

CONFIDENTIAL

KANSAS CORPORATION COMMISSION  
OIL & GAS CONSERVATION DIVISION

RECEIVED

ORIGINAL

AUG 04 2009

Form ACO-1  
October 2008  
Form Must Be Typed

9/28/11

WELL COMPLETION FORM  
WELL HISTORY - DESCRIPTION OF WELL & LEASE

KCC WICHITA

OPERATOR: License # 34055  
Name: H & M Petroleum Corporation  
Address 1: 13570 Meadowgrass Drive  
Address 2: Suite 101  
City: Colorado Springs State: CO Zip: 80921 + 3058  
Contact Person: David Allen  
Phone: ( 719 ) 590-6060  
CONTRACTOR: License # 33575  
Name: WW Drilling, LLC  
Wellsite Geologist: Richard J. Hall  
Purchaser: Coffeyville Resources

Designate Type of Completion:  
 New Well  Re-Entry  Workover  
 Oil  SWD  SLOW  
 Gas  ENHR  SIGW  
 CM (Coal Bed Methane)  Temp. Abd.  
 Dry  Other \_\_\_\_\_  
(Core, WSW, Expl., Cathodic, etc.)

If Workover/Re-entry: Old Well Info as follows:  
Operator: \_\_\_\_\_  
Well Name: \_\_\_\_\_  
Original Comp. Date: \_\_\_\_\_ Original Total Depth: \_\_\_\_\_  
 Deepening  Re-perf.  Conv. to Enhr.  Conv. to SWD  
 Plug Back: \_\_\_\_\_ Plug Back Total Depth \_\_\_\_\_  
 Commingled Docket No.: \_\_\_\_\_  
 Dual Completion Docket No.: \_\_\_\_\_  
 Other (SWD or Enhr.?) Docket No.: \_\_\_\_\_  
04/10/2009      04/17/2009      04/18/2009  
Spud Date or      Date Reached TD      Completion Date or  
Recompletion Date                Recompletion Date

API No. 15 - 15-101-22159-00-00  
Spot Description: \_\_\_\_\_  
SE SE SW Sec. 31 Twp. 17 S. R. 30  East  West  
330 Feet from  North /  South Line of Section  
2970 Feet from  East /  West Line of Section  
Footages Calculated from Nearest Outside Section Corner:  
 NE  NW  SE  SW  
County: Lane  
Lease Name: Doyle's Dome Well #: 7  
Field Name: Doyle's Dome  
Producing Formation: Kansas City "K" & Kansas City "L"  
Elevation: Ground: 2892' Kelly Bushing: 2897'  
Total Depth: 4654' Plug Back Total Depth: \_\_\_\_\_  
Amount of Surface Pipe Set and Cemented at: 5 jts @ 219 Feet  
Multiple Stage Cementing Collar Used?  Yes  No  
If yes, show depth set: 2176 Feet  
If Alternate II completion, cement circulated from: 2176  
feet depth to: Surface w/ 225 sx cmt.

Drilling Fluid Management Plan AK II NJ 10 5 09  
(Data must be collected from the Reserve Pit)  
Chloride content: 1000 ppm Fluid volume: 200 bbls  
Dewatering method used: Evaporation  
Location of fluid disposal if hauled offsite: \_\_\_\_\_  
Operator Name: \_\_\_\_\_  
Lease Name: \_\_\_\_\_ License No.: \_\_\_\_\_  
Quarter \_\_\_\_\_ Sec. \_\_\_\_\_ Twp. \_\_\_\_\_ S. R. \_\_\_\_\_  East  West  
County: \_\_\_\_\_ Docket No.: \_\_\_\_\_

**INSTRUCTIONS:** An original and two copies of this form shall be filed with the Kansas Corporation Commission, 130 S. Market - Room 2078, Wichita, Kansas 67202, within 120 days of the spud date, recompletion, workover or conversion of a well. Rule 82-3-130, 82-3-106 and 82-3-107 apply. Information of side two of this form will be held confidential for a period of 12 months if requested in writing and submitted with the form (see rule 82-3-107 for confidentiality in excess of 12 months). One copy of all wireline logs and geologist well report shall be attached with this form. ALL CEMENTING TICKETS MUST BE ATTACHED. Submit CP-4 form with all plugged wells. Submit CP-111 form with all temporarily abandoned wells.

