



OCD - HOBBS
04/03/2017
RECEIVED

Company: Devon Energy
Site: Chincoteague 32 State Com
Well: 5H
Project: Lea County, New Mexico (NAD 83)
Rig: ICD 217

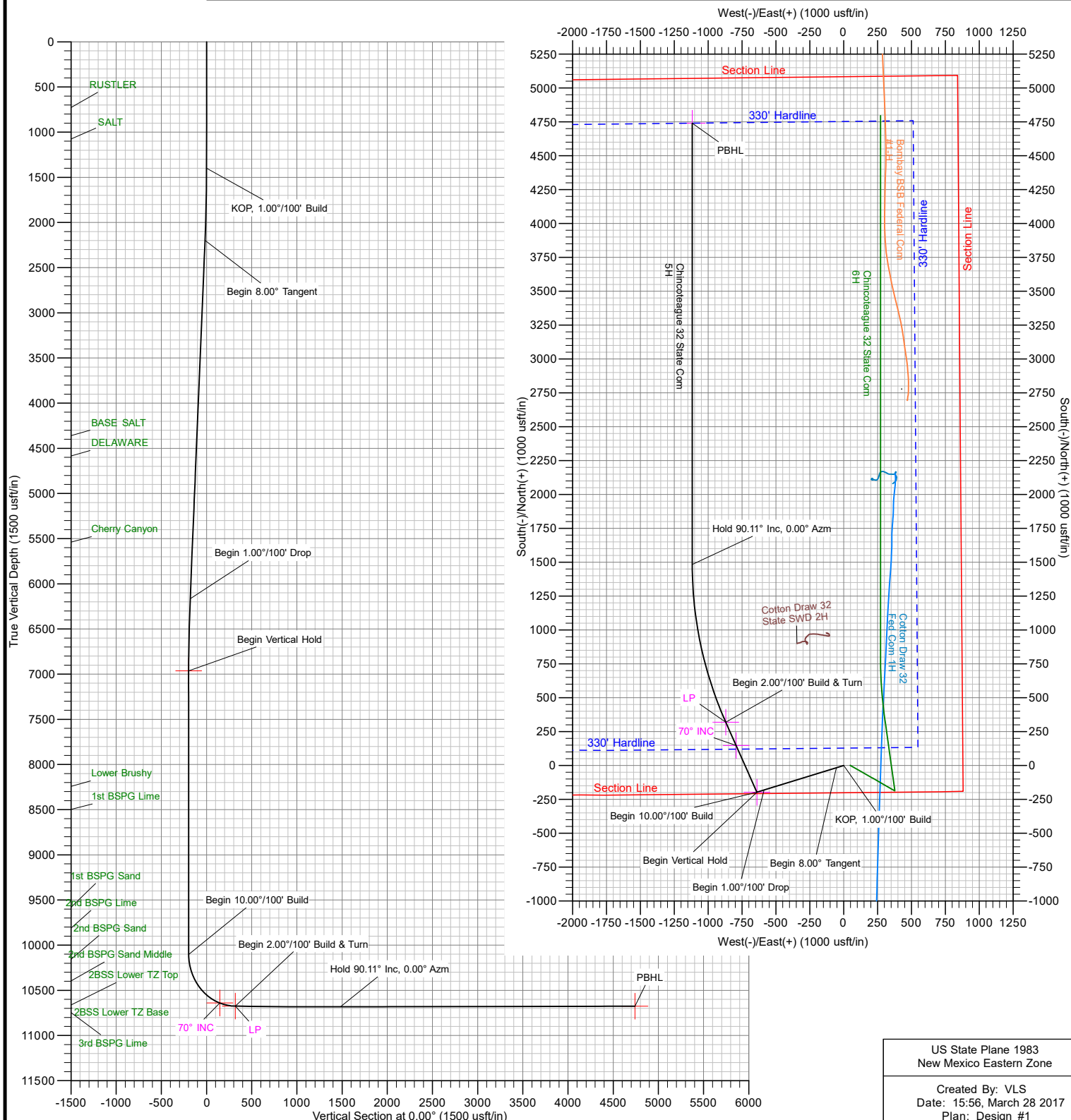


Azimuths to Grid North
True North: -0.34°
Magnetic North: 6.74°

Magnetic Field
Strength: 47984.8snT
Dip Angle: 59.99°
Date: 4/5/2017
Model: BGGM2016

ANNOTATIONS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Vsect	Departure	Annotation
1400.00	0.00	0.00	1400.00	0.00	0.00	0.00	0.00	KOP, 1.00°/100' Build
2200.31	8.00	252.88	2197.71	-16.43	-53.33	-16.43	55.80	Begin 8.00° Tangent
6206.91	8.00	252.88	6165.29	-180.63	-586.44	-180.68	613.63	Begin 1.00°/100' Drop
7007.22	0.00	0.00	6963.00	-197.06	-639.77	-197.12	669.43	Begin Vertical Hold
10146.72	0.00	0.00	10102.50	-197.06	-639.77	-197.12	669.43	Begin 10.00°/100' Build
11038.92	89.22	336.04	10675.40	319.40	-869.28	319.32	1234.59	Begin 2.00°/100' Build & Turn
12237.74	90.11	0.00	10682.54	1483.55	-1116.29	1483.45	2433.37	Hold 90.11° Inc, 0.00° Azm
15494.66	90.11	0.00	10676.40	4740.46	-1116.25	4740.36	5690.28	PBHL



US State Plane 1983
New Mexico Eastern Zone

Created By: VLS
Date: 15:56, March 28 2017
Plan: Design #1

The customer should only rely on this document after independently verifying all paths, targets, coordinates, lease and hard lines represented.
Any decisions made or wells drilled utilizing this or any other information supplied by MS Energy are at the sole risk and responsibility of the customer. MS Energy is not responsible for the accuracy of this schematic or the information contained herein.



