



Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION 1223496
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: _____

1223496

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)*

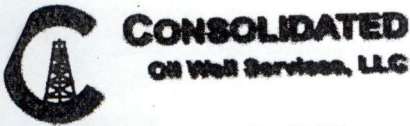
Shots Per Foot	PERFORATION RECORD - Bridge Plugs Set/Type Specify Footage of Each Interval Perforated	Acid, Fracture, Shot, Cement Squeeze Record <i>(Amount and Kind of Material Used)</i>	Depth

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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PO Box 884, Chanute, KS 66720
820-431-9210 or 800-467-8676

270199

TICKET NUMBER 46830
LOCATION Oakley, KS
FOREMAN Jerry

FIELD TICKET & TREATMENT REPORT

CEMENT

KS

DATE	CUSTOMER #	WELL NAME & NUMBER	SECTION	TOWNSHIP	RANGE	COUNTY
8-3	7158	Michaelis #3	3	145	32W	Logan
CUSTOMER			TRUCK #	DRIVER	TRUCK #	DRIVER
Raymond Oil			399	Jeremy R		
MAILING ADDRESS			397	Lance R		
CITY	STATE	ZIP CODE				

Ok. klayks
5 to 10 hrs
1W, salt
into

JOB TYPE Surface HOLE SIZE 12 1/4 HOLE DEPTH 265.8 CASING SIZE & WEIGHT 8 5/8 24#
 CASING DEPTH 265.8 DRILL PIPE _____ TUBING _____ OTHER _____
 SLURRY WEIGHT 14.8 SLURRY VOL _____ WATER gal/sk _____ CEMENT LEFT in CASING 20'
 DISPLACEMENT 15 1/2 DISPLACEMENT PSI _____ MIX PSI _____ RATE _____

REMARKS: Safety meeting & rig up on H2 rig. Break circulation with rig tree hook up to truck & mix 190SKs com class A cement 3% CC 2% gelarash up & displace with 15 1/2 bbl fresh water & shut in. Circulated approx 2 bbl to pit.

Cement did circulate

Thank you Jerry & crew

ACCOUNT CODE	QUANTITY or UNITS	DESCRIPTION of SERVICES or PRODUCT	UNIT PRICE	TOTAL
54015	1	PUMP CHARGE	1150 ⁰⁰	1150 ⁰⁰ ✓
5406	20	MILEAGE	5 ²⁵	105 ⁰⁰ ✓
5407	8.9	ton mileage delivery (min)	430 ⁰⁰	430 ⁰⁰ ✓
11045	190SKs	com class A cement	18 ⁵⁵	3524 ⁵⁰ ✓
11186	357#	gel	27	96 ³⁹ ✓
1102	536#	Calcium Chloride	94	503 ⁵⁴ ✓
			subtotal	5809 ²³
			less 10% disc.	580 ³⁸ ✓
			subtotal	5228 ⁷⁵
			SALES TAX	283.98 ✓
			ESTIMATED TOTAL	5512.73 ✓

completed

AUTHORIZATION Carlos Fabela 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

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

270183

TICKET NUMBER 46836
LOCATION Oakley KS
FOREMAN Jerry Y

FIELD TICKET & TREATMENT REPORT
CEMENT

DATE	CUSTOMER #	WELL NAME & NUMBER	SECTION	TOWNSHIP	RANGE	COUNTY	
8-13-14	7158	Michaellis #3	3	145	32W	Logan	
CUSTOMER		Raymond Oil		Oakley, KS to Mustang 1W 1/2 Emto			
MAILING ADDRESS				TRUCK #	DRIVER	TRUCK #	DRIVER
CITY		STATE	ZIP CODE	399	Jeremy R		
				397	Lance R		

JOB TYPE PTA HOLE SIZE 7 7/8 HOLE DEPTH 4700 CASING SIZE & WEIGHT _____
 CASING DEPTH _____ DRILL PIPE 4 1/2 TUBING _____ OTHER _____
 SLURRY WEIGHT 13.8 SLURRY VOL _____ WATER gal/sk _____ CEMENT LEFT in CASING _____
 DISPLACEMENT _____ DISPLACEMENT PSI _____ MIX PSI _____ RATE _____

REMARKS: Safety meeting & rig up on the rig plug as ordered with 255 SKS
60/40 poz mix 4% gel 1/4" fb seal prsk
50 sks @ 2400'
100 sks @ 1375'
50 sks @ 300'
10 sks @ 40' w/ 8 5/8 wooden plug
15 sks mh 30 sks rh

Thank you
Jerry & crew

ACCOUNT CODE	QUANTITY or UNITS	DESCRIPTION of SERVICES or PRODUCT	UNIT PRICE	TOTAL
5405A	1	PUMP CHARGE	1395.00	1395.00 ✓
5406	20	MILEAGE	5.25	105.00 ✓
5407	11	ton mileage delivery (min)	43.00	473.00 ✓
1131	255 sks	60/40 poz mix	15.86	4044.50 ✓
1186	877 #	gel	27	23679 ✓
1107	64 #	fb seal	297	19008 ✓
4432	1	8 5/8 wooden plug	100.25	100.25 ✓
			Subtotal	6501.92
			less 10% d.s.c.	650.19 ✓
			Subtotal	5,851.73
			SALES TAX	314.77 ✓
			ESTIMATED TOTAL	6166.50 ✓

RTF completed

AUTHORIZATION Carlos Fabela TITLE _____ DATE _____

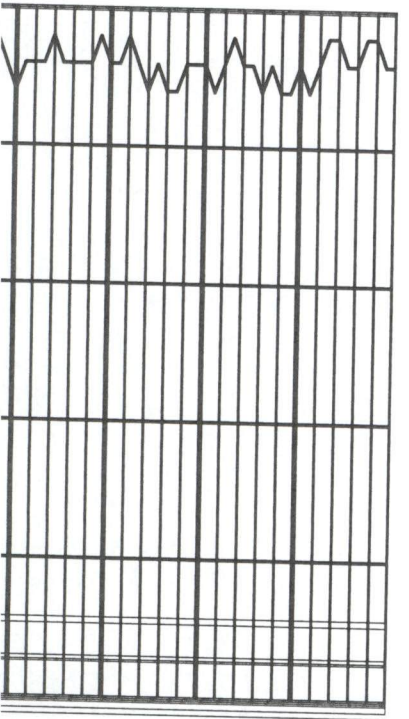
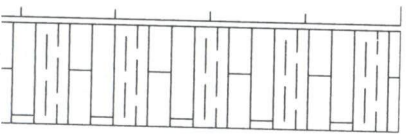
I acknowledge that the payment terms, unless specifically amended in writing on the front of the form or in the customer's account records, at our office, and conditions of service on the back of this form are in effect for services identified on this form.

HEEBNER	3864	- 979	3864	- 979	+ 06
LANSING	3906	- 1021	3906	- 1021	+ 03
STARK	4155	- 1270	4155	- 1270	+ 04
BASE / KC	4227	- 1342	4227	- 1342	+ 04
CHEROKEE	4452	- 1567	4452	- 1567	- 07
MISSISSIPPI	4586	- 1701	4586	- 1701	+ 17

REFERENCE WELL FOR STRUCTURAL COMPARISON :

RAYMOND OIL CO INC # 2 MICHAELIS SEC 03 - T 14 S - R 32 W LOGAN COUNTY KANSAS

3400



SHALE: RED - BRN SILTY -
SANDY SOFT MINOR GRAY
FXTAL LST. MOST CHKY. NO
VIS. POR. NSO

SHALE: RED BED SILTY
MINOR LST. A. A. NO VIS.
POR. NSO

3450



SHALE: RED - BRN SOFT
SILTY - SANDY TRC. DNSE
LST. NO VIS. POR. NSO

MUD CHECK @ 3450'
VIS: 53
WT: 8.7

SHALE: RED BED A. A. NO
VIS. POR. NSO

SHALE: RED - BRN - GRAY
SILTY NSO

LST: GRAY - WHT FXTAL
CHKY SOFT NO VIS. POR.
NSO

SHALE: GRAY SILTY CALC.
IN PART

LST: WHT - CRM - GRAY
FXTAL SUBCHKY - DNSE
RARE FOSS SHALE A. A. NO
VIS. POR. NSO

LST: A. A. NO VIS. POR. NSO

LST: CRM - GRAY FXTAL
CHKY - SUBCHKY MINOR
FOSS. FR AMT GRAY SHALE
NO VIS. POR. NSO

MUD CHECK @ 3550'
VIS: 52
WT: 8.7

3500

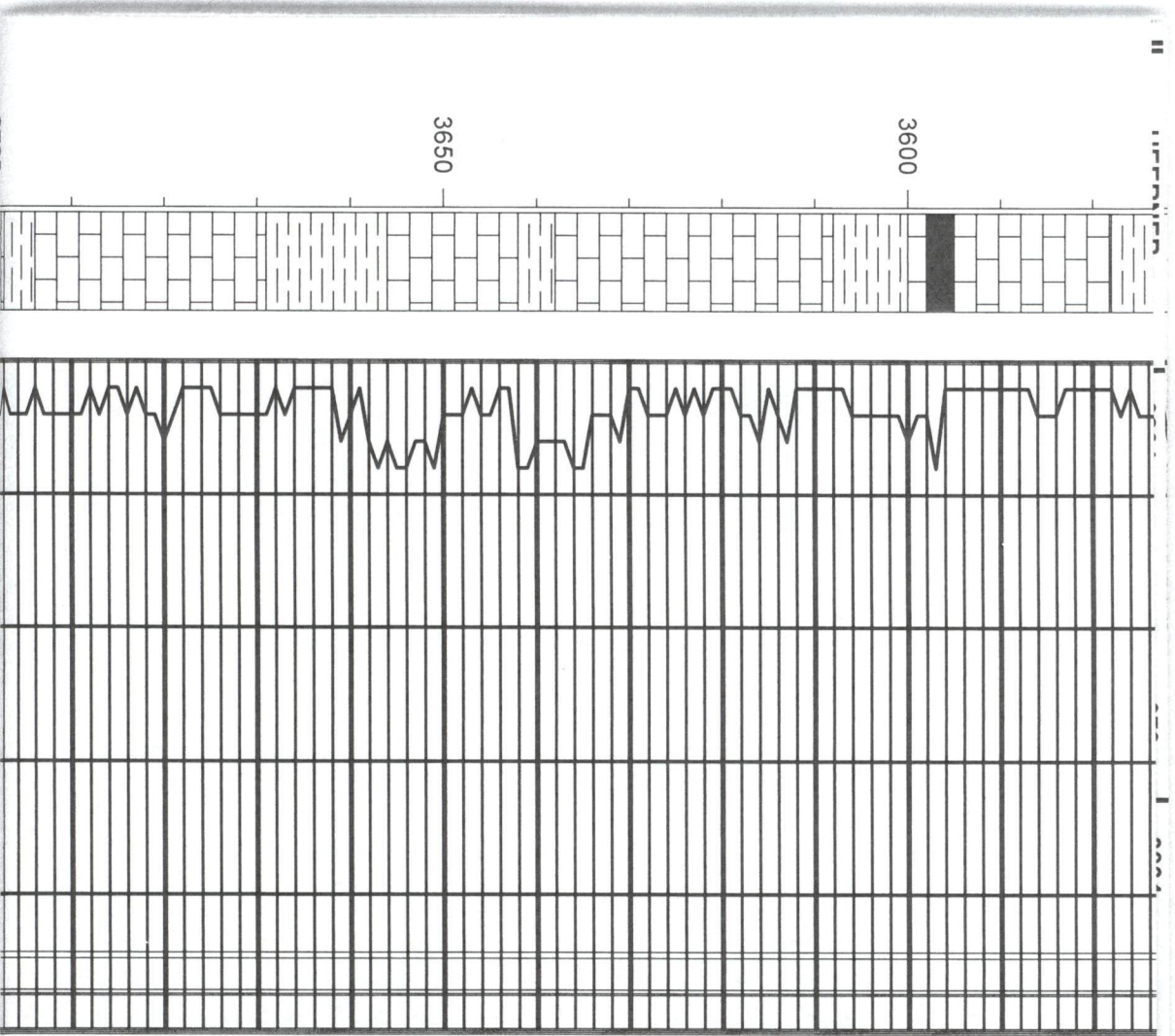


STOTLER 3410 (- 625)

