

Form 3160-5
(June 2019)UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENTFORM APPROVED
OMB No. 1004-0137
Expires: October 31, 2021**SUNDRY NOTICES AND REPORTS ON WELLS**
Do not use this form for proposals to drill or to re-enter an
abandoned well. Use Form 3160-3 (APD) for such proposals.

5. Lease Serial No. NMNM25953

6. If Indian, Allottee or Tribe Name

SUBMIT IN TRIPLICATE - Other instructions on page 2

1. Type of Well

☐ Oil Well ☒ Gas Well ☐ Other

2. Name of Operator MARATHON OIL PERMIAN LLC

3a. Address 990 TOWN & COUNTRY BLVD, HOUSTON, TX 3b. Phone No. (include area code)
(000) 000-00004. Location of Well (Footage, Sec., T., R., M., or Survey Description)
SEC 35/T24S/R28E/NMP

7. If Unit of CA/Agreement, Name and/or No.

8. Well Name and No. RIPLEY 35 WA FED COM/4H

9. API Well No. 3001547620

10. Field and Pool or Exploratory Area
PURPLE SAGE/PURPLE SAGE WOLFCAMP GAS11. Country or Parish, State
EDDY/NM

12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION				
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off	
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Hydraulic Fracturing	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity	
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other	
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon		
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal		

13. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has detennined that the site is ready for final inspection.)

Marathon Oil Permian LLC. respectfully requests to make changes to the Approved APD for the above listed well. See the first page of the attached file for a detailed summary of the requested changes including Well Name, Lateral Length (1 mile to 2 miles), MD, TVD, Pool, Formation, FTP, LTP, and Casing Program. Also included in the attached document is the revised C-102 Well Plat, Revised Directional Drilling Well Plan and Revised Drilling and Operations Plan.

NOTE: all requested changes are DOWNHOLE only, no surface changes requested.

14. I hereby certify that the foregoing is true and correct. Name (Printed/Typed)
MELISSA SZUDERA / Ph: (713) 296-3179

Title REGULATORY COMPLIANCE REPRESENTATIVE

Signature



Date

03/02/2022

THE SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

ZOTA M STEVENS / Ph: (575) 234-5998 / Approved

Title Petroleum Engineer

Date 05/10/2022

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office CARLSBAD

Title 18 U.S.C Section 1001 and Title 43 U.S.C Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on page 2)

GENERAL INSTRUCTIONS

This form is designed for submitting proposals to perform certain well operations and reports of such operations when completed as indicated on Federal and Indian lands pursuant to applicable Federal law and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local area or regional procedures and practices, are either shown below, will be issued by or may be obtained from the local Federal office.

SPECIFIC INSTRUCTIONS

Item 4 - Locations on Federal or Indian land should be described in accordance with Federal requirements. Consult the local Federal office for specific instructions.

Item 13: Proposals to abandon a well and subsequent reports of abandonment should include such special information as is required by the local Federal office. In addition, such proposals and reports should include reasons for the abandonment; data on any former or present productive zones or other zones with present significant fluid contents not sealed off by cement or otherwise; depths (top and bottom) and method of placement of cement plugs; mud or other material placed below, between and above plugs; amount, size, method of parting of any casing, liner or tubing pulled and the depth to the top of any tubing left in the hole; method of closing top of well and date well site conditioned for final inspection looking for approval of the abandonment. If the proposal will involve **hydraulic fracturing operations**, you must comply with 43 CFR 3162.3-3, including providing information about the protection of usable water. Operators should provide the best available information about all formations containing water and their depths. This information could include data and interpretation of resistivity logs run on nearby wells. Information may also be obtained from state or tribal regulatory agencies and from local BLM offices.

NOTICES

The privacy Act of 1974 and the regulation in 43 CFR 2.48(d) provide that you be furnished the following information in connection with information required by this application.

AUTHORITY: 30 U.S.C. 181 et seq., 351 et seq., 25 U.S.C. 396; 43 CFR 3160.

PRINCIPAL PURPOSE: The information is used to: (1) Evaluate, when appropriate, approve applications, and report completion of subsequent well operations, on a Federal or Indian lease; and (2) document for administrative use, information for the management, disposal and use of National Resource lands and resources, such as: (a) evaluating the equipment and procedures to be used during a proposed subsequent well operation and reviewing the completed well operations for compliance with the approved plan; (b) requesting and granting approval to perform those actions covered by 43 CFR 3162.3-2, 3162.3-3, and 3162.3-4; (c) reporting the beginning or resumption of production, as required by 43 CFR 3162.4-1(c) and (d) analyzing future applications to drill or modify operations in light of data obtained and methods used.

ROUTINE USES: Information from the record and/or the record will be transferred to appropriate Federal, State, local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecutions in connection with congressional inquiries or to consumer reporting agencies to facilitate collection of debts owed the Government.

EFFECT OF NOT PROVIDING THE INFORMATION: Filing of this notice and report and disclosure of the information is mandatory for those subsequent well operations specified in 43 CFR 3162.3-2, 3162.3-3, 3162.3-4.

The Paperwork Reduction Act of 1995 requires us to inform you that:

The BLM collects this information to evaluate proposed and/or completed subsequent well operations on Federal or Indian oil and gas leases.

Response to this request is mandatory.

The BLM would like you to know that you do not have to respond to this or any other Federal agency-sponsored information collection unless it displays a currently valid OMB control number.

BURDEN HOURS STATEMENT: Public reporting burden for this form is estimated to average 8 hours per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to U.S. Department of the Interior, Bureau of Land Management (1004-0137), Bureau Information Collection Clearance Officer (WO-630), 1849 C St., N.W., Mail Stop 401 LS, Washington, D.C. 20240

Additional Information

Location of Well

0. SHL: SWSE / 320 FSL / 1326 FEL / TWSP: 24S / RANGE: 28E / SECTION: 35 / LAT: 32.1673832 / LONG: -104.0536591 (TVD: 0 feet, MD: 0 feet)

PPP: NWNE / 1338 FNL / 1656 FEL / TWSP: 24S / RANGE: 28E / SECTION: 35 / LAT: 32.1775324 / LONG: -104.0547955 (TVD: 9777 feet, MD: 13474 feet)

PPP: SWSE / 330 FSL / 1654 FEL / TWSP: 24S / RANGE: 28E / SECTION: 35 / LAT: 32.1674126 / LONG: -104.0547186 (TVD: 9663 feet, MD: 9768 feet)

BHL: NWNE / 330 FNL / 1657 FEL / TWSP: 24S / RANGE: 28E / SECTION: 35 / LAT: 32.1803026 / LONG: -104.0548165 (TVD: 9777 feet, MD: 14482 feet)

CONFIDENTIAL

Well Name: RIPLEY 35 -26 SB FED COM	Well Location: T24S / R28E / SEC 35 / SWSE / 32.1673832 / -104.0536591	County or Parish/State: EDDY / NM
Well Number: 201H	Type of Well: CONVENTIONAL GAS WELL	Allottee or Tribe Name:
Lease Number: NMNM025953, NMNM25953	Unit or CA Name:	Unit or CA Number:
US Well Number: 3001547620	Well Status: Approved Application for Permit to Drill	Operator: MARATHON OIL PERMIAN LLC

Notice of Intent

Sundry ID: 2659590

Type of Submission: Notice of Intent	Type of Action: APD Change
Date Sundry Submitted: 03/02/2022	Time Sundry Submitted: 10:29
Date proposed operation will begin: 06/01/2022	

Procedure Description: Marathon Oil Permian LLC. respectfully requests to make changes to the Approved APD for the above listed well. See the first page of the attached file for a detailed summary of the requested changes including Well Name, Lateral Length (1 mile to 2 miles), MD, TVD, Pool, Formation, FTP, LTP, and Casing Program. Also included in the attached document is the revised C-102 Well Plat, Revised Directional Drilling Well Plan and Revised Drilling and Operations Plan. NOTE: all requested changes are DOWNHOLE only, no surface changes requested.

NOI Attachments

Procedure Description

Sub_SN_Att_RIPLEY_35_26_SB_FED_COM_201H_02.17.22_20220302095411.pdf

Received by OCD: 6/29/2022 10:31:49 AM

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Well Name: RIPLEY 35 -26 SB FED COM	Well Location: T24S / R28E / SEC 35 / SWSE / 32.1673832 / -104.0536591	County or Parish/State: EDDY / NM
Well Number: 201H	Type of Well: CONVENTIONAL GAS WELL	Allottee or Tribe Name:
Lease Number: NMNM025953, NMNM25953	Unit or CA Name:	Unit or CA Number:
US Well Number: 3001547620	Well Status: Approved Application for Permit to Drill	Operator: MARATHON OIL PERMIAN LLC

Conditions of Approval

Specialist Review
Ripley_35_36_SB_Fed_Com_201H_COA_20220510094727.pdf

Operator

I certify that the foregoing is true and correct. Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction. Electronic submission of Sundry Notices through this system satisfies regulations requiring a

Operator Electronic Signature: MELISSA SZUDERA	Signed on: MAR 02, 2022 09:54 AM
Name: MARATHON OIL PERMIAN LLC	
Title: REGULATORY COMPLIANCE REPRESENTATIVE	
Street Address: 990 TOWN & COUNTRY BLVD	
City: Houston	State: TX
Phone: (713) 296-3179	
Email address: mszudera@marathonoil.com	

Field

Representative Name:		
Street Address:		
City:	State:	Zip:
Phone:		
Email address:		

BLM Point of Contact

BLM POC Name: ZOTA M STEVENS	BLM POC Title: Petroleum Engineer
BLM POC Phone: 5752345998	BLM POC Email Address: ZSTEVENS@BLM.GOV
Disposition: Approved	Disposition Date: 05/10/2022
Signature: Zota Stevens	

Marathon Oil Permian, LLC.

