

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

State of New Mexico
 Energy, Minerals & Natural Resources Department

Form C-102

Revised August 1, 2011

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

OIL CONSERVATION DIVISION

Submit one copy to appropriate
 District Office

DISTRICT III
 1000 Rio Brazos Rd., Aztec, N.M. 87410
 Phone: (505) 334-6178 Fax: (505) 334-6170

1220 South St. Francis Dr.
 Santa Fe, N.M. 87505

AMENDED REPORT

DISTRICT IV
 1220 S. St. Francis Dr., Santa Fe, N.M. 87505
 Phone: (505) 476-3480 Fax: (505) 476-3482

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number	² Pool Code	³ Pool Name
⁴ Property Code	⁵ Property Name LADY FRANKLIN 25 STATE	
⁷ OGRID No. 371449	⁶ Operator Name COLGATE OPERATING, LLC	⁸ Well Number 124H
		⁹ Elevation 3334

¹⁰ Surface Location

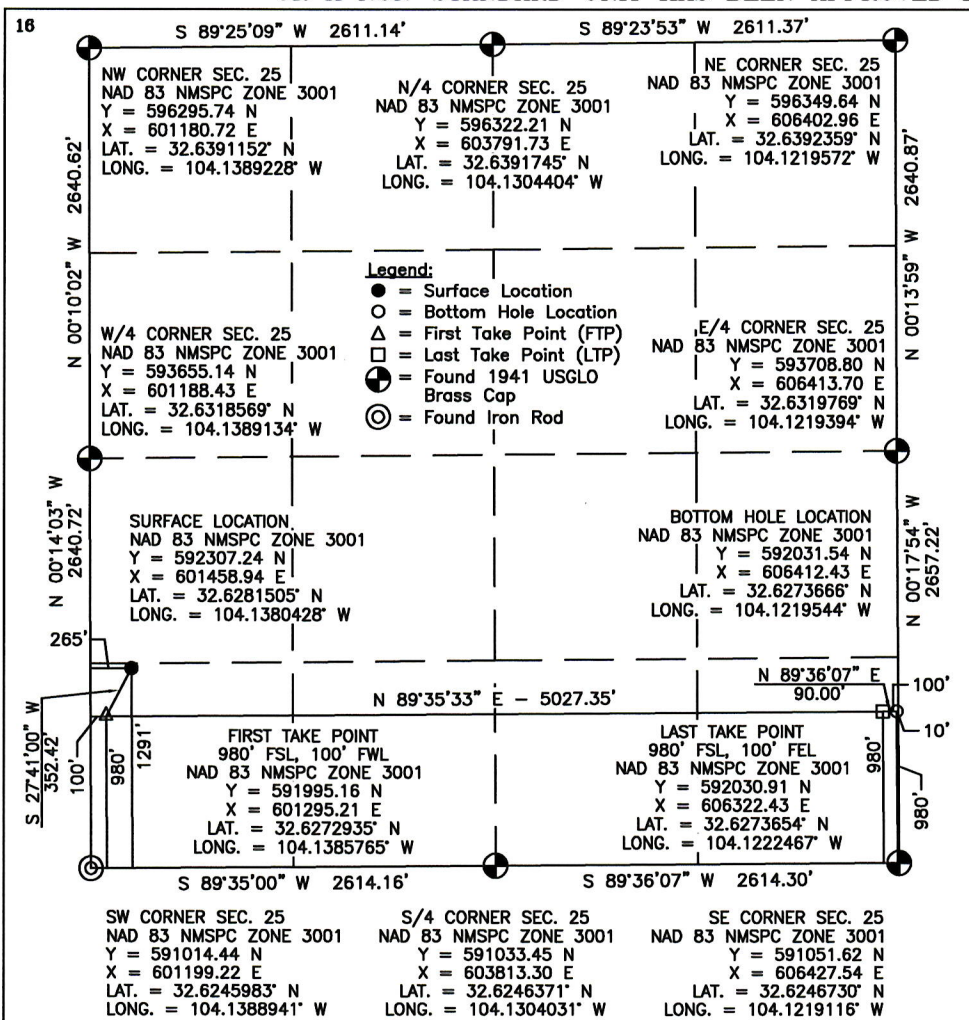
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	25	19 S	28 E		1291	SOUTH	265	WEST	EDDY

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
P	25	19 S	28 E		980	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.

Signature _____ Date _____

Printed Name _____

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. LINDBEN
 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 124H

Permit

APD Rev 2

Anticollision Report

21 October, 2020

Company:	Colgate Energy	Local Co-ordinate Reference:	Well Lady Franklin 25 State 124H
Project:	Eddy County, NM (N83-NME)	TVD Reference:	3333.6+26 @ 3359.60usft (Permit)
Reference Site:	Lady Franklin 25	MD Reference:	3333.6+26 @ 3359.60usft (Permit)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Lady Franklin 25 State 124H	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 Rev 2	Offset TVD Reference:	Offset Datum

Reference	APD Rev 2		
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	12,506.25	APD Rev 2 (Permit)	MWD	MWD - Standard

Site Name	Reference		Offset		Distance		Separation Factor	Warning
	Measured Depth (usft)	Offset Depth (usft)	Measured Depth (usft)	Offset Depth (usft)	Between Centres (usft)	Between Ellipses (usft)		
Offset Well - Wellbore - Design								
Lady Franklin 25								
Lady Franklin 25 State 121H - 121H - Plan #2	10,200.00	10,214.11	3,540.92	3,396.24	24.474	CC		
Lady Franklin 25 State 121H - 121H - Plan #2	12,506.25	12,519.45	3,549.43	3,287.87	13.570	ES, SF		
Lady Franklin 25 State 123H - Permit - APD Rev2	1,116.02	1,117.92	89.95	85.21	18.985	CC		
Lady Franklin 25 State 123H - Permit - APD Rev2	1,200.00	1,201.86	89.95	84.84	17.585	ES		
Lady Franklin 25 State 123H - Permit - APD Rev2	12,506.25	12,549.90	1,320.02	1,042.96	4.764	SF		
Lady Franklin 25 State 131H - Permit - Plan #1	10,200.00	11,282.07	3,514.02	3,369.41	24.300	CC		
Lady Franklin 25 State 131H - Permit - Plan #1	12,506.25	13,588.31	3,521.10	3,256.97	13.331	ES, SF		
Lady Franklin 25 State 132H - Permit - Plan #1	9,300.00	10,516.85	2,298.15	2,203.85	24.371	CC		
Lady Franklin 25 State 132H - Permit - Plan #1	12,506.25	13,723.09	2,307.20	2,060.39	9.348	ES, SF		
Lady Franklin 25 State 133H - Permit - Plan #1	1,516.19	1,517.59	44.91	38.37	6.872	CC		
Lady Franklin 25 State 133H - Permit - Plan #1	1,600.00	1,601.39	44.91	38.00	6.497	ES		
Lady Franklin 25 State 133H - Permit - Plan #1	1,700.00	1,700.00	47.25	39.92	6.447	SF		
Lady Franklin 25 State 134H - Permit - Plan #1	1,200.00	1,198.90	45.03	39.92	8.814	CC, ES		
Lady Franklin 25 State 134H - Permit - Plan #1	1,300.00	1,297.74	46.28	40.75	8.372	SF		
Offset-Exxon State 1H - OH - OH	9,255.70	7,583.22	322.39	90.38	1.390	Level 3, CC, ES, SF		
Offset-Exxon State 2H - OH - OH	9,431.59	7,643.35	2,271.32	2,039.50	9.798	CC		
Offset-Exxon State 2H - OH - OH	9,500.00	7,643.35	2,272.35	2,038.83	9.731	ES		
Offset-Exxon State 2H - OH - OH	9,900.00	7,643.32	2,319.12	2,076.72	9.567	SF		

Offset Design													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 (usft)	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)				
10,200.00	7,620.00	10,214.11	7,676.15	75.66	69.13	-90.50	3,248.49	2,609.95	3,540.92	3,396.24	144.68	24.474	CC	
10,300.00	7,620.00	10,314.07	7,678.94	78.35	71.39	-90.55	3,249.52	2,709.87	3,541.26	3,391.62	149.65	23.664		
10,400.00	7,620.00	10,414.03	7,681.74	81.05	73.68	-90.59	3,250.55	2,809.78	3,541.61	3,386.98	154.63	22.904		
10,500.00	7,620.00	10,513.99	7,684.53	83.76	75.97	-90.64	3,251.58	2,909.70	3,541.96	3,382.33	159.63	22.189		
10,600.00	7,620.00	10,613.95	7,687.32	86.46	78.27	-90.68	3,252.61	3,009.62	3,542.31	3,377.68	164.63	21.516		
10,700.00	7,620.00	10,713.91	7,690.12	89.17	80.58	-90.73	3,253.64	3,109.53	3,542.67	3,373.01	169.66	20.882		
10,800.00	7,620.00	10,813.87	7,692.91	91.89	82.90	-90.77	3,254.67	3,209.45	3,543.02	3,368.33	174.69	20.282		
10,900.00	7,620.00	10,913.83	7,695.70	94.60	85.22	-90.82	3,255.69	3,309.36	3,543.38	3,363.65	179.73	19.715		
11,000.00	7,620.00	11,013.79	7,698.49	97.32	87.55	-90.86	3,256.72	3,409.28	3,543.74	3,358.96	184.78	19.178		
11,100.00	7,620.00	11,113.75	7,701.29	100.04	89.89	-90.91	3,257.75	3,509.20	3,544.10	3,354.27	189.84	18.669		

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 124H
Project:	Eddy County, NM (N83-NME)	TVD Reference:	3333.6+26 @ 3359.60usft (Permit)
Reference Site:	Lady Franklin 25	MD Reference:	3333.6+26 @ 3359.60usft (Permit)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Lady Franklin 25 State 124H	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 Rev 2	Offset TVD Reference:	Offset Datum

Offset Design												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					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
11,200.00	7,620.00	11,213.71	7,704.08	102.76	92.24	-90.96	3,258.78	3,609.11	3,544.47	3,349.56	194.90	18.186	
11,300.00	7,620.00	11,313.67	7,706.87	105.49	94.59	-91.00	3,259.81	3,709.03	3,544.83	3,344.86	199.98	17.726	
11,400.00	7,620.00	11,413.63	7,709.66	108.21	96.94	-91.05	3,260.84	3,808.94	3,545.20	3,340.15	205.06	17.289	
11,500.00	7,620.00	11,513.59	7,712.46	110.94	99.30	-91.09	3,261.87	3,908.86	3,545.57	3,335.43	210.14	16.872	
11,600.00	7,620.00	11,613.55	7,715.25	113.67	101.67	-91.14	3,262.90	4,008.78	3,545.95	3,330.72	215.23	16.475	
11,700.00	7,620.00	11,713.52	7,718.04	116.40	104.04	-91.18	3,263.93	4,108.69	3,546.32	3,326.00	220.33	16.096	
11,800.00	7,620.00	11,813.48	7,720.83	119.13	106.41	-91.23	3,264.96	4,208.61	3,546.70	3,321.27	225.43	15.733	
11,900.00	7,620.00	11,913.44	7,723.63	121.87	108.78	-91.27	3,265.99	4,308.53	3,547.08	3,316.55	230.53	15.386	
12,000.00	7,620.00	12,013.40	7,726.42	124.60	111.16	-91.32	3,267.02	4,408.44	3,547.46	3,311.82	235.64	15.054	
12,100.00	7,620.00	12,113.36	7,729.21	127.34	113.54	-91.36	3,268.05	4,508.36	3,547.85	3,307.09	240.76	14.736	
12,200.00	7,620.00	12,213.32	7,732.00	130.07	115.93	-91.41	3,269.08	4,608.27	3,548.23	3,302.36	245.87	14.431	
12,300.00	7,620.00	12,313.28	7,734.80	132.81	118.32	-91.45	3,270.11	4,708.19	3,548.62	3,297.63	250.99	14.138	
12,400.00	7,620.00	12,413.24	7,737.59	135.55	120.71	-91.49	3,271.13	4,808.11	3,549.01	3,292.90	256.12	13.857	
12,506.25	7,620.00	12,519.45	7,740.56	138.46	123.25	-91.54	3,272.23	4,914.27	3,549.43	3,287.87	261.56	13.570	ES, SF

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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 Rev 2	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		
900.00	900.00	901.90	901.90	1.88	1.89	-0.23	89.95	-0.36	89.95	86.18	3.77	23.880		
1,000.00	1,000.00	1,001.90	1,001.90	2.11	2.11	-0.23	89.95	-0.36	89.95	85.73	4.22	21.334		
1,100.00	1,100.00	1,101.90	1,101.90	2.33	2.34	-0.23	89.95	-0.36	89.95	85.28	4.67	19.278		
1,116.02	1,116.02	1,117.92	1,117.92	2.37	2.37	-0.23	89.95	-0.36	89.95	85.21	4.74	18.985 CC		
1,200.00	1,200.00	1,201.86	1,201.86	2.56	2.56	-0.23	89.95	-0.36	89.95	84.84	5.12	17.585 ES		
1,300.00	1,300.00	1,300.00	1,299.99	2.78	2.78	-0.37	91.24	-0.60	91.26	85.70	5.56	16.414		
1,400.00	1,400.00	1,397.15	1,397.06	3.01	3.00	-0.77	94.95	-1.28	95.08	89.09	6.00	15.849		
1,500.00	1,500.00	1,494.48	1,494.18	3.23	3.22	-1.37	101.11	-2.41	101.43	94.99	6.44	15.758		
1,600.00	1,600.00	1,591.42	1,590.74	3.45	3.44	-2.08	109.66	-3.98	110.30	103.43	6.87	16.054		
1,700.00	1,699.99	1,687.72	1,686.40	3.65	3.68	149.68	120.53	-5.98	122.79	115.52	7.27	16.879		
1,800.00	1,799.91	1,782.99	1,780.73	3.83	3.92	149.58	133.62	-8.39	139.98	132.33	7.66	18.285		
1,900.00	1,899.69	1,876.90	1,873.36	4.01	4.19	149.79	148.78	-11.18	161.80	153.76	8.04	20.128		
1,929.94	1,929.53	1,904.71	1,900.72	4.07	4.26	149.88	153.70	-12.08	169.21	161.06	8.16	20.749		
2,000.00	1,999.33	1,969.85	1,964.65	4.20	4.46	150.21	165.98	-14.34	187.61	179.18	8.43	22.267		
2,100.00	2,098.96	2,066.18	2,059.09	4.40	4.77	150.56	184.66	-17.77	214.42	205.57	8.85	24.238		
8,300.00	7,620.00	8,343.78	7,597.06	27.01	29.42	-88.92	1,014.37	738.16	1,320.24	1,265.38	54.86	24.068		
8,400.00	7,620.00	8,443.78	7,597.84	29.25	31.43	-88.96	1,015.08	838.15	1,320.22	1,260.96	59.27	22.277		
8,500.00	7,620.00	8,543.78	7,598.63	31.57	33.57	-88.99	1,015.79	938.14	1,320.21	1,256.36	63.85	20.678		
8,600.00	7,620.00	8,643.77	7,599.41	33.96	35.80	-89.02	1,016.50	1,038.13	1,320.19	1,251.63	68.57	19.254		
8,700.00	7,620.00	8,743.77	7,600.19	36.40	38.11	-89.06	1,017.21	1,138.12	1,320.18	1,246.78	73.40	17.986		
8,800.00	7,620.00	8,843.77	7,600.98	38.88	40.48	-89.09	1,017.92	1,238.11	1,320.17	1,241.85	78.32	16.856		
8,900.00	7,620.00	8,943.76	7,601.76	41.39	42.90	-89.13	1,018.63	1,338.11	1,320.16	1,236.84	83.32	15.845		
9,000.00	7,620.00	9,043.76	7,602.54	43.94	45.36	-89.16	1,019.34	1,438.10	1,320.14	1,231.77	88.38	14.937		
9,100.00	7,620.00	9,143.76	7,603.32	46.51	47.85	-89.19	1,020.05	1,538.09	1,320.13	1,226.64	93.49	14.121		
9,200.00	7,620.00	9,243.75	7,604.11	49.10	50.37	-89.23	1,020.76	1,638.08	1,320.12	1,221.48	98.64	13.383		
9,300.00	7,620.00	9,343.75	7,604.89	51.71	52.91	-89.26	1,021.48	1,738.07	1,320.11	1,216.27	103.84	12.713		
9,400.00	7,620.00	9,443.75	7,605.67	54.33	55.48	-89.30	1,022.19	1,838.06	1,320.10	1,211.04	109.06	12.104		
9,500.00	7,620.00	9,543.74	7,606.45	56.96	58.06	-89.33	1,022.90	1,938.05	1,320.09	1,205.78	114.31	11.548		
9,600.00	7,620.00	9,643.74	7,607.24	59.61	60.66	-89.36	1,023.61	2,038.05	1,320.08	1,200.49	119.59	11.038		
9,700.00	7,620.00	9,743.74	7,608.02	62.27	63.28	-89.40	1,024.32	2,138.04	1,320.07	1,195.19	124.89	10.570		
9,800.00	7,620.00	9,843.74	7,608.80	64.93	65.90	-89.43	1,025.03	2,238.03	1,320.07	1,189.86	130.20	10.139		
9,900.00	7,620.00	9,943.73	7,609.58	67.60	68.54	-89.47	1,025.74	2,338.02	1,320.06	1,184.52	135.53	9.740		
10,000.00	7,620.00	10,043.73	7,610.37	70.28	71.18	-89.50	1,026.45	2,438.01	1,320.05	1,179.17	140.88	9.370		
10,100.00	7,620.00	10,143.73	7,611.15	72.97	73.83	-89.53	1,027.16	2,538.00	1,320.04	1,173.81	146.24	9.027		
10,200.00	7,620.00	10,243.72	7,611.93	75.66	76.49	-89.57	1,027.87	2,637.99	1,320.04	1,168.43	151.61	8.707		
10,300.00	7,620.00	10,343.72	7,612.71	78.35	79.16	-89.60	1,028.58	2,737.98	1,320.03	1,163.04	156.99	8.408		
10,400.00	7,620.00	10,443.72	7,613.50	81.05	81.84	-89.64	1,029.29	2,837.98	1,320.03	1,157.65	162.38	8.129		
10,500.00	7,620.00	10,543.71	7,614.28	83.76	84.52	-89.67	1,030.00	2,937.97	1,320.02	1,152.25	167.78	7.868		
10,600.00	7,620.00	10,643.71	7,615.06	86.46	87.20	-89.70	1,030.71	3,037.96	1,320.02	1,146.84	173.18	7.622		
10,700.00	7,620.00	10,743.71	7,615.84	89.17	89.89	-89.74	1,031.42	3,137.95	1,320.01	1,141.42	178.59	7.391		
10,800.00	7,620.00	10,843.71	7,616.63	91.89	92.58	-89.77	1,032.14	3,237.94	1,320.01	1,136.00	184.01	7.173		
10,900.00	7,620.00	10,943.70	7,617.41	94.60	95.28	-89.81	1,032.85	3,337.93	1,320.01	1,130.57	189.44	6.968		
11,000.00	7,620.00	11,043.70	7,618.19	97.32	97.98	-89.84	1,033.56	3,437.92	1,320.00	1,125.14	194.87	6.774		
11,100.00	7,620.00	11,143.70	7,618.97	100.04	100.68	-89.87	1,034.27	3,537.92	1,320.00	1,119.70	200.30	6.590		
11,200.00	7,620.00	11,243.69	7,619.76	102.76	103.39	-89.91	1,034.98	3,637.91	1,320.00	1,114.26	205.74	6.416		
11,300.00	7,620.00	11,343.69	7,620.54	105.49	106.10	-89.94	1,035.69	3,737.90	1,320.00	1,108.82	211.18	6.251		
11,400.00	7,620.00	11,443.69	7,621.32	108.21	108.81	-89.97	1,036.40	3,837.89	1,320.00	1,103.37	216.63	6.093		
11,500.00	7,620.00	11,543.68	7,622.11	110.94	111.52	-90.01	1,037.11	3,937.88	1,320.00	1,097.92	222.08	5.944		
11,513.67	7,620.00	11,557.36	7,622.21	111.31	111.89	-90.01	1,037.21	3,951.55	1,320.00	1,097.17	222.82	5.924		
11,600.00	7,620.00	11,643.68	7,622.89	113.67	114.24	-90.04	1,037.82	4,037.87	1,320.00	1,092.47	227.53	5.801		
11,700.00	7,620.00	11,743.68	7,623.67	116.40	116.95	-90.08	1,038.53	4,137.86	1,320.00	1,087.01	232.99	5.666		
11,800.00	7,620.00	11,843.67	7,624.45	119.13	119.67	-90.11	1,039.24	4,237.86	1,320.00	1,081.55	238.45	5.536		

