



Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION 1078384
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: _____

1078384

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 <i>(Attach Additional Sheets)</i>	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Log	Formation (Top), Depth and Datum	<input type="checkbox"/> Sample
Samples Sent to Geological Survey	<input type="checkbox"/> Yes <input type="checkbox"/> No	Name	Top	Datum
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:				

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: Yes No

Date of First, Resumed Production, SWD or ENHR. _____ Producing Method:
 Flowing Pumping Gas Lift Other *(Explain)* _____

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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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
Ward Loyd, Commissioner
Thomas E. Wright, Commissioner

Sam Brownback, Governor

April 26, 2012

Ted McHenry
Raymond Oil Company, Inc.
PO BOX 48788
WICHITA, KS 67202-1822

Re: ACO1
API 15-203-20169-00-00
Horton-Brack 1
NE/4 Sec.19-20S-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



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Raymond Oil Company

19-20-35 Wichita, Ks

P.O. Box 48788
Wichita, Ks 67202

Horton- Brack #1

ATTN: Max Lovely

Job Ticket: 45316

DST#: 1

Test Start: 2012.01.13 @ 07:40:56

GENERAL INFORMATION:

Formation: **Marmaton**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 11:07:36

Time Test Ended: 17:48:36

Test Type: Conventional Bottom Hole (Initial)

Tester: Brandon Turley

Unit No: 35

Interval: 4504.00 ft (KB) To 4519.00 ft (KB) (TVD)

Reference Elevations: 3204.00 ft (KB)

Total Depth: 4519.00 ft (KB) (TVD)

3194.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Poor

KB to GR/CF: 10.00 ft

Serial #: 8373

Inside

Press @ Run Depth: 1428.80 psig @ 4505.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2012.01.13

End Date:

2012.01.13

Last Calib.:

2012.01.13

Start Time:

07:40:56

End Time:

17:48:36

Time On Btm:

2012.01.13 @ 11:06:51

Time Off Btm:

2012.01.13 @ 14:40:05

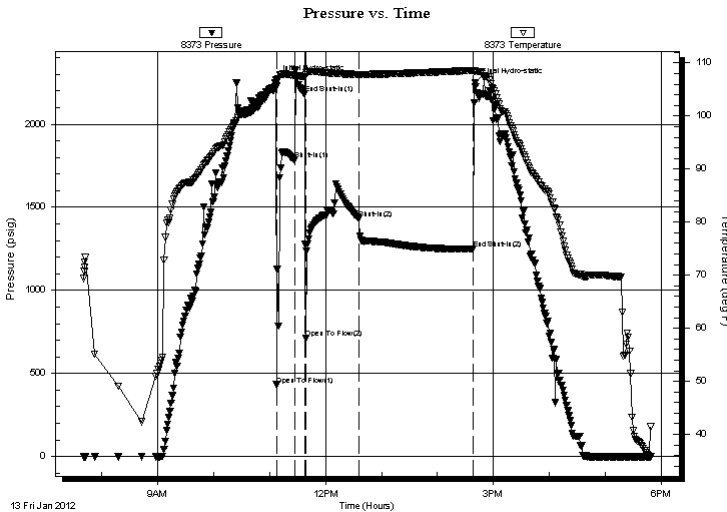
TEST COMMENT: IF: 1/4 blow died in 11 min. Slid the tool twenty feet and tool was sliding when test was on bottom.

IS: No return.

FF: Surface blow died in 10 min.

FS: No return.

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2268.01	106.05	Initial Hydro-static
1	431.60	105.67	Open To Flow (1)
21	1785.01	107.60	Shut-In(1)
31	2185.46	107.41	End Shut-In(1)
33	710.83	107.76	Open To Flow (2)
89	1428.80	107.84	Shut-In(2)
212	1249.82	108.60	End Shut-In(2)
214	2248.56	108.36	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
70.00	mud 100% _m	0.34