Summary of Changes for NOI Change to AAPD Sundry Submittal

Well Name: **Ripley 35-26 SB Fed Com 201H**
 APD ID Num: **10400035692**
 API Num: **3001547620**

		Approved APD	Submitted Sundry
Well Name & Number		Ripley 35 WA Fed Com 4H	Ripley 35-26 SB Fed Com 201H
Lateral Length		SL	XXL
Target Formation		WA	SB
TVD		9777	8400
MD		14482	18795.4
Pool Name		Purple Sage; Wolfcamp Gas	Bone Spring; Willow Lake
Pool Code		98220	96415
Dedicated Acreage		320	320
Elevation		2955	2955
SHL	FOOTAGE	320 FSL 1326 FEL	320 FSL 1326 FEL
	UL	O	O
	Q/Q	SWSE	SWSE
	S-T-R	35-24S-28E	35-24S-28E
FTP	FOOTAGE	330 FSL 1654 FEL	100 FSL 2155 FEL
	UL	O	O
	Q/Q	SWSE	SWSE
	S-T-R	35-24S-28E	35-24S-28E
LTP	FOOTAGE	330 FNL 1657 FEL	100 FNL 2155 FWL
	UL	B	B
	Q/Q	NWNE	NWNE
	S-T-R	35-24S-28E	26-24S-28E
Casing Stages		4	3
Surf Csg	Top MD	0	0
	Bottom MD	741	731
	Size, Weight, Grade Connection	13.375" 54.5# J55 STC	13.375" 54.5# J55 BTC
Int 1 Csg	Top MD	0	0
	Bottom MD	2610	2703
	Size, Weight, Grade Connection	9.625" 40# J55 LTC	9.625" 40# P110HC BTC
Int 2 Csg	Top MD	0	-
	Bottom MD	10140	-
	Size, Weight, Grade Connection	7" 29# P110 BTC	-
Prod Csg	Top MD	9840	0
	Bottom MD	14482	18795
	Size, Weight, Grade Connection	4.5" 13.5# P110 BTC	5.5" 23# P110HC TLW

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 30-015-47620	² Pool Code 96415 64450	³ Pool Name BONE SPRING; WILLOW LAKE
⁴ Property Code	⁵ Property Name RIPLEY 35-26 SB FED COM	⁶ Well Number 201H
⁷ OGRID No. 372098	⁸ Operator Name MARATHON OIL PERMIAN LLC	⁹ Elevation 2955'

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
O	35	24S	28E		320	SOUTH	1326	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
B	26	24S	28E		100	NORTH	2155	EAST	EDDY

¹² Dedicated Acres	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
320.0			

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.

	<p>CORNER COORDINATES NAD 83, SPCS NM EAST</p> <p>A - X: 627819.57' / Y: 435123.87' B - X: 627832.22' / Y: 429767.80' C - X: 627880.58' / Y: 424421.15' D - X: 626556.80' / Y: 424421.71' E - X: 626504.81' / Y: 429778.17' F - X: 626479.68' / Y: 435154.11'</p>	<p>¹⁷ OPERATOR CERTIFICATION</p> <p>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.</p> <p>Signature: Date: 02/22/2022</p> <p>Printed Name: Melissa Szudera</p> <p>E-mail Address: mszudera@marathonoil.com</p>	
	<p>CORNER COORDINATES NAD 27, SPCS NM EAST</p> <p>A - X: 586635.80' / Y: 435065.34' B - X: 586648.32' / Y: 429709.37' C - X: 586696.57' / Y: 424362.83' D - X: 585372.81' / Y: 424363.41' E - X: 585320.95' / Y: 429719.76' F - X: 585295.94' / Y: 435095.60'</p>		<p>¹⁸ SURVEYOR CERTIFICATION</p> <p>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.</p> <p>DATE OF SURVEY: FEBRUARY 22, 2022</p> <p>Signature and Seal of Professional Surveyor: </p> <p>Certificate Number: DAVID W. MYERS 11403</p>
	<p>LAST TAKE POINT/BOTTOM HOLE LOCATION 100' FNL 2155' FEL, SECTION 26 NAD 83, SPCS NM EAST X: 627004.46' / Y: 435042.24' LAT: 32.19570519N / LON: 104.05638826W NAD 27, SPCS NM EAST X: 585820.70' / Y: 434983.73' LAT: 32.19558300N / LON: 104.05589756W</p>		<p>KICK OFF/FIRST TAKE POINT 100' FSL 2155' FEL, SECTION 35 NAD 83, SPCS NM EAST X: 627048.44' / Y: 424521.50' LAT: 32.16678448N / LON: 104.05633365W NAD 27, SPCS NM EAST X: 585864.45' / Y: 424463.19' LAT: 32.16666193N / LON: 104.05584387W</p>
	<p>SURFACE HOLE LOCATION 320' FSL 1326' FEL, SECTION 35 NAD 83, SPCS NM EAST X: 627875.44' / Y: 424741.44' LAT: 32.16738318N / LON: 104.05365910W NAD 27, SPCS NM EAST X: 586691.44' / Y: 424683.11' LAT: 32.16726060N / LON: 104.05316946W</p>		

Distances/areas relative to NAD 83 Combined Scale Factor: 0.9997778 Convergence Angle: 00°08'28.560012"

☐ Horizontal Spacing Unit

MARATHON OIL PERMIAN, LLC.
DRILLING AND OPERATIONS PLAN



WELL NAME & NUMBER:

RIPLEY 35-26 SB FED COM 201H

LOCATION:

SECTION **35** TOWNSHIP **24S** RANGE **28E**
LEA COUNTY, **NEW MEXICO**

Section 1:**GEOLOGICAL FORMATIONS**

Name of Surface Formation: Permian
 Elevation: 2955 feet

Estimated Tops of Important Geological Markers:

Formation	TVD (ft)	MD (ft)	Elevation (ft SS)	Lithologies	Mineral Resources	Producing Formation?
Rustler	661	661	NA	Anhydrite	Brine	No
Salado	750	750	2205	Salt/Anhydrite	Brine	No
Castile	1009	1009	1946	Salt/Anhydrite	Brine	No
Base of Salt (BX)	2688	2688	267	Salt/Anhydrite	Brine	No
Lamar	2688	2688	267	Sandstone/Shale	None	No
Bell Canyon	2721	2721	234	Sandstone	Oil	No
Cherry Canyon	3600	3600	-645	Sandstone	Oil	No
Brushy Canyon	4880	4880	-1925	Sandstone	Oil	No
Bone Spring Lime	6434	6434	-3479	Limestone	None	No
Upper Avalon Shale	6480	6480	-3525	Shale	Oil	Yes
1st Bone Spring Sand	7357	7357	-4402	Sandstone	Oil	Yes
2nd Bone Spring Carbonate	7633	7633	-4678	Limestone/Shale	None	No
2nd Bone Spring Sand	7980	7980	-5025	Sandstone	Oil	Yes
3rd Bone Spring Carbonate	7633	7633	-4678	Limestone	Oil	No
3rd Bone Spring Sand	9259	9259	-6304	Sandstone	Oil	Yes
Wolfcamp	9626	9626	-6671	Sandstone/Shale/Carbonates	Natural Gas / Oil	Yes
Wolfcamp A	9773	9773	-6818	Sandstone/Shale/Carbonates	Natural Gas / Oil	Yes
Wolfcamp B	10065	10065	-7110	Sandstone/Shale/Carbonates	Natural Gas / Oil	No
Wolfcamp C	10334	10334	-7379	Sandstone/Shale/Carbonates	Natural Gas / Oil	No
Wolfcamp D	10843	10843	-7888	Sandstone/Shale/Carbonates	Natural Gas / Oil	No

Section 2:**BLOWOUT PREVENTER TESTING PROCEDURE**

Pressure Rating (PSI): 10M
 Rating Depth: 10000
 Equipment: 13 5/8 BOP Annular (5,000 psi WP) and BOP Stack (10,000 psi WP) will be installed and tested before drilling all holes.

Requesting Variance? Yes
 Variance Request: A variance is requested for the use of a flexible choke line from the BOP to Choke Manifold. See attached for specs and hydrostatic test chart.

Testing Procedure: BOP/BOPE will be tested to 250 psi low and a high of 50% WP for the Annular and 10,000 psi for the BOP Stacking. Testing will be conducted by an independent service company per Onshore Order 2 requirements. The System may be upgraded to a higher pressure but still tested to the working pressure listed in the Equipment Description above. If the system is upgraded all the components installed will be functional and tested. Pipe rams will be operationally checked each 24 hour period. Blind rams will be operationally checked on each trip out of the hole. These checks will be noted on the daily tour sheets. Other accessories to the BOP equipment will include a Kelly cock, full opening safety valve / inside BOP and choke lines and choke manifold. See attached schematics.

Formation integrity test will be performed per Onshore Order #2. On Exploratory wells or on that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Will be tested in accordance with Onshore Oil and Gas Order #2 III.B.1.i. A multibowl wellhead is being used. The BOP will be tested per Onshore Order #2 after installation on the surface casing which will cover testing requirements for a maximum of 30 days. If any seal subject to test pressure is broken the system must be tested. See attached schematic.

Marathon Oil Permian LLC.

Drilling & Operations Plan - Page 2 of 3

Section 3:**CASING PROGRAM**

String Type	Hole Size	Casing Size	Top Set MD	Bottom Set MD	Top Set TVD	Bottom Set TVD	Top Set MSL	Bottom Set MSL	Weight (lbs/ft)	Grade	Joint Type	Collapse SF	Burst SF	Joint SF Type	Joint SF	Body SF Type	Body SF
Surface	17.5	13.375	0	731	0	731	2955	2224	54.5	J55	BTC	1.00	1.15	BUOY	1.30	BUOY	1.30
Intermediate	12.25	9.625	0	2703	0	2703	2955	252	40	P110HC	BTC	1.00	1.15	BUOY	1.30	BUOY	1.30
Production	8.75	5.5	0	18795	0	8400	2955	-5445	23	P110HC	TLW	1.00	1.15	BUOY	1.30	BUOY	1.30
All casing strings will be tested in accordance with Onshore Oil and Gas Order #2 III.B.1.h												Safety Factors will Meet or Exceed					

Casing Condition: New
Casing Standard: API
Tapered String? No

Yes or No

Is casing new? If used, attach certification as required in Onshore Order #1.	Yes
Does casing meet API specifications? If no, attach casing specification sheet.	Yes
Is premium or uncommon casing planned? If yes attach casing specification sheet.	No
Does the above casing design meet or exceed BLM's minimum standards? If not provide justification (loading assumptions, casing design criteria).	Yes
Will the intermediate pipe be kept at a minimum 1/3 fluid filled to avoid approaching the collapse pressure rating of the casing?	Yes
Is well located within Capitan Reef?	No
If yes, does production casing cement tie back a minimum of 50' above the Reef?	
Is proposed well within the designated four string boundary?	
Is well located in R-111-P and SOPA?	No
If yes, are the first three strings cemented to surface?	
Is the second string set 100' to 600' below the base of salt?	
Is well located in SOPA but not in R-111-P?	No
If yes, are the first 2 strings cemented to surface and third string cement tied back 500' into previous casing?	
Is well located in high Cave/Karst?	No
If yes, are there two strings cemented to surface?	
If yes, is there a contingency casing if lost circulation occurs?	
Is well located in critical Cave/Karst?	No
If yes, are there three strings cemented to surface?	

