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

FORM C-102

Revised August 1, 2011

Submit one copy to appropriate

District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-025-47596	² Pool Code 97903	³ Pool Name WC-025 G-08 S253235G; Lwr Bone Spring
⁴ Property Code 329310	⁵ Property Name RESOLUTE 12 FED COM	⁶ Well Number 501H
⁷ OGRID No. 7377	⁸ Operator Name EOG RESOURCES, INC.	⁹ Elevation 3486'

¹⁰Surface Location

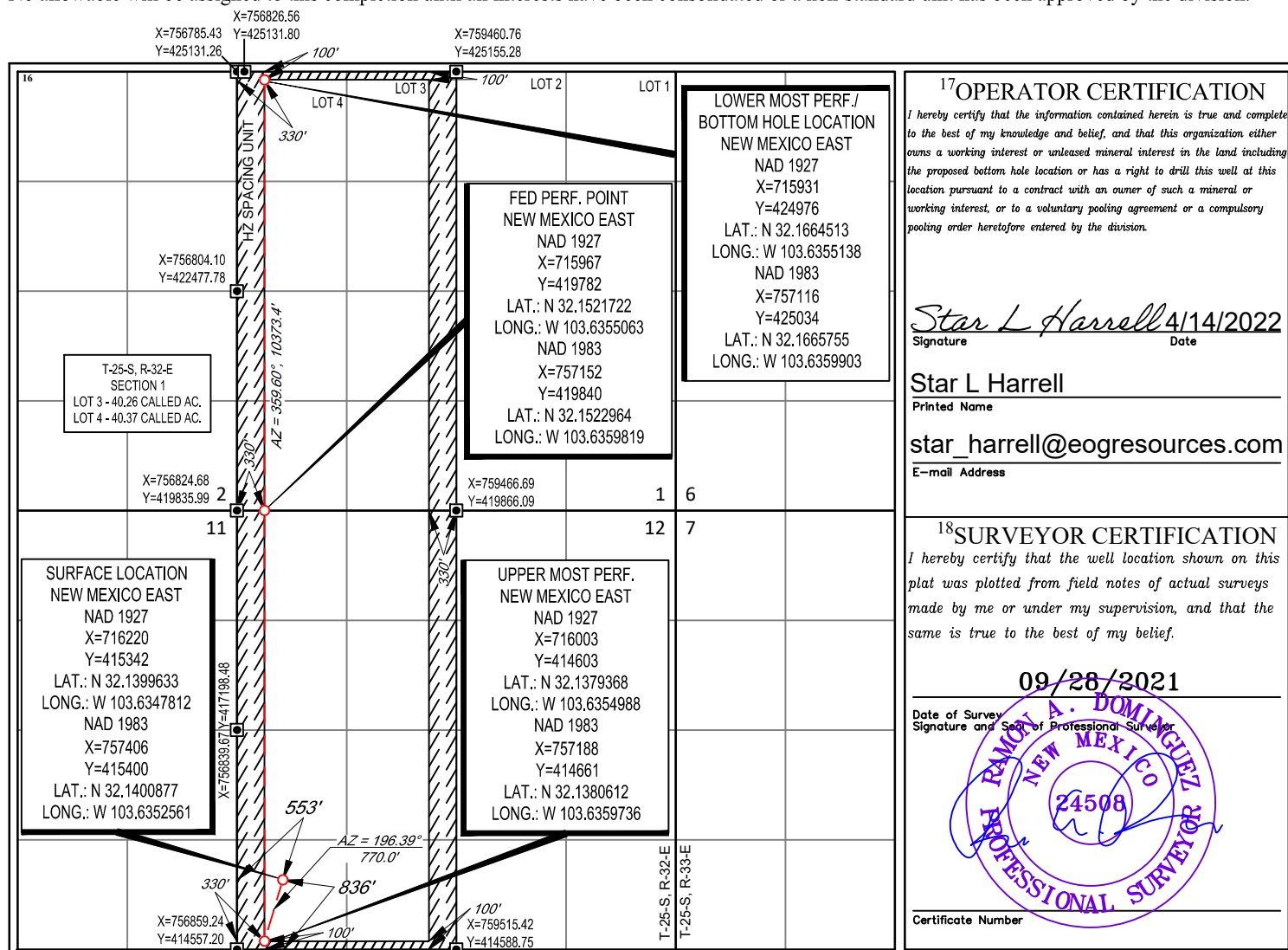
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	12	25-S	32-E	-	836'	SOUTH	553'	WEST	LEA

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	1	25-S	32-E	-	100'	NORTH	330'	WEST	LEA

¹² Dedicated Acres 640.63	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.



**Resolute 12 Fed Com 501H****Revised Permit Information 04/12/2022:**

Well Name: Resolute 12 Fed Com 501H

Location: SHL: 836' FSL & 553' FWL, Section 12, T-25-S, R-32-E, Lea Co., N.M.

BHL: 100' FNL & 330' FWL, Section 1, T-25-S, R-32-E, Lea Co., N.M.

Casing Program:

Hole Size	Interval MD		Interval TVD		Csg OD	Weight	Grade	Conn
	From (ft)	To (ft)	From (ft)	To (ft)				
16"	0	1,020	0	1,020	13-3/8"	54.5#	J-55	STC
12-1/4"	0	4,000	0	3,929	9-5/8"	40#	J-55	LTC
12-1/4"	4,000	4,720	3,929	4,649	9-5/8"	40#	HCK-55	LTC
7-7/8"	0	21,139	0	10,947	5-1/2"	17#	HCP-110	LTC

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 5-1/2" casing in the 7-7/8" hole size. An expansion additive will be utilized, in the cement slurry, for the entire length of the 7-7/8" hole interval to maximize cement bond and zonal isolation.

Cementing Program:

Depth	No. Sacks	Wt. ppg	Yld Ft3/sk	Slurry Description
1,020' 13-3/8"	310	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 @ 820')
4,720' 9-5/8"	690	12.7	2.22	Lead: Class C + 10% NaCl + 6% Bentonite Gel + 3% MagOx (TOC @ Surface)
	300	14.8	1.32	Tail: Class C + 10% NaCl + 3% MagOx (TOC @ 3,780')
21,139' 5-1/2"	450	11.0	3.21	Lead: Class H + 0.4% Halad-344 + 0.35% HR-601 + 3% Microbond (TOC @ 4,220')
	1550	13.2	1.52	Tail: Class H + 5% NEX-020 + 0.2% NAC-102 + 0.15% NAS-725 + 0.5% NFL-549 + 0.2% NFP-703 + 1% NBE-737 + 0.3% NRT-241 (TOC @ 10420')

**Resolute 12 Fed Com 501H**

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 (TVD)	Type	Weight (ppg)	Viscosity	Water Loss
0 – 1,020'	Fresh - Gel	8.6-8.8	28-34	N/c
1,020' – 4,720'	Brine	8.6-8.8	28-34	N/c
4,720' – 21,139'	Oil Base	8.8-9.5	58-68	N/c - 6

Wellhead & Offline Cementing:

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.a.i) to allow a testing schedule of the blow out preventer (BOP) and blow out prevention equipment (BOPE) along with Batch Drilling & Offline cement operations 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 option to offline cement and/or remediate (if needed) any surface or intermediate sections, according to attached offline cementing support documentation.
- After the well section is secured, the BOP will be disconnected from the wellhead and walked with the rig to another well on the pad.
- TA cap will also be installed per Wellhead vendor procedure and pressure inside the casing will be monitored via the valve on the TA cap as per standard batch drilling ops.
- See attached "EOG BLM Variance 3a -Offline Cement Intermediate Operational Procedure"



Resolute 12 Fed Com 501H

836' FSL
553' FWL
Section 12
T-25-S, R-32-E

Revised Wellbore

KB: 3511'
GL: 3486'

API: 30-025-47596

Bit Size: 16"
13-3/8", 54.5#, J-55, STC, 0' - 1,020'

Bit Size: 12-1/4"
9-5/8", 40.#, J-55, LTC @ 0' - 4,000'
9-5/8", 40.#, HCK-55, LTC @ 4,000' - 4,720'

TOC: 4,220'

Bit Size: 7-7/8"
5-1/2", 17.#, HCP-110, LTC
@ 0' - 21,139'

KOP: 10,415' MD, 10,355' TVD
EOC: 11,391' MD, 10,904' TVD

Lateral: 21,139' MD, 10,947' TVD
Upper Most Perf:
100' FSL & 330' FWL Sec. 12
Lower Most Perf:
100' FNL & 330' FWL Sec. 1
BH Location: 100' FNL & 330' FWL
Sec. 1
T-25-S R-32-E



Midland

Lea County, NM (NAD 83 NME)

Resolute 12 Fed Com

#501H

OH

Design: OH

Final PVA

14 February, 2022



Final PVA

Company:	Midland	Local Co-ordinate Reference:	Well #501H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 32' @ 3518.0usft (Nabors M1206)
Site:	Resolute 12 Fed Com	MD Reference:	KB = 32' @ 3518.0usft (Nabors M1206)
Well:	#501H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	PEDM

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		Resolute 12 Fed Com								
Site Position:		Northing:		414,863.00	usft	Latitude:	32° 8' 18.736 N			
From:	Map	Easting:		761,539.00	usft	Longitude:	103° 37' 18.893 W			
Position Uncertainty:		0.0	usft	Slot Radius:		13-3/16	"	Grid Convergence:	0.38	°

