

Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

Form ACO-1

January 2018

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

Gas DH EOR

OG GSW

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 EOR Conv. to SWD

Plug Back Liner Conv. to GSW Conv. to Producer

Commingled Permit #: _____

Dual Completion Permit #: _____

SWD Permit #: _____

EOR Permit #: _____

GSW Permit #: _____

Spud Date or Date Reached TD Completion Date or Recompletion Date

API No.: _____

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 Drill Stem Tests Received

Geologist Report / Mud Logs Received

UIC Distribution

ALT I II III Approved by: _____ Date: _____

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 Geologist Report / Mud Logs <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				

1. Did you perform a hydraulic fracturing treatment on this well? Yes No *(If No, skip questions 2 and 3)*
2. Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons? Yes No *(If No, skip question 3)*
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)*

Date of first Production/Injection or Resumed Production/Injection:	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> <i>(Submit ACO-4)</i>	PRODUCTION INTERVAL: Top Bottom
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Shots Per Foot	Perforation Top	Perforation Bottom	Bridge Plug Type	Bridge Plug Set At	Acid, Fracture, Shot, Cementing Squeeze Record <i>(Amount and Kind of Material Used)</i>

TUBING RECORD:	Size:	Set At:	Packer At:	
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PRESSURE PUMPING LLC
 PO Box 884, Chanute, KS 66720
 620-431-9210 or 800-467-8676

TICKET NUMBER 55007
 LOCATION Oakley Ks
 FOREMAN Jerry Y

FIELD TICKET & TREATMENT REPORT
CEMENT

Ks

DATE	CUSTOMER #	WELL NAME & NUMBER	SECTION	TOWNSHIP	RANGE	COUNTY
2-13-18	3613	Donna #50	21	225	33w	Finney
CUSTOMER			TRUCK #			
MAILING ADDRESS			DRIVER			
CITY			TRUCK #			
STATE			DRIVER			
ZIP CODE			TRUCK #			

JOB TYPE <u>long string</u>	HOLE SIZE <u>7 7/8</u>	HOLE DEPTH <u>4825</u>	CASING SIZE & WEIGHT <u>5 1/2 15.5#</u>
CASING DEPTH <u>4847</u>	DRILL PIPE	TUBING	OTHER
SLURRY WEIGHT <u>14.2</u>	SLURRY VOL <u>1.42</u>	WATER gal/sk	CEMENT LEFT in CASING <u>30'</u>
DISPLACEMENT <u>114 bbl</u>	DISPLACEMENT PSI	MIX PSI	RATE

REMARKS: Salty water & rig up on WU 12 run float equipment. cement on 2, 3, 4, 5, 7, 9, 11, 13, 15, 17, 19, 21' basket on bottom of 2 run casing to bottom pump ball thru & vis ↓ 40' pump 500gal/mud flush with 566/H₂O spacers mix 195 sks Thixoblad III 5# Kolsal 5# Kolsal 5# Kolsal release plug clean pump lines displace with 115 bbl flush water final lift 1500 # Plug logged @ 2000 & released back & float held

30 sks Rothole

Thank you Jerry & crew

ACCOUNT CODE	QUANTITY or UNITS	DESCRIPTION of SERVICES or PRODUCT	UNIT PRICE	TOTAL
CE0453	1	PUMP CHARGE	2800.00	2800.00
CE0002	65	MILEAGE	7.15	464.75
CE0710	10.58	for mileage delivery	1.75	1203.48
CC5862	225 sks	Thixoblad III	27.00	6075.00
CC6077	1125 #	Kolsal	.50	562.50
CC6125	500gal	mud flush	.65	325.00
CP8485	1	5 1/2 AF4 float shoe	585.00	585.00
CP8254	1	5 1/2 Latchdown gssy	400.00	400.00
CP8554	12	5 1/2 centralizers	81.00	972.00
CP8629	1	5 1/2 basket	385.00	385.00
CE5326	160#	salt	NC	NC
			subtotal	13772.73
			-308	4131.82
			subtotal	9640.91
			SALES TAX	
			ESTIMATED TOTAL	

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.

WYOMING CASING SERVICE, INC.



PO Box 815 ~ (620) 793-9630

Great Bend, KS 67530

FIELD TICKET

NO. 10- 10141 -1-17

Casing Running Service

BID

Company: Hartman Oil Date: 02-13-2018
 Billing Address: 10500 C BERKELEY SQ PKWY #100 Rig No. WJ12
WICHITA, KS 67206 Co. Rep _____
 Well Name: Damco #50 Sec _____ Twp _____ Rge _____
 State: KANSAS County: Finney

Quantity	Size	Description of Services	Unit Price	Total
107	15.504in	Furnished tools and crew to (run)/ pull <u>4817</u> feet of <u>5 1/2</u> " casing @ \$ <u>.50</u> per ft	.50 per ft	2408.50
ALL	5 1/2	Tools on Location	Out time	\$ 220.00
1		Transportation Fee: <u>1</u> # of trucks	1 hr rate	\$ 300.00
1		Pipe Dope	\$ 55.00	\$ 55.00
		Hours beyond Footage		
		Miscellaneous Charges per Job		
TOTAL:				\$ 2983.50

Left Shop:	<u>5:47 am</u>	Start Run Time:	<u>2:44 pm</u>		
Arrived at Location:	<u>8:36 am</u>	Finished Time:	<u>4:47 pm</u>		
Rig Up Start Time:	<u>LLDP @ 10:13 am</u>	Left Location:		Start Date:	<u>02-13-18</u>
Rig Up End Time:	<u>Finney LLDP @ 1:01 pm</u>	Arrived at Shop:		End Date:	<u>02-13-18</u>

WYOMING CASING CREW		ACCIDENT		COMPANY INFORMATION
		NO	YES	
Operator	<u>JOSEPH KELSO</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Stabber	<u>HEATH MIDDLETON</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Hand	<u>THOMAS WESTERMAN</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Hand	<u>CAIN SCHL</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Hand		<input type="checkbox"/>	<input type="checkbox"/>	
Hand		<input type="checkbox"/>	<input type="checkbox"/>	
Hand		<input type="checkbox"/>	<input type="checkbox"/>	

APPROVED BY: [Signature] DATE: _____

Thank You for your Business!



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

9979
9875
TICKET NUMBER 55037
LOCATION Oakley KS
FOREMAN Miles Shaw

FIELD TICKET & TREATMENT REPORT
CEMENT

Invoice #812317 KS

DATE	CUSTOMER #	WELL NAME & NUMBER	SECTION	TOWNSHIP	RANGE	COUNTY
2-2-18	3613	Damm #50	21	22 S	33 W	Lincoln
CUSTOMER Hartman Oil			TRUCK # DRIVER TRUCK # DRIVER			
MAILING ADDRESS 10500 E. Berkley Square Pkwy., Ste. 100			753 Travis W			
CITY Wichita			772/T-127 Paul W			
STATE KS			530/T-129 Harold B			
ZIP CODE 67206						

JOB TYPE Surface HOLE SIZE 12 7/8" HOLE DEPTH 1800' CASING SIZE & WEIGHT 8 5/8" 2.3 #
CASING DEPTH 1800' DRILL PIPE _____ TUBING _____ OTHER _____
SLURRY WEIGHT 12.7/14.8 SLURRY VOL 1.7/1.36 WATER gal/sk _____ CEMENT LEFT In CASING 41'
DISPLACEMENT 112 bbls DISPLACEMENT PSI 500/1000 MIX PSI _____ RATE _____

REMARKS: Safety meeting and Rig up on well drilling Rig #12. Run in casing Centralizer
on Jnts 2, 20, 40 Circulate casing for 20 min mix last 5x 6 3/8" 6.8 gal
3% calcium treated with 150 sx 3 3/8" calcium 28 gal Shut down (for release plug
displace 112 Bbls water left pressure Plus did land @ 1000 PSI
Cement did Circulate

Stops: 1 Bl
1.000 psi: land

Thanks Miles & crew

ACCOUNT CODE	QUANTITY or UNITS	DESCRIPTION of SERVICES or PRODUCT	UNIT PRICE	TOTAL
CE0451	1	PUMP CHARGE	1900.00	1900.00
CE0002	65	MILEAGE	7.15	464.75
CE0710	35.65 TONS	Ton M. base d pliers	1.75	4055.18
CC5828	650 SX	Lite Weight Blend II	20.50	13325.00
CC5871	150 SX	Surface blend II	24.00	3600.00
CC5324	100 #	Salt	N/C	N/C
CC6075	163 #	Collo Hako / Roseal	3.00	489.00
CP8191	1	8 5/8" Top Rubber Plug	185.00	185.00
CP8280	1	8 5/8" Guide Shoe	540.00	540.00
CP8435	1	8 5/8" AF Insert / Flange style	380.00	380.00
CP8556	3	8 5/8" Centralizer	110.00	330.00
			Subtotal	25268.93
		less 306 d	Account	7580.68
			Subtotal	17688.26
			SALES TAX	1009.36
			ESTIMATED	
			TOTAL	18,697.62

Ravin 3737

AUTHORIZATION [Signature] TITLE Toolpusher DATE 2-2-18

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: **Hartman Oil Co.Inc.**

10500 E Berkeley
SQ PKWY STE 100
Wichita KS 67206

ATTN: Kitt Noah

Damme #50

21-22s-33w Finney,KS

Start Date: 2018.02.06 @ 19:09:15

End Date: 2018.02.07 @ 03:08:15

Job Ticket #: 64424 DST #: 1

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

Printed: 2018.02.12 @ 16:45:27



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Hartman Oil Co. Inc.

