

WELL NAME: Horton #1
COMPANY: Abercrombie Drilling
LOCATION: 32-20S-35W
Wichita County, Kansas
DATE: 1/20/98

TRILOBITE TESTING L.L.C.

OPERATOR : Abercrombie Drilg. DATE 1-13-98
 WELL NAME: Horton #1 KB 3205.00 ft TICKET NO: 10398 DST #1
 LOCATION : 32-20S-35W CO Wichita KS GR 3200.00 ft FORMATION: Johnson
 INTERVAL : 4635.00 To 4670.00 ft TD 4745.00 ft TEST TYPE: CONV. STRADDLE

RECORDER DATA

Mins		Field	1	2	3	4	TIME DATA-----
PF 30	Rec.	11058	11058	2342			PF Fr. 1643 to 1713 hr
SI 45	Range(Psi)	4500.0	4500.0	4995.0	0.0	0.0	IS Fr. 1713 to 1758 hr
SF 30	Clock(hrs)	12 HR	12 HR	alpin			SF Fr. 1758 to 1828 hr
FS 45	Depth(ft)	4663.0	4663.0	4646.0	0.0	0.0	FS Fr. 1828 to 1913 hr

	Field	1	2	3	4	
A. Init Hydro	2255.0	2248.0	2343.0	0.0	0.0	T STARTED 1430 hr
B. First Flow	44.0	60.0	28.0	0.0	0.0	T ON BOTM 1640 hr
B1. Final Flow	33.0	40.0	31.0	0.0	0.0	T OPEN 1643 hr
C. In Shut-in	579.0	584.0	620.0	0.0	0.0	T PULLED 1913 hr
D. Init Flow	44.0	66.0	34.0	0.0	0.0	T OUT 2147 hr
E. Final Flow	33.0	43.0	36.0	0.0	0.0	
F. Fl Shut-in	122.0	135.0	157.0	0.0	0.0	TOOL DATA-----
G. Final Hydro	2244.0	2244.0	2270.0	0.0	0.0	Tool Wt. 5000.00 lbs
Inside/Outside	i	o	o			Wt Set On Packer 30000.00 lbs
						Wt Pulled Loose 54000.00 lbs
						Initial Str Wt 41000.00 lbs
						Unseated Str Wt 41000.00 lbs
						Bot Choke 0.75 in
						Hole Size 7.88 in
						D Col. ID 0.00 in
						D. Pipe ID 3.50 in
						D.C. Length 0.00 ft
						D.P. Length 4061.00 ft
						H.W. I.D 3.40 in
						H.W. Length 630.00 ft

RECOVERY

Tot Fluid 15.00 ft of 0.00 ft in DC and 15.00 ft in DP
 15.00 ft of Drilling mud 100% mud
 0.00 ft of
 SALINITY 6000.00 P.P.M. A.P.I. Gravity 0.00

BLOW DESCRIPTION

Initial Flow:
 1/4" in at open built to 1"
 Initial Shut-in:
 No return
 Final Flow:
 Bubble to open tool-no blow
 Final Shut-in:
 No return

SAMPLES:
 SENT TO:

MUD DATA-----
 Mud Type Chemical
 Weight 9.20 lb/c
 Vis. 46.00 S/L
 W.L. 10.40 in3
 F.C. 0.00 in
 Mud Drop N
 Amt. of fill 0.00 ft
 Btm. H. Temp. 101.00 F
 Hole Condition good
 % Porosity 0.00
 Packer Size 6.75 in
 No. of Packers 3
 Cushion Amt. 0.00
 Cushion Type
 Reversed Out N
 Tool Chased N
 Tester Shane McBride
 Co. Rep. Kent
 Contr. Abercrombie
 Rig # 8
 Unit #
 Pump T.

