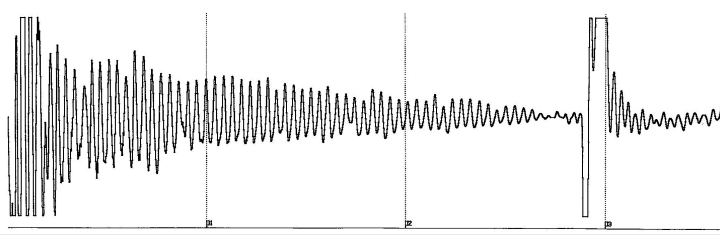


Acoustic Fluid Logger III

FIELD:
LEASE:
WELL NUMBER:
DATE:
SAGE TECHNOLOGIES, INC.
ACOUSTIC FLUID LOGGER
SN: 200705010200016
BATTERY: +12.7 VOLTS



AFL III —included components

- Acoustic Fluid Logger III
- Pressure Pulse Gas Gun, 1,500 psi
- 1,500 psi quick-connect gauge
- 200 psi quick-connect gauge for measuring casing pressure
- 11-point dividers
- 2.5 lb. CO₂ bottle
- CO₂ Charge hose
- Carrying case
- 25-ft. microphone cable
- 10 rolls thermal paper
- Wall-mount battery charger
- Spanner wrench
- Repair Kits
- Maintenance tools
- Operator's manual

Fluid levels with the push of a button

With its simple keypad, the **Acoustic Fluid Logger III** finds fluid levels with the push of a button, without the need for a computer in the field.

Acoustic Fluid Logger III finds the fluid level in a well, then prints out a fluid level tape showing collars and fluid inside the wellbore. A simple count of collars multiplied by the length of tubing joints find the distance to fluid. **One-second Timing Marks** overlay the echo on paper tape to simplify calculating the time to fluid in wells without tubing or when shooting down the tubing. The **Compressed Tape** feature shortens the length of the paper tape echo while retaining the precision timing marks. Compressed tapes can be shortened to 1/2, 1/4 or even 1/8 their original size for a quick check of wellbore fluid.

Use the 1,500 rated **Pressure Pulse Gas Gun** to fire a gas shot which reflects collars and fluid in the well; the AFL III finds readable collars at depths not attainable by other fluid level machines. And for further clarity, the AFL III collects **seven increasing amplifications** of the fluid level, which lets you zero in on the collars and fluid level in each well.

Easily identify working fluid levels on oil & gas wells

Sage Technologies, Inc.

P.O. Box 1466
Grapevine, Texas USA 76099

Phone: 817-488-2579
Email: info@sageoiltools.com
Website: www.sageoiltools.com

Acoustic Fluid Logger III



AFL III recorder features:

- Microprocessor based multichannel recorder
- Automatic gain control
- Analog to digital converter, thermal printer, embedded signal acquisition software
- Internal filter network reduces unwanted noise and highlights collar and fluid signals
- Precision one-second timing marks displayed on fluid tape
- Compressed mode shortens tapes to up to one-eighth original size, keeping one-second timing marks
- Tape reprint allows multiple copies of the same tape in field

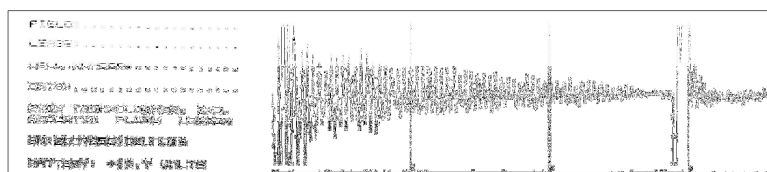
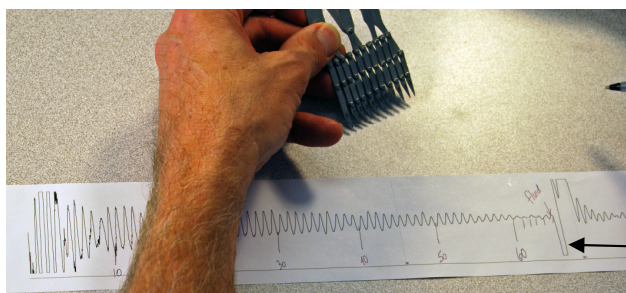


Pressure Pulse Gas Gun features:

- Stainless steel construction for durability; large chamber for accuracy on both deep and shallow wells
- Swagelok quick-connect on top of gun allows easy swap of gauge to check casing pressure
- Stab-in charge hose quickly loads gun with gas
- Load-fire shuttle valve moves side to side to fire the gun
- Standard 2.5 lb. CO₂ bottle delivers about 200 shots; 5 lb. bottles also available
- Optional N₂ connector allows use of compressed nitrogen in extreme cold conditions
- 1,500 psi Pressure Pulse Gas Gun threads directly to 2" line pipe

Shooting a fluid level with the Acoustic Fluid Logger III

- | | |
|---|---|
| <ul style="list-style-type: none">◇ Thread the Pressure Pulse Gas Gun onto the well-head.◇ Connect the microphone cable from the gas gun to the AFL III recorder.◇ Turn on the recorder, and the header prints on the paper tape, then stops to await the gas shot.◇ Charge the gas gun. Fire the compressed gas shot down annulus or tubing by simply sliding load-fire | <ul style="list-style-type: none">shuttle valve on gas gun.◇ The gas pulse travels down the wellbore. Reflections return from collars and fluid. AFL III plots collars and fluid as an easy-to-read trace on paper tape.◇ Reprint tape as condensed or amplified, as desired.◇ Count the collars in sets of 10 with the 11-point dividers. Simply multiply the number of collars by the joint length to find the depth to the fluid level. |
|---|---|



Counting collars with 11-point dividers;
Fluid kick marked on
on tape printout

Fluid kick on
compressed tape

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