



CONSTRUCTION EQUIPMENT

12288 VOLVO ECR235D 2 10657 - DIESEL ENGINE



Sample No: VCP444366
Oil Type: MOBIL 15W40
Job No: 12288



SAMPLE INFORMATION

Sample Number	VCP444366	VCP364131	VCP375219	VCP372003
Sample Date	14 Mar 2024	18 Oct 2022	20 Jul 2022	05 Jul 2022
Machine Hours	2459	1996	1906	1865
Oil Hours	0	0	0	250
Oil Changed	N/A	N/A	N/A	Changed
Sample Status	NORMAL	NORMAL	NORMAL	SEVERE

JAMES J ANDERSON
 6958 TORRESDALE AVENUE
 PHILADELPHIA, PA
 US 19135
 Contact: JOHN HERBUT
 herb@jjaconstruction.com
 T: (215)850-9051
 F: (215)427-0208



OIL CONDITION

Visc @ 100°C	cSt	12.1	12.7	13.0	▲ 12.4
Base Number (BN)	mg KOH/g	7.0	11.1	11.7	8.4
Oxidation (PA)	%	46	80	78	67

Diagnosis

No corrective action is recommended at this time. Resample at the next service interval to monitor. All component wear rates are normal. Light fuel dilution occurring. No other contaminants were detected 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 %	%	0.1	0.1	0.1	0.2
Nitration (PA)	%	58	48	47	77
Sulfation (PA)	%	47	63	62	55
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	1.6	<1.0	<1.0	▲ 4.7
Silicon	ppm	7	9	10	16
Sodium	ppm	2	3	2	3
Potassium	ppm	2	0	<1	<1



WEAR METALS

Iron	ppm	47	14	31	▲ 248
Copper	ppm	2	<1	<1	4
Lead	ppm	<1	1	<1	<1
Tin	ppm	<1	<1	<1	1
Aluminum	ppm	6	<1	4	▲ 33
Chromium	ppm	<1	1	<1	2
Molybdenum	ppm	14	43	43	23
Nickel	ppm	<1	0	<1	2
Titanium	ppm	4	<1	0	<1
Silver	ppm	0	0	<1	0
Manganese	ppm	<1	<1	<1	2
Vanadium	ppm	<1	<1	0	0



ADDITIVES

Calcium	ppm	2000	1622	1645	1433
Magnesium	ppm	193	502	499	565
Zinc	ppm	1038	1108	1053	795
Phosphorus	ppm	870	892	862	658
Barium	ppm	0	0	0	0
Boron	ppm	19	56	83	56

Depot: JAAPHI
Unique No: 10937578
Signed: Wes Davis
Report Date: 22 Mar 2024

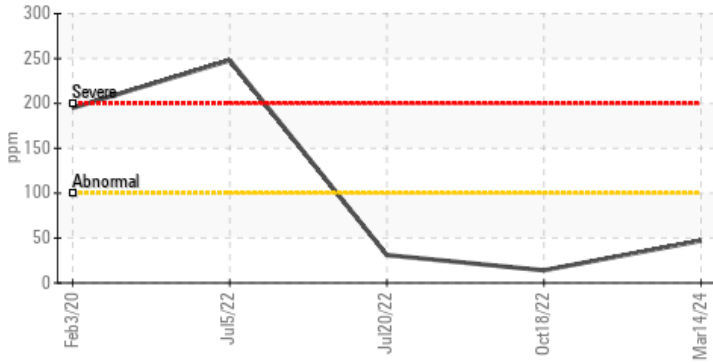


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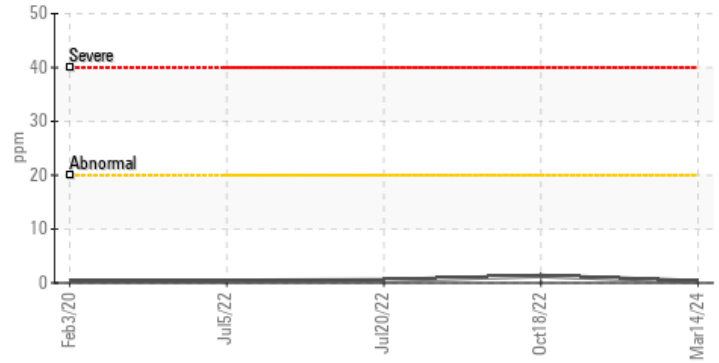


