



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Cynosure Energy, LLC

25-15S-20W Ellis, KS

1125 17th St.
Suite 410
Denver, CO 80202
ATTN: Justin Carter

Leiker #1-25-15-20

Job Ticket: 34549

DST#: 1

Test Start: 2015.09.05 @ 06:06:42

GENERAL INFORMATION:

Formation: **LKC "B&C"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 10:46:12

Time Test Ended: 17:28:42

Test Type: Conventional Bottom Hole (Initial)

Tester: Brannan Lonsdale

Unit No: 62

Interval: **3408.00 ft (KB) To 3488.00 ft (KB) (TVD)**

Reference Elevations: 2108.00 ft (KB)

Total Depth: 3488.00 ft (KB) (TVD)

2096.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 12.00 ft

Serial #: 6839

Outside

Press@RunDepth: 375.92 psig @ 3421.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2015.09.05

End Date: 2015.09.05

Last Calib.: 2015.09.05

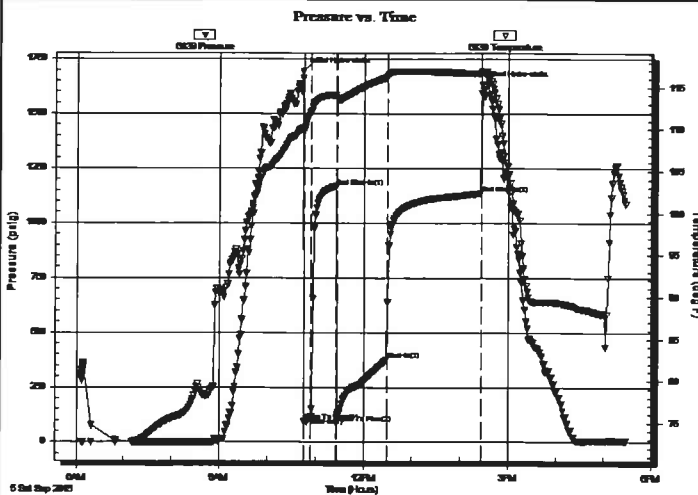
Start Time: 06:06:43

End Time: 17:28:42

Time On Btm: 2015.09.05 @ 10:44:12

Time Off Btm: 2015.09.05 @ 14:27:12

TEST COMMENT: 010- IF- BOB 2mins
030- IS- Sporadic surface blow
060- FF- BOB 2mins
120- FS- BOB 11mins



PRESSURE SUMMARY

Time (Mn.)	Pressure (psig)	Temp (deg F)	Annotation
0	1694.27	110.15	Initial Hydro-static
2	92.81	109.89	Open To Flow (1)
11	113.02	112.08	Shut-In(1)
41	1168.44	114.09	End Shut-In(1)
43	125.90	113.71	Open To Flow (2)
105	375.92	116.23	Shut-In(2)
222	1135.05	116.66	End Shut-In(2)
223	1631.15	116.87	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
927.00	GSWMCO, 15%G 5%W 65%O 15%M	13.14
0.00	2475' GIP	0.00
0.00	Sampler: 2000mL O @ 525PSI	0.00

Gas Rates

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



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1125 17th St.

Leiker #1-25-15-20

Suite 410

Job Ticket: 34549

DST#: 1

Denver, CO 80202

ATTN: Justin Carter

Test Start: 2015.09.05 @ 06:06:42

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

31 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 50.00 sec/qt

Cushion Volume:

bbl

Water Loss: 8.79 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 5500.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
927.00	GSWMCO, 15%G 5%W 65%O 15%M	13.141
0.00	2475' GIP	0.000
0.00	Sampler: 2000mL O @ 525PSI	0.000

