

**KANSAS CORPORATION COMMISSION  
ONE POINT STABILIZED OPEN FLOW OR DELIVERABILITY TEST**

FORM G-2  
(Rev. 8/98)

TYPE TEST:

- Open Flow  
 Deliverability

TEST DATE: 1-23-01

API No.

Company Horsehoe Operating Inc		Lease Parsens			Well Number 2	
County Hamilton	Location NE NE	Section 27 23S	TWP 41W	RNG(E/W)	Acres Attributed 160	
Field Bradshaw	Reservoir Winfield			Gas Gathering Connection Oneok		
Completion Date 10/22/00	Plug Back Total Depth 2505			Packer Set at		
Casing Size 4.500	Weight 10.500	Internal Diameter 4.000	Set at 2507	Perforations 2466	To 2475	
Tubing Size 2.375	Weight 4.700	Internal Diameter 1.995	Set at	Perforations	To	
Type Completion (Describe) Gas	Type Fluid Production water			Pump Unit or Traveling Plunger? Pumping Unit		
Producing Thru(Annulus/Tubing) Annulus	% Carbon Dioxide .016		% Nitrogen 35.060		Gas Gravity- Gg .792	
Vertical Depth (H) 2471	Pressure Taps Flange			Meter Run Size 2.067		
Pressure Buildup: Shut in	1-19-01 @ 10:00		TAKEN	1-22-01 @ 10:00		
Well on Line: Started	1-22-01 @ 12:55		TAKEN	1-23-01 @ 17:36		

**OBSERVED SURFACE DATA**

Static/ Dynamic Property	Orifice Size in.	Meter Pressure psig	Pressure Diff. In. H <sub>2</sub> O	Flowing Temp. t.	WellHead Temp. t.	Casing WellHead Press. (P <sub>w</sub> ) (P <sub>t</sub> ) (P <sub>c</sub> )		Tubing WellHead Press. (P <sub>w</sub> ) (P <sub>t</sub> ) (P <sub>c</sub> )		Duration (Hours)	Liquid Prod. Barrels
						psig	psia	psig	psia		
Shut-in						111	125			75.0	
Flow	.750	42.9	16.60	47		85	99			21.0	

**FLOW STREAM ATTRIBUTES**

COEFFICIENT (F <sub>b</sub> ) Mcf/d	(METER) PRESSURE psia	EXTENSION $\sqrt{P_m \times H_w}$	GRAVITY FACTOR Fg	FLOWING TEMP FACTOR Ft	DEVIATION FACTOR Fpv	RATE OF FLOW R Mcf/d	GOR	G <sub>m</sub>
2.780	57.3	30.84	1.1237	1.0127	1.0047	98		.792

**(OPEN FLOW)(DELIVERABILITY) CALCULATIONS**

(P<sub>c</sub>)<sup>2</sup> = 15.7      (P<sub>w</sub>)<sup>2</sup> = 9.9      37.5      %      (P<sub>c</sub> - 14.4) + 14.4 =      (P<sub>a</sub>)<sup>2</sup> = 0.207  
(P<sub>d</sub>)<sup>2</sup> = 2.21

$(P_c)^2 - (P_a)^2$ 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 Mcf/d
15.52	5.82	2.667	.4261	.705	.3002	1.996	195
13.52	5.82	2.323	.3661	.705	.2580	1.811	177

OPEN FLOW      195      Mcfd @ 14.65 psia      DELIVERABILITY      177      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 9 day of Feb, 2001

Witness (if any)

For Company

For Commission

Checked by

I declare under penalty or perjury under the laws of the state of Kansas that I am authorized to request exempt status under rule K.A.R. 82-3-304 on behalf of the operator Horsehoe Operating Inc and that the foregoing information and statements contained on this application form are true and correct to the best of my knowledge and belief based upon gas production records and records of equipment installation and/or of type completion or upon use of the gas well herein named.

I hereby request a permanent exemption from open flow testing for the Parsens gas well on the grounds that said well:

(check one)

- is a coalbed methane producer
- is cycled on plunger lift due to water
- is a source of natural gas for injection into an oil reservoir undergoing ER
- is on vacuum at the present time; KCC approval Docket No. \_\_\_\_\_
- is incapable of producing at a daily rate in excess of 150 mcf/D

Date: \_\_\_\_\_

Signature: \_\_\_\_\_

Title: \_\_\_\_\_

#### Instructions:

All active gas wells must have at least an original G-2 form on file with the conservation division. If a gas well meets the eligibility criteria set out in KCC regulation K.A.R. 82-3-304, the operator may complete the statement provided above in order to obtain a testing exemption.

At some point during the succeeding calendar year, wellhead shut-in pressure shall be measured after a minimum of 24 hours shut-in/buildup time and shall be reported on the front side of this form under "observed surface data." Shut-in pressure shall thereafter be reported yearly in the same manner.

The G-2 form conveying the newest shut-in pressure reading shall be filed with the Wichita office no later than thirty (30) days after the taking of the pressure reading. The form must be signed and dated on the front side as though it was a verified report of test results.