

DRILL HOLE SR-4, SILVER REEF DISTRICT, WASHINGTON COUNTY, UTAH ↓
JUNE 1951 Radioactivity of hole

| Elev. | Depth | Rock | Radioactivity of hole |
|---------|--------|--|------------------------------|
| 3,871.0 | 0. | Alluvium and granitic boulders. | |
| 3,809.3 | 21.7 | Very fine ss., pale yellowish orange 10YR 8/6. Dip 28° to 30°. Variable carbonate content in cement. At 35.4 to 35.5 feet, 3 partings with visible muscovite and grayish yellow green. | |
| | 42.95 | Sample FS 7-51..... 42.95 to 43.30 feet. | |
| | 43.30 | Very fine ss., 20% black plant remains, Garnetite, torbernite(?) | 1,500 c.p.m. |
| | | Sample FS 8-51..... 41.90 to 43.40 feet | |
| | 56.4 | Very fine ss., pale yellowish orange, variable carbonate content in cement. | 53.4 to 57.4 ft., 800 c.p.m. |
| | 57.0 | Very fine ss., with 10% black plant remains, green stained. | |
| | 58.0 | Very fine ss., dusky yellow green. | |
| | | Sample FS 9-51..... 54.8 feet to 59.8 | |
| | | Very fine ss., pale yellowish orange. Dip 25°. Clay partings, grayish yellow green, at 66.6, 67.9, 68.8, and 75.55 feet. | |
| 3,752.8 | 76.2 | | |
| | 81.35 | Mudstone, grayish yellow green 5Y 7/2. | |
| | | Siltstone, dark reddish brown. Dip 16°. | |
| | 90.2 | | |
| | 91.35 | Siltstone, light greenish gray 5GY 8/1, clay partings 5G 6/1. | |
| 3,755.5 | 95.5 | Mudstone, friable, grayish red purple and greenish gray 5G 6/1. | |
| | 96.5 | Very fine ss., 98% pinkish gray, 2% x-bedded lt. brownish gray. 15% | |
| | | Very fine ss., light brownish gray 5YR 6/1. | |
| | 104.2 | | |
| | 104.75 | Clay, greenish gray 5G 6/1. Dip 12°. | |
| | 109.5 | Mudstone, dark reddish brown, friable. | |

1/ All rock well consolidated throughout except where otherwise noted. Grain sizes given are in accord with the Wentworth Scale. Color names are taken from the Rock Color Chart distributed by the National Research Council, 1948. A highly variable quantity of carbonate exists throughout the rocks, except in the few most highly argillaceous layers.

DRILL HOLE SR-5, SILVER REEF DISTRICT, WASHINGTON COUNTY, UTAH ↓
JUNE 1951 Radioactivity of hole

| Elev. | Depth | Rock | Radioactivity of hole |
|---------|-------|---|-----------------------|
| 3,835.1 | 0. | Alluvium and granitic boulders. | |
| 3,817.1 | 18.0 | | |
| | 20.6 | Very fine ss., dark yellowish orange. Dip 11°. | |
| | | Very fine ss., 95% pale red 5R 6/2 with 5% very pale orange laminae about 0.01 foot thick each. Dip 13° to 14°. | |
| | 35.5 | | |
| | 40.2 | Very fine ss., very pale orange. Dip 14°. From 39.7 to 40.2 feet, 40% clay blebs pale green 5G 7/2. | |
| | 47.5 | Very fine ss., grayish orange 10YR 7/4. Dip 20° to 25°. | |
| | | Very fine ss., pale red 5R 6/2. Dip 21° to 21°. | |
| | | From 63 to 64 feet, close partings with grayish red 5R 6/2 surfaces. | |
| 3,751.5 | 82.6 | Sample FS 11-51..... 82.5 to 86.5 feet. | 81.5 to 84.5 ft. |
| | 84.2 | Very fine ss., very pale orange, 5% plant remains, green stained. | 470 c.p.m. |
| | 86.0 | 90% very fine ss., 50% clay pebbles 1/4 to 3/8 inch long. | |
| | | Very fine ss., very pale orange. Dip 17° to 18°. | |
| | | At 90.7 to 90.8 feet, some plant remains. | |
| 3,733.4 | 101.7 | | |
| | 106.2 | Mudstone, dark greenish gray 5GY 4/1. Dip 20°. Sample FS 10-51..... 102.8 to 103.9 feet | 103.0 ft. 370 c.p.m. |
| | 114.0 | Siltstone, dark reddish brown with 5% very fine ss., gray. 108.5 to 109. ft. irregularly mottled with 30% grayish green siltstone 10GY 5/2. | |
| | | Very fine ss. and siltstone, prominent crossbedding, pale red 10R 6/2. Dip about 25°. | |
| | 127.6 | | |
| | | Siltstone, dark reddish brown. Friable. | |
| 3,695.4 | 139.7 | | |

