

TRILOBITE TESTING COMPANY, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name URBAN #2 Test No. 1 Date 3/12/92
Company AFG ENERGY, INC. Zone Tested WINFIELD
Address P.O. BOX 606 RUSSELL KS 67665-0605 Elevation 2000
Co. Rep./Geo. STEVE PARKER Cont. EMPHASIS DRLG RIG # 5 Est. Ft. of Pay _____
Location: Sec. 10 Twp. 16S Rge. 17W Co. RUSH State KS

Interval Tested 1932-1990
Anchor Length 58
Top Packer Depth 1927
Bottom Packer Depth 1932
Total Depth 1990

Drill Pipe Size 4.5" XH
Wt. Pipe I.D. - 2.7 Ft. Run 604
Drill Collar - 2.25 Ft. Run _____

Mud Wt. 9.6 lb / gal. Viscosity 36 Filtrate 13.2

Tool Open @ 11:33 AM Initial Blow (SLID TOOL 3" WHEN OPENED) - 1.5" BLOW BUILDING TO BOTTOM OF BUCKET IN 23 MINUTES
Final Blow 1 1/2" BLOW BUILDING TO BOTTOM OF BUCKET IN 56 MINUTES

Recovery — Total Feet 210 Flush Tool? NO

Rec. 180 Feet of GAS IN PIPE

Rec. 30 Feet of MUD

Rec. 60 Feet of WATERY MUD-20%WATER/80%MUD

Rec. 120 Feet of WATERY MUD W/ SPOTS OF OIL IN TOOL-30%WTR/70%MUD

Rec. 79 Feet of _____

BHT _____ °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API

RW 0.27 @ 59.1 °F Chlorides 30000 ppm Recovery Chlorides 70000 ppm System

(A) Initial Hydrostatic Mud 1080.6 PSI Ak1 Recorder No. 24174 Range 3350

(B) First Initial Flow Pressure 82.3 PSI @ (depth) 1970 w/Clock No. 8698

(C) First Final Flow Pressure 105.6 PSI AK1 Recorder No. 11057 Range 4500

(D) Initial Shut-in Pressure 510.7 PSI @ (depth) 1989 w/Clock No. 17640

(E) Second Initial Flow Pressure 116.9 PSI AK1 Recorder No. _____ Range _____

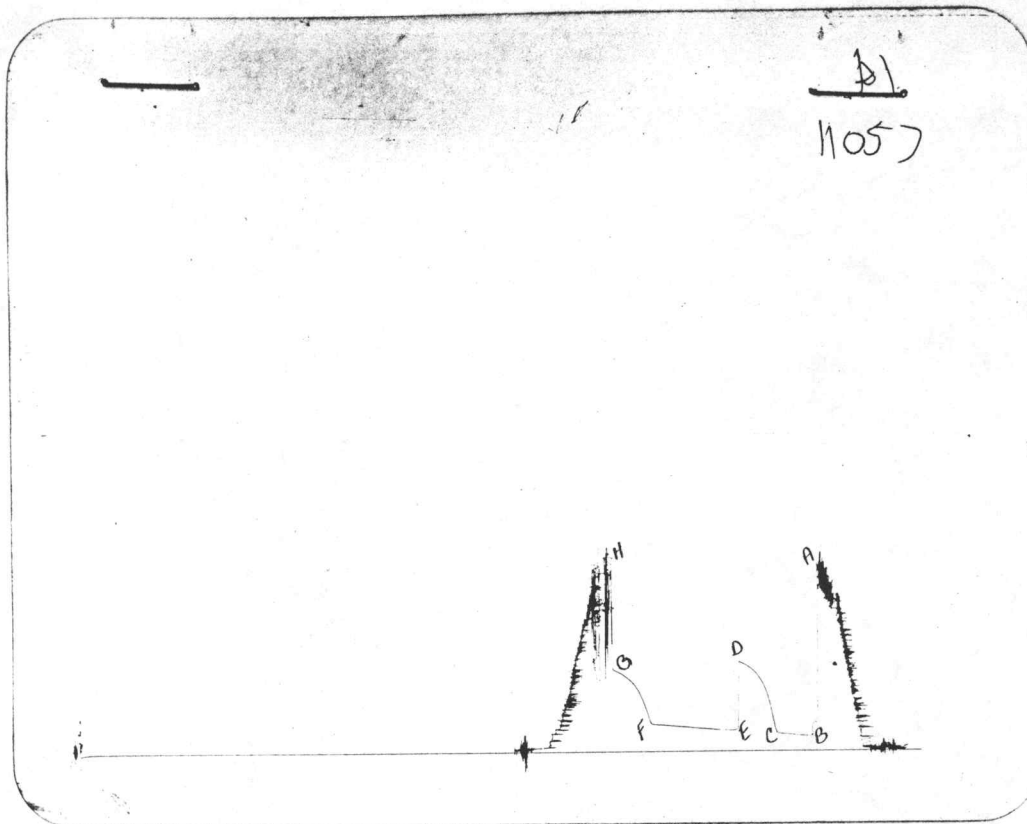
(F) Second Final Flow Pressure 163.1 PSI @ (depth) _____ w/Clock No. _____

(G) Final Shut-in Pressure 488.7 PSI Initial Opening 30 Final Flow 60

(H) Final Hydrostatic Mud 1044.6 PSI Initial Shut-In 30 Final Shut-In 30

Our Representative PAUL SIMPSON

TOTAL PRICE \$ 550



POINT This is an actual photograph of recorder chart
PRESSURE

	FIELD READING	OFFICE READING
(A) INITIAL HYDROSTATIC MUD	1074	1080.6
(B) FIRST INITIAL FLOW PRESSURE	78	82.3
(C) FIRST FINAL FLOW PRESSURE	101	105.6
(D) INITIAL CLOSED-IN PRESSURE	504	510.7
(E) SECOND INITIAL FLOW PRESSURE	112	116.9
(F) SECOND FINAL FLOW PRESSURE	157	163.1
(G) FINAL CLOSED-IN PRESSURE	482	488.7
(H) FINAL HYDROSTATIC MUD	1040	1044.6

Test Ticket

No 4778

Well Name & No. <u>Urban #2</u>	Test No. <u>1</u>	Date <u>3-12-92</u>
Company <u>AFC Energy, Inc</u>	Zone Tested <u>2000 Winfield</u>	
Address _____	Elevation <u>2000</u>	
Co. Rep./Geo. <u>Steve Parker</u>	Cont. <u>Emphasis #5</u>	Est. Ft. of Pay _____
Location: Sec. <u>10</u> Twp. <u>16S</u> Rge. <u>17W</u> Co. <u>Rush</u> State <u>Ks</u>		
No. of Copies <u>3</u> Distribution Sheet _____ Yes _____ No _____ Turnkey _____ Yes _____ No _____ Evaluation _____		

Interval Tested <u>1932-1990</u>	Drill Pipe Size <u>4 1/2 X 11</u>
Anchor Length <u>58</u>	Top Choke — 1" _____ Bottom Choke — 3/4" _____
Top Packer Depth <u>1927</u>	Hole Size — 77/8" _____ Rubber Size — 63/4" _____
Bottom Packer Depth <u>1932</u>	Wt. Pipe I.D. — 2.7 Ft. Run <u>604</u>
Total Depth <u>1990</u>	Drill Collar — 2.25 Ft. Run _____
Mud Wt. <u>9.6</u> lb/gal.	Viscosity <u>36</u> Filtrate <u>13.2</u>
Tool Open @ <u>11:33 AM</u> Initial Blow <u>(slid tool 3' when opened)</u> <u>1 1/2" blow building</u>	
<u>to bottom of bucket in 23 minutes</u>	
Final Blow <u>1 1/4" blow building to bottom of bucket in 56 minutes</u>	

Recovery — Total Feet <u>210</u>	Feet of Gas in Pipe <u>180</u>	Flush Tool? _____
Rec. <u>30</u> Feet Of <u>Mud</u>	%gas _____ %oil _____ %water _____ %mud _____	
Rec. <u>60</u> Feet Of <u>Watery mud</u>	%gas _____ %oil <u>20</u> %water <u>80</u> %mud _____	
Rec. <u>120</u> Feet Of <u>" "</u>	%gas _____ %oil <u>30</u> %water <u>70</u> %mud _____	
Rec. _____ Feet Of <u>spots of oil in tool</u>	%gas _____ %oil _____ %water _____ %mud _____	
Rec. _____ Feet Of _____	%gas _____ %oil _____ %water _____ %mud _____	

BHT <u>79</u> °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API
RW <u>27</u> @ <u>59.1</u> °F Chlorides <u>30,000</u> ppm Recovery Chlorides <u>70,000</u> ppm System
(A) Initial Hydrostatic Mud <u>1074</u> PSI AK1 Recorder No. <u>824124</u> Range <u>3350</u>
(B) First Initial Flow Pressure <u>78</u> PSI @ (depth) <u>1970</u> w/Clock No. <u>8698</u>
(C) First Final Flow Pressure <u>101</u> PSI AK1 Recorder No. <u>11057</u> Range <u>4500</u>
(D) Initial Shut-In Pressure <u>504</u> PSI @ (depth) <u>1989</u> w/Clock No. <u>17640</u>
(E) Second Initial Flow Pressure <u>112</u> PSI AK1 Recorder No. _____ Range _____
(F) Second Final Flow Pressure <u>157</u> PSI @ (depth) _____ w/Clock No. _____
(G) Final Shut-In Pressure <u>482</u> PSI Initial Opening <u>30</u> Test <u>550.00</u>
(H) Final Hydrostatic Mud <u>1040</u> PSI Initial Shut-In <u>30</u> Jars _____

TRILOBITE TESTING COMPANY SHALL NOT BE LIABLE FOR DAMAGE OF ANY KIND OF THE PROPERTY OR PERSONNEL OF THE ONE FOR WHOM A TEST IS MADE, OR FOR ANY LOSS SUFFERED OR SUBSTAINED, DIRECTLY OR INDIRECTLY, THROUGH THE USE OF ITS EQUIPMENT, OR ITS STATEMENTS OR OPINION CONCERNING THE RESULTS OF ANY TEST TOOLS LOST OR DAMAGED IN THE HOLE SHALL BE PAID FOR AT COST BY THE PARTY FOR WHOM THE TEST IS MADE.

