



## DRILL STEM TEST REPORT

Prepared For: **Imperial American Oil Corp**

303 N Carrol Blvd #214  
Denton TX 76201

ATTN: Hal Porter

**31-11s-15w Russell**

**Lou Ann #31-1**

Start Date: 2003.10.14 @ 01:29:14

End Date: 2003.10.14 @ 06:15:43

Job Ticket #: 18433                      DST #: 1

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Imperial American Oil Corp

Lou Ann #31-1

31-11s-15w Russell

DST # 1

Toronto

2003.10.14



**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

Imperial American Oil Corp  
 303 N Carrol Blvd #214  
 Denton TX 76201  
 ATTN: Hal Porter

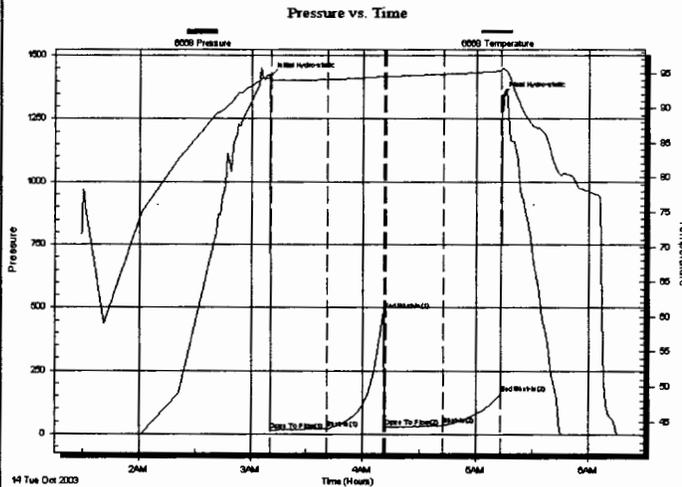
**Lou Ann #31-1**  
**31-11s-15w Russell**  
 Job Ticket: 18433 **DST#: 1**  
 Test Start: 2003.10.14 @ 01:29:14

## GENERAL INFORMATION:

Formation: **Toronto**  
 Deviated: **No Whipstock:** ft (KB)  
 Time Tool Opened: 03:10:43  
 Time Test Ended: 06:15:43  
 Interval: **2885.00 ft (KB) To 2920.00 ft (KB) (TVD)**  
 Total Depth: **2920.00 ft (KB) (TVD)**  
 Hole Diameter: **7.85 inches** Hole Condition: **Fair**  
 Test Type: **Conventional Bottom Hole**  
 Tester: **Ray Schwager**  
 Unit No: **28**  
 Reference Elevations: **1697.00 ft (KB)**  
**1692.00 ft (CF)**  
 KB to GR/CF: **5.00 ft**

**Serial #: 6668** **Inside**  
 Press@RunDepth: **35.62 psig @ 2886.01 ft (KB)** Capacity: **7000.00 psig**  
 Start Date: **2003.10.14** End Date: **2003.10.14** Last Calib.: **2003.10.14**  
 Start Time: **01:29:14** End Time: **06:15:43** Time On Btm: **2003.10.14 @ 03:10:13**  
 Time Off Btm: **2003.10.14 @ 05:13:43**

**TEST COMMENT:** FFP-wk surface bl died in 12 min  
 FFP-no bl  
 Times 30-30-30-30



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1419.01	94.24	Initial Hydro-static
1	15.07	94.07	Open To Flow (1)
31	23.49	94.10	Shut-In (1)
61	488.63	94.56	End Shut-In (1)
62	28.38	94.46	Open To Flow (2)
92	35.62	94.86	Shut-In (2)
123	162.92	95.32	End Shut-In (2)
124	1341.36	95.59	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
20.00	OCM 5%oil 95%mud	0.10

## Gas Rates

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



**TRILOBITE  
TESTING, INC.**

## DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Imperial American Oil Corp

**Lou Ann #31-1**

303 N Carrol Blvd #214  
Denton TX 76201

**31-11s-15w Russell**

Job Ticket: 18433

**DST#: 1**

ATTN: Hal Porter

Test Start: 2003.10.14 @ 01:29:14

### Tool Information

Drill Pipe:	Length: 2749.00 ft	Diameter: 3.80 inches	Volume: 38.56 bbl	Tool Weight: 2200.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 120.00 ft	Diameter: 2.25 inches	Volume: 0.59 bbl	Weight to Pull Loose: 60000.00 lb
			<u>Total Volume: 39.15 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	5.00 ft			String Weight: Initial 50000.00 lb
Depth to Top Packer:	2885.00 ft			Final 50000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	35.02 ft			
Tool Length:	56.02 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

### Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			2865.00	
Shut In Tool	5.00			2870.00	
Hydraulic tool	5.00			2875.00	
Packer	5.00			2880.00	21.00 Bottom Of Top Packer
Packer	5.00			2885.00	
Stubb	1.00			2886.00	
Recorder	0.01	6668	Inside	2886.01	
Perforations	31.00			2917.01	
Recorder	0.01	11085	Outside	2917.02	
Bullnose	3.00			2920.02	35.02 Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>56.02</b>				



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Imperial American Oil Corp

**Lou Ann #31-1**

303 N Carrol Blvd #214  
Denton TX 76201

**31-11s-15w Russell**

Job Ticket: 18433

**DST#: 1**

ATTN: Hal Porter

Test Start: 2003.10.14 @ 01:29:14

## 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: 48.00 sec/qt

Cushion Volume:

bbl

Water Loss: 9.53 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 4000.00 ppm

Filter Cake: 1.00 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
20.00	OCM 5%oil 95%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:

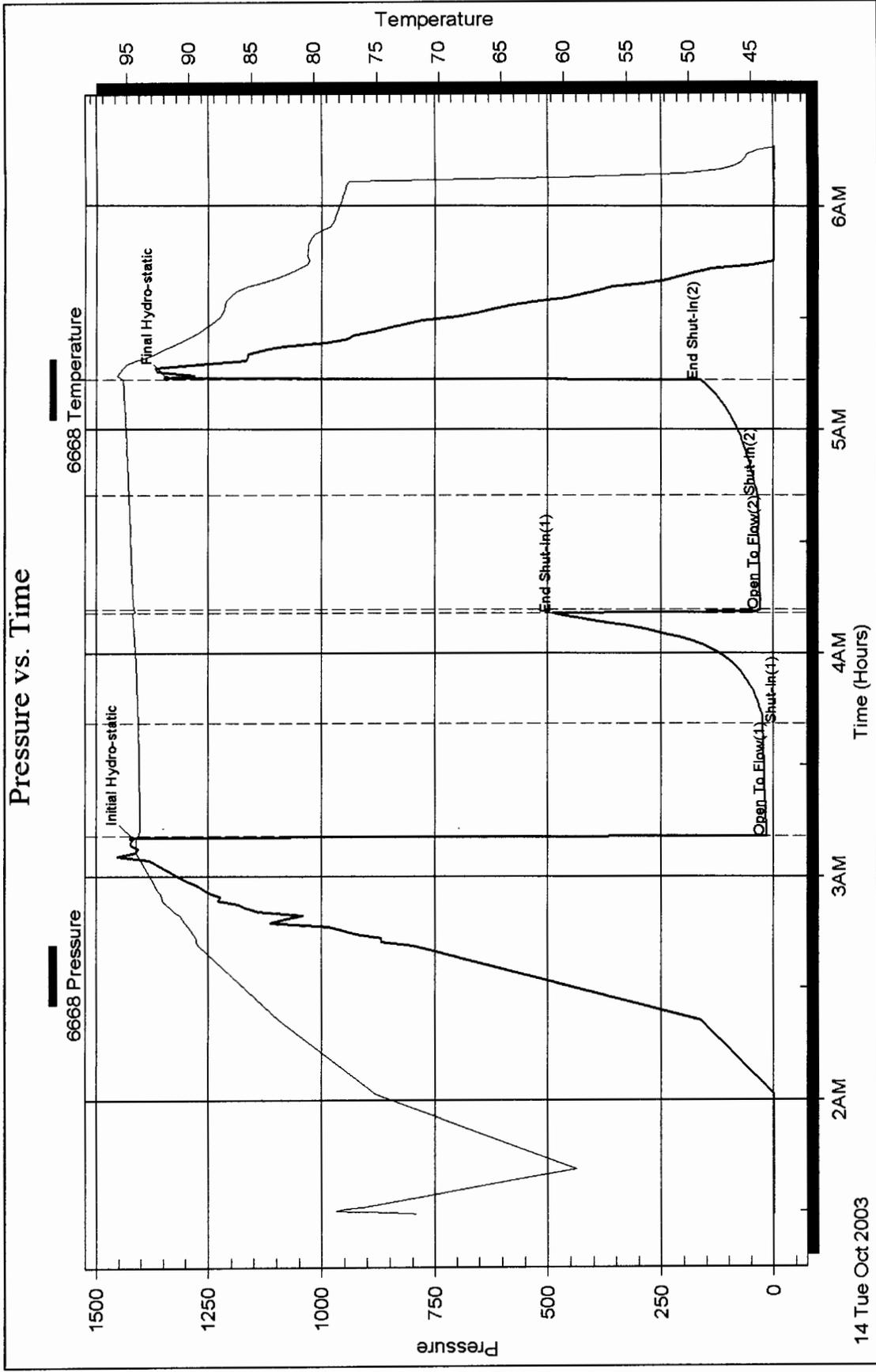
Serial #: 6668

Inside

Imperial American Oil Corp

31-11s-15w Russell

DST Test Number: 1





## DRILL STEM TEST REPORT

Prepared For: **Imperial American Oil Corp**

303 N Carrol Blvd #214  
Denton TX 76201

ATTN: Hal Porter

**31-11s-15w Russell**

**Lou Ann #31-1**

Start Date: 2003.10.14 @ 15:00:23

End Date: 2003.10.14 @ 20:21:52

Job Ticket #: 18434                      DST #: 2

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



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TESTING, INC**

## DRILL STEM TEST REPORT

Imperial American Oil Corp  
303 N Carrol Blvd #214  
Denton TX 76201  
ATTN: Hal Porter

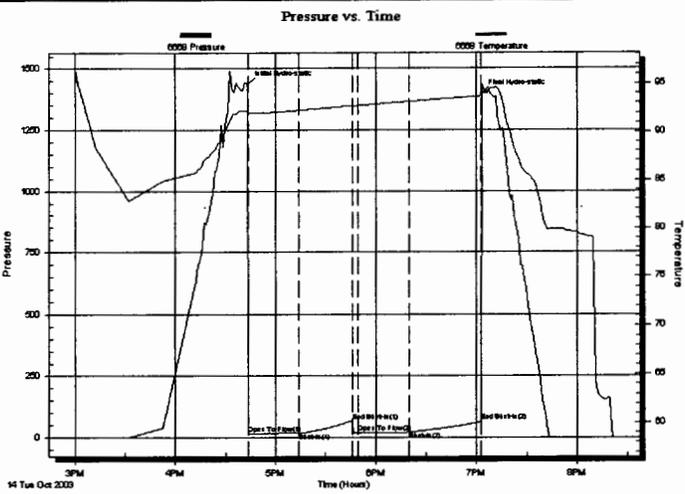
**Lou Ann #31-1**  
**31-11s-15w Russell**  
Job Ticket: 18434      **DST#: 2**  
Test Start: 2003.10.14 @ 15:00:23

### GENERAL INFORMATION:

Formation: **Ians A-D**  
Deviated: **No** Whipstock: **ft (KB)**  
Time Tool Opened: **16:43:52**  
Time Test Ended: **20:21:52**  
Interval: **2914.00 ft (KB) To 2990.00 ft (KB) (TVD)**  
Total Depth: **2990.00 ft (KB) (TVD)**  
Hole Diameter: **7.85 inches** Hole Condition: **Fair**  
Test Type: **Conventional Bottom Hole**  
Tester: **Ray Schwager**  
Unit No: **28**  
Reference Elevations: **1697.00 ft (KB)**  
**1692.00 ft (CF)**  
KB to GR/CF: **5.00 ft**

**Serial #: 6668**      **Inside**  
Press@RunDepth: **22.45 psig @ 2923.01 ft (KB)**  
Start Date: **2003.10.14**      End Date: **2003.10.14**  
Start Time: **15:00:23**      End Time: **20:21:52**  
Capacity: **7000.00 psig**  
Last Calib.: **2003.10.14**  
Time On Btm: **2003.10.14 @ 16:43:22**  
Time Off Btm: **2003.10.14 @ 19:02:52**

TEST COMMENT: **FFP-surface bl died in 7 min**  
**FFP-no bl**  
**Times 30-30-30-45**



### PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1437.48	92.19	Initial Hydro-static
1	16.34	92.01	Open To Flow (1)
31	18.03	92.21	Shut-In(1)
63	65.82	92.68	End Shut-In(1)
66	18.96	92.70	Open To Flow (2)
97	22.45	93.12	Shut-In(2)
139	64.43	93.68	End Shut-In(2)
140	1395.78	93.90	Final Hydro-static

### Recovery

Length (ft)	Description	Volume (bbl)
5.00	mud w/ show of oil in tool	0.02

### Gas Rates

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



**TRILOBITE  
TESTING, INC.**

## DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Imperial American Oil Corp

**Lou Ann #31-1**

303 N Carrol Blvd #214  
Denton TX 76201

**31-11s-15w Russell**

Job Ticket: 18434

**DST#: 2**

ATTN: Hal Porter

Test Start: 2003.10.14 @ 15:00:23

### Tool Information

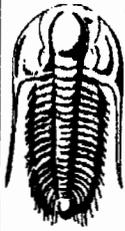
Drill Pipe:	Length: 2804.00 ft	Diameter: 3.80 inches	Volume: 39.33 bbl	Tool Weight: 2200.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 120.00 ft	Diameter: 2.25 inches	Volume: 0.59 bbl	Weight to Full Loose: 60000.00 lb
			<u>Total Volume: 39.92 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	31.00 ft			String Weight: Initial 51000.00 lb
Depth to Top Packer:	2914.00 ft			Final 51000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	76.02 ft			
Tool Length:	97.02 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

### Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			2894.00	
Shut In Tool	5.00			2899.00	
Hydraulic tool	5.00			2904.00	
Packer	5.00			2909.00	21.00 Bottom Of Top Packer
Packer	5.00			2914.00	
Stubb	1.00			2915.00	
Perforations	7.00			2922.00	
Change Over Sub	1.00			2923.00	
Recorder	0.01	6668	inside	2923.01	
Blank Spacing	31.00			2954.01	
Change Over Sub	1.00			2955.01	
Perforations	32.00			2987.01	
Recorder	0.01	11085	Outside	2987.02	
Bullnose	3.00			2990.02	76.02 Bottom Packers & Anchor

**Total Tool Length: 97.02**



**TRILOBITE  
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## DRILL STEM TEST REPORT

**FLUID SUMMARY**

Imperial American Oil Corp

**Lou Ann #31-1**

303 N Carrol Blvd #214  
Denton TX 76201

**31-11s-15w Russell**

Job Ticket: 18434

**DST#: 2**

ATTN: Hal Porter

Test Start: 2003.10.14 @ 15:00:23

### 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:

bbl

Water Loss: 6.37 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 5000.00 ppm

Filter Cake: 1.00 inches

### Recovery Information

Recovery Table

Length ft	Description	Volume bbl
5.00	mud w / show of oil in tool	0.025

Total Length: 5.00 ft

Total Volume: 0.025 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Serial #: 6668

