

Well Name: HONEY MUSTARD 22 WXY FED COM	Well Location: T24S / R28E / SEC 22 / SWSW / 32.1973418 / -104.0810082	County or Parish/State: EDDY / NM
Well Number: 8H	Type of Well: CONVENTIONAL GAS WELL	Allottee or Tribe Name:
Lease Number: NMNM020360, NMNM20360	Unit or CA Name:	Unit or CA Number:
US Well Number: 3001546983	Well Status: Approved Application for Permit to Drill	Operator: MARATHON OIL PERMIAN LLC

Notice of Intent

Sundry ID: 2153188

Type of Submission: Notice of Intent **Type of Action:** Other

Date Sundry Submitted: 03/30/2021 **Time Sundry Submitted:** 06:39

Date proposed operation will begin: 05/31/2021

Procedure Description: See attached for a copy of the WIS sundry and attachments submitted in December 2020.

Surface Disturbance

Is any additional surface disturbance proposed?: No

NOI Attachments

Procedure Description

BLM_Sundry_Sub_Honey_Mustard_22_WXY_Fed_Com_8H_APD_Change_12.8.2020_20210330183905.pdf

Received by OCD: 11/9/2022 11:08:23 AM

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Well Name: HONEY MUSTARD 22 WXY FED COM	Well Location: T24S / R28E / SEC 22 / SWSW / 32.1973418 / -104.0810082	County or Parish/State: EDDY / NM
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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: MELISSA SZUDERA	Signed on: MAR 30, 2021 06:39 PM
Name: MARATHON OIL PERMIAN LLC	
Title: REGULATORY COMPLIANCE REPRESENTATIVE	
Street Address: 5555 San Felipe St.	
City: Houston	State: TX
Phone: (713) 296-3179	
Email address: mszudera@marathonoil.com	

Field Representative

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

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: 09/03/2021
Signature: Chris Walls	

Form 3160-5
(June 2015)UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENTFORM APPROVED
OMB NO. 1004-0137
Expires: January 31, 2018**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.
NMNM20360

6. If Indian, Allottee or Tribe Name

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

8. Well Name and No.
HONEY MUSTARD 22 WXY FED COM 8H9. API Well No.
30-015-4698310. Field and Pool or Exploratory Area
PURPLE SAGE WOLFCAMP GAS11. County or Parish, State
EDDY COUNTY, NM**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

Contact: ADRIAN COVARRUBIAS

E-Mail: acovarrubias@marathonoil.com

3a. Address

5555 SAN FELIPE ST
HOUSTON, TX 77056

3b. Phone No. (include area code)

Ph: 713-296-3368

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

Sec 22 T24S R28E Mer NMP SWSW 479FSL 959FWL

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

TYPE OF SUBMISSION	TYPE OF ACTION			
☒ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
☐ Subsequent Report	☐ Alter Casing	☐ Hydraulic Fracturing	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☒ Other
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	Change to Original A
	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal	PD

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 determined that the site is ready for final inspection.

Marathon Oil Respectfully Request to make the following changes to the above listed well:

FTP ? 100 FSL 330 FWL 22-24S-28E to 330 FSL 660 FWL 22-24S-28E
LTP ? 100 FNL 330 FWL 22-24S-28E to 2308 FSL 660 FWL 15-24S-28E

See attachments for updated C102 well plat, pad plat packages including cut and fill, and updated drill plan.

14. I hereby certify that the foregoing is true and correct.

**Electronic Submission #539975 verified by the BLM Well Information System
For MARATHON OIL PERMIAN LLC, sent to the Carlsbad**

Name (Printed/Typed) ADRIAN COVARRUBIAS

Title REGULATORY PROFESSIONAL

Signature (Electronic Submission)

Date 12/08/2020

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By _____	Title _____	Date _____
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 _____

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)

**** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ****

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 30-015-46983	² Pool Code 98220	³ Pool Name PURPLE SAGE; WOLFCAMP (GAS)
⁴ Property Code	⁵ Property Name HONEY MUSTARD 22 WXY FED COM	⁶ Well Number 8H
⁷ OGRID No. 372098	⁸ Operator Name MARATHON OIL PERMIAN LLC	⁹ Elevation 3000'

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
M	22	24S	28E		479	SOUTH	959	WEST	EDDY

¹¹ Bottom Hole Location If Different From Surface

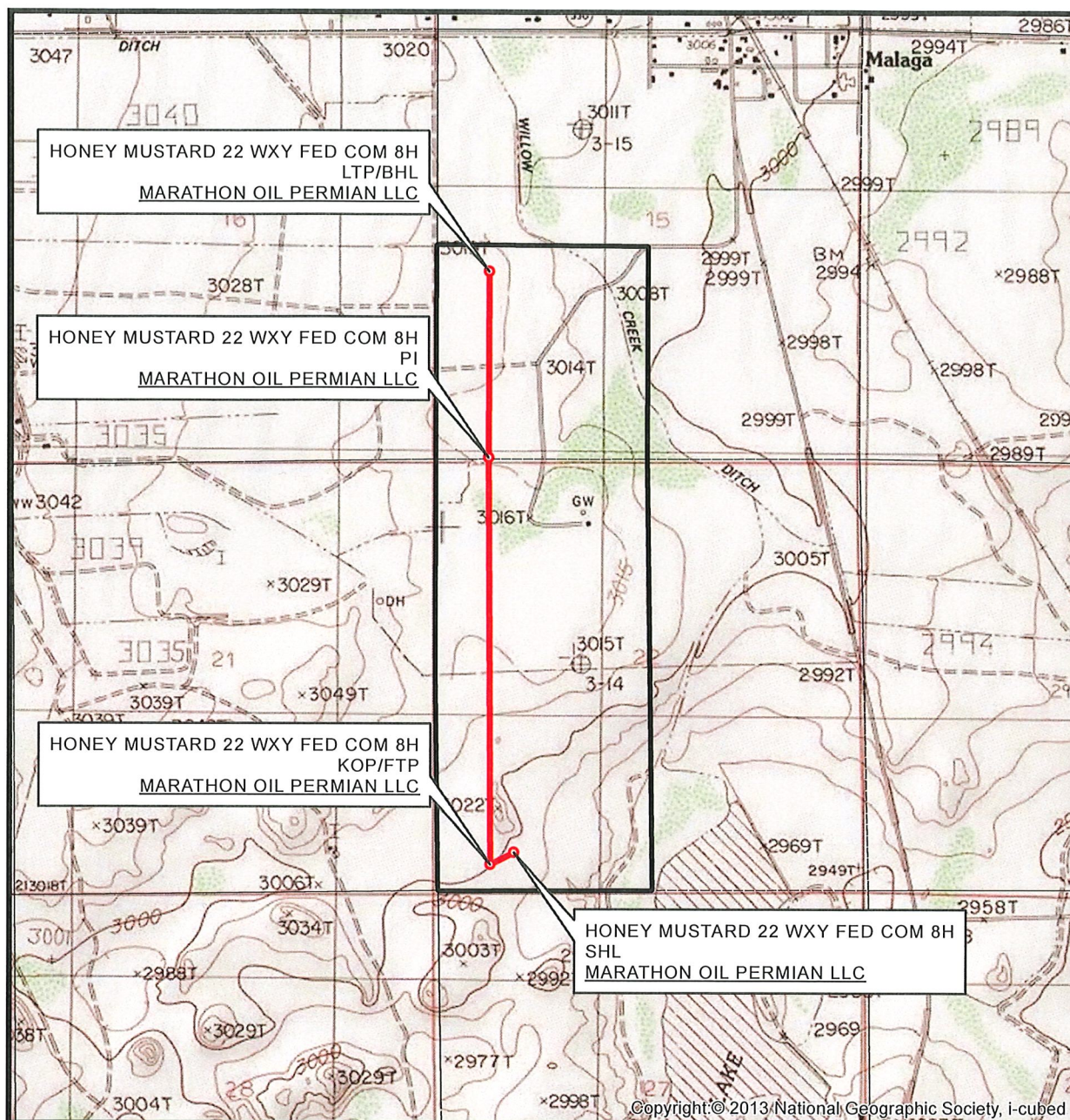
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
L	15	24S	28E		2308	SOUTH	660	WEST	EDDY

¹² Dedicated Acres 480.0	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
--	-------------------------------	----------------------------------	-------------------------

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

	CORNER COORDINATES NAD 83, SPCS NM EAST A - X: 618435.00' / Y: 435137.87' B - X: 618399.59' / Y: 437828.09' C - X: 618403.24' / Y: 440522.49' D - X: 618408.72' / Y: 443161.70' E - X: 621053.46' / Y: 443149.10' F - X: 621044.41' / Y: 440514.29' G - X: 621080.94' / Y: 437828.23' H - X: 621117.44' / Y: 435144.26'	CORNER COORDINATES NAD 27, SPCS NM EAST A - X: 577251.41' / Y: 435079.46' B - X: 577216.07' / Y: 437769.63' C - X: 577219.77' / Y: 440463.98' D - X: 577225.31' / Y: 443103.14' E - X: 579870.00' / Y: 443090.51' F - X: 579860.89' / Y: 440455.75' G - X: 579897.36' / Y: 437769.74' H - X: 579933.80' / Y: 435085.82'	¹⁷ OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division. Signature: Date: 12/3/2020 Printed Name: Adrian Covarrubias E-mail Address:
	LAST TAKE POINT/BOTTOM HOLE LOCATION 2308' FSL 660' FWL, SECTION 15 NAD 83, SPCS NM EAST X: 619068.03' / Y: 442828.56' LAT: 32.21716248N / LON: 104.08198617W NAD 27, SPCS NM EAST X: 577884.59' / Y: 442769.99' LAT: 32.21704095N / LON: 104.08149373W	KOP/FIRST TAKE POINT 330' FSL 660' FWL, SECTION 22 NAD 83, SPCS NM EAST X: 619090.69' / Y: 435469.43' LAT: 32.19693291N / LON: 104.08196853W NAD 27, SPCS NM EAST X: 577907.10' / Y: 435411.01' LAT: 32.19681113N / LON: 104.08147671W	¹⁸ SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief. DECEMBER 2, 2020 Date of Survey Signature and Seal of Professional Surveyor: Certificate Number: DAVID W. MYERS 11403
	SURFACE HOLE LOCATION 479' FSL 959' FWL, SECTION 22 NAD 83, SPCS NM EAST X: 619387.38' / Y: 435618.88' LAT: 32.19734181N / LON: 104.08100825W NAD 27, SPCS NM EAST X: 578203.79' / Y: 435560.45' LAT: 32.19722002N / LON: 104.08051645W	SHEET 1 OF 4 JOB No. R3935_001 REV 6 WM 10/28/2020	
	Distances/areas relative to NAD 83 Combined Scale Factor: 0.99977572 Convergence Angle: 00°08'09.70192"		

LOCATION VERIFICATION MAP



SEC. 22 TWP. 24-S RGE. 28-E
 SURVEY: N.M.P.M.
 COUNTY: EDDY
 OPERATOR: MARATHON OIL PERMIAN LLC
 DESCRIPTION: 479' FSL & 959' FWL
 ELEVATION: 3000'
 LEASE: HONEY MUSTARD 22 FED COM
 U.S.G.S. TOPOGRAPHIC MAP: MALAGA, NM.

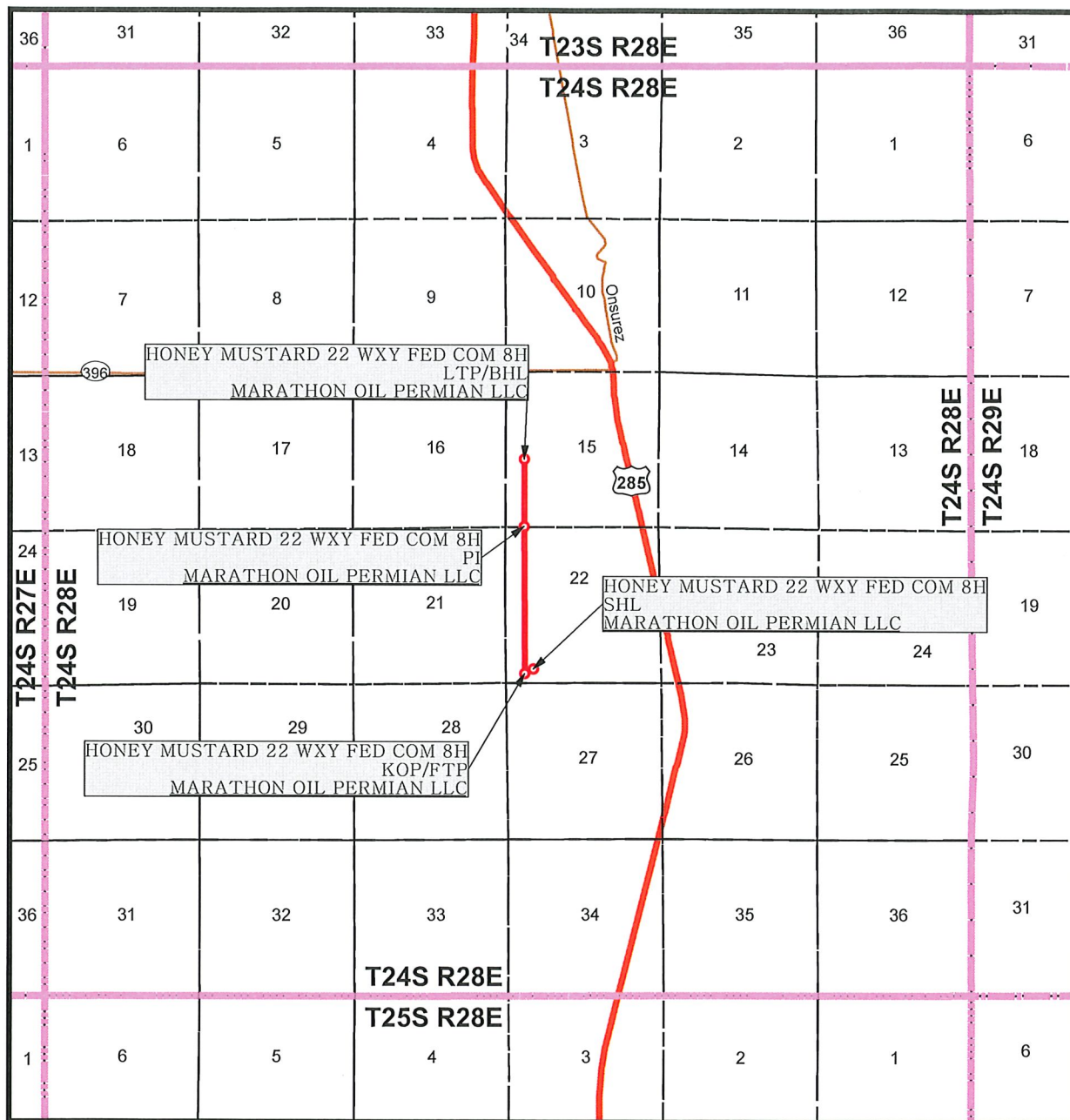
1" = 2,000'
 CONTOUR INTERVAL = 10'