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 124H
Project:	Eddy County, NM (N83-NME)	TVD Reference:	3333.6+26 @ 3359.60usft (Permit)
Reference Site:	Lady Franklin 25	MD Reference:	3333.6+26 @ 3359.60usft (Permit)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Lady Franklin 25 State 124H	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 Rev 2	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.00 usft		
Survey Program: 0-MWD												Lady Franklin 25 - Lady Franklin 25 State 123H - Permit - APD Rev2		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		
11,900.00	7,620.00	11,943.67	7,625.24	121.87	122.40	-90.14	1,039.95	4,337.85	1,320.00	1,076.09	243.91	5.412			
12,000.00	7,620.00	12,043.67	7,626.02	124.60	125.12	-90.18	1,040.66	4,437.84	1,320.00	1,070.63	249.37	5.293			
12,100.00	7,620.00	12,143.67	7,626.80	127.34	127.84	-90.21	1,041.37	4,537.83	1,320.01	1,065.17	254.84	5.180			
12,200.00	7,620.00	12,243.66	7,627.58	130.07	130.57	-90.25	1,042.09	4,637.82	1,320.01	1,059.70	260.30	5.071			
12,300.00	7,620.00	12,343.66	7,628.37	132.81	133.30	-90.28	1,042.80	4,737.81	1,320.01	1,054.24	265.77	4.967			
12,400.00	7,620.00	12,443.66	7,629.15	135.55	136.03	-90.31	1,043.51	4,837.80	1,320.02	1,048.77	271.25	4.866			
12,506.25	7,620.00	12,549.90	7,629.98	138.46	138.93	-90.35	1,044.26	4,944.05	1,320.02	1,042.96	277.06	4.764 SF			

Company:	Colgate Energy	Local Co-ordinate Reference:	Well Lady Franklin 25 State 124H
Project:	Eddy County, NM (N83-NME)	TVD Reference:	3333.6+26 @ 3359.60usft (Permit)
Reference Site:	Lady Franklin 25	MD Reference:	3333.6+26 @ 3359.60usft (Permit)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Lady Franklin 25 State 124H	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 Rev 2	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft		
Survey Program: 0-MWD													Lady Franklin 25 - Lady Franklin 25 State 131H - Permit - Plan #1		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				
10,200.00	7,620.00	11,282.07	8,735.00	75.66	75.75	-108.07	3,048.49	2,612.77	3,514.02	3,369.41	144.61	24.300	CC			
10,300.00	7,620.00	11,382.07	8,735.00	78.35	78.42	-108.07	3,049.52	2,712.76	3,514.33	3,364.60	149.73	23.471				
10,400.00	7,620.00	11,482.07	8,735.00	81.05	81.10	-108.06	3,050.55	2,812.76	3,514.63	3,359.78	154.86	22.696				
10,500.00	7,620.00	11,582.07	8,735.00	83.76	83.78	-108.06	3,051.59	2,912.75	3,514.94	3,354.95	159.99	21.969				
10,600.00	7,620.00	11,682.07	8,735.00	86.46	86.47	-108.06	3,052.62	3,012.75	3,515.25	3,350.11	165.14	21.287				
10,700.00	7,620.00	11,782.07	8,735.00	89.17	89.16	-108.06	3,053.65	3,112.74	3,515.55	3,345.27	170.29	20.645				
10,800.00	7,620.00	11,882.07	8,735.00	91.89	91.85	-108.06	3,054.69	3,212.73	3,515.86	3,340.41	175.45	20.039				
10,900.00	7,620.00	11,982.07	8,735.00	94.60	94.55	-108.06	3,055.72	3,312.73	3,516.17	3,335.56	180.61	19.468				
11,000.00	7,620.00	12,082.07	8,735.00	97.32	97.25	-108.05	3,056.75	3,412.72	3,516.47	3,330.69	185.78	18.928				
11,100.00	7,620.00	12,182.07	8,735.00	100.04	99.96	-108.05	3,057.79	3,512.72	3,516.78	3,325.82	190.96	18.416				
11,200.00	7,620.00	12,282.07	8,735.00	102.76	102.67	-108.05	3,058.82	3,612.71	3,517.09	3,320.95	196.14	17.932				
11,300.00	7,620.00	12,382.07	8,735.00	105.49	105.38	-108.05	3,059.85	3,712.70	3,517.39	3,316.07	201.32	17.471				
11,400.00	7,620.00	12,482.07	8,735.00	108.21	108.09	-108.05	3,060.89	3,812.70	3,517.70	3,311.19	206.51	17.034				
11,500.00	7,620.00	12,582.07	8,735.00	110.94	110.81	-108.05	3,061.92	3,912.69	3,518.01	3,306.30	211.71	16.617				
11,600.00	7,620.00	12,682.07	8,735.00	113.67	113.52	-108.04	3,062.96	4,012.69	3,518.31	3,301.41	216.90	16.221				
11,700.00	7,620.00	12,782.07	8,735.00	116.40	116.24	-108.04	3,063.99	4,112.68	3,518.62	3,296.52	222.10	15.842				
11,800.00	7,620.00	12,882.07	8,735.00	119.13	118.97	-108.04	3,065.02	4,212.68	3,518.93	3,291.62	227.31	15.481				
11,900.00	7,620.00	12,982.06	8,735.00	121.87	121.69	-108.04	3,066.06	4,312.67	3,519.24	3,286.72	232.51	15.136				
12,000.00	7,620.00	13,082.06	8,735.00	124.60	124.41	-108.04	3,067.09	4,412.66	3,519.54	3,281.82	237.72	14.805				
12,100.00	7,620.00	13,182.06	8,735.00	127.34	127.14	-108.04	3,068.12	4,512.66	3,519.85	3,276.92	242.93	14.489				
12,200.00	7,620.00	13,282.06	8,735.00	130.07	129.87	-108.03	3,069.16	4,612.65	3,520.16	3,272.01	248.15	14.186				
12,300.00	7,620.00	13,382.06	8,735.00	132.81	132.60	-108.03	3,070.19	4,712.65	3,520.46	3,267.10	253.36	13.895				
12,400.00	7,620.00	13,482.06	8,735.00	135.55	135.33	-108.03	3,071.22	4,812.64	3,520.77	3,262.19	258.58	13.616				
12,506.25	7,620.00	13,588.31	8,735.00	138.46	138.23	-108.03	3,072.32	4,918.89	3,521.10	3,256.97	264.13	13.331	ES, SF			

Company:	Colgate Energy	Local Co-ordinate Reference:	Well Lady Franklin 25 State 124H
Project:	Eddy County, NM (N83-NME)	TVD Reference:	3333.6+26 @ 3359.60usft (Permit)
Reference Site:	Lady Franklin 25	MD Reference:	3333.6+26 @ 3359.60usft (Permit)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Lady Franklin 25 State 124H	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 Rev 2	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft		
Survey Program: 0-MWD													Lady Franklin 25 - Lady Franklin 25 State 132H - Permit - Plan #1		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				
9,300.00	7,620.00	10,516.85	8,755.00	51.71	53.86	-118.89	1,713.60	1,726.54	2,298.15	2,203.85	94.30	24.371	CC			
9,400.00	7,620.00	10,616.85	8,755.00	54.33	56.35	-118.88	1,714.64	1,826.53	2,298.44	2,199.58	98.85	23.251				
9,500.00	7,620.00	10,716.85	8,755.00	56.96	58.86	-118.88	1,715.67	1,926.52	2,298.72	2,195.28	103.44	22.223				
9,600.00	7,620.00	10,816.85	8,755.00	59.61	61.40	-118.88	1,716.70	2,026.52	2,299.00	2,190.95	108.05	21.277				
9,700.00	7,620.00	10,916.85	8,755.00	62.27	63.95	-118.87	1,717.73	2,126.51	2,299.28	2,186.60	112.68	20.405				
9,800.00	7,620.00	11,016.85	8,755.00	64.93	66.52	-118.87	1,718.77	2,226.51	2,299.56	2,182.22	117.34	19.598				
9,900.00	7,620.00	11,116.85	8,755.00	67.60	69.11	-118.86	1,719.80	2,326.50	2,299.84	2,177.83	122.01	18.849				
10,000.00	7,620.00	11,216.85	8,755.00	70.28	71.70	-118.86	1,720.83	2,426.50	2,300.13	2,173.43	126.70	18.154				
10,100.00	7,620.00	11,316.85	8,755.00	72.97	74.32	-118.86	1,721.87	2,526.49	2,300.41	2,169.00	131.40	17.506				
10,200.00	7,620.00	11,416.85	8,755.00	75.66	76.94	-118.85	1,722.90	2,626.48	2,300.69	2,164.57	136.12	16.902				
10,300.00	7,620.00	11,516.85	8,755.00	78.35	79.57	-118.85	1,723.93	2,726.48	2,300.97	2,160.12	140.85	16.336				
10,400.00	7,620.00	11,616.85	8,755.00	81.05	82.21	-118.84	1,724.96	2,826.47	2,301.25	2,155.67	145.59	15.807				
10,500.00	7,620.00	11,716.85	8,755.00	83.76	84.85	-118.84	1,726.00	2,926.47	2,301.54	2,151.20	150.34	15.309				
10,600.00	7,620.00	11,816.85	8,755.00	86.46	87.51	-118.84	1,727.03	3,026.46	2,301.82	2,146.73	155.09	14.842				
10,700.00	7,620.00	11,916.84	8,755.00	89.17	90.17	-118.83	1,728.06	3,126.45	2,302.10	2,142.24	159.86	14.401				
10,800.00	7,620.00	12,016.84	8,755.00	91.89	92.83	-118.83	1,729.10	3,226.45	2,302.38	2,137.75	164.63	13.985				
10,900.00	7,620.00	12,116.84	8,755.00	94.60	95.50	-118.83	1,730.13	3,326.44	2,302.66	2,133.25	169.41	13.592				
11,000.00	7,620.00	12,216.84	8,755.00	97.32	98.18	-118.82	1,731.16	3,426.44	2,302.95	2,128.75	174.20	13.220				
11,100.00	7,620.00	12,316.84	8,755.00	100.04	100.86	-118.82	1,732.19	3,526.43	2,303.23	2,124.24	178.99	12.868				
11,200.00	7,620.00	12,416.84	8,755.00	102.76	103.55	-118.81	1,733.23	3,626.43	2,303.51	2,119.73	183.79	12.534				
11,300.00	7,620.00	12,516.84	8,755.00	105.49	106.24	-118.81	1,734.26	3,726.42	2,303.79	2,115.21	188.59	12.216				
11,400.00	7,620.00	12,616.84	8,755.00	108.21	108.93	-118.81	1,735.29	3,826.41	2,304.08	2,110.68	193.39	11.914				
11,500.00	7,620.00	12,716.84	8,755.00	110.94	111.62	-118.80	1,736.33	3,926.41	2,304.36	2,106.15	198.20	11.626				
11,600.00	7,620.00	12,816.84	8,755.00	113.67	114.32	-118.80	1,737.36	4,026.40	2,304.64	2,101.62	203.02	11.352				
11,700.00	7,620.00	12,916.84	8,755.00	116.40	117.02	-118.79	1,738.39	4,126.40	2,304.92	2,097.08	207.84	11.090				
11,800.00	7,620.00	13,016.84	8,755.00	119.13	119.73	-118.79	1,739.42	4,226.39	2,305.20	2,092.54	212.66	10.840				
11,900.00	7,620.00	13,116.84	8,755.00	121.87	122.43	-118.79	1,740.46	4,326.38	2,305.49	2,088.00	217.49	10.601				
12,000.00	7,620.00	13,216.84	8,755.00	124.60	125.14	-118.78	1,741.49	4,426.38	2,305.77	2,083.45	222.31	10.372				
12,100.00	7,620.00	13,316.84	8,755.00	127.34	127.85	-118.78	1,742.52	4,526.37	2,306.05	2,078.90	227.15	10.152				
12,200.00	7,620.00	13,416.84	8,755.00	130.07	130.57	-118.78	1,743.56	4,626.37	2,306.33	2,074.35	231.98	9.942				
12,300.00	7,620.00	13,516.84	8,755.00	132.81	133.28	-118.77	1,744.59	4,726.36	2,306.61	2,069.80	236.82	9.740				
12,400.00	7,620.00	13,616.84	8,755.00	135.55	136.00	-118.77	1,745.62	4,826.35	2,306.90	2,065.24	241.66	9.546				
12,506.25	7,620.00	13,723.09	8,755.00	138.46	138.88	-118.76	1,746.72	4,932.60	2,307.20	2,060.39	246.80	9.348	ES, SF			