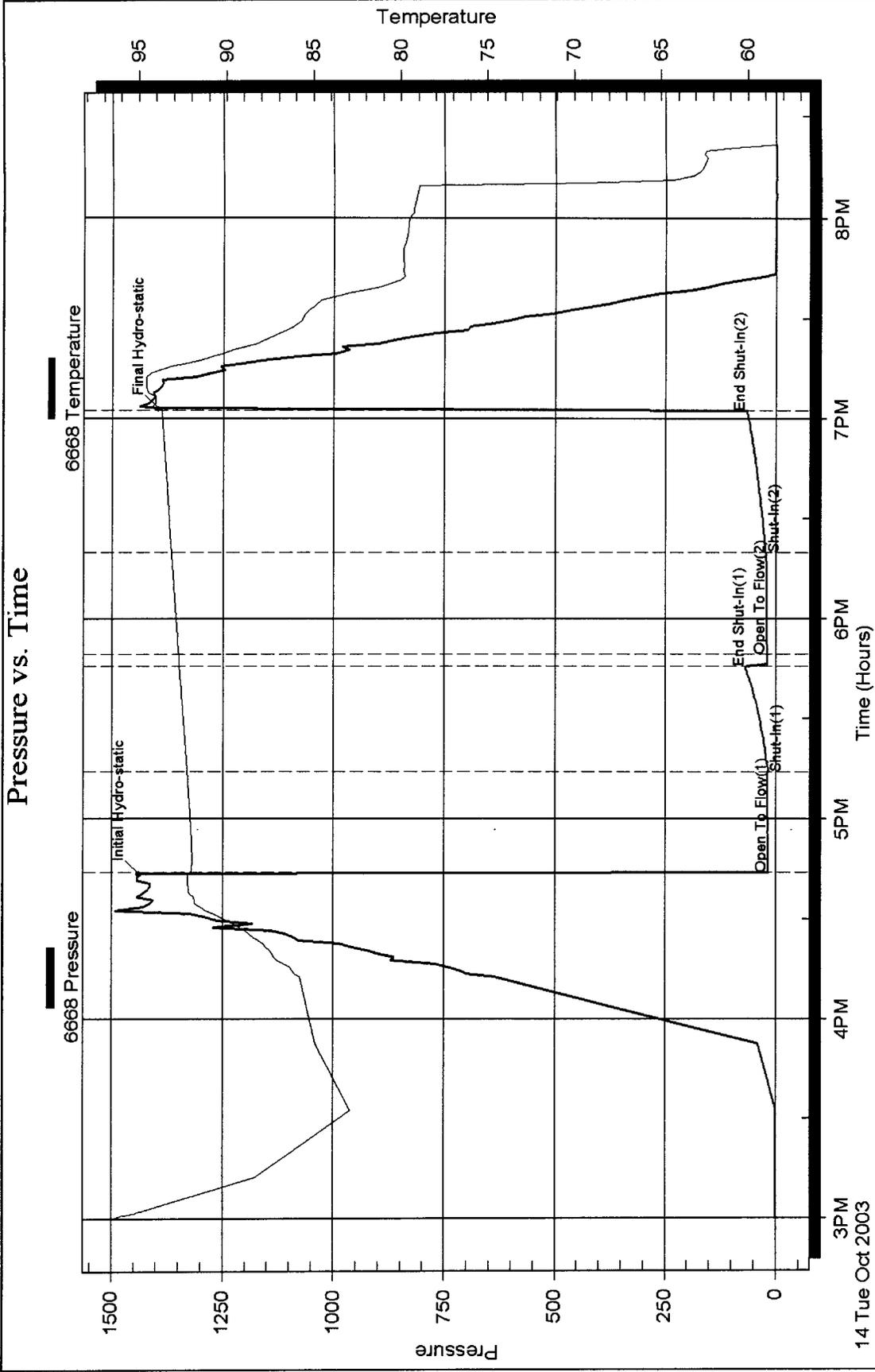
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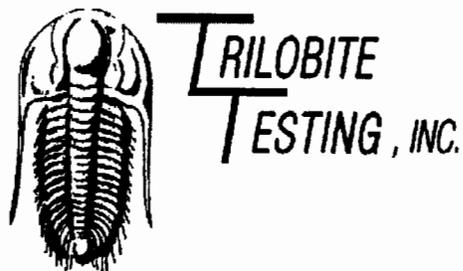
Imperial American Oil Corp

31-11s-15w Russell

DST Test Number: 2

### Pressure vs. Time





## DRILL STEM TEST REPORT

Prepared For: **Imperial American Oil Corp**

303 N Carrol Blvd #214  
Denton TX 76201

ATTN: Hal Porter

**31-11s-15w Russell**

**Lou Ann #31-1**

Start Date: 2003.10.15 @ 03:54:02

End Date: 2003.10.15 @ 09:28:31

Job Ticket #: 18435                      DST #: 3

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PO Box 362 Hays, KS 67601  
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## DRILL STEM TEST REPORT

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303 N Carrol Blvd #214  
Denton TX 76201  
ATTN: Hal Porter

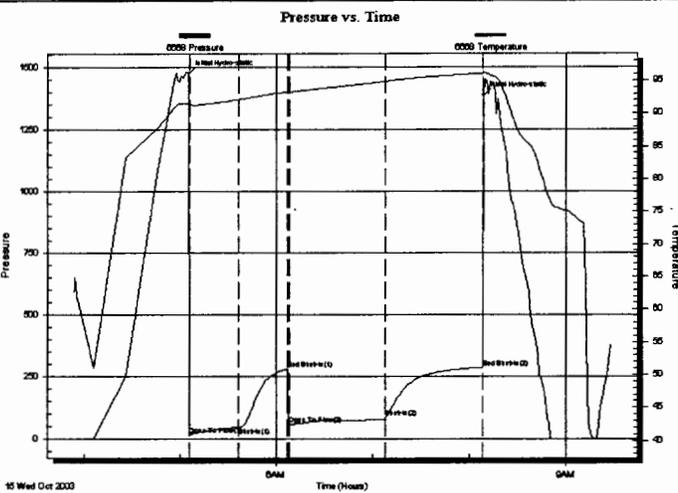
**Lou Ann #31-1**  
**31-11s-15w Russell**  
Job Ticket: 18435      **DST#: 3**  
Test Start: 2003.10.15 @ 03:54:02

### GENERAL INFORMATION:

Formation: **Ians E-G**  
Deviated: **No** Whipstock: **ft (KB)**  
Time Tool Opened: 05:06:01  
Time Test Ended: 09:28:31  
Interval: **2995.00 ft (KB) To 3050.00 ft (KB) (TVD)**  
Total Depth: **2920.00 ft (KB) (TVD)**  
Hole Diameter: **7.85 inches** Hole Condition: **Fair**  
Test Type: **Conventional Bottom Hole**  
Tester: **Ray Schwager**  
Unit No: **28**  
Reference Elevations: **1697.00 ft (KB)**  
**1692.00 ft (CF)**  
KB to GR/CF: **5.00 ft**

**Serial #: 6668**      **Inside**  
Press@RunDepth: **82.85 psig @ 3000.01 ft (KB)**      Capacity: **7000.00 psig**  
Start Date: **2003.10.15**      End Date: **2003.10.15**      Last Calib.: **2003.10.15**  
Start Time: **03:54:02**      End Time: **09:28:31**      Time On Btm: **2003.10.15 @ 05:05:31**  
Time Off Btm: **2003.10.15 @ 08:08:31**

TEST COMMENT: **FP-w k bl thru-out 1/4" to 1" bl**  
**FFP-w k bl thru-out 1/4" bl**  
**Times 30-30-60-60**



### PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1473.05	91.52	Initial Hydro-static
1	16.82	91.34	Open To Flow (1)
31	47.48	92.12	Shut-in (1)
62	279.73	93.31	End Shut-in (1)
63	55.85	93.26	Open To Flow (2)
123	82.85	94.86	Shut-in (2)
183	286.32	96.08	End Shut-in (2)
183	1384.42	96.32	Final Hydro-static

