DEPARTMENT OF THE INTERIOR
UNITED STATES GEOLOGICAL SURVEY

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SUMMARY OF INFERRED RESERVES

Inferred reserves - Class A 1/				
Number of group	Location	Schroeckingerite-bearing material (tons)	Average grade (percent uranium)	Uranium (pounds)
A-1	Trench 10	453.3	0.023	209
A-2	Trench 5	1,753.0	.064	2,244
A-3	Trench 1	888.7	.036	640
A-4	Trench 2	1,967.0	.016	629
	TOTALS - - - - - -	5,062.0	2/	3,722

1/ Class A inferred reserves are in four groups. Each group of closely related schroeckingerite deposits contains over 200 pounds of uranium.

2/ Average grade of all 4 groups is 0.037 percent uranium.

Inferred reserves - Class B and Class C

	Class B 1/			Class C 2/		
Number of block	Schroeckingerite deposits (tons)	Average grade (percent uranium)	Uranium (tons)	Rock (tons)	Average grade (percent uranium)	Uranium (tons)
Block 1	190	0.021	0.04	61,900	0.004	2.48
2	2,030	.028	.57	398,400	.004	15.94
3	9,650	.032	3.09	607,100	.005	33.36
4	21,910	.020	4.38	656,000	.004	26.24
5	15,180	.016	2.43	312,000	.004	12.48
6	70	.026	.02	2,100	.004	0.08
7	1,960	.031	.61	486,400	.004	19.46
8	760	.031	.24	187,900	.004	7.52
9	12,450	.057	7.10	299,500	.006	15.57
10	29,740	.039	11.60	664,700	.005	33.24
11	21,450	.022	4.72	401,900	.004	16.08
12	19,770	.020	3.95	336,700	.004	13.47
13	7,440	.019	1.41	318,800	.003	9.56
14	8,330	.019	1.58	399,500	.003	11.98
15	3,270	.015	.49	243,700	.003	7.31
16	170	.012	.02	10,000	.002	.20
TOTALS - -	134,370	3/	42.25	5,406,700	4/	224.97

1/ Class B inferred reserves consist of schroeckingerite deposits only, as inferred in Blocks 1-16. These reserves include the smaller amount shown as Class A reserves.

2/ Class C inferred reserves consist of both the host rock and schroeckingerite deposits in a zone 6 feet thick lying below overburden 2 feet thick in Blocks 1-16. These reserves include the amount of uranium shown in Class B reserves.

3/ Average grade of all schroeckingerite deposits in Blocks 1-16 is 0.027 percent uranium (figure is based on tonnage figures).

4/ Average grade of rock in the zone, 6 feet thick, is 0.004 percent uranium.

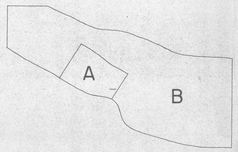
SUMMARY OF GRADE DATA FOR SCHROECKINGERITE DEPOSITS AND HOST ROCK IN TRENCHES 1-12

	Schroeckingerite deposits			Host rock		
Trench	Total area of schroeckingerite deposits on both walls of trench (square feet)	Range in uranium content - individual samples (percent uranium)	Average grade of schroeckingerite deposits 1/ (percent uranium)	Total length of channel samples (feet)	Range in uranium content - individual samples (percent uranium)	Average grade of the sampled host rock 2/ (percent uranium)
1 3/	613.8	0.001 - 0.260	0.026	1,335.6	0.000 - 0.021	0.003
2	809.2	.002 - .085	.020	798.5	.000 - .012	.003
3	258.6	.003 - .075	.020	470.0	< .001 - .024	.003
4	74.6	.002 - .037	.015	309.5	.001 - .011	.002
5	550.0	.003 - .150	.050	873.5	.000 - .029	.003
6	69.6	.003 - .066	.016	310.0	< .001 - .006	.003
7	244.7	.002 - .120	.031	1,240.0	< .001 - .039	.004
8	47.3	.008 - .071	.029	290.0	.001 - .011	.005
9	14.2	.005 - .034	.021	150.0	.001 - .007	.003
10	432.7	.001 - .074	.015	570.0	.001 - .011	.003
11	22.7	.006 - .033	.026	60.0	.002 - .009	.004
12	23.3	.002 - .033	.012	90.0	.001 - .003	.003
TRENCHES 1-12	3,160.7	0.001 - 0.260	0.026	6,497.1	0.000 - 0.039	0.003