SHEET 2 OF 3

PREPARED BY:
 R-SQUARED GLOBAL, LLC
 1309 LOUISVILLE AVENUE, MONROE, LA 71201
 318-323-6900 OFFICE
 JOB No. R3935_001

VICINITY MAP



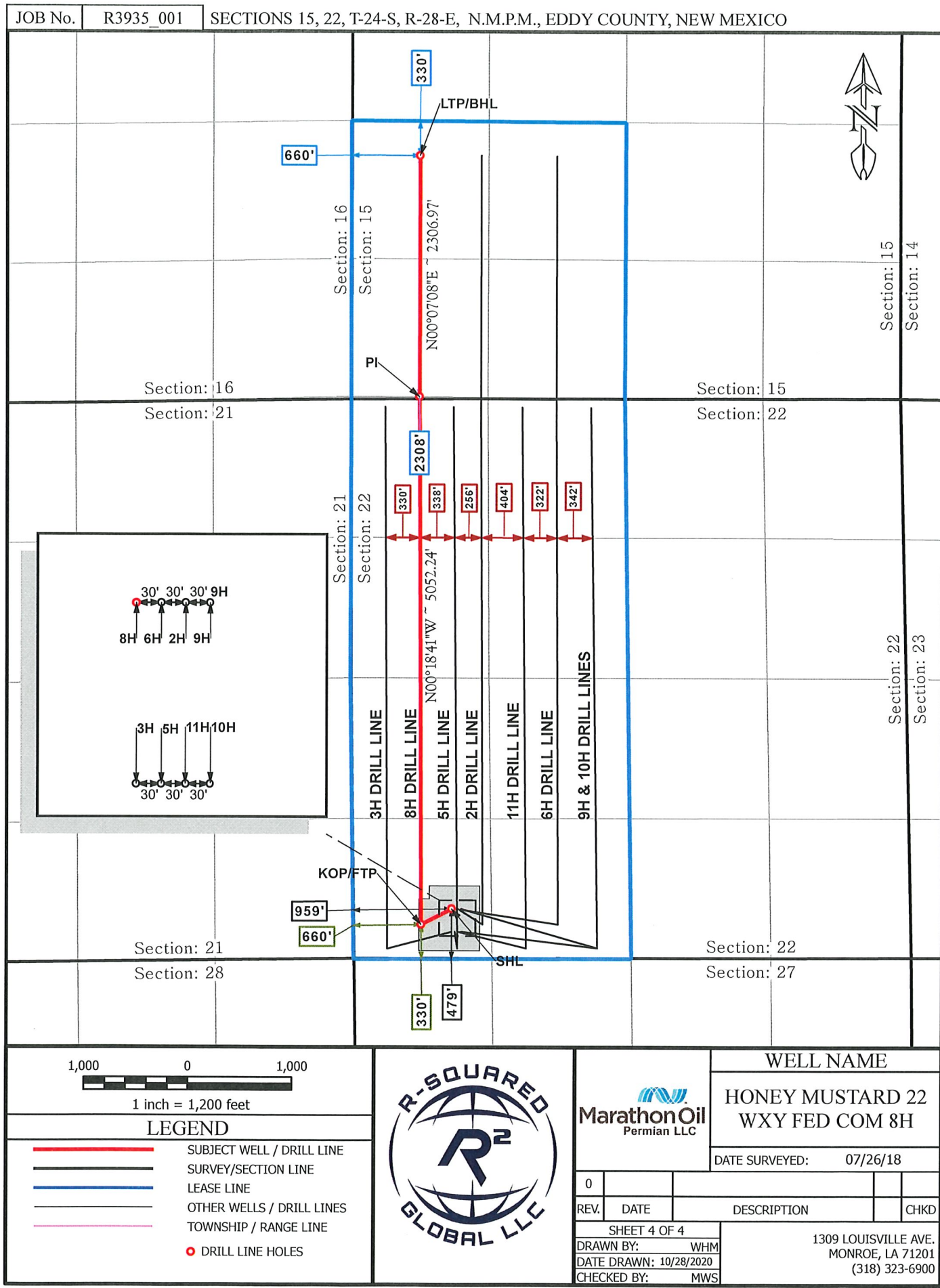
SEC. 22 TWP. 24-S RGE. 28-E
 SURVEY: N.M.P.M.
 COUNTY: EDDY
 OPERATOR: MARATHON OIL PERMIAN LLC
 DESCRIPTION: 479' FSL & 959' FWL
 ELEVATION: 3000'
 LEASE: HONEY MUSTARD 22 FED COM
 U.S.G.S. TOPOGRAPHIC MAP: MALAGA, NM.

1" = 1 MILE



SHEET 3 OF 3

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 JOB No. R3935_001



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WELL PAD EXISTING TOPO

HONEY MUSTARD 22 FED COM

SEC. 22 TWP. 24-S RGE. 28-E

SURVEY: N.M.P.M.

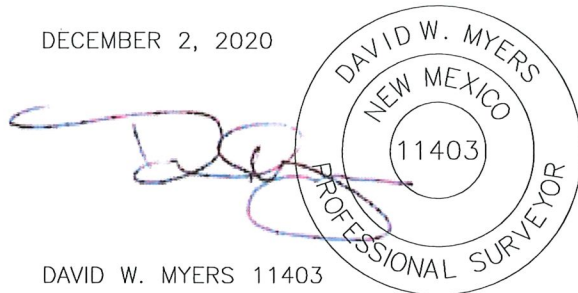
COUNTY: EDDY

OPERATOR: MARATHON OIL PERMIAN LLC

U.S.G.S. TOPOGRAPHIC MAP: MALAGA, N.M.

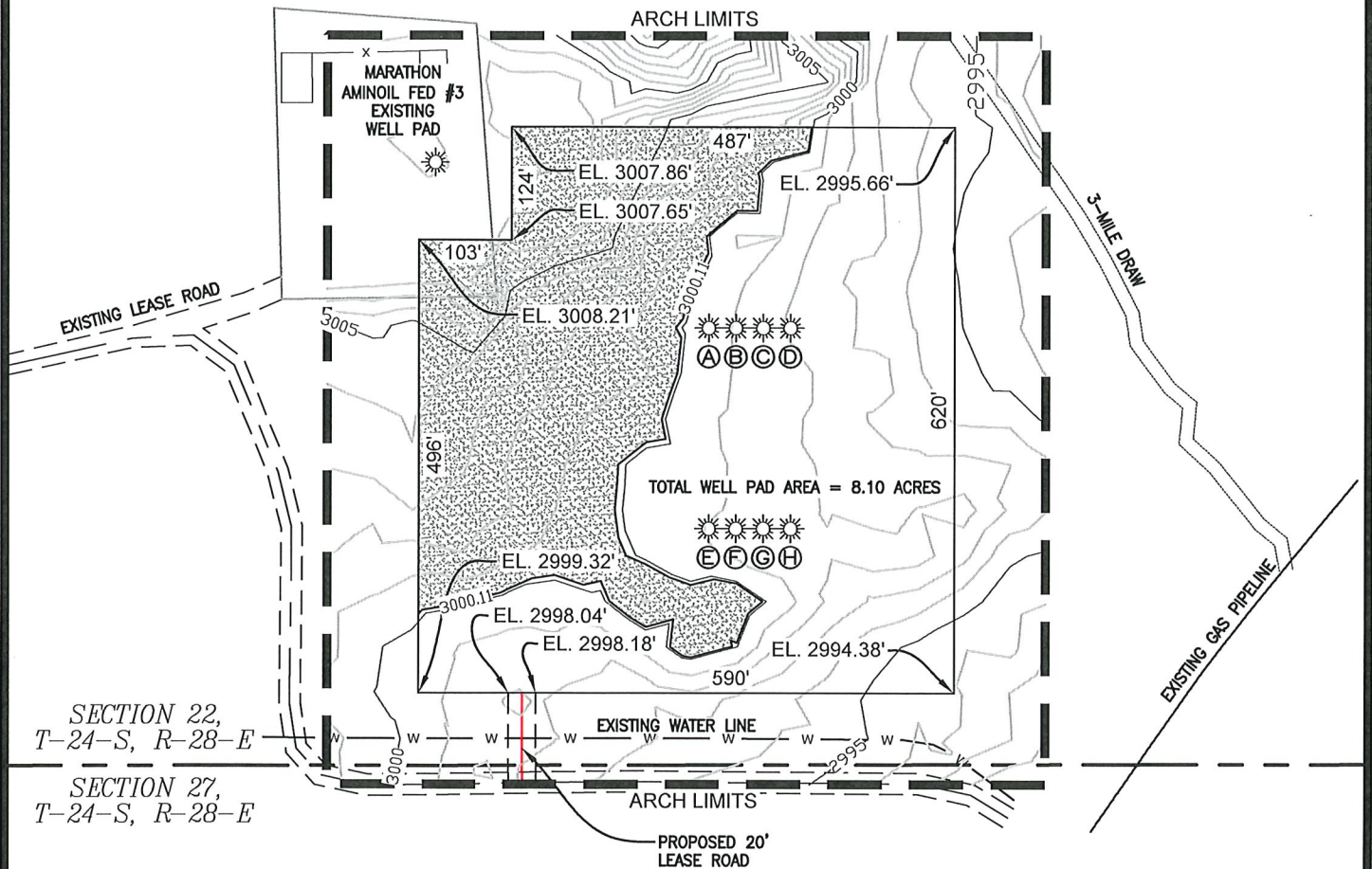
100' 0' 100' 200'
SCALE: 1" = 200'

DECEMBER 2, 2020



DAVID W. MYERS 11403

I HEREBY CERTIFY THAT THE DIMENSIONS, EXISTING ELEVATIONS AND AREAS SHOWN HEREIN ARE BASED ON RECENT GROUND SURVEYS PERFORMED BY ME OR UNDER MY SUPERVISION RELATIVE TO ENGINEERING DESIGN DATA PROVIDED PREVIOUSLY BY OTHERS. NO WARRANTY IS EXPRESSED HEREIN REGARDING THE ENGINEERING DESIGN DATA PROVIDED.



- A: PROPOSED HONEY MUSTARD 22 WXY FED COM 8H
- B: PROPOSED HONEY MUSTARD 22 WXY FED COM 6H
- C: PROPOSED HONEY MUSTARD 22 WA FED COM 2H
- D: PROPOSED HONEY MUSTARD 22 WA FED COM 9H
- E: PROPOSED HONEY MUSTARD 22 WD FED COM 3H
- F: PROPOSED HONEY MUSTARD 22 WD FED COM 5H
- G: PROPOSED HONEY MUSTARD 22 WD FED COM 11H
- H: PROPOSED HONEY MUSTARD 22 WD FED COM 10H

REV 4 10/28/2020 BFF

LEGEND		FENCE	
PROPOSED PAD SURFACE	—	PROPOSED 1' CONTOUR LINES	— x — x —
ARCH SURVEY LIMITS	—	PROPOSED 5' CONTOUR LINES	—
PROPOSED LEASE ROAD	—	EROSION CONTROL FENCE	— ECF —
EXIST. 1' CONTOUR LINES	—	STORM WATER CONTROL DIVERSION	—
EXIST. 5' CONTOUR LINES	—	DISTURBANCE AREA BOUNDARY	—

SHEET 1 OF 5
PREPARED BY:
R-SQUARED GLOBAL, LLC
1309 LOUISVILLE AVENUE, MONROE, LA 71201
318-323-6900 OFFICE
JOB No. R3935_001

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WELL PAD CONTOURS

HONEY MUSTARD 22 FED COM

DECEMBER 2, 2020

SEC. 22 TWP. 24-S RGE. 28-E

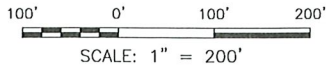
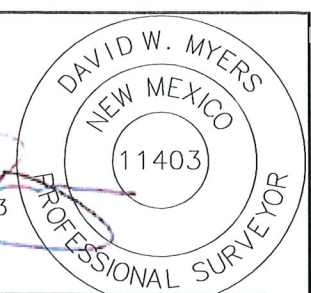
SURVEY: N.M.P.M.

COUNTY: EDDY

DAVID W. MYERS 11403

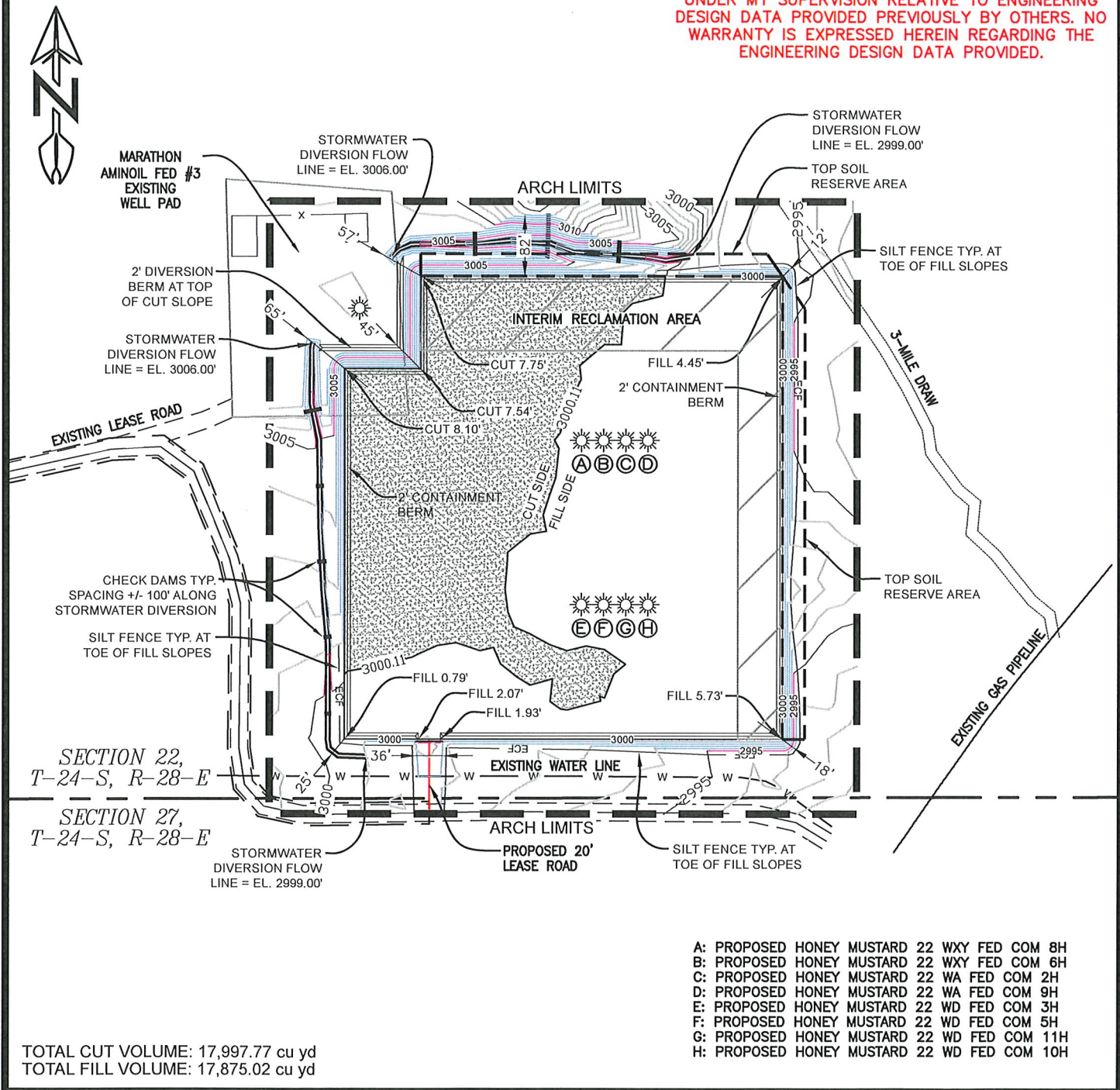
OPERATOR: MARATHON OIL PERMIAN LLC

U.S.G.S. TOPOGRAPHIC MAP: MALAGA, N.M.



PROPOSED SHORT-TERM
DISTURBANCE AREA = 9.83 ACRES

I HEREBY CERTIFY THAT THE DIMENSIONS, EXISTING ELEVATIONS AND AREAS SHOWN HEREIN ARE BASED ON RECENT GROUND SURVEYS PERFORMED BY ME OR UNDER MY SUPERVISION RELATIVE TO ENGINEERING DESIGN DATA PROVIDED PREVIOUSLY BY OTHERS. NO WARRANTY IS EXPRESSED HEREIN REGARDING THE ENGINEERING DESIGN DATA PROVIDED.



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- F: PROPOSED HONEY MUSTARD 22 WD FED COM 5H
- G: PROPOSED HONEY MUSTARD 22 WD FED COM 11H
- H: PROPOSED HONEY MUSTARD 22 WD FED COM 10H

TOTAL CUT VOLUME: 17,997.77 cu yd
TOTAL FILL VOLUME: 17,875.02 cu yd

REV 4 | 10/28/2020 | BFF

LEGEND		FENCE	
PROPOSED PAD SURFACE	—	PROPOSED 1' CONTOUR LINES	— x — x —
ARCH SURVEY LIMITS	—	PROPOSED 5' CONTOUR LINES	—
PROPOSED LEASE ROAD	—	EROSION CONTROL FENCE	— ECF —
EXIST. 1' CONTOUR LINES	—	STORM WATER CONTROL DIVERSION	—
EXIST. 5' CONTOUR LINES	—	DISTURBANCE AREA BOUNDARY	—

SHEET 2 OF 5
PREPARED BY:
R-SQUARED GLOBAL, LLC
1309 LOUISVILLE AVENUE, MONROE, LA 71201
318-323-6900 OFFICE
JOB No. R3935_001

INTERIM RECLAMATION PLAT

HONEY MUSTARD 22 FED COM

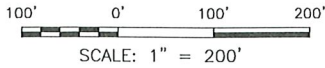
SEC. 22 TWP. 24-S RGE. 28-E

SURVEY: N.M.P.M.