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Site: Chincoteague 32 State Com
Well: 5H
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Azimuths to Grid North
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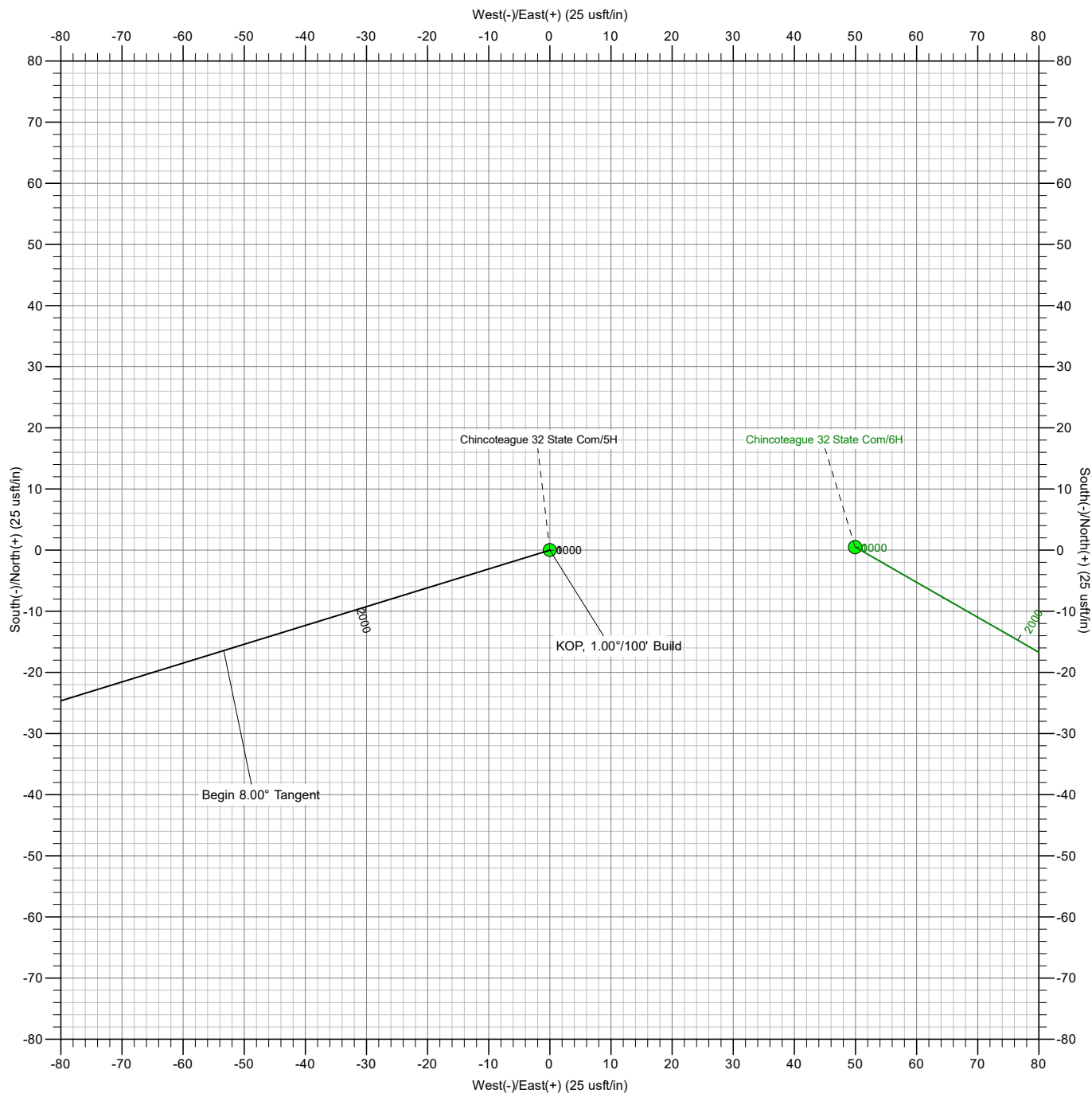
Magnetic Field
Strength: 47984.8snT
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2200.31	8.00	252.88	2197.71	-16.43	-53.33	-16.43	55.80	Begin 8.00° Tangent
6206.91	8.00	252.88	6165.29	-180.63	-586.44	-180.68	613.63	Begin 1.00°/100' Drop
7007.22	0.00	0.00	6963.00	-197.06	-639.77	-197.12	669.43	Begin Vertical Hold
10146.72	0.00	0.00	10102.50	-197.06	-639.77	-197.12	669.43	Begin 10.00°/100' Build
11038.92	89.22	336.04	10675.40	319.40	-869.28	319.32	1234.59	Begin 2.00°/100' Build & Turn
12237.74	90.11	0.00	10682.54	1483.55	-1116.29	1483.45	2433.37	Hold 90.11° Inc, 0.00° Azm
15494.66	90.11	0.00	10676.40	4740.46	-1116.25	4740.36	5690.28	PBHL

US State Plane 1983
New Mexico Eastern Zone

Created By: VLS
Date: 14:33, March 28 2017
Plan: Design #1





Devon Energy

Lea County, New Mexico (NAD 83)

Chincoteague 32 State Com

5H

Wellbore #1

Plan: Design #1

Standard Planning Report

28 March, 2017

Database:	5000.1 Conroe DB	Local Co-ordinate Reference:	Well 5H
Company:	Devon Energy	TVD Reference:	Well @ 3496.40usft (ICD 217)
Project:	Lea County, New Mexico (NAD 83)	MD Reference:	Well @ 3496.40usft (ICD 217)
Site:	Chincoteague 32 State Com	North Reference:	Grid
Well:	5H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Project	Lea County, New Mexico (NAD 83)		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Well	5H				
Well Position	+N/-S	425,164.88 usft	Northing:	425,164.88 usft	Latitude: 32° 10' 2.012 N
	+E/-W	740,102.77 usft	Easting:	740,102.77 usft	Longitude: 103° 41' 27.483 W
Position Uncertainty		0.00 usft	Wellhead Elevation:		Ground Level: 3,470.40 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2016	4/5/2017	7.09	59.99	47,985

Design	Design #1				
Audit Notes:					
Version:	Phase:	PROTOTYPE	Tie On Depth:	0.00	
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)	
	0.00	0.00	0.00	0.01	

Plan Survey Tool Program	Date	3/28/2017			
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks	
1	0.00	15,494.66	Design #1 (Wellbore #1)	MWD	
				OWSG MWD - Standard	

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,400.00	0.00	0.00	1,400.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,200.31	8.00	252.88	2,197.71	-16.43	-53.33	1.00	1.00	0.00	252.88	
6,206.91	8.00	252.88	6,165.29	-180.63	-586.44	0.00	0.00	0.00	0.00	
7,007.22	0.00	0.00	6,963.00	-197.06	-639.77	1.00	-1.00	0.00	180.00	vert - Chincoteague
10,146.72	0.00	0.00	10,102.50	-197.06	-639.77	0.00	0.00	0.00	0.00	
11,038.92	89.22	336.04	10,675.40	319.40	-869.28	10.00	10.00	0.00	336.04	
12,237.74	90.11	0.00	10,682.54	1,483.55	-1,116.29	2.00	0.07	2.00	87.98	
15,494.66	90.11	0.00	10,676.40	4,740.46	-1,116.25	0.00	0.00	0.00	0.00	PBHL - Chincoteague

Database:	5000.1 Conroe DB	Local Co-ordinate Reference:	Well 5H
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Project:	Lea County, New Mexico (NAD 83)	MD Reference:	Well @ 3496.40usft (ICD 217)
Site:	Chincoteague 32 State Com	North Reference:	Grid
Well:	5H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

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
726.40	0.00	0.00	726.40	0.00	0.00	0.00	0.00	0.00	0.00
RUSTLER									
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
1,076.40	0.00	0.00	1,076.40	0.00	0.00	0.00	0.00	0.00	0.00
SALT									
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
KOP, 1.00°/100' Build									
1,500.00	1.00	252.88	1,499.99	-0.26	-0.83	-0.26	1.00	1.00	0.00
1,600.00	2.00	252.88	1,599.96	-1.03	-3.34	-1.03	1.00	1.00	0.00
1,700.00	3.00	252.88	1,699.86	-2.31	-7.50	-2.31	1.00	1.00	0.00
1,800.00	4.00	252.88	1,799.68	-4.11	-13.34	-4.11	1.00	1.00	0.00
1,900.00	5.00	252.88	1,899.37	-6.42	-20.84	-6.42	1.00	1.00	0.00
2,000.00	6.00	252.88	1,998.90	-9.24	-30.00	-9.24	1.00	1.00	0.00
2,100.00	7.00	252.88	2,098.26	-12.57	-40.82	-12.58	1.00	1.00	0.00
2,200.31	8.00	252.88	2,197.71	-16.43	-53.33	-16.43	1.00	1.00	0.00
Begin 8.00° Tangent									
2,300.00	8.00	252.88	2,296.43	-20.51	-66.59	-20.52	0.00	0.00	0.00
2,400.00	8.00	252.88	2,395.46	-24.61	-79.90	-24.62	0.00	0.00	0.00
2,500.00	8.00	252.88	2,494.48	-28.71	-93.21	-28.72	0.00	0.00	0.00
2,600.00	8.00	252.88	2,593.51	-32.81	-106.51	-32.82	0.00	0.00	0.00
2,700.00	8.00	252.88	2,692.53	-36.91	-119.82	-36.92	0.00	0.00	0.00
2,800.00	8.00	252.88	2,791.56	-41.00	-133.12	-41.02	0.00	0.00	0.00
2,900.00	8.00	252.88	2,890.59	-45.10	-146.43	-45.12	0.00	0.00	0.00
3,000.00	8.00	252.88	2,989.61	-49.20	-159.74	-49.22	0.00	0.00	0.00
3,100.00	8.00	252.88	3,088.64	-53.30	-173.04	-53.31	0.00	0.00	0.00
3,200.00	8.00	252.88	3,187.66	-57.40	-186.35	-57.41	0.00	0.00	0.00
3,300.00	8.00	252.88	3,286.69	-61.50	-199.65	-61.51	0.00	0.00	0.00
3,400.00	8.00	252.88	3,385.72	-65.59	-212.96	-65.61	0.00	0.00	0.00
3,500.00	8.00	252.88	3,484.74	-69.69	-226.26	-69.71	0.00	0.00	0.00
3,600.00	8.00	252.88	3,583.77	-73.79	-239.57	-73.81	0.00	0.00	0.00
3,700.00	8.00	252.88	3,682.79	-77.89	-252.88	-77.91	0.00	0.00	0.00
3,800.00	8.00	252.88	3,781.82	-81.99	-266.18	-82.01	0.00	0.00	0.00
3,900.00	8.00	252.88	3,880.85	-86.09	-279.49	-86.11	0.00	0.00	0.00
4,000.00	8.00	252.88	3,979.87	-90.19	-292.79	-90.21	0.00	0.00	0.00
4,100.00	8.00	252.88	4,078.90	-94.28	-306.10	-94.31	0.00	0.00	0.00
4,200.00	8.00	252.88	4,177.92	-98.38	-319.40	-98.41	0.00	0.00	0.00
4,300.00	8.00	252.88	4,276.95	-102.48	-332.71	-102.51	0.00	0.00	0.00
4,384.27	8.00	252.88	4,360.40	-105.93	-343.92	-105.96	0.00	0.00	0.00
BASE SALT									
4,400.00	8.00	252.88	4,375.98	-106.58	-346.02	-106.61	0.00	0.00	0.00
4,500.00	8.00	252.88	4,475.00	-110.68	-359.32	-110.71	0.00	0.00	0.00

