

ORIGINAL

SIDE ONE

STATE CORPORATION COMMISSION OF KANSAS  
OIL & GAS CONSERVATION DIVISION  
WELL COMPLETION FORM  
ACO-1 WELL HISTORY  
DESCRIPTION OF WELL AND LEASE

Operator: License # 5474  
Name: Northern Lights Oil Co., L.P.  
Address P.O. Box 164  
Andover, KS, 67002  
City/State/Zip \_\_\_\_\_  
Purchaser: Clear Creek  
Operator Contact Person: John Sutherland  
Phone (316) 733-1515

Contractor: Name: Murfin Drilling Company, Inc.  
License: 30606  
Wellsite Geologist: Kurt Smith

Designate Type of Completion  
 New Well  Re-Entry  Workover  
 Oil  SWD  Temp. Abd.  
 Gas  Inj  Delayed Comp.  
 Dry  Other (Core, Water Supply, etc.)

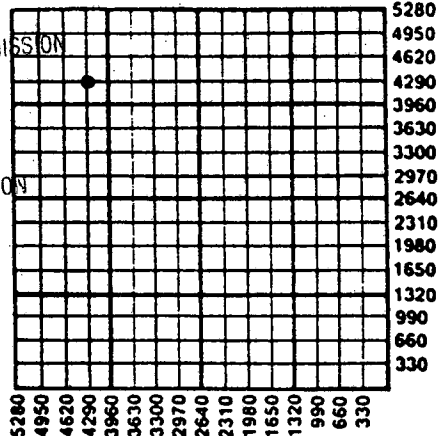
If OWM: old well info as follows:  
Operator: \_\_\_\_\_  
Well Name: \_\_\_\_\_  
Comp. Date \_\_\_\_\_ Old Total Depth \_\_\_\_\_

Drilling Method:  
 Mud Rotary  Air Rotary  Cable

04-17-91 04-23-91 04-23-91  
Spud Date Date Reached TD Completion Date

API NO. 15- 179-20, 998-00-00  
County Sheridan  
SE NW NW  Sec. 34 Twp. 8S Rge. 26W East West  
4290 Ft. North from Southeast Corner of Section  
4290 Ft. West from Southeast Corner of Section  
(NOTE: Locate well in section plat below.)  
Lease Name Pratt "B" Well # 5  
Field Name Boone  
Producing Formation LKC  
Elevation: Ground 2551 KB 2556  
Total Depth 3960 PBTD 3919

RECEIVED  
STATE CORPORATION COMMISSION  
5-20-1991  
MAY 20 1991  
CONSERVATION DIVISION  
Wichita, Kansas



5280  
4950  
4620  
4290  
3960  
3630  
3300  
2970  
2640  
2310  
1980  
1650  
1320  
990  
660  
330  
5-20-91

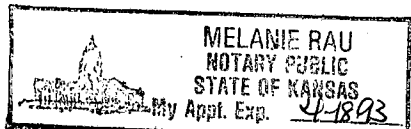
Amount of Surface Pipe Set and Cemented at 265 Feet  
Multiple Stage Cementing Collar Used? XXX Yes  No  
If yes, show depth set 2185' Feet  
If Alternate II completion, cement circulated from 2185'  
feet depth to surface w/ 400 sx cmt.

INSTRUCTIONS: This form shall be completed in triplicate and filed with the Kansas Corporation Commission, 200 Colorado Derby Building, Wichita, Kansas 67202, within 120 days of the spud date of any well. Rule 82-3-130, 82-3-107 and 82-3-106 apply. Information on side two of this form will be held confidential for a period of 12 months if requested in writing and submitted with the form. See rule 82-3-107 for confidentiality in excess of 12 months. One copy of all wireline logs and drillers time log shall be attached with this form. ALL CEMENTING TICKETS MUST BE ATTACHED. Submit CP-4 form with all plugged wells. Submit CP-111 form with all temporarily abandoned wells. Any recompletion, workover or conversion of a well requires filing of ACO-2 within 120 days from commencement date of such work.

All requirements of the statutes, rules and regulations promulgated to regulate the oil and gas industry have been fully complied with and the statements herein are complete and correct to the best of my knowledge.

Signature [Signature]  
Title Jack E. Goss, Agent f/Operator Date 5-03-91  
Subscribed and sworn to before me this 3rd day of May,  
19 91.  
Notary Public Melanie Rau  
Melanie Rau  
Date Commission Expires 4-18-93

K.C.C. OFFICE USE ONLY  
F  Letter of Confidentiality Attached  
C  Wireline Log Received  
C  Drillers Timelog Received  
Distribution  
 KCC  SWD/Rep  NGPA  
 KGS  Plug  Other (Specify)



SIDE TWO

Operator Name Northern Lights Oil Co., L.P.

