U. S. GEOLOGICAL SURVEY

DIAMOND DRILL LOGS

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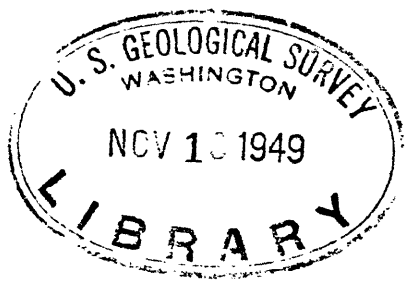
KOKOMO (TENMILE) ZINC-LEAD MINING DISTRICT, COLORADO



U. S. Geological Survey diamond drill logs, Kokomo (Tenmile) zinc-lead mining district, Colorado

Introduction

The Kokomo (Tenmile) zinc-lead district, which is part of an extensive mineralized area in the Tenmile Range of north-central Colorado, is an important source of base metals, chiefly zinc and lead. The most productive ore deposits are replacement bodies found chiefly in the Robinson and White Quail limestone members of the Dyer Gulch formation of Pennsylvanian and Permian (?) age, and locally in Mayflower Creek in the Leadville limestone of Mississippian age.

The rocks of the district are folded into a shallow north-plunging syncline. The Mosquito fault, which has a throw of 2,000 or 3,000 feet, has cut off a large part of the east limb of the syncline. The known ore bodies occur chiefly in a relatively narrow northeast-trending zone on the west limb of the syncline, but scattered prospect holes and outcrops show that a more extensive area than the productive zone, including parts of the east limb of the syncline, is mineralized. However, because of a deep cover of glacial drift, outcrops are absent in relatively large areas on the east limb of the syncline, and north of the Wilfley mine on the west limb, and relatively little effective exploration and prospecting have been done there.

The White Quail limestone, the most extensively mineralized and most productive limestone in the district, does not crop out on the east limb of the syncline and is covered in a large area on the west limb also. The Robinson limestone crops out in only one place on the east limb of the syncline, and there, in the Index of Yukon mine, a

small but rich lead-zinc ore body was found. As many prospect holes and scattered outcrops show that mineralization is widespread in the covered areas on the east limb of the syncline and on the west limb north of the Wilfley mine, and as structural features favorable to the localization of ore are indicated to be present in these areas, prospecting by drilling is economically justified wherever the productive limestone beds are present at reasonable depth.

In order to gain geologic information that can be used to delineate the most favorable areas for prospecting, and to remove such prospecting from the status of expensive "wildcatting", the Geological Survey undertook its drilling program.

The drill holes are located as follows: On the east limb of the syncline are six, four of which are in Mayflower Creek and two in Clinton Creek; one is on the west limb in Searle Gulch.

Diamond drill logs

DIAMOND DRILL HOLE NUMBER: 1

LOCATION: Mayflower Gulch, 900 feet N. 30° E. of portal of Boston mine.

ALTITUDE OF COLLAR: 11,470 feet (approx.)

DIP OF HOLE: -45°. BEARING: Due east. DEPTH: 70.0 feet

DRILLING DATES: July 12-20, 1948.

From (feet)	To (feet)	Core recovery (percent)	Description
0	47.0	0	Overburden of glacial drift.
47.0	50.0	5	Quartzite, white with purple streaks, vitreous, fine-grained. Sawatch quartzite of Cambrian age.
50.0	54.0	3	Quartzite, as above.
54.0	56.0	0	Quartzite, as above (from sludge).
56.0	60.0	18	Quartzite, as above, purple, pyritic.
60.0	63.0	8	Quartzite, as above.
63.0	65.0	0	Quartzite, as above (from sludge).
65.0	67.0	15	Quartzite, as above, pink at base, fractured.
67.0	70.0	29	Quartzite, as above, fractured and brecciated; cut by pyrite veinlets. Fault zone?

(Hole abandoned at 70.0 feet; casing lost in hole)

DIAMOND DRILL HOLE NUMBER: 2-A.

LOCATION: 282 feet N. 83° W. of drill hole No. 1.

ALTITUDE OF COLLAR: 11,515 feet (approx.).

DIP OF HOLE: -45° BEARING: Due east. DEPTH: 56.0 feet

DRILLING DATES: July 22-28, 1948.

From (feet)	To (feet)	Core recovery (percent)	Description
0	56.0	2	Overburden of glacial drift. The drift contains boulders of granite, gneiss, Lincoln porphyry.

