

DRILL STEM TEST REPORT

Prepared For: **Samuel Gary Jr.& Associates Inc.**

1670 Broadway Suite 3300
Denver, Colorado. 80202

ATTN: Tom Fertal

31-33S-20W

Selzer #1-31

Start Date: 2004.12.28 @ 10:25:01

End Date: 2004.12.28 @ 21:26:46

Job Ticket #: 19217 DST #: 1

Trilobite Testing, Inc
PO Box 362 Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Samuel Gary Jr. & Associates Inc.

1670 Broadway Suite 3300
Denver, Colorado 80202

ATTN: Tom Fertal

Selzer #1-31

31-33S-20W

Job Ticket: 19217

DST#: 1

Test Start: 2004.12.28 @ 10:25:01

GENERAL INFORMATION:

Formation: **Morrow Sd.**

Deviated: **No** Whipstock: **ft (KB)**

Time Tool Opened: 12:55:46

Time Test Ended: 21:26:46

Test Type: **Conventional Bottom Hole**

Tester: **Darren L. Amerine**

Unit No: **30**

Interval: **5211.00 ft (KB) To 5300.00 ft (KB) (TVD)**

Total Depth: **5300.00 ft (KB) (TVD)**

Hole Diameter: **7.88 inches** Hole Condition: **Fair**

Reference Elevations: **1784.00 ft (KB)**

1775.00 ft (CF)

KB to GR/CF: **9.00 ft**

Serial #: 6625 **Inside**

Press@RunDepth: **546.32 psig @ 5213.00 ft (KB)**

Start Date: **2004.12.28**

End Date: **2004.12.28**

Start Time: **10:25:04**

End Time: **21:26:46**

Capacity: **7000.00 psig**

Last Calib.: **2004.12.28**

Time On Btm: **2004.12.28 @ 12:55:01**

Time Off Btm: **2004.12.28 @ 17:13:01**

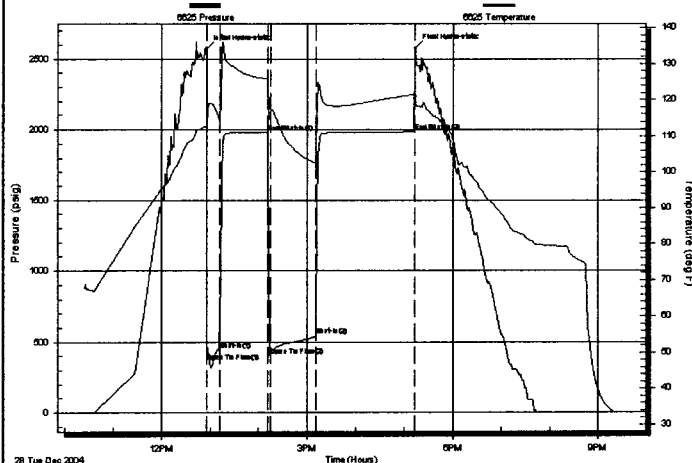
TEST COMMENT: IF: Strong blow b.o.b in 50 sec. GTS in 4 mins. gauge gas.

IS: Bled down in for 17 mins. no blow back.

FF: Strong blow b.o.b in 20 sec. gauge gas.

FS: Bled down in for 45 mins. built back to b.o.b.

Pressure vs. Time



PRESSURE SUMMARY

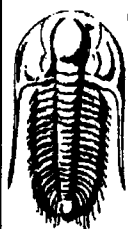
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2569.76	112.57	Initial Hydro-static
1	361.73	112.98	Open To Flow (1)
17	445.55	114.77	Shut-In(1)
77	1980.22	125.84	End Shut-In(1)
80	400.45	115.75	Open To Flow (2)
136	546.32	102.59	Shut-In(2)
257	1984.64	121.44	End Shut-In(2)
258	2578.46	119.72	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
0.00	4133' of gip	0.00
580.00	G&MCW 65% water 10% gas 25% mud	4.77
120.00	SG&MCW 10% gas 20% water 70% mud	1.68

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
First Gas Rate	0.75	40.00	849.72
Last Gas Rate	0.75	97.00	1740.05
Max. Gas Rate	0.75	97.00	1740.05



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Samuel Gary Jr. & Associates Inc.

Selzer #1-31

1670 Broadway Suite 3300
Denver, Colorado 80202

31-33S-20W

Job Ticket: 19217

DST#: 1

ATTN: Tom Fertal

Test Start: 2004.12.28 @ 10:25:01

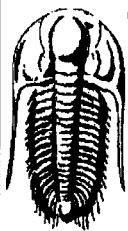
Tool Information

Drill Pipe:	Length: 4833.97 ft	Diameter: 3.80 inches	Volume: 67.81 bbl	Tool Weight: 2100.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 20000.00 lb
Drill Collar:	Length: 369.03 ft	Diameter: 2.25 inches	Volume: 1.81 bbl	Weight to Pull Loose: 110000.0 lb
		Total Volume:	69.62 bbl	Tool Chased 0.00 ft
Drill Pipe Above KB:	24.00 ft			String Weight: Initial 92000.00 lb
Depth to Top Packer:	5211.00 ft			Final 95000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	89.00 ft			
Tool Length:	121.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			5180.00	
Shut In Tool	5.00			5185.00	
Sampler	3.00			5188.00	
Hydraulic tool	5.00			5193.00	
Jars	5.00			5198.00	
Safety Joint	3.00			5201.00	
Packer	5.00			5206.00	32.00 Bottom Of Top Packer
Packer	5.00			5211.00	
Stubb	2.00			5213.00	
Recorder	0.00	6625	Inside	5213.00	
Anchor	23.00			5236.00	
Recorder	0.00	10991	Outside	5236.00	
Drill Pipe	61.00			5297.00	
Bullnose	3.00			5300.00	89.00 Bottom Packers & Anchor

Total Tool Length: 121.00



TRILOBITE
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DRILL STEM TEST REPORT

FLUID SUMMARY

Samuel Gary Jr. & Associates Inc.

