

15-055-21693

TRILOBITE TESTING L.L.C.

9-23s-31w

OPERATOR : Larson Operating Co.

DATE 11-2-00

WELL NAME: Pauls #1-9

KB 2890.00 ft

TICKET NO: 12729 DST #1

LOCATION : 9-23S-31W Finney co KS

GR 2885.00 ft

FORMATION: Morrow

INTERVAL : 4770.00 To 4797.00 ft

TD 4797.00 ft

TEST TYPE: CONVENTIONAL

RECORDER DATA

Mins	Field	1	2	3	4	TIME DATA-----
PF 30 Rec.	13339		3246			PF Fr. 0600 to 0630 hr
SI 60 Range(Psi)	4025.0	0.0	4995.0	0.0	0.0	IS Fr. 0630 to 0730 hr
SF 45 Clock(hrs)	12 HR		ALP			SF Fr. 0730 to 0815 hr
FS 90 Depth(ft)	4792.0	0.0	4772.0	0.0	0.0	FS Fr. 0815 to 0945 hr

	Field	1	2	3	4	
A. Init Hydro	2423.0	0.0	2426.0	0.0	0.0	T STARTED 0410 hr
B. First Flow	72.0	0.0	28.0	0.0	0.0	T ON BOTM 0558 hr
Bl. Final Flow	93.0	0.0	137.0	0.0	0.0	T OPEN 0600 hr
C. In Shut-in	343.0	0.0	405.0	0.0	0.0	T PULLED 0945 hr
D. Init Flow	166.0	0.0	147.0	0.0	0.0	T OUT 1215 hr
E. Final Flow	187.0	0.0	213.0	0.0	0.0	
F. Fl Shut-in	343.0	0.0	404.0	0.0	0.0	
G. Final Hydro	2373.0	0.0	2367.0	0.0	0.0	
Inside/Outside	0		I			

RECOVERY

Tot Fluid 511.00 ft of 241.00 ft in DC and 270.00 ft in DP
 660.00 ft of Gas in pipe
 90.00 ft of Gas & slightly mud cut oil
 0.00 ft of 65% gas 30%oil 5%mud
 421.00 ft of Gassy oil cut mud
 0.00 ft of 55% gas 15% oil 30% mud
 0.00 ft of
 0.00 ft of
 0.00 ft of

SALINITY 0.00 P.P.M. A.P.I. Gravity 29.00

TOOL DATA-----
 Tool Wt. 1800.00 lbs
 Wt Set On Packer 30000.00 lbs
 Wt Pulled Loose 70000.00 lbs
 Initial Str Wt 56000.00 lbs
 Unseated Str Wt 60000.00 lbs
 Bot Choke 0.75 in
 Hole Size 8.88 in
 D Col. ID 2.25 in
 D. Pipe ID 3.80 in
 D.C. Length 421.00 ft
 D.P. Length 4526.00 ft

BLOW DESCRIPTION

Initial Flow:

Weak to fair blow off bottom in 30 minutes

Initial Shut-In:

Surface return built to 3".

Final Flow:

Weak to fair blow off bottom in 30 minutes.

Final Shut-In:

Surface return steady throughout.

MUD DATA-----
 Mud Type Chemical
 Weight 9.40 lb/cf
 Vis. 54.00 S/L
 W.L. 9.60 in3
 F.C. 0.00 in
 Mud Drop N

Amt. of fill 0.00 ft
 Btm. H. Temp. 120.00 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 Rod Steinbrink
 Co. Rep. Steve Davis
 Contr. Mallard
 Rig # 2
 Unit #
 Pump T.

SAMPLES:

SENT TO:

Test Successful: Y

*** TOOL DIAGRAM *** CONVENTIONAL

WELL NAME: Pauls #1-9	P.O. SUB 1' Above 120' DC	4623
	C.O. SUB 1'	4743
LOCATION : 9-23S-31W Finney co KS	S.I. TOOL 5'	4749
TICKET No. 12729 D.S.T. No. 1 DATE 11-2-00		
TOTAL TOOL TO BOTTOM OF TOP PACKERS 27		
INTERVAL TOOL 27	HMV 5'	4754
BOTTOM PACKERS AND ANCHOR	JARS 5'	4759
TOTAL TOOL 54		
DRILL COLLAR ANCHOR IN INTERVAL		
D.C. ANCHOR STND.Stands Single Total	SAFETY JOINT 2'	4761
D.P. ANCHOR STND.Stands Single Total	PACKER 4'	4765
TOTAL ASSEMBLY 54	PACKER 5'	4770
D.C. ABOVE TOOLS.Stands4 Single Total 241	DEPTH	
D.P. ABOVE TOOLS.Stands72 Single 1 Total 4526	1'	4771
TOTAL DRILL COLLARS DRILL PIPE & TOOLS .. 4821	ANCHOR	
	ALP Rec. @	4772
	21' Perf	4792
TOTAL DEPTH 4797		
TOTAL DRILL PIPE ABOVE K.B. 24		
REMARKS:		
	AK-1 Rec. @	4792
	BULLNOSE 5'	
	T.D.	4797

12729 DST #1 Pauls #1-9 Larson Operating Co.

TEST HISTORY

Flag Points
t(Min.) P(PSig)

A:	0.00	2426.92
B:	0.00	28.78
C:	36.00	137.77
D:	57.50	405.16
E:	0.00	147.22
F:	49.00	213.19
G:	86.25	404.11
Q:	0.00	2367.78

