

TRILOBITE TESTING, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name FAWCETT "A" #1 Test No. 1 Date 12/13/92
Company CHARTER PRODUCTION COMPANY Zone CHASE
Address 224 EAST DOUGLAS #400 WICHITA KS 67202 Elevation 2823
Co. Rep./Geo. ROBERT SMITH Cont. ZENITH RIG #6 Est. Ft. of Pay _____
Location: Sec. 28 Twp. 32S Rge. 32W Co. SEWARD State KS

Interval Tested 2603-2660 Drill Pipe Size 4.5" XH
Anchor Length 57 Wt. Pipe I.D. - 2.7 Ft. Run _____
Top Packer Depth 2591-2596 Drill Collar - 2.25 Ft. Run 585/H-90
Bottom Packer Depth 2603 Mud Wt. 8.9 lb/Gal.
Total Depth 2660 Viscosity 40 Filtrate 12.8

Tool Open @ 2:10 PM Initial Blow WEAK 6" BLOW IN 30 MINUTES

Final Blow WEAK 8" BLOW IN 30 MINUTES

Recovery - Total Feet 20 Flush Tool? NO

Rec. 20 Feet of DRILLING MUD
Rec. _____ Feet of _____
Rec. _____ Feet of _____
Rec. _____ Feet of _____
Rec. _____ Feet of _____

BHT 110 °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API
RW _____ @ _____ °F Chlorides _____ ppm Recovery Chlorides 14000 ppm System

(A) Initial Hydrostatic Mud 1285.4 PSI AK1 Recorder No. 13337 Range 3975

(B) First Initial Flow Pressure 41.2 PSI @ (depth) 2606 w / Clock No. 25813

(C) First Final Flow Pressure 41.2 PSI AK1 Recorder No. 10332 Range 4025

(D) Initial Shut-in Pressure 145.6 PSI @ (depth) 2657 w / Clock No. 14389

(E) Second Initial Flow Pressure 66.1 PSI AK1 Recorder No. _____ Range _____

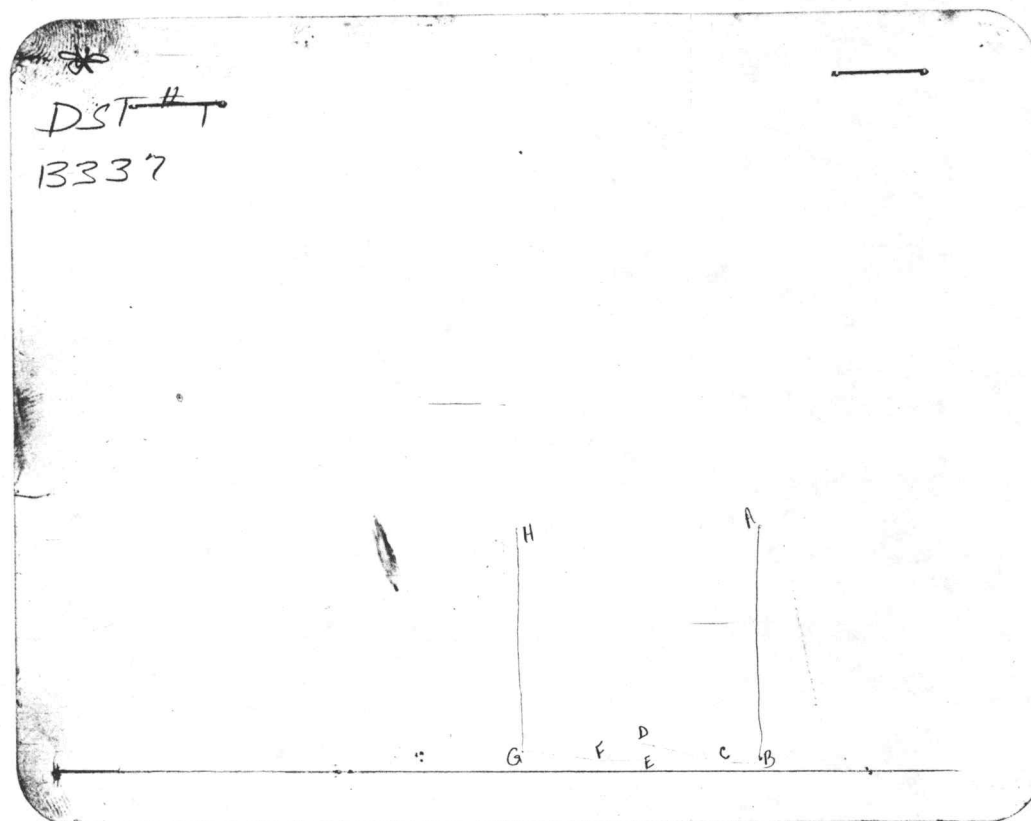
(F) Second Final Flow Pressure 66.1 PSI @ (depth) _____ w / Clock No. _____

(G) Final Shut-in Pressure 115.8 PSI Initial Opening 30 Final Flow 30

(H) Final Hydrostatic Mud 1233.4 PSI Initial Shut-in 60 Final Shut-in 60

Our Representative STEVE BOWMAN

CHART PAGE



This is an actual photograph of recorder chart

	FIELD READING	OFFICE READING
(A) INITIAL HYDROSTATIC MUD	1282	1285.4
(B) FIRST INITIAL FLOW PRESSURE	40	41.2
(C) FIRST FINAL FLOW PRESSURE	40	41.2
(D) INITIAL CLOSED-IN PRESSURE	142	145.6
(E) SECOND INITIAL FLOW PRESSURE	60	66.1
(F) SECOND FINAL FLOW PRESSURE	60	66.1
(G) FINAL CLOSED-IN PRESSURE	111	115.8
(H) FINAL HYDROSTATIC MUD	1231	1233.4

TRILOBITE TESTING L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Test Ticket

No 5338

Well Name & No. <u>Fawcett "A" #1</u>	Test No. <u>#1</u>	Date <u>12-13-92</u>
Company <u>Charter Production Company</u>	Zone Tested <u>Chase</u>	
Address <u>224 E. Douglas Suite 400 Wichita, KS</u>	Elevation <u>2823 GE</u>	
Co. Rep./Geo. <u>Robert Smith</u>	Cont. <u>Zenith Rig #6</u>	Est. Ft. of Pay _____
Location: Sec. <u>28</u>	Twp. <u>32S</u>	Rge. <u>32W</u> Co. <u>Seward</u> State <u>KS</u>
No. of Copies _____	Distribution Sheet _____	Yes ☒ No ☐ Turnkey _____ Yes ☒ No ☐ Evaluation _____