Section 4:**CEMENT PROGRAM**

String Type	Lead/Tail	Top MD	Bottom MD	Quantity (sks)	Yield (ft³/sks)	Density (ppg)	Slurry Volume (ft³)	Excess (%)	Cement Type	Additives
Surface	Lead	0	431	199	2.12	12.5	423	25	Class C	Extender, Accelerator, LCM
Surface	Tail	431	731	197	1.32	14.8	260	25	Class C	Accelerator
Intermediate	Lead	0	2203	416	2.18	12.4	908	25	Class C	Extender, Accelerator, LCM
Intermediate	Tail	2203	2703	147	1.33	14.8	196	25	Class C	Retarder
Production	Tail	2403	18795	3121	1.68	13	5244	25	Class H	Retarder, Extender, Fluid Loss, Suspension Agent

Stage tool depth(s) will be adjusted based on hole conditions and cement volumes will be adjusted proportionally. Stage tool will be set a minimum of 50 feet below previous casing and a minimum of 200 feet above current shoe. Lab reports with the 500 psi compressive strength time for the cement will be onsite for review.

Pilot Hole? No **Plugging Procedure for Pilot Hole:** N/A
Pilot Hole Depth: N/A
KOP Depth: N/A

Plug Top	Plug Bottom	Excess (%)	Quantity (sx)	Density (ppg)	Yield (ft³/sks)	Water gal/sk	Slurry Description and Cement Type

Marathon Oil Permian LLC.

Drilling & Operations Plan - Page 3 of 3

Section 5:**CIRCULATING MEDIUM**

Mud System Type: Closed
Will an air or gas system be used? No

Describe what will be on location to control well or mitigate other conditions:

The necessary mud products for additional weight and fluid loss control will be on location at all times.

Describe the mud monitoring system utilized:

Losses or gains in the mud system will be monitored visually/manually as well as with an electronic PVT.

Circulating Medium Table:

Top Depth	Bottom Depth	Mud Type	Min. Weight (ppg)	Max Weight (ppg)
0	731	Water Based Mud	8.4	8.8
731	2703	Brine or Oil Based Mud	9.2	10.2
2703	18795	Oil Based Mud	10.5	12.5

Section 6:**TESTING, LOGGING, CORING****List of production tests including testing procedures, equipment and safety measures:**

GR from TD to surface (horizontal well - vertical portion of hole).

List of open and cased hole logs run in the well:

GR while drilling from Intermediate casing shoe to TD.

Coring operation description for the well:

Run gamma-ray (GR) and corrected neutron log (CNL) or analogous to surface for future development of the area, one per shared well pad not to exceed 200' radial distance.

Section 7:**ANTICIPATED PRESSURE**

Anticipated Bottom Hole Pressure: 5460 PSI
Anticipated Bottom Hole Temperature: 195 °F
Anticipated Abnormal Pressure? No
Anticipated Abnormal Temperature? No

Potential Hazards:

H2S detection equipment will be in operation after drilling out the surface casing shoe until the production casing has been cemented. Breathing equipment will be on location from drilling out the surface shoe until production casing is cemented. If H2S is encountered the operator will comply with Onshore Order #6. Adequate flare lines will be installed off the mud/gas separator where gas may be flared safely. All personnel will be familiar with all aspects of safe operation of equipment being used to drill this well. See attached H2S Contingency Plan.

Section 8:**OTHER INFORMATION****Auxiliary Well Control and Monitoring Equipment:**

A Kelly cock will be in the drill string at all times. A full opening drill pipe stabbing valve having the appropriate connections will be on the rig floor unobstructed and readily accessible at all times.

Hydrogen Sulfide detection equipment will be in operation after drilling out the surface casing shoe until the production casing is cemented. Breathing equipment will be on location upon drilling the surface casing shoe until total depth is reached. If Hydrogen Sulfide is encountered, measured amounts and formations will be reported to the BLM.

Anticipated Starting Date and Duration of Operations:

Road and location construction will begin after the BLM has approved the APD. Anticipated spud date will be as soon as possible after BLM approval and as soon as a rig will be available. Move in operations and drilling is expected to take 30 days.

Ripley 35-26 SB Fed Com 201H
Eddy County, New Mexico (NAD 27)
Q2100** & MC-2100**
Design #1

PROJECT DETAILS: Eddy County, New Mexico (NAD 27)

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

WELL DETAILS: Ripley 35-26 SB Fed Com 201H

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.0	0.0	424682.84	586691.62	32° 10' 2.135 N 104° 3' 11.408 W	