3550



LST: CRM - GRAY FXTAL -
FXTAL UNIT - SUBUNIT



MEDXTAL SUBCHKY - DNSE
 MINOR SHALE NO VIS. POR.
 NSO

LST: CRM - GRAY FXTAL
 SUBCHKY - DNSE MINOR
 PYRITE TRC. BLK SHALE NO
 VIS. POR. NSO

LST: WHT - CRM - GRAY
 FXTAL MOST DNSE RARE
 FOSS. ABUND. GRAY - BRN
 SHALE NO VIS. POR. NSO

LST: CRM - GRAY - TAN
 FXTAL SUBCHKY - DNSE
 MINOR FOSS NO VIS. POR.
 NSO

LST: A. A. FR AMT GRAY
 SHALE NO VIS. POR. NSO

LST: WHT - CRM - GRAY
 FXTAL SUBCHKY - DNSE
 BRITTLE IN PART MINOR
 GRAY SILTY SHALE NO VIS.
 POR. NSO

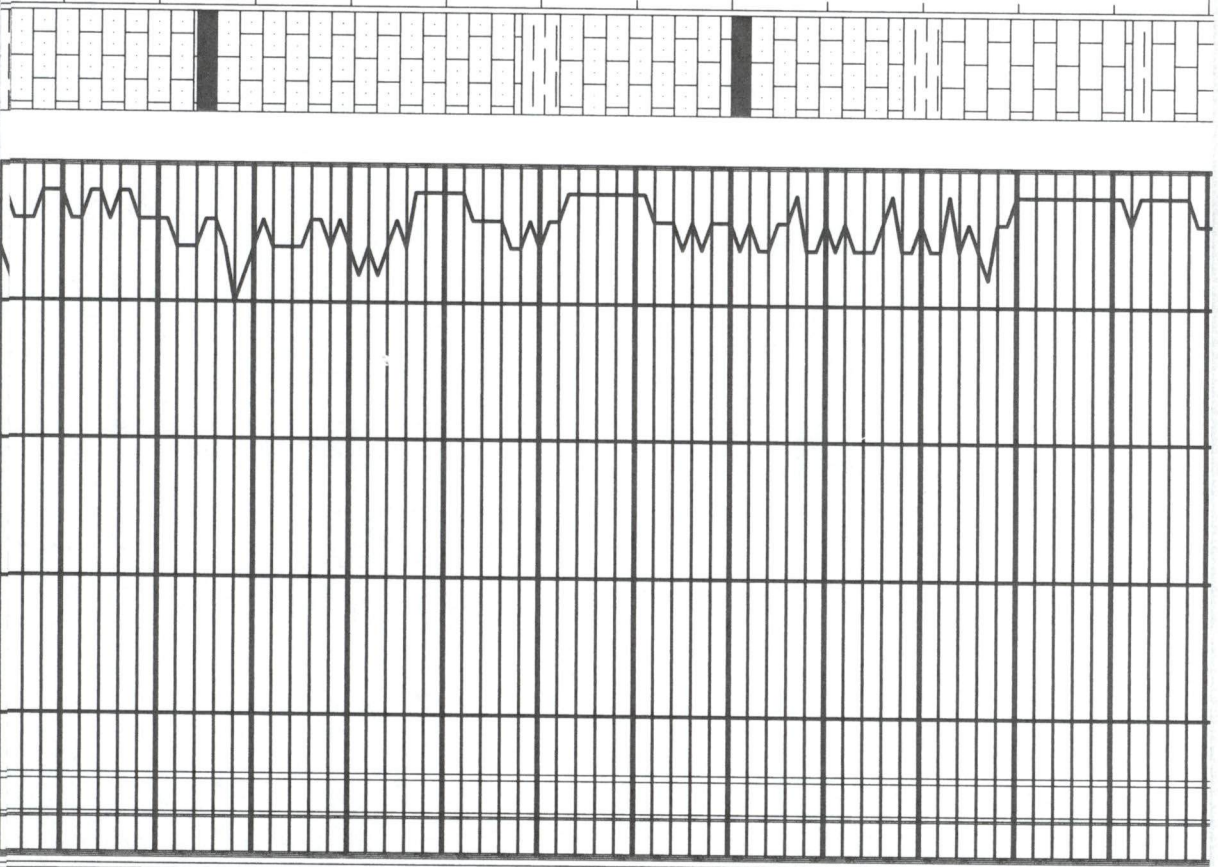
LST: A. A. NO VIS. POR. NSO

MUD CHECK @ 3650'
 VIS: 50
 WT: 8.8

3700

3750

3800



SHALE: GRAY SILTY CALC.
 W/ MINOR DNSE HARD
 GRAY LST. NO VIS. POR.
 NSO

LST: CRM - GRAY - TAN -
 BRN FXTAL SOFT CHKY
 ARENACEOUSE IN PART
 MINOR FOSS. NO VIS. POR.
 NSO

LST: CRM - GRAY - TAN -
 BRN FXTAL SUBCHKY -
 DNSE AREN. IN PART SLI
 FOSS. NO VIS. POR. NSO

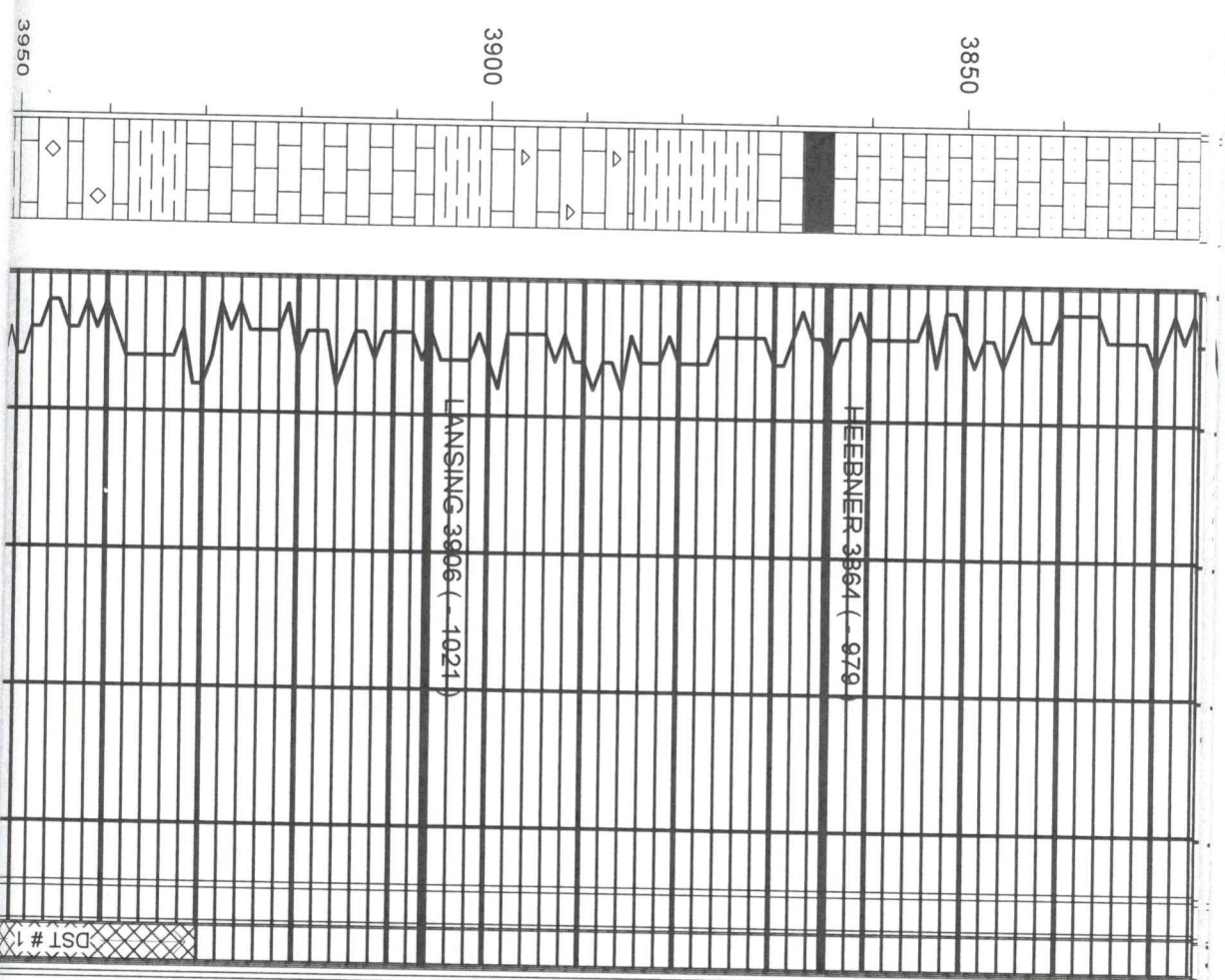
LST: A. A. MINOR BLACK
 CARB. SHALE NSO

SHALE: GRAY CALC. SILTY
 IN PART NSO

LST: CRM - GRAY - TAN
 FXTAL SUBCHKY - CHKY
 AREN. IN PART SLI FOSS.
 ARE OOLITES NO VIS. POR.
 NSO

LST: CRM - GRAY - TAN
 FXTAL CHKY - SUBCHKY

MUD CHECK @ 3750'
 VIS: 51
 WT: 8.8



FOSS IN PART AREN. MINOR
OOLITES NO VIS. POR. NSO

LST: A. A. FR AMT OOLITIC
FR. INTRPRT. POR. NSO

MUD CHECK @ 3850'
VIS: 50
WT: 8.9

LST: CRM - TAN FXTAL SOFT
CHKY FOSS. IN PRT. NO
VIS. POR. NSO
SHALE: BLACK CARB. W/FR
AMT DNSE MOTTLED LST.
NO VIS. POR. NSO

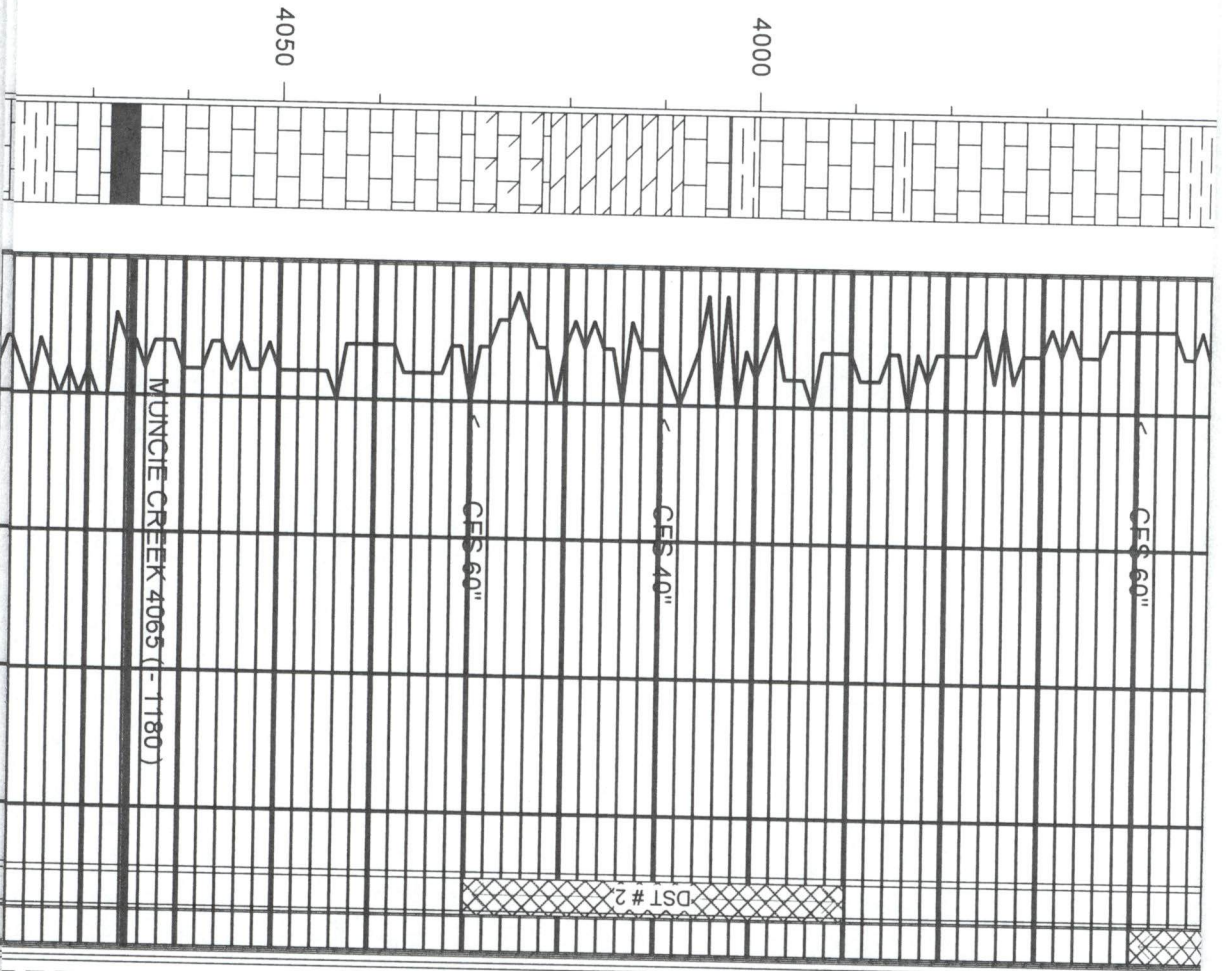
LST: WHT - CRM FXTAL
SUBCHKY - DNSE MINOR
CHERT SLI FOSS. NO VIS.
POR. NSO

LST: A. A. NO VIS. POR. NSO
SHALE: GRAY - GREEN
CALC.

LST: WHT - CRM FXTAL
CHKY - SUBCHKY - DNSE
FOSS. IN PART RARE
OOLITE NO VIS. POR. NSO
LST: WHT - CRM FXTAL
SUBCHKY - DNSE FOSS. IN
PART NO VIS. POR. NSO
SHALE: GRAY - DRK GRAY
NSO
LST: WHT - CRM FXTAL
SUBCHKY - DNSE OOLITIC IN
PART SLI FOSS. FSFO FNT

DST # 1 (3930 - 3960)
IF: BOB 20" FF: BOB 40"
30" - 60" - 45" - 90"
REC: 565' MW
IFP: 24 - 190#
ISIP: 1076#
FFP: 196 - 291#
FSIP: 1070#

MUD CHECK @ 3950'



ODOR ON BREAK SCATT
 SUBSAT - SAT MED - DRK
 BRN STN FR - GD INTRPRT
 POR.
 SHALE: GRAY SILTY

LST: WHT - CRM - GRAY
 FXTAL SUBCHKY - DNSE
 FOSS IN PART NO VIS. POR.
 NSO

SHALE: GRAY - DRK GRAY
 W/LST: A. A. NSO

LST: WHT - CRM FXTAL
 DNSE HAD FOSS. IN PART
 FSFO GD ODOR SCATT
 SUBSAT LT - MED BRN STN
 PR FOSS. & VUGGY POR.
 LOOKS TIGHT
 SHALE: GRAY - GREEN
 CALC

DOLO: CRM - GRAY FXTAL
 SUCROSIK SANDY DNSE
 HARD FSFO FNT - FR ODOR
 SCATT. SUBSAT - SAT DRK
 BRN STN FR INTXTAL POR.

LST: WHT - CRM - GRAY
 FXTAL MOST DNSE HARD
 FOSS. IN PART NO VIS. POR.
 NSO

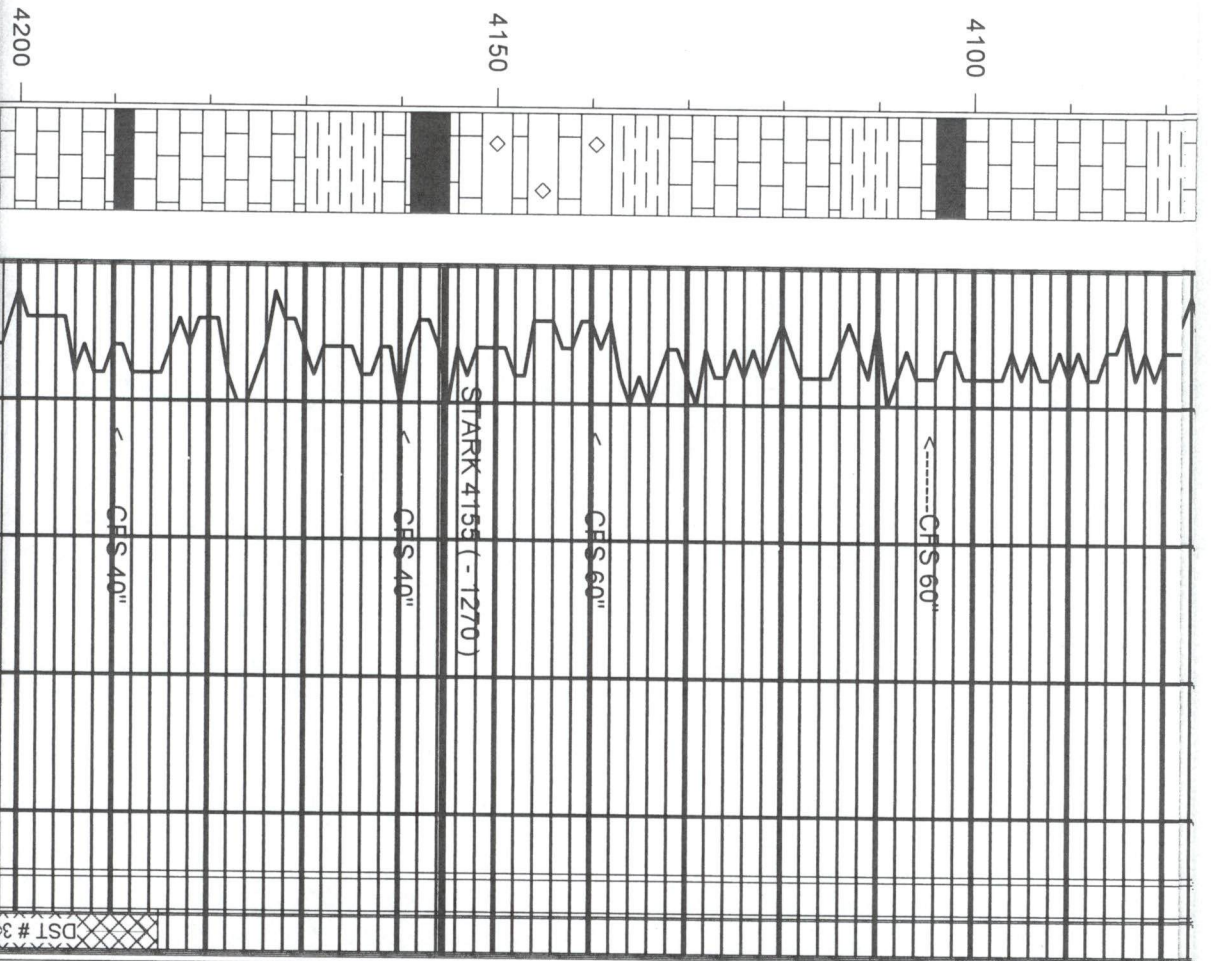
LST: A. A. NO VIS. POR. NSO
 SHALE: BLACK CARB.
 LST: WHT - CRM FXTAL
 HARD DNSE NO VIS. POR.
 NSO

VIS: 56
 WT: 9.1
 DEV: 3/4 DEG @ 3960'
 PIPE STRAP @ 3960'
 STRAP LONG 0.05'

DST # 2 (3990 - 4030)
 IF: BOB 2 1/2" FF: BOB 4"
 30" - 60" - 45" - 90"
 REC: 1930' MW
 IFP: 248 - 583#
 ISIP: 1103#
 FFP: 574 - 888#
 FSP: 1104#

DEV: 3/4 DEG @ 4030'

MUD CHECK @ 4050'
 VIS: 56
 WT: 9.3



SHALE: GRAY - DRK GRAY

LST: WHT - CRM - GRAY
 FXTAL MOST DNSE BLOCKY
 SLI FOSS. NO VIS. POR. NSO
 LST: A. A. W/FRAMT BLK
 CARB. SHALE NO VIS. POR.
 NSO

SHALE: GRAY - GREEN W/
 MINOR DNSE MOTTLED LST.
 NSO
 LST: CRM - TAN FXTAL DNSE
 HARD BLOCKY FOSS. IN
 PART NO VIS. POR. NSO

SHALE: GRAY CALC. W/ LST.
 A. A. NSO
 LST: WHT - CRM FXTAL
 DNSE BRITTLE SLI
 DOLOMITIC OOLICASTIC IN
 PART FR OOLICASTIC POR.
 NSO

