



DRILL STEM TEST REPORT

Prepared For: **Tengasco, Inc.**

P.O.Box 458
Hays, KS 67601

ATTN: Ed Glassman

28-16s-16w Rush Ks.

Andre #1

Start Date: 2001.11.20 @ 05:14:59

End Date: 2001.11.20 @ 10:33:29

Job Ticket #: 15341 DST #: 1

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Tengasco, Inc.

P.O.Box 458
Hays, KS 67601

ATTN: Ed Glassman

Andre #1

28-16s-16w Rush Ks.

Job Ticket: 15341

DST#: 1

Test Start: 2001.11.20 @ 05:14:59

GENERAL INFORMATION:

Formation: **Toronto/Lans.**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 07:01:29

Time Test Ended: 10:33:29

Test Type: Conventional Bottom Hole

Tester: Gary Pevoteaux

Unit No: 13

Interval: **3186.00 ft (KB) To 3295.00 ft (KB) (TVD)**

Total Depth: 3295.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Poor

Reference Elevations: 1963.00 ft (KB)

1955.00 ft (CF)

KB to GR/CF: 8.00 ft

Serial #: 2342

Inside

Press@RunDepth: 60.50 psig @ 3187.00 ft (KB)

Start Date: 2001.11.20

End Date: 2001.11.20

Start Time: 05:15:00

End Time: 10:33:29

Capacity: 7000.00 psig

Last Calib.: 2001.02.02

Time On Btm: 2001.11.20 @ 07:01:14

Time Off Btm: 2001.11.20 @ 08:54:29

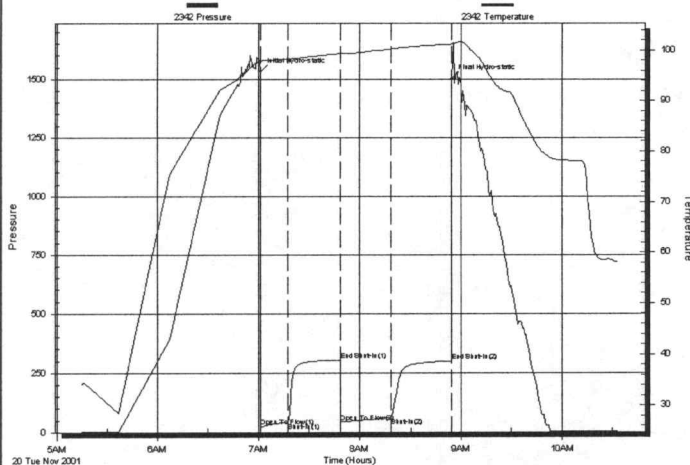
TEST COMMENT: IF:Weak blow . 1 - 2".

IS:No blow .

FF:Weak blow . 1 - 2".

FS:No blow .

Pressure vs. Time



PRESSURE SUMMARY

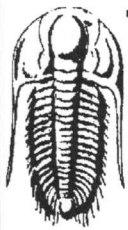
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1532.43	97.86	Initial Hydro-static
1	23.16	97.88	Open To Flow (1)
17	41.54	98.26	Shut-In(1)
47	304.22	99.31	End Shut-In(1)
48	42.21	99.31	Open To Flow (2)
77	60.50	100.23	Shut-In(2)
113	299.27	101.16	End Shut-In(2)
114	1501.21	101.18	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
65.00	Drlg.mud	0.64

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

TOOL DIAGRAM

Tengasco, Inc.

Andre #1

P.O.Box 458
Hays, KS 67601

28-16s-16w Rush Ks.

Job Ticket: 15341

DST#: 1

ATTN: Ed Glassman

Test Start: 2001.11.20 @ 05:14:59

Tool Information

Drill Pipe:	Length: 3140.00 ft	Diameter: 3.80 inches	Volume: 44.05 bbl	Tool Weight: 2100.00 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: 30.00 ft	Diameter: 2.25 inches	Volume: 0.15 bbl	Weight to Pull Loose: 60000.00 lb
		Total Volume: 44.20 bbl		Tool Chased 0.00 ft
Drill Pipe Above KB:	4.00 ft			String Weight: Initial 45000.00 lb
Depth to Top Packer:	3186.00 ft			Final 45000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	109.00 ft			
Tool Length:	129.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		
Tool Comments:				

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
C.O. Sub	1.00			3167.00	
S.I. Tool	5.00			3172.00	
HMV	5.00			3177.00	
Packer	4.00			3181.00	20.00 Bottom Of Top Packer
Packer	5.00			3186.00	
Stubb	1.00			3187.00	
Recorder	0.00	2342	Inside	3187.00	
Perforations	7.00			3194.00	
C.O. Sub	1.00			3195.00	
Blank Spacing	94.00			3289.00	
C.O. Sub	1.00			3290.00	
Recorder	0.00	10248	Outside	3290.00	
Bullnose	5.00			3295.00	109.00 Bottom Packers & Anchor

