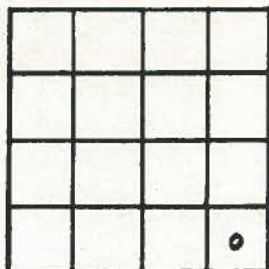


Field Sugar Loaf State Colorado County Moffat Sec. 4 T. 11N R. 101W
Company Mountain Fuel Supply Farm Sparks Ranch Well No. 1

Location 600' FSL, 709' FEL Elev. 6943.35
6931 Gr.



I.P. Gas _____ ft. R. P. _____ # _____ Oil _____ Bbls. _____

Drilling Commenced March 13, 1954 Completed May 11, 1954

Total Depth 5460'; PBTD 4881'

Remarks Dry and abandoned

Sands _____

Casing Record:

10-3/4-inch at 57.58' w/32 sacks
7-inch at 4980' w/225 sacks



FORMATION RECORD

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	From	To
No samples.	0	500
Sandstone, light green to gray, very fine-grained, very argillaceous, soft, sticky, with some pyrite and light to dark gray chert fragments.	500	520
Sandstone, as above, yellow.	520	530
Clay shale, light gray, yellow, pink, sandy, soft, sticky.	530	540
Sandstone, light gray to white, very fine-grained, loose, slightly argillaceous.	540	550
Sandstone, as above, with abundant white to gray chert fragments.	550	560
Clay shale, as above, very sandy.	560	580
Sandstone, white, very fine to coarse-grained, silty, argillaceous, soft, very calcareous.	580	590
Clay shale, drab, brown, very sandy.	590	630
Sandstone, white, very fine-grained, very calcareous, soft.	630	650
Clay shale, green, very sandy.	650	660
Sandstone, as above.	660	690
No sample.	690	700
Shale, yellow, pink, very sandy, very soft.	730	740
Shale, as above, yellow.	740	760
Shale, as above, yellow, green and maroon, less sandy.	760	780
Shale, gray, green, and maroon, soft to firm.	780	800
Shale, yellow, sandy, soft, with some shale, as above.	800	810
Shale, yellow, purple, green, soft, sticky.	810	830
Sandstone, white, very fine-grained, very argillaceous, soft.	830	840
Clay shale, yellow and light green.	840	900
Sandstone, yellow, argillaceous, very fine-grained, soft and shale, gray, green and maroon, soft.	900	920
Sandstone, light gray to white, very fine-grained, very argillaceous, soft, sticky.	920	930
Yellow sandstone and shale, as above.	930	950
Shale, yellow, sandy, soft, sticky.	950	970
Shale, as above, some gray.	970	980
Sandstone, light gray, fine-grained, very argillaceous, very soft.	980	1000
Clay shale, gray, green and yellow, sandy.	1000	1010
Sandstone, yellow, argillaceous, very fine-grained, soft.	1010	1040
Shale, yellow, very sandy, soft, sticky.	1040	1070
Shale and sandstone, as above.	1070	1100
Shale, as above.	1100	1110
Clay shale, red to brown.	1110	1120
Yellow shale, and sandstone, as above.	1120	1130
Siltstone, light gray, sandy, argillaceous, very soft.	1130	1140
Siltstone, as above, light brown.	1140	1160
Siltstone, as above, white.	1160	1170
Siltstone, as above, white.	1170	1190
Clay shale, pink, green gray.	1190	1200
Sandstone, gray, very fine-grained, very argillaceous, soft, sticky.	1200	1210
Clay shale, red to brown, very sandy.	1210	1220
Clay shale, brown, as above.	1220	1230
Sandstone, fine-grained, brown, very argillaceous, soft.	1230	1250
Clay shale, brown, sandy.	1250	1260
Siltstone, white, sandy, soft.	1260	1280

