



CONSTRUCTION EQUIPMENT

294415 VOLVO EW60E 311559 - DIESEL ENGINE



Sample No: VCP297596
Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3
Job No: 294415



SAMPLE INFORMATION

Sample Number	VCP297596	VCP299301	VCP251937	---
Sample Date	30 Jul 2021	15 Jun 2021	01 Jan 2020	---
Machine Hours	0	2067	1000	---
Oil Hours	0	500	500	---
Oil Changed	Not Changed	Changed	Changed	---
Sample Status	NORMAL	ABNORMAL	NORMAL	---



Strongco Equipment
 5179 Fountain St N.
 Breslau, ON
 CA N0B 1M0
 Contact: Matt Crisci
 mcrisci@strongco.com
 T: (519)744-3518
 F: (519)744-3284



OIL CONDITION

Visc @ 100°C	cSt	12.8	12.0	13.8	---
Oxidation (PA)	%	81	76	100	---



CONTAMINATION

Soot %	%	0.1	0.7	0.4	---
Nitration (PA)	%	58	90	91	---
Sulfation (PA)	%	64	68	78	---
Glycol	%	0.0	▲ 0.023	NEG	---
Fuel	%	<1.0	<1.0	<1.0	---
Silicon	ppm	4	10	5	---
Sodium	ppm	4	7	5	---
Potassium	ppm	<1	▲ 5	3	---

Diagnosis

Resample at the next service interval to monitor. All component wear rates are normal. Test for glycol is negative. There is no indication of any contamination in the oil. The condition of the oil is acceptable for the time in service.



WEAR METALS

Iron	ppm	8	32	24	---
Copper	ppm	1	7	18	---
Lead	ppm	<1	<1	<1	---
Tin	ppm	<1	<1	<1	---
Aluminum	ppm	1	4	3	---
Chromium	ppm	<1	<1	<1	---
Molybdenum	ppm	37	6	46	---
Nickel	ppm	<1	<1	<1	---
Titanium	ppm	0	<1	<1	---
Silver	ppm	<1	0	<1	---
Manganese	ppm	<1	<1	<1	---
Vanadium	ppm	0	<1	0	---



ADDITIVES

Calcium	ppm	1646	1471	1885	---
Magnesium	ppm	529	738	540	---
Zinc	ppm	1066	876	970	---
Phosphorus	ppm	944	751	801	---
Barium	ppm	0	3	<1	---
Boron	ppm	38	35	31	---

