

TRILOBITE TESTING L.L.C.

OPERATOR : Maxwell Oper. Co. Inc.
WELL NAME: Amos #1-30
LOCATION : 30-34S-24W Clark co KS
INTERVAL : 5622.00 To 5696.00 ft

DATE 4-2-99
KB 2018.00 ft TICKET NO: 10961 DST #1
GR 2006.00 ft FORMATION: Morrow & Chester
TD 5696.00 ft TEST TYPE: CONVENTIONAL

RECORDER DATA

Mins		Field	1	2	3	4	TIME DATA-----
PF 30	Rec.	10993	10993	3227			PF Fr. 0844 to 0914 hr
SI 60	Range(Psi)	4250.0	4250.0	4995.0	0.0	0.0	IS Fr. 0914 to 1014 hr
SF 60	Clock(hrs)	12HR.	12HR.	ELET.			SF Fr. 1014 to 1114 hr
FS 120	Depth(ft)	5693.0	5693.0	5625.0	0.0	0.0	FS Fr. 1144 to 1314 hr

	Field	1	2	3	4	
A. Init Hydro	2983.0	2905.0	2906.0	0.0	0.0	T STARTED 0600 hr
B. First Flow	108.0	133.0	67.0	0.0	0.0	T ON BOTM 0842 hr
B1. Final Flow	130.0	139.0	86.0	0.0	0.0	T OPEN 0844 hr
C. In Shut-in	1650.0	1667.0	1660.0	0.0	0.0	T PULLED 1314 hr
D. Init Flow	152.0	167.0	85.0	0.0	0.0	T OUT 1600 hr
E. Final Flow	173.0	167.0	114.0	0.0	0.0	
F. Fl Shut-in	1736.0	1751.0	1723.0	0.0	0.0	TOOL DATA-----
G. Final Hydro	2739.0	2757.0	2708.0	0.0	0.0	Tool Wt. 1800.00 lbs
Inside/Outside	0	0	I			Wt Set On Packer 25000.00 lbs
						Wt Pulled Loose 100000.00 lbs
						Initial Str Wt 76000.00 lbs
						Unseated Str Wt 78000.00 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 359.00 ft
						D.P. Length 5317.00 ft

RECOVERY

Tot Fluid 300.00 ft of 300.00 ft in DC and 0.00 ft in DP
300.00 ft of Drilling mud
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

BLOW DESCRIPTION

Initial Flow:
Strong blow bottom of bucket in
1 min. Gas to surface in 25 mins.
Final Flow:
Strong blow bottom of bucket as soon
as open tool MCF @ 28.0

SAMPLES: Yes 1
SENT TO: Caraway Lab Liberal.

Test Successful: Y

MUD DATA-----

Mud Type	Chemical
Weight	9.20 lb/cf
Vis.	54.00 S/L
W.L.	8.00 in3
F.C.	0.00 in
Mud Drop N	
Amt. of fill	0.00 ft
Btm. H. Temp.	116.00 F
Hole Condition	Good
% Porosity	10.00
Packer Size	6.75 in
No. of Packers	2
Cushion Amt.	0.00
Cushion Type	
Reversed Out N	
Tool Chased N	
Tester	Mike Colantonio
Co. Rep.	Roger Pearson
Contr.	Abercrombie
Rig #	5
Unit #	
Pump T.	

GAS RECOVERY

COMPANY: Maxwell Oper. Co. Inc.

DATE: 4-2-99

WELL NAME: Amos #1-30

KB Elev: 2018.00 ft TICKET #10961 DST #1

WELL LOCATION: 30-34S-24W Clark co KS

GR Elev: 2006.00 ft FORMATION: Morrow & Chester

INTERVAL Fr.: 5622.00 To 5696.00 T.D.: 5696.00 ft TEST TYPE: CONVENTIONAL

GAS RECOVERY MEASURED WITH Merla Data

**** GAS RATES FOR FLOW #1

Time (min)	Orifice (in)	Pressure (Psi)	H2O (in)	Rate (cf/d)
25	0.25	0	45	11100.0
30	0.25	0	55	12300.0