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	From	To
Grit, quartz and chert grains.	1280	1290
Sandstone, red to brown, fine-grained, very argillaceous, soft.	1290	1320
Sandstone, as above, variegated.	1320	1340
Clay shale, red, yellow, brown, light brown.	1340	1350
Sandstone, light green to gray, fine-grained, argillaceous, soft.	1350	1360
Clay shale, yellow, red, green.	1360	1400
Clay shale, maroon.	1400	1410
Clay shale, white, very sandy.	1410	1430
Clay shale, green and brown.	1430	1450
Clay shale, yellow.	1450	1460
Clay shale, green and brown.	1460	1500
Siltstone, light gray, soft.	1500	1510
Clay shale, yellow, sandy.	1510	1550
Sandstone, light green to gray, very fine-grained, very argillaceous, soft.	1550	1560
Clay shale, yellow, light brown, sandy.	1560	1600
Clay shale, red, green, sandy.	1600	1610
Clay shale, yellow, green and red to brown, sandy.	1610	1630
Clay shale, some white.	1630	1650
Clay shale, red to brown as above, not sandy.	1650	1680
Clay shale, as above, sandy.	1680	1690
No sample.	1690	1710
No sample.	1710	1720
Limestone, white, chalky, soft.	1720	1730
Clay shale, as above, very sandy.	1730	1750
Clay shale, pink.	1740	1750
Clay shale, as above, yellow.	1750	1770
Clay shale, as above, maroon.	1770	1780
Clay shale, as above, yellow, brown, light green.	1780	1910
Shale, maroon and light green, mottled, sandy, soft.	1910	1950
Clay shale, yellow, light green to gray, sandy.	1950	1960
Shale, red to brown, sandy, soft.	1960	1970
Shale, as above, brown.	1970	1980
Shale, light brown and light gray, very sandy, soft.	1980	1990
Clay shale, yellow, pale green, maroon, sandy.	1990	2020
Sandstone, light red, fine-grained, soft to firm.	2020	2030
Sandstone, light red to yellow, fine to coarse-grained, very argillaceous, soft to firm.	2030	2040
Sandstone, mottled, red to yellow, fine to medium-grained, very argillaceous, soft to firm with trace limestone, buff, hard, sandy.	2040	2060
Sandstone, buff to yellow, some light gray and red, fine to medium-grained, calcareous, very argillaceous with trace buff, arenaceous limestone.	2060	2070
Shale, light gray, sandy, firm.	2070	2080
Shale, red, very sandy, soft to firm.	2080	2090
Shale, mottled, yellow, light gray, red, very sandy, soft to firm.	2090	2100
Shale, as above, with trace buff arenaceous limestone.	2100	2110
Sandstone, mottled, red, yellow, light gray, fine to medium-grained, soft, very argillaceous with trace buff arenaceous limestone.	2110	2120
Shale, light gray, pink, very sandy, soft to firm, very sandy, with trace limestone, as above.	2120	2130
Shale, dark gray, pink, slightly carbonaceous, very sandy, soft, sticky.	2130	2140
Shale, pink, very sandy, soft to sticky.	2140	2160
Sandstone, light gray, pink, fine-grained, very argillaceous, firm, with trace buff arenaceous limestone.	2160	2170
Sandstone, light gray, some pink, fine-grained, very argillaceous, soft.	2170	2180
Sandstone, brown, light gray, fine-grained, argillaceous, firm.	2180	2190
Sandstone, light gray, mottled with yellow, brown, red, fine grained, very argillaceous, soft to firm.	2190	2200
Sandstone, light gray, yellow, brown, some red, fine-grained, very argillaceous, calcareous, very hard.	2200	2230
Sandstone, as above, fine to medium-grained.	2230	2240
Sandstone, red, yellow to brown, fine to medium-grained, soft, argillaceous.	2240	2250
Sandstone, light gray, red, yellow to brown, as above.	2250	2280
Shale, red, very soft, sticky, sandy.	2280	2290
Shale, red, light gray, sandy, very soft to sticky.	2290	2300

