681.50	Top of Salt				
980.50	980.50	Base of Salt				
2,090.06	2,082.50	Yates				
2,698.00	2,678.50	Capitan				
2,942.81	2,918.50	Cherry Canyon				
3,221.28	3,191.50	Brushy Canyon				
4,251.52	4,201.50	Bone Spring LM				
6,670.46	6,582.50	1st Bone Spring Sd				
7,566.38	7,431.50	2nd Bone Spring Sd				

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates			
		+N/-S (usft)	+E/-W (usft)	Comment	
1,200.00	1,200.00	0.00	0.00	Start Build 1.50	
5,929.59	5,846.60	73.80	-13.57	Start Drop -1.50	
7,109.43	7,021.47	844.17	-155.19	KOP: 7109.43' MD, -162.19' VS,7021.47' TVD	
8,004.94	7,594.41	917.97	-168.76	EOC: 8004.94' MD, 406.28' VS,7594.41' TVD	
12,552.48	7,630.00	917.97	-168.76	TD: 12552.48' MD, 4953.68' VS,7630.00' TVD	



Site: Lady Franklin 25
Well: Lady Franklin 25 State 123H
Wellbore: Permit
Plan: APD Rev2

FORMATION TOP DETAILS

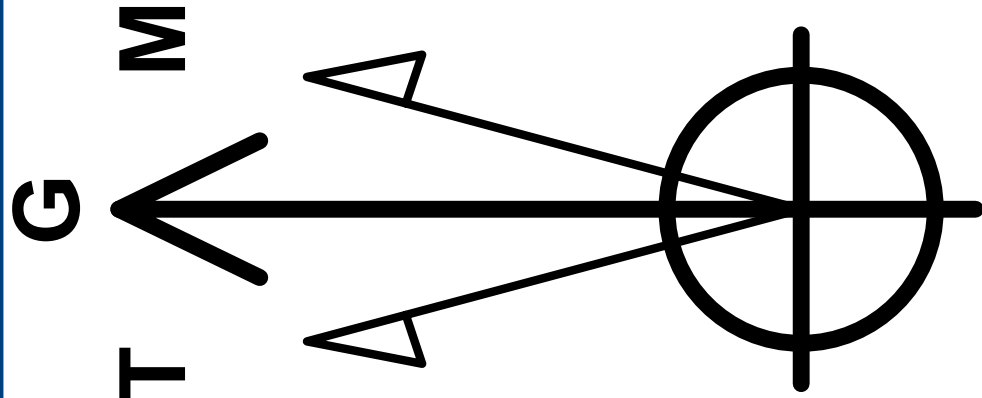
TVDPath	MDPath	Formation
681.50	681.50	Top of Salt
980.50	980.50	Base of Salt
2082.50	2090.06	Yates
2678.50	2698.00	Capitan
2918.50	2942.81	Cherry Canyon
3191.50	3221.28	Brushy Canyon
4201.50	4251.52	Bone Spring LM
6582.50	6670.46	1st Bone Spring Sd
7431.50	7566.38	2nd Bone Spring Sd

WELL DETAILS: Lady Franklin 25 State 123H

Northing	Easting	Latitude	Longitude
0.00 59230709	601458.58	32.62839776	-104.13804340

Section Details

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	1200.00	0.00	0.00	1200.00	0.00	0.00	0.00	0.00	0.00
3	1958.37	11.38	349.58	1953.40	73.80	-13.57	1.50	349.58	-13.04
4	5929.59	11.38	349.58	5846.60	844.17	-155.19	0.00	0.00	-149.15
5	6687.96	0.00	0.00	6600.00	917.97	-168.76	1.50	180.00	-162.19
6	7109.43	0.00	0.00	7021.47	917.97	-168.76	0.00	0.00	-162.19
7	8004.94	89.55	89.59	7594.41	922.01	399.70	10.00	89.59	406.29
8	12552.48	89.55	89.59	7630.00	954.33	4946.98	0.00	0.00	4953.68