21-22s-33w Finney, KS

10500 E Berkeley
SQ PKWY STE 100
Wichita KS 67206
ATTN: Kitt Noah

Damme #50

Job Ticket: 64424

DST#: 1

Test Start: 2018.02.06 @ 19:09:15

GENERAL INFORMATION:

Formation: **LKC H**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 21:42:30

Time Test Ended: 03:08:15

Test Type: Conventional Bottom Hole (Initial)

Tester: Mike Roberts

Unit No: 81

Interval: 4037.00 ft (KB) To 4060.00 ft (KB) (TVD)

Reference Elevations: 2893.00 ft (KB)

Total Depth: 4060.00 ft (KB) (TVD)

2888.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 5.00 ft

Serial #: 8374 Outside

Press@RunDepth: 100.12 psig @ 4038.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2018.02.06

End Date:

2018.02.07

Last Calib.:

2018.02.07

Start Time: 19:09:15

End Time:

03:08:15

Time On Btm:

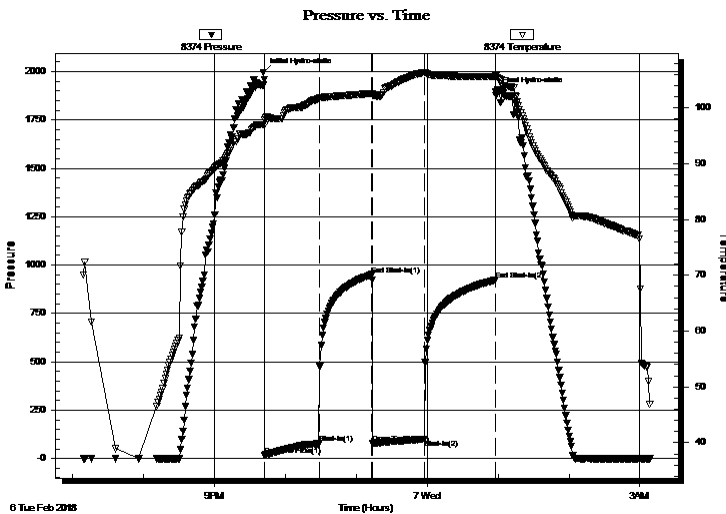
2018.02.06 @ 21:41:30

Time Off Btm:

2018.02.07 @ 00:58:00

TEST COMMENT: IF: Built to 6" blow (diesel)
IS: No return blow
FF: Built to 5" blow (diesel)
FS: No return blow

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1995.77	97.06	Initial Hydro-static
1	15.29	96.99	Open To Flow (1)
47	76.97	101.63	Shut-In(1)
92	950.57	102.56	End Shut-In(1)
92	78.11	102.31	Open To Flow (2)
136	100.12	106.36	Shut-In(2)
197	923.00	105.63	End Shut-In(2)
197	1893.95	105.92	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
120.00	w cm 20%w 80% m (collars)	0.59
72.00	m 100% m	1.00

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Hartman Oil Co.Inc.

21-22s-33w Finney,KS

10500 E Berkeley
SQ PKWY STE 100
Wichita KS 67206
ATTN: Kitt Noah

Damme #50

Job Ticket: 64424

DST#: 1

Test Start: 2018.02.06 @ 19:09:15

Tool Information

Drill Pipe:	Length: 3894.00 ft	Diameter: 3.80 inches	Volume: 54.62 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:	20000.00 lb
Drill Collar:	Length: 121.00 ft	Diameter: 2.25 inches	Volume: 0.60 bbl	Weight to Pull Loose:	70000.00 lb
			<u>Total Volume: 55.22 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	6.00 ft			String Weight: Initial	48000.00 lb
Depth to Top Packer:	4037.00 ft			Final	48000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	23.00 ft				
Tool Length:	51.00 ft				
Number of Packers:	2	Diameter: 7.85 inches			
Tool Comments:					

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			4010.00	
Shut In Tool	5.00			4015.00	
Hydraulic tool	5.00			4020.00	
Jars	5.00			4025.00	
Safety Joint	3.00			4028.00	
Packer	5.00			4033.00	28.00 Bottom Of Top Packer
Packer	4.00			4037.00	
Stubb	1.00			4038.00	
Recorder	0.00	8647	Inside	4038.00	
Recorder	0.00	8374	Outside	4038.00	
Perforations	17.00			4055.00	
Bullnose	5.00			4060.00	23.00 Bottom Packers & Anchor

Total Tool Length: 51.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Hartman Oil Co.Inc.

21-22s-33w Finney,KS

10500 E Berkeley
SQ PKWY STE 100
Wichita KS 67206
ATTN: Kitt Noah

Damme #50

Job Ticket: 64424

DST#: 1

Test Start: 2018.02.06 @ 19:09:15

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:

22000 ppm

Viscosity: 48.00 sec/qt

Cushion Volume:

bbf

Water Loss: 7.14 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 2500.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbf
120.00	w cm 20%w 80%m (collars)	0.590
72.00	m 100%m	1.001

Total Length: 192.00 ft Total Volume: 1.591 bbf

Num Fluid Samples: 0

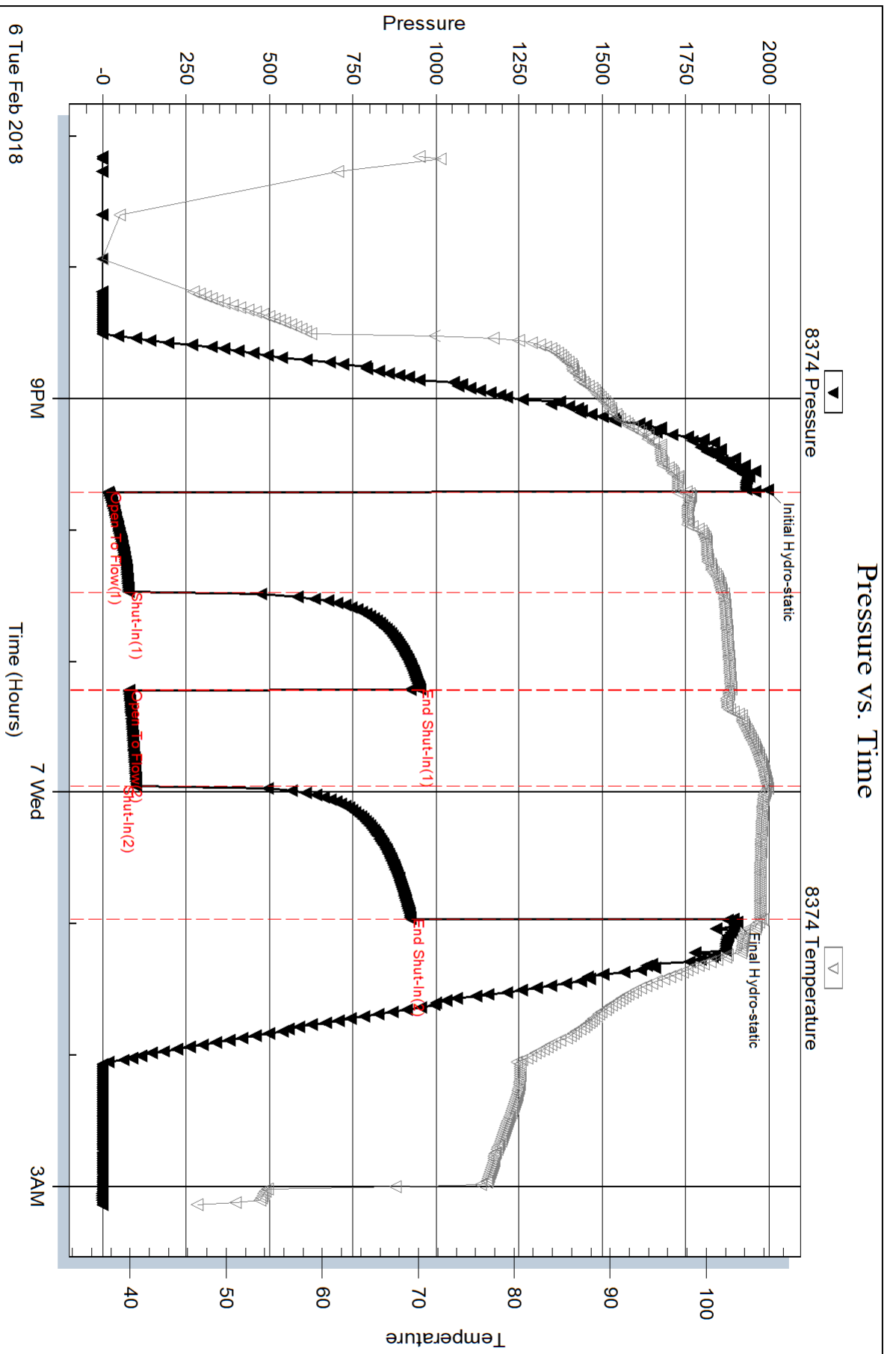
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW= .384@ 61.7=22,000 ppm



Serial #: 8647

Inside

Hartman Oil Co. Inc.

