

Submit 1 Copy To Appropriate District Office
 District I – (575) 393-6161
 1625 N. French Dr., Hobbs, NM 88240
 District II – (575) 748-1283
 811 S. First St., Artesia, NM 88210
 District III – (505) 334-6178
 1000 Rio Brazos Rd., Aztec, NM 87410
 District IV – (505) 476-3460
 1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
 Energy, Minerals and Natural Resources

OIL CONSERVATION DIVISION
 1220 South St. Francis Dr.
 Santa Fe, NM 87505

Form C-103
 Revised July 18, 2013

SUNDRY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)		WELL API NO. 30-015-49219
1. Type of Well: Oil Well ☒ Gas Well ☐ Other ☐		5. Indicate Type of Lease STATE ☐ FEE ☒
2. Name of Operator Redwood Operating LLC		6. State Oil & Gas Lease No.
3. Address of Operator PO Box 1370 Artesia, NM 88211-1370		7. Lease Name or Unit Agreement Name Leavitt 13
4. Well Location Unit Letter Lot 3 : 2528 feet from the South line and 797 feet from the West line Section 18 Township 18S Range 27E NMPM County Eddy		8. Well Number 10H
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 3292' GR		9. OGRID Number 330211
		10. Pool name or Wildcat Red Lake; Glorieta-Yeso

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐
 TEMPORARILY ABANDON ☐ CHANGE PLANS ☒
 PULL OR ALTER CASING ☐ MULTIPLE COMPL ☐
 DOWNHOLE COMMINGLE ☐
 CLOSED-LOOP SYSTEM ☐
 OTHER: ☐

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐
 COMMENCE DRILLING OPNS. ☐ P AND A ☐
 CASING/CEMENT JOB ☐
 OTHER: ☐

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 19.15.7.14 NMAC. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

Redwood Operating LLC would like to move this surface location from the original footages per the C-101. New footages will be Lot 3, 2528 FSL 797 FWL Sec. 18 T18S R27E. This location was moved +or- 560' to the northeast. Location is still in Lot 3.

Attachments: Revised C-102, Revised Directional Plan and Revised Casing and Cement Detail.

Spud Date:

Rig Release Date:

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE Jerry W Sherrell TITLE Regulatory Supervisor DATE 7/22/2022

Type or print name Jerry W Sherrell E-mail address: jerrys@mec.com PHONE: 575-748-1288

For State Use Only

APPROVED BY: [Signature] TITLE Petroleum Specialist DATE 07/26/2022

Conditions of Approval (if any):

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: (505) 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

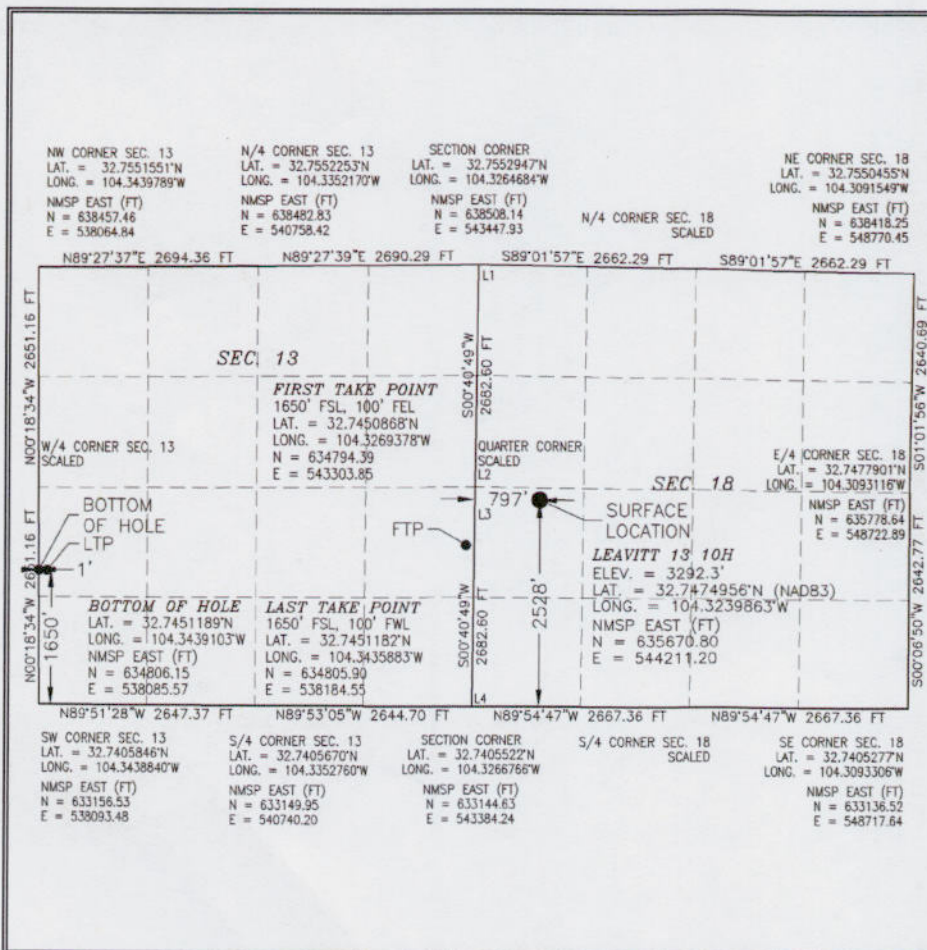
☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-015-49219		² Pool Code 51120		³ Pool Name Red Lake; Glorieta-Yeso					
⁴ Property Code 329504		⁵ Property Name LEAVITT 13						⁶ Well Number 10H	
⁷ OGRID No. 330211		⁸ Operator Name REDWOOD OPERATING, LLC						⁹ Elevation 3292.3	
¹⁰ Surface Location									
UL or lot no. 3	Section 18	Township 18 S	Range 27 E	Lot Idn	Feet from the 2528	North/South line SOUTH	Feet from the 797	East/West line WEST	County EDDY
¹¹ Bottom Hole Location If Different From Surface									
UL or lot no. L	Section 13	Township 18 S	Range 26 E	Lot Idn	Feet from the 1650	North/South line SOUTH	Feet from the 1	East/West line WEST	County EDDY
¹² Dedicated Acres 160		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.