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Site:	Chincoteague 32 State Com	North Reference:	Grid
Well:	5H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

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)
4,600.00	8.00	252.88	4,574.03	-114.78	-372.63	-114.81	0.00	0.00	0.00
4,610.47	8.00	252.88	4,584.40	-115.21	-374.02	-115.24	0.00	0.00	0.00
DELAWARE									
4,700.00	8.00	252.88	4,673.05	-118.87	-385.93	-118.91	0.00	0.00	0.00
4,800.00	8.00	252.88	4,772.08	-122.97	-399.24	-123.01	0.00	0.00	0.00
4,900.00	8.00	252.88	4,871.11	-127.07	-412.54	-127.11	0.00	0.00	0.00
5,000.00	8.00	252.88	4,970.13	-131.17	-425.85	-131.21	0.00	0.00	0.00
5,100.00	8.00	252.88	5,069.16	-135.27	-439.16	-135.31	0.00	0.00	0.00
5,200.00	8.00	252.88	5,168.18	-139.37	-452.46	-139.41	0.00	0.00	0.00
5,300.00	8.00	252.88	5,267.21	-143.46	-465.77	-143.51	0.00	0.00	0.00
5,400.00	8.00	252.88	5,366.24	-147.56	-479.07	-147.60	0.00	0.00	0.00
5,500.00	8.00	252.88	5,465.26	-151.66	-492.38	-151.70	0.00	0.00	0.00
5,573.86	8.00	252.88	5,538.40	-154.69	-502.21	-154.73	0.00	0.00	0.00
Cherry Canyon									
5,600.00	8.00	252.88	5,564.29	-155.76	-505.69	-155.80	0.00	0.00	0.00
5,700.00	8.00	252.88	5,663.32	-159.86	-518.99	-159.90	0.00	0.00	0.00
5,800.00	8.00	252.88	5,762.34	-163.96	-532.30	-164.00	0.00	0.00	0.00
5,900.00	8.00	252.88	5,861.37	-168.06	-545.60	-168.10	0.00	0.00	0.00
6,000.00	8.00	252.88	5,960.39	-172.15	-558.91	-172.20	0.00	0.00	0.00
6,100.00	8.00	252.88	6,059.42	-176.25	-572.21	-176.30	0.00	0.00	0.00
6,206.91	8.00	252.88	6,165.29	-180.63	-586.44	-180.68	0.00	0.00	0.00
Begin 1.00°/100' Drop									
6,300.00	7.07	252.88	6,257.57	-184.23	-598.11	-184.28	1.00	-1.00	0.00
6,400.00	6.07	252.88	6,356.91	-187.60	-609.05	-187.65	1.00	-1.00	0.00
6,500.00	5.07	252.88	6,456.44	-190.46	-618.33	-190.51	1.00	-1.00	0.00
6,600.00	4.07	252.88	6,556.12	-192.80	-625.95	-192.86	1.00	-1.00	0.00
6,700.00	3.07	252.88	6,655.93	-194.64	-631.90	-194.69	1.00	-1.00	0.00
6,800.00	2.07	252.88	6,755.82	-195.96	-636.19	-196.01	1.00	-1.00	0.00
6,900.00	1.07	252.88	6,855.78	-196.76	-638.81	-196.82	1.00	-1.00	0.00
7,007.22	0.00	0.00	6,963.00	-197.06	-639.77	-197.12	1.00	-1.00	0.00
Begin Vertical Hold									
7,100.00	0.00	0.00	7,055.78	-197.06	-639.77	-197.12	0.00	0.00	0.00
7,200.00	0.00	0.00	7,155.78	-197.06	-639.77	-197.12	0.00	0.00	0.00
7,300.00	0.00	0.00	7,255.78	-197.06	-639.77	-197.12	0.00	0.00	0.00
7,400.00	0.00	0.00	7,355.78	-197.06	-639.77	-197.12	0.00	0.00	0.00
7,500.00	0.00	0.00	7,455.78	-197.06	-639.77	-197.12	0.00	0.00	0.00
7,600.00	0.00	0.00	7,555.78	-197.06	-639.77	-197.12	0.00	0.00	0.00
7,700.00	0.00	0.00	7,655.78	-197.06	-639.77	-197.12	0.00	0.00	0.00
7,800.00	0.00	0.00	7,755.78	-197.06	-639.77	-197.12	0.00	0.00	0.00
7,900.00	0.00	0.00	7,855.78	-197.06	-639.77	-197.12	0.00	0.00	0.00
8,000.00	0.00	0.00	7,955.78	-197.06	-639.77	-197.12	0.00	0.00	0.00
8,100.00	0.00	0.00	8,055.78	-197.06	-639.77	-197.12	0.00	0.00	0.00
8,200.00	0.00	0.00	8,155.78	-197.06	-639.77	-197.12	0.00	0.00	0.00
8,285.62	0.00	0.00	8,241.40	-197.06	-639.77	-197.12	0.00	0.00	0.00
Lower Brushy									
8,300.00	0.00	0.00	8,255.78	-197.06	-639.77	-197.12	0.00	0.00	0.00
8,400.00	0.00	0.00	8,355.78	-197.06	-639.77	-197.12	0.00	0.00	0.00
8,500.00	0.00	0.00	8,455.78	-197.06	-639.77	-197.12	0.00	0.00	0.00
8,540.62	0.00	0.00	8,496.40	-197.06	-639.77	-197.12	0.00	0.00	0.00
1st BSPG Lime									
8,600.00	0.00	0.00	8,555.78	-197.06	-639.77	-197.12	0.00	0.00	0.00
8,700.00	0.00	0.00	8,655.78	-197.06	-639.77	-197.12	0.00	0.00	0.00
8,800.00	0.00	0.00	8,755.78	-197.06	-639.77	-197.12	0.00	0.00	0.00

Database:	5000.1 Conroe DB	Local Co-ordinate Reference:	Well 5H
Company:	Devon Energy	TVD Reference:	Well @ 3496.40usft (ICD 217)
Project:	Lea County, New Mexico (NAD 83)	MD Reference:	Well @ 3496.40usft (ICD 217)
Site:	Chincoteague 32 State Com	North Reference:	Grid
Well:	5H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

