

ORIGINAL

KANSAS CORPORATION COMMISSION  
OIL & GAS CONSERVATION DIVISION

Form ACO-1  
October 2008  
Form Must Be Typed

WELL COMPLETION FORM  
WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License # 33753  
Name: Lockard Petroleum, Inc  
Address 1: 806 Melanae Ct.  
Address 2: \_\_\_\_\_  
City: Liberty State: MO Zip: 64068 + \_\_\_\_\_  
Contact Person: Gale Schroeder  
Phone: ( 620 ) 437-6435 or 620-437-2646  
CONTRACTOR: License # 30567  
Name: Rig 6 Drilling, Inc  
Wellsite Geologist: Rex R. Ashlock  
Purchaser: Maclaskey Crude Oil Purchasing  
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.: \_\_\_\_\_  
12-28-08      12-31-08      06-28-09  
Spud Date or      Date Reached TD      Completion Date or  
Recompletion Date                Recompletion Date

API No. 15 - 073-24101-0000  
Spot Description: \_\_\_\_\_  
SW \_SW\_ NW \_SE\_ Sec. 5 Twp. 24 S. R. 12  East  West  
1470 Feet from  North /  South Line of Section  
2470 Feet from  East /  West Line of Section  
Footages Calculated from Nearest Outside Section Corner:  
 NE  NW  SE  SW  
County: Greenwood  
Lease Name: Beuchat Well #: 19  
Field Name: Seeley-Wick  
Producing Formation: Cattleman, Mississippian  
Elevation: Ground: 1050 Kelly Bushing: \_\_\_\_\_  
Total Depth: 1835 Plug Back Total Depth: \_\_\_\_\_  
Amount of Surface Pipe Set and Cemented at: 40' Feet  
Multiple Stage Cementing Collar Used?  Yes  No  
If yes, show depth set: \_\_\_\_\_ Feet  
If Alternate II completion, cement circulated from: 1828  
feet depth to: Surface w/ 215 sx cmt.

Drilling Fluid Management Plan AH II NR 1-6-10  
*(Data must be collected from the Reserve Pit)*  
Chloride content: \_\_\_\_\_ ppm Fluid volume: \_\_\_\_\_ bbls  
Dewatering method used: \_\_\_\_\_  
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: Gale L. Schroeder  
Title: Agent Date: 12-07-2009  
Subscribed and sworn to before me this 7 day of December,  
20 09 State of Kansas  
County of Greenwood  
Notary Public: Charla M. Dixon  
Date Commission Expires: 10-30-2012

**KCC Office Use ONLY**  
 Letter of Confidentiality Received  
If Denied, Yes  Date: \_\_\_\_\_  
 Wireline Log Received  
 Geologist Report Received  
\_\_\_\_\_ UIC Distribution  
**RECEIVED**  
**DEC 28 2009**

**CHARLA M. DIXON**  
Notary Public - State of Kansas  
My Appt. Expires 10-30-2012

**KCC WICHITA**

Operator Name: Lockard Petroleum, Inc Lease Name: Beuchat Well #: 19  
 Sec. 5 Twp. 24 S. R. 12  East  West County: Greenwood

**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 type="checkbox"/> Yes <input checked="" 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>Gamma-Neutron</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:60%;">Name</td> <td style="width:20%;">Top</td> <td style="width:20%;">Datum</td> </tr> <tr> <td>Cattleman Sand</td> <td>1570</td> <td>-520</td> </tr> <tr> <td>Mississippian</td> <td>1766</td> <td>-716</td> </tr> </table>	Name	Top	Datum	Cattleman Sand	1570	-520	Mississippian	1766	-716
Name	Top	Datum								
Cattleman Sand	1570	-520								
Mississippian	1766	-716								

CASING RECORD <input type="checkbox"/> New <input checked="" 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	12.25	8.625	24#	40'	Class A	20	
Long String	6.75	4.50	10.5	1830	60/40-Thickset	215	

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
Two	1571-74		
Two	1576-82		
Two	1784-90		