The casing was lost so the hole was abandoned at 56.0 feet.

DIAMOND DRILL HOLE NUMBER: 2 .

LOCATION: Same location as drill hole No. 2-A.

ALTITUDE OF COLLAR: 11,515 feet (approx.).

DIP OF HOLE: -65° BEARING: Due east. DEPTH: 285.0 feet.

DRILLING DATES: July 29 - August 11, 1948.

(Bedding angle given below is the angle of bedding in the core, measured with respect to a plane perpendicular to the core or line of the hole. It would represent true dip in a vertical hole.)

From (feet)	To (feet)	Core recovery (percent)	Bedding angle (degrees)	Description
0	20.0	0		Overburden of glacial drift; contains boulders of gneiss, granite, Elk Mountain porphyry; boulders in gravel, sand, and clay.
20.0	34.0	2		Sandstone, gray, coarse-grained, micaceous, arkosic.
34.0	38.0	2		Sandstone, red, fine-grained, micaceous, arkosic.
38.0	43.0	8		Sandstone, red, medium- to coarse-grained, micaceous, arkosic.
43.0	65.0	20		Siltstone, red fine-grained, micaceous. Contains a fault zone, probably bedding plane movement.
65.0	75.0	10		Sandstone, red to green, fine-grained, micaceous.
75.0	84.0	40		Grit, white, arkosic, medium-grained, micaceous
84.0	87.0	40		Grit, red.

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DIAMOND DRILL HOLE NO. 2, continued.

From (feet)	To (feet)	Core recovery (percent)	Bedding angle (degrees)	Description
87.0	96.0	20		Grit, white, coarse-grained, micaceous, arkosic.
96.0	97.0	80	8	Siltstone, red, fine-grained, micaceous.
97.0	106.0	5		Grit, red, medium-grained, arkosic, micaceous. Base of BX core.
106.0	116.0	20		Sandstone, red, coarse-grained, micaceous, arkosic; fractured throughout.
116.0	138.0	20		Sandstone, red with gray streaks, fine-grained, micaceous; fractured throughout.
138.0	152.0	10		Sandstone, gray, medium-grained, micaceous, arkosic.
152.0	160.0	10		Siltstone, gray and red, fine-grained. Contains a fault zone, probably movement on bedding plane.
160.0	182.0	25		Sandstone, gray, fine-grained; much-fractured.
182.0	202.0	25		Sandstone, pink to gray, coarse-grained, arkosic, micaceous.
202.0	207.0	0		Quartz sand, gray, angular grains; probably a fault zone.
207.0	217.0	22		Sandstone, gray, fractured, fine-grained.
217.0	220.0	10		Sandstone, red, fine-grained, micaceous, arkosic, fractured.
220.0	225.0	15		Sandstone, pink, coarse-grained, arkosic, fractured.
225.0	235.0	25		Siltstone, greenish gray; cut by small faults.
235.0	238.0	6		Fault gouge (sandstone, siltstone, sericite).

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DIAMOND DRILL HOLE NUMBER: 3

LOCATION: 2,460 feet N. 23° W. of drill hole No. 1 on northeast side of Mayflower Creek.

ALTITUDE OF COLLAR: 11,310 feet (approx.)

DIP OF HOLE: -55° BEARING: Due east. DEPTH: 265.0 feet

DRILLING DATES: August 8 - September 1, 1948.

From (feet)	To (feet)	Core recovery (percent)	Bedding angle (degrees)	Description
0	15.0	0		Overburden of glacial drift.
15.0	45.0	10		Sandstone, red, fine-grained, micaceous.
45.0	61.0	20		Siltstone, dark red, fine-grained, micaceous, sandy in streaks.
61.0	70.0	8		Sandstone, red, coarse-grained, micaceous, arkosic, fractured.
70.0	72.0	8		Siltstone, red, micaceous.
72.0	92.0	25		Grit, gray to pink, coarse, fractured.
92.0	96.0	10		Sandstone, red, silty, micaceous, arkosic.
96.0	102.0	0		Sandstone, red, medium-grained, (sludge).
102.0	103.0	5		Sandstone, coarse-grained, pink, arkosic, micaceous.
103.0	107.0	5		Sandstone, red, micaceous.
107.0	112.0	6		Sandstone, gray to pink, medium- to coarse-grained, micaceous, arkosic.
112.0	125.0	5		Sandstone, pink, coarse-grained, micaceous, arkosic.

