



CONSTRUCTION EQUIPMENT

SPM489356 CATERPILLAR TL943 TBL - DIESEL ENGINE



Sample No: VCP387445
Oil Type: DIESEL ENGINE OIL SAE 15W40
Job No: SPM489356



SAMPLE INFORMATION

Sample Number	VCP387445	---	---	---
Sample Date	07 Dec 2022	---	---	---
Machine Hours	3871	---	---	---
Oil Hours	0	---	---	---
Oil Changed	Changed	---	---	---
Sample Status	ATTENTION	---	---	---

WASTE MANAGEMENT - HOOKER ST
 1500 N HOOKER ST
 CHICAGO, IL
 US 60642
 Contact: Service Manager



OIL CONDITION

Visc @ 100°C	cSt	▲ 10.9	---	---	---
Base Number (BN)	mg KOH/g	■ 11.6	---	---	---
Oxidation (PA)	%	81	---	---	---

T:
F:

Diagnosis

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. All component wear rates are normal. Light fuel dilution occurring. The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.



CONTAMINATION

Soot %	%	■ 0.2	---	---	---
Nitration (PA)	%	63	---	---	---
Sulfation (PA)	%	64	---	---	---
Glycol	%	NEG	---	---	---
Fuel	%	▲ 3.2	---	---	---
Silicon	ppm	■ 8	---	---	---
Sodium	ppm	■ 2	---	---	---
Potassium	ppm	■ 0	---	---	---



WEAR METALS

Iron	ppm	■ 10	---	---	---
Copper	ppm	■ 4	---	---	---
Lead	ppm	■ 2	---	---	---
Tin	ppm	■ <1	---	---	---
Aluminum	ppm	■ 2	---	---	---
Chromium	ppm	■ 1	---	---	---
Molybdenum	ppm	■ 36	---	---	---
Nickel	ppm	■ <1	---	---	---
Titanium	ppm	■ <1	---	---	---
Silver	ppm	■ 0	---	---	---
Manganese	ppm	■ <1	---	---	---
Vanadium	ppm	<1	---	---	---



ADDITIVES

Calcium	ppm	■ 1809	---	---	---
Magnesium	ppm	■ 436	---	---	---
Zinc	ppm	■ 1146	---	---	---
Phosphorus	ppm	■ 923	---	---	---
Barium	ppm	■ 0	---	---	---
Boron	ppm	■ 56	---	---	---

Depot: WASCHILL
Unique No: 10258631
Signed: Jonathan Hester
Report Date: 20 Dec 2022



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GRAPHS

Iron (ppm)



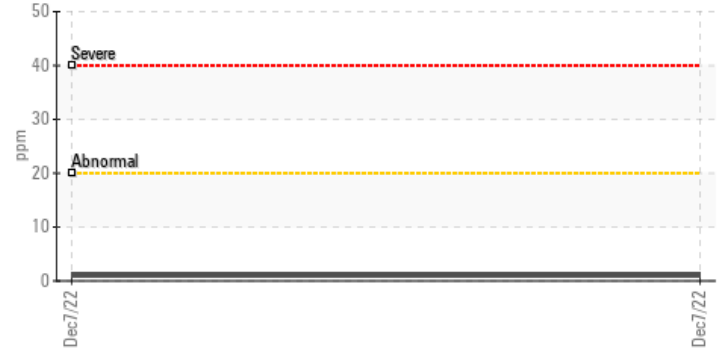
Lead (ppm)



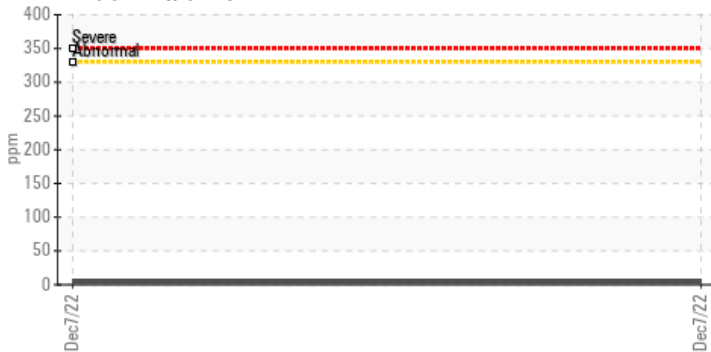
Aluminum (ppm)



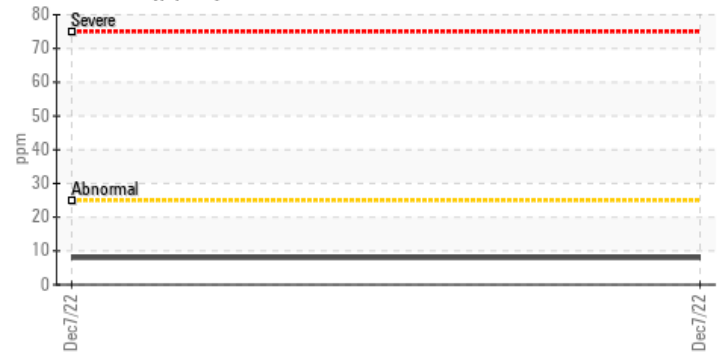
Chromium (ppm)



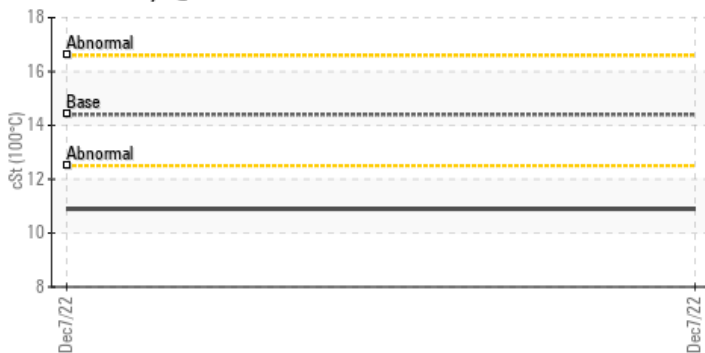
Copper (ppm)



Silicon (ppm)



▲ Viscosity @ 100°C



Base Number