All requirements of the statutes, rules and regulations promulgated to regulate the oil and gas industry have been fully complied with and the statements herein are complete and correct to the best of my knowledge.

Signature: \_\_\_\_\_  
Title: Office Manager Date: 08/03/2009  
Subscribed and sworn to before me this 3rd day of August,  
20 09.  
Notary Public: Aleasha Mitchek  
Date Commission Expires: 4/13/2013

**KCC Office Use ONLY**  
 Letter of Confidentiality Received  
If Denied, Yes  Date: \_\_\_\_\_  
 Wireline Log Received  
 Geologist Report Received  
 KCC Distribution

**ALEASHA MITCHEK**  
NOTARY PUBLIC  
STATE OF COLORADO  
My Commission Expires 04/13/2013

**KCC**  
**JUL 28 2009**  
**CONFIDENTIAL**

Operator Name: H & M Petroleum Corporation Lease Name: Doyle's Dome Well #: 7  
 Sec. 31 Twp. 17 S. R. 30  East  West County: Lane

**INSTRUCTIONS:** Show important tops and base of formations penetrated. Detail all cores. Report all final copies of drill stems tests giving interval tested, time tool open and closed, flowing and shut-in pressures, whether shut-in pressure reached static level, hydrostatic pressures, bottom hole temperature, fluid recovery, and flow rates if gas to surface test, along with final chart(s). Attach extra sheet if more space is needed. Attach copy of all Electric Wireline Logs surveyed. Attach final geological well site report.

Drill Stem Tests Taken <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <i>(Attach Additional Sheets)</i>  Samples Sent to Geological Survey <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No  Cores Taken <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Electric Log Run <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <i>(Submit Copy)</i>  List All E. Logs Run: <b>DI, CN, Micro</b>	<input checked="" type="checkbox"/> Log Formation (Top), Depth and Datum <input type="checkbox"/> Sample  <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 70%;">Name</td> <td style="width: 15%;">Top</td> <td style="width: 15%;">Datum</td> </tr> <tr> <td>Anhydrite</td> <td>2004</td> <td>+693</td> </tr> <tr> <td>Topeka</td> <td>3643</td> <td>-746</td> </tr> <tr> <td>Heebner Shale</td> <td>3878</td> <td>-981</td> </tr> <tr> <td>Lansing</td> <td>3913</td> <td>-1016</td> </tr> <tr> <td>Muncie Creek Shale</td> <td>4098</td> <td>-1201</td> </tr> <tr> <td>Stark Shale</td> <td>4195</td> <td>-1298</td> </tr> <tr> <td>Kansas City "K"</td> <td>4202</td> <td>-1305</td> </tr> </table>	Name	Top	Datum	Anhydrite	2004	+693	Topeka	3643	-746	Heebner Shale	3878	-981	Lansing	3913	-1016	Muncie Creek Shale	4098	-1201	Stark Shale	4195	-1298	Kansas City "K"	4202	-1305
Name	Top	Datum																							
Anhydrite	2004	+693																							
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Lansing	3913	-1016																							
Muncie Creek Shale	4098	-1201																							
Stark Shale	4195	-1298																							
Kansas City "K"	4202	-1305																							

CASING RECORD <input checked="" type="checkbox"/> New <input type="checkbox"/> Used							
Report all strings set-conductor, surface, intermediate, production, etc.							
Purpose of String	Size Hole Drilled	Size Casing Set (In O.D.)	Weight Lbs. / Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives
Surface	12 1/4"	8 5/8"	24#	219'	Common	165	5% CC/2% Gel
Production	7 7/8"	5 1/2"	15.5#	4646'	EA2	175	10% Salt/5% Cal

