



Titus Oil & Gas Production, LLC

Eddy County, NM (NAD83-NME)

A01 Todd DSU

Todd 2-24S-31E State 405H - Slot 405H

405H

Plan: Plan #1-Rev0

Standard Planning Report

31 May, 2019

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well Todd 2-24S-31E State 405H - Slot 405H
Company:	Titus Oil & Gas Production, LLC	TVD Reference:	3508+25 @ 3533.00usft (KB=25)
Project:	Eddy County, NM (NAD83-NME)	MD Reference:	3508+25 @ 3533.00usft (KB=25)
Site:	A01 Todd DSU	North Reference:	Grid
Well:	Todd 2-24S-31E State 405H	Survey Calculation Method:	Minimum Curvature
Wellbore:	405H		
Design:	Plan #1-Rev0		

Project	Eddy County, NM (NAD83-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	A01 Todd DSU		
Site Position:		Northing:	451,484.10 usft
From:	Map	Easting:	722,093.00 usft
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "
		Latitude:	32.23985324
		Longitude:	-103.74870598
		Grid Convergence:	0.31 °

Well	Todd 2-24S-31E State 405H - Slot 405H		
Well Position	+N/-S	-44.70 usft	Northing:
	+E/-W	30.90 usft	Easting:
Position Uncertainty	0.00 usft	Wellhead Elevation:	
		Latitude:	32.23972991
		Longitude:	-103.74860683
		Ground Level:	3,508.00 usft

Wellbore	405H		
Magnetics	Model Name	Sample Date	Declination
			(°)
	IGRF2015	5/30/2019	6.83
			Dip Angle
			(°)
			60.02
			Field Strength
			(nT)
			47,727.81676586

Design	Plan #1-Rev0		
Audit Notes:			
Version:	Phase:	PLAN	Tie On Depth:
			0.00
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W
	(usft)	(usft)	(usft)
	0.00	0.00	0.00
			Direction
			(°)
			3.47

Plan Survey Tool Program	Date	5/31/2019		
Depth From	Depth To	Survey (Wellbore)	Tool Name	Remarks
(usft)	(usft)			
1	0.00	16,757.88 Plan #1-Rev0 (405H)	MWD	
			MWD - Standard	

Plan Sections										
Measured	Inclination	Azimuth	Vertical	+N/-S	+E/-W	Dogleg	Build	Turn	TFO	Target
Depth	(°)	(°)	Depth	(usft)	(usft)	Rate	Rate	Rate	(°)	
(usft)			(usft)			(°/100usft)	(°/100usft)	(°/100usft)		
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,500.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,659.54	2.39	115.25	1,659.49	-1.42	3.01	1.50	1.50	0.00	115.25	
10,348.13	2.39	115.25	10,340.51	-156.15	331.16	0.00	0.00	0.00	0.00	
10,507.67	0.00	0.00	10,500.00	-157.57	334.17	1.50	-1.50	0.00	180.00	A01N05-EON (405H)
11,210.78	0.00	0.00	11,203.11	-157.57	334.17	0.00	0.00	0.00	0.00	
12,112.38	90.16	359.70	11,776.07	416.98	331.18	10.00	10.00	-0.03	359.70	
16,757.88	90.16	359.70	11,763.10	5,062.40	307.00	0.00	0.00	0.00	0.00	A01N05-PBHL (405H)