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Sandstone, light gray, medium-grained, soft, argillaceous.	2300	2310
Shale, red, sandy, very soft.	2310	2330
Shale, red, gray, soft; sandstone, light gray, medium-grained, loose, argillaceous.	2330	2340
Sandstone, light gray, fine-grained, very argillaceous, soft, with trace buff limestone; trace coal.	2340	2350
Shale, gray, sandy, very soft, sticky.	2350	2370
Shale, light gray, mottled, red and yellow, very sandy, soft, sticky.	2370	2390
Shale, light gray, very sandy, soft, some firm.	2390	2470
Shale, light gray with trace red, very sandy, soft.	2470	2480
Shale, mottled, red, yellow, some light gray, very sandy, soft, sticky.	2480	2490
Shale, red, some yellow and light gray, mottling, very sandy, soft, sticky.	2490	2500
Shale, red, very sandy, soft, sticky.	2500	2510
Sandstone, mottled, red, yellow, light gray, fine-grained, very argillaceous, soft.	2510	2530
Shale, red, very sandy, soft, sticky.	2530	2550
Shale, red, yellow, some light gray, sandy, soft, sticky.	2550	2560
Shale, red, some yellow and light gray, very sandy, soft, sticky.	2560	2580
Shale, light gray, very sandy, soft, sticky.	2580	2600
No sample.	2600	2610
Sandstone, mottled, red, yellow, light gray, fine-grained, very argillaceous, soft, micaceous.	2610	2620
Shale, gray with some yellow and red, mottling, sandy, soft, sticky.	2620	2630
Shale, light gray, with some yellow and red mottled sandy, soft, sticky.	2630	2650
Shale, gray to light gray, very sandy, soft sticky.	2640	2670
Sandstone, light gray, with some red and yellow mottling, fine to medium-grained, very argillaceous, soft to firm.	2670	2680
Sandstone, mottled brown and yellow, light gray and some red, fine to medium-grained, very argillaceous, calcareous, soft to firm.	2680	2690
Shale, light gray, soft, bentonitic with loose sandstone grains.	2690	2720
Shale, light gray, soft, bentonitic; sandstone, light gray and gray, some gray to green, fine-grained, loose, argillaceous.	2720	2740
Sandstone, light gray, some yellow, brown and grayish-green, fine to medium-grained, some very argillaceous, loose; trace limestone, buff to white.	2740	2760
Sandstone, light gray to gray, medium-grained, loose, slightly argillaceous, rounded to subrounded grains, with abundant colored grains.	2760	2780
Shale, light gray, soft, sticky with abundant loose sandstone grains.	2780	2790
Shale, as above.	2790	2830
Shale, light gray to gray, sticky, soft, with some loose sandstone grains.	2830	2840
Sandstone, light gray, gray to dark gray, very fine to fine-grained, soft, argillaceous; shale, gray, soft, sticky with loose sandstone grains.	2840	2850
Shale, light gray, soft to sticky with abundant loose sandstone grains.	2850	2860
Shale, as above; some black carbonaceous shale; some coal; some sandstone, light gray fine to medium-grained, loose.	2860	2870
Sandstone, gray, fine to medium-grained, very argillaceous; shale, light gray to gray, soft, sticky.	2870	2880
Sandstone, gray to light gray, fine-grained, some medium-grained, soft, argillaceous, slightly carbonaceous in part, slightly porous, with some colored grains; some shale, as above.	2880	2890
Sandstone, white to light gray, some gray, fine to medium-grained, friable, argillaceous in part, with colored grains. Some shale, light gray, green, bentonitic, soft with occasional carbonaceous fragments.	2890	2900
Sandstone, gray, fine-grained, some medium-grained, loose, friable, slightly argillaceous, carbonaceous in part, with colored grains.	2900	2920
Sandstone, gray, some light gray, fine to medium-grained, loose, friable, firm with abundant colored grains.	2920	2930
Sandstone, as above; shale dark gray, some yellow and trace red, sandy; trace limestone, buff, arenaceous.	2930	2940
Sandstone, light gray to gray, very fine-grained to fine-grained, firm, calcareous; some shale, light gray, soft to sticky.	2940	2950
Sandstone, light gray, gray mottled, red and yellow in part, fine-grained, very argillaceous; shale, light gray, sandy.	2950	2960
Shale, gray, light gray, soft, sandy; some sandstone, gray, fine-grained, loose in part.	2960	2970