Company:	Colgate Energy	Local Co-ordinate Reference:	Well Lady Franklin 25 State 124H
Project:	Eddy County, NM (N83-NME)	TVD Reference:	3333.6+26 @ 3359.60usft (Permit)
Reference Site:	Lady Franklin 25	MD Reference:	3333.6+26 @ 3359.60usft (Permit)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Lady Franklin 25 State 124H	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 Rev 2	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	501.40	501.40	0.98	0.99	-0.19	44.91	-0.15	44.91	42.94	1.97	22.825		
600.00	600.00	601.40	601.40	1.21	1.21	-0.19	44.91	-0.15	44.91	42.49	2.42	18.580		
700.00	700.00	701.40	701.40	1.43	1.43	-0.19	44.91	-0.15	44.91	42.04	2.87	15.666		
800.00	800.00	801.40	801.40	1.66	1.66	-0.19	44.91	-0.15	44.91	41.59	3.32	13.543		
900.00	900.00	901.40	901.40	1.88	1.88	-0.19	44.91	-0.15	44.91	41.14	3.77	11.926		
1,000.00	1,000.00	1,001.40	1,001.40	2.11	2.11	-0.19	44.91	-0.15	44.91	40.69	4.22	10.654		
1,100.00	1,100.00	1,101.40	1,101.40	2.33	2.33	-0.19	44.91	-0.15	44.91	40.25	4.66	9.627		
1,200.00	1,200.00	1,201.40	1,201.40	2.56	2.56	-0.19	44.91	-0.15	44.91	39.80	5.11	8.781		
1,300.00	1,300.00	1,301.40	1,301.40	2.78	2.78	-0.19	44.91	-0.15	44.91	39.35	5.56	8.072		
1,400.00	1,400.00	1,401.40	1,401.40	3.01	3.01	-0.19	44.91	-0.15	44.91	38.90	6.01	7.468		
1,500.00	1,500.00	1,501.40	1,501.40	3.23	3.23	-0.19	44.91	-0.15	44.91	38.45	6.46	6.949		
1,516.19	1,516.19	1,517.59	1,517.59	3.27	3.27	-0.19	44.91	-0.15	44.91	38.37	6.54	6.872	CC	
1,600.00	1,600.00	1,601.39	1,601.39	3.45	3.46	-0.19	44.91	-0.15	44.91	38.00	6.91	6.497	ES	
1,700.00	1,699.99	1,700.00	1,699.99	3.65	3.68	152.11	46.07	-0.76	47.25	39.92	7.33	6.447	SF	
1,800.00	1,799.91	1,798.89	1,798.80	3.83	3.90	152.10	49.50	-2.54	54.19	46.47	7.72	7.017		
1,900.00	1,899.69	1,897.32	1,897.03	4.01	4.12	152.14	55.06	-5.44	65.61	57.49	8.12	8.077		
1,929.94	1,929.53	1,926.98	1,926.62	4.07	4.19	152.26	56.90	-6.40	69.64	61.39	8.25	8.444		
2,000.00	1,999.33	1,996.37	1,995.84	4.20	4.35	152.65	61.19	-8.64	79.31	70.78	8.53	9.293		
2,100.00	2,098.96	2,095.41	2,094.64	4.40	4.57	153.07	67.33	-11.84	93.12	84.17	8.95	10.405		
2,200.00	2,198.58	2,194.45	2,193.43	4.61	4.80	153.38	73.46	-15.04	106.93	97.56	9.37	11.412		
2,300.00	2,298.21	2,293.49	2,292.23	4.83	5.04	153.62	79.60	-18.24	120.75	110.95	9.80	12.327		
2,400.00	2,397.84	2,392.53	2,391.03	5.05	5.27	153.81	85.73	-21.44	134.56	124.34	10.23	13.160		
2,500.00	2,497.46	2,491.57	2,489.83	5.28	5.51	153.97	91.87	-24.64	148.38	137.72	10.66	13.921		
2,600.00	2,597.09	2,590.61	2,588.63	5.51	5.75	154.09	98.00	-27.84	162.20	151.11	11.10	14.618		
2,700.00	2,696.72	2,689.65	2,687.43	5.75	5.98	154.20	104.14	-31.04	176.02	164.48	11.54	15.259		
2,800.00	2,796.35	2,788.69	2,786.22	5.99	6.22	154.29	110.27	-34.24	189.84	177.86	11.98	15.849		
2,900.00	2,895.97	2,887.73	2,885.02	6.23	6.47	154.37	116.41	-37.44	203.66	191.24	12.42	16.394		
3,000.00	2,995.60	2,986.77	2,983.82	6.47	6.71	154.44	122.54	-40.64	217.48	204.61	12.87	16.898		
3,100.00	3,095.23	3,085.81	3,082.62	6.72	6.95	154.50	128.68	-43.84	231.30	217.98	13.32	17.366		
3,200.00	3,194.85	3,184.85	3,181.42	6.97	7.19	154.56	134.81	-47.04	245.12	231.35	13.77	17.802		
3,300.00	3,294.48	3,283.89	3,280.21	7.22	7.44	154.61	140.95	-50.24	258.94	244.72	14.22	18.208		
3,400.00	3,394.11	3,382.93	3,379.01	7.48	7.68	154.65	147.08	-53.44	272.77	258.09	14.68	18.587		
3,500.00	3,493.74	3,481.97	3,477.81	7.73	7.93	154.69	153.22	-56.64	286.59	271.46	15.13	18.941		
3,600.00	3,593.36	3,581.01	3,576.61	7.99	8.17	154.73	159.35	-59.84	300.41	284.82	15.59	19.274		
3,700.00	3,692.99	3,680.05	3,675.41	8.25	8.42	154.76	165.49	-63.04	314.23	298.19	16.04	19.586		
3,800.00	3,792.62	3,779.09	3,774.20	8.51	8.67	154.79	171.62	-66.24	328.05	311.55	16.50	19.880		
3,900.00	3,892.25	3,878.13	3,873.00	8.77	8.91	154.82	177.76	-69.44	341.87	324.91	16.96	20.157		
4,000.00	3,991.87	3,977.17	3,971.80	9.03	9.16	154.84	183.89	-72.64	355.70	338.28	17.42	20.418		
4,100.00	4,091.50	4,076.21	4,070.60	9.29	9.41	154.87	190.03	-75.84	369.52	351.64	17.88	20.665		
4,200.00	4,191.13	4,175.25	4,169.40	9.55	9.66	154.89	196.16	-79.04	383.34	365.00	18.34	20.898		
4,300.00	4,290.75	4,274.29	4,268.19	9.82	9.90	154.91	202.30	-82.24	397.16	378.36	18.81	21.120		
4,400.00	4,390.38	4,373.33	4,366.99	10.08	10.15	154.93	208.43	-85.44	410.99	391.72	19.27	21.330		
4,500.00	4,490.01	4,472.37	4,465.79	10.35	10.40	154.94	214.56	-88.64	424.81	405.08	19.73	21.529		
4,600.00	4,589.64	4,571.41	4,564.59	10.61	10.65	154.96	220.70	-91.84	438.63	418.43	20.20	21.719		
4,700.00	4,689.26	4,670.45	4,663.39	10.88	10.90	154.98	226.83	-95.04	452.45	431.79	20.66	21.900		
4,800.00	4,788.89	4,769.49	4,762.18	11.15	11.15	154.99	232.97	-98.24	466.27	445.15	21.12	22.072		
4,900.00	4,888.52	4,868.53	4,860.98	11.42	11.40	155.01	239.10	-101.44	480.10	458.51	21.59	22.237		
5,000.00	4,988.14	4,967.57	4,959.78	11.68	11.65	155.02	245.24	-104.64	493.92	471.86	22.06	22.394		
5,100.00	5,087.77	5,066.61	5,058.58	11.95	11.90	155.03	251.37	-107.84	507.74	485.22	22.52	22.544		
5,200.00	5,187.40	5,165.65	5,157.38	12.22	12.15	155.04	257.51	-111.04	521.56	498.58	22.99	22.688		
5,300.00	5,287.03	5,264.69	5,256.17	12.49	12.40	155.05	263.64	-114.24	535.39	511.93	23.46	22.826		
5,400.00	5,386.65	5,363.73	5,354.97	12.76	12.65	155.06	269.78	-117.44	549.21	525.29	23.92	22.958		

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 124H
Project:	Eddy County, NM (N83-NME)	TVD Reference:	3333.6+26 @ 3359.60usft (Permit)
Reference Site:	Lady Franklin 25	MD Reference:	3333.6+26 @ 3359.60usft (Permit)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Lady Franklin 25 State 124H	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 Rev 2	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 0-MWD													Offset Well Error:	0.00 usft
Reference													Warning	
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		
5,500.00	5,486.28	5,462.77	5,453.77	13.03	12.90	155.07	275.91	-120.64	563.03	538.64	24.39	23.084		
5,600.00	5,585.91	5,561.81	5,552.57	13.30	13.15	155.08	282.05	-123.84	576.85	552.00	24.86	23.206		
5,684.88	5,670.47	5,645.88	5,636.43	13.53	13.36	155.09	287.25	-126.55	588.59	563.33	25.26	23.306		
5,700.00	5,685.54	5,660.86	5,651.37	13.56	13.40	155.10	288.18	-127.04	590.65	565.33	25.32	23.324		
5,800.00	5,785.29	5,760.09	5,750.36	13.77	13.65	155.12	294.33	-130.24	602.94	577.18	25.76	23.408		
5,900.00	5,885.20	5,859.58	5,849.61	13.97	13.90	155.02	300.49	-133.46	612.87	586.68	26.19	23.402		
6,000.00	5,985.18	5,959.25	5,949.04	14.15	14.15	154.81	306.67	-136.68	620.45	593.83	26.61	23.312		
6,014.82	6,000.00	5,974.04	5,963.78	14.18	14.19	2.46	307.58	-137.16	621.37	594.69	26.68	23.291		
6,100.00	6,085.18	6,059.01	6,048.55	14.33	14.40	2.18	312.85	-139.90	626.53	599.48	27.05	23.162		
6,200.00	6,185.18	6,158.76	6,148.06	14.51	14.66	1.87	319.02	-143.12	632.61	605.14	27.48	23.022		
6,300.00	6,285.18	6,258.52	6,247.57	14.69	14.91	1.56	325.20	-146.35	638.71	610.80	27.91	22.886		
6,400.00	6,385.18	6,358.27	6,347.08	14.86	15.16	1.26	331.38	-149.57	644.83	616.49	28.34	22.755		
6,500.00	6,485.18	6,458.03	6,446.60	15.04	15.41	0.96	337.56	-152.79	650.96	622.19	28.77	22.627		
6,600.00	6,585.18	6,557.79	6,546.11	15.22	15.67	0.67	343.74	-156.02	657.11	627.91	29.20	22.504		
6,700.00	6,685.18	6,657.54	6,645.62	15.41	15.92	0.39	349.92	-159.24	663.28	633.65	29.63	22.384		
6,800.00	6,785.18	6,759.51	6,747.34	15.59	16.17	0.10	356.21	-162.52	669.45	639.38	30.07	22.263		
6,900.00	6,885.18	6,877.84	6,865.51	15.77	16.41	-0.13	361.53	-165.29	673.94	643.43	30.51	22.088		
7,000.00	6,985.18	6,996.43	6,984.08	15.96	16.61	-0.22	363.60	-166.37	675.69	644.77	30.92	21.853		
7,061.86	7,047.04	7,060.79	7,048.44	16.07	16.72	-0.23	363.63	-166.39	675.72	644.55	31.16	21.684		
7,100.00	7,085.15	7,098.91	7,086.55	16.14	16.79	-89.93	363.63	-166.39	675.71	644.41	31.31	21.585		
7,111.46	7,096.58	7,110.33	7,097.98	16.16	16.82	-90.00	363.63	-166.39	675.71	644.36	31.35	21.555		
7,150.00	7,134.83	7,148.59	7,136.23	16.22	16.90	-90.39	363.63	-166.39	675.73	644.23	31.49	21.456		
7,200.00	7,183.85	7,197.60	7,185.25	16.28	17.00	-91.19	363.63	-166.39	675.87	644.20	31.67	21.342		
7,250.00	7,231.82	7,245.57	7,233.22	16.34	17.10	-92.28	363.63	-166.39	676.31	644.48	31.83	21.247		
7,300.00	7,278.38	7,292.14	7,279.78	16.39	17.19	-93.61	363.63	-166.39	677.32	645.33	31.98	21.176		
7,350.00	7,323.19	7,336.94	7,324.59	16.43	17.28	-95.10	363.63	-166.39	679.20	647.07	32.13	21.138		
7,400.00	7,365.89	7,379.65	7,367.29	16.47	17.37	-96.65	363.63	-166.39	682.33	650.05	32.28	21.137		
7,450.00	7,406.17	7,419.92	7,407.57	16.51	17.46	-98.16	363.63	-166.39	687.06	654.63	32.44	21.182		
7,500.00	7,443.71	7,457.46	7,445.11	16.55	17.53	-99.54	363.63	-166.39	693.80	661.19	32.61	21.277		
7,550.00	7,478.23	7,491.99	7,479.63	16.59	17.61	-100.68	363.63	-166.39	702.88	670.08	32.80	21.429		
7,600.00	7,509.48	7,523.23	7,510.88	16.64	17.67	-101.48	363.63	-166.39	714.60	681.58	33.02	21.640		
7,650.00	7,537.20	7,550.95	7,538.60	16.75	17.73	-101.86	363.63	-166.39	729.20	695.93	33.27	21.916		
7,700.00	7,561.19	7,574.95	7,562.59	17.05	17.78	-101.73	363.63	-166.39	746.79	713.24	33.55	22.257		
7,750.00	7,581.27	7,595.03	7,582.67	17.50	17.82	-101.01	363.63	-166.39	767.40	733.54	33.85	22.667		
7,800.00	7,597.29	7,611.04	7,598.69	18.06	17.85	-99.63	363.63	-166.39	790.94	756.77	34.17	23.147		
7,850.00	7,609.11	7,622.87	7,610.51	18.70	17.88	-97.52	363.63	-166.39	817.24	782.75	34.49	23.695		
7,900.00	7,616.66	7,630.42	7,618.06	19.41	17.89	-94.64	363.63	-166.39	846.02	811.22	34.80	24.310		
7,950.00	7,619.88	7,633.63	7,621.28	20.20	17.90	-90.98	363.63	-166.39	876.94	841.84	35.09	24.988		
9,100.00	7,620.00	10,235.42	8,760.00	46.51	47.79	-149.32	375.71	1,542.55	1,323.97	1,269.27	54.70	24.205		
9,200.00	7,620.00	10,335.42	8,760.00	49.10	50.31	-149.32	376.41	1,642.55	1,323.97	1,266.51	57.46	23.043		
9,300.00	7,620.00	10,435.42	8,760.00	51.71	52.85	-149.32	377.12	1,742.54	1,323.97	1,263.72	60.24	21.976		
9,400.00	7,620.00	10,535.42	8,760.00	54.33	55.42	-149.32	377.83	1,842.54	1,323.96	1,260.90	63.06	20.995		
9,500.00	7,620.00	10,635.42	8,760.00	56.96	58.01	-149.32	378.53	1,942.54	1,323.96	1,258.06	65.90	20.090		
9,600.00	7,620.00	10,735.42	8,760.00	59.61	60.61	-149.32	379.24	2,042.54	1,323.96	1,255.20	68.76	19.255		
9,700.00	7,620.00	10,835.42	8,760.00	62.27	63.22	-149.32	379.95	2,142.53	1,323.96	1,252.32	71.64	18.481		
9,800.00	7,620.00	10,935.42	8,760.00	64.93	65.84	-149.32	380.65	2,242.53	1,323.96	1,249.42	74.53	17.764		
9,900.00	7,620.00	11,035.42	8,760.00	67.60	68.48	-149.32	381.36	2,342.53	1,323.95	1,246.51	77.44	17.096		
10,000.00	7,620.00	11,135.42	8,760.00	70.28	71.12	-149.32	382.07	2,442.53	1,323.95	1,243.59	80.36	16.475		
10,100.00	7,620.00	11,235.42	8,760.00	72.97	73.78	-149.32	382.78	2,542.52	1,323.95	1,240.66	83.29	15.895		
10,200.00	7,620.00	11,335.42	8,760.00	75.66	76.44	-149.32	383.48	2,642.52	1,323.95	1,237.71	86.24	15.352		
10,300.00	7,620.00	11,435.42	8,760.00	78.35	79.11	-149.32	384.19	2,742.52	1,323.95	1,234.76	89.19	14.844		
10,400.00	7,620.00	11,535.42	8,760.00	81.05	81.78	-149.32	384.90	2,842.52	1,323.94	1,231.79	92.15	14.367		

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 124H
Project:	Eddy County, NM (N83-NME)	TVD Reference:	3333.6+26 @ 3359.60usft (Permit)
Reference Site:	Lady Franklin 25	MD Reference:	3333.6+26 @ 3359.60usft (Permit)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Lady Franklin 25 State 124H	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 Rev 2	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		
10,500.00	7,620.00	11,635.42	8,760.00	83.76	84.46	-149.32	385.60	2,942.51	1,323.94	1,228.82	95.12	13.919		
10,600.00	7,620.00	11,735.42	8,760.00	86.46	87.14	-149.32	386.31	3,042.51	1,323.94	1,225.85	98.09	13.497		
10,700.00	7,620.00	11,835.42	8,760.00	89.17	89.83	-149.32	387.02	3,142.51	1,323.94	1,222.87	101.07	13.099		
10,800.00	7,620.00	11,935.42	8,760.00	91.89	92.53	-149.32	387.72	3,242.51	1,323.93	1,219.88	104.06	12.723		
10,900.00	7,620.00	12,035.42	8,760.00	94.60	95.22	-149.32	388.43	3,342.50	1,323.93	1,216.88	107.05	12.367		
11,000.00	7,620.00	12,135.42	8,760.00	97.32	97.92	-149.32	389.14	3,442.50	1,323.93	1,213.88	110.05	12.031		
11,100.00	7,620.00	12,235.42	8,760.00	100.04	100.63	-149.32	389.84	3,542.50	1,323.93	1,210.88	113.05	11.711		
11,200.00	7,620.00	12,335.42	8,760.00	102.76	103.33	-149.32	390.55	3,642.50	1,323.93	1,207.87	116.05	11.408		
11,300.00	7,620.00	12,435.42	8,760.00	105.49	106.04	-149.32	391.26	3,742.49	1,323.92	1,204.86	119.06	11.120		
11,400.00	7,620.00	12,535.42	8,760.00	108.21	108.75	-149.32	391.96	3,842.49	1,323.92	1,201.85	122.07	10.845		
11,500.00	7,620.00	12,635.42	8,760.00	110.94	111.47	-149.32	392.67	3,942.49	1,323.92	1,198.83	125.09	10.584		
11,600.00	7,620.00	12,735.42	8,760.00	113.67	114.18	-149.32	393.38	4,042.49	1,323.92	1,195.81	128.11	10.335		
11,700.00	7,620.00	12,835.42	8,760.00	116.40	116.90	-149.32	394.08	4,142.48	1,323.92	1,192.79	131.13	10.096		
11,800.00	7,620.00	12,935.42	8,760.00	119.13	119.62	-149.32	394.79	4,242.48	1,323.91	1,189.76	134.15	9.869		
11,900.00	7,620.00	13,035.42	8,760.00	121.87	122.34	-149.32	395.50	4,342.48	1,323.91	1,186.73	137.18	9.651		
12,000.00	7,620.00	13,135.42	8,760.00	124.60	125.07	-149.32	396.20	4,442.48	1,323.91	1,183.70	140.20	9.443		
12,100.00	7,620.00	13,235.42	8,760.00	127.34	127.79	-149.32	396.91	4,542.47	1,323.91	1,180.67	143.24	9.243		
12,200.00	7,620.00	13,335.42	8,760.00	130.07	130.52	-149.32	397.62	4,642.47	1,323.90	1,177.64	146.27	9.051		
12,300.00	7,620.00	13,435.42	8,760.00	132.81	133.25	-149.32	398.32	4,742.47	1,323.90	1,174.60	149.30	8.867		
12,400.00	7,620.00	13,535.42	8,760.00	135.55	135.97	-149.32	399.03	4,842.47	1,323.90	1,171.56	152.34	8.691		
12,506.25	7,620.00	13,641.67	8,760.00	138.46	138.88	-149.32	399.78	4,948.72	1,323.90	1,168.33	155.57	8.510		

