TRILOBITE TESTING, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name JOHN HERD #1 Test No. 1 Date 11/15/92

Company CHARTER PRODUCTION COMPANY Zone LWR KS CITY

Address 224 EAST DOUGLAS #400 WICHITA KS 67202 Elevation 1896

Co. Rep./Geo. ROBERT SMITH Cont. EAGLE DRLG RIG #1 Est. Ft. of Pay 5

Location: Sec. 5 Twp. 33S Rge. 20W Co. COMANCHE State KS

Interval Tested 4765-4877 Drill Pipe Size 4.5" XH

Anchor Length 112 Wt. Pipe I.D. - 2.7 Ft. Run

Top Packer Depth 4760 Drill Collar – 2.25 Ft. Run 180

Bottom Packer Depth 4765 Mud Wt. 9.1 lb/Gal.

Total Depth 4877 Viscosity 40 Filtrate 13.2

Tool Open @ 9:10 PM Initial Blow 1/2" BLOW - BUILT TO BOTTOM OF BUCKET IN 10 MINUTES

ISI:BLED OFF BLOW - NO BLOW BACK

Final Blow 2" BLOW - BUILT TO BOTTOM IN 2 MINUTES

FSI:BLED OFF BLOW-NO BLOW BACK

Recovery - Total Feet 180 Flush Tool? NO

RELEASED

FEB 1 4 1995

FROM CONFIDENTIAL

Rec. 1000 Feet of GAS IN PIPE

Rec. 180 Feet of GASSY OIL CUT MUD-35%GAS/5%OIL/60%MUD

Rec. Feet of

Rec. Feet of

Rec. Feet of

BHT 108 °F Gravity °API @ °F Corrected Gravity °API

RW @ °F Chlorides ppm Recovery Chlorides 6500 ppm System

(A) Initial Hydrostatic Mud 2325.6 PSI AK1 Recorder No. 13277 Range 4125

(B) First Initial Flow Pressure 114.7 PSI @ (depth) 4769 w / Clock No. 27594

(C) First Final Flow Pressure 114.7 PSI AK1 Recorder No. 11038 Range 5075

(D) Initial Shut-in Pressure 1315.6 PSI @ (depth) 4874 w / Clock No. 25814

(E) Second Initial Flow Pressure 141.2 PSI AK1 Recorder No. Range

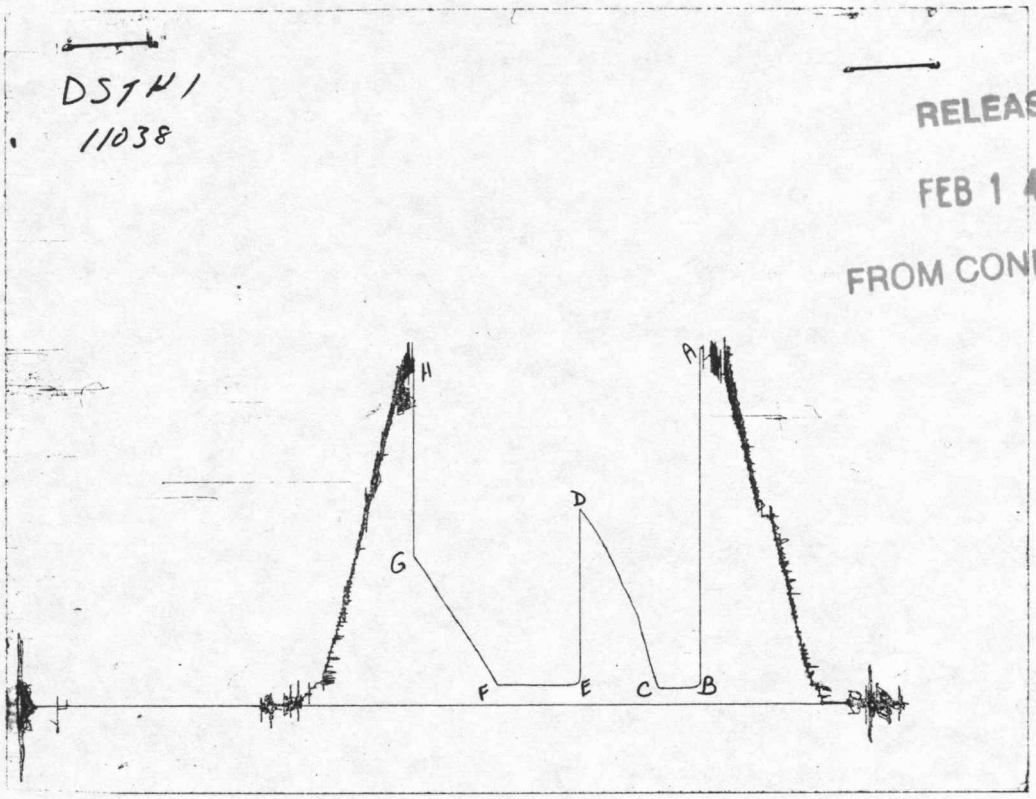
(F) Second Final Flow Pressure 141.2 PSI @ (depth) w / Clock No.

