

ORIGINAL

KANSAS CORPORATION COMMISSION  
OIL & GAS CONSERVATION DIVISION

Form ACO-1  
June 2009

Form Must Be Typed  
Form must be Signed  
All blanks must be Filled

CONFIDENTIAL

WELL COMPLETION FORM  
WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License # 5474  
Name: Northern Lights Oil Co., L.C.  
Address 1: 320 W. Central  
Address 2:  
City: Andover State: KS Zip: 67002  
Contact Person: Robert Sutherland  
Phone: (316) 305-0493  
CONTRACTOR: License # 4958  
Name: Mallard JV, Inc.  
Wellsite Geologist: Bill Shepherd  
Purchaser: NCRA

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Designate Type of Completion:

- New Well  Re-Entry  Workover
- Oil  WSW  SWD  SIOW
- Gas  D&A  ENHR  SIGW
- OG  GSW  Temp. Abd.
- CM (Coal Bed Methane)
- Cathodic  Other (Core, Expl., etc.):

If Workover/Re-entry: Old Well Info as follows:

Operator:

Well Name:

Original Comp. Date: Original Total Depth:

- Deepening  Re-perf.  Conv. to ENHR  Conv. to SWD
- Conv. to GSW
- Plug Back: Plug Back Total Depth
- Commingled Permit #:
- Dual Completion Permit #:
- SWD Permit #:
- ENHR Permit #:
- GSW Permit #:

7-25-11 7-31-11 8-1-11  
Spud Date or Date Reached TD Completion Date or  
Recompletion Date Recompletion Date

API No. 15 - 185-23692 • 00 • 00  
Spot Description: The North Half of the Northwest of the Southeast Quarter  
N/2 NW SE Sec. 2 Twp. 24 S. R. 15  East  West  
2,310 Feet from  North /  South Line of Section  
1,980 Feet from  East /  West Line of Section  
Footages Calculated from Nearest Outside Section Corner:  
 NE  NW  SE  SW  
County: Stafford  
Lease Name: Munz Well #: 2  
Field Name: Macksville  
Producing Formation: Viola  
Elevation: Ground: 2001' Kelly Bushing: 2006'  
Total Depth: 4180 Plug Back Total Depth:  
Amount of Surface Pipe Set and Cemented at: 300' Feet  
Multiple Stage Cementing Collar Used?  Yes  No  
If yes, show depth set: 971' Feet  
If Alternate II completion, cement circulated from: 971'  
feet depth to: Surface w/ 260 sx cmt.

Drilling Fluid Management Plan

(Data must be collected from the Reserve Pit)

Chloride content: 71,000 ppm Fluid volume: 300 bbls  
Dewatering method used: Haul to disposal

Location of fluid disposal if hauled offsite:

Operator Name: Bob's Hauling Service

Lease Name: Waters 1 License #: 33779

Quarter NW/4 Sec. 30 Twp. 24 S. R. 14  East  West

County: Stafford Permit #: D24863

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INSTRUCTIONS: An original and two copies of this form shall be filed with the Kansas Corporation Commission, 130 S. Market - Room 2078, 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 of 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.

AFFIDAVIT

I am the affiant and I hereby certify that 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 Geologist Date: 11-6-11

KCC Office Use ONLY

- Letter of Confidentiality Received Date: 11/4/11 - 11/4/13
- Confidential Release Date:
- Wireline Log Received
- Geologist Report Received
- UIC Distribution
- ALT  I  II  III Approved by: DLG Date: 11-22-11

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Operator Name: Northern Lights Oil Co., L.C. Lease Name: Munz Well #: 2  
 Sec. 2 Twp. 24 S. R. 15  East  West County: Stafford

**INSTRUCTIONS:** Show important tops and base of formations penetrated. Detail all cores. Report all final copies of drill stems 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 test, along with final chart(s). Attach extra sheet if more space is needed. Attach complete copy of all Electric Wireline Logs surveyed. Attach final geological well site report.

Drill Stem Tests Taken <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>(Attach Additional Sheets)</i>  Samples Sent to Geological Survey <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Cores Taken <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Electric Log Run <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Electric Log Submitted Electronically <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>(If no, Submit Copy)</i>  List All E. Logs Run: <b>RAG</b>	<input checked="" type="checkbox"/> Log Formation (Top), Depth and Datum <input type="checkbox"/> Sample  <table style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Name</th> <th style="text-align: left;">Top</th> <th style="text-align: left;">Datum</th> </tr> </thead> <tbody> <tr> <td>Anhydrite</td> <td>958</td> <td>+1048</td> </tr> <tr> <td>Heebner</td> <td>3528</td> <td>-1522</td> </tr> <tr> <td>LKC</td> <td>3674</td> <td>1668</td> </tr> <tr> <td>Simpson Shale</td> <td>4136</td> <td>-2130</td> </tr> </tbody> </table>	Name	Top	Datum	Anhydrite	958	+1048	Heebner	3528	-1522	LKC	3674	1668	Simpson Shale	4136	-2130
Name	Top	Datum														
Anhydrite	958	+1048														
Heebner	3528	-1522														
LKC	3674	1668														
Simpson Shale	4136	-2130														