Approved By _____
Our Representative Paul Simpson

Final Flow 60 Safety Joint _____
Final Shut-In 30 Straddle _____
Circ. Sub _____
Sampler _____
Extra Packer _____
Other _____
TOTAL PRICE \$ 550.00

TRILOBITE TESTING COMPANY, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name URBAN #2 Test No. 2 Date 3/15/92
Company APG ENERGY, INC. Zone Tested LKC-"A-B"
Address P.O. BOX 606 RUSSELL KS 67665-0605 Elevation 2003 K.B.
Co. Rep./Geo. STEVE PARKER Cont. EMPHASIS DRLG RIG #5 Est. Ft. of Pay _____
Location: Sec. 10 Twp. 16S Rge. 17W Co. RUSH State KS

Interval Tested 3272-3330
Anchor Length 58
Top Packer Depth 3267
Bottom Packer Depth 3272
Total Depth 3330

Drill Pipe Size 4.5" XH
Wt. Pipe I.D. - 2.7 Ft. Run 604
Drill Collar - 2.25 Ft. Run _____

Mud Wt. 8.9 lb / gal. Viscosity 52 Filtrate 8.4

Tool Open @ 9:45 AM Initial Blow 1" BLOW BUILDING TO BOTTOM OF BUCKET IN 14 MINUTES-(1/4" BLOW BACK ON SHUTIN)

Final Blow 3" BLOW BUILDING TO BOTTOM OF BUCKET IN 4 MINUTES (2" BLOW BACK ON SHUTIN)

Recovery - Total Feet 260 Flush Tool? NO

Rec. 740 Feet of GAS IN PIPE

Rec. 65 Feet of SLTLY OIL CUT MUD-8%OIL/92%MUD

Rec. 135 Feet of GASSY HEAVY OIL CUT MUD-10%GAS/48%OIL/2%WTR/40%MUD

Rec. 60 Feet of OIL CUT MUDDYWATER-10%OIL/60%WTR/30%MUD

Rec. 93 Feet of _____

BHT _____ °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API

RW 0.32 @ 66.7 °F Chlorides 23000 ppm Recovery Chlorides 6800 ppm System

(A) Initial Hydrostatic Mud 1596.4 PSI AK1 Recorder No. 24174 Range 3350

(B) First Initial Flow Pressure 76.2 PSI @ (depth) 3279 w/Clock No. 25810

(C) First Final Flow Pressure 102.0 PSI AK1 Recorder No. 11057 Range 4500

(D) Initial Shut-In Pressure 617.2 PSI @ (depth) 3329 w/Clock No. 17640

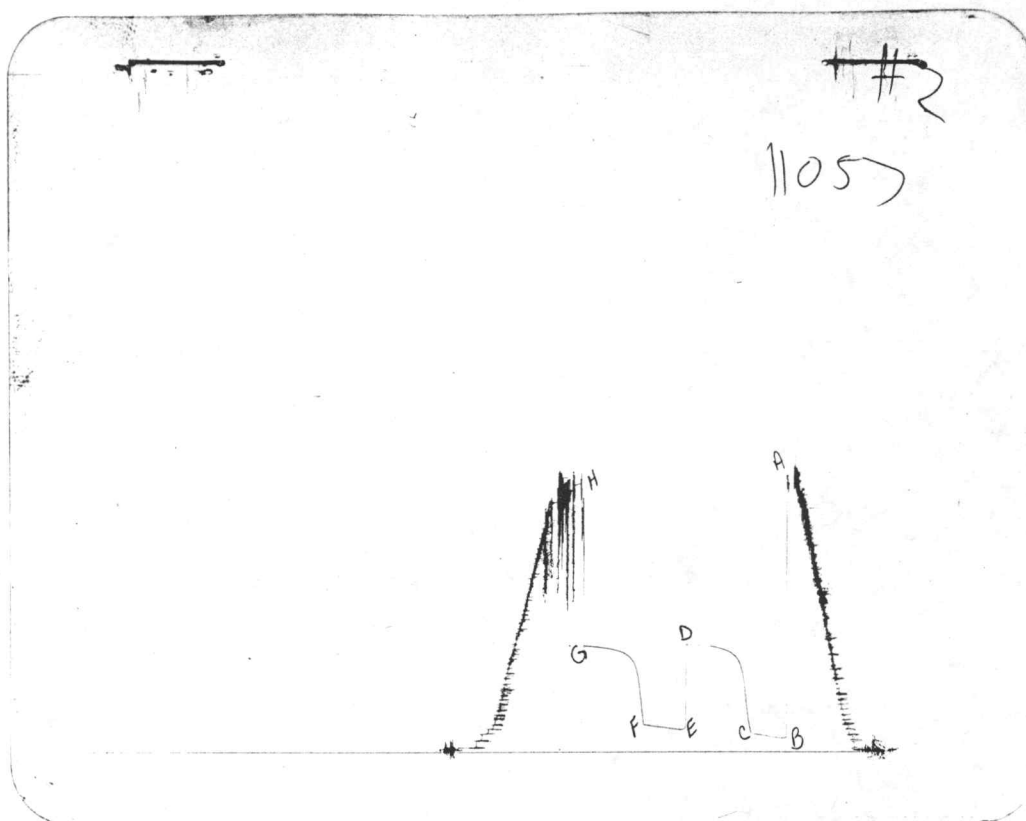
(E) Second Initial Flow Pressure 125.5 PSI AK1 Recorder No. _____ Range _____

(F) Second Final Flow Pressure 153.5 PSI @ (depth) _____ w/Clock No. _____

(G) Final Shut-In Pressure 612.7 PSI Initial Opening 30 Final Flow 30

(H) Final Hydrostatic Mud 1581.8 PSI Initial Shut-In 45 Final Shut-In 45

Our Representative PAUL SIMPSON TOTAL PRICE \$ 550



POINT This is an actual photograph of recorder chart
PRESSURE

	FIELD READING	OFFICE READING
(A) INITIAL HYDROSTATIC MUD	1601	1596.4
(B) FIRST INITIAL FLOW PRESSURE	78	76.2
(C) FIRST FINAL FLOW PRESSURE	101	102
(D) INITIAL CLOSED-IN PRESSURE	616	617.2
(E) SECOND INITIAL FLOW PRESSURE	112	125.5
(F) SECOND FINAL FLOW PRESSURE	146	153.5
(G) FINAL CLOSED-IN PRESSURE	616	612.7
(H) FINAL HYDROSTATIC MUD	1590	1581.8

CALCULATED RECOVERY ANALYSIS

DRILL COLLARS

DST #

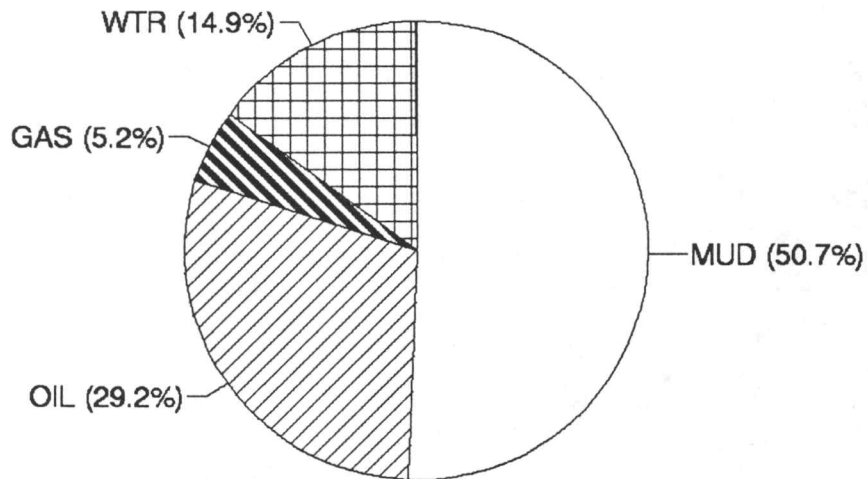
2

TICKET

4779

SAMPLE #	TOTAL FEET	GAS		OIL		WATER		MUD	
		%	FEET	%	FEET	%	FEET	%	FEET
1	65	0	0	8	5.2	0	0	92	59.8
2	135	10	13.5	48	64.8	2	2.7	40	54
3	60	0	0	10	6	60	36	30	18
4			0		0		0		0
5			0		0		0		0
TOTAL	260	5.19	13.5	29.23	76	14.88	38.7	50.692308	131.8

			HRS OP	BBL/DAY
BBL OIL=	0.37164	*	0.75	11.89248
BBL WATER=	0.189243	*		6.055776
BBL MUD=	0.644502			
BBL GAS=	0.066015			



MUD
OIL
GAS
WTR

INITIAL FLOW

REORDER # 11057
DST #2

DT(MIN)	PRESSURE	<> PRESSURE
0	76.2	76.2
3	77.3	1.100006
6	77.3	0
9	78.4	1.099999
12	81.8	3.400002
15	85.2	3.399994
18	89.6	4.400002
21	93	3.400002
24	96.4	3.400002
27	99.7	3.299996
30	102	2.300003

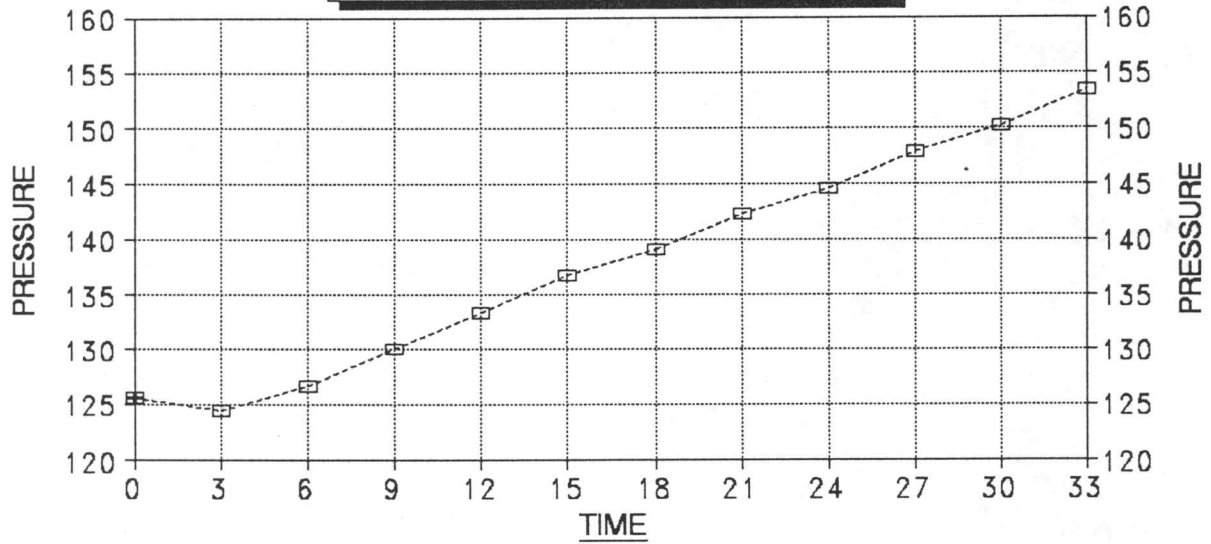
FINAL FLOW

REORDER # 11057
DST #2

DT(MIN)	PRESSURE	<> PRESSURE
0	125.5	125.5
3	124.4	-1.099999
6	126.6	2.199997
9	130	3.400002
12	133.4	3.399994
15	136.7	3.300003
18	139	2.300003
21	142.3	3.300003
24	144.6	2.300003
27	147.9	3.299988
30	150.2	2.300003
33	153.5	3.300003

