15-051-25025

TRILOBITE TESTING L.L.C.

5-11s-20w

OPERATOR : Murfin Drilling Co., Inc DATE 4-11-00
WELL NAME: Sterling-Fisher #1-5 KB 2060.00 ft TICKET NO: 12948 DST #1
LOCATION : 5-11s-20w Ellis co KS GR 2055.00 ft FORMATION: Topeka
INTERVAL : 3112.00 To 3128.00 ft TD 3128.00 ft TEST TYPE: CONVENTIONAL

RECORDER DATA

	Mins		Field	1	2	3	4
PF	30	Rec.	11085	11085	3027		
SI	45	Range(Psi)	4300.0	4300.0	4995.0	0.0	0.0
SF	60	Clock(hrs)	12hr	12hr	elec		
FS	90	Depth(ft)	3125.0	3125.0	3115.0	0.0	0.0

TIME DATA----------
PF Fr. 0017 to 0047 hr
IS Fr. 0047 to 0132 hr
SF Fr. 0132 to 0232 hr
FS Fr. 0232 to 0402 hr

	Field	1	2	3	4
A. Init Hydro	0.0	0.0	1474.0	0.0	0.0
B. First Flow	0.0	0.0	16.0	0.0	0.0
B1. Final Flow	0.0	0.0	35.0	0.0	0.0
C. In Shut-in	0.0	0.0	852.0	0.0	0.0
D. Init Flow	0.0	0.0	38.0	0.0	0.0
E. Final Flow	0.0	0.0	72.0	0.0	0.0
F. Fl Shut-in	0.0	0.0	847.0	0.0	0.0
G. Final Hydro	0.0	0.0	1470.0	0.0	0.0
Inside/Outside	o	o	i		

T STARTED 2200 hr
T ON BOTM 0013 hr
T OPEN 0017 hr
T PULLED 0402 hr
T OUT 0551 hr

RECOVERY
Tot Fluid 125.00 ft of 125.00 ft in DC and 0.00 ft in DP
10.00 ft of Clean oil
0.00 ft of 100% oil
115.00 ft of Slightly oil cut muddy water
0.00 ft of 1% oil 94% water 5% mud
0.00 ft of
0.00 ft of
0.00 ft of
0.00 ft of
SALINITY 150000.00 P.P.M. A.P.I. Gravity 32.00

TOOL DATA----------

Tool Wt.	2000.00 lbs
Wt Set On Packer	20000.00 lbs
Wt Pulled Loose	45000.00 lbs
Initial Str Wt	38000.00 lbs
Unseated Str Wt	38000.00 lbs
Bot Choke	0.75 in
Hole Size	7.78 in
D Col. ID	2.25 in
D. Pipe ID	3.80 in
D.C. Length	240.00 ft
D.P. Length	2885.00 ft

BLOW DESCRIPTION
Initial Flow:
Weak blow throughout. 1/2" to 1 1/4" blow.
Final Flow:
Weak 1" blow throughout.

MUD DATA----------

Mud Type	Chemical
Weight	9.00 lb/cf
Vis.	48.00 S/L
W.L.	8.40 in3
F.C.	0.00 in
Mud Drop	
Amt. of fill	4.00 ft
Btm. H. Temp.	102.00 F
Hole Condition	fair
% Porosity	0.00
Packer Size	6.75 in
No. of Packers	2
Cushion Amt.	0.00
Cushion Type	
Reversed Out	N
Tool Chased	N
Tester	Ray Schwager
Co. Rep.	Randy Killian
Contr.	Murfin Drlg.
Rig #	8
Unit #	
Pump T.	

SAMPLES:
SENT TO:

Test Successful: Y

*** TOOL DIAGRAM *** CONVENTIONAL

WELL NAME: Sterling-Fisher #1-5

LOCATION : 5-11s-20w Ellis co KS

TICKET No. 12948 D.S.T. No. 1 DATE 4-11-00

TOTAL TOOL TO BOTTOM OF TOP PACKERS 20

INTERVAL TOOL .....

BOTTOM PACKERS AND ANCHOR 16

TOTAL TOOL 36

DRILL COLLAR ANCHOR IN INTERVAL .....

D.C. ANCHOR STND.Stands Single Total

D.P. ANCHOR STND.Stands Single Total

TOTAL ASSEMBLY .....

D.C. ABOVE TOOLS.Stands4 Single Total 240

D.P. ABOVE TOOLS.Stands46 Single 1 Total 2885

TOTAL DRILL COLLARS DRILL PIPE & TOOLS .. 3161

TOTAL DEPTH 3128

TOTAL DRILL PIPE ABOVE K.B. 33

REMARKS:

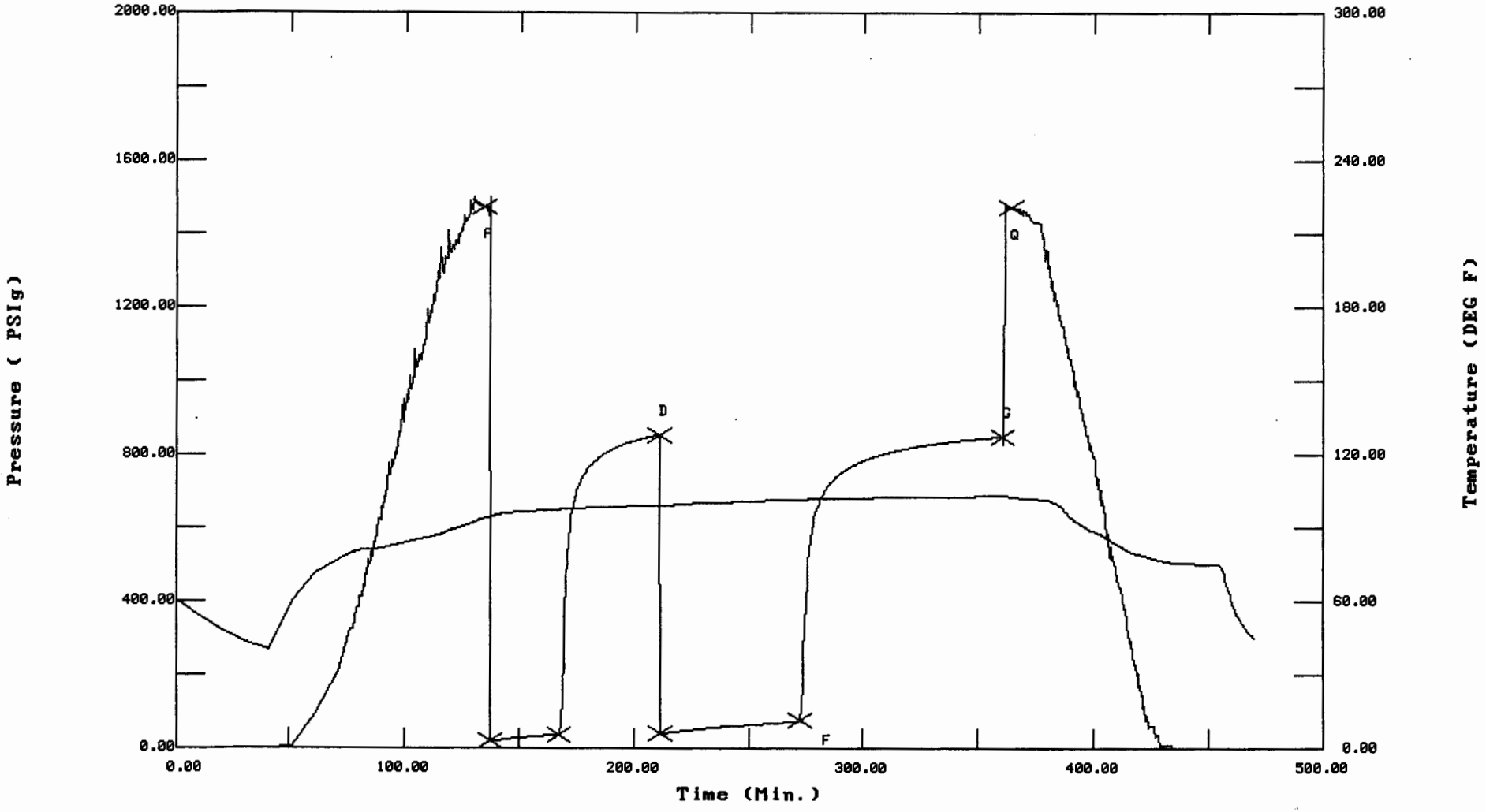
P.O. SUB	2882
C.O. SUB	3002
S.I. TOOL	3007
HMV	3102
JARS	
SAFETY JOINT	
PACKER	3107
PACKER	3112
DEPTH	3113
ANCHOR 5'perf	3118
5' "	3123
Alpine@3115	
Ak-1 @3125	
2'perf	3125
BULLNOSE 3'bullplug	3128
T.D.	3128

TEST HISTORY

12948 DST#1 Sterling-Fisher#1-5 Murfin Drilling Co., Inc.

Flag Points

	t(Min.)	P(PSIg)
A:	0.00	1474.15
B:	0.00	16.77
C:	30.00	35.85
D:	43.50	852.22
E:	0.00	38.14
F:	61.00	72.94
G:	88.00	847.90
Q:	0.00	1470.86



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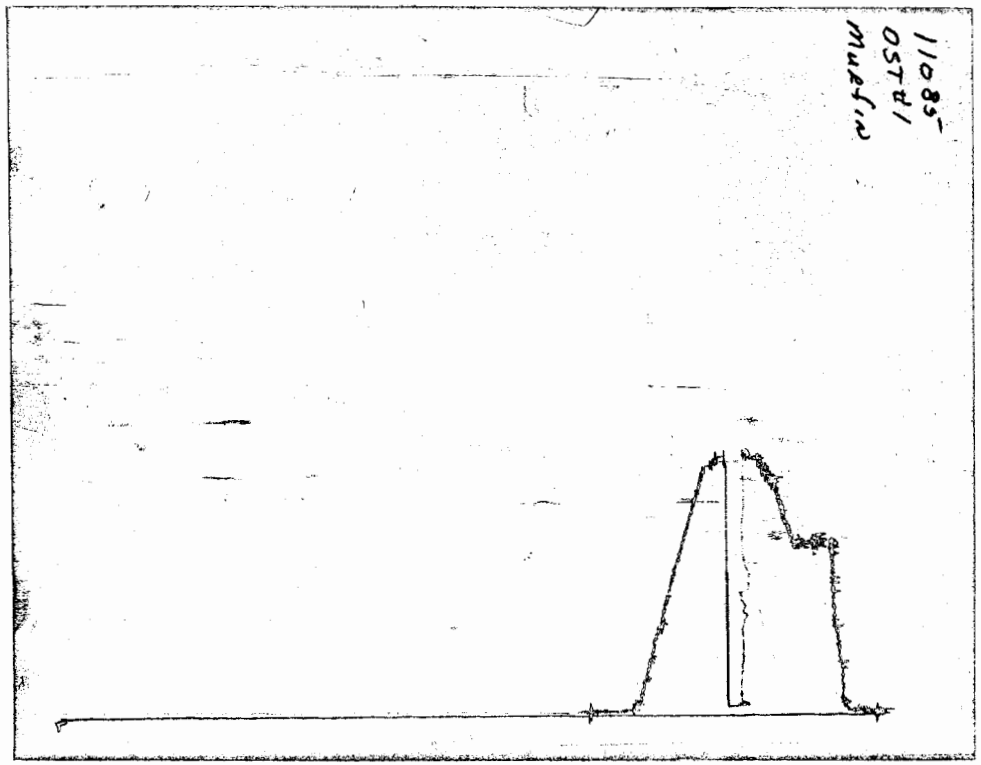


This is a photocopy of the actual AK-1 recorder chart

TRILOBITE TESTING L.L.C.

P.O. Box 362 • Hays, Kansas 67601

№ 12948

Test Ticket

Well Name & No. Sterling-Fisher #1-5 Test No. 1 Date 4-11-00

Company Murfin Drilling Co., Inc Zone Tested Topeka

Address 250 N. Water Suite 300 Wichita, Ks 67202 Elevation 2060 KB 2055 GL

Co. Rep / Geo. Randy Killian Cont. Murfin 8 Est. Ft. of Pay - Por. - %

Location: Sec. 5 Twp. 11S Rge. 20W Co. Ellis State Ks

No. of Copies Reg Distribution Sheet (Y, N) - Turnkey (Y, N) - Evaluation (Y, N) -

Interval Tested 3112 - 3128 Initial Str Wt./Lbs. 38000 Unseated Str Wt./Lbs. 38000

Anchor Length 16 Wt. Set Lbs. 20000 Wt. Pulled Loose/Lbs. 45000

Top Packer Depth 3107 Tool Weight 2000

Bottom Packer Depth 3112 Hole Size — 7 7/8" yes Rubber Size — 6 3/4" yes

Total Depth 3128 Wt. Pipe Run — Drill Collar Run 240

Mud Wt. 9 LCM - Vis. 48 WL 8.4 Drill Pipe Size 4½ XH Ft. Run 2885

Blow Description IFP - Weak Blow Throughout ½" To 1¼" Blow

FFP - Weak Blow Throughout 1" Blow

Recovery — Total Feet 125 GIP - Ft. in DC 125 Ft. in DP -

Rec. 10	Feet Of Clean Oil	%gas	%oil	%water	%mud
Rec. 115	Feet Of SOCMW	%gas	1 %oil	94 %water	5 %mud
Rec.	Feet Of	%gas	%oil	%water	%mud
Rec.	Feet Of	%gas	%oil	%water	%mud
Rec.	Feet Of	%gas	%oil	%water	%mud

BHT 102 °F Gravity 32 °API D@ 60 °F Corrected Gravity 32 °API

RW .07 @ 61 °F Chlorides 150,000 ppm Recovery Chlorides 1800 ppm System

	AK-1	Alpine					
(A) Initital Hydrostatic Mud		1474	PSI	Recorder No.	3027	T-On Location	2130
(B) First Initial Flow Pressure		16	PSI	(depth)	3115	T-Started	2200
(C) First Final Flow Pressure		35	PSI	Recorder No.	11085	T-Open	0017
(D) Initial Shut-In Pressure		852	PSI	(depth)	3125	T-Pulled	0402
(E) Second Initial Flow Pressure		38	PSI	Recorder No.	-	T-Out	0551
(F) Second Final Flow Pressure		72	PSI	(depth)	-	T-Off Location	0620
(G) Final Shut-in Pressure		847	PSI	Initial Opening	30	Test ✓	600
(Q) Final Hydrostatic Mud		1470	PSI	Initial Shut-in	45	Jars	
				Final Flow	60	Safety Joint	
				Final Shut-in	90	Straddle	
						Circ. Sub	
						Sampler	
						Extra Packer	
						Elec. Rec. ✓	150
						Mileage	
						Other ext 1hr	30
						TOTAL PRICE $ ✓	780

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 Ray Schwager Thank You

TRILOBITE TESTING L.L.C.

