



DRILL STEM TEST REPORT

Prepared For: **Hummon Corp.**

950 N Tyler
Wichita KS 67212

ATTN: Arden Ratzlaff

20-32S-18W Comanche

Cary "1-20"

Start Date: 2001.09.20 @ 20:54:07

End Date: 2001.09.21 @ 03:35:22

Job Ticket #: 14935 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

Hummon Corp.
 950 N Tyler
 Wichita KS 67212
 ATTN: Arden Ratzlaff

Cary "1-20"
20-32S-18W Comanche
 Job Ticket: 14935 **DST#: 1**
 Test Start: 2001.09.20 @ 20:54:07

GENERAL INFORMATION:

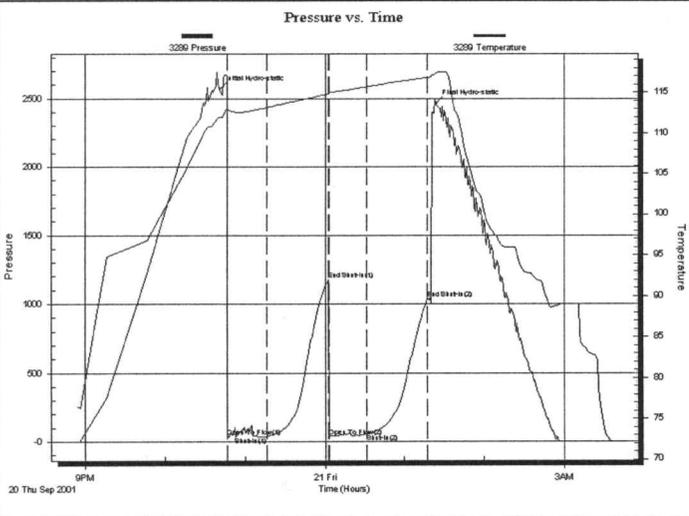
Formation: **Pawnee/Ft. Scott/Che**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 22:46:52
 Time Test Ended: 03:35:22
 Interval: **5078.00 ft (KB) To 5172.00 ft (KB) (TVD)**
 Total Depth: 5172.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole
 Tester: Lanny Saloga
 Unit No: 14
 Reference Elevations: 2138.00 ft (KB)
 2129.00 ft (CF)
 KB to GR/CF: 9.00 ft

Serial #: 3289

Inside

Press@RunDepth: 54.84 psig @ 5084.00 ft (KB)
 Start Date: 2001.09.20 End Date: 2001.09.21
 Start Time: 20:54:12 End Time: 03:35:21
 Capacity: 7000.00 psig
 Last Calib.: 2001.01.24
 Time On Btm: 2001.09.20 @ 22:41:07
 Time Off Btm: 2001.09.21 @ 01:24:07

TEST COMMENT: Surface blow throughout. I.F.P.
 Weak surface blow. Died in 16 min. F.F.P.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2570.38	111.95	Initial Hydro-static
6	37.45	112.71	Open To Flow (1)
36	37.41	113.15	Shut-In(1)
81	1173.58	114.77	End Shut-In(1)
82	37.90	115.02	Open To Flow (2)
111	54.84	115.67	Shut-In(2)
157	1032.83	116.81	End Shut-In(2)
163	2459.31	117.38	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
50.00	Sli GcMw /scum of Oil 5%G 95%M	0.70

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Hummon Corp.

Cary "1-20"

950 N Tyler
Wichita KS 67212

20-32S-18W Comanche

Job Ticket: 14935

DST#: 1

ATTN: Arden Ratzlaff

Test Start: 2001.09.20 @ 20:54:07

Tool Information

Drill Pipe:	Length: 5061.00 ft	Diameter: 3.80 inches	Volume: 70.99 bbl	Tool Weight: 2300.00 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: 11000.00 lb
			<u>Total Volume: 70.99 bbl</u>	Tool Chased ft
Drill Pipe Above KB:	5.00 ft			String Weight: Initial 49000.00 lb
Depth to Top Packer:	5078.00 ft			Final 49000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	94.00 ft			
Tool Length:	116.00 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			5057.00	
S.I. Tool	5.00			5062.00	
HMV	5.00			5067.00	
Safety Joint	2.00			5069.00	
Packer	4.00			5073.00	22.00 Bottom Of Top Packer
Packer	5.00			5078.00	
Stubb	1.00			5079.00	
Perforations	5.00			5084.00	
Recorder	0.00	3289	Inside	5084.00	
Perforations	22.00			5106.00	
C.O. Sub	1.00			5107.00	
Blank Spacing	62.00			5169.00	
Recorder	0.00	10242	Inside	5169.00	
C.O. Sub	1.00			5170.00	
Bullnose	2.00			5172.00	94.00 Bottom Packers & Anchor

Total Tool Length: 116.00



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TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Hummon Corp.

