TRILOBITE TESTING, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name LANGHOFER 1-2 Test No. 1 Date 1/3/95

Company MURFIN DRILLING/CANYON ENERGY INC. Zone C. GROVE

Address WICHITA, KS Elevation 2787

Co. Rep./Geo. CHUCK SCHMALTZ Cont. MURFIN 21 Est. Ft. of Pay 10

Location: Sec. 2 Twp. 32S Rge. 31W Co. SEWARD State KS

Interval Tested 3169-3184 Drill Pipe Size 4.5" XH

Anchor Length 17 Wt. Pipe I.D. - 2.7 Ft. Run

Top Packer Depth 3164 Drill Collar – 2.25 Ft. Run 521

Bottom Packer Depth 3169-3184 Mud Wt. 8.9 lb/Gal.

Total Depth 3340 Viscosity 40 Filtrate 20.4

Tool Open @ 12:30PM Initial Blow FAIR BLOW, BUILT TO 7 INCHES.

Final Blow WEAK BLOW, BUILT TO 3 INCHES.

Recovery - Total Feet 180 Flush Tool? NO

Rec. 60 Feet of MUDDY WATER. 50% WATER; 50 % MUD.

Rec. 120 Feet of SALT WATER. 100% WATER.

Rec. Feet of

Rec. Feet of

Rec. Feet of

BHT 110 °F Gravity °API @ °F Corrected Gravity °API

RW 0.183 @ 59 °F Chlorides 60,000 ppm Recovery Chlorides 6,500 ppm System

(A) Initial Hydrostatic Mud 15847.40 PSI AK1 Recorder No. 10333 Range 4050

(B) First Initial Flow Pressure 17.30 PSI @ (depth) 3172 w / Clock No. 16067

(C) First Final Flow Pressure 27.40 PSI AK1 Recorder No. 13251 Range 4550

(D) Initial Shut-in Pressure 711.80 PSI @ (depth) 3179 w / Clock No. 8698

(E) Second Initial Flow Pressure 73.80 PSI AK1 Recorder No. 1055 Range 4050

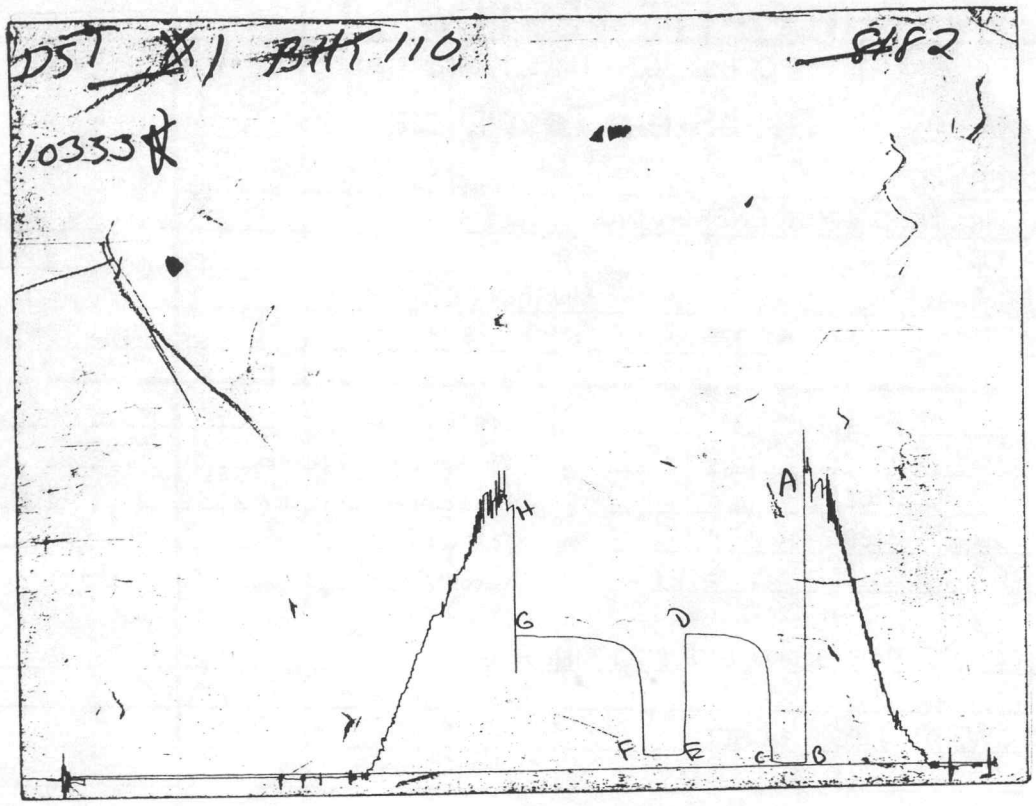
(F) Second Final Flow Pressure 80.30 PSI @ (depth) 3330 w / Clock No. 26191

(G) Final Shut-in Pressure 762.40 PSI Initial Opening 30 Final Flow 60

(H) Final Hydrostatic Mud 1415.00 PSI Initial Shut-in 30 Final Shut-in 90

Our Representative ROBERT COLLINS

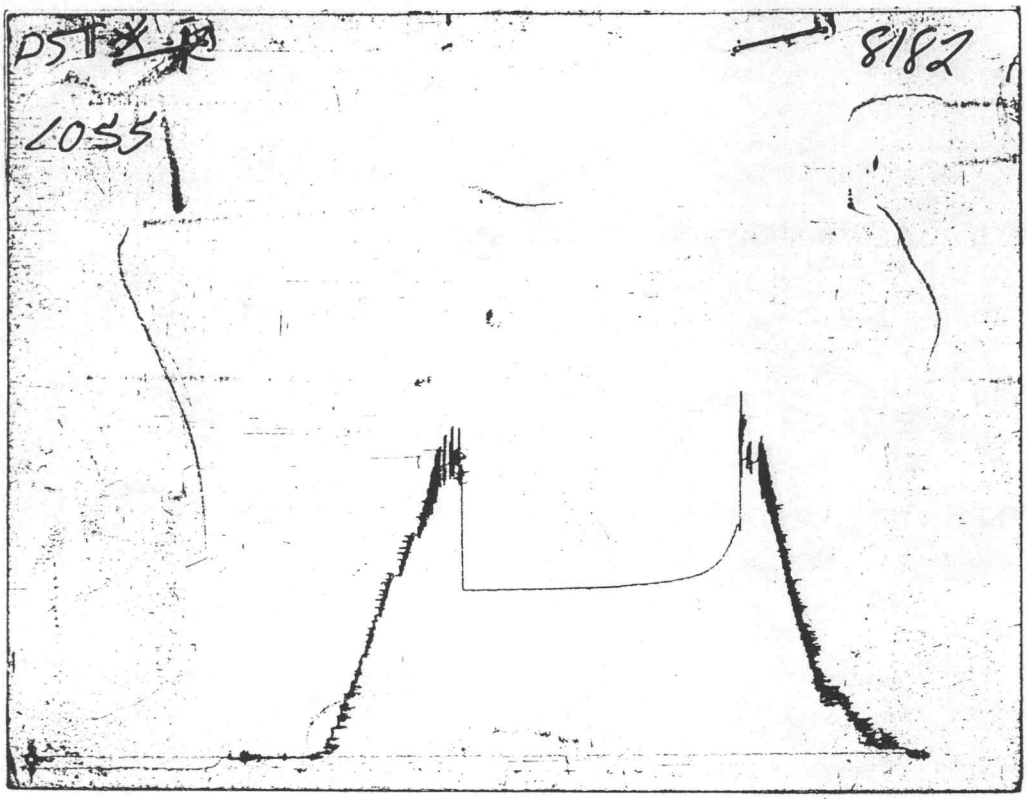
CHART PAGE



This is an actual photograph of recorder chart

	FIELD READING	OFFICE READING
(A) INITIAL HYDROSTATIC MUD	1569	1584.4
(B) FIRST INITIAL FLOW PRESSURE	10	17.3
(C) FIRST FINAL FLOW PRESSURE	20	27.4
(D) INITIAL CLOSED-IN PRESSURE	701	711.8
(E) SECOND INITIAL FLOW PRESSURE	60	73.8
(F) SECOND FINAL FLOW PRESSURE	60	80.3
(G) FINAL CLOSED-IN PRESSURE	701	762.4
(H) FINAL HYDROSTATIC MUD	1415	1415

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		

FLUID SAMPLER DATA

Ticket No.: 8182 **Date:** 1/3/95

Company: MURFIN DRILLING/CANYON ENERGY INC

Lease: LANGHOFER 1-2 **Test No.:** 1

County: SEWARD **Sec.:** 2 **Twp.:** 32S **Rng.:** 31W

SAMPLER RECOVERY

Gas		ML
Oil		ML
Mud		ML
Water	4000	ML
Other		ML
Pressure		PSI
TOTAL	4000	ML

SAMPLER ANALYSIS

Resistivity	.183	ohms@	59	F
Chlorides	60,000			ppm.
Gravity			corrected @60F	

PIT MUD ANALYSIS

Chlorides	6,500		
Resistivity		ohms@	F
Viscosity	40		
Mud Wt.	8.9		
Filtrate	20.4		
Other			

PIPE RECOVERY

TOP

Resistivity	.515	ohms@	57	F
Chlorides	11,000			ppm

MIDDLE

Resistivity	.347	ohms@	57	F
Chlorides	22,000			ppm

BOTTOM

Resistivity	.183	ohms@	59	F
Chlorides	60,000			ppm

TRILOBITE TESTING, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name: LANGHOFER 1-2 | Test No.: 2 | Date: 1/6/95

Company: MURFIN DRILLING/CANYON ENERGY INC | Zone: LANSING A

Address: WICHITA, KS | Elevation: 2787

Co. Rep./Geo.: CHUCK SCHMALTZ | Cont.: MURFIN 21 | Est. Ft. of Pay: 7

Location: Sec.: 2 | Twp.: 32S | Rge.: 31W | Co.: SEWARD | State: KS

Interval Tested: 4384-4412 | Drill Pipe Size: 4.5" XH

Anchor Length: 28 | Wt. Pipe I.D. - 2.7 Ft. Run:

Top Packer Depth: 4379 | Drill Collar – 2.25 Ft. Run: 460

Bottom Packer Depth: 4384 | Mud Wt.: 9.2 lb/Gal.

