

OKLAHOMA

OPERATION COMMISSION - OIL & GAS CONSERVATION DIVISION
BACK - PRESSURE TEST FOR NATURAL GAS WELLS

TYPE TEST: ☐ INITIAL ☐ ANNUAL ☒ SPECIAL				TEST DATE 1-23-71		OKLAHOMA TAX COMMISSION ASSIGNED LEASE NO.	
COMPANY Roger C. Hanks				CONNECTION None			
FIELD Indian Basin		ALLOCATED POOL NO.		RESERVOIR Cisco Canyon		LOCATION	
COMPLETION DATE		TOTAL DEPTH 7801		PLUG BACK TD 7767		ELEVATION 3698 + 16'	
CSG. SIZE 7"		WT. 23-26		SET AT 7801		PERFORATIONS: FROM TO 7668 - 7700	
T.B.G. SIZE 2-3/8		WT. 4.7		SET AT 7576		PERFORATIONS: FROM TO	
TYPE COMPLETION (DESCRIBE) Single				PACKER SET AT		COUNTY Eddy	
PRODUCING THRU Tubing		RESERVOIR TEMP. F 143 @ 7684		MEAN GROUND TEMP. F 74		BARO. PRESS. - P _s 14.4	
L 7684		H 7684		G _g .650		% CO ₂ .63	
				% N ₂ .82		% H ₂ S .28	
				PROVER 4.026		METER RUN TAPS Elg.	
FLOW DATA				TUBING DATA		CASING DATA	
NO.	(PROVER) (LINE) X ORIFICE SIZE	PRESS. PSIG	DIFF. (INCHES) (X 1000)	TEMP. F	PRESS. PSIG	TEMP. F	PRESS. PSIG
SI							
1.	4 x 1.250	171.0	59	85	445	90	
2.	4 x 1.250	171.0	50	85	485	90	
3.	4 x 1.250	171.0	30	85	633	90	
4.	4 x 1.250	171.0	21	85	719	89	
5.							

RATE OF FLOW CALCULATIONS

NO.	COEFFICIENT (24-HOUR)	$\sqrt{h_w P_m}$	PRESSURE P _m	FLOW TEMP. FACTOR, F _t	GRAVITY FACTOR, F _g	SUPER COMPRESSION FACTOR, F _{pv}	RATE OF Q, MCF
1.	7.857	104.2	184.2	.9768	1.240	1.016	1008
2.	7.857	96.0	184.2	.9768	1.240	1.016	928
3.	7.857	74.3	184.2	.9768	1.240	1.016	718
4.	7.857	62.2	184.2	.9768	1.240	1.016	601
5.							

NO.	P _r	TEMP. R	T _r	Z
1.	.27	545	1.45	.969
2.	.27	545	1.45	.969
3.	.27	545	1.45	.969
4.	.27	545	1.45	.969
5.				

GAS LIQUID HYDROCARBON RATIO 840 MCF/ BBL
API GRAVITY OF LIQUID HYDROCARBONS 61.0 DEG.
SPECIFIC GRAVITY SEPARATOR GAS .650 X X X X X X X X
SPECIFIC GRAVITY FLOWING FLUID X X X X .650
CRITICAL PRESSURE 670 PSIA 670 PSIA
CRITICAL TEMPERATURE 375 R 375 R

P_C 2400 * P_C² 5760

NO.	P _w	P _w ²	P _C ² - P _w ²
1.		236.6	5523.4
2.		270.7	5489.3
3.		430.7	5329.3
4.		545.1	5214.9
5.			

(1) $\frac{P_C^2}{P_C^2 - P_w^2} = \frac{P_C^2}{P_C^2 - P_w^2}$ (2) $\left[\frac{P_C^2}{P_C^2 - P_w^2} \right]^n$

WHAOF = Q $\left[\frac{P_C^2}{P_C^2 - P_w^2} \right]^n$

RECEIVED

MAR 29 1971

O. C. C.
ARTESIA, OFFICE

RECEIVED
MAR 23 1971
U. S. GEOLOGICAL SURVEY
ARTESIA, NEW MEXICO

CALCULATED WELLHEAD OPEN FLOW <u>1,080</u> MCFD @ <u>15.025</u>		ANGLE OF SLOPE θ <u>45.0</u>		SLOPE, n <u>1.000</u>	
REMARKS: * Calculated wellhead pressure after 72 hours					
Well producing fluid rate: 56 BBL H ₂ O/hour					
0.05 BBL 61° API Cond/hour					
APPROVED BY COMMISSION:		CONDUCTED BY:		CALCULATED BY:	