Lease Name Pratt "B"

Well # 75

East

County Sheridan

Sec. 34 Twp. 8S Rge. 26W

West

INSTRUCTIONS: Show important tops and base of formations penetrated. Detail all cores. Report all drill stem tests giving interval tested, time tool open and closed, flowing and shut-in pressures, whether shut-in pressure reached static level, hydrostatic pressures, bottom hole temperature, fluid recovery, and flow rates if gas to surface during test. Attach extra sheet if more space is needed. Attach copy of log.

Drill Stem Tests Taken  Yes  No  
(Attach Additional Sheets.)  
Samples Sent to Geological Survey  Yes  No  
Cores Taken  Yes  No  
Electric Log Run  Yes  No  
(Submit Copy.)

DST's Attached

Formation Description		
Name	Top	Bottom
Anhydrite	2164	
Heebner	3670	
LKC	3755	
bKC	3926	

CASING RECORD

New  Used

Report all strings set-conductor, surface, intermediate, production, etc.

Purpose of String	Size Hole Drilled	Size Casing Set (In O.D.)	Weight Lbs./Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives
Surface	12 1/4"	8-5/8"		265'	60/40 Poz	170	2% gel, 3% cc
Production		4-1/2"		3959'	EA2	125	

PERFORATION RECORD

Shots Per Foot Specify Footage of Each Interval Perforated

Acid, Fracture, Shot, Cement Squeeze Record (Amount and Kind of Material Used) Depth

4	3891-94	250 gal MCA	
4	3872-76	250 gal MCA/2000 gal NE	
4	3858-60	250 gal MCA/1000 gal NE	
4	3788-3790	250 gal MCA/1000 gal NE	

TUBING RECORD

Size 2 3/8 Set At 3893 Packer At

Liner Run  Yes  No

Date of First Production Producing Method  Flowing  Pumping  Gas Lift  Other (Explain)

Estimated Production Per 24 Hours Oil 40 Bbls. Gas Mcf Water 10 Bbls. Gas-Oil Ratio Gravity 40°

Disposition of Gas:  Vented  Sold  Used on Lease (If vented, submit ACO-18.)

METHOD OF COMPLETION

Production Interval

Open Hole  Perforation  Dually Completed  Commingled  Other (Specify)

# TRILOBITE TESTING COMPANY

# ORIGINAL

P.O. Box 362 • Hays, Kansas 67601

15-179-20998-00-00

NO 3838

## Test Ticket

Well Name & No. PRATT "B" #5 Test No. ONE Date 4-21-91  
 Company NORTHERN LIGHTS OIL CO. Zone Tested LISC. - B  
 Address PO-B-164 ANDOVER KS. 67002 Elevation \_\_\_\_\_  
 Co. Rep./Geo. KURT SMITH Cont. MURFIN #3 Est. Ft. of Pay \_\_\_\_\_  
 Location: Sec. 34 Twp. 8S Rge. 26W Co. SHERBORN State KS  
 No. of Copes \_\_\_\_\_ Distribution Sheet \_\_\_\_\_ Yes \_\_\_\_\_ No \_\_\_\_\_ Turnkey \_\_\_\_\_ Yes \_\_\_\_\_ No \_\_\_\_\_ Evaluation \_\_\_\_\_

Interval Tested 3723 TO 3750 Drill Pipe Size 4 1/2" X H.  
 Anchor Length 27' Top Choke — 1" Bottom Choke — 3/4"  
 Top Packer Depth 3718 Hole Size — 7 7/8" Rubber Size — 6 3/4"  
 Bottom Packer Depth 3728 Wt. Pipe I.D. — 2.7 Ft. Run 620  
 Total Depth 3750 Drill Collar — 2.25 Ft. Run 230'  
 Mud Wt. 9.2 lb/gal. Viscosity 36 Filtrate 12.0  
 Tool Open @ 9:57 A Initial Blow WEAK TO FAIR RECEIVED WATER IN 30 MIN.

STATE CORPORATION COMMISSION

Final Blow SAME AS INITIAL5-20-1991  
MAY 20 1991

Recovery — Total Feet	Feet of Gas in Pipe	CONSERVATION DIVISION Wichita, Kansas			
		% gas	% oil	% water	% mud
Rec. <u>290</u>	Feet Of <u>SALT WATER</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 118 °F Gravity \_\_\_\_\_ °API @ \_\_\_\_\_ °F Corrected Gravity \_\_\_\_\_ °API  
 RW 0.7 @ 49 °F Chlorides 13,200 ppm Recovery Chlorides 1500 ppm System

(A) Initial Hydrostatic Mud 1880 PSI AK1 Recorder No. 13851 Range 4425  
 (B) First Initial Flow Pressure 20 PSI @ (depth) 3728 w/Clock No. 31154  
 (C) First Final Flow Pressure 50 PSI AK1 Recorder No. 13850 Range 4325  
 (D) Initial Shut-In Pressure 991 PSI @ (depth) 3750 w/Clock No. 27585  
 (E) Second Initial Flow Pressure 70 PSI AK1 Recorder No. \_\_\_\_\_ Range \_\_\_\_\_  
 (F) Second Final Flow Pressure 120 PSI @ (depth) \_\_\_\_\_ w/Clock No. \_\_\_\_\_  
 (G) Final Shut-In Pressure 969 PSI Initial Opening 30 Test 550  
 (H) Final Hydrostatic Mud 1880 PSI Initial Shut-In 45 Jars \_\_\_\_\_

TRILOBITE TESTING COMPANY 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 SUBSTAINED, 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.

