

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

Form C-101
August 1, 2011

Permit 280670

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

1. Operator Name and Address RILEY PERMIAN OPERATING COMPANY, LLC 29 E Reno Avenue, Suite 500 Oklahoma City, OK 73104		2. OGRID Number 372290
		3. API Number 30-025-47244
4. Property Code 328119	5. Property Name TORINO 4 33	6. Well No. 003H

7. Surface Location

UL - Lot D	Section 9	Township 09S	Range 34E	Lot Idn D	Feet From 700	N/S Line N	Feet From 880	E/W Line W	County Lea
---------------	--------------	-----------------	--------------	--------------	------------------	---------------	------------------	---------------	---------------

8. Proposed Bottom Hole Location

UL - Lot L	Section 33	Township 08S	Range 34E	Lot Idn L	Feet From 2628	N/S Line S	Feet From 880	E/W Line W	County Roosevelt
---------------	---------------	-----------------	--------------	--------------	-------------------	---------------	------------------	---------------	---------------------

9. Pool Information

CLR;SAN ANDRES	12450
----------------	-------

Additional Well Information

11. Work Type New Well	12. Well Type OIL	13. Cable/Rotary	14. Lease Type Private	15. Ground Level Elevation 4285
16. Multiple N	17. Proposed Depth 12914	18. Formation San Andres	19. Contractor	20. Spud Date 6/1/2020
Depth to Ground water		Distance from nearest fresh water well		Distance to nearest surface water

☒ We will be using a closed-loop system in lieu of lined pits

21. Proposed Casing and Cement Program

Type	Hole Size	Casing Size	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC
Surf	12.25	9.625	36	2300	985	0
Prod	8.75	7	32	4500	700	0
Prod	8.75	5.5	20	12914	1925	0

Casing/Cement Program: Additional Comments

--

22. Proposed Blowout Prevention Program

Type	Working Pressure	Test Pressure	Manufacturer
Double Ram	5000	5000	TBD

23. I hereby certify that the information given above is true and complete to the best of my knowledge and belief. I further certify I have complied with 19.15.14.9 (A) NMAC ☒ and/or 19.15.14.9 (B) NMAC ☒ if applicable. Signature:	OIL CONSERVATION DIVISION	
Printed Name: Electronically filed by Maggie Crook	Approved By: Paul F Kautz	
Title: Sr. Land Analyst	Title: Geologist	
Email Address: maggiemoor@rileypermian.com	Approved Date: 6/8/2020	Expiration Date: 6/8/2022
Date: 4/21/2020	Phone: 405-415-8668	Conditions of Approval Attached

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720
District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

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

FORM C-102

Revised August 1, 2011

Submit one copy to appropriate

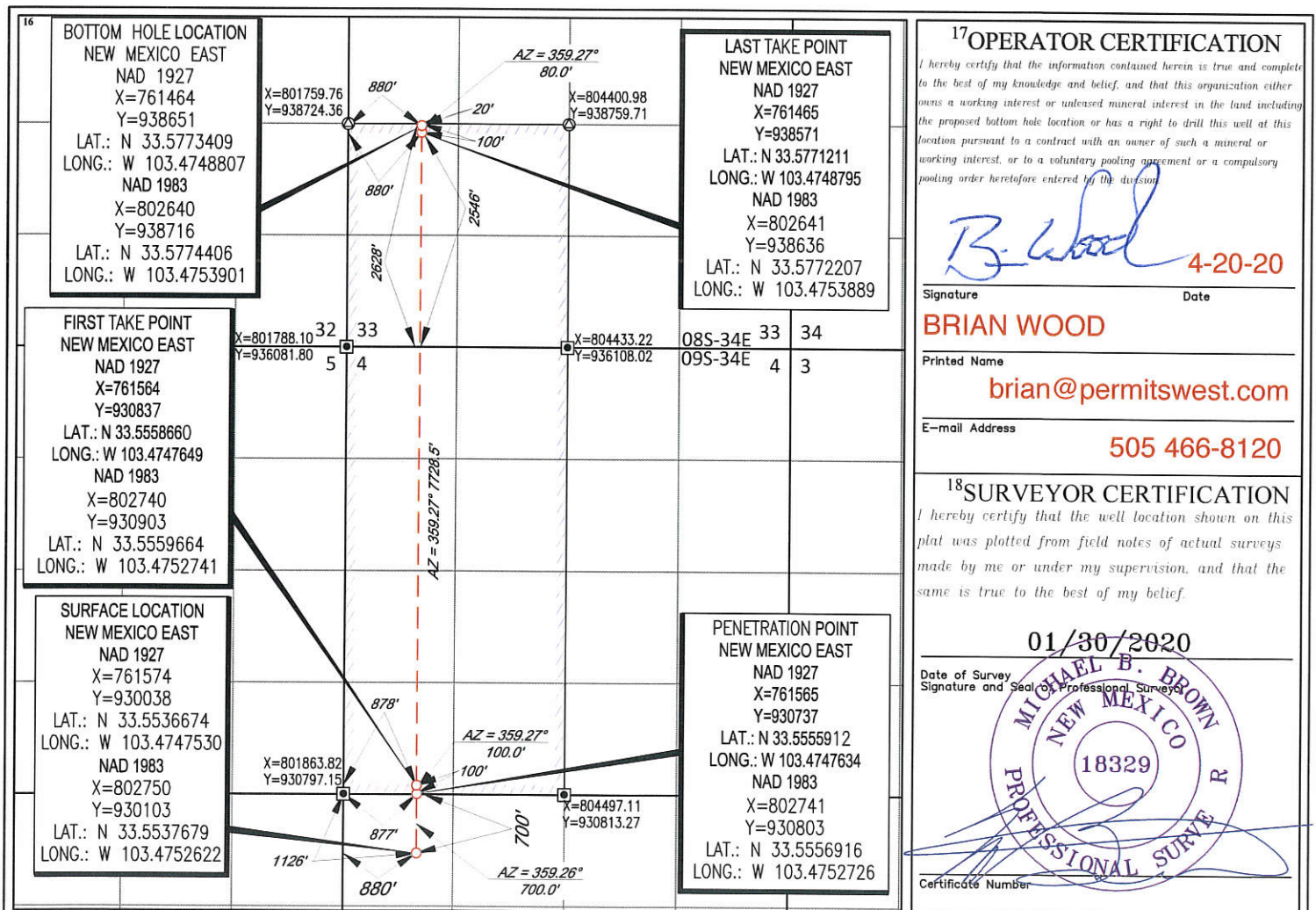
District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-025-		² Pool Code 12450		³ Pool Name CLR; SAN ANDRES	
⁴ Property Code		⁵ Property Name TORINO 4-33			⁶ Well Number 3H
⁷ OGRID No. 372290		⁸ Operator Name RILEY PERMIAN OPERATING CO, LLC			⁹ Elevation 4285'
¹⁰ Surface Location					
UL or lot no. D	Section 9	Township 9-S	Range 34-E	Lot Idn -	Feet from the 700'
		North/South line NORTH		Feet from the 880'	East/West line WEST
				County LEA	
¹¹ Bottom Hole Location If Different From Surface					
UL or lot no. L	Section 33	Township 8-S	Range 34-E	Lot Idn -	Feet from the 2628'
		North/South line SOUTH		Feet from the 880'	East/West line WEST
				County ROOSEVELT	
¹² Dedicated Acres 480.13		¹³ Joint or Infill		¹⁴ Consolidation Code	
				¹⁵ Order No.	

