



# CONSTRUCTION EQUIPMENT

## VOLVO EC160EL 310364 - DIESEL ENGINE



**Sample No:** VCP384632  
**Oil Type:** CHEVRON DELO 400 XLE 15W40  
**Job No:**



### SAMPLE INFORMATION

Sample Number	<b>VCP384632</b>	VCP335940	VCP335944	---
Sample Date	<b>13 Jun 2023</b>	07 Dec 2022	25 Mar 2022	---
Machine Hours	<b>4000</b>	3500	3000	---
Oil Hours	<b>500</b>	500	500	---
Oil Changed	<b>Changed</b>	Changed	Changed	---
Sample Status	<b>NORMAL</b>	NORMAL	NORMAL	---

**DH FUNK AND SONS LLC**  
 3995 CONTINENTAL DRIVE  
 COLUMBIA, PA  
 US 17512  
 Contact: GARY SHEPHERD  
 GSHEPHERD@DHFUNK.COM  
 T:  
 F:

### OIL CONDITION

Visc @ 100°C	cSt	<b>13.1</b>	13.3	13.3	---
Base Number (BN)	mg KOH/g	<b>7.3</b>	7.6	8.3	---
Oxidation (PA)	%	<b>62</b>	57	64	---

### 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 acceptable for the time in service.

### CONTAMINATION

Soot %	%	<b>0.3</b>	0.4	0.3	---
Nitration (PA)	%	<b>70</b>	81	90	---
Sulfation (PA)	%	<b>53</b>	59	58	---
Glycol	%	<b>NEG</b>	NEG	NEG	---
Fuel	%	<b>&lt;1.0</b>	<1.0	<1.0	---
Silicon	ppm	<b>10</b>	9	11	---
Sodium	ppm	<b>3</b>	<1	<1	---
Potassium	ppm	<b>&lt;1</b>	4	4	---

### WEAR METALS

Iron	ppm	<b>27</b>	26	26	---
Copper	ppm	<b>1</b>	2	2	---
Lead	ppm	<b>0</b>	0	0	---
Tin	ppm	<b>&lt;1</b>	<1	<1	---
Aluminum	ppm	<b>4</b>	4	5	---
Chromium	ppm	<b>1</b>	<1	1	---
Molybdenum	ppm	<b>60</b>	27	33	---
Nickel	ppm	<b>0</b>	0	0	---
Titanium	ppm	<b>&lt;1</b>	4	15	---
Silver	ppm	<b>0</b>	<1	0	---
Manganese	ppm	<b>&lt;1</b>	<1	<1	---
Vanadium	ppm	<b>0</b>	0	0	---

### ADDITIVES

Calcium	ppm	<b>1761</b>	2055	1551	---
Magnesium	ppm	<b>526</b>	256	666	---
Zinc	ppm	<b>1243</b>	963	849	---
Phosphorus	ppm	<b>1011</b>	794	689	---
Barium	ppm	<b>0</b>	0	0	---
Boron	ppm	<b>20</b>	25	62	---

**Depot:** DHFCOL  
**Unique No:** 10521585  
**Signed:** Sean Felton  
**Report Date:** 20 Jun 2023



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## GRAPHS