Total Length: 927.00 ft

Total Volume: 13.141 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

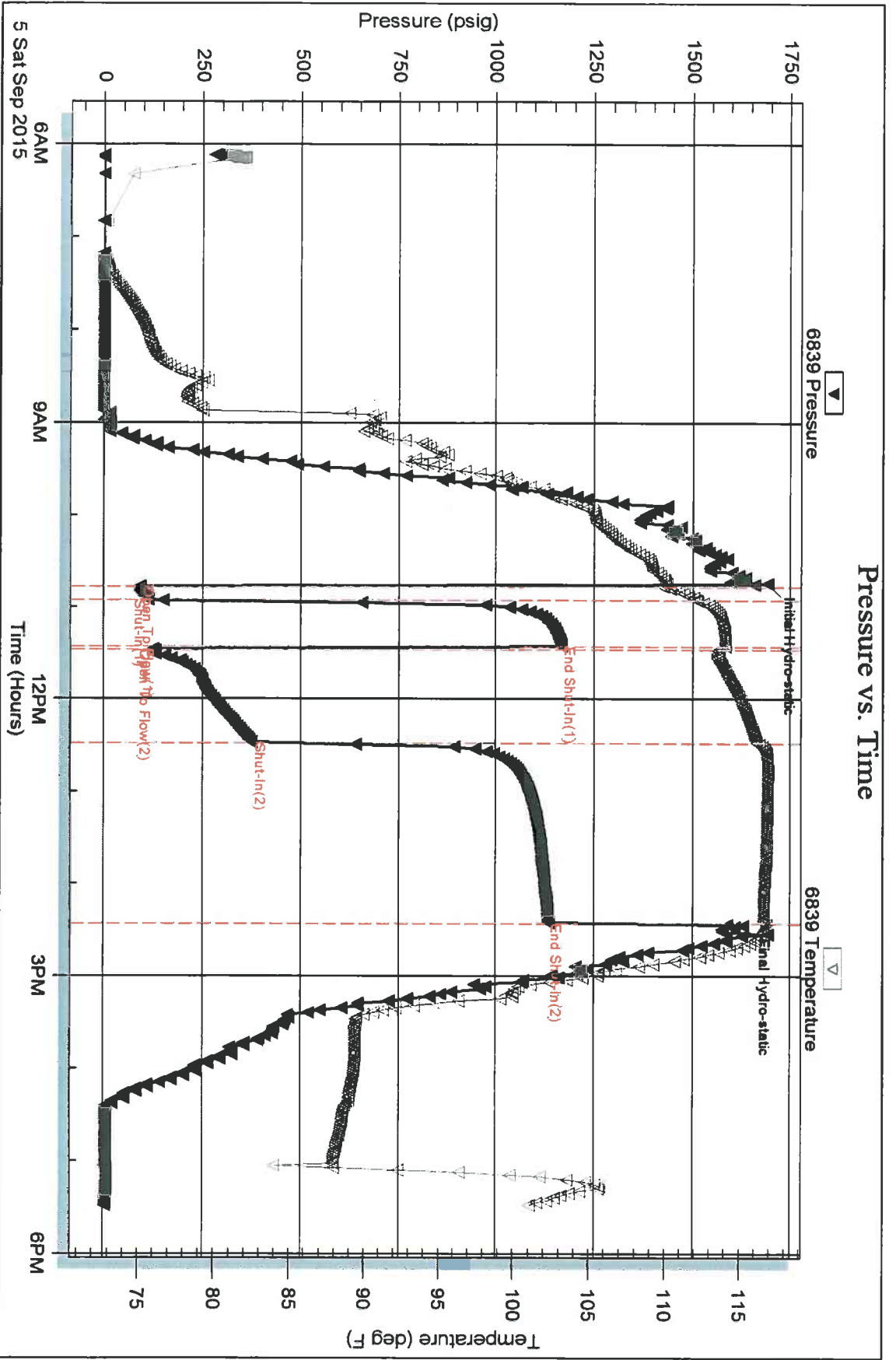
Recovery Comments:

Serial #: 6839

Outside Cynosure Energy, LLC

Leaker #1-25-15-20

DST Test Number: 1



Triobite Testing, Inc

Ref. No: 34549

Printed: 2015.09.05 @ 22:50:44



DRILL STEM TEST REPORT

Prepared For: **Cynosure Energy, LLC**

1125 17th St.
Suite 410
Denver, CO 80202

ATTN: Justin Carter

Leiker #1-25-15-20

25-15S-20W Ellis, KS

Start Date: 2015.09.06 @ 23:40:37

End Date: 2015.09.07 @ 06:45:07

Job Ticket #: 34550 DST #: 2

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

Printed: 2015.09.07 @ 07:14:15



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Cynosure Energy, LLC

25-15S-20W Ellis, KS

1125 17th St.
Suite 410
Denver, CO 80202
ATTN: Justin Carter

Leiker #1-25-15-20
Job Ticket: 34550 DST#: 2
Test Start: 2015.09.06 @ 23:40:37

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: 55.00 sec/qt	Cushion Volume: bbl		
Water Loss: 11.19 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 7800.00 ppm			
Filter Cake: inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
4.00	M	0.057
1.00	CO	0.014
0.00	Sampler: 2000mL Mw/Ospots @ 50PSI	0.000

Total Length: 5.00 ft Total Volume: 0.071 bbl
 Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
 Laboratory Name: Laboratory Location:
 Recovery Comments:

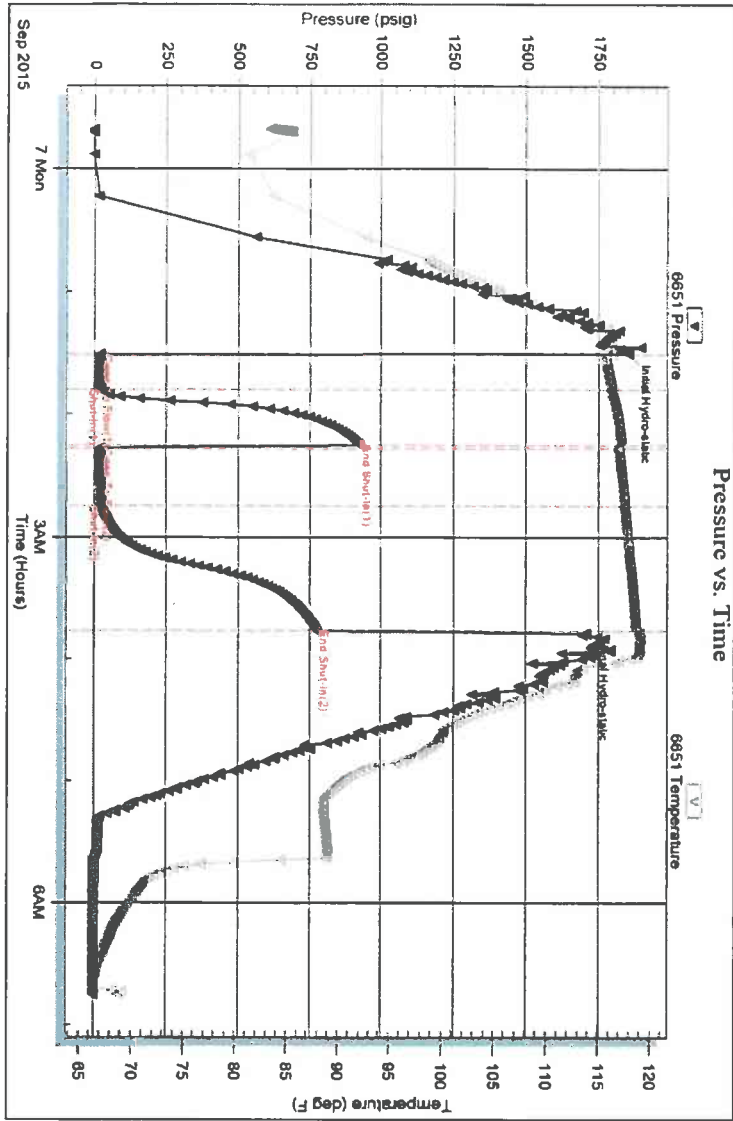
Serial # 6651

Inside

Cynsure Energy, LLC

Letter #1-25-15-20

DST Test Number: 2



Trochle Testing, Inc

Ref No: 34550

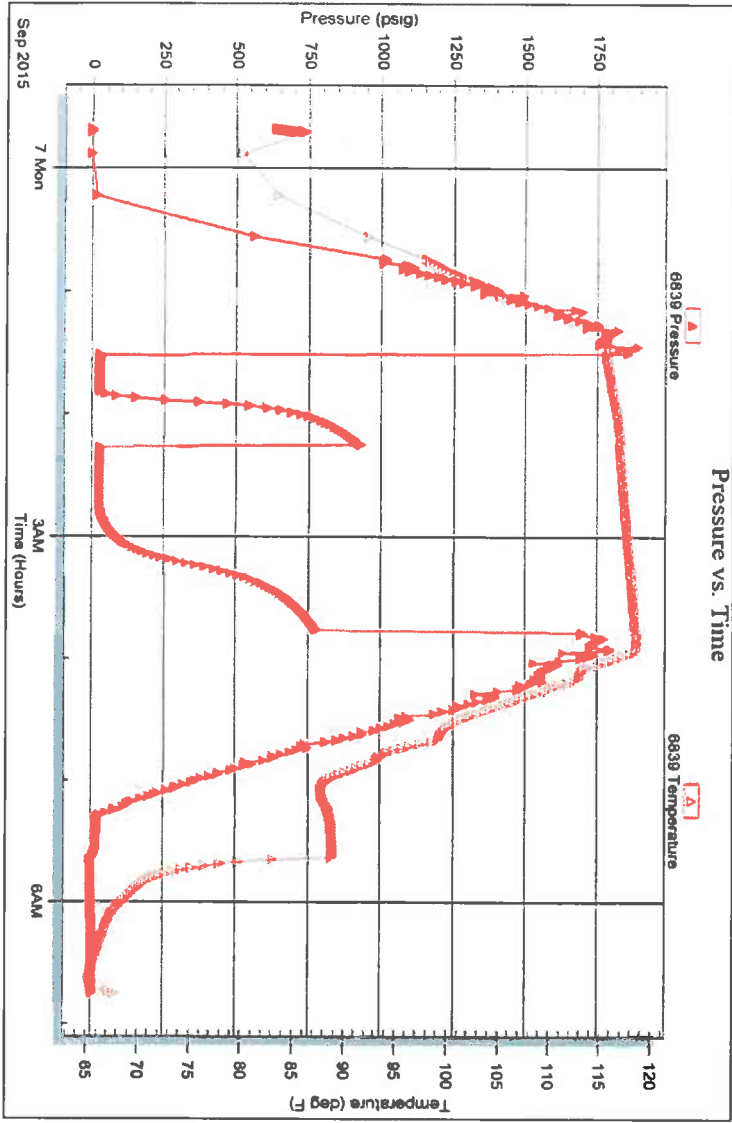
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Serial #: 6839