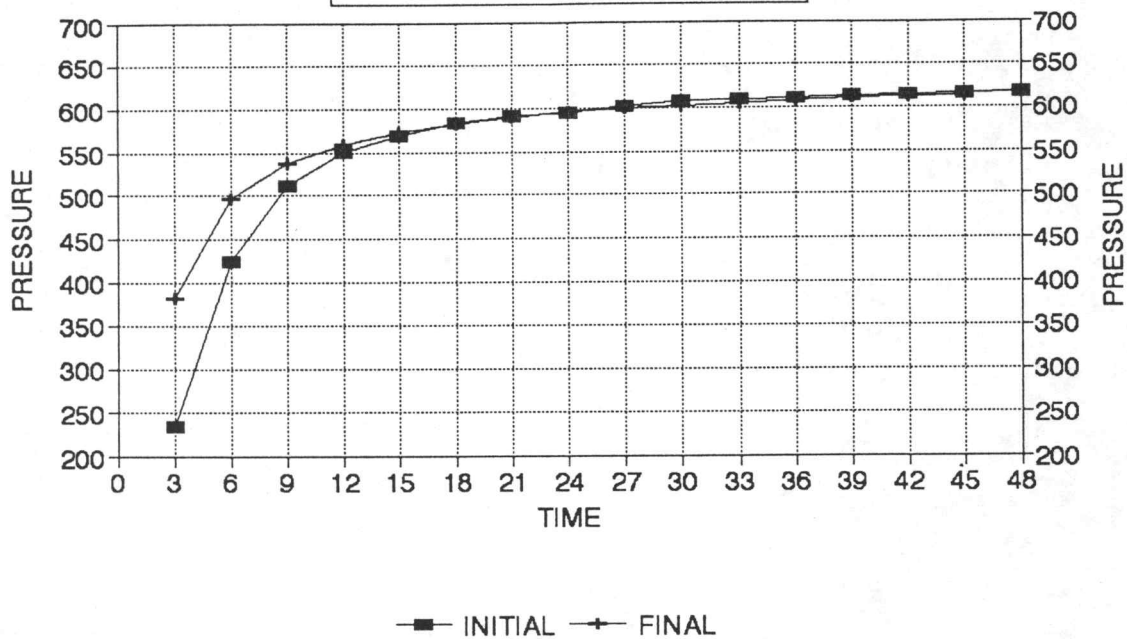
DELTA T DELTA P

FINAL FLOW - DST #2

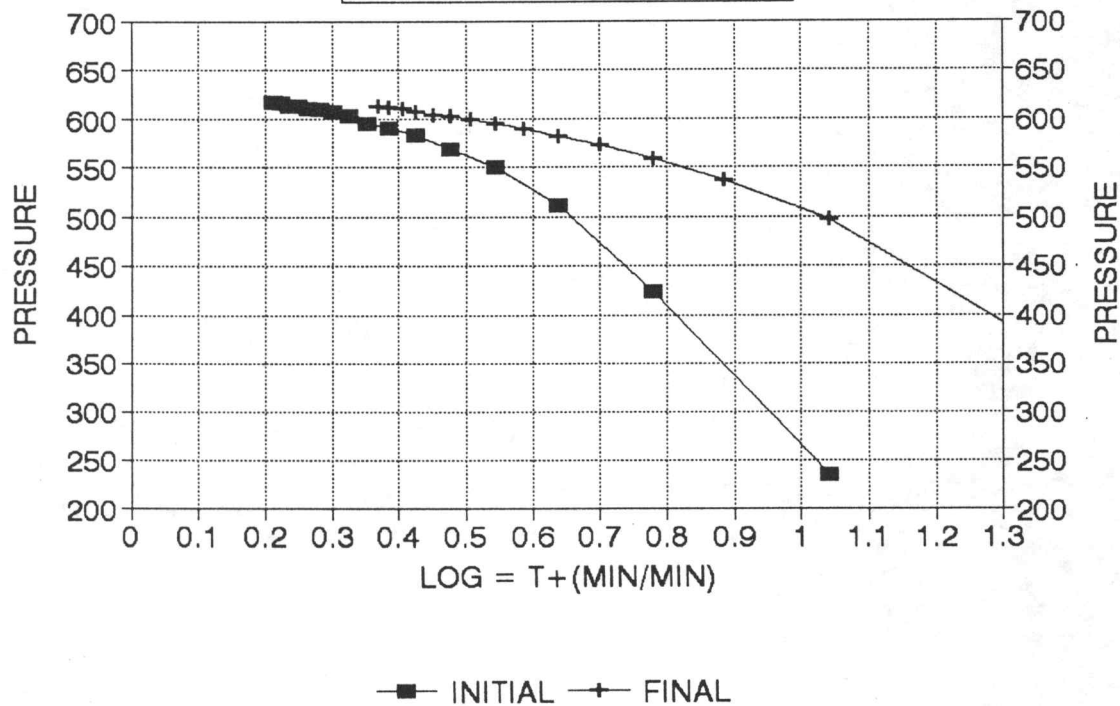


--□-- URBAN #2

DELTA T DELTA P DST #2 / URBAN #2



HORNER PLOT DST #2 / URBAN #2



URBAN #2
INITIAL

DST #2
SHUTIN
30 FLOW TIME

Slope -112.90 psi/cycle
P * 641 psi

	TIME(MIN)	Pws (psi)	Horn T	Log Horn T	<> PRESSURE
	3	234.3	11	1.041	234.3
	6	423.7	6	0.778	189.4
	9	512.1	4	0.637	88.4
	12	550.2	4	0.544	38.1
	15	569.2	3	0.477	19.0
	18	582.6	3	0.426	13.4
	21	590.4	2	0.385	7.8
	24	595.0	2	0.352	4.6
	27	602.6	2	0.325	7.6
	30	607.1	2	0.301	4.5
X	33	609.3	2	0.281	2.2
	36	610.5	2	0.263	1.2
	39	612.7	2	0.248	2.2
	42	613.8	2	0.234	1.1
	45	616.0	2	0.222	2.2
X	48	617.2	2	0.211	1.2

URBAN #2
FINAL

DST #2
SHUTIN
60 TOTAL FLOW

TIME

Slope -60.12 psi/cycle
P * 635 psi

	TIME(MIN)	Pws (psi)	Horn T	Log Horn T	<> PRESSURE
	3	383.4	21	1.322	383.4
	6	496.5	11	1.041	113.1
	9	537.9	8	0.885	41.4
	12	559.1	6	0.778	21.2
	15	572.5	5	0.699	13.4
	18	581.4	4	0.637	8.9
	21	589.3	4	0.586	7.9
	24	596.0	4	0.544	6.7
	27	599.3	3	0.508	3.3
	30	602.6	3	0.477	3.3
	33	604.9	3	0.450	2.3
	36	607.1	3	0.426	2.2
X	39	610.5	3	0.405	3.4
	42	611.6	2	0.385	1.1
X	45	612.7	2	0.368	1.1

TRILOBITE TESTING COMPANY L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Test Ticket

Nº 4779

Well Name & No. <u>17th & 22</u>	Test No. <u>2</u>	Date <u>3-15-92</u>
Company <u>AFC Energy Inc</u>	Zone Tested <u>LKC - 'A-B'</u>	
Address <u>P.O. Box 603 Russell KS 67665</u>	Elevation <u>2003 KB</u>	
Co. Rep./Geo. <u>Steve Parker</u>	Cont. <u>Emphasis #5</u>	Est. Ft. of Pay _____
Location: Sec. <u>10</u>	Twp. <u>16s</u>	Rge. <u>17w</u> Co. <u>Rush</u> State <u>KS</u>
No. of Copies <u>3</u>	Distribution Sheet _____	Yes _____ No _____ Turnkey _____ Yes _____ No _____ Evaluation _____

Interval Tested <u>3272 - 3330</u>	Drill Pipe Size <u>4 1/2 XH</u>
Anchor Length <u>58</u>	Top Choke — 1" _____ Bottom Choke — 3/4" _____
Top Packer Depth <u>3267</u>	Hole Size — 77/8" _____ Rubber Size — 63/4" _____
Bottom Packer Depth <u>3272</u>	Wt. Pipe I.D. — 2.7 Ft. Run <u>604</u>
Total Depth <u>3330</u>	Drill Collar — 2.25 Ft. Run _____
Mud Wt. <u>8.9</u> lb / gal.	Viscosity <u>52</u> Filtrate <u>8.4</u>
Tool Open @ <u>9:45 AM</u>	Initial Blow <u>1" blow building to bottom of bucket in 14 minutes (1/2" blow back on shut in)</u>
Final Blow <u>3" blow building to bottom of bucket in 4 minutes (2" blow back on shut in)</u>	

Recovery — Total Feet <u>260</u>	Feet of Gas in Pipe <u>740</u>	Flush Tool? _____
Rec. <u>65</u> Feet Of <u>SOLCM</u>	%gas <u>8</u> %oil _____ %water <u>92</u> %mud _____	
Rec. <u>135</u> Feet Of <u>lossy HOCM</u>	%gas <u>48</u> %oil <u>2</u> %water <u>40</u> %mud _____	
Rec. <u>60</u> Feet Of <u>oil cut Muddy water</u>	%gas <u>10</u> %oil <u>50</u> %water <u>30</u> %mud _____	
Rec. _____ Feet Of _____	%gas _____ %oil _____ %water _____ %mud _____	
Rec. _____ Feet Of _____	%gas _____ %oil _____ %water _____ %mud _____	

