

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

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

OCT 29 2019
RECEIVED

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 30-015-45874		² Pool Code 64450		³ Pool Name WILLOW LAKE; BONE SPRING	
⁴ Property Code 324983		⁵ Property Name ROCK RIDGE FEDERAL BSS			⁶ Well Number 8H
⁷ OGRID No. 15363		⁸ Operator Name MURCHISON OIL AND GAS, LLC			⁹ Elevation 2914.5

¹⁰ Surface Location

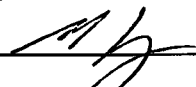
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	30	24 S	29 E		805	NORTH	250	EAST	EDDY

¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
2	30	24 S	29 E		2323	NORTH	333	WEST	EDDY

¹² Dedicated Acres 160	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.

N89°50'05"E 2607.02 FT NW CORNER SEC. 30 LAT. = 32.1957658°N LONG. = 104.0320931°W N QUARTER CORNER SEC. 30 LAT. = 32.1957641°N LONG. = 104.0236670°W NE CORNER SEC. 30 LAT. = 32.1957674°N LONG. = 104.0151925°W AS-DRILLED LAST TAKE POINT 2320' FNL, 407' FWL LAT. = 32.1893872°N LONG. = 104.0306942°W ROCK RIDGE FEDERAL BSS 8H ELEV. = 2914.5' LAT. = 32.1935547°N (NAD83) LONG. = 104.0159954°W LOT 1 LOT 2 AS-DRILLED BOTTOM OF HOLE LAT. = 32.1893796°N LONG. = 104.0309332°W LTP BHL W QUARTER CORNER SEC. 30 LAT. = 32.1884580°N LONG. = 104.0319969°W LOT 3 AS-DRILLED KOP 1243' FNL, 213' FEL LAT. = 32.1923500°N LONG. = 104.0158712°W FTP E QUARTER CORNER SEC. 30 LAT. = 32.1884804°N LONG. = 104.0151751°W NOTE: LATITUDE AND LONGITUDE COORDINATES ARE SHOWN USING THE NORTH AMERICAN DATUM OF 1983 (NAD83). LISTED NEW MEXICO STATE PLANE EAST COORDINATES ARE GRID (NAD83). BASIS OF BEARING AND DISTANCES USED ARE NEW MEXICO STATE PLANE EAST COORDINATES MODIFIED TO THE SURFACE. ELEVATION VALUES ARE NAVD83. LOT 4 SW CORNER SEC. 30 LAT. = 32.1811455°N LONG. = 104.022358°W S QUARTER CORNER SEC. 30 LAT. = 32.1811449°N LONG. = 104.0237181°W SE CORNER SEC. 30 LAT. = 32.1811434°N LONG. = 104.0151360°W S89°50'31"W 2635.78 FT S89°50'40"W 2655.71 FT		" OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division. Signature  Date 10/11/19 Printed Name Gary R. Cooper E-mail Address rcooper@jdmii.com "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 19, 2019 Date of Survey Signature and Seal of Professional Surveyor:  Certificate Number: WILLIAM F. JARAMILA, No. 5513C
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OCT 29 2019

Intent ☐ As Drilled ☒ X

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API #		
Operator Name: MURCHISON OIL AND GAS, LLC	Property Name: ROCK RIDGE FEDERAL BSS	Well Number 8H

Kick Off Point (KOP)

UL A	Section 30	Township 24S	Range 29E	Lot	Feet 1243	From N/S NORTH	Feet 213	From E/W EAST	County EDDY
Latitude 32.1923500					Longitude 104.0158712			NAD 83	

First Take Point (FTP)

UL H	Section 30	Township 24S	Range 29E	Lot	Feet 2276	From N/S NORTH	Feet 330	From E/W EAST	County EDDY
Latitude 32.1895120					Longitude 104.0162443			NAD 83	

Last Take Point (LTP)

UL	Section 30	Township 24S	Range 29E	Lot 2	Feet 2320	From N/S NORTH	Feet 407	From E/W WEST	County EDDY
Latitude 32.1893872					Longitude 104.0306942			NAD 83	

Is this well the defining well for the Horizontal Spacing Unit? ☐

Is this well an infill well? ☐

If infill is yes please provide API if available, Operator Name and well number for Defining well for Horizontal Spacing Unit.

