

U.S. Corps of Engineers Coreholes - Silver City Dome

29, 32 - 26 S - 15 E

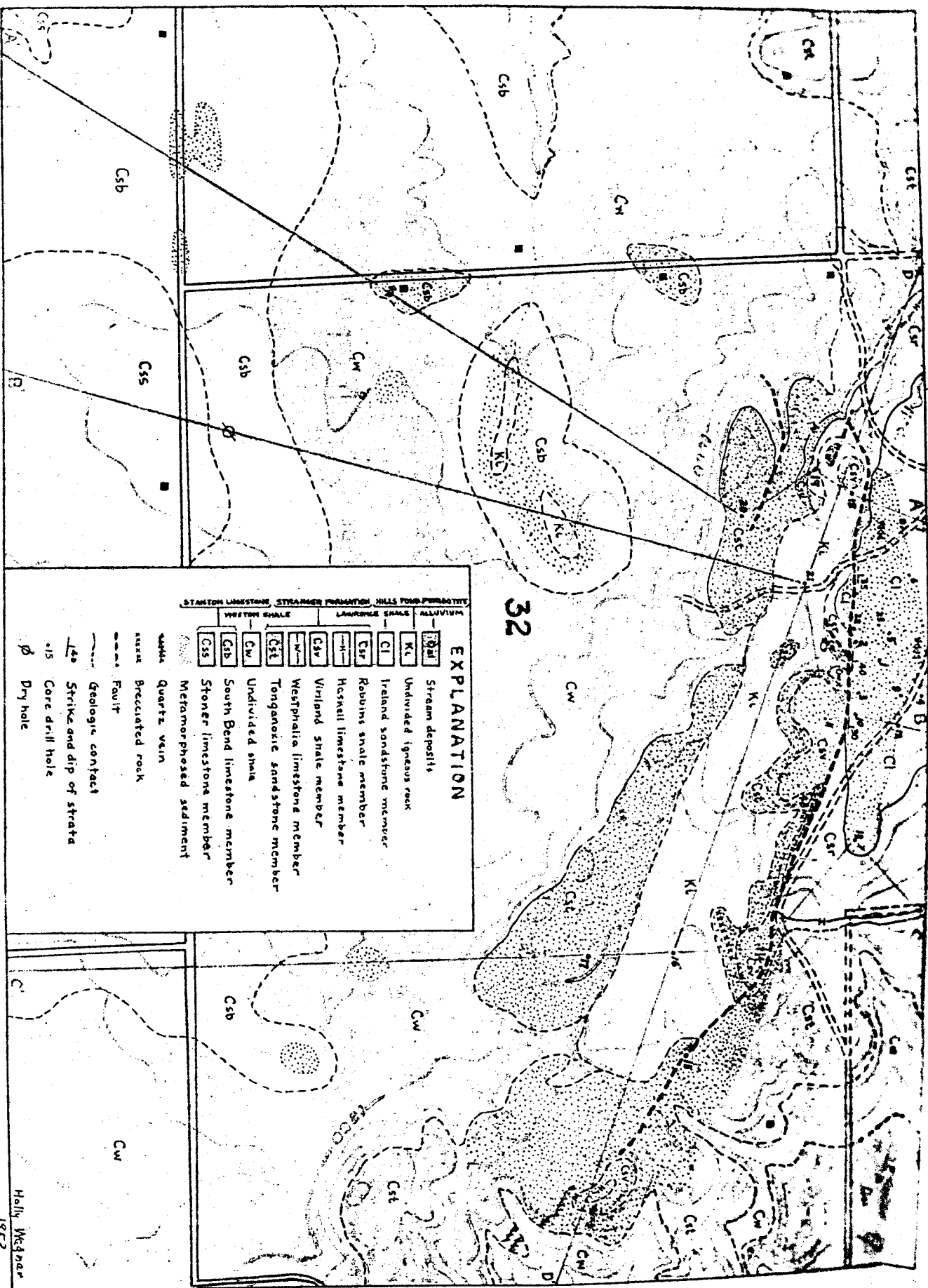
spots (see file) elev. ($\approx 1000-1100'$)

Woodson Co.