BHT <u>93</u> °F	Gravity _____	°API @ _____	°F Corrected Gravity _____	°API _____
RW <u>.32</u> @ <u>66.7</u> °F	Chlorides <u>23,000</u> ppm	Recovery _____	Chlorides <u>6500</u> ppm	System _____
(A) Initial Hydrostatic Mud <u>1601</u>	PSI	AK1 Recorder No. <u>24174</u>	Range <u>3350</u>	
(B) First Initial Flow Pressure <u>78</u>	PSI	@ (depth) <u>3279</u>	w/Clock No. <u>25810</u>	
(C) First Final Flow Pressure <u>101</u>	PSI	AK1 Recorder No. <u>11057</u>	Range <u>4500</u>	
(D) Initial Shut-In Pressure <u>616</u>	PSI	@ (depth) <u>3329</u>	w/Clock No. <u>17640</u>	
(E) Second Initial Flow Pressure <u>112</u>	PSI	AK1 Recorder No. _____	Range _____	
(F) Second Final Flow Pressure <u>146</u>	PSI	@ (depth) _____	w/Clock No. _____	
(G) Final Shut-In Pressure <u>616</u>	PSI	Initial Opening <u>30</u>	Test _____	
(H) Final Hydrostatic Mud <u>1590</u>	PSI	Initial Shut-In <u>45</u>	Jars _____	

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Approved By _____

Our Representative Paul Simpson

Final Flow 30
Final Shut-In 45

Safety Joint _____
Straddle _____
Circ. Sub _____
Sampler _____

Extra Packer _____
Other partial cool - 25.00
TOTAL PRICE \$ 550.00

TRILOBITE TESTING COMPANY, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name URBAN #2 Test No. 3 Date 3/15/92
Company APG ENERGY, INC. Zone Tested LKC-"C-F"
Address P.O. BOX 606 RUSSELL KS 67665-0605 Elevation 2003 K.B.
Co. Rep./Geo. STEVE PARKER Cont. EMPHASIS DRLG RIG #5 Est. Ft. of Pay _____
Location: Sec. 10 Twp. 16S Rge. 17W Co. RUSH State KS

Interval Tested 3330-3380
Anchor Length 50
Top Packer Depth 3325
Bottom Packer Depth 3330
Total Depth 3380

Drill Pipe Size 4.5" XH
Wt. Pipe I.D. - 2.7 Ft. Run 604
Drill Collar - 2.25 Ft. Run _____

Mud Wt. 8.7 lb / gal. Viscosity 46 Filtrate 8

Tool Open @ 10:35 AM Initial Blow STRONG BLOW - BOTTOM OF BUCKET IN 30 SECONDS/GAS
SURFACE IN 20 MIN-GAUGED-10.1 MCF/DAY(BLOWBACK TO BOTTOM IN 5 MIN)
Final Blow STRONG BLOW-BOTTOM OF BUCKET AS SOON AS TOOL OPENED
GAS TOO SMALL TO MEASURE-BLOW BACK ON SHUTIN TO BOTTOM IN 5 MIN

Recovery - Total Feet 1510 Flush Tool? YES

Rec. 1420 Feet of CLEAN GASSY OIL-30%GAS/70%OIL

Rec. 90 Feet of GASSY SLTLY OIL CUT MUD-30%GAS/60%OIL/10%MUD

Rec. _____ Feet of _____

Rec. _____ Feet of _____

Rec. _____ Feet of _____

BHT 98 °F Gravity 36 °API @ 70 °F Corrected Gravity 35 °API

RW _____ @ _____ °F Chlorides _____ ppm Recovery Chlorides _____ ppm System

(A) Initial Hydrostatic Mud 1596.4 PSI Ak1 Recorder No. 11057 Range 4500

(B) First Initial Flow Pressure 79.5 PSI @ (depth) 3350 w/Clock No. 17640

(C) First Final Flow Pressure 173.7 PSI Ak1 Recorder No. 22150 Range 3925

(D) Initial Shut-In Pressure 878.3 PSI @ (depth) 3379 w/Clock No. 25810

(E) Second Initial Flow Pressure 224.2 PSI Ak1 Recorder No. _____ Range _____

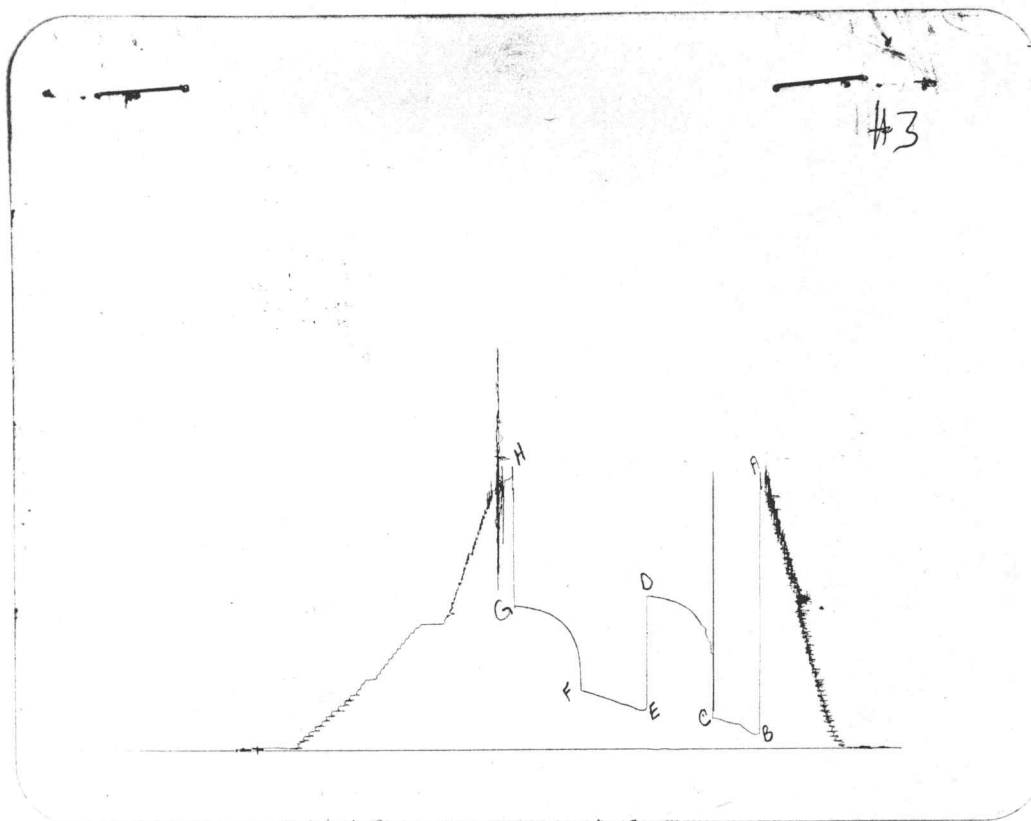
(F) Second Final Flow Pressure 337.4 PSI @ (depth) _____ w/Clock No. _____

(G) Final Shut-In Pressure 825.9 PSI Initial Opening 30 Final Flow 45

(H) Final Hydrostatic Mud 1579.5 PSI Initial Shut-In 45 Final Shut-In 45

Our Representative PAUL SIMPSON

TOTAL PRICE \$ 550



POINT This is an actual photograph of recorder chart
PRESSURE

	FIELD READING	OFFICE READING
(A) INITIAL HYDROSTATIC MUD	1590	1596.4
(B) FIRST INITIAL FLOW PRESSURE	78	79.5
(C) FIRST FINAL FLOW PRESSURE	168	173.7
(D) INITIAL CLOSED-IN PRESSURE	873	878.3
(E) SECOND INITIAL FLOW PRESSURE	213	224.2
(F) SECOND FINAL FLOW PRESSURE	336	337.4
(G) FINAL CLOSED-IN PRESSURE	817	825.9
(H) FINAL HYDROSTATIC MUD	1578	1579.5

CALCULATED RECOVERY ANALYSIS

DST #

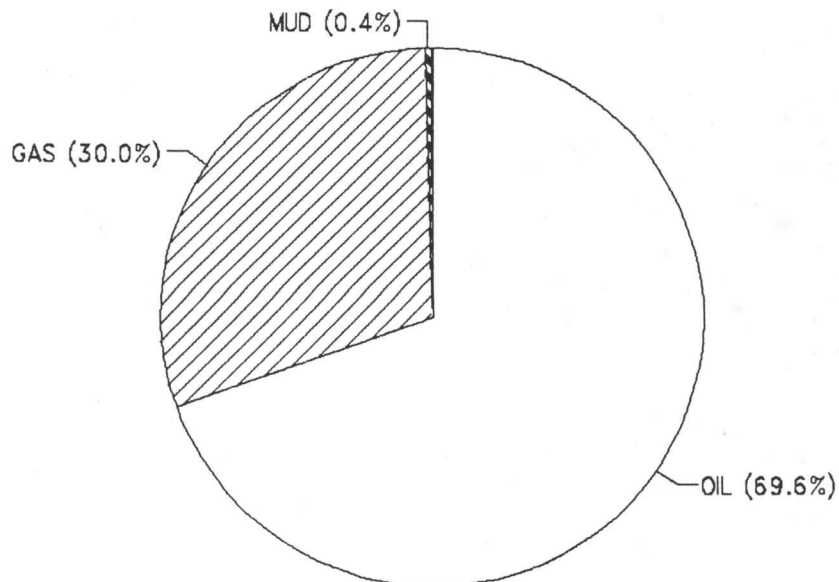
3

TICKET #

4780

SAMPLE #	TOTAL FEET	GAS %	FEET	OIL %	FEET	WATER %	FEET	MUD %	FEET
DRILL 1	906	30	271.8	70	634.2	0	0	0	0
PIPE 2			0		0		0		0
3			0		0		0		0
4			0		0		0		0
5			0		0		0		0
6			0		0		0		0
WEIGHT 1	514	30	154.2	70	359.8	0	0	0	0
PIPE 2	90	30	27	60	54	0	0	10	9
3			0		0		0		0
4			0		0		0		0
DRILL 1			0		0		0		0
COLLAR 2			0		0		0		0
3			0		0		0		0
4			0		0		0		0
5			0		0		0		0
TOTAL	1510		453		1048		0		9

			HRS OPEN	BBL/DAY
BBL OIL =	11.914924	*	0.75	381.27757
BBL WATER =	0	*		0
BBL MUD =	0.0702			
BBL GAS =	5.133396			



COMPUTER EVALUATION BY TRILOBITE TESTING
AFG ENERGY INC

REPORT FOR DST#3 FOR THE URBAN #2

10-16S-17W

RUSH KANSAS

TEST PARAMETERS

ELEVATION: 2003 KB EST. PAY: 3.5 FT
DATUM: -1348 ZONE TESTED: LANSING-KS CITY "C-

TEST INTERVAL: 3330-3380

TIME INTERVALS: 30-45-45-45

RECORDER DEPTH: 3350

VISCOSITY: 9.730005 CP

BOTTOM HOLE TEMP: 98

HOLE SIZE: 7.875 IN

CALCULATIONS

CUBIC FEET OF GAS IN PIPE: 175.5208

TOTAL FEET OF RECOVERY: 1510

BARRELS IN DRILL PIPE: 12.88332

BARRELS IN WEIGHT PIPE: 4.228

GAS OIL RATIO: 10.25759 CU.FT./BBL

BUBBLE POINT PRESSURE: ; .2271267

TOTAL BARRELS OF RECOVERY: 17.11132

UNCORR. INIT. PROD.: 328.5374 BBL/DAY

API GRAVITY: 35

FLUID GRADIENT: .368

CORRECTED PIPE FILLUP: 916.8478

CORR. BARRELS OF RECOVERY: 8.664641 BBL

INITIAL PRODUCTION CORRECTED TO FINAL FLOW PRESSURE: 166.3611 BBL/DAY

INITIAL PRODUCTION CORRECTED TO PSEUDO STEADY FLOW STATE

147.7528

INITIAL SLOPE 268.33 PSI/CYCLE

INITIAL P* 932 PSI

FINAL SLOPE 135.67 PSI/CYCLE

FINAL P* 879 PSI

TRANSMISSIBILITY

199.3832 (MD.-FT./CP.)