Final Flow 60 Safety Joint \_\_\_\_\_  
 Final Shut-In 60 Straddle \_\_\_\_\_  
 Circ. Sub \_\_\_\_\_  
 Sampler \_\_\_\_\_  
 Extra Packer \_\_\_\_\_  
 Other \_\_\_\_\_

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

Our Representative [Signature]TOTAL PRICE \$ 550

# TRILOBITE TESTING COMPANY

# ORIGINAL

P.O. Box 362 • Hays, Kansas 67601

15-179-26998-00-00

## Test Ticket

NO 3839

Well Name & No. <u>PRATT "B" # 5</u>	Test No. <u>TWO</u>	Date <u>4-22-91</u>
Company <u>NORTHERN LIGHTS OIL CO.</u>	Zone Tested <u>LKC - CD</u>	
Address <u>POB. 164 ANDOVERISS 67002</u>	Elevation	
Co. Rep./Geo. <u>KURT SMITH</u>	Cont. <u>MURFIN # 3</u>	Est. Ft. of Pay
Location: Sec. <u>34</u>	Twp. <u>8 S</u>	Rge. <u>26 W</u> Co. <u>SHERIDAN</u> State <u>KS</u>
No. of Copies <u>5</u>	Distribution Sheet	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Turnkey Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Evaluation

Interval Tested <u>3752 TO 3795</u>	Drill Pipe Size <u>4 1/2" X 14</u>
Anchor Length <u>43'</u>	Top Choke — 1" Bottom Choke — 3/4"
Top Packer Depth <u>3747</u>	Hole Size — 7 7/8" Rubber Size — 6 3/4"
Bottom Packer Depth <u>3752</u>	Wt. Pipe I.D. — 2.7 Ft. Run <u>620</u>
Total Depth <u>3795</u>	Drill Collar — 2.25 Ft. Run <u>230</u>
Mud Wt. <u>9.2</u> lb/gal.	Viscosity <u>36</u> Filtrate <u>12.0</u>
Tool Open @ <u>1:40 A</u>	Initial Blow <u>VERY WEAK THROUGHOUT I.P.R. 1"</u>

Final Blow SAME AS INITIAL

Recovery — Total Feet <u>110</u>	Feet of Gas in Pipe	Flush Tool? <u>NO</u>
Rec. <u>50</u> Feet Of <u>OIL CUT MUD</u>	% gas <u>10</u> % oil	% water <u>90</u> % mud
Rec. _____ Feet Of _____	% gas _____ % oil	% water _____ % mud
Rec. <u>60</u> Feet Of <u>MUD &amp; WATER</u>	% gas <u>1</u> % oil <u>25</u>	% water <u>74</u> % mud
Rec. _____ Feet Of <u>(SOCWIM)</u>	% gas _____ % oil	% water _____ % mud
Rec. _____ Feet Of _____	% gas _____ % oil	% water _____ % mud

BHT 118 °F Gravity \_\_\_\_\_ °API @ \_\_\_\_\_ °F Corrected Gravity \_\_\_\_\_ °APIRW 0.5 @ 65 °F Chlorides 14,000 ppm Recovery Chlorides 1500 ppm System

(A) Initial Hydrostatic Mud <u>1962</u>	PSI	Ak1 Recorder No. <u>13851</u>	Range <u>4425</u>
(B) First Initial Flow Pressure <u>20</u>	PSI @ (depth) <u>3757</u>	w/Clock No. <u>31154</u>	
(C) First Final Flow Pressure <u>30</u>	PSI	Ak1 Recorder No. <u>13850</u>	Range <u>4325</u>
(D) Initial Shut-In Pressure <u>510</u>	PSI @ (depth) <u>3795</u>	w/Clock No. <u>27585</u>	
(E) Second Initial Flow Pressure <u>30</u>	PSI	Ak1 Recorder No. _____	Range _____
(F) Second Final Flow Pressure <u>40</u>	PSI @ (depth) _____	w/Clock No. _____	
(G) Final Shut-In Pressure <u>477</u>	PSI	Initial Opening <u>30</u>	Test <u>550</u>
(H) Final Hydrostatic Mud <u>1962</u>	PSI	Initial Shut-In <u>45</u>	Jars _____

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Final Flow <u>45</u>	Safety Joint _____
Final Shut-In <u>60</u>	Straddle _____
RECEIVED	Circ. Sub _____
STATE CORPORATION COMMISSION	Sampler _____
<u>5-20-1991</u>	Extra Packer _____
<u>MAY 20 1991</u>	Other _____