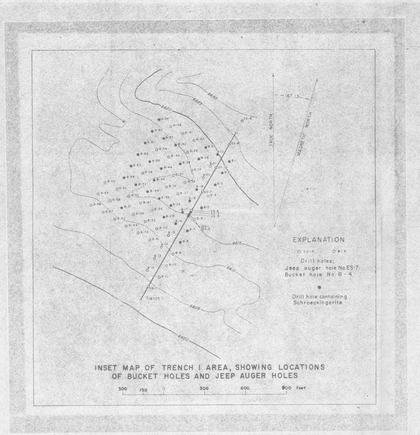
1/ Average grade of schroeckingerite deposits in each trench was computed by a process of weighted averages, using the area represented by each sample as a weighting factor.

2/ Average grade of the sampled host rock in each trench was computed by a process of weighted averages, using the length of each sample as a weighting factor.

3/ Data for Trench 1 include both the main trench and the wide-cut.



A.–Mapped by D.G. Wyant, W.N. Sharp, and H. L. Bauer, 1949. Revised by D.M. Sheridan, C.H. Maxwell, and J.T. Collier, 1952.
B.–Mapped by D.M. Sheridan, C.H. Maxwell, J.T. Collier, and A.W. Rose, 1952.



INSET MAP OF TRENCH I AREA, SHOWING LOCATIONS OF BUCKET HOLES AND JEEP AUGER HOLES

EXPLANATION

Quaternary deposits not shown

Green River and Wasatch formations

Tgr, Cathedral Bluffs tongue of Wasatch formation, Tgr, Tipton tongue of Green River formation, Tgw, undifferentiated complex interfingered Tipton tongue of Green River formation and Hoiwamba member of Wasatch formation (Wightman, 1952)

Patterns restricted to areas of outcrop

Contact, showing dip
Long dashes where approximately located. Short dashes where concealed 1/

Limit of outcrop

Fault, showing dip

Concealed fault showing dip, as observed in trenches. U, upthrown side, D, downthrown side 1/

Strike and dip of Tertiary beds, as observed in trenches

Trench I / Trench 9

United States Geological Survey exploratory trench number 1, showing wide cut, and trench number 9

Drill trench 2/

United States Geological Survey jeep auger hole number ES-87. DH, drill hole number 87.35

Old prospect pits and bulldozed cuts 2/

Locations of known schroeckingerite deposits shown by + in trenches and in cut bank along Lost Creek, by solid black in drill holes, prospect pits, and bulldozed cuts

Schroeckingerite observed on dump of old trench, not exposed in caved or filled trench

1/ The locations of concealed contacts and concealed faults were determined partly by projection of known data from outcrops, trenches, and drill holes and partly by interpretation of aerial photographs.

2/ Old trenches, old drill holes, and old prospect pits and bulldozed cuts were excavated prior to exploratory work by the United States Geological Survey.

Limits of Class B Reserves
Trench lines form boundaries between blocks

6
Number of blocks in Class B Reserves

A-2
Location of Group 2, Class A Reserves

Data on grade and reserves by D.M. Sheridan, J.T. Collier, and C.H. Maxwell

PLATE 27.–DETAILED MAP OF THE EXPLORATION AREA AND DATA ON RESERVES, LOST CREEK SCHROECKINGERITE DEPOSITS, SWEETWATER COUNTY, WYOMING

300 0 300 600 900 1200 1500 1800 2100 2400 2700 FEET

Contour interval 5 feet
Datum is approximate mean sea level

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