

Form 3160-3
(June 2015)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
APPLICATION FOR PERMIT TO DRILL OR REENTER

FORM APPROVED
OMB No. 1004-0137
Expires: January 31, 2018

1a. Type of work: ☒ DRILL ☐ REENTER 1b. Type of Well: ☒ Oil Well ☐ Gas Well ☐ Other 1c. Type of Completion: ☐ Hydraulic Fracturing ☒ Single Zone ☐ Multiple Zone		5. Lease Serial No. NMNM110838 6. If Indian, Allottee or Tribe Name 7. If Unit or CA Agreement, Name and No. 8. Lease Name and Well No. AUDACIOUS 19 FED 513H
2. Name of Operator EOG RESOURCES INCORPORATED		9. API Well No. 30-025-49466
3a. Address 1111 BAGBY SKY LOBBY 2, HOUSTON, TX 77002	3b. Phone No. (include area code) (713) 651-7000	10. Field and Pool, or Exploratory WC-025 G-08 S253235G; LWR BONE SPRING
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface LOT 3 / 2246 FSL / 1071 FWL / LAT 32.1150013 / LONG -103.6164464 At proposed prod. zone LOT 4 / 100 FSL / 330 FWL / LAT 32.0945882 / LONG -103.6188526		11. Sec., T. R. M. or Blk. and Survey or Area SEC 19/T25S/R33E/NMP
14. Distance in miles and direction from nearest town or post office*		12. County or Parish LEA
13. State NM		
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 100 feet	16. No of acres in lease 	17. Spacing Unit dedicated to this well 480.76
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 33 feet	19. Proposed Depth 10877 feet / 18473 feet	20. BLM/BIA Bond No. in file FED:
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3463 feet	22. Approximate date work will start* 10/15/2021	23. Estimated duration 25 days
24. Attachments		

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, and the Hydraulic Fracturing rule per 43 CFR 3162.3-3 (as applicable)

- | | |
|---|---|
| 1. Well plat certified by a registered surveyor.
2. A Drilling Plan.
3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office). | 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator certification.
6. Such other site specific information and/or plans as may be requested by the BLM. |
|---|---|

25. Signature Star L Harrell	Name (Printed/Typed) Star L Harrell	Date 10/15/2021
Title		
Approved by (Signature) (Electronic Submission)	Name (Printed/Typed)	Date
Title Assistant Field Manager Lands & Minerals	Office	

Application approval 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.
Conditions of approval, if any, are attached.

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.

KZ
10/21/2021

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

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

FORM C-102

Revised August 1, 2011

Submit one copy to appropriate

District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-025-49466	² Pool Code 97903	³ Pool Name WC025 G-08 S253235G; Lower Bone Spring
⁴ Property Code 322220	⁵ Property Name AUDACIOUS 19 FED	⁶ Well Number 513H
⁷ OGRID No. 7377	⁸ Operator Name EOG RESOURCES, INC.	⁹ Elevation 3463'

¹⁰Surface Location

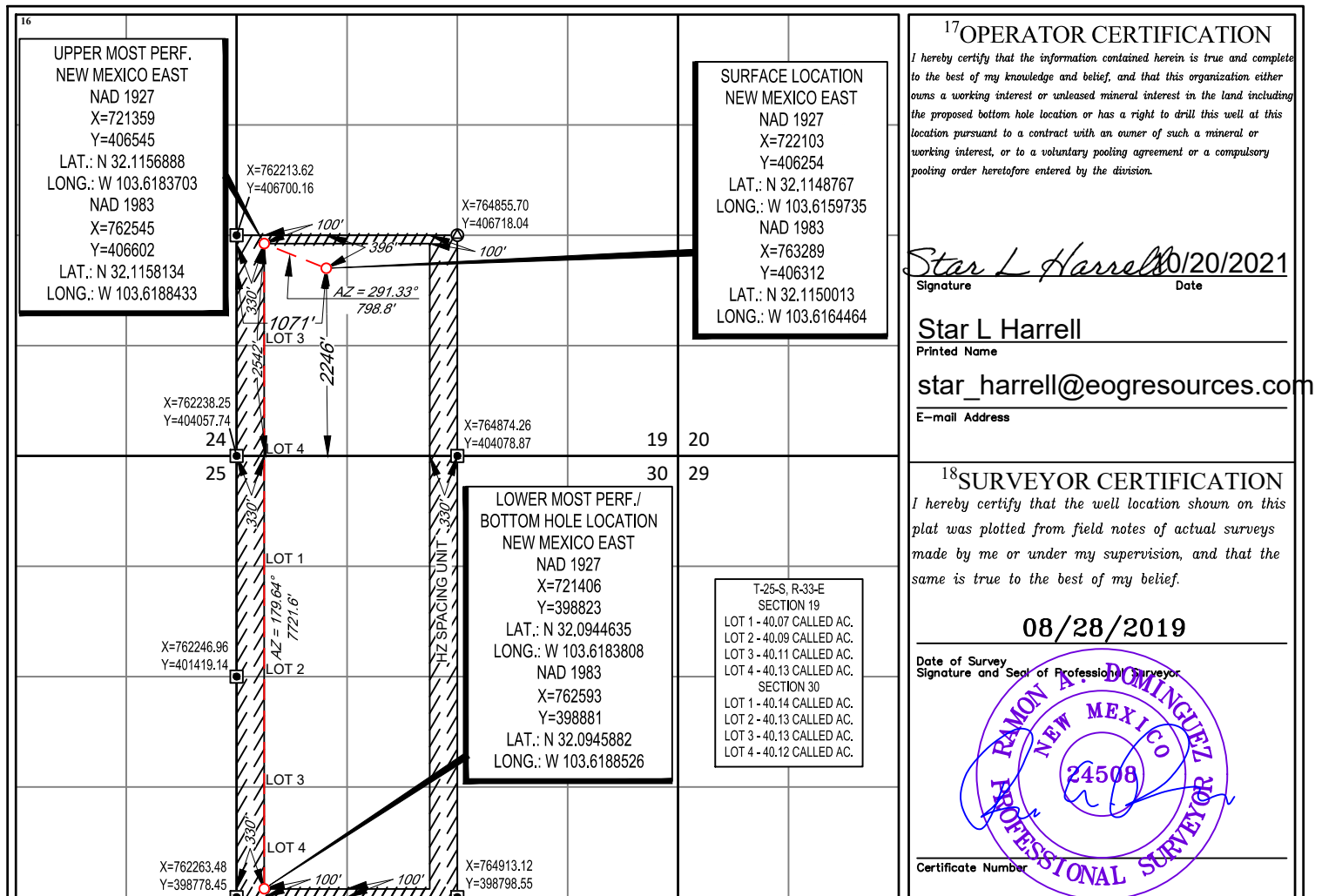
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
3	19	25-S	33-E	-	2246'	SOUTH	1071'	WEST	LEA

¹¹Bottom 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
4	30	25-S	33-E	-	100'	SOUTH	330'	WEST	LEA

¹² Dedicated Acres 480.76	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.



Well Name: AUDACIOUS 19 FED	Well Location: T25S / R33E / SEC 19 / LOT 3 / 32.1150013 / -103.6168727	County or Parish/State: LEA / NM
Well Number: 501Y	Type of Well: OIL WELL	Allottee or Tribe Name:
Lease Number: NMNM110838	Unit or CA Name:	Unit or CA Number:
US Well Number: 300254898300X1	Well Status: Drilling Well	Operator: EOG RESOURCES INCORPORATED

Notice of Intent

Sundry ID: 2640148

Type of Submission: Notice of Intent	Type of Action: Other
Date Sundry Submitted: 10/15/2021	Time Sundry Submitted: 11:53
Date proposed operation will begin: 10/14/2021	

Procedure Description: EOG respectfully requests an amendment to our approved APD for this well to reflect the following changes: Change SHL to T-25-S, R-33-E, Sec 19, 2246' FSL, 1071' FWL, Lea Co., N.M. Skid the rig to the new location due to P&A of 501Y.

Surface Disturbance

Is any additional surface disturbance proposed?: No

NOI Attachments

Procedure Description

- Audacious_19_Fed_501H_Sundry_Info___Rev_BHL_10.15.2021_20211015115007.pdf
- Audacious_19_Fed_501H_Wall_Plot_20211015114930.pdf
- Audacious_19_Fed_501H_Planning_Report_20211015114902.pdf
- AUDACIOUS_19_FED_501H_3160_20211015114827.pdf
- AUDACIOUS_19_FED_501H_C102_20211015114825.pdf

Received by OCD: 10/20/2021 6:24:35 AM

Page 4 of 23

Well Name: AUDACIOUS 19 FED	Well Location: T25S / R33E / SEC 19 / LOT 3 / 32.1150013 / -103.6168727	County or Parish/State: LEA / NM
Well Number: 501Y	Type of Well: OIL WELL	Allottee or Tribe Name:
Lease Number: NMNM110838	Unit or CA Name:	Unit or CA Number:
US Well Number: 300254898300X1	Well Status: Drilling Well	Operator: EOG RESOURCES INCORPORATED

Conditions of Approval

Specialist Review

AUDACIOUS_19_FED_501H_3160_20211015114827_20211015162205.pdf

Operator Certification

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 submission of Form 3160-5 or a Sundry Notice.

Operator Electronic Signature: STAR HARRELL

Signed on: OCT 15, 2021 11:52 AM

Name: EOG RESOURCES INCORPORATED

Title: Regulatory Specialist

Street Address: 5509 CHAMPIONS DRIVE

City: MIDLANDState: TX

Phone: (432) 848-9161

Email address: STAR_HARRELL@EOGRESOURCES.COM

Field Representative

Representative Name: Eric Brorman

Street Address: 5509 Champions Drive

City: MidlandState: TXZip: 79706

Phone: (432)556-1276

Email address: eric_brorman@eogresources.com

BLM Point of Contact

BLM POC Name: CHRISTOPHER WALLS

BLM POC Title: Petroleum Engineer

BLM POC Phone: 5752342234

BLM POC Email Address: cwalls@blm.gov

Disposition: Approved

Disposition Date: 10/15/2021

Signature: Chris Walls



Audacious 19 Fed 513H

Revised Permit Information 10/15/2021:

Well Name: Audacious 19 Fed 501H

Location: SHL: 2246' FSL & 1071' FWL, Section 19, T-25-S, R-33-E, Lea Co., N.M.

