



Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION 1237221
OIL & GAS CONSERVATION DIVISION

Form ACO-1
August 2013

Form must be Typed
Form must be Signed
All blanks must be Filled

WELL COMPLETION FORM
WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License # _____

Name: _____

Address 1: _____

Address 2: _____

City: _____ State: _____ Zip: _____ + _____

Contact Person: _____

Phone: (_____) _____

CONTRACTOR: License # _____

Name: _____

Wellsite Geologist: _____

Purchaser: _____

Designate Type of Completion:

- New Well Re-Entry Workover
- Oil WSW SWD SIOW
- Gas D&A ENHR SIGW
- OG GSW Temp. Abd.
- CM (Coal Bed Methane)
- Cathodic Other (Core, Expl., 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 Conv. to GSW Conv. to Producer
- Commingled Permit #: _____
- Dual Completion Permit #: _____
- SWD Permit #: _____
- ENHR Permit #: _____
- GSW Permit #: _____

Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date
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API No. 15 - _____

Spot Description: _____

_____ - _____ - _____ Sec. _____ Twp. _____ S. R. _____ East West

_____ Feet from North / South Line of Section

_____ Feet from East / West Line of Section

Footages Calculated from Nearest Outside Section Corner:

- NE NW SE SW

GPS Location: Lat: _____, Long: _____
(e.g. xx.xxxxx) (e.g. -xxx.xxxxx)

Datum: NAD27 NAD83 WGS84

County: _____

Lease Name: _____ Well #: _____

Field Name: _____

Producing Formation: _____

Elevation: Ground: _____ Kelly Bushing: _____

Total Vertical Depth: _____ Plug Back Total Depth: _____

Amount of Surface Pipe Set and Cemented at: _____ Feet

Multiple Stage Cementing Collar Used? Yes No

If yes, show depth set: _____ Feet

If Alternate II completion, cement circulated from: _____

feet depth to: _____ w/ _____ sx cmt.

Drilling Fluid Management Plan

(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 #: _____

Quarter _____ Sec. _____ Twp. _____ S. R. _____ East West

County: _____ Permit #: _____

AFFIDAVIT

I am the affiant and I hereby certify that 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.

Submitted Electronically

KCC Office Use ONLY

- Confidentiality Requested
Date: _____
- Confidential Release Date: _____
- Wireline Log Received
- Geologist Report Received
- UIC Distribution
- ALT I II III Approved by: _____ Date: _____

1237221

Operator Name: _____ Lease Name: _____ Well #: _____

Sec. _____ Twp. _____ S. R. _____ East West County: _____

INSTRUCTIONS: Show important tops 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.

Final Radioactivity Log, Final Logs run to obtain Geophysical Data and Final Electric Logs must be emailed to kcc-well-logs@kcc.ks.gov. Digital electronic log files must be submitted in LAS version 2.0 or newer AND an image file (TIFF or PDF).

Drill Stem Tests Taken <input type="checkbox"/> Yes <input type="checkbox"/> No <i>(Attach Additional Sheets)</i> Samples Sent to Geological Survey <input type="checkbox"/> Yes <input type="checkbox"/> No Cores Taken <input type="checkbox"/> Yes <input type="checkbox"/> No Electric Log Run <input type="checkbox"/> Yes <input type="checkbox"/> No List All E. Logs Run: _____	<input type="checkbox"/> Log Formation (Top), Depth and Datum <input type="checkbox"/> Sample Name Top Datum
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CASING RECORD <input 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

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				

Did you perform a hydraulic fracturing treatment on this well? Yes No *(If No, skip questions 2 and 3)*

Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons? Yes No *(If No, skip question 3)*

Was the hydraulic fracturing treatment information submitted to the chemical disclosure registry? Yes No *(If No, fill out Page Three of the ACO-1)*

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

TUBING RECORD:	Size:	Set At:	Packer At:	Liner Run: <input type="checkbox"/> Yes <input type="checkbox"/> No
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Date of First, Resumed Production, SWD or ENHR.	Producing Method: <input type="checkbox"/> Flowing <input type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other <i>(Explain)</i> _____				
Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity

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 type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <i>(Submit ACO-5)</i> <input type="checkbox"/> Other <i>(Specify)</i> _____	PRODUCTION INTERVAL: _____ _____
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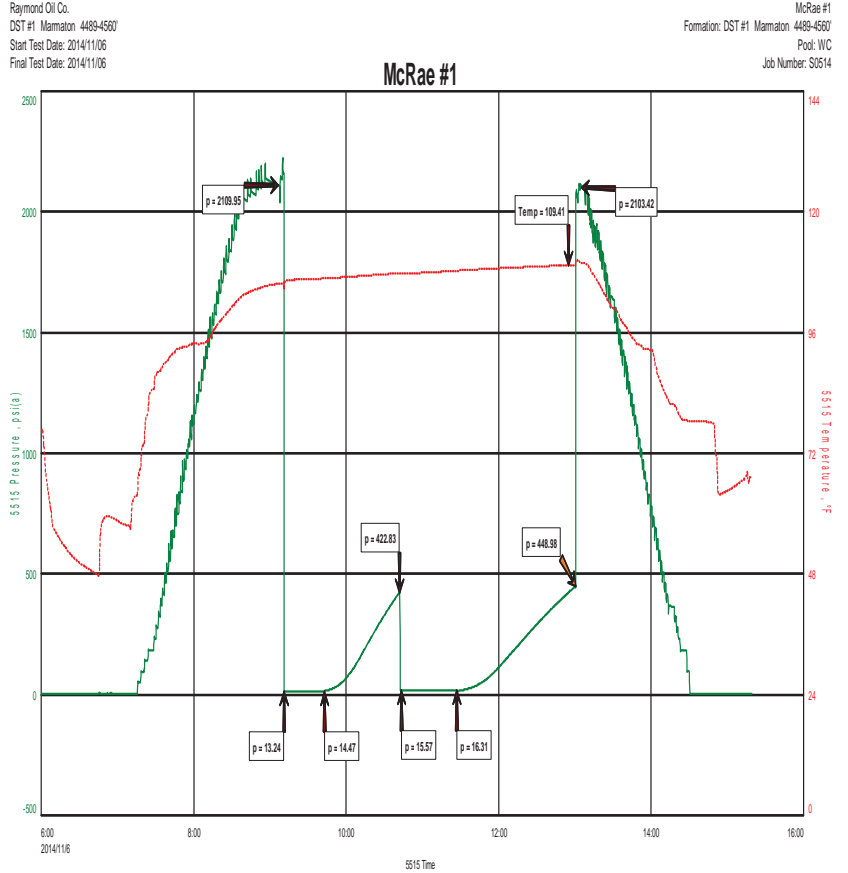
Hoisington, Kansas

JACOB MCCALLIE
620-627-7116
mccallie.dtlc@gmail.com

General Information

Company Name Raymond Oil Co.

Contact	Ted McHenry
Well Name	McRae #1
Unique Well ID	DST #1 Marmaton 4489-4560'
Surface Location	SEC 23-19S-36W Wichita County
Field	WC
Well Operator	Raymond Oil Co.
Test Type	Drill Stem Test
Well Type	Vertical
Formation	DST #1 Marmaton 4489-4560'
Well Fluid Type	01 Oil
Test Purpose (AEUB)	Initial Test
Start Test Date	2014/11/06
Start Test Time	06:00:00
Final Test Date	2014/11/06
Final Test Time	15:19:00
Job Number	S0514
Representative	Jacob McCallie
Prepared By	Jacob McCallie
Report Date	2014/11/06



FLUID RECOVERY

RECOVERY:
5' MUD 100% M

TOOL SAMPLE:
<1% O >99% M



DIAMOND TESTING
P.O. Box 157
HOISINGTON, KANSAS 67544
(800) 542-7313
DRILL-STEM TEST TICKET
FILE: mcræ1dst1

TIME ON: 06:00
TIME OFF: 15:19

Company Raymond Oil Co. Lease & Well No. McRae #1
Contractor H2 Rig #1 Charge to Raymond Oil Co.
Elevation 3225 KB Formation Marmaton Effective Pay _____ Ft. Ticket No. S0514
Date 11-06-14 Sec. 23 Twp. _____ 19 S Range _____ 36 W County Wichita State KANSAS
Test Approved By Max Lovely Diamond Representative Jacob McCallie

Formation Test No. 1 Interval Tested from 4489 ft. to 4560 ft. Total Depth 4560 ft.
Packer Depth 4484 ft. Size 6 3/4 in. Packer depth _____ ft. Size 6 3/4 in.
Packer Depth 4489 ft. Size 6 3/4 in. Packer depth _____ ft. Size 6 3/4 in.