(G) Final Shut-in Pressure 1006.3 PSI Initial Opening 30 Final Flow 60

(H) Final Hydrostatic Mud 2305.6 PSI Initial Shut-in 60 Final Shut-in 60

Our Representative TOM HORACEK

CHART PAGE



This is an actual photograph of recorder chart

	FIELD READING	OFFICE READING
(A) INITIAL HYDROSTATIC MUD	2323	2325.6
(B) FIRST INITIAL FLOW PRESSURE	109	114.7
(C) FIRST FINAL FLOW PRESSURE	109	114.7
(D) INITIAL CLOSED-IN PRESSURE	1310	1315.6
(E) SECOND INITIAL FLOW PRESSURE	136	141.2
(F) SECOND FINAL FLOW PRESSURE	136	141.2
(G) FINAL CLOSED-IN PRESSURE	1008	1006.3
(H) FINAL HYDROSTATIC MUD	2298	2305.6

TRILOBITE TESTING COMPANY

P.O. Box 362 • Hays, Kansas 67601

Test Ticket

№ 4848

Well Name & No. John Herd #1 Test No. #1 Date 11-15-92

Company Charter Production Company Zone Tested Lower KC

Address 224 E. Douglas St. 400 Wichita, Ks. 67202 Elevation 1896 KB

Co. Rep./Geo. Robert Smith Cont. Eagle Drlg #1 Est. Ft. of Pay 5'

Location: Sec. 5 Twp. 33 Rge. 20 Co. Comanche State Ks.

No. of Copies ____ Distribution Sheet ____ Yes X No Turnkey ____ Yes X No ____ Evaluation

Interval Tested 4765-4877 Drill Pipe Size 4.5 x-Hole

Anchor Length 112' Top Choke — 1" ____ Bottom Choke — ¾" ____

Top Packer Depth 4760 Hole Size — 7⅞" ____ Rubber Size — 6¾" ____

Bottom Packer Depth 4765 Wt. Pipe I.D. — 2.7 Ft. Run —

Total Depth 4877 Drill Collar — 2.25 Ft. Run 180'

Mud Wt. 9.1 lb / gal. Viscosity 40 Filtrate 13.2

Tool Open @ 9:10 pm Initial Blow ½ blow - built to bottom of bucket 10 min.

ISI - Bled off blow - NO blow back

Final Blow 2 in blow - built to bottom 2 min.

FSI - Bled off blow - NO blow back

Recovery — Total Feet 180' Feet of Gas in Pipe 1,000 Flush Tool? NO

Rec.		Feet Of		%gas	%oil	%water	%mud
Rec.		Feet Of		%gas	%oil	%water	%mud
Rec.	180'	Feet Of	GOCM	35 %gas	5 %oil	%water 60	%mud
Rec.		Feet Of		%gas	%oil	%water	%mud
Rec.		Feet Of		%gas	%oil	%water	%mud

BHT 108 °F Gravity ____ °API @ ____ °F Corrected Gravity ____ °API

RW ____ @ ____ °F Chlorides ____ ppm Recovery Chlorides 6500 ppm System

(A) Initial Hydrostatic Mud	2323 PSI	Ak1 Recorder No.	13277	Range	4125
(B) First Initial Flow Pressure	109 PSI	@ (depth)	4769	w/Clock No.	27594
(C) First Final Flow Pressure	109 PSI	AK1 Recorder No.	11038	Range	5075
(D) Initial Shut-In Pressure	1310 PSI	@ (depth)	4874	w/Clock No.	25814
(E) Second Initial Flow Pressure	136 PSI	AK1 Recorder No.		Range	
(F) Second Final Flow Pressure	136 PSI	@ (depth)		w/Clock No.	
(G) Final Shut-In Pressure	1008 PSI	Initial Opening	30	Test	X 600
(H) Final Hydrostatic Mud	2298 PSI	Initial Shut-In	60	Jars	X 200
		Final Flow	60	Safety Joint	X 50
		Final Shut-In	60	Straddle	
				Circ. Sub	
				Sampler	
				Extra Packer	
				Other	
				TOTAL PRICE $	850