BHL: 100' FSL & 330' FWL, Section 30, T-25-S, R-33-E, Lea Co., N.M.

Casing Program:

Hole Size	Interval	Csg OD	Weight	Grade	Conn	DFmin Collapse	DFmin Burst	DFmin Tension
16"	0' - 1,060'	13.375"	54.5#	J-55	STC	1.125	1.25	1.6
12.25"	0' - 4,000'	9.625"	40#	J-55	LTC	1.125	1.25	1.6
12.25"	4,000' - 5,080'	9.625"	40#	HCK-55	LTC	1.125	1.25	1.6
8.75"	0' - 11,190'	6"	24#	P-110 HP	Eagle	1.125	1.25	1.6
8.5"	11,190' - 18,483'	6"	24.5#	ICYP-110	TXP	1.125	1.25	1.6

Variance is requested to waive the centralizer requirements for the 9-5/8" casing in the 12-1/4" hole size. An expansion additive will be utilized, in the cement slurry, for the entire length of the 12-1/4" hole interval to maximize cement bond and zonal isolation.

Variance is also requested to waive any centralizer requirements for the 6" casing in the 8-3/4" and 8-1/2" hole sizes. An expansion additive will be utilized, in the cement slurry, for the entire length of the 8-3/4" and 8-1/2" hole intervals to maximize cement bond and zonal isolation.

Cementing Program:

Depth	No. Sacks	Wt. ppg	Yld Ft3/sk	Slurry Description
1,060' 13.375"	320	13.5	1.73	Lead: Class C + 4.0% Bentonite Gel + 0.5% CaCl ₂ + 0.25 lb/sk Cello-Flake (TOC @ Surface)
	100	14.8	1.34	Tail: Class C + 0.6% FL-62 + 0.25 lb/sk Cello-Flake + 0.2% Sodium Metasilicate (TOC @ 860')
5,080' 9.625"	740	12.7	2.22	Lead: Class C + 10% NaCl + 6% Bentonite Gel + 3% MagOx (TOC @ Surface)
	320	14.8	1.32	Tail: Class C + 10% NaCl + 3% MagOx (TOC @ 4,070')
18,483' 6"	520	11.0	3.21	Lead: Class H + 0.4% Halad-344 + 0.35% HR-601 + 3% Microbond (TOC @ 4,584')
	1690	14.4	1.2	Tail: Class H + 0.4% Halad-344 + 0.35% HR-601 + 3% Microbond (TOC @ 10,440')

**Audacious 19 Fed 513H**

Additive	Purpose
Bentonite Gel	Lightweight/Lost circulation prevention
Calcium Chloride	Accelerator
Cello-flake	Lost circulation prevention
Sodium Metasilicate	Accelerator
MagOx	Expansive agent
Pre-Mag-M	Expansive agent
Sodium Chloride	Accelerator
FL-62	Fluid loss control
Halad-344	Fluid loss control
Halad-9	Fluid loss control
HR-601	Retarder
Microbond	Expansive Agent

Note: Cement volumes based on bit size plus at least 25% excess in the open hole plus 10% excess in the cased-hole overlap section.

Mud Program:

Depth	Type	Weight (ppg)	Viscosity	Water Loss
0 – 1,060'	Fresh - Gel	8.6-8.8	28-34	N/c
1,060' – 5,080'	Brine	8.6-8.8	28-34	N/c
5,080' – 18,483'	Oil Base	8.8-9.5	58-68	N/c - 6

Wellhead:

EOG Resources Inc. (EOG) respectfully requests a variance from the minimum standards for well control equipment testing of Onshore Order No. 2 (item III.A.2.i) to allow a testing schedule of the blow out preventer (BOP) and blow out prevention equipment (BOPE) to include the following:

- Full BOPE test at first installation on the pad.
- Full BOPE test every 30 days per Onshore Order No. 2.
- Function test BOP elements per Onshore Order No. 2.
- Break testing BOP and BOPE coupled with batch drilling operations and production sections that do not penetrate the Wolfcamp or deeper formations.
- After the well section is cemented the BOP will be disconnected from the wellhead and walked with the rig to another well on the pad. The cemented well will be secured with a blind flange and a pressure gauge for monitoring.



Audacious 19 Fed 513H

2246' FSL

Revised Wellbore

KB: 3488'

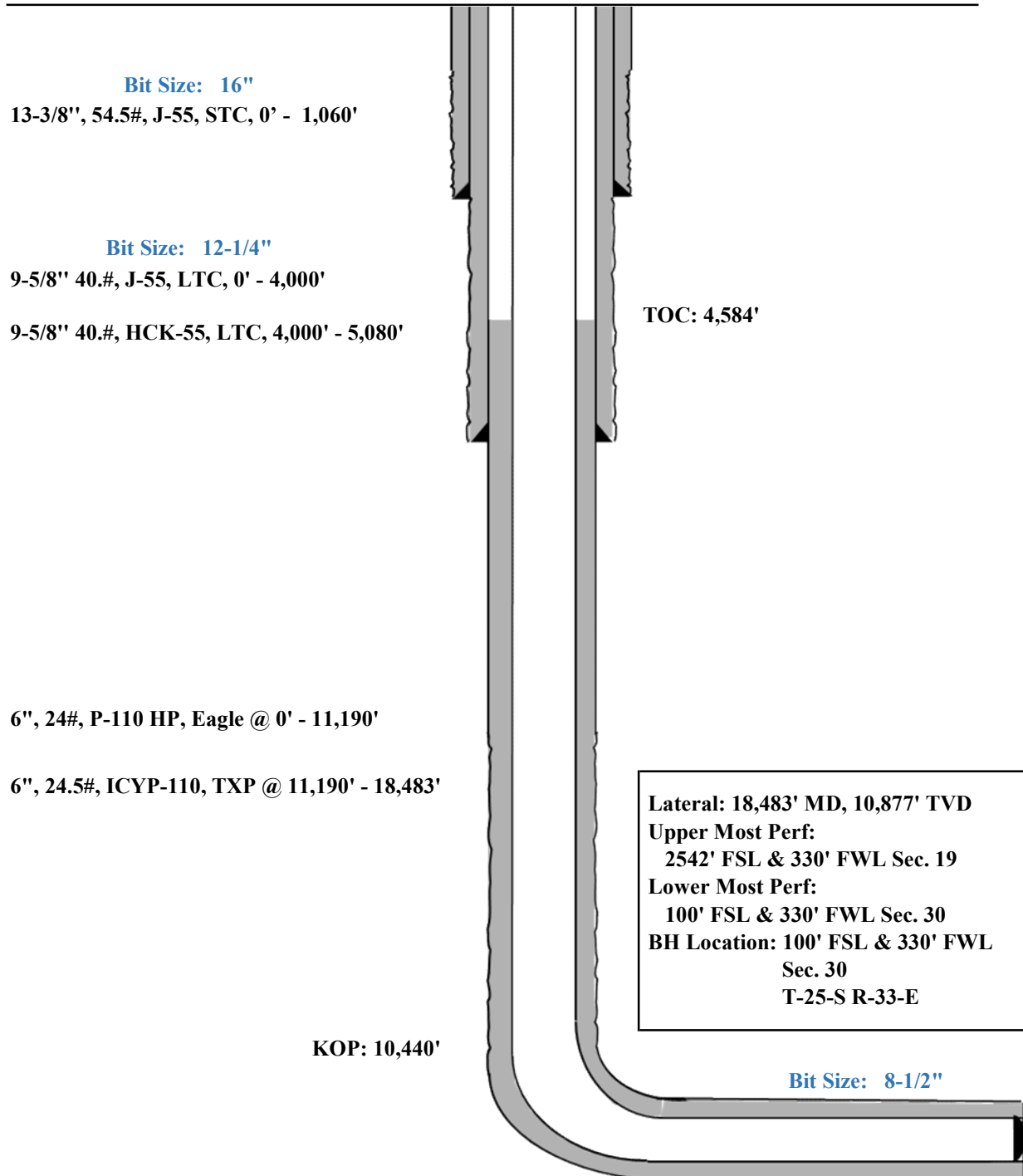
1071' FWL

GL: 3463'

Section 19

T-25-S, R-33-E

API: 30-025-*****





Midland

Lea County, NM (NAD 83 NME)

Audacious 19 Fed

#513H

142951

OH

Plan: Plan #1

Standard Planning Report

19 October, 2021



EOG Resources

Planning Report

Database:	PEDM	Local Co-ordinate Reference:	Well #513H
Company:	Midland	TVD Reference:	KB = 25' @ 3487.0usft
Project:	Lea County, NM (NAD 83 NME)	MD Reference:	KB = 25' @ 3487.0usft
Site:	Audacious 19 Fed	North Reference:	Grid
Well:	#513H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Project	Lea County, NM (NAD 83 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	Audacious 19 Fed				
Site Position:		Northing:	406,251.00 usft	Latitude:	32° 6' 53.415 N
From:	Map	Easting:	763,097.00 usft	Longitude:	103° 37' 1.440 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "		

Well	#513H					
Well Position	+N/-S	0.0 usft	Northing:	406,312.00 usft	Latitude:	32° 6' 54.006 N
	+E/-W	0.0 usft	Easting:	763,289.00 usft	Longitude:	103° 36' 59.203 W
Position Uncertainty		0.0 usft	Wellhead Elevation:	usft	Ground Level:	3,462.0 usft
Grid Convergence:	0.38 °					

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2020	10/14/2021	6.52	59.78	47,390.19332026

Design	Plan #1				
Audit Notes:					
Version:		Phase:	PLAN	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)	
	0.0	0.0	0.0	185.36	

Plan Survey Tool Program	Date	10/15/2021			
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks	
1	0.0	18,084.5 Plan #1 (OH)	EOG MWD+IFR1		
			MWD + IFR1		