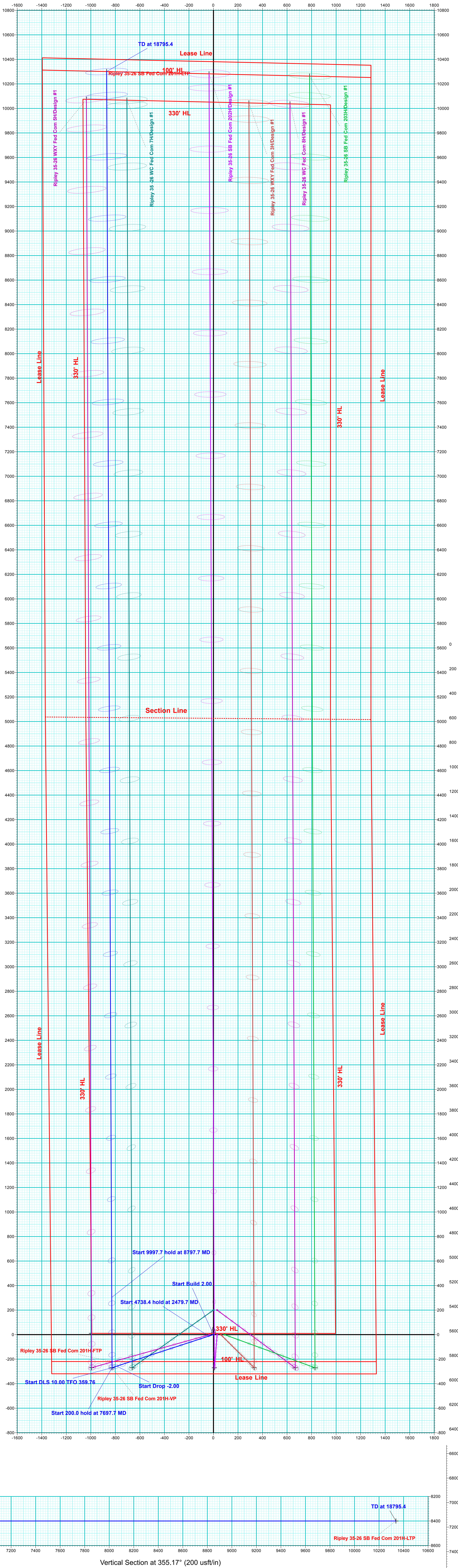
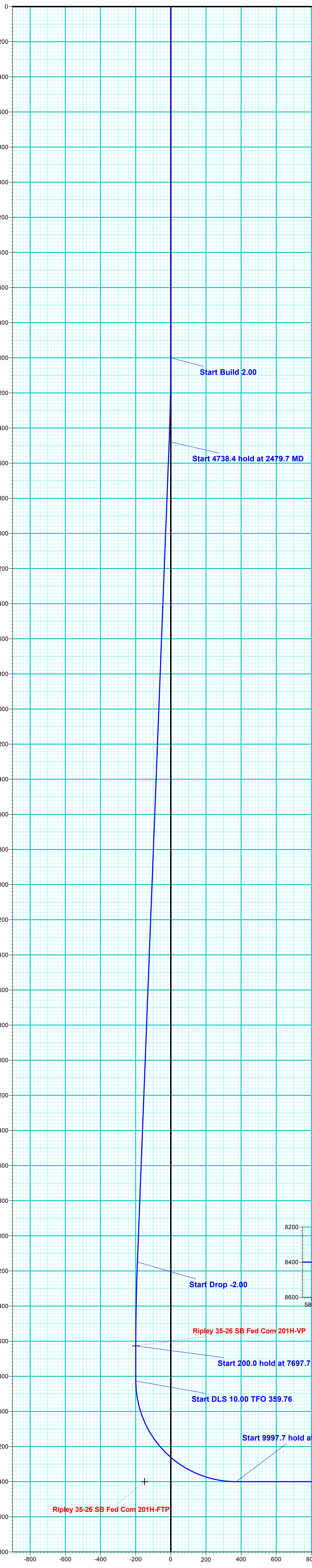
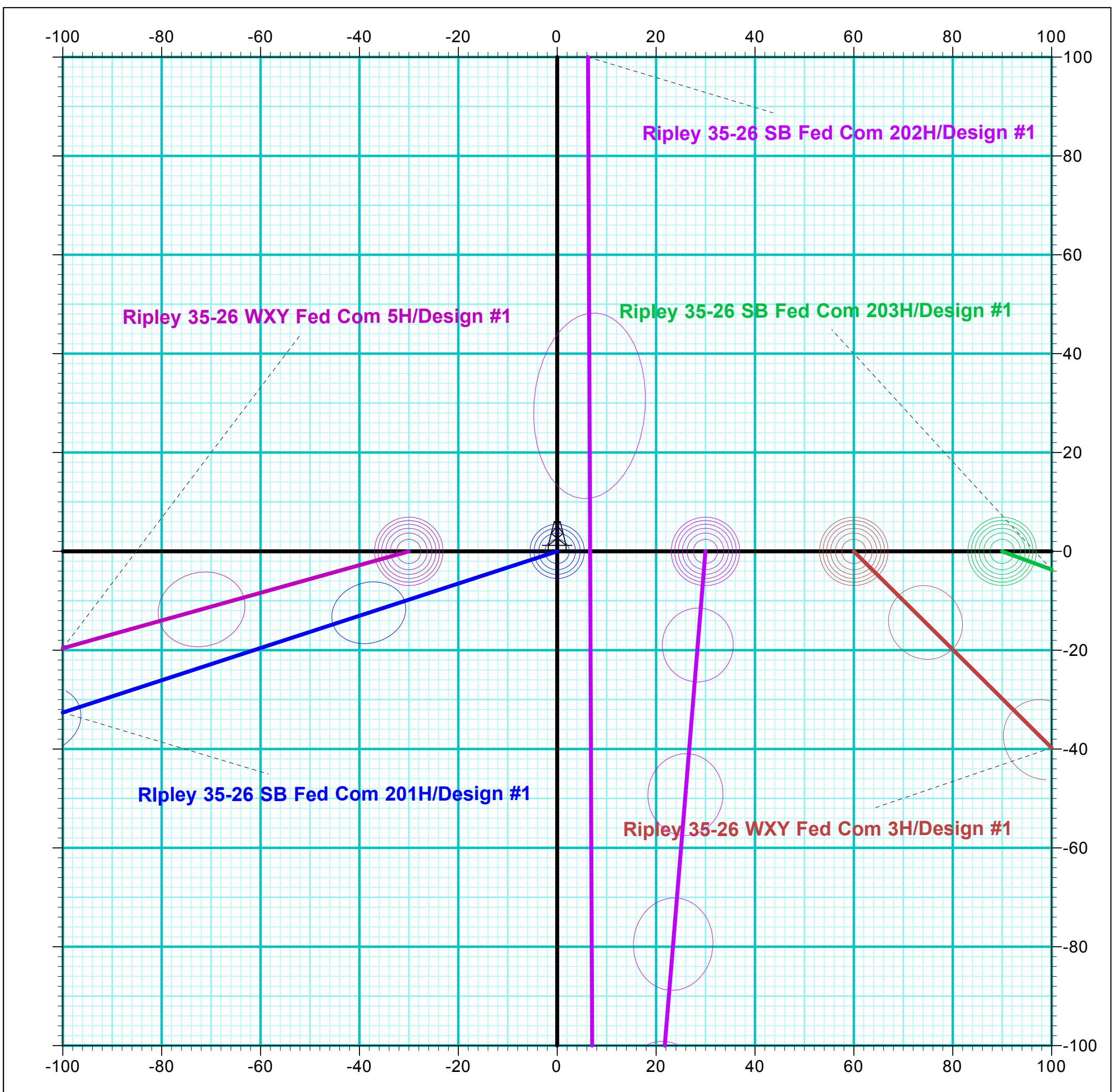
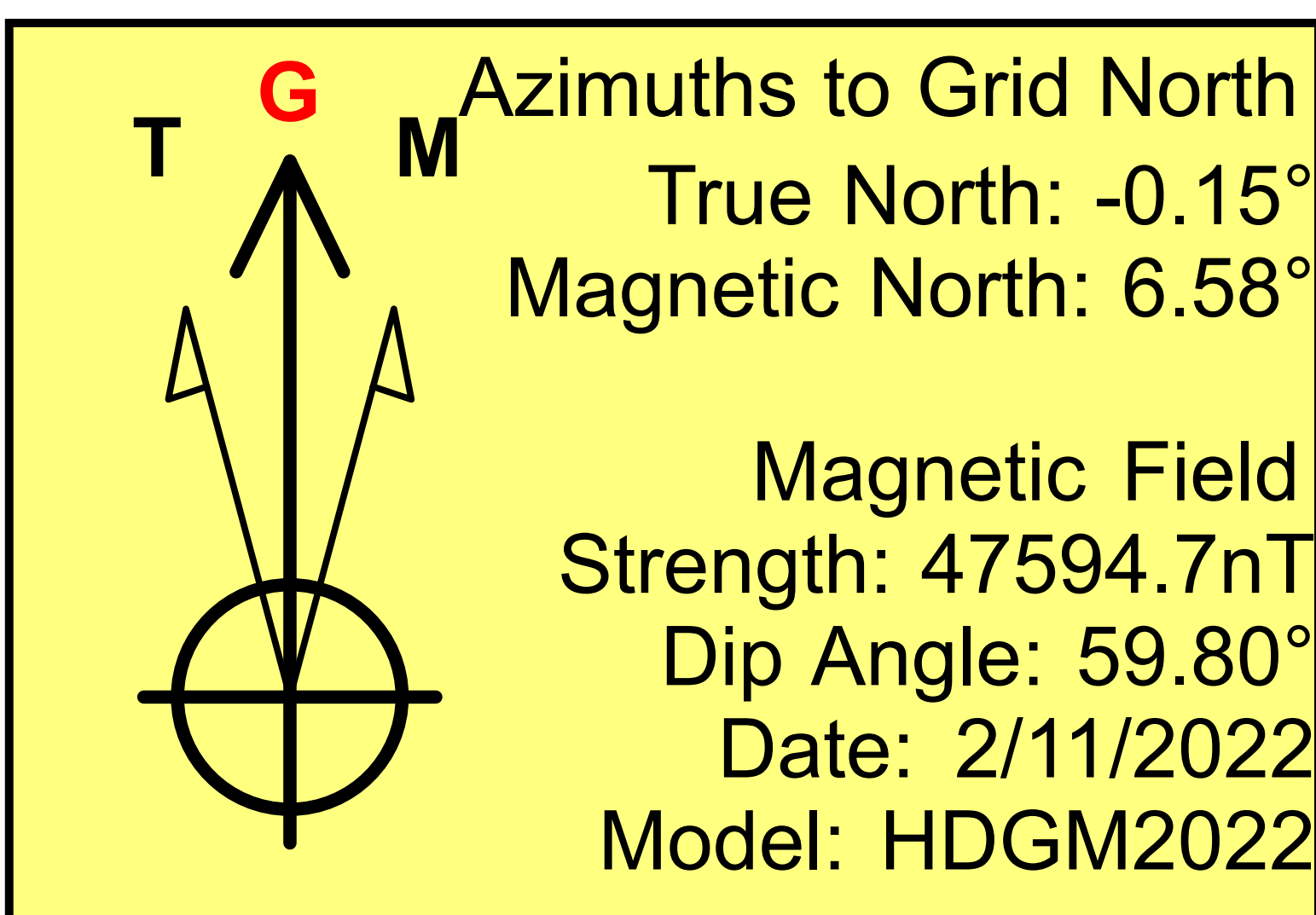
Company Name: Marathon Oil Permian LLC
Ripley 35-26 SB Fed Com 201H
Eddy County, New Mexico (NAD 27)
Rig: KB=26.5
Created By: Michael Hilliard
Date: 2/21/2022

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
Ripley 35-26 SB Fed Com 201H-VP - plan hits target center	7627.0	-269.6	-827.0	424413.20	585864.66	32° 9' 59.488 N 104° 3' 21.037 W		Point
Ripley 35-26 SB Fed Com 201H-FTP	8400.0	-219.6	-827.2	424463.19	585864.45	32° 9' 59.983 N 104° 3' 21.038 W		Point
Ripley 35-26 SB Fed Com 201H-LTP - plan misses target center by 202.8usft at 8373.5usft MD (-83.2 N, -827.7 E)	8400.0	10300.9	-870.9	434983.73	585820.7032	11° 44.099 N 104° 3' 21.231 W		Point

DESIGN ANNOTATIONS

MD	Inc	Azi	TVD	+N/-S	+E/-W	VSec	Departure	Annotation
2000.0	0.00	0.00	2000.0	0.0	0.0	0.0	0.0	Start Build 2.00
2479.7	9.59	251.94	2477.4	-12.4	-38.1	-9.2	40.1	Start 4738.4 hold at 2479.7 MD
7218.1	9.59	251.94	7149.6	-257.2	-788.9	-189.6	829.7	Start Drop -2.00
7697.7	0.00	0.00	7627.0	-269.6	-827.0	-199.0	869.8	Start 200.0 hold at 7697.7 MD
7897.7	0.00	0.00	7827.0	-269.6	-827.0	-199.0	869.8	Start DLS 10.00 TFO 359.76
8797.7	90.00	359.76	8400.0	303.3	-829.3	372.1	1442.8	Start 9997.7 hold at 8797.7 MD
18795.4	90.00	359.76	8400.0	10300.9	-870.9	10337.6	11440.4	TD at 18795.4



Vertical Section at 355.17° (200 usf/in)

Target Line: 8400' TVD @ 0° VS 90° 10' U/D

Vertical Section at 355.17° (200 usf/in)



Marathon Oil Permian LLC

Eddy County, New Mexico (NAD 27)

Sec 35, T24S, R28E

Ripley 35-26 SB Fed Com 201H

Wellbore #1

Plan: Design #1

KLX Well Planning Report

16 February, 2022





KLX
Well Planning Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well Ripley 35-26 SB Fed Com 201H
Company:	Marathon Oil Permian LLC	TVD Reference:	KB=26.5 @ 2981.5usft (KB=26.5)
Project:	Eddy County, New Mexico (NAD 27)	MD Reference:	KB=26.5 @ 2981.5usft (KB=26.5)
Site:	Sec 35, T24S, R28E	North Reference:	Grid
Well:	Ripley 35-26 SB Fed Com 201H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Project	Eddy County, New Mexico (NAD 27)		
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		

Site	Sec 35, T24S, R28E			
Site Position:		Northing:	424,682.84 usft	Latitude: 32° 10' 2.135 N
From: Map		Easting:	586,691.62 usft	Longitude: 104° 3' 11.408 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence: 0.15 °

Well	Ripley 35-26 SB Fed Com 201H			
Well Position	+N/-S	0.0 usft	Northing:	424,682.84 usft
	+E/-W	0.0 usft	Easting:	586,691.62 usft
Position Uncertainty		0.0 usft	Wellhead Elevation:	Ground Level: 2,955.0 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM2022	2/11/2022	6.73	59.80	47,594.70000000

Design	Design #1			
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	355.17

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	
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,479.7	9.59	251.94	2,477.4	-12.4	-38.1	2.00	2.00	0.00	251.94	
7,218.1	9.59	251.94	7,149.6	-257.2	-788.9	0.00	0.00	0.00	0.00	
7,697.7	0.00	0.01	7,627.0	-269.6	-827.0	2.00	-2.00	0.00	180.00	Ripley 35-26 SB Fed
7,897.7	0.00	0.01	7,827.0	-269.6	-827.0	0.00	0.00	0.00	0.01	
8,797.7	90.00	359.76	8,400.0	303.3	-829.3	10.00	10.00	-0.03	359.76	
18,795.4	90.00	359.76	8,400.0	10,300.9	-870.9	0.00	0.00	0.00	0.00	Ripley 35-26 SB Fed



