

15-129-21603

TRILOBITE TESTING L.L.C.

19-31s-39w

OPERATOR : Key Production Co.

DATE 6-11-00

WELL NAME: Milburn "1-19"

KB 3234.00 ft TICKET NO: 12575 DST #1

LOCATION : 19-31S-39W Morton co KS

GR 3224.00 ft FORMATION: Kinsler/Morrow

INTERVAL : 5338.00 To 5446.00 ft

TD 5446.00 ft TEST TYPE: CONVENTIONAL

RECORDER DATA

Mins	Field	1	2	3	4	TIME DATA-----
PF 15 Rec.	10242	10242	3017			PF Fr. 1815 to 1830 hr
SI 30 Range(Psi)	4175.0	4175.0	5000.0	0.0	0.0	IS Fr. 1830 to 1900 hr
SF 30 Clock(hrs)	12 HR	12 HR	Elect			SF Fr. 1900 to 1930 hr
FS 60 Depth(ft)	5443.0	5443.0	5340.0	0.0	0.0	FS Fr. 1930 to 2030 hr

	Field	1	2	3	4	
A. Init Hydro	2594.0	2640.0	2514.0	0.0	0.0	T STARTED 1530 hr
B. First Flow	123.0	160.0	27.0	0.0	0.0	T ON BOTM 1812 hr
B1. Final Flow	123.0	144.0	31.0	0.0	0.0	T OPEN 1815 hr
C. In Shut-in	128.0	145.0	72.0	0.0	0.0	T PULLED 2030 hr
D. Init Flow	123.0	144.0	32.0	0.0	0.0	T OUT hr
E. Final Flow	123.0	144.0	36.0	0.0	0.0	
F. Fl Shut-in	126.0	143.0	71.0	0.0	0.0	TOOL DATA-----
G. Final Hydro	2563.0	2586.0	2508.0	0.0	0.0	Tool Wt. 3300.00 lbs
Inside/Outside	I	I	I			Wt Set On Packer 26000.00 lbs
						Wt Pulled Loose 14000.00 lbs
						Initial Str Wt 106000.00 lbs
						Unseated Str Wt 106000.00 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 643.00 ft
						D.P. Length 4686.00 ft

RECOVERY

Tot Fluid 20.00 ft of 20.00 ft in DC and 0.00 ft in DP
 20.00 ft of Mud
 0.00 ft of 100% 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

SALINITY 1050.00 P.P.M. A.P.I. Gravity 0.00

BLOW DESCRIPTION

Initial Flow:
 Surface blow built to 1" in 15 minutes
 Initial Shut-In:
 No blow back.
 Final Flow:
 No blow.
 Final Shut-In:
 No blow back.

Remarks: Est. 3 Ft. of Pay.

SAMPLES: None

SENT TO:

MUD DATA-----

Mud Type	Chemical
Weight	9.10 lb/cf
Vis.	45.00 S/L
W.L.	12.40 in3
F.C.	0.00 in
Mud Drop Y	10.0 ft
Amt. of fill	0.00 ft
Btm. H. Temp.	128.00 F
Hole Condition	Good
% Porosity	8.00
Packer Size	6.75 in
No. of Packers	2
Cushion Amt.	0.00
Cushion Type	
Reversed Out N	
Tool Chased N	
Tester	Lanny Saloga
Co. Rep.	Roger Pearson
Contr.	Norseman
Rig #	3
Unit #	
Pump T.	

Test Successful: Y

*** TOOL DIAGRAM *** CONVENTIONAL

WELL NAME: Milburn "1-19"

LOCATION : 19-31S-39W Morton co KS

TICKET No. 12575 D.S.T. No. 1 DATE 6-11-00

TOTAL TOOL TO BOTTOM OF TOP PACKERS 30

INTERVAL TOOL

BOTTOM PACKERS AND ANCHOR 15

TOTAL TOOL 45

DRILL COLLAR ANCHOR IN INTERVAL

D.C. ANCHOR STND.Stands Single Total

D.P. ANCHOR STND.Stands 1 Single Total 93

TOTAL ASSEMBLY 138

D.C. ABOVE TOOLS.Stands Single Total 643

D.P. ABOVE TOOLS.Stands 50 Single Total 4686

TOTAL DRILL COLLARS DRILL PIPE & TOOLS .. 5467

TOTAL DEPTH 5446

TOTAL DRILL PIPE ABOVE K.B. 21

REMARKS:

FLUID SAMPLER DATA

Total Vol. 4000 ML.

