

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

API NO. 15- 065-227630000

ORIGINAL

County Graham

ne-sw-WSW Sec. 2 Twp. 7s Rge. 22W

990 Feet from (S) Line of Section

990 Feet from (E/W) Line of Section

Footages Calculated from Nearest Outside Section Corner:
NE, SE, NW or SW (circle one)

Lease Name Ft. Hays Well # 3

Field Name Mt Etna N.

Producing Formation D&A

Elevation: Ground 2437 KB 2442

Total Depth 3715 PBDT

Amount of Surface Pipe Set and Cemented at 266 Feet

Multiple Stage Cementing Collar Used? Yes No

If yes, show depth set Feet

If Alternate II completion, cement circulated from

feet depth to w/ sx cmt.

Drilling Fluid Management Plan D&A 5-10-96
(Data must be collected from the Reserve Pit) 20

Chloride content 1600 ppm Fluid volume 500 bbls

Dewatering method used Evaporation

Location of fluid disposal if hauled offsite:

Operator Name

Lease Name License No. 29-96

Quarter Sec. Twp. S Rng. 23 09 1396

County Docket No. CONSERVATION DIVISION WICHITA, KS

Operator: License # 5474

Name: NORTHERN LIGHTS OIL CO., L.P.

Address P.O. BOX 164

Andover, KS 67002

City/State/Zip

Purchaser:

Operator Contact Person: Kurt Smith

Phone (316) 733-1515

Contractor: Name: Mallard JV

License: 4958

Wellsite Geologist: Kurt Smith

Designate Type of Completion
 New Well Re-Entry Workover

Oil SWD S1OW Temp. Abd.
 Gas ENHR SIGW
 Dry Other (Core, WSW, Expl., Cathodic, etc)

If Workover/Re-Entry: old well info as follows:

Operator:

Well Name:

Comp. Date Old Total Depth

Deepening Re-perf. Conv. to Inj/SWD
 Plug Back PBDT
 Commingled Docket No.
 Dual Completion Docket No.
 Other (SWD or Inj?) Docket No.

1-20-96 1-25-96
Spud Date Date Reached TD Completion Date

INSTRUCTIONS: An original and two copies of this form shall be filed with the Kansas Corporation Commission, 200 Colorado Derby Building, Wichita, Kansas 67202, within 120 days of the spud date, recompletion, workover or conversion of a well. Rule 82-3-130, 82-3-106 and 82-3-107 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 geologist well report 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.

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 Exploration Manager Date 2-8-96

Subscribed and sworn to before me this 8th day of FEB 19 96.

Notary Public [Signature]

Date Commission Expires

JANIE S. HALL
NOTARY PUBLIC
STATE OF KANSAS
My Appt. Exp. 3/19/96

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

Operator Name NORTHERN LIGHTS OIL Lease Name FT. HAYS Well # 3
 Sec. 2 Twp. 7s Rge. 23 East West
 County graham

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 (Attach Additional Sheets.)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Log	Formation (Top), Depth and Datums	<input checked="" type="checkbox"/> Sample
Samples Sent to Geological Survey	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Name	Top	Datum
Cores Taken	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Anhydrite	2096	
Electric Log Run (Submit Copy.)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Heebner	3668	
List All E.Logs Run:		lkc	3707	
		Bkc	3903	

CASING RECORD <input checked="" type="checkbox"/> New <input type="checkbox"/> 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	20#	266	60/40 poz	180	2%ge13%cc

ADDITIONAL CEMENTING/SQUEEZE RECORD				
Purpose:	Depth Top Bottom	Type of Cement	#Sacks Used	Type and Percent Additives
<input type="checkbox"/> Perforate				
<input type="checkbox"/> Protect Casing				
<input type="checkbox"/> Plug Back TD				
<input type="checkbox"/> Plug Off Zone				

Shots Per Foot	PERFORATION RECORD - Bridge Plugs Set/Type		Acid, Fracture, Shot, Cement Squeeze Record	
	Specify Footage of Each Interval Perforated		(Amount and Kind of Material Used)	

TUBING RECORD	Size	Set At	Packer At	Liner Run <input type="checkbox"/> Yes <input type="checkbox"/> No

Date of First, Resumed Production, SWD or Inj.	Producing Method <input type="checkbox"/> Flowing <input type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other (Explain)
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Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity
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Disposition of Gas: Vented Sold Used on Lease (If vented, submit ACO-18.)

