

RELEASED

SEP 1 1988

Date:

COMPANY: Rains & Williamson Oil Co., Inc.
FROM CONFIDENTIAL

DRILLER'S LOG

KCC

Jnd

SEC. 31 T. 31 S R.1W

LOC. 4640' FSL & 1650' FWL

COUNTY: Sumner

WELL NAME: CRAWFORD #1

RIG NO. #3

TOTAL DEPTH 3700'

ELEVATION 1222 GL 1231 KB

COMMENCED: 7-20-87

COMPLETED: 7-28-87

CONTRACTOR: Rains & Williamson Oil Co., Inc.

CASING RECORD:

SURFACE: 8 5/8" @ 377' w/285 sx. 60-40 poz., 2% gel, 3% cc.

PRODUCTION: 5 1/2" @ 3699' w/75 sx. Class A., 18% salt, 3/4 of 1%
D-31 S-10

LOG

(Figures Indicate Bottom of Formations)

Shale	1655
Shale and Lime	2247
Lime and Shale	3309
Lime	3657
Lime and Shale	3700
Rotary Total Depth	3700

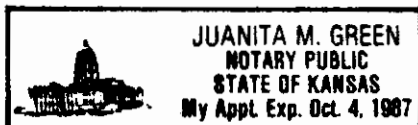
KANSAS GEOLOGICAL SURVEY
WICHITA BRANCH

SEP 30 1988

AUG 14 1987

STATE OF KANSAS)
COUNTY OF SEDGWICK) SS:

I, Wilson Rains, President of Rains & Williamson Oil Co., Inc.
upon oath state that the above and foregoing is a true and correct copy of the log of the
CRAWFORD #1 well.



AUG 17 1987
KANSAS GEOLOGICAL SURVEY
WICHITA BRANCH

Wilson Rains
WILSON RAINS

Subscribed and sworn to before me this 11th day of August, 1987.

My Appointment Expires:
10-4-87

Juanita M. Green
Juanita M. Green - Notary Public

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 # 5146
Name Rains & Williamson Oil Co., Inc.
Address 220 W. Douglas, Suite 425
City/State/Zip Wichita, KS 67202

Purchaser.....

Operator Contact Person Juanita Green
Phone (316) 265-9686

Contractor: License # 5146
Name Rains & Williamson Oil Co., Inc.

Wellsite Geologist Monte R. Marks
Phone (316) 262-8339

Designate Type of Completion

☒ New Well ☐ Re-Entry ☐ Workover

☐ Oil ☐ SWD ☐ Temp Abd
☐ Gas ☐ Inj ☐ Delayed Comp.
☒ Dry ☐ Other (Core, Water Supply etc.)
If ONWD: old well info as follows:

Operator
Well Name
Comp. Date Old Total Depth.....

WELL HISTORY

Drilling Method:

☒ Mud Rotary ☐ Air Rotary ☐ Cable

7-20-87... 7-28-87... 10-10-87...
Spud Date Date Reached TD Completion Date
3700
Total Depth PBD

Amount of Surface Pipe Set and Cemented at 377 feet
Multiple Stage Cementing Collar Used? ☐ Yes ☒ No
If yes, show depth set.....feet
If alternate 2 completion, cement circulated
from.....feet depth to.....w/.....SX cmt
Cement Company Name
Invoice #

API NO. 15-191-22,006

County Sumner

@SE NW NE Sec. 31 Twp. 31 Rge. 1 East
X West

4640 Ft North from Southeast Corner of Section
1650 Ft West from Southeast Corner of Section
(Note: Locate well in section plat below)

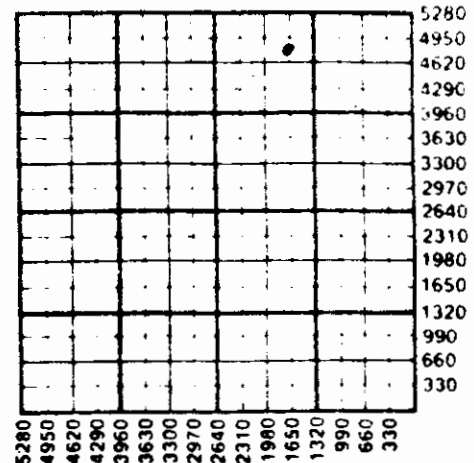
Lease Name CRAWFORD Well # 1

Field Name Wellington West

Producing Formation.....

Elevation: Ground 1222 GL KB 1231 KB

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).....
(purchased from city, R.W.D. #)

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. 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 WILSON RAINS
Title PRESIDENT Date 12-3-87

Subscribed and sworn to before me this 3rd day of December
Notary Public Teresa L. Burleigh-Smith
Date Commission Expires 7-2-90

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

for Name Rains & Williamson Oil Co., Inc. Lease Name..... CRAWFORD Well #... 1.....

1 Twp. 31 S Rge. 1 ☐ East ☒ West County..... Sumner

WELL LOG

INSTRUCTIONS: Show important tops and base of formations penetrated. Detail all cores. Report all drill stems giving interval tested, time tool open and closed, flowing and shut-in pressures, whether shut-in sure reached static level, hydrostatic pressures, bottom hole temperature, fluid recovery, and flow rates as 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

DST #1 3628' - 3657'. 30 60 90 90. Rec. 1380' gas in pipe, 120' gas cut mud, 120' slightly oil and gas cut mud. Pressures were invalid due to clock malfunction. Temp. 107°.

Formation Description
☐ Log ☒ Sample

Name	Top	Bottom
Kansas City	3017	(-1786)
Mississippian	3623	(-2392)
Miss. Dolomite	3637	(-2406)
R.T.D.	3700	(-2469)

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 1/2"	8 5/8"	22#	377'	60-40 poz.	285	2% gel, 3% cd.
Production	7 7/8"	5 1/2"	14#	3699'	Class A	75	18% salt, 3/4 of 1% D-31 S-10

PERFORATION RECORD

Acid, Fracture, Shot, Cement Squeeze Record

Shots Per Foot	Specify Footage of Each Interval Perforated	(Amount and Kind of Material Used)	Depth
2	3650' - 3660'	1000 gallons 15% MA. Frac w/9000# 12-20 Sand 2250# Sand, 400 barrels of gelled water.	20-40

TUBING RECORD	Size	Set At	Packer at	Liner Run	☐ Yes ☐ No
---------------	------	--------	-----------	-----------	--

Date of First Production	Producing Method
	☐ Flowing ☐ Pumping ☐ Gas Lift ☐ Other (explain).....

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

METHOD OF COMPLETION

Production Interval

Disposition of gas: ☐ Vented ☐ Open Hole ☐ Perforation
☐ Sold ☐ Other (Specify)
☐ Used on Lease ☐ Dually Completed
☐ Commingled

185641