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)
8,900.00	0.00	0.00	8,855.78	-197.06	-639.77	-197.12	0.00	0.00	0.00
9,000.00	0.00	0.00	8,955.78	-197.06	-639.77	-197.12	0.00	0.00	0.00
9,100.00	0.00	0.00	9,055.78	-197.06	-639.77	-197.12	0.00	0.00	0.00
9,200.00	0.00	0.00	9,155.78	-197.06	-639.77	-197.12	0.00	0.00	0.00
9,300.00	0.00	0.00	9,255.78	-197.06	-639.77	-197.12	0.00	0.00	0.00
9,400.00	0.00	0.00	9,355.78	-197.06	-639.77	-197.12	0.00	0.00	0.00
9,500.00	0.00	0.00	9,455.78	-197.06	-639.77	-197.12	0.00	0.00	0.00
9,600.00	0.00	0.00	9,555.78	-197.06	-639.77	-197.12	0.00	0.00	0.00
9,625.62	0.00	0.00	9,581.40	-197.06	-639.77	-197.12	0.00	0.00	0.00
1st BSPG Sand									
9,700.00	0.00	0.00	9,655.78	-197.06	-639.77	-197.12	0.00	0.00	0.00
9,800.00	0.00	0.00	9,755.78	-197.06	-639.77	-197.12	0.00	0.00	0.00
9,854.62	0.00	0.00	9,810.40	-197.06	-639.77	-197.12	0.00	0.00	0.00
2nd BSPG Lime									
9,900.00	0.00	0.00	9,855.78	-197.06	-639.77	-197.12	0.00	0.00	0.00
10,000.00	0.00	0.00	9,955.78	-197.06	-639.77	-197.12	0.00	0.00	0.00
10,100.00	0.00	0.00	10,055.78	-197.06	-639.77	-197.12	0.00	0.00	0.00
10,146.72	0.00	0.00	10,102.50	-197.06	-639.77	-197.12	0.00	0.00	0.00
Begin 10.00°/100' Build									
10,150.00	0.33	336.04	10,105.78	-197.05	-639.77	-197.11	10.00	10.00	0.00
10,199.70	5.30	336.04	10,155.40	-194.82	-640.76	-194.88	10.00	10.00	0.00
2nd BSPG Sand									
10,200.00	5.33	336.04	10,155.70	-194.80	-640.77	-194.85	10.00	10.00	0.00
10,250.00	10.33	336.04	10,205.22	-188.58	-643.54	-188.63	10.00	10.00	0.00
10,300.00	15.33	336.04	10,253.96	-178.44	-648.05	-178.49	10.00	10.00	0.00
10,350.00	20.33	336.04	10,301.54	-164.45	-654.26	-164.51	10.00	10.00	0.00
10,400.00	25.33	336.04	10,347.61	-146.73	-662.14	-146.79	10.00	10.00	0.00
10,450.00	30.33	336.04	10,391.81	-125.41	-671.61	-125.47	10.00	10.00	0.00
10,454.16	30.74	336.04	10,395.40	-123.47	-672.47	-123.53	10.00	10.00	0.00
2nd BSPG Sand Middle									
10,500.00	35.33	336.04	10,433.82	-100.65	-682.62	-100.71	10.00	10.00	0.00
10,550.00	40.33	336.04	10,473.30	-72.63	-695.06	-72.69	10.00	10.00	0.00
10,600.00	45.33	336.04	10,509.95	-41.58	-708.86	-41.64	10.00	10.00	0.00
10,650.00	50.33	336.04	10,543.51	-7.73	-723.91	-7.79	10.00	10.00	0.00
10,700.00	55.33	336.04	10,573.71	28.67	-740.08	28.60	10.00	10.00	0.00
10,750.00	60.33	336.04	10,600.33	67.33	-757.26	67.27	10.00	10.00	0.00
10,800.00	65.33	336.04	10,623.15	107.97	-775.32	107.90	10.00	10.00	0.00
10,850.00	70.33	336.04	10,642.02	150.27	-794.12	150.20	10.00	10.00	0.00
10,900.00	75.33	336.04	10,656.77	193.91	-813.51	193.84	10.00	10.00	0.00
10,928.97	78.22	336.04	10,663.40	219.67	-824.96	219.60	10.00	10.00	0.00
2BSS Lower TZ Top									
10,950.00	80.33	336.04	10,667.31	238.56	-833.35	238.48	10.00	10.00	0.00
11,000.00	85.33	336.04	10,673.55	283.88	-853.49	283.80	10.00	10.00	0.00
11,038.92	89.22	336.04	10,675.40	319.40	-869.28	319.32	10.00	10.00	0.00
Begin 2.00°/100' Build & Turn									
11,100.00	89.26	337.26	10,676.21	375.47	-893.48	375.39	2.00	0.07	2.00
11,200.00	89.33	339.26	10,677.44	468.34	-930.52	468.26	2.00	0.07	2.00
11,300.00	89.41	341.26	10,678.54	562.46	-964.29	562.37	2.00	0.07	2.00
11,400.00	89.48	343.26	10,679.51	657.69	-994.76	657.60	2.00	0.07	2.00
11,500.00	89.55	345.26	10,680.35	753.93	-1,021.89	753.84	2.00	0.07	2.00
11,600.00	89.63	347.25	10,681.06	851.06	-1,045.65	850.97	2.00	0.07	2.00
11,700.00	89.70	349.25	10,681.65	948.96	-1,066.01	948.87	2.00	0.07	2.00
11,800.00	89.78	351.25	10,682.10	1,047.51	-1,082.94	1,047.42	2.00	0.08	2.00

Database:	5000.1 Conroe DB	Local Co-ordinate Reference:	Well 5H
Company:	Devon Energy	TVD Reference:	Well @ 3496.40usft (ICD 217)
Project:	Lea County, New Mexico (NAD 83)	MD Reference:	Well @ 3496.40usft (ICD 217)
Site:	Chincoteague 32 State Com	North Reference:	Grid
Well:	5H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
11,900.00	89.85	353.25	10,682.42	1,146.59	-1,096.42	1,146.50	2.00	0.08	2.00
12,000.00	89.93	355.25	10,682.61	1,246.08	-1,106.44	1,245.99	2.00	0.08	2.00
12,100.00	90.00	357.25	10,682.67	1,345.86	-1,112.98	1,345.77	2.00	0.08	2.00
12,200.00	90.08	359.25	10,682.60	1,445.81	-1,116.04	1,445.71	2.00	0.08	2.00
12,237.74	90.11	0.00	10,682.54	1,483.55	-1,116.29	1,483.45	2.00	0.08	2.00
Hold 90.11° Inc, 0.00° Azm									
12,300.00	90.11	0.00	10,682.42	1,545.81	-1,116.28	1,545.71	0.00	0.00	0.00
12,400.00	90.11	0.00	10,682.23	1,645.81	-1,116.28	1,645.71	0.00	0.00	0.00
12,500.00	90.11	0.00	10,682.05	1,745.81	-1,116.28	1,745.71	0.00	0.00	0.00
12,600.00	90.11	0.00	10,681.86	1,845.81	-1,116.28	1,845.71	0.00	0.00	0.00
12,700.00	90.11	0.00	10,681.67	1,945.81	-1,116.28	1,945.71	0.00	0.00	0.00
12,800.00	90.11	0.00	10,681.48	2,045.81	-1,116.28	2,045.71	0.00	0.00	0.00
12,900.00	90.11	0.00	10,681.29	2,145.81	-1,116.28	2,145.71	0.00	0.00	0.00
13,000.00	90.11	0.00	10,681.10	2,245.81	-1,116.28	2,245.71	0.00	0.00	0.00
13,100.00	90.11	0.00	10,680.91	2,345.81	-1,116.28	2,345.71	0.00	0.00	0.00
13,200.00	90.11	0.00	10,680.73	2,445.81	-1,116.28	2,445.71	0.00	0.00	0.00
13,300.00	90.11	0.00	10,680.54	2,545.81	-1,116.27	2,545.71	0.00	0.00	0.00
13,400.00	90.11	0.00	10,680.35	2,645.81	-1,116.27	2,645.71	0.00	0.00	0.00
13,500.00	90.11	0.00	10,680.16	2,745.81	-1,116.27	2,745.71	0.00	0.00	0.00
13,600.00	90.11	0.00	10,679.97	2,845.81	-1,116.27	2,845.71	0.00	0.00	0.00
13,700.00	90.11	0.00	10,679.78	2,945.81	-1,116.27	2,945.71	0.00	0.00	0.00
13,800.00	90.11	0.00	10,679.59	3,045.81	-1,116.27	3,045.71	0.00	0.00	0.00
13,900.00	90.11	0.00	10,679.41	3,145.81	-1,116.27	3,145.71	0.00	0.00	0.00
14,000.00	90.11	0.00	10,679.22	3,245.81	-1,116.27	3,245.71	0.00	0.00	0.00
14,100.00	90.11	0.00	10,679.03	3,345.81	-1,116.27	3,345.71	0.00	0.00	0.00
14,200.00	90.11	0.00	10,678.84	3,445.81	-1,116.26	3,445.71	0.00	0.00	0.00
14,300.00	90.11	0.00	10,678.65	3,545.81	-1,116.26	3,545.71	0.00	0.00	0.00
14,400.00	90.11	0.00	10,678.46	3,645.81	-1,116.26	3,645.71	0.00	0.00	0.00
14,500.00	90.11	0.00	10,678.28	3,745.81	-1,116.26	3,745.71	0.00	0.00	0.00
14,600.00	90.11	0.00	10,678.09	3,845.81	-1,116.26	3,845.71	0.00	0.00	0.00
14,700.00	90.11	0.00	10,677.90	3,945.81	-1,116.26	3,945.71	0.00	0.00	0.00
14,800.00	90.11	0.00	10,677.71	4,045.81	-1,116.26	4,045.71	0.00	0.00	0.00
14,900.00	90.11	0.00	10,677.52	4,145.81	-1,116.26	4,145.71	0.00	0.00	0.00
15,000.00	90.11	0.00	10,677.33	4,245.81	-1,116.26	4,245.71	0.00	0.00	0.00
15,100.00	90.11	0.00	10,677.14	4,345.81	-1,116.25	4,345.71	0.00	0.00	0.00
15,200.00	90.11	0.00	10,676.96	4,445.81	-1,116.25	4,445.71	0.00	0.00	0.00
15,300.00	90.11	0.00	10,676.77	4,545.81	-1,116.25	4,545.71	0.00	0.00	0.00
15,400.00	90.11	0.00	10,676.58	4,645.80	-1,116.25	4,645.71	0.00	0.00	0.00
15,494.66	90.11	0.00	10,676.40	4,740.46	-1,116.25	4,740.36	0.00	0.00	0.00
PBHL									

