

CONFIDENTIAL

ORIGINAL

RICHARD S.(STEVE) DAVIS JR.
Petroleum Geologist
212 N. Market, Suite 268
Wichita, Kansas 67202

Office (316)267-9115

Home (620)459-6406

GEOLOGIST REPORT

OPERATOR: Larson Operating Co.

WELL NAME: Peppiatt #1-27

CONTRACTOR: Vonfeldt.Drilling Inc.

LOCATION: C NW NW SW of Section 27-T16S-R7W
(2310' FSL & 330' FWL)

API#: 15-053-2119-00

COUNTY: Ellsworth

STATE: Kansas

ELEVATION: G.L. 1603 K.B. 1608

SPUD: October 24, 2003

COMPLETED: October 29, 2003

SURFACE CASING: 8 5/8" @ 278' w/ 185 sx class A w/ 2% gel & 3% CC

PRODUCTION CASING: 4 1/2" @ 2360' w/225 sx SMD

MUD SYSTEM: Mud-Co. (Chemical mud displaced at 1400')

SAMPLES: Wet and dry samples from 900' to RTD.

DRILL TIME: One (1) foot recorded from 900' to rotary total depth.

GAS DETECTOR: Earth Tech OGL, Inc. (manned unit) JW Holdge and Tim Hedrick

WELLSITE GEOLOGIST: Tom Fertal and Steve Davis

DRILL STEM: Trilobite Testing, Inc.

E-LOGS: Log-Tech, Inc.
Dual induction, Neutron density & Micro

RECEIVED
FEB 05 2004
KCC WICHITA

KCC
FEB 03 2004
CONFIDENTIAL

27-16-7W

CONFIDENTIAL

ORIGINAL

<u>FORMATIONS</u>	<u>SAMPLE</u>	<u>E-LOG</u>	<u>SUB-SEA (KB 1608)</u>
HUTCHINSON SALT	N.A.	603	+1005
HERRINGTON	992	989	+619
WINFIELD	1042	1040	+568
TOWANDA	1109	1112	+496
FT. RILEY	1152	1150	+458
FLORENCE	1202	1198	+410
WREFORD	1296	1296	+312
CROUSE	1351	1350	+258
NEVA	1493	1490	+118
RED EAGLE	1577	1576	+32
FORAKER	1606	1604	+4
WABAUNSEE	1710	1715	-10
PONY CREEK	1760	1754	-146
GRAND HAVEN	1782	1783	-175
BASE ROOT SHALE	1871	1874	-266
TARKIO	1887	1888	-280
ELMONT	1930	1931	-323
CEDARVALE	2011	2011	-403
HOWARD	2084	2084	-476
SEVERY	2143	2143	-535
TOPEKA	2182	2184	-576
LE COMPTON	2315	2314	-706
HEEBNER SHALE	2450	2449	-841
LANSING	2590	2599	-991
LANSING X	2650	2659	-1051
Total Depth	2660	2652	-1044

RECEIVED
FEB 05 2004
KCC WICHITA

KCC
FEB 03 2004
CONFIDENTIAL

CONFIDENTIAL

ORIGINAL RECEIVED

SAMPLE ANALYSIS AND DRILL STEM TEST DATA
(Correlated to sample depth)

FEB 05 2004

KCC WICHITA

HERRINGTON 992 (+616)

CFS@ 1010 Dolomite, gray to tan, fine to very fine crystalline. Slightly argillaceous with fair to poor inter-crystalline porosity and poor pinpoint porosity. Questionable few gas bubbles on break, no fluorescence and no cut. (21 unit gas kick)

KCC

FEB 03 2004

WINFIELD 1042 (+566)

Dolomite, tan to off white, fine crystalline with sucrosic texture. Fair to good inter-crystalline porosity. No show gas, no fluorescence and no cut. Most limestone, white to tan, fine to medium crystalline. Slightly dolomitic, chalky in part with few fossil fragments. Rare poor inter-crystalline porosity, most no visible porosity. No visible show. (53' unit gas kick)

CONFIDENTIAL

TOWANDA 1109 (+499)

CFS @ 1140 Limestone, tan to light gray, fine to medium crystalline. Chalky in part with re-crystalline matrix and slightly fossiliferous. Fair to good inter-particle porosity and fair to good vugular porosity. Questionable few gas bubbles on break, no fluorescence and no cut. Included, dolomite, white to light gray and fine crystalline. Fair to poor inter-crystalline porosity with no visible show. Few pieces of chert, white to gray. (63 unit kick)

CROUSE 1351 (+257)

Limestone, light gray to off white, fine to medium crystalline with re-crystalline matrix and slightly fossiliferous. Poor to fair inter-crystalline porosity and fair fossil moldic porosity. No visible show. (25 unit gas kick)

GRAND HAVEN 1782 (-174)

CFS @ 1820 Sandstone, gray to tan, fine to medium grained, round to sub-round and moderately sorted. Slightly glauconitic, friable to compact and moderately calcareous. Fair to good inter-granular porosity with fair show of gas bubbles. No fluorescence and no cut. (27 unit gas kick)

DST #1 (1787 - 1820)
15 - 60 - 30 - 90

BLOW

I. F.	G.T.S. 3 min.	Gauged 552 MCF/Day	15 min.
F.F.	G.T.S.	Gauged 479 MCF/Day	1 min.
		854 MCF/Day	15 min.
		881 MCF/Day	30 min.