### Recovery

Length (ft)	Description	Volume (bbl)
80.00	socw m 2%oil 48%w water 50% mud	0.39
60.00	mw RW.42@60F	0.48

### Gas Rates

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



**TRILOBITE  
TESTING, INC.**

## DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Imperial American Oil Corp  
303 N Carrol Blvd #214  
Denton TX 76201  
ATTN: Hal Porter

**Lou Ann #31-1**  
**31-11s-15w Russell**  
Job Ticket: 18435      DST#: 3  
Test Start: 2003.10.15 @ 03:54:02

### Tool Information

Drill Pipe:	Length: 2868.00 ft	Diameter: 3.80 inches	Volume: 40.23 bbl	Tool Weight: 2200.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 120.00 ft	Diameter: 2.25 inches	Volume: 0.59 bbl	Weight to Full Loose: 60000.00 lb
			<u>Total Volume: 40.82 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	14.00 ft			String Weight: Initial 52000.00 lb
Depth to Top Packer:	2995.00 ft			Final 52000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	55.02 ft			
Tool Length:	76.02 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

### Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			2975.00	
Shut In Tool	5.00			2980.00	
Hydraulic tool	5.00			2985.00	
Packer	5.00			2990.00	21.00      Bottom Of Top Packer
Packer	5.00			2995.00	
Stubb	1.00			2996.00	
Perforations	3.00			2999.00	
Change Over Sub	1.00			3000.00	
Recorder	0.01	6668	Inside	3000.01	
Blank Off Sub	31.00			3031.01	
Change Over Sub	1.00			3032.01	
Perforations	15.00			3047.01	
Recorder	0.01	11085	Outside	3047.02	
Bullnose	3.00			3050.02	55.02      Bottom Packers & Anchor

**Total Tool Length: 76.02**



**TRILOBITE  
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**DRILL STEM TEST REPORT**

**FLUID SUMMARY**

Imperial American Oil Corp  
303 N Carrol Blvd #214  
Denton TX 76201  
ATTN: Hal Porter

**Lou Ann #31-1**  
**31-11s-15w Russell**  
Job Ticket: 18435      **DST#: 3**  
Test Start: 2003.10.15 @ 03:54:02

**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:	18000 ppm
Viscosity: 51.00 sec/qt	Cushion Volume: bbl		
Water Loss: 6.38 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 5000.00 ppm			
Filter Cake: 1.00 inches			

**Recovery Information**

Recovery Table

Length ft	Description	Volume bbl
80.00	socw m 2%oil 48%w ater 50%mud	0.393
60.00	mw RW.42@60F	0.477

Total Length: 140.00 ft      Total Volume: 0.870 bbl  
Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:  
Laboratory Name:      Laboratory Location:  
Recovery Comments:

Serial #: 6668

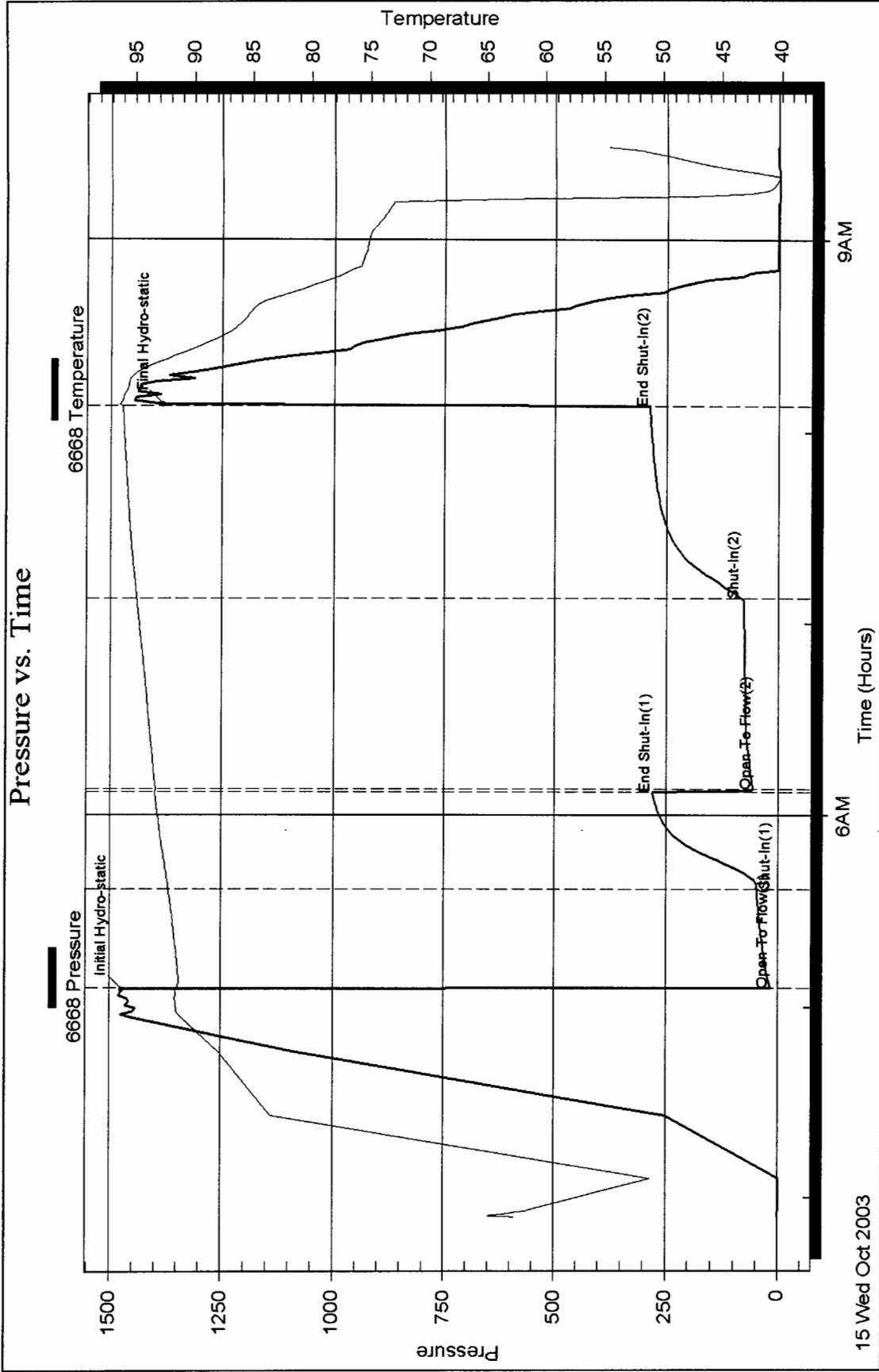
Inside

Imperial American Oil Corp

31-11s-15w Russell

DST Test Number: 3

### Pressure vs. Time





## DRILL STEM TEST REPORT

Prepared For: **Imperial American Oil Corp**

303 N Carrol Blvd #214  
Denton TX 76201

ATTN: Hal Porter

### **31-11s-15w Russell**

#### **Lou Ann #31-1**

Start Date: 2003.10.15 @ 20:00:48

End Date: 2003.10.16 @ 01:15:17

Job Ticket #: 18436                      DST #: 4

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



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## DRILL STEM TEST REPORT

Imperial American Oil Corp  
303 N Carrol Blvd #214  
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ATTN: Hal Porter

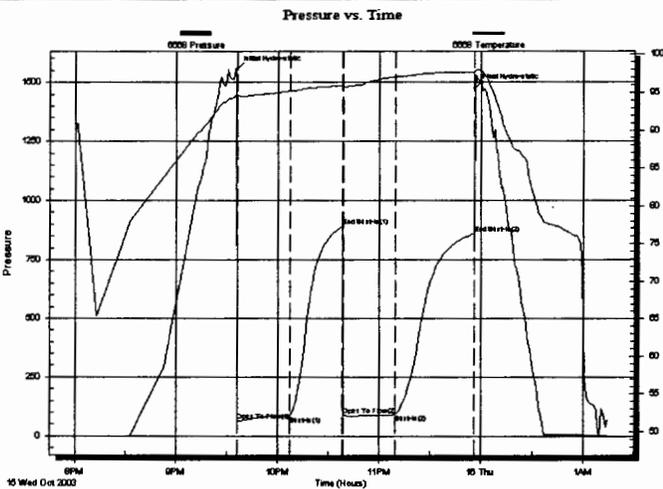
**Lou Ann #31-1**  
**31-11s-15w Russell**  
Job Ticket: 18436      **DST#: 4**  
Test Start: 2003.10.15 @ 20:00:48