1/ All rock well consolidated except where otherwise noted. Grain sizes given are in accord with the Wentworth Scale. Color names are taken from the Rock Color Chart distributed by the National Research Council, 1948. A highly variable quantity of carbonate exists throughout the rocks, except in the few most highly argillaceous layers.

DIAMOND DRILL HOLE SR-7, SILVER REEF DISTRICT, WASHINGTON COUNTY, UTAH ↓
JULY 1951

| Elev. | Depth | Rock | Analysis see |
|---------|--------|--|--------------|
| 3,839.8 | 0. | Alluvium and granitic boulders. | Table 2 |
| 3,760.0 | 79.75 | Very fine sandstone, pale red 5R 6/2 laminated 0.005 to 0.01 foot with very pale orange. Dip 16° at 85.6, 7° at 84.1. | |
| 3,752.9 | 86.9 | Very fine sandstone, grayish orange. Dip 19°. Pale red 5R 6/2 laminae from 87.61 to 87.69, and 87.82 to 87.92. | |
| 3,746.0 | 93.8 | 80 percent very fine sandstone, grayish orange, 20 percent clay blebs, pale green 5G 7/2, 0.1 to 0.4 inches across, random orientation. | |
| | 94.9 | | |
| 3,739.8 | 100.0 | Very fine sandstone, grayish orange. Dip 32° at 97.2 feet, 18° at 98.35, 18° at 99.5. | |
| | | Very fine sandstone, pale yellowish orange. Dip 32° at 103.8 feet. Between 103 and 104, color grades downward into grayish orange. Dip 17° at 112.3, 30° at 118.2, 27° at 119, 31° at 124.3, 31° at 125. Only 25 percent core recovery from 119 to 123. Between 123.5 and 124.9, several knife-edge thickness clay partings. | |
| 3,734.5 | 125.9 | | FS 18-5 |
| | 125.9 | Very fine sandstone, yellowish gray. 3 percent clay pebbles, greenish gray. | |
| | | Very fine sandstone, grayish orange to pale yellowish orange 125.9 to 158.35. Partings at 146.9 and 147.35 contain light brown plant fossils. From 146.9 to 148.75, color has a grayish cast. Dips: 24° at 147., 17° at 126.75 and 130., 20° at 144. | FS 19-51 |
| 3,681.4 | 158.35 | | |
| 3,679.0 | 160.75 | Siltstone, greenish gray 5G 6/1 to medium gray. Dip 17° at 160.4. | |
| 3,675.6 | 164.2 | Mudstone, greenish gray 5G 6/1 to dark greenish gray 5GY 4/1 to 165.8. From 163.8 is brownish gray. Dip 15°. | |

Bottomed 3 July 1951

1/ All rock well consolidated except where otherwise noted. Grain sizes given are in accord with the Wentworth Scale. Color names are taken from the Rock Color Chart distributed by the National Research Council, 1948. The word "dip" is used here to indicate the maximum angle between horizontal and the lamination of the rock, thus including foreset beds on which measurements are unavoidably taken.

