

CONFIDENTIAL

ORIGINAL
KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

RECEIVED

11/30/13

DEC 13 2011

Form ACO-1
June 2009

Form Must Be Typed

Form must be Signed

All blanks must be Filled

WELL COMPLETION FORM
WELL HISTORY - DESCRIPTION OF WELL & LEASE

KCC WICHITA

OPERATOR: License # 34090
Name: G.L. Allison Oil Operations Inc.
Address 1: 2000 Washington St.
Address 2: 15 SE 30 Rd.
City: Great Bend State: Ks. Zip: 67530 +
Contact Person: Greg Allison
Phone: (620) 791-7721
CONTRACTOR: License # 5123
Name: Pickerell Drilling
Wellsite Geologist: Kevin Bailey
Purchaser: _____

API No. 15 - 109-21038-00-00

Spot Description: _____
NE NE NW Sec. 21 Twp. 12 S. R. 32 East West
330 Feet from North / South Line of Section
2,310 Feet from East / West Line of Section

Footages Calculated from Nearest Outside Section Corner:

NE NW SE SW

County: Logan

Lease Name: Younkin Well #: 21-A

Field Name: Unnamed

Producing Formation: N/A

Elevation: Ground: 3002 Kelly Bushing: 3009

Total Depth: 4669 Plug Back Total Depth: _____

Amount of Surface Pipe Set and Cemented at: 265 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.

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
 Conv. to GSW
 Plug Back: _____ Plug Back Total Depth
 Commingled Permit #: _____
 Dual Completion Permit #: _____
 SWD Permit #: _____
 ENHR Permit #: _____
 GSW Permit #: _____

10-07-2011 10-19-2011 10-19-2011
Spud Date or Date Reached TD' Completion Date or
Recompletion Date' Recompletion Date'

Drilling Fluid Management Plan

(Data must be collected from the Reserve Pit)

Chloride content: 18000 ppm Fluid volume: 1500 bbls

Dewatering method used: Evaporated

Location of fluid disposal if hauled offsite: _____

Operator Name: _____

Lease Name: _____ License #: **KCC WICHITA**

Quarter _____ Sec. _____ Twp. _____ S. R. _____ East West

County: _____ Permit #: _____

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NOV 30 2013

INSTRUCTIONS: An original and two copies of this form shall be filed with the Kansas Corporation Commission, 130 S. Market - Room 2078, Wichita, Kansas 67202, within 120 days of the spud date, recompletion, workover or conversion of a well. Rule 82-3-130, 82-3-106 and 82-3-107 apply. Information of side two of this form will be held confidential for a period of 12 months if requested in writing and submitted with the form (see rule 82-3-107 for confidentiality in excess of 12 months). One copy of all wireline logs and geologist well report shall be attached with this form. ALL CEMENTING TICKETS MUST BE ATTACHED. Submit CP-4 form with all plugged wells. Submit CP-111 form with all temporarily abandoned wells.

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.

Signature: Greg Allison

Title: President Date: 11-25-2011

KCC Office Use ONLY

Letter of Confidentiality Received
Date: 11.30.11 - 11.30.13

Confidential Release Date: _____

Wireline Log Received

Geologist Report Received

UIC Distribution

ALT I II III Approved by: NJ Date: 12-22-11

**KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION
WELL COMPLETION FORM
WELL HISTORY - DESCRIPTION OF WELL & LEASE**

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Designate Type of Completion:
 New Well Re-Entry Workover
 Oil WSW SWD SLOW
 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
 Conv. to GSW
 Plug Back: _____ Plug Back Total Depth _____
 Commingled Permit #: _____
 Dual Completion Permit #: _____
 SWD Permit #: _____
 ENHR Permit #: _____
 GSW Permit #: _____
10-07-2011 10-18-2011 10-19-2011
Spud Date or Date Reached TD Completion Date or
Recompletion Date Recompletion Date

**RECEIVED
DEC 13 2011**

KCC WICHITA

API No. 15 - 109-21038-00-00
Spot Description: _____
NE NE NW Sec. 21 Twp. 12 S. R. 32 East West
330 Feet from North / South Line of Section
2,310 Feet from East / West Line of Section
Footages Calculated from Nearest Outside Section Corner:
 NE NW SE SW
County: Logan
Lease Name: Younkin Well #: 21-A
Field Name: Unnamed
Producing Formation: N/A
Elevation: Ground: 3002 Kelly Bushing: 3009
Total Depth: 4669 Plug Back Total Depth: _____
Amount of Surface Pipe Set and Cemented at: 265 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: 18000 ppm Fluid volume: 1500 bbls
Dewatering method used: Evaporated
Location of fluid disposal if hauled offsite: _____
Operator Name: _____
Lease Name: _____
Quarter _____ Sec. _____ Twp. 30 S. R3 East West
County: _____ Permit #: _____
KCC

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KCC

INSTRUCTIONS: An original and two copies of this form shall be filed with the Kansas Corporation Commission, 130 S. Market - Room 2078, Wichita, Kansas 67202, within 120 days of the spud date, recompletion, workover or conversion of a well. Rule 82-3-130, 82-3-106 and 82-3-107 apply. Information of side two of this form will be held confidential for a period of 12 months if requested in writing and submitted with the form (see rule 82-3-107 for confidentiality in excess of 12 months). One copy of all wireline logs and geologist well report shall be attached with this form. ALL CEMENTING TICKETS MUST BE ATTACHED. Submit CP-4 form with all plugged wells. Submit CP-111 form with all temporarily abandoned wells.

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.
Signature: Greg Allison
Title: PRESIDENT Date: 12-12-11

KCC Office Use ONLY

Letter of Confidentiality Received
Date: _____
 Confidential Release Date: _____
 Wireline Log Received
 Geologist Report Received
 UIC Distribution
ALT I II III Approved by: _____ Date: _____

Operator Name: G.L. Allison Oil Operations Inc. Lease Name: Younkin Well #: 21-A
 Sec. 21 Twp. 12 S. R. 32 East West County: Logan

INSTRUCTIONS: Show important tops and base 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. Attach complete copy of all Electric Wire-line Logs surveyed. Attach final geological well site report.

Drill Stem Tests Taken <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <i>(Attach Additional Sheets)</i> Samples Sent to Geological Survey <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Cores Taken <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Electric Log Run <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Electric Log Submitted Electronically <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>(If no, Submit Copy)</i> List All E. Logs Run: DCPL / DIL	<input checked="" type="checkbox"/> Log Formation (Top), Depth and Datum <input type="checkbox"/> Sample <table style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Name</th> <th style="text-align: left;">Top</th> <th style="text-align: left;">Datum</th> </tr> </thead> <tbody> <tr> <td>Anhydrite</td> <td>2480</td> <td>+529</td> </tr> <tr> <td>Lansing</td> <td>4008</td> <td>-999</td> </tr> <tr> <td>BKC</td> <td>4304</td> <td>-1295</td> </tr> <tr> <td>Cherokee Shale</td> <td>4486</td> <td>-1477</td> </tr> <tr> <td>Johnson</td> <td>4562</td> <td>-1553</td> </tr> <tr> <td>Mississippian</td> <td>4619</td> <td>-1610</td> </tr> </tbody> </table>	Name	Top	Datum	Anhydrite	2480	+529	Lansing	4008	-999	BKC	4304	-1295	Cherokee Shale	4486	-1477	Johnson	4562	-1553	Mississippian	4619	-1610
Name	Top	Datum																				
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Johnson	4562	-1553																				
Mississippian	4619	-1610																				

CASING RECORD <input checked="" 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
Surface	12 1/4"	8 5/8"	24 #	260	Common	200	3%CC 2% gel