Depth of Selective Zone Set _____

Top Recorder Depth (Inside) 4470 ft. Recorder Number 5515 Cap. 5,000 P.S.I.
Bottom Recorder Depth (Outside) 4525 ft. Recorder Number 5586 Cap. 5,000 P.S.I.
Below Straddle Recorder Depth _____ ft. Recorder Number _____ Cap. _____ P.S.I.

Mud Type Chem Viscosity 45 Drill Collar Length 368 ft. I.D. 2 1/4 in.
Weight 9.2 Water Loss 9.6 cc. Weight Pipe Length 0 ft. I.D. 2 7/8 in.
Chlorides 5,000 P.P.M. Drill Pipe Length 4088 ft. I.D. 3 1/2 in.
Jars: Make STERLING Serial Number 4 Test Tool Length 33 ft. Tool Size 3 1/2-IF in.
Did Well Flow? NO Reversed Out NO Anchor Length 71 (40A) ft. Size 4 1/2-FH in.
Main Hole Size 7 7/8 Tool Joint Size 4 1/2 XH in. Surface Choke Size 1 in. Bottom Choke Size 5/8 in.

Blow: 1st Open: WSB- Died in 12 min **NOBB**
2nd Open: No Blow- No Build **NOBB**

Recovered <u>5</u> ft. of Mud <u>100% M</u>	
Recovered _____ ft. of _____	
Recovered _____ ft. of _____	
Recovered _____ ft. of _____	
Recovered _____ ft. of _____	Price Job
Recovered _____ ft. of _____	Other Charges
Remarks: _____	Insurance
TOOL SAMPLE: <u><1 % O >99 % M</u>	Total

Time Set Packer(s) 9:11 AM A.M. P.M. Time Started Off Bottom 12:56 PM A.M. P.M. Maximum Temperature 109

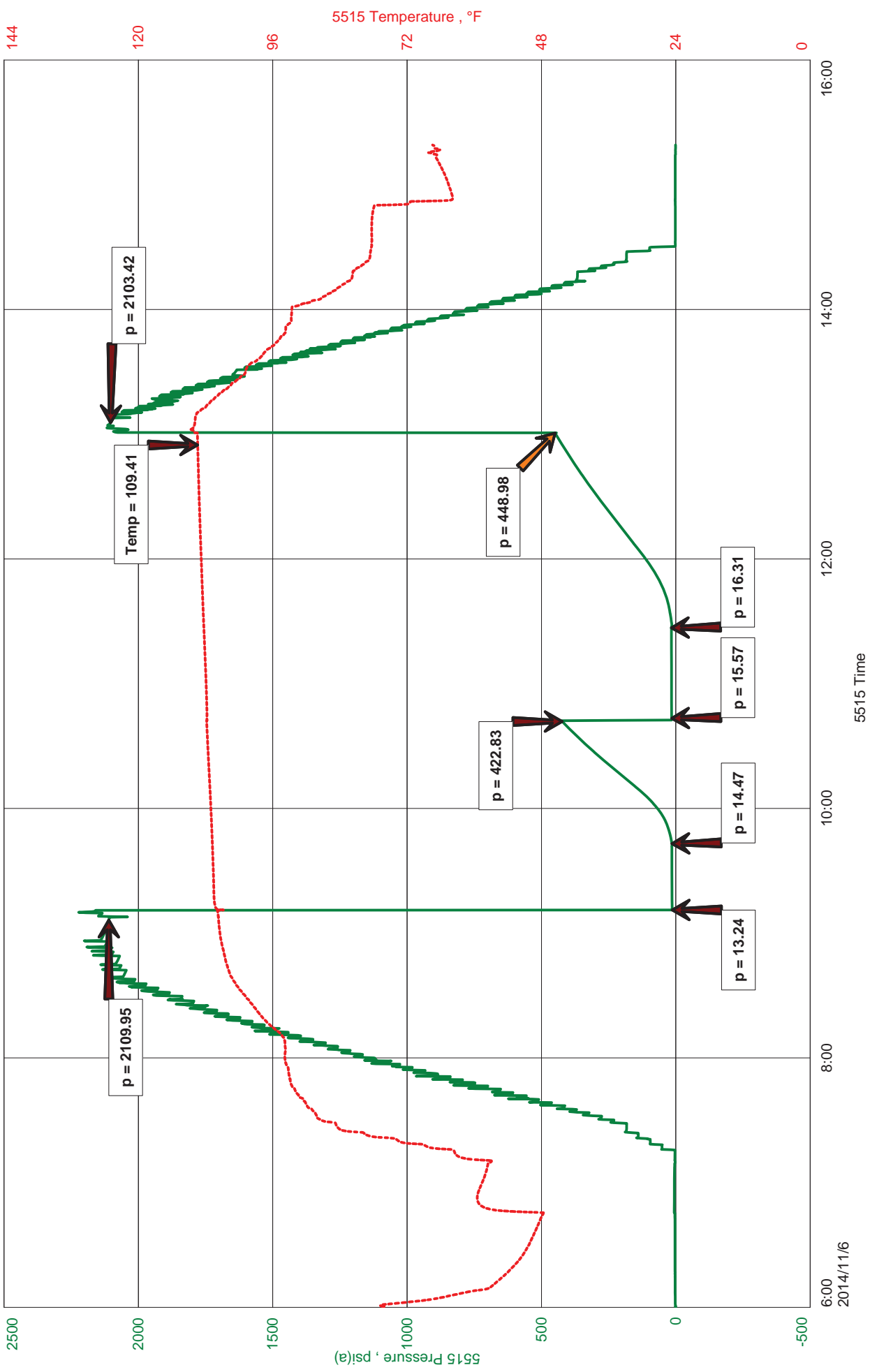
Initial Hydrostatic Pressure..... (A) 2110 P.S.I.
Initial Flow Period..... Minutes 30 (B) 13 P.S.I. to (C) 14 P.S.I.
Initial Closed In Period..... Minutes 60 (D) 423 P.S.I.
Final Flow Period..... Minutes 45 (E) 16 P.S.I. to (F) 16 P.S.I.
Final Closed In Period..... Minutes 90 (G) 449 P.S.I.
Final Hydrostatic Pressure..... (H) 2103 P.S.I.

Diamond Testing shall not be liable for damages of any kind to the property or personnel of the one for whom a test is made or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statement or opinion concerning the result of any test. Tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.

Raymond Oil Co.
DST #1 Marmaton 4489-4560'
Start Test Date: 2014/11/06
Final Test Date: 2014/11/06

McRae #1
Formation: DST #1 Marmaton 4489-4560'
Pool: WC
Job Number: S0514

McRae #1





CONSOLIDATED
Oil Well Services, LLC

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

TICKET NUMBER 47726

LOCATION Oakley, Ks.

FOREMAN Dauen

#212316

FIELD TICKET & TREATMENT REPORT

CEMENT

Ks.