Total Tool Length: 129.00

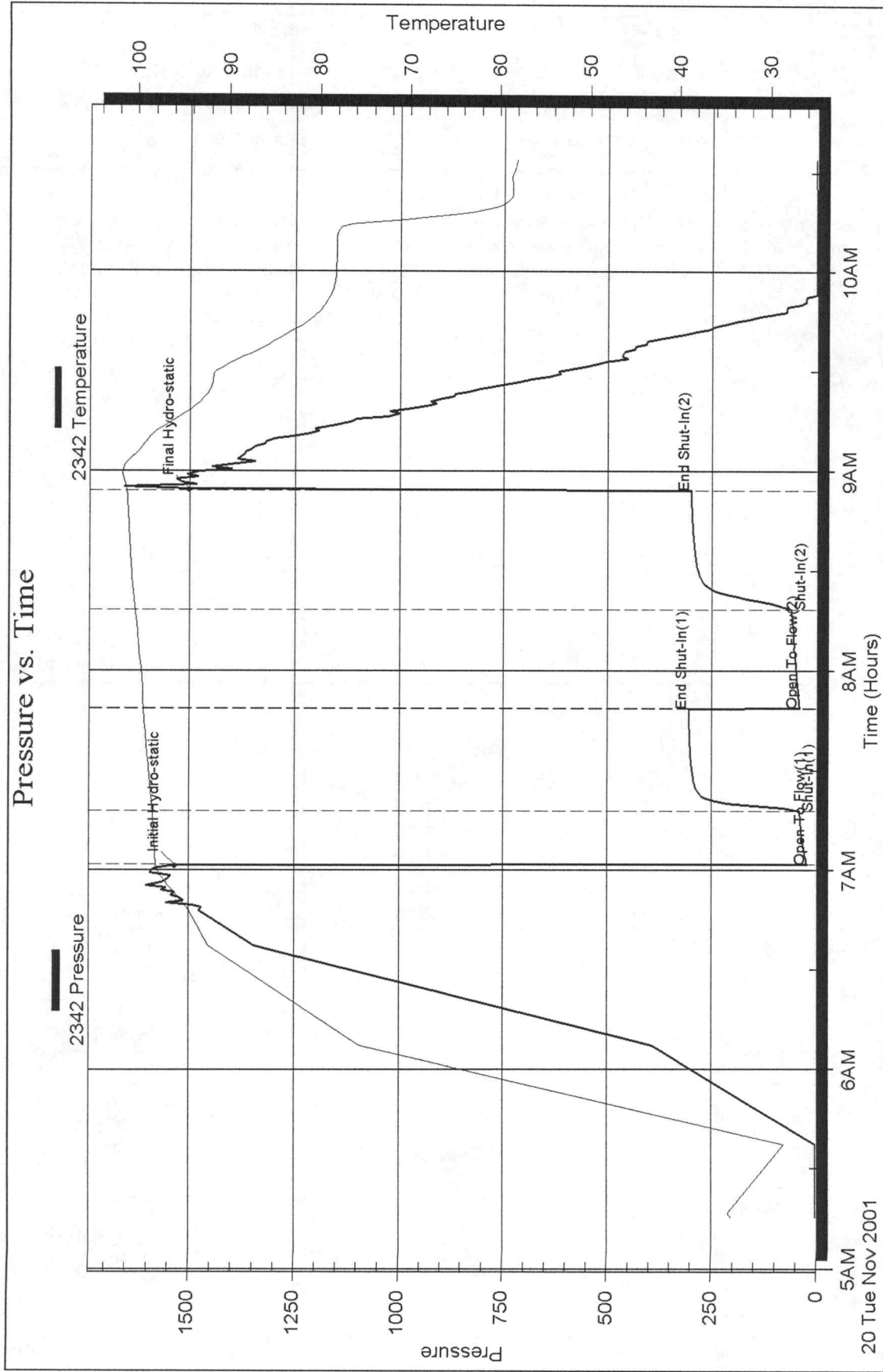
Serial #: 2342

Inside

Tengasco, Inc.

28-16s-16w Rush Ks.

DST Test Number: 1



Trilobite Testing, Inc

Ref. No: 15341

Printed: 2001.11.26 @ 16:32:50 Page 4



DRILL STEM TEST REPORT

Prepared For: **Tengasco, Inc.**

P.O.Box 458
Hays, KS 67601

ATTN: Ed Glassman

28-16s-16w Rush Ks.

Andre #1

Start Date: 2001.11.20 @ 19:19:11

End Date: 2001.11.21 @ 00:38:56

Job Ticket #: 15342 DST #: 2

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Tengasco, Inc.

P.O.Box 458
Hays, KS 67601

ATTN: Ed Glassman

Andre #1

28-16s-16w Rush Ks.

Job Ticket: 15342

DST#: 2

Test Start: 2001.11.20 @ 19:19:11

GENERAL INFORMATION:

Formation: **Lans.**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 21:12:56

Time Test Ended: 00:38:56

Test Type: Conventional Bottom Hole

Tester: Gary Pevoteaux

Unit No: 13

Interval: **3298.00 ft (KB) To 3360.00 ft (KB) (TVD)**

Total Depth: 3360.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Poor

Reference Elevations: 1963.00 ft (KB)

1955.00 ft (CF)

KB to GR/CF: 8.00 ft

Serial #: 2342

Inside

Press@RunDepth: 41.45 psig @ 3299.00 ft (KB)

Start Date: 2001.11.20

End Date:

2001.11.21

Capacity: 7000.00 psig

Last Calib.: 2001.01.04

Start Time: 19:19:12

End Time:

00:38:56

Time On Btm: 2001.11.20 @ 21:12:41

Time Off Btm: 2001.11.20 @ 22:45:56

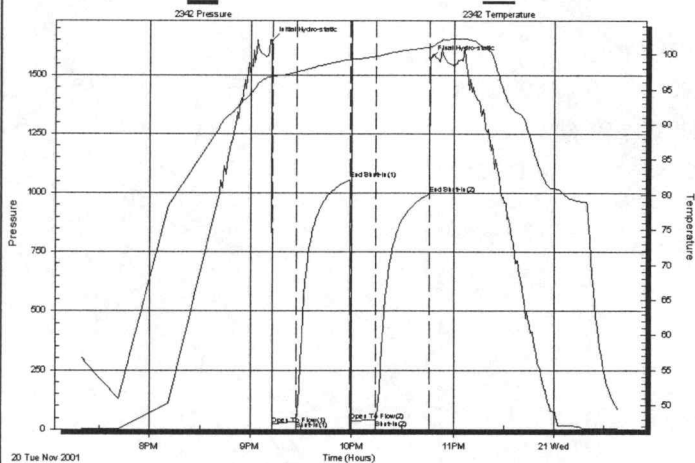
TEST COMMENT: IF:Weak blow . 1/2 - 1".

