



Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION 1167098
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: _____



1167098

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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CONSOLIDATED
Oil Well Services, LLC

262839

TICKET NUMBER 44366
LOCATION Oakley Ks.
FOREMAN Dauen

PO Box 864, Chanute, KS 66720
620-431-9210 or 800-467-8676

FIELD TICKET & TREATMENT REPORT
CEMENT

DATE	CUSTOMER #	WELL NAME & NUMBER	SECTION	TOWNSHIP	RANGE	COUNTY
9/30/13	7158	Helen Wells Trust 3	18	20	35	Wichita
CUSTOMER Raymond Oil Co. Inc.		Marianna	TRUCK #	DRIVER	TRUCK #	DRIVER
MAILING ADDRESS		115	463	Cory		
CITY		1W	693	Merel		
STATE		Sinto				
ZIP CODE						

JOB TYPE Surface HOLE SIZE 12 1/4 HOLE DEPTH 270 CASING SIZE & WEIGHT 8 3/8, 24'
CASING DEPTH 267.28 DRILL PIPE _____ TUBING _____ OTHER _____
SLURRY WEIGHT 14.8 SLURRY VOL 1.36 WATER gal/sk _____ CEMENT LEFT In CASING 20'
DISPLACEMENT 15.75 DISPLACEMENT PSI _____ MIX PSI _____ RATE _____

REMARKS: Softy Meeting Rig up on H2 Rig 4 Run Casing Break Circulation
With Rig Pump, Hookup To Pump truck mix 225 sks Com 3%CC 2% Gel
Displace with 15.75 bbl water Shut in Washup pump & Lines Rig Down

Cement Did Circulate

Approx 5 bbl To Pit

Thanks Dauen + Crew

ACCOUNT CODE	QUANTITY or UNITS	DESCRIPTION of SERVICES or PRODUCT	UNIT PRICE	TOTAL
5401 S	1	PUMP CHARGE	\$1150.00	\$1150.00
5406	60	MILEAGE	\$5.25	\$315.00
5407 A	10.58	Ton Mileage Delivery	\$175	\$1881.20
1104 S	225 sks	Class "A" Cement	\$18.55	\$4173.75
1102	635 *	Calcium Chloride	\$.94	\$596.90
1118 B	423 *	Bentonite	\$.27	\$114.21
<input checked="" type="checkbox"/> completed				
			SubTotal	\$7461.06
			Less 10%	\$746.11
			SubTotal	\$6714.95
			8.15% SALES TAX	358.31
			ESTIMATED TOTAL	7073.26

Ravin 3737

AUTHORIZATION _____ 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.



263012

TICKET NUMBER 44342
 LOCATION OAKLEY KS.
 FOREMAN DAMON M. TRAINING
Fuzzy

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

FIELD TICKET & TREATMENT REPORT
CEMENT

KANSAS

DATE	CUSTOMER #	WELL NAME & NUMBER	SECTION	TOWNSHIP	RANGE	COUNTY	
10-8-13	7158	HELEN WELLS TRUST #2	18	20	35	WITCHATA	
CUSTOMER		MARIOWA		TRUCK #	DRIVER	TRUCK #	DRIVER
RAYMOND OIL		RD 20		399	TIM W		
MAILING ADDRESS		ST RD		566	KEITH E		
CITY		AA WI		528T-121	JEREMY S.		
STATE		S INTO		DJ.	RIDE ALONG		
ZIP CODE							

JOB TYPE 2 STAGE HOLE SIZE 2 1/4 HOLE DEPTH 5054 CASING SIZE & WEIGHT 4 1/2 10#s
 CASING DEPTH 5041.37 DRILL PIPE _____ TUBING _____ OTHER DV @ 2282.07
 SLURRY WEIGHT 14.5/12.5 SLURRY VOL _____ WATER gal/sk _____ CEMENT LEFT in CASING _____
 DISPLACEMENT 79.54/36.0 DISPLACEMENT PSI _____ MIX PSI _____ RATE _____

REMARKS: SAFETY MEETING RIG UP ON H2 RIG #4 RAN FLOAT EQUIPMENT
CENT 1, 3, 7, 9, 11, 16 BASKET ON #67 DV ON TOP OF #66. HOOKED UP TO
CIRCULATE ON BOTTOM. MIXED 500 GAL OF MUD FLUSH THEN MIXED
225 SKS OF 60/40 POZ 7 1/2% SALT 2% GEL SHUT DOWN CLEANED PUMP
AND LINES RELEASED PLUG PUMPED 45.80 H2O & 34 BAR OF MUD LANDED
PLUG @ 1100# OPEN TOOL PUMPED 500 SKS 60/40 POZ 8% GEL 1/4# #10
SHUT DOWN CLEAN PUMP AND LINES PUMPED 36 BAR OF H2O LANDED PLUG
@ 1500# RELEASED PRESURE PLUG HELD RIG DOWN
RH 15 SKS
WH 10 SKS
 CEMENT DID NOT CIRCULATE
 THANK YOU DAMON WALT & CREW

ACCOUNT CODE	QUANTITY or UNITS	DESCRIPTION of SERVICES or PRODUCT	UNIT PRICE	TOTAL
5401P	1	PUMP CHARGE	3400.00	3400.00 ✓
5406	60	MILEAGE	5.25	315.00 ✓
5407A	31.17	TOW MILEAGE DELIVERY	1.75	3273.00 ✓
1131	225 SKS	60/40 POZ Bottom STAGE	15.86	3568.50 ✓
1131	500 SKS	60/40 POZ	15.86	7930.00 ✓
1118B	3827#	BETONITITE	.27	1033.29 ✓
1111	810#	SALT	.50	405.00 ✓
1107	125#	FLOSEAL	2.97	371.25 ✓
4156	1	4 1/2 AFU FLOAT SHOE (I)	301.50	301.50 ✓
4129	6	4 1/2 CENTRALIZERS (I)	48.50	291.00 ✓
4103	1	4 1/2 BASKET (W)	275.00	275.00 ✓
4283	1	4 1/2 DV TOOL W/ LATCH DOWN	4042.50	4042.50 ✓
				25206.04 ✓
			LESS 1090	2520.60 ✓
			SUBTOTAL	22685.44 ✓
			8.15%	SALES TAX
				ESTIMATED
				TOTAL
				1330.29 ✓
				24021.73 ✓

Ravin 3737

AUTHORIZATION Allen Sutt 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



263250

TICKET NUMBER 44374
 LOCATION Oakley, Mo.
 FOREMAN Dewen & Jerney

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	Co. COUNTY	
10/14/13	7158	Helen Wells Trust #2	18	20	35	Wichita	
CUSTOMER Raymond Oil		MORIENTHAL 115 1W Sinto		TRUCK #	DRIVER	TRUCK #	DRIVER
MAILING ADDRESS				456	Taylor Ripley		
CITY		STATE		528	Jerney S.		
ZIP CODE				Helper	Jack Hahn		

JOB TYPE Squeeze HOLE SIZE 8 1/2 HOLE DEPTH _____ CASING SIZE & WEIGHT 4 1/2', 10.5
 CASING DEPTH _____ DRILL PIPE _____ TUBING 2 3/8 2200' OTHER 2220' + 1000'
 SLURRY WEIGHT 12.5 to 13 SLURRY VOL _____ WATER gal/sk _____ CEMENT LEFT in CASING _____
 DISPLACEMENT _____ DISPLACEMENT PSI _____ MIX PSI _____ RATE 1 bbl Per min. @ 1200'

REMARKS: Safety meeting Riguron Professional Pulling Service get Rate mix
200SKs 60/40 Poz mix Cement pull out of Retainer & Wash hole Clean pull Tubing
Put on a packer Run 900' Back in hole get Rate mix 60/40 Poz mix Displace with water

Thanks Dewen & Crew

ACCOUNT CODE	QUANTITY or UNITS	DESCRIPTION of SERVICES or PRODUCT	UNIT PRICE	TOTAL
5401	1	PUMP CHARGE	\$2150.00	\$2150.00
5406	70	MILEAGE	\$5.23	\$367.00
5407A	10.75	Ton Mileage Delivery	\$175	\$1316.75
1131	250 SKs	60/40 Poz mix	\$15.86	\$3965.00
5613	1	Squeeze Manifold	\$200.00	\$200.00
completed			Subtotal	7999.25
			Less 10%	799.93
			Subtotal	7199.32
			8.15% SALES TAX	290.84
			ESTIMATED TOTAL	7490.16

AUTHORIZATION [Signature]

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.



DRILL STEM TEST REPORT

Prepared For: **Raymond Oil Comp Inc**

PO Box 48788
Wichita, KS 67201

ATTN: Max Lovely

Helen Wells #2

18-20s-35w Wichita,KS

Start Date: 2013.10.04 @ 19:55:43

End Date: 2013.10.05 @ 06:00:58

Job Ticket #: 54639 DST #: 1

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

ph: 785-625-4778 fax: 785-625-5620

Printed: 2013.10.08 @ 13:19:15



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Raymond Oil Comp Inc

18-20s-35w Wichita,KS

PO Box 48788
Wichita, KS 67201

Helen Wells #2

Job Ticket: 54639

DST#: 1

ATTN: Max Lovely

Test Start: 2013.10.04 @ 19:55:43

GENERAL INFORMATION:

Formation: **Marmaton**

Deviated: No Whipstock: 0.00 ft (KB)

Time Tool Opened: 22:33:43

Time Test Ended: 06:00:58

Test Type: Conventional Bottom Hole (Initial)

Tester: Shane McBride

Unit No: 55

Interval: 4472.00 ft (KB) To 4499.00 ft (KB) (TVD)

Reference Elevations: 3166.00 ft (KB)

Total Depth: 4499.00 ft (KB) (TVD)

3156.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 10.00 ft

Serial #: 6667

Inside

Press @ Run Depth: 247.81 psig @ 4473.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.10.04

End Date:

2013.10.05

Last Calib.: 2013.10.05

Start Time: 19:55:43

End Time:

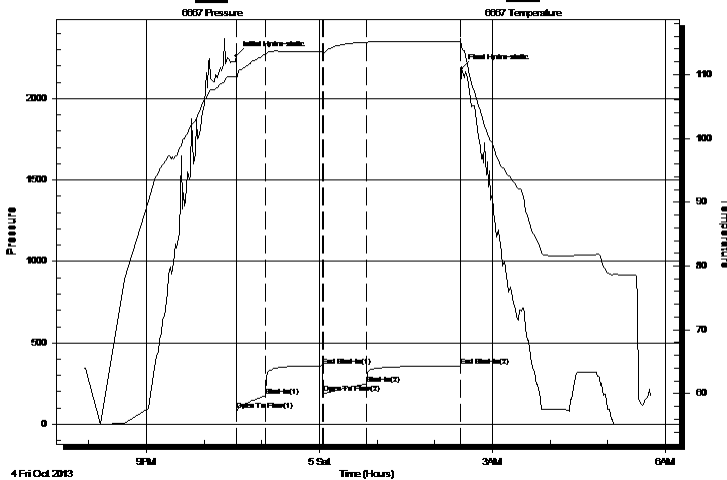
05:44:58

Time On Btm: 2013.10.04 @ 22:33:13

Time Off Btm: 2013.10.05 @ 02:27:58

TEST COMMENT: B.O.B. in 3 1/2 min.
B.O.B. return blow in 31 min.
B.O.B. @ open
Bled off through out shut in

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2263.52	109.69	Initial Hydro-static
1	83.71	109.26	Open To Flow (1)
31	173.83	113.08	Shut-In(1)
90	359.75	113.66	End Shut-In(1)
91	191.17	113.54	Open To Flow (2)
136	247.81	115.04	Shut-In(2)
234	358.74	115.11	End Shut-In(2)
235	2184.25	114.31	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
120.00	m c g o 20g 30m 50o under circ sub	0.59
378.00	c g o 20g 80o reversed out	4.14
60.00	c g o 15g 85o	0.84
0.00	720' gas in pipe	0.00

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Raymond Oil Comp Inc

18-20s-35w Wichita,KS

PO Box 48788
Wichita, KS 67201

Helen Wells #2

Job Ticket: 54639

DST#: 1

ATTN: Max Lovely

Test Start: 2013.10.04 @ 19:55:43

Tool Information

Drill Pipe:	Length: 4229.00 ft	Diameter: 3.80 inches	Volume: 59.32 bbl	Tool Weight: 1500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 248.00 ft	Diameter: 2.25 inches	Volume: 1.22 bbl	Weight to Pull Loose: 70000.00 lb
			<u>Total Volume: 60.54 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	33.00 ft			String Weight: Initial 54000.00 lb
Depth to Top Packer:	4472.00 ft			Final 58000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	27.00 ft			
Tool Length:	55.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
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Change Over Sub	1.00			4445.00	
Shut In Tool	5.00			4450.00	
Hydraulic tool	5.00			4455.00	
Jars	5.00			4460.00	
Safety Joint	3.00			4463.00	
Packer	5.00			4468.00	28.00 Bottom Of Top Packer
Packer	4.00			4472.00	
Stubb	1.00			4473.00	
Recorder	0.00	6667	Inside	4473.00	
Recorder	0.00	8368	Outside	4473.00	
Perforations	21.00			4494.00	
Bullnose	5.00			4499.00	27.00 Bottom Packers & Anchor

Total Tool Length: 55.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Raymond Oil Comp Inc

18-20s-35w Wichita,KS

PO Box 48788
Wichita, KS 67201

Helen Wells #2

Job Ticket: 54639

DST#: 1

ATTN: Max Lovely

Test Start: 2013.10.04 @ 19:55:43

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

31 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

0 ppm

Viscosity: 57.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.58 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 5000.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
120.00	m c g o 20g 30m 50o under circ sub	0.590
378.00	c g o 20g 80o reversed out	4.136
60.00	c g o 15g 85o	0.842
0.00	720' gas in pipe	0.000