Selzer #1-31

1670 Broadway Suite 3300
Denver, Colorado 80202

31-33S-20W

Job Ticket: 19217

DST#: 1

ATTN: Tom Fertal

Test Start: 2004.12.28 @ 10:25:01

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity: 850000 ppm

Viscosity: 51.00 sec/qt

Cushion Volume:

bbl

Water Loss: 9.58 in³

Gas Cushion Type:

Resistivity: 1.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 5500.00 ppm

Filter Cake: 0.32 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
0.00	4133' of gip	0.000
580.00	G&MCW 65% water 10% gas 25% mud	4.774
120.00	SG&MCW 10% gas 20% water 70% mud	1.683

Total Length: 700.00 ft Total Volume: 6.457 bbl

Num Fluid Samples: 1

Num Gas Bombs: 0

Serial #:

Laboratory Name: Caraway

Laboratory Location: Liberal, KS

Recovery Comments: Sampler recovery-2150PSI=5.3C.F. 4000ML. Total
.09@70'degrees=75000



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

GAS RATES

Samuel Gary Jr. & Associates Inc.

Selzer #1-31

1670 Broadway Suite 3300
Denver, Colorado 80202

31-33S-20W

Job Ticket: 19217

DST#: 1

ATTN: Tom Fertal

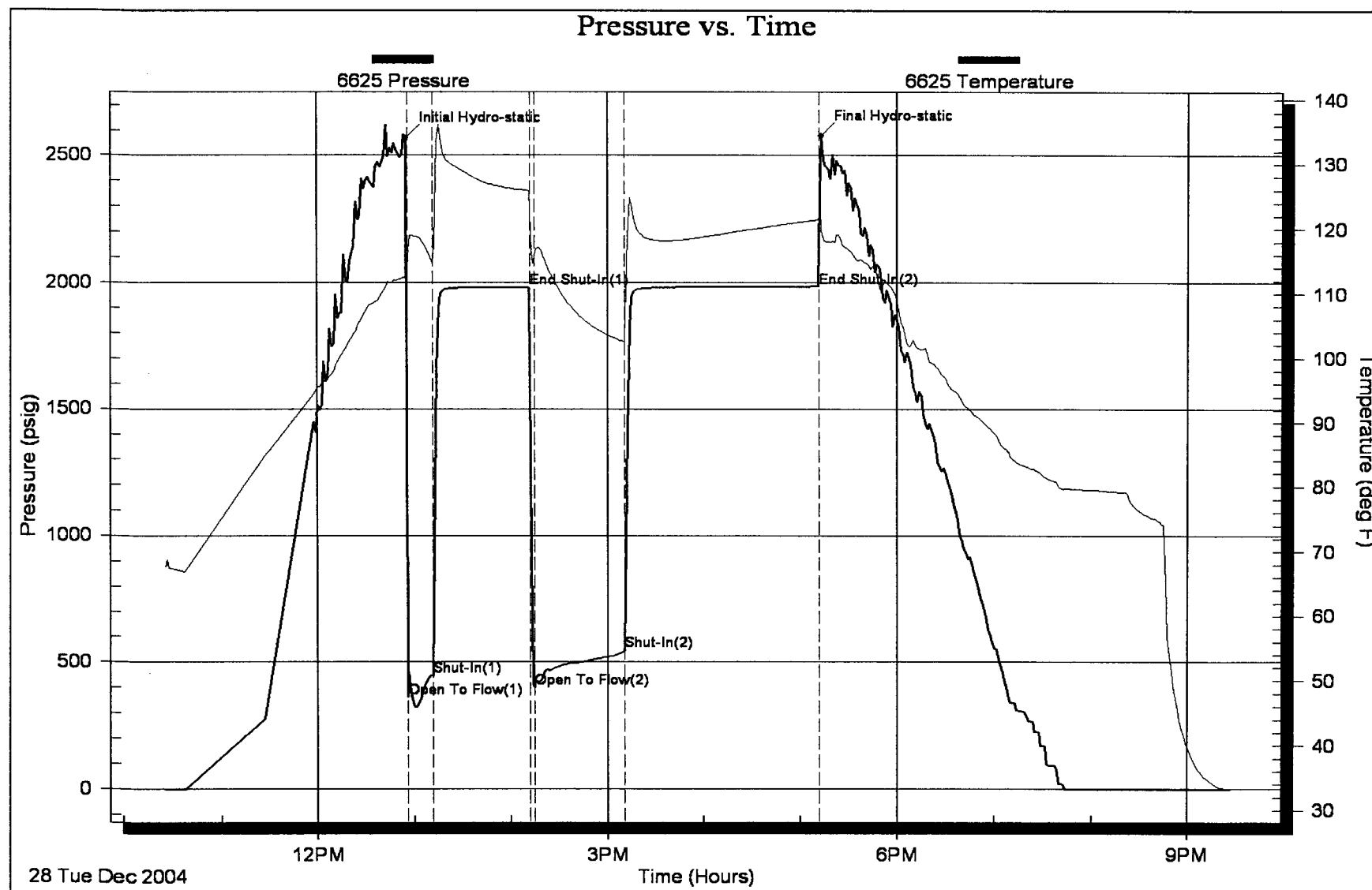
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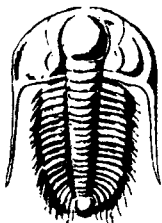
Gas Rates Information

Temperature: 59 deg C
Relative Density: 0.65
Z Factor: 0.8

Gas Rates Table

Flow Period	Elapsed Time	Choke (mm)	Pressure (kPaa)	Gas Rate (m ³ /d)
1	5	0.75	40.00	849.72
1	5	0.75	40.00	849.72
1	10	0.75	60.00	1162.12
1	15	0.75	65.00	1240.22
2	10	0.75	85.00	1552.61
2	20	0.75	94.00	1693.19
2	30	0.75	95.00	1708.81
2	40	0.75	96.00	1724.43
2	50	0.75	97.00	1740.05
2	60	0.75	97.00	1740.05





TRILOBITE TESTING INC.