**** GAS RATES FOR FLOW #2

Time (min)	Orifice (in)	Pressure (Psi)	H2O (in)	Rate (cf/d)
5	0.75	0	50	100000.0
10	0.75	0	25	72400.0
15	0.25	0	55	12300.0
20	0.25	0	100	16800.0
25	0.38	0	62	28000.0
30	0.38	0	54	26200.0
40	0.38	0	42	23100.0
50	0.38	0	40	22500.0
60	0.38	0	40	22500.0

*** TOOL DIAGRAM *** CONVENTIONAL

WELL NAME: Amos #1-30

LOCATION : 30-34S-24W Clark co KS

TICKET No. 10961 D.S.T. No. 1 DATE 4-2-99

TOTAL TOOL TO BOTTOM OF TOP PACKERS 30

INTERVAL TOOL

BOTTOM PACKERS AND ANCHOR 14ft

TOTAL TOOL 44

DRILL COLLAR ANCHOR IN INTERVAL

D.C. ANCHOR STND.Stands Single Total

D.P. ANCHOR STND.Stands Single 2 Total 60

TOTAL ASSEMBLY

D.C. ABOVE TOOLS.Stands4 Single Total 359

D.P. ABOVE TOOLS.Stands56 Single 1 Total 5257

TOTAL DRILL COLLARS DRILL PIPE & TOOLS .. 5720

TOTAL DEPTH 5696

TOTAL DRILL PIPE ABOVE K.B. 24ft

REMARKS:

SAMPLER DATA

1475 psi.

6.8 Cubic Ft Gas

1200ml Mud

4000ml total

P.O. SUB Top Tool	5693
C.O. SUB 1ft	5674
S.I. TOOL Sterling	5699
3ft sampler	5602
HMV Sterling	5607
JARS Sterling	5612
SAFETY JOINT Bowens	5614
PACKER 5ft	5617
PACKER 5ft	5622
DEPTH	
STUBB 1ft	5623
ANCHOR	
2ft Perf	5625
Alpine Rec.	5625
T.C.	
DEPTH	
5ft P.U. Sub	5630
1ft C\O	5631
2Joints pipe	5691
1ft C\O\ sub	5692
BULLNOSE AK-1 Rec.	5693
T.D. 4ft Bullplug	5691

TEST HISTORY

10961 DST #1 Amos #1-30 Maxwell Oper. Co. Inc.

Flag Points

t (Min.) P (PSIg)

A:	0.00	2906.16
B:	0.00	67.12
C:	29.50	86.16
D:	62.00	1660.12
E:	0.00	85.26
F:	57.00	114.60
G:	121.25	1723.21
Q:	0.00	2708.25

