

District I1625 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

Form C-101

August 1, 2011

Permit 347054

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

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

1. Operator Name and Address Permian Resources Operating, LLC 1001 17th Street, Suite 1800 Denver, CO 80202		2. OGRID Number 372165
		3. API Number 30-015-54059
4. Property Code 333978	5. Property Name RED EAGLE 18 STATE COM	6. Well No. 132H

7. Surface Location

UL - Lot H	Section 18	Township 19S	Range 28E	Lot Idn H	Feet From 1630	N/S Line N	Feet From 182	E/W Line E	County Eddy
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8. Proposed Bottom Hole Location

UL - Lot G	Section 13	Township 19S	Range 27E	Lot Idn G	Feet From 1650	N/S Line N	Feet From 2660	E/W Line E	County Eddy
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9. Pool Information

WINCHESTER; WOLFCAMP, NORTHWEST	97044
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Additional Well Information

11. Work Type New Well	12. Well Type OIL	13. Cable/Rotary	14. Lease Type State	15. Ground Level Elevation 3531
16. Multiple N	17. Proposed Depth 16004	18. Formation 3rd Bone Spring Sand	19. Contractor	20. Spud Date 8/26/2023
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	17.5	13.375	54.5	165	140	0
Int1	12.25	9.625	36	2850	720	0
Prod	7.875	5.5	17	16004	1070	7867
Prod	8.75	5.5	17	8617	800	2350

Casing/Cement Program: Additional Comments

Drilling 8.75-hole size for the curve and 7.875-hole size for the lateral for the 5.5" production casing string.
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22. Proposed Blowout Prevention Program

Type	Working Pressure	Test Pressure	Manufacturer
Pipe	10000	5000	Cameron

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.	OIL CONSERVATION DIVISION	
Signature:		
Printed Name: Electronically filed by Kanicia Schlichting	Approved By: Ward Rikala	
Title: Regulatory Specialist	Title:	
Email Address: Kanicia.Schlichting@permianres.com	Approved Date: 8/16/2023	Expiration Date: 8/16/2025
Date: 8/9/2023	Phone: 432-232-2875	Conditions of Approval Attached

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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 30-015-54059	2 Pool Code [97044]	3 Pool Name WINCHESTER;WOLFCAMP, NORTHWEST
4 Property Code 333978	5 Property Name RED EAGLE 18 STATE COM	6 Well Number 132H
7 OGRID No. 372165	8 Operator Name PERMIAN RESOURCES OPERATING, LLC	9 Elevation 3531.06'

¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
H	18	19-S	28-E		1630'	NORTH	182'	EAST	EDDY

¹¹ 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	13	19-S	27-E		1650'	NORTH	2660'	EAST	EDDY

12 Dedicated Acres 243.15	13 Joint or Infill	14 Consolidation Code	15 Order No.
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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.

16 BOTTOM HOLE LOCATION (BHL) NEW MEXICO EAST - NAD 83 X=572439.08 LAT.= 32.66297529° N Y=604936.24 LONG.= 104.23226783° W NEW MEXICO EAST - NAD 27 X=531259.36 LAT.= 32.66285916° N Y=604874.27 LONG.= 104.23175748° W 1650' FNL, 2660' FEL - SECTION 13 332' FNL, 10' FWL - LEASE LINE LAST TAKE POINT (LTP) NEW MEXICO EAST - NAD 83 X=572529.09 LAT.= 32.66297124° N Y=604934.85 LONG.= 104.23197534° W NEW MEXICO EAST - NAD 27 X=531349.37 LAT.= 32.66285510° N Y=604872.88 LONG.= 104.23146500° W 1650' FNL, 2570' FEL - SECTION 13 332' FNL, 100' FWL - LEASE LINE PENETRATION POINT 3 (PP3) NEW MEXICO EAST - NAD 83 X=575098.52 LAT.= 32.66285515° N Y=604895.17 LONG.= 104.22362605° W NEW MEXICO EAST - NAD 27 X=533918.80 LAT.= 32.66273893° N Y=604833.19 LONG.= 104.22311590° W 1650' FNL, 0' FWL - SECTION 18 323' FNL, 0' FWL - LEASE LINE SURFACE HOLE LOCATION (SHL) NEW MEXICO EAST - NAD 83 X=580220.52 LAT.= 32.66314926° N Y=605007.87 LONG.= 104.20698159° W NEW MEXICO EAST - NAD 27 X=539040.79 LAT.= 32.66303287° N Y=604945.84 LONG.= 104.20647182° W 1630' FNL, 182' FEL - SECTION 18 315' FNL, 182' FEL - LEASE LINE FIRST TAKE POINT (FTP) NEW MEXICO EAST - NAD 83 X=580302.41 LAT.= 32.66309802° N Y=604989.32 LONG.= 104.20671554° W NEW MEXICO EAST - NAD 27 X=539122.69 LAT.= 32.66298163° N Y=604927.30 LONG.= 104.20620578° W 1650' FNL, 100' FEL - SECTION 18 335' FNL, 100' FEL - LEASE LINE PENETRATION POINT 2 (PP2) NEW MEXICO EAST - NAD 83 X=576434.27 LAT.= 32.66291771° N Y=604919.34 LONG.= 104.21928543° W NEW MEXICO EAST - NAD 27 X=535254.54 LAT.= 32.66280145° N Y=604857.34 LONG.= 104.21877538° W 1646' FNL, 1336' FWL - SECTION 18 328' FNL, 0' FWL - LEASE LINE CORNER DATA NEW MEXICO EAST - NAD 83 A - FOUND 2" IRON PIPE N:606628.26° E:569731.41' B - FOUND 1" IRON ROD N:606586.64° E:572418.68' C - FOUND IRON PIPE W/ BRASS CAP N:606545.16° E:575105.23' D - FOUND 1" IRON ROD N:606595.15° E:577810.36' E - FOUND 2" IRON PIPE N:606641.54° E:580411.81' F - FOUND IRON PIPE W/ BRASS CAP N:604011.85° E:580396.86' G - FOUND IRON PIPE W/ BRASS CAP N:601382.22° E:580382.84' H - FOUND IRON PIPE W/ BRASS CAP N:601325.24° E:577779.98' I - FOUND IRON PIPE W/ BRASS CAP N:601266.44° E:575079.60' J - FOUND IRON PIPE W/ BRASS CAP N:601314.97° E:572451.91' K - FOUND IRON PIPE W/ BRASS CAP N:601363.65° E:569825.24' L - FOUND IRON PIPE W/ BRASS CAP N:603996.84° E:569778.17' M - CALCULATED CORNER N:603891.13° E:575094.44'	17 OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division. <i>Ashley Brown</i> 08/09/2023 Signature Date Ashley Brown Printed Name ashley.brown@permianres.com E-mail Address 18 SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief. CHARLES L. JURICA NEW MEXICO 25490 PROFESSIONAL SURVEYOR 07/25/2023 Date of Survey Signature and Seal of Professional Surveyor Certificate Number
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Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

Form APD Conditions

Permit 347054

PERMIT CONDITIONS OF APPROVAL

Operator Name and Address: Permian Resources Operating, LLC [372165] 1001 17th Street, Suite 1800 Denver, CO 80202	API Number: 30-015-54059
	Well: RED EAGLE 18 STATE COM #132H
OCD Reviewer	Condition

State of New Mexico
Energy, Minerals and Natural Resources Department

Submit Electronically
Via E-permitting

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

NATURAL GAS MANAGEMENT PLAN

This Natural Gas Management Plan must be submitted with each Application for Permit to Drill (APD) for a new or recompleted well.

Section 1 – Plan Description

Effective May 25, 2021

I. Operator: Permian Resources Operating , LLC **OGRID:** 372165 **Date:** 8/09/2023

II. Type: ☒ Original ☐ Amendment due to ☐ 19.15.27.9.D(6)(a) NMAC ☐ 19.15.27.9.D(6)(b) NMAC ☐ Other.

If Other, please describe: _____

III. Well(s): Provide the following information for each new or recompleted well or set of wells proposed to be drilled or proposed to be recompleted from a single well pad or connected to a central delivery point.

Well Name	API	ULSTR	Footages	Anticipated Oil BBL/D	Anticipated Gas MCF/D	Anticipated Produced Water BBL/D
Red Eagle 18 State Com 131H		H-18-19S-28E	1629' FNL & 215' FEL	655 BBL/D	1803 MCF/D	1750 BBL/D
Red Eagle 18 State Com 132H		H-18-19S-28E	1630' FNL & 182' FEL	385 BBL/D	1061 MCF/D	1029 BBL/D

IV. Central Delivery Point Name: Red Eagle CDP [See 19.15.27.9(D)(1) NMAC]

V. Anticipated Schedule: Provide the following information for each new or recompleted well or set of wells proposed to be drilled or proposed to be recompleted from a single well pad or connected to a central delivery point.