Total Depth: 4112 | Viscosity: 42 | Filtrate: 9.8

Tool Open @: 4:15AM | Initial Blow: VERY WEAK SURFACE BLOW, BUILDING TO 2 INCHES.

Final Blow: VERY WEAK BLOW, BUILT TO 1 INCH.

Recovery - Total Feet: 60 | Flush Tool?: NO

Rec. 1 Feet of CLEAN GASSY OIL. 5% GAS; 95% OIL.

Rec. 60 Feet of MUDDY WATER. 40% WATER; 60% MUD.

Rec. Feet of

Rec. Feet of

Rec. Feet of

BHT: 120 °F | Gravity: °API @ °F | Corrected Gravity: °API

RW: .435 @ 45 °F | Chlorides: 38,000 ppm Recovery | Chlorides: 6,500 ppm System

(A) Initial Hydrostatic Mud: 2234.8 PSI | AK1 Recorder No.: 10333 | Range: 4050

(B) First Initial Flow Pressure: 22.4 PSI | @ (depth): 4387 | w / Clock No.:

(C) First Final Flow Pressure: 20.3 PSI | AK1 Recorder No.: 13251 | Range: 4550

(D) Initial Shut-in Pressure: 1225.4 PSI | @ (depth): 4409 | w / Clock No.:

(E) Second Initial Flow Pressure: 43.7 PSI | AK1 Recorder No.: | Range:

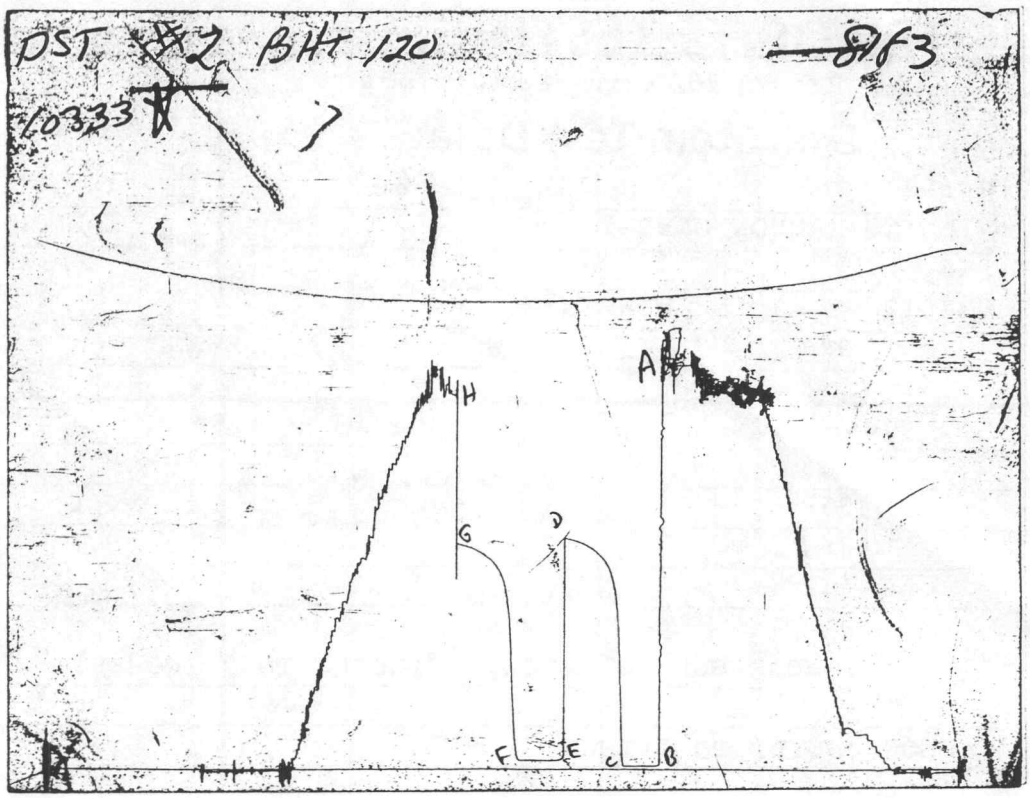
(F) Second Final Flow Pressure: 53.9 PSI | @ (depth): | w / Clock No.:

(G) Final Shut-in Pressure: 1194.7 PSI | Initial Opening: 30 | Final Flow: 30

(H) Final Hydrostatic Mud: 2204.5 PSI | Initial Shut-in: 45 | Final Shut-in: 45

Our Representative: ROBERT COLLINS

CHART PAGE



This is an actual photograph of recorder chart

		FIELD READING	OFFICE READING
(A)	INITIAL HYDROSTATIC MUD	2240	2234.8
(B)	FIRST INITIAL FLOW PRESSURE	20	22.4
(C)	FIRST FINAL FLOW PRESSURE	20	20.3
(D)	INITIAL CLOSED-IN PRESSURE	1221	1225.4
(E)	SECOND INITIAL FLOW PRESSURE	470	43.7
(F)	SECOND FINAL FLOW PRESSURE	40	53.9
(G)	FINAL CLOSED-IN PRESSURE	1170	1194.7
(H)	FINAL HYDROSTATIC MUD	2083	2204.5

FLUID SAMPLER DATA

Ticket No.: 8182 **Date:** 1/6/95

Company: MURFIN DRILLING/CANYON ENERGY INC

Lease: LANGHOFER 1-2 **Test No.:** 2

County: SEWARD **Sec.:** 2 **Twp.:** 32S **Rng.:** 31W

SAMPLER RECOVERY

Gas		ML
Oil		ML
Mud	3000	ML
Water	1000	ML
Other		ML
Pressure	250	PSI
TOTAL	4000	ML

SAMPLER ANALYSIS

Resistivity 0.435 **ohms@** 45 **F**

Chlorides 38,000 **ppm.**

Gravity **corrected @60F**

PIT MUD ANALYSIS

Chlorides 6,500

Resistivity **ohms@** **F**

Viscosity 42

Mud Wt. 9.2

Filtrate 9.8

Other

PIPE RECOVERY

TOP

Resistivity **ohms@** **F**

Chlorides **ppm**

MIDDLE

Resistivity **ohms@** **F**

Chlorides **ppm**

BOTTOM

Resistivity **ohms@** **F**

Chlorides **ppm**

TRILOBITE TESTING L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Test Ticket

№ 8183

Well Name & No. Langhofer # 1-2 Test No. 2 Date 1-6-95

Company MPC & Canyon Zone Tested Lansing A

Address W. Liberal KS Elevation 2787 KB

Co. Rep./Geo. Chuck Schmaltz cont Martin 21 Est. Ft. of Pay 7

Location: Sec. 2 Twp. 32 S Rge. 31 W Co. Seward State

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

Interval Tested 4384-4412 Drill Pipe Size 4½ XH

Anchor Length 28 Top Choke — 1" ____ Bottom Choke — ¾" ____

Top Packer Depth 4379 Hole Size — 7⅞" ____ Rubber Size — 6¾" ____

Bottom Packer Depth 4384 Wt. Pipe I.D. — 2.7 Ft. Run ____

Total Depth 4412 Drill Collar — 2.25 Ft. Run 460 XH

Mud Wt. 9.2 lb / gal. Viscosity 42 Filtrate 9.8

Tool Open @ 4:15AM Initial Blow Very weak surface blow build to 2" in

Final Blow Very weak blow build to 1½"

Recovery — Total Feet 60 Feet of Gas in Pipe ____ Flush Tool? NO

Rec. 1 Feet Of CGO:1 5 %gas 95 %oil ____ %water ____ %mud

Rec. ____ Feet Of ____ %gas ____ %oil ____ %water ____ %mud

Rec. 60 Feet Of MCW %gas ____ %oil 40 %water 60 %mud

Rec. ____ Feet Of ____ %gas ____ %oil ____ %water ____ %mud

Rec. ____ Feet Of ____ %gas ____ %oil ____ %water ____ %mud

BHT 120 °F Gravity ____ °API @ ____ °F Corrected Gravity 6560 °API

RW .435 @ 45 °F Chlorides 38,000 ppm Recovery Chlorides ~~45,000~~ ppm System

(A) Initial Hydrostatic Mud 2240 PSI AK1 Recorder No. 10333 Range 4050

(B) First Initial Flow Pressure 20 PSI @ (depth) 4387 w/Clock No. ____

(C) First Final Flow Pressure 20 PSI AK1 Recorder No. 13251 Range 4550

(D) Initial Shut-In Pressure 1221 PSI @ (depth) 4409 w/Clock No. ____

(E) Second Initial Flow Pressure 40 PSI AK1 Recorder No. ____ Range ____

(F) Second Final Flow Pressure 40 PSI @ (depth) ____ w/Clock No. ____

(G) Final Shut-In Pressure 1170 PSI Initial Opening 30 Test 600

(H) Final Hydrostatic Mud 2083 PSI Initial Shut-In 45 Jars X 200

Final Flow 30 Safety Joint X 50

Final Shut-In 45 Straddle —

Circ. Sub X N/C

Sampler X 200

Extra Packer —

Other ____

TOTAL PRICE $ 1050

Approved By Chuck Schmaltz

Our Representative R. Collins

Printcraft Printers - Hays, KS

TRILOBITE TESTING, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name: LANGHOFER #1-2 Test No. 3 Date 1/7/95

Company: MURFIN DRILLING/CANYON ENERGY INC Zone SWOPE

Address: WICHITA, KS Elevation 2787

Co. Rep./Geo.: CHUCK SCHMALTZ Cont. MURFIN 21 Est. Ft. of Pay

Location: Sec. 2 Twp. 32S Rge. 32W Co. SEWARD State KS

Interval Tested 4852-4885

Anchor Length 33

Top Packer Depth 4847

Bottom Packer Depth 4852

Total Depth 4885

Drill Pipe Size 4.5" XH

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

Drill Collar – 2.25 Ft. Run 460

Mud Wt. 9.2 lb/Gal.

Viscosity 40 Filtrate 8.6

Tool Open @ 2:00AM Initial Blow FAIR BLOW, BOTTOM IN 8 MINUTES. INITIAL SHUT IN: NO BLOW BACK.

Final Blow WEAK BLOW BUILD TO BOTTOM IN 18 MINUTES. FINIAL SHUT IN: NO BLOW BACK.

