

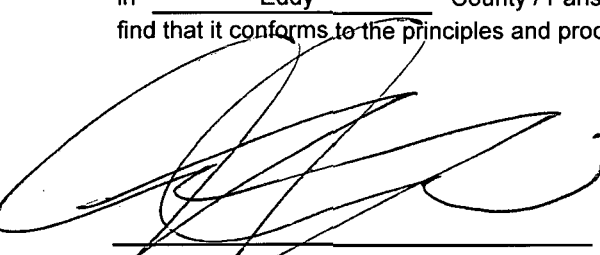
NM OIL CONSERVATION
ARTESIA DISTRICT

NOV 07 2016

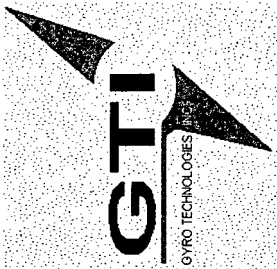
RECEIVED

30-015-43695

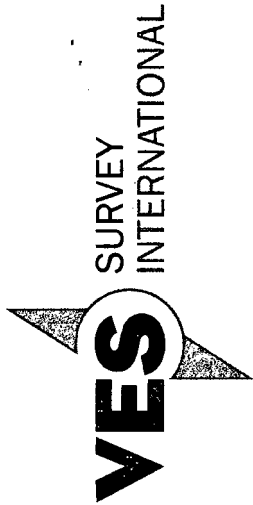
I Adam G. Askew certify that I am employed by VES Survey International. That I did on the day(s) of 06/14/16 through 06/14/16 conduct or supervise the taking of a Rate Gyro survey from a depth of 0.00 feet to a depth of 8,683.00 feet; that the data is true, correct, complete and within the limitations of the tool as set forth by Vaughn Energy Services, that I am authorized and qualified to make this report; that this survey was conducted at the request of Matador Production for the Charlie Sweeney 31-23 -28 RB Well # 201H API # 30-015-43695 in Eddy County / Parish New Mexico; and that I have reviewed this report and find that it conforms to the principles and procedures as set forth by VES Survey International.



Adam G. Askew
Service Technician
VES Survey International



Company: Matador Production
Lease/Well: Charlie Sweeney 31-23-28 RB No./201H



Rig Name: Patterson 297
State/County: New Mexico/Eddy
VS-Azi: 180.42 Degrees
Latitude: 32.27007, Longitude: -104.13323
Grid North = True North -0.11 degs (NAD 27)
Grid Correction Applied = -0.11 degs

NM OIL CONSERVATION
ARTESIA DISTRICT

NOV 07 2016

RECEIVED

Depth Reference : RKB = 28.5 feet

DRILLOG MS GYRO SURVEY CALCULATIONS

Filename: gyro survey final.ut
Minimum Curvature Method

Report Date/Time: 6/20/2016 / 08:34

VES Survey International
West Texas
432-563-5444

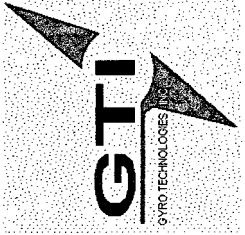
Surveyor: Adam Askew

Charlie Sweeney 31-23-28 RB No. 201H / API 30-015-43695

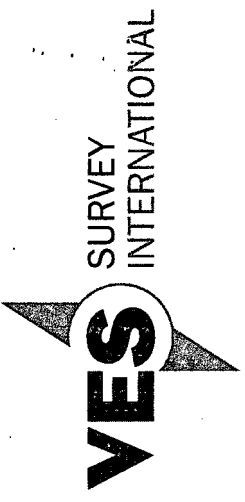
Measured Depth FT	Incl Angle Deg	Drift Direction Deg	TVD FT	+N/-S FT	+E/-W FT	Vertical Section FT	Closure Distance FT	Closure Direction Deg	Dogleg Severity Deg/100
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	****
68.12	0.20	276.09	68.12	0.01	-0.12	-0.01	0.12	276.09	0.30
161.76	0.65	172.30	161.76	-0.49	-0.21	0.50	0.54	203.46	0.77
255.40	0.92	220.23	255.39	-1.59	-0.63	1.60	1.71	201.57	0.73
349.04	1.46	204.80	349.01	-3.25	-1.62	3.27	3.63	206.44	0.67
442.68	2.11	183.85	442.60	-6.06	-2.23	6.07	6.46	200.25	0.97
536.32	2.45	197.09	536.17	-9.69	-2.94	9.71	10.13	196.87	0.67
629.96	2.99	181.75	629.71	-14.05	-3.60	14.07	14.50	194.38	0.96
723.60	3.07	187.09	723.22	-18.97	-3.99	19.00	19.39	191.86	0.31
817.24	3.60	196.82	816.70	-24.28	-5.15	24.32	24.82	191.97	0.83
910.88	4.21	202.41	910.12	-30.27	-7.31	30.33	31.14	193.57	0.77
1004.52	4.81	206.05	1003.47	-36.98	-10.34	37.05	38.40	195.63	0.71
1098.16	6.07	211.00	1096.69	-44.75	-14.62	44.85	47.07	198.09	1.43
1191.80	6.73	211.28	1189.74	-53.68	-20.02	53.82	57.29	200.45	0.72
1285.44	6.89	215.08	1282.72	-62.97	-26.10	63.16	68.16	202.51	0.51
1379.08	6.04	217.52	1375.77	-71.48	-32.33	71.71	78.45	204.34	0.96
1472.72	5.13	219.18	1468.96	-78.63	-37.98	78.91	87.32	205.78	0.98