Gas Rates

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

Serial #: 8373

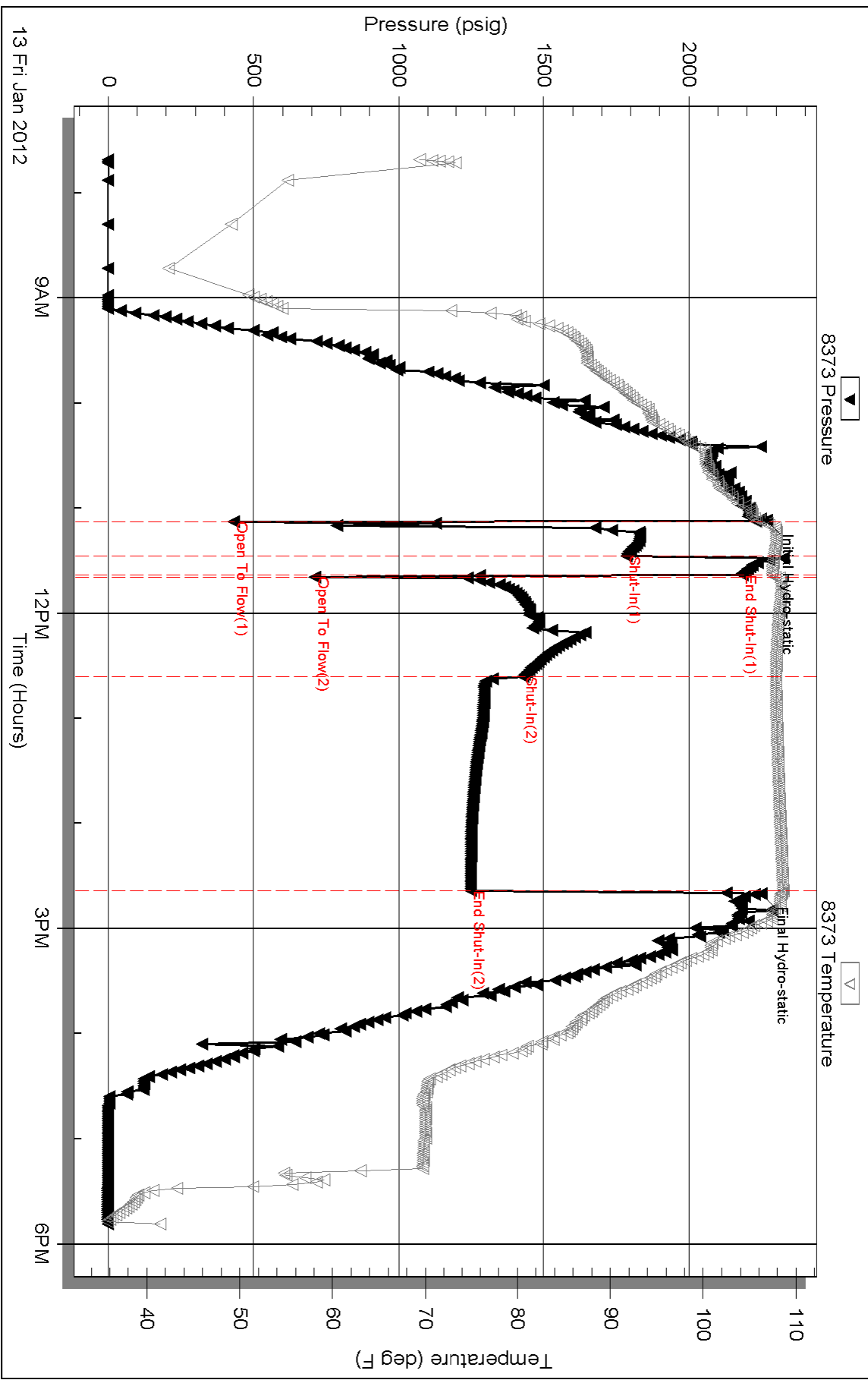
Inside

Raymond Oil Company

Horton-Brack #1

DST Test Number: 1

Pressure vs. Time

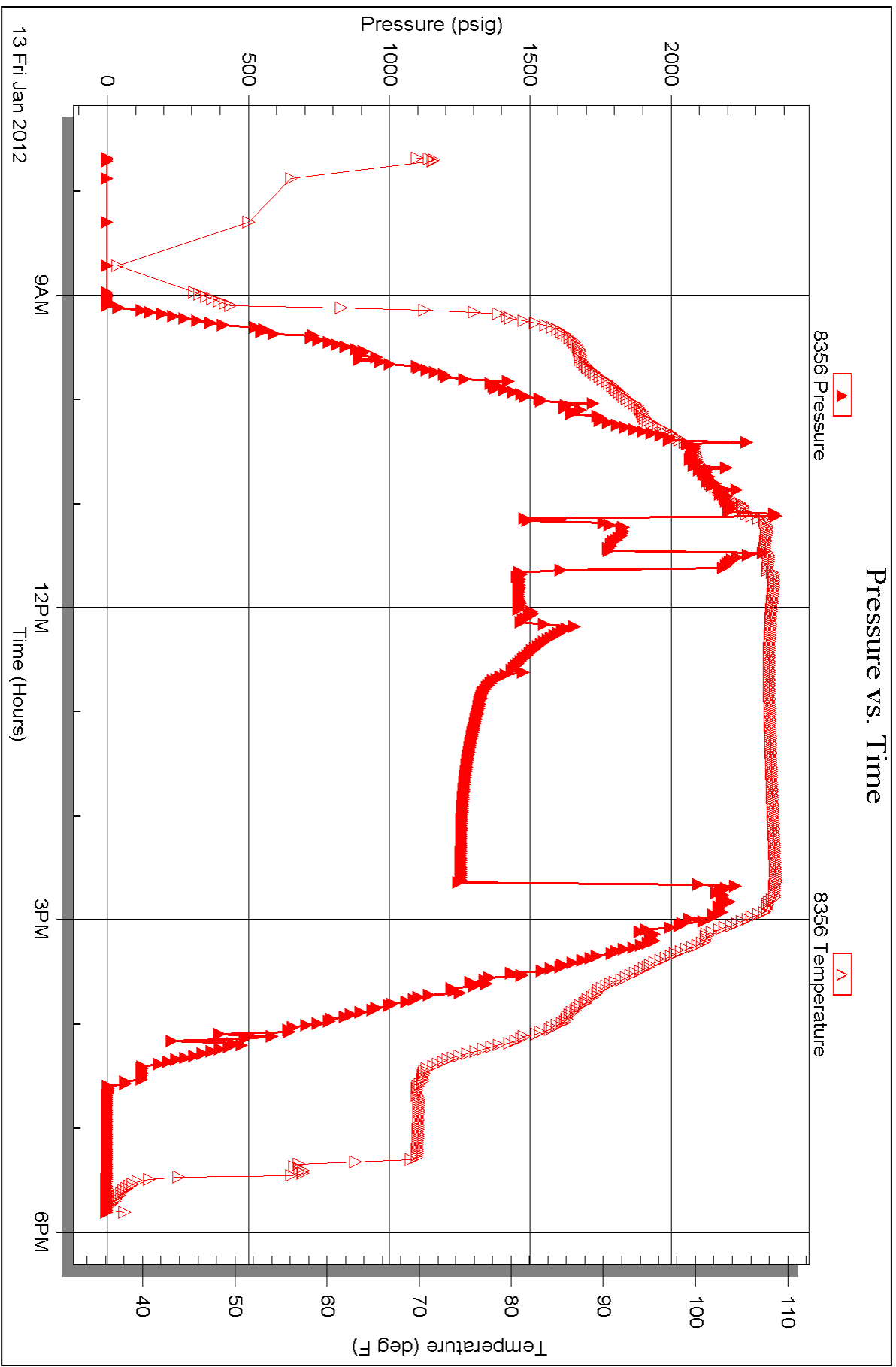


Serial #: 8356

Outside Raymond Oil Company

Horton-Brack #1

DST Test Number: 1





TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Raymond Oil Company

19-20-35 Wichita, Ks

P.O. Box 48788
Wichita, Ks 67202

Horton- Brack #1

Job Ticket: 45317

DST#: 2

ATTN: Max Lovely

Test Start: 2012.01.14 @ 05:58:11

GENERAL INFORMATION:

Formation: **Marmaton**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 09:06:51

Time Test Ended: 12:05:05

Test Type: Conventional Bottom Hole (Reset)

Tester: Brandon Turley

Unit No: 35

Interval: 4504.00 ft (KB) To 4524.00 ft (KB) (TVD)

Reference Elevations: 3204.00 ft (KB)

Total Depth: 4524.00 ft (KB) (TVD)

3194.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 10.00 ft

Serial #: 8373 Inside

Press @ RunDepth: psig @ 4505.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2012.01.14

End Date:

2012.01.14

Last Calib.:

2012.01.14

Start Time: 05:58:11

End Time:

12:05:05

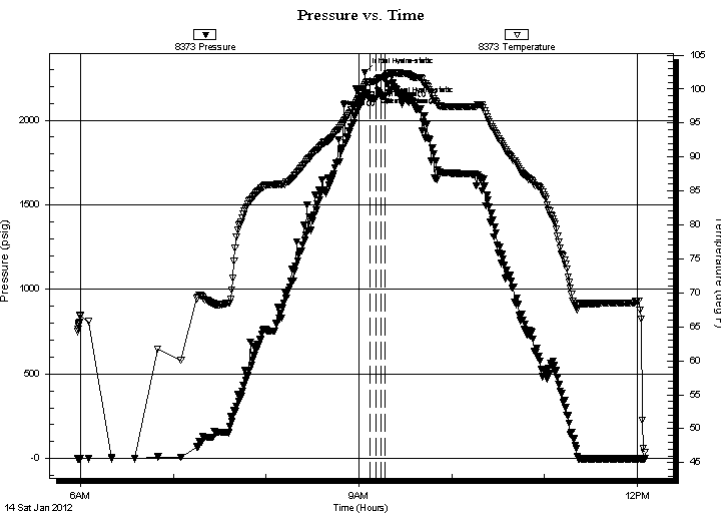
Time On Btm:

2012.01.14 @ 09:04:06

Time Off Btm:

2012.01.14 @ 09:17:21

TEST COMMENT: IF: Packers failed reset and failed again.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2282.74	100.61	Initial Hydro-static
3	2128.84	101.06	Open To Flow (1)
7	2125.88	101.14	Shut-In(1)
11	2142.16	101.68	Open To Flow (2)
13	2140.69	101.70	Shut-In(2)
14	2248.15	101.79	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
270.00	mud 100%m	1.59

Gas Rates

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

* Recovery from multiple tests



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Raymond Oil Company

19-20-35 Wichita, Ks

P.O. Box 48788
Wichita, Ks 67202

Horton- Brack #1

Job Ticket: 45317

DST#: 2

ATTN: Max Lovely

Test Start: 2012.01.14 @ 05:58:11

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: 51.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 10.38 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 8800.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
270.00	mud 100%m	1.592

Total Length: 270.00 ft Total Volume: 1.592 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Serial #: 8373

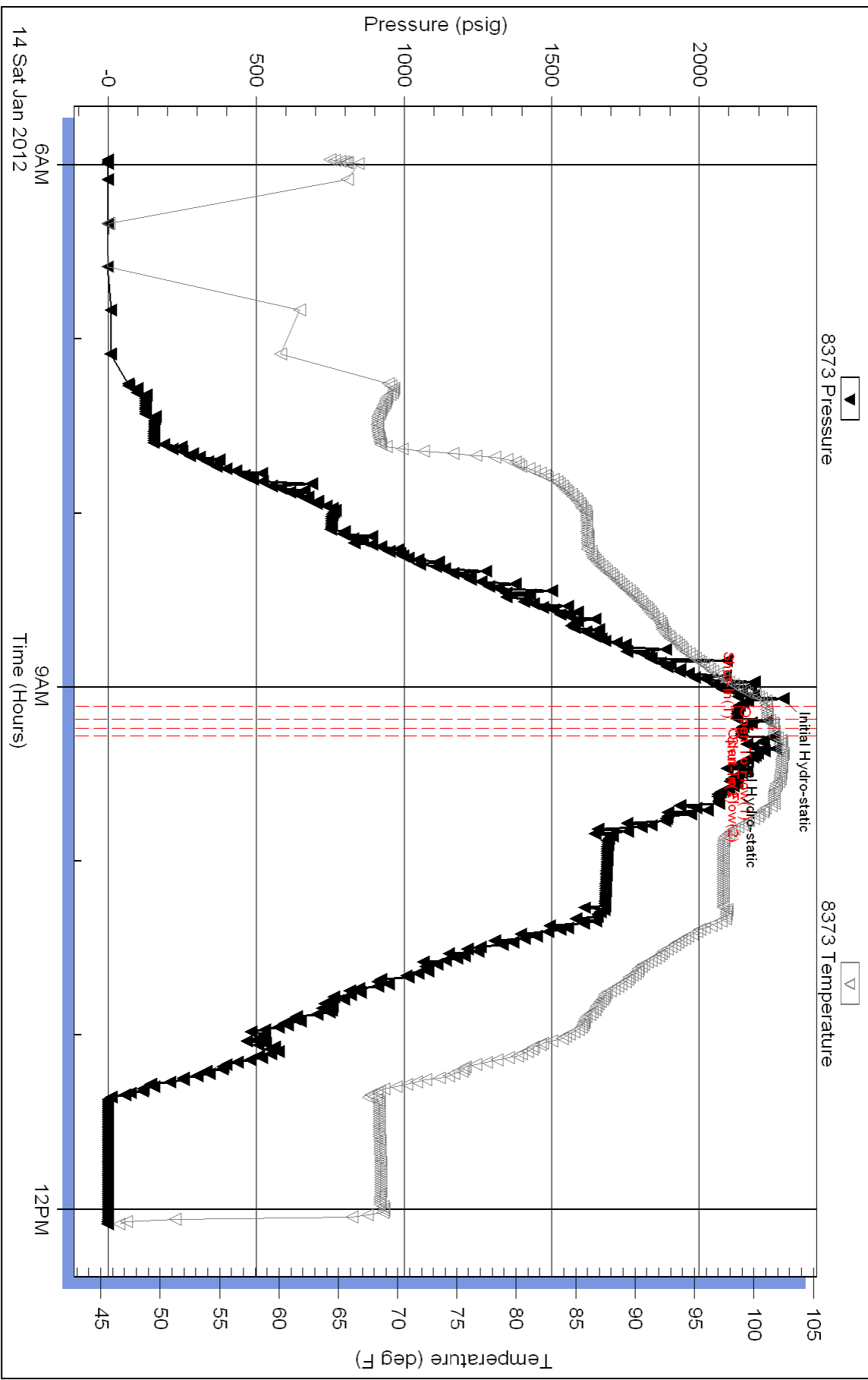
Inside

Raymond Oil Company

Horton-Brack #1

DST Test Number: 2

Pressure vs. Time





TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Raymond Oil Company

19-20-35 Wichita, Ks

P.O. Box 48788
Wichita, Ks 67202

Horton- Brack #1

Job Ticket: 45318

DST#: 3

ATTN: Max Lovely

Test Start: 2012.01.14 @ 12:28:54

GENERAL INFORMATION:

Formation: **Marmaton**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 14:57:04

Time Test Ended: 22:54:19

Test Type: Conventional Bottom Hole (Reset)

Tester: Brandon Turley

Unit No: 35

Interval: 4506.00 ft (KB) To 4524.00 ft (KB) (TVD)

Reference Elevations: 3204.00 ft (KB)

Total Depth: 4524.00 ft (KB) (TVD)

3194.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 10.00 ft

Serial #: 8373

Inside

Press @ Run Depth: 327.69 psig @ 4507.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2012.01.14

End Date:

2012.01.14

Last Calib.:

2012.01.14

Start Time: 12:28:54

End Time:

22:54:19

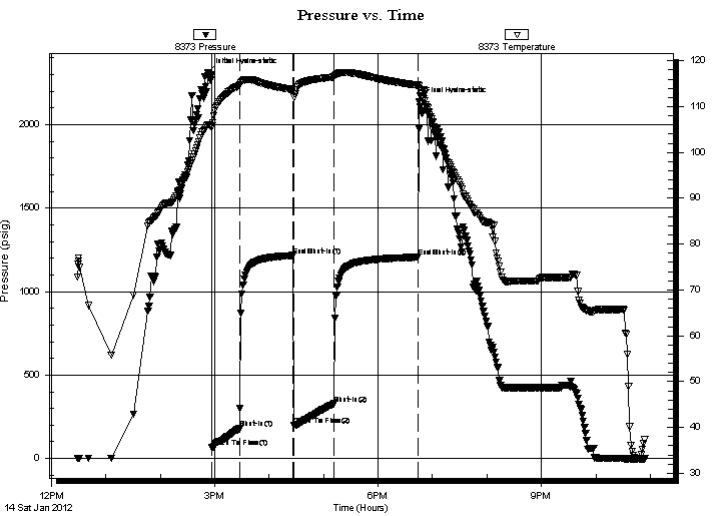
Time On Btm:

2012.01.14 @ 14:52:49

Time Off Btm:

2012.01.14 @ 18:45:18

TEST COMMENT: IF: BOB in 3 min.
IS: BOB in 12 min.
FF: BOB in 6 min.
FS: BOB in 24 min.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2313.13	106.00	Initial Hydro-static
5	66.16	105.73	Open To Flow (1)
35	178.91	114.58	Shut-In(1)
94	1215.90	113.66	End Shut-In(1)
95	196.85	112.09	Open To Flow (2)
139	327.69	116.45	Shut-In(2)
232	1205.99	114.65	End Shut-In(2)
233	2137.59	113.83	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
124.00	gocm 10%g 30%o 60%m	0.61
776.00	go 10%g 90%o	9.82
0.00	1394 GIP	0.00

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Raymond Oil Company

19-20-35 Wichita, Ks

P.O. Box 48788
Wichita, Ks 67202

Horton- Brack #1

Job Ticket: 45318

DST#: 3

ATTN: Max Lovely

Test Start: 2012.01.14 @ 12:28:54

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

34 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

0 ppm

Viscosity: 60.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.98 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 5100.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
124.00	gocm 10%g 30%o 60%m	0.610
776.00	go 10%g 90%o	9.819
0.00	1394 GIP	0.000

Total Length: 900.00 ft Total Volume: 10.429 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: .31@30=34

Serial #: 8373

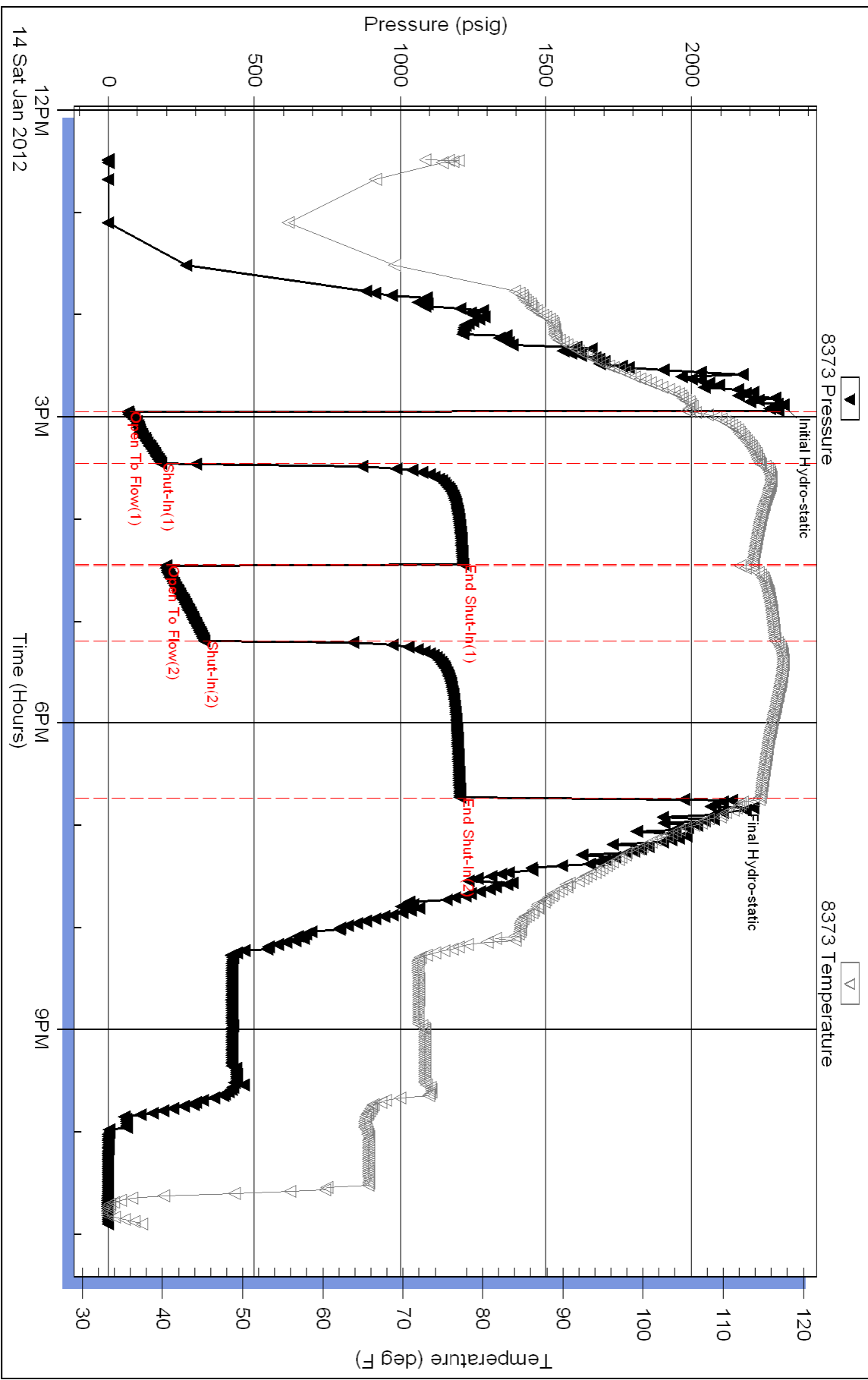
Inside

Raymond Oil Company

Horton-Brack #1

DST Test Number: 3

Pressure vs. Time



Triobite Testing, Inc

Ref. No: 45318

Printed: 2012.01.15 @ 11:24:59



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Raymond Oil Company

19-20-35 Wichita, Ks

P.O. Box 48788
Wichita, Ks 67202

Horton- Brack #1

ATTN: Max Lovely

Job Ticket: 44938

DST#: 5

Test Start: 2012.01.17 @ 06:25:18

GENERAL INFORMATION:

Formation: **Johnson - Atoka**

Deviated: No Whipstock: 0.00 ft (KB)

Time Tool Opened: 10:18:48

Time Test Ended: 17:25:33

Test Type: Conventional Bottom Hole (Reset)

Tester: Shane McBride

Unit No: 55

Interval: 4735.00 ft (KB) To 4790.00 ft (KB) (TVD)

Reference Elevations: 3204.00 ft (KB)

Total Depth: 4790.00 ft (KB) (TVD)

3194.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 10.00 ft

Serial #: 6667

Inside

Press @ Run Depth: 53.80 psig @ 4736.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2012.01.17

End Date:

2012.01.17

Last Calib.:

2012.01.17

Start Time: 06:25:18

End Time:

17:06:33

Time On Btm:

2012.01.17 @ 10:18:33

Time Off Btm:

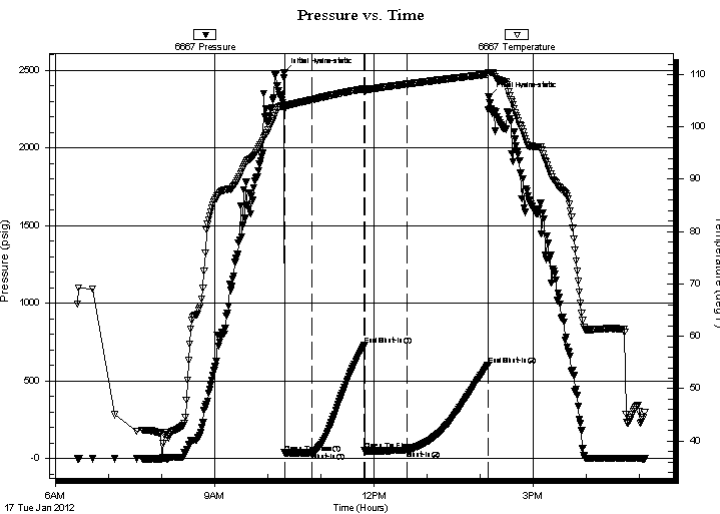
2012.01.17 @ 14:09:33

TEST COMMENT: 1/4" in blow died in 15 min

No return

No blow

No return



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2487.01	104.19	Initial Hydro-static
1	37.27	103.23	Open To Flow (1)
32	38.09	105.19	Shut-In(1)
91	728.56	107.25	End Shut-In(1)
91	50.79	106.89	Open To Flow (2)
139	53.80	108.16	Shut-In(2)
230	599.67	110.03	End Shut-In(2)
231	2328.85	110.40	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
60.00	mud w/oil spots 100%m	0.30