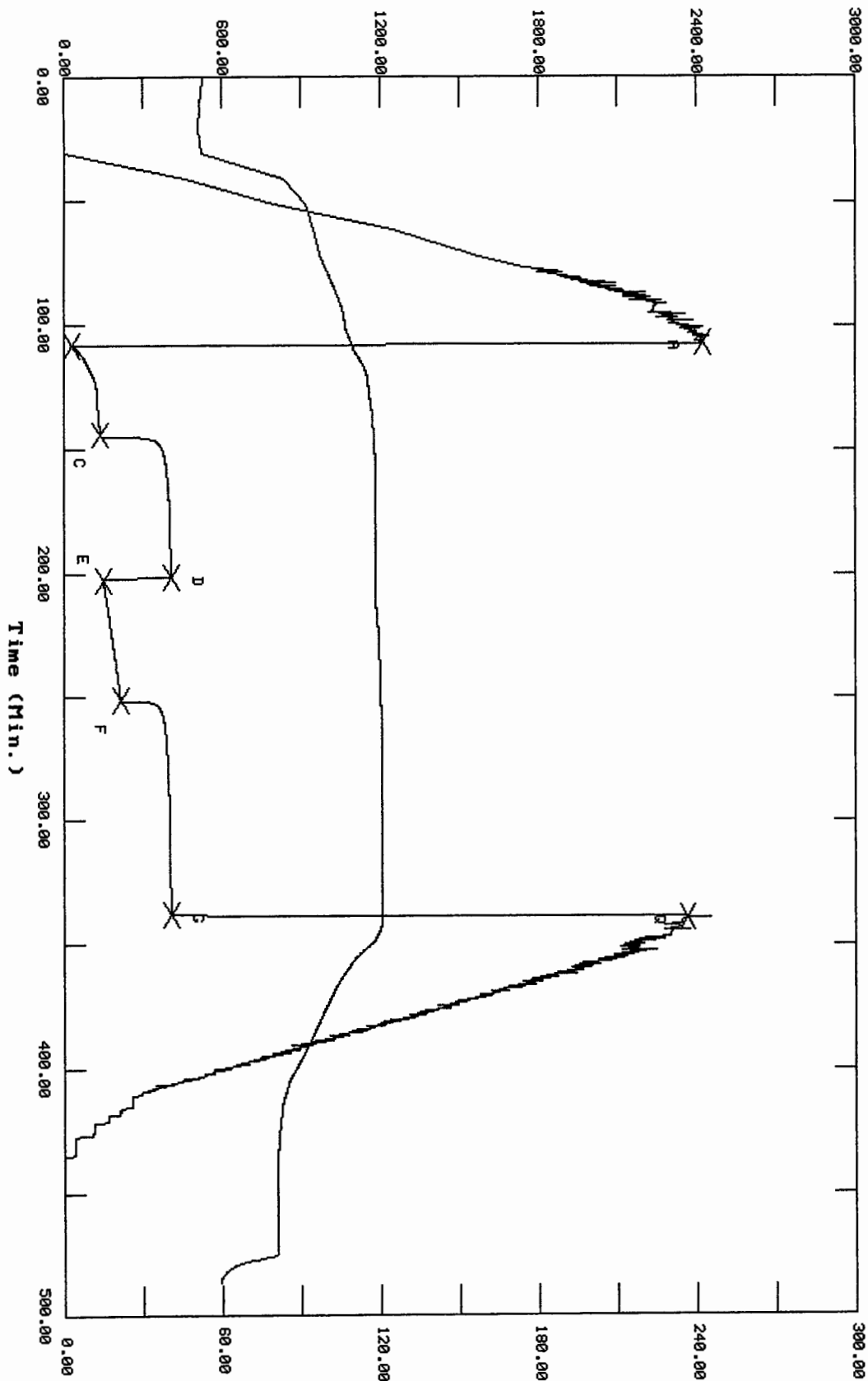
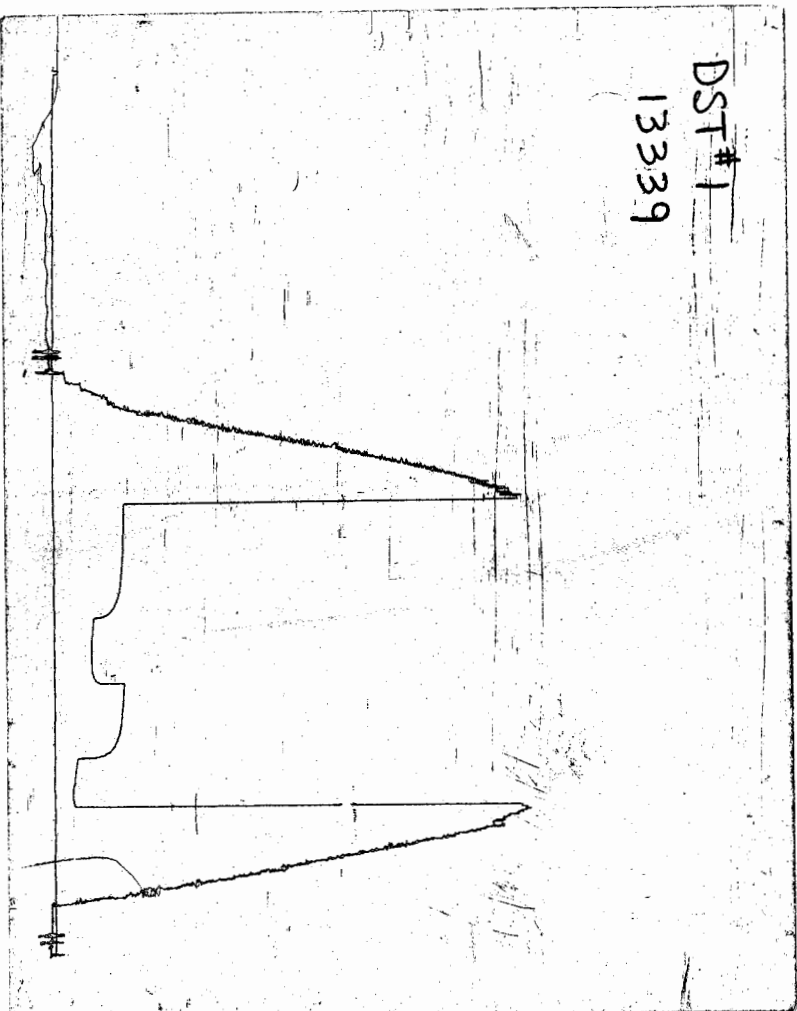


CHART PAGE



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

TRILOBITE TESTING L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Test Ticket

N^o 12729

Well Name & No.	<u>Pauls #1-9</u>	Test No.	<u>1</u>	Date	<u>11-2-00</u>
Company	<u>Larson Operating Company</u>	Zone Tested	<u>Morrow</u>		
Address	<u>562 W Hwy 4 Olmitz, KS. 67564-8561</u>	Elevation	<u>2890</u>	KB	<u>2885</u> GL
Co. Rep / Geo.	<u>Steve Davis</u>	Cont.	<u>Mallard #2</u>	Est. Ft. of Pay	<u> </u> Por. <u> </u> %
Location: Sec.	<u>9</u>	Twp.	<u>23^S</u>	Rge.	<u>31^W</u> Co. <u>Finney</u> State <u>KS</u>
No. of Copies	<u> </u>	Distribution Sheet (Y, N)	<u> </u>	Turnkey (Y, N)	<u> </u> Evaluation (Y, N) <u> </u>