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Site:	A01 Todd DSU	North Reference:	Grid
Well:	Todd 2-24S-31E State 405H	Survey Calculation Method:	Minimum Curvature
Wellbore:	405H		
Design:	Plan #1-Rev0		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00
1,100.00	0.00	0.00	1,100.00	0.00	0.00	0.00	0.00	0.00	0.00
1,200.00	0.00	0.00	1,200.00	0.00	0.00	0.00	0.00	0.00	0.00
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00	0.00
1,400.00	0.00	0.00	1,400.00	0.00	0.00	0.00	0.00	0.00	0.00
1,500.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00	0.00
1,600.00	1.50	115.25	1,599.99	-0.56	1.18	-0.49	1.50	1.50	0.00
1,659.54	2.39	115.25	1,659.49	-1.42	3.01	-1.24	1.50	1.50	0.00
1,700.00	2.39	115.25	1,699.92	-2.14	4.54	-1.86	0.00	0.00	0.00
1,800.00	2.39	115.25	1,799.83	-3.92	8.32	-3.41	0.00	0.00	0.00
1,900.00	2.39	115.25	1,899.74	-5.70	12.09	-4.96	0.00	0.00	0.00
2,000.00	2.39	115.25	1,999.66	-7.48	15.87	-6.51	0.00	0.00	0.00
2,100.00	2.39	115.25	2,099.57	-9.26	19.65	-8.06	0.00	0.00	0.00
2,200.00	2.39	115.25	2,199.48	-11.05	23.42	-9.61	0.00	0.00	0.00
2,300.00	2.39	115.25	2,299.40	-12.83	27.20	-11.16	0.00	0.00	0.00
2,400.00	2.39	115.25	2,399.31	-14.61	30.98	-12.71	0.00	0.00	0.00
2,500.00	2.39	115.25	2,499.22	-16.39	34.75	-14.25	0.00	0.00	0.00
2,600.00	2.39	115.25	2,599.13	-18.17	38.53	-15.80	0.00	0.00	0.00
2,700.00	2.39	115.25	2,699.05	-19.95	42.31	-17.35	0.00	0.00	0.00
2,800.00	2.39	115.25	2,798.96	-21.73	46.09	-18.90	0.00	0.00	0.00
2,900.00	2.39	115.25	2,898.87	-23.51	49.86	-20.45	0.00	0.00	0.00
3,000.00	2.39	115.25	2,998.78	-25.29	53.64	-22.00	0.00	0.00	0.00
3,100.00	2.39	115.25	3,098.70	-27.07	57.42	-23.55	0.00	0.00	0.00
3,200.00	2.39	115.25	3,198.61	-28.85	61.19	-25.10	0.00	0.00	0.00
3,300.00	2.39	115.25	3,298.52	-30.63	64.97	-26.65	0.00	0.00	0.00
3,400.00	2.39	115.25	3,398.44	-32.42	68.75	-28.19	0.00	0.00	0.00
3,500.00	2.39	115.25	3,498.35	-34.20	72.52	-29.74	0.00	0.00	0.00
3,600.00	2.39	115.25	3,598.26	-35.98	76.30	-31.29	0.00	0.00	0.00
3,700.00	2.39	115.25	3,698.17	-37.76	80.08	-32.84	0.00	0.00	0.00
3,800.00	2.39	115.25	3,798.09	-39.54	83.85	-34.39	0.00	0.00	0.00
3,900.00	2.39	115.25	3,898.00	-41.32	87.63	-35.94	0.00	0.00	0.00
4,000.00	2.39	115.25	3,997.91	-43.10	91.41	-37.49	0.00	0.00	0.00
4,100.00	2.39	115.25	4,097.83	-44.88	95.18	-39.04	0.00	0.00	0.00
4,200.00	2.39	115.25	4,197.74	-46.66	98.96	-40.59	0.00	0.00	0.00
4,300.00	2.39	115.25	4,297.65	-48.44	102.74	-42.14	0.00	0.00	0.00
4,400.00	2.39	115.25	4,397.56	-50.22	106.51	-43.68	0.00	0.00	0.00
4,500.00	2.39	115.25	4,497.48	-52.00	110.29	-45.23	0.00	0.00	0.00
4,600.00	2.39	115.25	4,597.39	-53.79	114.07	-46.78	0.00	0.00	0.00
4,700.00	2.39	115.25	4,697.30	-55.57	117.84	-48.33	0.00	0.00	0.00
4,800.00	2.39	115.25	4,797.21	-57.35	121.62	-49.88	0.00	0.00	0.00
4,900.00	2.39	115.25	4,897.13	-59.13	125.40	-51.43	0.00	0.00	0.00
5,000.00	2.39	115.25	4,997.04	-60.91	129.17	-52.98	0.00	0.00	0.00
5,100.00	2.39	115.25	5,096.95	-62.69	132.95	-54.53	0.00	0.00	0.00
5,200.00	2.39	115.25	5,196.87	-64.47	136.73	-56.08	0.00	0.00	0.00