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	TVD FT	+N/-S FT	+E/-W FT	Vertical Section FT	Closure Distance FT	Closure Direction Deg	Dogleg Severity Deg/100
1566.36	6.63	222.89	1562.10	-85.85	-44.30	86.17	96.60	207.30	1.65
1660.00	4.72	222.61	1655.28	-92.64	-50.59	93.01	105.56	208.64	2.05
1753.64	4.38	213.98	1748.63	-98.45	-55.20	98.85	112.87	209.28	0.82
1847.28	4.57	204.31	1841.98	-104.81	-58.73	105.24	120.14	209.27	0.83
1940.92	5.80	190.22	1935.24	-112.86	-61.11	113.31	128.35	208.43	1.88
2034.56	5.78	198.49	2028.40	-121.99	-63.44	122.45	137.50	207.48	0.89
2128.20	5.25	206.06	2121.61	-130.31	-66.82	130.80	146.45	207.15	0.96
2221.84	3.37	219.72	2214.98	-136.28	-70.47	136.80	153.42	207.34	2.27
2315.48	2.29	248.22	2308.51	-139.10	-73.96	139.63	157.54	208.00	1.86
2409.12	2.79	255.22	2402.06	-140.37	-77.90	140.94	160.54	209.03	0.63
2502.76	2.97	272.34	2495.59	-140.85	-82.53	141.45	163.25	210.37	0.94
2596.40	2.45	283.84	2589.12	-140.27	-86.90	140.91	165.01	211.78	0.80
2690.04	2.55	280.01	2682.67	-139.43	-90.90	140.09	166.45	213.10	0.21
2783.68	2.61	299.44	2776.22	-138.02	-94.81	138.71	167.45	214.49	0.93
2877.32	2.47	284.59	2869.77	-136.46	-98.63	137.18	168.37	215.86	0.72
2970.96	2.55	275.07	2963.32	-135.77	-102.66	136.52	170.21	217.09	0.45
3064.60	2.79	267.57	3056.86	-135.68	-107.01	136.46	172.81	218.26	0.45
3158.24	2.58	263.94	3150.39	-136.00	-111.39	136.81	175.80	219.32	0.29
3251.88	2.47	258.06	3243.94	-136.64	-115.46	137.48	178.89	220.20	0.30
3345.52	2.38	265.39	3337.50	-137.21	-119.37	138.09	181.87	221.02	0.34
3439.16	2.43	274.00	3431.06	-137.23	-123.29	138.13	184.48	221.94	0.39
3532.80	2.54	273.69	3524.61	-136.96	-127.34	137.89	187.01	222.92	0.12
3626.44	2.47	276.27	3618.16	-136.61	-131.42	137.57	189.56	223.89	0.15
3720.08	2.40	280.35	3711.71	-136.03	-135.35	137.02	191.90	224.86	0.20
3813.72	2.33	284.27	3805.27	-135.21	-139.13	136.23	194.01	225.82	0.19
3907.36	2.21	281.84	3898.84	-134.37	-142.75	135.41	196.04	226.73	0.17
4001.00	2.22	281.18	3992.41	-133.65	-146.29	134.72	198.15	227.58	0.03
4094.64	2.18	284.05	4085.98	-132.87	-149.79	133.96	200.23	228.43	0.12
4188.28	2.19	271.06	4179.55	-132.40	-153.32	133.52	202.57	229.19	0.53
4281.92	2.32	264.28	4273.12	-132.55	-156.99	133.70	205.47	229.82	0.31
4375.56	2.46	250.71	4366.68	-133.41	-160.77	134.58	208.91	230.31	0.62
4469.20	2.24	246.37	4460.24	-134.80	-164.34	136.01	212.56	230.64	0.31
4562.84	1.98	248.19	4553.82	-136.14	-167.52	137.36	215.87	230.90	0.28
4656.48	1.56	245.21	4647.41	-137.27	-170.18	138.52	218.65	231.11	0.46
4750.12	1.46	247.77	4741.02	-138.26	-172.44	139.52	221.02	231.28	0.13
4843.76	1.29	244.05	4834.63	-139.17	-174.49	140.45	223.20	231.42	0.21
4937.40	1.33	242.85	4928.25	-140.13	-176.41	141.42	225.29	231.54	0.05
5031.04	1.35	243.32	5021.86	-141.12	-178.37	142.43	227.44	231.65	0.03
5124.68	1.35	256.67	5115.48	-141.87	-180.43	143.19	229.53	231.82	0.34