Well Name	API	Spud Date	TD Reached Date	Completion Commencement Date	Initial Flow Back Date	First Production Date
Red Eagle 18 State Com 131H		9/13/2023	9/26/2023	10/13/2023	10/19/2023	10/29/2023
Red Eagle 18 State Com 132H		9/26/2023	10/9/2023	10/13/2023	10/19/2023	10/29/2023

VI. Separation Equipment: ☒ Attach a complete description of how Operator will size separation equipment to optimize gas capture.

VII. Operational Practices: ☒ Attach a complete description of the actions Operator will take to comply with the requirements of Subsection A through F of 19.15.27.8 NMAC.

VIII. Best Management Practices: ☒ Attach a complete description of Operator's best management practices to minimize venting during active and planned maintenance.

Section 2 – Enhanced Plan
EFFECTIVE APRIL 1, 2022

Beginning April 1, 2022, an operator that is not in compliance with its statewide natural gas capture requirement for the applicable reporting area must complete this section.

☐ Operator certifies that it is not required to complete this section because Operator is in compliance with its statewide natural gas capture requirement for the applicable reporting area.

IX. Anticipated Natural Gas Production:

Well	API	Anticipated Average Natural Gas Rate MCF/D	Anticipated Volume of Natural Gas for the First Year MCF

X. Natural Gas Gathering System (NGGS):

Operator	System	ULSTR of Tie-in	Anticipated Gathering Start Date	Available Maximum Daily Capacity of System Segment Tie-in

XI. Map. ☐ Attach an accurate and legible map depicting the location of the well(s), the anticipated pipeline route(s) connecting the production operations to the existing or planned interconnect of the natural gas gathering system(s), and the maximum daily capacity of the segment or portion of the natural gas gathering system(s) to which the well(s) will be connected.

XII. Line Capacity. The natural gas gathering system ☐ will ☐ will not have capacity to gather 100% of the anticipated natural gas production volume from the well prior to the date of first production.

XIII. Line Pressure. Operator ☐ does ☐ does not anticipate that its existing well(s) connected to the same segment, or portion, of the natural gas gathering system(s) described above will continue to meet anticipated increases in line pressure caused by the new well(s).

☐ Attach Operator's plan to manage production in response to the increased line pressure.

XIV. Confidentiality: ☐ Operator asserts confidentiality pursuant to Section 71-2-8 NMSA 1978 for the information provided in Section 2 as provided in Paragraph (2) of Subsection D of 19.15.27.9 NMAC, and attaches a full description of the specific information for which confidentiality is asserted and the basis for such assertion.

Section 3 - Certifications

Effective May 25, 2021

Operator certifies that, after reasonable inquiry and based on the available information at the time of submittal:

☒ Operator will be able to connect the well(s) to a natural gas gathering system in the general area with sufficient capacity to transport one hundred percent of the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking into account the current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system; or

☐ Operator will not be able to connect to a natural gas gathering system in the general area with sufficient capacity to transport one hundred percent of the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking into account the current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system.

If Operator checks this box, Operator will select one of the following:

Well Shut-In. ☒ Operator will shut-in and not produce the well until it submits the certification required by Paragraph (4) of Subsection D of 19.15.27.9 NMAC; or

Venting and Flaring Plan. ☒ Operator has attached a venting and flaring plan that evaluates and selects one or more of the potential alternative beneficial uses for the natural gas until a natural gas gathering system is available, including:

- (a) power generation on lease;
- (b) power generation for grid;
- (c) compression on lease;
- (d) liquids removal on lease;
- (e) reinjection for underground storage;
- (f) reinjection for temporary storage;
- (g) reinjection for enhanced oil recovery;
- (h) fuel cell production; and
- (i) other alternative beneficial uses approved by the division.

Section 4 - Notices

1. If, at any time after Operator submits this Natural Gas Management Plan and before the well is spud:

(a) Operator becomes aware that the natural gas gathering system it planned to connect the well(s) to has become unavailable or will not have capacity to transport one hundred percent of the production from the well(s), no later than 20 days after becoming aware of such information, Operator shall submit for OCD's approval a new or revised venting and flaring plan containing the information specified in Paragraph (5) of Subsection D of 19.15.27.9 NMAC; or

(b) Operator becomes aware that it has, cumulatively for the year, become out of compliance with its baseline natural gas capture rate or natural gas capture requirement, no later than 20 days after becoming aware of such information, Operator shall submit for OCD's approval a new or revised Natural Gas Management Plan for each well it plans to spud during the next 90 days containing the information specified in Paragraph (2) of Subsection D of 19.15.27.9 NMAC, and shall file an update for each Natural Gas Management Plan until Operator is back in compliance with its baseline natural gas capture rate or natural gas capture requirement.

2. OCD may deny or conditionally approve an APD if Operator does not make a certification, fails to submit an adequate venting and flaring plan which includes alternative beneficial uses for the anticipated volume of natural gas produced, or if OCD determines that Operator will not have adequate natural gas takeaway capacity at the time a well will be spud.

Page 8

I certify that, after reasonable inquiry, the statements in and attached to this Natural Gas Management Plan are true and correct to the best of my knowledge and acknowledge that a false statement may be subject to civil and criminal penalties under the Oil and Gas Act.

Signature: <i>Jackson Taylor</i>
Printed Name: Jackson Taylor
Title: Dir. Midstream & Marketing
E-mail Address: jackson.taylor@permianres.com
Date: 08/09/2023
Phone: 713-412-3943
OIL CONSERVATION DIVISION (Only applicable when submitted as a standalone form)
Approved By:
Title:
Approval Date:
Conditions of Approval:

Permian Resources Operating, LLC (372165)

Natural Gas Management Plan Descriptions**VI. Separation Equipment:**

Permian utilizes a production forecast from our Reservoir Engineering team to appropriately size each permanent, 3-phase separator and heater treater utilized for production operations. Our goal is to maintain 5 minutes of retention time in the test vessel and 20 minutes in the heater treater at peak production rates. The gas produced is routed from the separator to the gas sales line.

VII. Operational Practices:*Drilling*

During Permian's drilling operations it is uncommon for venting or flaring to occur. If flaring is needed due to safety concerns, gas will be routed to a flare and volumes will be estimated.

Flowback

During completion/recompletion flowback operations, after separation flowback begins and as soon as it is technically feasible, Permian routes gas through a permanent separator and the controlled facility where the gas is either sold or flared through a high-pressure flare if needed.

Production

Per 19.15.27.8.D, Permian's facilities are designed to minimize waste. Our produced gas will only be vented or flared in an emergency or malfunction situation, except as allowed for normal operations noted in 19.15.27.8.D(2) & (4). All gas that is flared is metered. All gas that may be vented will be estimated.

Performance Standards

Permian utilizes a production forecast from our Reservoir Engineering team to appropriately size each permanent, 3-phase separator and heater treater utilized for production operations.

All of Permian's permanent storage tanks associated with production operations which are routed to a flare or control device are equipped with an automatic gauging system.

All of Permian's flare stacks, both currently installed and for future installation, are:

- 1) Appropriately sized and designed to ensure proper combustion efficiency.
- 2) Equipped with an automatic ignitor or continuous pilot.
- 3) Anchored and located at least 100 feet from the well and storage tanks.

Permian's field operations and HSE teams have implemented an AVO inspection schedule that adheres to the requirements of 19.15.27.8.E(5).

All of our operations and facilities are designed to minimize waste. We routinely employ the following methods and practices:

- Closed-loop systems
- Enclosed and properly sized tanks

Permian Resources Operating, LLC (372165)

- Vapor recovery units to maximize recovery of low-pressure gas streams and potential unauthorized emissions
- Low-emitting or electric engines whenever practical
- Combustors and flare stacks in the event of a malfunction or emergency
- Routine facility inspections to identify leaking components, functioning control devices, such as flares and combustors, and repair / replacement of malfunctioning components where applicable

Measurement or estimation

Permian measures or estimates the volumes of natural gas vented, flared and/or beneficially used for all of our drilling, completing and producing wells. We utilize accepted industry standards and methodology which can be independently verified. Annual GOR testing is completed on our wells and will be submitted as required by the OCD. None of our equipment is designed to allow diversion around metering elements except during inspection, maintenance and repair operations.