### GENERAL INFORMATION:

Formation: **Ians I-K**  
Deviated: No Whipstock: ft (KB)  
Test Type: Conventional Bottom Hole  
Time Tool Opened: 21:36:17  
Tester: Ray Schwager  
Time Test Ended: 01:15:17  
Unit No: 28  
Interval: **3083.00 ft (KB) To 3163.00 ft (KB) (TVD)**  
Reference Elevations: 1697.00 ft (KB)  
Total Depth: 3163.00 ft (KB) (TVD)  
1692.00 ft (CF)  
Hole Diameter: 7.85 inches Hole Condition: Fair  
KB to GR/CF: 5.00 ft

**Serial #: 6668**      **Inside**  
Press@RunDepth: 92.67 psig @ 3086.01 ft (KB)  
Capacity: 7000.00 psig  
Start Date: 2003.10.15      End Date: 2003.10.16  
Last Calib.: 2003.10.16  
Start Time: 20:00:48      End Time: 01:15:17  
Time On Btm: 2003.10.15 @ 21:35:47  
Time Off Btm: 2003.10.15 @ 23:56:17

TEST COMMENT: FFP-wk bl died in 27 min  
FFP-no bl  
Times 30-30-30-45



### PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1553.06	94.71	Initial Hydro-static
1	62.79	94.58	Open To Flow (1)
32	86.11	95.21	Shut-In(1)
63	890.38	95.93	End Shut-In(1)
63	88.06	95.73	Open To Flow (2)
94	92.67	97.07	Shut-In(2)
140	860.24	97.69	End Shut-In(2)
141	1476.42	97.86	Final Hydro-static

### Recovery

Length (ft)	Description	Volume (bbl)
65.00	OCM 10%oil 90%mud	0.32
60.00	HO&GCM 15%gas 25%oil 60%mud	0.34

### Gas Rates

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



**TRILOBITE  
TESTING, INC.**

## DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Imperial American Oil Corp  
303 N Carrol Blvd #214  
Denton TX 76201  
ATTN: Hal Porter

**Lou Ann #31-1**  
**31-11s-15w Russell**  
Job Ticket: 18436      **DST#: 4**  
Test Start: 2003.10.15 @ 20:00:48

### Tool Information

Drill Pipe:	Length: 2962.00 ft	Diameter: 3.80 inches	Volume: 41.55 bbl	Tool Weight: 2200.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 120.00 ft	Diameter: 2.25 inches	Volume: 0.59 bbl	Weight to Pull Loose: 70000.00 lb
			<u>Total Volume: 42.14 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	20.00 ft			String Weight: Initial 52000.00 lb
Depth to Top Packer:	3083.00 ft			Final 52000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	80.02 ft			
Tool Length:	101.02 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

### Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3063.00	
Shut In Tool	5.00			3068.00	
Hydraulic tool	5.00			3073.00	
Packer	5.00			3078.00	21.00      Bottom Of Top Packer
Packer	5.00			3083.00	
Stubb	1.00			3084.00	
Perforations	2.00			3086.00	
Recorder	0.01	6668	Inside	3086.01	
Change Over Sub	1.00			3087.01	
Blank Spacing	62.00			3149.01	
Change Over Sub	1.00			3150.01	
Perforations	10.00			3160.01	
Recorder	0.01	11085	Outside	3160.02	
Bullnose	3.00			3163.02	80.02      Bottom Packers & Anchor

**Total Tool Length: 101.02**



**TRILOBITE  
TESTING, INC**

**DRILL STEM TEST REPORT**

**FLUID SUMMARY**

Imperial American Oil Corp

**Lou Ann #31-1**

303 N Carrol Blvd #214  
Denton TX 76201

**31-11s-15w Russell**

Job Ticket: 18436

**DST#: 4**

ATTN: Hal Porter

Test Start: 2003.10.15 @ 20:00:48

**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: 46.00 sec/qt

Cushion Volume:

bbl

Water Loss: 7.96 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 5000.00 ppm

Filter Cake: 1.00 inches

**Recovery Information**

Recovery Table

Length ft	Description	Volume bbl
65.00	OCM 10%oil 90%mud	0.320
60.00	HO&GCM 15%gas 25%oil 60%mud	0.341

Total Length: 125.00 ft

Total Volume: 0.661 bbl

Num Fluid Samples: 0

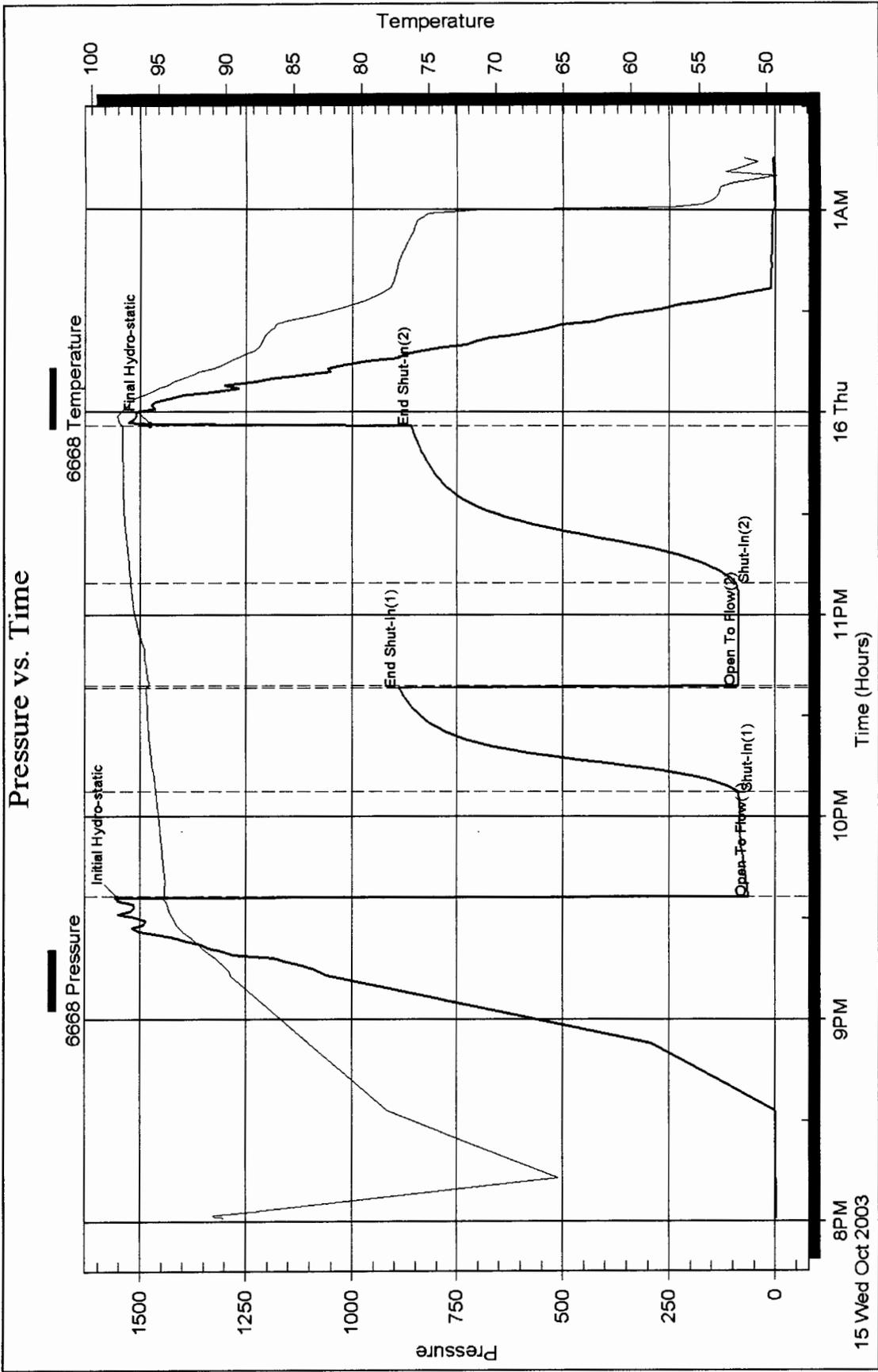
Num Gas Bombs: 0

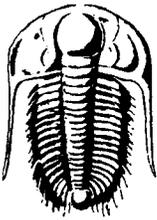
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:





# TRILOBITE TESTING INC.

P.O. Box 362 • Hays, Kansas 67601

INV 5894

Nº 18433

05/03

## Test Ticket

Well Name & No. Lou Ann #31-1 Test No. 1 Date 10-14-93  
 Company Imperial American Oil Corp Zone Tested TORONTO  
 Address 303 N. CAROL Blvd #214 Denton, Texas 76201 (Elevation 1697 KB 1692 GL  
 Co. Rep / Geo. Randy Killian Cont. MURFIN 16 Est. Ft. of Pay - Por. - %  
 Location: Sec. 31 Twp. 11<sup>s</sup> Rge. 15<sup>w</sup> Co. Russell State Ko  
 No. of Copies Reg Distribution Sheet (Y, N) \_\_\_\_\_ Turnkey (Y, N) \_\_\_\_\_ Evaluation (Y, N) \_\_\_\_\_

Interval Tested 2885-2920 Initial Str Wt./Lbs. 50000 Unseated Str Wt./Lbs. 50000  
 Anchor Length 35 Wt. Set Lbs. 25000 Wt. Pulled Loose/Lbs. 60000  
 Top Packer Depth 2880 Tool Weight 2200  
 Bottom Packer Depth 2885 Hole Size 7 7/8" Rubber Size 6 3/4"  
 Total Depth 2920 Wt. Pipe Run - Drill Collar Run 120  
 Mud Wt. 9 LCM TR Vis. 48 WL 9.6 Drill Pipe Size 4 1/2 XH Ft. Run 2749  
 Blow Description IFP - WEAK SURFACE BLOW DIED IN 12 MIN  
FFP - NO BLOW

Recovery - Total Feet	GIP	Ft. in DC	Ft. in DP
<u>20</u>	<u>-</u>	<u>20</u>	<u>-</u>
Rec. <u>20</u> Feet of <u>OCM</u>	%gas <u>5</u>	%oil <u>-</u>	%water <u>95</u> %mud <u>-</u>
Rec. _____ Feet of _____	%gas _____	%oil _____	%water _____ %mud _____
Rec. _____ Feet of _____	%gas _____	%oil _____	%water _____ %mud _____
Rec. _____ Feet of _____	%gas _____	%oil _____	%water _____ %mud _____
Rec. _____ Feet of _____	%gas _____	%oil _____	%water _____ %mud _____
BHT <u>95</u> °F Gravity _____ °API D @ _____ °F Corrected Gravity _____ °API			
RW <u>-</u> @ <u>-</u> °F Chlorides _____ ppm Recovery _____ Chlorides <u>4000</u> ppm System			

AK-1	Alpine	Recorder No.	Test
(A) Initial Hydrostatic Mud	<u>1409</u> PSI	<u>6668</u>	<u>706</u>
(B) First Initial Flow Pressure	<u>15</u> PSI	(depth) <u>2886</u>	Elec. Rec. <u>150</u>
(C) First Final Flow Pressure	<u>23</u> PSI	Recorder No. <u>11085</u>	Jars _____
(D) Initial Shut-In Pressure	<u>488</u> PSI	(depth) <u>2917</u>	Safety Jt. _____
(E) Second Initial Flow Pressure	<u>28</u> PSI	Recorder No. <u>-</u>	Circ Sub _____
(F) Second Final Flow Pressure	<u>35</u> PSI	(depth) <u>-</u>	Sampler _____
(G) Final Shut-In Pressure	<u>162</u> PSI	<b>Initial Opening</b> <u>30</u>	Straddle _____
(Q) Final Hydrostatic Mud	<u>1345</u> PSI	Initial Shut-In <u>30</u>	Ext. Packer _____
		Final Flow <u>30</u>	Shale Packer _____
		Final Shut-In <u>30</u>	Mileage <u>32</u> <u>32</u>
		<b>T-On Location</b> <u>0100</u>	Sub Total: <u>882</u>
		T-Started <u>0129</u>	Std. By _____
		T-Open <u>0310</u>	Other _____
		T-Pulled <u>0510</u>	Total: _____
		T-Out <u>0615</u>	

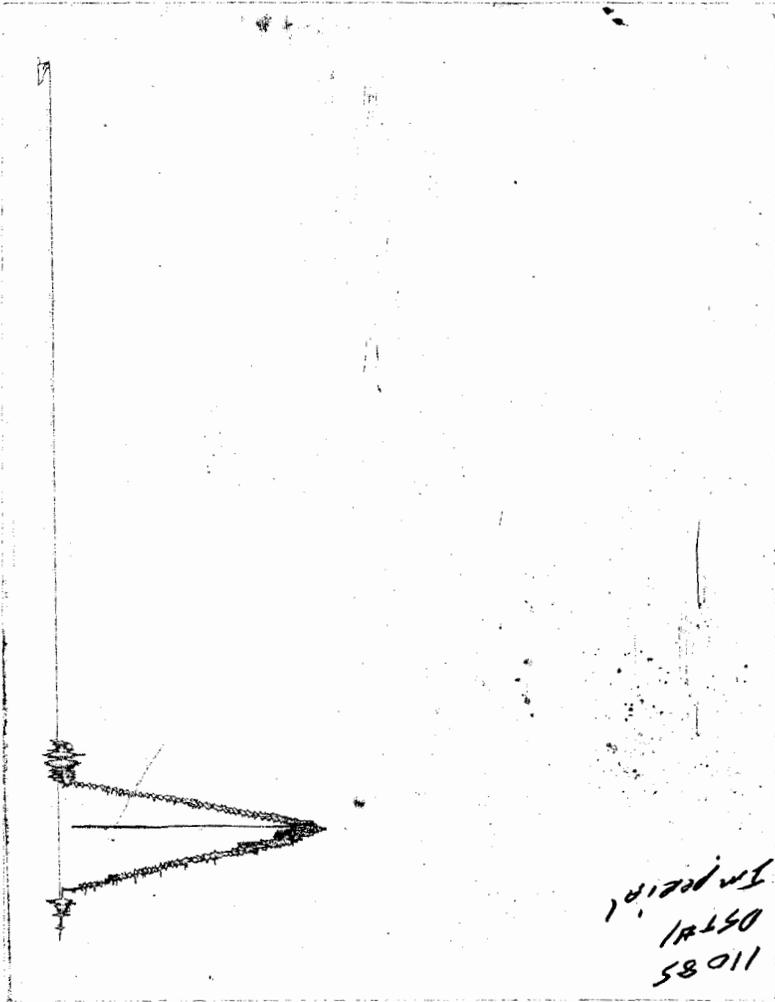
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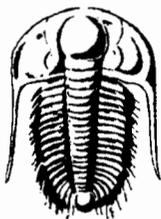
Approved By \_\_\_\_\_

