

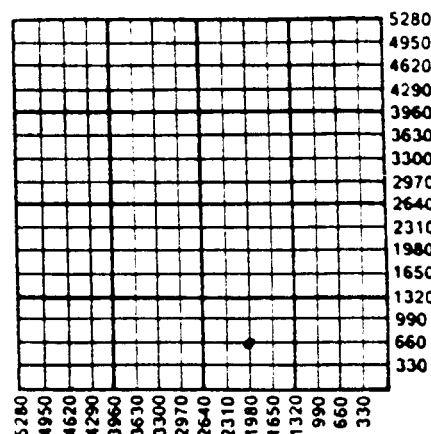
STATE CORPORATION COMMISSION OF KANSAS  
OIL & GAS CONSERVATION DIVISION  
WELL COMPLETION FORM  
ACO-1 WELL HISTORY  
DESCRIPTION OF WELL AND LEASE

API NO. 15- 055-20,992County FINNEY

C SW SE Sec. 08 Twp. 23 Rge. 30 X East West

660 Ft. North from Southeast Corner of Section

1980 Ft. West from Southeast Corner of Section  
(NOTE: Locate well in section plat below.)

Lease Name HAFLICH Well # #8-3Field Name N/AProducing Formation Morrow SdElevation: Ground 2833' KB 2838'Total Depth 4910 PBDT 4865'Amount of Surface Pipe Set and Cemented at 1781 FeetMultiple Stage Cementing Collar Used? Yes X NoIf yes, show depth set                      FeetIf Alternate II completion, cement circulated from                     feet depth to                      w/                      sx cmt.Operator: License # 4779Name: NORTH AMERICAN RESOURCES CO.Address 16 E. GRANITECity/State/Zip BUTTE, MT 59701Purchaser:                     Operator Contact Person: BEN STROMBERGPhone (406) 782-4233Contractor: Name: RED TIGER DRILLING CO.License: 5302Wellsite Geologist: Wesley D. Hansen

## Designate Type of Completion

X New Well        Re-Entry        WorkoverX Oil        SWD        Temp. Abd.       Gas        Inj        Delayed Comp.       Dry        Other (Core, Water Supply, etc.)

If OWMO: old well info as follows:

Operator:                     Well Name:                     Comp. Date                      Old Total Depth                     

Drilling Method:

X Mud Rotary        Air Rotary        Cable4-13-91 4-24-91 5/3/91Spud Date                      Date Reached TD                      Completion Date                     

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 *James E. Elise*I am Sr. Petroleum Engineer Date 6/24/91Subscribed and sworn to before me this 21<sup>st</sup> day of August, 19 91.Notary Public *Wesley D. Hansen*Date Commission Expires March 7, 1992

## K.C.C. OFFICE USE ONLY

F        Letter of Confidentiality Attached  
C        Wireline Log Received  
C        Drillers Timelog Received

## Distribution

1 KCC        SWD/Rep        NGPA  
       KGS        Plug        Other  
(Specify)

Operator Name NORTH AMERICAN RESOURCES CO. Lease Name HAFLICH Well # #8-3  
 Sec. 8 Twp. 23 Rge. 30 ☐ 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 ☒ Yes ☐ No  
 (Attach Additional Sheets.)

Samples Sent to Geological Survey ☐ Yes ☐ No

Cores Taken ☐ Yes ☐ No

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

DTS's, Logs, and Cement Tickets  
 are enclosed.

## Formation Description

☒ Log ☐ Sample

Name	Top	Bottom
Anhydrite	1983	2044
B/Anhydrite	2044	3986
Heebner	3986	4077
Lansing	4077	4469
BKC	4469	4491
Marmaton	4491	4465
Pawnee	4465	4595
Fort Scott	4595	4610
Cherokee	4610	4730
Morrow Sd	4730	4750
St. Genevieve	4750	4824
St. Louis	4824	TD-4912

## 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"	24	1781	60/40 Poz H	710	6% gel + 2% CC
					Class H	100	+1/4#/sk Cello-Seal
					Class H	300	2% CC + 1/4#/sk Cello-Seal
Production	7-7/8"	5-1/2"	14	4910'	Class H		10% Thixad + 10% Salt + .6% CF-s

## 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	4730-46'	3000 gal 2% KCL + .2% Clayfix II + .1% Claysta XP + .5% MUSCOA + .1% Losurf 300 w/120 ball sealers. Displace w/1200 gals 2% KCL w/add.	4730-46'

## TUBING RECORD

Size Set At Packer At  
 2-7/8" 4830 NA

Liner Run ☐ Yes ☒ No

Date of First Production 5/09/91 Producing Method ☐ Flowing ☒ Pumping ☐ Gas Lift ☐ Other (Explain)

Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity
	37	TSTM	0		28.7

Disposition of Gas:

## METHOD OF COMPLETION

Production Interval

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

☐ Open Hole ☒ Perforation ☐ Dually Completed ☐ Conmingled

☐ Other (Specify) \_\_\_\_\_