

RAINBO SERVICE CO. WIRE LINE WELL SERVICE
OKLAHOMA CORPORATION COMMISSION-OIL & GAS CONSERVATION DIVISION
BA. PRESSURE TEST FOR NATURAL GAS W. 3
(RULE 2-308)

RECEIVED
MAR 26 1984

COLORADO & GAS CONS. COMM.



00694126

TYPE TEST:		4 PT. <input checked="" type="checkbox"/> INITIAL <input type="checkbox"/> ANNUAL <input type="checkbox"/> RETEST		TEST DATE	2-17-84	OKLAHOMA TAX COMMISSION ASSIGNED LEASE NO.			
COMPANY		TUTHILL BARBEE		CONNECTION		N/A			
FIELD	ALLOCATED POOL NO.	RESERVOIR	MORROW	LOCATION	SEC.31-T24S-R45E	UNIT			
COMPLETION DATE	TOTAL DEPTH	PLUG BACK TD		ELEVATION		FARM OR LEASE NAME HOFFMAN			
CSG SIZE	WT.	d	SET AT	PERFORATIONS: FROM	TO	WELL NO.			
4 1/2"				4966	4982	1-31			
TBG SIZE	WT.	d	SET AT	PERFORATIONS: FROM	TO	SEC.	TWP- RGE-		
2 3/4"	4.7	1.995				31	24S 45E		
TYPE COMPLETION (DESCRIBE)				PACKER SET AT		COUNTY			
SINGLE				UNKN.		PROWERS			
PRODUCING THRU		RESERVOIR TEMP.F	MEAN GROUND TEMP.F	BARO.PRESS.-Pa	STATE				
TUBING		135 @ 4978	74	14.4	COLORADO				
L	H	Gg	% CO2	% N2	% H2S	PROVER METER RUN TAPS			
4978	4978	.700	0.00	0.00	---	2"			
FLOW DATA				TUBING DATA		CASING DATA			
NO.	PROVER (LINE) X ORIFICE SIZE SIZE	PRESS. PSIG	DIFF. (INCHES) (ROOTS)	TEMP. F	PRESS. PSIG	TEMP. F	PRESS. PSIG	TEMP. F	DURATION OF FLOW, HR.
SI					908	60	PKR		24
1.	2 X 3/8	104		55	900	60	PKR		1
2.	2 X 3/8	224		55	887	60	PKR		1
3.	2 X 1/2	199		60	863	60	PKR		1
4.	2 X 1/2	362		62	828	60	PKR		1
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 COMPRESS. FACTOR, F_{pv}	RATE OF FLOW Q , MCFD
1.	2.439		118.4	1.0048	1.195	1.015	352
2.	2.439		238.4	1.0048	1.195	1.031	720
3.	4.388		213.4	1.0000	1.195	1.026	1148
4.	4.388		376.4	0.9981	1.195	1.047	2063
5.							

NO.	Pr	TEMP.R	Tr	Z
1.	0.18	515	1.31	0.971
2.	0.36	515	1.31	0.941
3.	0.32	520	1.33	0.950
4.	0.56	522	1.33	0.913
5.				

GAS LIQUID HYDROCARBON RATIO _____ MCF/BBL
API GRAVITY OF LIQUID HYDROCARBONS _____ DEG.
SPECIFIC GRAVITY SEPARATOR GAS _____ X X X X X X
SPECIFIC GRAVITY FLOWING FLUID _____ X X X X
CRITICAL PRESSURE 668 PSIA _____ PSIA
CRITICAL TEMPERATURE 392 R _____ R

NO.	Pw	Pw2	Pc2-Pw2
1.	914.4	836.1	14.7
2.	901.4	812.5	38.3
3.	877.4	769.8	81.0
4.	842.4	709.6	141.2
5.			

$P_c 922.4 \quad P_{c2} 850.8$
 P_{c2}
(1) $\frac{P_{c2} - P_{w2}}{P_{c2} - P_{w2}} = 5.263$

(2) $\frac{P_{c2} - P_{w2}}{P_{c2} - P_{w2}} = 3.955$

WHAOF = $\left[\frac{P_{c2}}{P_{c2} - P_{w2}} \right]^n = 8159$

BEST IMAGE
AVAILABLE

CALCULATED WELLHEAD OPEN FLOW 8159 MCFD @ 14.65 ANGLE OF SLOPE 0 50.1 SLOPE, n 0.828

REMARKS:

APPROVED BY COMMISSION: _____ CONDUCTED BY: _____ CALCULATED BY: _____ CHECKED BY: _____