

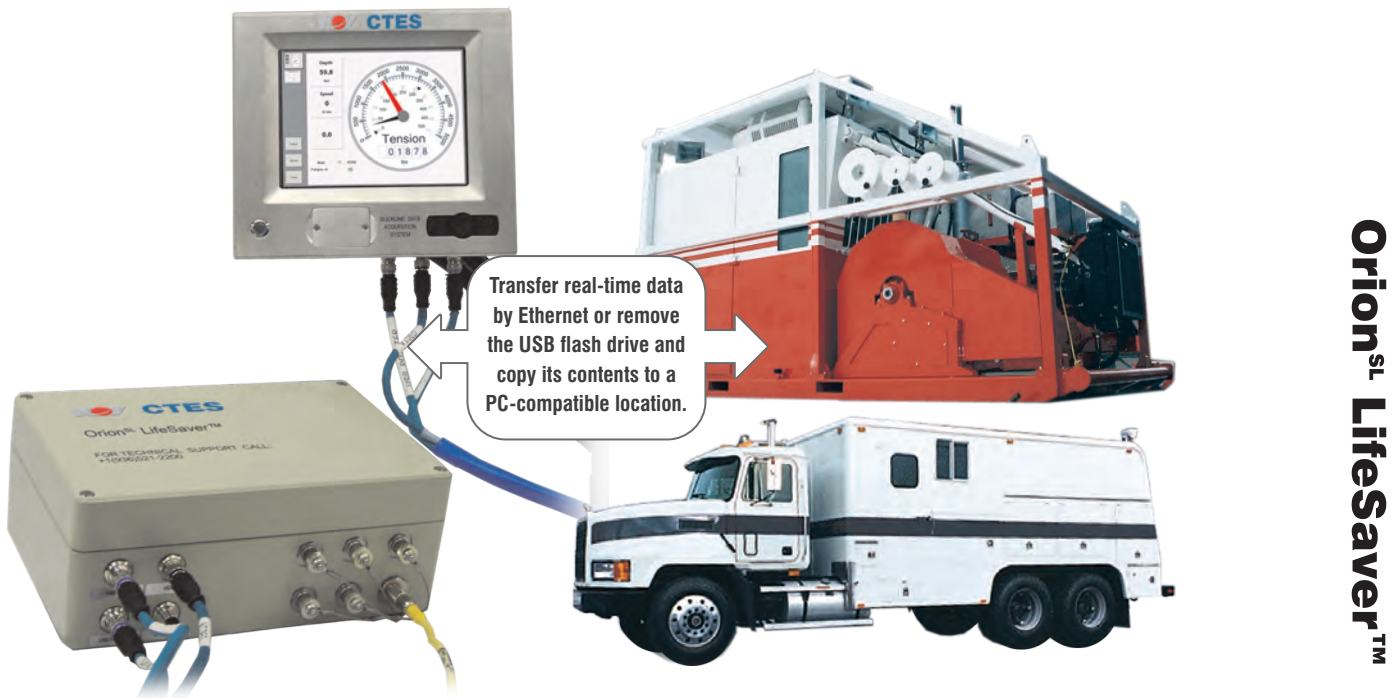
Orion^{SL} LifeSaver™

DATA ACQUISITION SYSTEM FOR SLICKLINE FATIGUE LIFE TRACKING

The NOV® CTES Orion^{SL} LifeSaver™ acquires, records, and displays slickline operating data to estimate fatigue along the length of a slickline. The system's calculated remaining fatigue life information is useful to help avoid costly field failures and to optimize the slickline replacement schedule.

The Orion LifeSaver monitors slickline forces and bending events as tools are run in and out of the well. The standalone system records slickline depth information via an encoder mounted on a measuring device.

Useful for post-job modeling, Orion LifeSaver's job data is written continuously (one time per second) onto a USB flash drive.



