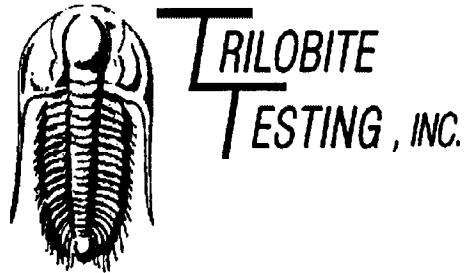


15-135-24301

16-17s-22w



DRILL STEM TEST REPORT

Prepared For: **Northern Lights Oil com.**

P O box 164
Andover, Ks 67002

ATTN: Kurt Smith

16-17-22 Ness

Delbert

Start Date: 2004.09.14 @ 03:14:02

End Date: 2004.09.14 @ 10:29:17

Job Ticket #: 20054 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

Northern Lights Oil com.

P.O. box 164
Andover, Ks 67002

ATTN: Kurt Smith

Delbert

16-17-22 Ness

Job Ticket: 20054

DST#: 1

Test Start: 2004.09.14 @ 03:14:02

GENERAL INFORMATION:

Formation: **Cherokee sand**

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

Time Tool Opened: 05:08:32

Time Test Ended: 10:29:17

Test Type: **Conventional Bottom Hole**

Tester: **Brandon Turley**

Unit No: **15**

Interval: **4260.00 ft (KB) To 4340.00 ft (KB) (TVD)**

Total Depth: **4340.00 ft (KB) (TVD)**

Hole Diameter: **7.88 inches** Hole Condition: **Fair**

Reference Elevations: **2330.00 ft (KB)**

2325.00 ft (CF)

KB to GRVCF: **5.00 ft**

Serial #: 6724 **Inside**

Press@RunDepth: **237.38 psig @ 4341.00 ft (KB)**

Start Date: **2004.09.14**

End Date:

2004.09.14

Start Time: **03:14:02**

End Time:

10:29:17

Capacity: **7000.00 psig**

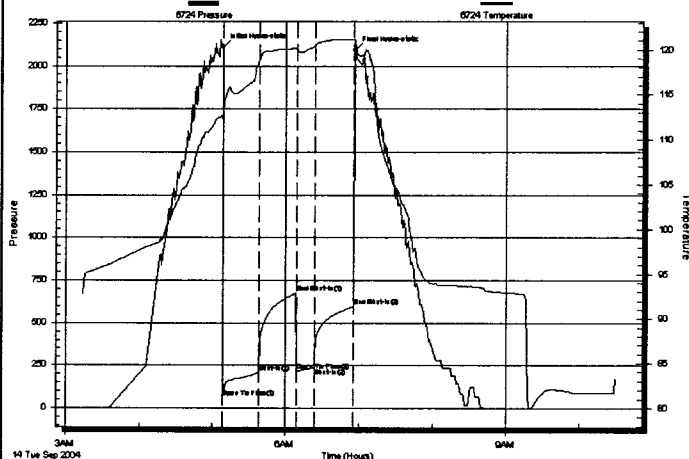
Last Calib.: **1899.12.30**

Time On Btm: **2004.09.14 @ 05:08:17**

Time Off Btm: **2004.09.14 @ 06:56:02**

TEST COMMENT: IF: 1/4 blow BOB in 6 min.
IS: Bleed off in 3 min built to 2 3/4 in 30 min.
FF: 1/4 blow BOB in 12 min.
FS: Surface blow built to 1 in 30 min.

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2108.70	112.70	Initial Hydro-static
1	59.92	112.10	Open To Flow (1)
31	208.75	118.77	Shut-In(1)
61	675.10	120.12	End Shut-In(1)
61	217.90	119.95	Open To Flow (2)
76	237.38	120.36	Shut-In(2)
107	596.84	121.14	End Shut-In(2)
108	2092.59	121.15	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
245.00	mco 10% m 90% o	1.20
189.00	gocm 60% m 20% o 20% g	2.65
219.00	mco 50% m 50% o	3.07

Gas Rates

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



TRILOBITE
TESTING, INC

DRILL STEM TEST REPORT

TOOL DIAGRAM

Northern Lights Oil com.