OPERATOR : Murfin Drilling Co., Inc DATE 4-12-00
WELL NAME: Sterling-Fisher#1-5 KB 2060.00 ft TICKET NO: 12949 DST #2
LOCATION : 5-11s-20w GR 2055.00 ft FORMATION: Topeka Plattsmouth
INTERVAL : 3245.00 To 3260.00 ft TD 3260.00 ft TEST TYPE: CONVENTIONAL

RECORDER DATA

Mins		Field	1	2	3	4
PF 30	Rec.	11085	11085	3027		
SI 45	Range(Psi)	4300.0	4300.0	4995.0	0.0	0.0
SF 60	Clock(hrs)	12hr	12hr	elec		
FS 90	Depth(ft)	3257.0	3257.0	3248.0	0.0	0.0

TIME DATA----------
PF Fr. 1811 to 1841 hr
IS Fr. 1841 to 1926 hr
SF Fr. 1926 to 2026 hr
FS Fr. 2026 to 2156 hr

	Field	1	2	3	4
A. Init Hydro	0.0	0.0	1551.0	0.0	0.0
B. First Flow	0.0	0.0	25.0	0.0	0.0
B1. Final Flow	0.0	0.0	87.0	0.0	0.0
C. In Shut-in	0.0	0.0	951.0	0.0	0.0
D. Init Flow	0.0	0.0	98.0	0.0	0.0
E. Final Flow	0.0	0.0	154.0	0.0	0.0
F. Fl Shut-in	0.0	0.0	957.0	0.0	0.0
G. Final Hydro	0.0	0.0	1501.0	0.0	0.0
Inside/Outside	0	o	i		

T STARTED 1540 hr
T ON BOTM 1808 hr
T OPEN 1811 hr
T PULLED 2156 hr
T OUT 0000 hr

RECOVERY
Tot Fluid 310.00 ft of 240.00 ft in DC and 70.00 ft in DP
40.00 ft of Clean oil
0.00 ft of 100% oil
30.00 ft of Slightly oil cut muddy water
0.00 ft of 1% oil 94% water 5% mud
240.00 ft of Water
0.00 ft of 100% water
0.00 ft of
0.00 ft of
SALINITY 150000.00 P.P.M. A.P.I. Gravity 34.00

TOOL DATA----------

Tool Wt.	2000.00 lbs
Wt Set On Packer	20000.00 lbs
Wt Pulled Loose	46000.00 lbs
Initial Str Wt	40000.00 lbs
Unseated Str Wt	41000.00 lbs
Bot Choke	0.75 in
Hole Size	7.78 in
D Col. ID	2.25 in
D. Pipe ID	3.80 in
D.C. Length	240.00 ft
D.P. Length	3012.00 ft

BLOW DESCRIPTION
Initial Flow:
Weak to a fair blow. 1/2" to 5 1/2" blow.
Final Flow:
Fair to a good blow. 5" to 6" blow.

Final Shut-In:
Had blow.

MUD DATA----------

Mud Type	Chemical
Weight	9.00 lb/cf
Vis.	45.00 S/L
W.L.	8.40 in3
F.C.	0.00 in
Mud Drop	
Amt. of fill	0.00 ft
Btm. H. Temp.	109.00 F
Hole Condition	good
% Porosity	0.00
Packer Size	6.75 in
No. of Packers	2
Cushion Amt.	0.00
Cushion Type	
Reversed Out	N
Tool Chased	N
Tester	Ray Schwager
Co. Rep.	Randy Killian
Contr.	Murfin Drlg.
Rig #	8
Unit #	
Pump T.	

SAMPLES:
SENT TO:

Test Successful: Y

*** TOOL DIAGRAM *** CONVENTIONAL

WELL NAME: Sterling-Fisher#1-5

LOCATION : 5-11s-20w

TICKET No. 12949 D.S.T. No. 2 DATE 4-12-00

TOTAL TOOL TO BOTTOM OF TOP PACKERS 20

INTERVAL TOOL .....

BOTTOM PACKERS AND ANCHOR 15

TOTAL TOOL 35

DRILL COLLAR ANCHOR IN INTERVAL .....

D.C. ANCHOR STND.Stands Single Total

D.P. ANCHOR STND.Stands Single Total

TOTAL ASSEMBLY .....

D.C. ABOVE TOOLS.Stands4 Single Total 240

D.P. ABOVE TOOLS.Stands48 Single 1 Total 3012

TOTAL DRILL COLLARS DRILL PIPE & TOOLS .. 3287

TOTAL DEPTH 3260

TOTAL DRILL PIPE ABOVE K.B. 27

REMARKS:

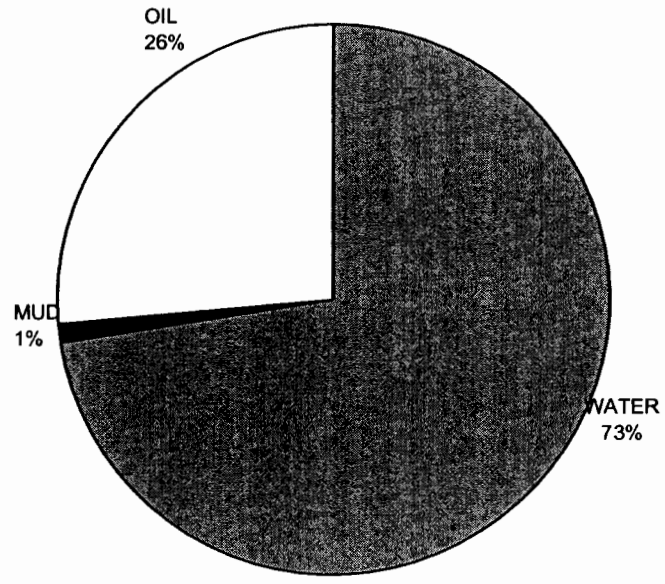
P.O. SUB	3105
C.O. SUB	3225
S.I. TOOL	3230
HMV	3235
JARS	
SAFETY JOINT	
PACKER	3240
PACKER	3245
DEPTH	3246
ANCHOR 5'perf	3251
4' "	3255
Alpine@3248	
Ak-1 @3257	
2'perf	3257
BULLNOSE 3'bullplug	3260
T.D.	3260

CALCULATED RECOVERY ANALYSIS

DST 2 TICKET 12949

SAMPLE #		TOTAL FEET	GAS %	GAS FEET	OIL %	OIL FEET	WATER %	WATER FEET	MUD %	MUD FEET
DRILL	1	40	0	0	100	40	0	0	0	0
PIPE	2	30	0	0	1	0.3	94	28.2	5	1.5
	3	0	0	0	0	0	0	0	0	0
	4	0	0	0	0	0	0	0	0	0
	5	0	0	0	0	0	0	0	0	0
	6	0	0	0	0	0	0	0	0	0
WEIGHT	1	0	0	0	0	0	0	0	0	0
PIPE	2	0	0	0	0	0	0	0	0	0
	3	0	0	0	0	0	0	0	0	0
	4	0	0	0	0	0	0	0	0	0
	5	0	0	0	0	0	0	0	0	0
DRILL	1	240	0	0	0	0	100	240	0	0
COLLARS	2	0	0	0	0	0	0	0	0	0
	3	0	0	0	0	0	0	0	0	0
	4	0	0	0	0	0	0	0	0	0
	5	0	0	0	0	0	0	0	0	0
TOTAL		310	0	0	0	40.3	0	268.2	0	1.5

			HRS OPEN		BBL/DAY
BBL OIL=	0.573066	*	1.5	=	9.169056
BBL WATER=	1.574604	*		=	25.193664
BBL MUD=	0.02133				
BBL GAS =	0				

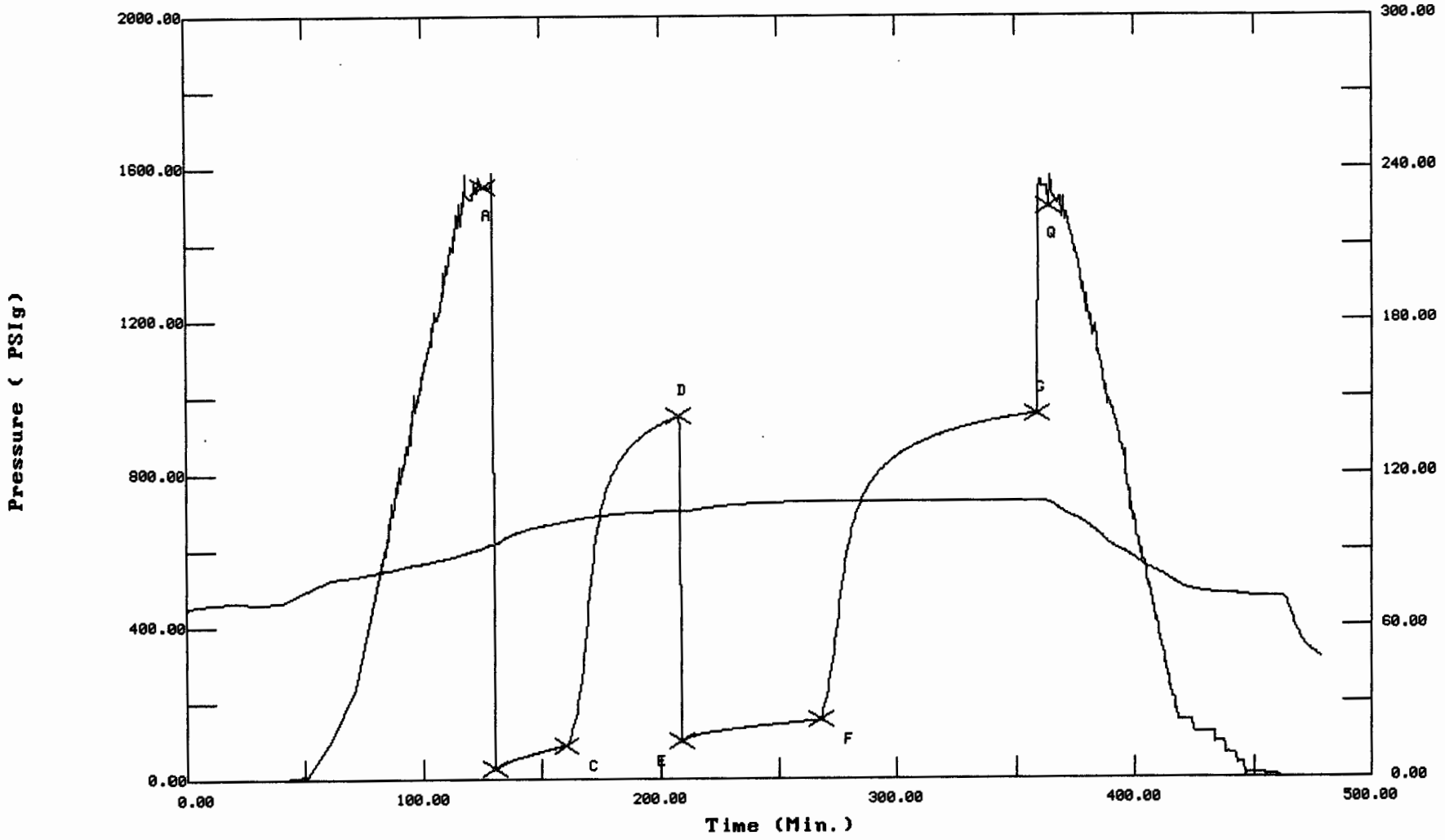


TEST HISTORY

12949 DST#2 Sterling-Fisher#1-5 Murfin Drilling Co., Inc.

Flag Points

	t(Min.)	P(PSIg)
A:	0.00	1551.71
B:	0.00	25.56
C:	30.00	87.60
D:	47.50	951.32
E:	0.00	98.26
F:	59.00	154.67
G:	91.00	957.33
Q:	0.00	1501.79



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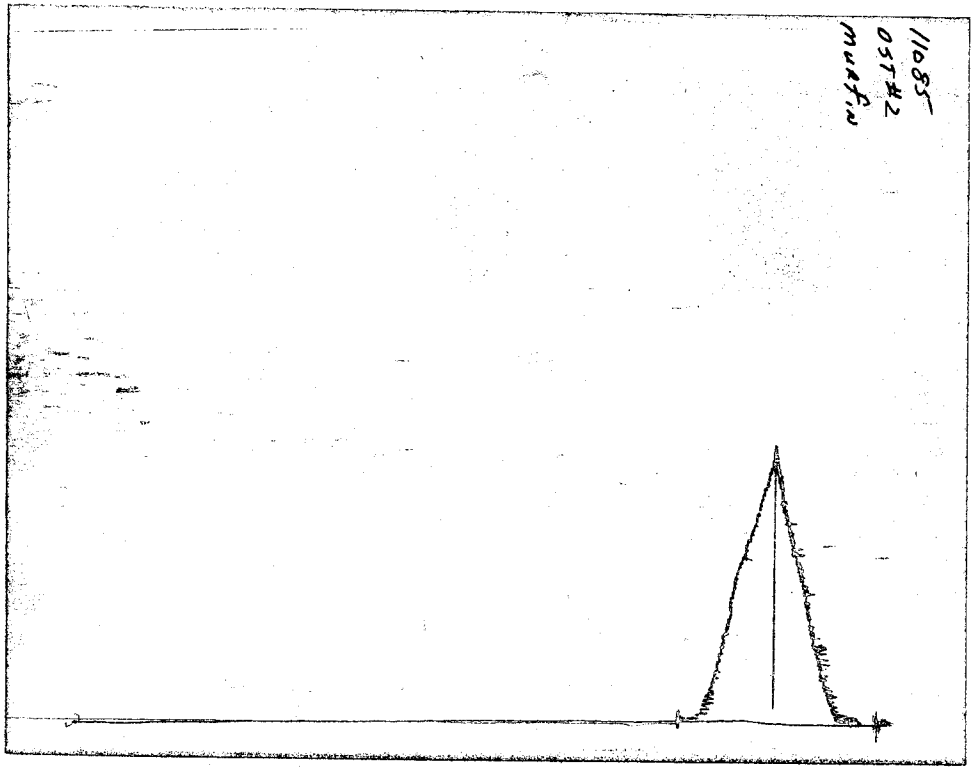


This is a photocopy of the actual AK-1 recorder chart

TRILOBITE TESTING L.L.C.