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				

Shots Per Foot	PERFORATION RECORD - Bridge Plugs Set/Type Specify Footage of Each Interval Perforated	Fracture, Shot, Cement Squeeze Record (Amount and Kind of Material Used)	Depth
		CONFIDENTIAL NOV 30 2013 KCC	RECEIVED NOV 30 2011 KCC WICHITA

TUBING RECORD:		Size:	Set At:	Packer At:	Liner Run: <input type="checkbox"/> Yes <input type="checkbox"/> No
Date of First, Resumed Production, SWD or ENHR.			Producing Method:		
			<input type="checkbox"/> Flowing <input type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other (Explain) _____		
Estimated Production Per 24 Hours	Oil Bbbs.	Gas Mcf	Water Bbbs.	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 (Specify) _____	PRODUCTION INTERVAL: _____ _____
---	---	-------------------------------------



CONSOLIDATED
Oil Well Services, LLC

TICKET NUMBER 33664
LOCATION Oakley
FOREMAN Fuzz

O Box 884, Chanute, KS 66720
20-431-9210 or 800-467-8676

FIELD TICKET & TREATMENT REPORT
CEMENT

DATE	CUSTOMER #	WELL NAME & NUMBER	SECTION	TOWNSHIP	RANGE	COUNTY
10-19-11		Younkin 21-A	21	12	32	LOGAN
CUSTOMER G.L. Aikawa Oil Oper Inc			OAKLEY			
MAILING ADDRESS 2000 Washington			85			
CITY Gr. Bend			1 W			
STATE KS			11 N			
ZIP CODE 67530			W. 4			
TRUCK #	DRIVER	TRUCK #	DRIVER			
463	John G					
429	Cecil P					

JOB TYPE PTA HOLE SIZE 7 7/8 HOLE DEPTH 4668' CASING SIZE & WEIGHT _____
 CASING DEPTH _____ DRILL PIPE 4 1/2 TUBING _____ OTHER _____
 SLURRY WEIGHT 14.1 SLURRY VOL 1.40 WATER gal/sk 6.8 CEMENT LEFT in CASING _____
 DISPLACEMENT _____ DISPLACEMENT PSI _____ MIX PSI _____ RATE _____

REMARKS: Safety meeting on Pickrell #10 Rigup + plug as ordered

- 25 @ 2530'
- 100 sk @ 1550'
- 40 sk @ 310'
- 10 sk @ 40' w/plus
- 30 sk @ RH

Thanks Fuzz crew

ACCOUNT CODE	QUANTITY or UNITS	DESCRIPTION of SERVICES or PRODUCT	UNIT PRICE	TOTAL
5405 W	1	PUMP CHARGE	1750 ⁰⁰	1750 ⁰⁰
5406	10	MILEAGE	50 ⁰⁰	500 ⁰⁰
5407	8.82 tow	Tow Mileage Delivery (min)	410 ⁰⁰	410 ⁰⁰
1131	205	60/40 pos	140 ³²	2941 ²⁸
1118 B	705 #	Bentonite	.24	169 ²⁰
1107	51 #	cellulose	2.66	135 ⁶⁶
4432	1	8 5/8 wood plug	96 ⁰⁰	96 ⁰⁰
Subtotal				5052 ⁶¹
less 10% discount				505 ²⁶
RECEIVED				4547 ³⁵
CONFIDENTIAL				NOV 30 2011
NOV 30 2013				KCC WICHITA
KCC				
SALES TAX				
ESTIMATED				
TOTAL				

AUTHORIZATION [Signature] TITLE _____ DATE _____

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



CEMENTING LOG

STAGE NO. _____

Date 10-8-11 District Oakley, KS Ticket No. 36081
 Company CA Allison Rig Pickard 10
 Lease Younker Well No. 21-A
 County Logan State KS
 Location 2P-12-32 Field _____
Oakley 95 TW 1/4 N W 4th

CASING DATA: Conductor PTA Squeeze Misc
 Surface Intermediate Production Liner
 Size 8 7/8 Type new Weight 24# Collar _____

Casing Depths: Top KB Bottom 265'

Drill Pipe: Size _____ Weight _____ Collars _____
 Open Hole: Size 12 1/4" T.D. 265 ft. P.B. to _____ ft.

CAPACITY FACTORS:
 Casing: Bbls/Lin. ft. .0637 Lin. ft./Bbl. _____
 Open Holes: Bbls/Lin. ft. _____ Lin. ft./Bbl. _____
 Drill Pipe: Bbls/Lin. ft. _____ Lin. ft./Bbl. _____
 Annulus: Bbls/Lin. ft. _____ Lin. ft./Bbl. _____
 Perforations: From _____ ft. to _____ ft. Amt. _____

CEMENT DATA:
 Spacer Type: _____
 Amt. _____ Skys Yield _____ ft³/sk Density _____ PPG

LEAD: Pump Time _____ hrs. Type com 370 PC
270 gal Excess _____
 Amt. 200 Skys Yield 736 ft³/sk Density 1508 PPG

TAIL: Pump Time _____ hrs. Type _____
 Excess _____
 Amt. _____ Skys Yield _____ ft³/sk Density _____ PPG
 WATER: Lead _____ gals/sk Tail _____ gals/sk Total _____ Bbls.

Pump Trucks Used 431-Darren
 Bulk Equip. 404-Ethan, Brandon

Float Equip: Manufacturer _____
 Shoe: Type _____ Depth _____
 Float: Type _____ Depth _____
 Centralizers: Quantity _____ Plugs Top _____ Btm. _____
 Stage Collars _____
 Special Equip. _____
 Disp. Fluid Type water Amt. 1523 Bbls. Weight _____ PPG
 Mud Type _____ Weight _____ PPG

COMPANY REPRESENTATIVE _____

CEMENTER Lohman

TIME	PRESSURES PSI		FLUID PUMPED DATA			REMARKS
	DRILL PIPE CASING	ANNULUS	TOTAL FLUID	Pumped Per Time Period	RATE Bbls Min.	
7:00						start water
						start cement 3K
						stop cement
7:30				30		wash pump 4 lines displacement
				1293		Displace with water
						cement did circulate

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 NOV 30 2011
 KCC WICHITA

Mike K...

ALLIED CEMENTING CO., LLC. 036081

REMIT TO P.O. BOX 31
RUSSELL, KANSAS 67665

SERVICE POINT:
Dakley, KS

DATE <u>10-8-11</u>	SEC. <u>21</u>	TWP. <u>12</u>	RANGE <u>32</u>	CALLED OUT	ON LOCATION	JOB START <u>7:00am</u>	JOB FINISH <u>7:30am</u>
LEASE <u>Yankin</u>	WELL # <u>21-A</u>	LOCATION <u>Dakley, KS 951W</u>			COUNTY <u>Logan</u>	STATE <u>KS</u>	
OLD OR NEW (Circle one)			<u>1 1/4" Water</u>				

CONTRACTOR <u>Picknell #10</u>	OWNER <u>same</u>
TYPE OF JOB <u>Surface</u>	CEMENT
HOLE SIZE <u>12 1/4"</u>	T.D. <u>265'</u>
CASING SIZE <u>8 3/8"</u>	DEPTH <u>265'</u>
TUBING SIZE	DEPTH
DRILL PIPE	DEPTH
TOOL	DEPTH
PRES. MAX	MINIMUM
MEAS. LINE	SHOE JOINT
CEMENT LEFT IN CSG. <u>15 ft</u>	COMMON <u>200 sks @ 16.25 3250.00</u>
PERFS.	POZMIX @
DISPLACEMENT <u>1593 bbl</u>	GEL <u>4 sks @ 21.25 85.00</u>
	CHLORIDE <u>7 sks @ 58.20 407.40</u>
	ASC @
	@
	@
	@
	@
	@
	@
	@
	@
	HANDLING <u>211 sks @ 2.25 474.75</u>
	MILEAGE <u>118 sk miles 278.52</u>
	TOTAL <u>4495.67</u>

