



DRILL STEM TEST REPORT

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

10500 E Berkeley Sq. Pkwy
Ste. 100
Wichita, KS 67206

ATTN: Kitt Noah

Gano Unit #1-36

36-9s-24w Graham, KS

Start Date: 2013.09.29 @ 11:11:00

End Date: 2013.09.29 @ 20:57:30

Job Ticket #: 54443 DST #: 1

Trilobite Testing, Inc
PO Box 362 Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620

Printed: 2013.10.03 @ 11:11:53



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Hartman Oil Co., Inc.
 10500 E Berkeley Sq. Pkw y
 Ste. 100
 Wichita, KS 67206
 ATTN: Kitt Noah

36-9s-24w Graham, KS

Gano Unit #1-36

Job Ticket: 54443

DST#: 1

Test Start: 2013.09.29 @ 11:11:00

GENERAL INFORMATION:

Formation: **LKC I-J**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 15:08:00

Time Test Ended: 20:57:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Brannan L

Unit No: 59

Interval: 3957.00 ft (KB) To 3992.00 ft (KB) (TVD)

Reference Elevations: 2469.00 ft (KB)

Total Depth: 3992.00 ft (KB) (TVD)

2458.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 11.00 ft

Serial #: 6753

Inside

Press @ Run Depth: 338.08 psig @ 3958.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.09.29

End Date:

2013.09.29

Last Calib.:

2013.09.29

Start Time: 11:11:05

End Time:

20:57:30

Time On Btm:

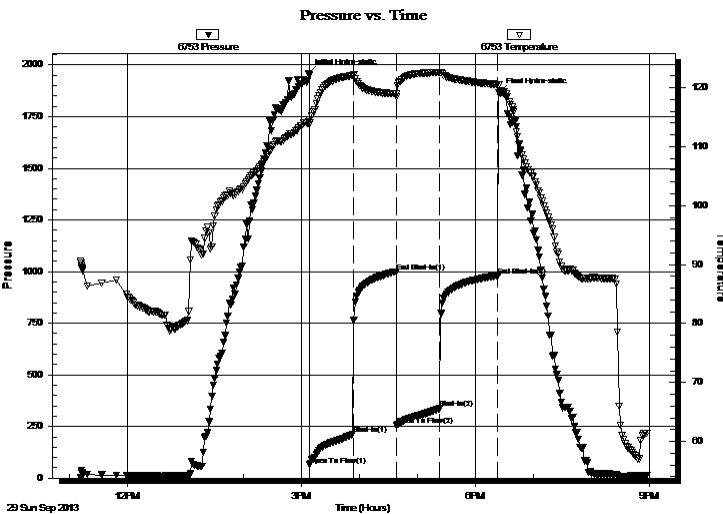
2013.09.29 @ 15:07:00

Time Off Btm:

2013.09.29 @ 18:24:00

TEST COMMENT: 45- IF- BOB 12 mins
 45- IS- Slow ly built to 3/4"
 45- FF- BOB 15 mins
 60- FSI- Surface blow throughout

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1959.86	114.28	Initial Hydro-static
1	64.65	113.68	Open To Flow (1)
46	212.82	122.04	Shut-In(1)
91	999.41	118.90	End Shut-In(1)
91	257.09	118.36	Open To Flow (2)
136	338.08	122.54	Shut-In(2)
196	978.63	120.51	End Shut-In(2)
197	1866.18	120.44	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
695.00	MW, 10%M 90%W	7.42
5.00	Free Oil, 100%O	0.07
0.00	20' GIP	0.00

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Hartman Oil Co., Inc.
10500 E Berkeley Sq. Pkwy
Ste. 100
Wichita, KS 67206
ATTN: Kitt Noah

36-9s-24w Graham, KS
Gano Unit #1-36
Job Ticket: 54443 **DST#: 1**
Test Start: 2013.09.29 @ 11:11:00

Tool Information

Drill Pipe:	Length: 3703.00 ft	Diameter: 3.75 inches	Volume: 50.59 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: ft	Diameter: 2.75 inches	Volume: - bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 237.00 ft	Diameter: 2.25 inches	Volume: 1.17 bbl	Weight to Pull Loose: 72000.00 lb
			<u>Total Volume: - bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	11.00 ft			String Weight: Initial 62000.00 lb
Depth to Top Packer:	3957.00 ft			Final 65000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	35.00 ft			
Tool Length:	63.00 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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Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3930.00	
Shut In Tool	5.00			3935.00	
Hydraulic tool	5.00			3940.00	
Jars	5.00			3945.00	
Safety Joint	2.00			3947.00	
Packer	5.00			3952.00	28.00 Bottom Of Top Packer
Packer	5.00			3957.00	
Stubb	1.00			3958.00	
Recorder	0.00	6753	Inside	3958.00	
Recorder	0.00	8319	Outside	3958.00	
Perforations	31.00			3989.00	
Bullnose	3.00			3992.00	35.00 Bottom Packers & Anchor

Total Tool Length: 63.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Hartman Oil Co., Inc.
10500 E Berkeley Sq. Pkw y
Ste. 100
Wichita, KS 67206
ATTN: Kitt Noah

36-9s-24w Graham, KS
Gano Unit #1-36
Job Ticket: 54443 **DST#: 1**
Test Start: 2013.09.29 @ 11:11:00

