



CONSTRUCTION EQUIPMENT

25023 VOLVO L90G 617079 - DIESEL ENGINE



Sample No: VCP440954
Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3
Job No: 25023



SAMPLE INFORMATION

Sample Number	VCP440954	VCP405643	VCP411022	VCP401761
Sample Date	20 Feb 2024	03 Aug 2023	02 May 2023	13 Feb 2023
Machine Hours	13412	12863	12413	12049
Oil Hours	0	1000	1000	1000
Oil Changed	N/A	Changed	Changed	N/A
Sample Status	NORMAL	ATTENTION	NORMAL	NORMAL

218 - ASCENDUM MACHINERY INC - N. CHARLESTON
 7235 CROSS COUNTRY RD.
 NORTH CHARLESTON, SC
 US 29418
 Contact: MATT MITCHAM
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 T:
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OIL CONDITION

Visc @ 100°C	cSt	12.4	11.0	13.2	13.2
Base Number (BN)	mg KOH/g	9.9	10.2	9.4	10.4
Oxidation (PA)	%	75	56	73	81



CONTAMINATION

Water	%	NEG	NEG	NEG	NEG
Soot %	%	0.2	0.2	0.2	0.5
Nitration (PA)	%	54	48	49	75
Sulfation (PA)	%	58	51	54	59
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	2.7	<1.0	<1.0
Silicon	ppm	6	5	5	5
Sodium	ppm	4	0	1	2
Potassium	ppm	2	0	0	0



WEAR METALS

Iron	ppm	8	7	7	16
Copper	ppm	1	0	0	2
Lead	ppm	<1	0	0	<1
Tin	ppm	<1	0	0	<1
Aluminum	ppm	6	2	5	12
Chromium	ppm	<1	<1	0	<1
Molybdenum	ppm	40	22	43	46
Nickel	ppm	<1	0	0	<1
Titanium	ppm	<1	0	0	0
Silver	ppm	0	0	0	0
Manganese	ppm	<1	0	<1	<1
Vanadium	ppm	<1	0	0	0



ADDITIVES

Calcium	ppm	1493	2481	1767	1738
Magnesium	ppm	465	347	578	544
Zinc	ppm	1027	1310	1236	1175
Phosphorus	ppm	826	1008	987	940
Barium	ppm	34	0	0	0
Boron	ppm	43	61	46	23

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.

Depot: VOLVO3387
Unique No: 10898158
Signed: Wes Davis
Report Date: 27 Feb 2024

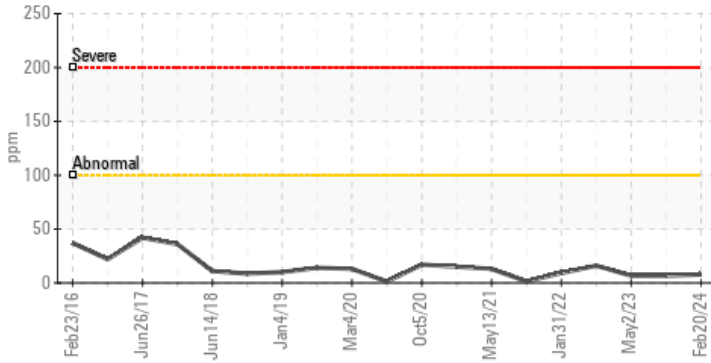


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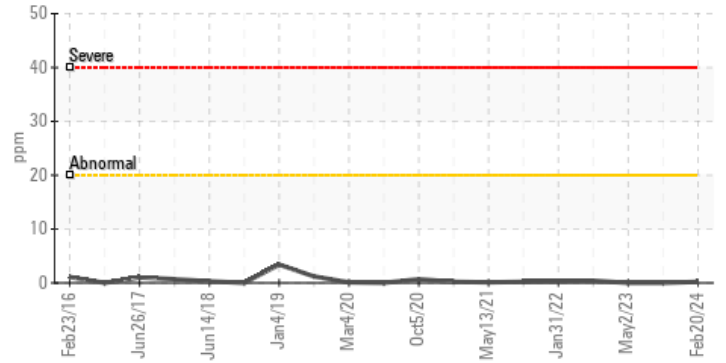


