



# CONSTRUCTION EQUIPMENT

## SPM608314 VOLVO EC380EL 311492 - DIESEL ENGINE



**Sample No:** VCP426425  
**Oil Type:** DIESEL ENGINE OIL SAE 15W40  
**Job No:** SPM608314



### SAMPLE INFORMATION

Sample Number	<b>VCP426425</b>	VCP414191	VCP396788	VCP403426
Sample Date	<b>15 Sep 2023</b>	21 Jul 2023	15 May 2023	22 Feb 2023
Machine Hours	<b>7993</b>	7780	7477	6944
Oil Hours	<b>0</b>	0	0	0
Oil Changed	<b>Changed</b>	Changed	Changed	Changed
Sample Status	<b>NORMAL</b>	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	<b>13.0</b>	13.1	12.5	12.3
Base Number (BN)	mg KOH/g	<b>9.5</b>	9.0	7.9	8.2
Oxidation (PA)	%	<b>57</b>	57	59	57

### 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.

### CONTAMINATION

Water	%	<b>NEG</b>	NEG	NEG	NEG
Soot %	%	<b>0.1</b>	0.1	0.1	0.1
Nitration (PA)	%	<b>57</b>	56	65	67
Sulfation (PA)	%	<b>50</b>	51	53	51
Glycol	%	<b>NEG</b>	NEG	NEG	NEG
Fuel	%	<b>&lt;1.0</b>	<1.0	<1.0	<1.0
Silicon	ppm	<b>4</b>	<1	2	2
Sodium	ppm	<b>1</b>	0	1	<1
Potassium	ppm	<b>2</b>	1	<1	1

### WEAR METALS

Iron	ppm	<b>3</b>	2	3	4
Copper	ppm	<b>1</b>	1	2	3
Lead	ppm	<b>0</b>	<1	<1	<1
Tin	ppm	<b>0</b>	<1	<1	<1
Aluminum	ppm	<b>1</b>	0	<1	1
Chromium	ppm	<b>&lt;1</b>	0	0	<1
Molybdenum	ppm	<b>60</b>	61	58	58
Nickel	ppm	<b>0</b>	<1	0	<1
Titanium	ppm	<b>&lt;1</b>	0	0	0
Silver	ppm	<b>0</b>	<1	0	0
Manganese	ppm	<b>0</b>	0	<1	<1
Vanadium	ppm	<b>0</b>	0	0	0

### ADDITIVES

Calcium	ppm	<b>944</b>	1057	1085	1073
Magnesium	ppm	<b>932</b>	916	873	910
Zinc	ppm	<b>1196</b>	1220	1249	1235
Phosphorus	ppm	<b>864</b>	1026	956	1022
Barium	ppm	<b>11</b>	2	0	0
Boron	ppm	<b>0</b>	<1	32	0

**Depot:** BELBOU  
**Unique No:** 10882796  
**Signed:** Wes Davis  
**Report Date:** 16 Feb 2024



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## VOLVO GRAPHS