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: <u>Jerry W. Sherrell</u> Date: <u>7/22/2022</u> Printed Name: <u>Jerry W. Sherrell</u> Email Address: <u>jerrys@mec.com</u>			
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. JUNE 29, 2022 Date of Survey: _____ Signature and Seal of Professional Surveyor: <u>[Signature]</u> Certificate Number: <u>20180905 JARANTULLO JLS 12797</u> SURVEY NO. 9194A			



Leavitt 13 10H, Plan 1

Operator	Redwood Operating LLC	Units	feet, °/100ft	13:49 Wednesday, July 20, 2022	Page 1 of 5
Field	Red Lake	County	Eddy	Vertical Section Azimuth	270.13
Well Name	Leavitt 13 10H	State	New Mexico	Survey Calculation Method	Minimum Curvature
Plan	1	Country	USA	Database	Access
Location	SL: 2528 FSL & 797 FWL Section 18-T15S-R27E BHL: 1650 FSL & 1 FWL Section 13-T18S-R26E			Map Zone	UTM
Site				Surface X	1848272.1
Slot Name		UWI		Surface Y	11887443.1
Well Number	10H	API		Surface Z	3310.3
Project		MD/TVD Ref	KB	Ground Level	3292.3
				Lat Long Ref	
				Surface Long	
				Surface Lat	
				Global Z Ref	KB
				Local North Ref	Grid

DIRECTIONAL WELL PLAN

MD*	INC*	AZI*	TVD*	N*	E*	DLS*	V. S.*	MapE*	MapN*	SysTVD*
ft	deg	deg	ft	ft	ft	°/100ft	ft	ft	ft	ft
*** TIE (at MD = 2553.00)										
2553.00	0.00	0.0	2553.00	0.00	0.00		0.00	1848272.10	11887443.10	757.30
2600.00	0.00	0.0	2600.00	0.00	0.00	0.00	0.00	1848272.10	11887443.10	710.30
2650.00	0.00	0.0	2650.00	0.00	0.00	0.00	0.00	1848272.10	11887443.10	660.30
*** KOP 8 DEGREES (at MD = 2653.00)										
2653.00	0.00	0.0	2653.00	0.00	0.00	0.00	0.00	1848272.10	11887443.10	657.30
2700.00	3.76	193.5	2699.97	-1.50	-0.36	8.00	0.36	1848271.74	11887441.60	610.33
2750.00	7.76	193.5	2749.70	-6.38	-1.53	8.00	1.52	1848270.57	11887436.72	560.60
2800.00	11.76	193.5	2798.97	-14.62	-3.51	8.00	3.48	1848268.59	11887428.48	511.33
2850.00	15.76	193.5	2847.53	-26.18	-6.29	8.00	6.23	1848265.81	11887416.92	462.77
2900.00	19.76	193.5	2895.13	-41.01	-9.84	8.00	9.75	1848262.26	11887402.09	415.17
2950.00	23.76	193.5	2941.56	-59.03	-14.17	8.00	14.04	1848257.93	11887384.07	368.74
3000.00	27.76	193.5	2986.58	-80.15	-19.24	8.00	19.06	1848252.86	11887362.95	323.72
3050.00	31.76	193.5	3029.98	-104.28	-25.04	8.00	24.80	1848247.06	11887338.82	280.32
3100.00	35.76	193.5	3071.54	-131.29	-31.52	8.00	31.22	1848240.58	11887311.81	238.76
3150.00	39.76	193.5	3111.06	-161.06	-38.67	8.00	38.30	1848233.43	11887282.04	199.24
3200.00	43.76	193.5	3148.35	-193.43	-46.44	8.00	46.00	1848225.66	11887249.67	161.95
3250.00	47.76	193.5	3183.23	-228.26	-54.80	8.00	54.28	1848217.30	11887214.84	127.07
3300.00	51.76	193.5	3215.52	-265.36	-63.71	8.00	63.11	1848208.39	11887177.74	94.78
*** 55 DEGREE TANGENT (at MD = 3340.50)										
3340.50	55.00	193.5	3239.67	-296.97	-71.30	8.00	70.62	1848200.81	11887146.13	70.63
3350.00	55.00	193.5	3245.12	-304.53	-73.11	0.00	72.42	1848198.99	11887138.57	65.18
3400.00	55.00	193.5	3273.80	-344.36	-82.67	0.00	81.89	1848189.43	11887098.74	36.50
3450.00	55.00	193.5	3302.48	-384.18	-92.23	0.00	91.36	1848179.87	11887058.92	7.82
3500.00	55.00	193.5	3331.16	-424.01	-101.80	0.00	100.83	1848170.30	11887019.09	-20.86
3550.00	55.00	193.5	3359.84	-463.84	-111.36	0.00	110.30	1848160.74	11886979.26	-49.54
*** 10 DEGREE BUILD (at MD = 3590.50)										
3590.50	55.00	193.5	3383.07	-496.09	-119.10	0.00	117.98	1848153.00	11886947.01	-72.77
3600.00	55.16	194.6	3388.51	-503.65	-121.00	10.00	119.85	1848151.10	11886939.45	-78.21
3650.00	56.15	200.6	3416.73	-542.96	-133.49	10.00	132.26	1848138.61	11886900.14	-106.43
3700.00	57.42	206.4	3444.14	-581.30	-150.15	10.00	148.83	1848121.95	11886861.80	-133.84
3750.00	58.95	212.0	3470.51	-618.37	-170.86	10.00	169.45	1848101.24	11886824.73	-160.21
3800.00	60.71	217.4	3495.66	-653.89	-195.45	10.00	193.96	1848076.65	11886789.21	-185.36
3850.00	62.68	222.6	3519.38	-687.59	-223.73	10.00	222.17	1848048.37	11886755.51	-209.08
3900.00	64.84	227.6	3541.50	-719.21	-255.50	10.00	253.87	1848016.60	11886723.89	-231.20
3950.00	67.16	232.5	3561.84	-748.51	-290.52	10.00	288.82	1847981.58	11886694.59	-251.54
4000.00	69.62	237.2	3580.26	-775.27	-328.50	10.00	326.74	1847943.60	11886667.83	-269.96
4050.00	72.21	241.7	3596.61	-799.29	-369.17	10.00	367.36	1847902.93	11886643.81	-286.31