EQUIPMENT

PUMP TRUCK # <u>431</u>	CEMENTER <u>Lakone</u>
	HELPER <u>Darren</u>
BULK TRUCK # <u>404</u>	DRIVER <u>Ethan/Brandon</u>
BULK TRUCK #	DRIVER

REMARKS:

mix 200sk cement down casing
wash pump / line
displace with water
cement did circulate

SERVICE

DEPTH OF JOB <u>265'</u>	
PUMP TRUCK CHARGE	<u>1125.00</u>
EXTRA FOOTAGE @	
MILEAGE <u>12 x 2</u> @ <u>7.00</u>	<u>168.00</u>
MANIFOLD @	
<u>light vehicle miles</u> @ <u>4.00</u>	<u>96.00</u>

CHARGE TO: C.L. Allison **CONFIDENTIAL**

STREET _____

CITY _____ STATE _____ ZIP _____

NOV 3 4 2013 **KCC**

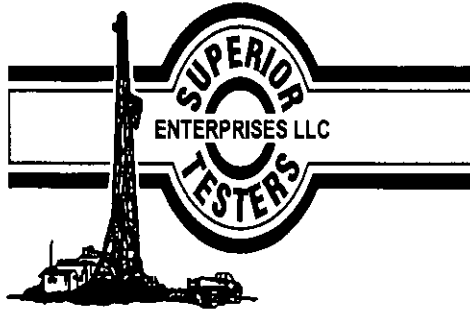
RECEIVED

NOV 3 2011

KCC WICHITA

PLUG & FLOAT EQUIPMENT

To Allied Cementing Co., LLC.
You are hereby requested to rent cementing equipment
and furnish cementer and helper to assist



DRILL STEM TEST REPORT

Prepared For: **GL Allison Oil Operations Incorporated**

2000 Washington
Great Bend, Kansas 67530

ATTN: Bailey

21/12S/32W/Logan

Younkin 21-A

Start Date: 2011.10.18 @ 05:58:00

End Date: 2011.10.18 @ 13:08:00

Job Ticket #: 18786 DST #: 1

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NOV 3 0 2013

KCC

Superior Testers Enterprises LLC
PO Box 138 Great Bend KS 67530
1-800-792-6902

Printed: 2011.10.19 @ 16:19:14

901 # 15.109.21038.00.00

GL Allison Oil Operations Incorporated

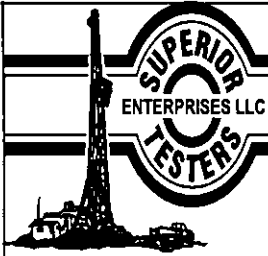
Younkin 21-A

21/12S/32W/Logan

DST # 1

Cherokee

2011.10.18



DRILL STEM TEST REPORT

GL Allison Oil Operations Incorporated

Younkin 21-A

2000 Washington
Great Bend, Kansas 67530

21/12S/32W/Logan

Job Ticket: 18786

DST#: 1

ATTN: Bailey

Test Start: 2011.10.18 @ 05:58:00

GENERAL INFORMATION:

Formation: **Cherokee**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 08:15:00

Time Test Ended: 13:08:00

Test Type: Conventional Bottom Hole (Initial)

Tester: Ken Swinney

Unit No: 3325 Scott City/74

Interval: **4560.00 ft (KB) To 4610.00 ft (KB) (TVD)**

Reference Elevations: 3009.00 ft (KB)

Total Depth: 4610.00 ft (KB) (TVD)

3002.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 7.00 ft

Serial #: 6651

Outside

Press@RunDepth: 134.66 psig @ 4606.84 ft (KB)

Capacity: 5000.00 psig

Start Date: 2011.10.18

End Date: 2011.10.18

Last Calib.: 2011.10.18

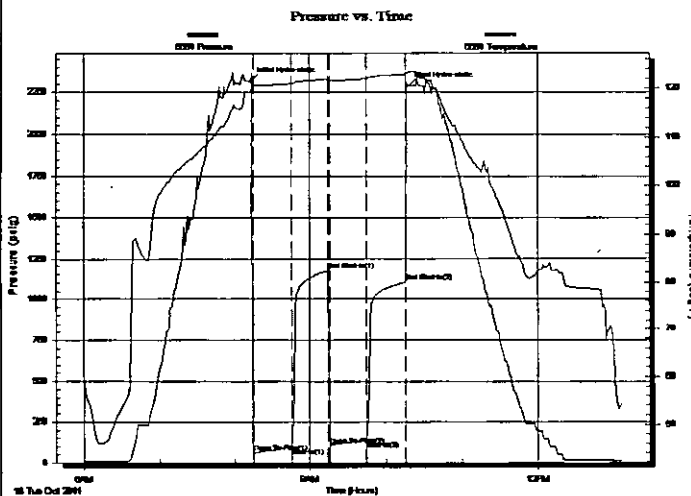
Start Time: 05:59:00

End Time: 13:08:00

Time On Btm: 2011.10.18 @ 08:12:30

Time Off Btm: 2011.10.18 @ 10:17:30

TEST COMMENT: 1ST Open 30 Minutes/Good blow/Blow to bottom of bucket in 8 minutes
 1ST Shut In 30 Minutes/Blow back built to 4 1/2 inches
 2ND Open 30 Minutes/Good blow/Blow built to bottom of bucket in 13 minutes
 2ND Shut In 30 Minutes/Blow back built to 2 1/2 inches



PRESSURE SUMMARY

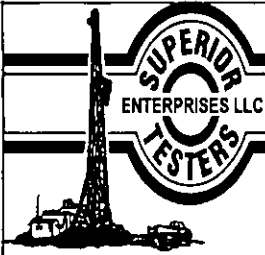
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2313.99	119.25	Initial Hydro-static
3	61.19	120.68	Open To Flow (1)
33	94.41	120.99	Shut-In(1)
63	1169.88	121.92	End Shut-In(1)
63	105.04	121.65	Open To Flow (2)
92	134.66	122.03	Shut-In(2)
124	1108.65	122.94	End Shut-In(2)
125	2289.41	123.34	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
0.00	540 Feet Gas in pipe	0.00
330.00	Clean gassy oil	4.83
0.00	Gas 20% Oil 80%	0.00
30.00	Gassy Oil cut Mud	0.44
0.00	Gas 20% Oil 35% Mud 45%	0.00
0.00	Gravity of oil corrected	0.00

Gas Rates

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



DRILL STEM TEST REPORT

GL Allison Oil Operations Incorporated

Younkin 21-A

2000 Washington
Great Bend, Kansas 67530

21/12S/32W/Logan

Job Ticket: 18786

DST#: 1

ATTN: Bailey

Test Start: 2011.10.18 @ 05:58:00

GENERAL INFORMATION:

Formation: **Cherokee**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 08:15:00

Time Test Ended: 13:08:00

Test Type: Conventional Bottom Hole (Initial)

Tester: Ken Swinney

Unit No: 3325 Scott City/74

Interval: **4560.00 ft (KB) To 4610.00 ft (KB) (TVD)**

Reference Elevations: 3009.00 ft (KB)

Total Depth: 4610.00 ft (KB) (TVD)

3002.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 7.00 ft

Serial #: 6749

Inside

Press@RunDepth: 1108.39 psig @ 4605.84 ft (KB)