Recovery - Total Feet 960 Flush Tool? NO

Rec. 120 Feet of MUDDY WATER. 50% WATER; 50% MUD.

Rec. 840 Feet of SALT WATER. 100% WATER.

Rec. Feet of

Rec. Feet of

Rec. Feet of

BHT 130 °F Gravity °API @ °F Corrected Gravity °API

RW .082 @ 70 °F Chlorides 160,000 ppm Recovery Chlorides 5,000 ppm System

(A) Initial Hydrostatic Mud 2407.21 PSI AK1 Recorder No. 10333 Range 4050

(B) First Initial Flow Pressure 92.10 PSI @ (depth) 4855 w / Clock No. 16067

(C) First Final Flow Pressure 3.00 PSI AK1 Recorder No. 13251 Range 4550

(D) Initial Shut-in Pressure 1520.40 PSI @ (depth) 4882 w / Clock No. 8698

(E) Second Initial Flow Pressure 349.10 PSI AK1 Recorder No. Range

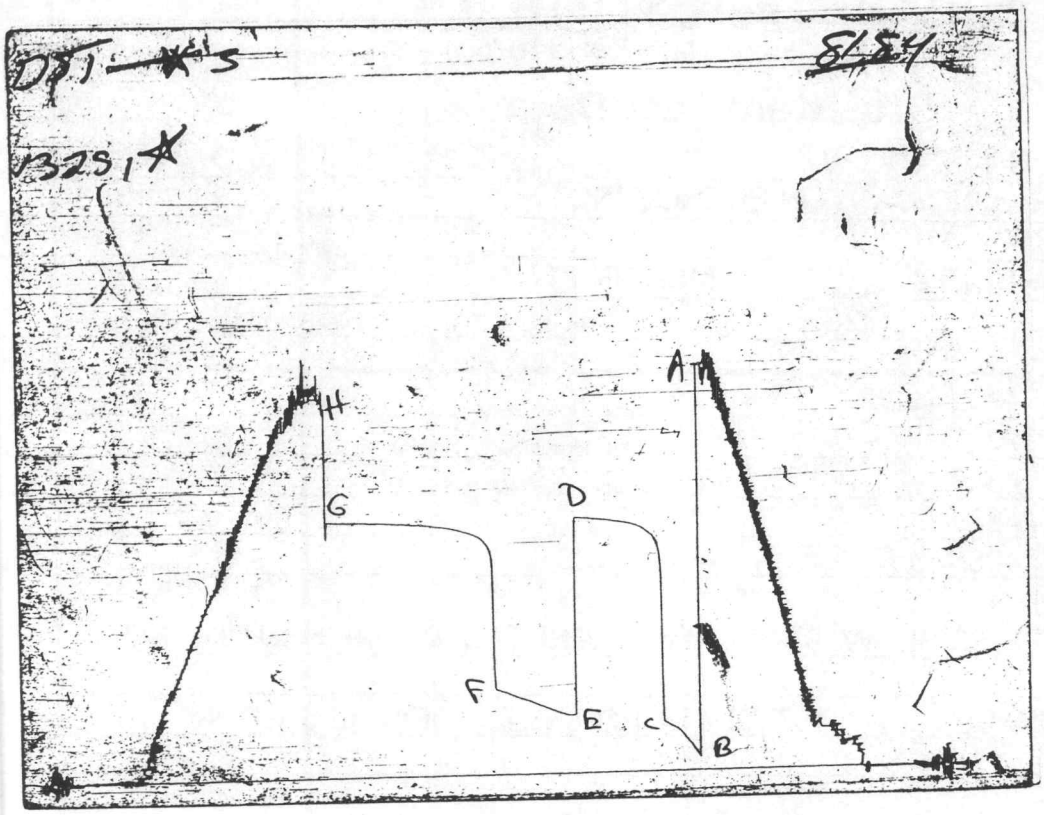
(F) Second Final Flow Pressure 512.40 PSI @ (depth) w / Clock No.

(G) Final Shut-in Pressure 1516.90 PSI Initial Opening 30 Final Flow 60

(H) Final Hydrostatic Mud 2245.50 PSI Initial Shut-in 60 Final Shut-in 120

Our Representative ROBERT COLLINS

CHART PAGE



This is an actual photograph of an AK1 recorder chart
READINGS ARE FROM ALPINE ELECTRONIC RECORDER

	FIELD READING	OFFICE READING
(A) INITIAL HYDROSTATIC MUD	2395	2407.21
(B) FIRST INITIAL FLOW PRESSURE	80	92.10
(C) FIRST FINAL FLOW PRESSURE	276	3.00
(D) INITIAL CLOSED-IN PRESSURE	1488	1520.40
(E) SECOND INITIAL FLOW PRESSURE	345	349.10
(F) SECOND FINAL FLOW PRESSURE	495	512.40
(G) FINAL CLOSED-IN PRESSURE	1488	1516.90
(H) FINAL HYDROSTATIC MUD	2384	2245.50

FLUID SAMPLER DATA

Ticket No.: 8184 Date: 1/7/95

Company: MURFIN DRILLING/CANYON ENERGY INC

Lease: LANGHOFER #1-2 Test No.: 3

County: SEWARD Sec.: 2 Twp.: 32S Rng.: 32W

SAMPLER RECOVERY

Gas		ML
Oil		ML
Mud		ML
Water	4000	ML
Other		ML
Pressure	200	PSI
TOTAL	4000	ML

SAMPLER ANALYSIS

Resistivity	0.082	ohms@	70	F
Chlorides		160,000		ppm.
Gravity			corrected @60F	

PIT MUD ANALYSIS

Chlorides	5000			
Resistivit		ohms@		F
Viscosity	40			
Mud Wt.	9.2			
Filtrate	8.6			
Other				

PIPE RECOVERY

TOP

Resistivit	0.199	ohms@	40	F
Chlorides		88,000		ppm.

MIDDLE

Resistivit	0.117	ohms@	48	F
Chlorides		145,000		ppm.

BOTTOM

Resistivit	0.082	ohms@	70	F
Chlorides		160,000		ppm.

TRILOBITE TESTING L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Test Ticket

№ 8184

Well Name & No. Laughafer #1-2 Test No. 3 Date 1-7-95

Company MPC & Canyon Zone Tested Swope?

Address Wichita KS Elevation 2787 KB

Co. Rep./Geo. Chuck S Cont. Murfin 21 Est. Ft. of Pay

Location: Sec. 2 Twp. 32S Rge. 31W Co. Seward State KS

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

Interval Tested 4852-4885 Drill Pipe Size 4-1/2 XH

Anchor Length 33 Top Choke — 1" Bottom Choke — ¾"

Top Packer Depth 4847 Hole Size — 7⅞" Rubber Size — 6¾"

Bottom Packer Depth 4852 Wt. Pipe I.D. — 2.7 Ft. Run

Total Depth 4885 Drill Collar — 2.25 Ft. Run 460 XH

Mud Wt. 9.2 lb / gal. Viscosity 40 Filtrate 8.6

Tool Open @ 2AM Initial Blow Fair blow bottom in 8 min

1/2 - no blow back

Final Blow Weak blow build to bottom in 18 min

FSI no blow back

Recovery — Total Feet 960 Feet of Gas in Pipe Flush Tool? NO

Rec. 120	Feet Of MW	%gas	%oil	50 %water	50 %mud
Rec.	Feet Of	%gas	%oil	%water	%mud
Rec. 840	Feet Of Salt WTR	%gas	%oil	100 %water	%mud
Rec.	Feet Of	%gas	%oil	%water	%mud
Rec.	Feet Of	%gas	%oil	%water	%mud

BHT 130 °F Gravity °API @ °F Corrected Gravity °API

RW .082 @ 70 °F Chlorides 160,000 ppm Recovery Chlorides 5,600 ppm System

(A) Initial Hydrostatic Mud	2395 PSI	AK1 Recorder No. 10333	Range 4050
(B) First Initial Flow Pressure	80 PSI	@ (depth) 4855	w/Clock No. 16067
(C) First Final Flow Pressure	276 PSI	AK1 Recorder No. 13251	Range 4550
(D) Initial Shut-In Pressure	1488 PSI	@ (depth) 4882	w/Clock No. 8698
(E) Second Initial Flow Pressure	345 PSI	AK1 Recorder No.	Range
(F) Second Final Flow Pressure	495 PSI	@ (depth)	w/Clock No.
(G) Final Shut-In Pressure	1488 PSI	Initial Opening 30	Test 600
(H) Final Hydrostatic Mud	2384 PSI	Initial Shut-In 60	Jars X 200
		Final Flow 60	Safety Joint X 50
		Final Shut-In 120	Straddle —
			Circ. Sub X n/c
			Sampler X 200
			Extra Packer —
			Other
			TOTAL PRICE $ 1050

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 Chas R. Ahlman

Our Representative R Callup

Printcraft Printers - Hays, KS

TRILOBITE TESTING, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name LANGHOFER #1-2 Test No. 4 Date 1/9/95

Company MURFIN DRILLING/CANYON ENERGY INC Zone MARMATON

Address WICHITA, KS Elevation 2787

Co. Rep./Geo. CHUCK SCHMALTZ Cont. MURFIN 21 Est. Ft. of Pay 5

Location: Sec. 2 Twp. 32S Rge. 32W Co. SEWARD State KS

Interval Tested 5023-5066 Drill Pipe Size 4.5" XH

Anchor Length 43 Wt. Pipe I.D. - 2.7 Ft. Run

Top Packer Depth 5018 Drill Collar – 2.25 Ft. Run 460

Bottom Packer Depth 5023 Mud Wt. 9.1 lb/Gal.

Total Depth 5066 Viscosity 46 Filtrate 7.8

Tool Open @ 9:45AM Initial Blow VERY WEAK SURFACE BLOW BUILD TO 2 INCHES.

Final Blow STRONG BLOW BUILD TO BOTTOM IN 13 MINUTES. FINAL SHUT IN: NO BLOW BACK.

Recovery - Total Feet 30 Flush Tool? NO

Rec. 675 Feet of GAS IN PIPE.

Rec. 30 Feet of MUDDY WATER & GAS CUT EMULSION.

Rec. Feet of 10% GAS; 5% WATER; 60% MUD. 25% EMULSION.