Damme #50

DST Test Number: 1



Trilobite Testing, Inc

Ref. No: 64424

Printed: 2018.02.12 @ 16:45:29



DRILL STEM TEST REPORT

Prepared For: **Hartman Oil Co.Inc.**

10500 E Berkeley
SQ PKWY STE 100
Wichita KS 67206

ATTN: Kitt Noah

Damme #50

21-22s-33w Finney,KS

Start Date: 2018.02.08 @ 10:37:15

End Date: 2018.02.08 @ 17:35:30

Job Ticket #: 64425 DST #: 2

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

Printed: 2018.02.12 @ 16:44:46



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Hartman Oil Co. Inc.

10500 E Berkeley
SQ PKWY STE 100
Wichita KS 67206
ATTN: Kitt Noah

21-22s-33w Finney, KS

Damme #50

Job Ticket: 64425

DST#: 2

Test Start: 2018.02.08 @ 10:37:15

GENERAL INFORMATION:

Formation: **Altamont A-B**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 12:43:00

Time Test Ended: 17:35:30

Test Type: Conventional Bottom Hole (Reset)

Tester: Mike Roberts

Unit No: 81

Interval: 4300.00 ft (KB) To 4371.00 ft (KB) (TVD)

Total Depth: 4371.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 2893.00 ft (KB)

2888.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 8647

Inside

Press@RunDepth: 80.46 psig @ 4336.00 ft (KB)

Start Date: 2018.02.08

End Date:

2018.02.08

Start Time: 10:37:15

End Time:

17:35:30

Capacity: 8000.00 psig

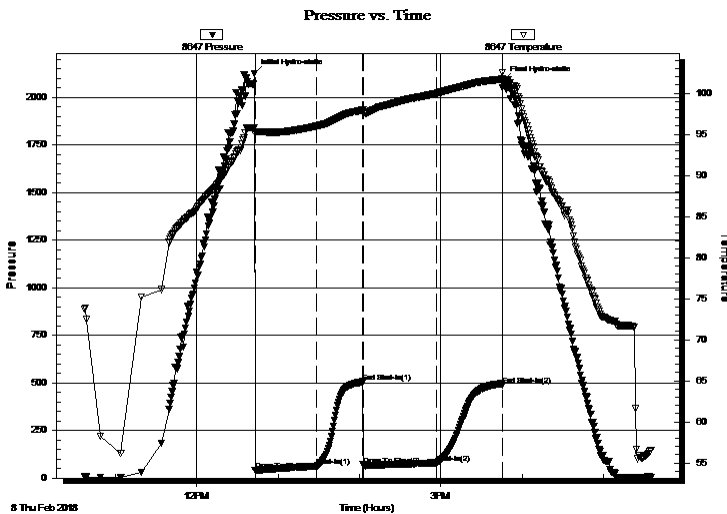
Last Calib.: 2018.02.08

Time On Btm: 2018.02.08 @ 12:42:45

Time Off Btm: 2018.02.08 @ 15:46:00

TEST COMMENT: IF: Built to 2" blow
IS: No return blow
FF: Built to 1 1/2" blow
FS: No return blow

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2127.01	95.78	Initial Hydro-static
1	40.20	95.12	Open To Flow (1)
46	61.70	96.01	Shut-In(1)
80	505.80	97.95	End Shut-In(1)
80	70.14	97.76	Open To Flow (2)
134	80.46	99.99	Shut-In(2)
183	489.83	101.71	End Shut-In(2)
184	2089.04	101.68	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
70.00	ocm 5% o 95% m	0.34

Gas Rates

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

* Recovery from multiple tests



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Hartman Oil Co.Inc.

21-22s-33w Finney,KS

10500 E Berkeley
SQ PKWY STE 100
Wichita KS 67206
ATTN: Kitt Noah

Damme #50

Job Ticket: 64425

DST#: 2

Test Start: 2018.02.08 @ 10:37:15

Tool Information

Drill Pipe:	Length: 4172.00 ft	Diameter: 3.80 inches	Volume: 58.52 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:	20000.00 lb
Drill Collar:	Length: 121.00 ft	Diameter: 2.25 inches	Volume: 0.60 bbl	Weight to Pull Loose:	70000.00 lb
			<u>Total Volume: 59.12 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	21.00 ft			String Weight: Initial	52000.00 lb
Depth to Top Packer:	4300.00 ft			Final	53000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	71.00 ft				
Tool Length:	99.00 ft				
Number of Packers:	2	Diameter: 7.85 inches			
Tool Comments:					

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			4273.00	
Shut In Tool	5.00			4278.00	
Hydraulic tool	5.00			4283.00	
Jars	5.00			4288.00	
Safety Joint	3.00			4291.00	
Packer	5.00			4296.00	28.00 Bottom Of Top Packer
Packer	4.00			4300.00	
Stubb	1.00			4301.00	
Perforations	2.00			4303.00	
Change Over Sub	1.00			4304.00	
Drill Pipe	31.00			4335.00	
Change Over Sub	1.00			4336.00	
Recorder	0.00	8647	Inside	4336.00	
Recorder	0.00	8374	Outside	4336.00	
Perforations	30.00			4366.00	
Bullnose	5.00			4371.00	71.00 Bottom Packers & Anchor
Total Tool Length:	99.00				



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Hartman Oil Co.Inc.

21-22s-33w Finney,KS

10500 E Berkeley
SQ PKWY STE 100
Wichita KS 67206
ATTN: Kitt Noah

Damme #50

Job Ticket: 64425

DST#: 2

Test Start: 2018.02.08 @ 10:37:15

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: 48.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.95 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 bbl
70.00	ocm 5% o 95% m	0.344

Total Length: 70.00 ft Total Volume: 0.344 bbl

Num Fluid Samples: 0

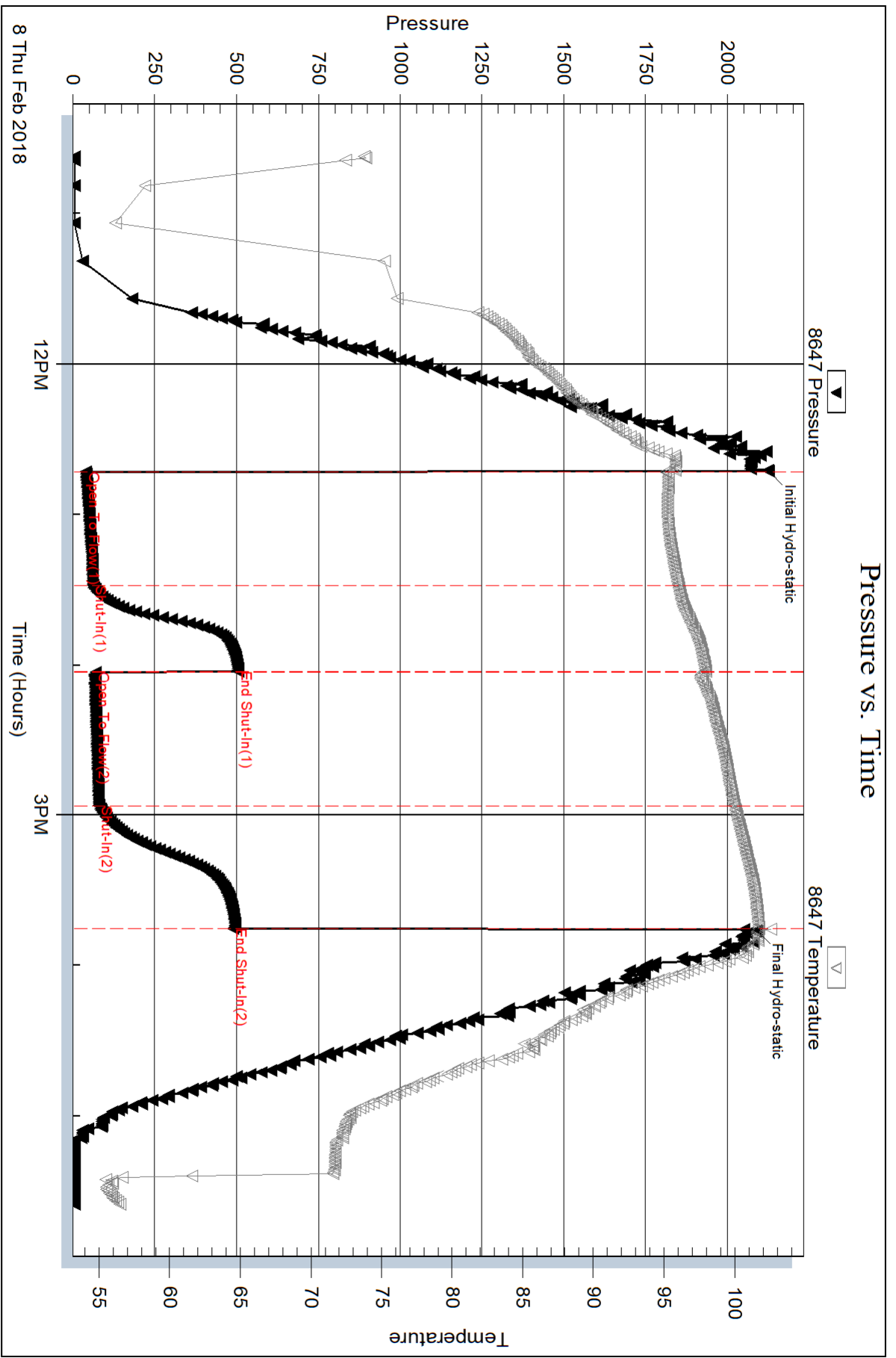
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

