

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

Operator: License # 5474
Name Northern Lights Oil Co.
Address 212 N. Market, Suite 400
City/State/Zip Wichita, Kansas 67202

Purchaser Mobil Oil Corporation
Dallas, Texas

Operator Contact Person John W. Sutherland, Jr.
Phone (316) 263-1008

Contractor: License # 4958
Name J. V. Mallard, Inc.

Wellsite Geologist Kurt L. Smith
Phone (316) 263-1008

Designate Type of Completion

☒ New Well ☐ Re-Entry ☐ Workover

☒ Oil ☐ SWD ☐ Temp Abd
☐ Gas ☐ Inj ☐ Delayed Comp.
☐ Dry ☐ Other (Core, Water Supply etc.)

If OWWO: old well info as follows:

Operator
Well Name
Comp. Date Old Total Depth

WELL HISTORY

Drilling Method:

☒ Mud Rotary ☐ Air Rotary ☐ Cable

11/29/86 12/5/86 12/5/86
Spud Date Date Reached TD Completion Date

3920
Total Depth PBTD 300ft 307.68

Amount of Surface Pipe Set and Cemented at....feet
Multiple Stage Cementing Collar Used? ☐ Yes ☒ No

If yes, show depth set.....feet
If alternate 2 completion, cement circulated
from 3920 feet depth to surface 375 cmt
Cement Company Name Allied
License # 47728

API NO. 15-179-20,878

County Sheridan

NE NE SW Sec. 1 Twp. 7S. Rge. 26 East
West

2310 Ft North from Southeast Corner of Section
2970 Ft West from Southeast Corner of Section
(Note: Locate well in section plat below)

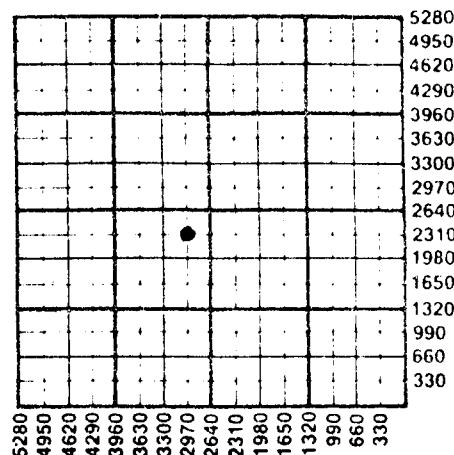
Lease Name Heskett Well # 1

Field Name Wildcat

Producing Formation Base Kansas City

Elevation: Ground 2576 KB 2684

Section Plat



WATER SUPPLY INFORMATION

Disposition of Produced Water: Disposal
Docket # Repressuring

Questions on this portion of the ACO-1 call:

Water Resources Board (913) 296-3717

Source of Water:
Division of Water Resources Permit #

Groundwater.....Ft North from Southeast Corner
(Well)Ft West from Southeast Corner of
Sec Twp Rge East West

Surface Water.....Ft North from Southeast Corner
(Stream, pond etc).....Ft West from Southeast Corner
Sec Twp Rge East West

Other (explain)

	Oil	Gas	Water	Gas-Oil Ratio	Gravity
Estimated Production Per 24 Hours	50 Bbls	MCF	Bbls	CFPB	35

METHOD OF COMPLETION

Production Interval

Disposition of gas: ☐ Vented
☐ Solid
☒ Used on Lease

☐ Open Hole ☒ Perforation
☐ Other (Specify)

3848-52

SIDE TWO

Operator Name Northern Lights Oil Co. Lease Name Heskett Well # 1Sec. 1 Twp. 7S Rge. 26W ☐ East ☒ West County Sheridan

WELL LOG

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
 Samples Sent to Geological Survey ☒ Yes ☐ No
 Cores Taken ☐ Yes ☒ No

Formation Description
☒ Log ☐ Sample

DST #1 3658 - 3705
 30 - 30 - 10 -
 Weak Blow
 Rec: 70' OCM (10% oil)
 SIP - 916
 FP - 32 - 32/54 - 54

DST #2 3712 - 3730
 30 - 30 - 30 - 30
 Strong Blow
 Rec: 15' FO
 600' MW, scum oil
 SIP 991 - 969
 FP 86 - 183
 237 - 270

DST #3 3734 - 3771
 30 - 30 - 30 - 30
 Strong Blow
 Rec: 820 MW, few spks
 oil
 SIP 980 - 937
 FP 86 - 237
 291 - 356

DST #4 3833 - 3855
 30 - 30 - 45 - 45
 Weak Blow Bldg to
 Strong in 25"
 Rec: 300 MGO
 (70% O, 10% G, 20% M)
 SIP 1269 - 1269
 FP 32-64/86-129

Name	Top	Bottom
Anhydrite	2191	+393
Heebner	3659	-1072
Toronto	3680	-1096
Lansing	3696	-1112
B/KC	3900	-1316

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"	23#	307.68'	60/40 poz	175	3% CC, 2% gel
production	7 7/8"	5 1/2"	14#	3919'	ATL & 60/40 poz	275 100	10 salt

PERFORATION RECORD

Shots Per Foot Specify Footage of Each Interval Perforated

Acid, Fracture, Shot, Cement Squeeze Record

(Amount and Kind of Material Used)

Depth

2	3848 - 52 ft	250MCA, 1500SGA	3848-52

TUBING RECORD Size 2 3/8" Set At 3856 Packer at

Liner Run ☐ Yes ☒ No

Date of First Production Producing Method

1/3/87

☐ Flowing ☒ Pumping ☐ Gas Lift ☐ Other (explain).....

15-179-20878

1-7-26W

DRILLERS' LOG

COMPANY: Northern Lights Oil Co. WELL: Heskett #1
 CONTRACTOR: Mallard Drilling API#: 15-179-20, 878
 PO Box 905
 McPherson, Ks., 67460 LOCATION: NE NE SW
 COMMENCED: November 28, 1986 Sec. 1, Twp. 7S, Rge. 26W
 COMPLETED: December 5, 1986 COUNTY: Sheridan
 TOTAL DEPTH: 3920' ELEVATION: 2576' G. L.
2684' K. B.

<u>FORMATION</u>	<u>FROM</u>	<u>TO</u>	
Soil, sand	0'	312'	
Shale	312	1786	
Shale, lime	1786	1810	
Cedar Hills	1810	1974	
Shale	1974	2193	
Anhydrite	2193	2226	
Shale	2226	3500	
Shale, lime	3500	3705	
Lansing, Kansas City	3705	3920	R.T.D.

Cut 12 $\frac{1}{4}$ " hole to 312' and ran 7 jts. 8 5/8" x 23# x 298.18' surface casing. Set at 307.68' and cemented with 175 sacks - 60/40 Poz Mix, 3% Cal. Chl., and 2% gel. Cement did circulate. Plug down at 8:30 p.m. 11/28/86

Ran 123 jts. 5 $\frac{1}{2}$ " x 14# x 3915' casing. Set at 3919' and cemented with 20 bbl. salt flush, 275 sacks A.T.L., and 100 sacks 60/40 Poz Mix with 10% salt. Bumped plug with 1000# at 9:30 p.m. 12/5/86

Ran 4 DST's and logged.

STATE OF KANSAS)
) SS:
 COUNTY OF McPHERSON)

I, BRYAN HESS of MALLARD DRILLING, do hereby certify that