Total Length: 558.00 ft

Total Volume: 5.568 bbl

Num Fluid Samples: 0

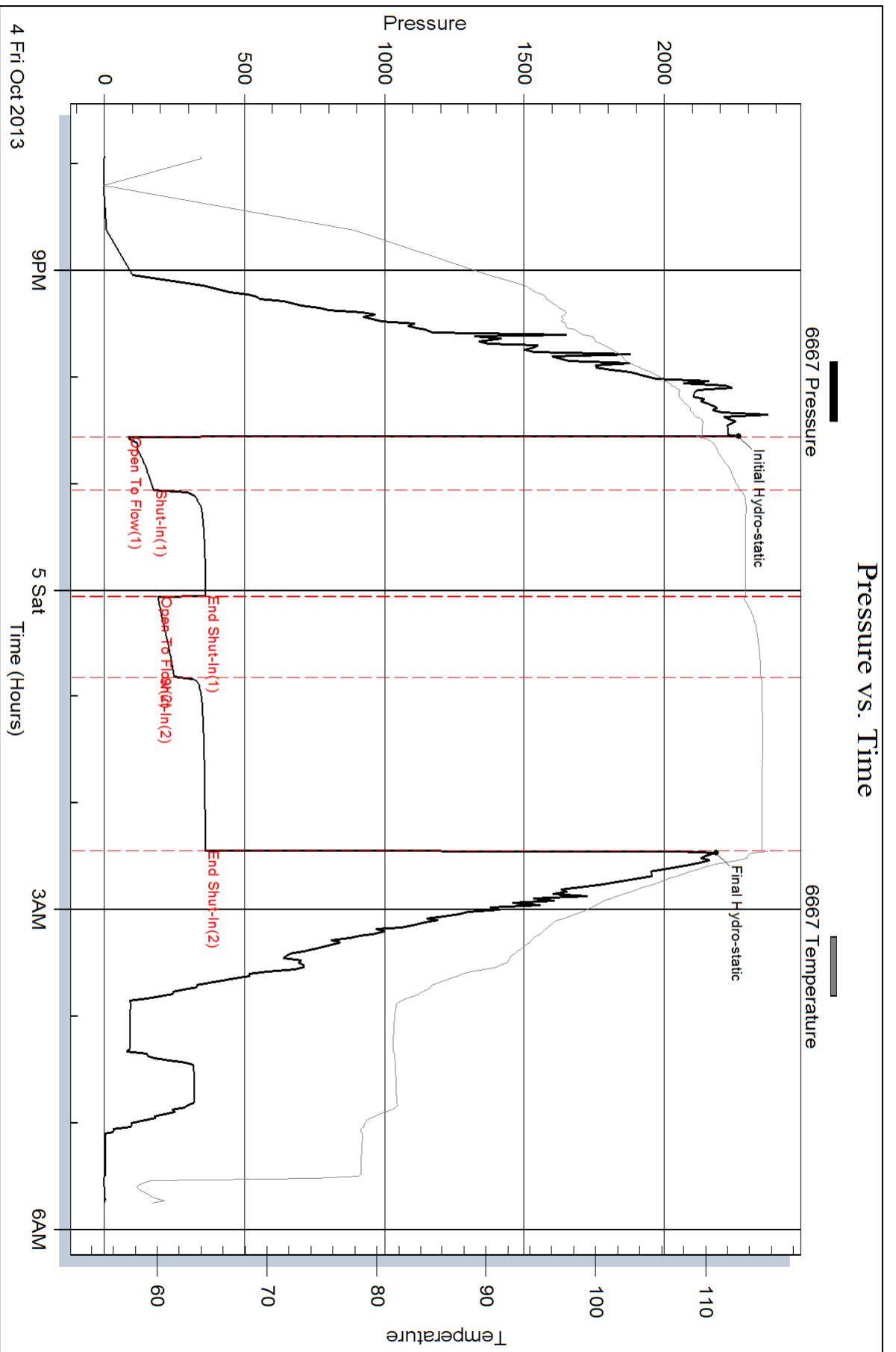
Num Gas Bombs: 0

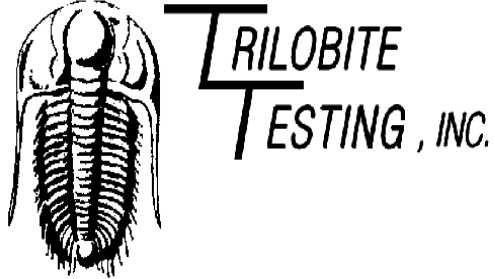
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:





DRILL STEM TEST REPORT

Prepared For: **Raymond Oil Comp Inc**

PO Box 48788
Wichita, KS 67201

ATTN: Max Lovely

Helen Wells #2

18-20s-35w Wichita,KS

Start Date: 2013.10.05 @ 20:10:52

End Date: 2013.10.06 @ 05:15:07

Job Ticket #: 54640 DST #: 2

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

ph: 785-625-4778 fax: 785-625-5620

Printed: 2013.10.08 @ 13:17:57

Raymond Oil Comp Inc

18-20s-35w Wichita,KS

Helen Wells #2

DST # 2

Pawnee, Myrick Stati

2013.10.05



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Raymond Oil Comp Inc

18-20s-35w Wichita, KS

PO Box 48788
Wichita, KS 67201

Helen Wells #2

Job Ticket: 54640

DST#: 2

ATTN: Max Lovely

Test Start: 2013.10.05 @ 20:10:52

GENERAL INFORMATION:

Formation: **Pawnee, Myrick Stati**

Deviated: No Whipstock: 0.00 ft (KB)

Time Tool Opened: 22:54:07

Time Test Ended: 05:15:07

Test Type: Conventional Bottom Hole (Reset)

Tester: Shane McBride

Unit No: 55

Interval: 4557.00 ft (KB) To 4608.00 ft (KB) (TVD)

Reference Elevations: 3166.00 ft (KB)

Total Depth: 4608.00 ft (KB) (TVD)

3156.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 10.00 ft

Serial #: 6667

Inside

Press @ Run Depth: 35.31 psig @ 4558.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.10.05

End Date:

2013.10.06

Last Calib.:

2013.10.06

Start Time:

20:10:52

End Time:

05:05:07

Time On Btm:

2013.10.05 @ 22:53:52

Time Off Btm:

2013.10.06 @ 02:42:37

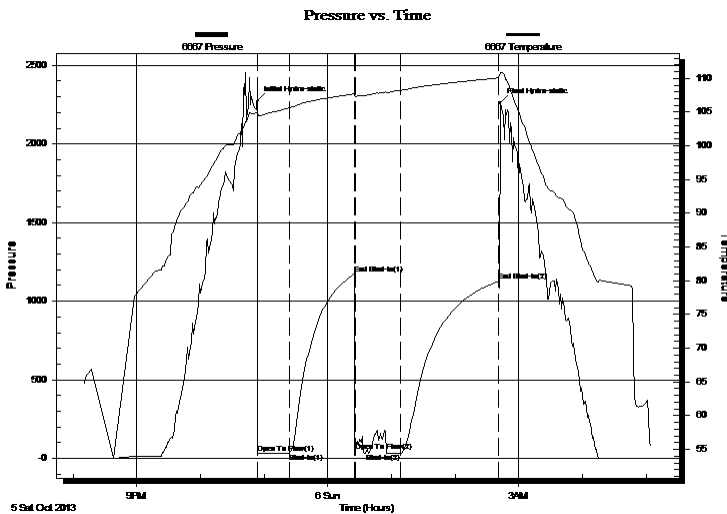
TEST COMMENT: 1/4" blow died in 26 min.

No return

No blow

No return

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2275.18	105.08	Initial Hydro-static
1	30.16	104.24	Open To Flow (1)
31	32.53	105.64	Shut-In(1)
92	1173.98	107.70	End Shut-In(1)
92	48.38	107.37	Open To Flow (2)
135	35.31	108.22	Shut-In(2)
228	1126.34	110.07	End Shut-In(2)
229	2260.78	110.87	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
10.00	heavy mud 100%m	0.05

Gas Rates

Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)

* Recovery from multiple tests



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Raymond Oil Comp Inc

18-20s-35w Wichita,KS

PO Box 48788
Wichita, KS 67201

Helen Wells #2

Job Ticket: 54640

DST#: 2

ATTN: Max Lovely

Test Start: 2013.10.05 @ 20:10:52

Tool Information

Drill Pipe:	Length: 4293.00 ft	Diameter: 3.80 inches	Volume: 60.22 bbl	Tool Weight: 1500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 248.00 ft	Diameter: 2.25 inches	Volume: 1.22 bbl	Weight to Pull Loose: 75000.00 lb
			<u>Total Volume: 61.44 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	12.00 ft			String Weight: Initial 56000.00 lb
Depth to Top Packer:	4557.00 ft			Final 56000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	51.00 ft			
Tool Length:	79.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			4530.00	
Shut In Tool	5.00			4535.00	
Hydraulic tool	5.00			4540.00	
Jars	5.00			4545.00	
Safety Joint	3.00			4548.00	
Packer	5.00			4553.00	28.00 Bottom Of Top Packer
Packer	4.00			4557.00	
Stubb	1.00			4558.00	
Recorder	0.00	6667	Inside	4558.00	
Recorder	0.00	8368	Outside	4558.00	
Perforations	11.00			4569.00	
Change Over Sub	1.00			4570.00	
Drill Pipe	32.00			4602.00	
Change Over Sub	1.00			4603.00	
Bullnose	5.00			4608.00	51.00 Bottom Packers & Anchor

Total Tool Length: 79.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Raymond Oil Comp Inc
PO Box 48788
Wichita, KS 67201
ATTN: Max Lovely

18-20s-35w Wichita,KS
Helen Wells #2
Job Ticket: 54640 **DST#: 2**
Test Start: 2013.10.05 @ 20:10:52

Mud and Cushion Information

Mud Type: Gel Chem	Cushion Type:	Oil API:	0 deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	0 ppm
Viscosity: 60.00 sec/qt	Cushion Volume: bbl		
Water Loss: 7.96 in ³	Gas Cushion Type:		
Resistivity: 0.00 ohm.m	Gas Cushion Pressure: psig		
Salinity: 5800.00 ppm			
Filter Cake: 1.00 inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
10.00	heavy mud 100%m	0.049

Total Length: 10.00 ft Total Volume: 0.049 bbl
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments:

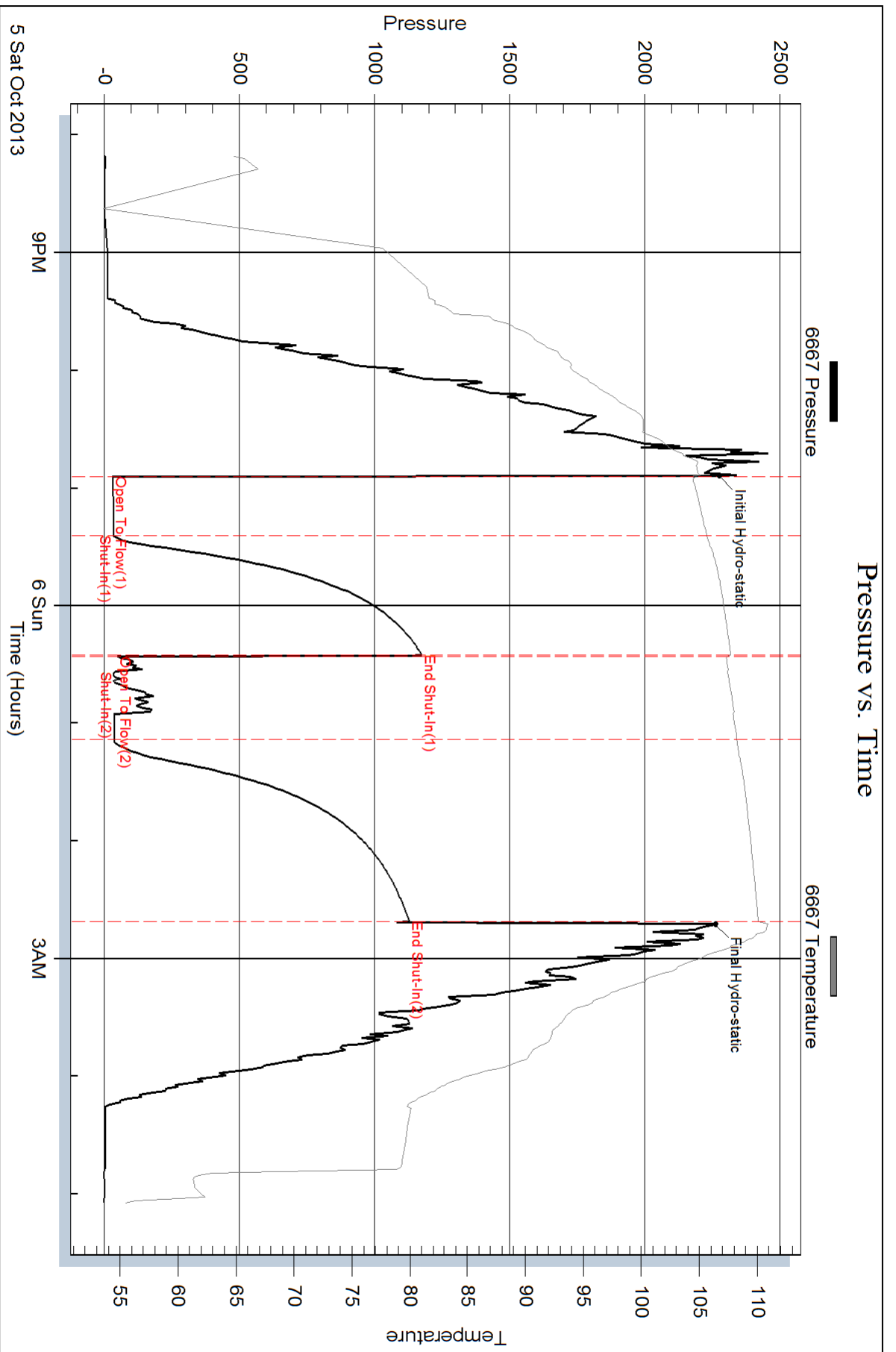
Serial #: 6667

Inside

Raymond Oil Comp Inc

Helen Wells #2

DST Test Number: 2





TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 54639

Well Name & No. Helen Wells #2 Test No. #1 Date 10/5/13
 Company Raymond O T Comp Inc Elevation 3166 KB 3154 GL
 Address P.O. Box 48788 Wichita, KS 67201
 Co. Rep / Geo. Marschally Rig #2#4
 Location: Sec. 18 Twp. 20 Rge. 35 Co. Wichita State Ks