C.H. 1 - 20 (1" core in wooden trays on rolling cart)

Metamorphosed middle Penn. and Cret. igneous

Diamond-Drill Holes, Cherry, 1952



32

19,32 - 265-15E
 Geology of the Silver City Metamorphic Area, Woodson Co, Kansas
 from Paul Franke
 1952
 0 1 2 Miles

Silver City Meta Area Cores

Described by Holly C. Wagner
7/14/52 & 7/15/52

Core Hole # 1

- 0-7.5'
about 60%
recovery Quartzite, moderate grayish green (5G 4/2), very fine sand grains cemented with silica. Mica sparingly present on bedding planes. Locally speckled with 1/8 inch bleb-like areas of darker green color.
- to 7.5-13'
50% Shale, yellowish-gray (5Y 7/2), fissile, slightly silty, apparently entirely unaltered. Grades downward into
- to 13.2'
100% Siltstone, very light gray (N8), very finely micaceous no apparent alteration. Grades downward into
- to 13.5'
100% Shale, light olive gray (5Y 6/1), very slightly silty, slightly micaceous, a few wood fragments along bedding. Grades downward through a siltstone (about 3/4" thick) into
- to 22.0'
100% Sandstone, very pale orange (10YR 8/2) to grayish orange (10YR 7/4), very fine grained, well-sorted, slightly micaceous, many very small blebs of iron oxide throughout. Generally fairly well-bedded and thin bedded (1/16" to 1/4"). Basal 8" is cross bedded and contains very many small fragments of carbonaceous matter on the bedding planes.
- to 28.5'
100% Sandstone, very light gray (N8), very fine grained, thin bedded, the beds being about 1/16" thick, separated by 1/16" beds of carbonaceous matter that contains a few mica plates. Locally the carbonaceous beds are lenticles that feather out laterally. Small-scale intraformational folding is present at the top.
- to 51.8'
Ireland ss
to here Sandstone, very light gray (N8), very fine grained, massive, relatively porous, slightly micaceous. Strongly cross-bedded locally and when cross bedded, the bedding is brought out by the thin carbonaceous layers. Lower 8" is gradational to the underlying
- to 84'
TD
Robbins
sh Siltstone, medium light gray (N6), carbonaceous, very finely micaceous. Brownish lenticular units throughout at intervals of a foot or slightly less.

Core Hole # 2

250' SW of Shaft

0-10'

Quartzite, light bluish gray (5B 7/1), very slightly micaceous, much chlorite (?)

Ireland ss 15'

Sandstone, light olive gray (5Y 6/1), slightly micaceous, cross bedded toward base.

to 63'

Robbins
sh T.D.

Claystone, medium light gray (N6), contains a little carbonaceous matter and very fine Mica. Slightly silty. Many moderate yellowish brown (19YR 5/4) lenses. (Ironstone concretions (?) throughout. Actually is fairly well bedded and breaks along bedding planes.

Core Hole # 3

350' SE of Shaft

0-11'	Quartzite, pale yellowish brown (10YR 6/2) to moderate yellowish brown (10YR 5/4), locally only poorly silicified. Many greenish blebs (chlorite?) locally.
Ireland	
to 16'	Shale, silty, yellowish gray (5Y 7/2) to light olive gray (5Y 5/2). No alteration apparent micaceous.
to 19'	Shale, medium gray (N5), very slightly silty, a little chlorite along joint planes in upper part. Lower part contains many reddish ironstone concretions.
T.D.	
Robbins	
sh	

Core Hole # 1

0-7' 6"

T.D.

Ireland

Sandstone, grayish orange (LOYR 7/4), very micaceous,
very fine grained, well sorted, well bedded but locally
cross bedded, many dark bleb-like areas in lower part.

Core Hole # 5

300' W of Shaft

0-18'

Ireland

Quartzite, very light gray (N3) with distinct greenish cast or bluish cast locally. About 1' above the base is a greenish body that appears to be almost entirely olivine (?) near which are vugs filled with small tetrahedral crystals, tentatively identified as

to 25'

T.D.

Robbins

Shale, light olive gray (5Y 6/1) in the upper foot and medium light gray (N6) below that. One ironstone concretion (?) noted.

Core Hole # 6

600' W of Shaft

0-19'

Ireland

Quartzite, yellowish gray (5Y 8/1) to grayish orange pink (5YR 7/2). Locally pale green (5G 7/2). Generally very fine grained, well sorted sandstone cemented with silica. Cementation less complete at base. Slightly to moderately micaceous silty lenses common near base.

to 23'

T.D.