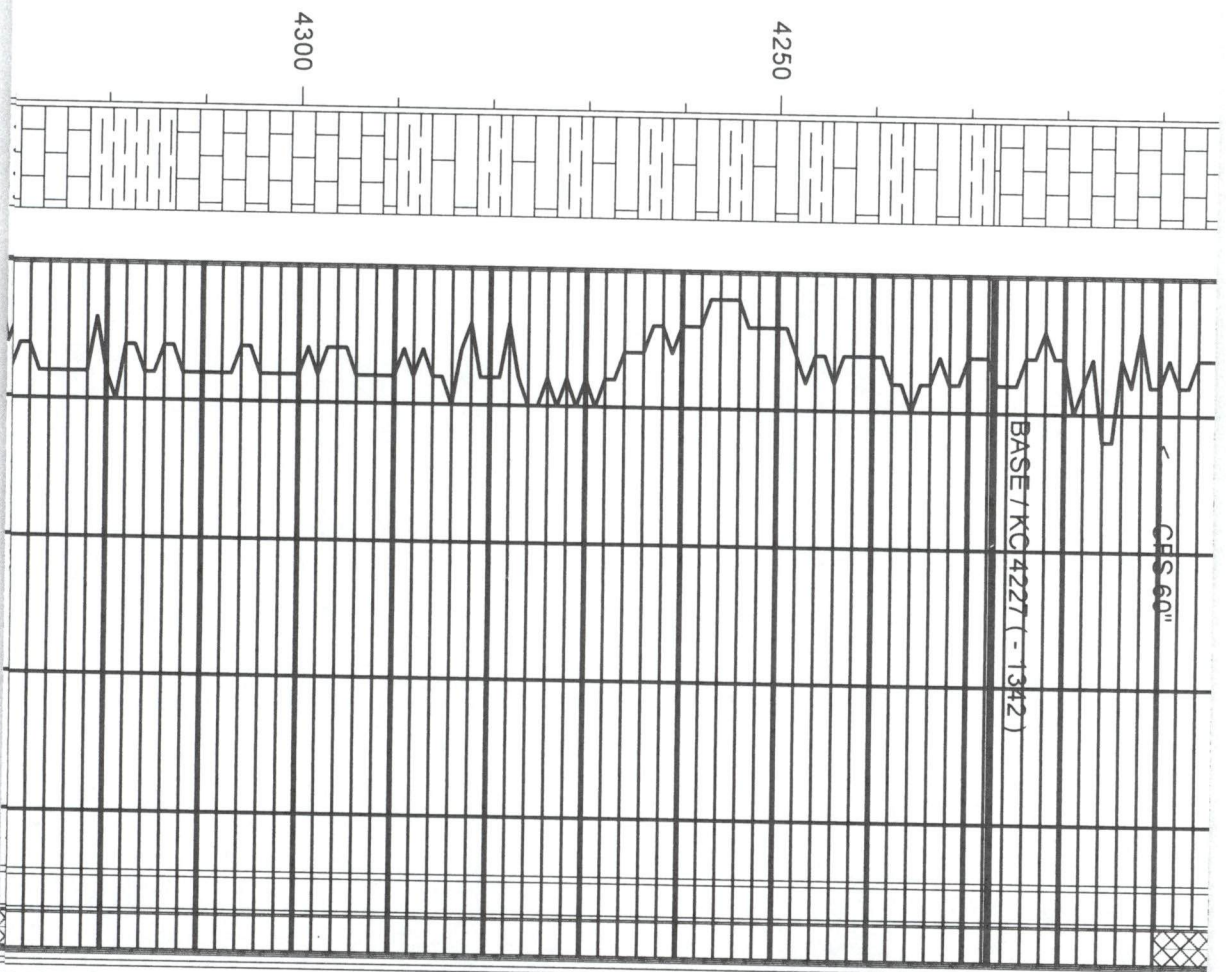
SHALE: BLACK CARB.

SHALE: GRAY W/ DNSE
 MOTTLED LST. NSO
 LST: CRM - TAN FXTAL DNSE
 BLOCKY HARD FOSS. IN
 PART NO VIS. POR. NSO

LST: A. A. W/ MINOR DRK
 GRAY - BLK CARB. SHALE
 NSO
 LST: CRM - GRAY - TAN
 FXTAL MOST DNSE FOSS. IN

MUD CHECK @ 4150'
 VIS: 55
 WT: 9.3

DST # 3 (4185 - 4210)
 IF: 1 1/2" FF: DEAD
 30" - 60" - 45" - 90"
 REC: 95' MUD
 I/P: 23 - 47#
 IS/P: 643#
 FFP: 53 - 67#
 FSI/P: 493#



PARTI S5-FU-FN1 UDUK-FEW
 PCS W/ SPTY - SUBSAT -
 SAT LT - MED BRN STN PR
 FOSS. POR

LST: CRM - GRAY - TAN
 FXTAL SUBCHKY - DNSE SLI
 FOSS. NO VIS. POR. NSO

SHALE: GRAY - GREEN
 SILTY SANDY W/ MINOR
 ARENACEOUS GRAY LST.
 NO VIS. POR. NSO

LST: CRM - GRAY - TAN
 FXTAL SUBCHKY - MOSTLY
 DNSE MICRITIC IN PART
 RARE FOSS. NO VIS. POR.
 NSO

SHALE: GRAY - DRK GRAY
 LST: DNSE HARD NO VIS.
 POR. NSO

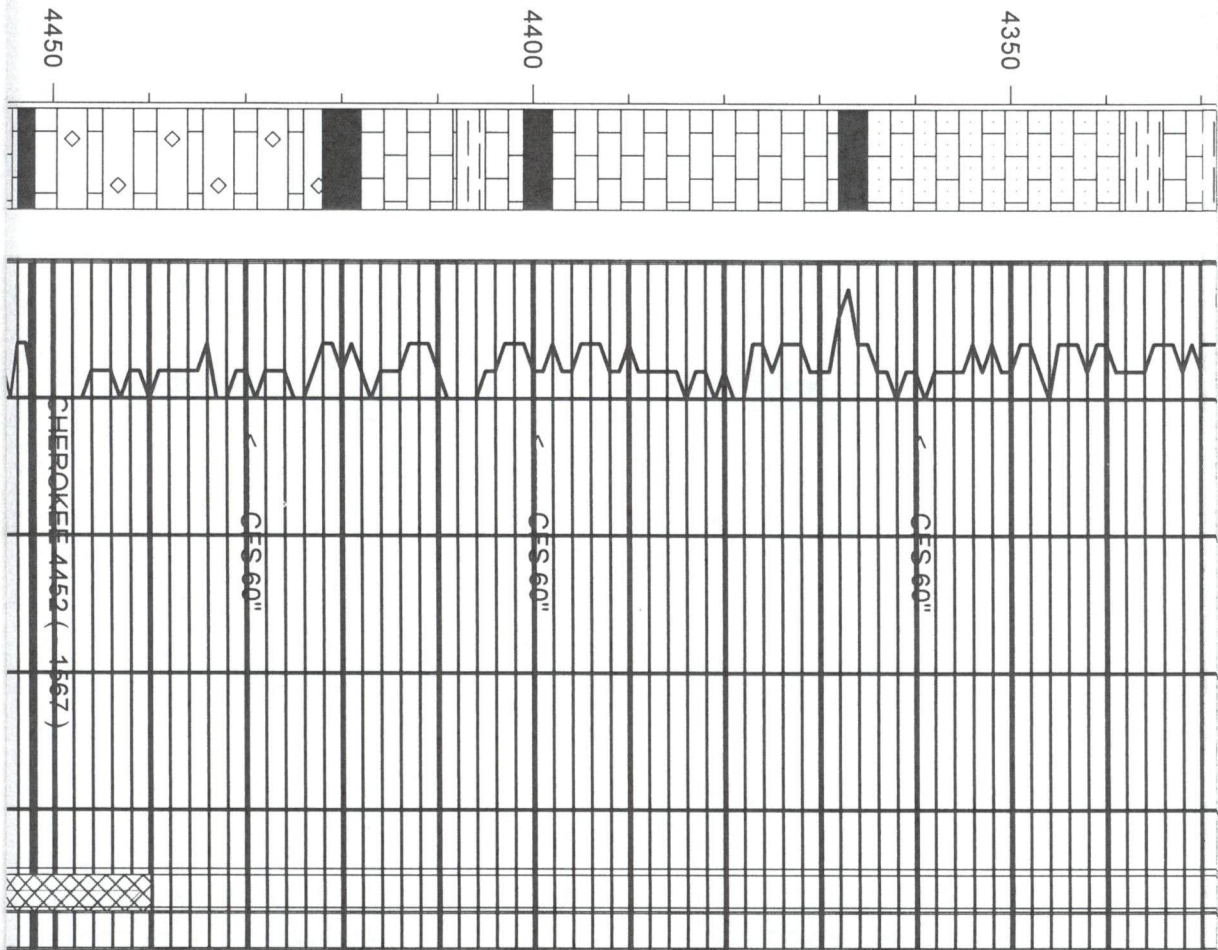
SHALE: GRAY - BRN EARTHY
 NSO

LST: CRM - GRAY - BRN
 FXTAL SUBCHKY - DNSE
 SANDY ARENACEOUS
 INPART NO VIS. POR. NSO

SHALE: TAN - BRN
 ARGILLACEOUS IN PART NSO
 LST: CRM - GRAY FXTAL
 DNSE HARD NO VIS. POR.
 NSO

DEV: 3/4 DEG @ 4210'

MUD CHECK @ 4250'
 VIS: 54
 WT: 9.3



NSO

SHALE: GRAY SILTY NSO

LST: CRM - TAN - BRN FXTAL
DNSE BLOCKY MICRITIC IN
PART NO VIS. POR. NSO

LST: A. A. NO VIS. POR. NSO

MUD CHECK @ 4350'
VIS: 56
WT: 9.3

SHALE: BLACK CARB. NSO

LST: CRM - GRAY FXTAL
SUBCHKY - DNSE SLI FOSS.
TIGHT NO VIS. POR. NSO

LST: CRM - GRAY FXTAL
DNSE BLOCKY RARE FOSS.
VERY HARD NO VIS. POR.
NSO

SHALE: BLACK CARB. NSO

LST: CRM - GRAY - TAN -
BRN FXTAL DNSE HARD
BLOCKY FOSS. IN PART NO
VIS. POR. NSO

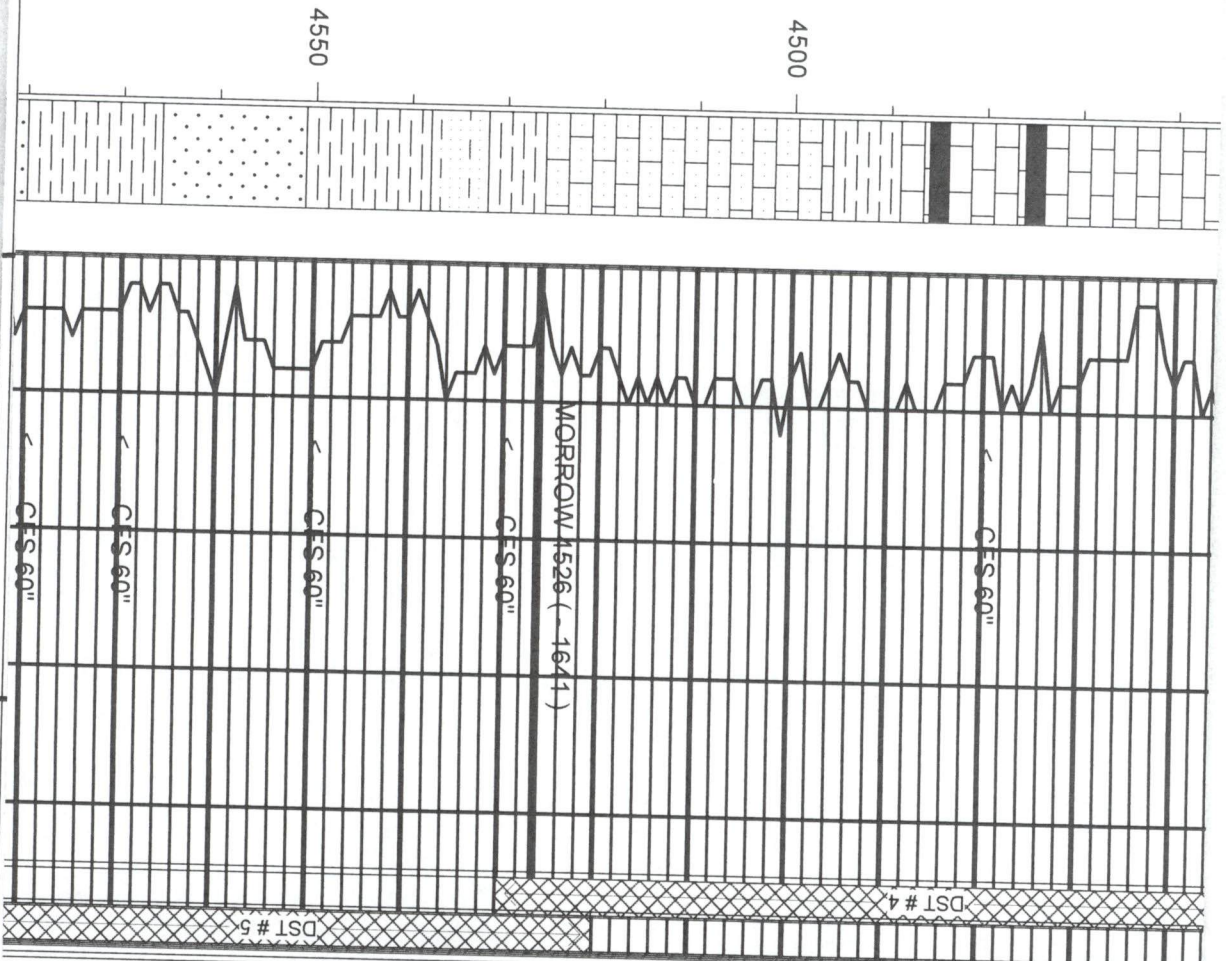
SHALE: BLACK CARB. NSO

LST: TAN - BRN FXTAL
MICRITIC IN PART HIGHLY
OOLITIC COMPACT NO VIS.
POR. NSO

LST: A. A. NO VIS. POR. NSO

SHALE: BLACK CARB. NSO

MUD CHECK @ 4450'
VIS: 54



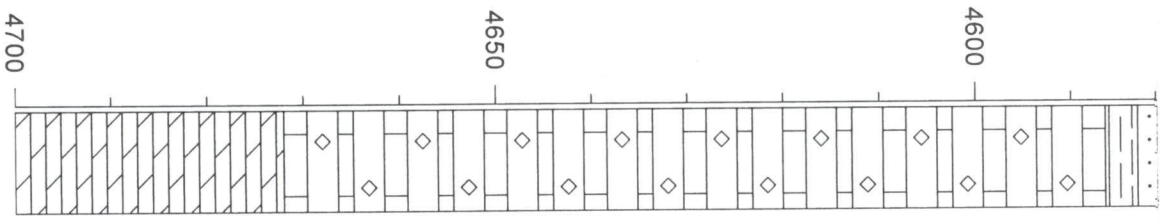
LST: CRM - GRAY FXTAL
 SUBCHKY - DNSE FOSS. IN
 PART SSFO FNT ODOR
 GSSY IN PART SCATT DRK
 BRN SPTY - SUBSAT STN PR
 - FR VUGGY POR.
 SHALE: BLACK CARB. NSO

 LST: CRM - GRAY FXTAL
 SUBCHKY - DNSE HARD
 BRITTLE RARE FOSS. NO
 VIS. POR. NSO
 LST: A. A. W/ MINOR DRK
 GRAY - BLACK SHALE NO
 VIS. POR. NSO
 LST: TAN - BRN FXTAL
 MICRITIC IN PART SLI FOSS.
 DNSE HARD ARENACEOUS
 SSFO FR ODOR SCATT MED
 BRN SUBSAT - SAT STN FR
 VUGGY & INTRPRT. POR.
 LST: A. A. W/ SHOW A. A.
 MINOR FRAC. POR
 SHALE: VARI COLORED RED
 - BRN GRAY - GREEN -
 YELLOW SANDY IN PART
 NSO
 SAND: FN. GRN. QTZ WELL
 SORTED SUB ROUND -
 ROUNDED GRAINS SILTY IN
 PART PR INTRGRAN POR.
 NSO
 SHALE: VARI COLORED
 SAND: QTZ. FN - MED -
 COARSE GRN FR SORTED
 ANGULAR - SUBROUNDED
 WELL CEMENTED HARD
 TIGHT CLUSTERS MOST
 BARREN FEW CLUSTERS
 SUBFRIABLE W/ FSFO FR
 ODOR ON BREAK MINOR

WT: 9.4
 DST # 4 (4440 - 4530)
 IF: 1/2" FF: DEAD
 30" - 60" - 45" - 90"
 REC: 15' MUD
 IFF: 27 - 37#
 ISIP: 1164#
 FFP: 39 - 49#
 FSIP: 1158#
 DEV: 3/4 DEG. @ 4530'

 MUD CHECK @ 4550'
 VIS: 56
 WT: 9.4

 DST # 5 (4520 - 4585)
 IF: 1/4" FF: DEAD
 30" - 60" - 45" - 90"
 REC: 10' MUD



MISSISSIPPI 4386 (-1701)
 CFS 60

AMT W/ SAT MED BRN STN
 FR INTRGRAN POR.