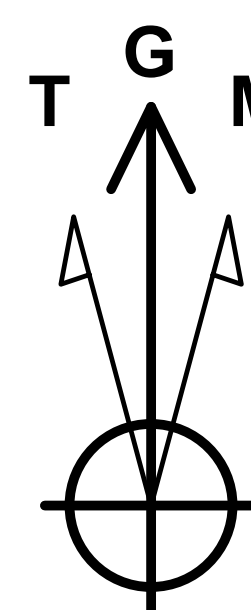
VIII. Best Management Practices:

Permian utilizes the following BMPs to minimize venting during active and planned maintenance activities:

- Use a closed-loop process wherever possible during planned maintenance activities, such as blowdowns, liquid removal, and work over operations.
- Employ low-emitting or electric engines for equipment, such as compressors
- Adhere to a strict preventative maintenance program which includes routine facility inspections, identification of component malfunctions, and repairing or replacing components such as hatches, seals, valves, etc. where applicable
- Utilize vapor recovery units (VRU's) to maximize recovery of volumes of low-pressure gas streams and potential unauthorized emissions
- Route low pressure gas and emissions streams to a combustion device to prevent venting where necessary

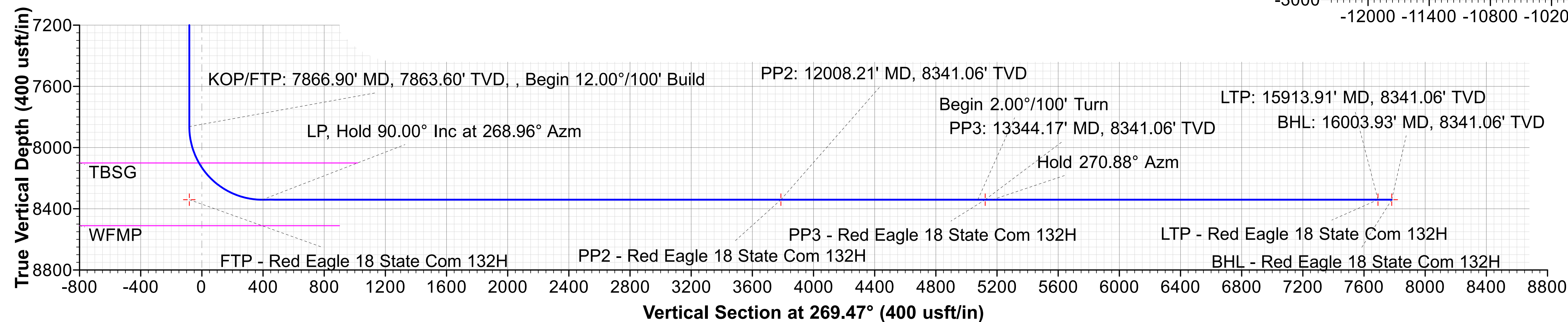
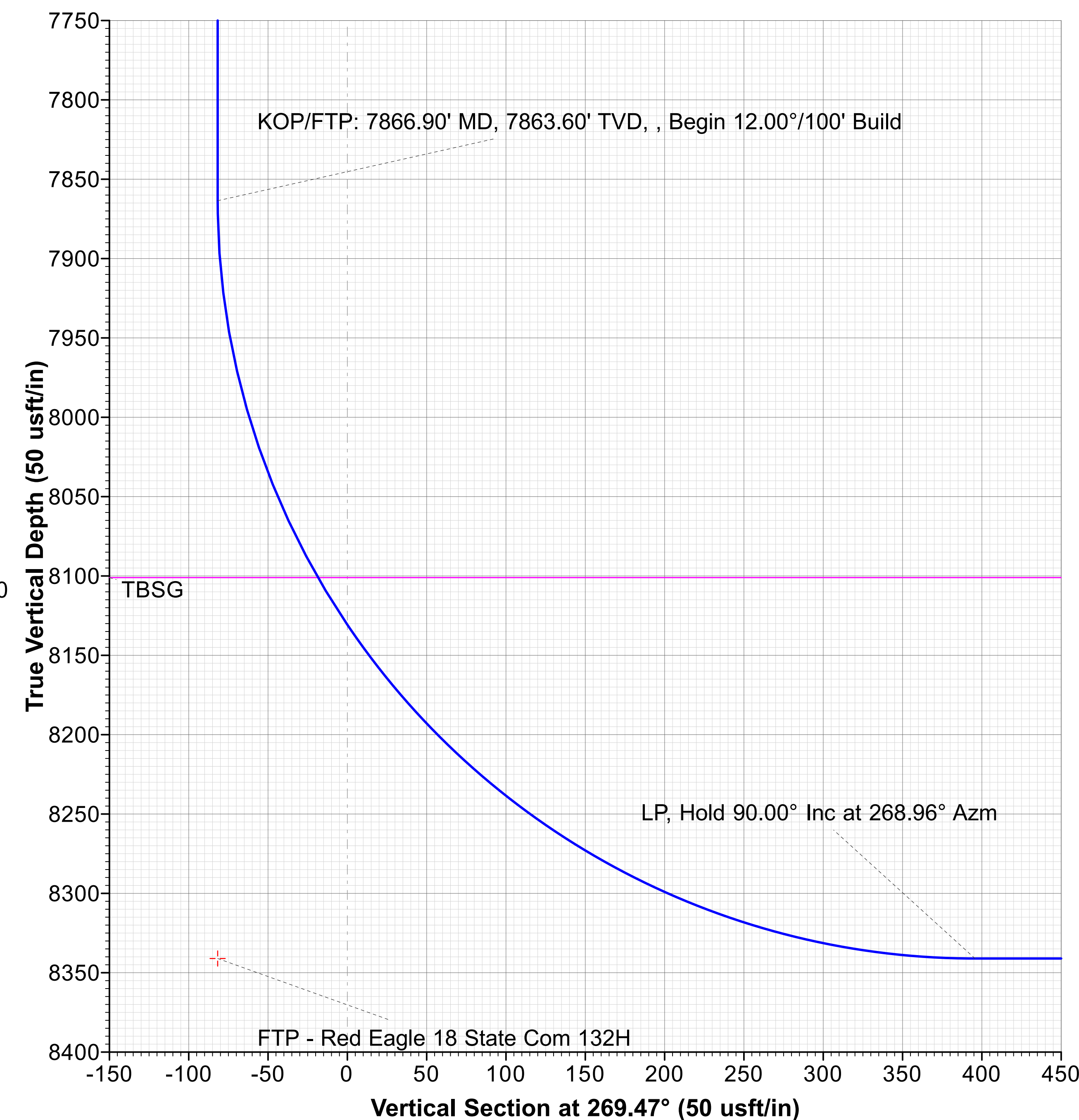
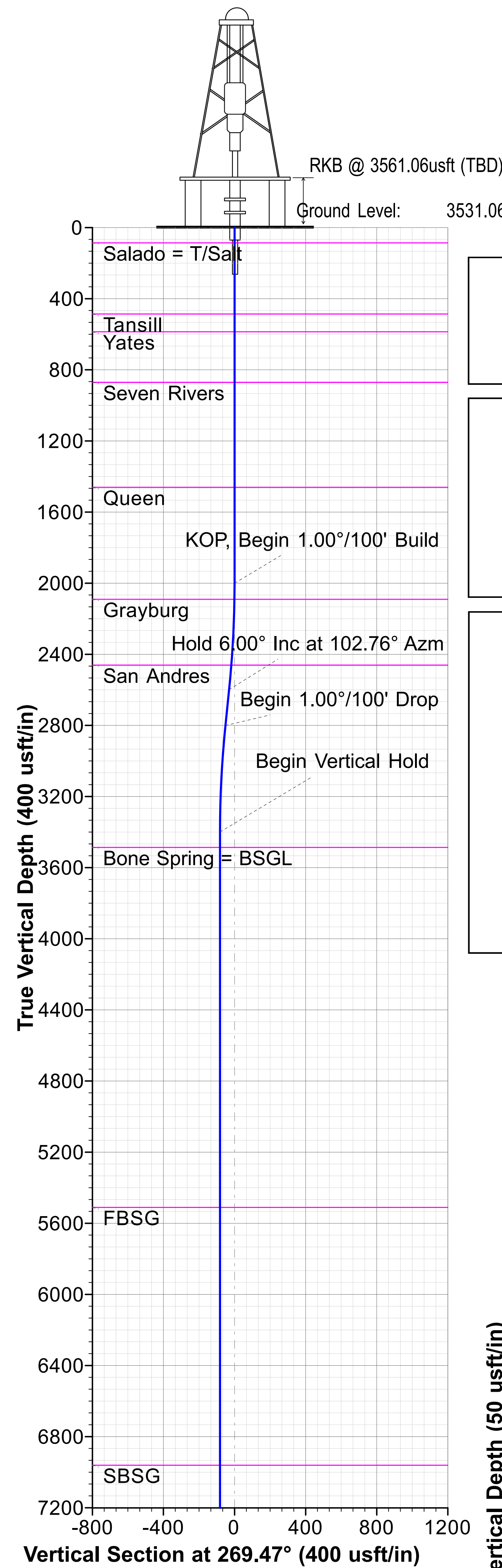
PERMIAN
RESOURCES