Delbert

P O box 164
Andover, Ks 67002

16-17-22 Ness

Job Ticket: 20054

DST#: 1

ATTN: Kurt Smith

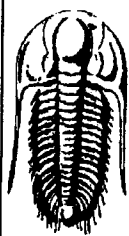
Test Start: 2004.09.14 @ 03:14:02

Tool Information

Drill Pipe:	Length:	4093.00 ft	Diameter:	3.80 inches	Volume:	57.41 bbl	Tool Weight:	1500.00 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:	245.00 ft	Diameter:	2.25 inches	Volume:	1.20 bbl	Weight to Pull Loose:	78000.00 lb
					Total Volume:	58.61 bbl	Tool Chased	0.00 ft
Drill Pipe Above KB:	25.00 ft						String Weight: Initial	58000.00 lb
Depth to Top Packer:	4340.00 ft						Final	60000.00 lb
Depth to Bottom Packer:	ft							
Interval between Packers:	80.00 ft							
Tool Length:	107.00 ft							
Number of Packers:	2	Diameter:	inches					
Tool Comments:								

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			4314.00	
Shut In Tool	5.00			4319.00	
Hydraulic tool	5.00			4324.00	
Jars	5.00			4329.00	
Safety Joint	2.00			4331.00	
Packer	5.00		Fluid	4336.00	27.00 Bottom Of Top Packer
Packer	4.00			4340.00	
Stubb	1.00			4341.00	
Recorder	0.00	6724	Inside	4341.00	
Perforations	10.00			4351.00	
Change Over Sub	1.00			4352.00	
Drill Pipe	63.00			4415.00	
Change Over Sub	1.00			4416.00	
Recorder	0.00	13849	Inside	4416.00	
Bullnose	4.00			4420.00	80.00 Bottom Packers & Anchor

Total Tool Length: 107.00



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Northern Lights Oil com

Delbert

P O box 164
Andover, Ks 67002

16-17-22 Ness

Job Ticket: 20054

DST#: 1

ATTN: Kurt Smith

Test Start: 2004.09.14 @ 03:14:02

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

38 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

3000 ppm

Viscosity: 50.00 sec/qt

Cushion Volume:

bbl

Water Loss: 7.77 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 3000.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
245.00	mco 10%m 90%o	1.205
189.00	gocm 60%m 20%o 20% g	2.651
219.00	mco 50%m 50% o	3.072