DATE	CUSTOMER #	WELL NAME & NUMBER	SECTION	TOWNSHIP	RANGE	COUNTY	
10/30/14	7158	Mac. Rae #1	23	19	36	Wichita	
CUSTOMER Raymond Oil Company, Inc.			Leoti				
MAILING ADDRESS P.O. BOX 48788			S to W Rd				
CITY Wichita,			E To				
STATE KS			Dead End				
ZIP CODE 67002			1/4 N E into				
TRUCK #		DRIVER		TRUCK #		DRIVER	
731		Kelly					
693		Cody					

JOB TYPE Surface HOLE SIZE 12 1/4 HOLE DEPTH 266 CASING SIZE & WEIGHT 8 5/8, 23 #
 CASING DEPTH 265.10 DRILL PIPE _____ TUBING _____ OTHER _____
 SLURRY WEIGHT 14 # SLURRY VOL 1.36 WATER gal/sk _____ CEMENT LEFT In CASING 20'
 DISPLACEMENT 15.68 DISPLACEMENT PSI _____ MIX PSI _____ RATE _____

REMARKS: Softy Meeting Rig up on H2 #1 Run Casing Break Circulation with Rig Pump Hook up To Pump Truck Mix 185 SKS Cem 3%CC 2%Gel Washup Pump & Lines Displace with 15.68 bbls water Shut in Rig Down

Cement Did Circulate

Approx 2 bbls to pit

Thanks Dauen & Crew

ACCOUNT CODE	QUANTITY or UNITS	DESCRIPTION of SERVICES or PRODUCT	UNIT PRICE	TOTAL
54013	1	PUMP CHARGE	\$1150.00	\$1150.00
5406	65	MILEAGE	\$5.25	\$341.25
5407H	8.70	Ton Mileage Delivery	\$1.75	\$152.25
1104S	185 SKS	Class "A" Cement	\$18.55	\$3420.75
1102	522 #	Calcium Chloride	\$0.94	\$490.68
1118B	348 #	Bentonite	\$0.27	\$93.96
			Sub Total	\$6497.26
			Less 10%	\$649.72
			Sub Total	\$5847.54
			SALES TAX	294.60
			ESTIMATED TOTAL	\$6142.14

AUTHORIZATION José C. Fobler TITLE _____ DATE _____

I acknowledge that the payment terms, unless specifically amended in writing on the front of the form or in the customer's account records, at our office, and conditions of service on the back of this form are in effect for services identified on this form.



CONSOLIDATED
Oil Well Services, LLC

870

TICKET NUMBER 47799 ⁸¹⁴ ~~826~~

LOCATION Oakley Ks.

FOREMAN Danen

INVOICE # 80203A

FIELD TICKET & TREATMENT REPORT
CEMENT

Ks.

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

DATE	CUSTOMER #	WELL NAME & NUMBER	SECTION	TOWNSHIP	RANGE	COUNTY
11/9/14	7158	MacRae #1	23	19	36	Wichita
CUSTOMER <u>Raymond Oil</u>		Leoti Sto Rd W 1/2 To Dead End 1/4 NE 1/4	TRUCK #	DRIVER	TRUCK #	DRIVER
MAILING ADDRESS			731	Cory		
CITY			693	Cody		
STATE				Colin		
ZIP CODE						

JOB TYPE PTA HOLE SIZE _____ HOLE DEPTH _____ CASING SIZE & WEIGHT _____
 CASING DEPTH _____ DRILL PIPE 4 1/2 TUBING _____ OTHER _____
 SLURRY WEIGHT 13.8 SLURRY VOL 142 WATER gal/sk _____ CEMENT LEFT in CASING _____
 DISPLACEMENT _____ DISPLACEMENT PSI _____ MIX PSI _____ RATE _____

REMARKS: Safety Meeting Rig up on H2 #1 Plug as ordered.

2400' - 50 SKs
1230' - 80 SKs
300' - 40 SKs 240 SKs 6 3/4 4% Gel 1/4 Floseal
60' - 20 SKs
Plug Mousehole 20 SKs
Plug Rat hole 30 SKs

Thanks Danen + Crew

ACCOUNT CODE	QUANTITY or UNITS	DESCRIPTION of SERVICES or PRODUCT	UNIT PRICE	TOTAL
5405N	1	PUMP CHARGE	\$1395.00	\$1395.00
5406	65	MILEAGE	\$5.25	\$341.25
5407A	10.32	Ton Mileage Delivery	\$1.75	\$178.20
1131	240 SKs	6 3/4 Poz mix	\$15.86	\$3806.40
1118B	826 #	Bentonite	\$.27	\$223.02
1107	60 #	Floseal	\$2.97	\$1782.00
				178.20
				4117.47
				111.78
				6406.00
			SubTotal	\$8721.97
			Less 10%	\$872.19
			SubTotal	\$7849.78
				6406.00
			SALES TAX	308.62
			ESTIMATED TOTAL	4714.83

AUTHORIZATION Charles Leblanc TITLE _____ DATE _____

I acknowledge that the payment terms, unless specifically amended in writing on the front of the form or in the customer's account records, at our office, and conditions of service on the back of this form are in effect for services identified on this form.

Max R. Lovely

GEOLOGIST'S REPORT

DRILLING TIME AND SAMPLE LOG

COMPANY Raymond Oil Co.
 LEASE McRae #1
 FIELD Wildcat
 LOCATION NW SE NW SW
 SEC 23 TWSP 19 RGE 36W
 COUNTY Wichita STATE KS

ELEVATIONS
 KB 3225
 DF _____
 GL 3214
 Measurements Are
 From KB

CONTRACTOR H2#1
 SPUD 10-31 COMP 11-9-14
 RTD 5200 LTD 5200
 MUD UP 3415 TYPE MUD Chem

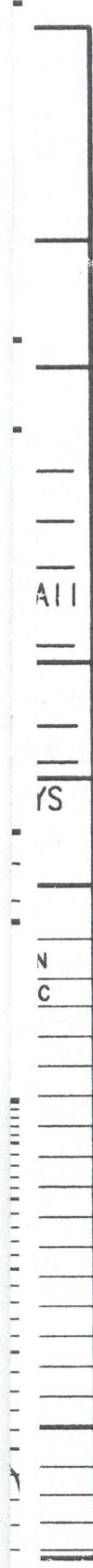
CASING
 SURFACE 8 7/8" @ 265'
 PRODUCTION _____
 ELECTRICAL SURVEY
 DUAL IND MICRO
 COMP N/D SONIC

FORMATION TOPS AND STRUCTURAL POSITION

FORMATION	SAMPLE TOP	ELECTRIC LOG TOP	SUB-SEA DATUM	STRUCTURAL POSITION		
				A	B	
Anhydrite	2356	2356	869	888		
Base Anhydrite	2372	2372	853	870	863	
Stotler	3574	3574	-349	-336	-339	
Heebner	3986	3984	-759	-742	-748	
Lansing	4034	4035	-810	-792	-799	
Muncie	4235	4237	-1012	-994	-1005	
Hushpuchney	4403	4394	-1169	-1162	-1177	
Marmaton	4526	4526	-1301	-1300	-1303	
Pawnee	4624	4610	-1385	-1375	-1399	
Myric	4659	4645	-1420	-1408	-1435	
Ft. Scott	4678	4659	-1434	-1436	-1451	
Johnson	4757	4732	-1507	-1514	-1529	
Morrow SH	4888	4866	-1641	-1662	-1678	
Mississippi	5072	5072	-1847	-1848	-1897	

REFERENCE WELLS FOR STRUCTURE

- A Raymond Shimanek #1 NE SW SW SW 26-19-36W
 B Helmerich Harris #1-27 SE SE NW 27-19-36W
 C _____

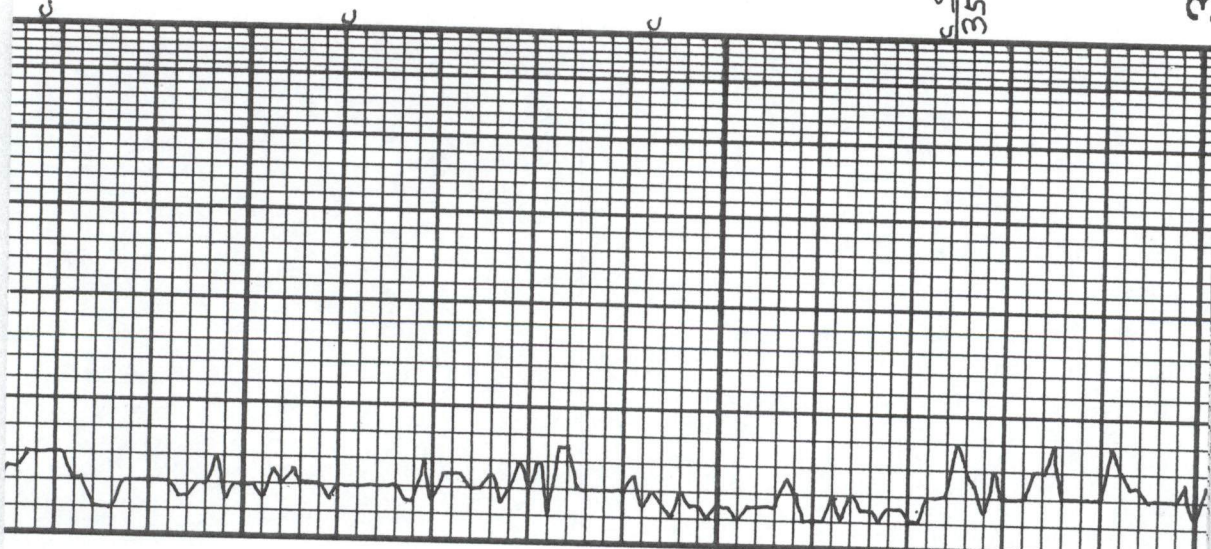


REMARKS

LEGEND	
	Anhydrite
	Salt
	Sandstone
	Shale
	Carb sh
	Limestone
	Ool. Lime
	Chert
	Dolomite