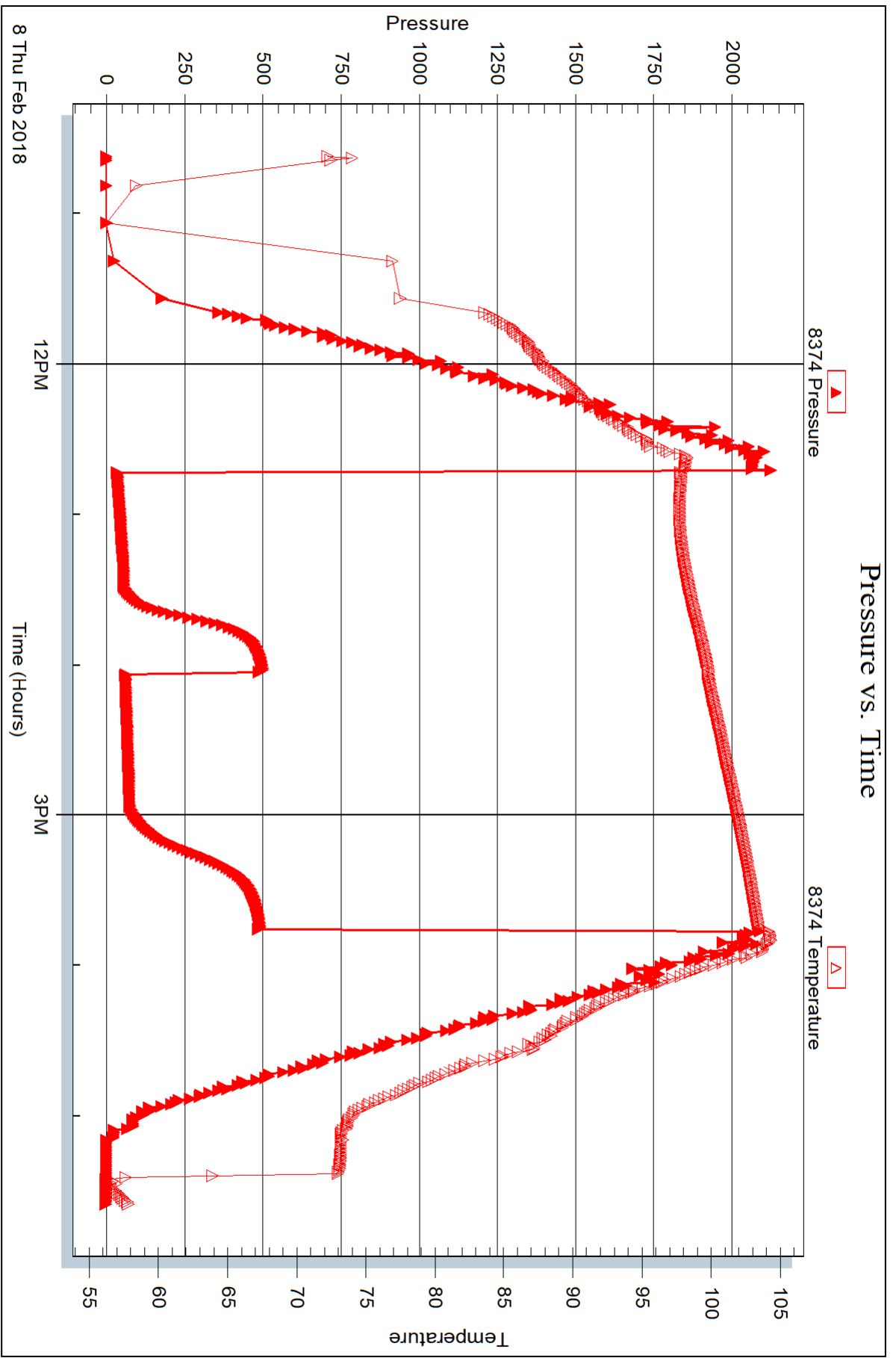


Serial #: 8374

Outside Hartman Oil Co. Inc.

Damme #50

DST Test Number: 2



Trilobite Testing, Inc

Ref. No: 64425

Printed: 2018.02.12 @ 16:44:48



DRILL STEM TEST REPORT

Prepared For: **Hartman Oil Co.Inc.**

10500 E Berkeley
SQ PKWY STE 100
Wichita KS 67206

ATTN: Kitt Noah

Damme #50

21-22s-33w Finney,KS

Start Date: 2018.02.10 @ 06:38:15

End Date: 2018.02.10 @ 14:19:00

Job Ticket #: 64426 DST #: 3

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

Printed: 2018.02.12 @ 16:44:20



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Hartman Oil Co. Inc.

10500 E Berkeley
SQ PKWY STE 100
Wichita KS 67206
ATTN: Kitt Noah

21-22s-33w Finney, KS

Damme #50

Job Ticket: 64426

DST#: 3

Test Start: 2018.02.10 @ 06:38:15

GENERAL INFORMATION:

Formation: **Morrow Sand**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 09:05:00

Time Test Ended: 14:19:00

Test Type: Conventional Bottom Hole (Reset)

Tester: Mike Roberts

Unit No: 81

Interval: **4622.00 ft (KB) To 4643.00 ft (KB) (TVD)**

Reference Elevations: 2893.00 ft (KB)

Total Depth: 4643.00 ft (KB) (TVD)

2888.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 5.00 ft

Serial #: 8647 Inside

Press@RunDepth: 33.87 psig @ 4623.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2018.02.10 End Date: 2018.02.10

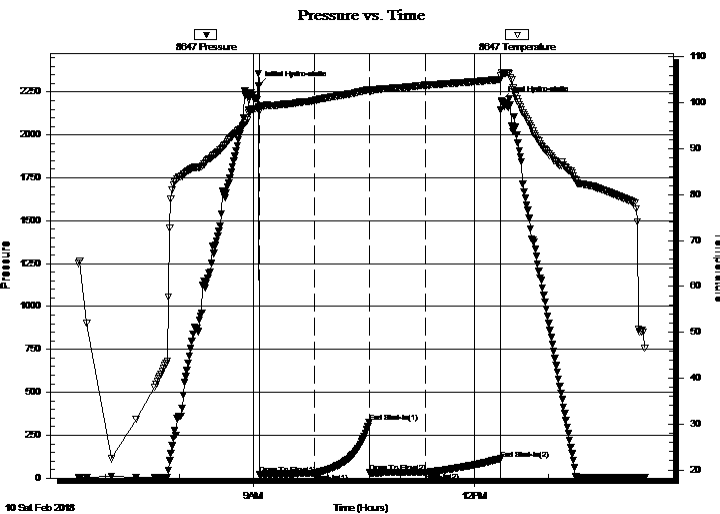
Last Calib.: 2018.02.10

Start Time: 06:38:15 End Time: 14:19:00

Time On Btm: 2018.02.10 @ 09:04:45

Time Off Btm: 2018.02.10 @ 12:21:45

TEST COMMENT: IF: Built to 1/4" blow
IS: No return blow
FF: Built to 1/4" blow
FS: No return blow



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2286.26	99.06	Initial Hydro-static
1	22.53	98.03	Open To Flow (1)
46	28.45	100.55	Shut-In(1)
90	326.23	102.90	End Shut-In(1)
90	31.55	102.59	Open To Flow (2)
136	33.87	103.85	Shut-In(2)
196	112.43	105.06	End Shut-In(2)
197	2197.74	106.63	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
15.00	socm 5%o 95%m	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

Hartman Oil Co.Inc.