SOFTWARE FEATURES AND BENEFITS:

OrionNET™ software arrives pre-installed in the unit:

- Provides real-time slickline fatigue calculations
- Acquires, displays, and records depth, tension, line speed, and one additional analog data channel
- Allows users to see rapidly changing values in tension or depth via a high-speed data display (event-driven; up to 10 times per second)
- High-speed, sensitive tension display detects “tickle” (small variations in tension) when moving past downhole restrictions
- Large graphical display screen includes analog gauge, strip chart, and easy-to-read digital displays
- Easy operation: single switch provides “power on and go” data acquisition and USB media storage
- User-set alarms for all input channels drive digital output for horns, lights, or relays
- Easy zero or calibration of input sensors
- English or Metric units

www.nov.com/ctes
ctesales@nov.com

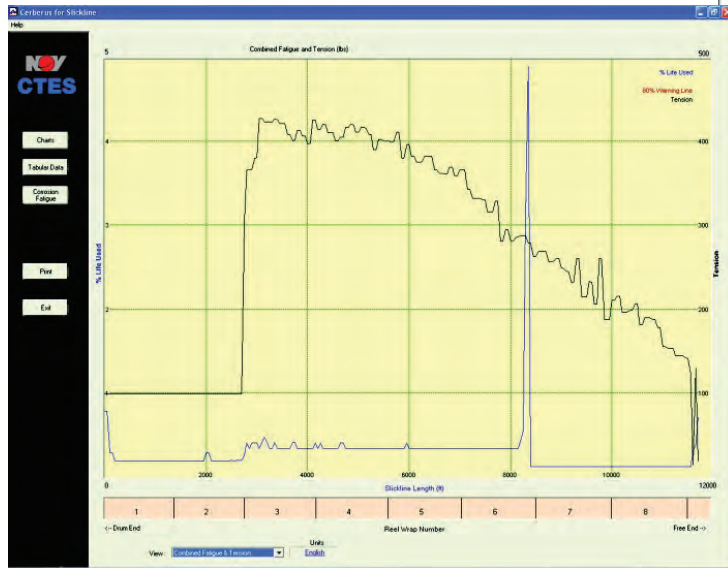
NOV Corporate Headquarters
7909 Parkwood Circle Drive
Houston, Texas 77036
United States
Phone: 713 375 3700
Fax: 713 346 7687

NOV CTES
9870 Pozos Lane
Conroe, Texas 77303
United States
Phone: 936 521 2200
Fax: 936 521 2275
24 Hour Support: 936 521 2200



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OrionNET software is pre-installed in the Orion LifeSaver unit.



Review Percent (Fatigue) Life Used and Tension

Create Field Job for Post-Fatigue Processing

Description: [Text Box]

Start Date Time: [Text Box]

End Date Time: [Text Box]

RC Reel Core (in): 16

US Upper Sheave (in): 16

LS Lower Sheave (in): 16

Geometry - Type 1

Event History

Slickline Name: TT Initial Length (ft): 12000

Slickline Type: Baidon SUPA-75 Current Length (ft): 12000

Date	Event	Event Description
10-6-2008	Slickline	Filename: TT
10/6/2008 10:09:11 AM	Job	Orion Real-Time Fatigue Processing
10/6/2008 10:27:11 AM	Job	Orion Real-Time Fatigue Processing
10/9/2008 3:32:07 PM	Job	Orion Real-Time Fatigue Processing
10/31/2008 11:43:43 AM	Job	Orion Real-Time Fatigue Processing
10/31/2008 12:54:11 PM	Job	Orion Real-Time Fatigue Processing

Review Event History

Specifications

ELECTRICAL

Control Box

CPU	500Mhz Pentium® MMX
Input/Output	2 quadrature inputs 2 Analog inputs 4-20mA current loop sourced 2 outputs 24V at 500mA
Memory	Storage 2GB USB
Communications	Ethernet
Operating Voltage	12VDC at 1.5A
Humidity	98% without condensation
Operating temperature	-35° C to 65° C
Storage temperature	-40° C to 75° C
Shock/Vibration	40g MIL-STD-810F
Protection	IP 67

Display

Type	8.4" Color TFT LCD
Resolution	800 x 600
Back Light	CCFT
Brightness	400 NIT
Touch Screen	Yes
Operating Voltage	12VDC at 1A
Operating Humidity	98% without condensation
Operating temperature	-5° C to 55° C
Storage temperature	-20° C to 60° C
Shock/Vibration	40g MIL-STD-810F
Protection	IP 65

Electrical Features

Up to 3000ft/min @ 500 pulses/ft
Dual-wheel measuring capability
Monitor has standard flat-panel mounting bracket for use with any standard commercial swing arm

Electrical Options

Up to one hour of battery back-up time in case of power interruption

MECHANICAL HARDWARE

Control Box

Weight	10 lbs
Length	12"
Height	8"
Width	5"
Display	
Weight	8 lbs
Length	10.5"
Height	9.5"
Width	3"
Viewing Area	8.4" diagonal

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