



CONSTRUCTION EQUIPMENT

SPM645360 VOLVO EC380EL 311492 - DIESEL ENGINE



Sample No: VCP433296
Oil Type: DIESEL ENGINE OIL SAE 15W40
Job No: SPM645360



SAMPLE INFORMATION

Sample Number	VCP433296	VCP414191	VCP396788	VCP403426
Sample Date	01 Dec 2023	21 Jul 2023	15 May 2023	22 Feb 2023
Machine Hours	3109	7780	7477	6944
Oil Hours	0	0	0	0
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	NORMAL	NORMAL	NORMAL	NORMAL

BELSON STEEL

1685 N STATE RTE 50
 BOURBONNAIS, IL
 US 60914
 Contact: M. POZAN
 mpozan@belsonsteel.com
 T: (815)932-7416
 F:



OIL CONDITION

Visc @ 100°C	cSt	12.4	13.1	12.5	12.3
Base Number (BN)	mg KOH/g	6.5	9.0	7.9	8.2
Oxidation (PA)	%	71	57	59	57

Diagnosis

No corrective action is recommended at this time. Resample at the next service interval to monitor. All component wear rates are normal. Fuel content negligible. 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 %	%	0.1	0.1	0.1	0.1
Nitration (PA)	%	88	56	65	67
Sulfation (PA)	%	58	51	53	51
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	0.5	<1.0	<1.0	<1.0
Silicon	ppm	3	<1	2	2
Sodium	ppm	1	0	1	<1
Potassium	ppm	0	1	<1	1



WEAR METALS

Iron	ppm	2	2	3	4
Copper	ppm	2	1	2	3
Lead	ppm	0	<1	<1	<1
Tin	ppm	<1	<1	<1	<1
Aluminum	ppm	<1	0	<1	1
Chromium	ppm	<1	0	0	<1
Molybdenum	ppm	61	61	58	58
Nickel	ppm	0	<1	0	<1
Titanium	ppm	0	0	0	0
Silver	ppm	0	<1	0	0
Manganese	ppm	<1	0	<1	<1
Vanadium	ppm	0	0	0	0



ADDITIVES

Calcium	ppm	1071	1057	1085	1073
Magnesium	ppm	937	916	873	910
Zinc	ppm	1247	1220	1249	1235
Phosphorus	ppm	1023	1026	956	1022
Barium	ppm	0	2	0	0
Boron	ppm	1	<1	32	0

Depot: BELBOU
Unique No: 10873243
Signed: Wes Davis
Report Date: 14 Feb 2024



CONSTRUCTION EQUIPMENT



GRAPHS

