

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Submit one copy to appropriate District Office

☐ AMENDED REPORT

I. REQUEST FOR ALLOWABLE AND AUTHORIZATION TO TRANSPORT

¹ Operator name and Address Colgate Operating, LLC 300 N Marienfeld Street, Suite 1000 Midland, Tx 79701		² OGRID Number 371449	
		³ Reason for Filing Code/ Effective Date RT	
⁴ API Number 30 – 015 – 46768	⁵ Pool Name WINCHESTER; BONE SPRING, WEST		⁶ Pool Code 97569
⁷ Property Code 371449	⁸ Property Name WEAVER 27 STATE COM		⁹ Well Number 131H

II. ¹⁰ Surface Location

UL or lot no. A	Section 27	Township 19S	Range 28E	Lot Idn	Feet from the 12393	North/South Line NORTH	Feet from the 185	East/West line EAST	County EDDY
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¹¹ Bottom Hole Location

UL or lot no. D	Section 28	Township 19S	Range 28E	Lot Idn	Feet from the 870	North/South line NORTH	Feet from the 32	East/West line WEST	County EDDY
¹² Lse Code F	¹³ Producing Method Code	¹⁴ Gas Connection Date 05/01/2022	¹⁵ C-129 Permit Number		¹⁶ C-129 Effective Date		¹⁷ C-129 Expiration Date		

III. Oil and Gas Transporters

¹⁸ Transporter OGRID	¹⁹ Transporter Name and Address	²⁰ O/G/W
329097	LM TOUCHDOWN, LLC	O
329097	LM TOUCHDOWN, LLC	G

IV. Well Completion Data

²¹ Spud Date 02/2/2022	²² Ready Date 06/01/2022	²³ TD 18,710 MD 8,396 TVD	²⁴ PBTD 18,690 MD 8,398 TVD	²⁵ Perforations 8,907-18,507	²⁶ DHC, MC	
²⁷ Hole Size		²⁸ Casing & Tubing Size		²⁹ Depth Set		³⁰ Sacks Cement
17.5		13.375		247		300 Tail
12.25		9.625		2,563		500 Lead 185 Tail
7.875		5.5		18,675		700 Lead 1,260 Tail

V. Well Test Data

³¹ Date New Oil	³² Gas Delivery Date	³³ Test Date	³⁴ Test Length	³⁵ Tbg. Pressure	³⁶ Csg. Pressure
³⁷ Choke Size	³⁸ Oil	³⁹ Water	⁴⁰ Gas		⁴¹ Test Method
⁴² I hereby certify that the rules of the Oil Conservation Division have been complied with and that the information given above is true and complete to the best of my knowledge and belief. Signature: Mikah Thomas			OIL CONSERVATION DIVISION		
Printed name: Mikah Thomas			Approved by: John Garcia		
Title: Sr. Regulatory Analyst			Title: Petroleum Engineer		
E-mail Address: mthomas@colgateenergy.com			Approval Date: 6/23/2022		
Date: 05/15/2022		Phone: 432-695-4272	RT Expires 9/1/2022		

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720

District II
811 S. First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720

District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170

District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-102
Revised August 1, 2011
Submit one copy to appropriate
District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

1 API Number 30-015-46768	2 Pool Code 97569	3 Pool Name WINCHESTER; BONE SPRING, WEST
4 Property Code 327176	5 Property Name WEAVER 27 STATE COM	6 Well Number 131H
7 OGRID No. 371449	8 Operator Name COLGATE ENERGY LLC	9 Elevation 3353.80'

10 Surface Location

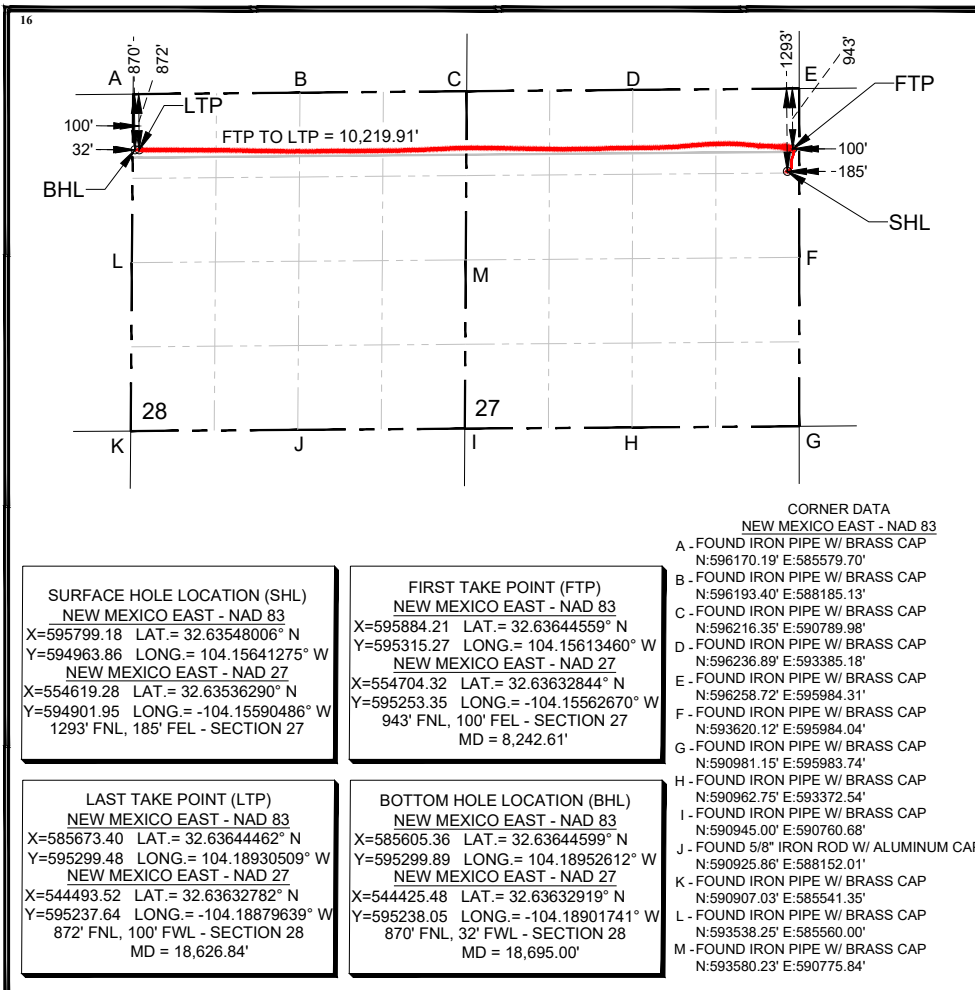
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	27	19-S	28-E		1293'	NORTH	185'	EAST	EDDY

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
D	28	19-S	28-E		870'	NORTH	32'	WEST	EDDY

12 Dedicated Acres	13 Joint or Infill	14 Consolidation Code	15 Order No.

No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.



17 OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Mikah Thomas 03.16.2022
Signature Date

Mikah Thomas

Printed Name

mthomas@colgateenergy.com

E-mail Address

18 SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

Date of Survey
Signature and Seal of Professional Surveyor:



Certificate Number

3/15/2022



Colgate Energy

Eddy County, NM (N83-NME)

Weaver 27 State Com

Weaver 27 State Com 131H

30-015-46768

131H

Design: OH-DRL

Standard Survey Report

23 February, 2022



Survey Report

Company:	Colgate Energy	Local Co-ordinate Reference:	Well Weaver 27 State Com 131H
Project:	Eddy County, NM (N83-NME)	TVD Reference:	3354+30 @ 3384.00usft
Site:	Weaver 27 State Com	MD Reference:	3354+30 @ 3384.00usft
Well:	Weaver 27 State Com 131H	North Reference:	Grid
Wellbore:	131H	Survey Calculation Method:	Minimum Curvature
Design:	OH-DRL	Database:	EDM 5000.14 Single User Db

Project	Eddy County, NM (N83-NME)		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site	Weaver 27 State Com		
Site Position:		Northing:	594,963.86 usft
From:	Map	Easting:	595,799.18 usft
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "
		Latitude:	32.63548004
		Longitude:	-104.15641274

Well	Weaver 27 State Com 131H					
Well Position	+N/-S	0.00 usft	Northing:	594,963.86 usft	Latitude:	32.63548004
	+E/-W	0.00 usft	Easting:	595,799.18 usft	Longitude:	-104.15641274
Position Uncertainty		0.00 usft	Wellhead Elevation:	usft	Ground Level:	3,354.00 usft
Grid Convergence:		0.10 °				

Wellbore	131H				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IFR	1/28/2022	7.12	60.36	47,707.50000000

Design	OH-DRL				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)	
	0.00	0.00	0.00		269.51

Survey Program	Date	2/23/2022			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
14.46	9,323.00	Survey #1_Gordon (131H)	MWD+IFR1+SAG+FDIR (SQ OWSG MWD + IFR1 + Sag + FDIR Correction		
9,377.00	9,377.00	Survey #2_PTB (131H)	BLIND	BLIND	

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
14.46	0.05	252.34	14.46	0.00	-0.01	0.01	0.35	0.35	0.00	
28.92	0.09	252.49	28.92	-0.01	-0.02	0.02	0.28	0.28	1.04	
43.38	0.14	252.63	43.38	-0.02	-0.05	0.05	0.35	0.35	0.97	
57.85	0.18	252.78	57.85	-0.03	-0.09	0.09	0.28	0.28	1.04	
72.31	0.23	252.93	72.31	-0.04	-0.14	0.14	0.35	0.35	1.04	
86.77	0.28	253.08	86.77	-0.06	-0.20	0.20	0.35	0.35	1.04	
101.23	0.32	253.22	101.23	-0.08	-0.27	0.27	0.28	0.28	0.97	
115.69	0.37	253.37	115.69	-0.11	-0.36	0.36	0.35	0.35	1.04	



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Well:	Weaver 27 State Com 131H	North Reference:	Grid
Wellbore:	131H	Survey Calculation Method:	Minimum Curvature
Design:	OH-DRL	Database:	EDM 5000.14 Single User Db

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
130.15	0.41	253.52	130.15	-0.14	-0.45	0.45	0.28	0.28	1.04	
144.62	0.46	253.67	144.62	-0.17	-0.56	0.56	0.35	0.35	1.04	
159.08	0.51	253.82	159.08	-0.20	-0.67	0.67	0.35	0.35	1.04	
173.54	0.55	253.97	173.54	-0.24	-0.80	0.80	0.28	0.28	1.04	
188.00	0.60	254.11	188.00	-0.28	-0.94	0.94	0.35	0.35	0.97	
202.54	0.55	257.71	202.54	-0.31	-1.08	1.09	0.42	-0.34	24.76	
217.08	0.50	262.00	217.08	-0.34	-1.21	1.22	0.44	-0.34	29.50	
231.62	0.46	267.11	231.61	-0.35	-1.33	1.34	0.40	-0.28	35.14	
246.15	0.43	273.22	246.14	-0.35	-1.45	1.45	0.39	-0.21	42.05	
260.69	0.39	280.42	260.68	-0.34	-1.55	1.55	0.45	-0.28	49.52	
275.23	0.37	288.75	275.22	-0.31	-1.64	1.65	0.40	-0.14	57.29	
289.77	0.35	298.05	289.76	-0.28	-1.73	1.73	0.42	-0.14	63.96	
304.31	0.35	307.92	304.30	-0.23	-1.80	1.80	0.41	0.00	67.88	
318.85	0.36	317.81	318.84	-0.17	-1.87	1.87	0.43	0.07	68.02	
333.38	0.37	327.14	333.37	-0.10	-1.92	1.92	0.41	0.07	64.21	
347.92	0.40	335.52	347.91	-0.01	-1.97	1.97	0.44	0.21	57.63	
362.46	0.43	342.77	362.45	0.09	-2.01	2.01	0.42	0.21	49.86	
377.00	0.47	348.91	376.99	0.20	-2.03	2.03	0.43	0.28	42.23	
391.67	0.43	0.22	391.66	0.31	-2.05	2.04	0.66	-0.27	77.10	
406.33	0.41	13.03	406.32	0.42	-2.03	2.03	0.65	-0.14	87.38	
421.00	0.42	26.20	420.99	0.52	-2.00	1.99	0.65	0.07	89.78	
435.67	0.45	38.43	435.66	0.61	-1.94	1.93	0.66	0.20	83.37	
450.33	0.49	48.87	450.32	0.70	-1.86	1.85	0.64	0.27	71.21	
465.00	0.55	57.35	464.99	0.78	-1.75	1.74	0.66	0.41	57.81	
479.67	0.61	64.07	479.66	0.85	-1.62	1.61	0.62	0.41	45.81	
494.33	0.69	69.39	494.32	0.91	-1.47	1.46	0.68	0.55	36.29	
509.00	0.77	73.64	508.99	0.97	-1.29	1.28	0.66	0.55	28.97	
523.67	0.85	77.06	523.65	1.03	-1.09	1.08	0.64	0.55	23.31	
538.33	0.93	79.85	538.31	1.07	-0.87	0.86	0.62	0.55	19.03	
553.00	1.02	82.16	552.98	1.11	-0.62	0.61	0.67	0.61	15.75	
567.67	1.05	82.82	567.65	1.14	-0.36	0.35	0.22	0.20	4.50	
582.33	1.08	83.55	582.31	1.18	-0.09	0.08	0.22	0.20	4.98	
597.00	1.11	84.31	596.97	1.21	0.19	-0.20	0.23	0.20	5.18	
611.67	1.15	85.04	611.64	1.23	0.48	-0.49	0.29	0.27	4.98	
626.33	1.19	85.73	626.30	1.26	0.78	-0.79	0.29	0.27	4.71	
641.00	1.23	86.35	640.96	1.28	1.09	-1.10	0.29	0.27	4.23	
655.67	1.26	86.91	655.63	1.30	1.41	-1.42	0.22	0.20	3.82	
670.33	1.30	87.40	670.29	1.31	1.73	-1.74	0.28	0.27	3.34	
685.00	1.33	87.80	684.95	1.33	2.07	-2.08	0.21	0.20	2.73	
699.67	1.36	88.10	699.62	1.34	2.41	-2.43	0.21	0.20	2.04	
714.33	1.39	88.29	714.27	1.35	2.77	-2.78	0.21	0.20	1.30	
729.00	1.41	88.32	728.94	1.36	3.12	-3.14	0.14	0.14	0.20	
742.86	1.42	88.19	742.80	1.37	3.47	-3.48	0.08	0.07	-0.94	



Survey Report

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Site:	Weaver 27 State Com	MD Reference:	3354+30 @ 3384.00usft
Well:	Weaver 27 State Com 131H	North Reference:	Grid
Wellbore:	131H	Survey Calculation Method:	Minimum Curvature
Design:	OH-DRL	Database:	EDM 5000.14 Single User Db

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
756.71	1.42	87.86	756.64	1.38	3.81	-3.82	0.06	0.00	-2.38	
770.57	1.42	87.38	770.50	1.40	4.15	-4.16	0.09	0.00	-3.46	
784.43	1.41	86.73	784.35	1.42	4.49	-4.51	0.14	-0.07	-4.69	
798.29	1.41	85.91	798.21	1.44	4.83	-4.85	0.15	0.00	-5.92	
812.14	1.40	84.89	812.05	1.46	5.17	-5.18	0.19	-0.07	-7.36	
826.00	1.40	83.58	825.91	1.50	5.51	-5.52	0.23	0.00	-9.45	
839.43	1.40	81.90	839.34	1.54	5.83	-5.85	0.31	0.00	-12.51	
852.86	1.41	80.00	852.76	1.59	6.16	-6.17	0.35	0.07	-14.15	
866.29	1.41	78.03	866.19	1.66	6.48	-6.50	0.36	0.00	-14.67	
879.71	1.42	76.09	879.60	1.73	6.81	-6.82	0.36	0.07	-14.46	
893.14	1.44	74.33	893.03	1.81	7.13	-7.15	0.36	0.15	-13.10	
906.57	1.45	72.87	906.46	1.91	7.46	-7.47	0.28	0.07	-10.87	
920.00	1.46	71.88	919.88	2.01	7.78	-7.80	0.20	0.07	-7.37	
933.57	1.48	71.53	933.45	2.12	8.11	-8.13	0.16	0.15	-2.58	
947.14	1.49	71.60	947.01	2.23	8.45	-8.46	0.07	0.07	0.52	
960.71	1.51	71.92	960.58	2.35	8.78	-8.80	0.16	0.15	2.36	
974.29	1.53	72.35	974.15	2.46	9.13	-9.15	0.17	0.15	3.17	
987.86	1.55	72.76	987.72	2.57	9.47	-9.49	0.17	0.15	3.02	
1,001.43	1.57	73.05	1,001.28	2.67	9.83	-9.85	0.16	0.15	2.14	
1,015.00	1.58	73.10	1,014.85	2.78	10.18	-10.21	0.07	0.07	0.37	
1,028.43	1.60	72.79	1,028.27	2.89	10.54	-10.56	0.16	0.15	-2.31	
1,041.86	1.62	72.26	1,041.70	3.01	10.90	-10.92	0.19	0.15	-3.95	
1,055.29	1.63	71.61	1,055.12	3.12	11.26	-11.29	0.16	0.07	-4.84	
1,068.71	1.65	70.94	1,068.54	3.25	11.63	-11.65	0.21	0.15	-4.99	
1,082.14	1.66	70.32	1,081.96	3.38	11.99	-12.02	0.15	0.07	-4.62	
1,095.57	1.67	69.85	1,095.39	3.51	12.36	-12.39	0.13	0.07	-3.50	
1,109.00	1.68	69.62	1,108.81	3.64	12.73	-12.76	0.09	0.07	-1.71	
1,122.57	1.69	69.80	1,122.37	3.78	13.10	-13.13	0.08	0.07	1.33	
1,136.14	1.69	70.22	1,135.94	3.92	13.48	-13.51	0.09	0.00	3.10	
1,149.71	1.70	70.78	1,149.50	4.05	13.85	-13.89	0.14	0.07	4.13	
1,163.29	1.70	71.41	1,163.08	4.18	14.24	-14.27	0.14	0.00	4.64	
1,176.86	1.70	72.03	1,176.64	4.31	14.62	-14.65	0.14	0.00	4.57	
1,190.43	1.70	72.59	1,190.20	4.43	15.00	-15.04	0.12	0.00	4.13	
1,204.00	1.69	72.99	1,203.77	4.55	15.39	-15.42	0.11	-0.07	2.95	
1,217.43	1.69	73.10	1,217.19	4.67	15.76	-15.80	0.02	0.00	0.82	
1,230.86	1.67	73.02	1,230.62	4.78	16.14	-16.18	0.15	-0.15	-0.60	
1,244.29	1.66	72.82	1,244.04	4.90	16.51	-16.56	0.09	-0.07	-1.49	
1,257.71	1.65	72.53	1,257.46	5.01	16.88	-16.93	0.10	-0.07	-2.16	
1,271.14	1.65	72.19	1,270.88	5.13	17.25	-17.30	0.07	0.00	-2.53	
1,284.57	1.65	71.82	1,284.30	5.25	17.62	-17.66	0.08	0.00	-2.76	
1,298.00	1.67	71.45	1,297.73	5.37	17.99	-18.03	0.17	0.15	-2.76	
1,311.57	1.70	71.04	1,311.29	5.50	18.37	-18.41	0.24	0.22	-3.02	
1,325.14	1.75	70.63	1,324.86	5.63	18.75	-18.80	0.38	0.37	-3.02	



Survey Report

Company:	Colgate Energy	Local Co-ordinate Reference:	Well Weaver 27 State Com 131H
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Site:	Weaver 27 State Com	MD Reference:	3354+30 @ 3384.00usft
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Wellbore:	131H	Survey Calculation Method:	Minimum Curvature
Design:	OH-DRL	Database:	EDM 5000.14 Single User Db

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
1,338.71	1.80	70.25	1,338.42	5.77	19.15	-19.20	0.38	0.37	-2.80	
1,352.29	1.85	69.90	1,351.99	5.92	19.56	-19.61	0.38	0.37	-2.58	
1,365.86	1.90	69.59	1,365.56	6.07	19.97	-20.02	0.38	0.37	-2.28	
1,379.43	1.94	69.34	1,379.12	6.23	20.40	-20.45	0.30	0.29	-1.84	
1,393.00	1.97	69.17	1,392.68	6.40	20.83	-20.88	0.23	0.22	-1.25	
1,406.57	1.98	69.10	1,406.24	6.56	21.27	-21.32	0.08	0.07	-0.52	
1,420.14	1.98	69.10	1,419.80	6.73	21.71	-21.76	0.00	0.00	0.00	
1,433.71	1.97	69.13	1,433.37	6.90	22.14	-22.20	0.07	-0.07	0.22	
1,447.29	1.95	69.14	1,446.94	7.06	22.58	-22.64	0.15	-0.15	0.07	
1,460.86	1.93	69.10	1,460.50	7.23	23.01	-23.07	0.15	-0.15	-0.29	
1,474.43	1.92	68.96	1,474.06	7.39	23.43	-23.49	0.08	-0.07	-1.03	
1,488.00	1.91	68.66	1,487.63	7.55	23.85	-23.92	0.10	-0.07	-2.21	
1,501.43	1.92	68.11	1,501.05	7.72	24.27	-24.34	0.16	0.07	-4.10	
1,514.86	1.94	67.42	1,514.47	7.89	24.69	-24.76	0.23	0.15	-5.14	
1,528.29	1.95	66.65	1,527.89	8.07	25.11	-25.18	0.21	0.07	-5.73	
1,541.71	1.97	65.85	1,541.30	8.25	25.53	-25.60	0.25	0.15	-5.96	
1,555.14	1.98	65.04	1,554.73	8.45	25.95	-26.02	0.22	0.07	-6.03	
1,568.57	1.99	64.24	1,568.15	8.65	26.37	-26.44	0.22	0.07	-5.96	
1,582.00	1.97	63.47	1,581.57	8.85	26.79	-26.86	0.25	-0.15	-5.73	
1,595.43	1.93	62.88	1,594.99	9.06	27.20	-27.27	0.33	-0.30	-4.39	
1,608.86	1.87	62.34	1,608.42	9.26	27.59	-27.67	0.47	-0.45	-4.02	
1,622.29	1.80	61.81	1,621.84	9.46	27.97	-28.05	0.54	-0.52	-3.95	
1,635.71	1.74	61.24	1,635.25	9.66	28.34	-28.42	0.47	-0.45	-4.25	
1,649.14	1.67	60.59	1,648.68	9.85	28.68	-28.77	0.54	-0.52	-4.84	
1,662.57	1.61	59.80	1,662.10	10.05	29.02	-29.10	0.48	-0.45	-5.88	
1,676.00	1.56	58.81	1,675.53	10.23	29.34	-29.42	0.42	-0.37	-7.37	
1,689.57	1.53	57.57	1,689.09	10.43	29.65	-29.74	0.33	-0.22	-9.14	
1,703.14	1.52	56.16	1,702.66	10.63	29.95	-30.04	0.29	-0.07	-10.39	
1,716.71	1.52	54.69	1,716.22	10.83	30.25	-30.34	0.29	0.00	-10.83	
1,730.29	1.53	53.23	1,729.80	11.04	30.54	-30.63	0.30	0.07	-10.75	
1,743.86	1.54	51.85	1,743.36	11.26	30.83	-30.92	0.28	0.07	-10.17	
1,757.43	1.55	50.63	1,756.93	11.49	31.11	-31.21	0.25	0.07	-8.99	
1,771.00	1.55	49.63	1,770.49	11.73	31.40	-31.49	0.20	0.00	-7.37	
1,784.43	1.55	49.02	1,783.92	11.96	31.67	-31.77	0.12	0.00	-4.54	
1,797.86	1.54	48.66	1,797.34	12.20	31.94	-32.05	0.10	-0.07	-2.68	
1,811.29	1.53	48.49	1,810.77	12.44	32.21	-32.32	0.08	-0.07	-1.27	
1,824.71	1.51	48.45	1,824.18	12.68	32.48	-32.59	0.15	-0.15	-0.30	
1,838.14	1.50	48.53	1,837.61	12.91	32.74	-32.85	0.08	-0.07	0.60	
1,851.57	1.50	48.70	1,851.03	13.14	33.01	-33.12	0.03	0.00	1.27	
1,865.00	1.50	48.98	1,864.46	13.37	33.27	-33.39	0.05	0.00	2.08	
1,878.57	1.52	49.42	1,878.02	13.61	33.54	-33.66	0.17	0.15	3.24	
1,892.14	1.54	49.94	1,891.59	13.84	33.82	-33.94	0.18	0.15	3.83	
1,905.71	1.56	50.46	1,905.15	14.08	34.10	-34.22	0.18	0.15	3.83	
1,919.29	1.59	50.97	1,918.73	14.31	34.39	-34.51	0.24	0.22	3.76	



Survey Report

Company:	Colgate Energy	Local Co-ordinate Reference:	Well Weaver 27 State Com 131H
Project:	Eddy County, NM (N83-NME)	TVD Reference:	3354+30 @ 3384.00usft
Site:	Weaver 27 State Com	MD Reference:	3354+30 @ 3384.00usft
Well:	Weaver 27 State Com 131H	North Reference:	Grid
Wellbore:	131H	Survey Calculation Method:	Minimum Curvature
Design:	OH-DRL	Database:	EDM 5000.14 Single User Db

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
1,932.86	1.62	51.40	1,932.29	14.55	34.69	-34.81	0.24	0.22	3.17	
1,946.43	1.64	51.73	1,945.86	14.79	34.99	-35.11	0.16	0.15	2.43	
1,960.00	1.66	51.90	1,959.42	15.03	35.30	-35.42	0.15	0.15	1.25	
1,973.43	1.66	51.85	1,972.85	15.27	35.60	-35.73	0.01	0.00	-0.37	
1,986.86	1.66	51.62	1,986.27	15.51	35.91	-36.04	0.05	0.00	-1.71	
2,000.29	1.65	51.26	1,999.69	15.76	36.21	-36.34	0.11	-0.07	-2.68	
2,013.71	1.64	50.79	2,013.11	16.00	36.51	-36.65	0.13	-0.07	-3.50	
2,027.14	1.63	50.22	2,026.53	16.24	36.81	-36.94	0.14	-0.07	-4.24	
2,040.57	1.62	49.56	2,039.96	16.49	37.10	-37.24	0.16	-0.07	-4.91	
2,054.00	1.61	48.77	2,053.38	16.73	37.38	-37.52	0.18	-0.07	-5.88	
2,067.43	1.60	47.85	2,066.81	16.99	37.66	-37.81	0.21	-0.07	-6.85	
2,080.86	1.59	46.84	2,080.23	17.24	37.94	-38.09	0.22	-0.07	-7.52	
2,094.29	1.59	45.78	2,093.66	17.50	38.21	-38.36	0.22	0.00	-7.89	
2,107.71	1.58	44.74	2,107.07	17.76	38.47	-38.62	0.23	-0.07	-7.75	
2,121.14	1.58	43.76	2,120.50	18.02	38.73	-38.88	0.20	0.00	-7.30	
2,134.57	1.58	42.92	2,133.92	18.29	38.98	-39.14	0.17	0.00	-6.25	
2,148.00	1.59	42.31	2,147.35	18.57	39.24	-39.39	0.15	0.07	-4.54	
2,161.57	1.60	42.03	2,160.91	18.84	39.49	-39.65	0.09	0.07	-2.06	
2,175.14	1.62	41.97	2,174.48	19.13	39.74	-39.91	0.15	0.15	-0.44	
2,188.71	1.64	42.06	2,188.04	19.42	40.00	-40.17	0.15	0.15	0.66	
2,202.29	1.67	42.25	2,201.62	19.71	40.27	-40.43	0.22	0.22	1.40	
2,215.86	1.69	42.52	2,215.18	20.00	40.53	-40.70	0.16	0.15	1.99	
2,229.43	1.72	42.87	2,228.74	20.30	40.81	-40.98	0.23	0.22	2.58	
2,243.00	1.75	43.28	2,242.31	20.60	41.09	-41.26	0.24	0.22	3.02	
2,256.43	1.78	43.87	2,255.73	20.90	41.37	-41.55	0.26	0.22	4.39	
2,269.86	1.81	44.50	2,269.15	21.20	41.67	-41.85	0.27	0.22	4.69	
2,283.29	1.84	45.09	2,282.58	21.50	41.97	-42.15	0.26	0.22	4.39	
2,296.71	1.87	45.62	2,295.99	21.81	42.28	-42.46	0.26	0.22	3.95	
2,310.14	1.90	46.01	2,309.41	22.11	42.59	-42.78	0.24	0.22	2.90	
2,323.57	1.93	46.20	2,322.84	22.43	42.92	-43.11	0.23	0.22	1.41	
2,337.00	1.95	46.09	2,336.26	22.74	43.25	-43.44	0.15	0.15	-0.82	
2,350.57	1.97	45.56	2,349.82	23.06	43.58	-43.77	0.20	0.15	-3.91	
2,364.14	1.99	44.75	2,363.38	23.39	43.91	-44.11	0.25	0.15	-5.97	
2,377.71	2.00	43.81	2,376.94	23.73	44.24	-44.44	0.25	0.07	-6.93	
2,391.29	2.02	42.83	2,390.52	24.08	44.57	-44.77	0.29	0.15	-7.22	
2,404.86	2.04	41.90	2,404.08	24.43	44.89	-45.10	0.28	0.15	-6.85	
2,418.43	2.06	41.11	2,417.64	24.80	45.21	-45.42	0.26	0.15	-5.82	
2,432.00	2.07	40.59	2,431.20	25.17	45.53	-45.75	0.16	0.07	-3.83	
2,445.00	2.09	40.45	2,444.19	25.53	45.84	-46.06	0.16	0.15	-1.08	
2,458.00	2.11	40.52	2,457.18	25.89	46.15	-46.37	0.16	0.15	0.54	
2,471.00	2.12	40.65	2,470.17	26.25	46.46	-46.68	0.09	0.08	1.00	
2,484.00	2.13	40.73	2,483.16	26.62	46.78	-47.00	0.08	0.08	0.62	
2,497.00	2.13	40.64	2,496.16	26.99	47.09	-47.32	0.03	0.00	-0.69	



Survey Report

Company:	Colgate Energy	Local Co-ordinate Reference:	Well Weaver 27 State Com 131H
Project:	Eddy County, NM (N83-NME)	TVD Reference:	3354+30 @ 3384.00usft
Site:	Weaver 27 State Com	MD Reference:	3354+30 @ 3384.00usft
Well:	Weaver 27 State Com 131H	North Reference:	Grid
Wellbore:	131H	Survey Calculation Method:	Minimum Curvature
Design:	OH-DRL	Database:	EDM 5000.14 Single User Db

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
2,511.91	2.12	40.13	2,511.06	27.41	47.45	-47.68	0.14	-0.07	-3.42	
2,526.82	2.09	39.34	2,525.96	27.83	47.80	-48.03	0.28	-0.20	-5.30	
2,541.73	2.06	38.35	2,540.86	28.25	48.14	-48.38	0.31	-0.20	-6.64	
2,556.64	2.03	37.23	2,555.76	28.67	48.46	-48.71	0.34	-0.20	-7.51	
2,571.55	2.01	36.04	2,570.66	29.09	48.78	-49.02	0.31	-0.13	-7.98	
2,586.45	1.99	34.82	2,585.55	29.51	49.08	-49.33	0.32	-0.13	-8.19	
2,601.36	1.98	33.65	2,600.45	29.94	49.37	-49.62	0.28	-0.07	-7.85	
2,616.27	1.98	32.60	2,615.35	30.37	49.65	-49.91	0.24	0.00	-7.04	
2,631.18	2.01	31.78	2,630.25	30.81	49.93	-50.19	0.28	0.20	-5.50	
2,646.09	2.06	31.33	2,645.15	31.26	50.20	-50.47	0.35	0.34	-3.02	
2,661.00	2.17	31.43	2,660.05	31.73	50.49	-50.76	0.74	0.74	0.67	
2,674.43	2.33	31.54	2,673.47	32.18	50.77	-51.04	1.19	1.19	0.82	
2,687.86	2.53	31.84	2,686.89	32.67	51.06	-51.34	1.49	1.49	2.23	
2,701.29	2.76	32.21	2,700.30	33.19	51.39	-51.68	1.72	1.71	2.76	
2,714.71	2.99	32.60	2,713.71	33.76	51.75	-52.04	1.72	1.71	2.91	
2,728.14	3.22	33.00	2,727.12	34.37	52.15	-52.44	1.72	1.71	2.98	
2,741.57	3.44	33.41	2,740.52	35.02	52.58	-52.87	1.65	1.64	3.05	
2,755.00	3.91	29.13	2,753.93	35.76	53.02	-53.32	4.05	3.50	-31.87	
2,768.43	4.76	23.29	2,767.32	36.67	53.46	-53.78	7.12	6.33	-43.48	
2,781.86	5.66	21.93	2,780.69	37.80	53.93	-54.25	6.76	6.70	-10.13	
2,795.29	5.79	22.90	2,794.06	39.04	54.44	-54.77	1.21	0.97	7.22	
2,808.71	5.93	23.90	2,807.41	40.29	54.99	-55.33	1.29	1.04	7.45	
2,822.14	6.06	24.79	2,820.76	41.57	55.57	-55.92	1.19	0.97	6.63	
2,835.57	6.19	25.40	2,834.12	42.87	56.17	-56.54	1.08	0.97	4.54	
2,849.00	6.31	25.57	2,847.47	44.19	56.80	-57.18	0.90	0.89	1.27	
2,862.57	6.43	25.08	2,860.95	45.55	57.45	-57.83	0.97	0.88	-3.61	
2,876.14	6.55	24.20	2,874.44	46.94	58.09	-58.48	1.15	0.88	-6.48	
2,889.71	6.67	23.10	2,887.92	48.38	58.71	-59.12	1.29	0.88	-8.11	
2,903.29	6.78	21.93	2,901.40	49.84	59.32	-59.74	1.29	0.81	-8.62	
2,916.86	6.89	20.80	2,914.88	51.35	59.91	-60.35	1.28	0.81	-8.33	
2,930.43	6.99	19.80	2,928.35	52.89	60.48	-60.93	1.16	0.74	-7.37	
2,944.00	7.05	15.04	2,941.81	54.47	60.97	-61.44	4.31	0.44	-35.08	
2,957.57	7.15	9.36	2,955.28	56.10	61.33	-61.80	5.22	0.74	-41.86	
2,971.14	7.18	9.04	2,968.74	57.78	61.60	-62.09	0.37	0.22	-2.36	
2,984.71	7.20	8.86	2,982.21	59.45	61.86	-62.37	0.22	0.15	-1.33	
2,998.29	7.21	8.77	2,995.68	61.14	62.12	-62.64	0.11	0.07	-0.66	
3,011.86	7.21	8.74	3,009.14	62.82	62.38	-62.92	0.03	0.00	-0.22	
3,025.43	7.22	8.75	3,022.61	64.50	62.64	-63.19	0.07	0.07	0.07	
3,039.00	7.22	8.80	3,036.07	66.19	62.90	-63.46	0.05	0.00	0.37	
3,052.43	7.24	8.87	3,049.39	67.86	63.16	-63.74	0.16	0.15	0.52	
3,065.86	7.25	8.94	3,062.71	69.53	63.42	-64.02	0.10	0.07	0.52	
3,079.29	7.26	9.01	3,076.04	71.21	63.69	-64.29	0.10	0.07	0.52	
3,092.71	7.26	9.06	3,089.35	72.88	63.95	-64.57	0.05	0.00	0.37	