Interval Tested 2603 to 2660 Drill Pipe Size 4 1/2 xH
 Anchor Length 57' Top Choke — 1" Bottom Choke — 3/4"
 Top Packer Depth 2591 - 2596 Hole Size — 7 7/8" Rubber Size — 6 3/4"
 Bottom Packer Depth 2603 Wt. Pipe I.D. — 2.7 Ft. Run —
 Total Depth 2660 Drill Collar — 2.25 Ft. Run 585 H-90
 Mud Wt. 8.9 lb/gal. Viscosity 40 Filtrate 12.8
 Tool Open @ 2:10 P.M. Initial Blow weak 8 inch Blow in 30 min

Final Blow weak 8 inch Blow in 30 min

Recovery — Total Feet <u>20</u>	Feet of Gas in Pipe <u>0</u>	Flush Tool? <u>NO</u>
Rec. <u>20</u> Feet Of <u>mud</u>	%gas _____ %oil _____	%water <u>100</u> %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 110 °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API

RW _____ @ _____ °F Chlorides _____ ppm Recovery Chlorides 14,000 ppm System

(A) Initial Hydrostatic Mud <u>1282</u>	PSI Ak1 Recorder No. <u>13337</u>	Range <u>3975</u>
(B) First Initial Flow Pressure <u>40</u>	PSI @ (depth) <u>2606</u>	w/Clock No. <u>25813</u>
(C) First Final Flow Pressure <u>40</u>	PSI Ak1 Recorder No. <u>10332</u>	Range <u>4025</u>
(D) Initial Shut-In Pressure <u>142</u>	PSI @ (depth) <u>2657</u>	w/Clock No. <u>14389</u>
(E) Second Initial Flow Pressure <u>60</u>	PSI Ak1 Recorder No. _____	Range _____
(F) Second Final Flow Pressure <u>60</u>	PSI @ (depth) _____	w/Clock No. _____
(G) Final Shut-In Pressure <u>111</u>	PSI Initial Opening <u>30</u>	Test ☒ <u>600</u>
(H) Final Hydrostatic Mud <u>1231</u>	PSI Initial Shut-In <u>60</u>	Jars ☒ <u>200</u>

TRILOBITE TESTING L.L.C. 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 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 [Signature]

Our Representative Steve Bowman Thank you

Final Flow 30 Safety Joint 150
 Final Shut-In 60 Straddle _____
 Circ. Sub _____
 Sampler _____
 Extra Packer Shale Packer 2456
 Other _____
 TOTAL PRICE \$ 950
1065.00

TRILOBITE TESTING, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name FAWCETT "A" #1 Test No. 2 Date 12/18/92
Company CHARTER PRODUCTION COMPANY Zone IOLA
Address 224 EAST DOUGLAS #400 WICHITA KS 67202 Elevation 2823
Co. Rep./Geo. ROBERT SMITH Cont. ZENITH RIG #6 Est. Ft. of Pay _____
Location: Sec. 28 Twp. 32S Rge. 32W Co. SEWARD State KS

Interval Tested 4600-4646 Drill Pipe Size 4.5" XH
Anchor Length 46 Wt. Pipe I.D. - 2.7 Ft. Run _____
Top Packer Depth 4595 Drill Collar - 2.25 Ft. Run 585/H-90
Bottom Packer Depth 4600 Mud Wt. 9.1 lb/Gal.
Total Depth 4646 Viscosity 45 Filtrate 6.8

Tool Open @ 3:55 AM Initial Blow WEAK 5" BLOW IN 30 MINUTES

Final Blow WEAK 3.25" BLOW IN 30 MINUTES

Recovery - Total Feet 336 Flush Tool? NO

Rec. 93 Feet of DRILLING MUD
Rec. 243 Feet of MUDDY WATER-95%WTR/5%MUD
Rec. _____ Feet of _____
Rec. _____ Feet of _____
Rec. _____ Feet of _____

BHT 120 °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API
RW 0.33 @ 60 °F Chlorides 24000 ppm Recovery Chlorides 2800 ppm System

(A) Initial Hydrostatic Mud 2330.4 PSI AK1 Recorder No. 13337 Range 3975

(B) First Initial Flow Pressure 85.6 PSI @ (depth) 4606 w / Clock No. 25813

(C) First Final Flow Pressure 156.7 PSI AK1 Recorder No. 10332 Range 4025

(D) Initial Shut-in Pressure 1420.3 PSI @ (depth) 4643 w / Clock No. 14389

(E) Second Initial Flow Pressure 165.9 PSI AK1 Recorder No. _____ Range _____

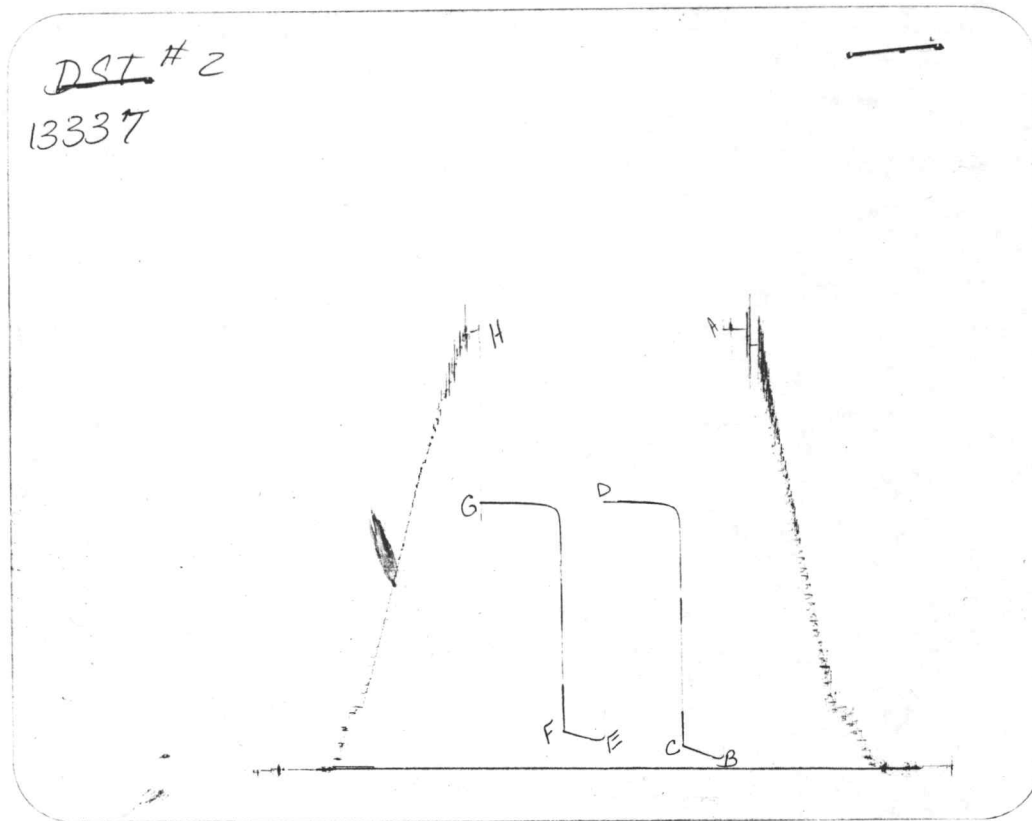
(F) Second Final Flow Pressure 215.4 PSI @ (depth) _____ w / Clock No. _____

