

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

FORM G-2  
(Rev.8/98)

TYPE TEST:

- Open Flow  
 Deliverability

TEST DATE: 3-19-1999 API No. 15-187-20913

Company McElvain Oil & Gas Properties		Lease Herrick			Well Number 1-927	
County Stanton	Location 2100fsl 330fel	Section 27	TWP 30s	RNG(E/W) 40w	Acres Attributed	
Field Wabaunsee	Reservoir Wabaunsee			Gas Gathering Connection Williams		
Completion Date 2-2-99	Plug Back Total Depth 4350 cibp			Packer Set at		
Casing Size 4.500	Weight 10.500	Internal Diameter 3.927	Set at 4500	Perforations 2928	To 2974	
Tubing Size 2.375	Weight 4.700	Internal Diameter 1.995	Set at 3037	Perforations	To	
Type Completion (Describe) unstimulated	Type Fluid Production Water			Pump Unit or Traveling Plunger? NO		
Producing Thru (Annulus/Tubing) annulus	% Carbon Dioxide			% Nitrogen	Gas Gravity- Gg .650	
Vertical Depth (H) 2970	Pressure Taps flange			Meter Run Size 3"		
Pressure Buildup: Shut in	03-15-1999 @ 8:00a			TAKEN	03-18-1999 @ 8:20a	
Well on Line: Started	03-18-1999 @ 8:30a			TAKEN	03-19-1999 @ 11:00	

**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						323	337			72.0	
Flow	.625	27.0	36.26	36	26	263	277				

**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>
1.897	41.4	38.75	1.2403	1.0239	1.0044	93		.650

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

(P<sub>c</sub>)<sup>2</sup> = 113.8      (P<sub>w</sub>)<sup>2</sup> = 77.0      8.0      %      (P<sub>c</sub> - 14.4) + 14.4 =      (P<sub>a</sub>)<sup>2</sup> = 0.207  
(P<sub>d</sub>)<sup>2</sup> = .73

$(P_c)^2 - (P_a)^2$ 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
113.63	36.86	3.083	.4890	.686	.3354	2.165	202
113.11	36.86	3.069	.4870	.686	.3341	2.158	202

OPEN FLOW      202      Mcfd @ 14.65 psia      DELIVERABILITY      202      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 \_\_\_\_\_ day of \_\_\_\_\_, 19 \_\_\_\_\_

\_\_\_\_\_  
Witness (if any)

\_\_\_\_\_  
For Commission

  
\_\_\_\_\_  
For Company

\_\_\_\_\_  
Checked by

KANSAS CORPORATION COMMISSION  
MULTIPOINT BACK PRESSURE TEST

FORM G-1  
8-7-58

TYPE TEST: <input checked="" type="checkbox"/> Initial <input type="checkbox"/> Annual <input type="checkbox"/> Special		TEST DATE: 3-18-1999			
COMPANY McElvain Oil & Gas Properties		LEASE Herrick		WELL NO. 1-927	
COUNTY Stanton	LOCATION 2100fsl 330fel	SECTION 27 30s	TWP 40w	RNG	ACRES
FIELD Wabaunsee		PIPELINE CONNECTION Williams			
COMPLETION DATE 2-2-99		PLUG BACK DEPTH TOTAL DEPTH		4350 cibp 2970	
CASING SIZE 4.500	WT. 10.500	ID 3.927	SET AT 4500	PERF. 2928	TO 2974
TUBING SIZE 2.375	WT. 4.700	ID 1.995	SET AT 3037	PERF.	TO
TYPE COMPLETION (Describe) unstimulated			TYPE FLUID PRODUCTION Water		
PRODUCING THRU (Annulus/Tubing) annulus			RESERVOIR TEMPERATURE F		BAR PRESS - Pa 14.4 psia
GAS GRAVITY - Gg .650		% CARBON DIOXIDE	% NITROGEN		API GRAVITY OF LIQUID
VERTICAL DEPTH (H) 2970		TYPE METER CONN. flange		METER RUN SIZE 3"	
REMARKS					