Our Representative Ray Schwager Thank You

# CHART PAGE

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





# TRILOBITE TESTING INC.

P.O. Box 362 • Hays, Kansas 67601

N<sup>o</sup> 18434

05/03

## Test Ticket

Well Name & No. Lou Ann #31-1 Test No. 2 Date 10-14-03  
 Company Imperial American Oil Corp Zone Tested Larling A-D  
 Address 303 N CAROL BLVD #214 DENTON, TEXAS 76201 Elevation 1692 KB 1692 GL  
 Co. Rep / Geo. Randy Killian Cont. MURFIN 16 Est. Ft. of Pay - Por. - %  
 Location: Sec. 31 Twp. 11<sup>s</sup> Rge. 15<sup>w</sup> Co. Russell State Ks  
 No. of Copies Reg Distribution Sheet (Y, N) \_\_\_\_\_ Turnkey (Y, N) \_\_\_\_\_ Evaluation (Y, N) \_\_\_\_\_

Interval Tested 2914-2990 Initial Str Wt./Lbs. 51000 Unseated Str Wt/Lbs. 51000  
 Anchor Length 76 Wt. Set Lbs. 25000 Wt. Pulled Loose/Lbs. 60000  
 Top Packer Depth 2909 Tool Weight 2200  
 Bottom Packer Depth 2914 Hole Size 7 7/8" Rubber Size 6 3/4"  
 Total Depth 2990 Wt. Pipe Run - Drill Collar Run 120  
 Mud Wt. 9.2 LCM TR Vis. 51 WL 6.4 Drill Pipe Size 4 1/2 XH Ft. Run 2804  
 Blow Description IFP - SURFACE Blow died in 7 min  
FFP - NO BLOW

Recovery - Total Feet 5 GIP - Ft. in DC 5 Ft. in DP -  
 Rec. 5 Feet of mud %gas \_\_\_\_\_ %oil \_\_\_\_\_ %water \_\_\_\_\_ %mud \_\_\_\_\_  
 Rec. \_\_\_\_\_ Feet of w/show of oil in Tool %gas \_\_\_\_\_ %oil \_\_\_\_\_ %water \_\_\_\_\_ %mud \_\_\_\_\_  
 Rec. \_\_\_\_\_ Feet of \_\_\_\_\_ %gas \_\_\_\_\_ %oil \_\_\_\_\_ %water \_\_\_\_\_ %mud \_\_\_\_\_  
 Rec. \_\_\_\_\_ Feet of \_\_\_\_\_ %gas \_\_\_\_\_ %oil \_\_\_\_\_ %water \_\_\_\_\_ %mud \_\_\_\_\_  
 Rec. \_\_\_\_\_ Feet of \_\_\_\_\_ %gas \_\_\_\_\_ %oil \_\_\_\_\_ %water \_\_\_\_\_ %mud \_\_\_\_\_  
 BHT 93 °F Gravity \_\_\_\_\_ °API D @ \_\_\_\_\_ °F Corrected Gravity \_\_\_\_\_ °API  
 RW - @ - °F Chlorides \_\_\_\_\_ ppm Recovery \_\_\_\_\_ Chlorides 5000 ppm System

	AK-1	Alpine	PSI	Recorder No.	Test	
(A) Initial Hydrostatic Mud		1412		6668	<input checked="" type="checkbox"/>	700
(B) First Initial Flow Pressure		16		2923	<input checked="" type="checkbox"/>	150
(C) First Final Flow Pressure		18		11085		
(D) Initial Shut-In Pressure		65		2987		
(E) Second Initial Flow Pressure		18		-		
(F) Second Final Flow Pressure		22		-		
(G) Final Shut-In Pressure		64		30		
(Q) Final Hydrostatic Mud		1383		30		

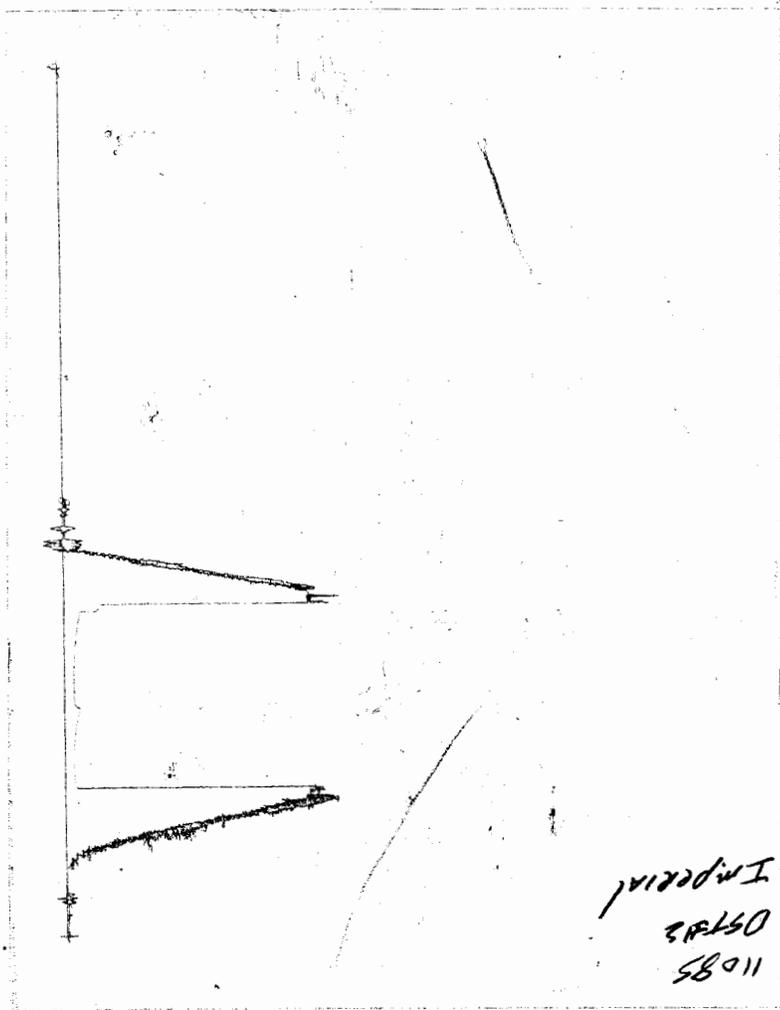
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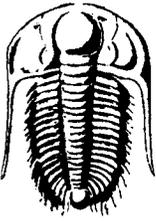
Recorder No. 6668 Test  700  
 (depth) 2923 Elec. Rec.  150  
 Recorder No. 11085 Jars \_\_\_\_\_  
 (depth) 2987 Safety Jt. \_\_\_\_\_  
 Recorder No. - Circ Sub \_\_\_\_\_  
 (depth) - Sampler \_\_\_\_\_  
 Initial Opening 30 Straddle \_\_\_\_\_  
 Initial Shut-In 30 Ext. Packer \_\_\_\_\_  
 Final Flow 30 Shale Packer \_\_\_\_\_  
 Final Shut-In 45 Mileage  32 32  
 T-On Location 1430 Sub Total: 882  
 T-Started 1500 Std. By \_\_\_\_\_  
 T-Open 1645 Other \_\_\_\_\_  
 T-Pulled 1900 Total: \_\_\_\_\_  
 T-Out 2025

Approved By \_\_\_\_\_  
 Our Representative Ray Schwager Thank you

**CHART PAGE**

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





# TRILOBITE TESTING INC.

P.O. Box 362 • Hays, Kansas 67601

N<sup>o</sup> 18435

05/03

## Test Ticket

Well Name & No. Lou Ann #31-1 Test No. 3 Date 10-15-03  
 Company Imperial American Oil Corp Zone Tested LANSING E-G  
 Address 303 N. CARROL BLVD. #214 DEATON, TEXAS 76201 Elevation 1697 KB 1692 GL  
 Co. Rep / Geo. Randy Killian Cont. MURFIN 16 Est. Ft. of Pay - Por. - %  
 Location: Sec. 31 Twp. 11<sup>s</sup> Rge. 15<sup>w</sup> Co. Russell State KO  
 No. of Copies Reg Disbtribution Sheet (Y, N) \_\_\_\_\_ Turnkey (Y, N) \_\_\_\_\_ Evaluation (Y, N) \_\_\_\_\_