Outside Cynovue Energy, LLC

Letter #1-25-15-20

DST Test Number: 2



Trachsel Testing, Inc

Ref No: 34550

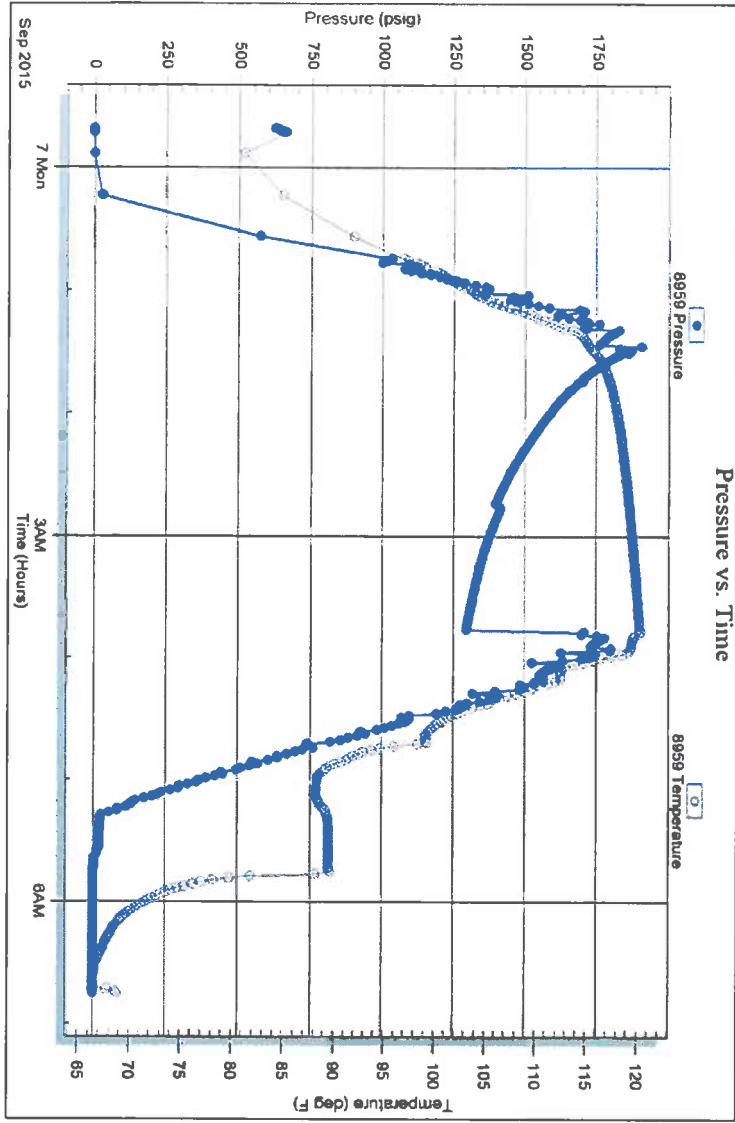
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Serial # 8959