OBSERVED SURFACE DATA

RATE NO.	ORIFICE SIZE in.	(METER) PRESSURE psig	DIFF. (h <sub>w</sub> ) (h <sub>t</sub> )	FLOWING TEMP. t.	WELLHEAD TEMP. t.	CASING WELLHEAD PRESS.		TUBING WELLHEAD PRESS.		DURATION HOURS	LIQUID PROD. Bbls.
						psig	(P <sub>w</sub> ) (P <sub>t</sub> ) (P <sub>c</sub> ) psia	psig	(P <sub>w</sub> ) (P <sub>t</sub> ) (P <sub>c</sub> ) psia		
SHUT-IN						323	337			78.00	
1.	.625	25.50	9.40	42		315	329			1.00	
2.	.625	27.10	45.81	42		297	311			1.00	
3.	.625	28.10	64.85	42		289	303			1.00	
4.	.625	28.80	86.00	39		276	290			1.00	

FLOW STREAM ATTRIBUTES

RATE NO.	COEFFICIENT (F <sub>b</sub> ) Mcfd	(METER) PRESSURE psia	EXTENSION $\sqrt{P_m \times H_w}$	GRAVITY FACTOR Fg	FLOWING TEMP FACTOR Ft	DEVIATION FACTOR Fpv	RATE OF FLOW Q Mcfd	GOR	G <sub>m</sub>
2.	1.900	41.5	43.60	1.2403	1.0178	1.0041	105		.650
3.	1.897	42.5	52.50	1.2403	1.0178	1.0042	126		.650
4.	1.900	43.2	60.95	1.2403	1.0208	1.0044	147		.650

PRESSURE CALCULATION

RATE NO.	Pt psia	Pc psia	Pw psia	(Pc) <sup>2</sup> Thousands	(Pw) <sup>2</sup> Thousands	PLOTTING POINTS		% SHUT-IN 100 $\left[ \frac{P_w - P_a}{P_c - P_a} \right]$
						(P <sub>c</sub> ) <sup>2</sup> - (P <sub>w</sub> ) <sup>2</sup> Thousands	Q Mcfd	
1.	329.4	337.4	329.4	113.8	108.5	5.3	46.6	97.5
2.	311.4	337.4	311.4	113.8	97.0	16.8	105.0	92.0
3.	303.4	337.4	303.5	113.8	92.1	21.7	126.2	89.5
4.	290.4	337.4	290.5	113.8	84.4	29.4	147.3	85.5

INDICATED WELLHEAD OPEN FLOW

383

Mcf @ 14.65 psia

"n" =

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 \_\_\_\_\_ day of \_\_\_\_\_, 19 \_\_\_\_\_

Witness (if any)

