



CONSTRUCTION EQUIPMENT

E15099 VOLVO L90H 626247 - DIESEL ENGINE



Sample No: VCP383342
Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3
Job No: E15099



SAMPLE INFORMATION

Sample Number	VCP383342	VCP416738	VCP383896	VCP396331
Sample Date	15 Dec 2023	25 Aug 2023	21 Jun 2023	23 Mar 2023
Machine Hours	5880	4792	4143	3266
Oil Hours	1088	600	500	980
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	NORMAL	NORMAL	NORMAL	NORMAL



COLUMBIA FOREST
 395 MISSILE ST
 PRESQUE ISLE, ME
 US 04769
 Contact: GARY



OIL CONDITION

Visc @ 100°C	cSt	13.8	13.3	13.77	13.4
Base Number (BN)	mg KOH/g	10.0	10.5	9.8	10.1
Oxidation (PA)	%	90	83	90	84

T: (207)764-9428
 F:

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	%	NEG	NEG	NEG	NEG
Soot %	%	1.2	0.7	0.8	0.7
Nitration (PA)	%	86	66	73	73
Sulfation (PA)	%	64	64	64	63
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	6	5	6	7
Sodium	ppm	1	<1	2	3
Potassium	ppm	0	<1	<1	0



WEAR METALS

Iron	ppm	17	12	19	19
Copper	ppm	<1	<1	<1	1
Lead	ppm	0	0	0	0
Tin	ppm	3	<1	<1	<1
Aluminum	ppm	6	2	3	4
Chromium	ppm	<1	<1	<1	1
Molybdenum	ppm	42	41	41	46
Nickel	ppm	0	0	0	0
Titanium	ppm	0	0	0	0
Silver	ppm	0	0	0	0
Manganese	ppm	<1	<1	<1	<1
Vanadium	ppm	0	0	0	0



ADDITIVES

Calcium	ppm	1744	1622	1744	1848
Magnesium	ppm	531	476	530	570
Zinc	ppm	1256	1098	1179	1244
Phosphorus	ppm	1014	913	949	1017
Barium	ppm	0	0	0	0
Boron	ppm	25	23	25	42

Depot: COLPRE
Unique No: 10807426
Signed: Wes Davis
Report Date: 28 Dec 2023

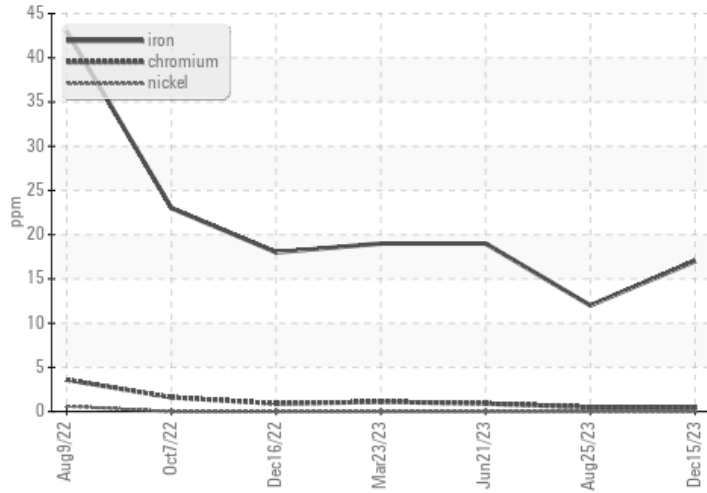


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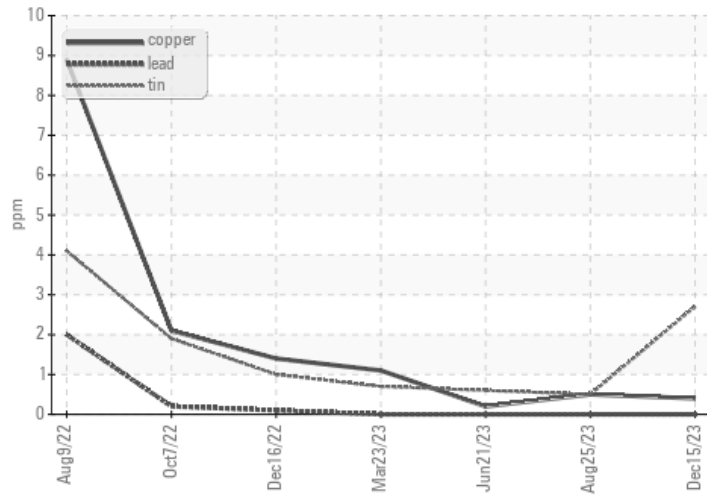


GRAPHS

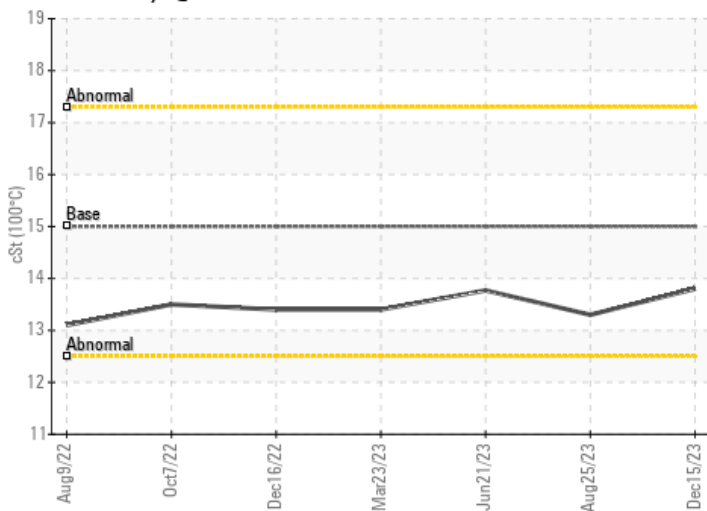
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 100°C



Base Number

