



CONSTRUCTION EQUIPMENT

386957 16-8002 - DIESEL ENGINE



Sample No: VCP391895
Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3
Job No: 386957



SAMPLE INFORMATION

Sample Number	VCP391895	VCP380504	VCP394759	VCP394897
Sample Date	29 Nov 2023	06 Oct 2023	04 Aug 2023	21 May 2023
Machine Hours	18500	18004	17470	16959
Oil Hours	500	500	500	500
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	ABNORMAL	NORMAL	NORMAL	NORMAL

CRH CANADA GROUP INC.
P.O. BOX 5400
CONCORD, ON
CA L4K 1B6
Contact: Dan Brown
dan.brown@ca.crh.com
T:
F:

OIL CONDITION

Visc @ 40°C	cSt	---	---	█ 109	---
Visc @ 100°C	cSt	█ 14.3	█ 12.3	█ 14.9	█ 14.8
Viscosity Index (VI)	Scale	---	---	█ 141	---
Oxidation (PA)	%	94	96	102	101

Diagnosis

We advise that you check the air filter, air induction system, and any areas where dirt may enter the component. Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition. All component wear rates are normal. Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress. The oil is no longer serviceable due to the presence of contaminants.

CONTAMINATION

Water	%	NEG	NEG	NEG	NEG
Soot %	%	█ 0.5	█ 0.6	█ 0.9	█ 0.6
Nitration (PA)	%	95	98	108	102
Sulfation (PA)	%	70	73	78	73
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	▲ 34	█ 6	█ 4	█ 4
Sodium	ppm	█ 4	█ 2	█ 3	█ 2
Potassium	ppm	█ 2	█ <1	█ <1	█ 0

WEAR METALS

Iron	ppm	█ 31	█ 13	█ 13	█ 13
Copper	ppm	█ 1	█ <1	█ <1	█ 1
Lead	ppm	█ 4	█ 3	█ 4	█ 5
Tin	ppm	█ <1	█ <1	█ <1	█ <1
Aluminum	ppm	9	█ 2	█ 1	█ 2
Chromium	ppm	█ 1	█ <1	█ <1	█ <1
Molybdenum	ppm	█ 56	█ 53	█ 58	█ 62
Nickel	ppm	█ <1	█ <1	█ 0	█ <1
Titanium	ppm	0	0	0	<1
Silver	ppm	█ 0	█ <1	█ 0	█ 0
Manganese	ppm	█ <1	█ 0	█ <1	█ <1
Vanadium	ppm	0	0	0	0

ADDITIVES

Calcium	ppm	█ 1606	█ 1339	█ 1553	█ 1606
Magnesium	ppm	863	█ 777	█ 829	█ 932
Zinc	ppm	█ 1230	█ 1170	█ 1269	█ 1357
Phosphorus	ppm	█ 1040	█ 977	█ 1140	█ 1247
Barium	ppm	█ <1	█ <1	█ 0	█ 0
Boron	ppm	█ 14	█ 10	█ 14	█ 12

Depot: HOLCON
Unique No: 5695890
Signed: Kevin Marson
Report Date: 14 Dec 2023



CONSTRUCTION EQUIPMENT



GRAPHS