DRILLING TIME IN MINUTES PER FOOT Rate of Penetration Decreases	DEPTH	LITHOLOGY	SAMPLE DESCRIPTIONS	OIL SHOWS	REMARKS
			LS. TAN, GRY, F XTLN, ABOU FOSS HRD, P. MS		

LOG 7710

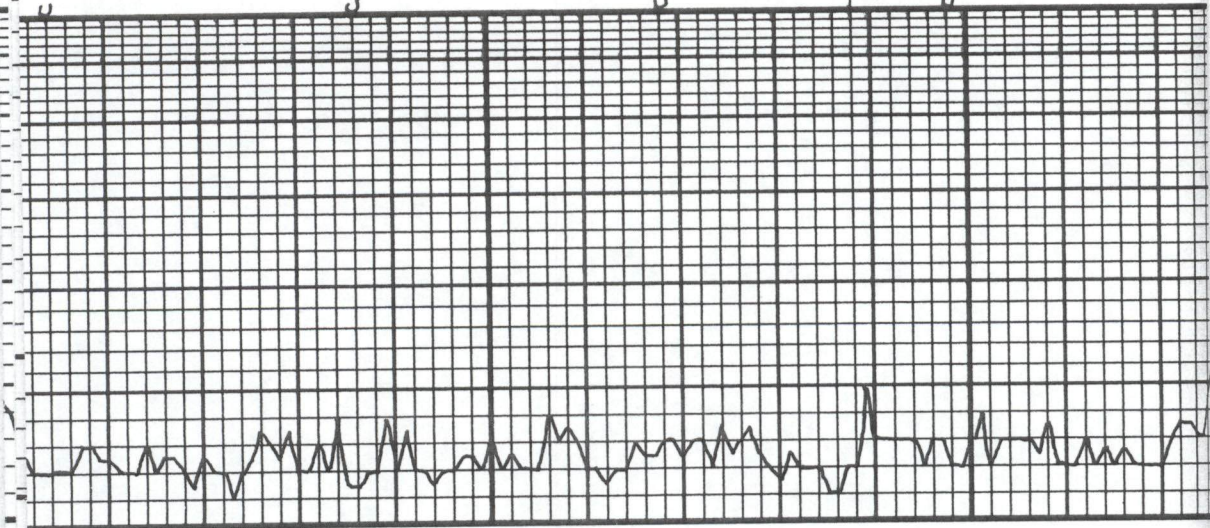


3500

STOTLER
3574-349

3600

LS, CRM, TAN, F XTLN, SL DMS, M HRD, V FEW FOSS CASTS, NS	LS, LT GRY, V F XTLN, DMS, HRD TO MED HRD, NO VIS Ø, NS	LS, BRN, CRS XTLN, HRD, ABUN FOSS + FRAGS, NO VIS Ø, NS	LS, GRY, F → M XTLN, HRD, NO VIS Ø, NS	SS, GRY, CRT, CLR MED → FINE GRNS, F SORT, SOFT, F → G Ø NS	SH, GRY, DK GRY	LS, GRY, TAN, F → M XTLN, HRD, V FOSS, VP Ø, NS	LS, WHI, V F XTLN, DMS,
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HRD, CLEAN, NS	LS, CRM, WHT, FXTLN, DMS Pcs V FOSS, NS	POOR SAMPLES				LS, WHT, CRM, FXTLN, HRD, SCT Pcs FOSS + ALGAL, NS	AA.	LS, TAN, MXTLN, HRD, FOSS, CHTY, NS
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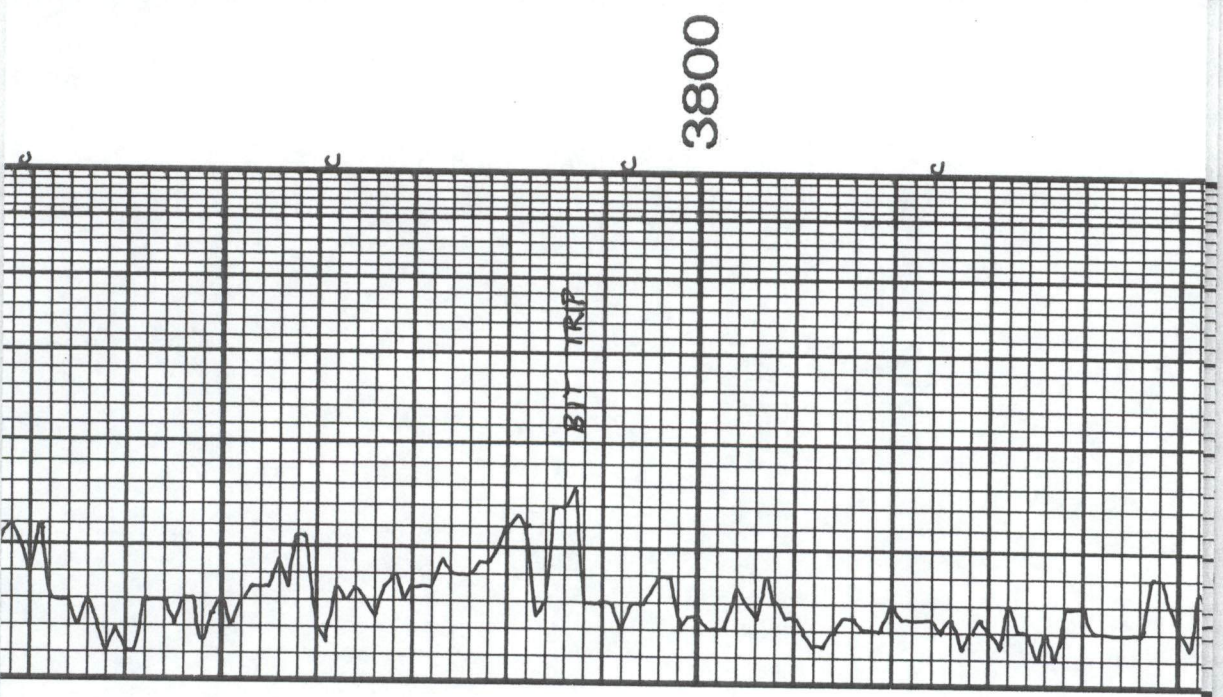
7:AM 11-3-14
 DRLG @ 3658'
 MUD CHECK
 VIS: 60 WT: 8.7
 CHLOR: 3,700 KCM: 16
 FILT: 7.2