21-22s-33w Finney,KS

10500 E Berkeley
SQ PKWY STE 100
Wichita KS 67206
ATTN: Kitt Noah

Damme #50

Job Ticket: 64426

DST#: 3

Test Start: 2018.02.10 @ 06:38:15

Tool Information

Drill Pipe:	Length: 4487.00 ft	Diameter: 3.80 inches	Volume: 62.94 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: 20000.00 lb
Drill Collar:	Length: 121.00 ft	Diameter: 2.25 inches	Volume: 0.60 bbl	Weight to Pull Loose: 70000.00 lb
			<u>Total Volume: 63.54 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	14.00 ft			String Weight: Initial 54000.00 lb
Depth to Top Packer:	4622.00 ft			Final 54000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	21.00 ft			
Tool Length:	49.00 ft			
Number of Packers:	2	Diameter: 7.85 inches		

Tool Comments:

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			4595.00	
Shut In Tool	5.00			4600.00	
Hydraulic tool	5.00			4605.00	
Jars	5.00			4610.00	
Safety Joint	3.00			4613.00	
Packer	5.00			4618.00	28.00 Bottom Of Top Packer
Packer	4.00			4622.00	
Stubb	1.00			4623.00	
Recorder	0.00	8647	Inside	4623.00	
Recorder	0.00	8374	Outside	4623.00	
Perforations	15.00			4638.00	
Bullnose	5.00			4643.00	21.00 Bottom Packers & Anchor

Total Tool Length: 49.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Hartman Oil Co.Inc.

21-22s-33w Finney,KS

10500 E Berkeley
SQ PKWY STE 100
Wichita KS 67206
ATTN: Kitt Noah

Damme #50

Job Ticket: 64426

DST#: 3

Test Start: 2018.02.10 @ 06:38:15

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: 48.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.75 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	socm 5%o 95%m	0.074

Total Length: 15.00 ft Total Volume: 0.074 bbl

Num Fluid Samples: 0

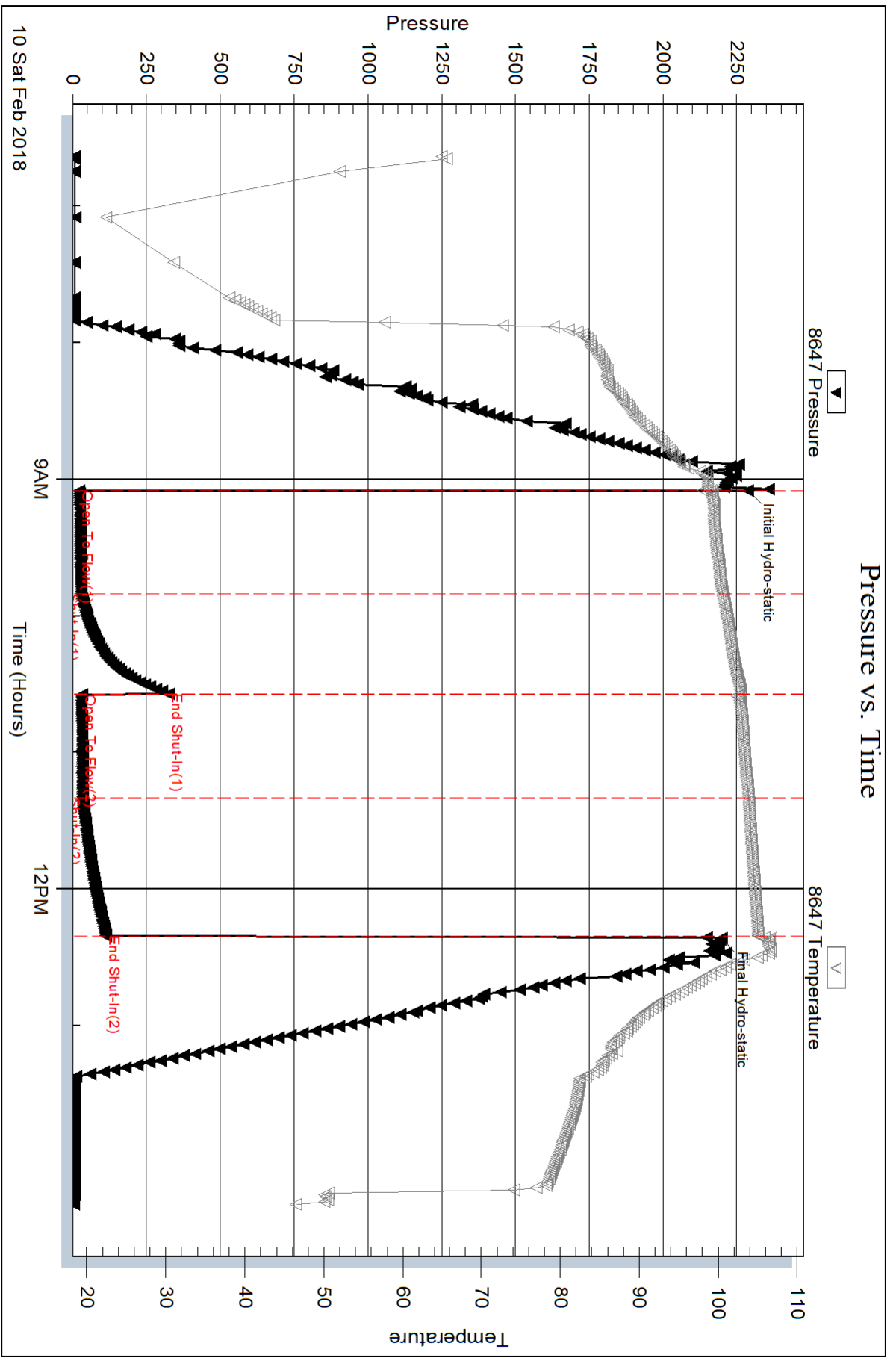
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

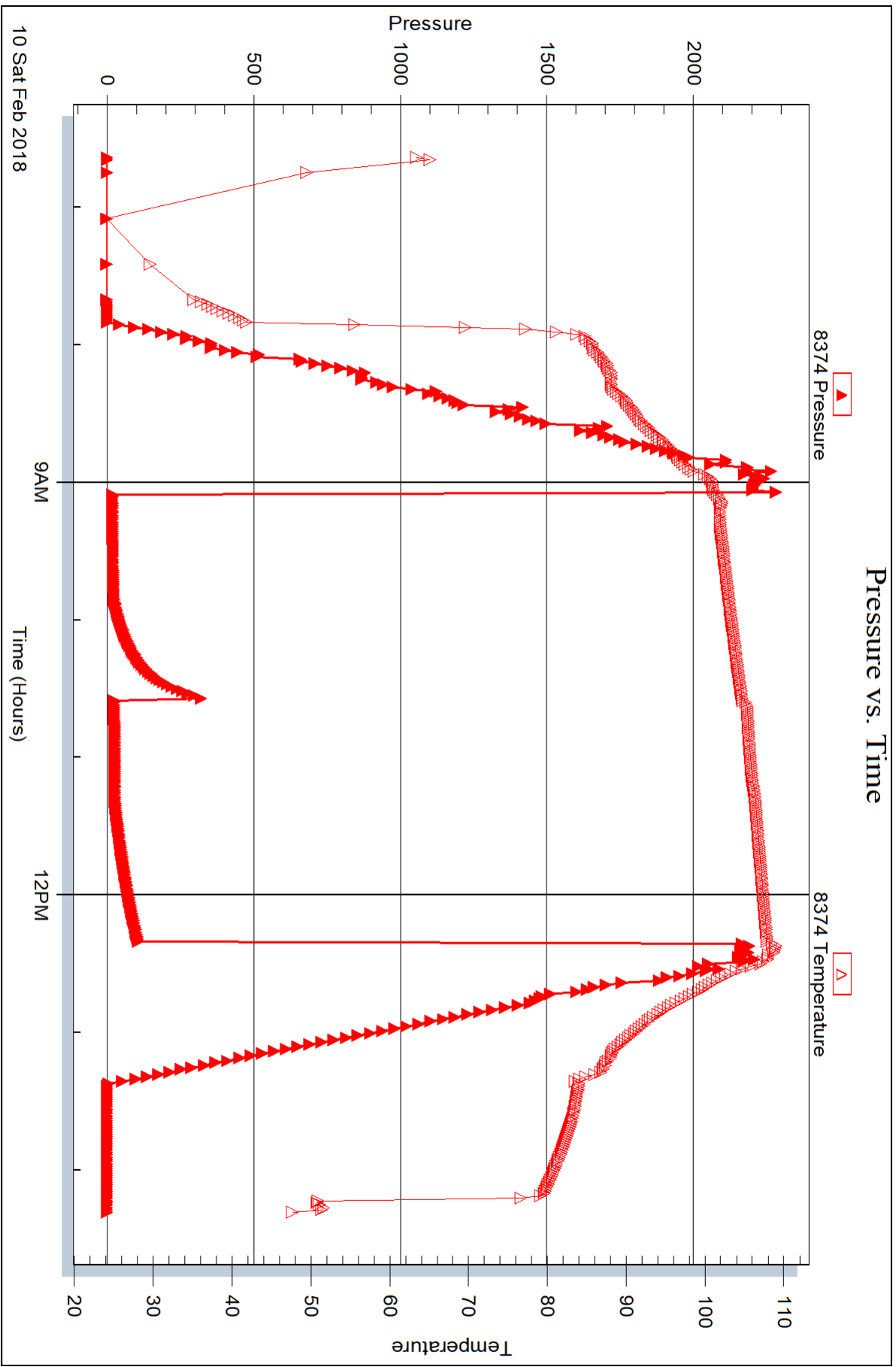


Serial #: 8374

Outside Hartman Oil Co./Inc.