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Shale, gray, light gray, sandy, soft to firm; sandstone, light gray, fine to medium-grained, loose, argillaceous.	2970	2980
Shale, light gray, some green, soft, sticky; some sandstone, gray to light gray, medium-grained, soft, loose.	2980	2990
Shale, light gray to white, bentonitic, soft to sticky, with much loose sandstone; some sandstone, light gray to gray, fine to medium-grained, soft, slightly porous, micaceous, with colored grains.	2990	3000
Shale, as above; sandstone, as above with some sandstone, dark gray, very fine-grained to fine-grained, firm, carbonaceous in part.	3000	3010
Sandstone, gray, some light gray, fine to medium-grained, firm to friable, slightly porous with some colored grains, some carbonaceous.	3010	3020
Sandstone, as above; some shale, gray, sandy, firm with trace red and yellow, sandy shale.	3020	3030
Sandstone, gray, as above; sandstone, white, medium-grained, slightly porous, loose with fluorescence.	3030	3040
Sandstone, light gray, gray, medium grained and coarse-grained, firm, calcareous, slightly porous with some colored grains; some shale, gray, bentonitic, soft.	3040	3050
Shale, gray, brown, black and coaly, soft, sticky, some sandstone, gray, very fine-grained, to fine-grained, carbonaceous in part.	3050	3060
Sandstone, brown, light gray, fine to medium-grained, hard, carbonaceous in part, slightly porous, calcareous, cement, with abundant calcite filled fractures; trace brown, coaly shale.	3060	3070
Shale, brown, carbonaceous, coaly, and limy, soft; some sandstone, as above.	3070	3080
Sandstone, light gray, gray, gray to green, very fine to fine-grained, firm, some argillaceous, carbonaceous in part, calcareous; some siltstone, gray to green, hard; some shale, brown to black, coaly, limy.	3080	3090
Sandstone, white to light gray, fine-grained, friable, slightly porous, siltstone, as above; trace coal, trace shale, as above.	3090	3100
Sandstone, light gray, some grayish-green, fine-grained, hard, slightly porous, carbonaceous in part.	3100	3110
Sandstone, gray, light gray, fine-grained, hard, slightly porous.	3110	3120
Sandstone, as above; shale, light gray, bentonitic, brown, coaly, soft.	3120	3130
Shale, brown, soft; some sandstone, light gray to gray, fine to medium-grained, friable; some coal.	3130	3140
Sandstone, light gray, fine to medium-grained, slightly porous, friable to firm, calcareous; sandstone, gray, very fine-grained, hard, tight, carbonaceous, some mottled with yellow; shale, gray, green with loose sandstone grains, trace oolitic, arenaceous limestone, buff.	3140	3150
Shale, light gray, soft, sticky, brown, coaly; some sandstone, light gray, fine to medium-grained, friable, loose, slightly porous, carbonaceous in part, some coal.	3150	3160
Sandstone, light gray, gray, fine to medium-grained, hard, slightly porous, calcareous; slightly micaceous, with carbonaceous laminations; some shale, light gray, as above; gray with loose grains.	3160	3170
Some sandstone, as above; sandstone, gray, very fine-grained, hard, tight; shale, gray, green, sandy, firm.	3170	3180
Shale, brown, soft, sticky, coaly, some gray and green, as above; coal; some sandstone, as above.	3190	3200
Shale, as above, coal from 3197-3202, trace sandstone, white, medium-grained, slightly porous, calcareous with carbonaceous laminations.	3190	3200
Sandstone, gray, very fine-grained, hard, tight; shale, gray to green sandy, some light gray to soft bentonite; coal from 3208-3211.	3200	3210
Shale, gray, green, some brown, sandy; some light gray, as above; sandstone, as above; some coal; trace limestone, brown, oolitic.	3210	3220
Sandstone to siltstone, gray, very hard, some shale, gray, green, as above.	3220	3230
Sandstone, and siltstone, as above; some sandstone, light gray, fine to medium-grained, calcareous, hard; shale, as above with some brown, trace limestone, buff, arenaceous; trace coal.	3230	3240
Sandstone, gray, very fine-grained, hard; shale, light gray, soft, sticky.	3240	3250
Shale, as above; coal 3256-3258.	3250	3260
Shale, as above, some siltstone, gray, green, hard.	3260	3270
Shale, as above, siltstone, as above; sandstone, gray, brown, very fine-grained, carbonaceous, hard; trace coal.	3270	3280

