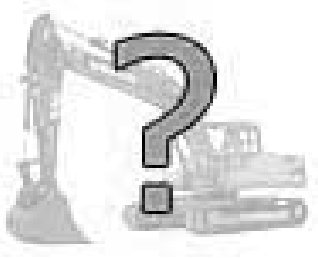
CONSTRUCTION EQUIPMENT
PETERBILT 337 MB01567 - DIESEL ENGINE

Sample No: VCP411501
Oil Type: DIESEL ENGINE OIL SAE 15W40
Job No:



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US 24153
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T:
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SAMPLE INFORMATION

Sample Number		**VCP411501**	VCP402746	---	---
Sample Date		**25 Aug 2023**	19 Jun 2023	---	---
Machine Hours		**22750**	0	---	---
Oil Hours		**0**	0	---	---
Oil Changed		**Changed**	N/A	---	---
Sample Status		**ATTENTION**	NORMAL	---	---

OIL CONDITION

Visc @ 100°C	cSt	▲ **12.2**	11.9	---	---
Base Number (BN)	mg KOH/g	**7.8**	7.2	---	---
Oxidation (PA)	%	**50**	56	---	---

CONTAMINATION

Soot %	%	**0.2**	0.2	---	---
Nitration (PA)	%	**58**	58	---	---
Sulfation (PA)	%	**48**	55	---	---
Glycol	%	**NEG**	NEG	---	---
Fuel	%	**<1.0**	1.3	---	---
Silicon	ppm	**9**	10	---	---
Sodium	ppm	**3**	2	---	---
Potassium	ppm	**148**	77	---	---

WEAR METALS

Iron	ppm	**22**	27	---	---
Copper	ppm	**4**	9	---	---
Lead	ppm	**1**	0	---	---
Tin	ppm	**<1**	0	---	---
Aluminum	ppm	**63**	34	---	---
Chromium	ppm	**2**	<1	---	---
Molybdenum	ppm	**67**	78	---	---
Nickel	ppm	**<1**	0	---	---
Titanium	ppm	**<1**	0	---	---
Silver	ppm	**0**	0	---	---
Manganese	ppm	**1**	<1	---	---
Vanadium	ppm	**<1**	0	---	---

ADDITIVES

Calcium	ppm	**1192**	1482	---	---
Magnesium	ppm	**735**	509	---	---
Zinc	ppm	**1173**	1228	---	---
Phosphorus	ppm	**934**	978	---	---
Barium	ppm	**0**	0	---	---
Boron	ppm	**99**	272	---	---

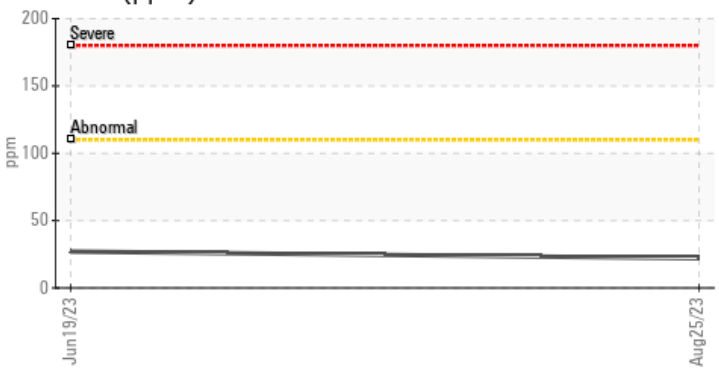
Diagnosis

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.Metal levels are typical for a new component breaking in. Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil. The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

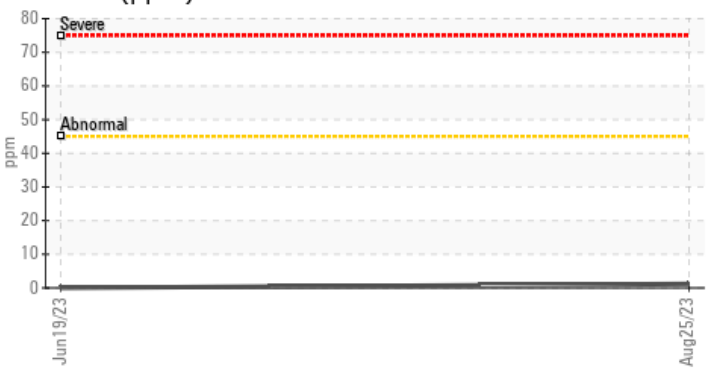
Depot: VOLVO9010
Unique No: 10622190
Signed: Sean Felton
Report Date: 29 Aug 2023

GRAPHS

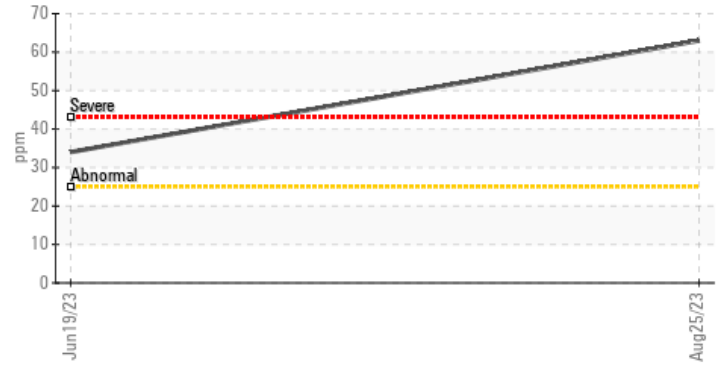
Iron (ppm)



Lead (ppm)



Aluminum (ppm)



Chromium (ppm)

Copper (ppm)

Silicon (ppm)

▲ Viscosity @ 100°C

Base Number