

See Pan Am Black A-7, 18-30N-33W,
Haskell Co., for full report



Amoco Production Company

Denver Region
Amoco Building
1670 Broadway
Denver, Colorado 80202
303-830-4640

March 23, 1983

Mr. K. David Newell
KANSAS GEOLOGICAL SURVEY
1930 Avenue A, Campus West
University of Kansas
Lawrence, Kansas 66044

Dear David,

Enclosed are the calcareous microfossil data from
Paul Brenckle's work. You received a rough copy
of his data in my February letter. This enclosure
represents a final copy.

Sincerely,

A handwritten signature in cursive script that reads "Chuck Sawyer". The signature is written in dark ink and is positioned above the typed name.

Chuck Sawyer

CS:dh

Enclosure

AMOCO PRODUCTION COMPANY
Tulsa, Oklahoma
February 22, 1983

83053ART0078

FILE: Technical Service 825370PS

TO: O. R. Hille, Denver Region

ATTN: C. W. Sawyer

SUBJECT: Calcareous Microfossil Identifications from Mississippian Core,
Hugoton Embayment, Southwestern Kansas.

Attached is a list of Mississippian calcareous microfossils identified by P. L. Brenckle from nine wells in the Hugoton area. The Kansas Geological Survey supplied all the core for this study with the provision that Amoco provide microfossil identifications for any material used. The enclosed list contains identifications only of literature taxa and no confidential Amoco paleo data are included. Transmission of the identifications to the Kansas Survey would be appropriate.

ERIC R. MICHAELIS

By Charles F. Upshaw
Charles F. Upshaw

PLB:sdg
Attachment

cc: J. A. Babcock
L. C. Babcock
W. S. Davis, Denver Region
H. R. Lane
A. R. Ormiston
J. W. Parks, Denver Region
R. W. Sherwood, Denver Region

M. L. Brown Maune No. 9, 31-21S-33W, Finney Co.

<u>Sample (depth in ft)</u>	<u>Identification</u>
4639-40	<u>Endothyra</u> sp., <u>Calcisphaera</u> sp., indet. <u>Aster-oarchaediscinae?</u> , <u>Nodosarchaediscus?</u> sp.
4644-45	<u>Endothyra</u> sp., <u>Pseudoammodiscus?</u> sp., <u>Calcisphaera</u> sp.
4650	<u>Endothyra</u> sp., indet. <u>Archaediscidae</u> , <u>Diplosphaerina inaequalis</u> , <u>Nodasperodiscus</u> sp.
4657	<u>Endothyra</u> sp., " <u>Stacheoides</u> " <u>spissa?</u> , indet. <u>Aoujgaliaceae</u> , <u>Stacheoides</u> sp., <u>Aoujgalia variabilis</u> , <u>Asphaltina?</u> <u>cordillerensis?</u>
4661-62	<u>Endothyra</u> sp., <u>Stacheoides</u> sp., <u>Koninckopora minuta/pruvosti</u> , <u>Tubisalebra?</u> sp., <u>Salebra</u> sp.
4668-69	Barren
4688-89	<u>Endothyra</u> sp., <u>Calcisphaera</u> sp., <u>Diplosphaerina inaequalis</u> .
4753-54	<u>Endothyra</u> sp., indet. <u>Aoujgaliaceae</u> , <u>Eoendothyranopsis</u> sp., <u>Diplosphaerina inaequalis</u> , <u>Stacheoides</u> sp., <u>Archaediscus</u> sp., <u>Nodararchaediscus</u> sp., <u>Stacheoides meandriformis</u> , <u>Koninckopora minuta/pruvosti</u> , <u>Aoujgalia variabilis</u> , indet. <u>Salebridae</u> .

M. L. Brown Maune No. 11, 32-21S-33W, Finney Co.

<u>Sample (depth in ft)</u>	<u>Identification</u>
4728	<u>Brunsia</u> sp., <u>Planoarchaediscus?</u> sp., <u>Archaediscus</u> sp., <u>Endothyra</u> sp., <u>Asphaltina?</u> <u>cordillerensis?</u> , <u>Globoendothyra</u> sp., <u>Earlandia moderata</u> gp.
4735	<u>Diplosphaerina inaequalis</u> , <u>Endothyra</u> sp., <u>Asphaltina?</u> <u>cordillerensis?</u> <u>Globoendothyra piasae?</u> <u>Earlandia moderata</u> gp., <u>Earlandia vulgaris</u> gp., <u>Rectangulina</u> sp.
4737	<u>Eoendothyranopsis</u> sp., <u>Archaediscus</u> sp., <u>Endothyra</u> sp., <u>Stacheoides tenuis?</u>
4739	indet. <u>Aoujgaliaceae</u> , <u>Nodosarchaediscus</u> sp., <u>Eoendothyranopsis?</u> sp., <u>Archaediscus</u> sp. <u>Endothyra</u> sp.