Survey Report

Company:	Colgate Energy	Local Co-ordinate Reference:	Well Weaver 27 State Com 131H
Project:	Eddy County, NM (N83-NME)	TVD Reference:	3354+30 @ 3384.00usft
Site:	Weaver 27 State Com	MD Reference:	3354+30 @ 3384.00usft
Well:	Weaver 27 State Com 131H	North Reference:	Grid
Wellbore:	131H	Survey Calculation Method:	Minimum Curvature
Design:	OH-DRL	Database:	EDM 5000.14 Single User Db

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
3,106.14	7.24	9.06	3,102.67	74.56	64.22	-64.86	0.15	-0.15	0.00	
3,119.57	7.20	9.00	3,116.00	76.22	64.49	-65.14	0.30	-0.30	-0.45	
3,133.00	7.12	8.84	3,129.32	77.88	64.75	-65.41	0.61	-0.60	-1.19	
3,146.43	6.98	8.47	3,142.65	79.51	64.99	-65.67	1.10	-1.04	-2.76	
3,159.86	6.80	7.97	3,155.98	81.10	65.22	-65.91	1.41	-1.34	-3.72	
3,173.29	6.61	7.38	3,169.32	82.66	65.43	-66.14	1.50	-1.41	-4.39	
3,186.71	6.41	6.74	3,182.65	84.17	65.62	-66.34	1.59	-1.49	-4.77	
3,200.14	6.21	6.09	3,196.00	85.63	65.79	-66.52	1.58	-1.49	-4.84	
3,213.57	6.03	5.49	3,209.36	87.06	65.93	-66.67	1.42	-1.34	-4.47	
3,227.00	5.53	5.28	3,222.72	88.40	66.06	-66.81	3.73	-3.72	-1.56	
3,240.57	4.80	5.48	3,236.23	89.62	66.17	-66.94	5.38	-5.38	1.47	
3,254.14	4.73	5.44	3,249.76	90.74	66.28	-67.05	0.52	-0.52	-0.29	
3,267.71	4.67	5.54	3,263.28	91.85	66.39	-67.17	0.45	-0.44	0.74	
3,281.29	4.63	5.72	3,276.81	92.94	66.49	-67.29	0.31	-0.29	1.33	
3,294.86	4.60	5.95	3,290.34	94.03	66.60	-67.41	0.26	-0.22	1.69	
3,308.43	4.58	6.19	3,303.87	95.11	66.72	-67.53	0.20	-0.15	1.77	
3,322.00	4.55	6.42	3,317.39	96.18	66.84	-67.66	0.26	-0.22	1.69	
3,335.43	4.53	6.60	3,330.78	97.24	66.96	-67.79	0.18	-0.15	1.34	
3,348.86	4.52	6.74	3,344.17	98.29	67.08	-67.92	0.11	-0.07	1.04	
3,362.29	4.50	6.86	3,357.56	99.34	67.21	-68.05	0.16	-0.15	0.89	
3,375.71	4.49	6.95	3,370.94	100.38	67.33	-68.19	0.09	-0.07	0.67	
3,389.14	4.48	7.02	3,384.33	101.43	67.46	-68.33	0.08	-0.07	0.52	
3,402.57	4.47	7.04	3,397.72	102.47	67.59	-68.46	0.08	-0.07	0.15	
3,416.00	4.46	7.03	3,411.10	103.50	67.72	-68.60	0.07	-0.07	-0.07	
3,429.57	4.46	6.94	3,424.63	104.55	67.84	-68.74	0.05	0.00	-0.66	
3,443.14	4.46	6.80	3,438.16	105.60	67.97	-68.87	0.08	0.00	-1.03	
3,456.71	4.46	6.60	3,451.69	106.65	68.09	-69.00	0.11	0.00	-1.47	
3,470.29	4.46	6.35	3,465.23	107.70	68.21	-69.13	0.14	0.00	-1.84	
3,483.86	4.46	6.02	3,478.76	108.75	68.33	-69.25	0.19	0.00	-2.43	
3,497.43	4.46	5.60	3,492.29	109.80	68.43	-69.37	0.24	0.00	-3.10	
3,511.00	4.45	5.04	3,505.82	110.85	68.53	-69.48	0.33	-0.07	-4.13	
3,524.43	4.42	4.28	3,519.21	111.88	68.62	-69.57	0.49	-0.22	-5.66	
3,537.86	4.40	3.38	3,532.60	112.91	68.68	-69.65	0.54	-0.15	-6.70	
3,551.29	4.37	2.41	3,545.99	113.94	68.74	-69.71	0.60	-0.22	-7.22	
3,564.71	4.35	1.42	3,559.37	114.96	68.77	-69.75	0.58	-0.15	-7.38	
3,578.14	4.33	0.44	3,572.76	115.97	68.79	-69.78	0.57	-0.15	-7.30	
3,591.57	4.32	359.54	3,586.15	116.99	68.79	-69.79	0.51	-0.07	-6.70	
3,605.00	4.33	358.80	3,599.54	118.00	68.77	-69.78	0.42	0.07	-5.51	
3,618.57	4.35	358.28	3,613.07	119.02	68.75	-69.76	0.33	0.15	-3.83	
3,632.14	4.38	357.91	3,626.61	120.06	68.71	-69.74	0.30	0.22	-2.73	
3,645.71	4.43	357.66	3,640.14	121.10	68.67	-69.70	0.39	0.37	-1.84	
3,659.29	4.47	357.49	3,653.67	122.15	68.63	-69.67	0.31	0.29	-1.25	
3,672.86	4.51	357.37	3,667.20	123.21	68.58	-69.63	0.30	0.29	-0.88	
3,686.43	4.54	357.31	3,680.73	124.28	68.53	-69.59	0.22	0.22	-0.44	



Survey Report

Company:	Colgate Energy	Local Co-ordinate Reference:	Well Weaver 27 State Com 131H
Project:	Eddy County, NM (N83-NME)	TVD Reference:	3354+30 @ 3384.00usft
Site:	Weaver 27 State Com	MD Reference:	3354+30 @ 3384.00usft
Well:	Weaver 27 State Com 131H	North Reference:	Grid
Wellbore:	131H	Survey Calculation Method:	Minimum Curvature
Design:	OH-DRL	Database:	EDM 5000.14 Single User Db

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
3,700.00	4.55	357.30	3,694.26	125.36	68.48	-69.55	0.07	0.07	-0.07
3,713.43	4.53	357.34	3,707.65	126.42	68.43	-69.51	0.15	-0.15	0.30
3,726.86	4.50	357.42	3,721.03	127.47	68.38	-69.47	0.23	-0.22	0.60
3,740.29	4.45	357.51	3,734.42	128.52	68.33	-69.43	0.38	-0.37	0.67
3,753.71	4.40	357.61	3,747.80	129.55	68.29	-69.40	0.38	-0.37	0.75
3,767.14	4.35	357.68	3,761.19	130.58	68.25	-69.36	0.37	-0.37	0.52
3,780.57	4.31	357.70	3,774.59	131.59	68.21	-69.33	0.30	-0.30	0.15
3,794.00	4.28	357.65	3,787.98	132.60	68.17	-69.30	0.23	-0.22	-0.37
3,807.57	4.27	357.43	3,801.51	133.61	68.12	-69.26	0.14	-0.07	-1.62
3,821.14	4.27	357.15	3,815.04	134.62	68.08	-69.22	0.15	0.00	-2.06
3,834.71	4.28	356.83	3,828.57	135.63	68.02	-69.18	0.19	0.07	-2.36
3,848.29	4.29	356.51	3,842.12	136.64	67.96	-69.13	0.19	0.07	-2.36
3,861.86	4.30	356.23	3,855.65	137.65	67.90	-69.07	0.17	0.07	-2.06
3,875.43	4.31	356.02	3,869.18	138.67	67.83	-69.01	0.14	0.07	-1.55
3,889.00	4.31	355.94	3,882.71	139.69	67.76	-68.95	0.04	0.00	-0.59
3,902.57	4.31	356.07	3,896.24	140.70	67.69	-68.89	0.07	0.00	0.96
3,916.14	4.29	356.32	3,909.78	141.72	67.62	-68.83	0.20	-0.15	1.84
3,929.71	4.27	356.65	3,923.31	142.73	67.56	-68.78	0.23	-0.15	2.43
3,943.29	4.24	356.99	3,936.85	143.74	67.50	-68.73	0.29	-0.22	2.50
3,956.86	4.21	357.31	3,950.38	144.74	67.45	-68.69	0.28	-0.22	2.36
3,970.43	4.17	357.56	3,963.92	145.73	67.41	-68.65	0.32	-0.29	1.84
3,984.00	4.13	357.67	3,977.45	146.71	67.37	-68.62	0.30	-0.29	0.81
3,997.43	4.08	357.48	3,990.85	147.67	67.33	-68.59	0.39	-0.37	-1.41
4,010.86	4.03	357.13	4,004.24	148.62	67.28	-68.55	0.42	-0.37	-2.61
4,024.29	3.98	356.68	4,017.64	149.55	67.23	-68.51	0.44	-0.37	-3.35
4,037.71	3.93	356.17	4,031.03	150.48	67.17	-68.46	0.46	-0.37	-3.80
4,051.14	3.88	355.64	4,044.43	151.39	67.11	-68.40	0.46	-0.37	-3.95
4,064.57	3.82	355.14	4,057.83	152.29	67.04	-68.34	0.51	-0.45	-3.72
4,078.00	3.78	354.71	4,071.23	153.17	66.96	-68.27	0.37	-0.30	-3.20
4,091.57	3.73	354.48	4,084.77	154.06	66.87	-68.19	0.38	-0.37	-1.69
4,105.14	3.69	354.35	4,098.31	154.93	66.79	-68.11	0.30	-0.29	-0.96
4,118.71	3.65	354.27	4,111.85	155.80	66.70	-68.03	0.30	-0.29	-0.59
4,132.29	3.61	354.22	4,125.41	156.65	66.62	-67.95	0.30	-0.29	-0.37
4,145.86	3.58	354.15	4,138.95	157.50	66.53	-67.87	0.22	-0.22	-0.52
4,159.43	3.55	354.04	4,152.49	158.34	66.44	-67.79	0.23	-0.22	-0.81
4,173.00	3.53	353.84	4,166.04	159.17	66.35	-67.71	0.17	-0.15	-1.47
4,186.43	3.51	353.46	4,179.44	159.99	66.26	-67.63	0.23	-0.15	-2.83
4,199.86	3.50	353.00	4,192.85	160.81	66.17	-67.54	0.22	-0.07	-3.43
4,213.29	3.50	352.49	4,206.25	161.62	66.06	-67.44	0.23	0.00	-3.80
4,226.71	3.49	351.96	4,219.65	162.43	65.95	-67.34	0.25	-0.07	-3.95
4,240.14	3.49	351.44	4,233.05	163.24	65.83	-67.23	0.24	0.00	-3.87
4,253.57	3.49	350.97	4,246.46	164.05	65.71	-67.11	0.21	0.00	-3.50
4,267.00	3.50	350.56	4,259.86	164.86	65.58	-66.99	0.20	0.07	-3.05



Survey Report

Company:	Colgate Energy	Local Co-ordinate Reference:	Well Weaver 27 State Com 131H
Project:	Eddy County, NM (N83-NME)	TVD Reference:	3354+30 @ 3384.00usft
Site:	Weaver 27 State Com	MD Reference:	3354+30 @ 3384.00usft
Well:	Weaver 27 State Com 131H	North Reference:	Grid
Wellbore:	131H	Survey Calculation Method:	Minimum Curvature
Design:	OH-DRL	Database:	EDM 5000.14 Single User Db

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
4,280.57	3.50	350.27	4,273.41	165.67	65.44	-66.85	0.13	0.00	-2.14
4,294.14	3.51	350.08	4,286.95	166.49	65.30	-66.72	0.11	0.07	-1.40
4,307.71	3.51	350.00	4,300.49	167.31	65.15	-66.58	0.04	0.00	-0.59
4,321.29	3.51	350.05	4,314.05	168.13	65.01	-66.45	0.02	0.00	0.37
4,334.86	3.50	350.26	4,327.59	168.94	64.87	-66.31	0.12	-0.07	1.55
4,348.43	3.48	350.71	4,341.14	169.76	64.73	-66.18	0.25	-0.15	3.32
4,362.00	3.44	351.49	4,354.68	170.57	64.61	-66.06	0.46	-0.29	5.75
4,375.43	3.37	352.78	4,368.09	171.36	64.50	-65.96	0.77	-0.52	9.61
4,388.86	3.28	354.45	4,381.50	172.13	64.41	-65.88	0.98	-0.67	12.43
4,402.29	3.18	356.40	4,394.91	172.89	64.35	-65.83	1.11	-0.74	14.52
4,415.71	3.09	358.55	4,408.31	173.62	64.32	-65.80	1.10	-0.67	16.02
4,429.14	3.00	0.80	4,421.72	174.33	64.31	-65.80	1.11	-0.67	16.75
4,442.57	2.92	3.02	4,435.13	175.03	64.34	-65.83	1.04	-0.60	16.53
4,456.00	3.01	11.93	4,448.54	175.71	64.43	-65.93	3.49	0.67	66.34
4,469.57	3.26	22.54	4,462.09	176.42	64.65	-66.15	4.65	1.84	78.19
4,483.14	3.19	23.69	4,475.64	177.12	64.95	-66.46	0.70	-0.52	8.47
4,496.71	3.14	24.75	4,489.19	177.80	65.25	-66.77	0.57	-0.37	7.81
4,510.29	3.09	25.70	4,502.75	178.47	65.57	-67.09	0.53	-0.37	7.00
4,523.86	3.04	26.50	4,516.30	179.12	65.89	-67.42	0.48	-0.37	5.90
4,537.43	3.01	27.07	4,529.85	179.76	66.21	-67.75	0.31	-0.22	4.20
4,551.00	2.98	27.32	4,543.40	180.39	66.53	-68.08	0.24	-0.22	1.84
4,564.43	2.97	27.03	4,556.81	181.01	66.85	-68.40	0.13	-0.07	-2.16
4,577.86	2.97	26.44	4,570.23	181.63	67.17	-68.72	0.23	0.00	-4.39
4,591.29	2.97	25.65	4,583.64	182.26	67.47	-69.03	0.30	0.00	-5.88
4,604.71	2.98	24.74	4,597.04	182.89	67.77	-69.33	0.36	0.07	-6.78
4,618.14	3.00	23.80	4,610.45	183.53	68.06	-69.62	0.39	0.15	-7.00
4,631.57	3.02	22.88	4,623.86	184.17	68.34	-69.91	0.39	0.15	-6.85
4,645.00	3.04	22.05	4,637.27	184.83	68.61	-70.18	0.36	0.15	-6.18
4,658.57	3.06	21.33	4,650.83	185.50	68.87	-70.46	0.32	0.15	-5.31
4,672.14	3.08	20.71	4,664.38	186.18	69.13	-70.72	0.29	0.15	-4.57
4,685.71	3.10	20.15	4,677.93	186.87	69.39	-70.99	0.27	0.15	-4.13
4,699.29	3.13	19.62	4,691.49	187.56	69.64	-71.24	0.31	0.22	-3.90
4,712.86	3.15	19.10	4,705.04	188.26	69.89	-71.49	0.26	0.15	-3.83
4,726.43	3.17	18.57	4,718.58	188.97	70.13	-71.74	0.26	0.15	-3.91
4,740.00	3.19	17.99	4,732.13	189.68	70.36	-71.98	0.28	0.15	-4.27
4,753.57	3.21	17.32	4,745.68	190.41	70.59	-72.22	0.31	0.15	-4.94
4,767.14	3.22	16.61	4,759.23	191.13	70.82	-72.45	0.30	0.07	-5.23
4,780.71	3.24	15.89	4,772.78	191.87	71.03	-72.67	0.33	0.15	-5.31
4,794.29	3.25	15.20	4,786.34	192.61	71.24	-72.88	0.30	0.07	-5.08
4,807.86	3.27	14.57	4,799.89	193.35	71.43	-73.09	0.30	0.15	-4.64
4,821.43	3.30	14.02	4,813.43	194.11	71.63	-73.28	0.32	0.22	-4.05
4,835.00	3.34	13.62	4,826.98	194.87	71.81	-73.48	0.34	0.29	-2.95
4,848.43	3.39	13.38	4,840.39	195.64	72.00	-73.67	0.39	0.37	-1.79



Survey Report

Company:	Colgate Energy	Local Co-ordinate Reference:	Well Weaver 27 State Com 131H
Project:	Eddy County, NM (N83-NME)	TVD Reference:	3354+30 @ 3384.00usft
Site:	Weaver 27 State Com	MD Reference:	3354+30 @ 3384.00usft
Well:	Weaver 27 State Com 131H	North Reference:	Grid
Wellbore:	131H	Survey Calculation Method:	Minimum Curvature
Design:	OH-DRL	Database:	EDM 5000.14 Single User Db

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
4,861.86	3.46	13.28	4,853.79	196.42	72.18	-73.86	0.52	0.52	-0.74	
4,875.29	3.53	13.26	4,867.20	197.21	72.37	-74.06	0.52	0.52	-0.15	
4,888.71	3.60	13.30	4,880.59	198.03	72.56	-74.25	0.52	0.52	0.30	
4,902.14	3.67	13.38	4,894.00	198.85	72.76	-74.46	0.52	0.52	0.60	
4,915.57	3.74	13.50	4,907.40	199.70	72.96	-74.67	0.52	0.52	0.89	
4,929.00	3.81	13.65	4,920.80	200.56	73.17	-74.88	0.53	0.52	1.12	
4,942.43	3.86	13.86	4,934.20	201.43	73.38	-75.10	0.39	0.37	1.56	
4,955.86	3.91	14.10	4,947.60	202.31	73.60	-75.33	0.39	0.37	1.79	
4,969.29	3.95	14.38	4,961.00	203.21	73.83	-75.56	0.33	0.30	2.08	
4,982.71	3.99	14.71	4,974.38	204.11	74.06	-75.80	0.34	0.30	2.46	
4,996.14	4.03	15.10	4,987.78	205.01	74.30	-76.05	0.36	0.30	2.90	
5,009.57	4.06	15.58	5,001.18	205.93	74.55	-76.31	0.34	0.22	3.57	
5,023.00	4.08	16.19	5,014.57	206.84	74.81	-76.58	0.36	0.15	4.54	
5,036.57	4.10	17.03	5,028.11	207.77	75.09	-76.87	0.47	0.15	6.19	
5,050.14	4.11	17.99	5,041.64	208.70	75.38	-77.17	0.51	0.07	7.07	
5,063.71	4.11	19.00	5,055.18	209.62	75.69	-77.48	0.53	0.00	7.44	
5,077.29	4.12	20.02	5,068.72	210.54	76.02	-77.82	0.54	0.07	7.51	
5,090.86	4.12	21.00	5,082.26	211.45	76.36	-78.16	0.52	0.00	7.22	
5,104.43	4.12	21.89	5,095.79	212.36	76.72	-78.53	0.47	0.00	6.56	
5,118.00	4.11	22.61	5,109.33	213.26	77.08	-78.91	0.39	-0.07	5.31	
5,131.43	4.09	23.02	5,122.73	214.14	77.46	-79.29	0.26	-0.15	3.05	
5,144.86	4.07	23.25	5,136.12	215.02	77.83	-79.67	0.19	-0.15	1.71	
5,158.29	4.05	23.35	5,149.52	215.90	78.21	-80.05	0.16	-0.15	0.74	
5,171.71	4.03	23.38	5,162.90	216.76	78.58	-80.43	0.15	-0.15	0.22	
5,185.14	4.02	23.35	5,176.30	217.63	78.96	-80.82	0.08	-0.07	-0.22	
5,198.57	4.01	23.29	5,189.70	218.49	79.33	-81.20	0.08	-0.07	-0.45	
5,212.00	4.03	23.23	5,203.09	219.36	79.70	-81.57	0.15	0.15	-0.45	
5,225.57	4.06	23.17	5,216.63	220.24	80.08	-81.96	0.22	0.22	-0.44	
5,239.14	4.12	23.13	5,230.17	221.13	80.46	-82.35	0.44	0.44	-0.29	
5,252.71	4.18	23.10	5,243.70	222.03	80.84	-82.74	0.44	0.44	-0.22	
5,266.29	4.25	23.09	5,257.24	222.95	81.24	-83.14	0.52	0.52	-0.07	
5,279.86	4.32	23.13	5,270.78	223.88	81.63	-83.55	0.52	0.52	0.29	
5,293.43	4.40	23.22	5,284.31	224.83	82.04	-83.96	0.59	0.59	0.66	
5,307.00	4.47	23.42	5,297.84	225.79	82.46	-84.38	0.53	0.52	1.47	
5,320.43	4.54	23.76	5,311.22	226.76	82.88	-84.81	0.56	0.52	2.53	
5,333.86	4.62	24.18	5,324.61	227.74	83.31	-85.26	0.65	0.60	3.13	
5,347.29	4.69	24.59	5,338.00	228.73	83.76	-85.72	0.58	0.52	3.05	
5,360.71	4.75	24.96	5,351.37	229.74	84.23	-86.19	0.50	0.45	2.76	
5,374.14	4.80	25.23	5,364.76	230.75	84.70	-86.67	0.41	0.37	2.01	
5,387.57	4.84	25.35	5,378.14	231.77	85.18	-87.16	0.31	0.30	0.89	
5,401.00	4.85	25.22	5,391.52	232.79	85.67	-87.65	0.11	0.07	-0.97	
5,414.57	4.83	24.69	5,405.04	233.83	86.15	-88.15	0.36	-0.15	-3.91	
5,428.14	4.80	23.89	5,418.56	234.87	86.62	-88.62	0.54	-0.22	-5.90	
5,441.71	4.75	22.89	5,432.09	235.91	87.07	-89.08	0.72	-0.37	-7.37	



Survey Report

Company:	Colgate Energy	Local Co-ordinate Reference:	Well Weaver 27 State Com 131H
Project:	Eddy County, NM (N83-NME)	TVD Reference:	3354+30 @ 3384.00usft
Site:	Weaver 27 State Com	MD Reference:	3354+30 @ 3384.00usft
Well:	Weaver 27 State Com 131H	North Reference:	Grid
Wellbore:	131H	Survey Calculation Method:	Minimum Curvature
Design:	OH-DRL	Database:	EDM 5000.14 Single User Db

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
5,455.29	4.70	21.72	5,445.62	236.94	87.49	-89.51	0.80	-0.37	-8.62	
5,468.86	4.65	20.43	5,459.15	237.97	87.89	-89.92	0.86	-0.37	-9.51	
5,482.43	4.61	19.03	5,472.67	239.01	88.26	-90.30	0.88	-0.29	-10.32	
5,496.00	4.58	17.56	5,486.20	240.04	88.60	-90.65	0.90	-0.22	-10.83	
5,509.43	4.56	16.07	5,499.58	241.06	88.91	-90.97	0.90	-0.15	-11.09	
5,522.86	4.56	14.53	5,512.97	242.09	89.19	-91.26	0.91	0.00	-11.47	
5,536.29	4.56	13.00	5,526.36	243.13	89.45	-91.52	0.91	0.00	-11.39	
5,549.71	4.57	11.52	5,539.74	244.17	89.67	-91.76	0.88	0.07	-11.03	
5,563.14	4.57	10.13	5,553.12	245.22	89.87	-91.97	0.82	0.00	-10.35	
5,576.57	4.56	8.89	5,566.51	246.28	90.05	-92.15	0.74	-0.07	-9.23	
5,590.00	4.54	7.85	5,579.90	247.33	90.20	-92.32	0.63	-0.15	-7.74	
5,603.43	4.48	7.24	5,593.29	248.38	90.34	-92.46	0.57	-0.45	-4.54	
5,616.86	4.41	6.87	5,606.68	249.41	90.47	-92.60	0.56	-0.52	-2.76	
5,630.29	4.33	6.68	5,620.07	250.43	90.59	-92.73	0.61	-0.60	-1.41	
5,643.71	4.24	6.61	5,633.45	251.42	90.71	-92.86	0.67	-0.67	-0.52	
5,657.14	4.16	6.63	5,646.85	252.40	90.82	-92.98	0.60	-0.60	0.15	
5,670.57	4.08	6.72	5,660.24	253.36	90.93	-93.10	0.60	-0.60	0.67	
5,684.00	4.02	6.87	5,673.64	254.30	91.05	-93.22	0.45	-0.45	1.12	
5,697.57	3.97	7.02	5,687.17	255.24	91.16	-93.34	0.38	-0.37	1.11	
5,711.14	3.95	7.20	5,700.71	256.17	91.28	-93.46	0.17	-0.15	1.33	
5,724.71	3.93	7.38	5,714.25	257.09	91.39	-93.59	0.17	-0.15	1.33	
5,738.29	3.91	7.53	5,727.80	258.01	91.52	-93.72	0.17	-0.15	1.10	
5,751.86	3.89	7.63	5,741.34	258.93	91.64	-93.85	0.16	-0.15	0.74	
5,765.43	3.87	7.63	5,754.88	259.84	91.76	-93.98	0.15	-0.15	0.00	
5,779.00	3.83	7.48	5,768.41	260.74	91.88	-94.10	0.30	-0.29	-1.11	
5,792.43	3.78	7.05	5,781.81	261.63	91.99	-94.23	0.43	-0.37	-3.20	
5,805.86	3.72	6.43	5,795.22	262.50	92.09	-94.34	0.54	-0.45	-4.62	
5,819.29	3.66	5.65	5,808.62	263.36	92.19	-94.43	0.58	-0.45	-5.81	
5,832.71	3.59	4.72	5,822.01	264.20	92.26	-94.52	0.68	-0.52	-6.93	
5,846.14	3.52	3.62	5,835.42	265.03	92.32	-94.59	0.73	-0.52	-8.19	
5,859.57	3.46	2.34	5,848.82	265.85	92.37	-94.64	0.73	-0.45	-9.53	
5,873.00	3.41	0.81	5,862.23	266.65	92.39	-94.66	0.78	-0.37	-11.39	
5,886.57	3.37	359.01	5,875.77	267.46	92.39	-94.67	0.84	-0.29	-13.26	
5,900.14	3.34	357.01	5,889.32	268.25	92.36	-94.65	0.89	-0.22	-14.74	
5,913.71	3.32	354.94	5,902.87	269.04	92.30	-94.60	0.90	-0.15	-15.25	
5,927.29	3.30	352.91	5,916.42	269.82	92.22	-94.52	0.88	-0.15	-14.95	
5,940.86	3.28	351.00	5,929.97	270.59	92.11	-94.42	0.82	-0.15	-14.08	
5,954.43	3.26	349.36	5,943.52	271.35	91.98	-94.30	0.70	-0.15	-12.09	
5,968.00	3.23	348.13	5,957.07	272.10	91.83	-94.15	0.56	-0.22	-9.06	
5,981.43	3.18	347.73	5,970.48	272.84	91.67	-94.00	0.41	-0.37	-2.98	
5,994.86	3.11	347.83	5,983.89	273.56	91.52	-93.85	0.52	-0.52	0.74	
6,008.29	3.03	348.32	5,997.30	274.26	91.37	-93.71	0.63	-0.60	3.65	
6,021.71	2.94	349.14	6,010.70	274.95	91.23	-93.58	0.74	-0.67	6.11	



Survey Report

Company:	Colgate Energy	Local Co-ordinate Reference:	Well Weaver 27 State Com 131H
Project:	Eddy County, NM (N83-NME)	TVD Reference:	3354+30 @ 3384.00usft
Site:	Weaver 27 State Com	MD Reference:	3354+30 @ 3384.00usft
Well:	Weaver 27 State Com 131H	North Reference:	Grid
Wellbore:	131H	Survey Calculation Method:	Minimum Curvature
Design:	OH-DRL	Database:	EDM 5000.14 Single User Db

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
6,035.14	2.83	350.28	6,024.11	275.61	91.11	-93.46	0.92	-0.82	8.49	
6,048.57	2.69	351.78	6,037.53	276.25	91.01	-93.37	1.17	-1.04	11.17	
6,062.00	2.98	0.07	6,050.94	276.91	90.96	-93.33	3.73	2.16	61.73	
6,075.57	3.21	6.00	6,064.49	277.64	91.01	-93.38	2.90	1.69	43.70	
6,089.14	2.91	7.86	6,078.04	278.36	91.09	-93.47	2.33	-2.21	13.71	
6,102.71	2.58	10.37	6,091.60	279.00	91.19	-93.58	2.59	-2.43	18.50	
6,116.29	2.24	13.76	6,105.16	279.56	91.31	-93.70	2.71	-2.50	24.96	
6,129.86	1.92	18.27	6,118.72	280.03	91.45	-93.84	2.65	-2.36	33.24	
6,143.43	1.64	24.07	6,132.29	280.43	91.60	-93.99	2.45	-2.06	42.74	
6,157.00	1.42	30.83	6,145.85	280.75	91.76	-94.16	2.09	-1.62	49.82	
6,170.43	1.24	33.27	6,159.28	281.01	91.93	-94.33	1.40	-1.34	18.17	
6,183.86	1.35	35.19	6,172.71	281.26	92.10	-94.50	0.88	0.82	14.30	
6,197.29	1.57	35.17	6,186.13	281.54	92.30	-94.70	1.64	1.64	-0.15	
6,210.71	1.79	35.15	6,199.55	281.87	92.52	-94.93	1.64	1.64	-0.15	
6,224.14	2.01	35.13	6,212.97	282.23	92.78	-95.19	1.64	1.64	-0.15	
6,237.57	2.24	35.11	6,226.39	282.64	93.06	-95.48	1.71	1.71	-0.15	
6,251.00	2.78	27.18	6,239.81	283.14	93.36	-95.78	4.77	4.02	-59.05	
6,264.57	3.58	18.95	6,253.36	283.84	93.65	-96.08	6.77	5.90	-60.65	
6,278.14	4.52	15.75	6,266.89	284.75	93.94	-96.37	7.12	6.93	-23.58	
6,291.71	4.67	16.40	6,280.42	285.79	94.24	-96.68	1.17	1.11	4.79	
6,305.29	4.57	17.51	6,293.95	286.84	94.56	-97.00	0.99	-0.74	8.17	
6,318.86	4.47	18.72	6,307.48	287.86	94.89	-97.35	1.02	-0.74	8.92	
6,332.43	4.36	19.98	6,321.01	288.84	95.23	-97.70	1.08	-0.81	9.29	
6,346.00	4.24	21.22	6,334.54	289.80	95.59	-98.07	1.12	-0.88	9.14	
6,359.43	4.07	22.17	6,347.94	290.70	95.95	-98.43	1.37	-1.27	7.07	
6,372.86	3.89	23.02	6,361.34	291.56	96.31	-98.80	1.41	-1.34	6.33	
6,386.29	3.70	23.80	6,374.74	292.38	96.66	-99.16	1.47	-1.41	5.81	
6,399.71	3.53	24.49	6,388.13	293.15	97.01	-99.51	1.31	-1.27	5.14	
6,413.14	3.37	25.06	6,401.53	293.88	97.35	-99.86	1.22	-1.19	4.24	
6,426.57	3.24	25.42	6,414.94	294.58	97.68	-100.19	0.98	-0.97	2.68	
6,440.00	3.18	25.47	6,428.35	295.26	98.00	-100.52	0.45	-0.45	0.37	
6,453.57	3.20	25.04	6,441.90	295.94	98.32	-100.85	0.23	0.15	-3.17	
6,467.14	3.29	24.37	6,455.45	296.64	98.64	-101.18	0.72	0.66	-4.94	
6,480.71	3.40	23.64	6,469.00	297.37	98.96	-101.50	0.87	0.81	-5.38	
6,494.29	3.53	22.95	6,482.55	298.12	99.29	-101.84	1.01	0.96	-5.08	
6,507.86	3.66	22.39	6,496.09	298.90	99.62	-102.17	0.99	0.96	-4.13	
6,521.43	3.76	22.05	6,509.64	299.72	99.95	-102.51	0.75	0.74	-2.51	
6,535.00	4.22	19.30	6,523.17	300.60	100.28	-102.85	3.67	3.39	-20.27	
6,548.43	5.08	15.50	6,536.56	301.64	100.60	-103.18	6.80	6.40	-28.29	
6,561.86	5.95	13.42	6,549.93	302.89	100.92	-103.51	6.65	6.48	-15.49	
6,575.29	6.44	13.38	6,563.28	304.30	101.26	-103.86	3.65	3.65	-0.30	
6,588.71	6.40	14.57	6,576.61	305.76	101.62	-104.23	1.04	-0.30	8.87	
6,602.14	6.34	15.86	6,589.96	307.19	102.01	-104.64	1.16	-0.45	9.61	



Survey Report

Company:	Colgate Energy	Local Co-ordinate Reference:	Well Weaver 27 State Com 131H
Project:	Eddy County, NM (N83-NME)	TVD Reference:	3354+30 @ 3384.00usft
Site:	Weaver 27 State Com	MD Reference:	3354+30 @ 3384.00usft
Well:	Weaver 27 State Com 131H	North Reference:	Grid
Wellbore:	131H	Survey Calculation Method:	Minimum Curvature
Design:	OH-DRL	Database:	EDM 5000.14 Single User Db

