

STATE OF KANSAS - CORPORATION COMMISSION
MULTIPOINT BACK PRESSURE TEST

FORM G-1
8-7-58

15-185-02099-0002 31-22-11W

TYPE TEST: ☒ Initial ☐ Annual ☐ Special		TEST DATE: 11/09/98	
COMPANY Charles Griffin		LEASE Allen	
COUNTY Stafford		WELL NO. 7	
LOCATION SE SW	SECTION 32	TWP 22s	RNG 11w
ACRES 160			
FIELD Richardson	RESERVOIR Severy	PIPELINE CONNECTION Sand Hills LLC	
COMPLETION DATE 3/23/98	PLUG BACK DEPTH 2800	PACKER SET AT	
	TOTAL DEPTH 2800		
CASING SIZE 7.000	WT. 20.000	ID 6.456	SET AT 2800
			PERF. 2767
			TO 2772
TUBING SIZE 2.875	WT. 6.500	ID 2.441	SET AT 2760
			PERF.
			TO
TYPE COMPLETION (Describe) new		TYPE FLUID PRODUCTION water	
PRODUCING THRU tub		RESERVOIR TEMPERATURE F 88	
		BAR PRESS - Pa 14.4 psia	
GAS GRAVITY - Gg .722	% CARBON DIOXIDE .106	% NITROGEN 28.033	
API GRAVITY OF LIQUID			
VERTICAL DEPTH (H) 2800	TYPE METER CONN.		PROVER SIZE 2
REMARKS Had to use prover as well was located a great distance from meter and it would			

OBSERVED DATA

RATE NO.	ORIFICE SIZE in.	(PROVER) PRESSURE psig	DIFF. (h _w) (h _t)	FLOWING TEMP. t.	WELLHEAD TEMP. t.	CASING WELLHEAD PRESS.		TUBING WELLHEAD PRESS.		DURATION HOURS	LIQUID PROD. Bbls.
						psig	(P _w)(P _t)(P _c) psia	psig	(P _w)(P _t)(P _c) psia		
SHUT-IN						611	625	431	445	72.00	
1.	.250	29.00		52		562	576	215	229	1.00	
2.	.250	40.00		54		527	541	146	160	1.00	.4
3.	.250	54.00		64		478	492	195	209	1.00	
4.	.250	71.00		62		410	424	135	149	1.00	

RATE OF FLOW CALCULATION

RATE NO.	COEFFICIENT (F _p) Mcfd	(PROVER) PRESSURE psia	EXTENSION $\sqrt{P_m \times H_w}$	GRAVITY FACTOR F _g	FLOWING TEMP FACTOR F _t	DEVIATION FACTOR F _p	RATE OF FLOW Q Mcfd	GOR	G _m
1.	1.115	43.4	43.40	1.1766	1.0078	1.0028	57		.722
2.	1.115	54.4	54.40	1.1766	1.0058	1.0037	72	7504.9	1.201
3.	1.115	68.4	68.40	1.1766	.9962	1.0046	89		.722
4.	1.115	85.4	85.40	1.1766	.9981	1.0058	112		.722

PRESSURE CALCULATION

RATE NO.	P _t psia	P _c psia	P _w psia	(P _c) ² Thousands	(P _w) ² Thousands	PLOTING POINTS		% SHUT-IN 100 $\left[\frac{P_w - P_a}{P_c - P_a} \right]$
						(P _c) ² - (P _w) ² Thousands	Q Mcfd	
1.	229.4	625.4	576.4	391.1	332.2	58.9	57.5	92.0
2.	160.4	625.4	541.4	391.1	293.1	98.0	72.0	86.3
3.	209.4	625.4	492.4	391.1	242.5	148.7	89.8	78.2
4.	149.4	625.4	424.4	391.1	180.1	211.0	112.5	67.1

INDICATED WELLHEAD OPEN FLOW

159

Mcfd @ 14.65 psia

"n" =

.581

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 herein, and that said report is true and correct.