<u>Sample (depth in ft)</u>	<u>Identification</u>
4742.5	<u>Endothyra</u> sp., <u>Earlandia elegans</u> gp.
4762	indet. Aoujgaliaceae, <u>Nodosarchaediscus</u> sp., <u>Eoendothyranopsis</u> sp., <u>Brunsia?</u> sp., <u>Calcisphaera</u> sp., <u>Diplosphaerina inaequalis</u> , <u>Endothyra</u> sp., <u>Stacheoides meandriiformis</u> , <u>Eoendothyranopsis scitula?</u> , <u>Tubisalebra</u> sp.

M. L. Brown Crist No. 3, 31-21S-33W, Finney Co.

<u>Sample (depth in ft)</u>	<u>Identification</u>
4688	<u>Nodosarchaediscus</u> sp., <u>Calcisphaera</u> sp., <u>Diplosphaerina inaequalis</u> .
4695.8	indet. Endothyridae, indet. Aoujgaliaceae, <u>Nodosarchaediscus</u> sp., <u>Eoendothyranopsis?</u> sp., <u>Calcisphaera</u> sp., <u>Koninckopora minuta/pruvosti</u> , <u>Globoendothyra?</u> sp.
4728.5	indet. Endothyridae, indet. Aoujgaliaceae, <u>Aoujgalia richi</u> , <u>Eoendothyranopsis</u> sp., <u>Brunsia?</u> sp., <u>Archaediscus</u> sp., <u>Eoendothyranopsis scitula</u> , <u>Koninckopora minuta/pruvosti</u> , <u>Endothyra obsoleta</u> .

M. L. Brown Crist No. 4R, 31-21S-33W, Finney Co.

<u>Sample (depth in ft)</u>	<u>Identification</u>
4650.2	Barren
4656.8	indet. Endothyridae.
4661	indet. Endothyridae, indet. Aoujgaliaceae, <u>Nodosarchaediscus</u> sp., <u>Calcisphaera</u> sp., <u>Diplosphaerina inaequalis</u> , <u>Endothyra</u> sp.
4672	indet. Endothyridae, <u>Nodosarchaediscus</u> sp., <u>Eoendothyranopsis</u> sp., <u>Endostaffella discoidea?</u> , <u>calcitornellid</u> , <u>Stacheoides</u> sp.
4712.5	indet. Palaeotextulariidae.
4716.9	<u>Archaediscus</u> sp., <u>Endothyra</u> sp., <u>Koninckopora minuta/pruvosti</u> , <u>Globoendothyra</u> sp.
4721	<u>Nodosarchaediscus</u> sp., <u>Eoendothyranopsis</u> sp., <u>Planoarchaediscus</u> sp., indet. Salebriidae, <u>Archaediscus</u> sp., <u>Endothyra</u> sp., <u>Stacheoides</u> sp., <u>Kon-</u>

Brown #11 Mauns-A. Finley Co.
T 21 S, R 33 W C SW NW sec. 31 (1975)

Ammonothis section
examined 4-14-83
by E. J. Zeller

4728. - Finely fragmental, recrystallization conspicuous. Endothyrids, byz.
Palmatogon, algal debris, Archaeosids

1. luster

Increase in pyrite upward. Sclerotization clearly seen.

4735. - Bodily recrystallized, incipient silicification, bleached algal (Archaeos
algae, endothyrids, byz., palmatogon plates, fecal pellets, some oolites
Chesteran. pyrite some.

4737. - Chesteran endothyrids, oolites, palmatogons, algal, echinoderm
interpenetration (grain pressure, recrystallization) P. free in oolites, some
incipient silicification.

4739. - Radial structure oolites, Chester endothyrids, some in oolites, bleached
P. kantala Paint Creek, Archaeosids in sort of oolites,
Permian pebbles, echinoid spines.