Rec. Feet of

Rec. Feet of

BHT 130 °F Gravity °API @ °F Corrected Gravity °API

RW @ °F Chlorides ppm Recovery Chlorides 5,000 ppm System

(A) Initial Hydrostatic Mud 2447.40 PSI AK1 Recorder No. 10333 Range 4050

(B) First Initial Flow Pressure 27.40 PSI @ (depth) 5026 w / Clock No. 16067

(C) First Final Flow Pressure 27.40 PSI AK1 Recorder No. 13251 Range 4550

(D) Initial Shut-in Pressure 697.50 PSI @ (depth) 5063 w / Clock No. 8698

(E) Second Initial Flow Pressure 34.60 PSI AK1 Recorder No. Range

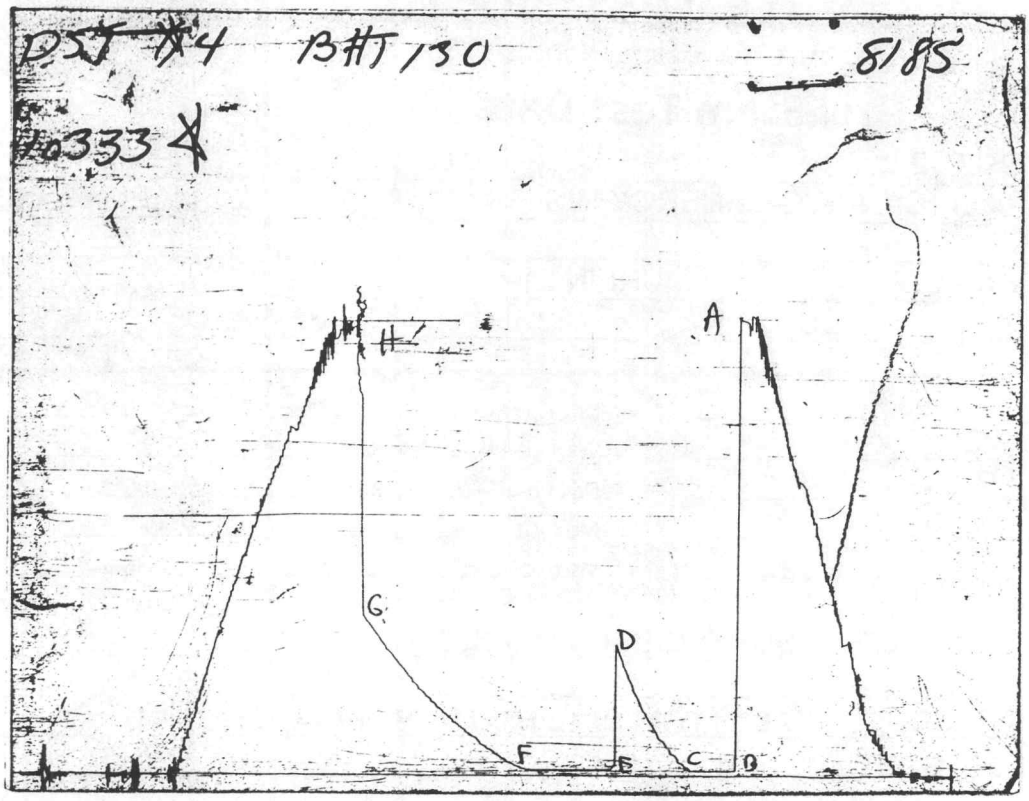
(F) Second Final Flow Pressure 34.60 PSI @ (depth) w / Clock No.

(G) Final Shut-in Pressure 848.60 PSI Initial Opening 30 Final Flow 60

(H) Final Hydrostatic Mud 2380.60 PSI Initial Shut-in 60 Final Shut-in 120

Our Representative ROBERT COLLINS

CHART PAGE



This is an actual photograph of an AK1 recorder chart
READINGS ARE FROM ALPINE ELECTRONIC RECORDER

	FIELD READING	OFFICE READING
(A) INITIAL HYDROSTATIC MUD	2427	2447.40
(B) FIRST INITIAL FLOW PRESSURE	30	27.40
(C) FIRST FINAL FLOW PRESSURE	30	27.40
(D) INITIAL CLOSED-IN PRESSURE	701	697.50
(E) SECOND INITIAL FLOW PRESSURE	40	34.60
(F) SECOND FINAL FLOW PRESSURE	40	34.60
(G) FINAL CLOSED-IN PRESSURE	843	848.60
(H) FINAL HYDROSTATIC MUD	2386	2380.60

FLUID SAMPLER DATA

Ticket No.: 8185 Date: 1/9/95

Company: MURFIN DRILLING/CANYON ENERGY INC

Lease: LANGHOFER #1-2 Test No.: 4

County: SEWARD Sec.: 2 Twp.: 32S Rng.: 32W

SAMPLER RECOVERY

Gas	4000 3.6 CF	ML
Oil	TRACE	ML
Mud	TRACE	ML
Water	TRACE	ML
Other		ML
Pressure	750	PSI
TOTAL	4000	ML

SAMPLER ANALYSIS

Resistivity ohms@ F

Chlorides ppm.

Gravity corrected @60F

PIT MUD ANALYSIS

Chlorides	5000		
Resistivit		ohms@	F
Viscosity	46		
Mud Wt.	9.1		
Filtrate	7.8		
Other			

PIPE RECOVERY

TOP

Resistivit ohms@ F

Chlorides ppm.

MIDDLE

Resistivit ohms@ F

Chlorides ppm.

BOTTOM

Resistivit ohms@ F

Chlorides ppm.

TRILOBITE TESTING L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Test Ticket

№ 8185

Well Name & No. Langhofer #1-2 Test No. 4 Date 1-9-95

Company MDC & Canyon Zone Tested Marmaton

Address Wichita KS Elevation 2787 KB

Co. Rep./Geo. Chuck S Cont. Murfin 21 Est. Ft. of Pay 5

Location: Sec. 2 Twp. 32S Rge. 31W Co. Seward State KS

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

Interval Tested 5023-5066 Drill Pipe Size 4-1/2 XH

Anchor Length 43 Top Choke — 1" ____ Bottom Choke — 3/4" ____

Top Packer Depth 5018 Hole Size — 7 7/8" ____ Rubber Size — 6 3/4" ____

Bottom Packer Depth 5023 Wt. Pipe I.D. — 2.7 Ft. Run ____

Total Depth 5066 Drill Collar — 2.25 Ft. Run 460 XH

Mud Wt. 9.1+ lb/gal. Viscosity 46 Filtrate 7.8

Tool Open @ 8:45 AM Initial Blow Very weak surface blow build to 2 in

Final Blow Strong blow build to bottom in 13 min
FSI - no blow back

Recovery — Total Feet 30 Feet of Gas in Pipe 675 Flush Tool? no

Rec.	Feet Of		%gas	%oil	%water	%mud
30	MW & GCEM		10		5	
	EM 25%					

BHT 130 °F Gravity ____ °API @ ____ °F Corrected Gravity ____ °API

RW ____ @ ____ °F Chlorides ____ ppm Recovery Chlorides 5,000 ppm System

(A) Initial Hydrostatic Mud 2427 PSI AK1 Recorder No. 10333 Range 4050

(B) First Initial Flow Pressure 30 PSI @ (depth) 5026 w/Clock No. 16067

(C) First Final Flow Pressure 30 PSI AK1 Recorder No. 13251 Range 4550

(D) Initial Shut-In Pressure 701 PSI @ (depth) 5063 w/Clock No. 8698

(E) Second Initial Flow Pressure 40 PSI AK1 Recorder No. ____ Range ____

(F) Second Final Flow Pressure 40 PSI @ (depth) ____ w/Clock No. ____

(G) Final Shut-In Pressure 843 PSI Initial Opening 30 Test 700

(H) Final Hydrostatic Mud 2386 PSI Initial Shut-In 60 Jars X 200

Final Flow 60 Safety Joint X 50

Final Shut-In 120 Straddle —

Circ. Sub X n/c

Sampler X 200

Extra Packer —

Other ____

TOTAL PRICE $ 1150

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 Chas. L. Sjhmal[illegible]

Representative K. Collins

Printcraft Printers - Hays, KS

TRILOBITE TESTING, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name LANGHOFER #1-2 Test No. 5 Date 1/11/95

Company MURFIN DRILLING/CANYON ENERGY INC Zone MORROW

Address WICHITA, KS Elevation 2787

Co. Rep./Geo. CHUCK SCHMALTZ Cont. MURFIN 21 Est. Ft. of Pay 5

Location: Sec. 2 Twp. 32S Rge. 32W Co. SEWARD State KS

Interval Tested 5482-5512 Drill Pipe Size 4.5" XH

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

Top Packer Depth 5477 Drill Collar – 2.25 Ft. Run 460

Bottom Packer Depth 5482 Mud Wt. 9.0 lb/Gal.

Total Depth 5512 Viscosity 40 Filtrate 9.4

Tool Open @ 2:15PM Initial Blow WEAK SURFACE BLOW BUILD TO 4-1/2 INCH.

Final Blow WEAK SURFACE BLOW BUILD TO 3 INCHES.

Recovery - Total Feet 30 Flush Tool? NO

Rec. 90 Feet of GAS IN PIPE.

Rec. 30 Feet of SLIGHT GAS CUT MUD. 10% GAS; 90% MUD.