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	TVD FT	+N/-S FT	+E/-W FT	Vertical Section FT	Closure Distance FT	Closure Direction Deg	Dogleg Severity Deg/100
5218.32	1.32	247.62	5209.09	-142.54	-182.50	143.87	231.57	232.01	0.23
5311.96	0.99	246.25	5302.71	-143.28	-184.24	144.62	233.39	232.13	0.36
5405.60	0.92	232.87	5396.34	-144.06	-185.58	145.41	234.93	232.18	0.25
5499.24	0.86	217.91	5489.97	-145.06	-186.61	146.43	236.36	232.14	0.26
5592.88	0.86	198.02	5583.60	-146.28	-187.26	147.65	237.62	232.00	0.32
5686.52	0.92	192.10	5677.23	-147.69	-187.63	149.06	238.79	231.79	0.12
5780.16	1.36	191.01	5770.85	-149.52	-188.00	150.89	240.21	231.50	0.47
5873.80	1.58	188.62	5864.46	-151.89	-188.41	153.26	242.01	231.13	0.24
5967.44	1.44	193.19	5958.07	-154.30	-188.87	155.68	243.89	230.75	0.20
6061.08	1.34	214.20	6051.68	-156.35	-189.76	157.74	245.87	230.51	0.55
6154.72	1.50	233.31	6145.29	-157.99	-191.36	159.39	248.15	230.46	0.53
6248.36	0.96	250.82	6238.91	-158.99	-193.09	160.40	250.12	230.53	0.70
6342.00	0.62	230.92	6332.54	-159.56	-194.22	160.98	251.36	230.60	0.47
6435.64	0.55	203.58	6426.18	-160.30	-194.80	161.72	252.27	230.55	0.30
6529.28	0.41	176.74	6519.81	-161.05	-194.96	162.47	252.87	230.44	0.28
6622.92	0.12	128.75	6613.45	-161.44	-194.86	162.87	253.05	230.36	0.36
6716.56	0.58	100.47	6707.09	-161.59	-194.32	163.01	252.73	230.25	0.51
6810.20	0.70	130.27	6800.72	-162.05	-193.41	163.46	252.32	230.04	0.37
6903.84	0.92	198.38	6894.36	-163.13	-193.21	164.54	252.87	229.83	0.99
6997.48	1.87	221.34	6987.97	-164.99	-194.46	166.41	255.02	229.69	1.16
7091.12	1.90	235.26	7081.56	-167.02	-196.75	168.46	258.08	229.67	0.49
7184.76	2.08	255.44	7175.14	-168.33	-199.66	169.79	261.15	229.87	0.77
7278.40	2.04	235.68	7268.72	-169.70	-202.69	171.18	264.35	230.06	0.76
7372.04	1.80	221.37	7362.31	-171.74	-205.04	173.24	267.46	230.05	0.57
7465.68	1.76	239.43	7455.91	-173.58	-207.25	175.09	270.33	230.05	0.60
7559.32	1.78	257.21	7549.50	-174.63	-209.90	176.16	273.04	230.24	0.58
7652.96	1.35	281.73	7643.11	-174.73	-212.40	176.28	275.03	230.56	0.84
7746.60	1.11	285.88	7736.73	-174.25	-214.35	175.82	276.24	230.89	0.27
7840.24	1.25	284.30	7830.35	-173.75	-216.22	175.33	277.38	231.21	0.15
7933.88	1.19	287.68	7923.97	-173.20	-218.13	174.80	278.53	231.55	0.10
8027.52	0.90	296.23	8017.59	-172.58	-219.72	174.19	279.40	231.85	0.35
8121.16	1.20	312.12	8111.21	-171.60	-221.11	173.22	279.88	232.18	0.44
8214.80	0.80	1.96	8204.84	-170.29	-221.81	171.91	279.64	232.49	0.98
8308.44	1.53	32.02	8298.46	-168.57	-221.12	170.19	278.05	232.68	0.99
8402.08	1.62	65.33	8392.07	-166.96	-219.25	168.56	275.58	232.71	0.97
8495.72	1.08	97.09	8485.68	-166.51	-217.17	168.10	273.66	232.52	0.97
8589.36	2.09	108.18	8579.29	-167.15	-214.67	168.72	272.08	232.09	1.12
8683.00	2.97	129.81	8672.84	-169.24	-211.19	170.78	270.64	231.29	1.37



VES Survey International
West Texas
432-563-5444
Surveyor: Adam Askew
Charlie Sweeney 31-23-28 RB No. 201H / API 30-015-43695