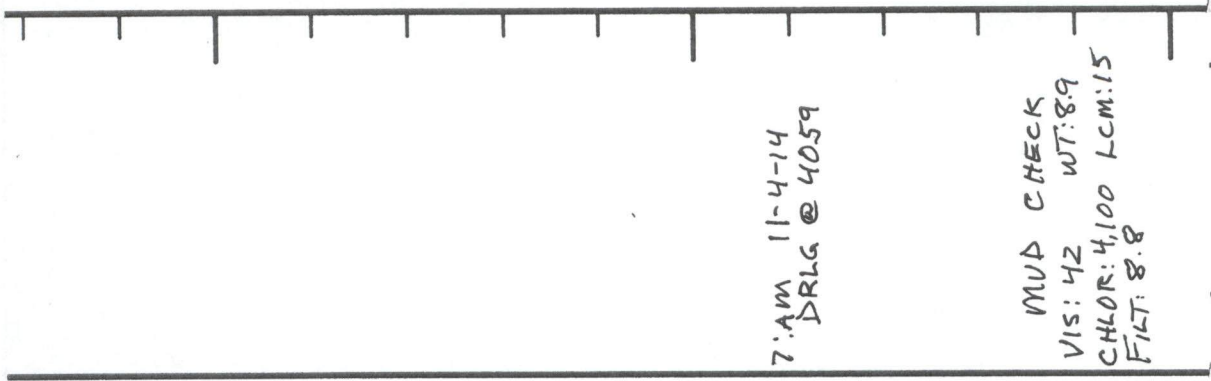
TOPEKA
 3688-463
 3700

BUTANE TEST
680 KICK

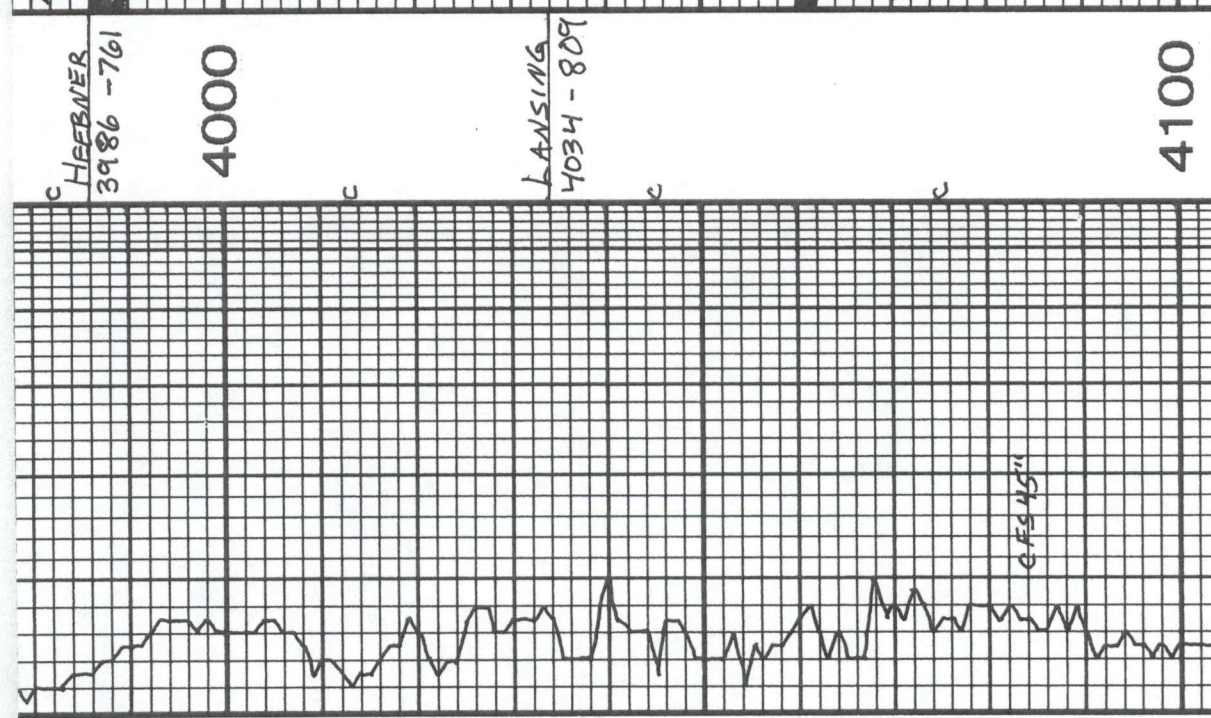
BACKGROUND INCR TO

CHALK	LS, TAN, CRM, F → M XTLN, HRD, FEW FOSS, NO VIS Ø, NS
SH, GRV	
SH, GRV, LMY, HRD	
LS, CRM, TAN, F XTLN, HRD, V FOSS - ALGAL, NO APP Ø, NS	
LS, WHI, CRM, F XTLN, SOFT, SL BR TL, P → F Ø, NS	
A.A.	
LS, CRM, WHI, F XTLN, HRD, ABUN FOSS, VP Ø, NS	
LS, BRN, TAN, F XTLN, HRD, ABUN FOSS, VP Ø, NS	





CHT, WHT, FRESH	SH, BLK	LS, CRM, TAN, CHLKY, SOFT, NS	LS, WHT, F XTLN, M HRD, FAIRLY CLEAN, P XTLN, NS	LS, BRN, F XTLN, LG XTLS W/N, HRD, NO VIS, NS	LS, WHT, CRM, F XTLN, HRD, LG XTLS W/N, V FOSS, F, NS	A.A.	SH, BLK LS, BUFF, CRM, F XTLN, HRD, SCT PCS CHLKY, P, NS, NO ODR	LS, BRN, F XTLN, V HRD, TITE LS, WHT, V F XTLN, V DNS + HRD, TITE, CLEAN, NS	LS, WHT, TAN, V F XTLN, DNS, HRD, TITE, NS	LS, AA, INCR WHT, CHT
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HEEBNER
 3986 -761
 4000
 LANSING
 4034 - 809
 4100
 "LANSING"
 MUD CHECK
 VIS: 42 WT: 89
 CHLOR: 4,100 LCM: 15
 FILT: 8.8

7:AM 11-4-14
DRLG @ 4059

MUD CHECK
VIS: 42 WT: 89
CHLOR: 4,100 LCM: 15
FILT: 8.8

NS
Are
RVE
RO
1/C

ITIO

HRD, CLEAN, NS

LS, WHT, TAN, V FXTLN, DNS, CTAB, CHTY, TITE, NS

LS, TAN, WHT, BRN, V FXTLN, V DNS, V HRD, CLEAN, TITE, NS

LS, CRM, WHT, F → M XTLN, HRD, FEW SCT VUGS, MUCH RE XTLN, NS

LS, WHT, LT GRV, FXTLN, HRD, FOSS, FEW SCT VUGS, NS

LS, WHT, GRV / TAN, V FXTLN, HRD, DNS, TITE, NS

A.A.

LS, WHT, GRV / TAN, V FXTLN, HRD, DNS, TITE, CLEAN, NS

LS, BUFF, WHT, FXTLN, BRTL, SOFT, G. COMP, NS

A.A.

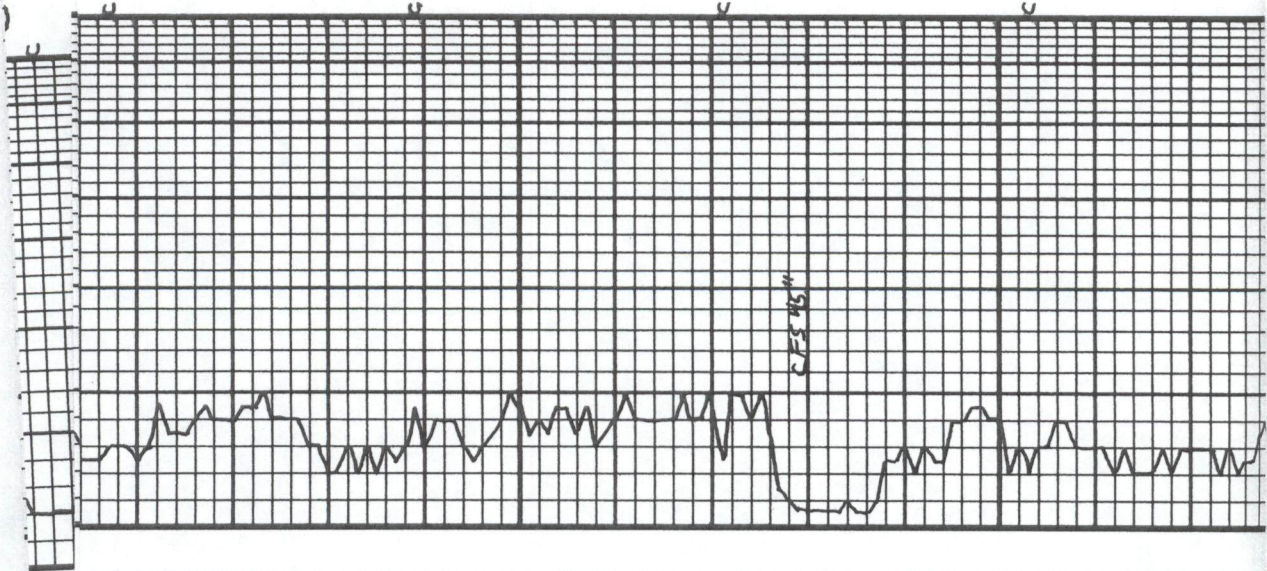
LS, WHT, FXTLN, HRD, V BRTL, G XTLN Ø, NS, WET

LS, TAN, V FXTLN, V HRD, DNS, SL-FOSS, NO APP Ø, NS

A.A.