LST: CRM - TAN FXTAL DNSE
 HARD BLOCKY VERY
 OOLITIC COMPACT NO VIS.
 POR. NSO

IFP: 28 - 38#
 ISIP: 1150#
 FFP: 46 - 51#
 FSP: 1145#
 DEV: 3/4 DEG. @ 4700'

LST: CRM - TAN - GRAY
 FXTAL DNSE VERY HARD
 BLOCKY OOLITIC SANDY IN
 PART NO VIS. POR. NSO

LST: CRM - TAN - BRN FXTAL
 SUBCHKY - DNSE HARD
 OOLITIC SANDY IN PART NO
 VIS. POR. NSO

LST: CRM - TAN - BRN FXTAL
 SUBCHKY - MOSTLY DNSE
 HARD BLOCKY OOLITIC
 COMPACT NO VIS. POR.
 NSO

MUD CHECK @ 4650'
 VIS: 57
 WT: 9.4

DOLomite: CRM - GRAY
 FXTAL DNSE BRITTLE
 SUCROSIC NO VIS. POR.
 NSO

DOLomite: CRM - GRAY
 FXTAL MOST DNSE HARD
 BRITTLE SUCROSIC NO VIS.
 POR. NSO

RTD = 4700' LTD = 4700'

COMMENTS:

DUE TO NEGATIVE DST RESULTS & LACK OF COMMERCIAL SHOWS OF OIL

THIS WELL WAS PLUGGED AS D&A

KEVIN L. KESSLER



DRILL STEM TEST REPORT

Prepared For: **Raymond Oil Company**

PO Box 48788
Wichita, KS 67201

ATTN: Kevin Kessler

Michaelis #3

3-14s-32w Logan,KS

Start Date: 2014.08.07 @ 02:39:38

End Date: 2014.08.07 @ 11:19:08

Job Ticket #: 59019 DST #: 1

Trilobite Testing, Inc
1515 Commerce Parkway Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620

Printed: 2014.08.13 @ 11:04:26



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Raymond Oil Company

3-14s-32w Logan,KS

PO Box 48788
Wichita, KS 67201

Michaelis #3

Job Ticket: 59019

DST#: 1

ATTN: Kevin Kessler

Test Start: 2014.08.07 @ 02:39:38

GENERAL INFORMATION:

Formation: **Lansing 35**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 05:03:08

Time Test Ended: 11:19:08

Test Type: Conventional Bottom Hole (Initial)

Tester: Brandon Turley

Unit No: 60

Interval: 3930.00 ft (KB) To 3960.00 ft (KB) (TVD)

Reference Elevations: 2885.00 ft (KB)

Total Depth: 3960.00 ft (KB) (TVD)

2874.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 11.00 ft

Serial #: 8373

Inside

Press@RunDepth: 291.42 psig @ 3931.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.08.07

End Date:

2014.08.07

Last Calib.:

2014.08.07

Start Time: 02:39:43

End Time:

11:19:08

Time On Btm:

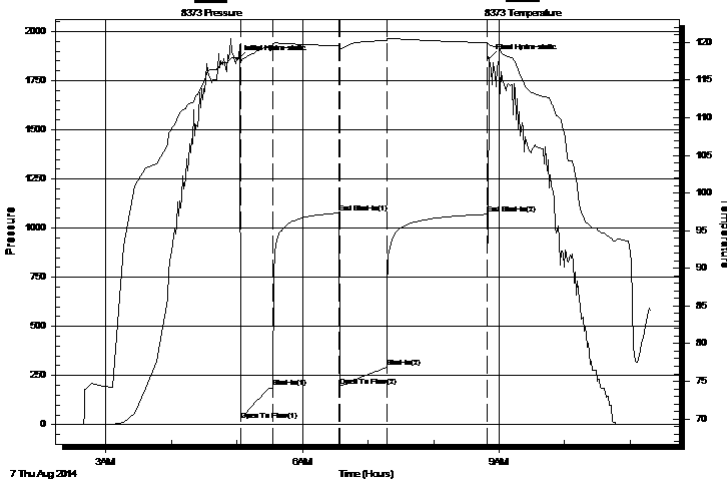
2014.08.07 @ 05:00:38

Time Off Btm:

2014.08.07 @ 08:50:38

TEST COMMENT: IF: BOB in 20 min.
IS: No return.
FF: BOB in 40 min.
FS: No return.

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1857.68	118.00	Initial Hydro-static
3	24.57	117.35	Open To Flow (1)
33	190.08	119.62	Shut-In(1)
93	1076.89	119.56	End Shut-In(1)
94	196.66	119.19	Open To Flow (2)
137	291.42	120.25	Shut-In(2)
229	1070.61	119.97	End Shut-In(2)
230	1862.91	119.76	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
365.00	mcw 80%w 20%m	1.80
200.00	nw 50%w 50%m	2.81

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Raymond Oil Company

3-14s-32w Logan,KS

PO Box 48788
Wichita, KS 67201

Michaelis #3

Job Ticket: 59019

DST#: 1

ATTN: Kevin Kessler

Test Start: 2014.08.07 @ 02:39:38

Tool Information

Drill Pipe:	Length: 3552.00 ft	Diameter: 3.80 inches	Volume: 49.83 bbl	Tool Weight: 2000.00 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: 365.00 ft	Diameter: 2.25 inches	Volume: 1.80 bbl	Weight to Pull Loose: 85000.00 lb
			<u>Total Volume: 51.63 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	15.00 ft			String Weight: Initial 66000.00 lb
Depth to Top Packer:	3930.00 ft			Final 74000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	30.00 ft			
Tool Length:	58.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
------------------	-------------	------------	----------	------------	----------------

Stubb	1.00			3903.00	
Shut In Tool	5.00			3908.00	
Hydraulic tool	5.00			3913.00	
Jars	5.00			3918.00	
Safety Joint	3.00			3921.00	
Packer	5.00			3926.00	28.00 Bottom Of Top Packer
Packer	4.00			3930.00	
Stubb	1.00			3931.00	
Recorder	0.00	8373	Inside	3931.00	
Recorder	0.00	8166	Outside	3931.00	
Perforations	24.00			3955.00	
Bullnose	5.00			3960.00	30.00 Bottom Packers & Anchor

Total Tool Length: 58.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Raymond Oil Company

3-14s-32w Logan,KS

PO Box 48788
Wichita, KS 67201

Michaelis #3

Job Ticket: 59019

DST#: 1

ATTN: Kevin Kessler

Test Start: 2014.08.07 @ 02:39:38

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:

18000 ppm

Viscosity: 50.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.18 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 3000.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
365.00	mcw 80%w 20%m	1.795
200.00	mw 50%w 50%m	2.805

Total Length: 565.00 ft Total Volume: 4.600 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

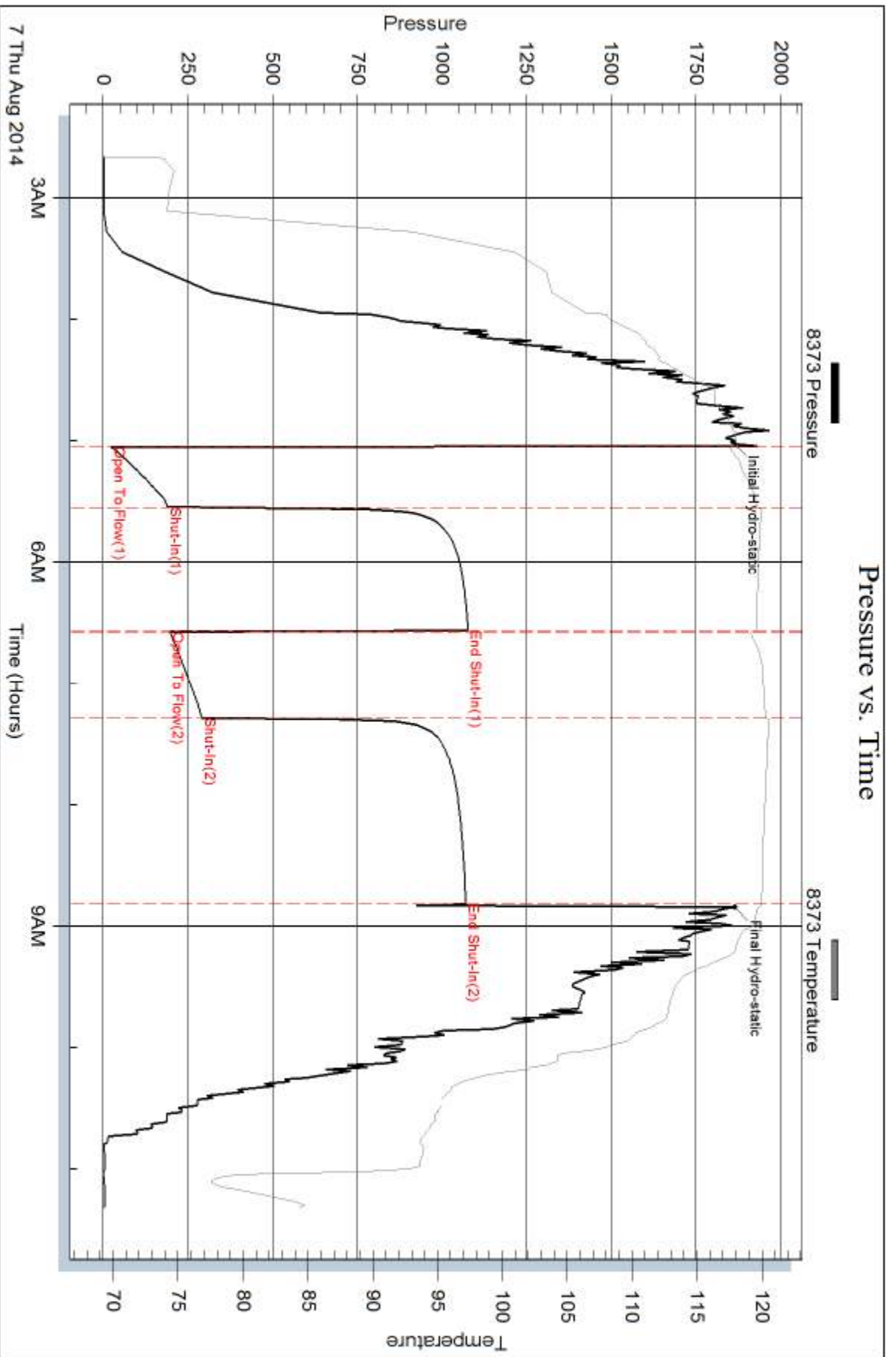
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: .34@78=18000

Pressure vs. Time

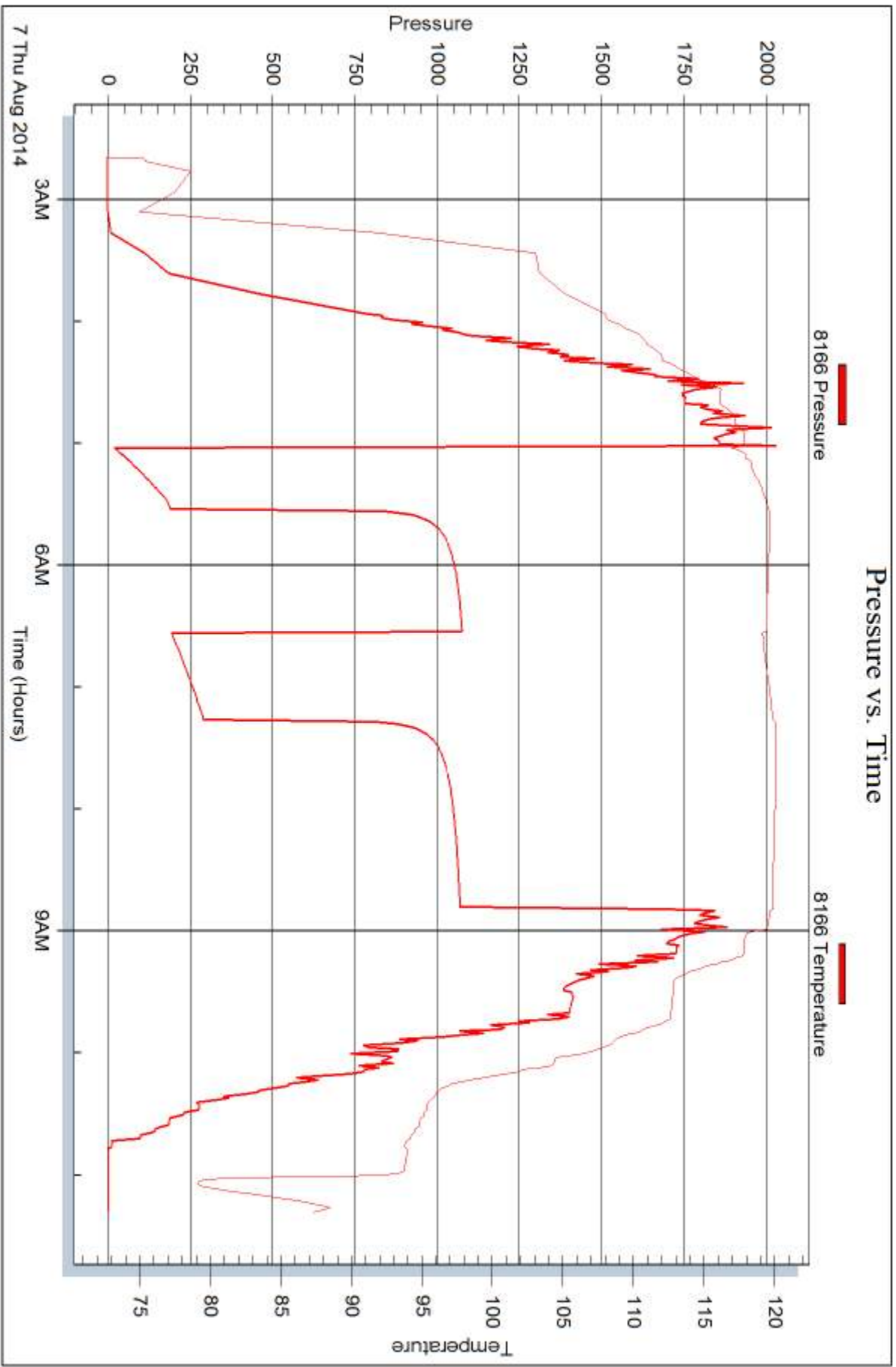


Serial #: 8166

Outside Raymond Oil Company

Michaelis #3

DST Test Number: 1



Trilobite Testing, Inc

Ref. No: 59019

Printed: 2014.08.13 @ 11:04:27



DRILL STEM TEST REPORT

Prepared For: **Raymond Oil Company**

PO Box 48788
Wichita, KS 67201

ATTN: Kevin Kessler

Michaelis #3

3-14s-32w Logan,KS

Start Date: 2014.08.08 @ 02:12:01

End Date: 2014.08.08 @ 10:01:31

Job Ticket #: 59020 DST #: 2

Trilobite Testing, Inc
1515 Commerce Parkway Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620

Printed: 2014.08.13 @ 11:03:48



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Raymond Oil Company

3-14s-32w Logan,KS

PO Box 48788
Wichita, KS 67201

Michaelis #3

Job Ticket: 59020

DST#: 2

ATTN: Kevin Kessler

Test Start: 2014.08.08 @ 02:12:01

GENERAL INFORMATION:

Formation: **Lansing 70-90**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 04:06:01

Time Test Ended: 10:01:31

Test Type: Conventional Bottom Hole (Reset)

Tester: Brandon Turley

Unit No: 60

Interval: 3990.00 ft (KB) To 4030.00 ft (KB) (TVD)

Reference Elevations: 2885.00 ft (KB)

Total Depth: 4030.00 ft (KB) (TVD)

2874.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 11.00 ft

Serial #: 8373

Inside

Press@RunDepth: 888.17 psig @ 3991.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.08.08

End Date:

2014.08.08

Last Calib.:

2014.08.08

Start Time: 02:12:06

End Time:

10:01:30

Time On Btm:

2014.08.08 @ 04:04:01

Time Off Btm:

2014.08.08 @ 07:52:31

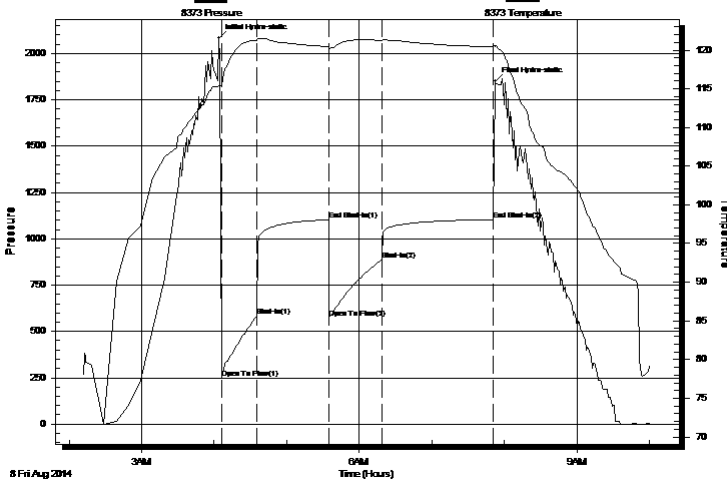
TEST COMMENT: IF: BOB in 2 1/2 min.