TUBING RECORD: Size: <u>2.375</u> Set At: <u>1781</u> Packer At: <u> </u> Liner Run: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		KCC WICHITA	
Date of First, Resumed Production, SWD or Enhr. <u>06-28-09</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>10</u>	Gas Mcf <u> </u>	Water Bbls. <u>70</u> Gas-Oil Ratio <u> </u> Gravity <u>38</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) <u> </u>	PRODUCTION INTERVAL: <u>Cattleman Sand</u> <u>Mississippian</u>
---	--	---

INVOICE #: 20490  
 COMPANY Lockard Petroleum  
 ADDRESS: 806 Melanie Ct  
 Liberty, MO 64068

DATE: 12/29/2008  
 LEASE Beuchat  
 COUNTY: GW  
 WELL 19  
 API #: 15-073-24,101

ORDERED BY: Gayle

SERVICE	RATE	UNITS	
Location Pit Charge		1	N/A
Set Surface Csg.	\$250.00 Per Hr	4	N/C
Cement Surface/W.O.C.	\$250.00 Per Hr	8	N/C
Drilling Charge	\$11.00 Per Ft	1835'	\$20,185.00
Circulating	\$250.00 Per Hr	4	N/C
Drill Stem Test	\$250.00 Per Hr		N/C
Logging	\$250.00 Per Hr		N/C
Core Samples	%500.00 Per Run		N/C
Water Hauling	\$40.00 Per Hr		N/C
Bit Charge (Lime W/O)	Cost + 10%		N/C
Drill Stem Lost	\$28.00 Per Ft		N/C
Trucking	\$40. per hr + \$1./ mi		N/C
Roustabout	\$23.00 Per Man Hr		N/C
Running Casing	\$250.00 Per Hr	2	\$500.00
Rigging Up	\$250.00 Per Hr	1	N/C
Rigging Down	\$250.00 Per Hr	1	N/C
Other			
Fuel Assess.			
Move Rig			
Material Provided:			
Cement	\$8.00 Per Sx	20	\$120.00
Sample Bags	\$28.00 Per Box		N/A

TOTAL AMOUNT

~~\$20,805.00~~  
 \$20,805.00

REMIT TO:

**RIG 6 DRILLING, INC**  
**PO BOX 227**  
**IOLA, KS 66749**

*pd*  
*1-6-09*  
*#2298*

**THANK YOU !!! WE APPRECIATE YOUR BUSINESS !!!**

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COMPANY Lockard Petroleum  
ADDRESS: 806 Melanie Ct.  
Liberty, MO 64068

LEASE: Beuchat  
COUNTY: Greenwood  
LOCATION 1470'FSL/2470'FEEL  
5/24/2012

COMMENCED: 12/29/08 #####  
COMPLETED: 1/1/2009  
WELL #: 19  
API#: 15-073-24101  
STATUS: Oil Well  
TOTAL DEPTH: 1835'-6 3/4"  
CASING: 40'-8 5/8" cmt w/ 20 sx  
1828'-4 1/2" Consol. Cmt

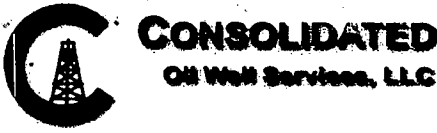
DRILLER'S LOG

		1367 Co	
		1510 Sh w/ ls brks	
		1570 Sh	
8	soil & clay	1600	Sa (good odor & show)
27	Sh (Shale)	1738	Sh
34	Limestone (Ls)	1741	Co
46	Sh	1752	Sa SH
54	Ls	1753	Co
65	Sh	1755	Sh
1332	Ls w/ sh brks	1757	Sh (blk)
291	Sh w/ ls strks	1785	LS (Miss)
312	LS w/ shs trks	1792	SA Ls Good odor & show)
606	Sh	1807	LS
614	Ls w/ sa ls	1813	Sa (Fair odor)
658	Sh	1835	LS T.D.
790	Ls		
925	SA Sh		
942	Ls		
973	Sh		
1119	LS		
1249	Sh		
1254	LS		
1257	Sh		
1264	LS w/ sh brks		
1267	Sh		
1278	LS		
1336	Sh		
1340	LS w/ sh brks		
1361	Sh		
1365	Ls		