ADDITIONAL CEMENTING / SQUEEZE RECORD				
Purpose:	Depth Top Bottom	Type of Cement	#Sacks Used	Type and Percent Additives
<input type="checkbox"/> Perforate <input type="checkbox"/> Protect Casing <input type="checkbox"/> Plug Back TD <input type="checkbox"/> Plug Off Zone				

Shots Per Foot	PERFORATION RECORD - Bridge Plugs Set/Type Specify Footage of Each Interval Perforated	Acid, Fracture, Shot, Cement Squeeze Record <i>(Amount and Kind of Material Used)</i>	Depth
4	4522'-4526'	<b>RECEIVED</b> <b>AUG 04 2009</b> <b>KCC WICHITA</b>	4526'
4	4387'-4394'		4394'
4	4248'-4252'		4252'
	CIBP Set at 4500'		

TUBING RECORD: Size: <u>2 7/8"</u>		Set At:	Packer At:	Liner Run: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Date of First, Resumed Production, SWD or Enhr. <u>06/17/2009</u>		Producing Method: <input type="checkbox"/> Flowing <input checked="" type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other (Explain)		
Estimated Production Per 24 Hours	Oil Bbls. <u>120</u>	Gas Mcf <u>0</u>	Water Bbls. <u>120</u>	Gas-Oil Ratio <u>33.8</u>

DISPOSITION OF GAS: <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i>	METHOD OF COMPLETION: <input type="checkbox"/> Open Hole <input checked="" type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <input type="checkbox"/> Other (Specify) _____	PRODUCTION INTERVAL: <u>4202'-4249'</u> <u>4249'-4309'</u>
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Doyle's Dome #7

NAME	TOP	DATUM
Kansas City "L"	4249	-1352
Base/Kansas City	4309	-1412
Marmaton "A"	4353	-1456
Marmaton "B"	4387	-1490
Ft. Scott	4432	-1535
Cher. Johnson Zone	4514	-1617
Mississippian	4544	-1647

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MIT TO  
 R 1 BOX 90 D  
 HOXIE KS 67740

SCHIPPERS OIL FIELD SERVICE L.L.C.

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DATE 7/10/09	SEC. 51	RANGE/TWP. 17 15	CALLED OUT	ON LOCATION	JOB START	JOB FINISH
LEASE <del>W W I D</del> Doyle - Dome			WELL # 7		COUNTY	STATE KS

CONTRACTOR W W I D	OWNER H + M				
TYPE OF JOB Surface					
HOLE SIZE 12 1/4	T.D. 219	CEMENT			
CASING SIZE 8 3/4	DEPTH	AMOUNT ORDERED 165			
TUBING SIZE	DEPTH				
DRILL PIPE 4 1/2	DEPTH				
TOOL	DEPTH				
PRES. MAX	MINIMUM	COMMON 165	@ 14 3/4	25	
DISPLACEMENT 1 1/2 bbl	SHOE JOINT	POZMIX	@		
CEMENT LEFT IN CSG.		GEL 2	@ 26	52	
PERFS		CHLORIDE 5	@ 52	260	
		ASC	@		
EQUIPMENT			@		
PUMP TRUCK			@		
#			@		
BULK TRUCK	RECEIVED		@		
#	AUG 04 2009		@		
BULK TRUCK	KCC WICHITA		@		
#			@		
		HANDLING 172	@ 1 1/2	35	
		MILEAGE 71	@ 15	1065	
			TOTAL		

REMARKS	SERVICE		
Line Lease + to	DEPT OF JOB	@	
	PUMP TRUCK CHARGE	@	150
	EXTRA FOOTAGE	@	
Plug Down 6:45 PM	MILEAGE 71	@ 1 1/2	106
	MANIFOLD	@	100
		@	
	TOTAL		

CHARGE TO: H + M	
STREET	STATE
CITY	ZIP

To: Schippers Oil Field Service LLC  
 You are hereby requested to rent cementing equipment and furnish staff to assist owner or contractor to do work as is listed. The above work was done to satisfaction and supervision of owner agent or contractor. I have read & understand the "TERMS AND CONDITIONS" listed on the reverse side.