Total Vol. Rec. 4000 ML.

Oil 0 ML.

Mud 4000 ML.

Wtr. 0 ML.

Gas 0 CF.

Psi. 80

Bht. 128 F.

Pit RW. 5.2 Ohms at 82 F. 900 PPM.

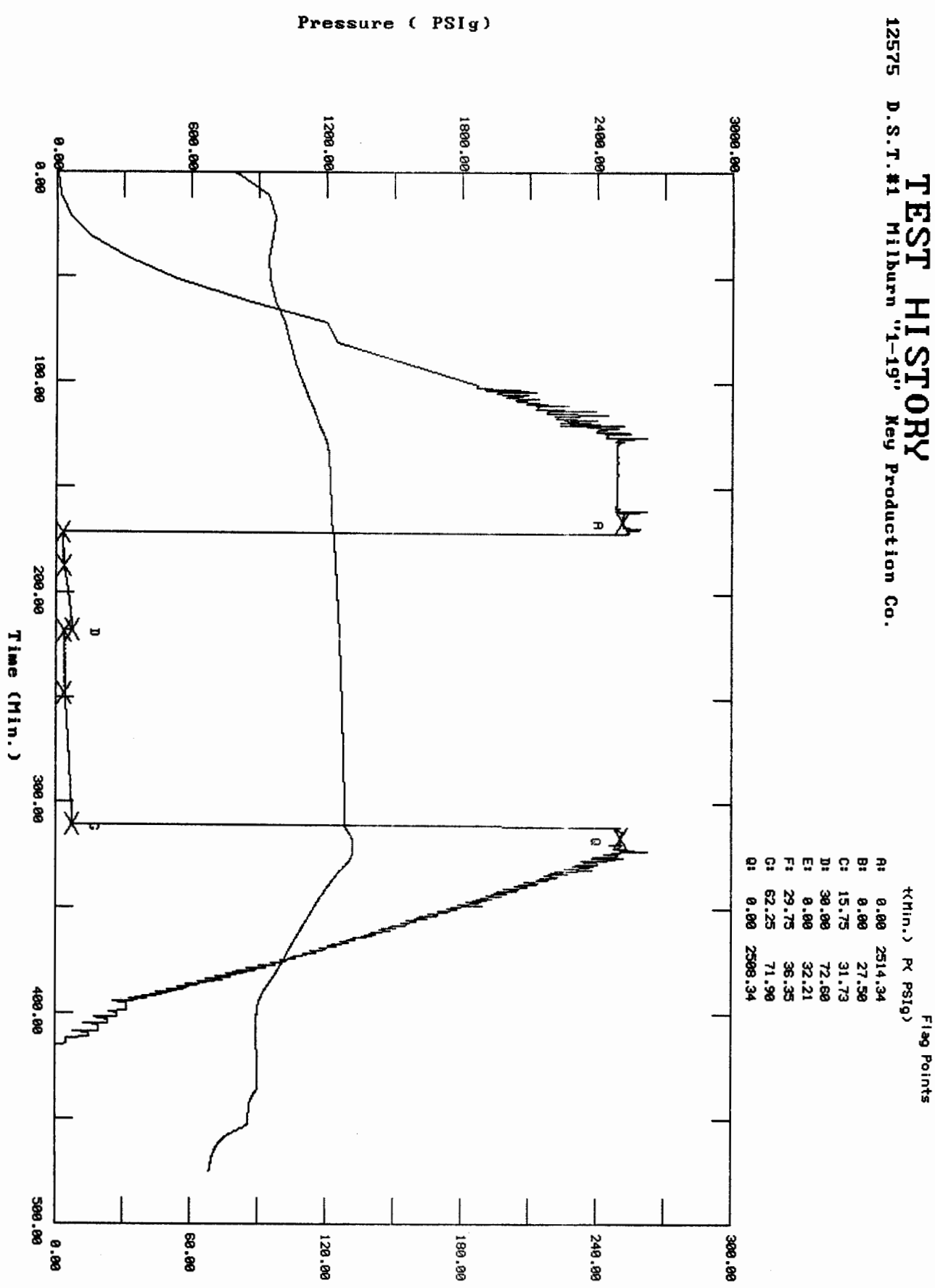
Rec RW. 5.6 Ohms at 65 F. 1,050 PPM.