Azimuths to Grid North
True North: -0.11°
Magnetic North: 6.91°

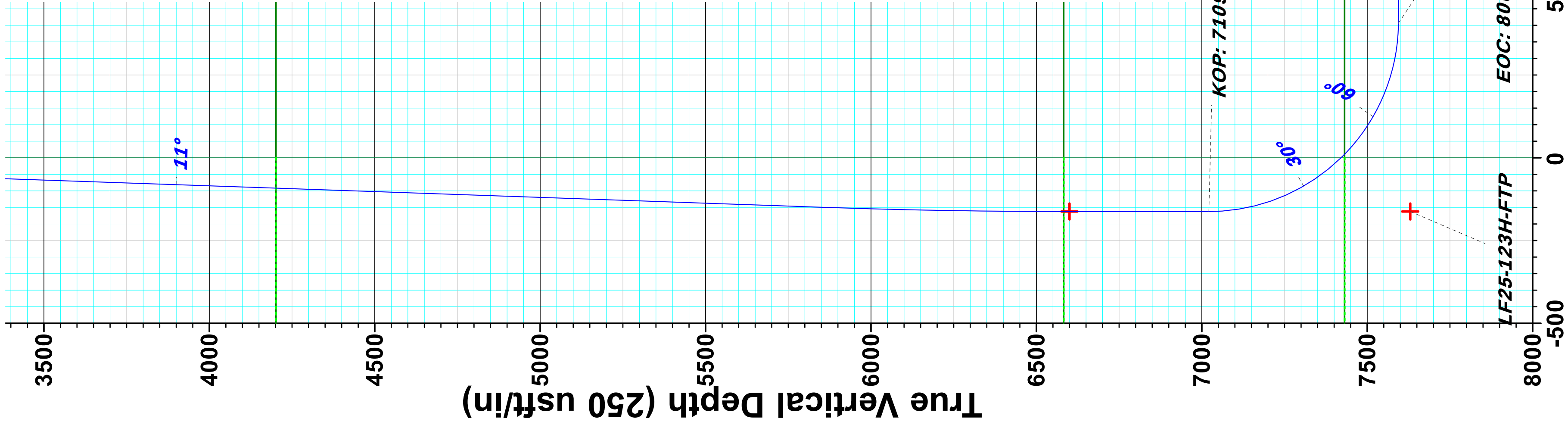
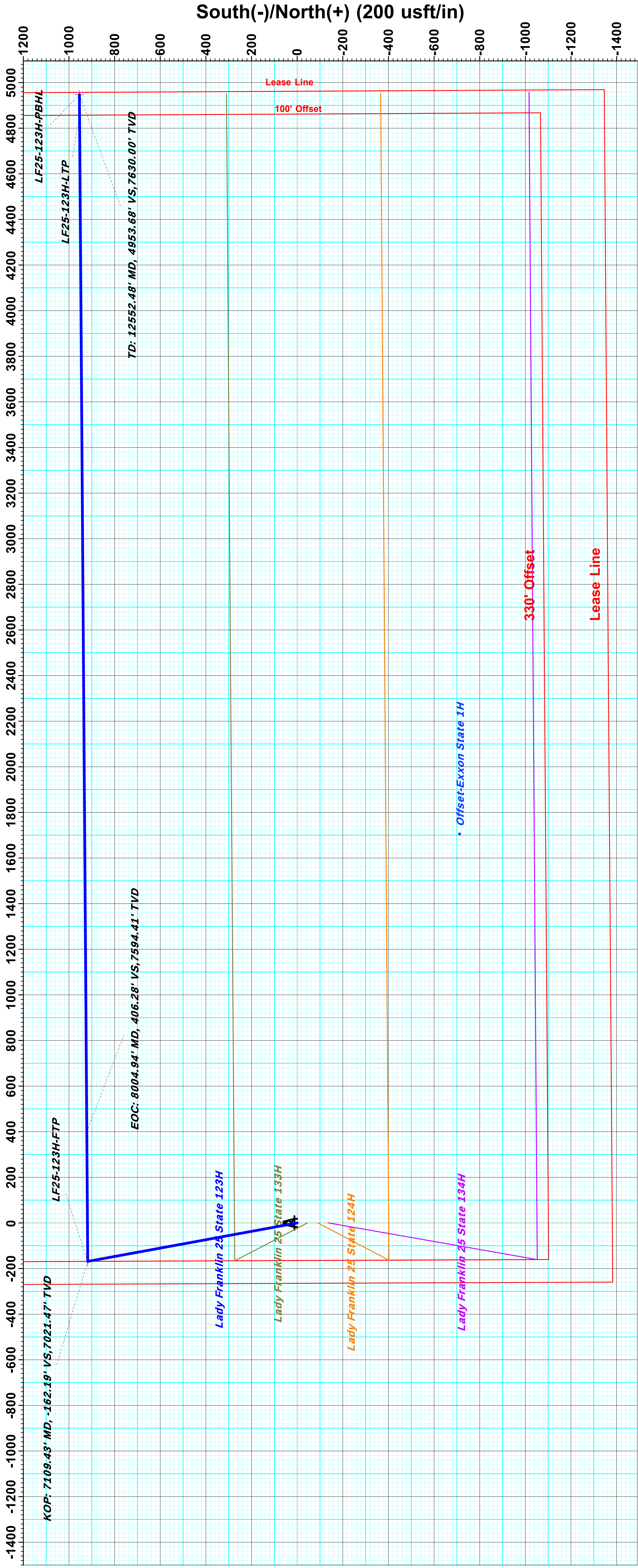
Magnetic Field
Strength: 47891.7snT
Dip Angle: 60.31°
Date: 8/27/2019
Model: IGRF2015

PROJECT DETAILS: Eddy County, NM (N83-NME)
Well Name: Lady Franklin 25 State 123H
Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: New Mexico Eastern Zone
System Datum: Mean Sea Level
Local North: Grid
KB Elevation: 3335.5+26 @ 3361.50usft (Permit)
Elevation: 3335.50

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
LF25-123H-EON	6600.00	917.97	-168.76	593315.16	601289.82	32.63092184	-104.13858611
LF25-123H-FTP	7630.00	917.97	-168.76	593315.16	601289.82	32.63092184	-104.13858611
LF25-123H-LTP	7630.00	953.71	4856.98	593350.90	606315.56	32.63099370	-104.12226052
LF25-123H-PBHL	7630.00	954.33	4946.98	593351.52	606405.56	32.63099492	-104.12196816

West(-)/East(+) (200 usft/in)



Vertical Section at 89.59° (250 usft/in)