Test Successful: Y

*** TOOL DIAGRAM *** CONV. STRADDLE

WELL NAME: Horton #1

LOCATION : 32-20S-35W CO Wichita KS

TICKET No. 10398 D.S.T. No. 1 DATE 1-13-98

TOTAL TOOL TO BOTTOM OF TOP PACKERS 20

INTERVAL TOOL

BOTTOM PACKERS AND ANCHOR 49

TOTAL TOOL 69

DRILL COLLAR ANCHOR IN INTERVAL

D.C. ANCHOR STND.Stands Single Total

D.P. ANCHOR STND.Stands 1 Single Total 62

TOTAL ASSEMBLY 131

D.C. ABOVE TOOLS.Stands Single Total

D.P. ABOVE TOOLS.Stands 75 Single 1 Total 4691

TOTAL DRILL COLLARS DRILL PIPE & TOOLS .. 4760

TOTAL DEPTH 4745

TOTAL DRILL PIPE ABOVE K.B. 15

REMARKS:

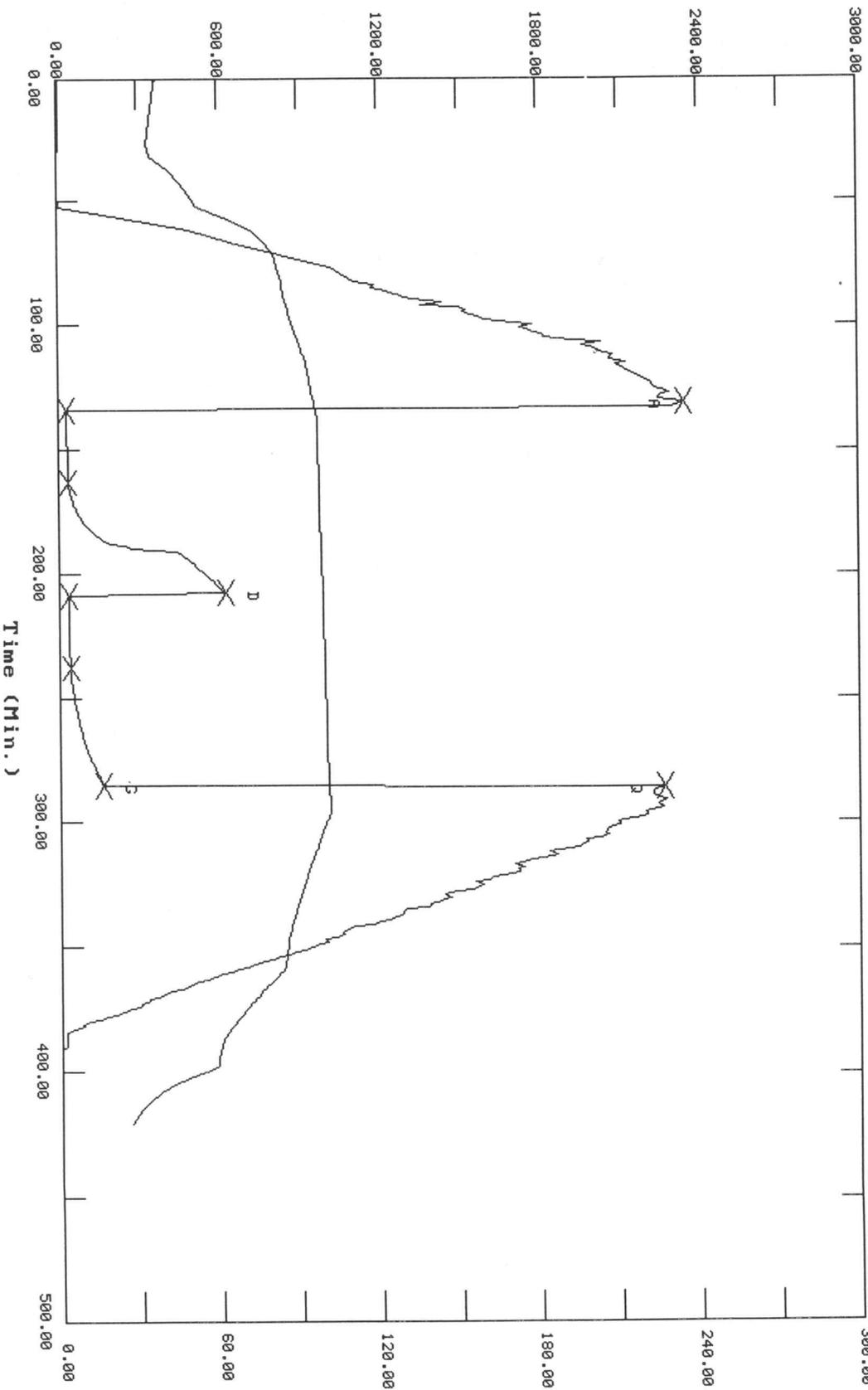
P.O. SUB	
C.O. SUB 1'	4614
S.I. TOOL 5'	4620
HMV 5'	4625
JARS n/a	
SAFETY JOINT	
PACKER top	4630
PACKER bottom	4635
DEPTH 4635	
STUBB 1'	4636
ANCHOR 10' perf	4646
alpine recorder	4646
17' perf	4663
ak-1 recorder	4663
3' perf	4666
1' blank off	4667
3' top of straddle	4670
T.C.	
DEPTH	
PACKER straddle packer	4670
1' stubb	4671
6' perf	4677
1' c.o.	4678
61' drillpipe	4739
ak-1 recorder	4739
1' c.o.	4740
BULLNOSE 5' bullplug	4745
T.D.	4745