PERMEABILITY

554.2855 (MD.)

INDICATED FLOW CAPACITY

1939.999 (MD.FT)

PRODUCTIVITY INDEX

.225303 (BARRELS/DAY/PSI)

DAMAGE RATIO

.7305432

RADIUS OF INVESTIGATION

203.8907 (FT.)

POTENTIOMETRIC SURFACE

691.401 (FT.)

DRAWDOWN FACTOR

5.686694 (%)

INITIAL FLOW

RECORDER # 11057
DST #3

DT(MIN)	PRESSURE	<> PRESSURE
0	79.5	79.5
3	80.7	1.199997
6	90.8	10.10001
9	107.6	16.8
12	125.5	17.9
15	140.1	14.60001
18	142.3	2.199997
21	147.9	5.599991
24	154.7	6.800003
27	163.6	8.900009
30	170.4	6.799988
33	173.7	3.300003

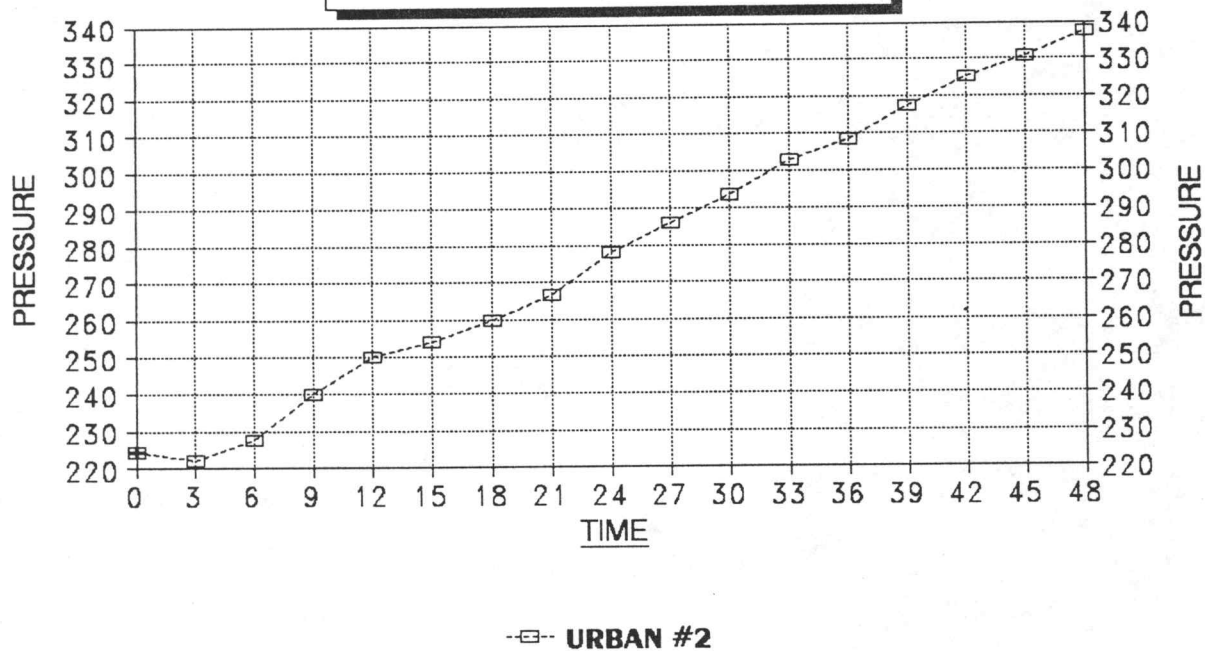
FINAL FLOW

RECORDER # 11057
DST #3

DT(MIN)	PRESSURE	<> PRESSURE
0	224.2	224.2
3	221.9	-2.300003
6	227.5	5.600006
9	239.9	12.39999
12	250	10.10001
15	254.4	4.399994
18	260	5.600006
21	266.8	6.799988
24	278	11.20001
27	285.8	7.799988
30	293.7	7.900025
33	302.6	8.899994
36	308.2	5.600006
39	317.2	9
42	325.1	7.899994
45	330.7	5.600006
48	337.4	6.699982

DELTA T DELTA P

FINAL FLOW - DST #3



INITIAL PRODUCTION CORRECTED TO PSEUDO STEADY FLOW STATE 147.7528 BBL/DAY

URBAN #2
INITIAL

DST #3
SHUTIN
30 FLOW TIME

Slope -268.33 psi/cycle
P * 932 psi

TIME(MIN)	Pws (psi)	Horn T	Log Horn T	<> PRESSURE
3	550.2	11	1.041	550.2
6	643.9	6	0.778	93.7
9	703.1	4	0.637	59.2
12	735.5	4	0.544	32.4
15	765.6	3	0.477	30.1
18	792.4	3	0.426	26.8
21	808.0	2	0.385	15.6
24	823.6	2	0.352	15.6
27	835.9	2	0.325	12.3
30	844.8	2	0.301	8.9
33	851.5	2	0.281	6.7
36	858.2	2	0.263	6.7
39	864.9	2	0.248	6.7
X 42	869.4	2	0.234	4.5
45	872.7	2	0.222	3.3
48	877.2	2	0.211	4.5
X 51	878.3	2	0.201	1.1

URBAN #2
FINAL

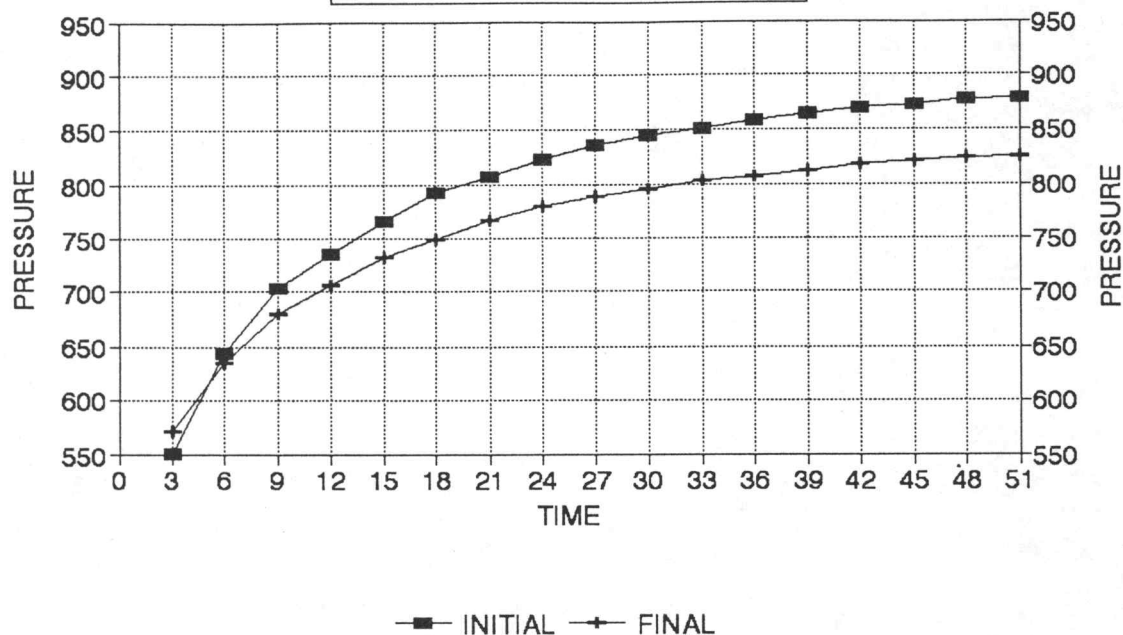
DST #3
SHUTIN
75 TOTAL FLOW

TIME

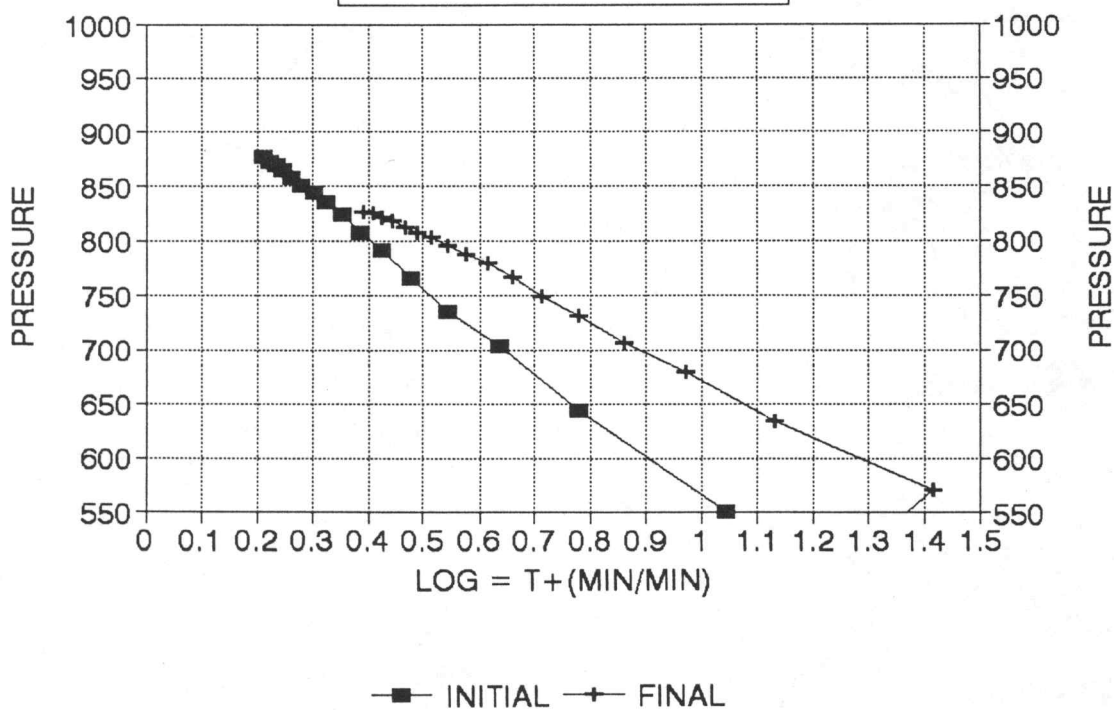
Slope -135.67 psi/cycle
P * 879 psi

TIME(MIN)	Pws (psi)	Horn T	Log Horn T	<> PRESSURE
3	571.4	26	1.415	571.4
6	633.9	14	1.130	62.5
9	679.6	9	0.970	45.7
12	706.4	7	0.860	26.8
15	732.1	6	0.778	25.7
18	748.8	5	0.713	16.7
21	766.7	5	0.660	17.9
24	780.1	4	0.615	13.4
27	787.9	4	0.577	7.8
30	795.7	4	0.544	7.8
33	803.5	3	0.515	7.8
36	808.0	3	0.489	4.5
39	812.5	3	0.466	4.5
42	818.0	3	0.445	5.5
X 45	821.4	3	0.426	3.4
48	824.7	3	0.409	3.3
X 51	825.9	2	0.393	1.2