Below (Stratigue) Energy, LLC

Letter #1-25-15-20

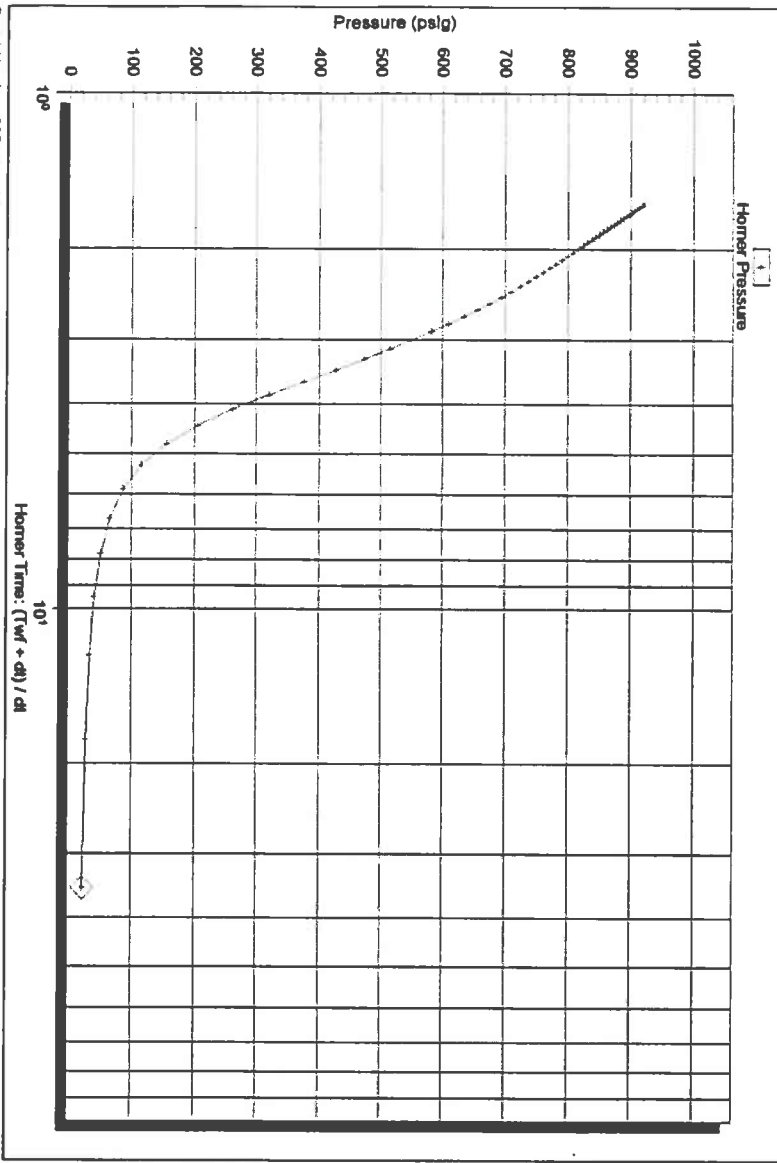
DST Test Number 2



Truckee Testing, Inc. Ref No. 34550

Printed: 2015.09.07 @ 07:14:16

Horner Plot



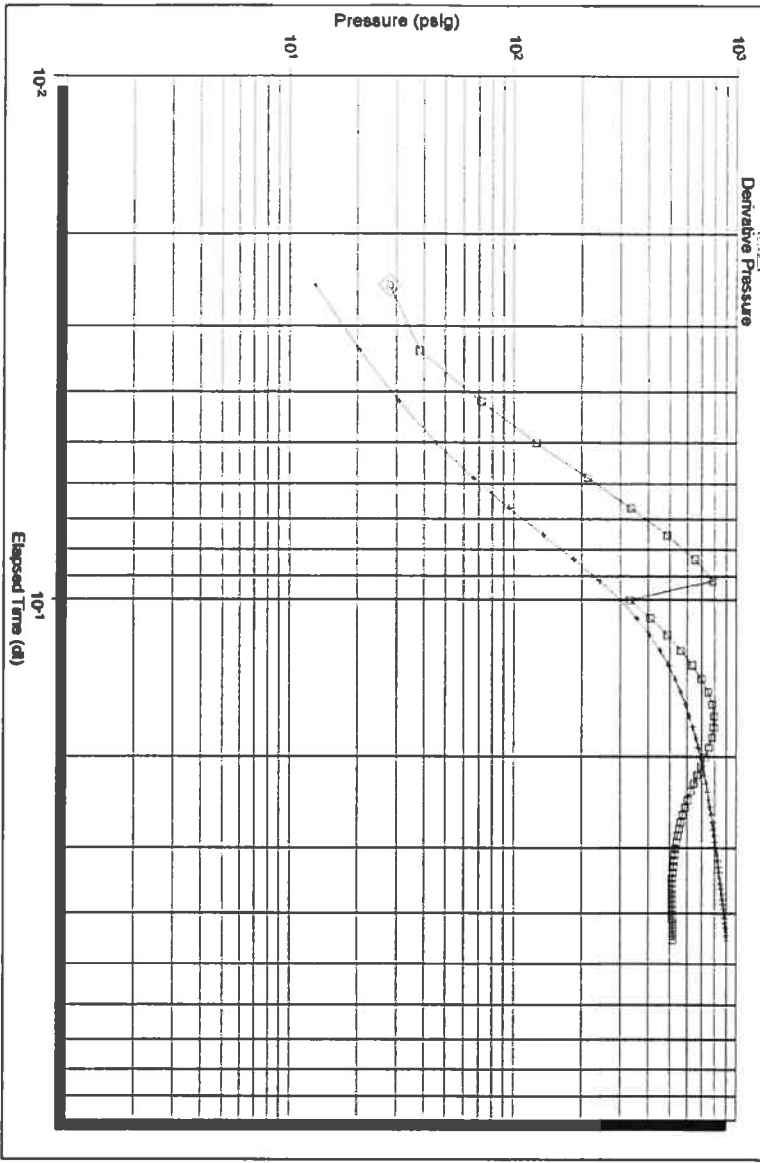
Serial Number: 6651 (Inside)

P = :

Slope (m) : kpa/log cycle

Flow Cycle: 1

Log-Log and Pseudo-Derivative



Serial Number 6651 (inside)

Flow Cycle: 1