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



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

GAS CAPTURE PLAN

Date: 6/8/2020

☒ Original

Operator & OGRID No.: [372290] RILEY PERMIAN OPERATING COMPANY, LLC

☐ Amended - Reason for
Amendment: _____

This Gas Capture Plan outlines actions to be taken by the Operator to reduce well/production facility flaring/venting for new completion (new drill, recomple to new zone, re-frac) activity.

Note: Form C-129 must be submitted and approved prior to exceeding 60 days allowed by Rule (Subsection A of 19.15.18.12 NMAC).

Well(s)/Production Facility – Name of facility

The well(s) that will be located at the production facility are shown in the table below.

Well Name	API	Well Location (ULSTR)	Footages	Expected MCF/D	Flared or Vented	Comments
TORINO 4 33 #003H	30-025-47244	D-9-09S-34E	0700N 0880W	500	Flared	

Gathering System and Pipeline Notification

Well(s) will be connected to a production facility after flowback operations are complete, if gas transporter system is in place. The gas produced from production facility is dedicated to TARGA MIDSTREAM SERVICES LLC and will be connected to TARGA MIDSTREAM SERVICES LLC Low Pressure gathering system located in Lea County, New Mexico. It will require 1170' of pipeline to connect the facility to Low Pressure gathering system. RILEY PERMIAN OPERATING COMPANY, LLC provides (periodically) to TARGA MIDSTREAM SERVICES LLC a drilling, completion and estimated first production date for wells that are scheduled to be drilled in the foreseeable future. In addition, RILEY PERMIAN OPERATING COMPANY, LLC and TARGA MIDSTREAM SERVICES LLC have periodic conference calls to discuss changes to drilling and completion schedules. Gas from these wells will be processed at TARGA MIDSTREAM SERVICES LLC Processing Plant located in Sec. 09, Twn. 09S, Rng. 34E, Lea County, New Mexico. The actual flow of the gas will be based on compression operating parameters and gathering system pressures.

Flowback Strategy

After the fracture treatment/completion operations, well(s) will be produced to temporary production tanks and gas will be flared or vented. During flowback, the fluids and sand content will be monitored. When the produced fluids contain minimal sand, the wells will be turned to production facilities. Gas sales should start as soon as the wells start flowing through the production facilities, unless there are operational issues on TARGA MIDSTREAM SERVICES LLC system at that time. Based on current information, it is RILEY PERMIAN OPERATING COMPANY, LLC's belief the system can take this gas upon completion of the well(s).

Safety requirements during cleanout operations from the use of underbalanced air cleanout systems may necessitate that sand and non-pipeline quality gas be vented and/or flared rather than sold on a temporary basis.

Alternatives to Reduce Flaring

Below are alternatives considered from a conceptual standpoint to reduce the amount of gas flared.

- Power Generation – On lease
 - Only a portion of gas is consumed operating the generator, remainder of gas will be flared
- Compressed Natural Gas – On lease
 - Gas flared would be minimal, but might be uneconomical to operate when gas volume declines
- NGL Removal – On lease
 - Plants are expensive, residue gas is still flared, and uneconomical to operate when gas volume declines

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

Form APD Comments

Permit 280670

PERMIT COMMENTS

Operator Name and Address: RILEY PERMIAN OPERATING COMPANY, LLC [372290] 29 E Reno Avenue, Suite 500 Oklahoma City, OK 73104		API Number: 30-025-47244
		Well: TORINO 4 33 #003H

Created By	Comment	Comment Date
------------	---------	--------------

District I

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

District II

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

District III

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

District IV

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

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

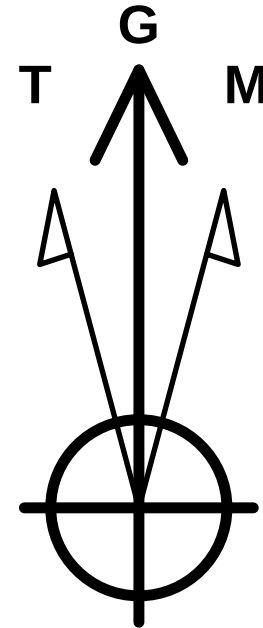
Form APD Conditions

Permit 280670

PERMIT CONDITIONS OF APPROVAL

Operator Name and Address: RILEY PERMIAN OPERATING COMPANY, LLC [372290] 29 E Reno Avenue, Suite 500 Oklahoma City, OK 73104	API Number: 30-025-47244
	Well: TORINO 4 33 #003H

OCD Reviewer	Condition
pkautz	Will require a directional survey with the C-104
pkautz	SURFACE & PRODUCTION CASING - Cement must circulate to surface
pkautz	If cement does not circulate to surface, must run temperature survey or other log to determine top of cement
pkautz	Surface casing must be set 25' below top of Rustler Anhydrite in order to seal off protectable water
pkautz	1)- The Operator is to notify NMOCD by sundry (Form C-103) within ten (10) days of the well being spud 2)- Drilling Sundries Form C-103 (Casing and Cement test are to be submitted within 10 days 3)- Completion Reports & Logs are to be submitted within 45 days 4)- Deviation / Directional Drill Survey are to be filed with or prior to C-104
pkautz	It is the operator's responsibility to monitor cancellation dates of approved APDs. APD's are good for 2 years and may be extended for one year. Only one 1 year extension will be granted if submitted by C-103 before expiration date. After expiration date or after a 1 year extension must submit new APD. If an APD expires and if site construction has occurred, site remediation is required.
pkautz	Stage Tool 1) Must notify OCD Hobbs Office prior to running Stage Tool at 5753703186 2) If using Stage Tool on Surface casing, Stage Tool must be set greater than 350' from surface and a minimum of 200 feet above surface shoe. 3) When using a Stage Tool on Intermediate or Production Casing Stage must be a minimum of 50 feet below previous casing shoe.