Robbins

Siltstone, light gray (N7) much finely divided carbonaceous matter. Slightly micaceous.

Core Hole # 7

- 0-12.5'
Ireland Sandstone, grayish orange (10YR 7/4) to very pale orange (10YR 8/2), very fine grained, well sorted, locally cross bedded, slightly to moderately micaceous.
- to 17' Shale, very pale orange (10YR 8/2) at top to light olive gray (5Y 6/1) at base. Very finely micaceous and silty. Carbonaceous.
- to 21'
T.D. Sandstone, grayish orange (10YR 7/4), very fine grained, finely micaceous. Locally cross bedded.

Core Hole # 8

200' S of # 7

- 0-11' Quartzite, very light gray (N3) with a distinct greenish cast. Very fine grained, cemented with silica. Bedding thin and regular, but locally cross bedded. Slightly micaceous
- to 15' Sandstone, very fine grained, light grayish orange (10YR 8/4), locally cross bedded and irregularly bedded, but generally thin, well bedded carbonaceous fragments and mica flakes present but not common.
- to 16' Siltstone, light olive gray (5Y 6/1), finely micaceous, sandy at base.
- to 18.5' Sandstone, yellowish gray (5Y 8/1) to light olive gray (5Y 6/1), harder than that directly above the silt and probably has some added silica, poorly bedded, very fine grained, well sorted, some mica.
- to 21' Shale, medium light gray (N6), very slightly silty, iron-
T.D. stone concretions (?) present.

Core Hole # 9

300' E of Shaft

0-30.9'

Quartzite, yellowish gray (5Y 8/1) with distinct pinkish cast locally, to very light gray (N8) with greenish cast. Very fine grained moderately micaceous and many small carbonaceous fragments locally. Locally cross-bedded and swirly-bedded. Silicification generally complete but is locally incomplete where bedding is most evident. This bedding is due to thin siltstone bands which were apparently not as readily permeated by the silicifying solution.

to 35'
T.D.

Shale, medium light gray (N6), very slightly silty. Some ironstone concretions.

Core Hole # 10

800' E of Shaft

0-22'

Quartzite, light gray (n7) with greenish cast in upper 14 ft and yellowish gray (5Y 8/1) in lower 8 ft. Upper part completely silicified. Lower part only partially silicified. Well bedded, locally cross-bedded. Very fine grained, well sorted, slightly micaceous.

to 26'
T.D.

Shale, medium light gray (N6), unaltered. Some iron-stone at top.

Core Hole # 11

- 0-2' 90% recovery Haskell Ls. SiO_2 dark dray (N3), seamed with white veinlets of quartz. The uppermost 5 inches contains many small, roundish to irregularly shaped white quartz which may represent fossils. At the outcrop I have found meta Haskell ls. that looked just like this and didn't react to acid either.
- to 3.8' Vinland sh. SiO_2 , dark gray (N3) with some greenish areas. This I believe represents the upper, calcareous (fossiliferous) part of the Vinland shale.
- to 9' Vinland sh. Shale, medium light gray (N6), slightly micaceous altered to quartzite practically throughout, excepting basal 3 inches, which is soft and unaltered.
- to 12' Westphalia Ls. SiO_2 , between very pale blue (5B 8/2) and light blue (5B 7/6). Has many darker blue or greenish areas, oval shaped to circular, that look as though they might originally have been Coagia Algae or fusulinids. I think this is the altered Westphalia.
- to 15' Tonganoxie ss Quartzite, light brownish gray (5YR 6/1) very thin bedded, the interlamination being white. Softer greenish material occurs locally at 13.4 ft.
- to 26' T.D. Mica rock grayish yellow (5Y 8/4) to yellowish gray (5Y 7/2). Cuttings only. No Core.

Core Hole # 12

0-6" Shale, grayish orange (10YR 7/4), punky. No silicification.

27.9' Sandstone, grayish orange (10YR 7/4) slightly silicified, very fine grained, well sorted, well bedded but locally cross bedded. Silty with carbonaceous fragments toward base.

to 28' Shale, light gray (N7), very slightly silty.
T.D.

Core Hole # 13

0-20' Quartzite, very light gray (N8) to light gray (N7),
 locally with distinct greenish cast. Many small dark
 blebs throughout. Well bedded, locally cross bedded.
 Silicified completely throughout.

to 22' Shale, medium light gray (N6), slightly silty, micaceous.
T.D.