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

Our Representative \_\_\_\_\_

TOTAL PRICE \$ 550.00

# TRILOBITE TESTING COMPANY ORIGINAL

P.O. Box 362 • Hays, Kansas 67601

15-179-20998-00-00

No 3840

## Test Ticket

Well Name & No. PRATT "B" #5 Test No. THREE Date 4-22-91  
 Company NORTHERN LIGHTS OIL CO. Zone Tested LKC - I, J, K  
 Address POB. 164 ANDOVER KS 67002 Elevation \_\_\_\_\_  
 Co. Rep./Geo. KURT SMITH Cont. MURFIN #3 Est. Ft. of Pay \_\_\_\_\_  
 Location: Sec. 34 Twp. 8S Rge. 26W Co. SHERIDAN State KS  
 No. of Copies 5 Distribution Sheet \_\_\_\_\_ Yes \_\_\_\_\_ No  Turnkey \_\_\_\_\_ Yes \_\_\_\_\_ No  Evaluation \_\_\_\_\_

Interval Tested 3848 TO 3903 Drill Pipe Size 4 1/2" X 17  
 Anchor Length 55' Top Choke — 1" \_\_\_\_\_ Bottom Choke — 3/4" \_\_\_\_\_  
 Top Packer Depth 3843 Hole Size — 7 7/8" \_\_\_\_\_ Rubber Size — 6 3/4" \_\_\_\_\_  
 Bottom Packer Depth 3848 Wt. Pipe I.D. — 2.7 Ft. Run 620  
 Total Depth 3903 Drill Collar — 2.25 Ft. Run 230  
 Mud Wt. 9.5 lb/gal. Viscosity 43 Filtrate 12.0  
 Tool Open @ 6:42 P Initial Blow VERY GOOD BOT BUCKET IN 5 MIN.

Final Blow VERY GOOD BOT. BUCKET IN 3 MIN.

Recovery — Total Feet	Feet of Gas In Pipe	Flush Tool?
<u>240'</u>	<u>1600</u>	<u>NO</u>
Rec. <u>60</u> Feet Of <u>Q + G L M</u>	<u>15</u> %gas <u>35</u> %oil	%water <u>50</u> %mud
Rec. <u>60</u> Feet Of <u>" "</u>	<u>30</u> %gas <u>30</u> %oil	%water <u>40</u> %mud
Rec. <u>60</u> Feet Of <u>" "</u>	<u>30</u> %gas <u>30</u> %oil	%water <u>40</u> %mud
Rec. <u>60</u> Feet Of <u>" "</u>	<u>30</u> %gas <u>40</u> %oil	%water <u>30</u> %mud
Rēc. _____ Feet Of _____	%gas _____ %oil _____	%water _____ %mud _____

BHT 118 °F Gravity \_\_\_\_\_ °API @ \_\_\_\_\_ °F Corrected Gravity \_\_\_\_\_ °API

RW \_\_\_\_\_ @ \_\_\_\_\_ °F Chlorides \_\_\_\_\_ ppm Recovery Chlorides 2000 ppm System

- (A) Initial Hydrostatic Mud 2006 PSI Ak1 Recorder No. 13851 Range 4425
- (B) First Initial Flow Pressure 50 PSI @ (depth) 3883 w/Clock No. 31154
- (C) First Final Flow Pressure 70 PSI Ak1 Recorder No. 13850 Range 4325
- (D) Initial Shut-In Pressure 277 PSI @ (depth) 3903 w/Clock No. 27585
- (E) Second Initial Flow Pressure 70 PSI Ak1 Recorder No. \_\_\_\_\_ Range \_\_\_\_\_
- (F) Second Final Flow Pressure 80 PSI @ (depth) \_\_\_\_\_ w/Clock No. \_\_\_\_\_
- (G) Final Shut-In Pressure 947 PSI Initial Opening 30 Test 550 OP
- (H) Final Hydrostatic Mud 2006 PSI Initial Shut-In 45 Jars \_\_\_\_\_

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Final Flow 45 Safety Joint \_\_\_\_\_  
 Final Shut-In 60 Straddle \_\_\_\_\_

Approved By \_\_\_\_\_ Our Representative \_\_\_\_\_  
 RECEIVED STATE OCCUPATION COMMISSION 5-20-1991  
 CONSERVATION DIVISION WICHITA, KANSAS

TOTAL PRICE \$ 550.00



HALLIBURTON SERVICES

INVOICE

15-179-20998-00-00

A Halliburton Company

INVOICE NO.	DATE				
051419	04/23/1991				
WELL LEASE NO./PLANT NAME	WELL/PLANT LOCATION	STATE	WELL/PLANT OWNER		
PRATT B 5	SHERIDAN	OKS	NORTHERN LIGHTS		
SERVICE LOCATION	CONTRACTOR	JOB PURPOSE	TICKET DATE		
BERLIN	MURFIN 3	CEMENT PRODUCTION CASING	04/23/1991		
ACCT. NO.	CUSTOMER AGENT	VENDOR NO.	CUSTOMER P.O. NUMBER	SHIPPED VIA	FILE NO.
634251	JIM LINE			COMPANY TRUCK	14275