Interval Tested	<u>4770 - 4797</u>	Initial Str Wt./Lbs.	<u>56,000</u>	Unseated Str Wt./Lbs.	<u>60,000</u>
Anchor Length	<u>27'</u>	Wt. Set Lbs.	<u>30,000</u>	Wt. Pulled Loose/Lbs.	<u>70,000</u>
Top Packer Depth	<u>4765</u>	Tool Weight	<u>1,800</u>		
Bottom Packer Depth	<u>4770</u>	Hole Size — 7 7/8"	<u> </u>	Rubber Size — 6 3/4"	<u> </u>
Total Depth	<u>4797</u>	Wt. Pipe Run	<u> </u>	Drill Collar Run	<u>421'</u> (4)
Mud Wt.	<u>9.4</u> LCM <u> </u> Vis. <u>54</u> WL <u>9.6</u>	Drill Pipe Size	<u>4 1/2" XH</u>	Ft. Run	<u>4526'</u> (12.1)
Blow Description	<u>IF: Weak to fair blow off btm in 30 mins.</u>				
	<u>ISL: Surface return built to 3"</u>				
	<u>FF: Weak to fair blow off btm in 30 mins.</u>				
	<u>FSI: Surface return steady throughout.</u>				

Recovery — Total Feet	<u>511'</u>	GIP	<u>660'</u>	Ft. in DC	<u>240'</u>	Ft. in DP	<u>270'</u>
Rec.	<u> </u>	Feet Of	<u> </u>	%gas	%oil	%water	%mud
Rec.	<u>90'</u>	Feet Of	<u>GSMCO</u>	65	%gas 30	%oil —	%water 5
Rec.	<u> </u>	Feet Of	<u> </u>	%gas	%oil	%water	%mud
Rec.	<u>421'</u>	Feet Of	<u>GDCM</u>	55	%gas 15	%oil —	%water 30
Rec.	<u> </u>	Feet Of	<u> </u>	%gas	%oil	%water	%mud
BHT	<u>120°</u>	°F Gravity	<u>29</u>	°API D@	<u>60°</u>	°F Corrected Gravity	<u>29</u>
RW	<u> </u>	@	<u> </u>	°F Chlorides	<u> </u>	ppm Recovery	Chlorides <u>2,500</u> ppm System

	AK-1	Alpine		
(A) Initial Hydrostatic Mud	<u>2423</u>	<u>2426</u>	PSI Recorder No.	<u>3246</u>
(B) First Initial Flow Pressure	<u>72</u>	<u>28</u>	PSI (depth)	<u>4772</u>
(C) First Final Flow Pressure	<u>93</u>	<u>137</u>	PSI Recorder No.	<u>13339</u>
(D) Initial Shut-In Pressure	<u>343</u>	<u>405</u>	PSI (depth)	<u>4792</u>
(E) Second Initial Flow Pressure	<u>166</u>	<u>147</u>	PSI Recorder No.	<u> </u>
(F) Second Final Flow Pressure	<u>187</u>	<u>213</u>	PSI (depth)	<u> </u>
(G) Final Shut-in Pressure	<u>343</u>	<u>404</u>	PSI Initial Opening	<u>30</u>
(Q) Final Hydrostatic Mud	<u>2373</u>	<u>2367</u>	PSI Initial Shut-in	<u>60</u>
			Final Flow	<u>45</u>
			Final Shut-in	<u>90</u>

T-On Location	<u>0300</u>
T-Started	<u>0410</u>
T-Open	<u>0600</u>
T-Pulled	<u>0945</u>
T-Out	<u>1215</u>
T-Off Location	<u>1315</u>
Test	<u>750</u>
Jars	<u>X</u> 200
Safety Joint	<u>X</u> 50
Straddle	<u> </u>
Circ. Sub	<u>X</u> N/C
Sampler	<u> </u>
Extra Packer	<u> </u>
Elec. Rec.	<u>X</u> 150
Mileage	<u>40mi</u> 40
Other	<u> </u>
TOTAL PRICE \$	<u>1190</u>

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Approved By St Os

Our Representative Rod Steinbrink