Mud and Cushion Information

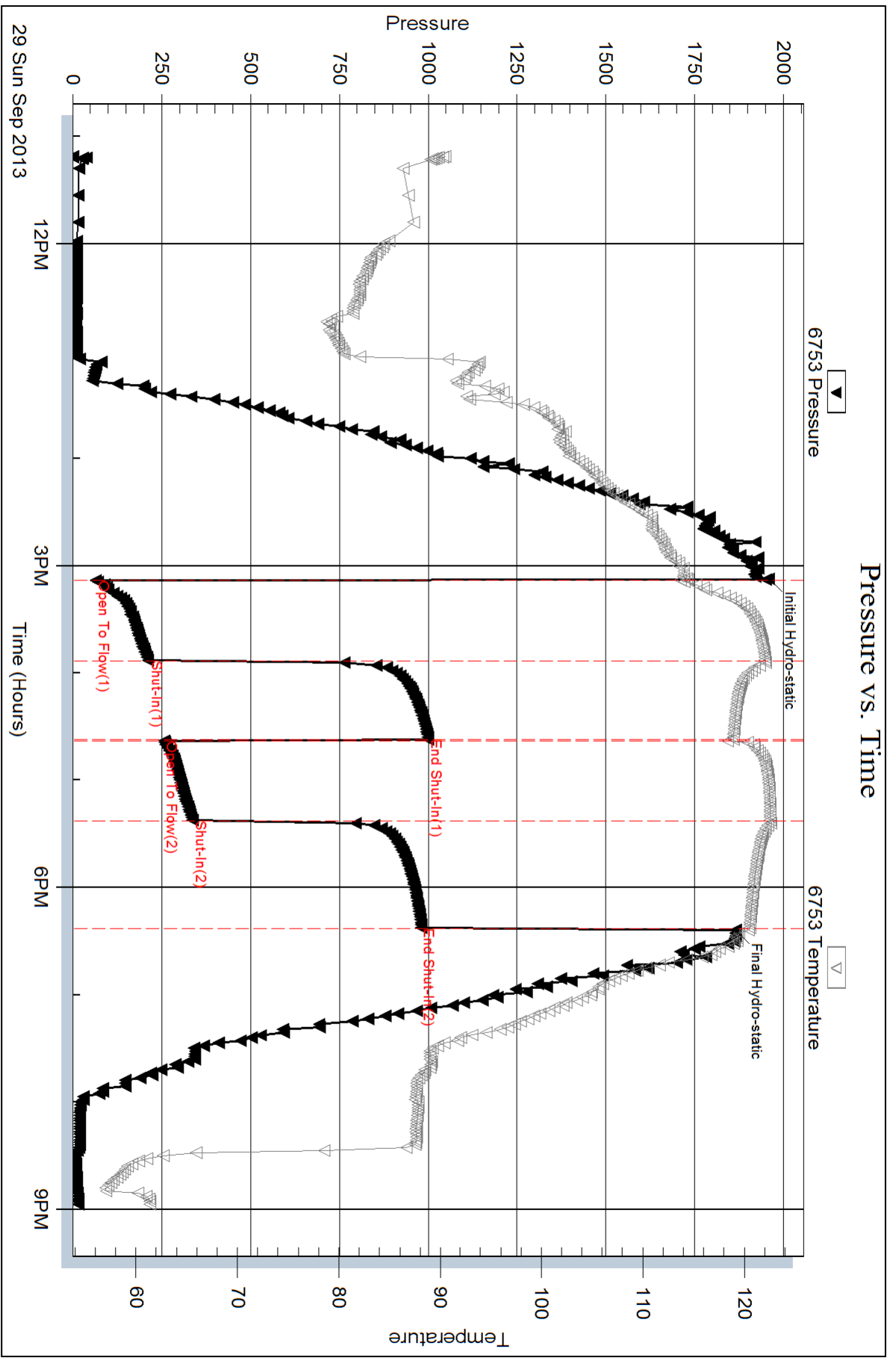
Mud Type: Gel Chem	Cushion Type:	Oil API:	deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	6000 ppm
Viscosity: 60.00 sec/qt	Cushion Volume: bbl		
Water Loss: 5.79 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 2900.00 ppm			
Filter Cake: inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
695.00	MW, 10%M 90%W	7.422
5.00	Free Oil, 100%O	0.068
0.00	20' GIP	0.000

Total Length: 700.00 ft Total Volume: 7.490 bbl
 Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
 Laboratory Name: Laboratory Location:
 Recovery Comments:

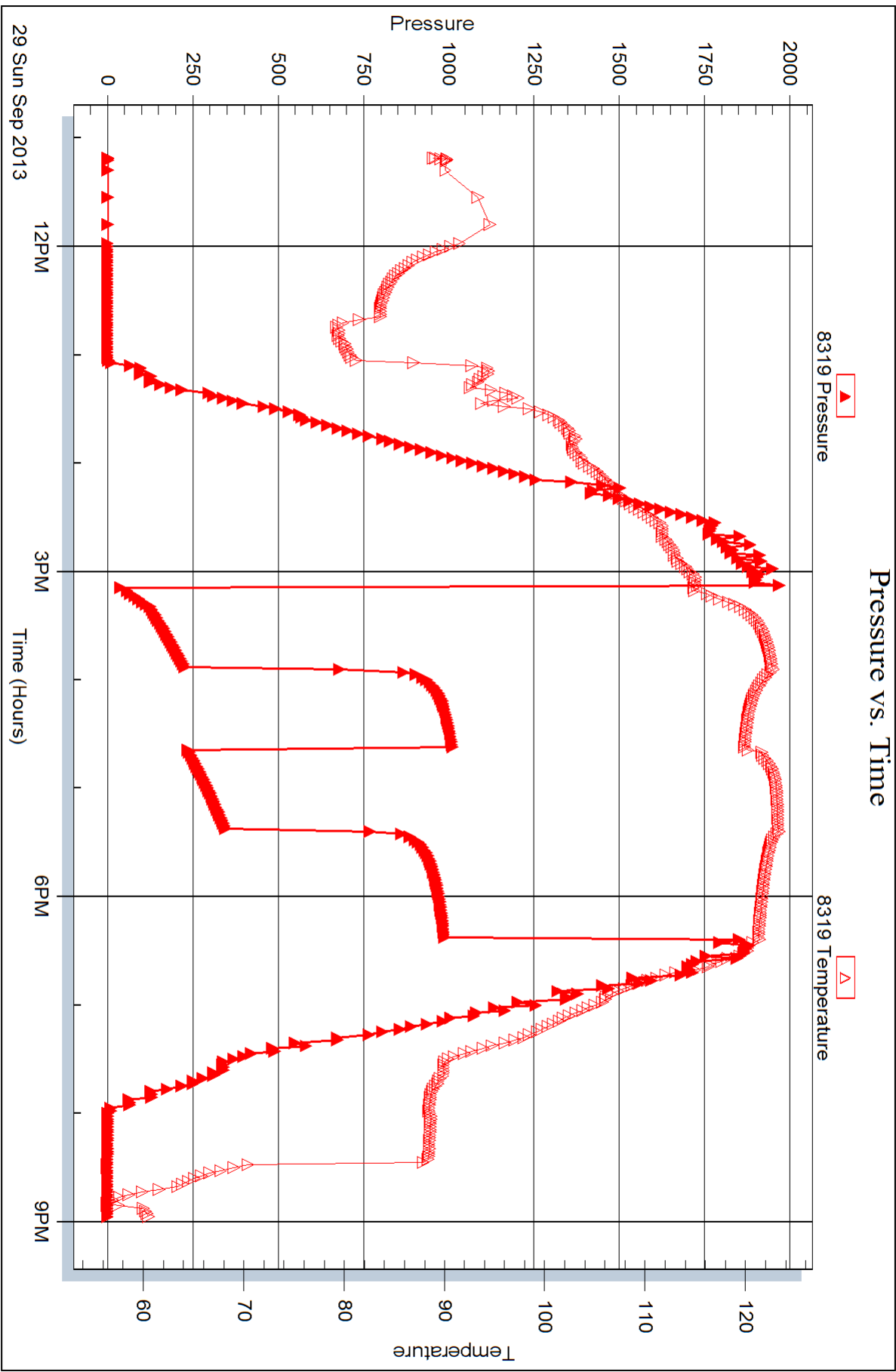


Serial #: 8319

Outside Hartman Oil Co., Inc.

