

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

FORM 0-3  
 8-7-58

15-005-20050-0000-1489

TYPE TEST:  Deliverability  Open Flow TEST DATE: 9/3/88

COMPANY: Olympic Petroleum Co. LEASE: Childress WELL NO.: 1

COUNTY: Atchison LOCATION: S/2 SW/4 SECTION: 2 TWP: 7S RNO: 18E ACRES:

FIELD: Wehking RESERVOIR: Upper & Lower McLouth PIPELINE CONNECTION: Atchison Pipeline Co.

COMPLETION DATE: 11/30/87 PLUG BACK TOTAL DEPTH: 1763 PACKER SET AT:

CASING SIZE: 4 1/2" WT. 9.5# LD. 1799 SET AT 1799 PERF. 1696 TO 1750

TUBING SIZE: 2 3/8" WT. 4.7# LD. 1752 SET AT 1752 PERF. TO

TYPE COMPLETION (Describe): Single Gas TYPE FLUID PRODUCTION: None

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

GAS GRAVITY - G<sub>g</sub>: 0.596 % CARBON DIOXIDE: 0.30 % NITROGEN: 8.40 API GRAVITY OF LIQUID:

VERTICAL DEPTH (ft): 1723 TYPE METER CONN.: Flange/Down (METER RUN)(FLOWER) SIZE: 2.067

SHUT-IN PRESSURE: SHUT IN 9/3 10:88 AT 7:11 (AM) TAKEN 9/6 10:88 AT 7:30 (AM) TAKEN

FLOW TEST: STARTED 9/2 10:88 AT 4:00 (AM) TAKEN 9/3 10:88 AT 4:00 (AM) TAKEN

OBSERVED DATA

DURATION OF SHUT-IN 72 HR.

SHUT-IN OR FLOW	ORIFICE SIZE in.	(METER) (FLOWER) PRESSURE psig	DIFF. in. (h <sub>w</sub> )(h <sub>d</sub> )	FLOWING TEMP. t	WELL-HEAD TEMP. t	CASING WELLHEAD PRESS.		TUBING WELLHEAD PRESS.		DURATION HOURS	LIQUID PROD. Bbls.
						psig	(P <sub>w</sub> )(P <sub>f</sub> )(P <sub>c</sub> ) psia	psig	(P <sub>w</sub> )(P <sub>f</sub> )(P <sub>c</sub> ) psia		
SHUT-IN						378.9	393.3			72	
FLOW	1.000	260	20.0	72		330.7	345.1			24	

RECEIVED  
 STATE CORPORATION COMMISSION

RATE OF FLOW CALCULATIONS

CONSERVATION DIVISION  
 Wichita, Kansas

COEFFICIENT (F <sub>1</sub> )(F <sub>2</sub> ) Mcfd	(METER) (FLOWER) PRESSURE psia	EX.ENSION $\sqrt{P_m \times h_w}$	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>
5.073	274.4	74.1	1.2953	0.9887	1.0193	491		

(OPEN FLOW) (DELIVERABILITY) CALCULATIONS

(P<sub>c</sub>)<sup>2</sup> = 154.685 ; (P<sub>w</sub>)<sup>2</sup> = 119.094 ; P<sub>d</sub><sup>2</sup> = \_\_\_\_\_ % (P<sub>c</sub> - 14.4) + 14.4 = \_\_\_\_\_ ; (P<sub>w</sub>)<sup>2</sup> = 0.207 ; (P<sub>d</sub>)<sup>2</sup> = \_\_\_\_\_

$\frac{(P_c)^2 - (P_d)^2}{(P_c)^2 - (P_w)^2}$	$(P_c)^2 - (P_w)^2$	$\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2}$	LOG [ ]	"a"	a x LOG [ ]	ANTILOG	OPEN FLOW DELIVERABILITY EQUALS R x ANTILOG Mcfd
154.478	35.591	4.340	0.6375	1.0000	0.6375	4.340	2131

OPEN FLOW 2131 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 July, 1989

Petroleum Science Corporation  
 600 Commerce Plaza  
 7300 West 110th Street  
 Overland Park, KS 66210

*Ronald Thompson* (consultant)  
 For Company

Witness (if any)

For Commission

Checked by