Approved By [signature]

Our Representative Tom Hornick

Printcraft Printers - Hays, KS

TRILOBITE TESTING, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name JOHN HERD #1 Test No. 2 Date 11/16/92

Company CHARTER PRODUCTION COMPANY Zone MARMATON

Address 224 EAST DOUGLAS #400 WICHITA KS 67202 Elevation 1896

Co. Rep./Geo. ROBERT SMITH Cont. EAGLE DRLG RIG #1 Est. Ft. of Pay

Location: Sec. 5 Twp. 33S Rge. 20W Co. COMANCHE State KS

Interval Tested 4950-5030

Anchor Length 80

Top Packer Depth 4945

Bottom Packer Depth 4950

Total Depth 5030

Drill Pipe Size 4.5" XH

Wt. Pipe I.D. - 2.7 Ft. Run

Drill Collar – 2.25 Ft. Run 241

Mud Wt. 9.1 lb/Gal.

Viscosity 46 Filtrate 9.6

Tool Open @ 8:50 PM Initial Blow SURFACE BLOW - BUILT TO 1"

Final Blow SURFACE BLOW - BUILT TO 3"

Recovery - Total Feet 50 Flush Tool? NO

Rec. 50 Feet of DRILLING MUD WITH SCUM OF OIL

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 8000 ppm System

(A) Initial Hydrostatic Mud 2408.9 PSI AK1 Recorder No. 13277 Range 4125

(B) First Initial Flow Pressure 86.3 PSI @ (depth) 4954 w / Clock No. 27594

(C) First Final Flow Pressure 86.3 PSI AK1 Recorder No. 11038 Range 5075

(D) Initial Shut-in Pressure 354.7 PSI @ (depth) 5027 w / Clock No. 25814

(E) Second Initial Flow Pressure 86.3 PSI AK1 Recorder No. Range

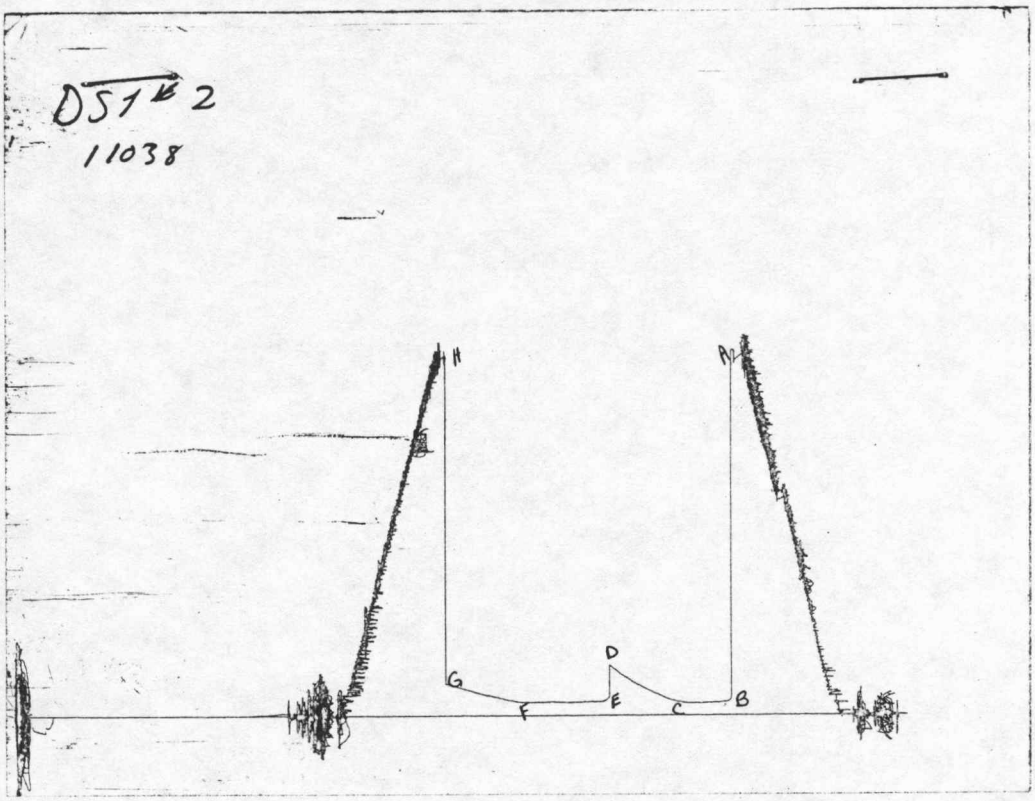
(F) Second Final Flow Pressure 86.3 PSI @ (depth) w / Clock No.