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Raymond Oil Company

19-20-35 Wichita, Ks

P.O. Box 48788
Wichita, Ks 67202

Horton- Brack #1

Job Ticket: 44938

DST#: 5

ATTN: Max Lovely

Test Start: 2012.01.17 @ 06:25:18

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: 54.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.97 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 75000.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
60.00	mud w/oil spots 100%m	0.295

Total Length: 60.00 ft Total Volume: 0.295 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

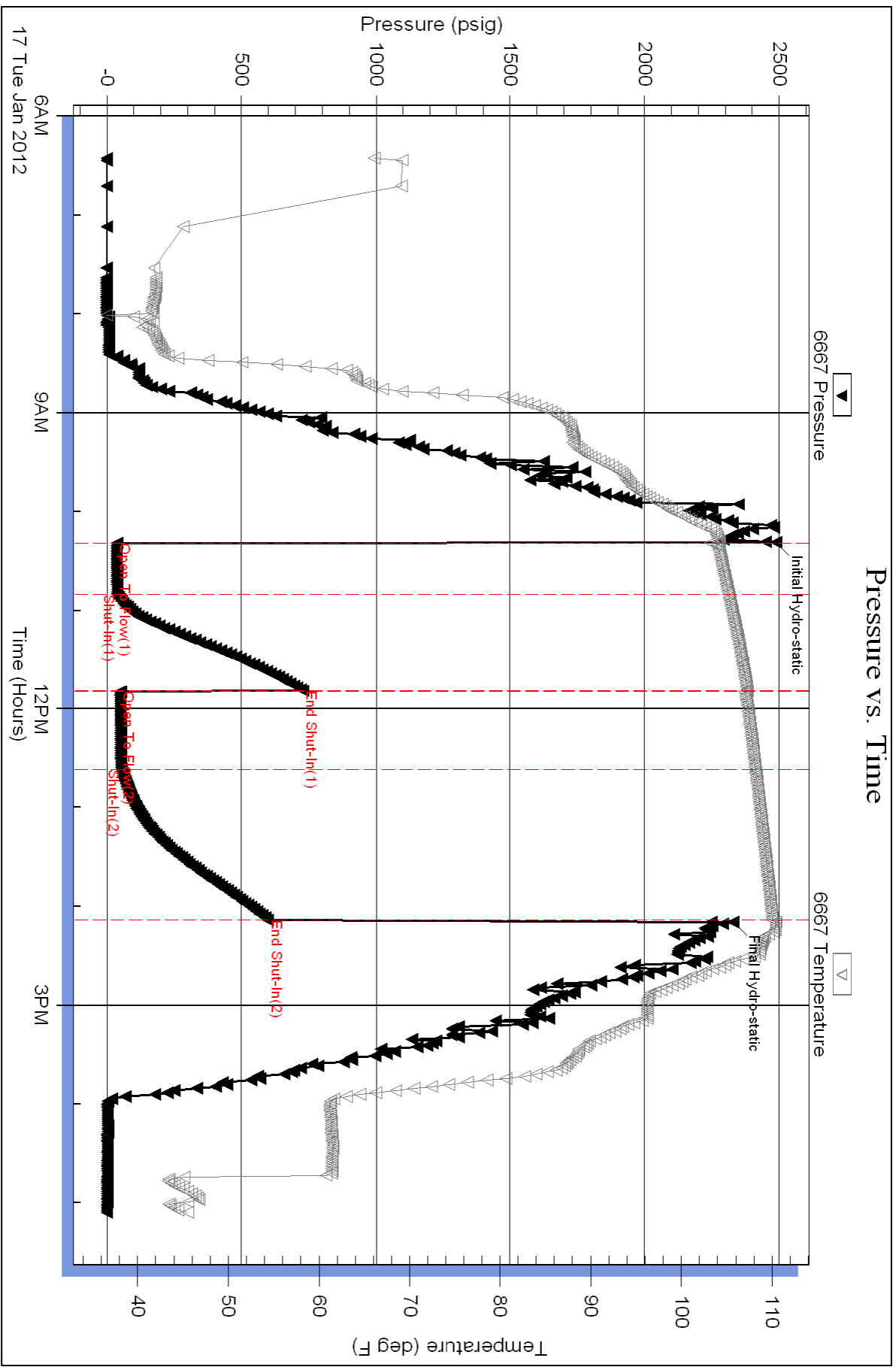
Serial #: 6667

Inside

Raymond Oil Company

Horton-Brack #1

DST Test Number: 5



Triobite Testing, Inc

Ref. No: 44938

Printed: 2012.01.18 @ 08:22:54



CONSOLIDATED
Oil Well Services, LLC



TICKET NUMBER 33820
LOCATION Oakley
FOREMAN Fuzz4

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	
1-20-12	7158	Horton-Brack #1	19	20S	35W	Wichita	
CUSTOMER Raymond Oil Co.			TRUCK# DRIVER TRUCK# DRIVER 399 Kelly G Comy D 466 Wos F 566 Josh G				
MAILING ADDRESS							
CITY		STATE					ZIP CODE
shallow water w-dial and s-Rick 4w 4w 1/2							

JOB TYPE 2 stage HOLE SIZE 7 7/8 HOLE DEPTH 5190' CASING SIZE & WEIGHT 4 1/2 - 10.5
 CASING DEPTH 5186' DRILL PIPE _____ TUBING _____ OTHER DU @ 2276'
 SLURRY WEIGHT 14.2 - 12.5 SLURRY VOL 1.40 - 1.9 WATER gal/sk 5.6 - 10.8 CEMENT LEFT IN CASING 42'
 DISPLACEMENT 81 2/3 DISPLACEMENT PSI _____ MIX PSI _____ RATE _____

REMARKS: Safety meeting on H₂*2 Float equip cont 1, 3, 5, 7, 11, 68 - Basket top #68 DU Tool Top #69. Rig up & circulate. Pump 5 BBL water, mix 220SKS 60/40 pos 29 gal 7 1/2% salt. Wash pump & lines. Drop plug & displace 45 water 36 1/2 mud, 600* lift, 1300* land float hold Drop DU Barb wait 10 min open tool @ 1200*. Pump 5 BBL water mix 20SKS MH 30SKS AH mix 450* 60/40 pos 89 gal 11% flo seal. Wash pump & lines. Drop plug and displace 36 3/4 BBL 700* lift close tool @ 1700*. cement did circulate
 APPROX 25 BBL to pit.

Thanks Fuzz4 crew

ACCOUNT CODE	QUANTITY or UNITS	DESCRIPTION of SERVICES or PRODUCT	UNIT PRICE	TOTAL
5401P	1	PUMP CHARGE	2950 ⁰⁰	2950 ⁰⁰
5406	60	MILEAGE	5 ⁰⁰	300 ⁰⁰
5407A	31 ton	Tow mileage Delivery	102	3106 ²⁰
1131	220 SKS	60/40 pos Bottom stage	15 ¹⁰	3322 ⁰⁰
1131	500 SKS	60/40 pos Top stage	15 ¹⁰	7550 ⁰⁰
1118B	3818*	Bentonite	.25	954 ⁵⁰
1111	814*	Salt	.45	366 ³⁰
1107	113*	Flo-seal	2 ⁸²	318 ⁶⁶
4156	1	4 1/2 ATFU float shoe	287 ⁰⁰	287 ⁰⁰
4129	6	4 1/2 centralizers	46 ⁰⁰	276 ⁰⁰
4103	1	4 1/2 cement basket	261 ⁰⁰	261 ⁰⁰
4283	1	4 1/2 DU Tool w/Latchdown	3850 ⁰⁰	3850 ⁰⁰
		subtotal		23541 ⁶⁶
		less 10% disc		23541 ⁶⁶
		subtotal		21187 ⁵⁰
		247308	SALES TAX	1283.75
			ESTIMATED TOTAL	22471.75

Ravin 3737

AUTHORIZATION [Signature] TITLE Foreman DATE 1-20-12

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

CLIENT	Raymond Oil Co.	FORMATION	
LEASE	#1 Horton-Brack	NO.	3204
SECTION	NW NE NW NE	OF	
TOWNSHIP	19	RANGE	3193
RANGE	20	COUNTY	KB
COUNTY	Wichita	STATE	KS
CONTRACTOR	H2 #1	CASING	
DATE	1-5-2012	NO.	8518 @ 268
WELL	5101	DEPTH	472
WELL	5013	ELECTRICAL SURFACES	
MOD. NO.	3322	DI	MICRO
TYPE	Chem	Comp	N/D

FORMATION TOPS AND STRUCTURAL POSITIONS

FORMATION	SAMPLE TOP	ELECTRIC LOG TOP	SURFACE BATHY	STRUCTURAL POSITIONS		
B/Anhydrite	2325			884	881	893
Stoller	3543	3551	-347	-346	-353	
Heobner	3886	3873	-769	-769	-776	-762
Lansing	4018	4024	-820	-819	-823	-821
Stark	4329	4334	-1130	-1130	-1145	-1145
Marmaton	4498	4516	-1312	-1301	-1309	-1327
FT Scott	4647	4658	-1454	-1450	-1460	-1468
Johnson	4716	4731	-1527	-1521	-1530	-1548
Atoka	4780	4778	-1574	-1564	-1577	-1596
Morrow SH	4849	4874	-1670	-1644	-1661	-1678
ST Genevieve	4937	4945	-1741	-1735	-1757	-1769
ST Louis	5031	5044	-1840	-1775	-1809	

REFERENCE WELLS FOR STRUCTURE

- 1. Woolsey Brack #1 NE NE NW 20-20-35W
- 2. Raymond Eder #2 NE NE SW 17-20-35W
- 3. Abercrombie Glee Smith #1-19 200' S of SW SE 19-20-35W

REMARKS: A POSITIVE TEST IN THE MARMATON WARRANTS PRODUCTION CASING TO BE SET.