Leavitt 13 10H, Plan 1

Operator	Redwood Operating LLC	Units	feet, °/100ft	13:49 Wednesday, July 20, 2022	Page 2 of 5
Field	Red Lake	County	Eddy	Vertical Section Azimuth	270.13
Well Name	Leavitt 13 10H	State	New Mexico	Survey Calculation Method	Minimum Curvature
Plan	1	Country	USA	Database	Access
Location	SL: 2528 FSL & 797 FWL Section 18-T15S-R27E BHL: 1650 FSL & 1 FWL Section 13-T18S-R26E			Map Zone	UTM
Site				Surface X	1848272.1
Slot Name		UWI		Surface Y	11887443.1
Well Number	10H	API		Surface Z	3310.3
Project		MD/TVD Ref	KB	Ground Level	3292.3
				Lat Long Ref	
				Surface Long	
				Surface Lat	
				Global Z Ref	KB
				Local North Ref	Grid

DIRECTIONAL WELL PLAN

MD*	INC*	AZI*	TVD*	N*	E*	DLS*	V. S.*	MapE*	MapN*	SysTVD*
ft	deg	deg	ft	ft	ft	°/100ft	ft	ft	ft	ft
4100.00	74.90	246.1	3610.78	-820.38	-412.22	10.00	410.36	1847859.88	11886622.72	-300.48
4150.00	77.66	250.4	3622.64	-838.38	-457.32	10.00	455.41	1847814.78	11886604.72	-312.34
4200.00	80.50	254.6	3632.11	-853.16	-504.12	10.00	502.18	1847767.98	11886589.94	-321.81
4250.00	83.38	258.7	3639.13	-864.60	-552.27	10.00	550.30	1847719.83	11886578.50	-328.83
4300.00	86.30	262.8	3643.62	-872.61	-601.40	10.00	599.42	1847670.70	11886570.49	-333.32
4350.00	89.23	266.8	3645.57	-877.14	-651.14	10.00	649.15	1847620.96	11886565.96	-335.27
*** LANDING POINT (at MD = 4390.92)										
4390.92	91.64	270.1	3645.26	-878.23	-692.03	10.00	690.04	1847580.07	11886564.87	-334.96
4400.00	91.64	270.1	3645.00	-878.21	-701.11	0.00	699.12	1847570.99	11886564.89	-334.70
4450.00	91.64	270.1	3643.57	-878.10	-751.09	0.00	749.10	1847521.01	11886565.00	-333.27
4500.00	91.64	270.1	3642.14	-877.98	-801.07	0.00	799.08	1847471.03	11886565.12	-331.84
4550.00	91.64	270.1	3640.71	-877.87	-851.05	0.00	849.06	1847421.05	11886565.23	-330.41
4600.00	91.64	270.1	3639.28	-877.76	-901.03	0.00	899.03	1847371.07	11886565.34	-328.98
4650.00	91.64	270.1	3637.85	-877.64	-951.01	0.00	949.01	1847321.09	11886565.46	-327.55
4700.00	91.64	270.1	3636.42	-877.53	-1000.99	0.00	998.99	1847271.11	11886565.57	-326.12
4750.00	91.64	270.1	3634.99	-877.42	-1050.97	0.00	1048.97	1847221.13	11886565.68	-324.69
4800.00	91.64	270.1	3633.55	-877.30	-1100.95	0.00	1098.95	1847171.15	11886565.80	-323.25
4850.00	91.64	270.1	3632.12	-877.19	-1150.93	0.00	1148.93	1847121.17	11886565.91	-321.82
4900.00	91.64	270.1	3630.69	-877.08	-1200.90	0.00	1198.91	1847071.20	11886566.02	-320.39
4950.00	91.64	270.1	3629.26	-876.96	-1250.88	0.00	1248.89	1847021.22	11886566.14	-318.96
5000.00	91.64	270.1	3627.83	-876.85	-1300.86	0.00	1298.87	1846971.24	11886566.25	-317.53
5050.00	91.64	270.1	3626.40	-876.74	-1350.84	0.00	1348.85	1846921.26	11886566.36	-316.10
5100.00	91.64	270.1	3624.97	-876.62	-1400.82	0.00	1398.83	1846871.28	11886566.48	-314.67
5150.00	91.64	270.1	3623.54	-876.51	-1450.80	0.00	1448.81	1846821.30	11886566.59	-313.24
5200.00	91.64	270.1	3622.11	-876.39	-1500.78	0.00	1498.79	1846771.32	11886566.71	-311.81
5250.00	91.64	270.1	3620.68	-876.28	-1550.76	0.00	1548.77	1846721.34	11886566.82	-310.38
5300.00	91.64	270.1	3619.24	-876.17	-1600.74	0.00	1598.75	1846671.36	11886566.93	-308.94
5350.00	91.64	270.1	3617.81	-876.05	-1650.72	0.00	1648.73	1846621.38	11886567.05	-307.51
5400.00	91.64	270.1	3616.38	-875.94	-1700.70	0.00	1698.71	1846571.40	11886567.16	-306.08
5450.00	91.64	270.1	3614.95	-875.83	-1750.68	0.00	1748.69	1846521.42	11886567.27	-304.65
5500.00	91.64	270.1	3613.52	-875.71	-1800.66	0.00	1798.67	1846471.44	11886567.39	-303.22
5550.00	91.64	270.1	3612.09	-875.60	-1850.64	0.00	1848.65	1846421.46	11886567.50	-301.79
5600.00	91.64	270.1	3610.66	-875.49	-1900.62	0.00	1898.63	1846371.48	11886567.61	-300.36
5650.00	91.64	270.1	3609.23	-875.37	-1950.60	0.00	1948.60	1846321.50	11886567.73	-298.93
5700.00	91.64	270.1	3607.80	-875.26	-2000.58	0.00	1998.58	1846271.52	11886567.84	-297.50
5750.00	91.64	270.1	3606.37	-875.15	-2050.55	0.00	2048.56	1846221.55	11886567.95	-296.07
5800.00	91.64	270.1	3604.93	-875.03	-2100.53	0.00	2098.54	1846171.57	11886568.07	-294.63