(G) Final Shut-in Pressure 233.7 PSI Initial Opening 30 Final Flow 60

(H) Final Hydrostatic Mud 2375.9 PSI Initial Shut-in 60 Final Shut-in 60

Our Representative TOM HORACEK

CHART PAGE



This is an actual photograph of recorder chart

	FIELD READING	OFFICE READING
(A) INITIAL HYDROSTATIC MUD	2400	2408.9
(B) FIRST INITIAL FLOW PRESSURE	84	86.3
(C) FIRST FINAL FLOW PRESSURE	84	86.3
(D) INITIAL CLOSED-IN PRESSURE	350	354.7
(E) SECOND INITIAL FLOW PRESSURE	84	86.3
(F) SECOND FINAL FLOW PRESSURE	84	86.3
(G) FINAL CLOSED-IN PRESSURE	230	233.7
(H) FINAL HYDROSTATIC MUD	2374	2375.9

TRILOBITE TESTING COMPANY

P.O. Box 362 • Hays, Kansas 67601

Test Ticket

№ 4849

Well Name & No. John Herd #1 Test No. #2 Date 11-16-92

Company Charter Production Company Zone Tested Marmaton

Address 224 E. Douglas St. 400 Wichita Ks 67202 Elevation 1896 KB

Co. Rep./Geo. Robert Smith Cont. Eagle Drlg #1 Est. Ft. of Pay

Location: Sec. 5 Twp. 33 Rge. 20 Co. Comanche State Ks.

No. of Copies Distribution Sheet Yes X No Turnkey Yes X No Evaluation

Interval Tested 4950-5030 Drill Pipe Size 4.5 x-Hole

Anchor Length 80' Top Choke — 1" Bottom Choke — ¾"

Top Packer Depth 4945 Hole Size — 7⅞" Rubber Size — 6¾"

Bottom Packer Depth 4950 Wt. Pipe I.D. — 2.7 Ft. Run —

Total Depth 5030 Drill Collar — 2.25 Ft. Run 241'

Mud Wt. 9.1 lb/gal. Viscosity 46 Filtrate 9.6

Tool Open @ 8:50 pm Initial Blow surface blow - built to 1 in.

Final Blow surface blow - built to 3 in.

Recovery — Total Feet 50' Feet of Gas in Pipe Flush Tool? NO

Rec.	Feet Of		%gas	%oil	%water	%mud
Rec.	Feet Of		%gas	%oil	%water	%mud
Rec. 50'	Feet Of	Drlg mud w/scum oil	%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 8000 ppm System

(A) Initial Hydrostatic Mud	2400 PSI	AK1 Recorder No.	13277	Range	4125
(B) First Initial Flow Pressure	84 PSI	@ (depth)	4954	w/Clock No.	27594
(C) First Final Flow Pressure	84 PSI	AK1 Recorder No.	11038	Range	5075
(D) Initial Shut-In Pressure	350 PSI	@ (depth)	5027	w/Clock No.	25814
(E) Second Initial Flow Pressure	84 PSI	AK1 Recorder No.		Range	
(F) Second Final Flow Pressure	84 PSI	@ (depth)		w/Clock No.	
(G) Final Shut-In Pressure	230 PSI	Initial Opening	30	Test	X 700
(H) Final Hydrostatic Mud	2374 PSI	Initial Shut-In	60	Jars	X 200
		Final Flow	60	Safety Joint	X 50
		Final Shut-In	60	Straddle	
				Circ. Sub	
				Sampler	
				Extra Packer	
				Other	
				TOTAL PRICE $	950

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 Tom Horacek

Printcraft Printers - Hays, KS

TRILOBITE TESTING, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name JOHN HERD #1 Test No. 3 Date 11/17/92

Company CHARTER PRODUCTION COMPANY Zone MORROW

Address 224 EAST DOUGLAS #400 WICHITA KS 67202 Elevation 1896

Co. Rep./Geo. ROBERT SMITH Cont. EAGLE DRLG RIG #1 Est. Ft. of Pay

Location: Sec. 5 Twp. 33S Rge. 20W Co. COMANCHE State KS

Interval Tested 5190-5220 Drill Pipe Size 4.5" XH

Anchor Length 30 Wt. Pipe I.D. - 2.7 Ft. Run

Top Packer Depth 5185 Drill Collar – 2.25 Ft. Run 300

Bottom Packer Depth 5190 Mud Wt. 9.1 lb/Gal.

