

TYPE TEST: <input checked="" type="checkbox"/> Initial <input type="checkbox"/> Annual <input type="checkbox"/> Special		TEST DATE: 11-1-1999	
COMPANY Horsehoe Operating Inc		LEASE Dikeman	
COUNTY Hamilton		WELL NO. 1	
LOCATION C NW/4	SECTION 15	TWP 22s	RNG 40
ACRES 320			
FIELD Bradshaw	RESERVOIR Winfield	PIPELINE CONNECTION Heritage	
COMPLETION DATE 5/6/1998	PLUG BACK DEPTH 2765	PACKER SET AT	
TOTAL DEPTH			
CASING SIZE 4.500	WT. 10.500	ID 4.052	SET AT 2765
PERF. 2727		TO 2737	
TUBING SIZE 2.375	WT. 4.700	ID 1.995	SET AT 2734
PERF.		TO	
TYPE COMPLETION (Describe) Single Gas		TYPE FLUID PRODUCTION Water	
PRODUCING THRU (Annulus/Tubing) casing		RESERVOIR TEMPERATURE F 90	BAR PRESS - Pa 14.4 psia
GAS GRAVITY - Gg .759	% CARBON DIOXIDE .024	% NITROGEN 25.716	API GRAVITY OF LIQUID
VERTICAL DEPTH (H) 2732	TYPE METER CONN. flange		METER RUN SIZE 2.067
REMARKS			

OBSERVED SURFACE DATA

RATE NO.	ORIFICE SIZE in.	(METER) PRESSURE psig	DIFF. (h _w) (h _t)	FLOWING TEMP. t.	WELLHEAD TEMP. t.	CASING WELLHEAD PRESS.		TUBING WELLHEAD PRESS.		DURATION HOURS	LIQUID PROD. Ebls.
						psig	(P _w) (P _t) (P _c) psia	psig	(P _w) (P _t) (P _c) psia		
SHUT-IN						152	165			96.00	
1.	1.000	57.00	18.00	60		144	157				
2.	1.000	57.00	48.00	60		137	150			.50	
3.	1.000	57.00	61.00	60		128	141			.50	
4.	1.000	58.50	89.00	61		119	132			.50	

FLOW STREAM ATTRIBUTES

RATE NO.	COEFFICIENT (F _b) Mcfd	(METER) PRESSURE psia	EXTENSION $\sqrt{P_m \times H_w}$	GRAVITY FACTOR Fg	FLOWING TEMP FACTOR Ft	DEVIATION FACTOR Epv	RATE OF FLOW Q Mcfd	GOR	G _m
1.	5.070	70.3	35.57	1.1478	1.0000	1.0057	208		.759
2.	5.070	70.3	58.09	1.1478	1.0000	1.0057	339		.759
3.	5.073	70.3	65.49	1.1478	1.0000	1.0057	383		.759
4.	5.070	71.8	79.94	1.1478	.9990	1.0058	467		.759

PRESSURE CALCULATION

RATE NO.	P _t psia	P _c psia	P _w psia	(P _c) ² Thousands	(P _w) ² Thousands	PLOTING POINTS		% SHUT-IN 100 $\left[\frac{P_w - P_a}{P_c - P_a} \right]$
						(P _c) ² - (P _w) ² Thousands	Q Mcfd	
1.	157.3	165.3	157.6	27.3	24.8	2.5	208.2	95.0
2.	150.3	165.3	151.2	27.3	22.9	4.5	340.0	90.7
3.	141.3	165.3	142.5	27.3	20.3	7.0	383.5	85.0
4.	132.8	165.3	134.6	27.3	18.1	9.2	467.4	79.8

INDICATED WELLHEAD OPEN FLOW

889

Mcfd @ 14.65 psia

"n" =

The undersigned authority, on behalf of the Company, states that he is duly authorized to make the above report and that he has knowledge of the facts stated herein and that said report is true and correct. Executed this the 27 day of Nov, 19 99

Witness (if any)

For Commission

For Company

Checked by

GAS WELL BACK PRESSURE CURVE

WELL TESTER:

TEST DATE: 11-1-1999

Horsehoe Operating Inc
Dikeman 1
15 22s 40
Hamilton ,KS.
Exponent n: 0.6088
AOF: 889.

