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

29, 32 – 26 S – 15 E

spots (see file) elev. (≈ 1000 - 1100')

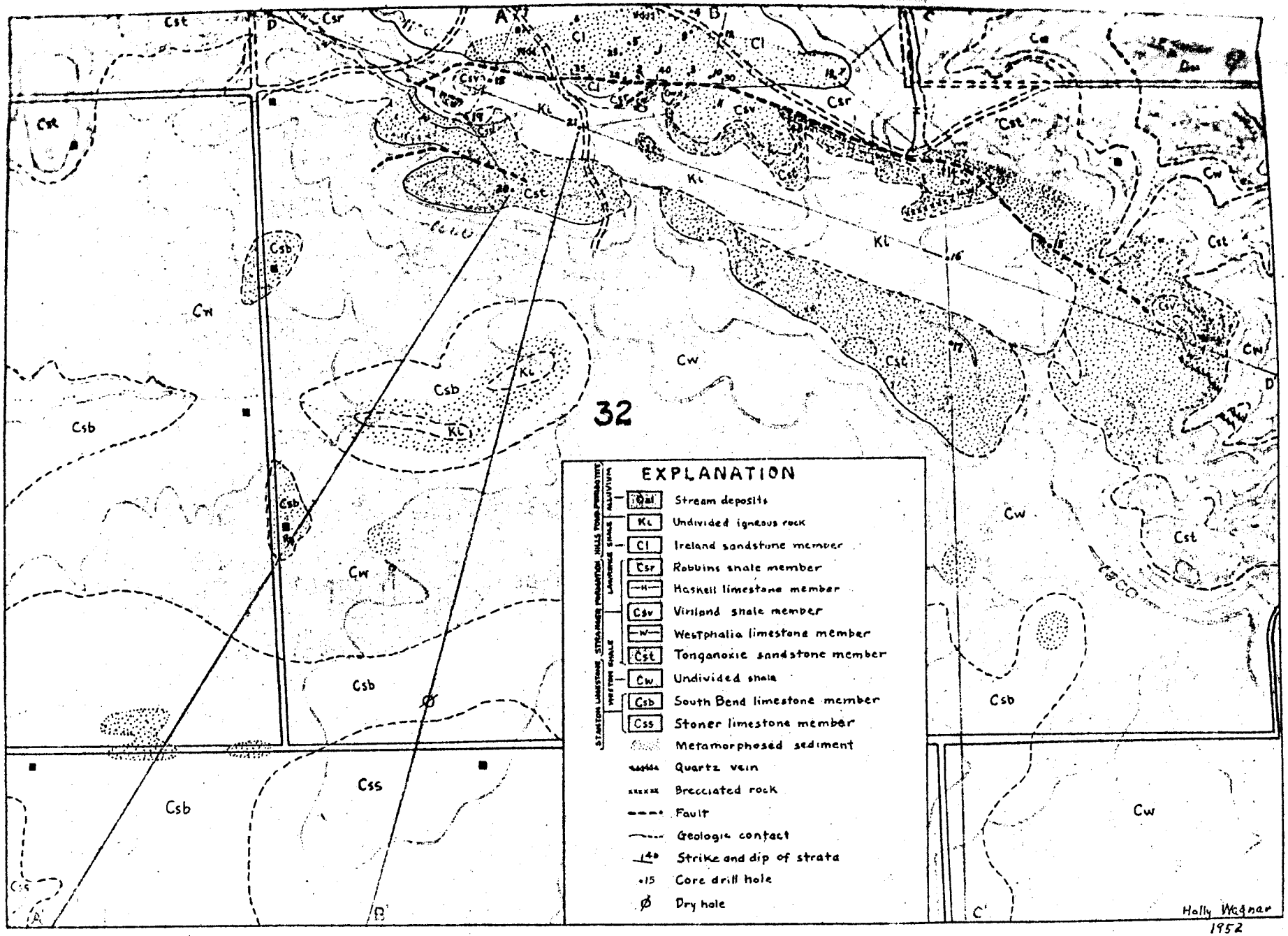
Woodson Co.

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

Metamorphosed middle Penn. and Cret. igneous

1

Diamond-Drill Holes, chiefly [illegible]



29,32 - 26S - 15E

Geology of the Silver City Metamorphic Area, Woodson Co., Kansas

from: Paul Franke

0 Miles 1

from: Paul Franke

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 1/4" 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.
Robbins sh	to 63' T.D.	Claystone, medium light gray (N6), contains a little carbonaceous matter and very fine Mica. Slightly silty. Many moderate yellowish brown (10YR 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' Ireland	Quartzite, pale yellowish brown (10YR 6/2) to moderate yellowish brown (10YR 5/4), locally only poorly silicified. Many greenish blebs (chlorite?) locally.
to 16'	Shale, silty, yellowish gray (5Y 7/2) to light olive gray (5Y 5/2). No alteration apparent micaceous.
to 20' T.D. Robbins sh	Shale, medium gray (N5), very slightly silty, a little chlorite along joint planes in upper part. Lower part contains many reddish ironstone concretions.

Core Hole # 4

0-7' 6" T.D. Ireland	Sandstone, grayish orange (10YR 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 (N8) 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 26' 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. Hobbins	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 (N8) 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' T.D.	Shale, medium light gray (N6), very slightly silty, ironstone 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 Osagia 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 interlaminations 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' T.D.	Shale, light gray (N7), very slightly silty.

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

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' Tonganoxie	Quartzite, very light gray (N8), very micaceous. Very 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' T.D. Weston	Shale, silty, medium gray (N5), well bedded, micaceous.

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' T.D. Robbins or Weston sh	Shale, dark gray (N3), fissile, no mica or silt or ironstone.

Core Hole # 19

0-3' Robbins sh	Quartzite, greenish gray (5G 6/1), absolutely solid SiO_2, very thin bedded. Very poor recovery. A few fragments are dark pinkish gray (5YR 7/1) with many iron blebs.
to 5' Haskell	Quartzite, medium dark gray (N4), brecciated. I think this is Haskell. Poor recovery.
to 16' Vinland	Quartzite, dark gray (N3) unbedded to well bedded.
to 21' Westphalia	Limestone, generally light gray (N7), considerably altered 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' T.D.	Sandstone, light gray (N7) and siltstone, light olive gray (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 silificied.
to 34.8'	Siltstone, light olive gray (5Y 6/1) with a few ss interbeds. Very micaceous.
to 41' Weston	Shale, medium light gray (N6), very slightly silty, fissile, locally micaceous and silty or very fine sandy.

Tonganoxie