KANSAS CORPORATION COMMISSION ONE POINT STABILIZED OPEN FLOW OR DELIVERABILITY TEST

RECEIVED

JUL 23 2010 (See Instructions on Reverse Side) Type Test: ✓ Open Flow KCC WICHITA Test Date: API No. 15 023-20271 Deliverabilty 7-6-2010 Company Lease Well Number Prime Operating Company Ilene Raile 1-27 TWP County Location Section RNG (E/W) Acres Attributed Cheyenne C SENW 27 3S 42W 160 Field Reservoir Gas Gathering Connection NW Cherry Cheek Niobrara Kinder Morgan Completion Date Plug Back Total Depth Packer Set at 3-27-91 1643' N/A Casing Size Weight Internal Diameter Set at Perforations To 4 1/2" 10.5# 4.052" 1668.391 1500' 1532' Tubing Size Weight Internal Diameter Perforations Set at To 2 3/8" 4.7# 1574.24' N/A Type Completion (Describe) Type Fluid Production Pump Unit or Traveling Plunger? Yes / No singular "conventional" Water Yes Producing Thru (Annulus / Tubing) Gas Gravity - G % Carbon Dioxide % Nitrogen Annulus Vertical Depth(H) Pressure Taps (Meter Run) (Prover) Size 1668' flange Shut in July 7 20 10 at 12:00 PM (AM) (PM) Taken July 10 ____₂₀ 10 at 3:00 PM Pressure Buildup: (AM) (PM) Started July 10 20 10 at 3:00 PM ___ ₂₀ <u>1</u>0 _{at} 8:00 AM _ (AM) (PM) Taken July 16 Well on Line: (AM) (PM) **OBSERVED SURFACE DATA** Duration of Shut-in Circle one: Pressure Casing Tubing Static / Orifice Flowing Well Head Meter Differential Duration Liquid Produced Wellhead Pressure Wellhead Pressure Temperature Dynamic Size Temperature Prover Pressure in (P_w) or (P_L) or (P_c) (P,) or (P,) or (P,) (Hours) (Barrels) Property (inches) psig (Pm) Inches H₂0 psig psig psia psia 0 Shut-In 3/8" PSIG 27 0 65 80 15 75 95 Flow 3/8" PSIG 27 65 65 27 42 0 24 42 30 **FLOW STREAM ATTRIBUTES** Circle one: Plate Flowing Flowing Press Gravity Deviation Metered Flow GOR Meter or Coeffiecient Temperature Extension Fluid Factor (Cubic Feet/ Factor Prover Pressure $(F_b)(F_p)$ Factor Gravity √ P_mxh F, $F_{\rho \nu}$ (Mcfd) Barrel) Mcfd psia F,, G_m 42 32 .886 35.5 1.0084 .9952 1.002 (OPEN FLOW) (DELIVERABILITY) CALCULATIONS $(P_a)^2 = 0.207$ $(P_w)^2 = 1764$ $(P_c - 14.4) + 14.4 =$ $P_d =$ $(P_d)^2 =$ Backpressure Curve Open Flow (P_a)² - (P_a)² (P_)2 - (P_)2 LOG of 1. P.2 - P.2 Slope = "n" n x LOG Deliverability formula 1. or 2. Antiloa --- or----2. P2-P2 Equals R x Antilog (P_a)² - (P_a)² Assigned and divide P_c²-P_w² (Mcfd) divided by: P.2 - P.2 Standard Slope 1,180 38 7261 0.07172 8818 1.21 0.08437 0.85 : 38 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 July the facts stated therein, and that said report is true and correct. Executed this the day of ___ Livingston For Company Central Oprs Mgr Witness (if any)

Checked by

For Commission