Invalid Test; Not Enough Drawdown Jim R. 4/17/03

KANSAS CORPORATION COMMISSION
ONE POINT STABLIZED OPEN FLOW OR DELIVERABILITY TEST

FORM G-2
(Rev.8/98)

TYPE TEST:
☒ Open Flow
☒ Deliverability

TEST DATE: 3-12-03

API No 15- 023-20450-0000

Company	Lease	Well Number
Priority Oil & Gas LLC	Briggs-Vincent	5-23

County	Location	Section	TWP	RNG(E/W)	Acres Attributed
Cheyenne	NE/NW/NW	23	3s	42w	

Field	Reservoir	Gas Gathering Connection
	Niobrara	Williams

Completion Date	Plug Back Total Depth	Packer Set at
1/14/03	1616	

Casing Size	Weight	Internal Diameter	Set at	Perforations	To
4.500	10.500	4.052	1665	1457	1501

Tubing Size	Weight	Internal Diameter	Set at	Perforations	To
NONE					

Type Completion (Describe)	Type Fluid Production	Pump Unit or Traveling Plunger?
Frac		

Producing Thru (Annulus/Tubing)	% Carbon Dioxide	% Nitrogen	Gas Gravity- Gg
casing	.260	3.850	.584

Vertical Depth (H)	Pressure Taps	Meter Run Size
1479	Flange	2"

Pressure Buildup: Shut in	3-8-03 @ 10:30	TAKEN	3-11-03 @ 11:30
Well on Line: Started	3-11-03 @ 11:30	TAKEN	3-12-03 @ 15:30

OBSERVED SURFACE DATA

Static/ Dynamic Property	Orifice Size in.	Meter Pressure psig	Pressure Diff. In. H_2O	Flowing Temp. t.	WellHead Temp. t.	Casing WellHead Press. (P_w) (P_t) (P_c) psig	Casing WellHead Press. psia	Tubing WellHead Press. (P_w) (P_t) (P_c) psig	Tubing WellHead Press. psia	Duration (Hours)	Liquid Prod. Barrels
Shut-in						184	198				
Flow	.625	92.1	58.80	64	3.5%	177	191			24.0	

FLOW STREAM ATTRIBUTES

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
1.914	106.5	79.13	1.3086	.9962	1.0074	198		.584

(OPEN FLOW)(DELIVERABILITY) CALCULATIONS

$(Pc)^2$ = 39.4 $(Pw)^2$ = 36.6 Pd = 46.4 % (Pc - 14.4) + 14.4 = $(Pa)^2$ = 0.207 $(Pd)^2$ = 8.48

$(P_c)^2 - (P_a)^2$ or $(P_c)^2 - (P_d)^2$	$(P_c)^2 - (P_w)^2$	$\frac{(P_c)^2 - (P_a)^2 \text{ or } (P_c)^2 - (P_d)^2}{(P_c)^2 - (P_w)^2}$	LOG [ ]	Backpressure Curve Slope "n" ---- or ---- Assigned Standard Slope	n x LOG [ ]	Antilog	Open Flow Deliverability = R x Antilog Mcfd
39.16	2.72	14.388	1.1580	1.000	1.1580	14.388	2861
30.88	2.72	11.347	1.0549	1.000	1.0549	11.347	2256

OPEN FLOW 2861 Mcfd @ 14.65 psia DELIVERABILITY 2256 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 17 day of April, 20 03

Witness (if any)

For Company

For Commission

Checked by

EMPACT ANALYTICAL SYSTEMS INC.
365 S. MAIN ST.
BRIGHTON, CO
80601
303-637-0150

NATURAL GAS ANALYSIS

PROJECT NO. :	**0303099**	ANALYSIS NO. :	**04**
COMPANY NAME :	**PRIORITY OIL & GAS**	ANALYSIS DATE:	APRIL 1, 2003
ACCOUNT NO. :		SAMPLE DATE :	MARCH 27, 2003
PRODUCER :	PRIORITY OIL & GAS	TO:	
LEASE NO. :	5-23	CYLINDER NO. :	0523
NAME/DESCRIP :	BRIGGS-VINCENT		