Total Depth 5220 Viscosity 50 Filtrate 8.8

Tool Open @ 9:25 PM Initial Blow STRONG BLOW - BUILT TO BOTTOM OF BUCKET IN 30 SECONDS

ISI:BLED OFF BLOW - WEAK BLOW BUILT TO 3"

Final Blow BOTTOM OF BUCKET AS TOOL OPENED - GAS TO SURFACE IN 7 MINUTES - GAUGED @3.71 MCF/DAU

Recovery - Total Feet 70 Flush Tool? NO

Rec. 70 Feet of GSY DRILLING MUD WITH TRACE OF OIL-5%GAS/2%OIL/93%MUD

Rec. Feet of

Rec. Feet of

Rec. Feet of

Rec. Feet of

BHT 116 °F Gravity °API @ °F Corrected Gravity °API

RW @ °F Chlorides ppm Recovery Chlorides 8000 ppm System

(A) Initial Hydrostatic Mud 2520.3 PSI AK1 Recorder No. 13277 Range 4125

(B) First Initial Flow Pressure 28.9 PSI @ (depth) 5194 w / Clock No. 27594

(C) First Final Flow Pressure 44.5 PSI AK1 Recorder No. 11038 Range 5075

(D) Initial Shut-in Pressure 1540.3 PSI @ (depth) 5217 w / Clock No. 25814

(E) Second Initial Flow Pressure 44.5 PSI AK1 Recorder No. Range

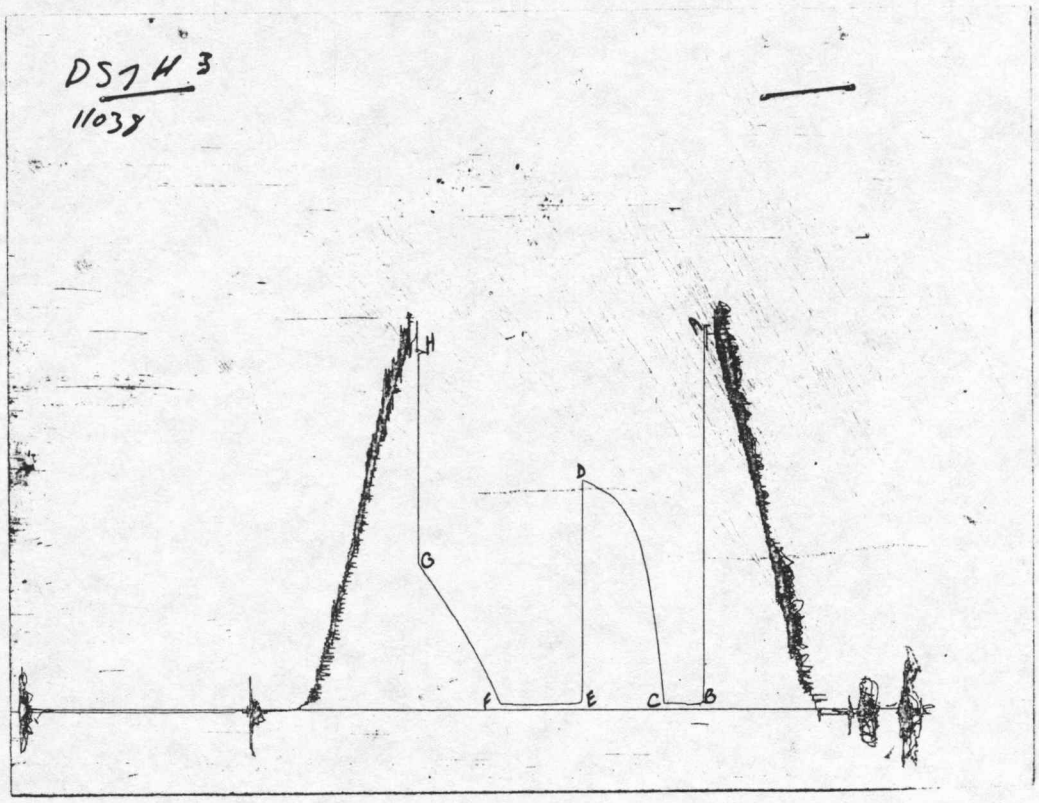
(F) Second Final Flow Pressure 44.5 PSI @ (depth) w / Clock No.

