

KANSAS CORPORATION COMMISSION ONE POINT STABILIZED OPEN FLOW OR DELIVERABILITY TEST

FORM G-2

(Rev. 8/98)

See Instructions on Reverse Side)

Type Test:

☐ Open Flow

☒ Deliverability

TEST DATE: 8-26-02

API No. 15-175-21874

15-175-21874

COPY

REC WICHITA 8-27-02

COMPANY Helmerich & Payne, Inc.

LEASE C.S. High

Well Number 1-2

COUNTY Seward LOCATION 4030 FSL & 4030 FEL SECTION 33 TWN 31S RNG 32W ACRES 640

FIELD Hugoton RESERVOIR Chase PIPELINE CONNECTION Oneok

COMPLETION DATE 7/18/02 PLUG BACK TOTAL DEPTH 2790' PACKER SET AT

CASING SIZE 5 1/2 WT. 14 I.D. SET AT 2782 PERF 2654 TO 2692

TUBING SIZE 2 3/8 WT. I.D. SET AT 2699 PERF TO

TYPE COMPLETION (Describe) Single TYPE FLUID PRODUCTION PUMP UNIT OR TRAVELING PLUNGER? YES/NO

PRODUCING THRU Tbg/Csg RESERVOIR TEMPERATURE F BAR.PRESS Pa 14.4 Psia

GAS GRAVITY - Gg %CARBON DIOXIDE %NITROGEN API GRAVITY OF LIQUID

VERTICAL DEPTH (H) 2835 TYPE METER CONN. Flange (METER RUN)(PROVER)SIZE 2 x 1.125

SHUT-IN PRESSURE: SHUT IN: 8/23 20 02 at (AM) (PM) TAKEN 8/26 20 02 at (AM) (PM)
FLOW TEST: STARTED 8/19 20 02 at (AM) (PM) TAKEN 8/22 20 02 at (AM) (PM)

OBSERVED DATA

DURATION OF SHUT-IN HR.

SHUT-IN OR FLOW	ORIFICE SIZE in.	(METER) (PROVER) PRESSURE Psig	DIFF. in. (Hw)(Hd)	FLOWING TEMP. T	WELL-HEAD TEMP. T	CASING WELLHEAD PRESS.		TUBING WELLHEAD PRESS.		DURATION HOURS	LIQUID PROD. BbLS.
						psig	(Pw)(Pt)(Pc) psig	psig	(Pw)(Pt)(Pc) psig		
SHUT-IN		120.2				120.2	134.6				
FLOW	1.125	41.5	1.1			89.5	103.9				

RATE OF FLOW CALCULATIONS

COEFFICIENT (Fb)(Fp) Mcfd	(METER) (PROVER) PRESSURE Psig	EXTENSION Pmxhw	Gravity Factor Fg	Flowing Temp Factor Ft	Deviation Factor Fpv	Rate of Flow R Mcfd	GOR	Gm
7762.5	55.9	7.84				60.86		

(OPEN FLOW) (DELIVERABILITY) CALCATIONS

(Pc)2 = 18117.16 (Pw)2 = 10795.21 Pd = % (Pc-14.4) + 14.4 = (Pa)2 = 0.207 (Pd)2 = 259.01

(Pc)2-(PA)2 OR (Pc)2-(Pd)2	(Pc)2 - (Pw)2	$\left[\frac{Pc^2 - Pz^2}{Pc^2 - Pw^2} \right]$	LOG $\left[\right]$	"n"	N x Log $\left[\right]$	ANTILOG	OPEN FLOW DELIVERABILITY EQUALS R X ANTILOG MCFD
17857.95	7321.95	2.45	.38	.85	.33	2.13	129.85

OPEN FLOW 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 5th day of September, 2002

Witness (if any)

Helmerich & Payne, Inc.
For Company

Shirley Kelly
Checked by