FIELD DATA

SAMPLED BY :	K. ANDREWS	AMBIENT TEMP.:	
SAMPLE PRES. :	97#	GRAVITY :	
SAMPLE TEMP. :	44 F	VAPOR PRES. :	
COMMENTS :	*NO PROBE*		

COMPONENTS	NORM. MOLE%	GPM @ **14.65**	GPM @ **14.73**
HELIUM	0.09	-	-
HYDROGEN	0.01	-	-
OXYGEN/ARGON	0.04	-	-
NITROGEN	3.85	-	-
CO2	0.26	-	-
METHANE	94.15	-	-
ETHANE	1.10	0.293	0.294
PROPANE	0.34	0.093	0.094
ISOBUTANE	0.06	0.020	0.020
N-BUTANE	0.06	0.019	0.019
ISOPENTANE	0.02	0.007	0.007
N-PENTANE	0.01	0.004	0.004
HEXANES+	0.01	0.004	0.004
TOTAL	100.00	0.439	0.442

BTU @ 60 DEG F	**14.65**	**14.73**
GROSS DRY REAL =	983.4	988.8
GROSS WET REAL =	966.3	971.6

DENSITY (AIR=1 @14.696 PSIA 60F) : 0.5841

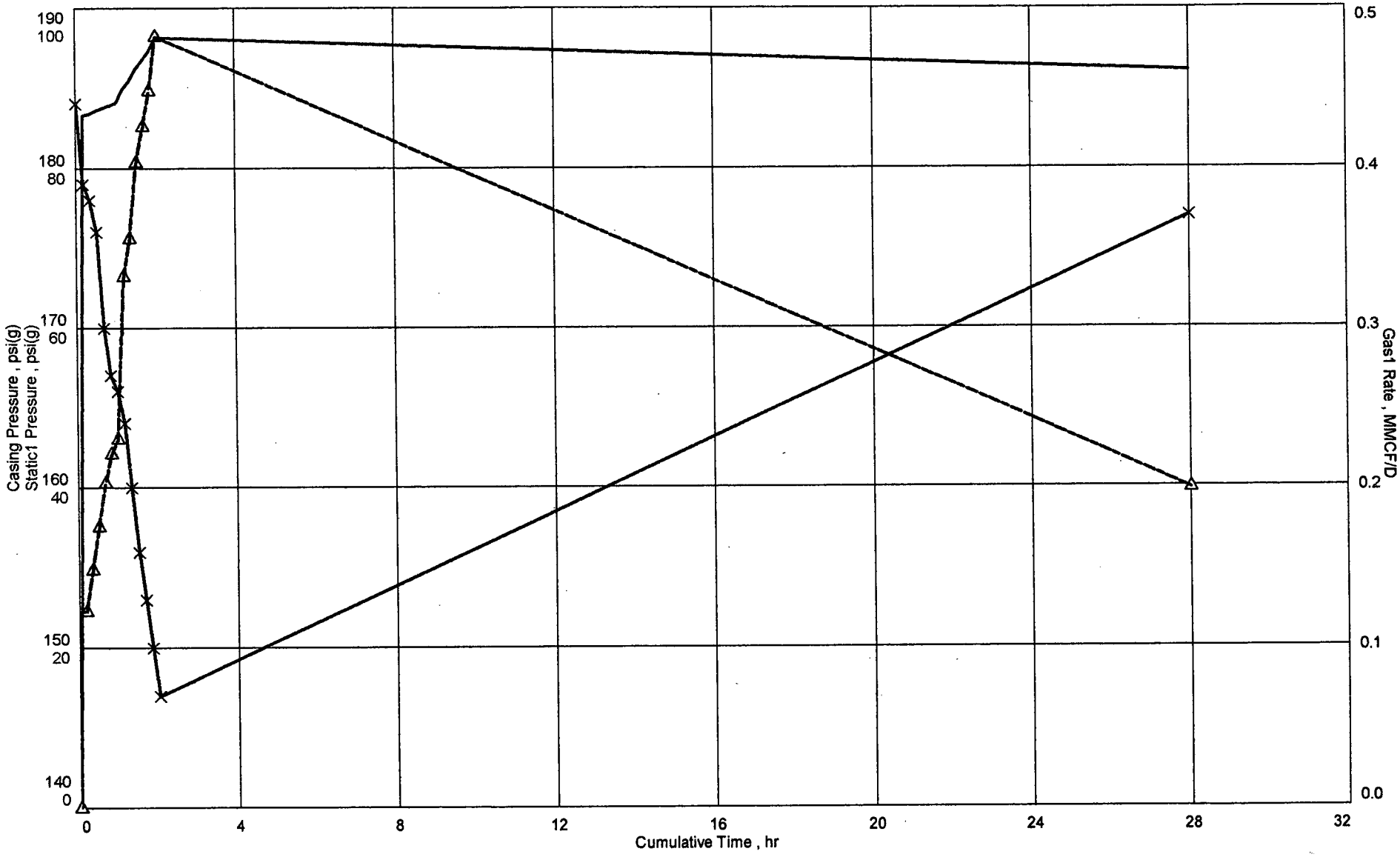
COMPRESSIBILITY FACTOR : 0.99803

NOTE: REFERENCE GPA 2261(ASTM D1945), 2145, & 2172 CURRENT PUBLICATIONS

Priority Oil & Gas
NE/NW/NW 23-3s-42w Cheyene co. Kansas
Start Test Date: 2003/03/11
Final Test Date: 2003/03/12

Briggs-Vincent 5-23

Plot



Priority Oil & Gas
NE/NW/NW 23-3s-42w Cheyene co. Kansas
Start Test Date: 2003/03/11
Final Test Date: 2003/03/12