Interval Tested 4472 4499 Zone Tested Marmaton
 Anchor Length 27 Drill Pipe Run 4229 Mud Wt. 9.5
 Top Packer Depth 4467 Drill Collars Run 248 Vis 57
 Bottom Packer Depth 4472 Wt. Pipe Run --- WL 7.6
 Total Depth 4499 Chlorides 5000 ppm System LCM #2

Blow Description B.O.B. in 3 1/2 min.
B.O.B. return blow in 3 min
B.O.B. @ open
Bled off through out shut-in

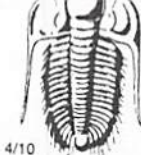
Rec	Feet of	%gas	%oil	%water	%mud
<u>60</u>	<u>CGO</u>	<u>15</u>	<u>85</u>		
<u>378</u>	<u>CGO (Reversed)</u>	<u>20</u>	<u>80</u>		
<u>120</u>	<u>McGO (under core sub)</u>	<u>20</u>	<u>50</u>		<u>30</u>
	<u>720' GAS IN PIPE</u>				
Rec Total	<u>558</u>	BHT <u>115°</u>	Gravity <u>31</u>	API RW <u>---</u>	@ <u>---</u> ° F Chlorides <u>---</u> ppm

(A) Initial Hydrostatic 2263 Test 1250 T-On Location 19:10
 (B) First Initial Flow 83 Jars 250 T-Started 19:55
 (C) First Final Flow 173 Safety Joint 75 T-Open 22:36
 (D) Initial Shut-In 359 Circ Sub 50.00 T-Pulled 62:21
 (E) Second Initial Flow 191 Hourly Standby .75h 75 T-Out 06:00
 (F) Second Final Flow 247 Mileage 60RT 93 Comments _____
 (G) Final Shut-In 358 Sampler _____
 (H) Final Hydrostatic 2184 Straddle _____ Ruined Shale Packer 350
 Shale Packer 250 Ruined Packer _____
 Extra Packer _____ Extra Copies _____
 Extra Recorder _____ Sub Total 0
 Day Standby _____ Total 2543
 Accessibility 150.00 MP/DST Disc't _____
 Sub Total 2193

Initial Open 30
 Initial Shut-In 60
 Final Flow 45
 Final Shut-In 90

Approved By MJ Long Our Representative [Signature]

Trilobite Testing Inc. shall not be liable for damaged of any kind of 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 statements or opinion concerning the results 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.



TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 54640

Well Name & No. Helen Wells #2 Test No. #2 Date 10/6/13
 Company Raymond Oil Comp Inc. Elevation 3166 KB 3156 GL
 Address P.O. Box 48788 Wichita KS 67201
 Co. Rep / Geo. Max Lowry Rig H2#4
 Location: Sec. 18 Twp. 20 Rge. 35 Co. Wichita State Ks

Interval Tested 4557 4608 Zone Tested Pawnee Myrick Station
 Anchor Length 51 Drill Pipe Run 4293 Mud Wt. 9.3
 Top Packer Depth 4552 Drill Collars Run 248' Vis 60
 Bottom Packer Depth 4557 Wt. Pipe Run WL 8.0
 Total Depth 4608 Chlorides 5800 ppm System LCM #2

Blow Description 1/4" in blow dried w/ 2L/min
No return
No blow
No return

Rec	Feet of	%gas	%oil	%water	%mud
<u>10'</u>	<u>Mud (Heavy)</u>			<u>100</u>	
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 10' BHT 110° Gravity API RW @ ° F Chlorides ppm

(A) Initial Hydrostatic <u>2275</u>	<input checked="" type="checkbox"/> Test <u>1250</u>	T-On Location <u>19:25</u>
(B) First Initial Flow <u>30</u>	<input checked="" type="checkbox"/> Jars <u>250</u>	T-Started <u>20:10</u>
(C) First Final Flow <u>32</u>	<input checked="" type="checkbox"/> Safety Joint <u>75</u>	T-Open <u>22:53</u>
(D) Initial Shut-In <u>1173</u>	<input checked="" type="checkbox"/> Circ Sub <u>N/A</u>	T-Pulled <u>02:38</u>
(E) Second Initial Flow <u>48</u>	<input type="checkbox"/> Hourly Standby <u> </u>	T-Out <u>05:15</u>
(F) Second Final Flow <u>35</u>	<input checked="" type="checkbox"/> Mileage <u>6000</u>	Comments <u>loaded tools 10/7 11:00</u>
(G) Final Shut-In <u>1126</u>	<input type="checkbox"/> Sampler <u> </u>	<input type="checkbox"/> Ruined Shale Packer <u> </u>
(H) Final Hydrostatic <u>2260</u>	<input type="checkbox"/> Straddle <u> </u>	<input type="checkbox"/> Ruined Packer <u> </u>
Initial Open <u>30</u>	<input type="checkbox"/> Shale Packer <u> </u>	<input type="checkbox"/> Extra Copies <u> </u>
Initial Shut-In <u>60</u>	<input type="checkbox"/> Extra Packer <u> </u>	Sub Total <u>800</u>
Final Flow <u>45</u>	<input type="checkbox"/> Extra Recorder <u> </u>	Total <u>2618</u>
Final Shut-In <u>90</u>	<input type="checkbox"/> Day Standby <u>1d 5.75h</u>	MP/DST Disc't <u> </u>
	<input checked="" type="checkbox"/> Accessibility <u>150.00</u>	
	Sub Total <u>1818</u>	

Approved By [Signature] Our Representative [Signature]
 Trilobite Testing Inc. shall not be liable for damaged or lost 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 statements or opinion concerning the results 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.

Conservation Division
Finney State Office Building
130 S. Market, Rm. 2078
Wichita, KS 67202-3802



Phone: 316-337-6200
Fax: 316-337-6211
<http://kcc.ks.gov/>

Mark Sievers, Chairman
Thomas E. Wright, Commissioner
Shari Feist Albrecht, Commissioner

Sam Brownback, Governor

November 06, 2013

Ted McHenry
Raymond Oil Company, Inc.
PO BOX 48788
WICHITA, KS 67201-8788

Re: ACO1
API 15-203-20234-00-00
Helen Wells Trust 2
NW/4 Sec.18-20S-35W
Wichita County, Kansas

Dear Production Department:

We are herewith requesting that the Well Completion Form ACO-1 and attached information for the subject well be held confidential for a period of two years.

Should you have any questions or need additional information regarding subject well, please contact our office.

Respectfully,
Ted McHenry

Max R. Lovely

GEOLOGIST'S REPORT

DRILLING TIME AND SAMPLE LOG

COMPANY **Raymond Oil Co.**
 LEASE **#2 Helen Wells**
 FIELD **Wildcat**
 LOCATION **990'ENL, 1237'FWL**
 SEC **18** TWSP **20** RGE. **35W**
 COUNTY **Wichita** STATE **KS**

ELEVATIONS
 KB **3166**
 DF _____
 GL **3155**
 Measurements Are All
 From **KB**

CONTRACTOR **H2 #4**
 SPUD **9-30-13** COMP **10-7-2013**
 RTD. **5052** LTD. **5054**
 MUD UP **3450** TYPE MUD **Chem**

CASING
 SURFACE **8 5/8 @ 267'**
 PRODUCTION **4 1/2**
 ELECTRICAL SURVEYS
 DI MICRO
 COMP M/D

FORMATION TOPS AND STRUCTURAL POSITION

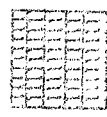
FORMATION	SAMPLE TOP	ELECTRIC LOG TOP	SUB-SEA DATUM	STRUCTURAL POSITION		
				A	B	C
Base Anhydrite	2284	2280	886	888		
Stotler	3515	3514	-348	-348		
Heebner	3935	3934	-788	-786		
Lansing	3987	3986	-820	-820		
Stark	4289	4286	-1120	-1127		
Marmaton	4468	4466	-1300	-1301		
Ft. Scott	4610	4611	-1445	-1444		
Johnson	4682	4686	-1523	-1523		
Atoka	4736	4736	-1570	-1571		
Morrow SH	4816	4819	-1653	-1651		
St. Genevieve	4924	4922	-1756	-1761		
St. Louis	5001	5001	-1835	-1820		

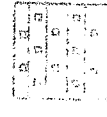
REFERENCE WELLS FOR STRUCTURE

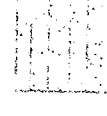
A **Raymond #1 Helen Wells NW NE NW NW 18-20-35W**
 B _____
 C _____