(G) Final Shut-in Pressure 999.7 PSI Initial Opening 30 Final Flow 60

(H) Final Hydrostatic Mud 2510.3 PSI Initial Shut-in 60 Final Shut-in 60

Our Representative TOM HORACEK

CHART PAGE



This is an actual photograph of recorder chart

	FIELD READING	OFFICE READING
(A) INITIAL HYDROSTATIC MUD	2516	2520.3
(B) FIRST INITIAL FLOW PRESSURE	27	28.9
(C) FIRST FINAL FLOW PRESSURE	41	44.5
(D) INITIAL CLOSED-IN PRESSURE	1536	1540.3
(E) SECOND INITIAL FLOW PRESSURE	41	44.5
(F) SECOND FINAL FLOW PRESSURE	41	44.5
(G) FINAL CLOSED-IN PRESSURE	995	999.7
(H) FINAL HYDROSTATIC MUD	2503	2510.3

GAS VOLUME REPORT

CHARTER PRODUCTION COMPANY

JOHN HERD #1 DST # 3

MIN	PSIG	ORIFICE	MCF/D	MIN	PSIG	ORIFICE	MCF/D
				15	5	0.25	3.71
				25	8	0.25	4.76
				35	6	0.25	4.12
				45	5	0.25	3.71
				55	5	0.25	3.71
				60	5	0.25	3.71

Remarks: GAS TO SURFACE IN 7 MINUTES / GAS WILL BURN

TRILOBITE TESTING COMPANY

P.O. Box 362 • Hays, Kansas 67601

Test Ticket

№ 4850

Well Name & No. John Herd #1 Test No. #3 Date 11-17-92

Company Charter Production Company Zone Tested Morrow

Address 224 E Douglas St. 400 Wichita Ks 67202 Elevation 1896 KB

Co. Rep./Geo. Robert Smith Cont. Eagle Drlg #1 Est. Ft. of Pay

Location: Sec. 5 Twp. 33 Rge. 20 Co. Comanche State Ks.

No. of Copies Distribution Sheet Yes X No Turnkey Yes X No Evaluation

Interval Tested 5190-5220 Drill Pipe Size 4.5 X-Hole

Anchor Length 30' Top Choke — 1" Bottom Choke — ¾"

Top Packer Depth 5185 Hole Size — 7⅞" Rubber Size — 6¾"

Bottom Packer Depth 5190 Wt. Pipe I.D. — 2.7 Ft. Run —

Total Depth 5220 Drill Collar — 2.25 Ft. Run 300'

Mud Wt. 9.1 lb/gal. Viscosity 50 Filtrate 8.8

Tool Open @ 9:25 pm Initial Blow Strong blow - built to bottom of bucket 30 sec. ISI - Bld off blow - weak blow built to - 3 in.

Final Blow Bottom of bucket as tool opened. (Gas to surface 7 min.) Gauged @ 3.71 MCF

Recovery — Total Feet 70' Feet of Gas in Pipe Flush Tool? NO

Rec.	Feet Of	%gas	%oil	%water	%mud	
Rec.	Feet Of	%gas	%oil	%water	%mud	
Rec. 70'	Feet Of Gassy Drlg mud w/trace oil	5 %gas	2 %oil	%water 93	%mud	
Rec.	Feet Of	%gas	%oil	%water	%mud	
Rec.	Feet Of	%gas	%oil	%water	%mud	

BHT 116 °F Gravity °API @ °F Corrected Gravity °API

RW @ °F Chlorides ppm Recovery Chlorides 8000 ppm System

(A) Initial Hydrostatic Mud	2516 PSI	AK1 Recorder No.	13277	Range	4125
(B) First Initial Flow Pressure	27 PSI	@ (depth)	5194	w/Clock No.	22594
(C) First Final Flow Pressure	41 PSI	AK1 Recorder No.	11038	Range	5075
(D) Initial Shut-In Pressure	1536 PSI	@ (depth)	5217	w/Clock No.	25814
(E) Second Initial Flow Pressure	41 PSI	AK1 Recorder No.		Range	
(F) Second Final Flow Pressure	41 PSI	@ (depth)		w/Clock No.	
(G) Final Shut-In Pressure	995 PSI	Initial Opening	30	Test	X 700
(H) Final Hydrostatic Mud	2503 PSI	Initial Shut-In	60	Jars	X 200
		Final Flow	60	Safety Joint	X 50
		Final Shut-In	60	Straddle	
				Circ. Sub	
				Sampler	
				Extra Packer	
				Other	
				TOTAL PRICE $	950

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 Tom Hornack

Printcraft Printers - Hays, KS

TRILOBITE TESTING, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name JOHN HERD #1 Test No. 4 Date 11/18/92