API #		
Operator Name:	Property Name:	Well Number

KZ 06/29/2018



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NOV 19 2019

DISTRICT/ARTESIA O.C.D.

7821 Will Rogers Blvd.
Fort Worth, Texas 76140
817.568.1038 (office)
817.568.1499 (fax)
www.msdir.com

MS Directional Survey Data Certification

MS Directional Job Number: MSMO-66370
Survey Type: MWD
Operating Company: Murchison Oil & Gas LLC
Well Name & Number: Rock Ridge Federal WCB #008H
Location: Eddy County, NM
API Number: 30-015-45874
Tie In Depth: Surface
Surveyed Depths: 100' – 13,142' MD
Projected TD Survey: 13,216' MD
Dates Performed: 06/07/2019 – 08/10/2019

I certify that the data is true, correct and complete and within the limitations of the tool set forth by MS Directional; that I am authorized and qualified to make this report and that I have reviewed this report and find it conforms to the principles and procedures as set forth by MS Directional.

Digitally signed by:

MWD Surveyor Name: Snider Zamora

Date: 09-05-2019

Email: Snider.Zamora@msdir.com

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NOV 19 2019

9/4/19 15:55



SURVEY CALCULATION PROGRAM

DISTRICT 7 - ARTESIA O.C.D.

Company:		Murchison Oil & Gas, LLC									
Well Name:		Rock Ridge Federal WCB #008H									
Location:		Eddy County, NM									
Rig:		Latshaw #7				Magnetic Declination:		6.81		REFERENCED TO GRID NORTH	
Job Number:		MSMO-66370									
API #:		30-015-45874									
Vertical Section Azimuth:				251.82		Proposed Direction:		251.82			
Survey Calculation Method:				Minimum Curvature							
PTB:	MD		INC		AZM	TVD	N/S	E/W	VS		
	13,216		90.6		267.7	8408.5	-1532.48	-4617.54	4865.17		
#	Depth Feet	Inc Degrees	Azm Degrees	TVD Feet	N/S Feet	E/W Feet	Surface Vert Sec	Closure Distance	Azm	DLS/ 100	BUR/ 100'
TIE IN	0	0.00	0.00	0.00	0.00	0.00		0.00			
1	100	1.70	44.00	99.99	1.07	1.03	-1.31	1.48	44.00	1.70	1.70
2	166	1.70	294.10	165.97	2.17	0.82	-1.45	2.32	20.62	4.22	0.00
3	255	1.70	278.60	254.93	2.91	-1.69	0.70	3.36	329.78	0.52	0.00
4	338	1.90	288.60	337.89	3.53	-4.21	2.90	5.50	309.95	0.45	0.24