(G) Final Shut-in Pressure 1420.3 PSI Initial Opening 30 Final Flow 30

(H) Final Hydrostatic Mud 2250.4 PSI Initial Shut-in 60 Final Shut-in 60

Our Representative STEVE BOWMAN

CHART PAGE



This is an actual photograph of recorder chart

	FIELD READING	OFFICE READING
(A) INITIAL HYDROSTATIC MUD	2328	2330.4
(B) FIRST INITIAL FLOW PRESSURE	80	85.6
(C) FIRST FINAL FLOW PRESSURE	151	156.7
(D) INITIAL CLOSED-IN PRESSURE	1417	1420.3
(E) SECOND INITIAL FLOW PRESSURE	161	165.9
(F) SECOND FINAL FLOW PRESSURE	212	215.4
(G) FINAL CLOSED-IN PRESSURE	1417	1420.3
(H) FINAL HYDROSTATIC MUD	2248	2250.4

TRILOBITE TESTING L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Test Ticket

No 5339

Well Name & No. <u>Fawcett "A" #1</u>	Test No. <u>#2</u>	Date <u>12-18-92</u>
Company <u>Charter Production Company</u>	Zone Tested <u>Atola</u>	
Address <u>224 E. Douglas Suite 400 Wichita, KS</u>	Elevation <u>2823 GE</u>	
Co. Rep./Geo. <u>Robert Smith</u>	Cont. <u>Zenith Rig #6</u>	Est. Ft. of Pay _____
Location: Sec. <u>28</u>	Twp. <u>32 S</u>	Rge. <u>32 W</u> Co. <u>Seward</u> State <u>KS</u>
No. of Copies <u>10</u>	Distribution Sheet _____	Yes ☒ No ☐ Turnkey _____ Yes ☒ No ☐ Evaluation _____

Interval Tested 4600 to 4646 Drill Pipe Size 4 1/2 x 11
 Anchor Length 46' Top Choke — 1" Bottom Choke — 3/4"
 Top Packer Depth 4595 Hole Size — 7 7/8" Rubber Size — 6 3/4"
 Bottom Packer Depth 4600 Wt. Pipe I.D. — 2.7 Ft. Run —
 Total Depth 4646 Drill Collar — 2.25 Ft. Run 585 H-90
 Mud Wt. 9.1 lb/gal. Viscosity 45 Filtrate 6.8
 Tool Open @ 3:55 A.M. Initial Blow Weak 5 inch Blow in 30 min

Final Blow Weak 3 1/4 inch Blow in 30 min

Recovery — Total Feet <u>336</u>	Feet of Gas in Pipe <u>0</u>	Flush Tool? <u>NO</u>
Rec. <u>93</u> Feet Of <u>mud</u>	%gas _____ %oil _____ %water <u>100</u> %mud _____	
Rec. <u>243</u> Feet Of <u>muddy water</u>	%gas _____ %oil _____ %water <u>95</u> %mud <u>5</u>	
Rec. _____ Feet Of _____	%gas _____ %oil _____ %water _____ %mud _____	
Rec. _____ Feet Of _____	%gas _____ %oil _____ %water _____ %mud _____	
Rec. _____ Feet Of _____	%gas _____ %oil _____ %water _____ %mud _____	

BHT 120 °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API
 RW .33 @ 60 °F Chlorides 24000 ppm Recovery Chlorides 2800 ppm System
 (A) Initial Hydrostatic Mud 2328 PSI AK1 Recorder No. 13337 Range 3975
 (B) First Initial Flow Pressure 80 PSI @ (depth) 4606 w/Clock No. 25813
 (C) First Final Flow Pressure 151 PSI AK1 Recorder No. 10332 Range 4025
 (D) Initial Shut-In Pressure 1417 PSI @ (depth) 4643 w/Clock No. 14389
 (E) Second Initial Flow Pressure 161 PSI AK1 Recorder No. _____ Range _____
 (F) Second Final Flow Pressure 212 PSI @ (depth) _____ w/Clock No. _____
 (G) Final Shut-In Pressure 1417 PSI Initial Opening 30 Test ☒
 (H) Final Hydrostatic Mud 2248 PSI Initial Shut-In 60 Jars ☒

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Final Flow 30 Safety Joint ☒
 Final Shut-In 60 Straddle _____
 Circ. Sub _____
 Sampler _____
 Extra Packer _____
 Other _____

Approved By [Signature]
 Our Representative Steve Bowman Thank You

TRILOBITE TESTING, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name FAWCETT "A" #1 Test No. 3 Date 12/20/92
Company CHARTER PRODUCTION COMPANY Zone MARMATON
Address 224 EAST DOUGLAS #400 WICHITA KS 67202 Elevation 2823
Co. Rep./Geo. ROBERT SMITH Cont. ZENITH RIG #6 Est. Ft. of Pay _____
Location: Sec. 28 Twp. 32S Rge. 32W Co. SEWARD State KS

Interval Tested 4995-5020 Drill Pipe Size 4.5" XH
Anchor Length 25 Wt. Pipe I.D. - 2.7 Ft. Run _____
Top Packer Depth 4990 Drill Collar - 2.25 Ft. Run 585/H-90
Bottom Packer Depth 4995 Mud Wt. 9 lb/Gal.
Total Depth 5020 Viscosity 47 Filtrate 7.2