GRAPHS

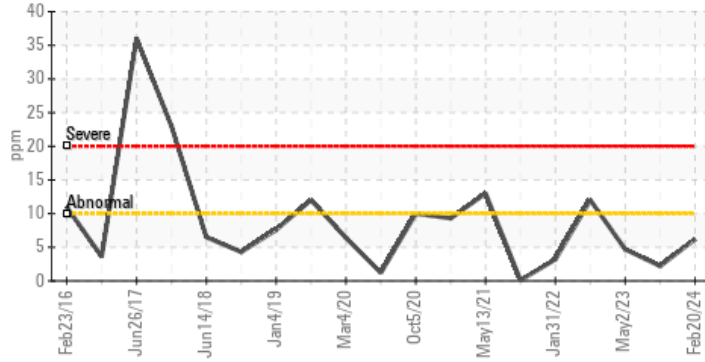
Iron (ppm)



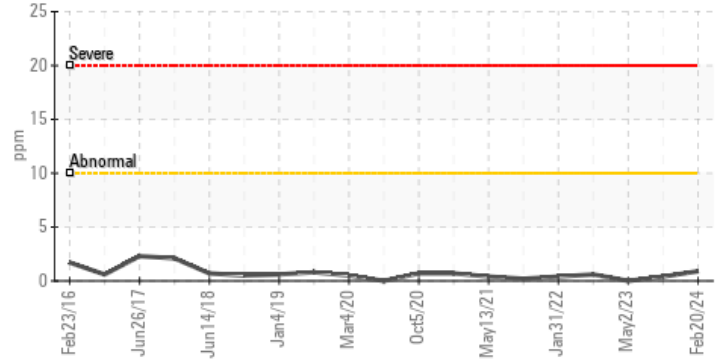
Lead (ppm)



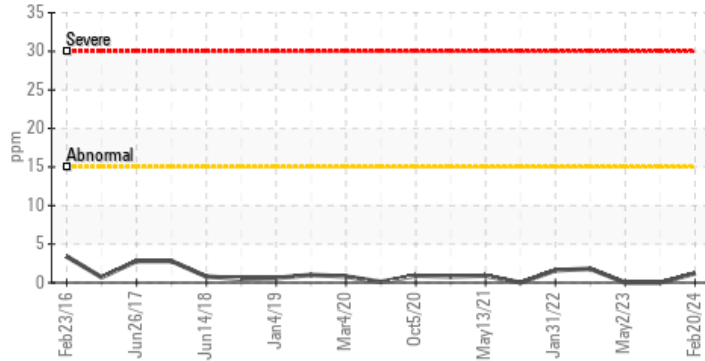
Aluminum (ppm)



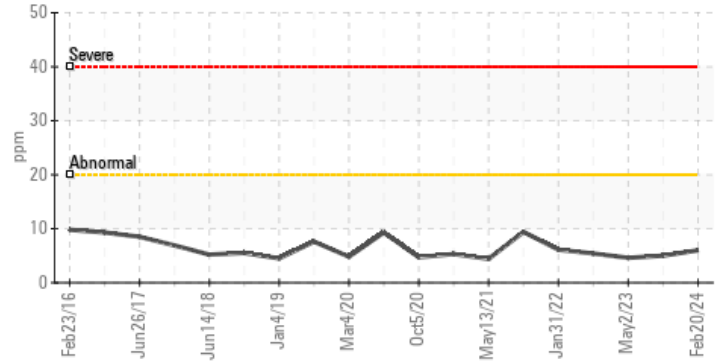
Chromium (ppm)



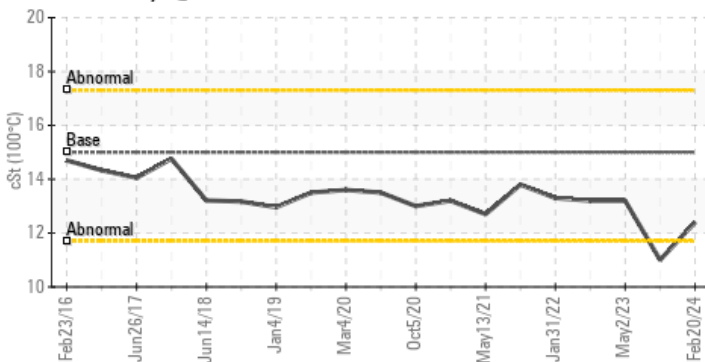
Copper (ppm)



Silicon (ppm)



Viscosity @ 100°C



Base Number