GRAPHS

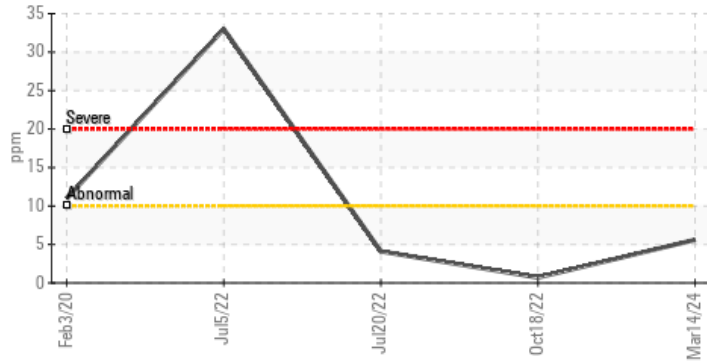
Iron (ppm)



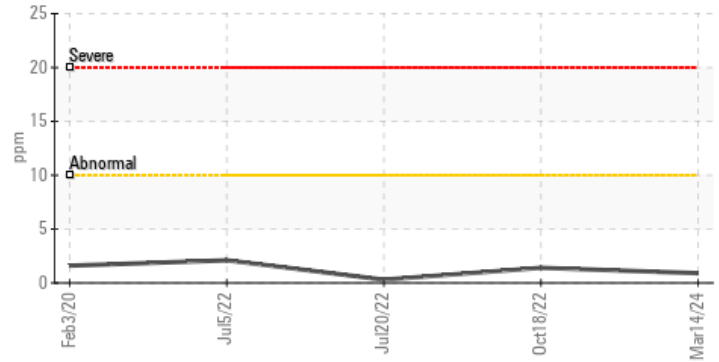
Lead (ppm)



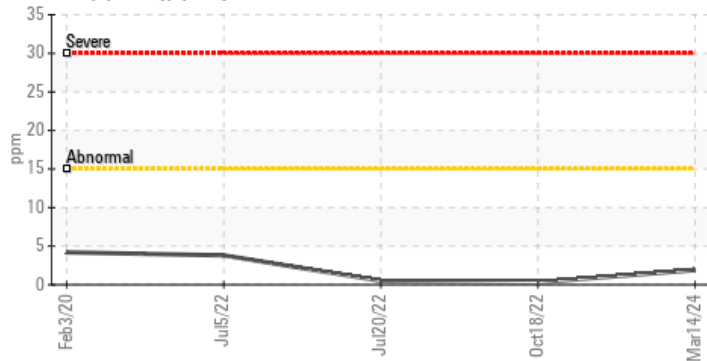
Aluminum (ppm)



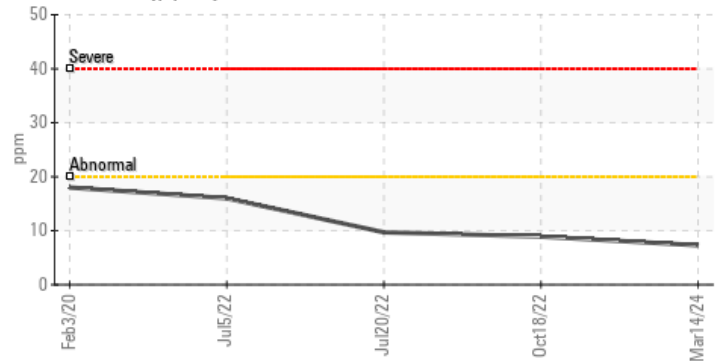
Chromium (ppm)



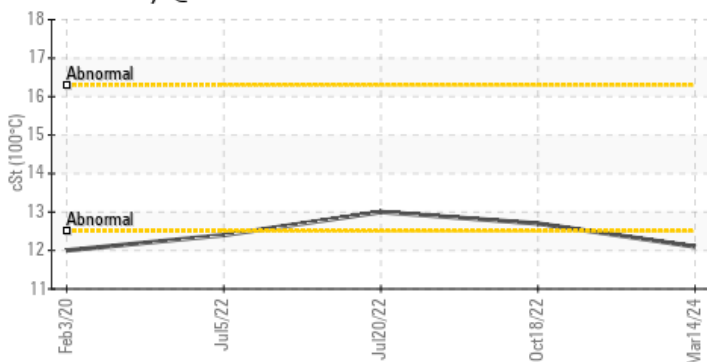
Copper (ppm)



Silicon (ppm)



Viscosity @ 100°C



Base Number