Total Length: 653.00 ft

Total Volume: 6.928 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

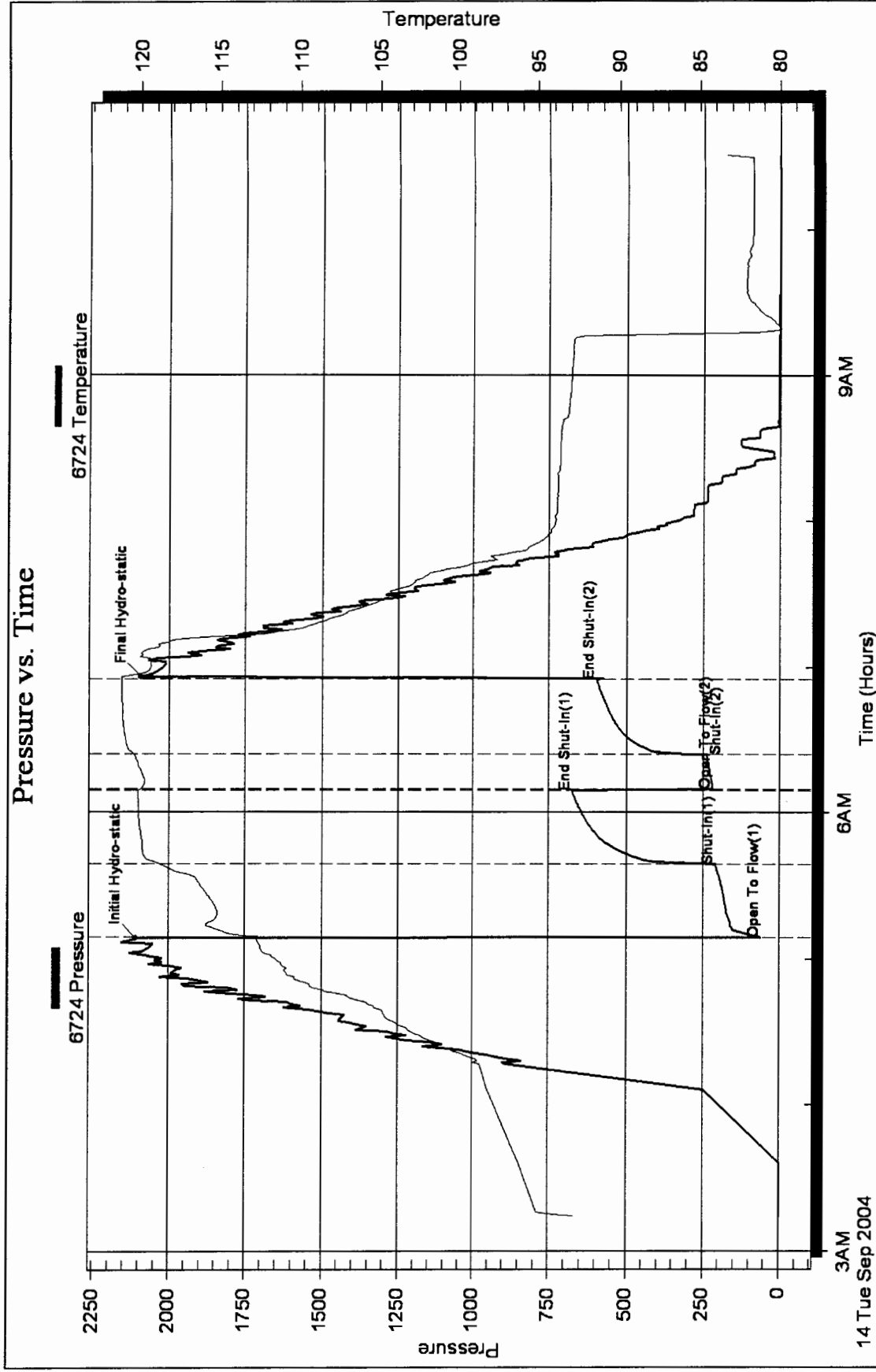
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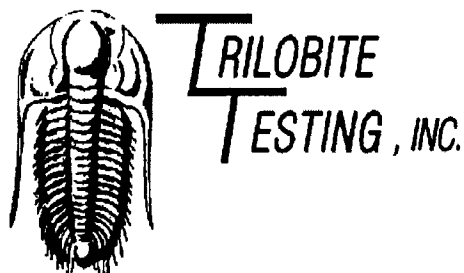
Inside

Northern Lights Oil com.

16-17-22 Ness

DST Test Number: 1





DRILL STEM TEST REPORT

Prepared For: **Northern Lights Oil com.**

P O box 164
Andover, Ks 67002

ATTN: Kurt Smith

16-17-22 Ness

Delbert

Start Date: 2004.09.15 @ 08:40:16

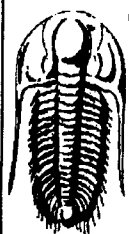
End Date: 2004.09.15 @ 16:35:46

Job Ticket #: 20055 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

Northern Lights Oil com

P O box 164
Andover, Ks 67002

ATTN: Kurt Smith

Delbert

16-17-22 Ness

Job Ticket: 20055

DST#: 2

Test Start: 2004.09.15 @ 08:40:16

GENERAL INFORMATION:

Formation: **Cherokee sand**

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

Time Tool Opened: 10:25:31

Time Test Ended: 16:35:46

Test Type: **Conventional Bottom Hole**

Tester: **Brandon Turley**

Unit No: **15**

Interval: **4260.00 ft (KB) To 4352.00 ft (KB) (TVD)**

Total Depth: **4340.00 ft (KB) (TVD)**

Hole Diameter: **7.88 inches** Hole Condition: **Fair**

Reference Elevations: **2330.00 ft (KB)**

2325.00 ft (CF)

KB to GR/CF: **5.00 ft**

Serial #: 6724

Inside

Press@RunDepth: **214.06 psig @ 4353.00 ft (KB)**

Start Date: **2004.09.15**

End Date:

2004.09.15

Capacity: **7000.00 psig**

Last Calib.: **1899.12.30**

Start Time: **08:40:16**

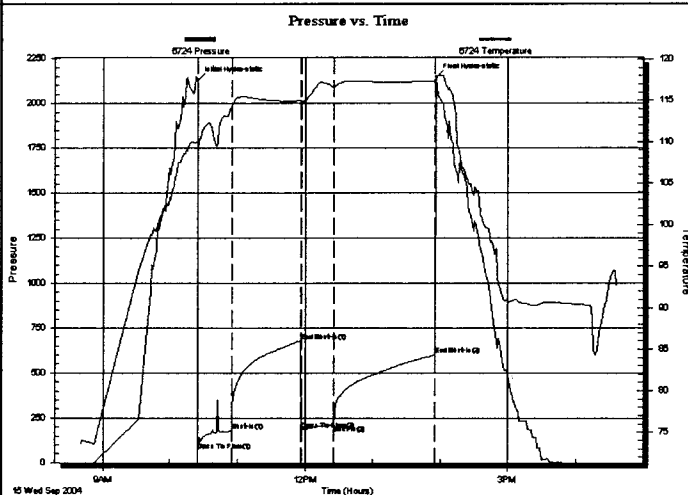
End Time:

16:35:46

Time On Btm: **2004.09.15 @ 10:25:16**

Time Off Btm: **2004.09.15 @ 13:56:16**

TEST COMMENT: IF: 1/4 blow BOB in 9 min.
IS: Surface blow died in 20 min.
FF: 1/4 blow BOB in 16 min.
FS: Surface blow died in 18 min.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2131.02	109.93	Initial Hydro-static
1	70.03	109.22	Open To Flow (1)
30	181.34	114.27	Shut-In(1)
91	675.79	115.00	End Shut-In(1)
91	187.58	114.87	Open To Flow (2)
121	214.06	116.67	Shut-In(2)
210	600.72	117.34	End Shut-In(2)
211	2147.65	117.59	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
245.00	gocm 20%m 30%o 50%g	1.20
63.00	ocm 30%m 70%o	0.88
63.00	gocm 10%m 30%o 60%g	0.88
189.00	ocm 50%m 50%o	2.65

Gas Rates

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

DRILL STEM TEST REPORT

TOOL DIAGRAM

Northern Lights Oil com.