IS:No blow .

FF:Weak blow . 1/4".

FS:No blow .

Pressure vs. Time



PRESSURE SUMMARY

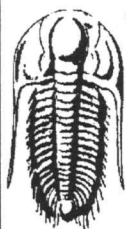
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1645.48	96.91	Initial Hydro-static
1	20.81	96.91	Open To Flow (1)
15	34.91	97.48	Shut-In(1)
47	1056.06	99.33	End Shut-In(1)
47	34.82	99.33	Open To Flow (2)
62	41.45	99.75	Shut-In(2)
93	996.05	101.03	End Shut-In(2)
94	1570.03	101.06	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
40.00	Drilg.mud	0.29

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

TOOL DIAGRAM

Tengasco, Inc.

Andre #1

P.O.Box 458
Hays, KS 67601

28-16s-16w Rush Ks.

Job Ticket: 15342

DST#: 2

ATTN: Ed Glassman

Test Start: 2001.11.20 @ 19:19:11

Tool Information

Drill Pipe:	Length: 3264.00 ft	Diameter: 3.80 inches	Volume: 45.79 bbl	Tool Weight: 2100.00 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: 30.00 ft	Diameter: 2.25 inches	Volume: 0.15 bbl	Weight to Pull Loose: 62000.00 lb
			Total Volume: 45.94 bbl	Tool Chased 0.00 ft
Drill Pipe Above KB:	16.00 ft			String Weight: Initial 47000.00 lb
Depth to Top Packer:	3298.00 ft			Final 47000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	62.00 ft			
Tool Length:	82.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		
Tool Comments:				

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
C.O. Sub	1.00			3279.00	
S.I. Tool	5.00			3284.00	
HMV	5.00			3289.00	
Packer	4.00			3293.00	20.00 Bottom Of Top Packer
Packer	5.00			3298.00	
Stubb	1.00			3299.00	
Recorder	0.00	2342	Inside	3299.00	
Perforations	5.00			3304.00	
C.O. Sub	1.00			3305.00	
Blank Spacing	31.00			3336.00	
C.O. Sub	1.00			3337.00	
Perforations	18.00			3355.00	
Recorder	0.00	10248	Outside	3355.00	
Bullnose	5.00			3360.00	62.00 Bottom Packers & Anchor

Total Tool Length: 82.00



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TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Tengasco, Inc.

Andre #1

P.O.Box 458
Hays, KS 67601

28-16s-16w Rush Ks.

Job Ticket: 15342

DST#: 2

ATTN: Ed Glassman

Test Start: 2001.11.20 @ 19:19:11

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

6000 ppm

Viscosity: 45.00 sec/qt

Cushion Volume:

bbl

Water Loss: 11.95 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 6000.00 ppm

Filter Cake: 0.20 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
40.00	Drlg.mud	0.288