5	406	1.90	291.60	405.85	4.31	-6.33	4.67	7.66	304.21	0.15	0.00
6	495	2.10	299.30	494.80	5.65	-9.13	6.91	10.73	301.75	0.38	0.22
7	586	2.10	294.70	585.74	7.16	-12.09	9.26	14.05	300.62	0.19	0.00
8	676	2.40	237.70	675.68	6.84	-15.19	12.29	16.66	294.25	2.40	0.33
9	766	2.90	212.40	765.58	3.91	-18.00	15.88	18.42	282.26	1.40	0.56
10	796	3.40	195.20	795.54	2.41	-18.64	16.95	18.79	277.38	3.55	1.67
11	890	3.50	195.80	889.37	-3.04	-20.15	20.09	20.38	261.43	0.11	0.11
12	984	5.40	184.60	983.08	-10.21	-21.29	23.41	23.61	244.38	2.21	2.02
13	1,078	8.00	177.80	1076.44	-21.16	-21.39	26.92	30.08	225.32	2.89	2.77
14	1,173	9.30	175.50	1170.35	-35.41	-20.53	30.56	40.94	210.11	1.42	1.37
15	1,267	10.40	176.40	1262.97	-51.46	-19.41	34.49	54.99	200.66	1.18	1.17
16	1,361	12.90	175.20	1355.02	-70.38	-17.99	39.06	72.65	194.34	2.67	2.66
17	1,455	15.10	173.00	1446.23	-92.99	-15.62	43.86	94.30	189.54	2.41	2.34
18	1,550	14.40	169.70	1538.10	-116.90	-12.00	47.88	117.51	185.86	1.15	-0.74
19	1,645	12.30	168.80	1630.52	-138.45	-7.93	50.73	138.68	183.28	2.22	-2.21
20	1,738	12.30	167.60	1721.39	-157.84	-3.87	52.93	157.89	181.41	0.27	0.00
21	1,832	13.00	166.60	1813.11	-177.91	0.73	54.82	177.91	179.77	0.78	0.74
22	1,925	13.90	167.10	1903.55	-198.97	5.64	56.72	199.05	178.38	0.98	0.97
23	2,020	12.60	171.30	1996.03	-220.34	9.76	59.47	220.55	177.46	1.70	-1.37
24	2,114	12.70	171.90	2087.74	-240.70	12.77	62.97	241.04	176.96	0.18	0.11
25	2,209	13.70	170.80	2180.23	-262.15	16.04	66.55	262.64	176.50	1.09	1.05
26	2,302	13.00	171.90	2270.72	-283.37	19.27	70.10	284.03	176.11	0.80	-0.75
27	2,396	13.00	170.30	2362.31	-304.26	22.54	73.51	305.10	175.76	0.38	0.00
28	2,490	14.20	169.60	2453.67	-326.02	26.40	76.63	327.09	175.37	1.29	1.28
29	2,584	14.30	172.10	2544.78	-348.86	30.08	80.27	350.16	175.07	0.66	0.11
30	2,678	14.50	173.50	2635.83	-372.05	33.01	84.72	373.52	174.93	0.43	0.21
31	2,733	14.60	174.00	2689.07	-385.79	34.51	87.58	387.33	174.89	0.29	0.18
32	2,805	14.60	174.20	2758.74	-403.84	36.38	91.44	405.48	174.85	0.07	0.00
33	2,867	14.30	174.90	2818.78	-419.24	37.85	94.85	420.95	174.84	0.56	-0.48