Company:	Colgate Energy	Local Co-ordinate Reference:	Well Lady Franklin 25 State 124H
Project:	Eddy County, NM (N83-NME)	TVD Reference:	3333.6+26 @ 3359.60usft (Permit)
Reference Site:	Lady Franklin 25	MD Reference:	3333.6+26 @ 3359.60usft (Permit)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Lady Franklin 25 State 124H	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 Rev 2	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	498.90	498.90	0.98	0.98	179.75	-45.03	0.20	45.03	43.07	1.96	22.951		
600.00	600.00	598.90	598.90	1.21	1.20	179.75	-45.03	0.20	45.03	42.62	2.41	18.673		
700.00	700.00	698.90	698.90	1.43	1.43	179.75	-45.03	0.20	45.03	42.17	2.86	15.739		
800.00	800.00	798.90	798.90	1.66	1.65	179.75	-45.03	0.20	45.03	41.72	3.31	13.602		
900.00	900.00	898.90	898.90	1.88	1.88	179.75	-45.03	0.20	45.03	41.27	3.76	11.976		
1,000.00	1,000.00	998.90	998.90	2.11	2.10	179.75	-45.03	0.20	45.03	40.82	4.21	10.697		
1,100.00	1,100.00	1,098.90	1,098.90	2.33	2.33	179.75	-45.03	0.20	45.03	40.37	4.66	9.665		
1,200.00	1,200.00	1,198.90	1,198.90	2.56	2.55	179.75	-45.03	0.20	45.03	39.92	5.11	8.814 CC, ES		
1,300.00	1,300.00	1,297.74	1,297.73	2.78	2.75	-179.98	-46.26	-0.02	46.28	40.75	5.53	8.372 SF		
1,400.00	1,400.00	1,396.45	1,396.36	3.01	2.92	-179.23	-50.00	-0.68	50.07	44.15	5.92	8.457		
1,500.00	1,500.00	1,494.88	1,494.59	3.23	3.10	-178.20	-56.23	-1.77	56.43	50.11	6.32	8.932		
1,600.00	1,600.00	1,592.93	1,592.24	3.45	3.29	-177.09	-64.92	-3.30	65.34	58.63	6.72	9.730		
1,700.00	1,699.99	1,690.61	1,689.26	3.65	3.50	-24.06	-76.02	-5.25	75.62	68.53	7.09	10.672		
1,800.00	1,799.91	1,788.02	1,785.70	3.83	3.73	-24.02	-89.52	-7.63	86.05	78.61	7.43	11.576		
1,900.00	1,899.69	1,887.33	1,883.80	4.01	3.99	-24.52	-104.75	-10.31	95.60	87.78	7.81	12.234		
1,929.94	1,929.53	1,917.17	1,913.28	4.07	4.07	-24.78	-109.33	-11.12	98.00	90.07	7.93	12.357		
2,000.00	1,999.33	1,987.02	1,982.27	4.20	4.26	-25.43	-120.05	-13.00	103.39	95.18	8.21	12.592		
2,100.00	2,098.96	2,086.71	2,080.74	4.40	4.55	-26.25	-135.35	-15.70	111.10	102.48	8.62	12.887		
2,200.00	2,198.58	2,186.40	2,179.21	4.61	4.84	-26.96	-150.65	-18.39	118.83	109.79	9.04	13.147		
2,300.00	2,298.21	2,286.09	2,277.69	4.83	5.15	-27.58	-165.95	-21.08	126.57	117.11	9.47	13.370		
2,400.00	2,397.84	2,385.78	2,376.16	5.05	5.46	-28.14	-181.26	-23.77	134.33	124.43	9.90	13.567		
2,500.00	2,497.46	2,485.47	2,474.63	5.28	5.78	-28.63	-196.56	-26.47	142.10	131.76	10.34	13.740		
2,600.00	2,597.09	2,585.16	2,573.10	5.51	6.10	-29.07	-211.86	-29.16	149.88	139.09	10.79	13.891		
2,700.00	2,696.72	2,684.85	2,671.58	5.75	6.43	-29.47	-227.16	-31.85	157.67	146.42	11.24	14.025		
2,800.00	2,796.35	2,784.54	2,770.05	5.99	6.76	-29.83	-242.46	-34.55	165.46	153.76	11.70	14.144		
2,900.00	2,895.97	2,884.23	2,868.52	6.23	7.09	-30.16	-257.76	-37.24	173.26	161.10	12.16	14.249		
3,000.00	2,995.60	2,983.92	2,966.99	6.47	7.43	-30.46	-273.06	-39.93	181.06	168.44	12.62	14.342		
3,100.00	3,095.23	3,083.61	3,065.47	6.72	7.77	-30.73	-288.37	-42.62	188.87	175.78	13.09	14.426		
3,200.00	3,194.85	3,183.31	3,163.94	6.97	8.11	-30.99	-303.67	-45.32	196.69	183.12	13.56	14.501		
3,300.00	3,294.48	3,283.00	3,262.41	7.22	8.45	-31.22	-318.97	-48.01	204.50	190.47	14.04	14.568		
3,400.00	3,394.11	3,382.69	3,360.88	7.48	8.80	-31.44	-334.27	-50.70	212.32	197.81	14.51	14.628		
3,500.00	3,493.74	3,482.38	3,459.36	7.73	9.14	-31.64	-349.57	-53.39	220.15	205.15	14.99	14.683		
3,600.00	3,593.36	3,582.07	3,557.83	7.99	9.49	-31.83	-364.87	-56.09	227.97	212.50	15.47	14.732		
3,700.00	3,692.99	3,681.76	3,656.30	8.25	9.84	-32.00	-380.17	-58.78	235.80	219.84	15.96	14.777		
3,800.00	3,792.62	3,781.45	3,754.77	8.51	10.19	-32.16	-395.48	-61.47	243.63	227.19	16.44	14.817		
3,900.00	3,892.25	3,881.14	3,853.25	8.77	10.54	-32.32	-410.78	-64.17	251.46	234.53	16.93	14.854		
4,000.00	3,991.87	3,980.83	3,951.72	9.03	10.89	-32.46	-426.08	-66.86	259.29	241.88	17.42	14.888		
4,100.00	4,091.50	4,080.52	4,050.19	9.29	11.25	-32.60	-441.38	-69.55	267.13	249.22	17.91	14.919		
4,200.00	4,191.13	4,180.21	4,148.66	9.55	11.60	-32.73	-456.68	-72.24	274.96	256.57	18.40	14.947		
4,300.00	4,290.75	4,279.90	4,247.14	9.82	11.95	-32.85	-471.98	-74.94	282.80	263.91	18.89	14.973		
4,400.00	4,390.38	4,379.59	4,345.61	10.08	12.31	-32.96	-487.28	-77.63	290.64	271.26	19.38	14.997		
4,500.00	4,490.01	4,479.28	4,444.08	10.35	12.66	-33.07	-502.59	-80.32	298.48	278.60	19.87	15.019		
4,600.00	4,589.64	4,578.98	4,542.55	10.61	13.02	-33.17	-517.89	-83.02	306.32	285.95	20.37	15.039		
4,700.00	4,689.26	4,678.67	4,641.03	10.88	13.37	-33.27	-533.19	-85.71	314.16	293.30	20.86	15.058		
4,800.00	4,788.89	4,778.36	4,739.50	11.15	13.73	-33.36	-548.49	-88.40	322.00	300.64	21.36	15.075		
4,900.00	4,888.52	4,878.05	4,837.97	11.42	14.08	-33.45	-563.79	-91.09	329.85	307.99	21.86	15.091		
5,000.00	4,988.14	4,977.74	4,936.44	11.68	14.44	-33.54	-579.09	-93.79	337.69	315.33	22.36	15.105		
5,100.00	5,087.77	5,077.43	5,034.92	11.95	14.80	-33.62	-594.39	-96.48	345.53	322.68	22.85	15.119		
5,200.00	5,187.40	5,177.12	5,133.39	12.22	15.16	-33.69	-609.70	-99.17	353.38	330.03	23.35	15.132		
5,300.00	5,287.03	5,276.81	5,231.86	12.49	15.51	-33.77	-625.00	-101.87	361.23	337.37	23.85	15.144		
5,400.00	5,386.65	5,376.50	5,330.34	12.76	15.87	-33.84	-640.30	-104.56	369.07	344.72	24.35	15.155		
5,500.00	5,486.28	5,476.19	5,428.81	13.03	16.23	-33.91	-655.60	-107.25	376.92	352.07	24.85	15.165		

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 124H
Project:	Eddy County, NM (N83-NME)	TVD Reference:	3333.6+26 @ 3359.60usft (Permit)
Reference Site:	Lady Franklin 25	MD Reference:	3333.6+26 @ 3359.60usft (Permit)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Lady Franklin 25 State 124H	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 Rev 2	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	5,585.91	5,575.88	5,527.28	13.30	16.59	-33.97	-670.90	-109.94	384.77	359.41	25.36	15.175		
5,684.88	5,670.47	5,660.50	5,610.86	13.53	16.89	-34.02	-683.89	-112.23	391.43	365.65	25.78	15.182		
5,700.00	5,685.54	5,675.57	5,625.75	13.56	16.95	-34.04	-686.20	-112.64	392.64	366.78	25.85	15.186		
5,800.00	5,785.29	5,775.14	5,724.10	13.77	17.30	-34.04	-701.48	-115.33	401.90	375.59	26.31	15.276		
5,900.00	5,885.20	5,874.46	5,822.21	13.97	17.66	-33.86	-716.73	-118.01	413.31	386.57	26.74	15.456		
6,000.00	5,985.18	5,973.47	5,920.01	14.15	18.02	-33.52	-731.93	-120.68	426.91	399.75	27.15	15.721		
6,014.82	6,000.00	5,988.12	5,934.48	14.18	18.07	174.23	-734.17	-121.08	429.11	401.89	27.22	15.766		
6,100.00	6,085.18	6,072.26	6,017.59	14.33	18.38	174.70	-747.09	-123.35	441.91	414.34	27.57	16.030		
6,200.00	6,185.18	6,171.03	6,115.16	14.51	18.73	175.21	-762.25	-126.02	456.97	429.00	27.98	16.335		
6,300.00	6,285.18	6,269.81	6,212.73	14.69	19.09	175.69	-777.41	-128.69	472.07	443.69	28.39	16.630		
6,400.00	6,385.18	6,368.59	6,310.30	14.86	19.44	176.15	-792.57	-131.36	487.20	458.40	28.80	16.917		
6,500.00	6,485.18	6,467.37	6,407.87	15.04	19.80	176.57	-807.73	-134.03	502.36	473.14	29.22	17.194		
6,600.00	6,585.18	6,566.15	6,505.45	15.22	20.16	176.97	-822.90	-136.69	517.54	487.90	29.64	17.463		
6,700.00	6,685.18	6,664.92	6,603.02	15.41	20.52	177.35	-838.06	-139.36	532.75	502.69	30.06	17.724		
6,800.00	6,785.18	6,763.70	6,700.59	15.59	20.87	177.70	-853.22	-142.03	547.97	517.49	30.48	17.978		
6,900.00	6,885.18	6,862.48	6,798.16	15.77	21.23	178.04	-868.38	-144.70	563.22	532.31	30.91	18.223		
7,000.00	6,985.18	6,961.26	6,895.73	15.96	21.59	178.36	-883.54	-147.37	578.48	547.15	31.33	18.462		
7,061.86	7,047.04	7,022.36	6,956.09	16.07	21.81	178.55	-892.92	-149.02	587.93	556.33	31.60	18.606		
7,100.00	7,085.15	7,059.97	6,993.24	16.14	21.94	88.61	-898.69	-150.03	593.74	561.99	31.75	18.700		
7,150.00	7,134.83	7,108.89	7,041.56	16.22	22.12	88.51	-906.20	-151.35	601.30	569.39	31.92	18.841		
7,200.00	7,183.85	7,157.03	7,089.11	16.28	22.29	88.77	-913.59	-152.65	608.90	576.85	32.05	18.999		
7,250.00	7,231.82	7,209.96	7,141.42	16.34	22.46	89.54	-921.54	-154.05	616.54	584.36	32.18	19.160		
7,300.00	7,278.38	7,264.39	7,195.32	16.39	22.60	90.73	-929.00	-155.37	623.99	591.70	32.30	19.321		
7,350.00	7,323.19	7,316.94	7,247.45	16.43	22.73	92.18	-935.48	-156.51	631.58	599.16	32.42	19.482		
7,400.00	7,365.89	7,367.20	7,297.40	16.47	22.85	93.78	-941.03	-157.48	639.69	607.12	32.56	19.644		
7,450.00	7,406.17	7,414.77	7,344.73	16.51	22.95	95.41	-945.67	-158.30	648.75	616.00	32.76	19.805		
7,500.00	7,443.71	7,459.26	7,389.05	16.55	23.04	96.96	-949.49	-158.97	659.21	626.19	33.02	19.965		
7,550.00	7,478.23	7,500.31	7,429.98	16.59	23.13	98.31	-952.57	-159.51	671.48	638.11	33.37	20.125		
7,600.00	7,509.48	7,537.57	7,467.17	16.64	23.20	99.34	-954.98	-159.94	685.91	652.11	33.81	20.290		
7,650.00	7,537.20	7,570.74	7,500.28	16.75	23.26	99.94	-956.83	-160.26	702.81	668.47	34.34	20.464		
7,700.00	7,561.19	7,599.51	7,529.02	17.05	23.31	100.00	-958.21	-160.51	722.37	687.40	34.97	20.657		
7,750.00	7,581.27	7,623.65	7,553.13	17.50	23.35	99.44	-959.20	-160.68	744.66	708.99	35.66	20.880		
7,800.00	7,597.29	7,642.91	7,572.39	18.06	23.38	98.15	-959.88	-160.80	769.66	733.26	36.40	21.144		
7,850.00	7,609.11	7,657.12	7,586.59	18.70	23.40	96.07	-960.32	-160.88	797.23	760.07	37.16	21.455		
7,900.00	7,616.66	7,666.13	7,595.59	19.41	23.41	93.13	-960.57	-160.92	827.13	789.22	37.91	21.818		
7,950.00	7,619.88	7,669.81	7,599.27	20.20	23.42	89.31	-960.67	-160.94	859.03	820.40	38.63	22.235		
7,961.86	7,620.00	7,669.89	7,599.35	20.39	23.42	88.27	-960.67	-160.94	866.85	828.05	38.80	22.341		
8,000.00	7,620.00	7,669.66	7,599.12	21.04	23.42	88.25	-960.67	-160.94	892.60	853.28	39.32	22.701		
8,100.00	7,620.00	7,669.07	7,598.53	22.87	23.42	88.20	-960.65	-160.94	964.01	923.44	40.57	23.760		
8,200.00	7,620.00	7,668.46	7,597.93	24.88	23.42	88.15	-960.64	-160.93	1,040.14	998.48	41.66	24.966		
9,200.00	7,620.00	10,392.76	8,755.00	49.10	51.03	150.22	-949.19	1,651.91	1,308.90	1,254.20	54.70	23.928		
9,300.00	7,620.00	10,492.76	8,755.00	51.71	53.54	150.22	-948.48	1,751.91	1,308.90	1,251.45	57.45	22.783		
9,400.00	7,620.00	10,592.76	8,755.00	54.33	56.07	150.22	-947.78	1,851.90	1,308.91	1,248.68	60.23	21.732		
9,500.00	7,620.00	10,692.76	8,755.00	56.96	58.62	150.22	-947.07	1,951.90	1,308.91	1,245.88	63.03	20.767		
9,600.00	7,620.00	10,792.76	8,755.00	59.61	61.20	150.22	-946.37	2,051.90	1,308.91	1,243.06	65.85	19.877		
9,700.00	7,620.00	10,892.76	8,755.00	62.27	63.78	150.22	-945.66	2,151.90	1,308.91	1,240.23	68.69	19.056		
9,800.00	7,620.00	10,992.76	8,755.00	64.93	66.39	150.22	-944.95	2,251.89	1,308.92	1,237.38	71.54	18.296		
9,900.00	7,620.00	11,092.76	8,755.00	67.60	69.00	150.22	-944.25	2,351.89	1,308.92	1,234.51	74.41	17.591		
10,000.00	7,620.00	11,192.76	8,755.00	70.28	71.62	150.22	-943.54	2,451.89	1,308.92	1,231.63	77.29	16.936		
10,100.00	7,620.00	11,292.76	8,755.00	72.97	74.26	150.22	-942.84	2,551.89	1,308.93	1,228.75	80.18	16.325		
10,200.00	7,620.00	11,392.76	8,755.00	75.66	76.90	150.22	-942.13	2,651.88	1,308.93	1,225.85	83.08	15.755		
10,300.00	7,620.00	11,492.76	8,755.00	78.35	79.55	150.22	-941.43	2,751.88	1,308.93	1,222.94	85.99	15.222		

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 124H
Project:	Eddy County, NM (N83-NME)	TVD Reference:	3333.6+26 @ 3359.60usft (Permit)
Reference Site:	Lady Franklin 25	MD Reference:	3333.6+26 @ 3359.60usft (Permit)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Lady Franklin 25 State 124H	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 Rev 2	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
Survey Program: 0-MWD													Offset Well Error:	0.00 usft
Lady Franklin 25 - Lady Franklin 25 State 134H - Permit - Plan #1														
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		
10,400.00	7,620.00	11,592.76	8,755.00	81.05	82.21	150.22	-940.72	2,851.88	1,308.93	1,220.03	88.91	14.722		
10,500.00	7,620.00	11,692.76	8,755.00	83.76	84.88	150.22	-940.02	2,951.88	1,308.94	1,217.10	91.83	14.254		
10,600.00	7,620.00	11,792.76	8,755.00	86.46	87.55	150.22	-939.31	3,051.87	1,308.94	1,214.18	94.76	13.813		
10,700.00	7,620.00	11,892.76	8,755.00	89.17	90.22	150.22	-938.61	3,151.87	1,308.94	1,211.24	97.70	13.397		
10,800.00	7,620.00	11,992.76	8,755.00	91.89	92.90	150.22	-937.90	3,251.87	1,308.94	1,208.30	100.64	13.006		
10,900.00	7,620.00	12,092.76	8,755.00	94.60	95.59	150.22	-937.19	3,351.87	1,308.95	1,205.36	103.59	12.636		
11,000.00	7,620.00	12,192.76	8,755.00	97.32	98.28	150.22	-936.49	3,451.86	1,308.95	1,202.41	106.54	12.286		
11,100.00	7,620.00	12,292.76	8,755.00	100.04	100.97	150.22	-935.78	3,551.86	1,308.95	1,199.45	109.50	11.954		
11,200.00	7,620.00	12,392.76	8,755.00	102.76	103.67	150.22	-935.08	3,651.86	1,308.95	1,196.49	112.46	11.639		
11,300.00	7,620.00	12,492.76	8,755.00	105.49	106.37	150.22	-934.37	3,751.86	1,308.96	1,193.53	115.43	11.340		
11,400.00	7,620.00	12,592.76	8,755.00	108.21	109.07	150.22	-933.67	3,851.85	1,308.96	1,190.57	118.39	11.056		
11,500.00	7,620.00	12,692.76	8,755.00	110.94	111.78	150.22	-932.96	3,951.85	1,308.96	1,187.60	121.36	10.786		
11,600.00	7,620.00	12,792.76	8,755.00	113.67	114.49	150.22	-932.26	4,051.85	1,308.97	1,184.63	124.34	10.528		
11,700.00	7,620.00	12,892.76	8,755.00	116.40	117.20	150.22	-931.55	4,151.85	1,308.97	1,181.66	127.31	10.282		
11,800.00	7,620.00	12,992.76	8,755.00	119.13	119.91	150.22	-930.84	4,251.84	1,308.97	1,178.68	130.29	10.047		
11,900.00	7,620.00	13,092.76	8,755.00	121.87	122.62	150.22	-930.14	4,351.84	1,308.97	1,175.70	133.27	9.822		
12,000.00	7,620.00	13,192.76	8,755.00	124.60	125.34	150.22	-929.43	4,451.84	1,308.98	1,172.72	136.26	9.607		
12,100.00	7,620.00	13,292.76	8,755.00	127.34	128.06	150.22	-928.73	4,551.84	1,308.98	1,169.74	139.24	9.401		
12,200.00	7,620.00	13,392.76	8,755.00	130.07	130.78	150.22	-928.02	4,651.83	1,308.98	1,166.75	142.23	9.203		
12,300.00	7,620.00	13,492.76	8,755.00	132.81	133.50	150.22	-927.32	4,751.83	1,308.98	1,163.77	145.22	9.014		
12,400.00	7,620.00	13,592.76	8,755.00	135.55	136.23	150.22	-926.61	4,851.83	1,308.99	1,160.78	148.21	8.832		
12,409.74	7,620.00	13,602.50	8,755.00	135.82	136.49	150.22	-926.54	4,861.57	1,308.99	1,160.49	148.50	8.815		
12,506.25	7,620.00	13,697.85	8,755.00	138.46	139.09	150.22	-925.87	4,956.92	1,308.99	1,157.61	151.38	8.647		