COUNTY: EDDY

OPERATOR: MARATHON OIL PERMIAN LLC

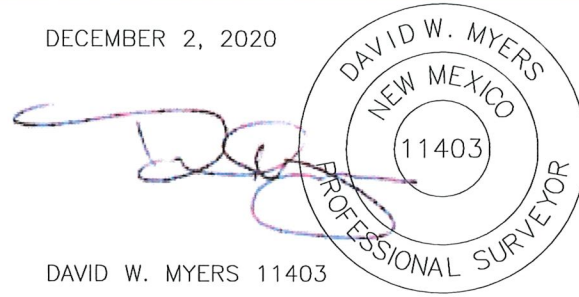
U.S.G.S. TOPOGRAPHIC MAP: MALAGA, N.M.



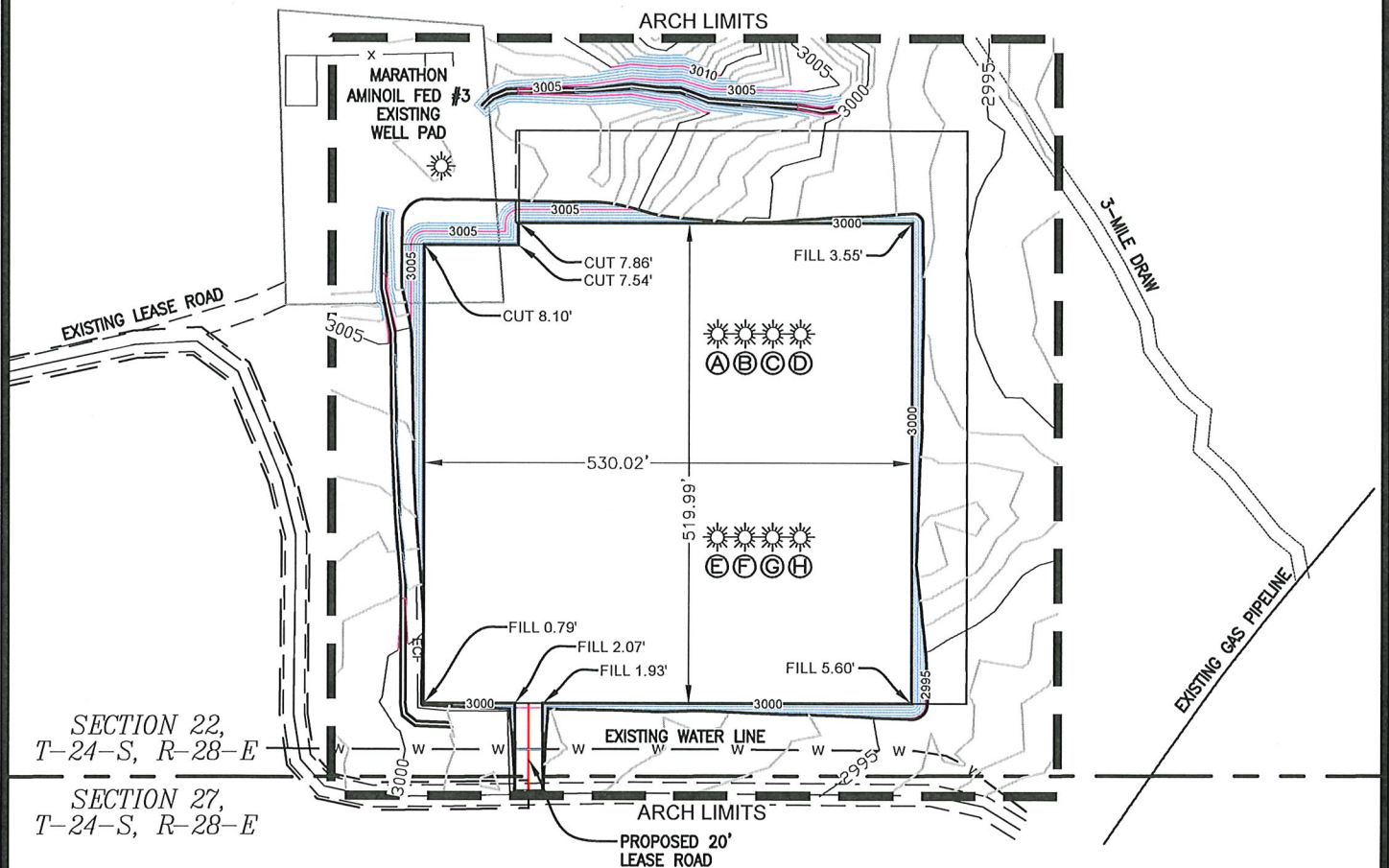
LONG-TERM PAD DISTURBANCE = 6.97 ACRES

DECEMBER 2, 2020

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DAVID W. MYERS 11403



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- G: PROPOSED HONEY MUSTARD 22 WD FED COM 11H
- H: PROPOSED HONEY MUSTARD 22 WD FED COM 10H

REV 4 10/28/2020 BFF

LEGEND		FENCE	— x — x —
INTERIM RECLAMATION	— — — — —	PROPOSED 1' CONTOUR LINES	— — — — —
ARCH SURVEY LIMITS	— — — — —	PROPOSED 5' CONTOUR LINES	— — — — —
PROPOSED LEASE ROAD	— — — — —	EROSION CONTROL FENCE	— ECF —
EXIST. 1' CONTOUR LINES	— — — — —	STORM WATER CONTROL DIVERSION	— — — — —
EXIST. 5' CONTOUR LINES	— — — — —	DISTURBANCE AREA BOUNDARY	— — — — —

SHEET 5 OF 5
PREPARED BY:
R-SQUARED GLOBAL, LLC
1309 LOUISVILLE AVENUE, MONROE, LA 71201
318-323-6900 OFFICE
JOB No. R3935_001

NEW OR RECONSTRUCTED ACCESS ROADS

HONEY MUSTARD 22 FED COM

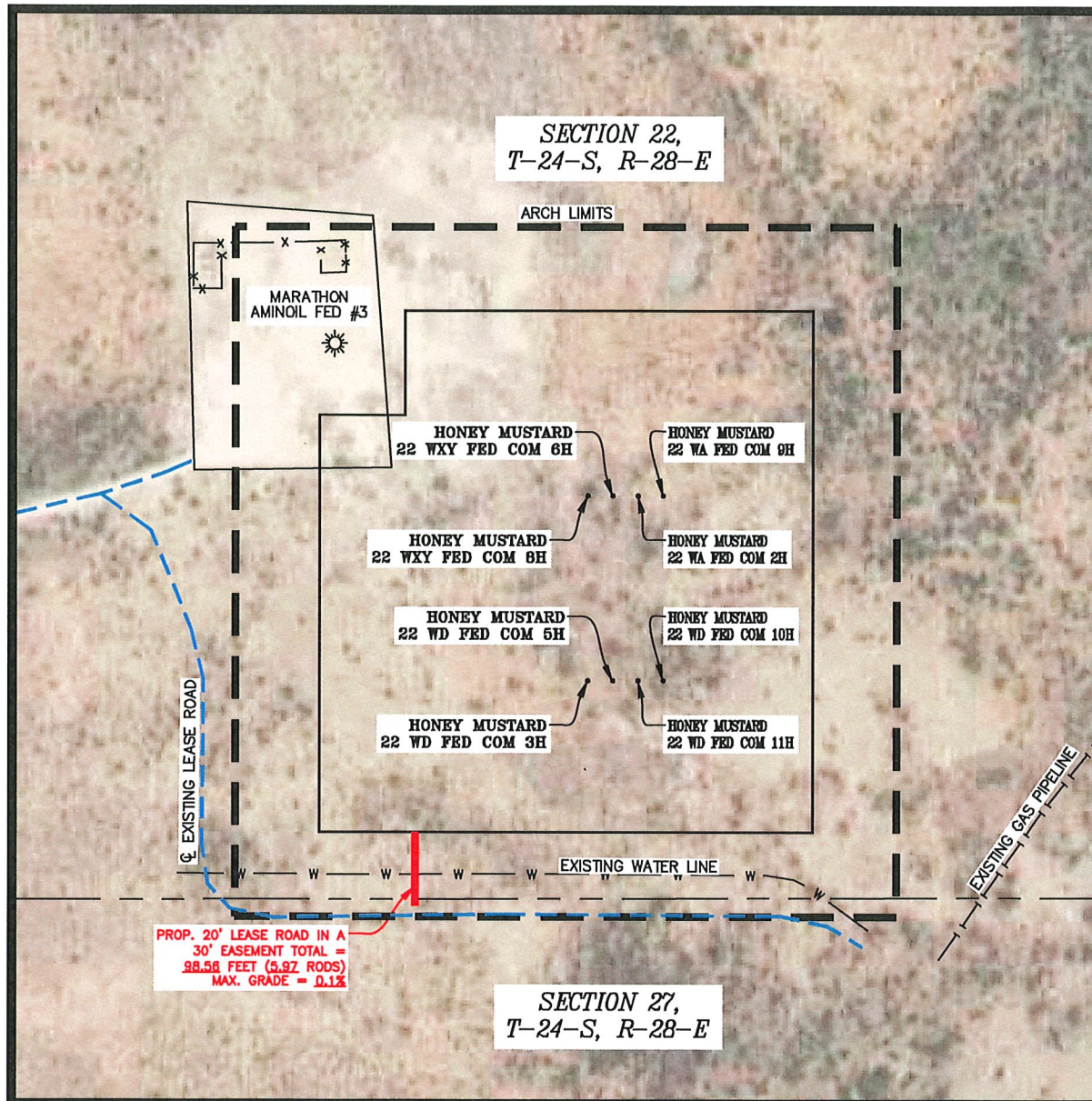
SEC. 22 TWP. 24-S RGE. 28-E

SURVEY: N.M.P.M.

COUNTY: EDDY

OPERATOR: MARATHON OIL PERMIAN LLC

U.S.G.S. TOPOGRAPHIC MAP: MALAGA, N.M.



6	10/29/2020	JCS
REV.	DATE	BY

SCALE: 1" = 200'

LEGEND

PROPOSED WELL PAD	—————	WATER LINE	— w — w —
ARCH SURVEY LIMITS	- - - - -	EXISTING PIPELINE	- + - + - + - + -
EXISTING LEASE ROAD	- - - - -	PI/BEND	O
PROPOSED LEASE ROAD	—————	WELLS	•
SECTION LINE	—————		
FENCE	— x — x —		

SHEET 1 OF 8

PREPARED BY:
R-SQUARED GLOBAL, LLC
1309 LOUISVILLE AVENUE, MONROE, LA 71201
318-323-6900 OFFICE
JOB No. R3935_001

ONE-MILE RADIUS MAP

HONEY MUSTARD 22 FED COM

SEC. 22 TWP. 24-S RGE. 28-E

SURVEY: N.M.P.M.

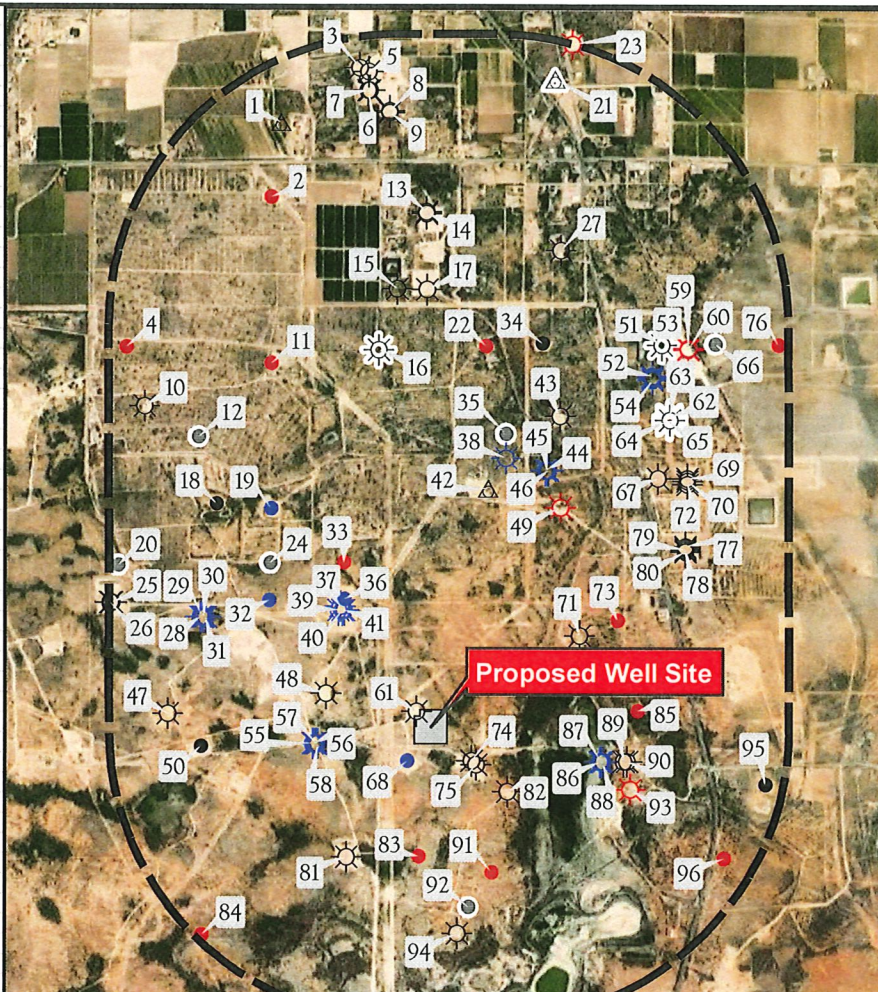
COUNTY: EDDY

OPERATOR: MARATHON OIL PERMIAN LLC

U.S.G.S. TOPOGRAPHIC MAP: MALAGA, NM.



INDEX	WELL
1	CALDERON FARMS SWD #001
2	ZIMA #001
3	TOM MATTHEWS 10 24S 28E RB #223H
4	PRE-ONGARD WELL #001
5	TOM MATTHEWS 10 24S 28E RB #203H
6	CHICAGO 9 8 WOPM FEE #001H
7	CHICAGO 9 8 WOPM FEE #002H
8	TOM MATTHEWS 10 24S 28E RB #224H
9	TOM MATTHEWS 10 24S 28E RB #204H
10	OXY BYPASS 16 ST #001
11	SILVER BULLET #001
12	PARDUE 16 ST #001
13	ANNE COM 15 24S 28E RB #221H
14	ANNE COM 15 24S 28E RB #201H
15	ANNE COM 15 24S 28E RB #202H
16	WILLOW LAKE WA 15 #002C
17	ANNE COM 15 24S 28E RB #222H
18	PARDUE #001Q
19	PARDUE FARMS 21 SWD #001
20	PARDUE FARMS 21 #001
21	ALPHA SWD #001
22	PRE-ONGARD WELL #003
23	KIRKES COM #001
24	PARDUE #001
25	CREEDENCE 21 16 W0ED SC #002H
26	KANSAS 21 28 W0LM FC #002H
27	ANNE COM 15 24S 28E RB #001
28	KANSAS 21 28 W1KN FC #003H
29	CREEDENCE 21 16 W1FC SC #003H
30	CREEDENCE 21 16 W0FC SC #004H
31	KANSAS 21 28 W0KN FC #004H
32	CREEDENCE 21 16 B3GB SC #001H
33	PRE-ONGARD WELL #001
34	WILLOW LAKE 15 #002
35	WILLOW LAKE 15 #004
36	CREEDENCE 21 16 B3HA SC #001H
37	KANSAS 21 28 W0IP FC #002H
38	HONEY MUSTARD 22 WD FC #010H
39	CREEDENCE 21 16 W0HA SC #002H
40	KANSAS 21 28 W2IP FC #001H
41	CREEDENCE 21 16 W0HA SC #001H
42	WILLOW LAKE #001
43	WILLOW LAKE 15 #001
44	CHICKEN FRY 22 WD FC #016H
45	CHICKEN FRY 22 WXY FC #012H
46	CHICKEN FRY FC 24 28 22 WA #015H
47	OXY STENT FED #001
48	OPL NEW ZIPPER FED #001