P.O. Box 362 • Hays, Kansas 67601

№ 12949

Test Ticket

Well Name & No. Sterling-Fisher #1-5 Test No. 2 Date 4-12-00

Company Murfin Drilling Co. Inc Zone Tested Topeka, Plattsmouth

Address 250 N. Water, Suite 300 Wichita, Ks 67202 Elevation 2060 KB 2055 GL

Co. Rep / Geo. Randy Killian Cont. Murfin 8 Est. Ft. of Pay - Por. - %

Location: Sec. 5 Twp. 11S Rge. 20W Co. Ellis State Ks

No. of Copies Reg Distribution Sheet (Y, N) - Turnkey (Y, N) - Evaluation (Y, N) -

Interval Tested 3245-3260 Initial Str Wt./Lbs. 40000 Unseated Str Wt./Lbs. 41000

Anchor Length 15 Wt. Set Lbs. 20000 Wt. Pulled Loose/Lbs. 46000

Top Packer Depth 3240 Tool Weight 2000

Bottom Packer Depth 3245 Hole Size — 7 7/8" yes Rubber Size — 6 3/4" yes

Total Depth 3260 Wt. Pipe Run - Drill Collar Run 240

Mud Wt. 9 LCM - Vis. 45 WL 8.4 Drill Pipe Size 4½ XH Ft. Run 3012

Blow Description IFP - WEAK TO A FAIR BLOW ½" TO 5½" BLOW
FFP - FAIR TO A GOOD BLOW 5" TO 6" BLOW
HAD BLOW ON SHUT-IN

Recovery — Total Feet 310 GIP - Ft. in DC 240 Ft. in DP 70

Rec. 40	Feet Of CO	%gas	%oil	%water	%mud
Rec. 30	Feet Of SOCMW	%gas	1 %oil	94 %water	5 %mud
Rec. 240	Feet Of WATER	%gas	%oil	%water	%mud
Rec.	Feet Of	%gas	%oil	%water	%mud
Rec.	Feet Of	%gas	%oil	%water	%mud

BHT 109 °F Gravity 34 °API D@ 60 °F Corrected Gravity 34 °API

RW .07 @ 60 °F Chlorides 150000 ppm Recovery Chlorides 1800 ppm System

	AK-1	Alpine					
(A) Initial Hydrostatic Mud		1551	PSI	Recorder No.	3027	T-On Location	1540
(B) First Initial Flow Pressure		25	PSI	(depth)	3248	T-Started	1601
(C) First Final Flow Pressure		87	PSI	Recorder No.	11085	T-Open	1811
(D) Initial Shut-In Pressure		951	PSI	(depth)	3257	T-Pulled	2156
(E) Second Initial Flow Pressure		98	PSI	Recorder No.	-	T-Out	0000
(F) Second Final Flow Pressure		154	PSI	(depth)	-	T-Off Location	0030
(G) Final Shut-in Pressure		957	PSI	Initial Opening	30	Test ✓	700
(Q) Final Hydrostatic Mud		1501	PSI	Initial Shut-in	45	Jars	
				Final Flow	60	Safety Joint	
				Final Shut-in	90	Straddle	
						Circ. Sub	
						Sampler	
						Extra Packer	
						Elec. Rec. ✓	150
						Mileage	
						Other ext 1 hr	30
						TOTAL PRICE $ ✓	780

Approved By

Our Representative Ray Schwager Thank You

TRILOBITE TESTING L.L.C.

OPERATOR : Murfin Drilling Co., Inc — DATE 4-13-00
WELL NAME: Sterling-Fisher #1-5 — KB 2060.00 ft — TICKET NO: 12950 DST #3
LOCATION : 5-11s-20w Ellis co KS — GR 2055.00 ft — FORMATION: Toronto&Lans.A,B,C,D
INTERVAL : 3295.00 To 3404.00 ft — TD 3404.00 ft — TEST TYPE: CONVENTIONAL

RECORDER DATA

Mins			Field	1	2	3	4
PF	30	Rec.	11085	11085	3027		
SI	45	Range(Psi)	4300.0	4300.0	4995.0	0.0	0.0
SF	30	Clock(hrs)	12hr	12hr	elec		
FS	45	Depth(ft)	3401.0	3401.0	3298.0	0.0	0.0

TIME DATA----------
PF Fr. 1330 to 1400 hr
IS Fr. 1400 to 1445 hr
SF Fr. 1445 to 1515 hr
FS Fr. 1515 to 1600 hr

	Field	1	2	3	4
A. Init Hydro	1614.0	1685.0	1574.0	0.0	0.0
B. First Flow	77.0	84.0	16.0	0.0	0.0
B1. Final Flow	77.0	77.0	24.0	0.0	0.0
C. In Shut-in	723.0	718.0	675.0	0.0	0.0
D. Init Flow	88.0	99.0	25.0	0.0	0.0
E. Final Flow	88.0	98.0	29.0	0.0	0.0
F. Fl Shut-in	637.0	659.0	612.0	0.0	0.0
G. Final Hydro	1603.0	1569.0	1517.0	0.0	0.0
Inside/Outside	o	O	i		

T STARTED 1128 hr
T ON BOTM 1327 hr
T OPEN 1330 hr
T PULLED 1600 hr
T OUT 1740 hr

RECOVERY
Tot Fluid 30.00 ft of 30.00 ft in DC and 0.00 ft in DP
30.00 ft of Mud with show of oil in tool
0.00 ft of
0.00 ft of
0.00 ft of
0.00 ft of
0.00 ft of
0.00 ft of
0.00 ft of
SALINITY 0.00 P.P.M. A.P.I. Gravity 0.00

TOOL DATA----------

Tool Wt.	2000.00 lbs
Wt Set On Packer	20000.00 lbs
Wt Pulled Loose	46000.00 lbs
Initial Str Wt	42000.00 lbs
Unseated Str Wt	42000.00 lbs
Bot Choke	0.75 in
Hole Size	7.78 in
D Col. ID	2.25 in
D. Pipe ID	3.80 in
D.C. Length	240.00 ft
D.P. Length	3042.00 ft

BLOW DESCRIPTION
Initial Flow:
Weak blow throughout 1/4" blow.
Final Flow:
No blow.

MUD DATA----------

Mud Type	Chemical
Weight	9.20 lb/c
Vis.	45.00 S/L
W.L.	9.20 in3
F.C.	0.00 in
Mud Drop	
Amt. of fill	0.00 ft
Btm. H. Temp.	97.00 F
Hole Condition	good
% Porosity	0.00
Packer Size	6.75 in
No. of Packers	2
Cushion Amt.	0.00
Cushion Type	
Reversed Out	N
Tool Chased	N
Tester	Ray Schwager
Co. Rep.	Randy Killian
Contr.	Murfin Drlg
Rig #	8
Unit #	
Pump T.	

SAMPLES:
SENT TO:

Test Successful: Y

*** TOOL DIAGRAM *** CONVENTIONAL

WELL NAME: Sterling-Fisher #1-5

LOCATION : 5-11s-20w Ellis co KS

TICKET No. 12950 D.S.T. No. 3 DATE 4-13-00

TOTAL TOOL TO BOTTOM OF TOP PACKERS 20

INTERVAL TOOL .....

BOTTOM PACKERS AND ANCHOR 109

TOTAL TOOL 129

DRILL COLLAR ANCHOR IN INTERVAL .....

D.C. ANCHOR STND.Stands Single Total

D.P. ANCHOR STND.Stands Single Total

TOTAL ASSEMBLY .....

D.C. ABOVE TOOLS.Stands4 Single Total 240

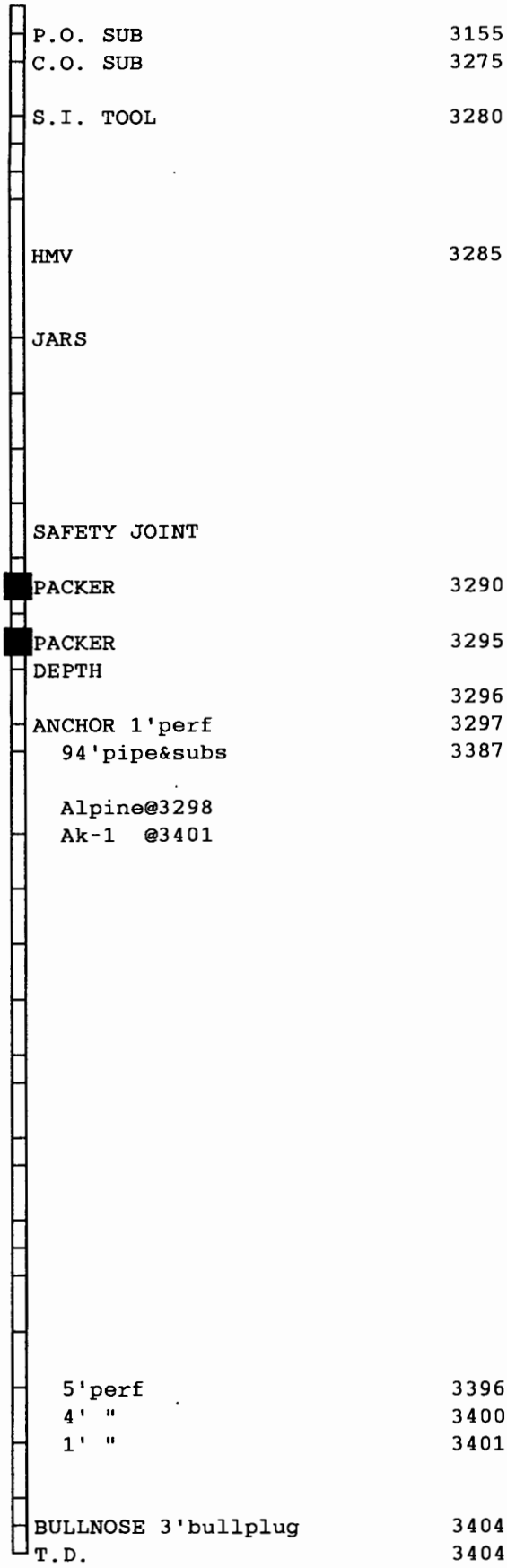
D.P. ABOVE TOOLS.Stands49 Single Total 3042

TOTAL DRILL COLLARS DRILL PIPE & TOOLS .. 3414

TOTAL DEPTH 3404

TOTAL DRILL PIPE ABOVE K.B. 7

REMARKS:



TEST HISTORY

12950 DST#3 Sterling-Fisher #1-5 Murfin Drilling Co., Inc.

Flag Points

	t(Min.)	P(PSIg)
A:	0.00	1574.75
B:	0.00	16.77
C:	31.00	24.38
D:	44.00	675.22
E:	0.00	25.76
F:	30.50	29.30
G:	43.50	612.22
Q:	0.00	1517.53

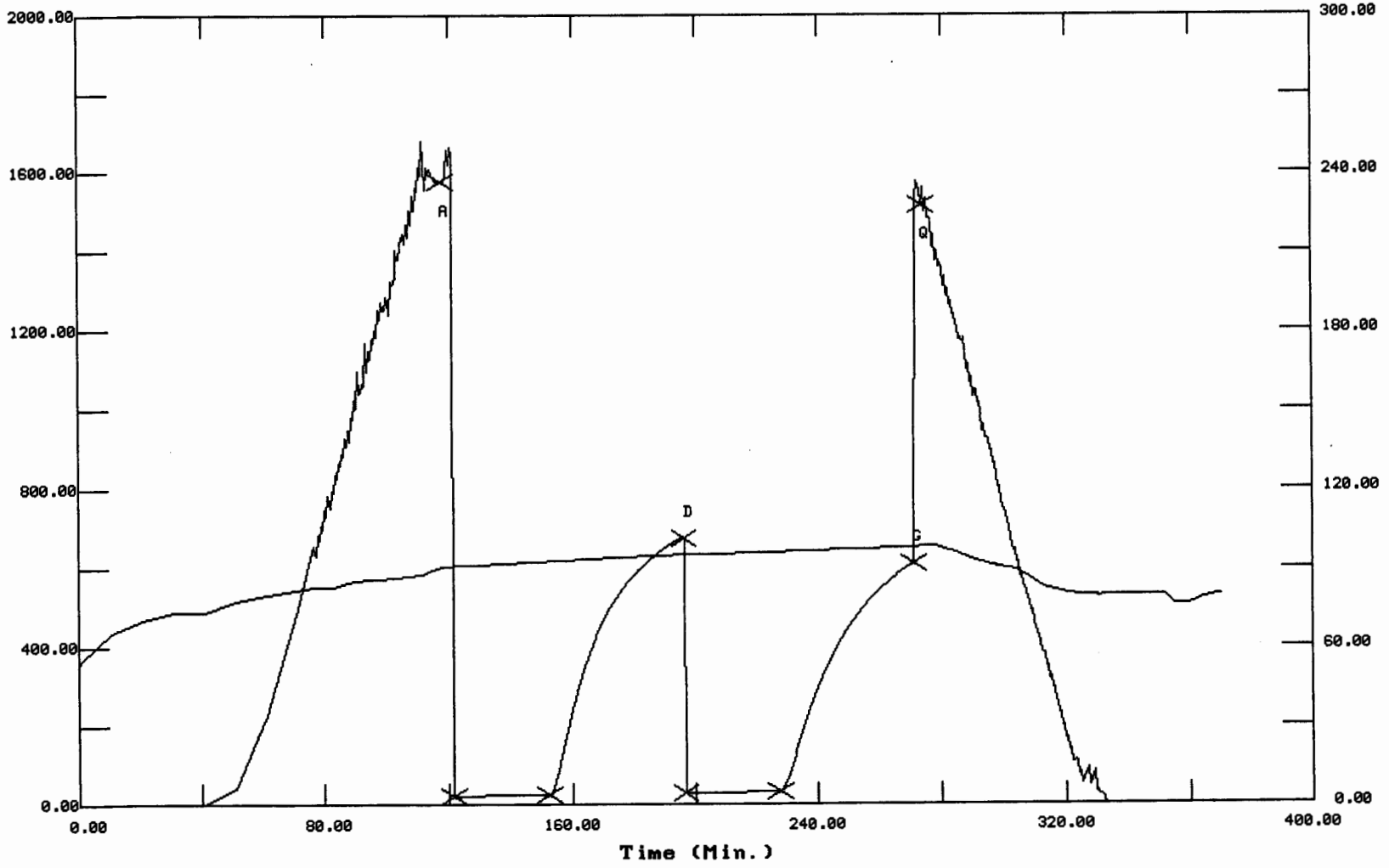
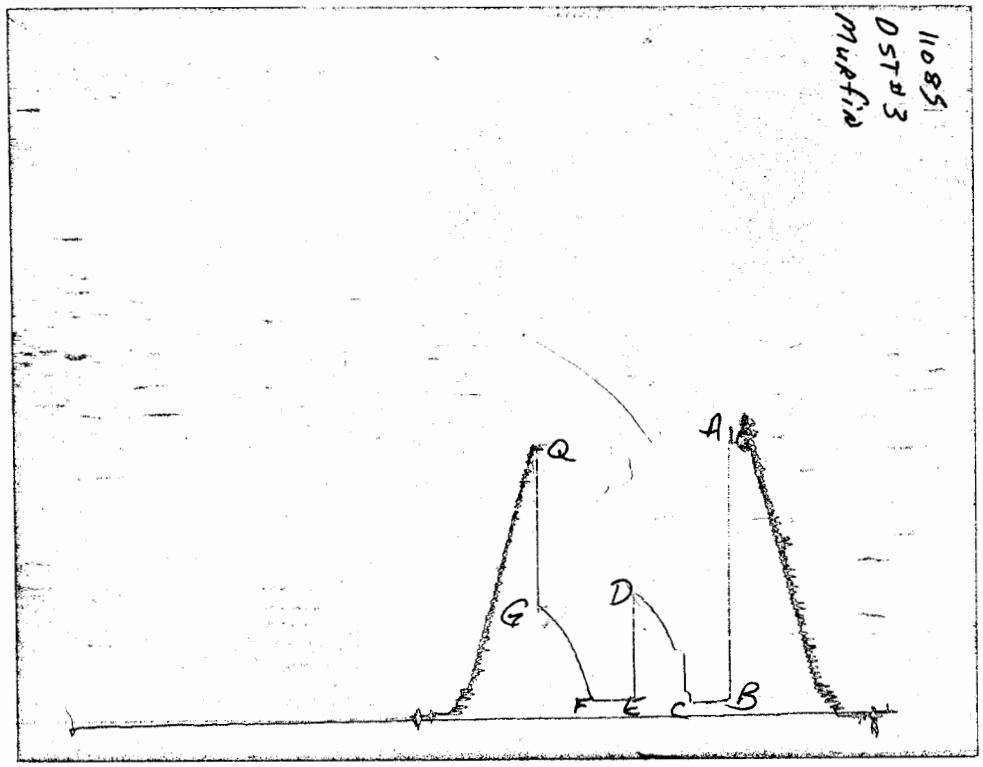


CHART PAGE



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

TRILOBITE TESTING L.L.C.