Gano Unit #1-36

DST Test Number: 1



Triobite Testing, Inc

Ref. No: 54443

Printed: 2013.10.03 @ 11:11:54



DRILL STEM TEST REPORT

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

10500 E Berkeley Sq. Pkwy
Ste. 100
Wichita, KS 67206

ATTN: Kitt Noah

Gano Unit #1-36

36-9s-24w Graham, KS

Start Date: 2013.09.30 @ 06:52:00

End Date: 2013.09.30 @ 14:52:00

Job Ticket #: 54444 DST #: 2

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2013.10.03 @ 11:11:27

Hartman Oil Co., Inc.
36-9s-24w Graham, KS
Gano Unit #1-36
DST # 2
LKC "K"
2013.09.30



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Hartman Oil Co., Inc.
10500 E Berkeley Sq. Pkw y
Ste. 100
Wichita, KS 67206
ATTN: Kitt Noah

36-9s-24w Graham, KS

Gano Unit #1-36

Job Ticket: 54444

DST#: 2

Test Start: 2013.09.30 @ 06:52:00

GENERAL INFORMATION:

Formation: **LKC "K"**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 09:28:00
 Time Test Ended: 14:52:00
 Interval: **3994.00 ft (KB) To 4016.00 ft (KB) (TVD)**
 Total Depth: 4016.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Reset)
 Tester: Brannan L/Brett Dick
 Unit No: 59
 Reference Elevations: 2469.00 ft (KB)
 2458.00 ft (CF)
 KB to GR/CF: 11.00 ft

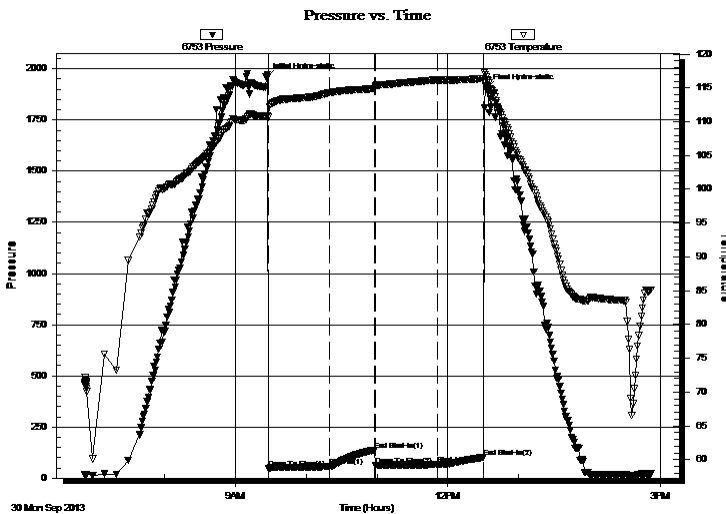
Serial #: 6753

Inside

Press @ Run Depth: 66.12 psig @ 3995.00 ft (KB)
 Start Date: 2013.09.30 End Date: 2013.09.30
 Start Time: 06:52:05 End Time: 14:51:59
 Capacity: 8000.00 psig
 Last Calib.: 2013.09.30
 Time On Btm: 2013.09.30 @ 09:26:30
 Time Off Btm: 2013.09.30 @ 12:32:30

TEST COMMENT: 45- IF- BOB 42 mins
 45- ISI- No blow
 45 FF-4 1/2" blow
 45 FSI- No blow

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1958.27	110.87	Initial Hydro-static
2	46.64	110.69	Open To Flow (1)
53	57.65	114.30	Shut-In(1)
91	136.93	114.88	End Shut-In(1)
92	63.16	115.14	Open To Flow (2)
145	66.12	116.17	Shut-In(2)
184	101.39	116.37	End Shut-In(2)
186	1904.39	116.60	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
65.00	VSGOCM 5%G 40%O 55%M	0.32
10.00	VSGO 5%G 95%O	0.05
0.00	285' 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.
10500 E Berkeley Sq. Pkwy
Ste. 100
Wichita, KS 67206
ATTN: Kitt Noah

36-9s-24w Graham, KS

Gano Unit #1-36

Job Ticket: 54444

DST#: 2

Test Start: 2013.09.30 @ 06:52:00

Tool Information

Drill Pipe:	Length: 3734.00 ft	Diameter: 3.75 inches	Volume: 51.01 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: ft	Diameter: 2.75 inches	Volume: - bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 237.00 ft	Diameter: 2.25 inches	Volume: 1.17 bbl	Weight to Pull Loose: 70000.00 lb
			<u>Total Volume: - bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	5.00 ft			String Weight: Initial 61000.00 lb
Depth to Top Packer:	3994.00 ft			Final 61000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	22.00 ft			
Tool Length:	50.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3967.00	
Shut In Tool	5.00			3972.00	
Hydraulic tool	5.00			3977.00	
Jars	5.00			3982.00	
Safety Joint	2.00			3984.00	
Packer	5.00			3989.00	28.00 Bottom Of Top Packer
Packer	5.00			3994.00	
Stubb	1.00			3995.00	
Recorder	0.00	6753	Inside	3995.00	
Recorder	0.00	8319	Outside	3995.00	
Perforations	18.00			4013.00	
Bullnose	3.00			4016.00	22.00 Bottom Packers & Anchor

Total Tool Length: 50.00



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DRILL STEM TEST REPORT

FLUID SUMMARY

Hartman Oil Co., Inc.
10500 E Berkeley Sq. Pkwy
Ste. 100
Wichita, KS 67206
ATTN: Kitt Noah

36-9s-24w Graham, KS
Gano Unit #1-36
Job Ticket: 54444 **DST#: 2**
Test Start: 2013.09.30 @ 06:52:00