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ENTERED

TICKET NUMBER 20753

LOCATION EUREKA

FOREMAN Kevin McCoy

PO Box 884, Chanute, KS 66720  
620-431-9210 or 800-467-8676

FIELD TICKET & TREATMENT REPORT  
CEMENT

DATE	CUSTOMER #	WELL NAME & NUMBER	SECTION	TOWNSHIP	RANGE	COUNTY																				
1-1-09	4972	Beuchat # 19				Gw																				
CUSTOMER Lockard Petroleum, Inc.			<table border="1"> <thead> <tr> <th>TRUCK #</th> <th>DRIVER</th> <th>TRUCK #</th> <th>DRIVER</th> </tr> </thead> <tbody> <tr> <td>445</td> <td>Justin</td> <td></td> <td></td> </tr> <tr> <td>479</td> <td>Phillip</td> <td></td> <td></td> </tr> <tr> <td>543</td> <td>DAVE</td> <td></td> <td></td> </tr> <tr> <td>437</td> <td>Jim</td> <td></td> <td></td> </tr> </tbody> </table>				TRUCK #	DRIVER	TRUCK #	DRIVER	445	Justin			479	Phillip			543	DAVE			437	Jim		
TRUCK #	DRIVER	TRUCK #					DRIVER																			
445	Justin																									
479	Phillip																									
543	DAVE																									
437	Jim																									
MAILING ADDRESS 806 MEANAE CL																										
CITY STATE ZIP CODE Liberty Mo. 64068																										
Rig 6 DR19.																										

JOB TYPE Longstring HOLE SIZE 6 3/4 HOLE DEPTH 1835' CASING SIZE & WEIGHT 4 1/2 10.5" New  
 CASING DEPTH 1836' DRILL PIPE \_\_\_\_\_ TUBING \_\_\_\_\_ OTHER \_\_\_\_\_  
 SLURRY WEIGHT 12.8" - 13.6" SLURRY VOL 63 BBL WATER gal/sk 8.0 CEMENT LEFT in CASING 0'  
 DISPLACEMENT 29.7 BBL DISPLACEMENT PSI 900 ~~MAX~~ PSI 1400 Bump Plug RATE \_\_\_\_\_

REMARKS: Safety Meeting: Rig up to 4 1/2 Casing. BREAK Circulation w/ 5 BBL Fresh Water. Pump 5 BBL Metasilicate Pre Flush, 5 BBL water Spacer. Mixed 135 sks 60/40 Pozmix Cement w/ 6% Gel, 1/4" Flocele /sk @ 12.8" /gal, yield 1.60. TAIL IN w/ 80 sks THICK Set Cement w/ 5" Kol-Seal /sk @ 13.6" /gal, yield 1.69. Shut down. WASH out Pump & Lines. Release Plug. Displace w/ 29.7 BBL Fresh Water. FINAL Pumping Pressure 900 PSI. Bump Plug to 1400 PSI. wait 2 minutes, Release Pressure. Float Held. Good Cement Returns to Surface = 7 BBL slurry (24 sks) to Pit. Job Complete. Rig down.

Note: Rotated Casing while mixing TAIL Cement. Could not Rotate while Displacing Plug. Casing was torquing up down Hole.