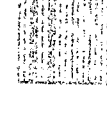
REMARKS

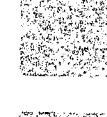
LEGEND

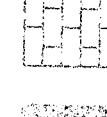
- 


Abydrate
- 

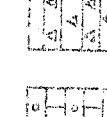
Salt
- 

Sandstone
- 

Shale
- 

Chert
- 

Limestone
- 

Dol. Lime
- 

Dolomite

DRILLING TIME IN MINUTES
PER FOOT

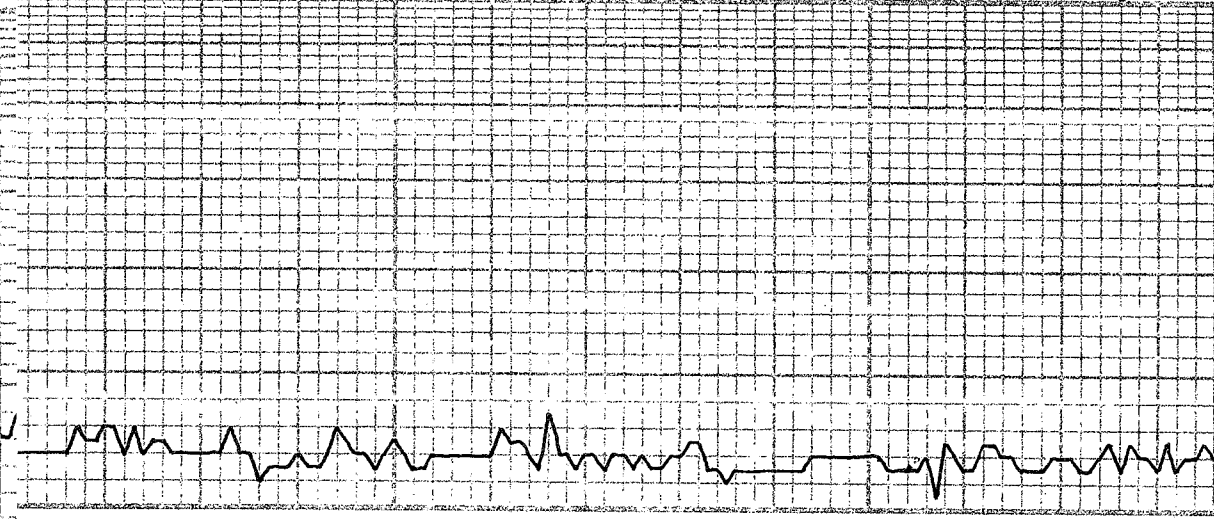
Note of Penetration Decreases



LITHOLOGY

DEPTH

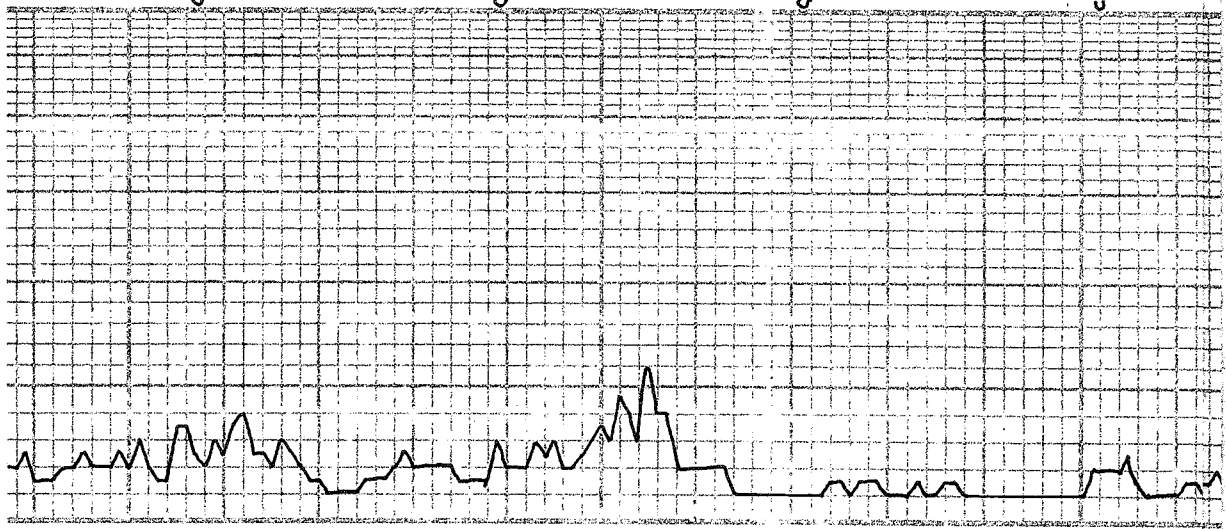
REMARKS



3500

C STOTLER
3515 - 349

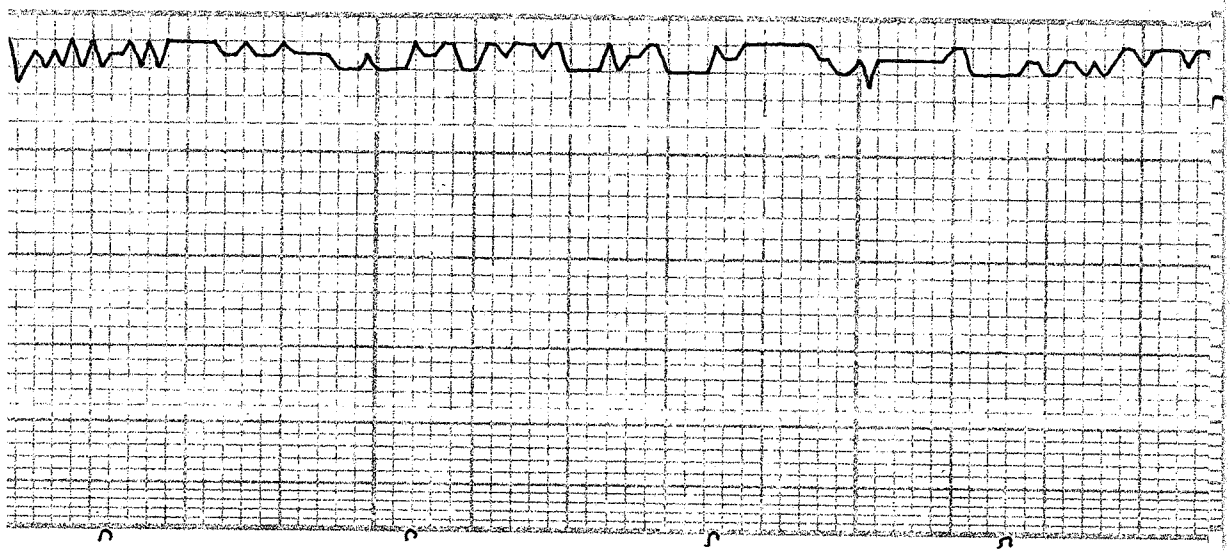
LS, GRY, TAN, F XTLN, HRD, ABUN COCK & FOSSE, V.P. 0.15	LS, GRY, TAN - WCMT ID 00LS, F XTLN, HRD, DMS, TITE	SH, GRY	SH, GRY, STICKY	SH, GRY, SANDY	LS, WH, GRY, F GRNLR TXT, FOSSE W/IN, F. 0.15	SH, GRY	LS, GRY, TAN, VF XTLN, DMS, HRD, TITENS	SH, SLTY, GRY	LS, CRM, TAN, F XTLN, MED GRY XTLS W/IN, NS	SH, GRY, RED
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3600

3700

LS. WH. F. CRS XTLN, FOSS CASTS NS	LS. BRN, F. XTLN, ABUN FOSS + FRAGS, VWCMTIP, HRD	SLTSTN GRY	SH, GRY.	LS. WH. TAN, FOSS, NS	SH, GRY, SLTY	LS, GRY, VE. XTLN, HRD, DMS, LITE	DOLO, TAN, FXTLN, GRAY TKT, HRD, NO VIS Ø, NS	A. A.	LS, WH. F. XTLN, HRD, SCT LG XTLS W/N, F. G. VUG Ø, NS	BRILL, ABUN SOME FOSS, NI
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3800

LS. TAN, F. XTLM, FRD, SL ALGAS, TXT, F. Ø. NS
SLTSTN, GRY
LS. BUFE, F. XTLM, GRANR TX, MHRD, F. Ø. XTLM/Ø. NS
LS. WHT, TAN, SOFT, F. XTLM, GILS, SL CHCKY, NS
LS. GRY, F. XTLM, DWS, HRD, TTE, NS
LS. WHT, TAN, SOFT, F. XTLM, GRANR TX, GLAUC, F. Ø. XTLM/Ø. NS
SH. BLK
SLTSTN, GRY
SH, RED SLTY
LS. GRM, F. XRS XTLM, SL CONKA, SOFT, BRILL, G. XTLM/Ø. NS
LS. WHT, F. XTLM, CMPT'D FOSS, ABOU LG FOSS, F. Ø. NS

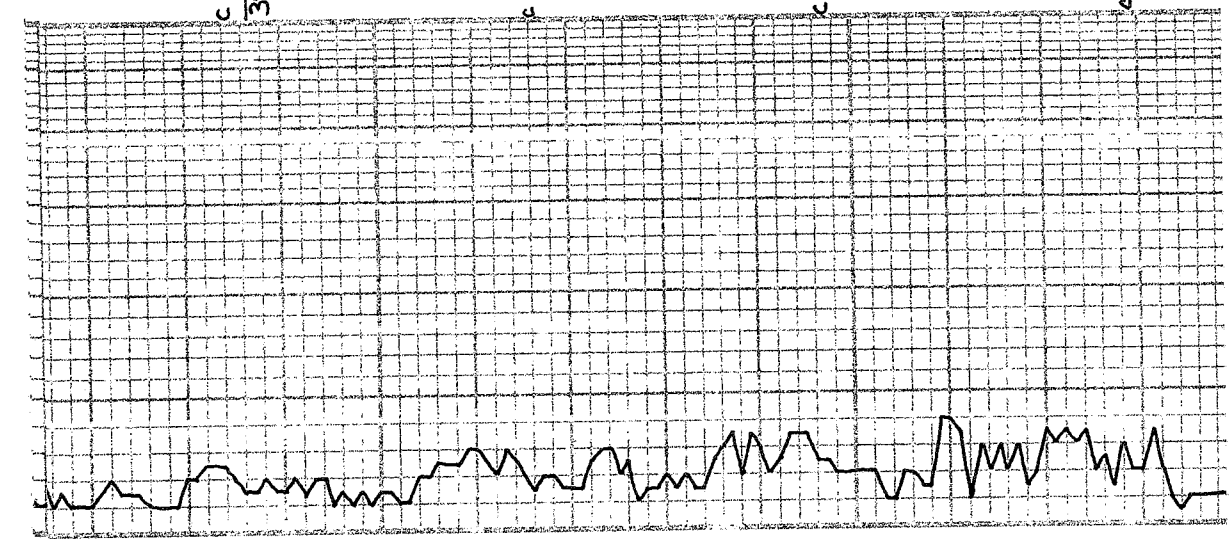
MUD CHECK
 VIS 44 WT 8.95
 CHLOR 5,000 LCM 2
 FILT 7.6



3900

HEEBNER
3935 - 769

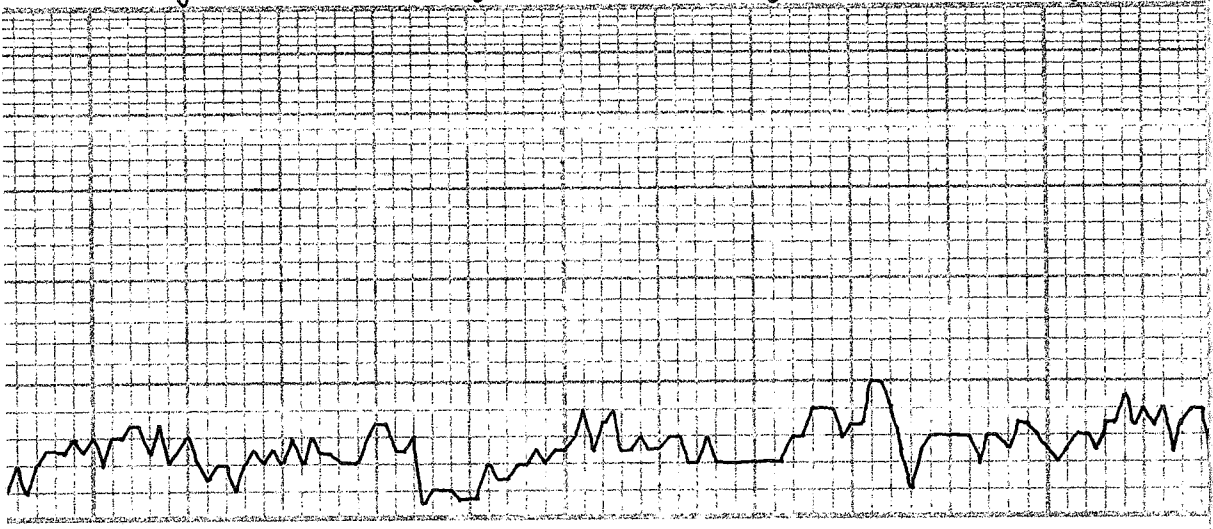
SH, WHT, LT GRY
LS, BDFE, F GRNLR TPT, FOSS INCL'S W/W, M HRD, NS
SH, BLK
LS, WHT, GRY, FXTLU, V FOSS, SL HRD, F P. NS
LS, BRN, TAN, FXTLU, M XTL'S + FOSS W/W, SL CHKY, P. NS
LS, WHT, FXTLU, HRD, FOSS, TITE, NS
SH, SLTY, LMY, WHT, GRY
LS, CRM, CHKY, SHLY, SOFT, NS
SH, BLK, DK GRY
SH, GRY
CHALK, CRM, SHLY
LS, TAN, FXTLU, M HRD, DWS, BRTL, ABUN, SML FOSS, M,



C LANSING
3987 - 821

4000

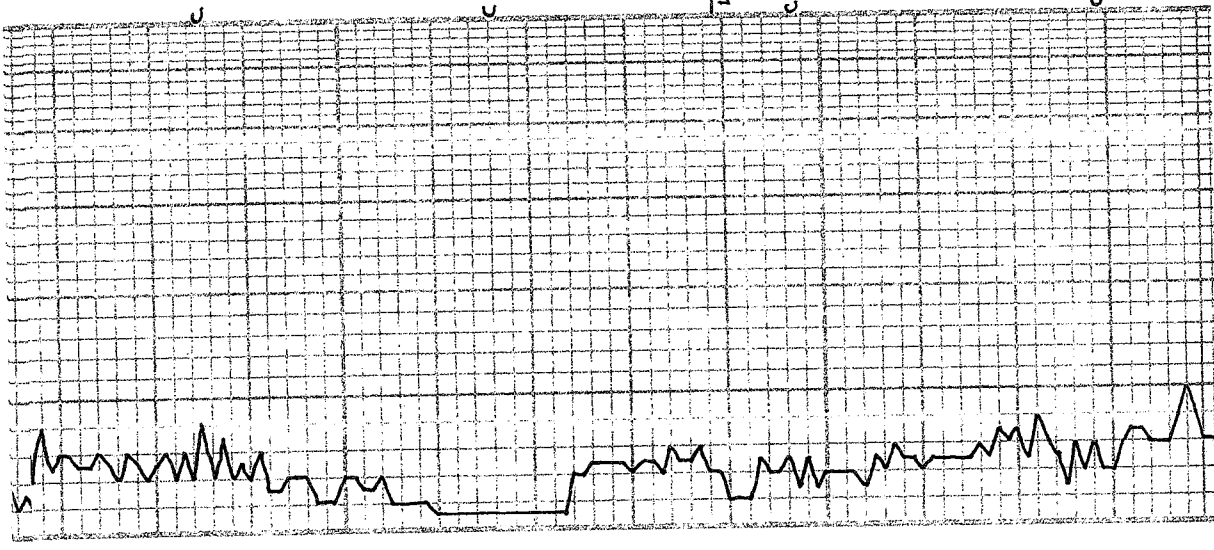
10. TLM. EXTEN. AIRD. SL. A/CAL	LS, WHT, CRM, BRN, FXTLN, V FOSS, NS	SH, BLK	LS, WHT, CRM, FXTLN, HRD, FOSS, SCT WHT FOSS CHT NS	CHT, WHT, WHT-BRN, SL FOSS	SH, GRY	CHT, GRY	SH, GRY	LS, GRY, V FXTLN, DNS, HRD, SCT GRY CHT	LS, WHT, BRTL, FXTLN, NS	LS, WHT, TAN, FXTLN, HRD, DNS NS
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4100

4200

LS, TAN, VF XTLW, V DMS, V HRD, TITE, NS	SH, GRY	LS, WHI, HRD, EXTLW, MDV, ϕ NS	A.A.	SH, DK GRY	LS, BUFF, F XTLW, SL HRD, G YUG ϕ , NS	LS, GRY/TAN, VF XTLW, V HRD, SCT YUG, NS	LS, GRY/TAN, VF XTLW, V HRD, DMS, TITE, SCT FOSS, NS	SH, GRY, GRN	LS, TAN, BUFF, F \rightarrow M XTLW, HRD, SCT SL GRN LR TIT, TITE, NS	A.A. INCR FOSS, SCT WHI, CHI
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STARK
4289-1123

4300

SH, BLK	LS, TAN, VF XTLN, V HRD, DMS, TITE, MS
	LS, BUFF, VF XTLN CMT'D OOLS, ABUN MED OOLS, TITE, MS
	SH, BRN, GRY, RED
	LS, BUFF, FXTLN, BRTL, ABUN OOM, MS
	LS, TAN, VF XTLN CMT'D OOLS, HRD, VTITE CMT'D, MS
	SH, GRY, RED
	LS, LT GRY, VF XTLN, DMS, V FEW SGT XTLN FILL VUGS, TITE, MS
	LS, WHT, FXTLN, HRD, DMS, SGT SML FOSS W/M, TITE, MS
	LS, AA
	SH FLOOD