Azimuths to Grid North
True North: -0.47°
Magnetic North: 6.27°

Magnetic Field
Strength: 48441.3nT
Dip Angle: 61.15°
Date: 4/6/2020
Model: WMM2020

PROJECT DETAILS: Lea County, NM

Geodetic System: **US State Plane 1983**
Datum: **North American Datum 1983**
Ellipsoid: GRS 1980
Zone: New Mexico Eastern Zone
System Datum: Mean Sea Level



WELL DETAILS: 3H

		GL 4285 + 17' KB @ 4302.00usft	4285.00		
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.00	0.00	930103.07	802750.23	33.553769	-103.475262
					Slot

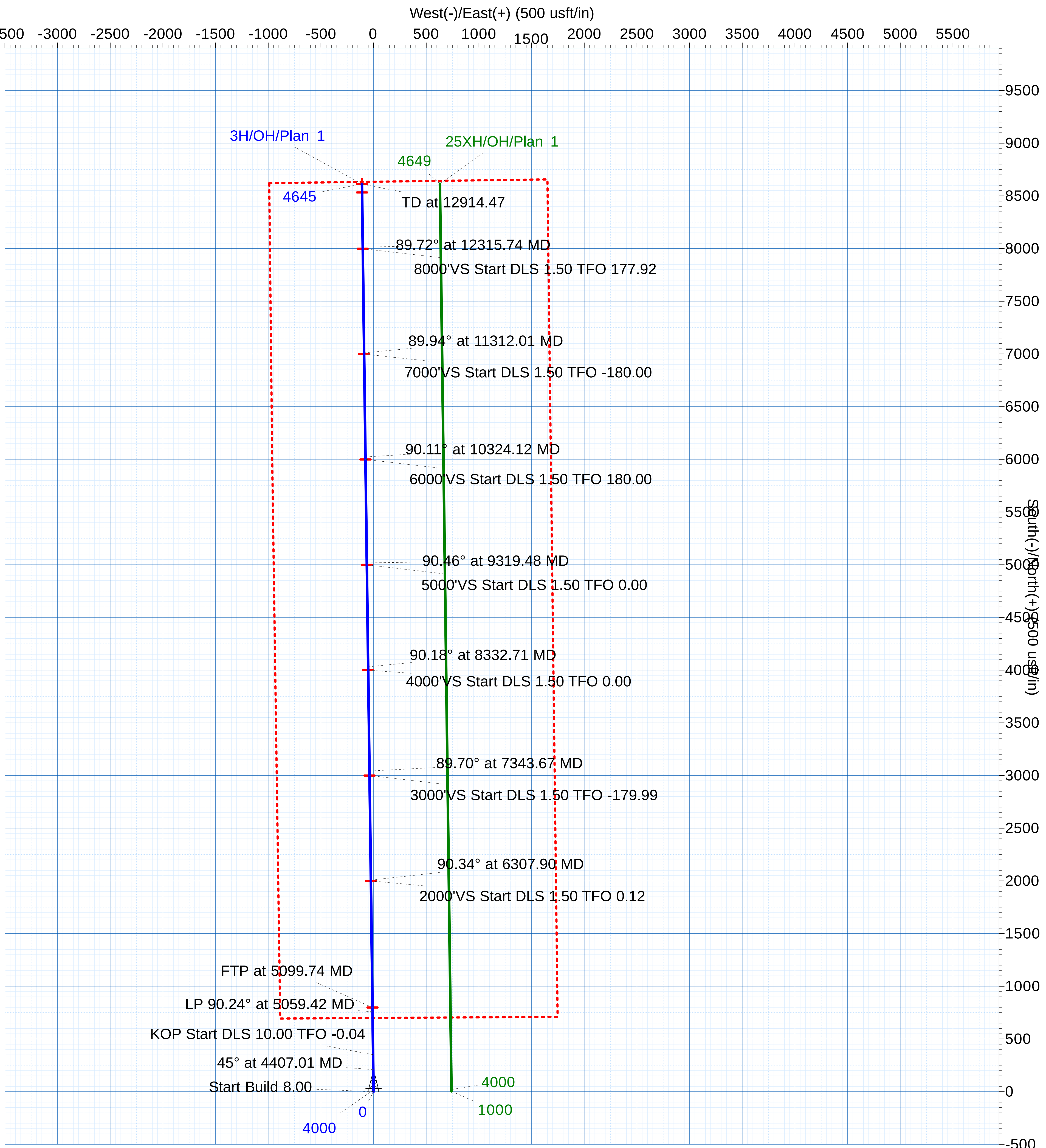
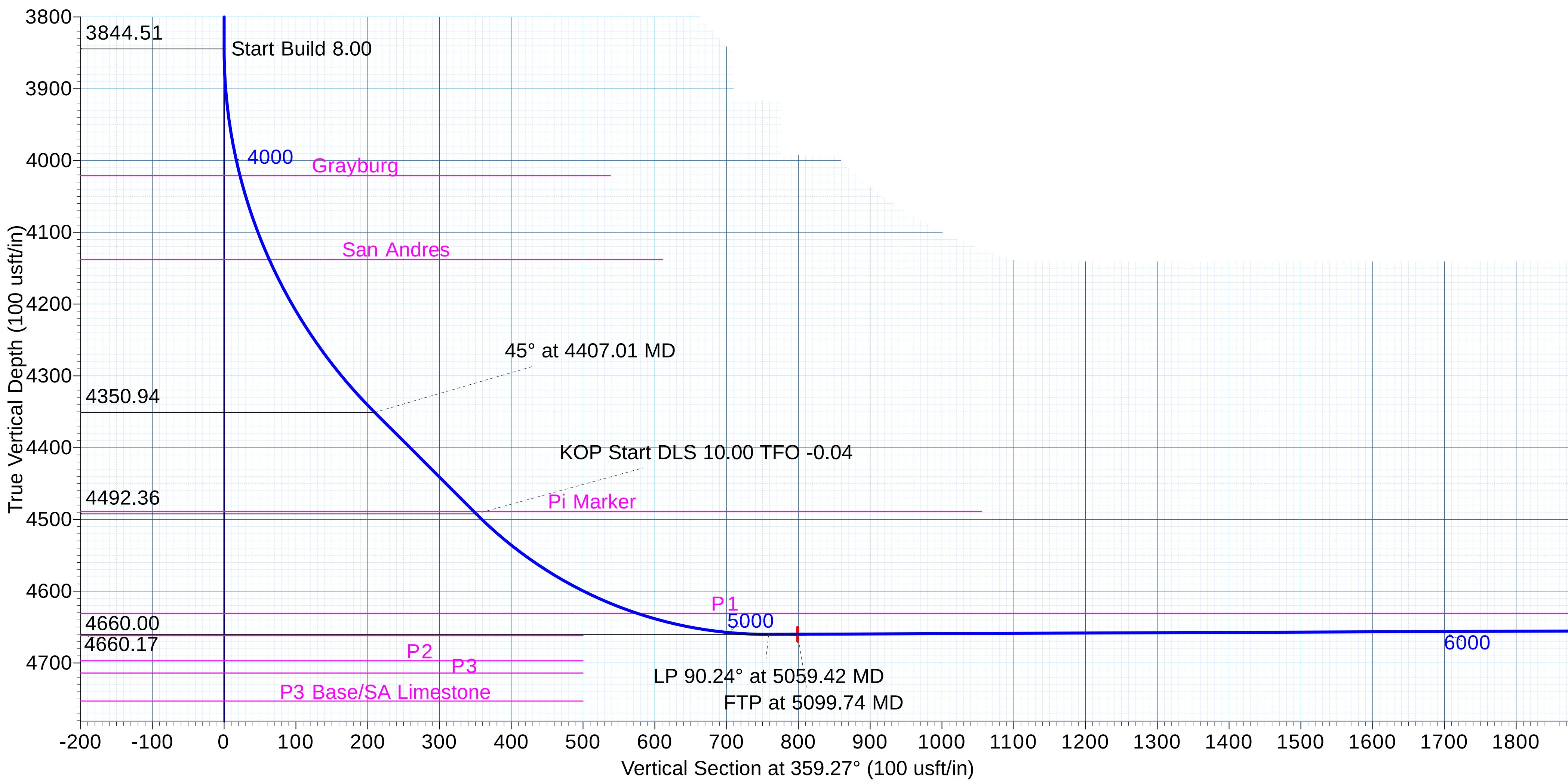
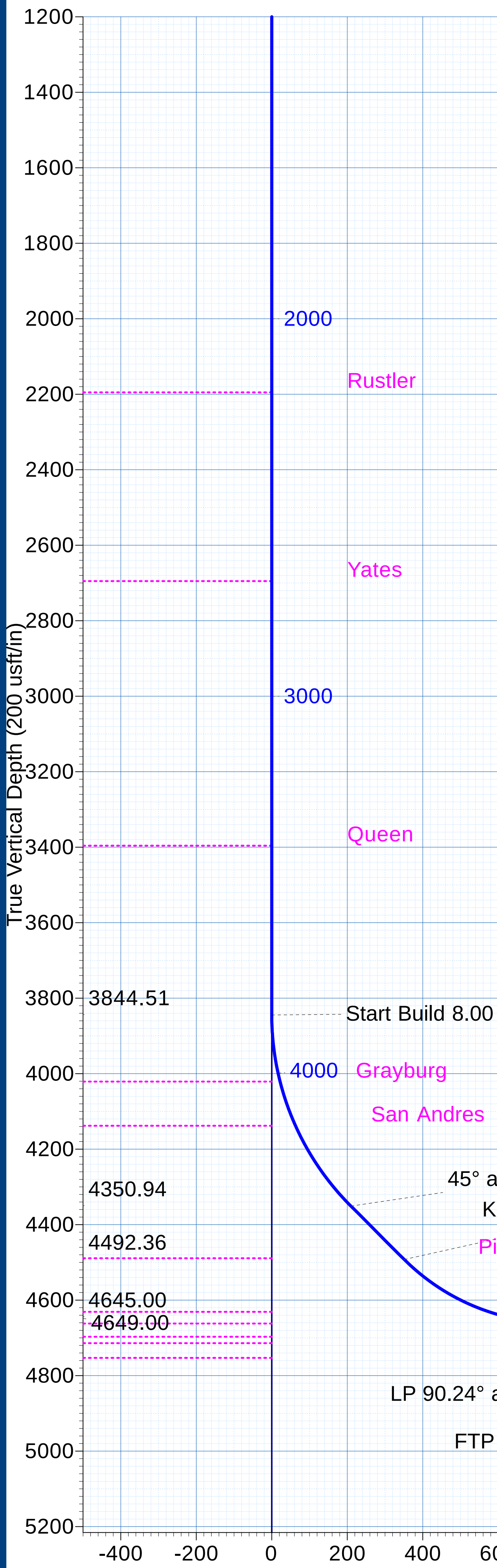
Company: Riley Permian Operating Co., LLC
Field: Lea County, NM
Location: Torino 4-33
Well: 3H
OH
Plan: Plan 1
GL 4285 + 17' KB @ 4302.00usft

