

15-055-21695

TRILOBITE TESTING L.L.C.

34-22s-31w

OPERATOR : Northern Lights Oil Co.
 WELL NAME: Lilly #1
 LOCATION : 34-22s-31w Finney co KS
 INTERVAL : 4596.00 To 4650.00 ft

DATE 10-22-00
 KB 2885.00 ft TICKET NO: 12727 DST #1
 GR 2880.00 ft FORMATION: Marmaton
 TD 4650.00 ft TEST TYPE: CONVENTIONAL

RECORDER DATA

Mins	Field	1	2	3	4	TIME DATA-----
PF 30 Rec.	13339	13339				PF Fr. 1750 to 1820 hr
SI 60 Range(Psi)	4000.0	4000.0	0.0	0.0	0.0	IS Fr. 1820 to 1920 hr
SF 45 Clock(hrs)	12	12				SF Fr. 1920 to 2005 hr
FS 90 Depth(ft)	4645.0	4645.0	0.0	0.0	0.0	FS Fr. 2005 to 2135 hr

	Field	1	2	3	4	
A. Init Hydro	2353.0	2405.0	0.0	0.0	0.0	T STARTED 1600 hr
B. First Flow	83.0	117.0	0.0	0.0	0.0	T ON BOTM 1745 hr
B1. Final Flow	104.0	140.0	0.0	0.0	0.0	T OPEN 1750 hr
C. In Shut-in	1210.0	1249.0	0.0	0.0	0.0	T PULLED 2135 hr
D. Init Flow	176.0	203.0	0.0	0.0	0.0	T OUT 2330 hr
E. Final Flow	187.0	206.0	0.0	0.0	0.0	
F. Fl Shut-in	1210.0	1249.0	0.0	0.0	0.0	TOOL DATA-----
G. Final Hydro	2333.0	2371.0	0.0	0.0	0.0	Tool Wt. 2000.00 lbs
Inside/Outside	I	I				Wt Set On Packer 30000.00 lbs
						Wt Pulled Loose 65000.00 lbs
						Initial Str Wt 55000.00 lbs
						Unseated Str Wt 55000.00 lbs
						Bot Choke 0.75 in
						Hole Size 7.78 in
						D Col. ID 2.25 in
						D. Pipe ID 3.80 in
						D.C. Length 241.00 ft
						D.P. Length 4363.00 ft

RECOVERY

Tot Fluid 300.00 ft of 241.00 ft in DC and 59.00 ft in DP
 90.00 ft of Drilling mud
 0.00 ft of 100% mud
 210.00 ft of Water
 0.00 ft of 100% water
 0.00 ft of
 0.00 ft of
 0.00 ft of
 0.00 ft of
 SALINITY 44000.00 P.P.M. A.P.I. Gravity 0.00

BLOW DESCRIPTION

Initial Flow:
 Weak surface blow built to 3"
 Initial Shut-In:
 NO blow back.
 Final Flow:
 Weak return in 10 minutes. Steady
 throughout.
 Final Shut-In:
 No blow back.

SAMPLES:
 SENT TO:

Test Successful: Y

MUD DATA-----
 Mud Type Chemical
 Weight 9.40 lb/c
 Vis. 47.00 S/L
 W.L. 8.20 in3
 F.C. 0.00 in
 Mud Drop
 Amt. of fill 0.00 ft
 Btm. H. Temp. 129.00 F
 Hole Condition
 % Porosity 0.00
 Packer Size 6.75 in
 No. of Packers 2
 Cushion Amt. 0.00
 Cushion Type
 Reversed Out
 Tool Chased
 Tester Rod Steinbrink
 Co. Rep. Kurt Smith
 Contr. Mallard
 Rig # 2
 Unit #
 Pump T.