Mud and Cushion Information

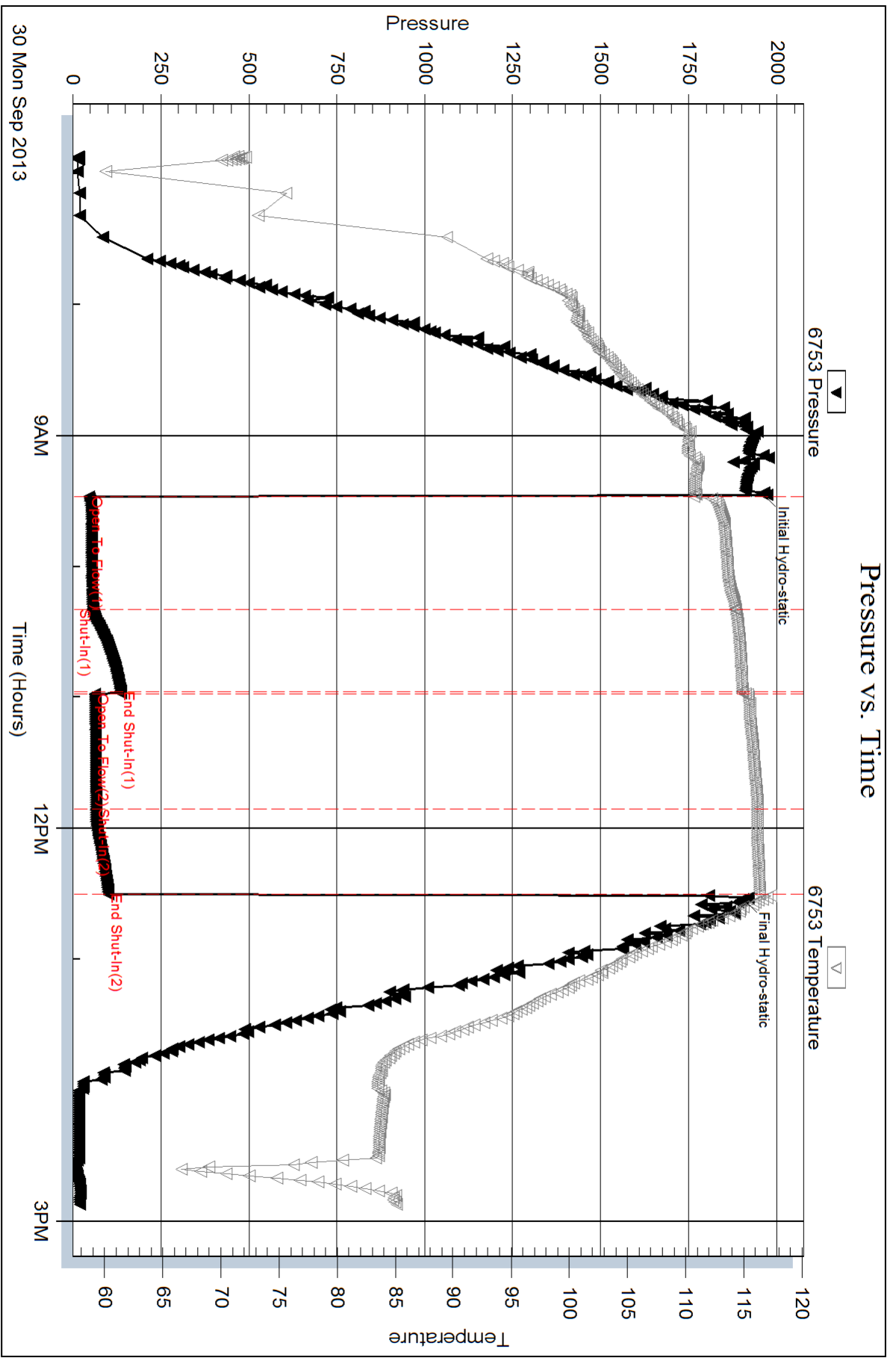
Mud Type: Gel Chem	Cushion Type:	Oil API: 30 deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity: ppm
Viscosity: 65.00 sec/qt	Cushion Volume: bbl	
Water Loss: 5.79 in ³	Gas Cushion Type:	
Resistivity: ohm.m	Gas Cushion Pressure: psig	
Salinity: 3000.00 ppm		
Filter Cake: inches		

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
65.00	VSGOCM 5%G 40%O 55%M	0.320
10.00	VSGO 5%G 95%O	0.049
0.00	285' GIP	0.000

Total Length: 75.00 ft Total Volume: 0.369 bbl
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments:

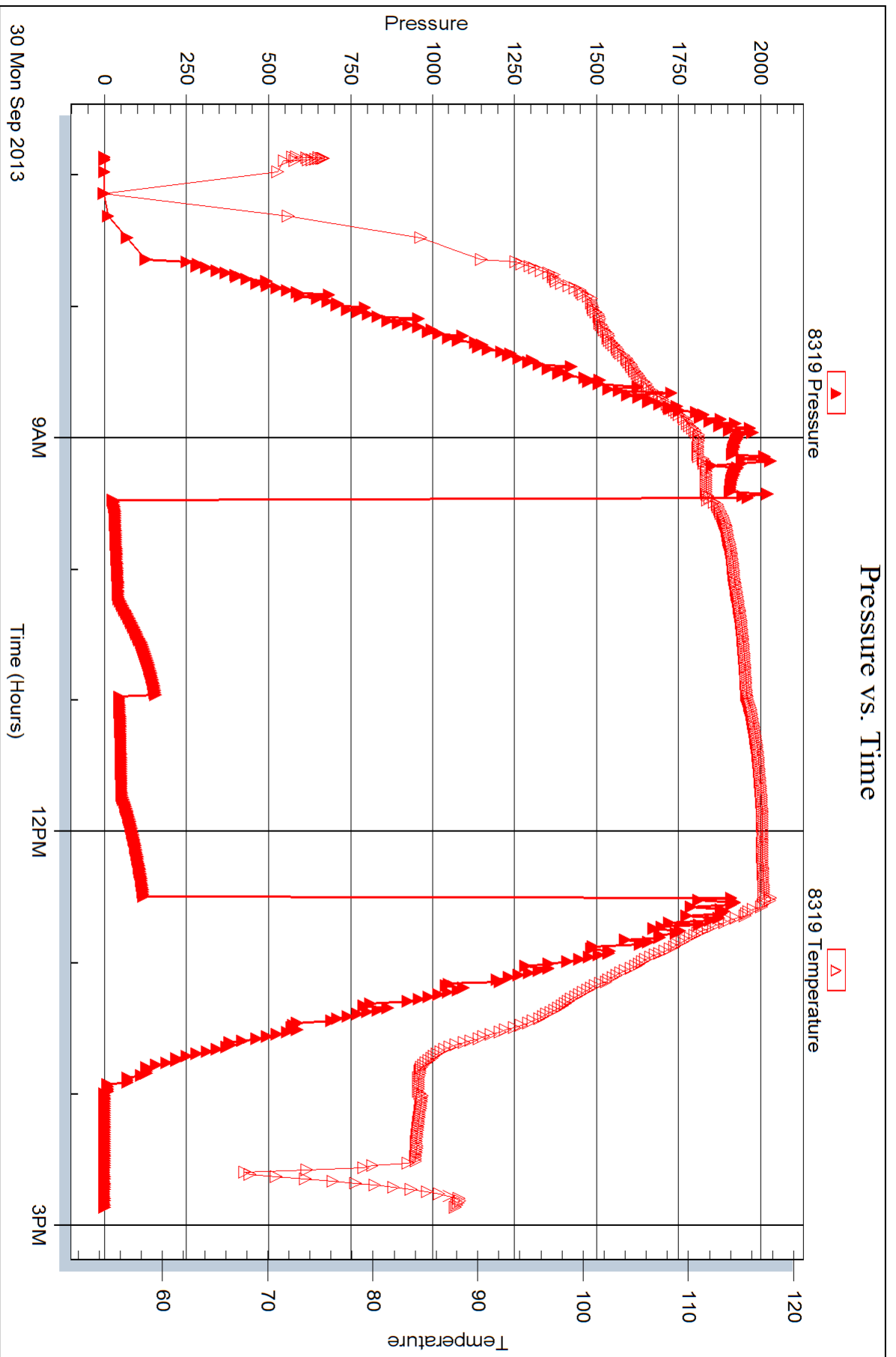


Serial #: 8319

Outside Hartman Oil Co., Inc.