P.O. Box 362 • Hays, Kansas 67601

INV
7100

No. 19217

05/03

Test Ticket

Well Name & No. Selzer #1-31 Test No. #1 Date 12-28-04
 Company Samuel Gary Jr. & Associates, Inc. Zone Tested Morrison
 Address 1670 Bldg. Suite 3300 Denver, Co. 80202 Elevation 1784 KB 1775 GL
 Co. Rep / Geo. Tom Fertal Cont. Abercrombie #8 Est. Ft. of Pay _____ Por. _____ %
 Location: Sec. 31 Twp. 33S Rge. 20W Co. Comanche, Co State KS
 No. of Copies 5 Distribution Sheet (Y, N) _____ Turnkey (Y, N) _____ Evaluation (Y, N) _____

Interval Tested 5211' - 5300' Initial Str Wt./Lbs. 92000 Unseated Str Wt./Lbs. 95000
 Anchor Length 89' Wt. Set Lbs. 20,000 Wt. Pulled Loose/Lbs. 110,000
 Top Packer Depth 5206' Tool Weight 2100
 Bottom Packer Depth 5211' Hole Size 7 7/8" ☒ Rubber Size 6 3/4" ☒
 Total Depth 5300' Wt. Pipe Run N/A Drill Collar Run 369.03
 Mud Wt. 9.1 LCM 16# Vis. 51 WL _____ Drill Pipe Size 4 1/2 KH Ft. Run 4894.97

Blow Description IF Strong blow b.o.b in 50 sec. BTS in 4 mins Gauge Gas.
ISI Bled down for 17 mins.
FF Strong blow b.o.b in 20 sec Gauge Gas. Mud @ the end of flow.
ISI Bled down for 75 mins.

Recovery - Total Feet 700 GIP 4133' Ft. in DC 369 Ft. in DP 331
 Rec. 120' Feet of SGFWCM 10% gas %oil 20 %water 70 %mud
 Rec. 580' Feet of SGFWCM 10% gas %oil 65 %water 25 %mud
 Rec. 4133' Feet of GIP %gas %oil %water %mud
 Rec. _____ Feet of _____ %gas %oil %water %mud
 Rec. _____ Feet of _____ %gas %oil %water %mud
 BHT 121 °F Gravity _____ °API D @ _____ °F Corrected Gravity _____ °API
 RW .09 @ 70 °F Chlorides 2500 ppm Recovery _____ Chlorides 5500 ppm System

AK-1	Alpine				
(A) Initial Hydrostatic Mud	<u>2570</u>	PSI	Recorder No. <u>6625</u>	Test ☒	<u>100</u>
(B) First Initial Flow Pressure	<u>362</u>	PSI	(depth) <u>5213'</u>	Elec. Rec. ☒	
(C) First Final Flow Pressure	<u>446</u>	PSI	Recorder No. <u>10991</u>	Jars ☒	<u>200</u>
(D) Initial Shut-In Pressure	<u>1980</u>	PSI	(depth) <u>5236'</u>	Safety Jt. ☒	<u>50</u>
(E) Second Initial Flow Pressure	<u>400</u>	PSI	Recorder No. _____	Circ Sub _____	
(F) Second Final Flow Pressure	<u>546</u>	PSI	(depth) _____	Sampler ☒	<u>200</u>
(G) Final Shut-In Pressure	<u>1985</u>	PSI	Initial Opening <u>15</u>	Straddle _____	
(Q) Final Hydrostatic Mud	<u>2578</u>	PSI	Initial Shut-In <u>60</u>	Ext. Packer _____	
			Final Flow <u>60</u>	Shale Packer _____	
			Final Shut-In <u>120</u>	Mileage <u>80</u>	<u>80</u>
			T-On Location <u>0915</u>	Sub Total: _____	<u>1630</u>
			T-Started <u>1024</u>	Std. By <u>hrs</u>	<u>60</u>
			T-Open <u>1300</u>	Other _____	
			T-Pulled <u>1715</u>	Total: _____	<u>#1690</u>
			T-Out <u>2126</u>		

TRILOBITE TESTING INC. SHALL NOT BE LIABLE FOR DAMAGED OF ANY KIND OF THE PROPERTY OR PERSONNEL OF THE ONE FOR WHOM A TEST IS MADE, OR FOR ANY LOSS SUFFERED OR SUSTAINED, 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

[Signature]
[Signature]

TRILOBITE TESTING L.L.C.

P.O. Box 362 - Hays, Kansas 67601

FLUID SAMPLER DATA

Ticket No. # 19219 Date 12-28-04
Company Name Samuel Gary Jr. & Associates, Inc.
Lease Selzer #1-31 Test No. #1
County Comanche, Co. KS Sec. 31 Twp. 33S Rng. 20W

SAMPLER RECOVERY

Gas 4000 5.3 CF ML
Oil N/A ML
Mud N/A ML
Water N/A ML
Other N/A ML
Pressure 2150 PSI
Total 4000 ML ML

PIT MUD ANALYSIS

Chlorides 5500 ppm.
Resistivity 1 ohms @ 70° F
Viscosity 51
Mud Weight 9.1
Filtrate 9.6
Other 1 1/2 # LCM

SAMPLER ANALYSIS

Resistivity 5 ohms @ _____ F
Chlorides 5 ppm.
Gravity _____ corrected @ 60 F

PIPE RECOVERY

TOP
Resistivity 5 ohms @ _____ F
Chlorides 5 ppm.
MIDDLE
Resistivity .09 ohms @ 70 F
Chlorides 75000 ppm.
BOTTOM
Resistivity _____ ohms @ _____ F
Chlorides _____ ppm.