Tool Open @ 4:55 AM Initial Blow STRONG 12" BLOW IN 90 SECONDS
2" BLOW BACK ON SHUT IN
Final Blow WEAK 8" BLOW IN 30 MINUTES
1" BLOW BACK ON SHUT IN

Recovery - Total Feet 899 Flush Tool? NO

Rec. 775 Feet of GAS IN PIPE
Rec. 62 Feet of GASSY MUD-5%GAS/95%MUD
Rec. 372 Feet of GAS CUT MUDDY WTR- 5%GAS/90%WTR/5%MUD
Rec. 465 Feet of GASSY WATER-10%GAS/ 90%WATER
Rec. _____ Feet of _____

BHT 123 °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API
RW 0.15 @ 60 °F Chlorides 58000 ppm Recovery Chlorides 3200 ppm System

(A) Initial Hydrostatic Mud 2506.9 PSI AK1 Recorder No. 13851 Range 4425

(B) First Initial Flow Pressure 72.3 PSI @ (depth) 4992 w / Clock No. 26191

(C) First Final Flow Pressure 291.3 PSI AK1 Recorder No. 1055 Range 4050

(D) Initial Shut-in Pressure 1560.4 PSI @ (depth) 5014 w / Clock No. 17652

(E) Second Initial Flow Pressure 337.8 PSI AK1 Recorder No. _____ Range _____

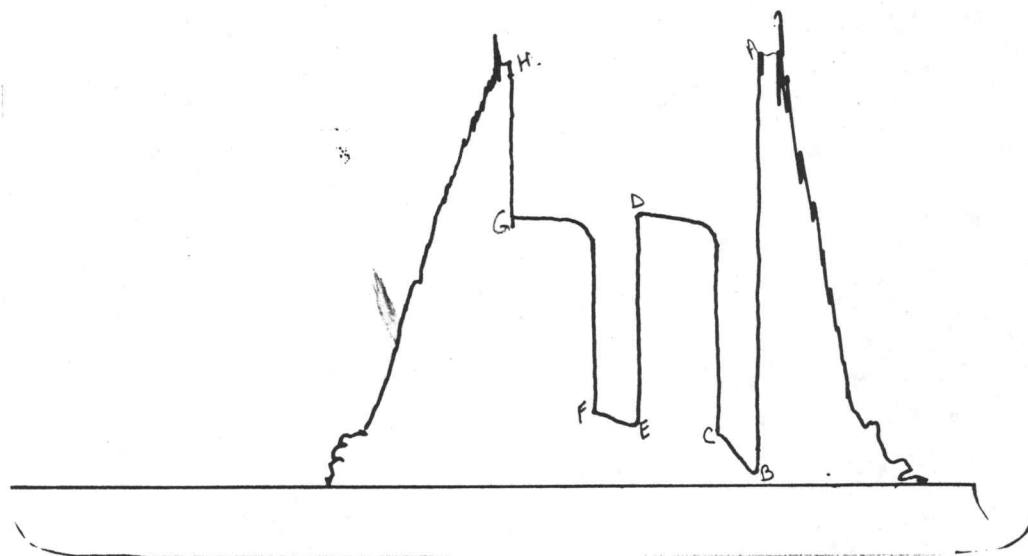
(F) Second Final Flow Pressure 425.6 PSI @ (depth) _____ w / Clock No. _____

(G) Final Shut-in Pressure 1560.4 PSI Initial Opening 30 Final Flow 30

(H) Final Hydrostatic Mud 2433.9 PSI Initial Shut-in 60 Final Shut-in 60

Our Representative STEVE BOWMAN

CHART PAGE



This is an actual photograph of recorder chart

	FIELD READING	OFFICE READING
(A) INITIAL HYDROSTATIC MUD	2497	2506.9
(B) FIRST INITIAL FLOW PRESSURE	66	72.3
(C) FIRST FINAL FLOW PRESSURE	288	291.3
(D) INITIAL CLOSED-IN PRESSURE	1553	1560.4
(E) SECOND INITIAL FLOW PRESSURE	333	337.8
(F) SECOND FINAL FLOW PRESSURE	422	425.6
(G) FINAL CLOSED-IN PRESSURE	1553	1560.4
(H) FINAL HYDROSTATIC MUD	2430	2433.9

TRILOBITE TESTING L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Test Ticket

No 5479

Well Name & No. <u>Fawcett "A" #1</u>	Test No. <u>#3</u>	Date <u>12-20-92</u>
Company <u>Charter Production Company</u>	Zone Tested <u>Alarmon</u>	
Address <u>224 E. Douglas Suite 400 Wichita, KS</u>	Elevation <u>2823 GE</u>	
Co. Rep./Geo. <u>Robert Smith</u>	Cont. <u>Zenith Rig #6</u>	Est. Ft. of Pay _____
Location: Sec. <u>28</u>	Twp. <u>32S</u>	Rge. <u>32W</u> Co. <u>Seward</u> State <u>KS</u>
No. of Copies <u>10</u>	Distribution Sheet _____	Yes ☒ No ☐ Turnkey _____ Yes ☒ No ☐ Evaluation _____

Interval Tested <u>4995 to 5020</u>	Drill Pipe Size <u>4 1/2 x 4</u>
Anchor Length <u>25'</u>	Top Choke — 1" _____ Bottom Choke — 1/4" _____
Top Packer Depth <u>4990</u>	Hole Size — 7 7/8" _____ Rubber Size — 6 3/4" _____
Bottom Packer Depth <u>4995</u>	Wt. Pipe I.D. — 2.7 Ft. Run _____
Total Depth <u>5020</u>	Drill Collar — 2.25 Ft. Run <u>585</u> <u>H-90</u>
Mud Wt. <u>9.0</u> lb/gal.	Viscosity <u>47</u> Filtrate <u>7.2</u>

Tool Open @ 4:55 A.M. Initial Blow Strong 12 inch Blow in 1 1/2 min
2 inch Blow Back on Shut-in

Final Blow Weak 8 inch Blow in 30 min
1 inch Blow Back on Shut-in

Recovery — Total Feet <u>899</u>	Feet of Gas in Pipe <u>275</u>	Flush Tool? <u>NO</u>
Rec. <u>62</u> Feet Of <u>Grassy mud</u>	5 %gas	%Oil _____ %water <u>95</u> %mud _____
Rec. <u>372</u> Feet Of <u>Gas cut muddy water</u>	5 %gas	%Oil _____ %water <u>90</u> %mud <u>5</u>
Rec. <u>465</u> Feet Of <u>Grassy water</u>	10 %gas	%Oil _____ %water <u>90</u> %mud _____
Rec. _____ Feet Of _____	%gas _____	%Oil _____ %water _____ %mud _____
Rec. _____ Feet Of _____	%gas _____	%Oil _____ %water _____ %mud _____