Delbert

P O box 164
Andover, Ks 67002

16-17-22 Ness

Job Ticket: 20055

DST#: 2

ATTN: Kurt Smith

Test Start: 2004.09.15 @ 08:40:16

Tool Information

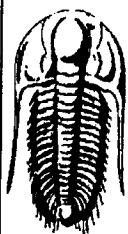
Drill Pipe:	Length: 4105.00 ft	Diameter: 3.80 inches	Volume: 57.58 bbl	Tool Weight: 1500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 245.00 ft	Diameter: 2.25 inches	Volume: 1.20 bbl	Weight to Pull Loose: 78000.00 lb
		Total Volume: 58.78 bbl		Tool Chased 0.00 ft
Drill Pipe Above KB:	25.00 ft			String Weight: Initial 58000.00 lb
Depth to Top Packer:	4352.00 ft			Final 60000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	92.00 ft			
Tool Length:	119.00 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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Change Over Sub	1.00			4326.00	
Shut In Tool	5.00			4331.00	
Hydraulic tool	5.00			4336.00	
Jars	5.00			4341.00	
Safety Joint	2.00			4343.00	
Packer	5.00		Fluid	4348.00	27.00 Bottom Of Top Packer
Packer	4.00			4352.00	
Stubb	1.00			4353.00	
Recorder	0.00	6724	Inside	4353.00	
Perforations	22.00			4375.00	
Change Over Sub	1.00			4376.00	
Drill Pipe	63.00			4439.00	
Change Over Sub	1.00			4440.00	
Recorder	0.00	13849	Inside	4440.00	
Bulhose	4.00			4444.00	92.00 Bottom Packers & Anchor

Total Tool Length: 119.00



TRILOBITE
TESTING, INC

DRILL STEM TEST REPORT

FLUID SUMMARY

Northern Lights Oil com

Delbert

P O box 164
Andover, Ks 67002

16-17-22 Ness

Job Ticket: 20055

DST#: 2

ATTN: Kurt Smith

Test Start: 2004.09.15 @ 08:40:16

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

38 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

3000 ppm

Viscosity: 50.00 sec/qt

Cushion Volume:

bbl

Water Loss: 7.79 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 3000.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
245.00	gocm 20%m 30%o 50%g	1.205
63.00	ocm 30%m 70%o	0.884
63.00	gocm 10%m 30%o 60%g	0.884
189.00	ocm 50%m 50%o	2.651

Total Length: 560.00 ft

Total Volume: 5.624 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Serial #: 6724

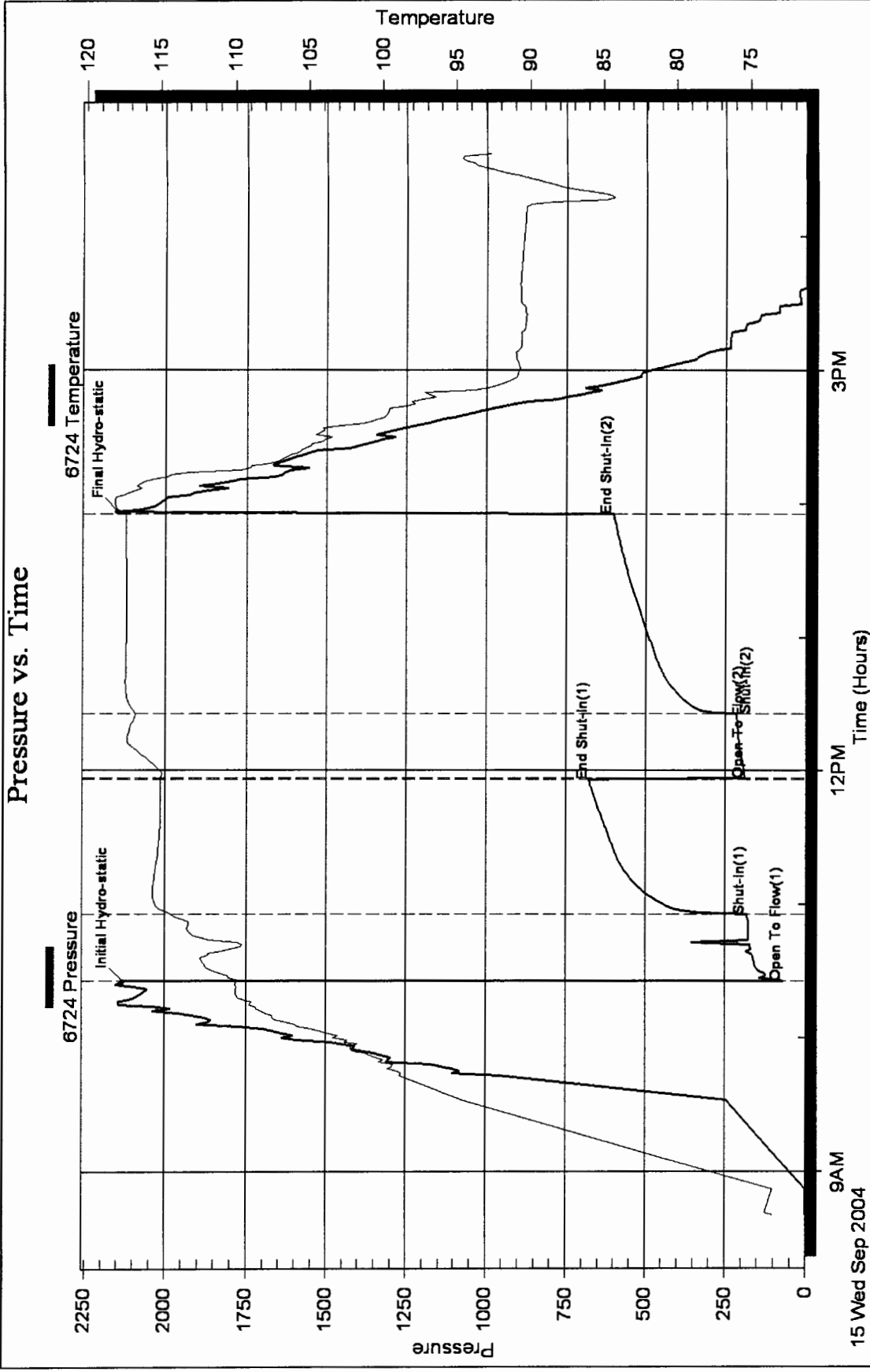
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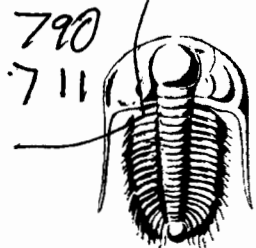
Northern Lights Oil com.