P.O. Box 362 • Hays, Kansas 67601

№ 12950

Test Ticket

Well Name & No. Sterling-Fisher #1-5 Test No. 3 Date 4-13-00

Company Murfin Drilling Co., Inc Zone Tested Toronto + Lans

Address 250 N. Water, Suite 300 Wichita, Ks 67202 Elevation 2060 KB 2055 GL

Co. Rep / Geo. Randy Killian Cont. Murfin 8 Est. Ft. of Pay — Por. — %

Location: Sec. 5 Twp. 11S Rge. 20W Co. Ellis State Ks

No. of Copies Reg Distribution Sheet (Y, N) _____ Turnkey (Y, N) _____ Evaluation (Y, N) _____

Interval Tested 3295-3404 Initial Str Wt./Lbs. 42000 Unseated Str Wt./Lbs. 42000

Anchor Length 109 Wt. Set Lbs. 20000 Wt. Pulled Loose/Lbs. 46000

Top Packer Depth 3290 Tool Weight 2000

Bottom Packer Depth 3295 Hole Size — 7 7/8" yes Rubber Size — 6 3/4" yes

Total Depth 3404 Wt. Pipe Run — Drill Collar Run 240

Mud Wt. 9.2 LCM - Vis. 45 WL 9.2 Drill Pipe Size 4½XH Ft. Run 3042

Blow Description IFP – Weak Blow Throughout ¼" Blow

FFP - No Blow

Recovery — Total Feet 30 GIP — Ft. in DC 30 Ft. in DP —

Rec. 30	Feet Of Mud	%gas	%oil	%water	%mud
Rec.	Feet Of w/show of oil in	%gas	%oil	%water	%mud
Rec.	Feet Of Tool	%gas	%oil	%water	%mud
Rec.	Feet Of	%gas	%oil	%water	%mud
Rec.	Feet Of	%gas	%oil	%water	%mud

BHT 97 °F Gravity — °API D@ — °F Corrected Gravity — °API

RW — @ — °F Chlorides — ppm Recovery Chlorides 5600 ppm System

	AK-1	Alpine				
(A) Initial Hydrostatic Mud	1614	1574	PSI	Recorder No.	3027	T-On Location 1110
(B) First Initial Flow Pressure	77	16	PSI	(depth)	3298	T-Started 1128
(C) First Final Flow Pressure	77	24	PSI	Recorder No.	11085	T-Open 1330
(D) Initial Shut-In Pressure	723	675	PSI	(depth)	3401	T-Pulled 1600
(E) Second Initial Flow Pressure	88	25	PSI	Recorder No.	—	T-Out 1740
(F) Second Final Flow Pressure	88	29	PSI	(depth)	—	T-Off Location 1800
(G) Final Shut-in Pressure	637	612	PSI	Initial Opening	30	Test ✓ 700
(Q) Final Hydrostatic Mud	1603	1517	PSI	Initial Shut-in	45	Jars
				Final Flow	30	Safety Joint
				Final Shut-in	45	Straddle
						Circ. Sub
						Sampler
						Extra Packer
						Elec. Rec. ✓ 150
						Mileage
						Other
						TOTAL PRICE $ ✓ 950

Approved By _____

Our Representative Ray Schwager Thank you

TRILOBITE TESTING L.L.C.

OPERATOR : Murfin Drilling Co., Inc DATE 4-14-00
WELL NAME: Sterling-Fisher #1-5 KB 2060.00 ft TICKET NO: 13301 DST #4
LOCATION : 5-11w-20w Ellis co KS GR 2055.00 ft FORMATION: Lans. F&G
INTERVAL : 3404.00 To 3440.00 ft TD 3440.00 ft TEST TYPE: CONVENTIONAL

RECORDER DATA

Mins			Field	1	2	3	4
PF	30	Rec.	11085	11085	3027		
SI	45	Range(Psi)	4300.0	4300.0	4995.0	0.0	0.0
SF	60	Clock(hrs)	12hr	12hr	elec		
FS	90	Depth(ft)	3415.0	3415.0	3407.0	0.0	0.0

TIME DATA----------
PF Fr. 0400 to 0430 hr
IS Fr. 0430 to 0515 hr
SF Fr. 0515 to 0615 hr
FS Fr. 0615 to 0745 hr

	Field	1	2	3	4
A. Init Hydro	1614.0	1668.0	1680.0	0.0	0.0
B. First Flow	33.0	30.0	23.0	0.0	0.0
B1. Final Flow	99.0	98.0	120.0	0.0	0.0
C. In Shut-in	691.0	680.0	716.0	0.0	0.0
D. Init Flow	143.0	136.0	127.0	0.0	0.0
E. Final Flow	187.0	186.0	192.0	0.0	0.0
F. Fl Shut-in	658.0	660.0	682.0	0.0	0.0
G. Final Hydro	1614.0	1576.0	1599.0	0.0	0.0
Inside/Outside	O	O	i		

T STARTED 0209 hr
T ON BOTM 0357 hr
T OPEN 0400 hr
T PULLED 0745 hr
T OUT 0953 hr

RECOVERY
Tot Fluid 420.00 ft of 240.00 ft in DC and 180.00 ft in DP
840.00 ft of Gas in pipe.
180.00 ft of Clean oil
0.00 ft of 100% oil
240.00 ft of Muddy gassy oil
0.00 ft of 20% gas 70% oil 10% mud
0.00 ft of
0.00 ft of
0.00 ft of
SALINITY 0.00 P.P.M. A.P.I. Gravity 38.00

TOOL DATA----------

Tool Wt.	2000.00 lbs
Wt Set On Packer	20000.00 lbs
Wt Pulled Loose	46000.00 lbs
Initial Str Wt	42000.00 lbs
Unseated Str Wt	44000.00 lbs
Bot Choke	0.75 in
Hole Size	7.78 in
D Col. ID	2.25 in
D. Pipe ID	3.80 in
D.C. Length	240.00 ft
D.P. Length	3164.00 ft

MUD DATA----------

Mud Type	Chemical
Weight	9.20 lb/c
Vis.	47.00 S/L
W.L.	9.20 in3
F.C.	0.00 in
Mud Drop	
Amt. of fill	0.00 ft
Btm. H. Temp.	110.00 F
Hole Condition	good
% Porosity	0.00
Packer Size	6.75 in
No. of Packers	2
Cushion Amt.	0.00
Cushion Type	
Reversed Out	N
Tool Chased	N
Tester	Ray Schwager
Co. Rep.	Randy Killian
Contr.	Murfin Drlg.
Rig #	8
Unit #	
Pump T.	

BLOW DESCRIPTION
Initial Flow:
Weak to a strong blow in 12 minutes.
Final Flow:
Fair to a strong blow in 8 minutes.
Final Shut-In:
Had blow back.

SAMPLES:
SENT TO:

Test Successful: Y

*** TOOL DIAGRAM *** CONVENTIONAL

WELL NAME: Sterling-Fisher #1-5

LOCATION : 5-11w-20w Ellis co KS

TICKET No. 13301 D.S.T. No. 4 DATE 4-14-00

TOTAL TOOL TO BOTTOM OF TOP PACKERS 20

INTERVAL TOOL .....

BOTTOM PACKERS AND ANCHOR 36

TOTAL TOOL 56

DRILL COLLAR ANCHOR IN INTERVAL .....

D.C. ANCHOR STND.Stands Single Total

D.P. ANCHOR STND.Stands Single Total

TOTAL ASSEMBLY .....

D.C. ABOVE TOOLS.Stands4 Single Total 240

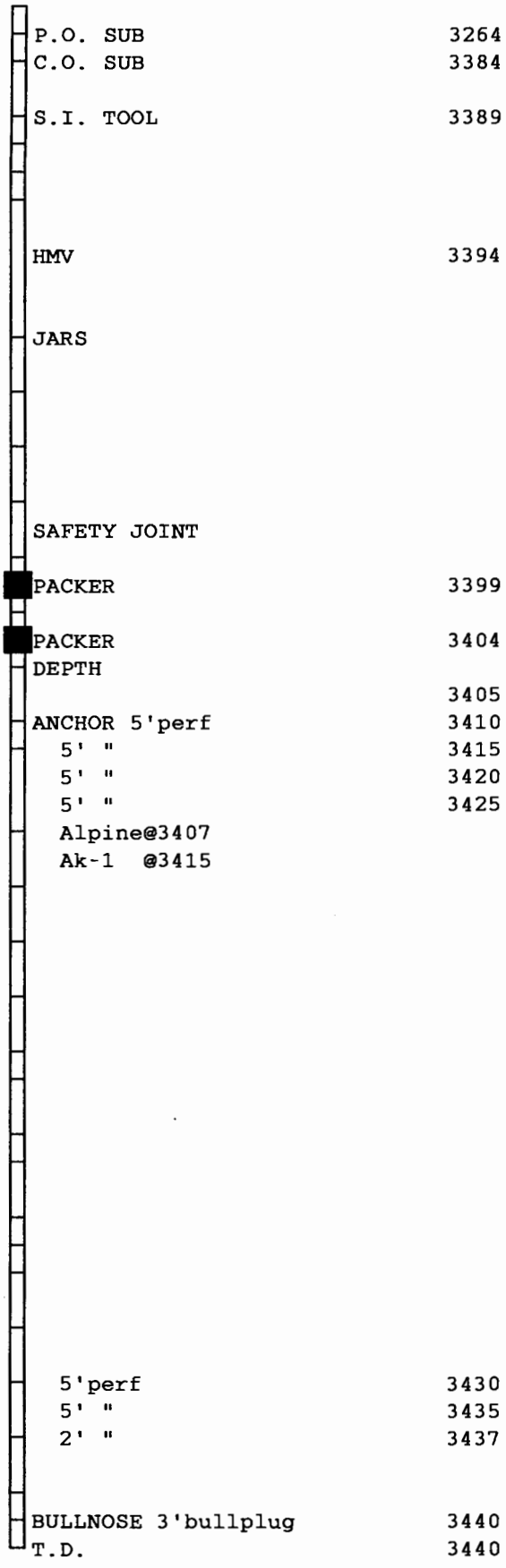
D.P. ABOVE TOOLS.Stands51 Single Total 3164

TOTAL DRILL COLLARS DRILL PIPE & TOOLS .. 3460

TOTAL DEPTH 3440

TOTAL DRILL PIPE ABOVE K.B. 20

REMARKS:

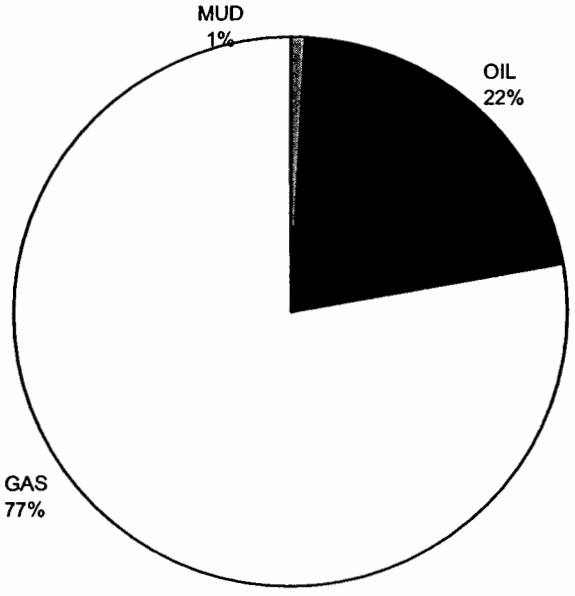


CALCULATED RECOVERY ANALYSIS

DST 4 TICKET 13301

SAMPLE #		TOTAL FEET	GAS %	GAS FEET	OIL %	OIL FEET	WATER %	WATER FEET	MUD %	MUD FEET
DRILL	1	840	100	840	0	0	0	0	0	0
PIPE	2	180	0	0	100	180	0	0	0	0
	3	0	0	0	0	0	0	0	0	0
	4	0	0	0	0	0	0	0	0	0
	5	0	0	0	0	0	0	0	0	0
	6	0	0	0	0	0	0	0	0	0
WEIGHT	1	0	0	0	0	0	0	0	0	0
PIPE	2	0	0	0	0	0	0	0	0	0
	3	0	0	0	0	0	0	0	0	0
	4	0	0	0	0	0	0	0	0	0
	5	0	0	0	0	0	0	0	0	0
DRILL	1	240	20	48	70	168	0	0	10	24
COLLARS	2	0	0	0	0	0	0	0	0	0
	3	0	0	0	0	0	0	0	0	0
	4	0	0	0	0	0	0	0	0	0
	5	0	0	0	0	0	0	0	0	0
TOTAL		1260	0	888	0	348	0	0	0	24