Rec. Feet of

Rec. Feet of

Rec. Feet of

BHT 132 °F Gravity °API @ °F Corrected Gravity °API

RW @ °F Chlorides ppm Recovery Chlorides 4,500 ppm System

(A) Initial Hydrostatic Mud 2704.50 PSI AK1 Recorder No. 10333 Range 4050

(B) First Initial Flow Pressure 41.40 PSI @ (depth) 5485 w / Clock No. 16067

(C) First Final Flow Pressure 35.70 PSI AK1 Recorder No. 13251 Range 4550

(D) Initial Shut-in Pressure 156.70 PSI @ (depth) 5509 w / Clock No. 8698

(E) Second Initial Flow Pressure 47.20 PSI AK1 Recorder No. Range

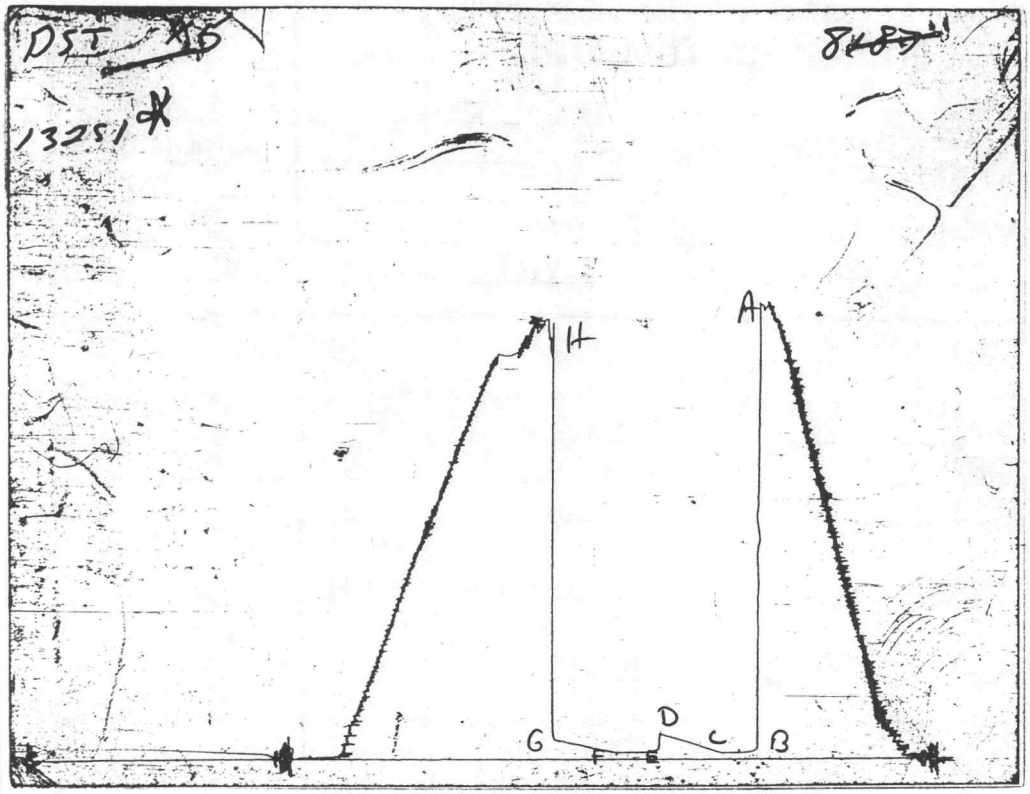
(F) Second Final Flow Pressure 41.40 PSI @ (depth) w / Clock No.

(G) Final Shut-in Pressure 122.10 PSI Initial Opening 30 Final Flow 30

(H) Final Hydrostatic Mud 2584.10 PSI Initial Shut-in 45 Final Shut-in 45

Our Representative ROBERT COLLINS

CHART PAGE



This is an actual photograph of an AK1 recorder chart
READINGS ARE FROM ALPINE ELECTRONIC RECORDER

	FIELD READING	OFFICE READING
(A) INITIAL HYDROSTATIC MUD	2702	2704.50
(B) FIRST INITIAL FLOW PRESSURE	57	41.40
(C) FIRST FINAL FLOW PRESSURE	57	35.70
(D) INITIAL CLOSED-IN PRESSURE	161	156.70
(E) SECOND INITIAL FLOW PRESSURE	57	47.20
(F) SECOND FINAL FLOW PRESSURE	57	41.40
(G) FINAL CLOSED-IN PRESSURE	115	122.10
(H) FINAL HYDROSTATIC MUD	2611	2584.10

FLUID SAMPLER DATA

Ticket No.: 8187 Date: 1/11/95

Company: MURFIN DRILLING/CANYON ENERGY INC

Lease: LANGHOFER #1-2 Test No.: 5

County: SEWARD Sec.: 2 Twp.: 32S Rng.: 32W

SAMPLER RECOVERY

Gas	.01 CF	ML
Oil		ML
Mud	3900	ML
Water		ML
Other		ML
Pressure	50	PSI
TOTAL	4000	ML

SAMPLER ANALYSIS

Resistivity ohms@ F

Chlorides ppm.

Gravity corrected @60F

PIT MUD ANALYSIS

Chlorides 4500

Resistivit ohms@ F

Viscosity 40

Mud Wt. 9.0

Filtrate 9.4

Other

PIPE RECOVERY

TOP

Resistivit ohms@ F

Chlorides ppm.

MIDDLE

Resistivit ohms@ F

Chlorides ppm.

BOTTOM

Resistivit ohms@ F

Chlorides ppm.

TRILOBITE TESTING L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Test Ticket

№ 8187

Well Name & No. Langhofer 1-2 Test No. 5 Date 1-11-95

Company MDC a Conyon Zone Tested Morrow

Address Wichita KS Elevation 2787 KB

Co. Rep./Geo. Chuck Schmaltz Cont. Murfin 21 Est. Ft. of Pay 5

Location: Sec. 2 Twp. 32s Rge. 31w Co. Seward State Ks

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

Interval Tested 5482-5512 Drill Pipe Size 4½ XH

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

Top Packer Depth 5477 Hole Size — 7⅞" ____ Rubber Size — 6¾" ____

Bottom Packer Depth 5482 Wt. Pipe I.D. — 2.7 Ft. Run ____

Total Depth 5512 Drill Collar — 2.25 Ft. Run 460 XH

Mud Wt. 9.0 lb / gal. Viscosity 40 Filtrate 9.4

Tool Open @ 2:15PM Initial Blow Weak surface blow build to 4-1/2 in

Final Blow Weak surface blow build to 3 in

Recovery — Total Feet 30 Feet of Gas in Pipe 90 Flush Tool? no

Rec. ____	Feet Of ____	%gas	%oil	%water	%mud
Rec. 30	Feet Of SLI GAS CM	10 %gas	%oil	%water 90	%mud
Rec. ____	Feet Of ____	%gas	%oil	%water	%mud
Rec. ____	Feet Of ____	%gas	%oil	%water	%mud
Rec. ____	Feet Of ____	%gas	%oil	%water	%mud

BHT 132 °F Gravity ____ °API @ ____ °F Corrected Gravity ____ °API

RW ____ @ ____ °F Chlorides ____ ppm Recovery Chlorides 4500 ppm System

(A) Initial Hydrostatic Mud	2702 PSI	AK1 Recorder No.	10333	Range	4050
(B) First Initial Flow Pressure	57 PSI	@ (depth)	5485	w/Clock No.	16067
(C) First Final Flow Pressure	57 PSI	AK1 Recorder No.	13251	Range	4550
(D) Initial Shut-In Pressure	161 PSI	@ (depth)	5509	w/Clock No.	8698
(E) Second Initial Flow Pressure	57 PSI	AK1 Recorder No.	____	Range	____
(F) Second Final Flow Pressure	57 PSI	@ (depth)	____	w/Clock No.	____
(G) Final Shut-In Pressure	115 PSI	Initial Opening	30	Test	700
(H) Final Hydrostatic Mud	2611 PSI	Initial Shut-In	45	Jars	x 200
		Final Flow	30	Safety Joint	x 50
		Final Shut-In	45	Straddle	—
				Circ. Sub	x n/c
				Sampler	x 200
				Extra Packer	—
				Other	____
				TOTAL PRICE $	1150

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 Chuck Schmaltz

Our Representative R Callen

Printcraft Printers - Hays, KS

TRILOBITE TESTING, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name LANGHOFER #1-2 Test No. 6 Date 1/12/95

Company MURFIN DRILLING/CANYON ENERGY INC Zone MORROW

Address WICHITA, KS Elevation 2787

Co. Rep./Geo. CHUCK SCHMALTZ Cont. MURFIN 21 Est. Ft. of Pay 5

Location: Sec. 2 Twp. 32S Rge. 32W Co. SEWARD State KS

Interval Tested 5499-5540 Drill Pipe Size 4.5" XH

Anchor Length 41 Wt. Pipe I.D. - 2.7 Ft. Run

Top Packer Depth 5494 Drill Collar – 2.25 Ft. Run 460

Bottom Packer Depth 5499 Mud Wt. 9.2 lb/Gal.

Total Depth 5540 Viscosity 52 Filtrate 8.2

Tool Open @ 7:35AM Initial Blow STRONG BLOW BOTTOM IN 30 SECONDS. INITIAL SHUT IN: NO BLOW BACK.

Final Blow STRONG BLOW BOTTOM AS TOOL OPENED. FINAL SHUT IN: NO BLOW BACK.

Recovery - Total Feet 260 Flush Tool? NO

Rec. 1200 Feet of GAS IN PIPE.

Rec. 60 Feet of SLIGHT OIL GAS CUT WATERY MUD.

Rec. Feet of 20% GAS; 5% OIL; 15% WATER; 60% MUD.

Rec. 200 Feet of GAS CUT WATERY MUD. 35% GAS; 30% WTR; 35% MUD.

Rec. Feet of WITH SCUM OIL.