ACCOUNT CODE	QUANTITY or UNITS	DESCRIPTION of SERVICES or PRODUCT	UNIT PRICE	TOTAL
5401	1	PUMP CHARGE	925.00	925.00
5406	20	MILEAGE	3.65	73.00
1131	135 sks	60/40 Pozmix Cement	11.35	1532.25
1118 A	700 *	Gel 6% } Lead Cement	.17 *	119.00
1107	34 *	Flocele 1/4" /sk	2.10 *	71.40
1126 A	80 sks	THICK Set Cement } TAIL Cement	17.00	1360.00
1110 A	400 *	Kol-Seal 5" /sk	.42 *	168.00
1111 A	50 *	Metasilicate Pre Flush	1.80	90.00
5407	10.2 TONS	TON Mileage BULK TRUCKS	M/C	315.00
5502 C	3 Hrs	80 BBL VAC TRUCK	100.00	300.00
1123	3000 gals	City water	14.00/1000	42.00
4129	4	4 1/2 x 6 3/4 CENTRALIZERS	40.00	160.00
4156	1	4 1/2 FV FLOAT Shoe	227.00	227.00
4404	1	4 1/2 Top Rubber Plug	45.00	45.00
KCC WICHITA				
Sub Total				5427.65
THANK YOU 6.3%				SALES TAX 240.33
				ESTIMATED TOTAL 5667.98

Ravin 3737

AUTHORIZATION witnessed By Gate

TITLE Lockard Co. Rep.

DATE

208287

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# GEOLOGICAL REPORT

December 31, 2008

## Beuchat #19

SW-SW-NW-SE (1470 FSL, 2470 FEL)

Section 5-T24S-R12E

Greenwood Co., KS

API #15-073-24101

Elevation: 1050 Gr. Level (GPS'd by Mr. Gale Schroeder)

Operator: Lockard Petroleum, Inc. (Operator Lic. #33753)

Drilling Contractor: Rig 6 Drilling, Inc. (Operator Lic. #30567)

Spud: 12/28/2008

Surface: 12 ¼" Bore, Set 40' of 8 5/8" csg., Cmt'd w/ 18 sx of Portland

Production Bore: 6 ¾"

Drilling Fluid: Fresh water, bentonite, & chemical

Rotary Total Depth (RTD): 1835' at 9:02 P.M., 12/31/2008

Production Csg: 4 ½" at 1828', Cmt'd w/ 135 sx 60/40 Piz-mix, 6% gel + 80 sx "thick-set" (01/01/09)

E-log TD: No open hole logs

<u>Formation</u>	<u>Sample Tops</u>	<u>Datum</u>	<u>E-Log Tops</u>	<u>Datum</u>
Verdigris/Ardmore Ls	1493	-443		
Croweburg Sh	1503	-453		
Cattlemen Ss	1570	-520		
Base Cattlemen Ss	1600	-550		
Bartlesville Ss	Not Developed	-----		
Mississippian "Cgl."	1758	-708		
Mississippian "Chat"	1763	-713		
Mississippian "Lime"	1766	-716		
1 <sup>st</sup> Break	1781	-731		
2 <sup>nd</sup> Break	1802	-752		
RTD	1835	-785		

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The following report is based on microscopic examination of rotary drillings cuttings collected from 1500' to the rotary total depth of 1835'. All measurements were taken from ground level which was estimated at 1050' using a handheld GPS unit.

## MAJOR ZONES OF INTREST

**Cattlemen Sand, 1570-1580.** Sandstone, light tan, tan, gray tan, fine with trace medium grain, sub-rounded to angular, poorly sorted, well consolidated, mostly friable to semi-firm, poor to fair intergranular porosity, trace micro pale green shale platelets in some sand clusters, scattered silty to shaley micro lamina, seems to be a little more shaley with depth, poor/dull fluorescence, fair hydrocarbon odor, weak trace fair show of free oil and hydrocarbon residue in some sand clusters.

NOTE: A small "scum of oil" collected on pit while drilling through the top portion of the sand.

**Cattleman Sand Continued:**

**1580-1600.** Sandstone, tan, fine to medium grain, sub-angular to angular, poorly sorted, but becomes a little lighter tan, more medium grained, somewhat sub-rounded in part, and fairly well sorted with depth (possibly "watery"), friable to semi-firm, fair to good intergranular porosity, poor to fair fluorescence, fair hydrocarbon odor, weak show of free oil.