Gano Unit #1-36

DST Test Number: 2



Trilobite Testing, Inc

Ref. No: 54444

Printed: 2013.10.03 @ 11:11:28



DRILL STEM TEST REPORT

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

10500 E Berkeley Sq. Pkwy
Ste. 100
Wichita, KS 67206

ATTN: Kitt Noah

Gano Unit #1-36

36-9s-24w Graham, KS

Start Date: 2013.10.01 @ 07:15:00

End Date: 2013.10.01 @ 16:15:00

Job Ticket #: 54445 DST #: 3

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2013.10.03 @ 11:10:58



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Hartman Oil Co., Inc.
10500 E Berkeley Sq. Pkw y
Ste. 100
Wichita, KS 67206
ATTN: Kitt Noah

36-9s-24w Graham, KS

Gano Unit #1-36

Job Ticket: 54445

DST#: 3

Test Start: 2013.10.01 @ 07:15:00

GENERAL INFORMATION:

Formation: **KC "I"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 10:10:30

Time Test Ended: 16:15:00

Test Type: Conventional Straddle (Reset)

Tester: Brett Dickinson

Unit No: 59

Interval: 3960.00 ft (KB) To 3970.00 ft (KB) (TVD)

Total Depth: 4097.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 2469.00 ft (KB)

2458.00 ft (CF)

KB to GR/CF: 11.00 ft

Serial #: 6753 Outside

Press @ Run Depth: 179.45 psig @ 3966.00 ft (KB)

Start Date: 2013.10.01

End Date: 2013.10.01

Start Time: 07:15:05

End Time: 16:15:00

Capacity: 8000.00 psig

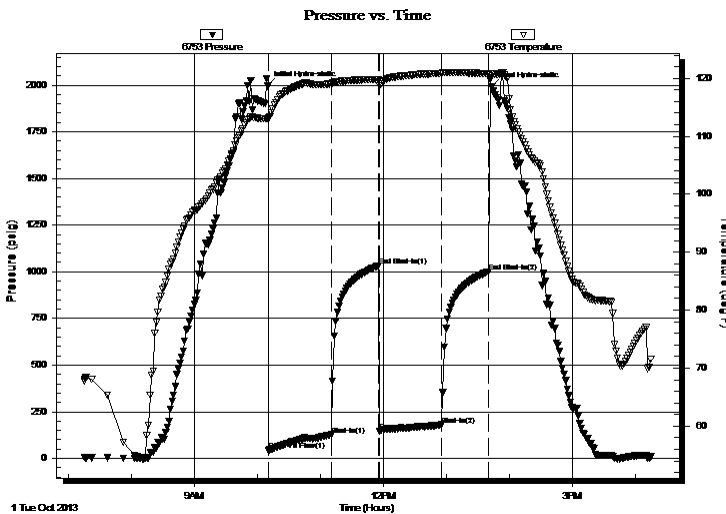
Last Calib.: 2013.10.01

Time On Btm: 2013.10.01 @ 10:09:00

Time Off Btm: 2013.10.01 @ 13:43:00

TEST COMMENT: IF-10" blow
IS- No blow
FF-7 1/2" blow
FS- No blow

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1995.46	113.04	Initial Hydro-static
2	41.87	112.91	Open To Flow (1)
61	126.24	119.02	Shut-In(1)
106	1031.09	119.70	End Shut-In(1)
108	145.60	118.72	Open To Flow (2)
166	179.45	120.85	Shut-In(2)
211	999.40	120.78	End Shut-In(2)
214	1991.76	120.76	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
355.00	OS VSMCW 90%W 10%M	2.78

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.
10500 E Berkeley Sq. Pkwy
Ste. 100
Wichita, KS 67206
ATTN: Kitt Noah

36-9s-24w Graham, KS

Gano Unit #1-36

Job Ticket: 54445

DST#: 3

Test Start: 2013.10.01 @ 07:15:00

Tool Information

Drill Pipe:	Length: 3701.00 ft	Diameter: 3.75 inches	Volume: 50.56 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: ft	Diameter: 2.75 inches	Volume: - bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 237.00 ft	Diameter: 2.25 inches	Volume: 1.17 bbl	Weight to Pull Loose: 70000.00 lb
			<u>Total Volume: - bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	6.00 ft			String Weight: Initial 61000.00 lb
Depth to Top Packer:	3960.00 ft			Final 61000.00 lb
Depth to Bottom Packer:	3970.00 ft			
Interval between Packers:	10.00 ft			
Tool Length:	168.00 ft			
Number of Packers:	3	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
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Change Over Sub	1.00			3933.00	
Shut In Tool	5.00			3938.00	
Hydraulic tool	5.00			3943.00	
Jars	5.00			3948.00	
Safety Joint	3.00			3951.00	
Packer	4.00			3955.00	28.00 Bottom Of Top Packer
Packer	5.00			3960.00	
Stubb	1.00			3961.00	
Perforations	5.00			3966.00	
Recorder	0.00	8166	Inside	3966.00	
Recorder	0.00	6753	Outside	3966.00	
Blank Off Sub	4.00			3970.00	10.00 Tool Interval
Packer	4.00			3974.00	
Stubb	1.00			3975.00	
Recorder	0.00	8319	Below	3975.00	
perforations	2.00			3977.00	
Change Over Sub	1.00			3978.00	
Blank Spacing	94.00			4072.00	
Change Over Sub	1.00			4073.00	
Perforations	24.00			4097.00	
Bullnose	3.00			4100.00	130.00 Bottom Packers & Anchor

Total Tool Length: 168.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Hartman Oil Co., Inc.