Capacity: 5000.00 psig

Start Date: 2011.10.18

End Date: 2011.10.18

Last Calib.: 2011.10.18

Start Time: 05:59:00

End Time: 13:09:30

Time On Btm: 2011.10.18 @ 08:14:00

Time Off Btm: 2011.10.18 @ 10:20:00

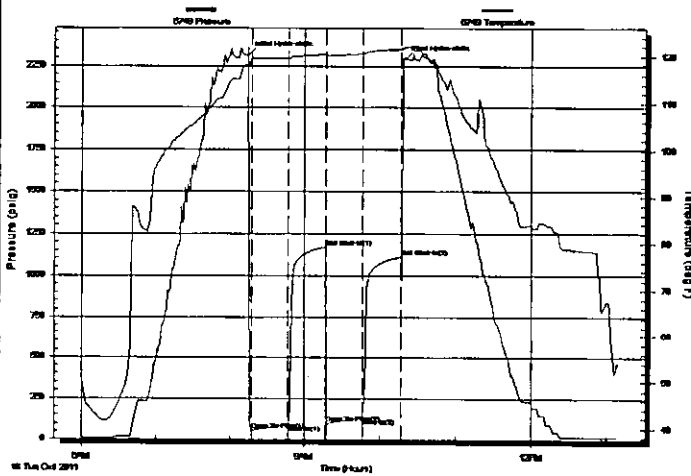
TEST COMMENT: 1ST Open 30 Minutes/Good blow/Blow to bottom of bucket in 8 minutes

1ST Shut In 30 Minutes/Blow back built to 4 1/2 inches

2ND Open 30 Minutes/Good blow/Blow built to bottom of bucket in 13 minutes

2ND Shut In 30 Minutes/Blow back built to 2 1/2 inches

Pressure vs. Time



PRESSURE SUMMARY

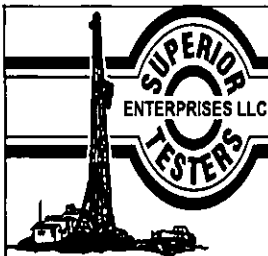
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2310.63	118.21	Initial Hydro-static
3	57.45	119.38	Open To Flow (1)
33	93.63	119.59	Shut-In(1)
63	1168.59	120.41	End Shut-In(1)
64	98.87	120.14	Open To Flow (2)
92	132.71	120.61	Shut-In(2)
123	1108.39	121.59	End Shut-In(2)
126	2290.91	121.97	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
0.00	540 Feet Gas in pipe	0.00
330.00	Clean gassy oil	4.83
0.00	Gas 20% Oil 80%	0.00
30.00	Gassy Oil cut Mud	0.44
0.00	Gas 20% Oil 35% Mud 45%	0.00
0.00	Gravity of oil corrected	0.00

Gas Rates

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



DRILL STEM TEST REPORT

TOOL DIAGRAM

GL Allison Oil Operations Incorporated

Younkin 21-A

2000 Washington
Great Bend, Kansas 67530

21/12S/32W/Logan

Job Ticket: 18786

DST#: 1

ATTN: Bailey

Test Start: 2011.10.18 @ 05:58:00

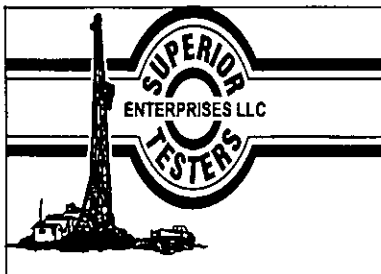
Tool Information

Drill Pipe:	Length: 4560.00 ft	Diameter: 3.88 inches	Volume: 66.69 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 20000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 98000.00 lb
			Total Volume: 66.69 bbl	Tool Chased 2.00 ft
Drill Pipe Above KB:	28.75 ft			String Weight: Initial 58000.00 lb
Depth to Top Packer:	4560.00 ft			Final 60000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	49.84 ft			
Tool Length:	78.59 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			4536.25	
Hydraulic tool	5.00			4541.25	
Change over sub	0.75			4542.00	
Jars	6.00			4548.00	
Safety Joint	2.00			4550.00	
Packer	5.00			4555.00	28.75 Bottom Of Top Packer
Packer	5.00			4560.00	
Anchor	0.00			4560.00	
change over sub	0.75			4560.75	
drill pipe	31.34			4592.09	
change over sub	0.75			4592.84	
anchor	12.00			4604.84	
Recorder	1.00	6749	Inside	4605.84	
Recorder	1.00	6651	Outside	4606.84	
bull plug	3.00			4609.84	49.84 Bottom Packers & Anchor

Total Tool Length: 78.59



DRILL STEM TEST REPORT

FLUID SUMMARY

GL Allison Oil Operations Incorporated

Younklin 21-A

2000 Washington
Great Bend, Kansas 67530

21/12S/32W/Logan

Job Ticket: 18786

DST#: 1

ATTN: Bailey

Test Start: 2011.10.18 @ 05:58:00

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 10.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 41.00 sec/qt

Cushion Volume:

bbl

Water Loss: 8.78 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1000.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
0.00	540 Feet Gas in pipe	0.000
330.00	Clean gassy oil	4.826
0.00	Gas 20% Oil 80%	0.000
30.00	Gassy Oil cut Mud	0.439
0.00	Gas 20% Oil 35% Mud 45%	0.000
0.00	Gravity of oil corrected	0.000