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
6,615.57	6.25	17.05	6,603.31	308.61	102.43	-105.07	1.18	-0.67	8.86	
6,629.00	6.13	17.90	6,616.66	309.99	102.86	-105.51	1.12	-0.89	6.33	
6,642.57	5.93	17.79	6,630.16	311.34	103.30	-105.96	1.48	-1.47	-0.81	
6,656.14	5.70	17.11	6,643.66	312.66	103.71	-106.38	1.77	-1.69	-5.01	
6,669.71	5.45	16.01	6,657.16	313.92	104.09	-106.77	2.00	-1.84	-8.11	
6,683.29	5.20	14.61	6,670.68	315.14	104.42	-107.11	2.07	-1.84	-10.31	
6,696.86	4.97	13.04	6,684.20	316.30	104.71	-107.41	1.98	-1.69	-11.57	
6,710.43	4.77	11.46	6,697.72	317.43	104.96	-107.67	1.77	-1.47	-11.64	
6,724.00	4.62	10.14	6,711.25	318.52	105.16	-107.88	1.36	-1.11	-9.73	
6,737.57	4.54	9.71	6,724.77	319.59	105.35	-108.08	0.64	-0.59	-3.17	
6,751.14	4.51	9.61	6,738.30	320.64	105.53	-108.27	0.23	-0.22	-0.74	
6,764.71	4.50	9.73	6,751.83	321.69	105.71	-108.46	0.10	-0.07	0.88	
6,778.29	4.52	9.98	6,765.37	322.74	105.89	-108.65	0.21	0.15	1.84	
6,791.86	4.53	10.31	6,778.89	323.80	106.08	-108.85	0.21	0.07	2.43	
6,805.43	4.53	10.68	6,792.42	324.85	106.28	-109.05	0.22	0.00	2.73	
6,819.00	4.78	9.85	6,805.95	325.94	106.47	-109.26	1.91	1.84	-6.12	
6,832.43	5.57	8.27	6,819.32	327.13	106.66	-109.46	5.98	5.88	-11.76	
6,845.86	6.43	9.92	6,832.68	328.52	106.88	-109.69	6.53	6.40	12.29	
6,859.29	7.28	8.51	6,846.01	330.10	107.14	-109.96	6.45	6.33	-10.50	
6,872.71	7.18	8.82	6,859.33	331.77	107.39	-110.23	0.80	-0.75	2.31	
6,886.14	7.01	9.34	6,872.65	333.41	107.66	-110.50	1.35	-1.27	3.87	
6,899.57	6.83	9.76	6,885.98	335.00	107.92	-110.79	1.39	-1.34	3.13	
6,913.00	6.65	9.89	6,899.32	336.56	108.19	-111.07	1.35	-1.34	0.97	
6,926.57	6.48	9.38	6,912.80	338.09	108.45	-111.34	1.32	-1.25	-3.76	
6,940.14	6.32	8.47	6,926.29	339.58	108.69	-111.59	1.40	-1.18	-6.71	
6,953.71	6.17	7.26	6,939.78	341.04	108.89	-111.80	1.47	-1.11	-8.92	
6,967.29	6.01	5.82	6,953.28	342.47	109.05	-111.98	1.63	-1.18	-10.60	
6,980.86	5.85	4.22	6,966.78	343.87	109.18	-112.11	1.70	-1.18	-11.79	
6,994.43	5.68	2.47	6,980.28	345.23	109.26	-112.21	1.80	-1.25	-12.90	
7,008.00	5.49	0.61	6,993.79	346.55	109.29	-112.25	1.93	-1.40	-13.71	
7,021.57	5.24	359.12	7,007.30	347.82	109.29	-112.26	2.11	-1.84	-10.98	
7,035.14	4.97	357.60	7,020.81	349.03	109.26	-112.24	2.23	-1.99	-11.20	
7,048.71	4.67	356.03	7,034.33	350.17	109.19	-112.18	2.41	-2.21	-11.57	
7,062.29	4.35	354.41	7,047.87	351.23	109.11	-112.10	2.54	-2.36	-11.93	
7,075.86	4.00	352.71	7,061.41	352.21	109.00	-112.00	2.74	-2.58	-12.53	
7,089.43	3.61	350.94	7,074.95	353.10	108.87	-111.88	3.00	-2.87	-13.04	
7,103.00	3.17	349.10	7,088.49	353.89	108.73	-111.75	3.34	-3.24	-13.56	
7,116.43	2.62	348.94	7,101.90	354.56	108.60	-111.63	4.10	-4.10	-1.19	
7,129.86	2.03	349.72	7,115.32	355.09	108.50	-111.53	4.40	-4.39	5.81	
7,143.29	1.43	352.28	7,128.75	355.49	108.43	-111.47	4.50	-4.47	19.06	
7,156.71	0.84	0.03	7,142.16	355.76	108.41	-111.45	4.53	-4.40	57.75	
7,170.14	0.36	34.47	7,155.59	355.89	108.44	-111.48	4.32	-3.57	256.44	
7,183.57	0.45	112.80	7,169.02	355.91	108.51	-111.55	3.84	0.67	583.25	
7,197.00	0.52	76.13	7,182.45	355.90	108.62	-111.66	2.33	0.52	-273.05	



Survey Report

Company:	Colgate Energy	Local Co-ordinate Reference:	Well Weaver 27 State Com 131H
Project:	Eddy County, NM (N83-NME)	TVD Reference:	3354+30 @ 3384.00usft
Site:	Weaver 27 State Com	MD Reference:	3354+30 @ 3384.00usft
Well:	Weaver 27 State Com 131H	North Reference:	Grid
Wellbore:	131H	Survey Calculation Method:	Minimum Curvature
Design:	OH-DRL	Database:	EDM 5000.14 Single User Db

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
7,210.57	1.21	21.82	7,196.02	356.05	108.73	-111.77	7.37	5.08	-400.22	
7,224.14	2.18	10.04	7,209.59	356.44	108.83	-111.87	7.56	7.15	-86.81	
7,237.71	2.66	10.43	7,223.14	357.00	108.93	-111.98	3.54	3.54	2.87	
7,251.29	2.63	15.78	7,236.71	357.61	109.07	-112.13	1.83	-0.22	39.40	
7,264.86	2.66	21.58	7,250.27	358.20	109.27	-112.33	1.98	0.22	42.74	
7,278.43	2.74	27.32	7,263.82	358.78	109.54	-112.60	2.08	0.59	42.30	
7,292.00	2.83	32.79	7,277.37	359.35	109.87	-112.94	2.07	0.66	40.31	
7,305.43	2.77	38.17	7,290.79	359.89	110.25	-113.32	2.01	-0.45	40.06	
7,318.86	2.69	43.56	7,304.20	360.37	110.66	-113.74	2.00	-0.60	40.13	
7,332.29	2.62	49.08	7,317.62	360.80	111.11	-114.19	1.97	-0.52	41.10	
7,345.71	2.56	54.76	7,331.02	361.17	111.59	-114.67	1.96	-0.45	42.32	
7,359.14	2.52	60.52	7,344.44	361.49	112.09	-115.18	1.92	-0.30	42.89	
7,372.57	2.50	66.24	7,357.86	361.75	112.62	-115.71	1.87	-0.15	42.59	
7,386.00	2.52	71.74	7,371.28	361.96	113.17	-116.26	1.80	0.15	40.95	
7,399.57	2.46	76.85	7,384.83	362.12	113.73	-116.83	1.69	-0.44	37.66	
7,413.14	2.43	81.89	7,398.39	362.23	114.30	-117.39	1.60	-0.22	37.14	
7,426.71	2.41	86.74	7,411.95	362.29	114.87	-117.96	1.52	-0.15	35.74	
7,440.29	2.40	91.33	7,425.52	362.30	115.44	-118.53	1.42	-0.07	33.80	
7,453.86	2.39	95.59	7,439.07	362.26	116.01	-119.10	1.31	-0.07	31.39	
7,467.43	2.38	99.42	7,452.63	362.19	116.56	-119.66	1.18	-0.07	28.22	
7,481.00	2.34	102.75	7,466.19	362.08	117.11	-120.21	1.05	-0.29	24.54	
7,494.43	2.24	104.91	7,479.61	361.95	117.63	-120.73	0.98	-0.74	16.08	
7,507.86	2.12	106.53	7,493.03	361.82	118.13	-121.22	1.00	-0.89	12.06	
7,521.29	1.98	107.84	7,506.45	361.67	118.58	-121.67	1.10	-1.04	9.75	
7,534.71	1.83	109.04	7,519.87	361.53	119.01	-122.10	1.16	-1.12	8.94	
7,548.14	1.68	110.35	7,533.29	361.40	119.40	-122.48	1.16	-1.12	9.75	
7,561.57	1.53	112.12	7,546.71	361.26	119.75	-122.83	1.18	-1.12	13.18	
7,575.00	1.38	114.88	7,560.14	361.12	120.06	-123.14	1.23	-1.12	20.55	
7,588.57	1.27	120.51	7,573.71	360.98	120.34	-123.42	1.26	-0.81	41.49	
7,602.14	1.17	127.76	7,587.27	360.82	120.58	-123.66	1.35	-0.74	53.43	
7,615.71	1.10	136.08	7,600.84	360.64	120.78	-123.86	1.32	-0.52	61.31	
7,629.29	1.06	144.63	7,614.42	360.44	120.94	-124.02	1.22	-0.29	62.96	
7,642.86	1.09	154.36	7,627.99	360.22	121.07	-124.14	1.36	0.22	71.70	
7,656.43	1.15	162.81	7,641.55	359.98	121.16	-124.24	1.29	0.44	62.27	
7,670.00	1.22	170.34	7,655.12	359.70	121.23	-124.30	1.26	0.52	55.49	
7,683.43	1.19	175.30	7,668.55	359.42	121.26	-124.33	0.81	-0.22	36.93	
7,696.86	1.17	180.21	7,681.97	359.15	121.27	-124.34	0.77	-0.15	36.56	
7,710.29	1.22	187.21	7,695.40	358.87	121.26	-124.32	1.15	0.37	52.12	
7,723.71	1.27	189.36	7,708.82	358.58	121.21	-124.28	0.51	0.37	16.02	
7,737.14	1.33	191.33	7,722.24	358.28	121.16	-124.22	0.56	0.45	14.67	
7,750.57	1.39	193.15	7,735.67	357.97	121.09	-124.15	0.55	0.45	13.55	
7,764.00	1.45	194.81	7,749.10	357.65	121.01	-124.06	0.54	0.45	12.36	
7,777.43	1.52	197.64	7,762.52	357.31	120.91	-123.96	0.75	0.52	21.07	



Survey Report

Company:	Colgate Energy	Local Co-ordinate Reference:	Well Weaver 27 State Com 131H
Project:	Eddy County, NM (N83-NME)	TVD Reference:	3354+30 @ 3384.00usft
Site:	Weaver 27 State Com	MD Reference:	3354+30 @ 3384.00usft
Well:	Weaver 27 State Com 131H	North Reference:	Grid
Wellbore:	131H	Survey Calculation Method:	Minimum Curvature
Design:	OH-DRL	Database:	EDM 5000.14 Single User Db

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
7,790.86	1.62	200.15	7,775.95	356.97	120.79	-123.84	0.90	0.74	18.69
7,804.29	1.72	202.25	7,789.37	356.60	120.65	-123.70	0.87	0.74	15.64
7,817.71	1.83	203.93	7,802.78	356.22	120.49	-123.53	0.91	0.82	12.52
7,831.14	1.92	205.16	7,816.21	355.82	120.31	-123.34	0.73	0.67	9.16
7,844.57	2.00	205.89	7,829.63	355.40	120.11	-123.14	0.62	0.60	5.44
7,858.00	2.04	205.96	7,843.05	354.98	119.90	-122.93	0.30	0.30	0.52
7,871.57	2.03	205.03	7,856.61	354.54	119.69	-122.72	0.25	-0.07	-6.85
7,885.14	1.99	203.54	7,870.17	354.11	119.50	-122.52	0.48	-0.29	-10.98
7,898.71	1.92	201.67	7,883.74	353.68	119.32	-122.34	0.70	-0.52	-13.78
7,912.29	1.84	199.63	7,897.31	353.27	119.16	-122.18	0.77	-0.59	-15.02
7,925.86	1.75	197.65	7,910.87	352.86	119.03	-122.04	0.81	-0.66	-14.59
7,939.43	1.66	196.11	7,924.44	352.48	118.91	-121.92	0.74	-0.66	-11.35
7,953.00	1.55	195.60	7,938.00	352.11	118.81	-121.81	0.82	-0.81	-3.76
7,967.00	1.46	199.04	7,952.00	351.76	118.70	-121.70	0.91	-0.64	24.57
7,981.00	1.39	204.47	7,965.99	351.44	118.57	-121.57	1.09	-0.50	38.79
7,995.00	1.37	211.13	7,979.99	351.14	118.41	-121.41	1.15	-0.14	47.57
8,009.00	1.41	217.90	7,993.98	350.86	118.22	-121.22	1.21	0.29	48.36
8,023.00	1.52	223.46	8,007.98	350.59	117.99	-120.98	1.28	0.79	39.71
8,037.20	1.66	229.99	8,022.17	350.32	117.70	-120.69	1.61	0.99	45.99
8,051.40	1.86	235.33	8,036.37	350.06	117.35	-120.34	1.82	1.41	37.61
8,065.60	2.11	239.32	8,050.56	349.79	116.94	-119.92	2.01	1.76	28.10
8,079.80	2.37	242.08	8,064.75	349.52	116.45	-119.44	1.98	1.83	19.44
8,094.00	2.63	243.74	8,078.93	349.24	115.90	-118.88	1.90	1.83	11.69
8,107.57	2.87	244.80	8,092.49	348.96	115.31	-118.29	1.81	1.77	7.81
8,118.00	3.31	248.26	8,102.90	348.73	114.80	-117.78	4.62	4.26	33.13
KOP: 8118.00' MD, -117.78' VS, 8102.90' TVD									
8,121.14	3.45	249.12	8,106.04	348.67	114.63	-117.60	4.62	4.32	27.55
8,134.71	5.60	259.33	8,119.56	348.40	113.59	-116.57	16.86	15.84	75.24
8,148.29	7.97	269.11	8,133.05	348.26	112.00	-114.97	19.35	17.45	72.02
8,161.86	10.55	271.20	8,146.44	348.27	109.82	-112.79	19.17	19.01	15.40
8,175.43	13.01	273.04	8,159.72	348.38	107.05	-110.03	18.34	18.13	13.56
8,189.00	15.57	274.56	8,172.87	348.61	103.71	-106.69	19.07	18.87	11.20
8,202.57	18.22	275.83	8,185.86	348.97	99.78	-102.76	19.72	19.53	9.36
8,216.14	20.78	277.89	8,198.65	349.51	95.29	-98.27	19.53	18.87	15.18
8,229.71	23.24	280.67	8,211.23	350.34	90.27	-93.26	19.68	18.13	20.49
8,242.77	25.48	282.20	8,223.12	351.41	84.99	-87.99	17.83	17.16	11.75
100FEL: 8242.77' MD, -87.99' VS, 8223.12' TVD									
8,243.29	25.57	282.26	8,223.59	351.46	84.77	-87.77	17.83	17.21	10.74
8,256.86	27.85	281.12	8,235.72	352.69	78.80	-81.81	17.22	16.80	-8.40
8,270.43	30.38	280.87	8,247.57	353.95	72.32	-75.34	18.67	18.64	-1.84
8,284.00	32.82	281.59	8,259.13	355.34	65.35	-68.38	18.19	17.98	5.31
8,297.43	35.15	282.51	8,270.26	356.90	58.00	-61.05	17.77	17.35	6.85
8,310.86	37.53	282.90	8,281.08	358.66	50.24	-53.31	17.80	17.72	2.90
8,324.29	39.56	282.99	8,291.58	360.53	42.09	-45.17	15.12	15.12	0.67



Survey Report

Company:	Colgate Energy	Local Co-ordinate Reference:	Well Weaver 27 State Com 131H
Project:	Eddy County, NM (N83-NME)	TVD Reference:	3354+30 @ 3384.00usft
Site:	Weaver 27 State Com	MD Reference:	3354+30 @ 3384.00usft
Well:	Weaver 27 State Com 131H	North Reference:	Grid
Wellbore:	131H	Survey Calculation Method:	Minimum Curvature
Design:	OH-DRL	Database:	EDM 5000.14 Single User Db

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
8,337.71	39.09	283.31	8,301.96	362.46	33.80	-36.90	3.81	-3.50	2.38	
8,351.14	38.79	283.67	8,312.41	364.43	25.60	-28.71	2.80	-2.23	2.68	
8,364.57	38.24	283.94	8,322.92	366.43	17.48	-20.61	4.28	-4.10	2.01	
8,378.00	37.70	284.06	8,333.51	368.43	9.46	-12.61	4.06	-4.02	0.89	
8,391.57	37.20	283.85	8,344.28	370.42	1.45	-4.62	3.80	-3.68	-1.55	
8,405.14	36.74	283.44	8,355.12	372.34	-6.48	3.30	3.85	-3.39	-3.02	
8,418.71	36.31	282.91	8,366.02	374.18	-14.34	11.14	3.93	-3.17	-3.91	
8,432.29	35.91	282.32	8,377.00	375.93	-22.15	18.94	3.90	-2.95	-4.34	
8,445.86	35.55	281.73	8,388.01	377.58	-29.90	26.67	3.67	-2.65	-4.35	
8,459.43	35.24	281.18	8,399.07	379.14	-37.61	34.36	3.28	-2.28	-4.05	
8,473.00	35.84	278.35	8,410.12	380.48	-45.38	42.12	12.90	4.42	-20.85	
8,486.43	37.49	276.49	8,420.89	381.51	-53.33	50.07	14.81	12.29	-13.85	
8,499.86	39.64	275.52	8,431.39	382.39	-61.66	58.38	16.63	16.01	-7.22	
8,513.29	41.78	274.54	8,441.57	383.15	-70.38	67.10	16.63	15.93	-7.30	
8,526.71	43.92	273.90	8,451.41	383.82	-79.48	76.20	16.27	15.95	-4.77	
01-FTP(W-131H)										
8,540.14	45.99	273.14	8,460.91	384.41	-88.95	85.66	15.92	15.41	-5.66	
8,553.57	47.86	271.82	8,470.08	384.83	-98.75	95.46	15.67	13.92	-9.83	
8,567.00	49.81	271.09	8,478.92	385.08	-108.86	105.56	15.09	14.52	-5.44	
8,580.57	51.79	270.97	8,487.50	385.27	-119.37	116.08	14.61	14.59	-0.88	
8,594.14	53.72	270.77	8,495.71	385.44	-130.18	126.87	14.27	14.22	-1.47	
8,607.71	55.49	270.92	8,503.57	385.60	-141.24	137.93	13.07	13.04	1.11	
8,621.29	56.97	271.99	8,511.12	385.89	-152.52	149.21	12.71	10.90	7.88	
8,634.86	58.34	272.95	8,518.38	386.38	-163.97	160.66	11.73	10.10	7.07	
8,648.43	60.17	273.15	8,525.32	387.00	-175.62	172.30	13.54	13.49	1.47	
8,662.00	62.04	273.79	8,531.87	387.72	-187.48	184.15	14.39	13.78	4.72	
8,675.43	62.96	274.18	8,538.07	388.55	-199.36	196.03	7.32	6.85	2.90	
8,688.86	63.04	274.00	8,544.17	389.40	-211.30	207.96	1.33	0.60	-1.34	
8,702.29	63.15	273.83	8,550.25	390.22	-223.24	219.90	1.39	0.82	-1.27	
8,715.71	63.25	273.68	8,556.30	391.01	-235.20	231.85	1.25	0.75	-1.12	
8,729.14	64.85	273.06	8,562.18	391.72	-247.25	243.89	12.62	11.91	-4.62	
8,742.57	66.81	272.04	8,567.67	392.26	-259.49	256.13	16.16	14.59	-7.59	
8,756.00	68.70	271.01	8,572.76	392.59	-271.92	268.55	15.76	14.07	-7.67	
8,769.57	69.92	270.96	8,577.55	392.81	-284.61	281.24	9.00	8.99	-0.37	
8,783.14	72.23	270.79	8,581.95	393.00	-297.44	294.07	17.06	17.02	-1.25	
8,796.71	74.54	270.87	8,585.83	393.19	-310.45	307.07	17.03	17.02	0.59	
8,810.29	76.86	271.36	8,589.19	393.45	-323.60	320.22	17.44	17.08	3.61	
8,823.86	79.11	271.86	8,592.01	393.82	-336.87	333.49	16.97	16.58	3.68	
8,837.43	81.34	272.02	8,594.32	394.28	-350.23	346.85	16.47	16.43	1.18	
8,851.00	83.70	272.51	8,596.08	394.81	-363.68	360.29	17.76	17.39	3.61	
8,864.43	84.59	272.88	8,597.45	395.44	-377.02	373.62	7.17	6.63	2.76	
8,877.86	84.62	273.05	8,598.72	396.13	-390.37	386.97	1.28	0.22	1.27	
8,891.29	84.70	273.23	8,599.97	396.86	-403.72	400.32	1.46	0.60	1.34	



Survey Report

Company:	Colgate Energy	Local Co-ordinate Reference:	Well Weaver 27 State Com 131H
Project:	Eddy County, NM (N83-NME)	TVD Reference:	3354+30 @ 3384.00usft
Site:	Weaver 27 State Com	MD Reference:	3354+30 @ 3384.00usft
Well:	Weaver 27 State Com 131H	North Reference:	Grid
Wellbore:	131H	Survey Calculation Method:	Minimum Curvature
Design:	OH-DRL	Database:	EDM 5000.14 Single User Db

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
8,904.71	84.77	273.40	8,601.20	397.63	-417.07	413.65	1.37	0.52	1.27	
8,918.14	86.67	273.03	8,602.20	398.38	-430.44	427.01	14.41	14.15	-2.76	
8,931.57	88.84	272.56	8,602.73	399.04	-443.84	440.41	16.53	16.16	-3.50	
8,945.00	90.30	271.98	8,602.83	399.57	-457.26	453.82	11.70	10.87	-4.32	
8,958.57	90.32	272.08	8,602.75	400.05	-470.82	467.38	0.75	0.15	0.74	
8,972.14	90.34	272.18	8,602.67	400.55	-484.38	480.94	0.75	0.15	0.74	
8,985.71	90.35	272.28	8,602.59	401.08	-497.94	494.49	0.74	0.07	0.74	
8,999.29	90.36	272.37	8,602.51	401.63	-511.51	508.05	0.67	0.07	0.66	
9,012.86	90.35	272.45	8,602.42	402.20	-525.07	521.61	0.59	-0.07	0.59	
9,026.43	90.33	272.52	8,602.34	402.79	-538.62	535.16	0.54	-0.15	0.52	
9,040.00	90.32	272.57	8,602.27	403.39	-552.18	548.71	0.38	-0.07	0.37	
9,053.43	90.37	272.59	8,602.19	404.00	-565.59	562.12	0.40	0.37	0.15	
9,066.86	90.46	272.60	8,602.09	404.61	-579.01	575.53	0.67	0.67	0.07	
9,080.29	90.56	272.60	8,601.97	405.22	-592.43	588.94	0.74	0.74	0.00	
9,093.71	90.68	272.59	8,601.82	405.82	-605.83	602.34	0.90	0.89	-0.07	
9,107.14	90.80	272.58	8,601.65	406.43	-619.25	615.75	0.90	0.89	-0.07	
9,120.57	90.92	272.57	8,601.45	407.03	-632.66	629.16	0.90	0.89	-0.07	
9,130.00	92.05	272.02	8,601.20	407.41	-642.08	638.57	13.35	11.99	-5.88	
Top of Fish: 9130.00' MD, 638.57' VS, 8601.20' TVD										
9,134.00	92.53	271.78	8,601.04	407.54	-646.08	642.57	13.35	11.99	-5.89	
9,147.57	92.65	271.78	8,600.43	407.96	-659.63	656.11	0.88	0.88	0.00	
9,161.14	92.76	271.77	8,599.79	408.38	-673.17	669.66	0.81	0.81	-0.07	
9,174.71	92.88	271.77	8,599.12	408.80	-686.72	683.20	0.88	0.88	0.00	
9,188.29	92.99	271.76	8,598.43	409.22	-700.28	696.75	0.81	0.81	-0.07	
9,201.86	93.07	271.74	8,597.71	409.63	-713.82	710.29	0.61	0.59	-0.15	
9,215.43	93.10	271.72	8,596.98	410.04	-727.37	723.83	0.27	0.22	-0.15	
9,229.00	93.11	271.69	8,596.25	410.45	-740.91	737.37	0.23	0.07	-0.22	
9,242.43	93.07	271.63	8,595.52	410.83	-754.31	750.77	0.54	-0.30	-0.45	
9,255.86	93.00	271.57	8,594.81	411.21	-767.72	764.18	0.69	-0.52	-0.45	
9,269.29	92.92	271.50	8,594.12	411.57	-781.13	777.58	0.79	-0.60	-0.52	
9,282.71	92.83	271.43	8,593.44	411.91	-794.53	790.97	0.85	-0.67	-0.52	
9,296.14	92.75	271.36	8,592.79	412.24	-807.94	804.38	0.79	-0.60	-0.52	
9,309.57	92.67	271.29	8,592.16	412.55	-821.35	817.79	0.79	-0.60	-0.52	
9,323.00	92.60	271.23	8,591.54	412.84	-834.76	831.20	0.69	-0.52	-0.45	
Last MWD Survey(OH): 9323.00' MD, 92.60°INC, 271.23°AZ										
9,377.00	92.60	271.23	8,589.09	414.00	-888.69	885.12	0.00	0.00	0.00	
PTB(OH): 9377.00' MD, 92.60°INC, 271.23°AZ - 06-LTP(W-131H) - 03-v5000(W-131H) - 04-v7500(W-131H) - 05-v10000(W-131H) - 02-v2500(W										



Survey Report

Company:	Colgate Energy	Local Co-ordinate Reference:	Well Weaver 27 State Com 131H
Project:	Eddy County, NM (N83-NME)	TVD Reference:	3354+30 @ 3384.00usft
Site:	Weaver 27 State Com	MD Reference:	3354+30 @ 3384.00usft
Well:	Weaver 27 State Com 131H	North Reference:	Grid
Wellbore:	131H	Survey Calculation Method:	Minimum Curvature
Design:	OH-DRL	Database:	EDM 5000.14 Single User Db

Design Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
8,118.00	8,102.90	348.73	114.80	KOP: 8118.00' MD, -117.78' VS, 8102.90' TVD
8,242.77	8,223.12	351.41	84.99	100FEL: 8242.77' MD, -87.99' VS, 8223.12' TVD
9,130.00	8,601.20	407.41	-642.08	Top of Fish: 9130.00' MD, 638.57' VS, 8601.20' TVD
9,323.00	8,591.54	412.84	-834.76	Last MWD Survey(OH): 9323.00' MD, 92.60°INC, 271.23°AZ
9,377.00	8,589.09	414.00	-888.69	PTB(OH): 9377.00' MD, 92.60°INC, 271.23°AZ

Checked By: _____ Approved By: _____ Date: _____



Colgate Energy

Eddy County, NM (N83-NME)

Weaver 27 State Com

Weaver 27 State Com 131H

30-015-46768

ST 131H

Design: ST01-DRL

Standard Survey Report

23 February, 2022



Survey Report

Company:	Colgate Energy	Local Co-ordinate Reference:	Well Weaver 27 State Com 131H
Project:	Eddy County, NM (N83-NME)	TVD Reference:	3354+30 @ 3384.00usft
Site:	Weaver 27 State Com	MD Reference:	3354+30 @ 3384.00usft
Well:	Weaver 27 State Com 131H	North Reference:	Grid
Wellbore:	ST 131H	Survey Calculation Method:	Minimum Curvature
Design:	ST01-DRL	Database:	EDM 5000.14 Single User Db

Project	Eddy County, NM (N83-NME)		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site	Weaver 27 State Com		
Site Position:		Northing:	594,963.86 usft
From:	Map	Easting:	595,799.18 usft
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "
		Latitude:	32.63548004
		Longitude:	-104.15641274

Well	Weaver 27 State Com 131H					
Well Position	+N/-S	0.00 usft	Northing:	594,963.86 usft	Latitude:	32.63548004
	+E/-W	0.00 usft	Easting:	595,799.18 usft	Longitude:	-104.15641274
Position Uncertainty		0.00 usft	Wellhead Elevation:	usft	Ground Level:	3,354.00 usft
Grid Convergence:		0.10 °				

Wellbore	ST 131H				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IFR	1/28/2022	7.12	60.36	47,707.50000000

Design	ST01-DRL				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)	
	0.00	0.00	0.00		269.51

Survey Program	Date	2/23/2022			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
14.46	8,851.00	Survey #0_OH Plan Tie-In (ST 131H)	MWD+IFR1+SAG+FDIR (SQ OWSG MWD + IFR1 + Sag + FDIR Correction		
8,863.60	18,636.00	Survey #1_ST01 (ST 131H)	MWD+IFR1+SAG+FDIR (SQ OWSG MWD + IFR1 + Sag + FDIR Correction		
18,695.00	18,695.00	Survey #2_PTB (ST 131H)	BLIND	BLIND	

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
14.46	0.05	252.34	14.46	0.00	-0.01	0.01	0.35	0.35	0.00	
28.92	0.09	252.49	28.92	-0.01	-0.02	0.02	0.28	0.28	1.04	
43.38	0.14	252.63	43.38	-0.02	-0.05	0.05	0.35	0.35	0.97	
57.85	0.18	252.78	57.85	-0.03	-0.09	0.09	0.28	0.28	1.04	
72.31	0.23	252.93	72.31	-0.04	-0.14	0.14	0.35	0.35	1.04	
86.77	0.28	253.08	86.77	-0.06	-0.20	0.20	0.35	0.35	1.04	
101.23	0.32	253.22	101.23	-0.08	-0.27	0.27	0.28	0.28	0.97	



Survey Report

Company:	Colgate Energy	Local Co-ordinate Reference:	Well Weaver 27 State Com 131H
Project:	Eddy County, NM (N83-NME)	TVD Reference:	3354+30 @ 3384.00usft
Site:	Weaver 27 State Com	MD Reference:	3354+30 @ 3384.00usft
Well:	Weaver 27 State Com 131H	North Reference:	Grid
Wellbore:	ST 131H	Survey Calculation Method:	Minimum Curvature
Design:	ST01-DRL	Database:	EDM 5000.14 Single User Db

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
115.69	0.37	253.37	115.69	-0.11	-0.36	0.36	0.35	0.35	1.04	
130.15	0.41	253.52	130.15	-0.14	-0.45	0.45	0.28	0.28	1.04	
144.62	0.46	253.67	144.62	-0.17	-0.56	0.56	0.35	0.35	1.04	
159.08	0.51	253.82	159.08	-0.20	-0.67	0.67	0.35	0.35	1.04	
173.54	0.55	253.97	173.54	-0.24	-0.80	0.80	0.28	0.28	1.04	
188.00	0.60	254.11	188.00	-0.28	-0.94	0.94	0.35	0.35	0.97	
202.54	0.55	257.71	202.54	-0.31	-1.08	1.09	0.42	-0.34	24.76	
217.08	0.50	262.00	217.08	-0.34	-1.21	1.22	0.44	-0.34	29.50	
231.62	0.46	267.11	231.61	-0.35	-1.33	1.34	0.40	-0.28	35.14	
246.15	0.43	273.22	246.14	-0.35	-1.45	1.45	0.39	-0.21	42.05	
260.69	0.39	280.42	260.68	-0.34	-1.55	1.55	0.45	-0.28	49.52	
275.23	0.37	288.75	275.22	-0.31	-1.64	1.65	0.40	-0.14	57.29	
289.77	0.35	298.05	289.76	-0.28	-1.73	1.73	0.42	-0.14	63.96	
304.31	0.35	307.92	304.30	-0.23	-1.80	1.80	0.41	0.00	67.88	
318.85	0.36	317.81	318.84	-0.17	-1.87	1.87	0.43	0.07	68.02	
333.38	0.37	327.14	333.37	-0.10	-1.92	1.92	0.41	0.07	64.21	
347.92	0.40	335.52	347.91	-0.01	-1.97	1.97	0.44	0.21	57.63	
362.46	0.43	342.77	362.45	0.09	-2.01	2.01	0.42	0.21	49.86	
377.00	0.47	348.91	376.99	0.20	-2.03	2.03	0.43	0.28	42.23	
391.67	0.43	0.22	391.66	0.31	-2.05	2.04	0.66	-0.27	77.10	
406.33	0.41	13.03	406.32	0.42	-2.03	2.03	0.65	-0.14	87.38	
421.00	0.42	26.20	420.99	0.52	-2.00	1.99	0.65	0.07	89.78	
435.67	0.45	38.43	435.66	0.61	-1.94	1.93	0.66	0.20	83.37	
450.33	0.49	48.87	450.32	0.70	-1.86	1.85	0.64	0.27	71.21	
465.00	0.55	57.35	464.99	0.78	-1.75	1.74	0.66	0.41	57.81	
479.67	0.61	64.07	479.66	0.85	-1.62	1.61	0.62	0.41	45.81	
494.33	0.69	69.39	494.32	0.91	-1.47	1.46	0.68	0.55	36.29	
509.00	0.77	73.64	508.99	0.97	-1.29	1.28	0.66	0.55	28.97	
523.67	0.85	77.06	523.65	1.03	-1.09	1.08	0.64	0.55	23.31	
538.33	0.93	79.85	538.31	1.07	-0.87	0.86	0.62	0.55	19.03	
553.00	1.02	82.16	552.98	1.11	-0.62	0.61	0.67	0.61	15.75	
567.67	1.05	82.82	567.65	1.14	-0.36	0.35	0.22	0.20	4.50	
582.33	1.08	83.55	582.31	1.18	-0.09	0.08	0.22	0.20	4.98	
597.00	1.11	84.31	596.97	1.21	0.19	-0.20	0.23	0.20	5.18	
611.67	1.15	85.04	611.64	1.23	0.48	-0.49	0.29	0.27	4.98	
626.33	1.19	85.73	626.30	1.26	0.78	-0.79	0.29	0.27	4.71	
641.00	1.23	86.35	640.96	1.28	1.09	-1.10	0.29	0.27	4.23	
655.67	1.26	86.91	655.63	1.30	1.41	-1.42	0.22	0.20	3.82	
670.33	1.30	87.40	670.29	1.31	1.73	-1.74	0.28	0.27	3.34	
685.00	1.33	87.80	684.95	1.33	2.07	-2.08	0.21	0.20	2.73	
699.67	1.36	88.10	699.62	1.34	2.41	-2.43	0.21	0.20	2.04	
714.33	1.39	88.29	714.27	1.35	2.77	-2.78	0.21	0.20	1.30	
729.00	1.41	88.32	728.94	1.36	3.12	-3.14	0.14	0.14	0.20	



Survey Report

Company:	Colgate Energy	Local Co-ordinate Reference:	Well Weaver 27 State Com 131H
Project:	Eddy County, NM (N83-NME)	TVD Reference:	3354+30 @ 3384.00usft
Site:	Weaver 27 State Com	MD Reference:	3354+30 @ 3384.00usft
Well:	Weaver 27 State Com 131H	North Reference:	Grid
Wellbore:	ST 131H	Survey Calculation Method:	Minimum Curvature
Design:	ST01-DRL	Database:	EDM 5000.14 Single User Db

