CONSTRUCTION EQUIPMENT
TAHLTAN BAND   W09003335-1   210752 - DIESEL ENGINE

Sample No: VCP324518

Oil Type: KLONDIKE HEAVY DUTY 15W40

Job No: W09003335-1

SAMPLE INFORMATION

Sample Number		VCP324518	---	---	---
Sample Date		31 Mar 2023	---	---	---
Machine Hours		5096	---	---	---
Oil Hours		200	---	---	---
Oil Changed		Changed	---	---	---
Sample Status		ABNORMAL	---	---	---

OIL CONDITION

Visc @ 100°C	cSt	▲ 11.3	---	---	---
Oxidation (PA)	%	61	---	---	---

CONTAMINATION

Soot %	%	0.1	---	---	---
Nitration (PA)	%	64	---	---	---
Sulfation (PA)	%	60	---	---	---
Glycol	%	0.0	---	---	---
Fuel	%	1.2	---	---	---
Silicon	ppm	7	---	---	---
Sodium	ppm	38	---	---	---
Potassium	ppm	13	---	---	---

WEAR METALS

Iron	ppm	25	---	---	---
Copper	ppm	6	---	---	---
Lead	ppm	<1	---	---	---
Tin	ppm	<1	---	---	---
Aluminum	ppm	6	---	---	---
Chromium	ppm	<1	---	---	---
Molybdenum	ppm	64	---	---	---
Nickel	ppm	<1	---	---	---
Titanium	ppm	<1	---	---	---
Silver	ppm	0	---	---	---
Manganese	ppm	<1	---	---	---
Vanadium	ppm	0	---	---	---

ADDITIVES

Calcium	ppm	1195	---	---	---
Magnesium	ppm	1038	---	---	---
Zinc	ppm	1292	---	---	---
Phosphorus	ppm	1195	---	---	---
Barium	ppm	0	---	---	---
Boron	ppm	3	---	---	---

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3830 Sharples Road
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CA V8G 5P8
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Diagnosis

The oil change at the time of sampling has been noted. Confirm the source of the lubricant being utilized for top-up/fill. Resample at the next service interval to monitor. No other corrective action is recommended at this time. The fluid was specified as KLONDIKE HEAVY DUTY 15W40, however, a fluid match indicates that this fluid is SAE 30 Diesel Engine Oil. Please confirm the oil type and grade on your next sample. All component wear rates are normal. Light fuel dilution occurring. No other contaminants were detected in the oil. Viscosity of sample indicates oil is within SAE 30 range, advise investigate. This plus the additive levels indicates that this is not the same brand, or type of oil as reported. The condition of the oil is acceptable for the time in service.

Depot:	VOLVO0284
Unique No:	5554890
Signed:	Kevin Marson
Report Date:	06 Apr 2023

GRAPHS

Iron (ppm)

Severe — 200
Abnormal — 100

Mar31/23 ... Mar31/23

Lead (ppm)

Severe — 40
Abnormal — 20

Mar31/23 ... Mar31/23

Aluminum (ppm)

Severe — 20
Abnormal — 10

Mar31/23 ... Mar31/23

Chromium (ppm)

Severe — 20
Abnormal — 10

Mar31/23 ... Mar31/23

Copper (ppm)

Severe — 30
Abnormal — 15

Mar31/23 ... Mar31/23

Silicon (ppm)

Severe — 40
Abnormal — 20

Mar31/23 ... Mar31/23

⚠ Viscosity @ 100°C

Abnormal — 17
Base — 15
Abnormal — 12.5

Mar31/23 ... Mar31/23

Soot %

Severe — 5.0
Abnormal — 3.0

Mar31/23 ... Mar31/23