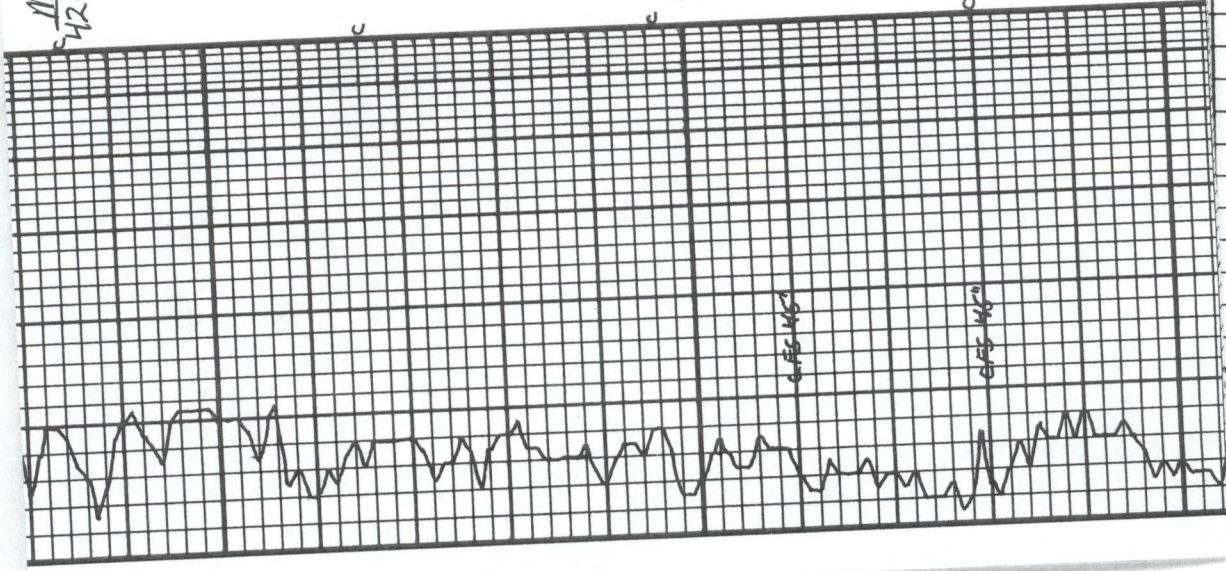
100 Hw Kick

4200



MUNCIE
4235-1010

4300



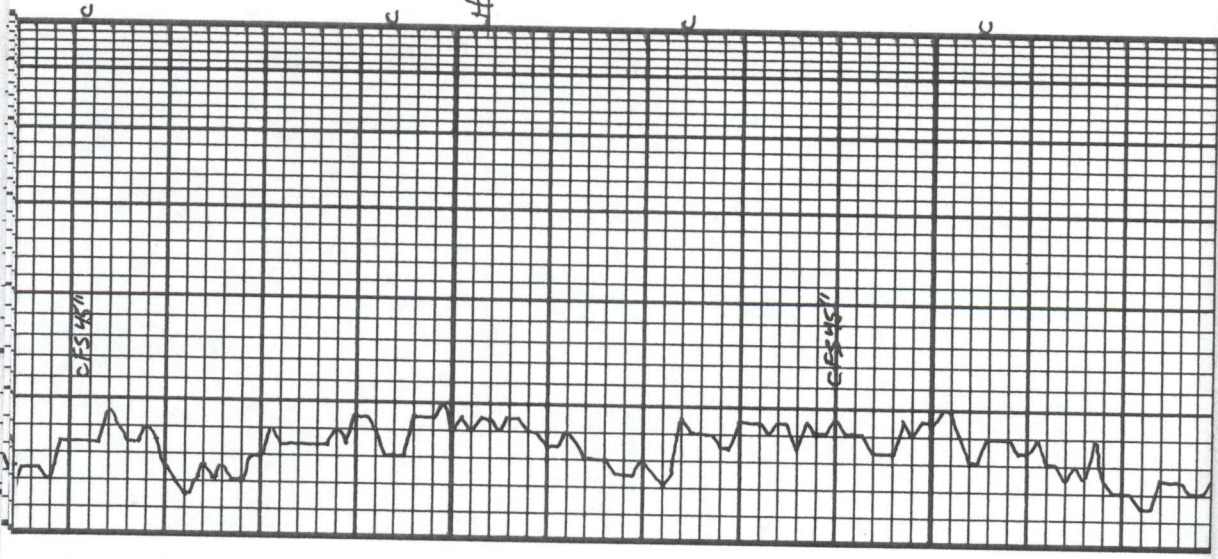
SK, BLK LS, LT GR, V F XTLN, PMS + HRD, CLEAN, NO APP, NS	LS, TAN, V F XTLN, V HRD, ITC NS	LS, WHT, F XTLN, HRD, ITC, NS	LS, TAN, WHT, F XTLN, M HRD, NO VIS, NS	SK, BLK, DK GR	LS, BRN, F XTLN, M HRD, P, NS	LS, CRM, WHT, F XTLN, S → M HRD, V SL CHKY, NS	LS, WHT / TAN, F XTLN, SOFT, V CHKY, NS	LS, WHT, TAN, F XTLN, BRTL, SOFT, ABUN FOSS, F FOSS, NS	LS, WHT, F → M XTLN, BRTL, FOSS, G, NS	LS, BUFF, F XTLN, BRTL, LT DOM, NS, NS, NO OPOR	SK, BLK, CARB LS, LT GR, BUFF, F XTLN, V FOSS NS	LS, LT GR, V F XTLN, ABUN DOGS FOSS, V. HRD, WHT, ITC
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ONS

Are

URVE
CRO
NIC

SITIO



4400
HUSH/UCR/NE

LS. WHT, TAN, F XTLN, SL FOSS, HRD, VP Ø, NS
LS. BRN, DK BRN, F → M XTLN, HRD, BRTL, V FOSS, P FOSS Ø, NS
LS. GRY, CRM, TAN, V XTLN, DMS HRD, TITE, NS
LS. BRN, A.A.
SH, BLK
LS. BUF, F XTLN, HRD, V OOM, NO VIS PERM, NS
LS. CRM, WHT, F XTLN, SOFT, SL CHLKY DW BRK, NO VIS Ø, NS NO OPOR, NO KICKS
LS. TAN, CRM, BRN, F XTLN, SL DMS HRD, NO VIS Ø, NS
LS. GRY, BRN, TAN, F XTLN, DMS, HRD, TITE, NS
LS. WHT, CRM, S → M HRD, F XTLN, VP Ø, NS
LS. TAN, F XTLN, M HRD, BRTL, ABUN W CMT'D OOLS, VP → TITE Ø, NS
LS. TAN, F XTLN, V FOSS, BRTL, F Ø, NS

7:AM 11-5-14
DRLG @ 4395'

