

Office
 District I – (575) 393-6161
 1625 N. French Dr., Hobbs, NM 88240
 District II – (575) 748-1283
 811 S. First St., Artesia, NM 88210
 District III – (505) 334-6178
 1000 Rio Brazos Rd., Aztec, NM 87410
 District IV – (505) 476-3460
 1220 S. St. Francis Dr., Santa Fe, NM
 87505

State of New Mexico
 Energy, Minerals and Natural Resources

Form C-103
 Revised July 18, 2013

OIL CONSERVATION DIVISION
 1220 South St. Francis Dr.
 Santa Fe, NM 87505

WELL API NO. 30-025-51640
5. Indicate Type of Lease STATE ☒ FEE ☐
6. State Oil & Gas Lease No.
7. Lease Name or Unit Agreement Name BARBARA 29 17S 37E
8. Well Number 001
9. OGRID Number 228937
10. Pool name or Wildcat MIDWAY;STRAWN, SOUTH

SUNDRY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)	
1. Type of Well: Oil Well ☒ Gas Well ☐ Other ☐	
2. Name of Operator Matador Production Company	
3. Address of Operator One Lincoln Centre, 5400 LBJ Freeway, Ste 1500, Dallas, TX 75240	
4. Well Location Unit Letter <u>G</u> : <u>2444</u> feet from the <u>North</u> line and <u>1328</u> feet from the <u>East</u> line Section <u>29</u> Township <u>17S</u> Range <u>37E</u> NMPM County <u>LEA</u>	
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 3761.8'	

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO: PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐ TEMPORARILY ABANDON ☐ CHANGE PLANS ☒ PULL OR ALTER CASING ☐ MULTIPLE COMPL ☐ DOWNHOLE COMMINGLE ☐ CLOSED-LOOP SYSTEM ☐ OTHER: ☐		SUBSEQUENT REPORT OF: REMEDIAL WORK ☐ ALTERING CASING ☐ COMMENCE DRILLING OPNS. ☐ P AND A ☐ CASING/CEMENT JOB ☐ OTHER: ☐	
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13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 19.15.7.14 NMAC. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

Matador Production Company requests to amend the surface hole location.

From: 29-17S-37E 2160 FNL & 1915 FEL LEA COUNTY

To New Location: 29-17S-37E 2444 FNL & 1328 FEL LEA COUNTY

Please see attached updated C-102 attached.

Spud Date:

Rig Release Date:

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE: *Eileen M Kosakowski*

TITLE: Regulatory Analyst

DATE: 10/23/2023

PRINT NAME: Eileen M Kosakowski

E-mail address: eileen.kosakowski@matadorresources.com

PHONE: 832-672-4604

For State Use Only

APPROVED BY: _____ TITLE _____ DATE _____
 Conditions of Approval (if any): _____

DISTRICT I
1825 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) 748-0720

DISTRICT III
1000 RIO BRAZOS RD., AZTEC, NM 87410
Phone: (505) 334-8178 Fax: (505) 334-8170

DISTRICT IV
1220 S. ST. FRANCIS DR., SANTA FE, NM 87505
Phone: (505) 478-3460 Fax: (505) 478-3462

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 SOUTH ST. FRANCIS DR.
Santa Fe, New Mexico 87505

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-025-51640	Pool Code 96346	Pool Name Midway; Strawn, South
Property Code 334167	Property Name BARBARA 29-17S-37E	Well Number 1
OGRI No. 228937	Operator Name MATADOR PRODUCTION COMPANY	Elevation 3761.8'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
G	29	17-S	37-E		2444	NORTH	1328	EAST	LEA

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
G	29	17-S	37-E		1902	NORTH	1874	EAST	LEA

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
40			

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

POINT LEGEND NAD 83 1 Y=859849.9 N X=866899.0 E 2 Y=859856.9 N X=868221.3 E 3 Y=858535.0 N X=868232.7 E 4 Y=858527.3 N X=866891.6 E	POINT LEGEND NAD 27 1 Y=859787.1 N X=825719.9 E 2 Y=859794.2 N X=827042.2 E 3 Y=858472.4 N X=827053.6 E 4 Y=858464.6 N X=825732.4 E			OPERATOR CERTIFICATION I hereby certify that the information 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 mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division. Signature: <i>Reece Clark</i> Date: 10/19/23 Printed Name: <i>Reece Clark</i> E-mail Address: <i>reece.clark@matadorresources.com</i>
NAD 83 NME GRID AZ. - 314°17'24" HORZ. DIST. - 771.1' NAD 27 NME GRID AZ. - 314°17'10" HORZ. DIST. - 771.0'	NAD 83 NME SURFACE LOCATION Y=658734.5 N X=868233.5 E LAT.=32.806370° N LONG.=103.269398° W	NAD 27 NME SURFACE LOCATION Y=658671.8 N X=827054.4 E LAT.=32.806252° N LONG.=103.268907° W	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: OCTOBER 10, 2023 Signature & Seal of Professional Surveyor: <i>Chad L. Harcrow</i>	
NAD 83 NME PROPOSED BOTTOM HOLE LOCATION Y=659272.9 N X=867681.6 E LAT.=32.807865° N LONG.=103.271177° W	NAD 27 NME PROPOSED BOTTOM HOLE LOCATION Y=659210.2 N X=826502.4 E LAT.=32.807747° N LONG.=103.270686° W	CHAD L. HARCROW NEW MEXICO 17777 LICENSED PROFESSIONAL SURVEYOR Certificate No. CHAD HARCROW 17777 W.O. # 23-786 DRAWN BY: WN		

Well Name: **Barbara 29-17S-37E #1**

STRING	FLUID TYPE	HOLE SZ	CSG SZ	CSG GRADE	CSG WT	DEPTH SET	TOP CSG	TTL SX CEMENT	CLASS	EST TOC (CMT)	ADDITIONAL INFO FOR CSG/CMT PROGRAM (Optional)
SURF	FRESH WTR	14.75	9.625	J-55	36.00	2132	0	1700	C	0	
PROD	Brine	8.75	5.5	P-110	17.00	11218	0	1815	H	0	Optional DV/Packer placed at least 50' outside surface shoe

Fluid Type
Pick List Choices

- Air

Fresh Water

Cut Brine

Brine

Produced Water

Mud

Oil-Based Mud

Matador Production Company

Twin Lakes

Barbara State #1

Barbara State #1

Well Bore

State Plan #2

Anticollision Summary Report

19 October, 2023

Anticollision Summary Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Barbara State #1
Project:	Twin Lakes	TVD Reference:	KB @ 3793.6usft
Reference Site:	Barbara State #1	MD Reference:	KB @ 3793.6usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Barbara State #1	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Well Bore	Database:	EDM 5000.14 Single User Db
Reference Design:	State Plan #2	Offset TVD Reference:	Offset Datum

Reference	State Plan #2		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	Stations	Error Model:	ISCWSA
Depth Range:	Unlimited	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum center-center distance of 10,000.0 usft	Error Surface:	Pedal Curve
Warning Levels Evaluated at:	2.00 Sigma	Casing Method:	Not applied

Survey Tool Program	Date	10/19/2023		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.0	11,251.9	State Plan #2 (Well Bore)	MWD	OWSG MWD - Standard