Database:	5000.1 Conroe DB	Local Co-ordinate Reference:	Well 5H
Company:	Devon Energy	TVD Reference:	Well @ 3496.40usft (ICD 217)
Project:	Lea County, New Mexico (NAD 83)	MD Reference:	Well @ 3496.40usft (ICD 217)
Site:	Chincoteague 32 State Com	North Reference:	Grid
Well:	5H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Design Targets									
Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
vert - Chincoteague 3: - plan hits target center - Point	0.00	0.01	6,963.00	-197.06	-639.77	424,967.82	739,463.00	32° 10' 0.100 N	103° 41' 34.940 W
70° INC - Chincoteague - plan hits target center - Point	0.00	0.00	10,640.90	147.45	-792.87	425,312.33	739,309.90	32° 10' 3.518 N	103° 41' 36.697 W
LP - Chincoteague 32 - plan hits target center - Point	0.00	0.00	10,675.40	319.40	-869.28	425,484.28	739,233.49	32° 10' 5.224 N	103° 41' 37.574 W
PBHL - Chincoteague - plan hits target center - Point	0.00	0.01	10,676.40	4,740.46	-1,116.25	429,905.34	738,986.52	32° 10' 48.987 N	103° 41' 40.142 W

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
726.40	726.40	RUSTLER		0.00		
1,076.40	1,076.40	SALT		0.00		
4,384.27	4,360.40	BASE SALT		0.00		
4,610.47	4,584.40	DELAWARE		0.00		
5,573.86	5,538.40	Cherry Canyon		0.00		
8,285.62	8,241.40	Lower Brushy		0.00		
8,540.62	8,496.40	1st BSPG Lime		0.00		
9,625.62	9,581.40	1st BSPG Sand		0.00		
9,854.62	9,810.40	2nd BSPG Lime		0.00		
10,199.70	10,155.40	2nd BSPG Sand		0.00		
10,454.16	10,395.40	2nd BSPG Sand Middle		0.00		
10,928.97	10,663.40	2BSS Lower TZ Top		0.00		

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates			
		+N/-S (usft)	+E/-W (usft)	Comment	
1,400.00	1,400.00	0.00	0.00	KOP, 1.00°/100' Build	
2,200.31	2,197.71	-16.43	-53.33	Begin 8.00° Tangent	
6,206.91	6,165.29	-180.63	-586.44	Begin 1.00°/100' Drop	
7,007.22	6,963.00	-197.06	-639.77	Begin Vertical Hold	
10,146.72	10,102.50	-197.06	-639.77	Begin 10.00°/100' Build	
11,038.92	10,675.40	319.40	-869.28	Begin 2.00°/100' Build & Turn	
12,237.74	10,682.54	1,483.55	-1,116.29	Hold 90.11° Inc, 0.00° Azm	
15,494.66	10,676.40	4,740.46	-1,116.25	PBHL	

Devon Energy

Chincoteague 32 State Com 5H
Lea County, New Mexico (NAD 83)
North Reference: Grid
KB-MSL: 3496.40
Ground Level: 3470.40
Design #1