SH FLOOD

H FLOOD

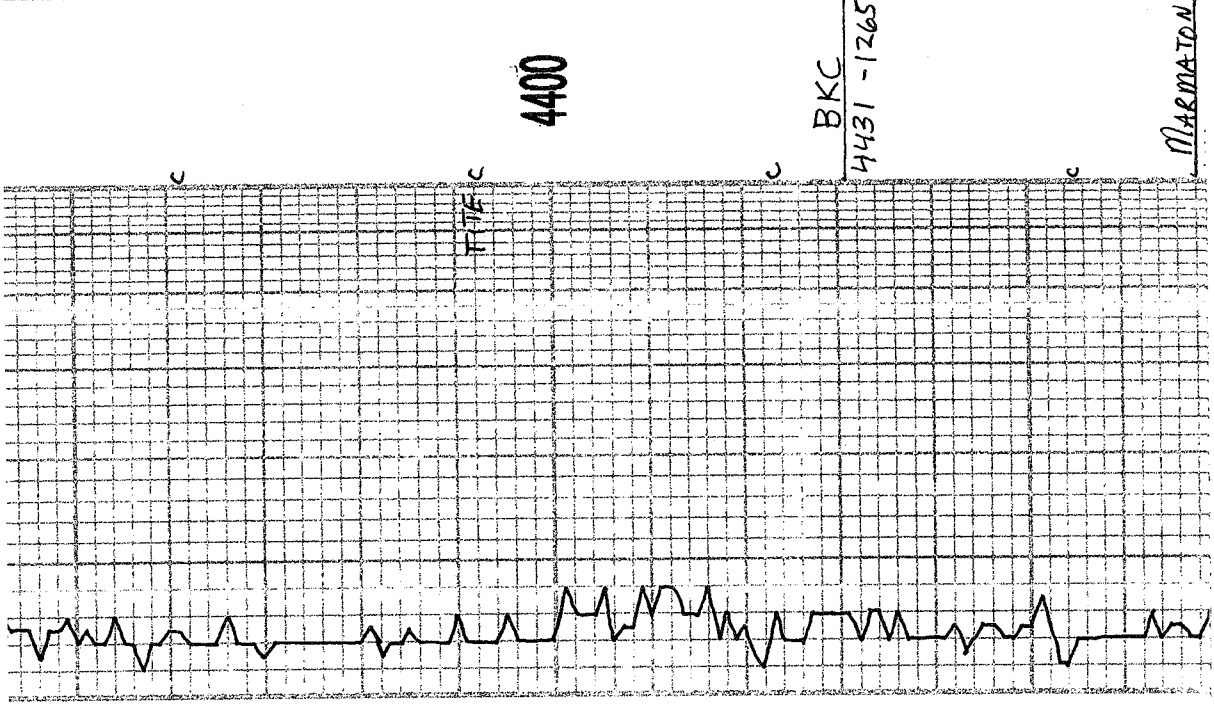
7:AM, 10-4-13

DKL6 @ 4340

V

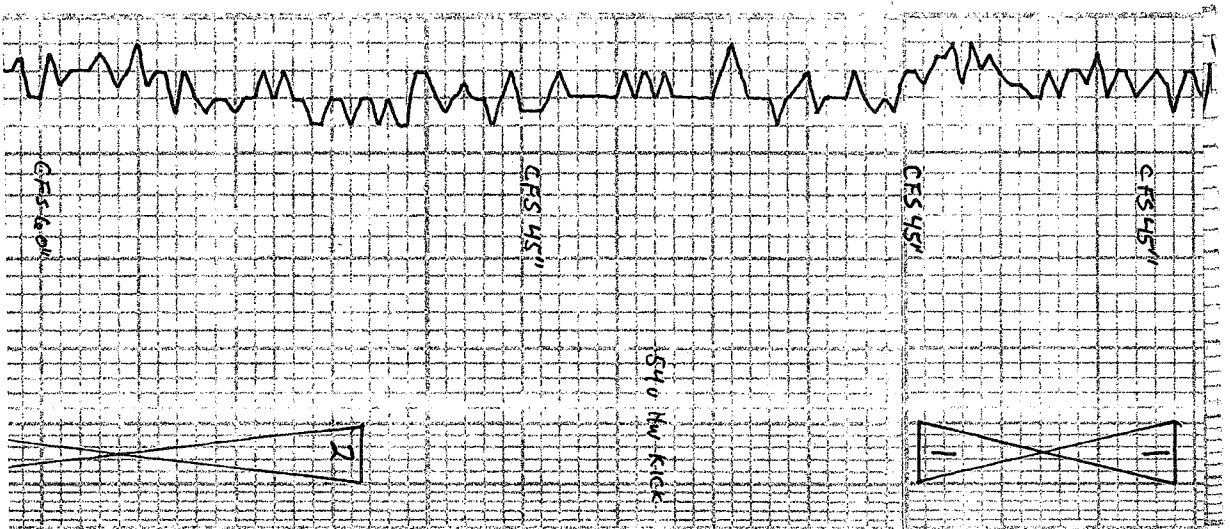
SH, GRV, SLTY-SMDY	LS, WHT, F → M XTLN, SL HRD, V FEW FOSS, FAIR XTLN PINS	LS, CRIM, WHT, SOFT, CHALKY, DIS	A.A.	LS, WHT, F → M XTLN, HRD, F → G XTLN PINS	LS, WHT, TAN, MXTLN, A HRD, FOSS, F PINS	SH, GRV	LS, TAN, MXTLN, S → M HRD, NO VIS PINS	SS, GRY CNT, CLR F → M GRNS, FRIABLE, SOFT, W SORT, V PARTYS INS	IC ADMU DICE E → M VTN
--------------------	--	----------------------------------	------	--	---	---------	---	--	------------------------

MUD CHECK
 VIS 57 WT 9.3
 CHLOR 5.000 WCMZ
 FILT 7.6



FIVE

BKC



4468-1302

BRTL, G FLUDR STWD VUGS,
MED GRW OIL, SL FLUDR FO
OW BRK, G VUG

FLUDR FO
N TRAY
WIS P ODOOR
IDU Kick-HW

4500 DEVI

LS BUFE, F XTUN CMT, ABUN FOSS
HRD, VG FOSS & W/GOOD LT BRN
+ FLUDR STAG, G ODOOR, TR
GAS N P

COBOR
FO NCUP
RATHBOW
27U HW Kick
31U HW Kick

SHU HW Kick

20" AA, VG GASSY BLEED,
MED BRN OIL

GASSY
BLEED
O circ Pump to 50 SPM
850-900 PSI
7:AM 10-5-13
OUT w/ DST #1 @ 4499
MUD CHECK
VIS 60 WT 9.3
CHLOR 5.800 LCM 2
FILT 8.0

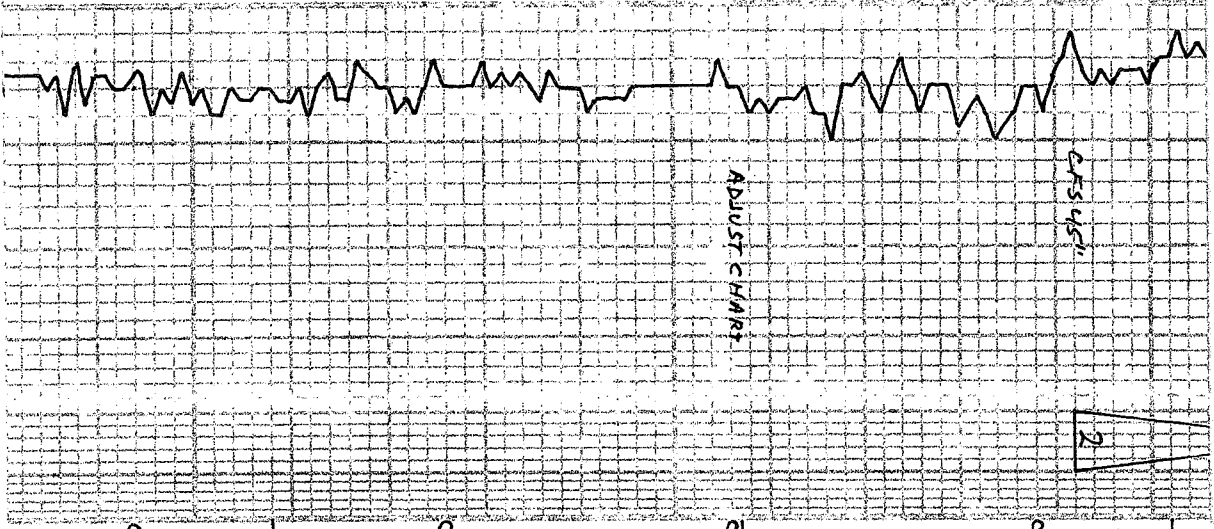
PAWNEE
4566-1400

SH, GRV RED
LS, WHT, EXTU, HRD, EGS, SCT
WHT CHT, NO VIS O, NS
LS GRM, WHT, F XTUN, HRD, SL
FOSS, G FLUDR OIL, COATID VUGY
O LEAR FO OW BRK, THIN ZONE

DST #1 4472-4499
30-60-45-90
IF: BOB 3/4 MW
IS: BOB 3/4 MW
FF: BOB 1/4 MED
FSI: BLED OFF THRU OUT
REC: 720' GIP
60' CGO, 15% G, 85% O
REV + 378' CGO, 20% G, 80% O
REV + 120' MCGO, 20% G, 50% O
FP: 83-173, 191-247
SIP: 359-358
HP: 2263-2184

SH, BLK
LS, BRN/WHT, CHLKY, SOFT, NS

NO ODOOR
FD. BRK
THIN
ZONES
NO ODOOR
20 U HW Kick



MYRIC
4600
4598-1444

CHEROKEE
4643-1477

JOHNSON
4692-1526

4700

SH DEN	LS BRN, VEXTW, HRD G OIL COAT'D BEDDING PLATES, FEW BRN FO N TRAY SH, BLK	FEW FES
	LS BRN, TAN, GRAY, VEXTW, V HRD, DMS, FOSS, TITE, MS	
	AA	
	LS TAN, WHT, FXTW, HRD, V DK GRY FOSS W/ N TITE, MS	
	SH, BLK SH, GRY	
	LS LT GRY, TAN, VEXTW, DMS, HRD, TITE, MS	
	SH, GRY, DK GRY	
	LS TAN, WHT, FXTW, W HRD, MS	
	SH, GRY, SCLTY	
	SH, BLK, V HRD	
	LS WHT, TAN, VEXTW, HRD, ARDN FOSS, TITE, MS	
	LS WHT, FXTW, W HRD, SCT BLK DD OIL STMG, NO FO, NO ODOOR GUS?	DD OIL STMG? GUS?
	LS TAN, GRY, VEXTW, HRD, DMS TITE, MS	

7:14M 10-6-13
COND V FROM DST#2

DST#2 4557-4608
30.60 45.90

IF: 4', d. ed 26min
FF: NO BLD
REC: 10'M
FP: 30-32, 48-35
SID: 1173-1126
HP: 2275-2260