**NOTE:** The 1600 to 1610 sample bag contained a large percentage of the sand described above, but using a lag time of one minute per 100 feet, puts the base of the sand at 1600 feet, mentioned this because the sand could be more than 30 feet.

**Mississippian "Conglomerate", 1758-1763.** Varied colored shale, trace coarse, loose, sub-round to sub-angular sand grains, trace chert, trace weathered limestone fragments, no shows

**Mississippian "Chat", 1763-1766.** Chert ("chat"), cream, white, trace semi-translucent, mostly blocky cuttings, tripolitic in part, trace conglomerate as above, poor leached and fractured porosity, no show.

**Mississippian "Lime", 1766-1774.** Limestone, cream, very light tans, micro to medium, trace coarse crystalline, poor trace fair crystalline porosity, glauconitic in part, looks like "reworked" limestone, trace chert as above, trace shale, no show.

**1774-1781.** Limestone, very-very light tan, cream, micro to coarse crystalline, fossiliferous, very poor to poor inter-crystalline and bioclastic porosity, no shows.

**1781-1787, (1<sup>st</sup> break).** Limestone, cream, very-very light to light tans, fine to medium crystalline, fair to good crystalline porosity, dolomitic in part, poor to fair fluorescence, good to strong hydrocarbon odor, weak show of free oil, fair show of free oil when diluted hydrochloric acid applied to cuttings.

**1787-1793.** Limestone, tan, dolomitic, sucrosic in part, good to very good crystalline porosity, fair fluorescence, good to strong hydrocarbon odor, fair to good show of free oil after acid applied to cuttings (long stringers of free oil under the ultraviolet "black" light)

**1793-1802.** Limestone, light tan, fine to medium, trace coarse crystalline, poor trace fair porosity, trace chert, weak scattered patchy fluorescence, fair odor, poor to fair hydrocarbon staining, no apparent show of free oil.

**1802-1807, (2<sup>nd</sup> break).** Limestone, very light to light tan, fine to medium crystalline, dolomitic in part, fossiliferous, oolitic, fair to good crystalline, fossiliferous, and oolitic porosity, weak to fair odor, fair to trace good fluorescence, poor trace good show of free oil in oolitic and fossil casts/vugs. Based on the drilling cuttings collected and examined, only the top 2 to 3 feet of the "2<sup>nd</sup> break is carrying any oil.

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**1807-1813.** Dolomite calcareous "limey", cream to very-very light tans, fine to medium crystalline, good crystalline porosity, very dull fluorescence, mainly mineral fluorescence, very-very weak odor, no show of free oil, very-very weak/poor scattered hydrocarbon staining, area looks "watery".

**Mississippian Continued:**

**1813-1823.** Dolomite / Dolomitic shale, dark tan to dark gray-brown, dense, silty textured, looks a lot like the "Cowley" facies, no show.

**1832-1835 (RTD).** Dolomite, off white, cream, very-very light grays, fine to medium crystalline, abundant chert, opal, white, semi to translucent, blocky to sharp, poor to fair crystalline and fractured porosity no show.

**SUMMARY:**

Due to the shows of oil found in the Cattlemen Sand and Mississippian, the decision was made to run production casing to further test these zones for commercial production.

**RECOMMENDATIONS:**

**Mississippian**

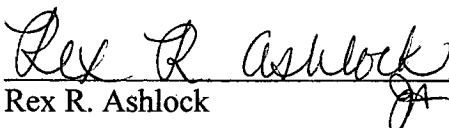
After running the Cased Hole Gamma Ray-Neutron Log, you may elect to swab the well down leaving only 250 to 300 feet of fluid over the first set of perforations. After minor depth adjustments to the E-log, it is recommended to perforate only the top six feet of the "first break" of the Mississippi (1781-1787+/-), 2 shots per foot. After perforating, swab the remaining fluid from the well bore down to 1794+/-, this will make sure that the treatment fluid will be over the perforations and not the fresh water used to push down the cement plug. Since this is a new well it is recommended to first treat the Mississippi with 150 gallons of "mud acid". After just barely clearing the perforations with the acid, swab back, try not to leave the "mud acid" in for any length of time. This procedure will help determine if further treatment is needed.