RECEIVED

NORTHERN LIGHTS OIL CO  
P.O. BOX 164  
ANDOVER, KS 67002

MAY 20 1991  
5-20-1991  
CONSERVATION DIVISION  
Wichita, Kansas

DIRECT CORRESPONDENCE TO:  
FIRST OKLAHOMA TOWER  
210 WEST PARK AVENUE  
SUITE 2050  
OKLAHOMA CITY, OK 73102-5601

PRICE REF. NO.	DESCRIPTION	QUANTITY	U/M	UNIT PRICE	AMOUNT
000-117	MID CONTINENT MILEAGE	50	MI		
001-015	CEMENTING CASING	3959	FT		
030-016	CEMENTING PLUG 5W ALUM TOP	4 1/2	IN		
018-317	SUPER FLUSH	10	SK		
24A	INSERT FLOAT VALVE - 4 1/2" BRD	1	EA		
815.19101	PILL-UP UNIT 4 1/2" - 5"	1	EA		
815.19111	CENTRALIZER 4 1/2" MODEL S-4	1	EA		
807.93004	CEMENT BASKET 4 1/2"	2	EA		
800.8881	PASGRIP LIMIT CLAMP 4 1/2"	2	EA		
807.64021	P.O. MULT STAGE CMTR 4 1/2" BRD	1	EA		
813.0141	GUIDE SHOE 4 1/2" BRD THD.	1	EA		
825.201	CASING SWIVEL W/O WALL CLEANER	1	JOB		
019-241	STANDARD CEMENT	125	SK		
504-308	SALT	541	LB		
509-968	CAL SEAL	6	SK		
508-127	D-AIR 1. POWDER	29	LB		
507-970	HALAD-922	59	LB		
507-775	SALT	300	LB		
509-968	BULK SERVICE CHARGE	141	CFT		
500-207	MILEAGE CMTG MAT DEL OR RETURN	324.48	TMI		
500-306					

\*\*\*\*\* CONTINUED ON NEXT PAGE \*\*\*\*\*

TERMS: INVOICES PAYABLE NET BY THE 20TH OF THE FOLLOWING MONTH AFTER DATE OF INVOICE. UPON CUSTOMER'S DEFAULT IN PAYMENT OF CUSTOMER'S ACCOUNT BY THE LAST DAY OF THE MONTH FOLLOWING THE MONTH IN WHICH THE INVOICE IS DATED, CUSTOMER AGREES TO PAY INTEREST THEREON AFTER DEFAULT AT THE HIGHEST LAWFUL CONTRACT RATE APPLICABLE BUT NEVER TO EXCEED 18% PER ANNUM. IN THE EVENT IT BECOMES NECESSARY TO EMPLOY AN ATTORNEY TO ENFORCE COLLECTION OF SAID ACCOUNT, CUSTOMER AGREES TO PAY ALL COLLECTION COSTS AND ATTORNEY FEES IN THE AMOUNT OF 20% OF THE AMOUNT OF THE UNPAID ACCOUNT.

# JOB SUMMARY

HALLIBURTON DIVISION  
 OKLAHOMA CITY  
 HALLIBURTON LOCATION  
 Oberlin, KS

ORIGINAL  
 BILLED ON TICKET NO. 051422

## WELL DATA

SEC. 34 TWP. 8S R. 26W COUNTY Sheridan STATE KS  
 15-179-20998-00-00

FORMATION NAME \_\_\_\_\_ TYPE \_\_\_\_\_  
 FORMATION THICKNESS \_\_\_\_\_ FROM \_\_\_\_\_ TO \_\_\_\_\_  
 INITIAL PROD: OIL \_\_\_\_\_ BPD. WATER \_\_\_\_\_ BPD. GAS \_\_\_\_\_ MCFD  
 PRESENT PROD: OIL \_\_\_\_\_ BPD. WATER \_\_\_\_\_ BPD. GAS \_\_\_\_\_ MCFD  
 COMPLETION DATE \_\_\_\_\_ MUD TYPE \_\_\_\_\_ MUD WT. \_\_\_\_\_  
 PACKER TYPE F.O. Cement SET AT 2185'  
 BOTTOM HOLE TEMP \_\_\_\_\_ PRESSURE \_\_\_\_\_  
 MISC. DATA 7 7/8" Hole PB TOTAL DEPTH 3919'

	NEW USED	WEIGHT	SIZE	FROM	TO	MAXIMUM PSI ALLOWABLE
CASING	U	105	4 1/2"	KB	3919'	PBTD
LINER						
TUBING	U	47	2 3/8"	KB	2185'	
OPEN HOLE						SHOTS/FT.
PERFORATIONS						
PERFORATIONS						
PERFORATIONS						