Summary						
Site Name	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
Offset Twin Lakes						
Garrett #1 - Barbara #1 - Actual	8,727.8	8,498.0	3,120.6	3,059.2	50.811	CC, ES
Garrett #1 - Barbara #1 - Actual	9,000.0	8,498.0	3,132.4	3,070.4	50.492	SF
Kimbrough 20 #001 - Wellbore #1 - Wellbore #1	10,192.6	6,342.8	3,183.0	3,123.5	53.453	CC
Kimbrough 20 #001 - Wellbore #1 - Wellbore #1	10,249.5	6,388.1	3,183.3	3,123.4	53.135	ES
Kimbrough 20 #001 - Wellbore #1 - Wellbore #1	11,249.5	7,326.2	3,213.5	3,147.0	48.255	SF
Shipp 20 #001 - Wellbore #1 - Design #1	11,100.7	11,057.6	5,213.4	5,133.8	65.547	CC
Shipp 20 #001 - Wellbore #1 - Design #1	11,200.0	11,105.0	5,213.6	5,133.6	65.122	ES
Shipp 20 #001 - Wellbore #1 - Design #1	11,249.5	11,105.0	5,214.4	5,134.2	65.054	SF
Shipp 20 #001 - Wellbore #1 - Wellbore #1	10,502.3	10,461.1	5,210.4	5,135.1	69.143	CC
Shipp 20 #001 - Wellbore #1 - Wellbore #1	11,200.0	11,105.0	5,210.7	5,130.6	65.060	ES
Shipp 20 #001 - Wellbore #1 - Wellbore #1	11,249.5	11,105.0	5,211.5	5,131.3	64.994	SF

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

Anticollision Summary Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Barbara State #1
Project:	Twin Lakes	TVD Reference:	KB @ 3793.6usft
Reference Site:	Barbara State #1	MD Reference:	KB @ 3793.6usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Barbara State #1	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Well Bore	Database:	EDM 5000.14 Single User Db
Reference Design:	State Plan #2	Offset TVD Reference:	Offset Datum

Reference Depths are relative to KB @ 3793.6usft

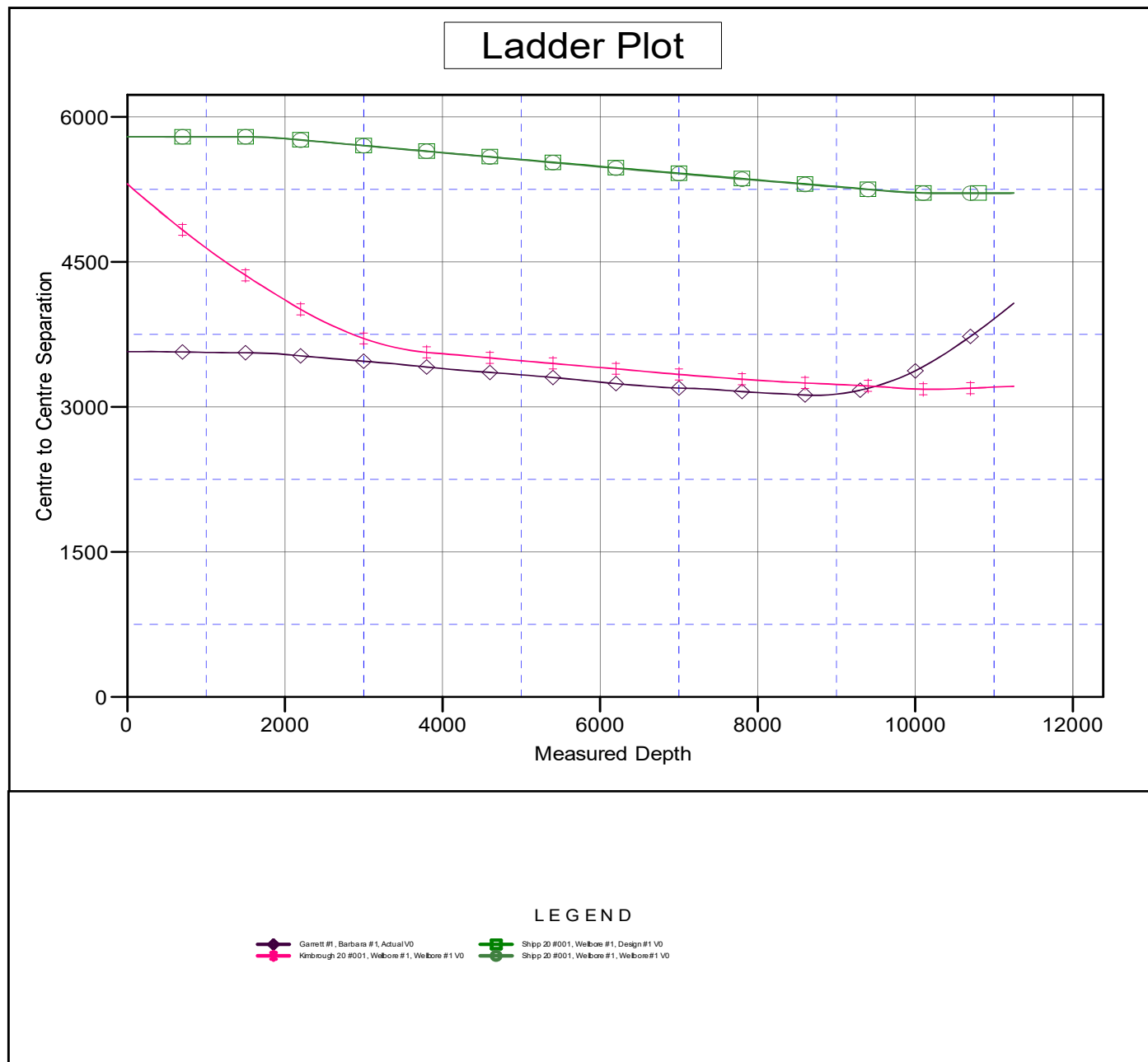
Offset Depths are relative to Offset Datum

Central Meridian is 104° 20' 0.000 W

Coordinates are relative to: Barbara State #1

Coordinate System is US State Plane 1927 (Exact solution), New Mexico East 30

Grid Convergence at Surface is: 0.58°



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

Anticollision Summary Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Barbara State #1
Project:	Twin Lakes	TVD Reference:	KB @ 3793.6usft
Reference Site:	Barbara State #1	MD Reference:	KB @ 3793.6usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Barbara State #1	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Well Bore	Database:	EDM 5000.14 Single User Db
Reference Design:	State Plan #2	Offset TVD Reference:	Offset Datum

