



CONSTRUCTION EQUIPMENT

1035843 EWING IRRIGA VOLVO L60H 622769 - DIESEL ENGINE



Sample No: VCP454024
Oil Type: DIESEL ENGINE OIL SAE 15W40
Job No: 1035843 EWING IRRIGA



SAMPLE INFORMATION

Sample Number	VCP454024	VCP437523	VCP441008	VCP406949
Sample Date	05 Jun 2024	14 Mar 2024	03 Nov 2023	30 Jun 2023
Machine Hours	4102	3597	2934	2163
Oil Hours	0	0	0	0
Oil Changed	N/A	N/A	Changed	Changed
Sample Status	ABNORMAL	ABNORMAL	ABNORMAL	ABNORMAL

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OIL CONDITION

Visc @ 100°C	cSt	13.8	12.9	13.2	13.9
Base Number (BN)	mg KOH/g	9.7	10.3	10.4	9.6
Oxidation (PA)	%	58	78	80	67

Diagnosis

No corrective action is recommended at this time. We recommend an early resample to monitor this condition. Cylinder, crank, or cam shaft wear is indicated. All other 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 %	%	0.3	0.3	0.4	0.3
Nitration (PA)	%	51	58	61	58
Sulfation (PA)	%	52	60	60	55
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	7	9	8	7
Sodium	ppm	<1	4	2	2
Potassium	ppm	1	1	<1	0



WEAR METALS

Iron	ppm	▲ 140	▲ 169	▲ 152	▲ 116
Copper	ppm	2	2	<1	<1
Lead	ppm	0	<1	0	0
Tin	ppm	<1	1	<1	<1
Aluminum	ppm	2	6	2	2
Chromium	ppm	2	3	2	2
Molybdenum	ppm	56	59	42	58
Nickel	ppm	<1	<1	0	0
Titanium	ppm	<1	<1	0	<1
Silver	ppm	0	0	0	0
Manganese	ppm	2	3	2	2
Vanadium	ppm	<1	<1	0	0



ADDITIVES

Calcium	ppm	1242	2246	1671	1330
Magnesium	ppm	839	795	573	785
Zinc	ppm	1152	1646	1225	1208
Phosphorus	ppm	916	1373	970	989
Barium	ppm	0	0	0	0
Boron	ppm	13	47	36	20

Depot: VOLVO6174
Unique No: 11073541
Signed: Sean Felton
Report Date: 13 Jun 2024

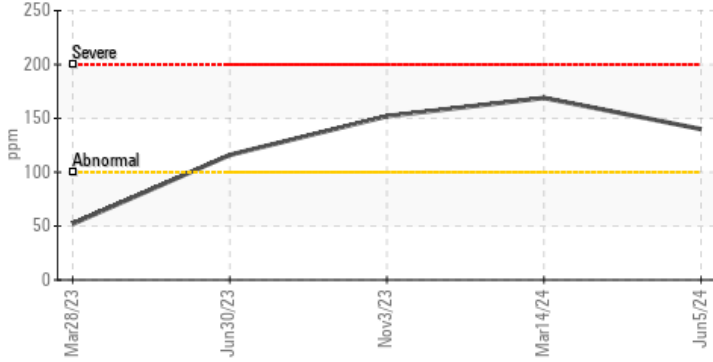


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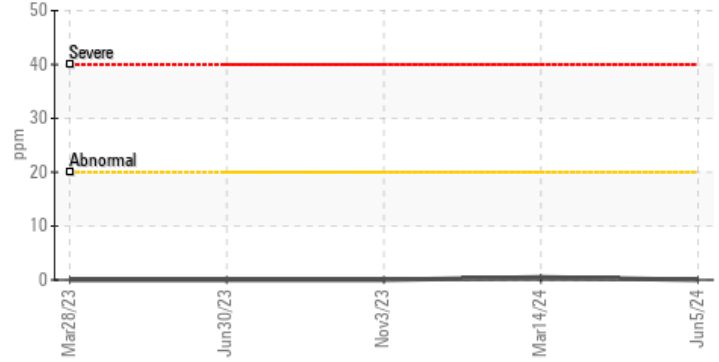