Total Length: 360.00 ft

Total Volume: 5.265 bbl

Num Fluid Samples: 0

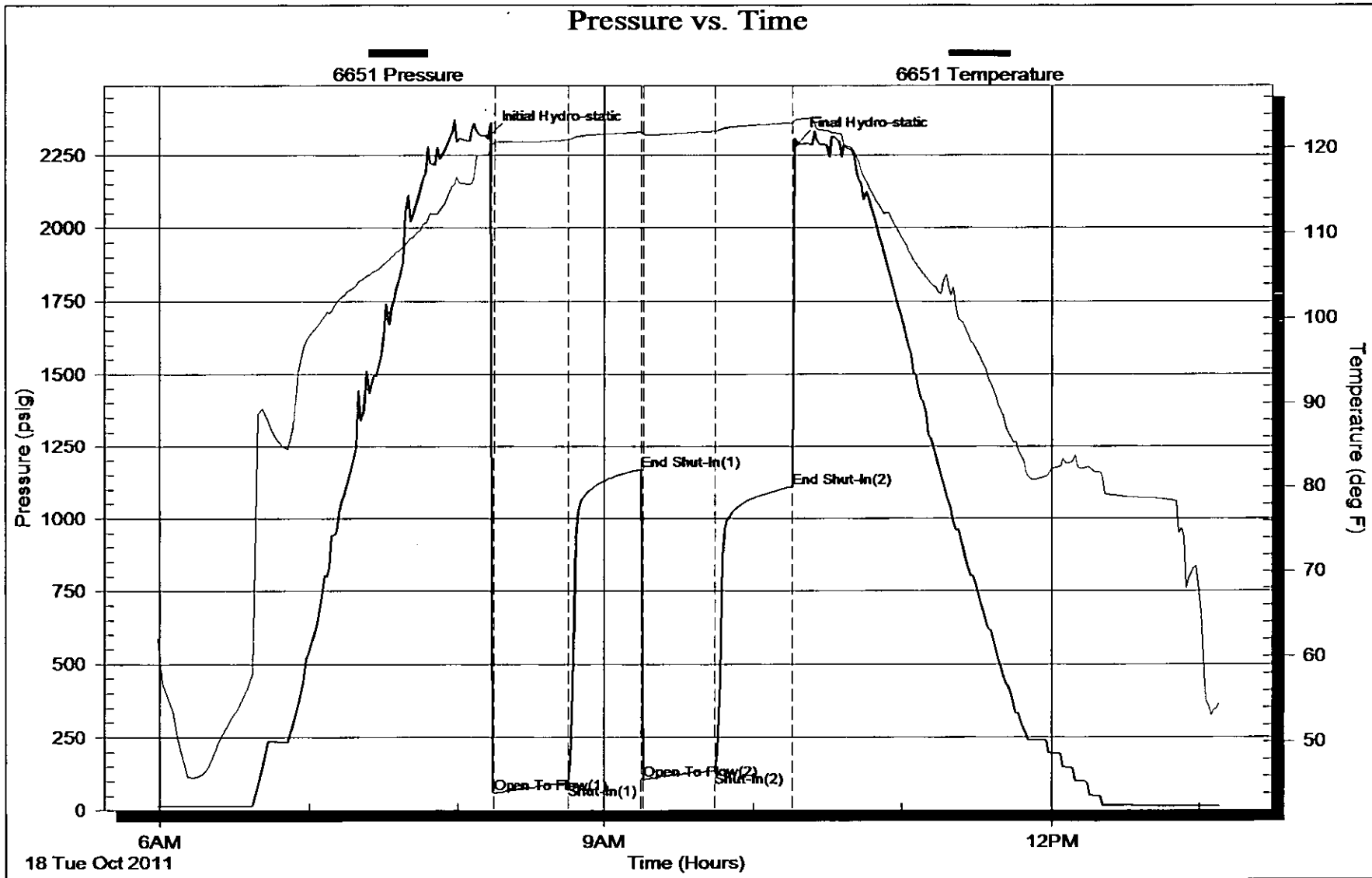
Num Gas Bombs: 0

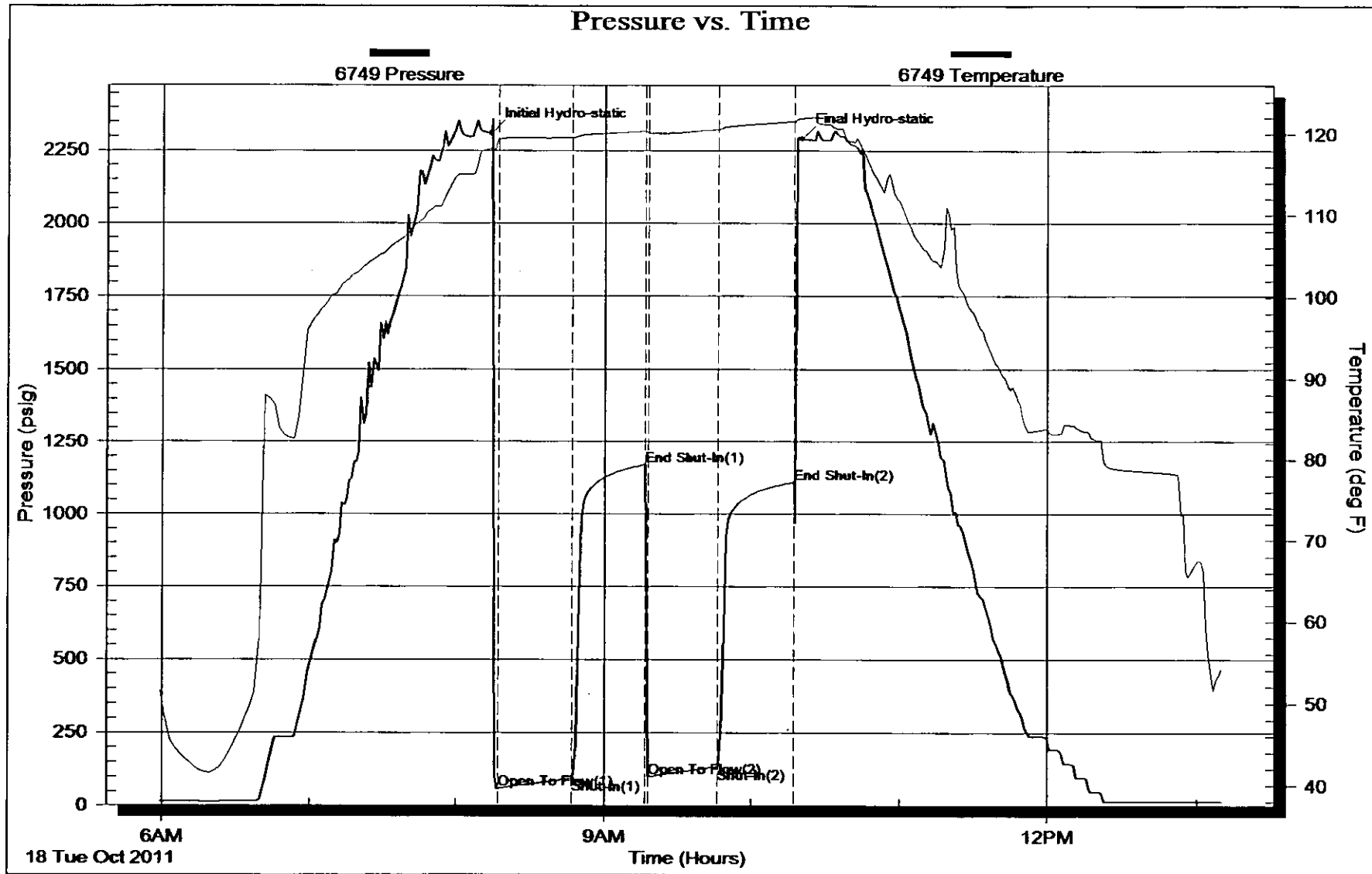
Serial #:

Laboratory Name:

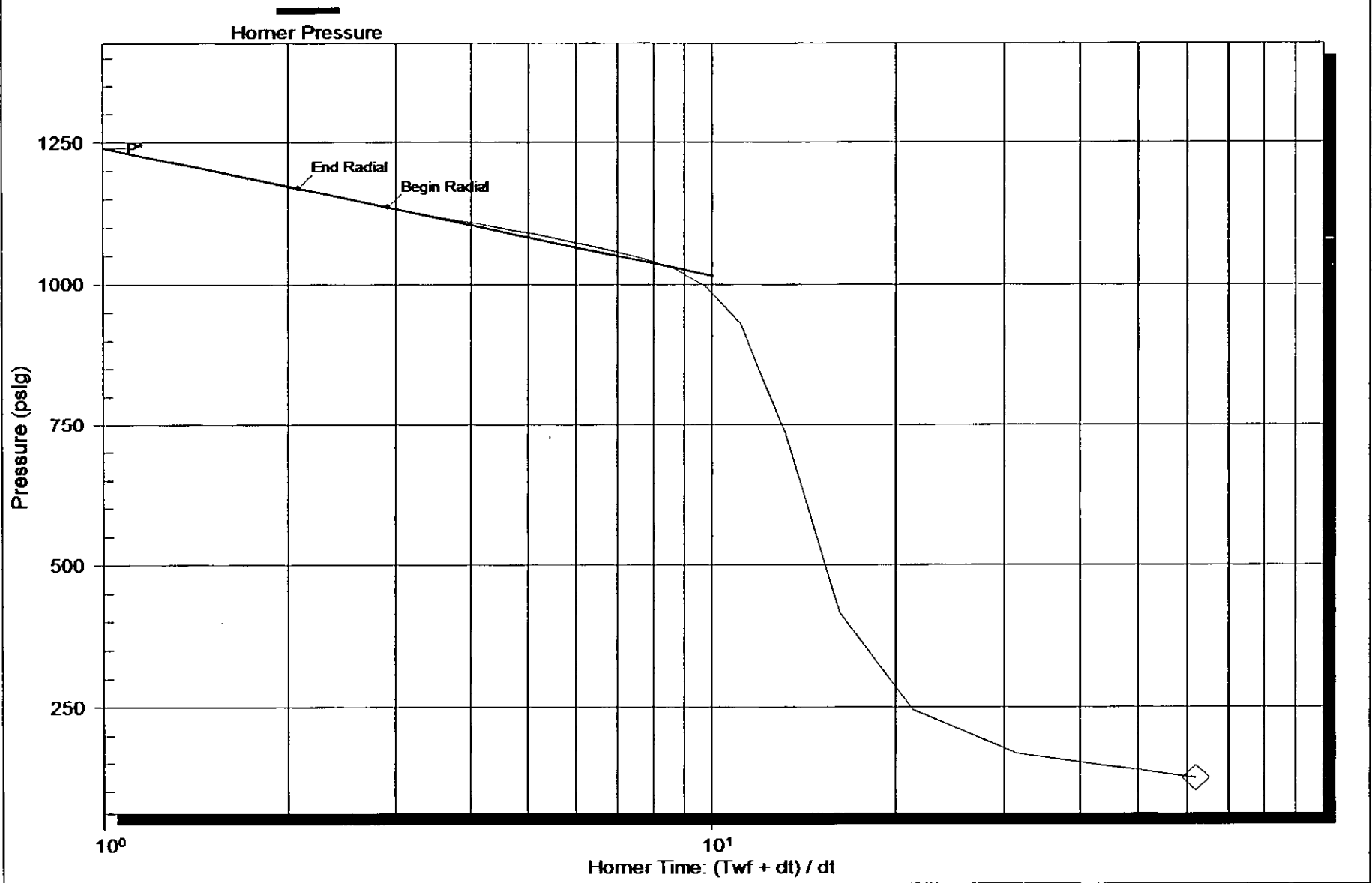
Laboratory Location:

Recovery Comments:





Horner Plot



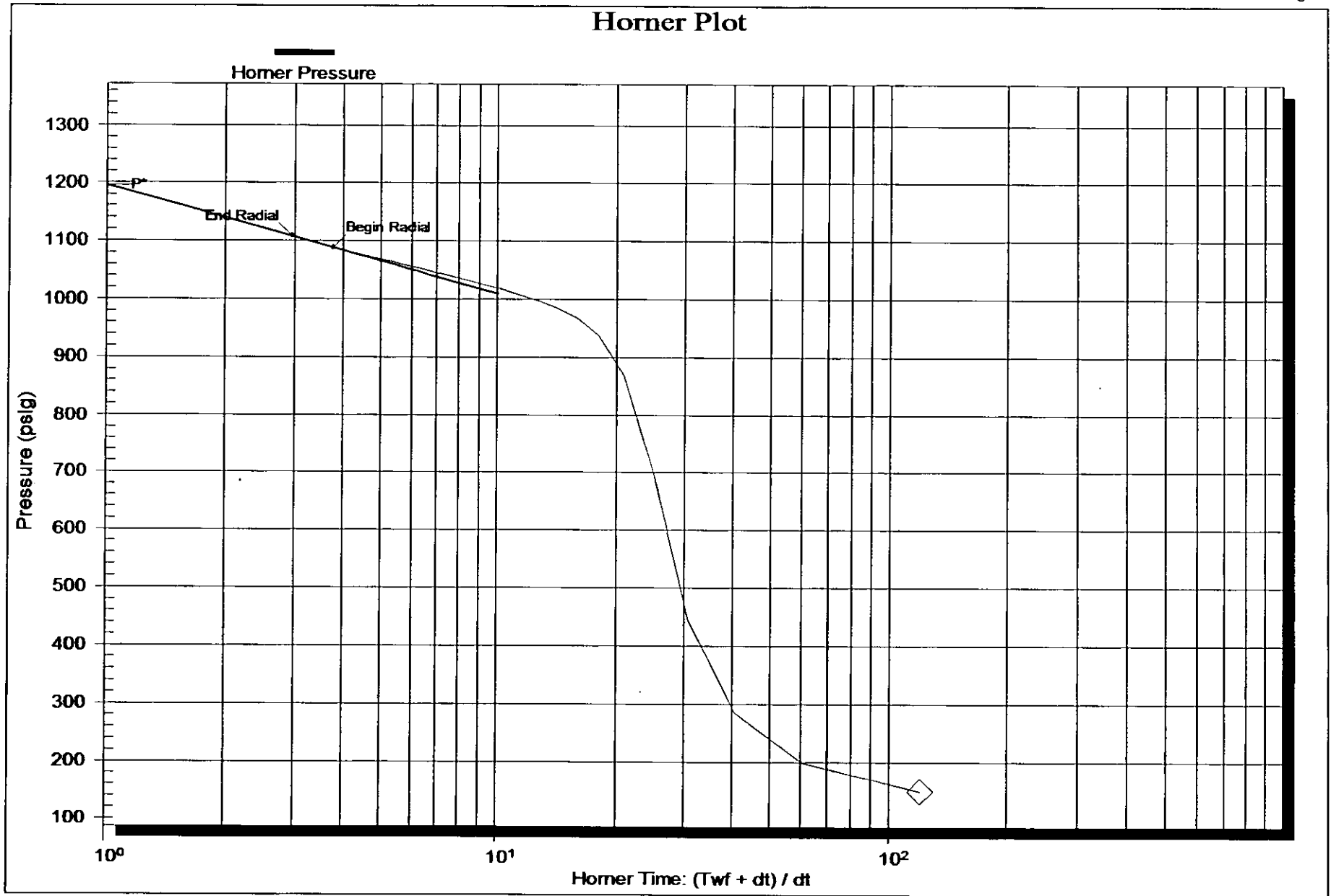
Serial Number: 6651 (Outside)