RESPECTFULLY SUBMITTED

W. K. Lacey

LEGEND



Waterline Salt Sandstone Shale Carbonaceous shale Gas Oil Cement

DRILLING TIME IN MINUTES PER FOOT

(Rate of penetration Decreases)

10' 15' 20' 25'



ANHYDRITE
2312 + 892

BASE ANHYDRITE
2325 + 879

1000.000

DEPTH

SAMPLE DESCRIPTION

10' 15' 20'

REMARKS



2350

3400

LS TAN, CRM, BRN, PXTLN,
CHKY, SOFT, & XTWN P.N.S

A.A.

A.A.

LS. GRAY, TAN, W XTLN, SOFT,
G XTLN, NS

LS, WHT/TAN, F+M XTLN,
BRTL, M HRD, SL CONGL
NS

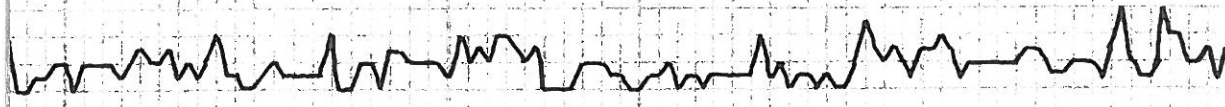
SLTSTN, GRAY, WHT/GRY,
SL SND GRNS, NS

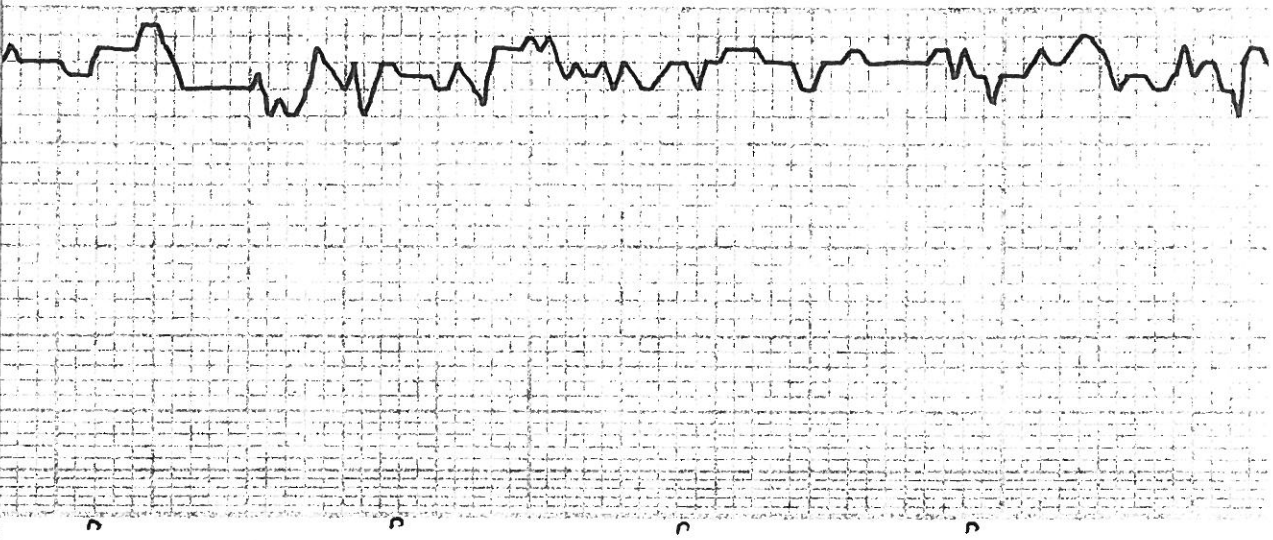
LS, LT GRY, CHLKY, SOFT
SL FOSS, NS

LS. BUFF, TAN, F XTLN, LG
XTLS w/N, G CMT'D, NS

3500

STOTLER
3543 - 339





3600

3700

LS, WHT GRM, HRD, CHLKY
 DV BRK, PXTLN Ø, NS

LS, GRY, DK GRY, ALGAL +
 DENSE FOSS, VHRD, TTE, NS

SH, GRY

LS, GRY, EXTLN, HRD, VE
 FOSS, NO APP Ø, NS

LS, CRM, EXTLN, IN → CRS
 XTLN W/N, FOSS, G, 10T
 XTLN Ø, NS

LS. A.A.

SH, GRY, RED

SS, GRY, MUSTARD, SLTY,
W SORT, CLR GRNS, SOFT,
G.F. NS

LS, GRY/WHT, FXTLN, NS

SH, GRY

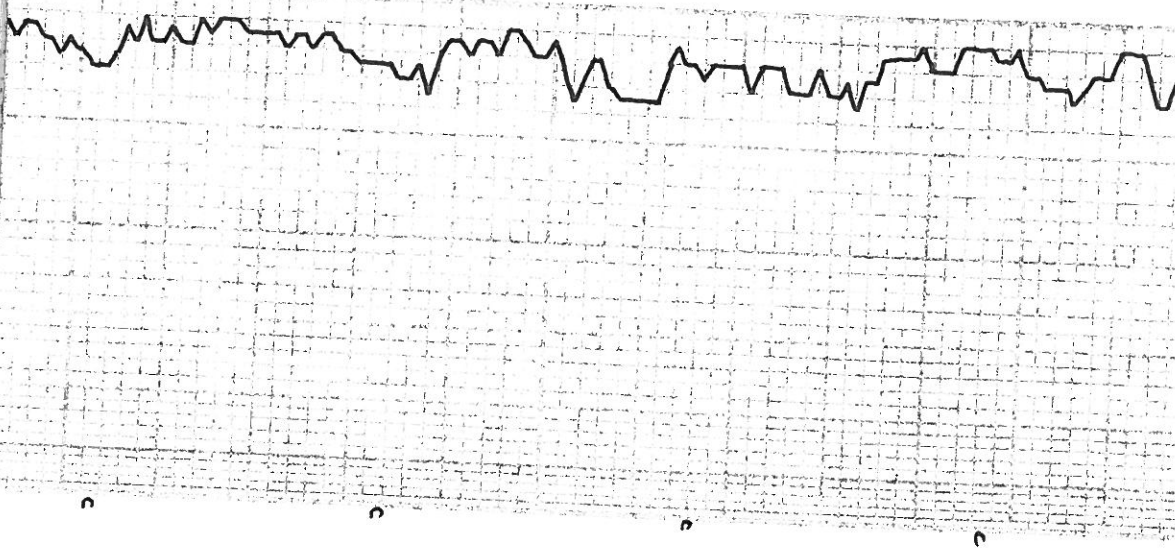
LS, GRY/WHT, FXTLN, VHRD,
DNS, SL FOSS, ? P. NS

LS, CRM, BUFE, MXTLN, HRD
FOSS, P. NS

LS, TAN, BRN, FXTLN, MHRD
BRTH, V FOSS, TITE, NS

3800





3900

LS, CRM, TAN, FXTLN, SOFT,
SL CHLKY, SL FOSS, MS

LS, WHT, CRM, FXTLN,
CHLKY, FOSS, SOFT, MS

CHT, CHINA WHT

LS, CRM, TAN, FXTLN, SL FOSS,
M HRD, BRTL, REXTLD
FRAC'S, MS

CHT, TAN, FOSS

MUD CHECK
VIS 40 WT 9.1
CHLOR HB00 LCM 2
FILT 8

AA
AA
AA

HEEBNER
3966 -762

SH, GRY, BLK

LS, CRM, FXTLN, MHRD,
PXTLN, NS

LS, CRM, TAN, F → MXTLN,
MHRD, FOSS, BRITL, NS

4000

CHT, WHT, MILKY, SLOPAG,
V FEW FOSS, NS

LANSING
4018 -814

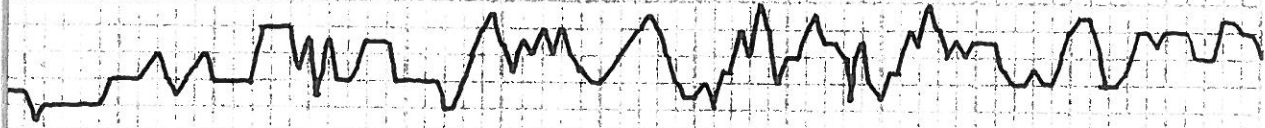
LS, CRM, VFXTLN CMT, VOOK,
HRD, NO APP, NS