For Company

For Commission

Checked by

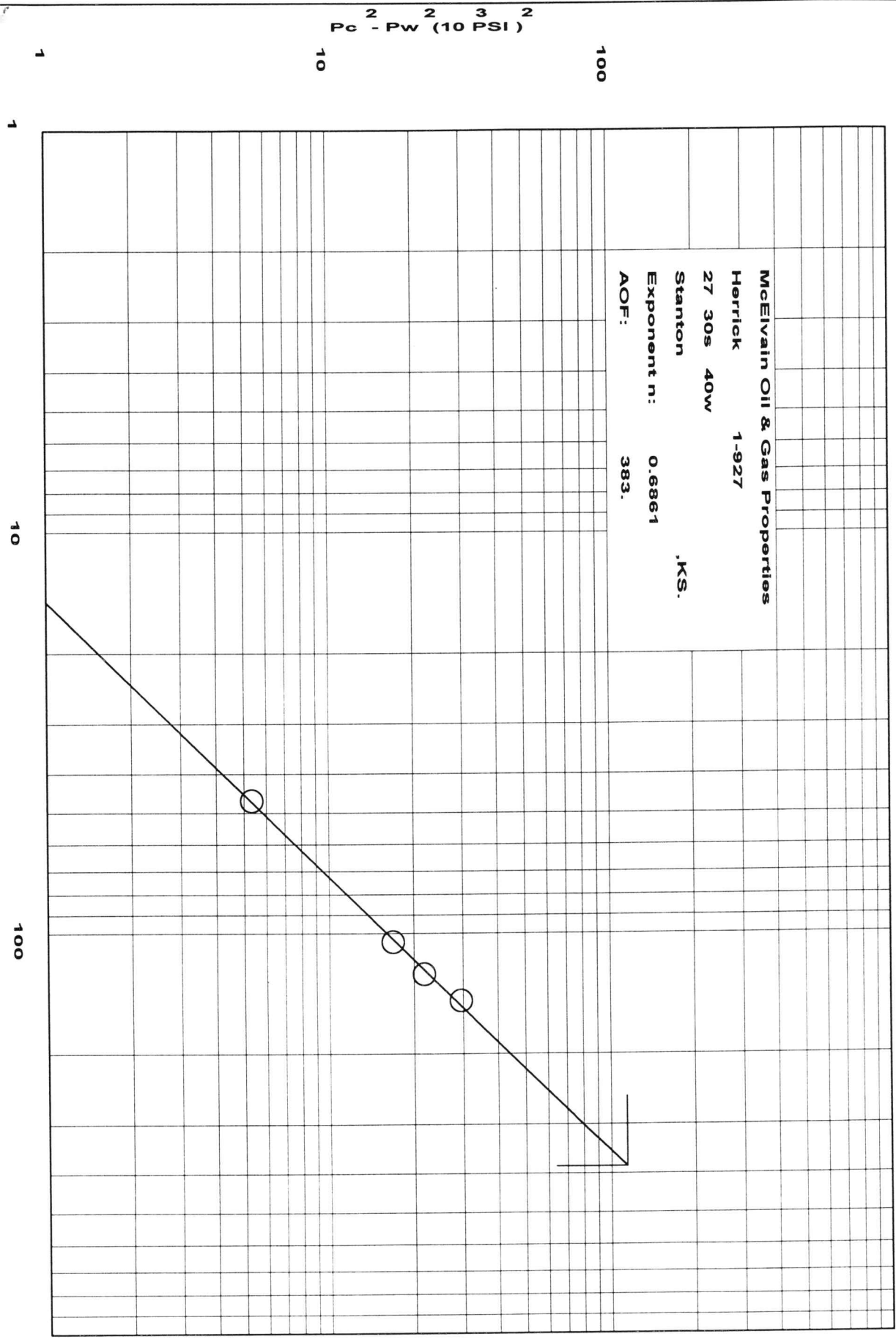
**GAS WELL BACK PRESSURE CURVE**

WELL TESTER:

TEST DATE:

3-18-1999

McElvain Oil & Gas Properties  
 Herrick 1-927  
 27 30s 40w  
 Stanton .KS.  
 Exponent n: 0.6861  
 AOF: 383.



NATURAL GAS ANALYSIS REPORT

Sampled by:  
 Trilobite Testing, L. L. C.  
 Hays, Kansas  
 Scott City, Kansas  
 Phone: 800-728-5369  
 Fax: 913-625-5620

Analyzed by:  
 Caraway Analytical, Inc  
 P. O. Box 2137  
 Liberal, Kansas 67905  
 Phone: 316-624-5389  
 Fax: 316-626-7108