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
742.86	1.42	88.19	742.80	1.37	3.47	-3.48	0.08	0.07	-0.94	
756.71	1.42	87.86	756.64	1.38	3.81	-3.82	0.06	0.00	-2.38	
770.57	1.42	87.38	770.50	1.40	4.15	-4.16	0.09	0.00	-3.46	
784.43	1.41	86.73	784.35	1.42	4.49	-4.51	0.14	-0.07	-4.69	
798.29	1.41	85.91	798.21	1.44	4.83	-4.85	0.15	0.00	-5.92	
812.14	1.40	84.89	812.05	1.46	5.17	-5.18	0.19	-0.07	-7.36	
826.00	1.40	83.58	825.91	1.50	5.51	-5.52	0.23	0.00	-9.45	
839.43	1.40	81.90	839.34	1.54	5.83	-5.85	0.31	0.00	-12.51	
852.86	1.41	80.00	852.76	1.59	6.16	-6.17	0.35	0.07	-14.15	
866.29	1.41	78.03	866.19	1.66	6.48	-6.50	0.36	0.00	-14.67	
879.71	1.42	76.09	879.60	1.73	6.81	-6.82	0.36	0.07	-14.46	
893.14	1.44	74.33	893.03	1.81	7.13	-7.15	0.36	0.15	-13.10	
906.57	1.45	72.87	906.46	1.91	7.46	-7.47	0.28	0.07	-10.87	
920.00	1.46	71.88	919.88	2.01	7.78	-7.80	0.20	0.07	-7.37	
933.57	1.48	71.53	933.45	2.12	8.11	-8.13	0.16	0.15	-2.58	
947.14	1.49	71.60	947.01	2.23	8.45	-8.46	0.07	0.07	0.52	
960.71	1.51	71.92	960.58	2.35	8.78	-8.80	0.16	0.15	2.36	
974.29	1.53	72.35	974.15	2.46	9.13	-9.15	0.17	0.15	3.17	
987.86	1.55	72.76	987.72	2.57	9.47	-9.49	0.17	0.15	3.02	
1,001.43	1.57	73.05	1,001.28	2.67	9.83	-9.85	0.16	0.15	2.14	
1,015.00	1.58	73.10	1,014.85	2.78	10.18	-10.21	0.07	0.07	0.37	
1,028.43	1.60	72.79	1,028.27	2.89	10.54	-10.56	0.16	0.15	-2.31	
1,041.86	1.62	72.26	1,041.70	3.01	10.90	-10.92	0.19	0.15	-3.95	
1,055.29	1.63	71.61	1,055.12	3.12	11.26	-11.29	0.16	0.07	-4.84	
1,068.71	1.65	70.94	1,068.54	3.25	11.63	-11.65	0.21	0.15	-4.99	
1,082.14	1.66	70.32	1,081.96	3.38	11.99	-12.02	0.15	0.07	-4.62	
1,095.57	1.67	69.85	1,095.39	3.51	12.36	-12.39	0.13	0.07	-3.50	
1,109.00	1.68	69.62	1,108.81	3.64	12.73	-12.76	0.09	0.07	-1.71	
1,122.57	1.69	69.80	1,122.37	3.78	13.10	-13.13	0.08	0.07	1.33	
1,136.14	1.69	70.22	1,135.94	3.92	13.48	-13.51	0.09	0.00	3.10	
1,149.71	1.70	70.78	1,149.50	4.05	13.85	-13.89	0.14	0.07	4.13	
1,163.29	1.70	71.41	1,163.08	4.18	14.24	-14.27	0.14	0.00	4.64	
1,176.86	1.70	72.03	1,176.64	4.31	14.62	-14.65	0.14	0.00	4.57	
1,190.43	1.70	72.59	1,190.20	4.43	15.00	-15.04	0.12	0.00	4.13	
1,204.00	1.69	72.99	1,203.77	4.55	15.39	-15.42	0.11	-0.07	2.95	
1,217.43	1.69	73.10	1,217.19	4.67	15.76	-15.80	0.02	0.00	0.82	
1,230.86	1.67	73.02	1,230.62	4.78	16.14	-16.18	0.15	-0.15	-0.60	
1,244.29	1.66	72.82	1,244.04	4.90	16.51	-16.56	0.09	-0.07	-1.49	
1,257.71	1.65	72.53	1,257.46	5.01	16.88	-16.93	0.10	-0.07	-2.16	
1,271.14	1.65	72.19	1,270.88	5.13	17.25	-17.30	0.07	0.00	-2.53	
1,284.57	1.65	71.82	1,284.30	5.25	17.62	-17.66	0.08	0.00	-2.76	
1,298.00	1.67	71.45	1,297.73	5.37	17.99	-18.03	0.17	0.15	-2.76	
1,311.57	1.70	71.04	1,311.29	5.50	18.37	-18.41	0.24	0.22	-3.02	
1,325.14	1.75	70.63	1,324.86	5.63	18.75	-18.80	0.38	0.37	-3.02	



Survey Report

Company:	Colgate Energy	Local Co-ordinate Reference:	Well Weaver 27 State Com 131H
Project:	Eddy County, NM (N83-NME)	TVD Reference:	3354+30 @ 3384.00usft
Site:	Weaver 27 State Com	MD Reference:	3354+30 @ 3384.00usft
Well:	Weaver 27 State Com 131H	North Reference:	Grid
Wellbore:	ST 131H	Survey Calculation Method:	Minimum Curvature
Design:	ST01-DRL	Database:	EDM 5000.14 Single User Db

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
1,338.71	1.80	70.25	1,338.42	5.77	19.15	-19.20	0.38	0.37	-2.80
1,352.29	1.85	69.90	1,351.99	5.92	19.56	-19.61	0.38	0.37	-2.58
1,365.86	1.90	69.59	1,365.56	6.07	19.97	-20.02	0.38	0.37	-2.28
1,379.43	1.94	69.34	1,379.12	6.23	20.40	-20.45	0.30	0.29	-1.84
1,393.00	1.97	69.17	1,392.68	6.40	20.83	-20.88	0.23	0.22	-1.25
1,406.57	1.98	69.10	1,406.24	6.56	21.27	-21.32	0.08	0.07	-0.52
1,420.14	1.98	69.10	1,419.80	6.73	21.71	-21.76	0.00	0.00	0.00
1,433.71	1.97	69.13	1,433.37	6.90	22.14	-22.20	0.07	-0.07	0.22
1,447.29	1.95	69.14	1,446.94	7.06	22.58	-22.64	0.15	-0.15	0.07
1,460.86	1.93	69.10	1,460.50	7.23	23.01	-23.07	0.15	-0.15	-0.29
1,474.43	1.92	68.96	1,474.06	7.39	23.43	-23.49	0.08	-0.07	-1.03
1,488.00	1.91	68.66	1,487.63	7.55	23.85	-23.92	0.10	-0.07	-2.21
1,501.43	1.92	68.11	1,501.05	7.72	24.27	-24.34	0.16	0.07	-4.10
1,514.86	1.94	67.42	1,514.47	7.89	24.69	-24.76	0.23	0.15	-5.14
1,528.29	1.95	66.65	1,527.89	8.07	25.11	-25.18	0.21	0.07	-5.73
1,541.71	1.97	65.85	1,541.30	8.25	25.53	-25.60	0.25	0.15	-5.96
1,555.14	1.98	65.04	1,554.73	8.45	25.95	-26.02	0.22	0.07	-6.03
1,568.57	1.99	64.24	1,568.15	8.65	26.37	-26.44	0.22	0.07	-5.96
1,582.00	1.97	63.47	1,581.57	8.85	26.79	-26.86	0.25	-0.15	-5.73
1,595.43	1.93	62.88	1,594.99	9.06	27.20	-27.27	0.33	-0.30	-4.39
1,608.86	1.87	62.34	1,608.42	9.26	27.59	-27.67	0.47	-0.45	-4.02
1,622.29	1.80	61.81	1,621.84	9.46	27.97	-28.05	0.54	-0.52	-3.95
1,635.71	1.74	61.24	1,635.25	9.66	28.34	-28.42	0.47	-0.45	-4.25
1,649.14	1.67	60.59	1,648.68	9.85	28.68	-28.77	0.54	-0.52	-4.84
1,662.57	1.61	59.80	1,662.10	10.05	29.02	-29.10	0.48	-0.45	-5.88
1,676.00	1.56	58.81	1,675.53	10.23	29.34	-29.42	0.42	-0.37	-7.37
1,689.57	1.53	57.57	1,689.09	10.43	29.65	-29.74	0.33	-0.22	-9.14
1,703.14	1.52	56.16	1,702.66	10.63	29.95	-30.04	0.29	-0.07	-10.39
1,716.71	1.52	54.69	1,716.22	10.83	30.25	-30.34	0.29	0.00	-10.83
1,730.29	1.53	53.23	1,729.80	11.04	30.54	-30.63	0.30	0.07	-10.75
1,743.86	1.54	51.85	1,743.36	11.26	30.83	-30.92	0.28	0.07	-10.17
1,757.43	1.55	50.63	1,756.93	11.49	31.11	-31.21	0.25	0.07	-8.99
1,771.00	1.55	49.63	1,770.49	11.73	31.40	-31.49	0.20	0.00	-7.37
1,784.43	1.55	49.02	1,783.92	11.96	31.67	-31.77	0.12	0.00	-4.54
1,797.86	1.54	48.66	1,797.34	12.20	31.94	-32.05	0.10	-0.07	-2.68
1,811.29	1.53	48.49	1,810.77	12.44	32.21	-32.32	0.08	-0.07	-1.27
1,824.71	1.51	48.45	1,824.18	12.68	32.48	-32.59	0.15	-0.15	-0.30
1,838.14	1.50	48.53	1,837.61	12.91	32.74	-32.85	0.08	-0.07	0.60
1,851.57	1.50	48.70	1,851.03	13.14	33.01	-33.12	0.03	0.00	1.27
1,865.00	1.50	48.98	1,864.46	13.37	33.27	-33.39	0.05	0.00	2.08
1,878.57	1.52	49.42	1,878.02	13.61	33.54	-33.66	0.17	0.15	3.24
1,892.14	1.54	49.94	1,891.59	13.84	33.82	-33.94	0.18	0.15	3.83
1,905.71	1.56	50.46	1,905.15	14.08	34.10	-34.22	0.18	0.15	3.83



Survey Report

Company:	Colgate Energy	Local Co-ordinate Reference:	Well Weaver 27 State Com 131H
Project:	Eddy County, NM (N83-NME)	TVD Reference:	3354+30 @ 3384.00usft
Site:	Weaver 27 State Com	MD Reference:	3354+30 @ 3384.00usft
Well:	Weaver 27 State Com 131H	North Reference:	Grid
Wellbore:	ST 131H	Survey Calculation Method:	Minimum Curvature
Design:	ST01-DRL	Database:	EDM 5000.14 Single User Db

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
1,919.29	1.59	50.97	1,918.73	14.31	34.39	-34.51	0.24	0.22	3.76	
1,932.86	1.62	51.40	1,932.29	14.55	34.69	-34.81	0.24	0.22	3.17	
1,946.43	1.64	51.73	1,945.86	14.79	34.99	-35.11	0.16	0.15	2.43	
1,960.00	1.66	51.90	1,959.42	15.03	35.30	-35.42	0.15	0.15	1.25	
1,973.43	1.66	51.85	1,972.85	15.27	35.60	-35.73	0.01	0.00	-0.37	
1,986.86	1.66	51.62	1,986.27	15.51	35.91	-36.04	0.05	0.00	-1.71	
2,000.29	1.65	51.26	1,999.69	15.76	36.21	-36.34	0.11	-0.07	-2.68	
2,013.71	1.64	50.79	2,013.11	16.00	36.51	-36.65	0.13	-0.07	-3.50	
2,027.14	1.63	50.22	2,026.53	16.24	36.81	-36.94	0.14	-0.07	-4.24	
2,040.57	1.62	49.56	2,039.96	16.49	37.10	-37.24	0.16	-0.07	-4.91	
2,054.00	1.61	48.77	2,053.38	16.73	37.38	-37.52	0.18	-0.07	-5.88	
2,067.43	1.60	47.85	2,066.81	16.99	37.66	-37.81	0.21	-0.07	-6.85	
2,080.86	1.59	46.84	2,080.23	17.24	37.94	-38.09	0.22	-0.07	-7.52	
2,094.29	1.59	45.78	2,093.66	17.50	38.21	-38.36	0.22	0.00	-7.89	
2,107.71	1.58	44.74	2,107.07	17.76	38.47	-38.62	0.23	-0.07	-7.75	
2,121.14	1.58	43.76	2,120.50	18.02	38.73	-38.88	0.20	0.00	-7.30	
2,134.57	1.58	42.92	2,133.92	18.29	38.98	-39.14	0.17	0.00	-6.25	
2,148.00	1.59	42.31	2,147.35	18.57	39.24	-39.39	0.15	0.07	-4.54	
2,161.57	1.60	42.03	2,160.91	18.84	39.49	-39.65	0.09	0.07	-2.06	
2,175.14	1.62	41.97	2,174.48	19.13	39.74	-39.91	0.15	0.15	-0.44	
2,188.71	1.64	42.06	2,188.04	19.42	40.00	-40.17	0.15	0.15	0.66	
2,202.29	1.67	42.25	2,201.62	19.71	40.27	-40.43	0.22	0.22	1.40	
2,215.86	1.69	42.52	2,215.18	20.00	40.53	-40.70	0.16	0.15	1.99	
2,229.43	1.72	42.87	2,228.74	20.30	40.81	-40.98	0.23	0.22	2.58	
2,243.00	1.75	43.28	2,242.31	20.60	41.09	-41.26	0.24	0.22	3.02	
2,256.43	1.78	43.87	2,255.73	20.90	41.37	-41.55	0.26	0.22	4.39	
2,269.86	1.81	44.50	2,269.15	21.20	41.67	-41.85	0.27	0.22	4.69	
2,283.29	1.84	45.09	2,282.58	21.50	41.97	-42.15	0.26	0.22	4.39	
2,296.71	1.87	45.62	2,295.99	21.81	42.28	-42.46	0.26	0.22	3.95	
2,310.14	1.90	46.01	2,309.41	22.11	42.59	-42.78	0.24	0.22	2.90	
2,323.57	1.93	46.20	2,322.84	22.43	42.92	-43.11	0.23	0.22	1.41	
2,337.00	1.95	46.09	2,336.26	22.74	43.25	-43.44	0.15	0.15	-0.82	
2,350.57	1.97	45.56	2,349.82	23.06	43.58	-43.77	0.20	0.15	-3.91	
2,364.14	1.99	44.75	2,363.38	23.39	43.91	-44.11	0.25	0.15	-5.97	
2,377.71	2.00	43.81	2,376.94	23.73	44.24	-44.44	0.25	0.07	-6.93	
2,391.29	2.02	42.83	2,390.52	24.08	44.57	-44.77	0.29	0.15	-7.22	
2,404.86	2.04	41.90	2,404.08	24.43	44.89	-45.10	0.28	0.15	-6.85	
2,418.43	2.06	41.11	2,417.64	24.80	45.21	-45.42	0.26	0.15	-5.82	
2,432.00	2.07	40.59	2,431.20	25.17	45.53	-45.75	0.16	0.07	-3.83	
2,445.00	2.09	40.45	2,444.19	25.53	45.84	-46.06	0.16	0.15	-1.08	
2,458.00	2.11	40.52	2,457.18	25.89	46.15	-46.37	0.16	0.15	0.54	
2,471.00	2.12	40.65	2,470.17	26.25	46.46	-46.68	0.09	0.08	1.00	
2,484.00	2.13	40.73	2,483.16	26.62	46.78	-47.00	0.08	0.08	0.62	



Survey Report

Company:	Colgate Energy	Local Co-ordinate Reference:	Well Weaver 27 State Com 131H
Project:	Eddy County, NM (N83-NME)	TVD Reference:	3354+30 @ 3384.00usft
Site:	Weaver 27 State Com	MD Reference:	3354+30 @ 3384.00usft
Well:	Weaver 27 State Com 131H	North Reference:	Grid
Wellbore:	ST 131H	Survey Calculation Method:	Minimum Curvature
Design:	ST01-DRL	Database:	EDM 5000.14 Single User Db

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
2,497.00	2.13	40.64	2,496.16	26.99	47.09	-47.32	0.03	0.00	-0.69	
2,511.91	2.12	40.13	2,511.06	27.41	47.45	-47.68	0.14	-0.07	-3.42	
2,526.82	2.09	39.34	2,525.96	27.83	47.80	-48.03	0.28	-0.20	-5.30	
2,541.73	2.06	38.35	2,540.86	28.25	48.14	-48.38	0.31	-0.20	-6.64	
2,556.64	2.03	37.23	2,555.76	28.67	48.46	-48.71	0.34	-0.20	-7.51	
2,571.55	2.01	36.04	2,570.66	29.09	48.78	-49.02	0.31	-0.13	-7.98	
2,586.45	1.99	34.82	2,585.55	29.51	49.08	-49.33	0.32	-0.13	-8.19	
2,601.36	1.98	33.65	2,600.45	29.94	49.37	-49.62	0.28	-0.07	-7.85	
2,616.27	1.98	32.60	2,615.35	30.37	49.65	-49.91	0.24	0.00	-7.04	
2,631.18	2.01	31.78	2,630.25	30.81	49.93	-50.19	0.28	0.20	-5.50	
2,646.09	2.06	31.33	2,645.15	31.26	50.20	-50.47	0.35	0.34	-3.02	
2,661.00	2.17	31.43	2,660.05	31.73	50.49	-50.76	0.74	0.74	0.67	
2,674.43	2.33	31.54	2,673.47	32.18	50.77	-51.04	1.19	1.19	0.82	
2,687.86	2.53	31.84	2,686.89	32.67	51.06	-51.34	1.49	1.49	2.23	
2,701.29	2.76	32.21	2,700.30	33.19	51.39	-51.68	1.72	1.71	2.76	
2,714.71	2.99	32.60	2,713.71	33.76	51.75	-52.04	1.72	1.71	2.91	
2,728.14	3.22	33.00	2,727.12	34.37	52.15	-52.44	1.72	1.71	2.98	
2,741.57	3.44	33.41	2,740.52	35.02	52.58	-52.87	1.65	1.64	3.05	
2,755.00	3.91	29.13	2,753.93	35.76	53.02	-53.32	4.05	3.50	-31.87	
2,768.43	4.76	23.29	2,767.32	36.67	53.46	-53.78	7.12	6.33	-43.48	
2,781.86	5.66	21.93	2,780.69	37.80	53.93	-54.25	6.76	6.70	-10.13	
2,795.29	5.79	22.90	2,794.06	39.04	54.44	-54.77	1.21	0.97	7.22	
2,808.71	5.93	23.90	2,807.41	40.29	54.99	-55.33	1.29	1.04	7.45	
2,822.14	6.06	24.79	2,820.76	41.57	55.57	-55.92	1.19	0.97	6.63	
2,835.57	6.19	25.40	2,834.12	42.87	56.17	-56.54	1.08	0.97	4.54	
2,849.00	6.31	25.57	2,847.47	44.19	56.80	-57.18	0.90	0.89	1.27	
2,862.57	6.43	25.08	2,860.95	45.55	57.45	-57.83	0.97	0.88	-3.61	
2,876.14	6.55	24.20	2,874.44	46.94	58.09	-58.48	1.15	0.88	-6.48	
2,889.71	6.67	23.10	2,887.92	48.38	58.71	-59.12	1.29	0.88	-8.11	
2,903.29	6.78	21.93	2,901.40	49.84	59.32	-59.74	1.29	0.81	-8.62	
2,916.86	6.89	20.80	2,914.88	51.35	59.91	-60.35	1.28	0.81	-8.33	
2,930.43	6.99	19.80	2,928.35	52.89	60.48	-60.93	1.16	0.74	-7.37	
2,944.00	7.05	15.04	2,941.81	54.47	60.97	-61.44	4.31	0.44	-35.08	
2,957.57	7.15	9.36	2,955.28	56.10	61.33	-61.80	5.22	0.74	-41.86	
2,971.14	7.18	9.04	2,968.74	57.78	61.60	-62.09	0.37	0.22	-2.36	
2,984.71	7.20	8.86	2,982.21	59.45	61.86	-62.37	0.22	0.15	-1.33	
2,998.29	7.21	8.77	2,995.68	61.14	62.12	-62.64	0.11	0.07	-0.66	
3,011.86	7.21	8.74	3,009.14	62.82	62.38	-62.92	0.03	0.00	-0.22	
3,025.43	7.22	8.75	3,022.61	64.50	62.64	-63.19	0.07	0.07	0.07	
3,039.00	7.22	8.80	3,036.07	66.19	62.90	-63.46	0.05	0.00	0.37	
3,052.43	7.24	8.87	3,049.39	67.86	63.16	-63.74	0.16	0.15	0.52	
3,065.86	7.25	8.94	3,062.71	69.53	63.42	-64.02	0.10	0.07	0.52	
3,079.29	7.26	9.01	3,076.04	71.21	63.69	-64.29	0.10	0.07	0.52	
3,092.71	7.26	9.06	3,089.35	72.88	63.95	-64.57	0.05	0.00	0.37	



Survey Report

Company:	Colgate Energy	Local Co-ordinate Reference:	Well Weaver 27 State Com 131H
Project:	Eddy County, NM (N83-NME)	TVD Reference:	3354+30 @ 3384.00usft
Site:	Weaver 27 State Com	MD Reference:	3354+30 @ 3384.00usft
Well:	Weaver 27 State Com 131H	North Reference:	Grid
Wellbore:	ST 131H	Survey Calculation Method:	Minimum Curvature
Design:	ST01-DRL	Database:	EDM 5000.14 Single User Db

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
3,106.14	7.24	9.06	3,102.67	74.56	64.22	-64.86	0.15	-0.15	0.00
3,119.57	7.20	9.00	3,116.00	76.22	64.49	-65.14	0.30	-0.30	-0.45
3,133.00	7.12	8.84	3,129.32	77.88	64.75	-65.41	0.61	-0.60	-1.19
3,146.43	6.98	8.47	3,142.65	79.51	64.99	-65.67	1.10	-1.04	-2.76
3,159.86	6.80	7.97	3,155.98	81.10	65.22	-65.91	1.41	-1.34	-3.72
3,173.29	6.61	7.38	3,169.32	82.66	65.43	-66.14	1.50	-1.41	-4.39
3,186.71	6.41	6.74	3,182.65	84.17	65.62	-66.34	1.59	-1.49	-4.77
3,200.14	6.21	6.09	3,196.00	85.63	65.79	-66.52	1.58	-1.49	-4.84
3,213.57	6.03	5.49	3,209.36	87.06	65.93	-66.67	1.42	-1.34	-4.47
3,227.00	5.53	5.28	3,222.72	88.40	66.06	-66.81	3.73	-3.72	-1.56
3,240.57	4.80	5.48	3,236.23	89.62	66.17	-66.94	5.38	-5.38	1.47
3,254.14	4.73	5.44	3,249.76	90.74	66.28	-67.05	0.52	-0.52	-0.29
3,267.71	4.67	5.54	3,263.28	91.85	66.39	-67.17	0.45	-0.44	0.74
3,281.29	4.63	5.72	3,276.81	92.94	66.49	-67.29	0.31	-0.29	1.33
3,294.86	4.60	5.95	3,290.34	94.03	66.60	-67.41	0.26	-0.22	1.69
3,308.43	4.58	6.19	3,303.87	95.11	66.72	-67.53	0.20	-0.15	1.77
3,322.00	4.55	6.42	3,317.39	96.18	66.84	-67.66	0.26	-0.22	1.69
3,335.43	4.53	6.60	3,330.78	97.24	66.96	-67.79	0.18	-0.15	1.34
3,348.86	4.52	6.74	3,344.17	98.29	67.08	-67.92	0.11	-0.07	1.04
3,362.29	4.50	6.86	3,357.56	99.34	67.21	-68.05	0.16	-0.15	0.89
3,375.71	4.49	6.95	3,370.94	100.38	67.33	-68.19	0.09	-0.07	0.67
3,389.14	4.48	7.02	3,384.33	101.43	67.46	-68.33	0.08	-0.07	0.52
3,402.57	4.47	7.04	3,397.72	102.47	67.59	-68.46	0.08	-0.07	0.15
3,416.00	4.46	7.03	3,411.10	103.50	67.72	-68.60	0.07	-0.07	-0.07
3,429.57	4.46	6.94	3,424.63	104.55	67.84	-68.74	0.05	0.00	-0.66
3,443.14	4.46	6.80	3,438.16	105.60	67.97	-68.87	0.08	0.00	-1.03
3,456.71	4.46	6.60	3,451.69	106.65	68.09	-69.00	0.11	0.00	-1.47
3,470.29	4.46	6.35	3,465.23	107.70	68.21	-69.13	0.14	0.00	-1.84
3,483.86	4.46	6.02	3,478.76	108.75	68.33	-69.25	0.19	0.00	-2.43
3,497.43	4.46	5.60	3,492.29	109.80	68.43	-69.37	0.24	0.00	-3.10
3,511.00	4.45	5.04	3,505.82	110.85	68.53	-69.48	0.33	-0.07	-4.13
3,524.43	4.42	4.28	3,519.21	111.88	68.62	-69.57	0.49	-0.22	-5.66
3,537.86	4.40	3.38	3,532.60	112.91	68.68	-69.65	0.54	-0.15	-6.70
3,551.29	4.37	2.41	3,545.99	113.94	68.74	-69.71	0.60	-0.22	-7.22
3,564.71	4.35	1.42	3,559.37	114.96	68.77	-69.75	0.58	-0.15	-7.38
3,578.14	4.33	0.44	3,572.76	115.97	68.79	-69.78	0.57	-0.15	-7.30
3,591.57	4.32	359.54	3,586.15	116.99	68.79	-69.79	0.51	-0.07	-6.70
3,605.00	4.33	358.80	3,599.54	118.00	68.77	-69.78	0.42	0.07	-5.51
3,618.57	4.35	358.28	3,613.07	119.02	68.75	-69.76	0.33	0.15	-3.83
3,632.14	4.38	357.91	3,626.61	120.06	68.71	-69.74	0.30	0.22	-2.73
3,645.71	4.43	357.66	3,640.14	121.10	68.67	-69.70	0.39	0.37	-1.84
3,659.29	4.47	357.49	3,653.67	122.15	68.63	-69.67	0.31	0.29	-1.25
3,672.86	4.51	357.37	3,667.20	123.21	68.58	-69.63	0.30	0.29	-0.88



Survey Report

Company:	Colgate Energy	Local Co-ordinate Reference:	Well Weaver 27 State Com 131H
Project:	Eddy County, NM (N83-NME)	TVD Reference:	3354+30 @ 3384.00usft
Site:	Weaver 27 State Com	MD Reference:	3354+30 @ 3384.00usft
Well:	Weaver 27 State Com 131H	North Reference:	Grid
Wellbore:	ST 131H	Survey Calculation Method:	Minimum Curvature
Design:	ST01-DRL	Database:	EDM 5000.14 Single User Db

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
3,686.43	4.54	357.31	3,680.73	124.28	68.53	-69.59	0.22	0.22	-0.44
3,700.00	4.55	357.30	3,694.26	125.36	68.48	-69.55	0.07	0.07	-0.07
3,713.43	4.53	357.34	3,707.65	126.42	68.43	-69.51	0.15	-0.15	0.30
3,726.86	4.50	357.42	3,721.03	127.47	68.38	-69.47	0.23	-0.22	0.60
3,740.29	4.45	357.51	3,734.42	128.52	68.33	-69.43	0.38	-0.37	0.67
3,753.71	4.40	357.61	3,747.80	129.55	68.29	-69.40	0.38	-0.37	0.75
3,767.14	4.35	357.68	3,761.19	130.58	68.25	-69.36	0.37	-0.37	0.52
3,780.57	4.31	357.70	3,774.59	131.59	68.21	-69.33	0.30	-0.30	0.15
3,794.00	4.28	357.65	3,787.98	132.60	68.17	-69.30	0.23	-0.22	-0.37
3,807.57	4.27	357.43	3,801.51	133.61	68.12	-69.26	0.14	-0.07	-1.62
3,821.14	4.27	357.15	3,815.04	134.62	68.08	-69.22	0.15	0.00	-2.06
3,834.71	4.28	356.83	3,828.57	135.63	68.02	-69.18	0.19	0.07	-2.36
3,848.29	4.29	356.51	3,842.12	136.64	67.96	-69.13	0.19	0.07	-2.36
3,861.86	4.30	356.23	3,855.65	137.65	67.90	-69.07	0.17	0.07	-2.06
3,875.43	4.31	356.02	3,869.18	138.67	67.83	-69.01	0.14	0.07	-1.55
3,889.00	4.31	355.94	3,882.71	139.69	67.76	-68.95	0.04	0.00	-0.59
3,902.57	4.31	356.07	3,896.24	140.70	67.69	-68.89	0.07	0.00	0.96
3,916.14	4.29	356.32	3,909.78	141.72	67.62	-68.83	0.20	-0.15	1.84
3,929.71	4.27	356.65	3,923.31	142.73	67.56	-68.78	0.23	-0.15	2.43
3,943.29	4.24	356.99	3,936.85	143.74	67.50	-68.73	0.29	-0.22	2.50
3,956.86	4.21	357.31	3,950.38	144.74	67.45	-68.69	0.28	-0.22	2.36
3,970.43	4.17	357.56	3,963.92	145.73	67.41	-68.65	0.32	-0.29	1.84
3,984.00	4.13	357.67	3,977.45	146.71	67.37	-68.62	0.30	-0.29	0.81
3,997.43	4.08	357.48	3,990.85	147.67	67.33	-68.59	0.39	-0.37	-1.41
4,010.86	4.03	357.13	4,004.24	148.62	67.28	-68.55	0.42	-0.37	-2.61
4,024.29	3.98	356.68	4,017.64	149.55	67.23	-68.51	0.44	-0.37	-3.35
4,037.71	3.93	356.17	4,031.03	150.48	67.17	-68.46	0.46	-0.37	-3.80
4,051.14	3.88	355.64	4,044.43	151.39	67.11	-68.40	0.46	-0.37	-3.95
4,064.57	3.82	355.14	4,057.83	152.29	67.04	-68.34	0.51	-0.45	-3.72
4,078.00	3.78	354.71	4,071.23	153.17	66.96	-68.27	0.37	-0.30	-3.20
4,091.57	3.73	354.48	4,084.77	154.06	66.87	-68.19	0.38	-0.37	-1.69
4,105.14	3.69	354.35	4,098.31	154.93	66.79	-68.11	0.30	-0.29	-0.96
4,118.71	3.65	354.27	4,111.85	155.80	66.70	-68.03	0.30	-0.29	-0.59
4,132.29	3.61	354.22	4,125.41	156.65	66.62	-67.95	0.30	-0.29	-0.37
4,145.86	3.58	354.15	4,138.95	157.50	66.53	-67.87	0.22	-0.22	-0.52
4,159.43	3.55	354.04	4,152.49	158.34	66.44	-67.79	0.23	-0.22	-0.81
4,173.00	3.53	353.84	4,166.04	159.17	66.35	-67.71	0.17	-0.15	-1.47
4,186.43	3.51	353.46	4,179.44	159.99	66.26	-67.63	0.23	-0.15	-2.83
4,199.86	3.50	353.00	4,192.85	160.81	66.17	-67.54	0.22	-0.07	-3.43
4,213.29	3.50	352.49	4,206.25	161.62	66.06	-67.44	0.23	0.00	-3.80
4,226.71	3.49	351.96	4,219.65	162.43	65.95	-67.34	0.25	-0.07	-3.95
4,240.14	3.49	351.44	4,233.05	163.24	65.83	-67.23	0.24	0.00	-3.87
4,253.57	3.49	350.97	4,246.46	164.05	65.71	-67.11	0.21	0.00	-3.50



Survey Report

Company:	Colgate Energy	Local Co-ordinate Reference:	Well Weaver 27 State Com 131H
Project:	Eddy County, NM (N83-NME)	TVD Reference:	3354+30 @ 3384.00usft
Site:	Weaver 27 State Com	MD Reference:	3354+30 @ 3384.00usft
Well:	Weaver 27 State Com 131H	North Reference:	Grid
Wellbore:	ST 131H	Survey Calculation Method:	Minimum Curvature
Design:	ST01-DRL	Database:	EDM 5000.14 Single User Db

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
4,267.00	3.50	350.56	4,259.86	164.86	65.58	-66.99	0.20	0.07	-3.05	
4,280.57	3.50	350.27	4,273.41	165.67	65.44	-66.85	0.13	0.00	-2.14	
4,294.14	3.51	350.08	4,286.95	166.49	65.30	-66.72	0.11	0.07	-1.40	
4,307.71	3.51	350.00	4,300.49	167.31	65.15	-66.58	0.04	0.00	-0.59	
4,321.29	3.51	350.05	4,314.05	168.13	65.01	-66.45	0.02	0.00	0.37	
4,334.86	3.50	350.26	4,327.59	168.94	64.87	-66.31	0.12	-0.07	1.55	
4,348.43	3.48	350.71	4,341.14	169.76	64.73	-66.18	0.25	-0.15	3.32	
4,362.00	3.44	351.49	4,354.68	170.57	64.61	-66.06	0.46	-0.29	5.75	
4,375.43	3.37	352.78	4,368.09	171.36	64.50	-65.96	0.77	-0.52	9.61	
4,388.86	3.28	354.45	4,381.50	172.13	64.41	-65.88	0.98	-0.67	12.43	
4,402.29	3.18	356.40	4,394.91	172.89	64.35	-65.83	1.11	-0.74	14.52	
4,415.71	3.09	358.55	4,408.31	173.62	64.32	-65.80	1.10	-0.67	16.02	
4,429.14	3.00	0.80	4,421.72	174.33	64.31	-65.80	1.11	-0.67	16.75	
4,442.57	2.92	3.02	4,435.13	175.03	64.34	-65.83	1.04	-0.60	16.53	
4,456.00	3.01	11.93	4,448.54	175.71	64.43	-65.93	3.49	0.67	66.34	
4,469.57	3.26	22.54	4,462.09	176.42	64.65	-66.15	4.65	1.84	78.19	
4,483.14	3.19	23.69	4,475.64	177.12	64.95	-66.46	0.70	-0.52	8.47	
4,496.71	3.14	24.75	4,489.19	177.80	65.25	-66.77	0.57	-0.37	7.81	
4,510.29	3.09	25.70	4,502.75	178.47	65.57	-67.09	0.53	-0.37	7.00	
4,523.86	3.04	26.50	4,516.30	179.12	65.89	-67.42	0.48	-0.37	5.90	
4,537.43	3.01	27.07	4,529.85	179.76	66.21	-67.75	0.31	-0.22	4.20	
4,551.00	2.98	27.32	4,543.40	180.39	66.53	-68.08	0.24	-0.22	1.84	
4,564.43	2.97	27.03	4,556.81	181.01	66.85	-68.40	0.13	-0.07	-2.16	
4,577.86	2.97	26.44	4,570.23	181.63	67.17	-68.72	0.23	0.00	-4.39	
4,591.29	2.97	25.65	4,583.64	182.26	67.47	-69.03	0.30	0.00	-5.88	
4,604.71	2.98	24.74	4,597.04	182.89	67.77	-69.33	0.36	0.07	-6.78	
4,618.14	3.00	23.80	4,610.45	183.53	68.06	-69.62	0.39	0.15	-7.00	
4,631.57	3.02	22.88	4,623.86	184.17	68.34	-69.91	0.39	0.15	-6.85	
4,645.00	3.04	22.05	4,637.27	184.83	68.61	-70.18	0.36	0.15	-6.18	
4,658.57	3.06	21.33	4,650.83	185.50	68.87	-70.46	0.32	0.15	-5.31	
4,672.14	3.08	20.71	4,664.38	186.18	69.13	-70.72	0.29	0.15	-4.57	
4,685.71	3.10	20.15	4,677.93	186.87	69.39	-70.99	0.27	0.15	-4.13	
4,699.29	3.13	19.62	4,691.49	187.56	69.64	-71.24	0.31	0.22	-3.90	
4,712.86	3.15	19.10	4,705.04	188.26	69.89	-71.49	0.26	0.15	-3.83	
4,726.43	3.17	18.57	4,718.58	188.97	70.13	-71.74	0.26	0.15	-3.91	
4,740.00	3.19	17.99	4,732.13	189.68	70.36	-71.98	0.28	0.15	-4.27	
4,753.57	3.21	17.32	4,745.68	190.41	70.59	-72.22	0.31	0.15	-4.94	
4,767.14	3.22	16.61	4,759.23	191.13	70.82	-72.45	0.30	0.07	-5.23	
4,780.71	3.24	15.89	4,772.78	191.87	71.03	-72.67	0.33	0.15	-5.31	
4,794.29	3.25	15.20	4,786.34	192.61	71.24	-72.88	0.30	0.07	-5.08	
4,807.86	3.27	14.57	4,799.89	193.35	71.43	-73.09	0.30	0.15	-4.64	
4,821.43	3.30	14.02	4,813.43	194.11	71.63	-73.28	0.32	0.22	-4.05	
4,835.00	3.34	13.62	4,826.98	194.87	71.81	-73.48	0.34	0.29	-2.95	
4,848.43	3.39	13.38	4,840.39	195.64	72.00	-73.67	0.39	0.37	-1.79	