MD	INC	AZI	Course Length	TVD	Subsea Depth	N-/S	E/-W	X	Y	Lat	Long	Dogleg Severity	T.Face	Vert Sec
0.00	0.00	0.00	0.00	0.00	3496.40	0.00	0.00	740102.77	425164.88	32° 10' 2.0' 103° 41' 27	0.00	0.00	0.00	
100.00	0.00	0.00	100.00	100.00	3396.40	0.00	0.00	740102.77	425164.88	32° 10' 2.0' 103° 41' 27	0.00	0.00	0.00	
200.00	0.00	0.00	100.00	200.00	3296.40	0.00	0.00	740102.77	425164.88	32° 10' 2.0' 103° 41' 27	0.00	0.00	0.00	
300.00	0.00	0.00	100.00	300.00	3196.40	0.00	0.00	740102.77	425164.88	32° 10' 2.0' 103° 41' 27	0.00	0.00	0.00	
400.00	0.00	0.00	100.00	400.00	3096.40	0.00	0.00	740102.77	425164.88	32° 10' 2.0' 103° 41' 27	0.00	0.00	0.00	
500.00	0.00	0.00	100.00	500.00	2996.40	0.00	0.00	740102.77	425164.88	32° 10' 2.0' 103° 41' 27	0.00	0.00	0.00	
600.00	0.00	0.00	100.00	600.00	2896.40	0.00	0.00	740102.77	425164.88	32° 10' 2.0' 103° 41' 27	0.00	0.00	0.00	
700.00	0.00	0.00	100.00	700.00	2796.40	0.00	0.00	740102.77	425164.88	32° 10' 2.0' 103° 41' 27	0.00	0.00	0.00	
800.00	0.00	0.00	100.00	800.00	2696.40	0.00	0.00	740102.77	425164.88	32° 10' 2.0' 103° 41' 27	0.00	0.00	0.00	
900.00	0.00	0.00	100.00	900.00	2596.40	0.00	0.00	740102.77	425164.88	32° 10' 2.0' 103° 41' 27	0.00	0.00	0.00	
1000.00	0.00	0.00	100.00	1000.00	2496.40	0.00	0.00	740102.77	425164.88	32° 10' 2.0' 103° 41' 27	0.00	0.00	0.00	
1100.00	0.00	0.00	100.00	1100.00	2396.40	0.00	0.00	740102.77	425164.88	32° 10' 2.0' 103° 41' 27	0.00	0.00	0.00	
1200.00	0.00	0.00	100.00	1200.00	2296.40	0.00	0.00	740102.77	425164.88	32° 10' 2.0' 103° 41' 27	0.00	0.00	0.00	
1300.00	0.00	0.00	100.00	1300.00	2196.40	0.00	0.00	740102.77	425164.88	32° 10' 2.0' 103° 41' 27	0.00	0.00	0.00	
1400.00	0.00	0.00	100.00	1400.00	2096.40	0.00	0.00	740102.77	425164.88	32° 10' 2.0' 103° 41' 27	0.00	0.00	0.00	KOP, 1.00°/100' Build
1500.00	1.00	252.88	100.00	1499.99	1996.41	-0.26	-0.83	740101.94	425164.62	32° 10' 2.0' 103° 41' 27	1.00	252.88	-0.26	
1600.00	2.00	252.88	100.00	1599.96	1896.44	-1.03	-3.34	740099.43	425163.85	32° 10' 2.0' 103° 41' 27	1.00	0.00	-1.03	
1700.00	3.00	252.88	100.00	1699.86	1796.54	-2.31	-7.50	740095.27	425162.57	32° 10' 1.9' 103° 41' 27	1.00	0.00	-2.31	
1800.00	4.00	252.88	100.00	1799.68	1696.72	-4.11	-13.34	740089.43	425160.77	32° 10' 1.9' 103° 41' 27	1.00	0.00	-4.11	
1900.00	5.00	252.88	100.00	1899.37	1597.03	-6.42	-20.84	740081.93	425158.46	32° 10' 1.9' 103° 41' 27	1.00	0.00	-6.42	
2000.00	6.00	252.88	100.00	1998.90	1497.50	-9.24	-30.00	740072.77	425155.64	32° 10' 1.9' 103° 41' 27	1.00	0.00	-9.24	
2100.00	7.00	252.88	100.00	2098.26	1398.14	-12.57	-40.82	740061.95	425152.31	32° 10' 1.8' 103° 41' 27	1.00	0.00	-12.58	
2200.31	8.00	252.88	100.31	2197.71	1298.69	-16.43	-53.33	740049.44	425148.45	32° 10' 1.8' 103° 41' 28	1.00	0.00	-16.43	Begin 8.00° Tangent
2300.00	8.00	252.88	99.69	2296.43	1199.97	-20.51	-66.59	740036.18	425144.37	32° 10' 1.8' 103° 41' 28	0.00	0.00	-20.52	
2400.00	8.00	252.88	100.00	2395.46	1100.94	-24.61	-79.90	740022.87	425140.27	32° 10' 1.7' 103° 41' 28	0.00	0.00	-24.62	
2500.00	8.00	252.88	100.00	2494.48	1001.92	-28.71	-93.21	740009.56	425136.17	32° 10' 1.7' 103° 41' 28	0.00	0.00	-28.72	
2600.00	8.00	252.88	100.00	2593.51	902.89	-32.81	-106.51	739996.26	425132.07	32° 10' 1.6' 103° 41' 28	0.00	0.00	-32.82	
2700.00	8.00	252.88	100.00	2692.53	803.87	-36.91	-119.82	739982.95	425127.97	32° 10' 1.6' 103° 41' 28	0.00	0.00	-36.92	
2800.00	8.00	252.88	100.00	2791.56	704.84	-41.00	-133.12	739969.65	425123.88	32° 10' 1.6' 103° 41' 29	0.00	0.00	-41.02	
2900.00	8.00	252.88	100.00	2890.59	605.81	-45.10	-146.43	739956.34	425119.78	32° 10' 1.5' 103° 41' 29	0.00	0.00	-45.12	
3000.00	8.00	252.88	100.00	2989.61	506.79	-49.20	-159.74	739943.03	425115.68	32° 10' 1.5' 103° 41' 29	0.00	0.00	-49.22	
3100.00	8.00	252.88	100.00	3088.64	407.76	-53.30	-173.04	739929.73	425111.58	32° 10' 1.4' 103° 41' 29	0.00	0.00	-53.31	
3200.00	8.00	252.88	100.00	3187.66	308.74	-57.40	-186.35	739916.42	425107.48	32° 10' 1.4' 103° 41' 29	0.00	0.00	-57.41	
3300.00	8.00	252.88	100.00	3286.69	209.71	-61.50	-199.65	739903.12	425103.38	32° 10' 1.4' 103° 41' 29	0.00	0.00	-61.51	
3400.00	8.00	252.88	100.00	3385.72	110.68	-65.59	-212.96	739889.81	425099.29	32° 10' 1.3' 103° 41' 29	0.00	0.00	-65.61	
3500.00	8.00	252.88	100.00	3484.74	11.66	-69.69	-226.26	739876.51	425095.19	32° 10' 1.3' 103° 41' 30	0.00	0.00	-69.71	
3600.00	8.00	252.88	100.00	3583.77	-87.37	-73.79	-239.57	739863.20	425091.09	32° 10' 1.2' 103° 41' 30	0.00	0.00	-73.81	
3700.00	8.00	252.88	100.00	3682.79	-186.39	-77.89	-252.88	739849.89	425086.99	32° 10' 1.2' 103° 41' 30	0.00	0.00	-77.91	
3800.00	8.00	252.88	100.00	3781.82	-285.42	-81.99	-266.18	739836.59	425082.89	32° 10' 1.2' 103° 41' 30	0.00	0.00	-82.01	
3900.00	8.00	252.88	100.00	3880.85	-384.45	-86.09	-279.49	739823.28	425078.79	32° 10' 1.1' 103° 41' 30	0.00	0.00	-86.11	
4000.00	8.00	252.88	100.00	3979.87	-483.47	-90.19	-292.79	739809.98	425074.69	32° 10' 1.1' 103° 41' 30	0.00	0.00	-90.21	
4100.00	8.00	252.88	100.00	4078.90	-582.50	-94.28	-306.10	739796.67	425070.60	32° 10' 1.0' 103° 41' 31	0.00	0.00	-94.31	
4200.00	8.00	252.88	100.00	4177.92	-681.52	-98.38	-319.40	739783.37	425066.50	32° 10' 1.0' 103° 41' 31	0.00	0.00	-98.41	
4300.00	8.00	252.88	100.00	4276.95	-780.55	-102.48	-332.71	739770.06	425062.40	32° 10' 1.0' 103° 41' 31	0.00	0.00	-102.51	
4400.00	8.00	252.88	100.00	4375.98	-879.58	-106.58	-346.02	739756.75	425058.30	32° 10' 0.9' 103° 41' 31	0.00	0.00	-106.61	
4500.00	8.00	252.88	100.00	4475.00	-978.60	-110.68	-359.32	739743.45	425054.20	32° 10' 0.9' 103° 41' 31	0.00	0.00	-110.71	
4600.00	8.00	252.88	100.00	4574.03	-1077.63	-114.78	-372.63	739730.14	425050.10	32° 10' 0.8' 103° 41' 31	0.00	0.00	-114.81	
4700.00	8.00	252.88	100.00	4673.05	-1176.65	-118.87	-385.93	739716.84	425046.01	32° 10' 0.8' 103° 41' 31	0.00	0.00	-118.91	
4800.00	8.00	252.88	100.00	4772.08	-1275.68	-122.97	-399.24	739703.53	425041.91	32° 10' 0.8' 103° 41' 32	0.00	0.00	-123.01	
4900.00	8.00	252.88	100.00	4871.11	-1374.71	-127.07	-412.54	739690.23	425037.81	32° 10' 0.7' 103° 41' 32	0.00	0.00	-127.11	
5000.00	8.00	252.88	100.00	4970.13	-1473.73	-131.17	-425.85	739676.92	425033.71	32° 10' 0.7' 103° 41' 32	0.00	0.00	-131.21	
5100.00	8.00	252.88	100.00	5069.16	-1572.76	-135.27	-439.16	739663.61	425029.61	32° 10' 0.6' 103° 41' 32	0.00	0.00	-135.31	
5200.00	8.00	252.88	100.00	5168.18	-1671.78	-139.37	-452.46	739650.31	425025.51	32° 10' 0.6' 103° 41' 32	0.00	0.00	-139.41	
5300.00	8.00	252.88	100.00	5267.21	-1770.81	-143.46	-465.77	739637.00	425021.42	32° 10' 0.6' 103° 41' 32	0.00	0.00	-143.51	
5400.00	8.00	252.88	100.00	5366.24	-1869.84	-147.56	-479.07	739623.70	425017.32	32° 10' 0.5' 103° 41' 33	0.00	0.00	-147.60	
5500.00	8.00	252.88	100.00	5465.26	-1968.86	-151.66	-492.38	739610.39	425013.22	32° 10' 0.5' 103° 41' 33	0.00	0.00	-151.70	
5600.00	8.00	252.88	100.00	5564.29	-2067.89	-155.76	-505.69	739597.08	425009.12	32° 10' 0.5' 103° 41' 33	0.00	0.00	-155.80	
5700.00	8.00	252.88	100.00	5663.32	-2166.92	-159.86	-518.99	739583.78	425005.02	32° 10' 0.4' 103° 41' 33	0.00	0.00	-159.90	
5800.00	8.00	252.88	100.00	5762.34	-2265.94	-163.96	-532.30	739570.47	425000.92	32° 10' 0.4' 103° 41' 33	0.00	0.00	-164.00	
5900.00	8.00	252.88	100.00	5861.37	-2364.97	-168.06	-545.60	739557.17	424996.82	32° 10' 0.3' 103° 41' 33	0.00	0.00	-168.10	
6000.00	8.00	252.88	100.00	5960.39	-2463.99	-172.15	-558.91	739543.86	424992.73	32° 10' 0.3' 103° 41' 33	0.00	0.00	-172.20	
6100.00	8.00	252.88	100.00	6059.42	-2563.02	-176.25	-572.21	739530.56	424988.63	32° 10' 0.3' 103° 41' 34	0.00	0.00	-176.30	
6206.91	8.00	252.88	106.91	6165.29	-2668.89	-180.63	-586.44	739516.33	424984.25	32° 10' 0.2' 103° 41' 34	0.00	0.00	-180.68	Begin 1.00°/100' Drop
6300.00	7.07	252.88	93.09	6257.57	-2761.17	-184.23	-598.11	739504.66	424980.65	32° 10' 0.2' 103° 41' 34	1.00	180.00	-184.28	
6400.00	6.07	252.88	100.00	6356.91	-2860.51	-187.60	-609.05	739493.72	424977.28	32° 10' 0.1' 103° 41' 34	1.00	180.00	-187.65	
6500.00	5.07	252.88	100.00	6456.44	-2960.04	-190.46	-618.33	739484.44	424974.42	32° 10' 0.1' 103° 41' 34	1.00	180.00	-190.51	
6600.00	4.07	252.88	100.00	6556.12	-3059.72	-192.80	-625.95	739476.82	424972.08	32° 10' 0.1' 103° 41' 34	1.00	180.00	-192.86	
6700.00	3.07	252.88	100.00	6655.93	-3159.									