DST#1
13339 X

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

TRILOBITE TESTING L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Test Ticket

N^o 12727

Well Name & No.	<u>Lilly #1</u>	Test No.	<u>1</u>	Date	<u>10-22-00</u>
Company	<u>Northern Lights Oil Company</u>	Zone Tested	<u>Marmaton</u>		
Address	<u>P.O. Box 164 Andover, KS. 67002</u>	Elevation	<u>2885</u>	KB	<u>2880</u> GL
Co. Rep / Geo.	<u>Kurt Smith</u>	Cont.	<u>Mallard #2</u>	Est. Ft. of Pay	<u> </u> Por. <u> </u> %
Location: Sec.	<u>34</u>	Twp.	<u>22^S</u>	Rge.	<u>31^W</u> Co. <u>Finney</u> State <u>KS</u>
No. of Copies	<u> </u>	Distribution Sheet (Y, N)	<u> </u>	Turnkey (Y, N)	<u> </u> Evaluation (Y, N) <u> </u>

Interval Tested	<u>4596 - 4650</u>	Initial Str Wt./Lbs.	<u>55,000</u>	Unseated Str Wt./Lbs.	<u>55,000</u>
Anchor Length	<u>54'</u>	Wt. Set Lbs.	<u>30,000</u>	Wt. Pulled Loose/Lbs.	<u>65,000</u>
Top Packer Depth	<u>4591</u>	Tool Weight	<u>2,000</u>		
Bottom Packer Depth	<u>4596</u>	Hole Size — 7 7/8"	<u> </u>	Rubber Size — 6 3/4"	<u> </u>
Total Depth	<u>4650</u>	Wt. Pipe Run	<u> </u>	Drill Collar Run	<u>241'</u> (4)
Mud Wt. <u>9.4</u> LCM <u> </u> Vis. <u>47</u> WL <u>8.2</u>		Drill Pipe Size	<u>4 1/2" XH</u>	Ft. Run	<u>4363'</u> (70)
Blow Description	<u>IF: Weak surface blow built to 3"</u>				
	<u>ISI: No blow back</u>				
	<u>FF: Weak return in 10 mins steady throughout.</u>				
	<u>FSI: No blow back</u>				

Recovery — Total Feet	<u>300'</u>	GIP	<u> </u>	Ft. in DC	<u>241'</u>	Ft. in DP	<u>59'</u>
Rec.		Feet Of		%gas	%oil	%water	%mud
Rec.	<u>90'</u>	Feet Of	<u>Drlg Mud</u>	%gas	%oil	%water	%mud
Rec.		Feet Of		%gas	%oil	%water	%mud
Rec.	<u>210'</u>	Feet Of	<u>Water</u>	%gas	%oil	%water	%mud
Rec.		Feet Of		%gas	%oil	%water	%mud
BHT	<u>129°</u>	°F Gravity	<u> </u>	°API D@	<u> </u>	°F Corrected Gravity	<u> </u> °API
RW	<u>-17</u>	@	<u>70°</u>	°F Chlorides	<u>44,000</u>	ppm Recovery	<u> </u> Chlorides <u>4,200</u> ppm System

	AK-1	Alpine		
(A) Initial Hydrostatic Mud	<u>2353</u>		PSI Recorder No.	<u>13309</u>
(B) First Initial Flow Pressure	<u>83</u>		PSI (depth)	<u>4598</u>
(C) First Final Flow Pressure	<u>104</u>		PSI Recorder No.	<u>13339</u>
(D) Initial Shut-In Pressure	<u>1210</u>		PSI (depth)	<u>4645</u>
(E) Second Initial Flow Pressure	<u>176</u>		PSI Recorder No.	<u> </u>
(F) Second Final Flow Pressure	<u>187</u>		PSI (depth)	<u> </u>
(G) Final Shut-in Pressure	<u>1210</u>		PSI Initial Opening	<u>30</u>
(Q) Final Hydrostatic Mud	<u>2333</u>		PSI Initial Shut-in	<u>60</u>
			Final Flow	<u>45</u>
			Final Shut-in	<u>90</u>
			Safety Joint	<u> </u>
			Straddle	<u> </u>
			Circ. Sub	<u>X</u> <u>N/C</u>
			Sampler	<u> </u>
			Extra Packer	<u> </u>
			Elec. Rec.	<u> </u>
			Mileage	<u>40 mi</u> <u>40</u>
			Other	<u> </u>
			TOTAL PRICE \$	<u>790</u>

TRILOBITE TESTING L.L.C. SHALL NOT BE LIABLE FOR DAMAGE OF ANY KIND OF THE PROPERTY OR PERSONNEL OF THE ONE FOR WHOM A TEST IS MADE, OR FOR ANY LOSS SUFFERED OR SUSTAINED, DIRECTLY OR INDIRECTLY, THROUGH THE USE OF ITS EQUIPMENT, OR ITS STATEMENTS OR OPINION CONCERNING THE RESULTS OF ANY TEST. TOOLS LOST OR DAMAGED IN THE HOLE SHALL BE PAID FOR AT COST BY THE PARTY FOR WHOM THE TEST IS MADE.

