C-104 Submit Electronically Via OCD Permitting	State of New Mexico Energy, Minerals & Natural Resources Department OIL CONSERVATION DIVISION	Revised July 9, 2024

REQUEST FOR ALLOWABLE AND AUTHORIZATION TO TRANSPORT

Section 1 - Operator and Well Information

Submittal Type: ☐ Test Allowable (C-104RT) ☒ New Well (C-104NW) ☐ Recomplete (C-104RC) ☐ Pay Add (C-104RC) ☐ Amended	
Operator Name: **NOVO OIL & GAS NORTHERN DELAWARE, LLC**	OGRID: **372920**
Property Name and Well Number: **CASSIUS FED COM 123H**	Property Code: 336002
Mineral Owner: ☐ State ☐ Fee ☐ Tribal ☒ Federal	API Number: 30-0 **15-49241**
Pool Name: **LAGUNA SALADO; BONE SPRING**	Pool Code: **96721**

Section 2 – Surface Location

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
B	22	23S	29E		765' FNL	1,461' FEL	32.295723°	-103.968757°	EDDY

Section 3 – Completion Information

Producing Method	Ready Date	Perforations MD	Perforations TVD
Flowing	10/25/2024	FTP: 9,200 LTP: 19,614	FTP: 8,804 LTP:11,250

Section 4 – Action IDs for Submissions and Order Numbers

List Action IDs for Drilling Sundries	Was an Order required / needed (Y/N), if yes list Order number:
C-104 RT Action ID (if C-104NW):	Communitization Agreement ☒Yes ☐No, Order No. Pending
Surface Casing Action ID: 365425	Unit: ☐Yes ☒No, Order No.
Intermediate 1 Casing Action ID: 370235	Compulsory Pooling: ☐Yes ☒No, Order No.
Intermediate 2 Casing Action ID:	Down Hole Commingling: ☐Yes ☒No, Order No.
Production Casing Action ID: 378918	Surface Commingling: ☐Yes ☒No, Order No.
All casing was pressure tested in accordance with NMAC ☒Yes ☐No	Non-standard Location: ☐Yes ☒No ☐Common ownership Order No.
Liner 1 Action ID:	Non-standard Proration: ☐Yes ☒No, Order No.
Casing was installed prior to OCD's Action ID system (Y/N): N	Simultaneous Dedication: ☐Yes ☒No, Order No.

Section 5 - Operator Signature and Certification

☒ I hereby certify that the required Water Use Report has been, or will be, submitted for this well's completion.

☒ I hereby certify that the required Fracfocus disclosure has been, or will be, submitted for this well's completion.

☒ I hereby certify that the rules of the Oil Conservation Division have been complied with and that the information given above is true and complete to the best of my knowledge and belief.

Name: Jean A Cooper Email: jean.cooper@permianres.com

Title	Date
Regulatory Analyst	11/20/2024

C-102	State of New Mexico Energy, Minerals & Natural Resources Department OIL CONSERVATION DIVISION	Revised July 9, 2024
Submit Electronically Via OCD Permitting		Submittal Type: ☐ Initial Submittal ☑ Amended Report ☑ As Drilled

WELL LOCATION INFORMATION

API Number	Pool Code	Pool Name
30-015-49241	96721	LAGUNA SALADO; BONE SPRING

Property Code	Property Name	Well Number
336002	CASSIUS FED COM	123H

OGRID No.	Operator Name	Ground Level Elevation
372920	NOVO OIL & GAS NORTHERN DELAWARE, LLC	3,000'

Surface Owner: ☐ State ☐ Fee ☐ Tribal ☑ Federal | Mineral Owner: ☐ State ☐ Fee ☐ Tribal ☑ Federal

Surface Location

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
B	22	23 S	29 E		765' FNL	1,461' FEL	32.295723°	-103.968757°	EDDY

Bottom Hole Location

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
B	10	23 S	29 E		59' FNL	2,155' FEL	32.326891°	-103.971069°	EDDY

Dedicated Acres	Infill or Defining Well	Defining Well API	Overlapping Spacing Unit (Y/N)	Consolidation Code
320	INFILL	30-015-49239	N	0

Order Numbers. N/A | Well setbacks are under Common Ownership: ☒ Yes ☐ No

Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
B	22	23 S	29 E		534' FNL	1,952' FEL	32.296360°	-103.970348°	EDDY

First Take Point (FTP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
O	15	23 S	29 E		118' FSL	1,974' FEL	32.298151°	-103.970427°	EDDY

Last Take Point (LTP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
B	10	23 S	29 E		115' FNL	2,153' FEL	32.326737°	-103.971061°	EDDY

Unitized Area or Area of Uniform Interest	Spacing Unit Type ☒ Horizontal ☐ Vertical	Ground Floor Elevation:
Y		3,026.5

OPERATOR CERTIFICATIONS

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and, if the well is a vertical or directional well, 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 a working interest or unleased mineral interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

If this well is a horizontal well, I further certify that this organization has received the consent of at least one lessee or owner of a working interest or unleased mineral interest in each tract (in the target pool or formation) in which any part of the well's completed interval will be located or obtained a compulsory pooling order from the division.

Jean A Cooper 11/20/2024

Signature Date

Jean A Cooper

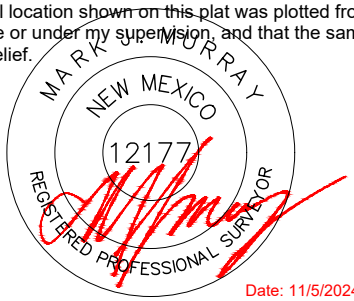
Printed Name

jean.cooper@permianres.com

Email Address

SURVEYOR CERTIFICATIONS

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.