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	300ft	Class A	225 sx	2% gel, 3% cc
Production	7 7/8"	4 1/2"	11.6	4179 ft	Common	175 sx	10% salt, 2% gel

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 Specify Footage of Each Interval Perforated	Acid, Fracture, Shot, Cement Squeeze Record (Amount and Kind of Material Used)	Depth
1	Viola	3050 gal. 7.5% HCL, 1550 MiRA, 3000 ME/FE	4086-4091
1	Viola	114,000 gals of .1 to 4 ppg proppant/ slick	4102-4105
1	Viola	water and 727 bags of sand	4110-4132

TUBING RECORD: Size: <u>2 3/8"</u> Set At: <u>4160</u> Packer At: _____ Liner Run: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	RECEIVED NOV 18 2011 KCC WICHITA
Date of First, Resumed Production, SWD or ENHR. _____ Producing Method: <input type="checkbox"/> Flowing <input checked="" type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other (Explain) _____	
Estimated Production Per 24 Hours: Oil <u>10</u> Bbls. Gas <u>35</u> Mcf Water <u>40</u> Bbls. Gas-Oil Ratio _____ Gravity _____	

DISPOSITION OF GAS: <input type="checkbox"/> Vented <input checked="" type="checkbox"/> Sold <input checked="" type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i>	METHOD OF COMPLETION: <input type="checkbox"/> Open Hole <input checked="" type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <i>(Submit ACO-5)</i> <input type="checkbox"/> Other (Specify) _____	PRODUCTION INTERVAL: CONFIDENTIAL <u>4086-4091, 4102-4105, 4110-4132</u> NOV 04 2011
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# ALLIED CEMENTING CO., LLC. 038130

TO P.O. BOX 31  
RUSSELL, KANSAS 67665

SERVICE POINT:

*Russell KS*

DATE <u>7-31-2011</u>	SEC. <u>20</u>	TWP. <u>12S</u>	RANGE <u>24W</u>	CALLED OUT	ON LOCATION	JOB START <u>5:00 PM</u>	JOB FINISH <u>9:00 PM</u>
LEASE <u>MUNZ</u>	WELL <u>2</u>	LOCATION <u>MACKSVILLE KS. 2E</u>			COUNTY <u>STAFFORD</u>	STATE <u>KANSAS</u>	
OLD OR <u>NEW</u> (Circle one)		<u>2 x 1/2 W INTO</u>					

CONTRACTOR <u>Marland Drig. Rig # MVI</u>	OWNER
TYPE OF JOB <u>Production String (D.V.) 4299 LTD.</u>	
HOLE SIZE <u>7 7/8</u>	T.D. <u>4180 FT.</u>
CASING SIZE <u>4 1/2 New 11 #</u>	DEPTH <u>4179'</u>
<del>PLUG SIZE</del> <u>LATCH Down Plug</u>	DEPTH <u>4155'</u>
DRILL PIPE	DEPTH
TOOL <u>DV Tool</u>	DEPTH <u>97'</u>
PRES. MAX <u>2300 #</u>	MINIMUM
MEAS. LINE	SHOE JOINT <u>286.2</u>
CEMENT LEFT IN CSG <u>255 #</u>	
PERFS.	
DISPLACEMENT <u>15.10 BBL</u>	<u>67.1 BBL</u>

CEMENT	AMOUNT ORDERED <u>175 SK Com. 1105 SK 29 GAL</u>
	<u>310 SK Lite/W.T. w/ 1/4" FIBER SKL CSK</u>
	<u>500 GAL WFR-2 MID FLUSH</u>
COMMON	<u>175 @ 16.25 = 2843.75</u>
POZMIX	@
GEL	<u>3 @ 21.25 = 63.75</u>
CHLORIDE	@
ASC	@
SALT	<u>15 @ 23.95 = 359.25</u>
Lite	<u>310 @ 14.5 = 4495.00</u>
Fiber	<u>77 # @ 2.70 = 207.90</u>
WFR-2	<u>500 Gal @ 1.10 = 550.00</u>
	@
	@
HANDLING	<u>503 @ 2.25 = 1131.75</u>
MILEAGE <u>1116.46</u>	<u>2213.20</u>
TOTAL	<u>11764.60</u>