INDEX	WELL
49	WILLOW LAKE 22 #002
50	STENT 21 FC #002H
51	WILLOW LAKE WC 15 #002C
52	WILLOW LAKE 15 WXY FEE #003H
53	WILLOW LAKE 15 WA FEE #005H
54	WILLOW LAKE 15 WXY FEE #007H
55	CREEDENCE 21 16 W1OB FC #001H
56	CREEDENCE 21 16 W0OB FC #002H
57	CREEDENCE 21 16 W1PA FC #002H
58	CREEDENCE 21 16 W0PA FC #001H
59	WILLOW LAKE WA 15 #001H
60	WILLOW LAKE WC 15 #001H
61	AMINOIL FED #003
62	WILLOW LAKE WA 15 #003C
63	WILLOW LAKE WC 15 #003C
64	WILLOW LAKE WC 15 #004C
65	WILLOW LAKE WA 15 #004C
66	PRE-ONGARD WELL #005
67	CHICKEN FRY FC #001H
68	ROCK SPUR 27 W0DM FC #001H
69	FIDDLE FEE 24 28 23 TB #002H
70	FIDDLE FEE 24 28 23 WA #006H
71	AMINOIL FED #001
72	FIDDLE FEE 24 28 23 WXY #009H
73	PRE-ONGARD WELL #002
74	ROCK SPUR 27 W2CN SC #001H
75	ROCK SPUR 27 W0CN SC #002H
76	PRE-ONGARD WELL #004
77	FIDDLE FEE 24 28 23 WD #007H
78	FIDDLE FEE 24 28 23 WD #008H
79	FIDDLE FEE 24 28 23 WD #003H
80	FIDDLE FEE 24 28 23 WD #004H
81	SALT DRAW 28 FED SWD #001
82	ST V 492 #002
83	PRE-ONGARD WELL #001
84	PRE-ONGARD WELL #001
85	PRE-ONGARD WELL #001
86	ROCK SPUR 27 W1CN SC #001H
87	ROCK SPUR 27 W0BO SC #004H
88	ROCK SPUR 27 W1BO ST #003H
89	ROCK SPUR 27 W0AP ST #002H
90	ROCK SPUR 27 W2AP ST #001H
91	PRE-ONGARD WELL #001
92	BRASKY 27 #001
93	ST V 492 #001
94	MALAGA COM #001
95	IMC #001
96	PRE-ONGARD WELL #001

NEAREST ACTIVE WELL		
8H	AMINOIL FED #003	355'
6H	AMINOIL FED #003	380'
2H	AMINOIL FED #003	406'
9H	AMINOIL FED #003	433'

NEAREST ACTIVE WELL		
3H	AMINOIL FED #003	511'
5H	AMINOIL FED #003	529'
11H	AMINOIL FED #003	548'
10H	AMINOIL FED #003	568'

Source
CNE
User

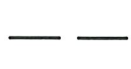
REV 6 JCS 10/31/2020

1" = 3,500'

Proposed Well
Pad



Arch Survey
Limits



Section Line



CO2 Active

CO2 Cancelled

CO2, Plugged



Gas, Active

Gas, Cancelled

Gas, New

Gas, Plugged

Gas, Abandoned

Injection, Active

Injection, New

Injection, Plugged



Salt Water Injection, Cancelled

Injection, Abandoned

Oil, Active

Oil, Cancelled

Oil, New

Oil, Plugged

Oil, Abandoned

Salt Water Injection, Active



Salt Water Injection, New

Salt Water Injection, Plugged

Water, Active

Water, Plugged



SHEET 2 OF 8

PREPARED BY:

RSQUARED GLOBAL, LLC
1309 LOUISVILLE AVENUE, MONROE, LA 71201

318-323-6900 OFFICE
JOB No. R3935_001

WELL PAD PLAT

HONEY MUSTARD 22 FED COM

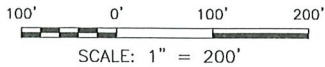
SEC. 22 TWP. 24-S RGE. 28-E

SURVEY: N.M.P.M.

COUNTY: EDDY

OPERATOR: MARATHON OIL PERMIAN LLC

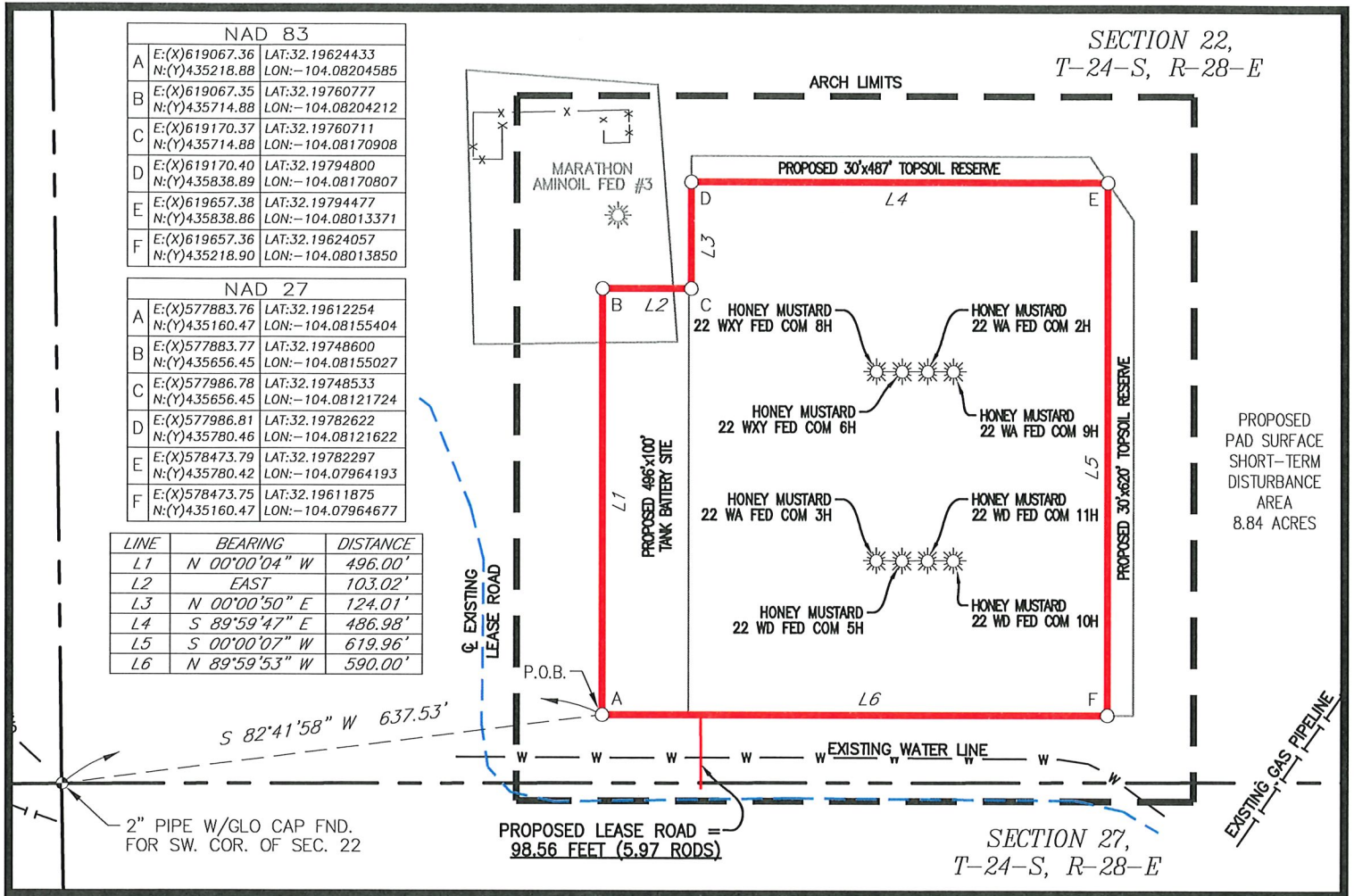
U.S.G.S. TOPOGRAPHIC MAP: MALAGA, N.M.



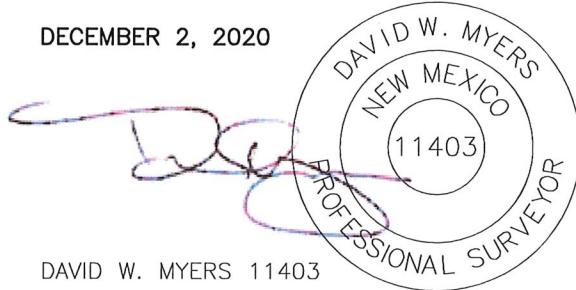
NAD 83			
A	E:(X)619067.36 N:(Y)435218.88	LAT:32.19624433 LON:-104.08204585	
B	E:(X)619067.35 N:(Y)435714.88	LAT:32.19760777 LON:-104.08204212	
C	E:(X)619170.37 N:(Y)435714.88	LAT:32.19760711 LON:-104.08170908	
D	E:(X)619170.40 N:(Y)435838.89	LAT:32.19794800 LON:-104.08170807	
E	E:(X)619657.38 N:(Y)435838.86	LAT:32.19794477 LON:-104.08013371	
F	E:(X)619657.36 N:(Y)435218.90	LAT:32.19624057 LON:-104.08013850	

NAD 27			
A	E:(X)577883.76 N:(Y)435160.47	LAT:32.19612254 LON:-104.08155404	
B	E:(X)577883.77 N:(Y)435656.45	LAT:32.19748600 LON:-104.08155027	
C	E:(X)577986.78 N:(Y)435656.45	LAT:32.19748533 LON:-104.08121724	
D	E:(X)577986.81 N:(Y)435780.46	LAT:32.19782622 LON:-104.08121622	
E	E:(X)578473.79 N:(Y)435780.42	LAT:32.19782297 LON:-104.07964193	
F	E:(X)578473.75 N:(Y)435160.47	LAT:32.19611875 LON:-104.07964677	

LINE	BEARING	DISTANCE
L1	N 00°00'04" W	496.00'
L2	EAST	103.02'
L3	N 00°00'50" E	124.01'
L4	S 89°59'47" E	486.98'
L5	S 00°00'07" W	619.96'
L6	N 89°59'53" W	590.00'



DECEMBER 2, 2020



DAVID W. MYERS 11403

PLAT FOR A SURFACE SITE ON THE PROPERTY OF SCOTT AND VALERIE BRANSON (N-JT) EDDY COUNTY, NEW MEXICO			
6	10/29/2020	DESIGN CHANGE	JCS MWS
REV.	DATE	DESCRIPTION	BY CHKD
SHEET 3 OF 8			
DRAWN BY: JCS		1309 LOUISVILLE AVE. MONROE, LA 71201 (318) 323-6900	
DATE: 08/08/2018		(318) 362-0064	
CHECKED BY: MWS			

ALL BEARINGS AND COORDINATES REFER TO NAD 83, NEW MEXICO STATE PLANE COORDINATE SYSTEM, EAST ZONE, U.S. SURVEY FEET. (ALL BEARINGS AND DISTANCES ARE GRID MEASUREMENTS.)

LEGEND	P.O.B. POINT OF BEGINNING	R3935_001
--- x ---	ARCH LIMITS	
---	FENCE	
---	SECTION LINE	
---	SALT WATER DISPOSAL	
---	WATER LINE	
---	EXIST. PIPELINE	
---	SWD	
---	W	
●	MONUMENT	
●	QUARTER SPLIT	

LEGEND

WELL LOCATION PLAT



PROPOSED WELL PAD ———
 ARCH SURVEY LIMITS ———
 PROPOSED LEASE ROAD ———
 EXISTING LEASE ROAD - - - - -
 FENCE — x — x —

HONEY MUSTARD 22 FED COM

SEC. 22 TWP. 24-S RGE. 28-E

SURVEY: N.M.P.M.

COUNTY: EDDY

OPERATOR: MARATHON OIL PERMIAN LLC

U.S.G.S. TOPOGRAPHIC MAP: MALAGA, N.M.

HONEY MUSTARD 22 WXY FED COM 8H
 MARATHON OIL PERMIAN LLC
 479' FSL 959' FWL, SECTION 22
 NAD 83, SPCS NM EAST
 X:619387.38' / Y:435618.88'
 LAT:32.19734181N / LON:-104.08100825W
 NAD 27, SPCS NM EAST
 X:578203.79' / Y:435560.45'
 LAT:32.19722002N / LON:-104.08051645W
 ELEVATION = 3000'

HONEY MUSTARD 22 WXY FED COM 6H
 MARATHON OIL PERMIAN LLC
 479' FSL 989' FWL, SECTION 22
 NAD 83, SPCS NM EAST
 X:619417.38' / Y:435618.92'
 LAT:32.19734173N / LON:-104.08091127W
 NAD 27, SPCS NM EAST
 X:578233.78' / Y:435560.49'
 LAT:32.19721993N / LON:-104.08041948W
 ELEVATION = 2999'

HONEY MUSTARD 22 WA FED COM 2H
 MARATHON OIL PERMIAN LLC
 479' FSL 1019' FWL, SECTION 22
 NAD 83, SPCS NM EAST
 X:619447.36' / Y:435618.88'
 LAT:32.19734145N / LON:-104.08081434W
 NAD 27, SPCS NM EAST
 X:578263.77' / Y:435560.45'
 LAT:32.19721965N / LON:-104.08032255W
 ELEVATION = 2998'

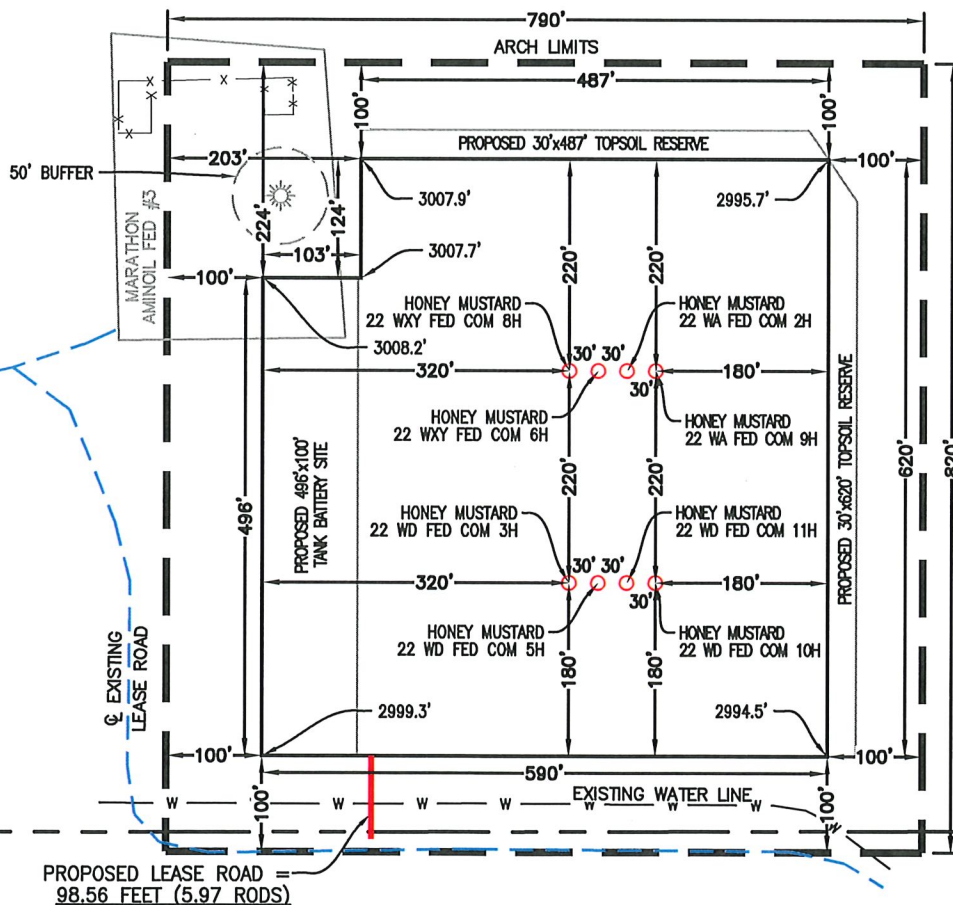
HONEY MUSTARD 22 WA FED COM 9H
 MARATHON OIL PERMIAN LLC
 479' FSL 1049' FWL, SECTION 22
 NAD 83, SPCS NM EAST
 X:619477.36' / Y:435618.88'
 LAT:32.19734120N / LON:-104.08071737W
 NAD 27, SPCS NM EAST
 X:578293.76' / Y:435560.43'
 LAT:32.19721940N / LON:-104.08022559W
 ELEVATION = 2998'