Cary "1-20"

950 N Tyler
Wichita KS 67212

20-32S-18W Comanche

Job Ticket: 14935

DST#: 1

ATTN: Arden Ratzlaff

Test Start: 2001.09.20 @ 20:54:07

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: 10.13 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 8000.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
50.00	Sli GcMw /scum of Oil 5%G 95%M	0.701

Total Length: 50.00 ft Total Volume: 0.701 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

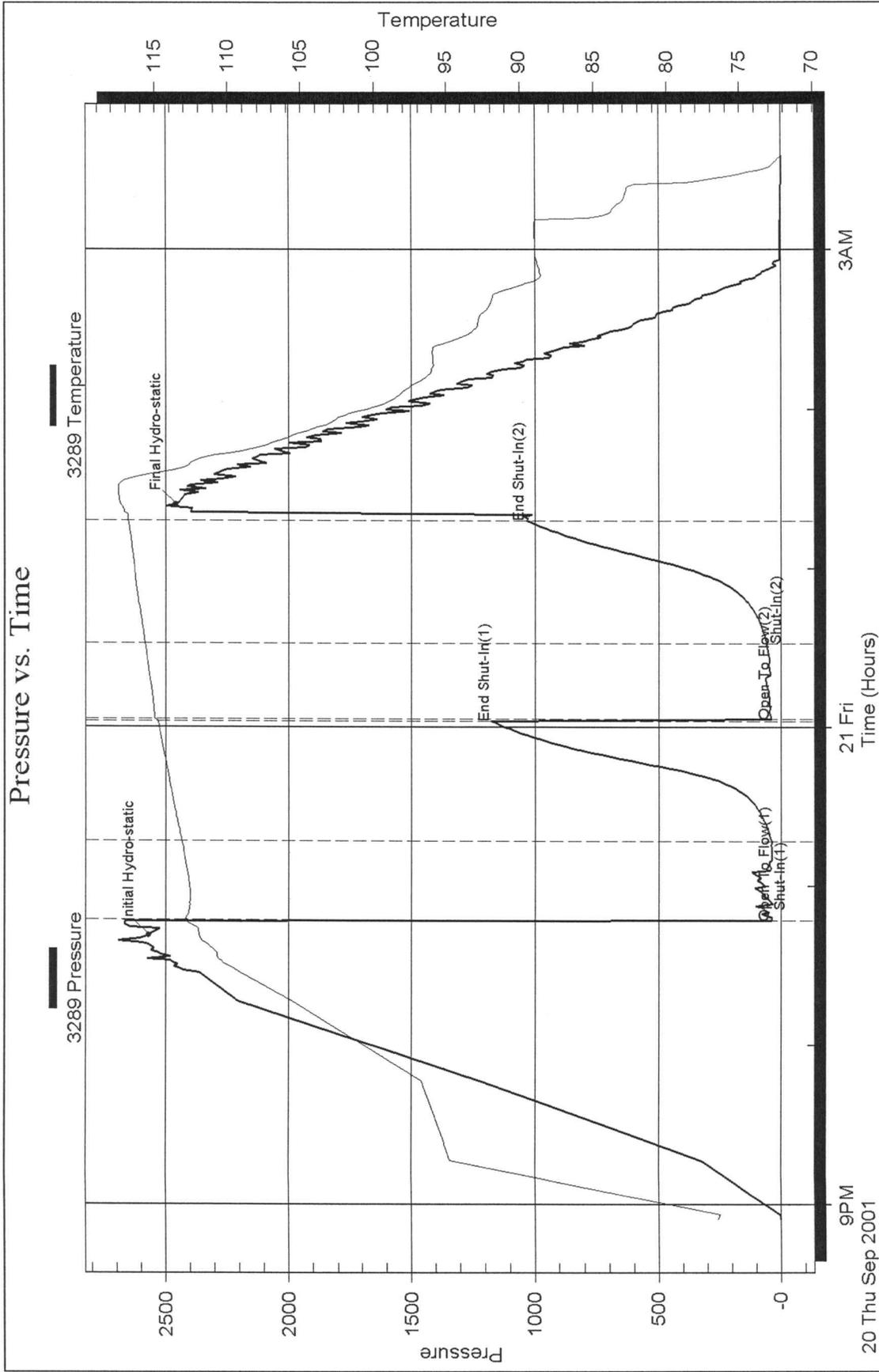
Serial #: 3289

Inside

Hummon Corp.