Total Length: 40.00 ft

Total Volume: 0.288 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

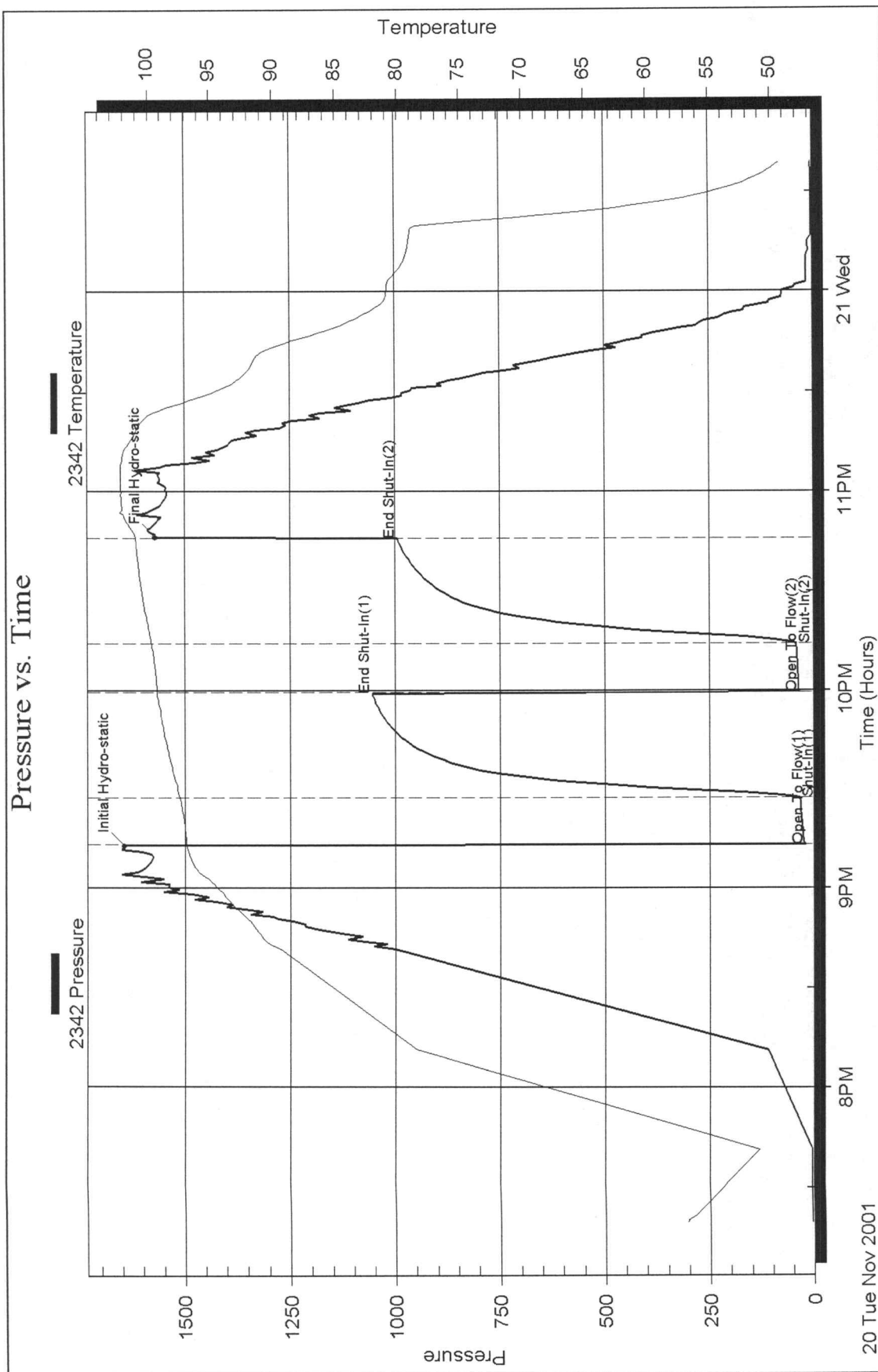
Serial #: none

Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time





DRILL STEM TEST REPORT

Prepared For: **Tengasco, Inc.**

P.O.Box 458
Hays, KS 67601

ATTN: Ed Glassman

28-16s-16w Rush Ks.

Andre #1

Start Date: 2001.11.21 @ 12:58:52

End Date: 2001.11.21 @ 18:27:37

Job Ticket #: 15343 DST #: 3

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



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Tengasco, Inc.

P.O.Box 458
Hays, KS 67601

ATTN: Ed Glassman

Andre #1

28-16s-16w Rush Ks.

Job Ticket: 15343

DST#: 3

Test Start: 2001.11.21 @ 12:58:52

GENERAL INFORMATION:

Formation: **Lans.**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 14:30:37

Time Test Ended: 18:27:37

Interval: **3362.00 ft (KB) To 3480.00 ft (KB) (TVD)**

Total Depth: 3480.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Poor

Test Type: Conventional Bottom Hole

Tester: Gary Pevoteaux

Unit No: 13

Reference Elevations: 1963.00 ft (KB)

1955.00 ft (CF)

KB to GR/CF: 8.00 ft

Serial #: 2342

Inside

Press@RunDepth: 57.99 psig @ 3363.00 ft (KB)

Start Date: 2001.11.21

End Date:

2001.11.21

Start Time: 12:58:53

End Time:

18:27:37

Capacity: 7000.00 psig

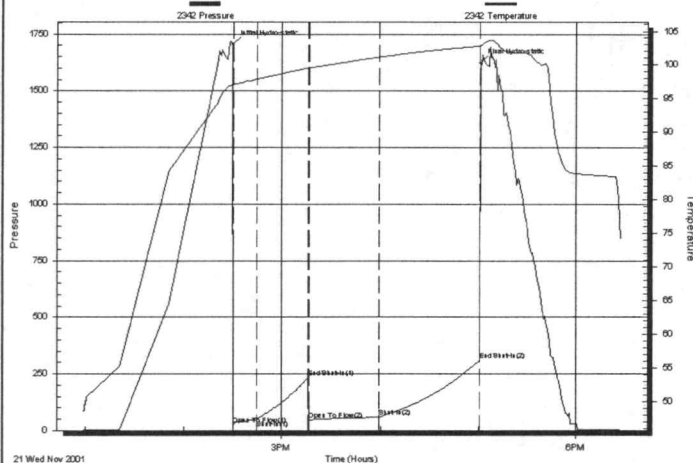
Last Calib.: 2001.01.04

Time On Btm: 2001.11.21 @ 14:30:07

Time Off Btm: 2001.11.21 @ 17:01:07

TEST COMMENT: IF:Weak blow . Slow increase to 5 1/2".
IS:No blow .
FF:Fair to strong blow . B.O.B. in 12 mins.
FS:No blow .

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1704.57	97.14	Initial Hydro-static
1	25.84	97.19	Open To Flow (1)
15	47.58	97.90	Shut-In(1)
47	234.57	99.56	End Shut-In(1)
47	45.31	99.59	Open To Flow (2)
90	57.99	101.13	Shut-In(2)
151	309.18	102.83	End Shut-In(2)
151	1623.83	102.85	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
60.00	GOCM 18%g 12%o 70%m	0.57
30.00	GCM 20%g 80%m	0.42
0.00	160 ft. of gas in pipe.	0.00

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

TOOL DIAGRAM

Tengasco, Inc.

Andre #1

P.O.Box 458
Hays, KS 67601

28-16s-16w Rush Ks.

Job Ticket: 15343

DST#: 3

ATTN: Ed Glassman

Test Start: 2001.11.21 @ 12:58:52

Tool Information

Drill Pipe:	Length:	3358.00 ft	Diameter:	3.80 inches	Volume:	47.10 bbl	Tool Weight:	2100.00 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:	30.00 ft	Diameter:	2.25 inches	Volume:	0.15 bbl	Weight to Pull Loose:	62000.00 lb
					Total Volume:	47.25 bbl	Tool Chased	0.00 ft
Drill Pipe Above KB:		46.00 ft					String Weight: Initial	48000.00 lb
Depth to Top Packer:		3362.00 ft					Final	47000.00 lb
Depth to Bottom Packer:		ft						
Interval between Packers:		118.00 ft						
Tool Length:		138.00 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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C.O. Sub	1.00			3343.00	
S.I. Tool	5.00			3348.00	
HMV	5.00			3353.00	
Packer	4.00			3357.00	20.00 Bottom Of Top Packer
Packer	5.00			3362.00	
Stubb	1.00			3363.00	
Recorder	0.00	2342	Inside	3363.00	
Perforations	5.00			3368.00	
C.O. Sub	1.00			3369.00	
Blank Spacing	93.00			3462.00	
C.O. Sub	1.00			3463.00	
Perforations	12.00			3475.00	
Recorder	0.00	10248	Outside	3475.00	
Bullnose	5.00			3480.00	118.00 Bottom Packers & Anchor

Total Tool Length: 138.00



**TRILOBITE
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DRILL STEM TEST REPORT

FLUID SUMMARY

Tengasco, Inc.