Survey Report

Company:	Colgate Energy	Local Co-ordinate Reference:	Well Weaver 27 State Com 131H
Project:	Eddy County, NM (N83-NME)	TVD Reference:	3354+30 @ 3384.00usft
Site:	Weaver 27 State Com	MD Reference:	3354+30 @ 3384.00usft
Well:	Weaver 27 State Com 131H	North Reference:	Grid
Wellbore:	ST 131H	Survey Calculation Method:	Minimum Curvature
Design:	ST01-DRL	Database:	EDM 5000.14 Single User Db

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
4,861.86	3.46	13.28	4,853.79	196.42	72.18	-73.86	0.52	0.52	-0.74
4,875.29	3.53	13.26	4,867.20	197.21	72.37	-74.06	0.52	0.52	-0.15
4,888.71	3.60	13.30	4,880.59	198.03	72.56	-74.25	0.52	0.52	0.30
4,902.14	3.67	13.38	4,894.00	198.85	72.76	-74.46	0.52	0.52	0.60
4,915.57	3.74	13.50	4,907.40	199.70	72.96	-74.67	0.52	0.52	0.89
4,929.00	3.81	13.65	4,920.80	200.56	73.17	-74.88	0.53	0.52	1.12
4,942.43	3.86	13.86	4,934.20	201.43	73.38	-75.10	0.39	0.37	1.56
4,955.86	3.91	14.10	4,947.60	202.31	73.60	-75.33	0.39	0.37	1.79
4,969.29	3.95	14.38	4,961.00	203.21	73.83	-75.56	0.33	0.30	2.08
4,982.71	3.99	14.71	4,974.38	204.11	74.06	-75.80	0.34	0.30	2.46
4,996.14	4.03	15.10	4,987.78	205.01	74.30	-76.05	0.36	0.30	2.90
5,009.57	4.06	15.58	5,001.18	205.93	74.55	-76.31	0.34	0.22	3.57
5,023.00	4.08	16.19	5,014.57	206.84	74.81	-76.58	0.36	0.15	4.54
5,036.57	4.10	17.03	5,028.11	207.77	75.09	-76.87	0.47	0.15	6.19
5,050.14	4.11	17.99	5,041.64	208.70	75.38	-77.17	0.51	0.07	7.07
5,063.71	4.11	19.00	5,055.18	209.62	75.69	-77.48	0.53	0.00	7.44
5,077.29	4.12	20.02	5,068.72	210.54	76.02	-77.82	0.54	0.07	7.51
5,090.86	4.12	21.00	5,082.26	211.45	76.36	-78.16	0.52	0.00	7.22
5,104.43	4.12	21.89	5,095.79	212.36	76.72	-78.53	0.47	0.00	6.56
5,118.00	4.11	22.61	5,109.33	213.26	77.08	-78.91	0.39	-0.07	5.31
5,131.43	4.09	23.02	5,122.73	214.14	77.46	-79.29	0.26	-0.15	3.05
5,144.86	4.07	23.25	5,136.12	215.02	77.83	-79.67	0.19	-0.15	1.71
5,158.29	4.05	23.35	5,149.52	215.90	78.21	-80.05	0.16	-0.15	0.74
5,171.71	4.03	23.38	5,162.90	216.76	78.58	-80.43	0.15	-0.15	0.22
5,185.14	4.02	23.35	5,176.30	217.63	78.96	-80.82	0.08	-0.07	-0.22
5,198.57	4.01	23.29	5,189.70	218.49	79.33	-81.20	0.08	-0.07	-0.45
5,212.00	4.03	23.23	5,203.09	219.36	79.70	-81.57	0.15	0.15	-0.45
5,225.57	4.06	23.17	5,216.63	220.24	80.08	-81.96	0.22	0.22	-0.44
5,239.14	4.12	23.13	5,230.17	221.13	80.46	-82.35	0.44	0.44	-0.29
5,252.71	4.18	23.10	5,243.70	222.03	80.84	-82.74	0.44	0.44	-0.22
5,266.29	4.25	23.09	5,257.24	222.95	81.24	-83.14	0.52	0.52	-0.07
5,279.86	4.32	23.13	5,270.78	223.88	81.63	-83.55	0.52	0.52	0.29
5,293.43	4.40	23.22	5,284.31	224.83	82.04	-83.96	0.59	0.59	0.66
5,307.00	4.47	23.42	5,297.84	225.79	82.46	-84.38	0.53	0.52	1.47
5,320.43	4.54	23.76	5,311.22	226.76	82.88	-84.81	0.56	0.52	2.53
5,333.86	4.62	24.18	5,324.61	227.74	83.31	-85.26	0.65	0.60	3.13
5,347.29	4.69	24.59	5,338.00	228.73	83.76	-85.72	0.58	0.52	3.05
5,360.71	4.75	24.96	5,351.37	229.74	84.23	-86.19	0.50	0.45	2.76
5,374.14	4.80	25.23	5,364.76	230.75	84.70	-86.67	0.41	0.37	2.01
5,387.57	4.84	25.35	5,378.14	231.77	85.18	-87.16	0.31	0.30	0.89
5,401.00	4.85	25.22	5,391.52	232.79	85.67	-87.65	0.11	0.07	-0.97
5,414.57	4.83	24.69	5,405.04	233.83	86.15	-88.15	0.36	-0.15	-3.91
5,428.14	4.80	23.89	5,418.56	234.87	86.62	-88.62	0.54	-0.22	-5.90



Survey Report

Company:	Colgate Energy	Local Co-ordinate Reference:	Well Weaver 27 State Com 131H
Project:	Eddy County, NM (N83-NME)	TVD Reference:	3354+30 @ 3384.00usft
Site:	Weaver 27 State Com	MD Reference:	3354+30 @ 3384.00usft
Well:	Weaver 27 State Com 131H	North Reference:	Grid
Wellbore:	ST 131H	Survey Calculation Method:	Minimum Curvature
Design:	ST01-DRL	Database:	EDM 5000.14 Single User Db

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
5,441.71	4.75	22.89	5,432.09	235.91	87.07	-89.08	0.72	-0.37	-7.37
5,455.29	4.70	21.72	5,445.62	236.94	87.49	-89.51	0.80	-0.37	-8.62
5,468.86	4.65	20.43	5,459.15	237.97	87.89	-89.92	0.86	-0.37	-9.51
5,482.43	4.61	19.03	5,472.67	239.01	88.26	-90.30	0.88	-0.29	-10.32
5,496.00	4.58	17.56	5,486.20	240.04	88.60	-90.65	0.90	-0.22	-10.83
5,509.43	4.56	16.07	5,499.58	241.06	88.91	-90.97	0.90	-0.15	-11.09
5,522.86	4.56	14.53	5,512.97	242.09	89.19	-91.26	0.91	0.00	-11.47
5,536.29	4.56	13.00	5,526.36	243.13	89.45	-91.52	0.91	0.00	-11.39
5,549.71	4.57	11.52	5,539.74	244.17	89.67	-91.76	0.88	0.07	-11.03
5,563.14	4.57	10.13	5,553.12	245.22	89.87	-91.97	0.82	0.00	-10.35
5,576.57	4.56	8.89	5,566.51	246.28	90.05	-92.15	0.74	-0.07	-9.23
5,590.00	4.54	7.85	5,579.90	247.33	90.20	-92.32	0.63	-0.15	-7.74
5,603.43	4.48	7.24	5,593.29	248.38	90.34	-92.46	0.57	-0.45	-4.54
5,616.86	4.41	6.87	5,606.68	249.41	90.47	-92.60	0.56	-0.52	-2.76
5,630.29	4.33	6.68	5,620.07	250.43	90.59	-92.73	0.61	-0.60	-1.41
5,643.71	4.24	6.61	5,633.45	251.42	90.71	-92.86	0.67	-0.67	-0.52
5,657.14	4.16	6.63	5,646.85	252.40	90.82	-92.98	0.60	-0.60	0.15
5,670.57	4.08	6.72	5,660.24	253.36	90.93	-93.10	0.60	-0.60	0.67
5,684.00	4.02	6.87	5,673.64	254.30	91.05	-93.22	0.45	-0.45	1.12
5,697.57	3.97	7.02	5,687.17	255.24	91.16	-93.34	0.38	-0.37	1.11
5,711.14	3.95	7.20	5,700.71	256.17	91.28	-93.46	0.17	-0.15	1.33
5,724.71	3.93	7.38	5,714.25	257.09	91.39	-93.59	0.17	-0.15	1.33
5,738.29	3.91	7.53	5,727.80	258.01	91.52	-93.72	0.17	-0.15	1.10
5,751.86	3.89	7.63	5,741.34	258.93	91.64	-93.85	0.16	-0.15	0.74
5,765.43	3.87	7.63	5,754.88	259.84	91.76	-93.98	0.15	-0.15	0.00
5,779.00	3.83	7.48	5,768.41	260.74	91.88	-94.10	0.30	-0.29	-1.11
5,792.43	3.78	7.05	5,781.81	261.63	91.99	-94.23	0.43	-0.37	-3.20
5,805.86	3.72	6.43	5,795.22	262.50	92.09	-94.34	0.54	-0.45	-4.62
5,819.29	3.66	5.65	5,808.62	263.36	92.19	-94.43	0.58	-0.45	-5.81
5,832.71	3.59	4.72	5,822.01	264.20	92.26	-94.52	0.68	-0.52	-6.93
5,846.14	3.52	3.62	5,835.42	265.03	92.32	-94.59	0.73	-0.52	-8.19
5,859.57	3.46	2.34	5,848.82	265.85	92.37	-94.64	0.73	-0.45	-9.53
5,873.00	3.41	0.81	5,862.23	266.65	92.39	-94.66	0.78	-0.37	-11.39
5,886.57	3.37	359.01	5,875.77	267.46	92.39	-94.67	0.84	-0.29	-13.26
5,900.14	3.34	357.01	5,889.32	268.25	92.36	-94.65	0.89	-0.22	-14.74
5,913.71	3.32	354.94	5,902.87	269.04	92.30	-94.60	0.90	-0.15	-15.25
5,927.29	3.30	352.91	5,916.42	269.82	92.22	-94.52	0.88	-0.15	-14.95
5,940.86	3.28	351.00	5,929.97	270.59	92.11	-94.42	0.82	-0.15	-14.08
5,954.43	3.26	349.36	5,943.52	271.35	91.98	-94.30	0.70	-0.15	-12.09
5,968.00	3.23	348.13	5,957.07	272.10	91.83	-94.15	0.56	-0.22	-9.06
5,981.43	3.18	347.73	5,970.48	272.84	91.67	-94.00	0.41	-0.37	-2.98
5,994.86	3.11	347.83	5,983.89	273.56	91.52	-93.85	0.52	-0.52	0.74
6,008.29	3.03	348.32	5,997.30	274.26	91.37	-93.71	0.63	-0.60	3.65



Survey Report

Company:	Colgate Energy	Local Co-ordinate Reference:	Well Weaver 27 State Com 131H
Project:	Eddy County, NM (N83-NME)	TVD Reference:	3354+30 @ 3384.00usft
Site:	Weaver 27 State Com	MD Reference:	3354+30 @ 3384.00usft
Well:	Weaver 27 State Com 131H	North Reference:	Grid
Wellbore:	ST 131H	Survey Calculation Method:	Minimum Curvature
Design:	ST01-DRL	Database:	EDM 5000.14 Single User Db

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
6,021.71	2.94	349.14	6,010.70	274.95	91.23	-93.58	0.74	-0.67	6.11	
6,035.14	2.83	350.28	6,024.11	275.61	91.11	-93.46	0.92	-0.82	8.49	
6,048.57	2.69	351.78	6,037.53	276.25	91.01	-93.37	1.17	-1.04	11.17	
6,062.00	2.98	0.07	6,050.94	276.91	90.96	-93.33	3.73	2.16	61.73	
6,075.57	3.21	6.00	6,064.49	277.64	91.01	-93.38	2.90	1.69	43.70	
6,089.14	2.91	7.86	6,078.04	278.36	91.09	-93.47	2.33	-2.21	13.71	
6,102.71	2.58	10.37	6,091.60	279.00	91.19	-93.58	2.59	-2.43	18.50	
6,116.29	2.24	13.76	6,105.16	279.56	91.31	-93.70	2.71	-2.50	24.96	
6,129.86	1.92	18.27	6,118.72	280.03	91.45	-93.84	2.65	-2.36	33.24	
6,143.43	1.64	24.07	6,132.29	280.43	91.60	-93.99	2.45	-2.06	42.74	
6,157.00	1.42	30.83	6,145.85	280.75	91.76	-94.16	2.09	-1.62	49.82	
6,170.43	1.24	33.27	6,159.28	281.01	91.93	-94.33	1.40	-1.34	18.17	
6,183.86	1.35	35.19	6,172.71	281.26	92.10	-94.50	0.88	0.82	14.30	
6,197.29	1.57	35.17	6,186.13	281.54	92.30	-94.70	1.64	1.64	-0.15	
6,210.71	1.79	35.15	6,199.55	281.87	92.52	-94.93	1.64	1.64	-0.15	
6,224.14	2.01	35.13	6,212.97	282.23	92.78	-95.19	1.64	1.64	-0.15	
6,237.57	2.24	35.11	6,226.39	282.64	93.06	-95.48	1.71	1.71	-0.15	
6,251.00	2.78	27.18	6,239.81	283.14	93.36	-95.78	4.77	4.02	-59.05	
6,264.57	3.58	18.95	6,253.36	283.84	93.65	-96.08	6.77	5.90	-60.65	
6,278.14	4.52	15.75	6,266.89	284.75	93.94	-96.37	7.12	6.93	-23.58	
6,291.71	4.67	16.40	6,280.42	285.79	94.24	-96.68	1.17	1.11	4.79	
6,305.29	4.57	17.51	6,293.95	286.84	94.56	-97.00	0.99	-0.74	8.17	
6,318.86	4.47	18.72	6,307.48	287.86	94.89	-97.35	1.02	-0.74	8.92	
6,332.43	4.36	19.98	6,321.01	288.84	95.23	-97.70	1.08	-0.81	9.29	
6,346.00	4.24	21.22	6,334.54	289.80	95.59	-98.07	1.12	-0.88	9.14	
6,359.43	4.07	22.17	6,347.94	290.70	95.95	-98.43	1.37	-1.27	7.07	
6,372.86	3.89	23.02	6,361.34	291.56	96.31	-98.80	1.41	-1.34	6.33	
6,386.29	3.70	23.80	6,374.74	292.38	96.66	-99.16	1.47	-1.41	5.81	
6,399.71	3.53	24.49	6,388.13	293.15	97.01	-99.51	1.31	-1.27	5.14	
6,413.14	3.37	25.06	6,401.53	293.88	97.35	-99.86	1.22	-1.19	4.24	
6,426.57	3.24	25.42	6,414.94	294.58	97.68	-100.19	0.98	-0.97	2.68	
6,440.00	3.18	25.47	6,428.35	295.26	98.00	-100.52	0.45	-0.45	0.37	
6,453.57	3.20	25.04	6,441.90	295.94	98.32	-100.85	0.23	0.15	-3.17	
6,467.14	3.29	24.37	6,455.45	296.64	98.64	-101.18	0.72	0.66	-4.94	
6,480.71	3.40	23.64	6,469.00	297.37	98.96	-101.50	0.87	0.81	-5.38	
6,494.29	3.53	22.95	6,482.55	298.12	99.29	-101.84	1.01	0.96	-5.08	
6,507.86	3.66	22.39	6,496.09	298.90	99.62	-102.17	0.99	0.96	-4.13	
6,521.43	3.76	22.05	6,509.64	299.72	99.95	-102.51	0.75	0.74	-2.51	
6,535.00	4.22	19.30	6,523.17	300.60	100.28	-102.85	3.67	3.39	-20.27	
6,548.43	5.08	15.50	6,536.56	301.64	100.60	-103.18	6.80	6.40	-28.29	
6,561.86	5.95	13.42	6,549.93	302.89	100.92	-103.51	6.65	6.48	-15.49	
6,575.29	6.44	13.38	6,563.28	304.30	101.26	-103.86	3.65	3.65	-0.30	
6,588.71	6.40	14.57	6,576.61	305.76	101.62	-104.23	1.04	-0.30	8.87	
6,602.14	6.34	15.86	6,589.96	307.19	102.01	-104.64	1.16	-0.45	9.61	



Survey Report

Company:	Colgate Energy	Local Co-ordinate Reference:	Well Weaver 27 State Com 131H
Project:	Eddy County, NM (N83-NME)	TVD Reference:	3354+30 @ 3384.00usft
Site:	Weaver 27 State Com	MD Reference:	3354+30 @ 3384.00usft
Well:	Weaver 27 State Com 131H	North Reference:	Grid
Wellbore:	ST 131H	Survey Calculation Method:	Minimum Curvature
Design:	ST01-DRL	Database:	EDM 5000.14 Single User Db

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
6,615.57	6.25	17.05	6,603.31	308.61	102.43	-105.07	1.18	-0.67	8.86	
6,629.00	6.13	17.90	6,616.66	309.99	102.86	-105.51	1.12	-0.89	6.33	
6,642.57	5.93	17.79	6,630.16	311.34	103.30	-105.96	1.48	-1.47	-0.81	
6,656.14	5.70	17.11	6,643.66	312.66	103.71	-106.38	1.77	-1.69	-5.01	
6,669.71	5.45	16.01	6,657.16	313.92	104.09	-106.77	2.00	-1.84	-8.11	
6,683.29	5.20	14.61	6,670.68	315.14	104.42	-107.11	2.07	-1.84	-10.31	
6,696.86	4.97	13.04	6,684.20	316.30	104.71	-107.41	1.98	-1.69	-11.57	
6,710.43	4.77	11.46	6,697.72	317.43	104.96	-107.67	1.77	-1.47	-11.64	
6,724.00	4.62	10.14	6,711.25	318.52	105.16	-107.88	1.36	-1.11	-9.73	
6,737.57	4.54	9.71	6,724.77	319.59	105.35	-108.08	0.64	-0.59	-3.17	
6,751.14	4.51	9.61	6,738.30	320.64	105.53	-108.27	0.23	-0.22	-0.74	
6,764.71	4.50	9.73	6,751.83	321.69	105.71	-108.46	0.10	-0.07	0.88	
6,778.29	4.52	9.98	6,765.37	322.74	105.89	-108.65	0.21	0.15	1.84	
6,791.86	4.53	10.31	6,778.89	323.80	106.08	-108.85	0.21	0.07	2.43	
6,805.43	4.53	10.68	6,792.42	324.85	106.28	-109.05	0.22	0.00	2.73	
6,819.00	4.78	9.85	6,805.95	325.94	106.47	-109.26	1.91	1.84	-6.12	
6,832.43	5.57	8.27	6,819.32	327.13	106.66	-109.46	5.98	5.88	-11.76	
6,845.86	6.43	9.92	6,832.68	328.52	106.88	-109.69	6.53	6.40	12.29	
6,859.29	7.28	8.51	6,846.01	330.10	107.14	-109.96	6.45	6.33	-10.50	
6,872.71	7.18	8.82	6,859.33	331.77	107.39	-110.23	0.80	-0.75	2.31	
6,886.14	7.01	9.34	6,872.65	333.41	107.66	-110.50	1.35	-1.27	3.87	
6,899.57	6.83	9.76	6,885.98	335.00	107.92	-110.79	1.39	-1.34	3.13	
6,913.00	6.65	9.89	6,899.32	336.56	108.19	-111.07	1.35	-1.34	0.97	
6,926.57	6.48	9.38	6,912.80	338.09	108.45	-111.34	1.32	-1.25	-3.76	
6,940.14	6.32	8.47	6,926.29	339.58	108.69	-111.59	1.40	-1.18	-6.71	
6,953.71	6.17	7.26	6,939.78	341.04	108.89	-111.80	1.47	-1.11	-8.92	
6,967.29	6.01	5.82	6,953.28	342.47	109.05	-111.98	1.63	-1.18	-10.60	
6,980.86	5.85	4.22	6,966.78	343.87	109.18	-112.11	1.70	-1.18	-11.79	
6,994.43	5.68	2.47	6,980.28	345.23	109.26	-112.21	1.80	-1.25	-12.90	
7,008.00	5.49	0.61	6,993.79	346.55	109.29	-112.25	1.93	-1.40	-13.71	
7,021.57	5.24	359.12	7,007.30	347.82	109.29	-112.26	2.11	-1.84	-10.98	
7,035.14	4.97	357.60	7,020.81	349.03	109.26	-112.24	2.23	-1.99	-11.20	
7,048.71	4.67	356.03	7,034.33	350.17	109.19	-112.18	2.41	-2.21	-11.57	
7,062.29	4.35	354.41	7,047.87	351.23	109.11	-112.10	2.54	-2.36	-11.93	
7,075.86	4.00	352.71	7,061.41	352.21	109.00	-112.00	2.74	-2.58	-12.53	
7,089.43	3.61	350.94	7,074.95	353.10	108.87	-111.88	3.00	-2.87	-13.04	
7,103.00	3.17	349.10	7,088.49	353.89	108.73	-111.75	3.34	-3.24	-13.56	
7,116.43	2.62	348.94	7,101.90	354.56	108.60	-111.63	4.10	-4.10	-1.19	
7,129.86	2.03	349.72	7,115.32	355.09	108.50	-111.53	4.40	-4.39	5.81	
7,143.29	1.43	352.28	7,128.75	355.49	108.43	-111.47	4.50	-4.47	19.06	
7,156.71	0.84	0.03	7,142.16	355.76	108.41	-111.45	4.53	-4.40	57.75	
7,170.14	0.36	34.47	7,155.59	355.89	108.44	-111.48	4.32	-3.57	256.44	
7,183.57	0.45	112.80	7,169.02	355.91	108.51	-111.55	3.84	0.67	583.25	



Survey Report

Company:	Colgate Energy	Local Co-ordinate Reference:	Well Weaver 27 State Com 131H
Project:	Eddy County, NM (N83-NME)	TVD Reference:	3354+30 @ 3384.00usft
Site:	Weaver 27 State Com	MD Reference:	3354+30 @ 3384.00usft
Well:	Weaver 27 State Com 131H	North Reference:	Grid
Wellbore:	ST 131H	Survey Calculation Method:	Minimum Curvature
Design:	ST01-DRL	Database:	EDM 5000.14 Single User Db

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
7,197.00	0.52	76.13	7,182.45	355.90	108.62	-111.66	2.33	0.52	-273.05	
7,210.57	1.21	21.82	7,196.02	356.05	108.73	-111.77	7.37	5.08	-400.22	
7,224.14	2.18	10.04	7,209.59	356.44	108.83	-111.87	7.56	7.15	-86.81	
7,237.71	2.66	10.43	7,223.14	357.00	108.93	-111.98	3.54	3.54	2.87	
7,251.29	2.63	15.78	7,236.71	357.61	109.07	-112.13	1.83	-0.22	39.40	
7,264.86	2.66	21.58	7,250.27	358.20	109.27	-112.33	1.98	0.22	42.74	
7,278.43	2.74	27.32	7,263.82	358.78	109.54	-112.60	2.08	0.59	42.30	
7,292.00	2.83	32.79	7,277.37	359.35	109.87	-112.94	2.07	0.66	40.31	
7,305.43	2.77	38.17	7,290.79	359.89	110.25	-113.32	2.01	-0.45	40.06	
7,318.86	2.69	43.56	7,304.20	360.37	110.66	-113.74	2.00	-0.60	40.13	
7,332.29	2.62	49.08	7,317.62	360.80	111.11	-114.19	1.97	-0.52	41.10	
7,345.71	2.56	54.76	7,331.02	361.17	111.59	-114.67	1.96	-0.45	42.32	
7,359.14	2.52	60.52	7,344.44	361.49	112.09	-115.18	1.92	-0.30	42.89	
7,372.57	2.50	66.24	7,357.86	361.75	112.62	-115.71	1.87	-0.15	42.59	
7,386.00	2.52	71.74	7,371.28	361.96	113.17	-116.26	1.80	0.15	40.95	
7,399.57	2.46	76.85	7,384.83	362.12	113.73	-116.83	1.69	-0.44	37.66	
7,413.14	2.43	81.89	7,398.39	362.23	114.30	-117.39	1.60	-0.22	37.14	
7,426.71	2.41	86.74	7,411.95	362.29	114.87	-117.96	1.52	-0.15	35.74	
7,440.29	2.40	91.33	7,425.52	362.30	115.44	-118.53	1.42	-0.07	33.80	
7,453.86	2.39	95.59	7,439.07	362.26	116.01	-119.10	1.31	-0.07	31.39	
7,467.43	2.38	99.42	7,452.63	362.19	116.56	-119.66	1.18	-0.07	28.22	
7,481.00	2.34	102.75	7,466.19	362.08	117.11	-120.21	1.05	-0.29	24.54	
7,494.43	2.24	104.91	7,479.61	361.95	117.63	-120.73	0.98	-0.74	16.08	
7,507.86	2.12	106.53	7,493.03	361.82	118.13	-121.22	1.00	-0.89	12.06	
7,521.29	1.98	107.84	7,506.45	361.67	118.58	-121.67	1.10	-1.04	9.75	
7,534.71	1.83	109.04	7,519.87	361.53	119.01	-122.10	1.16	-1.12	8.94	
7,548.14	1.68	110.35	7,533.29	361.40	119.40	-122.48	1.16	-1.12	9.75	
7,561.57	1.53	112.12	7,546.71	361.26	119.75	-122.83	1.18	-1.12	13.18	
7,575.00	1.38	114.88	7,560.14	361.12	120.06	-123.14	1.23	-1.12	20.55	
7,588.57	1.27	120.51	7,573.71	360.98	120.34	-123.42	1.26	-0.81	41.49	
7,602.14	1.17	127.76	7,587.27	360.82	120.58	-123.66	1.35	-0.74	53.43	
7,615.71	1.10	136.08	7,600.84	360.64	120.78	-123.86	1.32	-0.52	61.31	
7,629.29	1.06	144.63	7,614.42	360.44	120.94	-124.02	1.22	-0.29	62.96	
7,642.86	1.09	154.36	7,627.99	360.22	121.07	-124.14	1.36	0.22	71.70	
7,656.43	1.15	162.81	7,641.55	359.98	121.16	-124.24	1.29	0.44	62.27	
7,670.00	1.22	170.34	7,655.12	359.70	121.23	-124.30	1.26	0.52	55.49	
7,683.43	1.19	175.30	7,668.55	359.42	121.26	-124.33	0.81	-0.22	36.93	
7,696.86	1.17	180.21	7,681.97	359.15	121.27	-124.34	0.77	-0.15	36.56	
7,710.29	1.22	187.21	7,695.40	358.87	121.26	-124.32	1.15	0.37	52.12	
7,723.71	1.27	189.36	7,708.82	358.58	121.21	-124.28	0.51	0.37	16.02	
7,737.14	1.33	191.33	7,722.24	358.28	121.16	-124.22	0.56	0.45	14.67	
7,750.57	1.39	193.15	7,735.67	357.97	121.09	-124.15	0.55	0.45	13.55	
7,764.00	1.45	194.81	7,749.10	357.65	121.01	-124.06	0.54	0.45	12.36	



Survey Report

Company:	Colgate Energy	Local Co-ordinate Reference:	Well Weaver 27 State Com 131H
Project:	Eddy County, NM (N83-NME)	TVD Reference:	3354+30 @ 3384.00usft
Site:	Weaver 27 State Com	MD Reference:	3354+30 @ 3384.00usft
Well:	Weaver 27 State Com 131H	North Reference:	Grid
Wellbore:	ST 131H	Survey Calculation Method:	Minimum Curvature
Design:	ST01-DRL	Database:	EDM 5000.14 Single User Db

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
7,777.43	1.52	197.64	7,762.52	357.31	120.91	-123.96	0.75	0.52	21.07
7,790.86	1.62	200.15	7,775.95	356.97	120.79	-123.84	0.90	0.74	18.69
7,804.29	1.72	202.25	7,789.37	356.60	120.65	-123.70	0.87	0.74	15.64
7,817.71	1.83	203.93	7,802.78	356.22	120.49	-123.53	0.91	0.82	12.52
7,831.14	1.92	205.16	7,816.21	355.82	120.31	-123.34	0.73	0.67	9.16
7,844.57	2.00	205.89	7,829.63	355.40	120.11	-123.14	0.62	0.60	5.44
7,858.00	2.04	205.96	7,843.05	354.98	119.90	-122.93	0.30	0.30	0.52
7,871.57	2.03	205.03	7,856.61	354.54	119.69	-122.72	0.25	-0.07	-6.85
7,885.14	1.99	203.54	7,870.17	354.11	119.50	-122.52	0.48	-0.29	-10.98
7,898.71	1.92	201.67	7,883.74	353.68	119.32	-122.34	0.70	-0.52	-13.78
7,912.29	1.84	199.63	7,897.31	353.27	119.16	-122.18	0.77	-0.59	-15.02
7,925.86	1.75	197.65	7,910.87	352.86	119.03	-122.04	0.81	-0.66	-14.59
7,939.43	1.66	196.11	7,924.44	352.48	118.91	-121.92	0.74	-0.66	-11.35
7,953.00	1.55	195.60	7,938.00	352.11	118.81	-121.81	0.82	-0.81	-3.76
7,967.00	1.46	199.04	7,952.00	351.76	118.70	-121.70	0.91	-0.64	24.57
7,981.00	1.39	204.47	7,965.99	351.44	118.57	-121.57	1.09	-0.50	38.79
7,995.00	1.37	211.13	7,979.99	351.14	118.41	-121.41	1.15	-0.14	47.57
8,009.00	1.41	217.90	7,993.98	350.86	118.22	-121.22	1.21	0.29	48.36
8,023.00	1.52	223.46	8,007.98	350.59	117.99	-120.98	1.28	0.79	39.71
8,037.20	1.66	229.99	8,022.17	350.32	117.70	-120.69	1.61	0.99	45.99
8,051.40	1.86	235.33	8,036.37	350.06	117.35	-120.34	1.82	1.41	37.61
8,065.60	2.11	239.32	8,050.56	349.79	116.94	-119.92	2.01	1.76	28.10
8,079.80	2.37	242.08	8,064.75	349.52	116.45	-119.44	1.98	1.83	19.44
8,094.00	2.63	243.74	8,078.93	349.24	115.90	-118.88	1.90	1.83	11.69
8,107.57	2.87	244.80	8,092.49	348.96	115.31	-118.29	1.81	1.77	7.81
8,121.14	3.45	249.12	8,106.04	348.67	114.63	-117.60	4.62	4.27	31.83
8,134.71	5.60	259.33	8,119.56	348.40	113.59	-116.57	16.86	15.84	75.24
8,148.29	7.97	269.11	8,133.05	348.26	112.00	-114.97	19.35	17.45	72.02
8,161.86	10.55	271.20	8,146.44	348.27	109.82	-112.79	19.17	19.01	15.40
8,175.43	13.01	273.04	8,159.72	348.38	107.05	-110.03	18.34	18.13	13.56
8,189.00	15.57	274.56	8,172.87	348.61	103.71	-106.69	19.07	18.87	11.20
8,202.57	18.22	275.83	8,185.86	348.97	99.78	-102.76	19.72	19.53	9.36
8,216.14	20.78	277.89	8,198.65	349.51	95.29	-98.27	19.53	18.87	15.18
8,229.71	23.24	280.67	8,211.23	350.34	90.27	-93.26	19.68	18.13	20.49
8,243.29	25.57	282.26	8,223.59	351.46	84.77	-87.77	17.83	17.16	11.71
8,256.86	27.85	281.12	8,235.72	352.69	78.80	-81.81	17.22	16.80	-8.40
8,270.43	30.38	280.87	8,247.57	353.95	72.32	-75.34	18.67	18.64	-1.84
8,284.00	32.82	281.59	8,259.13	355.34	65.35	-68.38	18.19	17.98	5.31
8,297.43	35.15	282.51	8,270.26	356.90	58.00	-61.05	17.77	17.35	6.85
8,310.86	37.53	282.90	8,281.08	358.66	50.24	-53.31	17.80	17.72	2.90
8,324.29	39.56	282.99	8,291.58	360.53	42.09	-45.17	15.12	15.12	0.67
8,337.71	39.09	283.31	8,301.96	362.46	33.80	-36.90	3.81	-3.50	2.38
8,351.14	38.79	283.67	8,312.41	364.43	25.60	-28.71	2.80	-2.23	2.68
8,364.57	38.24	283.94	8,322.92	366.43	17.48	-20.61	4.28	-4.10	2.01



Survey Report

Company:	Colgate Energy	Local Co-ordinate Reference:	Well Weaver 27 State Com 131H
Project:	Eddy County, NM (N83-NME)	TVD Reference:	3354+30 @ 3384.00usft
Site:	Weaver 27 State Com	MD Reference:	3354+30 @ 3384.00usft
Well:	Weaver 27 State Com 131H	North Reference:	Grid
Wellbore:	ST 131H	Survey Calculation Method:	Minimum Curvature
Design:	ST01-DRL	Database:	EDM 5000.14 Single User Db