Depot: CASKIT
Unique No: 5265003
Signed: Bill Quesnel
Report Date: 11 Aug 2021

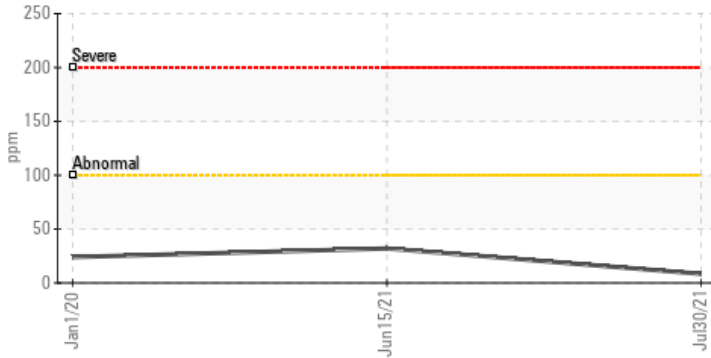


CONSTRUCTION EQUIPMENT

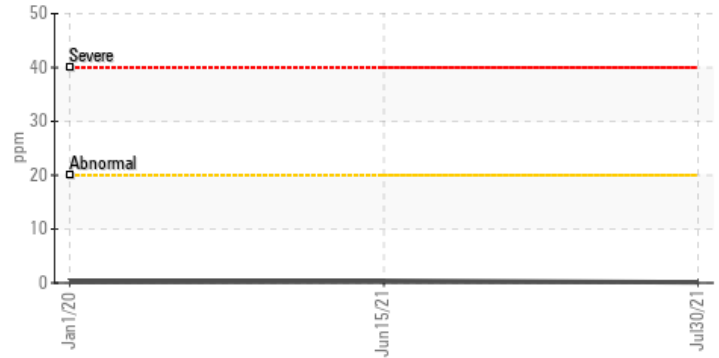


GRAPHS

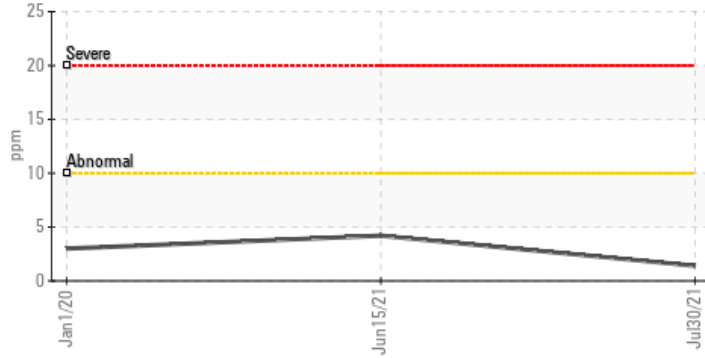
Iron (ppm)



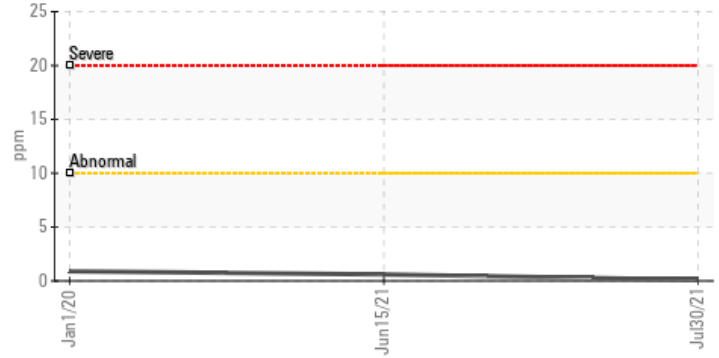
Lead (ppm)



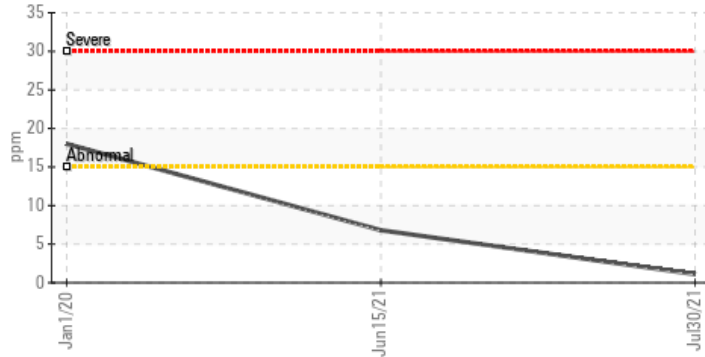
Aluminum (ppm)



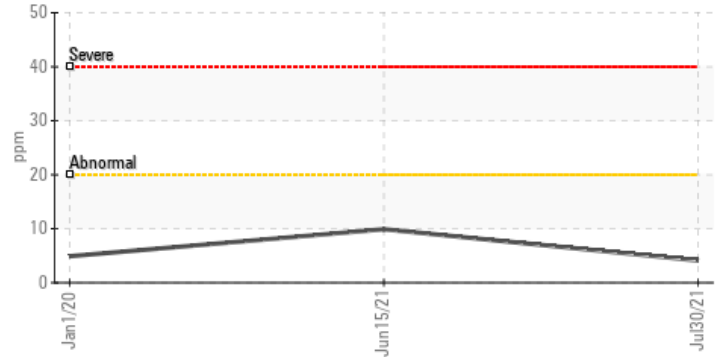
Chromium (ppm)



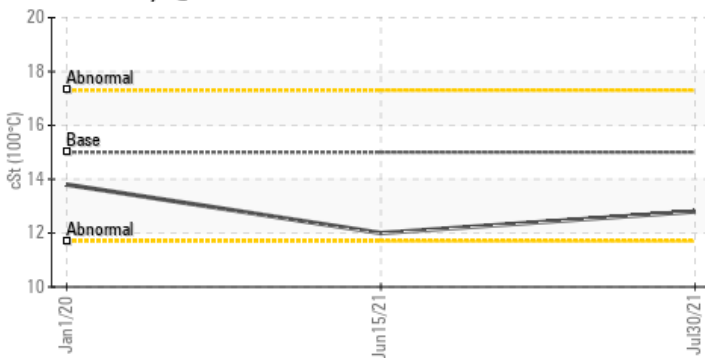
Copper (ppm)



Silicon (ppm)



Viscosity @ 100°C



Soot %