EOG Resources

Planning Report



Database:	PEDM	Local Co-ordinate Reference:	Well #513H
Company:	Midland	TVD Reference:	KB = 25' @ 3487.0usft
Project:	Lea County, NM (NAD 83 NME)	MD Reference:	KB = 25' @ 3487.0usft
Site:	Audacious 19 Fed	North Reference:	Grid
Well:	#513H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
500.0	0.00	0.00	500.0	0.0	0.0	0.00	0.00	0.00	0.00	
600.0	2.00	220.00	600.0	-1.3	-1.1	2.00	2.00	0.00	220.00	
2,701.3	2.00	220.00	2,700.0	-57.5	-48.3	0.00	0.00	0.00	0.00	
3,104.9	8.50	290.94	3,101.9	-52.2	-80.7	2.00	1.61	17.58	84.39	
7,022.5	8.50	290.94	6,976.5	154.8	-621.6	0.00	0.00	0.00	0.00	
7,447.6	0.00	179.65	7,400.0	166.0	-651.0	2.00	-2.00	0.00	180.00	
10,165.6	0.00	179.65	10,118.0	166.0	-651.0	0.00	0.00	0.00	0.00	KOP (Audacious 19 F
11,062.6	89.70	187.54	10,690.9	-399.0	-725.8	10.00	10.00	0.00	187.54	
11,259.6	89.69	179.66	10,692.0	-595.5	-738.1	4.00	-0.01	-4.00	-90.13	
11,622.1	89.69	179.66	10,694.0	-958.0	-736.0	0.00	0.00	0.00	0.00	TGT 1 (Audacious 19
11,634.7	89.94	179.65	10,694.0	-970.6	-735.9	2.00	2.00	-0.10	-2.80	
13,428.1	89.94	179.65	10,696.0	-2,764.0	-724.8	0.00	0.00	0.00	0.00	TGT 2 (Audacious 19
13,441.4	90.20	179.65	10,696.0	-2,777.3	-724.8	2.00	2.00	0.00	0.01	
15,133.9	90.20	179.65	10,690.0	-4,469.7	-714.3	0.00	0.00	0.00	0.00	TGT 3 (Audacious 19
15,136.9	90.14	179.65	10,690.0	-4,472.7	-714.3	2.00	-2.00	0.00	-180.00	
16,739.3	90.14	179.65	10,686.0	-6,075.1	-704.4	0.00	0.00	0.00	0.00	TGT 4 (Audacious 19
16,742.2	90.09	179.65	10,686.0	-6,078.0	-704.4	2.00	-2.00	0.00	180.00	
18,085.2	90.09	179.65	10,684.0	-7,421.0	-696.1	0.00	0.00	0.00	0.00	PBHL (Audacious 19

EOG Resources

Planning Report



Database:	PEDM	Local Co-ordinate Reference:	Well #513H
Company:	Midland	TVD Reference:	KB = 25' @ 3487.0usft
Project:	Lea County, NM (NAD 83 NME)	MD Reference:	KB = 25' @ 3487.0usft
Site:	Audacious 19 Fed	North Reference:	Grid
Well:	#513H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
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	2.00	220.00	600.0	-1.3	-1.1	1.4	2.00	2.00	0.00
700.0	2.00	220.00	699.9	-4.0	-3.4	4.3	0.00	0.00	0.00
800.0	2.00	220.00	799.9	-6.7	-5.6	7.2	0.00	0.00	0.00
900.0	2.00	220.00	899.8	-9.4	-7.9	10.0	0.00	0.00	0.00
1,000.0	2.00	220.00	999.7	-12.0	-10.1	12.9	0.00	0.00	0.00
1,100.0	2.00	220.00	1,099.7	-14.7	-12.3	15.8	0.00	0.00	0.00
1,200.0	2.00	220.00	1,199.6	-17.4	-14.6	18.7	0.00	0.00	0.00
1,300.0	2.00	220.00	1,299.6	-20.1	-16.8	21.5	0.00	0.00	0.00
1,400.0	2.00	220.00	1,399.5	-22.7	-19.1	24.4	0.00	0.00	0.00
1,500.0	2.00	220.00	1,499.4	-25.4	-21.3	27.3	0.00	0.00	0.00
1,600.0	2.00	220.00	1,599.4	-28.1	-23.6	30.1	0.00	0.00	0.00
1,700.0	2.00	220.00	1,699.3	-30.7	-25.8	33.0	0.00	0.00	0.00
1,800.0	2.00	220.00	1,799.2	-33.4	-28.0	35.9	0.00	0.00	0.00
1,900.0	2.00	220.00	1,899.2	-36.1	-30.3	38.8	0.00	0.00	0.00
2,000.0	2.00	220.00	1,999.1	-38.8	-32.5	41.6	0.00	0.00	0.00
2,100.0	2.00	220.00	2,099.1	-41.4	-34.8	44.5	0.00	0.00	0.00
2,200.0	2.00	220.00	2,199.0	-44.1	-37.0	47.4	0.00	0.00	0.00
2,300.0	2.00	220.00	2,298.9	-46.8	-39.3	50.2	0.00	0.00	0.00
2,400.0	2.00	220.00	2,398.9	-49.5	-41.5	53.1	0.00	0.00	0.00
2,500.0	2.00	220.00	2,498.8	-52.1	-43.7	56.0	0.00	0.00	0.00
2,600.0	2.00	220.00	2,598.8	-54.8	-46.0	58.9	0.00	0.00	0.00
2,701.3	2.00	220.00	2,700.0	-57.5	-48.3	61.8	0.00	0.00	0.00
2,800.0	2.94	261.87	2,798.6	-59.2	-51.9	63.8	2.00	0.96	42.42
2,900.0	4.62	278.91	2,898.4	-58.9	-58.4	64.1	2.00	1.68	17.04
3,000.0	6.48	286.57	2,997.9	-56.7	-67.8	62.8	2.00	1.86	7.66
3,104.9	8.50	290.94	3,101.9	-52.2	-80.7	59.5	2.00	1.93	4.17
3,200.0	8.50	290.94	3,196.0	-47.2	-93.8	55.8	0.00	0.00	0.00
3,300.0	8.50	290.94	3,294.9	-41.9	-107.6	51.8	0.00	0.00	0.00
3,400.0	8.50	290.94	3,393.8	-36.6	-121.4	47.8	0.00	0.00	0.00
3,500.0	8.50	290.94	3,492.7	-31.4	-135.3	43.9	0.00	0.00	0.00
3,600.0	8.50	290.94	3,591.6	-26.1	-149.1	39.9	0.00	0.00	0.00
3,700.0	8.50	290.94	3,690.5	-20.8	-162.9	35.9	0.00	0.00	0.00
3,800.0	8.50	290.94	3,789.4	-15.5	-176.7	31.9	0.00	0.00	0.00
3,900.0	8.50	290.94	3,888.3	-10.2	-190.5	28.0	0.00	0.00	0.00
4,000.0	8.50	290.94	3,987.2	-4.9	-204.3	24.0	0.00	0.00	0.00
4,100.0	8.50	290.94	4,086.1	0.3	-218.1	20.0	0.00	0.00	0.00
4,200.0	8.50	290.94	4,185.0	5.6	-231.9	16.1	0.00	0.00	0.00
4,300.0	8.50	290.94	4,283.9	10.9	-245.7	12.1	0.00	0.00	0.00
4,400.0	8.50	290.94	4,382.8	16.2	-259.5	8.1	0.00	0.00	0.00
4,500.0	8.50	290.94	4,481.7	21.5	-273.3	4.1	0.00	0.00	0.00
4,600.0	8.50	290.94	4,580.6	26.8	-287.1	0.2	0.00	0.00	0.00
4,700.0	8.50	290.94	4,679.5	32.0	-300.9	-3.8	0.00	0.00	0.00
4,800.0	8.50	290.94	4,778.4	37.3	-314.7	-7.8	0.00	0.00	0.00
4,900.0	8.50	290.94	4,877.3	42.6	-328.6	-11.7	0.00	0.00	0.00
5,000.0	8.50	290.94	4,976.2	47.9	-342.4	-15.7	0.00	0.00	0.00
5,100.0	8.50	290.94	5,075.1	53.2	-356.2	-19.7	0.00	0.00	0.00
5,200.0	8.50	290.94	5,174.0	58.5	-370.0	-23.7	0.00	0.00	0.00
5,300.0	8.50	290.94	5,272.9	63.7	-383.8	-27.6	0.00	0.00	0.00