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Planned Survey

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5,300.00	2.39	115.25	5,296.78	-66.25	140.50	-57.62	0.00	0.00	0.00
5,400.00	2.39	115.25	5,396.69	-68.03	144.28	-59.17	0.00	0.00	0.00
5,500.00	2.39	115.25	5,496.60	-69.81	148.06	-60.72	0.00	0.00	0.00
5,600.00	2.39	115.25	5,596.52	-71.59	151.83	-62.27	0.00	0.00	0.00
5,700.00	2.39	115.25	5,696.43	-73.37	155.61	-63.82	0.00	0.00	0.00
5,800.00	2.39	115.25	5,796.34	-75.16	159.39	-65.37	0.00	0.00	0.00
5,900.00	2.39	115.25	5,896.26	-76.94	163.16	-66.92	0.00	0.00	0.00
6,000.00	2.39	115.25	5,996.17	-78.72	166.94	-68.47	0.00	0.00	0.00
6,100.00	2.39	115.25	6,096.08	-80.50	170.72	-70.02	0.00	0.00	0.00
6,200.00	2.39	115.25	6,195.99	-82.28	174.49	-71.57	0.00	0.00	0.00
6,300.00	2.39	115.25	6,295.91	-84.06	178.27	-73.11	0.00	0.00	0.00
6,400.00	2.39	115.25	6,395.82	-85.84	182.05	-74.66	0.00	0.00	0.00
6,500.00	2.39	115.25	6,495.73	-87.62	185.82	-76.21	0.00	0.00	0.00
6,600.00	2.39	115.25	6,595.65	-89.40	189.60	-77.76	0.00	0.00	0.00
6,700.00	2.39	115.25	6,695.56	-91.18	193.38	-79.31	0.00	0.00	0.00
6,800.00	2.39	115.25	6,795.47	-92.96	197.15	-80.86	0.00	0.00	0.00
6,900.00	2.39	115.25	6,895.38	-94.74	200.93	-82.41	0.00	0.00	0.00
7,000.00	2.39	115.25	6,995.30	-96.52	204.71	-83.96	0.00	0.00	0.00
7,100.00	2.39	115.25	7,095.21	-98.31	208.48	-85.51	0.00	0.00	0.00
7,200.00	2.39	115.25	7,195.12	-100.09	212.26	-87.05	0.00	0.00	0.00
7,300.00	2.39	115.25	7,295.03	-101.87	216.04	-88.60	0.00	0.00	0.00
7,400.00	2.39	115.25	7,394.95	-103.65	219.81	-90.15	0.00	0.00	0.00
7,500.00	2.39	115.25	7,494.86	-105.43	223.59	-91.70	0.00	0.00	0.00
7,600.00	2.39	115.25	7,594.77	-107.21	227.37	-93.25	0.00	0.00	0.00
7,700.00	2.39	115.25	7,694.69	-108.99	231.14	-94.80	0.00	0.00	0.00
7,800.00	2.39	115.25	7,794.60	-110.77	234.92	-96.35	0.00	0.00	0.00
7,900.00	2.39	115.25	7,894.51	-112.55	238.70	-97.90	0.00	0.00	0.00
8,000.00	2.39	115.25	7,994.42	-114.33	242.47	-99.45	0.00	0.00	0.00
8,100.00	2.39	115.25	8,094.34	-116.11	246.25	-100.99	0.00	0.00	0.00
8,200.00	2.39	115.25	8,194.25	-117.89	250.03	-102.54	0.00	0.00	0.00
8,300.00	2.39	115.25	8,294.16	-119.68	253.80	-104.09	0.00	0.00	0.00
8,400.00	2.39	115.25	8,394.08	-121.46	257.58	-105.64	0.00	0.00	0.00
8,500.00	2.39	115.25	8,493.99	-123.24	261.36	-107.19	0.00	0.00	0.00
8,600.00	2.39	115.25	8,593.90	-125.02	265.13	-108.74	0.00	0.00	0.00
8,700.00	2.39	115.25	8,693.81	-126.80	268.91	-110.29	0.00	0.00	0.00
8,800.00	2.39	115.25	8,793.73	-128.58	272.69	-111.84	0.00	0.00	0.00
8,900.00	2.39	115.25	8,893.64	-130.36	276.47	-113.39	0.00	0.00	0.00
9,000.00	2.39	115.25	8,993.55	-132.14	280.24	-114.94	0.00	0.00	0.00
9,100.00	2.39	115.25	9,093.46	-133.92	284.02	-116.48	0.00	0.00	0.00
9,200.00	2.39	115.25	9,193.38	-135.70	287.80	-118.03	0.00	0.00	0.00
9,300.00	2.39	115.25	9,293.29	-137.48	291.57	-119.58	0.00	0.00	0.00
9,400.00	2.39	115.25	9,393.20	-139.26	295.35	-121.13	0.00	0.00	0.00
9,500.00	2.39	115.25	9,493.12	-141.05	299.13	-122.68	0.00	0.00	0.00
9,600.00	2.39	115.25	9,593.03	-142.83	302.90	-124.23	0.00	0.00	0.00
9,700.00	2.39	115.25	9,692.94	-144.61	306.68	-125.78	0.00	0.00	0.00
9,800.00	2.39	115.25	9,792.85	-146.39	310.46	-127.33	0.00	0.00	0.00
9,900.00	2.39	115.25	9,892.77	-148.17	314.23	-128.88	0.00	0.00	0.00
10,000.00	2.39	115.25	9,992.68	-149.95	318.01	-130.42	0.00	0.00	0.00
10,100.00	2.39	115.25	10,092.59	-151.73	321.79	-131.97	0.00	0.00	0.00
10,200.00	2.39	115.25	10,192.51	-153.51	325.56	-133.52	0.00	0.00	0.00
10,300.00	2.39	115.25	10,292.42	-155.29	329.34	-135.07	0.00	0.00	0.00
10,348.13	2.39	115.25	10,340.51	-156.15	331.16	-135.82	0.00	0.00	0.00
10,400.00	1.62	115.25	10,392.34	-156.92	332.80	-136.49	1.50	-1.50	0.00
10,507.67	0.00	0.00	10,500.00	-157.57	334.17	-137.05	1.50	-1.50	0.00