20-32S-18W Comanche

DST Test Number: 1





DRILL STEM TEST REPORT

Prepared For: **Hummon Corp.**

950 N Tyler
Wichita KS 67212

ATTN: Arden Ratzlaff

20-32S-18W Comanche

Cary "1-20"

Start Date: 2001.09.21 @ 16:52:03

End Date: 2001.09.22 @ 02:09:03

Job Ticket #: 14936 DST #: 2

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Hummon Corp.

Cary "1-20"

20-32S-18W Comanche

DST # 2

Mississippi

2001.09.21



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Hummon Corp.
950 N Tyler
Wichita KS 67212
ATTN: Arden Ratzlaff

Cary "1-20"
20-32S-18W Comanche
Job Ticket: 14936 **DST#: 2**
Test Start: 2001.09.21 @ 16:52:03

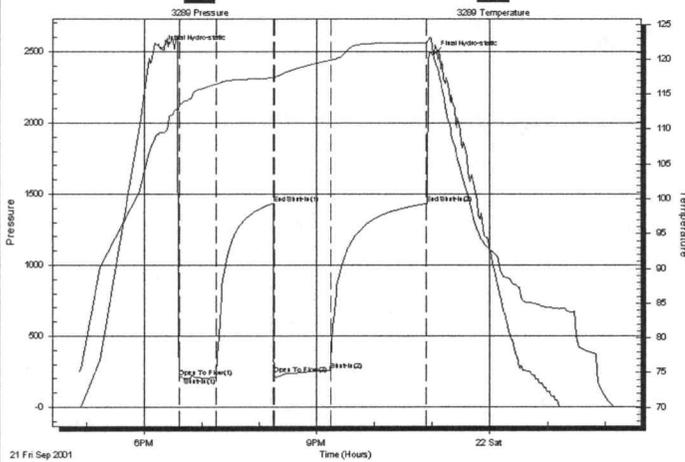
GENERAL INFORMATION:

Formation: **Mississippi**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 18:36:33
Time Test Ended: 02:09:03
Test Type: Conventional Bottom Hole
Tester: Lanny Saloga
Unit No: 14
Interval: **5170.00 ft (KB) To 5236.00 ft (KB) (TVD)**
Total Depth: 5236.00 ft (KB) (TVD)
Reference Elevations: 2138.00 ft (KB)
Hole Diameter: 7.88 inches Hole Condition: Fair
KB to GR/CF: 9.00 ft

Serial #: 3289 Inside
Press@RunDepth: 260.52 psig @ 5176.00 ft (KB) Capacity: 7000.00 psig
Start Date: 2001.09.21 End Date: 2001.09.22 Last Calib.: 2001.01.24
Start Time: 16:52:08 End Time: 02:09:03 Time On Btm: 2001.09.21 @ 18:17:18
Time Off Btm: 2001.09.21 @ 23:01:48

TEST COMMENT: Had 20' of fill. Opened tool 3 times to wash to bottom. Strong OBB in 30 sec.
GTS in 6 min. See flow chart. I.F.P. 3" blow-back. I.S.I.P.
See flow chart. F.F.P. "Gas burned."
5" blow-back

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2521.83	109.52	Initial Hydro-static
20	213.03	113.64	Open To Flow (1)
58	209.21	116.44	Shut-In (1)
118	1434.11	117.33	End Shut-In (1)
119	230.92	117.46	Open To Flow (2)
178	260.52	119.85	Shut-In (2)
277	1433.55	122.38	End Shut-In (2)
285	2477.79	120.24	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
185.00	Hvy O&GcM 15%G 23%O 62%M	2.60
325.00	O&GcM 6%G 6%O 88%M	4.56
4646.00	GIP	65.17

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
First Gas Rate	0.50	12.00	178.09
Last Gas Rate	0.25	9.00	37.12
Max. Gas Rate	0.38	14.00	104.04



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TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Hummon Corp.

Cary "1-20"

950 N Tyler
Wichita KS 67212

20-32S-18W Comanche

Job Ticket: 14936

DST#: 2

ATTN: Arden Ratzlaff

Test Start: 2001.09.21 @ 16:52:03

Tool Information

Drill Pipe:	Length: 5156.00 ft	Diameter: 3.80 inches	Volume: 72.33 bbl	Tool Weight: 2300.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 22000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 26000.00 lb
			<u>Total Volume: 72.33 bbl</u>	Tool Chased ft
Drill Pipe Above KB:	8.00 ft			String Weight: Initial 52000.00 lb
Depth to Top Packer:	5170.00 ft			Final 54000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	66.00 ft			
Tool Length:	88.00 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			5149.00	
S.I. Tool	5.00			5154.00	
HMV	5.00			5159.00	
Safety Joint	2.00			5161.00	
Packer	4.00			5165.00	22.00 Bottom Of Top Packer
Packer	5.00			5170.00	
Stubb	1.00			5171.00	
Perforations	5.00			5176.00	
Recorder	0.00	3289	Inside	5176.00	
Perforations	25.00			5201.00	
C.O. Sub	1.00			5202.00	
Blank Spacing	31.00			5233.00	
Recorder	0.00	10242	Inside	5233.00	
C.O. Sub	1.00			5234.00	
Bullnose	2.00			5236.00	66.00 Bottom Packers & Anchor

Total Tool Length: 88.00



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DRILL STEM TEST REPORT

FLUID SUMMARY

Hummon Corp.

