

15-129-21257-00-00871

STATE OF KANSAS - CORPORATION COMMISSION
 PRODUCTION TEST & GOR REPORT

Form C-5 Revised

Conservation Division
 TYPE TEST: (Initial) Annual Workover Reclassification TEST DATE: Nov 23, 1994
 Company: Houghton Energy Lease: Voiles Well No.: 1-4
 County: Madison Location: NW Section: 4 Township: 33 Range: 43 Acres:
 Field: Mustangs west Reservoir: Keyes Pipeline Connection:
 Completion Date: 3-5-94 Type Completion(Describe): Single Plug Back T.D.: 5073 Packer Set At:
 Production Method: Type Fluid Production: Oil & water API Gravity of Liquid/Oil:
 Flowing Pumping Gas Lift
 Casing Size: 5 1/2 Weight: 15.5 I.D.: Set At: 5073 Perforations: 4955 To: 4960
 Tubing Size: 2 3/8 Weight: I.D.: Set At: 4700 Perforations: open end slotted To:
 Pretest: Starting Date: 11-21-94 Time: 10:30 Ending Date: 11-22-94 Time: 10:30 Duration Hrs.: 27
 Test: Starting Date: 11-22-94 Time: 10:30 Ending Date: 11-23-94 Time: 10:30 Duration Hrs.: 24

OIL PRODUCTION OBSERVED DATA

Producing Wellhead Pressure		Separator Pressure			Choke Size					
Casing:	<u>35</u>	Tubing:	<u>35</u>							
Bbls./In.	Tank	Starting Gauge			Ending Gauge			Net Prod. Bbls.		
	Size Number	Feet	Inches	Barrels	Feet	Inches	Barrels	Water	Oil	
Pretest:	<u>250</u>	<u>234169</u>	<u>4</u>	<u>8</u>	<u>93.52</u>	<u>7</u>	<u>7 3/4</u>	<u>15322</u>	<u>13.24</u>	<u>5970</u>
Test:										
Test:			<u>7</u>	<u>7 3/4</u>	<u>153.27</u>	<u>10</u>	<u>8 1/2</u>		<u>13.0</u>	<u>6137</u>

GAS PRODUCTION OBSERVED DATA

Orifice Meter Connections				Orifice Meter Range			
Pipe Taps:	Flange Taps:	Differential:		Static Pressure:			
Measuring Device	Run-Prover Tester Size	Orifice Size	Meter-Prover Tester In. Water	Pressure In. Merc. Psig or (Pd)	Diff. Press. (hw) or (hd)	Gravity Gas (Gg)	Flowing Temp. (t)
Orifice Meter						<u>700</u>	<u>60</u>
Critical Flow Prover							
Orifice Well Tester	<u>2</u>	<u>1/4</u>			<u>3.0</u>		

GAS FLOW RATE CALCULATIONS (R)

Coeff. (Fb)(Fp)(OWTC)	Meter-Prover Press. (Psia) (Pm)	Extension $\sqrt{hw \times Pm}$	Gravity Factor (Fg)	Flowing Temp. Factor (Ft)	Deviation Factor (Fpv)	Chart Factor (Fd)
	<u>3.0</u>		<u>0.9258</u>	<u>1.004</u>		

Gas Prod. MCFD: 14.535 Oil Prod. Bbls./Day: 61.37 Gas/Oil Ratio (GOR) = 0.36 Cubic Ft. per Bbl.

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 23 day of Nov. 1994

For Offset Operator: Steve R. Barber For State: Steve R. Barber For Company: Steve R. Barber

Most of gas used on location venting only when Treater dumps.

STATE CORPORATION COMMISSION OF KANSAS, CONSERVATION DIVISION

PRODUCTIVITY TEST
BARREL TEST

OPERATOR _____ LOCATION OF WELL _____

LEASE _____ OF SEC. _____ T _____ R _____

WELL NO. _____ COUNTY _____

FIELD _____ PRODUCING FORMATION _____

Date Taken _____ Date Effective _____

Well Depth _____ Top Prod. Form _____ Perfs _____

Casing: Size _____ Wt. _____ Depth _____ Acid _____

Tubing: Size _____ Depth of Perfs _____ Gravity _____

Pump: Type _____ Bore _____ Purchaser _____

Well Status _____

Pumping, flowing, etc.

TEST DATA

Permanent _____ Field _____ Special _____

Flowing _____ Swabbing _____ Pumping _____

STATUS BEFORE TEST:

PRODUCED _____ HOURS

SHUT IN _____ HOURS

DURATION OF TEST _____ HOURS _____ MINUTES _____ SECONDS

GAUGES: WATER _____ INCHES _____ PERCENTAGE

OIL _____ INCHES _____ PERCENTAGE

GROSS FLUID PRODUCTION RATE (BARRELS PER DAY) _____

WATER PRODUCTION RATE (BARRELS PER DAY) _____

OIL PRODUCTION RATE (BARRELS PER DAY) _____ PRODUCTIVITY

STROKES PER MINUTE _____

LENGTH OF STROKE _____ INCHES

REGULAR PRODUCING SCHEDULE _____ HOURS PER DAY.

COMMENTS _____

WITNESSES: _____

FOR STATE

FOR OPERATOR

FOR OFFSET