Reference Depths are relative to KB @ 3793.6usft

Offset Depths are relative to Offset Datum

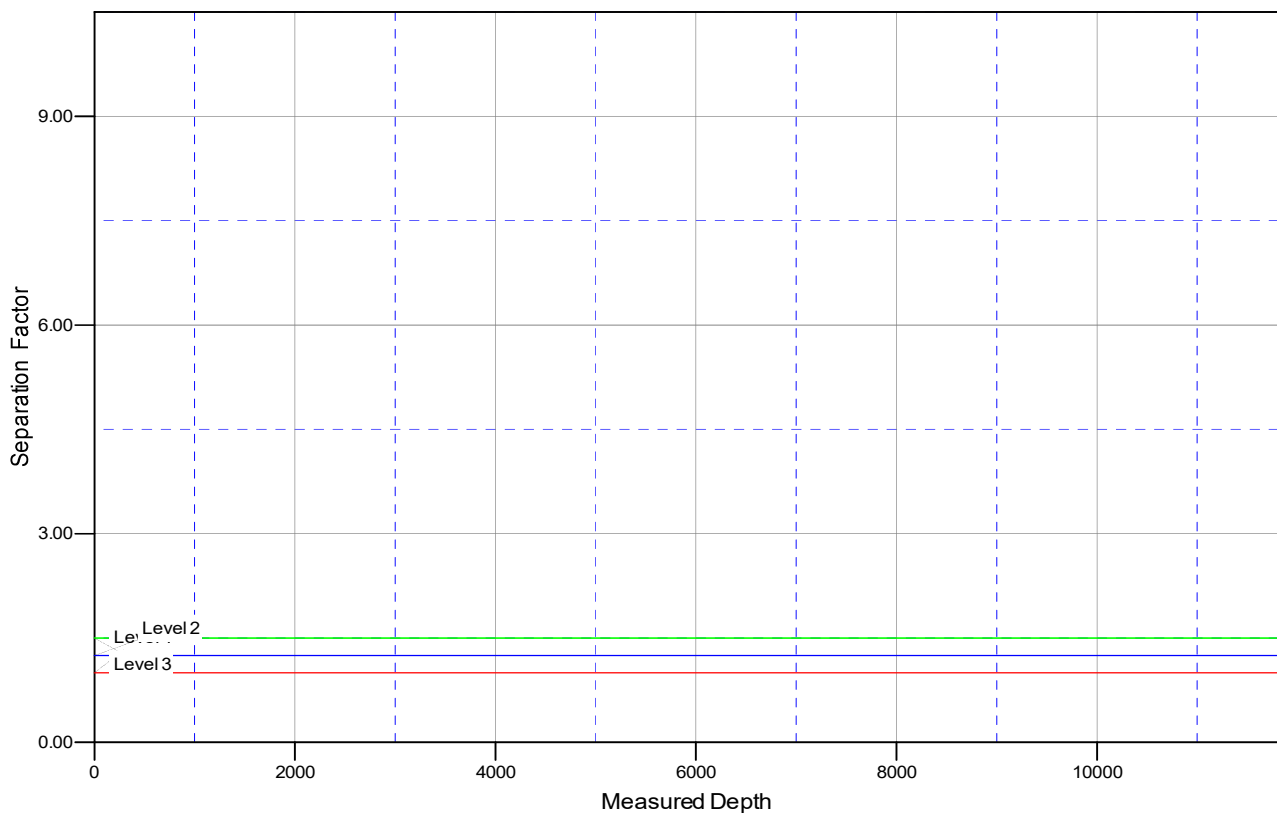
Central Meridian is 104° 20' 0.000 W

Coordinates are relative to: Barbara State #1

Coordinate System is US State Plane 1927 (Exact solution), New Mexico East 30

Grid Convergence at Surface is: 0.58°

Separation Factor Plot



LEGEND

Garrett #1, Barbara #1, Actual VO
 Kimbrough 20 #001, Wellbore #1, Wellbore #1 VO
 Shipp 20 #001, Wellbore #1, Design#1 VO
 Shipp 20 #001, Wellbore #1, Wellbore#1 VO

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

Matador Production Company

Twin Lakes

Barbara State #1

Barbara State #1

Well Bore

Plan: State Plan #2

Standard Planning Report

19 October, 2023

Planning Report

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well Barbara State #1
Company:	Matador Production Company	TVD Reference:	KB @ 3793.6usft
Project:	Twin Lakes	MD Reference:	KB @ 3793.6usft
Site:	Barbara State #1	North Reference:	Grid
Well:	Barbara State #1	Survey Calculation Method:	Minimum Curvature
Wellbore:	Well Bore		
Design:	State Plan #2		

Project	Twin Lakes		
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		Using geodetic scale factor

Site		Barbara State #1			
Site Position: From:	Map	Northing:	658,671.80 usft	Latitude:	32° 48' 22.509 N
		Easting:	827,054.40 usft	Longitude:	103° 16' 8.066 W
		Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "

Well	Barbara State #1					
Well Position	+N/-S	-0.2 usft	Northing:	658,671.60 usft	Latitude:	32° 48' 22.507 N
	+E/-W	0.1 usft	Easting:	827,054.48 usft	Longitude:	103° 16' 8.065 W
Position Uncertainty		0.0 usft	Wellhead Elevation:		Ground Level:	3,761.8 usft

Wellbore	Well Bore				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	5/9/2023	6.21	60.55	47,699.46106950

Design	State Plan #2			
Audit Notes:				
Version:	Phase:	PROTOTYPE	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	0.00

Plan Survey Tool Program	Date	10/19/2023		
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.0	11,251.9	State Plan #2 (Well Bore)	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
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,039.0	5.39	314.28	2,038.2	17.7	-18.1	1.00	1.00	0.00	314.28	
9,710.5	5.39	314.28	9,675.8	520.8	-534.0	0.00	0.00	0.00	0.00	
10,249.5	0.00	0.00	10,214.0	538.5	-552.2	1.00	-1.00	0.00	180.00	
11,249.5	0.00	0.00	11,214.0	538.5	-552.2	0.00	0.00	0.00	0.00	BHL - Barbara State

Planning Report

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well Barbara State #1
Company:	Matador Production Company	TVD Reference:	KB @ 3793.6usft
Project:	Twin Lakes	MD Reference:	KB @ 3793.6usft
Site:	Barbara State #1	North Reference:	Grid
Well:	Barbara State #1	Survey Calculation Method:	Minimum Curvature
Wellbore:	Well Bore		
Design:	State Plan #2		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	0.00
1,600.0	1.00	314.28	1,600.0	0.6	-0.6	0.6	1.00	1.00	0.00
1,700.0	2.00	314.28	1,700.0	2.4	-2.5	2.4	1.00	1.00	0.00
1,800.0	3.00	314.28	1,799.9	5.5	-5.6	5.5	1.00	1.00	0.00
1,900.0	4.00	314.28	1,899.7	9.7	-10.0	9.7	1.00	1.00	0.00
2,000.0	5.00	314.28	1,999.4	15.2	-15.6	15.2	1.00	1.00	0.00
2,039.0	5.39	314.28	2,038.2	17.7	-18.1	17.7	1.00	1.00	0.00
2,083.0	5.39	314.28	2,082.0	20.6	-21.1	20.6	0.00	0.00	0.00
Rustler									
2,100.0	5.39	314.28	2,098.9	21.7	-22.2	21.7	0.00	0.00	0.00
2,200.0	5.39	314.28	2,198.5	28.2	-29.0	28.2	0.00	0.00	0.00
2,300.0	5.39	314.28	2,298.1	34.8	-35.7	34.8	0.00	0.00	0.00
2,400.0	5.39	314.28	2,397.6	41.4	-42.4	41.4	0.00	0.00	0.00
2,500.0	5.39	314.28	2,497.2	47.9	-49.1	47.9	0.00	0.00	0.00
2,600.0	5.39	314.28	2,596.7	54.5	-55.9	54.5	0.00	0.00	0.00
2,700.0	5.39	314.28	2,696.3	61.0	-62.6	61.0	0.00	0.00	0.00
2,800.0	5.39	314.28	2,795.8	67.6	-69.3	67.6	0.00	0.00	0.00
2,900.0	5.39	314.28	2,895.4	74.2	-76.0	74.2	0.00	0.00	0.00
3,000.0	5.39	314.28	2,995.0	80.7	-82.8	80.7	0.00	0.00	0.00
3,100.0	5.39	314.28	3,094.5	87.3	-89.5	87.3	0.00	0.00	0.00
3,200.0	5.39	314.28	3,194.1	93.8	-96.2	93.8	0.00	0.00	0.00
3,211.0	5.39	314.28	3,205.0	94.5	-97.0	94.5	0.00	0.00	0.00
Base salt/Top Artesia group									
3,300.0	5.39	314.28	3,293.6	100.4	-102.9	100.4	0.00	0.00	0.00
3,400.0	5.39	314.28	3,393.2	106.9	-109.7	106.9	0.00	0.00	0.00
3,500.0	5.39	314.28	3,492.7	113.5	-116.4	113.5	0.00	0.00	0.00
3,600.0	5.39	314.28	3,592.3	120.1	-123.1	120.1	0.00	0.00	0.00
3,700.0	5.39	314.28	3,691.9	126.6	-129.8	126.6	0.00	0.00	0.00
3,800.0	5.39	314.28	3,791.4	133.2	-136.6	133.2	0.00	0.00	0.00
3,900.0	5.39	314.28	3,891.0	139.7	-143.3	139.7	0.00	0.00	0.00
4,000.0	5.39	314.28	3,990.5	146.3	-150.0	146.3	0.00	0.00	0.00
4,100.0	5.39	314.28	4,090.1	152.9	-156.7	152.8	0.00	0.00	0.00
4,200.0	5.39	314.28	4,189.7	159.4	-163.5	159.4	0.00	0.00	0.00
4,300.0	5.39	314.28	4,289.2	166.0	-170.2	166.0	0.00	0.00	0.00
4,400.0	5.39	314.28	4,388.8	172.5	-176.9	172.5	0.00	0.00	0.00
4,500.0	5.39	314.28	4,488.3	179.1	-183.6	179.1	0.00	0.00	0.00
4,600.0	5.39	314.28	4,587.9	185.6	-190.4	185.6	0.00	0.00	0.00
4,700.0	5.39	314.28	4,687.4	192.2	-197.1	192.2	0.00	0.00	0.00

