

Operator Name: _____ Lease Name: _____ Well #: _____

Sec. _____ Twp. _____ S. R. _____ East West County: _____

INSTRUCTIONS: Show important tops of formations penetrated. Detail all cores. Report all final copies of drill stems tests giving interval tested, time tool open and closed, flowing and shut-in pressures, whether shut-in pressure reached static level, hydrostatic pressures, bottom hole temperature, fluid recovery, and flow rates if gas to surface test, along with final chart(s). Attach extra sheet if more space is needed.

Final Radioactivity Log, Final Logs run to obtain Geophysical Data and Final Electric Logs must be emailed to kcc-well-logs@kcc.ks.gov. Digital electronic log files must be submitted in LAS version 2.0 or newer AND an image file (TIFF or PDF).

Drill Stem Tests Taken <input type="checkbox"/> Yes <input type="checkbox"/> No <i>(Attach Additional Sheets)</i> Samples Sent to Geological Survey <input type="checkbox"/> Yes <input type="checkbox"/> No Cores Taken <input type="checkbox"/> Yes <input type="checkbox"/> No Electric Log Run <input type="checkbox"/> Yes <input type="checkbox"/> No List All E. Logs Run: _____	<input type="checkbox"/> Log Formation (Top), Depth and Datum <input type="checkbox"/> Sample Name Top Datum
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CASING RECORD <input type="checkbox"/> New <input type="checkbox"/> Used							
Report all strings set-conductor, surface, intermediate, production, etc.							
Purpose of String	Size Hole Drilled	Size Casing Set (In O.D.)	Weight Lbs. / Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives

ADDITIONAL CEMENTING / SQUEEZE RECORD				
Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
<input type="checkbox"/> Perforate <input type="checkbox"/> Protect Casing <input type="checkbox"/> Plug Back TD <input type="checkbox"/> Plug Off Zone				

Did you perform a hydraulic fracturing treatment on this well? Yes No *(If No, skip questions 2 and 3)*
 Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons? Yes No *(If No, skip question 3)*
 Was the hydraulic fracturing treatment information submitted to the chemical disclosure registry? Yes No *(If No, fill out Page Three of the ACO-1)*

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

TUBING RECORD: Size: _____ Set At: _____ Packer At: _____ Liner Run: 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> <i>(Submit ACO-4)</i> <input type="checkbox"/> Other <i>(Specify)</i> _____	PRODUCTION INTERVAL: _____ _____
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Form	ACO1 - Well Completion
Operator	Hess Oil Company
Well Name	Younger 1
Doc ID	1264414

Tops

Name	Top	Datum
Anhydrite	1463	+711
Base Anhydrite	1510	+664
Topeka	3184	-1010
Heebner	3441	-1267
Lansing	3489	-1315
Base Kansas City	3742	-1568
Conglomerate	3800	-1626
Arbuckle	3842	-1668
RTD	3925	-1751

Summary of Changes

Lease Name and Number: Younger 1

API/Permit #: 15-051-26767-00-00

Doc ID: 1264414

Correction Number: 1

Approved By: NAOMI JAMES

Field Name	Previous Value	New Value
Approved Date	04/08/2015	10/09/2015
Completion Or Recompletion Date	4/6/2015	7/8/2015
Date of First or Resumed Production or SWD or Enhr Liner Run?		7/10/2015
Method Of Completion - Perf	No	Yes
Perf_Material_2		300 gal. 15% MCA
Perf_Material_3		300 gal. 15% MCA
Perf_Material_4		500 gal 15% MCA
Perf_Record_1		Perf. 3850' - 3857', set CIBP @ 3780'
Perf_Record_2		Perf. 3622' - 3626'

Summary of changes for correction 1 continued

Field Name	Previous Value	New Value
Perf_Record_3		Perf. 3580' - 3584'
Perf_Record_4		Perf. 3557' - 3564' (3580' - 3584' open)
Perf_Shots_1		3
Perf_Shots_2		4
Perf_Shots_3		4
Perf_Shots_4		4
Plug Back Total Depth		3780
Producing Formation	Arbuckle	LKC
Producing Method Pumping	No	Yes
Production - Barrels Oil		5
Production - Barrels of Water		20
Production - Oil Gravity		34
Production Interval #1		3622' - 3564'

Summary of changes for correction 1 continued

Field Name	Previous Value	New Value
Purchaser's Name		CHS
Save Link	../../../../kcc/detail/operatorE ditDetail.cfm?docID=12 46440	../../../../kcc/detail/operatorE ditDetail.cfm?docID=12 64414
Tubing Set At		3742
Tubing Size		2.875



Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION 1246440
OIL & GAS CONSERVATION DIVISION

Form ACO-1

August 2013

Form must be Typed

Form must be Signed

All blanks must be Filled

CONFIDENTIAL 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: _____

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) (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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Form	ACO1 - Well Completion
Operator	Hess Oil Company
Well Name	Younger 1
Doc ID	1246440

Tops

Name	Top	Datum
Anhydrite	1463	+711
Base Anhydrite	1510	+664
Topeka	3184	-1010
Heebner	3441	-1267
Lansing	3489	-1315
Base Kansas City	3742	-1568
Conglomerate	3800	-1626
Arbuckle	3842	-1668
RTD	3925	-1751



Scale 1:240 (5"=100') Imperial
Measured Depth Log

Well Name: Younger #1
API: 15-051-26767-00-00
Location: SW NE SW NW SECTION 35 13S 19W
License Number: 5663
Spud Date: 12/12/2014
Surface Coordinates: 1795' FROM NORTH LINE OF SECTION
 956' FROM WEST LINE OF SECTION
Bottom Hole Coordinates: 1795' FROM NORTH LINE OF SECTION
 956' FROM WEST LINE OF SECTION
Ground Elevation (ft): 2169' K.B. Elevation (ft): 2174'
Logged Interval (ft): 2800' To: 3925' Total Depth (ft): 3925'
Formation: ARBUCKLE
Type of Drilling Fluid: CHEMICAL, MUD-CO
 Printed by WellSight Log Viewer from WellSight Systems 1-800-447-1534 www.WellSight.com

OPERATOR

Company: HESS OIL COMPANY
Address: PO BOX 1009
 MCPHERSON, KANSAS 67460-1009
 (620) 241-4640

GEOLOGIST

Name: DAVID GOULD (LOGGER)
Company: DMT COMPANY
Address: 532 SUNRISE
 PRATT, KANSAS 67124
 (620) 388-2847

Comments

CONTRACTOR: MALLARD Rig #1

BIT RECORD:

#1, 7 7/8, F27, RD1785, 209'-3561'
 #2, 7 7/8, F27, RD5411, 3561'-3691'
 #3, 7 7/8, F27, RR, 3691'-3925'

SURVEYS:

209' 1 DEGREE
 3419' 1 1/2 DEGREES
 3925' 2 DEGREES

DAILY STATUS: (7:00 AM)

12/12/14 Moved in Mallard Drilling rig. Spudded @ 2:30 pm. Drilled to 217' and ran 5 jts. 8-5/8" x 20# x 202' surface casing. Set @ 209' and cemented w/150 sx Class A, 3% cc, 2% gel. CDC. PD @ 9:30 pm
 12/13/14 Rig repairs @ 209' @ 6:30 am
 12/14/14 Drilling @ 1917'
 12/15/14 Drilling @ 2641'
 12/16/14 Drilling @ 3209'
 12/17/14 Drilled to 3419', DST #1, Drilled ahead to 3530'.
 12/18/14 3530' DST #2
 12/19/14 Drilling @ 3573'
 12/20/14 Drilling @ 3677'
 12/21/14 3701' DST #5
 12/22/14 3807' DST #6
 12/23/14 3851' DST #7
 12/24/14 3925' Shut down for christmas after logs
 12/27/14 Rig up @ 6:30 AM, Ream to TD
 12/28/14 Cement Production Pipe Plug Down @ 7:25 AM

Well Name & No.: Younger #1 Company: Hess Oil Co. Test No.: 1 Interval Tested: 3396 - 4419

Zone Tested: Oriad Times: 30-45-30-45

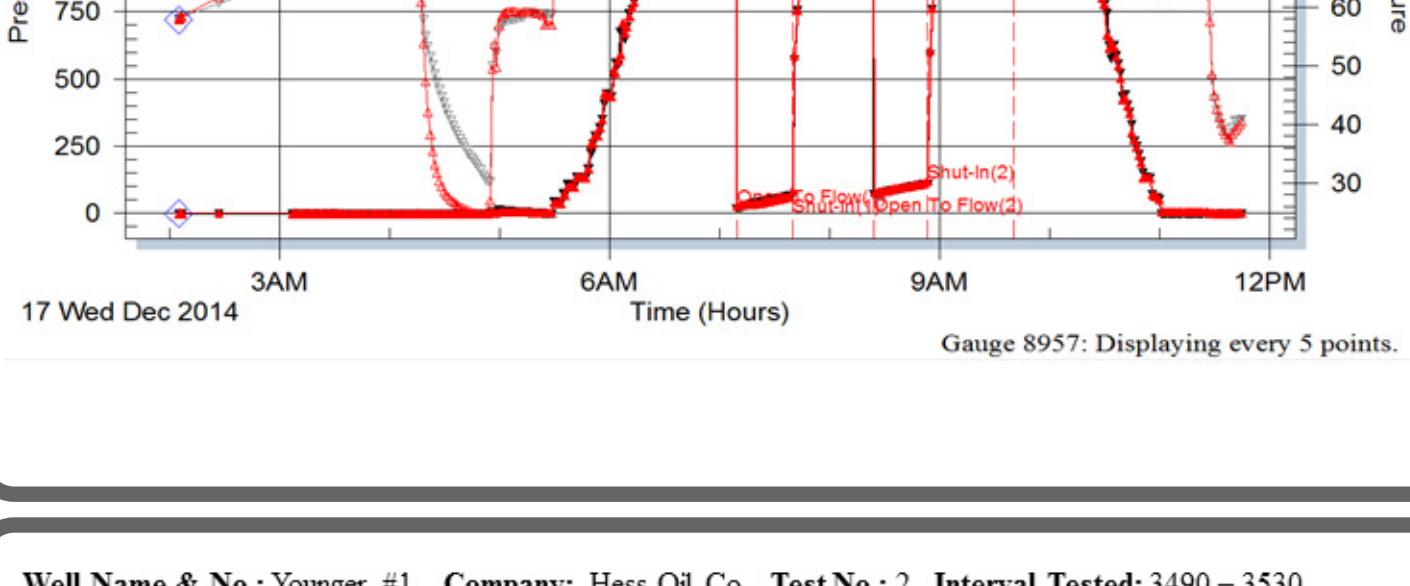
Blow Description: IFP: 2 1/2" Blow ISI: No Blow Back FFP: 2' blow FSI: No Blow Back

Rec: 60 Feet of OSMCW 70% Water 30% Mud, 125 Feet of SMCW 95% Water 5% Mud, Rec. Total: 185', BHT: 108 Gravity: N/A

Initial Hydrostatic: 1728 First Initial Flow: 18 First Final Flow: 66 Initial Shut-In: 1,079

Second Initial Flow: 69 Second Final Flow: 110 Final Shut-In: 1,063 Final Hydrostatic: 1,644

Pressure vs. Time



Gauge 8957: Displaying every 5 points.

Well Name & No.: Younger #1 Company: Hess Oil Co. Test No.: 2 Interval Tested: 3490 - 3530

Zone Tested: Lansing Times: 30-45-30-45

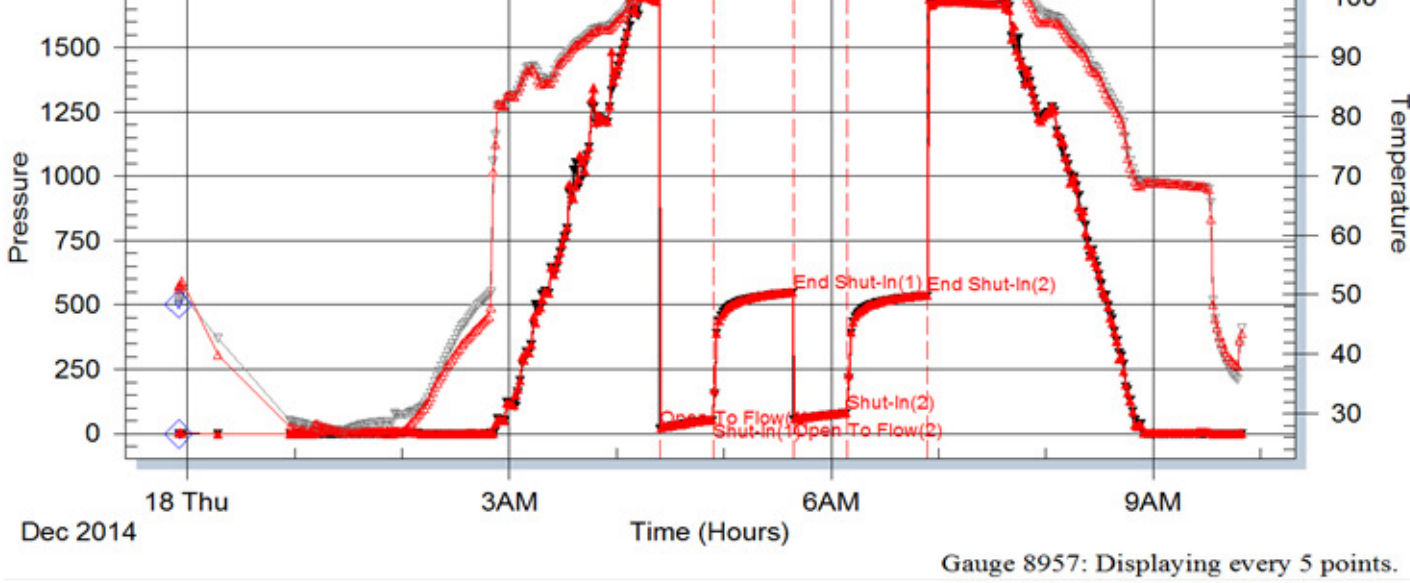
Blow Description: IFP: 3" Blow ISI: No Blow Back FFP: 1 1/2" Blow FSI: No Blow Back

Rec: 65 Feet of VSWCM 10% Water 90% Mud, 60 Feet of MCW 70% Water 30% Mud Rec. Total: 125', BHT: 108 Gravity: N/A

Initial Hydrostatic: 1736 First Initial Flow: 78 First Final Flow: 52 Initial Shut-In: 546

Second Initial Flow: 55 Second Final Flow: 78 Final Shut-In: 536 Final Hydrostatic: 1694

Pressure vs. Time



Gauge 8957: Displaying every 5 points.

Well Name & No.: Younger #1 Company: Hess Oil Co. Test No.: 3 Interval Tested: 3535 - 3564

Zone Tested: Lansing Times: 45-45-45-45

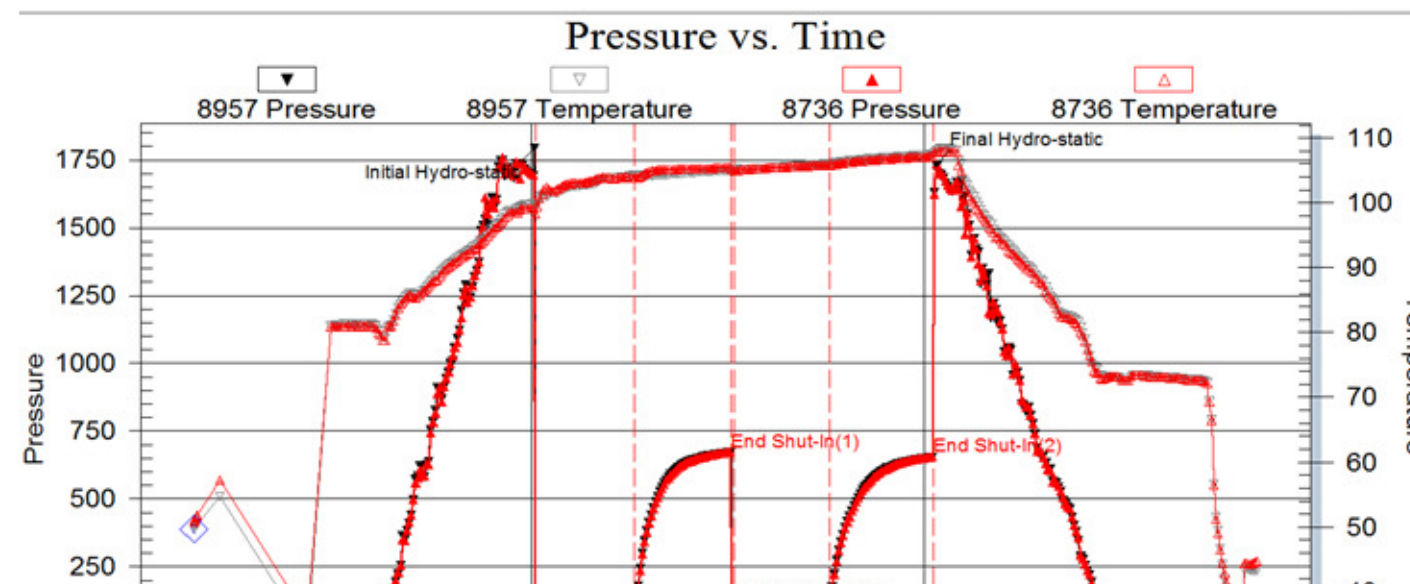
Blow Description: IFP: BOB in 18 Min. ISI: No Blow Back FFP: BOB in 10 Min. FSI: 1 1/2" Blow

Rec: 50 Feet of GOCM 20% Gas 20% Oil, 60% Mud, 250 Feet of GO 20% Gas 80% Oil, 750' Feet of GIP Rec. Total: 300', BHT: 107 Gravity: N/C

Initial Hydrostatic: 1795 First Initial Flow: 20 First Final Flow: 98 Initial Shut-In: 672

Second Initial Flow: 106 Second Final Flow: 120 Final Shut-In: 654 Final Hydrostatic: 1734

Pressure vs. Time



Gauge 8957: Displaying every 4 points.

