

15-065-2-2100-000



WHITEHALL EXPLORATION

WELLSITE GEOLOGICAL CONSULTING

GEOLOGICAL ANALYSIS & WELL REPORT

H & M Petroleum Corp.

Sand Creek No. 1

2,640' FNL & 1,650' FEL
Approximately E/2-W/2-E/2
Section 5-Township 8 South-Range 23 West
Graham County, Kansas

5-8-23W

September 30, 2008

RECEIVED
KANSAS CORPORATION COMMISSION
FEB 10 2009
CONSERVATION DIVISION
WICHITA, KS

GENERAL INFORMATION

Elevation: G.L. 2,293' K.B. 2,298'
All measurements are from K.B.

Field: Wildcat

Drilling Contractor/Rig No.: WW Drilling, LLC/Rig 10

Total Depth: RTD: 3,830' LTD: 3,812'

Surface Casing: 8 5/8" @ 219'

Production Casing: 5 1/2" set

Drill Time Kept: 3,280'-3,830' RTD

Samples Examined: 3,300'-3,830' RTD

Geological Supervision: 3,250'-3,830' RTD

Wellsite Geologist: Richard J. Hall
Certified Petroleum Geologist No. 5820
Consulting Wellsite Geologist-Whitehall Expl.

Drill Stem Tests: 4 Open Hole Tests:
-Lansing "C" Zone
-Lansing "E"- "F" Zone's
-Kansas City "I"- "J" Zone's
-Kansas City "K" Zone

Mud Company/Mud Type: Morgan Mud/Chemical

Electric Logging Company: Log-Tech

Log Suite: -Dual Induction
-Compensated Neutron/Density Porosity
-Microlog

Samples: Dry cut sent to Kansas Geological Survey Sample
Library-Wichita, KS per the Survey's request

Total Depth Formation: Base/Kansas City

Well Status: Production casing set (LKC "C" & "K" Zone's)

<u>2008 Date</u>	<u>7:00 A.M. Depth</u>	<u>24 Hour Footage</u>	<u>7:00 A.M. Operation; 24 Hour Activity</u>
09/13/08	0	0	MIRU; spud @ 1:45 P.M., drill to 220', drop dev. survey, TOO H, run 5 jts 8 5/8" surf. csg. set @ 219', cement csg., WOC 8', drill out cement plug/drilling @ 1:30 P.M.-9/14/08, jet, drilling.
09/14/08	800'	800'	Drilling ahead; jet, drilling, jet, drilling, jet, drilling, jet, drilling.
09/15/08	2,700'	1,900'	Drilling ahead; jet, drilling, jet displace/ mud up @ 2,835', drilling, 15" fix rotary chain, drilling.
09/16/08	3,460'	760'	Drilling ahead; CFS @ 3,580', short trip 36 stands - work tight spots (3.5'), circ. 1', drop dev. survey, TOO H strapping pipe - strap 14' short, pick up test tool, TIH, run DST No. 1, TOO H, lay down test tool, TIH w/bit, drilling, CFS @ 3,612', drilling, CFS @ 3,633'.
09/17/08	3,633'	173'	Trip out of hole; pick up test tool, TIH, run DST No. 2, TOO H, lay down test tool, TIH w/bit, drilling, jet, drilling, CFS @ 3,696', drilling, CFS @ 3,715', drilling, CFS @ 3,730', adjust brakes (15"), TOO H, pick up test tool, TIH, run DST No. 3, TOO H.
09/18/08	3,730'	97'	Lay down test tool; TIH w/bit, circ. 1', drilling, CFS @ 3,750', TOO H, pick up test tool, TIH, run DST No. 4, TOO H, lay down test tool, TIH w/bit, drilling, reach 3,830' RTD @ 12:00 A.M.-9/19/08, circ. 1', drop dev. survey, TOO H w/bit, run Log-Tech logs (4'), 30" WOO.
09/19/08	3,830'	100'	Tripping in hole with bit; circ. 1.25'-WO csg, TOO H laying down drill pipe, strap prod. csg., RU casing crew, run 92 jts 5 1/2" prod csg., cement prod. csg.- plug down @ 5:30 P.M., rig released @ 7:30 P.M.