Well		#501H				
Well Position	+N/-S	0.0 usft	Northing:	415,400.00 usft	Latitude:	32° 8' 24.318 N
	+E/-W	0.0 usft	Easting:	757,406.00 usft	Longitude:	103° 38' 6.919 W
Position Uncertainty		0.0 usft	Wellhead Elevation:	usft	Ground Level:	3,486.0 usft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2020	12/29/2021	6.51	59.80	47,381.20427568

Design		OH			
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (usft)		+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0		0.0	0.0	358.27

Survey Program		Date	2/14/2022		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
195.0	21,139.0	DrilTech MWD #1 (OH)	EOG MWD+IFR1	MWD + IFR1	



Final PVA

Company:	Midland	Local Co-ordinate Reference:	Well #501H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 32' @ 3518.0usft (Nabors M1206)
Site:	Resolute 12 Fed Com	MD Reference:	KB = 32' @ 3518.0usft (Nabors M1206)
Well:	#501H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	PEDM

Survey											
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)	
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	
195.0	0.09	157.02	195.0	-0.1	0.1	0.05	0.05	0.00	-0.2	0.0	
285.0	0.09	188.66	285.0	-0.3	0.1	0.05	0.00	35.16	-0.3	0.1	
373.0	0.18	288.24	373.0	-0.3	-0.1	0.24	0.10	113.16	0.0	0.3	
462.0	0.53	294.48	462.0	-0.1	-0.6	0.40	0.39	7.01	-0.5	0.3	
551.0	0.44	279.28	551.0	0.1	-1.3	0.18	-0.10	-17.08	-1.3	0.1	
642.0	0.53	268.55	642.0	0.2	-2.0	0.14	0.10	-11.79	-2.0	-0.2	
738.0	0.79	266.88	738.0	0.1	-3.2	0.27	0.27	-1.74	-3.1	-0.3	
832.0	0.79	267.32	832.0	0.1	-4.4	0.01	0.00	0.47	-4.4	-0.3	
927.0	0.88	266.88	927.0	0.0	-5.8	0.09	0.09	-0.46	-5.8	-0.3	
1,021.0	0.97	269.34	1,021.0	0.0	-7.3	0.10	0.10	2.62	-7.3	0.0	
1,158.0	0.70	277.61	1,157.9	0.1	-9.3	0.22	-0.20	6.04	-9.3	1.2	
1,252.0	0.70	283.06	1,251.9	0.3	-10.5	0.07	0.00	5.80	-10.3	2.1	
1,346.0	0.79	274.79	1,345.9	0.4	-11.7	0.15	0.10	-8.80	-11.7	0.5	
1,441.0	1.14	245.79	1,440.9	0.1	-13.2	0.62	0.37	-30.53	-11.8	-5.7	
1,535.0	2.20	220.92	1,534.9	-1.6	-15.2	1.34	1.13	-26.46	-8.3	-11.7	
1,629.0	3.43	208.52	1,628.8	-5.5	-17.7	1.45	1.31	-13.19	-4.3	-14.8	
1,724.0	5.19	198.77	1,723.5	-12.0	-20.5	2.00	1.85	-10.26	0.3	-16.2	
1,818.0	7.12	197.01	1,816.9	-21.6	-23.6	2.06	2.05	-1.87	2.9	-16.3	
1,913.0	8.88	198.94	1,911.0	-34.2	-27.7	1.87	1.85	2.03	3.5	-16.7	
2,008.0	9.06	199.47	2,004.8	-48.2	-32.5	0.21	0.19	0.56	2.9	-17.4	
2,102.0	9.06	199.30	2,097.7	-62.2	-37.4	0.03	0.00	-0.18	2.4	-18.0	
2,197.0	8.97	199.74	2,191.5	-76.2	-42.4	0.12	-0.09	0.46	1.8	-18.7	
2,292.0	9.06	200.44	2,285.3	-90.2	-47.5	0.15	0.09	0.74	1.0	-19.6	
2,387.0	8.97	201.76	2,379.2	-104.1	-52.9	0.24	-0.09	1.39	0.1	-20.7	
2,482.0	9.06	202.28	2,473.0	-117.9	-58.5	0.13	0.09	0.55	-0.7	-22.0	
2,575.0	8.79	200.44	2,564.9	-131.3	-63.7	0.42	-0.29	-1.98	-0.3	-23.1	



Final PVA

Company:	Midland	Local Co-ordinate Reference:	Well #501H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 32' @ 3518.0usft (Nabors M1206)
Site:	Resolute 12 Fed Com	MD Reference:	KB = 32' @ 3518.0usft (Nabors M1206)
Well:	#501H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	PEDM

Survey											
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)	
2,670.0	8.79	199.30	2,658.7	-144.9	-68.7	0.18	0.00	-1.20	0.0	-23.9	
2,764.0	8.44	198.94	2,751.7	-158.2	-73.3	0.38	-0.37	-0.38	0.3	-24.5	
2,859.0	8.35	199.47	2,845.7	-171.3	-77.8	0.12	-0.09	0.56	0.7	-25.1	
2,954.0	8.27	199.56	2,939.7	-184.3	-82.4	0.09	-0.08	0.09	1.3	-25.8	
3,049.0	8.27	198.59	3,033.7	-197.2	-86.9	0.15	0.00	-1.02	2.5	-26.3	
3,143.0	8.00	199.38	3,126.7	-209.8	-91.2	0.31	-0.29	0.84	3.1	-26.9	
3,237.0	8.09	198.77	3,219.8	-222.2	-95.5	0.13	0.10	-0.65	4.5	-27.4	
3,331.0	7.83	199.82	3,312.9	-234.5	-99.8	0.32	-0.28	1.12	5.2	-28.2	
3,425.0	7.74	199.38	3,406.0	-246.5	-104.1	0.11	-0.10	-0.47	6.9	-28.8	
3,520.0	7.83	201.05	3,500.2	-258.6	-108.5	0.26	0.09	1.76	7.6	-29.9	
3,614.0	7.65	200.09	3,593.3	-270.4	-113.0	0.24	-0.19	-1.02	9.7	-30.7	
3,709.0	7.12	200.44	3,687.5	-281.9	-117.2	0.56	-0.56	0.37	11.7	-31.6	
3,804.0	6.42	196.83	3,781.9	-292.5	-120.8	0.86	-0.74	-3.80	16.9	-31.2	
3,899.0	6.86	193.23	3,876.2	-303.1	-123.6	0.64	0.46	-3.79	22.3	-29.5	
3,993.0	7.30	191.47	3,969.5	-314.4	-126.1	0.52	0.47	-1.87	25.8	-27.7	
4,088.0	7.83	190.24	4,063.7	-326.7	-128.5	0.58	0.56	-1.29	28.2	-25.6	
4,182.0	8.44	186.73	4,156.7	-339.8	-130.4	0.84	0.65	-3.73	30.5	-21.8	
4,276.0	8.53	182.95	4,249.7	-353.6	-131.6	0.60	0.10	-4.02	31.9	-16.8	
4,371.0	8.88	189.36	4,343.6	-367.9	-133.1	1.08	0.37	6.75	29.8	-17.5	
4,465.0	9.41	190.42	4,436.4	-382.6	-135.7	0.59	0.56	1.13	28.7	-16.4	
4,559.0	9.67	189.28	4,529.1	-398.0	-138.4	0.34	0.28	-1.21	27.5	-14.1	
4,653.0	9.67	187.61	4,621.8	-413.6	-140.7	0.30	0.00	-1.78	26.2	-11.3	
4,831.0	7.56	186.73	4,797.8	-440.0	-144.0	1.19	-1.19	-0.49	26.3	-6.4	
4,926.0	9.41	189.89	4,891.7	-453.9	-146.1	2.01	1.95	3.33	26.2	-5.7	
5,020.0	9.50	188.22	4,984.4	-469.1	-148.5	0.31	0.10	-1.78	25.0	-3.1	
5,114.0	9.32	186.55	5,077.2	-484.4	-150.5	0.35	-0.19	-1.78	23.8	0.0	
5,209.0	9.67	195.08	5,170.9	-499.7	-153.5	1.52	0.37	8.98	22.3	-1.9	



Final PVA

Company: Midland
Project: Lea County, NM (NAD 83 NME)
Site: Resolute 12 Fed Com
Well: #501H
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well #501H
TVD Reference: KB = 32' @ 3518.0usft (Nabors M1206)
MD Reference: KB = 32' @ 3518.0usft (Nabors M1206)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: PEDM