PUMP TRUCK	CEMENTER <u>Jeff</u>
# <u>409</u>	HELPER <u>TODD</u>
BULK TRUCK	
# <u>410</u>	DRIVER <u>Walter</u>
BULK TRUCK	
# <u>401</u>	DRIVER <u>ROB</u>
<u>30 SK @ RAFFOIE</u>	
<u>20 SK @ mousehole</u>	

REMARKS: DV TOOL ON 7/3  
REN 95 ITS OF NEW 11" @ 4 1/2 CSG.  
SET @ 4179' CIRCULATE ON BOTTOM  
1 Hry Pump 500 Gal mid flush. Cement  
w/ 175 SK Com. 1105 SK 29 Gal, Clear Line, Release  
LATCH Down Plug + Displace 645 BBL/LAND @ 1700 #  
Deep Drift + OPEN DV Tool @ 1200 # + Circulate  
emul top w/ 260 SK Lite w/ 1/4" FIBER SKL Displace  
15.10 BBL/mid, Land Plug @ 2200 # Chase DV Tool  
Release/Pressure (HOLD)  
TRANKS

DEPTH OF JOB	
PUMP TRUCK CHARGE	<u>2225.00</u>
EXTRA FOOTAGE	@
MILEAGE	<u>80 @ 7.00 = 560.00</u>
MANIFOLD	@
<u>7 LUM 80 @ 4.00 = 320.00</u>	
TOTAL	<u>3105.00</u>

CHARGE TO: NORTHERN LIGHTS

STREET \_\_\_\_\_

CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_

Cement D'D CIRCULATE  
 SURFACE. PUT APPROX 60 SK 15 BBL SURRY IN PIT

To Allied Cementing Co., LLC.  
 You are hereby requested to rent cementing equipment and furnish cementer and helper(s) to assist owner or contractor to do work as is listed. The above work was done to satisfaction and supervision of owner agent or contractor. I have read and understand the "GENERAL TERMS AND CONDITIONS" listed on the reverse side.

4 1/2 CSG

PLUG & FLOAT EQUIPMENT	
1-Float shoe	<u>229.00</u>
12-Centralizers	<u>@ 34.00 = 408.00</u>
3-Baskets	<u>@ 189.00 = 567.00</u>
1-D.V. Tool	<u>@ 2230.00</u>
1-LATCH Down Plug Assy	<u>@ N-C</u>
Wait time ON Float Equipment	<u>1 1/2 HRS</u>
11:45 - 1:15	TOTAL <u>3434.00</u>
SALES TAX (If Any)	

PRINTED NAME Preston L. Drilling

SIGNATURE [Signature]

TOTAL CHARGES \_\_\_\_\_

DISCOUNT 50/20 IF PAID IN 30 DAYS

40 GREAT BEND NR

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# CEMENTING LOG

STAGE NO.

Miller Cementing Co., LLC  
Cementing & Acidizing Services

Date 7-28-11 District Great Bend KS Ticket No. 37376  
 Company Weatherly Johts Rig Miller #2  
 Lease SUNZ Well No. 7  
 County Haskell State KS  
 Location Kilgus Wicksville KA Field \_\_\_\_\_  
 To Co. line 2E 3/4 S W into

CEMENT DATA:  
 Spacer Type: Fresh water  
 Amt. 5.57 Sks Yield \_\_\_\_\_ ft<sup>3</sup>/sk Density 8.24 PPG

CASING DATA: Conductor  PTA  Squeeze  Misc   
 Surface  Intermediate  Production  Liner   
 Size 8 5/8 Type Now Weight 20 Collar YTD

LEAD: Pump Time \_\_\_\_\_ hrs. Type \_\_\_\_\_  
 Excess \_\_\_\_\_  
 Amt. \_\_\_\_\_ Sks Yield \_\_\_\_\_ ft<sup>3</sup>/sk Density \_\_\_\_\_ PPG

TAIL: Pump Time 7 Minutes hrs. Type 100% A 3%  
CC 70% gel Excess 100%  
 Amt. 227 Sks Yield 1.34 ft<sup>3</sup>/sk Density 15.2 PPG

WATER: Lead \_\_\_\_\_ gals/sk Tail 6.71 gals/sk Total 34.88 Bbls.

Casing Depths: Top 113 Bottom 308

Pump Trucks Used 266 Trent H.  
 Bulk Equip. 341 Leomin W.

Drill Pipe: Size 4 1/2 Weight \_\_\_\_\_ Collars X110e  
 Open Hole: Size 12 1/4 T.D. 308 ft. P.B. to \_\_\_\_\_ ft.