IS: No return.

FF: BOB in 4 min.

FS: No return.

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2081.55	115.43	Initial Hydro-static
2	248.71	115.30	Open To Flow (1)
32	583.92	121.30	Shut-In(1)
91	1103.31	120.44	End Shut-In(1)
91	574.04	120.27	Open To Flow (2)
135	888.17	121.26	Shut-In(2)
227	1104.50	120.42	End Shut-In(2)
229	1849.63	120.52	Final Hydro-static

Recovery

Gas Rates

Length (ft)	Description	Volume (bbl)
1505.00	water 100%w	17.79
285.00	mcw 90%w 10%m	4.00
140.00	mcw 60%w 40%m	1.96

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

* Recovery from multiple tests



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Raymond Oil Company

3-14s-32w Logan,KS

PO Box 48788
Wichita, KS 67201

Michaelis #3

Job Ticket: 59020

DST#: 2

ATTN: Kevin Kessler

Test Start: 2014.08.08 @ 02:12:01

Tool Information

Drill Pipe:	Length: 3611.00 ft	Diameter: 3.80 inches	Volume: 50.65 bbl	Tool Weight:	2000.00 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: 365.00 ft	Diameter: 2.25 inches	Volume: 1.80 bbl	Weight to Pull Loose:	85000.00 lb
			<u>Total Volume: 52.45 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	14.00 ft			String Weight: Initial	70000.00 lb
Depth to Top Packer:	3990.00 ft			Final	80000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	40.00 ft				
Tool Length:	68.00 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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Stubb	1.00			3963.00	
Shut In Tool	5.00			3968.00	
Hydraulic tool	5.00			3973.00	
Jars	5.00			3978.00	
Safety Joint	3.00			3981.00	
Packer	5.00			3986.00	28.00 Bottom Of Top Packer
Packer	4.00			3990.00	
Stubb	1.00			3991.00	
Recorder	0.00	8373	Inside	3991.00	
Recorder	0.00	8166	Outside	3991.00	
Perforations	1.00			3992.00	
Change Over Sub	1.00			3993.00	
Drill Pipe	31.00			4024.00	
Change Over Sub	1.00			4025.00	
Bullnose	5.00			4030.00	40.00 Bottom Packers & Anchor

Total Tool Length: 68.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Raymond Oil Company

3-14s-32w Logan,KS

PO Box 48788
Wichita, KS 67201

Michaelis #3

Job Ticket: 59020

DST#: 2

ATTN: Kevin Kessler

Test Start: 2014.08.08 @ 02:12:01

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:

47000 ppm

Viscosity: 54.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.98 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 3200.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
1505.00	water 100%w	17.786
285.00	mcw 90%w 10%m	3.998
140.00	mcw 60%w 40%m	1.964

Total Length: 1930.00 ft Total Volume: 23.748 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

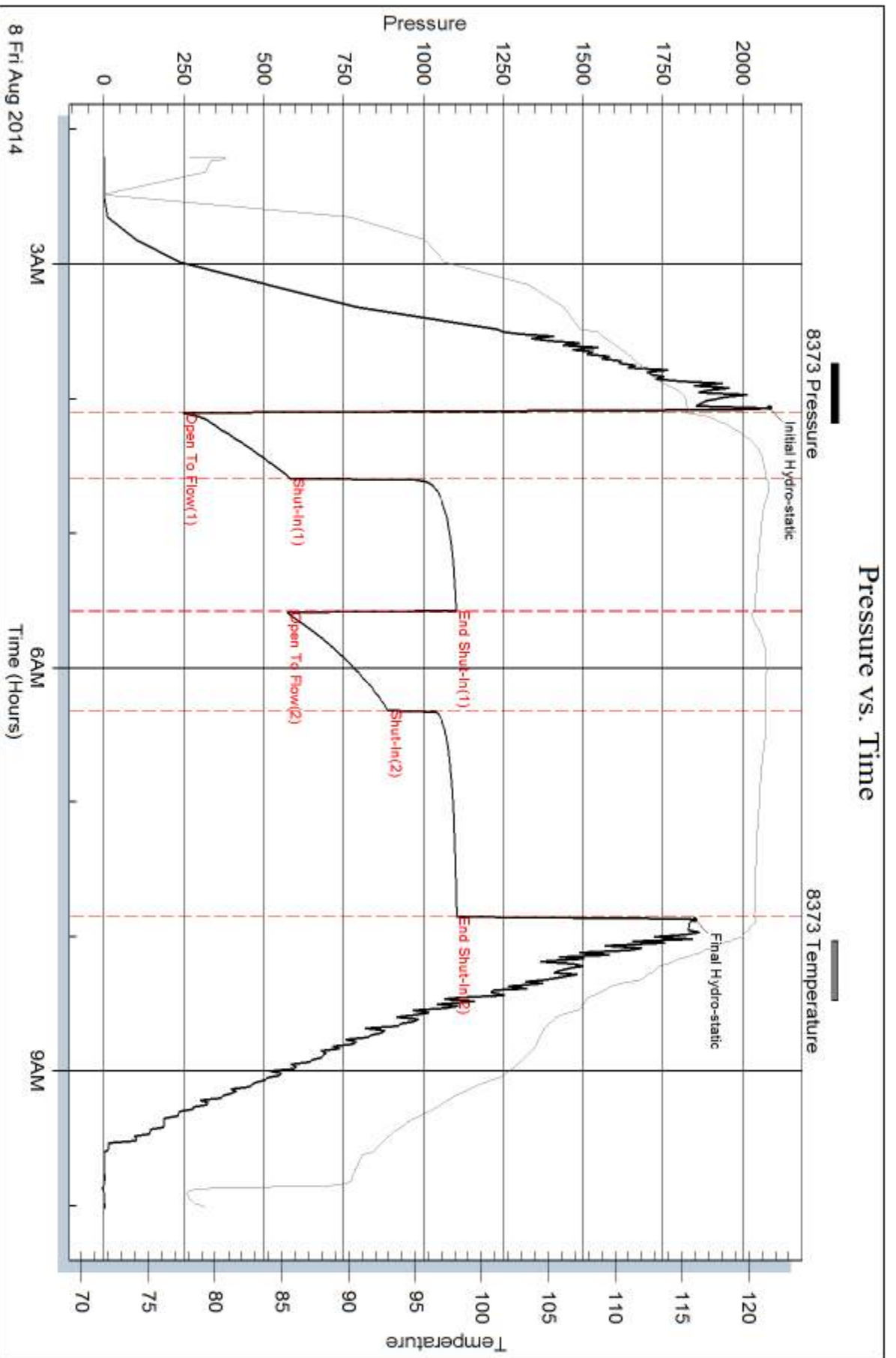
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: .14@80=47000

Pressure vs. Time

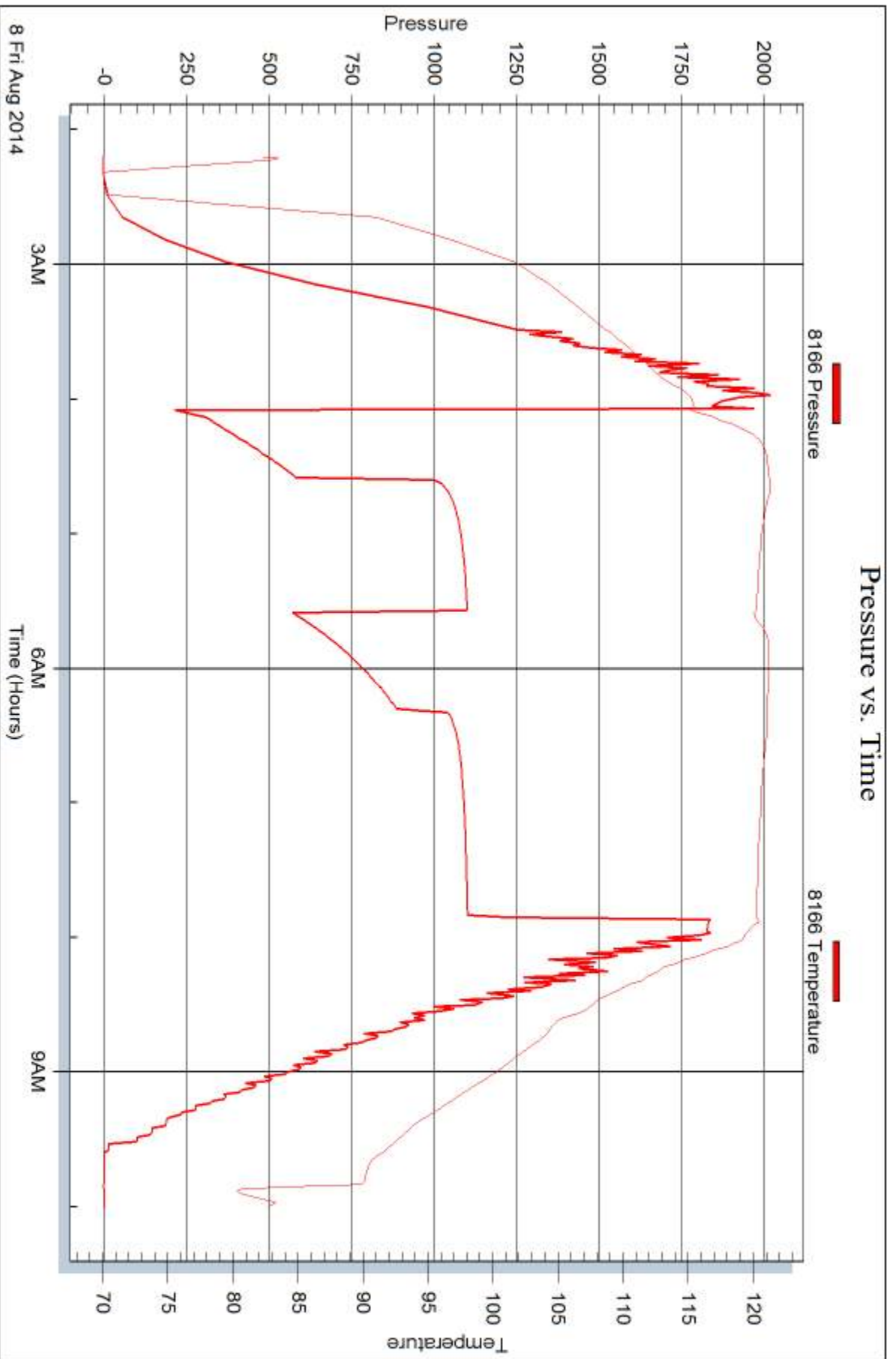


Serial #: 8166

Outside Raymond Oil Company

Michaelis #3

DST Test Number: 2



Trilobite Testing, Inc

Ref. No: 59020

Printed: 2014.08.13 @ 11:03:49



DRILL STEM TEST REPORT

Prepared For: **Raymond Oil Company**

PO Box 48788
Wichita, KS 67201

ATTN: Kevin Kessler

Michaelis #3

3-14s-32w Logan,KS

Start Date: 2014.08.09 @ 07:33:00

End Date: 2014.08.09 @ 15:38:00

Job Ticket #: 56670 DST #: 3

Trilobite Testing, Inc
1515 Commerce Parkway Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620

Printed: 2014.08.13 @ 11:00:04



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Raymond Oil Company
 PO Box 48788
 Wichita, KS 67201
 ATTN: Kevin Kessler

3-14s-32w Logan,KS

Michaelis #3

Job Ticket: 56670

DST#: 3

Test Start: 2014.08.09 @ 07:33:00

GENERAL INFORMATION:

Formation: **Lansing 220 " L"**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 10:01:00
 Time Test Ended: 15:38:00
 Interval: **4185.00 ft (KB) To 4210.00 ft (KB) (TVD)**
 Total Depth: 4210.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Poor
 Test Type: Conventional Bottom Hole (Reset)
 Tester: Justin Harris
 Unit No: 60
 Reference Elevations: 2885.00 ft (KB)
 2874.00 ft (CF)
 KB to GR/CF: 11.00 ft

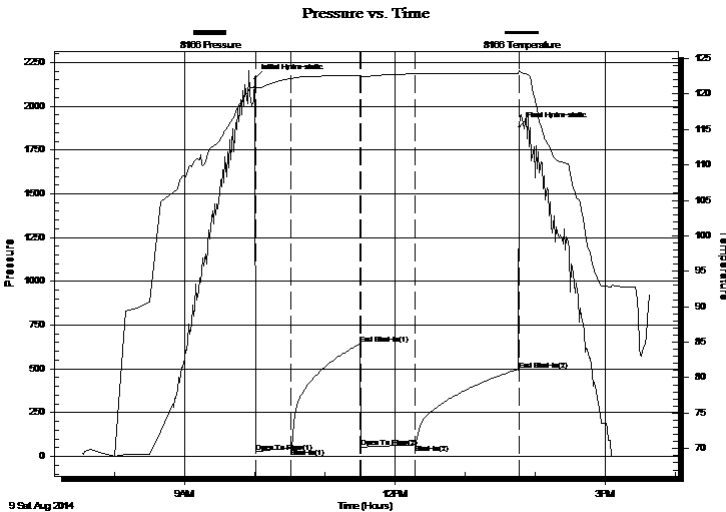
Serial #: 8166

Outside

Press@RunDepth: 66.88 psig @ 4186.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2014.08.09 End Date: 2014.08.09 Last Calib.: 2014.08.09
 Start Time: 07:33:05 End Time: 15:37:59 Time On Btm: 2014.08.09 @ 10:00:30
 Time Off Btm: 2014.08.09 @ 13:46:30

TEST COMMENT: 30: Weak Surface blow build to 1 1/2"
 60: No Return.
 45: No Blow .
 90: No Return.