36-9s-24w Graham, KS

10500 E Berkeley Sq. Pkw y
Ste. 100
Wichita, KS 67206
ATTN: Kitt Noah

Gano Unit #1-36

Job Ticket: 54445

DST#: 3

Test Start: 2013.10.01 @ 07:15:00

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

85000 ppm

Viscosity: 60.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 5.78 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 2900.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
355.00	OS VSMCW 90%W 10%M	2.777

Total Length: 355.00 ft Total Volume: 2.777 bbl

Num Fluid Samples: 0

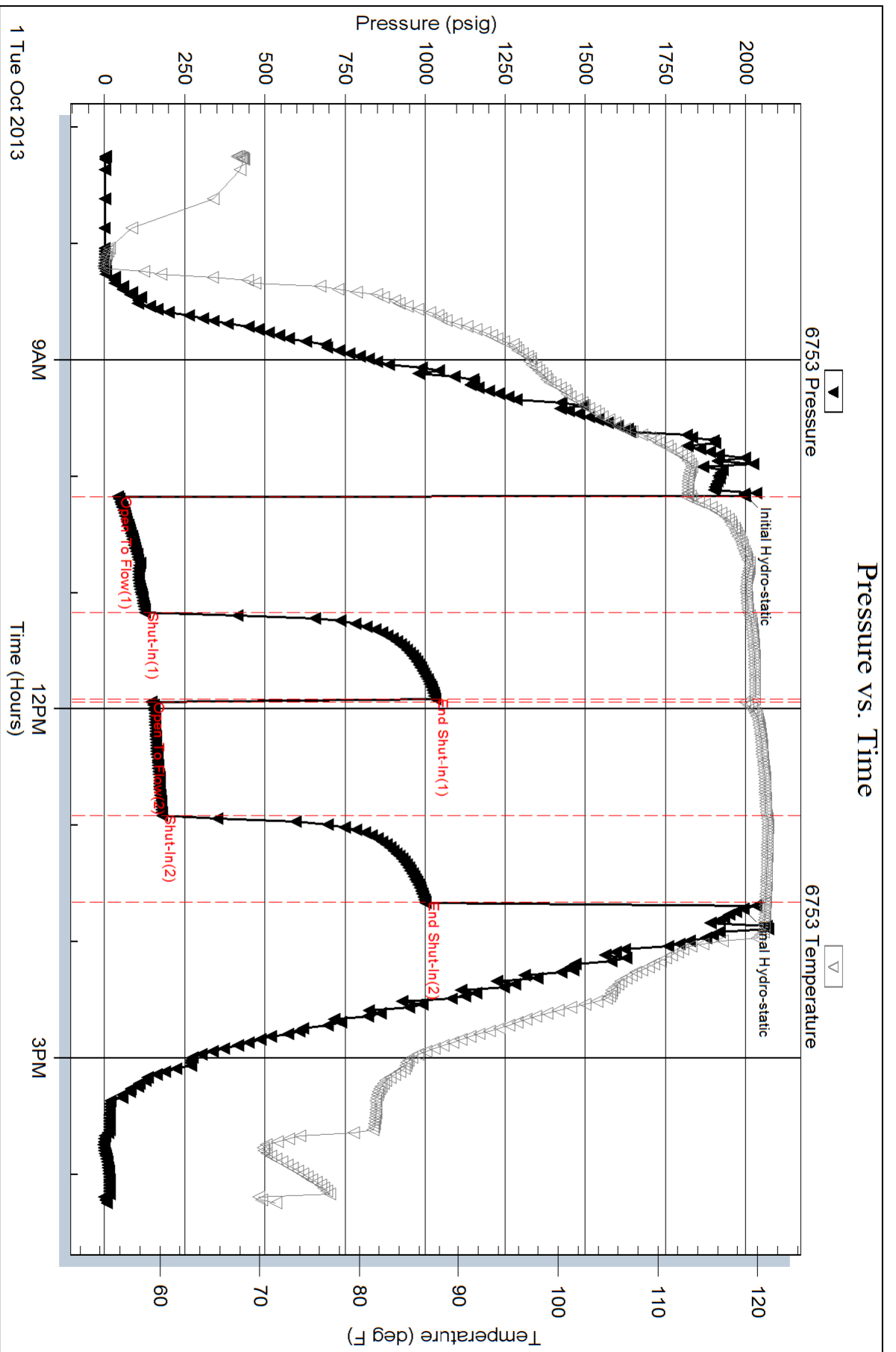
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:



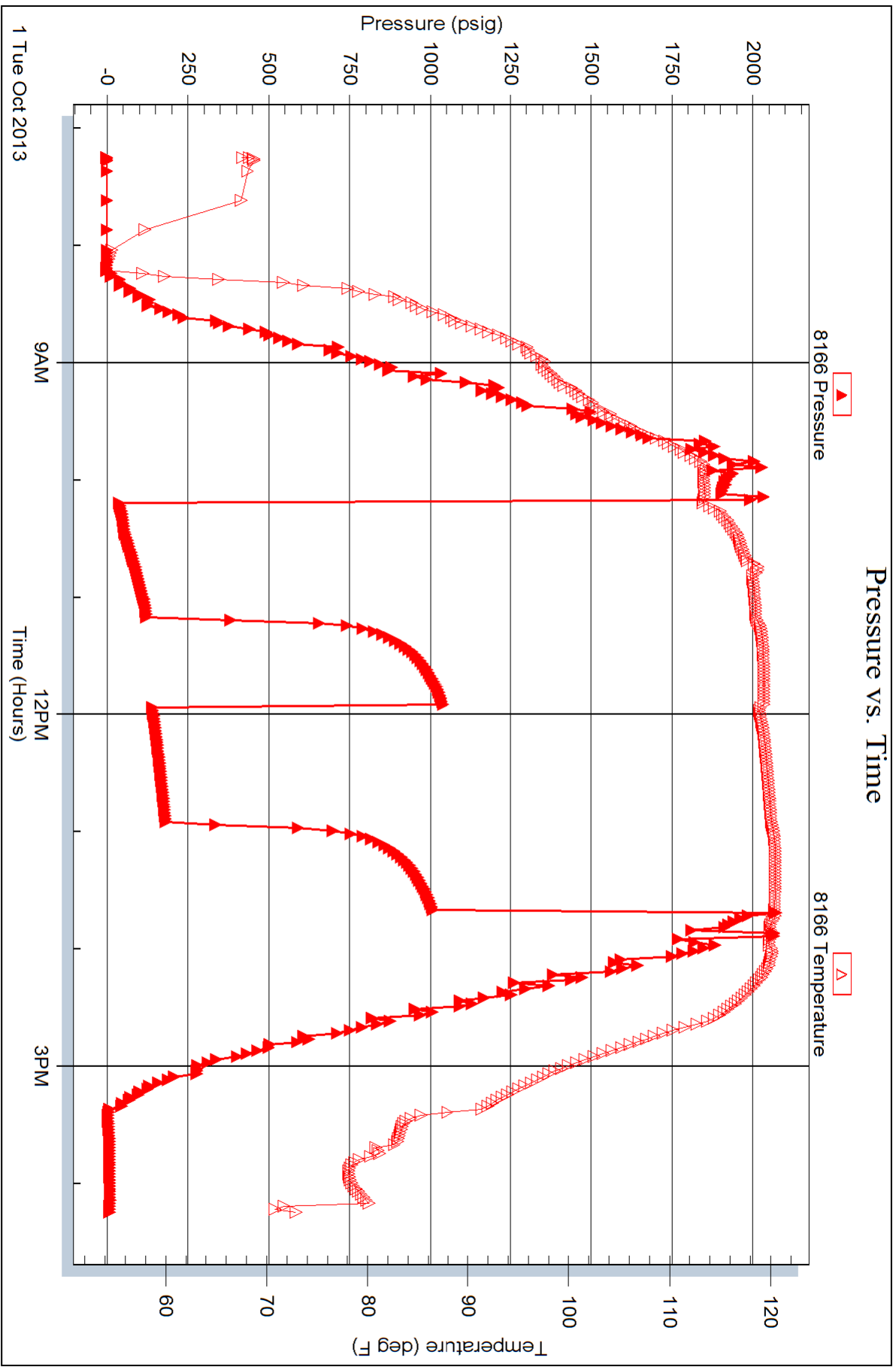
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Inside

Hartman Oil Co., Inc.