Gravity -- at -- F.

P.O. SUB Cir. sub	5218
C.O. SUB Top of tool	5308
Double pin	5309
S.I. TOOL Sterling	5314
Sampler	5317
HMV Sterling	5322
JARS Bowen	5327
SAFETY JOINT Bowen	5329
PACKER Sparton	5334
PACKER Shale	5338
DEPTH	
1 ft.	5339
ANCHOR Rec. sub	5340
Alpine	5340
Pu. sub	5345
4 ft. perfs	5349
Co. sub	5350
1 std DP 93 ft.	5443
AK-1	5443
Co. sub	5444
BULLNOSE 2 ft. perf	
T.D.	5446

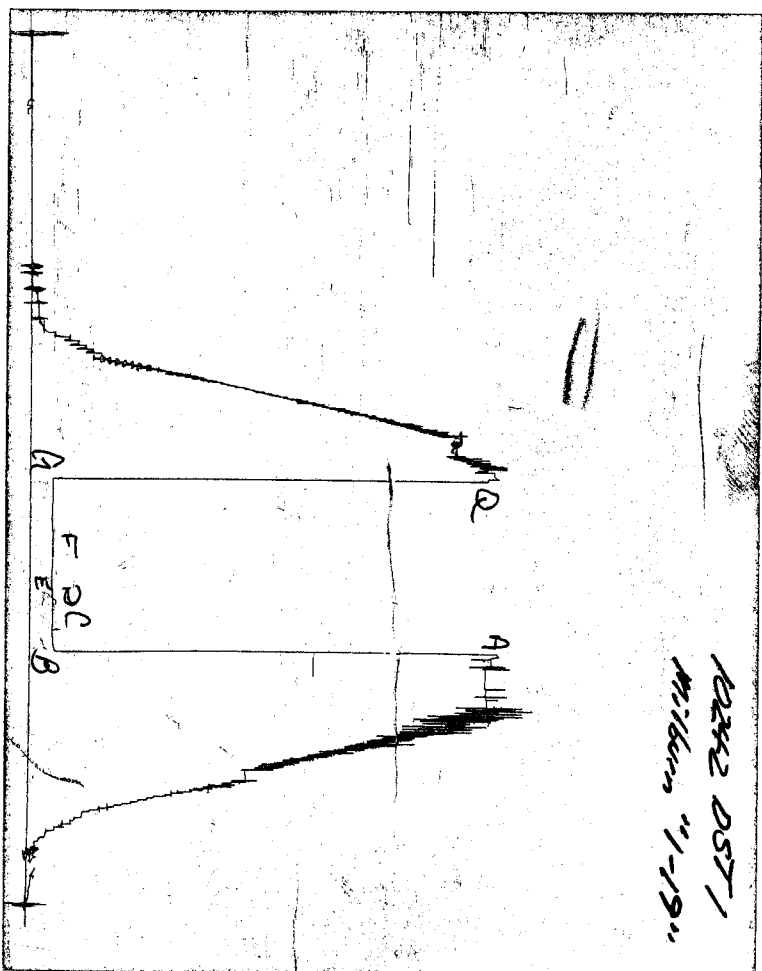
TEST HISTORY

12575 D.S.T.#1 Milburn "1-19" Key Production Co.



Temperature (DEG F)

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

FLUID SAMPLER DATA

Ticket No. 12575 Date 6-11-00
Company Name Key Pool Co.
Lease Milburn "1-19" Test No. 1
County Martin Ks. Sec. 19 Twp. 31S Rng. 39W

SAMPLER RECOVERY

Gas 0 G.E. ~~ME~~
Oil 0 ML
Mud 4000 ML
Water 0 ML
Other 0 ML
Pressure 80 PSI

Total Val. Rec. = 4000 ML
Total Vol. of chamber = 4000 ML

SAMPLER ANALYSIS

Resistivity 5.6 ohms @ 65 F
Chlorides 1050 ppm.
Gravity — corrected @ 60 F

PIT MUD ANALYSIS

Chlorides 900 ppm.
Resistivity 5.02 ohms @ 82 F
Viscosity 45
Mud Weight 9.1
Filtrate 12.4
Other 4.46 g/ml