HONEY MUSTARD 22 WD FED COM 3H
 MARATHON OIL PERMIAN LLC
 259' FSL 956' FWL, SECTION 22
 NAD 83, SPCS NM EAST
 X:619387.37' / Y:435398.87'
 LAT:32.19673706N / LON:-104.08100995W
 NAD 27, SPCS NM EAST
 X:578203.77' / Y:435340.45'
 LAT:32.19661525N / LON:-104.08051817W
 ELEVATION = 2999'

HONEY MUSTARD 22 WD FED COM 5H
 MARATHON OIL PERMIAN LLC
 259' FSL 986' FWL, SECTION 22
 NAD 83, SPCS NM EAST
 X:619417.38' / Y:435398.82'
 LAT:32.19673672N / LON:-104.08091293W
 NAD 27, SPCS NM EAST
 X:578233.78' / Y:435340.40'
 LAT:32.19661491N / LON:-104.08042116W
 ELEVATION = 2999'

HONEY MUSTARD 22 WD FED COM 11H
 MARATHON OIL PERMIAN LLC
 259' FSL 1016' FWL, SECTION 22
 NAD 83, SPCS NM EAST
 X:619447.39' / Y:435398.88'
 LAT:32.19673668N / LON:-104.08081591W
 NAD 27, SPCS NM EAST
 X:578263.79' / Y:435340.45'
 LAT:32.19661487N / LON:-104.08032414W
 ELEVATION = 2998'

HONEY MUSTARD 22 WD FED COM 10H
 MARATHON OIL PERMIAN LLC
 259' FSL 1046' FWL, SECTION 22
 NAD 83, SPCS NM EAST
 X:619477.41' / Y:435398.89'
 LAT:32.19673650N / LON:-104.08071888W
 NAD 27, SPCS NM EAST
 X:578293.81' / Y:435340.46'
 LAT:32.19661469N / LON:-104.08022711W
 ELEVATION = 2998'



SECTION 22,
 T-24-S, R-28-E

SECTION 27,
 T-24-S, R-28-E

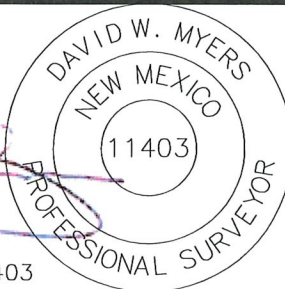
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 INFORMATION ONLY. BOUNDARY DATA SHOWN
 IS FROM STATE OF NEW MEXICO OIL
 CONSERVATION DIVISION FORM C-102
 INCLUDED IN THIS SUBMITTAL.

DECEMBER 2, 2020

6	10/29/2020	JCS
REV.	DATE	BY

100' 0' 100' 200'
 SCALE: 1" = 200'

DAVID W. MYERS 11403



SHEET 5 OF 8

PREPARED BY:
 R-SQUARED GLOBAL, LLC
 1309 LOUISVILLE AVENUE, MONROE, LA 71201
 318-323-6900 OFFICE
 JOB No. R3935_001

Page 17 of 31
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VICINITY AND EXISTING ROADS MAP

HONEY MUSTARD 22 FED COM

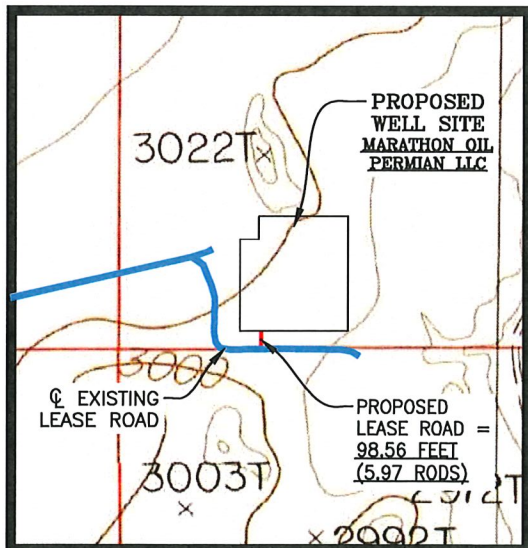
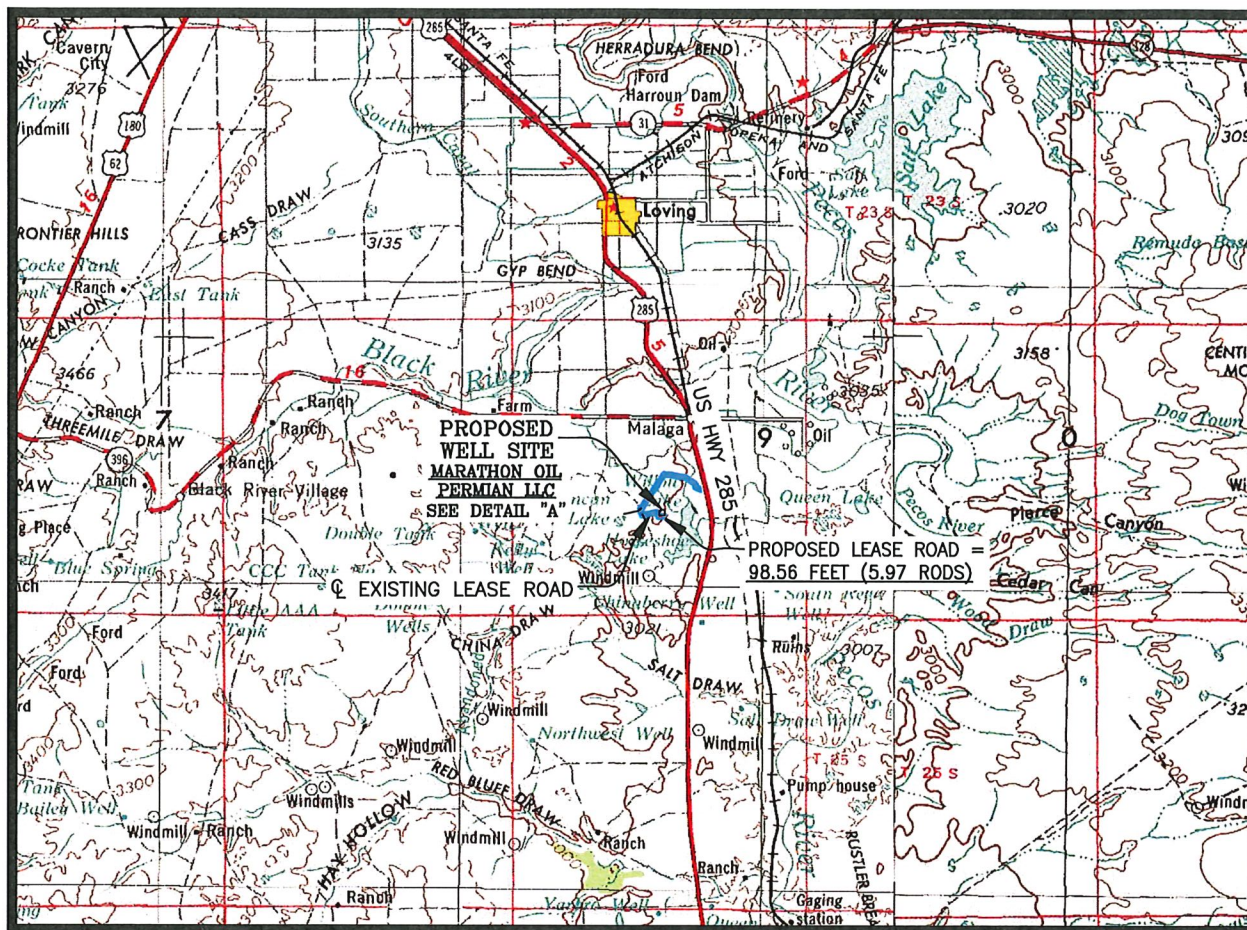
SEC. 22 TWP. 24-S RGE. 28-E

SURVEY: N.M.P.M.

COUNTY: EDDY

OPERATOR: MARATHON OIL PERMIAN LLC

U.S.G.S. TOPOGRAPHIC MAP: MALAGA, N.M.



SCALE: 1" = 20,000'
CONTOUR INTERVAL = 100'

DIRECTIONS TO LOCATION:

FROM THE MARATHON OFFICE AT 4111 TIDWELL, CARLSBAD, NM HEAD SOUTH ON TIDWELL RD TOWARD US HWY 285 N FOR 0.2 MILES. TURN LEFT ONTO US HWY 285 S, HEADING SOUTH, FOR 13.8 MILES TO A CALICHE ROAD. TURN RIGHT ONTO CALICHE ROAD, HEADING WEST, FOR 0.9 MILES TO THE INTERSECTION OF CALICHE ROADS. TURN LEFT ONTO CALICHE ROAD, HEADING SOUTH, FOR 0.1 MILES TO THE INTERSECTION WITH A CALICHE ROAD. TURN LEFT ONTO CALICHE ROAD, HEADING EAST, FOR 0.2 MILES TO THE INTERSECTION WITH A CALICHE LEASE ROAD. KEEP RIGHT, HEADING SOUTH, FOR 0.1 MILES TO THE INTERSECTION WITH THE PROPOSED LEASE ROAD FOR THE HONEY MUSTARD 22 FED COM WXY8H-WA2H-WXY6H-WA9H-WD3H-WD5H-WD11H-WD10H WELL PAD LOCATION. TURN LEFT ONTO SAID PROPOSED LEASE ROAD, HEADING NORTH, FOR 99 FEET, ENTERING THE SOUTHWEST CORNER OF SAID WELL PAD LOCATION.

SHEET 6 OF 8

6	10/29/2020	JCS
RBV.	DATE	BY

DETAIL A
N.T.S.

PREPARED BY:
R-SQUARED GLOBAL, LLC
1309 LOUISVILLE AVENUE, MONROE, LA 71201
318-323-6900 OFFICE
JOB No. R3936_001

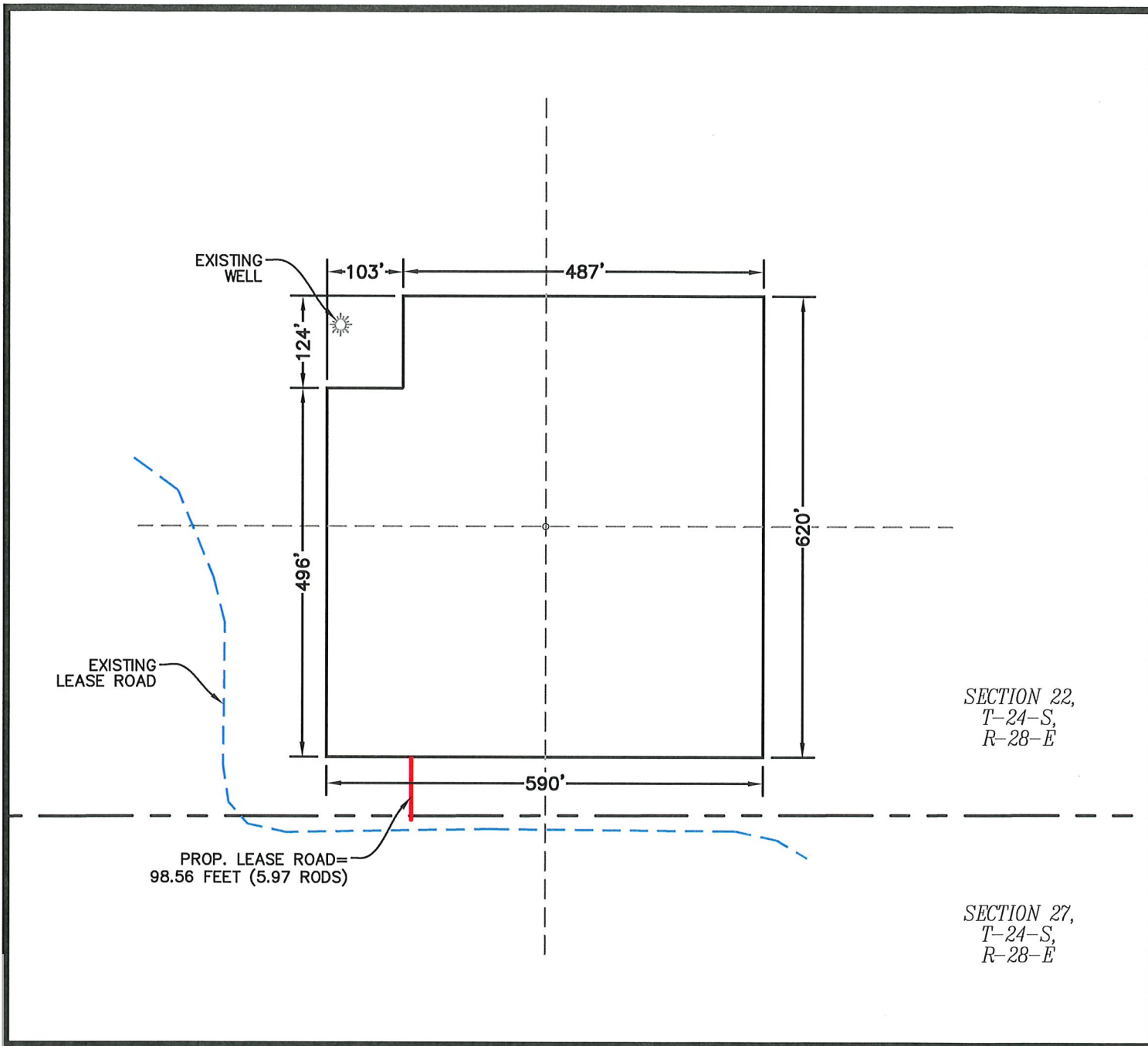
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LEGEND

- PROPOSED WELL PAD —————
- PERMANENT EASEMENT —————
- PROPOSED LEASE ROAD —————
- EXISTING LEASE ROAD - - - - -

RIG LAYOUT

HONEY MUSTARD 22 FED COM
SEC. 22 TWP. 24-S RGE. 28-E
SURVEY: N.M.P.M.
COUNTY: EDDY
OPERATOR: MARATHON OIL PERMIAN LLC
U.S.G.S. TOPOGRAPHIC MAP: MALAGA, N.M.



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CONSERVATION DIVISION FORM C-102
INCLUDED IN THIS SUBMITTAL.