Andre #1

P.O.Box 458
Hays, KS 67601

28-16s-16w Rush Ks.

Job Ticket: 15343

DST#: 3

ATTN: Ed Glassman

Test Start: 2001.11.21 @ 12:58:52

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:

9000 ppm

Viscosity: 42.00 sec/qt

Cushion Volume:

bbl

Water Loss: 11.95 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 9000.00 ppm

Filter Cake: 0.20 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
60.00	GOCM 18%g 12%o 70%m	0.568
30.00	GCM 20%g 80%m	0.421
0.00	160 ft. of gas in pipe.	0.000

Total Length: 90.00 ft

Total Volume: 0.989 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

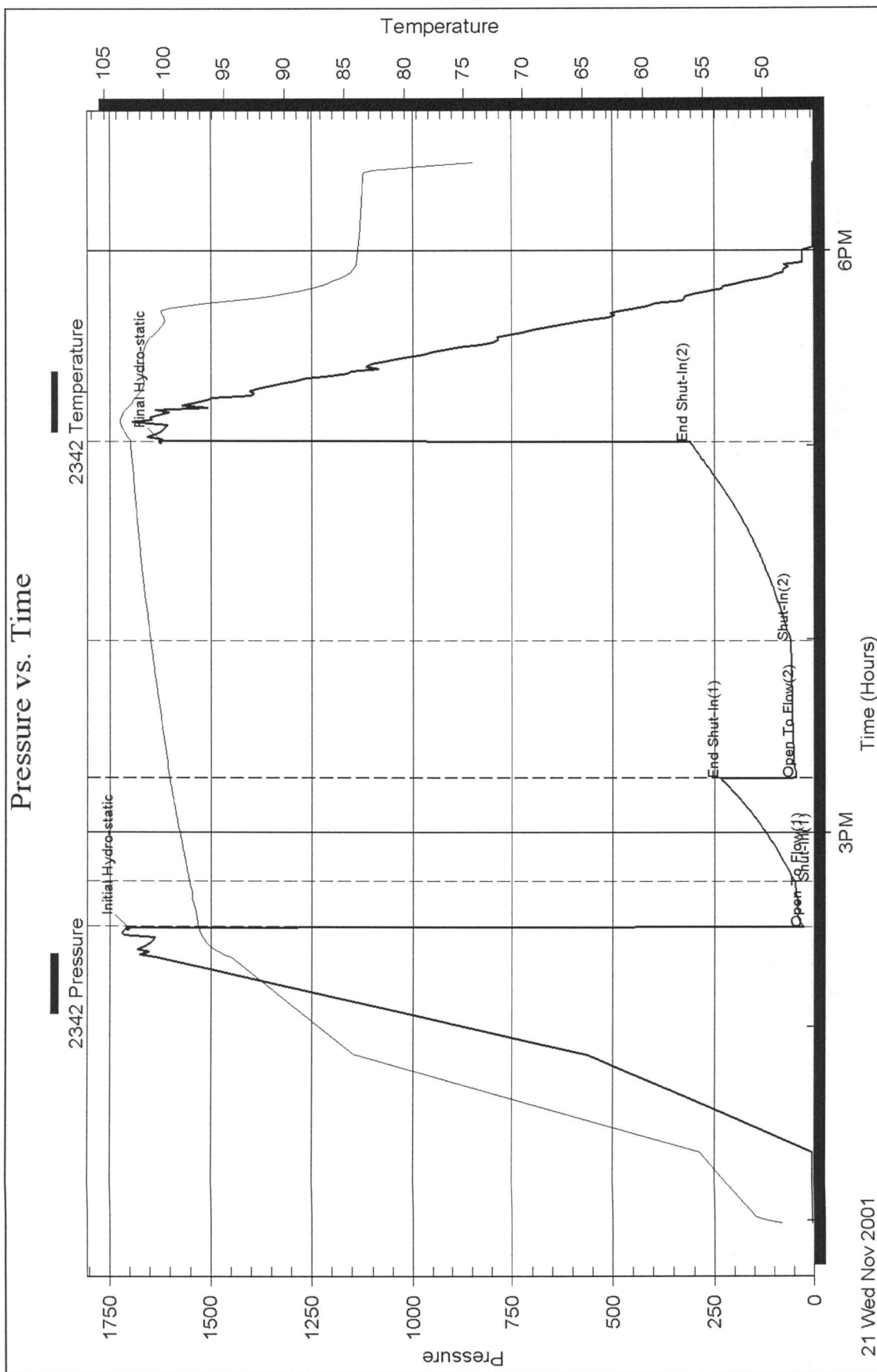
Serial #: NONE

Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time





DRILL STEM TEST REPORT

Prepared For: **Tengasco, Inc.**

P.O.Box 458
Hays, KS 67601

ATTN: Ed Glassman

28-16s-16w Rush Ks.

Andre #1

Start Date: 2001.11.22 @ 05:45:50

End Date: 2001.11.22 @ 10:47:20

Job Ticket #: 15344 DST #: 4

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Tengasco, Inc.

P.O.Box 458
Hays, KS 67601

ATTN: Ed Glassman

Andre #1

28-16s-16w Rush Ks.

