

15-185-23074

36-22-12W

STATE OF KANSAS - CORPORATION COMMISSION
MULTIPOINT BACK PRESSURE TESTFORM G-1
8-7-58

TYPE TEST: ☒ Initial ☐ Annual ☐ Special		TEST DATE: 11-2-98	
COMPANY Charles Griffin		LEASE Richardson	
COUNTY Stafford		WELL NO. 1A	
LOCATION SE SE SE	SECTION 36	TWP 22s	RNG 12w
ACRES 160			
FIELD Richardson		PIPELINE CONNECTION Sandhills LLC	
COMPLETION DATE 4-15-98		PLUG BACK DEPTH 2848	PACKER SET AT 2732
TOTAL DEPTH 2800			
CASING SIZE 5.500	WT. 15.000	ID 4.974	SET AT 2873
PERF. 2766		TO 2776	
TUBING SIZE 2.875	WT. 2.700	ID 2.441	SET AT 2732
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 .724	% CARBON DIOXIDE .081	% NITROGEN 27.906	API GRAVITY OF LIQUID
VERTICAL DEPTH (H) 2800		TYPE METER CONN. flange	METER RUN SIZE 2
REMARKS			

OBSERVED DATA

RATE NO.	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								484	498	72.00	
1.	.500	71.00	1.50	48	45			364	378	1.00	
2.	.500	82.00	3.00	52	46			281	295	1.00	
3.	.500	65.00	5.00	52	47			160	174	1.00	
4.	.500	58.00	9.00	54	48			55	69	1.00	

RATE OF FLOW CALCULATION

RATE NO.	COEFFICIENT (F _b) Mcfd	(METER) PRESSURE psia	EXTENSION $\sqrt{P_m \times H_w}$	GRAVITY FACTOR F _g	FLOWING TEMP FACTOR F _t	DEVIATION FACTOR F _{pv}	RATE OF FLOW Q Mcfd	GOR	G _m
1.	1.219	85.4	11.32	1.1756	1.0117	1.0064	16		.724
2.	1.219	96.4	17.01	1.1756	1.0078	1.0071	24		.724
3.	1.219	79.4	19.92	1.1756	1.0078	1.0058	28		.724
4.	1.219	72.4	25.53	1.1756	1.0058	1.0052	36		.724

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.	378.4	498.4	378.4	248.4	143.2	105.2	16.5	75.2
2.	295.4	498.4	295.4	248.4	87.3	161.1	24.7	58.1
3.	174.4	498.4	174.4	248.4	30.4	218.0	28.9	33.1
4.	69.4	498.4	69.5	248.4	4.8	243.6	37.0	11.4

INDICATED WELLHEAD OPEN FLOW

33

Mcfd @ 14.85 psia

"n" = .800

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

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: 11/03/98	
COMPANY LaVeta Operating		LEASE Richardson	
COUNTY Stafford		WELL NO. 1A	
LOCATION SE SE SE	SECTION 36	TWP 22s	RNG 12w
ACRES 160			
FIELD Richardson		PIPELINE CONNECTION Sandhills LLC	
RESERVOIR Severy Sand			
COMPLETION DATE 4-15-98	PLUG BACK DEPTH 2848	PACKER SET AT 2732	
TOTAL DEPTH 2800			
CASING SIZE 5.500	WT. 15.000	ID 4.974	SET AT 2873
PERF. 2766		TO 2776	
TUBING SIZE 2.875	WT. 2.700	ID 2.441	SET AT 2732
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 - G _g .724	% CARBON DIOXIDE .081	% NITROGEN 27.906	API GRAVITY OF LIQUID
VERTICAL DEPTH (H) 2800		TYPE METER CONN. flange	
METER RUN SIZE 2"			
SHUT-IN PRESSURE: SHUT IN	10-30 19 9 AT 8 8(AM)-(PM)	TAKEN	11-02 1998 AT 8 (AM)-(PM)
FLOW TEST STARTED:	11-02 19 9 AT 8 8(AM)-(PM)	TAKEN	11-03 1998 AT 12 (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								484	498	72.00	
FLOW	.500	55.00	6.00	52				60	74	28.25	

RATE OF FLOW CALCULATION

COEFFICIENT (F _b) Mcfd	(METER) PRESSURE psia	EXTENSION $\sqrt{P_m \times H_w}$	GRAVITY FACTOR F _g	FLOWING TEMP FACTOR F _t	DEVIATION FACTOR F _{pv}	RATE OF FLOW R Mcfd	GOR	G _m
1.219	69.4	20.41	1.1756	1.0078	1.0051	29		.724

(OPEN FLOW)(DELIVERABILITY CALCULATIONS)

(P _c) ² = 248.4		(P _w) ² = 5.5		P _d = 11.0		%		(P _c - 14.4) + 14.4 =		(P _a) ² = 0.207		(P _d) ² = 3.03		
(P _c) ² - (P _a) ² OR (P _c) ² - (P _d) ²	(P _c) ² - (P _w) ²	$\frac{(P_c)^2 - (P_a)^2}{(P_c)^2 - (P_d)^2}$		LOG	"n"	n x LOG	ANTILOG	OPEN FLOW DELIVERABILITY = R x ANTILOG Mcfd						
248.20	242.86	1.022		.0094	.799	.0075	1.018	30						
245.38	242.86	1.010		.0045	.799	.0036	1.008	29						

OPEN FLOW

30

Mcfd @ 14.65 psia

DELIVERABILITY

29

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: 11-02 815
 TEST DATE: 11-2-98

Charles Griffin
 Richardson 1A
 36 22s 12w
 Stafford ,KS.
 Slope n : 0.7998

$P_c^2 - P_w^2$ (10³ PSI²)

5

2

20

200

Q (MCF/DAY)