BHT 132 °F Gravity °API @ °F Corrected Gravity °API

RW 0.332 @ 55 °F Chlorides 35,000 ppm Recovery Chlorides 4,000 ppm System

(A) Initial Hydrostatic Mud 2696.90 PSI AK1 Recorder No. 10333 Range 4050

(B) First Initial Flow Pressure 47.80 PSI @ (depth) 5503 w / Clock No. 8698

(C) First Final Flow Pressure 52.80 PSI AK1 Recorder No. 13251 Range 4550

(D) Initial Shut-in Pressure 1305.30 PSI @ (depth) 5537 w / Clock No. 16067

(E) Second Initial Flow Pressure 87.40 PSI AK1 Recorder No. Range

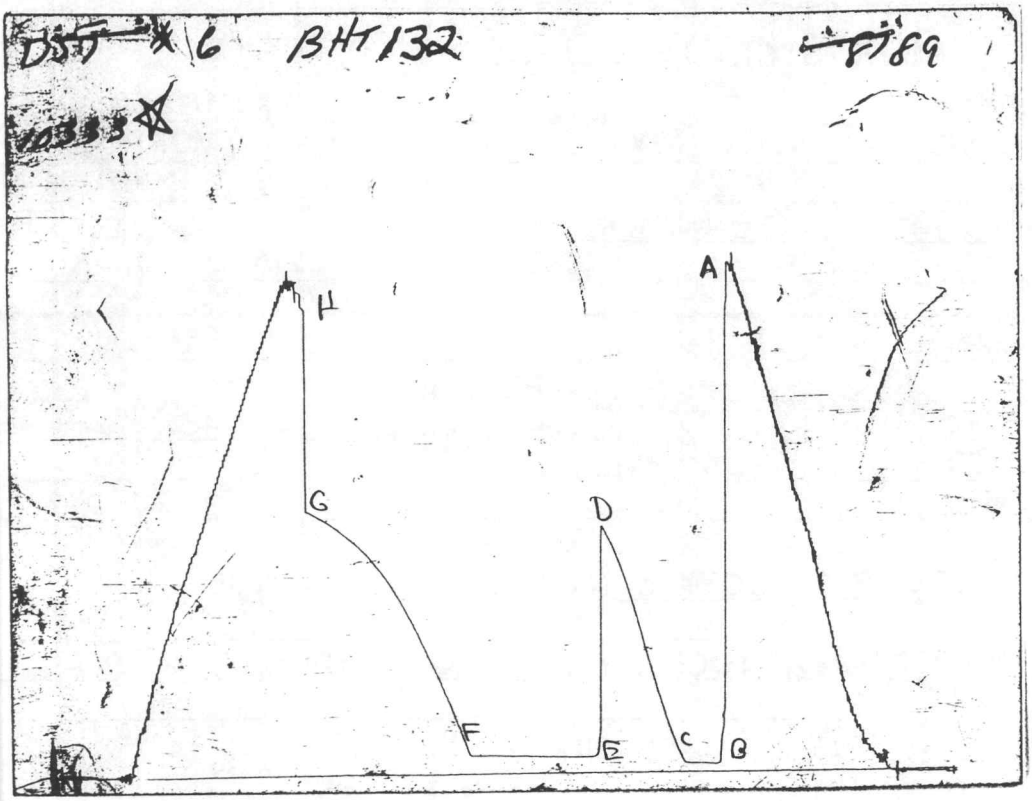
(F) Second Final Flow Pressure 100.60 PSI @ (depth) w / Clock No.

(G) Final Shut-in Pressure 1393.40 PSI Initial Opening 30 Final Flow 90

(H) Final Hydrostatic Mud 2553.10 PSI Initial Shut-in 60 Final Shut-in 120

Our Representative ROBERT COLLINS

CHART PAGE



This is an actual photograph of an AK1 recorder chart
READINGS ARE FROM ALPINE ELECTRONIC RECORDER

	FIELD READING	OFFICE READING
(A) INITIAL HYDROSTATIC MUD	2702	2696.90
(B) FIRST INITIAL FLOW PRESSURE	50	47.80
(C) FIRST FINAL FLOW PRESSURE	60	52.80
(D) INITIAL CLOSED-IN PRESSURE	1293	1305.30
(E) SECOND INITIAL FLOW PRESSURE	81	87.40
(F) SECOND FINAL FLOW PRESSURE	91	100.60
(G) FINAL CLOSED-IN PRESSURE	1385	1393.40
(H) FINAL HYDROSTATIC MUD	2600	2553.10

FLUID SAMPLER DATA

Ticket No.: 8189 Date: 1/12/95

Company: MURFIN DRILLING/CANYON ENERGY INC

Lease: LANGHOFER #1-2 Test No.: 6

County: SEWARD Sec.: 2 Twp.: 32S Rng.: 32W

SAMPLER RECOVERY

Gas	6.6 CF	3000	ML
Oil	TRACE		ML
Mud	500		ML
Water	500		ML
Other			ML
Pressure	1200		PSI
TOTAL	4000		ML

SAMPLER ANALYSIS

Resistivity	0.332	ohms@	55	F
Chlorides		35,000		ppm.
Gravity			corrected @60F	

PIT MUD ANALYSIS

Chlorides	4000		
Resistivit		ohms@	F
Viscosity	52		
Mud Wt.	9.2		
Filtrate	8.2		
Other			

PIPE RECOVERY

TOP

Resistivit		ohms@	F
Chlorides			ppm.

MIDDLE

Resistivit	0.304	ohms@	54	F
Chlorides		28,000		ppm.

BOTTOM

Resistivit	ohms@	F
Chlorides		ppm.

TRILOBITE TESTING L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Test Ticket

№ 8189

Well Name & No. Langhofer 1-2 Test No. 6 Date 1-12-95

Company MDC a Canyon Zone Tested Morrow

Address Wichita Ks Elevation 2787

Co. Rep./Geo Chuck Schmaltz Cont. Murfin 21 Est. Ft. of Pay 5

Location: Sec. 2 Twp. 32S Rge. 31W Co. Seward State KS

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

Interval Tested 5499-5540 Drill Pipe Size 4-1/2 XH

Anchor Length 41 Top Choke — 1" ___ Bottom Choke — ¾" ___

Top Packer Depth 5494 Hole Size — 7⅞" ___ Rubber Size — 6¾" ___

Bottom Packer Depth 5499 Wt. Pipe I.D. — 2.7 Ft. Run ___

Total Depth 5540 Drill Collar — 2.25 Ft. Run 460 ft

Mud Wt. 9.2 lb/gal. Viscosity 52 Filtrate 8.2

Tool Open @ 7:35 Am Initial Blow Strong blow bottom in 30 sec

ISI - no blow back

Final Blow Strong blow bottom as tool opened

FSI - no blow back

Recovery — Total Feet 260 Feet of Gas in Pipe 1200 Flush Tool? no

Rec.	Feet Of	%gas	%oil	%water	%mud
60	SOGCWM	20	5	15	60
200	GCWTRM	35		30	35
	w/scum oil				

BHT 132 °F Gravity ___ °API @ ___ °F Corrected Gravity ___ °API

RW .332 @ 55 °F Chlorides 35,000 ppm Recovery Chlorides 4000 ppm System

(A) Initial Hydrostatic Mud 2702 PSI AK1 Recorder No. 10333 Range 4050

(B) First Initial Flow Pressure 50 PSI @ (depth) 5503 w/Clock No. 8698

(C) First Final Flow Pressure 60 PSI AK1 Recorder No. 13251 Range 4550

(D) Initial Shut-In Pressure 1293 PSI @ (depth) 5537 w/Clock No. 16067

(E) Second Initial Flow Pressure 81 PSI AK1 Recorder No. ___ Range ___

(F) Second Final Flow Pressure 91 PSI @ (depth) ___ w/Clock No. ___

(G) Final Shut-In Pressure 1385 PSI Initial Opening 30 Test 700

(H) Final Hydrostatic Mud 2600 PSI Initial Shut-In 60 Jars X 200

Final Flow 90 Safety Joint X 50

Final Shut-In 120 Straddle —

Circ. Sub X n/c

Sampler X 200

Extra Packer —

Other ___

TOTAL PRICE $ 1150

Approved By Chuck Schmaltz

Our Representative R Collins

Printcraft Printers - Hays, KS

TRILOBITE TESTING, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name LANGHOFER 1-2 Test No. 7 Date 1/13/95

Company MURFIN DRILLING/CANYON ENERGY INC. Zone CHESTER

Address WICHITA, KS Elevation 2787

Co. Rep./Geo. CHUCK SCHMALTZ Cont. MURFIN 21 Est. Ft. of Pay 5

Location: Sec. 2 Twp. 32S Rge. 31W Co. SEWARD State KS

Interval Tested 5715-5733 Drill Pipe Size 4.5" XH

Anchor Length 18 Wt. Pipe I.D. - 2.7 Ft. Run

Top Packer Depth 5710 Drill Collar – 2.25 Ft. Run 460

Bottom Packer Depth 5715 Mud Wt. 9.2 lb/Gal.

Total Depth 5733 Viscosity 50 Filtrate 7.0

Tool Open @ Initial Blow BRIDGE AT 5250. TRIP OUT WITH TOOL TO CONDITION HOLE.

Final Blow

Recovery - Total Feet Flush Tool? NO

Rec. Feet of

Rec. Feet of

Rec. Feet of

Rec. Feet of

Rec. Feet of

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

RW @ °F Chlorides ppm Recovery Chlorides ppm System

(A) Initial Hydrostatic Mud PSI AK1 Recorder No. 10333 Range 4050

(B) First Initial Flow Pressure PSI @ (depth) 5718 w / Clock No. 16067

(C) First Final Flow Pressure PSI AK1 Recorder No. 13551 Range 4550

(D) Initial Shut-in Pressure PSI @ (depth) 5730 w / Clock No. 8698

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

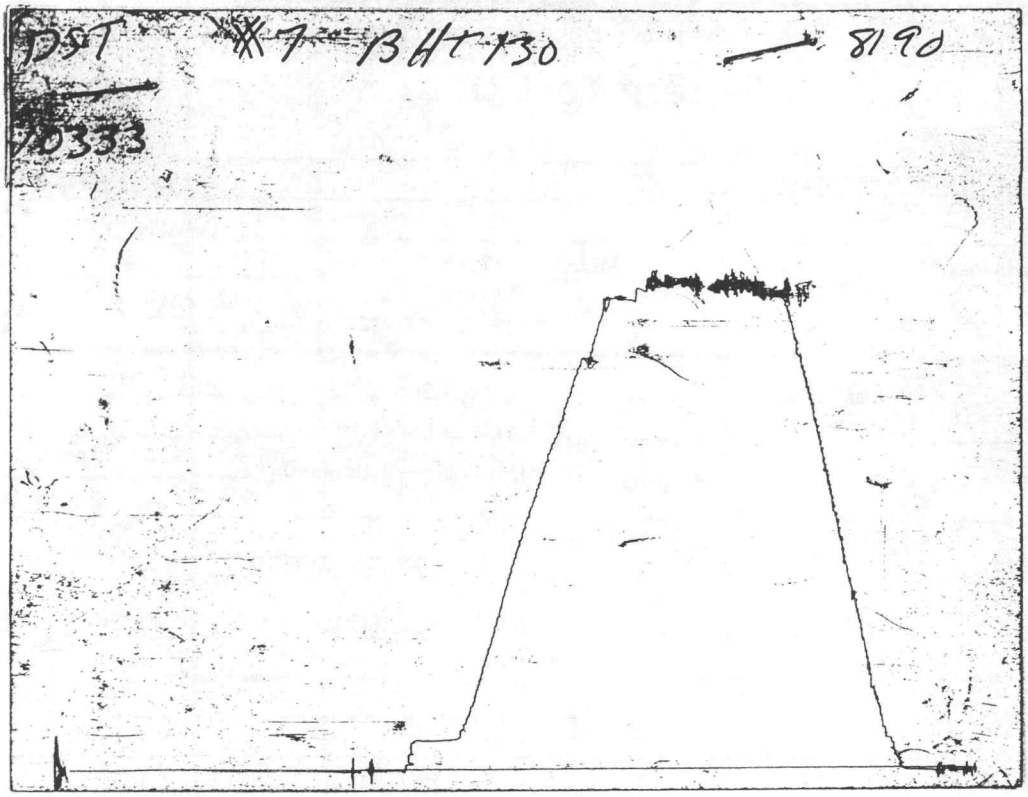
(F) Second Final Flow Pressure PSI @ (depth) w / Clock No.

