

**DFL-3**

**APPLICATION**

- Intermediate and Production Casing
- Liner
- Squeeze
- Plug and Abandonment
- 10°C - 230°C (Tested)

**BENEFITS**

- Consistent performance
- Economical
- Pre-hydratable
- High temperature stability

**FEATURES**

- Linear fluid loss values
- Non-retarding to set times
- CaCl<sub>2</sub> compatible
- Effective in lightweight slurries
- Typical loadings: 0.2 – 1.0%

**PHYSICAL & CHEMICAL PROPERTIES**

<b>APPEARANCE</b>	Brown powder
<b>TYPE</b>	Proprietary
<b>PRE-HYDRATE</b>	YES

**SAFETY & HANDLING**

<b>WHMIS</b>	Not controlled
<b>TDG</b>	Non-regulated
<b>PACKAGING</b>	20 kg bags

**DESCRIPTION**

As the cement slurry is pumped across a permeable formation it is exposed to a differential pressure across a filter medium. The filter medium allows water (filtrate) to pass through leaving behind cement particles (filter cake). Insufficient fluid loss control can cause excess filtrate resulting in an increase in slurry viscosity, higher pump pressures or in severe cases prevent proper slurry placement in both primary and remedial cementing operations.

DFL-3 effectively controls fluid loss across a wide range of temperatures in both primary and remedial cementing. The non-retarding characteristics make this product idea for shallow squeezes. DFL-3 is also stable at high temperatures and effective for use in deeper wells with higher bottom hole temperatures.

This combination of selected water-soluble polymers controls fluid loss by increasing the viscosity of the aqueous phase of the cement slurry while decreasing filter cake permeability.

**TECHNICAL DATA:**

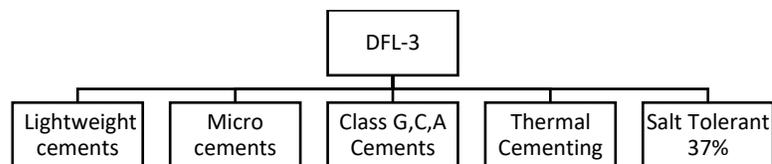
**0-1-0 "G" @ 1900 kg/m<sup>3</sup>**

GRAPH #	TEMP °C	ADDITIVE %				RHEOLOGY				FLUID LOSS (mL)API	THICKENING TIME 70Bc
		DFL3	CaCl <sub>2</sub>	FR-2	MTR	300	100	6	3		
1	20	0.4	1.0	-	-	166	74	11	8	86	1:36
2	20	0.3	0.5	0.1	-	104	42	5	4	45	2:15
3	30	0.4	-	-	-	188	80	8	5	38	1:54
4	40	0.4	-	-	0.2	210	87	7	4	50	2:47

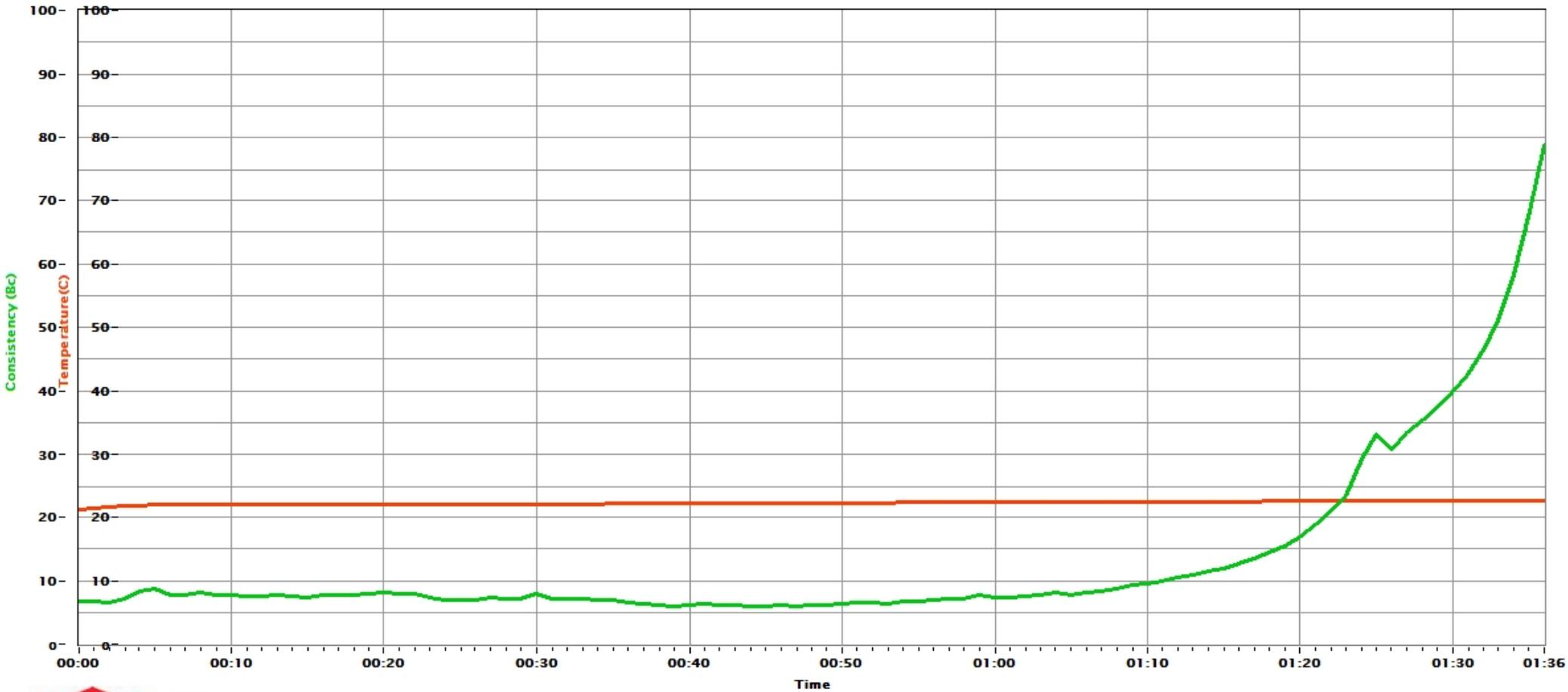
Tested with MTR (ScottCo mid – temperature retarder) at 40°C