Well Name & No.: Younger #1 Company: Hess Oil Co. Test No.: 4 Interval Tested: 3566 - 3600

Zone Tested: LKC Times: 30-30-30-30

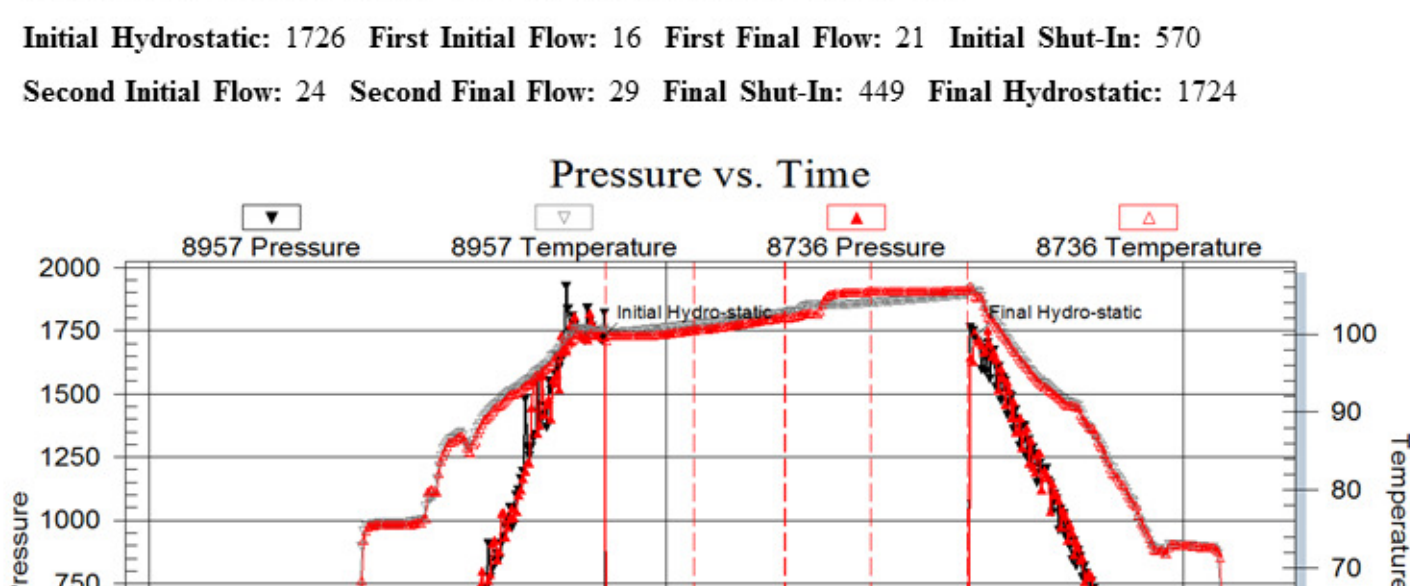
Blow Description: IFP: Weak Surface Blow ISI: No Blow Back FFP: No Blow FSI: No Blow Back

Rec: 20 Feet of OSM 100% Mud Rec. Total: 20', BHT: 105 Gravity: N/A

Initial Hydrostatic: 1726 First Initial Flow: 16 First Final Flow: 21 Initial Shut-In: 570

Second Initial Flow: 24 Second Final Flow: 29 Final Shut-In: 449 Final Hydrostatic: 1724

Pressure vs. Time



Gauge 8957: Displaying every 3 points.

Well Name & No.: Younger #1 Company: Hess Oil Co. Test No.: 5 Interval Tested: 3608 - 3700

Zone Tested: LKC Times: 45-45-45-45

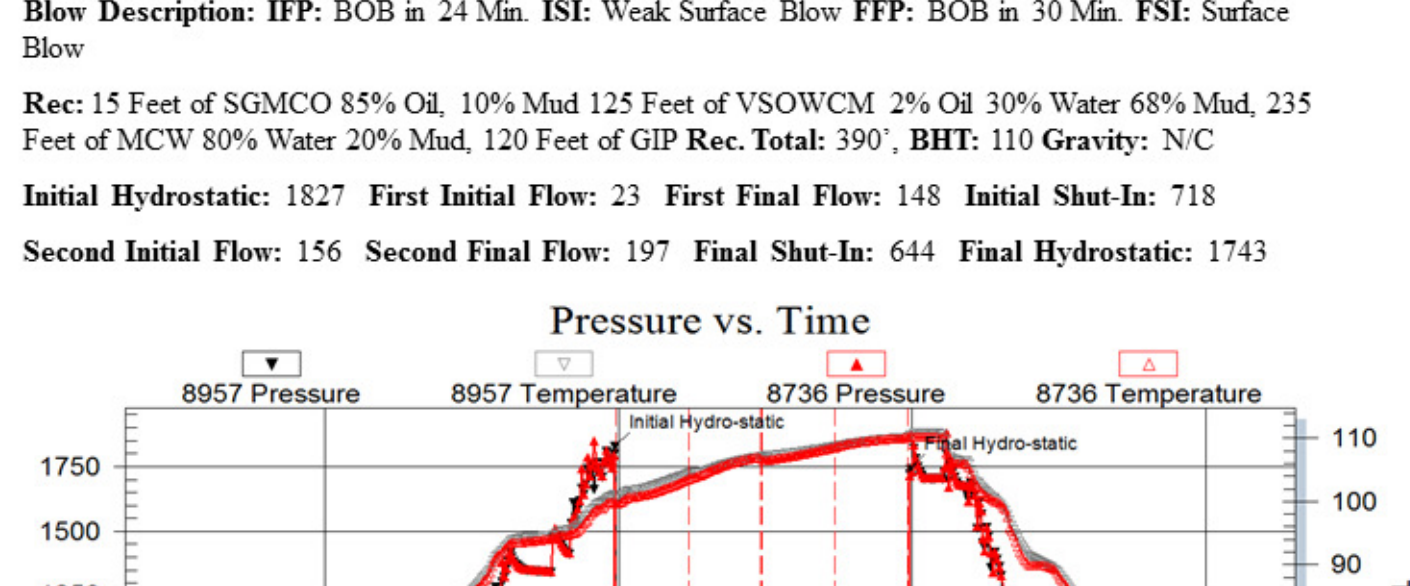
Blow Description: IFP: BOB in 24 Min. ISI: Weak Surface Blow FFP: BOB in 30 Min. FSI: Surface Blow

Rec: 15 Feet of SGMCO 85% Oil, 10% Mud 125 Feet of VSOWCM 30% Oil 30% Water 68% Mud, 235 Feet of MCW 80% Water 20% Mud, 120 Feet of GIP Rec. Total: 290', BHT: 110 Gravity: N/C

Initial Hydrostatic: 1827 First Initial Flow: 23 First Final Flow: 148 Initial Shut-In: 718

Second Initial Flow: 156 Second Final Flow: 197 Final Shut-In: 644 Final Hydrostatic: 1743

Pressure vs. Time



Gauge 8957: Displaying every 5 points.

Well Name & No.: Younger #1 Company: Hess Oil Co. Test No.: 6 Interval Tested: 3791 - 3807

Zone Tested: Cong. Times: 30-30-30-30

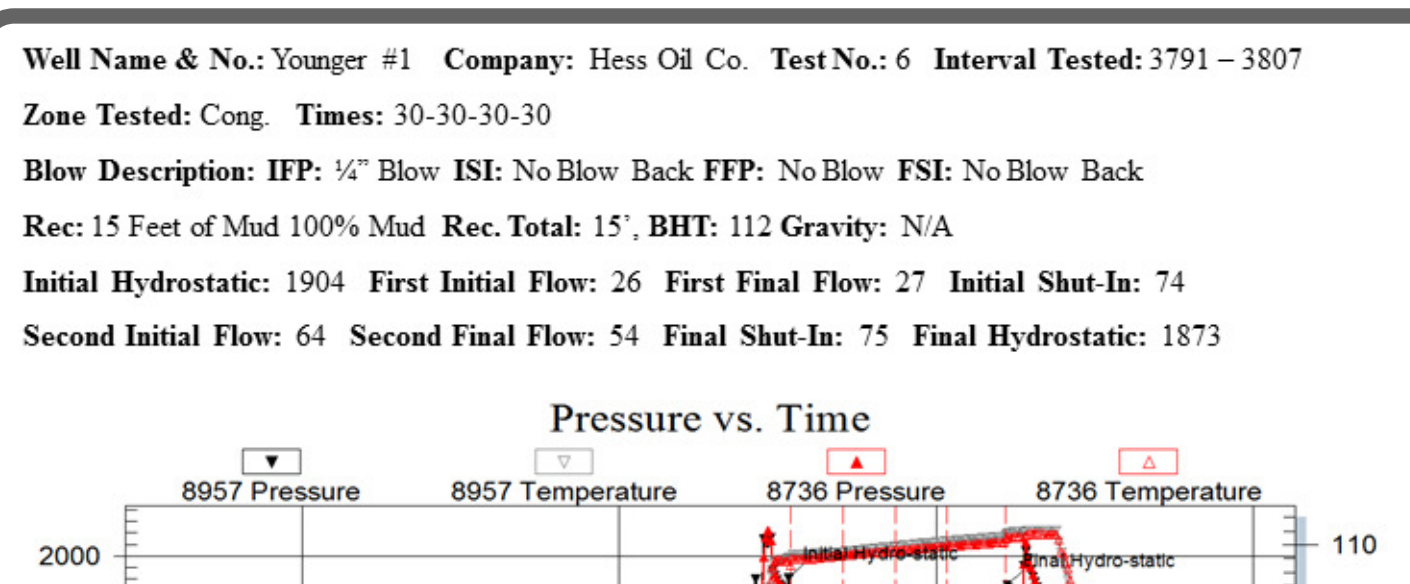
Blow Description: IFP: 1/4" Blow ISI: No Blow Back FFP: No Blow FSI: No Blow Back

Rec: 15 Feet of Mud 100% Mud Rec. Total: 15', BHT: 112 Gravity: N/A

Initial Hydrostatic: 1904 First Initial Flow: 26 First Final Flow: 27 Initial Shut-In: 74

Second Initial Flow: 64 Second Final Flow: 54 Final Shut-In: 75 Final Hydrostatic: 1873

Pressure vs. Time



Gauge 8957: Displaying every 5 points.

Well Name & No.: Younger #1 Company: Hess Oil Co. Test No.: 7 Interval Tested: 3843 - 3851

Zone Tested: Arbuclde Times: 30-30-30-30

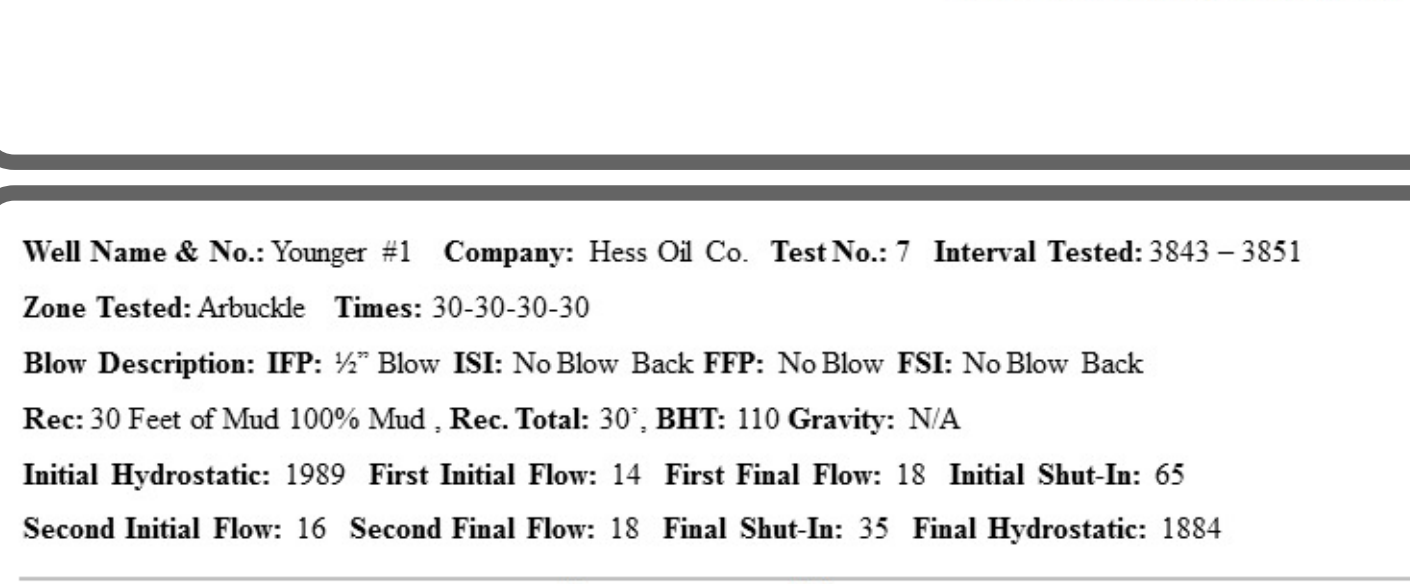
Blow Description: IFP: 1/2" Blow ISI: No Blow Back FFP: No Blow FSI: No Blow Back

Rec: 30 Feet of Mud 100% Mud, Rec. Total: 30', BHT: 110 Gravity: N/A

Initial Hydrostatic: 1989 First Initial Flow: 14 First Final Flow: 18 Initial Shut-In: 65

Second Initial Flow: 16 Second Final Flow: 18 Final Shut-In: 35 Final Hydrostatic: 1884

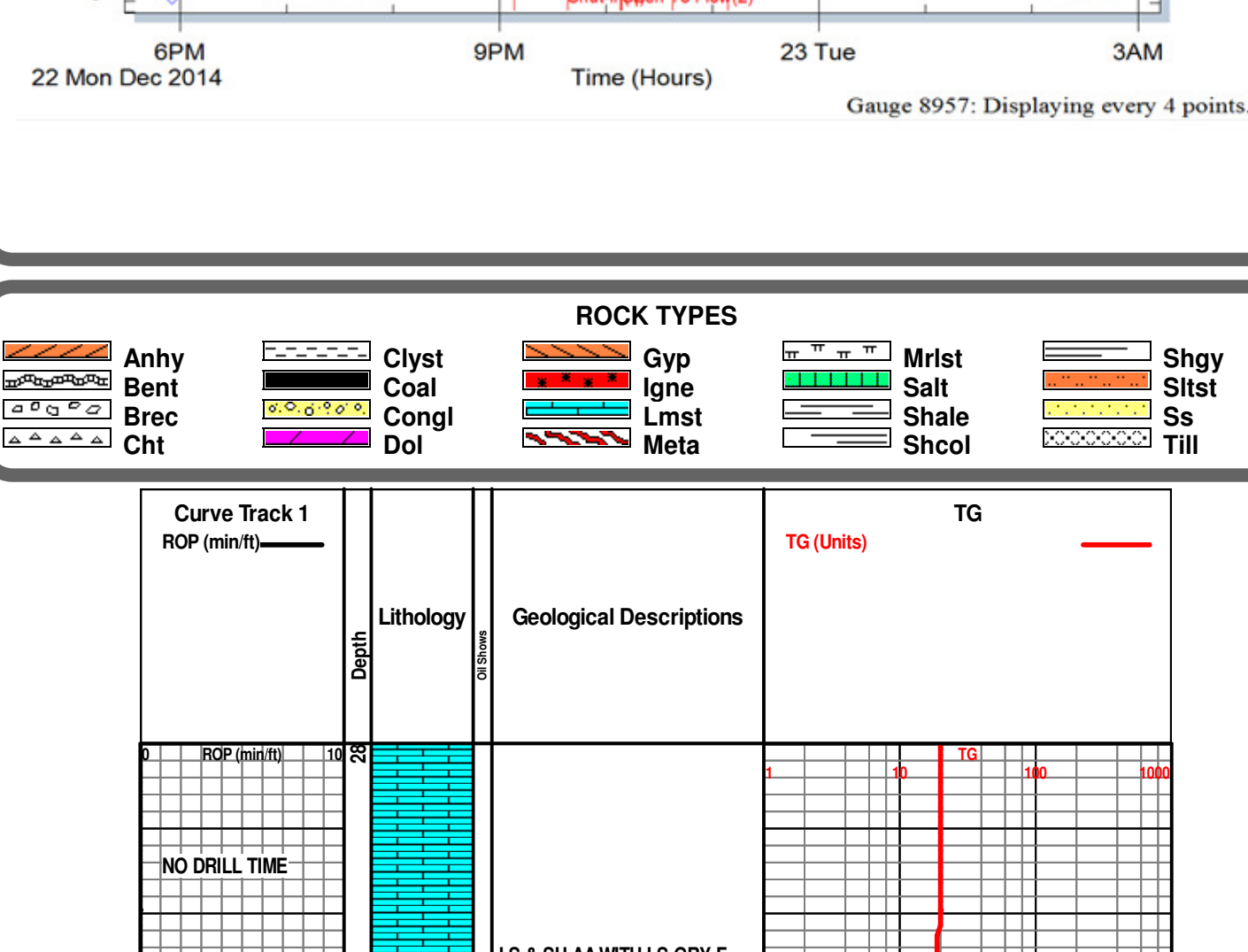
Pressure vs. Time



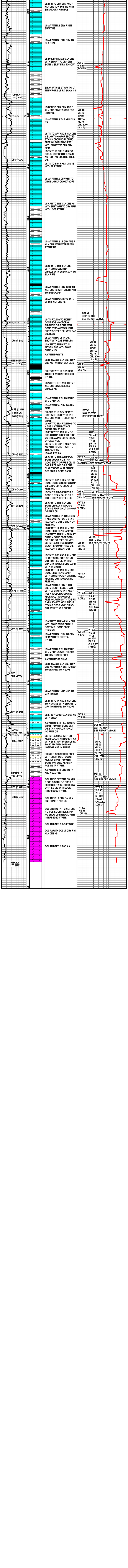
Gauge 8957: Displaying every 4 points.