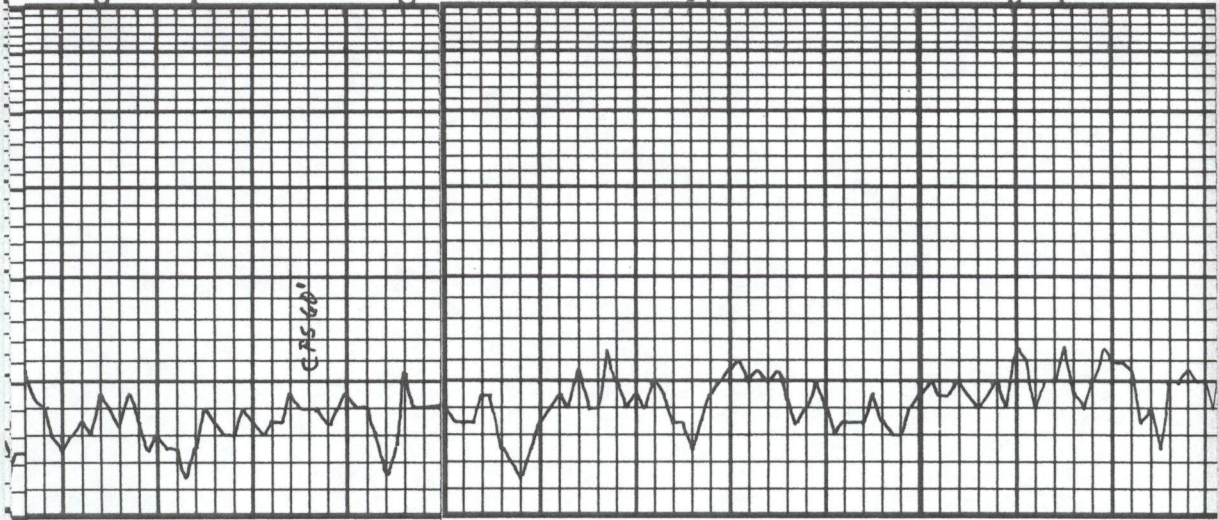
BUTANE TEST: 420 KICK

MUD CHECK

VIS: 45 WT: 9.2

CHLOR: 5000 LCM: 12

FILT: 9.6



<p>SH, GRAY LS, GRAY, VF XTLN, HRD, DNS, NO APP, NS</p>	<p>SH, BLK LS, LT GRAY, CRM, F XTLN, BRTL, FOSS, NO APP, NS</p>	<p>LS, GRAY, F XTLN, V HRD, DNS, TITE NS</p>	<p>CHY, CRM, SCT CLR INCL'S W/M, WHT, CAR, OPAL, SHARP, NS</p>	<p>CHT, FLESH W/ WHT INCL'S W/M SHARP SH, BLK</p>	<p>LS, TAN, BRN, F M XTLN, HRD, FOSS, NO APP, NS</p>	<p>SH, BLK LS, GRAY, TAN, BRN, VF XTLN, DNS, HRD, TITE, NS</p>	<p>LS, TAN, VF XTLN, DNS, HRD, TITE NS</p>	<p>LS, WHT, TAN, VF XTLN, BRTL, SL HRD, FOSS, VP XTLN, NPS, NS</p>	<p>AA.</p>	<p>SH, BLK-CARB, GRAY</p>	<p>LS, CRM, F XTLN, S M HRD, V BRTL, NS</p>
<p>PAWNEE 4624-1399</p>		<p>MYRIC 4659-1434</p>		<p>St. Scott 4678-1453</p>		<p>4700</p>		<p>CHEROKEE 4715-1490</p>			

7:10 AM 11-7-14
DRLG @ 4680'

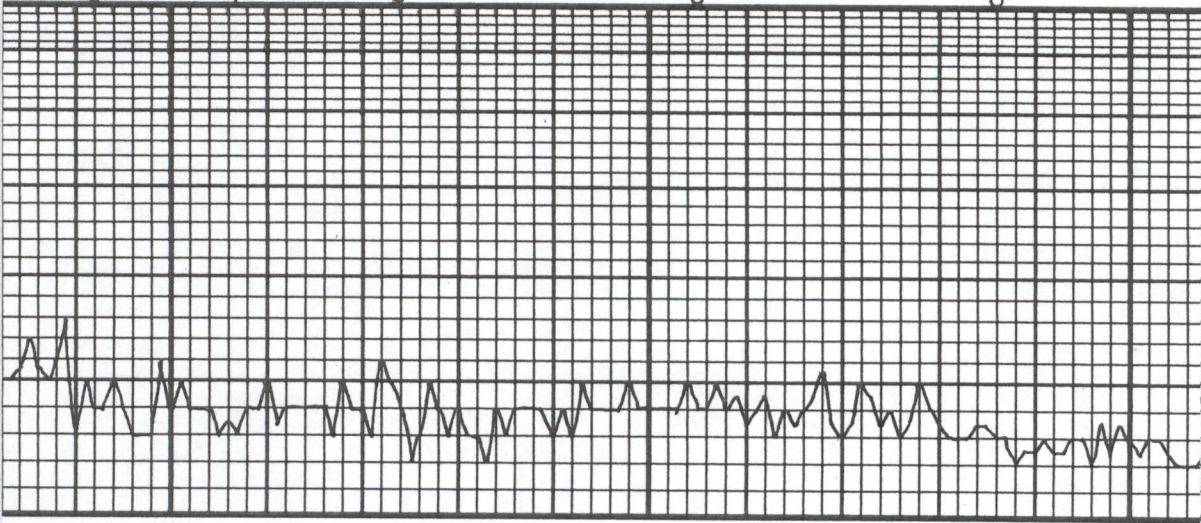
MUD CHECK
VIS: 54 WT: 9.1
CHLOR: 6200 LCM: 10
FILT: 9.6
BUTANE TEST: 43.0 MW

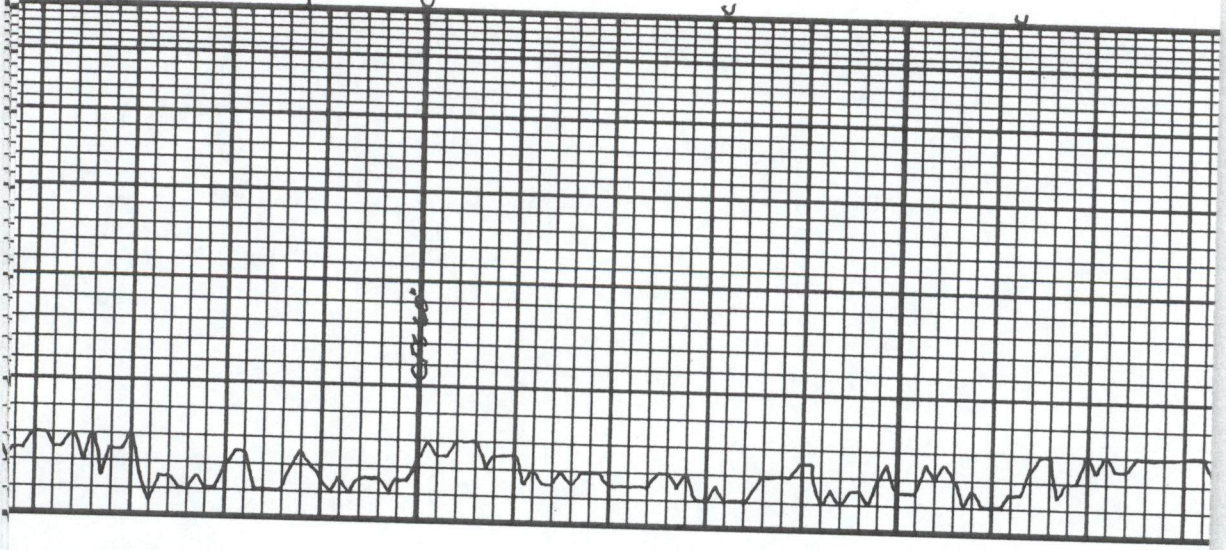
CARBIDE TEST : 620 Hw
 BIT TRIP @ 4738'

LS. BRN, TAN, M XTLN XTLS W/N, FOSS, HRD, NO VIS P, NS	TRASH SAMPLES
SS, WHT, GRY, ANG, MED GRMS, SOFT, G P, NS SH, GRY	
LS, GRY, V HRD, F XTLN, V DNS, NS	
LS, DK GRY, VF XTLN, V HRD, DNS, NS	
A.A.	
LS, DK BRN, VF XTLN, DNS, V HRD, TITE, NS	
LS, GRY, DK GRY, F XTLN, V HRD, NO APP P, NS	
LS, WHT, A.A.	
CHT, WHT, SMOKE, BLK, FRESH, SHARP, NS	
LS, BLK, DK GRY, F XTLN, V HRD, V DNS, TITE, NS	
A.A.	

