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UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

TRACE ELEMENTS INVESTIGATIONS
REPORT 254

DIAMOND DRILL HOLE SR-1, SILVER REEF DISTRICT, WASHINGTON COUNTY, UTAH 1/

JUNE 1951

Elev.	Depth/ft	Rock description	[redacted]	RADIOACTIVITY OF HOLE
3825.4	0	Alluvium of very fine sand and silt. Granitic boulders up to 1.85 feet across. Boulders are typically light gray, medium grained granitic rock, with white feldspar phenocrysts up to 1/8 inch length.		
3849.7	24.3			
	26.65	Fine ss., pale yellowish orange. Bedding planes not apparent.		
	27.2	Fine ss., grayish orange.		
	32.72	Fine ss., grayish orange, some clay content. Broken. Only 20% of core recovered.		
	34.0	Very fine ss., very pale orange. Dip 19°. Lt.brown plant stems.		
	42.30	Very fine ss., very pale orange. Dip 18°. Fracture dipping 70° is coated by hematite and manganese oxide.		
	49.20	Fine ss., very pale orange. Dip 24°. Full core recovery. Fracture from 46. to 46.5 feet has 0.05 in. calcite crust. At 49. ft., 0.01 ft. of clay blebs 1/16 by 1/8 inch.		
	53.40	Fine ss., grayish orange. Dip 30°.	52.20 to 55.2 - 800 [redacted] c.p.m.	
	58.7	Fine ss., dark yellowish orange. Increasingly argillaceous.		
	59.0	Greenish gray clay, sandy impurities.		
	73.15	Fine ss., pale yellowish orange. Dip 30°. Sparse greenish gray clay blebs up to 1/8 inch, along bedding planes.		
	73.33	20% greenish gray clay, 30% very fine ss.		
	73.85	Very fine ss., with greenish gray clay.		
	79.1	Very fine ss., pale yellowish orange. Dip 24°. $CaCO_3$ in cement.		
3742.2	83.20	Very fine ss., pale yellowish orange. Dip 17°. Intergranular cement contains $CaCO_3$. Short vertical fractures $CaCO_3$ coated.		
	84.32	Mudstone, greenish gray. Dip 17°.		
	86.6	Mudstone, light brownish gray. $CaCO_3$ in intergranular cement.		
	88.0	Mudstone, pale olive. Dip 31°.		
	89.5	Mudstone, pale brown.		
	93.0	Very fine ss., yellowish gray and lt.brownish gray. $CaCO_3$ present.		
3728.3	97.1	Very fine ss., yellowish gray. Cement contains carbonate. Clay blebs 0.1 to 2. inches, flattened, pale yellowish green.		
	105.0	Mudstone and siltstone, dark reddish brown and pale olive. Dip 16°.		
	109.4	Mudstone and siltstone, dark reddish brown and pale olive and yellowish gray. Dip 13°. Short vertical fracture, $CaCO_3$ coating.		
	112.4	Mudstone, dusky yellow green mottled with dark reddish brown.		
	118.7	Mudstone, dark reddish brown with pale olive blebs. Dip 16°. Small $CaCO_3$ content.	117. to 117.5 660 c.p.m. [redacted]	
3699.4	126.0	Siltstone, grayish red.	119.1 to 120.3 870 c.p.m. [redacted]	
	128.50	Very fine ss., pale red.		
	130.50	Very fine ss., grayish orange. Dip 7°.		
	138.5	Siltstone, pale red 10R 6/2. Dip 22°.		
3685.0	140.45	Very fine ss., yellowish gray. Dip 15°. Trace of $CaCO_3$.		
	151.90	Siltstone, grayish red 5R 4/2. Dip 15° to 27°.	143.5 to 143.7 730 c.p.m. [redacted]	
3631.4	194.0	Siltstone and mudstone, dark reddish brown 10R 3/4. Dusty surface of rock is pale reddish brown 10 R 5/4; wet surface of rock is very dusky red 10R 2/2.	174.5 to 175.7 930 c.p.m. [redacted]	
	200.5	Siltstone, yellowish gray 5Y 8/1. Dip 15°. Bedding faintly marked by dark streaking.		
	205.90	Siltstone, pale greenish gray and dark reddish brown.		
3616.6	208.80	Broken mudstone, grayish olive.		
		Siltstone and mudstone, dark reddish brown 10R 3/4. Finely crossbedded. Dip along mudstone layers about 21°. Below 249.5, rock is badly broken and soft. Sparse to no carbonate in intergranular cement.		
3562.0	263.45	Bottomed 6 June 1951		

1/ All rock is well consolidated except where otherwise noted. Grain size is given in terms of the Wentworth scale. Color nomenclature is that of the Rock Color Chart distributed by the National Research Council, 1948.