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Shale, light gray, brown, soft, sticky; sandstone, gray, very fine-grained to fine-grained, hard, some coal.	3280	3290
Coal; shale, as above; siltstone, gray, green.	3290	3300
Shale, as above; siltstone, light gray, green, grayish-green, firm, trace brown; some sandstone, light gray to gray, fine to medium-grained, firm, some soft.	3300	3310
Shale, light gray, as above, gray, green, silty to sandy, with some coal.	3310	3320
Shale, as above, with some sandstone, gray, fine to medium-grained, argillaceous; trace coal.	3320	3330
Shale, gray, green, some brown, silty to sandy, some sandstone, gray, buff, fine-grained, loose, argillaceous; trace limestone, buff, trace coal.	3330	3340
Shale, brown, soft, coaly; some coal.	3340	3350
Shale, as above, with some gray, green, silty shale, slight trace coal.	3350	3360
Shale, gray, brown, soft, sticky, with trace coal.	3360	3370
Shale, light gray, soft, sticky, brown, firm, carbonaceous, gray, green, silty; some sandstone, light gray, fine to medium-grained, loose, with colored grains; some coal.	3370	3380
Sandstone, white to light gray, buff, fine to medium-grained, friable, loose; sandstone, gray, very fine-grained, soft, argillaceous; shale, gray, silty, brown, coaly, some coal.	3380	3390
Sandstone to siltstone, gray, very fine-grained, argillaceous in part; some coal; shale, gray, silty, brown, coaly, trace siltstone.	3390	3400
Shale, gray, sandy, some brown, coaly; some sandstone, gray, fine-grained, soft, argillaceous, some white, fine-grained friable sandstone, trace coal.	3400	3410
Shale, brown, coaly, gray, silty to sand, some limestone, buff, very arenaceous; some coal.	3410	3420
Shale, gray, green, some brown, some sandy; some sandstone, white, fine-grained to medium-grained, loose; trace limestone, as above.	3420	3430
Sandstone, light gray and buff, fine to medium-grained, very calcareous, friable, loose; shale, gray, some brown, sandy; limestone, brown, very arenaceous, trace coal.	3430	3440
Shale, gray, silty, soft; brown, coaly, trace limestone, buff, arenaceous.	3440	3460
Sandstone, white, fine to medium-grained, very friable, loose; shale, as above; some loose limestone, as above.	3460	3470
Shale, gray, silty to sandy, firm, some brown, coaly, trace limestone, buff, arenaceous; trace coal.	3470	3480
Shale, gray, silty, some sandy, some brown, coaly; some sandstone, light gray, fine-grained, loose; some coal.	3480	3490
Shale, gray, some gray to green, silty to sandy, some brown; some sandstone, gray, fine-grained, loose; trace coal.	3490	3500
Shale, as above, with trace coal.	3500	3510
Shale, gray, some gray to green, silty, firm.	3510	3520
Shale, gray, some green, some gray, some brown, some very sandy, trace coal.	3520	3530
Shale, as above, trace brown; siltstone, firm; sandstone, light gray, medium to coarse-grained, loose, hard, calcareous with black shale grains, some colored grains.	3530	3540
Shale, as above, some brown; siltstone, as above; some sandstone, white, buff, fine to medium-grained, friable, loose, calcareous; trace limestone, buff, arenaceous, trace coal.	3540	3550
Sandstone, white, medium to coarse-grained, friable, loose, very calcareous, with abundant colored grain; shale, gray, brown, silty, some sandy; some coal; trace limestone, buff, hard.	3550	3560
Shale, gray, medium gray, some silty, some brown, carbonaceous, trace coal.	3560	3580
Shale, light gray, gray, some silty, sandy, firm, some brown, carbonaceous shale.	3580	3600
Shale, light gray, gray to green, silty to sandy; some sandstone, light gray, fine-grained, argillaceous, loose.	3600	3610
Shale, gray, dark gray, firm, some brown, trace coal.	3610	3620
Shale, as above; siltstone, gray, soft.	3620	3630
Shale, gray, firm; siltstone, gray, firm; some sandstone, gray, fine-grained, loose with colored grains.	3630	3640
Sandstone, as above, fine to medium hard, loose; shale, light gray, soft, bentonitic, some brown, coaly.	3640	3650
Shale, gray, gray to green, some silty to sandy, some brown, coaly, some sandstone, gray, fine-grained, soft, loose.	3650	3660