7500.00	0.00	0.00	100.00	7455.78	-3959.38	-197.06	-639.77	739463.00	424967.82	32° 10' 0.0" 103° 41' 34	0.00	0.00	-197.12
7600.00	0.00	0.00	100.00	7555.78	-4059.38	-197.06	-639.77	739463.00	424967.82	32° 10' 0.0" 103° 41' 34	0.00	0.00	-197.12
7700.00	0.00	0.00	100.00	7655.78	-4159.38	-197.06	-639.77	739463.00	424967.82	32° 10' 0.0" 103° 41' 34	0.00	0.00	-197.12
7800.00	0.00	0.00	100.00	7755.78	-4259.38	-197.06	-639.77	739463.00	424967.82	32° 10' 0.0" 103° 41' 34	0.00	0.00	-197.12
7900.00	0.00	0.00	100.00	7855.78	-4359.38	-197.06	-639.77	739463.00	424967.82	32° 10' 0.0" 103° 41' 34	0.00	0.00	-197.12
8000.00	0.00	0.00	100.00	7955.78	-4459.38	-197.06	-639.77	739463.00	424967.82	32° 10' 0.0" 103° 41' 34	0.00	0.00	-197.12
8100.00	0.00	0.00	100.00	8055.78	-4559.38	-197.06	-639.77	739463.00	424967.82	32° 10' 0.0" 103° 41' 34	0.00	0.00	-197.12
8200.00	0.00	0.00	100.00	8155.78	-4659.38	-197.06	-639.77	739463.00	424967.82	32° 10' 0.0" 103° 41' 34	0.00	0.00	-197.12
8300.00	0.00	0.00	100.00	8255.78	-4759.38	-197.06	-639.77	739463.00	424967.82	32° 10' 0.0" 103° 41' 34	0.00	0.00	-197.12
8400.00	0.00	0.00	100.00	8355.78	-4859.38	-197.06	-639.77	739463.00	424967.82	32° 10' 0.0" 103° 41' 34	0.00	0.00	-197.12
8500.00	0.00	0.00	100.00	8455.78	-4959.38	-197.06	-639.77	739463.00	424967.82	32° 10' 0.0" 103° 41' 34	0.00	0.00	-197.12
8600.00	0.00	0.00	100.00	8555.78	-5059.38	-197.06	-639.77	739463.00	424967.82	32° 10' 0.0" 103° 41' 34	0.00	0.00	-197.12
8700.00	0.00	0.00	100.00	8655.78	-5159.38	-197.06	-639.77	739463.00	424967.82	32° 10' 0.0" 103° 41' 34	0.00	0.00	-197.12
8800.00	0.00	0.00	100.00	8755.78	-5259.38	-197.06	-639.77	739463.00	424967.82	32° 10' 0.0" 103° 41' 34	0.00	0.00	-197.12
8900.00	0.00	0.00	100.00	8855.78	-5359.38	-197.06	-639.77	739463.00	424967.82	32° 10' 0.0" 103° 41' 34	0.00	0.00	-197.12
9000.00	0.00	0.00	100.00	8955.78	-5459.38	-197.06	-639.77	739463.00	424967.82	32° 10' 0.0" 103° 41' 34	0.00	0.00	-197.12
9100.00	0.00	0.00	100.00	9055.78	-5559.38	-197.06	-639.77	739463.00	424967.82	32° 10' 0.0" 103° 41' 34	0.00	0.00	-197.12
9200.00	0.00	0.00	100.00	9155.78	-5659.38	-197.06	-639.77	739463.00	424967.82	32° 10' 0.0" 103° 41' 34	0.00	0.00	-197.12
9300.00	0.00	0.00	100.00	9255.78	-5759.38	-197.06	-639.77	739463.00	424967.82	32° 10' 0.0" 103° 41' 34	0.00	0.00	-197.12
9400.00	0.00	0.00	100.00	9355.78	-5859.38	-197.06	-639.77	739463.00	424967.82	32° 10' 0.0" 103° 41' 34	0.00	0.00	-197.12
9500.00	0.00	0.00	100.00	9455.78	-5959.38	-197.06	-639.77	739463.00	424967.82	32° 10' 0.0" 103° 41' 34	0.00	0.00	-197.12
9600.00	0.00	0.00	100.00	9555.78	-6059.38	-197.06	-639.77	739463.00	424967.82	32° 10' 0.0" 103° 41' 34	0.00	0.00	-197.12
9700.00	0.00	0.00	100.00	9655.78	-6159.38	-197.06	-639.77	739463.00	424967.82	32° 10' 0.0" 103° 41' 34	0.00	0.00	-197.12
9800.00	0.00	0.00	100.00	9755.78	-6259.38	-197.06	-639.77	739463.00	424967.82	32° 10' 0.0" 103° 41' 34	0.00	0.00	-197.12
9900.00	0.00	0.00	100.00	9855.78	-6359.38	-197.06	-639.77	739463.00	424967.82	32° 10' 0.0" 103° 41' 34	0.00	0.00	-197.12
10000.00	0.00	0.00	100.00	9955.78	-6459.38	-197.06	-639.77	739463.00	424967.82	32° 10' 0.0" 103° 41' 34	0.00	0.00	-197.12
10100.00	0.00	0.00	100.00	10055.78	-6559.38	-197.06	-639.77	739463.00	424967.82	32° 10' 0.0" 103° 41' 34	0.00	0.00	-197.12
10146.72	0.00	0.00	46.72	10102.50	-6606.10	-197.06	-639.77	739463.00	424967.82	32° 10' 0.0" 103° 41' 34	0.00	0.00	-197.12 Begin 10.00°/100' Build
10150.00	0.33	336.04	3.28	10105.78	-6609.38	-197.05	-639.77	739463.00	424967.83	32° 10' 0.0" 103° 41' 34	10.00	336.04	-197.11
10200.00	5.33	336.04	50.00	10155.70	-6659.30	-194.80	-640.77	739462.00	424970.08	32° 10' 0.1" 103° 41' 34	10.00	0.00	-194.85
10250.00	10.33	336.04	50.00	10205.22	-6708.82	-188.58	-643.54	739459.23	424976.30	32° 10' 0.1" 103° 41' 34	10.00	0.00	-188.63
10300.00	15.33	336.04	50.00	10253.96	-6757.56	-178.44	-648.05	739454.72	424986.44	32° 10' 0.2" 103° 41' 35	10.00	0.00	-178.49
10350.00	20.33	336.04	50.00	10301.54	-6805.14	-164.45	-654.26	739448.51	425000.43	32° 10' 0.4" 103° 41' 35	10.00	0.00	-164.51
10400.00	25.33	336.04	50.00	10347.61	-6851.21	-146.73	-662.14	739440.63	425018.15	32° 10' 0.5" 103° 41' 35	10.00	0.00	-146.79
10450.00	30.33	336.04	50.00	10391.81	-6895.41	-125.41	-671.61	739431.16	425039.47	32° 10' 0.8" 103° 41' 35	10.00	0.00	-125.47
10500.00	35.33	336.04	50.00	10433.82	-6937.42	-100.65	-682.62	739420.15	425064.23	32° 10' 1.0" 103° 41' 35	10.00	0.00	-100.71
10550.00	40.33	336.04	50.00	10473.30	-6976.90	-72.63	-695.06	739407.71	425092.25	32° 10' 1.3" 103° 41' 35	10.00	0.00	-72.69
10600.00	45.33	336.04	50.00	10509.95	-7013.55	-41.58	-708.86	739393.91	425123.30	32° 10' 1.6" 103° 41' 35	10.00	0.00	-41.64