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2155.36	121.22	Initial Hydro-static
1	22.66	120.54	Open To Flow (1)
31	47.26	122.16	Shut-In(1)
90	643.22	122.56	End Shut-In(1)
91	52.53	122.32	Open To Flow (2)
137	66.88	122.82	Shut-In(2)
226	493.08	122.90	End Shut-In(2)
226	1882.85	123.31	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
95.00	mud	0.47

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Raymond Oil Company

3-14s-32w Logan, KS

PO Box 48788
Wichita, KS 67201

Michaelis #3

Job Ticket: 56670

DST#: 3

ATTN: Kevin Kessler

Test Start: 2014.08.09 @ 07:33:00

Tool Information

Drill Pipe:	Length: 3804.00 ft	Diameter: 3.80 inches	Volume: 53.36 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 30000.00 lb
Drill Collar:	Length: 365.00 ft	Diameter: 2.25 inches	Volume: 1.80 bbl	Weight to Pull Loose: 80000.00 lb
			<u>Total Volume: 55.16 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	12.00 ft			String Weight: Initial 70000.00 lb
Depth to Top Packer:	4185.00 ft			Final 71000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	25.00 ft			
Tool Length:	53.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Stubb	1.00			4158.00	
Shut In Tool	5.00			4163.00	
Hydraulic tool	5.00			4168.00	
Jars	5.00			4173.00	
Safety Joint	3.00			4176.00	
Packer	5.00			4181.00	28.00 Bottom Of Top Packer
Packer	4.00			4185.00	
Stubb	1.00			4186.00	
Recorder	0.00	8373	Inside	4186.00	
Recorder	0.00	8166	Outside	4186.00	
Perforations	19.00			4205.00	
Bullnose	5.00			4210.00	25.00 Bottom Packers & Anchor

Total Tool Length: 53.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Raymond Oil Company

3-14s-32w Logan, KS

PO Box 48788
Wichita, KS 67201

Michaelis #3

Job Ticket: 56670

DST#: 3

ATTN: Kevin Kessler

Test Start: 2014.08.09 @ 07:33:00

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: 55.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 10.38 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 6400.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
95.00	mud	0.467

Total Length: 95.00 ft Total Volume: 0.467 bbl

Num Fluid Samples: 0

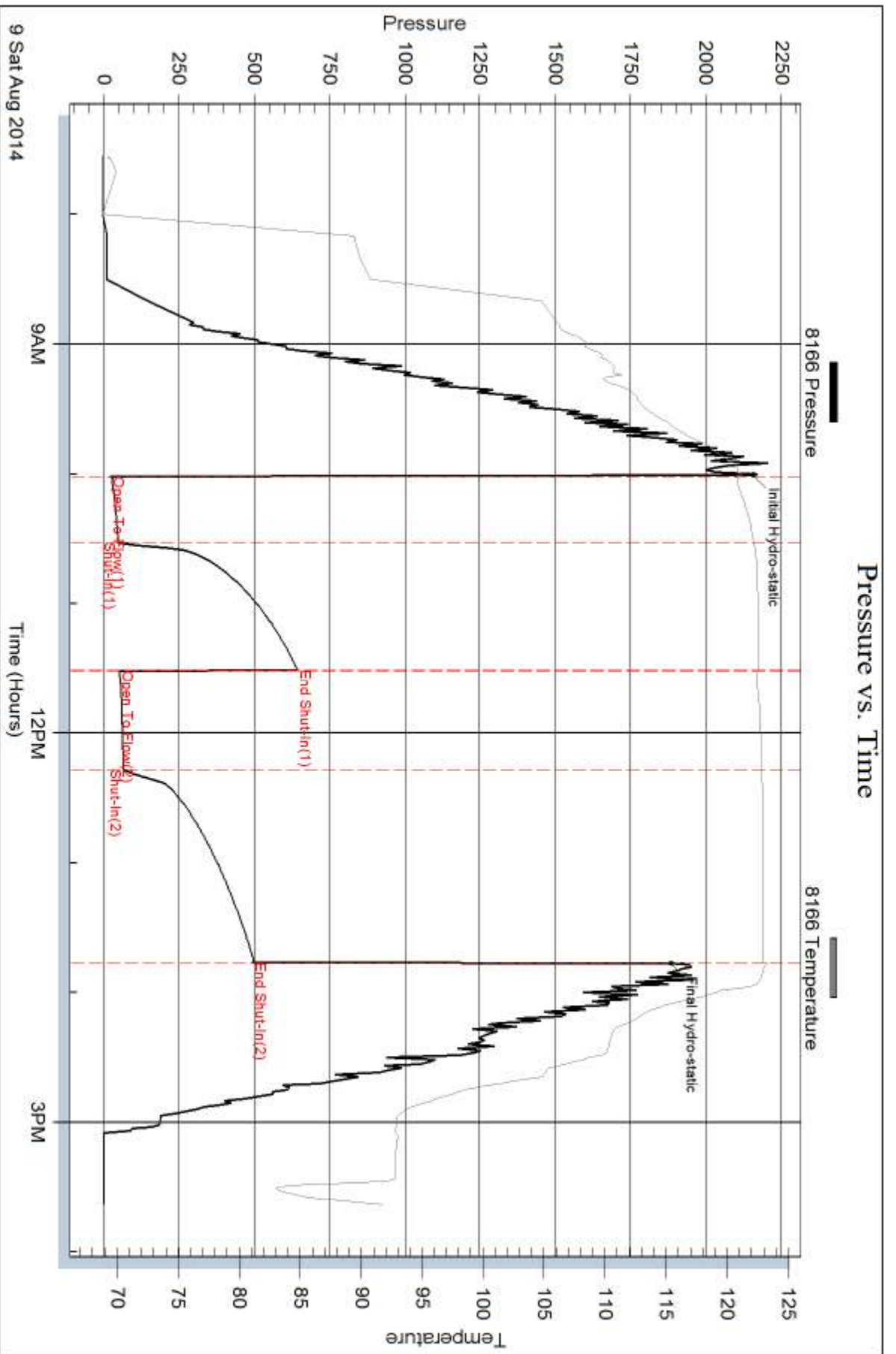
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:



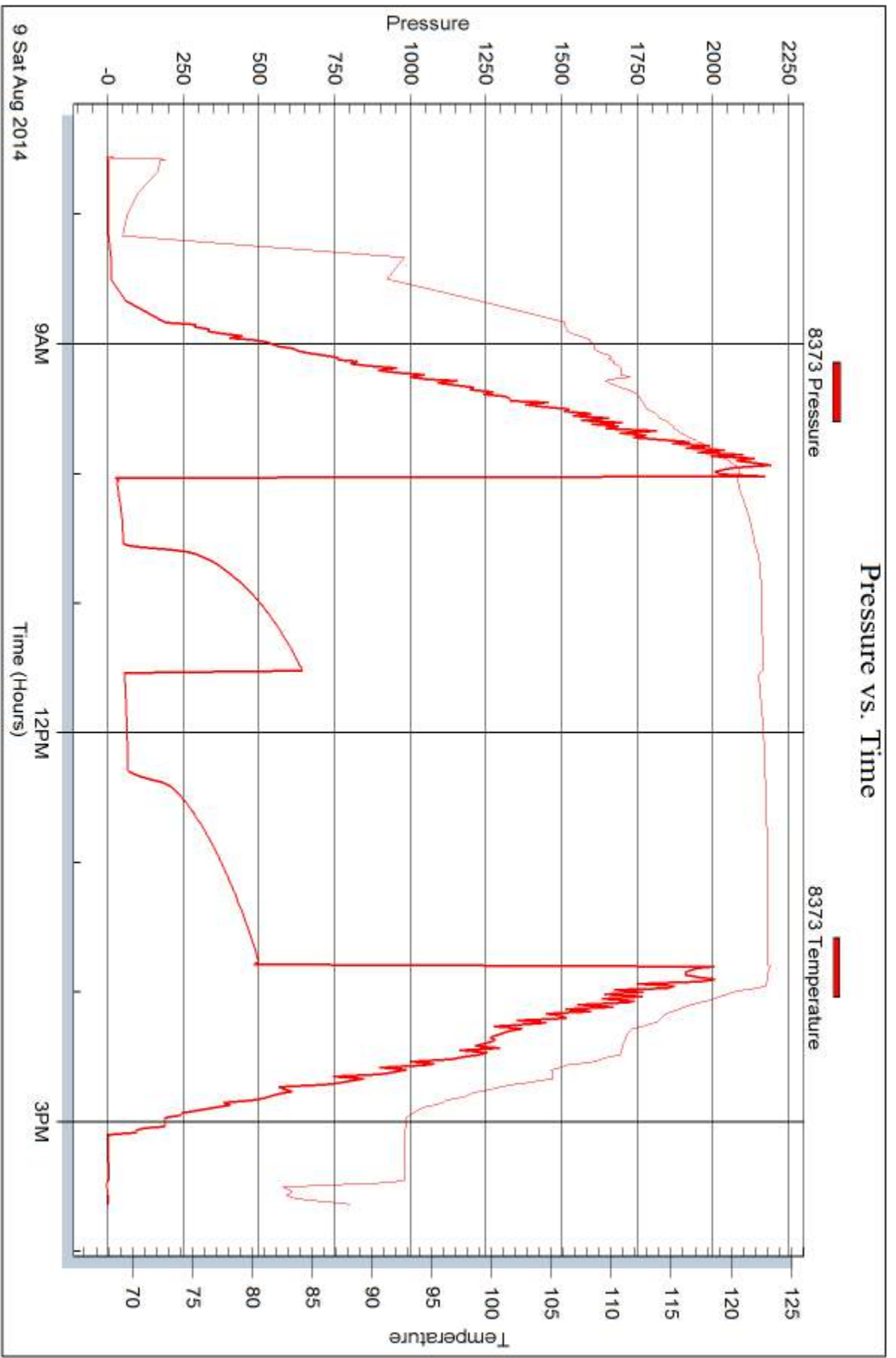
Serial #: 8373

Inside

Raymond Oil Company

Michaels #3

DST Test Number: 3



Tribble Testing, Inc

Ref. No: 56670

Printed: 2014.08.13 @ 11:00:06



DRILL STEM TEST REPORT

Prepared For: **Raymond Oil Company**

PO Box 48788
Wichita, KS 67201

ATTN: Kevin Kessler

Michaelis #3

3-14s-32w Logan,KS

Start Date: 2014.08.10 @ 21:30:00

End Date: 2014.08.11 @ 05:42:00

Job Ticket #: 56671 DST #: 4

Trilobite Testing, Inc
1515 Commerce Parkway Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620

Printed: 2014.08.13 @ 10:58:59

Raymond Oil Company

3-14s-32w Logan,KS

Michaelis #3

DST # 4

Cherokee/Johnson

2014.08.10



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Raymond Oil Company

3-14s-32w Logan,KS

PO Box 48788
Wichita, KS 67201

Michaelis #3

Job Ticket: 56671

DST#: 4

ATTN: Kevin Kessler

Test Start: 2014.08.10 @ 21:30:00

GENERAL INFORMATION:

Formation: **Cherokee/Johnson**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 23:56:30

Time Test Ended: 05:42:00

Test Type: Conventional Bottom Hole (Reset)

Tester: Justin Harris

Unit No: 60

Interval: 4440.00 ft (KB) To 4530.00 ft (KB) (TVD)

Reference Elevations: 2885.00 ft (KB)

Total Depth: 4530.00 ft (KB) (TVD)

2874.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Poor

KB to GR/CF: 11.00 ft

Serial #: 8373

Inside

Press@RunDepth: 48.72 psig @ 4441.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.08.10

End Date:

2014.08.11

Last Calib.: 2014.08.11

Start Time: 21:30:05

End Time:

05:41:59

Time On Btm: 2014.08.10 @ 23:56:00

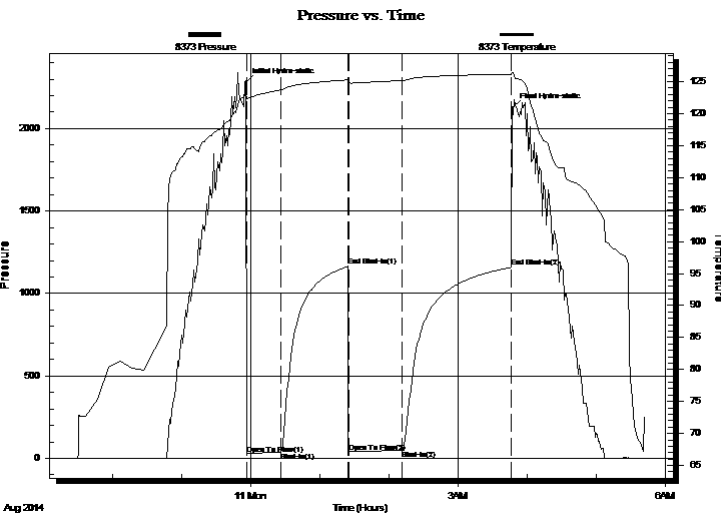
Time Off Btm: 2014.08.11 @ 03:47:30

TEST COMMENT: 30: 1/2" blow died in 20 min.

60: No Return.

45: No Blow .

90: No Return.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2278.50	123.04	Initial Hydro-static
1	27.06	122.45	Open To Flow (1)
30	37.32	123.68	Shut-In(1)
89	1164.32	125.27	End Shut-In(1)
89	39.10	124.84	Open To Flow (2)
136	48.72	125.16	Shut-In(2)
231	1158.16	126.18	End Shut-In(2)
232	2124.32	126.41	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
15.00	mud	0.07

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Raymond Oil Company

3-14s-32w Logan, KS

PO Box 48788
Wichita, KS 67201

Michaelis #3

Job Ticket: 56671

DST#: 4

ATTN: Kevin Kessler

Test Start: 2014.08.10 @ 21:30:00

Tool Information

Drill Pipe:	Length: 4058.00 ft	Diameter: 3.80 inches	Volume: 56.92 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 30000.00 lb
Drill Collar:	Length: 365.00 ft	Diameter: 2.25 inches	Volume: 1.80 bbl	Weight to Pull Loose: 80000.00 lb
			<u>Total Volume: 58.72 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	11.00 ft			String Weight: Initial 70000.00 lb
Depth to Top Packer:	4440.00 ft			Final 71000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	90.00 ft			
Tool Length:	118.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Stubb	1.00			4413.00	
Shut In Tool	5.00			4418.00	
Hydraulic tool	5.00			4423.00	
Jars	5.00			4428.00	
Safety Joint	3.00			4431.00	
Packer	5.00			4436.00	28.00 Bottom Of Top Packer
Packer	4.00			4440.00	
Stubb	1.00			4441.00	
Recorder	0.00	8373	Inside	4441.00	
Recorder	0.00	8166	Outside	4441.00	
Perforations	19.00			4460.00	
Change Over Sub	1.00			4461.00	
Drill Pipe	63.00			4524.00	
Change Over Sub	1.00			4525.00	
Bullnose	5.00			4530.00	90.00 Bottom Packers & Anchor

Total Tool Length: 118.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Raymond Oil Company

3-14s-32w Logan,KS

PO Box 48788
Wichita, KS 67201

Michaelis #3

Job Ticket: 56671

DST#: 4

ATTN: Kevin Kessler

Test Start: 2014.08.10 @ 21:30:00

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: 8.79 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 6000.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
15.00	mud	0.074

Total Length: 15.00 ft Total Volume: 0.074 bbl

Num Fluid Samples: 0

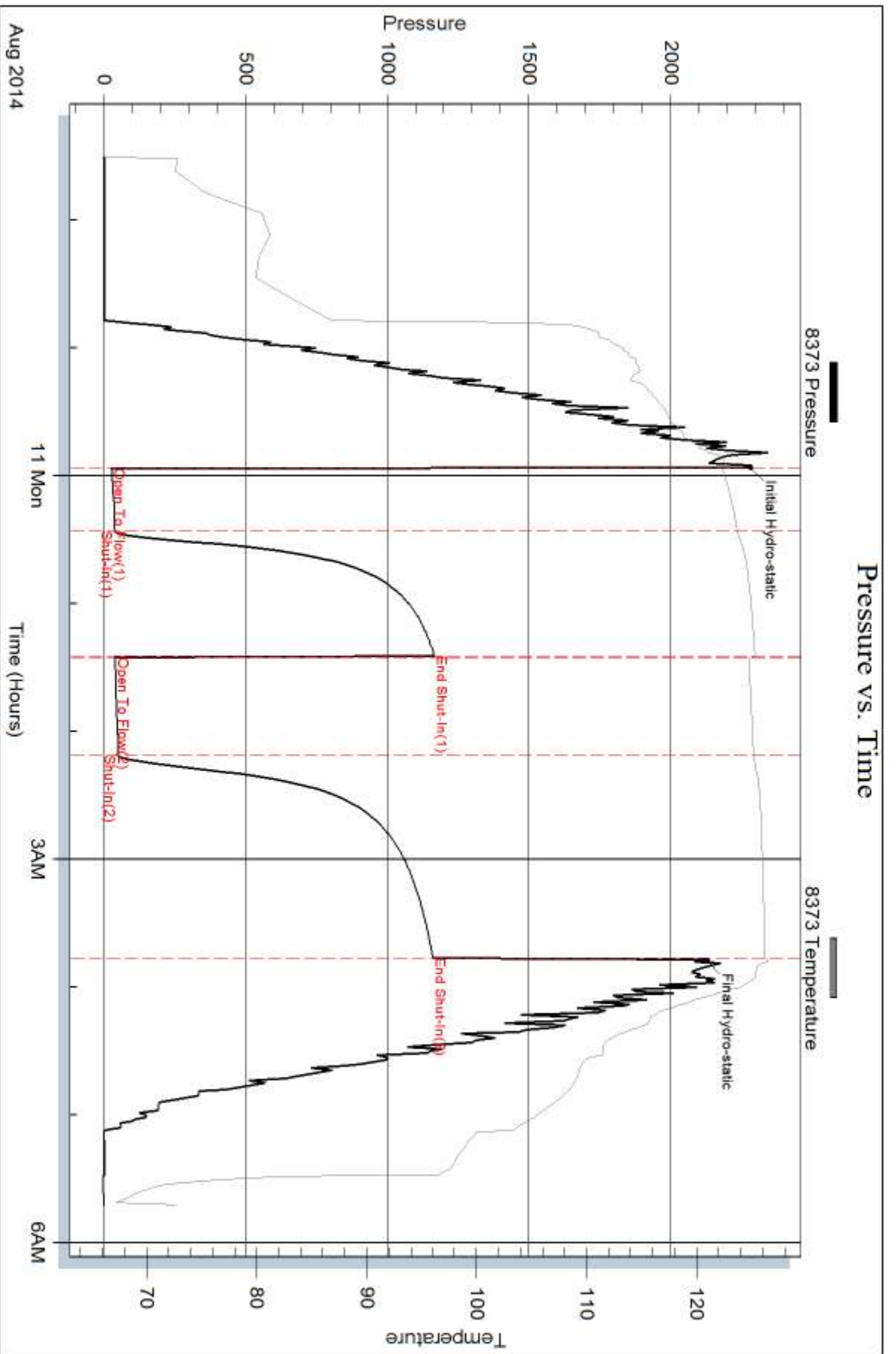
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