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DIAMOND DRILL HOLE NO. 2, continued.

From (feet)	To (feet)	Core recovery (percent)	Bedding angle (degrees)	Description
238.0	242.0	20		Siltstone, greenish gray, micaceous; sheeting indicates movement.
242.0	252.0	2		Clay, gray, sericitic--gouge?
252.0	275.0	0		Fault zone. Fine-grained, white, angular quartz sand in sludge. Micaceous.
275.0	285.0	5		Quartzite, white, vitreous, fine-grained. Sawatch quartzite of Cambrian age.

DIAMOND DRILL HOLE NO. 3, continued.

From (feet)	To (feet)	Core recovery (percent)	Bedding angle (degrees)	Description
125.0	127.0	0		Probably same as above.
127.0	132.0	10		Sandstone, dark red, coarse-grained, arkosic.
132.0	162.0	20		Grit, gray, coarse, arkosic, micaceous.
162.0	175.0	20		Siltstone, red, micaceous.
175.0	183.0	10		Sandstone, dark red, coarse-grained, arkosic.
183.0	193.0	15		Grit, dark red, arkosic, micaceous, medium-grained.
193.0	199.0	5		Sandstone, red; angular quartz grains; fault zone?
199.0	200.0	15		Siltstone, greenish gray, fine-grained, micaceous, very dense, calcareous.
200.0	215.0	20		Grit, red, coarse-grained, micaceous, arkosic.
215.0	218.0	20		Sandstone, gray, medium-grained, micaceous.
218.0	232.0	0		Quartz sand, white, micaceous (disintegrated sandstone); fault zone?
232.0	244.0	20		Sandstone, white, to gray, coarse-grained, arkosic, micaceous.
244.0	245.0	10		Grit, gray, coarse.
245.0	246.0	12		Siltstone, red, fine-grained, micaceous.
246.0	247.0	10		Shale, black, fine-grained, calcareous.
247.0	249.0	15		Grit, gray, coarse-grained, micaceous.

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DIAMOND DRILL HOLE NO. 3, continued.

From (feet)	To (feet)	Core recovery (percent)	Bedding angle (degrees)	Description
249.0	250.0	70		Siltstone, gray, calcareous, fine-grained, dense.
250.0	251.0	100		Siltstone, red, micaceous; contains sandy streaks.
251.0	254.0	41		Sandstone, pink to red, medium- to coarse-grained, micaceous, arkosic.
254.0	263.0	100		Grit, pink, coarse, micaceous, arkosic; much green material (clay) in interstices of sand.
263.0	264.0	100		Mudstone, red.
264.0	265.0	0		Quartz sand, red, micaceous. Sand under such pressure that it was pushed out of AX casing.
				Hole abandoned at this depth.

DIAMOND DRILL HOLE NUMBER: 4

LOCATION: West slope of Gold Hill; 1,300 feet due east of Gagen Tunnel.

ALTITUDE OF COLLAR: 11,285 feet (approx.)

DIP OF HOLE: -45° BEARING: Due east. DEPTH: 920.0

DRILLING DATES: September 3 - December 4, 1948.

(Bedding angle given below is the angle of bedding in the core, measured with respect to a plane perpendicular to the core or line of the hole. It would represent true dip in a vertical hole.)

From (feet)	To (feet)	Core recovery (percent)	Bedding angle (degrees)	Description
0	25.0	0		Overburden, residual; clay, boulders of red sandstone and Elk Mountain prophyry.
25.0	29.0	0		Sandstone, brown, medium-grained, micaceous. Sludge.
29.0	32.0	37	24	Sandstone, red, fine- to medium-grained, micaceous.
32.0	55.0	25	24	Grit, red to brown.
55.0	74.0	55	15	Sandstone, red, medium-grained.
74.0	84.0	41	18	Sandstone, red, fine-grained.
84.0	87.0	72		Siltstone, red, micaceous.
87.0	93.0	80		Sandstone, red, fine- to medium-grained.
93.0	96.0	80		Siltstone, red, with green streaks.
96.0	127.0	65		Sandstone, red, fine-to medium-grained.
127.0	137.0	36		Grit, gray to pink, coarse.
137.0	148.0	89	20	Sandstone, red, medium- to coarse-grained.
148.0	149.0	89		Siltstone, red, micaceous.
149.0	154.0	83		Sandstone, red, fine- to medium-grained.