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
2195.00	2195.00	Rustler
2695.00	2695.00	Yates
3396.00	3396.00	Queen
4021.00	4022.84	Grayburg
4138.00	4146.91	San Andres
4489.00	4602.26	Pi Marker
4631.00	4873.38	P1

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	3844.51	0.00	0.00	3844.51	0.00	0.00	0.00	0.00	0.00	
3	4407.01	45.00	359.29	4350.94	209.75	-2.59	8.00	359.29	209.77	
4	4607.01	45.00	359.29	4492.36	351.16	-4.34	0.00	0.00	351.19	
5	5059.42	90.24	359.27	4660.17	758.69	-9.48	10.00	-0.04	758.75	
6	5099.73	90.24	359.27	4660.00	798.99	-10.00	0.00	0.00	799.05	FTP - Torino 4-33 3H
7	6307.89	90.24	359.27	4655.00	1999.82	-25.38	0.00	174.39	1999.98	2000'VS - Torino 4-33 3H
8	6307.89	90.34	359.27	4654.96	2007.04	-25.47	1.50	-0.24	2007.20	
9	7300.68	90.34	359.27	4649.00	2999.73	-38.19	0.00	0.00	2999.97	3000'VS - Torino 4-33 3H
10	7343.64	89.70	359.27	4648.98	3042.69	-38.74	1.50	-180.00	3042.94	
11	8300.67	89.70	359.27	4654.00	3999.63	-51.00	0.00	0.00	3999.95	4000'VS - Torino 4-33 3H
12	8332.66	90.18	359.27	4654.03	4031.62	-51.41	1.50	0.00	4031.95	
13	9300.67	90.18	359.27	4651.00	4999.54	-63.82	0.00	0.00	4999.94	5000'VS - Torino 4-33 3H
14	9319.43	90.46	359.27	4650.90	5018.30	-64.06	1.50	0.00	5018.71	
15	10300.69	90.46	359.27	4643.00	5999.45	-76.63	0.00	0.00	5999.94	6000'VS - Troino 4-33 3H
16	10324.06	90.11	359.27	4642.88	6022.81	-76.93	1.50	180.00	6023.30	
17	11300.69	90.11	359.27	4641.00	6999.36	-89.44	0.00	0.00	6999.93	7000'VS - Torino 4-33 3H
18	11311.94	89.94	359.27	4640.99	7010.60	-89.58	1.50	-180.00	7011.18	
19	12300.68	89.94	359.27	4642.00	7999.26	-102.25	0.00	0.00	7999.92	8000'VS - Torino 4-33 3H
20	12315.66	89.72	359.28	4642.04	8014.25	-102.44	1.50	177.55	8014.90	
21	12914.38	89.72	359.28	4645.00	8612.91	-110.01	0.00	0.00	8613.61	BHL - Torino 4-33 3H



Legacy Directional Planning Report

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well 3H
Company:	Riley Permian Operating Co., LLC	TVD Reference:	GL 4285 + 17' KB @ 4302.00usft
Project:	Lea County, NM	MD Reference:	GL 4285 + 17' KB @ 4302.00usft
Site:	Torino 4-33	North Reference:	Grid
Well:	3H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan 1		