FieldNotes
Field Measurements

Briggs-Vincent 5-23

	Date	Clock Time	Comments	Casing Pres	Diff1 Pres	Meter1 Temp	Static1 Pres	Gas1 Rate	Orifice1
	yyyy/mm/dd	hh:mm:ss		psi(g)	in of H2O	°F	psi(g)	MMCF/D	in
1	2003/03/11		Shutin						
2	2003/03/11	11:30:00		184.00	0.00	0.00	0.00	0.000	0.625
3		11:40:00		179.00	25.00	90.00	86.60	0.123	
4		11:50:00		178.00	36.40	88.40	86.80	0.149	
5		12:00:00	1st point						
6		12:00:00		176.00	49.60	80.20	87.20	0.176	
7		12:10:00		170.00	64.80	72.80	87.50	0.203	
8		12:20:00		167.00	76.20	69.10	87.80	0.221	
9		12:30:00	2nd point						
10		12:30:00		166.00	81.80	66.40	88.10	0.230	
11		12:40:00		164.00	164.30	61.30	89.80	0.332	
12		12:50:00		160.00	184.10	56.20	90.80	0.356	
13		13:00:00	3rd point						
14		13:00:00		156.00	230.80	53.00	92.40	0.404	
15		13:10:00		153.00	252.10	50.30	93.50	0.426	
16		13:20:00		150.00	275.00	49.30	94.60	0.448	
17		13:30:00	4th point						
18		13:30:00		147.00	311.60	48.20	96.30	0.482	
19	2003/03/12	15:30:00	1 point						
20		15:30:00		177.00	58.80	64.30	92.10	0.199	