16-17-22 Ness

DST Test Number: 2

Pressure vs. Time





TRILOBITE TESTING INC.

P.O. Box 362 • Hays, Kansas 67601

No 20054

05/03

Test Ticket

Well Name & No. Delbert Test No. 1 Date 9-14-04
Company Norther Lights oil co. Zone Tested Cherokee Sand
Address PO Box 164 Andover, KS 67002 Elevation 2330 KB 2325 GL
Co. Rep / Geo. Kurt Smith Cont. Mallard Est. Ft. of Pay _____ Por. _____ %
Location: Sec. 16 Twp. 17 Rge. 22 Co. Ness State KS
No. of Copies norm Distribution Sheet (Y, N) _____ Turnkey (Y, N) _____ Evaluation (Y, N) _____

Interval Tested 4260 4340 Initial Str Wt./Lbs. 58000 Unseated Str Wt./Lbs. 60000
Anchor Length 80 Wt. Set Lbs. 25000 Wt. Pulled Loose/Lbs. 78000
Top Packer Depth 4255 Tool Weight 1500
Bottom Packer Depth 4260 Hole Size 7 7/8" ✓ Rubber Size 6 3/4" ✓
Total Depth 4340 Wt. Pipe Run _____ Drill Collar Run 245
Mud Wt. 9.2 LCM 0 Vis. 50 WL 7.8 Drill Pipe Size 4 1/2 X H Ft. Run 4093
Blow Description IF: 1/4 blow BOB in 6 min.
IS: Bleed off in 3 min surface blow built to 2 3/4 in 30 min
FF: 1/4 blow BOB in 12 min.
FS: surface blow built to 1 in 3 min.
Recovery - Total Feet 252 653 GIP 252 Ft. in DC 245 Ft. in DP 408
Rec. 252 Feet of 100 %gas _____ %oil _____ %water _____ %mud _____
Rec. 219 Feet of MCO %gas 50 %oil _____ %water 50 %mud _____
Rec. 189 Feet of 90CM 20 %gas 20 %oil _____ %water 60 %mud _____
Rec. 245 Feet of MCO %gas 90 %oil _____ %water 10 %mud _____
Rec. _____ Feet of _____ %gas _____ %oil _____ %water _____ %mud _____
BHT 101 °F Gravity 40 °API D @ 80 °F Corrected Gravity 38 °API
RW 440 @ 80 °F Chlorides 3000 ppm Recovery 3000 Chlorides 3000 ppm System