**0-1-0 "G" Salt Blend**

TEMP °C	DENSITY Kg/m <sup>3</sup>	ADDITIVE %		Salt% BWOW NaCl	RHEOLOGY				FLUID LOSS (mL)API
		DFL3	FR-2		300	100	6	3	
20	1937	0.5	0.5	18%	205	98	9	6	66
20	1963	1.0	0.8	37%	222	105	11	8	87



# GRAPH #: 1



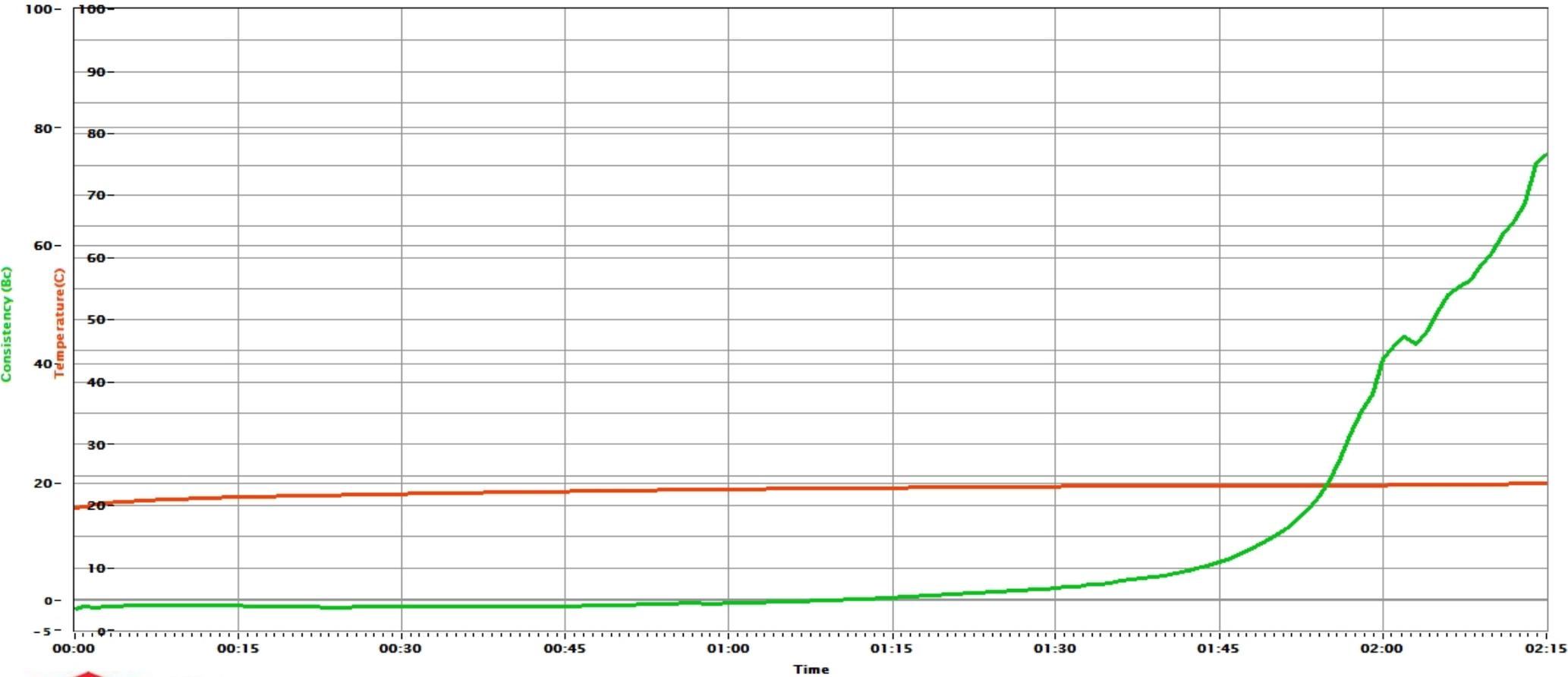
CTE, Inc.  
Tulsa, OK

www.ctetulsa.com

Alarm 45.00Bc	Bc 45.00 @ 91.957 minutes