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Shale, light gray, some silty to sandy; some sandstone, as above.	3660	3670
Siltstone, gray to green, gray, argillaceous; some shale, green, firm.	3670	3680
Siltstone, as above; shale, gray, some brown, coaly; some sandstone, light gray, white, fine-grained, some argillaceous, soft, loose.	3680	3690
Shale, gray, grayish-green, some sandy, brown, coaly, some sandstone, white, fine-grained, hard, tight with colored grains.	3690	3700
Shale, as above; sandstone, white to light gray, some light buff, fine-grained, friable, calcareous with colored grains; some coal.	3700	3710
Shale, gray, light gray, soft, bentonitic, soft, gray brown; some sandstone, light gray, fine to medium-grained, loose.	3710	3720
Shale, gray, brown, black, soft, carbonaceous.	3720	3730
Sandstone, white, fine-grained, friable, some with ashy material, some colored grains; shale, gray, grayish-green, some silty.	3730	3740
Shale, gray, gray to brown, grayish-green, some silty to sandy, firm, some carbonaceous fragments; trace coal.	3740	3750
Sandstone, white to light gray, fine to medium-grained, firm, slightly porous, with some colored grains, calcareous; good fluorescence.	3750	3770
Sandstone, as above; shale, gray to green, some brown, some silty.	3770	3780
Shale, gray, grayish-green, silty to sandy, brown, carbonaceous; sandstone, gray to green, gray, fine-grained, argillaceous, firm; trace coal.	3780	3790
Coal; some shale, as above.	3790	3800
Shale, as above; some brown, some silty to sandy; some sandstone, gray, fine to medium-grained, hard, carbonaceous in part, with black grains; trace coal; trace limestone, buff, hard.	3800	3820
Shale, light gray, gray, green, some silty to sandy, some brown, carbonaceous; some coal; trace sandstone, as above.	3820	3830
Sandstone, white, light gray, light grayish-green, fine-grained, friable, with colored grains and coal fragments; calcareous, buff, fine-grained; some limestone, buff, very arenaceous; some coal; some shale, as above.	3830	3840
Sandstone, white, light gray, fine-grained, some medium-grained, firm, some friable, clean, some with colored grains, gray, very fine to fine-grained, hard, tight, buff to light tan, very calcareous, firm; some shale, gray, grayish-green, silty to sandy, some brown, coaly.	3840	3850
Sandstone, white to light gray, very fine to fine-grained, some medium-grained, hard, tight, some friable to loose, some calcareous with some green and brown grains, some with carbonaceous laminations, some loose quartz very coarse-grained grains.	3850	3860
Sandstone, as above; some light gray to gray sandstone, medium-grained, hard, tight, with colored grains and black shale grains, some shale, brown, with some gray, grayish-green silty to sandy; some coal; trace limestone, brown buff, with chert filled fractures.	3860	3870
Sandstone, white to light gray, fine-grained, some medium-grained, hard, tight, some silty to sandy, some soft, bentonitic.	3870	3890
Shale, as above, with some coal; some sandstone, as above, loose.	3890	3900
Coal.	3900	3910
Shale, gray, grayish-green, light gray, some silty, some brown, carbonaceous, siltstone, light gray, soft; some sandstone, light gray, gray, very fine to fine-grained, some medium-grained, tight with some colored grains; trace coal; trace limestone, buff, very arenaceous.	3910	3920
Shale, gray, grayish-green, some silty to sandy, light gray, soft, brown, coaly; sandstone, white, light gray, fine-grained, some medium-grained to coarse-grained, hard to friable, loose, clean; some coal; trace limestone, as above.	3920	3930
Sandstone, white, fine to medium-grained, some coarse-grained, clean, hard tight, with occasional colored grains; shale, gray, green, some browns, very silty to very sandy, firm.	3930	3940
Shale, light gray, bentonitic; gray, firm, silty to sandy, some brown; some coal; sandstone, light gray, buff, fine-grained, hard, some friable, clean.	3940	3950
Shale, red, orange, very sandy, soft; light gray, as above; sandstone, white, fine-grained, some medium to coarse-grained, loose, clean, calcareous, trace coal; trace limestone, buff, hard.	3950	3960
Sandstone, white, fine-grained, clean, hard, tight; dark gray, fine to medium-grained, carbonaceous, hard. Shale, light gray, as above; silty; some brown to black coaly shale.	3960	3970