Traces of carbonate occur in all except the most highly argillaceous beds. No abnormal radioactivity was detected in this core by a Geiger-Mueller counter.

DIAMOND DRILL HOLE SR-6, SILVER REEF DISTRICT, WASHINGTON COUNTY, UTAH ↓
JUNE 1951 Radioactivity of hole

| Elev. | Depth/ft | Rock description | Radioactivity of hole |
|---------|----------|--|-------------------------|
| 3,831.1 | | Alluvium and granitic boulders, as much as 2.2 feet through | |
| 3,793.6 | 37.5 | | |
| | 40.0 | Very fine ss., pale red and pale yellowish orange. Dip 8°. Broken. | |
| | 44.1 | Very fine ss., very pale orange. Dip 38°. | 42.8 to 45.1 480 c.p.m. |
| | 46.3 | Mudstone, pale olive 10Y 6/2. Dip 16°. | |
| | 49.6 | Pale yellowish orange, very fine ss. to 49.6 feet. Below 49.6, 98 percent grayish orange, 1 percent pale red. Dip 17°. | 50.0 feet, 600 c.p.m. |
| | | At 57. feet, dip 22°. Sample FS 26-51..... 64. to 64.3 feet | |
| | | At 57.8 feet, dip 24°. Sample FS 27-51..... 64.3 to 65.3 feet | |
| | | At 59.2 feet, dip 26°. Sample FS 28-51..... 65.3 to 65.95 feet | 62.5 to 65.4 750 c.p.m. |
| 3,766.0 | 65.1 | Green copper mineral on 2 partings at 64.35 feet. Dip 17°. | 65.9 to 64.7 870 c.p.m. |
| | 69.7 | 95% very fine ss., grayish orange, 5% black plant remains. Dip 17°. | |
| | | Very fine ss., pale yellowish orange. Dip 11° at 68.4 feet. | |
| | | Dip 20° at 82.8 feet. | |
| | 83.05 | | |
| | 85.25 | Same ss. with 10% content clay blebs, pale blue green to lt. olive gray | |
| | 86.0 | Very fine ss., pale yellowish orange, 1% clay blebs. | |
| | 86.45 | Very fine ss., pale yellowish orange, 10% clay blebs, pale blue green | |
| 3,743.4 | 87.7 | Same ss. with 3% clay blebs, moderate yellow green. | |
| 3,739.6 | 91.5 | Very fine ss., 30% clay blebs, lt. olive gray to pale blue green. | |
| | 97.2 | Very fine ss., pale yellowish orange. Dip 27° at 93.3. 60° fracture at 92 feet, calcite lined. | |
| | 99.1 | Very fine ss., very light gray. | |
| 3,728.3 | 102.8 | Very fine ss., very pale orange. Dip 22° at 102.2 feet. | |
| | 103.9 | Siltstone, light gray. Dip 11° at 103. ft. | |
| | 106.7 | Mudstone, greenish gray to moderate gray. Folded, crossbedded. | |
| | | Mudstone, dark reddish brown. Dip 15° at 114.5 feet. | |
| | 114.7 | | |
| | 116.7 | Mottled siltstone, dip 15°. Dk. red. brwn., lt. y. orange, lt. gray, red. | |
| | | Siltstone, 80% dk. reddish brown, 20% medium gray. Dip 73° to 10°. | |
| | 121.2 | 80° fracture from 117. to 117.5 feet. | |

Bottomed 26 June 1951

1/ All rock is well consolidated, except where otherwise noted. Grain size in Wentworth scale. Color nomenclature from Rock Color Chart, National Research Council, 1948.

Geology by F. Stugard, Jr.

FIGURE 4—LOGS OF DRILL CORES 4, 5, 6, AND 7, SILVER REEF DISTRICT, WASHINGTON COUNTY, UTAH