**Cattlemen Sand**

In regards to the Cattlemen Sand, you may want to stay in the top 10-12 feet of the sand body, this will depend on the shaleyiness and/or shale partings between sand(s), but based on the drill cuttings examined, the bottom 10-15 feet appears to be "watery".

End Report

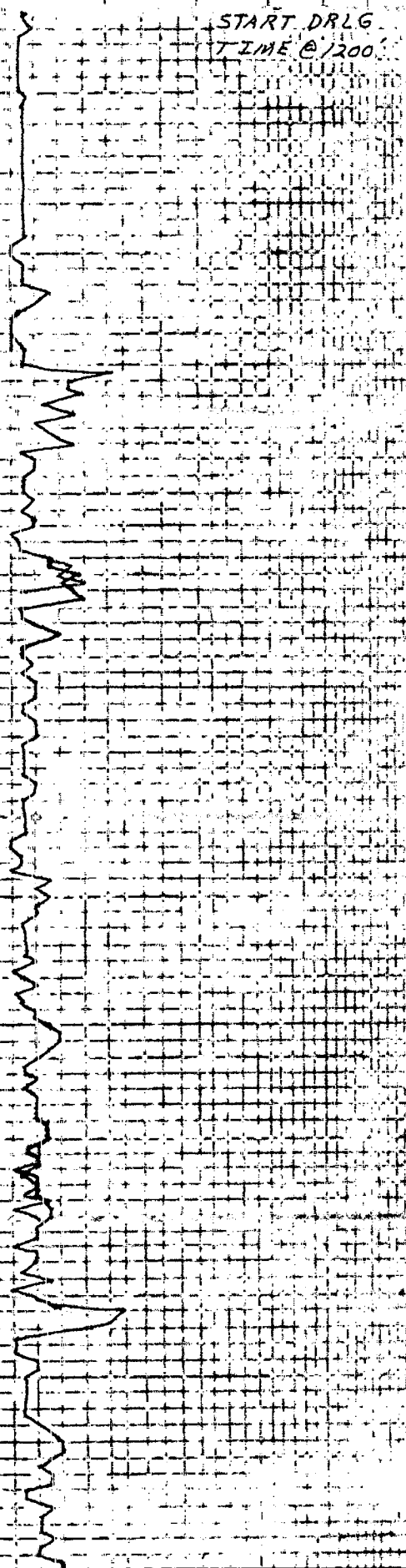
Sincerely,

  
Rex R. Ashlock

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Drill Time in Minutes Per Foot  
 Penetration Decreases



START DRLG  
 TIME @ 1200'

DEPTH  
 1200

1300

LITHOLOGY

SAMPLE DESCRIPTIONS

Q. No.

REMARKS

Drlg Time Taps

Marmaton  
 Group  
 1244 (-194)

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Myrick Station  
 1360 (-310)  
 Anna SH  
 "Lexington" Coal  
 Zone  
 1364 (-314)

ZONE  
1364 (-314)

SUMMIT

1400

MULKY

Cherokee  
1406 (-356)

SQUIRREL

MUD UP

START 10 SPLS

1500

Ardmore/  
Verdigris L:  
1493 (-443)

MOTT. TAN, V.FU-MED. XLN.  
LS VP. FOR, Foss, TR DR BRN LC

SH, BLK, MOSTLY BLOCKY, PYICUS

Croweburg  
1503 (-453)