ROCK TYPES

Anhy	Clyst	Gyp	Mrlst	Shgy
Brec	Coagl	Igne	Shalt	Silt
Cht	Dol	Lmst	Shcol	Till



Geological Descriptions:
 LS & SH AA WITH LS GRY F XLN FOS DNS NS
 LS AA WITH SH GRY TO GRN FIRM
 LS TN TO BRN F XLN DNS FOS WITH SH GRY TO LT GRN FIRM TO SOFT
 SH GRY TO GRN FIRM WITH LS TN TO DRK BRN ANG F XLN DNS NS
 MOSTLY LS AA
 LS GRY TO BRN ANG F XLN DNS TO V DNS NS
 LS AA WITH SH GRY TO LT GRY SOME SILTY FIRM TO SOFT WITH SS LT GRY F-V FV GR SUB RD SLIGHTLY SHALY NS
 SH GRY TO DRK GRY FIRM WITH INTERBEDDED PYRITE WITH LS CRM TO TN F XLN SOME F POS V SLIGHT STAIN NO SHOW OF FREE OIL
 LS AA WITH LS DRK GRY TO BRN F XLN DNS NS WITH SH GRY FIRM
 SH GRY TO GRN FIRM WITH LS CRM TO TN F XLN DNS NS
 LS LT GRY TO BRN F XLN DNS WITH INTERBED DRK GRY SH
 LS LT GRY TO BRN F XLN DNS





DRILL STEM TEST REPORT

Prepared For: **Hess Oil Company**

PO Box 1009
McPherson KS 67460

ATTN: David Gould

Younger #1

35-13s-19w Ellis,KS

Start Date: 2014.12.17 @ 02:05:00

End Date: 2014.12.17 @ 11:45:30

Job Ticket #: 53829 DST #: 1

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

Printed: 2014.12.23 @ 16:45:11



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Hess Oil Company
PO Box 1009
McPherson KS 67460
ATTN: David Gould

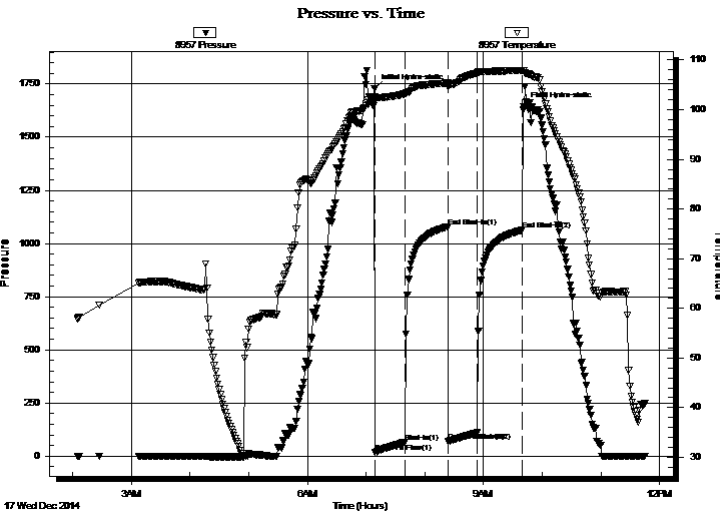
35-13s-19w Ellis,KS
Younger #1
Job Ticket: 53829 **DST#: 1**
Test Start: 2014.12.17 @ 02:05:00

GENERAL INFORMATION:

Formation: **Oread**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 07:09:15
Time Test Ended: 11:45:30
Interval: **3396.00 ft (KB) To 3419.00 ft (KB) (TVD)**
Total Depth: 3419.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair
Reference Elevations: 2174.00 ft (KB)
2169.00 ft (CF)
KB to GR/CF: 5.00 ft
Test Type: Conventional Bottom Hole (Initial)
Tester: Brett Dickinson
Unit No: 59

Serial #: 8957 Outside
Press@RunDepth: 109.80 psig @ 3416.00 ft (KB) Capacity: 8000.00 psig
Start Date: 2014.12.17 End Date: 2014.12.17 Last Calib.: 2014.12.17
Start Time: 02:05:05 End Time: 11:45:30 Time On Btm: 2014.12.17 @ 07:08:30
Time Off Btm: 2014.12.17 @ 09:41:15

TEST COMMENT: IF-2 1/4" blow
IS-No blow
FF-2" blow
FS-No blow



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1726.77	102.59	Initial Hydro-static
1	17.94	101.85	Open To Flow (1)
32	66.00	103.16	Shut-In(1)
76	1079.05	105.34	End Shut-In(1)
76	68.85	104.69	Open To Flow (2)
105	109.80	107.37	Shut-In(2)
152	1062.97	107.88	End Shut-In(2)
153	1643.90	107.90	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
125.00	SMCW 5%M 95%W	0.61
60.00	OS MCW 30%M 70%W	0.30

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Hess Oil Company
PO Box 1009
McPherson KS 67460
ATTN: David Gould

35-13s-19w Ellis,KS
Younger #1
Job Ticket: 53829 **DST#: 1**
Test Start: 2014.12.17 @ 02:05:00

Tool Information

Drill Pipe:	Length: 3135.00 ft	Diameter: 3.80 inches	Volume: 43.98 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.70 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 248.00 ft	Diameter: 2.25 inches	Volume: 1.22 bbl	Weight to Pull Loose: 75000.00 lb
			<u>Total Volume: 45.20 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	15.00 ft			String Weight: Initial 58000.00 lb
Depth to Top Packer:	3396.00 ft			Final 58000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	23.00 ft			
Tool Length:	51.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

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

Shut In Tool	5.00			3373.00	
Hydraulic tool	5.00			3378.00	
Jars	5.00			3383.00	
Safety Joint	3.00			3386.00	
Packer	5.00			3391.00	28.00 Bottom Of Top Packer
Packer	5.00			3396.00	
Stubb	1.00			3397.00	
Perforations	19.00			3416.00	
Recorder	0.00	8736	Inside	3416.00	
Recorder	0.00	8957	Outside	3416.00	
Bullnose	3.00			3419.00	23.00 Bottom Packers & Anchor

Total Tool Length: 51.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Hess Oil Company
PO Box 1009
McPherson KS 67460
ATTN: David Gould

35-13s-19w Ellis,KS
Younger #1
Job Ticket: 53829 **DST#: 1**
Test Start: 2014.12.17 @ 02:05:00

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:	82000 ppm
Viscosity: 53.00 sec/qt	Cushion Volume: bbl		
Water Loss: 7.58 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 2200.00 ppm			
Filter Cake: inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
125.00	SMCW 5%M 95%W	0.615
60.00	OS MCW 30%M 70%W	0.295

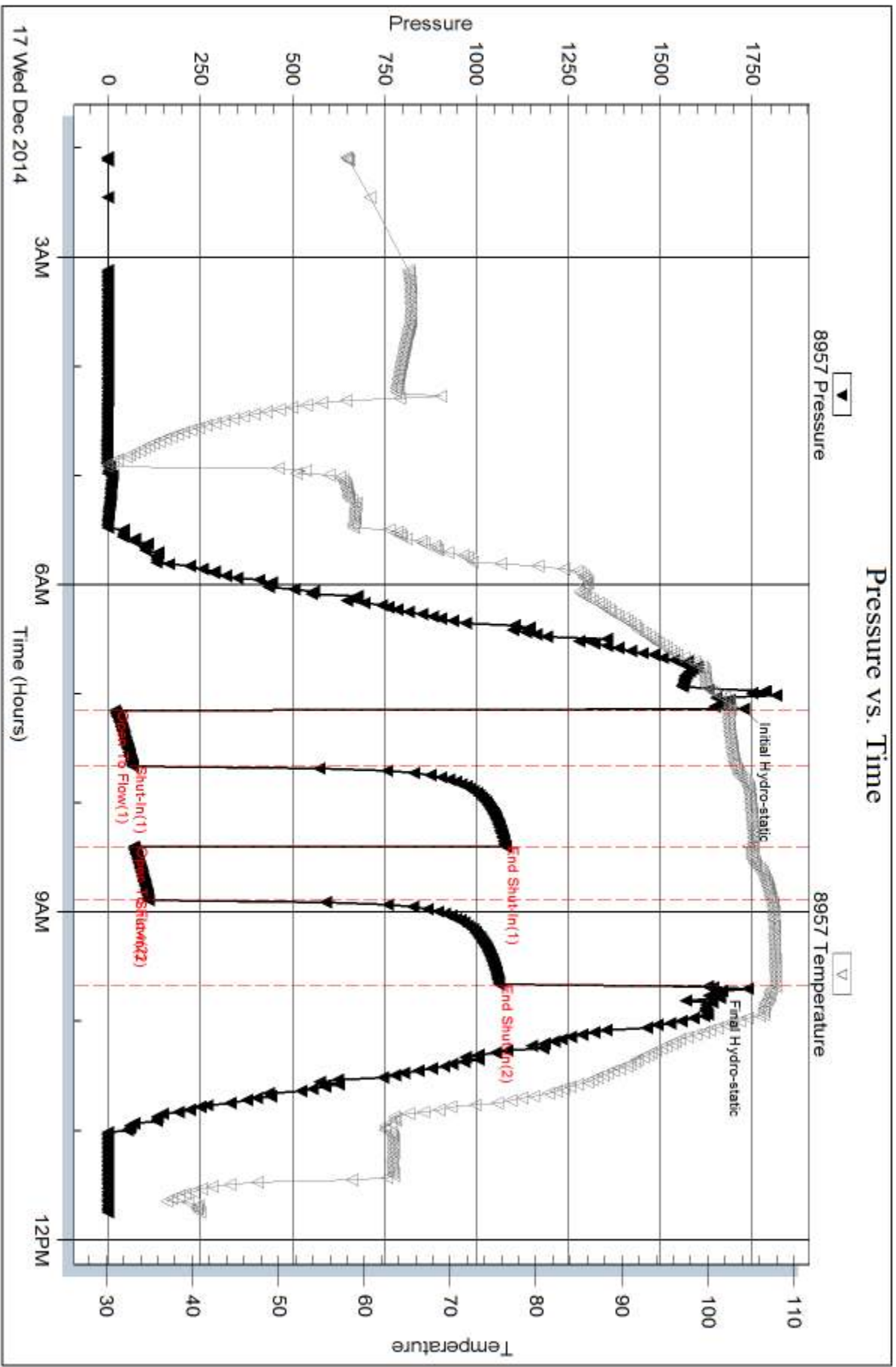
Total Length: 185.00 ft Total Volume: 0.910 bbl
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments:

Serial #: 8957

Outside Hess Oil Company

Younger #1

DST Test Number: 1



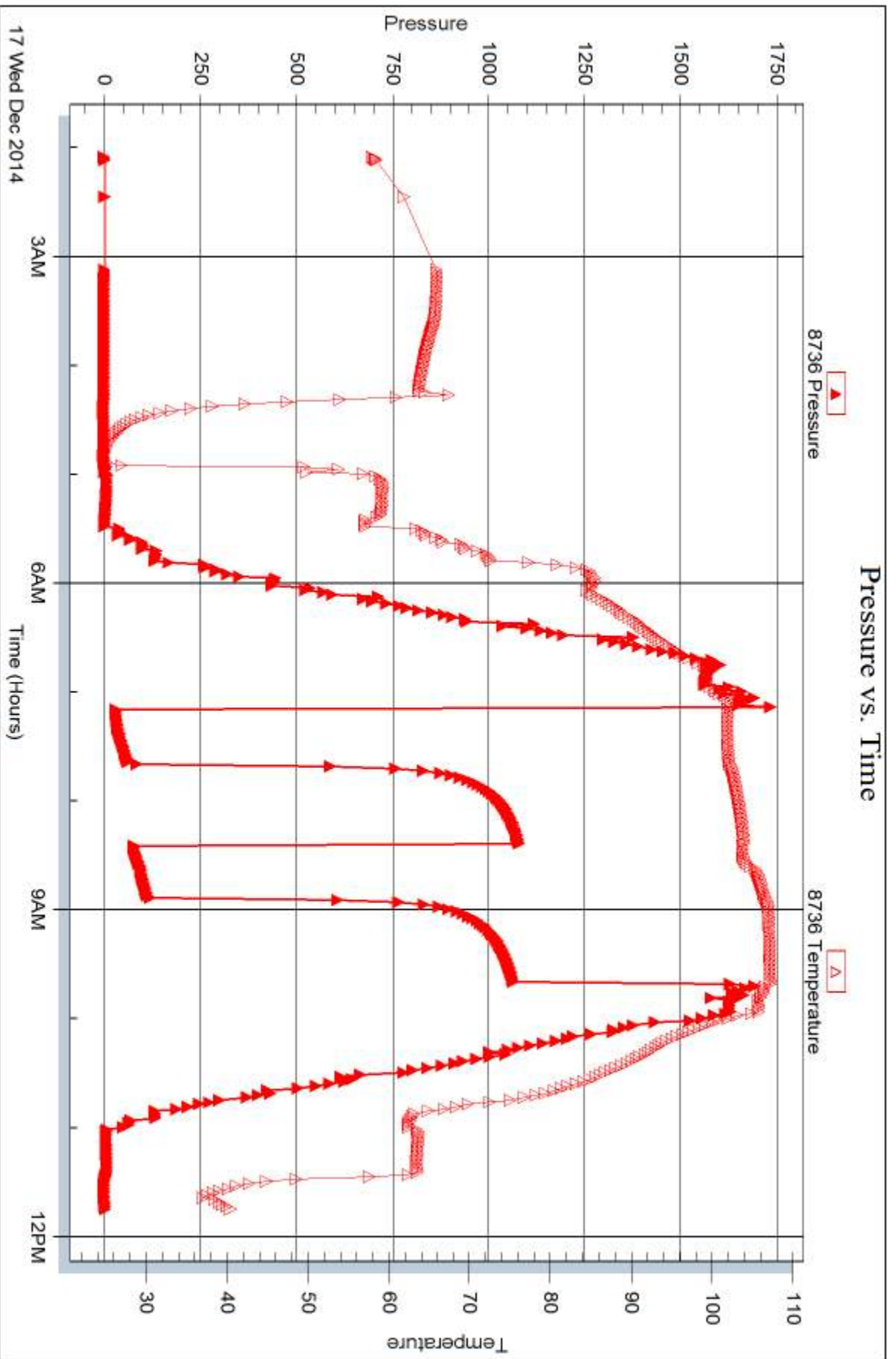
Serial #: 8736

Inside

Hess Oil Company

Younger #1

DST Test Number: 1



Trilobite Testing, Inc

Ref. No: 53829

Printed: 2014, 12, 23 @ 16:45:12



DRILL STEM TEST REPORT

Prepared For: **Hess Oil Company**

PO Box 1009
McPherson KS 67460

ATTN: David Gould

Younger #1

35-13s-19w Ellis,KS

Start Date: 2014.12.17 @ 23:55:00

End Date: 2014.12.18 @ 09:50:00

Job Ticket #: 53830 DST #: 2

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

Printed: 2014.12.23 @ 16:44:48



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Hess Oil Company
PO Box 1009
McPherson KS 67460
ATTN: David Gould

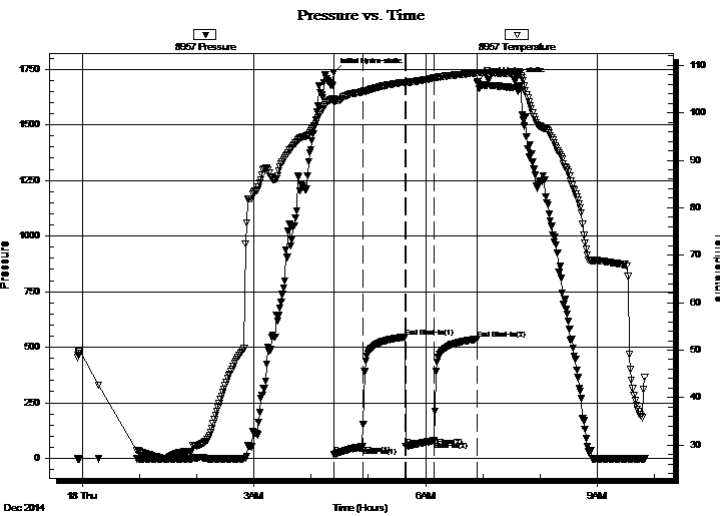
35-13s-19w Ellis,KS
Younger #1
Job Ticket: 53830 **DST#: 2**
Test Start: 2014.12.17 @ 23:55:00

GENERAL INFORMATION:

Formation: **LKC**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 04:24:15
Time Test Ended: 09:50:00
Interval: **3490.00 ft (KB) To 3530.00 ft (KB) (TVD)**
Total Depth: 3530.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair
Test Type: Conventional Bottom Hole (Reset)
Tester: Brett Dickinson
Unit No: 59
Reference Elevations: 2174.00 ft (KB)
2169.00 ft (CF)
KB to GR/CF: 5.00 ft

Serial #: 8957 Outside
Press@RunDepth: 78.41 psig @ 3527.00 ft (KB) Capacity: 8000.00 psig
Start Date: 2014.12.17 End Date: 2014.12.18 Last Calib.: 2014.12.18
Start Time: 23:55:05 End Time: 09:50:00 Time On Btm: 2014.12.18 @ 04:23:30
Time Off Btm: 2014.12.18 @ 06:54:30

TEST COMMENT: IF-3in blow
IS-No blow
FF-1 1/2in blow
FS-No blow



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1736.16	102.99	Initial Hydro-static
1	17.51	102.30	Open To Flow (1)
31	51.89	104.42	Shut-In(1)
76	546.16	106.46	End Shut-In(1)
76	54.87	106.17	Open To Flow (2)
106	78.41	107.32	Shut-In(2)
150	535.79	108.39	End Shut-In(2)
151	1694.15	108.45	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
60.00	MCW 70%W 30%M	0.30
65.00	VSWCM 10%W 90%M	0.32

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Hess Oil Company
PO Box 1009
McPherson KS 67460
ATTN: David Gould

35-13s-19w Ellis,KS
Younger #1
Job Ticket: 53830 **DST#: 2**
Test Start: 2014.12.17 @ 23:55:00

Tool Information

Drill Pipe:	Length: 3230.00 ft	Diameter: 3.80 inches	Volume: 45.31 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.70 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 248.00 ft	Diameter: 2.25 inches	Volume: 1.22 bbl	Weight to Pull Loose: 65000.00 lb
			<u>Total Volume: 46.53 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	16.00 ft			String Weight: Initial 58000.00 lb
Depth to Top Packer:	3490.00 ft			Final 58000.00 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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Shut In Tool	5.00			3467.00	
Hydraulic tool	5.00			3472.00	
Jars	5.00			3477.00	
Safety Joint	3.00			3480.00	
Packer	5.00			3485.00	28.00 Bottom Of Top Packer
Packer	5.00			3490.00	
Stubb	1.00			3491.00	
Perforations	36.00			3527.00	
Recorder	0.00	8736	Inside	3527.00	
Recorder	0.00	8957	Outside	3527.00	
Bullnose	3.00			3530.00	40.00 Bottom Packers & Anchor

Total Tool Length: 68.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Hess Oil Company
PO Box 1009
McPherson KS 67460
ATTN: David Gould

35-13s-19w Ellis,KS
Younger #1
Job Ticket: 53830 **DST#: 2**
Test Start: 2014.12.17 @ 23:55:00