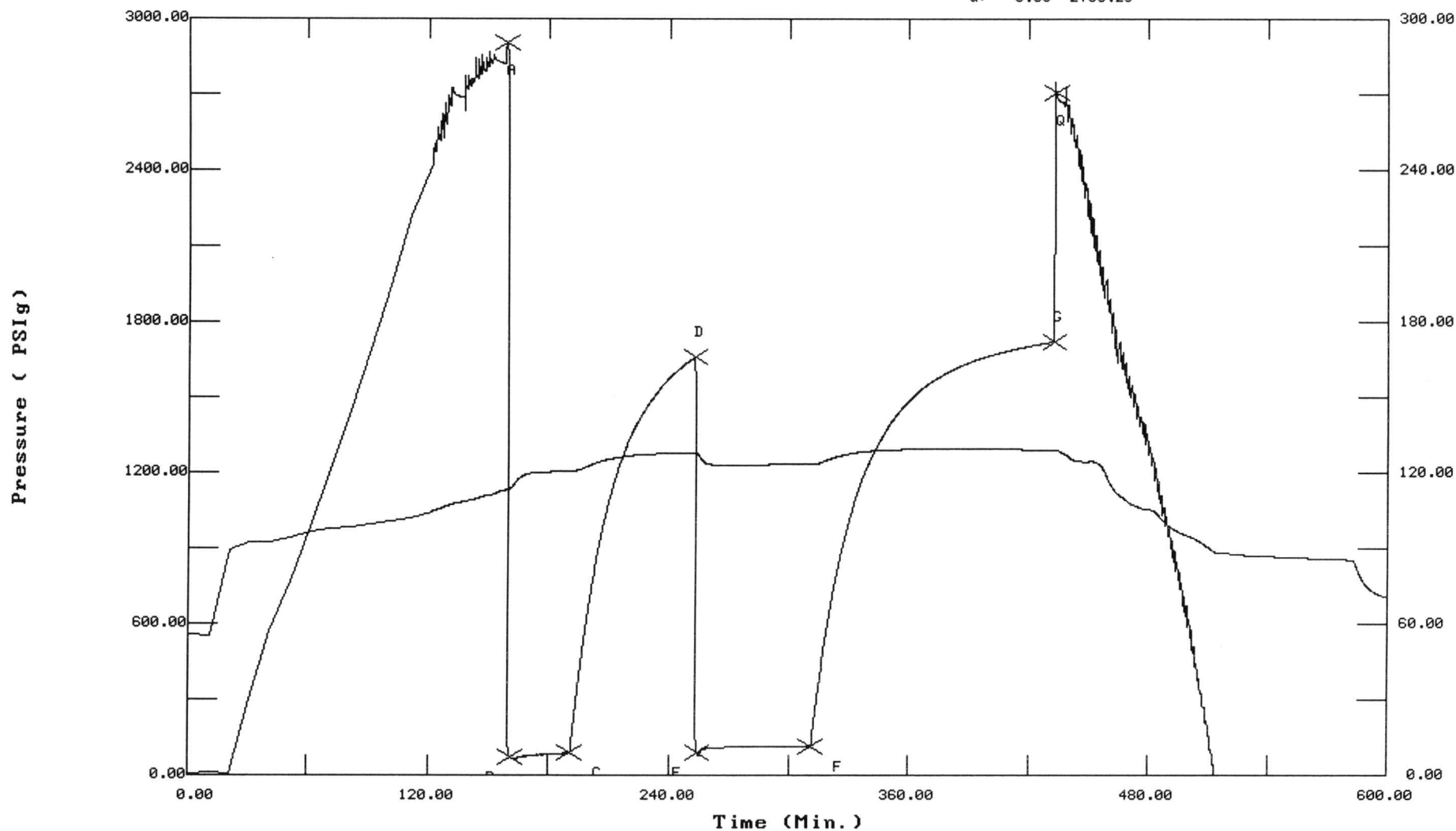
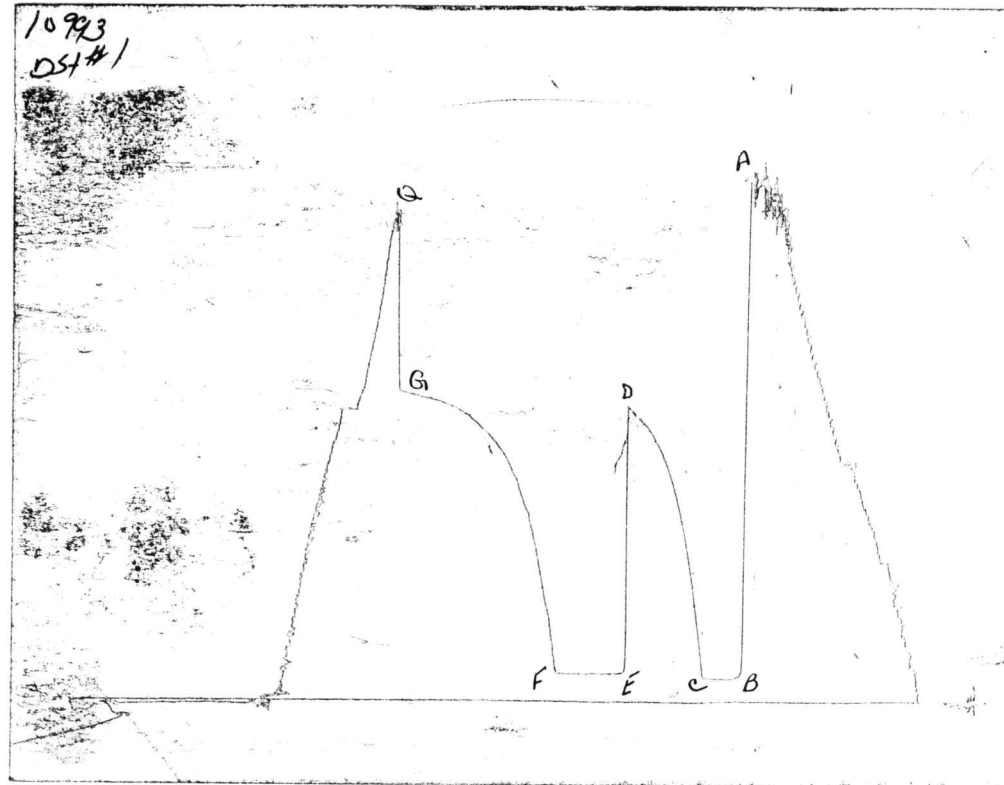