PLUG & FLOAT EQUIPMENT	
8 3/4	@ 69
	@
	@
	@
	@
	TOTAL
TAX	
TOTAL CHARGE	
DISCOUNT (IF PAID IN 20 DAYS)	

SIGNATURE *Lonnie L. King*

PRINTED NAME Lonnie L. King

# SWIFT Services, Inc.

DATE 04.18.09 PAGE NO. 7

H&M Petroleum

WELL NO. 7

LEASE DOYLE'S DOME

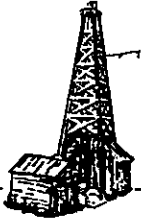
JOB TYPE 2 STAGE LONG STRING

TICKET NO. 16410

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CHART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMPS		PRESSURE (PSI)		DESCRIPTION OF OPERATION AND MATERIALS
				T	C	TUBING	CASING	
	0600							DNLOCATION, LAYINGDOWN, CHANGEVER CMT: BOTTOM 175 SUS EA-2, Top 225 SUS SMD RTD 4654, SET PPE @ 4646, SJ 15.35, INSERT 4630 5 1/2 15.5 1/4, DIV ON TOP #63, 2176 FT, 70 FT SCRATCHES CMT 1, 2, 4, 6, 8, 10, 12, 14, 16, 18, 62, BASSET 63, Limit Clamp #1
	0830							START CSLO FLOW TEST
	1020							TAC BOTTOM - DROP BALL
	1030							BREAK CIRC & ROTATE PPE
	1130	4.0	0				60	START MUD FLUSH SDCAL
			12					" HCL "
			32					END
			0					START CMT 175 EA-2
			42.3					END
	1150							DROP CATCHDOWN AUG, START DROP 1/2 @ 200 " " 1/2 MUD CMT ON BOTTOM
		5.5	0				100	
			58				200	
			68.3				200	
			95				450	
			100				550	
			105				650	
	1210	4.0	110.1				1100	LAND PLUG DROP D.V. OPENING JART
	1225						1100	OPEN. D.V., CIRC 1/2 RIG 1 HOUR
	1320		7.5					PLUG RH. MH 30, 15
	1325	5.0	0				250	START HCL FLUSH
			20					" "
			0					START SMD CMT @ 11.2
			95					" " " @ 14.0
	1350		101					END
								DROP D.V. @ CLOSING PLUG
	1350	5.5	0				200	START DROP 1/2 @ 11.2
			40				450	CIRC CMT 2000 TO PIT!
	1400		51.7				1300	LAND PLUG
	1445							JOB COMPLETE THANK YOU! DAVE, JOSH B, ROB

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WHITEHALL EXPLORATION

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AUG 04 2009

KCC WICHITA

WELLSITE GEOLOGICAL CONSULTING

KCC  
JUL 28 2009  
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**GEOLOGICAL ANALYSIS & WELL REPORT**

**H & M Petroleum Corporation**

**Doyle's Dome No. 7**

330' FSL & 2,970' FEL

C-SE-SE-SW

Irregular Section 31-Township 17 South-Range 30 West

Lane County, Kansas

April 22, 2009

## GENERAL INFORMATION

Elevation: G.L. 2,892' K.B. 2,897'  
All measurements are from K.B.

Field: Manning

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

Total Depth: RTD: 4,654' LTD: 4,652'

Surface Casing: 8 5/8" @ 218'

Production Casing: 5 1/2" @ 4,646'

Drill Time Kept: 3,600'-4,654' RTD

Samples Examined: 3,650'-4,654' RTD

Geological Supervision: 3,600'-4,654' RTD

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

Drill Stem Tests: 1) Lansing "K" Zone - Open hole test  
2) Lansing "L" Zone - Open hole test