SILTST, LT GY'S, W/GY-GRA  
GY SH

SH, GRN-GY'S, GY-GRN'S, TR  
SLTY

SH, V-DK GY, BLK

SH, GY-GRN-GY'S, TR MAROON  
TR SLTY

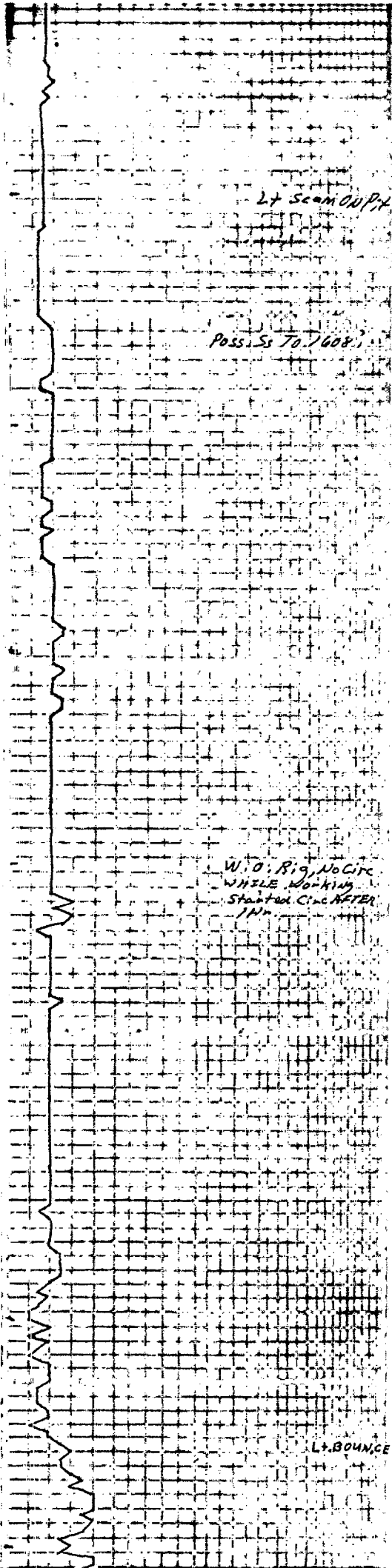
SH<sup>A</sup>, TR V-DK GY- BLK

Cattlemen Ss-  
1570 (-520)

(GY'S)  
SS, LT TAN-TAN, FU-TR MED.  
GU, S-RDD-ANG, P-SORT, W.  
CONS, FRI-SEMI FRM, P-F.Ø  
TR SLTY-SHLY, DULL-B. FLUR  
F-ODOR, WX-TR.F.3FO & RES.

LT SCAMON PT

30'



1600

1700

SH<sup>A</sup>/A, TR VV-DK GY-BLK

(GYSA)  
SS, Lt-TAN-TAN, FU-TR MED  
GN, S-RDD-ANG, P-SORT, W,  
CONS, FRI-SEMI FRM P-F-Ø  
TR SLTY-SALY, DULL-B. FLUR  
F-ODOR, WK-TR F3FO & RES  
SLTY-SH W/DEPTH

SS, TAN, F-MED GN, S-ANG-ANG, P-TR  
FW-SORT, FRM-TO-SEMI FRM,  
F-G-Ø, W3FO, F-ODOR, P-F-FLUR  
MORE MED GN-W/DEPTH & S-RDD-  
S-ANG

SH, PALE GRNS, TR WH SILT/VFN  
GN SS, NS → LAM  
(STILL CARRYING SS IN 1600 SP)  
SH, BLK, TR COAL, NO "FLOATERS"  
NS FG, PYIC, TR "COALY SH"  
SH, GY'S, DULL GRN-GY'S, TR  
BLK