Executed this the _____ day of _____, 19 ____.

Witness (if any)

For Company

For Commission

Checked by

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: 11-10-98	
COMPANY LaVeta Operating		LEASE Allen	
WELL NO. 7			
COUNTY Stafford	LOCATION SE SW	SECTION 32	TWP 22s
		RNG 11w	ACRES 160
FIELD Richardson	RESERVOIR Severy	PIPELINE CONNECTION Sand Hills LLC	
COMPLETION DATE 3/23/98	PLUG BACK DEPTH 2800	PACKER SET AT	
	TOTAL DEPTH 2800		
CASING SIZE 7.000	WT. 20.000	ID 6.456	SET AT 2800
		PERF. 2767	TO 2772
TUBING SIZE 2.875	WT. 6.500	ID 2.441	SET AT 2760
		PERF.	TO
TYPE COMPLETION (Describe) new		TYPE FLUID PRODUCTION water	
PRODUCING THRU tubing		RESERVOIR TEMPERATURE F 88	BAR PRESS - Pa 14.4 psia
GAS GRAVITY - Gg .722	% CARBON DIOXIDE .106	% NITROGEN 28.033	API GRAVITY OF LIQUID
VERTICAL DEPTH (H) 2800	TYPE METER CONN. flange		METER RUN SIZE 2
SHUT-IN PRESSURE: SHUT IN	11-06 19 98	AT 8 (AM)(PM)	TAKEN 11-9 1998
FLOW TEST STARTED:	11-09 19 98	AT 9 (AM)(PM)	TAKEN 11-10 1998
			AT 3 (AM)(PM)

OBSERVED DATA

SHUT-IN OR FLOW	ORIFICE SIZE in.	(METER) PRESSURE psig	DIFF. (h _w) (h _t)	FLOWING TEMP. t.	WELLHEAD TEMP. t.	CASING WELLHEAD PRESS.		TUBING WELLHEAD PRESS.		DURATION HOURS	LIQUID PROD. Bbls.
						psig	(P _w)(P _t)(P _c) psia	psig	(P _w)(P _t)(P _c) psia		
SHUT-IN						611	625	431	445	72.00	
FLOW	.625	45.00	8.00	52		441	455	100	114	27.00	

RATE OF FLOW CALCULATION

COEFFICIENT (F _b) Mcfd	(METER) PRESSURE psia	EXTENSION $\sqrt{P_m \times H_w}$	GRAVITY FACTOR Fg	FLOWING TEMP FACTOR Ft	DEVIATION FACTOR Fpv	RATE OF FLOW R Mcfd	GOR	G _m
1.919	59.4	21.80	1.1766	1.0078	1.0043	49		.722

(OPEN FLOW)(DELIVERABILITY CALCULATIONS)

(P _c) ² = 391.1		(P _w) ² = 207.4		Pd = 7.2		% (P _c - 14.4) + 14.4 =		(Pa) ² = 0.297
(P _c) ² - (P _a) ²		(P _c) ² - (P _w) ²		LOG		n x LOG		(Pd) ² = 2.03
OR (P _c) ² - (P _d) ²		$\frac{(P_c)^2 - (P_a)^2}{(P_c)^2 - (P_d)^2}$		"n"		ANTILOG		OPEN FLOW DELIVERABILITY = R x ANTILOG Mcfd
390.92		183.74		2.128		.3279		.582
.1907		1.551		77				
389.10		183.74		2.118		.3259		.582
.1895		1.547		77				

OPEN FLOW 77 Mcfd @ 14.65 psia DELIVERABILITY 77 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 herein, and that said report is true and correct.

Executed this the _____ day of _____, 19 ____.

Witness (if any)

For Commission

For Company

Checked by

GAS WELL BACK PRESSURE CURVE

WELL TESTER: 11-09 9
TEST DATE: 11/09/98

Charles Griffin 7
Allen 32 22s 11w .KS.
Stafford
Slope n : 0.5816