KLX
Well Planning Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well Ripley 35-26 SB Fed Com 201H
Company:	Marathon Oil Permian LLC	TVD Reference:	KB=26.5 @ 2981.5usft (KB=26.5)
Project:	Eddy County, New Mexico (NAD 27)	MD Reference:	KB=26.5 @ 2981.5usft (KB=26.5)
Site:	Sec 35, T24S, R28E	North Reference:	Grid
Well:	Ripley 35-26 SB Fed Com 201H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.0	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	0.00	0.00	1,600.0	0.0	0.0	0.0	0.00	0.00	0.00
1,700.0	0.00	0.00	1,700.0	0.0	0.0	0.0	0.00	0.00	0.00
1,800.0	0.00	0.00	1,800.0	0.0	0.0	0.0	0.00	0.00	0.00
1,900.0	0.00	0.00	1,900.0	0.0	0.0	0.0	0.00	0.00	0.00
Start Build 2.00									
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.0	0.00	0.00	0.00
2,100.0	2.00	251.94	2,100.0	-0.5	-1.7	-0.4	2.00	2.00	0.00
2,200.0	4.00	251.94	2,199.8	-2.2	-6.6	-1.6	2.00	2.00	0.00
2,300.0	6.00	251.94	2,299.5	-4.9	-14.9	-3.6	2.00	2.00	0.00
2,400.0	8.00	251.94	2,398.7	-8.6	-26.5	-6.4	2.00	2.00	0.00
Start 4738.4 hold at 2479.7 MD									
2,479.7	9.59	251.94	2,477.4	-12.4	-38.1	-9.2	2.00	2.00	0.00
2,500.0	9.59	251.94	2,497.5	-13.5	-41.3	-9.9	0.00	0.00	0.00
2,600.0	9.59	251.94	2,596.1	-18.6	-57.2	-13.8	0.00	0.00	0.00
2,700.0	9.59	251.94	2,694.7	-23.8	-73.0	-17.6	0.00	0.00	0.00
2,800.0	9.59	251.94	2,793.3	-29.0	-88.8	-21.4	0.00	0.00	0.00
2,900.0	9.59	251.94	2,891.9	-34.1	-104.7	-25.2	0.00	0.00	0.00
3,000.0	9.59	251.94	2,990.5	-39.3	-120.5	-29.0	0.00	0.00	0.00
3,100.0	9.59	251.94	3,089.1	-44.5	-136.4	-32.8	0.00	0.00	0.00
3,200.0	9.59	251.94	3,187.7	-49.6	-152.2	-36.6	0.00	0.00	0.00
3,300.0	9.59	251.94	3,286.3	-54.8	-168.1	-40.4	0.00	0.00	0.00
3,400.0	9.59	251.94	3,384.9	-60.0	-183.9	-44.3	0.00	0.00	0.00
3,500.0	9.59	251.94	3,483.5	-65.1	-199.8	-48.1	0.00	0.00	0.00
3,600.0	9.59	251.94	3,582.1	-70.3	-215.6	-51.9	0.00	0.00	0.00
3,700.0	9.59	251.94	3,680.7	-75.5	-231.4	-55.7	0.00	0.00	0.00
3,800.0	9.59	251.94	3,779.3	-80.6	-247.3	-59.5	0.00	0.00	0.00
3,900.0	9.59	251.94	3,877.9	-85.8	-263.1	-63.3	0.00	0.00	0.00
4,000.0	9.59	251.94	3,976.5	-91.0	-279.0	-67.1	0.00	0.00	0.00
4,100.0	9.59	251.94	4,075.1	-96.1	-294.8	-71.0	0.00	0.00	0.00
4,200.0	9.59	251.94	4,173.7	-101.3	-310.7	-74.8	0.00	0.00	0.00
4,300.0	9.59	251.94	4,272.3	-106.5	-326.5	-78.6	0.00	0.00	0.00
4,400.0	9.59	251.94	4,370.9	-111.6	-342.4	-82.4	0.00	0.00	0.00
4,500.0	9.59	251.94	4,469.5	-116.8	-358.2	-86.2	0.00	0.00	0.00
4,600.0	9.59	251.94	4,568.1	-122.0	-374.0	-90.0	0.00	0.00	0.00
4,700.0	9.59	251.94	4,666.7	-127.1	-389.9	-93.8	0.00	0.00	0.00
4,800.0	9.59	251.94	4,765.3	-132.3	-405.7	-97.6	0.00	0.00	0.00
4,900.0	9.59	251.94	4,863.9	-137.5	-421.6	-101.5	0.00	0.00	0.00
5,000.0	9.59	251.94	4,962.5	-142.6	-437.4	-105.3	0.00	0.00	0.00



KLX
Well Planning Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well Ripley 35-26 SB Fed Com 201H
Company:	Marathon Oil Permian LLC	TVD Reference:	KB=26.5 @ 2981.5usft (KB=26.5)
Project:	Eddy County, New Mexico (NAD 27)	MD Reference:	KB=26.5 @ 2981.5usft (KB=26.5)
Site:	Sec 35, T24S, R28E	North Reference:	Grid
Well:	Ripley 35-26 SB Fed Com 201H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
5,100.0	9.59	251.94	5,061.1	-147.8	-453.3	-109.1	0.00	0.00	0.00
5,200.0	9.59	251.94	5,159.7	-153.0	-469.1	-112.9	0.00	0.00	0.00
5,300.0	9.59	251.94	5,258.3	-158.1	-485.0	-116.7	0.00	0.00	0.00
5,400.0	9.59	251.94	5,356.9	-163.3	-500.8	-120.5	0.00	0.00	0.00
5,500.0	9.59	251.94	5,455.5	-168.5	-516.7	-124.3	0.00	0.00	0.00
5,600.0	9.59	251.94	5,554.1	-173.6	-532.5	-128.1	0.00	0.00	0.00
5,700.0	9.59	251.94	5,652.7	-178.8	-548.3	-132.0	0.00	0.00	0.00
5,800.0	9.59	251.94	5,751.3	-184.0	-564.2	-135.8	0.00	0.00	0.00
5,900.0	9.59	251.94	5,849.9	-189.1	-580.0	-139.6	0.00	0.00	0.00
6,000.0	9.59	251.94	5,948.5	-194.3	-595.9	-143.4	0.00	0.00	0.00
6,100.0	9.59	251.94	6,047.1	-199.5	-611.7	-147.2	0.00	0.00	0.00
6,200.0	9.59	251.94	6,145.7	-204.6	-627.6	-151.0	0.00	0.00	0.00
6,300.0	9.59	251.94	6,244.3	-209.8	-643.4	-154.8	0.00	0.00	0.00
6,400.0	9.59	251.94	6,342.9	-215.0	-659.3	-158.7	0.00	0.00	0.00
6,500.0	9.59	251.94	6,441.5	-220.1	-675.1	-162.5	0.00	0.00	0.00
6,600.0	9.59	251.94	6,540.1	-225.3	-690.9	-166.3	0.00	0.00	0.00
6,700.0	9.59	251.94	6,638.7	-230.5	-706.8	-170.1	0.00	0.00	0.00
6,800.0	9.59	251.94	6,737.3	-235.6	-722.6	-173.9	0.00	0.00	0.00
6,900.0	9.59	251.94	6,835.9	-240.8	-738.5	-177.7	0.00	0.00	0.00
7,000.0	9.59	251.94	6,934.5	-246.0	-754.3	-181.5	0.00	0.00	0.00
7,100.0	9.59	251.94	7,033.1	-251.1	-770.2	-185.3	0.00	0.00	0.00
7,200.0	9.59	251.94	7,131.7	-256.3	-786.0	-189.2	0.00	0.00	0.00
Start Drop -2.00									
7,218.1	9.59	251.94	7,149.6	-257.2	-788.9	-189.8	0.00	0.00	0.00
7,300.0	7.95	251.94	7,230.5	-261.1	-800.8	-192.7	2.00	-2.00	0.00
7,400.0	5.95	251.94	7,329.8	-264.9	-812.3	-195.5	2.00	-2.00	0.00
7,500.0	3.95	251.94	7,429.4	-267.5	-820.5	-197.5	2.00	-2.00	0.00
7,600.0	1.95	251.94	7,529.3	-269.1	-825.4	-198.6	2.00	-2.00	0.00
Start 200.0 hold at 7697.7 MD									
7,697.7	0.00	0.00	7,627.0	-269.6	-827.0	-199.0	2.00	-2.00	0.00
7,700.0	0.00	0.00	7,629.3	-269.6	-827.0	-199.0	0.00	0.00	0.00
7,800.0	0.00	0.00	7,729.3	-269.6	-827.0	-199.0	0.00	0.00	0.00
Start DLS 10.00 TFO 359.76									
7,897.7	0.00	0.00	7,827.0	-269.6	-827.0	-199.0	0.00	0.00	0.00
7,900.0	0.23	359.76	7,829.3	-269.6	-827.0	-199.0	10.00	10.00	0.00
7,950.0	5.23	359.76	7,879.2	-267.3	-827.0	-196.6	10.00	10.00	0.00
8,000.0	10.23	359.76	7,928.7	-260.5	-827.0	-189.9	10.00	10.00	0.00
8,050.0	15.23	359.76	7,977.5	-249.5	-827.0	-179.0	10.00	10.00	0.00
8,100.0	20.23	359.76	8,025.1	-234.3	-827.1	-163.8	10.00	10.00	0.00
8,150.0	25.23	359.76	8,071.2	-215.0	-827.2	-144.6	10.00	10.00	0.00
8,200.0	30.23	359.76	8,115.4	-191.8	-827.3	-121.4	10.00	10.00	0.00
8,250.0	35.23	359.76	8,157.5	-164.7	-827.4	-94.4	10.00	10.00	0.00
8,300.0	40.23	359.76	8,197.0	-134.1	-827.5	-63.9	10.00	10.00	0.00
8,350.0	45.23	359.76	8,233.7	-100.2	-827.7	-30.1	10.00	10.00	0.00
8,400.0	50.23	359.76	8,267.4	-63.2	-827.8	6.7	10.00	10.00	0.00
8,450.0	55.23	359.76	8,297.6	-23.5	-828.0	46.4	10.00	10.00	0.00
8,500.0	60.23	359.76	8,324.3	18.8	-828.2	88.5	10.00	10.00	0.00
8,550.0	65.23	359.76	8,347.2	63.2	-828.3	132.8	10.00	10.00	0.00
8,600.0	70.23	359.76	8,366.2	109.5	-828.5	178.9	10.00	10.00	0.00
8,650.0	75.23	359.76	8,381.0	157.2	-828.7	226.5	10.00	10.00	0.00
8,700.0	80.23	359.76	8,391.6	206.0	-828.9	275.1	10.00	10.00	0.00
8,750.0	85.23	359.76	8,398.0	255.6	-829.1	324.6	10.00	10.00	0.00
Start 9997.7 hold at 8797.7 MD									