GAS VOLUME REPORT

DST N

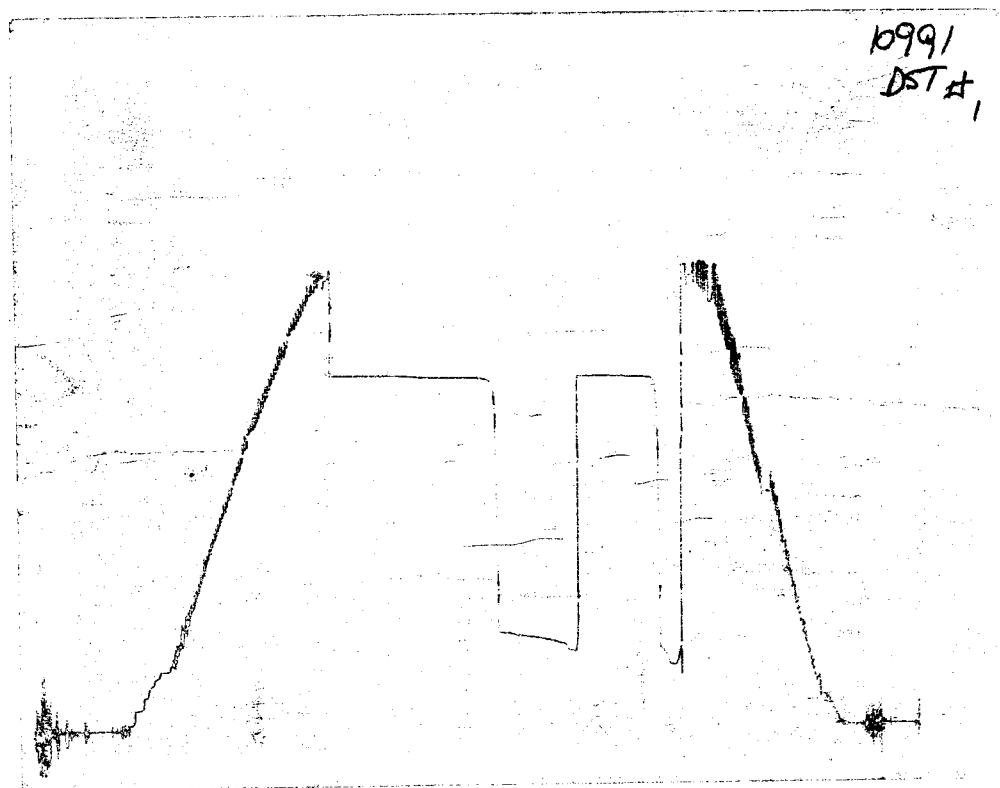
675 in 4 mins. on initial flow Final Flow

Remarks:

1030

CHART PAGE

This is a photocopy of the actual AK-1 recorder chart



KANSAS CORPORATION COMMISSION
MULTIPOINT BACK PRESSURE TEST

FORM G-1
8-7-58

TYPE TEST: ☐ Initial ☐ Annual ☐ Special		TEST DATE: 7/12/2005	
COMPANY Samuel Gary Jr. & Associates		LEASE Selzer	WELL NO. 1-31
COUNTY Comanche	LOCATION 1450'FNL450'FEL	SECTION 31 33s	ACRES 640
FIELD Harper Ranch Ea	RESERVOIR Morrow	PIPELINE CONNECTION Duke	
COMPLETION DATE 4/27/05	PLUG BACK DEPTH 5336	PACKER SET AT	
	TOTAL DEPTH 5392		
CASING SIZE 5.500	WT. 15.500	ID 4.950	SET AT 5391
			PERF. 5232
			TO 5276
TUBING SIZE 2.380	WT. 4.700	ID 1.995	SET AT 5197
			PERF.
			TO
TYPE COMPLETION (Describe) Flowing		TYPE FLUID PRODUCTION Salt Water	
PRODUCING THRU(Annulus/Tubing) Tubing		RESERVOIR TEMPERATURE F 121	BAR PRESS - Pa 14.4 psia
GAS GRAVITY - Gg .628	% CARBON DIOXIDE .426	% NITROGEN 2.420	API GRAVITY OF LIQUID
VERTICAL DEPTH (H) 5254		TYPE METER CONN. Flange	METER RUN SIZE 2"
REMARKS no place to measure tubing pressure, no temp probe on meter			

OBSERVED SURFACE DATA

RATE NO.	ORIFICE SIZE in.	(METER) PRESSURE psig	DIFF. (h _w) (h _t)	FLOWING TEMP. t.	WELLHEAD TEMP. t.	CASING WELLHEAD PRESS.		TUBING WELLHEAD PRESS.		DURATION HOURS	LIQUID PROD. Bbls.
						psig	(P _w) (P _t) (P _c) psia	psig	(P _w) (P _t) (P _c) psia		
SHUT-IN						1489	1503			72.00	
1.	1.000	93.00	18.00			1418	1432			1.00	
2.	1.000	95.00	24.00			1339	1353			1.00	
3.	1.000	97.00	35.00			1266	1280			1.00	
4.	1.000	98.00	57.00			1176	1190			1.00	

FLOW STREAM ATTRIBUTES

RATE NO.	COEFFICIENT (F _b) 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 _m
1.	5.073	107.4	43.97	1.2619	1.0632	1.0134	303		.628
2.	5.073	109.4	51.24	1.2619	1.0632	1.0136	353		.628
3.	5.073	111.4	62.44	1.2619	1.0632	1.0138	430		.628
4.	5.073	112.4	80.04	1.2619	1.0632	1.0140	552		.628

PRESSURE CALCULATION

RATE NO.	P _t psia	P _c psia	P _w psia	(P _c) ² Thousands	(P _w) ² Thousands	PLOTING POINTS		% SHUT-IN 100 $\left[\frac{P_w - P_a}{P_c - P_a} \right]$
						(P _c) ² - (P _w) ² Thousands	Q Mcfd	
1.	14.4	1503.4	1432.4	2260.2	2051.8	208.4	303.3	95.2
2.	14.4	1503.4	1353.4	2260.2	1831.7	428.5	353.5	89.9
3.	14.4	1503.4	1280.4	2260.2	1639.4	620.8	430.9	85.0
4.	14.4	1503.4	1190.4	2260.2	1417.1	843.2	552.4	79.0

