## LITHOLOGIC DESCRIPTION OF SAMPLES SUBMITTED FOR ASSAY 1/

Rotary cuttings of the Green River Formation from Shell Oil Company's Blue Rim well 23–22 drilled in 1964 in NE1/4SW1/4 (1,984 ft N/S and 1,980 ft E/W) of sec 22, T 23 N, R 108 W, Sweetwater County, Wyoming

Surface elevation: 6,499 feet Sampled section: 40-1,320 feet

From	То	Description
40	60	Siltstone and some fine sandstone: Light to medium gray, some yellowish buff, rare brick red. Irregular to platy fragments. Rare fine disseminated pyrite. Very rare dark shale (no oil in test tube). Very rare gypsum (?) flakes.
60	338	Missing.
338	350	Mudstone: Light olive gray. Irregular fragments.
350	352	Missing.
352	355	Cement.
355	360	Siltstone and mudstone: Light to medium gray and olive gray.  Irregular fragments. Rare cement.
360	365	Siltstone and mudstone: Gray to olive gray and some light brownish gray. Irregular to platy fragments. Rare gray silty shale.
365	400	Mudstone, siltstone and fine sandstone: Medium to light olive gray. Very irregular fragments. Very rare dark brownish gray silty shale in upper 10 feet. Very rare pyrite.
400	470.	Sandstone, fine to medium: Medium to light olive gray and rare buff. Irregular fragments. Rare dark brownish gray stains or impregnations. Some siltstone, mudstone and rare oil shale in lower 10 feet.
470	495	Oil shale: Medium to some dark olive gray and brownish-gray, rare buff. Platy to shaly fragments.
495	525	Oil shale: Dark to medium gray and brownish gray, some buff. Shaly to platy fragments. Some brownish black papery shale in lower 15 feet.
525	560	Oil shale and mudstone: Medium to light olive gray and yellowis' buff. Shaly to irregular fragments. Some to common brownish gray and brownish black papery shale. Some white to light gray siltstone and fine sandstone in lower part.
560	590	Mudstone and oil shale: Light to medium olive gray. Irregular to platy fragments. Rare light gray siltstone. Very rare pyrite. Some dark brownish gray to brownish black papery shale in lower part.

1/ By L. G. Trudell, completed August 1964.

Illustration No. SBR-4451P (Sheet 1 of 3).

## LITHOLOGIC DESCRIPTION OF SAMPLES SUBMITTED FOR ASSAY

Rotary cuttings of the Green River Formation from Shell Oil Company's Blue Rim well 22–23

From	То	Description
590	620	Oil shale and maristone: Dark brownish gray to buff, some
		brownish black. Platy to shaly fragments. Rare gray siltstone.
620	640	Oil shale and marlstone: Medium and some dark brownish gray to
		buff, rare brownish black. Platy to shaly fragments. Some
		chalky white tuff (?) lower half.
640	650	Mudstone, marlstone and oil shale: Light to some dark olive gray and gray, some buff to medium brownish gray. Platy to irregular fragments. Rare pyrite.
650	675	Oil shale, mudstone and marlstone: Medium to light olive gray and
		gray, some to common buff. Shaly to platy fragments.
675	695	Oil shale and marlstone: Dark brownish gray and olive gray (some
		almost neutral) to buff. Platy to shaly fragments.
695	710	Oil shale: Dark to medium brownish gray and olive gray, some
		brownish black and buff. Irregular to platy fragments. Rare
		white siltstone or tuff.
<i>7</i> 10	735	Same as above, but common light olive and buff and rare brownish
		black. Rare pyrite.
735	755	Mudstone and oil shale: Medium to light olive gray (some almost neutral) and brownish gray to buff. Very irregular to platy fragments. Rare pyrite.
755	815	Mudstone and marlstone: Light to medium olive gray and brownish
755	13.13	gray, some to common buff. Irregular to shaly fragments. Some dark brownish gray oil shale. Very rare coal or bitumen.
815	825	Mudstone, marlstone and oil shale: Medium to light olive gray
- 1 -		(some almost neutral) and brownish gray, some buff. Irregular to platy fragments. Rare dark brownish gray oil shale.
825	840	Marlstone and mudstone: Buff and light olive gray, some medium
		olive gray and brownish gray. Irregular to platy fragments.
840	1,000	Mudstone, markstone and oil shale: Medium to light olive gray and
		brownish gray to buff, some dark brownish gray to brownish black Irregular to shaly fragments. Rare buff-white earthy tuff upper 20 feet. Common brownish gray to brownish black oil shale from 850 to 880 feet. Some massive buff translucent carbonate grains from 895 to 970 feet. Some siltstone, sandstone and rare pink an gray cement at 980-985 feet (caving).
1,000	1,070	Marlstone, mudstone, siltstone and some oil shale: Medium to ligh
		and rare dark olive gray and brownish gray, some neutral gray.

Illustration No. SBR-4451P (Sheet 2 of 3)

## LITHOLOGIC DESCRIPTION OF SAMPLES SUBMITTED FOR ASSAY

Rotary cuttings of the Green River Formation from Shell Oil Company's Blue Rim well 22-23

From	Τ̈́o	Description
		Irregular and some platy fragments. Some massive buff trans- lucent carbonate grains. Very rare muscovite flakes. Rare pink cement. Some pipe dope stains at 1,030-1,035 feet.
1,070	1,220	Mudstone, siltstone and fine to rare medium grained sandstone: Medium to light gray and olive gray. Very irregular fragments. Some muscovite flakes. Rare dark brownish gray oil shale. Very rare coal (?). Some to common pink cement with angular quartz chips from 1,070 to 1,100 feet. Mostly siltstone and sandstone from 1,145 to 1,170 feet.
1,220	1,270	Oil shale: Brownish gray to brownish black, some buff. Shaly to platy and some papery fragments. Some to very common colitic limestone from 1,235 to 1,260 feet. Rare clive gray mudstone in lower 5 feet.
1,270	1,305	Mudstone, maristone and oil shale: Light to dark olive gray and brownish gray. Irregular to shaly fragments. Some to common coal. Some gray siltstone lower 10 feet. Some pipe dope stains. (Unwashed samples.)
1,305	1,320	Mudstone, siltstone and sandstone: Light to some dark gray and olive gray. Very common muscovite flakes. Some to common coal. Some buff maristone or limestone in upper part. Very common coarse quartz grains in lower 5 feet.

Illustration No. SBR-4451P (Sheet 3 of 3)