



# CONSTRUCTION EQUIPMENT

621070 SENNEBOGEN 840 840.0.2244 - DIESEL ENGINE



**Sample No:** VCP442761  
**Oil Type:** VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3  
**Job No:** 621070



## SAMPLE INFORMATION

Sample Number	<b>VCP442761</b>	VCP416929	VCP412582	VCP410709
Sample Date	<b>20 Nov 2023</b>	01 Sep 2023	03 Aug 2023	18 Apr 2023
Machine Hours	<b>6752</b>	6206	5960	5184
Oil Hours	<b>500</b>	500	500	0
Oil Changed	<b>Changed</b>	Changed	Changed	Changed
Sample Status	<b>NORMAL</b>	NORMAL	NORMAL	NORMAL

**FERROUS PROCESSING AND TRADING**  
 3400 E LAFAYETTE  
 DETROIT, MI  
 US 48207  
 Contact: KEITH HALL  
 keith.hall@fpt1.com  
 T:  
 F:

## OIL CONDITION

Visc @ 100°C	cSt	<b>13.1</b>	13.3	13.5	13.1
Base Number (BN)	mg KOH/g	<b>6.2</b>	7.0	7.1	5.2
Oxidation (PA)	%	<b>66</b>	56	82	80

## Diagnosis

Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

## CONTAMINATION

Water	%	<b>NEG</b>	NEG	NEG	NEG
Soot %	%	<b>0.2</b>	0.1	0.3	0.2
Nitration (PA)	%	<b>82</b>	73	92	89
Sulfation (PA)	%	<b>55</b>	51	62	63
Glycol	%	<b>NEG</b>	NEG	NEG	NEG
Fuel	%	<b>&lt;1.0</b>	<1.0	<1.0	<1.0
Silicon	ppm	<b>4</b>	3	3	0
Sodium	ppm	<b>2</b>	2	2	2
Potassium	ppm	<b>4</b>	4	11	4

## WEAR METALS

Iron	ppm	<b>4</b>	5	19	16
Copper	ppm	<b>&lt;1</b>	<1	1	1
Lead	ppm	<b>0</b>	0	0	0
Tin	ppm	<b>&lt;1</b>	0	<1	0
Aluminum	ppm	<b>3</b>	10	5	4
Chromium	ppm	<b>0</b>	<1	<1	<1
Molybdenum	ppm	<b>58</b>	60	65	61
Nickel	ppm	<b>0</b>	0	0	<1
Titanium	ppm	<b>0</b>	0	0	0
Silver	ppm	<b>0</b>	0	0	0
Manganese	ppm	<b>&lt;1</b>	<1	<1	<1
Vanadium	ppm	<b>0</b>	0	<1	0

## ADDITIVES

Calcium	ppm	<b>2021</b>	2137	1315	2418
Magnesium	ppm	<b>33</b>	103	984	34
Zinc	ppm	<b>1204</b>	1279	1350	1328
Phosphorus	ppm	<b>959</b>	1039	1064	1067
Barium	ppm	<b>0</b>	0	0	0
Boron	ppm	<b>38</b>	54	2	26

**Depot:** FERDET  
**Unique No:** 10764776  
**Signed:** Wes Davis  
**Report Date:** 30 Nov 2023

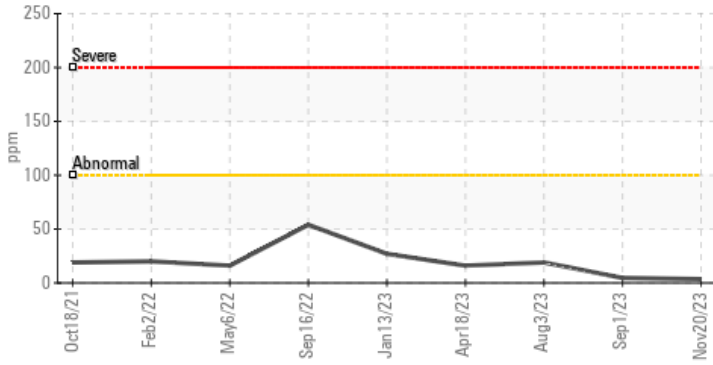


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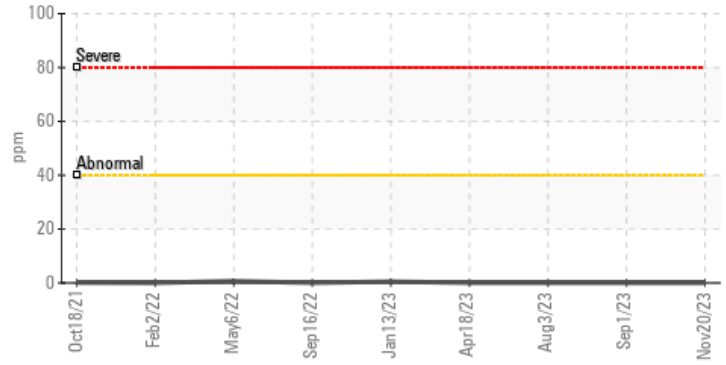