Date: 11/5/2024

Signature and Seal of Professional Surveyor

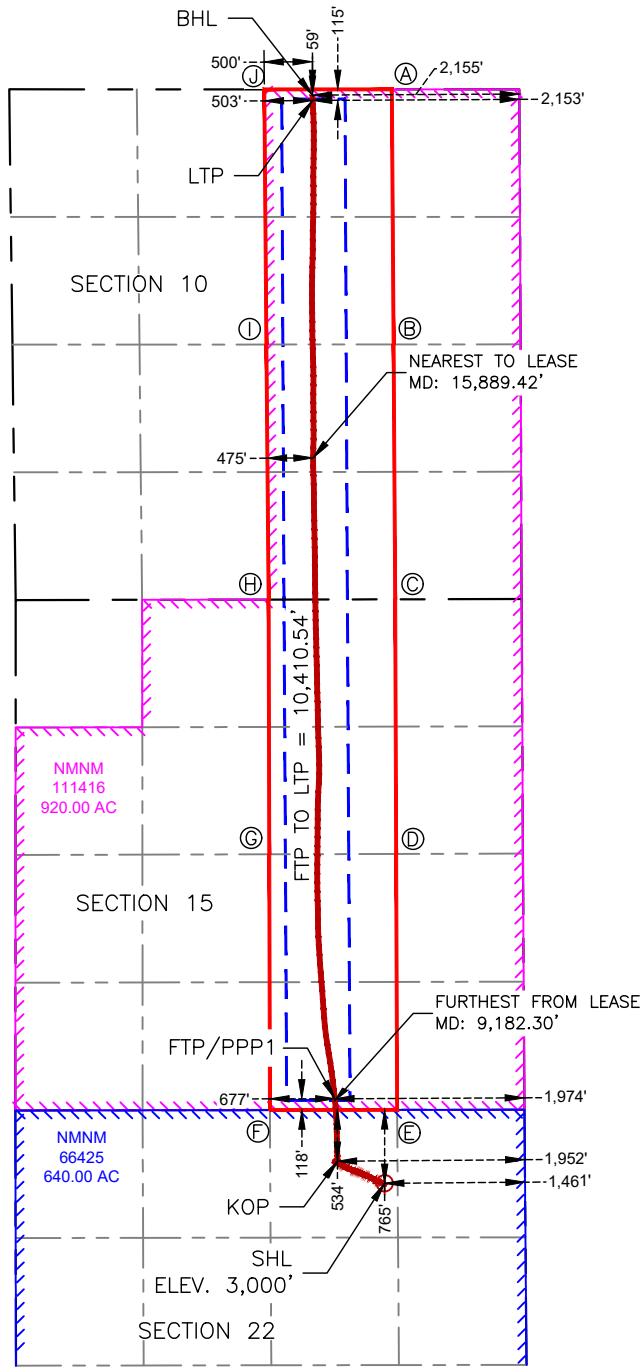
Certificate Number	Date of Survey
12177	11/5/2024

Note: 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.

ACREAGE DEDICATION PLATS

This grid represents a standard section. You may superimpose a non-standard section, or larger area, over this grid. Operators must outline the dedicated acreage in a red box, clearly show the well surface location and bottom hole location, if it is directionally drilled, with the dimensions from the section lines in the cardinal directions. If this is a horizontal wellbore show on this plat the location of the First Take Point and Last Take Point, and the point within the Completed interval (other than the First Take Point or Last Take Point) that is closest to any outer boundary of the tract.

Surveyors shall use the latest United States government survey or dependent resurvey. Well locations will be in reference to the New Mexico Principal Meridian. If the land is not surveyed, contact the OCD Engineering Bureau. Independent subdivision surveys will not be acceptable.



SURFACE HOLE LOCATION
765' FNL & 1,461' FEL
ELEV. = 3,000.00'

NAD 83 X = 653,987.83'
NAD 83 Y = 471,508.05'
NAD 83 LAT = 32.295723°
NAD 83 LONG = -103.968757°
NAD 27 X = 612,804.66'
NAD 27 Y = 471,448.52'
NAD 27 LAT = 32.295601°
NAD 27 LONG = -103.968266°

KICK-OFF POINT
534' FNL & 1,952' FEL
MD = 8,244.00'

NAD 83 X = 653,495.45'
NAD 83 Y = 471,738.23'
NAD 83 LAT = 32.296360°
NAD 83 LONG = -103.970348°
NAD 27 X = 612,312.29'
NAD 27 Y = 471,678.70'
NAD 27 LAT = 32.296238°
NAD 27 LONG = -103.969857°

FIRST TAKE POINT &
PENETRATION POINT 1
118' FSL & 1,974' FEL
MD = 9,200.00'

NAD 83 X = 653,468.79'
NAD 83 Y = 472,389.55'
NAD 83 LAT = 32.298151°
NAD 83 LONG = -103.970427°
NAD 27 X = 612,285.65'
NAD 27 Y = 472,329.99'
NAD 27 LAT = 32.298029°
NAD 27 LONG = -103.969936°

LAST TAKE POINT
115' FNL & 2,153' FEL
MD = 19,614.00'

NAD 83 X = 653,237.73'
NAD 83 Y = 482,788.43'
NAD 83 LAT = 32.326737°
NAD 83 LONG = -103.971061°
NAD 27 X = 612,054.89'
NAD 27 Y = 482,728.64'
NAD 27 LAT = 32.326616°
NAD 27 LONG = -103.970569°

BOTTOM HOLE LOCATION
59' FNL & 2,155' FEL
MD = 19,670.00'

NAD 83 X = 653,235.12'
NAD 83 Y = 482,844.26'
NAD 83 LAT = 32.326891°
NAD 83 LONG = -103.971069°
NAD 27 X = 612,052.27'
NAD 27 Y = 482,784.46'
NAD 27 LAT = 32.326769°
NAD 27 LONG = -103.970577°

HSU CORNER COORDINATES NEW MEXICO EAST - NAD 83	
A	CALCULATED CORNER N:482,903.24' E:654,062.13'
B	CALCULATED CORNER N:480,246.91' E:654,080.13'
C	CALCULATED CORNER N:477,591.78' E:654,096.73'
D	CALCULATED CORNER N:474,939.29' E:654,106.57'
E	CALCULATED CORNER N:472,272.81' E:654,117.56'
F	IRON PIPE W/ BRASS CAP N:472,271.10' E:652,792.08'
G	CALCULATED CORNER N:474,935.51' E:652,785.66'
H	IRON PIPE W/ BRASS CAP (RAN OVER) N:477,588.80' E:652,779.28'
I	CALCULATED CORNER N:480,246.06' E:652,756.72'
J	IRON PIPE W/ BRASS CAP (RAN OVER) N:482,903.50' E:652,734.15'

Operator:	**Permian Resources Operating, LLC**	Target KBTVD:	**8858.00**
Well Name:	**Cassius_Fed_Com_123H**	Target Inclination:	**90.00º**
Job Number:	**ID4434**	Declination Correction:	**6.37º**
Survey Company:	**Intrepid Directional Drilling Specialists**	DF Elevation:	**3026**
Rig Name:	**H&P 375**		