KLX
Well Planning Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well Ripley 35-26 SB Fed Com 201H
Company:	Marathon Oil Permian LLC	TVD Reference:	KB=26.5 @ 2981.5usft (KB=26.5)
Project:	Eddy County, New Mexico (NAD 27)	MD Reference:	KB=26.5 @ 2981.5usft (KB=26.5)
Site:	Sec 35, T24S, R28E	North Reference:	Grid
Well:	Ripley 35-26 SB Fed Com 201H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
8,797.7	90.00	359.76	8,400.0	303.3	-829.3	372.1	10.00	10.00	0.00
8,800.0	90.00	359.76	8,400.0	305.6	-829.4	374.4	0.00	0.00	0.00
8,900.0	90.00	359.76	8,400.0	405.6	-829.8	474.0	0.00	0.00	0.00
9,000.0	90.00	359.76	8,400.0	505.6	-830.2	573.7	0.00	0.00	0.00
9,100.0	90.00	359.76	8,400.0	605.6	-830.6	673.4	0.00	0.00	0.00
9,200.0	90.00	359.76	8,400.0	705.6	-831.0	773.1	0.00	0.00	0.00
9,300.0	90.00	359.76	8,400.0	805.6	-831.4	872.7	0.00	0.00	0.00
9,400.0	90.00	359.76	8,400.0	905.6	-831.8	972.4	0.00	0.00	0.00
9,500.0	90.00	359.76	8,400.0	1,005.6	-832.3	1,072.1	0.00	0.00	0.00
9,600.0	90.00	359.76	8,400.0	1,105.6	-832.7	1,171.8	0.00	0.00	0.00
9,700.0	90.00	359.76	8,400.0	1,205.6	-833.1	1,271.5	0.00	0.00	0.00
9,800.0	90.00	359.76	8,400.0	1,305.6	-833.5	1,371.1	0.00	0.00	0.00
9,900.0	90.00	359.76	8,400.0	1,405.6	-833.9	1,470.8	0.00	0.00	0.00
10,000.0	90.00	359.76	8,400.0	1,505.6	-834.3	1,570.5	0.00	0.00	0.00
10,100.0	90.00	359.76	8,400.0	1,605.6	-834.8	1,670.2	0.00	0.00	0.00
10,200.0	90.00	359.76	8,400.0	1,705.6	-835.2	1,769.9	0.00	0.00	0.00
10,300.0	90.00	359.76	8,400.0	1,805.6	-835.6	1,869.5	0.00	0.00	0.00
10,400.0	90.00	359.76	8,400.0	1,905.6	-836.0	1,969.2	0.00	0.00	0.00
10,500.0	90.00	359.76	8,400.0	2,005.6	-836.4	2,068.9	0.00	0.00	0.00
10,600.0	90.00	359.76	8,400.0	2,105.6	-836.8	2,168.6	0.00	0.00	0.00
10,700.0	90.00	359.76	8,400.0	2,205.5	-837.3	2,268.2	0.00	0.00	0.00
10,800.0	90.00	359.76	8,400.0	2,305.5	-837.7	2,367.9	0.00	0.00	0.00
10,900.0	90.00	359.76	8,400.0	2,405.5	-838.1	2,467.6	0.00	0.00	0.00
11,000.0	90.00	359.76	8,400.0	2,505.5	-838.5	2,567.3	0.00	0.00	0.00
11,100.0	90.00	359.76	8,400.0	2,605.5	-838.9	2,667.0	0.00	0.00	0.00
11,200.0	90.00	359.76	8,400.0	2,705.5	-839.3	2,766.6	0.00	0.00	0.00
11,300.0	90.00	359.76	8,400.0	2,805.5	-839.8	2,866.3	0.00	0.00	0.00
11,400.0	90.00	359.76	8,400.0	2,905.5	-840.2	2,966.0	0.00	0.00	0.00
11,500.0	90.00	359.76	8,400.0	3,005.5	-840.6	3,065.7	0.00	0.00	0.00
11,600.0	90.00	359.76	8,400.0	3,105.5	-841.0	3,165.4	0.00	0.00	0.00
11,700.0	90.00	359.76	8,400.0	3,205.5	-841.4	3,265.0	0.00	0.00	0.00
11,800.0	90.00	359.76	8,400.0	3,305.5	-841.8	3,364.7	0.00	0.00	0.00
11,900.0	90.00	359.76	8,400.0	3,405.5	-842.2	3,464.4	0.00	0.00	0.00
12,000.0	90.00	359.76	8,400.0	3,505.5	-842.7	3,564.1	0.00	0.00	0.00
12,100.0	90.00	359.76	8,400.0	3,605.5	-843.1	3,663.7	0.00	0.00	0.00
12,200.0	90.00	359.76	8,400.0	3,705.5	-843.5	3,763.4	0.00	0.00	0.00
12,300.0	90.00	359.76	8,400.0	3,805.5	-843.9	3,863.1	0.00	0.00	0.00
12,400.0	90.00	359.76	8,400.0	3,905.5	-844.3	3,962.8	0.00	0.00	0.00
12,500.0	90.00	359.76	8,400.0	4,005.5	-844.7	4,062.5	0.00	0.00	0.00
12,600.0	90.00	359.76	8,400.0	4,105.5	-845.2	4,162.1	0.00	0.00	0.00
12,700.0	90.00	359.76	8,400.0	4,205.5	-845.6	4,261.8	0.00	0.00	0.00
12,800.0	90.00	359.76	8,400.0	4,305.5	-846.0	4,361.5	0.00	0.00	0.00
12,900.0	90.00	359.76	8,400.0	4,405.5	-846.4	4,461.2	0.00	0.00	0.00
13,000.0	90.00	359.76	8,400.0	4,505.5	-846.8	4,560.9	0.00	0.00	0.00
13,100.0	90.00	359.76	8,400.0	4,605.5	-847.2	4,660.5	0.00	0.00	0.00
13,200.0	90.00	359.76	8,400.0	4,705.5	-847.7	4,760.2	0.00	0.00	0.00
13,300.0	90.00	359.76	8,400.0	4,805.5	-848.1	4,859.9	0.00	0.00	0.00
13,400.0	90.00	359.76	8,400.0	4,905.5	-848.5	4,959.6	0.00	0.00	0.00
13,500.0	90.00	359.76	8,400.0	5,005.5	-848.9	5,059.2	0.00	0.00	0.00
13,600.0	90.00	359.76	8,400.0	5,105.5	-849.3	5,158.9	0.00	0.00	0.00
13,700.0	90.00	359.76	8,400.0	5,205.5	-849.7	5,258.6	0.00	0.00	0.00
13,800.0	90.00	359.76	8,400.0	5,305.5	-850.1	5,358.3	0.00	0.00	0.00
13,900.0	90.00	359.76	8,400.0	5,405.5	-850.6	5,458.0	0.00	0.00	0.00
14,000.0	90.00	359.76	8,400.0	5,505.5	-851.0	5,557.6	0.00	0.00	0.00