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Wellbore:	405H		
Design:	Plan #1-Rev0		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
A01N05-EON (405H)									
10,600.00	0.00	0.00	10,592.33	-157.57	334.17	-137.05	0.00	0.00	0.00
10,700.00	0.00	0.00	10,692.33	-157.57	334.17	-137.05	0.00	0.00	0.00
10,800.00	0.00	0.00	10,792.33	-157.57	334.17	-137.05	0.00	0.00	0.00
10,900.00	0.00	0.00	10,892.33	-157.57	334.17	-137.05	0.00	0.00	0.00
11,000.00	0.00	0.00	10,992.33	-157.57	334.17	-137.05	0.00	0.00	0.00
11,100.00	0.00	0.00	11,092.33	-157.57	334.17	-137.05	0.00	0.00	0.00
11,200.00	0.00	0.00	11,192.33	-157.57	334.17	-137.05	0.00	0.00	0.00
11,210.78	0.00	0.00	11,203.11	-157.57	334.17	-137.05	0.00	0.00	0.00
KOP: 11210.78' MD, 11203.11' TVD									
11,250.00	3.92	359.70	11,242.30	-156.23	334.16	-135.71	10.00	10.00	0.00
11,300.00	8.92	359.70	11,291.97	-150.64	334.13	-130.14	10.00	10.00	0.00
11,350.00	13.92	359.70	11,340.96	-140.74	334.08	-120.26	10.00	10.00	0.00
11,400.00	18.92	359.70	11,388.91	-126.61	334.01	-106.16	10.00	10.00	0.00
11,450.00	23.92	359.70	11,435.44	-108.35	333.91	-87.94	10.00	10.00	0.00
11,500.00	28.92	359.70	11,480.20	-86.11	333.80	-65.75	10.00	10.00	0.00
11,550.00	33.92	359.70	11,522.86	-60.05	333.66	-39.75	10.00	10.00	0.00
11,600.00	38.92	359.70	11,563.08	-30.38	333.51	-10.13	10.00	10.00	0.00
11,650.00	43.92	359.70	11,600.56	2.69	333.34	22.87	10.00	10.00	0.00
11,700.00	48.92	359.70	11,635.01	38.90	333.15	59.00	10.00	10.00	0.00
11,750.00	53.92	359.70	11,666.18	77.98	332.94	97.99	10.00	10.00	0.00
11,800.00	58.92	359.70	11,693.83	119.62	332.73	139.54	10.00	10.00	0.00
11,842.24	63.15	359.70	11,714.28	156.57	332.53	176.41	10.00	10.00	0.00
A01N05-FTP (405H)									
11,850.00	63.92	359.70	11,717.74	163.51	332.50	183.34	10.00	10.00	0.00
11,900.00	68.92	359.70	11,737.73	209.32	332.26	229.05	10.00	10.00	0.00
11,950.00	73.92	359.70	11,753.66	256.70	332.01	276.33	10.00	10.00	0.00
12,000.00	78.92	359.70	11,765.39	305.29	331.76	324.81	10.00	10.00	0.00
12,050.00	83.92	359.70	11,772.85	354.71	331.50	374.13	10.00	10.00	0.00
12,100.00	88.92	359.70	11,775.97	404.60	331.24	423.91	10.00	10.00	0.00
12,112.38	90.16	359.70	11,776.07	416.98	331.18	436.26	10.00	10.00	0.00
EOC: 12112.38' MD, 11776.07' TVD									
12,200.00	90.16	359.70	11,775.82	504.60	330.72	523.69	0.00	0.00	0.00
12,300.00	90.16	359.70	11,775.54	604.60	330.20	623.48	0.00	0.00	0.00
12,400.00	90.16	359.70	11,775.26	704.59	329.68	723.26	0.00	0.00	0.00
12,500.00	90.16	359.70	11,774.98	804.59	329.16	823.04	0.00	0.00	0.00
12,600.00	90.16	359.70	11,774.70	904.59	328.64	922.83	0.00	0.00	0.00
12,700.00	90.16	359.70	11,774.43	1,004.59	328.12	1,022.61	0.00	0.00	0.00
12,800.00	90.16	359.70	11,774.15	1,104.59	327.60	1,122.39	0.00	0.00	0.00
12,900.00	90.16	359.70	11,773.87	1,204.59	327.08	1,222.18	0.00	0.00	0.00
13,000.00	90.16	359.70	11,773.59	1,304.58	326.56	1,321.96	0.00	0.00	0.00
13,100.00	90.16	359.70	11,773.31	1,404.58	326.04	1,421.74	0.00	0.00	0.00
13,200.00	90.16	359.70	11,773.03	1,504.58	325.52	1,521.53	0.00	0.00	0.00
13,300.00	90.16	359.70	11,772.75	1,604.58	325.00	1,621.31	0.00	0.00	0.00
13,400.00	90.16	359.70	11,772.47	1,704.58	324.48	1,721.09	0.00	0.00	0.00
13,500.00	90.16	359.70	11,772.19	1,804.58	323.96	1,820.88	0.00	0.00	0.00
13,600.00	90.16	359.70	11,771.91	1,904.57	323.44	1,920.66	0.00	0.00	0.00
13,700.00	90.16	359.70	11,771.63	2,004.57	322.92	2,020.44	0.00	0.00	0.00
13,800.00	90.16	359.70	11,771.36	2,104.57	322.40	2,120.23	0.00	0.00	0.00
13,900.00	90.16	359.70	11,771.08	2,204.57	321.88	2,220.01	0.00	0.00	0.00
14,000.00	90.16	359.70	11,770.80	2,304.57	321.35	2,319.79	0.00	0.00	0.00
14,100.00	90.16	359.70	11,770.52	2,404.57	320.83	2,419.58	0.00	0.00	0.00
14,200.00	90.16	359.70	11,770.24	2,504.56	320.31	2,519.36	0.00	0.00	0.00