SH, GY'S, GRN-GY'S & GRU-GY'S, TR  
SLTY

SH, GY-GAN, GRN-GY, OLIVE  
TR SLTY

SH, PALE-DULL GRNS, SCAT  
WH & PALE GRU SILTST  
LAM, NS, TR V-DK GY SH

SH, DK GY'S, TR GRU-GY

SH, DK-V-DK GY'S, TR GRU-GY'S  
OLIVE, TR COAL FRAGS

SH, A/A, Few Scat. Ss Clusters

SH, V-DK GYS-BLK, FEW SCAT.  
CARB FRAGS, TR PY

SH<sup>A</sup>/A, TR COAL & "COALY-SH"  
NO "FLOATERS", NSFG

SH<sup>A</sup>/A, SLIGHT INC. CARB.  
MAT

SH<sup>A</sup>/A, PY

• CGL, VARIED COLOR SH, TR Lg LOOSE  
SS GYS, TR CNT, TR WEATHERED LS  
CRM, WH, TR SZMS TRANSL, BLKY-  
CNT, TR REP IN PART, TR CGL  
LS, CRM, V-L-TAN, MILD-MED  
TR CAS, P-TR F-Ø, TR GLMC  
LOOKS "REWORKED", TR CNT, NS  
LS VV-L-TAN CRM MILD-MED

Cattlemen Ss  
1570(-520)

30'-

Base Catt  
1600(-550)

Miss. Cgl.  
1758(-700)  
Miss. "Chat."  
1763(-765)-713  
MISS. "LIME"

W. D. S. G. M. C. F.  
WHILE WORKING  
Started Circle AFTER  
7:10

1700

SH, DK-V-DK GYs, TR GRN-GYs  
OLIVE, TR COAL FRAGS

SH, A/A, Few Scat. Ss Clusters

SH, V-DK-GYs-BLK, FEW SCAT.  
CARB FRAGS, TR PY

SH, A/A, TR COAL & "COALY-SH"  
NO "FLOATERS", NSPG

SH, A/A, SLIGHT INCL CARB.  
MAT

SH, A/A, PY

CGL, VARIED COLOR SH, TR LG LOOSE  
SS GUS, TR CNT, TR WEATHERED LS  
CRM, WH, TR SIMS TRANSL, BLKY-  
CNT, TR EP IN PART, TR CGL, A/A  
LS, CRM, V-LT TAN, MICRO-MED  
TR CRS, P-TR F. Ø, TR GLANC  
LOOKS "REWORKED", TR CNT, NS  
LS, VV-LT TAN, CRM, MICRO-CRS  
XLN, P-UP-POR, BIOCLASTIC, NS

LS, LT CRM, VV-LT-TO-LT TANS,  
FU-MED XLN, F-G-XLN POR  
DOL'ic IN PART, P-F-FLUOR, G-  
VG/STG, ODOR, WK SEO, TR F. W/ACID  
LS, TAN, DOL'ic, G-STG-ODOR, F.  
FLUOR, F-TR G SEO W/HCL "STRINGS"  
G-VG-XLN Ø

LS, LT TAN, FU-MED XLN, TR  
CRS XLN, P-TR F. POR, TR  
CNT, WK-SCAT FLUOR (PATCHY)  
F-ODOR, P-F-STAN, N-APPT SEO

LS, LT TAN-V-LT TAN, FU-MED XLN  
F-G-XLN, POR, BIOCLASTIC, COLICASTIC  
POR, DOL'ic IN PART, P-TR  
SEO-VUG, F-TR G-FLUOR, WK-  
F-ODOR

DOL, "Lime", FU-MED XLN, TR  
SUC, G-XLN-POR, NS "Lity"  
VV-LT CRM

DOL/DOL'ic SH, DK TAN-TO-  
GY-BRN, BRN, DENSE, LOOKS LIKE  
"COWLEY" FACIES

DOL, OFF WH, CRM, VV-LT GY, FU-  
MED XLN, P-F-POR, ABUT CNT  
OPAL, WH, SEMI-TO-TRANSL  
BLCKY, TO SHARP, NS

LT BOUNCE

3 RW ON B.Y. SR =  
NEW PASS FASTER  
D-19 TIME

Sp/ @ 97

R  
R 1800

Circ Btm Up  
12/31/08

Miss. Cgl.  
1758 (-708)  
Miss. "Chat."  
1763 (-705)-713  
Miss. "Lime"  
1766 (-716)  
Ø 1781 (-731)  
9-10' Ø

Ø 1802 (-752)

RTD  
1835 (-785)