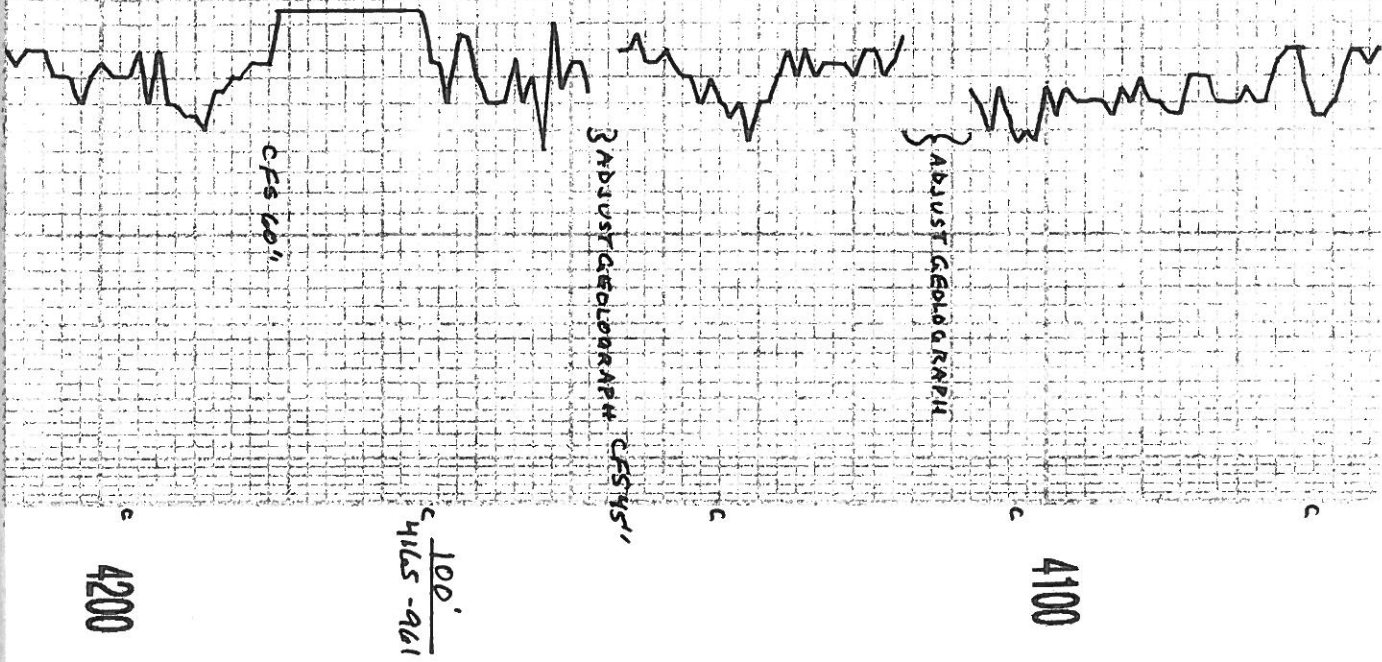
LS, A.A.

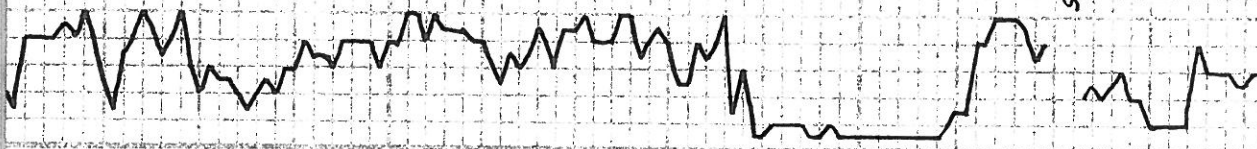
LS, CRM, FXTLN, HRD, VW
CMT, DOLS & FOSS FRAGS
MED SIZE DOLS, TITE, NS

LS, WHT, VFXTLN, SCT PCS
MXTLN, SLFOSS, FOSS
SHADOWS, P, B, NS

LS, A A OALIC M C MTD







SHORT CORNER

LS, GRV, FXTLM, HRD, V FOSS
NO APP, NS

MUNCIE
CREEK
4229-1025

SH, BLK

0 0
0 0
0 0
0 0

CHLK

LS, WHT, FXTLM, SL SUCR TXIT,
V HRD, TTITE, NS

LS, TAN, FXTLM, SL ALCAL, FRAGS,
HRD, NS

LS, CRM, FXTLM, HRD, V OOL
V FOSS, REXTLD FRACS

160'
4286-1082

LS, CRM, BUFF, FXTLM,
VG LG DOM, NS

4300

A.A.

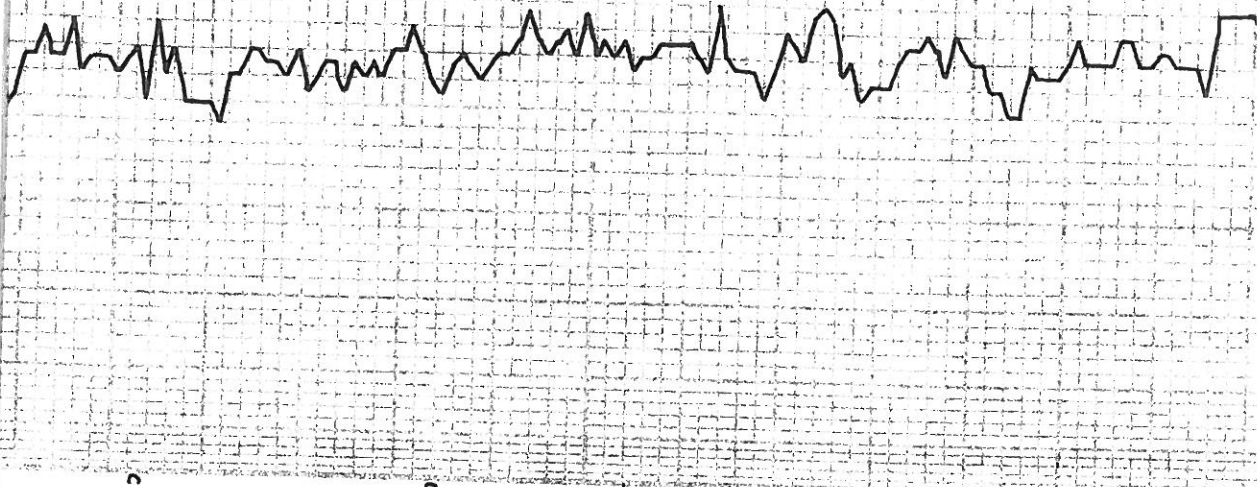
LS, BUFF, FXTLM, V HRD, ABUN
FOSS, W CMT'D FOSS, TITE, NS

STARK
4329-1125

SH, BLK

LS, BUFF, WHT, FXTLM, HRD,
BRITL, FOSS, NO APP, NS

MUDCHECK
VIS 46 WT 9.3
CHLOR 4,800 LCM 2
FILT 8.0
-7:AM 1-12-12
DRLG@4281



4329 - 1125

SHIBLK
LS, BUFF / WHT, FXTLN, HRD,
BRITL, FOSS, NO APP, NS

LS, GRN / WHT, VEXTLN, DNS,
HRD, NO FOSS, TITE, NS

LS, GRN, FXTLN, MHRD, CHKY,
SLFOSS, FØ, NS

LS, BUFF, FXTLN, SOFT,
CHKY, VFOSS, NS

SH, BLK

LS, BUFF, GRN, FXTLN,
FREEDOLS, SOFT, CHKY,
NS

LS, BUFF, P-M XTLN, Pcs
CHKY, MHRD, SCT FOSS,
SL XTLN Ø, NS

LS, WHT, FXTLN, VHRD,
TITE, NS

A. A.

4396 - 1192

4400

HUSHUCKNEY

SHORT TRIP 25 STRANDS

DST#1 4504-4519

15.15.60.120

LF: Y8' DIEDID" 151: NR

FF: SURFBLE, DIEDID"

PLUGGED TOOL

DST#2 4504-4524

MIS RUN

DST#3 4506-4524

30.60.45.90

LF: 808 3" 151: 808 12"

FF: 808 6" FS1: 808 24"

REC: 1394' CIP

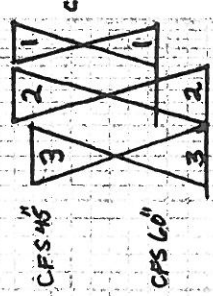
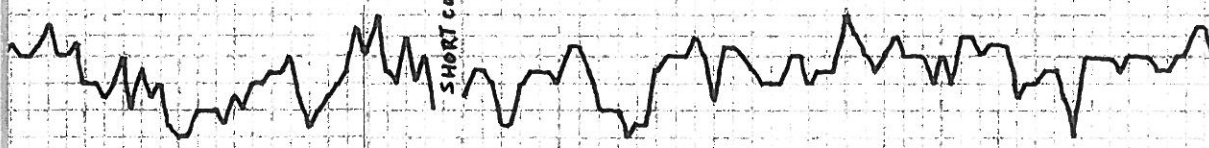
776.60 10% 6.90%

FP: 66-178, 196-327

SIP: 1215-1205

HP: 2313-2137

34° grav, 114° BHT



BKC
4470 -1266

MARMATON
4500

SH, RED, GRN

SLT STN, GRV, BRN, V SNDY

LS, WHT, V FXTLN, V DNS, HRD,
TITE, FEW SCT FOSS, NS

LS, TAN, FXTLN, VAR SIZE OOLS, NAT FB
F → G, OOL B, BRN FO, DK BRN FLUOR
D W/D, LT BRN → M. BRN FLUOR
FO, SCT POS W/CMT'D + HRD, SCT
FOOLS, VSSG