2003/03/11 11:30:00 To 2003/03/12 15:30:00
Gas 0.023 Cum. 0.023 MMCF

KANSAS CORPORATION COMMISSION
MULTIPOINT BACK PRESSURE TEST

FORM G-1
8-7-58

TYPE TEST: ☐ Initial ☐ Annual ☐ Special				TEST DATE: 3-11-03	
COMPANY		LEASE			WELL NO.
Priority Oil & Gas LLC		Briggs-Vincent			5-23
COUNTY	LOCATION	SECTION	TWP	RNG	ACRES
Cheyenne	NE/NW/NW	23-3s-42w			
FIELD	RESERVOIR	PIPELINE CONNECTION			
	Niobrara	Williams			
COMPLETION DATE	PLUG BACK DEPTH	1616			PACKER SET AT
1/14/03	TOTAL DEPTH	1680			
CASING SIZE	WT.	ID	SET AT	PERF.	TO
4.500	10.500	4.052	1665	1457	1501
TUBING SIZE	WT.	ID	SET AT	PERF.	TO
NONE					
TYPE COMPLETION (Describe)		TYPE FLUID PRODUCTION			
Frac					
PRODUCING THRU (Annulus/Tubing)		RESERVOIR TEMPERATURE F			BAR PRESS - Pa
casing					14.4 psia
GAS GRAVITY - Gg	% CARBON DIOXIDE	% NITROGEN			API GRAVITY OF LIQUID
.584	.260	3.850			
VERTICAL DEPTH (H)		TYPE METER CONN.			METER RUN SIZE
1479		Flange			2"
REMARKS					

RECEIVED
APR 07 2003
KCC WICHITA

OBSERVED SURFACE DATA

RATE NO.	ORIFICE SIZE in.	(METER) PRESSURE psig	DIFF. (h_w) (h_t)	FLOWING TEMP. t.	WELLHEAD TEMP. t.	CASING WELLHEAD PRESS. psig	CASING WELLHEAD PRESS. (P_w) (P_t) (P_c) psia	TUBING WELLHEAD PRESS. psig	TUBING WELLHEAD PRESS. (P_w) (P_t) (P_c) psia	DURATION HOURS	LIQUID PROD. Bbls.
SHUT-IN						184	198			72.00	
1.	.625	87.20	49.60	90		179	193			.50	
2.	.625	88.10	81.80	66		166	180			.50	
3.	.625	92.40	230.80	53		156	170			.50	
4.	.625	96.30	311.60	48		147	161			.50	

FLOW STREAM ATTRIBUTES

RATE NO.	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 Q Mcfd	GOR	G_m
1.	1.941	101.6	70.99	1.3086	.9723	1.0060	176		.584
2.	1.914	102.5	91.57	1.3086	.9943	1.0070	229		.584
3.	1.914	106.8	157.00	1.3086	1.0068	1.0080	399		.584
4.	1.914	110.7	185.73	1.3086	1.0117	1.0085	474		.584

PRESSURE CALCULATION

RATE NO.	Pt psia	Pc psia	Pw psia	$(Pc)^2$ Thousands	$(Pw)^2$ Thousands	PLOTTING POINTS $(P_c)^2 - (P_w)^2$ Thousands	PLOTTING POINTS Q Mcfd	% SHUT-IN $100\left[\frac{Pw - Pa}{Pc - Pa}\right]$
1.	193.4	198.4	193.4	39.4	37.4	2.0	176.4	97.3
2.	180.4	198.4	180.4	39.4	32.6	6.8	229.6	90.2
3.	170.4	198.4	170.5	39.4	29.1	10.3	399.0	84.8
4.	161.4	198.4	161.5	39.4	26.1	13.3	474.6	80.0

INDICATED WELLHEAD OPEN FLOW 1709 Mcfd @ 14.65 psia "n" = 1.000

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 4 day of April, 20 03

Witness (if any)

For Company

For Commission

Checked by

GAS WELL BACK PRESSURE CURVE

WELL TESTER: Trilobite Testing

TEST DATE: 3-11-03