Vertical Section Calculated Along Azimuth: **359.72º**

Survey Calculation Method: Minimum Curvature

TIE PT. TYPE	SVY #	Survey Depth	INC deg.	AZM deg.	Course Length	TVD Ft.	V'Sect FT.	+N/-S Ft.	+E/-W Ft.	Dogleg º/100'
TIE PT.	0	**0.00**	**0.00**	**0.00**	**0**	**0**	**0**	**0**	**0**	0.00
MWD	1	**192.00**	**0.97**	**204.83**	192	191.99	-1.47	-1.47	-0.68	0.51
MWD	2	**283.00**	**1.06**	**198.32**	91	282.98	-2.97	-2.97	-1.27	0.16
MWD	3	**457.00**	**1.14**	**213.88**	174	456.94	-5.92	-5.94	-2.74	0.18
MWD	4	**548.00**	**1.49**	**288.59**	91	547.93	-6.29	-6.31	-4.37	1.78
MWD	5	**639.00**	**2.90**	**293.24**	91	638.86	-4.99	-5.03	-7.60	1.56
MWD	6	**729.00**	**4.31**	**297.11**	90	728.68	-2.53	-2.59	-12.71	1.59
MWD	7	**821.00**	**4.57**	**298.17**	92	820.40	0.81	0.72	-19.01	0.30
MWD	8	**913.00**	**6.42**	**298.87**	92	911.97	5.06	4.93	-26.75	2.01
MWD	9	**1002.00**	**6.07**	**295.62**	89	1000.45	9.54	9.37	-35.35	0.56
MWD	10	**1094.00**	**6.07**	**290.26**	92	1091.93	13.37	13.16	-44.30	0.62
MWD	11	**1188.00**	**6.07**	**289.73**	94	1185.40	16.82	16.56	-53.64	0.06
MWD	12	**1282.00**	**6.07**	**290.43**	94	1278.88	20.28	19.97	-62.98	0.08
MWD	13	**1376.00**	**5.89**	**288.59**	94	1372.37	23.59	23.24	-72.21	0.28
MWD	14	**1471.00**	**5.98**	**288.85**	95	1466.86	26.79	26.39	-81.51	0.10
MWD	15	**1565.00**	**5.80**	**289.11**	94	1560.36	29.97	29.53	-90.63	0.19
MWD	16	**1659.00**	**5.10**	**291.31**	94	1653.93	33.09	32.60	-99.01	0.78
MWD	17	**1753.00**	**5.01**	**292.37**	94	1747.57	36.21	35.68	-106.70	0.14
MWD	18	**1847.00**	**4.84**	**301.24**	94	1841.22	39.86	39.30	-113.89	0.83
MWD	19	**1941.00**	**4.92**	**313.99**	94	1934.89	44.75	44.16	-120.18	1.15
MWD	20	**2035.00**	**5.36**	**308.10**	94	2028.51	50.29	49.67	-126.53	0.73
MWD	21	**2130.00**	**5.89**	**300.80**	95	2123.05	55.56	54.90	-134.21	0.94
MWD	22	**2224.00**	**4.84**	**308.10**	94	2216.64	60.51	59.82	-141.47	1.33
MWD	23	**2318.00**	**3.61**	**304.41**	94	2310.38	64.66	63.94	-147.04	1.34
MWD	24	**2412.00**	**5.10**	**289.20**	94	2404.11	67.73	66.99	-153.42	1.99
MWD	25	**2507.00**	**4.48**	**285.16**	95	2498.78	70.13	69.34	-160.99	0.74
MWD	26	**2601.00**	**5.36**	**291.75**	94	2592.43	72.75	71.93	-168.61	1.11
MWD	27	**2695.00**	**5.19**	**288.50**	94	2686.04	75.77	74.91	-176.72	0.37
MWD	28	**2789.00**	**7.65**	**287.09**	94	2779.44	79.01	78.10	-186.74	2.62
MWD	29	**2883.00**	**8.27**	**295.18**	94	2872.54	83.78	82.81	-198.84	1.36
MWD	30	**2977.00**	**7.91**	**293.07**	94	2965.60	89.25	88.22	-210.91	0.50
MWD	31	**3071.00**	**7.47**	**292.63**	94	3058.75	94.19	93.11	-222.50	0.47
MWD	32	**3090.00**	**7.03**	**291.40**	19	3077.60	95.10	94.01	-224.72	2.46
MWD	33	**3244.00**	**7.47**	**295.00**	154	3230.37	102.86	101.68	-242.57	0.41
MWD	34	**3338.00**	**7.56**	**293.60**	94	3323.56	107.97	106.73	-253.77	0.22
MWD	35	**3433.00**	**7.39**	**292.89**	95	3417.76	112.91	111.61	-265.13	0.20
MWD	36	**3527.00**	**7.30**	**293.24**	94	3510.99	117.67	116.32	-276.18	0.11
MWD	37	**3621.00**	**7.39**	**293.51**	94	3604.21	122.49	121.09	-287.21	0.10
MWD	38	**3715.00**	**7.12**	**291.22**	94	3697.46	127.06	125.61	-298.19	0.42
MWD	39	**3809.00**	**6.95**	**292.28**	94	3790.75	131.38	129.87	-308.88	0.23
MWD	40	**3904.00**	**6.24**	**290.34**	95	3885.12	135.40	133.85	-319.04	0.78
MWD	41	**3998.00**	**5.80**	**288.94**	94	3978.61	138.77	137.16	-328.32	0.49
MWD	42	**4093.00**	**5.63**	**287.44**	95	4073.13	141.77	140.12	-337.31	0.24
MWD	43	**4187.00**	**5.54**	**284.46**	94	4166.69	144.32	142.63	-346.10	0.32
MWD	44	**4281.00**	**5.45**	**285.16**	94	4260.26	146.67	144.93	-354.80	0.12
MWD	45	**4376.00**	**5.72**	**283.93**	95	4354.81	149.03	147.25	-363.75	0.31
MWD	46	**4470.00**	**5.45**	**287.62**	94	4448.36	151.55	149.73	-372.55	0.48
MWD	47	**4565.00**	**5.10**	**291.66**	95	4542.96	154.52	152.66	-380.78	0.54
MWD	48	**4659.00**	**4.84**	**290.70**	94	4636.60	157.50	155.60	-388.37	0.29
MWD	49	**4753.00**	**6.24**	**299.05**	94	4730.16	161.42	159.48	-396.55	1.71