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well Todd 2-24S-31E State 405H - Slot 405H
Company:	Titus Oil & Gas Production, LLC	TVD Reference:	3508+25 @ 3533.00usft (KB=25)
Project:	Eddy County, NM (NAD83-NME)	MD Reference:	3508+25 @ 3533.00usft (KB=25)
Site:	A01 Todd DSU	North Reference:	Grid
Well:	Todd 2-24S-31E State 405H	Survey Calculation Method:	Minimum Curvature
Wellbore:	405H		
Design:	Plan #1-Rev0		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
14,300.00	90.16	359.70	11,769.96	2,604.56	319.79	2,619.14	0.00	0.00	0.00
14,400.00	90.16	359.70	11,769.68	2,704.56	319.27	2,718.93	0.00	0.00	0.00
14,500.00	90.16	359.70	11,769.40	2,804.56	318.75	2,818.71	0.00	0.00	0.00
14,600.00	90.16	359.70	11,769.12	2,904.56	318.23	2,918.49	0.00	0.00	0.00
14,700.00	90.16	359.70	11,768.84	3,004.55	317.71	3,018.28	0.00	0.00	0.00
14,800.00	90.16	359.70	11,768.56	3,104.55	317.19	3,118.06	0.00	0.00	0.00
14,900.00	90.16	359.70	11,768.29	3,204.55	316.67	3,217.84	0.00	0.00	0.00
15,000.00	90.16	359.70	11,768.01	3,304.55	316.15	3,317.63	0.00	0.00	0.00
15,100.00	90.16	359.70	11,767.73	3,404.55	315.63	3,417.41	0.00	0.00	0.00
15,200.00	90.16	359.70	11,767.45	3,504.55	315.11	3,517.19	0.00	0.00	0.00
15,300.00	90.16	359.70	11,767.17	3,604.54	314.59	3,616.98	0.00	0.00	0.00
15,400.00	90.16	359.70	11,766.89	3,704.54	314.07	3,716.76	0.00	0.00	0.00
15,500.00	90.16	359.70	11,766.61	3,804.54	313.55	3,816.54	0.00	0.00	0.00
15,600.00	90.16	359.70	11,766.33	3,904.54	313.03	3,916.33	0.00	0.00	0.00
15,700.00	90.16	359.70	11,766.05	4,004.54	312.51	4,016.11	0.00	0.00	0.00
15,800.00	90.16	359.70	11,765.77	4,104.54	311.99	4,115.89	0.00	0.00	0.00
15,900.00	90.16	359.70	11,765.49	4,204.53	311.47	4,215.68	0.00	0.00	0.00
16,000.00	90.16	359.70	11,765.22	4,304.53	310.94	4,315.46	0.00	0.00	0.00
16,100.00	90.16	359.70	11,764.94	4,404.53	310.42	4,415.24	0.00	0.00	0.00
16,200.00	90.16	359.70	11,764.66	4,504.53	309.90	4,515.03	0.00	0.00	0.00
16,300.00	90.16	359.70	11,764.38	4,604.53	309.38	4,614.81	0.00	0.00	0.00
16,400.00	90.16	359.70	11,764.10	4,704.52	308.86	4,714.59	0.00	0.00	0.00
16,437.87	90.16	359.70	11,763.99	4,742.40	308.67	4,752.39	0.00	0.00	0.00
A01N05-LTP (405H)									
16,500.00	90.16	359.70	11,763.82	4,804.52	308.34	4,814.38	0.00	0.00	0.00
16,600.00	90.16	359.70	11,763.54	4,904.52	307.82	4,914.16	0.00	0.00	0.00
16,700.00	90.16	359.70	11,763.26	5,004.52	307.30	5,013.94	0.00	0.00	0.00
16,757.88	90.16	359.70	11,763.10	5,062.40	307.00	5,071.70	0.00	0.00	0.00
TD: 16757.88' MD, 11763.10' TVD - A01N05-PBHL (405H)									