Planning Report

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well Barbara State #1
Company:	Matador Production Company	TVD Reference:	KB @ 3793.6usft
Project:	Twin Lakes	MD Reference:	KB @ 3793.6usft
Site:	Barbara State #1	North Reference:	Grid
Well:	Barbara State #1	Survey Calculation Method:	Minimum Curvature
Wellbore:	Well Bore		
Design:	State Plan #2		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
4,800.0	5.39	314.28	4,787.0	198.8	-203.8	198.8	0.00	0.00	0.00
4,900.0	5.39	314.28	4,886.6	205.3	-210.5	205.3	0.00	0.00	0.00
5,000.0	5.39	314.28	4,986.1	211.9	-217.3	211.9	0.00	0.00	0.00
5,100.0	5.39	314.28	5,085.7	218.4	-224.0	218.4	0.00	0.00	0.00
5,200.0	5.39	314.28	5,185.2	225.0	-230.7	225.0	0.00	0.00	0.00
5,300.0	5.39	314.28	5,284.8	231.6	-237.4	231.5	0.00	0.00	0.00
5,400.0	5.39	314.28	5,384.3	238.1	-244.2	238.1	0.00	0.00	0.00
5,431.8	5.39	314.28	5,416.0	240.2	-246.3	240.2	0.00	0.00	0.00
San Andres									
5,500.0	5.39	314.28	5,483.9	244.7	-250.9	244.7	0.00	0.00	0.00
5,600.0	5.39	314.28	5,583.5	251.2	-257.6	251.2	0.00	0.00	0.00
5,700.0	5.39	314.28	5,683.0	257.8	-264.3	257.8	0.00	0.00	0.00
5,800.0	5.39	314.28	5,782.6	264.3	-271.1	264.3	0.00	0.00	0.00
5,900.0	5.39	314.28	5,882.1	270.9	-277.8	270.9	0.00	0.00	0.00
6,000.0	5.39	314.28	5,981.7	277.5	-284.5	277.5	0.00	0.00	0.00
6,100.0	5.39	314.28	6,081.2	284.0	-291.2	284.0	0.00	0.00	0.00
6,200.0	5.39	314.28	6,180.8	290.6	-298.0	290.6	0.00	0.00	0.00
6,300.0	5.39	314.28	6,280.4	297.1	-304.7	297.1	0.00	0.00	0.00
6,400.0	5.39	314.28	6,379.9	303.7	-311.4	303.7	0.00	0.00	0.00
6,500.0	5.39	314.28	6,479.5	310.2	-318.1	310.2	0.00	0.00	0.00
6,600.0	5.39	314.28	6,579.0	316.8	-324.9	316.8	0.00	0.00	0.00
6,700.0	5.39	314.28	6,678.6	323.4	-331.6	323.4	0.00	0.00	0.00
6,800.0	5.39	314.28	6,778.2	329.9	-338.3	329.9	0.00	0.00	0.00
6,900.0	5.39	314.28	6,877.7	336.5	-345.0	336.5	0.00	0.00	0.00
7,000.0	5.39	314.28	6,977.3	343.0	-351.8	343.0	0.00	0.00	0.00
7,100.0	5.39	314.28	7,076.8	349.6	-358.5	349.6	0.00	0.00	0.00
7,200.0	5.39	314.28	7,176.4	356.2	-365.2	356.1	0.00	0.00	0.00
7,300.0	5.39	314.28	7,275.9	362.7	-371.9	362.7	0.00	0.00	0.00
7,400.0	5.39	314.28	7,375.5	369.3	-378.7	369.3	0.00	0.00	0.00
7,500.0	5.39	314.28	7,475.1	375.8	-385.4	375.8	0.00	0.00	0.00
7,600.0	5.39	314.28	7,574.6	382.4	-392.1	382.4	0.00	0.00	0.00
7,662.7	5.39	314.28	7,637.0	386.5	-396.3	386.5	0.00	0.00	0.00
First Bone Spring									
7,700.0	5.39	314.28	7,674.2	388.9	-398.8	388.9	0.00	0.00	0.00
7,800.0	5.39	314.28	7,773.7	395.5	-405.6	395.5	0.00	0.00	0.00
7,900.0	5.39	314.28	7,873.3	402.1	-412.3	402.1	0.00	0.00	0.00
8,000.0	5.39	314.28	7,972.8	408.6	-419.0	408.6	0.00	0.00	0.00
8,100.0	5.39	314.28	8,072.4	415.2	-425.7	415.2	0.00	0.00	0.00
8,200.0	5.39	314.28	8,172.0	421.7	-432.5	421.7	0.00	0.00	0.00
8,300.0	5.39	314.28	8,271.5	428.3	-439.2	428.3	0.00	0.00	0.00
8,400.0	5.39	314.28	8,371.1	434.9	-445.9	434.8	0.00	0.00	0.00
8,426.0	5.39	314.28	8,397.0	436.6	-447.7	436.6	0.00	0.00	0.00
Second Bone Spring									
8,500.0	5.39	314.28	8,470.6	441.4	-452.6	441.4	0.00	0.00	0.00
8,600.0	5.39	314.28	8,570.2	448.0	-459.4	448.0	0.00	0.00	0.00
8,700.0	5.39	314.28	8,669.8	454.5	-466.1	454.5	0.00	0.00	0.00
8,800.0	5.39	314.28	8,769.3	461.1	-472.8	461.1	0.00	0.00	0.00
8,900.0	5.39	314.28	8,868.9	467.6	-479.5	467.6	0.00	0.00	0.00
9,000.0	5.39	314.28	8,968.4	474.2	-486.3	474.2	0.00	0.00	0.00
9,100.0	5.39	314.28	9,068.0	480.8	-493.0	480.8	0.00	0.00	0.00
9,200.0	5.39	314.28	9,167.5	487.3	-499.7	487.3	0.00	0.00	0.00
9,239.6	5.39	314.28	9,207.0	489.9	-502.4	489.9	0.00	0.00	0.00
Third Bone Carb									