4742.5 - Fine frags. of fossils, incipient silicification of crinoid frags,
etc. some areas of complete replacement by silicification, solving
some fossils, but preserving Endothyrids. Archaeosids in oolites, by
finely Endothyrids because of staining factor.
Chester

4762 - Radial-structure oolites + free endothyrids. Definite
Chesteran species, plus E. symmetrica

"
Plectogyr"

"
Endothyr"

C SW NW 32-21S-33W

Mississippian 4700-4750; 4761-4764

Available Footage (By Box):

4745-50 Incomplete

NOTES: 18 samples (for ϕ , k, Sro, Srw) taken from 4700'-4750'; 3
samples taken from 4761'-64'.

ROUGH DRAFT
FINAL WILL BE SENT AS IT BECOMES AVAILABLE

AMOCO PRODUCTION COMPANY
Tulsa, Oklahoma
February 21, 1983

DRAFT 30520214

FILE: T.S. 825370PS

TO: C. F. Upshaw

SUBJECT: Calcareous Microfossils in Mississippian Core from the Hugoton Embayment, Southwestern Kansas

The following calcareous microfossils were found in Hugoton Mississippian cores supplied to us by the Kansas Geological Survey. The Denver Southern Division will forward these identifications to the Survey as part of our agreement for ^{their} use ~~of the cores~~. The ages of most of these microfossils have been outlined in my memorandum of November 18, 1982, and discussed at the Hugoton Core Evaluation meeting in Denver on December ⁹⁻10. Since the meeting, samples from the previously unstudied M.L.B. Maune 9 have been processed and supplemental thin sections made from the Pan Am Block A-7 and S.W. Maune 4 wells. Identifications from all these new samples are included in this report.

<u>Sample (depth in ft)</u>	<u>Identification</u>
Pan Am Block A-7, 18-30N-33W, Haskell Co.	
5501	indet. Endothyridae, indet. Aoujgaliaceae, indet. Archaeodiscidae, <u>Asphaltina?</u> <u>cordillerensis?</u> , <u>Stacheoides</u> <u>tenellus?</u> , <u>Stacheoides</u> sp., <u>Proniella</u> sp., indet. Dasycladaceae.

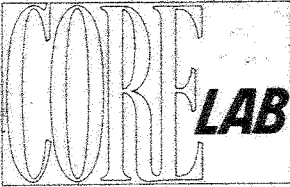
Proprietary Statement

<u>Sample (depth in ft)</u>	<u>Identification</u>
	<u>Earlandia moderata</u> gp., <u>Earlandia vulgaris</u> gp., <u>Rectangulina</u> sp.
4737	<u>Eoendothyranopsis</u> sp., <u>Archaediscus</u> sp., <u>Endo-</u> <u>thyra</u> sp., <u>Stacheoides tenuis</u> ?
4739	indet. Aoujgaliaceae, <u>Nodosarchaediscus</u> sp., <u>Eoendothyranopsis</u> ? sp., <u>Archaediscus</u> sp. <u>Endo-</u> <u>thyra</u> sp.
4742.5	<u>Endothyra</u> sp., <u>Earlandia elegans</u> gp.
4762	indet. Aoujgaliaceae, <u>Nodosarchaediscus</u> sp., <u>Eoendothyranopsis</u> sp., <u>Brunsia</u> ? sp., <u>Calcisphaera</u> sp., <u>Diplosphaerina inaequalis</u> , <u>Endothyra</u> sp., <u>Stacheoides meandriformis</u> , <u>Eoendothyranopsis sci-</u> <u>tula</u> ?, <u>Tubisalebra</u> sp.

M. L. Brown Crust No. 3, 31-21^S-33W, Finney Co.
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^

<u>Sample (depth in ft)</u>	<u>Identification</u>
4688	<u>Nodosarchaediscus</u> sp., <u>Calcisphaera</u> sp., <u>Diplos-</u> <u>phaerina inaequalis</u> , ^

CORE LABORATORIES, INC.



Petroleum Reservoir Engineering

COMPANY

AMOCO PRODUCTION COMPANY

WELL

MAUNE NO. 11

FIELD

COUNTY

LOCATION

FORMATION

DRLG. FLD.

FILE NO.

RP-2-6923

DATE

8-2-82

ELEV.

CORES

CORRELATION COREGRAPH

These analyses, opinions or interpretations are based on observations and material supplied by the client to whom, and for whose exclusive and confidential use, this report is made. The interpretations or opinions expressed represent the best judgment of Core Laboratories, Inc., (all errors or omissions excepted); but Core Laboratories, Inc., and its officers and employees, assume no responsibility and make no warranty or representations as to the productivity, proper operation, or profitability of any oil, gas or other mineral well or sand in connection with which such report is used or relied upon.

VERTICAL SCALE: 5" = 100'