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	From	To
Shale, light gray, soft, bentonitic, some gray, silty; sandstone, light gray, fine to medium-grained, some loose grains; some with white silica bands; trace coal.	3970	3980
Shale, light gray, as above, gray, grayish-green, silty in part, brown, coaly; some sandstone, light gray, buff, fine-grained, hard, tight, clear; trace coal.	3980	3990
Shale, light gray, light grayish-green, bentonitic, gray, buff, bentonitic, some brown to black, coaly; some sandstone, as above; trace coal.	3990	4000
Shale, light gray, light gray to green, bentonitic, soft, some orange to yellow, brown, sandy shale with trace red; some gray, brown, carbonaceous; trace sandstone, as above; fractures filled with colored grains.	4000	4010
Shale, gray, light gray, light grayish-green, hard, bentonitic, brown to black, firm, coaly in part.	4010	4020
Shale, as above with some green, firm; siltstone, gray, dark greenish-gray, hard.	4020	4030
Shale, light gray to light green, gray, some silty to sandy, bentonitic in part, some brown to black coaly shale; trace sandstone, light gray, mottled red to orange, fine-grained, hard, tight.	4030	4040
Coal; some shale, as above.	4040	4050
Sandstone, light gray, gray, very fine to fine-grained, some medium-grained, hard, tight; shale, gray, gray to green, bentonitic, firm, some coal.	4050	4060
Sandstone, as above with light gray bentonitic soft shale.	4060	4070
Shale, gray, gray to green, some silty to sandy; some light gray, as above, some brown with coaly streaks; sandstone, light gray to light green, very fine-grained, to fine-grained, firm, loose, clean.	4070	4080
Shale, as above, some brown, coaly; some sandstone, as above.	4080	4090
Shale, gray to grayish-green, firm, some silty to sandy; some brown sandstone, with gray, green, dark gray, medium to fine-grained, argillaceous, hard, tight, some coal, pyritiferous and cannal coal.	4090	4100
Shale, light gray to green, some gray, firm to soft, some silty, sandy, brown to black; coal; some sandstone, light gray to buff, fine to medium-grained, hard, tight, clean.	4100	4110
Shale, as above, some brown to black, coaly.	4110	4120
Shale, as above with some red, yellow, orange; trace coal.	4120	4130
Sandstone, white, fine-grained, some medium-grained, firm to friable, clean, some shale, gray, grayish-green, brown to black, coaly.	4130	4140
Sandstone, as above; shale, gray, light green, silty to sandy, some brown to black, coaly.	4140	4150
TOP FORT UNION 4149'.		
Shale, as above; some sand.	4150	4160
Shale, as above, bentonitic.	4160	4170
Shale, gray, light green, sandy, firm, some brown, coaly; some sandstone, gray, fine-grained, hard, tight.	4170	4180
Shale, red, orange, yellow, sandy, some shale, as above; some sandstone, light gray, fine to medium-grained, clean, firm to friable, loose.	4180	4190
Shale, gray, light green, stily, brown, coaly, light gray, bentonitic, soft, some sandstone, as above.	4190	4200
Shale, gray, light grayish-green, silty to very sandy, firm, some brown, coaly; trace sandstone, as above with gray fine-grained hard tight sandstone.	4200	4220
Sandstone, white, light gray, fine-grained, hard, tight, clean; shale, as above some silty to very sandy, brown, coaly.	4220	4230
Shale, as above.	4230	4240
Shale, as above; some sandstone, gray to light gray, fine-grained, tight, argillaceous.	4240	4250
Sandstone, white, fine to medium-grained, friable, clean; some shale, gray, green, light grayish-green, bentonitic, some sandy, some brown, carbonaceous.	4250	4260
Sandstone, as above with gray coarse-grained sandstone; shale, as above, silty, sandy.	4260	4270
Shale, gray, gray to green, some sandy, light gray, soft, bentonitic, some brown, calcareous, carbonaceous; some sandstone, white, gray, fine-grained, firm, clean, argillaceous.	4270	4280