DELTA T DELTA P DST #3 / URBAN #2



HORNER PLOT DST #3 / URBAN #2





GAS VOLUME REPORT

59

WELL NAME AND NO.

DST NO.

Remarks:

101 BOND

TRILOBITE TESTING COMPANY, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name URBAN #2 Test No. 4 Date 3/16/92
Company AFG ENERGY, INC. Zone Tested LKC
Address P.O. BOX 606 RUSSELL KS 67665-0605 Elevation 2003 K.B.
Co. Rep./Geo. STEVE PARKER Cont. EMPHASIS DRLG RIG #5 Est. Ft. of Pay _____
Location: Sec. 10 Twp. 16S Rge. 17W Co. RUSH State KS

Interval Tested 3412-3480
Anchor Length 68
Top Packer Depth 3407
Bottom Packer Depth 3412
Total Depth 3480

Drill Pipe Size 4.5" XH
Wt. Pipe I.D. - 2.7 Ft. Run 604
Drill Collar — 2.25 Ft. Run _____

Mud Wt. 9 lb / gal. Viscosity 50 Filtrate 8

Tool Open @ 7:00 PM Initial Blow STRONG BLOW-BOTTOM OF BUCKET IN 30 SECONDS
GAS TO SURFACE IN 14 MINUTES

Final Blow STRONG-GAUGING GAS

Recovery — Total Feet 2313 Flush Tool? NO

Rec. 2313 Feet of CLEAN GASSY OIL-34%GAS/66%OIL

Rec. _____ Feet of (REVERSED OIL INTO PIT)

Rec. _____ Feet of _____

Rec. _____ Feet of _____

Rec. _____ Feet of _____

BHT N/A °F Gravity 39 °API @ 70 °F Corrected Gravity 38 °API

RW _____ @ _____ °F Chlorides _____ ppm Recovery Chlorides _____ ppm System

(A) Initial Hydrostatic Mud 1670.4 PSI Ak1 Recorder No. 11057 Range 4500

(B) First Initial Flow Pressure 213 PSI @ (depth) 3459 w/Clock No. 17640

(C) First Final Flow Pressure 526.7 PSI Ak1 Recorder No. 22150 Range 3925

(D) Initial Shut-in Pressure 1053.8 PSI @ (depth) 3479 w/Clock No. 25810

(E) Second Initial Flow Pressure 606 PSI Ak1 Recorder No. _____ Range _____

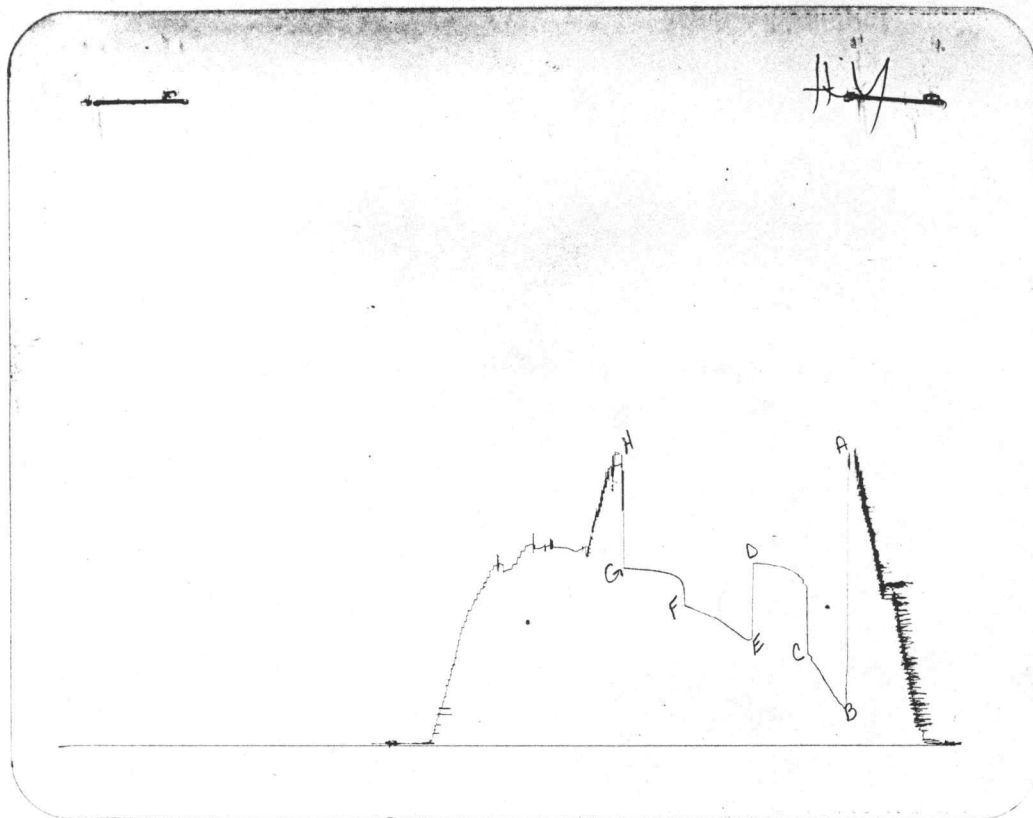
(F) Second Final Flow Pressure 803.5 PSI @ (depth) _____ w/Clock No. _____

(G) Final Shut-in Pressure 1035.7 PSI Initial Opening 30 Final Flow 45

(H) Final Hydrostatic Mud 1627.7 PSI Initial Shut-in 45 Final Shut-in 45

Our Representative PAUL SIMPSON

TOTAL PRICE \$ 585



POINT

This is an actual photograph of recorder chart
PRESSURE

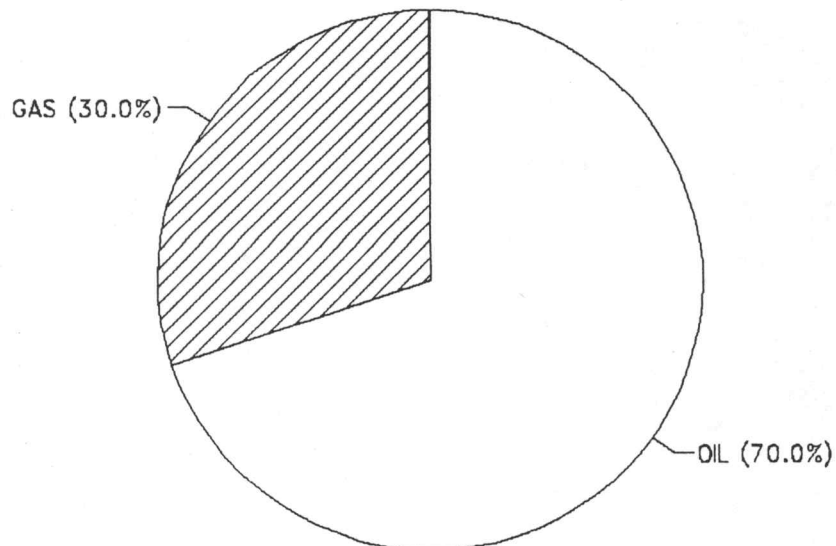
	FIELD READING	OFFICE READING
(A) INITIAL HYDROSTATIC MUD	1679	1670.4
(B) FIRST INITIAL FLOW PRESSURE	202	213
(C) FIRST FINAL FLOW PRESSURE	516	526.7
(D) INITIAL CLOSED-IN PRESSURE	1051	1053.8
(E) SECOND INITIAL FLOW PRESSURE	605	606
(F) SECOND FINAL FLOW PRESSURE	806	803.5
(G) FINAL CLOSED-IN PRESSURE	1018	1035.7
(H) FINAL HYDROSTATIC MUD	1668	1627.7

CALCULATED RECOVERY ANALYSIS

DST # 4 TICKET # 4781

SAMPLE	TOTAL	GAS		OIL		WATER		MUD	
#	FEET	%	FEET	%	FEET	%	FEET	%	FEET
DRILL 1	1709	30	512.7	70	1196.3	0	0	0	0
PIPE 2			0		0		0		0
3			0		0		0		0
4			0		0		0		0
5			0		0		0		0
6			0		0		0		0
WEIGHT 1	604	30	181.2	70	422.8	0	0	0	0
PIPE 2			0		0		0		0
3			0		0		0		0
4			0		0		0		0
DRILL 1			0		0		0		0
COLLAR 2			0		0		0		0
3			0		0		0		0
4			0		0		0		0
5			0		0		0		0
TOTAL	2313		693.9		1619.1		0		0

			HRS OPEN	BBL/DAY
BBL OIL =	19.970986	*	0.75	639.07155
BBL WATER =	0	*		0
BBL MUD =	0			
BBL GAS =	8.558994			



COMPUTER EVALUATION BY TRILOBITE TESTING
AFG ENERGY INC

REPORT FOR DST#4 FOR THE URBAN #2

10-16S-17W

RUSH KANSAS

TEST PARAMETERS

ELEVATION: 2003 KB EST. PAY: 7 FT
DATUM: -1457 ZONE TESTED: LANSING-KS CITY
TEST INTERVAL: 3412-3480
TIME INTERVALS: 30-45-45-45
RECORDER DEPTH: 3459 VISCOSITY: 6.102562 CP
BOTTOM HOLE TEMP: 109 HOLE SIZE: 7.875 IN