MWD	50	**4847.00**	**7.12**	**306.69**	94	4823.53	167.42	165.44	-405.68	1.33
MWD	51	**4941.00**	**7.30**	**304.93**	94	4916.78	174.37	172.34	-415.25	0.30
MWD	52	**5035.00**	**7.47**	**305.29**	94	5010.00	181.37	179.29	-425.14	0.19
MWD	53	**5130.00**	**7.03**	**303.53**	95	5104.24	188.20	186.07	-435.02	0.52
MWD	54	**5224.00**	**6.86**	**301.59**	94	5197.55	194.36	192.19	-444.60	0.31
MWD	55	**5318.00**	**6.95**	**301.95**	94	5290.87	200.36	198.14	-454.21	0.11
MWD	56	**5412.00**	**6.51**	**298.43**	94	5384.22	205.95	203.69	-463.72	0.64
MWD	57	**5506.00**	**6.07**	**297.29**	94	5477.66	210.81	208.50	-472.82	0.49
MWD	58	**5600.00**	**5.10**	**297.90**	94	5571.21	215.08	212.74	-480.93	1.03
MWD	59	**5695.00**	**4.84**	**296.06**	95	5665.85	218.86	216.47	-488.26	0.32
MWD	60	**5789.00**	**4.75**	**289.55**	94	5759.53	221.94	219.52	-495.49	0.59
MWD	61	**5883.00**	**3.34**	**286.92**	94	5853.29	224.07	221.62	-501.78	1.51
MWD	62	**5977.00**	**1.85**	**309.77**	94	5947.19	225.85	223.39	-505.57	1.90
MWD	63	**6072.00**	**1.32**	**313.28**	95	6042.16	227.59	225.12	-507.54	0.57
MWD	64	**6166.00**	**1.23**	**294.65**	94	6136.13	228.77	226.28	-509.25	0.45
MWD	65	**6260.00**	**1.41**	**291.31**	94	6230.11	229.62	227.12	-511.24	0.21
MWD	66	**6354.00**	**1.14**	**282.26**	94	6324.09	230.24	227.74	-513.23	0.36
MWD	67	**6448.00**	**0.88**	**277.60**	94	6418.07	230.55	228.03	-514.86	0.29
MWD	68	**6542.00**	**0.79**	**264.15**	94	6512.06	230.58	228.06	-516.22	0.23
MWD	69	**6636.00**	**0.62**	**243.67**	94	6606.05	230.30	227.77	-517.32	0.32
MWD	70	**6731.00**	**0.88**	**243.06**	95	6701.05	229.74	227.21	-518.43	0.27
MWD	71	**6825.00**	**0.70**	**223.81**	94	6795.04	229.01	226.47	-519.47	0.34
MWD	72	**6919.00**	**0.97**	**201.49**	94	6889.03	227.86	225.32	-520.16	0.44
MWD	73	**7013.00**	**0.97**	**205.35**	94	6983.01	226.40	223.86	-520.80	0.07
MWD	74	**7107.00**	**0.62**	**182.15**	94	7077.00	225.17	222.63	-521.16	0.50
MWD	75	**7201.00**	**1.93**	**119.49**	94	7170.98	223.88	221.34	-519.80	1.85
MWD	76	**7295.00**	**2.02**	**114.74**	94	7264.93	222.39	219.87	-516.91	0.20
MWD	77	**7389.00**	**1.85**	**86.79**	94	7358.87	221.77	219.26	-513.89	1.01
MWD	78	**7483.00**	**1.49**	**70.97**	94	7452.84	222.24	219.75	-511.22	0.62
MWD	79	**7577.00**	**1.32**	**65.78**	94	7546.81	223.07	220.59	-509.08	0.23
MWD	80	**7765.00**	**2.11**	**60.77**	188	7734.72	225.63	223.17	-504.09	0.43
MWD	81	**7859.00**	**2.20**	**79.93**	94	7828.66	226.77	224.33	-500.80	0.77
MWD	82	**7953.00**	**1.85**	**98.04**	94	7922.60	226.86	224.43	-497.52	0.77
MWD	83	**8047.00**	**1.76**	**112.10**	94	8016.55	226.09	223.67	-494.68	0.48
MWD	84	**8141.00**	**1.32**	**347.21**	94	8110.54	226.60	224.19	-493.58	2.91
MWD	85	**8260.00**	**5.63**	**16.83**	119	8229.29	233.52	231.11	-492.20	3.81
MWD	86	**8355.00**	**17.94**	**358.02**	95	8322.14	252.67	250.28	-491.35	13.41
MWD	87	**8449.00**	**25.94**	**357.05**	94	8409.26	287.74	285.33	-492.91	8.52
MWD	88	**8543.00**	**30.86**	**356.00**	94	8491.92	332.36	329.94	-495.65	5.26
MWD	89	**8637.00**	**44.58**	**359.16**	94	8566.11	389.69	387.26	-497.83	14.74
MWD	90	**8731.00**	**51.79**	**0.83**	94	8628.74	459.69	457.27	-497.78	7.78
MWD	91	**8826.00**	**55.49**	**358.64**	95	8685.06	536.18	533.75	-498.16	4.31
MWD	92	**8920.00**	**61.91**	**357.67**	94	8733.87	616.42	613.98	-500.77	6.89
MWD	93	**9014.00**	**70.96**	**356.88**	94	8771.41	702.41	699.95	-504.88	9.66
MWD	94	**9108.00**	**78.79**	**356.00**	94	8795.92	792.93	790.45	-510.53	8.38
MWD	95	**9176.00**	**87.67**	**353.89**	68	8803.92	860.15	857.64	-516.48	13.42
MWD	96	**9203.00**	**92.24**	**353.89**	27	8803.95	887.01	884.48	-519.36	16.93
MWD	97	**9297.00**	**93.56**	**353.71**	94	8799.19	980.38	977.81	-529.49	1.42
MWD	98	**9391.00**	**88.81**	**352.48**	94	8797.25	1073.71	1071.08	-540.79	5.22
MWD	99	**9486.00**	**87.23**	**351.69**	95	8800.53	1167.81	1165.11	-553.86	1.86
MWD	100	**9580.00**	**86.88**	**351.52**	94	8805.36	1260.74	1257.98	-567.57	0.41
MWD	101	**9674.00**	**87.14**	**350.90**	94	8810.26	1353.58	1350.75	-581.91	0.71
MWD	102	**9769.00**	**87.49**	**350.55**	95	8814.71	1447.31	1444.41	-597.21	0.52
MWD	103	**9863.00**	**87.14**	**352.04**	94	8819.12	1540.19	1537.22	-611.42	1.63
MWD	104	**9957.00**	**86.35**	**354.94**	94	8824.45	1633.47	1630.45	-622.06	3.19
MWD	105	**10051.00**	**88.11**	**355.30**	94	8829.00	1727.06	1724.00	-630.05	1.91
MWD	106	**10146.00**	**89.52**	**355.65**	95	8830.96	1821.77	1818.68	-637.54	1.53
MWD	107	**10240.00**	**89.16**	**355.82**	94	8832.04	1915.54	1912.41	-644.53	0.42
MWD	108	**10334.00**	**90.31**	**356.09**	94	8832.48	2009.33	2006.17	-651.16	1.26
MWD	109	**10428.00**	**90.40**	**355.30**	94	8831.90	2103.10	2099.91	-658.22	0.85
MWD	110	**10522.00**	**90.57**	**355.38**	94	8831.10	2196.82	2193.59	-665.85	0.20
MWD	111	**10616.00**	**90.57**	**355.91**	94	8830.17	2290.58	2287.32	-672.99	0.56
MWD	112	**10710.00**	**90.66**	**356.17**	94	8829.16	2384.38	2381.09	-679.48	0.29