EOG Resources

Planning Report

Database:	PEDM	Local Co-ordinate Reference:	Well #513H
Company:	Midland	TVD Reference:	KB = 25' @ 3487.0usft
Project:	Lea County, NM (NAD 83 NME)	MD Reference:	KB = 25' @ 3487.0usft
Site:	Audacious 19 Fed	North Reference:	Grid
Well:	#513H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
5,400.0	8.50	290.94	5,371.8	69.0	-397.6	-31.6	0.00	0.00	0.00
5,500.0	8.50	290.94	5,470.7	74.3	-411.4	-35.6	0.00	0.00	0.00
5,600.0	8.50	290.94	5,569.6	79.6	-425.2	-39.5	0.00	0.00	0.00
5,700.0	8.50	290.94	5,668.5	84.9	-439.0	-43.5	0.00	0.00	0.00
5,800.0	8.50	290.94	5,767.4	90.2	-452.8	-47.5	0.00	0.00	0.00
5,900.0	8.50	290.94	5,866.3	95.4	-466.6	-51.4	0.00	0.00	0.00
6,000.0	8.50	290.94	5,965.2	100.7	-480.4	-55.4	0.00	0.00	0.00
6,100.0	8.50	290.94	6,064.1	106.0	-494.2	-59.4	0.00	0.00	0.00
6,200.0	8.50	290.94	6,163.0	111.3	-508.0	-63.4	0.00	0.00	0.00
6,300.0	8.50	290.94	6,261.9	116.6	-521.8	-67.3	0.00	0.00	0.00
6,400.0	8.50	290.94	6,360.8	121.9	-535.7	-71.3	0.00	0.00	0.00
6,500.0	8.50	290.94	6,459.7	127.1	-549.5	-75.3	0.00	0.00	0.00
6,600.0	8.50	290.94	6,558.6	132.4	-563.3	-79.2	0.00	0.00	0.00
6,700.0	8.50	290.94	6,657.5	137.7	-577.1	-83.2	0.00	0.00	0.00
6,800.0	8.50	290.94	6,756.4	143.0	-590.9	-87.2	0.00	0.00	0.00
6,900.0	8.50	290.94	6,855.3	148.3	-604.7	-91.2	0.00	0.00	0.00
7,000.0	8.50	290.94	6,954.2	153.6	-618.5	-95.1	0.00	0.00	0.00
7,022.5	8.50	290.94	6,976.5	154.8	-621.6	-96.0	0.00	0.00	0.00
7,100.0	6.95	290.94	7,053.3	158.5	-631.3	-98.8	2.00	-2.00	0.00
7,200.0	4.95	290.94	7,152.7	162.2	-641.0	-101.6	2.00	-2.00	0.00
7,300.0	2.95	290.94	7,252.5	164.6	-647.5	-103.5	2.00	-2.00	0.00
7,400.0	0.95	290.94	7,352.4	165.9	-650.6	-104.4	2.00	-2.00	0.00
7,447.6	0.00	179.65	7,400.0	166.0	-651.0	-104.5	2.00	-2.00	0.00
7,500.0	0.00	0.00	7,452.4	166.0	-651.0	-104.5	0.00	0.00	0.00
7,600.0	0.00	0.00	7,552.4	166.0	-651.0	-104.5	0.00	0.00	0.00
7,700.0	0.00	0.00	7,652.4	166.0	-651.0	-104.5	0.00	0.00	0.00
7,800.0	0.00	0.00	7,752.4	166.0	-651.0	-104.5	0.00	0.00	0.00
7,900.0	0.00	0.00	7,852.4	166.0	-651.0	-104.5	0.00	0.00	0.00
8,000.0	0.00	0.00	7,952.4	166.0	-651.0	-104.5	0.00	0.00	0.00
8,100.0	0.00	0.00	8,052.4	166.0	-651.0	-104.5	0.00	0.00	0.00
8,200.0	0.00	0.00	8,152.4	166.0	-651.0	-104.5	0.00	0.00	0.00
8,300.0	0.00	0.00	8,252.4	166.0	-651.0	-104.5	0.00	0.00	0.00
8,400.0	0.00	0.00	8,352.4	166.0	-651.0	-104.5	0.00	0.00	0.00
8,500.0	0.00	0.00	8,452.4	166.0	-651.0	-104.5	0.00	0.00	0.00
8,600.0	0.00	0.00	8,552.4	166.0	-651.0	-104.5	0.00	0.00	0.00
8,700.0	0.00	0.00	8,652.4	166.0	-651.0	-104.5	0.00	0.00	0.00
8,800.0	0.00	0.00	8,752.4	166.0	-651.0	-104.5	0.00	0.00	0.00
8,900.0	0.00	0.00	8,852.4	166.0	-651.0	-104.5	0.00	0.00	0.00
9,000.0	0.00	0.00	8,952.4	166.0	-651.0	-104.5	0.00	0.00	0.00
9,100.0	0.00	0.00	9,052.4	166.0	-651.0	-104.5	0.00	0.00	0.00
9,200.0	0.00	0.00	9,152.4	166.0	-651.0	-104.5	0.00	0.00	0.00
9,300.0	0.00	0.00	9,252.4	166.0	-651.0	-104.5	0.00	0.00	0.00
9,400.0	0.00	0.00	9,352.4	166.0	-651.0	-104.5	0.00	0.00	0.00
9,500.0	0.00	0.00	9,452.4	166.0	-651.0	-104.5	0.00	0.00	0.00
9,600.0	0.00	0.00	9,552.4	166.0	-651.0	-104.5	0.00	0.00	0.00
9,700.0	0.00	0.00	9,652.4	166.0	-651.0	-104.5	0.00	0.00	0.00
9,800.0	0.00	0.00	9,752.4	166.0	-651.0	-104.5	0.00	0.00	0.00
9,900.0	0.00	0.00	9,852.4	166.0	-651.0	-104.5	0.00	0.00	0.00
10,000.0	0.00	0.00	9,952.4	166.0	-651.0	-104.5	0.00	0.00	0.00
10,100.0	0.00	0.00	10,052.4	166.0	-651.0	-104.5	0.00	0.00	0.00
10,165.6	0.00	179.65	10,118.0	166.0	-651.0	-104.5	0.00	0.00	0.00
10,200.0	3.44	187.54	10,152.4	165.0	-651.1	-103.4	10.00	10.00	0.00
10,250.0	8.44	187.54	10,202.1	159.8	-651.8	-98.3	10.00	10.00	0.00
10,300.0	13.44	187.54	10,251.2	150.4	-653.1	-88.8	10.00	10.00	0.00

EOG Resources

Planning Report



Database:	PEDM	Local Co-ordinate Reference:	Well #513H
Company:	Midland	TVD Reference:	KB = 25' @ 3487.0usft
Project:	Lea County, NM (NAD 83 NME)	MD Reference:	KB = 25' @ 3487.0usft
Site:	Audacious 19 Fed	North Reference:	Grid
Well:	#513H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
10,350.0	18.44	187.54	10,299.3	136.8	-654.9	-75.1	10.00	10.00	0.00	
10,400.0	23.44	187.54	10,345.9	119.1	-657.2	-57.2	10.00	10.00	0.00	
10,450.0	28.44	187.54	10,390.9	97.4	-660.1	-35.4	10.00	10.00	0.00	
10,500.0	33.44	187.54	10,433.8	72.0	-663.4	-9.7	10.00	10.00	0.00	
10,550.0	38.44	187.54	10,474.2	42.9	-667.3	19.6	10.00	10.00	0.00	
10,600.0	43.44	187.54	10,512.0	10.4	-671.6	52.4	10.00	10.00	0.00	
10,650.0	48.44	187.54	10,546.7	-25.2	-676.3	88.3	10.00	10.00	0.00	
10,700.0	53.44	187.54	10,578.2	-63.7	-681.4	127.0	10.00	10.00	0.00	
10,750.0	58.44	187.54	10,606.2	-104.7	-686.8	168.4	10.00	10.00	0.00	
10,800.0	63.44	187.54	10,630.5	-148.0	-692.6	212.1	10.00	10.00	0.00	
10,850.0	68.44	187.54	10,650.9	-193.3	-698.6	257.7	10.00	10.00	0.00	
10,900.0	73.44	187.54	10,667.2	-240.1	-704.8	304.9	10.00	10.00	0.00	
10,950.0	78.44	187.54	10,679.3	-288.2	-711.1	353.4	10.00	10.00	0.00	
11,000.0	83.44	187.54	10,687.2	-337.1	-717.6	402.7	10.00	10.00	0.00	
11,050.0	88.44	187.54	10,690.7	-386.6	-724.1	452.5	10.00	10.00	0.00	
11,062.6	89.70	187.54	10,690.9	-399.0	-725.8	465.1	10.00	10.00	0.00	
11,100.0	89.70	186.04	10,691.1	-436.2	-730.2	502.5	4.00	-0.01	-4.00	
11,200.0	89.69	182.04	10,691.7	-535.9	-737.3	602.4	4.00	-0.01	-4.00	
11,259.6	89.69	179.66	10,692.0	-595.5	-738.1	661.8	4.00	-0.01	-4.00	
11,300.0	89.69	179.66	10,692.2	-635.9	-737.9	702.0	0.00	0.00	0.00	
11,400.0	89.69	179.66	10,692.8	-735.9	-737.3	801.5	0.00	0.00	0.00	
11,500.0	89.69	179.66	10,693.3	-835.9	-736.7	901.0	0.00	0.00	0.00	
11,600.0	89.69	179.66	10,693.9	-935.9	-736.1	1,000.6	0.00	0.00	0.00	
11,622.1	89.69	179.66	10,694.0	-958.0	-736.0	1,022.5	0.00	0.00	0.00	
11,634.7	89.94	179.65	10,694.0	-970.6	-735.9	1,035.1	2.00	2.00	-0.10	
11,700.0	89.94	179.65	10,694.1	-1,035.9	-735.5	1,100.1	0.00	0.00	0.00	
11,800.0	89.94	179.65	10,694.2	-1,135.9	-734.9	1,199.6	0.00	0.00	0.00	
11,900.0	89.94	179.65	10,694.3	-1,235.9	-734.3	1,299.1	0.00	0.00	0.00	
12,000.0	89.94	179.65	10,694.4	-1,335.9	-733.7	1,398.6	0.00	0.00	0.00	
12,100.0	89.94	179.65	10,694.5	-1,435.9	-733.0	1,498.1	0.00	0.00	0.00	
12,200.0	89.94	179.65	10,694.7	-1,535.9	-732.4	1,597.6	0.00	0.00	0.00	
12,300.0	89.94	179.65	10,694.8	-1,635.9	-731.8	1,697.1	0.00	0.00	0.00	
12,400.0	89.94	179.65	10,694.9	-1,735.9	-731.2	1,796.6	0.00	0.00	0.00	
12,500.0	89.94	179.65	10,695.0	-1,835.9	-730.6	1,896.1	0.00	0.00	0.00	
12,600.0	89.94	179.65	10,695.1	-1,935.9	-730.0	1,995.6	0.00	0.00	0.00	
12,700.0	89.94	179.65	10,695.2	-2,035.9	-729.3	2,095.1	0.00	0.00	0.00	
12,800.0	89.94	179.65	10,695.3	-2,135.9	-728.7	2,194.6	0.00	0.00	0.00	
12,900.0	89.94	179.65	10,695.4	-2,235.9	-728.1	2,294.1	0.00	0.00	0.00	
13,000.0	89.94	179.65	10,695.5	-2,335.9	-727.5	2,393.6	0.00	0.00	0.00	
13,100.0	89.94	179.65	10,695.6	-2,435.9	-726.9	2,493.1	0.00	0.00	0.00	
13,200.0	89.94	179.65	10,695.8	-2,535.9	-726.3	2,592.6	0.00	0.00	0.00	
13,300.0	89.94	179.65	10,695.9	-2,635.9	-725.6	2,692.1	0.00	0.00	0.00	
13,400.0	89.94	179.65	10,696.0	-2,735.9	-725.0	2,791.6	0.00	0.00	0.00	
13,428.1	89.94	179.65	10,696.0	-2,764.0	-724.8	2,819.6	0.00	0.00	0.00	
13,441.4	90.20	179.65	10,696.0	-2,777.3	-724.8	2,832.8	2.00	2.00	0.00	
13,500.0	90.20	179.65	10,695.8	-2,835.9	-724.4	2,891.1	0.00	0.00	0.00	
13,600.0	90.20	179.65	10,695.4	-2,935.9	-723.8	2,990.6	0.00	0.00	0.00	
13,700.0	90.20	179.65	10,695.1	-3,035.9	-723.2	3,090.1	0.00	0.00	0.00	
13,800.0	90.20	179.65	10,694.7	-3,135.8	-722.5	3,189.6	0.00	0.00	0.00	
13,900.0	90.20	179.65	10,694.4	-3,235.8	-721.9	3,289.1	0.00	0.00	0.00	
14,000.0	90.20	179.65	10,694.0	-3,335.8	-721.3	3,388.6	0.00	0.00	0.00	
14,100.0	90.20	179.65	10,693.7	-3,435.8	-720.7	3,488.1	0.00	0.00	0.00	
14,200.0	90.20	179.65	10,693.3	-3,535.8	-720.1	3,587.6	0.00	0.00	0.00	
14,300.0	90.20	179.65	10,692.9	-3,635.8	-719.5	3,687.1	0.00	0.00	0.00	