GRAPHS

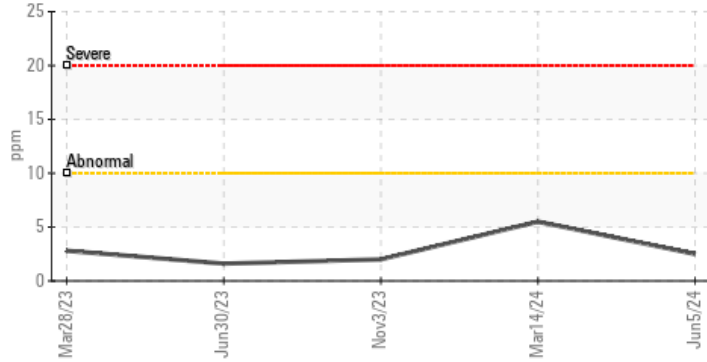
▲ Iron (ppm)



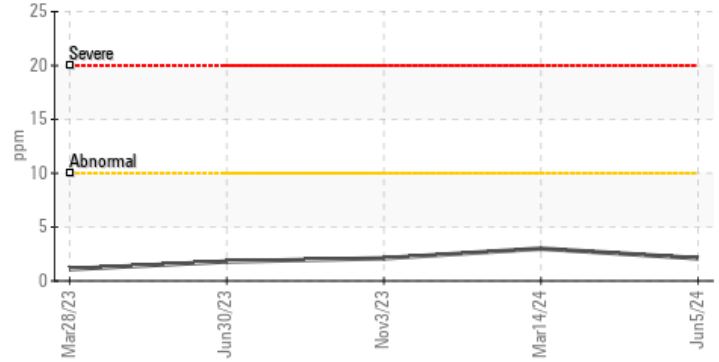
Lead (ppm)



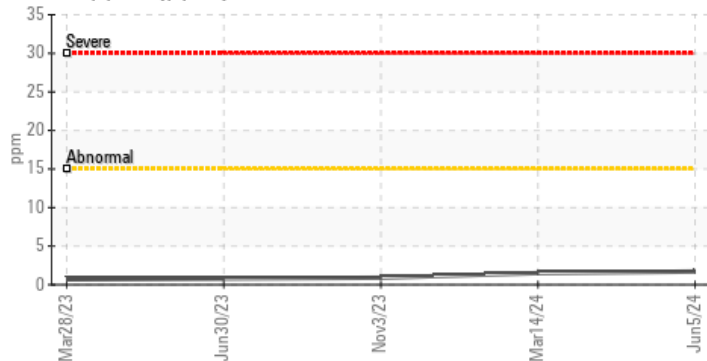
Aluminum (ppm)



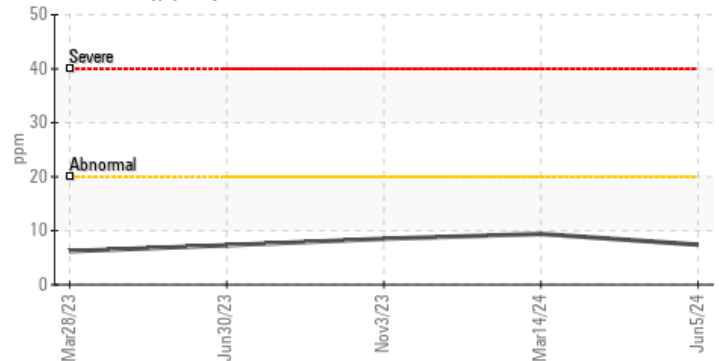
Chromium (ppm)



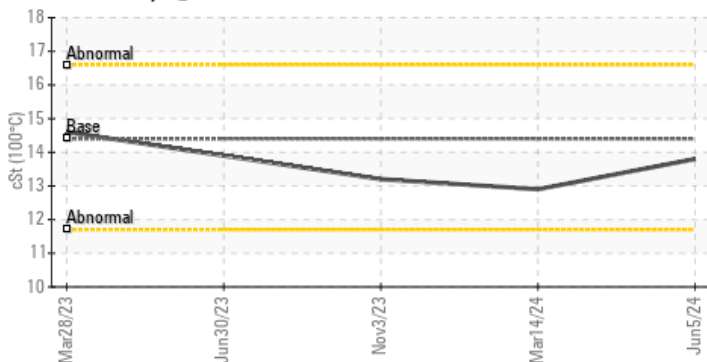
Copper (ppm)



Silicon (ppm)



Viscosity @ 100°C



Base Number