Company:		Murchison Oil & Gas, LLC										
Well Name:		Rock Ridge Federal WCB #008H										
Location:		Eddy County, NM										
Rig:		Latshaw #7					Magnetic Declination:		6.81		REFERENCED TO GRID NORTH	
Job Number:		MSMO-66370										
API #:		30-015-45874										
Vertical Section Azimuth:			251.82			Proposed Direction:		251.82				
Survey Calculation Method:			Minimum Curvature									
PTB:	MD		INC		AZM	TVD	N/S	E/W		VS		
	13,216		90.6		267.7	8408.5	-1532.48		-4617.54		4865.17	
#	Depth Feet	Inc Degrees	Azm Degrees	TVD Feet	N/S Feet	E/W Feet	Surface Vert Sec	Closure Distance Azm		DLS/ 100	BUR/ 100'	
34	2,960	16.20	173.90	2908.50	-443.58	40.25	100.16	445.41	174.82	2.06	2.04	
35	3,053	16.30	173.30	2997.79	-469.45	43.15	105.47	471.43	174.75	0.21	0.11	
36	3,148	16.40	173.00	3088.94	-496.00	46.34	110.73	498.16	174.66	0.14	0.11	
37	3,243	16.30	167.90	3180.11	-522.35	50.77	114.74	524.81	174.45	1.51	-0.11	
38	3,337	15.10	164.70	3270.60	-547.06	56.77	116.75	549.99	174.08	1.57	-1.28	
39	3,432	10.80	163.00	3363.16	-567.51	62.64	117.56	570.96	173.70	4.54	-4.53	
40	3,526	10.00	161.50	3455.62	-583.67	67.80	117.69	587.60	173.37	0.90	-0.85	
41	3,621	10.70	167.20	3549.07	-600.10	72.37	118.47	604.45	173.12	1.30	0.74	
42	3,715	10.90	173.50	3641.41	-617.44	75.31	121.09	622.01	173.05	1.27	0.21	
43	3,810	12.30	174.00	3734.47	-636.43	77.39	125.04	641.11	173.07	1.48	1.47	
44	3,904	16.10	173.20	3825.58	-659.33	79.98	129.73	664.17	173.08	4.05	4.04	
45	3,998	16.50	172.10	3915.80	-685.50	83.35	134.68	690.55	173.07	0.54	0.43	
46	4,092	16.30	172.10	4005.98	-711.79	87.00	139.42	717.08	173.03	0.21	-0.21	
47	4,187	15.50	170.20	4097.34	-737.50	91.00	143.65	743.09	172.97	1.00	-0.84	
48	4,280	14.10	169.40	4187.25	-760.88	95.19	146.96	766.81	172.87	1.52	-1.51	
49	4,374	12.70	168.90	4278.69	-782.28	99.29	149.74	788.55	172.77	1.49	-1.49	
50	4,469	14.20	174.40	4371.09	-804.12	102.44	153.56	810.62	172.74	2.07	1.58	
51	4,563	13.80	175.10	4462.30	-826.77	104.52	158.65	833.35	172.79	0.46	-0.43	
52	4,657	13.30	174.20	4553.68	-848.70	106.57	163.54	855.36	172.84	0.58	-0.53	
53	4,752	15.50	175.00	4645.69	-872.22	108.78	168.78	878.97	172.89	2.33	2.32	
54	4,845	15.80	174.20	4735.24	-897.19	111.14	174.33	904.05	172.94	0.40	0.32	
55	4,940	15.40	173.90	4826.74	-922.60	113.79	179.74	929.59	172.97	0.43	-0.42	
56	5,034	13.60	172.60	4917.74	-945.97	116.54	184.42	953.12	172.98	1.95	-1.91	
57	5,129	13.30	172.20	5010.14	-967.88	119.46	188.48	975.22	172.96	0.33	-0.32	
58	5,223	12.50	171.30	5101.77	-988.64	122.47	192.10	996.20	172.94	0.88	-0.85	
59	5,317	12.20	174.80	5193.59	-1008.59	124.91	196.01	1016.30	172.94	0.86	-0.32	
60	5,411	13.70	173.80	5285.20	-1029.55	127.01	200.55	1037.35	172.97	1.61	1.60	
61	5,506	13.60	174.60	5377.52	-1051.85	129.28	205.36	1059.77	172.99	0.22	-0.11	
62	5,600	13.80	174.60	5468.84	-1074.02	131.37	210.28	1082.02	173.03	0.21	0.21	
63	5,694	12.80	175.00	5560.32	-1095.55	133.34	215.14	1103.64	173.06	1.07	-1.06	
64	5,789	14.90	172.80	5652.55	-1118.16	135.78	219.86	1126.37	173.08	2.28	2.21	
65	5,883	14.10	171.30	5743.56	-1141.46	139.03	224.05	1149.90	173.06	0.94	-0.85	
66	5,978	14.70	167.30	5835.58	-1164.66	143.43	227.11	1173.46	172.98	1.22	0.63	
67	6,073	14.30	166.30	5927.55	-1187.82	148.86	229.18	1197.11	172.86	0.50	-0.42	