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
8,378.00	37.70	284.06	8,333.51	368.43	9.46	-12.61	4.06	-4.02	0.89
8,391.57	37.20	283.85	8,344.28	370.42	1.45	-4.62	3.80	-3.68	-1.55
8,405.14	36.74	283.44	8,355.12	372.34	-6.48	3.30	3.85	-3.39	-3.02
8,418.71	36.31	282.91	8,366.02	374.18	-14.34	11.14	3.93	-3.17	-3.91
8,432.29	35.91	282.32	8,377.00	375.93	-22.15	18.94	3.90	-2.95	-4.34
8,445.86	35.55	281.73	8,388.01	377.58	-29.90	26.67	3.67	-2.65	-4.35
8,459.43	35.24	281.18	8,399.07	379.14	-37.61	34.36	3.28	-2.28	-4.05
8,473.00	35.84	278.35	8,410.12	380.48	-45.38	42.12	12.90	4.42	-20.85
8,486.43	37.49	276.49	8,420.89	381.51	-53.33	50.07	14.81	12.29	-13.85
8,499.86	39.64	275.52	8,431.39	382.39	-61.66	58.38	16.63	16.01	-7.22
8,513.29	41.78	274.54	8,441.57	383.15	-70.38	67.10	16.63	15.93	-7.30
8,526.71	43.92	273.90	8,451.41	383.82	-79.48	76.20	16.27	15.95	-4.77
8,540.14	45.99	273.14	8,460.91	384.41	-88.95	85.66	15.92	15.41	-5.66
8,553.57	47.86	271.82	8,470.08	384.83	-98.75	95.46	15.67	13.92	-9.83
8,567.00	49.81	271.09	8,478.92	385.08	-108.86	105.56	15.09	14.52	-5.44
8,580.57	51.79	270.97	8,487.50	385.27	-119.37	116.08	14.61	14.59	-0.88
8,594.14	53.72	270.77	8,495.71	385.44	-130.18	126.87	14.27	14.22	-1.47
8,607.71	55.49	270.92	8,503.57	385.60	-141.24	137.93	13.07	13.04	1.11
8,621.29	56.97	271.99	8,511.12	385.89	-152.52	149.21	12.71	10.90	7.88
8,634.86	58.34	272.95	8,518.38	386.38	-163.97	160.66	11.73	10.10	7.07
8,648.43	60.17	273.15	8,525.32	387.00	-175.62	172.30	13.54	13.49	1.47
8,662.00	62.04	273.79	8,531.87	387.72	-187.48	184.15	14.39	13.78	4.72
8,675.43	62.96	274.18	8,538.07	388.55	-199.36	196.03	7.32	6.85	2.90
8,688.86	63.04	274.00	8,544.17	389.40	-211.30	207.96	1.33	0.60	-1.34
8,702.29	63.15	273.83	8,550.25	390.22	-223.24	219.90	1.39	0.82	-1.27
8,715.71	63.25	273.68	8,556.30	391.01	-235.20	231.85	1.25	0.75	-1.12
8,729.14	64.85	273.06	8,562.18	391.72	-247.25	243.89	12.62	11.91	-4.62
8,742.57	66.81	272.04	8,567.67	392.26	-259.49	256.13	16.16	14.59	-7.59
8,756.00	68.70	271.01	8,572.76	392.59	-271.92	268.55	15.76	14.07	-7.67
8,769.57	69.92	270.96	8,577.55	392.81	-284.61	281.24	9.00	8.99	-0.37
8,783.14	72.23	270.79	8,581.95	393.00	-297.44	294.07	17.06	17.02	-1.25
8,796.71	74.54	270.87	8,585.83	393.19	-310.45	307.07	17.03	17.02	0.59
8,810.29	76.86	271.36	8,589.19	393.45	-323.60	320.22	17.44	17.08	3.61
8,823.86	79.11	271.86	8,592.01	393.82	-336.87	333.49	16.97	16.58	3.68
8,837.43	81.34	272.02	8,594.32	394.28	-350.23	346.85	16.47	16.43	1.18
8,851.00	83.70	272.51	8,596.08	394.81	-363.68	360.29	17.76	17.39	3.61
8,863.60	83.63	272.55	8,597.47	395.36	-376.19	372.79	0.64	-0.56	0.32
8,876.20	83.55	272.60	8,598.88	395.92	-388.69	385.29	0.75	-0.63	0.40
8,888.80	83.47	272.64	8,600.30	396.49	-401.20	397.80	0.71	-0.63	0.32
8,901.40	83.39	272.69	8,601.75	397.08	-413.70	410.29	0.75	-0.63	0.40
8,914.00	82.98	272.99	8,603.24	397.70	-426.20	422.78	4.02	-3.25	2.38
8,924.33	82.38	273.52	8,604.56	398.28	-436.43	433.01	7.72	-5.81	5.13
8,934.67	82.52	274.36	8,605.92	398.98	-446.66	443.23	8.17	1.35	8.12



Survey Report

Company:	Colgate Energy	Local Co-ordinate Reference:	Well Weaver 27 State Com 131H
Project:	Eddy County, NM (N83-NME)	TVD Reference:	3354+30 @ 3384.00usft
Site:	Weaver 27 State Com	MD Reference:	3354+30 @ 3384.00usft
Well:	Weaver 27 State Com 131H	North Reference:	Grid
Wellbore:	ST 131H	Survey Calculation Method:	Minimum Curvature
Design:	ST01-DRL	Database:	EDM 5000.14 Single User Db

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
8,945.00	82.96	275.06	8,607.22	399.82	-456.87	453.43	7.96	4.26	6.78
8,954.00	83.42	275.52	8,608.29	400.65	-465.77	462.32	7.22	5.16	5.09
EOC: 8954.00' MD, 462.32' VS,8608.29' TVD									
8,958.57	83.66	275.75	8,608.80	401.09	-470.29	466.84	7.22	5.16	5.08
8,972.14	83.86	275.82	8,610.28	402.45	-483.71	480.25	1.56	1.47	0.52
8,985.71	84.93	276.25	8,611.60	403.87	-497.14	493.66	8.49	7.89	3.17
8,999.29	85.10	276.34	8,612.78	405.36	-510.58	507.10	1.42	1.25	0.66
9,012.86	85.07	276.31	8,613.95	406.85	-524.02	520.52	0.31	-0.22	-0.22
9,026.43	85.08	276.30	8,615.11	408.33	-537.46	533.95	0.10	0.07	-0.07
9,040.00	85.16	276.33	8,616.26	409.82	-550.90	547.37	0.63	0.59	0.22
9,053.43	85.42	276.43	8,617.37	411.31	-564.20	560.66	2.07	1.94	0.74
9,066.86	86.44	275.90	8,618.32	412.74	-577.52	573.97	8.55	7.59	-3.95
9,080.29	87.48	275.10	8,619.03	414.03	-590.87	587.30	9.76	7.74	-5.96
9,093.71	88.40	274.53	8,619.52	415.16	-604.23	600.66	8.06	6.86	-4.25
9,107.14	88.51	274.75	8,619.88	416.24	-617.61	614.03	1.83	0.82	1.64
9,120.57	88.65	274.97	8,620.21	417.38	-630.99	627.40	1.94	1.04	1.64
9,134.00	89.53	274.64	8,620.42	418.50	-644.37	640.77	7.00	6.55	-2.46
9,147.57	90.64	274.06	8,620.40	419.53	-657.90	654.29	9.23	8.18	-4.27
9,161.14	91.67	273.81	8,620.13	420.46	-671.44	667.82	7.81	7.59	-1.84
9,174.71	91.70	273.94	8,619.73	421.38	-684.97	681.34	0.98	0.22	0.96
9,188.29	91.74	274.07	8,619.32	422.33	-698.51	694.87	1.00	0.29	0.96
9,201.86	91.85	274.20	8,618.90	423.31	-712.04	708.39	1.25	0.81	0.96
9,215.43	91.96	274.32	8,618.45	424.31	-725.56	721.91	1.20	0.81	0.88
9,229.00	92.08	274.42	8,617.97	425.35	-739.09	735.42	1.15	0.88	0.74
9,242.43	92.65	274.25	8,617.41	426.36	-752.47	748.79	4.43	4.24	-1.27
9,255.86	93.55	273.50	8,616.69	427.27	-765.84	762.16	8.72	6.70	-5.58
9,269.29	93.95	272.62	8,615.81	427.98	-779.23	775.54	7.18	2.98	-6.55
9,282.71	94.04	272.66	8,614.87	428.60	-792.60	788.91	0.73	0.67	0.30
9,296.14	94.14	272.68	8,613.92	429.22	-805.98	802.28	0.76	0.74	0.15
9,309.57	94.24	272.68	8,612.94	429.85	-819.36	815.65	0.74	0.74	0.00
9,323.00	94.34	272.64	8,611.93	430.47	-832.74	829.03	0.80	0.74	-0.30
9,336.43	94.47	272.55	8,610.90	431.08	-846.12	842.40	1.18	0.97	-0.67
9,349.86	94.60	272.42	8,609.84	431.66	-859.49	855.77	1.37	0.97	-0.97
9,363.29	94.73	272.27	8,608.75	432.21	-872.86	869.14	1.48	0.97	-1.12
9,376.71	94.85	272.13	8,607.62	432.72	-886.23	882.50	1.37	0.89	-1.04
9,390.14	95.02	272.01	8,606.47	433.20	-899.60	895.86	1.55	1.27	-0.89
9,403.57	95.31	271.04	8,605.26	433.56	-912.97	909.23	7.51	2.16	-7.22
9,417.00	95.39	269.75	8,604.01	433.65	-926.34	922.60	9.58	0.60	-9.61
9,430.57	95.37	268.89	8,602.74	433.49	-939.85	936.11	6.31	-0.15	-6.34
9,444.14	95.54	268.90	8,601.45	433.23	-953.36	949.62	1.25	1.25	0.07
9,457.71	95.71	268.93	8,600.12	432.97	-966.86	963.12	1.27	1.25	0.22
9,471.29	95.85	268.96	8,598.75	432.73	-980.37	976.63	1.05	1.03	0.22
9,484.86	95.99	268.98	8,597.35	432.48	-993.86	990.13	1.04	1.03	0.15



Survey Report

Company:	Colgate Energy	Local Co-ordinate Reference:	Well Weaver 27 State Com 131H
Project:	Eddy County, NM (N83-NME)	TVD Reference:	3354+30 @ 3384.00usft
Site:	Weaver 27 State Com	MD Reference:	3354+30 @ 3384.00usft
Well:	Weaver 27 State Com 131H	North Reference:	Grid
Wellbore:	ST 131H	Survey Calculation Method:	Minimum Curvature
Design:	ST01-DRL	Database:	EDM 5000.14 Single User Db

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
9,498.43	96.12	268.99	8,595.92	432.24	-1,007.35	1,003.62	0.96	0.96	0.07	
9,512.00	96.24	268.97	8,594.46	432.00	-1,020.84	1,017.11	0.90	0.88	-0.15	
9,525.43	96.34	268.90	8,592.98	431.76	-1,034.19	1,030.46	0.91	0.74	-0.52	
9,538.86	96.42	268.80	8,591.49	431.49	-1,047.53	1,043.81	0.95	0.60	-0.74	
9,552.29	96.48	268.68	8,589.98	431.19	-1,060.88	1,057.15	0.99	0.45	-0.89	
9,565.71	96.54	268.56	8,588.46	430.87	-1,074.21	1,070.48	0.99	0.45	-0.89	
9,579.14	96.55	268.44	8,586.93	430.52	-1,087.54	1,083.82	0.89	0.07	-0.89	
9,592.57	96.49	268.33	8,585.41	430.15	-1,100.88	1,097.16	0.93	-0.45	-0.82	
9,606.00	95.45	267.81	8,584.01	429.70	-1,114.23	1,110.52	8.65	-7.74	-3.87	
9,619.57	95.39	267.73	8,582.73	429.17	-1,127.73	1,124.02	0.73	-0.44	-0.59	
9,633.14	95.34	267.66	8,581.46	428.63	-1,141.23	1,137.52	0.63	-0.37	-0.52	
9,646.71	95.36	267.59	8,580.19	428.07	-1,154.73	1,151.03	0.53	0.15	-0.52	
9,660.29	95.42	267.52	8,578.92	427.49	-1,168.24	1,164.54	0.68	0.44	-0.52	
9,673.86	95.51	267.43	8,577.63	426.90	-1,181.73	1,178.04	0.94	0.66	-0.66	
9,687.43	95.60	267.33	8,576.31	426.28	-1,195.22	1,191.53	0.99	0.66	-0.74	
9,701.00	95.68	267.19	8,574.98	425.63	-1,208.71	1,205.03	1.18	0.59	-1.03	
9,714.43	95.76	267.01	8,573.64	424.96	-1,222.06	1,218.38	1.46	0.60	-1.34	
9,727.86	95.81	266.80	8,572.29	424.24	-1,235.40	1,231.73	1.60	0.37	-1.56	
9,741.29	95.82	266.58	8,570.93	423.47	-1,248.74	1,245.07	1.63	0.07	-1.64	
9,754.71	95.73	266.38	8,569.58	422.65	-1,262.07	1,258.41	1.63	-0.67	-1.49	
9,768.14	95.56	266.19	8,568.25	421.78	-1,275.40	1,271.75	1.89	-1.27	-1.41	
9,781.57	94.46	266.12	8,567.08	420.88	-1,288.75	1,285.11	8.21	-8.19	-0.52	
9,795.00	93.45	266.09	8,566.16	419.97	-1,302.12	1,298.48	7.52	-7.52	-0.22	
9,808.57	93.44	266.03	8,565.34	419.04	-1,315.63	1,312.00	0.45	-0.07	-0.44	
9,822.14	93.47	266.00	8,564.52	418.10	-1,329.14	1,325.52	0.31	0.22	-0.22	
9,835.71	93.52	265.98	8,563.69	417.15	-1,342.66	1,339.04	0.40	0.37	-0.15	
9,849.29	93.58	265.96	8,562.85	416.20	-1,356.18	1,352.57	0.47	0.44	-0.15	
9,862.86	93.64	265.93	8,562.00	415.24	-1,369.69	1,366.08	0.49	0.44	-0.22	
9,876.43	93.71	265.88	8,561.13	414.28	-1,383.19	1,379.60	0.63	0.52	-0.37	
9,890.00	93.76	265.79	8,560.25	413.29	-1,396.70	1,393.11	0.76	0.37	-0.66	
9,903.43	93.81	265.64	8,559.36	412.29	-1,410.06	1,406.48	1.18	0.37	-1.12	
9,916.86	93.83	265.46	8,558.46	411.25	-1,423.42	1,419.85	1.35	0.15	-1.34	
9,930.29	93.79	265.27	8,557.57	410.17	-1,436.78	1,433.22	1.44	-0.30	-1.41	
9,943.71	93.65	265.08	8,556.70	409.04	-1,450.12	1,446.57	1.76	-1.04	-1.42	
9,957.14	93.36	264.96	8,555.88	407.88	-1,463.48	1,459.94	2.34	-2.16	-0.89	
9,970.57	92.27	265.14	8,555.22	406.72	-1,476.84	1,473.31	8.23	-8.12	1.34	
9,984.00	91.11	265.15	8,554.82	405.58	-1,490.22	1,486.69	8.64	-8.64	0.07	
9,997.57	91.08	265.08	8,554.57	404.43	-1,503.73	1,500.22	0.56	-0.22	-0.52	
10,011.14	91.07	265.02	8,554.31	403.26	-1,517.25	1,513.75	0.45	-0.07	-0.44	
10,024.71	91.10	264.98	8,554.05	402.08	-1,530.77	1,527.27	0.37	0.22	-0.29	
10,038.29	91.16	264.94	8,553.79	400.88	-1,544.29	1,540.81	0.53	0.44	-0.29	
10,051.86	91.23	264.91	8,553.50	399.68	-1,557.81	1,554.33	0.56	0.52	-0.22	
10,065.43	91.29	264.88	8,553.20	398.48	-1,571.32	1,567.85	0.49	0.44	-0.22	
10,079.00	91.35	264.86	8,552.89	397.26	-1,584.83	1,581.38	0.47	0.44	-0.15	



Survey Report

Company:	Colgate Energy	Local Co-ordinate Reference:	Well Weaver 27 State Com 131H
Project:	Eddy County, NM (N83-NME)	TVD Reference:	3354+30 @ 3384.00usft
Site:	Weaver 27 State Com	MD Reference:	3354+30 @ 3384.00usft
Well:	Weaver 27 State Com 131H	North Reference:	Grid
Wellbore:	ST 131H	Survey Calculation Method:	Minimum Curvature
Design:	ST01-DRL	Database:	EDM 5000.14 Single User Db

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
10,092.43	91.39	264.84	8,552.57	396.06	-1,598.20	1,594.76	0.33	0.30	-0.15	
10,105.86	91.44	264.82	8,552.24	394.85	-1,611.57	1,608.14	0.40	0.37	-0.15	
10,119.29	91.51	264.81	8,551.89	393.63	-1,624.94	1,621.52	0.53	0.52	-0.07	
10,132.71	91.57	264.80	8,551.53	392.42	-1,638.30	1,634.89	0.45	0.45	-0.07	
10,146.14	91.61	264.79	8,551.16	391.20	-1,651.67	1,648.27	0.31	0.30	-0.07	
10,159.57	91.64	264.80	8,550.78	389.98	-1,665.04	1,661.65	0.24	0.22	0.07	
10,173.00	91.66	264.82	8,550.39	388.77	-1,678.41	1,675.03	0.21	0.15	0.15	
10,186.57	91.64	264.86	8,550.00	387.55	-1,691.92	1,688.55	0.33	-0.15	0.29	
10,200.14	91.62	264.91	8,549.62	386.34	-1,705.43	1,702.07	0.40	-0.15	0.37	
10,213.71	91.57	264.96	8,549.24	385.14	-1,718.94	1,715.59	0.52	-0.37	0.37	
10,227.29	91.48	265.01	8,548.88	383.96	-1,732.47	1,729.12	0.76	-0.66	0.37	
10,240.86	91.33	265.05	8,548.54	382.78	-1,745.98	1,742.65	1.14	-1.11	0.29	
10,254.43	91.20	266.24	8,548.24	381.75	-1,759.51	1,756.18	8.82	-0.96	8.77	
10,268.00	90.96	267.47	8,547.99	381.01	-1,773.06	1,769.73	9.23	-1.77	9.06	
10,281.43	90.87	267.86	8,547.77	380.46	-1,786.47	1,783.16	2.98	-0.67	2.90	
10,294.86	90.86	267.83	8,547.57	379.95	-1,799.89	1,796.58	0.24	-0.07	-0.22	
10,308.29	90.86	267.80	8,547.37	379.44	-1,813.31	1,810.00	0.22	0.00	-0.22	
10,321.71	90.89	267.77	8,547.16	378.92	-1,826.72	1,823.41	0.32	0.22	-0.22	
10,335.14	90.92	267.74	8,546.95	378.40	-1,840.14	1,836.83	0.32	0.22	-0.22	
10,348.57	90.97	267.71	8,546.73	377.87	-1,853.56	1,850.26	0.43	0.37	-0.22	
10,362.00	91.03	267.69	8,546.50	377.33	-1,866.97	1,863.68	0.47	0.45	-0.15	
10,375.57	91.09	267.68	8,546.25	376.78	-1,880.53	1,877.24	0.45	0.44	-0.07	
10,389.14	91.15	267.67	8,545.98	376.23	-1,894.09	1,890.80	0.45	0.44	-0.07	
10,402.71	91.22	267.68	8,545.70	375.68	-1,907.64	1,904.36	0.52	0.52	0.07	
10,416.29	91.30	267.69	8,545.40	375.13	-1,921.21	1,917.93	0.59	0.59	0.07	
10,429.86	91.38	267.71	8,545.08	374.58	-1,934.76	1,931.49	0.61	0.59	0.15	
10,443.43	91.44	267.74	8,544.75	374.05	-1,948.32	1,945.05	0.49	0.44	0.22	
10,457.00	91.51	267.79	8,544.40	373.52	-1,961.87	1,958.61	0.63	0.52	0.37	
10,470.43	91.56	267.85	8,544.04	373.01	-1,975.29	1,972.03	0.58	0.37	0.45	
10,483.86	91.58	267.92	8,543.67	372.51	-1,988.70	1,985.45	0.54	0.15	0.52	
10,497.29	91.59	268.00	8,543.30	372.03	-2,002.12	1,998.87	0.60	0.07	0.60	
10,510.71	91.57	268.07	8,542.93	371.57	-2,015.53	2,012.28	0.54	-0.15	0.52	
10,524.14	91.52	268.14	8,542.57	371.13	-2,028.95	2,025.70	0.64	-0.37	0.52	
10,537.57	91.83	269.21	8,542.18	370.82	-2,042.37	2,039.12	8.29	2.31	7.97	
10,551.00	91.85	269.57	8,541.75	370.68	-2,055.79	2,052.54	2.68	0.15	2.68	
10,564.57	91.81	269.57	8,541.31	370.57	-2,069.35	2,066.11	0.29	-0.29	0.00	
10,578.14	91.83	269.56	8,540.88	370.47	-2,082.91	2,079.67	0.16	0.15	-0.07	
10,591.71	91.90	269.54	8,540.44	370.36	-2,096.48	2,093.23	0.54	0.52	-0.15	
10,605.29	92.02	269.52	8,539.98	370.25	-2,110.05	2,106.80	0.90	0.88	-0.15	
10,618.86	92.15	269.50	8,539.48	370.14	-2,123.61	2,120.37	0.97	0.96	-0.15	
10,632.43	93.06	269.27	8,538.86	369.99	-2,137.16	2,133.92	6.92	6.71	-1.69	
10,646.00	93.11	269.26	8,538.13	369.82	-2,150.71	2,147.47	0.38	0.37	-0.07	
10,659.57	93.16	269.26	8,537.39	369.64	-2,164.26	2,161.02	0.37	0.37	0.00	



Survey Report

Company:	Colgate Energy	Local Co-ordinate Reference:	Well Weaver 27 State Com 131H
Project:	Eddy County, NM (N83-NME)	TVD Reference:	3354+30 @ 3384.00usft
Site:	Weaver 27 State Com	MD Reference:	3354+30 @ 3384.00usft
Well:	Weaver 27 State Com 131H	North Reference:	Grid
Wellbore:	ST 131H	Survey Calculation Method:	Minimum Curvature
Design:	ST01-DRL	Database:	EDM 5000.14 Single User Db

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
10,673.14	93.25	269.27	8,536.63	369.47	-2,177.81	2,174.57	0.67	0.66	0.07	
10,686.71	93.34	269.29	8,535.85	369.30	-2,191.36	2,188.12	0.68	0.66	0.15	
10,700.29	93.45	269.31	8,535.05	369.13	-2,204.91	2,201.67	0.82	0.81	0.15	
10,713.86	93.55	269.32	8,534.22	368.97	-2,218.45	2,215.22	0.74	0.74	0.07	
10,727.43	93.63	269.33	8,533.37	368.81	-2,232.00	2,228.76	0.59	0.59	0.07	
10,741.00	93.70	269.33	8,532.50	368.65	-2,245.54	2,242.30	0.52	0.52	0.00	
10,754.57	93.73	269.31	8,531.62	368.49	-2,259.08	2,255.84	0.27	0.22	-0.15	
10,768.14	93.76	269.28	8,530.74	368.33	-2,272.62	2,269.39	0.31	0.22	-0.22	
10,781.71	93.78	269.25	8,529.85	368.15	-2,286.16	2,282.93	0.27	0.15	-0.22	
10,795.29	93.79	269.21	8,528.95	367.97	-2,299.71	2,296.48	0.30	0.07	-0.29	
10,808.86	93.79	269.17	8,528.05	367.78	-2,313.25	2,310.02	0.29	0.00	-0.29	
10,822.43	93.78	269.14	8,527.16	367.58	-2,326.78	2,323.56	0.23	-0.07	-0.22	
10,836.00	93.80	269.12	8,526.26	367.37	-2,340.32	2,337.10	0.21	0.15	-0.15	
10,849.43	93.84	269.11	8,525.37	367.17	-2,353.72	2,350.50	0.31	0.30	-0.07	
10,862.86	93.89	269.11	8,524.46	366.96	-2,367.12	2,363.90	0.37	0.37	0.00	
10,876.29	93.95	269.11	8,523.54	366.75	-2,380.52	2,377.29	0.45	0.45	0.00	
10,889.71	94.02	269.11	8,522.61	366.54	-2,393.90	2,390.68	0.52	0.52	0.00	
10,903.14	94.09	269.11	8,521.66	366.33	-2,407.30	2,404.08	0.52	0.52	0.00	
10,916.57	94.17	269.11	8,520.69	366.13	-2,420.69	2,417.47	0.60	0.60	0.00	
10,930.00	94.25	269.09	8,519.71	365.92	-2,434.08	2,430.86	0.61	0.60	-0.15	
10,943.57	94.31	269.05	8,518.69	365.70	-2,447.61	2,444.40	0.53	0.44	-0.29	
10,957.14	94.31	269.00	8,517.67	365.47	-2,461.14	2,457.93	0.37	0.00	-0.37	
10,970.71	94.27	268.94	8,516.66	365.22	-2,474.67	2,471.46	0.53	-0.29	-0.44	
10,984.29	94.20	268.88	8,515.66	364.97	-2,488.21	2,485.00	0.68	-0.52	-0.44	
10,997.74	94.02	268.81	8,514.69	364.69	-2,501.62	2,498.41	1.42	-1.33	-0.52	
02-v2500(W-131H)										
10,997.86	94.02	268.81	8,514.68	364.69	-2,501.75	2,498.54	1.42	-1.33	-0.52	
11,011.43	93.40	269.32	8,513.81	364.47	-2,515.29	2,512.08	5.91	-4.57	3.76	
11,025.00	92.83	269.83	8,513.07	364.37	-2,528.84	2,525.63	5.63	-4.20	3.76	
11,038.43	92.80	269.77	8,512.41	364.32	-2,542.25	2,539.04	0.50	-0.22	-0.45	
11,051.86	92.80	269.69	8,511.75	364.26	-2,555.66	2,552.45	0.59	0.00	-0.60	
11,065.29	92.78	269.62	8,511.10	364.18	-2,569.08	2,565.87	0.54	-0.15	-0.52	
11,078.71	92.75	269.54	8,510.45	364.08	-2,582.48	2,579.27	0.64	-0.22	-0.60	
11,092.14	92.67	269.46	8,509.82	363.96	-2,595.89	2,592.69	0.84	-0.60	-0.60	
11,105.57	92.58	269.38	8,509.20	363.83	-2,609.31	2,606.10	0.90	-0.67	-0.60	
11,119.00	92.47	269.29	8,508.61	363.67	-2,622.73	2,619.52	1.06	-0.82	-0.67	
11,132.57	92.35	269.19	8,508.04	363.49	-2,636.28	2,633.08	1.15	-0.88	-0.74	
11,146.14	92.22	269.09	8,507.50	363.29	-2,649.84	2,646.64	1.21	-0.96	-0.74	
11,159.71	92.12	268.98	8,506.98	363.06	-2,663.40	2,660.20	1.10	-0.74	-0.81	
11,173.29	92.02	268.88	8,506.49	362.81	-2,676.97	2,673.77	1.04	-0.74	-0.74	
11,186.86	91.94	268.77	8,506.02	362.53	-2,690.53	2,687.33	1.00	-0.59	-0.81	
11,200.43	91.85	268.66	8,505.58	362.23	-2,704.09	2,700.89	1.05	-0.66	-0.81	
11,214.00	91.77	268.56	8,505.15	361.90	-2,717.65	2,714.45	0.94	-0.59	-0.74	
11,227.57	91.69	268.45	8,504.74	361.54	-2,731.20	2,728.01	1.00	-0.59	-0.81	



Survey Report

Company:	Colgate Energy	Local Co-ordinate Reference:	Well Weaver 27 State Com 131H
Project:	Eddy County, NM (N83-NME)	TVD Reference:	3354+30 @ 3384.00usft
Site:	Weaver 27 State Com	MD Reference:	3354+30 @ 3384.00usft
Well:	Weaver 27 State Com 131H	North Reference:	Grid
Wellbore:	ST 131H	Survey Calculation Method:	Minimum Curvature
Design:	ST01-DRL	Database:	EDM 5000.14 Single User Db

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
11,241.14	91.62	268.35	8,504.35	361.16	-2,744.76	2,741.57	0.90	-0.52	-0.74
11,254.71	91.56	268.25	8,503.97	360.76	-2,758.32	2,755.14	0.86	-0.44	-0.74
11,268.29	91.52	268.15	8,503.60	360.34	-2,771.89	2,768.71	0.79	-0.29	-0.74
11,281.86	91.53	268.06	8,503.24	359.89	-2,785.45	2,782.27	0.67	0.07	-0.66
11,295.43	91.56	267.99	8,502.88	359.42	-2,799.01	2,795.83	0.56	0.22	-0.52
11,309.00	91.60	267.92	8,502.50	358.94	-2,812.56	2,809.39	0.59	0.29	-0.52
11,322.57	91.64	267.89	8,502.12	358.44	-2,826.12	2,822.95	0.37	0.29	-0.22
11,336.14	91.67	267.86	8,501.73	357.94	-2,839.67	2,836.51	0.31	0.22	-0.22
11,349.71	91.70	267.85	8,501.33	357.43	-2,853.23	2,850.07	0.23	0.22	-0.07
11,363.29	91.73	267.85	8,500.92	356.92	-2,866.79	2,863.63	0.22	0.22	0.00
11,376.86	91.78	267.85	8,500.51	356.41	-2,880.35	2,877.19	0.37	0.37	0.00
11,390.43	91.86	267.86	8,500.08	355.90	-2,893.90	2,890.75	0.59	0.59	0.07
11,404.00	91.92	267.86	8,499.63	355.40	-2,907.45	2,904.31	0.44	0.44	0.00
11,417.57	91.90	267.87	8,499.18	354.89	-2,921.01	2,917.86	0.16	-0.15	0.07
11,431.14	91.80	267.89	8,498.74	354.39	-2,934.56	2,931.42	0.75	-0.74	0.15
11,444.71	91.63	267.90	8,498.33	353.89	-2,948.11	2,944.98	1.25	-1.25	0.07
11,458.29	91.36	267.91	8,497.98	353.39	-2,961.68	2,958.55	1.99	-1.99	0.07
11,471.86	90.98	267.93	8,497.70	352.90	-2,975.24	2,972.11	2.80	-2.80	0.15
11,485.43	90.30	268.69	8,497.55	352.50	-2,988.80	2,985.68	7.51	-5.01	5.60
11,499.00	89.67	269.40	8,497.55	352.28	-3,002.37	2,999.25	6.99	-4.64	5.23
11,512.43	89.40	269.43	8,497.66	352.14	-3,015.80	3,012.68	2.02	-2.01	0.22
11,525.86	89.29	269.45	8,497.81	352.01	-3,029.23	3,026.11	0.83	-0.82	0.15
11,539.29	89.25	269.48	8,497.99	351.88	-3,042.65	3,039.53	0.37	-0.30	0.22
11,552.71	89.25	269.51	8,498.16	351.76	-3,056.07	3,052.95	0.22	0.00	0.22
11,566.14	89.27	269.54	8,498.33	351.65	-3,069.50	3,066.38	0.27	0.15	0.22
11,579.57	89.28	269.57	8,498.50	351.55	-3,082.93	3,079.81	0.24	0.07	0.22
11,593.00	89.25	269.58	8,498.68	351.45	-3,096.36	3,093.24	0.24	-0.22	0.07
11,606.43	89.20	269.59	8,498.86	351.35	-3,109.79	3,106.67	0.38	-0.37	0.07
11,619.86	89.13	269.59	8,499.05	351.26	-3,123.22	3,120.10	0.52	-0.52	0.00
11,633.29	89.05	269.58	8,499.27	351.16	-3,136.64	3,133.53	0.60	-0.60	-0.07
11,646.71	88.97	269.56	8,499.50	351.06	-3,150.06	3,146.94	0.61	-0.60	-0.15
11,660.14	88.91	269.54	8,499.75	350.95	-3,163.49	3,160.37	0.47	-0.45	-0.15
11,673.57	88.84	269.51	8,500.01	350.84	-3,176.91	3,173.80	0.57	-0.52	-0.22
11,687.00	88.76	269.48	8,500.29	350.72	-3,190.34	3,187.23	0.64	-0.60	-0.22
11,700.57	88.67	269.43	8,500.60	350.59	-3,203.91	3,200.79	0.76	-0.66	-0.37
11,714.14	88.57	269.37	8,500.92	350.45	-3,217.47	3,214.36	0.86	-0.74	-0.44
11,727.71	88.48	269.30	8,501.27	350.29	-3,231.04	3,227.92	0.84	-0.66	-0.52
11,741.29	88.40	269.22	8,501.64	350.12	-3,244.61	3,241.50	0.83	-0.59	-0.59
11,754.86	88.31	269.14	8,502.03	349.92	-3,258.17	3,255.06	0.89	-0.66	-0.59
11,768.43	88.22	269.04	8,502.44	349.71	-3,271.74	3,268.63	0.99	-0.66	-0.74
11,782.00	88.12	268.94	8,502.88	349.47	-3,285.30	3,282.19	1.04	-0.74	-0.74
11,795.43	88.03	268.81	8,503.33	349.21	-3,298.72	3,295.61	1.18	-0.67	-0.97
11,808.86	87.93	268.67	8,503.80	348.91	-3,312.14	3,309.03	1.28	-0.74	-1.04



Survey Report

Company:	Colgate Energy	Local Co-ordinate Reference:	Well Weaver 27 State Com 131H
Project:	Eddy County, NM (N83-NME)	TVD Reference:	3354+30 @ 3384.00usft
Site:	Weaver 27 State Com	MD Reference:	3354+30 @ 3384.00usft
Well:	Weaver 27 State Com 131H	North Reference:	Grid
Wellbore:	ST 131H	Survey Calculation Method:	Minimum Curvature
Design:	ST01-DRL	Database:	EDM 5000.14 Single User Db