## GRAPHS

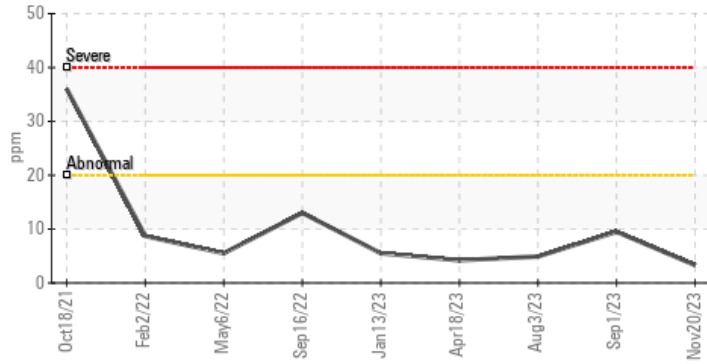
### Iron (ppm)



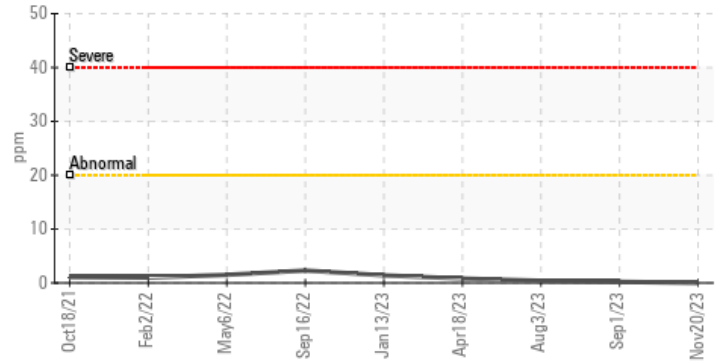
### Lead (ppm)



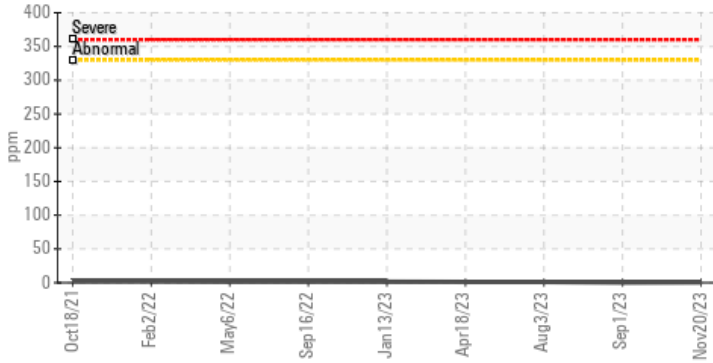
### Aluminum (ppm)



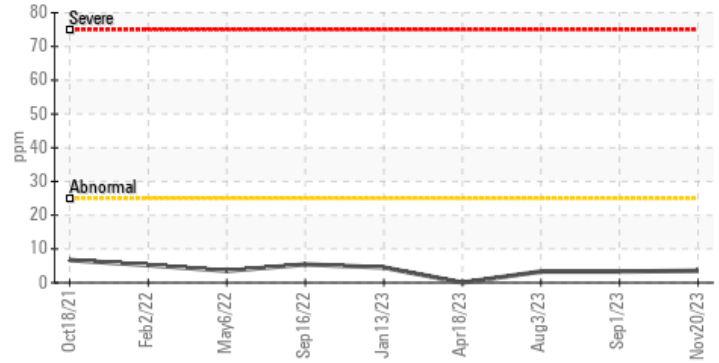
### Chromium (ppm)



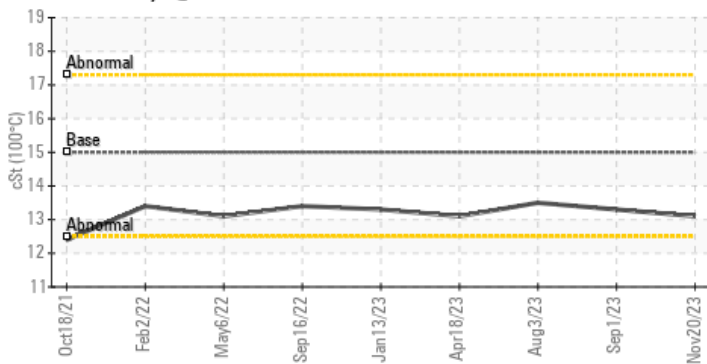
### Copper (ppm)



### Silicon (ppm)



### Viscosity @ 100°C



### Base Number