## JOB DATA

CALLED OUT DATE	ON LOCATION DATE	JOB STARTED DATE	JOB COMPLETED DATE
5-1-91	5-1-91	5-1-91	5-1-91
TIME 0800	TIME 1030	TIME 1200	TIME

## TOOLS AND ACCESSORIES

TYPE AND SIZE	QTY.	MAKE
FLOAT COLLAR		
FLOAT SHOE		
GUIDE SHOE		
CENTRALIZERS		
BOTTOM PLUG		
TOP PLUG		
HEAD		
PACKER		
OTHER <u>F.O. positioners</u>	<u>2ea</u>	<u>Howers</u>

## PERSONNEL AND SERVICE UNITS

NAME	UNIT NO. & TYPE	LOCATION
<u>S. Dolan</u>	<u>36654 Tools</u>	<u>Oberlin KS</u>
<u>J. Keenan</u>	<u>3643-REM HT-400</u>	<u>"</u>
<u>D. Clayton</u>	<u>3846 Bulk</u>	<u>Duncan Ok</u>
<u>A. Boatright</u>	<u>50181 Bulk</u>	<u>"</u>

## MATERIALS

TREAT. FLUID \_\_\_\_\_ DENSITY \_\_\_\_\_ LB/GAL-API  
 DISPL. FLUID \_\_\_\_\_ DENSITY \_\_\_\_\_ LB/GAL-API  
 PROP. TYPE \_\_\_\_\_ SIZE \_\_\_\_\_ LB.  
 PROP. TYPE \_\_\_\_\_ SIZE \_\_\_\_\_ LB.  
 ACID TYPE \_\_\_\_\_ GAL  
 ACID TYPE \_\_\_\_\_ GAL  
 ACID TYPE \_\_\_\_\_ GAL  
 SURFACANT TYPE \_\_\_\_\_ GAL  
 NE AGENT TYPE \_\_\_\_\_ GAL  
 FLUID LOSS ADD. TYPE \_\_\_\_\_ GAL-LB  
 GELLING AGENT TYPE \_\_\_\_\_ GAL-LB  
 FRIC. RED. AGENT TYPE \_\_\_\_\_ GAL-LB  
 BREAKER TYPE \_\_\_\_\_ GAL-LB  
 BLOCKING AGENT TYPE \_\_\_\_\_ GAL-LB  
 PERFPAC BALLS TYPE \_\_\_\_\_ QTY.  
 OTHER 20 Bbl Salt Flush  
 OTHER \_\_\_\_\_

RECEIVED

STATE CORPORATION COMMISSION

MAY 20 1991

CONSERVATION DIVISION

DEPARTMENT Tool, Cmt + Bulk

DESCRIPTION OF JOB  
Run 4 1/2" F.O. Positioners  
Cmt Thru F.O. Cement

JOB DONE THRU: TUBING  CASING  ANNULUS  TBG/ANN.

CUSTOMER REPRESENTATIVE [Signature]

HALLIBURTON OPERATOR [Signature] COPIES REQUESTED \_\_\_\_\_

## CEMENT DATA

STAGE	NUMBER OF SACKS	CEMENT	BRAND	BULK SACKED	ADDITIVES	YIELD CU.FT./SK.	MIXED LBS./GAL.
1	400	HRC	S&P	B	1/4 lb Florele	1.84	127
	60	SFS	King	"	1/4 lb Florele	1.18	15.6

## PRESSURES IN PSI

CIRCULATING \_\_\_\_\_ DISPLACEMENT \_\_\_\_\_  
 BREAKDOWN \_\_\_\_\_ MAXIMUM \_\_\_\_\_  
 AVERAGE \_\_\_\_\_ FRACTURE GRADIENT \_\_\_\_\_  
 SHUT-IN: INSTANT \_\_\_\_\_ 5-MIN. \_\_\_\_\_ 15-MIN. \_\_\_\_\_  
 HYDRAULIC HORSEPOWER \_\_\_\_\_  
 ORDERED \_\_\_\_\_ AVAILABLE \_\_\_\_\_ USED \_\_\_\_\_  
 AVERAGE RATES IN BPM \_\_\_\_\_  
 TREATING \_\_\_\_\_ DISPL \_\_\_\_\_ OVERALL \_\_\_\_\_  
 CEMENT LEFT IN PIPE \_\_\_\_\_  
 FEET \_\_\_\_\_ REASON \_\_\_\_\_

## SUMMARY

VOLUMES  
 PRESUR. BBL-GAL \_\_\_\_\_  
 WASH BBL-GAL \_\_\_\_\_  
 TREATMENT: BBL-GAL \_\_\_\_\_  
 CEMENT SLURRY BBL-GAL \_\_\_\_\_  
 TOTAL VOLUME: BBL-GAL \_\_\_\_\_

## REMARKS

See Sub log + Chart  
Thank You - Scott, John, Dave + Al

CUSTOMER Northland Production Co. LEASE  
 WELL NO. 15-179-20998-00-00  
 JOB TYPE Tool-Cmt + F.O.  
 DATE 5-1-91