Project: Eddy County, NM (NAD83 - NME)
Site: Red Eagle
Well: Red Eagle 18 State Com 132H
Wellbore: OH
Design: Plan 1 07-28-23
Rig: TBD



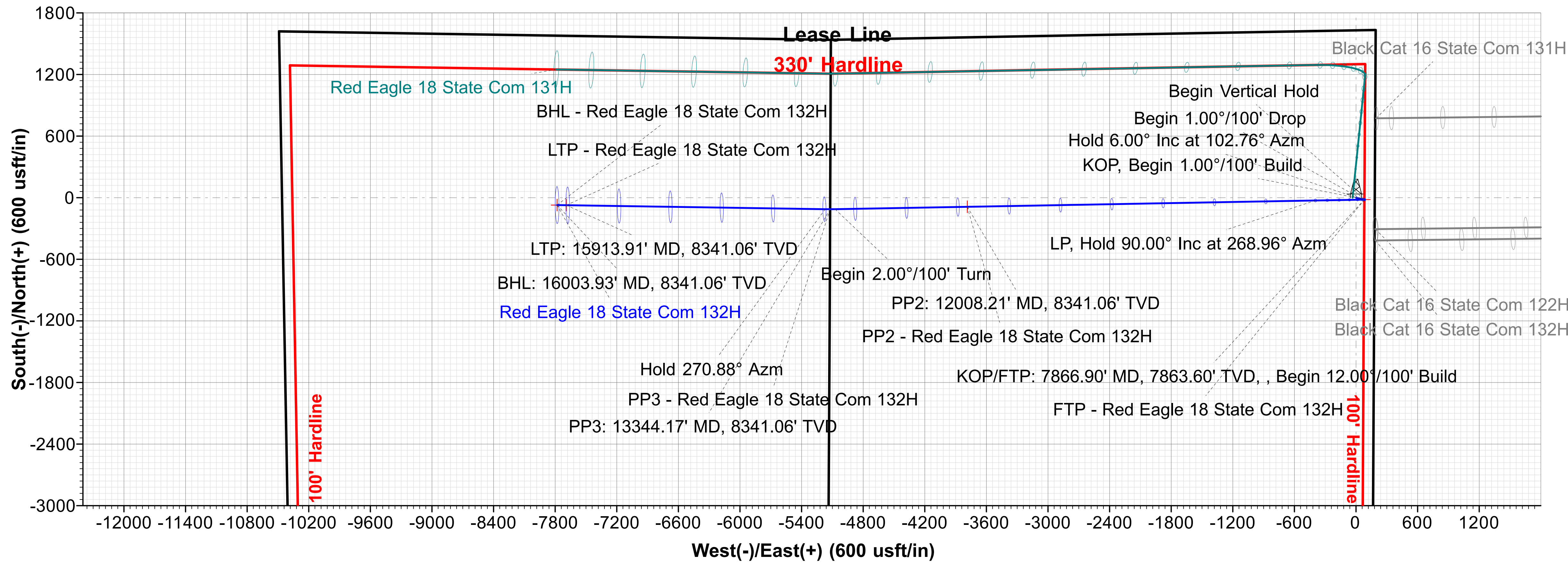
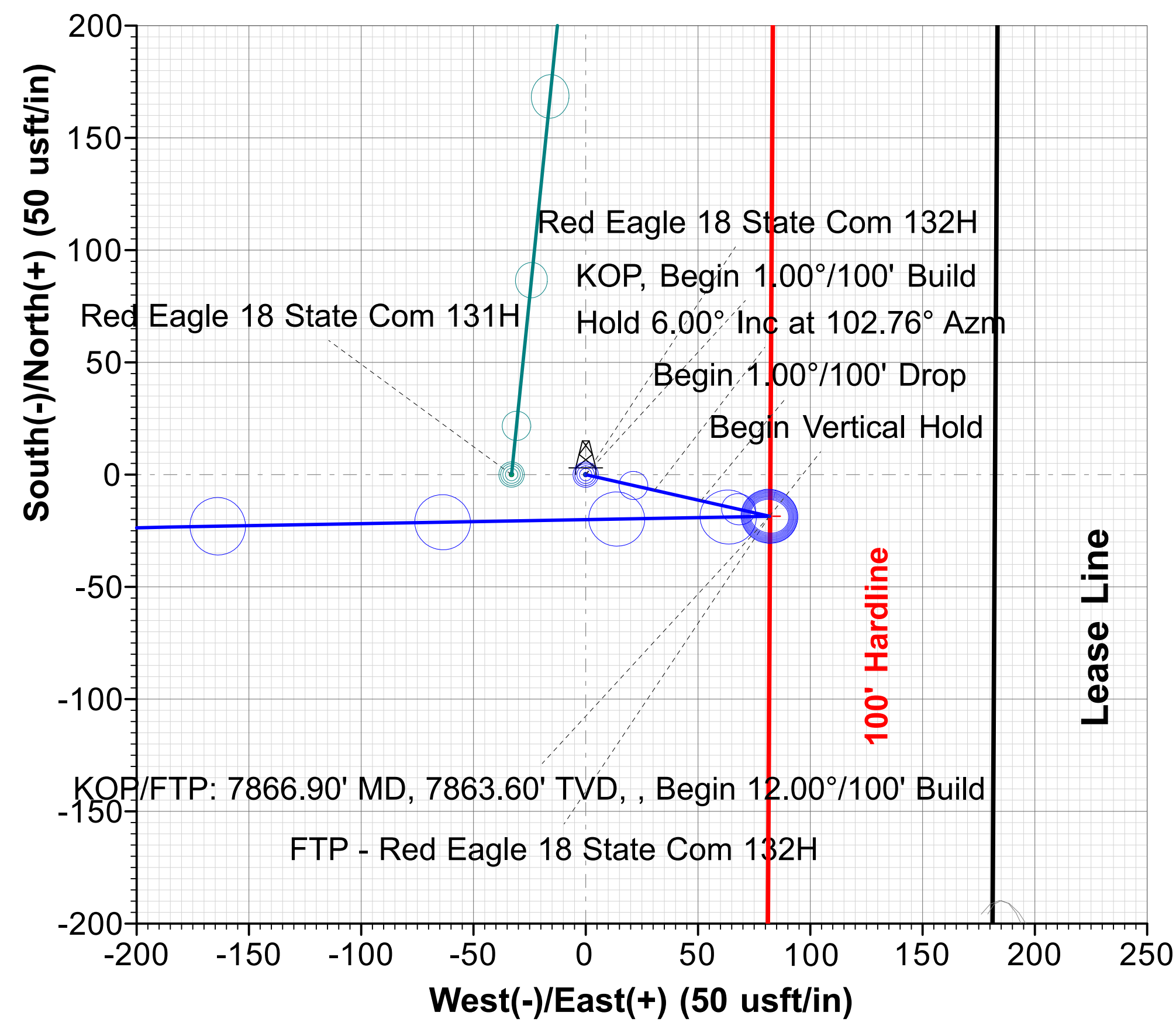
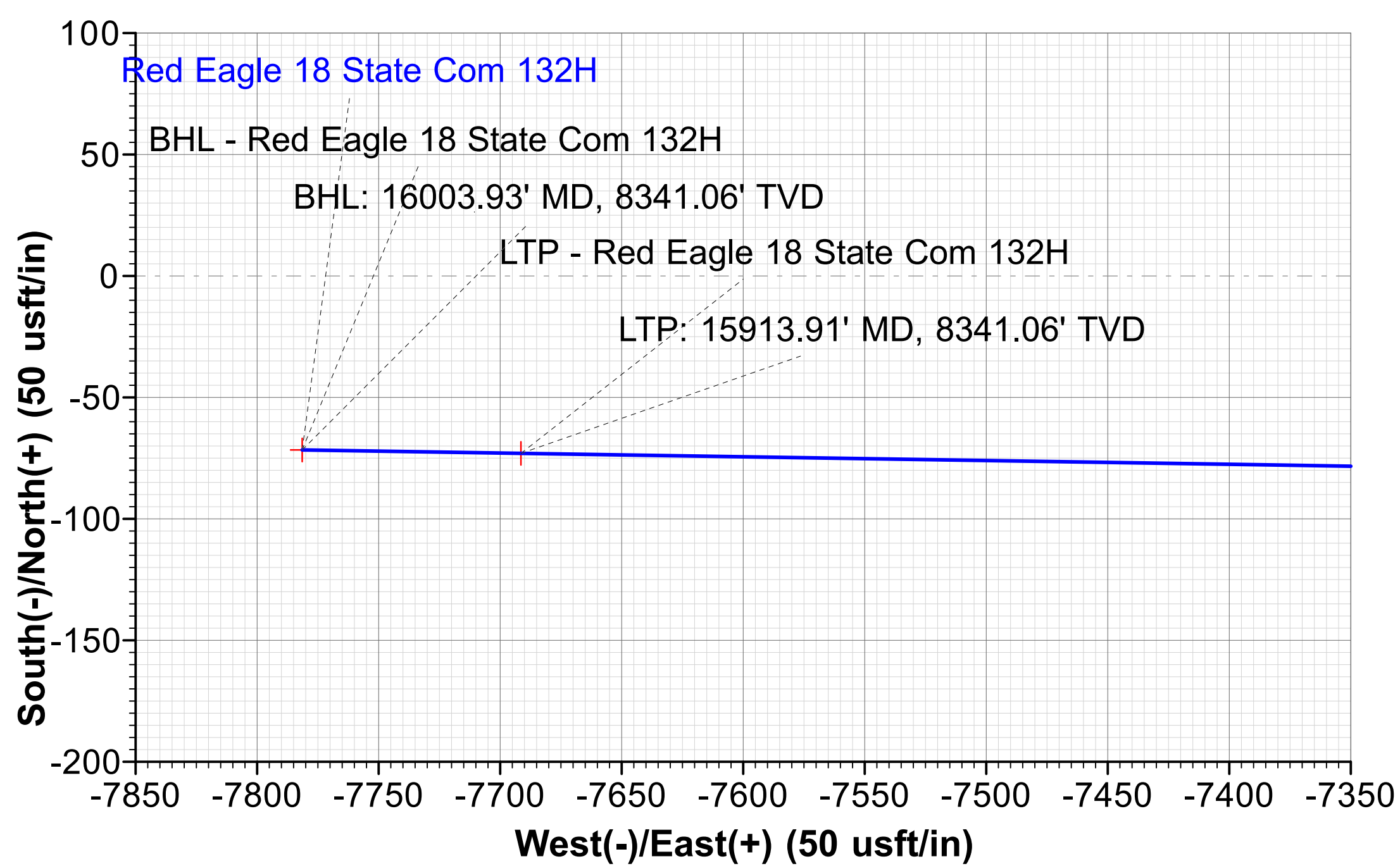
Azimuths to Grid North
True North: -0.07°
Magnetic North: 6.80°

