

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

FORM 0-3  
 8-7-58

19  
 2-14-88

15-005-20052-0000

TYPE TEST:  Deliverability  Open Flow TEST DATE: 9/17/88

COMPANY: Theodore Leben & Associates LEASE: Wehking WELL NO.: 2

COUNTY: Atchison LOCATION: NE/4 NW/4 SE/4 SECTION: 2 TWP: 7S R14G: 18E ACRES: .

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

COMPLETION DATE: 11/20/87 PLUG BACK TOTAL DEPTH: 1836 PACKER SET AT: .

CASING SIZE: 4 1/2" WT.: 9.5# LD.: . SET AT: 1868 PERF.: 1780 TO: 1788

TUBING SIZE: 2 3/8" WT.: 4.7# LD.: . SET AT: 1708 PERF.: . TO: .

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

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

GAS GRAVITY - G<sub>g</sub>: 0.588 % CARBON DIOXIDE: 0.30 % NITROGEN: 6.70 API GRAVITY OF LIQUID: .

VERTICAL DEPTH (ft): 1784 TYPE METER CONN.: Flange/Down (METER RUN) (PROV) SIZE: 2.067

SHUT-IN PRESSURE: SHUT IN 9/17 19.88 AT 7:45 (AM) TAKEN 9/20 19.88 AT 7:45 (AM) (PM)

FLOW TEST: STARTED 9/16 19.88 AT 7:45 (AM) TAKEN 9/17 19.88 AT 7:45 (AM) (PM)

OBSERVED DATA

DURATION OF SHUT-IN 72 HR.

SHUT-IN OR FLOW	ORIFICE SIZE In.	(METER) (PROV) 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>t</sub> )(P <sub>e</sub> ) psia	psig	(P <sub>w</sub> )(P <sub>t</sub> )(P <sub>e</sub> ) psia		
SHUT-IN						498.8	513.2	494.0	508.4	72	RECEIVED STATE CORPORATION COMMISSION
FLOW	1.000	332.4	10.5	68		432.0	446.4	355.0	369.4		11/14/88

RATE OF FLOW CALCULATIONS

CONSERVATION DIVISION  
 Wichita, Kansas

COEFFICIENT (P <sub>w</sub> ) <sup>2</sup> / Mcfd	(METER) (PROV) PRESSURE psia	EX.ENSION √ P <sub>mshw</sub>	GRAVITY FACTOR F <sub>g</sub>	FLOWING TEMP. F <sub>L</sub>	DEVIATION FACTOR F <sub>pv</sub>	RATE OF FLOW R Mcfd	GOR	O <sub>m</sub>
5.073	332.4	59.1	1.3041	0.9924	1.0257	398		

(OPEN FLOW) (DELIVERABILITY) CALCULATIONS

(P<sub>c</sub>)<sup>2</sup> = 263.374 ; (P<sub>w</sub>)<sup>2</sup> = 199.273 ; P<sub>d</sub><sup>2</sup> = \_\_\_\_\_ % (P<sub>c</sub> - 14.4) + 14.4 = \_\_\_\_\_ ; (P<sub>d</sub>)<sup>2</sup> = 0.207 ; (P<sub>d</sub>)<sup>2</sup> = \_\_\_\_\_

(P <sub>w</sub> ) <sup>2</sup> - (P <sub>d</sub> ) <sup>2</sup> / (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>	[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> ]	LOG [ ]	"n"	n x LOG [ ]	ANTILOG	OPEN FLOW DELIVERABILITY EQUALS R x ANTILOG Mcfd
263.167	64.101	4.106	0.6134	0.8047	0.4936	3.116	1240

OPEN FLOW 1240 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

Witness (if any)

For Commission

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

*Donald Thompson* (consultant)  
 For Company

Checked by