P* : 1240.49

Slope (m) : 225.87 kpa/log cycle

Flow Cycle: 1

Horner Plot



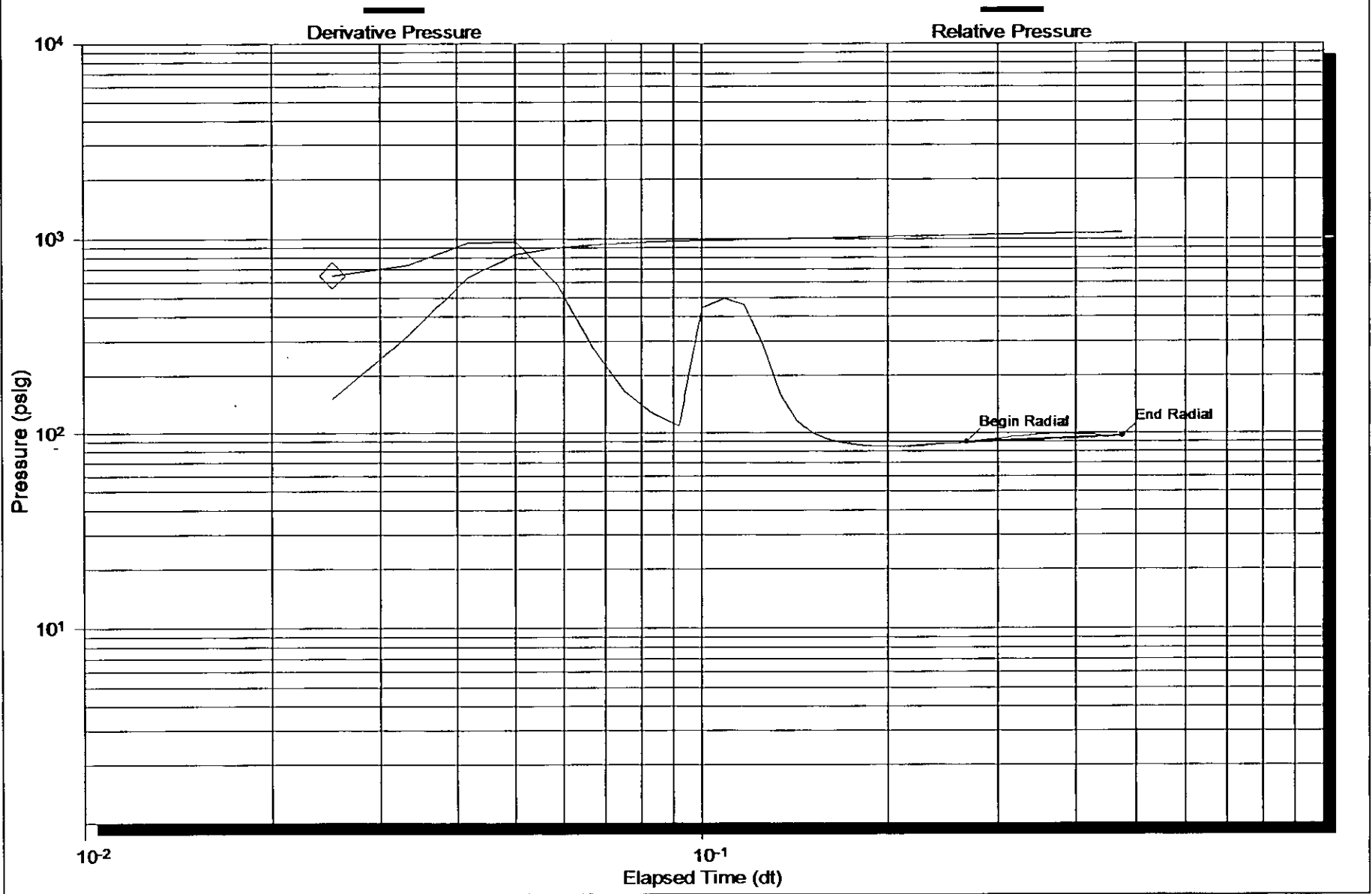
Serial Number: 6651 (Outside)