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DIAMOND DRILL HOLE NO. 4, continued

From (feet)	To (feet)	Core recovery (percent)	Bedding angle (degrees)	Description
154.0	160.0	83		Sandstone, red, coarse-grained
160.0	161.0	83		Siltstone, red, medium-grained, sandy, micaceous.
161.0	176.0	34		Grit, pink, medium-grained, arkosic, micaceous, contains pebbles up to 3/4 inch in diameter.
176.0	178.0	37	20	Sandstone, red, medium- to coarse-grained, micaceous, arkosic.
178.0	194.0	26		Sandstone and grit, pink to red, coarse-grained, micaceous, arkosic.
194.0	196.0	24		Siltstone, greenish gray, medium-grained, sandy, micaceous.
196.0	223.0	78		Grit, pink, coarse-grained, with silty streaks; trace of pyrite and sphalerite at 202 feet, probably along small fracture.
223.0	226.0	69		Siltstone, red, fine-grained, micaceous.
226.0	227.0	69		Sandstone, gray to pink, coarse-grained, arkosic, micaceous.
227.0	228.0	69		Siltstone, red, fine-grained, micaceous.
228.0	234.0	74		Sandstone, pink, coarse-grained, micaceous, arkosic.
234.0	252.0	52	12	Sandstone, red, grit streaks, coarse-grained, micaceous, arkosic.
252.0	372.0	31		Elk Mountain porphyry, light greenish gray, very fine-grained groundmass, pyritic. Mineralized from 285.8 to 363.2 feet. Porphyry is cut by veinlets of sulfides, quartz, and dolomite, and contains disseminated grains of sulfides. Veinlets are almost parallel to core. (However, only part of core was assayed). Assay results follow:

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ASSAY RESULTS

From (feet)	To (feet)	Core Recovery (percent)	Pb (percent)	Zn (percent)	Au (oz./ton)	Cu (percent)
285.9	296.0		* 0.05	* 0.05	0.01	* 0.05
296.0	306.0		* 0.05	* 0.05	0.01	* 0.05
306.0	313.0		* 0.05	* 0.05	0.01	* 0.05
313.0	317.0		0.16	0.4	0.01	* 0.05
317.0	324.0		0.16	1.01	0.01	* 0.05

* Indicates less than.

372.0	377.0	40	Siltstone, red, micaceous; calcite veinlets in fractures.
377.0	403.0	32	Sandstone, red, medium-grained, micaceous, arkosic.
403.0	414.0	23	Grit, coarse, pink, arkosic, micaceous.
414.0	420.0	12	Siltstone, red, fine-grained, micaceous, arkosic.
420.0	434.0	26	Grit, gray to pink, arkosic, coarse-grained, micaceous.
434.0	438.0	55	Sandstone, red, coarse-grained, arkosic, micaceous.
438.0	445.0	13	Sandstone, pink to red, medium-grained, arkosic, micaceous.
445.0	449.0	12	Grit, red, medium-grained, micaceous, arkosic.
449.0	468.0	38	Grit, gray to pink, coarse-grained, micaceous, arkosic.
468.0	469.0	55	Siltstone, light gray, medium-grained, sandy, micaceous.
469.0	471.0	13	Grit, as above.
471.0	476.0	42	Sandstone, gray, coarse-grained; faulted, much black shaly gouge in fractures; no mineralization.
476.0	477.0	0	Siltstone or mudstone, red, fine-grained; may be caved in from hole above.
477.0	481.0	51	Sandstone, light gray, medium-grained, arkosic, micaceous; some fractures filled with dolomite & traces of pyrite.

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DIAMOND DRILL HOLE NO. 4, continued.