Core Hole # 14

Geo. Hills' record shows this hole as all mica rock.
No. core or depth given.

Geo. told me later that they got about 3 feet of
Quartzite at the top and then all mica rock.

Core Hole # 15

- 0-7.3'
Tonganoxie Quartzite, very light gray (N8). Has distinct greenish and bluish casts locally. The colors are due to addition of greenish to bluish quartz in the interstices and as partial replacement of limonitic blebs (?). Generally massive and unbedded except near the center. Very micaceous.
- to 8.8' Quartzite, dark gray (N3) to very light gray (N8) consisting of alternating beds (about 4") of silicified sandstone and shale, the shale being the dark gray. The shale is only partly silicified near the base. Micaceous.
- to 12.3' Quartzite, very light gray (N8) with many very thin lenticular partings of black siltstone. Micaceous. Very fine grained.
- to 18' Siltstone and Sandstone, alternating in 1/8" (ss) and 1/16" (slst) beds. The slst is nearly black and very micaceous and occurs as very thin lenticles interlaminated in the sandstone. Relatively unaltered.
- to 21'
T.D. Slst, medium dark gray (N4), very micaceous. A few beds of very fine grained very light gray (N8) sandstone included. Soft, relatively unaltered.

Core Hole # 16

Igneous Rock, highly altered, approximately light olive gray (5Y 6/1) with yellowish spots in it. Very micaceous. One part of the sample had a quartzite (looked like a fragment of a core) embedded in the igneous material. Practically no core.

No depth given.

Core Hole # 17

0-4' Quartzite, very light gray (N8), very micaceous. Very
Tonganoxie fine grained. Some pistachio green alteration.

to 4.8' Siltstone, light olive gray (5Y 6/1) very micaceous.
Soft unaltered. Grade downward into

to 13' Shale, silty, medium gray (N5), well bedded, micaceous.
T.D.
Weston

Core Hole # 18

0-41.6' No Core - Geo. Hill's record shows this as mica rock.

41.6-66' Igneous Rock - General color is moderate olive brown (5Y 4/4) to olive gray (5Y 3/2). Relatively coarse grained, large amber colored mica books, black nearly equidimensional fe mag; light green or pistachio green mineral as blebs (olivine?). A few calcite (it fizzed) veinlets cut the cores.

to 72' Shale, dark gray (N3), fissile, no mica or silt or iron-stone.
T.D.
Robbins or
Weston sh

Core Hole # 19

- 0-3' Quartzite, greenish gray (5G 6/1), absolutely solid
Robbins SiO_2 , very thin bedded. Very poor recovery. A few
sh fragments are dark pinkish gray (5YR 7/1) with many iron
blobs.
- to 5' Quartzite, medium dark gray (M4), brecciated. I think
Haskell this is Haskell. Poor recovery.
- to 16' Quartzite, dark gray (N3) unbedded to well bedded.
Vinland
- to 21' Limestone, generally light gray (N7), considerably altered
Westphalia locally but Osagia Algae and calcareous nature still quite
obvious.
- to 25' Siltstone, medium gray (N5) very micaceous and thin bedded.
Interlaminae are light colored very fine grained ss. This
is silicified in local areas.
- to 41' Sandstone, light gray (N7) and siltstone, light olive gray
T.D. (5Y 6/1) interlaminated in very thin laminae. Sandstone
most prevalent in upper 4 ft. Very micaceous. Seamed
with a few calcite veinlets. Only locally silicified and
then only slightly.

Core Hole # 20 -

- 0-8.5' Quartzite, very light gray (N8) locally with a distinct greenish cast. Very micaceous, much added greenish (chloritic?) silica.
- to 10' Clay, yellowish gray (5Y 8/1), may be alteration product of something but seems to fill this interval. Very poor recovery.
- to 31' Sandstone, very light gray (N8) and siltstone, light olive gray (5Y 6/1), both very micaceous, interlaminated, the sandstone generally predominating. ss locally silicified.
- to 34.8' Siltstone, light olive gray (5Y 6/1) with a few ss interbeds. Very micaceous.
- to 41' Shale, medium light gray (N6), very slightly silty, fissile, locally micaceous and silty or very fine sandy.
- Weston

Tonganoche