Company:		Murchison Oil & Gas, LLC												
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	13,216		90.6		267.7		8408.5		-1532.48		-4617.54		4865.17	
#	Depth Feet	Inc Degrees	Azm Degrees	TVD Feet	N/S Feet	E/W Feet	Surface Vert Sec	Closure Distance Azm		DLS/ 100	BUR/ 100'			
68	6,168	13.70	166.00	6019.73	-1210.13	154.36	230.91	1219.94	172.73	0.64	-0.63			
69	6,262	12.70	165.30	6111.24	-1230.93	159.67	232.35	1241.24	172.61	1.08	-1.06			
70	6,356	13.50	168.50	6202.80	-1251.68	164.48	234.25	1262.44	172.51	1.15	0.85			
71	6,450	14.10	170.90	6294.08	-1273.74	168.48	237.34	1284.83	172.46	0.88	0.64			
72	6,545	15.30	169.10	6385.97	-1297.47	172.68	240.75	1308.91	172.42	1.35	1.26			
73	6,639	14.20	170.00	6476.87	-1321.00	177.03	243.96	1332.81	172.37	1.20	-1.17			
74	6,733	14.10	172.90	6568.02	-1343.72	180.45	247.81	1355.78	172.35	0.76	-0.11			
75	6,827	13.40	172.50	6659.33	-1365.88	183.28	252.02	1378.12	172.36	0.75	-0.74			
76	6,922	10.50	167.60	6752.26	-1385.25	186.58	254.94	1397.76	172.33	3.23	-3.05			
77	7,016	8.40	168.10	6844.98	-1400.34	189.84	256.55	1413.15	172.28	2.24	-2.23			
78	7,110	7.90	173.70	6938.03	-1413.48	191.96	258.63	1426.45	172.27	1.00	-0.53			
79	7,204	7.50	179.80	7031.19	-1426.03	192.69	261.86	1438.99	172.30	0.97	-0.43			
80	7,299	9.30	172.60	7125.17	-1439.85	193.70	265.21	1452.82	172.34	2.19	1.89			
81	7,394	6.70	167.70	7219.23	-1452.88	195.87	267.21	1466.02	172.32	2.83	-2.74			
82	7,488	5.20	172.00	7312.73	-1462.45	197.63	268.52	1475.75	172.30	1.66	-1.60			
83	7,582	4.50	169.60	7406.39	-1470.30	198.89	269.78	1483.69	172.30	0.78	-0.74			
84	7,676	4.40	163.40	7500.11	-1477.38	200.59	270.37	1490.94	172.27	0.52	-0.11			
85	7,771	2.60	179.30	7594.93	-1483.03	201.65	271.12	1496.68	172.26	2.14	-1.89			
86	7,865	2.20	190.50	7688.85	-1486.94	201.35	272.63	1500.51	172.29	0.65	-0.43			
87	7,959	0.90	239.60	7782.81	-1489.08	200.39	274.22	1502.51	172.34	1.86	-1.38			
88	8,022	0.80	288.30	7845.81	-1489.20	199.54	275.05	1502.50	172.37	1.12	-0.16			
89	8,116	7.30	274.20	7939.52	-1488.55	192.96	281.11	1501.01	172.61	6.94	6.91			
90	8,211	18.00	277.10	8032.08	-1486.29	172.31	300.02	1496.24	173.39	11.28	11.26			
91	8,305	24.40	281.10	8119.68	-1480.75	138.81	330.12	1487.24	174.64	6.98	6.81			
92	8,399	34.30	278.80	8201.51	-1472.94	93.47	370.76	1475.90	176.37	10.60	10.53			
93	8,493	43.50	273.70	8274.61	-1466.79	34.87	424.51	1467.20	178.64	10.36	9.79			
94	8,587	50.30	265.80	8338.85	-1467.35	-33.62	489.76	1467.73	181.31	9.48	7.23			
95	8,681	56.40	260.60	8394.96	-1476.40	-108.41	563.64	1480.38	184.20	7.86	6.49			
96	8,775	65.50	260.90	8440.56	-1489.59	-189.43	644.73	1501.58	187.25	9.68	9.68			
97	8,869	71.20	265.50	8475.24	-1499.86	-276.13	730.31	1525.06	190.43	7.58	6.06			
98	8,964	84.00	270.00	8495.61	-1503.40	-368.63	819.29	1547.93	193.78	14.24	13.47			
99	9,058	91.90	273.00	8498.97	-1500.94	-462.45	907.66	1570.56	197.12	8.99	8.40			
100	9,152	91.90	273.40	8495.85	-1495.69	-556.25	995.14	1595.78	200.40	0.43	0.00			
101	9,245	90.90	272.20	8493.58	-1491.15	-649.11	1081.95	1626.31	203.52	1.68	-1.08			