From (feet)	To (feet)	Core recovery (percent)	Bedding angle (degrees)	Description
481.0	486.0	34	8	Siltstone, medium to dark gray, fine-grained, calcareous; may be "marker bed" usually found from 80 to 100 feet above the upper part of the White Quail limestone. Member of the Menturn formation.
486.0	489.0	30		Sandstone, light gray, medium-grained, micaceous, arkosic.
489.0	507.0	46		Sandstone, greenish gray, with red streaks and red shaly partings, fine-grained, fractured, carbonaceous, micaceous. Gouge (0.6 foot) at 506.1 feet, may indicate fault zone. Base of AX core at 500.7.
507.0	510.0	70		Siltstone, red, micaceous, fine-grained.
510.0	511.0	100		Gouge, red; fault or caved in material?
511.0	517.0	91	9	Sandstone, greenish gray with red streaks and shaly partings, fine-grained, micaceous, fractured.
517.0	528.0	85	12	Siltstone, dark gray, fine-grained, sandy, micaceous, fractured; contains streaks of red sandstone.
528.0	535.0	44		Sandstone, red, fine-grained, micaceous, arkosic.
535.0	547.0	100		Grit, medium gray, medium-grained, arkosic, micaceous, pyritic; a few thin siltstone layers at top; 0.1 foot gouge at 537 feet.
547.0	559.0	76		Siltstone, and dolomite in thin beds, gray to black, carbonaceous; fractures filled with dolomite and calcite; trace of pyrite. This is probably the upper part of the White Quail limestone member. If so, the middle White Quail limestone, one of the main producers at Kokomo, is either faulted out or is below the porphyry sill which was penetrated at 583.0 feet, and in which the hole bottomed.

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DIAMOND DRILL HOLE NO. 4, continued.

From (feet)	To (feet)	Core recovery (percent)	Bedding angle (degrees)	Description
559.0	560.0	73		Grit, dark gray, shaly, coarse-grained, arkosic, micaceous.
560.0	564.0	73		Grit, light gray, medium-grained, arkosic, micaceous.
564.0	581.0	38		Sandstone, medium gray, fine- to medium-grained, arkosic, micaceous, carbonaceous in streaks.
581.0	583.0	57		Siltstone, dark gray, fine-grained, micaceous; may be part of upper silty unit of the middle part of the White Quail limestone.
583.0	605.0	90		Elk Mountain porphyry, light gray groundmass; medium-grained pyrite disseminated throughout.
605.0	609.0	89		Porphyry, as above, but dark gray color.
609.0	920.0	65		Porphyry, medium gray, groundmass and phenocrysts are consistently finer than porphyry above and rock resembles Quail porphyry more than Elk Mountain porphyry. Very little mineralization.
				Hole abandoned at 920 feet because drill reached its maximum depth and winter weather prevented bringing in another drill.

DIAMOND DRILL HOLE NUMBER: 5

LOCATION: West bank of Clinton Creek; 6,600 feet S. 20° E. of junction of Clinton and Tenmile Creeks.

ALTITUDE OF COLLAR: 10,935 (approx.)

DIP OF HOLE: -45° at collar, -47° at 400 feet, - 49° at 641 feet, caved below. BEARING: Due east at collar. DEPTH: 987 feet.

DRILLING DATES: April 27 - August 23, 1949

(Bedding angle given below is the angle of bedding in the core, measured with respect to a plane perpendicular to the core or line of the hole. It would represent true dip in a vertical hole.)

From (feet)	To (feet)	Core recovery (percent)	Bedding angle (degrees)	Description
0	63.0	0		Overburden of glacial drift.
63.0	181.0	18.4	13° (at 135')	Sandstone, red, coarse-grained, arkosic, micaceous, base NX core at 150.0'.
181.0	190.0	15.0		Sandstone, pink to red, fine-grained, micaceous; fractures filled with calcite and dolomite.
190.0	200.0	13.0		Sandstone, gray, fine-grained, micaceous; fractures filled with dolomite.
200.0	205.0	13.0		Sandstone, pink, medium-grained, micaceous, arkosic.
205.0	206.0	40.5		Grit, pink, medium-grained, arkosic, micaceous.
206.0	215.0	43.0		Sandstone, pink to red, medium-grained, micacecus, arkosic; fractures filled with dolomite.
215.0	224.0	14.0		Sandstone, pink to gray, coarse-grained, arkosic, micaceous.
224.0	261.0	13.0	70°	Sandstone, red, fine- to medium-grained, micaceous, fractured.
261.0	265.0	17.5		Siltstone, dark gray, fine-grained, contains fragments of Elk Mountain porphyry — breccia?