Float Equip: Manufacturer \_\_\_\_\_  
 Shoe: Type \_\_\_\_\_ Depth \_\_\_\_\_  
 Float: Type \_\_\_\_\_ Depth \_\_\_\_\_  
 Centralizers: Quantity \_\_\_\_\_ Plugs Top \_\_\_\_\_ Btm. \_\_\_\_\_  
 Stage Collars \_\_\_\_\_  
 Special Equip. \_\_\_\_\_  
 Disp. Fluid Type Freshwater Amt. 18.66 Bbls. Weight 8.14 PPG  
 Mud Type Native Weight 9.1 PPG

CAPACITY FACTORS:  
 Casing: Bbls/Lin. ft. .0637 Lin. ft./Bbl. 15.7  
 Open Holes: Bbls/Lin. ft. .1438 Lin. ft./Bbl. 6.85  
 Drill Pipe: Bbls/Lin. ft. .0142 Lin. ft./Bbl. 70.32  
 Annulus: Bbls/Lin. ft. .0735 Lin. ft./Bbl. 13.60

Perforations: From \_\_\_\_\_ ft. to \_\_\_\_\_ ft. Amt. \_\_\_\_\_

COMPANY REPRESENTATIVE Frank

CEMENTER Greg R. / Deb R.

TIME AM/PM	PRESSURES PSI		FLUID PUMPED DATA			REMARKS
	DRILL PIPE CASING	ANNULUS	TOTAL FLUID	Pumped Per Time Period	RATE Bbls Min.	
						ou location Rig up <b>CONFIDENTIAL</b>
						Sofetu meeting
						Run casing, Break circ.
						Rig w to pump cement
						Start freshwater
				5 bbls		Freshwater in - Start cement
			271.87	271.87		Cement in the down - Release plug
						Start displacement
			200.2	18.66		Cement did circ.
						Displacement in - Stop pump
						<b>RECEIVED</b>
						<b>CONFIDENTIAL</b>
						NOV 04 2011
						NOV 18 2011
						KCC WICHITA
						<b>KCC</b>

# ALLIED CEMENTING CO., LLC. 037376

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

SERVICE POINT:  
Great Bend, KS  
11-26-11

DATE <u>11-25-11</u>	SEC. <u>2</u>	TWP. <u>24s</u>	RANGE <u>15W</u>	CALLED OUT	ON LOCATION	JOB START <u>1:17 PM</u>	JOB FINISH <u>1:45 PM</u>
LEASE # <u>11-11-2</u>	WELL # <u>2</u>	LOCATION <u>K-19 E Macksville Rd</u>			COUNTY <u>Go</u>	STATE <u>KS</u>	
OLD OR NEW (Circle one)		<u>Sorto Coline 2E 3/4 S 6W into</u>					

CONTRACTOR Mallard #1

TYPE OF JOB Surface

HOLE SIZE 12 1/4 ID. 308

CASING SIZE 8 1/8 20 DEPTH 308

TUBING SIZE DEPTH

DRILL PIPE 4 1/2 DEPTH 308

TOOL DEPTH

PRES. MAX MINIMUM

MEAS. LINE SHOE JOINT

CEMENT LEFT IN CSG. 15 ft.

PERFS.

DISPLACEMENT Fresh water

OWNER Northern Lights

CEMENT

AMOUNT ORDERED 225 yds Class A  
30% ce 2% gel

EQUIPMENT

PUMP TRUCK CEMENTER Greg R / Bob R

# 366 HELPER 1012 H

BULK TRUCK

# 341 DRIVER Kevin W.

BULK TRUCK

# DRIVER

COMMON 225 @

POZMIX @

GEL 4 @

CHLORIDE 8 @

ASC @

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HANDLING @

MILEAGE @

TOTAL

**REMARKS:**

Pipe on bottom break circ w/ rig mud  
Mix: 225 yds Class A 30% ce 2% gel  
with 34.88 bbls Freshwater  
Start displacement displace with  
18.66 bbls Freshwater & shut in  
Content dis circ.

CHARGE TO: Northern Lights

STREET

CITY STATE ZIP

SERVICE

DEPTH OF JOB 308

PUMP TRUCK CHARGE

EXTRA FOOTAGE @

MILEAGE @

MANIFOLD @

TOTAL

**PLUG & FLOAT EQUIPMENT**

6000 plug @

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TOTAL

To Allied Cementing Co., LLC.  
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PRINTED NAME Frank Sprank

SIGNATURE Frank Sprank

SALES TAX (If Any)

TOTAL CHARGES

DISCOUNT IF PAID IN 30 DAYS

Thank you!