MWD	113	**10804.00**	**90.66**	**356.35**	94	8828.07	2478.20	2474.88	-685.61	0.19
MWD	114	**10898.00**	**90.48**	**357.05**	94	8827.14	2572.07	2568.72	-691.02	0.77
MWD	115	**10992.00**	**90.92**	**359.51**	94	8825.99	2666.02	2662.66	-693.84	2.66
MWD	116	**11086.00**	**92.07**	**359.51**	94	8823.54	2759.99	2756.63	-694.65	1.22
MWD	117	**11181.00**	**90.13**	**358.81**	95	8821.71	2854.96	2851.59	-696.04	2.17
MWD	118	**11275.00**	**89.16**	**358.55**	94	8822.30	2948.94	2945.56	-698.21	1.07
MWD	119	**11369.00**	**88.64**	**358.90**	94	8824.10	3042.91	3039.52	-700.30	0.67
MWD	120	**11463.00**	**88.99**	**359.78**	94	8826.05	3136.89	3133.50	-701.38	1.01
MWD	121	**11558.00**	**90.40**	**359.95**	95	8826.55	3231.88	3228.49	-701.60	1.49
MWD	122	**11652.00**	**91.98**	**0.31**	94	8824.60	3325.86	3322.47	-701.39	1.72
MWD	123	**11747.00**	**92.33**	**0.22**	95	8821.03	3420.78	3417.40	-700.95	0.38
MWD	124	**11841.00**	**92.59**	**0.48**	94	8816.99	3514.69	3511.31	-700.38	0.39
MWD	125	**11935.00**	**93.03**	**0.57**	94	8812.38	3608.57	3605.19	-699.52	0.48
MWD	126	**12030.00**	**91.89**	**0.31**	95	8808.31	3703.47	3700.10	-698.79	1.23
MWD	127	**12124.00**	**92.24**	**0.92**	94	8804.92	3797.40	3794.04	-697.78	0.75
MWD	128	**12218.00**	**90.04**	**0.39**	94	8803.05	3891.36	3888.00	-696.71	2.41
MWD	129	**12313.00**	**89.87**	**1.36**	95	8803.12	3986.34	3982.99	-695.25	1.04
MWD	130	**12407.00**	**90.75**	**3.56**	94	8802.61	4080.23	4076.90	-691.22	2.52
MWD	131	**12501.00**	**90.48**	**3.03**	94	8801.61	4174.04	4170.74	-685.82	0.63
MWD	132	**12596.00**	**90.13**	**1.71**	95	8801.10	4268.93	4265.65	-681.89	1.44
MWD	133	**12690.00**	**88.20**	**359.08**	94	8802.47	4362.90	4359.63	-681.24	3.47
MWD	134	**12784.00**	**87.05**	**357.76**	94	8806.37	4456.79	4453.51	-683.83	1.86
MWD	135	**12878.00**	**86.53**	**357.41**	94	8811.63	4550.58	4547.27	-687.78	0.67
MWD	136	**12973.00**	**87.93**	**358.81**	95	8816.22	4645.43	4642.11	-690.91	2.08
MWD	137	**13067.00**	**89.16**	**358.37**	94	8818.61	4739.38	4736.05	-693.23	1.39
MWD	138	**13161.00**	**88.81**	**358.55**	94	8820.27	4833.34	4830.00	-695.75	0.42
MWD	139	**13256.00**	**89.69**	**359.08**	95	8821.52	4928.32	4924.97	-697.72	1.08
MWD	140	**13350.00**	**90.22**	**358.81**	94	8821.59	5022.31	5018.95	-699.45	0.63
MWD	141	**13444.00**	**89.78**	**358.81**	94	8821.59	5116.30	5112.93	-701.40	0.47
MWD	142	**13538.00**	**89.16**	**358.90**	94	8822.46	5210.28	5206.91	-703.28	0.67
MWD	143	**13633.00**	**88.81**	**358.55**	95	8824.14	5305.25	5301.87	-705.39	0.52
MWD	144	**13727.00**	**88.81**	**358.72**	94	8826.09	5399.22	5395.82	-707.63	0.18
MWD	145	**13821.00**	**88.81**	**358.64**	94	8828.05	5493.18	5489.78	-709.79	0.09
MWD	146	**13915.00**	**88.64**	**358.64**	94	8830.14	5587.14	5583.73	-712.02	0.18
MWD	147	**14009.00**	**88.55**	**358.64**	94	8832.44	5681.10	5677.67	-714.26	0.10
MWD	148	**14104.00**	**89.16**	**358.72**	95	8834.34	5776.06	5772.63	-716.44	0.65
MWD	149	**14198.00**	**89.43**	**358.46**	94	8835.50	5870.03	5866.59	-718.76	0.40
MWD	150	**14292.00**	**89.34**	**358.90**	94	8836.51	5964.01	5960.56	-720.92	0.48
MWD	151	**14387.00**	**89.16**	**359.34**	95	8837.75	6059.00	6055.54	-722.38	0.50
MWD	152	**14481.00**	**88.90**	**359.25**	94	8839.34	6152.98	6149.52	-723.54	0.29
MWD	153	**14576.00**	**88.81**	**359.34**	95	8841.24	6247.96	6244.50	-724.71	0.13
MWD	154	**14670.00**	**89.78**	**359.34**	94	8842.40	6341.95	6338.48	-725.79	1.03
MWD	155	**14765.00**	**90.31**	**359.60**	95	8842.32	6436.95	6433.48	-726.67	0.62
MWD	156	**14859.00**	**91.19**	**359.69**	94	8841.09	6530.94	6527.47	-727.25	0.94
MWD	157	**14954.00**	**90.75**	**358.72**	95	8839.48	6625.92	6622.44	-728.57	1.12
MWD	158	**15048.00**	**90.75**	**359.08**	94	8838.25	6719.90	6716.42	-730.37	0.38
MWD	159	**15142.00**	**89.87**	**358.64**	94	8837.74	6813.89	6810.39	-732.24	1.05
MWD	160	**15236.00**	**89.78**	**358.81**	94	8838.03	6907.88	6904.37	-734.33	0.20
MWD	161	**15331.00**	**90.31**	**359.51**	95	8837.96	7002.87	6999.36	-735.73	0.92
MWD	162	**15425.00**	**89.87**	**359.43**	94	8837.81	7096.87	7093.36	-736.60	0.48
MWD	163	**15520.00**	**88.99**	**359.34**	95	8838.75	7191.86	7188.34	-737.62	0.93
MWD	164	**15614.00**	**89.25**	**358.90**	94	8840.20	7285.85	7282.32	-739.06	0.54
MWD	165	**15708.00**	**89.52**	**358.20**	94	8841.21	7379.82	7376.29	-741.44	0.80
MWD	166	**15802.00**	**90.04**	**357.93**	94	8841.57	7473.78	7470.23	-744.61	0.62
MWD	167	**15897.00**	**90.48**	**0.31**	95	8841.14	7568.77	7565.21	-746.07	2.55
MWD	168	**15991.00**	**89.87**	**2.15**	94	8840.85	7662.73	7659.19	-744.05	2.06
MWD	169	**16085.00**	**89.52**	**1.45**	94	8841.35	7756.67	7753.14	-741.10	0.83
MWD	170	**16179.00**	**87.58**	**359.34**	94	8843.73	7850.62	7847.09	-740.45	3.05
MWD	171	**16274.00**	**87.41**	**359.34**	95	8847.88	7945.53	7942.00	-741.54	0.18
MWD	172	**16368.00**	**87.76**	**359.43**	94	8851.84	8039.44	8035.91	-742.55	0.38
MWD	173	**16462.00**	**88.55**	**359.43**	94	8854.87	8133.39	8129.85	-743.49	0.84
MWD	174	**16556.00**	**89.87**	**0.92**	94	8856.16	8227.37	8223.84	-743.20	2.12
MWD	175	**16650.00**	**89.43**	**0.57**	94	8856.74	8321.36	8317.83	-741.98	0.60