Survey										
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)
5,304.0	9.32	196.66	5,264.6	-514.8	-157.7	0.46	-0.37	1.66	21.0	-2.3
5,399.0	9.06	188.75	5,358.4	-529.6	-161.1	1.36	-0.27	-8.33	20.3	1.5
5,494.0	9.15	187.08	5,452.2	-544.5	-163.2	0.29	0.09	-1.76	19.4	4.3
5,588.0	9.15	186.55	5,545.0	-559.3	-164.9	0.09	0.00	-0.56	18.4	7.0
5,683.0	8.79	184.79	5,638.8	-574.0	-166.4	0.48	-0.38	-1.85	17.5	10.3
5,777.0	9.41	192.52	5,731.6	-588.7	-168.7	1.46	0.66	8.22	18.1	9.9
5,872.0	9.58	192.16	5,825.3	-604.0	-172.0	0.19	0.18	-0.38	16.7	11.1
5,966.0	9.15	191.37	5,918.1	-619.0	-175.1	0.48	-0.46	-0.84	15.5	12.6
6,060.0	9.15	189.44	6,010.9	-633.7	-177.8	0.33	0.00	-2.05	14.3	14.7
6,154.0	8.71	188.65	6,103.7	-648.1	-180.1	0.49	-0.47	-0.84	13.6	16.8
6,249.0	9.41	196.73	6,197.5	-662.6	-183.4	1.53	0.74	8.51	15.3	15.8
6,343.0	9.67	197.35	6,290.2	-677.5	-188.0	0.30	0.28	0.66	14.1	15.5
6,437.0	9.76	196.56	6,382.9	-692.7	-192.6	0.17	0.10	-0.84	12.3	15.7
6,531.0	9.58	197.26	6,475.6	-707.8	-197.2	0.23	-0.19	0.74	10.9	15.5
6,626.0	8.97	196.82	6,569.3	-722.5	-201.7	0.65	-0.64	-0.46	9.9	15.5
6,719.0	7.30	192.60	6,661.4	-735.2	-205.1	1.91	-1.80	-4.54	9.7	16.7
6,814.0	6.33	194.45	6,755.7	-746.1	-207.7	1.05	-1.02	1.95	13.4	17.2
6,908.0	3.96	198.05	6,849.3	-754.2	-210.0	2.54	-2.52	3.83	19.3	16.3
7,003.0	1.93	147.52	6,944.2	-758.7	-210.2	3.28	-2.14	-53.19	2.7	30.6
7,097.0	2.37	129.23	7,038.1	-761.3	-207.8	0.86	0.47	-19.46	-7.7	36.0
7,192.0	0.53	217.74	7,133.1	-762.9	-206.6	2.54	-1.94	93.17	39.0	9.2
7,286.0	0.44	234.53	7,227.1	-763.4	-207.1	0.18	-0.10	17.86	40.0	-2.9
7,381.0	0.97	228.99	7,322.1	-764.1	-208.0	0.56	0.56	-5.83	38.9	0.9
7,476.0	1.58	219.50	7,417.1	-765.7	-209.5	0.68	0.64	-9.99	36.1	7.2
7,571.0	1.67	212.99	7,512.0	-767.9	-211.1	0.22	0.09	-6.85	32.4	11.1
7,665.0	2.02	216.16	7,606.0	-770.3	-212.8	0.39	0.37	3.37	29.9	9.4
7,760.0	2.11	219.32	7,700.9	-773.0	-214.9	0.15	0.09	3.33	27.0	7.8



Final PVA

Company:	Midland	Local Co-ordinate Reference:	Well #501H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 32' @ 3518.0usft (Nabors M1206)
Site:	Resolute 12 Fed Com	MD Reference:	KB = 32' @ 3518.0usft (Nabors M1206)
Well:	#501H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	PEDM

Survey											
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)	
7,855.0	2.29	212.73	7,795.9	-776.0	-217.0	0.33	0.19	-6.94	22.3	10.6	
7,949.0	2.02	220.29	7,889.8	-778.8	-219.1	0.42	-0.29	8.04	20.0	7.8	
8,044.0	2.02	217.74	7,984.7	-781.4	-221.2	0.09	0.00	-2.68	16.2	8.7	
8,138.0	1.85	215.89	8,078.7	-784.0	-223.1	0.19	-0.18	-1.97	12.8	9.1	
8,233.0	1.76	214.84	8,173.6	-786.4	-224.9	0.10	-0.09	-1.11	9.6	9.3	
8,328.0	2.02	211.50	8,268.6	-789.0	-226.6	0.30	0.27	-3.52	5.9	9.8	
8,422.0	2.20	212.99	8,362.5	-792.0	-228.4	0.20	0.19	1.59	2.7	9.7	
8,516.0	2.29	206.49	8,456.4	-795.2	-230.2	0.29	0.10	-6.91	-2.0	9.7	
8,610.0	0.53	312.66	8,550.4	-796.6	-231.4	2.65	-1.87	112.95	10.0	1.1	
8,704.0	0.62	322.24	8,644.4	-795.9	-232.0	0.14	0.10	10.19	9.1	-0.5	
8,799.0	0.53	247.18	8,739.4	-795.6	-232.7	0.74	-0.09	-79.01	2.3	8.1	
8,893.0	0.97	228.73	8,833.4	-796.3	-233.7	0.53	0.47	-19.63	-1.6	8.3	
8,988.0	1.23	221.08	8,928.4	-797.6	-235.0	0.31	0.27	-8.05	-4.5	7.9	
9,082.0	1.23	202.89	9,022.4	-799.3	-236.1	0.41	0.00	-19.35	-8.7	5.8	
9,176.0	1.58	240.68	9,116.3	-800.9	-237.6	1.03	0.37	40.20	-5.4	10.5	
9,270.0	1.49	213.17	9,210.3	-802.5	-239.4	0.78	-0.10	-29.27	-12.1	6.2	
9,364.0	1.58	229.96	9,304.3	-804.4	-241.0	0.49	0.10	17.86	-12.2	9.8	
9,457.0	2.11	253.07	9,397.2	-805.7	-243.7	0.97	0.57	24.85	-10.3	14.3	
9,551.0	1.93	242.26	9,491.2	-806.9	-246.7	0.45	-0.19	-11.50	-16.1	11.8	
9,645.0	1.67	213.26	9,585.1	-808.8	-248.9	1.00	-0.28	-30.85	-22.5	1.8	
9,739.0	1.32	203.33	9,679.1	-811.0	-250.1	0.46	-0.37	-10.56	-24.9	-2.4	
9,834.0	1.58	186.89	9,774.1	-813.3	-250.6	0.51	0.27	-17.31	-25.6	-9.6	
9,928.0	1.93	200.25	9,868.0	-816.0	-251.3	0.57	0.37	14.21	-30.0	-3.2	
10,023.0	2.11	209.48	9,963.0	-819.1	-252.8	0.39	0.19	9.72	-33.4	1.9	
10,117.0	1.85	303.43	10,056.9	-819.7	-254.9	3.09	-0.28	99.95	2.8	35.0	
10,212.0	1.93	299.39	10,151.9	-818.1	-257.6	0.16	0.08	-4.25	-2.8	35.0	
10,352.0	2.20	293.94	10,291.8	-815.9	-262.1	0.24	0.19	-3.89	-11.1	34.3	



Final PVA

Company:	Midland	Local Co-ordinate Reference:	Well #501H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 32' @ 3518.0usft (Nabors M1206)
Site:	Resolute 12 Fed Com	MD Reference:	KB = 32' @ 3518.0usft (Nabors M1206)
Well:	#501H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	PEDM

Survey											
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)	
10,415.0	4.36	326.87	10,354.7	-813.4	-264.5	4.42	3.43	52.27	6.1	35.6	
KOP (MD=10415.0')											
10,446.0	5.63	332.88	10,385.6	-811.0	-265.8	4.42	4.09	19.39	8.6	35.6	
10,540.0	17.67	348.61	10,477.5	-792.9	-270.8	13.13	12.81	16.73	13.6	36.4	
10,635.0	28.93	348.35	10,564.6	-756.1	-278.3	11.85	11.85	-0.27	4.8	43.0	
10,729.0	37.28	4.43	10,643.4	-705.3	-280.7	12.83	8.88	17.11	6.0	44.8	
10,823.0	49.51	7.77	10,711.6	-641.2	-273.6	13.23	13.01	3.55	-4.0	40.1	
10,889.4	59.18	4.27	10,750.3	-587.6	-268.1	15.17	14.56	-5.28	-16.9	36.2	
(50' from Plan) HL Crossing, MD:10889.4', TVD:10750.3', N/S:-587.6', E/W:-268.1', INC:59.18											
10,917.0	63.22	3.02	10,763.6	-563.5	-266.5	15.17	14.65	-4.51	-23.0	35.3	
11,012.0	67.36	3.90	10,803.3	-477.4	-261.3	4.44	4.36	0.93	-39.1	32.7	
11,106.0	66.21	2.85	10,840.3	-391.1	-256.2	1.60	-1.22	-1.12	-41.5	29.6	
11,201.0	71.31	2.06	10,874.7	-302.7	-252.4	5.42	5.37	-0.83	-29.9	28.1	
11,296.0	81.95	3.02	10,896.7	-210.5	-248.3	11.24	11.20	1.01	-15.2	26.4	
11,391.0	89.25	3.64	10,903.9	-116.0	-242.8	7.71	7.68	0.65	-8.9	20.6	
11,486.0	94.88	4.61	10,900.5	-21.4	-236.0	6.01	5.93	1.02	-13.2	13.1	
11,580.0	93.56	3.38	10,893.6	72.2	-229.5	1.92	-1.40	-1.31	-20.8	6.0	
11,674.0	86.44	0.83	10,893.6	166.0	-226.0	8.05	-7.57	-2.71	-21.6	1.8	
11,769.0	86.35	0.56	10,899.6	260.8	-224.9	0.30	-0.09	-0.28	-16.4	0.0	
11,864.0	88.64	0.04	10,903.7	355.7	-224.4	2.47	2.41	-0.55	-13.1	-1.1	
11,958.0	89.34	0.74	10,905.4	449.7	-223.7	1.05	0.74	0.74	-12.2	-2.4	
12,053.0	88.72	359.95	10,907.0	544.7	-223.2	1.06	-0.65	-0.83	-11.4	-3.7	
12,147.0	85.65	357.66	10,911.6	638.6	-225.1	4.07	-3.27	-2.44	-7.6	-2.4	
12,242.0	88.64	357.66	10,916.3	733.3	-229.0	3.15	3.15	0.00	-3.7	0.8	
12,337.0	90.84	356.70	10,916.8	828.2	-233.7	2.53	2.32	-1.01	-4.1	4.8	
12,431.0	91.19	356.08	10,915.1	922.0	-239.6	0.76	0.37	-0.66	-6.5	10.1	
12,526.0	88.20	356.78	10,915.6	1,016.8	-245.5	3.23	-3.15	0.74	-6.8	15.4	