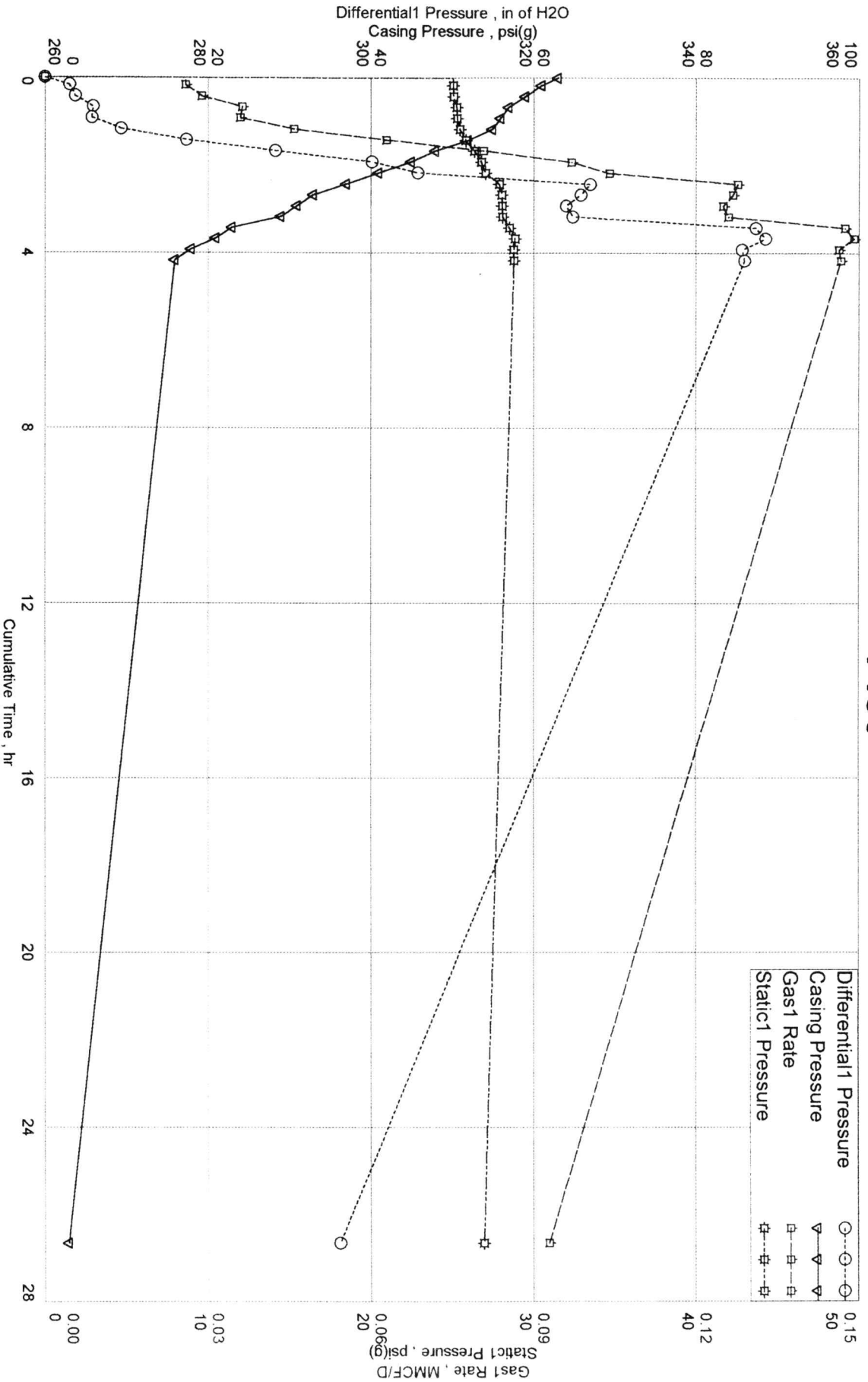
Lab Number:	991300	Analyzed:	03/31/99
Sample From:	Herrick 1-927 4 pt	Pressure:	
Producer:	McElvain O&G Properties	Temperature:	
Date:		Location:	27-30-40
Time:		County:	Stanton
Sampler:		State:	Kansas
Source:		Formation:	Wabaunsee

		Mole %	GPM
Helium	He:	0.614	0.000
Hydrogen	H2:	0.000	0.000
Oxygen	O2:	0.000	0.000
Nitrogen	N2:	24.527	0.000
Carbon Dioxide	CO2:	0.120	0.000
Methane	C1:	63.359	0.000
Ethane	C2:	5.969	1.596
Propane	C3:	3.476	0.958
Iso Butane	iC4:	0.384	0.126
Normal Butane	nC4:	0.919	0.290
Iso Pentane	iC5:	0.182	0.067
Normal Pentane	nC5:	0.210	0.076
Hexanes Plus	C6+:	0.240	0.105
	TOTAL:	100.000	3.217
	Z Fact:	0.9979	
	SP. GR.:	0.7513	
	BTU (SAT):	891.7 @ 14.73 psia	
	BTU (DRY):	907.5 @ 14.73 psia	
	OCTANE RATING:	93.4	

COMMENTS:

0.000

# Plot



McElvain Oil & Gas Corp  
 2100fsl/330fel-sec 27-30S-40W/  
 Start Test Date: 1999/03/18  
 Final Test Date: 1999/03/19

# Field Notes

## Field Measurements

Date	Clock Time	Comments	Casing		Diff1		Static1		Meter1		Orifice1	Gas1 Rate	Cum. Gas1
			Pres	psi(g)	Pres	in of H2O	Pres	psi(g)	Temp	°F			
yyyy/mm/dd	hh:mm:ss										in	MMCF/D	MMCF
1999/03/18	08:20:00	shutin	323.00		0.00		0.00		0.00		0.000	0.000	0.000
	08:30:00	flowing	321.00		3.01		25.09		42.00		0.625	0.026	0.000
	08:45:00		319.00		3.74		25.12		42.00			0.029	0.000
	09:00:00		317.00		5.90		25.31		42.00			0.036	0.001
	09:15:00		316.00		5.78		25.34		42.00			0.036	0.001
	09:30:00	1st pt	315.00		9.36		25.51		42.00			0.046	0.002
	09:45:00		312.00		17.40		25.87		42.00			0.063	0.002
	10:00:00		308.00		28.30		26.40		42.00			0.081	0.003
	10:15:00		305.00		40.14		26.82		42.00			0.097	0.004
	10:30:00	2nd pt	301.00		45.81		27.07		42.00			0.104	0.005
	10:45:00		297.00		66.97		27.93		41.00			0.128	0.006
	11:00:00		293.00		65.82		28.07		41.00			0.127	0.007
	11:15:00		291.00		63.96		28.10		41.00			0.125	0.009
	11:30:00	3rd pt	289.00		64.85		28.11		40.00			0.126	0.010
	11:45:00		283.00		87.33		28.55		40.00			0.147	0.011
	12:00:00		281.00		88.54		28.89		40.00			0.149	0.013
	12:15:00		278.00		85.64		28.78		40.00			0.146	0.015
	12:30:00	4th pt	276.00		85.96		28.81		40.00			0.147	0.016
1999/03/19	11:00:00	pressure reading for 1 point (G2) test											
	11:00:00		263.00		36.26		27.01		36.00			0.093	0.128