Mud and Cushion Information

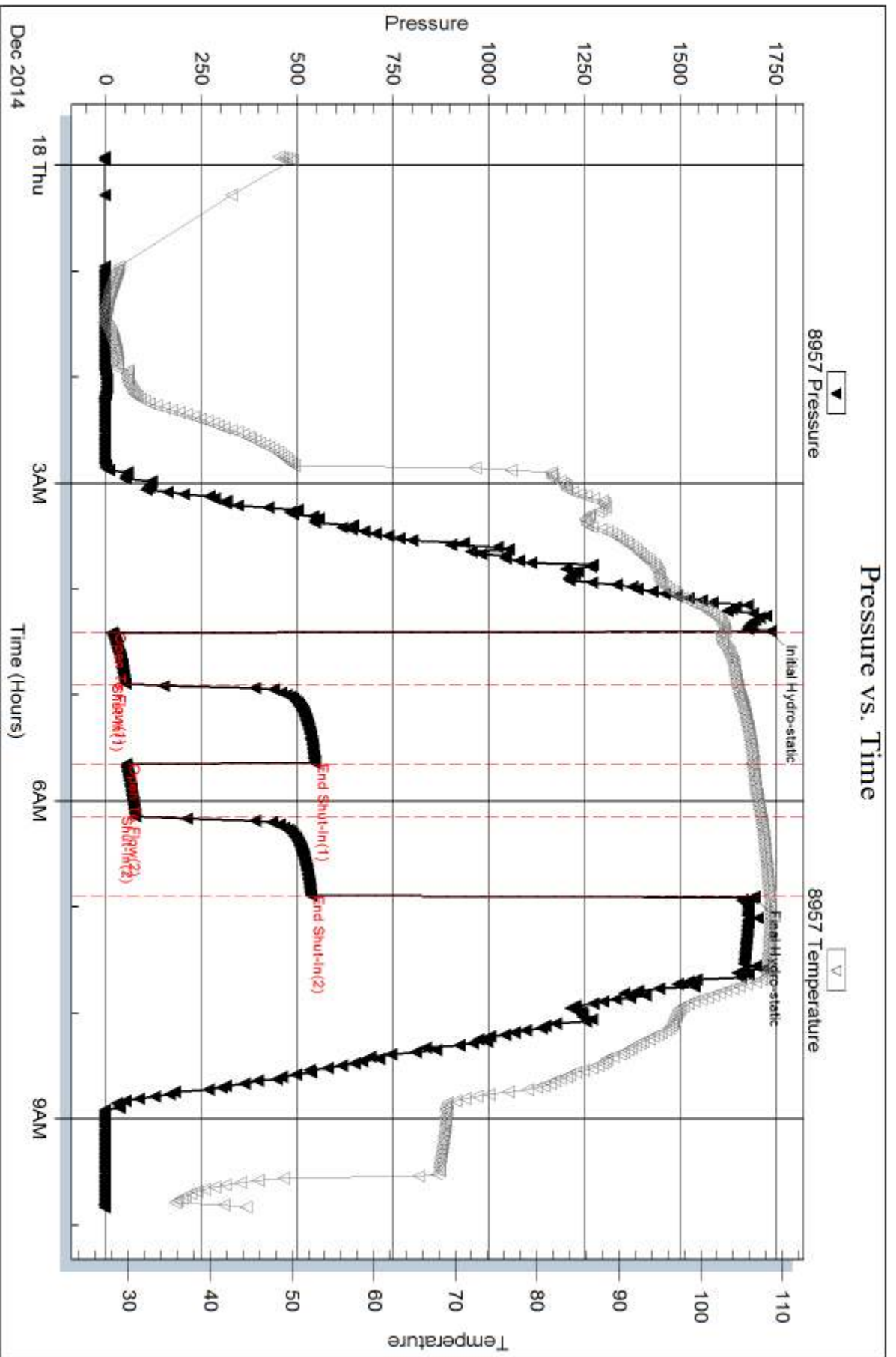
Mud Type: Gel Chem	Cushion Type:	Oil API:	deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	35000 ppm
Viscosity: 53.00 sec/qt	Cushion Volume: bbl		
Water Loss: 7.58 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 2200.00 ppm			
Filter Cake: inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
60.00	MCW 70%W 30%M	0.295
65.00	VSWCM 10%W 90%M	0.320

Total Length: 125.00 ft Total Volume: 0.615 bbl
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments:



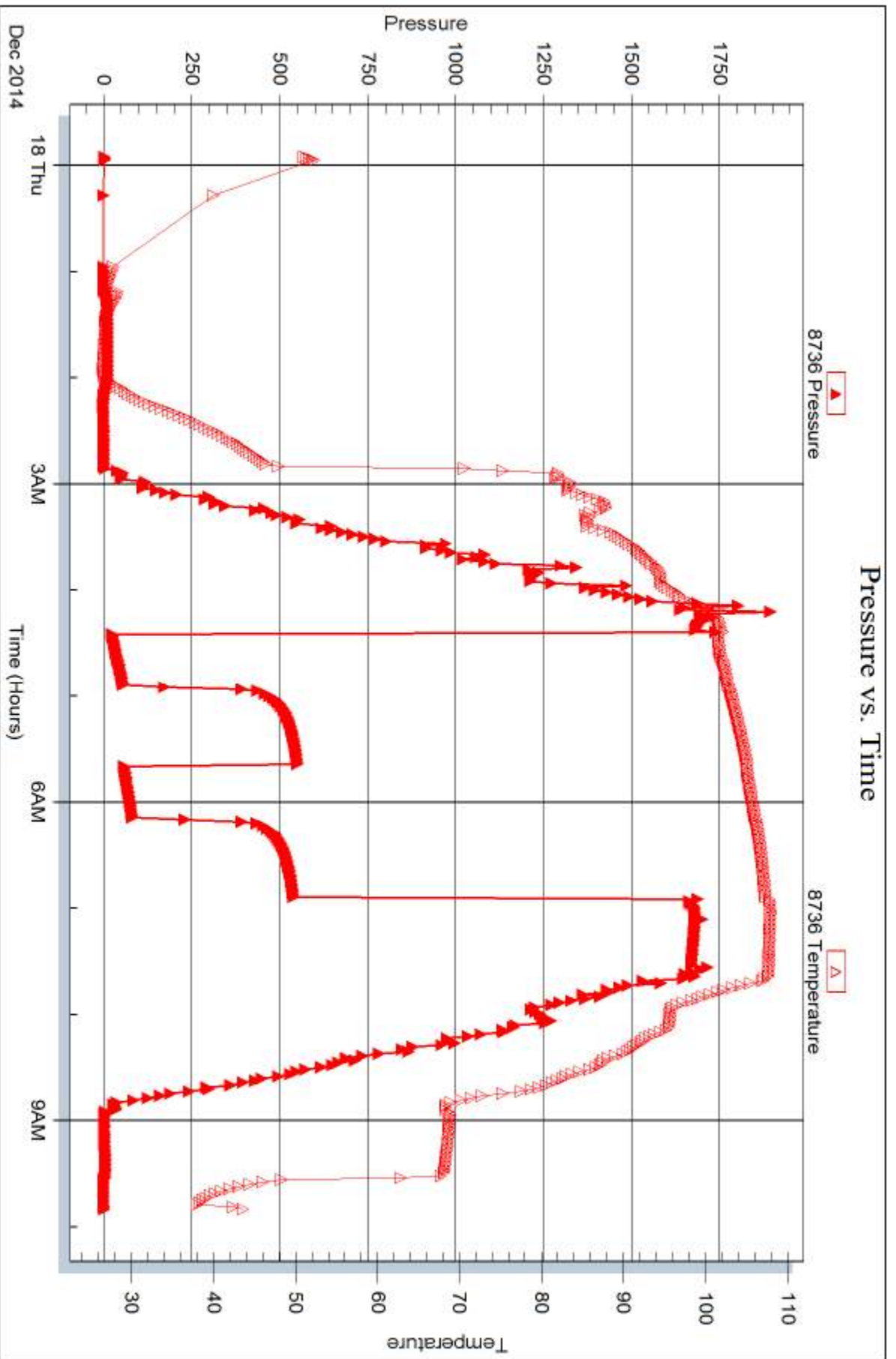
Serial #: 8736

Inside

Hess Oil Company

Younger #1

DST Test Number: 2



Triobite Testing, Inc

Ref. No: 53830

Printed: 2014, 12, 23 @ 16:44:49



DRILL STEM TEST REPORT

Prepared For: **Hess Oil Company**

PO Box 1009
McPherson KS 67460

ATTN: David Gould

Younger #1

35-13s-19w Ellis,KS

Start Date: 2014.12.18 @ 18:25:00

End Date: 2014.12.19 @ 02:33:15

Job Ticket #: 53831 DST #: 3

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

Printed: 2014.12.23 @ 16:44:25



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Hess Oil Company
PO Box 1009
McPherson KS 67460
ATTN: David Gould

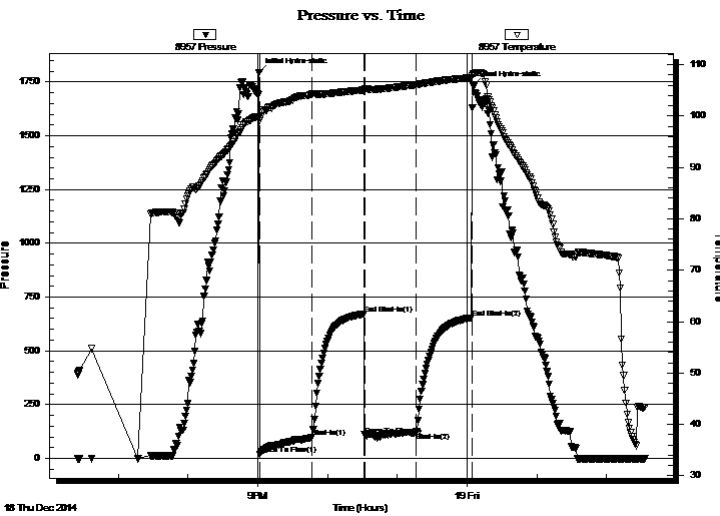
35-13s-19w Ellis,KS
Younger #1
Job Ticket: 53831 **DST#: 3**
Test Start: 2014.12.18 @ 18:25:00

GENERAL INFORMATION:

Formation: **LKC**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 21:01:45
Time Test Ended: 02:33:15
Interval: **3535.00 ft (KB) To 3564.00 ft (KB) (TVD)**
Total Depth: 3564.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair
Reference Elevations: 2174.00 ft (KB)
2169.00 ft (CF)
KB to GR/CF: 5.00 ft
Test Type: Conventional Bottom Hole (Reset)
Tester: Brett Dickinson
Unit No: 59

Serial #: 8957 Outside
Press@RunDepth: 120.16 psig @ 3561.00 ft (KB) Capacity: 8000.00 psig
Start Date: 2014.12.18 End Date: 2014.12.19 Last Calib.: 2014.12.19
Start Time: 18:25:05 End Time: 02:33:14 Time On Btm: 2014.12.18 @ 21:01:15
Time Off Btm: 2014.12.19 @ 00:05:30

TEST COMMENT: IF-BOB in 18 min
IS- No blow
FF-BOB in 10 min
FSI- 1 1/2" blow



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1794.64	99.87	Initial Hydro-static
1	20.09	99.06	Open To Flow (1)
46	97.72	104.25	Shut-In(1)
90	671.72	105.04	End Shut-In(1)
92	105.93	105.25	Open To Flow (2)
136	120.16	106.07	Shut-In(2)
183	654.10	107.44	End Shut-In(2)
185	1733.87	108.11	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
250.00	GO 20%G 80%O	1.25
50.00	GOCM 20%G 20%O 60%M	0.70
0.00	750ft GIP	0.00

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Hess Oil Company
PO Box 1009
McPherson KS 67460
ATTN: David Gould

35-13s-19w Ellis,KS
Younger #1
Job Ticket: 53831 **DST#: 3**
Test Start: 2014.12.18 @ 18:25:00

Tool Information

Drill Pipe:	Length: 3262.00 ft	Diameter: 3.80 inches	Volume: 45.76 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.70 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 248.00 ft	Diameter: 2.25 inches	Volume: 1.22 bbl	Weight to Pull Loose: 65000.00 lb
			<u>Total Volume: 46.98 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	3.00 ft			String Weight: Initial 58000.00 lb
Depth to Top Packer:	3535.00 ft			Final 59000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	29.00 ft			
Tool Length:	57.00 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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Shut In Tool	5.00			3512.00	
Hydraulic tool	5.00			3517.00	
Jars	5.00			3522.00	
Safety Joint	3.00			3525.00	
Packer	5.00			3530.00	28.00 Bottom Of Top Packer
Packer	5.00			3535.00	
Stubb	1.00			3536.00	
Perforations	25.00			3561.00	
Recorder	0.00	8736	Inside	3561.00	
Recorder	0.00	8957	Outside	3561.00	
Bullnose	3.00			3564.00	29.00 Bottom Packers & Anchor

Total Tool Length: 57.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Hess Oil Company
PO Box 1009
McPherson KS 67460
ATTN: David Gould

35-13s-19w Ellis,KS
Younger #1
Job Ticket: 53831 **DST#: 3**
Test Start: 2014.12.18 @ 18:25:00

Mud and Cushion Information

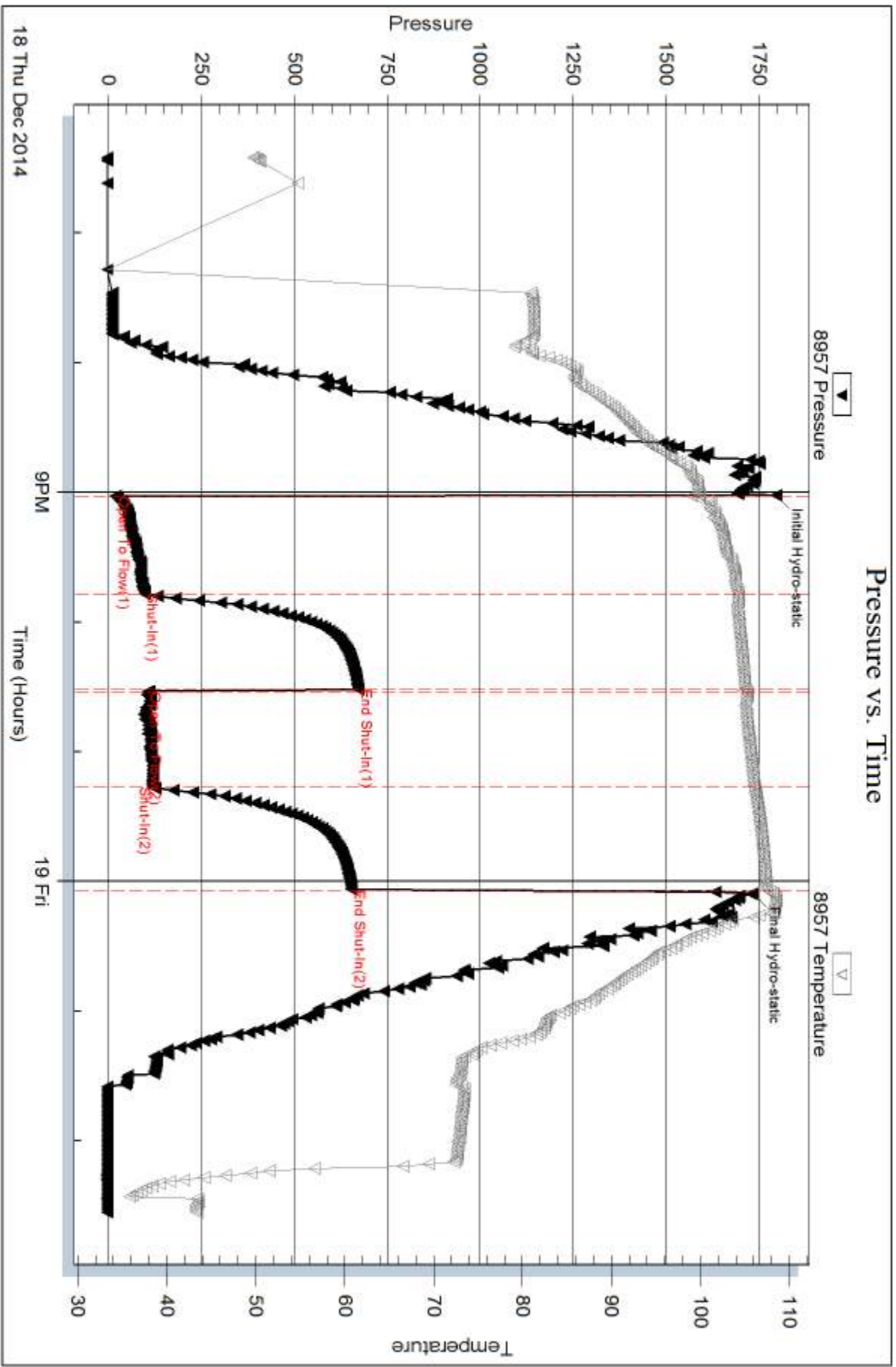
Mud Type: Gel Chem	Cushion Type:	Oil API: 35 deg API
Mud Weight: 92.00 lb/gal	Cushion Length: ft	Water Salinity: ppm
Viscosity: 47.00 sec/qt	Cushion Volume: bbl	
Water Loss: 7.58 in ³	Gas Cushion Type:	
Resistivity: ohm.m	Gas Cushion Pressure: psig	
Salinity: 2700.00 ppm		
Filter Cake: inches		

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
250.00	GO 20%G 80%O	1.248
50.00	GOCM 20%G 20%O 60%M	0.701
0.00	750ft GIP	0.000

Total Length: 300.00 ft Total Volume: 1.949 bbl
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments:



