

Kansas Corporation Commission One Point Stabilized Open Flow or Deliverability Test

Type Test:

- Open Flow
 Deliverability

Test Date: **05/14/2013** API No. **15175216270000**

Company OXY USA Inc		Lease HARKRADER C 1			Well Number	
County Seward	Location 660 FEL & 1980 FNL	Section 21	TWP 31S	RNG (E/W) 32W	Acres Attributed 640	
Field THIRTY-ONE		Reservoir Atoka		Gas Gathering Connection Oneok		
Completion Date 06/09/2001		Plug Back Total Depth 5,445'		Packer Set at		
Casing Size 5 1/2"	Weight 15.5#	Internal Diameter 4.950"	Set at 5,858'	Perforations 5,394'	To 5,397'	
Tubing Size 2 3/8"	Weight 4.7#	Internal Diameter 1.995"	Set at 5,404'	Perforations	To	
Type Completion (Describe) SINGLE-GAS		Type Fluid Production WATER		Pump Unit or Traveling Plunger? Yes - Beam Pump		Yes / No
Producing Thru (Annulus / Tubing) Annulus		% Carbon Dioxide 0.164%		% Nitrogen 4.734%		Gas Gravity - Gg 0.699
Vertical Depth (H) 5,396'		Pressure Taps Flange			(Meter Run) (Prover) Size 3.068"	
Pressure Buildup: Shut in 05/13 20 13 at 9:00		Taken 05/14 20 13 at 9:00				
Well on Line: Shut in _____ 20 _____ at _____		Taken _____ 20 _____ at _____				

OBSERVED SURFACE DATA Duration of Shut-in **24** Hours

Static / Dynamic Property	Orifice Size (inches)	Circle one: Meter or Prover Pressure (Pm) psig	Pressure Differential in Inches H ₂ O	Flowing Temperature t	Well Head Temperature t	Casing Wellhead Pressure (P _w) or (P _i) or (P _c)		Tubing Wellhead Pressure (P _w) or (P _i) or (P _c)		Duration (Hours)	Liquid Produced (Barrels)
						psig	psia	psig	psia		
Shut-In						320.0	334.4			24	
Flow											

FLOW STREAM ATTRIBUTES

Plate Coefficient (F _b) (F _p) Mcfd	Circle one: Meter or Prover Pressure psia	Press Extension P _m x h	Gravity Factor F _g	Flowing Temperature Factor F _t	Deviation Factor F _{pv}	Metered Flow R (Mcfd)	GOR (Cubic Feet/Barrel)	Flowing Fluid Gravity G _m

(OPEN FLOW) (DELIVERABILITY) CALCULATIONS

$(P_c)^2 = \underline{\hspace{2cm}}$: $(P_w)^2 = \underline{0.0}$: $P_d = \underline{\hspace{2cm}}$ % $(P_c - 14.4) + 14.4 = \underline{\hspace{2cm}}$: $(P_a)^2 = \underline{0.207}$
 $(P_d)^2 = \underline{0}$

$(P_c)^2 - (P_d)^2$ or $(P_c)^2 - (P_w)^2$	$(P_c)^2 - (P_w)^2$	Choose Formula 1 or 2: 1. $P_c^2 - P_w^2$ 2. $P_c^2 - P_d^2$ divided by: $P_c^2 - P_w^2$	LOG of formula 1. or 2. and divide by:	$P_c^2 - P_w^2$	Backpressure Curve Slope = "n" -----or----- Assigned Standard Slope	n x LOG	Antilog	Open Flow Deliverability Equals R x Antilog (Mcfd)

Open Flow **0** 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 **24** day of **July**, **2013**

RECEIVED **OXY USA Inc.**
 Witness **KANSAS CORPORATION COMMISSION** For Company
Aimee Lannou Oxy USA Inc. *Aimee Lannou*
 For Commission **AUG 26 2013**

I declare under penalty of 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 OXY USA Inc. and that the foregoing pressure information and statements contained on this application form are true and correct to the best of my knowledge and belief based upon available production summaries and lease records of equipment installation and/or upon type of completion or upon use being made of the gas well herein named.

I hereby request a one-year exemption from open flow HARKRADER C 1 for the 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 a vacuum at the present time; KCC approval Docket No.
- is not capable of producing at a daily rate in excess of 250 mcf/D

I further agree to supply to the best of my ability any and all supporting documents deemed by Commission staff as necessary to corroborate this claim for exemption from testing.

Date: July 24, 2013

Signature: Aimee Lannou *Aimee Lannou*

Title: Gas Business Coordinator

Instructions: If a gas well meets one of the eligibility criteria set out in the KCC regulation K.A.R. 82-3-304, the operator may complete the statement provided above in order to claim exempt status for the gas well.

At some point during the current calendar year, wellhead shut-in pressure shall have been 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 for so long as the gas well continues to meet the eligibility criterion or until the claim of eligibility for exemption **IS** denied.

The G-2 form conveying the newest shut-in pressure reading shall be filed with the Wichita office no later than December 31st of the year for which it's intended to acquire exempt status for the subject well. The form must be signed and dated on the front side as though it was a verified report of annual test results.

RECEIVED
KANSAS CORPORATION COMMISSION

AUG 26 2013

CONSERVATION DIVISION
WICHITA, KS