Alarm 60.00Bc	Bc 60.00 @ 94.956 minutes
Alarm 75.00Bc	Bc 75.00 @ 95.961 minutes

**CONTACT: SALES@SCOTTCO.BIZ**  
**6320 Imperial Way Olds Alberta Canada T4H 1M5**  
**www.scottco.biz**

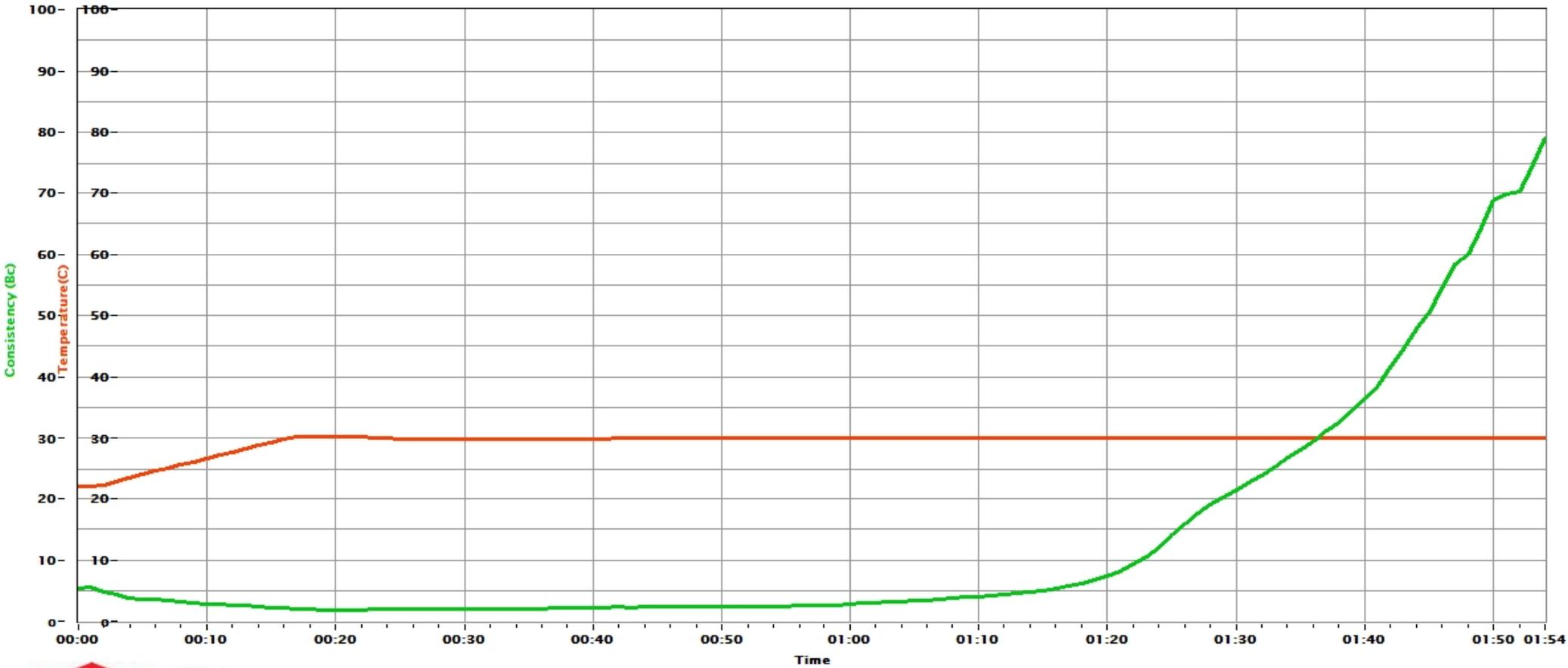
# GRAPH #: 2



Alarm 45.00Bc	Bc 45.00 @ 123.964 minutes
Alarm 60.00Bc	Bc 60.00 @ 130.966 minutes
Alarm 75.00Bc	Bc 75.00 @ 134.952 minutes