Mud Company/Mud Type: Morgan Mud/Chemical

Mud Engineer: Dave Lines

Electric Logging Company: Log-Tech

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

Samples: Examined and discarded

Total Depth Formation: Mississippian

Well Status: Production casing set

## DAILY DRILLING CHRONOLOGY

<u>2009 Date</u>	<u>7:00 A.M. Depth</u>	<u>24 Hour Footage</u>	<u>7:00 A.M. Operation; 24 Hour Activity</u>
04/10/09	0	0	MIRU; mix mud, drill rat hole, spud @ 2:00 P.M., drilling, circ., TOOH, run 5 jts of 8 5/8" surf. csg. set @ 218' w/165 sx cement, plug down @ 6:45 P.M., WOC 9' (cement soft), drill out @ 3:45 A.M. 4/11/09.
04/11/09	540'	540'	Drilling ahead; jet, and drilling.
04/12/09	2,520'	1,980'	Drilling ahead; jet, drilling, 45" rig repair, drilling, lost circ. @ 2,820' (100 bbls), drilling, jet, drilling.
04/13/09	3,235'	715'	Drilling ahead; jet/clean suction/start hole displacement @ 3,388'—complete @ 3,403', drilling, tight conn. @ 3,451', drilling, tight conn. @ 3,705', drilling, tight connection @ 3,769', drilling.
04/14/09	3,805'	570'	Drilling ahead; work tight conn. @ 3,895', drilling, jet, drilling, CFS @ 4,208', short trip 15 stands (1') circ. 1', drop dev. survey, TOOH strapping pipe.
04/15/09	4,208'	403'	Tripping out of hole; WO tester 30", pick up test tool, TIH, run DST No. 1, TOOH, lay down test tool, clean floor, TIH, drilling, CFS @ 4,257', drilling, CFS @ 4,262', TOOH, pick up test tool, TIH, run DST No. 2, TOOH, lay down test tool.
04/16/09	4,262'	754'	Laying down test tool (DST No. 2); TIH w/bit, 15" circ., drilling, jet, drilling, 15" rig repair, drilling, CFS @ 4,400', drilling.
04/17/09	4,570'	308'	Drilling ahead; 15" fill premix tank w/pit mud, drilling, reach 4,654' RTD @ 11:30 A.M., circ. 1', short trip—tight (2.25'), circ. 1', TOOH, rig up Log-Tech, run logs, rig down loggers, TIH, circ., TOOH laying down drill pipe.
04/18/09	4,654'	84'	Lay down drill pipe & drill collars; rig up casing crew, run 116 jts 5 1/2" prod. csg. w/DV tool, set @ 4,646', cement csg. (Swift Cementers), plug down @ 2:00 P.M., rig released @ 4:00 P.M.



## DEVIATION SURVEYS

<u>Depth</u>	<u>Deviation (Degrees)</u>	<u>Method</u>
219'	1.25	dropped
4,208'	1.0	dropped
4,654'	1.5	dropped

## REFERENCE WELLS

Reference Well "A": H & M Petroleum Corp.  
Doyle's Dome No. 1  
S/2-SE-SW  
330' FSL & 3,300' FEL  
Irregular Section 31-T17S-R30W  
Lane County, KS  
KB: 2,899'  
LTD: 4,618'  
Date Drilled: July 2008  
TD Formation: Mississippian  
Status: Multiple pay oil well (Kansas City "L" Zone & Marmaton "B" Zone)

Reference Well "B": H & M Petroleum Corp.  
Doyle's Dome No. 5  
C-SE-SW  
660' FSL & 3,223' FEL  
Irregular Section 31-T17S-R30W  
Lane County, KS  
KB: 2,904'  
LTD: 4,688'  
Date Drilled: October 2008  
TD Formation: Mississippian  
Status: Multiple pay oil well (Kansas City "L" Zone, Marmaton "B" Zone & Cherokee Johnson Zone)