CHART PAGE



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

From: Robert Caraway Caraway Analytical, Inc. Fax: 316-626-7108
To: Simpson, Paul Trilobite Testing, L. L. C. Fax: 1-785-625-5620

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NATURAL GAS ANALYSIS REPORT

Sampled by:
Trilobite Testing, L. L. C.
Hays, Kansas
Scott City, Kansas
Phone: 800-728-5369
Fax: 913-625-5620

Analyzed by:
Caraway Analytical, Inc
P. O. Box 2137
Liberal, Kansas 67905
Phone: 316-624-5389
Fax: 316-626-7108

Lab Number: 991607
Sample From: Ames 1-30 DST 1
Producer: Maxwell Operating Co., Inc.
Date:
Time:
Sampler:
Source:

Analyzed: 04/02/99
Pressure:
Temperature:
Location: 30-24-34
County: Clark
State: Kansas
Formation: Morrow/
Chester

	Mole %	GPM
Helium	He: 0.133	0.000
Hydrogen	H2: 0.061	0.000
Oxygen	O2: 0.000	0.000
Nitrogen	N2: 2.470	0.000
Carbon Dioxide	CO2: 0.010	0.000
Methane	C1: 87.181	0.000
Ethane	C2: 5.186	1.387
Propane	C3: 2.659	0.733
Iso Butane	iC4: 0.395	0.129
Normal Butane	nC4: 0.815	0.257
Iso Pentane	iC5: 0.234	0.086
Normal Pentane	nC5: 0.245	0.089
Hexanes Plus	C6+: 0.611	0.267
TOTAL:	100.000	2.947
Z Fact:	0.9973	
SP. GR.:	0.6594	
BTU (SAT):	1115.2 @ 14.73 psia	
BTU (DRY):	1135.0 @ 14.73 psia	
OCTANE RATING:	122.8	

COMMENTS:

0.000

TRILOBITE TESTING L.L.C.

OPERATOR : Maxwell Oper. Co. Inc.

DATE 4-3-99

WELL NAME: Amos #1-30

KB 2018.00 ft

TICKET NO: 10962 DST #2

LOCATION : 30-34S-24W Clark co KS

GR 2006.00 ft

FORMATION: Chester

INTERVAL : 5698.00 To 5785.00 ft

TD 5785.00 ft

TEST TYPE: CONVENTIONAL

RECORDER DATA

Mins	Field	1	2	3	4	TIME DATA-----
PF 30 Rec.	10993	10993	3227			PF Fr. 0830 to 0900 hr
SI 60 Range (Psi)	4250.0	4250.0	4995.0	0.0	0.0	IS Fr. 0900 to 1000 hr
SF 30 Clock (hrs)	12HR.	12HR.	ELET.			SF Fr. 1000 to 1030 hr
FS 90 Depth (ft)	5693.0	5693.0	5625.0	0.0	0.0	FS Fr. 1030 to 1200 hr