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

Site	Torino 4-33				
Site Position:		Northing:	930,103.07 usft	Latitude:	33.553769
From:	Map	Easting:	802,750.23 usft	Longitude:	-103.475262
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.47

Well	3H					
Well Position	+N/-S	0.00 usft	Northing:	930,103.07 usft	Latitude:	33.553769
	+E/-W	0.00 usft	Easting:	802,750.23 usft	Longitude:	-103.475262
Position Uncertainty		0.00 usft	Wellhead Elevation:		Ground Level:	4,285.00 usft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	WMM2020	4/6/2020	6.75	61.15	48,441.30641791

Design	Plan 1				
Audit Notes:					
Version:		Phase:	PLAN	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)	
	0.00	0.00	0.00	359.27	

Plan Survey Tool Program	Date	4/6/2020			
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks	
1	0.00	12,914.47	Plan 1 (OH)	MWD	
				OWSG MWD - Standard	

Legacy Directional

Planning Report

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well 3H
Company:	Riley Permian Operating Co., LLC	TVD Reference:	GL 4285 + 17' KB @ 4302.00usft
Project:	Lea County, NM	MD Reference:	GL 4285 + 17' KB @ 4302.00usft
Site:	Torino 4-33	North Reference:	Grid
Well:	3H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan 1		

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	
3,844.51	0.00	0.00	3,844.51	0.00	0.00	0.00	0.00	0.00	0.00	
4,407.01	45.00	359.29	4,350.94	209.75	-2.59	8.00	8.00	0.00	359.29	
4,607.01	45.00	359.29	4,492.36	351.16	-4.34	0.00	0.00	0.00	0.00	
5,059.42	90.24	359.27	4,660.17	758.69	-9.48	10.00	10.00	-0.01	-0.04	
5,099.73	90.24	359.27	4,660.00	798.99	-10.00	0.00	0.00	0.00	0.00	FTP - Torino 4-33 3H
6,300.67	90.24	359.27	4,655.00	1,999.82	-25.38	0.00	0.00	0.00	174.39	2000°VS - Torino 4-33
6,307.89	90.34	359.27	4,654.96	2,007.04	-25.47	1.50	1.50	-0.01	-0.24	
7,300.68	90.34	359.27	4,649.00	2,999.73	-38.19	0.00	0.00	0.00	0.00	3000°VS - Torino 4-33
7,343.64	89.70	359.27	4,648.98	3,042.69	-38.74	1.50	-1.50	0.00	-180.00	
8,300.67	89.70	359.27	4,654.00	3,999.63	-51.00	0.00	0.00	0.00	0.00	4000°VS - Torino 4-33
8,332.66	90.18	359.27	4,654.03	4,031.62	-51.41	1.50	1.50	0.00	0.00	
9,300.67	90.18	359.27	4,651.00	4,999.54	-63.82	0.00	0.00	0.00	0.00	5000°VS - Torino 4-33
9,319.43	90.46	359.27	4,650.90	5,018.30	-64.06	1.50	1.50	0.00	0.00	
10,300.69	90.46	359.27	4,643.00	5,999.45	-76.63	0.00	0.00	0.00	0.00	6000°VS - Troino 4-33
10,324.06	90.11	359.27	4,642.88	6,022.81	-76.93	1.50	-1.50	0.00	180.00	
11,300.69	90.11	359.27	4,641.00	6,999.36	-89.44	0.00	0.00	0.00	0.00	7000°VS - Torino 4-33
11,311.94	89.94	359.27	4,640.99	7,010.60	-89.58	1.50	-1.50	0.00	-180.00	
12,300.68	89.94	359.27	4,642.00	7,999.26	-102.25	0.00	0.00	0.00	0.00	8000°VS - Torino 4-33
12,315.66	89.72	359.28	4,642.04	8,014.25	-102.44	1.50	-1.50	0.06	177.55	
12,914.38	89.72	359.28	4,645.00	8,612.91	-110.01	0.00	0.00	0.00	0.00	BHL - Torino 4-33 3H

Legacy Directional

Planning Report

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well 3H
Company:	Riley Permian Operating Co., LLC	TVD Reference:	GL 4285 + 17' KB @ 4302.00usft
Project:	Lea County, NM	MD Reference:	GL 4285 + 17' KB @ 4302.00usft
Site:	Torino 4-33	North Reference:	Grid
Well:	3H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan 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)
3,800.00	0.00	0.00	3,800.00	0.00	0.00	0.00	0.00	0.00	0.00
3,844.51	0.00	0.00	3,844.51	0.00	0.00	0.00	0.00	0.00	0.00
Start Build 8.00									
3,900.00	4.44	359.29	3,899.94	2.15	-0.03	2.15	8.00	8.00	0.00
4,000.00	12.44	359.29	3,998.78	16.81	-0.21	16.81	8.00	8.00	0.00
4,022.84	14.27	359.29	4,021.00	22.08	-0.27	22.09	8.00	8.00	0.00
Grayburg									
4,100.00	20.44	359.29	4,094.62	45.09	-0.56	45.09	8.00	8.00	0.00
4,146.91	24.19	359.29	4,138.00	62.89	-0.78	62.90	8.00	8.00	0.00
San Andres									
4,200.00	28.44	359.29	4,185.58	86.42	-1.07	86.43	8.00	8.00	0.00
4,300.00	36.44	359.29	4,269.91	140.01	-1.73	140.03	8.00	8.00	0.00
4,400.00	44.44	359.29	4,345.96	204.82	-2.53	204.84	8.00	8.00	0.00
4,407.01	45.00	359.29	4,350.94	209.75	-2.59	209.77	8.00	8.00	0.00
45° at 4407.01 MD									
4,500.00	45.00	359.29	4,416.69	275.50	-3.40	275.52	0.00	0.00	0.00
4,600.00	45.00	359.29	4,487.40	346.21	-4.28	346.23	0.00	0.00	0.00
4,602.26	45.00	359.29	4,489.00	347.80	-4.30	347.83	0.00	0.00	0.00
Pi Marker									
4,607.01	45.00	359.29	4,492.36	351.16	-4.34	351.19	0.00	0.00	0.00
KOP Start DLS 10.00 TFO -0.04									
4,700.00	54.30	359.28	4,552.50	421.95	-5.22	421.98	10.00	10.00	-0.01
4,800.00	64.30	359.28	4,603.49	507.82	-6.30	507.86	10.00	10.00	-0.01
4,873.38	71.64	359.27	4,631.00	575.79	-7.15	575.83	10.00	10.00	-0.01
P1									
4,900.00	74.30	359.27	4,638.80	601.23	-7.48	601.28	10.00	10.00	0.00
5,000.00	84.30	359.27	4,657.34	699.36	-8.73	699.42	10.00	10.00	0.00
5,059.42	90.24	359.27	4,660.17	758.69	-9.48	758.74	10.00	10.00	0.00
LP 90.24° at 5059.42 MD									
5,099.73	90.24	359.27	4,660.00	798.99	-10.00	799.05	0.00	0.00	0.00
FTP - Torino 4-33 3H									
5,099.74	90.24	359.27	4,660.00	799.00	-10.00	799.06	0.00	0.00	0.00
FTP at 5099.74 MD									
5,100.00	90.24	359.27	4,660.00	799.26	-10.00	799.32	0.00	0.00	0.00
5,200.00	90.24	359.27	4,659.58	899.25	-11.29	899.32	0.00	0.00	0.00
5,300.00	90.24	359.27	4,659.16	999.24	-12.57	999.32	0.00	0.00	0.00
5,400.00	90.24	359.27	4,658.74	1,099.23	-13.85	1,099.32	0.00	0.00	0.00
5,500.00	90.24	359.27	4,658.32	1,199.22	-15.13	1,199.32	0.00	0.00	0.00
5,600.00	90.24	359.27	4,657.90	1,299.21	-16.41	1,299.32	0.00	0.00	0.00
5,700.00	90.24	359.27	4,657.49	1,399.21	-17.69	1,399.32	0.00	0.00	0.00
5,800.00	90.24	359.27	4,657.07	1,499.20	-18.97	1,499.32	0.00	0.00	0.00
5,900.00	90.24	359.27	4,656.66	1,599.19	-20.25	1,599.32	0.00	0.00	0.00
6,000.00	90.24	359.27	4,656.24	1,699.18	-21.53	1,699.31	0.00	0.00	0.00
6,100.00	90.24	359.27	4,655.83	1,799.17	-22.81	1,799.31	0.00	0.00	0.00
6,200.00	90.24	359.27	4,655.41	1,899.16	-24.09	1,899.31	0.00	0.00	0.00
6,300.00	90.24	359.27	4,655.00	1,999.15	-25.37	1,999.31	0.00	0.00	0.00
6,300.67	90.24	359.27	4,655.00	1,999.82	-25.38	1,999.98	0.07	-0.07	0.01
2000°VS - Torino 4-33 3H									
6,300.69	90.24	359.27	4,655.00	1,999.84	-25.38	2,000.00	0.00	0.00	0.00
2000°VS Start DLS 1.50 TFO 0.12									
6,307.89	90.34	359.27	4,654.96	2,007.04	-25.47	2,007.20	1.50	1.50	-0.01
6,307.90	90.34	359.27	4,654.96	2,007.05	-25.47	2,007.21	0.01	0.00	0.00