Job Ticket: 15344

DST#: 4

Test Start: 2001.11.22 @ 05:45:50

GENERAL INFORMATION:

Formation: **Cherokee/Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 07:23:05

Time Test Ended: 10:47:20

Test Type: Conventional Bottom Hole

Tester: Gary Pevoteaux

Unit No: 13

Interval: **3510.00 ft (KB) To 3555.00 ft (KB) (TVD)**

Total Depth: 3555.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Poor

Reference Elevations: 1963.00 ft (KB)

1955.00 ft (CF)

KB to GR/CF: 8.00 ft

Serial #: 2342 Inside

Press@RunDepth: 289.96 psig @ 3511.00 ft (KB)

Start Date: 2001.11.22 End Date: 2001.11.22

Start Time: 05:45:51 End Time: 10:47:20

Capacity: 7000.00 psig

Last Calib.: 2001.01.04

Time On Btm: 2001.11.22 @ 07:22:35

Time Off Btm: 2001.11.22 @ 08:54:20

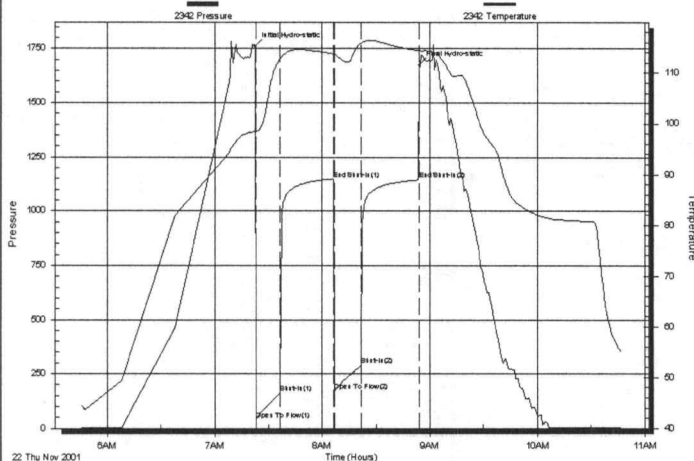
TEST COMMENT: IF: Strong blow . B.O.B. in 4 1/2 mins.

IS: Weak blow . 1/4".

FF: Strong blow . B.O.B. in 5 mins.

FS: No blow .

Pressure vs. Time



PRESSURE SUMMARY

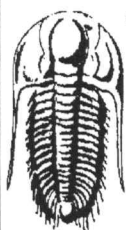
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1761.64	98.40	Initial Hydro-static
1	39.69	98.40	Open To Flow (1)
14	163.65	112.69	Shut-In(1)
44	1149.30	113.72	End Shut-In(1)
44	169.61	113.69	Open To Flow (2)
60	289.96	115.86	Shut-In(2)
92	1146.03	114.36	End Shut-In(2)
92	1675.53	114.43	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
180.00	MW 7% m 93% w Rw .23 ohms @ 50 deg 2.25	
400.00	MW 38% m 62% w	5.61

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

TOOL DIAGRAM

Tengasco, Inc.

Andre #1

P.O.Box 458
Hays, KS 67601

28-16s-16w Rush Ks.

Job Ticket: 15344

DST#: 4

ATTN: Ed Glassman

Test Start: 2001.11.22 @ 05:45:50

Tool Information

Drill Pipe:	Length:	3482.00 ft	Diameter:	3.80 inches	Volume:	48.84 bbl	Tool Weight:	2100.00 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:	30.00 ft	Diameter:	2.25 inches	Volume:	0.15 bbl	Weight to Pull Loose:	60000.00 lb
					Total Volume:	48.99 bbl	Tool Chased	0.00 ft
Drill Pipe Above KB:		22.00 ft					String Weight: Initial	48000.00 lb
Depth to Top Packer:		3510.00 ft					Final	50500.00 lb
Depth to Bottom Packer:		ft						
Interval between Packers:		45.00 ft						
Tool Length:		65.00 ft						
Number of Packers:		2	Diameter:	6.75 inches				
Tool Comments:								

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
C.O. Sub	1.00			3491.00	
S.I. Tool	5.00			3496.00	
HMV	5.00			3501.00	
Packer	4.00			3505.00	20.00 Bottom Of Top Packer
Packer	5.00			3510.00	
Stubb	1.00			3511.00	
Recorder	0.00	2342	Inside	3511.00	
Perforations	7.00			3518.00	
C.O. Sub	1.00			3519.00	
Blank Spacing	30.00			3549.00	
C.O. Sub	1.00			3550.00	
Recorder	0.00	10248	Outside	3550.00	
Bullnose	5.00			3555.00	45.00 Bottom Packers & Anchor

Total Tool Length: 65.00



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DRILL STEM TEST REPORT

FLUID SUMMARY

Tengasco, Inc.

Andre #1

P.O.Box 458
Hays, KS 67601

28-16s-16w Rush Ks.

Job Ticket: 15344

DST#: 4

ATTN: Ed Glassman

Test Start: 2001.11.22 @ 05:45:50

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:

43000 ppm

Viscosity: 53.00 sec/qt

Cushion Volume:

bbl

Water Loss: 11.95 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 9000.00 ppm

Filter Cake: 0.20 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
180.00	MW 7% _m 93% _w Rw .23 ohms @ 50 deg.F	2.252
400.00	MW 38% _m 62% _w	5.611