			HRS OPEN		BBL/DAY
BBL OIL=	3.38112	*	1.5	=	54.09792
BBL WATER=	0	*		=	0
BBL MUD=	0.11736				
BBL GAS =	12.17952				

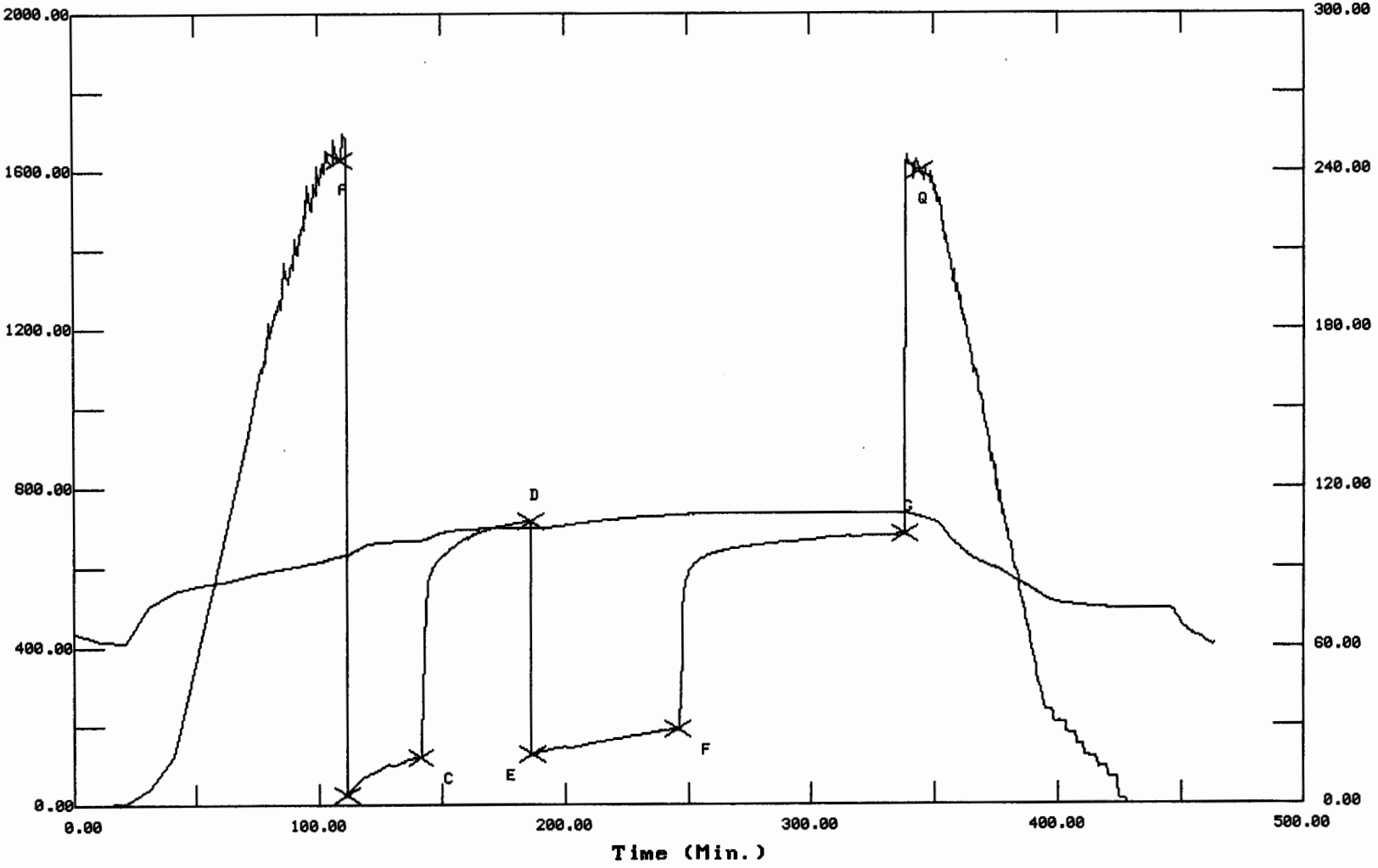


TEST HISTORY

13301 DST#4 Sterling-Fisher#1-5 Murfin Drilling Co., Inc.

Flag Points

	t(Min.)	P(PSIg)
A:	0.00	1630.06
B:	0.00	23.46
C:	30.00	120.37
D:	44.50	716.78
E:	0.00	127.62
F:	59.00	192.19
G:	92.00	682.95
Q:	0.00	1599.72



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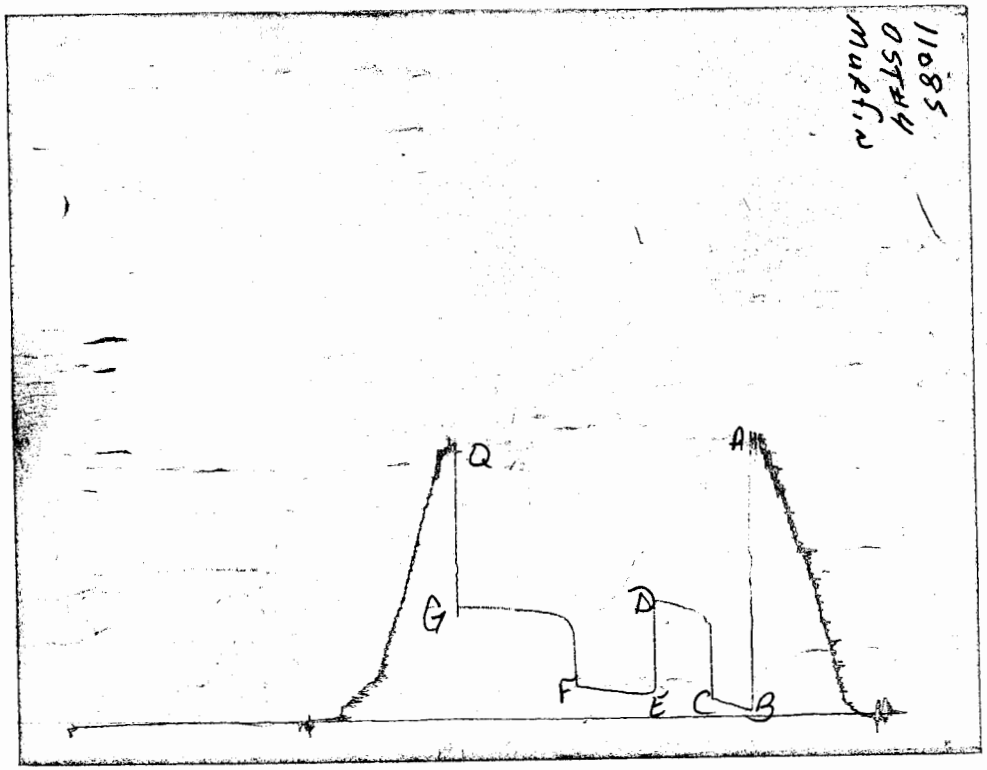


This is a photocopy of the actual AK-1 recorder chart

TRILOBITE TESTING L.L.C.

P.O. Box 362 • Hays, Kansas 67601

№ 13301

Test Ticket

Well Name & No. Steeling-Fisher #1-5 Test No. 4 Date 4-14-00

Company Murfin Drilling Co., Inc Zone Tested Lans F-G

Address 250 N. Water, Suite 300 Wichita, Ks 67202 Elevation 2060 KB 2055 GL

Co. Rep / Geo. Randy Killian Cont. Murfin 8 Est. Ft. of Pay — Por. — %

Location: Sec. 5 Twp. 11S Rge. 20W Co. Ellis State Ks

No. of Copies Reg Distribution Sheet (Y, N) _____ Turnkey (Y, N) _____ Evaluation (Y, N) _____

Interval Tested 3404-3440 Initial Str Wt./Lbs. 42000 Unseated Str Wt./Lbs. 44000

Anchor Length 36 Wt. Set Lbs. 20000 Wt. Pulled Loose/Lbs. 46000

Top Packer Depth 3399 Tool Weight 2000

Bottom Packer Depth 3404 Hole Size — 7 7/8" yes Rubber Size — 6 3/4" yes

Total Depth 3440 Wt. Pipe Run — Drill Collar Run 240

Mud Wt. 9.2 LCM — Vis. 47 WL 9.6 Drill Pipe Size 4½ XH Ft. Run 3164

Blow Description IFP- Weak To A Strong Blow in 12 min
FFP- Fair To A Strong Blows in 8 min
Had Blow Back On Shut-in

Recovery — Total Feet 420 GIP 840 Ft. in DC 240 Ft. in DP 180

Rec. 180	Feet Of Clean Oil		%gas	%oil	%water		%mud
Rec. 240	Feet Of MCO	20	%gas	70 %oil	%water	10	%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 38 °API D@ 60 °F Corrected Gravity 38 °API

RW — @ — °F Chlorides — ppm Recovery Chlorides 6900 ppm System

	AK-1	Alpine				
(A) Initial Hydrostatic Mud	1614	1680	PSI	Recorder No.	3027	T-On Location 0145
(B) First Initial Flow Pressure	33	23	PSI	(depth)	3407	T-Started 0209
(C) First Final Flow Pressure	99	120	PSI	Recorder No.	11085	T-Open 0400
(D) Initial Shut-In Pressure	691	716	PSI	(depth)	3415	T-Pulled 0745
(E) Second Initial Flow Pressure	143	127	PSI	Recorder No.	—	T-Out 0953
(F) Second Final Flow Pressure	187	192	PSI	(depth)	—	T-Off Location 1020
(G) Final Shut-in Pressure	658	682	PSI	Initial Opening	30	Test ✓ 700
(Q) Final Hydrostatic Mud	1614	1599	PSI	Initial Shut-in	45	Jars
				Final Flow	60	Safety Joint
				Final Shut-in	90	Straddle
						Circ. Sub
						Sampler
						Extra Packer
						Elec. Rec. ✓ 150
						Mileage
						Other et Fee 1hr 30
						TOTAL PRICE $ ✓ 885

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 Ray Schwager Thank you

TRILOBITE TESTING L.L.C.

OPERATOR : Murfin Drilling Co., Inc DATE 4-14-00
WELL NAME: Sterling-Fisher #1-5 KB 2060.00 ft TICKET NO: 13302 DST #5
LOCATION : 5-11s-20w Ellis co KS GR 2055.00 ft FORMATION: Lans. H-L
INTERVAL : 3454.00 To 3550.00 ft TD 3550.00 ft TEST TYPE: CONVENTIONAL

RECORDER DATA

Mins		Field	1	2	3	4
PF 30	Rec.	11085	11085	3027		
SI 45	Range(Psi)	4300.0	4300.0	4995.0	0.0	0.0
SF 60	Clock(hrs)	12hr	12hr	elec		
FS 90	Depth(ft)	3464.0	3464.0	3457.0	0.0	0.0

TIME DATA----------
PF Fr. 2217 to 2247 hr
IS Fr. 2247 to 2332 hr
SF Fr. 2332 to 0032 hr
FS Fr. 0032 to 0202 hr

	Field	1	2	3	4
A. Init Hydro	1690.0	1740.0	1677.0	0.0	0.0
B. First Flow	66.0	106.0	33.0	0.0	0.0
B1. Final Flow	209.0	236.0	232.0	0.0	0.0
C. In Shut-in	930.0	931.0	936.0	0.0	0.0
D. Init Flow	264.0	275.0	244.0	0.0	0.0
E. Final Flow	396.0	402.0	391.0	0.0	0.0
F. Fl Shut-in	832.0	834.0	830.0	0.0	0.0
G. Final Hydro	1690.0	1729.0	1679.0	0.0	0.0
Inside/Outside	o	o	i		

T STARTED 2015 hr
T ON BOTM 2214 hr
T OPEN 2217 hr
T PULLED 0202 hr
T OUT 0500 hr

RECOVERY
Tot Fluid 960.00 ft of 240.00 ft in DC and 720.00 ft in DP
120.00 ft of Gas in pipe
180.00 ft of Clean oil
0.00 ft of 100% oil
540.00 ft of Gassy mud & water cut oil
0.00 ft of 5% gas 45% oil 40% water 10% mud
240.00 ft of Slightly oil & gas cut water
0.00 ft of 4% gas 2% oil 94% water
0.00 ft of
SALINITY 90000.00 P.P.M. A.P.I. Gravity 40.00

TOOL DATA----------

Tool Wt.	2000.00 lbs
Wt Set On Packer	20000.00 lbs
Wt Pulled Loose	48000.00 lbs
Initial Str Wt	43000.00 lbs
Unseated Str Wt	45000.00 lbs
Bot Choke	0.75 in
Hole Size	7.78 in
D Col. ID	2.25 in
D. Pipe ID	3.80 in
D.C. Length	240.00 ft
D.P. Length	3194.00 ft

BLOW DESCRIPTION
Initial Flow:
Weak to a strong blow in 8 minutes.
Final Flow:
Weak to a strong blow in 25 minutes.
Final Shut-In:
Had a weak blow back.

MUD DATA----------

Mud Type	Chemical
Weight	9.30 lb/c
Vis.	46.00 S/L
W.L.	9.60 in3
F.C.	0.00 in
Mud Drop	
Amt. of fill	0.00 ft
Btm. H. Temp.	113.00 F
Hole Condition	good
% Porosity	0.00
Packer Size	6.75 in
No. of Packers	2
Cushion Amt.	0.00
Cushion Type	
Reversed Out	N
Tool Chased	N
Tester	Ray Schwager
Co. Rep.	Randy Killian
Contr.	Murfin Drlg.
Rig #	8
Unit #	
Pump T.	

SAMPLES:
SENT TO:

Test Successful: Y

*** TOOL DIAGRAM *** CONVENTIONAL

WELL NAME: Sterling-Fisher #1-5

LOCATION : 5-11s-20w Ellis co KS

TICKET No. 13302 D.S.T. No. 5 DATE 4-14-00

TOTAL TOOL TO BOTTOM OF TOP PACKERS 20

INTERVAL TOOL .....

BOTTOM PACKERS AND ANCHOR 96

TOTAL TOOL 116

DRILL COLLAR ANCHOR IN INTERVAL .....

D.C. ANCHOR STND.Stands Single Total

D.P. ANCHOR STND.Stands Single Total

TOTAL ASSEMBLY .....

D.C. ABOVE TOOLS.Stands4 Single Total 240

D.P. ABOVE TOOLS.Stands53 Single Total 3194

TOTAL DRILL COLLARS DRILL PIPE & TOOLS .. 3581

TOTAL DEPTH 3550

TOTAL DRILL PIPE ABOVE K.B. 31

REMARKS:
RW .12 @ 53F

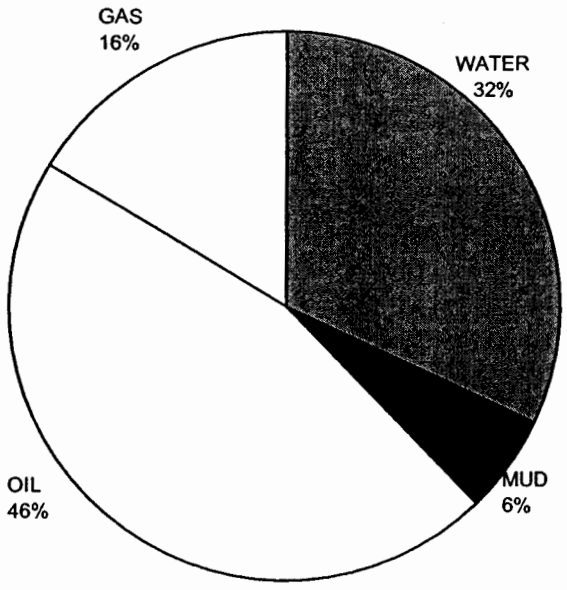
P.O. SUB	3314
C.O. SUB	3434
S.I. TOOL	3439
HMV	3444
JARS	
SAFETY JOINT	
PACKER	3449
PACKER	3454
DEPTH	3455
ANCHOR 4'perf	3459
63'pipe&subs	3522
5'perf	3527
5' "	3532
5' "	3537
Alpine@3457	
Ak-1 @3464	
5'perf	3542
5' "	3547
BULLNOSE 3'bullplug	3550
T.D.	3550

CALCULATED RECOVERY ANALYSIS

DST 5 TICKET 13302

SAMPLE #		TOTAL FEET	GAS %	GAS FEET	OIL %	OIL FEET	WATER %	WATER FEET	MUD %	MUD FEET
DRILL	1	120	100	120	0	0	0	0	0	0
PIPE	2	180	0	0	100	180	0	0	0	0
	3	540	5	27	45	243	40	216	10	54
	4	0	0	0	0	0	0	0	0	0
	5	0	0	0	0	0	0	0	0	0
	6	0	0	0	0	0	0	0	0	0
WEIGHT	1	0	0	0	0	0	0	0	0	0
PIPE	2	0	0	0	0	0	0	0	0	0
	3	0	0	0	0	0	0	0	0	0
	4	0	0	0	0	0	0	0	0	0
	5	0	0	0	0	0	0	0	0	0
DRILL	1	240	4	9.6	2	4.8	94	225.6	0	0
COLLARS	2	0	0	0	0	0	0	0	0	0
	3	0	0	0	0	0	0	0	0	0
	4	0	0	0	0	0	0	0	0	0
	5	0	0	0	0	0	0	0	0	0
TOTAL		1080	0	156.6	0	427.8	0	441.6	0	54