INDICATED WELLHEAD OPEN FLOW

1049

Mcfd @ 14.65 psia

"n" = .665

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 14 day of July, 2005

Witness (if any)

For Company

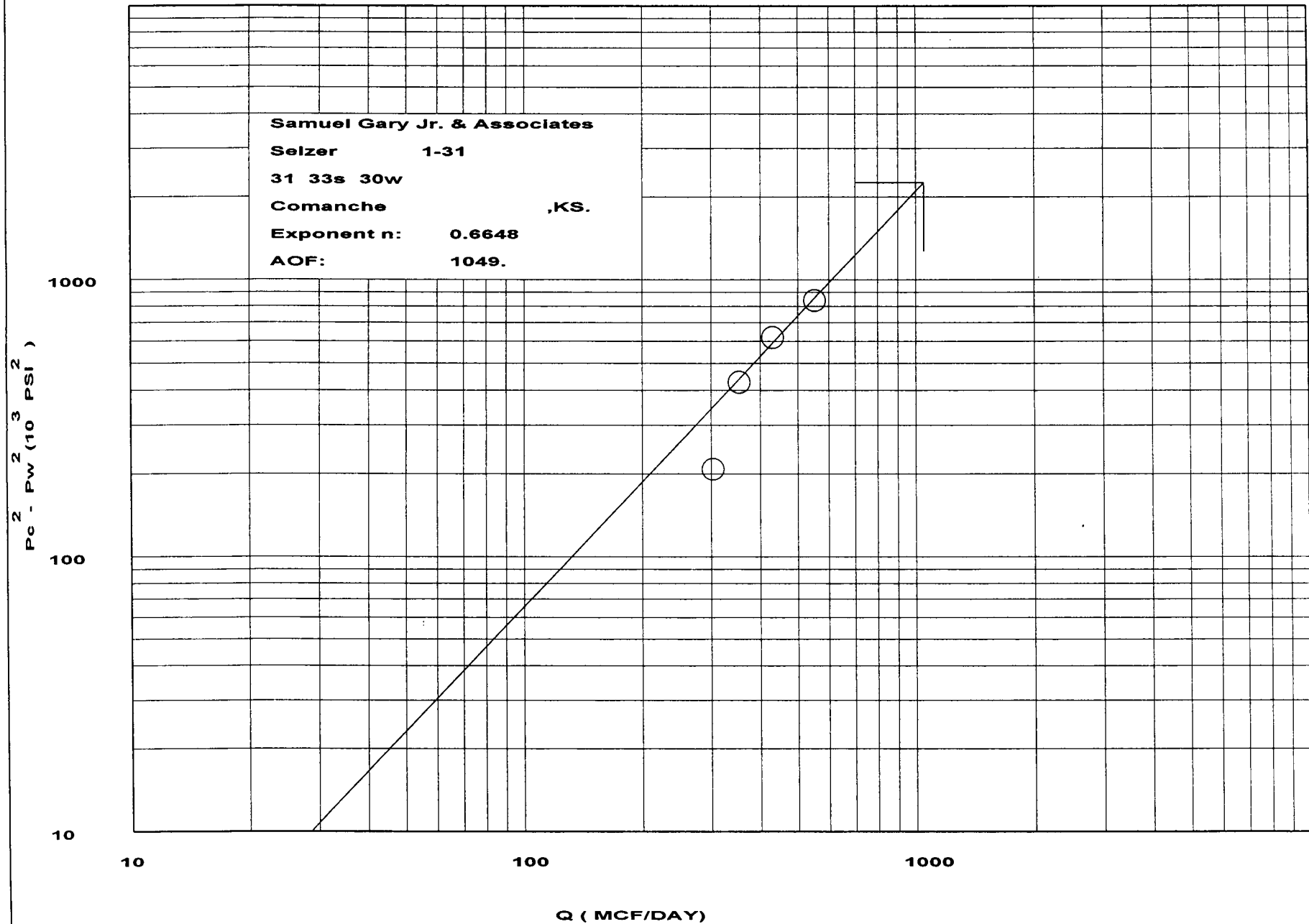
For Commission

Checked by

GAS WELL BACK PRESSURE CURVE

WELL TESTER: Trilobite Testing

TEST DATE: 7/12/2005



KANSAS CORPORATION COMMISSION
ONE POINT STABILIZED OPEN FLOW OR DELIVERABILITY TEST

FORM G-2
(Rev. 8/98)

TYPE TEST:

- ☒ Open Flow
☒ Deliverability

TEST DATE: 07/13/05

API No. 033-21416-0000

Company Samuel Gary Jr. & Associates		Lease Selzer		Well Number 1-31	
County Comanche	Location 1450'FNL450'FEL	Section 31	TWP 33s	RNG(E/W) 30w	Acres Attributed 640
Field Harper Ranch Ea	Reservoir Morrow	Gas Gathering Connection Duke			
Completion Date 4/27/05	Plug Back Total Depth 5336	Packer Set at			
Casing Size 5.500	Weight 15.500	Internal Diameter 4.950	Set at 5391	Perforations 5232	To 5276
Tubing Size 2.380	Weight 4.700	Internal Diameter 1.995	Set at 5197	Perforations	To
Type Completion (Describe) Flowing	Type Fluid Production Salt Water	Pump Unit or Traveling Plunger? no			
Producing Thru (Annulus/Tubing) Tubing	% Carbon Dioxide .426	% Nitrogen 2.420		Gas Gravity- Gg .628	
Vertical Depth (ft) 5254	Pressure Taps Flange	Meter Run Size 2			
Pressure Buildup: Shut in	7-9-05 @ 10:00	TAKEN	7-12-05 @ 10:00		
Well on Line: Started	7-12-05 @ 10:00	TAKEN	7-13-05 # 10:07		

OBSERVED SURFACE DATA

Static/ Dynamic Property	Orifice Size in.	Meter Pressure psig	Pressure Diff. In. H ₂ O	Flowing Temp. t.	WellHead Temp. t.	Casing WellHead Press. (P _w) (P _t) (P _c)		Tubing WellHead Press. (P _w) (P _t) (P _c)		Duration (Hours)	Liquid Prod. Barrels
						psig	psia	psig	psia		
Shut-in								1489	1503	72.0	
Flow	1.000	100.0	46.00					759	773	24.0	6.7

