



CONSTRUCTION EQUIPMENT

594089 DIPRO VOLVO L220H 3352 - DIESEL ENGINE



Sample No: VCP411735
Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3
Job No: 594089 DIPRO



SAMPLE INFORMATION

Sample Number	VCP411735	VCP416245	VCP407919	VCP411188
Sample Date	14 Aug 2023	11 Jul 2023	02 Jun 2023	27 Apr 2023
Machine Hours	6368	5801	5245	4636
Oil Hours	500	500	500	500
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	NORMAL	NORMAL	NORMAL	NORMAL

ALTA EQUIPMENT COMPANY - METRO WEST
 56195 PONTIAC TRAIL
 NEW HUDSON, MI
 US 48165
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 T: (313)348-8861
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OIL CONDITION

Visc @ 100°C	cSt	14.1	14.2	14.0	13.8
Base Number (BN)	mg KOH/g	8.7	9.0	9.3	8.3
Oxidation (PA)	%	54	56	58	54



CONTAMINATION

Soot %	%	0.1	0.2	0.1	0.1
Nitration (PA)	%	48	53	53	48
Sulfation (PA)	%	50	51	53	46
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	3	3	3	2
Sodium	ppm	2	2	<1	<1
Potassium	ppm	4	0	0	<1



WEAR METALS

Iron	ppm	4	4	6	3
Copper	ppm	1	1	1	0
Lead	ppm	<1	0	0	0
Tin	ppm	<1	<1	<1	0
Aluminum	ppm	<1	<1	<1	<1
Chromium	ppm	0	0	<1	0
Molybdenum	ppm	59	61	57	63
Nickel	ppm	0	0	0	0
Titanium	ppm	<1	<1	<1	0
Silver	ppm	0	0	0	0
Manganese	ppm	<1	<1	<1	<1
Vanadium	ppm	<1	<1	0	0



ADDITIVES

Calcium	ppm	1038	1117	1052	1137
Magnesium	ppm	989	1032	973	1098
Zinc	ppm	1216	1283	1232	1404
Phosphorus	ppm	990	1053	981	1100
Barium	ppm	0	0	0	0
Boron	ppm	0	0	0	0

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 acceptable for the time in service.

Depot: VOLVO2990
Unique No: 10616580
Signed: Sean Felton
Report Date: 24 Aug 2023

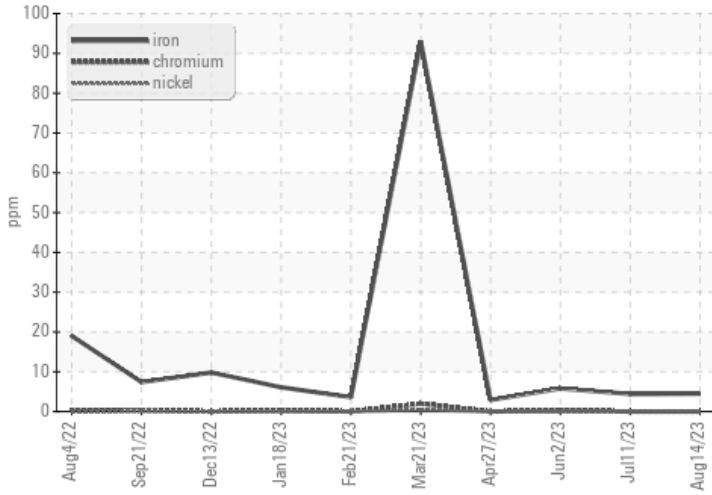


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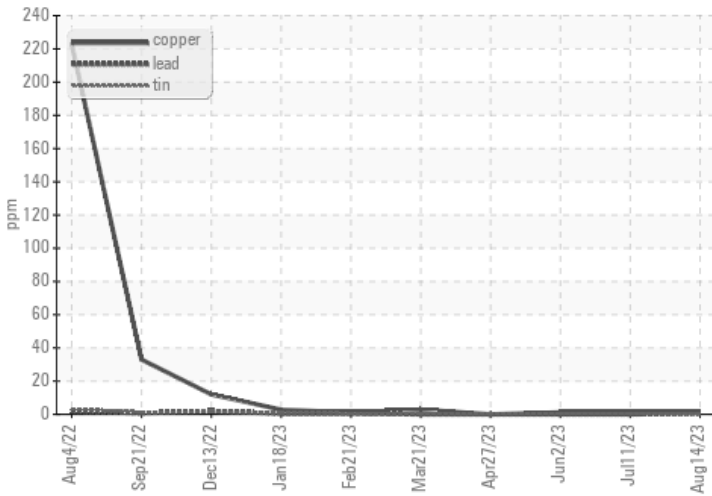


GRAPHS

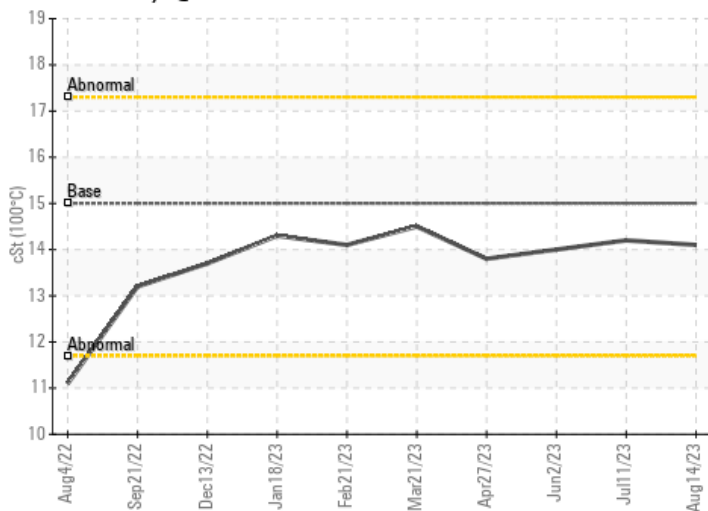
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 100°C



Base Number