CALCULATIONS

CUBIC FEET OF GAS IN PIPE: 588.5417
TOTAL FEET OF RECOVERY: 2313
BARRELS IN DRILL PIPE: 24.30198
BARRELS IN WEIGHT PIPE: 4.228
GAS OIL RATIO: 20.62888 CU.FT./BBL
BUBBLE POINT PRESSURE: ; .4858324
TOTAL BARRELS OF RECOVERY: 28.52998
UNCORR. INIT. PROD.: 547.7756 BBL/DAY
API GRAVITY: 38
FLUID GRADIENT: .362
CORRECTED PIPE FILLUP: 2219.613
CORR. BARRELS OF RECOVERY: 27.1933 BBL
INITIAL PRODUCTION CORRECTED TO FINAL FLOW PRESSURE: 522.1114 BBL/DAY
INITIAL PRODUCTION CORRECTED TO PSEUDO STEADY FLOW STATE
213.2992

INITIAL SLOPE 78.88 PSI/CYCLE
INITIAL P* 1072 PSI

FINAL SLOPE 63.57 PSI/CYCLE
FINAL P* 1052 PSI

TRANSMISSIBILITY	1335.462 (MD.-FT./CP.)
PERMEABILITY	1164.248 (MD.)
INDICATED FLOW CAPACITY	8149.738 (MD.FT)
PRODUCTIVITY INDEX	1.509072 (BARRELS/DAY/PSI)
DAMAGE RATIO	.715361
RADIUS OF INVESTIGATION	295.4973 (FT.)
POTENTIOMETRIC SURFACE	983.5879 (FT.)
DRAWDOWN FACTOR	1.865673 (%)

INITIAL FLOW

REORDER # 11057
DST #4

DT(MIN)	PRESSURE	<> PRESSURE
0	213	213
3	239.9	26.9
6	270.1	30.20001
9	297	26.9
12	337.4	40.4
15	369.9	32.5
18	412.5	42.60001
21	448.4	35.9
24	477.5	29.10001
27	521.1	43.59998
30	526.7	5.600037

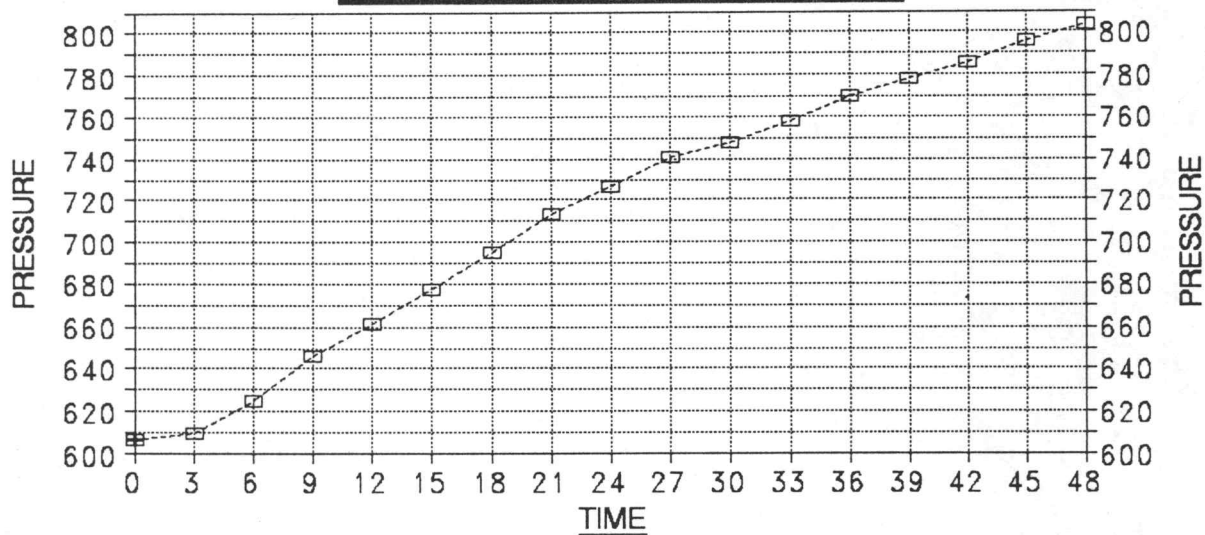
FINAL FLOW

REORDER # 11057
DST #4

DT(MIN)	PRESSURE	<> PRESSURE
0	606	606
3	609.3	3.299988
6	625	15.70001
9	646.2	21.20001
12	661.8	15.59998
15	677.4	15.60004
18	695.3	17.89996
21	713.1	17.79999
24	726.5	13.40003
27	741	14.5
30	747.7	6.700012
33	757.8	10.09998
36	770	12.20001
39	777.9	7.900025
42	785.7	7.799988
45	795.7	10
48	803.5	7.799988

DELTA T DELTA P

FINAL FLOW - DST #4



--□-- URBAN #2

INITIAL PRODUCTION CORRECTED TO PSEUDO STEADY FLOW STATE 213.2992 BBL/DAY

URBAN #2
INITIAL

DST #4
SHUTIN
30 FLOW TIME

Slope -78.88 psi/cycle
P * 1,072 psi

	TIME(MIN)	Pws (psi)	Horn T	Log Horn T	<> PRESSURE
	3	917.4	11	1.041	917.4
	6	963.1	6	0.778	45.7
	9	984.4	4	0.637	21.3
	12	1004.4	4	0.544	20.0
	15	1015.6	3	0.477	11.2
	18	1025.7	3	0.426	10.1
	21	1032.5	2	0.385	6.8
	24	1036.9	2	0.352	4.4
	27	1040.3	2	0.325	3.4
	30	1045.9	2	0.301	5.6
	33	1048.2	2	0.281	2.3
X	36	1051.5	2	0.263	3.3
	39	1052.6	2	0.248	1.1
X	42	1053.8	2	0.234	1.2

URBAN #2
FINAL

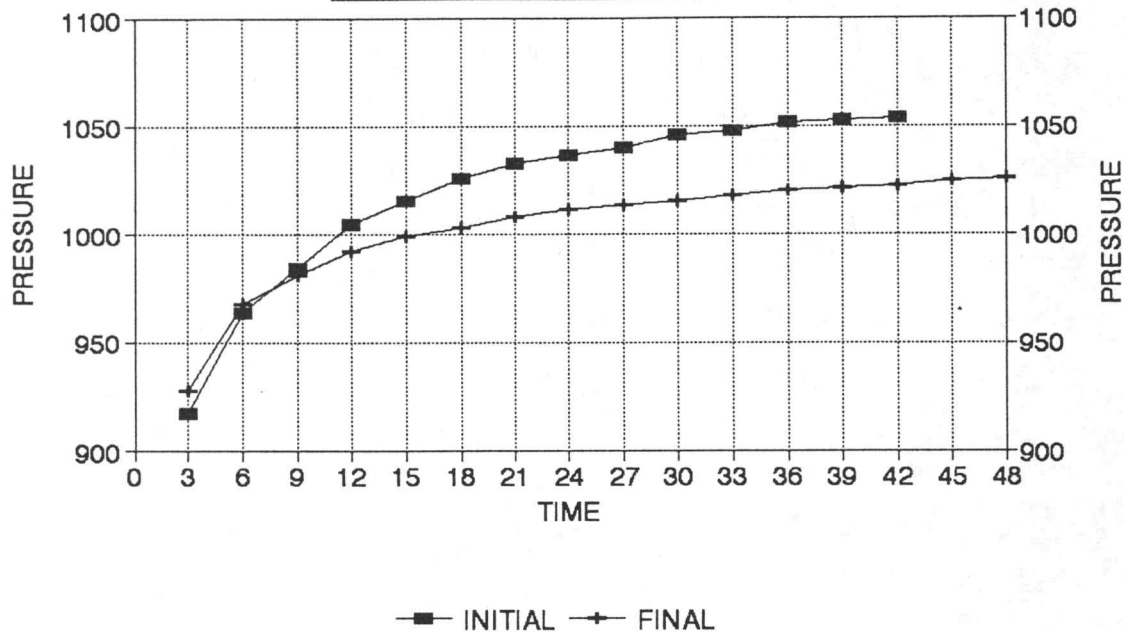
DST #4
SHUTIN
75 TOTAL FLOW

TIME

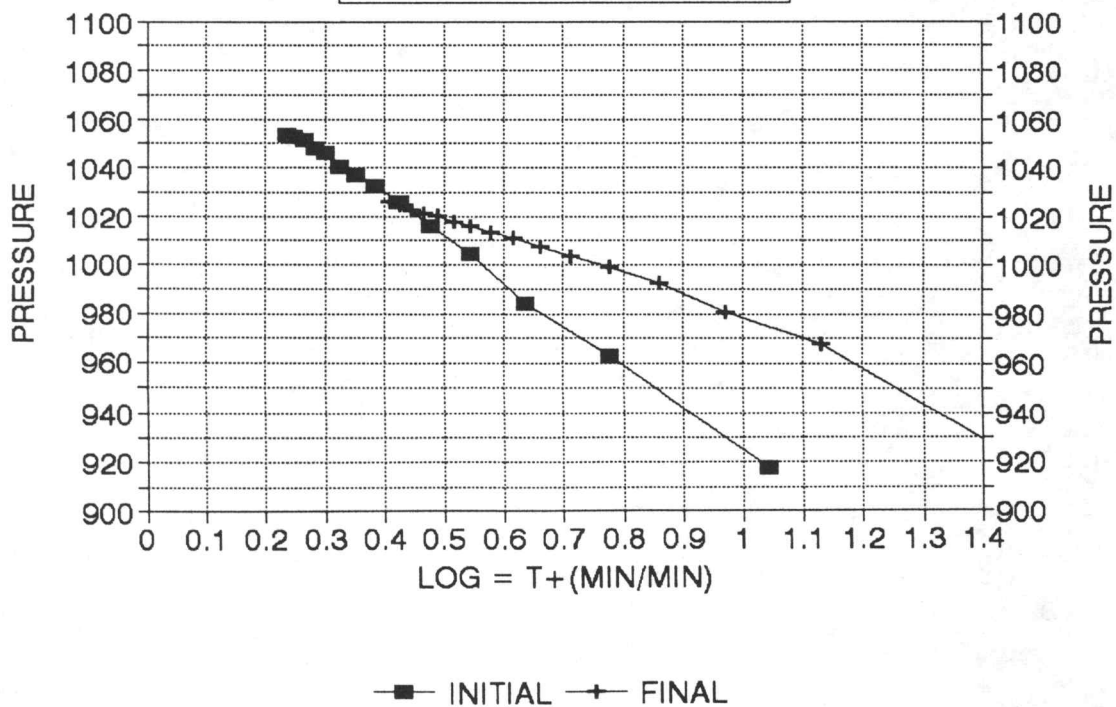
Slope -63.57 psi/cycle
P * 1,052 psi

	TIME(MIN)	Pws (psi)	Horn T	Log Horn T	<> PRESSURE
	3	927.4	26	1.415	927.4
	6	967.6	14	1.130	40.2
	9	981.0	9	0.970	13.4
	12	992.2	7	0.860	11.2
	15	998.9	6	0.778	6.7
	18	1003.3	5	0.713	4.4
	21	1007.8	5	0.660	4.5
	24	1011.2	4	0.615	3.4
	27	1013.4	4	0.577	2.2
	30	1015.6	4	0.544	2.2
	33	1017.9	3	0.515	2.3
	36	1020.1	3	0.489	2.2
	39	1021.3	3	0.466	1.2
	42	1022.4	3	0.445	1.1
X	45	1024.6	3	0.426	2.2
X	48	1025.7	3	0.409	1.1

DELTA T DELTA P DST #4 / URBAN #2



HORNER PLOT DST #4 / URBAN #2





GAS VOLUME REPORT

4 _____
DST NO.