SHEET 7 OF 8

PREPARED BY:
R-SQUARED GLOBAL, LLC
1309 LOUISVILLE AVENUE,
MONROE, LA 71201
318-323-6900 OFFICE
JOB No. R3935_001

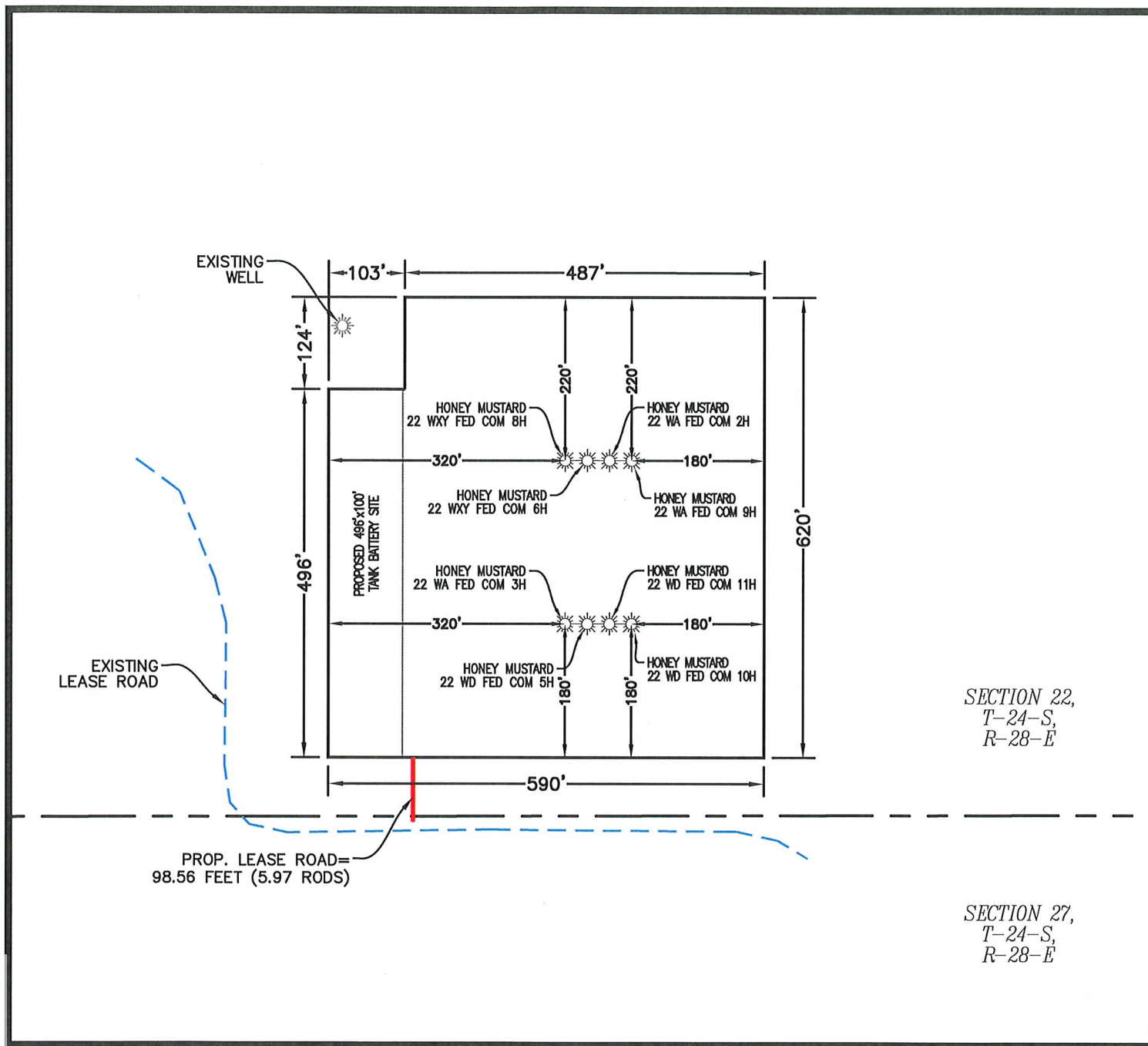
Page 20 of 31
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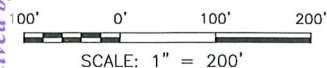
- PROPOSED WELL PAD
- PERMANENT EASEMENT
- PROPOSED LEASE ROAD
- EXISTING LEASE ROAD

FACILITY LAYOUT

HONEY MUSTARD 22 FED COM
SEC. 22 TWP. 24-S RGE. 28-E
SURVEY: N.M.P.M.
COUNTY: EDDY
OPERATOR: MARATHON OIL PERMIAN LLC
U.S.G.S. TOPOGRAPHIC MAP: MALAGA, N.M.



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SHEET 8 OF 8

PREPARED BY:
R-SQUARED GLOBAL, LLC
1309 LOUISVILLE AVENUE,
MONROE, LA 71201
318-323-6900 OFFICE
JOB No. R3935_001

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MARATHON OIL PERMIAN LLC

DRILLING AND OPERATIONS PLAN

WELL NAME / NUMBER: HONEY MUSTARD 22 WXY FED COM 8H

STATE: NEW MEXICO

COUNTY: EDDY

Application Data Report

1. WELL LOCATION TABLE

Traverse Segment	Latitude NAD83	Longitude NAD83	Elevation (ft SS)	MD (RKB)	TVD (RKB)	Lease Serial	NS Foot	NS Indicator	EW Foot	EW Indicator	TWSP	Range	Section	Aliquot/Lot	Lease Type
SHL	32.19734181	-104.0810083	3000	0	0	NMNM020360	479	FSL	959	FWL	24S	28E	22	SWSW	F
FTP	32.19693291	-104.0819685	-6087	9113	9087	NMNM020360	330	FSL	660	FWL	24S	28E	22	SWSW	F
PPP-2	32.19972132	-104.0819787	-6564	10400	9564	NMNM0556542	1344	FSL	668	FWL	24S	28E	22	NWSW	F
PPP-3	32.20341679	-104.0819921	-6564	11744	9564	NMNM020360	2689	FSL	678	FWL	24S	28E	22	SWNW	F
PPP-4	32.21081775	-104.0820191	-6564	14437	9564	PRIVATE	0	FSL	660	FWL	24S	28E	15	SWSW	P
BHL	32.21716248	-104.0819862	-6564	16745	9564	PRIVATE	2308	FSL	660	FWL	24S	28E	15	NWSW	P

Drilling Plan Data Report

1. GEOLOGIC FORMATIONS

Formation	True Vertical Depth (ft)	Measured Depth (ft)	Lithologies	Mineral Resources
Rustler	N/A	N/A	Salt/Anhydrite	BRINE
Castile	1088	1088	Salt/Anhydrite	BRINE
Base of Salt	2608	2620	Limy Sands	BRINE
Lamar	2608	2620	Sand/Shales	NONE
Delaware	2644	2656.5	Sands/Shale	OIL
Bone Spring	6223	6249.5	Sands/Carbonates	OIL
Wolfcamp	9448	9523.1	Carbonates/Shales/Sands	OIL

2. BLOWOUT PREVENTION

BOP installed and tested before drilling which hole?	Size?	Min. Required WP	Type	✓	Tested to:
17 1/2"	13 5/8"	5000	Annular	X	50% of working pressure
			BOP Stack	X	5000
12 1/4"	13 5/8"	5000	Annular	X	50% of working pressure
			BOP Stack	X	5000
8 3/4"	13 5/8"	5000	Annular	X	50% of working pressure
			BOP Stack	X	5000

BOP/BOPE will be tested by an independent service company to 250 psi low and the high pressure indicated above per Onshore Order 2 requirements. The System may be upgraded to a higher pressure but still tested to the working pressure listed in the table 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.

Y	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 IILB.1.i.	
Y	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.	
	N	Are anchors required by manufacturer?
Y	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.	

3. CASING PROGRAM

String Type	Hole Size	Csg Size	Top Set MD	Bottom Set MD	Top Set TVD	Bottom Set TVD	Top Set MSL	Bottom Set MSL	Weight (lbs/ft)	Grade	Conn.	SF Collapse	SF Burst	SF Tension
Surface	17 1/2"	13 3/8	0	500	0	500	3000	2500	54.5	J55	STC	3.37	1.71	2.93
Intermediate	12 1/4"	9 5/8	0	2820	0	2808	3000	192	36	J55	LTC	1.26	1.2	1.96
Production	8 3/4"	5 1/2	0	16745	0	9564	3000	-6564	20	P110	BTC	1.65	1.29	2.08

All casing strings will be tested in accordance with Onshore Oil and Gas Order #2 III.B.1.h

Is casing new? If used, attach certification as required in Onshore Order #1	Y
Does casing meet API specifications? If no, attach casing specification sheet.	Y
Is premium or uncommon casing planned? If yes attach casing specification sheet.	N
Does the above casing design meet or exceed BLM's minimum standards? If not provide justification (loading assumptions, casing design criteria).	Y
Will the intermediate pipe be kept at a minimum 1/3 fluid filled to avoid approaching the collapse pressure rating of the casing?	Y
Is well located within Capitan Reef?	N
If yes, does production casing cement tie back a minimum of 50' above the Reef?	
Is well within the designated 4 string boundary.	
Is well located in SOPA but not in R-111-P?	N
If yes, are the first 2 strings cemented to surface and 3 rd string cement tied back 500' into previous casing?	
Is well located in R-111-P and SOPA?	N
If yes, are the first three strings cemented to surface?	
Is 2 nd string set 100' to 600' below the base of salt?	
Is well located in high Cave/Karst?	N
If yes, are there two strings cemented to surface?	
(For 2 string wells) If yes, is there a contingency casing if lost circulation occurs?	
Is well located in critical Cave/Karst?	N
If yes, are there three strings cemented to surface?	

4. CEMENT

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity (sks)	Yield (ft3/sks)	Density (ppg)	Slurry Volume (ft3)	Excess (%)	Cement Type	Additives
Surface	Lead	--	0	300	241	1.73	13.5	417	150	Class C	LCM
Surface	Tail	--	300	500	167	1.33	14.8	223	100	Class C	Accelerator
Intermediate	Lead	--	0	1800	310	2.49	11.0	773	100	Class C	Extender, Accelerator
Intermediate	Tail	--	1800	2820	222	1.28	13.8	285	30	Class H	Retarder
Production	Lead	--	320	820	47	1.29	14.5	60	30	Class H	Viscosifier, Retarder
Production	Tail	--	820	16745	1608	1.09	14.5	1753	30	Class H	Extender, Fluid Loss, Dispersant

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 depth: N/A TVD/MD

KOP: N/A TVD/MD

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

Attach plugging procedure for pilot hole: N/A

5. CIRCULATING MEDIUM

Top Depth	Bottom Depth	Mud Type	Min. Weight (ppg)	Max Weight (ppg)
0	500	Water Based Mud	8.4	8.8
500	2820	Brine	9.2	10.2
2820	16745	Oil Based Mud	10.5	12.5

Losses or gains in the mud system will be monitored visually/manually as well as with an electronic PVT.
The necessary mud products for additional weight and fluid loss control will be on location at all times.

6. TEST, 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:

No coring is planned at this time.

Mud Logger: None.

DST's: None.

Open Hole Logs: GR while drilling from Intermediate casing shoe to TD.

7. PRESSURE

ANTICIPATED BOTTOM HOLE PRESSURE: 6,217 psi

ANTICIPATED BOTTOM HOLE TEMPERATURE: 195 °F

ANTICIPATED ABNORMAL PRESSURE: N

ANTICIPATED ABNORMAL TEMPERATURE: N

POTENTIAL HAZARDS:

A. 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.

B. No abnormal temperatures or pressures are anticipated. All personnel will be familiar with all aspects of safe operation of equipment being used to drill this well. Adequate flare lines will be installed off the mud/gas separator where gas may be flared safely.

C. No losses are anticipated at this time.

D. All personnel will be familiar with all aspects of safe operation of equipment being used to drill this well.

E. Adequate flare lines will be installed off the mud/gas separator where gas may be flared safely.

8. OTHER

Other Well 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.

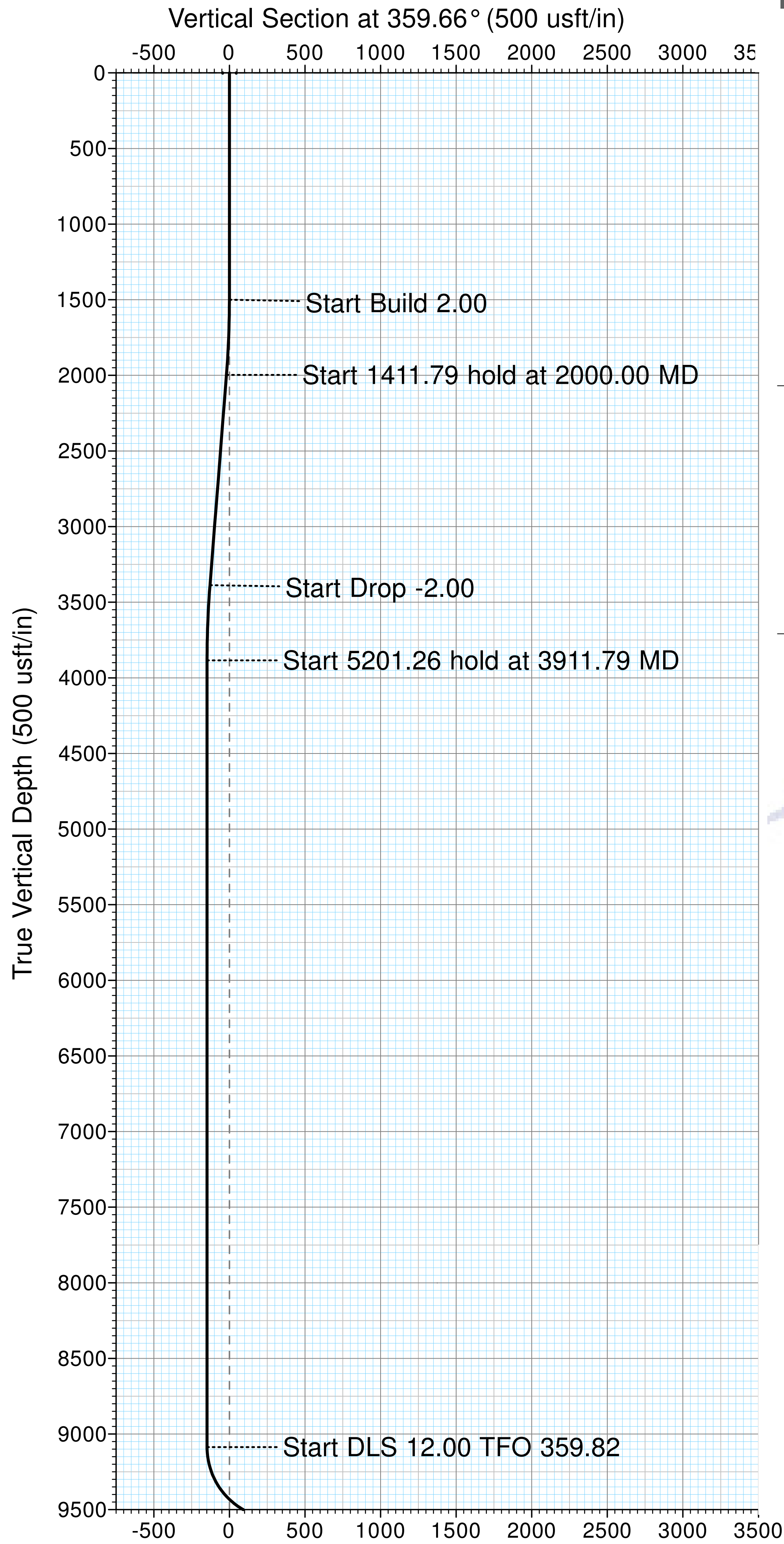
Hydrogen Sulfide detection equipment will be in operation after drilling out the surface casing shoe until the production casing is cemented. Breathing equipment will be on location upon drilling the surface casing shoe until total depth is reached. **If Hydrogen Sulfide is encountered, measured amounts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



Marathon Oil
Eddy County, NM
Honey Mustard 22 Fed (2-6-8-9)
WXY #8H
Prelim Plan D



US State Plane 1927 (Exact solution)
NAD 1927 (NADCON CONUS)
Clarke 1866
New Mexico East 3001
Mean Sea Level

RKB Elevation: well @ 3025.00usft

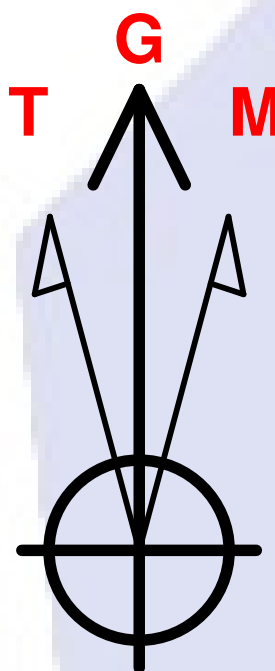
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.00	0.00	435560.45	578203.79	32.197220	-104.080516	

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	VSect
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	1500.00	0.00	0.00	1500.00	0.00	0.00	0.00	0.00
3	2000.00	10.00	243.27	1997.47	-19.58	-38.87	2.00	-19.35
4	3411.79	10.00	243.27	3387.81	-129.86	-257.82	0.00	-128.33
5	3911.79	0.00	0.00	3885.28	-149.44	-296.69	2.00	-147.68
6	9113.06	0.00	0.00	9086.54	-149.44	-296.69	0.00	-147.68
7	9863.06	90.00	359.82	9564.00	328.02	-298.15	12.00	329.79
8	16744.61	90.00	359.82	9564.00	7209.54	-319.20	0.00	7211.31

WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

Name	TVD	+N/-S	+E/-W	Northing	Easting
[HoneyMust#8H]KOP/FTP	9086.54	-149.44	-296.69	435411.01	577907.10
[HoneyMust#8H]LTP/BHL	9564.00	7209.54	-319.20	442769.99	577884.59
[HoneyMust#8H]PPP-2	9564.00	864.90	-302.18	436425.35	577901.61
[HoneyMust#8H]PPP-3	9564.00	2209.20	-309.46	437769.65	577894.33
[HoneyMust#8H]PPP-4	9564.00	4901.47	-324.03	440461.92	577879.76