BHT 123 °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API

RW 15 @ 60 °F Chlorides 58,000 ppm Recovery Chlorides 3200 ppm System

(A) Initial Hydrostatic Mud <u>2497</u>	PSI Ak1 Recorder No. <u>13851</u>	Range <u>4425</u>
(B) First Initial Flow Pressure <u>66</u>	PSI @ (depth) <u>4992</u>	w/Clock No. <u>26191</u>
(C) First Final Flow Pressure <u>288</u>	PSI AK1 Recorder No. <u>1055</u>	Range <u>4050</u>
(D) Initial Shut-In Pressure <u>1553</u>	PSI @ (depth) <u>5014</u>	w/Clock No. <u>17652</u>
(E) Second Initial Flow Pressure <u>333</u>	PSI AK1 Recorder No. _____	Range _____
(F) Second Final Flow Pressure <u>422</u>	PSI @ (depth) _____	w/Clock No. _____
(G) Final Shut-In Pressure <u>1553</u>	PSI Initial Opening <u>30</u>	Test ☒ <u>700</u>
(H) Final Hydrostatic Mud <u>2430</u>	PSI Initial Shut-In <u>60</u>	Jars ☒ <u>200</u>

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Final Flow 30 Safety Joint ☒ 50

Final Shut-In 60 Straddle _____

Approved By [Signature]

Our Representative Steve Bowman Thank you

Circ. Sub _____

Sampler _____

Extra Packer _____

Other _____

TRILOBITE TESTING, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name FAWCETT "A" #1 Test No. 4 Date 12/28/92
Company CHARTER PRODUCTION COMPANY Zone ST LOUIS
Address 224 EAST DOUGLAS #400 WICHITA KS 67202 Elevation 2834
Co. Rep./Geo. ROBERT SMITH Cont. ZENITH RIG #6 Est. Ft. of Pay 10
Location: Sec. 28 Twp. 32S Rge. 32W Co. SEWARD State KS

Interval Tested 5900-5928 Drill Pipe Size 4.5" XH
Anchor Length 28 Wt. Pipe I.D. - 2.7 Ft. Run _____
Top Packer Depth 5895-5900 Drill Collar - 2.25 Ft. Run 497
Bottom Packer Depth 5928 Mud Wt. 8.9 lb/Gal.
Total Depth 6040 Viscosity 45 Filtrate 6.4

Tool Open @ 3:35 AM Initial Blow STRONG BLOW - BOTTOM OF BUCKET IN 30 SECONDS
GAS TO SURFACE IN 5 MINUTES / GAUGED @511000
Final Blow BOTTOM OF BUCKET THROUGHOUT / GAUGED @ 709000

Recovery - Total Feet 525 Flush Tool? NO

Rec. 195 Feet of CLEAN GASSY OIL-10%GAS/90%OIL
Rec. 330 Feet of GASSY OIL CUT MUD-15%GAS/35%OIL/50%MUD
Rec. _____ Feet of _____
Rec. _____ Feet of _____
Rec. _____ Feet of _____

BHT 132 °F Gravity 27 °API @ 52 °F Corrected Gravity 28 °API
RW _____ @ _____ °F Chlorides _____ ppm Recovery Chlorides 3300 ppm System

(A) Initial Hydrostatic Mud 2966.7 PSI AK1 Recorder No. 13277 Range 4125

(B) First Initial Flow Pressure 130.9 PSI @ (depth) 5904 w / Clock No. 3942

(C) First Final Flow Pressure 180.8 PSI AK1 Recorder No. 11038 Range 5075

(D) Initial Shut-in Pressure 1793.9 PSI @ (depth) 5891 w / Clock No. 25814

(E) Second Initial Flow Pressure 207.6 PSI AK1 Recorder No. 5295 Range 5200

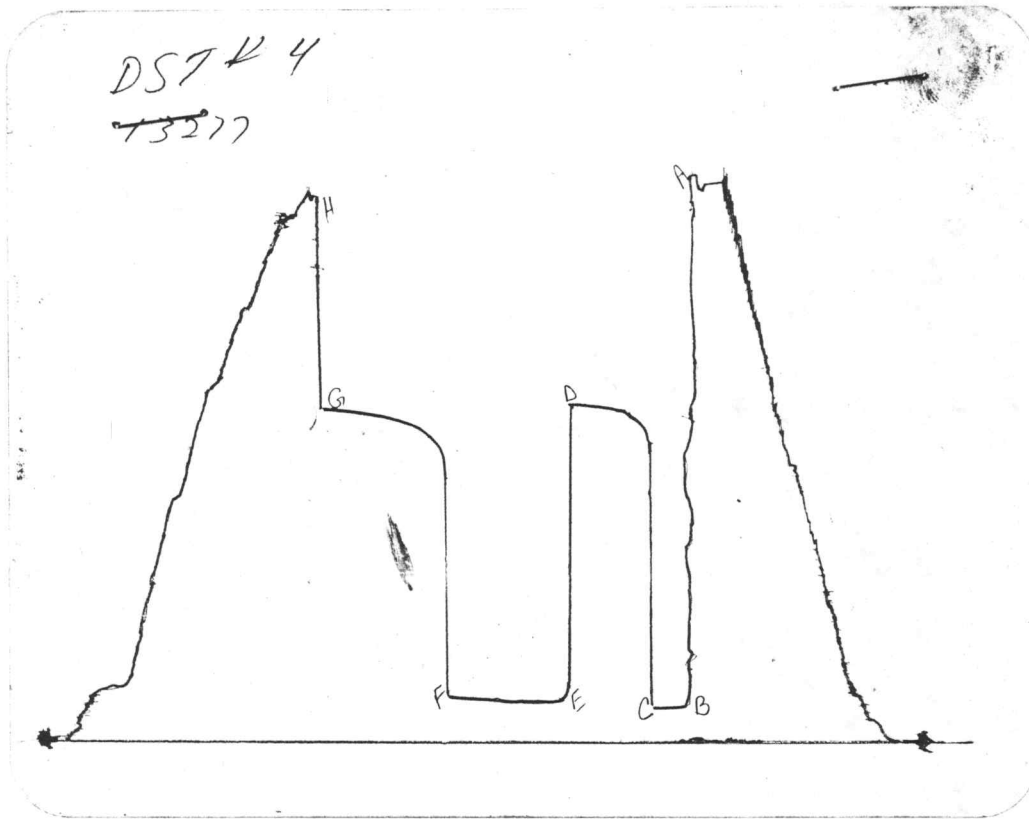
(F) Second Final Flow Pressure 221.0 PSI @ (depth) 6037 w / Clock No. 27594