## FORMATION TOPS

FORMATION	Doyle's Dome No. 7			Doyles Dome 1	Doyles Dome 5				
	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	2200	2204	+693	+694	+692		-1	+1	
PENNSYLVANIAN									
Topeka	3645	3643	-746	-746	-746		FLAT	FLAT	
Heebner Shale	3881	3878	-981	-981	-980		FLAT	-1	
Lansing	3918	3913	-1016	-1017	-1018		+1	+2	
Muncie Creek Shale	4099	4098	-1201	-1198	-1200		-3	-1	
Stark Shale	4198	4195	-1298	-1295	-1294		-3	-4	
Ks City K Porosity	4205	4202	-1305	-1304	-1304		-1	-1	
Ks City L Porosity	4252	4249	-1352	-1351	-1356		-1	+4	
Base/Kansas City	4312	4309	-1412	-1410	-1410		-2	-2	
Marmaton A Porosity	4358	4353	-1456	-1456	-1457		FLAT	+1	
Marmaton B Porosity	4390	4387	-1490	-1487	-1489		-3	-1	
Ft. Scott	4436	4432	-1535	-1534	-1532		-1	-3	
Cher. Johnson Zone	4521	4514	-1617	-1618	-1616		+1	-1	
MISSISSIPPIAN									
Mississippian	4545	4544	-1647	-1647	-1643		FLAT	-4	

## ZONES OF INTEREST

<u>Formation</u>	<u>Log Depth</u>	<u>Lithologic &amp; Show Descriptions, Remarks</u>
Kansas City "K"	4,202'-4,223'	<p>Limestone, off-white-light gray, minor buff in part, predominately very fine crystalline with some fine crystalline in part, friable to hard, mottled, fossiliferous in part, abundant fossil fragments (Fusulinina, Crinoid), minor scattered vugs, intermediate-good in part inter-crystalline porosity; VERY GOOD SHOW: very good strong odor, very good saturated bright yellow fluorescence, slight light-medium brown oil stain in part, very good show free very light to medium brown oil droplets on break, slow faint milky live cut, strong yellow dried cut.</p> <p>DST No. 1 isolated this formation and tested wet recovering 374 feet of fluid consisting of: 1 foot free oil, 61 feet of water cut mud (30% water, 70% mud), 124 feet of mud cut water (85% water, 15% mud), and 188 feet of mud cut water (95% water, 5% mud) with shut in pressures of 874-875 p.s.i.</p> <p>Log-Tech logs show this zone has a very clean gamma ray, very good SP development, 12.5-29% neutron porosity, 10.5-15 density porosity, 20 feet of excellent microlog development, and has a maximum deep resistivity of 18 ohms.</p>
Kansas City "L"	4,249'-4,258'	<p>Limestone, off-white-light gray, occasional buff-tan, friable fine-medium grain stone pieces, very fine crystalline, firm to hard, fossiliferous in part, intermediate-good inter-crystalline and very good inter-particle porosity; VERY GOOD SHOW: medium odor, fair dull yellow fluorescence, uneven-mostly even brown oil stain, very good show light-medium brown free oil droplets on break, fair slow streaming to very pale milky cut, fair dull yellow dried halo cut.</p> <p>This zone was isolated on DST No. 2 and on a 60 minute flow period recovered 322 feet of total fluid consisting of: 62 feet of gassy oil (10% gas, 90% oil), 72 feet of slightly water and mud cut oil (1% gas, 65% oil, 5% water, 30% mud), 62 feet of mud/water (50% mud, 50% water) and 126 feet of mud cut water (20% mud, 80% water) with shut in</p>

pressures of 155-156 p.s.i.

Log-Tech logs show this zone has a very clean blocky gamma ray, excellent SP development, maximum 22-29% neutron porosity, 19-23% density porosity, 17 feet of excellent microlog development, and has a maximum deep resistivity of 63 ohms with an approximate oil/water contact at 4,257 feet.

Marmaton "B"

4,387'-4,396'

Limestone, predominately buff-tan with some off-white in part, very fine to fine crystalline with fair-good grain stone development, moderately to very oolitic in part, fair-good fossiliferous development with scattered vugs, Fusulinina fossil fragments, minor calcite inclusions, fair-good inter-crystalline porosity, GOOD SHOW: fair odor, good very bright yellow fluorescence, uneven brown oil stain, fair disseminated to good show free oil droplets on break, pale yellow slow streaming cut, grading to moderate bright yellow-milky cut, very good bright yellow dried residual halo cut.