Magnetic Field
Strength: 47540.3nT
Dip Angle: 60.28°
Date: 7/27/2023
Model: MVHD



WELL DETAILS											
		+N/-S	+E/-W	Ground Level:		3531.06					
		0.00	0.00	Northing	Easting	Latitude		Longitude			
				605007.87	580220.52	32° 39' 47.337374 N		104° 12' 25.133729 W			
DESIGN TARGET DETAILS											
Name		TVD	+N/-S	+E/-W	Northing	Easting	Latitude		Longitude		
BHL - Red Eagle 18 State Com 132H		8341.06	-71.63	-7781.44	604936.24	572439.08	32° 39' 46.711043 N		104° 13' 56.164217 W		
FTP - Red Eagle 18 State Com 132H		8341.06	-18.55	81.89	604989.32	580302.41	32° 39' 47.152850 N		104° 12' 24.176014 W		
LTP - Red Eagle 18 State Com 132H		8341.06	-73.02	-7691.43	604934.85	572529.09	32° 39' 46.696439 N		104° 13' 55.111269 W		
PP2 - Red Eagle 18 State Com 132H		8341.06	-88.53	-3786.25	604919.34	576434.27	32° 39' 46.503759 N		104° 13' 9.427551 W		
PP3 - Red Eagle 18 State Com 132H		8341.06	-112.70	-5122.00	604895.17	575098.52	32° 39' 46.278517 N		104° 13' 25.053819 W		
SECTION DETAILS											
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target	Annotation
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.00		
2	2000.00	0.00	0.00	2000.00	0.00	0.00	0.00	0.000	0.00		KOP, Begin 1.00°/100' Build
3	2600.00	6.00	102.76	2598.90	-6.93	30.61	1.00	102.763	-30.55		Hold 6.00° Inc at 102.76° Azm
4	2802.72	6.00	102.76	2800.52	-11.62	51.28	0.00	0.000	-51.17		Begin 1.00°/100' Drop
5	3402.72	0.00	0.00	3399.42	-18.55	81.89	1.00	180.000	-81.72		Begin Vertical Hold
6	7866.90	0.00	0.00	7863.60	-18.55	81.89	0.00	0.000	-81.72		KOP/FTP: 7866.90' MD, 7863.60' TVD, , Begin 12.00°/100' Build
7	8616.90	90.00	268.96	8341.06	-27.19	-395.50	12.00	268.964	395.73		LP, Hold 90.00° Inc at 268.96° Azm
8	13296.15	90.00	268.96	8341.06	-111.83	-5073.98	0.00	0.000	5074.80		Begin 2.00°/100' Turn
9	13392.22	90.00	270.88	8341.06	-111.96	-5170.04	2.00	89.997	5170.85		Hold 270.88° Azm
10	16003.93	90.00	270.88	8341.06	-71.63	-7781.44	0.00	0.000	7781.77	BHL - Red Eagle 18 State Com 132H	BHL: 16003.93' MD, 8341.06' TVD

Map System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone Name: New Mexico Eastern Zone
Local Origin: Well Red Eagle 18 State Com 132H, Grid North
Latitude: 32° 39' 47.337374 N
Longitude: 104° 12' 25.133729 W
Grid East: 580220.52
Grid North: 605007.87
Scale Factor: 1.000
Geomagnetic Model: MVHD
Sample Date: 27-Jul-23
Magnetic Declination: 6.869°
Dip Angle from Horizontal: 60.280°
Magnetic Field Strength: 47540.28823768nT
To convert a Magnetic Direction to a Grid Direction, Add 6.801°
To convert a Magnetic Direction to a True Direction, Add 6.869° East
To convert a True Direction to a Grid Direction, Subtract 0.068°





Permian Resources

Eddy County, NM (NAD83 - NME)

Red Eagle

Red Eagle 18 State Com 132H

OH

Plan: Plan 1 07-28-23

Standard Planning Report

28 July, 2023



PERMIAN

RESOURCES

Phoenix Technology Services

Planning Report



Database:	USAEDMDB	Local Co-ordinate Reference:	Well Red Eagle 18 State Com 132H
Company:	Permian Resources	TVD Reference:	RKB @ 3561.06usft (TBD)
Project:	Eddy County, NM (NAD83 - NME)	MD Reference:	RKB @ 3561.06usft (TBD)
Site:	Red Eagle	North Reference:	Grid
Well:	Red Eagle 18 State Com 132H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan 1 07-28-23		

Project	Eddy County, NM (NAD83 - NME)		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site		Red Eagle			
Site Position:		Northing:	605,007.92 usft	Latitude:	32° 39' 47.338272 N
From:	Map	Easting:	580,187.52 usft	Longitude:	104° 12' 25.519788 W
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.068

Well	Red Eagle 18 State Com 132H					
Well Position	+N/-S	-0.05 usft	Northing:	605,007.87 usft	Latitude:	32° 39' 47.337374 N
	+E/-W	33.00 usft	Easting:	580,220.52 usft	Longitude:	104° 12' 25.133729 W
Position Uncertainty		1.00 usft	Wellhead Elevation:		Ground Level:	3,531.06 usft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	MVHD	7/27/2023	6.869	60.280	47,540.28823768

Design	Plan 1 07-28-23				
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	269.47	

Plan Survey Tool Program	Date	7/28/2023			
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks	
1	0.00	16,003.93	Plan 1 07-28-23 (OH)	MWD+HRGM	
				OWSG MWD + HRGM	

PERMIAN

RESOURCES

Phoenix Technology Services

Planning Report



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Site:	Red Eagle	North Reference:	Grid
Well:	Red Eagle 18 State Com 132H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan 1 07-28-23		

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	0.000	
2,000.00	0.00	0.00	2,000.00	0.00	0.00	0.00	0.00	0.00	0.000	
2,600.00	6.00	102.76	2,598.90	-6.93	30.61	1.00	1.00	0.00	102.763	
2,802.72	6.00	102.76	2,800.52	-11.62	51.28	0.00	0.00	0.00	0.000	
3,402.72	0.00	0.00	3,399.42	-18.55	81.89	1.00	-1.00	0.00	180.000	
7,866.90	0.00	0.00	7,863.60	-18.55	81.89	0.00	0.00	0.00	0.000	
8,616.90	90.00	268.96	8,341.07	-27.19	-395.50	12.00	12.00	0.00	268.963	
13,296.15	90.00	268.96	8,341.07	-111.83	-5,073.98	0.00	0.00	0.00	0.000	
13,392.22	90.00	270.88	8,341.06	-111.96	-5,170.04	2.00	0.00	2.00	89.997	
16,003.93	90.00	270.88	8,341.06	-71.63	-7,781.44	0.00	0.00	0.00	0.000	BHL - Red Eagle 18