Final PVA

Company:	Midland	Local Co-ordinate Reference:	Well #501H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 32' @ 3518.0usft (Nabors M1206)
Site:	Resolute 12 Fed Com	MD Reference:	KB = 32' @ 3518.0usft (Nabors M1206)
Well:	#501H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	PEDM

Survey											
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)	
12,620.0	89.08	359.68	10,917.8	1,110.7	-248.4	3.22	0.94	3.09	-5.4	17.6	
12,714.0	88.29	0.74	10,920.0	1,204.7	-248.1	1.41	-0.84	1.13	-4.0	16.6	
12,808.0	90.66	1.71	10,920.9	1,298.7	-246.1	2.72	2.52	1.03	-4.0	13.9	
12,902.0	90.48	1.53	10,919.9	1,392.6	-243.4	0.27	-0.19	-0.19	-5.7	10.6	
12,997.0	90.13	0.12	10,919.4	1,487.6	-242.0	1.53	-0.37	-1.48	-7.0	8.6	
13,091.0	93.30	358.63	10,916.6	1,581.6	-243.1	3.73	3.37	-1.59	-10.6	9.0	
13,186.0	93.91	358.45	10,910.6	1,676.3	-245.5	0.67	0.64	-0.19	-17.4	10.7	
13,280.0	90.57	358.54	10,907.0	1,770.2	-247.9	3.55	-3.55	0.10	-21.9	12.5	
13,374.0	89.08	0.83	10,907.2	1,864.2	-248.4	2.91	-1.59	2.44	-22.4	12.4	
13,468.0	88.90	0.21	10,908.9	1,958.2	-247.6	0.69	-0.19	-0.66	-21.6	10.9	
13,563.0	90.04	359.42	10,909.8	2,053.2	-247.9	1.46	1.20	-0.83	-21.5	10.5	
13,657.0	87.67	0.30	10,911.7	2,147.2	-248.1	2.69	-2.52	0.94	-20.5	10.1	
13,752.0	86.79	359.86	10,916.3	2,242.0	-248.0	1.04	-0.93	-0.46	-16.7	9.3	
13,846.0	88.46	0.21	10,920.1	2,336.0	-247.9	1.82	1.78	0.37	-13.6	8.6	
13,940.0	88.46	359.51	10,922.7	2,429.9	-248.2	0.74	0.00	-0.74	-11.9	8.2	
14,035.0	90.92	0.91	10,923.2	2,524.9	-247.8	2.98	2.59	1.47	-12.2	7.2	
14,129.0	91.19	0.83	10,921.5	2,618.9	-246.4	0.30	0.29	-0.09	-14.7	5.1	
14,222.0	89.60	1.18	10,920.8	2,711.9	-244.8	1.75	-1.71	0.38	-16.2	2.8	
14,316.0	87.23	0.30	10,923.4	2,805.8	-243.6	2.69	-2.52	-0.94	-14.4	0.9	
14,410.0	88.90	359.86	10,926.6	2,899.8	-243.4	1.84	1.78	-0.47	-12.0	0.1	
14,504.0	92.42	0.65	10,925.5	2,993.7	-243.0	3.84	3.74	0.84	-13.9	-0.9	
14,599.0	92.77	0.21	10,921.2	3,088.6	-242.3	0.59	0.37	-0.46	-19.0	-2.3	
14,693.0	91.36	1.18	10,917.8	3,182.6	-241.2	1.82	-1.50	1.03	-23.2	-4.1	
14,788.0	88.90	358.45	10,917.6	3,277.5	-241.5	3.87	-2.59	-2.87	-24.3	-4.5	
14,882.0	91.01	358.19	10,917.7	3,371.5	-244.2	2.26	2.24	-0.28	-25.0	-2.4	
14,977.0	90.66	357.49	10,916.3	3,466.4	-247.8	0.82	-0.37	-0.74	-27.2	0.6	
15,071.0	91.28	357.40	10,914.7	3,560.3	-252.0	0.67	0.66	-0.10	-29.6	4.1	



Final PVA

Company: Midland
Project: Lea County, NM (NAD 83 NME)
Site: Resolute 12 Fed Com
Well: #501H
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well #501H
TVD Reference: KB = 32' @ 3518.0usft (Nabors M1206)
MD Reference: KB = 32' @ 3518.0usft (Nabors M1206)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: PEDM

Survey										
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)
15,166.0	90.75	356.78	10,913.0	3,655.2	-256.8	0.86	-0.56	-0.65	-32.1	8.2
15,260.0	91.19	356.34	10,911.4	3,749.0	-262.4	0.66	0.47	-0.47	-34.5	13.2
15,355.0	89.43	359.16	10,910.9	3,843.9	-266.2	3.50	-1.85	2.97	-35.5	16.3
15,450.0	89.34	0.91	10,911.9	3,938.9	-266.1	1.84	-0.09	1.84	-34.8	15.6
15,545.0	89.34	2.85	10,913.0	4,033.8	-263.0	2.04	0.00	2.04	-34.0	11.8
15,639.0	91.71	3.46	10,912.2	4,127.7	-257.8	2.60	2.52	0.65	-35.1	6.0
15,733.0	88.29	1.27	10,912.2	4,221.6	-253.9	4.32	-3.64	-2.33	-35.4	1.5
15,828.0	88.46	1.53	10,914.9	4,316.5	-251.6	0.33	0.18	0.27	-33.0	-1.5
15,923.0	88.46	1.09	10,917.4	4,411.5	-249.5	0.46	0.00	-0.46	-30.7	-4.3
16,016.0	88.02	1.00	10,920.3	4,504.4	-247.8	0.48	-0.47	-0.10	-28.1	-6.7
16,111.0	88.72	0.56	10,923.0	4,599.4	-246.5	0.87	0.74	-0.46	-25.7	-8.6
16,205.0	89.43	1.00	10,924.5	4,693.3	-245.2	0.89	0.76	0.47	-24.4	-10.5
16,300.0	88.64	0.56	10,926.1	4,788.3	-243.9	0.95	-0.83	-0.46	-23.1	-12.5
16,394.0	87.85	0.30	10,929.0	4,882.3	-243.2	0.88	-0.84	-0.28	-20.5	-13.9
16,488.0	89.96	358.54	10,930.8	4,976.2	-244.1	2.92	2.24	-1.87	-19.0	-13.6
16,583.0	88.99	357.40	10,931.6	5,071.2	-247.5	1.58	-1.02	-1.20	-18.4	-10.8
16,677.0	88.46	356.52	10,933.7	5,165.0	-252.5	1.09	-0.56	-0.94	-16.6	-6.5
16,772.0	88.90	356.17	10,935.9	5,259.8	-258.5	0.59	0.46	-0.37	-14.7	-1.1
16,866.0	89.69	355.55	10,937.1	5,353.5	-265.3	1.07	0.84	-0.66	-13.8	5.0
16,960.0	91.54	357.05	10,936.1	5,447.3	-271.4	2.53	1.97	1.60	-15.1	10.4
17,054.0	92.59	359.33	10,932.7	5,541.2	-274.4	2.67	1.12	2.43	-18.7	12.8
17,149.0	92.33	359.51	10,928.6	5,636.1	-275.3	0.33	-0.27	0.19	-23.1	13.1
17,243.0	91.36	1.00	10,925.6	5,730.1	-274.9	1.89	-1.03	1.59	-26.4	12.0
17,337.0	92.42	1.27	10,922.5	5,824.0	-273.0	1.16	1.13	0.29	-29.8	9.5
17,432.0	89.52	1.71	10,920.9	5,918.9	-270.6	3.09	-3.05	0.46	-31.7	6.3
17,526.0	89.52	1.27	10,921.6	6,012.9	-268.1	0.47	0.00	-0.47	-31.1	3.3
17,620.0	87.32	0.74	10,924.2	6,106.8	-266.5	2.41	-2.34	-0.56	-28.8	1.0



Final PVA

Company:	Midland	Local Co-ordinate Reference:	Well #501H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 32' @ 3518.0usft (Nabors M1206)
Site:	Resolute 12 Fed Com	MD Reference:	KB = 32' @ 3518.0usft (Nabors M1206)
Well:	#501H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	PEDM