EOG Resources

Planning Report

Database:	PEDM	Local Co-ordinate Reference:	Well #513H
Company:	Midland	TVD Reference:	KB = 25' @ 3487.0usft
Project:	Lea County, NM (NAD 83 NME)	MD Reference:	KB = 25' @ 3487.0usft
Site:	Audacious 19 Fed	North Reference:	Grid
Well:	#513H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
14,400.0	90.20	179.65	10,692.6	-3,735.8	-718.8	3,786.6	0.00	0.00	0.00
14,500.0	90.20	179.65	10,692.2	-3,835.8	-718.2	3,886.1	0.00	0.00	0.00
14,600.0	90.20	179.65	10,691.9	-3,935.8	-717.6	3,985.6	0.00	0.00	0.00
14,700.0	90.20	179.65	10,691.5	-4,035.8	-717.0	4,085.1	0.00	0.00	0.00
14,800.0	90.20	179.65	10,691.2	-4,135.8	-716.4	4,184.6	0.00	0.00	0.00
14,900.0	90.20	179.65	10,690.8	-4,235.8	-715.8	4,284.2	0.00	0.00	0.00
15,000.0	90.20	179.65	10,690.5	-4,335.8	-715.1	4,383.7	0.00	0.00	0.00
15,100.0	90.20	179.65	10,690.1	-4,435.8	-714.5	4,483.2	0.00	0.00	0.00
15,133.9	90.20	179.65	10,690.0	-4,469.7	-714.3	4,516.9	0.00	0.00	0.00
15,136.9	90.14	179.65	10,690.0	-4,472.7	-714.3	4,519.9	2.00	-2.00	0.00
15,200.0	90.14	179.65	10,689.8	-4,535.8	-713.9	4,582.7	0.00	0.00	0.00
15,300.0	90.14	179.65	10,689.6	-4,635.8	-713.3	4,682.2	0.00	0.00	0.00
15,400.0	90.14	179.65	10,689.3	-4,735.8	-712.7	4,781.7	0.00	0.00	0.00
15,500.0	90.14	179.65	10,689.1	-4,835.8	-712.1	4,881.2	0.00	0.00	0.00
15,600.0	90.14	179.65	10,688.8	-4,935.8	-711.4	4,980.7	0.00	0.00	0.00
15,700.0	90.14	179.65	10,688.6	-5,035.8	-710.8	5,080.2	0.00	0.00	0.00
15,800.0	90.14	179.65	10,688.3	-5,135.8	-710.2	5,179.7	0.00	0.00	0.00
15,900.0	90.14	179.65	10,688.1	-5,235.8	-709.6	5,279.2	0.00	0.00	0.00
16,000.0	90.14	179.65	10,687.8	-5,335.8	-709.0	5,378.7	0.00	0.00	0.00
16,100.0	90.14	179.65	10,687.6	-5,435.8	-708.4	5,478.2	0.00	0.00	0.00
16,200.0	90.14	179.65	10,687.3	-5,535.8	-707.7	5,577.7	0.00	0.00	0.00
16,300.0	90.14	179.65	10,687.1	-5,635.8	-707.1	5,677.2	0.00	0.00	0.00
16,400.0	90.14	179.65	10,686.8	-5,735.8	-706.5	5,776.7	0.00	0.00	0.00
16,500.0	90.14	179.65	10,686.6	-5,835.8	-705.9	5,876.2	0.00	0.00	0.00
16,600.0	90.14	179.65	10,686.3	-5,935.8	-705.3	5,975.7	0.00	0.00	0.00
16,700.0	90.14	179.65	10,686.1	-6,035.8	-704.6	6,075.2	0.00	0.00	0.00
16,739.3	90.14	179.65	10,686.0	-6,075.1	-704.4	6,114.3	0.00	0.00	0.00
16,742.2	90.09	179.65	10,686.0	-6,078.0	-704.4	6,117.2	2.00	-2.00	0.00
16,800.0	90.09	179.65	10,685.9	-6,135.8	-704.0	6,174.7	0.00	0.00	0.00
16,900.0	90.09	179.65	10,685.8	-6,235.8	-703.4	6,274.2	0.00	0.00	0.00
17,000.0	90.09	179.65	10,685.6	-6,335.8	-702.8	6,373.7	0.00	0.00	0.00
17,100.0	90.09	179.65	10,685.5	-6,435.8	-702.2	6,473.2	0.00	0.00	0.00
17,200.0	90.09	179.65	10,685.3	-6,535.8	-701.6	6,572.7	0.00	0.00	0.00
17,300.0	90.09	179.65	10,685.2	-6,635.8	-700.9	6,672.2	0.00	0.00	0.00
17,400.0	90.09	179.65	10,685.0	-6,735.8	-700.3	6,771.7	0.00	0.00	0.00
17,500.0	90.09	179.65	10,684.9	-6,835.8	-699.7	6,871.2	0.00	0.00	0.00
17,600.0	90.09	179.65	10,684.7	-6,935.8	-699.1	6,970.7	0.00	0.00	0.00
17,700.0	90.09	179.65	10,684.6	-7,035.8	-698.5	7,070.2	0.00	0.00	0.00
17,800.0	90.09	179.65	10,684.4	-7,135.8	-697.9	7,169.7	0.00	0.00	0.00
17,900.0	90.09	179.65	10,684.3	-7,235.8	-697.2	7,269.2	0.00	0.00	0.00
18,000.0	90.09	179.65	10,684.1	-7,335.8	-696.6	7,368.8	0.00	0.00	0.00
18,085.2	90.09	179.65	10,684.0	-7,421.0	-696.1	7,453.6	0.00	0.00	0.00