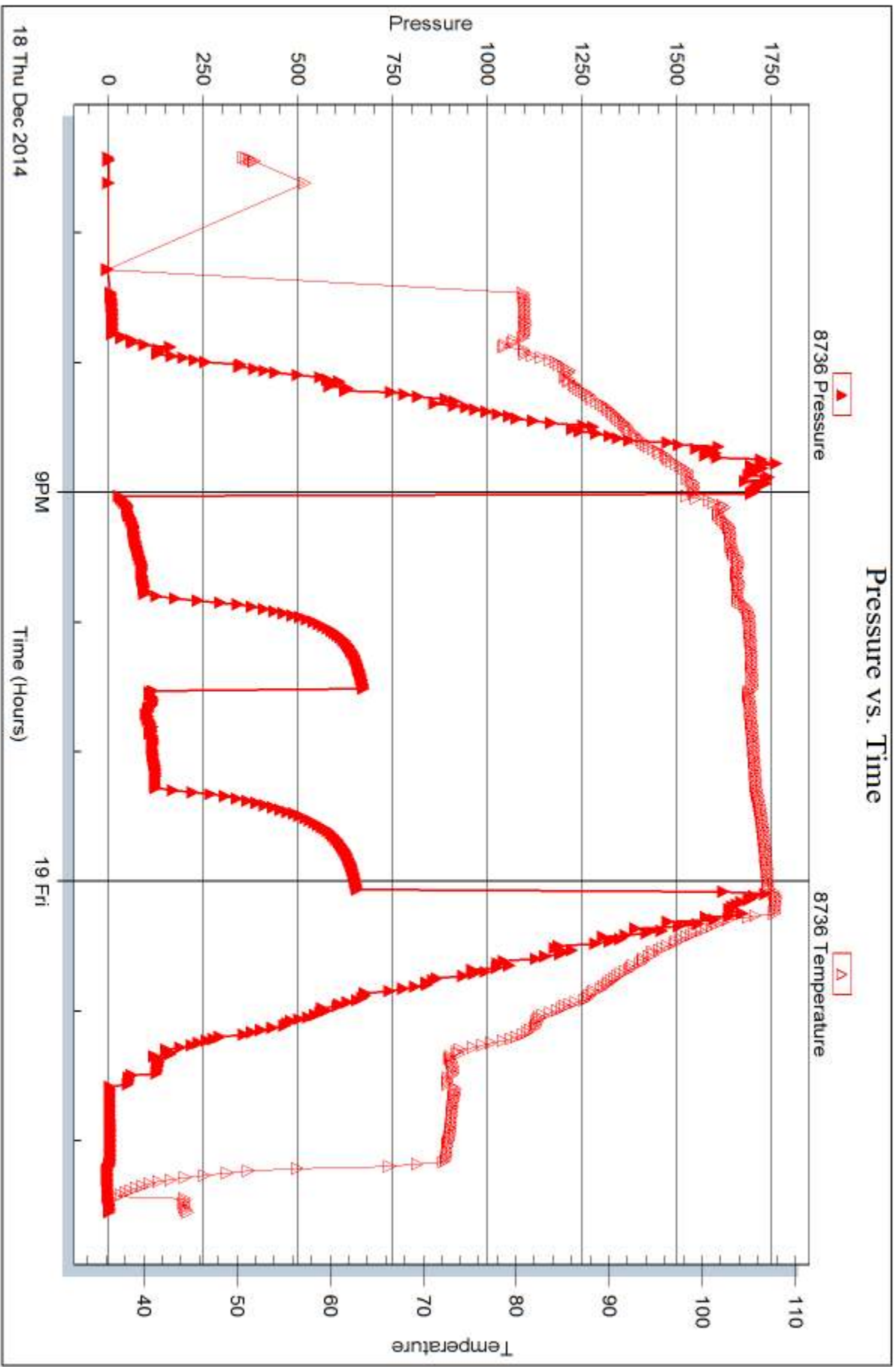
Serial #: 8736

Inside

Hess Oil Company

Younger #1

DST Test Number: 3



Trilobite Testing, Inc

Ref. No: 53831

Printed: 2014, 12, 23 @ 16:44:27



DRILL STEM TEST REPORT

Prepared For: **Hess Oil Company**

PO Box 1009
McPherson KS 67460

ATTN: David Gould

Younger #1

35-13s-19w Ellis,KS

Start Date: 2014.12.19 @ 12:10:00

End Date: 2014.12.19 @ 18:20:15

Job Ticket #: 53832 DST #: 4

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

Printed: 2014.12.23 @ 16:43:17

Hess Oil Company
35-13s-19w Ellis,KS
Younger #1
DST # 4
KC
2014.12.19



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Hess Oil Company
PO Box 1009
McPherson KS 67460
ATTN: David Gould

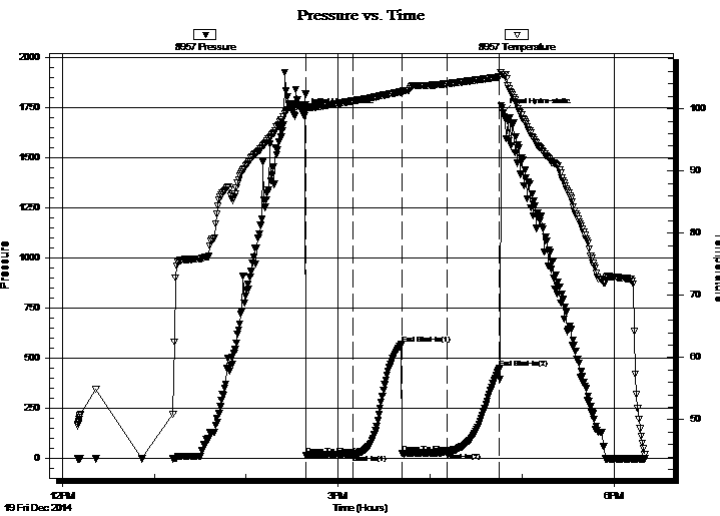
35-13s-19w Ellis,KS
Younger #1
Job Ticket: 53832 **DST#: 4**
Test Start: 2014.12.19 @ 12:10:00

GENERAL INFORMATION:

Formation: **KC**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 14:38:45
Time Test Ended: 18:20:15
Interval: **3566.00 ft (KB) To 3600.00 ft (KB) (TVD)**
Total Depth: 3600.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair
Test Type: Conventional Bottom Hole (Reset)
Tester: Brett Dickinson
Unit No: 59
Reference Elevations: 2174.00 ft (KB)
2169.00 ft (CF)
KB to GR/CF: 5.00 ft

Serial #: 8957 Outside
Press@RunDepth: 28.91 psig @ 3597.00 ft (KB) Capacity: 8000.00 psig
Start Date: 2014.12.19 End Date: 2014.12.19 Last Calib.: 2014.12.19
Start Time: 12:10:05 End Time: 18:20:14 Time On Btm: 2014.12.19 @ 14:38:00
Time Off Btm: 2014.12.19 @ 16:47:30

TEST COMMENT: IF-weak surface blow
IS-No blow
FF-No blow
FS-No blow



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1726.03	100.45	Initial Hydro-static
1	16.44	99.71	Open To Flow (1)
32	21.09	101.24	Shut-In(1)
64	570.31	102.72	End Shut-In(1)
64	24.13	102.41	Open To Flow (2)
94	28.91	104.02	Shut-In(2)
127	448.85	105.10	End Shut-In(2)
130	1723.87	105.45	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
20.00	OS Mud	0.10

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Hess Oil Company
PO Box 1009
McPherson KS 67460
ATTN: David Gould

35-13s-19w Ellis,KS
Younger #1
Job Ticket: 53832 **DST#: 4**
Test Start: 2014.12.19 @ 12:10:00

Tool Information

Drill Pipe:	Length: 3292.00 ft	Diameter: 3.80 inches	Volume: 46.18 bbl	Tool Weight:	2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.70 inches	Volume: 0.00 bbl	Weight set on Packer:	25000.00 lb
Drill Collar:	Length: 248.00 ft	Diameter: 2.25 inches	Volume: 1.22 bbl	Weight to Pull Loose:	60000.00 lb
			<u>Total Volume: 47.40 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	2.00 ft			String Weight: Initial	58000.00 lb
Depth to Top Packer:	3566.00 ft			Final	58000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	34.00 ft				
Tool Length:	62.00 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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Shut In Tool	5.00			3543.00	
Hydraulic tool	5.00			3548.00	
Jars	5.00			3553.00	
Safety Joint	3.00			3556.00	
Packer	5.00			3561.00	28.00 Bottom Of Top Packer
Packer	5.00			3566.00	
Stubb	1.00			3567.00	
Perforations	30.00			3597.00	
Recorder	0.00	8736	Inside	3597.00	
Recorder	0.00	8957	Outside	3597.00	
Bullnose	3.00			3600.00	34.00 Bottom Packers & Anchor

Total Tool Length: 62.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Hess Oil Company
PO Box 1009
McPherson KS 67460
ATTN: David Gould

35-13s-19w Ellis,KS
Younger #1
Job Ticket: 53832 **DST#: 4**
Test Start: 2014.12.19 @ 12:10:00

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:	ppm
Viscosity: 53.00 sec/qt	Cushion Volume: bbl		
Water Loss: 7.57 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 2200.00 ppm			
Filter Cake: inches			

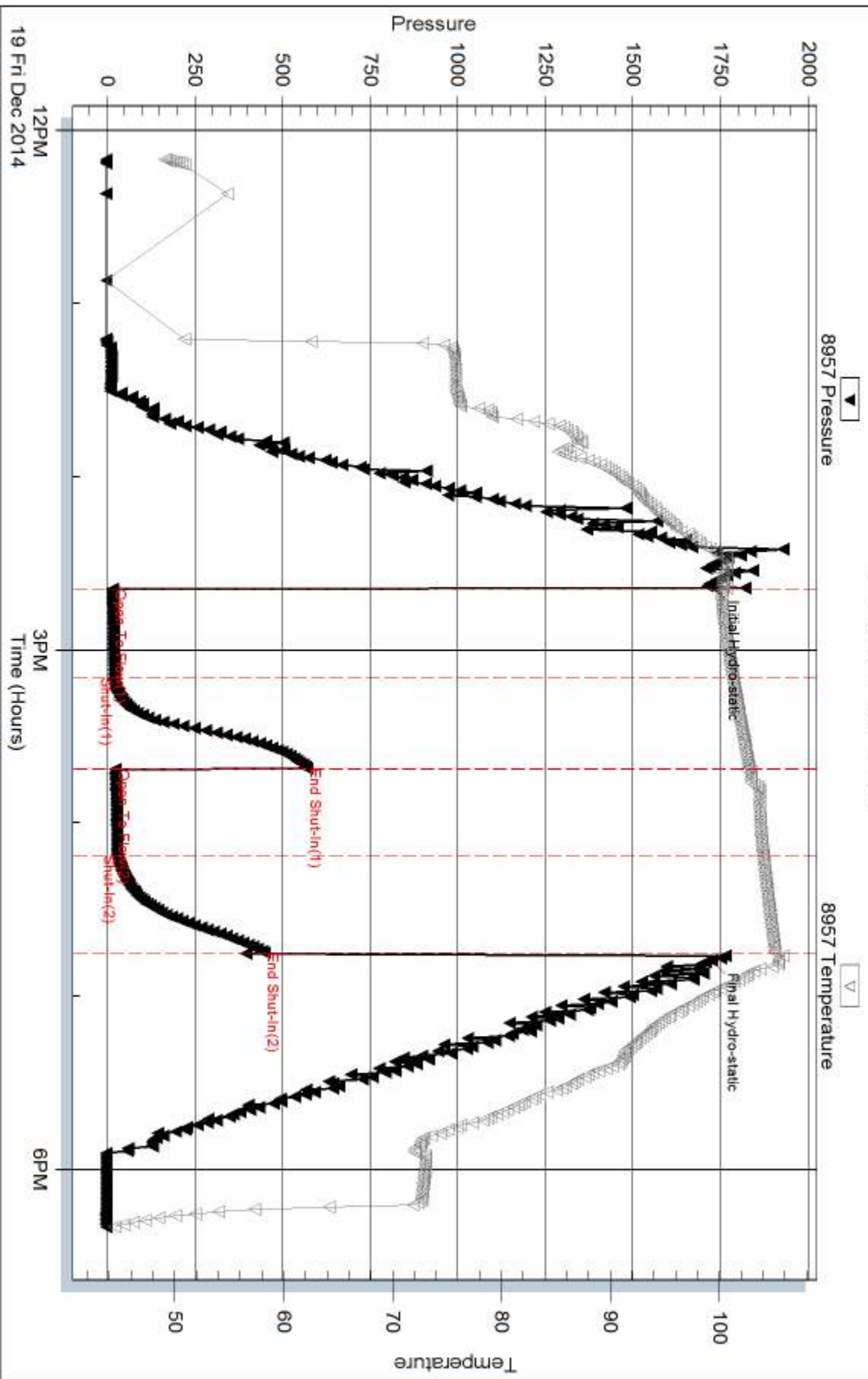
Recovery Information

Recovery Table

Length ft	Description	Volume bbl
20.00	OS Mud	0.098

Total Length: 20.00 ft Total Volume: 0.098 bbl
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments:

Pressure vs. Time



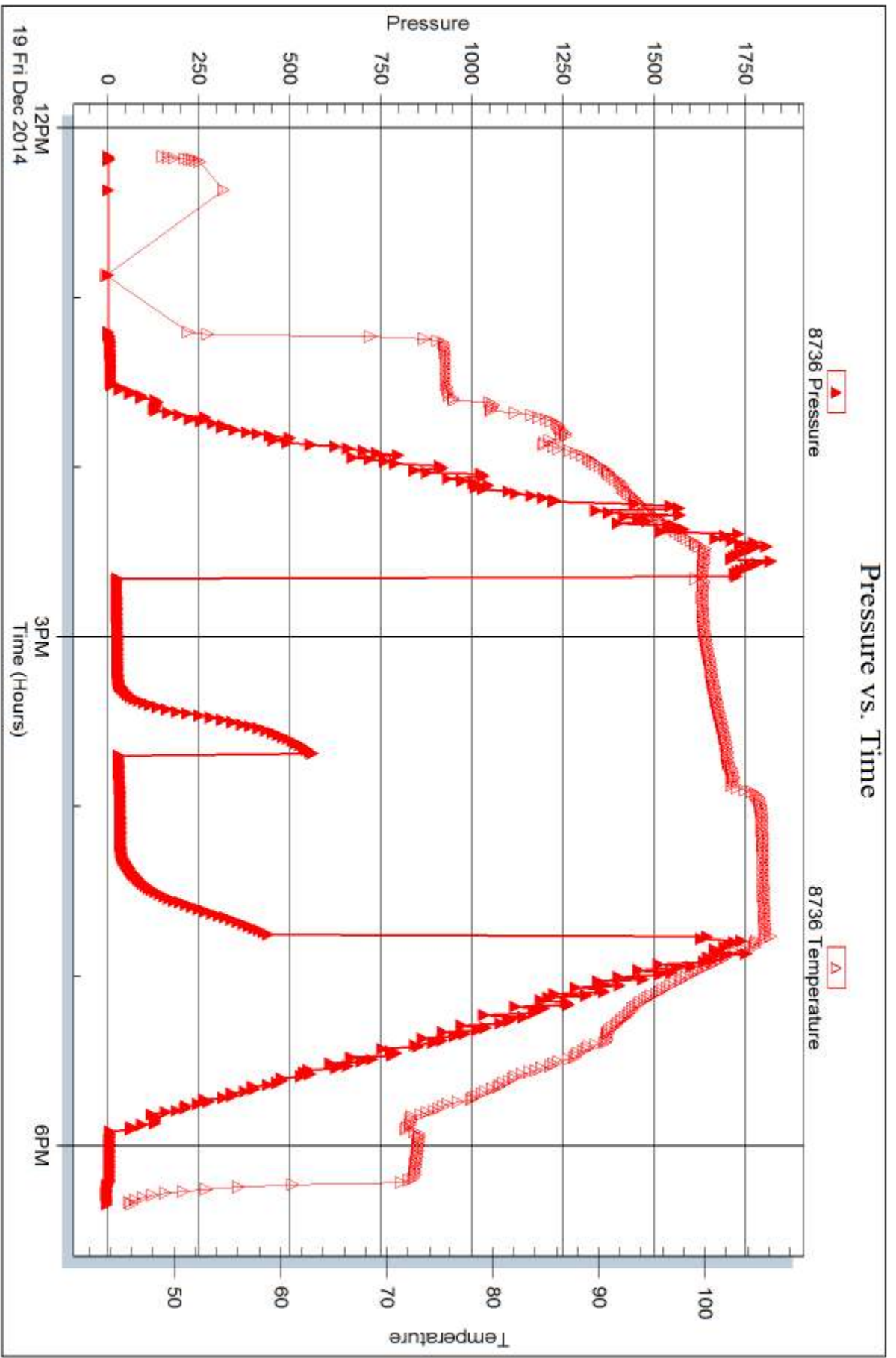
Serial #: 8736

Inside

Hess Oil Company

Younger #1

DST Test Number: 4



Trilobite Testing, Inc

Ref. No: 53832

Printed: 2014, 12, 23 @ 16:43:19



DRILL STEM TEST REPORT

Prepared For: **Hess Oil Company**

PO Box 1009
McPherson KS 67460

ATTN: David Gould

Younger #1

35-13s-19w Ellis,KS

Start Date: 2014.12.20 @ 19:30:00

End Date: 2014.12.21 @ 06:22:15

Job Ticket #: 53833 DST #: 5

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

Printed: 2014.12.23 @ 16:42:55

Hess Oil Company
35-13s-19w Ellis,KS
Younger #1
DST # 5
KC
2014.12.20



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Hess Oil Company
 PO Box 1009
 McPherson KS 67460
 ATTN: David Gould

35-13s-19w Ellis,KS
Younger #1
 Job Ticket: 53833 **DST#: 5**
 Test Start: 2014.12.20 @ 19:30:00

GENERAL INFORMATION:

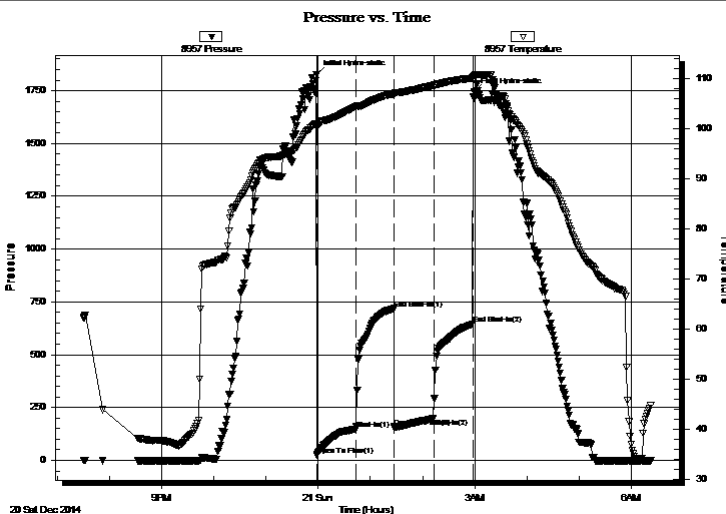
Formation: **KC**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 23:58:15
 Time Test Ended: 06:22:15
 Interval: **3608.00 ft (KB) To 3700.00 ft (KB) (TVD)**
 Total Depth: 3708.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Reset)
 Tester: Brett Dickinson
 Unit No: 59
 Reference Elevations: 2174.00 ft (KB)
 2169.00 ft (CF)
 KB to GR/CF: 5.00 ft

Serial #: 8957 Outside

Press@RunDepth: 197.19 psig @ 3697.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2014.12.20 End Date: 2014.12.21 Last Calib.: 2014.12.21
 Start Time: 19:30:05 End Time: 06:22:15 Time On Btm: 2014.12.20 @ 23:57:45
 Time Off Btm: 2014.12.21 @ 02:59:00

TEST COMMENT: IF-BOB in 24 min
 IS-Surface blow
 FF-BOB in 30 min
 FS-Surface blow