KLX
Well Planning Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well Ripley 35-26 SB Fed Com 201H
Company:	Marathon Oil Permian LLC	TVD Reference:	KB=26.5 @ 2981.5usft (KB=26.5)
Project:	Eddy County, New Mexico (NAD 27)	MD Reference:	KB=26.5 @ 2981.5usft (KB=26.5)
Site:	Sec 35, T24S, R28E	North Reference:	Grid
Well:	Ripley 35-26 SB Fed Com 201H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
14,100.0	90.00	359.76	8,400.0	5,605.5	-851.4	5,657.3	0.00	0.00	0.00
14,200.0	90.00	359.76	8,400.0	5,705.5	-851.8	5,757.0	0.00	0.00	0.00
14,300.0	90.00	359.76	8,400.0	5,805.5	-852.2	5,856.7	0.00	0.00	0.00
14,400.0	90.00	359.76	8,400.0	5,905.5	-852.6	5,956.4	0.00	0.00	0.00
14,500.0	90.00	359.76	8,400.0	6,005.5	-853.1	6,056.0	0.00	0.00	0.00
14,600.0	90.00	359.76	8,400.0	6,105.5	-853.5	6,155.7	0.00	0.00	0.00
14,700.0	90.00	359.76	8,400.0	6,205.5	-853.9	6,255.4	0.00	0.00	0.00
14,800.0	90.00	359.76	8,400.0	6,305.5	-854.3	6,355.1	0.00	0.00	0.00
14,900.0	90.00	359.76	8,400.0	6,405.5	-854.7	6,454.7	0.00	0.00	0.00
15,000.0	90.00	359.76	8,400.0	6,505.5	-855.1	6,554.4	0.00	0.00	0.00
15,100.0	90.00	359.76	8,400.0	6,605.5	-855.6	6,654.1	0.00	0.00	0.00
15,200.0	90.00	359.76	8,400.0	6,705.5	-856.0	6,753.8	0.00	0.00	0.00
15,300.0	90.00	359.76	8,400.0	6,805.5	-856.4	6,853.5	0.00	0.00	0.00
15,400.0	90.00	359.76	8,400.0	6,905.5	-856.8	6,953.1	0.00	0.00	0.00
15,500.0	90.00	359.76	8,400.0	7,005.5	-857.2	7,052.8	0.00	0.00	0.00
15,600.0	90.00	359.76	8,400.0	7,105.5	-857.6	7,152.5	0.00	0.00	0.00
15,700.0	90.00	359.76	8,400.0	7,205.5	-858.0	7,252.2	0.00	0.00	0.00
15,800.0	90.00	359.76	8,400.0	7,305.5	-858.5	7,351.9	0.00	0.00	0.00
15,900.0	90.00	359.76	8,400.0	7,405.5	-858.9	7,451.5	0.00	0.00	0.00
16,000.0	90.00	359.76	8,400.0	7,505.5	-859.3	7,551.2	0.00	0.00	0.00
16,100.0	90.00	359.76	8,400.0	7,605.5	-859.7	7,650.9	0.00	0.00	0.00
16,200.0	90.00	359.76	8,400.0	7,705.5	-860.1	7,750.6	0.00	0.00	0.00
16,300.0	90.00	359.76	8,400.0	7,805.5	-860.5	7,850.3	0.00	0.00	0.00
16,400.0	90.00	359.76	8,400.0	7,905.5	-861.0	7,949.9	0.00	0.00	0.00
16,500.0	90.00	359.76	8,400.0	8,005.5	-861.4	8,049.6	0.00	0.00	0.00
16,600.0	90.00	359.76	8,400.0	8,105.5	-861.8	8,149.3	0.00	0.00	0.00
16,700.0	90.00	359.76	8,400.0	8,205.5	-862.2	8,249.0	0.00	0.00	0.00
16,800.0	90.00	359.76	8,400.0	8,305.5	-862.6	8,348.6	0.00	0.00	0.00
16,900.0	90.00	359.76	8,400.0	8,405.5	-863.0	8,448.3	0.00	0.00	0.00
17,000.0	90.00	359.76	8,400.0	8,505.5	-863.5	8,548.0	0.00	0.00	0.00
17,100.0	90.00	359.76	8,400.0	8,605.5	-863.9	8,647.7	0.00	0.00	0.00
17,200.0	90.00	359.76	8,400.0	8,705.5	-864.3	8,747.4	0.00	0.00	0.00
17,300.0	90.00	359.76	8,400.0	8,805.5	-864.7	8,847.0	0.00	0.00	0.00
17,400.0	90.00	359.76	8,400.0	8,905.5	-865.1	8,946.7	0.00	0.00	0.00
17,500.0	90.00	359.76	8,400.0	9,005.5	-865.5	9,046.4	0.00	0.00	0.00
17,600.0	90.00	359.76	8,400.0	9,105.5	-865.9	9,146.1	0.00	0.00	0.00
17,700.0	90.00	359.76	8,400.0	9,205.5	-866.4	9,245.8	0.00	0.00	0.00
17,800.0	90.00	359.76	8,400.0	9,305.5	-866.8	9,345.4	0.00	0.00	0.00
17,900.0	90.00	359.76	8,400.0	9,405.5	-867.2	9,445.1	0.00	0.00	0.00
18,000.0	90.00	359.76	8,400.0	9,505.5	-867.6	9,544.8	0.00	0.00	0.00
18,100.0	90.00	359.76	8,400.0	9,605.5	-868.0	9,644.5	0.00	0.00	0.00
18,200.0	90.00	359.76	8,400.0	9,705.5	-868.4	9,744.1	0.00	0.00	0.00
18,300.0	90.00	359.76	8,400.0	9,805.5	-868.9	9,843.8	0.00	0.00	0.00
18,400.0	90.00	359.76	8,400.0	9,905.5	-869.3	9,943.5	0.00	0.00	0.00
18,500.0	90.00	359.76	8,400.0	10,005.5	-869.7	10,043.2	0.00	0.00	0.00
18,600.0	90.00	359.76	8,400.0	10,105.5	-870.1	10,142.9	0.00	0.00	0.00
18,700.0	90.00	359.76	8,400.0	10,205.5	-870.5	10,242.5	0.00	0.00	0.00
TD at 18795.4									
18,795.4	90.00	359.76	8,400.0	10,300.9	-870.9	10,337.6	0.00	0.00	0.00



KLX
Well Planning Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well Ripley 35-26 SB Fed Com 201H
Company:	Marathon Oil Permian LLC	TVD Reference:	KB=26.5 @ 2981.5usft (KB=26.5)
Project:	Eddy County, New Mexico (NAD 27)	MD Reference:	KB=26.5 @ 2981.5usft (KB=26.5)
Site:	Sec 35, T24S, R28E	North Reference:	Grid
Well:	Ripley 35-26 SB Fed Com 201H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Design Targets									
Target Name	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- hit/miss target	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)		
- Shape									
Ripley 35-26 SB Fed Co	0.00	0.00	7,627.0	-269.6	-827.0	424,413.20	585,864.66	32° 9' 59.488 N	104° 3' 21.037 W
- plan hits target center									
- Point									
Ripley 35-26 SB Fed Co	0.00	0.00	8,400.0	-219.6	-827.2	424,463.19	585,864.45	32° 9' 59.983 N	104° 3' 21.038 W
- plan misses target center by 202.8usft at 8373.5usft MD (8249.9 TVD, -83.2 N, -827.7 E)									
- Point									
Ripley 35-26 SB Fed Co	0.00	0.00	8,400.0	10,300.9	-870.9	434,983.73	585,820.70	32° 11' 44.099 N	104° 3' 21.231 W
- plan hits target center									
- Point									

Plan Annotations				
Measured Depth	Vertical Depth	Local Coordinates		Comment
(usft)	(usft)	+N/-S (usft)	+E/-W (usft)	
2,000.0	2,000.0	0.0	0.0	Start Build 2.00
2,479.7	2,477.4	-12.4	-38.1	Start 4738.4 hold at 2479.7 MD
7,218.1	7,149.6	-257.2	-788.9	Start Drop -2.00
7,697.7	7,627.0	-269.6	-827.0	Start 200.0 hold at 7697.7 MD
7,897.7	7,827.0	-269.6	-827.0	Start DLS 10.00 TFO 359.76
8,797.7	8,400.0	303.3	-829.3	Start 9997.7 hold at 8797.7 MD
18,795.4	8,400.0	10,300.9	-870.9	TD at 18795.4



TEC-LOCK WEDGE

5.500" 23 LB/FT (.415"Wall)

BENTELER P110 CY

Pipe Body Data

Nominal OD:	5.500	in
Nominal Wall:	.415	in
Nominal Weight:	23.00	lb/ft
Plain End Weight:	22.56	lb/ft
Material Grade:	P110 CY	
Mill/Specification:	BENTELER	
Yield Strength:	125,000	psi
Tensile Strength:	130,000	psi
Nominal ID:	4.670	in
API Drift Diameter:	4.545	in
Special Drift Diameter:	None	in
RBW:	87.5 %	
Body Yield:	829,000	lbf
Burst:	16,510	psi
Collapse:	16,910	psi

Connection Data

Standard OD:	5.950	in
Pin Bored ID:	4.670	in
Critical Section Area:	6.457	in ²
Tensile Efficiency:	97.4 %	
Compressive Efficiency:	100 %	
Longitudinal Yield Strength:	807,000	lbf
Compressive Limit:	829,000	lbf
Internal Pressure Rating:	16,510	psi
External Pressure Rating:	16,910	psi
Maximum Bend:	101.5	°/100ft

Operational Data

Minimum Makeup Torque:	16,400	ft*lbf
Optimum Makeup Torque:	20,500	ft*lbf
Maximum Makeup Torque:	44,300	ft*lbf
Minimum Yield:	49,200	ft*lbf
Makeup Loss:	5.97	in

Notes Operational Torque is equivalent to the Maximum Make-Up Torque

Generated on Mar 12, 2019





Technical Data Sheet

9 5/8" 40.00 lbs/ft. P110HC - BTC

Mechanical Properties

Minimum Yield Strength	psi.	110,000
Maximum Yield Strength	psi.	140,000
Minimum Tensile Strength	psi.	125,000

Dimensions

		Pipe	BTC	LTC	STC
Outside Diameter	in.	9.625	10.625	-	-
Wall Thickness	in.	0.395	-	-	-
Inside Diameter	in.	8.835	-	-	-
Standard Drift	in.	-	-	-	-
Alternate Drift	in.	8.750	-	-	-
Plain End Weight	lbs/ft.	-	-	-	-
Nominal Linear Weight	lbs/ft.	40.00	-	-	-

Performance

		Pipe	BTC	LTC	STC
Minimum Collapse Pressure	psi.	4,230	-	-	-
Minimum Internal Yield Pressure	psi.	7,910	7,910	-	-
Minimum Pipe Body Yield Strength	lbs.	1,260 x 1,000	-	-	-
Joint Strength	lbs.	-	1,266 x 1,000	-	-

Make-Up Torques

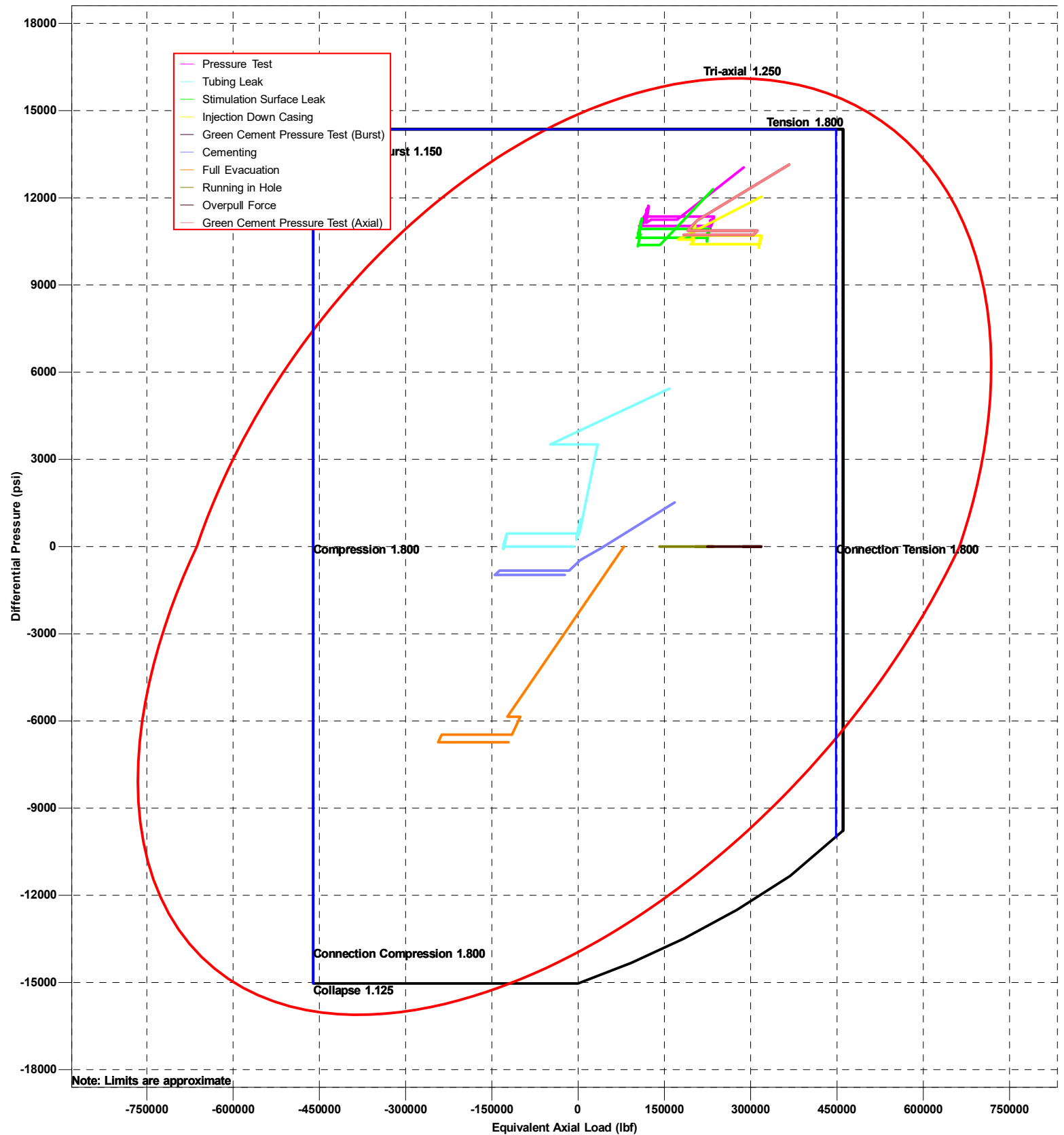
		Pipe	BTC	LTC	STC
Make-Up Loss	in.	-	4.81	-	-
Optimum Make-Up Torque	ft/lbs.	-	-	-	-
Maximum Operational Make-Up Torque	ft/lbs.	-	-	-	-