Planning Report

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well Barbara State #1
Company:	Matador Production Company	TVD Reference:	KB @ 3793.6usft
Project:	Twin Lakes	MD Reference:	KB @ 3793.6usft
Site:	Barbara State #1	North Reference:	Grid
Well:	Barbara State #1	Survey Calculation Method:	Minimum Curvature
Wellbore:	Well Bore		
Design:	State Plan #2		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
9,300.0	5.39	314.28	9,267.1	493.9	-506.4	493.9	0.00	0.00	0.00
9,400.0	5.39	314.28	9,366.7	500.4	-513.2	500.4	0.00	0.00	0.00
9,500.0	5.39	314.28	9,466.2	507.0	-519.9	507.0	0.00	0.00	0.00
9,579.1	5.39	314.28	9,545.0	512.2	-525.2	512.2	0.00	0.00	0.00
Third Bone Spring									
9,600.0	5.39	314.28	9,565.8	513.6	-526.6	513.5	0.00	0.00	0.00
9,700.0	5.39	314.28	9,665.3	520.1	-533.3	520.1	0.00	0.00	0.00
9,710.5	5.39	314.28	9,675.8	520.8	-534.0	520.8	0.00	0.00	0.00
9,790.0	4.59	314.28	9,755.0	525.6	-539.0	525.6	1.00	-1.00	0.00
Wolfcamp A									
9,800.0	4.50	314.28	9,765.0	526.2	-539.6	526.2	1.00	-1.00	0.00
9,900.0	3.50	314.28	9,864.7	531.0	-544.5	531.0	1.00	-1.00	0.00
10,000.0	2.50	314.28	9,964.6	534.7	-548.3	534.7	1.00	-1.00	0.00
10,100.0	1.50	314.28	10,064.5	537.1	-550.8	537.1	1.00	-1.00	0.00
10,200.0	0.50	314.28	10,164.5	538.3	-552.0	538.3	1.00	-1.00	0.00
10,249.5	0.00	0.00	10,214.0	538.5	-552.2	538.5	1.00	-1.00	0.00
10,300.0	0.00	0.00	10,264.5	538.5	-552.2	538.5	0.00	0.00	0.00
10,400.0	0.00	0.00	10,364.5	538.5	-552.2	538.5	0.00	0.00	0.00
10,500.0	0.00	0.00	10,464.5	538.5	-552.2	538.5	0.00	0.00	0.00
10,560.5	0.00	0.00	10,525.0	538.5	-552.2	538.5	0.00	0.00	0.00
Penn Shale									
10,600.0	0.00	0.00	10,564.5	538.5	-552.2	538.5	0.00	0.00	0.00
10,700.0	0.00	0.00	10,664.5	538.5	-552.2	538.5	0.00	0.00	0.00
10,705.5	0.00	0.00	10,670.0	538.5	-552.2	538.5	0.00	0.00	0.00
Strawn									
10,800.0	0.00	0.00	10,764.5	538.5	-552.2	538.5	0.00	0.00	0.00
10,900.0	0.00	0.00	10,864.5	538.5	-552.2	538.5	0.00	0.00	0.00
10,949.5	0.00	0.00	10,914.0	538.5	-552.2	538.5	0.00	0.00	0.00
Atoka									
11,000.0	0.00	0.00	10,964.5	538.5	-552.2	538.5	0.00	0.00	0.00
11,100.0	0.00	0.00	11,064.5	538.5	-552.2	538.5	0.00	0.00	0.00
11,200.0	0.00	0.00	11,164.5	538.5	-552.2	538.5	0.00	0.00	0.00
11,249.5	0.00	0.00	11,214.0	538.5	-552.2	538.5	0.00	0.00	0.00

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
VP - Barbara State #1 - hit/miss target - Shape - Point	0.00	0.00	10,214.0	538.5	-552.2	659,210.03	826,502.37	32° 48' 27.889 N	103° 16' 14.470 W
BHL - Barbara State # - plan hits target center - Point	0.00	0.00	11,214.0	538.5	-552.2	659,210.03	826,502.37	32° 48' 27.889 N	103° 16' 14.470 W

Planning Report

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well Barbara State #1
Company:	Matador Production Company	TVD Reference:	KB @ 3793.6usft
Project:	Twin Lakes	MD Reference:	KB @ 3793.6usft
Site:	Barbara State #1	North Reference:	Grid
Well:	Barbara State #1	Survey Calculation Method:	Minimum Curvature
Wellbore:	Well Bore		
Design:	State Plan #2		

Formations						
	Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
	2,083.0	2,082.0	Rustler			
	3,211.0	3,205.0	Base salt/Top Artesia group			
	5,431.8	5,416.0	San Andres			
	7,662.7	7,637.0	First Bone Spring			
	8,426.0	8,397.0	Second Bone Spring			
	9,239.6	9,207.0	Third Bone Carb			
	9,579.1	9,545.0	Third Bone Spring			
	9,790.0	9,755.0	Wolfcamp A			
	10,560.5	10,525.0	Penn Shale			
	10,705.5	10,670.0	Strawn			
	10,949.5	10,914.0	Atoka			



SURVEY PROGRAM

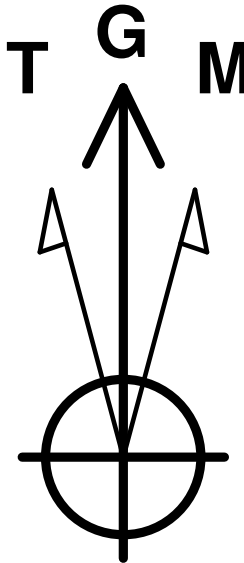
WELL DETAILS: Barbara State #1

Depth From	Depth To	Survey/Plan	Tool				GL @ 3761.8	KB @ 3793.6usft			Slot
0.0	11249.0	State Plan #2 (Well Bore)	MWD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude		
				0.0	0.0	658671.60	827054.48	32° 48' 22.507 N	103° 16' 8.065 W		

Company: Matador Production Company
Well: Barbara State #1
County: Lea County
Wellbore: Well Bore
Plan: State Plan #2
Date: 10/19/2023

Geodetic System: US State Plane 1927 (Exact solution)
Datum: NAD 1927 (NADCON CONUS)
Ellipsoid: Clarke 1866
Zone: New Mexico East 3001
System Datum: Mean Sea Level

To convert a Magnetic Direction to a Grid Direction, Add 5.63°
To convert a Magnetic Direction to a True Direction, Add 6.21° East
To convert a True Direction to a Grid Direction, Subtract 0.58°



