

NSAS DRILLERS LOG

API No. 15 — 033 — 20,421  
 County Number

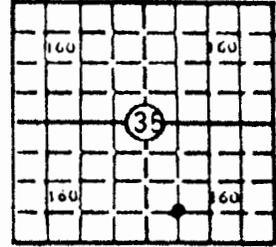
Operator  
R.J. Patrick Operating Company  
 Address  
P.O. Box 1314, Liberal, KS 67901  
 Well No. 1 Lease Name ROBERT WIMMER

S. 35 T. 33S R. 20 XX  
 W

Loc. C-SW-SF

County Comanche

640 Acres  
 N



Locate well correctly

Elev.: Gr. 1798'

DF 1803' KB 1805'

Footage Location  
660' feet from XY (S) line 1980' feet from YQ (W) line  
 Principal Contractor NRG Drilling, Inc. Geologist Mr. Joseph Blair  
 Spud Date March 7, 1981 Total Depth 5232' P.B.T.D. 5211'  
 Date Completed March 31, 1981 Oil Purchaser UPG & Northern Natural

CASING RECORD

Report of all strings set — surface, intermediate, production, etc.

Purpose of string	Size hole drilled	Size casing set (in O.D.)	Weight lbs./ft.	Setting depth	Type cement	Sacks	Type and percent additives
Conductor Pipe	30"	20"	20# steel	61'	Grout	6 1/2 yds.	None
Surface Pipe	12 1/2"	8-5/8"	24#	658'	HOWCO	500	3% CC
Production Pipe	7-7/8"	5-1/2"	15.5#	5231'	HOWCO	250	18% salt, 3/4# 1% CER-2

LINER RECORD

PERFORATION RECORD

Top, ft.	Bottom, ft.	Sacks cement	Shots per ft.	Size & type	Depth interval
			1	3/8" jets	5151-55', 5160-71'
			2	3/8" jets	5180-88', 5188-4193'

TUBING RECORD

Size	Setting depth	Packer set at
2-1/16"	5130	5130
2-1/16"	4255	None

ACID, FRACTURE, SHOT, CEMENT SQUEEZE RECORD

Amount and kind of material used	Depth interval treated
5000 gal. 15% Non-F Acid	5551-5188'
750 gal. MCA	4188-4193'

**K. G. S. LIBRARY**

INITIAL PRODUCTION

Date of first production <u>March 31, 1981</u>	Producing method (flowing, pumping, gas lift, etc.) <u>Oil Zone swabbing; Gas Zone flowing (dual completion)</u>		
RATE OF PRODUCTION PER 24 HOURS	<u>Oil 219 bbls/55wtr</u>	<u>Gas 250,000 gas PD</u>	<u>Water Both zones</u>
	<u>Gas-TSTM</u>	<u>2 BU, 36 BW</u>	<u>91 bbls.</u>
Disposition of gas (vented, used on lease or sold) <u>Vented</u>	Producing interval (s) <u>5551-5188', 4188-4193'</u>		

Surface Sand	0'	73'
Sand, Clay	73'	660'
Shale, Lime	660'	2170'
Lime, Shale	2170'	2716'
Shale	2716'	3520'
Lime, Shale	3520'	3975'
Shale, Lime	3975'	4222'
Lime, Shale	4222'	4711'
Lime	4711'	4858'
Shale, Lime	4858'	5041'
Lime, Shale	5041'	5232'
RTD		5232'
LTD		5233'

NORTHERN NATURAL GAS COMPANY  
OBSERVED SURFACE DATA WORKSHEET  
SHEET 1

TYPE TEST: One-Point  INITIAL  ANNUAL  RETEST  SPECIAL TEST DATE: 4 / 2

OPERATOR: Patrick Operating LEASE: Robert Wimmer WELL NO. 1

SEC. 35 TWP. 33 R1G. SUR. 20 COUNTY: Comanche STA. NO. \_\_\_\_\_ PIPELINE CONN. NNG

GAS SYSTEM \_\_\_\_\_ FIELD \_\_\_\_\_ RESERVOIR \_\_\_\_\_

CSG \_\_\_\_\_ WT. \_\_\_\_\_ TBG SIZE \_\_\_\_\_ WT. \_\_\_\_\_ PERFS. \_\_\_\_\_ TO \_\_\_\_\_

TYPE COMPLETION: SINGLE ( ) GAS-GAS ( ) GAS-OIL ( ) PACKER @ \_\_\_\_\_ ft. FLOW STRING @ \_\_\_\_\_

DATE ON PREFLOW \_\_\_\_\_ DATE SHUT IN \_\_\_\_\_ LENGTH OF PREFLOW \_\_\_\_\_ AVG. PRESS. RATE \_\_\_\_\_

DATE SHUT IN \_\_\_\_\_ LENGTH OF SHUT IN \_\_\_\_\_ SHUT IN CSG. PRESS. Pkr. psig SHUT IN TBG. PRESS. 1502

PRESS TAKEN: 4-22-81 TIME 0945 SHUT IN \_\_\_\_\_

GAS GRAVITY (Gm) \_\_\_\_\_ API GRAVITY \_\_\_\_\_ PROVER SIZE 2" METER RUN SIZE \_\_\_\_\_ ORIFICE SIZE \_\_\_\_\_ TYPE TAPS \_\_\_\_\_

EST. (Gg) 650 OF LIQUID @ 60°F \_\_\_\_\_

DATE TIME OF READING	ELAP TIME HRS.	W.H. PRESSURE DATA				WELL HEAD TEMP	METER OR PROVER DATA			LIQUID HYDRO-CARBONS BBLs	WATER PRODUCED BBLs	REMARKS PERTINENT TO TEST DATA QUALITY
		CASING psig	Δ P CSG.	TUBING psig	Δ P TBG.		PRESS psig	DIFF.	TEMP			
4-22-81 0945	Wed.											Prover downstream of separator.
1015												
1030												Dec. flow.
1145												
1100												
1115												Well logging off.
1115												
1130												Well logging off.
1130												End of four-point. Start one-point. Changed orifice to 1/4" @ 350.
1145												Opened well up.
1200												Separator choke wide
1215												Started making liquid
1230												Making lots of liquid
1245												" " " "
1300												" " " "
1415												" " " "
1445												" " " "
1515												" " " "
1545												" " " "
1615										15		Gas sample taken.
1615												Tank 261. No trace H <sub>2</sub>
1620												
1625												
1630												
1645												
1700												
1715												

TESTED BY: W. E. Gough WITNESSED BY: Ike Osborne (Patrick Op)

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