This formation was not drill stem tested.

Log-Tech logs show this zone has a mostly-very clean gamma ray, fair-good SP development, 5-5.5% neutron porosity, 6.5-9% density porosity, 19 feet of very good microlog development, and has 30-85 ohms deep resistivity.

Johnson Zone

4,523'-4,526'

Limestone, dark tan-light brown, very fine with some fine crystalline in part, hard, minor grain stone development in part, fair-intermediate inter-crystalline porosity, GOOD SHOW: spotty-uneven brown oil stain, good dark brown show free oil on break, slight dull yellow slow streaming cut, grading to intermediate pale yellow milky cut, intermediate yellow dried residual halo cut.

This formation was not drill stem tested.

Log-Tech logs show this zone has a hot/shaley gamma ray signature, slight-fair SP development, maximum 5% neutron porosity, maximum 5.5% density porosity, 2 gross feet of microlog development, and has a maximum 55 ohms deep resistivity.

## **SUMMARY**

The Doyle's Dome No. 7 well location is a development/step out location based on a 3-D seismic survey shot over the Doyle's Dome Prospect and existing well control (H & M Petroleum's Doyle's Dome No. 1, No. 5, No. 2, and No.4 well's).

The 3-D seismic interpretation showed the Doyle's Dome No. 7 location would encounter the Top/Lansing flat to slightly lower structurally to the Doyle's Dome No. 1 and Doyle's Dome No. 5 multi-pay zone oil producer's, with structure dipping rapidly to the east of this location. The 3-D seismic proved correct in that the primary objective formation's were encountered approximately structurally flat slightly low to the Reference/Correlation Well's.

The Doyle's Dome No. 7 well is located 330 feet due east of the H & M Petroleum Doyle's Dome No. 1 (S/2-SE-SW-Section 31-T17S-R30W), the discovery well drilled in July 2008 which currently produces from the Kansas City "L" and Marmaton "B" Formation's.

The Doyle's Dome No. 7 is located approximately 10 miles west and 3 miles north of Dighton, Kansas and 12 miles east and 3 miles north of Scott City, Kansas in an irregular section due to the Scott/Lane county line.

Based on the abundant well control close by, the primary objectives in the Doyle's Dome No. 7 included the: Lansing "E" Zone, Kansas City "H", "K" and "L" Zone's, and the Marmaton "A" and "B" Zone's. Secondary objectives included the Lansing "C" and "D" Zone's, Pawnee, Ft. Scott, Cherokee Johnson Zone, and Mississippian Formation's.

During the drilling of the Doyle's Dome No. 7, two open hole drill stem test's were run. DST No. 1 isolated the Kansas City "K" Zone (recovered water with 1 foot of oil) and DST No. 2 isolated the Kansas City "L" Zone Porosity (recovered oil and water).

The Doyle's Dome No. 7 well was spudded on April 10, 2009 and production casing was set on April 18, 2009. No significant drilling problems were encountered during the drilling of this well.

The well was under 24-hour geological supervision from 3,600 feet to 4,654 feet RTD. Wet and dry drilling samples were caught by the drilling crews from 3,650 feet to 4,654 feet RTD at 10-foot intervals. All lithologic descriptions were lagged to true depth by the consulting wellsite geologist.