AK-1 Alpine
(A) Initial Hydrostatic Mud 2108 PSI Recorder No. 6724 Test X 1000
(B) First Initial Flow Pressure 59 PSI (depth) 4261 Elec. Rec. X
(C) First Final Flow Pressure 208 PSI Recorder No. 13849 Jars X 200
(D) Initial Shut-In Pressure 675 PSI (depth) 4336 Safety Jt. X 50
(E) Second Initial Flow Pressure 217 PSI Recorder No. _____ Circ Sub X N/C
(F) Second Final Flow Pressure 237 PSI (depth) _____ Sampler _____
(G) Final Shut-In Pressure 596 PSI Initial Opening 30 Straddle _____
(Q) Final Hydrostatic Mud 2092 PSI Initial Shut-In 30 Ext. Packer _____
Final Flow 15 Shale Packer _____
Final Shut-In 30 Mileage 120 \$ 102.00
T-On Location 14 30 Sub Total: 1352.00
T-Started 1513 Std. By _____
T-Open 1708 Other _____
T-Pulled 18:53 Total: _____
T-Out 2200

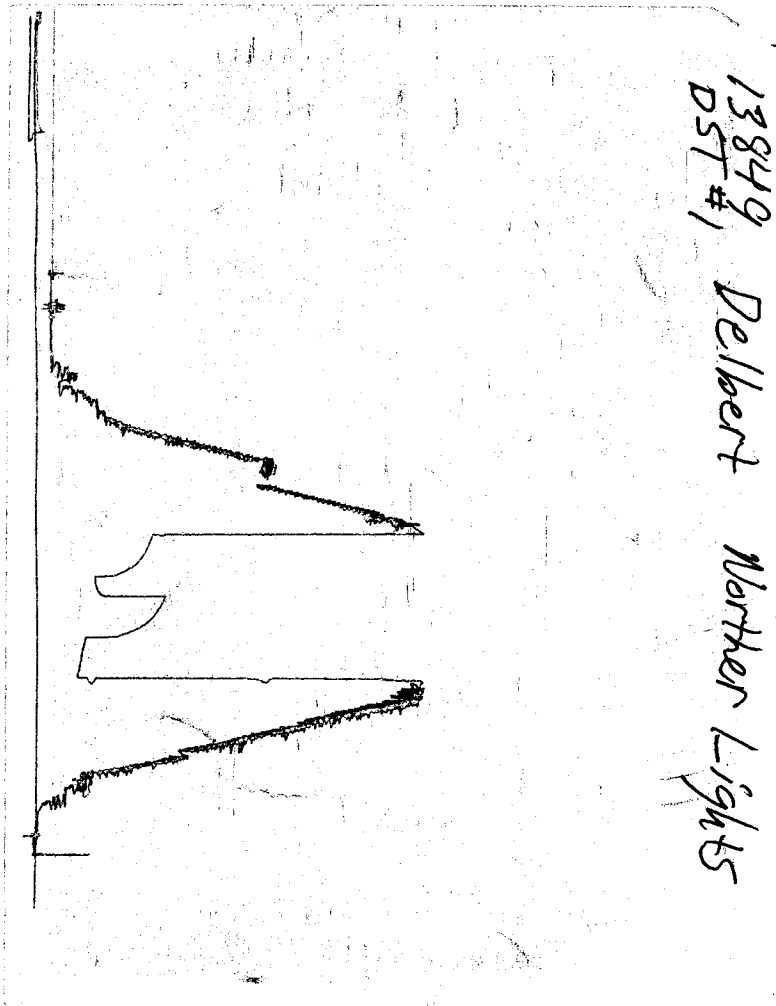
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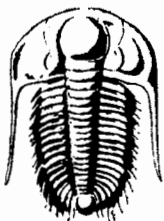
Approved By _____
Our Representative _____

CHART PAGE

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

13849 Delbert Norther Lights
DST #1





TRILOBITE TESTING INC.