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DIAMOND DRILL HOLE NO. 5 continued

From (feet)	To (feet)	Core recovery (percent)	Bedding angle (degrees)	Description
265.0	271.0	52.0		Porphyry, probably Elk Mountain, intensely sheared, many fault planes with black carbonaceous gouge up to 1/2". Probably a fault with considerable displacement due to thinning of the porphyry which is 100 feet or more thinner than in hole No. 4.
271.0	289.0	20.5		Elk Mountain porphyry, light greenish groundmass, Upper part well fractured.
289.0	301.0	16.0		Sandstone, pink, medium- to coarse-grained, micaceous, arkosic.
301.0	321.0	56.0	5°	Sandstone, red, fine-grained, banded micaceous; fractures filled with dolomite and traces of pyrite.
321.0	323.0	75.0	2°	Sandstone, greenish gray, coarse-grained, micaceous.
323.0	335.0	63.0		Sandstone, red, medium- to coarse-grained, arkosic, micaceous.
335.0	346.0	54.0		Sandstone, gray, coarse-grained, micaceous.
346.0	349.0	100.0		Sandstone, red, medium- to coarse-grained, with silty streaks, arkosic, micaceous.
349.0	350.0	100.0		Siltstone, red, fine-grained, micaceous.
350.0	364.0	81.5		Grit, gray, coarse-grained, micaceous.
364.0	374.0	38.0		Siltstone, dark gray, fine-grained, upper 4' dolomitic and pyritized; may be the upper part of the White Quail limestone member.
374.0	378.0	31.0		Sandstone, green to gray, coarse-grained, micaceous, arkosic.
378.0	384.0	29.0		Siltstone, green, gray, and red beds, fine-grained, micaceous.

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DIAMOND DRILL HOLE NO. 5, continued

From (feet)	To (feet)	Core recovery (percent)	Bedding angle (degrees)	Description
384.0	392.0	46.0		Grit, light gray, coarse-grained, micaceous.
392.0	394.0	46.0		Siltstone, red, fine-grained, micaceous.
394.0	397.0	39.7		Grit, light gray, coarse-grained, micaceous.
397.0	399.0	38.5		Siltstone, red, fine-grained, micaceous.
399.0	409.0	38.5		Grit, light gray, coarse-grained, micaceous.
409.0	414.0	42.0		Siltstone, dark gray, green, and red beds, fine-grained, micaceous, fractures filled with dolomite; several bedding planes show movement.
414.0	420.0	37.0		Grit, light gray, medium-grained micaceous.
420.0	555.0	26.7		Elk Mountain porphyry, traces of pyrite throughout.
555.0	988.0	61.5		Elk Mountain porphyry, traces of pyrite at 560 and 636 to 927 feet; veinlets containing pyrite, sphalerite, and galena at depths of 640, 682, 709 to 710, 749 to 751, and 890 feet. Possibly a fault at 640 feet.

DIAMOND DRILL HOLE NUMBER: 6

LOCATION: Searle Gulch on north bank of creek, 3,000 feet N. 41° W. of portal of Wilfley mine.

ALTITUDE OF COLLAR: 10,990 feet (approx.)

DIP OF HOLE: -45° BEARING: S. 50° W. DEPTH: 466.0 feet

DRILLING DATES: December 2 - January 19, 1949.

(Bedding angle given below is the angle of bedding in the core, measured with respect to a plane perpendicular to the core or line of the hole. It would represent true dip in a vertical hole.)

From (feet)	To (feet)	Core recovery (percent)	Bedding angle (degrees)	Description
0	45.0	0		Overburden of glacial drift.
45.0	74.0	68	18	Sandstone, red, with green streaks and shaly partings, medium-grained, micaceous, arkosic; 1- to 2-inch beds of fine-grained sandstone.
74.0	80.0	100	10	Sandstone, as above.
80.00	84.0	100	8	Sandstone, red with white streaks, coarse-grained; some grit lenses.
84.0	85.0	98		Siltstone, dark gray, shaly.
85.0	89.0	94		Sandstone and grit, red, coarse-grained, arkosic, micaceous.
89.0	90.0	94	12	Siltstone, light gray, micaceous.
90.0	91.0	94		Sandstone, red with calcareous white patches, medium-grained, micaceous.
91.0	92.0	94	13	Siltstone, mottled red and green, micaceous.
92.0	124.0	79	15	Sandstone, red with gray streaks, fine-grained, micaceous; 0.4-foot coarse red sandstone at 100.6 feet; fractures filled with calcite at 105.5 and 105.8 feet.
124.0	125.0	73		Sandstone, green, coarse-grained, micaceous.