Azimuths to Grid North
True North: -0.14°
Magnetic North: 6.95°

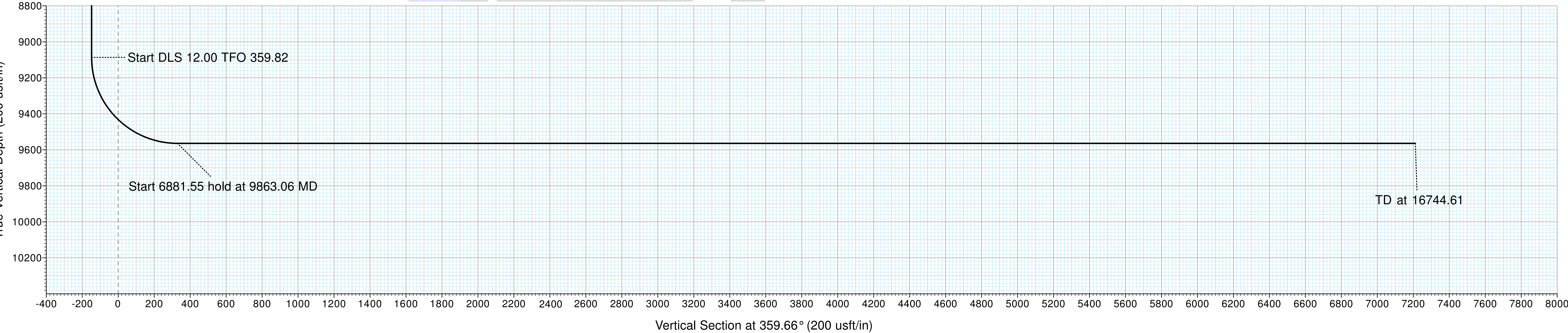
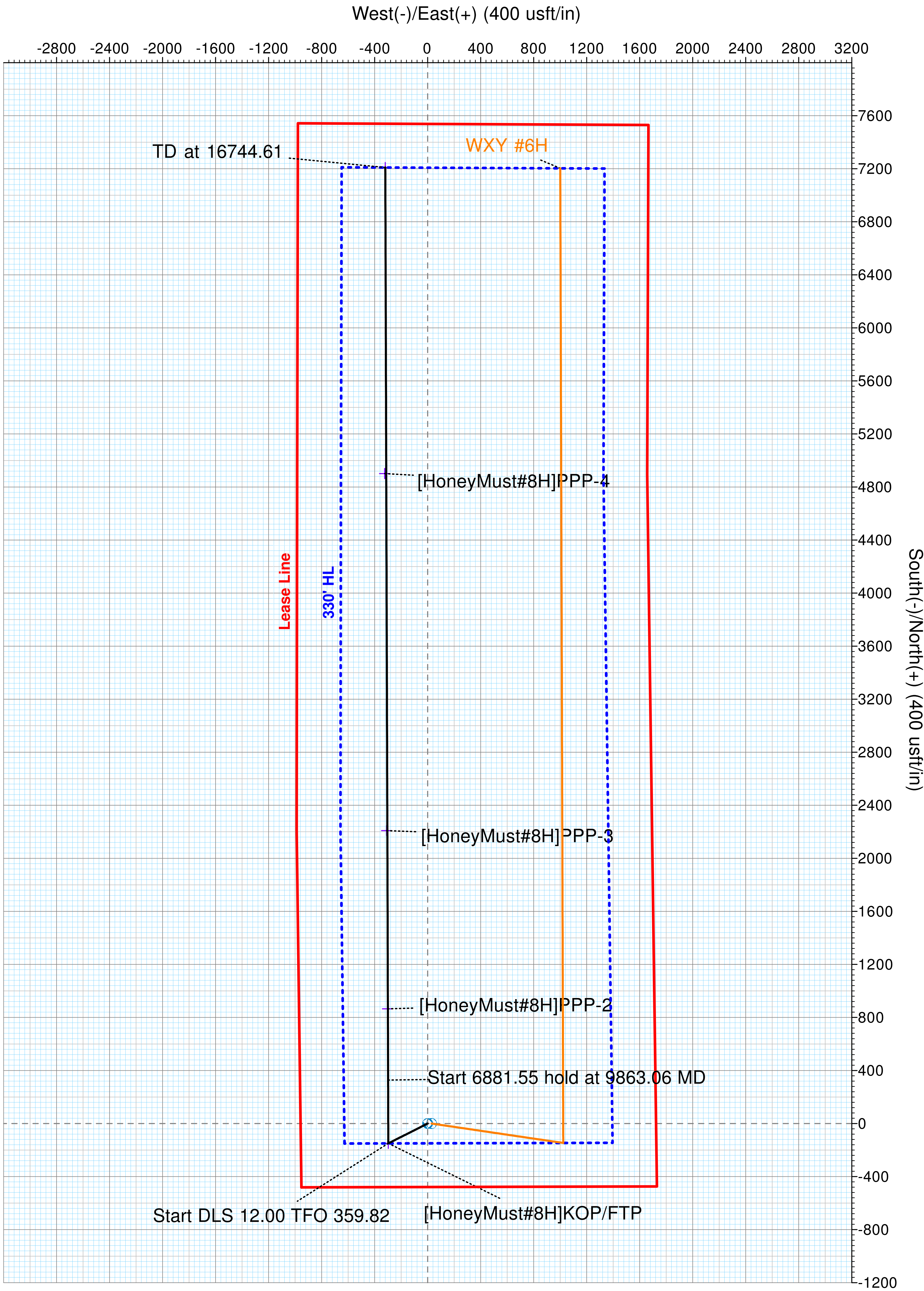
Magnetic Field
Strength: 47869.0snT
Dip Angle: 59.92°
Date: 7/19/2019
Model: HDGM

Azimuth Corrections

Total Magnetic Corr. (M to G): 6.95°

Declination (M to T): 7.08° East

Target Line: 9564' TVD @ 0° VS: 90° INC



36" x 48"



Pro Directional Survey Report



Company:	Marathon Oil	Local Co-ordinate Reference:	Well WXY #8H
Project:	Eddy County, NM	TVD Reference:	well @ 3025.00usft
Site:	Honey Mustard 22 Fed (2-6-8-9)	MD Reference:	well @ 3025.00usft
Well:	WXY #8H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Prelim Plan D	Database:	WellPlanner1

Project	Eddy County, NM		
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		Honey Mustard 22 Fed (2-6-8-9)			
Site Position:		Northing:	435,560.49 usft	Latitude:	32.197220
From:	Map	Easting:	578,233.78 usft	Longitude:	-104.080420
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.13 °

Well	WXY #8H					
Well Position	+N/-S	0.00 usft	Northing:	435,560.45 usft	Latitude:	32.197220
	+E/-W	0.00 usft	Easting:	578,203.79 usft	Longitude:	-104.080517
Position Uncertainty		0.00 usft	Wellhead Elevation:	usft	Ground Level:	3,000.00 usft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM	7/19/2019	7.08	59.92	47,869.00

Design	Prelim Plan D				
Audit Notes:					
Version:	Phase:	PLAN	Tie On Depth:	0.00	
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)	
	0.00	0.00	0.00	359.66	

Survey Tool Program	Date	11/9/2020			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
0.00	1,850.00	Prelim Plan D (OH)	MWD+HDGM	OWSG MWD + HRGM	
1,850.00	5,400.00	Prelim Plan D (OH)	MWD+HDGM	OWSG MWD + HRGM	
5,400.00	9,014.02	Prelim Plan D (OH)	MWD+HDGM	OWSG MWD + HRGM	
10,000.00	16,744.61	Prelim Plan D (OH)	MWD+HDGM	OWSG MWD + HRGM	

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00	
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00	
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00	
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00	
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00	
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00	



Pro Directional Survey Report



Company:	Marathon Oil	Local Co-ordinate Reference:	Well WXY #8H
Project:	Eddy County, NM	TVD Reference:	well @ 3025.00usft
Site:	Honey Mustard 22 Fed (2-6-8-9)	MD Reference:	well @ 3025.00usft
Well:	WXY #8H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Prelim Plan D	Database:	WellPlanner1

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)
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00
1,100.00	0.00	0.00	1,100.00	0.00	0.00	0.00	0.00	0.00	0.00
1,200.00	0.00	0.00	1,200.00	0.00	0.00	0.00	0.00	0.00	0.00
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00	0.00
1,400.00	0.00	0.00	1,400.00	0.00	0.00	0.00	0.00	0.00	0.00
1,500.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00	0.00
1,600.00	2.00	243.27	1,599.98	-0.79	-1.56	-0.78	2.00	2.00	0.00
1,700.00	4.00	243.27	1,699.84	-3.14	-6.23	-3.10	2.00	2.00	0.00
1,800.00	6.00	243.27	1,799.45	-7.06	-14.02	-6.98	2.00	2.00	0.00
1,900.00	8.00	243.27	1,898.70	-12.54	-24.90	-12.39	2.00	2.00	0.00
2,000.00	10.00	243.27	1,997.47	-19.58	-38.87	-19.35	2.00	2.00	0.00
2,100.00	10.00	243.27	2,095.95	-27.39	-54.38	-27.07	0.00	0.00	0.00
2,200.00	10.00	243.27	2,194.43	-35.20	-69.89	-34.79	0.00	0.00	0.00
2,300.00	10.00	243.27	2,292.91	-43.01	-85.40	-42.51	0.00	0.00	0.00
2,400.00	10.00	243.27	2,391.39	-50.82	-100.90	-50.23	0.00	0.00	0.00
2,500.00	10.00	243.27	2,489.87	-58.64	-116.41	-57.94	0.00	0.00	0.00
2,600.00	10.00	243.27	2,588.35	-66.45	-131.92	-65.66	0.00	0.00	0.00
2,700.00	10.00	243.27	2,686.83	-74.26	-147.43	-73.38	0.00	0.00	0.00
2,800.00	10.00	243.27	2,785.31	-82.07	-162.94	-81.10	0.00	0.00	0.00
2,900.00	10.00	243.27	2,883.79	-89.88	-178.45	-88.82	0.00	0.00	0.00
3,000.00	10.00	243.27	2,982.27	-97.69	-193.96	-96.54	0.00	0.00	0.00
3,100.00	10.00	243.27	3,080.75	-105.51	-209.46	-104.26	0.00	0.00	0.00
3,200.00	10.00	243.27	3,179.23	-113.32	-224.97	-111.98	0.00	0.00	0.00
3,300.00	10.00	243.27	3,277.72	-121.13	-240.48	-119.70	0.00	0.00	0.00
3,400.00	10.00	243.27	3,376.20	-128.94	-255.99	-127.42	0.00	0.00	0.00
3,411.79	10.00	243.27	3,387.81	-129.86	-257.82	-128.33	0.00	0.00	0.00
3,500.00	8.24	243.27	3,474.90	-136.15	-270.30	-134.54	2.00	-2.00	0.00
3,600.00	6.24	243.27	3,574.10	-141.81	-281.55	-140.14	2.00	-2.00	0.00
3,700.00	4.24	243.27	3,673.68	-145.92	-289.70	-144.20	2.00	-2.00	0.00
3,800.00	2.24	243.27	3,773.51	-148.46	-294.74	-146.71	2.00	-2.00	0.00
3,900.00	0.24	243.27	3,873.48	-149.43	-296.67	-147.67	2.00	-2.00	0.00
3,911.79	0.00	0.00	3,885.28	-149.44	-296.69	-147.68	2.00	-2.00	0.00
4,000.00	0.00	0.00	3,973.48	-149.44	-296.69	-147.68	0.00	0.00	0.00
4,100.00	0.00	0.00	4,073.48	-149.44	-296.69	-147.68	0.00	0.00	0.00
4,200.00	0.00	0.00	4,173.48	-149.44	-296.69	-147.68	0.00	0.00	0.00
4,300.00	0.00	0.00	4,273.48	-149.44	-296.69	-147.68	0.00	0.00	0.00
4,400.00	0.00	0.00	4,373.48	-149.44	-296.69	-147.68	0.00	0.00	0.00
4,500.00	0.00	0.00	4,473.48	-149.44	-296.69	-147.68	0.00	0.00	0.00
4,600.00	0.00	0.00	4,573.48	-149.44	-296.69	-147.68	0.00	0.00	0.00
4,700.00	0.00	0.00	4,673.48	-149.44	-296.69	-147.68	0.00	0.00	0.00
4,800.00	0.00	0.00	4,773.48	-149.44	-296.69	-147.68	0.00	0.00	0.00



Pro Directional Survey Report



Company:	Marathon Oil	Local Co-ordinate Reference:	Well WXY #8H
Project:	Eddy County, NM	TVD Reference:	well @ 3025.00usft
Site:	Honey Mustard 22 Fed (2-6-8-9)	MD Reference:	well @ 3025.00usft
Well:	WXY #8H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Prelim Plan D	Database:	WellPlanner1

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
4,900.00	0.00	0.00	4,873.48	-149.44	-296.69	-147.68	0.00	0.00	0.00
5,000.00	0.00	0.00	4,973.48	-149.44	-296.69	-147.68	0.00	0.00	0.00
5,100.00	0.00	0.00	5,073.48	-149.44	-296.69	-147.68	0.00	0.00	0.00
5,200.00	0.00	0.00	5,173.48	-149.44	-296.69	-147.68	0.00	0.00	0.00
5,300.00	0.00	0.00	5,273.48	-149.44	-296.69	-147.68	0.00	0.00	0.00
5,400.00	0.00	0.00	5,373.48	-149.44	-296.69	-147.68	0.00	0.00	0.00
5,500.00	0.00	0.00	5,473.48	-149.44	-296.69	-147.68	0.00	0.00	0.00
5,600.00	0.00	0.00	5,573.48	-149.44	-296.69	-147.68	0.00	0.00	0.00
5,700.00	0.00	0.00	5,673.48	-149.44	-296.69	-147.68	0.00	0.00	0.00
5,800.00	0.00	0.00	5,773.48	-149.44	-296.69	-147.68	0.00	0.00	0.00
5,900.00	0.00	0.00	5,873.48	-149.44	-296.69	-147.68	0.00	0.00	0.00
6,000.00	0.00	0.00	5,973.48	-149.44	-296.69	-147.68	0.00	0.00	0.00
6,100.00	0.00	0.00	6,073.48	-149.44	-296.69	-147.68	0.00	0.00	0.00
6,200.00	0.00	0.00	6,173.48	-149.44	-296.69	-147.68	0.00	0.00	0.00
6,300.00	0.00	0.00	6,273.48	-149.44	-296.69	-147.68	0.00	0.00	0.00
6,400.00	0.00	0.00	6,373.48	-149.44	-296.69	-147.68	0.00	0.00	0.00
6,500.00	0.00	0.00	6,473.48	-149.44	-296.69	-147.68	0.00	0.00	0.00
6,600.00	0.00	0.00	6,573.48	-149.44	-296.69	-147.68	0.00	0.00	0.00
6,700.00	0.00	0.00	6,673.48	-149.44	-296.69	-147.68	0.00	0.00	0.00
6,800.00	0.00	0.00	6,773.48	-149.44	-296.69	-147.68	0.00	0.00	0.00
6,900.00	0.00	0.00	6,873.48	-149.44	-296.69	-147.68	0.00	0.00	0.00
7,000.00	0.00	0.00	6,973.48	-149.44	-296.69	-147.68	0.00	0.00	0.00
7,100.00	0.00	0.00	7,073.48	-149.44	-296.69	-147.68	0.00	0.00	0.00
7,200.00	0.00	0.00	7,173.48	-149.44	-296.69	-147.68	0.00	0.00	0.00
7,300.00	0.00	0.00	7,273.48	-149.44	-296.69	-147.68	0.00	0.00	0.00
7,400.00	0.00	0.00	7,373.48	-149.44	-296.69	-147.68	0.00	0.00	0.00
7,500.00	0.00	0.00	7,473.48	-149.44	-296.69	-147.68	0.00	0.00	0.00
7,600.00	0.00	0.00	7,573.48	-149.44	-296.69	-147.68	0.00	0.00	0.00
7,700.00	0.00	0.00	7,673.48	-149.44	-296.69	-147.68	0.00	0.00	0.00
7,800.00	0.00	0.00	7,773.48	-149.44	-296.69	-147.68	0.00	0.00	0.00
7,900.00	0.00	0.00	7,873.48	-149.44	-296.69	-147.68	0.00	0.00	0.00
8,000.00	0.00	0.00	7,973.48	-149.44	-296.69	-147.68	0.00	0.00	0.00
8,100.00	0.00	0.00	8,073.48	-149.44	-296.69	-147.68	0.00	0.00	0.00
8,200.00	0.00	0.00	8,173.48	-149.44	-296.69	-147.68	0.00	0.00	0.00
8,300.00	0.00	0.00	8,273.48	-149.44	-296.69	-147.68	0.00	0.00	0.00
8,400.00	0.00	0.00	8,373.48	-149.44	-296.69	-147.68	0.00	0.00	0.00
8,500.00	0.00	0.00	8,473.48	-149.44	-296.69	-147.68	0.00	0.00	0.00
8,600.00	0.00	0.00	8,573.48	-149.44	-296.69	-147.68	0.00	0.00	0.00
8,700.00	0.00	0.00	8,673.48	-149.44	-296.69	-147.68	0.00	0.00	0.00
8,800.00	0.00	0.00	8,773.48	-149.44	-296.69	-147.68	0.00	0.00	0.00
8,900.00	0.00	0.00	8,873.48	-149.44	-296.69	-147.68	0.00	0.00	0.00
9,000.00	0.00	0.00	8,973.48	-149.44	-296.69	-147.68	0.00	0.00	0.00
9,100.00	0.00	0.00	9,073.48	-149.44	-296.69	-147.68	0.00	0.00	0.00
9,113.06	0.00	0.00	9,086.54	-149.44	-296.69	-147.68	0.00	0.00	0.00