Total Length: 580.00 ft

Total Volume: 7.863 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #: none

Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time

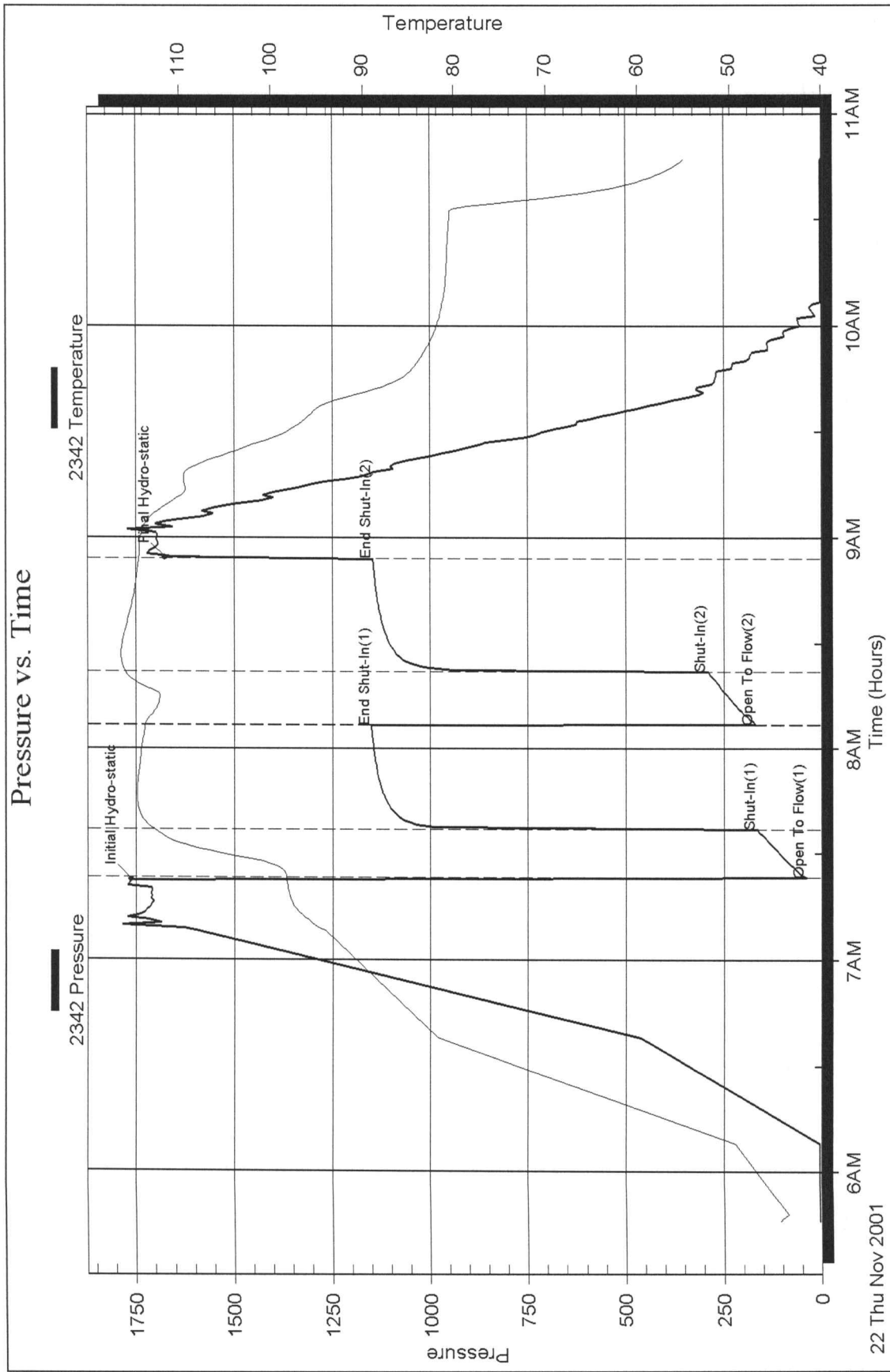


CHART PAGE

This is a photocopy of the actual AK-1 recorder chart

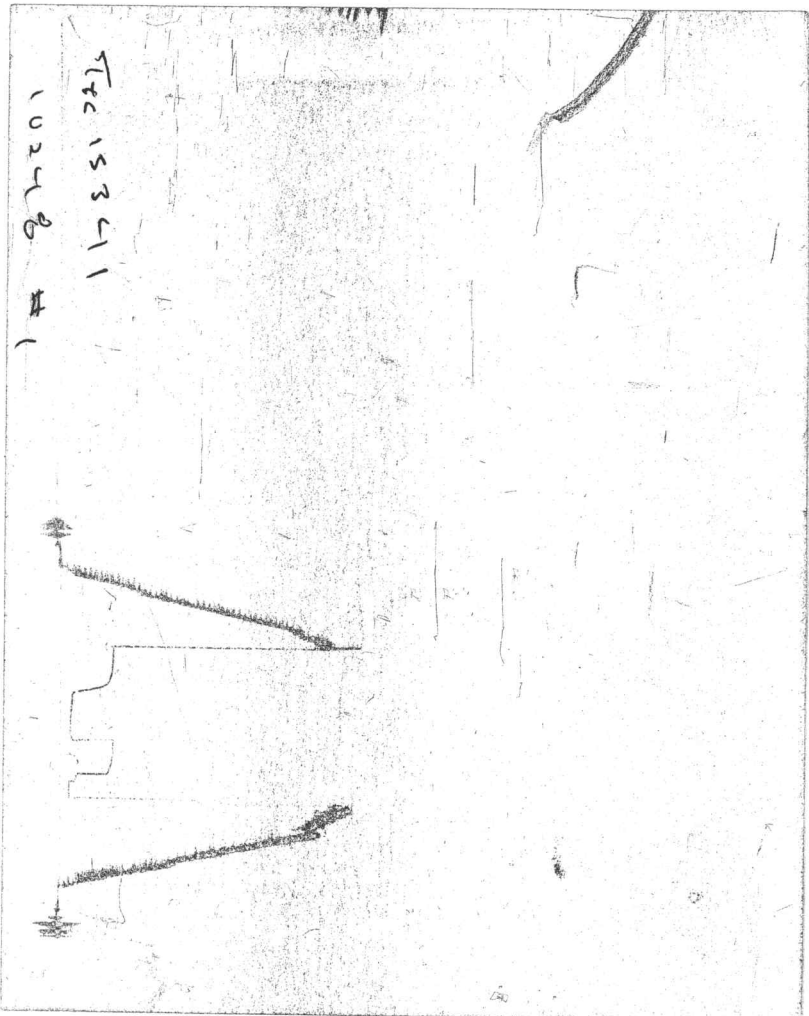