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

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

Our Representative ROBERT COLLINS

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		

TRILOBITE TESTING L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Test Ticket

№ 8190

Well Name & No. Langhofer 1-2 Test No. 7 Date 1-13-93

Company MDC & Conyon Zone Tested Chester

Address Wich. Ks Elevation 2787

Co. Rep./Geo. Chuck Schmaltz Cont. Murfin 21 Est. Ft. of Pay 5

Location: Sec. 2 Twp. 32S Rge. 31W Co. Seward State Ks

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

Interval Tested 5715-5733 Drill Pipe Size 4½ XH

Anchor Length 18 Top Choke — 1" ____ Bottom Choke — ¾" ____

Top Packer Depth 5710 Hole Size — 7⅞" ____ Rubber Size — 6¾" ____

Bottom Packer Depth 5715 Wt. Pipe I.D. — 2.7 Ft. Run ____

Total Depth 5733 Drill Collar — 2.25 Ft. Run 460 XH

Mud Wt. 9.2 lb / gal. Viscosity 50 Filtrate 7.0

Tool Open @ ____ Initial Blow Bridge @ 5250

Trip out w/ Tool to condition Hole

Final Blow ____

Recovery — Total Feet ____ Feet of Gas in Pipe ____ Flush Tool? ✓

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
Rec. ____	Feet Of ____	%gas	%oil	%water	%mud

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

RW ____ @ ____ °F Chlorides ____ ppm Recovery Chlorides 3,000 ppm System

(A) Initial Hydrostatic Mud ____ PSI	AK1 Recorder No. 10333	Range 4050	
(B) First Initial Flow Pressure ____ PSI	@ (depth) 5718	w/Clock No. 16067	
(C) First Final Flow Pressure ____ PSI	AK1 Recorder No. 13251	Range 4550	
(D) Initial Shut-In Pressure ____ PSI	@ (depth) 5730	w/Clock No. 8698	
(E) Second Initial Flow Pressure ____ PSI	AK1 Recorder No. ____	Range ____	
(F) Second Final Flow Pressure ____ PSI	@ (depth) ____	w/Clock No. ____	
(G) Final Shut-In Pressure ____ PSI	Initial Opening ____	Test 500	
(H) Final Hydrostatic Mud ____ PSI	Initial Shut-In ____	Jars X 200	
	Final Flow ____	Safety Joint X 50	
	Final Shut-In ____	Straddle —	
		Circ. Sub X	
		Sampler X	
		Extra Packer —	
		Other ____	
		TOTAL PRICE $ 750	

Approved By ____

Our Representative R Callis

Printcraft Printers - Hays, KS

TRILOBITE TESTING, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name LANGHOFER 1-2 Test No. 8 Date 1/14/95

Company MURFIN DRILLING/CANYON ENERGY INC. Zone CHESTER

Address WICHITA, KS Elevation 2787

Co. Rep./Geo. CHUCK SCHMALTZ Cont. MURFIN 21 Est. Ft. of Pay

Location: Sec. 2 Twp. 32S Rge. 31W Co. SEWARD State KS

Interval Tested 5715-5733 Drill Pipe Size 4.5" XH

Anchor Length 18 Wt. Pipe I.D. - 2.7 Ft. Run

Top Packer Depth 5710 Drill Collar – 2.25 Ft. Run 460

Bottom Packer Depth 5715 Mud Wt. 9.1 lb/Gal.

Total Depth 5733 Viscosity 57 Filtrate 7.0

Tool Open @ 9:10AM Initial Blow FAIR BLOW TO WEAK BLOW AT 7-1/2 INCHES.

Final Blow VERY WEAK SURFACE BLOW, BUILT TO ONE INCH.

Recovery - Total Feet 10 Flush Tool? NO

Rec. 10 Feet of SLIGHT OIL CUT MUD. 5% OIL; 95% MUD.

Rec. Feet of

Rec. Feet of

Rec. Feet of

Rec. Feet of

BHT 135 °F Gravity °API @ °F Corrected Gravity °API

RW @ °F Chlorides ppm Recovery Chlorides 3,000 ppm System

(A) Initial Hydrostatic Mud 2788.60 PSI AK1 Recorder No. 10333 Range 4050

(B) First Initial Flow Pressure 60.70 PSI @ (depth) 5718 w / Clock No. 16067

(C) First Final Flow Pressure 54.70 PSI AK1 Recorder No. 13251 Range 4550

(D) Initial Shut-in Pressure 62.80 PSI @ (depth) 5730 w / Clock No. 8698

(E) Second Initial Flow Pressure 51.60 PSI AK1 Recorder No. Range

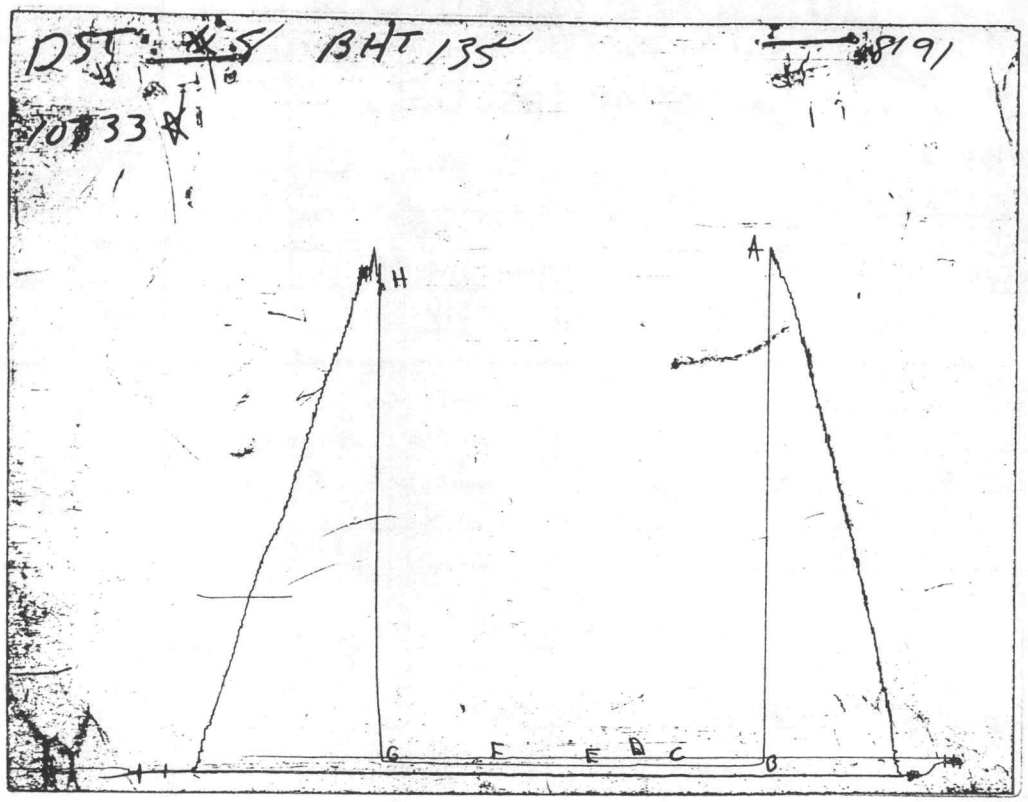
(F) Second Final Flow Pressure 59.70 PSI @ (depth) w / Clock No.

(G) Final Shut-in Pressure 72.90 PSI Initial Opening 30 Final Flow 60

(H) Final Hydrostatic Mud 2682.90 PSI Initial Shut-in 60 Final Shut-in 120

Our Representative ROBERT COLLINS

CHART PAGE



This is an actual photograph of an AK1 recorder chart

	FIELD READING	OFFICE READING
(A) INITIAL HYDROSTATIC MUD	2804	2788.60
(B) FIRST INITIAL FLOW PRESSURE	60	60.70
(C) FIRST FINAL FLOW PRESSURE	50	54.70
(D) INITIAL CLOSED-IN PRESSURE	60	62.80
(E) SECOND INITIAL FLOW PRESSURE	50	51.60
(F) SECOND FINAL FLOW PRESSURE	50	59.70
(G) FINAL CLOSED-IN PRESSURE	60	72.90
(H) FINAL HYDROSTATIC MUD	2702	2682.90

FLUID SAMPLER DATA

Ticket No.: 8191 Date: 1/14/95

Company: MURFIN DRILLING/CANYON ENERGY INC.

Lease: LANGHOFER 1-2 Test No.: 8

County: SEWARD Sec.: 2 Twp.: 32S Rng.: 31W

SAMPLER RECOVERY

Gas		ML
Oil	50	ML
Mud	3950	ML
Water		ML
Other		ML
Pressure	50	PSI
TOTAL	4000	ML

SAMPLER ANALYSIS

Resistivity ohms@ F

Chlorides ppm.

Gravity corrected @60F

PIT MUD ANALYSIS

Chlorides	3000		
Resistivit		ohms@	F
Viscosity	57		
Mud Wt.	9.1		
Filtrate	7.0		
Other			

PIPE RECOVERY

TOP

Resistivit ohms@ F

Chlorides ppm.

MIDDLE

Resistivit ohms@ F

Chlorides ppm.

BOTTOM

Resistivit ohms@ F

Chlorides ppm.