JOHANSON
 4757 - 1532

4800

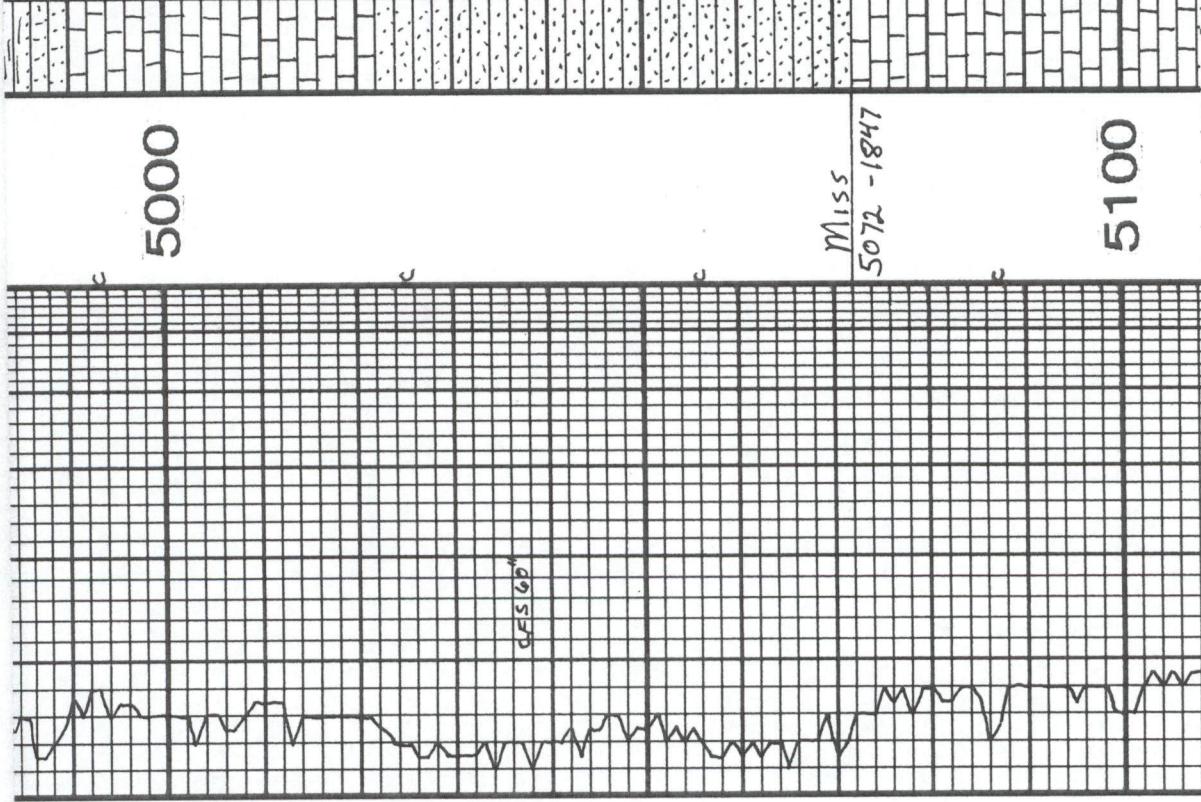




MORROW SH
4888-1663

4900

CHT, CRM, FRESH, NS	CHT, CRM, FRESH, NS
LS, DK GR, CHTY, FXTLN, V HARD, DMS, TITE	LS, DK GR, CHTY, FXTLN, V HARD, DMS, TITE
LS, DK GR, BLK, CHTY, V FXTLN, DMS, HRD, TITE, NS	LS, DK GR, BLK, CHTY, V FXTLN, DMS, HRD, TITE, NS
SH, BLK	SH, BLK
SH, LT + DK GR	SH, LT + DK GR
SS CLR GRMS GRY CMT, HRD, W CMT P, VP, NS	SS CLR GRMS GRY CMT, HRD, W CMT P, VP, NS
SH, GR, GRN, SCT BRN LS	SH, GR, GRN, SCT BRN LS
A.A	A.A
LS, TAN, FXTLN, SOFT, PXTLN, NS	LS, TAN, FXTLN, SOFT, PXTLN, NS
M.A	M.A
SH, LT + DK GR	SH, LT + DK GR
SH, GR, GRN	SH, GR, GRN



5000

MISS
5072 - 1847

5100

SS, WHIT, GRN, F → MED GRNS, SOFT MED GRNS @ BASE, W SORTS, NS	NO KICKS
LS, BRN, F XTLN, HRD, SCT BRN FRESH CHT, NS	
LS, WHIT, F XTLN, HRD, FEW FOSS, CASTS, MOSTLY DNS, NO VIS P, NS	
LS, AA.	
SS, WHIT, F → LG GRNS, P SORT, ANG, S → M HRD, NO VIS P, NS W CMTID	
SS, AA.	
SS, WHIT, M GRNS, W SORT, SUB RND → RND, CLR GRNS, SOFT, NS, W CMTID	NO KICKS
LS, TAN, F XTLN, HRD, SL FOSS, TITE, NS	
LS, AA.	
LS, BRN, F XTLN, HRD, DNS, ? FRAC P, NS	
LS, WHIT, F XTLN, V, CHTY-CRM	

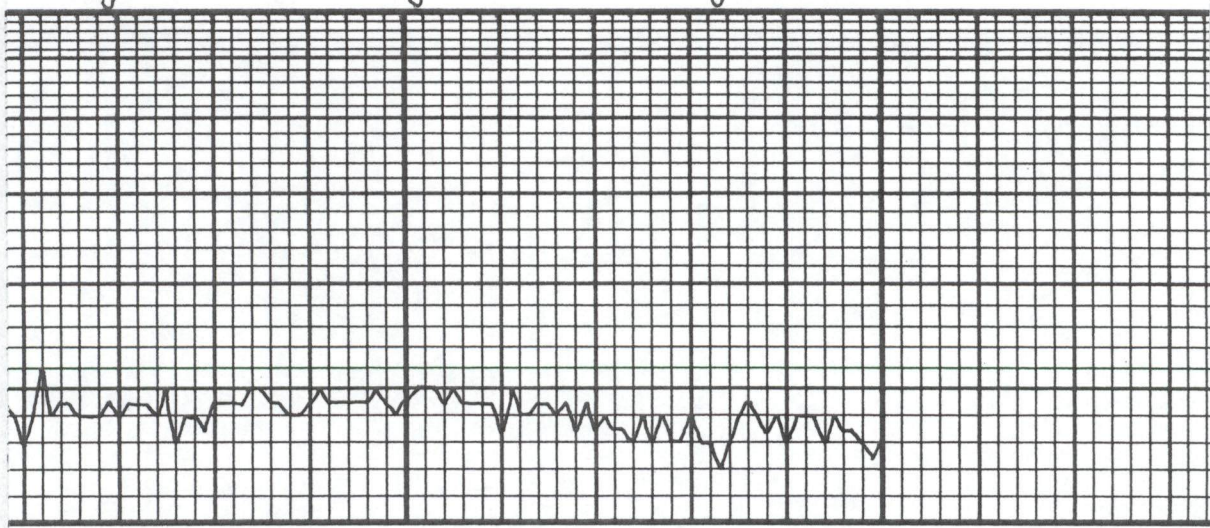
7:AM 11-8-14
DRLG @ 4990'

Butane Test: Neg
Flow Panels Had Been
SAUT By MBC WHEN UNIT
WAS CHECKED 11-7
RETEST: 63 u Hw Kick

MUD CHECK

VIS: 55 WT: 9.2
CHLOR: 6000 LCM: 8
FLT: 9.6

SD FLOOD



5200

FRESH, TITE, NS	LS. CR M, VEX TLN, V CLEAN, TITE, NS	A.A.	LS. WHT, M X TLN, V HRD, NO VISD NS	LS. TAN, M X TLN, GRNY TXT, HRD, TITE, NS	LS. CR M, TAN, A.A.	A.A.	LS. TAN, VEX TLN, DNS, HRD, TITE, NS				
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7:AM 11-9-14
LOGGING @ 5200' TA