V.E.S. Survey Date: 6/13/2016

Phoenix Technology Services
SURVEY DATA CERTIFICATION



PHOENIX JOB NUMBER

60109

ENERGY COMPANY

Matador Resources

WELL NAME

Charlie Sweeney 31-23S-28E 201H

COUNTY & STATE

Eddy County, New Mexico

API WELL NUMBER

30-015-43695

PROPOSED DIRECTION

180.42°

TIE-IN DATA						
MEASURED	VERTICAL			N-S	E-W	DATA
DEPTH	DEPTH	INCLIN	AZIMUTH	COORD	COORD	SOURCE
503.00 ft	503.00 ft	2.90°	184.00°	10.00 S	2.00 W	FloDrift

FIRST	FIRST		
SURVEY	SURVEY		
DATE	DEPTH	INCLIN	AZIMUTH
7-Jun-16	598.00 ft	3.30°	175.80°

SURVEY INSTRUMENT
TYPE

Phoenix MWD

LAST	LAST		
SURVEY	SURVEY		
DATE	DEPTH	INCLIN	AZIMUTH
23-Jun-16	14,500.00 ft	90.70°	180.40°

TO THE BEST OF MY KNOWLEDGE I
CERTIFY THIS SURVEY DATA TO BE
TRUE AND CORRECT.

PROJECTED	PROJECTED		
TD SURVEY	TD SURVEY		
DATE	DEPTH	INCLIN	AZIMUTH
23-Jun-16	14,580.00 ft	90.70°	180.40°

Shane King

PRINT YOUR NAME ABOVE

Shane King

SIGN YOUR NAME ABOVE

6/23/2016

TODAY'S DATE

MAGNETIC DECLINATION OR TOTAL GRID

TOTAL CORRECTION USED	7.36
DECLINATION OR GRID	GRID

MWD SUPERVISOR 1

Shane King

DIRECTIONAL DRILLER 1

Wes Kelldorf

MWD SUPERVISOR 2

Brian Pittman

DIRECTIONAL DRILLER 2

Dustin St. Clair

12329 Cutten Rd., Houston, Texas 77066 (713)337-0600 (Voice), (713)337-0599 (Fax)



Matador Resources

Eddy County, NM (NAD27 NME)

Charlie Sweeney 31-23S-28E

#201H

OH / Job 60109

Survey: Phoenix MWD Surveys

Standard Survey Report

23 June, 2016



PHOENIX
TECHNOLOGY SERVICES



Phoenix Technology Services

Survey Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well #201H
Project:	Eddy County, NM (NAD27 NME)	TVD Reference:	RKB @ 3144.50usft (Patterson 297)
Site:	Charlie Sweeney 31-23S-28E	MD Reference:	RKB @ 3144.50usft (Patterson 297)
Well:	#201H	North Reference:	Grid
Wellbore:	OH / Job 60109	Survey Calculation Method:	Minimum Curvature
Design:	Surveys (Patterson 297)	Database:	Compass 5000 GCR

Project	Eddy County, NM (NAD27 NME)		
Map System:	US State Plane 1927 (Exact solution)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico East 3001		

Site	Charlie Sweeney 31-23S-28E		
Site Position:	Map	Northings:	462,027.00 usft
From:		Easting:	561,848.00 usft
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 16' 12.25398 N
		Longitude:	104° 7' 59.63405 W
		Grid Convergence:	0.11 °

Well	#201H		
Well Position	+N/-S	0.00 usft	Northings:
	+E/-W	0.00 usft	Easting:
Position Uncertainty	0.00 usft	Wellhead Elevation:	0.00 usft
		Latitude:	32° 16' 12.25398 N
		Longitude:	104° 7' 59.63405 W
		Ground Level:	3,117.00 usft

Wellbore	OH / Job 60109		
Magnetics	Model Name	Sample Date	Declination
	HDGM	5/30/2016	7.47
			Dip Angle
			60.12
			Field Strength
			48,220

Design	Surveys (Patterson 297)		
Audit Notes:			
Version:	1.0	Phase:	ACTUAL
		Tie On Depth:	0.00
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W
	(usft)	(usft)	(usft)
	0.00	0.00	0.00
			Direction
			180.42

Survey Program	Date 6/23/2016		
From	To	Survey (Wellbore)	Tool Name
(usft)	(usft)		
598.00	14,580.00	Phoenix MWD Surveys (OH / Job 60109)	PHX+MWD+HDGM
			Description
			PHX+QWSG MWD + HDGM