RECOVERY 70' G. M **SAMPLER** 1.2 CFG @ 250 psi

<u>PRESSURES</u>	I.H.P.	903 #
	I.F.P.	220 - 229 #
	I.S.I.P.	605 #
	F.F.P.	177 - 196 #
	F.S.I.P.	607 #
	F.H.P.	862 #
	B.H.T.	86° F

CONFIDENTIAL

RECEIVED **ORIGINAL**

KCC

FEB 03 2004

FEB 05 2004

KCC WICHITA

TARKIO 1887 (- 279)

CONFIDENTIAL

CFS @ 1930

Sandstone, light gray, very fine grained, sub-angular to angular, well sorted. Micaceous, calcareous in part with black shale inclusions. Friable to compact with fair to good intergranular porosity and fair show of gas bubbles. No fluorescence and no cut. (79 unit gas kick)

DST #2 (1887 - 1930)

10 - 90 - 60 - 180

BLOW

I.F. 1" blow building to B.O.B. in 3 min.

F.F.	G.T.S. 12 min.	Gauged 12 MCF/Day	15 min.
		15 MCF/Day	30 min.
		21 MCF/Day	60 min.

<u>RECOVERY</u>	58' G. M.	<u>SAMPLER</u>	1 CFG @ 125 psi
------------------------	-----------	-----------------------	-----------------

PRESSURES

I.H.P.	915 #
I.F.P.	16 - 21 #
I.S.I.P.	730 #
F.F.P.	20 - 30 #
F.S.I.P.	722 #
F.H.P.	882 #
B.H.T.	89° F

SEVERY 2143 (-535)

CFS @ 2182

Sandstone, gray to light gray, fine to very fine grained, sub-angular and well sorted. Calcareous in part, argilaceous, micaceous with some clusters clean. Friable to compact, with poor intergranular to no visible porosity. No show of gas bubbles, no fluorescence and no cut. (50 unit gas kick)

DST #3 (2142 - 2182)

10 - 60 - 30 - 90

BLOW

I.F.	B.O.B. 1 min.		
I.S.I.	G.T.S. 2 min.		
F.F.	G.T.S. 4 min.	Gauged 6 MCF/Day	5 min.
		(stabilized)	

<u>RECOVERY</u>	15' M	<u>SAMPLER</u>	(failed)
------------------------	-------	-----------------------	----------

PRESSURES

I.H.P.	1132 #
I.F.P.	28 - 28 #
I.S.I.P.	865 #
F.F.P.	29 - 32 #
F.S.I.P.	858 #
F.H.P.	1055 #
B.H.T.	94° F

CONFIDENTIAL

KCC

FEB 03 2004

CONFIDENTIAL

ORIGINAL
RECEIVED

FEB 05 2004

KCC WICHITA

TOPEKA 2182 (-574)

CFS @ 2227 Limestone, cream to tan, fine crystalline with re-crystalline matrix. Slightly dolomitic, chalky in part with fossil fragments. Poor inter-crystalline porosity with fair show of gas bubbles. No fluorescence and no cut. Few pieces of chert, gray to tan, opaque. (76 unit gas kick)

LECOMPTON 2315 (-707)

Limestone, tan to brown, fine to medium crystalline and slightly fossiliferous. Dense with no visible porosity.

DOUGLAS 2491 (- 883)

Sandstone, tan to gray, very fine grained. Sub-round to sub-angular and well sorted. Calcareous, slightly glauconitic and micaceous. Poor inter-granular porosity with no show of gas bubbles. No fluorescence and no cut.

LANSING 2590 (- 982)

Limestone, tan to brown, fine crystalline with re-crystalline matrix. Slightly fossiliferous, dense, no visible porosity.

LANSING B 2608 (- 1000)

Limestone, gray to brown, fine to very fine crystalline. Slightly fossiliferous, chalky to dense. Few pieces with poor inter-crystalline and poor pinpoint porosity, most with no visible porosity. Trace of gas bubbles, no fluorescence and no cut.

Remarks,

Following log analysis, orders were issued by the operator to run 4 1/2" production casing to further evaluate the Peppiatt #1-27.

Respectfully,



Richard S. (Steve) Davis Jr.
Wellsite Geologist