Company CHARTER PRODUCTION COMPANY Zone MORROW

Address 224 EAST DOUGLAS #400 WICHITA KS 67202 Elevation 1896

Co. Rep./Geo. ROBERT SMITH Cont. EAGLE DRLG RIG #1 Est. Ft. of Pay

Location: Sec. 5 Twp. 33S Rge. 20W Co. COMANCHE State KS

Interval Tested 5188-5235 Drill Pipe Size 4.5" XH

Anchor Length 47 Wt. Pipe I.D. - 2.7 Ft. Run

Top Packer Depth 5183 Drill Collar – 2.25 Ft. Run 270

Bottom Packer Depth 5188 Mud Wt. 9.1 lb/Gal.

Total Depth 5235 Viscosity 50 Filtrate 8.8

Tool Open @ 12:15 PM Initial Blow STRONG BLOW - BUILT TO BOTTOM OF BUCKET IN 30 SECONDS

ISI:BLED OFF BLOW - WEAK BLOW - BUILT TO 3.5"

Final Blow STRONG BLOW - BUILT TO BOTTOM OF BUCKET IN 5 MINUTES

FSI: BLED OFF BLOW - WEAK BLOW - BUILT TO 3"

Recovery - Total Feet 680 Flush Tool? NO

Rec. 3000 Feet of GAS IN PIPE

Rec. 135 Feet of GSY OIL CUT MUD(TRACE OF OIL)-5%GAS/2%OIL/93%MUD

Rec. 545 Feet of GSY SALT WATER

Rec. Feet of

Rec. Feet of

BHT 116 °F Gravity °API @ °F Corrected Gravity °API

RW 0.45 @ 70 °F Chlorides 15000 ppm Recovery Chlorides 8000 ppm System

(A) Initial Hydrostatic Mud 2520.3 PSI AK1 Recorder No. 13277 Range 4125

(B) First Initial Flow Pressure 141.5 PSI @ (depth) 5192 w / Clock No. 27594

(C) First Final Flow Pressure 221.7 PSI AK1 Recorder No. 11038 Range 5075

(D) Initial Shut-in Pressure 1765.9 PSI @ (depth) 5232 w / Clock No. 25814

(E) Second Initial Flow Pressure 263.8 PSI AK1 Recorder No. Range

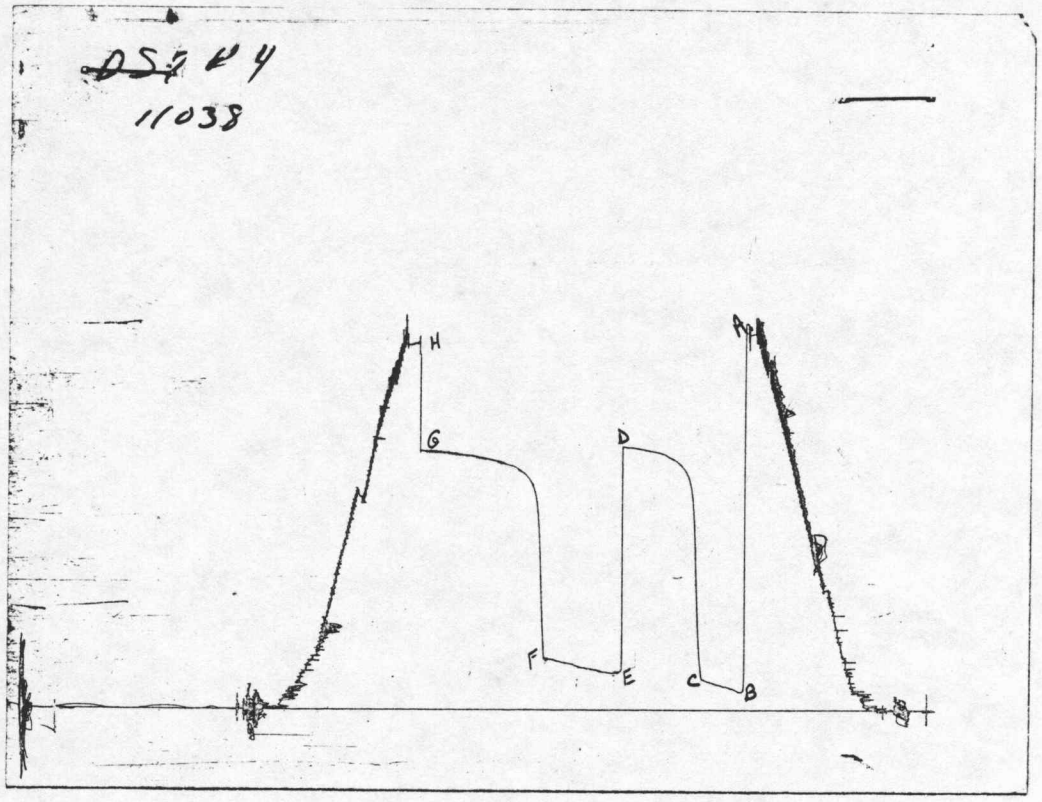
(F) Second Final Flow Pressure 354.7 PSI @ (depth) w / Clock No.