Damme #50

DST Test Number: 3





DRILL STEM TEST REPORT

Prepared For: **Hartman Oil Co.Inc.**

10500 E Berkeley
SQ PKWY STE 100
Wichita KS 67206

ATTN: Kitt Noah

Damme #50

21-22s-33w Finney,KS

Start Date: 2018.02.11 @ 06:49:15

End Date: 2018.02.11 @ 14:18:45

Job Ticket #: 64427 DST #: 4

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

Printed: 2018.02.12 @ 16:43:35



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Hartman Oil Co. Inc.

10500 E Berkeley
SQ PKWY STE 100
Wichita KS 67206
ATTN: Kitt Noah

21-22s-33w Finney, KS

Damme #50

Job Ticket: 64427

DST#: 4

Test Start: 2018.02.11 @ 06:49:15

GENERAL INFORMATION:

Formation: **St. Louis B**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 09:08:00

Time Test Ended: 14:18:45

Test Type: Conventional Bottom Hole (Reset)

Tester: Mike Roberts

Unit No: 81

Interval: 4701.00 ft (KB) To 4718.00 ft (KB) (TVD)

Reference Elevations: 2893.00 ft (KB)

Total Depth: 4718.00 ft (KB) (TVD)

2888.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 5.00 ft

Serial #: 8647

Inside

Press@RunDepth: 132.39 psig @ 4702.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2018.02.11

End Date:

2018.02.11

Last Calib.:

2018.02.11

Start Time: 06:49:15

End Time:

14:18:45

Time On Btm:

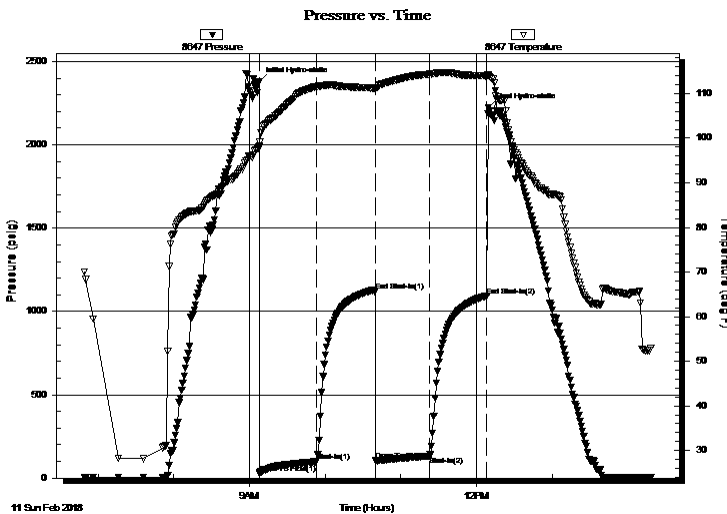
2018.02.11 @ 09:07:30

Time Off Btm:

2018.02.11 @ 12:09:45

TEST COMMENT: IF:BOB in 32 min.
IS:Built to weak surface blow
FF:BOB in 40 min.
FS:Built to weak surface blow

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2377.43	97.96	Initial Hydro-static
1	28.58	98.25	Open To Flow (1)
46	99.34	111.57	Shut-In(1)
93	1121.97	111.20	End Shut-In(1)
93	105.55	110.95	Open To Flow (2)
136	132.39	114.33	Shut-In(2)
181	1094.57	113.93	End Shut-In(2)
183	2221.82	114.17	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
120.00	mcw 15% m 85% w (collars)	0.59
62.00	mcw 35% m 65% w	0.86
62.00	gcow m 10% g 15% o 15% w 60% m	0.87
5.00	gw cm o 5% g 10% w 20% m 60% o	0.07
0.00	124 ft GIP	0.00

Gas Rates

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

* Recovery from multiple tests



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Hartman Oil Co. Inc.

21-22s-33w Finney, KS

10500 E Berkeley
SQ PKWY STE 100
Wichita KS 67206
ATTN: Kitt Noah

Damme #50

Job Ticket: 64427

DST#: 4

Test Start: 2018.02.11 @ 06:49:15

Tool Information

Drill Pipe:	Length: 4580.00 ft	Diameter: 3.80 inches	Volume: 64.25 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: 20000.00 lb
Drill Collar:	Length: 121.00 ft	Diameter: 2.25 inches	Volume: 0.60 bbl	Weight to Pull Loose: 70000.00 lb
			<u>Total Volume: 64.85 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	28.00 ft			String Weight: Initial 520000.0 lb
Depth to Top Packer:	4701.00 ft			Final 53000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	17.00 ft			
Tool Length:	45.00 ft			
Number of Packers:	2	Diameter: 7.85 inches		

Tool Comments:

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

Change Over Sub	1.00			4674.00	
Shut In Tool	5.00			4679.00	
Hydraulic tool	5.00			4684.00	
Jars	5.00			4689.00	
Safety Joint	3.00			4692.00	
Packer	5.00			4697.00	28.00 Bottom Of Top Packer
Packer	4.00			4701.00	
Stubb	1.00			4702.00	
Recorder	0.00	8647	Inside	4702.00	
Recorder	0.00	8374	Outside	4702.00	
Perforations	11.00			4713.00	
Bullnose	5.00			4718.00	17.00 Bottom Packers & Anchor

Total Tool Length: 45.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Hartman Oil Co.Inc.

21-22s-33w Finney,KS

10500 E Berkeley
SQ PKWY STE 100
Wichita KS 67206
ATTN: Kitt Noah

Damme #50

Job Ticket: 64427

DST#: 4

Test Start: 2018.02.11 @ 06:49:15

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:

28000 ppm

Viscosity: 48.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 9.17 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 6250.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
120.00	mcw 15%m 85%w (collars)	0.590
62.00	mcw 35%m 65%w	0.861
62.00	gcow m 10%g 15%o 15%w 60%m	0.870
5.00	gw cmo 5%g 10%w 20%m 60%o	0.070
0.00	124 ft GIP	0.000

Total Length: 249.00 ft Total Volume: 2.391 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW= .275@ 58.3= 28,000 ppm