Company:	Colgate Energy	Local Co-ordinate Reference:	Well Lady Franklin 25 State 124H
Project:	Eddy County, NM (N83-NME)	TVD Reference:	3333.6+26 @ 3359.60usft (Permit)
Reference Site:	Lady Franklin 25	MD Reference:	3333.6+26 @ 3359.60usft (Permit)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Lady Franklin 25 State 124H	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 Rev 2	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		
3,500.00	3,493.74	3,451.92	3,451.66	7.73	65.96	-102.25	-620.86	1,705.31	1,840.80	1,767.13	73.67	24.986		
3,600.00	3,593.36	3,554.07	3,553.76	7.99	68.22	-102.51	-621.19	1,705.31	1,842.75	1,766.56	76.18	24.188		
3,700.00	3,692.99	3,653.69	3,653.39	8.25	70.62	-102.77	-621.19	1,705.31	1,844.64	1,765.80	78.84	23.396		
3,800.00	3,792.62	3,753.32	3,753.02	8.51	73.03	-103.03	-621.19	1,705.31	1,846.57	1,765.07	81.51	22.656		
3,900.00	3,892.25	3,851.54	3,851.23	8.77	75.40	-103.31	-620.22	1,705.31	1,848.30	1,764.17	84.13	21.969		
4,000.00	3,991.87	3,949.70	3,949.38	9.03	77.77	-103.55	-620.69	1,705.31	1,850.43	1,763.67	86.76	21.328		
4,100.00	4,091.50	4,052.38	4,051.90	9.29	80.38	-103.81	-621.19	1,705.31	1,852.60	1,762.97	89.63	20.670		
4,200.00	4,191.13	4,150.08	4,149.57	9.55	83.07	-104.08	-620.31	1,705.31	1,854.48	1,761.90	92.58	20.031		
4,300.00	4,290.75	4,251.77	4,251.15	9.82	85.94	-104.32	-621.19	1,705.31	1,856.81	1,761.09	95.71	19.400		
4,400.00	4,390.38	4,350.68	4,350.05	10.08	88.95	-104.60	-620.24	1,705.31	1,858.75	1,759.77	98.99	18.778		
4,500.00	4,490.01	4,451.21	4,450.41	10.35	92.02	-104.83	-621.19	1,705.31	1,861.16	1,758.85	102.32	18.190		
4,600.00	4,589.64	4,550.65	4,549.73	10.61	95.70	-105.10	-620.73	1,705.31	1,863.30	1,757.04	106.26	17.536		
4,700.00	4,689.26	4,650.80	4,649.66	10.88	99.65	-105.34	-621.19	1,705.31	1,865.67	1,755.20	110.47	16.889		
4,800.00	4,788.89	4,750.65	4,749.29	11.15	103.82	-105.60	-621.19	1,705.31	1,867.98	1,753.08	114.90	16.258		
4,900.00	4,888.52	4,845.92	4,844.44	11.42	107.58	-105.85	-620.81	1,705.31	1,870.25	1,751.33	118.92	15.726		
5,000.00	4,988.14	4,950.19	4,948.54	11.68	111.42	-106.10	-621.19	1,705.31	1,872.71	1,749.68	123.03	15.222		
5,100.00	5,087.77	5,046.65	5,044.91	11.95	114.78	-106.36	-620.72	1,705.31	1,875.04	1,748.39	126.65	14.805		
5,200.00	5,187.40	5,148.27	5,146.44	12.22	118.19	-106.63	-620.53	1,705.31	1,877.46	1,747.14	130.32	14.407		
5,300.00	5,287.03	5,249.10	5,247.15	12.49	121.45	-106.87	-620.67	1,705.31	1,879.98	1,746.14	133.84	14.046		
5,400.00	5,386.65	5,349.06	5,347.05	12.76	124.36	-107.11	-621.19	1,705.31	1,882.61	1,745.59	137.02	13.740		
5,500.00	5,486.28	5,448.75	5,446.68	13.03	126.99	-107.36	-621.19	1,705.31	1,885.17	1,745.26	139.91	13.474		
5,600.00	5,585.91	5,546.61	5,544.54	13.30	129.35	-107.62	-620.70	1,705.31	1,887.69	1,745.15	142.54	13.243		
5,684.88	5,670.47	5,632.99	5,630.87	13.53	131.37	-107.82	-621.19	1,705.31	1,890.01	1,745.23	144.78	13.054		
5,700.00	5,685.54	5,648.05	5,645.94	13.56	131.71	-107.86	-621.19	1,705.31	1,890.40	1,745.25	145.15	13.024		
5,800.00	5,785.29	5,747.28	5,745.16	13.77	133.90	-108.11	-620.51	1,705.31	1,892.43	1,744.88	147.55	12.825		
5,900.00	5,885.20	5,844.65	5,842.51	13.97	136.06	-108.24	-621.08	1,705.31	1,893.87	1,743.97	149.90	12.634		
6,000.00	5,985.18	5,947.75	5,945.58	14.15	138.62	-108.29	-621.19	1,705.31	1,894.42	1,741.77	152.65	12.410		
6,014.82	6,000.00	5,962.57	5,960.40	14.18	139.00	99.39	-621.19	1,705.31	1,894.43	1,741.38	153.05	12.378		
6,052.26	6,037.44	6,000.00	5,997.83	14.25	139.94	99.37	-620.56	1,705.31	1,894.33	1,740.26	154.06	12.296		
6,100.00	6,085.18	6,046.88	6,044.71	14.33	141.12	99.37	-620.62	1,705.31	1,894.34	1,739.01	155.33	12.195		
6,200.00	6,185.18	6,147.85	6,145.58	14.51	143.68	99.39	-621.19	1,705.31	1,894.43	1,736.36	158.07	11.985		
6,271.40	6,256.58	6,219.13	6,216.85	14.64	145.77	99.37	-620.56	1,705.31	1,894.33	1,734.04	160.29	11.818		
6,300.00	6,285.18	6,245.77	6,243.48	14.69	146.56	99.37	-620.65	1,705.31	1,894.34	1,733.22	161.12	11.757		
6,400.00	6,385.18	6,347.94	6,345.58	14.86	149.50	99.39	-621.19	1,705.31	1,894.43	1,730.19	164.24	11.534		
6,500.00	6,485.18	6,448.01	6,445.58	15.04	152.26	99.39	-621.19	1,705.31	1,894.43	1,727.24	167.19	11.331		
6,557.33	6,542.51	6,505.17	6,502.73	15.15	153.71	99.37	-620.60	1,705.31	1,894.33	1,725.60	168.73	11.227		
6,600.00	6,585.18	6,545.42	6,542.98	15.22	154.72	99.38	-620.78	1,705.31	1,894.36	1,724.54	169.82	11.155		
6,700.00	6,685.18	6,648.07	6,645.58	15.41	157.17	99.39	-621.19	1,705.31	1,894.43	1,721.97	172.46	10.985		
6,741.91	6,727.09	6,689.98	6,687.49	15.48	158.14	99.37	-620.59	1,705.31	1,894.33	1,720.83	173.50	10.918		
6,800.00	6,785.18	6,746.36	6,743.86	15.59	159.44	99.38	-620.75	1,705.31	1,894.36	1,719.45	174.91	10.830		
6,900.00	6,885.18	6,848.12	6,845.58	15.77	161.85	99.39	-621.19	1,705.31	1,894.43	1,716.93	177.50	10.673		
6,965.88	6,951.06	6,913.87	6,911.33	15.89	163.44	99.37	-620.59	1,705.31	1,894.33	1,715.12	179.22	10.570		
7,000.00	6,985.18	6,946.99	6,944.45	15.96	164.24	99.37	-620.66	1,705.31	1,894.34	1,714.26	180.08	10.519		
7,061.86	7,047.04	7,007.04	7,004.49	16.07	165.69	99.39	-621.06	1,705.31	1,894.41	1,712.76	181.65	10.429		
7,100.00	7,085.15	7,048.15	7,045.55	16.14	166.75	9.83	-621.19	1,705.31	1,893.18	1,710.41	182.77	10.358		
7,150.00	7,134.83	7,097.83	7,095.23	16.22	168.05	9.95	-621.19	1,705.31	1,887.76	1,703.60	184.16	10.250		
7,200.00	7,183.85	7,146.25	7,143.64	16.28	169.32	10.15	-620.49	1,705.31	1,877.99	1,692.47	185.52	10.123		
7,250.00	7,231.82	7,192.54	7,189.93	16.34	170.54	10.49	-620.70	1,705.31	1,864.19	1,677.38	186.81	9.979		
7,300.00	7,278.38	7,241.47	7,238.78	16.39	171.83	10.97	-621.19	1,705.31	1,846.38	1,658.21	188.17	9.812		
7,350.00	7,323.19	7,286.28	7,283.59	16.43	173.10	11.58	-621.19	1,705.31	1,824.57	1,635.06	189.50	9.628		
7,400.00	7,365.89	7,326.31	7,323.60	16.47	174.24	12.34	-620.91	1,705.31	1,798.96	1,608.26	190.70	9.434		
7,450.00	7,406.17	7,369.32	7,366.57	16.51	175.46	13.37	-621.19	1,705.31	1,769.89	1,577.92	191.97	9.220		

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 124H
Project:	Eddy County, NM (N83-NME)	TVD Reference:	3333.6+26 @ 3359.60usft (Permit)
Reference Site:	Lady Franklin 25	MD Reference:	3333.6+26 @ 3359.60usft (Permit)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Lady Franklin 25 State 124H	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 Rev 2	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		
7,500.00	7,443.71	7,406.86	7,404.11	16.55	176.53	14.66	-621.19	1,705.31	1,737.45	1,544.38	193.07	8.999		
7,550.00	7,478.23	7,439.86	7,437.10	16.59	177.46	16.29	-620.63	1,705.31	1,701.85	1,507.80	194.05	8.770		
7,600.00	7,509.48	7,468.88	7,466.11	16.64	178.29	18.43	-620.88	1,705.31	1,663.60	1,468.70	194.90	8.536		
7,650.00	7,537.20	7,500.42	7,497.60	16.75	179.18	21.38	-621.19	1,705.31	1,622.87	1,427.06	195.81	8.288		
7,700.00	7,561.19	7,524.42	7,521.59	17.05	179.86	25.28	-621.19	1,705.31	1,579.92	1,383.41	196.51	8.040		
7,750.00	7,581.27	7,544.50	7,541.67	17.50	180.44	30.73	-621.19	1,705.31	1,535.14	1,338.05	197.08	7.789		
7,800.00	7,597.29	7,560.51	7,557.69	18.06	180.89	38.51	-621.19	1,705.31	1,488.88	1,291.33	197.54	7.537		
7,850.00	7,609.11	7,572.34	7,569.51	18.70	181.23	49.79	-621.19	1,705.31	1,441.50	1,243.62	197.88	7.285		
7,900.00	7,616.66	7,579.89	7,577.06	19.41	181.44	65.63	-621.19	1,705.31	1,393.39	1,195.29	198.09	7.034		
7,950.00	7,619.88	7,583.10	7,580.28	20.20	181.53	85.21	-621.19	1,705.31	1,344.91	1,146.72	198.19	6.786		
7,961.86	7,620.00	7,583.22	7,580.40	20.39	181.54	90.00	-621.19	1,705.31	1,333.40	1,135.21	198.19	6.728		
8,000.00	7,620.00	7,583.22	7,580.40	21.04	181.54	90.00	-621.19	1,705.31	1,296.42	1,098.23	198.20	6.541		
8,100.00	7,620.00	7,583.22	7,580.40	22.87	181.54	90.00	-621.19	1,705.31	1,199.82	1,001.56	198.26	6.052		
8,200.00	7,620.00	7,583.22	7,580.40	24.88	181.54	90.00	-621.19	1,705.31	1,103.83	905.42	198.41	5.563		
8,300.00	7,620.00	7,583.22	7,580.40	27.01	181.54	90.00	-621.19	1,705.31	1,008.61	809.92	198.69	5.076		
8,400.00	7,620.00	7,583.22	7,580.40	29.25	181.54	90.00	-621.19	1,705.31	914.41	715.24	199.18	4.591		
8,500.00	7,620.00	7,583.22	7,580.40	31.57	181.54	90.00	-621.19	1,705.31	821.59	621.63	199.97	4.109		
8,600.00	7,620.00	7,583.22	7,580.40	33.96	181.54	90.00	-621.19	1,705.31	730.67	529.45	201.21	3.631		
8,700.00	7,620.00	7,583.22	7,580.40	36.40	181.54	90.00	-621.19	1,705.31	642.44	439.32	203.13	3.163		
8,800.00	7,620.00	7,583.22	7,580.40	38.88	181.54	90.00	-621.19	1,705.31	558.21	352.21	205.99	2.710		
8,900.00	7,620.00	7,583.22	7,580.40	41.39	181.54	90.00	-621.19	1,705.31	480.06	269.91	210.15	2.284		
9,000.00	7,620.00	7,583.22	7,580.40	43.94	181.54	90.00	-621.19	1,705.31	411.48	195.63	215.85	1.906		
9,100.00	7,620.00	7,583.22	7,580.40	46.51	181.54	90.00	-621.19	1,705.31	358.02	135.20	222.81	1.607		
9,200.00	7,620.00	7,583.22	7,580.40	49.10	181.54	90.00	-621.19	1,705.31	327.16	97.71	229.46	1.426	Level 3	
9,255.70	7,620.00	7,583.22	7,580.40	50.55	181.54	90.00	-621.19	1,705.31	322.39	90.38	232.00	1.390	Level 3, CC, ES, SF	
9,300.00	7,620.00	7,583.22	7,580.40	51.71	181.54	90.00	-621.19	1,705.31	325.42	92.32	233.10	1.396	Level 3	
9,400.00	7,620.00	7,583.22	7,580.40	54.33	181.54	90.00	-621.19	1,705.31	353.21	120.57	232.64	1.518		
9,500.00	7,620.00	7,583.22	7,580.40	56.96	181.54	90.00	-621.19	1,705.31	404.50	174.86	229.64	1.761		
9,600.00	7,620.00	7,583.22	7,580.40	59.61	181.54	90.00	-621.19	1,705.31	471.68	245.68	225.99	2.087		
9,700.00	7,620.00	7,583.22	7,580.40	62.27	181.54	90.00	-621.19	1,705.31	548.94	326.29	222.65	2.465		
9,800.00	7,620.00	7,583.22	7,580.40	64.93	181.54	90.00	-621.19	1,705.31	632.61	412.75	219.86	2.877		
9,900.00	7,620.00	7,583.22	7,580.40	67.60	181.54	90.00	-621.19	1,705.31	720.46	502.87	217.59	3.311		
10,000.00	7,620.00	7,583.22	7,580.40	70.28	181.54	90.00	-621.19	1,705.31	811.12	595.37	215.76	3.759		
10,100.00	7,620.00	7,583.22	7,580.40	72.97	181.54	90.00	-621.19	1,705.31	903.76	689.50	214.26	4.218		
10,200.00	7,620.00	7,583.22	7,580.40	75.66	181.54	90.00	-621.19	1,705.31	997.82	784.78	213.04	4.684		
10,300.00	7,620.00	7,583.22	7,580.40	78.35	181.54	90.00	-621.19	1,705.31	1,092.93	880.91	212.02	5.155		
10,400.00	7,620.00	7,583.22	7,580.40	81.05	181.54	90.00	-621.19	1,705.31	1,188.85	977.68	211.16	5.630		
10,500.00	7,620.00	7,583.22	7,580.40	83.76	181.54	90.00	-621.19	1,705.31	1,285.39	1,074.94	210.44	6.108		
10,600.00	7,620.00	7,583.22	7,580.40	86.46	181.54	90.00	-621.19	1,705.31	1,382.42	1,172.59	209.83	6.588		
10,700.00	7,620.00	7,583.22	7,580.40	89.17	181.54	90.00	-621.19	1,705.31	1,479.84	1,270.55	209.29	7.071		
10,800.00	7,620.00	7,583.22	7,580.40	91.89	181.54	90.00	-621.19	1,705.31	1,577.59	1,368.76	208.83	7.554		
10,900.00	7,620.00	7,583.22	7,580.40	94.60	181.54	90.00	-621.19	1,705.31	1,675.61	1,467.18	208.43	8.039		
11,000.00	7,620.00	7,583.22	7,580.40	97.32	181.54	90.00	-621.19	1,705.31	1,773.84	1,565.77	208.08	8.525		
11,100.00	7,620.00	7,583.22	7,580.40	100.04	181.54	90.00	-621.19	1,705.31	1,872.27	1,664.50	207.77	9.011		
11,200.00	7,620.00	7,583.22	7,580.40	102.76	181.54	90.00	-621.19	1,705.31	1,970.85	1,763.36	207.49	9.499		
11,300.00	7,620.00	7,583.22	7,580.40	105.49	181.54	90.00	-621.19	1,705.31	2,069.57	1,862.32	207.24	9.986		
11,400.00	7,620.00	7,583.22	7,580.40	108.21	181.54	90.00	-621.19	1,705.31	2,168.40	1,961.38	207.02	10.474		
11,500.00	7,620.00	7,583.22	7,580.40	110.94	181.54	90.00	-621.19	1,705.31	2,267.34	2,060.51	206.82	10.963		
11,600.00	7,620.00	7,583.22	7,580.40	113.67	181.54	90.00	-621.19	1,705.31	2,366.37	2,159.72	206.65	11.451		
11,700.00	7,620.00	7,583.22	7,580.40	116.40	181.54	90.00	-621.19	1,705.31	2,465.47	2,258.98	206.49	11.940		
11,800.00	7,620.00	7,583.22	7,580.40	119.13	181.54	90.00	-621.19	1,705.31	2,564.65	2,358.30	206.34	12.429		
11,900.00	7,620.00	7,583.22	7,580.40	121.87	181.54	90.00	-621.19	1,705.31	2,663.88	2,457.67	206.21	12.918		