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
11,822.29	87.81	268.53	8,504.30	348.58	-3,325.55	3,322.45	1.37	-0.89	-1.04
11,835.71	87.69	268.40	8,504.83	348.22	-3,338.96	3,335.86	1.32	-0.89	-0.97
11,849.14	87.58	268.29	8,505.38	347.84	-3,352.37	3,349.27	1.16	-0.82	-0.82
11,862.57	87.47	268.20	8,505.96	347.43	-3,365.78	3,362.69	1.06	-0.82	-0.67
11,876.00	87.36	268.16	8,506.57	347.00	-3,379.19	3,376.10	0.87	-0.82	-0.30
11,889.57	87.24	268.18	8,507.21	346.57	-3,392.74	3,389.65	0.90	-0.88	0.15
11,903.14	87.17	268.25	8,507.87	346.14	-3,406.29	3,403.20	0.73	-0.52	0.52
11,916.71	87.16	268.34	8,508.54	345.74	-3,419.83	3,416.75	0.67	-0.07	0.66
11,930.29	87.20	268.44	8,509.21	345.36	-3,433.39	3,430.31	0.79	0.29	0.74
11,943.86	87.26	268.54	8,509.86	345.00	-3,446.94	3,443.86	0.86	0.44	0.74
11,957.43	87.98	269.31	8,510.43	344.75	-3,460.50	3,457.42	7.76	5.31	5.67
11,971.00	88.45	269.76	8,510.85	344.64	-3,474.06	3,470.99	4.79	3.46	3.32
11,984.57	88.56	269.83	8,511.20	344.59	-3,487.62	3,484.55	0.96	0.81	0.52
11,998.14	88.68	269.91	8,511.53	344.56	-3,501.19	3,498.12	1.06	0.88	0.59
12,011.71	88.78	269.97	8,511.83	344.55	-3,514.76	3,511.68	0.86	0.74	0.44
12,025.29	88.91	270.04	8,512.10	344.55	-3,528.33	3,525.26	1.09	0.96	0.52
12,038.86	89.04	270.09	8,512.35	344.56	-3,541.90	3,538.83	1.03	0.96	0.37
12,052.43	89.82	270.51	8,512.48	344.63	-3,555.47	3,552.39	6.53	5.75	3.10
12,066.00	90.73	271.07	8,512.42	344.82	-3,569.04	3,565.96	7.87	6.71	4.13
12,079.43	91.23	271.44	8,512.19	345.11	-3,582.46	3,579.38	4.63	3.72	2.76
12,092.86	91.28	271.44	8,511.89	345.45	-3,595.89	3,592.80	0.37	0.37	0.00
12,106.29	91.35	271.44	8,511.59	345.79	-3,609.31	3,606.22	0.52	0.52	0.00
12,119.71	91.43	271.44	8,511.26	346.13	-3,622.72	3,619.63	0.60	0.60	0.00
12,133.14	91.52	271.44	8,510.91	346.46	-3,636.14	3,633.05	0.67	0.67	0.00
12,146.57	91.60	271.43	8,510.55	346.80	-3,649.56	3,646.46	0.60	0.60	-0.07
12,160.00	91.68	271.42	8,510.16	347.13	-3,662.98	3,659.88	0.60	0.60	-0.07
12,173.43	91.77	271.41	8,509.76	347.46	-3,676.40	3,673.30	0.67	0.67	-0.07
12,186.86	91.85	271.41	8,509.34	347.80	-3,689.82	3,686.71	0.60	0.60	0.00
12,200.29	91.93	271.40	8,508.89	348.12	-3,703.24	3,700.13	0.60	0.60	-0.07
12,213.71	91.99	271.39	8,508.43	348.45	-3,716.65	3,713.53	0.45	0.45	-0.07
12,227.14	92.06	271.38	8,507.96	348.78	-3,730.07	3,726.95	0.53	0.52	-0.07
12,240.57	92.12	271.37	8,507.47	349.10	-3,743.48	3,740.36	0.45	0.45	-0.07
12,254.00	92.19	271.35	8,506.96	349.42	-3,756.90	3,753.78	0.54	0.52	-0.15
12,267.57	92.25	271.34	8,506.44	349.73	-3,770.46	3,767.33	0.45	0.44	-0.07
12,281.14	92.30	271.32	8,505.90	350.05	-3,784.01	3,780.88	0.40	0.37	-0.15
12,294.71	92.35	271.30	8,505.35	350.36	-3,797.57	3,794.43	0.40	0.37	-0.15
12,308.29	92.40	271.27	8,504.79	350.66	-3,811.13	3,808.00	0.43	0.37	-0.22
12,321.86	92.45	271.25	8,504.21	350.96	-3,824.69	3,821.55	0.40	0.37	-0.15
12,335.43	92.51	271.22	8,503.63	351.25	-3,838.24	3,835.10	0.49	0.44	-0.22
12,349.00	92.57	271.20	8,503.02	351.54	-3,851.80	3,848.65	0.47	0.44	-0.15
12,362.43	92.65	271.17	8,502.41	351.82	-3,865.21	3,862.06	0.64	0.60	-0.22
12,375.86	92.72	271.14	8,501.78	352.09	-3,878.62	3,875.47	0.57	0.52	-0.22
12,389.29	92.79	271.10	8,501.14	352.35	-3,892.03	3,888.88	0.60	0.52	-0.30



Survey Report

Company:	Colgate Energy	Local Co-ordinate Reference:	Well Weaver 27 State Com 131H
Project:	Eddy County, NM (N83-NME)	TVD Reference:	3354+30 @ 3384.00usft
Site:	Weaver 27 State Com	MD Reference:	3354+30 @ 3384.00usft
Well:	Weaver 27 State Com 131H	North Reference:	Grid
Wellbore:	ST 131H	Survey Calculation Method:	Minimum Curvature
Design:	ST01-DRL	Database:	EDM 5000.14 Single User Db

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
12,402.71	92.86	271.07	8,500.48	352.60	-3,905.43	3,902.28	0.57	0.52	-0.22	
12,416.14	92.90	271.03	8,499.80	352.85	-3,918.85	3,915.68	0.42	0.30	-0.30	
12,429.57	92.96	270.99	8,499.11	353.09	-3,932.26	3,929.09	0.54	0.45	-0.30	
12,443.00	92.99	270.94	8,498.42	353.31	-3,945.67	3,942.50	0.43	0.22	-0.37	
12,456.57	93.00	270.88	8,497.71	353.53	-3,959.22	3,956.05	0.45	0.07	-0.44	
12,470.14	92.96	270.81	8,497.00	353.73	-3,972.77	3,969.60	0.59	-0.29	-0.52	
12,483.71	92.89	270.75	8,496.31	353.91	-3,986.32	3,983.14	0.68	-0.52	-0.44	
12,497.29	92.74	270.68	8,495.64	354.08	-3,999.88	3,996.70	1.22	-1.10	-0.52	
12,510.86	92.56	270.63	8,495.02	354.24	-4,013.43	4,010.26	1.38	-1.33	-0.37	
12,524.43	91.71	270.81	8,494.51	354.41	-4,026.99	4,023.82	6.40	-6.26	1.33	
12,538.00	91.55	270.77	8,494.13	354.59	-4,040.56	4,037.38	1.22	-1.18	-0.29	
12,551.43	91.49	270.76	8,493.77	354.77	-4,053.98	4,050.80	0.45	-0.45	-0.07	
12,564.86	91.47	270.75	8,493.42	354.95	-4,067.40	4,064.22	0.17	-0.15	-0.07	
12,578.29	91.51	270.75	8,493.07	355.12	-4,080.83	4,077.64	0.30	0.30	0.00	
12,591.71	91.56	270.76	8,492.71	355.30	-4,094.24	4,091.05	0.38	0.37	0.07	
12,605.14	91.62	270.77	8,492.34	355.48	-4,107.67	4,104.48	0.45	0.45	0.07	
12,618.57	91.69	270.78	8,491.95	355.66	-4,121.09	4,117.90	0.53	0.52	0.07	
12,632.00	91.78	270.78	8,491.55	355.85	-4,134.51	4,131.32	0.67	0.67	0.00	
12,645.57	91.87	270.77	8,491.11	356.03	-4,148.07	4,144.88	0.67	0.66	-0.07	
12,659.14	91.95	270.76	8,490.66	356.21	-4,161.64	4,158.44	0.59	0.59	-0.07	
12,672.71	92.06	270.75	8,490.19	356.39	-4,175.20	4,172.00	0.81	0.81	-0.07	
12,686.29	92.22	270.73	8,489.68	356.56	-4,188.77	4,185.56	1.19	1.18	-0.15	
12,699.86	92.41	270.72	8,489.13	356.74	-4,202.32	4,199.12	1.40	1.40	-0.07	
12,713.43	92.63	270.70	8,488.54	356.90	-4,215.88	4,212.67	1.63	1.62	-0.15	
12,727.00	92.91	270.69	8,487.88	357.07	-4,229.43	4,226.22	2.06	2.06	-0.07	
12,740.43	93.14	270.69	8,487.17	357.23	-4,242.84	4,239.63	1.71	1.71	0.00	
12,753.86	93.29	270.69	8,486.42	357.39	-4,256.25	4,253.04	1.12	1.12	0.00	
12,767.29	93.36	270.69	8,485.64	357.55	-4,269.66	4,266.44	0.52	0.52	0.00	
12,780.71	93.36	270.70	8,484.85	357.71	-4,283.05	4,279.84	0.07	0.00	0.07	
12,794.14	93.26	270.71	8,484.08	357.88	-4,296.46	4,293.24	0.75	-0.74	0.07	
12,807.57	92.25	271.02	8,483.43	358.08	-4,309.87	4,306.65	7.87	-7.52	2.31	
12,821.00	92.17	271.13	8,482.91	358.33	-4,323.29	4,320.07	1.01	-0.60	0.82	
12,834.57	92.46	271.17	8,482.36	358.61	-4,336.85	4,333.62	2.16	2.14	0.29	
12,848.14	92.75	271.22	8,481.75	358.89	-4,350.40	4,347.17	2.17	2.14	0.37	
12,861.71	92.98	271.27	8,481.07	359.18	-4,363.95	4,360.72	1.73	1.69	0.37	
12,875.29	93.13	271.31	8,480.35	359.49	-4,377.51	4,374.27	1.14	1.10	0.29	
12,888.86	93.24	271.35	8,479.59	359.80	-4,391.05	4,387.81	0.86	0.81	0.29	
12,902.43	93.32	271.37	8,478.82	360.12	-4,404.60	4,401.35	0.61	0.59	0.15	
12,916.00	93.36	271.36	8,478.03	360.45	-4,418.14	4,414.89	0.30	0.29	-0.07	
12,929.57	93.38	271.31	8,477.23	360.76	-4,431.68	4,428.43	0.40	0.15	-0.37	
12,943.14	93.37	271.24	8,476.43	361.06	-4,445.22	4,441.97	0.52	-0.07	-0.52	
12,956.71	93.35	271.15	8,475.63	361.35	-4,458.77	4,455.52	0.68	-0.15	-0.66	
12,970.29	93.27	271.06	8,474.85	361.61	-4,472.32	4,469.07	0.89	-0.59	-0.66	
12,983.86	93.18	270.97	8,474.09	361.85	-4,485.87	4,482.61	0.94	-0.66	-0.66	



Survey Report

Company:	Colgate Energy	Local Co-ordinate Reference:	Well Weaver 27 State Com 131H
Project:	Eddy County, NM (N83-NME)	TVD Reference:	3354+30 @ 3384.00usft
Site:	Weaver 27 State Com	MD Reference:	3354+30 @ 3384.00usft
Well:	Weaver 27 State Com 131H	North Reference:	Grid
Wellbore:	ST 131H	Survey Calculation Method:	Minimum Curvature
Design:	ST01-DRL	Database:	EDM 5000.14 Single User Db

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
12,997.43	92.14	270.76	8,473.46	362.05	-4,499.42	4,496.16	7.82	-7.66	-1.55
13,011.00	91.45	270.78	8,473.03	362.23	-4,512.99	4,509.72	5.09	-5.08	0.15
13,024.57	91.36	270.74	8,472.70	362.41	-4,526.55	4,523.29	0.73	-0.66	-0.29
13,038.14	91.31	270.71	8,472.38	362.59	-4,540.12	4,536.85	0.43	-0.37	-0.22
13,051.71	91.29	270.68	8,472.07	362.75	-4,553.68	4,550.41	0.27	-0.15	-0.22
13,065.29	91.27	270.65	8,471.77	362.91	-4,567.26	4,563.99	0.27	-0.15	-0.22
13,078.86	91.22	270.63	8,471.48	363.06	-4,580.82	4,577.55	0.40	-0.37	-0.15
13,092.43	90.35	270.58	8,471.29	363.20	-4,594.39	4,591.12	6.42	-6.41	-0.37
13,106.00	90.35	270.57	8,471.21	363.34	-4,607.96	4,604.68	0.07	0.00	-0.07
13,119.43	90.37	270.57	8,471.12	363.47	-4,621.39	4,618.11	0.15	0.15	0.00
13,132.86	90.44	270.57	8,471.03	363.61	-4,634.82	4,631.54	0.52	0.52	0.00
13,146.29	90.51	270.57	8,470.92	363.74	-4,648.25	4,644.97	0.52	0.52	0.00
13,159.71	90.60	270.58	8,470.79	363.88	-4,661.66	4,658.38	0.67	0.67	0.07
13,173.14	90.68	270.58	8,470.64	364.01	-4,675.09	4,671.81	0.60	0.60	0.00
13,186.57	90.77	270.58	8,470.47	364.15	-4,688.52	4,685.24	0.67	0.67	0.00
13,200.00	90.85	270.58	8,470.28	364.28	-4,701.95	4,698.66	0.60	0.60	0.00
13,213.57	90.93	270.56	8,470.07	364.42	-4,715.52	4,712.23	0.61	0.59	-0.15
13,227.14	91.01	270.55	8,469.84	364.55	-4,729.08	4,725.79	0.59	0.59	-0.07
13,240.71	91.09	270.52	8,469.59	364.68	-4,742.65	4,739.36	0.63	0.59	-0.22
13,254.29	91.16	270.50	8,469.32	364.80	-4,756.23	4,752.93	0.54	0.52	-0.15
13,267.86	91.22	270.47	8,469.04	364.91	-4,769.80	4,766.50	0.49	0.44	-0.22
13,281.43	91.30	270.45	8,468.74	365.02	-4,783.36	4,780.06	0.61	0.59	-0.15
13,295.00	91.36	270.42	8,468.43	365.12	-4,796.93	4,793.63	0.49	0.44	-0.22
13,308.57	91.41	270.40	8,468.10	365.22	-4,810.49	4,807.19	0.40	0.37	-0.15
13,322.14	91.45	270.38	8,467.76	365.31	-4,824.06	4,820.76	0.33	0.29	-0.15
13,335.71	91.48	270.36	8,467.41	365.40	-4,837.62	4,834.32	0.27	0.22	-0.15
13,349.29	91.52	270.33	8,467.06	365.48	-4,851.20	4,847.90	0.37	0.29	-0.22
13,362.86	91.58	270.29	8,466.69	365.56	-4,864.76	4,861.46	0.53	0.44	-0.29
13,376.43	91.65	270.24	8,466.31	365.62	-4,878.33	4,875.02	0.63	0.52	-0.37
13,390.00	91.71	270.18	8,465.91	365.67	-4,891.89	4,888.59	0.63	0.44	-0.44
13,403.57	91.75	270.09	8,465.50	365.70	-4,905.46	4,902.15	0.73	0.29	-0.66
13,417.14	91.76	269.98	8,465.08	365.71	-4,919.02	4,915.71	0.81	0.07	-0.81
13,430.71	91.77	269.86	8,464.67	365.69	-4,932.58	4,929.28	0.89	0.07	-0.88
13,444.29	91.75	269.75	8,464.25	365.64	-4,946.16	4,942.85	0.82	-0.15	-0.81
13,457.86	91.66	269.64	8,463.85	365.57	-4,959.72	4,956.41	1.05	-0.66	-0.81
13,471.43	91.38	269.50	8,463.49	365.47	-4,973.29	4,969.98	2.31	-2.06	-1.03
13,485.00	90.45	269.21	8,463.27	365.32	-4,986.85	4,983.55	7.18	-6.85	-2.14
13,498.43	90.09	269.04	8,463.21	365.11	-5,000.28	4,996.98	2.96	-2.68	-1.27
13,501.46	90.09	269.03	8,463.20	365.06	-5,003.31	5,000.00	0.27	0.15	-0.22
03-v5000(W-131H)									
13,511.86	90.11	269.01	8,463.18	364.88	-5,013.71	5,010.41	0.27	0.15	-0.22
13,525.29	90.17	268.98	8,463.15	364.65	-5,027.14	5,023.83	0.50	0.45	-0.22
13,538.71	90.24	268.96	8,463.10	364.41	-5,040.55	5,037.25	0.54	0.52	-0.15



Survey Report

Company:	Colgate Energy	Local Co-ordinate Reference:	Well Weaver 27 State Com 131H
Project:	Eddy County, NM (N83-NME)	TVD Reference:	3354+30 @ 3384.00usft
Site:	Weaver 27 State Com	MD Reference:	3354+30 @ 3384.00usft
Well:	Weaver 27 State Com 131H	North Reference:	Grid
Wellbore:	ST 131H	Survey Calculation Method:	Minimum Curvature
Design:	ST01-DRL	Database:	EDM 5000.14 Single User Db

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
13,552.14	90.31	268.94	8,463.04	364.16	-5,053.98	5,050.68	0.54	0.52	-0.15	
13,565.57	90.38	268.91	8,462.96	363.91	-5,067.41	5,064.11	0.57	0.52	-0.22	
13,579.00	90.42	268.86	8,462.86	363.65	-5,080.84	5,077.54	0.48	0.30	-0.37	
13,592.57	90.44	268.80	8,462.76	363.37	-5,094.40	5,091.11	0.47	0.15	-0.44	
13,606.14	90.46	268.71	8,462.65	363.07	-5,107.97	5,104.68	0.68	0.15	-0.66	
13,619.71	90.48	268.62	8,462.54	362.76	-5,121.54	5,118.25	0.68	0.15	-0.66	
13,633.29	90.52	268.52	8,462.42	362.42	-5,135.11	5,131.82	0.79	0.29	-0.74	
13,646.86	90.57	268.42	8,462.29	362.06	-5,148.68	5,145.39	0.82	0.37	-0.74	
13,660.43	90.60	268.31	8,462.16	361.67	-5,162.24	5,158.96	0.84	0.22	-0.81	
13,674.00	90.63	268.20	8,462.01	361.26	-5,175.80	5,172.52	0.84	0.22	-0.81	
13,687.57	90.65	268.09	8,461.86	360.82	-5,189.36	5,186.09	0.82	0.15	-0.81	
13,701.14	90.68	267.98	8,461.70	360.35	-5,202.93	5,199.65	0.84	0.22	-0.81	
13,714.71	90.71	267.87	8,461.54	359.86	-5,216.49	5,213.22	0.84	0.22	-0.81	
13,728.29	90.73	267.76	8,461.37	359.34	-5,230.05	5,226.79	0.82	0.15	-0.81	
13,741.86	90.75	267.65	8,461.19	358.80	-5,243.61	5,240.35	0.82	0.15	-0.81	
13,755.43	90.76	267.53	8,461.01	358.23	-5,257.17	5,253.91	0.89	0.07	-0.88	
13,769.00	90.77	267.40	8,460.83	357.63	-5,270.72	5,267.47	0.96	0.07	-0.96	
13,782.43	90.77	267.27	8,460.65	357.01	-5,284.14	5,280.89	0.97	0.00	-0.97	
13,795.86	90.76	267.13	8,460.47	356.35	-5,297.55	5,294.31	1.05	-0.07	-1.04	
13,809.29	90.73	267.00	8,460.30	355.66	-5,310.96	5,307.73	0.99	-0.22	-0.97	
13,822.71	90.70	266.87	8,460.13	354.94	-5,324.36	5,321.13	0.99	-0.22	-0.97	
13,836.14	90.67	266.75	8,459.97	354.20	-5,337.77	5,334.55	0.92	-0.22	-0.89	
13,849.57	90.62	266.65	8,459.82	353.42	-5,351.18	5,347.96	0.83	-0.37	-0.74	
13,863.00	90.54	266.57	8,459.68	352.63	-5,364.58	5,361.37	0.84	-0.60	-0.60	
13,876.43	90.41	266.54	8,459.57	351.82	-5,377.99	5,374.78	0.99	-0.97	-0.22	
13,889.86	90.29	266.53	8,459.49	351.01	-5,391.39	5,388.20	0.90	-0.89	-0.07	
13,903.29	90.22	266.54	8,459.43	350.20	-5,404.80	5,401.61	0.53	-0.52	0.07	
13,916.71	90.16	266.54	8,459.38	349.39	-5,418.20	5,415.01	0.45	-0.45	0.00	
13,930.14	90.10	266.54	8,459.35	348.58	-5,431.60	5,428.42	0.45	-0.45	0.00	
13,943.57	90.44	267.36	8,459.29	347.86	-5,445.01	5,441.84	6.61	2.53	6.11	
13,957.00	90.76	268.27	8,459.15	347.35	-5,458.43	5,455.26	7.18	2.38	6.78	
13,970.43	90.72	268.21	8,458.98	346.94	-5,471.85	5,468.69	0.54	-0.30	-0.45	
13,983.86	90.73	268.15	8,458.81	346.51	-5,485.28	5,482.11	0.45	0.07	-0.45	
13,997.29	90.78	268.07	8,458.63	346.07	-5,498.70	5,495.54	0.70	0.37	-0.60	
14,010.71	90.82	267.99	8,458.44	345.61	-5,512.11	5,508.95	0.67	0.30	-0.60	
14,024.14	90.86	267.90	8,458.24	345.13	-5,525.53	5,522.37	0.73	0.30	-0.67	
14,037.57	90.89	267.80	8,458.04	344.62	-5,538.95	5,535.80	0.78	0.22	-0.74	
14,051.00	90.93	267.70	8,457.83	344.10	-5,552.36	5,549.22	0.80	0.30	-0.74	
14,064.57	90.97	267.59	8,457.60	343.54	-5,565.92	5,562.78	0.86	0.29	-0.81	
14,078.14	91.00	267.48	8,457.37	342.96	-5,579.48	5,576.34	0.84	0.22	-0.81	
14,091.71	91.01	267.36	8,457.13	342.34	-5,593.03	5,589.90	0.89	0.07	-0.88	
14,105.29	91.01	267.25	8,456.89	341.71	-5,606.59	5,603.47	0.81	0.00	-0.81	
14,118.86	91.00	267.15	8,456.65	341.04	-5,620.15	5,617.02	0.74	-0.07	-0.74	



Survey Report

Company:	Colgate Energy	Local Co-ordinate Reference:	Well Weaver 27 State Com 131H
Project:	Eddy County, NM (N83-NME)	TVD Reference:	3354+30 @ 3384.00usft
Site:	Weaver 27 State Com	MD Reference:	3354+30 @ 3384.00usft
Well:	Weaver 27 State Com 131H	North Reference:	Grid
Wellbore:	ST 131H	Survey Calculation Method:	Minimum Curvature
Design:	ST01-DRL	Database:	EDM 5000.14 Single User Db

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
14,132.43	90.94	267.05	8,456.42	340.36	-5,633.70	5,630.58	0.86	-0.44	-0.74
14,146.00	90.85	266.98	8,456.21	339.65	-5,647.25	5,644.13	0.84	-0.66	-0.52
14,159.57	90.67	266.95	8,456.03	338.93	-5,660.80	5,657.69	1.34	-1.33	-0.22
14,173.14	90.48	266.93	8,455.89	338.21	-5,674.35	5,671.25	1.41	-1.40	-0.15
14,186.71	90.27	266.92	8,455.81	337.48	-5,687.90	5,684.80	1.55	-1.55	-0.07
14,200.29	90.00	266.91	8,455.77	336.75	-5,701.46	5,698.37	1.99	-1.99	-0.07
14,213.86	89.71	267.08	8,455.81	336.04	-5,715.01	5,711.92	2.48	-2.14	1.25
14,227.43	89.43	267.99	8,455.91	335.45	-5,728.56	5,725.49	7.02	-2.06	6.71
14,241.00	89.36	268.95	8,456.05	335.09	-5,742.13	5,739.05	7.09	-0.52	7.07
14,254.43	89.19	269.36	8,456.22	334.89	-5,755.56	5,752.48	3.30	-1.27	3.05
14,267.86	89.10	269.26	8,456.42	334.73	-5,768.98	5,765.91	1.00	-0.67	-0.74
14,281.29	89.05	269.14	8,456.64	334.54	-5,782.41	5,779.34	0.97	-0.37	-0.89
14,294.71	89.03	269.03	8,456.87	334.33	-5,795.83	5,792.76	0.83	-0.15	-0.82
14,308.14	89.02	268.91	8,457.09	334.09	-5,809.25	5,806.18	0.90	-0.07	-0.89
14,321.57	89.02	268.79	8,457.32	333.82	-5,822.68	5,819.61	0.89	0.00	-0.89
14,335.00	89.00	268.67	8,457.56	333.52	-5,836.10	5,833.04	0.91	-0.15	-0.89
14,348.43	88.98	268.56	8,457.79	333.20	-5,849.53	5,846.46	0.83	-0.15	-0.82
14,361.86	88.95	268.45	8,458.04	332.85	-5,862.95	5,859.89	0.85	-0.22	-0.82
14,375.29	88.93	268.34	8,458.28	332.47	-5,876.37	5,873.31	0.83	-0.15	-0.82
14,388.71	88.90	268.24	8,458.54	332.07	-5,889.78	5,886.73	0.78	-0.22	-0.75
14,402.14	88.85	268.13	8,458.80	331.65	-5,903.20	5,900.15	0.90	-0.37	-0.82
14,415.57	88.80	268.03	8,459.08	331.20	-5,916.62	5,913.58	0.83	-0.37	-0.74
14,429.00	88.75	267.92	8,459.36	330.72	-5,930.04	5,927.00	0.90	-0.37	-0.82
14,442.57	88.70	267.80	8,459.67	330.21	-5,943.60	5,940.56	0.96	-0.37	-0.88
14,456.14	88.65	267.68	8,459.98	329.68	-5,957.16	5,954.12	0.96	-0.37	-0.88
14,469.71	88.60	267.56	8,460.31	329.12	-5,970.71	5,967.68	0.96	-0.37	-0.88
14,483.29	88.57	267.47	8,460.64	328.53	-5,984.27	5,981.24	0.70	-0.22	-0.66
14,496.86	88.54	267.39	8,460.98	327.92	-5,997.83	5,994.80	0.63	-0.22	-0.59
14,510.43	88.51	267.35	8,461.33	327.30	-6,011.38	6,008.36	0.37	-0.22	-0.29
14,524.00	88.46	267.37	8,461.69	326.67	-6,024.93	6,021.91	0.40	-0.37	0.15
14,537.43	88.38	267.48	8,462.06	326.07	-6,038.34	6,035.33	1.01	-0.60	0.82
14,550.86	88.31	267.64	8,462.45	325.50	-6,051.75	6,048.75	1.30	-0.52	1.19
14,564.29	88.23	267.81	8,462.85	324.96	-6,065.16	6,062.16	1.40	-0.60	1.27
14,577.71	88.16	267.96	8,463.28	324.47	-6,078.57	6,075.57	1.23	-0.52	1.12
14,591.14	88.33	268.30	8,463.69	324.03	-6,091.98	6,088.99	2.83	1.27	2.53
14,604.57	88.86	269.07	8,464.02	323.72	-6,105.41	6,102.42	6.96	3.95	5.73
14,618.00	89.14	269.94	8,464.25	323.61	-6,118.83	6,115.84	6.80	2.08	6.48
14,631.57	89.41	270.45	8,464.42	323.65	-6,132.40	6,129.41	4.25	1.99	3.76
14,645.14	89.37	270.35	8,464.57	323.75	-6,145.97	6,142.98	0.79	-0.29	-0.74
14,658.71	89.36	270.23	8,464.72	323.82	-6,159.54	6,156.55	0.89	-0.07	-0.88
14,672.29	89.37	270.09	8,464.87	323.85	-6,173.12	6,170.13	1.03	0.07	-1.03
14,685.86	89.38	269.96	8,465.02	323.86	-6,186.69	6,183.69	0.96	0.07	-0.96
14,699.43	89.40	269.84	8,465.16	323.84	-6,200.26	6,197.26	0.90	0.15	-0.88
14,713.00	89.44	269.74	8,465.30	323.79	-6,213.83	6,210.83	0.79	0.29	-0.74



Survey Report

Company:	Colgate Energy	Local Co-ordinate Reference:	Well Weaver 27 State Com 131H
Project:	Eddy County, NM (N83-NME)	TVD Reference:	3354+30 @ 3384.00usft
Site:	Weaver 27 State Com	MD Reference:	3354+30 @ 3384.00usft
Well:	Weaver 27 State Com 131H	North Reference:	Grid
Wellbore:	ST 131H	Survey Calculation Method:	Minimum Curvature
Design:	ST01-DRL	Database:	EDM 5000.14 Single User Db

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
14,726.57	89.51	269.68	8,465.42	323.72	-6,227.40	6,224.40	0.68	0.52	-0.44
14,740.14	89.59	269.66	8,465.53	323.64	-6,240.97	6,237.97	0.61	0.59	-0.15
14,753.71	89.70	269.65	8,465.61	323.56	-6,254.54	6,251.54	0.81	0.81	-0.07
14,767.29	89.81	269.65	8,465.67	323.48	-6,268.12	6,265.12	0.81	0.81	0.00
14,780.86	89.92	269.65	8,465.70	323.39	-6,281.69	6,278.69	0.81	0.81	0.00
14,794.43	90.03	269.66	8,465.71	323.31	-6,295.26	6,292.26	0.81	0.81	0.07
14,808.00	90.13	269.67	8,465.69	323.23	-6,308.82	6,305.83	0.74	0.74	0.07
14,821.57	90.22	269.67	8,465.65	323.15	-6,322.39	6,319.40	0.66	0.66	0.00
14,835.14	90.31	269.67	8,465.59	323.08	-6,335.96	6,332.97	0.66	0.66	0.00
14,848.71	90.38	269.66	8,465.51	323.00	-6,349.53	6,346.54	0.52	0.52	-0.07
14,862.29	90.45	269.65	8,465.41	322.91	-6,363.11	6,360.12	0.52	0.52	-0.07
14,875.86	90.52	269.63	8,465.29	322.83	-6,376.68	6,373.69	0.54	0.52	-0.15
14,889.43	90.59	269.61	8,465.16	322.74	-6,390.25	6,387.26	0.54	0.52	-0.15
14,903.00	90.66	269.58	8,465.01	322.64	-6,403.82	6,400.83	0.56	0.52	-0.22
14,916.43	90.74	269.54	8,464.85	322.54	-6,417.25	6,414.26	0.67	0.60	-0.30
14,929.86	90.81	269.49	8,464.67	322.43	-6,430.68	6,427.68	0.64	0.52	-0.37
14,943.29	90.88	269.44	8,464.47	322.30	-6,444.11	6,441.11	0.64	0.52	-0.37
14,956.71	90.96	269.38	8,464.25	322.16	-6,457.52	6,454.53	0.75	0.60	-0.45
14,970.14	91.04	269.33	8,464.02	322.01	-6,470.95	6,467.96	0.70	0.60	-0.37
14,983.57	91.12	269.28	8,463.77	321.85	-6,484.38	6,481.39	0.70	0.60	-0.37
14,997.00	91.19	269.24	8,463.49	321.68	-6,497.80	6,494.81	0.60	0.52	-0.30
15,010.57	91.22	269.20	8,463.21	321.49	-6,511.37	6,508.38	0.37	0.22	-0.29
15,024.14	91.25	269.18	8,462.92	321.30	-6,524.93	6,521.95	0.27	0.22	-0.15
15,037.71	91.27	269.15	8,462.62	321.10	-6,538.50	6,535.51	0.27	0.15	-0.22
15,051.29	91.29	269.13	8,462.32	320.90	-6,552.07	6,549.09	0.21	0.15	-0.15
15,064.86	91.31	269.11	8,462.01	320.69	-6,565.64	6,562.66	0.21	0.15	-0.15
15,078.43	91.34	269.09	8,461.69	320.48	-6,579.20	6,576.22	0.27	0.22	-0.15
15,092.00	91.36	269.06	8,461.37	320.26	-6,592.77	6,589.79	0.27	0.15	-0.22
15,105.57	91.40	269.03	8,461.05	320.03	-6,606.33	6,603.35	0.37	0.29	-0.22
15,119.14	91.45	269.00	8,460.71	319.80	-6,619.90	6,616.92	0.43	0.37	-0.22
15,132.71	91.51	268.96	8,460.36	319.56	-6,633.46	6,630.48	0.53	0.44	-0.29
15,146.29	91.57	268.91	8,459.99	319.30	-6,647.03	6,644.06	0.58	0.44	-0.37
15,159.86	91.63	268.87	8,459.62	319.04	-6,660.59	6,657.62	0.53	0.44	-0.29
15,173.43	91.68	268.82	8,459.22	318.77	-6,674.16	6,671.19	0.52	0.37	-0.37
15,187.00	91.75	268.76	8,458.82	318.48	-6,687.72	6,684.75	0.68	0.52	-0.44
15,200.57	91.76	268.69	8,458.40	318.18	-6,701.28	6,698.31	0.52	0.07	-0.52
15,214.14	91.76	268.62	8,457.98	317.86	-6,714.84	6,711.87	0.52	0.00	-0.52
15,227.71	91.74	268.55	8,457.57	317.53	-6,728.40	6,725.44	0.54	-0.15	-0.52
15,241.29	91.63	268.47	8,457.17	317.17	-6,741.97	6,739.01	1.00	-0.81	-0.59
15,254.86	91.50	268.40	8,456.80	316.80	-6,755.53	6,752.57	1.09	-0.96	-0.52
15,268.43	90.91	269.41	8,456.52	316.54	-6,769.09	6,766.14	8.62	-4.35	7.44
15,282.00	90.39	270.55	8,456.36	316.54	-6,782.66	6,779.70	9.23	-3.83	8.40
15,295.43	90.22	271.01	8,456.29	316.72	-6,796.09	6,793.13	3.65	-1.27	3.43



Survey Report

Company:	Colgate Energy	Local Co-ordinate Reference:	Well Weaver 27 State Com 131H
Project:	Eddy County, NM (N83-NME)	TVD Reference:	3354+30 @ 3384.00usft
Site:	Weaver 27 State Com	MD Reference:	3354+30 @ 3384.00usft
Well:	Weaver 27 State Com 131H	North Reference:	Grid
Wellbore:	ST 131H	Survey Calculation Method:	Minimum Curvature
Design:	ST01-DRL	Database:	EDM 5000.14 Single User Db