Gano Unit #1-36

DST Test Number: 3

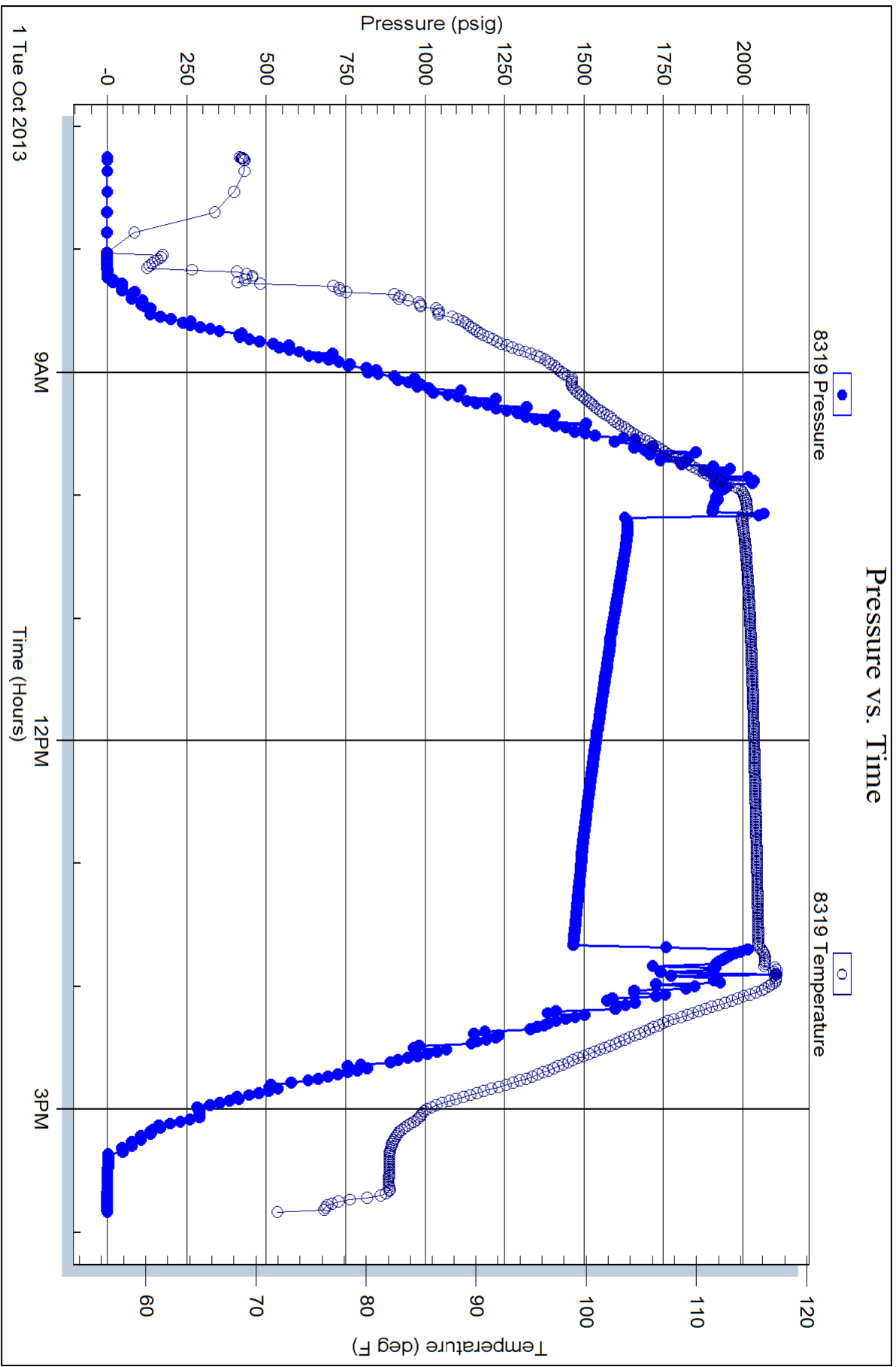


Serial #: 8319

Below (Stratfield) Oil Co., Inc.

Gano Unit #1-36

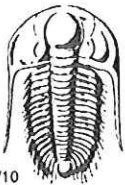
DST Test Number: 3



Triobite Testing, Inc

Ref. No: 54445

Printed: 2013.10.03 @ 11:11:00



TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 54443

Well Name & No. Gano Unit #1-36 Test No. 1 Date 9/29/13
 Company Hertman Oil Coy Inc. Elevation 2469 KB 2458 GL
 Address 10500 E Berkeley Sq. Pkwy. Ste. 100 Wichita, KS 67206
 Co. Rep / Geo. Kitt Noah Rig H2 #2
 Location: Sec. 36 Twp. 9 Rge. 24 Co. Graham State KS

Interval Tested 3957-3992 Zone Tested LK6 "I+J"
 Anchor Length 35' Drill Pipe Run 3703 Mud Wt. 9.1
 Top Packer Depth 3952 Drill Collars Run 237 Vis 60
 Bottom Packer Depth 3957 Wt. Pipe Run --- WL 5.8
 Total Depth 3992 Chlorides 2900 ppm System LCM 2#

Blow Description IF - DOB 12 mins
ISI - Slowly Built to 3/4"
FF - BOB 15 mins
FSI - Surface Blow throughout

Rec	Feet of	%gas	%oil	%water	%mud
<u>5</u>	<u>Free O</u>		<u>100</u>		
<u>695</u>	<u>MW</u>			<u>90</u>	<u>12</u>
	<u>20' ATP</u>	<u>100</u>			