Leavitt 13 10H, Plan 1

Operator	Redwood Operating LLC		Units	feet, °/100ft		13:49 Wednesday, July 20, 2022 Page 3 of 5					
Field	Red Lake		County	Eddy		Vertical Section Azimuth 270.13					
Well Name	Leavitt 13 10H		State	New Mexico		Survey Calculation Method Minimum Curvature					
Plan	1		Country	USA		Database Access					
Location	SL: 2528 FSL & 797 FWL Section 18-T15S-R27E BHL: 1650 FSL & 1 FWL Section 13-T18S-R26E					Map Zone	UTM		Lat Long Ref		
Site	UWI API MD/TVD Ref KB					Surface X	1848272.1		Surface Long		
Slot Name						Surface Y	11887443.1		Surface Lat		
Well Number						10H	Surface Z	3310.3		Global Z Ref KB	
Project						Ground Level	3292.3		Local North Ref Grid		
DIRECTIONAL WELL PLAN											
MD*	INC*	AZI*	TVD*	N*	E*	DLS*	V. S.*	MapE*	MapN*	SysTVD*	
ft	deg	deg	ft	ft	ft	°/100ft	ft	ft	ft	ft	
5850.00	91.64	270.1	3603.50	-874.92	-2150.51	0.00	2148.52	1846121.59	11886568.18	-293.20	
5900.00	91.64	270.1	3602.07	-874.81	-2200.49	0.00	2198.50	1846071.61	11886568.29	-291.77	
5950.00	91.64	270.1	3600.64	-874.69	-2250.47	0.00	2248.48	1846021.63	11886568.41	-290.34	
6000.00	91.64	270.1	3599.21	-874.58	-2300.45	0.00	2298.46	1845971.65	11886568.52	-288.91	
6050.00	91.64	270.1	3597.78	-874.47	-2350.43	0.00	2348.44	1845921.67	11886568.63	-287.48	
6100.00	91.64	270.1	3596.35	-874.35	-2400.41	0.00	2398.42	1845871.69	11886568.75	-286.05	
6150.00	91.64	270.1	3594.92	-874.24	-2450.39	0.00	2448.40	1845821.71	11886568.86	-284.62	
6200.00	91.64	270.1	3593.49	-874.13	-2500.37	0.00	2498.38	1845771.73	11886568.97	-283.19	
6250.00	91.64	270.1	3592.06	-874.01	-2550.35	0.00	2548.36	1845721.75	11886569.09	-281.76	
6300.00	91.64	270.1	3590.62	-873.90	-2600.33	0.00	2598.34	1845671.77	11886569.20	-280.32	
6350.00	91.64	270.1	3589.19	-873.79	-2650.31	0.00	2648.32	1845621.79	11886569.31	-278.89	
6400.00	91.64	270.1	3587.76	-873.67	-2700.29	0.00	2698.30	1845571.81	11886569.43	-277.46	
6450.00	91.64	270.1	3586.33	-873.56	-2750.27	0.00	2748.28	1845521.83	11886569.54	-276.03	
6500.00	91.64	270.1	3584.90	-873.45	-2800.25	0.00	2798.26	1845471.85	11886569.65	-274.60	