DISTRICT Berlin, KS

DATE 5-19-91

TO: HALLIBURTON SERVICES YOU ARE HEREBY REQUESTED TO FURNISH EQUIPMENT AND SERVICEMEN TO DELIVER AND OPERATE THE SAME AS AN INDEPENDENT CONTRACTOR TO: Northern Lights Oil Company (CUSTOMER) AND DELIVER AND SELL PRODUCTS, SUPPLIES, AND MATERIALS FOR THE PURPOSE OF SERVICING

WELL NO. 5 LEASE Point B SEC. 34 TWP. 8S RANGE 26W

FIELD \_\_\_\_\_ COUNTY Sheridan STATE KS OWNED BY Northern Lights Oil Co.

THE FOLLOWING INFORMATION WAS FURNISHED BY THE CUSTOMER OR HIS AGENT

FORMATION NAME \_\_\_\_\_ TYPE \_\_\_\_\_  
FORMATION THICKNESS \_\_\_\_\_ FROM \_\_\_\_\_ TO \_\_\_\_\_  
PACKER: TYPE F.O. Center SET AT 2185'  
TOTAL DEPTH 2839' MUD WEIGHT \_\_\_\_\_  
BORE HOLE 7 7/8"  
INITIAL PROD: OIL \_\_\_\_\_ BPD, H<sub>2</sub>O \_\_\_\_\_ BPD, GAS \_\_\_\_\_ MCF  
PRESENT PROD: OIL \_\_\_\_\_ BPD, H<sub>2</sub>O \_\_\_\_\_ BPD, GAS \_\_\_\_\_ MCF

	NEW USED	WEIGHT	SIZE	FROM	TO	MAX. ALLOW. P.S.I.
CASING	U	10.5	4 1/2"	KB	3919'	ABTD
LINER						
TUBING	U	4.7	2 1/8"	KB	2185'	
OPEN HOLE						SHOTS/FT.
PERFORATIONS	RECEIVED					
PERFORATIONS	5-20-1991					
PERFORATIONS	MAY 20 1991					

PREVIOUS TREATMENT: DATE \_\_\_\_\_ TYPE \_\_\_\_\_ MATERIALS ON \_\_\_\_\_  
TREATMENT INSTRUCTIONS: TREAT THRU TUBING  ANNULUS  CASING  TUBING/ANNULUS  HYDRAULIC HORSEPOWER ORDERED  
Comb thru F.O. Center with 20 Bbl 3% Salt Flush, 4000 lbs H<sub>2</sub>O - 1/4 lb Floeole, 60 lbs Std - 1/4 lb Floeole as directed.

CUSTOMER OR HIS AGENT WARRANTS THE WELL IS IN PROPER CONDITION TO RECEIVE THE PRODUCTS, SUPPLIES, MATERIALS, AND SERVICES

- As consideration, the above-named Customer agrees: THIS CONTRACT MUST BE SIGNED BEFORE WORK IS COMMENCED
- a) To pay Halliburton in accord with the rates and terms stated in Halliburton's current price list. Invoices are payable NET by the 20th of the following month after date of invoice. Upon Customer's default in payment of Customer's account by the last day of the month following the month in which the invoice is dated, Customer agrees to pay interest thereon after default at the highest lawful contract rate applicable, but never to exceed 18% per annum. In the event it becomes necessary to employ attorneys to enforce collection of said account, Customer agrees to pay all collection costs and attorney fees in the amount of 20% of the amount of the unpaid account.
  - b) To defend, indemnify, release and hold harmless Halliburton, its divisions, subsidiaries, parent and affiliated companies and the officers, directors, employees, agents and servants of all of them from and against any claims, liability, expenses, attorneys fees, and costs of defense to the extent permitted by law for:
    1. Damage to property owned by, in the possession of, or leased by Customer, and/or the well owner (if different from Customer), including, but not limited to, surface and subsurface damage. The term "well owner" shall include working and royalty interest owners.
    2. Reservoir, formation or well loss or damage, subsurface trespass or any action in the nature thereof.
    3. Personal injury or death or property damage (including, but not limited to, damage to the reservoir, formation or well), or any damages whatsoever, growing out of or in any way connected with or resulting from pollution, subsurface pressure, losing control of the well, and/or a well blowout or the use of radioactive material.