Remarks:

101 BOND

TRILOBITE TESTING COMPANY, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name URBAN #2 Test No. 5 Date 3/17/92
Company AFG ENERGY, INC. Zone Tested LKC-"K"
Address P.O. BOX 606 RUSSELL KS 67665-0605 Elevation 2003 K.B.
Co. Rep./Geo. STEVE PARKER Cont. EMPHASIS DRLG RIG #5 Est. Ft. of Pay _____
Location: Sec. 10 Twp. 16S Rge. 17W Co. RUSH State KS

Interval Tested 3480-3515
Anchor Length 35
Top Packer Depth 3475
Bottom Packer Depth 3480
Total Depth 3515

Drill Pipe Size 4.5" XH
Wt. Pipe I.D. - 2.7 Ft. Run 604
Drill Collar — 2.25 Ft. Run _____

Mud Wt. 9 lb / gal. Viscosity 47 Filtrate 6

Tool Open @ 10:00 AM Initial Blow WEAK 1/2" BLOW BUILDING TO 3/4"

Final Blow WEAK SURFACE BLOW THROUGHOUT

Recovery — Total Feet 2 Flush Tool? NO

Rec. 2 Feet of MUD

Rec. _____ Feet of _____

Rec. _____ Feet of _____

Rec. _____ Feet of _____

Rec. 97 Feet of _____

BHT _____ °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API

RW _____ @ _____ °F Chlorides _____ ppm Recovery Chlorides _____ ppm System

(A) Initial Hydrostatic Mud 1730.8 PSI Ak1 Recorder No. 11057 Range 4500

(B) First Initial Flow Pressure 52.3 PSI @ (depth) 3487 w/Clock No. 17640

(C) First Final Flow Pressure 52.3 PSI Ak1 Recorder No. 24174 Range 3350

(D) Initial Shut-in Pressure 52.3 PSI @ (depth) 3514 w/Clock No. 25810

(E) Second Initial Flow Pressure 52.3 PSI Ak1 Recorder No. _____ Range _____

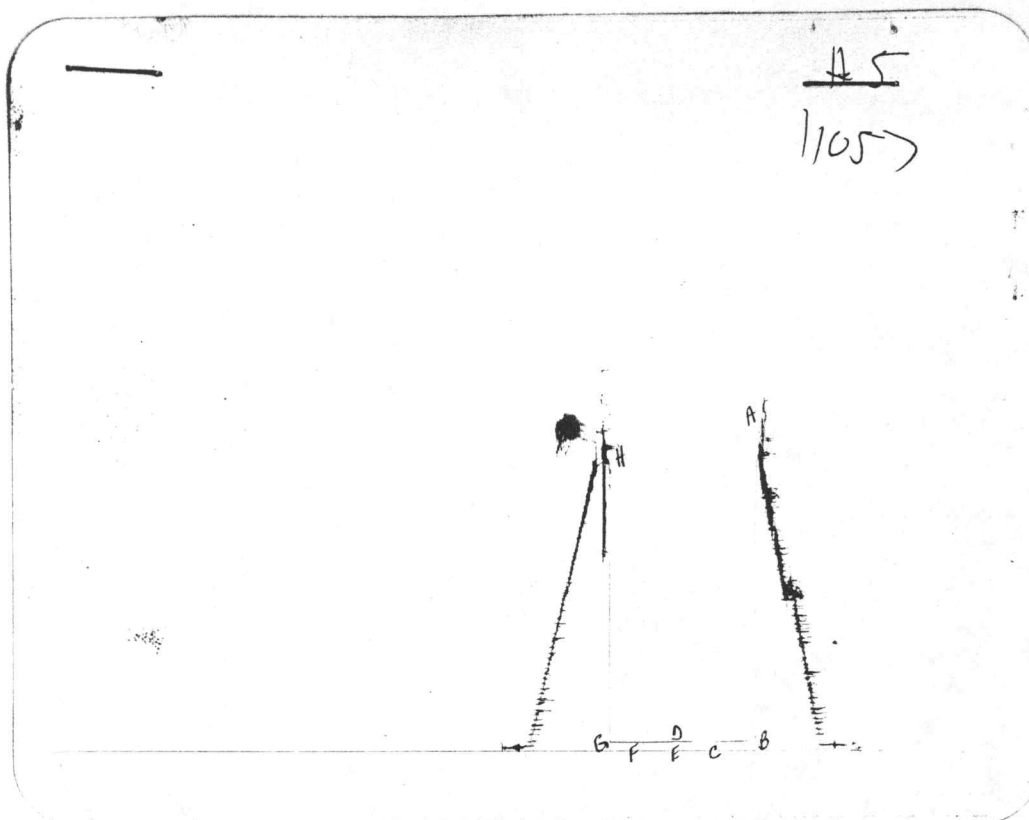
(F) Second Final Flow Pressure 52.3 PSI @ (depth) _____ w/Clock No. _____

(G) Final Shut-in Pressure 52.3 PSI Initial Opening 30 Final Flow 15

(H) Final Hydrostatic Mud 1710.9 PSI Initial Shut-in 30 Final Shut-in 30

Our Representative PAUL SIMPSON

TOTAL PRICE \$ 550



POINT This is an actual photograph of recorder chart PRESSURE

	FIELD READING	OFFICE READING
(A) INITIAL HYDROSTATIC MUD	1724	1730.8
(B) FIRST INITIAL FLOW PRESSURE	45	52.3
(C) FIRST FINAL FLOW PRESSURE	45	52.3
(D) INITIAL CLOSED-IN PRESSURE	45	52.3
(E) SECOND INITIAL FLOW PRESSURE	45	52.3
(F) SECOND FINAL FLOW PRESSURE	45	52.3
(G) FINAL CLOSED-IN PRESSURE	45	52.3
(H) FINAL HYDROSTATIC MUD	1702	1710.9

TRILOBITE TESTING COMPANY L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Test Ticket

No 4782

Well Name & No. Urban #2 Test No. 5 Date 3-17-92
 Company Aff Energy Inc Zone Tested LKC K
 Address _____ Elevation 2003
 Co. Rep./Geo. Steve Parker cont. Emphasis #5 Est. Ft. of Pay _____
 Location: Sec. 10 Twp. 16s Rge. 17w Co. Rush State IL
 No. of Copies 3 Distribution Sheet _____ Yes _____ No _____ Turnkey _____ Yes _____ No _____ Evaluation _____

Interval Tested 3480-3515 Drill Pipe Size 4 1/2 XT
 Anchor Length 35 Top Choke — 1" Bottom Choke — 3/4"
 Top Packer Depth 3475 Hole Size — 7 7/8" Rubber Size — 6 3/4"
 Bottom Packer Depth 3480 Wt. Pipe I.D. — 2.7 Ft. Run 604
 Total Depth 3515 Drill Collar — 2.25 Ft. Run _____
 Mud Wt. 9.0 lb/gal. Viscosity 47 Filtrate 6.0
 Tool Open @ 10:00 AM Initial Blow weak 1/2" blow building to 3/4"
 Final Blow weak surface blow throughout

Recovery — Total Feet 2 Feet of Gas in Pipe _____ Flush Tool? _____
 Rec. 2 Feet Of Mud %gas %oil %water %mud
 Rec. _____ Feet Of _____ %gas %oil %water %mud
 Rec. _____ Feet Of _____ %gas %oil %water %mud
 Rec. _____ Feet Of _____ %gas %oil %water %mud
 Rec. _____ Feet Of _____ %gas %oil %water %mud
 BHT 97 °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API

RW _____ @ _____ °F Chlorides _____ ppm Recovery Chlorides _____ ppm System
 (A) Initial Hydrostatic Mud 1724 PSI AK1 Recorder No. 11057 Range 4500
 (B) First Initial Flow Pressure 45 PSI @ (depth) 3487 W/Clock No. 17640
 (C) First Final Flow Pressure 45 PSI AK1 Recorder No. 24174 Range 3350
 (D) Initial Shut-In Pressure 45 PSI @ (depth) 3514 W/Clock No. 25810
 (E) Second Initial Flow Pressure 45 PSI AK1 Recorder No. _____ Range _____
 (F) Second Final Flow Pressure 45 PSI @ (depth) _____ W/Clock No. _____
 (G) Final Shut-In Pressure 43 PSI Initial Opening 30 Test X
 (H) Final Hydrostatic Mud 1702 PSI Initial Shut-In 30 Jars _____

TRILOBITE TESTING COMPANY SHALL NOT BE LIABLE FOR DAMAGE OF ANY KIND OF THE PROPERTY OR PERSONNEL OF THE ONE FOR WHOM A TEST IS MADE, OR FOR ANY LOSS SUFFERED OR SUBSTAINED, DIRECTLY OR INDIRECTLY, THROUGH THE USE OF ITS EQUIPMENT, OR ITS STATEMENTS OR OPINION CONCERNING THE RESULTS OF ANY TEST. TOOLS LOST OR DAMAGED IN THE HOLE SHALL BE PAID FOR AT COST BY THE PARTY FOR WHOM THE TEST IS MADE.

Approved By _____
 Our Representative Paul Simpson

Safety Joint _____
 Straddle _____
 Circ. Sub _____
 Sampler _____
 Extra Packer _____
 Other _____
 TOTAL PRICE \$ _____