			HRS OPEN		BBL/DAY
BBL OIL=	6.038532	*	1.5	=	96.616512
BBL WATER=	4.174704	*		=	66.795264
BBL MUD=	0.76788				
BBL GAS =	2.137284				

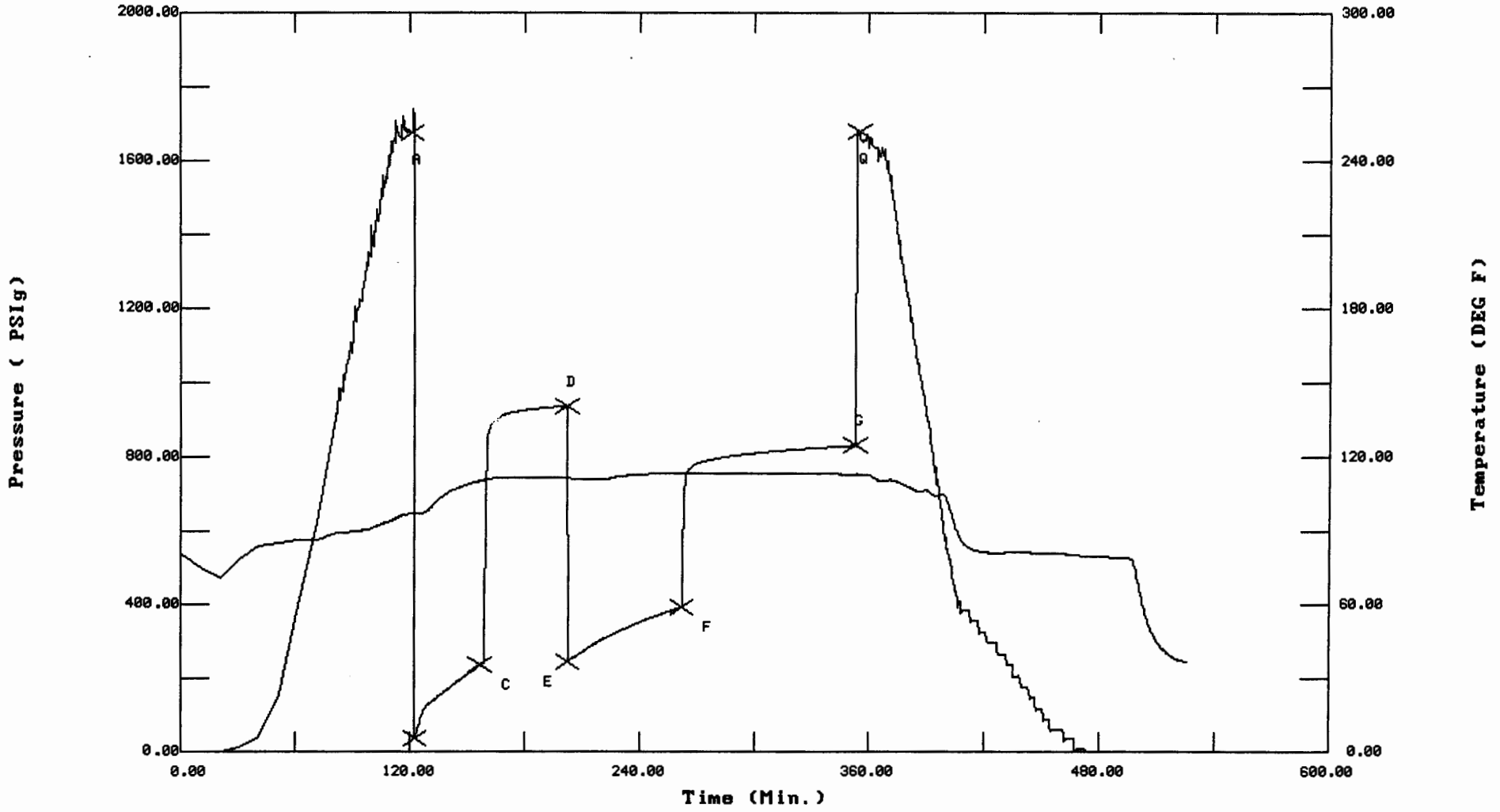


TEST HISTORY

13302 DST#5 Sterling-Fisher #1-5 Murfin Drilling Co., Inc.

Flag Points

	t(Min.)	P(PSIg)
A:	0.00	1677.67
B:	0.00	33.45
C:	34.00	232.74
D:	45.50	936.70
E:	0.00	244.04
F:	59.50	391.02
G:	91.00	830.19
Q:	0.00	1679.91



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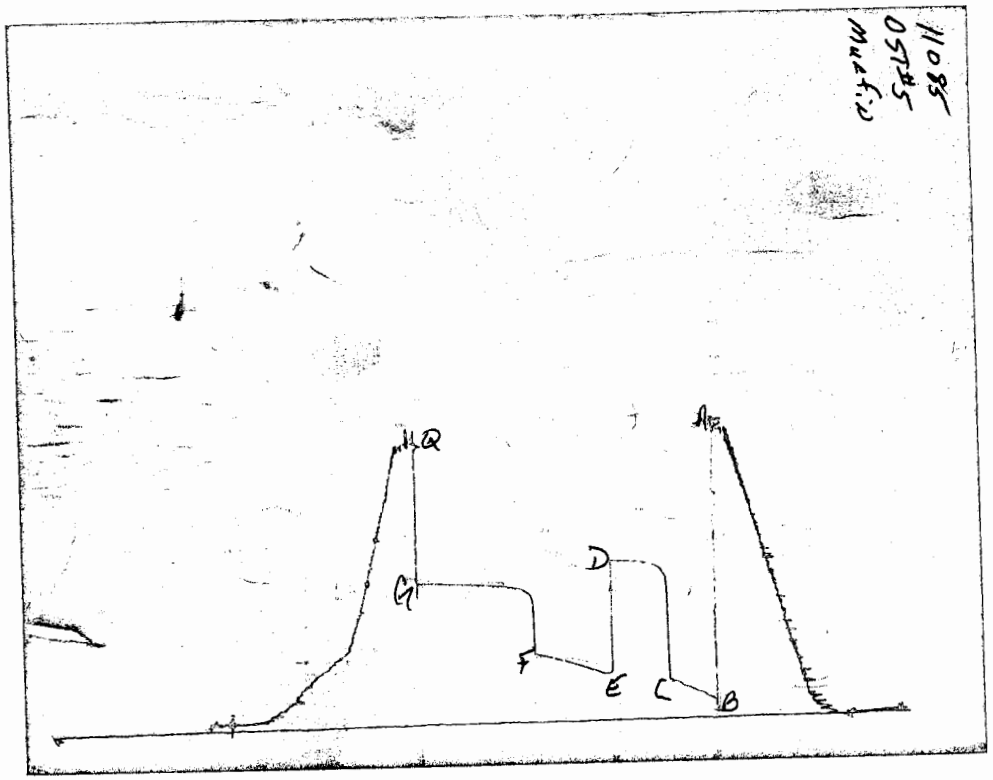


This is a photocopy of the actual AK-1 recorder chart

TRILOBITE TESTING L.L.C.

P.O. Box 362 • Hays, Kansas 67601

№ 13302

Test Ticket

Well Name & No. Sterling-Fisher #1-5 Test No. 5 Date 4-14-00

Company Murfin Drilling Co., Inc Zone Tested Lans H-I

Address 250 N. Water, Suite 300, Wichita, KS 67202 Elevation 2060 KB 2055 GL

Co. Rep / Geo. Randy Killian Cont. Murfin 8 Est. Ft. of Pay — Por. — %

Location: Sec. 5 Twp. 11S Rge. 20W Co. Ellis State Ks

No. of Copies Reg Distribution Sheet (Y, N) — Turnkey (Y, N) — Evaluation (Y, N) —

Interval Tested 3454-3550 Initial Str Wt./Lbs. 43000 Unseated Str Wt./Lbs. 45000

Anchor Length 96 Wt. Set Lbs. 20000 Wt. Pulled Loose/Lbs. 48000

Top Packer Depth 3449 Tool Weight 2000

Bottom Packer Depth 3454 Hole Size — 7 7/8" yes Rubber Size — 6 3/4" yes

Total Depth 3550 Wt. Pipe Run — Drill Collar Run 240

Mud Wt. 9.3 LCM — Vis. 46 WL 9.6 Drill Pipe Size 4½ XH Ft. Run 3194

Blow Description IFP - Weak To A Strong Blow in 8 min
FFP - Weak To A Strong Blow in 25 min
Had a weak blow back on Shut-in

Recovery — Total Feet	960	GIP	120	Ft. in DC	240	Ft. in DP	720	
Rec.	180	Feet Of	Clean Oil	%gas	%oil	%water	%mud	
Rec.	540	Feet Of	GMWCO	5 %gas	45 %oil	40 %water	10 %mud	
Rec.	240	Feet Of	SOWCW	4 %gas	2 %oil	94 %water	%mud	
Rec.		Feet Of		%gas	%oil	%water	%mud	
Rec.		Feet Of		%gas	%oil	%water	%mud	

BHT 113 °F Gravity 40 °API D@ 60 °F Corrected Gravity 40 °API

RW .12 @ 53 °F Chlorides 90000 ppm Recovery Chlorides 6900 ppm System

	AK-1	Alpine					
(A) Initital Hydrostatic Mud	1690	1677	PSI	Recorder No.	3027	T-On Location	1945
(B) First Initial Flow Pressure	66	33	PSI	(depth)	3457	T-Started	2015
(C) First Final Flow Pressure	209	232	PSI	Recorder No.	11085	T-Open	2217
(D) Initial Shut-In Pressure	930	936	PSI	(depth)	3464	T-Pulled	0202
(E) Second Initial Flow Pressure	264	244	PSI	Recorder No.	—	T-Out	0500
(F) Second Final Flow Pressure	396	391	PSI	(depth)	—	T-Off Location	0520
(G) Final Shut-in Pressure	832	830	PSI	Initial Opening	30	Test ✓	700
(Q) Final Hydrostatic Mud	1690	1679	PSI	Initial Shut-in	45	Jars	
				Final Flow	60	Safety Joint	
				Final Shut-in	90	Straddle	
						Circ. Sub	
						Sampler	
						Extra Packer	
						Elec. Rec. ✓	150
						Mileage	
						Other	1 hr 30
						TOTAL PRICE $ ✓	280

Approved By

Our Representative Ray Schwager Thank you

TRILOBITE TESTING L.L.C.

OPERATOR : Murfin Drilling Co., Inc DATE 4-15-00
WELL NAME: Sterling-Fisher #1-5 KB 2060.00 ft TICKET NO: 13303 DST #6
LOCATION : 5-11s-20w Ellis co KS GR 2055.00 ft FORMATION: Arbuckle
INTERVAL : 3642.00 To 3654.00 ft TD 3654.00 ft TEST TYPE: CONVENTIONAL

RECORDER DATA

Mins		Field	1	2	3	4
PF 30	Rec.	11085	11085	3027		
SI 45	Range(Psi)	4300.0	4300.0	4995.0	0.0	0.0
SF 30	Clock(hrs)	12hr	12hr	elec		
FS 60	Depth(ft)	3651.0	3651.0	3643.0	0.0	0.0

TIME DATA----------
PF Fr. 1616 to 1646 hr
IS Fr. 1646 to 1731 hr
SF Fr. 1731 to 1801 hr
FS Fr. 1801 to 1901 hr

	Field	1	2	3	4
A. Init Hydro	1722.0	1763.0	1786.0	0.0	0.0
B. First Flow	374.0	410.0	429.0	0.0	0.0
B1. Final Flow	658.0	672.0	721.0	0.0	0.0
C. In Shut-in	1082.0	1080.0	1111.0	0.0	0.0
D. Init Flow	702.0	726.0	697.0	0.0	0.0
E. Final Flow	865.0	882.0	927.0	0.0	0.0
F. Fl Shut-in	1082.0	1081.0	1101.0	0.0	0.0
G. Final Hydro	1722.0	1754.0	1750.0	0.0	0.0
Inside/Outside	o	o	i		

T STARTED 1434 hr
T ON BOTM 1613 hr
T OPEN 1616 hr
T PULLED 1901 hr
T OUT 2240 hr

RECOVERY
Tot Fluid 2500.00 ft of 240.00 ft in DC and 2260.00 ft in DP
180.00 ft of Gas in pipe.
2500.00 ft of Clean oil
0.00 ft of 100% oil
0.00 ft of
0.00 ft of
0.00 ft of
0.00 ft of
0.00 ft of
SALINITY 0.00 P.P.M. A.P.I. Gravity 26.00

TOOL DATA----------

Tool Wt.	2000.00 lbs
Wt Set On Packer	20000.00 lbs
Wt Pulled Loose	52000.00 lbs
Initial Str Wt	42000.00 lbs
Unseated Str Wt	50000.00 lbs
Bot Choke	0.75 in
Hole Size	7.78 in
D Col. ID	2.25 in
D. Pipe ID	3.80 in
D.C. Length	240.00 ft
D.P. Length	3412.00 ft

BLOW DESCRIPTION
Initial Flow:
Strong blow in 1 minute.
Final Flow:
Strong blow in 3 minutes.
Final Shut-In:
Had blow back.

MUD DATA----------

Mud Type	Chemical
Weight	9.20 lb/c
Vis.	48.00 S/L
W.L.	8.00 in3
F.C.	0.00 in
Mud Drop	
Amt. of fill	0.00 ft
Btm. H. Temp.	119.00 F
Hole Condition	good
% Porosity	0.00
Packer Size	6.75 in
No. of Packers	2
Cushion Amt.	0.00
Cushion Type	
Reversed Out	Y
Tool Chased	N
Tester	Ray Schwager
Co. Rep.	Randy Killian
Contr.	Murfin Drilling
Rig #	8
Unit #	
Pump T.	

SAMPLES:
SENT TO:

Test Successful: Y

*** TOOL DIAGRAM *** CONVENTIONAL

WELL NAME: Sterling-Fisher #1-5

LOCATION : 5-11s-20w Ellis co KS

TICKET No. 13303 D.S.T. No. 6 DATE 4-15-00

TOTAL TOOL TO BOTTOM OF TOP PACKERS 20

INTERVAL TOOL .....

BOTTOM PACKERS AND ANCHOR 12

TOTAL TOOL 32

DRILL COLLAR ANCHOR IN INTERVAL .....

D.C. ANCHOR STND.Stands Single Total

D.P. ANCHOR STND.Stands Single Total

TOTAL ASSEMBLY .....