### **Hydrocarbon Shows**

Numerous minor to very significant free oil sample shows were observed and recorded in the drill cuttings/samples during the drilling of the Doyle's Dome No. 7 well, and included the:

-Kansas City "C" Zone-Slight Show (scattered oil stain, slight pin point show free oil)

-Kansas City "K" Zone-Very Good Show (very good odor, very good saturated bright yellow fluorescence, very good brown oil stain, very good show free oil droplets (DST No. 1)

-Kansas City "L" Zone-Very Good Show (medium odor, uneven-mostly even brown oil stain, very good show free oil droplets (DST No. 2)

-Marmaton "A" Zone-Fair Show (spotty-uneven brown oil stain, fair show free oil)

-Marmaton "B" Zone-Good Show (fair odor, very good bright yellow fluorescence, uneven brown oil stain, fair disseminated to good show free oil droplets)

-Pawnee Formation-Medium/Good Show (trace odor, spotty brown oil stain, fair-good show free oil)

-Cherokee Johnson Zone-Good Show (spotty-uneven brown oil stain, good show free oil)

Complete lithologic descriptions and hydrocarbon sample shows can be found in the detailed "Zones of Interest" portion of this geologic report. Complete Drill Stem Test fluid recovery results and pressures can be found in this report under Drill Stem Tests.

### **Structural Position**

The Doyle's Dome No. 7 runs structurally mixed, but approximately structurally flat to slightly low at the primary objective zone's compared to the Doyle's Dome No. 1 oil discovery/Reference Well "A" and the Doyle's Dome No. 5/Reference Well "B".

Compared to Reference Well "A"/H & M Petroleum Doyle's Dome No. 1 (S/2-SE-SW-Section 31-T17S-R30W), the Doyle's Dome No. 7 runs: -1 foot low at the Stone Corral Anhydrite, flat at the Heebner Shale, +1 foot high at the Top/Lansing, -1 foot low at the Kansas City "K" Zone, -1 foot low at the Kansas City "L" Zone Porosity, -3 feet low at the Marmaton "B" Porosity, -1 foot low at the Ft. Scott, +1 foot high at the Cherokee Johnson Zone, and flat at the Mississippian.

Compared to Reference Well "B"/H & M Petroleum Doyle's Dome No. 5 (C-SE-SW-Section 31-T17S-R30W), the Doyle's Dome No. 7 runs: +1 foot high at the Stone Corral Anhydrite, flat at the Heebner Shale, +2 feet high at the Top/Lansing, -1 foot low at the Kansas City "K" Zone, +4 feet high at the Kansas City "L" Zone Porosity, -1 foot low at the Marmaton "B" Porosity, -3 feet high at the Ft. Scott, -1 foot low at the Cherokee Johnson Zone, and -4 feet low at the Mississippian.

A structural comparison of the Formation Tops in this well, in relation to Reference Well's "A" and "B", can be found in the detailed "Formation Tops" table in this geologic report.

### Conclusion

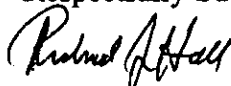
The Doyle's Dome No. 7 well is located on the eastern side of the Manning Field and is a development well located 330 feet east of the H & M Petroleum Doyle's Dome No. 1 Kansas City "L" Zone and Marmaton "B" Zone oil discovery well (Reference Well "A"), and was based on the interpretation of the Doyle's Dome Prospect 3-D seismic survey combined with recent drilling well control/subsurface geology.

The hydrocarbon sample shows observed and recorded in the primary objective Kansas City "K" Zone and Kansas City "L" Zone were both drill stem tested. The Marmaton "A" Zone, Marmaton "B" Zone and the Cherokee Johnson Zone were not drill stem tested.

Structurally, the Doyle's Dome No. 7 development well is -1 foot low and + 4 feet high structurally to the H & M Petroleum Doyle's Dome No. 1 and H & M Petroleum Doyle's Dome No. 5, respectively, at the Kansas City "L" Porosity Zone, and -3 feet low and -1 foot low at the Marmaton "B" Zone, respectively.

Based on the recorded sample free oil shows, the oil recovery on Drill Stem Test No. 2, the favorable structural position of the primary and secondary objectives relative to the Doyle's Dome No. 1 and Doyle's Dome No. 5 Kansas City "L" and Marmaton "B" Zone oil producer's, and Log-Tech log analysis and evaluation confirming reservoir development (porosity and microlog/permeability) in these primary objective zone's, production casing was set in the Doyle's Dome No. 7.

Respectfully Submitted,



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