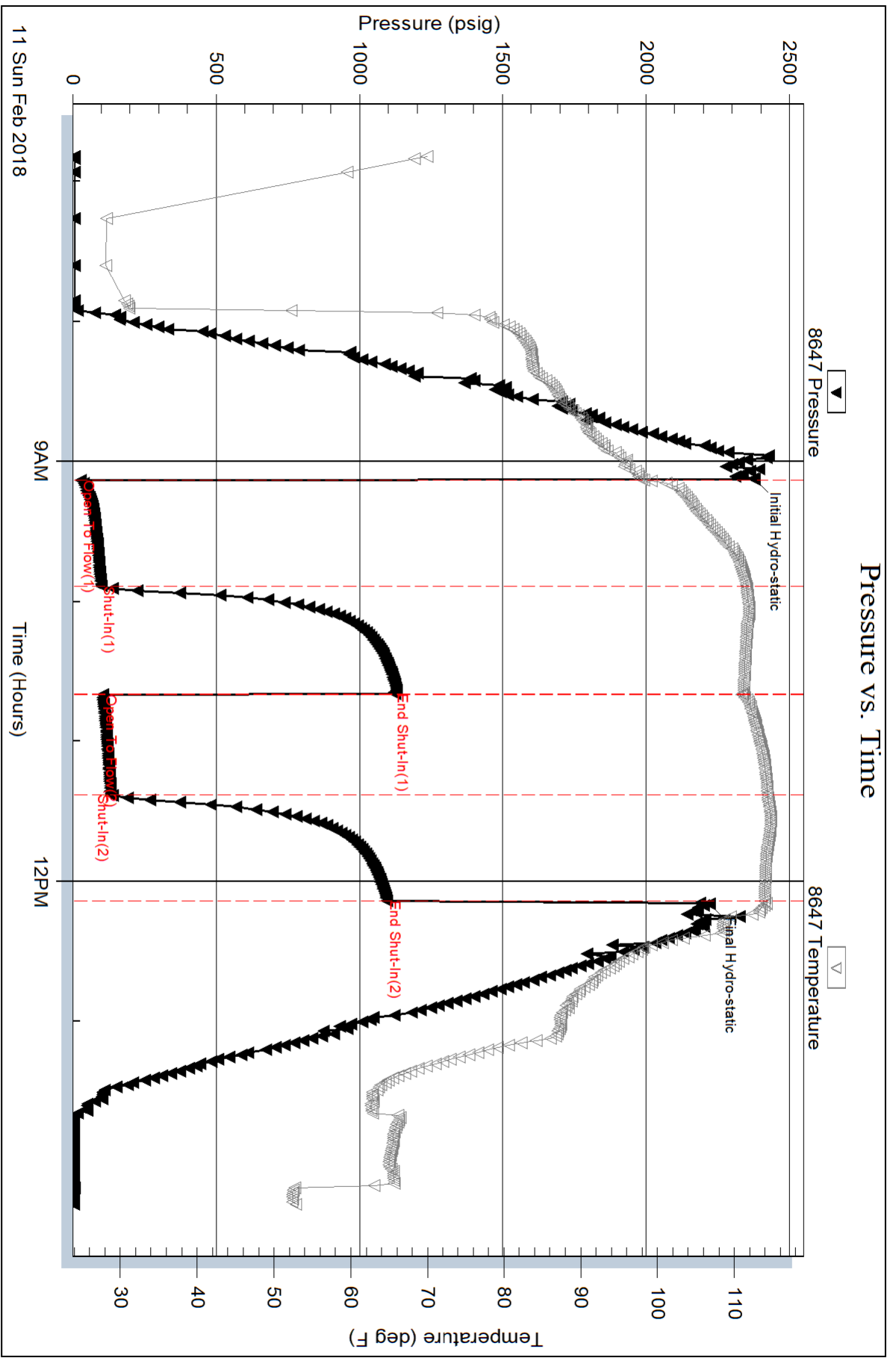
Serial #: 8647

Inside

Hartman Oil Co. Inc.

Darome #50

DST Test Number: 4



Triobite Testing, Inc

Ref. No: 64427

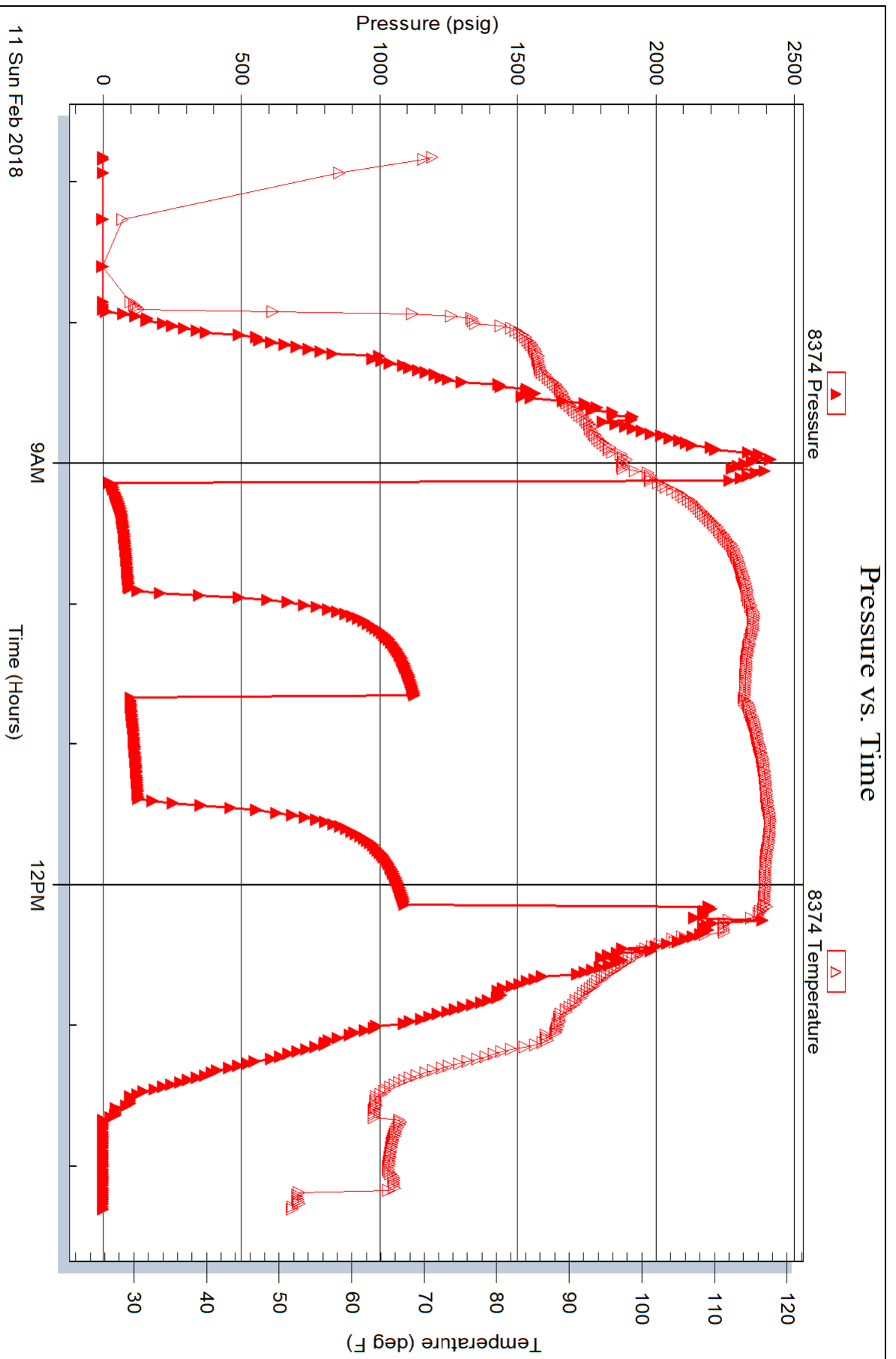
Printed: 2018.02.12 @ 16:43:39

Serial #: 8374

Outside Hartman Oil Co. Inc.

Damme #50

DST Test Number: 4





TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. **64424**

Well Name & No. Damme #50 Test No. 1 Date 2-6-18
 Company Hartman Oil Co Inc. Elevation 2893 KB 2888 GL
 Address 10500 E Berkeley SQ PKWY STE 100 Wichita KS 67206
 Co. Rep / Geo. KITT NOAH Rig WW12
 Location: Sec. 21 Twp. 22S Rge. 33W Co. Finney State KS

Interval Tested 4037-4060 Zone Tested H
 Anchor Length 23' Drill Pipe Run 3894 Mud Wt. 8.9
 Top Packer Depth 4032 Drill Collars Run 120 Vis 48
 Bottom Packer Depth 4037 Wt. Pipe Run Ø WL 7.2
 Total Depth 4060 Chlorides 2500 ppm System LCM 3
 Blow Description IF: Built to 5" Blow (Diesel)
IS: No Return Blow
FF: Built to 5" Blow (Diesel)
FS: No Return Blow

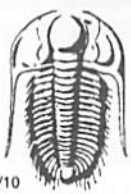
Rec	Feet of	%gas	%oil	%water	%mud
<u>72</u>	<u>MUD</u>			<u>100</u>	
<u>120</u>	<u>WCM</u>		<u>20</u>	<u>80</u>	

Rec Total 192 BHT 105 Gravity — API RW 1384 @ 61.7° F Chlorides 22000 ppm

(A) Initial Hydrostatic <u>1995</u>	<input checked="" type="checkbox"/> Test <u>1150</u>	T-On Location <u>17:05</u>
(B) First Initial Flow <u>15</u>	<input checked="" type="checkbox"/> Jars <u>250</u>	T-Started <u>19:09</u>
(C) First Final Flow <u>76</u>	<input checked="" type="checkbox"/> Safety Joint <u>75</u>	T-Open <u>21:43</u>
(D) Initial Shut-In <u>950</u>	<input checked="" type="checkbox"/> Circ Sub <u>NC</u>	T-Pulled <u>21:58 12:58</u>
(E) Second Initial Flow <u>78</u>	<input type="checkbox"/> Hourly Standby	T-Out <u>03:08</u>
(F) Second Final Flow <u>100</u>	<input checked="" type="checkbox"/> Mileage <u>62RT</u> <u>62</u>	Comments
(G) Final Shut-In <u>923</u>	<input type="checkbox"/> Sampler	
(H) Final Hydrostatic <u>1893</u>	<input type="checkbox"/> Straddle	
	<input type="checkbox"/> Shale Packer	<input type="checkbox"/> Ruined Shale Packer
	<input type="checkbox"/> Extra Packer	<input type="checkbox"/> Ruined Packer
	<input type="checkbox"/> Extra Recorder	<input type="checkbox"/> Extra Copies
	<input type="checkbox"/> Day Standby	Sub Total <u>0</u>
	<input type="checkbox"/> Accessibility	Total <u>1537</u>
	Sub Total <u>1537</u>	MP/DST Disc't