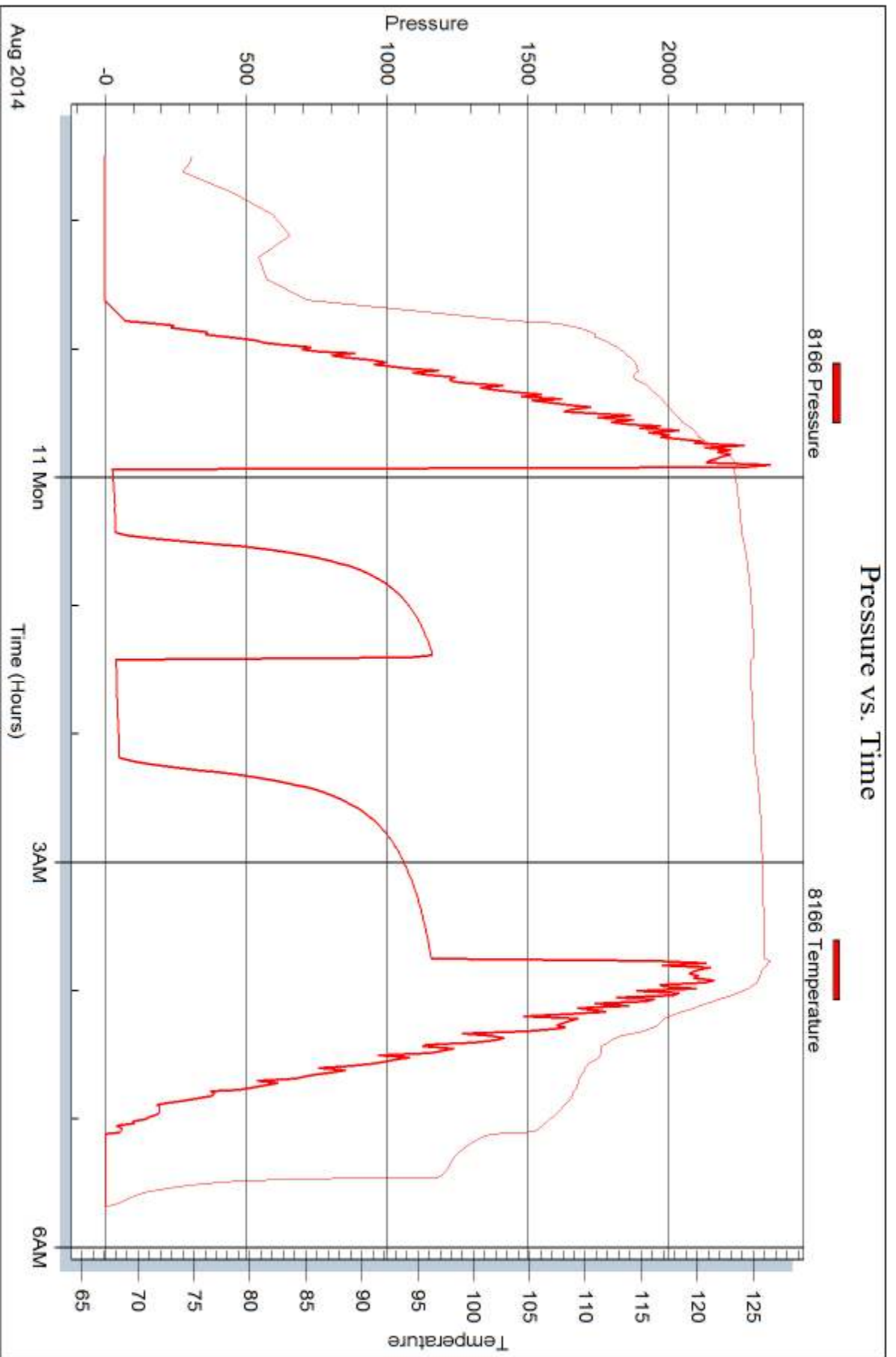


Serial #: 8166

Outside Raymond Oil Company

Michaelis #3

DST Test Number: 4





DRILL STEM TEST REPORT

Prepared For: **Raymond Oil Company**

PO Box 48788
Wichita, KS 67201

ATTN: Kevin Kessler

Michaelis #3

3-14s-32w Logan,KS

Start Date: 2014.08.11 @ 16:50:00

End Date: 2014.08.12 @ 00:33:00

Job Ticket #: 56672 DST #: 5

Trilobite Testing, Inc
1515 Commerce Parkway Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620

Printed: 2014.08.13 @ 10:56:34



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Raymond Oil Company
 PO Box 48788
 Wichita, KS 67201
 ATTN: Kevin Kessler

3-14s-32w Logan, KS

Michaelis #3

Job Ticket: 56672

DST#: 5

Test Start: 2014.08.11 @ 16:50:00

GENERAL INFORMATION:

Formation: **Morrow sand**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 18:59:00

Time Test Ended: 00:33:00

Test Type: Conventional Bottom Hole (Reset)

Tester: Justin Harris

Unit No: 60

Interval: 4520.00 ft (KB) To 4585.00 ft (KB) (TVD)

Reference Elevations: 2885.00 ft (KB)

Total Depth: 4585.00 ft (KB) (TVD)

2874.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Poor

KB to GR/CF: 11.00 ft

Serial #: 8373 Inside

Press@RunDepth: 51.11 psig @ 4521.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.08.11

End Date:

2014.08.12

Last Calib.: 2014.08.12

Start Time: 16:50:05

End Time:

00:32:59

Time On Btm: 2014.08.11 @ 18:58:30

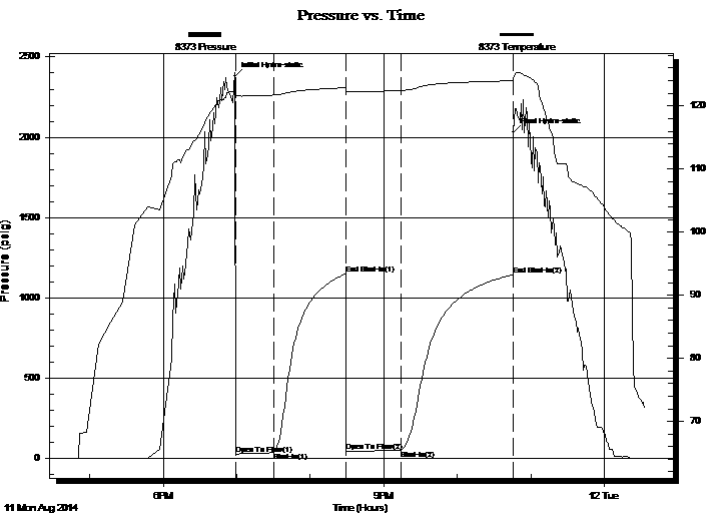
Time Off Btm: 2014.08.11 @ 22:46:00

TEST COMMENT: 30: Weak surface blow died in 14 min.

60: No Return.

45: No Blow .

90: No Return.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2380.10	122.45	Initial Hydro-static
1	28.18	121.38	Open To Flow (1)
32	37.67	121.73	Shut-In(1)
91	1150.38	122.88	End Shut-In(1)
91	46.24	122.39	Open To Flow (2)
136	51.11	122.45	Shut-In(2)
227	1144.89	124.01	End Shut-In(2)
228	2031.77	124.28	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
10.00	mud	0.05

Gas Rates

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

* Recovery from multiple tests



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Raymond Oil Company

3-14s-32w Logan, KS

PO Box 48788
Wichita, KS 67201

Michaelis #3

Job Ticket: 56672

DST#: 5

ATTN: Kevin Kessler

Test Start: 2014.08.11 @ 16:50:00

GENERAL INFORMATION:

Formation: **Morrow sand**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 18:59:00

Time Test Ended: 00:33:00

Test Type: Conventional Bottom Hole (Reset)

Tester: Justin Harris

Unit No: 60

Interval: 4520.00 ft (KB) To 4585.00 ft (KB) (TVD)

Reference Elevations: 2885.00 ft (KB)

Total Depth: 4585.00 ft (KB) (TVD)

2874.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Poor

KB to GR/CF: 11.00 ft

Serial #: 8166 Outside

Press@RunDepth: psig @ 4521.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.08.11

End Date:

2014.08.12

Last Calib.:

2014.08.12

Start Time: 16:50:05

End Time:

00:32:29

Time On Btm:

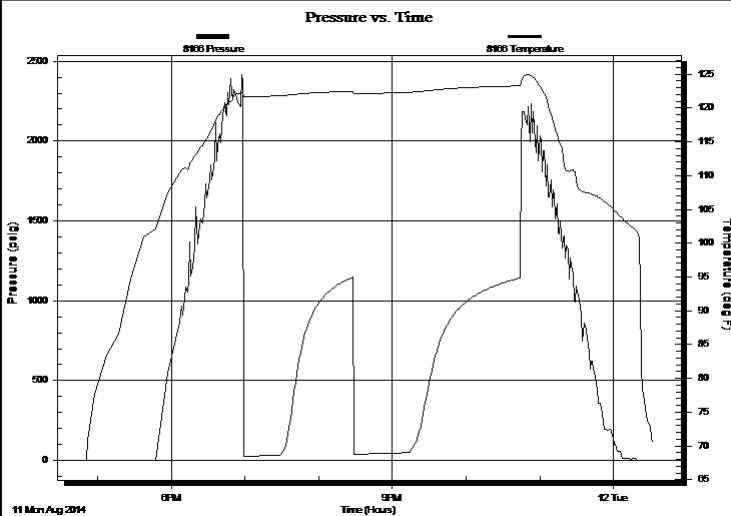
Time Off Btm:

TEST COMMENT: 30: Weak surface blow died in 14 min.

60: No Return.

45: No Blow .

90: No Return.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation

Recovery

Length (ft)	Description	Volume (bbl)
10.00	mud	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 Company

3-14s-32w Logan,KS

PO Box 48788
Wichita, KS 67201

Michaelis #3

Job Ticket: 56672

DST#: 5

ATTN: Kevin Kessler

Test Start: 2014.08.11 @ 16:50:00

Tool Information

Drill Pipe:	Length: 4150.00 ft	Diameter: 3.80 inches	Volume: 58.21 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 30000.00 lb
Drill Collar:	Length: 365.00 ft	Diameter: 2.25 inches	Volume: 1.80 bbl	Weight to Pull Loose: 80000.00 lb
			<u>Total Volume: 60.01 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	23.00 ft			String Weight: Initial 70000.00 lb
Depth to Top Packer:	4520.00 ft			Final 71000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	65.00 ft			
Tool Length:	93.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
------------------	-------------	------------	----------	------------	----------------

Stubb	1.00			4493.00	
Shut In Tool	5.00			4498.00	
Hydraulic tool	5.00			4503.00	
Jars	5.00			4508.00	
Safety Joint	3.00			4511.00	
Packer	5.00			4516.00	28.00 Bottom Of Top Packer
Packer	4.00			4520.00	
Stubb	1.00			4521.00	
Recorder	0.00	8373	Inside	4521.00	
Recorder	0.00	8166	Outside	4521.00	
Perforations	26.00			4547.00	
Change Over Sub	1.00			4548.00	
Drill Pipe	31.00			4579.00	
Change Over Sub	1.00			4580.00	
Bullnose	5.00			4585.00	65.00 Bottom Packers & Anchor

Total Tool Length: 93.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Raymond Oil Company

3-14s-32w Logan,KS

PO Box 48788
Wichita, KS 67201

Michaelis #3

Job Ticket: 56672

DST#: 5

ATTN: Kevin Kessler

Test Start: 2014.08.11 @ 16:50:00

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: 59.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 9.39 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 6500.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
10.00	mud	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 #: 8373