Rec Total 700' BHT 121° Gravity --- API RW .12 @ 63 °F Chlorides 6000 ppm

(A) Initial Hydrostatic <u>1960</u>	<input checked="" type="checkbox"/> Test <u>1150</u>	T-On Location <u>1000</u>
(B) First Initial Flow <u>65</u>	<input checked="" type="checkbox"/> Jars <u>250</u>	T-Started <u>1111</u>
(C) First Final Flow <u>213</u>	<input checked="" type="checkbox"/> Safety Joint <u>75</u>	T-Open <u>1508</u>
(D) Initial Shut-In <u>999</u>	<input type="checkbox"/> Circ Sub <u>---</u>	T-Pulled <u>1823</u>
(E) Second Initial Flow <u>257</u>	<input checked="" type="checkbox"/> Hourly Standby <u>.75h 75</u>	T-Out <u>2058</u>
(F) Second Final Flow <u>338</u>	<input checked="" type="checkbox"/> Mileage <u>116 RT</u> 179.80	Comments <u>---</u>
(G) Final Shut-In <u>979</u>	<input type="checkbox"/> Sampler <u>---</u>	
(H) Final Hydrostatic <u>1866</u>	<input type="checkbox"/> Straddle <u>---</u>	<input type="checkbox"/> Ruined Shale Packer <u>---</u>

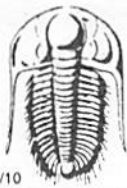
Initial Open 45
 Initial Shut-In 45
 Final Flow 45
 Final Shut-In 60

Extra Packer ---
 Extra Recorder ---
 Day Standby ---
 Accessibility 150
 Sub Total 1879.80

Extra Copies ---
 Sub Total 0
 Total 1879.80
 MP/DST Disc't ---

Approved By _____ Our Representative Brannon L.

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. 54444

Well Name & No. Gano Unit #1-36 Test No. 2 Date 9/30/13
 Company Hartman Oil Co, Inc. Elevation 2469 KB 2458 GL
 Address 10500 E Berkeley Sq Pkwy, Ste. 100 Wichita, KS 67206
 Co. Rep / Geo. Kitt Noah Rig H2 #2
 Location: Sec. 36 Twp. 9 Rge. 24 Co. Graham State KS

Interval Tested 3994-4016 Zone Tested LKC "K"
 Anchor Length 22' Drill Pipe Run 3734 Mud Wt. 9.2
 Top Packer Depth 3989 Drill Collars Run 237 Vis 65
 Bottom Packer Depth 3994 Wt. Pipe Run WL 58
 Total Depth 4016 Chlorides 3000 ppm System LCM 2#

Blow Description IF- BOB 42 mins
ISI- No blow
FF- 48 in blow
FSI- No blow

Rec	Feet of	%gas	%oil	%water	%mud
<u>10</u>	<u>USGO</u>	<u>5</u>	<u>95</u>		
<u>65</u>	<u>USGOCM</u>	<u>5</u>	<u>40</u>		<u>55</u>
	<u>285 ft GEP</u>				

Rec Total 75 BHT _____ Gravity _____ API RW _____ @ _____ °F Chlorides _____ ppm

(A) Initial Hydrostatic 4958 Test 1250 T-On Location 0610
 (B) First Initial Flow 47 Jars 250 T-Started 0642
 (C) First Final Flow 58 Safety Joint 75 T-Open 0918
 (D) Initial Shut-In 137 Circ Sub _____ T-Pulled 1218
 (E) Second Initial Flow 63 Hourly Standby _____ T-Out 14145
 (F) Second Final Flow 66 Mileage 116 RT 179.80 Comments _____
 (G) Final Shut-In 101 Sampler _____
 (H) Final Hydrostatic 4904 Straddle _____
 Shale Packer _____
 Extra Packer _____
 Extra Recorder _____
 Day Standby _____
 Accessibility No stairs 150 MP/DST Disc't _____
 Sub Total 1904.80

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

Ruined Shale Packer _____
 Ruined Packer _____
 Extra Copies _____
 Sub Total 0
 Total 1904.80

Approved By _____ Our Representative Brannan Lonsdale

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. **54445**

Well Name & No. Gano Unit #1-36 Test No. 3 Date 10/1/13
 Company Hartman Oil Co Inc Elevation 2469 KB 2458 GL
 Address 10500 E. Berkeley Sq Pkwy Ste 100 Wichita, KS 67206
 Co. Rep / Geo. K. L. Noah Rig H2 #2
 Location: Sec. 36 Twp. 9 Rge. 24 Co. Graham State KS

Interval Tested 3960 - 3970 Zone Tested KC "I"
 Anchor Length 10 Drill Pipe Run 3701 Mud Wt. _____
 Top Packer Depth 3955, 3960 Drill Collars Run 237 Vis _____
 Bottom Packer Depth 3970 Wt. Pipe Run — WL _____
 Total Depth 4097 Chlorides _____ ppm System LCM _____

Blow Description FF - 10in blow
ISI - No blow
FF - 7 1/2in blow
FSI - No blow

Rec	Feet of	%gas	%oil	%water	%mud
<u>355</u>	<u>OS USMCW</u>		<u>90</u>	<u>10</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 355 BHT 121 Gravity _____ API RW .1 @ 65 °F Chlorides 85,000 ppm

(A) Initial Hydrostatic <u>1,995</u>	<input checked="" type="checkbox"/> Test <u>1150</u>	T-On Location <u>6:45</u>
(B) First Initial Flow <u>42</u>	<input checked="" type="checkbox"/> Jars <u>250</u>	T-Started <u>7:15</u>
(C) First Final Flow <u>126</u>	<input checked="" type="checkbox"/> Safety Joint <u>75</u>	T-Open <u>10:10</u>
(D) Initial Shut-In <u>1,031</u>	<input type="checkbox"/> Circ Sub _____	T-Pulled <u>13:40</u>
(E) Second Initial Flow <u>146</u>	<input checked="" type="checkbox"/> Hourly Standby <u>.5h 50</u>	T-Out <u>16:15</u>
(F) Second Final Flow <u>179</u>	<input checked="" type="checkbox"/> Mileage <u>116.87</u> 179.80	Comments _____
(G) Final Shut-In <u>999</u>	<input type="checkbox"/> Sampler _____	_____
(H) Final Hydrostatic <u>1,992</u>	<input checked="" type="checkbox"/> Straddle <u>600</u>	<input type="checkbox"/> Ruined Shale Packer _____
	<input type="checkbox"/> Shale Packer _____	<input type="checkbox"/> Ruined Packer _____
Initial Open <u>60</u>	<input type="checkbox"/> Extra Packer _____	<input type="checkbox"/> Extra Copies _____
Initial Shut-In <u>45</u>	<input type="checkbox"/> Extra Recorder _____	Sub Total <u>0</u>
Final Flow <u>60</u>	<input type="checkbox"/> Day Standby _____	Total <u>2454.80</u>
Final Shut-In <u>45</u>	<input checked="" type="checkbox"/> Accessibility <u>No Stairs</u> 150	MP/DST Disc't _____
	Sub Total <u>2454.80</u>	

Approved By _____ Our Representative Paul Deed

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