Disclaimer: The content of this Technical Data Sheet is for general information only and does not guarantee performance and/or accuracy, which can only be determined by a professional expert with the specific installation and operation parameters. Information printed or downloaded may not be current and no longer in control by Axis Pipe and Tube. Anyone using the information herein does so at his or her own risk. To verify that you have the latest technical information, please contact Axis Pipe and Tube Technical Sales +1 (979) 599-7600, www.axispipeandtube.com

File: Basis of Design Malaga WA -New Design *

Date: December 07, 2021 Page: 1

Design Limits (5 1/2" Production Casing - Section 1)



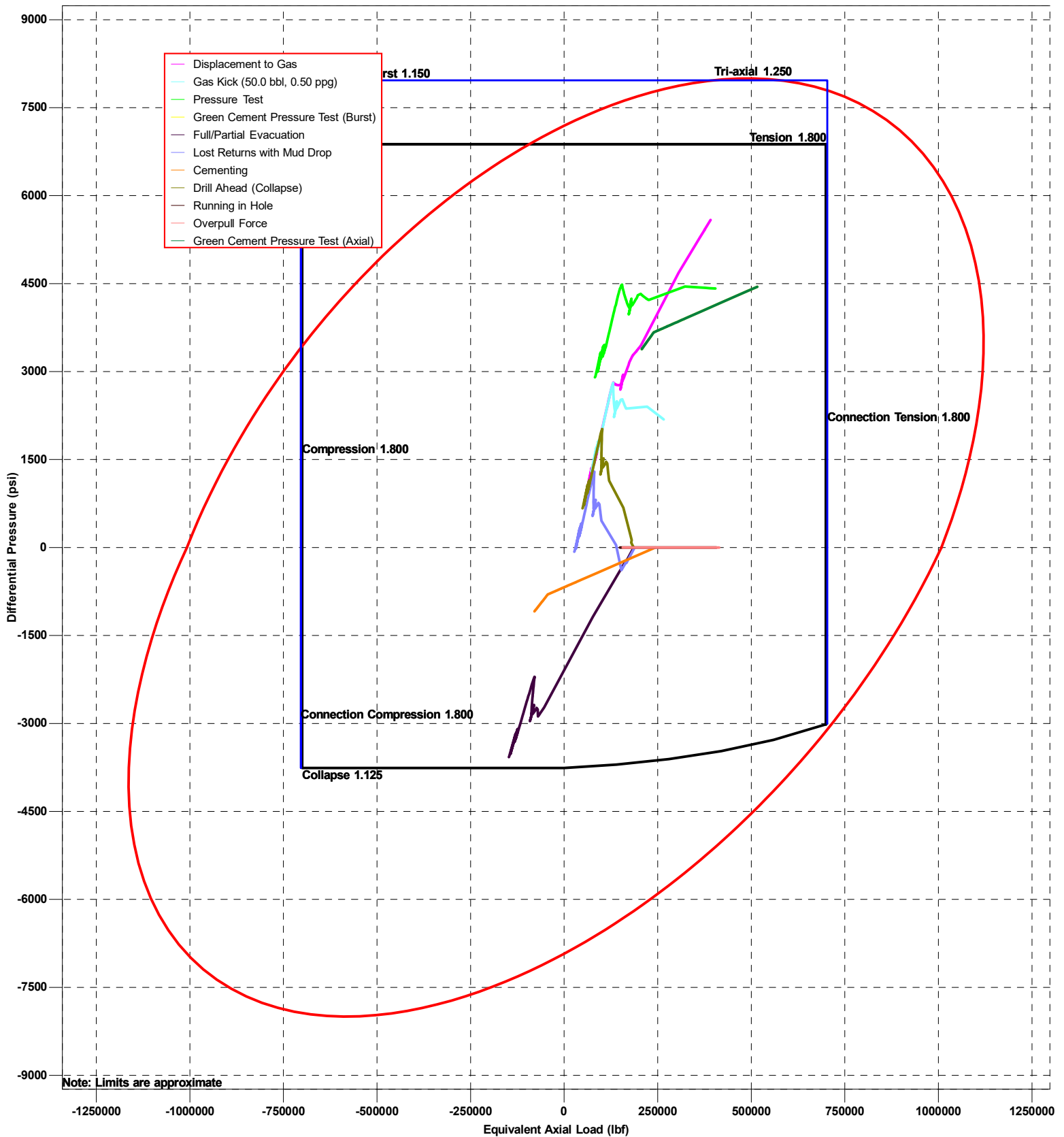
MALAGA TB & WA - New Design

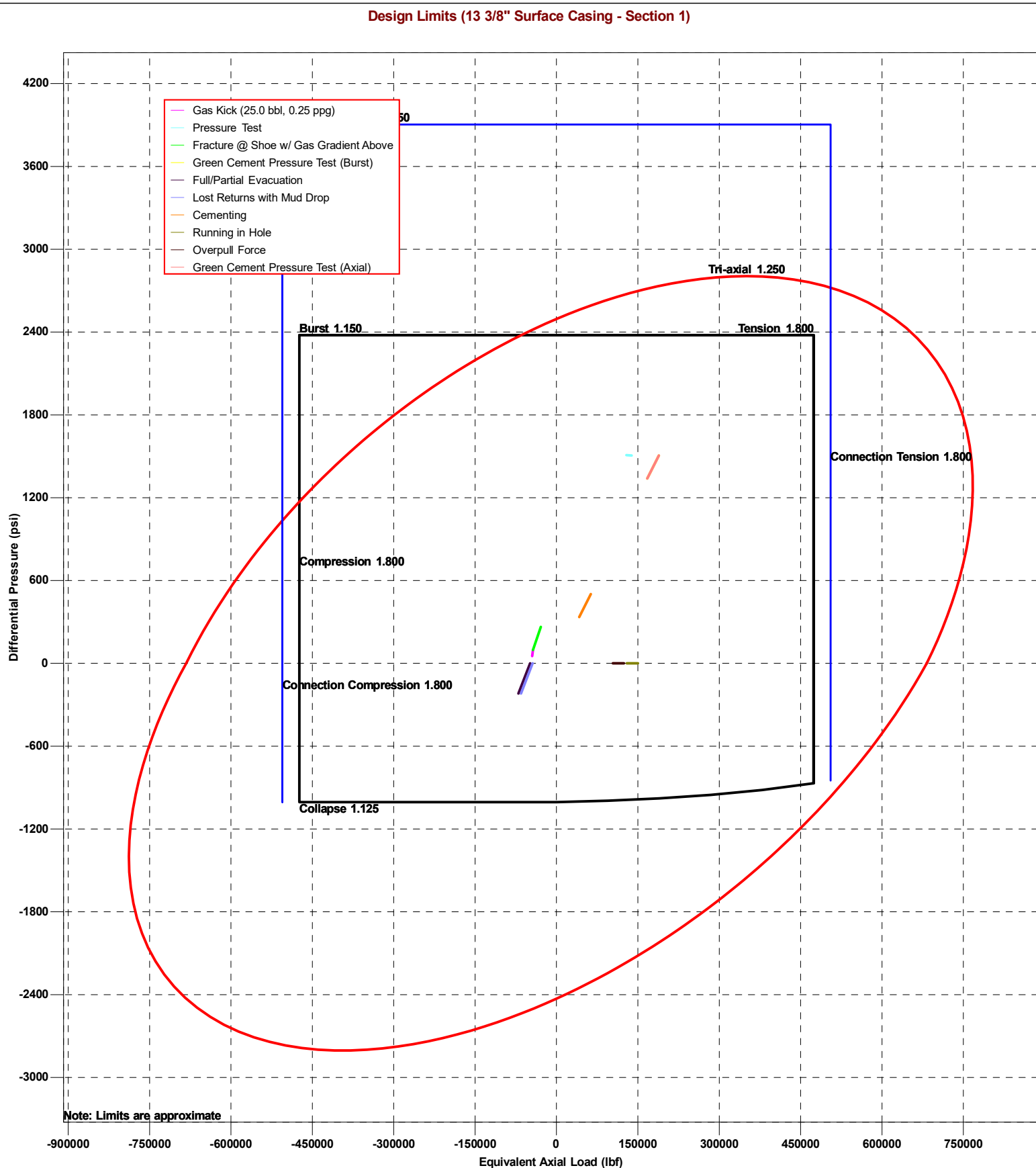
StressCheck 5000.16.1.02 Build 14

File: Basis of Design Malaga WA -New Design *

Date: December 07, 2021 Page: 1

Design Limits (9 5/8" Intermediate Casing - Section 1)





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 121466

CONDITIONS

Operator: MARATHON OIL PERMIAN LLC 990 Town & Country Blvd. Houston, TX 77024	OGRID: 372098
	Action Number: 121466
	Action Type: [C-103] NOI Change of Plans (C-103A)

CONDITIONS

Created By	Condition	Condition Date
jagarcia	New property code is 333485	10/24/2022