LS, TAN, WHT, WCMT'D OOLS,
SLT O COAT'D VUGS, V HRD,
FLUOR STNG

LS, GRY, V FXTLN, HRD, DNS
SPRC FOSS, TITE, NS

LS, TAN, F → M XTLN, CRS XTLN
W/N, HRD, PYRINS

LS, GRY / WHT, MXTLN, BRITL,
SLFOSS, NO APP OINS

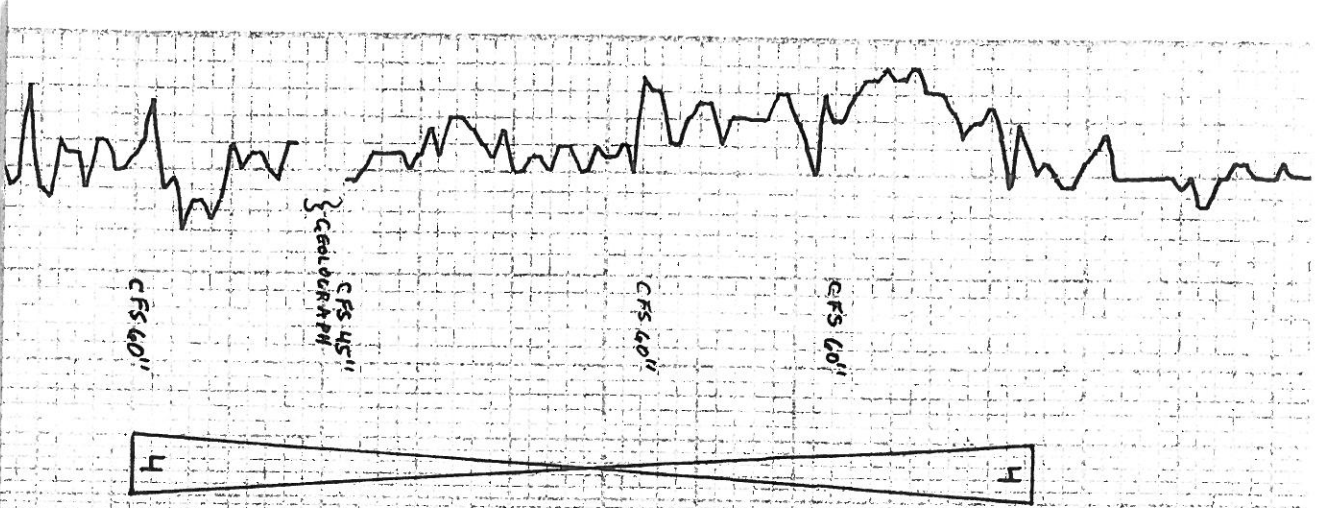
@ 4519'
STRAP
BOARD

MUD CHECK
VIS 51 WT 9.2
CHLOR 8800 LCM2
FILT 10.4

7:AM 1-13-12
GIH W/TOOL DST #1
7:AM 1-14-12
GIH W/TOOL DST #2

MUD CHECK
VIS 60 WT 9.1
CHLOR 5100 LCM2
FILT 8.0
@ 4524'
STRAP 4546.91
BOARD 4541.69
dir 5.23

7:AM 1-15-12
DRLG @ 4567'



4600

PAWNEE

H611-1407

CFS 60'

MYRIC STATION
C 4633-1429

CFS 60'

FT. SCOTT
H647-1443

LS CRM/TAN, CHLKY, SL FLUOR
STNG FEW SPT PP FO ON BRK,
SPT SPTY FLUOR SIMS, NO ODR,
V TRIM ZONE, PCS BRN O SPTD,
NO ENERGY

SH, BLK, GASSY

LS, CRM/TAN A.A.

SH, GRV, DK GRV, BLK

LS, CRM V EXTLW, DNS, HRD,
PCS PP XTLW, BRN O SPTS,
SCT STNG, FEW BRN FO W/SAS
BBL, SOME FLUOR FO SPTS ON
BRK

A.A. Pcs CHLKY + SOFT,
PP FLUOR FO

SH, BLK

LS, WHT, BUFF, TAN, VEXTW,
HRD

LS, TAN, BRN, VEXTW, V DNS,
V HRD, TITE, NS

SH, GRV, DK GRV

LS, WHT/GRV, GRV, WHT, MXLW,
NO APP O, NS

A.A.

SH, GRV

GASSY

PP FO
SPTY
FLUOR

DST#4 4605-4700
30.60.45.90
IF: SURFBLO, DIED 20" ISI: NR
FF: DEAD FSI: NR
REC: 30'M 108°
FP: 18-29, 31-42
ISI: 1131-1109
HP: 2309-2385

MUD CHECK
VIS 51 WT 9.0
CHLOR C, 000 LCM 3
FLT 7.2

VIS 50
WT 9.3
LCM 2

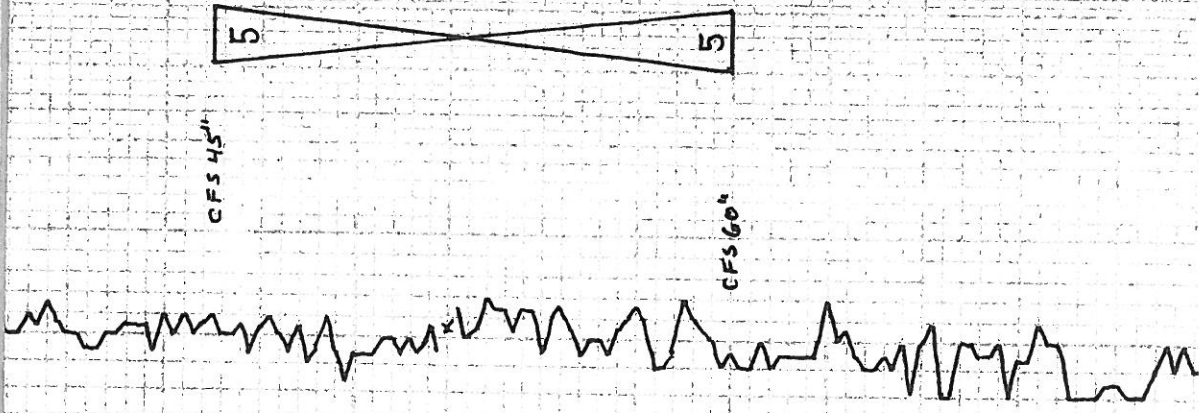
-7:AM 1-16-12
DST#4 @ 4700'
MUD CHECK
VIS 52 WT 9.2
CHLOR 5800 LCM 3

DELOSS, NO APP O, NS

JOHNSON
4716 -1512

AIOKA
4760 -1556

4800



FILT 7.2

LS, TAN, FXTLN, SCT CRS, XTLs,
V SPRC SCT FLUOR, O SPTS,
VLT DOR, ? O SPT FLUOR FD

LS, WHT/TAN, MXTLN, M HRD,
SL FLUR STAG, MICRO O SPTS,
LT DOR, F

LS, WHT, TAN, GRY, V DMS, FXTLN,
V HRD, FEW FOSS, TITE, NS

LS, TAN, V FXTLN, ABUN FOSS, 4 LG
DK BRN FO BLEEP, HVV ODR,
NO FLUOR, O SAT (? FOSS SHAPING)

LS, TAN, GRY, WHT, V FXTLN, DMS
V FEW FOSS, TITE, NS

LS, GRY, TAN, V FXTLN, V DMS + HRD, DK OIL
V SCT O FILL, DK OIL, NO PERM
LT DOR

SS, UNCONSOL, VARI SIZE + SHAPE,
FLUR FO, BRN O SPTS, LT DOR
O SPTS

SH, REP

LS, BRN, V FXTLN, V DMS, UHRD,
TITE, NS

LS BRN, F + MXTLN, CRS XTLs W,
HRD

SS WHT, F GRMS, W CMT'D, HRD,
DMS, TITE, NS

LS, WHT, FXTLN, DMS, ATY,

SCT FLUR
FO
? ODR

O SPTS
FLUR
STAG
LT DOR

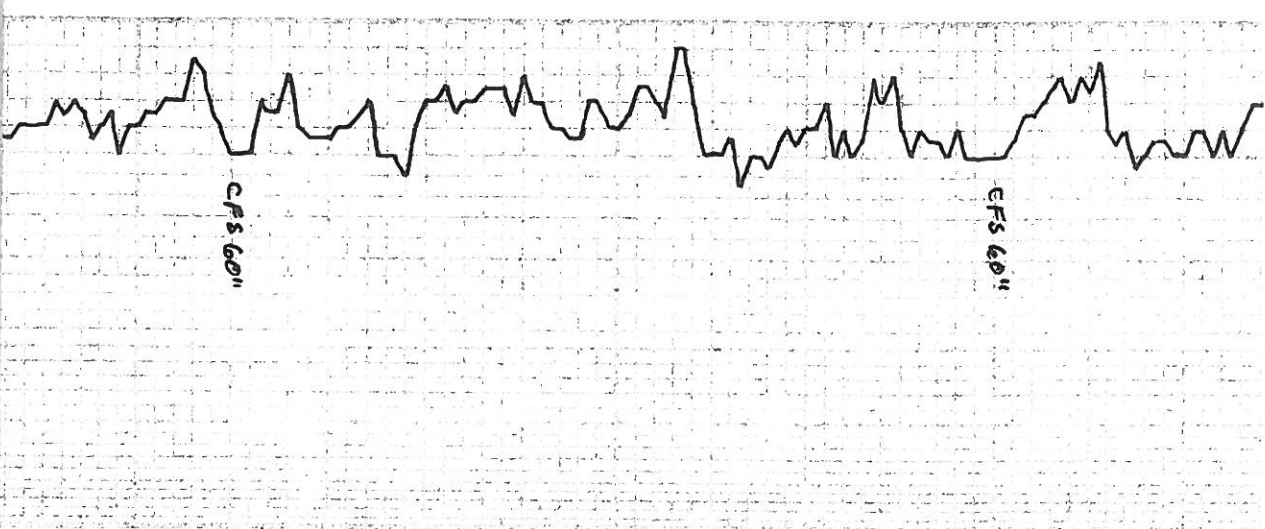
LG, FO
ODOR

LT DOR
FLUR
O SPTS

DST #S 4735-4790
30.60.45.90
IF: SURFBLO, DIED IS" ISI:NR
FF: DEAD FSI:NR
REC: 60' M/W O SPTS
FP: 37-38, 50-53
SIP: 728-599
HP: 2487-2328 110°