Cary "1-20"

950 N Tyler
Wichita KS 67212

20-32S-18W Comanche

Job Ticket: 14936

DST#: 2

ATTN: Arden Ratzlaff

Test Start: 2001.09.21 @ 16:52:03

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: 70.00 sec/qt	Cushion Volume: bbl		
Water Loss: 12.53 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 10000.00 ppm			
Filter Cake: inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
185.00	Hvy O&GcM 15%G 23%O 62%M	2.595
325.00	O&GcM 6%G 6%O 88%M	4.559
4646.00	GIP	65.171

Total Length: 5156.00 ft Total Volume: 72.325 bbl

Num Fluid Samples: 1

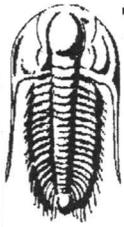
Num Gas Bombs: 1

Serial #: 1

Laboratory Name: Caraway

Laboratory Location: Liberal KS

Recovery Comments:



**TRILOBITE
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DRILL STEM TEST REPORT

GAS RATES

Hummon Corp.

Cary "1-20"

950 N Tyler
Wichita KS 67212

20-32S-18W Comanche

Job Ticket: 14936

DST#: 2

ATTN: Arden Ratzlaff

Test Start: 2001.09.21 @ 16:52:03

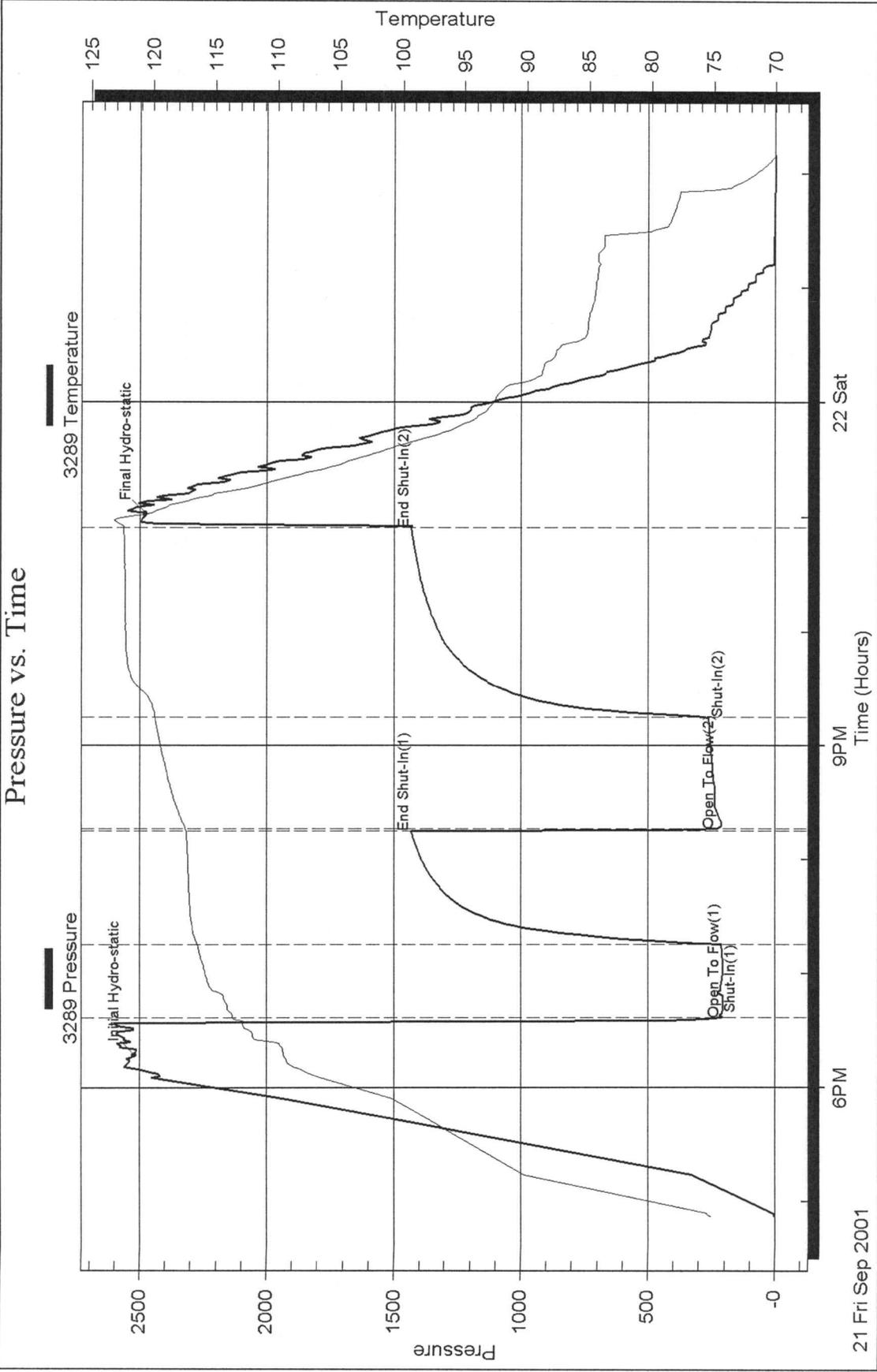
Gas Rates Information

Temperature: 59 deg C
Relative Density: 0.65
Z Factor: 0.8

Gas Rates Table

Flow Period	Elapsed Time	Choke (mm)	Pressure (kPaa)	Gas Rate (m ³ /d)
1	10	0.50	12.00	178.09
1	20	0.50	12.00	178.09
1	30	0.50	4.00	124.12
1	40	0.38	6.00	74.73
2	10	0.38	14.00	104.04
2	20	0.38	5.00	71.07
2	30	0.25	7.00	33.95
2	40	0.25	8.00	35.54
2	50	0.25	9.00	37.12
2	60	0.25	9.00	37.12