TEST HISTORY

10398 DST #1 Horton #1 Abercrombie Drilg.

Flag Points

(Min.)	PK	PSIG
A: 0.00	2343.81	
B: 0.00	28.10	
C: 29.00	31.85	
D: 45.00	620.25	
E: 0.00	34.65	
F: 29.00	36.99	
G: 47.00	157.14	
Q: 0.00	2270.33	

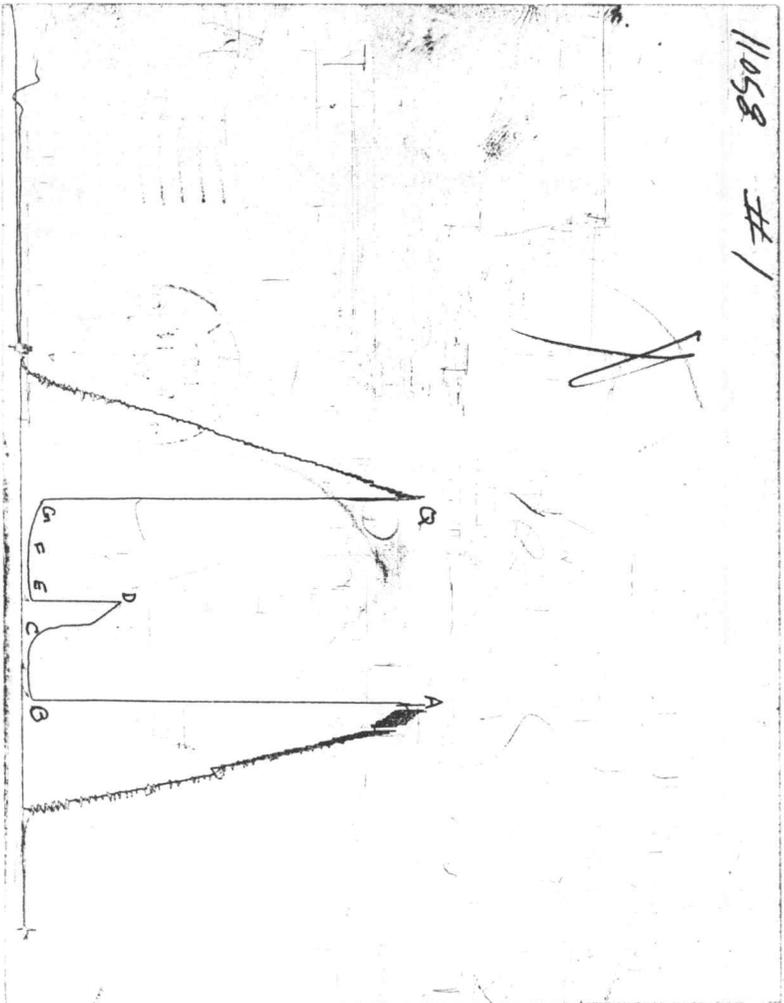


Pressure (PSig)