MWD	176	**16745.00**	**89.34**	**359.69**	95	8857.76	8416.35	8412.82	-741.76	0.93
MWD	177	**16839.00**	**89.87**	**358.72**	94	8858.41	8510.34	8506.81	-743.07	1.18
MWD	178	**16933.00**	**89.52**	**357.32**	94	8858.91	8604.30	8600.75	-746.31	1.54
MWD	179	**17027.00**	**90.66**	**358.90**	94	8858.76	8698.25	8694.69	-749.41	2.07
MWD	180	**17121.00**	**90.84**	**358.28**	94	8857.53	8792.23	8788.66	-751.73	0.69
MWD	181	**17215.00**	**91.80**	**359.87**	94	8855.36	8886.19	8882.62	-753.24	1.98
MWD	182	**17309.00**	**92.51**	**359.60**	94	8851.83	8980.12	8976.55	-753.68	0.81
MWD	183	**17404.00**	**90.75**	**358.64**	95	8849.13	9075.08	9071.49	-755.14	2.11
MWD	184	**17498.00**	**89.60**	**0.04**	94	8848.84	9169.07	9165.48	-756.22	1.93
MWD	185	**17592.00**	**88.72**	**359.25**	94	8850.22	9263.06	9259.47	-756.80	1.26
MWD	186	**17687.00**	**88.81**	**1.10**	95	8852.26	9358.03	9354.44	-756.51	1.95
MWD	187	**17781.00**	**88.72**	**0.57**	94	8854.29	9451.99	9448.41	-755.14	0.57
MWD	188	**17876.00**	**88.37**	**1.71**	95	8856.70	9546.93	9543.36	-753.25	1.25
MWD	189	**17970.00**	**88.99**	**1.54**	94	8858.87	9640.85	9637.30	-750.59	0.68
MWD	190	**18064.00**	**89.78**	**0.57**	94	8859.88	9734.82	9731.27	-748.86	1.33
MWD	191	**18158.00**	**90.13**	**359.69**	94	8859.95	9828.81	9825.27	-748.64	1.01
MWD	192	**18253.00**	**90.13**	**0.83**	95	8859.74	9923.81	9920.27	-748.21	1.20
MWD	193	**18347.00**	**91.45**	**1.62**	94	8858.44	10017.76	10014.24	-746.20	1.64
MWD	194	**18441.00**	**90.04**	**1.18**	94	8857.22	10111.71	10108.20	-743.91	1.57
MWD	195	**18536.00**	**91.36**	**1.01**	95	8856.06	10206.68	10203.17	-742.09	1.40
MWD	196	**18630.00**	**91.36**	**359.87**	94	8853.83	10300.64	10297.14	-741.37	1.21
MWD	197	**18724.00**	**87.67**	**358.55**	94	8854.62	10394.61	10391.11	-742.67	4.17
MWD	198	**18818.00**	**88.64**	**0.22**	94	8857.65	10488.56	10485.05	-743.67	2.05
MWD	199	**18913.00**	**90.40**	**1.36**	95	8858.44	10583.53	10580.03	-742.36	2.21
MWD	200	**19007.00**	**91.45**	**1.45**	94	8856.93	10677.48	10673.99	-740.06	1.12
MWD	201	**19102.00**	**91.54**	**0.48**	95	8854.45	10772.42	10768.94	-738.46	1.03
MWD	202	**19196.00**	**92.33**	**359.78**	94	8851.27	10866.37	10862.89	-738.25	1.12
MWD	203	**19291.00**	**90.13**	**359.08**	95	8849.23	10961.34	10957.86	-739.19	2.43
MWD	204	**19385.00**	**90.75**	**358.55**	94	8848.51	11055.32	11051.83	-741.14	0.87
MWD	205	**19479.00**	**92.59**	**357.76**	94	8845.77	11149.24	11145.74	-744.16	2.13
MWD	206	**19574.00**	**93.65**	**357.32**	95	8840.60	11244.03	11240.51	-748.23	1.21
PTB	207	**19670.00**	**93.65**	**357.32**	96	8834.49	11339.75	11336.21	-752.71	0.00