FLOW STREAM ATTRIBUTES

COEFFICIENT (F _b) Mcfd	(METER) PRESSURE psia	EXTENSION $\sqrt{P_m \times H_w}$	GRAVITY FACTOR F _g	FLOWING TEMP FACTOR F _t	DEVIATION FACTOR F _{pv}	RATE OF FLOW R Mcfd	GOR	G _m
5.073	114.4	72.54	1.2619	1.0632	1.0143	500	74967	.684

(OPEN FLOW)(DELIVERABILITY) CALCULATIONS

(P _c) ² = 2260.2		(P _w) ² = 603.4		P _d = 6.7		% (P _c - 14.4) + 14.4 =		(P _a) ² = 0.207	
(P _d) ² = 10.00									
$(P_c)^2 - (P_a)^2$ or $(P_c)^2 - (P_d)^2$	$(P_c)^2 - (P_w)^2$	$\frac{(P_c)^2 - (P_a)^2}{(P_c)^2 - (P_w)^2}$ or LOG	LOG	Backpressure Curve Slope "n" ----- or ----- Assigned Standard Slope	n x LOG	Antilog	Open Flow Deliverability = R x Antilog Mcfd		
2260.00	1656.78	1.364	.1348	.665	.0897	1.229	615		
2250.21	1656.78	1.358	.1330	.665	.0884	1.226	613		

OPEN FLOW 615 Mcfd @ 14.65 psia DELIVERABILITY 613 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 14 day of July, 20 05

Witness (if any)

For Commission

For Company

Checked by

Samuel Gary Jr. & Assoc
SE NE 31 33s 20w Comanche co KS
Start Test Date: 2005/07/12

FieldNotes

Field Measurements

Selzer 1-31
Formation: Morrow

	Date	Clock Time	Comment	Casing Pres psi(g)	Static1 Pres psi(g)	Diff1 Pres in of H2O	Meter1 Temp °F	Gas1 Rate MMCF/D	Orifice1 in
1	2005/07/12	10:00:00	shut in						
2		10:00:00		1489.00	0.00	0.00	0.00	0.000	0.000
3		10:15:00		1463.00	91.00	8.00	0.00	0.202	1.000
4		10:30:00		1441.00	92.00	12.00	0.00	0.249	
5		10:45:00		1431.00	92.00	16.00	0.00	0.287	
6		11:00:00	1st pt						
7		11:00:00		1418.00	93.00	18.00	0.00	0.306	
8		11:15:00		1389.00	94.00	20.00	0.00	0.324	
9		11:30:00		1371.00	94.00	21.00	0.00	0.332	
10		11:45:00		1350.00	94.00	22.00	0.00	0.340	
11		12:00:00	2nd pt						
12		12:00:00		1339.00	95.00	24.00	0.00	0.357	
13		12:15:00		1323.00	95.00	25.00	0.00	0.364	
14		12:30:00		1308.00	95.00	27.00	0.00	0.379	
15		12:45:00		1283.00	96.00	33.00	0.00	0.421	
16		13:00:00	3rd pt						
17		13:00:00		1266.00	97.00	35.00	0.00	0.435	
18		13:15:00		1240.00	97.00	37.00	0.00	0.447	
19		13:30:00		1222.00	98.00	44.00	0.00	0.490	
20		13:45:00		1196.00	98.00	54.00	0.00	0.544	
21		14:00:00	4th pt						
22		14:00:00		1176.00	98.00	57.00	0.00	0.559	
23	2005/07/13	10:00:00	1 point						
24		10:00:00		759.00	100.00	46.00	0.00	0.506	

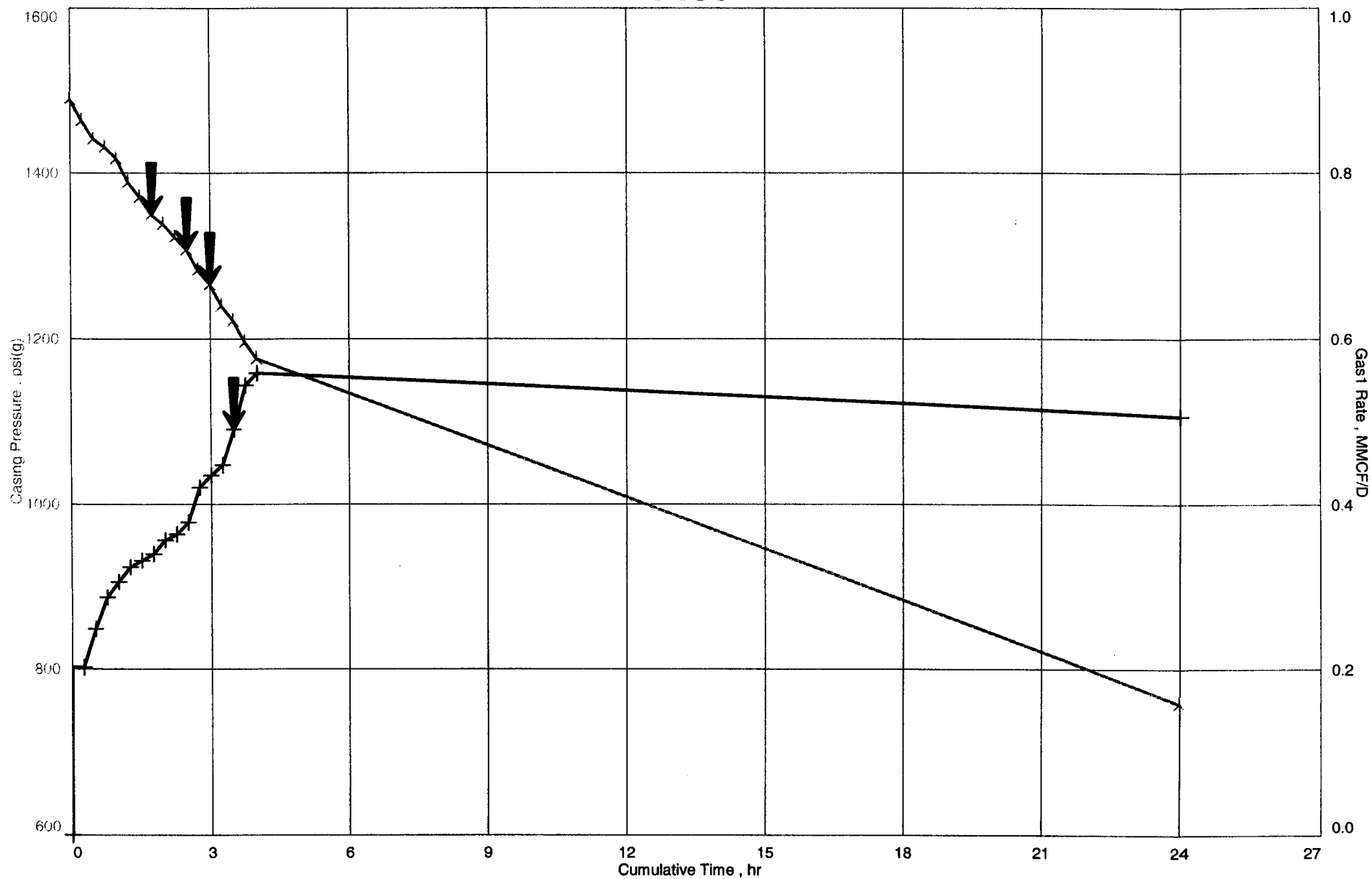
2005/07/12 10:00:00 To 2005/07/13 10:00:00