(G) Final Shut-in Pressure 1740.5 PSI Initial Opening 30 Final Flow 60

(H) Final Hydrostatic Mud 2499.8 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	2516	2520.3
(B) FIRST INITIAL FLOW PRESSURE	136	141.5
(C) FIRST FINAL FLOW PRESSURE	217	221.7
(D) INITIAL CLOSED-IN PRESSURE	1763	1765.9
(E) SECOND INITIAL FLOW PRESSURE	257	263.8
(F) SECOND FINAL FLOW PRESSURE	350	354.7
(G) FINAL CLOSED-IN PRESSURE	1738	1740.5
(H) FINAL HYDROSTATIC MUD	2490	2499.8

TRILOBITE TESTING L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Test Ticket

No. 4951

Well Name & No. John Herd #1 Test No. #4 Date 11-18-92

Company Charter Production Company Zone Tested Morrow

Address 224 E. Douglas St. 400 Wichita Ks. 67202 Elevation 1896 KB

Co. Rep./Geo. Robert Smith Cont. Eagle Drlg #1 Est. Ft. of Pay

Location: Sec. 5 Twp. 33 Rge. 20 Co. Comanche State Ks.

No. of Copies Distribution Sheet Yes X No Turnkey Yes X No Evaluation

Interval Tested 5188-5235 Drill Pipe Size 4.5 X-Hole

Anchor Length 47' Top Choke — 1" Bottom Choke — ¾"

Top Packer Depth 5183 Hole Size — 7⅞" Rubber Size — 6¾"

Bottom Packer Depth 5188 Wt. Pipe I.D. — 2.7 Ft. Run -

Total Depth 5235 Drill Collar — 2.25 Ft. Run 270'

Mud Wt. 9.1 lb/gal. Viscosity 50 Filtrate 8.8

Tool Open @ 12:15 pm Initial Blow Strong blow - built to bottom of bucket 30 sec.
ISI - Bled off blow - weak blow - built to 3½ in.

Final Blow Strong blow - built to bottom of bucket 5 min.
FSI - Bled off blow - weak blow - built to 3 in.

Recovery — Total Feet 680' Feet of Gas in Pipe 3,000 Flush Tool? NO

Rec.	Feet Of		%gas	%oil	%water	%mud
Rec. 135'	Feet Of	GOCM (Trace oil)	5 %gas	2 %oil	%water	93 %mud
Rec. 545	Feet Of	GSW	%gas	%oil	%water	%mud
Rec.	Feet Of		%gas	%oil	%water	%mud
Rec.	Feet Of		%gas	%oil	%water	%mud

BHT 116 °F Gravity °API @ °F Corrected Gravity °API

RW .45 @ 70 °F Chlorides 15,000 ppm Recovery Chlorides 8000 ppm System

(A) Initial Hydrostatic Mud	2516 PSI	AK1 Recorder No.	13277	Range	4125
(B) First Initial Flow Pressure	136 PSI	@ (depth)	5192	w/Clock No.	27594
(C) First Final Flow Pressure	217 PSI	AK1 Recorder No.	11038	Range	5075
(D) Initial Shut-In Pressure	1763 PSI	@ (depth)	5232	w/Clock No.	25814
(E) Second Initial Flow Pressure	257 PSI	AK1 Recorder No.		Range	
(F) Second Final Flow Pressure	350 (354?) PSI	@ (depth)		w/Clock No.	
(G) Final Shut-In Pressure	1738 PSI	Initial Opening	30	Test	X 700
(H) Final Hydrostatic Mud	2490 PSI	Initial Shut-In	60	Jars	X 200
		Final Flow	60	Safety Joint	X 50
		Final Shut-In	90	Straddle	
				Circ. Sub	
				Sampler	
				Extra Packer	
				Other	
				TOTAL PRICE $	950.00

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

Our Representative Tom Horacek

Printcraft Printers - Hays, KS