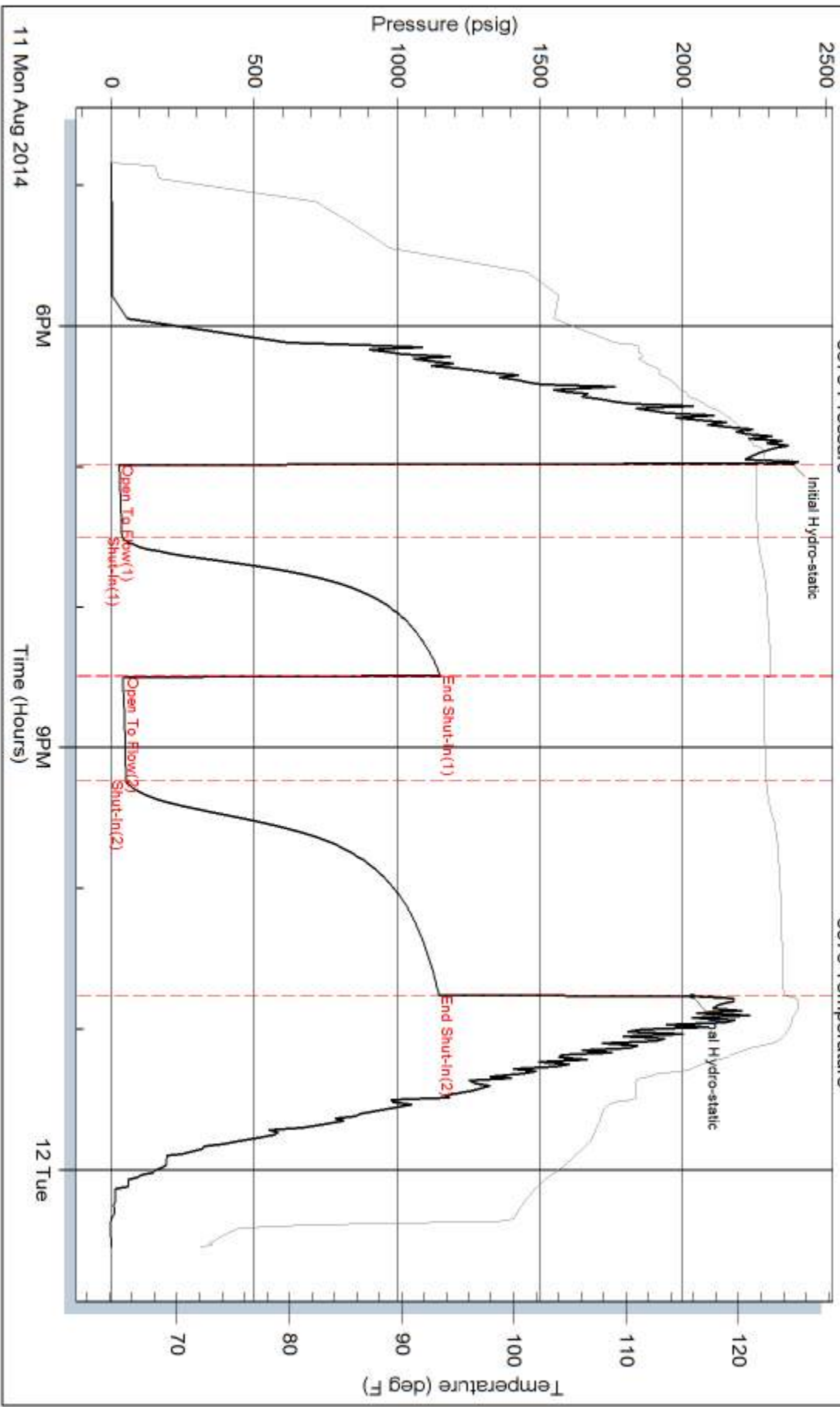
Inside

Raymond Oil Company

Michaelis #3

DST Test Number: 5

Pressure vs. Time



Trilobite Testing, Inc

Ref. No: 56672

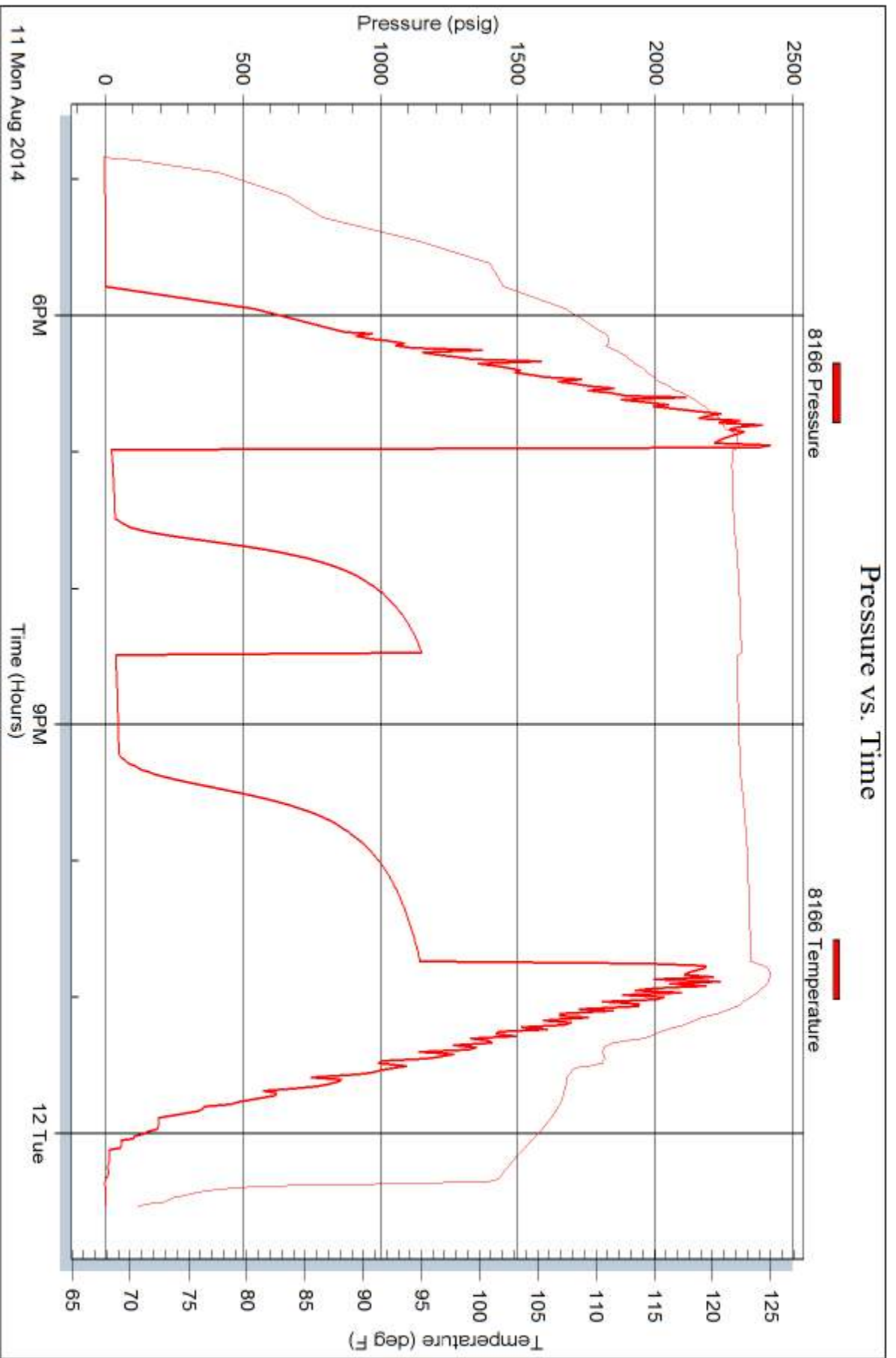
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Serial #: 8166

Outside Raymond Oil Company

Michaelis #3

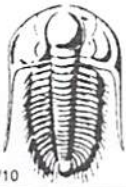
DST Test Number: 5



Triobite Testing, Inc

Ref. No: 56672

Printed: 2014.08.13 @ 10:56:35



TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 59019

Well Name & No. Michaelis #3 Test No. 1 Date 8-7-14
 Company Raymond oil company Elevation 2885 KB 2874 GL
 Address P.O. Box 48788 Wichita, KS 67201
 Co. Rep / Geo. Kevin Kessler Rig H2 #1
 Location: Sec. 3 Twp. 14S Rge. 32W Co. Logan State KS

Interval Tested 3930 3960 Zone Tested Lmsing 35
 Anchor Length 30 Drill Pipe Run 3552 Mud Wt. 8.8
 Top Packer Depth 3925 Drill Collars Run 365 Vis 50
 Bottom Packer Depth 3930 Wt. Pipe Run --- WL 7.2
 Total Depth 3960 Chlorides 3000 ppm System LCM 1

Blow Description IF: BoB in 20 min.
FS: NO return,
FF: BoB in 40 min.
FS: No return,

Rec	Feet of	%gas	%oil	%water	%mud
<u>200</u>	<u>MW</u>		<u>50</u>	<u>50</u>	
<u>365</u>	<u>MLW</u>		<u>80</u>	<u>20</u>	

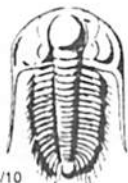
Rec Total 565 BHT 120 Gravity --- API RW .34 @ 78 °F Chlorides 18,000 ppm

(A) Initial Hydrostatic 1857 Test 1150 T-On Location 00:30
 (B) First Initial Flow 24 Jars 250 T-Started 2:39
 (C) First Final Flow 190 Safety Joint 75 T-Open 5:02
 (D) Initial Shut-In 1076 Circ Sub N/C T-Pulled 8:47
 (E) Second Initial Flow 196 Hourly Standby 2- ??? T-Out 11:20
 (F) Second Final Flow 291 Mileage 64- 99.20
 (G) Final Shut-In 1070 Sampler
 (H) Final Hydrostatic 1862 Straddle Ruined Shale Packer
 Shale Packer Ruined Packer
 Extra Packer Extra Copies

Initial Open 30
 Initial Shut-In 60
 Final Flow 45
 Final Shut-In 90
 Accessibility 150
 Sub Total 1724.20
 Sub Total 0
 Total _____
 MP/DST Disc't _____

Approved By Kevin Kessler Our Representative [Signature]

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TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 59020

Well Name & No. Michaelis #3 Test No. 2 Date 8-8-14
 Company Raymond oil company Elevation 2885 KB 2874 GL
 Address _____
 Co. Rep / Geo. Kevin Kessler Rig H2#1
 Location: Sec. 3 Twp. 143 Rge. 32W Co. Logan State KS

Interval Tested 3990 4030 Zone Tested Lansing 70-90
 Anchor Length 40 Drill Pipe Run 3811 Mud Wt. 9.1
 Top Packer Depth 3985 Drill Collars Run 365 Vis 54
 Bottom Packer Depth 3990 Wt. Pipe Run _____ WL 8.0
 Total Depth 4030 Chlorides 3200 ppm System LCM 1

Blow Description IF: BoB in 2 1/2 min.
ISI No return,
FFI BoB in 4 min,
FS: No return.

Rec	Feet of	%gas	%oil	%water	%mud
<u>140</u>	<u>MCW</u>			<u>60</u>	<u>40</u>
<u>285</u>	<u>MCW</u>			<u>90</u>	<u>10</u>
<u>1505</u>	<u>water</u>			<u>100</u>	
____	____				
____	____				

Rec Total 1930 BHT 120 Gravity _____ API RW 14 @ 80 ° F Chlorides 47,000 ppm

(A) Initial Hydrostatic <u>2081</u>	<input checked="" type="checkbox"/> Test <u>1250</u>	T-On Location <u>1:00</u>
(B) First Initial Flow <u>248</u>	<input checked="" type="checkbox"/> Jars <u>250</u>	T-Started <u>2:12</u>
(C) First Final Flow <u>583</u>	<input checked="" type="checkbox"/> Safety Joint <u>75</u>	T-Open <u>4:04</u>
(D) Initial Shut-In <u>1103</u>	<input checked="" type="checkbox"/> Circ Sub <u>NIL</u>	T-Pulled <u>7:49</u>
(E) Second Initial Flow <u>574</u>	<input checked="" type="checkbox"/> Hourly Standby _____	T-Out <u>10:00</u>
(F) Second Final Flow <u>888</u>	<input checked="" type="checkbox"/> Mileage <u>64</u> - 99.20	Comments _____
(G) Final Shut-In <u>1104</u>	<input type="checkbox"/> Sampler _____	_____
(H) Final Hydrostatic <u>1849</u>	<input type="checkbox"/> Straddle _____	<input type="checkbox"/> Ruined Shale Packer _____

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

Shale Packer _____
 Extra Packer _____
 Extra Recorder _____
 Day Standby _____
 Accessibility 150

Sub Total 1824.20

Approved By Kevin Kessler Our Representative [Signature]

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TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 56670

4/10

Well Name & No. Michaelis #3 Test No. 3 Date 08-09-14
 Company Raymond oil company Elevation 2885 KB 2874 GL
 Address P.O. Box 48788 Wichita, ks 67201
 Co. Rep / Geo. Kiven Kessler Rig #12 #1
 Location: Sec. 3 Twp. 17S Rge. 32W Co. Logan State KS

Interval Tested 4185 4210 Zone Tested Lansing 220' "L"
 Anchor Length 25' Drill Pipe Run 3804 Mud Wt. 9.4
 Top Packer Depth 4180 Drill Collars Run 365 Vis 55
 Bottom Packer Depth 4185 Wt. Pipe Run Ø WL 10.4
 Total Depth 4210 Chlorides 6400 ppm System LCM 1

Blow Description 30 weak surface Blow Build to 1 1/2"
60 No Return
45 No Blow
90 No Return

Rec	Feet of	%gas	%oil	%water	%mud
<u>95</u>	<u>Mud</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 95 BHT 123 Gravity — API RW — @ — ° F Chlorides — ppm

(A) Initial Hydrostatic <u>2155</u>	<input checked="" type="checkbox"/> Test <u>1250</u>	T-On Location <u>6:35</u>
(B) First Initial Flow <u>23</u>	<input checked="" type="checkbox"/> Jars <u>250</u>	T-Started <u>7:33</u>
(C) First Final Flow <u>47</u>	<input checked="" type="checkbox"/> Safety Joint <u>75</u>	T-Open <u>10:02</u>
(D) Initial Shut-In <u>643</u>	<input checked="" type="checkbox"/> Circ Sub <u>N/C</u>	T-Pulled <u>13:49</u>
(E) Second Initial Flow <u>53</u>	<input type="checkbox"/> Hourly Standby	T-Out <u>15:38</u>
(F) Second Final Flow <u>67</u>	<input checked="" type="checkbox"/> Mileage <u>64 RT</u> 99.20	Comments
(G) Final Shut-In <u>493</u>	<input type="checkbox"/> Sampler	
(H) Final Hydrostatic <u>1883</u>	<input type="checkbox"/> Straddle	<input type="checkbox"/> Ruined Shale Packer

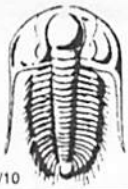
Initial Open 30
 Initial Shut-In 40
 Final Flow 45
 Final Shut-In 90

Shale Packer
 Extra Packer
 Extra Recorder
 Day Standby
 Accessibility 150
 Sub Total 1824.20

T-On Location 6:35
 T-Started 7:33
 T-Open 10:02
 T-Pulled 13:49
 T-Out 15:38
 Comments
 Ruined Packer
 Extra Copies
 Sub Total 0
 Total 1824.20
 MP/DST Disc't

Approved By Kiven Kessler Our Representative [Signature]

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TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 56671

Well Name & No. Michaelis #3 Test No. 4 Date 08-10-14
 Company Raymond oil company Elevation 2885 KB 2874 GL
 Address P.O. Box 48788 Wichita, KS 67201
 Co. Rep / Geo. Kevin Kessler Rig #2 #1
 Location: Sec. 3 Twp. 14S Rge. 32W Co. Igan State KS

Interval Tested 4440 4530 Zone Tested Cherokee/Johnson
 Anchor Length 90 Drill Pipe Run 4058 Mud Wt. 9.2
 Top Packer Depth 4435 Drill Collars Run 365 Vis 54
 Bottom Packer Depth 4440 Wt. Pipe Run Ø WL 8.8
 Total Depth 4530 Chlorides 4000 ppm System LCM 2

Blow Description 30 1/2 Blow Died in 20min
40 No Return
45 No Blow
90 No Return

Rec	Feet of	%gas	%oil	%water	%mud
<u>15</u>	<u>mud</u>				
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 15 BHT 124 Gravity — API RW — @ — °F Chlorides — ppm

(A) Initial Hydrostatic	<u>2278</u>	<input checked="" type="checkbox"/> Test	<u>1250</u>	T-On Location	<u>21:00</u>
(B) First Initial Flow	<u>27</u>	<input checked="" type="checkbox"/> Jars	<u>250</u>	T-Started	<u>21:30</u>
(C) First Final Flow	<u>37</u>	<input checked="" type="checkbox"/> Safety Joint	<u>75</u>	T-Open	<u>23:57</u>
(D) Initial Shut-In	<u>1164</u>	<input checked="" type="checkbox"/> Circ Sub	<u>N/C</u>	T-Pulled	<u>3:42</u>
(E) Second Initial Flow	<u>39</u>	<input type="checkbox"/> Hourly Standby		T-Out	<u>5:42</u>
(F) Second Final Flow	<u>49</u>	<input checked="" type="checkbox"/> Mileage	<u>64 BT</u> 99.20	Comments	
(G) Final Shut-In	<u>1158</u>	<input type="checkbox"/> Sampler			
(H) Final Hydrostatic	<u>2124</u>	<input type="checkbox"/> Straddle		<input type="checkbox"/> Ruined Shale Packer	

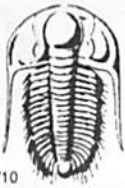
Initial Open 30
 Initial Shut-In 60
 Final Flow 45
 Final Shut-In 90

<input type="checkbox"/> Shale Packer	<input type="checkbox"/> Extra Packer	<input type="checkbox"/> Extra Recorder	<input type="checkbox"/> Day Standby	<input checked="" type="checkbox"/> Accessibility	Sub Total
			<u>1d 4.25h</u>	<u>150</u>	<u>1824.20</u>

Sub Total 1824.20

Approved By [Signature] Our Representative [Signature]

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TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. **56672**

4/10

Well Name & No. Michaelis #3 Test No. 5 Date 08-11-14
 Company Raymond oil company Elevation 2885 KB 2874 GL
 Address P.O. Box 48788 Wichita, KS 67201
 Co. Rep / Geo. Kiven Kessler Rig #2 #1
 Location: Sec. 3 Twp. 14s Rge. 32w Co. logan State KS

Interval Tested 4520 4585 Zone Tested Marrow Sand
 Anchor Length 65 Drill Pipe Run 4150 Mud Wt. 9.4
 Top Packer Depth 4515 Drill Collars Run 365 Vis .59
 Bottom Packer Depth 4520 Wt. Pipe Run Ø WL 9.6
 Total Depth 4585 Chlorides 4500 ppm System LCM 2
 Blow Description 30 Weak surface Blow Died in 14 min
60 No Return
45 No Blow
90 No Return

Rec	Feet of	%gas	%oil	%water	%mud
<u>10</u>	<u>mud</u>				

Rec Total 10 BHT 124 Gravity — API RW — @ — °F Chlorides — ppm

(A) Initial Hydrostatic <u>2380</u>	<input checked="" type="checkbox"/> Test <u>1250</u>	T-On Location <u>16:00</u>
(B) First Initial Flow <u>28</u>	<input checked="" type="checkbox"/> Jars <u>250</u>	T-Started <u>14:50</u>
(C) First Final Flow <u>38</u>	<input checked="" type="checkbox"/> Safety Joint <u>75</u>	T-Open <u>19:00</u>
(D) Initial Shut-In <u>1150</u>	<input checked="" type="checkbox"/> Circ Sub <u>N/C</u>	T-Pulled <u>22:45</u>
(E) Second Initial Flow <u>44</u>	<input type="checkbox"/> Hourly Standby	T-Out <u>00:33</u>
(F) Second Final Flow <u>51</u>	<input checked="" type="checkbox"/> Mileage <u>64 BT</u> 99.20	Comments <u>8-12-14</u>
(G) Final Shut-In <u>1145</u>	<input type="checkbox"/> Sampler 99.20	<u>Wait on logger From 6pm</u>
(H) Final Hydrostatic <u>2032</u>	<input type="checkbox"/> Straddle	<u>Geo said pick up tool at 6pm</u>

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

Shale Packer
 Extra Packer
 Extra Recorder
 Day Standby
 Accessibility 150
 Sub Total 1923.40

Ruined Shale Packer
 Ruined Packer
 Extra Copies
 Sub Total 0
 Total 1923.40
 MP/DST Disc't _____

Approved By Karen Kessler Our Representative [Signature]

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