Gas	0.061	Cum.	0.061 MMCF
Oil	0.000	Cum.	0.000 bbl
Water	0.000	Cum.	0.000 bbl
Condensate	0.000	Cum.	0.000 bbl

Samuel Gary Jr. & Assoc
SE NE 31 33s 20w Comanche co KS
Start Test Date: 2005/07/12

Selzer 1-31
Formation: Morrow

Plot



NATURAL GAS ANALYSIS REPORT

Sampled by:
Trilobite Testing, Inc.
Hays, Kansas
Scott City, Kansas
Phone: 800-728-5369
Fax: 785-625-5620

Analyzed by:
Caraway Analytical, Inc
P. O. Box 2137
Liberal, Kansas 67905
Phone: 620-624-5389
Fax: 620-626-7108

Lab Number:	20050084	Analyzed:	01/06/05
Sample From:	Selzer 1-31	Pressure:	
Producer:	Samuel Gary Jr	Temperature:	
Date:		Location:	31-33-20
Time:		County:	Comanche
Sampler:		State:	Kansas
Source:	DST 1	Formation:	Morr Snd

		Mole %	GPM
Helium	He:	0.131	0.000
Hydrogen	H2:	0.009	0.000
Oxygen	O2:	0.000	0.000
Nitrogen	N2:	2.420	0.000
Carbon Dioxide	CO2:	0.426	0.000
Methane	C1:	90.288	0.000
Ethane	C2:	3.985	1.066
Propane	C3:	1.403	0.387
Iso Butane	iC4:	0.185	0.061
Normal Butane	nC4:	0.417	0.131
Iso Pentane	iC5:	0.126	0.046
Normal Pentane	nC5:	0.142	0.051
Hexanes Plus	C6+:	0.468	0.204

TOTAL: 100.000 1.946
Z Fact: 0.9976
SP.GR.: 0.6285
BTU (SAT): 1058.4 @ 14.73 psia
BTU (DRY): 1077.1 @ 14.73 psia
OCTANE RATING: 123.7

COMMENTS:

0.000

STATE OF KANSAS - CORPORATION COMMISSION
MULTIPOINT BACK PRESSURE TEST

FORM CG-1 Rev.

TYPE TEST:	☒ Initial	☐ Annual	☐ Special	TEST DATE:	
COMPANY	SAMUEL GARY JR + ASSOC			LEASE	SELZER
COUNTY	COMANCHE	LOCATION	SE NE	SECTION	31
API WELL NUMBER	15-033-21416-0000	RESERVOIR	MORROW	TWP	33S
COMPLETION DATE	4/27/05	PLUG BACK TOTAL DEPTH	5336	RNG (E/W)	20W
CASING SIZE	5-1/2"	WT.	15.5 #	SET AT	5391'
TUBING SIZE	2-3/8"	WT.	4.7 #	SET AT	5197'
TYPE COMPLETION (Describe)	Flowing	TYPE FLUID PRODUCTION	Salt Water	PERF.	5232-36' + 5273-76'
PRODUCING THRU	Tubing	RESERVOIR TEMPERATURE °F	125	BAR PRESS - P _a	14.4 Psia
GAS GRAVITY - G _s	0.63	% CARBON DIOXIDE	0.4 %	% NITROGEN	2.4 %
VERTICAL DEPTH (H)	5392'	TYPE METER CONNECTION		API GRAVITY OF LIQUID	
REMARKS					

OBSERVED DATA							DURATION OF SHUT-IN			HR.
RATE NO.	ORIFICE SIZE in.	(METER) (PROVER) PRESSURE Psig	DIFF. (h _u) (h _d)	FLOWING TEMP t	WELL-HEAD TEMP. t	CSG WELLHEAD PRESS. Psig (P _w)(P ₁)(P ₂) Psia	TBG WELLHEAD PRESS. Psig (P _w)(P ₁)(P ₂) Psia	FLOW DURATION (HOURS)	LIQUID PROD. Bbls.	
SHUT IN										
1										
2										
3										
4										
5										

RATE OF FLOW CALCULATIONS									
RATE NO.	COEFFICIENT (F ₁)(F ₂) Mcfd	(METER) (PROVER) PRESSURE Psia	PRESS EXTENSION $\sqrt{P_w - P_c}$	GRAVITY FACTOR F _g	FLOWING TEMP FACTOR F _t	DEVIATION FACTOR F _v	RATE OF FLOW Q Mcfd	GOR (ft ³ /Bbl)	G _s
1									
2									
3									
4									
5									

