CONSTRUCTION EQUIPMENT 659444 MOSAIC FERT VOLVO EC480EL 315147 - DIESEL ENGINE

Sample No:VCP442577Oil Type:VOLVO ULTRA IJob No:659444 MOSAIC

VOLVO

e: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3
659444 MOSAIC FERT

SAMPLE INFORMATION

Sample Number		VCP442577	VCP417083	
Sample Date		13 Jan 2024	21 Aug 2023	
Machine Hours		1647	812	
Oil Hours		600	812	
Oil Changed		Changed	Changed	
Sample Status		ABNORMAL	ABNORMAL	
OIL CONDIT	FION			
Visc @ 100°C	cSt	12.3	1 1.0	
Base Number (BN)	mg KOH/g	6.4	4.4	
Oxidation (PA)	%	80	73	
CONTAMIN	IATION			
Water	%	NEG	NEG	
Soot %	%	■0.1	0.1	
Nitration (PA)	%	89	91	
Sulfation (PA)	%	62	65	
Glycol	%	NEG	NEG	
Fuel	%	<1.0	0.6	
Silicon	ppm	15	27	
Sodium	ppm	2	3	
Potassium	ppm	0	2	
VOLVO				

WEAR METALS

Iron	ppm	11	16	
Copper	ppm	A 33	<u> </u>	
Lead	ppm	 <1	2	
Tin	ppm	1	3	
Aluminum	ppm	2	4	
Chromium	ppm	■ <1	0	
Molybdenum	ppm	35	79	
Nickel	ppm	 <1	0	
Titanium	ppm	<1	0	
Silver	ppm	0	0	
Manganese	ppm	 <1	2	
Vanadium	ppm	<1	0	

ADDITIVES							
Calcium	ppm	1913	2130				
Magnesium	ppm	374	66				
Zinc	ppm	1126	1189				
Phosphorus	ppm	843	928				
Barium	ppm	0	0				
Boron	ppm	8	6				



ALTA EQUIPMENT/FLAGLER CONSTRUCTION EQUIPMENT LLC 8418 PALM RIVER ROAD

TAMPA, FL US 33619 Contact: JOHN FARDELLA john.fardella@altg.com T: (813)630-0077 F: (813)630-2233

Diagnosis

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.The copper level has decreased, but is still abnormal. In the absence of other significant wear metals, suspect copper due to sources other than wear (i.e. cooling core). All other component wear rates are normal. 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:
 VOLVO0093

 Unique No:
 10886300

 Signed:
 Sean Felton

 Report Date:
 21 Feb 2024

Report Id: VOLVO0093 [WUSCAR] 06093447 (Generated: 02/21/2024 15:42:36) Rev: 1

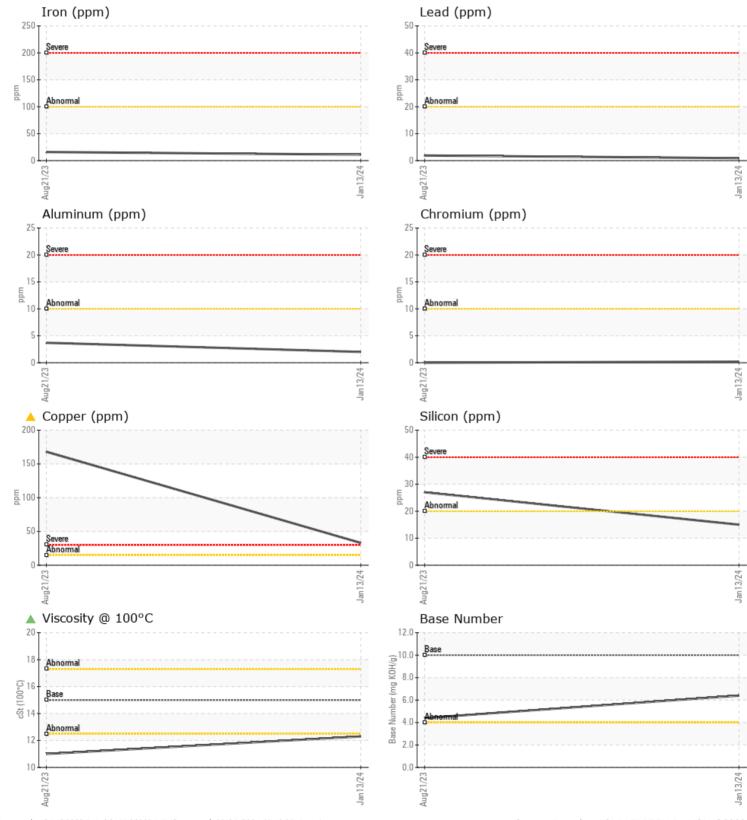
Contact/Location: JOHN FARDELLA - VOLVO0093

CONSTRUCTION EQUIPMENT



GRAPHS

VOLVO



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Contact/Location: JOHN FARDELLA - VOLVO0093