Survey										
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)
17,714.0	87.58	0.65	10,928.4	6,200.7	-265.3	0.29	0.28	-0.10	-24.9	-0.8
17,808.0	87.76	0.04	10,932.2	6,294.7	-264.8	0.68	0.19	-0.65	-21.4	-2.1
17,903.0	87.49	359.33	10,936.2	6,389.6	-265.3	0.80	-0.28	-0.75	-17.7	-2.2
17,997.0	88.20	359.60	10,939.7	6,483.5	-266.2	0.81	0.76	0.29	-14.5	-2.0
18,091.0	89.16	359.16	10,941.9	6,577.5	-267.2	1.12	1.02	-0.47	-12.6	-1.6
18,185.0	91.28	359.42	10,941.5	6,671.5	-268.4	2.27	2.26	0.28	-13.2	-1.1
18,279.0	91.45	358.89	10,939.3	6,765.4	-269.7	0.59	0.18	-0.56	-15.7	-0.3
18,373.0	91.28	358.54	10,937.0	6,859.4	-271.9	0.41	-0.18	-0.37	-18.2	1.1
18,468.0	89.52	357.93	10,936.4	6,954.3	-274.8	1.96	-1.85	-0.64	-19.2	3.4
18,562.0	89.96	357.66	10,936.8	7,048.3	-278.4	0.55	0.47	-0.29	-19.0	6.3
18,656.0	90.31	357.31	10,936.6	7,142.2	-282.5	0.53	0.37	-0.37	-19.5	9.8
18,751.0	89.87	356.78	10,936.4	7,237.0	-287.4	0.73	-0.46	-0.56	-19.5	14.0
18,846.0	90.04	356.87	10,936.5	7,331.9	-292.7	0.20	0.18	0.09	-19.2	18.7
18,939.0	90.04	356.70	10,936.4	7,424.7	-297.9	0.18	0.00	-0.18	-19.1	23.2
19,033.0	92.42	359.42	10,934.4	7,518.7	-301.1	3.84	2.53	2.89	-20.9	25.8
19,127.0	89.25	359.68	10,933.1	7,612.6	-301.8	3.38	-3.37	0.28	-22.1	25.9
19,221.0	90.84	1.35	10,933.0	7,706.6	-301.0	2.45	1.69	1.78	-22.0	24.3
19,316.0	91.45	1.18	10,931.1	7,801.6	-298.9	0.67	0.64	-0.18	-23.7	21.6
19,410.0	91.63	1.27	10,928.6	7,895.5	-296.9	0.21	0.19	0.10	-26.0	18.9
19,505.0	89.08	1.79	10,928.0	7,990.5	-294.3	2.74	-2.68	0.55	-26.4	15.7
19,599.0	88.81	1.62	10,929.7	8,084.4	-291.5	0.34	-0.29	-0.18	-24.5	12.3
19,694.0	87.76	0.91	10,932.5	8,179.3	-289.4	1.33	-1.11	-0.75	-21.4	9.6
19,788.0	87.23	0.91	10,936.7	8,273.2	-287.9	0.56	-0.56	0.00	-17.1	7.4
19,882.0	86.35	1.18	10,941.9	8,367.1	-286.2	0.98	-0.94	0.29	-11.7	5.1
19,976.0	88.64	359.60	10,946.0	8,461.0	-285.6	2.96	2.44	-1.68	-7.4	3.8
20,071.0	89.52	0.12	10,947.5	8,556.0	-285.8	1.08	0.93	0.55	-5.7	3.3
20,165.0	89.96	359.33	10,948.0	8,650.0	-286.3	0.96	0.47	-0.84	-5.0	3.1



Final PVA

Company:	Midland	Local Co-ordinate Reference:	Well #501H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 32' @ 3518.0usft (Nabors M1206)
Site:	Resolute 12 Fed Com	MD Reference:	KB = 32' @ 3518.0usft (Nabors M1206)
Well:	#501H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	PEDM

Survey										
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)
20,259.0	89.43	359.24	10,948.5	8,744.0	-287.5	0.57	-0.56	-0.10	-4.3	3.6
20,354.0	89.78	358.98	10,949.1	8,838.9	-288.9	0.46	0.37	-0.27	-3.5	4.5
20,447.0	90.04	358.63	10,949.3	8,931.9	-290.9	0.47	0.28	-0.38	-3.2	5.8
20,542.0	90.66	358.80	10,948.7	9,026.9	-293.0	0.68	0.65	0.18	-3.5	7.2
20,635.0	90.40	357.84	10,947.8	9,119.8	-295.7	1.07	-0.28	-1.03	-4.2	9.3
20,729.0	89.25	357.31	10,948.1	9,213.8	-299.7	1.35	-1.22	-0.56	-3.7	12.6
20,824.0	91.01	357.14	10,947.9	9,308.6	-304.3	1.86	1.85	-0.18	-3.7	16.6
20,918.0	90.48	356.70	10,946.7	9,402.5	-309.3	0.73	-0.56	-0.47	-4.8	21.0
21,012.0	89.87	355.73	10,946.4	9,496.3	-315.6	1.22	-0.65	-1.03	-4.9	26.5
21,076.0	89.96	355.99	10,946.5	9,560.1	-320.2	0.43	0.14	0.41	-4.6	30.7
Final MWD Survey (MD=21076.0')										
21,139.0	89.96	355.99	10,946.5	9,623.0	-324.6	0.00	0.00	0.00	-4.5	34.7
Final Projection to Bit (MD=21139.0')										

Design Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
10,415.0	10,354.7	-813.4	-264.5	KOP (MD=10415.0')
10,889.4	10,750.3	-587.6	-268.1	(50' from Plan) HL Crossing, MD:10889.4', TVD:10750.3', N/S:-587.6', E/W:-268
21,076.0	10,946.5	9,560.1	-320.2	Final MWD Survey (MD=21076.0')
21,139.0	10,946.5	9,623.0	-324.6	Final Projection to Bit (MD=21139.0')

Checked By: _____	Approved By: _____	Date: _____
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Lea County, NM (NAD 83 NME)

Resolute 12 Fed Com #501H

Nabors M1206

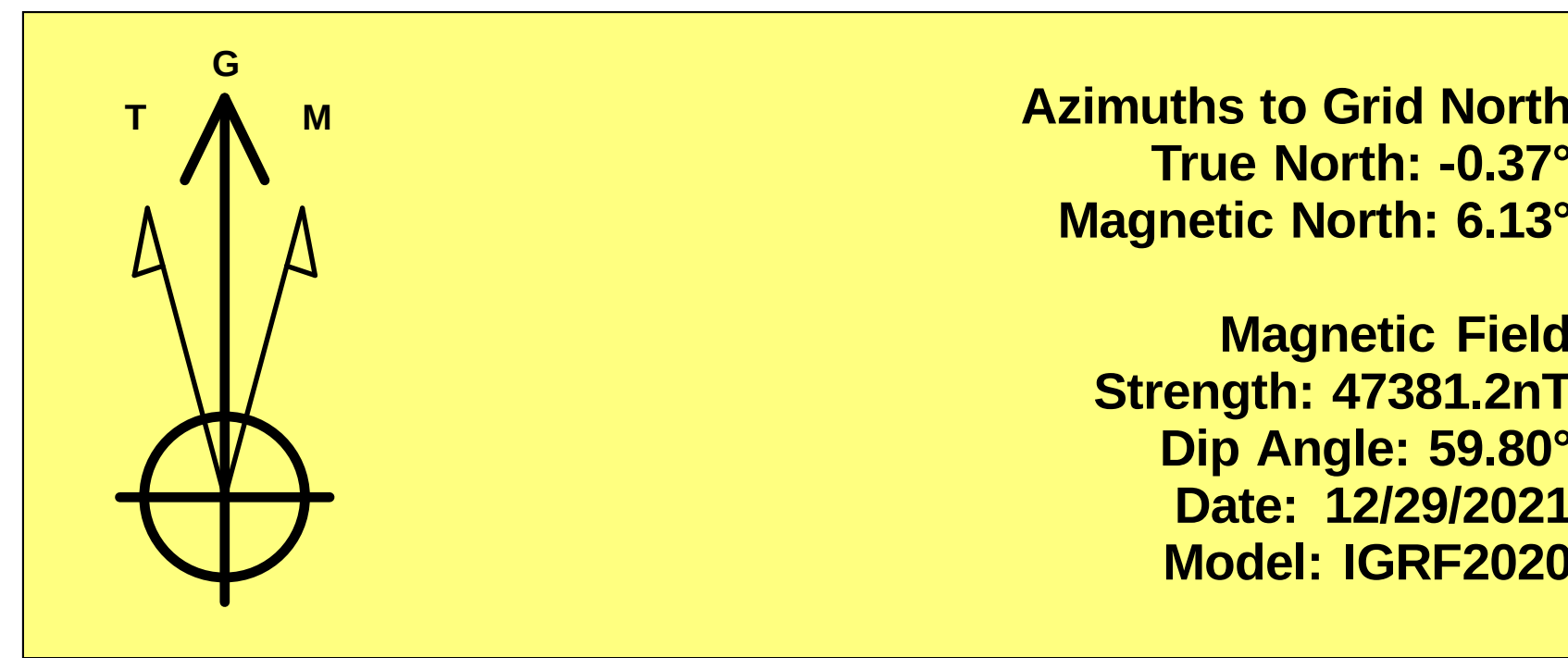
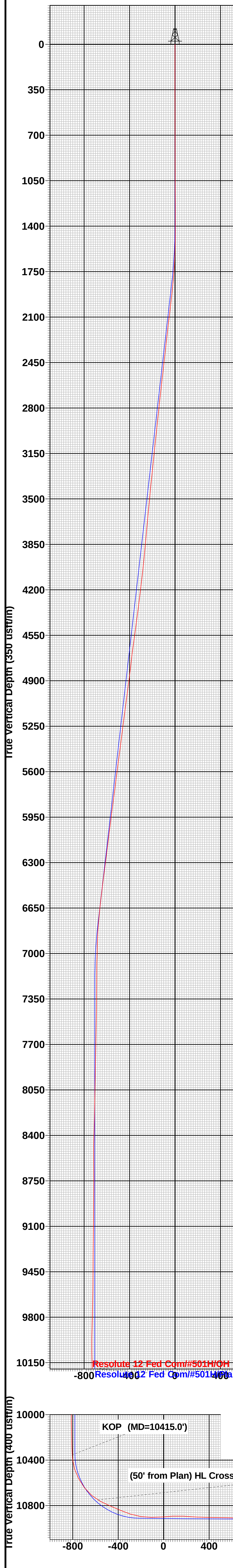
OH