Pressure vs. Time



NATURAL GAS ANALYSIS REPORT

Sampled by:
 Trilobite Testing, L. L. C.
 Hays, Kansas
 Scott City, Kansas
 Phone: 800-728-5369
 Fax: 913-625-5620

Analyzed by:
 Caraway Analytical, Inc
 P. O. Box 2137
 Liberal, Kansas 67905
 Phone: 316-624-5389
 Fax: 316-626-7108

 Lab Number: 20014614
 Sample From: Cary 1-20 DST 2
 Producer: Hummon Corp
 Date: 09/21/01
 Time:
 Sampler: Lanny
 Source:

Analyzed: 09/26/01
 Pressure:
 Temperature:
 Location: 20-32-18
 County: Comanche
 State: Kansas
 Formation: Miss

	Mole %	GPM
Helium	He: 0.103	0.000
Hydrogen	H2: 0.005	0.000
Oxygen	O2: 0.000	0.000
Nitrogen	N2: 1.379	0.000
Carbon Dioxide	CO2: 0.101	0.000
Methane	C1: 91.529	0.000
Ethane	C2: 3.537	0.946
Propane	C3: 1.355	0.373
Iso Butane	iC4: 0.232	0.076
Normal Butane	nC4: 0.512	0.161
Iso Pentane	iC5: 0.183	0.067
Normal Pentane	nC5: 0.198	0.072
Hexanes Plus	C6+: 0.866	0.378

TOTAL: 100.000 2.073
 Z Fact: 0.9975
 SP.GR.: 0.6335
 BTU (SAT): 1091.1 @ 14.73 psia
 BTU (DRY): 1110.4 @ 14.73 psia
 OCTANE RATING: 125.0

 COMMENTS:

0.000



DRILL STEM TEST REPORT

Prepared For: **Hummon Corp.**

950 N Tyler
Wichita KS 67212

ATTN: Arden Ratzlaff

20-32S-18W Comanche

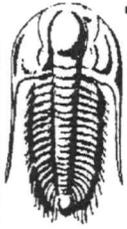
Cary "1-20"

Start Date: 2001.09.22 @ 11:31:04

End Date: 2001.09.22 @ 18:10:34

Job Ticket #: 14937 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

Hummon Corp.