Survey									
Measured	Inclination	Azimuth	Vertical	+N/-S	+E/-W	Vertical	Dogleg	Build	Turn
Depth	(°)	(°)	Depth	(usft)	(usft)	Section	Rate	Rate	Rate
(usft)			(usft)			(usft)	(°/100usft)	(°/100usft)	(°/100usft)
503.00	2.90	184.00	503.00	-10.00	-2.00	10.01	0.00	0.00	0.00
Tie In									
598.00	3.30	175.80	597.86	-15.12	-1.97	15.14	0.63	0.42	-8.63
First Phoenix MWD Survey									
780.00	3.90	197.20	779.51	-26.26	-3.41	26.29	0.80	0.33	11.76
963.00	5.30	208.30	961.92	-39.65	-9.26	39.72	0.90	0.77	6.07
1,150.00	6.90	216.50	1,147.86	-56.28	-20.04	56.43	0.97	0.86	4.39
1,337.00	5.20	220.80	1,333.81	-71.73	-32.26	71.97	0.94	-0.91	2.30
1,525.00	6.50	226.60	1,520.83	-85.49	-45.56	85.82	0.76	0.69	3.09
1,713.00	4.40	220.70	1,707.97	-98.27	-57.99	98.69	1.15	-1.12	-3.14



Phoenix Technology Services

Survey Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well #201H
Project:	Eddy County, NM (NAD27 NME)	TVD Reference:	RKB @ 3144.50usft (Patterson 297)
Site:	Charlie Sweeney 31-23S-28E	MD Reference:	RKB @ 3144.50usft (Patterson 297)
Well:	#201H	North Reference:	Grid
Wellbore:	OH / Job 60109	Survey Calculation Method:	Minimum Curvature
Design:	Surveys (Patterson 297)	Database:	Compass 5000 GCR

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)
1,900.00	5.90	173.50	1,894.29	-113.27	-61.58	113.72	2.32	0.80	-25.24
2,087.00	5.80	199.30	2,080.35	-131.74	-63.62	132.20	1.40	-0.05	13.80
2,275.00	2.60	249.50	2,267.87	-142.20	-70.76	142.72	2.44	-1.70	26.70
2,462.00	2.90	278.70	2,454.66	-142.97	-79.41	143.55	0.76	0.16	15.61
2,571.00	2.40	281.10	2,563.55	-142.11	-84.37	142.73	0.47	-0.46	2.20
2,758.00	2.50	282.20	2,750.37	-140.50	-92.20	141.17	0.06	0.05	0.59
2,945.00	2.70	268.10	2,937.18	-139.78	-100.59	140.52	0.36	0.11	-7.54
3,133.00	2.60	264.20	3,124.98	-140.36	-109.26	141.16	0.11	-0.05	-2.07
3,320.00	2.50	267.30	3,311.80	-140.98	-117.55	141.84	0.09	-0.05	1.66
3,507.00	2.60	274.10	3,498.61	-140.87	-125.85	141.79	0.17	0.05	3.64
3,694.00	2.40	277.10	3,685.44	-140.08	-133.97	141.06	0.13	-0.11	1.60
3,882.00	2.20	280.10	3,873.28	-138.96	-141.43	140.00	0.12	-0.11	1.60
4,069.00	2.10	279.50	4,060.15	-137.77	-148.34	138.85	0.05	-0.05	-0.32
4,256.00	2.40	255.30	4,247.01	-138.20	-155.51	139.33	0.53	0.16	-12.94
4,444.00	2.10	246.70	4,434.87	-140.56	-162.48	141.75	0.24	-0.16	-4.57
4,631.00	1.50	237.60	4,621.77	-143.23	-167.69	144.45	0.35	-0.32	-4.87
4,818.00	1.30	243.60	4,808.72	-145.48	-171.66	146.73	0.13	-0.11	3.21
5,006.00	1.30	237.70	4,996.67	-147.57	-175.37	148.85	0.07	0.00	-3.14
5,193.00	1.20	244.10	5,183.63	-149.56	-178.93	150.86	0.09	-0.05	3.42
5,381.00	1.00	230.20	5,371.59	-151.47	-181.96	152.80	0.18	-0.11	-7.39
5,568.00	1.00	193.80	5,558.56	-154.10	-183.60	155.44	0.33	0.00	-19.47
5,755.00	1.10	185.70	5,745.53	-157.47	-184.17	158.81	0.10	0.05	-4.33
5,943.00	1.50	191.90	5,933.48	-161.67	-184.86	163.02	0.23	0.21	3.30
6,130.00	1.50	223.10	6,120.42	-165.85	-187.03	167.22	0.43	0.00	16.68
6,317.00	0.90	246.20	6,307.38	-168.23	-190.05	169.62	0.41	-0.32	12.35
6,505.00	0.50	167.70	6,495.37	-169.63	-191.22	171.03	0.50	-0.21	-41.76
6,692.00	0.50	64.00	6,682.37	-170.07	-190.32	171.46	0.42	0.00	-55.45
6,879.00	0.40	218.50	6,869.37	-170.22	-189.99	171.61	0.47	-0.05	82.62
7,066.00	1.80	233.90	7,056.33	-172.46	-192.77	173.87	0.76	0.75	8.24
7,253.00	2.20	240.70	7,243.21	-175.95	-198.27	177.40	0.25	0.21	3.64
7,441.00	1.80	230.60	7,431.10	-179.59	-203.70	181.08	0.28	-0.21	-5.37
7,628.00	1.30	273.40	7,618.04	-181.33	-208.09	182.85	0.65	-0.27	22.89
7,815.00	1.10	284.60	7,804.99	-180.75	-211.94	182.30	0.16	-0.11	5.99
8,003.00	0.90	286.50	7,992.97	-179.88	-215.11	181.45	0.11	-0.11	1.01
8,190.00	1.00	277.70	8,179.94	-179.24	-218.13	180.83	0.09	0.05	-4.71
8,377.00	1.60	85.20	8,366.92	-178.80	-217.15	180.39	1.38	0.32	89.57
8,565.00	2.20	124.30	8,554.82	-180.62	-211.55	182.16	0.74	0.32	20.80
8,727.00	2.60	132.20	8,716.68	-184.84	-206.26	186.34	0.32	0.25	4.88
8,825.00	4.90	154.80	8,814.47	-190.12	-202.83	191.60	2.75	2.35	23.06
8,872.00	9.10	162.00	8,861.11	-195.47	-200.83	196.94	9.11	8.94	15.32
8,918.00	11.70	168.00	8,906.35	-203.50	-198.73	204.95	6.12	5.65	13.04
8,965.00	14.90	169.20	8,952.09	-214.10	-196.61	215.53	6.83	6.81	2.55
9,012.00	18.60	170.00	8,997.08	-227.42	-194.17	228.83	7.89	7.87	1.70