6550.00	91.64	270.1	3583.47	-873.33	-2850.22	0.00	2848.24	1845421.88	11886569.77	-273.17	
6600.00	91.64	270.1	3582.04	-873.22	-2900.20	0.00	2898.22	1845371.90	11886569.88	-271.74	
6650.00	91.64	270.1	3580.61	-873.11	-2950.18	0.00	2948.19	1845321.92	11886569.99	-270.31	
6700.00	91.64	270.1	3579.18	-872.99	-3000.16	0.00	2998.17	1845271.94	11886570.11	-268.88	
6750.00	91.64	270.1	3577.75	-872.88	-3050.14	0.00	3048.15	1845221.96	11886570.22	-267.45	
6800.00	91.64	270.1	3576.32	-872.77	-3100.12	0.00	3098.13	1845171.98	11886570.33	-266.02	
6850.00	91.64	270.1	3574.88	-872.65	-3150.10	0.00	3148.11	1845122.00	11886570.45	-264.58	
6900.00	91.64	270.1	3573.45	-872.54	-3200.08	0.00	3198.09	1845072.02	11886570.56	-263.15	
6950.00	91.64	270.1	3572.02	-872.43	-3250.06	0.00	3248.07	1845022.04	11886570.67	-261.72	
7000.00	91.64	270.1	3570.59	-872.31	-3300.04	0.00	3298.05	1844972.06	11886570.79	-260.29	
7050.00	91.64	270.1	3569.16	-872.20	-3350.02	0.00	3348.03	1844922.08	11886570.90	-258.86	
7100.00	91.64	270.1	3567.73	-872.09	-3400.00	0.00	3398.01	1844872.10	11886571.01	-257.43	
7150.00	91.64	270.1	3566.30	-871.97	-3449.98	0.00	3447.99	1844822.12	11886571.13	-256.00	
7200.00	91.64	270.1	3564.87	-871.86	-3499.96	0.00	3497.97	1844772.14	11886571.24	-254.57	
7250.00	91.64	270.1	3563.44	-871.75	-3549.94	0.00	3547.95	1844722.16	11886571.35	-253.14	
7300.00	91.64	270.1	3562.01	-871.63	-3599.92	0.00	3597.93	1844672.18	11886571.47	-251.71	
7350.00	91.64	270.1	3560.57	-871.52	-3649.89	0.00	3647.91	1844622.21	11886571.58	-250.27	
7400.00	91.64	270.1	3559.14	-871.41	-3699.87	0.00	3697.89	1844572.23	11886571.69	-248.84	
7450.00	91.64	270.1	3557.71	-871.29	-3749.85	0.00	3747.87	1844522.25	11886571.81	-247.41	
7500.00	91.64	270.1	3556.28	-871.18	-3799.83	0.00	3797.85	1844472.27	11886571.92	-245.98	
7550.00	91.64	270.1	3554.85	-871.07	-3849.81	0.00	3847.83	1844422.29	11886572.03	-244.55	
7600.00	91.64	270.1	3553.42	-870.95	-3899.79	0.00	3897.81	1844372.31	11886572.15	-243.12	
7650.00	91.64	270.1	3551.99	-870.84	-3949.77	0.00	3947.79	1844322.33	11886572.26	-241.69	