C-105 Submit Electronically Via OCD Permitting	State of New Mexico Energy, Minerals & Natural Resources Department OIL CONSERVATION DIVISION	Revised July 9, 2024

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

Section 1 - Operator and Well Information

Submittal Type: ☒ New Well ☐ Workover ☐ Deepening ☐ Plugback ☐ Different Reservoir ☐ C-144 Closure Attachment ☐ Other	
Operator Name: **NOVO OIL & GAS NORTHERN DELAWARE, LLC**	OGRID: **372920**
Property Name and Well Number: **CASSIUS FED COM 123H**	Property Code: 336002
Mineral Owner: ☐ State ☐ Fee ☐ Tribal ☒ Federal	API Number: 30-0 **15-49241**
Pool Name: **LAGUNA SALADO; BONE SPRING**	Pool Code: **96721**

Section 2 – Well Location

	Ul or lot no.	Section	Township	Range	Lot Id	Feet from	N/S Line	Feet from	E/W Line	County
SHL:	**B**	22	23S	29E		**765'**	**FNL**	**1,461'**	**FEL**	**EDDY**
BHL	**B**	**10**	**23 S**	**29 E**		**59'**	**FNL**	**2,155'**	**FEL**	**EDDY**

Section 3 – Completion Information

Date T.D. Reached 8/16/2024	Total Measured Depth of Well 19,670	Acid Volume (bbls)	☒Directional Survey Submitted ☐Deviation Survey Submitted
Date Rig Released 8/19/2024	Plug-Back Measured Depth 19,653	Completion Fluid Used (bbls) 531,116	Were Logs Ran (Y/N) Y
Completion Date 10/25/2024	Perforations (MD and TVD) TVD FTP: 9,200 FTP: 8,804 LTP: 19,614 LTP:11,250	Completion Proppant Used (lbs) 25,651,912	List Type of Logs Ran if applicable: GAMMA RAY

Section 4 – Action IDs for Submissions and Order Numbers

Surface Casing Action ID: 365425	UIC Permit/Order (UIC wells only) ☐Yes ☒No, Order No.
Intermediate 1 Casing Action ID: 370235	NOI Recomplete Action ID (if applicable):
Intermediate 2 Casing Action ID:	NOI Plugback Action ID (if applicable):
Production Casing Action ID: 378918	Cement Squeeze Action ID (if applicable):
Tubing Action ID: 373444	All casing was pressure tested in accordance with NMAC ☒Yes ☐No
Liner 1 Action ID:	Casing was installed prior to Action ID system (Y/N): N

Section 5 – Test Data

Date First Production 10/25/2024	Production Method Flowing	Well Status Producing	Gas – Oil Ratio 1265
Date of Test 11/14/2024	Choke Size .813 inches	Flowing Tubing Pressure N/A	Casing Pressure 865
24 hr Oil (bbls) 2,175	24 hr Gas (MCF) 2,750	24 hr Water (bbls) 2,289	Oil Gravity - API 45.1
Disposition of Gas: Sold			

Section 6 – Pits

☐ A temporary pit was used at the well. If so, attach a plat with the location of the temporary pit.
☒ A Closed Loop System was used.
☐ If an on-site burial was used at the well, report the exact location of the on-site burial:
LAT:_____ LONG: _____

Section 7 - Operator Signature and Certification

☒ I hereby certify that the required Water Use Report has been, or will be, submitted for this well's completion.

☒ I hereby certify that the required Fracfocus disclosure has been, or will be, submitted for this well's completion.

☒ I hereby certify that the rules of the Oil Conservation Division have been complied with and that the information given above is true and complete to the best of my knowledge and belief.

Name Jean A Cooper Email: jean.cooper@permianres.com

Title	Date
Regulatory Analyst	11/20/2024

South Formations			
Formation/Zone	MD	TVD	W/O/G
T. Anhy			
T. Salt			
B. Salt			
T. Yates			
T. 7 Rivers			
T. Queen			
T. Grayburg			
T. San Andres			
T. Glorieta			
T. Yeso			
T. Paddock			
T. Blinebry			
T.Tubb			
T. Drinkard			
T. Abo			
T. Wolfcamp			
T. Penn			
T. Cisco			
T. Canyon			
T. Strawn			
T. Atoka			
T. Morrow			
T. Barrnett Shale			
T. Miss			
T. Woodford Shale			
T. Devonian			
T. Silurian			
T. Fusselman			
T. Montoya			
T. Simpson			
T. McKee			
T. Waddell			
T. Connel			
T. Ellenburger			
T. Gr. Wash			
T. Delaware Sand			
T. Lamar Lime			
T. Bell Canyon			0
T. Cherry Canyon	3,988	3,928	0
T. Brushy Canyon	5,229	5,149	0
T. Bone Springs			
T. 1st BS Sand	8,118	7,776	0
T. 2nd BS Carbonate			
T. 2nd BS Sand			
T. 3rd BS Carbonate			
T. 3rd BS Sand			

North Formations			
Formation/Zone	MD	TVD	W/O/G
T. San Jose			
T. Nacimento			
T. Ojo Alamo			
T. Kirtland			
T. Fruitland			
T. Pictured Cliffs			
T. Lewis Shale			
T. Chacra			
T. Cliff House			
T. Menefee			
T. Point Lookout			
T. Mancos			
T. Gallup			
T. Greenhorn			
T. Graneros			
T. Dakota			
T. Morrison			
T. Bluff			
T.Todilto			
T. Entrada			
T. Wingate			
T. Chinle			
T. Permian			
T. Penn A"			
T. Penn. "B"			
T. Penn. "C"			
T. Penn. "D"			
T. Leadville			
T. Madison			
T. Elbert			
T. McCracken			
T. Ignacio Otzte			
T. Granite			
T. Hermosa			
T. De Chelly			
T. Pinkerton			
Lamar	3,133	3,090	0
Bone Spring Lime	6,915	6,816	0
Rustler	305	305	0
SALADO	574	564	0