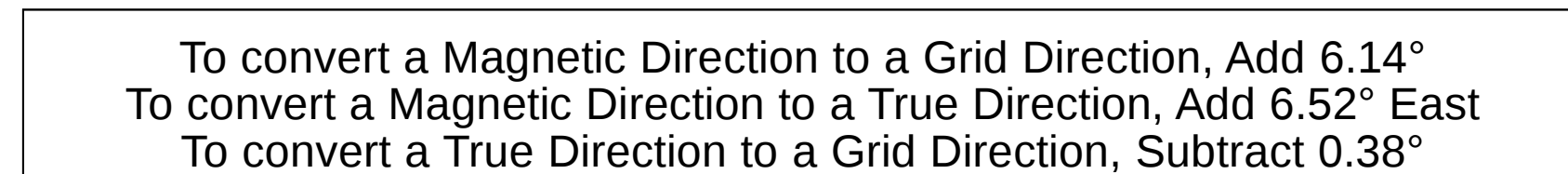
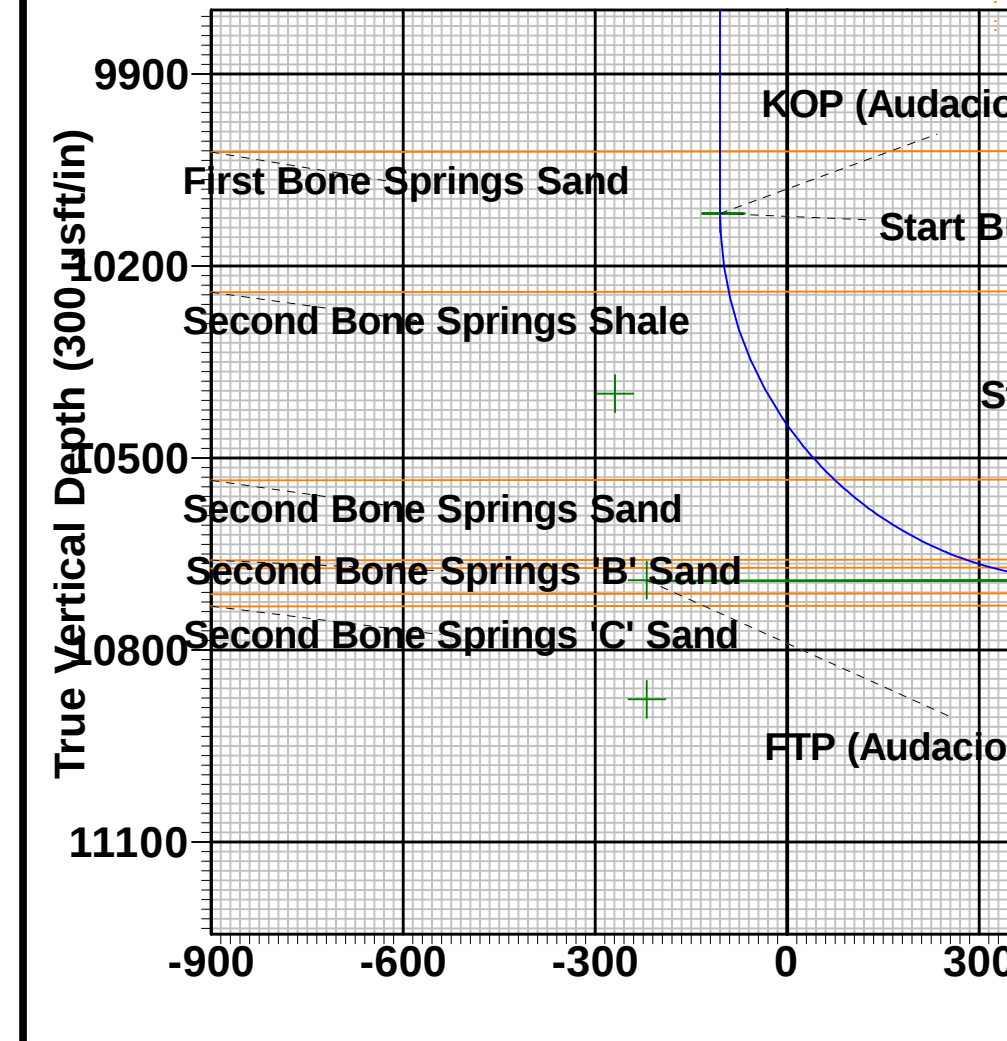
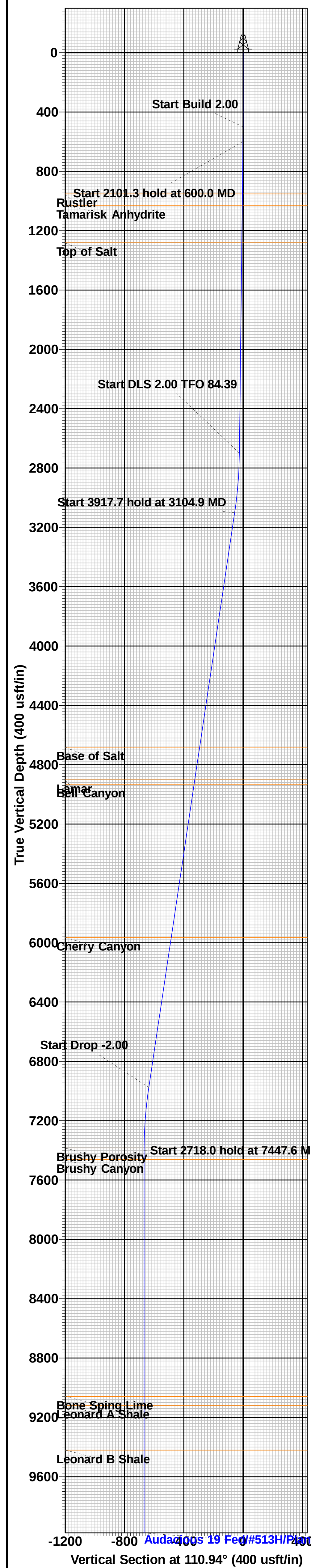
EOG Resources

Planning Report

Database:	PEDM	Local Co-ordinate Reference:	Well #513H
Company:	Midland	TVD Reference:	KB = 25' @ 3487.0usft
Project:	Lea County, NM (NAD 83 NME)	MD Reference:	KB = 25' @ 3487.0usft
Site:	Audacious 19 Fed	North Reference:	Grid
Well:	#513H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Design Targets									
Target Name									
- hit/miss target	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- Shape	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)		
KOP (Audacious 19 Fed - plan hits target center - Rectangle (sides W50.0 H60.0 D0.0)	0.00	179.65	10,118.0	166.0	-651.0	406,478.00	762,638.00	32° 6' 55.691 N	103° 37' 6.759 W
PBHL (Audacious 19 Fe - plan hits target center - Rectangle (sides W60.0 H0.0 D7,708.0)	89.94	179.65	10,684.0	-7,421.0	-696.1	398,891.00	762,592.90	32° 5' 40.617 N	103° 37' 7.868 W
TGT 4 (Audacious 19 Fe - plan hits target center - Point	0.00	0.00	10,686.0	-6,075.1	-704.4	400,236.90	762,584.59	32° 5' 53.936 N	103° 37' 7.861 W
TGT 3 (Audacious 19 Fe - plan hits target center - Point	0.00	0.01	10,690.0	-4,469.7	-714.3	401,842.30	762,574.68	32° 6' 9.823 N	103° 37' 7.852 W
FTP (Audacious 19 Fed - plan misses target center by 337.1usft at 10559.8usft MD (10481.9 TVD, 36.8 N, -668.1 E) - Point	0.00	0.00	10,691.0	290.0	-744.0	406,602.00	762,545.00	32° 6' 56.924 N	103° 37' 7.831 W
TGT 1 (Audacious 19 Fe - plan hits target center - Point	0.00	0.00	10,694.0	-958.0	-736.0	405,354.00	762,553.01	32° 6' 44.574 N	103° 37' 7.834 W
TGT 2 (Audacious 19 Fe - plan hits target center - Point	0.00	0.00	10,696.0	-2,764.0	-724.8	403,548.00	762,564.15	32° 6' 26.702 N	103° 37' 7.843 W

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
952.2	952.0	Rustler				
1,032.3	1,032.0	Tamarisk Anhydrite				
1,282.4	1,282.0	Top of Salt				
4,702.5	4,682.0	Base of Salt				
4,925.0	4,902.0	Lamar				
4,955.3	4,932.0	Bell Canyon				
5,998.8	5,964.0	Cherry Canyon				
7,431.6	7,384.0	Brushy Porosity				
7,510.6	7,463.0	Brushy Canyon				
9,106.6	9,059.0	Bone Sping Lime				
9,166.6	9,119.0	Leonard A Shale				
9,468.6	9,421.0	Leonard B Shale				
10,068.8	10,021.2	First Bone Springs Sand		0.06		
10,288.7	10,240.2	Second Bone Springs Shale		0.06		
10,631.1	10,534.0	Second Bone Springs Sand		0.06		
10,872.6	10,658.8	Second Bone Springs 'B' Sand		0.06		
10,916.7	10,671.7	TOW		0.06		