Legacy Directional

Planning Report

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well 3H
Company:	Riley Permian Operating Co., LLC	TVD Reference:	GL 4285 + 17' KB @ 4302.00usft
Project:	Lea County, NM	MD Reference:	GL 4285 + 17' KB @ 4302.00usft
Site:	Torino 4-33	North Reference:	Grid
Well:	3H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan 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)
90.34° at 6307.90 MD									
6,400.00	90.34	359.27	4,654.41	2,099.14	-26.65	2,099.31	0.00	0.00	0.00
6,500.00	90.34	359.27	4,653.81	2,199.13	-27.94	2,199.31	0.00	0.00	0.00
6,600.00	90.34	359.27	4,653.21	2,299.12	-29.22	2,299.31	0.00	0.00	0.00
6,700.00	90.34	359.27	4,652.61	2,399.11	-30.50	2,399.31	0.00	0.00	0.00
6,800.00	90.34	359.27	4,652.01	2,499.10	-31.78	2,499.30	0.00	0.00	0.00
6,900.00	90.34	359.27	4,651.41	2,599.09	-33.06	2,599.30	0.00	0.00	0.00
7,000.00	90.34	359.27	4,650.81	2,699.08	-34.34	2,699.30	0.00	0.00	0.00
7,100.00	90.34	359.27	4,650.21	2,799.07	-35.62	2,799.30	0.00	0.00	0.00
7,200.00	90.34	359.27	4,649.60	2,899.06	-36.90	2,899.30	0.00	0.00	0.00
7,300.00	90.34	359.27	4,649.00	2,999.05	-38.18	2,999.29	0.00	0.00	0.00
7,300.68	90.34	359.27	4,649.00	2,999.73	-38.19	2,999.97	0.00	0.00	0.00
3000°VS - Torino 4-33 3H									
7,300.71	90.34	359.27	4,649.00	2,999.76	-38.19	3,000.00	0.00	0.00	0.00
3000°VS Start DLS 1.50 TFO -179.99									
7,343.64	89.70	359.27	4,648.98	3,042.69	-38.74	3,042.94	1.50	-1.50	0.00
7,343.67	89.70	359.27	4,648.98	3,042.72	-38.74	3,042.96	0.00	0.00	0.00
89.70° at 7343.67 MD									
7,400.00	89.70	359.27	4,649.28	3,099.04	-39.47	3,099.29	0.00	0.00	0.00
7,500.00	89.70	359.27	4,649.80	3,199.03	-40.75	3,199.29	0.00	0.00	0.00
7,600.00	89.70	359.27	4,650.33	3,299.02	-42.03	3,299.29	0.00	0.00	0.00
7,700.00	89.70	359.27	4,650.85	3,399.01	-43.31	3,399.29	0.00	0.00	0.00
7,800.00	89.70	359.27	4,651.38	3,499.00	-44.59	3,499.29	0.00	0.00	0.00
7,900.00	89.70	359.27	4,651.90	3,598.99	-45.87	3,599.29	0.00	0.00	0.00
8,000.00	89.70	359.27	4,652.42	3,698.98	-47.15	3,699.29	0.00	0.00	0.00
8,100.00	89.70	359.27	4,652.95	3,798.97	-48.43	3,799.28	0.00	0.00	0.00
8,200.00	89.70	359.27	4,653.47	3,898.97	-49.71	3,899.28	0.00	0.00	0.00
8,300.00	89.70	359.27	4,654.00	3,998.96	-51.00	3,999.28	0.00	0.00	0.00
8,300.67	89.70	359.27	4,654.00	3,999.63	-51.00	3,999.95	0.00	0.00	0.00
4000°VS - Torino 4-33 3H									
8,300.71	89.70	359.27	4,654.00	3,999.67	-51.00	3,999.99	0.00	0.00	0.00
4000°VS Start DLS 1.50 TFO 0.00									
8,332.66	90.18	359.27	4,654.03	4,031.62	-51.41	4,031.95	1.50	1.50	0.00
8,332.71	90.18	359.27	4,654.03	4,031.66	-51.41	4,031.99	0.00	0.00	0.00
90.18° at 8332.71 MD									
8,400.00	90.18	359.27	4,653.82	4,098.95	-52.28	4,099.28	0.00	0.00	0.00
8,500.00	90.18	359.27	4,653.51	4,198.94	-53.56	4,199.28	0.00	0.00	0.00
8,600.00	90.18	359.27	4,653.20	4,298.93	-54.84	4,299.28	0.00	0.00	0.00
8,700.00	90.18	359.27	4,652.88	4,398.92	-56.12	4,399.28	0.00	0.00	0.00
8,800.00	90.18	359.27	4,652.57	4,498.91	-57.40	4,499.28	0.00	0.00	0.00
8,900.00	90.18	359.27	4,652.26	4,598.90	-58.68	4,599.28	0.00	0.00	0.00
9,000.00	90.18	359.27	4,651.94	4,698.89	-59.96	4,699.28	0.00	0.00	0.00
9,100.00	90.18	359.27	4,651.63	4,798.89	-61.24	4,799.28	0.00	0.00	0.00
9,200.00	90.18	359.27	4,651.32	4,898.88	-62.53	4,899.28	0.00	0.00	0.00
9,300.00	90.18	359.27	4,651.00	4,998.87	-63.81	4,999.28	0.00	0.00	0.00
9,300.67	90.18	359.27	4,651.00	4,999.54	-63.82	4,999.94	0.00	0.00	0.00
5000°VS - Torino 4-33 3H									
9,300.72	90.18	359.27	4,651.00	4,999.59	-63.82	5,000.00	0.00	0.00	0.00
5000°VS Start DLS 1.50 TFO 0.00									
9,319.43	90.46	359.27	4,650.90	5,018.30	-64.06	5,018.71	1.50	1.50	0.00
9,319.49	90.46	359.27	4,650.89	5,018.35	-64.06	5,018.76	0.00	0.00	0.00
90.46° at 9319.48 MD									
9,400.00	90.46	359.27	4,650.25	5,098.86	-65.09	5,099.27	0.00	0.00	0.00