	Field	1	2	3	4	
A. Init Hydro	2691.0	2962.0	2867.0	0.0	0.0	T STARTED 0545 hr
B. First Flow	119.0	119.0	39.0	0.0	0.0	T ON BOTM 0828 hr
B1. Final Flow	130.0	132.0	75.0	0.0	0.0	T OPEN 0830 hr
C. In Shut-in	1349.0	1387.0	1368.0	0.0	0.0	T PULLED 1200 hr
D. Init Flow	173.0	183.0	95.0	0.0	0.0	T OUT 1415 hr
E. Final Flow	173.0	176.0	118.0	0.0	0.0	
F. Fl Shut-in	1446.0	1457.0	1433.0	0.0	0.0	TOOL DATA-----
G. Final Hydro	2771.0	2870.0	2730.0	0.0	0.0	Tool Wt. 1800.00 lbs
Inside/Outside	O	O	I			Wt Set On Packer 25000.00 lbs
						Wt Pulled Loose 90000.00 lbs
						Initial Str Wt 80000.00 lbs
						Unseated Str Wt 80000.00 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 359.00 ft
						D.P. Length 5381.00 ft

RECOVERY

Tot Fluid 200.00 ft of 200.00 ft in DC and 0.00 ft in DP
 120.00 ft of Muddy water 50%Mud 50%Water
 0.00 ft of
 90.00 ft of Muddy water 40%Mud 60%Water
 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 15000.00 P.P.M. A.P.I. Gravity 0.00

BLOW DESCRIPTION

Initial Flow:

Weak blow built 1"

Final Flow:

Weak blow built to .25" died in 17 mins.

MUD DATA-----

Mud Type	Chemical
Weight	9.40 lb/cf
Vis.	51.00 S/L
W.L.	8.00 in3
F.C.	0.00 in
Mud Drop N	

Amt. of fill	0.00 ft
Btm. H. Temp.	127.00 F
Hole Condition	Good
% Porosity	10.00
Packer Size	6.75 in
No. of Packers	2
Cushion Amt.	0.00
Cushion Type	
Reversed Out N	
Tool Chased N	

SAMPLES:

SENT TO:

Tester	Mike Colantonio
Co. Rep.	Roger Pearson
Contr.	Abercrombie
Rig #	5
Unit #	
Pump T.	

Test Successful: Y

*** TOOL DIAGRAM *** CONVENTIONAL

WELL NAME: Amos #1-30

LOCATION : 30-34S-24W Clark co KS

TICKET No. 10962 D.S.T. No. 2 DATE 4-3-99

TOTAL TOOL TO BOTTOM OF TOP PACKERS 30

INTERVAL TOOL

BOTTOM PACKERS AND ANCHOR 25ft

TOTAL TOOL 55

DRILL COLLAR ANCHOR IN INTERVAL

D.C. ANCHOR STND.Stands Single Total

D.P. ANCHOR STND.Stands Single 2 Total 62

TOTAL ASSEMBLY

D.C. ABOVE TOOLS.Stands4 Single Total 359

D.P. ABOVE TOOLS.Stands57 Single Total 5319

TOTAL DRILL COLLARS DRILL PIPE & TOOLS .. 5795

TOTAL DEPTH 5785

TOTAL DRILL PIPE ABOVE K.B. 10ft

REMARKS:

SAMPLER DATA

50Psi

200Ml Mud

300ml Water

000ml total

64.9 Temp .525 res.

5000 Chlorides

	P.O. SUB Top Tool	5668
	C.O. SUB 1ft	5669
	S.I. TOOL Sterling	5674
	3ft sampler	5677
	HMV Sterling	5682
	JARS Sterling	5687
	SAFETY JOINT Bowens	5689
	PACKER 5ft	5694
	PACKER 5ft	5698
	DEPTH	
	STUBB 1ft	5699
	ANCHOR	
	3ft Perf	5702
	Alpine Rec.	5702
	T.C.	
	DEPTH	
	5ft P.U. Sub	5707
	10ft perf	5717
	1ft C\O	5718
	2Joints pipe	5780
	1ft C\O\ sub	5781
	BULLNOSE AK-1 Rec.	5782
	T.D. 4ft Bullplug	5785