Phoenix Technology Services

Survey Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well #201H
Project:	Eddy County, NM (NAD27 NME)	TVD Reference:	RKB @ 3144.50usft (Patterson 297)
Site:	Charlie Sweeney 31-23S-28E	MD Reference:	RKB @ 3144.50usft (Patterson 297)
Well:	#201H	North Reference:	Grid
Wellbore:	OH / Job 60109	Survey Calculation Method:	Minimum Curvature
Design:	Surveys (Patterson 297)	Database:	Compass 5000 GCR

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)
9,043.00	21.70	170.50	9,026.18	-237.94	-192.37	239.35	10.02	10.00	1.61
9,075.00	24.30	170.80	9,055.64	-250.28	-190.34	251.67	8.13	8.13	0.94
9,106.00	26.90	171.20	9,083.59	-263.51	-188.25	264.88	8.41	8.39	1.29
9,153.00	30.40	169.40	9,124.83	-285.71	-184.43	287.05	7.67	7.45	-3.83
9,199.00	34.90	171.40	9,163.55	-310.17	-180.32	311.49	10.06	9.78	4.35
9,246.00	39.70	170.10	9,200.93	-338.27	-175.72	339.55	10.35	10.21	-2.77
9,293.00	44.10	172.20	9,235.91	-369.28	-170.92	370.52	9.82	9.36	4.47
9,340.00	47.30	175.70	9,268.73	-402.72	-167.41	403.94	8.64	6.81	7.45
9,387.00	48.70	179.00	9,300.19	-437.60	-165.80	438.80	6.01	2.98	7.02
9,418.00	51.20	180.50	9,320.13	-461.33	-165.70	462.53	8.87	8.06	4.84
9,449.00	53.60	180.00	9,339.05	-485.89	-165.81	487.09	7.85	7.74	-1.61
9,478.00	56.30	179.40	9,355.70	-509.62	-165.68	510.82	9.46	9.31	-2.07
9,510.00	59.20	179.60	9,372.77	-536.68	-165.45	537.88	9.08	9.06	0.63
9,541.00	61.90	179.50	9,388.01	-563.67	-165.24	564.87	8.71	8.71	-0.32
9,572.00	66.00	178.50	9,401.62	-591.51	-164.75	592.71	13.54	13.23	-3.23
9,603.00	71.00	177.70	9,412.98	-620.33	-163.79	621.52	16.31	16.13	-2.58
9,634.00	76.00	176.70	9,421.78	-650.01	-162.33	651.18	16.42	16.13	-3.23
9,794.00	92.50	173.60	9,437.76	-808.06	-148.86	809.13	10.49	10.31	-1.94
9,808.00	92.40	173.56	9,437.16	-821.96	-147.29	823.02	0.80	-0.74	-0.32
FPP Crossing: 9808' MD									
9,889.00	91.80	173.30	9,434.20	-902.37	-138.03	903.36	0.80	-0.74	-0.32
9,983.00	88.80	174.80	9,433.71	-995.85	-128.29	996.77	3.57	-3.19	1.60
10,077.00	91.60	176.20	9,433.38	-1,089.55	-120.91	1,090.41	3.33	2.98	1.49
10,172.00	92.30	176.80	9,430.15	-1,184.32	-115.12	1,185.13	0.97	0.74	0.63
10,266.00	87.90	174.80	9,429.98	-1,278.04	-108.23	1,278.80	5.14	-4.68	-2.13
10,361.00	89.80	174.40	9,431.89	-1,372.59	-99.30	1,373.28	2.04	2.00	-0.42
10,455.00	89.00	173.60	9,432.87	-1,466.07	-89.47	1,466.69	1.20	-0.85	-0.85
10,549.00	89.50	173.70	9,434.10	-1,559.49	-79.07	1,560.02	0.54	0.53	0.11
10,644.00	94.60	175.40	9,430.71	-1,653.96	-70.06	1,654.43	5.66	5.37	1.79
10,738.00	99.40	178.80	9,419.25	-1,747.10	-65.33	1,747.53	6.24	5.11	3.62
10,832.00	92.00	184.90	9,409.91	-1,840.47	-68.37	1,840.93	10.18	-7.87	6.49
10,926.00	86.70	184.80	9,410.98	-1,934.10	-76.32	1,934.61	5.64	-5.64	-0.11
11,021.00	88.80	184.00	9,414.71	-2,028.74	-83.60	2,029.30	2.37	2.21	-0.84
11,115.00	91.80	183.60	9,414.22	-2,122.52	-89.83	2,123.12	3.22	3.19	-0.43
11,209.00	90.00	183.40	9,412.74	-2,216.33	-95.57	2,216.97	1.93	-1.91	-0.21
11,303.00	87.90	183.50	9,414.46	-2,310.14	-101.22	2,310.82	2.24	-2.23	0.11
11,397.00	89.70	181.50	9,416.43	-2,404.02	-105.32	2,404.73	2.86	1.91	-2.13
11,491.00	92.20	180.80	9,414.87	-2,497.98	-107.21	2,498.70	2.76	2.66	-0.74
11,585.00	89.30	180.20	9,413.64	-2,591.96	-108.03	2,592.68	3.15	-3.09	-0.64
11,679.00	94.90	180.90	9,410.20	-2,685.85	-108.93	2,686.58	6.00	5.96	0.74
11,773.00	94.40	180.90	9,402.58	-2,779.53	-110.40	2,780.27	0.53	-0.53	0.00
11,862.00	92.20	180.00	9,397.45	-2,868.37	-111.10	2,869.11	2.67	-2.47	-1.01
11,955.00	90.40	179.70	9,395.34	-2,961.35	-110.85	2,962.08	1.96	-1.94	-0.32
12,049.00	89.50	179.00	9,395.43	-3,055.34	-109.79	3,056.06	1.21	-0.96	-0.74