D.C. ABOVE TOOLS.Stands4 Single Total 240

D.P. ABOVE TOOLS.Stands55 Single Total 3412

TOTAL DRILL COLLARS DRILL PIPE & TOOLS .. 3684

TOTAL DEPTH 3654

TOTAL DRILL PIPE ABOVE K.B. 30

REMARKS:

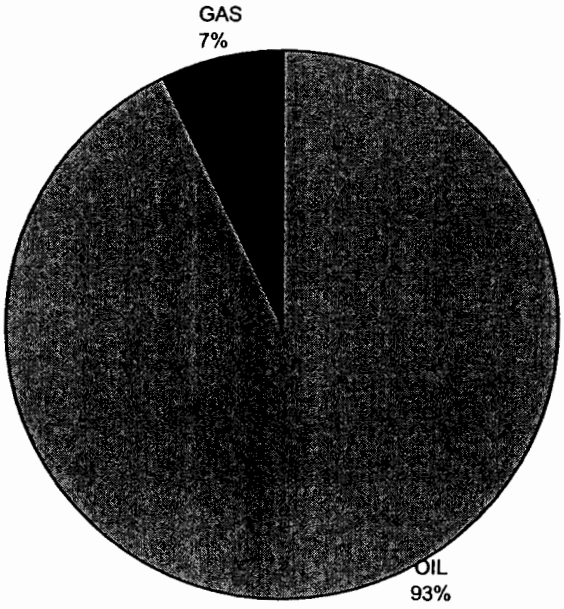
P.O. SUB	3502
C.O. SUB	3622
S.I. TOOL	3627
HMV	3632
JARS	
SAFETY JOINT	
PACKER	3637
PACKER	3642
DEPTH	3643
ANCHOR 1'perf	3644
5' "	3649
Alpine@3643	
Ak-1 @3651	
2'perf	3651
BULLNOSE 3'bullplug	3654
T.D.	3654

CALCULATED RECOVERY ANALYSIS

DST 6 TICKET 13303

SAMPLE #		TOTAL FEET	GAS %	GAS FEET	OIL %	OIL FEET	WATER %	WATER FEET	MUD %	MUD FEET
DRILL	1	180	100	180	0	0	0	0	0	0
PIPE	2	2260	0	0	100	2260	0	0	0	0
	3	0	0	0	0	0	0	0	0	0
	4	0	0	0	0	0	0	0	0	0
	5	0	0	0	0	0	0	0	0	0
	6	0	0	0	0	0	0	0	0	0
WEIGHT	1	0	0	0	0	0	0	0	0	0
PIPE	2	0	0	0	0	0	0	0	0	0
	3	0	0	0	0	0	0	0	0	0
	4	0	0	0	0	0	0	0	0	0
	5	0	0	0	0	0	0	0	0	0
DRILL	1	240	0	0	100	240	0	0	0	0
COLLARS	2	0	0	0	0	0	0	0	0	0
	3	0	0	0	0	0	0	0	0	0
	4	0	0	0	0	0	0	0	0	0
	5	0	0	0	0	0	0	0	0	0
TOTAL		2680	0	180	0	2500	0	0	0	0

		HRS OPEN		BBL/DAY
BBL OIL=	33.3108	* 1	=	799.4592
BBL WATER=	0	*	=	0
BBL MUD=	0			
BBL GAS =	2.5596			

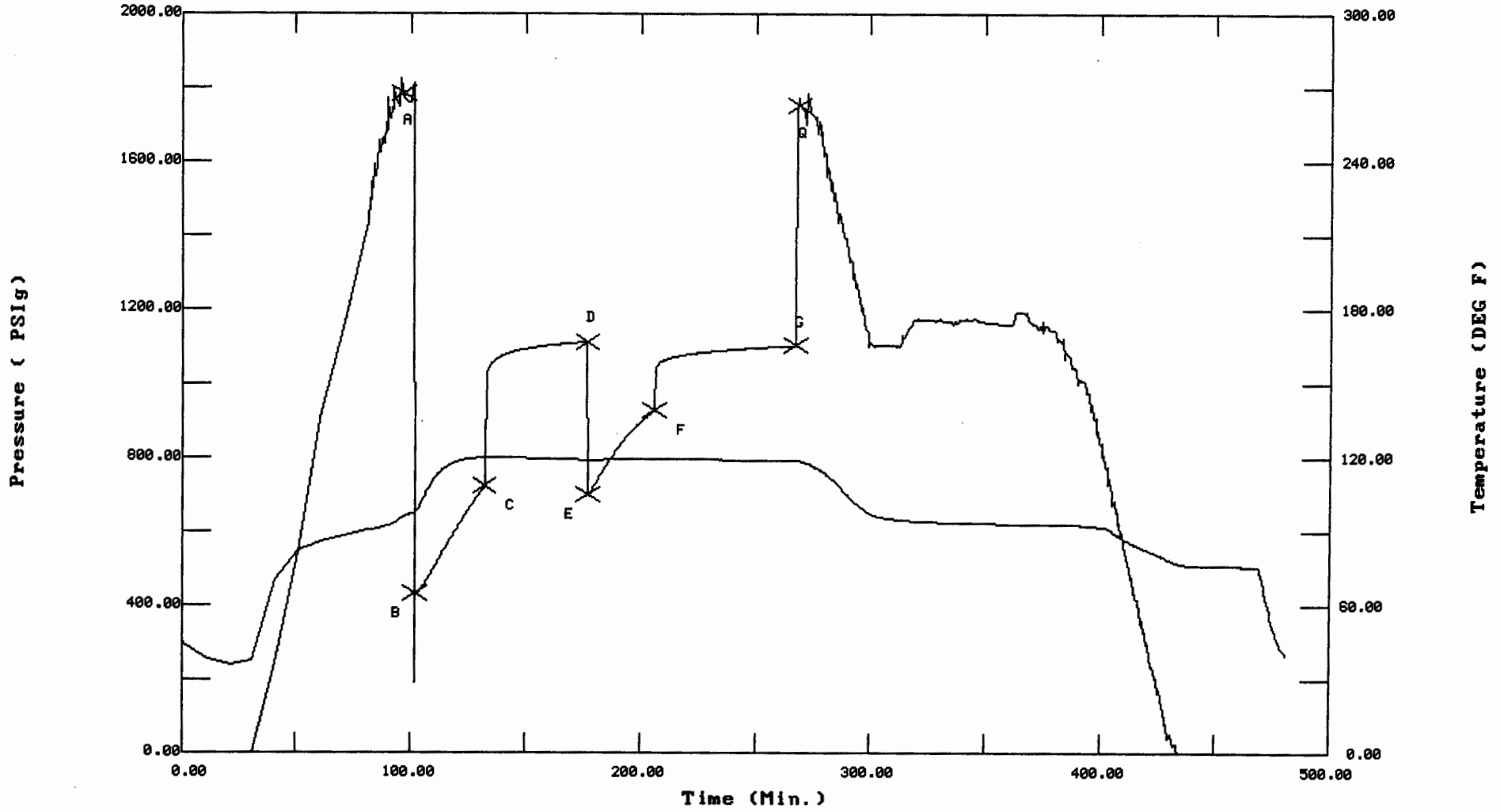


TEST HISTORY

13303 DST#6 Sterling-Fisher #1-5 Murfin Drilling Co., Inc.

Flag Points

	t(Min.)	P(PSIg)
A:	0.00	1786.61
B:	0.00	429.99
C:	30.00	721.59
D:	45.00	1111.92
E:	0.00	697.55
F:	28.50	927.75
G:	61.50	1101.96
Q:	0.00	1750.93



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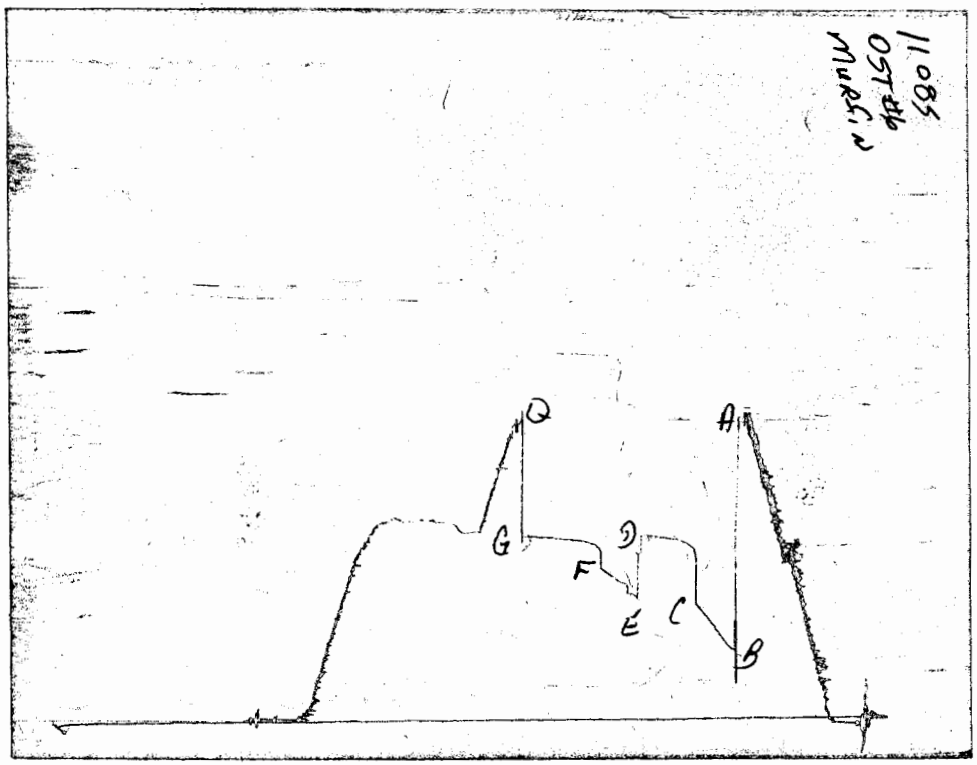


This is a photocopy of the actual AK-1 recorder chart

TRILOBITE TESTING L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Nº 13303

Test Ticket

Well Name & No. Sterling-Fisher #1-5 Test No. 6 Date 4-15-00

Company Murfin Drilling Co., Inc Zone Tested Arbuckle

Address 250 N. Water Suite 300 Wichita Ks 67202 Elevation 2060 KB 2055 GL

Co. Rep / Geo. Randy Killian Cont. Murfin 8 Est. Ft. of Pay — Por. — %

Location: Sec. 5 Twp. 11S Rge. 20W Co. Ellis State Ks

No. of Copies Reg Distribution Sheet (Y, N) _____ Turnkey (Y, N) _____ Evaluation (Y, N) _____

Interval Tested 3642-3654 Initial Str Wt./Lbs. 42000 Unseated Str Wt./Lbs. 50000

Anchor Length 12 Wt. Set Lbs. 20000 Wt. Pulled Loose/Lbs. 52000

Top Packer Depth 3637 Tool Weight 2000

Bottom Packer Depth 3642 Hole Size — 7 7/8" yes Rubber Size — 6 3/4" yes

Total Depth 3654 Wt. Pipe Run — Drill Collar Run 240

Mud Wt. 9.2 LCM — Vis. 48 WL 8.0 Drill Pipe Size 4½XH Ft. Run 3412

Blow Description IFP - Strong Blow in 1 min
FFP - Strong Blow in 3 min
Had blowback on Shut-in

Recovery — Total Feet 2500 GIP 180 Ft. in DC 240 Ft. in DP 2260

Rec. 2500	Feet Of CLEAN Oil	%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 119 °F Gravity 26 °API D@ 60 °F Corrected Gravity 26 °API

RW — @ — °F Chlorides — ppm Recovery Chlorides 8700 ppm System

	AK-1	Alpine					
(A) Initial Hydrostatic Mud	1722	1786	PSI	Recorder No.	3027	T-On Location	1415
(B) First Initial Flow Pressure	374	429	PSI	(depth)	3643	T-Started	1434
(C) First Final Flow Pressure	658	721	PSI	Recorder No.	11085	T-Open	1616
(D) Initial Shut-In Pressure	1082	1111	PSI	(depth)	3651	T-Pulled	1901
(E) Second Initial Flow Pressure	702	697	PSI	Recorder No.	—	T-Out	2240
(F) Second Final Flow Pressure	865	927	PSI	(depth)	—	T-Off Location	2300
(G) Final Shut-in Pressure	1082	1101	PSI	Initial Opening	30	Test ✓	700
(Q) Final Hydrostatic Mud	1722	1750	PSI	Initial Shut-in	45	Jars	
				Final Flow	30	Safety Joint	
				Final Shut-in	60	Straddle	
						Circ. Sub ✓	35
						Sampler	
						Extra Packer	
						Elec. Rec. ✓	150
						Mileage	
						Other ef / NC	30
						TOTAL PRICE $ ✓	915

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 Ray Schwager Thankyou

TRILOBITE TESTING L.L.C.

OPERATOR : Murfin Drilling Co., Inc DATE 4-16-00
WELL NAME: Sterling-Fisher #1-5 KB 2060.00 ft TICKET NO: 13304 DST #7
LOCATION : 5-11s-20w Ellis co KS GR 2055.00 ft FORMATION: Arbuckle
INTERVAL : 3657.00 To 3669.00 ft TD 3669.00 ft TEST TYPE: CONVENTIONAL

RECORDER DATA

Mins			Field	1	2	3	4
PF	30	Rec.	11085	11085	3027		
SI	45	Range(Psi)	4300.0	4300.0	4995.0	0.0	0.0
SF	30	Clock(hrs)	12hr	12hr	elec		
FS	60	Depth(ft)	3666.0	3666.0	3666.0	0.0	0.0

TIME DATA----------
PF Fr. 0651 to 0721 hr
IS Fr. 0721 to 0806 hr
SF Fr. 0806 to 0836 hr
FS Fr. 0836 to 0936 hr

	Field	1	2	3	4
A. Init Hydro	1712.0	1787.0	1745.0	0.0	0.0
B. First Flow	77.0	71.0	50.0	0.0	0.0
B1. Final Flow	242.0	242.0	265.0	0.0	0.0
C. In Shut-in	1115.0	1108.0	1136.0	0.0	0.0
D. Init Flow	297.0	308.0	268.0	0.0	0.0
E. Final Flow	396.0	394.0	412.0	0.0	0.0
F. Fl Shut-in	1126.0	1123.0	1141.0	0.0	0.0
G. Final Hydro	1712.0	1778.0	1725.0	0.0	0.0
Inside/Outside	o	o	i		

T STARTED 0451 hr
T ON BOTM 0648 hr
T OPEN 0651 hr
T PULLED 0936 hr
T OUT 1210 hr

RECOVERY
Tot Fluid 1080.00 ft of 240.00 ft in DC and 840.00 ft in DP
120.00 ft of Gas in pipe
1080.00 ft of Clean oil
0.00 ft of 100% oil
0.00 ft of
0.00 ft of
0.00 ft of
0.00 ft of
SALINITY 0.00 P.P.M. A.P.I. Gravity 26.00

TOOL DATA----------

Tool Wt.	2000.00 lbs
Wt Set On Packer	20000.00 lbs
Wt Pulled Loose	52000.00 lbs
Initial Str Wt	44000.00 lbs
Unseated Str Wt	47000.00 lbs
Bot Choke	0.75 in
Hole Size	7.78 in
D Col. ID	2.25 in
D. Pipe ID	3.80 in
D.C. Length	240.00 ft
D.P. Length	3414.00 ft

MUD DATA----------

Mud Type	Chemical
Weight	9.00 lb/cf
Vis.	51.00 S/L
W.L.	10.00 in3
F.C.	0.00 in
Mud Drop	
Amt. of fill	0.00 ft
Btm. H. Temp.	107.00 F
Hole Condition	good
% Porosity	0.00
Packer Size	6.75 in
No. of Packers	2
Cushion Amt.	0.00
Cushion Type	
Reversed Out	N
Tool Chased	N
Tester	Ray Schwager
Co. Rep.	Randy Killian
Contr.	Murfin Drlg.
Rig #	8
Unit #	
Pump T.	