PROJECT DETAILS: Lea County, NM (NAD 83 NME)

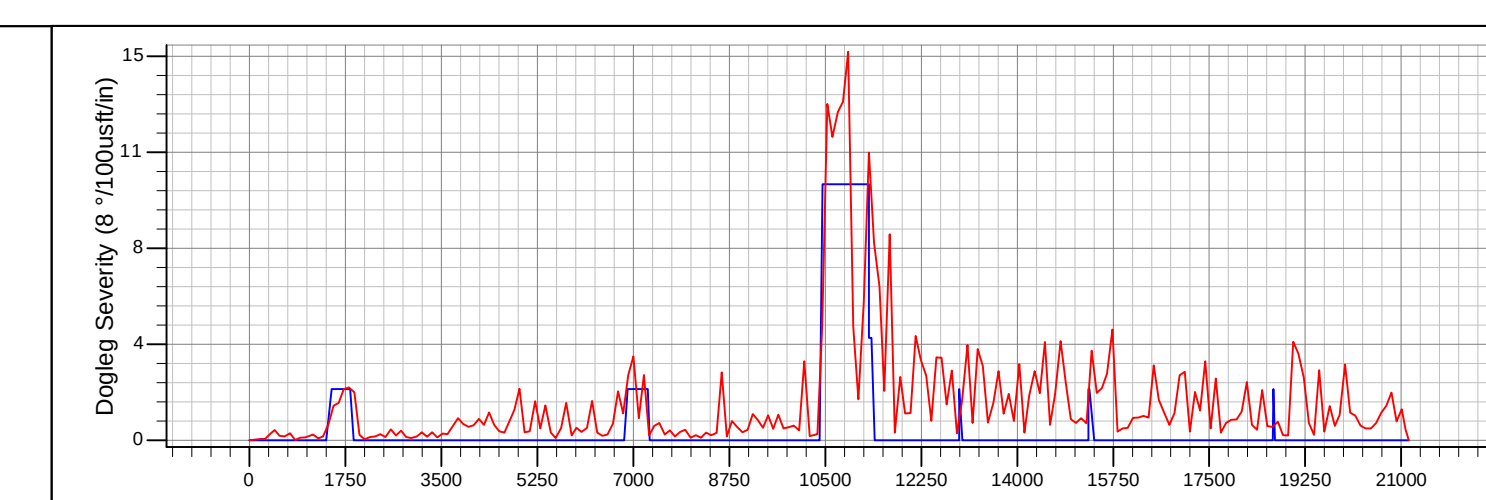
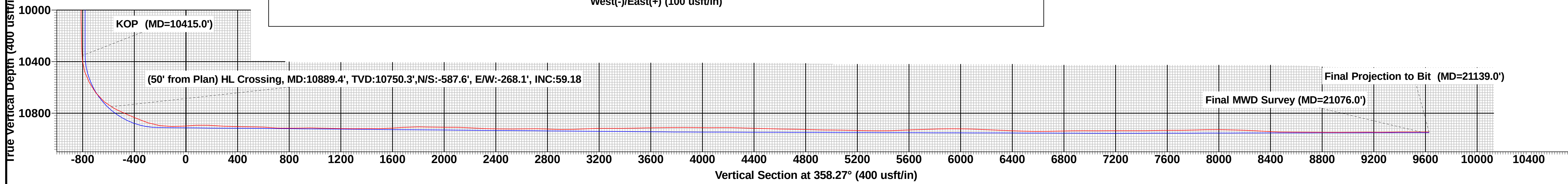
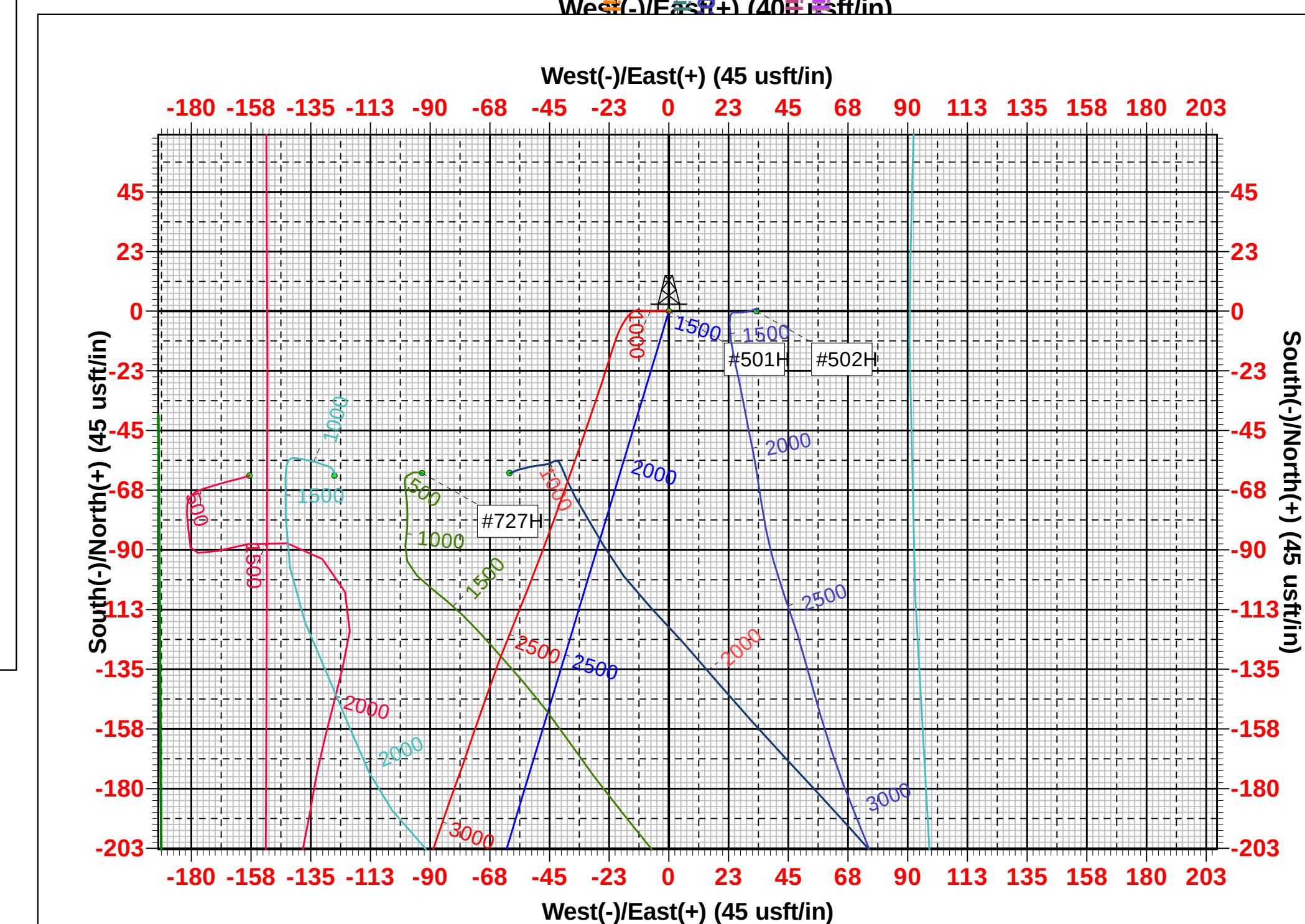
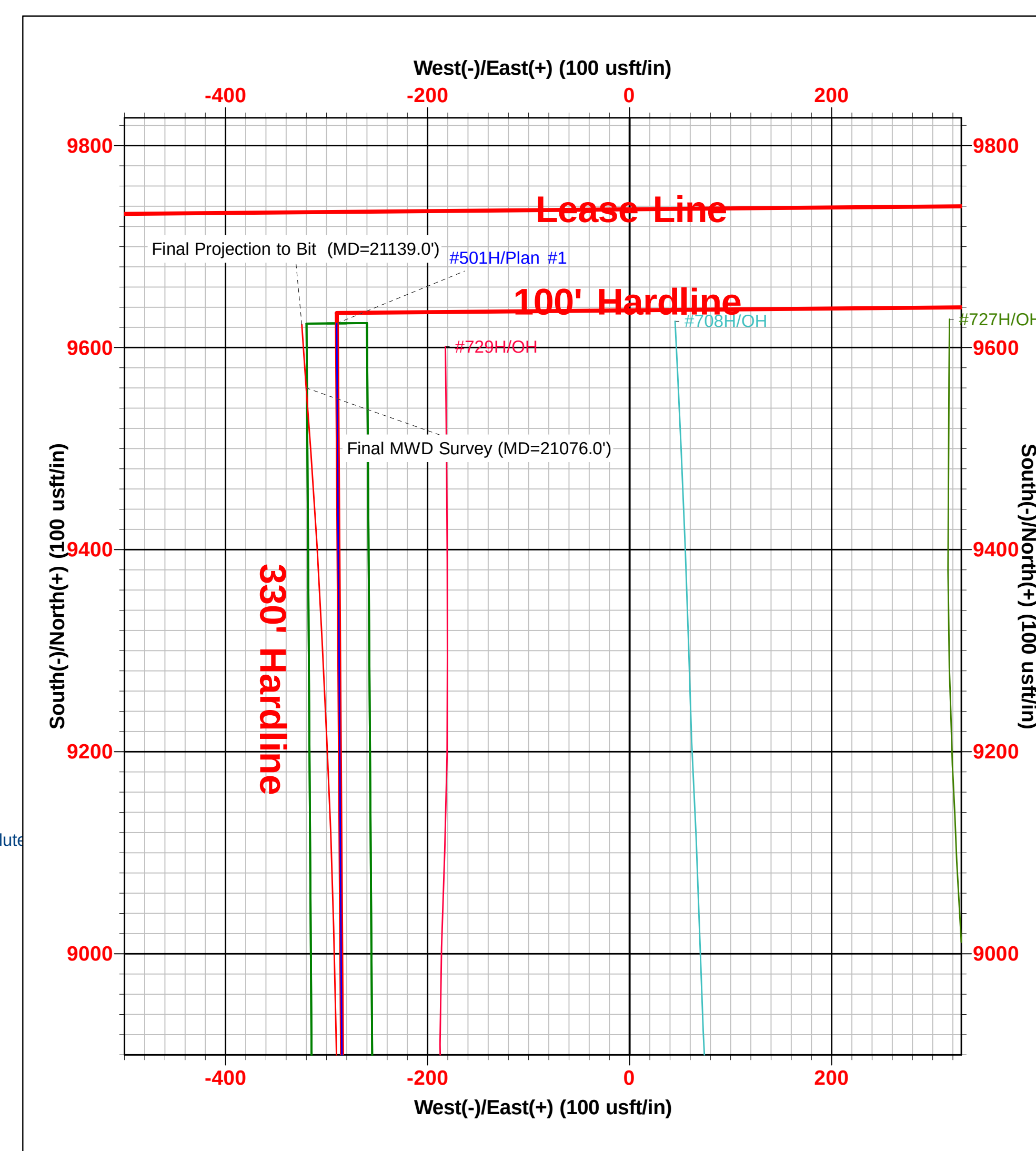
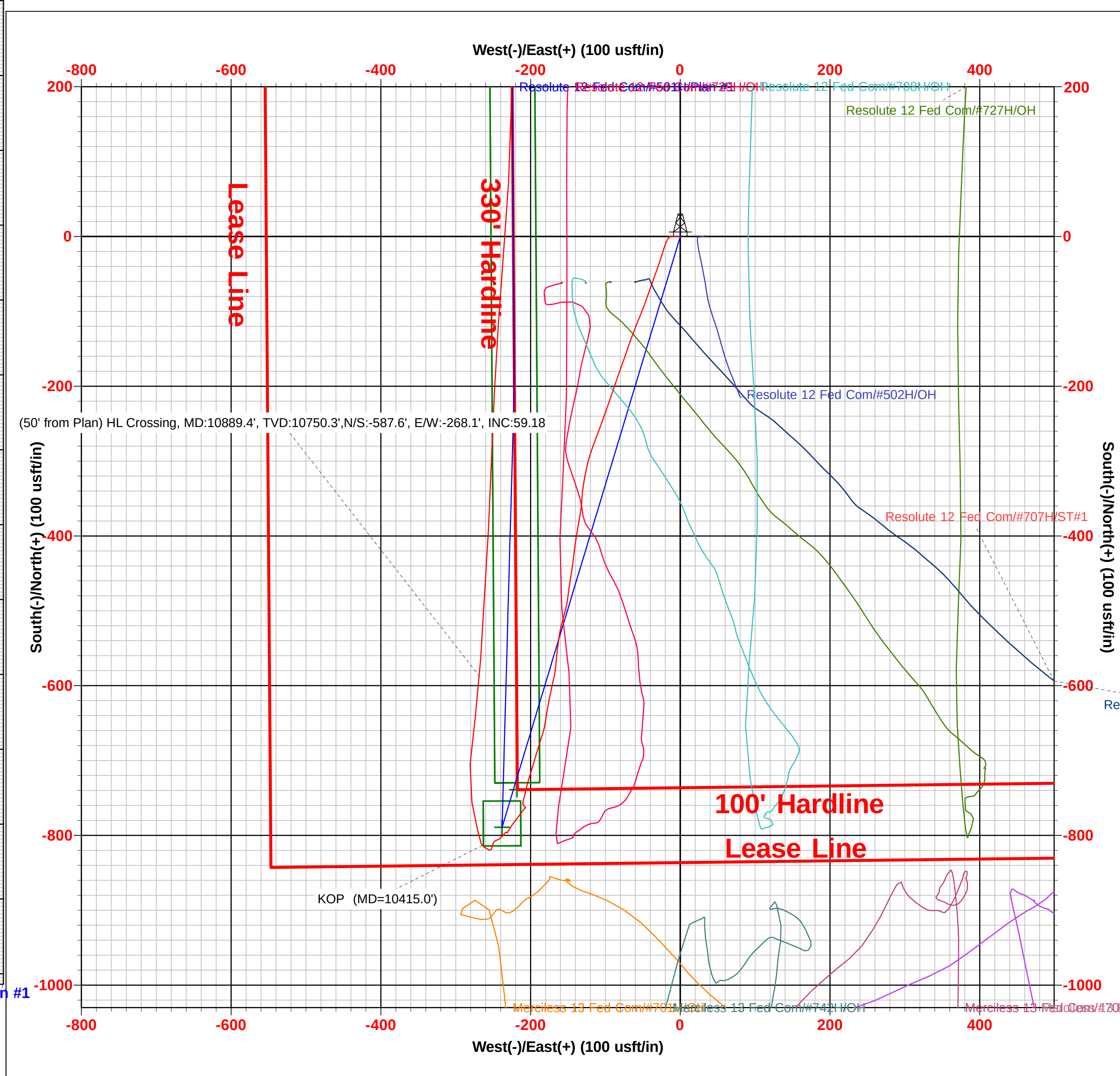