Approved By [Signature] Our Representative Mike Roberts

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TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. **64425**

Well Name & No. Damme #50 Test No. 2 Date 2-8-18
 Company Hartman Oil Co Inc Elevation 2893 KB 2888 GL
 Address 10500 E Berkeley SQ PKWY ST 100 Wichita KS 67206
 Co. Rep / Geo. KITT MOAH Rig WW12
 Location: Sec. 21 Twp. 22S Rge. 33W Co. Finney State KS

Interval Tested 4300-4371 Zone Tested Att. A-B
 Anchor Length 71 Drill Pipe Run 4172 Mud Wt. 9.2
 Top Packer Depth 4295 Drill Collars Run 120 Vis 48
 Bottom Packer Depth 4300 Wt. Pipe Run Ø WL 8.0
 Total Depth 4371 Chlorides 5000 ppm System LCM 3

Blow Description IF: Built to 2" Blow
IS: No Return Blow
FF: Built to 1 1/2" Blow
FS: No Return Blow

Rec	Feet of	%gas	%oil	%water	%mud
<u>70</u>	<u>OCM</u>	<u>5</u>	<u>5</u>	<u>95</u>	<u>5</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 70 BHT 102 Gravity — API RW — @ — °F Chlorides — ppm

(A) Initial Hydrostatic <u>2127</u>	<input checked="" type="checkbox"/> Test <u>1150</u>	T-On Location <u>0224 10:00</u>
(B) First Initial Flow <u>40</u>	<input checked="" type="checkbox"/> Jars <u>250</u>	T-Started <u>10:37</u>
(C) First Final Flow <u>61</u>	<input checked="" type="checkbox"/> Safety Joint <u>75</u>	T-Open <u>12:42</u>
(D) Initial Shut-In <u>505</u>	<input checked="" type="checkbox"/> Circ Sub <u>NC</u>	T-Pulled <u>15:42</u>
(E) Second Initial Flow <u>70</u>	<input type="checkbox"/> Hourly Standby	T-Out <u>17:35</u>
(F) Second Final Flow <u>80</u>	<input checked="" type="checkbox"/> Mileage <u>62RT</u> <u>62</u>	Comments
(G) Final Shut-In <u>489</u>	<input type="checkbox"/> Sampler	
(H) Final Hydrostatic <u>2089</u>	<input type="checkbox"/> Straddle	<input type="checkbox"/> Ruined Shale Packer
	<input type="checkbox"/> Shale Packer	<input type="checkbox"/> Ruined Packer
	<input type="checkbox"/> Extra Packer	<input type="checkbox"/> Extra Copies
	<input type="checkbox"/> Extra Recorder	Sub Total <u>0</u>
	<input type="checkbox"/> Day Standby	Total <u>1537</u>
	<input type="checkbox"/> Accessibility	MP/DST Disc't
	Sub Total <u>1537</u>	

Initial Open 45
 Initial Shut-In 45
 Final Flow 45
 Final Shut-In 45

Approved By [Signature] 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. **64426**

Well Name & No. Damme #50 Test No. 3 Date 2-10-18
 Company Hartman Oil Co Inc. Elevation 2893 KB 2888 GL
 Address 10500 E Berkeley SQ PKWY ST 100 Wichita KS 67206
 Co. Rep / Geo. KITT NOAH Rig WW12
 Location: Sec. 21 Twp. 22S Rge. 33W Co. Finney State KS

Interval Tested 4622-4643 Zone Tested Morrow Sand
 Anchor Length 21 Drill Pipe Run 4487 Mud Wt. 9.2
 Top Packer Depth 4617 Drill Collars Run 120 Vis 48
 Bottom Packer Depth 4622 Wt. Pipe Run Ø WL 8.8
 Total Depth 4643 Chlorides 6000 ppm System LCM 3
 Blow Description IF: Built to 1/4" Blow
IS: No Return Blow
FF: Built to 1/4" Blow
FS: No Return Blow

Rec	Feet of	%gas	%oil	%water	%mud
<u>15</u>	<u>0cm</u>		<u>5</u>	<u>95</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 15 BHT 105 Gravity — API RW — @ — F Chlorides — ppm

(A) Initial Hydrostatic 2286 Test 1537 T-On Location 05:45
 (B) First Initial Flow 22 Jars 250 T-Started 06:38
 (C) First Final Flow 28 Safety Joint 75 T-Open 09:05
 (D) Initial Shut-In 326 Circ Sub NC T-Pulled 12:20
 (E) Second Initial Flow 31 Hourly Standby — T-Out 14:19
 (F) Second Final Flow 33 Mileage 62RT 62 Comments —
 (G) Final Shut-In 112 Sampler —
 (H) Final Hydrostatic 2197 Straddle — Ruined Shale Packer —
 Shale Packer — Ruined Packer —
 Extra Packer — Extra Copies —
 Extra Recorder — Sub Total 0
 Day Standby — Total 1537
 Accessibility — MP/DST Disc't —

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

Approved By Kitt Noah Our Representative Mike Roberts

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. **64427**

Well Name & No. Damme #50 Test No. 4 Date 2-11-18
 Company Hartman Oil Co Inc. Elevation 2893 KB 2888 GL
 Address 10500 E. Berkeley Sq Pkwy ST 100 Wichita KS 67206
 Co. Rep / Geo. KITT NOAH Rig
 Location: Sec. 21 Twp. 22S Rge. 33W Co. Finney State KS

Interval Tested 4701-4718 Zone Tested St. Louis
 Anchor Length 17 Drill Pipe Run 4580 Mud Wt. 9.3
 Top Packer Depth 4696 Drill Collars Run 120 Vis 48
 Bottom Packer Depth 4701 Wt. Pipe Run Ø WL 9.2
 Total Depth 4718 Chlorides 6250 ppm System LCM 3
 Blow Description IF: BOB IN 32 Min
IS: Built to Weak Surface Blow
FF: BOB IN 40 Min.
FS: Built to Weak Surface Blow

Rec	Feet of	%gas	%oil	%water	%mud
<u>Ø</u>	<u>124' GIP</u>	<u>100</u>			
<u>5</u>	<u>gwc m o</u>	<u>5</u>	<u>60</u>	<u>10</u>	<u>20</u>
<u>62</u>	<u>gc ow m</u>	<u>10</u>	<u>15</u>	<u>15</u>	<u>60</u>
<u>62</u>	<u>mcw</u>			<u>65</u>	<u>35</u>
<u>120</u>	<u>mcw</u>			<u>85</u>	<u>15</u>

Rec Total 249 BHT 115
 (A) Initial Hydrostatic 2377
 (B) First Initial Flow 28
 (C) First Final Flow 99
 (D) Initial Shut-In 1121
 (E) Second Initial Flow 105
 (F) Second Final Flow 132
 (G) Final Shut-In 1094
 (H) Final Hydrostatic 2221
 Initial Open 45
 Initial Shut-In 45
 Final Flow 45
 Final Shut-In 45

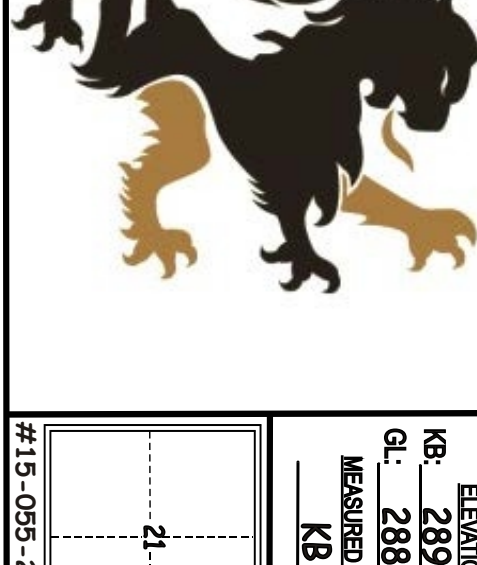
Gravity — API RW 275 @ 58.3° F Chlorides 28000 ppm
 Test 1250 T-On Location 06:00
 Jars 250 T-Started 06:49
 Safety Joint 75 T-Open 09:08
 Circ Sub NC T-Pulled 12:08
 Hourly Standby T-Out 14:18
 Mileage 62 RT X2 124 Comments Loaded tools at 11:00 2-12-18
 Sampler
 Straddle Ruined Shale Packer
 Shale Packer Ruined Packer
 Extra Packer Extra Copies
 Extra Recorder Sub Total 0
 Day Standby Total 1699
 Accessibility MP/DST Disc't
 Sub Total 1699

Approved By [Signature] Our Representative Mike Roberts

Trilobite Testing Inc. shall not be liable for damaged or 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.

KITT NOAH

PETROLEUM GEOLOGIST
Kansas License #229



GEOLOGIST'S REPORT

DRILLING TIME AND SAMPLE LOG

#15-095-22-477

EL ELEVATION: KB 2893

GL: 2885

MEASURED BENCH: KB

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