DEVIATION SURVEYS

<u>Depth</u>	<u>Deviation (Degrees)</u>
220'	0.75
3,580'	1.5
3,830'	0.75

REFERENCE WELLS

Reference Well "A": A. Scott Ritchie
Kipper No. 1
SW-SE-NE
Section 5- T8S- R23W
Graham County, Kansas
KB: 2,319'
Date Drilled: October, 1980
RTD/LTD: 3,816'
TD Formation: Base/Kansas City
Status: Dry and Abandoned

Reference Well "B": Anschutz Drilling & Swenson
Clark No. 1
SE-SE-NW
Section 5- T8S- R23W
Graham County, Kansas
KB: 2,282'
Date Drilled: September, 1954
RTD/LTD: 3,995'
TD Formation: Arbuckle
Status: Dry and Abandoned

FORMATION TOPS

FORMATION	Sand Creek No. 1			Kipper No. 1	Clark No. 1				
	SAMPLE	ELECTRIC LOG		REFERENCE	REFERENCE	REFERENCE	DIFFERENCE TO		
	TOPS	TOPS	DATUM	WELL "A"	WELL "B"	WELL "C"	WELL "A"	WELL "B"	WELL "C"
PERMIAN									
Anhydrite	1951	1948	+350	+337	NA		+13	NA	
PENNSYLVANIAN									
Topeka	3306	3308	-1010	-1018	-1016		+8	+6	
Heebner Shale	3518	3518	-1220	-1229	-1226		+9	+6	
Lansing "A"	3556	3555	-1257	-1267	-1264		+10	+7	
Muncie Creek Shale	3665	3667	-1369	-1382	-1380		+13	+11	
Kansas City "K"	3742	3739	-1441	-1455	-1451		+14	+10	
Base/Kansas City	3764	3762	-1464	-1478	-1472		+14	+8	

NA = Not Available

ZONES OF INTEREST

<u>Formation</u>	<u>Log Depth</u>	<u>Lithologic & Show Descriptions, Remarks</u>
Lansing "C"	3,586'-3,593'	<p>Limestone, dolomitic, buff-light brown, fine crystalline, very fine crystalline in part-oolitic, some oolitic shoal development - abundant inter-oolitic vugular pore throat porosity, Fusilinid fossil fragments, good inter-oolitic matrix porosity and very good sucrosic inter-crystalline porosity, GOOD SHOW: trace odor, spotty inter-oolitic/uneven to near saturated brown oil stain, fair-very good light brown free oil droplets/broken, good live cut, good yellow dried halo cut.</p> <p>DST No. 1 isolated this formation and recovered 15 feet of clean oil and 65 feet of mud cut water (70% water, 30% mud), with shut-in pressures of 286-267 p.s.i.</p> <p>Log-Tech logs show this interval has a very clean gamma ray, good SP development, 3+ feet of microlog development, 7-9% density porosity, 5.5-7% neutron porosity, neutron/density crossover, and has a maximum 22 ohms deep resistivity.</p>
Kansas City "K"	3,739'-3,742'	<p>Limestone, light gray-slightly buff, very fine to fine/medium crystalline, scattered oolites and oolitic shoal pieces, minor slightly chalky in part, good small to large vugs, good inter-crystalline and inter-oolitic matrix porosity, GOOD SHOW: uneven dull yellow/gold fluorescence, uneven to saturated dark brown oil stain, good dark brown show free oil, slow yellow streaming cut, fair-medium pale milky cut, intermediate dull gold dried halo cut.</p> <p>DST No. 3 isolated the Kansas City "K" Zone and recovered 10 feet of clean oil and 110 feet of heavy oil cut mud (50% oil, 50% mud) with shut-in pressures of 862-860 p.s.i.</p> <p>Log Tech logs show this zone has a moderately dirty gamma ray at the top of the zone grading with depth to very clean gamma ray, intermediate-good SP development, 2 feet of microlog development, 12+% density porosity, 14+% neutron porosity, with a maximum 30 ohms deep resistivity.</p>