7:AM 1-17-12
GIH W/DST#54770
MUD CHECK
VIS 54 WT 9.2
CHLDR 7.500 LCM 2
FILT 8.0

VIS 43
WT 9.3
LCM 2



MORROW SH
4894-1645

LS, WHT, EXTN, DMS, ATY,
HRD, TITE, MS
CHT, WHT, EXTN, DMS
BLK, FOS
SH, BLK, CARB
CHT, VARI COLOR, OPA

LS, TAN, VEXTN, DMS, HRD,
TITE, MS

SS, WHT, SLTY / BLK SH, SOFT,
W SORT, FRIABLE, MS

SH, GRN, GRY

SS, CLR GRMS, ANG & SUBANG,
F SORT, G INT GRNLR, LG
GRMS

SS, AA, GRN STND

SH, VARI COLOR, MUSTARD

LS, BUFE, FXTN, HRD, TITE, MS

SH, GRY/GRN, SUDY, SCT BRN,
WHT SUD GRMS
SS, UN CONSOL, VARI COLOR QTZ, GRMS,
SCT LG BLK/GRN DOL, GRMS

ST. GEN.
4937-1733

CHT, WHT, V DMS, ? FRAC

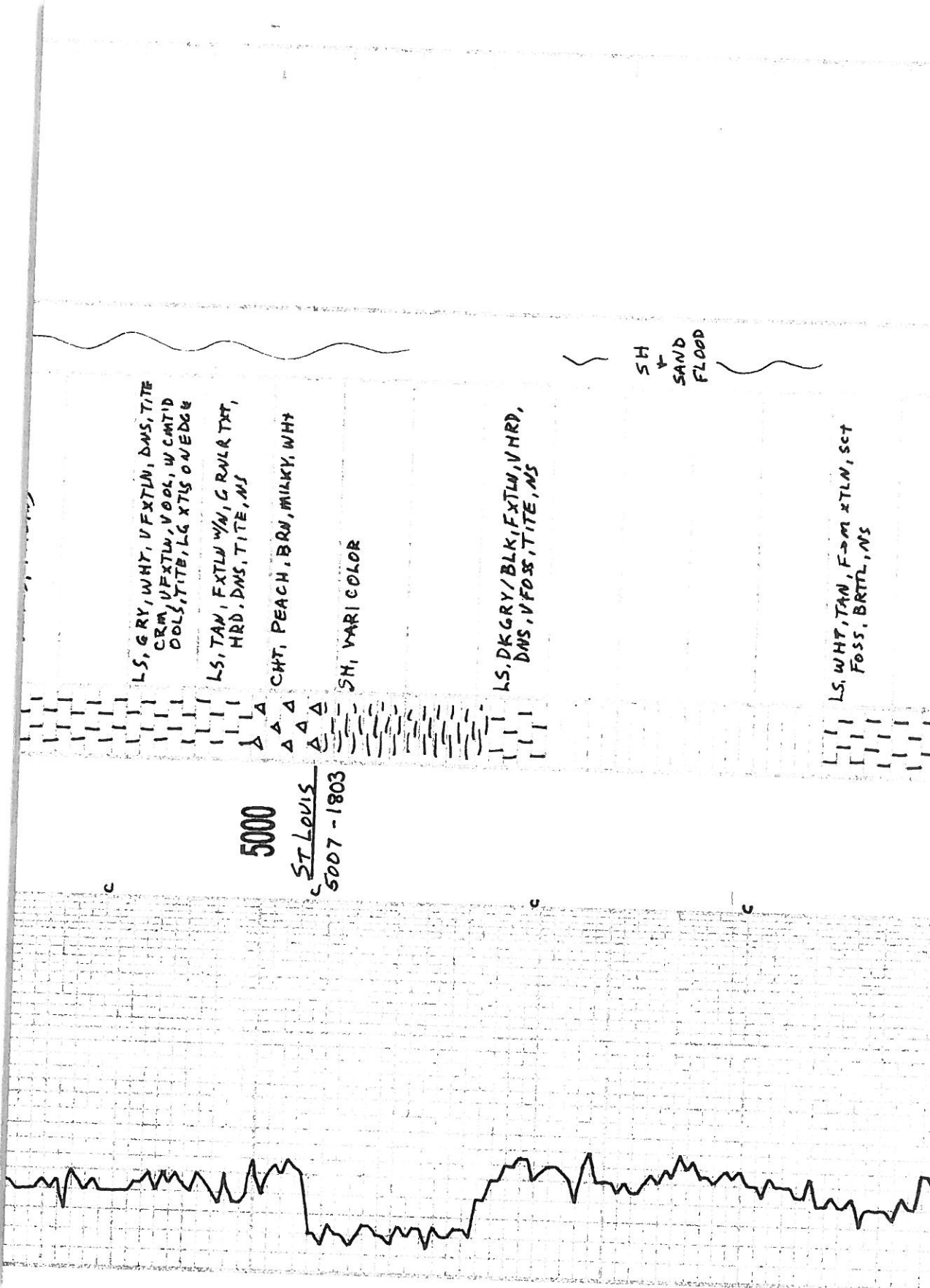
SS, WHT, TAN, CRM, GRN, V FINE,
WRNDD QTZ, GRMS, W CNT'D, MS
FS HRD

LS, BUFE, FXTN, V HRD, DMS,
V FOS, TITE, MS

VIS 54
WT 9.2
LCM 2

7:4M 1.18.12
DRG @ 4901
MUD CHECK
VIS 52 WT 9.2
CHLOR 7.500 LCM 1
FILT 8

SH
+
SAND
FLOOD



LS, GRAY, WHY, V FXTLN, DMS, TITE
 CRM, V FXTLN, V OOL, W CMTID
 DOLS, TITB, LG XTIS ON EDGE

LS, TAN, FXTLN W/A, G RVLRTXT,
 HRD, DMS, TITE, MS

CHT, PEACH, BRN, MILKY, WHY

SH, VARICOLOR

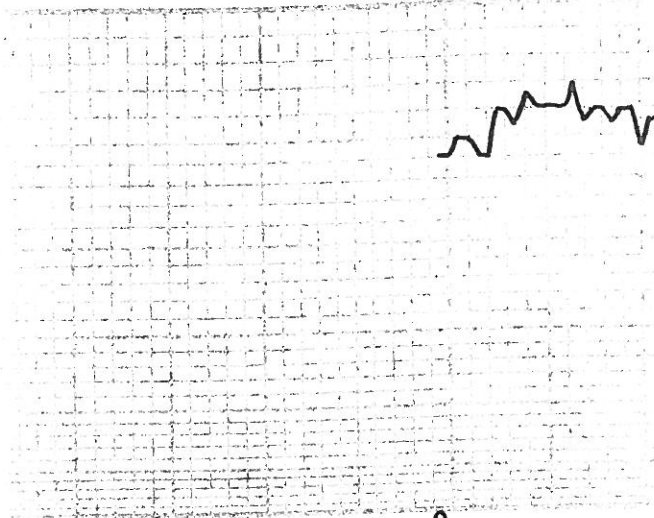
LS, DKGRY/BLK, FXTLN, V HRD,
 DMS, V FOSS, TITE, MS

LS, WHY, TAN, F → M XTLN, SCT
 FOSS, BRITL, MS

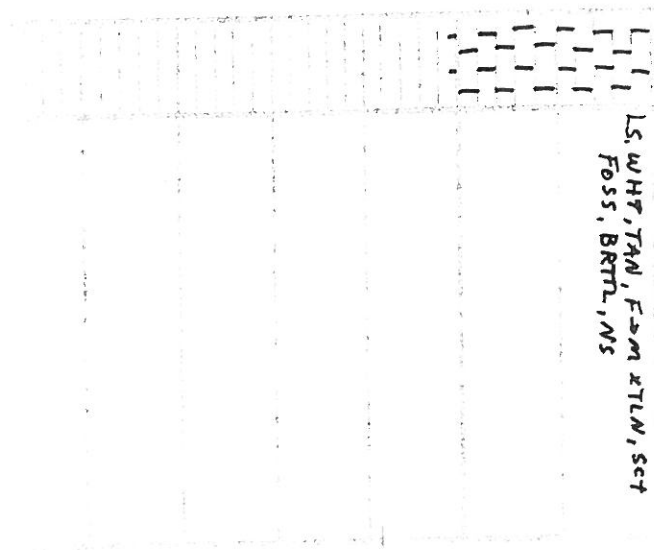
SH
 SAND
 FLOOD

5000

ST Lewis
 5007-1803



5100
DEV 1 1/2°



LS. WHIT, TAN, F. & M. XLN, Sct
FOSS, BRTL, MS

CONDITION HOLE
FOR LOGS