Azimuths to Grid North
True North: -0.58°
Magnetic North: 5.63°

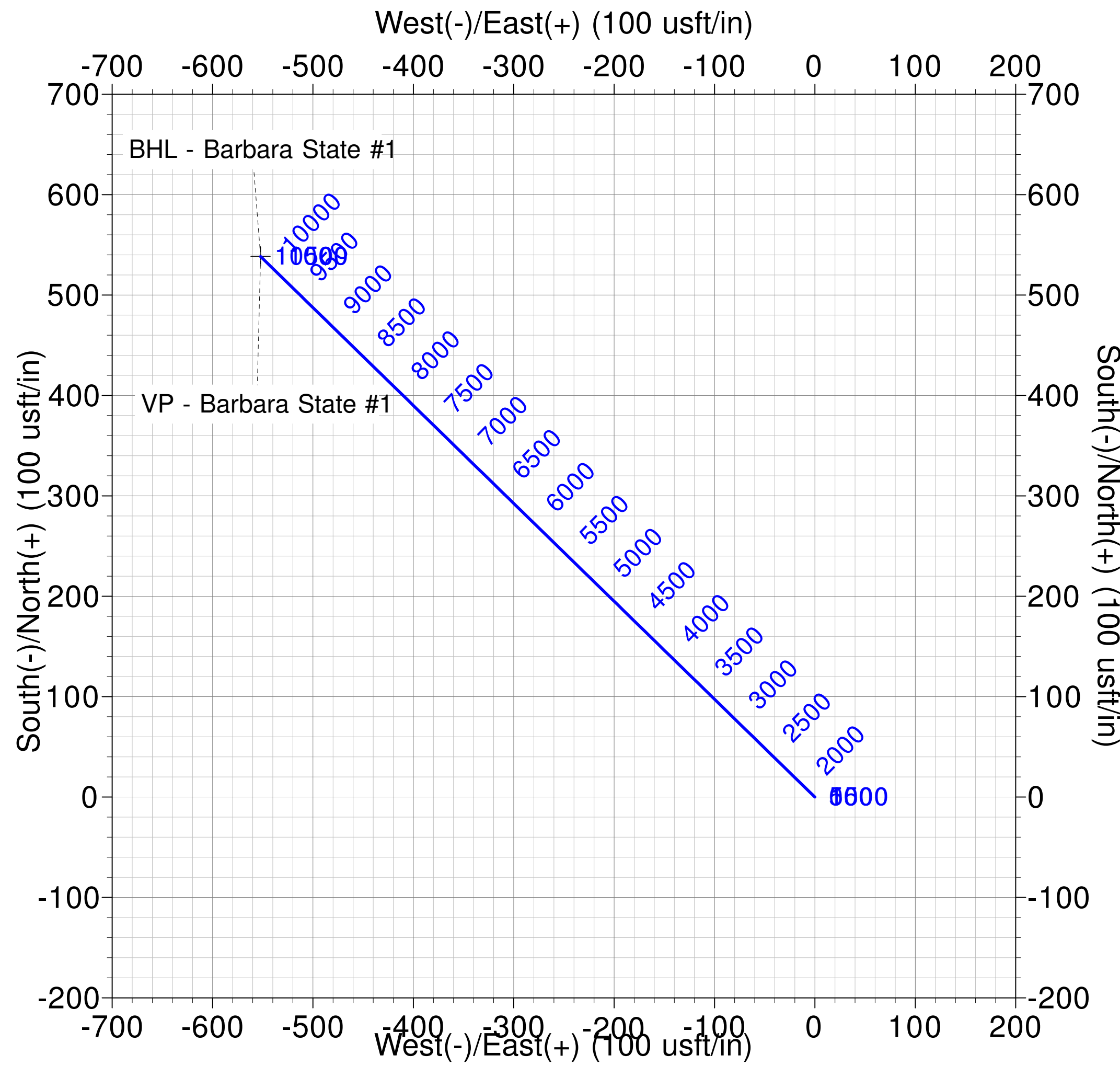
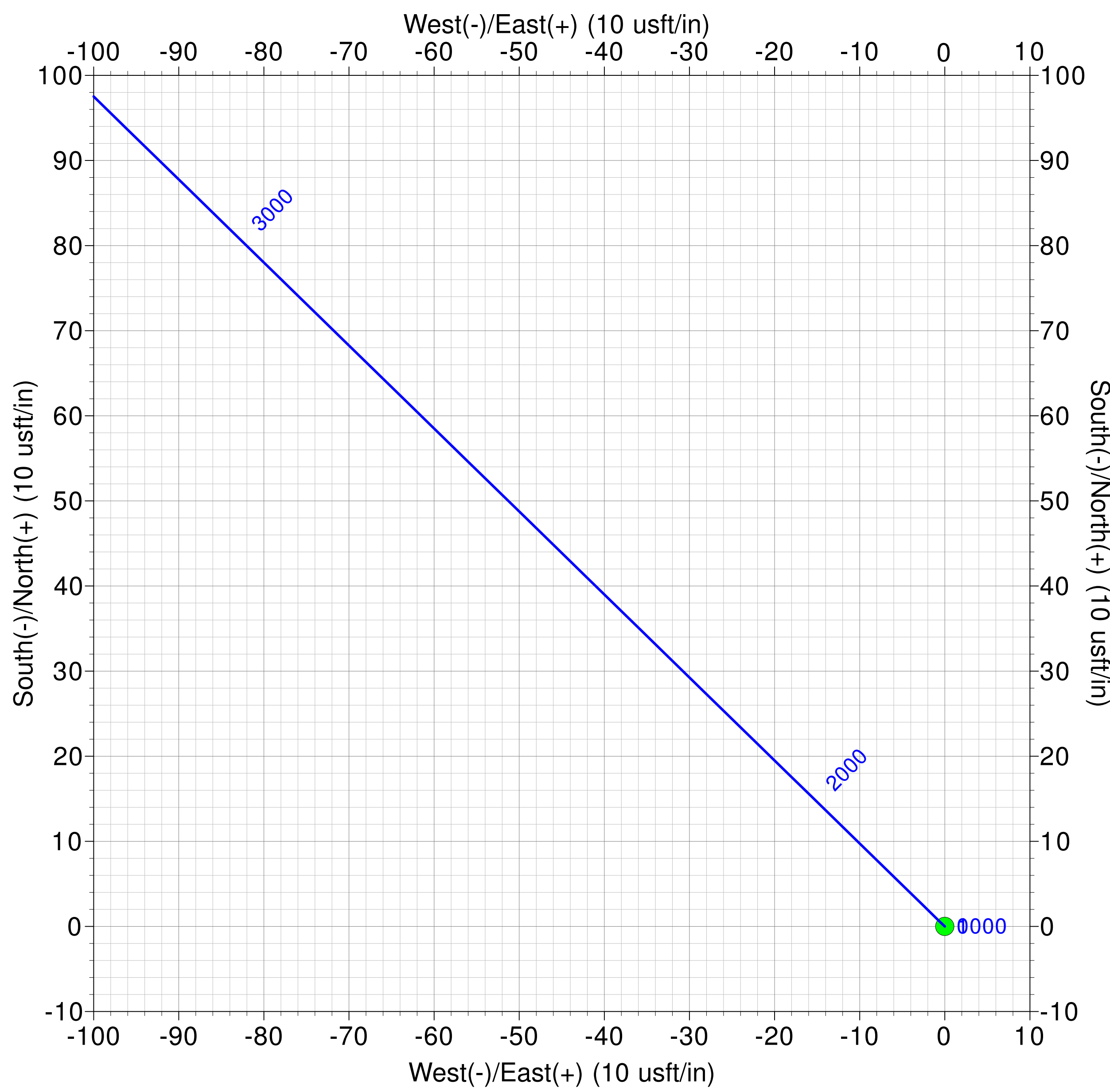
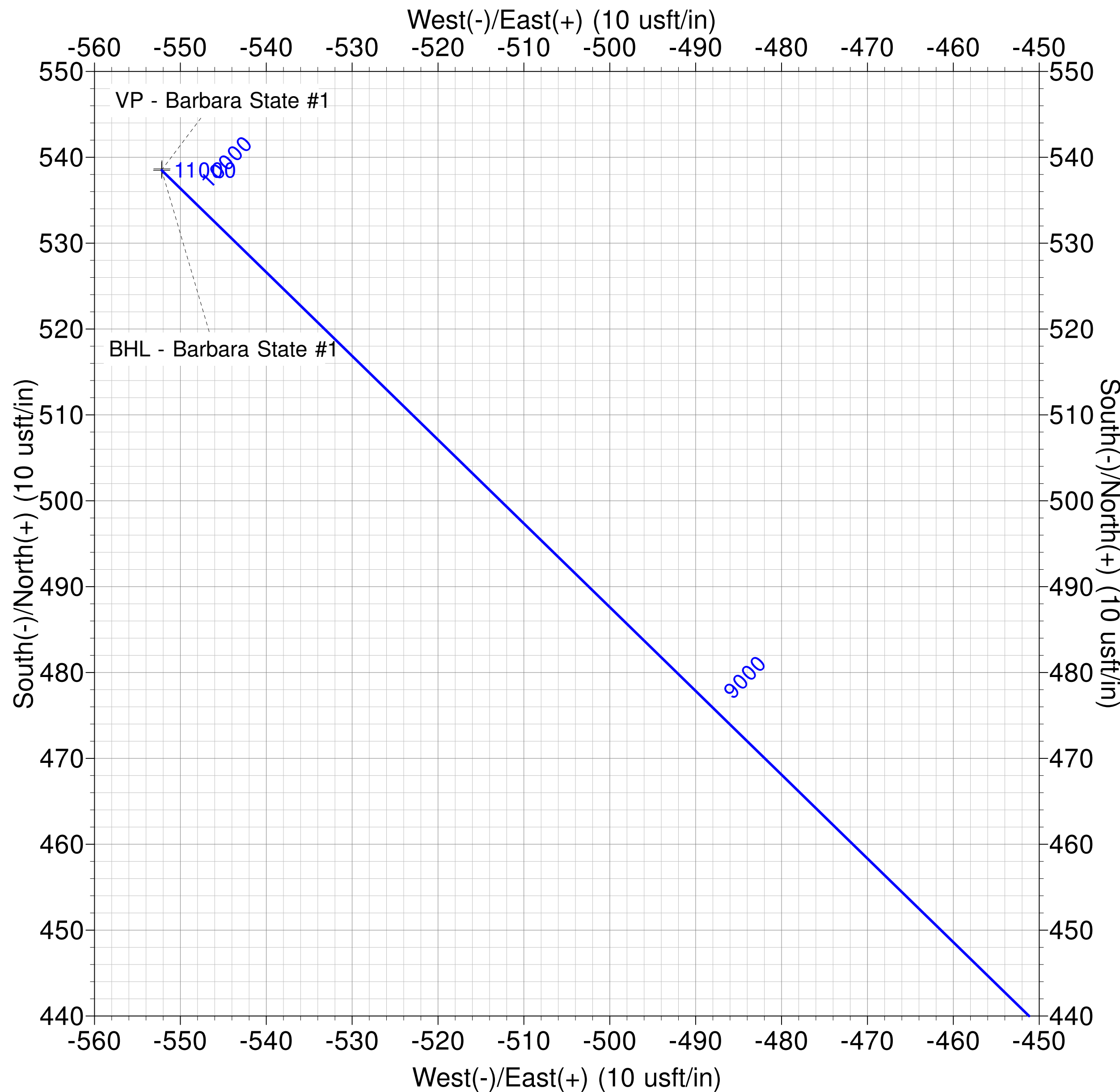