Leavitt 13 10H, Plan 1

Operator Redwood Operating LLC		Units feet, °/100ft		13:49 Wednesday, July 20, 2022 Page 4 of 5						
Field Red Lake		County Eddy		Vertical Section Azimuth 270.13						
Well Name Leavitt 13 10H		State New Mexico		Survey Calculation Method Minimum Curvature						
Plan 1		Country USA		Database Access						
Location SL: 2528 FSL & 797 FWL Section 18-T15S-R27E BHL: 1650 FSL & 1 FWL Section 13-T18S-R26E				Map Zone UTM		Lat Long Ref				
Site		UWI		Surface X 1848272.1		Surface Long				
Slot Name		API		Surface Y 11887443.1		Surface Lat				
Well Number 10H		MD/TVD Ref KB		Surface Z 3310.3		Global Z Ref KB				
Project				Ground Level 3292.3		Local North Ref Grid				
DIRECTIONAL WELL PLAN										
MD*	INC*	AZI*	TVD*	N*	E*	DLS*	V. S.*	MapE*	MapN*	SysTVD*
ft	deg	deg	ft	ft	ft	°/100ft	ft	ft	ft	ft
7700.00	91.64	270.1	3550.56	-870.72	-3999.75	0.00	3997.76	1844272.35	11886572.38	-240.26
7750.00	91.64	270.1	3549.13	-870.61	-4049.73	0.00	4047.74	1844222.37	11886572.49	-238.83
7800.00	91.64	270.1	3547.70	-870.50	-4099.71	0.00	4097.72	1844172.39	11886572.60	-237.40
7850.00	91.64	270.1	3546.26	-870.38	-4149.69	0.00	4147.70	1844122.41	11886572.72	-235.96
7900.00	91.64	270.1	3544.83	-870.27	-4199.67	0.00	4197.68	1844072.43	11886572.83	-234.53
7950.00	91.64	270.1	3543.40	-870.16	-4249.65	0.00	4247.66	1844022.45	11886572.94	-233.10
8000.00	91.64	270.1	3541.97	-870.04	-4299.63	0.00	4297.64	1843972.47	11886573.06	-231.67
8050.00	91.64	270.1	3540.54	-869.93	-4349.61	0.00	4347.62	1843922.49	11886573.17	-230.24
8100.00	91.64	270.1	3539.11	-869.82	-4399.59	0.00	4397.60	1843872.51	11886573.28	-228.81
8150.00	91.64	270.1	3537.68	-869.70	-4449.57	0.00	4447.58	1843822.53	11886573.40	-227.38
8200.00	91.64	270.1	3536.25	-869.59	-4499.54	0.00	4497.56	1843772.56	11886573.51	-225.95
8250.00	91.64	270.1	3534.82	-869.48	-4549.52	0.00	4547.54	1843722.58	11886573.62	-224.52
8300.00	91.64	270.1	3533.39	-869.36	-4599.50	0.00	4597.52	1843672.60	11886573.74	-223.09
8350.00	91.64	270.1	3531.95	-869.25	-4649.48	0.00	4647.50	1843622.62	11886573.85	-221.65
8400.00	91.64	270.1	3530.52	-869.14	-4699.46	0.00	4697.48	1843572.64	11886573.96	-220.22
8450.00	91.64	270.1	3529.09	-869.02	-4749.44	0.00	4747.46	1843522.66	11886574.08	-218.79
8500.00	91.64	270.1	3527.66	-868.91	-4799.42	0.00	4797.44	1843472.68	11886574.19	-217.36
8550.00	91.64	270.1	3526.23	-868.80	-4849.40	0.00	4847.42	1843422.70	11886574.30	-215.93
8600.00	91.64	270.1	3524.80	-868.68	-4899.38	0.00	4897.40	1843372.72	11886574.42	-214.50
8650.00	91.64	270.1	3523.37	-868.57	-4949.36	0.00	4947.38	1843322.74	11886574.53	-213.07
8700.00	91.64	270.1	3521.94	-868.46	-4999.34	0.00	4997.36	1843272.76	11886574.64	-211.64
8750.00	91.64	270.1	3520.51	-868.34	-5049.32	0.00	5047.33	1843222.78	11886574.76	-210.21
8800.00	91.64	270.1	3519.08	-868.23	-5099.30	0.00	5097.31	1843172.80	11886574.87	-208.78
8850.00	91.64	270.1	3517.65	-868.12	-5149.28	0.00	5147.29	1843122.82	11886574.98	-207.35
8900.00	91.64	270.1	3516.21	-868.00	-5199.26	0.00	5197.27	1843072.84	11886575.10	-205.91
8950.00	91.64	270.1	3514.78	-867.89	-5249.24	0.00	5247.25	1843022.86	11886575.21	-204.48
9000.00	91.64	270.1	3513.35	-867.78	-5299.21	0.00	5297.23	1842972.89	11886575.32	-203.05
9050.00	91.64	270.1	3511.92	-867.66	-5349.19	0.00	5347.21	1842922.91	11886575.44	-201.62
9100.00	91.64	270.1	3510.49	-867.55	-5399.17	0.00	5397.19	1842872.93	11886575.55	-200.19
9150.00	91.64	270.1	3509.06	-867.44	-5449.15	0.00	5447.17	1842822.95	11886575.66	-198.76
9200.00	91.64	270.1	3507.63	-867.32	-5499.13	0.00	5497.15	1842772.97	11886575.78	-197.33
9250.00	91.64	270.1	3506.20	-867.21	-5549.11	0.00	5547.13	1842722.99	11886575.89	-195.90
9300.00	91.64	270.1	3504.77	-867.10	-5599.09	0.00	5597.11	1842673.01	11886576.00	-194.47
9350.00	91.64	270.1	3503.34	-866.98	-5649.07	0.00	5647.09	1842623.03	11886576.12	-193.04
9400.00	91.64	270.1	3501.90	-866.87	-5699.05	0.00	5697.07	1842573.05	11886576.23	-191.60
9450.00	91.64	270.1	3500.47	-866.76	-5749.03	0.00	5747.05	1842523.07	11886576.34	-190.17
9500.00	91.64	270.1	3499.04	-866.64	-5799.01	0.00	5797.03	1842473.09	11886576.46	-188.74