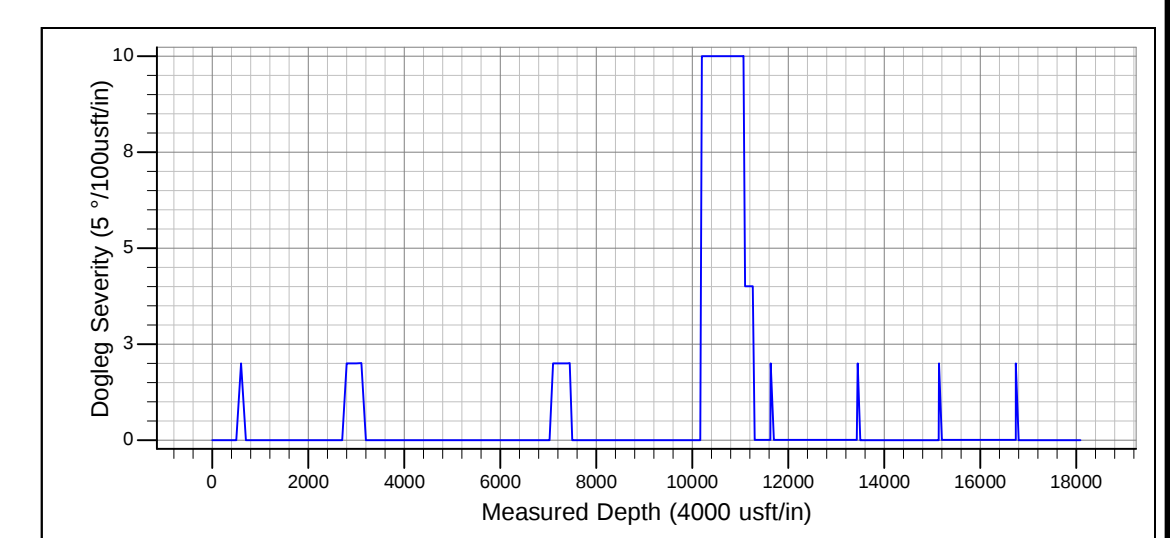
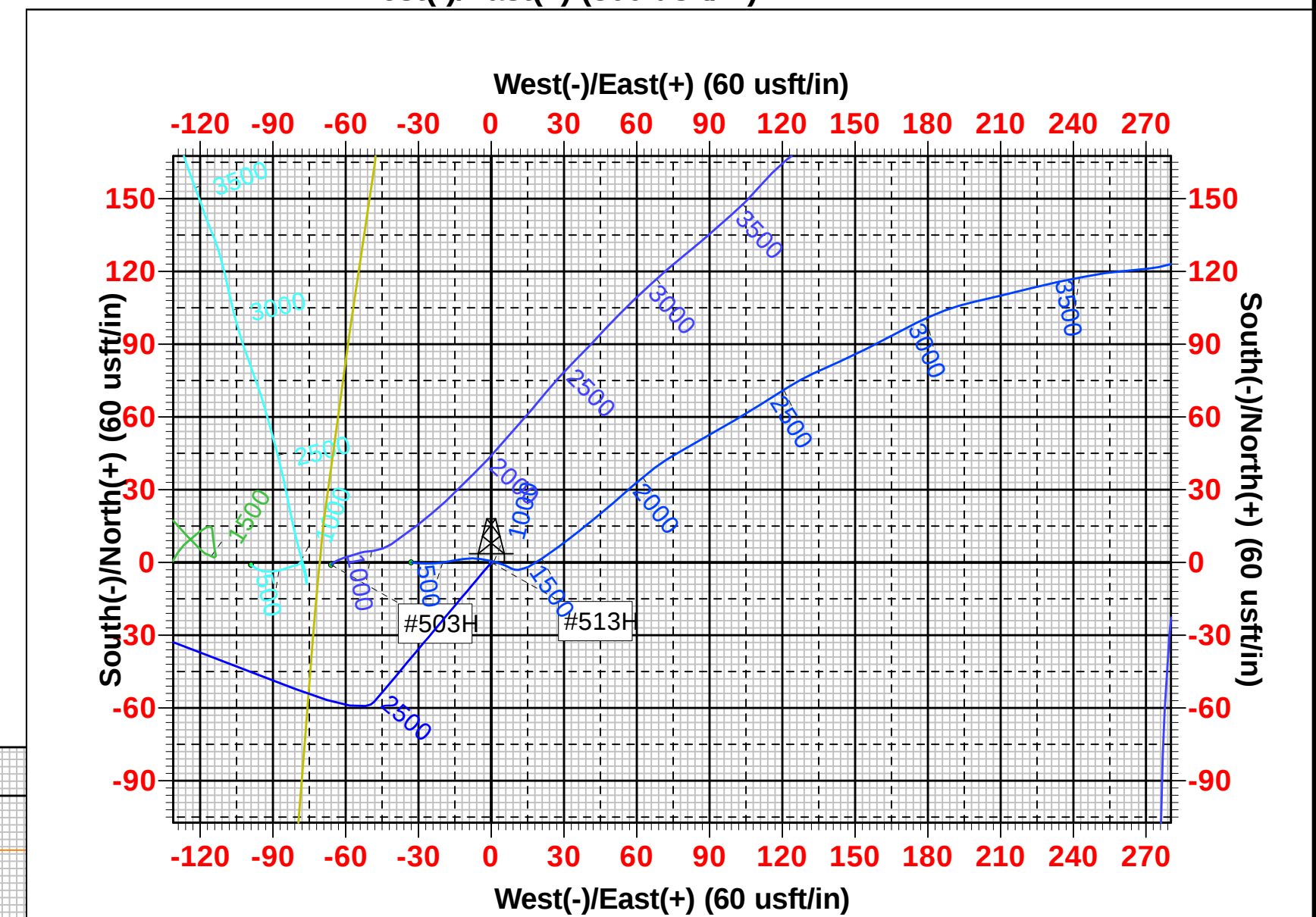
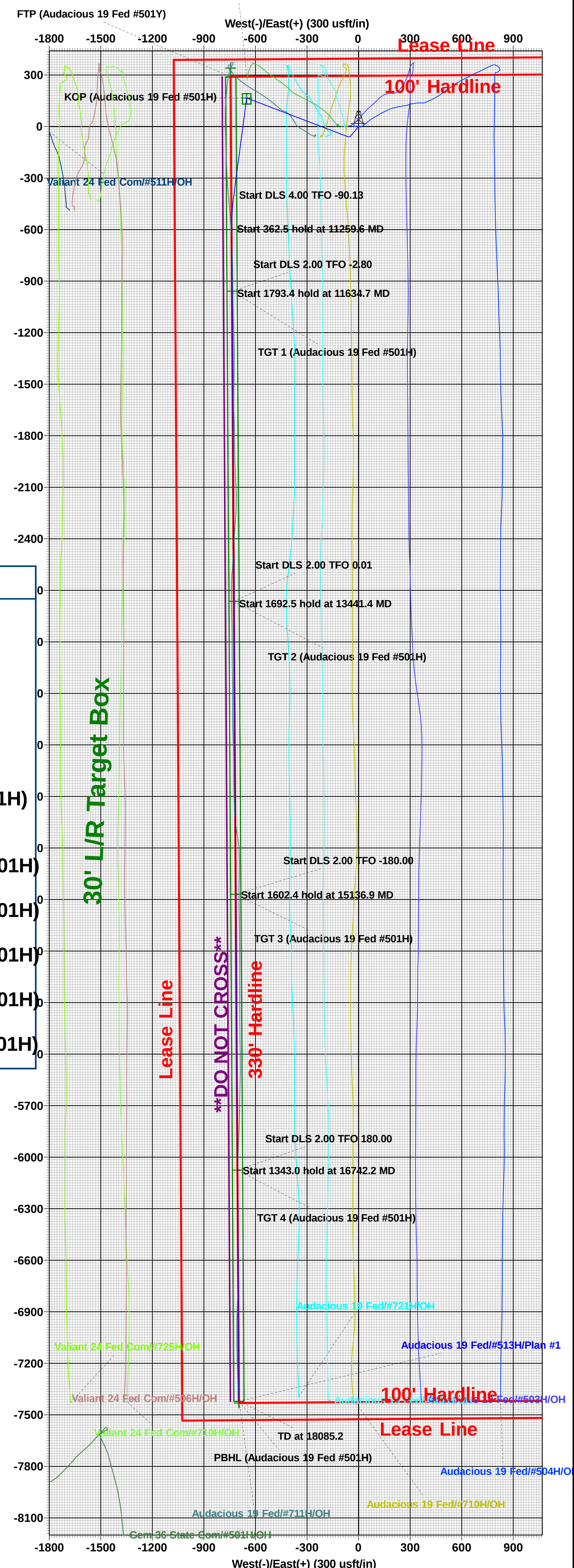
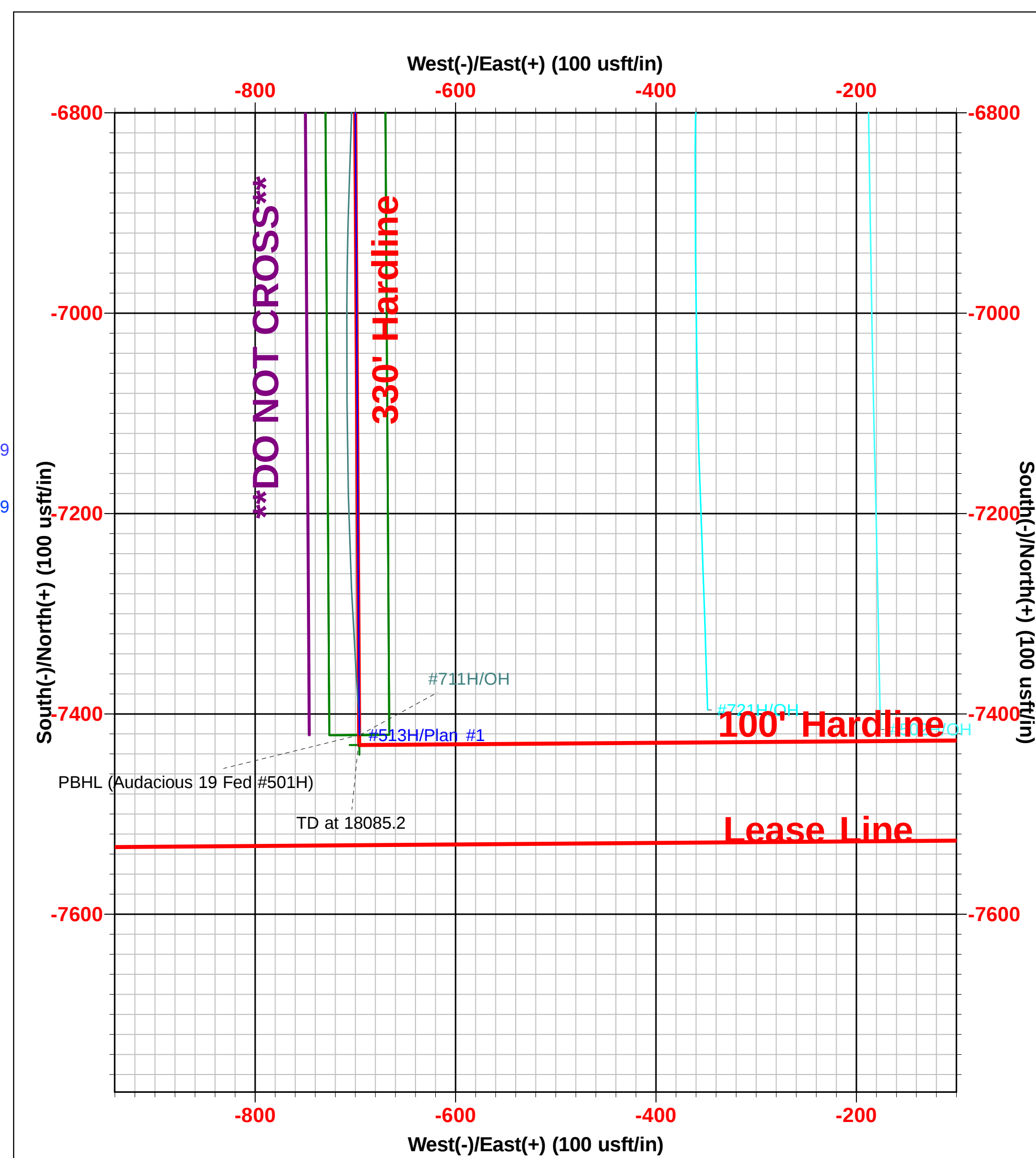
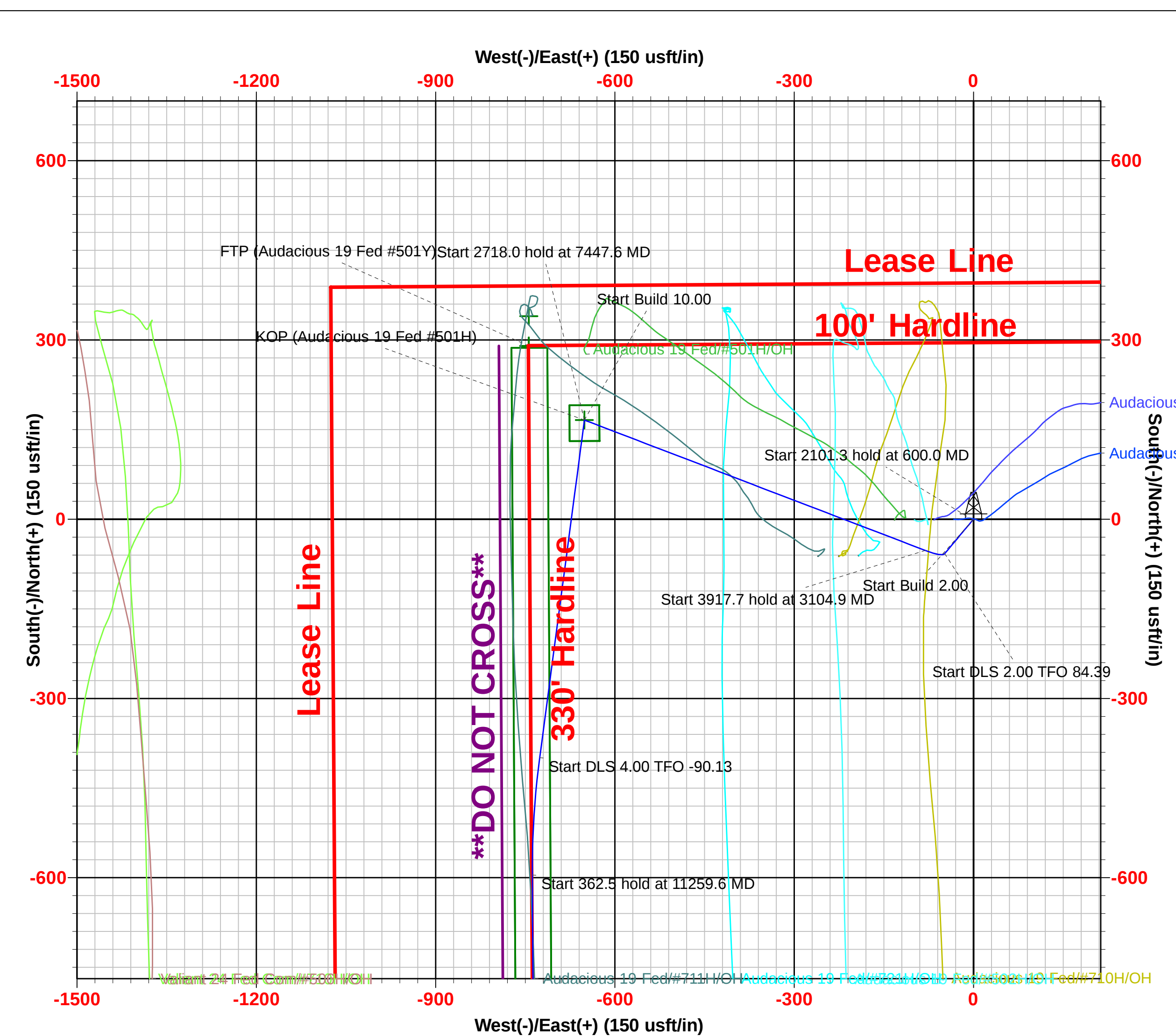
Plan #1