TEST HISTORY

10962 DST #2 Amos #1-30 Maxwell Oper. Co. Inc.

Flag Points
t(Min.) P(PSIg)

A: 0.00 2876.44
B: 0.00 39.36
C: 30.25 75.93
D: 58.50 1368.85
E: 0.00 95.89
F: 29.00 118.30
G: 90.75 1433.75
Q: 0.00 2730.42

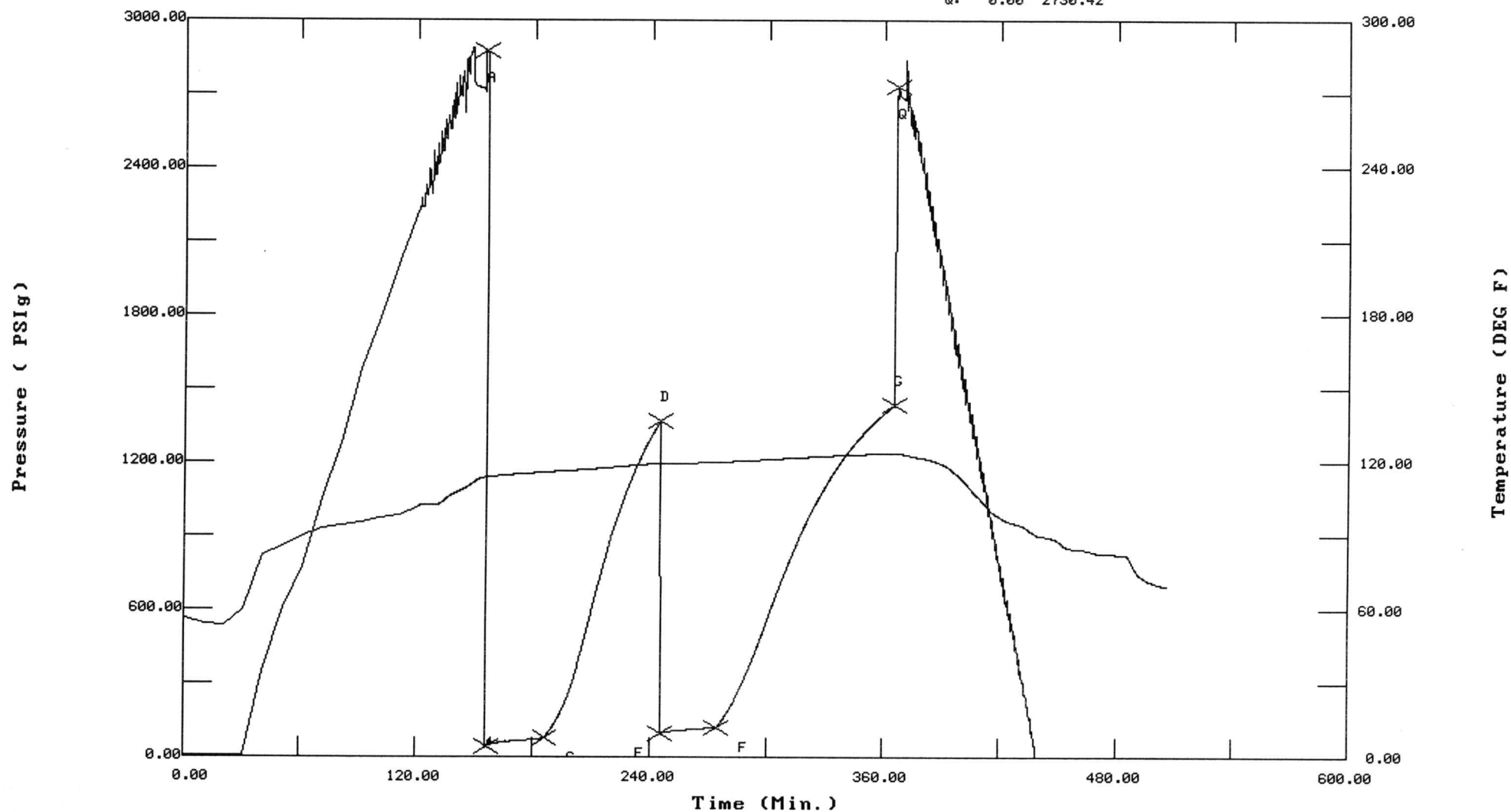
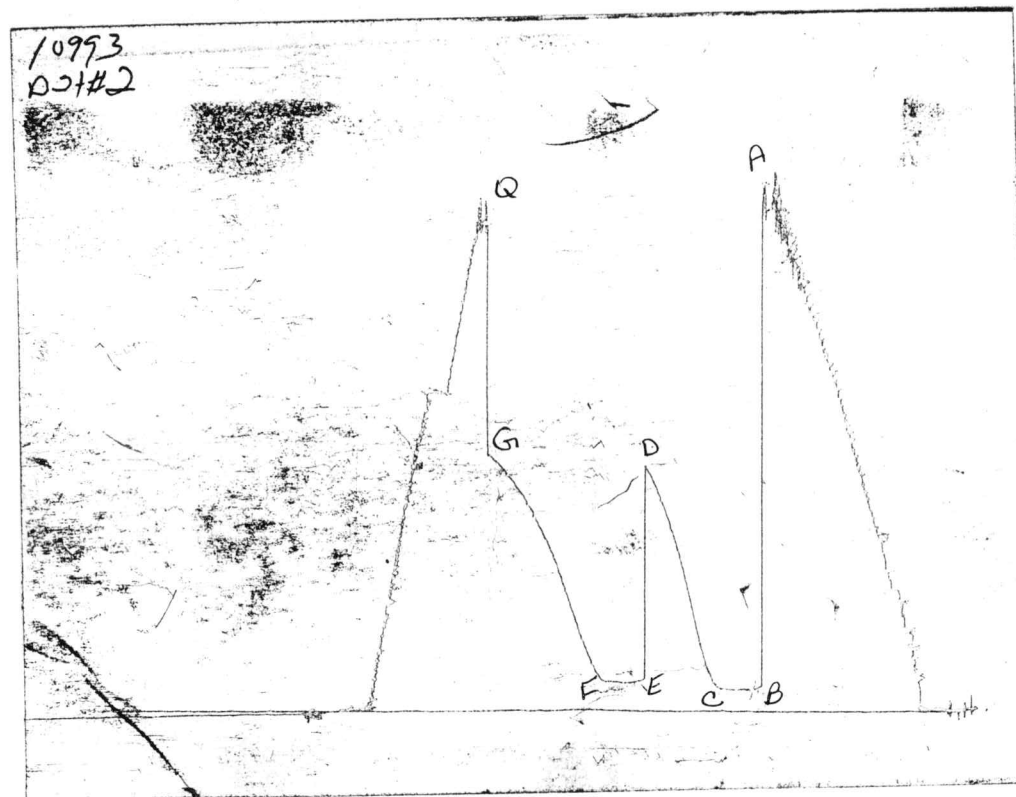


CHART PAGE



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

MAXWELL OPERATING CO., INC.

#1-30 AMOS

660' FNL, 600' FWL

Sec. 30 T34S - R24W

Clark County, Kansas

2018' K.B.

DRILL STEM TESTS:

DST #1 5622' - 5696' (Chester): OP30" SI60" OP60" SI120"

GTS 25", Stab @ 22.5 MCFGPD;

Rec 300' Drilling Mud;

FP 67-86# / 85-114#

SIP 1660-1723#

HP 2906-2708#

DST #2 5698' - 5785' (Chester): OP30" SI60" OP30" SI90"

Rec 210' Muddy Water;

FP 39-75# / 95-118#

SIP 1368-1433#

HP 2867-2730#