Legacy Directional

Planning Report

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well 3H
Company:	Riley Permian Operating Co., LLC	TVD Reference:	GL 4285 + 17' KB @ 4302.00usft
Project:	Lea County, NM	MD Reference:	GL 4285 + 17' KB @ 4302.00usft
Site:	Torino 4-33	North Reference:	Grid
Well:	3H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan 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)
9,500.00	90.46	359.27	4,649.44	5,198.85	-66.37	5,199.27	0.00	0.00	0.00
9,600.00	90.46	359.27	4,648.64	5,298.83	-67.65	5,299.27	0.00	0.00	0.00
9,700.00	90.46	359.27	4,647.83	5,398.82	-68.93	5,399.26	0.00	0.00	0.00
9,800.00	90.46	359.27	4,647.03	5,498.81	-70.21	5,499.26	0.00	0.00	0.00
9,900.00	90.46	359.27	4,646.22	5,598.80	-71.49	5,599.26	0.00	0.00	0.00
10,000.00	90.46	359.27	4,645.42	5,698.79	-72.77	5,699.25	0.00	0.00	0.00
10,100.00	90.46	359.27	4,644.61	5,798.78	-74.06	5,799.25	0.00	0.00	0.00
10,200.00	90.46	359.27	4,643.81	5,898.77	-75.34	5,899.25	0.00	0.00	0.00
10,300.00	90.46	359.27	4,643.01	5,998.75	-76.62	5,999.24	0.00	0.00	0.00
10,300.69	90.46	359.27	4,643.00	5,999.45	-76.63	5,999.94	0.00	0.00	0.00
6000'VS - Troino 4-33 3H									
10,300.76	90.46	359.27	4,643.00	5,999.51	-76.63	6,000.00	0.00	0.00	0.00
6000'VS Start DLS 1.50 TFO 180.00									
10,324.06	90.11	359.27	4,642.88	6,022.81	-76.93	6,023.30	1.50	-1.50	0.00
10,324.12	90.11	359.27	4,642.88	6,022.88	-76.93	6,023.37	0.00	0.00	0.00
90.11° at 10324.12 MD									
10,400.00	90.11	359.27	4,642.74	6,098.75	-77.90	6,099.24	0.00	0.00	0.00
10,500.00	90.11	359.27	4,642.54	6,198.74	-79.18	6,199.24	0.00	0.00	0.00
10,600.00	90.11	359.27	4,642.35	6,298.73	-80.46	6,299.24	0.00	0.00	0.00
10,700.00	90.11	359.27	4,642.16	6,398.72	-81.74	6,399.24	0.00	0.00	0.00
10,800.00	90.11	359.27	4,641.97	6,498.71	-83.02	6,499.24	0.00	0.00	0.00
10,900.00	90.11	359.27	4,641.77	6,598.70	-84.30	6,599.24	0.00	0.00	0.00
11,000.00	90.11	359.27	4,641.58	6,698.70	-85.59	6,699.24	0.00	0.00	0.00
11,100.00	90.11	359.27	4,641.39	6,798.69	-86.87	6,799.24	0.00	0.00	0.00
11,200.00	90.11	359.27	4,641.19	6,898.68	-88.15	6,899.24	0.00	0.00	0.00
11,300.00	90.11	359.27	4,641.00	6,998.67	-89.43	6,999.24	0.00	0.00	0.00
11,300.69	90.11	359.27	4,641.00	6,999.36	-89.44	6,999.93	0.00	0.00	0.00
7000'VS - Torino 4-33 3H									
11,300.76	90.11	359.27	4,641.00	6,999.43	-89.44	7,000.00	0.00	0.00	0.00
7000'VS Start DLS 1.50 TFO -180.00									
11,311.94	89.94	359.27	4,640.99	7,010.60	-89.58	7,011.18	1.51	-1.51	0.00
11,312.01	89.94	359.27	4,641.00	7,010.68	-89.58	7,011.25	0.00	0.00	0.00
89.94° at 11312.01 MD									
11,400.00	89.94	359.27	4,641.08	7,098.66	-90.71	7,099.24	0.00	0.00	0.00
11,500.00	89.94	359.27	4,641.19	7,198.65	-91.99	7,199.24	0.00	0.00	0.00
11,600.00	89.94	359.27	4,641.29	7,298.65	-93.27	7,299.24	0.00	0.00	0.00
11,700.00	89.94	359.27	4,641.39	7,398.64	-94.55	7,399.24	0.00	0.00	0.00
11,800.00	89.94	359.27	4,641.49	7,498.63	-95.83	7,499.24	0.00	0.00	0.00
11,900.00	89.94	359.27	4,641.59	7,598.62	-97.12	7,599.24	0.00	0.00	0.00
12,000.00	89.94	359.27	4,641.69	7,698.61	-98.40	7,699.24	0.00	0.00	0.00
12,100.00	89.94	359.27	4,641.80	7,798.60	-99.68	7,799.24	0.00	0.00	0.00
12,200.00	89.94	359.27	4,641.90	7,898.60	-100.96	7,899.24	0.00	0.00	0.00
12,300.00	89.94	359.27	4,642.00	7,998.59	-102.24	7,999.24	0.00	0.00	0.00
12,300.68	89.94	359.27	4,642.00	7,999.26	-102.25	7,999.92	0.00	0.00	0.00
8000'VS - Torino 4-33 3H									
12,300.76	89.94	359.27	4,642.00	7,999.35	-102.25	8,000.00	0.00	0.00	0.00
8000'VS Start DLS 1.50 TFO 177.92									
12,315.66	89.72	359.28	4,642.04	8,014.25	-102.44	8,014.90	1.51	-1.51	0.06
12,315.74	89.72	359.28	4,642.05	8,014.33	-102.44	8,014.98	0.00	0.00	0.00
89.72° at 12315.74 MD									
12,400.00	89.72	359.28	4,642.46	8,098.58	-103.51	8,099.24	0.00	0.00	0.00
12,500.00	89.72	359.28	4,642.95	8,198.57	-104.77	8,199.24	0.00	0.00	0.00
12,600.00	89.72	359.28	4,643.45	8,298.56	-106.03	8,299.24	0.00	0.00	0.00