PERMIAN RESOURCES

Phoenix Technology Services Planning Report



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Company:	Permian Resources	TVD Reference:	RKB @ 3561.06usft (TBD)
Project:	Eddy County, NM (NAD83 - NME)	MD Reference:	RKB @ 3561.06usft (TBD)
Site:	Red Eagle	North Reference:	Grid
Well:	Red Eagle 18 State Com 132H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan 1 07-28-23		

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
86.06	0.00	0.00	86.06	0.00	0.00	0.00	0.00	0.00	0.00
Salado = T/Salt									
486.06	0.00	0.00	486.06	0.00	0.00	0.00	0.00	0.00	0.00
Tansill									
586.06	0.00	0.00	586.06	0.00	0.00	0.00	0.00	0.00	0.00
Yates									
871.06	0.00	0.00	871.06	0.00	0.00	0.00	0.00	0.00	0.00
Seven Rivers									
1,461.06	0.00	0.00	1,461.06	0.00	0.00	0.00	0.00	0.00	0.00
Queen									
2,000.00	0.00	0.00	2,000.00	0.00	0.00	0.00	0.00	0.00	0.00
KOP, Begin 1.00°/100' Build									
2,091.06	0.91	102.76	2,091.06	-0.16	0.71	-0.70	1.00	1.00	0.00
Grayburg									
2,100.00	1.00	102.76	2,099.99	-0.19	0.85	-0.85	1.00	1.00	0.00
2,200.00	2.00	102.76	2,199.96	-0.77	3.40	-3.40	1.00	1.00	0.00
2,300.00	3.00	102.76	2,299.86	-1.73	7.66	-7.64	1.00	1.00	0.00
2,400.00	4.00	102.76	2,399.68	-3.08	13.61	-13.58	1.00	1.00	0.00
2,461.56	4.62	102.76	2,461.06	-4.11	18.12	-18.08	1.00	1.00	0.00
San Andres									
2,500.00	5.00	102.76	2,499.37	-4.82	21.26	-21.22	1.00	1.00	0.00
2,600.00	6.00	102.76	2,598.90	-6.93	30.61	-30.55	1.00	1.00	0.00
Hold 6.00° Inc at 102.76° Azm									
2,700.00	6.00	102.76	2,698.36	-9.24	40.81	-40.72	0.00	0.00	0.00
2,800.00	6.00	102.76	2,797.81	-11.55	51.00	-50.89	0.00	0.00	0.00
2,802.72	6.00	102.76	2,800.52	-11.62	51.28	-51.17	0.00	0.00	0.00
Begin 1.00°/100' Drop									
2,900.00	5.03	102.76	2,897.34	-13.68	60.39	-60.27	1.00	-1.00	0.00
3,000.00	4.03	102.76	2,997.03	-15.42	68.09	-67.95	1.00	-1.00	0.00
3,100.00	3.03	102.76	3,096.84	-16.78	74.09	-73.93	1.00	-1.00	0.00
3,200.00	2.03	102.76	3,196.74	-17.76	78.39	-78.23	1.00	-1.00	0.00
3,300.00	1.03	102.76	3,296.70	-18.35	80.99	-80.82	1.00	-1.00	0.00
3,400.00	0.03	102.76	3,396.70	-18.55	81.89	-81.72	1.00	-1.00	0.00
3,402.72	0.00	0.00	3,399.42	-18.55	81.89	-81.72	1.00	-1.00	0.00
Begin Vertical Hold									
3,489.36	0.00	0.00	3,486.06	-18.55	81.89	-81.72	0.00	0.00	0.00
Bone Spring = BSGL									
3,500.00	0.00	0.00	3,496.70	-18.55	81.89	-81.72	0.00	0.00	0.00
3,600.00	0.00	0.00	3,596.70	-18.55	81.89	-81.72	0.00	0.00	0.00
3,700.00	0.00	0.00	3,696.70	-18.55	81.89	-81.72	0.00	0.00	0.00
3,800.00	0.00	0.00	3,796.70	-18.55	81.89	-81.72	0.00	0.00	0.00
3,900.00	0.00	0.00	3,896.70	-18.55	81.89	-81.72	0.00	0.00	0.00
4,000.00	0.00	0.00	3,996.70	-18.55	81.89	-81.72	0.00	0.00	0.00
4,100.00	0.00	0.00	4,096.70	-18.55	81.89	-81.72	0.00	0.00	0.00
4,200.00	0.00	0.00	4,196.70	-18.55	81.89	-81.72	0.00	0.00	0.00
4,300.00	0.00	0.00	4,296.70	-18.55	81.89	-81.72	0.00	0.00	0.00
4,400.00	0.00	0.00	4,396.70	-18.55	81.89	-81.72	0.00	0.00	0.00
4,500.00	0.00	0.00	4,496.70	-18.55	81.89	-81.72	0.00	0.00	0.00
4,600.00	0.00	0.00	4,596.70	-18.55	81.89	-81.72	0.00	0.00	0.00
4,700.00	0.00	0.00	4,696.70	-18.55	81.89	-81.72	0.00	0.00	0.00
4,800.00	0.00	0.00	4,796.70	-18.55	81.89	-81.72	0.00	0.00	0.00

PERMIAN RESOURCES

Phoenix Technology Services Planning Report



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Company:	Permian Resources	TVD Reference:	RKB @ 3561.06usft (TBD)
Project:	Eddy County, NM (NAD83 - NME)	MD Reference:	RKB @ 3561.06usft (TBD)
Site:	Red Eagle	North Reference:	Grid
Well:	Red Eagle 18 State Com 132H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan 1 07-28-23		