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 124H
Project:	Eddy County, NM (N83-NME)	TVD Reference:	3333.6+26 @ 3359.60usft (Permit)
Reference Site:	Lady Franklin 25	MD Reference:	3333.6+26 @ 3359.60usft (Permit)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Lady Franklin 25 State 124H	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 Rev 2	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		
12,000.00	7,620.00	7,583.22	7,580.40	124.60	181.54	90.00	-621.19	1,705.31	2,763.17	2,557.08	206.10	13.407		
12,100.00	7,620.00	7,583.22	7,580.40	127.34	181.54	90.00	-621.19	1,705.31	2,862.51	2,656.52	205.99	13.896		
12,200.00	7,620.00	7,583.22	7,580.40	130.07	181.54	90.00	-621.19	1,705.31	2,961.90	2,756.01	205.89	14.386		
12,300.00	7,620.00	7,583.22	7,580.40	132.81	181.54	90.00	-621.19	1,705.31	3,061.32	2,855.52	205.80	14.875		
12,400.00	7,620.00	7,583.22	7,580.40	135.55	181.54	90.00	-621.19	1,705.31	3,160.79	2,955.06	205.73	15.364		
12,506.25	7,620.00	7,583.22	7,580.40	138.46	181.54	90.00	-621.19	1,705.31	3,266.50	3,060.85	205.65	15.884		

Company:	Colgate Energy	Local Co-ordinate Reference:	Well Lady Franklin 25 State 124H
Project:	Eddy County, NM (N83-NME)	TVD Reference:	3333.6+26 @ 3359.60usft (Permit)
Reference Site:	Lady Franklin 25	MD Reference:	3333.6+26 @ 3359.60usft (Permit)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Lady Franklin 25 State 124H	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 Rev 2	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		
4,700.00	4,689.26	4,744.52	4,743.15	10.88	111.33	-165.62	1,972.51	1,862.76	2,958.08	2,836.74	121.34	24.378		
4,800.00	4,788.89	4,793.54	4,792.09	11.15	112.53	-165.65	1,973.41	1,862.76	2,966.67	2,843.90	122.78	24.163		
4,900.00	4,888.52	4,905.78	4,904.31	11.42	115.49	-165.71	1,974.40	1,862.76	2,975.80	2,849.83	125.96	23.625		
5,000.00	4,988.14	5,034.71	5,033.20	11.68	118.88	-165.74	1,972.82	1,862.76	2,983.25	2,853.67	129.58	23.023		
5,100.00	5,087.77	5,092.54	5,090.97	11.95	120.30	-165.77	1,973.41	1,862.76	2,991.76	2,860.53	131.23	22.797		
5,200.00	5,187.40	5,192.17	5,190.60	12.22	122.82	-165.81	1,973.41	1,862.76	3,000.13	2,866.15	133.98	22.392		
5,300.00	5,287.03	5,302.91	5,301.31	12.49	125.62	-165.87	1,974.65	1,862.76	3,009.43	2,872.43	137.01	21.966		
5,400.00	5,386.65	5,418.07	5,416.45	12.76	128.52	-165.91	1,973.69	1,862.76	3,017.18	2,877.04	140.14	21.529		
5,500.00	5,486.28	5,491.20	5,489.48	13.03	130.37	-165.93	1,973.41	1,862.76	3,025.23	2,883.01	142.22	21.272		
5,600.00	5,585.91	5,590.83	5,589.11	13.30	132.89	-165.97	1,973.41	1,862.76	3,033.60	2,888.64	144.97	20.926		
5,684.88	5,670.47	5,691.79	5,690.05	13.53	135.44	-166.02	1,974.16	1,862.76	3,041.31	2,893.59	147.71	20.589		
5,700.00	5,685.54	5,710.26	5,708.51	13.56	135.90	-166.03	1,974.01	1,862.76	3,042.45	2,894.24	148.21	20.528		
5,800.00	5,785.29	5,790.32	5,788.49	13.77	137.84	-166.07	1,973.41	1,862.76	3,048.67	2,898.32	150.35	20.277		
5,900.00	5,885.20	5,890.23	5,888.40	13.97	140.05	-166.11	1,973.41	1,862.76	3,052.86	2,900.11	152.74	19.987		
6,000.00	5,985.18	5,994.17	5,992.32	14.15	142.34	-166.14	1,974.72	1,862.76	3,055.48	2,900.25	155.23	19.684		
6,014.82	6,000.00	6,011.56	6,009.71	14.18	142.72	41.55	1,974.68	1,862.76	3,055.48	2,899.84	155.64	19.632		
6,100.00	6,085.18	6,111.57	6,109.71	14.33	144.93	41.55	1,974.07	1,862.76	3,055.09	2,897.08	158.02	19.334		
6,200.00	6,185.18	6,190.29	6,188.38	14.51	146.62	41.56	1,973.41	1,862.76	3,054.53	2,894.63	159.90	19.102		
6,300.00	6,285.18	6,290.29	6,288.38	14.69	148.62	41.56	1,973.41	1,862.76	3,054.53	2,892.44	162.09	18.844		
6,400.00	6,385.18	6,390.29	6,388.38	14.86	150.61	41.56	1,973.41	1,862.76	3,054.53	2,890.25	164.28	18.593		
6,500.00	6,485.18	6,496.49	6,494.57	15.04	152.73	41.55	1,974.04	1,862.76	3,055.01	2,888.41	166.60	18.338		
6,600.00	6,585.18	6,603.43	6,601.51	15.22	154.87	41.56	1,973.59	1,862.76	3,054.69	2,885.76	168.93	18.083		
6,700.00	6,685.18	6,690.35	6,688.38	15.41	156.66	41.56	1,973.41	1,862.76	3,054.53	2,883.61	170.92	17.871		
6,800.00	6,785.18	6,790.35	6,788.38	15.59	158.77	41.56	1,973.41	1,862.76	3,054.53	2,881.30	173.23	17.633		
6,900.00	6,885.18	6,894.18	6,892.20	15.77	160.96	41.55	1,974.34	1,862.76	3,055.22	2,879.61	175.61	17.398		
7,000.00	6,985.18	7,004.18	7,002.20	15.96	163.27	41.56	1,973.91	1,862.76	3,054.94	2,876.81	178.13	17.150		
7,061.86	7,047.04	7,072.23	7,070.24	16.07	164.70	41.56	1,973.41	1,862.76	3,054.59	2,874.91	179.68	17.000		
7,100.00	7,085.15	7,090.38	7,088.35	16.14	165.09	-48.11	1,973.41	1,862.76	3,053.68	2,873.54	180.14	16.952		
7,150.00	7,134.83	7,140.07	7,138.03	16.22	166.13	-48.46	1,973.41	1,862.76	3,050.01	2,868.72	181.29	16.824		
7,200.00	7,183.85	7,189.08	7,187.05	16.28	167.17	-49.10	1,973.41	1,862.76	3,043.47	2,861.05	182.42	16.684		
7,250.00	7,231.82	7,237.05	7,235.02	16.34	168.18	-50.02	1,973.41	1,862.76	3,034.14	2,850.61	183.54	16.532		
7,300.00	7,278.38	7,283.62	7,281.58	16.39	169.16	-51.23	1,973.41	1,862.76	3,022.13	2,837.50	184.62	16.369		
7,350.00	7,323.19	7,328.42	7,326.39	16.43	170.10	-52.74	1,973.41	1,862.76	3,007.55	2,821.87	185.68	16.198		
7,400.00	7,365.89	7,371.14	7,369.09	16.47	171.01	-54.57	1,974.72	1,862.76	2,991.58	2,804.88	186.70	16.023		
7,450.00	7,406.17	7,414.30	7,412.25	16.51	171.91	-56.72	1,974.69	1,862.76	2,972.40	2,784.64	187.75	15.832		
7,500.00	7,443.71	7,454.53	7,452.48	16.55	172.76	-59.19	1,974.62	1,862.76	2,951.18	2,762.42	188.76	15.634		
7,550.00	7,478.23	7,491.53	7,489.48	16.59	173.54	-61.96	1,974.51	1,862.76	2,928.16	2,738.43	189.73	15.433		
7,600.00	7,509.48	7,525.01	7,522.96	16.64	174.25	-65.01	1,974.37	1,862.76	2,903.61	2,712.94	190.67	15.228		
7,650.00	7,537.20	7,554.72	7,552.67	16.75	174.88	-68.30	1,974.23	1,862.76	2,877.79	2,686.20	191.58	15.021		
7,700.00	7,561.19	7,580.43	7,578.38	17.05	175.42	-71.78	1,974.08	1,862.76	2,850.97	2,658.51	192.47	14.813		
7,750.00	7,581.27	7,601.95	7,599.89	17.50	175.87	-75.40	1,973.94	1,862.76	2,823.45	2,630.12	193.33	14.604		
7,800.00	7,597.29	7,619.11	7,617.05	18.06	176.23	-79.08	1,973.82	1,862.76	2,795.50	2,601.33	194.16	14.398		
7,850.00	7,609.11	7,631.78	7,629.72	18.70	176.50	-82.73	1,973.73	1,862.76	2,767.40	2,572.42	194.98	14.193		
7,900.00	7,616.66	7,639.87	7,637.81	19.41	176.67	-86.29	1,973.66	1,862.76	2,739.42	2,543.66	195.76	13.994		
7,950.00	7,619.88	7,643.31	7,641.25	20.20	176.74	-89.68	1,973.64	1,862.76	2,711.83	2,515.32	196.52	13.800		
7,961.86	7,620.00	7,643.44	7,641.38	20.39	176.75	-90.46	1,973.64	1,862.76	2,705.37	2,508.68	196.69	13.755		
8,000.00	7,620.00	7,643.44	7,641.38	21.04	176.75	-90.46	1,973.64	1,862.76	2,684.84	2,487.58	197.26	13.611		
8,100.00	7,620.00	7,643.43	7,641.37	22.87	176.75	-90.46	1,973.64	1,862.76	2,632.88	2,433.97	198.91	13.236		
8,200.00	7,620.00	7,643.43	7,641.37	24.88	176.75	-90.46	1,973.64	1,862.76	2,583.74	2,382.97	200.78	12.869		
8,300.00	7,620.00	7,643.42	7,641.36	27.01	176.75	-90.46	1,973.64	1,862.76	2,537.60	2,334.77	202.83	12.511		
8,400.00	7,620.00	7,643.41	7,641.35	29.25	176.74	-90.46	1,973.64	1,862.76	2,494.61	2,289.57	205.04	12.166		
8,500.00	7,620.00	7,643.41	7,641.35	31.57	176.74	-90.46	1,973.64	1,862.76	2,454.95	2,247.56	207.39	11.837		

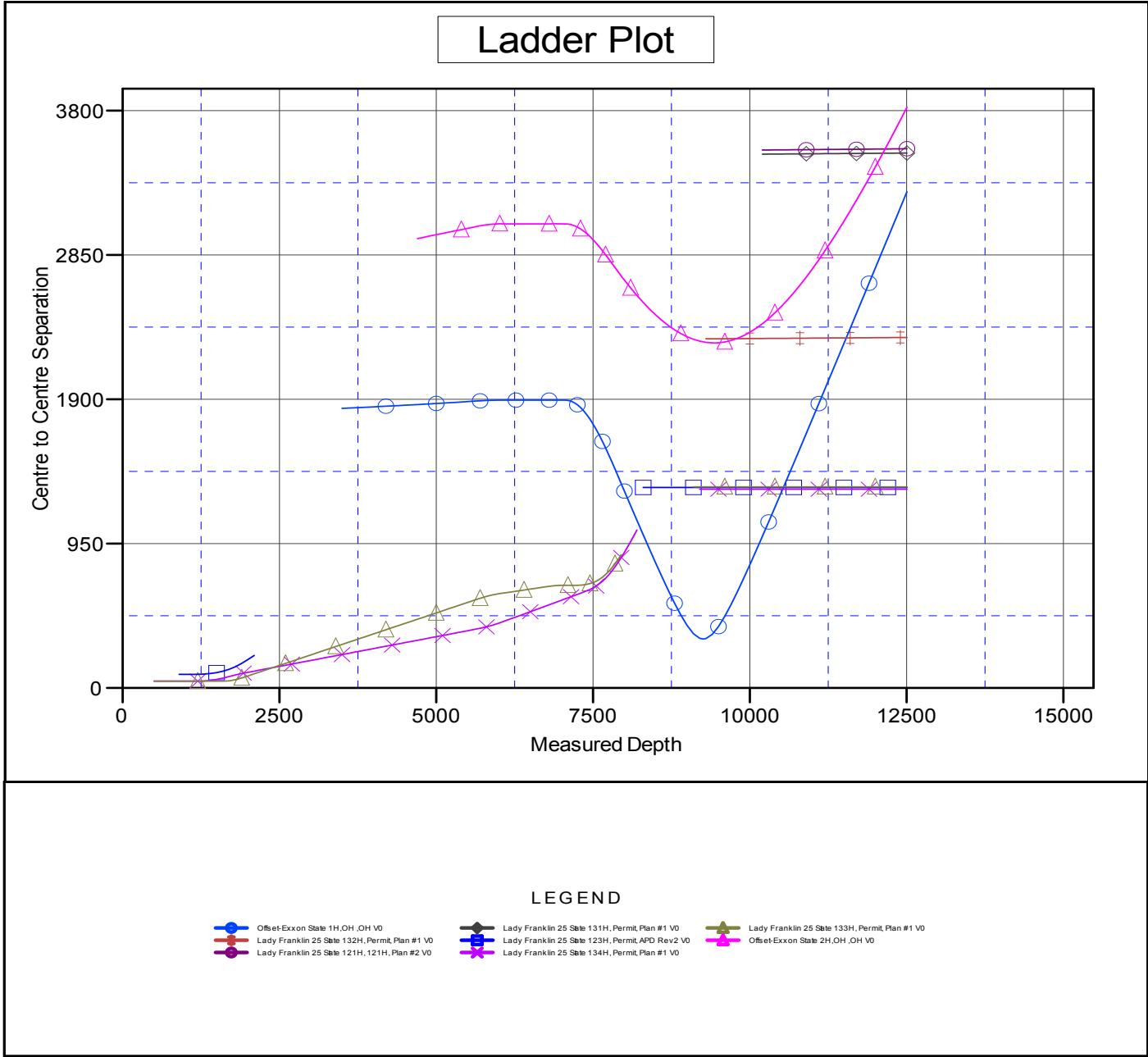
CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Company:	Colgate Energy	Local Co-ordinate Reference:	Well Lady Franklin 25 State 124H
Project:	Eddy County, NM (N83-NME)	TVD Reference:	3333.6+26 @ 3359.60usft (Permit)
Reference Site:	Lady Franklin 25	MD Reference:	3333.6+26 @ 3359.60usft (Permit)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Lady Franklin 25 State 124H	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 Rev 2	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			
8,600.00	7,620.00	7,643.40	7,641.34	33.96	176.74	-90.46	1,973.64	1,862.76	2,418.77	2,208.91	209.86	11.526			
8,700.00	7,620.00	7,643.40	7,641.34	36.40	176.74	-90.46	1,973.64	1,862.76	2,386.24	2,173.82	212.42	11.234			
8,800.00	7,620.00	7,643.39	7,641.33	38.88	176.74	-90.46	1,973.64	1,862.76	2,357.50	2,142.46	215.05	10.963			
8,900.00	7,620.00	7,643.38	7,641.32	41.39	176.74	-90.46	1,973.64	1,862.76	2,332.70	2,114.98	217.72	10.714			
9,000.00	7,620.00	7,643.38	7,641.32	43.94	176.74	-90.46	1,973.64	1,862.76	2,311.97	2,091.54	220.42	10.489			
9,100.00	7,620.00	7,643.37	7,641.31	46.51	176.74	-90.46	1,973.64	1,862.76	2,295.40	2,072.27	223.13	10.287			
9,200.00	7,620.00	7,643.37	7,641.31	49.10	176.74	-90.46	1,973.64	1,862.76	2,283.10	2,057.29	225.81	10.111			
9,300.00	7,620.00	7,643.36	7,641.30	51.71	176.74	-90.46	1,973.64	1,862.76	2,275.13	2,046.68	228.45	9.959			
9,400.00	7,620.00	7,643.35	7,641.29	54.33	176.74	-90.46	1,973.64	1,862.76	2,271.54	2,040.52	231.03	9.832			
9,431.59	7,620.00	7,643.35	7,641.29	55.16	176.74	-90.46	1,973.64	1,862.76	2,271.32	2,039.50	231.83	9.798 CC			
9,500.00	7,620.00	7,643.35	7,641.29	56.96	176.74	-90.46	1,973.64	1,862.76	2,272.35	2,038.83	233.52	9.731 ES			
9,600.00	7,620.00	7,643.34	7,641.28	59.61	176.74	-90.46	1,973.64	1,862.76	2,277.56	2,041.64	235.92	9.654			
9,700.00	7,620.00	7,643.34	7,641.28	62.27	176.74	-90.46	1,973.64	1,862.76	2,287.13	2,048.92	238.21	9.601			
9,800.00	7,620.00	7,643.33	7,641.27	64.93	176.74	-90.46	1,973.64	1,862.76	2,301.01	2,060.63	240.37	9.573			
9,900.00	7,620.00	7,643.32	7,641.26	67.60	176.74	-90.46	1,973.64	1,862.76	2,319.12	2,076.72	242.40	9.567 SF			
10,000.00	7,620.00	7,643.32	7,641.26	70.28	176.74	-90.46	1,973.64	1,862.76	2,341.37	2,097.08	244.29	9.584			
10,100.00	7,620.00	7,643.31	7,641.25	72.97	176.74	-90.46	1,973.64	1,862.76	2,367.63	2,121.60	246.04	9.623			
10,200.00	7,620.00	7,643.31	7,641.25	75.66	176.74	-90.46	1,973.64	1,862.76	2,397.78	2,150.15	247.64	9.683			
10,300.00	7,620.00	7,643.30	7,641.24	78.35	176.74	-90.46	1,973.64	1,862.76	2,431.67	2,182.58	249.09	9.762			
10,400.00	7,620.00	7,643.29	7,641.23	81.05	176.74	-90.45	1,973.64	1,862.76	2,469.15	2,218.74	250.41	9.860			
10,500.00	7,620.00	7,643.29	7,641.23	83.76	176.74	-90.45	1,973.64	1,862.76	2,510.06	2,258.47	251.59	9.977			
10,600.00	7,620.00	7,643.28	7,641.22	86.46	176.74	-90.45	1,973.64	1,862.76	2,554.23	2,301.59	252.64	10.110			
10,700.00	7,620.00	7,643.28	7,641.22	89.17	176.74	-90.45	1,973.64	1,862.76	2,601.49	2,347.92	253.57	10.259			
10,800.00	7,620.00	7,643.27	7,641.21	91.89	176.74	-90.45	1,973.64	1,862.76	2,651.69	2,397.30	254.39	10.424			
10,900.00	7,620.00	7,643.26	7,641.20	94.60	176.74	-90.45	1,973.64	1,862.76	2,704.65	2,449.55	255.10	10.602			
11,000.00	7,620.00	7,643.26	7,641.20	97.32	176.74	-90.45	1,973.64	1,862.76	2,760.22	2,504.51	255.71	10.794			
11,100.00	7,620.00	7,643.25	7,641.19	100.04	176.74	-90.45	1,973.64	1,862.76	2,818.24	2,562.01	256.23	10.999			
11,200.00	7,620.00	7,643.25	7,641.19	102.76	176.74	-90.45	1,973.64	1,862.76	2,878.57	2,621.90	256.67	11.215			
11,300.00	7,620.00	7,643.24	7,641.18	105.49	176.74	-90.45	1,973.64	1,862.76	2,941.06	2,684.03	257.04	11.442			
11,400.00	7,620.00	7,643.23	7,641.17	108.21	176.74	-90.45	1,973.64	1,862.76	3,005.58	2,748.25	257.33	11.680			
11,500.00	7,620.00	7,643.23	7,641.17	110.94	176.74	-90.45	1,973.64	1,862.76	3,072.01	2,814.43	257.57	11.927			
11,600.00	7,620.00	7,643.22	7,641.16	113.67	176.74	-90.45	1,973.64	1,862.76	3,140.21	2,882.45	257.76	12.183			
11,700.00	7,620.00	7,643.22	7,641.16	116.40	176.74	-90.45	1,973.64	1,862.76	3,210.08	2,952.18	257.89	12.447			
11,800.00	7,620.00	7,643.21	7,641.15	119.13	176.74	-90.45	1,973.64	1,862.76	3,281.50	3,023.51	257.99	12.720			
11,900.00	7,620.00	7,643.20	7,641.14	121.87	176.74	-90.45	1,973.64	1,862.76	3,354.39	3,096.35	258.05	12.999			
12,000.00	7,620.00	7,643.20	7,641.14	124.60	176.74	-90.45	1,973.64	1,862.76	3,428.65	3,170.58	258.07	13.286			
12,100.00	7,620.00	7,643.19	7,641.13	127.34	176.74	-90.45	1,973.64	1,862.76	3,504.18	3,246.12	258.06	13.579			
12,200.00	7,620.00	7,643.19	7,641.13	130.07	176.74	-90.45	1,973.64	1,862.76	3,580.92	3,322.89	258.03	13.878			
12,300.00	7,620.00	7,643.18	7,641.12	132.81	176.74	-90.45	1,973.64	1,862.76	3,658.78	3,400.80	257.98	14.182			
12,400.00	7,620.00	7,643.17	7,641.11	135.55	176.74	-90.45	1,973.64	1,862.76	3,737.69	3,479.78	257.91	14.492			
12,506.25	7,620.00	7,643.17	7,641.11	138.46	176.74	-90.45	1,973.64	1,862.76	3,822.62	3,564.81	257.82	14.827			