U. S. Geological Survey
OPEN FILE REPORT
This map or illustration is preliminary and has not been edited or reviewed for conformity with Geological Survey standards or nomenclature.

DRILL HOLE SR-2 SILVER REEF DISTRICT, WASHINGTON COUNTY, UTAH 1/

JUNE [redacted] 1951

Elev.	Depth	Rock	[redacted]	RADIOACTIVITY OF HOLE
3,893.6	0.			
	3.9	Overburden/		
	4.0	Very fine ss., very pale orange.		
	8.2	Very fine ss., weak pale red, 5R 6/2. Dip 13°.		
	8.8	Very fine ss., layered 0.05 to 0.3 feet pale red and v. pale or.		
	20.5	Very fine ss., pale red 5R 6/2.		
	29.05	Very fine ss., very pale orange 10YR 8/2. Dip 12° to 15°. Visible detrital muscovite. Traces of carbonate cement throughout.		
	29.70	Clay, light greenish gray 5G 8/1.		
	33.30	Same ss. as 20.5 to 29.05		
	89.45	Very fine ss., very pale orange 10YR 8/4. Dip 5° to 6°. No joints.		
3,730.4	86.90	Mudstone, light olive to pale olive. Dip 5°.		
	93.90	Dip 5°. Mudstone and siltstone, pale red purple, lt.olive & lt.gray spots.		
	107.3	Siltstone, grayish red purple. Dip 10°.		
3,728.5	109.3	Very fine ss., yellowish gray.		
	116.7	Siltstone, dark reddish brown. Dip 4°. Sample FS 6-51 .....116.3 to 116.8 feet.	[redacted] 470 c.p.m. 116.3-116.8 ft.	
	124.2	Siltstone, color laminations 0.05 to 0.3 inches pale purple and grayish yellow. Color boundaries in part cut across bedding. No carbonate in cement. Dip 9°.		
	126.3	Siltstone, dark reddish brown.		
	128.5	Clay, grayish red purple and yellowish gray. Soft, crumbling.		
	135.2	Siltstone, dark reddish brown. Dip 8°. Bottomed 11 June 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.

DRILL HOLE SR-3, SILVER REEF DISTRICT, WASHINGTON COUNTY, UTAH 1/

JUNE 1951

Elev.	Depth	Rock	[redacted]	RADIOACTIVITY OF HOLE
3,808.1	0.			
	16.0	Alluvium, very fine sand and silt, pale reddish brown. An old stream channel.		
3,792.1	32.6	Very fine ss., very pale orange. Dip 8° to 10°. Bedding not prominent, but revealed by scattered clay blebs 0.1 to 0.3 inch long, moderate yellowish brown and pale olive. Rock is mostly quartz grains, with visible muscovite (0.1 percent).	[redacted] 29.9 feet 350 c.p.m. 31.0 feet 380 c.p.m.	
	33.3	90 percent greenish gray clay blebs, 10 percent very fine ss.		
	65.3	Very fine ss., very pale orange. Dip 8° to 22°. Voids 0.1 percent along bedding surfaces. 0.5 percent of rock is clay blebs, light green 5G 7/2 in some layers, light yellowish brown in others.		
3,742.6	66.65	Mudstone, with siltstone, light green 5G 7/2.		
	73.8	Mudstone and siltstone, mingled greenish gray 5G 6/1 and brownish gray 5YR 4/1. Irregular color boundaries. Dip 16° to 21°.		
	78.6	Siltstone, dark reddish brown to very dusky red.		
3,720.1	88.0	Siltstone, dark reddish brown and pale olive. Colorlayers along foreset beds, 0.1 to 0.3 feet thick. Dip 16° to 18°.		
	89.8	Very fine ss., grayish yellow.		
	98.1	Siltstone, dark reddish brown. Dip 17° to 20°.		
3,700.5	107.6	Siltstone, dip 10° to 14°. Grayish yellow to 98.3 feet. Laminated 0.1 inch below 98.3: pale purple, grayish purple, and yellowish gray.		
	113.2	Very fine ss., saccharoidal texture, yellowish gray.		
3,684.5	123.6	Siltstone, dark reddish brown. Bottomed 14 June 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.

Geology by F. Stugard, Jr.

FIGURE 3 - LOG OF DRILL CORES 1, 2, AND 3, SILVER REEF DISTRICT, WASHINGTON COUNTY, UTAH

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