(G) Final Shut-in Pressure 1762.4 PSI Initial Opening 30 Final Flow 90

(H) Final Hydrostatic Mud 2947.4 PSI Initial Shut-in 60 Final Shut-in 90

Our Representative TOM HORACEK

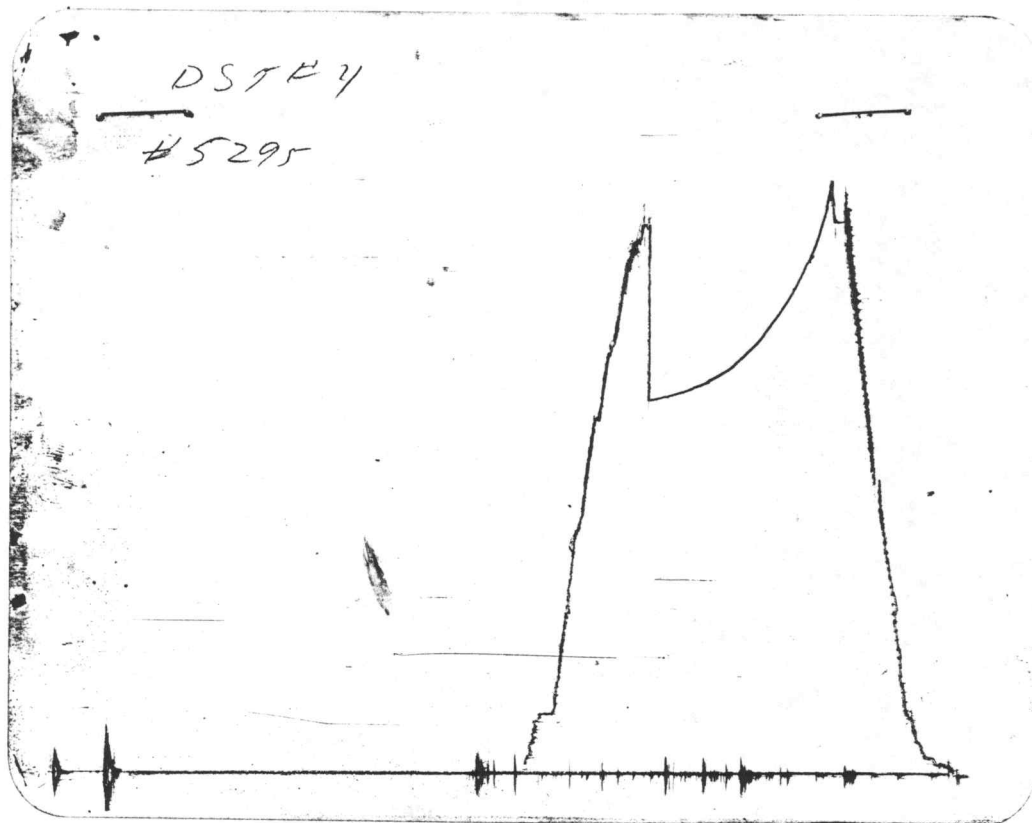
CHART PAGE



This is an actual photograph of recorder chart

	FIELD READING	OFFICE READING
(A) INITIAL HYDROSTATIC MUD	2966	2966.7
(B) FIRST INITIAL FLOW PRESSURE	136	130.9
(C) FIRST FINAL FLOW PRESSURE	176	180.8
(D) INITIAL CLOSED-IN PRESSURE	1788	1793.9
(E) SECOND INITIAL FLOW PRESSURE	217	207.6
(F) SECOND FINAL FLOW PRESSURE	230	221
(G) FINAL CLOSED-IN PRESSURE	1776	1762.4
(H) FINAL HYDROSTATIC MUD	2953	2947.4

CHART PAGE



This is an actual photograph of recorder chart

FIELD
READING

OFFICE
READING

- (A) INITIAL HYDROSTATIC MUD
- (B) FIRST INITIAL FLOW PRESSURE
- (C) FIRST FINAL FLOW PRESSURE
- (D) INITIAL CLOSED-IN PRESSURE
- (E) SECOND INITIAL FLOW PRESSURE
- (F) SECOND FINAL FLOW PRESSURE
- (G) FINAL CLOSED-IN PRESSURE
- (H) FINAL HYDROSTATIC MUD

CALCULATED RECOVERY ANALYSIS

DST #

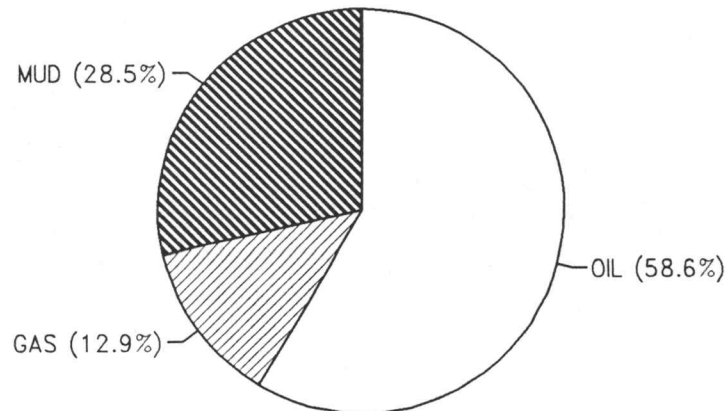
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TICKET #

4965

SAMPLE	TOTAL	GAS		OIL		WATER		MUD	
#	FEET	%	FEET	%	FEET	%	FEET	%	FEET
DRILL 1	28	10	2.8	90	25.2	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			0		0		0		0
PIPE 2			0		0		0		0
3			0		0		0		0
4			0		0		0		0
DRILL 1	167	10	16.7	90	150.3	0	0	0	0
COLLAR 2	330	15	49.5	35	115.5	0	0	50	165
3			0		0		0		0
4			0		0		0		0
5			0		0		0		0
TOTAL	525		69		291		0		165

			HRS OPEN	BBL/DAY
BBL OIL=	1.658106	*	2	19.897272
BBL WATER=	0	*		0
BBL MUD=	0.80685			
BBL GAS =	0.363534			



COMPUTER EVALUATION BY TRILOBITE TESTING, L.L.C.