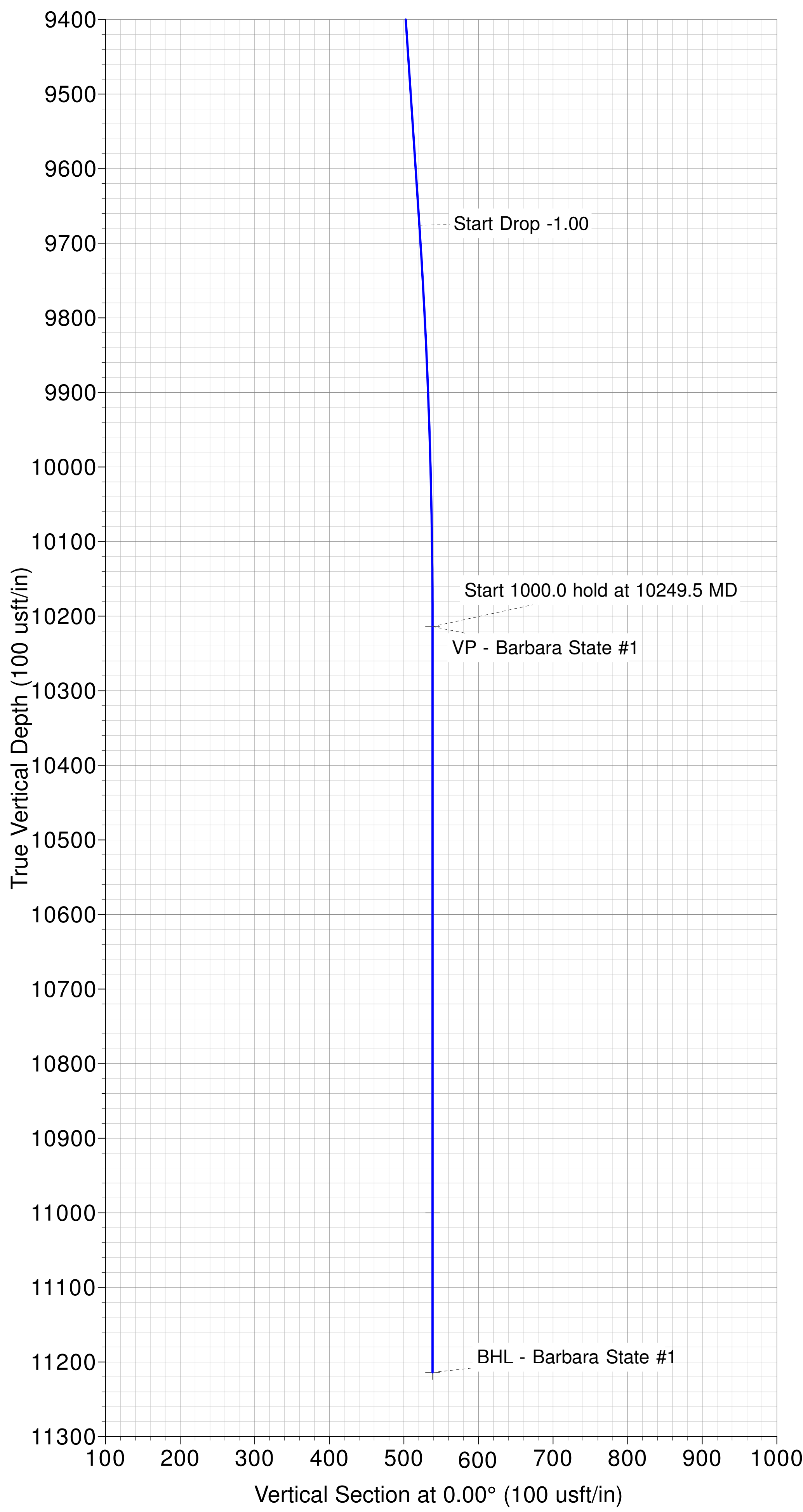
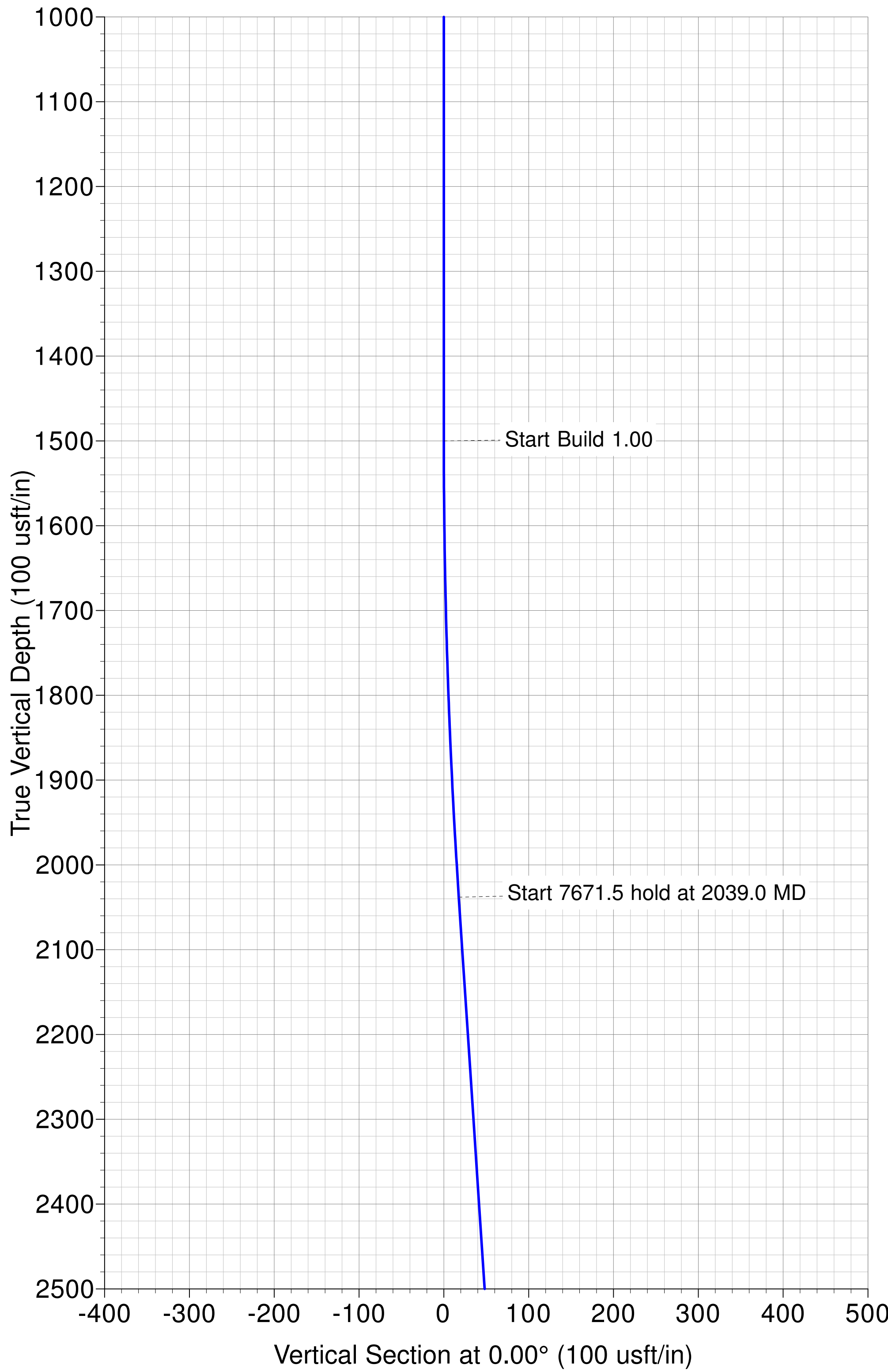
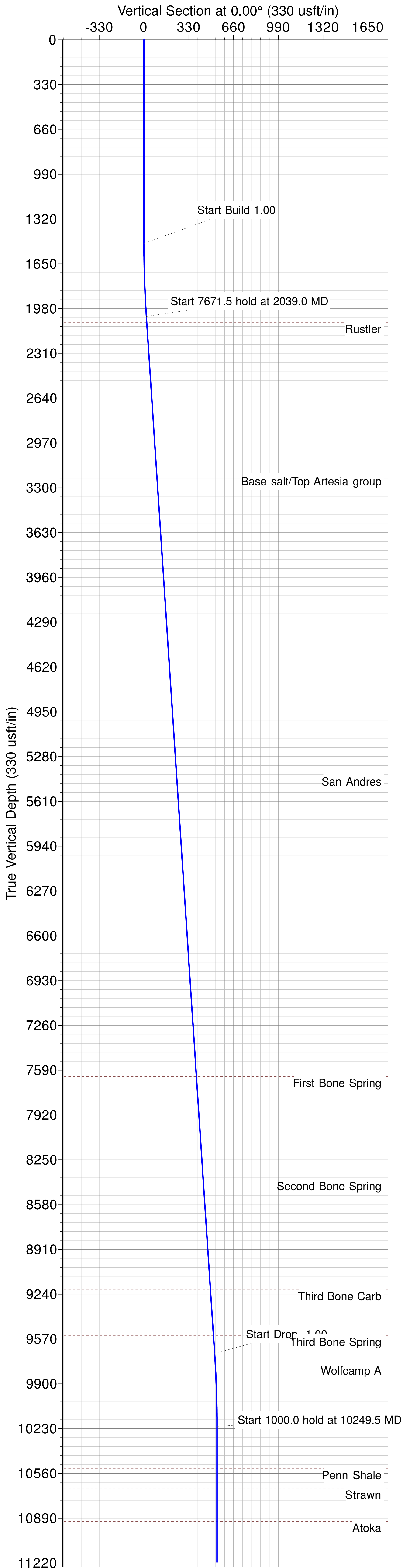
Magnetic Field
Strength: 47699.5snT
Dip Angle: 60.55°
Date: 5/9/2023
Model: IGRF2015

