

HORIZON OIL & GAS  
CORPORATION COMMISSIONFORM G-2  
8-7-58

## POINT STABILIZED OPEN FLOW OR DELIVERABILITY TEST

TYPE TEST: ☐ Deliverability ☒ Open Flow TEST DATE: June 15, 1967

COMPANY: Shenandoah Oil Corp. LEASE: Cogburn WELL NO.: 1-12

COUNTY: Baca LOCATION: 1320 FWL & 2640 FSL SECTION: 12 TWP: 33S RNG: 42W ACRES: 640

FIELD: Midway RESERVOIR: Topeka PIPELINE CONNECTION: Baca Gas Gathering System, Inc.

COMPLETION DATE: 1-7-67 PLUG BACK TOTAL DEPTH: 3190 PACKER SET AT: NONE

CASING SIZE: 4-1/2" WT.: 9.5 I.D.: 4.090 SET AT: 3256 PERF.: 3132 TO: 3142

TUBING SIZE: 2-3/8" WT.: 4.7 I.D.: 1.995 SET AT: 3084 PERF.: 3087 TO: 3092

TYPE COMPLETION (Describe): Single with static column TYPE FLUID PRODUCTION: NONE

PRODUCING THRU: Tubing RESERVOIR TEMPERATURE F: 98° F BAR. PRESS - P<sub>a</sub>: 14.4 Psia

GAS GRAVITY - G<sub>g</sub>: 0.700 % CARBON DIOXIDE: -- % NITROGEN: -- API GRAVITY OF LIQUID: --

VERTICAL DEPTH (H): 3115 TYPE METER CONN.: Flange (METER RUN) (XXXX) SIZE: 3.000

SHUT-IN PRESSURE: SHUT IN 6-9 19 67 AT 2:20 (XX) (PM) TAKEN 6-12 19 67 AT 10:30 (AM) (XX)

FLOW TEST: STARTED 6-12 19 67 AT 10:30 (AM) (XX) TAKEN 6-15 19 67 AT 9:00 (AM) (XX)

## OBSERVED DATA

DURATION OF SHUT-IN 68 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	CASING 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						313.2	327.6	313.2	327.6	68	
FLOW	0.750	274.4	15	60	60	302.7	317.1	274.5	288.9	70	0

P<sub>cr</sub> =T<sub>cr</sub> =

## RATE OF FLOW CALCULATIONS

COEFFICIENT (F <sub>b</sub> )(F <sub>p</sub> ) Mcfd	(METER) (PROVER) PRESSURE psia	EXTENSION $\sqrt{P_m \times h_w}$	GRAVITY FACTOR F <sub>g</sub>	FLOWING TEMP. FACTOR F <sub>t</sub>	DEVIATION FACTOR F <sub>pv</sub>	RATE OF FLOW R Mcfd	GOR	G <sub>m</sub>
2.740	288.8	65.8	1.195	1.000	1.034	223	--	--

## (OPEN FLOW) (DELIVERABILITY) CALCULATIONS

$(P_c)^2 = 107.3$ ;		$(P_w)^2 = 100.6$ ;	$P_d =$ _____ %	$(P_c - 14.4) + 14.4 =$ _____ ;	$(P_d)^2 = 0.207$ ;		
$\frac{(P_c)^2 - (P_a)^2}{(P_c)^2 - (P_d)^2}$ or $\frac{(P_c)^2 - (P_d)^2}{(P_c)^2 - (P_w)^2}$	$(P_c)^2 - (P_w)^2$	$\frac{[P_c^2 - P_a^2]}{[P_c^2 - P_w^2]}$	LOG [      ]	"n"	n x LOG [      ]	ANTILOG	OPEN FLOW DELIVERABILITY EQUALS R x ANTILOG Mcfd
107.1	6.7	15.985	1.20372	0.881	1.0605	11.495	2,563

OPEN FLOW 2,563 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 12th day of July, 1967.

Witness (if any)

For Commission

HORIZON OIL &amp; GAS COMPANY

For Company

Checked by