Leavitt 13 10H, Plan 1

Operator Redwood Operating LLC	Units feet, °/100ft	13:49 Wednesday, July 20, 2022 Page 5 of 5	
Field Red Lake	County Eddy	Vertical Section Azimuth 270.13	
Well Name Leavitt 13 10H	State New Mexico	Survey Calculation Method Minimum Curvature	
Plan 1	Country USA	Database Access	
Location SL: 2528 FSL & 797 FWL Section 18-T15S-R27E BHL: 1650 FSL & 1 FWL Section 13-T18S-R26E		Map Zone UTM	Lat Long Ref
Site		Surface X 1848272.1	Surface Long
Slot Name	UWI	Surface Y 11887443.1	Surface Lat
Well Number 10H	API	Surface Z 3310.3	Global Z Ref KB
Project	MD/TVD Ref KB	Ground Level 3292.3	Local North Ref Grid

DIRECTIONAL WELL PLAN

MD*	INC*	AZI*	TVD*	N*	E*	DLS*	V. S.*	MapE*	MapN*	SysTVD*
ft	deg	deg	ft	ft	ft	°/100ft	ft	ft	ft	ft
9550.00	91.64	270.1	3497.61	-866.53	-5848.99	0.00	5847.01	1842423.11	11886576.57	-187.31
9600.00	91.64	270.1	3496.18	-866.42	-5898.97	0.00	5896.99	1842373.13	11886576.68	-185.88
9650.00	91.64	270.1	3494.75	-866.30	-5948.95	0.00	5946.97	1842323.15	11886576.80	-184.45
9700.00	91.64	270.1	3493.32	-866.19	-5998.93	0.00	5996.95	1842273.17	11886576.91	-183.02
*** TD (at MD = 9741.92)										
9741.92	91.64	270.1	3492.12	-866.09	-6040.83	0.00	6038.85	1842231.27	11886577.01	-181.82

Leavitt 13 #10H

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Surface- 12 ¼" hole 1,230'
9 5/8"-36#-J-55

Stage 1	Slurry	Density	Yield	Mix H2O Gals./sk	# of Sacks	% Excess	Slurry Top
Lead	Class C +4%PF20+1% PF1+0.125#/skPF29+.4%PF 45	13.5	1.72	9.102	250	100	Surface
Tail	Class C+.1%PF1	14.8	1.34	6.307	200	100	1,800'

Comments	20bbls Gel Spacer. 50 sacks of 11# Scavenger cement.	Cu/Ft per lin/Ft 385.23
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Production-9,742' 7"-26#-L-80
LT&C and BTC (3,650') XO 5 ½"
17# L-80 BTC (6,092')

Stage 1	Slurry	Density	Yield	Mix H2O Gals./sk	# of Sacks	% Excess	Slurry Top
Lead	35/65 Perlite/C 5% PF44+6%PF20+.2%PF13+3ppsPF 42+.4ppsPF45+.125ppsPF29	12.9	1.82	9.21	475	35	Surface
Tail	PVL+1.3%PF44(BWOW)+5%PF1 74+.5%PF506+0.1%PF153+.4#PF 45	13	1.48	7.57	2250	35	2,450'
Comments	20bbls Gel Spacer. 50 sacks of 11# Scavenger cement.	Cu/Ft per lin/Ft 2461					

Casing DesignWell:Leavitt 13 #10H

String Size & Function:9.625 in surface x intermediate

Total Depth:1230 ft

Pressure Gradient for Calculations(While drilling)

Mud weight, collapse:9.6 #/galSafety Factor Collapse:1.125

Mud weight, burst:9.6 #/galSafety Factor Burst:1.25

Mud weight for joint strength:9.6 #/galSafety Factor Joint Strength1.8

BHP @ TD for:collapse:614.016 psiBurst:614.016 psi, joint strength:614.016 psi

Partially evacuated hole?Pressure gradient remaining:10 #/gal

Max. Shut in surface pressure:500 psi

1st segment	1230 ft	to	0 ft	Make up Torque ft-lbs	Total ft =	1230
O.D.	Weight	Grade	Threads	opt.	min.	mx.
9.625 inches	36 #/ft	J-55	ST&C	3,940	2,960	4,930
Collapse Resistance	Internal Yield	Joint Strength	Body Yield	Drift		
2,020 psi	3,520 psi	394,000 #	564,000 #	8.765		

2nd segment	0 ft	to	0 ft	Make up Torque ft-lbs	Total ft =	0
O.D.	Weight	Grade	Threads	opt.	min.	mx.
inches	#/ft					
Collapse Resistance	Internal Yield	Joint Strength	Body Yield	Drift		
psi	psi	,000 #	,000 #			

3rd segment	0 ft	to	0 ft	Make up Torque ft-lbs	Total ft =	0
O.D.	Weight	Grade	Threads	opt.	min.	mx.
inches	#/ft					
Collapse Resistance	Internal Yield	Joint Strength	Body Yield	Drift		
psi	psi	,000 #	,000 #			