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)
4,900.00	0.00	0.00	4,896.70	-18.55	81.89	-81.72	0.00	0.00	0.00
5,000.00	0.00	0.00	4,996.70	-18.55	81.89	-81.72	0.00	0.00	0.00
5,100.00	0.00	0.00	5,096.70	-18.55	81.89	-81.72	0.00	0.00	0.00
5,200.00	0.00	0.00	5,196.70	-18.55	81.89	-81.72	0.00	0.00	0.00
5,300.00	0.00	0.00	5,296.70	-18.55	81.89	-81.72	0.00	0.00	0.00
5,400.00	0.00	0.00	5,396.70	-18.55	81.89	-81.72	0.00	0.00	0.00
5,500.00	0.00	0.00	5,496.70	-18.55	81.89	-81.72	0.00	0.00	0.00
5,514.36	0.00	0.00	5,511.06	-18.55	81.89	-81.72	0.00	0.00	0.00
FBSG									
5,600.00	0.00	0.00	5,596.70	-18.55	81.89	-81.72	0.00	0.00	0.00
5,700.00	0.00	0.00	5,696.70	-18.55	81.89	-81.72	0.00	0.00	0.00
5,800.00	0.00	0.00	5,796.70	-18.55	81.89	-81.72	0.00	0.00	0.00
5,900.00	0.00	0.00	5,896.70	-18.55	81.89	-81.72	0.00	0.00	0.00
6,000.00	0.00	0.00	5,996.70	-18.55	81.89	-81.72	0.00	0.00	0.00
6,100.00	0.00	0.00	6,096.70	-18.55	81.89	-81.72	0.00	0.00	0.00
6,200.00	0.00	0.00	6,196.70	-18.55	81.89	-81.72	0.00	0.00	0.00
6,300.00	0.00	0.00	6,296.70	-18.55	81.89	-81.72	0.00	0.00	0.00
6,400.00	0.00	0.00	6,396.70	-18.55	81.89	-81.72	0.00	0.00	0.00
6,500.00	0.00	0.00	6,496.70	-18.55	81.89	-81.72	0.00	0.00	0.00
6,600.00	0.00	0.00	6,596.70	-18.55	81.89	-81.72	0.00	0.00	0.00
6,700.00	0.00	0.00	6,696.70	-18.55	81.89	-81.72	0.00	0.00	0.00
6,800.00	0.00	0.00	6,796.70	-18.55	81.89	-81.72	0.00	0.00	0.00
6,900.00	0.00	0.00	6,896.70	-18.55	81.89	-81.72	0.00	0.00	0.00
6,964.36	0.00	0.00	6,961.06	-18.55	81.89	-81.72	0.00	0.00	0.00
SBSG									
7,000.00	0.00	0.00	6,996.70	-18.55	81.89	-81.72	0.00	0.00	0.00
7,100.00	0.00	0.00	7,096.70	-18.55	81.89	-81.72	0.00	0.00	0.00
7,200.00	0.00	0.00	7,196.70	-18.55	81.89	-81.72	0.00	0.00	0.00
7,300.00	0.00	0.00	7,296.70	-18.55	81.89	-81.72	0.00	0.00	0.00
7,400.00	0.00	0.00	7,396.70	-18.55	81.89	-81.72	0.00	0.00	0.00
7,500.00	0.00	0.00	7,496.70	-18.55	81.89	-81.72	0.00	0.00	0.00
7,600.00	0.00	0.00	7,596.70	-18.55	81.89	-81.72	0.00	0.00	0.00
7,700.00	0.00	0.00	7,696.70	-18.55	81.89	-81.72	0.00	0.00	0.00
7,800.00	0.00	0.00	7,796.70	-18.55	81.89	-81.72	0.00	0.00	0.00
7,866.90	0.00	0.00	7,863.60	-18.55	81.89	-81.72	0.00	0.00	0.00
KOP/FTP: 7866.90' MD, 7863.60' TVD, , Begin 12.00°/100' Build									
7,900.00	3.97	268.96	7,896.67	-18.57	80.74	-80.57	12.00	12.00	0.00
8,000.00	15.97	268.96	7,994.98	-18.88	63.46	-63.29	12.00	12.00	0.00
8,100.00	27.97	268.96	8,087.55	-19.56	26.12	-25.94	12.00	12.00	0.00
8,115.43	29.82	268.96	8,101.06	-19.69	18.66	-18.48	12.00	12.00	0.00
TBSG									
8,200.00	39.97	268.96	8,170.33	-20.57	-29.65	29.83	12.00	12.00	0.00
8,300.00	51.97	268.96	8,239.70	-21.87	-101.40	101.60	12.00	12.00	0.00
8,400.00	63.97	268.96	8,292.64	-23.40	-186.01	186.22	12.00	12.00	0.00
8,500.00	75.97	268.96	8,326.83	-25.09	-279.78	280.00	12.00	12.00	0.00
8,600.00	87.97	268.96	8,340.77	-26.88	-378.60	378.83	12.00	12.00	0.00
8,616.90	90.00	268.96	8,341.07	-27.19	-395.50	395.73	12.00	12.00	0.00
LP, Hold 90.00° Inc at 268.96° Azm									
8,700.00	90.00	268.96	8,341.07	-28.69	-478.58	478.82	0.00	0.00	0.00
8,800.00	90.00	268.96	8,341.07	-30.50	-578.56	578.82	0.00	0.00	0.00
8,900.00	90.00	268.96	8,341.07	-32.31	-678.55	678.82	0.00	0.00	0.00
9,000.00	90.00	268.96	8,341.07	-34.12	-778.53	778.81	0.00	0.00	0.00
9,100.00	90.00	268.96	8,341.07	-35.93	-878.52	878.81	0.00	0.00	0.00
9,200.00	90.00	268.96	8,341.07	-37.73	-978.50	978.80	0.00	0.00	0.00

PERMIAN

RESOURCES

Phoenix Technology Services

Planning Report



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Wellbore:	OH		
Design:	Plan 1 07-28-23		

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)
9,300.00	90.00	268.96	8,341.07	-39.54	-1,078.48	1,078.80	0.00	0.00	0.00
9,400.00	90.00	268.96	8,341.07	-41.35	-1,178.47	1,178.80	0.00	0.00	0.00
9,500.00	90.00	268.96	8,341.07	-43.16	-1,278.45	1,278.79	0.00	0.00	0.00
9,600.00	90.00	268.96	8,341.07	-44.97	-1,378.43	1,378.79	0.00	0.00	0.00
9,700.00	90.00	268.96	8,341.07	-46.78	-1,478.42	1,478.78	0.00	0.00	0.00
9,800.00	90.00	268.96	8,341.07	-48.59	-1,578.40	1,578.78	0.00	0.00	0.00
9,900.00	90.00	268.96	8,341.07	-50.40	-1,678.38	1,678.78	0.00	0.00	0.00
10,000.00	90.00	268.96	8,341.07	-52.21	-1,778.37	1,778.77	0.00	0.00	0.00
10,100.00	90.00	268.96	8,341.07	-54.02	-1,878.35	1,878.77	0.00	0.00	0.00
10,200.00	90.00	268.96	8,341.07	-55.82	-1,978.34	1,978.77	0.00	0.00	0.00
10,300.00	90.00	268.96	8,341.07	-57.63	-2,078.32	2,078.76	0.00	0.00	0.00
10,400.00	90.00	268.96	8,341.07	-59.44	-2,178.30	2,178.76	0.00	0.00	0.00
10,500.00	90.00	268.96	8,341.07	-61.25	-2,278.29	2,278.75	0.00	0.00	0.00
10,600.00	90.00	268.96	8,341.07	-63.06	-2,378.27	2,378.75	0.00	0.00	0.00
10,700.00	90.00	268.96	8,341.07	-64.87	-2,478.25	2,478.75	0.00	0.00	0.00
10,800.00	90.00	268.96	8,341.07	-66.68	-2,578.24	2,578.74	0.00	0.00	0.00
10,900.00	90.00	268.96	8,341.07	-68.49	-2,678.22	2,678.74	0.00	0.00	0.00
11,000.00	90.00	268.96	8,341.07	-70.30	-2,778.20	2,778.73	0.00	0.00	0.00
11,100.00	90.00	268.96	8,341.07	-72.10	-2,878.19	2,878.73	0.00	0.00	0.00
11,200.00	90.00	268.96	8,341.07	-73.91	-2,978.17	2,978.73	0.00	0.00	0.00
11,300.00	90.00	268.96	8,341.07	-75.72	-3,078.16	3,078.72	0.00	0.00	0.00
11,400.00	90.00	268.96	8,341.07	-77.53	-3,178.14	3,178.72	0.00	0.00	0.00
11,500.00	90.00	268.96	8,341.07	-79.34	-3,278.12	3,278.71	0.00	0.00	0.00
11,600.00	90.00	268.96	8,341.07	-81.15	-3,378.11	3,378.71	0.00	0.00	0.00
11,700.00	90.00	268.96	8,341.07	-82.96	-3,478.09	3,478.71	0.00	0.00	0.00
11,800.00	90.00	268.96	8,341.07	-84.77	-3,578.07	3,578.70	0.00	0.00	0.00
11,900.00	90.00	268.96	8,341.07	-86.58	-3,678.06	3,678.70	0.00	0.00	0.00
12,000.00	90.00	268.96	8,341.07	-88.39	-3,778.04	3,778.69	0.00	0.00	0.00
12,008.21	90.00	268.96	8,341.07	-88.53	-3,786.25	3,786.90	0.00	0.00	0.00
PP2: 12008.21' MD, 8341.06' TVD									
12,100.00	90.00	268.96	8,341.07	-90.19	-3,878.02	3,878.69	0.00	0.00	0.00
12,200.00	90.00	268.96	8,341.07	-92.00	-3,978.01	3,978.69	0.00	0.00	0.00
12,300.00	90.00	268.96	8,341.07	-93.81	-4,077.99	4,078.68	0.00	0.00	0.00
12,400.00	90.00	268.96	8,341.07	-95.62	-4,177.98	4,178.68	0.00	0.00	0.00
12,500.00	90.00	268.96	8,341.07	-97.43	-4,277.96	4,278.67	0.00	0.00	0.00
12,600.00	90.00	268.96	8,341.07	-99.24	-4,377.94	4,378.67	0.00	0.00	0.00
12,700.00	90.00	268.96	8,341.07	-101.05	-4,477.93	4,478.67	0.00	0.00	0.00
12,800.00	90.00	268.96	8,341.07	-102.86	-4,577.91	4,578.66	0.00	0.00	0.00
12,900.00	90.00	268.96	8,341.07	-104.67	-4,677.89	4,678.66	0.00	0.00	0.00
13,000.00	90.00	268.96	8,341.07	-106.47	-4,777.88	4,778.65	0.00	0.00	0.00
13,100.00	90.00	268.96	8,341.07	-108.28	-4,877.86	4,878.65	0.00	0.00	0.00
13,200.00	90.00	268.96	8,341.07	-110.09	-4,977.84	4,978.65	0.00	0.00	0.00
13,296.15	90.00	268.96	8,341.07	-111.83	-5,073.98	5,074.80	0.00	0.00	0.00
Begin 2.00°/100' Turn									
13,300.00	90.00	269.04	8,341.07	-111.90	-5,077.83	5,078.64	2.00	0.00	2.00
13,344.17	90.00	269.92	8,341.06	-112.30	-5,122.00	5,122.81	2.00	0.00	2.00
PP3: 13344.17' MD, 8341.06' TVD									
13,392.22	90.00	270.88	8,341.06	-111.96	-5,170.04	5,170.85	2.00	0.00	2.00
Hold 270.88° Azm									
13,400.00	90.00	270.88	8,341.06	-111.84	-5,177.82	5,178.63	0.00	0.00	0.00
13,500.00	90.00	270.88	8,341.06	-110.29	-5,277.81	5,278.60	0.00	0.00	0.00
13,600.00	90.00	270.88	8,341.06	-108.75	-5,377.80	5,378.57	0.00	0.00	0.00
13,700.00	90.00	270.88	8,341.06	-107.21	-5,477.79	5,478.54	0.00	0.00	0.00