MUD CHECK
VIS 65 WT 9.5
CHLOR 7.000 LCM 2
FILT 9.2

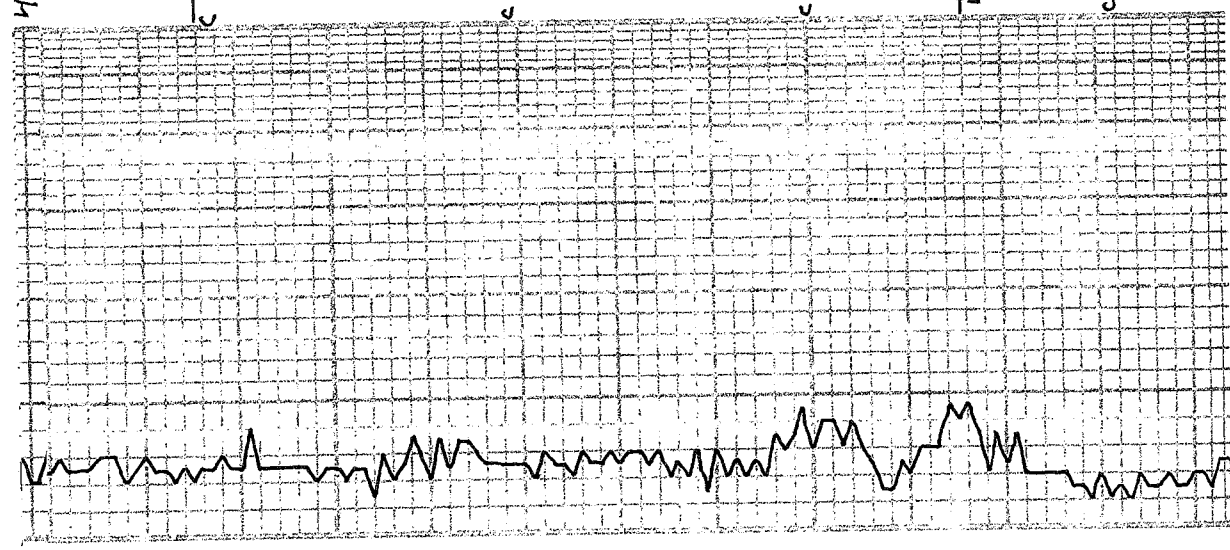
4468 -1302

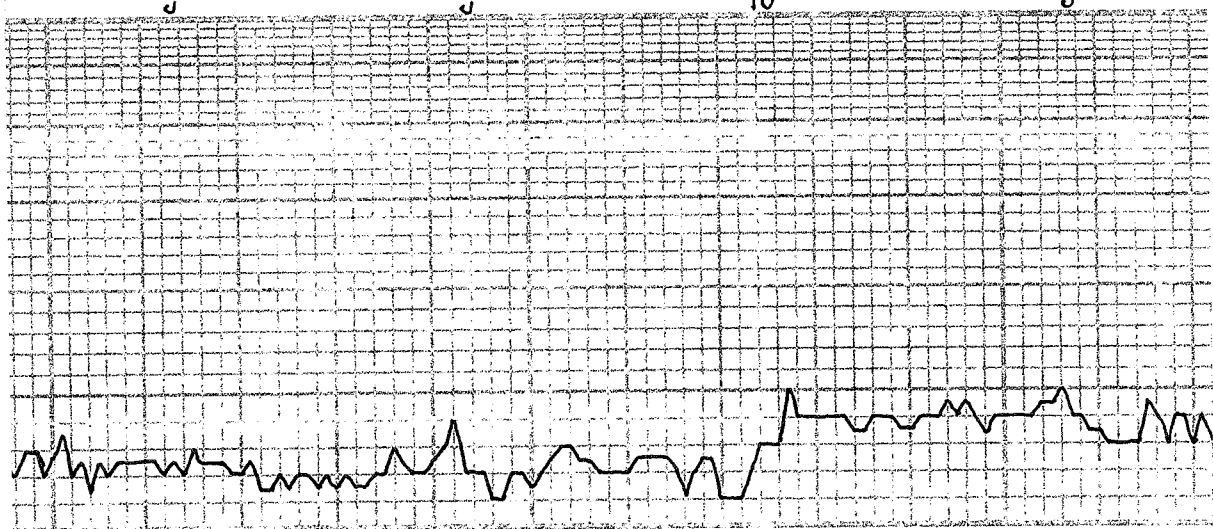
ATDKA
C 4736-1570

4800

MORROWSH
4816-1650

LS, WHT, CRM, F XTLN, V HRD, DMS, MS SH, GRY	CHT, BRN, GRY, SCT FOSS, FRESH MS	LS, WHT, TAN, BRN, UF XTLN, DMS, HRD, TITE, MS	LS, A.A.	CHT, TAN, WHT, BRN, F XTLN, FOSS FRESH MS	LS WHT, GRY, F XTLN, HRD, DMS, SCT GRY XTLN WIN, TITE, MS	SH, BLK	SH, GRY	A.A.
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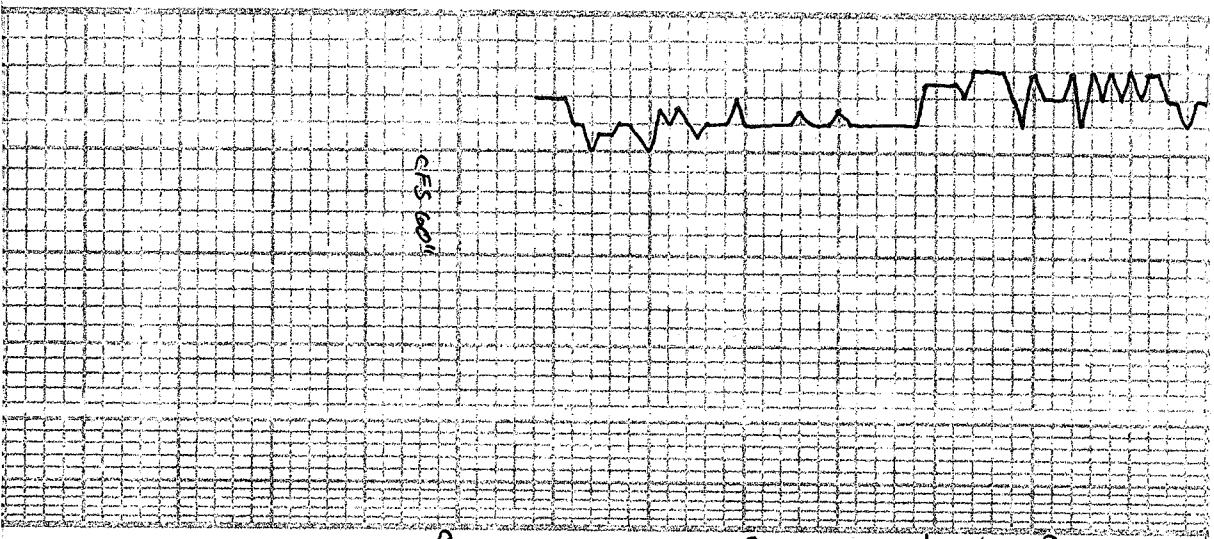




4900

Miss
C4924-1758

SH, GRY, GRN, PYR	SS, WHT + GRN CMT, F → M GRNS, W SORT, RND, F → P CMT'D, GRNS	SH, GRY, GRN, BLK	LS, WHT, CRM, F XTLN, A BUN SML FOSS, CHTY - WHT, TAN, NOUS	SS, WHT GRNS, WHT + GRN CMT, SOFT, W SORT, F GRNS, GØ, NS	A.A.	LS, BLK, TAN, F → M XTLN, HRD, TITE, NS	LS, WHT, CRM, F → CRS XTLN, HRD, SL GRN LRT, TITE, NS	A.A.	LS, BRN, TAN, F XTLN, DMS, HRD TITE, NS
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ST LOUIS
5000
5001 - 1835

	A.A.
	SH, FLOOD
	CHT, TAN, FOSS, FRESH, MS
	CHT, BRN, PEACH, FRESH
	A.A.
	CHT, WHI, PEACH, TAN, FRESH
	A.A.

74M 10-7-13
DRLG @ 5031'
MUD CHECK WT 9.5
RSSY CHLOR 6000 LCM3
FILT 9.2

Max R. Lovely

GEOLOGIST'S REPORT

DRILLING TIME AND SAMPLE LOG

COMPANY Raymond Oil Co.	ELEVATIONS
LEASE # #2 Helen Wells	KB 3166
FIELD Wildcat	DF _____
LOCATION 990'ENL, 1237'FWL	GL 3155
SEC 18 TWSP 20 RGE. 35W	Measurements Are All From KB
COUNTY Wichita STATE KS	
CONTRACTOR H2 #4	CASING
SPUD 9-30-13 COMP 10-7-2013	SURFACE 8 5/8 @ 267'
RTD. 5052 LTD. 5054	PRODUCTION 4Yr
MUD UP 3450 TYPE MUD Chem	ELECTRICAL SURVEYS
	DI MICRO
	COMP M/D

FORMATION TOPS AND STRUCTURAL POSITION

FORMATION	SAMPLE TOP	ELECTRIC LOG TOP	SUB-SEA DATUM	STRUCTURAL POSITION		
				A	B	C
Base Anhydrite	2284	2280	886	888		
Stotler	3515	3514	-348	-348		
Heebner	3935	3934	-788	-786		
Lansing	3987	3986	-820	-820		
Stark	4289	4286	-1120	-1127		
Marmaton	4468	4466	-1300	-1301		
Ft. Scott	4610	4611	-1445	-1444		
Johnson	4682	4686	-1523	-1523		
Atoka	4736	4736	-1570	-1571		
Morrow SH	4816	4819	-1653	-1651		
St. Genevieve	4924	4922	-1756	-1761		
St. Louis	5001	5001	-1835	-1820		

REFERENCE WELLS FOR STRUCTURE

A **Raymond #1 Helen Wells NW NE NW NW 18-20-35W**

B _____

C _____

REMARKS

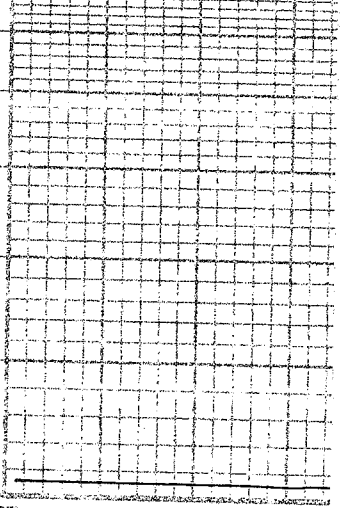
LEGEND

- Anhydrite
- Salt
- sandstone
- Shale
- Chert
- Dolomite

DRILLING TIME IN MINUTES
PER FOOT

Rate of Penetration Decreases

5" 10" 15" 20" 25"

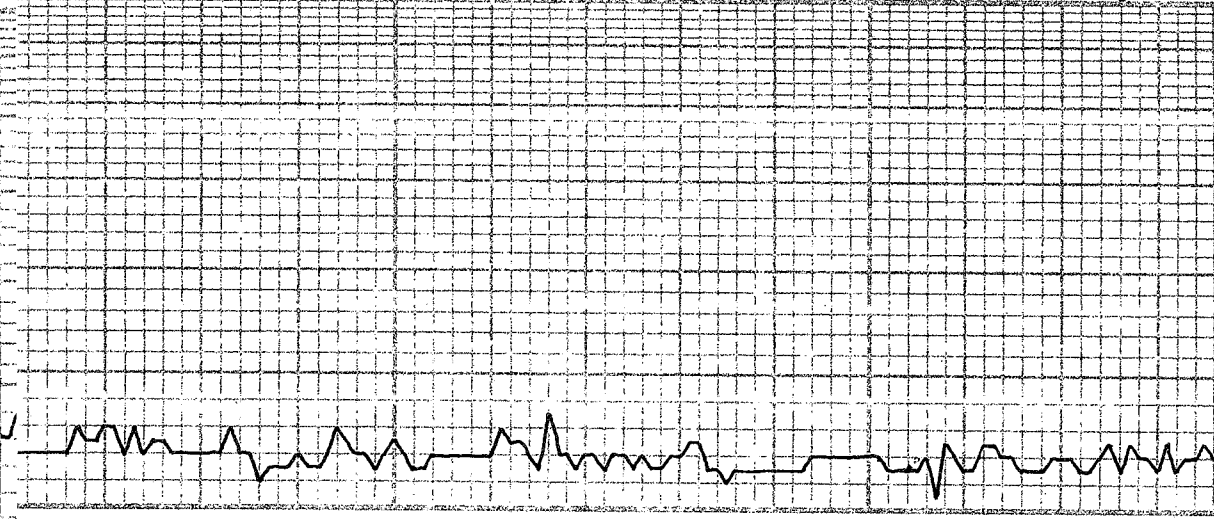


LITHOLOGY

SAMPLE DESCRIPTIONS

OIL SHOWS

REMARKS



3500

C STOTLER
3515 - 349

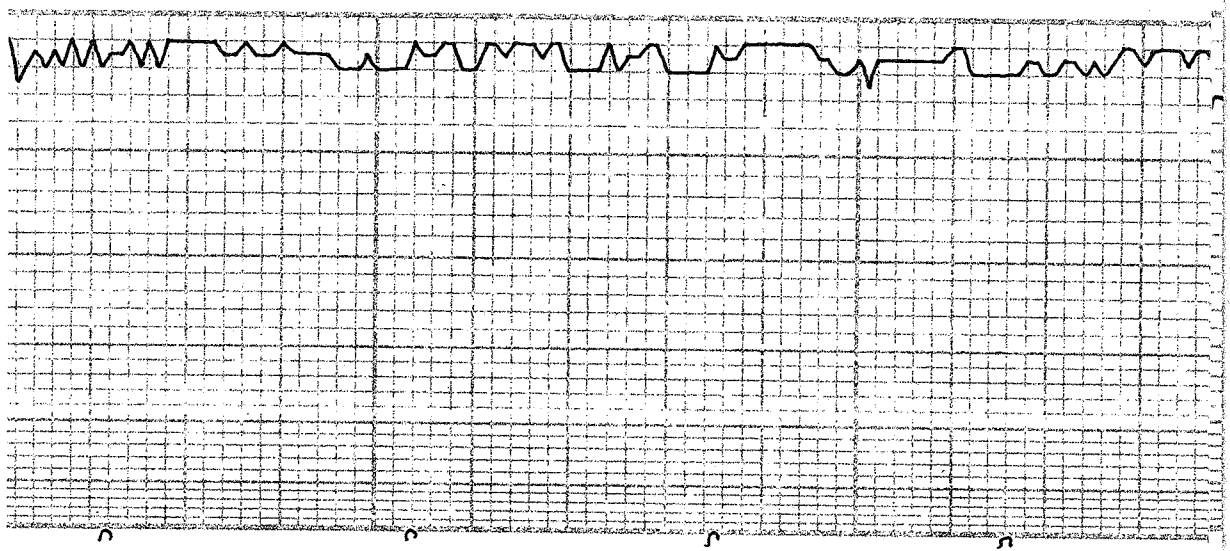
LS, GRY, TAN, F XTLN, HRD, ABUN COCK & FOSSE, V.P. 0.15	LS, GRY, TAN - WCMT ID 00LS, F XTLN, HRD, DMS, TITE	SH, GRY	SH, GRY, STICKY	SH, GRY, SANDY	LS, WH, GRY, F GRNLR TXT, FOSSE W/N, F. 0.15	SH, GRY	LS, GRY, TAN, VF XTLN, DMS, HRD, TITENS	SH, SLTY, GRY	LS, CRM, TAN, F XTLN, MED GRY XTLS W/N, NS	SH, GRY, RED
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3600

3700

LS. WH. F. CRS XTLN, FOSS CASTS NS	LS. BRN, F. XTLN, ABUN FOSS + FRAGS, VWCMTIP, HRD	SLTSTN GRY	SH, GRY.	LS. WH. TAN, FOSS, NS	SH, GRY, SLTY	LS, GRY, VE. XTLN, HRD, DMS, LITE	DOLO, TAN, FXTLN, GRAY TKT, HRD, NO VIS Ø, NS	A. A.	LS, WH. F. XTLN, HRD, SCT LG XTLS W/N, F. G. VUG Ø, NS	BRILL, ABUN SOME FOSS, NI
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3800

LS. TAN, F. XTLM, FRD, SL ALGAS, TXT, F. Ø. NS
SLTSTN, GRY
LS. BUFE, F. XTLM, GRANR TX, MHRD, F. Ø. XTLM/Ø. NS
LS. WHT, TAN, SOFT, F. XTLM, GILS, SL CHKY, NS
LS. GRY, F. XTLM, DWS, HRD, TTE, NS
LS. WHT, TAN, SOFT, F. XTLM, GRANR TX, GLAUC, F. Ø. XTLM/Ø. NS
SH. BLK
SLTSTN, GRY
SH, RED SLTY
LS. GRM, F. XRS XTLM, SL CONKA, SOFT, BRILL, G. XTLM/Ø. NS
LS. WHT, F. XTLM, CMPT'D FOSS, ABOU LG FOSS, F. Ø. NS