CHARTER PRODUCTION C FAWCETT "A" #1

DST 4

28

32S

32W

SEWARD KS

ELEVATION:	2834	KB	EST. PAY	10	FT
DATUM:	-3058		ZONE TESTED:	ST LOUIS	
TEST INTERVAL:	5900-5928		TIME INTERVALS:	30-60-90-90	
RECORDER DEPTH:	5891		VISCOSITY:	2.271	CP
BOTTOM HOLE TEMP:	132		HOLE SIZE:	7.875	IN

CUBIC FEET OF GAS IN PIPE:	59083.33			
TOTAL FEET OF RECOVERY:	525.00	CORRECTED PIPE FILLUP:	575.521	
TOTAL BARRELS OF RECOVERY:	2.83	CORR. BARRELS OF RECOVERY:	3.539	BBL
BARRELS IN DRILL PIPE:	0.40	API GRAVITY:	28	
BARRELS IN WEIGHT PIPE:	0.00	FLUID GRADIENT:	0.384	
BARRELS IN DRILL COLLARS:	2.43			
GAS OIL RATIO:	20888.6485	CU.FT/BBL		
BUBBLE POINT PRESSURE:	90442.361			
UNCORRECTED INITIAL PRODUCTION:			33.94	BBL
INITIAL PRODUCTION CORRECTED TO FINAL FLOW PRESSURE:			42.47	BBL/DAY
INITIAL PRODUCTION CORRECTED TO PSEUDO STEADY FLOW STATE:			7.396	

INITIAL SLOPE	187.08	PSI/CYCLE	FINAL SLOPE	168.75	PSI/CYCLE
INITIAL P*	1826	PSI	FINAL P*	1823	PSI

TRANSMISSIBILITY	40.93	(MD.-FT./CP.)
PERMEABILITY	9.30	(MD.)
INDICATED FLOW CAPACITY	92.95	)MD.FT)
PRODUCTIVITY INDEX	0.05	(BARRELS/DAY/PSI)
DAMAGE RATIO	1.74	
RADIUS OF INVESTIGATION	33.40	(FT.)
POTENTIOMETRIC SURFACE	1170.85	(FT.)
DRAWDOWN FACTOR	0.132	(%)
THEORETICAL POTENTIAL FROM FINAL FLOW PRESSURE	73.79	
THEORETICAL POTENTIAL FROM PSEUDO STEADY FLOW STATE	12.85	

FINAL FLOW

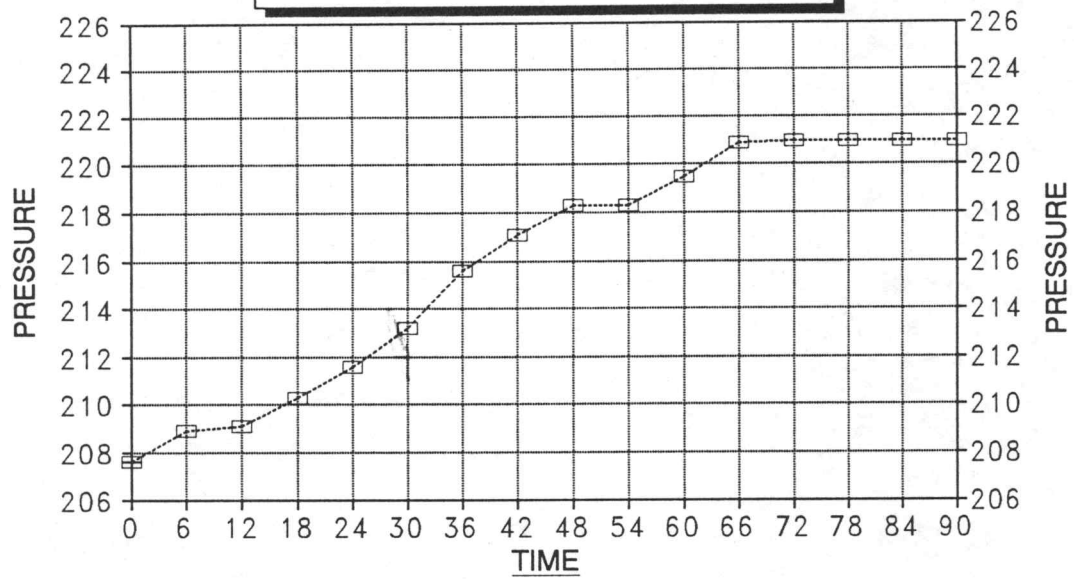
RECORDER # 11038

DST # 4

TIME(MIN)	PRESSURE	<> PRESSURE
-----	-----	-----
0	207.6	207.6
6	208.9	1.3
12	209.1	0.2
18	210.3	1.2
24	211.6	1.3
30	213.2	1.6
36	215.6	2.4
42	217.1	1.5
48	218.3	1.2
54	218.3	0
60	219.5	1.2
66	220.9	1.4
72	221	0.1
78	221	0
84	221	0
90	221	0

DELTA T DELTA P

FINAL FLOW - DST #4



---□--- FAWCETT "A" #1

INITIAL PRODUCTION CORRECTED TO PSEUDO STEADY FLOW STATE:

7.396

FAWCETT "A"
INITIAL

DST #4
SHUTIN

30 TOTAL FLOW TIME

Slope 187.08 psi/cycle
P * 1826 psi

	TIME(MIN)	Pws (psi)	Log Horn T	<> PRESSURE	Horn T
	3	1398.5	1.041	1398.5	11
	6	1685.3	0.778	286.8	6
	9	1719.4	0.637	34.1	4
	12	1739.6	0.544	20.2	4
	15	1752.3	0.477	12.7	3
	18	1759.8	0.426	7.5	3
	21	1764.9	0.385	5.1	2
	24	1768.7	0.352	3.8	2
	27	1773.7	0.325	5.0	2
	30	1776.2	0.301	2.5	2
	33	1777.5	0.281	1.3	2
	36	1778.8	0.263	1.3	2
	39	1780.0	0.248	1.2	2
	42	1782.6	0.234	2.6	2
	45	1785.1	0.222	2.5	2
	48	1786.3	0.211	1.2	2
	51	1787.6	0.201	1.3	2
	54	1790.1	0.192	2.5	2
	57	1791.4	0.184	1.3	2
X	60	1792.6	0.176	1.2	2
X	63	1793.9	0.169	1.3	1