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1827.13	101.02	Initial Hydro-static
1	23.48	100.43	Open To Flow (1)
46	148.45	104.52	Shut-In(1)
90	718.28	107.08	End Shut-In(1)
90	155.61	107.00	Open To Flow (2)
135	197.19	108.73	Shut-In(2)
180	643.82	110.16	End Shut-In(2)
182	1743.43	110.57	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
235.00	MCW 80%W 20%M	1.16
125.00	VSOWCM 2%O 30%W 68%M	1.63
15.00	SGMCO 5%G 85%O 10%M	0.21
0.00	120ft GIP	0.00

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Hess Oil Company

35-13s-19w Ellis,KS

PO Box 1009
McPherson KS 67460

Younger #1

Job Ticket: 53833

DST#: 5

ATTN: David Gould

Test Start: 2014.12.20 @ 19:30:00

Tool Information

Drill Pipe:	Length: 3355.00 ft	Diameter: 3.80 inches	Volume: 47.06 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.70 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 248.00 ft	Diameter: 2.25 inches	Volume: 1.22 bbl	Weight to Pull Loose: 70000.00 lb
			<u>Total Volume: 48.28 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	23.00 ft			String Weight: Initial 59000.00 lb
Depth to Top Packer:	3608.00 ft			Final 60000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	92.00 ft			
Tool Length:	120.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description

Length (ft) Serial No. Position Depth (ft) Accum. Lengths

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut In Tool	5.00			3585.00	
Hydraulic tool	5.00			3590.00	
Jars	5.00			3595.00	
Safety Joint	3.00			3598.00	
Packer	5.00			3603.00	28.00 Bottom Of Top Packer
Packer	5.00			3608.00	
Stubb	1.00			3609.00	
Perforations	3.00			3612.00	
Change Over Sub	1.00			3613.00	
Drill Pipe	63.00			3676.00	
Change Over Sub	1.00			3677.00	
Perforations	20.00			3697.00	
Recorder	0.00	8736	Inside	3697.00	
Recorder	0.00	8957	Outside	3697.00	
Bullnose	3.00			3700.00	92.00 Bottom Packers & Anchor

Total Tool Length: 120.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Hess Oil Company
PO Box 1009
McPherson KS 67460
ATTN: David Gould

35-13s-19w Ellis,KS
Younger #1
Job Ticket: 53833 **DST#: 5**
Test Start: 2014.12.20 @ 19:30:00

Mud and Cushion Information

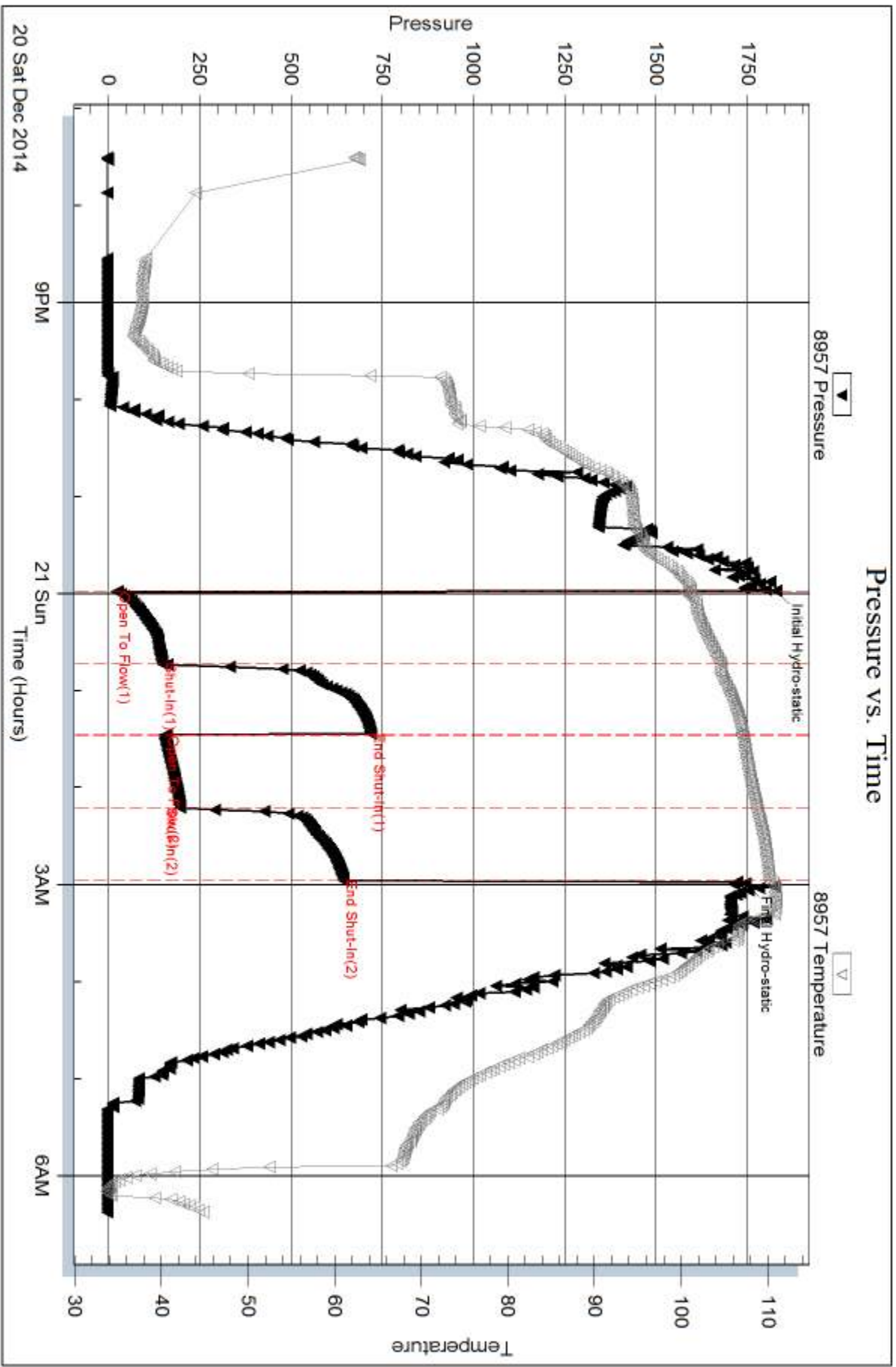
Mud Type: Gel Chem	Cushion Type:	Oil API:	deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	55000 ppm
Viscosity: 53.00 sec/qt	Cushion Volume: bbl		
Water Loss: 7.58 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 2200.00 ppm			
Filter Cake: inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
235.00	MCW 80%W 20%M	1.156
125.00	VSOWCM 2%O 30%W 68%M	1.635
15.00	SGMCO 5%G 85%O 10%M	0.210
0.00	120ft GIP	0.000

Total Length: 375.00 ft Total Volume: 3.001 bbl
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments:



Serial #: 8736

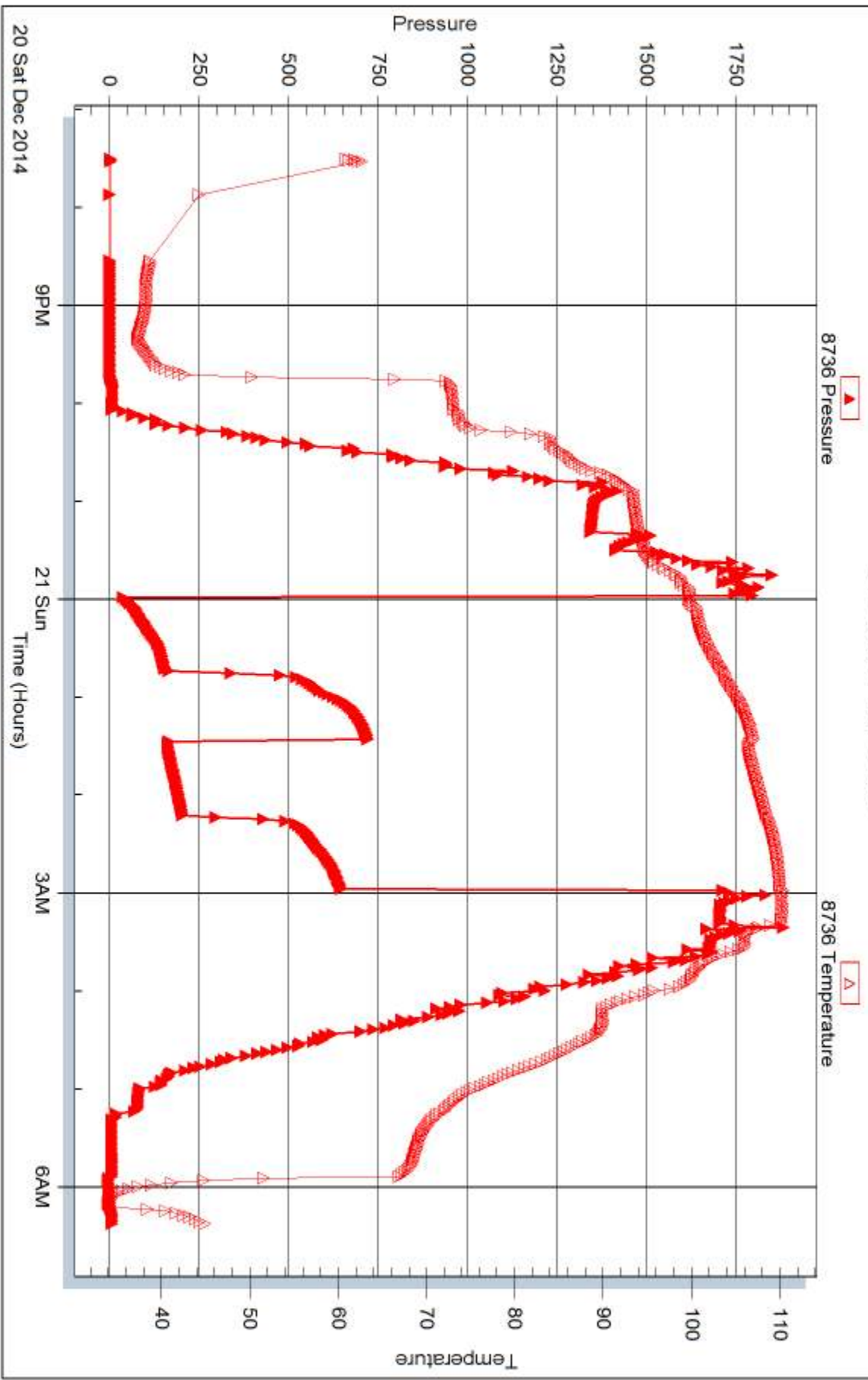
Inside

Hess Oil Company

Younger #1

DST Test Number: 5

Pressure vs. Time





DRILL STEM TEST REPORT

Prepared For: **Hess Oil Company**

PO Box 1009
McPherson KS 67460

ATTN: David Gould

Younger #1

35-13s-19w Ellis,KS

Start Date: 2014.12.21 @ 22:50:00

End Date: 2014.12.22 @ 08:53:45

Job Ticket #: 53834 DST #: 6

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

Printed: 2014.12.23 @ 16:41:50



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Hess Oil Company
 PO Box 1009
 McPherson KS 67460
 ATTN: David Gould

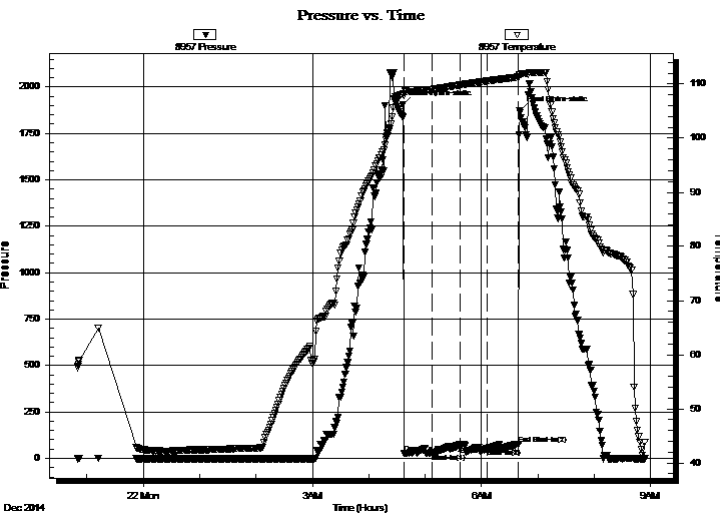
35-13s-19w Ellis,KS
Younger #1
 Job Ticket: 53834 **DST#: 6**
 Test Start: 2014.12.21 @ 22:50:00

GENERAL INFORMATION:

Formation: **Cong. Sd.**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 04:37:15
 Time Test Ended: 08:53:45
 Interval: **3791.00 ft (KB) To 3807.00 ft (KB) (TVD)**
 Total Depth: 3807.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Reset)
 Tester: Brett Dickinson
 Unit No: 59
 Reference Elevations: 2174.00 ft (KB)
 2169.00 ft (CF)
 KB to GR/CF: 5.00 ft

Serial #: 8957 Outside
 Press@RunDepth: 53.65 psig @ 3804.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2014.12.21 End Date: 2014.12.22 Last Calib.: 2014.12.22
 Start Time: 22:50:05 End Time: 08:53:45 Time On Btm: 2014.12.22 @ 04:36:30
 Time Off Btm: 2014.12.22 @ 06:40:30

TEST COMMENT: IF-1/4" blow
 IS-No blow
 FF-No blow
 FS-No blow



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1903.96	108.18	Initial Hydro-static
1	26.08	107.88	Open To Flow (1)
31	26.74	108.98	Shut-In(1)
60	74.37	109.82	End Shut-In(1)
61	63.93	109.82	Open To Flow (2)
90	53.65	110.57	Shut-In(2)
123	75.28	111.29	End Shut-In(2)
124	1872.77	111.81	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

Hess Oil Company
PO Box 1009
McPherson KS 67460
ATTN: David Gould

35-13s-19w Ellis,KS
Younger #1
Job Ticket: 53834 **DST#: 6**
Test Start: 2014.12.21 @ 22:50:00

Tool Information

Drill Pipe:	Length: 3543.00 ft	Diameter: 3.80 inches	Volume: 49.70 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.70 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 248.00 ft	Diameter: 2.25 inches	Volume: 1.22 bbl	Weight to Pull Loose: 70000.00 lb
			<u>Total Volume: 50.92 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	28.00 ft			String Weight: Initial 59000.00 lb
Depth to Top Packer:	3791.00 ft			Final 59000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	16.00 ft			
Tool Length:	44.00 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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Shut In Tool	5.00			3768.00	
Hydraulic tool	5.00			3773.00	
Jars	5.00			3778.00	
Safety Joint	3.00			3781.00	
Packer	5.00			3786.00	28.00 Bottom Of Top Packer
Packer	5.00			3791.00	
Stubb	1.00			3792.00	
Perforations	12.00			3804.00	
Recorder	0.00	8736	Inside	3804.00	
Recorder	0.00	8957	Outside	3804.00	
Bullnose	3.00			3807.00	16.00 Bottom Packers & Anchor

Total Tool Length: 44.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Hess Oil Company
PO Box 1009
McPherson KS 67460
ATTN: David Gould

35-13s-19w Ellis,KS
Younger #1
Job Ticket: 53834 **DST#: 6**
Test Start: 2014.12.21 @ 22:50:00

Mud and Cushion Information

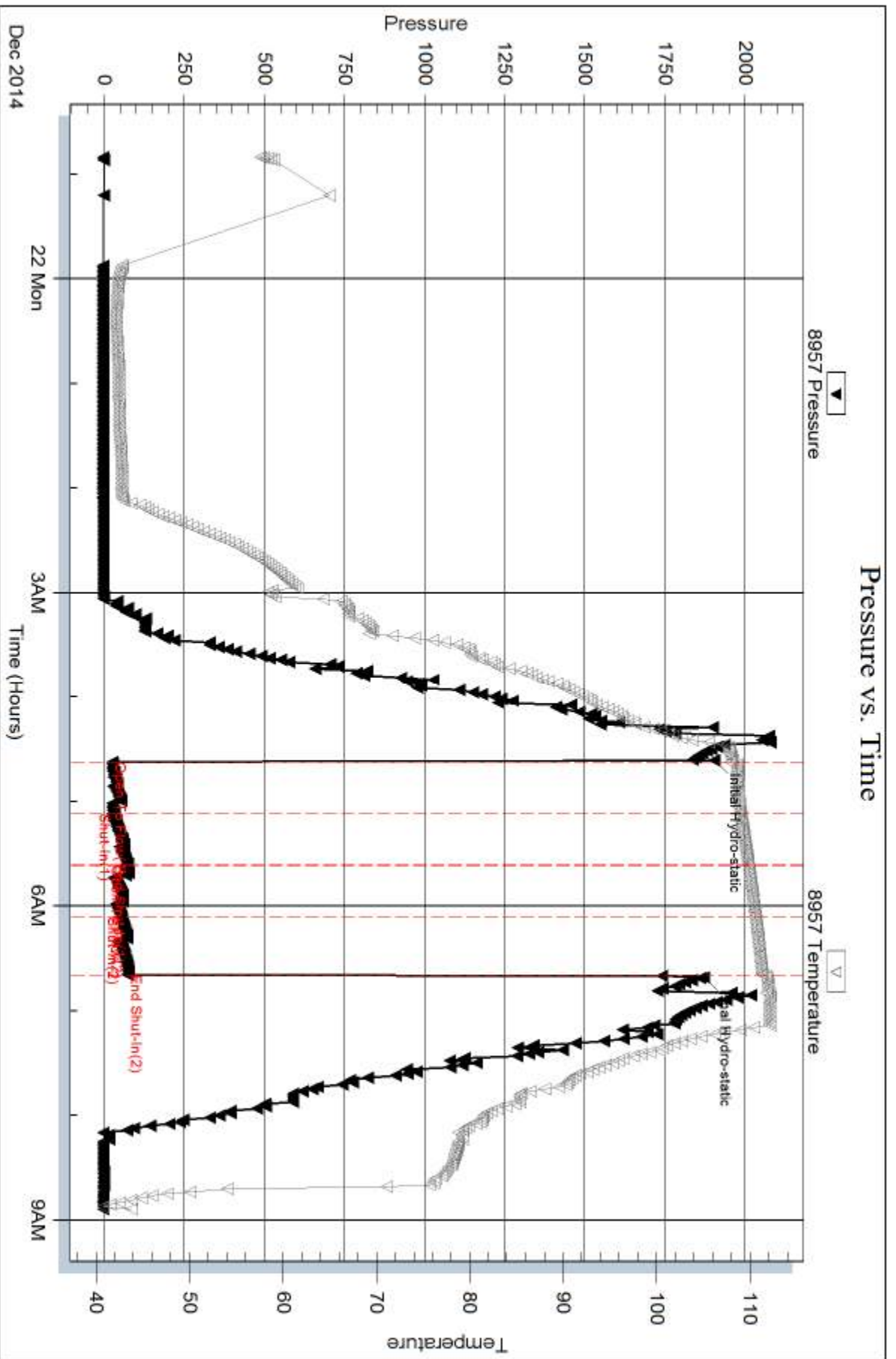
Mud Type: Gel Chem	Cushion Type:	Oil API:	deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	ppm
Viscosity: 52.00 sec/qt	Cushion Volume: bbl		
Water Loss: 7.58 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 2700.00 ppm			
Filter Cake: inches			