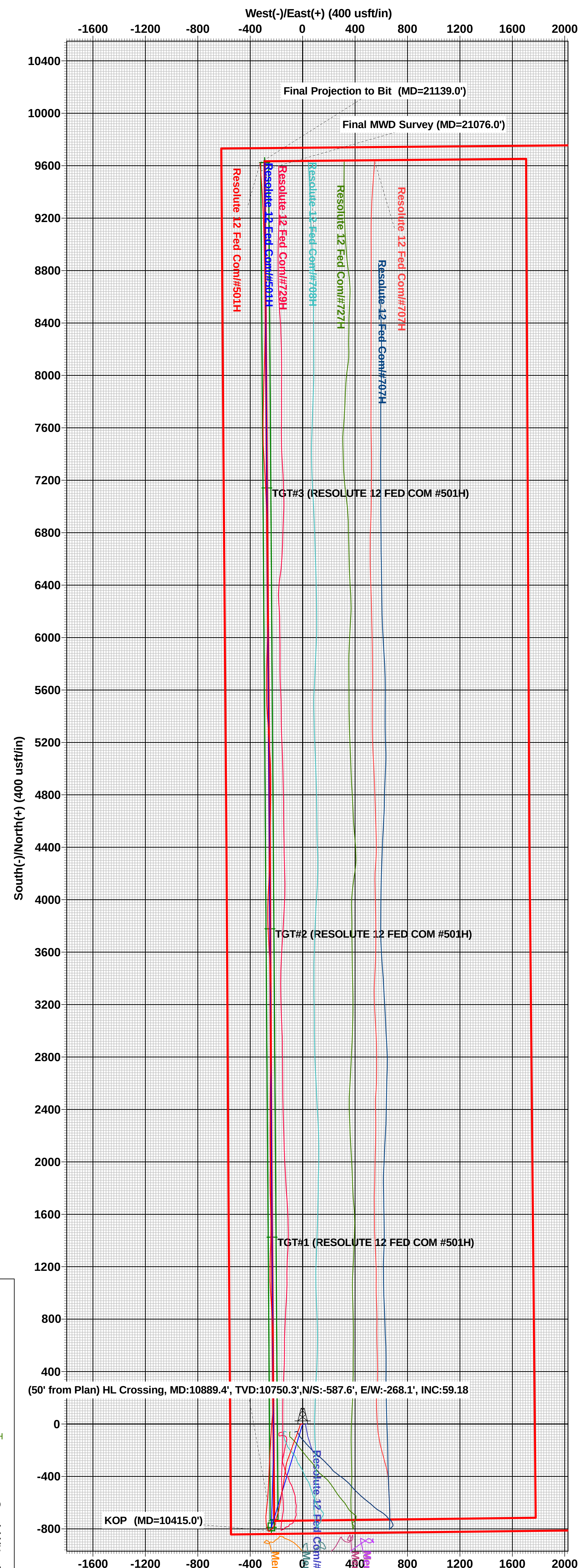
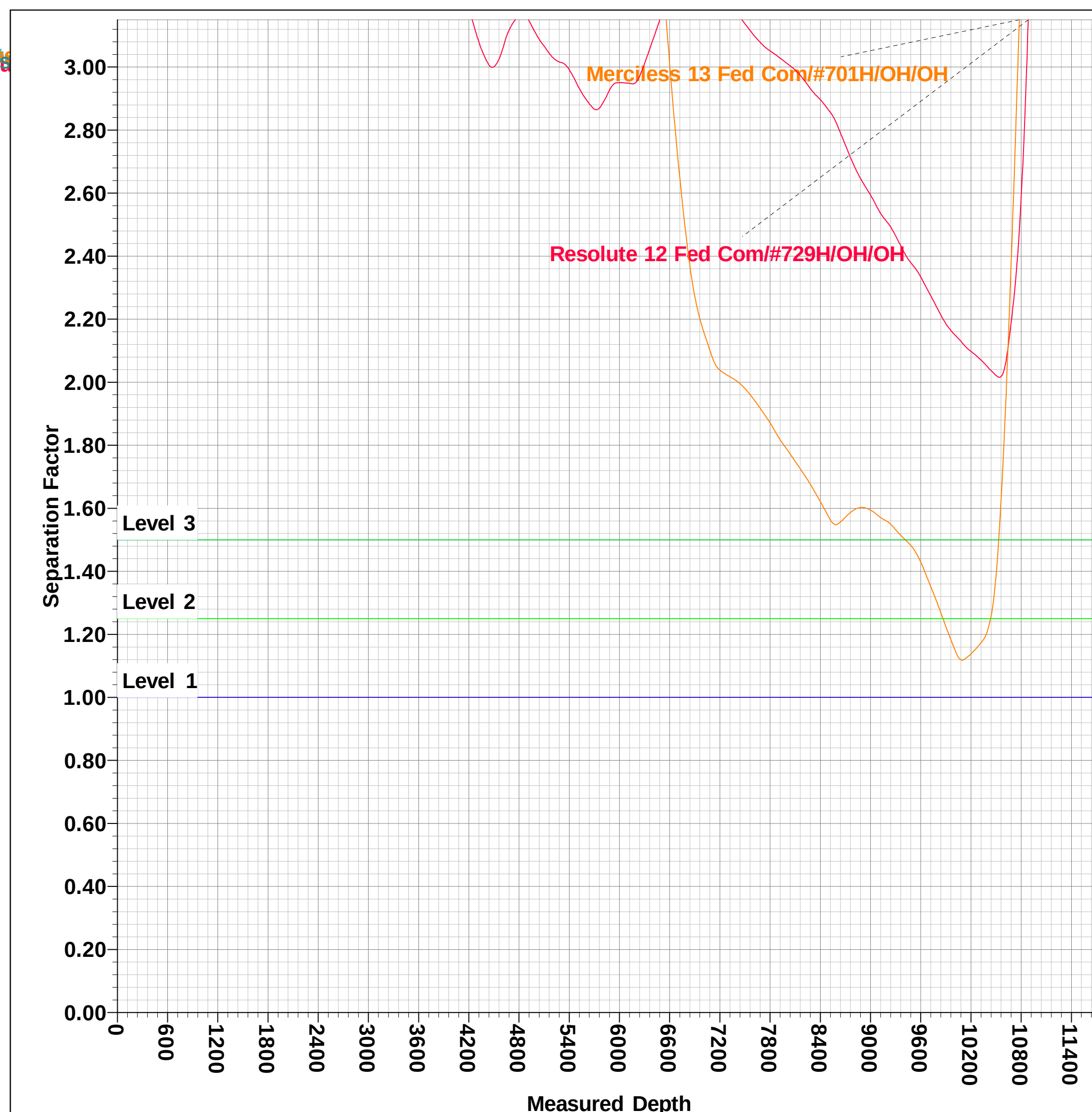
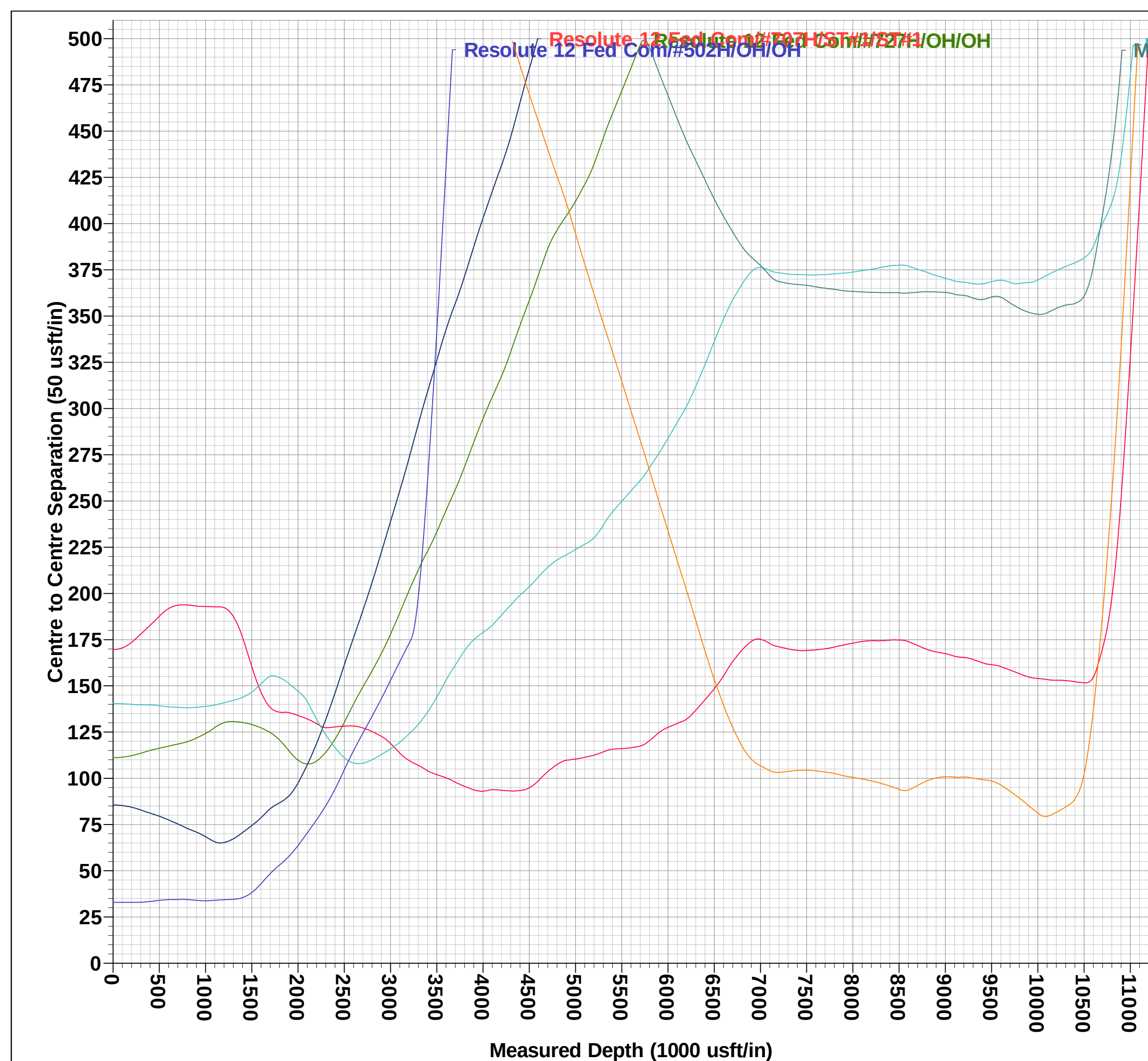
Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: New Mexico Eastern Zone
System Datum: Mean Sea Level