Pro Directional Survey Report



Company:	Marathon Oil	Local Co-ordinate Reference:	Well WXY #8H
Project:	Eddy County, NM	TVD Reference:	well @ 3025.00usft
Site:	Honey Mustard 22 Fed (2-6-8-9)	MD Reference:	well @ 3025.00usft
Well:	WXY #8H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Prelim Plan D	Database:	WellPlanner1

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)
[HoneyMust#8H]KOP/FTP									
9,125.00	1.43	359.82	9,098.48	-149.29	-296.69	-147.53	12.00	12.00	0.00
9,150.00	4.43	359.82	9,123.45	-148.01	-296.69	-146.25	12.00	12.00	0.00
9,175.00	7.43	359.82	9,148.31	-145.43	-296.70	-143.66	12.00	12.00	0.00
9,200.00	10.43	359.82	9,173.00	-141.55	-296.71	-139.78	12.00	12.00	0.00
9,225.00	13.43	359.82	9,197.46	-136.38	-296.73	-134.61	12.00	12.00	0.00
9,250.00	16.43	359.82	9,221.61	-129.94	-296.75	-128.17	12.00	12.00	0.00
9,275.00	19.43	359.82	9,245.40	-122.24	-296.77	-120.48	12.00	12.00	0.00
9,300.00	22.43	359.82	9,268.74	-113.31	-296.80	-111.55	12.00	12.00	0.00
9,325.00	25.43	359.82	9,291.59	-103.17	-296.83	-101.40	12.00	12.00	0.00
9,350.00	28.43	359.82	9,313.88	-91.85	-296.87	-90.08	12.00	12.00	0.00
9,375.00	31.43	359.82	9,335.54	-79.37	-296.90	-77.61	12.00	12.00	0.00
9,400.00	34.43	359.82	9,356.52	-65.78	-296.95	-64.02	12.00	12.00	0.00
9,425.00	37.43	359.82	9,376.76	-51.11	-296.99	-49.35	12.00	12.00	0.00
9,450.00	40.43	359.82	9,396.20	-35.40	-297.04	-33.64	12.00	12.00	0.00
9,475.00	43.43	359.82	9,414.80	-18.70	-297.09	-16.94	12.00	12.00	0.00
9,500.00	46.43	359.82	9,432.50	-1.05	-297.14	0.72	12.00	12.00	0.00
9,525.00	49.43	359.82	9,449.24	17.51	-297.20	19.27	12.00	12.00	0.00
9,550.00	52.43	359.82	9,465.00	36.92	-297.26	38.68	12.00	12.00	0.00
9,575.00	55.43	359.82	9,479.72	57.13	-297.32	58.89	12.00	12.00	0.00
9,600.00	58.43	359.82	9,493.35	78.07	-297.39	79.84	12.00	12.00	0.00
9,625.00	61.43	359.82	9,505.88	99.71	-297.45	101.47	12.00	12.00	0.00
9,650.00	64.43	359.82	9,517.25	121.97	-297.52	123.73	12.00	12.00	0.00
9,675.00	67.43	359.82	9,527.45	144.79	-297.59	146.55	12.00	12.00	0.00
9,700.00	70.43	359.82	9,536.43	168.12	-297.66	169.88	12.00	12.00	0.00
9,725.00	73.43	359.82	9,544.18	191.88	-297.73	193.64	12.00	12.00	0.00
9,750.00	76.43	359.82	9,550.68	216.02	-297.81	217.78	12.00	12.00	0.00
9,775.00	79.43	359.82	9,555.91	240.46	-297.88	242.23	12.00	12.00	0.00
9,800.00	82.43	359.82	9,559.85	265.15	-297.96	266.91	12.00	12.00	0.00
9,825.00	85.43	359.82	9,562.49	290.01	-298.03	291.77	12.00	12.00	0.00
9,850.00	88.43	359.82	9,563.83	314.97	-298.11	316.73	12.00	12.00	0.00
9,863.06	90.00	359.82	9,564.01	328.02	-298.15	329.79	12.00	12.00	0.00
9,900.00	90.00	359.82	9,564.01	364.96	-298.26	366.73	0.00	0.00	0.00
10,000.00	90.00	359.82	9,564.00	464.96	-298.57	466.73	0.00	0.00	0.00
10,100.00	90.00	359.82	9,564.00	564.96	-298.88	566.73	0.00	0.00	0.00
10,200.00	90.00	359.82	9,564.00	664.96	-299.18	666.73	0.00	0.00	0.00
10,300.00	90.00	359.82	9,564.00	764.96	-299.49	766.73	0.00	0.00	0.00
10,399.95	90.00	359.82	9,564.00	864.91	-299.79	866.67	0.00	0.00	0.00
[HoneyMust#8H]PPP-2									
10,400.00	90.00	359.82	9,564.00	864.96	-299.79	866.73	0.00	0.00	0.00
10,500.00	90.00	359.82	9,564.00	964.96	-300.10	966.73	0.00	0.00	0.00
10,600.00	90.00	359.82	9,564.00	1,064.96	-300.40	1,066.73	0.00	0.00	0.00
10,700.00	90.00	359.82	9,564.00	1,164.96	-300.71	1,166.73	0.00	0.00	0.00



Pro Directional Survey Report



Company:	Marathon Oil	Local Co-ordinate Reference:	Well WXY #8H
Project:	Eddy County, NM	TVD Reference:	well @ 3025.00usft
Site:	Honey Mustard 22 Fed (2-6-8-9)	MD Reference:	well @ 3025.00usft
Well:	WXY #8H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Prelim Plan D	Database:	WellPlanner1

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)
10,800.00	90.00	359.82	9,564.00	1,264.96	-301.02	1,266.72	0.00	0.00	0.00
10,900.00	90.00	359.82	9,564.00	1,364.96	-301.32	1,366.72	0.00	0.00	0.00
11,000.00	90.00	359.82	9,564.00	1,464.96	-301.63	1,466.72	0.00	0.00	0.00
11,100.00	90.00	359.82	9,564.00	1,564.96	-301.93	1,566.72	0.00	0.00	0.00
11,200.00	90.00	359.82	9,564.00	1,664.96	-302.24	1,666.72	0.00	0.00	0.00
11,300.00	90.00	359.82	9,564.00	1,764.96	-302.55	1,766.72	0.00	0.00	0.00
11,400.00	90.00	359.82	9,564.00	1,864.96	-302.85	1,866.72	0.00	0.00	0.00
11,500.00	90.00	359.82	9,564.00	1,964.96	-303.16	1,966.72	0.00	0.00	0.00
11,600.00	90.00	359.82	9,564.00	2,064.96	-303.46	2,066.72	0.00	0.00	0.00
11,700.00	90.00	359.82	9,564.00	2,164.96	-303.77	2,166.72	0.00	0.00	0.00
11,744.27	90.00	359.82	9,564.00	2,209.22	-303.90	2,210.99	0.00	0.00	0.00
[HoneyMust#8H]PPP-3									
11,800.00	90.00	359.82	9,564.00	2,264.96	-304.08	2,266.72	0.00	0.00	0.00
11,900.00	90.00	359.82	9,564.00	2,364.96	-304.38	2,366.72	0.00	0.00	0.00
12,000.00	90.00	359.82	9,564.00	2,464.96	-304.69	2,466.72	0.00	0.00	0.00
12,100.00	90.00	359.82	9,564.00	2,564.95	-304.99	2,566.72	0.00	0.00	0.00
12,200.00	90.00	359.82	9,564.00	2,664.95	-305.30	2,666.72	0.00	0.00	0.00
12,300.00	90.00	359.82	9,564.00	2,764.95	-305.60	2,766.72	0.00	0.00	0.00
12,400.00	90.00	359.82	9,564.00	2,864.95	-305.91	2,866.72	0.00	0.00	0.00
12,500.00	90.00	359.82	9,564.00	2,964.95	-306.22	2,966.72	0.00	0.00	0.00
12,600.00	90.00	359.82	9,564.00	3,064.95	-306.52	3,066.72	0.00	0.00	0.00
12,700.00	90.00	359.82	9,564.00	3,164.95	-306.83	3,166.72	0.00	0.00	0.00
12,800.00	90.00	359.82	9,564.00	3,264.95	-307.13	3,266.72	0.00	0.00	0.00
12,900.00	90.00	359.82	9,564.00	3,364.95	-307.44	3,366.72	0.00	0.00	0.00
13,000.00	90.00	359.82	9,564.00	3,464.95	-307.75	3,466.72	0.00	0.00	0.00
13,100.00	90.00	359.82	9,564.00	3,564.95	-308.05	3,566.72	0.00	0.00	0.00
13,200.00	90.00	359.82	9,564.00	3,664.95	-308.36	3,666.71	0.00	0.00	0.00
13,300.00	90.00	359.82	9,564.00	3,764.95	-308.66	3,766.71	0.00	0.00	0.00
13,400.00	90.00	359.82	9,564.00	3,864.95	-308.97	3,866.71	0.00	0.00	0.00
13,500.00	90.00	359.82	9,564.00	3,964.95	-309.28	3,966.71	0.00	0.00	0.00
13,600.00	90.00	359.82	9,564.00	4,064.95	-309.58	4,066.71	0.00	0.00	0.00
13,700.00	90.00	359.82	9,564.00	4,164.95	-309.89	4,166.71	0.00	0.00	0.00
13,800.00	90.00	359.82	9,564.00	4,264.95	-310.19	4,266.71	0.00	0.00	0.00
13,900.00	90.00	359.82	9,564.00	4,364.95	-310.50	4,366.71	0.00	0.00	0.00
14,000.00	90.00	359.82	9,564.00	4,464.95	-310.80	4,466.71	0.00	0.00	0.00
14,100.00	90.00	359.82	9,564.00	4,564.95	-311.11	4,566.71	0.00	0.00	0.00
14,200.00	90.00	359.82	9,564.00	4,664.94	-311.42	4,666.71	0.00	0.00	0.00
14,300.00	90.00	359.82	9,564.00	4,764.94	-311.72	4,766.71	0.00	0.00	0.00
14,400.00	90.00	359.82	9,564.00	4,864.94	-312.03	4,866.71	0.00	0.00	0.00
14,436.56	90.00	359.82	9,564.00	4,901.50	-312.14	4,903.27	0.00	0.00	0.00
[HoneyMust#8H]PPP-4									
14,500.00	90.00	359.82	9,564.00	4,964.94	-312.33	4,966.71	0.00	0.00	0.00
14,600.00	90.00	359.82	9,564.00	5,064.94	-312.64	5,066.71	0.00	0.00	0.00
14,700.00	90.00	359.82	9,564.00	5,164.94	-312.95	5,166.71	0.00	0.00	0.00



Pro Directional Survey Report



Company:	Marathon Oil	Local Co-ordinate Reference:	Well WXY #8H
Project:	Eddy County, NM	TVD Reference:	well @ 3025.00usft
Site:	Honey Mustard 22 Fed (2-6-8-9)	MD Reference:	well @ 3025.00usft
Well:	WXY #8H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Prelim Plan D	Database:	WellPlanner1

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)	
14,800.00	90.00	359.82	9,564.00	5,264.94	-313.25	5,266.71	0.00	0.00	0.00	
14,900.00	90.00	359.82	9,564.00	5,364.94	-313.56	5,366.71	0.00	0.00	0.00	
15,000.00	90.00	359.82	9,564.00	5,464.94	-313.86	5,466.71	0.00	0.00	0.00	
15,100.00	90.00	359.82	9,564.00	5,564.94	-314.17	5,566.71	0.00	0.00	0.00	
15,200.00	90.00	359.82	9,564.00	5,664.94	-314.48	5,666.71	0.00	0.00	0.00	
15,300.00	90.00	359.82	9,564.00	5,764.94	-314.78	5,766.71	0.00	0.00	0.00	
15,400.00	90.00	359.82	9,564.00	5,864.94	-315.09	5,866.71	0.00	0.00	0.00	
15,500.00	90.00	359.82	9,564.00	5,964.94	-315.39	5,966.71	0.00	0.00	0.00	
15,600.00	90.00	359.82	9,564.00	6,064.94	-315.70	6,066.70	0.00	0.00	0.00	
15,700.00	90.00	359.82	9,564.00	6,164.94	-316.00	6,166.70	0.00	0.00	0.00	
15,800.00	90.00	359.82	9,564.00	6,264.94	-316.31	6,266.70	0.00	0.00	0.00	
15,900.00	90.00	359.82	9,564.00	6,364.94	-316.62	6,366.70	0.00	0.00	0.00	
16,000.00	90.00	359.82	9,564.00	6,464.94	-316.92	6,466.70	0.00	0.00	0.00	
16,100.00	90.00	359.82	9,564.00	6,564.94	-317.23	6,566.70	0.00	0.00	0.00	
16,200.00	90.00	359.82	9,564.00	6,664.94	-317.53	6,666.70	0.00	0.00	0.00	
16,300.00	90.00	359.82	9,564.00	6,764.94	-317.84	6,766.70	0.00	0.00	0.00	
16,400.00	90.00	359.82	9,564.00	6,864.93	-318.15	6,866.70	0.00	0.00	0.00	
16,500.00	90.00	359.82	9,564.00	6,964.93	-318.45	6,966.70	0.00	0.00	0.00	
16,600.00	90.00	359.82	9,564.00	7,064.93	-318.76	7,066.70	0.00	0.00	0.00	
16,700.00	90.00	359.82	9,564.00	7,164.93	-319.06	7,166.70	0.00	0.00	0.00	
16,744.61	90.00	359.82	9,564.00	7,209.54	-319.20	7,211.31	0.00	0.00	0.00	
[HoneyMust#8H]LTP/BHL										

Design Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude	
[HoneyMust#8H]KOP/F1 - hit/miss target - Shape - Point	0.00	0.01	9,086.54	-149.44	-296.69	435,411.01	577,907.10	32.196811	-104.081477	
[HoneyMust#8H]PPP-2 - plan misses target center by 2.39usft at 10399.95usft MD (9564.00 TVD, 864.91 N, -299.79 E) - Point	0.00	0.00	9,564.00	864.90	-302.18	436,425.35	577,901.61	32.199600	-104.081487	
[HoneyMust#8H]LTP/BH - plan hits target center - Point	0.00	0.00	9,564.00	7,209.54	-319.20	442,769.99	577,884.59	32.217041	-104.081494	
[HoneyMust#8H]PPP-3 - plan misses target center by 5.55usft at 11744.27usft MD (9564.00 TVD, 2209.22 N, -303.90 E) - Point	0.00	0.00	9,564.00	2,209.20	-309.46	437,769.65	577,894.34	32.203295	-104.081500	
[HoneyMust#8H]PPP-4 - plan misses target center by 11.89usft at 14436.56usft MD (9564.00 TVD, 4901.50 N, -312.14 E) - Point	0.00	0.00	9,564.00	4,901.47	-324.03	440,461.92	577,879.76	32.210696	-104.081527	

Checked By: _____	Approved By: _____	Date: _____
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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 157346

CONDITIONS

Operator: MARATHON OIL PERMIAN LLC 990 Town & Country Blvd. Houston, TX 77024	OGRID: 372098
	Action Number: 157346
	Action Type: [C-103] NOI Change of Plans (C-103A)

CONDITIONS

Created By	Condition	Condition Date
kpickford	Adhere to previous NMOCD Conditions of Approval	11/10/2022