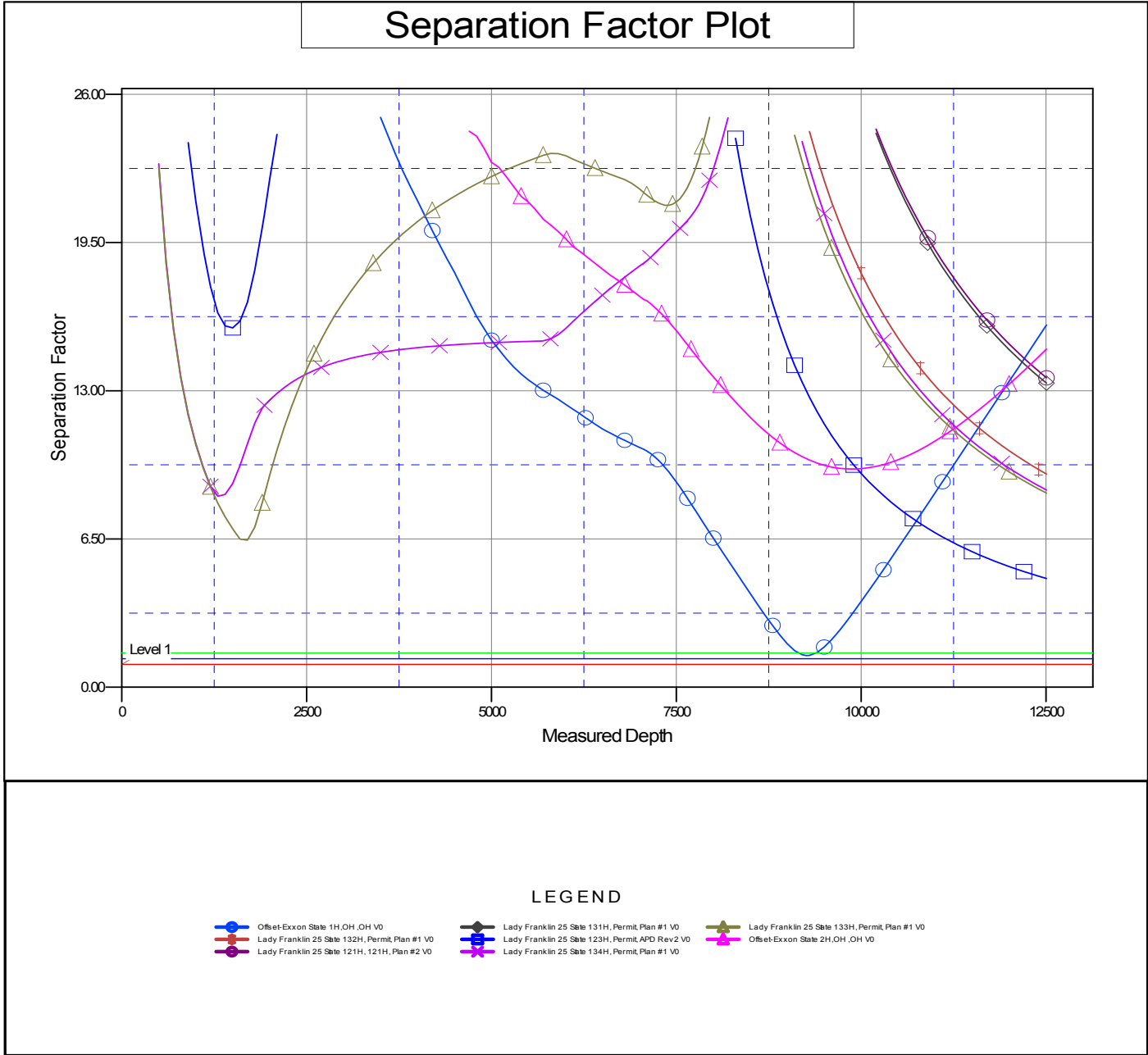
Company:	Colgate Energy	Local Co-ordinate Reference:	Well Lady Franklin 25 State 124H
Project:	Eddy County, NM (N83-NME)	TVD Reference:	3333.6+26 @ 3359.60usft (Permit)
Reference Site:	Lady Franklin 25	MD Reference:	3333.6+26 @ 3359.60usft (Permit)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Lady Franklin 25 State 124H	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 Rev 2	Offset TVD Reference:	Offset Datum

Reference Depths are relative to 3333.6+26 @ 3359.60usft (Permit) Coordinates are relative to: Lady Franklin 25 State 124H
 Offset Depths are relative to Offset Datum Coordinate System is US State Plane 1983, New Mexico Eastern Zone
 Central Meridian is -104.3333334 Grid Convergence at Surface is: 0.11°



Company:	Colgate Energy	Local Co-ordinate Reference:	Well Lady Franklin 25 State 124H
Project:	Eddy County, NM (N83-NME)	TVD Reference:	3333.6+26 @ 3359.60usft (Permit)
Reference Site:	Lady Franklin 25	MD Reference:	3333.6+26 @ 3359.60usft (Permit)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Lady Franklin 25 State 124H	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 Rev 2	Offset TVD Reference:	Offset Datum

Reference Depths are relative to 3333.6+26 @ 3359.60usft (Permit) Coordinates are relative to: Lady Franklin 25 State 124H
 Offset Depths are relative to Offset Datum Coordinate System is US State Plane 1983, New Mexico Eastern Zone
 Central Meridian is -104.33333334 Grid Convergence at Surface is: 0.11°





Colgate Energy

Eddy County, NM (N83-NME)

Lady Franklin 25

Lady Franklin 25 State 124H

Permit

Plan: APD Rev 2

Standard Planning Report

21 October, 2020

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well Lady Franklin 25 State 124H
Company:	Colgate Energy	TVD Reference:	3333.6+26 @ 3359.60usft (Permit)
Project:	Eddy County, NM (N83-NME)	MD Reference:	3333.6+26 @ 3359.60usft (Permit)
Site:	Lady Franklin 25	North Reference:	Grid
Well:	Lady Franklin 25 State 124H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Permit		
Design:	APD Rev 2		

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 124H					
Well Position	+N/-S	-3,988.48 usft	Northing:	592,307.24 usft	Latitude:	32.62815051
	+E/-W	278.13 usft	Easting:	601,458.94 usft	Longitude:	-104.13804277
Position Uncertainty	0.00 usft	Wellhead Elevation:		Ground Level:	3,333.60 usft	

Wellbore	Permit				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	8/27/2019	7.01	60.31	47,891.52316103

Design	APD Rev 2			
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	12,506.25	APD Rev 2 (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	
1,600.00	0.00	0.00	1,600.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,929.94	4.95	207.68	1,929.53	-12.61	-6.62	1.50	1.50	0.00	207.68	
5,684.88	4.95	207.68	5,670.47	-299.47	-157.11	0.00	0.00	0.00	0.00	
6,014.82	0.00	0.00	6,000.00	-312.08	-163.73	1.50	-1.50	0.00	180.00	LF25-124H-EON
7,061.86	0.00	0.00	7,047.04	-312.08	-163.73	0.00	0.00	0.00	0.00	
7,961.86	90.00	89.59	7,620.00	-308.01	409.21	10.00	10.00	9.95	89.59	
12,506.25	90.00	89.59	7,620.00	-275.70	4,953.49	0.00	0.00	0.00	0.00	LF25-124H-PBHL

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well Lady Franklin 25 State 124H
Company:	Colgate Energy	TVD Reference:	3333.6+26 @ 3359.60usft (Permit)
Project:	Eddy County, NM (N83-NME)	MD Reference:	3333.6+26 @ 3359.60usft (Permit)
Site:	Lady Franklin 25	North Reference:	Grid
Well:	Lady Franklin 25 State 124H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Permit		
Design:	APD Rev 2		

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	0.00
100.00	0.00	0.00	100.00	0.00	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	0.00
300.00	0.00	0.00	300.00	0.00	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	0.00
SCP										
500.00	0.00	0.00	500.00	0.00	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	0.00
679.60	0.00	0.00	679.60	0.00	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	0.00
800.00	0.00	0.00	800.00	0.00	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	0.00
978.60	0.00	0.00	978.60	0.00	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	0.00
1,100.00	0.00	0.00	1,100.00	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	0.00
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,400.00	0.00	0.00	1,400.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,500.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,600.00	0.00	0.00	1,600.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Start Build 1.50										
1,700.00	1.50	207.68	1,699.99	-1.16	-0.61	-0.62	1.50	1.50	0.00	0.00
1,800.00	3.00	207.68	1,799.91	-4.64	-2.43	-2.47	1.50	1.50	0.00	0.00
1,900.00	4.50	207.68	1,899.69	-10.43	-5.47	-5.54	1.50	1.50	0.00	0.00
1,929.94	4.95	207.68	1,929.53	-12.61	-6.62	-6.71	1.50	1.50	0.00	0.00
2,000.00	4.95	207.68	1,999.33	-17.96	-9.42	-9.55	0.00	0.00	0.00	0.00
2,081.58	4.95	207.68	2,080.60	-24.19	-12.69	-12.87	0.00	0.00	0.00	0.00
Yates										
2,100.00	4.95	207.68	2,098.96	-25.60	-13.43	-13.61	0.00	0.00	0.00	0.00
2,200.00	4.95	207.68	2,198.58	-33.24	-17.44	-17.68	0.00	0.00	0.00	0.00
2,300.00	4.95	207.68	2,298.21	-40.88	-21.45	-21.74	0.00	0.00	0.00	0.00
2,400.00	4.95	207.68	2,397.84	-48.52	-25.46	-25.80	0.00	0.00	0.00	0.00
2,500.00	4.95	207.68	2,497.46	-56.16	-29.46	-29.87	0.00	0.00	0.00	0.00
2,600.00	4.95	207.68	2,597.09	-63.80	-33.47	-33.93	0.00	0.00	0.00	0.00
2,679.81	4.95	207.68	2,676.60	-69.90	-36.67	-37.17	0.00	0.00	0.00	0.00
Capitan										
2,700.00	4.95	207.68	2,696.72	-71.44	-37.48	-37.99	0.00	0.00	0.00	0.00
2,800.00	4.95	207.68	2,796.35	-79.08	-41.49	-42.05	0.00	0.00	0.00	0.00
2,900.00	4.95	207.68	2,895.97	-86.72	-45.50	-46.12	0.00	0.00	0.00	0.00
2,920.70	4.95	207.68	2,916.60	-88.30	-46.33	-46.96	0.00	0.00	0.00	0.00
Cherry Canyon										
3,000.00	4.95	207.68	2,995.60	-94.36	-49.50	-50.18	0.00	0.00	0.00	0.00
3,100.00	4.95	207.68	3,095.23	-102.00	-53.51	-54.24	0.00	0.00	0.00	0.00
3,194.73	4.95	207.68	3,189.60	-109.23	-57.31	-58.09	0.00	0.00	0.00	0.00
Brushy Canyon										
3,200.00	4.95	207.68	3,194.85	-109.64	-57.52	-58.30	0.00	0.00	0.00	0.00
3,205.16	4.95	207.68	3,200.00	-110.03	-57.73	-58.51	0.00	0.00	0.00	0.00
ICP										
3,300.00	4.95	207.68	3,294.48	-117.28	-61.53	-62.37	0.00	0.00	0.00	0.00
3,400.00	4.95	207.68	3,394.11	-124.92	-65.54	-66.43	0.00	0.00	0.00	0.00
3,500.00	4.95	207.68	3,493.74	-132.56	-69.54	-70.49	0.00	0.00	0.00	0.00

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well Lady Franklin 25 State 124H
Company:	Colgate Energy	TVD Reference:	3333.6+26 @ 3359.60usft (Permit)
Project:	Eddy County, NM (N83-NME)	MD Reference:	3333.6+26 @ 3359.60usft (Permit)
Site:	Lady Franklin 25	North Reference:	Grid
Well:	Lady Franklin 25 State 124H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Permit		
Design:	APD Rev 2		

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	4.95	207.68	3,593.36	-140.19	-73.55	-74.55	0.00	0.00	0.00
3,700.00	4.95	207.68	3,692.99	-147.83	-77.56	-78.62	0.00	0.00	0.00
3,800.00	4.95	207.68	3,792.62	-155.47	-81.57	-82.68	0.00	0.00	0.00
3,900.00	4.95	207.68	3,892.25	-163.11	-85.58	-86.74	0.00	0.00	0.00
4,000.00	4.95	207.68	3,991.87	-170.75	-89.58	-90.80	0.00	0.00	0.00
4,100.00	4.95	207.68	4,091.50	-178.39	-93.59	-94.87	0.00	0.00	0.00
4,200.00	4.95	207.68	4,191.13	-186.03	-97.60	-98.93	0.00	0.00	0.00
4,208.51	4.95	207.68	4,199.60	-186.68	-97.94	-99.27	0.00	0.00	0.00
Bone Spring LM									
4,300.00	4.95	207.68	4,290.75	-193.67	-101.61	-102.99	0.00	0.00	0.00
4,400.00	4.95	207.68	4,390.38	-201.31	-105.62	-107.05	0.00	0.00	0.00
4,500.00	4.95	207.68	4,490.01	-208.95	-109.62	-111.12	0.00	0.00	0.00
4,600.00	4.95	207.68	4,589.64	-216.59	-113.63	-115.18	0.00	0.00	0.00
4,700.00	4.95	207.68	4,689.26	-224.23	-117.64	-119.24	0.00	0.00	0.00
4,800.00	4.95	207.68	4,788.89	-231.87	-121.65	-123.30	0.00	0.00	0.00
4,900.00	4.95	207.68	4,888.52	-239.51	-125.66	-127.37	0.00	0.00	0.00
5,000.00	4.95	207.68	4,988.14	-247.15	-129.66	-131.43	0.00	0.00	0.00
5,100.00	4.95	207.68	5,087.77	-254.79	-133.67	-135.49	0.00	0.00	0.00
5,200.00	4.95	207.68	5,187.40	-262.43	-137.68	-139.55	0.00	0.00	0.00
5,300.00	4.95	207.68	5,287.03	-270.07	-141.69	-143.62	0.00	0.00	0.00
5,400.00	4.95	207.68	5,386.65	-277.71	-145.70	-147.68	0.00	0.00	0.00
5,500.00	4.95	207.68	5,486.28	-285.35	-149.70	-151.74	0.00	0.00	0.00
5,600.00	4.95	207.68	5,585.91	-292.98	-153.71	-155.80	0.00	0.00	0.00
5,684.88	4.95	207.68	5,670.47	-299.47	-157.11	-159.25	0.00	0.00	0.00
Start Drop -1.50									
5,700.00	4.72	207.68	5,685.54	-300.60	-157.71	-159.85	1.50	-1.50	0.00
5,800.00	3.22	207.68	5,785.29	-306.73	-160.92	-163.12	1.50	-1.50	0.00
5,900.00	1.72	207.68	5,885.20	-310.55	-162.93	-165.15	1.50	-1.50	0.00
6,000.00	0.22	207.68	5,985.18	-312.05	-163.72	-165.95	1.50	-1.50	0.00
6,014.82	0.00	0.00	6,000.00	-312.08	-163.73	-165.96	1.50	-1.50	0.00
LF25-124H-EON									
6,100.00	0.00	0.00	6,085.18	-312.08	-163.73	-165.96	0.00	0.00	0.00
6,200.00	0.00	0.00	6,185.18	-312.08	-163.73	-165.96	0.00	0.00	0.00
6,300.00	0.00	0.00	6,285.18	-312.08	-163.73	-165.96	0.00	0.00	0.00
6,400.00	0.00	0.00	6,385.18	-312.08	-163.73	-165.96	0.00	0.00	0.00
6,500.00	0.00	0.00	6,485.18	-312.08	-163.73	-165.96	0.00	0.00	0.00
6,595.42	0.00	0.00	6,580.60	-312.08	-163.73	-165.96	0.00	0.00	0.00
1st Bone Spring Sd									
6,600.00	0.00	0.00	6,585.18	-312.08	-163.73	-165.96	0.00	0.00	0.00
6,700.00	0.00	0.00	6,685.18	-312.08	-163.73	-165.96	0.00	0.00	0.00
6,800.00	0.00	0.00	6,785.18	-312.08	-163.73	-165.96	0.00	0.00	0.00
6,900.00	0.00	0.00	6,885.18	-312.08	-163.73	-165.96	0.00	0.00	0.00
7,000.00	0.00	0.00	6,985.18	-312.08	-163.73	-165.96	0.00	0.00	0.00
7,061.86	0.00	0.00	7,047.04	-312.08	-163.73	-165.96	0.00	0.00	0.00
KOP: 7061.86' MD, -165.96' VS, 7047.04' TVD									
7,100.00	3.81	89.59	7,085.15	-312.07	-162.46	-164.69	10.00	10.00	0.00
7,150.00	8.81	89.59	7,134.83	-312.03	-156.96	-159.19	10.00	10.00	0.00
7,200.00	13.81	89.59	7,183.85	-311.96	-147.16	-149.39	10.00	10.00	0.00
7,250.00	18.81	89.59	7,231.82	-311.86	-133.12	-135.35	10.00	10.00	0.00
7,300.00	23.81	89.59	7,278.38	-311.73	-114.95	-117.18	10.00	10.00	0.00
7,350.00	28.81	89.59	7,323.19	-311.58	-92.79	-95.02	10.00	10.00	0.00
7,400.00	33.81	89.59	7,365.89	-311.39	-66.82	-69.04	10.00	10.00	0.00
7,450.00	38.81	89.59	7,406.17	-311.18	-37.22	-39.44	10.00	10.00	0.00