PERMIAN RESOURCES

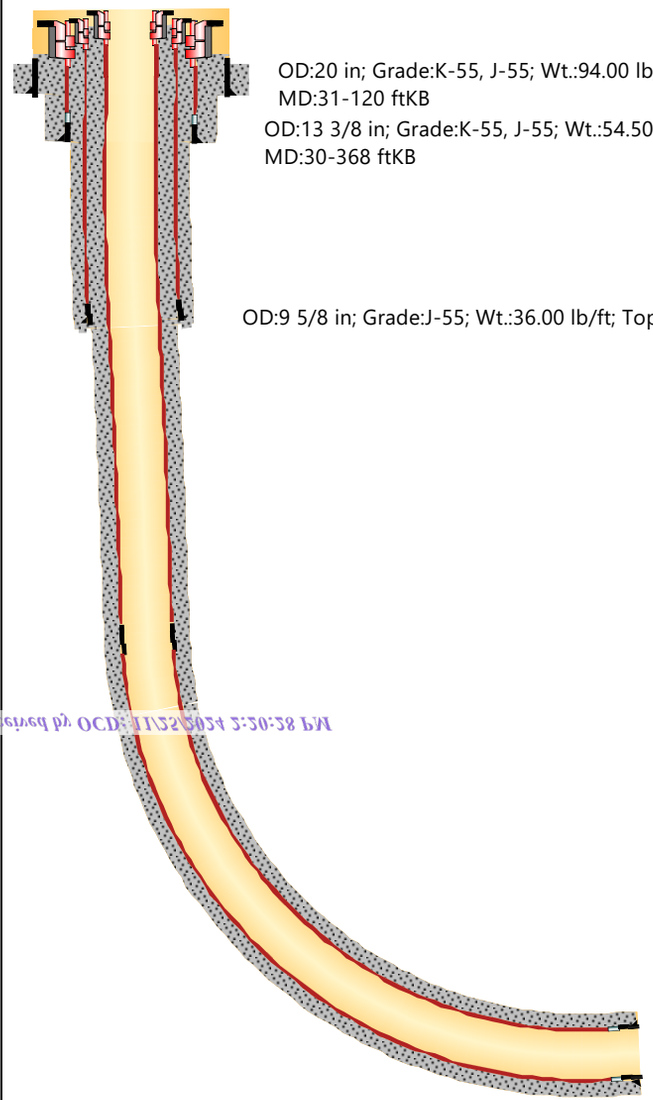
Drilling Wellbore Schematic

Well Name: CASSIUS FED COM 123H

County	State/Province	Pad Name	Wells Drilling on Pad
EDDY	NEW MEXICO	CASSIUS 1510 X2	4
Wellbore API/UWI	**Original KB Elevation (ft)**	**Ground Elevation (ft)**	**KB-Ground Distance (ft)**
30-015-49241	3,026.5	3,000	26.50
Responsible Grp 1	Contractor	Rig Number	Target Formation
	H&P	375	SBSG_SAND

Original Hole

Directional schematic (actual)



OD:20 in; Grade:K-55, J-55; Wt.:94.00 lb/ft; Top MD:31 ftKB; Depth MD:31-120 ftKB

OD:13 3/8 in; Grade:K-55, J-55; Wt.:54.50 lb/ft; Top MD:30 ftKB; Depth MD:30-368 ftKB

OD:9 5/8 in; Grade:J-55; Wt.:36.00 lb/ft; Top MD:30 ftKB; Depth MD:30-3,162

OD:5 1/2 in; Grade:P-110; Wt.:20.00 lb/ft; Top MD:29 ftKB; Depth MD:29 -19,655

Wellbore Sections

Section Des	Size (in)	Top Depth (ftKB)	Top Depth (TVD) (ftKB)	Btm Depth (ftKB)	Btm Depth (TVD) (ftKB)
Conductor	20	26.0	26.0	120.0	120.0
Surface	17 1/2	120.0	120.0	383.0	383.0
Intermediate 1	12 1/4	383.0	383.0	3,177.0	3,164.1
Production	8 3/4	3,177.0	3,164.1	9,230.0	8,803.0
Production	8 1/2	9,230.0	8,803.0	19,670.0	8,835.2

Wellbore Kick Offs & Key Depths

Type	Top Depth (ftKB)	Depth Top (TVD) (ftKB)
KOP-LP	8,244.0	8,213.6

Deepest TVD:

TVD (ftKB)
8,860.14

Casing Strings

Csg Des	OD (in)	OD Nom Max (in)	Wt/Len (lb/ft)	Grade	Top (ftKB)	Set Depth (ftKB)	# Centralizers (Tally)
Conductor	20	20	94.00	J-55	31.5	120	0
Surface Casing	13 3/8	13 3/8	54.50	J-55	30.2	368	5
Intermediate 1	9 5/8	9 5/8	36.00	J-55	30.1	3,162	21
Production Casing/Liner	5 1/2	5 1/2	20.00	P-110	29.1	19,655	97

Perfs

MD FTP: 9,200, **MD LTP:** 19,614'
TVD FTP: 8,804', **TVD LTP:** 11,250'

Number of Holes: 2,127, **Size of Holes:** .43 inches

Cement:

Surface: Tail w/430sx Class C, 1.33 yield, TOC: 31.4
Intermediate: Lead w/495sx, Class C, 3.08 yield, Tail w/290sx Class C, 1.38 yield, TOC: 30.8
Production: Lead w/55sx Class C, 3.51 yield, Tail w/685sx Class C, 3.48 yield, 2nd tail w/2045, Class C, TOC: 30.4

Tubing

Information Not Available

Sante Fe Main Office
Phone: (505) 476-3441

General Information
Phone: (505) 629-6116

Online Phone Directory
https://www.emnrd.nm.gov/ocd/contact-us

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

ACKNOWLEDGMENTS

Operator: NOVO OIL & GAS NORTHERN DELAWARE, LLC 300 N. Marienfeld St Ste 1000 Midland, TX 79701	OGRID: 372920
	Action Number: 406463
	Action Type: [C-104] Completion Packet - New Well (C-104NW)

ACKNOWLEDGMENTS

☑	I hereby certify that the required Water Use Report has been, or will be, submitted for this wells completion.
☑	I hereby certify that the required FracFocus disclosure has been, or will be, submitted for this wells completion.
☑	I hereby certify that the rules of the Oil Conservation Division have been complied with and that the information given above is true and complete to the best of my knowledge and belief.

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CONDITIONS

Action 406463

CONDITIONS

Operator: NOVO OIL & GAS NORTHERN DELAWARE, LLC 300 N. Marienfeld St Ste 1000 Midland, TX 79701	OGRID: 372920
	Action Number: 406463
	Action Type: [C-104] Completion Packet - New Well (C-104NW)

CONDITIONS

Created By	Condition	Condition Date
plmartinez	File 3160-4 Completion Report within 10 days of BLM approval.	11/13/2025