

KANSAS CORPORATION COMMISSION ONE POINT STABILIZED OPEN FLOW OR DELIVERABILITY TEST

(See Instructions on Reverse Side)

Type Test:

- Open Flow
 Deliverability

(Horizontal)

Test Date:
April 30, 2001

API No. 15
023-20362-01-00

Company Breck Operating Corp.			Lease Bucholtz		Well Number 1-15H
County Cheyenne	Sur. 1570 FSL 375 FEL	Location 15	Section 3N	TWP 41W	Acres Attributed 640
Field Cherry Creek			Reservoir Niobrara	Gas Gathering Connection Williams / Lyons & Lyns	
Completion Date March 4, 2000			Plug Back Total Depth 2449	Packer Set at N/A	
Casing Size 7"	Weight 20	Internal Diameter 6.456	Set at 1530'	Perforations Open Hole	To 2449
Tubing Size 2-3/8	Weight 4.7	Internal Diameter 2"	Set at 1699	Perforations	To
Type Completion (Describe) Open Hole			Type Fluid Production Water	Pump Unit or Travelling Plunger? <input checked="" type="checkbox"/> Yes / No	
Producing Thru (Annulus / Tubing) Annulus			% Carbon Dioxide 0.21	% Nitrogen 3.92	Gas Gravity - G _s .583
Vertical Depth(H) 1359'			Pressure Taps Flange		(Meter Run) (Prover) Size 2"
Pressure Buildup: Shut in Jan 4 at 01 at 8:00 (AM) (PM) Taken Jan 5 at 01 at 4:00 (AM) (PM)					
Well on Line: Started April 28 at 01 at 4:00 (AM) (PM) Taken April 30 at 01 at 8:00 (AM) (PM)					

OBSERVED SURFACE DATA

Duration of Shut-in **32** Hours

Static / Dynamic Property	Orifice Size inches	Circs one: Meter or Prover Pressure psig	Pressure Differential in (h) Inches H ₂ O	Flowing Temperature °F	Well Head Temperature °F	Casing Wellhead Pressure (P _w) or (P _c) or (P _s)		Tubing Wellhead Pressure (P _w) or (P _c) or (P _s)		Duration (Hours)	Liquid Produced (Barrels)
						psig	psia	psig	psia		
Shut-in	1/2	280	-	-	60	280	295	0	15	32	0
Flow	1/2	30	27	75	60	20	35	0	15	40	0

FLOW STREAM ATTRIBUTES

Plate Coefficient (F _s) (F _o) Mcfd	Circs one: Meter or Prover Pressure psia	Press Extension $\frac{P_s - P_w}{P_s \times H_w}$	Gravity Factor F _g	Flowing Temperature Factor F _{tt}	Deviation Factor F _{dv}	Metered Flow R (Mcfd)	GOR (Cubic Feet/ Barrel)	Flowing Fluid Gravity G _m
1.58	30	28.45	1.0135	.9859	1.002	45	N/A	

(OPEN FLOW) (DELIVERABILITY) CALCULATIONS

(P_o)² = 87025 : (P_w)² = 1225 : P_o = _____ % (P_c - 14.4) + 14.4 = _____ : (P_o)² = 0.207
(P_w)² = _____

$\frac{(P_o)^2 - (P_w)^2}{(P_o)^2 - (P_w)^2}$	(P _o) ² - (P _w) ²	Chosen formula 1 or 2: 1. P _o ² - P _w ² 2. P _o ² - P _w ² divided by: P _o ² - P _w ²	LOG of formula 1, or 2, and divide by: P _o ² - P _w ²	Backpressure Curve Slope = "n" Assigned Standard Slope	n x LOG []	Antilog	Open Flow Deliverability Equals R x Antilog Mcfd
86.807	85.800	86.7-207	Log [1.0081]	.85	.00297	1.00686	45.309
		86.493	.00349				

Open Flow 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 22nd day of August, XX, 2001.

Breck Operating Corp.
For Company

Witness (if any)

For Commission

Ken Seligman
Checked by

Divide all sub-totals by 1000


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 Breck Operating Corp. 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 Bucholtz 1-15H 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: August 22, 2001

Signature: 
Title: Daniel D. Wilson / Vice President - Prod. Mgr.

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.