4th segment	0 ft	to	0 ft	Make up Torque ft-lbs	Total ft =	0
O.D.	Weight	Grade	Threads	opt.	min.	mx.
inches	#/ft					
Collapse Resistance	Internal Yield	Joint Strength	Body Yield	Drift		
psi	psi	,000 #	,000 #			

5th segment	0 ft	to	0 ft	Make up Torque ft-lbs	Total ft =	0
O.D.	Weight	Grade	Threads	opt.	min.	mx.
inches	#/ft					
Collapse Resistance	Internal Yield	Joint Strength	Body Yield	Drift		
psi	psi	,000 #	,000 #			

6th segment	0 ft	to	0 ft	Make up Torque ft-lbs	Total ft =	0
O.D.	Weight	Grade	Threads	opt.	min.	mx.
inches	#/ft					
Collapse Resistance	Internal Yield	Joint Strength	Body Yield	Drift		
psi	psi	,000 #	,000 #			

Select	1st segment bottom	1230	S.F.	Actual	Desire
			collapse	3.289817	>= 1.125
	1230 ft to 0 ft		burst-b	6.697312	>= 1.25
	9.625 36 J-55 ST&C		burst-t	7.04	
	Top of segment 1 (ft)	0	S.F.	Actual	Desire
Select	2nd segment from bottom		collapse	#DIV/0!	>= 1.125
			burst-b	0	>= 1.25
	0 ft to 0 ft		burst-t	0	
	0 0 0 0		jnt strngth	10.42986	>= 1.8

Casing DesignWell:Leavitt 33 #10H

String Size & Function:5 1/2" x 7" inProductionX

Total Depth:9742 ftTVD:3493 ft

Pressure Gradient for Calculations(While drilling)

Mud weight, collapse:10.3 #/galSafety Factor Collapse:1.125

Mud weight, burst:10.3 #/galSafety Factor Burst:1.25

Mud weight for joint strength:10.3 #/galSafety Factor Joint Strength1.8

BHP @ TD for:collapse:1870.851 psiBurst:1870.851 psi, joint strength:1870.851 psi

Partially evacuated hole?Pressure gradient remaining:10 #/gal

Max. Shut in surface pressure:3000 psi

1st segment	9742 ft	to	3650 ft	Make up Torque ft-lbs	Total ft =	6092
O.D.	Weight	Grade	Threads	opt.	min.	mx.
5.5 inches	17 #/ft	L-80	BTC	3410	2560	4260
Collapse Resistance	Internal Yield	Joint Strength	Body Yield	Drift		
6,290	7,740 psi	338,000 #	397,000 #	4,767		

2nd segment	2550 ft	to	3650 ft	Make up Torque ft-lbs	Total ft =	1200
O.D.	Weight	Grade	Threads	opt.	min.	mx.
7 inches	26 #/ft	L-80	BTC	5110	3830	6390
Collapse Resistance	Internal Yield	Joint Strength	Body Yield	Drift		
5,410 psi	7,240 psi	511,000 #	604,000 #	6,151		

3rd segment	2550 ft	to	0 ft	Make up Torque ft-lbs	Total ft =	2550
O.D.	Weight	Grade	Threads	opt.	min.	mx.
7 inches	26 #/ft	L-80	LT&C	5110	3830	6390
Collapse Resistance	Internal Yield	Joint Strength	Body Yield	Drift		
5,410 psi	7,240 psi	511,000 #	604,000 #	6,151		

4th segment	0 ft	to	0 ft	Make up Torque ft-lbs	Total ft =	0
O.D.	Weight	Grade	Threads	opt.	min.	mx.
inches	#/ft					
Collapse Resistance	Internal Yield	Joint Strength	Body Yield	Drift		
psi	psi	,000 #	,000 #			

5th segment	0 ft	to	0 ft	Make up Torque ft-lbs	Total ft =	0
O.D.	Weight	Grade	Threads	opt.	min.	mx.
inches	#/ft					
Collapse Resistance	Internal Yield	Joint Strength	Body Yield	Drift		
psi	psi	,000 #	,000 #			

6th segment	0 ft	to	0 ft	Make up Torque ft-lbs	Total ft =	0
O.D.	Weight	Grade	Threads	opt.	min.	mx.
inches	#/ft					
Collapse Resistance	Internal Yield	Joint Strength	Body Yield	Drift		
psi	psi	,000 #	,000 #			

Select	1st segment bottom	9742	S.F.	Actual	Desire
			collapse	3.362107	>= 1.125
	9742 ft to 3650 ft		burst-b	2.717673	>= 1.25
	5.5 26 L-80 BTC		burst-t	2.629916	
	Top of segment 1 (ft)	3650	S.F.	Actual	Desire
Select	2nd segment from bottom		collapse	2.636371	>= 1.125
			burst-b	2.460025	>= 1.25
	3650 ft to 2550 ft		burst-t	2.445764	
	7 26 L-80 BTC		jnt strngth	3.874221	>= 1.8

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 128056

CONDITIONS

Operator: Redwood Operating LLC PO Box 1370 Artesia, NM 88210	OGRID: 330211
	Action Number: 128056
	Action Type: [C-103] NOI Change of Plans (C-103A)

CONDITIONS

Created By	Condition	Condition Date
kpickford	Adhere to previous NMOCD Conditions of Approval	7/26/2022