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well Lady Franklin 25 State 124H
Company:	Colgate Energy	TVD Reference:	3333.6+26 @ 3359.60usft (Permit)
Project:	Eddy County, NM (N83-NME)	MD Reference:	3333.6+26 @ 3359.60usft (Permit)
Site:	Lady Franklin 25	North Reference:	Grid
Well:	Lady Franklin 25 State 124H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Permit		
Design:	APD Rev 2		

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)
7,480.75	41.89	89.59	7,429.60	-311.04	-17.31	-19.53	10.00	10.00	0.00
2nd Bone Spring Sd									
7,500.00	43.81	89.59	7,443.71	-310.95	-4.22	-6.44	10.00	10.00	0.00
7,506.41	44.46	89.59	7,448.31	-310.91	0.25	-1.98	10.00	10.00	0.00
LF25-124H-FTP									
7,550.00	48.81	89.59	7,478.23	-310.69	31.93	29.70	10.00	10.00	0.00
7,600.00	53.81	89.59	7,509.48	-310.41	70.94	68.72	10.00	10.00	0.00
7,650.00	58.81	89.59	7,537.20	-310.12	112.53	110.31	10.00	10.00	0.00
7,700.00	63.81	89.59	7,561.19	-309.80	156.38	154.16	10.00	10.00	0.00
7,750.00	68.81	89.59	7,581.27	-309.48	202.15	199.93	10.00	10.00	0.00
7,800.00	73.81	89.59	7,597.29	-309.14	249.50	247.28	10.00	10.00	0.00
7,850.00	78.81	89.59	7,609.11	-308.80	298.07	295.85	10.00	10.00	0.00
7,900.00	83.81	89.59	7,616.66	-308.45	347.48	345.26	10.00	10.00	0.00
7,950.00	88.81	89.59	7,619.88	-308.09	397.35	395.14	10.00	10.00	0.00
7,961.86	90.00	89.59	7,620.00	-308.01	409.21	407.00	10.00	10.00	0.00
EOC: 7961.86' MD, 407.00' VS,7620.00' TVD									
8,000.00	90.00	89.59	7,620.00	-307.74	447.35	445.14	0.00	0.00	0.00
8,100.00	90.00	89.59	7,620.00	-307.02	547.35	545.14	0.00	0.00	0.00
8,200.00	90.00	89.59	7,620.00	-306.31	647.35	645.14	0.00	0.00	0.00
8,300.00	90.00	89.59	7,620.00	-305.60	747.35	745.14	0.00	0.00	0.00
8,400.00	90.00	89.59	7,620.00	-304.89	847.34	845.14	0.00	0.00	0.00
8,500.00	90.00	89.59	7,620.00	-304.18	947.34	945.14	0.00	0.00	0.00
8,600.00	90.00	89.59	7,620.00	-303.47	1,047.34	1,045.14	0.00	0.00	0.00
8,700.00	90.00	89.59	7,620.00	-302.76	1,147.33	1,145.14	0.00	0.00	0.00
8,800.00	90.00	89.59	7,620.00	-302.05	1,247.33	1,245.14	0.00	0.00	0.00
8,900.00	90.00	89.59	7,620.00	-301.34	1,347.33	1,345.14	0.00	0.00	0.00
9,000.00	90.00	89.59	7,620.00	-300.63	1,447.33	1,445.14	0.00	0.00	0.00
9,100.00	90.00	89.59	7,620.00	-299.92	1,547.32	1,545.14	0.00	0.00	0.00
9,200.00	90.00	89.59	7,620.00	-299.20	1,647.32	1,645.14	0.00	0.00	0.00
9,300.00	90.00	89.59	7,620.00	-298.49	1,747.32	1,745.14	0.00	0.00	0.00
9,400.00	90.00	89.59	7,620.00	-297.78	1,847.32	1,845.14	0.00	0.00	0.00
9,500.00	90.00	89.59	7,620.00	-297.07	1,947.31	1,945.14	0.00	0.00	0.00
9,600.00	90.00	89.59	7,620.00	-296.36	2,047.31	2,045.14	0.00	0.00	0.00
9,700.00	90.00	89.59	7,620.00	-295.65	2,147.31	2,145.14	0.00	0.00	0.00
9,800.00	90.00	89.59	7,620.00	-294.94	2,247.31	2,245.14	0.00	0.00	0.00
9,900.00	90.00	89.59	7,620.00	-294.23	2,347.30	2,345.14	0.00	0.00	0.00
10,000.00	90.00	89.59	7,620.00	-293.52	2,447.30	2,445.14	0.00	0.00	0.00
10,100.00	90.00	89.59	7,620.00	-292.81	2,547.30	2,545.14	0.00	0.00	0.00
10,200.00	90.00	89.59	7,620.00	-292.10	2,647.30	2,645.14	0.00	0.00	0.00
10,300.00	90.00	89.59	7,620.00	-291.38	2,747.29	2,745.14	0.00	0.00	0.00
10,400.00	90.00	89.59	7,620.00	-290.67	2,847.29	2,845.14	0.00	0.00	0.00
10,500.00	90.00	89.59	7,620.00	-289.96	2,947.29	2,945.14	0.00	0.00	0.00
10,600.00	90.00	89.59	7,620.00	-289.25	3,047.29	3,045.14	0.00	0.00	0.00
10,700.00	90.00	89.59	7,620.00	-288.54	3,147.28	3,145.14	0.00	0.00	0.00
10,800.00	90.00	89.59	7,620.00	-287.83	3,247.28	3,245.14	0.00	0.00	0.00
10,900.00	90.00	89.59	7,620.00	-287.12	3,347.28	3,345.14	0.00	0.00	0.00
11,000.00	90.00	89.59	7,620.00	-286.41	3,447.28	3,445.14	0.00	0.00	0.00
11,100.00	90.00	89.59	7,620.00	-285.70	3,547.27	3,545.14	0.00	0.00	0.00
11,200.00	90.00	89.59	7,620.00	-284.99	3,647.27	3,645.14	0.00	0.00	0.00
11,300.00	90.00	89.59	7,620.00	-284.28	3,747.27	3,745.14	0.00	0.00	0.00
11,400.00	90.00	89.59	7,620.00	-283.56	3,847.27	3,845.14	0.00	0.00	0.00
11,500.00	90.00	89.59	7,620.00	-282.85	3,947.26	3,945.14	0.00	0.00	0.00
11,600.00	90.00	89.59	7,620.00	-282.14	4,047.26	4,045.14	0.00	0.00	0.00

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well Lady Franklin 25 State 124H
Company:	Colgate Energy	TVD Reference:	3333.6+26 @ 3359.60usft (Permit)
Project:	Eddy County, NM (N83-NME)	MD Reference:	3333.6+26 @ 3359.60usft (Permit)
Site:	Lady Franklin 25	North Reference:	Grid
Well:	Lady Franklin 25 State 124H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Permit		
Design:	APD Rev 2		

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)	
11,700.00	90.00	89.59	7,620.00	-281.43	4,147.26	4,145.14	0.00	0.00	0.00	
11,800.00	90.00	89.59	7,620.00	-280.72	4,247.26	4,245.14	0.00	0.00	0.00	
11,900.00	90.00	89.59	7,620.00	-280.01	4,347.25	4,345.14	0.00	0.00	0.00	
12,000.00	90.00	89.59	7,620.00	-279.30	4,447.25	4,445.14	0.00	0.00	0.00	
12,100.00	90.00	89.59	7,620.00	-278.59	4,547.25	4,545.14	0.00	0.00	0.00	
12,200.00	90.00	89.59	7,620.00	-277.88	4,647.25	4,645.14	0.00	0.00	0.00	
12,300.00	90.00	89.59	7,620.00	-277.17	4,747.24	4,745.14	0.00	0.00	0.00	
12,400.00	90.00	89.59	7,620.00	-276.46	4,847.24	4,845.14	0.00	0.00	0.00	
LF25-124H-LTP										
12,506.25	90.00	89.59	7,620.00	-275.70	4,953.49	4,951.39	0.00	0.00	0.00	
TD: 12506.25' MD, 4951.39' VS,7620.00' TVD - LF25-124H-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	
LF25-124H-EON - plan hits target center - Point	0.00	0.00	6,000.00	-312.08	-163.73	591,995.16	601,295.21	32.62729351	-104.13857646	
LF25-124H-LTP - plan misses target center by 16.25usft at 12400.00usft MD (7620.00 TVD, -276.46 N, 4847.24 E) - Point	0.00	0.00	7,620.00	-276.33	4,863.49	592,030.91	606,322.43	32.62736539	-104.12224672	
LF25-124H-PBHL - plan hits target center - Point	0.00	0.00	7,620.00	-275.70	4,953.49	592,031.54	606,412.43	32.62736663	-104.12195438	
LF25-124H-FTP - plan misses target center by 237.42usft at 7506.41usft MD (7448.31 TVD, -310.91 N, 0.25 E) - Point	0.00	0.00	7,620.00	-312.08	-163.73	591,995.16	601,295.21	32.62729351	-104.13857646	

Casing Points										
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")						
400.00	400.00	SCP	0	0						
3,205.16	3,200.00	ICP	0	0						

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well Lady Franklin 25 State 124H
Company:	Colgate Energy	TVD Reference:	3333.6+26 @ 3359.60usft (Permit)
Project:	Eddy County, NM (N83-NME)	MD Reference:	3333.6+26 @ 3359.60usft (Permit)
Site:	Lady Franklin 25	North Reference:	Grid
Well:	Lady Franklin 25 State 124H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Permit		
Design:	APD Rev 2		

Formations					
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
679.60	679.60	Top of Salt			
978.60	978.60	Base of Salt			
2,081.58	2,080.60	Yates			
2,679.81	2,676.60	Capitan			
2,920.70	2,916.60	Cherry Canyon			
3,194.73	3,189.60	Brushy Canyon			
4,208.51	4,199.60	Bone Spring LM			
6,595.42	6,580.60	1st Bone Spring Sd			
7,480.75	7,429.60	2nd Bone Spring Sd			

Plan Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
1,600.00	1,600.00	0.00	0.00	Start Build 1.50
5,684.88	5,670.47	-12.61	-6.62	Start Drop -1.50
7,061.86	7,047.04	-299.47	-157.11	KOP: 7061.86' MD, -165.96' VS,7047.04' TVD
7,961.86	7,620.00	-312.08	-163.73	EOC: 7961.86' MD, 407.00' VS,7620.00' TVD
12,506.25	7,620.00	-312.08	-163.73	TD: 12506.25' MD, 4951.39' VS,7620.00' TVD



Site: Lady Franklin 25
 Well: Lady Franklin 25 State 124H
 Wellbore: Permit
 Plan: APD Rev 2

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
679.60	679.60	Top of Salt
978.60	978.60	Base of Salt
2080.60	2081.58	Yates
2676.60	2679.81	Capitan
2916.60	2920.70	Cherry Canyon
3189.60	3194.73	Brushy Canyon
4199.60	4208.51	Bone Spring LM
6580.60	6595.42	1st Bone Spring Sd
7429.60	7480.75	2nd Bone Spring Sd

WELL DETAILS: Lady Franklin 25 State 124H

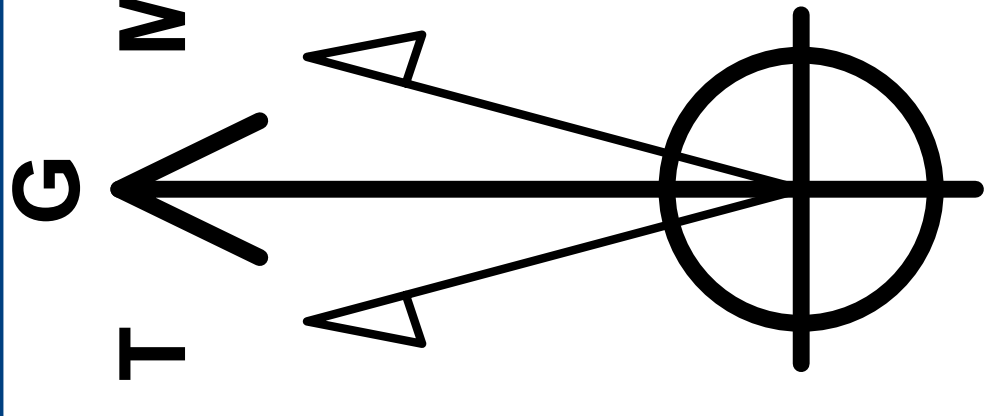
Northing	Easting	Latitude	Longitude
0.00 592300004	601458.94	32.62815051	-104.13804277

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	1600.00	0.00	0.00	1600.00	0.00	0.00	0.00	0.00	0.00
3	1929.94	4.95	207.68	1929.53	-12.61	-6.62	1.50	207.68	-6.71
4	5684.88	4.95	207.68	5670.47	-299.47	-157.11	0.00	0.00	-159.25
5	6014.82	0.00	0.00	6000.00	-312.08	-163.73	1.50	180.00	-165.96
6	7061.86	0.00	0.00	7047.04	-312.08	-163.73	0.00	0.00	-165.96
7	7961.86	90.00	89.59	7620.00	-308.01	409.21	10.00	89.59	407.00
8	12506.25	90.00	89.59	7620.00	-275.70	4953.49	0.00	0.00	4951.39

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

Magnetic Field
 Strength: 47891.5snT
 Dip Angle: 60.31°
 Date: 8/27/2019
 Model: IGRF2015

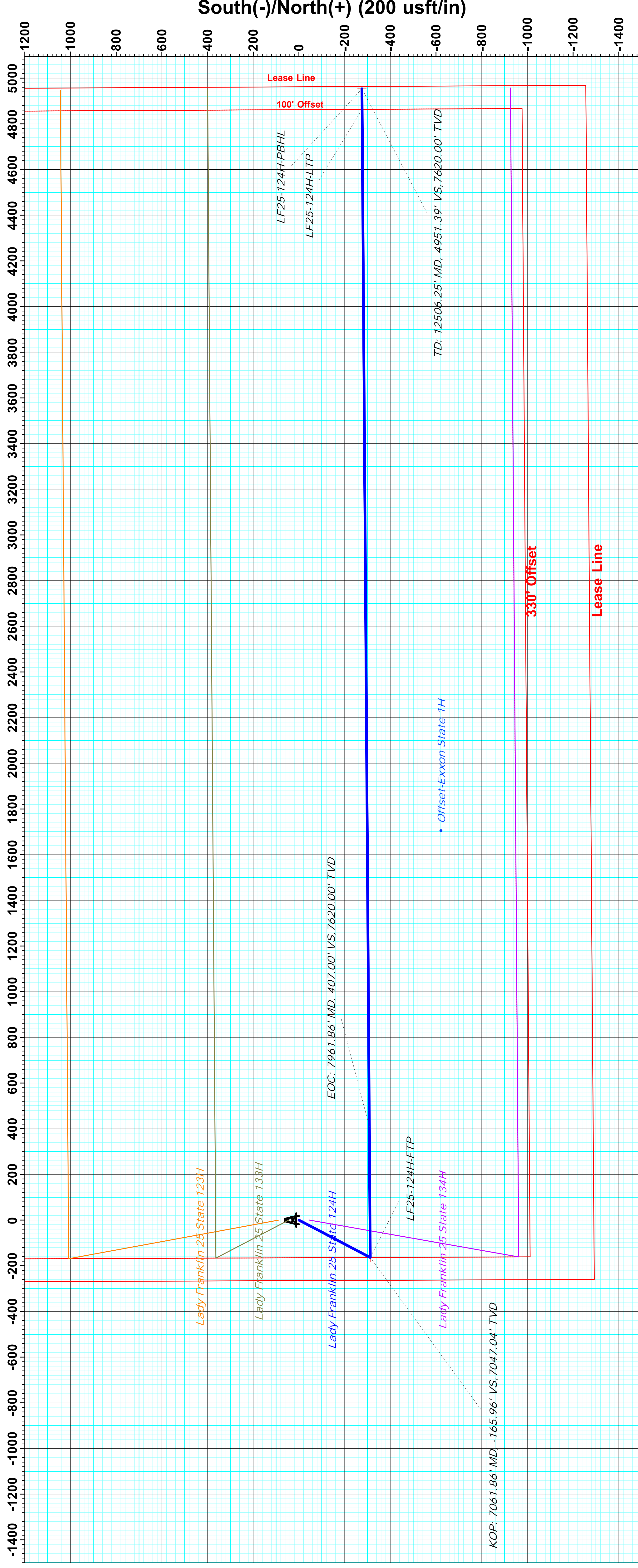


PROJECT DETAILS: Eddy County, NM (N83-NME)
 Well Name: Lady Franklin 25 State 124H
 Geodetic System: US State Plane 1983
 Datum: North American Datum 1983
 Ellipsoid: GRS 1980
 Zone: New Mexico Eastern Zone
 System Datum: Mean Sea Level
 Local North: Grid
 KB Elevation: 3333.6+26 @ 3359.60usft (Permit)
 Elevation: 3333.60

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
LF25-124H-EON	6000.00	-312.08	-163.73	591995.16	601295.21	32.62729352	-104.13857646
LF25-124H-LTP	7620.00	-276.33	4863.49	592030.91	606322.43	32.62736639	-104.12224672
LF25-124H-PBHL	7620.00	-275.70	4953.49	592031.54	606412.43	32.62736663	-104.12195437

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



Vertical Section at 89.59° (250 usft/in)