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	From	To
Shale, as above; trace sandstone, as above.	4280	4290
Shale, gray, gray to green, firm, some silty, some very sandy, some brown, coaly, some shale, trace sandstone, as above.	4290	4300
Shale, as above.	4300	4310
Shale, gray, green, silty, sandy, firm, brown, coaly; some sandstone, white, fine to medium-grained, hard, clean.	4310	4320
Shale, light gray, light gray to green, some brown, carbonaceous, bentonitic; some sandstone, as above; trace coal with limestone streaks.	4320	4330
Shale, light gray, very bentonitic, soft, some green, gray, firm; trace coal.	4330	4340
Shale, as above with some carbonaceous brown sandstone, light gray in part, fine-grained, argillaceous, friable, loose.	4340	4350
Shale, white, very bentonitic, some gray to grayish-green, some loose sandstone, as above.	4350	4360
Shale, white, gray, some brown, some sandy, bentonitic; some sandstone, gray, fine to medium-grained, friable, loose.	4360	4370
Shale, as above, mottled slightly with yellow, with much loose sandstone, some sandstone, gray, fine-grained, hard, tight.	4370	4380
Shale, gray, gray to green, some sandy, firm; some sandstone to siltstone, grayish-green, very fine-grained, hard, tight.	4380	4390
Shale, gray, firm, with sand grains, some brown, coaly.	4390	4400
Shale, white, very bentonitic, gray, grayish-green, firm, some brown, coaly.	4400	4410
Shale, gray, grayish-green, some brown, some sandy, firm.	4410	4420
Shale, white to light gray, mottled with yellow, bentonitic, soft, gray, firm.	4420	4430
Shale, as above with some brown carbonaceous.	4430	4450
Shale, gray, grayish-green, dark gray, some sandy, firm, some carbonaceous.	4450	4460
Shale, as above, with some light gray to white soft to sticky shale mottled with yellow and trace red.	4460	4470
Sandstone, white, fine to medium-grained, friable, loose; shale, gray, grayish-green some sandy, firm, some dark brown, coaly.	4470	4480
Sandstone, light gray, coarse- to very coarse-grained, conglomeratic, loose, some shale, gray to green, some brown, firm.	4480	4490
Shale, brown, coaly, gray, green, dark gray, sandy; sandstone, as above, loose with light gray to buff medium-grained, friable sandstone.	4490	4500
Shale, maroon, yellow to brown, very sandy, soft, some gray to green, some sandy; some sandstone, white to light gray, some gray, fine to medium-grained, friable, hard and tight.	4500	4510
Shale, gray to green, firm, some silty to sandy.	4510	4520
Shale, as above, very bentonitic, some brown, carbonaceous shale.	4520	4530
Shale, gray to green, silty to sandy, some brown; sandstone, white, some gray, fine to medium-grained, hard, clean; trace coal.	4530	4540
Shale, as above, sandy, very sandy; some sandstone, as above, loose.	4540	4550
Shale, as above, some sandstone, white, gray, brown, fine to medium-grained, hard, friable, some slightly argillaceous, clean.	4550	4560
Shale, gray to green, silty to sandy, firm, trace sandstone, firm, as above.	4560	4570
Shale, gray, green, as above; trace sandstone, gray, white, fine to medium-grained, hard to friable.	4570	4580
Shale, gray to green, some gray, some silty to sandy, trace brown, some sandstone, gray, fine-grained, friable to hard, tight, trace limestone, brown.	4580	4590
Shale, gray, green, trace brown, sandy, some white to light gray, soft to sticky; some sandstone, gray, brown, light gray, fine-grained, loose, some argillaceous.	4590	4600
Sandstone, gray, white, fine to medium-grained, some loose coarse-grained, friable to firm, argillaceous, clean; shale, as above.	4600	4610
Sandstone, white, some gray, fine to medium-grained, dean, firm with fluorescence; shale, gray to green, trace brown, firm.	4610	4620
Sandstone, as above some pyritic; shale, gray, grayish-green, brown, firm, with trace brown argillaceous limestone.	4620	4630
Shale, as above, trace brown, sandy, some white bentonitic; some sandstone, gray, some brown, firm, fine-grained, hard, clean to argillaceous.	4630	4640
Shale, gray to green some brown, very fine to fine-grained, argillaceous, soft.	4640	4660
Shale, gray, dark brown, sandy; some sandstone, gray, brown, very fine to fine-grained, tight.	4660	4690

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	From	To
Shale, as above, some sandy; some sandstone, as above.	4690	4700
Shale, as above; sandstone, white, some gray to buff, fine to medium-grained, friable, hard, clean with occasional colored grains.	4700	4710
Shale, gray to green, dark brown, sandy; some sandstone, gray, brown, light gray, very fine to fine-grained, argillaceous in part, firm.	4710	4720
Shale, gray to green, some sandy; dark brown coal and limestone laminations, white soft, bentonitic, mottled yellow shale; some sandstone, gray, white, very fine to fine-grained, hard, tight.	4720	4730
Shale, gray, green, some sandy, dark brown, coaly; some sandstone, gray, white, light gray, buff, very fine to fine-grained, friable and argillaceous to hard, and tight, clean, trace limestone, buff, hard.	4730	4740
Shale, gray, light green, some brown, coaly, some sandy, some siltstone, brown, hard, trace sandstone, gray, light gray, fine-grained, as above, some white bentonitic shale.	4740	4750
Shale, gray, light green, sandy, white, bentonitic, soft, mottled with yellow, trace brown, coaly, some sandstone, buff, green, fine-grained, argillaceous, friable.	4750	4760
Shale, as above, with some brown; some sandstone, buff, gray, very fine-grained, to fine-grained, argillaceous in part; soft, trace coal.	4760	4770
Shale, dark gray, gray to green, some silty to sandy, trace brown, white soft bentonitic siltstone, red, maroon, firm, trace sandy.	4770	4780
Shale, gray to dark gray, grayish-green, silty to very sandy, brown, dark brown, carbonaceous, white, bentonitic, soft; trace dark brown, carbonaceous limestone.	4780	4790
Shale, as above; siltstone, dark brown, firm, argillaceous; trace sandstone, gray to brown, very fine to fine-grained, hard, tight.	4790	4810
Sandstone, gray, buff to brown, very fine to fine-grained, argillaceous in part, soft, loose; shale, dark gray, some green and brown, very sandy, firm, with some white bentonitic shale, soft.	4810	4814
Cored.	4814	5131

TOP OF MESAVERDE 4940'

DRILLED WITH GAS FROM 5131' TOTAL DEPTH OF 5460'.

6869
4945
1929