

## SURELINE PROJECTS [SL23-089]

## 64002

## **Diesel Engine**

## PHILLIPS SYN 5W40 (--- GAL)

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor.	Sample Number		Client Info		VCP369847	VCP369842	
	Sample Date		Client Info		15 Nov 2023	04 Oct 2023	
	Machine Age	hrs	Client Info		502	252	
	Oil Age	hrs	Client Info		502	252	
	Filter Age	hrs	Client Info		0	0	
	Oil Changed		Client Info		Changed	Changed	
	Filter Changed		Client Info		Changed	Changed	
	Sample Status				NORMAL	NORMAL	
WEAR	Iron	ppm	ASTM D5185(m)	>100	6	8	
Metal levels are typical for a new component breaking in.	Chromium	ppm	ASTM D5185(m)	>20	0	0	
	Nickel	ppm	ASTM D5185(m)		<1	<1	
	Titanium	ppm	ASTM D5185(m)		91	4	
	Silver	ppm	ASTM D5185(m)	>2	<1	<1	
	Aluminum	ppm	ASTM D5185(m)	>25	2	2	
	Lead	ppm	ASTM D5185(m)	>40	<1	1	
	Copper	ppm	ASTM D5185(m)	>330	4	20	
	Tin	ppm	ASTM D5185(m)	>15	<1	1	
	Vanadium	ppm	ASTM D5185(m)		<1	0	
CONTAMINATION	Silicon	ppm	ASTM D5185(m)	>25	11	24	
There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185(m)	>20	1	3	
	Fuel		WC Method	>6.0	<1.0	0.6	
	Water		WC Method	>0.2	NEG	NEG	
	Glycol		WC Method		NEG	NEG	
	Soot %	%	ASTM D7844*	>3	0	0	
	Nitration	Abs/cm	ASTM D7624*	>20	8.3	8.3	
	Sulfation	Abs/.1mm	ASTM D7415*	>30	18.7	18.4	
	Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	
FLUID CONDITION	Sodium	ppm	ASTM D5185(m)		2	4	
The condition of the oil is acceptable for the time in service.	Boron	ppm	ASTM D5185(m)		113	63	
	Barium	ppm	ASTM D5185(m)		<1	<1	
	Molybdenum	ppm	ASTM D5185(m)		7	77	
	Manganese	ppm	ASTM D5185(m)		0	1	
	Magnesium	ppm	ASTM D5185(m)		641	88	
	Calcium	ppm	ASTM D5185(m)		1425	2129	
	Phosphorus	ppm	ASTM D5185(m)		955	962	
	7:				1140	1100	

Zinc

Sulfur

Oxidation

Visc @ 100°C cSt

ppm

ppm

Abs/.1mm

ASTM D5185(m)

ASTM D5185(m)

ASTM D7279(m)

ASTM D7414\* >25

Contact/Location: Mathew Stockley - VOLVO5076

1128

3272

14.4

10.9

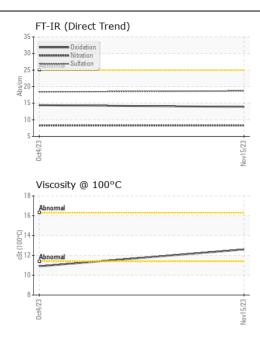
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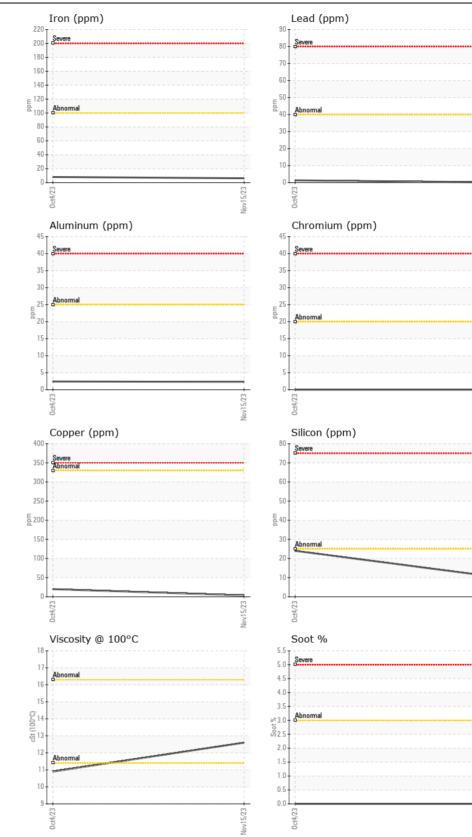
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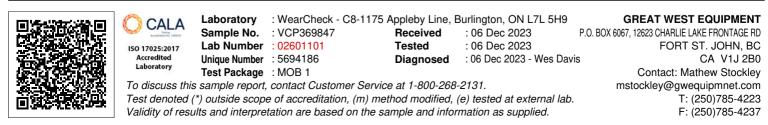
13.9

12.6

WEAR NORMAL CONTAMINATION NORMAL FLUID CONDITION NORMAL







Contact/Location: Mathew Stockley - VOLVO5076 Page 2 of 2