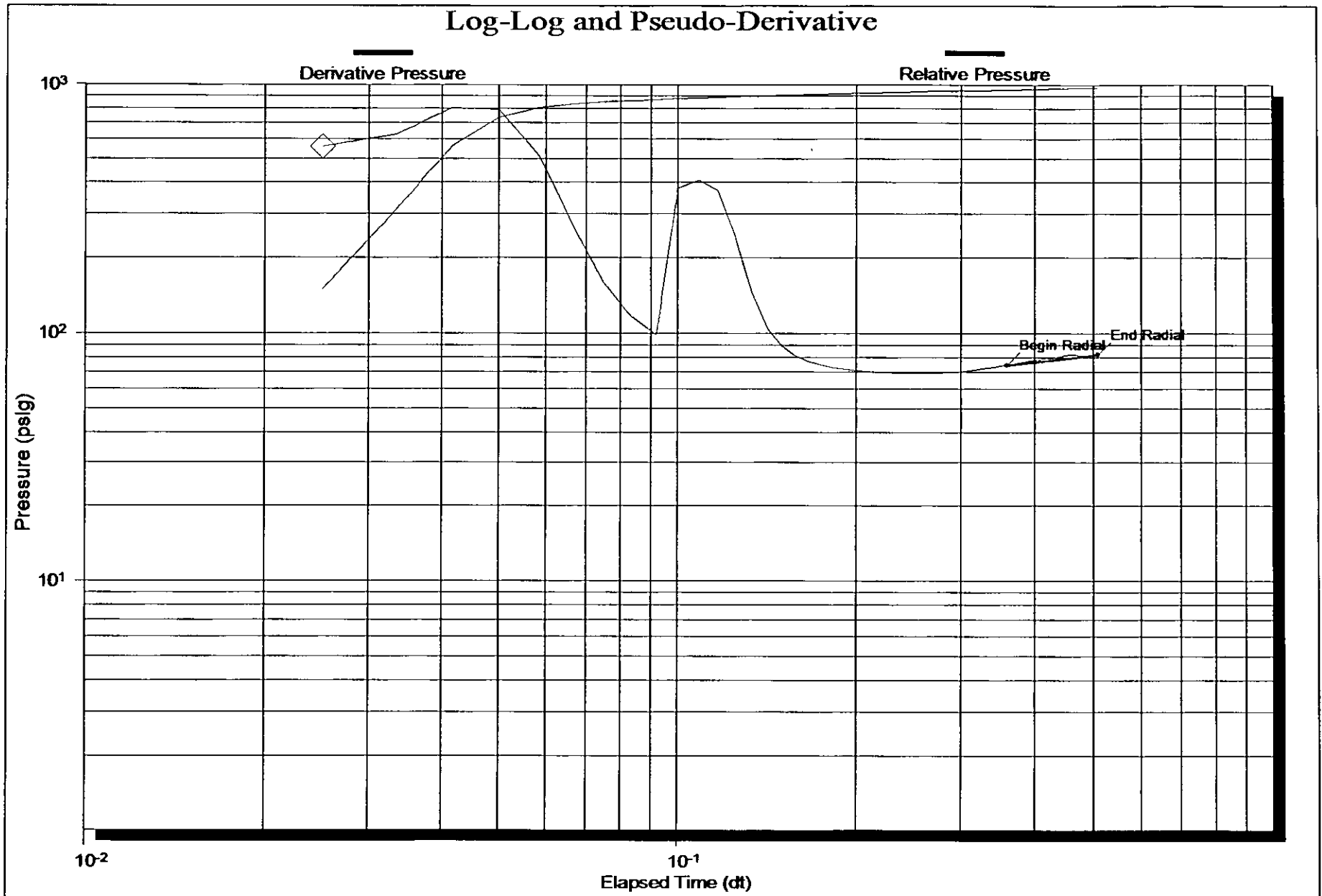
P* : 1195.52

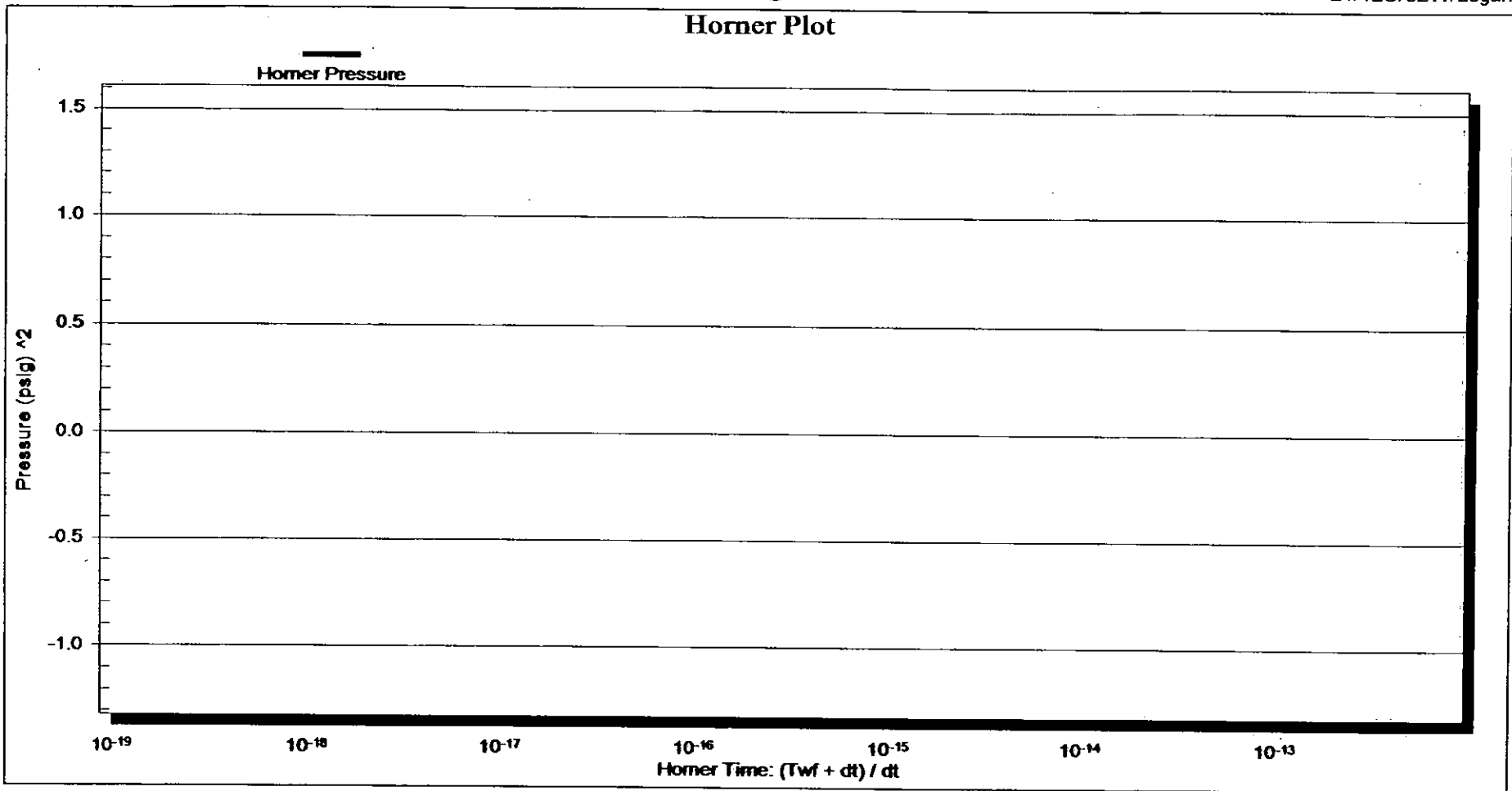
Slope (m) : 186.61 kpa/log cycle

Flow Cycle: 2

Log-Log and Pseudo-Derivative







Serial Number: 6651 (Outside)

Flow Cycle: -2147483648

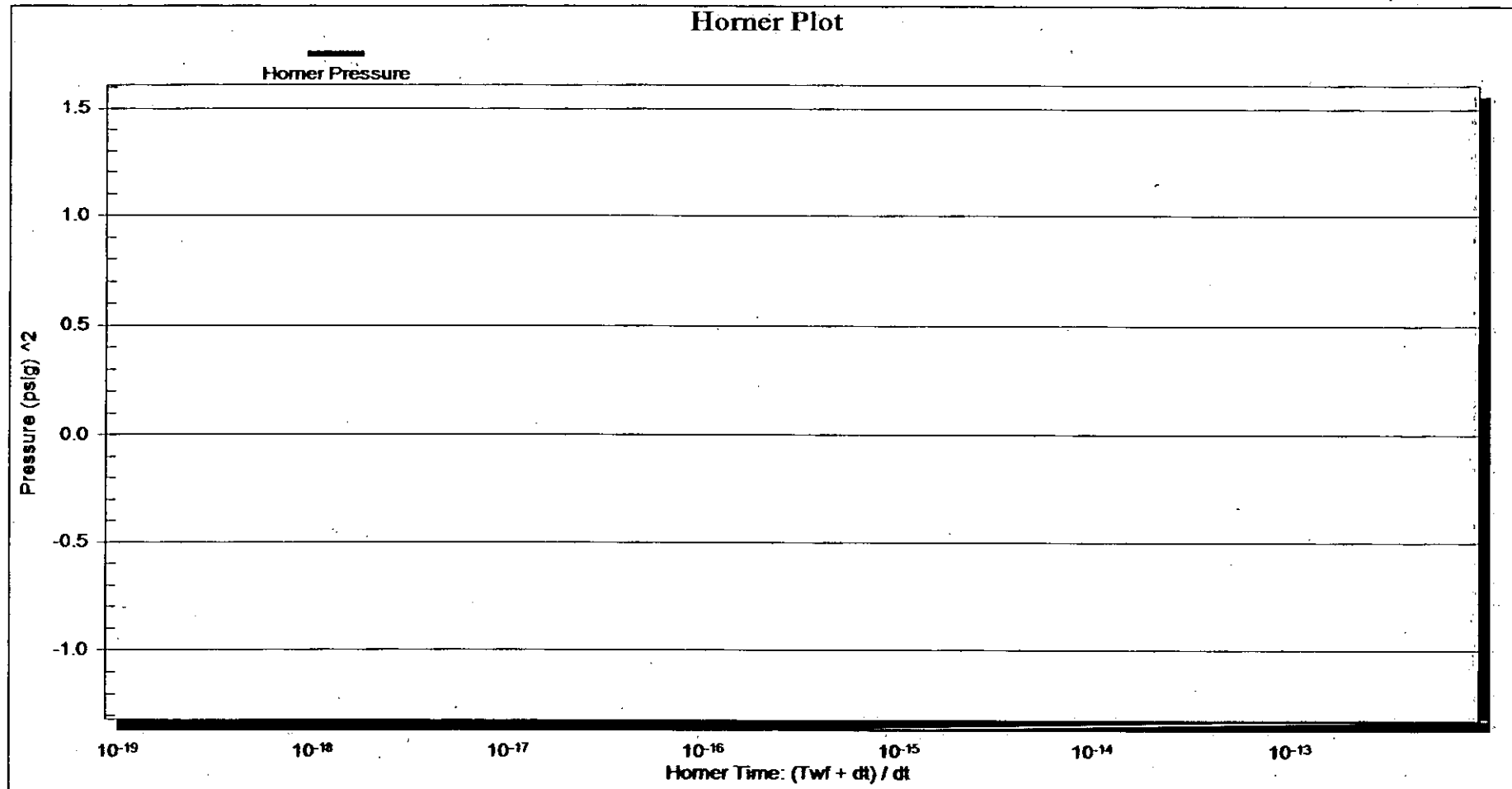
Analysis (Fluid)

Inputs

Average Fluid Viscosity: 1.2	Net Pay Thickness: 6.0	Initial Static Reservoir Pressure: 1195.52	Volume of Recovered Fluid: 5.26
Total System Compress: 1E-7	Formation Porosity: 0.18	Flowing Bottom Hole Pressure: 134.66	Total Flowing Time: 0.9917
Formation Volume Factor: 1.2	Water Saturation: 0.35	Wellbore Radius: 3.94	

Outputs

Horner Slope (m): 186.61	Effective Permeability: 764.96
Radius of Investigation: 199.36	Apparent Skin Factor: 36.88
Fluid Flow Rate: 90.32	kh: 1398.96



Serial Number: 6651 (Outside)

Flow Cycle: -2147483648

Analysis (Fluid)

Inputs

Average Fluid Viscosity: 1.2	Net Pay Thickness: 6.0	Initial Static Reservoir Pressure: 1240.49	Volume of Recovered Fluid: 5.26
Total System Compress: 1E-7	Formation Porosity: 0.18	Flowing Bottom Hole Pressure: 94.41	Total Flowing Time: 0.5083
Formation Volume Factor: 1.2	Water Saturation: 0.35	Wellbore Radius: 3.94	

Outputs

Horner Slope (m): 225.87	Effective Permeability: 632.01
Radius of Investigation: 129.74	Apparent Skin Factor: 32.46
Fluid Flow Rate: 90.32	kh: 1155.81