



# CONSTRUCTION EQUIPMENT

## 10163 WHEELABRATOR VOLVO L180F 3119 - DIESEL ENGINE



**Sample No:** VCP422163  
**Oil Type:** CHEVRON 15W40  
**Job No:** 10163 WHEELABRATOR



### SAMPLE INFORMATION

Sample Number	<b>VCP422163</b>	VCP413822	VCP408924	VCP387943
Sample Date	<b>04 Jan 2024</b>	25 Aug 2023	20 Jun 2023	05 Apr 2023
Machine Hours	<b>19920</b>	19441	19229	18471
Oil Hours	<b>0</b>	0	0	0
Oil Changed	<b>Changed</b>	Changed	Changed	Changed
Sample Status	<b>NORMAL</b>	NORMAL	NORMAL	NORMAL

**WHEELABRATOR**  
 1801 ANNAPOLIS RD  
 BALTIMORE, MD  
 US 21230  
 Contact: SERVICE MANAGER



### OIL CONDITION

Visc @ 100°C	cSt	<b>13.2</b>	13.2	12.8	13.2
Base Number (BN)	mg KOH/g	<b>6.9</b>	7.3	5.9	5.4
Oxidation (PA)	%	<b>63</b>	59	71	65

T: (215)428-7902  
 F:

### 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>58</b>	49	62	59
Sulfation (PA)	%	<b>60</b>	57	64	58
Glycol	%	<b>NEG</b>	NEG	NEG	NEG
Fuel	%	<b>&lt;1.0</b>	<1.0	<1.0	<1.0
Silicon	ppm	<b>18</b>	13	14	6
Sodium	ppm	<b>&lt;1</b>	2	2	4
Potassium	ppm	<b>1</b>	1	<1	5



### WEAR METALS

Iron	ppm	<b>7</b>	7	12	42
Copper	ppm	<b>&lt;1</b>	<1	<1	2
Lead	ppm	<b>0</b>	<1	1	0
Tin	ppm	<b>0</b>	<1	<1	0
Aluminum	ppm	<b>2</b>	2	2	5
Chromium	ppm	<b>&lt;1</b>	0	<1	1
Molybdenum	ppm	<b>89</b>	94	86	44
Nickel	ppm	<b>0</b>	0	0	0
Titanium	ppm	<b>1</b>	1	<1	0
Silver	ppm	<b>0</b>	0	0	0
Manganese	ppm	<b>0</b>	0	<1	<1
Vanadium	ppm	<b>0</b>	<1	0	0



### ADDITIVES

Calcium	ppm	<b>1417</b>	1546	1402	1238
Magnesium	ppm	<b>404</b>	447	424	881
Zinc	ppm	<b>1280</b>	1373	1276	1140
Phosphorus	ppm	<b>1038</b>	1154	1029	928
Barium	ppm	<b>0</b>	0	0	0
Boron	ppm	<b>512</b>	496	285	11

**Depot:** WHEBAL  
**Unique No:** 10822260  
**Signed:** Jonathan Hester  
**Report Date:** 16 Jan 2024



# CONSTRUCTION EQUIPMENT



## GRAPHS