Legacy Directional

Planning Report

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well 3H
Company:	Riley Permian Operating Co., LLC	TVD Reference:	GL 4285 + 17' KB @ 4302.00usft
Project:	Lea County, NM	MD Reference:	GL 4285 + 17' KB @ 4302.00usft
Site:	Torino 4-33	North Reference:	Grid
Well:	3H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan 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)	
12,700.00	89.72	359.28	4,643.94	8,398.55	-107.30	8,399.24	0.00	0.00	0.00	
12,800.00	89.72	359.28	4,644.44	8,498.54	-108.56	8,499.24	0.00	0.00	0.00	
12,834.37	89.72	359.28	4,644.61	8,532.91	-109.00	8,533.61	0.00	0.00	0.00	
LTP - Torino 4-33 3H										
12,900.00	89.72	359.28	4,644.93	8,598.53	-109.83	8,599.23	0.00	0.00	0.00	
12,914.38	89.72	359.28	4,645.00	8,612.91	-110.01	8,613.61	0.00	0.00	0.00	
TD at 12914.47 - BHL - Torino 4-33 3H										

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	
7000'VS - Torino 4-33 3H - plan hits target center - Point	0.00	0.00	4,641.00	6,999.36	-89.44	937,102.43	802,660.79	33.573006	-103.475366	
8000'VS - Torino 4-33 3H - plan hits target center - Point	0.00	0.00	4,642.00	7,999.26	-102.25	938,102.34	802,647.98	33.575754	-103.475381	
6000'VS - Torino 4-33 3H - plan hits target center - Point	0.00	0.00	4,643.00	5,999.45	-76.63	936,102.52	802,673.60	33.570258	-103.475351	
LTP - Torino 4-33 3H - plan misses target center by 0.07usft at 12834.37usft MD (4644.61 TVD, 8532.91 N, -109.00 E) - Point	0.00	0.00	4,644.54	8,532.91	-109.01	938,635.98	802,641.22	33.577220	-103.475388	
BHL - Torino 4-33 3H - plan hits target center - Point	0.00	0.00	4,645.00	8,612.91	-110.01	938,715.98	802,640.22	33.577440	-103.475389	
3000'VS - Torino 4-33 3H - plan hits target center - Point	0.00	0.00	4,649.00	2,999.73	-38.19	933,102.80	802,712.03	33.562014	-103.475306	
5000'VS - Torino 4-33 3H - plan hits target center - Point	0.00	0.00	4,651.00	4,999.54	-63.82	935,102.61	802,686.41	33.567510	-103.475336	
4000'VS - Torino 4-33 3H - plan hits target center - Point	0.00	0.00	4,654.00	3,999.63	-51.00	934,102.70	802,699.22	33.564762	-103.475321	
2000'VS - Torino 4-33 3H - plan hits target center - Point	0.00	0.00	4,655.00	1,999.82	-25.38	932,102.89	802,724.84	33.559265	-103.475291	
FTP - Torino 4-33 3H - plan hits target center - Point	0.00	0.00	4,660.00	798.99	-10.00	930,902.07	802,740.22	33.555965	-103.475273	

Legacy Directional

Planning Report

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well 3H
Company:	Riley Permian Operating Co., LLC	TVD Reference:	GL 4285 + 17' KB @ 4302.00usft
Project:	Lea County, NM	MD Reference:	GL 4285 + 17' KB @ 4302.00usft
Site:	Torino 4-33	North Reference:	Grid
Well:	3H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan 1		

Formations					
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
2,195.00	2,195.00	Rustler		0.00	
2,695.00	2,695.00	Yates		0.00	
3,396.00	3,396.00	Queen		0.00	
4,022.84	4,021.00	Grayburg		0.00	
4,146.91	4,138.00	San Andres		0.00	
4,602.26	4,489.00	Pi Marker		0.00	
4,873.38	4,631.00	P1		0.00	

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates			
		+N/-S (usft)	+E/-W (usft)	Comment	
3,844.51	3,844.51	0.00	0.00	Start Build 8.00	
4,407.01	4,350.94	209.75	-2.59	45° at 4407.01 MD	
4,607.01	4,492.36	351.16	-4.34	KOP Start DLS 10.00 TFO -0.04	
5,059.42	4,660.17	758.69	-9.48	LP 90.24° at 5059.42 MD	
5,099.74	4,660.00	799.00	-10.00	FTP at 5099.74 MD	
6,300.69	4,655.00	1,999.84	-25.38	2000°VS Start DLS 1.50 TFO 0.12	
6,307.90	4,654.96	2,007.05	-25.47	90.34° at 6307.90 MD	
7,300.71	4,649.00	2,999.76	-38.19	3000°VS Start DLS 1.50 TFO -179.99	
7,343.67	4,648.98	3,042.72	-38.74	89.70° at 7343.67 MD	
8,300.71	4,654.00	3,999.67	-51.00	4000°VS Start DLS 1.50 TFO 0.00	
8,332.71	4,654.03	4,031.66	-51.41	90.18° at 8332.71 MD	
9,300.72	4,651.00	4,999.59	-63.82	5000°VS Start DLS 1.50 TFO 0.00	
9,319.49	4,650.89	5,018.35	-64.06	90.46° at 9319.48 MD	
10,300.76	4,643.00	5,999.51	-76.63	6000°VS Start DLS 1.50 TFO 180.00	
10,324.12	4,642.88	6,022.88	-76.93	90.11° at 10324.12 MD	
11,300.76	4,641.00	6,999.43	-89.44	7000°VS Start DLS 1.50 TFO -180.00	
11,312.01	4,641.00	7,010.68	-89.58	89.94° at 11312.01 MD	
12,300.76	4,642.00	7,999.35	-102.25	8000°VS Start DLS 1.50 TFO 177.92	
12,315.74	4,642.05	8,014.33	-102.44	89.72° at 12315.74 MD	
12,914.38	4,645.00	8,612.91	-110.01	TD at 12914.47	