Phoenix Technology Services

Survey Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well #201H
Project:	Eddy County, NM (NAD27 NME)	TVD Reference:	RKB @ 3144.50usft (Patterson 297)
Site:	Charlie Sweeney 31-23S-28E	MD Reference:	RKB @ 3144.50usft (Patterson 297)
Well:	#201H	North Reference:	Grid
Wellbore:	OH / Job 60109	Survey Calculation Method:	Minimum Curvature
Design:	Surveys (Patterson 297)	Database:	Compass 5000 GCR

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)
12,143.00	89.30	179.30	9,396.41	-3,149.32	-108.39	3,150.03	0.38	-0.21	0.32
12,238.00	89.10	179.00	9,397.74	-3,244.30	-106.98	3,245.00	0.38	-0.21	-0.32
12,333.00	89.30	179.20	9,399.06	-3,339.28	-105.49	3,339.97	0.30	0.21	0.21
12,427.00	89.00	179.30	9,400.46	-3,433.26	-104.26	3,433.94	0.34	-0.32	0.11
12,521.00	89.10	179.50	9,402.02	-3,527.25	-103.28	3,527.91	0.24	0.11	0.21
12,615.00	88.10	179.40	9,404.31	-3,621.21	-102.37	3,621.87	1.07	-1.06	-0.11
12,709.00	90.00	181.40	9,405.87	-3,715.19	-103.03	3,715.84	2.93	2.02	2.13
12,804.00	90.50	181.60	9,405.46	-3,810.15	-105.52	3,810.83	0.57	0.53	0.21
12,897.00	91.40	182.80	9,403.92	-3,903.07	-109.09	3,903.76	1.61	0.97	1.29
12,991.00	91.60	182.50	9,401.45	-3,996.94	-113.43	3,997.66	0.38	0.21	-0.32
13,087.00	89.40	180.80	9,400.62	-4,092.88	-116.19	4,093.63	2.90	-2.29	-1.77
13,181.00	89.80	181.40	9,401.27	-4,186.86	-118.00	4,187.62	0.77	0.43	0.64
13,275.00	87.40	180.20	9,403.57	-4,280.82	-119.31	4,281.58	2.85	-2.55	-1.28
13,369.00	85.60	179.40	9,409.31	-4,374.64	-118.98	4,375.39	2.09	-1.91	-0.85
13,463.00	85.90	179.80	9,416.27	-4,468.38	-118.33	4,469.12	0.53	0.32	0.43
13,558.00	87.80	179.90	9,421.49	-4,563.23	-118.08	4,563.97	2.00	2.00	0.11
13,652.00	91.70	180.70	9,421.90	-4,657.21	-118.57	4,657.95	4.24	4.15	0.85
13,745.00	91.50	181.20	9,419.31	-4,750.16	-120.12	4,750.91	0.58	-0.22	0.54
13,839.00	92.90	181.60	9,415.70	-4,844.06	-122.41	4,844.83	1.55	1.49	0.43
13,934.00	94.80	181.90	9,409.32	-4,938.80	-125.30	4,939.58	2.02	2.00	0.32
14,028.00	92.40	181.60	9,403.42	-5,032.56	-128.17	5,033.36	2.57	-2.55	-0.32
14,123.00	91.80	181.30	9,399.94	-5,127.46	-130.57	5,128.28	0.71	-0.63	-0.32
14,217.00	89.40	180.80	9,398.95	-5,221.44	-132.29	5,222.27	2.61	-2.55	-0.53
14,312.00	89.10	180.50	9,400.20	-5,316.42	-133.37	5,317.26	0.45	-0.32	-0.32
14,406.00	90.70	180.50	9,400.36	-5,410.41	-134.19	5,411.25	1.70	1.70	0.00
14,472.00	90.70	180.43	9,399.55	-5,476.41	-134.73	5,477.25	0.11	0.00	-0.11
LPP Crossing: 14472' MD									
14,500.00	90.70	180.40	9,399.21	-5,504.40	-134.93	5,505.25	0.11	0.00	-0.11
Final Phoenix MWD Survey									