FAWCETT "A"
FINAL

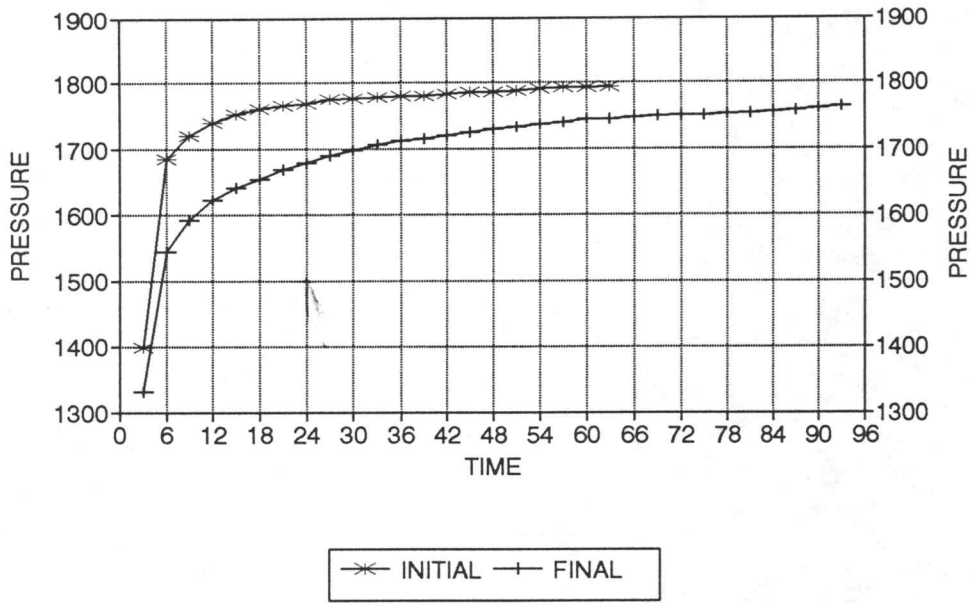
DST #4
SHUTIN

120 TOTAL FLOW TIME

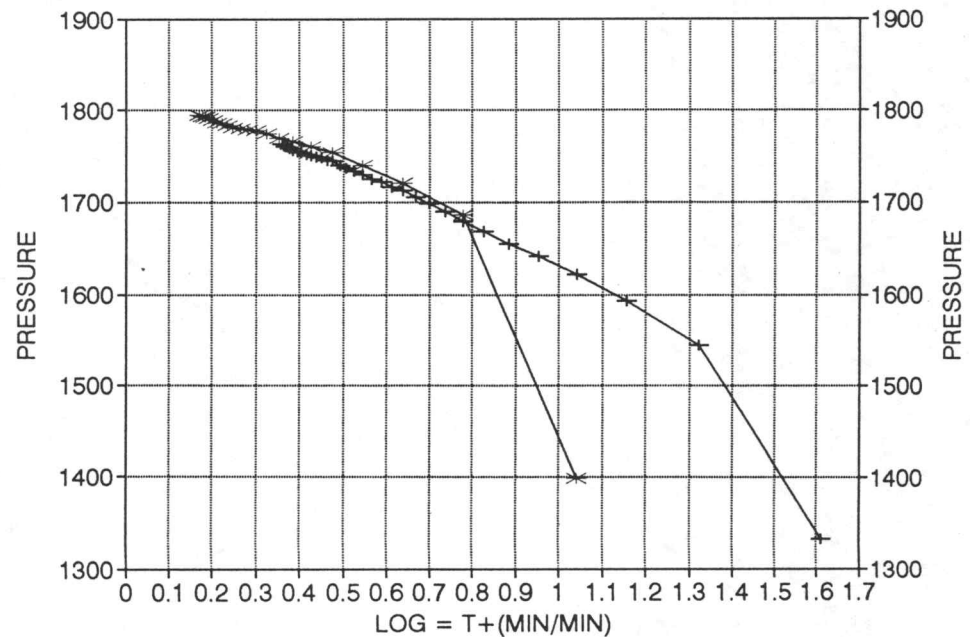
Slope 168.75 psi/cycle
P * 1823 psi

	Pws (psi)	Log Horn T	<> PRESSURE	Horn T
	-----	-----	-----	-----
	3 1331.9	1.613	1331.9	41
	6 1544.3	1.322	212.4	21
	9 1592.2	1.156	47.9	14
	12 1622.4	1.041	30.2	11
	15 1641.3	0.954	18.9	9
	18 1655.1	0.885	13.8	8
	21 1668.9	0.827	13.8	7
	24 1679.0	0.778	10.1	6
	27 1689.1	0.736	10.1	5
	30 1698.0	0.699	8.9	5
	33 1705.5	0.666	7.5	5
	36 1711.9	0.637	6.4	4
	39 1715.7	0.610	3.8	4
	42 1720.7	0.586	5.0	4
	45 1724.5	0.564	3.8	4
	48 1729.5	0.544	5.0	4
	51 1732.1	0.525	2.6	3
	54 1735.9	0.508	3.8	3
	57 1739.6	0.492	3.7	3
	60 1743.4	0.477	3.8	3
	63 1744.7	0.463	1.3	3
X	66 1747.2	0.450	2.5	3
	69 1748.5	0.438	1.3	3
	72 1749.7	0.426	1.2	3
	75 1751.0	0.415	1.3	3
	78 1752.3	0.405	1.3	3
	81 1753.5	0.395	1.2	2
	84 1754.8	0.385	1.3	2
	87 1757.3	0.376	2.5	2
	90 1759.8	0.368	2.5	2
X	93 1762.4	0.360	2.6	2

FAWCETT "A" #1 / DST #4
DELTA T DELTA P



HORNER PLOT



GAS VOLUME REPORT

CHARTER PRODUCTION COMPANY

FAWCETT "A" #1

DST # 4

MIN	INCHES OF WTR	ORIFICE	MCF/D	MIN	PSIG	ORIFICE	MCF/D
10	42	1.5	451	10	3.5	1.5	709
20	46	1.5	473	20	4	1.5	764
30	54	1.5	511	30	3.5	1.5	709
				40	3.5	1.5	709
				50	3.5	1.5	709
				60	3.5	1.5	709
				70	3.5	1.5	709
				80	3.5	1.5	709
				90	3.5	1.5	709

Remarks: GAS TO SURFACE IN 5 MINUTES/GAS WILL BURN