1-800-593-5620

STATE OF KANSAS - CORPORATION COMMISSION  
ONE POINT STABILIZED OPEN FLOW OR DELIVERABILITY TEST

FORM G-2 Rev.

TYPE TEST:	<input type="checkbox"/> Deliverability	<input type="checkbox"/> Open Flow	TEST DATE:	API No. 15-187-20913
COMPANY	M <sup>c</sup> ELVAIN OIL & GAS PROP., INC.		LEASE	HERICK
COUNTY	STANTON	LOCATION	SECTION	WELL NO. 1-927
FIELD	2100' FSU & 330' FEL	RESERVOIR	TWP	RNG (E/W)
COMPLETION DATE	2-2-99	WABAUWSEE	30S	40W
CASING SIZE	4 1/2"	WT. 10.5#	PIPELINE CONNECTION	ACRES
TUBING SIZE	2 3/8"	WT. 4.7	WILLIAMS	
TYPE COMPLETION (Describe)	UNSTIMULATED	PLUG BACK TOTAL DEPTH	PACKER SET AT	
PRODUCING THRU	Casing-Tubing Annulus	LD. 3.927	4500'	PERF. 2928 TO 2974
GAS GRAVITY - G <sub>s</sub>		LD. 1.995	SET AT 3037	PERF. TO
VERTICAL DEPTH (H)		TYPE FLUID PRODUCTION		
		RESERVOIR TEMPERATURE ° F		BAR. PRESS - P, 14.4 Ppsi
		% CARBON DIOXIDE		API GRAVITY OF LIQUID
		% NITROGEN		
		TYPE METER CONNECTION		(METER RUN) (PROVER) SIZE

This well needs to pump water up the tubing & flow gas out the casing - An adjustable choke has been installed on the casing.

John

STATE OF KANSAS - CORPORATION COMMISSION  
 ONE POINT STABILIZED OPEN FLOW OR DELIVERABILITY TEST

FORM G-2 Rev.

TYPE TEST: <input type="checkbox"/> Deliverability <input type="checkbox"/> Open Flow		TEST DATE:	API No. 13 - 187-20914	
COMPANY McELVAIN Oil & Gas Properties, Inc		LEASE	WELL NO. #1-516	
COUNTY STANTON	LOCATION 330' F.N.L. & 1650' F.N.L.	SECTION 16	TWP 30N	RNG (E/W) 39W ACRES
FIELD	RESERVOIR MORROW	PIPELINE CONNECTION WILLIAMS		
COMPLETION DATE 2-3-99	PLUG BACK TOTAL DEPTH	<del>5780</del> - 5746		PACKER SET AT
CASING SIZE 4 1/2	WT. 10.5/11.6	I.D. 3.927	SET AT 5780	PERF. 5624 TO 5678'
TUBING SIZE 2 3/8	WT. 4.7	I.D. 1.995	SET AT 5595'	PERF. TO
TYPE COMPLETION (Describe) STIMULATED	TYPE FLUID PRODUCTION Gas/Oil/Water			
PRODUCING THRU TUBING/CASING ANNULUS	RESERVOIR TEMPERATURE °F		BAR. PRESS - P. 14.4 P.S.I.	
GAS GRAVITY - G <sub>s</sub>	% CARBON DIOXIDE	% NITROGEN	API GRAVITY OF LIQUID	
VERTICAL DEPTH (ft) 5780'	TYPE METRE CONNECTION		METER RUN (PROVER) SIZE	

*HAVE BEEN PRODUCING UP THE CASING.*