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DIAMOND DRILL HOLE NO. 6, continued.

From (feet)	To (feet)	Core recovery (percent)	Bedding angle (degrees)	Description
125.0	149.0	74		Sandstone, fine- to medium-grained, red with gray streaks, arkosic, micaceous.
149.0	150.0	80		Siltstone, red with gray streaks, micaceous.
150.0	156.0	57		Sandstone, fine-grained, red, with gray streaks, micaceous.
156.0	157.0	57		Siltstone, red, fine-grained, micaceous.
157.0	158.0	57		Limestone, mottled gray, fine-grained.
158.0	159.0	58		Limestone, mottled red, fine-grained, silty.
159.0	162.0	60		Limestone, mottled gray to brown, fine-grained.
162.0	164.0	60		Limestone, mottled red, silty, fine-grained.
164.0	165.0	60		Siltstone, red, fine-grained, sandy.
165.0	166.0	60		Limestone, mottled, gray and red, fine-grained, fractured.
166.0	172.0	60	13	Sandstone, coarse-grained, pink, micaceous, arkosic.
172.0	181.0	97		Siltstone, red with gray limy spots, fine-grained.
181.0	190.0	96	11	Sandstone, red with gray beds, fine-grained, micaceous.
190.0	195.0	98	12	Sandstone, red, coarse-grained, micaceous, arkosic; fractures filled with calcite.
195.0	210.0	100	14	Sandstone, red with gray streaks, fine-grained, micaceous, arkosic.

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DIAMOND DRILL HOLE NO. 6, continued.

From (feet)	To (feet)	Core recovery (percent)	Bedding angle (degrees)	Description
210.0	211.0	99		Conglomerate containing pebbles of pink limestone up to 1.5 inches in diameter; groundmass is micaceous sandstone.
211.0	213.0	93		Siltstone, red, fine-grained, micaceous.
213.0	217.0	93		Conglomerate, red, micaceous, arkosic; pebbles up to one-half inch in diameter.
217.0	221.0	100	16	Sandstone, red with gray streaks, fine-grained, contains limy spots, micaceous.
221.0	255.0	100	15	Sandstone, coarse-grained, pink to red, arkosic, micaceous; fractured and leached from 241 to 245 feet; white spots near base.
255.0	256.0	100		Siltstone, gray, fine-grained, micaceous, calcareous.
256.0	271.0	91		Sandstone, medium- to coarse-grained, red, arkosic, micaceous. Base BX core at 270.6.
271.0	274.0	96		Sandstone, red, fine-grained, micaceous, limy in spots.
274.0	278.0	86		Siltstone, red and gray, fine-grained, micaceous, calcareous.
278.0	280.0	91	18	Sandstone, dark gray, medium-grained, limy in spots.
280.0	302.0	75		Sandstone, red with gray streaks, medium- to coarse-grained, arkosic, micaceous.
302.0	308.0	100		Sandstone, gray, coarse-grained, micaceous, arkosic.
308.0	316.0	94		Limestone and siltstone in thin beds, dark gray, fine-grained; upper part of White Quail limestone member.

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DIAMOND DRILL HOLE NO. 6, continued.

From (feet)	To (feet)	Core recovery (percent)	Bedding angle (degrees)	Description
316.0	318.0	70		Sandstone, pink, coarse-grained, micaceous.
318.0	321.0	70		Sandstone, gray, coarse-grained, micaceous.
321.0	325.0	70		Conglomerate, gray; 25 percent of pebbles are dark gray limestone, rest are micaceous, medium-grained arkose.
325.0	329.0	91		Sandstone, gray, fine- to medium-grained.
329.0	330.0	91		Siltstone, dark gray, fine-grained, limy in spots.
330.0	333.0	91		Sandstone, pink, fine-grained, micaceous, with silty streaks.
333.0	337.0	85		Sandstone, light gray, coarse-grained, micaceous.
337.0	448.0	40		Elk Mountain porphyry, light-gray groundmass, medium-grained.
448.0	453.0	28		Sandstone, dark gray, silty, medium- to fine-grained, micaceous.
453.0	462.0	18		Limestone, dark gray, fine-grained, fossiliferous; fractures filled with calcite; trace of pyrite; upper part of the middle part of White Quail limestone member.
462.0	463.0	20		Sandstone, medium gray, fine-grained, micaceous.
463.0	466.0	7		Porphyry, as above.