14,580.00	90.70	180.40	9,398.24	-5,584.40	-135.49	5,585.24	0.00	0.00	0.00
Projection to TD									

Survey Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
503.00	503.00	-10.00	-2.00	Tie In
598.00	597.86	-15.12	-1.97	First Phoenix MWD Survey
9,808.00	9,437.16	-821.96	-147.29	FPP Crossing: 9808' MD
14,472.00	9,399.55	-5,476.41	-134.73	LPP Crossing: 14472' MD
14,500.00	9,399.21	-5,504.40	-134.93	Final Phoenix MWD Survey
14,580.00	9,398.24	-5,584.40	-135.49	Projection to TD



Phoenix Technology Services
Survey Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well #201H
Project:	Eddy County, NM (NAD27 NME)	TVD Reference:	RKB @ 3144.50usft (Patterson 297)
Site:	Charlie Sweeney 31-23S-28E	MD Reference:	RKB @ 3144.50usft (Patterson 297)
Well:	#201H	North Reference:	Grid
Wellbore:	OH / Job 60109	Survey Calculation Method:	Minimum Curvature
Design:	Surveys (Patterson 297)	Database:	Compass 5000 GCR

Checked By: _____ Approved By: _____ Date: _____

**NM OIL CONSERVATION
ARTESIA DISTRICT**

NOV 07 2016

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

RECEIVED

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	² Pool Code	³ Pool Name
	97442	Black River Wolfcamp East (Gas)
⁴ Property Code	⁵ Property Name	⁶ Well Number
	CHARLIE SWEENEY 31-23S-28E RB	#201H
⁷ GRID No.	⁸ Operator Name	⁹ Elevation
228937	MATADOR PRODUCTION COMPANY	3117'

¹⁰Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
4	30	23-S	28-E	-	492'	SOUTH	497'	WEST	EDDY

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
4	31	23-S	28-E	-	240'	SOUTH	330'	WEST	EDDY

¹² Dedicated Acres	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
320			

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.

	SURFACE LOCATION NEW MEXICO EAST NAD 1927 X=561848 Y=462027 LAT.: N 32.2700693 LONG.: W 104.1332310 NAD 1983 X=603031 Y=462085 LAT.: N 32.2701895 LONG.: W 104.1337272 ELEV = 3117'	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. <i>Chris Carleton</i> 3/30/16 Signature Date Chris Carleton Printed Name ccarleton@matadorresources.com E-mail Address
	FIRST PERFORATION POINT NEW MEXICO EAST NAD 1927 X=561677 Y=461205 LAT.: N 32.2678112 LONG.: W 104.1337886 NAD 1983 X=602860 Y=461264 LAT.: N 32.2679314 LONG.: W 104.1342847 LAST PERFORATION POINT NEW MEXICO EAST NAD 1927 X=561642 Y=456550 LAT.: N 32.2550149 LONG.: W 104.1339303 NAD 1983 X=602825 Y=456608 LAT.: N 32.2551351 LONG.: W 104.1344260	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 to the best of my belief. 11/24/2015 Date of Survey Signature and Seal of Professional Surveyor Certificate Number