Approved By

Our Representative Rod Steinbrink

TRILOBITE TESTING L.L.C.

OPERATOR : Northern Lights Oil Co.
WELL NAME: Lilly #1
LOCATION : 34-22s-31w Finney co KS
INTERVAL : 4773.00 To 4796.00 ft

DATE 10-23-00
KB 2885.00 ft TICKET NO: 12728 DST #2
GR 2880.00 ft FORMATION: Morrow
TD 4796.00 ft TEST TYPE: CONVENTIONAL

RECORDER DATA

Mins	Field	1	2	3	4	TIME DATA-----
PF 30 Rec.	13339	13339				PF Fr. 2100 to 2115 hr
SI 60 Range(Psi)	4000.0	4000.0	0.0	0.0	0.0	IS Fr. 2115 to 2145 hr
SF 45 Clock(hrs)	12	12				SF Fr. 2145 to 2200 hr
FS 90 Depth(ft)	4791.0	4791.0	0.0	0.0	0.0	FS Fr. to 0 hr

	Field	1	2	3	4	
A. Init Hydro	2413.0	2405.0	0.0	0.0	0.0	T STARTED 1900 hr
B. First Flow	31.0	61.0	0.0	0.0	0.0	T ON BOTM 1955 hr
B1. Final Flow	31.0	43.0	0.0	0.0	0.0	T OPEN 2100 hr
C. In Shut-in	31.0	37.0	0.0	0.0	0.0	T PULLED 2200 hr
D. Init Flow	41.0	63.0	0.0	0.0	0.0	T OUT 2330 hr
E. Final Flow	0.0	0.0	0.0	0.0	0.0	
F. Fl Shut-in	0.0	0.0	0.0	0.0	0.0	TOOL DATA-----
G. Final Hydro	2383.0	2387.0	0.0	0.0	0.0	Tool Wt. 1800.00 lbs
Inside/Outside	I	I				Wt Set On Packer 30000.00 lbs
						Wt Pulled Loose 60000.00 lbs
						Initial Str Wt 55000.00 lbs
						Unseated Str Wt 55000.00 lbs
						Bot Choke 0.75 in
						Hole Size 7.78 in
						D Col. ID 2.25 in
						D. Pipe ID 3.80 in
						D.C. Length 241.00 ft
						D.P. Length 4522.00 ft

RECOVERY

Tot Fluid 5.00 ft of 5.00 ft in DC and 0.00 ft in DP
5.00 ft of Drilling mud
0.00 ft of 100% mud
0.00 ft of
0.00 ft of
0.00 ft of
0.00 ft of
0.00 ft of
0.00 ft of

SALINITY 0.00 P.P.M. A.P.I. Gravity 0.00

BLOW DESCRIPTION

Initial Flow:
Weak surface blow died in 10 minutes.
Final Flow:
No blow. Flushed tool good surge- no help. TOH @ co Orders

SAMPLES:
SENT TO:

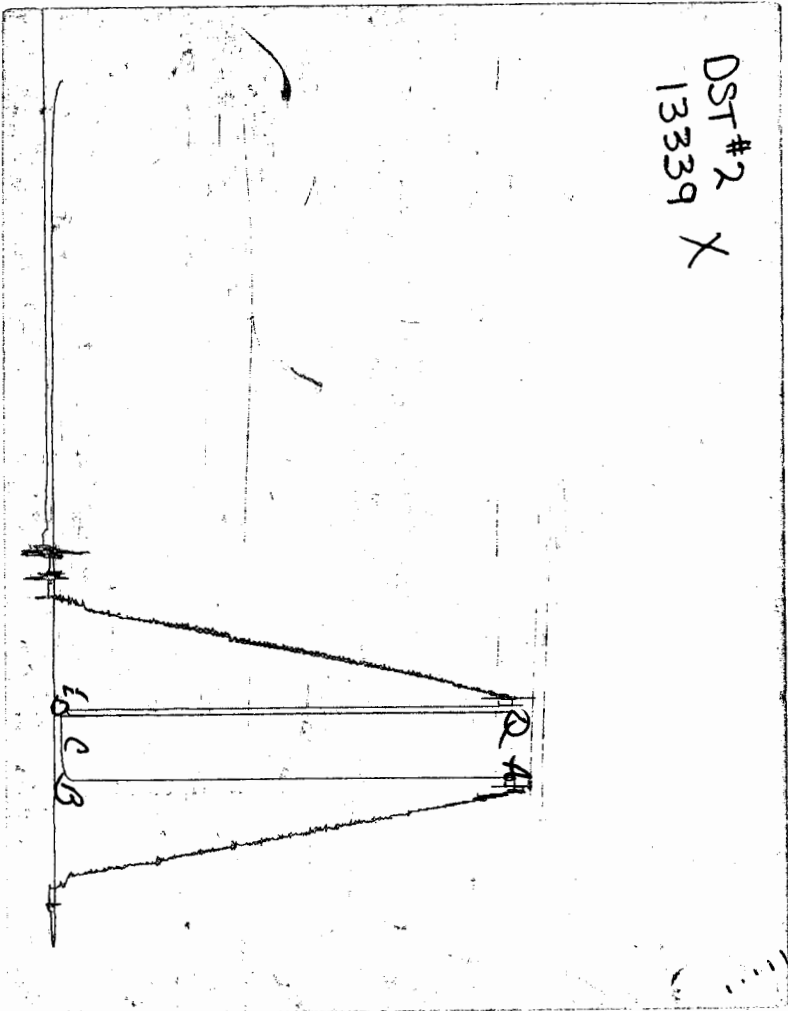
MUD DATA-----
Mud Type Chemical
Weight 9.40 lb/c
Vis. 45.00 S/L
W.L. 8.60 in3
F.C. 0.00 in
Mud Drop

Amt. of fill 0.00 ft
Btm. H. Temp. 125.00 F
Hole Condition
% Porosity 0.00
Packer Size 6.75 in
No. of Packers 2
Cushion Amt. 0.00
Cushion Type
Reversed Out
Tool Chased
Tester Rod Steinbrink
Co. Rep. Kurt Smith
Contr. Mallard
Rig # 2
Unit #
Pump T.

Test Successful: Y

CHART PAGE

DST #2
13339 X



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

TRILOBITE TESTING L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Test Ticket

N^o 12728

Well Name & No.	<u>Lilly #1</u>	Test No.	<u>2</u>	Date	<u>10-23-00</u>
Company	<u>Northern Lights Oil Company</u>	Zone Tested	<u>Morrow</u>		
Address	<u>P.O. Box 164 Andover, KS. 67002</u>	Elevation	<u>2885</u>	KB	<u>2880</u> GL
Co. Rep / Geo.	<u>Kurt Smith</u>	Cont.	<u>Mallard #2</u>	Est. Ft. of Pay	<u> </u> Por. <u> </u> %
Location: Sec.	<u>34</u>	Twp.	<u>22^s</u>	Rge.	<u>31^w</u> Co. <u>Finney</u> State <u>KS.</u>
No. of Copies	<u> </u>	Distribution Sheet (Y, N)	<u> </u>	Turnkey (Y, N)	<u> </u> Evaluation (Y, N) <u> </u>