CHART PAGE

This is a photocopy of the actual AK-1 recorder chart

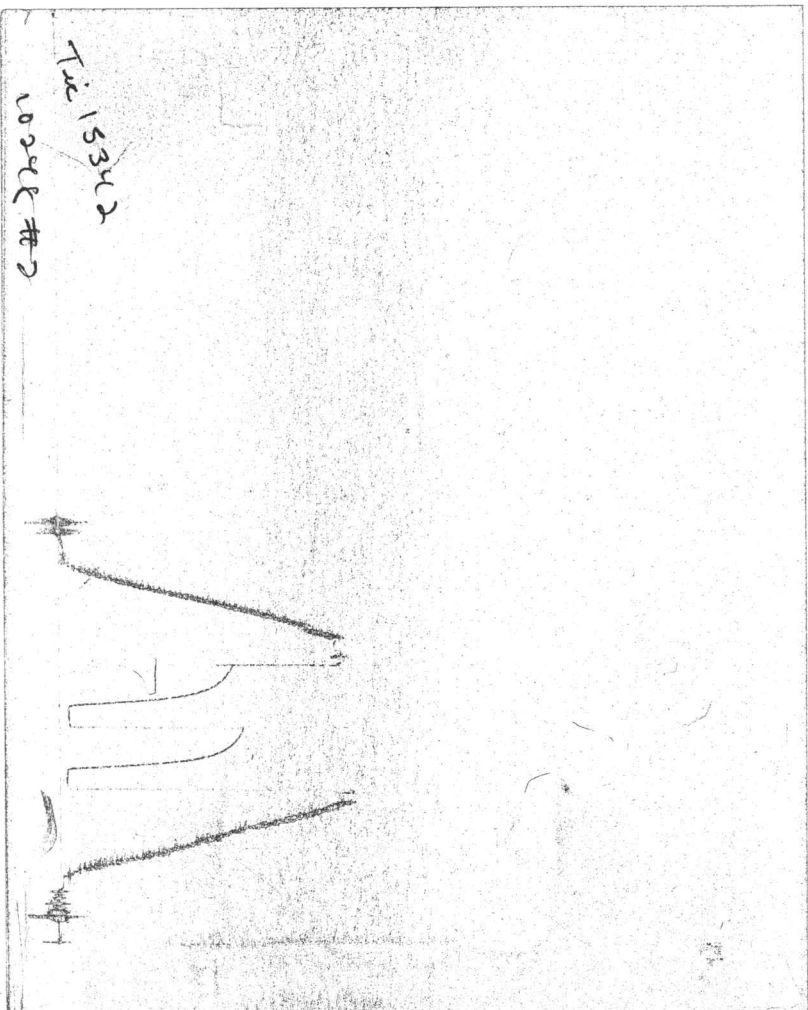


CHART PAGE

This is a photocopy of the actual AK-1 recorder chart

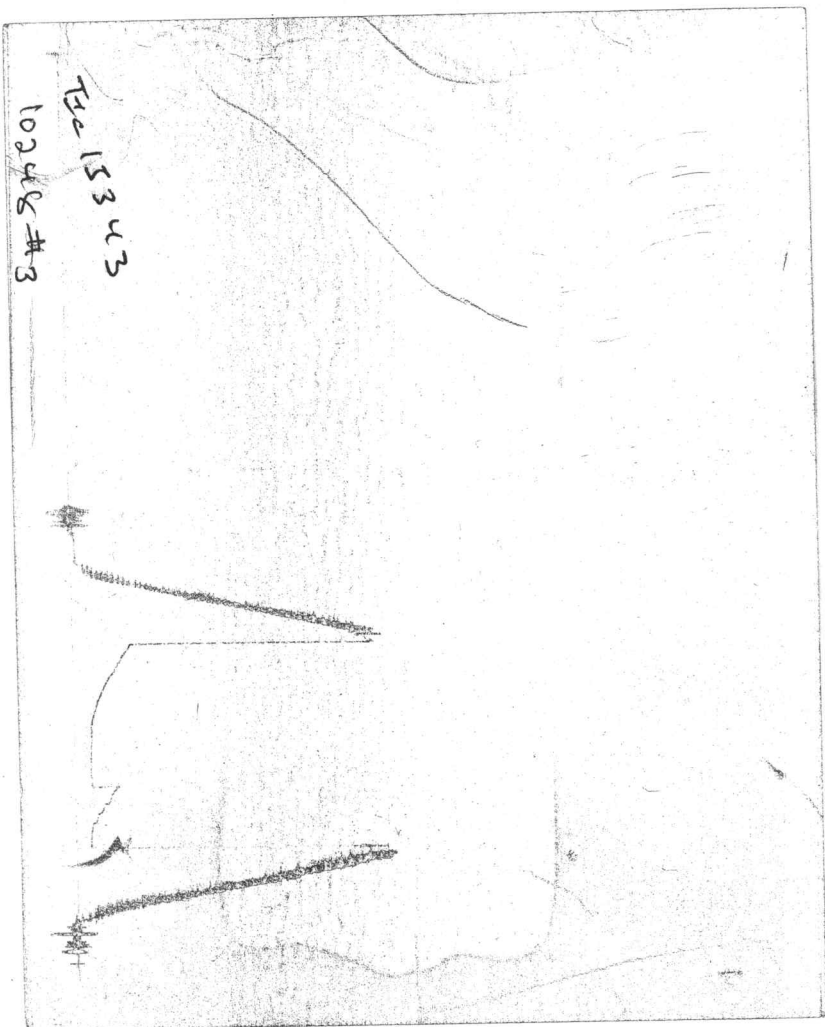


CHART PAGE
This is a photocopy of the actual AK-1 recorder chart