Temperature (DEG F)

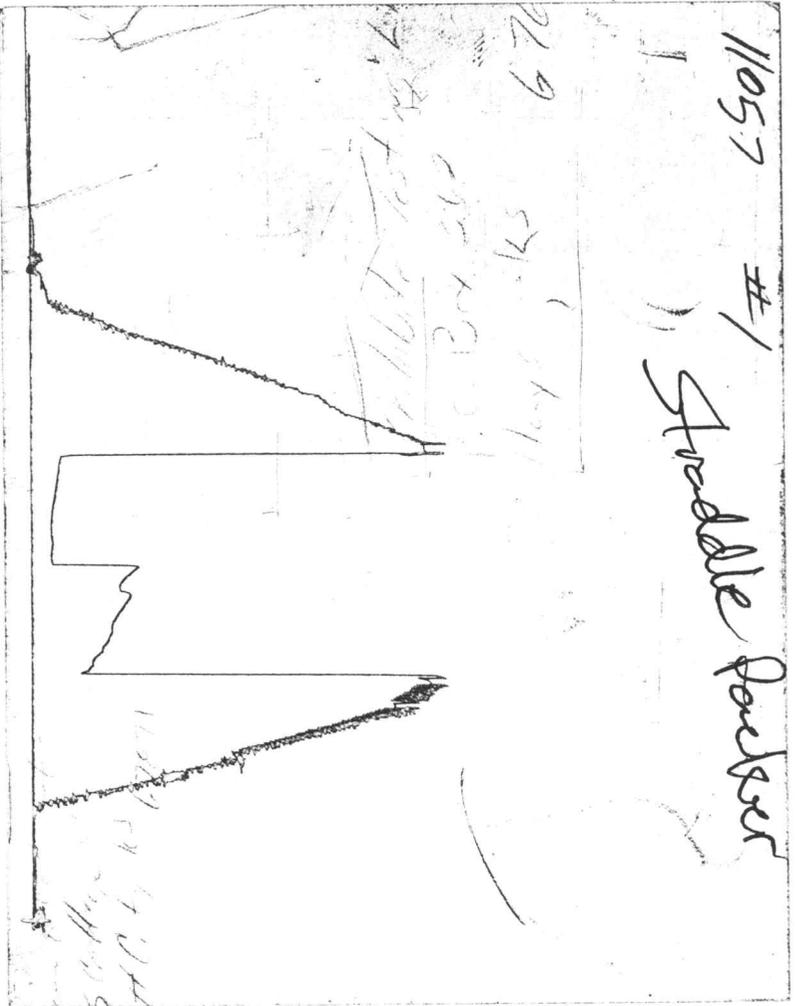
Time (Min.)

CHART PAGE



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

CHART PAGE



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

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 10398 DST #1 Horton #1 Abercrombie Drilg.
 DATE: 01/14/98 TIME: 03:28:57

	Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
***** Initial Hydro.	131.00	2343.8	0.0	95.61		
***** Start Flow 1	0.00	28.1	0.0	96.37		
	1.00	28.5	0.4	96.58		
	2.00	28.8	0.7	96.73		
	3.00	29.0	0.9	96.85		
	4.00	29.3	1.2	96.94		
	5.00	29.4	1.3	97.01		
	6.00	29.5	1.4	97.05		
	7.00	29.6	1.5	97.10		
	8.00	29.6	1.5	97.14		
	9.00	29.7	1.6	97.16		
	10.00	29.9	1.8	97.19		
	11.00	30.1	2.0	97.21		
	12.00	30.2	2.1	97.24		
	13.00	30.4	2.3	97.25		
	14.00	30.5	2.4	97.27		
	15.00	30.7	2.6	97.29		
	16.00	30.7	2.6	97.29		
	17.00	30.8	2.7	97.31		
	18.00	31.0	2.9	97.33		
	19.00	31.0	2.9	97.34		
	20.00	31.0	2.9	97.35		
	21.00	31.3	3.2	97.37		
	22.00	31.3	3.2	97.38		
	23.00	31.2	3.1	97.40		
	24.00	31.3	3.2	97.42		
	25.00	31.4	3.3	97.43		
	26.00	31.6	3.5	97.45		
	27.00	31.7	3.6	97.47		
	28.00	31.7	3.6	97.49		
***** End Flow 1	29.00	31.8	3.7	97.51		
***** Start Shutin 1	0.00	31.8	0.0	97.51	0.0000	0.001
	1.00	30.7	-1.1	97.53	30.0000	0.001
	2.00	35.2	3.3	97.54	15.5000	0.001
	3.00	37.3	5.4	97.57	10.6667	0.001
	4.00	39.5	7.7	97.59	8.2500	0.002
	5.00	41.8	10	97.61	6.8000	0.002
	6.00	44.5	12.7	97.63	5.8333	0.002
	7.00	47.2	15.4	97.65	5.1429	0.002
	8.00	50.3	18.4	97.68	4.6250	0.003
	9.00	53.6	21.8	97.71	4.2222	0.003
	10.00	57.3	25.4	97.72	3.9000	0.003
	11.00	62.2	30.3	97.75	3.6364	0.004
	12.00	66.6	34.7	97.77	3.4167	0.004
	13.00	71.4	39.5	97.80	3.2308	0.005
	14.00	76.6	44.7	97.82	3.0714	0.006
	15.00	82.1	50.2	97.85	2.9333	0.007
	16.00	88.3	56.5	97.87	2.8125	0.008
	17.00	95.3	63.4	97.90	2.7059	0.009
	18.00	103.0	71.2	97.93	2.6111	0.011
	19.00	111.7	79.8	97.96	2.5263	0.012

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 DATE: 01/14/98 TIME: 03:28:57

	Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P^2/10^6
	20.00	121.5	89.6	97.99	2.4500	0.015
	21.00	133.0	101.2	98.01	2.3810	0.018
	22.00	145.3	113.5	98.04	2.3182	0.021
	23.00	159.0	127.1	98.07	2.2609	0.025
	24.00	173.5	141.7	98.10	2.2083	0.030
	25.00	189.2	157.4	98.13	2.1600	0.036
	26.00	248.4	216.5	98.16	2.1154	0.062
	27.00	267.0	235.2	98.19	2.0741	0.071
	28.00	443.5	411.6	98.22	2.0357	0.197
	29.00	455.0	423.1	98.26	2.0000	0.207
	30.00	466.2	434.4	98.29	1.9667	0.217
	31.00	477.4	445.5	98.33	1.9355	0.228
	32.00	488.5	456.6	98.36	1.9062	0.239
	33.00	499.4	467.6	98.40	1.8788	0.249
	34.00	510.2	478.3	98.44	1.8529	0.260
	35.00	520.9	489.1	98.47	1.8286	0.271
	36.00	531.4	499.5	98.50	1.8056	0.282
	37.00	541.7	509.9	98.53	1.7838	0.293
	38.00	552.0	520.1	98.56	1.7632	0.305
	39.00	562.2	530.4	98.60	1.7436	0.316
	40.00	572.1	540.3	98.62	1.7250	0.327
	41.00	582.1	550.2	98.66	1.7073	0.339
	42.00	591.7	559.9	98.69	1.6905	0.350
	43.00	601.3	569.5	98.72	1.6744	0.362
	44.00	610.8	579.0	98.75	1.6591	0.373
***** End Shut-in 1	45.00	620.2	588.4	98.77	1.6444	0.385
***** Start Flow 2	0.00	34.7	0.0	98.80		
	1.00	35.0	0.4	98.82		
	2.00	35.2	0.5	98.83		
	3.00	35.2	0.6	98.84		
	4.00	35.4	0.7	98.87		
	5.00	35.5	0.8	98.88		
	6.00	35.6	0.9	98.91		
	7.00	35.6	1	98.93		
	8.00	35.7	1.0	98.95		
	9.00	35.8	1.2	98.98		
	10.00	35.9	1.2	99.00		
	11.00	35.9	1.2	99.03		
	12.00	35.9	1.2	99.05		
	13.00	36.0	1.3	99.08		
	14.00	36.1	1.4	99.11		
	15.00	36.1	1.4	99.13		
	16.00	35.7	1.1	99.16		
	17.00	36.1	1.5	99.18		
	18.00	36.2	1.6	99.20		
	19.00	36.3	1.6	99.23		
	20.00	36.4	1.7	99.26		
	21.00	36.4	1.8	99.28		
	22.00	36.5	1.8	99.30		
	23.00	36.4	1.7	99.33		
	24.00	36.5	1.9	99.35		