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
15,308.86	90.27	270.96	8,456.23	316.95	-6,809.52	6,806.56	0.53	0.37	-0.37	
15,322.29	90.36	270.91	8,456.16	317.17	-6,822.94	6,819.98	0.77	0.67	-0.37	
15,335.71	90.46	270.87	8,456.06	317.38	-6,836.36	6,833.40	0.80	0.75	-0.30	
15,349.14	90.55	270.82	8,455.94	317.58	-6,849.79	6,846.82	0.77	0.67	-0.37	
15,362.57	90.63	270.76	8,455.81	317.76	-6,863.22	6,860.25	0.74	0.60	-0.45	
15,376.00	90.68	270.70	8,455.65	317.93	-6,876.65	6,873.68	0.58	0.37	-0.45	
15,389.57	90.70	270.64	8,455.49	318.09	-6,890.21	6,887.24	0.47	0.15	-0.44	
15,403.14	90.72	270.57	8,455.32	318.24	-6,903.78	6,900.81	0.54	0.15	-0.52	
15,416.71	90.77	270.49	8,455.14	318.36	-6,917.35	6,914.37	0.70	0.37	-0.59	
15,430.29	90.82	270.42	8,454.96	318.47	-6,930.93	6,927.95	0.63	0.37	-0.52	
15,443.86	90.87	270.34	8,454.76	318.56	-6,944.50	6,941.52	0.70	0.37	-0.59	
15,457.43	90.92	270.26	8,454.54	318.63	-6,958.06	6,955.09	0.70	0.37	-0.59	
15,471.00	90.98	270.17	8,454.32	318.68	-6,971.63	6,968.65	0.80	0.44	-0.66	
15,484.57	91.05	270.09	8,454.08	318.71	-6,985.20	6,982.22	0.78	0.52	-0.59	
15,498.14	91.12	270.00	8,453.82	318.72	-6,998.77	6,995.79	0.84	0.52	-0.66	
15,511.71	91.19	269.92	8,453.55	318.71	-7,012.34	7,009.35	0.78	0.52	-0.59	
15,525.29	91.27	269.83	8,453.26	318.68	-7,025.91	7,022.93	0.89	0.59	-0.66	
15,538.86	91.33	269.75	8,452.95	318.63	-7,039.48	7,036.50	0.74	0.44	-0.59	
15,552.43	91.37	269.68	8,452.63	318.57	-7,053.04	7,050.06	0.59	0.29	-0.52	
15,566.00	91.41	269.61	8,452.30	318.48	-7,066.61	7,063.63	0.59	0.29	-0.52	
15,579.43	91.43	269.55	8,451.97	318.38	-7,080.04	7,077.05	0.47	0.15	-0.45	
15,592.86	91.45	269.51	8,451.63	318.27	-7,093.46	7,090.48	0.33	0.15	-0.30	
15,606.29	91.49	269.46	8,451.28	318.15	-7,106.89	7,103.91	0.48	0.30	-0.37	
15,619.71	91.53	269.42	8,450.93	318.02	-7,120.30	7,117.32	0.42	0.30	-0.30	
15,633.14	91.58	269.38	8,450.57	317.88	-7,133.73	7,130.75	0.48	0.37	-0.30	
15,646.57	91.63	269.33	8,450.19	317.73	-7,147.15	7,144.17	0.53	0.37	-0.37	
15,660.00	91.68	269.28	8,449.80	317.57	-7,160.57	7,157.60	0.53	0.37	-0.37	
15,673.57	91.74	269.23	8,449.40	317.39	-7,174.14	7,171.16	0.58	0.44	-0.37	
15,687.14	91.80	269.17	8,448.98	317.20	-7,187.70	7,184.72	0.63	0.44	-0.44	
15,700.71	91.86	269.10	8,448.55	317.00	-7,201.26	7,198.29	0.68	0.44	-0.52	
15,714.29	91.91	269.04	8,448.10	316.78	-7,214.83	7,211.86	0.57	0.37	-0.44	
15,727.86	91.97	268.96	8,447.64	316.54	-7,228.39	7,225.42	0.74	0.44	-0.59	
15,741.43	92.01	268.89	8,447.17	316.29	-7,241.95	7,238.98	0.59	0.29	-0.52	
15,755.00	92.05	268.80	8,446.69	316.01	-7,255.51	7,252.54	0.73	0.29	-0.66	
15,768.57	92.07	268.71	8,446.20	315.72	-7,269.07	7,266.10	0.68	0.15	-0.66	
15,782.14	92.09	268.61	8,445.71	315.40	-7,282.62	7,279.66	0.75	0.15	-0.74	
15,795.71	92.09	268.52	8,445.21	315.06	-7,296.18	7,293.22	0.66	0.00	-0.66	
15,809.29	92.10	268.42	8,444.72	314.70	-7,309.75	7,306.79	0.74	0.07	-0.74	
15,822.86	92.11	268.32	8,444.22	314.31	-7,323.30	7,320.35	0.74	0.07	-0.74	
15,836.43	92.12	268.24	8,443.72	313.91	-7,336.86	7,333.90	0.59	0.07	-0.59	
15,850.00	92.10	268.17	8,443.22	313.48	-7,350.41	7,347.46	0.54	-0.15	-0.52	
15,863.57	92.06	268.13	8,442.72	313.04	-7,363.96	7,361.02	0.42	-0.29	-0.29	
15,877.14	92.02	268.09	8,442.24	312.60	-7,377.52	7,374.58	0.42	-0.29	-0.29	



Survey Report

Company:	Colgate Energy	Local Co-ordinate Reference:	Well Weaver 27 State Com 131H
Project:	Eddy County, NM (N83-NME)	TVD Reference:	3354+30 @ 3384.00usft
Site:	Weaver 27 State Com	MD Reference:	3354+30 @ 3384.00usft
Well:	Weaver 27 State Com 131H	North Reference:	Grid
Wellbore:	ST 131H	Survey Calculation Method:	Minimum Curvature
Design:	ST01-DRL	Database:	EDM 5000.14 Single User Db

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
15,890.71	91.94	268.06	8,441.77	312.14	-7,391.07	7,388.13	0.63	-0.59	-0.22	
15,904.29	91.77	268.03	8,441.33	311.68	-7,404.64	7,401.70	1.27	-1.25	-0.22	
15,917.86	91.51	267.99	8,440.94	311.21	-7,418.19	7,415.26	1.94	-1.92	-0.29	
15,931.43	90.94	269.20	8,440.65	310.87	-7,431.76	7,428.83	9.85	-4.20	8.92	
15,945.00	90.47	270.34	8,440.49	310.82	-7,445.33	7,442.40	9.09	-3.46	8.40	
15,958.43	90.51	271.46	8,440.37	311.03	-7,458.75	7,455.82	8.34	0.30	8.34	
15,971.86	90.58	271.31	8,440.24	311.35	-7,472.18	7,469.24	1.23	0.52	-1.12	
15,985.29	90.69	271.15	8,440.10	311.64	-7,485.60	7,482.67	1.45	0.82	-1.19	
15,998.71	90.80	270.97	8,439.92	311.89	-7,499.02	7,496.08	1.57	0.82	-1.34	
16,003.23	90.84	270.91	8,439.86	311.97	-7,503.54	7,500.60	1.51	0.82	-1.27	
04-v7500(W-131H)										
16,012.14	90.91	270.80	8,439.72	312.10	-7,512.45	7,509.50	1.51	0.82	-1.27	
16,025.57	91.00	270.64	8,439.50	312.27	-7,525.88	7,522.93	1.37	0.67	-1.19	
16,039.00	91.08	270.50	8,439.25	312.40	-7,539.30	7,536.35	1.20	0.60	-1.04	
16,052.57	91.13	270.40	8,438.99	312.51	-7,552.87	7,549.92	0.82	0.37	-0.74	
16,066.14	91.19	270.33	8,438.72	312.59	-7,566.44	7,563.49	0.68	0.44	-0.52	
16,079.71	91.23	270.27	8,438.43	312.67	-7,580.00	7,577.05	0.53	0.29	-0.44	
16,093.29	91.28	270.23	8,438.13	312.72	-7,593.58	7,590.63	0.47	0.37	-0.29	
16,106.86	91.32	270.18	8,437.83	312.77	-7,607.15	7,604.19	0.47	0.29	-0.37	
16,120.43	91.36	270.14	8,437.51	312.81	-7,620.71	7,617.76	0.42	0.29	-0.29	
16,134.00	91.38	270.09	8,437.18	312.84	-7,634.28	7,631.32	0.40	0.15	-0.37	
16,147.57	91.38	270.03	8,436.86	312.85	-7,647.84	7,644.89	0.44	0.00	-0.44	
16,161.14	91.36	269.96	8,436.53	312.85	-7,661.41	7,658.45	0.54	-0.15	-0.52	
16,174.71	91.33	269.89	8,436.21	312.83	-7,674.98	7,672.02	0.56	-0.22	-0.52	
16,188.29	91.28	269.81	8,435.90	312.80	-7,688.55	7,685.60	0.69	-0.37	-0.59	
16,201.86	91.21	269.73	8,435.61	312.74	-7,702.12	7,699.16	0.78	-0.52	-0.59	
16,215.43	91.12	269.63	8,435.33	312.67	-7,715.69	7,712.73	0.99	-0.66	-0.74	
16,229.00	91.00	269.53	8,435.08	312.57	-7,729.25	7,726.30	1.15	-0.88	-0.74	
16,242.43	90.84	269.42	8,434.87	312.44	-7,742.68	7,739.73	1.45	-1.19	-0.82	
16,255.86	90.69	269.31	8,434.69	312.30	-7,756.11	7,753.16	1.38	-1.12	-0.82	
16,269.29	90.61	269.19	8,434.54	312.12	-7,769.54	7,766.58	1.07	-0.60	-0.89	
16,282.71	90.56	269.07	8,434.40	311.92	-7,782.96	7,780.00	0.97	-0.37	-0.89	
16,296.14	90.54	269.34	8,434.27	311.73	-7,796.38	7,793.43	2.02	-0.15	2.01	
16,309.57	90.56	270.56	8,434.14	311.72	-7,809.81	7,806.86	9.08	0.15	9.08	
16,323.00	90.63	271.79	8,434.00	311.99	-7,823.24	7,820.28	9.17	0.52	9.16	
16,336.57	90.68	271.72	8,433.85	312.41	-7,836.80	7,833.84	0.63	0.37	-0.52	
16,350.14	90.75	271.64	8,433.68	312.81	-7,850.36	7,847.40	0.78	0.52	-0.59	
16,363.71	90.85	271.57	8,433.49	313.19	-7,863.93	7,860.96	0.90	0.74	-0.52	
16,377.29	90.94	271.50	8,433.27	313.55	-7,877.50	7,874.53	0.84	0.66	-0.52	
16,390.86	91.02	271.44	8,433.04	313.90	-7,891.07	7,888.09	0.74	0.59	-0.44	
16,404.43	91.09	271.39	8,432.79	314.23	-7,904.63	7,901.65	0.63	0.52	-0.37	
16,418.00	91.15	271.34	8,432.53	314.56	-7,918.19	7,915.21	0.58	0.44	-0.37	
16,431.57	91.21	271.31	8,432.25	314.87	-7,931.76	7,928.77	0.49	0.44	-0.22	
16,445.14	91.27	271.28	8,431.95	315.18	-7,945.32	7,942.33	0.49	0.44	-0.22	



Survey Report

Company:	Colgate Energy	Local Co-ordinate Reference:	Well Weaver 27 State Com 131H
Project:	Eddy County, NM (N83-NME)	TVD Reference:	3354+30 @ 3384.00usft
Site:	Weaver 27 State Com	MD Reference:	3354+30 @ 3384.00usft
Well:	Weaver 27 State Com 131H	North Reference:	Grid
Wellbore:	ST 131H	Survey Calculation Method:	Minimum Curvature
Design:	ST01-DRL	Database:	EDM 5000.14 Single User Db

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
16,458.71	91.34	271.26	8,431.65	315.48	-7,958.88	7,955.89	0.54	0.52	-0.15	
16,472.29	91.41	271.24	8,431.32	315.77	-7,972.46	7,969.46	0.54	0.52	-0.15	
16,485.86	91.49	271.22	8,430.98	316.07	-7,986.02	7,983.02	0.61	0.59	-0.15	
16,499.43	91.57	271.19	8,430.61	316.35	-7,999.58	7,996.58	0.63	0.59	-0.22	
16,513.00	91.65	271.16	8,430.23	316.63	-8,013.14	8,010.14	0.63	0.59	-0.22	
16,526.57	91.74	271.11	8,429.83	316.90	-8,026.70	8,023.70	0.76	0.66	-0.37	
16,540.14	91.82	271.05	8,429.41	317.15	-8,040.26	8,037.26	0.74	0.59	-0.44	
16,553.71	91.89	270.99	8,428.97	317.39	-8,053.82	8,050.82	0.68	0.52	-0.44	
16,567.29	91.92	270.93	8,428.52	317.62	-8,067.40	8,064.38	0.49	0.22	-0.44	
16,580.86	91.95	270.87	8,428.06	317.84	-8,080.96	8,077.94	0.49	0.22	-0.44	
16,594.43	91.96	270.81	8,427.60	318.03	-8,094.52	8,091.50	0.45	0.07	-0.44	
16,608.00	91.97	270.77	8,427.13	318.22	-8,108.08	8,105.06	0.30	0.07	-0.29	
16,621.43	91.98	270.74	8,426.67	318.40	-8,121.50	8,118.48	0.24	0.07	-0.22	
16,634.86	92.00	270.72	8,426.20	318.57	-8,134.92	8,131.90	0.21	0.15	-0.15	
16,648.29	92.05	270.71	8,425.73	318.74	-8,148.34	8,145.32	0.38	0.37	-0.07	
16,661.71	92.11	270.69	8,425.24	318.90	-8,161.75	8,158.72	0.47	0.45	-0.15	
16,675.14	92.19	270.68	8,424.74	319.06	-8,175.17	8,172.14	0.60	0.60	-0.07	
16,688.57	92.30	270.65	8,424.21	319.22	-8,188.59	8,185.56	0.85	0.82	-0.22	
16,702.00	92.42	270.60	8,423.66	319.36	-8,202.01	8,198.97	0.97	0.89	-0.37	
16,715.57	92.49	270.53	8,423.08	319.50	-8,215.56	8,212.53	0.73	0.52	-0.52	
16,729.14	92.51	270.43	8,422.49	319.61	-8,229.12	8,226.09	0.75	0.15	-0.74	
16,742.71	92.53	270.34	8,421.89	319.70	-8,242.68	8,239.64	0.68	0.15	-0.66	
16,756.29	92.52	270.24	8,421.29	319.77	-8,256.24	8,253.21	0.74	-0.07	-0.74	
16,769.86	92.30	270.23	8,420.72	319.83	-8,269.80	8,266.76	1.62	-1.62	-0.07	
16,783.43	91.36	270.84	8,420.29	319.95	-8,283.36	8,280.32	8.26	-6.93	4.50	
16,797.00	91.05	271.58	8,420.00	320.24	-8,296.93	8,293.88	5.91	-2.28	5.45	
16,810.57	90.97	271.52	8,419.76	320.61	-8,310.49	8,307.44	0.74	-0.59	-0.44	
16,824.14	90.92	271.48	8,419.54	320.96	-8,324.05	8,321.00	0.47	-0.37	-0.29	
16,837.71	90.88	271.43	8,419.33	321.31	-8,337.62	8,334.56	0.47	-0.29	-0.37	
16,851.29	90.85	271.40	8,419.12	321.64	-8,351.19	8,348.14	0.31	-0.22	-0.22	
16,864.86	90.81	271.36	8,418.92	321.97	-8,364.76	8,361.70	0.42	-0.29	-0.29	
16,878.43	90.79	271.33	8,418.73	322.29	-8,378.32	8,375.26	0.27	-0.15	-0.22	
16,892.00	90.80	271.30	8,418.55	322.60	-8,391.89	8,388.82	0.23	0.07	-0.22	
16,905.57	90.85	271.27	8,418.35	322.90	-8,405.45	8,402.38	0.43	0.37	-0.22	
16,919.14	90.92	271.25	8,418.14	323.20	-8,419.02	8,415.94	0.54	0.52	-0.15	
16,932.71	90.99	271.23	8,417.91	323.49	-8,432.58	8,429.51	0.54	0.52	-0.15	
16,946.29	91.06	271.21	8,417.67	323.78	-8,446.16	8,443.08	0.54	0.52	-0.15	
16,959.86	91.11	271.19	8,417.41	324.07	-8,459.72	8,456.64	0.40	0.37	-0.15	
16,973.43	91.13	271.16	8,417.15	324.35	-8,473.29	8,470.20	0.27	0.15	-0.22	
16,987.00	91.13	271.13	8,416.88	324.62	-8,486.85	8,483.76	0.22	0.00	-0.22	
17,000.43	91.15	271.09	8,416.61	324.88	-8,500.27	8,497.19	0.33	0.15	-0.30	
17,013.86	91.21	271.04	8,416.34	325.13	-8,513.70	8,510.61	0.58	0.45	-0.37	
17,027.29	91.28	270.99	8,416.05	325.36	-8,527.12	8,524.03	0.64	0.52	-0.37	



Survey Report

Company:	Colgate Energy	Local Co-ordinate Reference:	Well Weaver 27 State Com 131H
Project:	Eddy County, NM (N83-NME)	TVD Reference:	3354+30 @ 3384.00usft
Site:	Weaver 27 State Com	MD Reference:	3354+30 @ 3384.00usft
Well:	Weaver 27 State Com 131H	North Reference:	Grid
Wellbore:	ST 131H	Survey Calculation Method:	Minimum Curvature
Design:	ST01-DRL	Database:	EDM 5000.14 Single User Db

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
17,040.71	91.36	270.94	8,415.74	325.59	-8,540.54	8,537.44	0.70	0.60	-0.37	
17,054.14	91.40	270.90	8,415.41	325.81	-8,553.96	8,550.86	0.42	0.30	-0.30	
17,067.57	91.44	270.86	8,415.08	326.01	-8,567.39	8,564.29	0.42	0.30	-0.30	
17,081.00	91.50	270.82	8,414.74	326.21	-8,580.81	8,577.71	0.54	0.45	-0.30	
17,094.57	91.60	270.80	8,414.37	326.40	-8,594.38	8,591.27	0.75	0.74	-0.15	
17,108.14	91.70	270.78	8,413.98	326.59	-8,607.94	8,604.83	0.75	0.74	-0.15	
17,121.71	91.77	270.77	8,413.57	326.77	-8,621.50	8,618.39	0.52	0.52	-0.07	
17,135.29	91.83	270.75	8,413.14	326.95	-8,635.07	8,631.96	0.47	0.44	-0.15	
17,148.86	91.87	270.74	8,412.70	327.13	-8,648.63	8,645.52	0.30	0.29	-0.07	
17,162.43	91.92	270.73	8,412.25	327.30	-8,662.20	8,659.08	0.38	0.37	-0.07	
17,176.00	91.95	270.71	8,411.80	327.47	-8,675.76	8,672.64	0.27	0.22	-0.15	
17,189.43	92.00	270.68	8,411.33	327.63	-8,689.18	8,686.06	0.43	0.37	-0.22	
17,202.86	92.04	270.64	8,410.86	327.79	-8,702.60	8,699.48	0.42	0.30	-0.30	
17,216.29	92.08	270.60	8,410.38	327.93	-8,716.02	8,712.90	0.42	0.30	-0.30	
17,229.71	92.14	270.57	8,409.88	328.07	-8,729.43	8,726.31	0.50	0.45	-0.22	
17,243.14	92.19	270.53	8,409.38	328.20	-8,742.85	8,739.72	0.48	0.37	-0.30	
17,256.57	92.22	270.50	8,408.86	328.32	-8,756.27	8,753.14	0.32	0.22	-0.22	
17,270.00	92.26	270.48	8,408.33	328.44	-8,769.69	8,766.56	0.33	0.30	-0.15	
17,283.71	92.28	270.47	8,407.79	328.55	-8,783.39	8,780.26	0.16	0.15	-0.07	
17,297.43	92.29	270.46	8,407.24	328.66	-8,797.10	8,793.96	0.10	0.07	-0.07	
17,311.14	92.32	270.47	8,406.69	328.77	-8,810.79	8,807.66	0.23	0.22	0.07	
17,324.86	92.37	270.47	8,406.13	328.88	-8,824.50	8,821.37	0.36	0.36	0.00	
17,338.57	92.44	270.47	8,405.56	329.00	-8,838.20	8,835.06	0.51	0.51	0.00	
17,352.29	92.49	270.47	8,404.97	329.11	-8,851.91	8,848.77	0.36	0.36	0.00	
17,366.00	92.54	270.46	8,404.36	329.22	-8,865.60	8,862.46	0.37	0.36	-0.07	
17,379.57	92.62	270.43	8,403.75	329.32	-8,879.16	8,876.02	0.63	0.59	-0.22	
17,393.14	92.67	270.39	8,403.13	329.42	-8,892.71	8,889.57	0.47	0.37	-0.29	
17,406.71	92.68	270.35	8,402.49	329.51	-8,906.27	8,903.13	0.30	0.07	-0.29	
17,420.29	92.72	270.29	8,401.85	329.59	-8,919.83	8,916.69	0.53	0.29	-0.44	
17,433.86	92.75	270.23	8,401.21	329.65	-8,933.39	8,930.24	0.49	0.22	-0.44	
17,447.43	92.79	270.16	8,400.55	329.69	-8,946.94	8,943.80	0.59	0.29	-0.52	
17,461.00	92.86	270.07	8,399.88	329.72	-8,960.50	8,957.35	0.84	0.52	-0.66	
17,474.43	92.90	269.95	8,399.21	329.72	-8,973.91	8,970.76	0.94	0.30	-0.89	
17,487.86	92.89	269.83	8,398.53	329.70	-8,987.32	8,984.17	0.90	-0.07	-0.89	
17,501.29	92.85	269.70	8,397.86	329.64	-9,000.73	8,997.59	1.01	-0.30	-0.97	
17,514.71	92.77	269.58	8,397.20	329.56	-9,014.14	9,010.99	1.07	-0.60	-0.89	
17,528.14	92.65	269.47	8,396.56	329.45	-9,027.55	9,024.41	1.21	-0.89	-0.82	
17,541.57	91.70	269.95	8,396.05	329.38	-9,040.97	9,037.83	7.92	-7.07	3.57	
17,555.00	90.48	270.54	8,395.80	329.44	-9,054.40	9,051.25	10.09	-9.08	4.39	
17,568.57	89.89	270.84	8,395.75	329.60	-9,067.97	9,064.82	4.88	-4.35	2.21	
17,582.14	89.96	270.78	8,395.77	329.79	-9,081.54	9,078.38	0.68	0.52	-0.44	
17,595.71	90.08	270.72	8,395.77	329.97	-9,095.11	9,091.95	0.99	0.88	-0.44	
17,609.29	90.23	270.67	8,395.73	330.13	-9,108.69	9,105.53	1.16	1.10	-0.37	
17,622.86	90.37	270.62	8,395.66	330.29	-9,122.25	9,119.10	1.10	1.03	-0.37	



Survey Report

Company:	Colgate Energy	Local Co-ordinate Reference:	Well Weaver 27 State Com 131H
Project:	Eddy County, NM (N83-NME)	TVD Reference:	3354+30 @ 3384.00usft
Site:	Weaver 27 State Com	MD Reference:	3354+30 @ 3384.00usft
Well:	Weaver 27 State Com 131H	North Reference:	Grid
Wellbore:	ST 131H	Survey Calculation Method:	Minimum Curvature
Design:	ST01-DRL	Database:	EDM 5000.14 Single User Db

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
17,636.43	90.52	270.57	8,395.55	330.43	-9,135.82	9,132.66	1.17	1.11	-0.37
17,650.00	90.66	270.53	8,395.41	330.56	-9,149.39	9,146.23	1.07	1.03	-0.29
17,663.43	90.79	270.50	8,395.25	330.68	-9,162.82	9,159.66	0.99	0.97	-0.22
17,676.86	90.92	270.46	8,395.04	330.79	-9,176.25	9,173.08	1.01	0.97	-0.30
17,690.29	91.03	270.43	8,394.82	330.89	-9,189.68	9,186.51	0.85	0.82	-0.22
17,703.71	91.16	270.40	8,394.56	330.99	-9,203.09	9,199.93	0.99	0.97	-0.22
17,717.14	91.27	270.38	8,394.27	331.08	-9,216.52	9,213.35	0.83	0.82	-0.15
17,730.57	91.40	270.35	8,393.96	331.17	-9,229.95	9,226.78	0.99	0.97	-0.22
17,744.00	91.54	270.34	8,393.62	331.25	-9,243.37	9,240.20	1.05	1.04	-0.07
17,757.57	91.67	270.33	8,393.24	331.33	-9,256.94	9,253.76	0.96	0.96	-0.07
17,771.14	91.79	270.33	8,392.83	331.41	-9,270.50	9,267.33	0.88	0.88	0.00
17,784.71	91.90	270.32	8,392.39	331.48	-9,284.06	9,280.89	0.81	0.81	-0.07
17,798.29	92.02	270.32	8,391.93	331.56	-9,297.63	9,294.46	0.88	0.88	0.00
17,811.86	92.13	270.31	8,391.44	331.63	-9,311.19	9,308.02	0.81	0.81	-0.07
17,825.43	92.23	270.30	8,390.92	331.71	-9,324.75	9,321.58	0.74	0.74	-0.07
17,839.00	92.33	270.27	8,390.38	331.77	-9,338.31	9,335.13	0.77	0.74	-0.22
17,852.43	92.43	270.23	8,389.82	331.83	-9,351.73	9,348.55	0.80	0.74	-0.30
17,865.86	92.51	270.17	8,389.24	331.88	-9,365.15	9,361.97	0.74	0.60	-0.45
17,879.29	92.57	270.11	8,388.65	331.91	-9,378.57	9,375.38	0.63	0.45	-0.45
17,892.71	92.62	270.05	8,388.04	331.93	-9,391.97	9,388.79	0.58	0.37	-0.45
17,906.14	92.67	269.98	8,387.42	331.93	-9,405.39	9,402.21	0.64	0.37	-0.52
17,919.57	91.37	270.22	8,386.95	331.96	-9,418.81	9,415.63	9.84	-9.68	1.79
17,933.00	90.01	270.55	8,386.78	332.05	-9,432.24	9,429.05	10.42	-10.13	2.46
17,946.43	88.59	270.69	8,386.95	332.19	-9,445.67	9,442.48	10.62	-10.57	1.04
17,959.86	88.56	270.64	8,387.28	332.35	-9,459.09	9,455.90	0.43	-0.22	-0.37
17,973.29	88.63	270.59	8,387.61	332.49	-9,472.52	9,469.33	0.64	0.52	-0.37
17,986.71	88.71	270.53	8,387.92	332.62	-9,485.93	9,482.74	0.75	0.60	-0.45
18,000.14	88.78	270.48	8,388.22	332.74	-9,499.36	9,496.16	0.64	0.52	-0.37
18,013.57	88.85	270.43	8,388.50	332.85	-9,512.78	9,509.59	0.64	0.52	-0.37
18,027.00	88.91	270.40	8,388.76	332.95	-9,526.21	9,523.02	0.50	0.45	-0.22
18,040.43	88.99	270.38	8,389.00	333.04	-9,539.64	9,536.44	0.61	0.60	-0.15
18,053.86	89.07	270.37	8,389.23	333.13	-9,553.07	9,549.87	0.60	0.60	-0.07
18,067.29	89.16	270.37	8,389.44	333.21	-9,566.49	9,563.30	0.67	0.67	0.00
18,080.71	89.23	270.37	8,389.63	333.30	-9,579.91	9,576.71	0.52	0.52	0.00
18,094.14	89.31	270.37	8,389.80	333.39	-9,593.34	9,590.14	0.60	0.60	0.00
18,107.57	89.36	270.36	8,389.95	333.47	-9,606.77	9,603.57	0.38	0.37	-0.07
18,121.00	89.39	270.34	8,390.10	333.55	-9,620.20	9,617.00	0.27	0.22	-0.15
18,134.43	89.38	270.31	8,390.25	333.63	-9,633.63	9,630.42	0.24	-0.07	-0.22
18,147.86	89.36	270.26	8,390.39	333.70	-9,647.06	9,643.85	0.40	-0.15	-0.37
18,161.29	89.36	270.21	8,390.54	333.75	-9,660.49	9,657.28	0.37	0.00	-0.37
18,174.71	89.37	270.16	8,390.69	333.79	-9,673.91	9,670.70	0.38	0.07	-0.37
18,188.14	89.38	270.11	8,390.84	333.83	-9,687.33	9,684.13	0.38	0.07	-0.37
18,201.57	89.39	270.05	8,390.98	333.85	-9,700.76	9,697.55	0.45	0.07	-0.45



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Site:	Weaver 27 State Com	MD Reference:	3354+30 @ 3384.00usft
Well:	Weaver 27 State Com 131H	North Reference:	Grid
Wellbore:	ST 131H	Survey Calculation Method:	Minimum Curvature
Design:	ST01-DRL	Database:	EDM 5000.14 Single User Db

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
18,215.00	89.41	270.00	8,391.12	333.85	-9,714.19	9,710.98	0.40	0.15	-0.37	
18,228.57	89.42	269.95	8,391.26	333.85	-9,727.76	9,724.55	0.38	0.07	-0.37	
18,242.14	89.44	269.91	8,391.40	333.83	-9,741.33	9,738.12	0.33	0.15	-0.29	
18,255.71	89.46	269.87	8,391.53	333.80	-9,754.90	9,751.69	0.33	0.15	-0.29	
18,269.29	89.48	269.84	8,391.65	333.77	-9,768.48	9,765.27	0.27	0.15	-0.22	
18,282.86	89.51	269.82	8,391.77	333.73	-9,782.05	9,778.84	0.27	0.22	-0.15	
18,296.43	89.56	269.81	8,391.88	333.68	-9,795.62	9,792.41	0.38	0.37	-0.07	
18,310.00	89.62	269.83	8,391.98	333.64	-9,809.19	9,805.98	0.47	0.44	0.15	
18,323.43	89.70	269.88	8,392.06	333.61	-9,822.62	9,819.41	0.70	0.60	0.37	
18,336.86	89.81	269.95	8,392.12	333.59	-9,836.05	9,832.84	0.97	0.82	0.52	
18,350.29	89.93	270.03	8,392.15	333.59	-9,849.48	9,846.27	1.07	0.89	0.60	
18,363.71	90.07	270.11	8,392.15	333.60	-9,862.90	9,859.69	1.20	1.04	0.60	
18,377.14	90.22	270.20	8,392.11	333.64	-9,876.33	9,873.11	1.30	1.12	0.67	
18,390.57	90.39	270.28	8,392.04	333.69	-9,889.76	9,886.54	1.40	1.27	0.60	
18,404.00	90.60	270.35	8,391.93	333.77	-9,903.19	9,899.97	1.65	1.56	0.52	
18,417.43	90.84	270.41	8,391.76	333.86	-9,916.62	9,913.40	1.84	1.79	0.45	
18,430.86	91.11	270.45	8,391.53	333.96	-9,930.04	9,926.82	2.03	2.01	0.30	
18,444.29	91.39	270.48	8,391.23	334.07	-9,943.47	9,940.25	2.10	2.08	0.22	
18,457.71	91.66	270.50	8,390.88	334.18	-9,956.88	9,953.66	2.02	2.01	0.15	
18,471.14	91.92	270.52	8,390.46	334.30	-9,970.31	9,967.08	1.94	1.94	0.15	
18,484.57	92.16	270.54	8,389.98	334.43	-9,983.73	9,980.50	1.79	1.79	0.15	
18,498.00	92.34	270.55	8,389.45	334.55	-9,997.15	9,993.92	1.34	1.34	0.07	
18,503.80	92.39	270.55	8,389.21	334.61	-10,002.94	9,999.71	0.89	0.89	0.00	
05-v10000(W-131H)										
18,511.43	92.46	270.55	8,388.89	334.68	-10,010.57	10,007.34	0.89	0.89	0.00	
18,524.86	92.53	270.55	8,388.31	334.81	-10,023.98	10,020.75	0.52	0.52	0.00	
18,538.29	92.59	270.54	8,387.71	334.94	-10,037.40	10,034.17	0.45	0.45	-0.07	
18,551.71	92.64	270.53	8,387.09	335.06	-10,050.80	10,047.57	0.38	0.37	-0.07	
18,565.14	92.69	270.51	8,386.47	335.19	-10,064.22	10,060.98	0.40	0.37	-0.15	
18,578.57	92.75	270.49	8,385.83	335.30	-10,077.63	10,074.40	0.47	0.45	-0.15	
18,592.00	92.85	270.46	8,385.18	335.41	-10,091.05	10,087.81	0.78	0.74	-0.22	
18,606.67	93.03	270.42	8,384.42	335.53	-10,105.70	10,102.46	1.26	1.23	-0.27	
18,621.33	93.24	270.38	8,383.62	335.63	-10,120.33	10,117.09	1.46	1.43	-0.27	
18,626.84	93.31	270.36	8,383.31	335.66	-10,125.84	10,122.60	1.26	1.23	-0.27	
06-LTP(W-131H)										
18,626.95	93.31	270.36	8,383.30	335.66	-10,125.94	10,122.70	1.26	1.23	-0.27	
100FWL: 18626.95' MD, 10122.70' VS, 8383.30' TVD										
18,636.00	93.42	270.34	8,382.77	335.72	-10,134.98	10,131.74	1.26	1.23	-0.27	
Final MWD Survey: 18636.00' MD, 93.42°INC, 270.34°AZ										
18,695.00	93.42	270.34	8,379.25	336.07	-10,193.87	10,190.63	0.00	0.00	0.00	
PTB: 18695.00' MD, 93.42°INC, 270.34°AZ - 07-PBHL(W-131H)										



Survey Report

Company:	Colgate Energy	Local Co-ordinate Reference:	Well Weaver 27 State Com 131H
Project:	Eddy County, NM (N83-NME)	TVD Reference:	3354+30 @ 3384.00usft
Site:	Weaver 27 State Com	MD Reference:	3354+30 @ 3384.00usft
Well:	Weaver 27 State Com 131H	North Reference:	Grid
Wellbore:	ST 131H	Survey Calculation Method:	Minimum Curvature
Design:	ST01-DRL	Database:	EDM 5000.14 Single User Db

Design Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
8,954.00	8,608.29	400.65	-465.77	EOC: 8954.00' MD, 462.32' VS, 8608.29' TVD
18,626.95	8,383.30	335.66	-10,125.94	100FWL: 18626.95' MD, 10122.70' VS, 8383.30' TVD
18,636.00	8,382.77	335.72	-10,134.98	Final MWD Survey: 18636.00' MD, 93.42°INC, 270.34°AZ
18,695.00	8,379.25	336.07	-10,193.87	PTB: 18695.00' MD, 93.42°INC, 270.34°AZ

Checked By: _____ Approved By: _____ Date: _____

District I

1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720

District II

811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720

District III

1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170

District IV

1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

ACKNOWLEDGMENTS

Action 117775

ACKNOWLEDGMENTS

Operator: COLGATE OPERATING, LLC 300 North Marienfeld Street Midland, TX 79701	OGRID: 371449
	Action Number: 117775
	Action Type: [C-104] Completion Packet (C-104C)

ACKNOWLEDGMENTS

☒	I hereby certify that the required Water Use Report has been, or will be, submitted for this wells completion.
☒	I hereby certify that the required FracFocus disclosure has been, or will be, submitted for this wells completion.

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District IV
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State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS

Action 117775

CONDITIONS

Operator: COLGATE OPERATING, LLC 300 North Marienfeld Street Midland, TX 79701	OGRID: 371449
	Action Number: 117775
	Action Type: [C-104] Completion Packet (C-104C)

CONDITIONS

Created By	Condition	Condition Date
jagarcia	RT expires 9/1/2022	6/23/2022