

15-023-20098-00-00

2.9  
3.14.86

STATE OF KANSAS - CORPORATION COMMISSION  
ONE POINT STABILIZED OPEN FLOW OR DELIVERABILITY TEST

FORM G-2  
8-7-58

TYPE TEST:  Deliverability  Open Flow TEST DATE: 2-28-86

COMPANY: F.M.P. Operating LEASE: Federal WELL NO.: 1-9-440

COUNTY: Cheyenne LOCATION: SECTION 9 TWP 4 RNG 40 ACRES

FIELD: Reservoir PIPELINE CONNECTION: K&N Energy

COMPLETION DATE: PLUG BACK TOTAL DEPTH: PACKER SET AT:

CASINO SIZE: WT. I.D. SET AT PERF. TO

TUBING SIZE: WT. I.D. SET AT PERF. TO

TYPE COMPLETION (Describe): TYPE FLUID PRODUCTION:

PRODUCING THRU: Tubing RESERVOIR TEMPERATURE F: BAR. PRESS - P<sub>a</sub>: 14.4 Psia

GAS GRAVITY G<sub>g</sub>: .585 % CARBON DIOXIDE: % NITROGEN: API GRAVITY OF LIQUID:

VERTICAL DEPTH (H): TYPE METER CONN.: (METER RUN) (METER) SIZE: 2"

SHUT-IN PRESSURE: SHUT IN 2-28 1986 AT (AM)(PM) TAKEN 3-3 1986 AT (AM)(PM)

FLOW TEST: STARTED 3-3 1986 AT (AM)(PM) TAKEN 3-4 1986 AT (AM)(PM)

OBSERVED DATA DURATION OF SHUT-IN HR.

SHUT-IN OR FLOW	ORIFICE SIZE in.	(METER) (PROVER) PRESSURE psig	DIFF. in. (h <sub>w</sub> )(h <sub>d</sub> )	FLOWING TEMP. t	WELL-HEAD TEMP. t	CASINO WELLHEAD PRESS		TUBING WELLHEAD PRESS		DURATION HOURS	LIQUID PROD. Bbls.
						psig	(P <sub>w</sub> )(P <sub>t</sub> )(P <sub>c</sub> ) psia	psig	(P <sub>w</sub> )(P <sub>t</sub> )(P <sub>c</sub> ) psia		
SHUT-IN						159.0	173.4				
FLOW	3/8	122.0	14.0			150.1	164.5				

RATE OF FLOW CALCULATIONS

COEFFICIENT (F <sub>p</sub> )(F <sub>d</sub> ) Mcfd	(METER) (PROVER) PRESSURE psia	EXTENSION √P <sub>mshw</sub>	GRAVITY FACTOR F <sub>g</sub>	FLOWING TEMP. FACTOR F <sub>L</sub>	DEVIATION FACTOR F <sub>pv</sub>	RATE OF FLOW R Mcfd	GOR	G <sub>m</sub>
.6860	136.4	43699	1.307	1.000	1.012	40.0		

(OPEN FLOW) (DELIVERABILITY) CALCULATIONS

(P<sub>c</sub>)<sup>2</sup> = 30.1 ; (P<sub>w</sub>)<sup>2</sup> = 27.1 ; P<sub>d</sub> = \_\_\_\_\_ % (P<sub>c</sub> - 14.4) + 14.4 = \_\_\_\_\_ ; (P<sub>w</sub>)<sup>2</sup> = 0.207 ; (P<sub>d</sub>)<sup>2</sup> = \_\_\_\_\_

(P <sub>c</sub> ) <sup>2</sup> - (P <sub>w</sub> ) <sup>2</sup> or (P <sub>c</sub> ) <sup>2</sup> - (P <sub>d</sub> ) <sup>2</sup>	(P <sub>c</sub> ) <sup>2</sup> - (P <sub>w</sub> ) <sup>2</sup>	$\frac{P_c^2 - P_w^2}{P_c^2 - P_d^2}$	LOG [ ]	"n"	n x LOG [ ]	ANTILOG	OPEN FLOW DELIVERABILITY EQUALS R x ANTILOG Mcfd
29.9	3.0	9.9667	.9986	.760	.7589	5.7398	230.0

OPEN FLOW 230.0 Mcfd @ 14.65 psia DELIVERABILITY Mcfd @ 14.65 psia

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 therein, and that said report is true and correct.

Executed this the \_\_\_\_\_ day of \_\_\_\_\_, 19\_\_\_\_.

Witness (if any) Shirley Wiley For Commission  
 For Company \_\_\_\_\_  
 Checked by \_\_\_\_\_  
 MAR 13 1986  
 REGISTRATION DIVISION