Design Targets

Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
A01N05-EON (405H) - hit/miss target - Shape - Point	0.00	0.00	10,500.00	-157.57	334.17	451,281.83	722,458.07	32.23929178	-103.74752884
A01N05-PBHL (405H) - plan hits target center - Point	0.00	0.00	11,763.10	5,062.40	307.00	456,501.80	722,430.90	32.25364060	-103.74752461
A01N05-LTP (405H) - plan misses target center by 0.53usft at 16437.87usft MD (11763.99 TVD, 4742.40 N, 308.67 E) - Point	0.00	0.00	11,764.00	4,742.40	309.20	456,181.80	722,433.10	32.25276096	-103.74752314
A01N05-FTP (405H) - plan misses target center by 71.42usft at 11842.24usft MD (11714.28 TVD, 156.57 N, 332.53 E) - Point	0.00	0.00	11,777.00	122.40	332.70	451,561.80	722,456.60	32.24006137	-103.74752865

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well Todd 2-24S-31E State 405H - Slot 405H
Company:	Titus Oil & Gas Production, LLC	TVD Reference:	3508+25 @ 3533.00usft (KB=25)
Project:	Eddy County, NM (NAD83-NME)	MD Reference:	3508+25 @ 3533.00usft (KB=25)
Site:	A01 Todd DSU	North Reference:	Grid
Well:	Todd 2-24S-31E State 405H	Survey Calculation Method:	Minimum Curvature
Wellbore:	405H		
Design:	Plan #1-Rev0		

Plan Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
11,210.78	11,203.11	-157.57	334.17	KOP: 11210.78' MD, 11203.11' TVD
12,112.38	11,776.07	416.98	331.18	EOC: 12112.38' MD, 11776.07' TVD
16,757.88	11,763.10	5,062.40	307.00	TD: 16757.88' MD, 11763.10' TVD