Interval Tested 2995-3050 Initial Str Wt./Lbs. 52000 Unseated Str Wt/Lbs. 52000  
 Anchor Length 55 Wt. Set Lbs. 25000 Wt. Pulled Loose/Lbs. 60000  
 Top Packer Depth 2990 Tool Weight 2200  
 Bottom Packer Depth 2995 Hole Size 7 7/8" - Rubber Size 6 3/4" -  
 Total Depth 3050 Wt. Pipe Run - Drill Collar Run 120  
 Mud Wt. 8.9 LCM 1/8<sup>#</sup> Vis. 51 WL 6.4 Drill Pipe Size 4 1/2 X H Ft. Run 2868  
 Blow Description IFP - WEAK BLOW THRU-OUT 1/4" TO 1" BLOW  
FFP - WEAK BLOW THRU-OUT 1/4" BLOW

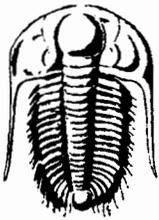
Recovery - Total Feet	GIP	Ft. in DC	Ft. in DP
<u>140</u>	<u>-</u>	<u>120</u>	<u>20</u>
Rec. <u>80</u>	Feet of <u>SOCWM</u>	%gas <u>2</u> %oil <u>48</u> %water <u>50</u> %mud	
Rec. <u>60</u>	Feet of <u>MW</u>	%gas _____ %oil <u>80</u> %water <u>20</u> %mud	
Rec. _____	Feet of _____	%gas _____ %oil _____ %water _____ %mud	
Rec. _____	Feet of _____	%gas _____ %oil _____ %water _____ %mud	
Rec. _____	Feet of _____	%gas _____ %oil _____ %water _____ %mud	
BHT <u>96</u>	°F Gravity <u>-</u>	°API D @ <u>-</u>	°F Corrected Gravity <u>-</u> °API
RW <u>.42</u>	@ <u>52</u> °F	Chlorides <u>18000</u> ppm Recovery	Chlorides <u>5000</u> ppm System

AK-1	Alpine	Recorder No.	Test
(A) Initial Hydrostatic Mud	<u>1454</u> PSI	<u>6668</u>	<u>700</u>
(B) First Initial Flow Pressure	<u>16</u> PSI	(depth) <u>3000</u>	Elec. Rec. <u>150</u>
(C) First Final Flow Pressure	<u>47</u> PSI	Recorder No. <u>11085</u>	Jars _____
(D) Initial Shut-In Pressure	<u>279</u> PSI	(depth) <u>3047</u>	Safety Jt. _____
(E) Second Initial Flow Pressure	<u>55</u> PSI	Recorder No. <u>-</u>	Circ Sub _____
(F) Second Final Flow Pressure	<u>82</u> PSI	(depth) <u>-</u>	Sampler _____
(G) Final Shut-In Pressure	<u>286</u> PSI	<b>Initial Opening</b> <u>30</u>	Straddle _____
(Q) Final Hydrostatic Mud	<u>1433</u> PSI	Initial Shut-In <u>30</u>	Ext. Packer _____
		Final Flow <u>60</u>	Shale Packer _____
		Final Shut-In <u>60</u>	Mileage <u>32</u> <u>32</u>
		<b>T-On Location</b> <u>0345</u>	Sub Total: <u>882</u>
		T-Started <u>0354</u>	Std. By _____
		T-Open <u>0505</u>	Other _____
		T-Pulled <u>0805</u>	Total: _____
		T-Out <u>0930</u>	

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Approved By \_\_\_\_\_  
 Our Representative Ray Schwager Thank you





# TRILOBITE TESTING INC.

P.O. Box 362 • Hays, Kansas 67601

Nº 18436

05/03

## Test Ticket

Well Name & No. Lou Ann #31-1 Test No. 4 Date 10-15-03  
 Company Imperial American Oil Corp Zone Tested LANSING I-K  
 Address 303 N. CARROL BLVD. #214 DENTON, TEXAS 76201 Elevation 1697 KB 1692 GL  
 Co. Rep / Geo. Randy Killian Cont. MURFIN 16 Est. Ft. of Pay - Por. - %  
 Location: Sec. 31 Twp. 11<sup>s</sup> Rge. 15<sup>w</sup> Co. Russell State Ks  
 No. of Copies Reg Distribution Sheet (Y, N) \_\_\_\_\_ Turnkey (Y, N) \_\_\_\_\_ Evaluation (Y, N) \_\_\_\_\_

Interval Tested 3083-3163 Initial Str Wt./Lbs. 52000 Unseated Str Wt./Lbs. 52000  
 Anchor Length 80 Wt. Set Lbs. 25000 Wt. Pulled Loose/Lbs. 70000  
 Top Packer Depth 3078 Tool Weight 2200  
 Bottom Packer Depth 3083 Hole Size 7 7/8" Rubber Size 6 3/4"  
 Total Depth 3163 Wt. Pipe Run - Drill Collar Run 120  
 Mud Wt. 9.1 LCM Te Vis. 46 WL 8 Drill Pipe Size 4 1/2 XH Ft. Run 2962  
 Blow Description IFP - WEAK Blow died in 27 min  
FFP - NO Blow

Recovery - Total Feet 125 GIP - Ft. in DC 120 Ft. in DP 5  
 Rec. 65 Feet of OCM %gas 10 %oil \_\_\_\_\_ %water 90 %mud \_\_\_\_\_  
 Rec. 60 Feet of HO+GCM 15 %gas 25 %oil \_\_\_\_\_ %water 60 %mud \_\_\_\_\_  
 Rec. \_\_\_\_\_ Feet of \_\_\_\_\_ %gas \_\_\_\_\_ %oil \_\_\_\_\_ %water \_\_\_\_\_ %mud \_\_\_\_\_  
 Rec. \_\_\_\_\_ Feet of \_\_\_\_\_ %gas \_\_\_\_\_ %oil \_\_\_\_\_ %water \_\_\_\_\_ %mud \_\_\_\_\_  
 Rec. \_\_\_\_\_ Feet of \_\_\_\_\_ %gas \_\_\_\_\_ %oil \_\_\_\_\_ %water \_\_\_\_\_ %mud \_\_\_\_\_  
 BHT 97 °F Gravity \_\_\_\_\_ °API D @ \_\_\_\_\_ °F Corrected Gravity \_\_\_\_\_ °API  
 RW \_\_\_\_\_ @ \_\_\_\_\_ °F Chlorides \_\_\_\_\_ ppm Recovery \_\_\_\_\_ Chlorides 5000 ppm System

(A) Initial Hydrostatic Mud	AK-1	Alpine	1513	PSI	Recorder No.	6668	Test	<input checked="" type="checkbox"/>
(B) First Initial Flow Pressure			62	PSI	(depth)	3086	Elec. Rec.	<input checked="" type="checkbox"/>
(C) First Final Flow Pressure			86	PSI	Recorder No.	11085	Jars	
(D) Initial Shut-In Pressure			890	PSI	(depth)	3160	Safety Jt.	
(E) Second Initial Flow Pressure			88	PSI	Recorder No.	-	Circ Sub	
(F) Second Final Flow Pressure			92	PSI	(depth)	-	Sampler	
(G) Final Shut-In Pressure			860	PSI	Initial Opening	30	Straddle	
(Q) Final Hydrostatic Mud			1509	PSI	Initial Shut-In	30	Ext. Packer	
					Final Flow	30	Shale Packer	
					Final Shut-In	45	Mileage	<input checked="" type="checkbox"/> 32
					T-On Location	1945	Sub Total:	882
					T-Started	2000	Std. By	
					T-Open	2140	Other	200 copies
					T-Pulled	2355	Total:	@ 2.50 50
					T-Out	0120		932

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Approved By \_\_\_\_\_  
 Our Representative Ray Schwager Thank you

**CHART PAGE**

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