950 N Tyler
Wichita KS 67212

ATTN: Arden Ratzlaff

Cary "1-20"

20-32S-18W Comanche

Job Ticket: 14937

DST#: 3

Test Start: 2001.09.22 @ 11:31:04

GENERAL INFORMATION:

Formation: **Mississippi**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 13:06:19

Time Test Ended: 18:10:34

Test Type: Conventional Bottom Hole

Tester: Lanny Saloga

Unit No: 14

Interval: **5236.00 ft (KB) To 5250.00 ft (KB) (TVD)**

Total Depth: 5250.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 2138.00 ft (KB)

2129.00 ft (CF)

KB to GR/CF: 9.00 ft

Serial #: 3289 Inside

Press@RunDepth: 58.72 psig @ 5238.00 ft (KB)

Start Date: 2001.09.22

End Date: 2001.09.22

Start Time: 11:31:09

End Time: 18:10:33

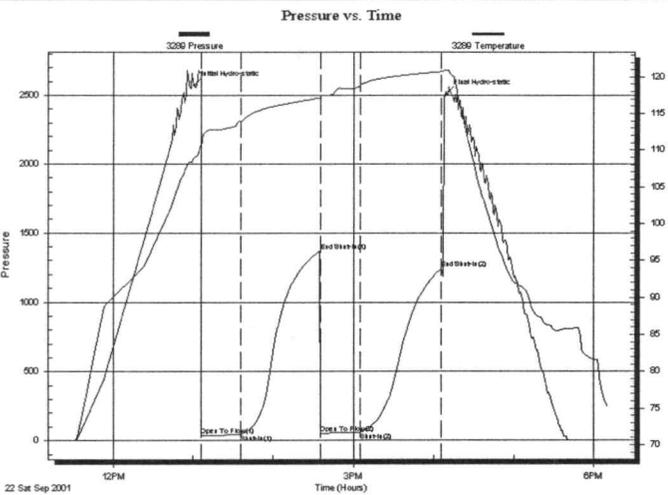
Capacity: 7000.00 psig

Last Calib.: 2001.01.24

Time On Btm: 2001.09.22 @ 13:01:04

Time Off Btm: 2001.09.22 @ 16:09:34

TEST COMMENT: Slid tool 3 ft. 1/2" blow built to 2 1/2" in 30 min. I.F.P.
Surface blow built to 1" in 30 min. F.F.P.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2576.51	108.95	Initial Hydro-static
6	37.68	110.30	Open To Flow (1)
35	43.48	113.99	Shut-In(1)
94	1369.79	117.17	End Shut-In(1)
95	50.05	117.29	Open To Flow (2)
124	58.72	118.88	Shut-In(2)
185	1239.61	120.71	End Shut-In(2)
189	2512.66	120.90	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
85.00	Sli GcMw /speaks Oil 4%G 96%M	1.19

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Hummon Corp.

Cary "1-20"

950 N Tyler
Wichita KS 67212

20-32S-18W Comanche

Job Ticket: 14937

DST#: 3

ATTN: Arden Ratzlaff

Test Start: 2001.09.22 @ 11:31:04

Tool Information

Drill Pipe:	Length: 5218.00 ft	Diameter: 3.80 inches	Volume: 73.19 bbl	Tool Weight: 1800.00 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: 9000.00 lb
			<u>Total Volume: 73.19 bbl</u>	Tool Chased: ft
Drill Pipe Above KB:	4.00 ft			String Weight: Initial 51000.00 lb
Depth to Top Packer:	5236.00 ft			Final 51000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	14.00 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
C.O. Sub	1.00			5215.00	
S.I. Tool	5.00			5220.00	
HMV	5.00			5225.00	
Safety Joint	2.00			5227.00	
Packer	4.00			5231.00	22.00 Bottom Of Top Packer
Packer	5.00			5236.00	
Stubb	1.00			5237.00	
Perforations	1.00			5238.00	
Recorder	0.00	3289	Inside	5238.00	
Perforations	10.00			5248.00	
Recorder	0.00	10242	Inside	5248.00	
Bullnose	2.00			5250.00	14.00 Bottom Packers & Anchor

Total Tool Length: 36.00



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DRILL STEM TEST REPORT

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Hummon Corp.

Cary "1-20"

950 N Tyler
Wichita KS 67212

20-32S-18W Comanche

Job Ticket: 14937

DST#: 3

ATTN: Arden Ratzlaff

Test Start: 2001.09.22 @ 11:31:04

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: 51.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 10.11 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 10000.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
85.00	Sli GcMw /speaks Oil 4%G 96%M	1.192