The defense, indemnity, release and hold harmless obligations of Customer provided for in this Section b) and Section c) below shall apply to claims or liability even if caused or contributed to by Halliburton's negligence, strict liability or the unseaworthiness of any vessel owned, operated, or furnished by Halliburton or any defect in the data, products, supplies, materials, or equipment of Halliburton whether in the preparation, design, manufacture, distribution, or marketing thereof, or from a failure to warn any person of such defect. Such defense, indemnity, release and hold harmless obligations of Customer shall not apply where the claims or liability are caused by the gross negligence or willful misconduct of Halliburton. The term "Halliburton" as used in said Sections b) and c) shall mean Halliburton, its divisions, subsidiaries, parent and affiliated companies, and the officers, directors, employees, agents and servants of all of them.
  - c) That because of the uncertainty of variable well conditions and the necessity of relying on facts and supporting services furnished by others, Halliburton is unable to guarantee the effectiveness of the products, supplies or materials, nor the results of any treatment or service, nor the accuracy of any chart interpretation, research analysis, job recommendation or other data furnished by Halliburton. Halliburton personnel will use their best efforts in gathering such information and their best judgment in interpreting it, but Customer agrees that Halliburton shall not be liable for and Customer shall indemnify Halliburton against any damages arising from the use of such information.
  - d) That Halliburton warrants only title to the products, supplies, and materials and that the same are free from defects in workmanship and materials. THERE ARE NO WARRANTIES, EXPRESS OR IMPLIED, OF MERCHANTABILITY, FITNESS OR OTHERWISE WHICH EXTEND BEYOND THOSE STATED IN THE IMMEDIATELY PRECEDING SENTENCE. Halliburton's liability and Customer's exclusive remedy in any cause of action (whether in contract, tort, breach of warranty or otherwise) arising out of the sale or use of any products, supplies or materials is expressly limited to the replacement of such products, supplies or materials on their return to Halliburton or, at Halliburton's option, to the allowance to the Customer of credit for the cost of such items. In no event shall Halliburton be liable for special, incidental, indirect, punitive or consequential damages.
  - e) That Customer shall, at its risk and expense, attempt to recover any Halliburton equipment, tools or instruments which are lost in the well and if such equipment, tools or instruments are not recovered, Customer shall pay Halliburton its replacement cost unless such loss is due to the sole negligence of Halliburton. If Halliburton equipment, tools or instruments are damaged in the well, Customer shall pay Halliburton the lesser of its replacement cost or the cost of repairs unless such damage is caused by the sole negligence of Halliburton. In the case of equipment, tools or instruments for marine operators, Customer shall, in addition to the foregoing, be fully responsible for loss of or damage to any of Halliburton's equipment, tools or instruments which occurs at any time after delivery to Customer at the landing until returned to the landing, unless such loss or damage is caused by the sole negligence of Halliburton.
  - f) To waive the provisions of the Deceptive Trade Practices - Consumer Protection Act, to the extent permitted by law.
  - g) That this contract shall be governed by the law of the state where services are performed or materials are furnished.
  - h) That Halliburton shall not be bound by any changes or modifications in this contract, except where such change or modification is made in writing by a duly authorized executive officer of Halliburton.

I HAVE READ AND UNDERSTAND THIS CONTRACT AND REPRESENT THAT I AM AUTHORIZED TO SIGN FOR SAME AS CUSTOMER'S AGENT.  
SIGNED [Signature] CUSTOMER  
DATE 5-19-91



WELL NO. **5** LEASE **Pratt 8** 15-179-20948-00-00  
 TICKET NO. **051422**  
 CUSTOMER **Northern Lights Oil Company** PAGE NO. **1 ORIGINAL**  
 JOB TYPE **Run 4 1/2" F.O. Fingers. Cmt. F.O.** DATE **5-1-91**

TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMPS		PRESSURE (PSI)		DESCRIPTION OF OPERATION AND MATERIALS
			T	C	TUBING	CASING	
1030							On loc. Rig Crew waiting on Tbg Unload Tbg. Rots, Make up F.O. positioners. Set up Eq.
1205							Start Fingers on used 2 1/8" Tbg
1325							Opening Fingers below F.O @ 2190
1330							Hook up to Tbg. Close Ann
1334		14			1,000		Press Test - Holding
1338					300		Release Press. Pull Opening Fingers up to F.O. @ 2185'
1340	3				600		Press up
1344		11-Flush					Open F.O. (16,000 over) Start 20 Bbl Salt Flush
1347	"	20-Flush			600		Hole Circ
1424	"	131-HLC			700		Finish Flush - Start 400 sls HLC. 1/4 lb Flocele
1426	3	6-Std.			800		Fin. HLC - Cmt Circ to Surf Start 60 sls Std. 1/4 lb Flocele
1428		100/2 Std					Partial Returns
1431		8 1/2 H2O			900		Fin. Cmt - St Displ. - Partial Returns
1432					1,000		Fin. Displ. Shut Down
1434							Close F.O. Cmt. - Press Test - Holding
1435	3				500		Release Press. lower Tbg - bottom of closing fingers @ 2194'
1440	-	15-H2O					Rev out
							Shut Down - Knock loose. Wash up Trk. Rig Crew pull Tbg / Fingers
							Tbg / Fingers out - Job Complete

RECEIVED  
 STATE CORPORATION COMMISSION  
 5-20-1991  
 MAY 20 1991  
 CONSERVATION DIVISION  
 Wichita, Kansas

" Thank You "  
 Scott, John, Dave + Ah  
 " 18 Bbl. Cmt. Circ. "

CUSTOMER