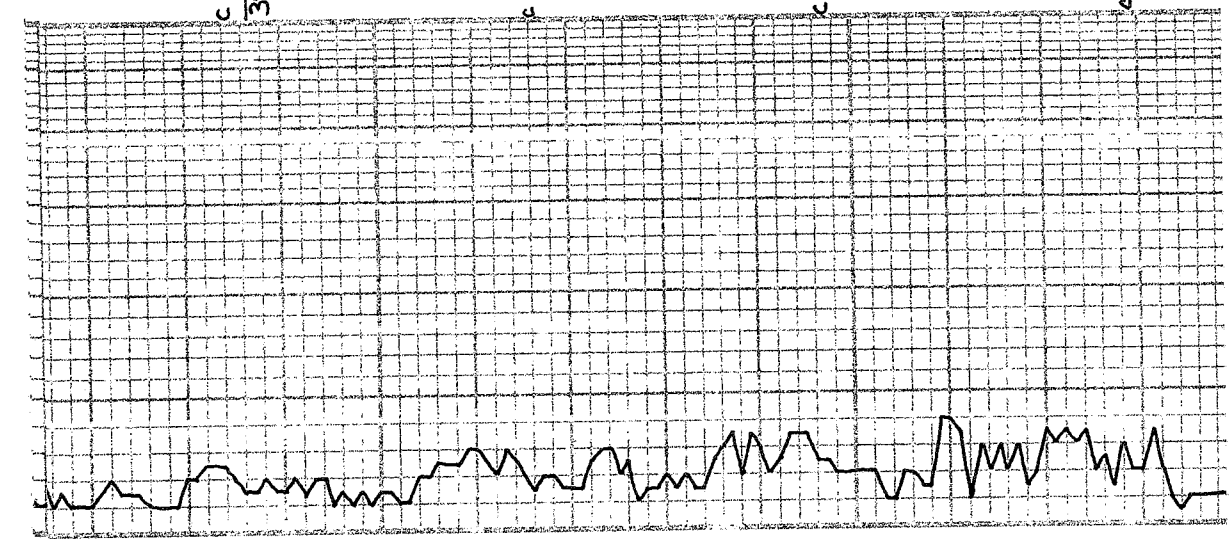
MUD CHECK
 VIS 44 WT 8.95
 CHLOR 5,000 LCM 2
 FILT 7.6



3900

HEEBNER
3935 - 769

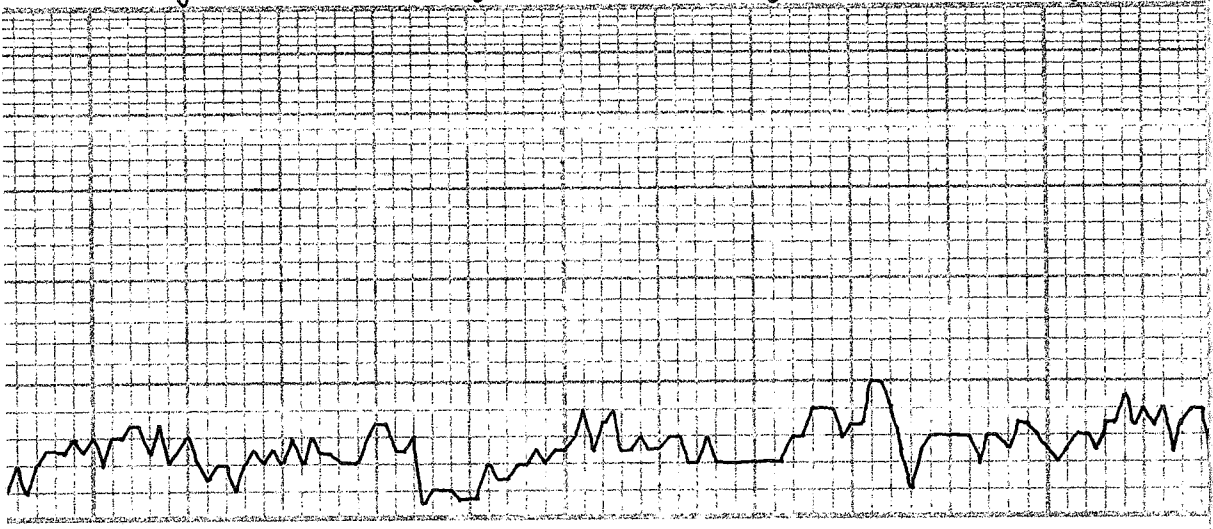
SH, WHT, LT GRY
LS, BDFE, F GRNLR TPT, FOSS INCL'S W/W, M HRD, NS
SH, BLK
LS, WHT, GRY, FXTLV, V FOSS, SL HRD, F P. NS
LS, BRN, TAN, FXTLV, M XTL'S FOSS W/W, SL CHKY, P. NS
LS, WHT, FXTLV, HRD, FOSS, TITE, NS
SH, SLTY, LMY, WHT, GRY
LS, CRM, CHKY, SHLY, SOFT, NS
SH, BLK, DK GRY
SH, GRY
CHALK, CRM, SHLY
LS, TAN, FXTLV, M HRD, DWS, BRTL, ABUN, SML FOSS, M,



C LANSING
3987 - 821

4000

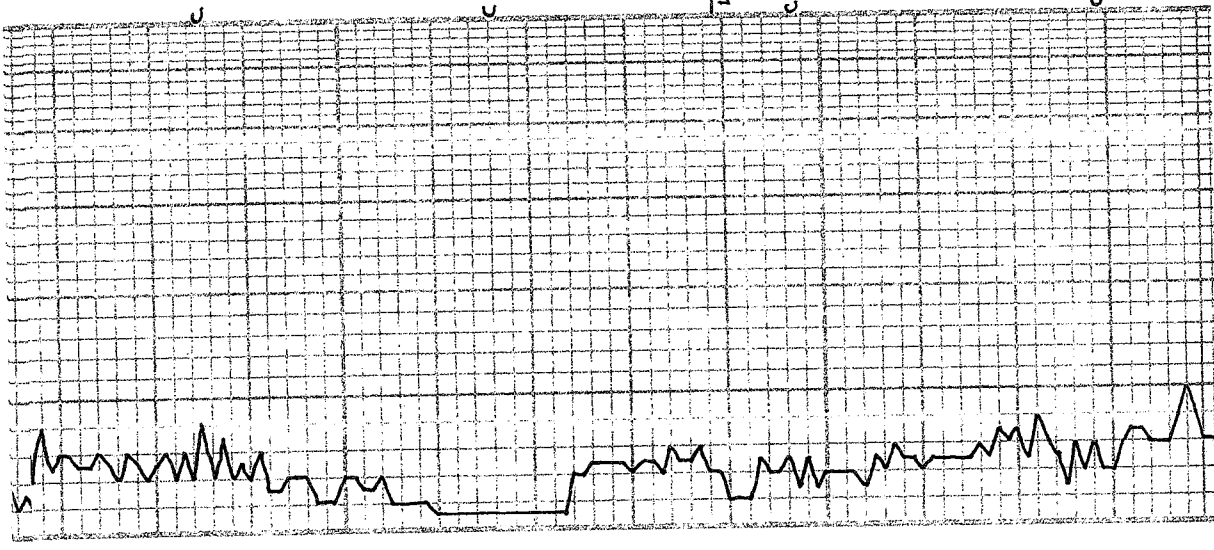
10. TLM. EXT. N. ARD. SL. A/CAL	LS, WHT, CRM, BRN, FXTLN, V FOSS, NS	SH, BLK	LS, WHT, CRM, FXTLN, HRD, FOSS, SCT WHT FOSS CHT NS	CHT, WHT, WHT-BRN, SL FOSS	SH, GRY	CHT, GRY	SH, GRY	LS, GRY, V FXTLN, DNS, HRD, SCT GRY CHT	LS, WHT, BRTL, FXTLN, NS	LS, WHT, TAN, FXTLN, HRD, DNS NS
				AA AA AA	AA AA AA	AA AA AA	AA AA AA			



4100

4200

LS, TAN, VF XTLW, V DMS, V HRD, TITE, NS	SH, GRY	LS, WHI, HRD, EXTLW, MDV, ϕ NS	A.A.	SH, DK GRY	LS, BUFF, F XTLW, SL HRD, G YUG ϕ , NS	LS, GRY/TAN, VF XTLW, V HRD, SCT YUG, NS	LS, GRY/TAN, VF XTLW, V HRD, DMS, TITE, SCT FOSS, NS	SH, GRY, GRN	LS, TAN, BUFF, F \rightarrow M XTLW, HRD, SCT SL GRN LR TIT, TITE, NS	A.A. INCR FOSS, SCT WHI, CHI
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STARK
4289-1123

4300

SH, BLK	LS, TAN, VF XTLN, V HRD, DMS, TITE, MS
	LS, BUFF, VF XTLN CMT'D OOLS, ABUN MED OOLS, TITE, MS
	SH, BRN, GRY, RED
	LS, BUFF, FXTLN, BRTL, ABUN OOM, MS
	LS, TAN, VF XTLN CMT'D OOLS, HRD, VTITE CMT'D, MS
	SH, GRY, RED
	LS, LT GRY, VF XTLN, DMS, V FEW SCT XTLN FILL VUGS, TITE, MS
	LS, WHT, FXTLN, HRD, DMS, SCT SML FOSS W/M, TITE, MS
	LS, AA
	SH FLOOD

SH FLOOD

H FLOOD

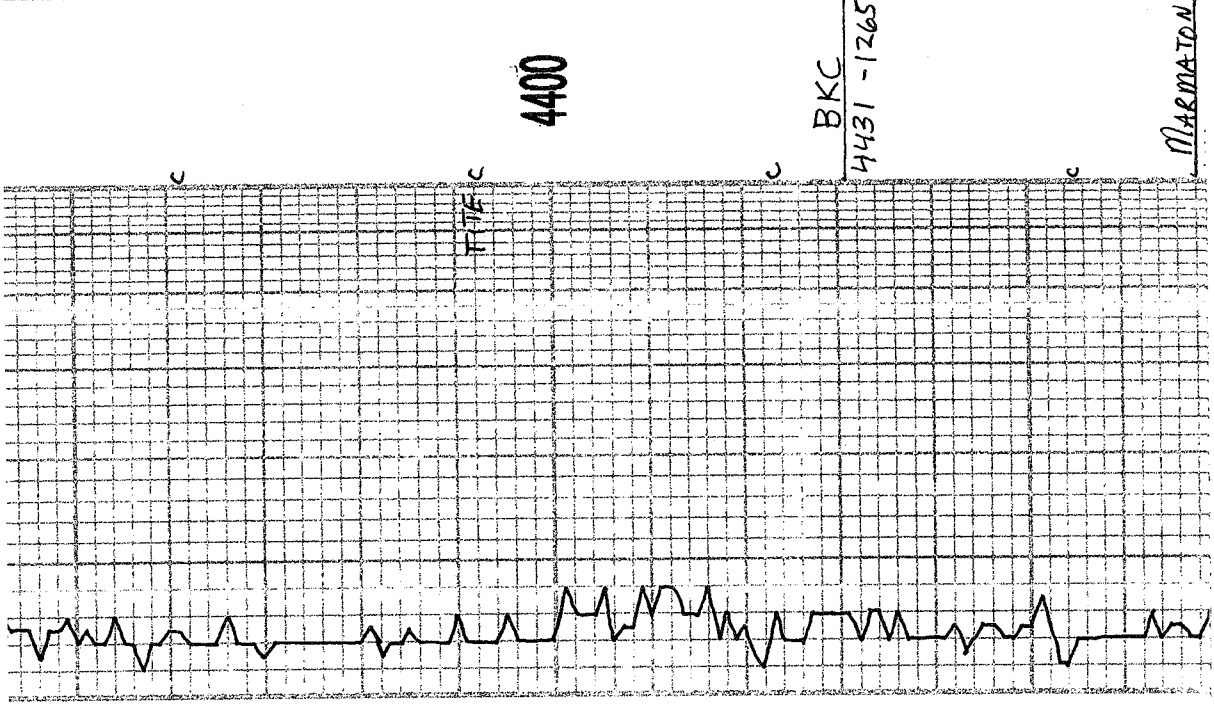
7:AM, 10-4-13

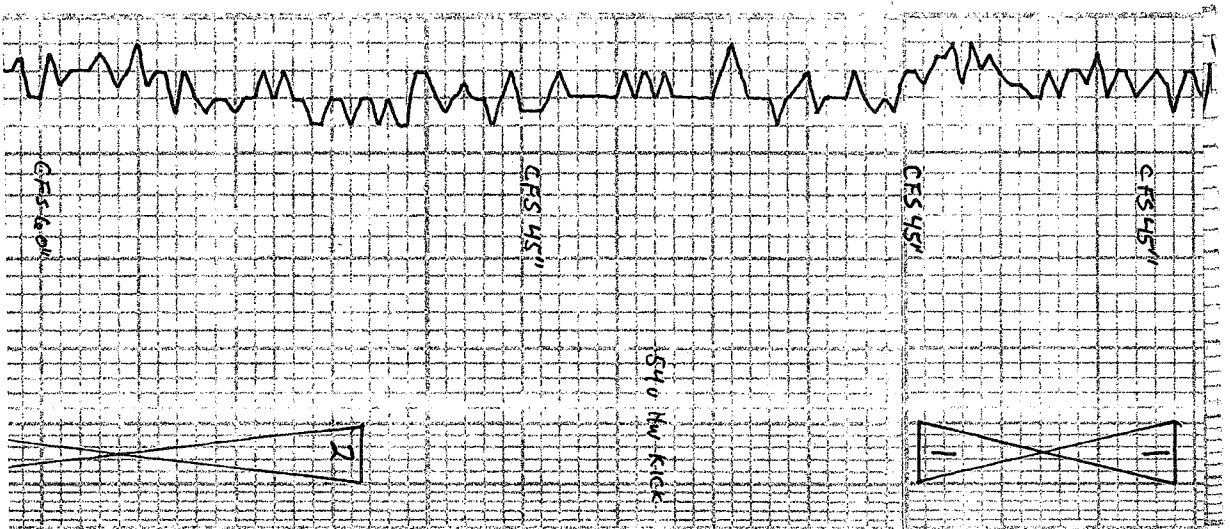
DKL6 @ 4340

V

SH, GRV, SLTY-SMDY	LS, WHT, F → M XTLN, SL HRD, V FEW FOSS, FAIR XTLN PINS	LS, CRIM, WHT, SOFT, CHALKY, DIS	A.A.	LS, WHT, F → M XTLN, HRD, F → G XTLN PINS	LS, WHT, TAN, MXTLN, A HRD, FOSS, F PINS	SH, GRV	LS, TAN, MXTLN, S → M HRD, NO VIS PINS	SS, GRYCMT, CLR F → M GRNS, FRIABLE, SOFT, W SORT, V PARTYS, INS	IC ADMU DIFC E → M VTI M
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MUD CHECK
 VIS 57 WT 9.3
 CHLOR 5.000 KCMZ
 FILT 7.6