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

			3462.0
	KB = 25' @ 3487.0usft		
Northing	Easting	Latitude	Longitude
406312.00	763289.00	32° 6' 54.006 N	103° 36' 59.203 W

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
500.0	0.00	0.00	500.0	0.0	0.0	0.00	0.00	0.0	
600.0	2.00	220.00	600.0	-1.3	-1.1	2.00	220.00	1.4	
2701.3	2.00	220.00	2700.0	-57.5	-48.3	0.00	0.00	61.8	
3104.9	8.50	290.94	3101.9	-52.2	-80.7	2.00	84.39	59.5	
7022.5	8.50	290.94	6976.5	154.8	-621.6	0.00	0.00	-96.0	
7447.6	0.00	179.65	7400.0	166.0	-651.0	2.00	180.00	-104.5	
10165.6	0.00	179.65	10118.0	166.0	-651.0	0.00	0.00	-104.5	KOP (Audacious 19 Fed #501H)
11062.6	89.70	187.54	10690.9	-399.0	-725.8	10.00	187.54	465.1	
11259.6	89.69	179.66	10692.0	-595.5	-738.1	4.00	-90.13	661.8	
11622.1	89.69	179.66	10694.0	-958.0	-736.0	0.00	0.00	1022.5	TGT 1 (Audacious 19 Fed #501H)
11634.7	89.94	179.65	10694.0	-970.6	-735.9	2.00	-2.80	1035.1	
13428.1	89.94	179.65	10696.0	-2764.0	-724.8	0.00	0.00	2819.6	TGT 2 (Audacious 19 Fed #501H)
13441.4	90.20	179.65	10696.0	-2777.3	-724.8	2.00	0.01	2832.8	
15133.9	90.20	179.65	10690.0	-4469.7	-714.3	0.00	0.00	4516.9	TGT 3 (Audacious 19 Fed #501H)
15136.9	90.14	179.65	10690.0	-4472.7	-714.3	2.00	-180.00	4519.9	
16739.3	90.14	179.65	10686.0	-6075.1	-704.4	0.00	0.00	6114.3	TGT 4 (Audacious 19 Fed #501H)
16742.2	90.09	179.65	10686.0	-6078.0	-704.4	2.00	180.00	6117.2	
18085.2	90.09	179.65	10684.0	-7421.0	-696.1	0.00	0.00	7453.6	PBHL (Audacious 19 Fed #501H)

Name	TVD	+N/-S	+E/-W	Northring	Easting
KOP (Audacious 19 Fed #501H)	10118.8	166.0	-651.0	406478.00	76238.00
PTH4 (Audacious 19 Fed #501H)	10684.0	-7421.0	-696.1	398891.00	762592.90
TGT 4 (Audacious 19 Fed #501H)	10686.0	-6075.1	-704.4	400236.90	762584.59
TGT 3 (Audacious 19 Fed #501H)	10690.0	-4469.7	-714.3	401842.30	762574.68
FTP (Audacious 19 Fed #501H)	10691.0	290.0	-744.0	406602.00	762545.00
TGT 1 (Audacious 19 Fed #501H)	10694.0	-958.0	-736.0	405354.00	762553.01
TGT 2 (Audacious 19 Fed #501H)	10696.0	-2764.0	-724.8	403548.00	762564.16



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: EOG Resources, Inc. **OGRID:** 7377 **Date:** 10/20 /2021

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
Audacious 19 Fed 513H	30-025-49466	L-19-25S-33E	2246' FSL & 1071' FWL	+/- 1000	+/- 3500	+/- 3000

IV. Central Delivery Point Name: Audacious 19 Fed CTB [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
Audacious 19 Fed 513H	30-025-49466	10/21/21	11/4/21	12/1/21	1/1/22	2/1/22

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.

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: *Star L Harrell*

Printed Name: Star L Harrell

Title: Sr Regulatory Specialist

E-mail Address: Star_Harrell@eogresources.com

Date: 10/20/2021

Phone: (432) 848-9161

OIL CONSERVATION DIVISION
(Only applicable when submitted as a standalone form)

Approved By:

Title:

Approval Date:

Conditions of Approval:

Natural Gas Management Plan Items VI-VIII

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

- Separation equipment will be sized to provide adequate separation for anticipated rates.
- Adequate separation relates to retention time for Liquid – Liquid separation and velocity for Gas-Liquid separation.
- Collection systems are appropriately sized to handle facility production rates on all (3) phases.
- Ancillary equipment and metering is selected to be serviced without flow interruptions or the need to release gas from the well.

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

Drilling Operations

- All flare stacks will be properly sized. The flare stacks will be located at a minimum 100' from the nearest surface hole location on the pad.
- All natural gas produced during drilling operations will be flared, unless there is an equipment malfunction and/or to avoid risk of an immediate and substantial adverse impact on safety and the environment, at which point the gas will be vented.

Completions/Recompletions Operations

- New wells will not be flowed back until they are connected to a properly sized gathering system.
- The facility will be built/sized for maximum anticipated flowrates and pressures to minimize waste.
- For flowback operations, multiple stages of separation will be used as well as excess VRU and blowers to make sure waste is minimized off the storage tanks and facility.
- During initial flowback, the well stream will be routed to separation equipment.
- At an existing facility, when necessary, post separation natural gas will be flared until it meets pipeline specifications, at which point it will be turned into a collection system.
- At a new facility, post separation natural gas will be vented until storage tanks can safely function, at which point it will be flared until it meets pipeline spec.

Production Operations

- Weekly AVOs will be performed on all facilities.
- All flares will be equipped with auto-ignition systems and continuous pilot operations.
- After a well is stabilized from liquid unloading, the well will be turned back into the collection system.
- All plunger lift systems will be optimized to limit the amount of waste.
- All tanks will have automatic gauging equipment installed.
- Leaking thief hatches found during AVOs will be cleaned and properly re-sealed.

Performance Standards

- Production equipment will be designed to handle maximum anticipated rates and pressure.

- All flared gas will be combusted in a flare stack that is properly sized and designed to ensure proper combustion.
- Weekly AVOs will be performed on all wells and facilities that produce more than 60 Mcfd.

Measurement & Estimation

- All volume that is flared or vented that is not measured will be estimated.
- All measurement equipment for flared volumes will conform to API 14.10.
- No meter bypasses will be installed.
- When metering is not practical due to low pressure/low rate, the vented or flared volume will be estimated.

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

- During downhole well maintenance, EOG will use best management practices to vent as minimally as possible.
- After downhole well maintenance, natural gas will be flared until it reaches pipeline specification.

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 56781

CONDITIONS

Operator: EOG RESOURCES INC P.O. Box 2267 Midland, TX 79702	OGRID:
	7377
	Action Number: 56781
	Action Type: [C-101] BLM - Federal/Indian Land Lease (Form 3160-3)

CONDITIONS

Created By	Condition	Condition Date
pkautz	Will require a File As Drilled C-102 and a Directional Survey with the C-104	10/21/2021
pkautz	Once the well is spud, to prevent ground water contamination through whole or partial conduits from the surface, the operator shall drill without interruption through the fresh water zone or zones and shall immediately set in cement the water protection string	10/21/2021
pkautz	Oil base muds are not to be used until fresh water zones are cased and cemented providing isolation from the oil or diesel. This includes synthetic oils. Oil based mud, drilling fluids and solids must be contained in a steel closed loop system	10/21/2021
pkautz	Cement is required to circulate on both surface and intermediate1 strings of casing	10/21/2021