Interval Tested	<u>4773 - 4796</u>	Initial Str Wt./Lbs.	<u>55,000</u>	Unseated Str Wt./Lbs.	<u>55,000</u>
Anchor Length	<u>23'</u>	Wt. Set Lbs.	<u>30,000</u>	Wt. Pulled Loose/Lbs.	<u>60,000</u>
Top Packer Depth	<u>4768</u>	Tool Weight	<u>1,800</u>		
Bottom Packer Depth	<u>4773</u>	Hole Size — 7 7/8"	<u> </u>	Rubber Size — 6 3/4"	<u> </u>
Total Depth	<u>4796</u>	Wt. Pipe Run	<u> </u>	Drill Collar Run	<u>241'</u> (4)
Mud Wt. <u>9.4</u> LCM <u> </u> Vis. <u>45</u> WL <u>8.6</u>		Drill Pipe Size	<u>4 1/2" XH</u>	Ft. Run	<u>4522'</u> (72.4)
Blow Description	<u>IF: Weak surface blow died in 10 mins.</u>				

FF: No blow, Flushed tool good surge - no help.

TDH @ Co Orders

Recovery — Total Feet	<u>5'</u>	GIP	<u> </u>	Ft. in DC	<u>5'</u>	Ft. in DP	<u> </u>
Rec. <u> </u>	Feet Of <u> </u>	%gas	<u> </u>	%oil	<u> </u>	%water	<u> </u>
Rec. <u> </u>	Feet Of <u> </u>	%gas	<u> </u>	%oil	<u> </u>	%water	<u> </u>
Rec. <u>5'</u>	Feet Of <u>Drilg Mud</u>	%gas	<u> </u>	%oil	<u> </u>	%water	<u>100%</u>
Rec. <u> </u>	Feet Of <u> </u>	%gas	<u> </u>	%oil	<u> </u>	%water	<u> </u>
Rec. <u> </u>	Feet Of <u> </u>	%gas	<u> </u>	%oil	<u> </u>	%water	<u> </u>
BHT <u>125°</u>	°F Gravity <u> </u>	°API D@ <u> </u>	°F Corrected Gravity <u> </u>	°API	<u> </u>		
RW <u> </u>	@ <u> </u>	°F Chlorides <u> </u>	ppm Recovery <u> </u>	Chlorides <u>3,600</u>	ppm System	<u> </u>	

(A) Initial Hydrostatic Mud	<u>2413</u>	AK-1	Alpine	PSI Recorder No.	<u>13309</u>	T-On Location	<u>1815</u> :45
(B) First Initial Flow Pressure	<u>31</u>			PSI (depth)	<u>4786</u>	T-Started	<u>1900</u>
(C) First Final Flow Pressure	<u>31</u>			PSI Recorder No.	<u>13339</u>	T-Open	<u>2100</u> 4:30
(D) Initial Shut-In Pressure	<u>31</u>			PSI (depth)	<u>4791</u>	T-Pulled	<u>2250</u>
(E) Second Initial Flow Pressure	<u>41</u>			PSI Recorder No.	<u> </u>	T-Out	<u>2330</u>
(F) Second Final Flow Pressure	<u> </u>			PSI (depth)	<u> </u>	T-Off Location	<u>0015</u>
(G) Final Shut-in Pressure	<u> </u>			PSI Initial Opening	<u>15</u>	Test	<u>750</u>
(Q) Final Hydrostatic Mud	<u>2383</u>			PSI Initial Shut-in	<u>30</u>	Jars	<u>X</u> 200
				Final Flow	<u>15</u>	Safety Joint	<u>X</u> 50
				Final Shut-in	<u> </u>	Straddle	<u> </u>

TRILOBITE TESTING L.L.C. SHALL NOT BE LIABLE FOR DAMAGE OF ANY KIND OF THE PROPERTY OR PERSONNEL OF THE ONE FOR WHOM A TEST IS MADE, OR FOR ANY LOSS SUFFERED OR SUSTAINED, DIRECTLY OR INDIRECTLY, THROUGH THE USE OF ITS EQUIPMENT, OR ITS STATEMENTS OR OPINION CONCERNING THE RESULTS OF ANY TEST. TOOLS LOST OR DAMAGED IN THE HOLE SHALL BE PAID FOR AT COST BY THE PARTY FOR WHOM THE TEST IS MADE.

Approved By

Our Representative Rod Steinbrink

Circ. Sub X N/C
Sampler
Extra Packer
Elec. Rec.
Mileage 40
Other
TOTAL PRICE \$ 1040