10650.00	50.33	336.04	50.00	10543.51	-7047.11	-7.73	-723.91	739378.86	425157.15	32° 10' 1.9" 103° 41' 35	10.00	0.00	-7.79
10700.00	55.33	336.04	50.00	10573.71	-7077.31	28.67	-740.08	739362.69	425193.55	32° 10' 2.3" 103° 41' 36	10.00	0.00	28.60
10750.00	60.33	336.04	50.00	10600.33	-7103.93	67.33	-757.26	739345.51	425232.21	32° 10' 2.7" 103° 41' 36	10.00	0.00	67.27
10800.00	65.33	336.04	50.00	10623.15	-7126.75	107.97	-775.32	739327.45	425272.85	32° 10' 3.1" 103° 41' 36	10.00	0.00	107.90
10850.00	70.33	336.04	50.00	10642.02	-7145.62	150.27	-794.12	739308.65	425315.15	32° 10' 3.5" 103° 41' 36	10.00	0.00	150.20
10900.00	75.33	336.04	50.00	10656.77	-7160.37	193.91	-813.51	739289.26	425358.79	32° 10' 3.9" 103° 41' 36	10.00	0.00	193.84
10950.00	80.33	336.04	50.00	10667.31	-7170.91	238.56	-833.35	739269.42	425403.44	32° 10' 4.4" 103° 41' 37	10.00	0.00	238.48
11000.00	85.33	336.04	50.00	10673.55	-7177.15	283.88	-853.49	739249.28	425448.76	32° 10' 4.8" 103° 41' 37	10.00	0.00	283.80
11038.92	89.22	336.04	38.92	10675.40	-7179.00	319.40	-869.28	739233.49	425484.28	32° 10' 5.2" 103° 41' 37	10.00	0.00	319.32 Begin 2.00°/100' Build & Turn
11100.00	89.26	337.26	61.08	10676.21	-7179.81	375.47	-893.48	739209.29	425540.35	32° 10' 5.7" 103° 41' 37	2.00	87.97	375.39
11200.00	89.33	339.26	100.00	10677.44	-7181.04	468.34	-930.52	739172.25	425633.22	32° 10' 6.7" 103° 41' 38	2.00	87.96	468.26
11300.00	89.41	341.26	100.00	10678.53	-7182.13	562.46	-964.29	739138.48	425727.34	32° 10' 7.6" 103° 41' 38	2.00	87.94	562.37
11400.00	89.48	343.26	100.00	10679.51	-7183.11	657.69	-994.76	739108.01	425822.57	32° 10' 8.5" 103° 41' 39	2.00	87.92	657.60
11500.00	89.55	345.26	100.00	10680.35	-7183.95	753.93	-1021.89	739080.88	425918.81	32° 10' 9.5" 103° 41' 39	2.00	87.90	753.84
11600.00	89.63	347.25	100.00	10681.06	-7184.66	851.06	-1045.65	739057.12	426015.94	32° 10' 10.1" 103° 41' 39	2.00	87.88	850.97
11700.00	89.70	349.25	100.00	10681.65	-7185.25	948.96	-1066.01	739036.76	426113.84	32° 10' 11.1" 103° 41' 39	2.00	87.87	948.87
11800.00	89.78	351.25	100.00	10682.10	-7185.70	1047.51	-1082.94	739019.83	426212.39	32° 10' 12.1" 103° 41' 40	2.00	87.86	1047.42
11900.00	89.85	353.25	100.00	10682.42	-7186.02	1146.59	-1096.42	739006.35	426311.47	32° 10' 13.1" 103° 41' 40	2.00	87.85	1146.50
12000.00	89.93	355.25	100.00	10682.61	-7186.21	1246.08	-1106.44	738996.33	426410.96	32° 10' 14.1" 103° 41' 40	2.00	87.84	1245.99
12100.00	90.00	357.25	100.00	10682.67	-7186.27	1345.86	-1112.98	738989.79	426510.74	32° 10' 15.1" 103° 41' 40	2.00	87.84	1345.77
12200.00	90.08	359.25	100.00	10682.60	-7186.20	1445.81	-1116.04	738986.73	426610.69	32° 10' 16.1" 103° 41' 40	2.00	87.83	1445.71
12237.74	90.11	0.00	37.74	10682.54	-7186.14	1483.55	-1116.29	738986.48	426648.43	32° 10' 16.1" 103° 41' 40	2.00	87.84	1483.45 Hold 90.11° Inc, 0.00° Azm
12300.00	90.11	0.00	62.26	10682.42	-7186.02	1545.81	-1116.28	738986.49	426710.69	32° 10' 17.1" 103° 41' 40	0.00	87.84	1545.71
12400.00	90.11	0.00	100.00	10682.23	-7185.83	1645.81	-1116.28	738986.49	426810.69	32° 10' 18.1" 103° 41' 40	0.00	0.00	1645.71
12500.00	90.11	0.00	100.00	10682.04	-7185.64	1745.81	-1116.28	738986.49	426910.69	32° 10' 19.1" 103° 41' 40	0.00	0.00	1745.71
12600.00	90.11	0.00	100.00	10681.86	-7185.46	1845.81	-1116.28	738986.49	427010.69	32° 10' 20.1" 103° 41' 40	0.00	0.00	1845.71
12700.00	90.11	0.00	100.00	10681.67	-7185.27	1945.81	-1116.28	738986.49	427110.69	32° 10' 21.1" 103° 41' 40	0.00	0.00	1945.71
12800.00	90.11	0.00	100.00	10681.48	-7185.08	2045.81	-1116.28	738986.49	427210.69	32° 10' 22.1" 103° 41' 40	0.00	0.00	2045.71
12900.00	90.11	0.00	100.00	10681.29	-7184.89	2145.81	-1116.28	738986.49	427310.69	32° 10' 23.1" 103° 41' 40	0.00	0.00	2145.71
13000.00	90.11	0.00	100.00	10681.10	-7184.70	2245.81	-1116.28	738986.49	427410.69	32° 10' 24.1" 103°			

15000.00	90.11	0.00	100.00	10677.33	-7180.93	4245.81	-1116.26	738986.51	429410.69	32° 10' 44.1 103° 41' 40	0.00	0.00	4245.71
15100.00	90.11	0.00	100.00	10677.14	-7180.74	4345.81	-1116.25	738986.52	429510.69	32° 10' 45.1 103° 41' 40	0.00	0.00	4345.71
15200.00	90.11	0.00	100.00	10676.96	-7180.56	4445.81	-1116.25	738986.52	429610.69	32° 10' 46.1 103° 41' 40	0.00	0.00	4445.71
15300.00	90.11	0.00	100.00	10676.77	-7180.37	4545.81	-1116.25	738986.52	429710.69	32° 10' 47.1 103° 41' 40	0.00	0.00	4545.71
15400.00	90.11	0.00	100.00	10676.58	-7180.18	4645.80	-1116.25	738986.52	429810.68	32° 10' 48.1 103° 41' 40	0.00	0.00	4645.71
15494.66	90.11	0.00	94.66	10676.40	-7180.00	4740.46	-1116.25	738986.52	429905.34	32° 10' 48.1 103° 41' 40	0.00	0.00	4740.36 PBHL