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
BHL - Barbara State #1	11214.0	538.5	-552.2	659210.02	826502.37	32° 48' 27.889 N	103° 16' 14.470 W
VP - Barbara State #1	10214.0	538.5	-552.2	659210.02	826502.37	32° 48' 27.889 N	103° 16' 14.470 W

SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Annotation
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
1500.0	0.00	0.00	1500.0	0.0	0.0	0.00	0.00	0.0	Start Build 1.00
2039.0	5.39	314.28	2038.2	17.7	-18.1	1.00	314.28	17.7	Start 7671.5 hold at 2039.0 MD
9710.5	5.39	314.28	9675.8	520.8	-534.0	0.00	0.00	520.8	Start Drop -1.00
10249.5	0.00	0.00	10214.0	538.5	-552.2	1.00	180.00	538.5	Start 1000.0 hold at 10249.5 MD
11249.5	0.00	0.00	11214.0	538.5	-552.2	0.00	0.00	538.5	TD at 11249.5



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

CONDITIONS

Action 278157

CONDITIONS

Operator: MATADOR PRODUCTION COMPANY One Lincoln Centre Dallas, TX 75240	OGRID: 228937
	Action Number: 278157
	Action Type: [C-103] NOI Change of Plans (C-103A)

CONDITIONS

Created By	Condition	Condition Date
pkautz	None	10/25/2023