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# GRAPH #: 3



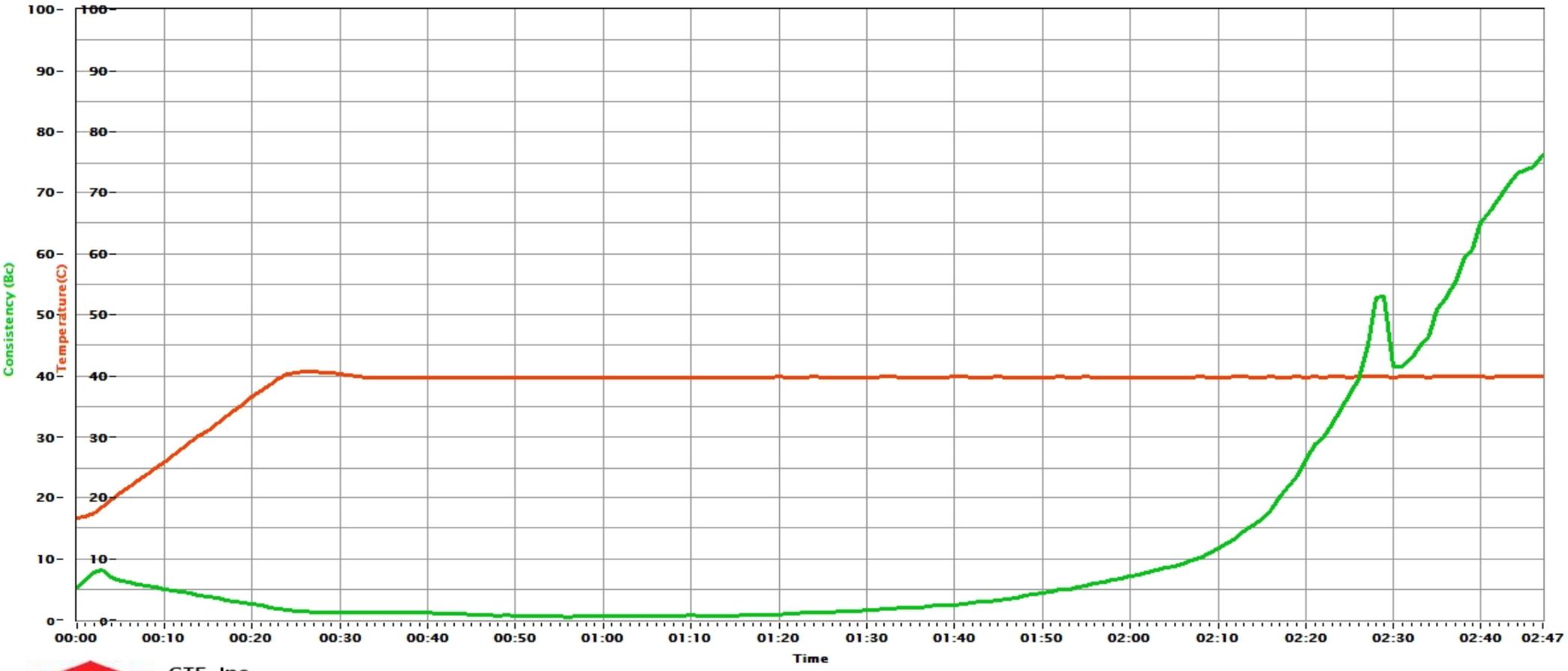
CTE, Inc.  
Tulsa, OK

[www.ctetulsa.com](http://www.ctetulsa.com)

Alarm 45.00Bc	Bc 45.00 @ 103.958 minutes
Alarm 60.00Bc	Bc 60.00 @ 108.949 minutes
Alarm 75.00Bc	Bc 75.00 @ 113.959 minutes

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# GRAPH #: 4



**CTE** CTE, Inc.  
Tulsa, OK  
www.ctetulsa.com

Alarm 45.00Bc	Bc 45.00 @ 147.954 minutes
Alarm 60.00Bc	Bc 60.00 @ 158.962 minutes
Alarm 75.00Bc	Bc 75.00 @ 166.955 minutes

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