PERMIAN

RESOURCES

Phoenix Technology Services

Planning Report



Database:	USAEDMDB	Local Co-ordinate Reference:	Well Red Eagle 18 State Com 132H
Company:	Permian Resources	TVD Reference:	RKB @ 3561.06usft (TBD)
Project:	Eddy County, NM (NAD83 - NME)	MD Reference:	RKB @ 3561.06usft (TBD)
Site:	Red Eagle	North Reference:	Grid
Well:	Red Eagle 18 State Com 132H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan 1 07-28-23		

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)
13,800.00	90.00	270.88	8,341.06	-105.66	-5,577.78	5,578.51	0.00	0.00	0.00
13,900.00	90.00	270.88	8,341.06	-104.12	-5,677.76	5,678.48	0.00	0.00	0.00
14,000.00	90.00	270.88	8,341.06	-102.57	-5,777.75	5,778.45	0.00	0.00	0.00
14,100.00	90.00	270.88	8,341.06	-101.03	-5,877.74	5,878.42	0.00	0.00	0.00
14,200.00	90.00	270.88	8,341.06	-99.49	-5,977.73	5,978.39	0.00	0.00	0.00
14,300.00	90.00	270.88	8,341.06	-97.94	-6,077.72	6,078.36	0.00	0.00	0.00
14,400.00	90.00	270.88	8,341.06	-96.40	-6,177.70	6,178.33	0.00	0.00	0.00
14,500.00	90.00	270.88	8,341.06	-94.85	-6,277.69	6,278.30	0.00	0.00	0.00
14,600.00	90.00	270.88	8,341.06	-93.31	-6,377.68	6,378.27	0.00	0.00	0.00
14,700.00	90.00	270.88	8,341.06	-91.76	-6,477.67	6,478.24	0.00	0.00	0.00
14,800.00	90.00	270.88	8,341.06	-90.22	-6,577.66	6,578.21	0.00	0.00	0.00
14,900.00	90.00	270.88	8,341.06	-88.68	-6,677.64	6,678.18	0.00	0.00	0.00
15,000.00	90.00	270.88	8,341.06	-87.13	-6,777.63	6,778.15	0.00	0.00	0.00
15,100.00	90.00	270.88	8,341.06	-85.59	-6,877.62	6,878.12	0.00	0.00	0.00
15,200.00	90.00	270.88	8,341.06	-84.04	-6,977.61	6,978.09	0.00	0.00	0.00
15,300.00	90.00	270.88	8,341.06	-82.50	-7,077.60	7,078.06	0.00	0.00	0.00
15,400.00	90.00	270.88	8,341.06	-80.96	-7,177.58	7,178.03	0.00	0.00	0.00
15,500.00	90.00	270.88	8,341.06	-79.41	-7,277.57	7,278.00	0.00	0.00	0.00
15,600.00	90.00	270.88	8,341.06	-77.87	-7,377.56	7,377.97	0.00	0.00	0.00
15,700.00	90.00	270.88	8,341.06	-76.32	-7,477.55	7,477.93	0.00	0.00	0.00
15,800.00	90.00	270.88	8,341.06	-74.78	-7,577.54	7,577.90	0.00	0.00	0.00
15,900.00	90.00	270.88	8,341.06	-73.23	-7,677.53	7,677.87	0.00	0.00	0.00
15,913.91	90.00	270.88	8,341.06	-73.02	-7,691.43	7,691.78	0.00	0.00	0.00
LTP: 15913.91' MD, 8341.06' TVD									
16,000.00	90.00	270.88	8,341.06	-71.69	-7,777.51	7,777.84	0.00	0.00	0.00
16,003.93	90.00	270.88	8,341.06	-71.63	-7,781.44	7,781.77	0.00	0.00	0.00
BHL: 16003.93' MD, 8341.06' TVD									

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
PP2 - Red Eagle 18 S - hit/miss target - Shape - Point	0.00	0.00	8,341.06	-88.53	-3,786.25	604,919.34	576,434.27	2° 39' 46.503759 N	04° 13' 9.427551 W
- plan misses target center by 0.01usft at 12008.21usft MD (8341.06 TVD, -88.53 N, -3786.25 E)									
LTP - Red Eagle 18 S - plan hits target center - Point	0.00	0.00	8,341.06	-73.02	-7,691.43	604,934.85	572,529.09	2° 39' 46.696440 N	04° 13' 55.111269 W
PP3 - Red Eagle 18 S - plan misses target center by 0.40usft at 13344.17usft MD (8341.06 TVD, -112.30 N, -5122.00 E) - Point	0.00	0.00	8,341.06	-112.70	-5,122.00	604,895.17	575,098.52	2° 39' 46.278517 N	04° 13' 25.053819 W
FTP - Red Eagle 18 S - plan misses target center by 197.81usft at 8238.52usft MD (8198.82 TVD, -21.04 N, -55.55 E) - Point	0.00	0.00	8,341.06	-18.55	81.89	604,989.32	580,302.41	2° 39' 47.152850 N	04° 12' 24.176014 W
BHL - Red Eagle 18 S - plan hits target center - Point	0.00	0.00	8,341.06	-71.63	-7,781.44	604,936.24	572,439.08	2° 39' 46.711043 N	04° 13' 56.164217 W

PERMIAN RESOURCES

Phoenix Technology Services Planning Report



Database:	USAEDMDB	Local Co-ordinate Reference:	Well Red Eagle 18 State Com 132H
Company:	Permian Resources	TVD Reference:	RKB @ 3561.06usft (TBD)
Project:	Eddy County, NM (NAD83 - NME)	MD Reference:	RKB @ 3561.06usft (TBD)
Site:	Red Eagle	North Reference:	Grid
Well:	Red Eagle 18 State Com 132H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan 1 07-28-23		

Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
86.06	86.06	Salado = T/Salt			
486.06	486.06	Tansill			
586.06	586.06	Yates			
871.06	871.06	Seven Rivers			
1,461.06	1,461.06	Queen			
2,091.06	2,091.06	Grayburg			
2,461.56	2,461.06	San Andres			
3,489.36	3,486.06	Bone Spring = BSG			
5,514.36	5,511.06	FBSG			
6,964.36	6,961.06	SBSG			
8,115.43	8,101.06	TBSG			

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
2,000.00	2,000.00	0.00	0.00	KOP, Begin 1.00°/100' Build
2,600.00	2,598.90	-6.93	30.61	Hold 6.00° Inc at 102.76° Azm
2,802.72	2,800.52	-11.62	51.28	Begin 1.00°/100' Drop
3,402.72	3,399.42	-18.55	81.89	Begin Vertical Hold
7,866.90	7,863.60	-18.55	81.89	KOP/FTP: 7866.90' MD, 7863.60' TVD, , Begin 12.00°/100' Build
8,616.90	8,341.07	-27.19	-395.50	LP, Hold 90.00° Inc at 268.96° Azm
12,008.21	8,341.07	-88.53	-3,786.25	PP2: 12008.21' MD, 8341.06' TVD
13,296.15	8,341.07	-111.83	-5,073.98	Begin 2.00°/100' Turn
13,344.17	8,341.06	-112.30	-5,122.00	PP3: 13344.17' MD, 8341.06' TVD
13,392.22	8,341.06	-111.96	-5,170.04	Hold 270.88° Azm
15,913.91	8,341.06	-73.02	-7,691.43	LTP: 15913.91' MD, 8341.06' TVD
16,003.93	8,341.06	-71.63	-7,781.44	BHL: 16003.93' MD, 8341.06' TVD

Intent ☐ As Drilled ☐

API #		
Operator Name:	Property Name:	Well Number

Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
Latitude					Longitude				NAD

First Take Point (FTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
Latitude					Longitude				NAD

Last Take Point (LTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
Latitude					Longitude				NAD

Is this well the defining well for the Horizontal Spacing Unit? ☐Is this well an infill well? ☐

If infill is yes please provide API if available, Operator Name and well number for Defining well for Horizontal Spacing Unit.

API #		
Operator Name:	Property Name:	Well Number

KZ 06/29/2018