BLOW DESCRIPTION
Initial Flow:
Strong blow in 5 minutes.
Final Flow:
Weak to a strong blow in 10 minutes.
Final Shut-In:
Had blow back.

SAMPLES:
SENT TO:

Test Successful: Y

*** TOOL DIAGRAM *** CONVENTIONAL

WELL NAME: Sterling-Fisher #1-5

LOCATION : 5-11s-20w Ellis co KS

TICKET No. 13304 D.S.T. No. 7 DATE 4-16-00

TOTAL TOOL TO BOTTOM OF TOP PACKERS 20

INTERVAL TOOL .....

BOTTOM PACKERS AND ANCHOR 12

TOTAL TOOL 32

DRILL COLLAR ANCHOR IN INTERVAL .....

D.C. ANCHOR STND.Stands Single Total

D.P. ANCHOR STND.Stands Single Total

TOTAL ASSEMBLY .....

D.C. ABOVE TOOLS.Stands4 Single Total 240

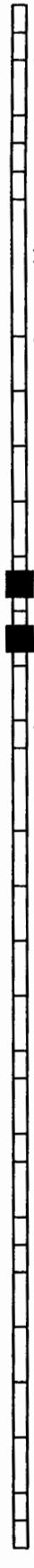
D.P. ABOVE TOOLS.Stands55 Single Total 3414

TOTAL DRILL COLLARS DRILL PIPE & TOOLS .. 3686

TOTAL DEPTH 3669

TOTAL DRILL PIPE ABOVE K.B. 17

REMARKS:



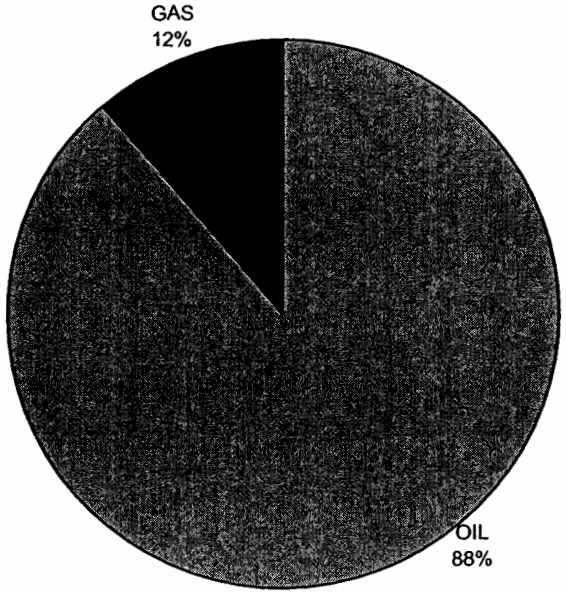
P.O. SUB	3517
C.O. SUB	3637
S.I. TOOL	3642
HMV	3647
JARS	
SAFETY JOINT	
PACKER	3652
PACKER	3657
DEPTH	3658
ANCHOR 1'perf	3659
5' "	3664
Alpine@3659	
Ak-1 @3666	
2'perf	3666
BULLNOSE 3'bullplug	3669
T.D.	3669

CALCULATED RECOVERY ANALYSIS

DST 7 TICKET 13304

SAMPLE #		TOTAL FEET	GAS %	GAS FEET	OIL %	OIL FEET	WATER %	WATER FEET	MUD %	MUD FEET
DRILL	1	120	100	120	0	0	0	0	0	0
PIPE	2	840	0	0	100	840	0	0	0	0
	3	0	0	0	0	0	0	0	0	0
	4	0	0	0	0	0	0	0	0	0
	5	0	0	0	0	0	0	0	0	0
	6	0	0	0	0	0	0	0	0	0
WEIGHT	1	0	0	0	0	0	0	0	0	0
PIPE	2	0	0	0	0	0	0	0	0	0
	3	0	0	0	0	0	0	0	0	0
	4	0	0	0	0	0	0	0	0	0
	5	0	0	0	0	0	0	0	0	0
DRILL	1	240	0	0	100	240	0	0	0	0
COLLARS	2	0	0	0	0	0	0	0	0	0
	3	0	0	0	0	0	0	0	0	0
	4	0	0	0	0	0	0	0	0	0
	5	0	0	0	0	0	0	0	0	0
TOTAL		1200	0	120	0	1080	0	0	0	0

			HRS OPEN		BBL/DAY
BBL OIL=	13.1184	*	1	=	314.8416
BBL WATER=	0	*		=	0
BBL MUD=	0				
BBL GAS =	1.7064				

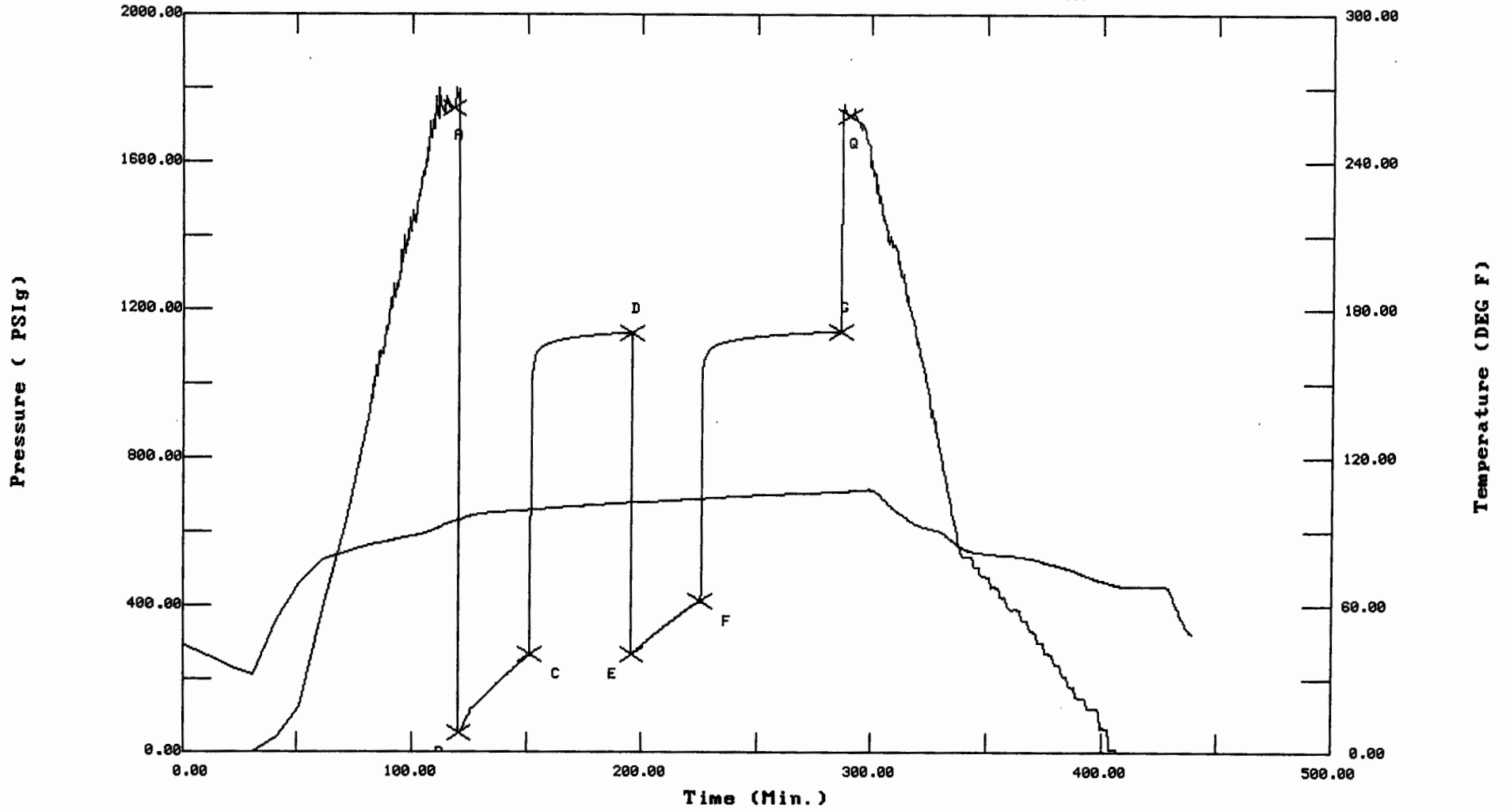


TEST HISTORY

13304 DST#7 Sterling-Fisher #1-5 Murfin Drilling Co., Inc.

Flag Points

	t(Min.)	P(PSIg)
A:	0.00	1745.68
B:	0.00	50.67
C:	31.00	265.95
D:	44.00	1136.91
E:	0.00	268.15
F:	29.50	412.81
G:	61.00	1141.48
Q:	0.00	1725.69



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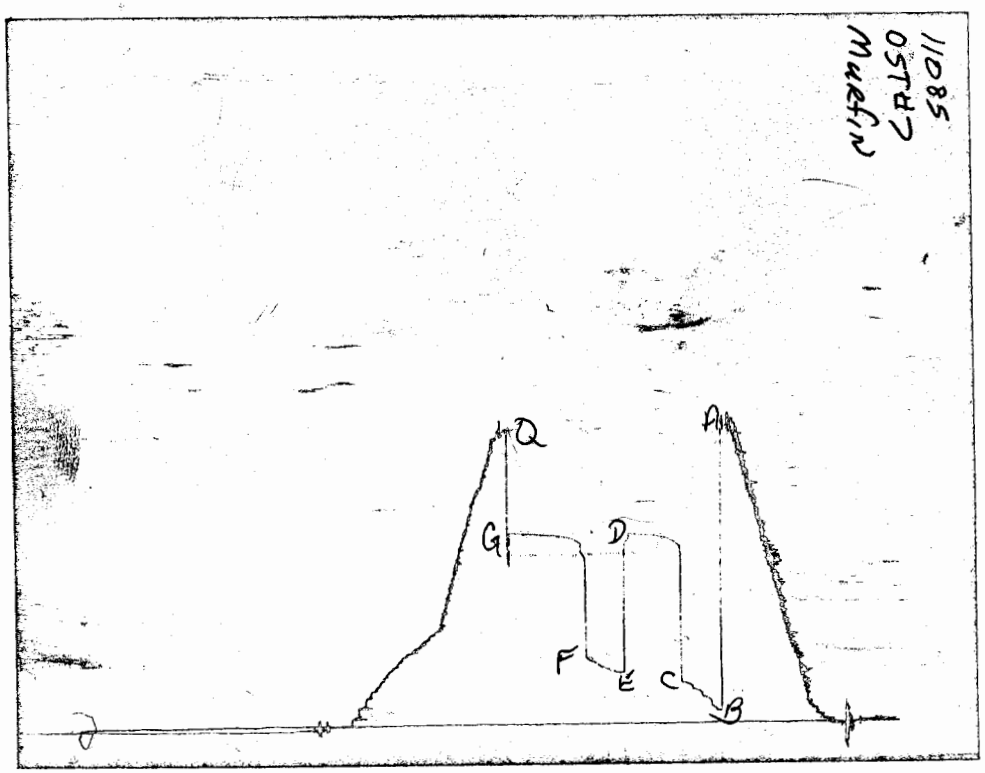

This is a photocopy of the actual AK-1 recorder chart

TRILOBITE TESTING L.L.C.

P.O. Box 362 • Hays, Kansas 67601

№ 13304

Test Ticket

Well Name & No. Sterling-Fisher #1-5 Test No. 7 Date 4-16-00

Company Murfin Drilling Co., Inc Zone Tested Arbuckle

Address 250 N. Water, Suite 300 Wichita, Ks 67202 Elevation 2060 KB 2055 GL

Co. Rep / Geo. Randy Killian Cont. Murfin 8 Est. Ft. of Pay — Por. — %

Location: Sec. 5 Twp. 11 S Rge. 20 W Co. Ellis State Ks

No. of Copies Reg Distribution Sheet (Y, N) _____ Turnkey (Y, N) _____ Evaluation (Y, N) _____

Interval Tested 3657-3669 Initial Str Wt./Lbs. 44000 Unseated Str Wt./Lbs. 47000

Anchor Length 12 Wt. Set Lbs. 20000 Wt. Pulled Loose/Lbs. 52000

Top Packer Depth 3652 Tool Weight 2000

Bottom Packer Depth 3657 Hole Size — 7 7/8" yes Rubber Size — 6 3/4" yes

Total Depth 3669 Wt. Pipe Run — Drill Collar Run 240

Mud Wt. 9 LCM TR Vis. 51 WL ~~10.8~~ Drill Pipe Size 4½ XH Ft. Run 3414

Blow Description IFP — Strong Blow in 5 min

FFP - Weak to a Steong Blow in 10 min

Had Blow Back on Shut-in

Recovery — Total Feet 1080 GIP 120 Ft. in DC 240 Ft. in DP 840

			%gas	%oil	%water	%mud
Rec. 1080	Feet Of	Clean Oil				
Rec.	Feet Of					
Rec.	Feet Of					
Rec.	Feet Of					
Rec.	Feet Of					

BHT 107 °F Gravity 26 °API D@ 60 °F Corrected Gravity 26 °API

RW — @ — °F Chlorides — ppm Recovery Chlorides 8700 ppm System

	AK-1	Alpine					
(A) Initial Hydrostatic Mud	1712	1745	PSI	Recorder No.	3027	T-On Location	0435
(B) First Initial Flow Pressure	77	50	PSI	(depth)	3659	T-Started	0451
(C) First Final Flow Pressure	242	265	PSI	Recorder No.	11085	T-Open	0651
(D) Initial Shut-In Pressure	1115	1136	PSI	(depth)	3666	T-Pulled	0936
(E) Second Initial Flow Pressure	297	268	PSI	Recorder No.	—	T-Out	1210
(F) Second Final Flow Pressure	396	412	PSI	(depth)	—	T-Off Location	1300
(G) Final Shut-in Pressure	1126	1141	PSI	Initial Opening	30	Test ✓	700
(Q) Final Hydrostatic Mud	1712	1725	PSI	Initial Shut-in	45	Jars	
				Final Flow	30	Safety Joint	
				Final Shut-in	60	Straddle	
						Circ. Sub	
						Sampler	
						Extra Packer	
						Elec. Rec. ✓	150
						Mileage	
						Other	a/t 1hr 30
						TOTAL PRICE $ ✓	880

Approved By _____

Our Representative Ray Schwager Thank you