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DATE: 01/14/98

TIME: 03:28:57

	Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P^2/10^6
	25.00	36.7	2.0	99.38		
	26.00	36.7	2.1	99.40		
	27.00	36.8	2.1	99.43		
	28.00	37.0	2.3	99.45		
***** End Flow 2	29.00	37.0	2.3	99.47		
***** Start Shutin 2	0.00	37.0	0.0	99.47	0.0000	0.001
	1.00	35.9	-1.1	99.50	59.0000	0.001
	2.00	37.2	0.2	99.52	30.0000	0.001
	3.00	38.5	1.5	99.55	20.3333	0.001
	4.00	39.8	2.8	99.57	15.5000	0.002
	5.00	41.2	4.2	99.60	12.6000	0.002
	6.00	42.4	5.4	99.62	10.6667	0.002
	7.00	43.7	6.7	99.66	9.2857	0.002
	8.00	45.0	8.0	99.67	8.2500	0.002
	9.00	46.4	9.4	99.70	7.4444	0.002
	10.00	47.9	10.9	99.72	6.8000	0.002
	11.00	49.3	12.3	99.75	6.2727	0.002
	12.00	50.7	13.7	99.77	5.8333	0.003
	13.00	52.4	15.4	99.80	5.4615	0.003
	14.00	53.9	16.9	99.82	5.1429	0.003
	15.00	55.6	18.6	99.84	4.8667	0.003
	16.00	57.4	20.4	99.86	4.6250	0.003
	17.00	59.2	22.2	99.89	4.4118	0.004
	18.00	61.0	24.1	99.92	4.2222	0.004
	19.00	62.9	26.0	99.94	4.0526	0.004
	20.00	64.9	27.9	99.96	3.9000	0.004
	21.00	66.9	29.9	99.99	3.7619	0.004
	22.00	69.0	32.0	100.01	3.6364	0.005
	23.00	71.1	34.1	100.03	3.5217	0.005
	24.00	73.5	36.5	100.06	3.4167	0.005
	25.00	75.8	38.8	100.08	3.3200	0.006
	26.00	78.7	41.7	100.11	3.2308	0.006
	27.00	81.3	44.3	100.13	3.1481	0.007
	28.00	83.9	46.9	100.16	3.0714	0.007
	29.00	86.6	49.6	100.18	3.0000	0.007
	30.00	89.4	52.5	100.20	2.9333	0.008
	31.00	92.4	55.4	100.23	2.8710	0.009
	32.00	95.4	58.4	100.25	2.8125	0.009
	33.00	98.7	61.7	100.27	2.7576	0.01
	34.00	102.1	65.1	100.29	2.7059	0.010
	35.00	105.6	68.6	100.32	2.6571	0.011
	36.00	109.3	72.3	100.34	2.6111	0.012
	37.00	114.6	77.6	100.37	2.5676	0.013
	38.00	119.0	82.0	100.39	2.5263	0.014
	39.00	123.2	86.2	100.42	2.4872	0.015
	40.00	127.5	90.5	100.44	2.4500	0.016
	41.00	132.0	95.0	100.46	2.4146	0.017
	42.00	136.6	99.6	100.48	2.3810	0.019
	43.00	141.6	104.6	100.51	2.3488	0.020
	44.00	146.2	109.2	100.53	2.3182	0.021
	45.00	149.8	112.8	100.55	2.2889	0.022

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

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DATE: 01/14/98 TIME: 03:28:57

	Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
***** End Shut-in 2	46.00	153.4	116.4	100.57	2.2609	0.024
	47.00	157.1	120.1	100.60	2.2340	0.025
***** Final Hydro.	286.00	2270.3	0.0	100.69		

TRILOBITE TESTING L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Test Ticket