METHOD OF COMPLETION: Open Hole Perf. Dually Comp. Commingled Other (Specify) _____

Production Interval _____

ORIGINAL

15-065-22763-00-00

MALLARD JV, Inc.
DRILLING CONTRACTORS

P. O. Box 1009
McPHERSON, KS 67460

316-241-4640

Drillers Log

OPERATOR: **Northern Lights Oil Co., L. P.**
P. O. Box 164
Andover, KS 67002

WELL: **Ft. Hays #3**

API #: **15-065-227630000**

COMMENCED: **January 20, 1996**

COMPLETED: **January 25, 1996**

TOTAL DEPTH: **3915'**

LOCATION: **NE SW SW**
990' FSL, 990' FWL
Section 2, Township 7 S, Range 23 W
Graham County, Kansas

ELEVATION: **2437' GL, 2442' KB**

STATUS: **Dry and Abandoned - Marmaton formation**

SPUD: **2:50 am 1/20/96**

SIZE HOLE DRILLED: **12-1/4" x 270'**

SURFACE CASING SIZE: **8-5/8" x 20# x 260.07' (6 jts.)**

SET AT: **266.67'**

CEMENT: **180 sacks 60/40 Pozmix, 2% gel, 3% cc**

SIZE HOLE DRILLED: **7-7/8" x 4915'**

PLUGGED HOLE WITH: **200 sacks 60/40 Pozmix, 6% gel, 1/4# floseal per sack as follows:**

25 sx @ 2115'

100 sx @ 1350'

40 sx @ 320'

10 sx @ 40'

15 sx rathole,

10 sx mousehole

P. D.: **2:00 am 1/25/96**

DRILL STEM TESTS: **1**

ELECTRIC LOG: **None**

RESERVE PIT: **1600 ppm chlorides, 500 bbls free fluid content**

REC-1111
KANSAS CORPORATION COMMISSION

FEB 09 1996
29-96
CONSERVATION DIVISION
WICHITA, KS

TRILOBITE TESTING L.L.C. 15-065-22763

P.O. Box 362 • Hays, Kansas 67601

15-065-22763-00-00

Test Ticket

ORIGINAL

No. 8746

Well Name & No. <u>FT. Hays #3</u>	Test No. <u>1</u>	Date <u>1-24-96</u>
Company <u>Northern Lights Oil Co.</u>	Zone Tested <u>I</u>	<u>L.L.C.</u>
Address <u>P.O. Box 164 Andover, Ks. 67002</u>	Elevation <u>2442</u> KB <u>2437</u> GL	
Co. Rep / Geo. <u>Kurt h. Smith</u> Cont. <u>Mallard #1</u>	Est. Ft. of Pay	Por. %
Location: Sec. <u>2</u> Twp. <u>7</u> Rge. <u>23</u>	Co. <u>Graham</u> State <u>Ks.</u>	
No. of Copies <u>6</u> Distribution Sheet (Y, N) <u>N</u>	Turnkey (Y, N) <u>N</u>	Evaluation (Y, N)

Interval Tested <u>3845 - 3872</u>	Initial Str Wt./Lbs. <u>55,000</u> Unseated Str Wt./Lbs. <u>55,000</u>
Anchor Length <u>27</u>	Wt. Set Lbs. <u>20,000</u> Wt. Pulled Loose/Lbs. <u>55,000</u>
Top Packer Depth <u>3840</u>	Hole Size — 7 7/8" Rubber Size — 6 3/4"
Bottom Packer Depth <u>3845</u>	Wt. Pipe I.D. — 2.7 Ft. Run
Total Depth <u>3872</u>	Drill Collar — 2.25 Ft. Run <u>248</u>
Mud Wt. <u>9.7</u> LCM Vis. <u>45</u> WL <u>5</u>	Drill Pipe Size <u>4.5 XH</u> Ft. Run <u>3599</u>
Blow Description <u>I.F. Weak 1/4" blow - Died in 18 min.</u>	

F.F. No blow - flushed tool - No help

Recovery — Total Feet	Ft. in DC	Ft. in WP	Ft. in DP	%gas	%oil	%water	%mud
Rec. <u>5</u> Feet Of <u>D.M w/ few oil spots</u>	<u>5</u>						
Rec. <u>5</u> Feet Of <u>on top too</u>							
Rec. _____ Feet Of _____							
Rec. _____ Feet Of _____							
Rec. _____ Feet Of _____							