PRESSURE CALCULATIONS								
RATE NO.	P _i Psia	P _c Psia	P _w Psia	(P _i) ² THOUSANDS	(P _w) ² THOUSANDS	PLOTING POINTS		% SHUT-IN $\frac{(P_w - P_c)}{(P_c - P_d)}$
						(P _i) ² - (P _w) ² THOUSANDS	Q Mcfd	
1								
2								
3								
4								
5								

INDICATED WELLHEAD OPEN FLOW

Mcfd @ 14.65 Psia

"u" =

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 (Rev.10/96)

Company: SAMUEL GARY JR. & ASSOC									
Address: DENVER CO.									
Well name: SELZER #1-31									
Title: SE NE Sec: 31 Twp: 33 S Rge: 20 E									
Formation: MORROW			Field/Pool:			County: COMANCHE St: KS			
Casing size: 5 1/2"	Feet of: 5391	Wt: 15.5 #	Meter run size: 2.07		SI: 1489				
Intake size: 2 3/8"	Feet of: 5197	Wt: 4.7 #	Orif (in): 1.00"		95% 1415				
TO: 5392	Plugged back depth: 5336		Packer depth: N/A		90% 1340				
Vib test: STATE 4PT.			Tap Type:		Gravity: 0.63		85% 1266		
Type Completion: Flowing			Producing through: Tubing			80% 1191			
Time	Clk/Tm	Tbg Pres	Csg Pres	Diff	Temp	Static/Prover	Wat Vol1	Oil Vol	Comment
20/6	clock	psi	psi	in of H2O	F	PSI	inch	inch	NO ACCESS TO TESTING PRESSURE / METABOL F
	1000	N/A	1489	1"	87	90	126"		START TEST
	1015		1463	8"	NO	91			
	1030		1441	12"	TEMP	92			
	1045		1431	16"	Correct	92			
	1100		1418	18"		93			15' P
	1115		1389	20"		94			
	1130		1371	21"		94			
	1145		1350	22"		94			
	1200		1339	24"		95	126"		20' P
	1215		1323	25"		95			
	1230		1308	27"		95			
	1245		1283	33"		96			
	1300		1266	35"		97			30' P
	1315		1240	37"		97			
	1330		1222	44"		98			
	1345		1196	54"		98			
	1400		1176	57"		98	126"		40' P
27/3	1007		759	46"		100	130"		24HR. 1st
Date	Miles	Name	Date	Miles	Name	Date	Miles	Name	
6/13	170	Gary	5/13	170	Gary	7			
		Private			Private				

4pt	295
mileage	170
1pt	115
mileage	170
	750

Samuel Gary Jr. & Associates, Inc.

1670 Broadway, Suite 3300 Denver, Colorado 80202 (303) 831-4673

FAX TRANSMITTAL

CONFIDENTIALITY NOTE:

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DATE: 6/23/05
FAX #: (785)-625-5620
TO: Paul Simpson
COMPANY: Trilobite 800-728-5367
FROM: Brian Disney Cell: 720-480-2646
SGA FAX #: 303-863-7285

URGENT COMMUNICATION - PLEASE DELIVER AT ONCE TO ADDRESSEE!

NUMBER OF PAGES (INCLUDING THIS PAGE): 2

In the event you do not receive all the pages or are unable to read any of the information, please contact Laura E. Alarid at (303) 831-4673.

Message: Attached is info. on the Selzer #1-31 well which we would like to have a multi-point back-pressure test performed, followed by a one-point stabilized Flow test to satisfy the State KCC. I do not want to flow this well too hard as I am concerned about coming in water from the lower Morrow sand completed in this well, but the rates need to satisfy the KCC. Discussing this issue with Jim Hammen from the KCC beforehand is advisable.

Please contact our Pumping, Bill Woodward at 620-635-5821 to coordinate/arrange this test.

Thank you, Brian Disney

Company: SAMUEL GARY JR. & ASSOC									
Address: DENVER CO.									
Wellname: SELZER #1-31									
Legal: SE NE				Sec: 31		Twp: 33 S		Rge: 20 W	
Formation: MORROW			Field/Pool:			County: COMANCHE St: KS.			
Casing size: 5 1/2"		Feet of: 5391		Wt: 15.5 #		Meter run size: 2.07"		SI: 1489	
Tubing Size: 2 3/8"		Feet of: 5197		Wt: 4.7 #		Orif (in): 1.00"		95% 1415	
TD: 5392		Plugged back depth: 5336		Packer depth: N/A		90% 1340			
Type Test: STATE 4PT.				Tap Type:		Gravity: 0.63		85% 1266	
Type Completion: FLOWING				Producing through: TUBING				80% 1191	

Date	Clk Tim	Tbg Pres	Csg Pres	Diff	Temp	Static/Prover	Wat Vol1	Oil Vol	Comment
mm/dd	clock	psi	psi	in of H2O	F	PSI	inch	inch	
07/12	1000	N/A	1489	1"	87	90	126"		START TEST
	1015		1463	8"	NO	91			
	1030		1441	12"	TEMP	92			
	1045		1431	16"	Gauge	92			
	1100		1418	18"		93			1 st PT
	1115		1389	20"		94			
	1130		1371	21"		94			
	1145		1350	22"		94			
	1200		1339	24"		95	126"		2 nd PT.
	1215		1323	25"		95			
	1230		1308	27"		95			
	1245		1283	33"		96			
	1300		1266	35"		97			3 rd PT.
	1315		1240	37"		97			
	1330		1222	44"		98			
	1345		1196	54"		98			
	1400		1176	57"		98	126"		4 th PT.
07/13	1007		759	46"		100	130"		24 HR. 1 PT.

Date	Miles	Name	Date	Miles	Name	Date	Miles	Name
07/12	170	Gary	07/13	170	Gary			
		Proctor			Proctor			