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:



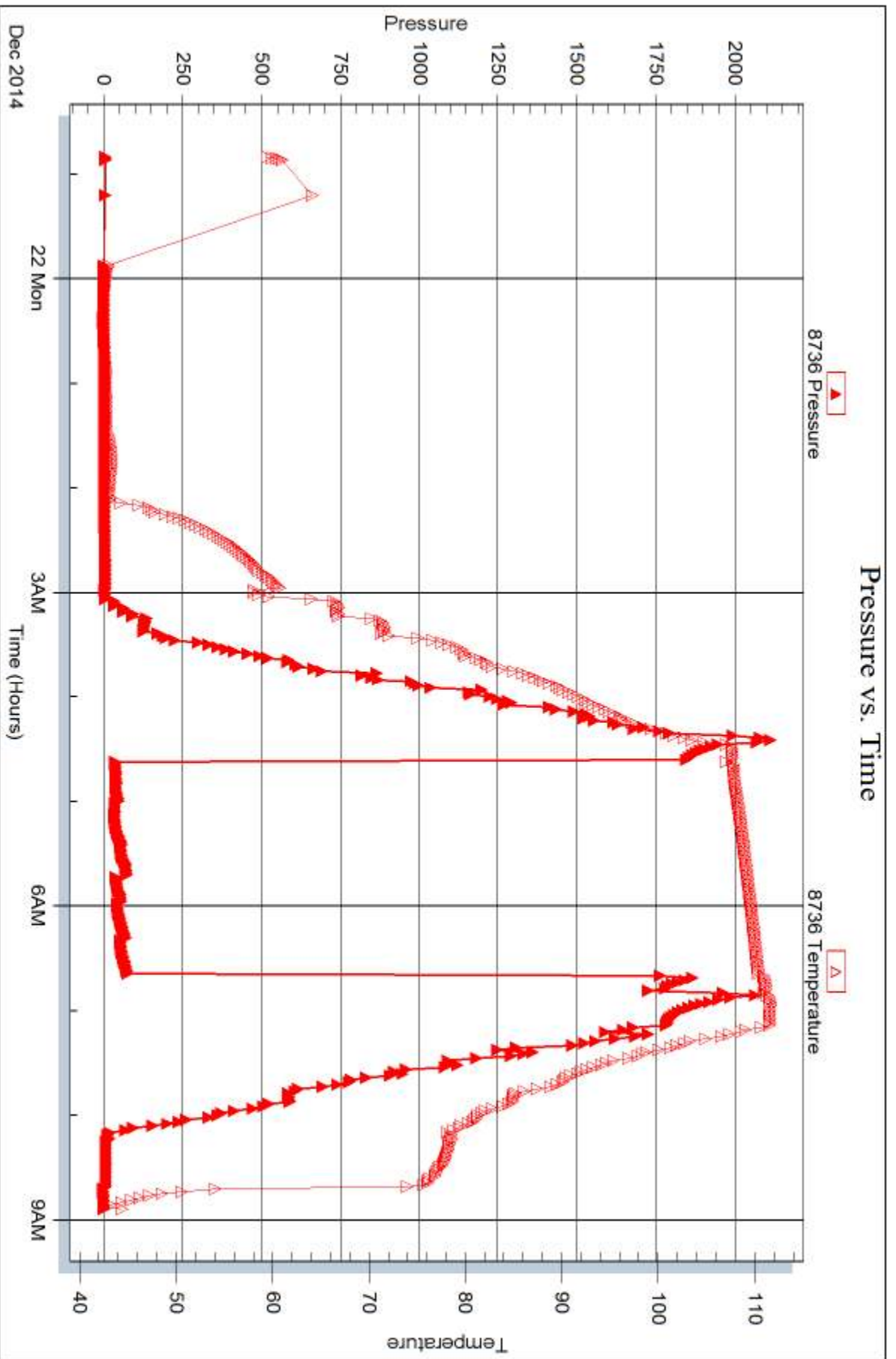
Serial #: 8736

Inside

Hess Oil Company

Younger #1

DST Test Number: 6





DRILL STEM TEST REPORT

Prepared For: **Hess Oil Company**

PO Box 1009
McPherson KS 67460

ATTN: David Gould

Younger #1

35-13s-19w Ellis,KS

Start Date: 2014.12.22 @ 17:55:00

End Date: 2014.12.23 @ 02:46:15

Job Ticket #: 53835 DST #: 7

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

Printed: 2014.12.23 @ 16:41:12



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Hess Oil Company
 PO Box 1009
 McPherson KS 67460
 ATTN: David Gould

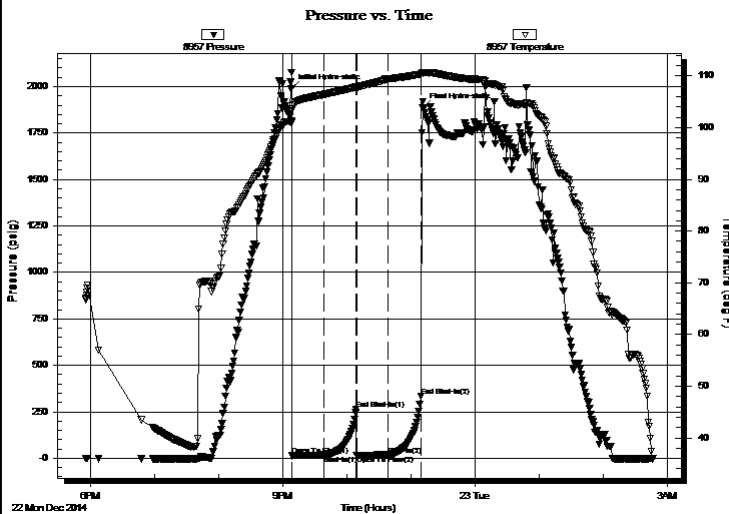
35-13s-19w Ellis,KS
Younger #1
 Job Ticket: 53835 **DST#: 7**
 Test Start: 2014.12.22 @ 17:55:00

GENERAL INFORMATION:

Formation: **Arbuckle**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 21:08:15
 Time Test Ended: 02:46:15
 Interval: **3843.00 ft (KB) To 3853.00 ft (KB) (TVD)**
 Total Depth: 3851.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Reset)
 Tester: Brett Dickinson
 Unit No: 59
 Reference Elevations: 2174.00 ft (KB)
 2169.00 ft (CF)
 KB to GR/CF: 5.00 ft

Serial #: 8957 Outside
 Press@RunDepth: 18.06 psig @ 3848.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2014.12.22 End Date: 2014.12.23 Last Calib.: 2014.12.23
 Start Time: 17:55:05 End Time: 02:46:15 Time On Btm: 2014.12.22 @ 21:07:30
 Time Off Btm: 2014.12.22 @ 23:10:30

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



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1988.86	101.24	Initial Hydro-static
1	13.77	101.02	Open To Flow (1)
31	18.10	106.46	Shut-In(1)
61	265.22	107.87	End Shut-In(1)
61	16.43	107.72	Open To Flow (2)
90	18.06	109.42	Shut-In(2)
122	335.43	110.37	End Shut-In(2)
123	1884.12	110.60	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
30.00	Mud	0.15

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Hess Oil Company

35-13s-19w Ellis,KS

PO Box 1009
McPherson KS 67460

Younger #1

Job Ticket: 53835

DST#: 7

ATTN: David Gould

Test Start: 2014.12.22 @ 17:55:00

Tool Information

Drill Pipe:	Length: 3572.00 ft	Diameter: 3.80 inches	Volume: 50.11 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.70 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 248.00 ft	Diameter: 2.25 inches	Volume: 1.22 bbl	Weight to Pull Loose: 75000.00 lb
			<u>Total Volume: 51.33 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	5.00 ft			String Weight: Initial 61000.00 lb
Depth to Top Packer:	3843.00 ft			Final 61000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	8.00 ft			
Tool Length:	36.00 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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Shut In Tool	5.00			3820.00	
Hydraulic tool	5.00			3825.00	
Jars	5.00			3830.00	
Safety Joint	3.00			3833.00	
Packer	5.00			3838.00	28.00 Bottom Of Top Packer
Packer	5.00			3843.00	
Stubb	1.00			3844.00	
Perforations	4.00			3848.00	
Recorder	0.00	8736	Inside	3848.00	
Recorder	0.00	8957	Outside	3848.00	
Bullnose	3.00			3851.00	8.00 Bottom Packers & Anchor

Total Tool Length: 36.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Hess Oil Company
PO Box 1009
McPherson KS 67460
ATTN: David Gould

35-13s-19w Ellis,KS
Younger #1
Job Ticket: 53835 **DST#: 7**
Test Start: 2014.12.22 @ 17:55:00

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:	ppm
Viscosity: 53.00 sec/qt	Cushion Volume: bbl		
Water Loss: 7.58 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 2200.00 ppm			
Filter Cake: inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
30.00	Mud	0.148

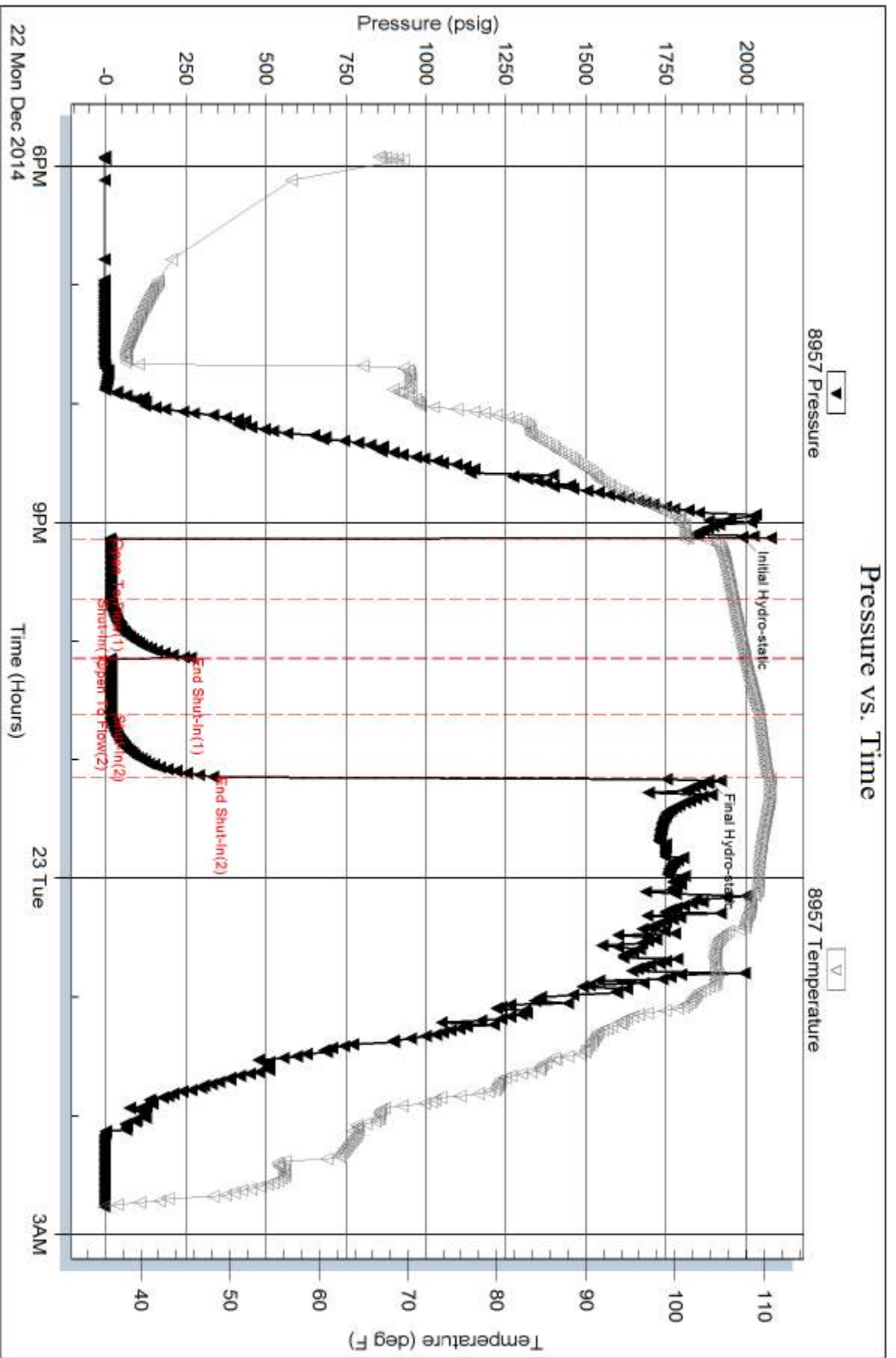
Total Length: 30.00 ft Total Volume: 0.148 bbl
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments:

Serial #: 8957

Outside Hess Oil Company

Younger #1

DST Test Number: 7



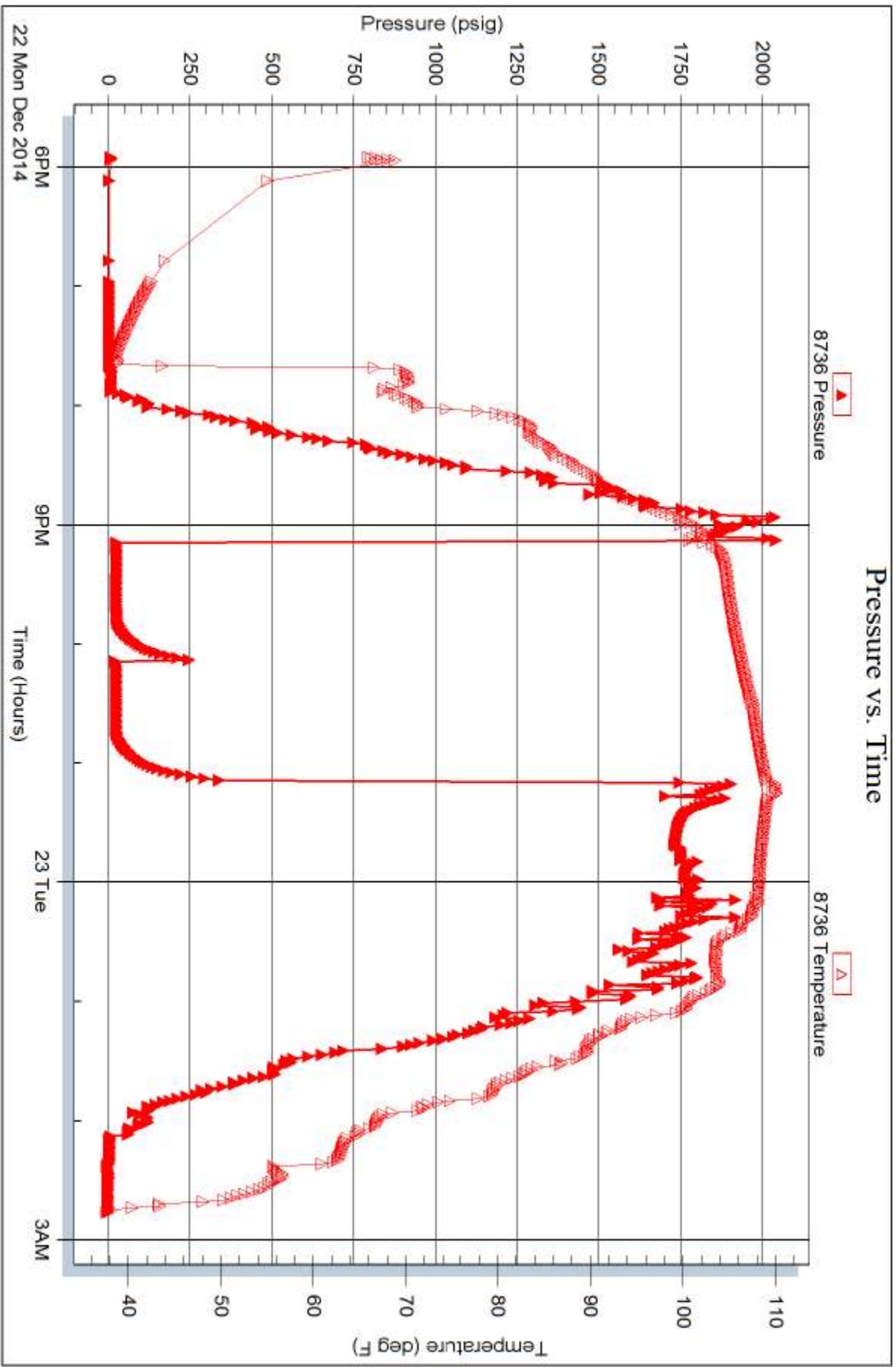
Serial #: 8736

Inside

Hess Oil Company

Younger #1

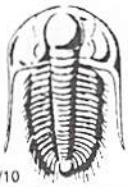
DST Test Number: 7



Trilobite Testing, Inc

Ref. No: 53835

Printed: 2014, 12, 23 @ 16:41:14



TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 53829

Well Name & No. Younger #1 Test No. 1 Date 12/17/14
 Company Hess Oil Company Elevation 2174 KB 2169 GL
 Address PO Box 1009 McPherson KS 67460
 Co. Rep / Geo. David Gould Rig Mallard
 Location: Sec. 35 Twp. 13s Rge. 19w Co. Ellis State KS

Interval Tested 3396 - 3419 Zone Tested Oriad
 Anchor Length 23 Drill Pipe Run _____ Mud Wt. 9.0
 Top Packer Depth 3391 Drill Collars Run 248 Vis 52
 Bottom Packer Depth 3396 Wt. Pipe Run — WL 7.6
 Total Depth 3419 Chlorides 2,200 ppm System LCM 2#

Blow Description IF - 2 1/4 in blow
ISI - No blow
FF - 2 in blow
FSI - No blow

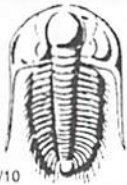
Rec	Feet of	%gas	%oil	%water	%mud
<u>60</u>	<u>OSMCW</u>		<u>70</u>	<u>30</u>	
<u>125</u>	<u>SMCW</u>		<u>95</u>	<u>5</u>	
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