BHT 105 °F Gravity _____ °API D@ _____ °F Corrected Gravity _____ °API

RW _____ @ _____ °F Chlorides _____ ppm Recovery Chlorides 1200 ppm System

(A) Initial Hydrostatic Mud <u>2006</u> PSI	Recorder No. <u>13754</u>	T-Started <u>1215</u>
(B) First Initial Flow Pressure <u>19</u> PSI	@ (depth) <u>3848</u>	T-Open <u>1340</u>
(C) First Final Flow Pressure <u>19</u> PSI	Recorder No. <u>13849</u>	T-Pulled <u>1450</u>
(D) Initial Shut-in Pressure <u>29</u> PSI	@ (depth) <u>3869</u>	T-Out <u>1600</u>
(E) Second Initial Flow Pressure <u>19</u> PSI	Recorder No. _____	
(F) Second Final Flow Pressure <u>19</u> PSI	@ (depth) _____	
(G) Final Shut-in Pressure <u>—</u> PSI	Initial Opening <u>20</u>	Test _____
(H) Final Hydrostatic Mud <u>1986</u> PSI	Initial Shut-in <u>20</u>	Jars _____

RECEIVED
 KANSAS CORPORATION COMMISSION
 FEB 09 1996
 CONSERVATION DIVISION
 WICHITA, KS

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 [Signature]

Our Representative Dan Dange

Final Flow 15 Safety Joint _____

Final Shut-in — Straddle _____

Circ. Sub _____

Sampler _____

Extra Packer _____

Elect. Rec. _____

Other _____

TOTAL PRICE \$ _____

ALLIED CEMENTING CO., INC.

4353

15-065-22763-00-00

REMIT TO P.O. BOX 31
RUSSELL, KANSAS 67665

SERVICE POINT:

ORIGINAL

Russell

DATE <u>1-20-96</u>	SEC. <u>2</u>	TWP. <u>7 S</u>	RANGE <u>23W</u>	CALLED OUT <u>4:00AM</u>	ON LOCATION <u>8:00AM</u>	JOB START <u>8:15AM</u>	JOB FINISH <u>8:45AM</u>
LEASE <u>FT. HAYS</u>	WELL # <u>3</u>	LOCATION <u>Hill City 7N 3/4W 1/4N</u>		COUNTY <u>GRAHAM</u>	STATE <u>KANSAS</u>		

CONTRACTOR MAIARD DRGG. Rig #

TYPE OF JOB SURFACE

HOLE SIZE 12 1/4 TD. 270'

CASING SIZE 8 5/8 24# DEPTH 266'

TUBING SIZE _____ DEPTH _____

DRILL PIPE _____ DEPTH _____

TOOL _____ DEPTH _____

PRES. MAX _____ MINIMUM _____

MEAS. LINE _____ SHOE JOINT _____

CEMENT LEFT IN CSG. 15' 16 GALS

PERFS. _____

OWNER _____

CEMENT

AMOUNT ORDERED 180 SK 60/40 270 GEL
3% CC

COMMON	<u>108</u>	@	<u>6.10</u>	<u>658.80</u>
POZMIX	<u>72</u>	@	<u>3.15</u>	<u>226.80</u>
GEL	<u>3</u>	@	<u>9.50</u>	<u>28.50</u>
CHLORIDE	<u>5</u>	@	<u>28.00</u>	<u>140.00</u>
		@		
		@		
		@		
		@		
		@		
		@		
HANDLING		@	<u>105</u>	<u>189.00</u>
MILEAGE	<u>6.8m</u>		<u>.04</u>	<u>487.60</u>
TOTAL				<u>1732.70</u>

EQUIPMENT

PUMP TRUCK # 177 CEMENTER Will
HELPER Will

BULK TRUCK # 282 DRIVER Ryan

BULK TRUCK # _____ DRIVER _____

REMARKS:

Cement
CIRCULATED

[Signature]

SERVICE

DEPTH OF JOB	_____		
PUMP TRUCK CHARGE	_____		<u>445.00</u>
EXTRA FOOTAGE	_____	@	
MILEAGE	<u>6.8m</u>	@	<u>235</u> <u>159.80</u>
PLUG	_____	@	<u>45.00</u>
		@	
		@	
TOTAL <u>649.80</u>			

CHARGE TO: NORTHERN LIGHTS OIL CO. L.P.

STREET P.O. Box 164

CITY Andover STATE Kan ZIP 67002

FLOAT EQUIPMENT

	@		
	@		
	@		
	@		
	@		
TOTAL _____			