

Tulsa, Oklahoma
July 2, 1928

Mr. Roy H. Hall,
Wichita, Kansas.

33-138-15W

Dear Sir:

Ran three samples of basal conglomerate from 33-138-15W. Heavies and feldspars are rare. The rareness of zircon seems to me to be evidence that not much local material was incorporated in the sediment, or if it was, it was diluted with material from other sources. My guess is that the samples studied represent beach stuff in a sea which was encroaching rapidly, as would be the case over low land. Somewhere in that country there may be river sediment if the land area was large enough. Theoretically, such sediment should contain more zircon as it would concentrate it from the residual weathered granite. Could you give me as to what wells have the thickest, the sandiest, and the lowest, sections of basal conglomerate. I have some time to spend on that area but want help in the way of suggestions as to what to hit at. A through study of all the samples might be very uneconomical but it will be a good idea to run enough to get some idea as to the variation of mineral content in the conglomerate over considerable areas. If possible, future samples from that horizon should be large, for the samples at hand are small.

Enclosed is a more detailed statement of the mineral analyses.

Very truly yours,

Max Littlefield.

May 1934.

Vickers #1 Gorham,
SW SW NW, 33-13S-15W,
Elevation ~~1995' approx.~~ ¹⁹⁰⁶ ✓

590703

Pennsylvanian conglomerate No samples.

Ordovician	Top 3324'	Sub-sea, minus 1418 1418
Arbuckle	" "	Penetration 2' " " " "
3324-3326	Sand, medium.	Probably basal Arbuckle sand.

#103 Stearns-Streeter #1 Gorham, 33-13S-15W.
3344-50'

15-167-39933

Zircon rare; angular, zoned. Zircon
Anhydrite crystalline, secondary. Anhydrite
Black opaque rare. Not ilmenite. Black opaque
Abundant pyrite in crystal aggregates.

No Slide.

#104 Vickers #1 Gorham, 33-13S-15W.
3324-26'

15-167-39926

Zircon rare, slightly worn. Zircon
Black opaque not determined. Black opaque
Biotite very rare, one shred. Xenotime *
Biotite

Very small separate. No Slide.

#105 Stearns-Streeter #2 Mermis, 33-13S-15W.
3306-10'

15-167-06529

Zircon small, very slightly worn. Zircon
Phosphate as fossil replacement. Phosphate
Anhydrite coarsely crystalline. Anhydrite
Opaque material which looks like Leucoxene
lead but has shapes which indicate
that it may be a weathered form of
biotite.

Note* Have just recently learned to recognize xenotime. It is
usually present with zircon and has the same significance
as zircon. It is widespread in Mid-Continent sediments.