4468 -1302

BRTL, G FLUDR STWD VUGS,
MED GRW OIL, SL FLUDR FO
OW BRK, G VUG

FLUDR FO
N TRAY
WIS P ODOOR
IDU Kick-HW

4500 DEVI

LS BUFE, F XTUN CMT, ABUN FOSS
HRD, VG FOSS & W/GOOD LT BRN
+ FLUDR STAG, G ODOOR, TR
GAS N P

COBOR
FO NCUP
RATHBOW
27U HW Kick
31U HW Kick

850-900 PSI
7:AM 10-5-13
OUT W/ DST #1 @ 4499

SH1 HW Kick

SH, GRV RED
LS WHT, EXTLW HRD, EGS, SCT
WHT CHT, NO VIS P, MS
LS GRM, WHT, F XTUN, HRD SL
FOSS, G FLUDR OIL, COATID VUGY
P LEAR FO OW BRK, THIN ZONE

SL FO
N TRAY
FNT ODOOR
VIS 60 WT 9.3
CHLOR 5,800 LCM 2
FILT 8.0

DST #1 4472-4499
30-60-45-90

PAWNEE
4566-1400

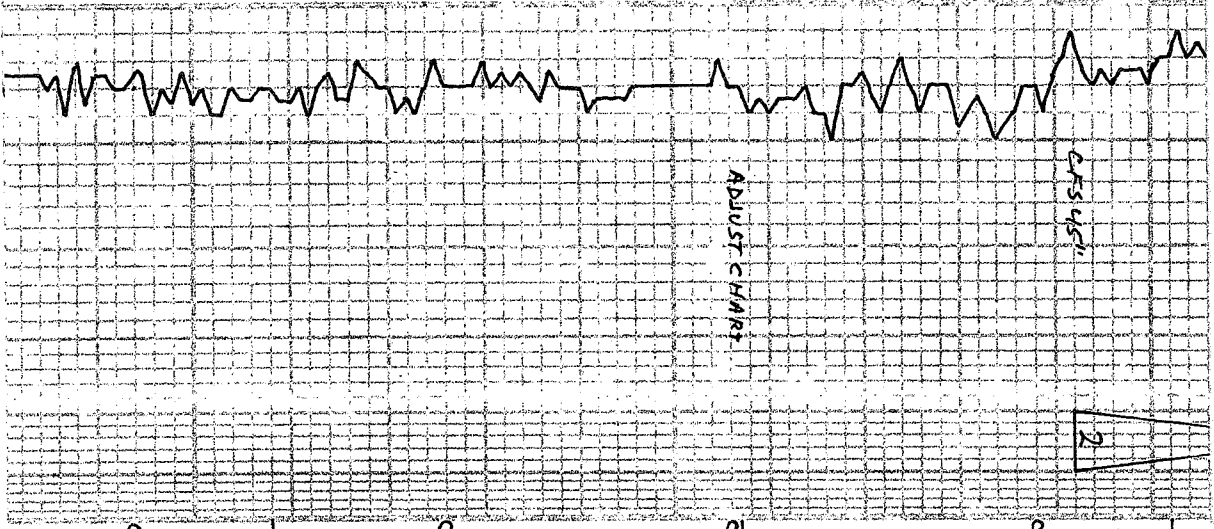
LS TAN, V F XTUN, DNS, HRD,
TITE, V CLEAN LS, NS
SCT Pcs TAN CHT
SH, BLK

IF: BOB 3/4 MW
IS: BOB 3/4 MW
FF: BOB 1MWD
FSI: BLED OFF THRU OUT
REC: 720' GIP
60' CGO, 15% G, 85% O
REV + 378' CGO, 20% G, 80% O
REV + 120' MCGO, 20% G, 50% O
FP: 83-173, 191-247
SIP: 359-358
HP: 2263-2184

20 U HW Kick

LS BUFE, F XTUN, LG XTLS W/M, PCMTS
FOSS, STRKS FLUDR STAG, FEW
FLUDR FO OW BRK, G BRN FO OW
BRK, TR GAS, G XTUN FOSS
LS WHT, F XTUN CMTID OOLS,
VG OIL FILL OOL, V OOL
LS BRN/WHT, CHLKY, SOFT, NS

NO ODOOR
FD BRK
THIN
ZONES
NO ODOOR



MYRIC
4600
4598-1444

CHEROKEE
4643-1477

JOHNSON
4692-1526

4700

SH DEN	LS BRN, VEXTW, HRD G OIL COAT'D BEDDING PLATES, FEW BRN FO N TRAY SH, BLK	FEW FES
	LS BRN, TAN, GRAY, VEXTW, V HRD, DMS, FOSS, TITE, MS	
	AA	
	LS TAN, WHT, FXTW, HRD, V DK GRY FOSS W/ N TITE, MS	
	SH, BLK SH, GRAY	
	LS LT GRAY, TAN, VEXTW, DMS, HRD, TITE, MS	
	SH, GRAY, DK GRAY	
	LS TAN, WHT, FXTW, W HRD, MS	
	SH, GRAY, SLTY	
	SH, BLK, V HRD	
	LS WHT, TAN, VEXTW, HRD, ARDN FOSS, TITE, MS	
	LS WHT, FXTW, W HRD, SCT BLK DD OIL STMG, NO FO, NO ODOOR CILS?	DD OIL STMG? CILS?
	LS TAN, GRAY, VEXTW, HRD, DMS TITE, MS	

7:14M 10-6-13
CONDV FROM DST#2

DST#2 4557-4608
30.60 45.90

IF: 4', d. ed 26min
FF: NO BLD
REC: 10'M
FP: 30-32, 48-35
SID: 1173-1126
HP: 2275-2260

MUD CHECK
VIS 65 WT 9.5
CHLOR 7.000 LCM 2
FILT 9.2

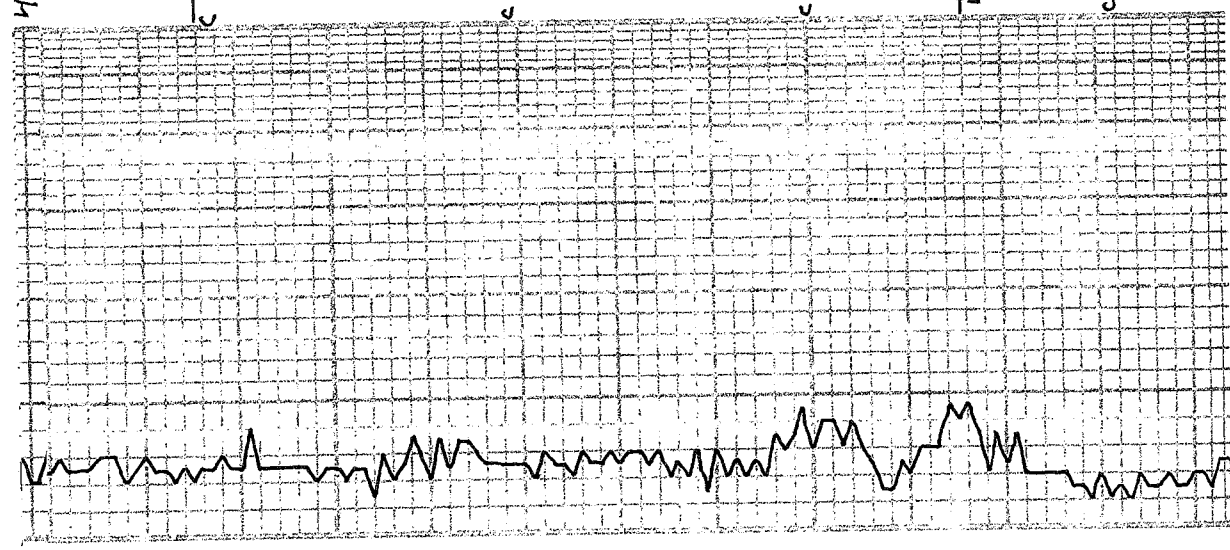
4468 -1302

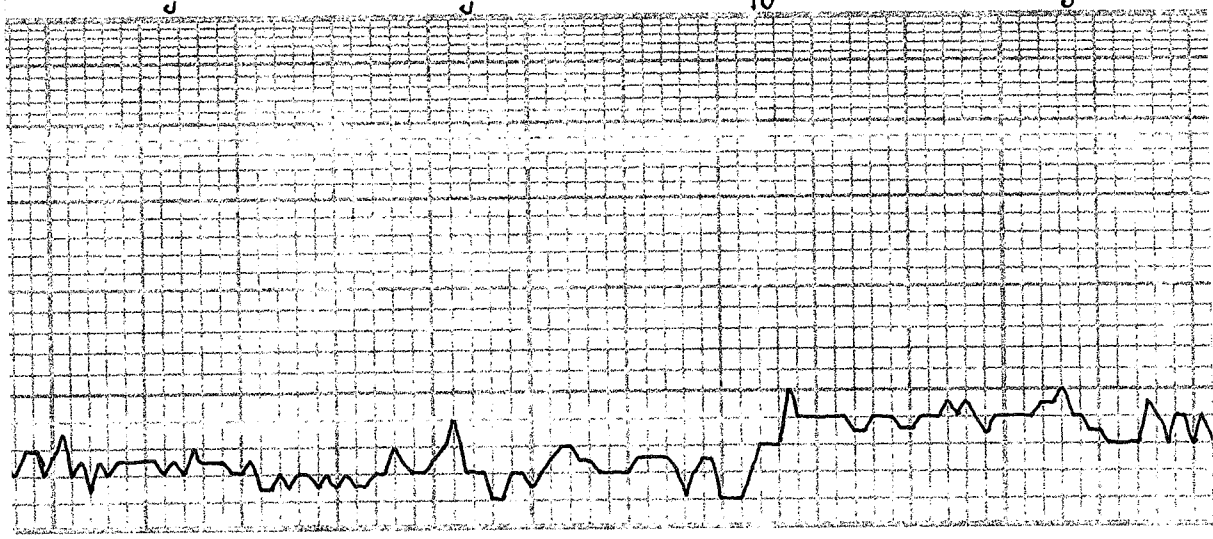
ATDKA
C 4736-1570

4800

MORROWSH
4816-1650

LS, WHT, CRM, F XTLN, V HRD, DMS, MS SH, GRY	CHT, BRN, GRY, SCT FOSS, FRESH MS	LS, WHT, TAN, BRN, UF XTLN, DMS, HRD, TITE, MS	LS, A.A.	CHT, TAN, WHT, BRN, F XTLN, FOSS FRESH MS	LS WHT, GRY, F XTLN, HRD, DMS, SCT GRY XTLN WIN, TITE, MS	SH, BLK	SH, GRY	A.A.
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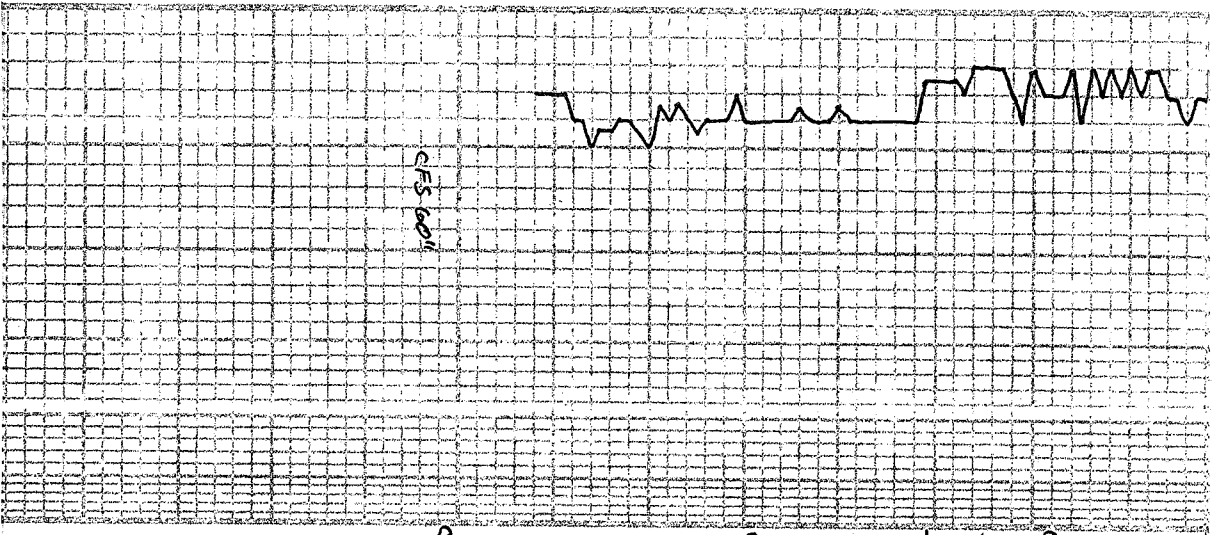




4900

Miss
C4924-1758

SH, GRY, GRN, PYR	SS, WHT + GRN CMT, F → M GRNS, W SORT, RND, F → P CMT'D, GRNS	SH, GRY, GRN, BLK	LS, WHT, CRM, F XTLN, A BUN SML FOSS, CHTY - WHT, TAN, NOUS	SS, WHT GRNS, WHT + GRN CMT, SOFT, W SORT, F GRNS, GØ, NS	A.A.	LS, BLK, TAN, F → M XTLN, HRD, TITE, NS	LS, WHT, CRM, F → CRS XTLN, HRD, SL GRN LRT, TITE, NS	A.A.	LS, BRN, TAN, F XTLN, DMS, HRD TITE, NS
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ST LOUIS
5000
5001 - 1835

	A.A.
	SH, FLOOD
	CHT, TAN, FOSS, FRESH, MS
	CHT, BRN, PEACH, FRESH
	A.A.
	CHT, WHI, PEACH, TAN, FRESH
	A.A.

74M 10-7-13
DRLG @ 5031'

MUD CHECK WT 9.5
RSSY CHLOR 6000 LCM3
FLT 9.2