Total Length: 85.00 ft

Total Volume: 1.192 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

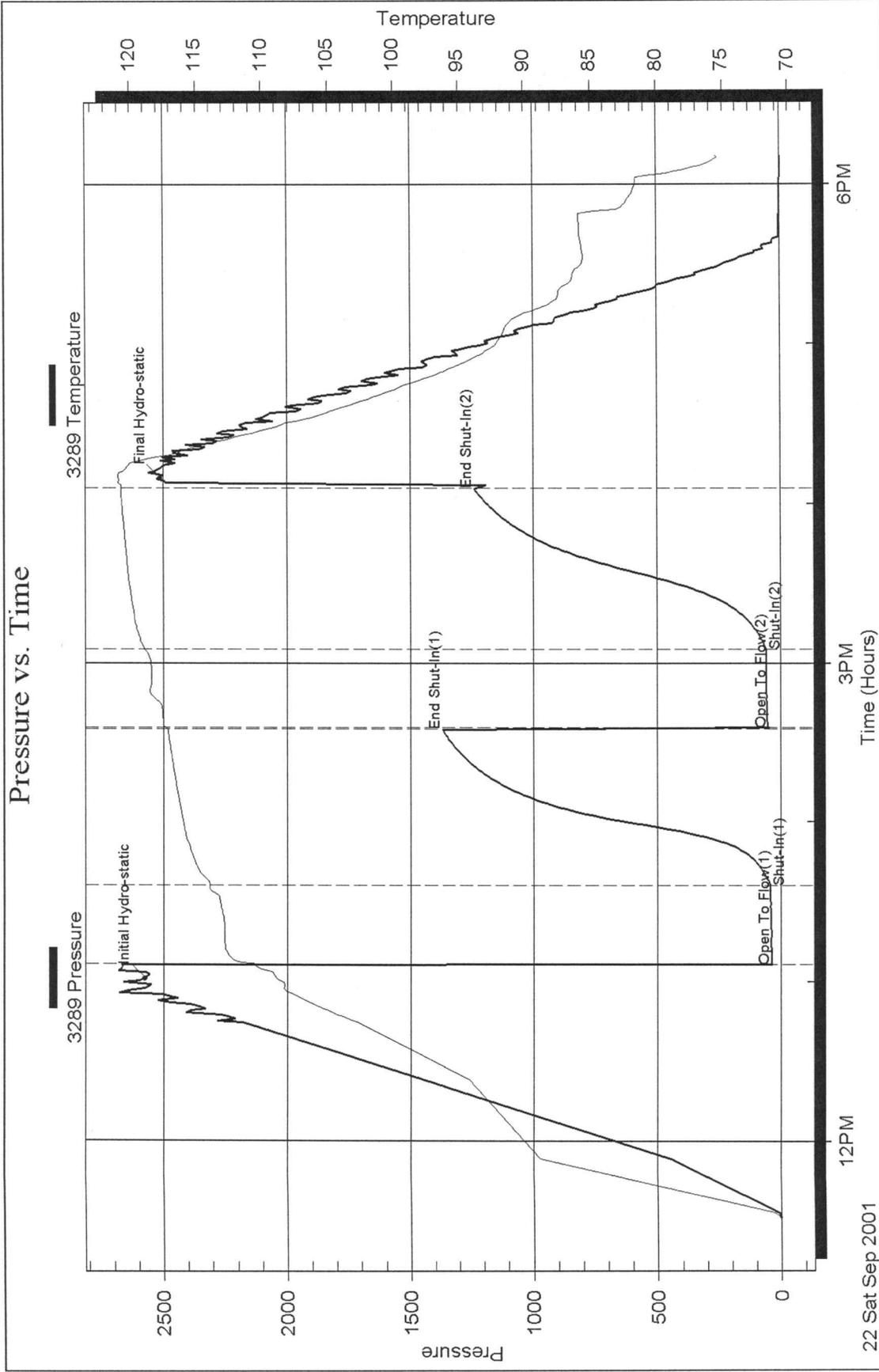
Serial #: 3289

Inside

Hummon Corp.

20-32S-18W Comanche

DST Test Number: 3



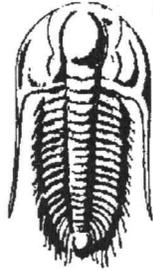
22 Sat Sep 2001

12PM

3PM

6PM

Time (Hours)



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Prepared For: **Hummon Corp.**

950 N Tyler
Wichita KS 67212

ATTN: Arden Ratzlaff

20-32S-18W Comanche

Cary "1-20"

Start Date: 2001.09.25 @ 08:14:58

End Date: 2001.09.25 @ 17:33:57

Job Ticket #: 14974 DST #: 4

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

Hummon Corp.

Cary "1-20"

20-32S-18W Comanche

DST # 4

Viola

2001.09.25



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Hummon Corp.