No 10398

Well Name & No. <u>Horton #1</u>		Test No. <u>1</u>	Date <u>1-13-98</u>
Company <u>Abercrombie Drilling</u>		Zone Tested <u>Johnson</u>	
Address <u>100 N. Main Suite #801 Union Center Bldg, Wichita, KS 67202</u>		Elevation <u>3205'</u>	KB <u>3200'</u> GL
Co. Rep / Geo. <u>Kent</u>	Cont. <u>Abercrombie #8</u>	Est. Ft. of Pay	Por. %
Location: Sec. <u>32</u>	Twp. <u>20</u>	Rge. <u>35</u>	Co. <u>Wichita</u> State <u>KS</u>
No. of Copies <u>Norm. Distribution Sheet (Y, N)</u>		Turnkey (Y, N) <u>X</u>	Evaluation (Y, N)

Interval Tested <u>4635'</u>	<u>4670'</u>	Initial Str Wt./Lbs. <u>41000</u>	Unseated Str Wt./Lbs. <u>41,000</u>
Anchor Length	<u>35'</u>	Wt. Set Lbs. <u>30,000</u>	Wt. Pulled Loose/Lbs. <u>54,000</u>
Top Packer Depth <u>4630'</u>	<u>4635'</u>	Tool Weight <u>5,000</u>	
Bottom Packer Depth <u>4635'</u>	<u>straddle 4670'</u>	Hole Size — <u>7 7/8"</u>	Rubber Size — <u>6 3/4"</u>
Total Depth <u>4745'</u>		Wt. Pipe Run <u>630'</u>	Drill Collar Run
Mud Wt. <u>9.2</u> LCM <u>—</u> Vis. <u>46</u> WL <u>10.4</u>		Drill Pipe Size <u>4 1/2 X H</u>	Ft. Run <u>4061'</u>
Blow Description <u>1/4" @ open - built to 1" in.</u>			

I.S.I: No return
 F.I: Bubble to open tool - No blow
 F.S.I: No return

Recovery — Total Feet <u>15'</u>	GIP <u>—</u>	Ft. in DC <u>—</u>	Ft. in DP <u>15'</u>
Rec. <u>15'</u> Feet Of <u>Drilling mud</u>	%gas	%oil	%water <u>100%</u> %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 101° °F Gravity — °API D@ — °F Corrected Gravity — °API
 RW — @ — °F Chlorides — ppm Recovery Chlorides 4,000 ppm System

(A) Initial Hydrostatic Mud <u>2255</u> <u>2343</u> PSI	Recorder No. <u>2342</u>	T-Started <u>14:30 P.M.</u>
(B) First Initial Flow Pressure <u>44</u> <u>28</u> PSI	(depth) <u>4646'</u>	T-Open <u>16:43 P.M.</u>
(C) First Final Flow Pressure <u>33</u> <u>31</u> PSI	Recorder No. <u>11058</u>	T-Pulled <u>19:13 P.M.</u>
(D) Initial Shut-in Pressure <u>579</u> <u>620</u> PSI	(depth) <u>4663'</u>	T-Out <u>21:47 P.M.</u>
(E) Second Initial Flow Pressure <u>44</u> <u>34</u> PSI	Recorder No. <u>11057</u>	
(F) Second Final Flow Pressure <u>33</u> <u>36</u> PSI	(depth) <u>4789'</u>	
(G) Final Shut-in Pressure <u>122</u> <u>157</u> PSI	Initial Opening <u>30</u>	Test <u>X</u> <u>700</u>
(H) Final Hydrostatic Mud <u>2244</u> <u>2270</u> PSI	Initial Shut-in <u>45</u>	Jars
<u>AK-1</u> <u>ALPINE</u>	Final Flow <u>30</u>	Safety Joint
	Final Shut-in <u>45</u>	Straddle <u>Y</u> <u>250</u>

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.

on location @ 13:15 PM Circ. Sub X N/C
off location @ 22:15 PM Sampler

Approved By Kent Crisk
 Our Representative Steve MCB

Extra Packer X 150
 Elect. Rec. X 150
 Other _____
 TOTAL PRICE \$ 1250