TRILOBITE TESTING L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Test Ticket

№ 8191

Well Name & No. Langhofer 1-2 Test No. 8 Date 1-14-95

Company MOC a Conyon Zone Tested Chester

Address Wichita KS Elevation 2787 KB

Co. Rep./Geo. Chuck Schmalte Cont. Murfin 21 Est. Ft. of Pay

Location: Sec. 2 Twp. 32S Rge. 31W Co. Seward State KS

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

Interval Tested 5715-5733 Drill Pipe Size 4½ XH

Anchor Length 18 Top Choke — 1" Bottom Choke — ¾"

Top Packer Depth 5710 Hole Size — 7⅞" Rubber Size — 6¾"

Bottom Packer Depth 5715 Wt. Pipe I.D. — 2.7 Ft. Run

Total Depth 5733 Drill Collar — 2.25 Ft. Run 460 XH

Mud Wt. 9.1 lb / gal. Viscosity 57 Filtrate 7.0

Tool Open @ 9:10 pm Initial Blow Fair blow ~~to~~ to weak blow 2 7½

Final Blow Very weak surface blow build to 1

Recovery — Total Feet 10 Feet of Gas in Pipe Flush Tool? NO

Rec.	Feet Of	%gas	%oil	%water	%mud
Rec. 10	Feet Of SLO&WCM	%gas	5 %oil	%water	95 %mud
Rec.	Feet Of	%gas	%oil	%water	%mud
Rec.	Feet Of	%gas	%oil	%water	%mud
Rec.	Feet Of	%gas	%oil	%water	%mud

BHT 135 °F Gravity °API @ °F Corrected Gravity °API

RW @ °F Chlorides ppm Recovery Chlorides 3,600 ppm System

(A) Initial Hydrostatic Mud	2804 PSI	AK1 Recorder No.	10333	Range	4050
(B) First Initial Flow Pressure	60 PSI	@ (depth)	5718	w/Clock No.	16067
(C) First Final Flow Pressure	50 PSI	AK1 Recorder No.	13251	Range	4550
(D) Initial Shut-In Pressure	60 PSI	@ (depth)	5730	w/Clock No.	8698
(E) Second Initial Flow Pressure	50 PSI	AK1 Recorder No.		Range	
(F) Second Final Flow Pressure	50 PSI	@ (depth)		w/Clock No.	
(G) Final Shut-In Pressure	60 PSI	Initial Opening	30	Test	700
(H) Final Hydrostatic Mud	2702 PSI	Initial Shut-In	60	Jars	X 200
		Final Flow	60	Safety Joint	X 50
		Final Shut-In	120	Straddle	—
				Circ. Sub	X N/C
				Sampler	X 200
				Extra Packer	—
				Other	
				TOTAL PRICE $	1150

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 K Callis

Printcraft Printers - Hays, KS

TRILOBITE TESTING, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name LANGHOFER 1-2 Test No. 9 Date 1/15/95

Company MURFIN DRILLING/CANYON ENERGY INC. Zone ST. LOUIS

Address WICHITA, KS Elevation 2787

Co. Rep./Geo. CHUCK SCHMALTZ Cont. MURFIN 21 Est. Ft. of Pay 10

Location: Sec. 2 Twp. 32S Rge. 31W Co. SEWARD State KS

Interval Tested 5880-5916 Drill Pipe Size 4.5" XH

Anchor Length 36 Wt. Pipe I.D. - 2.7 Ft. Run

Top Packer Depth 5875 Drill Collar – 2.25 Ft. Run 420

Bottom Packer Depth 5880 Mud Wt. 9.2 lb/Gal.

Total Depth 5916 Viscosity 44 Filtrate 6.6

Tool Open @ 10:15PM Initial Blow STONG BLOW BOTTOM IN 30 SECONDS.

Final Blow STRONG BLOW BOTTOM IN 1 MINUTES. GAS TO SURFACE IN 45 MINUTES.

Recovery - Total Feet 820 Flush Tool? NO

Rec. 180 Feet of HEAVY MUD CUT OIL & GAS. 20% GAS; 30% OIL; 50% MUD.

Rec. 640 Feet of SALT WATER. 100% WATER.

Rec. Feet of

Rec. Feet of

Rec. Feet of

BHT 133 °F Gravity °API @ °F Corrected Gravity °API

RW 0.092 @ 69 °F Chlorides 120,000 ppm Recovery Chlorides 4,000 ppm System

(A) Initial Hydrostatic Mud 2900.90 PSI AK1 Recorder No. 13251 Range 4550

(B) First Initial Flow Pressure 130.80 PSI @ (depth) 5883 w / Clock No. 27475

(C) First Final Flow Pressure 163.10 PSI AK1 Recorder No. 13255 Range 6300

(D) Initial Shut-in Pressure 1625.00 PSI @ (depth) 5913 w / Clock No. 8698

(E) Second Initial Flow Pressure 261.50 PSI AK1 Recorder No. Range

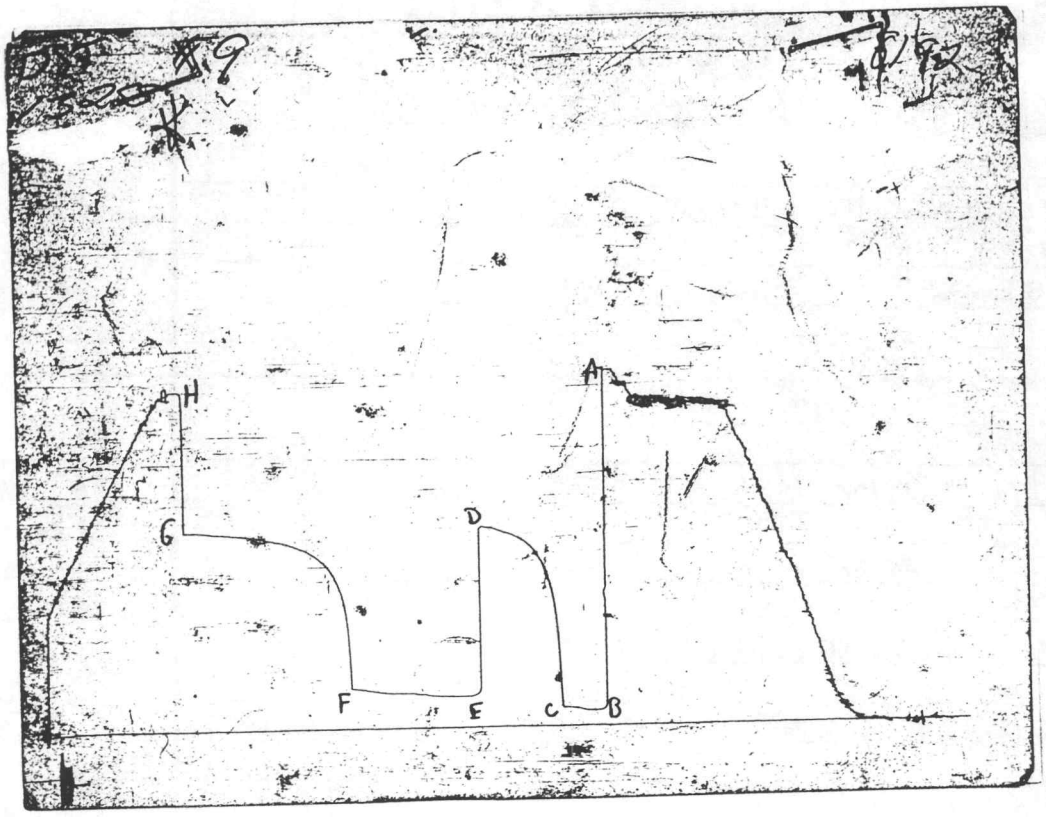
(F) Second Final Flow Pressure 343.10 PSI @ (depth) w / Clock No.

(G) Final Shut-in Pressure 1612.50 PSI Initial Opening 30 Final Flow 90

(H) Final Hydrostatic Mud 2750.00 PSI Initial Shut-in 60 Final Shut-in 120

Our Representative ROBERT COLLINS

CHART PAGE



This is an actual photograph of an AK1 recorder chart

	FIELD READING	OFFICE READING
(A) INITIAL HYDROSTATIC MUD	2864	2900.90
(B) FIRST INITIAL FLOW PRESSURE	123	130.80
(C) FIRST FINAL FLOW PRESSURE	138	163.10
(D) INITIAL CLOSED-IN PRESSURE	1593	1625.00
(E) SECOND INITIAL FLOW PRESSURE	246	261.50
(F) SECOND FINAL FLOW PRESSURE	307	343.10
(G) FINAL CLOSED-IN PRESSURE	1593	1612.50
(H) FINAL HYDROSTATIC MUD	2738	2750.00

FLUID SAMPLER DATA

Ticket No.: 8192 Date: 1/15/95

Company: MURFIN DRILLING/CANYON ENERGY INC.

Lease: LANGHOFER 1-2 Test No.: 9

County: SEWARD Sec.: 2 Twp.: 32S Rng.: 31W

SAMPLER RECOVERY

Gas		ML
Oil		ML
Mud		ML
Water	4000	ML
Other		ML
Pressure		PSI
TOTAL	4000	ML

SAMPLER ANALYSIS

Resistivity	0.092	ohms@	69	F
Chlorides		120,000		ppm.
Gravity			corrected @60F	

PIT MUD ANALYSIS

Chlorides	4000		
Resistivit		ohms@	F
Viscosity	44		
Mud Wt.	9.2		
Filtrate	6.6		
Other			

PIPE RECOVERY

TOP

Resistivit	0.145	ohms@	57	F
Chlorides		80,000		ppm.

MIDDLE

Resistivit	0.097	ohms@	70	F
Chlorides		100,000		ppm.

BOTTOM

Resistivit	0.092	ohms@	69	F
Chlorides		120,000		ppm.

GAS VOLUME REPORT

MURFIN DRILLING/CANYON ENERGY INC.

LANGHOFER 1-2 DST # 9

MIN	INS. WATER PSIG	ORIFICE	MCF/D	MIN	INS. WATER ~~PSIG~~	ORIFICE	MCF/D
				50	8	0.25	4.76
				55	14	0.25	6.33
				60	20	0.25	7.51
				70	32	0.25	9.5
				80	38	0.25	10.4
				90	40	0.25	10.6

Remarks: GAS TO SURFACE IN 45 MINUTES. GAS WILL BURN.