WELL DETAILS: #501H

KB = 32' @ 3518.0usft (Nabors M1206) 3486.0
Northing 415400.00 Easting 757406.00 Latitude 32° 8' 24.318 N Longitude 103° 38' 6.919 W



To convert a Magnetic Direction to a Grid Direction, Add 6.13°
To convert a Magnetic Direction to a True Direction, Add 6.51° East
To convert a True Direction to a Grid Direction, Subtract 0.37°



Jordan Kessler

To: Powell, Brandon, EMNRD
Cc: justin.wrinkle@state.nm.us; Patrick Padilla
Subject: Explanation for submission of C-102/drilling location update

EOG is submitting the attached C-102 to show the updated location of the subject well. The federal sundry showing the well's updated location will be filed with the BLM following drilling, pursuant to the BLM's request that the as-drilled and final location may be submitted via sundry so long as the location is within the quarter quarter section and orthodox. The purpose of BLM's guidance and policy is to consolidate sundry filings into a single, as-drilled approval.

Thanks,
Jordan

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 98604

CONDITIONS

Operator: EOG RESOURCES INC P.O. Box 2267 Midland, TX 79702	OGRID:
	7377
	Action Number: 98604
	Action Type: [C-102] Well Location & Acreage Plat (C-102)

CONDITIONS

Created By	Condition	Condition Date
pkautz	previous COA's still apply	4/14/2022