950 N Tyler
Wichita KS 67212

ATTN: Arden Ratzlaff

Cary "1-20"

20-32S-18W Comanche

Job Ticket: 14974

DST#: 4

Test Start: 2001.09.25 @ 08:14:58

GENERAL INFORMATION:

Formation: **Viola**

Deviated: **No** Whipstock: **ft (KB)**

Time Tool Opened: 10:22:27

Time Test Ended: 17:33:57

Test Type: Conventional Bottom Hole

Tester: Gary Pevoteaux

Unit No: 13

Interval: **5720.00 ft (KB) To 5730.00 ft (KB) (TVD)**

Total Depth: 5730.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition:

Reference Elevations: 2138.00 ft (KB)

2129.00 ft (CF)

KB to GR/CF: 9.00 ft

Serial #: 2342

Inside

Press@RunDepth: 916.32 psig @ 5721.00 ft (KB)

Start Date: 2001.09.25

End Date:

2001.09.25

Start Time: 08:14:58

End Time:

17:33:57

Capacity: 7000.00 psig

Last Calib.: 2001.09.17

Time On Btm: 2001.09.25 @ 10:19:27

Time Off Btm: 2001.09.25 @ 14:34:27

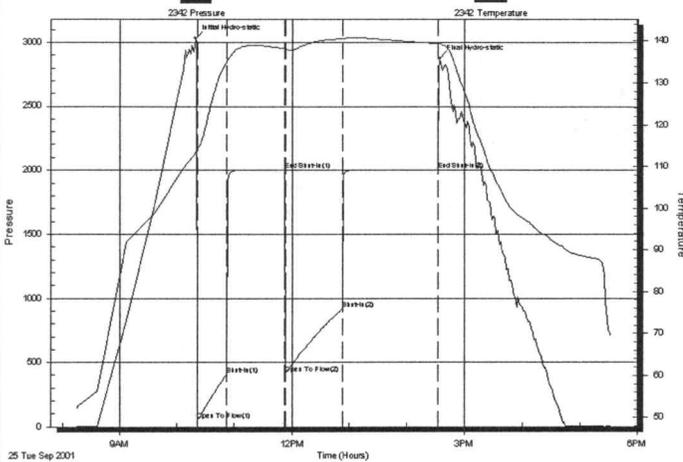
TEST COMMENT: IF Strong blow 41/2 mins. to B.O.B.

ISI strong blow building to 9"

FF Strong blow 6 mins to B.O.B.

FSI fair blow building to 7"

Pressure vs. Time



PRESSURE SUMMARY

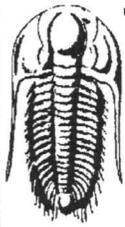
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	3031.04	113.12	Initial Hydro-static
3	54.46	114.37	Open To Flow (1)
34	405.87	135.09	Shut-In (1)
94	2004.71	138.16	End Shut-In (1)
94	414.59	138.12	Open To Flow (2)
153	916.32	140.52	Shut-In (2)
253	2004.62	139.41	End Shut-In (2)
255	2875.02	139.43	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
1800.00	SGCW Rw .073 @ 74 deg.F	25.25
150.00	WM 20%w 80%m	2.10
50.00	GIP	0.70

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Hummon Corp.

Cary "1-20"

950 N Tyler
Wichita KS 67212

20-32S-18W Comanche

Job Ticket: 14974

DST#: 4

ATTN: Arden Ratzlaff

Test Start: 2001.09.25 @ 08:14:58

Tool Information

Drill Pipe:	Length: 5714.00 ft	Diameter: 3.80 inches	Volume: 80.15 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: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 76000.00 lb
			<u>Total Volume: 80.15 bbl</u>	Tool Chased 1.00 ft
Drill Pipe Above KB:	16.00 ft			String Weight: Initial 53000.00 lb
Depth to Top Packer:	5720.00 ft			Final 63000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	10.00 ft			
Tool Length:	32.00 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			5699.00	
S.I. Tool	5.00			5704.00	
HMV	5.00			5709.00	
Safety Joint	2.00			5711.00	
Packer	4.00			5715.00	22.00 Bottom Of Top Packer
Packer	5.00			5720.00	
Stubb	1.00			5721.00	
Recorder	0.00	2342	Inside	5721.00	
Perforations	4.00			5725.00	
Recorder	0.00	10248	Outside	5725.00	
Bullnose	5.00			5730.00	10.00 Bottom Packers & Anchor
Total Tool Length:		32.00			



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DRILL STEM TEST REPORT

FLUID SUMMARY

Hummon Corp.

Cary "1-20"

950 N Tyler
Wichita KS 67212

20-32S-18W Comanche

Job Ticket: 14974

DST#: 4

ATTN: Arden Ratzlaff

Test Start: 2001.09.25 @ 08:14:58

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: 100000 ppm

Viscosity: 61.00 sec/qt

Cushion Volume:

bbl

Water Loss: 10.34 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 11000.00 ppm

Filter Cake: 0.20 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
1800.00	SGCW Rw .073 @ 74 deg.F	25.249
150.00	WM 20%w 80%m	2.104
50.00	GIP	0.701

Total Length: 2000.00 ft Total Volume: 28.054 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