Company:		Murchison Oil & Gas, LLC										
Well Name:		Rock Ridge Federal WCB #008H										
Location:		Eddy County, NM										
Rig:		Latshaw #7					Magnetic Declination:		6.81		REFERENCED TO GRID NORTH	
Job Number:		MSMO-66370										
API #:		30-015-45874										
Vertical Section Azimuth:					251.82			Proposed Direction:		251.82		
Survey Calculation Method:					Minimum Curvature							
PTB:	MD		INC		AZM		TVD	N/S	E/W		VS	
	13,216		90.6		267.7		8408.5	-1532.48	-4617.54		4865.17	
#	Depth Feet	Inc Degrees	Azm Degrees	TVD Feet	N/S Feet	E/W Feet	Surface Vert Sec	Closure Distance Azm		DLS/ 100	BUR/ 100'	
102	9,340	91.30	271.90	8491.76	-1487.75	-744.03	1171.07	1663.43	206.57	0.53	0.42	
103	9,434	91.60	271.70	8489.38	-1484.80	-837.95	1259.39	1704.94	209.44	0.38	0.32	
104	9,528	91.90	270.80	8486.51	-1482.75	-931.89	1347.99	1751.28	212.15	1.01	0.32	
105	9,621	91.40	270.10	8483.83	-1482.02	-1024.84	1436.08	1801.86	214.66	0.92	-0.54	
106	9,716	91.80	268.80	8481.18	-1482.93	-1119.80	1526.58	1858.24	217.06	1.43	0.42	
107	9,810	92.50	268.90	8477.65	-1484.82	-1213.71	1616.40	1917.76	219.26	0.75	0.74	
108	9,904	91.10	268.30	8474.70	-1487.11	-1307.64	1706.35	1980.26	221.33	1.62	-1.49	
109	9,998	91.40	268.20	8472.65	-1489.98	-1401.57	1796.49	2045.59	223.25	0.34	0.32	
110	10,093	87.60	266.80	8473.48	-1494.13	-1496.46	1887.93	2114.66	225.04	4.26	-4.00	
111	10,187	87.40	266.50	8477.58	-1499.62	-1590.21	1978.71	2185.77	226.68	0.38	-0.21	
112	10,281	88.90	267.50	8480.61	-1504.53	-1684.03	2069.38	2258.22	228.22	1.92	1.60	
113	10,376	90.90	268.60	8480.78	-1507.76	-1778.96	2160.59	2331.97	229.72	2.40	2.11	
114	10,470	91.90	269.00	8478.48	-1509.73	-1872.91	2250.46	2405.64	231.13	1.15	1.06	
115	10,564	92.40	269.30	8474.95	-1511.13	-1966.84	2340.13	2480.31	232.46	0.62	0.53	
116	10,658	92.40	269.50	8471.02	-1512.11	-2060.75	2429.66	2556.01	233.73	0.21	0.00	
117	10,751	92.20	269.50	8467.28	-1512.92	-2153.67	2518.20	2631.96	234.91	0.22	-0.22	
118	10,845	91.50	270.30	8464.25	-1513.08	-2247.62	2607.51	2709.47	236.05	1.13	-0.74	
119	10,939	92.00	270.60	8461.38	-1512.35	-2341.57	2696.54	2787.50	237.14	0.62	0.53	
120	11,033	92.00	270.10	8458.10	-1511.77	-2435.51	2785.61	2866.56	238.17	0.53	0.00	
121	11,127	92.40	269.80	8454.49	-1511.85	-2529.44	2874.88	2946.83	239.13	0.53	0.43	
122	11,222	91.00	270.50	8451.67	-1511.61	-2624.40	2965.02	3028.60	240.06	1.65	-1.47	
123	11,315	90.90	270.50	8450.13	-1510.79	-2717.38	3053.11	3109.13	240.93	0.11	-0.11	
124	11,409	91.20	269.90	8448.41	-1510.47	-2811.37	3142.30	3191.44	241.75	0.71	0.32	
125	11,504	91.90	269.60	8445.84	-1510.88	-2906.33	3232.65	3275.59	242.53	0.80	0.74	
126	11,598	91.60	270.20	8442.97	-1511.04	-3000.29	3321.96	3359.31	243.27	0.71	-0.32	
127	11,691	91.60	270.40	8440.37	-1510.56	-3093.25	3410.13	3442.38	243.97	0.21	0.00	
128	11,786	90.50	270.00	8438.63	-1510.23	-3188.23	3500.27	3527.83	244.65	1.23	-1.16	
129	11,880	91.30	270.00	8437.15	-1510.23	-3282.22	3589.57	3612.99	245.29	0.85	0.85	
130	11,974	91.80	270.00	8434.61	-1510.23	-3376.18	3678.84	3698.57	245.90	0.53	0.53	
131	12,068	90.30	269.90	8432.89	-1510.31	-3470.16	3768.16	3784.58	246.48	1.60	-1.60	
132	12,163	90.60	270.00	8432.14	-1510.39	-3565.16	3858.44	3871.91	247.04	0.33	0.32	
133	12,257	90.80	269.70	8430.99	-1510.64	-3659.15	3947.82	3958.72	247.57	0.38	0.21	
134	12,351	90.80	269.30	8429.68	-1511.46	-3753.14	4037.37	4046.06	248.06	0.43	0.00	
135	12,444	91.30	268.90	8427.98	-1512.92	-3846.11	4126.15	4132.98	248.53	0.69	0.54	