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

Nº 12575

Well Name & No. Milburn "1-19" Test No. 1 Date 6-11-00
Company Key Prod. Co. Zone Tested Kinsler / Macman
427 S. Boston, Suite 515 Tulsa OK 74103
Address 707. Seventh St., Suite 3300 Denver Co. 80202 Elevation 3234 KB 3224 GL
Co. Rep / Geo. Roger Pearson Cont. Nascom Rig 3 Est. Ft. of Pay 3 Por. 8 %
Location: Sec. 19 Twp. 31 S. Rge. 29 W. Co. Morton State KS
No. of Copies See Distribution Sheet (Y, N) Y Turnkey (Y, N) N Evaluation (Y, N)

Interval Tested 5238-5446 Initial Str Wt./Lbs. 10600 Unseated Str Wt./Lbs. 10600
Anchor Length 108' 701 = 30' Wt. Set Lbs. 26000 Wt. Pulled Loose/Lbs. 14000
Top Packer Depth 5232 Tool Weight 3300
h/c Bottom Packer Depth 5238 Hole Size — 7 7/8" Rubber Size — 6 3/4"
Total Depth 5446 Wt. Pipe Run — Drill Collar Run 643
Mud Wt. 9.1 LCM 4.4 Vis. 45 WL 12.4 Drill Pipe Size 4 1/2 XH Ft. Run 4686 21' up
Blow Description Surface blow built to 1" in 15 min. F.E.P.

No blow-back. F.S.T.P.
No blow. F.E.P.
No blow-back. F.S.T.P.

Recovery — Total Feet	GIP	Ft. in DC	Ft. in DP		
<u>20</u>	<u>0</u>	<u>20</u>	<u>0</u>		
Rec. <u>20</u>	Feet Of <u>100</u>	%gas	%oil	%water	%mud
Rec. <u>20</u>	Feet Of <u>100</u>	%gas	%oil	%water	%mud
Rec. <u>20</u>	Feet Of <u>100</u>	%gas	%oil	%water	%mud
Rec. <u>20</u>	Feet Of <u>100</u>	%gas	%oil	%water	%mud
Rec. <u>20</u>	Feet Of <u>100</u>	%gas	%oil	%water	%mud

BHT 128 °F Gravity — °API D@ — °F Corrected Gravity — °API
RW 5.6 @ 65 °F Chlorides 1050 ppm Recovery Chlorides 900 ppm System

	AK-1	Alpine		
(A) Initial Hydrostatic Mud	<u>2594</u>	<u>2514</u>	PSI Recorder No. <u>3017 "1522"</u>	T-On Location <u>1:30 P.M.</u>
(B) First Initial Flow Pressure	<u>123</u>	<u>27</u>	PSI (depth) <u>5240</u>	T-Started <u>2:30 P.M.</u>
(C) First Final Flow Pressure	<u>123</u>	<u>31</u>	PSI Recorder No. <u>10242</u>	T-Open <u>6:15 P.M.</u>
(D) Initial Shut-In Pressure	<u>128</u>	<u>72</u>	PSI (depth) <u>5443</u>	T-Pulled <u>8:30 P.M.</u>
(E) Second Initial Flow Pressure	<u>123</u>	<u>32</u>	PSI Recorder No. <u>—</u>	T-Out <u>11:30 P.M.</u>
(F) Second Final Flow Pressure	<u>123</u>	<u>36</u>	PSI (depth) <u>—</u>	T-Off Location <u>—</u>
(G) Final Shut-in Pressure	<u>126</u>	<u>71</u>	PSI Initial Opening <u>15</u>	Test <u>800</u> ✓
(Q) Final Hydrostatic Mud	<u>2563</u>	<u>2508</u>	PSI Initial Shut-in <u>30</u>	Jars <u>200</u> ✓

Final Flow 30 Safety Joint 50 ✓
Final Shut-in 60 Straddle —
Circ. Sub —
Sampler 200 ✓
SHALE Extra Packer 150 ✓
Elec. Rec. 150 ✓
Mileage —
Other —

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Approved By [Signature]

Our Representative [Signature]

TOTAL PRICE \$ 4550.00