P.O. Box 362 • Hays, Kansas 67601

No 20055

05/03

Test Ticket

Well Name & No.	Delbert		Test No.	2	Date	9-15-04
Company	Norther Lights oil CO.		Zone Tested	Cherokee Sand		
Address	P.O. Box 164 Andover, KS 67002		Elevation	2380	KB	2325 GL
Co. Rep / Geo.	Kurt Smith	Cont.	M. Allard	Est. Ft. of Pay	Por. %	
Location: Sec.	16	Twp.	17	Rge.	22	Co. Ness State KS
No. of Copies	norm	Disbtribution Sheet (Y, N)	Turnkey (Y, N)		Evaluation (Y, N)	

Interval Tested	4260	4352	Initial Str Wt./Lbs.	58000	Unseated Str Wt./Lbs.	60000	
Anchor Length	92		Wt. Set Lbs.	25000	Wt. Pulled Loose/Lbs.	78000	
Top Packer Depth	4255		Tool Weight	1500			
Bottom Packer Depth	4260		Hole Size 7 7/8"	✓	Rubber Size 6 3/4"	✓	
Total Depth	4352		Wt. Pipe Run	—	Drill Collar Run	245	
Mud Wt.	9.2	LCM	Vis.	50	WL	2.8	
Blow Description	IF: 1/4 blow BOB in 9 min. IS: Surface blow died in 20 min. FF: 1/4 blow BOB in 16 min. FS: Surface blow died in 18 min.						
Recovery - Total Feet	560	GIP	126	Ft. in DC	245	Ft. in DP	315
Rec.	189	Feet of	0CM	%gas	50	%oil	%water 50 %mud
Rec.	63	Feet of	90CM	60	%gas 30	%oil	%water 10 %mud
Rec.	63	Feet of	0CM	%gas 70	%oil	%water 30	%mud
Rec.	245	Feet of	90CM	50	%gas 30	%oil	%water 20 %mud
Rec.		Feet of	90CM	%gas	%oil	%water	%mud
BHT	117	°F Gravity	40	°API D @	80	°F Corrected Gravity	38 °API
RW	—	@	—	Chlorides	3000	ppm Recovery	3000 Chlorides 3000 ppm System

	AK-1	Alpine					
(A) Initial Hydrostatic Mud	2131	PSI	Recorder No.	6724	Test	X	1000
(B) First Initial Flow Pressure	90	PSI	(depth)	4261	Elec. Rec.	X	
(C) First Final Flow Pressure	181	PSI	Recorder No.	13849	Jars	X	200
(D) Initial Shut-In Pressure	675	PSI	(depth)	4348	Safety Jt.	X	50
(E) Second Initial Flow Pressure	187	PSI	Recorder No.		Circ Sub	X N/C	
(F) Second Final Flow Pressure	214	PSI	(depth)		Sampler		
(G) Final Shut-In Pressure	600	PSI	Initial Opening	30	Straddle		
(Q) Final Hydrostatic Mud	2147	PSI	Initial Shut-In	60	Ext. Packer		
			Final Flow	30	Shale Packer		
			Final Shut-In	90	Mileage		102.00
			T-On Location	1430	Sub Total:		1352.00
			T-Started	08:40	Std. By		
			T-Open	1026	Other		
			T-Pulled	1356	Total:		
			T-Out	1636			

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Approved By:

Our Representative:

CHART PAGE

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

13849 Dst 2
Delbert
Nortter lights