Company:

Murchison Oil & Gas, LLC

Well Name:

Rock Ridge Federal WCB #008H

Location:

Eddy County, NM

Rig:

Latshaw #7

Magnetic Declination:

6.81

REFERENCED TO GRID NORTH

Job Number:

MSMO-66370

API #:

30-015-45874

Vertical Section Azimuth:

251.82

Proposed Direction:

251.82

Survey Calculation Method:

Minimum Curvature

PTB:

MD

INC

AZM

TVD

N/S

E/W

VS

13,216

90.6

267.7

8408.5

-1532.48

-4617.54

4865.17

#

Depth Feet

Inc Degrees

Azm Degrees

TVD Feet

N/S Feet

E/W Feet

Surface Vert Sec

Closure Distance

Azm

DLS/ 100

BUR/ 100'

136

12,538

92.10

268.80

8425.19

-1514.80

-3940.05

4215.99

4221.21

248.97

0.86

0.85

137

12,633

91.60

268.90

8422.12

-1516.71

-4034.98

4306.78

4310.63

249.40

0.54

-0.53

138

12,725

92.30

268.80

8418.99

-1518.55

-4126.91

4394.69

4397.43

249.80

0.77

0.76

139

12,819

91.50

268.90

8415.87

-1520.44

-4220.84

4484.52

4486.34

250.19

0.86

-0.85

140

12,913

92.70

268.70

8412.43

-1522.41

-4314.75

4574.36

4575.46

250.57

1.29

1.28

141

13,007

90.30

268.40

8409.97

-1524.78

-4408.68

4664.35

4664.92

250.92

2.57

-2.55

142

13,101

90.20

267.80

8409.56

-1527.90

-4502.63

4754.57

4754.81

251.26

0.65

-0.11

143

13,142

90.60

267.70

8409.27

-1529.51

-4543.60

4794.00

4794.13

251.40

1.01

0.98

PTB:

13,216

90.60

267.70

8408.50

-1532.48

-4617.54

4865.17

4865.20

251.64

0.00

0.00