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 # 4779

Name: North American Resources Co.

Address 16 E. Granite

City/State/Zip Butt, MT 59701

Purchaser:

Operator Contact Person: Ben Stromberg

Phone (406) 723-5421

Contractor: Name: Red Tiger Drilling

License: 5302

Wellsite Geologist: Wesley E. Hansen

Designate Type of Completion
X New Well ___ Re-Entry ___ Workover

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

OWWO: old well info as follows:
Operator:

Well Name:

Comp. Date ___ Old Total Depth ___

Drilling Method:
X Mud Rotary ___ Air Rotary ___ Cable

10-26-90	11-06-90	11-07-90
Spud Date	Date Reached TD	Completion Date

API NO. 15- 055-20,944

County Finney

___ NW NW Sec. 17 Twp. 23 Rge. 30W X East ___ West

4620 Ft. North from Southeast Corner of Section

4620 Ft. West from Southeast Corner of Section
(NOTE: Locate well in section plat below.)

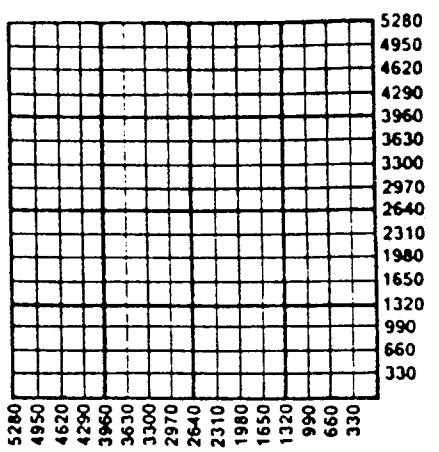
Lease Name Herbert Well # #17-1

Field Name Bulger

Producing Formation St. Louis & St. Genevieve

Elevation: Ground 2847' KB 2852'

Total Depth 5000' PBTD



ACT II not received 12-8-92 DRW

Amount of Surface Pipe Set and Cemented at 474' Feet

Multiple Stage Cementing Collar Used? X Yes ___ No

If yes, show depth set ~~2805~~ 2850 Feet

If Alternate II completion, cement circulated from

feet depth to ___ w/ ___ 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

Title Drilling Superintendent Date 2/14/91

Subscribed and sworn to before me this 15th day of February, 19 91.

Notary Public

Date Commission Expires

NOTARY PUBLIC State of Montana
[illegible]te, Montana
My Commission Expires March 7, 1992

RELEASED
DEC 9 8 1992
FROM CONFIDENTIAL

K.C.C. OFFICE USE ONLY
F ___ Letter of Confidentiality Attached
C ✓ Wireline Log Received
___ Drillers Timelog Received

Distribution
~~1992~~ KCC ___ SWD/Rep ___ NGPA
___ KGS ___ Plug ✓ Other (Specify) IS

Form ACO-1 (7-89)

SIDE TWO

Operator Name North American Resources Co. Lease Name Herbert Well # #17-1

Sec. 17 Twp. 23 Rge. 30W ☐ East ☒ West County Finney

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.) ☒ Yes ☐ No

Samples Sent to Geological Survey ☐ Yes ☒ No

Cores Taken ☐ Yes ☒ No

Electric Log Run (Submit Copy.) ☒ Yes ☐ No

DST results attached.

Formation Description

☐ Log ☒ Sample

Name	Top	Bottom
Heebner	3977	4071
Lansing	4071	4375
Stark	4375	4464
BKC	4464	4490
Marmaton	4490	4561
Pawnee	4561	4588
Fort Scott	4588	4603
Cherokee	4603	
Morrow	Not Called	
St. Genevieve	4723	4811
St. Louis	4811	5000 (TD)

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#	474'	common	125	Class "C"+2% CC 1/4# Celoflake.
Production	7-7/8	5-1/2	14#	4986'	PLEASE SEE ATTACHED SHEET		

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 SPF	4811-4820'	1000 gals 15% MCA-Fe w/.2% Losurf 300+ .1% HAI-60. Acidize St. Louis w/4000 gals MOD-202 acid + 8 gals Losurf 300 + 4 gals HAI-60 + Fe additives in MOD 202 Pmp1000 gals of 15% Fe HCl acid via tubing.	
4 SPF	4736 - 4740'		

TUBING RECORD	Size	Set At	Packer At	Liner Run
	2-3/8"	4857'	N/A	☐ Yes ☐ No

Date of First Production	Producing Method
12/9/90	☐ Flowing ☒ Pumping ☐ Gas Lift ☐ Other (Explain)

Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity
	51	TSTM	10	N/A	30

Disposition of Gas:

☐ Vented ☐ Sold ☒ Used on Lease (If vented, submit ACO-18.)

METHOD OF COMPLETION

☐ Open Hole ☒ Perforation ☐ Dually Completed ☒ Commingled

☐ Other (Specify) _____

Production Interval _____

North American Resources Co.

Herbert 17-1
NW/NW Sec 17-T23S-R30W
Finney Co., KS

Continuation of Casing Record

Production String
7-7/8" Hole
5-1/2" Casing
14#/ft.
4986' Setting Dept

1st Stage Cmt: 12 bbls, 2% KCl preflush, 1000 gas CW100 wash, 50 sx 35/65 Poz w/6% gel, 150 sx selfstress II (H).

2nd Stage Cmt: 350 sx 35/64 Poz/C + 6T gel + 2% $CaCl_2$ + 1/4 lb/sk flakes, 50 sx Class "H" w/2% $CaCl_2$.