Rec Total 185 BHT 108 Gravity _____ API RW _____ @ _____ °F Chlorides 82,000 ppm
 (A) Initial Hydrostatic 1,728 Test 1150 T-On Location 21:00
 (B) First Initial Flow 18 Jars 250 T-Started 2:05
 (C) First Final Flow 66 Safety Joint 75 T-Open 7:05
 (D) Initial Shut-In 1,079 Circ Sub _____ T-Pulled 9:35
 (E) Second Initial Flow 69 Hourly Standby .75h 75 T-Out 11:45
 (F) Second Final Flow 110 Mileage 20.1 31
 (G) Final Shut-In 1,063 Sampler _____
 (H) Final Hydrostatic 1,644 Straddle _____

Initial Open 30 Ruined Shale Packer _____
 Initial Shut-In 45 Ruined Packer _____
 Final Flow 30 Extra Copies _____
 Final Shut-In 45 Extra Recorder _____ Sub Total 0
 Day Standby _____ Total 1581.00
 Accessibility _____ MP/DST Disc't _____
 Sub Total 1581.00

Approved By _____ Our Representative Brett Dickinson

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. 53830

Well Name & No. Younger #1 Test No. 2 Date 12/17/14
 Company Hess Oil Company Elevation 2174 KB 2169 GL
 Address _____
 Co. Rep / Geo. David Gould Rig Mallard
 Location: Sec. 35 Twp. 13s Rge. 19w Co. Ellis State KS

Interval Tested 3490 - 3530 Zone Tested LKC
 Anchor Length 40 Drill Pipe Run _____ Mud Wt. 9.3
 Top Packer Depth 3485 Drill Collars Run 248 Vis 52
 Bottom Packer Depth 3490 Wt. Pipe Run - WL 7.6
 Total Depth 3530 Chlorides 2,700 ppm System LCM 2#

Blow Description IF - 3in blow
ISI - No blow
FF - 1 1/2 in blow
FSI - No blow

Rec	Feet of	%gas	%oil	%water	%mud
<u>65</u>	<u>VSWCM</u>			<u>10</u>	<u>90</u>
<u>60</u>	<u>MCW</u>			<u>20</u>	<u>30</u>
_____	_____				
_____	_____				
_____	_____				

Rec Total 125 BHT 108 Gravity _____ API RW .4 @ 35 °F Chlorides 35,000 ppm
 (A) Initial Hydrostatic 1,736 Test 1150 T-On Location 23:45
 (B) First Initial Flow 18 Jars 250 T-Started 23:55
 (C) First Final Flow 52 Safety Joint 75 T-Open 4:25
 (D) Initial Shut-In 546 Circ Sub _____ T-Pulled 6:55
 (E) Second Initial Flow 55 Hourly Standby 1h 100 T-Out 9:50
 (F) Second Final Flow 78 Mileage 20rt 31 Comments _____
 (G) Final Shut-In 536 Sampler _____
 (H) Final Hydrostatic 1,694 Straddle _____ Ruined Shale Packer _____
 Shale Packer _____ Ruined Packer _____
 Extra Packer _____ Extra Copies _____
 Extra Recorder _____ Sub Total 0
 Day Standby _____ Total 1606
 Accessibility _____ MP/DST Disc't _____
 Sub Total 1606

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

Approved By _____ Our Representative Brett Dickinson

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. 53831

Well Name & No. Younger #1 Test No. 3 Date 12/18/14
 Company Hess Oil Company Elevation 2174 KB 2169 GL
 Address PO Box 1009 McPherson KS 67460
 Co. Rep / Geo. David Gould Rig Mallard
 Location: Sec. 35 Twp. 13s Rge. 19w Co. Ellis State KS

Interval Tested 3535-3564 Zone Tested LKC
 Anchor Length 29 Drill Pipe Run _____ Mud Wt. 9.2
 Top Packer Depth 3530 Drill Collars Run 248 Vis 47
 Bottom Packer Depth 3535 Wt. Pipe Run — WL 7.6
 Total Depth 3564 Chlorides 2,700 ppm System LCM 2#

Blow Description IF - BOB in 18 min
ISI - No blow
FF - BOB in 10 min
FSI - 1 1/2 in blow

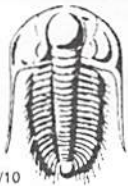
Rec	Feet of	%gas	%oil	%water	%mud
<u>50</u>	<u>GOCM</u>	<u>20</u>	<u>20</u>	<u>60</u>	
<u>250</u>	<u>60</u>	<u>20</u>	<u>80</u>		
Rec _____	Feet of <u>7.50 FT GIP</u>	%gas	%oil	%water	%mud
Rec _____	Feet of _____	%gas	%oil	%water	%mud
Rec _____	Feet of _____	%gas	%oil	%water	%mud

Rec Total 300 BHT 107 Gravity _____ API RW _____ @ _____ °F Chlorides _____ ppm

(A) Initial Hydrostatic	<u>1,795</u>	<input checked="" type="checkbox"/> Test	<u>1150</u>	T-On Location	<u>18:10</u>
(B) First Initial Flow	<u>20</u>	<input checked="" type="checkbox"/> Jars	<u>250</u>	T-Started	<u>18:25</u>
(C) First Final Flow	<u>98</u>	<input checked="" type="checkbox"/> Safety Joint	<u>75</u>	T-Open	<u>21:02</u>
(D) Initial Shut-In	<u>672</u>	<input type="checkbox"/> Circ Sub		T-Pulled	<u>00:02</u>
(E) Second Initial Flow	<u>106</u>	<input type="checkbox"/> Hourly Standby		T-Out	<u>2:35</u>
(F) Second Final Flow	<u>120</u>	<input checked="" type="checkbox"/> Mileage	<u>20.1 31</u>	Comments	
(G) Final Shut-In	<u>654</u>	<input type="checkbox"/> Sampler			
(H) Final Hydrostatic	<u>1,734</u>	<input type="checkbox"/> Straddle		<input type="checkbox"/> Ruined Shale Packer	
Initial Open	<u>45</u>	<input type="checkbox"/> Shale Packer		<input type="checkbox"/> Ruined Packer	
Initial Shut-In	<u>45</u>	<input type="checkbox"/> Extra Packer		<input type="checkbox"/> Extra Copies	
Final Flow	<u>45</u>	<input type="checkbox"/> Extra Recorder		Sub Total	<u>0</u>
Final Shut-In	<u>45</u>	<input type="checkbox"/> Day Standby		Total	<u>1506</u>
		<input type="checkbox"/> Accessibility		MP/DST Disc't	
		Sub Total	<u>1506</u>		

Approved By _____ Our Representative Brett Dierman

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TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 53832

4/10

Well Name & No. Younger #1 Test No. 4 Date 12/19/14
 Company Hess Oil Company Elevation 2174 KB 2169 GL
 Address PO Box 1009 McPherson KS 67460
 Co. Rep / Geo. David Gould Rig Mallard
 Location: Sec. 35 Twp. 13s Rge. 19w Co. Ellis State KS

Interval Tested 3566 - 3600 Zone Tested KC
 Anchor Length 34 Drill Pipe Run _____ Mud Wt. 9.3
 Top Packer Depth 3561 Drill Collars Run 248 Vis 58
 Bottom Packer Depth 3566 Wt. Pipe Run - WL 7.4
 Total Depth 3600 Chlorides 2,700 ppm System LCM 2#

Blow Description IF - weak surface blow
ISI - No blow
FF - No blow
FSI - No blow

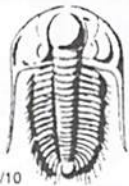
Rec	Feet of	%gas	%oil	%water	%mud
<u>20</u>	<u>OS Mud</u>				
____	____				
____	____				
____	____				
____	____				

Rec Total 20 BHT 105 Gravity _____ API RW _____ @ _____ ° F Chlorides _____ ppm

(A) Initial Hydrostatic <u>1,726</u>	<input checked="" type="checkbox"/> Test <u>1150</u>	T-On Location <u>11:55</u>
(B) First Initial Flow <u>16</u>	<input checked="" type="checkbox"/> Jars <u>250</u>	T-Started <u>12:10</u>
(C) First Final Flow <u>21</u>	<input checked="" type="checkbox"/> Safety Joint <u>75</u>	T-Open <u>14:35</u>
(D) Initial Shut-In <u>570</u>	<input type="checkbox"/> Circ Sub _____	T-Pulled <u>16:35</u>
(E) Second Initial Flow <u>24</u>	<input type="checkbox"/> Hourly Standby _____	T-Out <u>18:20</u>
(F) Second Final Flow <u>29</u>	<input checked="" type="checkbox"/> Mileage <u>20 rt</u> 31	Comments _____
(G) Final Shut-In <u>449</u>	<input type="checkbox"/> Sampler _____	
(H) Final Hydrostatic <u>1,724</u>	<input type="checkbox"/> Straddle _____	<input type="checkbox"/> Ruined Shale Packer _____
	<input type="checkbox"/> Shale Packer _____	<input type="checkbox"/> Ruined Packer _____
Initial Open <u>30</u>	<input type="checkbox"/> Extra Packer _____	<input type="checkbox"/> Extra Copies _____
Initial Shut-In <u>30</u>	<input type="checkbox"/> Extra Recorder _____	Sub Total <u>0</u>
Final Flow <u>30</u>	<input type="checkbox"/> Day Standby _____	Total <u>1506</u>
Final Shut-In <u>30</u>	<input type="checkbox"/> Accessibility _____	MP/DST Disc't _____
	Sub Total <u>1506</u>	

Approved By _____ Our Representative Burt Duhon

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TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 53833

4/10

Well Name & No. Younger #1 Test No. 5 Date 12/20/14
 Company Hess Oil Company Elevation 2174 KB 2169 GL
 Address PO Box 1009 McPherson KS 67460
 Co. Rep / Geo. David Gould Rig Mallard
 Location: Sec. 35 Twp. 13s Rge. 19w Co. Ellis State KS

Interval Tested 3608-3700 Zone Tested KC
 Anchor Length 92 Drill Pipe Run _____ Mud Wt. _____
 Top Packer Depth 3603 Drill Collars Run 248 Vis _____
 Bottom Packer Depth 3608 Wt. Pipe Run — WL _____
 Total Depth 3700 Chlorides _____ ppm System LCM _____
 Blow Description IF - BOB in 24 min
ISI - weak surface blow
FF - BOB in 30 min
FSI -

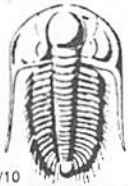
Rec	Feet of	%gas	%oil	%water	%mud
<u>15</u>	<u>SGMCO</u>	<u>5</u>	<u>85</u>	<u>10</u>	<u>10</u>
<u>125</u>	<u>VSO WCM</u>		<u>2</u>	<u>30</u>	<u>68</u>
<u>235</u>	<u>MCH</u>		<u>80</u>	<u>20</u>	<u>20</u>
Rec	Feet of <u>120 FT GFP</u>	%gas	%oil	%water	%mud
Rec	Feet of _____	%gas	%oil	%water	%mud

Rec Total 390 BHT 110 Gravity _____ API RW _____ @ _____ °F Chlorides _____ ppm

(A) Initial Hydrostatic <u>1,827</u>	<input checked="" type="checkbox"/> Test <u>1150</u>	T-On Location <u>19:10</u>
(B) First Initial Flow <u>23</u>	<input checked="" type="checkbox"/> Jars <u>250</u>	T-Started <u>19:30</u>
(C) First Final Flow <u>148</u>	<input checked="" type="checkbox"/> Safety Joint <u>75</u>	T-Open <u>23:58</u>
(D) Initial Shut-In <u>718</u>	<input type="checkbox"/> Circ Sub _____	T-Pulled <u>2:58</u>
(E) Second Initial Flow <u>156</u>	<input checked="" type="checkbox"/> Hourly Standby _____	T-Out <u>6:20</u>
(F) Second Final Flow <u>197</u>	<input checked="" type="checkbox"/> Mileage <u>20 RT 31</u>	Comments _____
(G) Final Shut-In <u>644</u>	<input type="checkbox"/> Sampler _____	<input type="checkbox"/> Ruined Shale Packer _____
(H) Final Hydrostatic <u>1,743</u>	<input type="checkbox"/> Straddle _____	<input type="checkbox"/> Ruined Packer _____
Initial Open <u>45</u>	<input type="checkbox"/> Shale Packer _____	<input type="checkbox"/> Extra Copies _____
Initial Shut-In <u>45</u>	<input type="checkbox"/> Extra Packer _____	Sub Total <u>0</u>
Final Flow <u>45</u>	<input type="checkbox"/> Extra Recorder _____	Total <u>1506</u>
Final Shut-In <u>43</u>	<input type="checkbox"/> Day Standby _____	MP/DST Disc't _____
	<input type="checkbox"/> Accessibility _____	
	Sub Total <u>1506</u>	

Approved By _____ Our Representative Batt Dickins

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TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 53834

Well Name & No. Younger #1 Test No. 6 Date 12/21/14
 Company Hess Oil Company Elevation 2174 KB 2169 GL
 Address PO Box 1009 McPherson KS 67460
 Co. Rep / Geo. David Gould Rig Mallard
 Location: Sec. 35 Twp. 13s Rge. 19w Co. Ellis State KS

Interval Tested 3791 - 3807 Zone Tested Cong. Sd.
 Anchor Length 16 Drill Pipe Run _____ Mud Wt. 9.3
 Top Packer Depth 3786 Drill Collars Run 248 Vis 52
 Bottom Packer Depth 3791 Wt. Pipe Run — WL 7.4
 Total Depth 3807 Chlorides 2,700 ppm System LCM 2#

Blow Description IF - 1/4 in blow
ISF - No blow
FF - No blow
FSI - No blow

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 _____ Gravity _____ API RW _____ @ _____ °F Chlorides _____ ppm

- (A) Initial Hydrostatic _____ Test 1150 T-On Location 21:35
- (B) First Initial Flow _____ Jars 250 T-Started 22:50
- (C) First Final Flow _____ Safety Joint 75 T-Open 4:35
- (D) Initial Shut-In _____ Circ Sub _____ T-Pulled 6:35
- (E) Second Initial Flow _____ Hourly Standby 1h 100 T-Out 8:55
- (F) Second Final Flow _____ Mileage 20.7 31 Comments _____
- (G) Final Shut-In _____ Sampler _____
- (H) Final Hydrostatic _____ Straddle _____

Initial Open 30 Ruined Shale Packer _____
 Initial Shut-In 30 Ruined Packer _____
 Final Flow 30 Extra Packer _____
 Final Shut-In 30 Extra Recorder _____ Sub Total 0
 Day Standby _____ Total 1606
 Accessibility _____ MP/DST Disc't _____
 Sub Total 1606

Approved By _____ Our Representative Beth Dickinson

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TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 53835

Well Name & No. Younger #1 Test No. 7 Date 12/22/14
 Company Hess Oil Company Elevation 2174 KB 2169 GL
 Address _____
 Co. Rep / Geo. David Gould Rig Mallard
 Location: Sec. 35 Twp. 13s Rge. 19w Co. Ellis State KS

Interval Tested 3843 - 3851 Zone Tested Arb.
 Anchor Length 8 Drill Pipe Run _____ Mud Wt. _____
 Top Packer Depth 3838 Drill Collars Run 248 Vis _____
 Bottom Packer Depth 3843 Wt. Pipe Run - WL _____
 Total Depth 3851 Chlorides _____ ppm System LCM _____

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

Rec	Feet of	%gas	%oil	%water	%mud
<u>30</u>	<u>Mud</u>				
____	____	____	____	____	____
____	____	____	____	____	____
____	____	____	____	____	____

Rec Total 30 BHT 110 Gravity _____ API RW _____ @ _____ ° F Chlorides _____ ppm

(A) Initial Hydrostatic <u>1,989</u>	<input checked="" type="checkbox"/> Test <u>1150</u>	T-On Location <u>17:20</u>
(B) First Initial Flow <u>14</u>	<input checked="" type="checkbox"/> Jars <u>250</u>	T-Started <u>17:55</u>
(C) First Final Flow <u>18</u>	<input checked="" type="checkbox"/> Safety Joint <u>75</u>	T-Open <u>21:05</u>
(D) Initial Shut-In <u>265</u>	<input type="checkbox"/> Circ Sub _____	T-Pulled <u>23:05</u>
(E) Second Initial Flow <u>16</u>	<input type="checkbox"/> Hourly Standby _____	T-Out <u>21:45</u>
(F) Second Final Flow <u>18</u>	<input checked="" type="checkbox"/> Mileage <u>20 on T</u> 31 31	Comments _____
(G) Final Shut-In <u>335</u>	<input type="checkbox"/> Sampler _____	_____
(H) Final Hydrostatic <u>1,884</u>	<input type="checkbox"/> Straddle _____	<input type="checkbox"/> Ruined Shale Packer _____

Initial Open 30
 Initial Shut-In 30
 Final Flow 30
 Final Shut-In 30

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

Sub Total 1537

Sub Total 0
 Total 1537
 MP/DST Disc't _____

Approved By _____ Our Representative Britt Duhon

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JOB LOG

SWIFT Services, Inc.

DATE 12-27-14 PAGE NO.

CUSTOMER ~~Hess~~ Hess Oil Co WELL NO. 41 LEASE Yonger JOB TYPE 2-Stage TICKET NO. 26924

CHART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMPS		PRESSURE (PSI)		DESCRIPTION OF OPERATION AND MATERIALS
				T	C	TUBING	CASING	
	2100							on loc 4W /FE
								RTD 3925 5 1/2" x 15.5" x 3916' x 16' Turbo 1,3,5,7,9 cent 56 Basket 57 D.V. 57 @ 1434'
	2215							start FE
	0030							Break Circ
	0100	5	0				200	start 50 gal Mud Flush
	0102	5	12/0				200	start 20 bbl KCL Flush
	0106	5	20/0				200	start 150 sks EA-2 cent
	0113		36					End Cent Wash P+L Drop L.D. Plug
	0125	6	0				200	Start Displacement wtr
	0137	5	70				250	catch cent start mud
	0145		93				750/1400	Land Plug Release Pressure Hold / Drop Open Plug / washing Trk
	0200						1400	Open DV Circ 4 hrs
	0630							Plug RH 30 sks SMD
	0640	5	0				150	start 20 bbl KCL wtr Flush
	0645	5	20/0				150	start 170 sks SMD cent
	0705		100					End Cent Drop Closing Plug
	0715	5	0				150	Start Displacement
	0717	4	10				250	circ cent
	0725		34				500/1500	Land Plug Release Press DV closed
								circ 40 sks to pit
								Thank you Nick, Austin, & Craig