



# CONSTRUCTION EQUIPMENT

## VOLVO L150F 14323 - DIESEL ENGINE



**Sample No:** VCE030481  
**Oil Type:** PHILLIPS 66 15W40  
**Job No:**



### SAMPLE INFORMATION

Sample Number	<b>VCE030481</b>	VCE01802	VCE232863	VCE232889
Sample Date	<b>18 Dec 2023</b>	11 Jan 2023	14 Jan 2022	05 Nov 2020
Machine Hours	<b>4511</b>	4259	4057	3767
Oil Hours	<b>252</b>	202	290	250
Oil Changed	<b>Changed</b>	Changed	Changed	Changed
Sample Status	<b>NORMAL</b>	NORMAL	NORMAL	NORMAL

**GRAND COUNTY ROAD AND BRIDGE**  
 PO BOX 9  
 GRANBY, CO  
 US 80446  
 Contact: ZAC BROADY  
 zbroady@co.grand.co.us  
 T: (970)887-2123  
 F: (970)887-3168

### OIL CONDITION

Visc @ 100°C	cSt	<b>13.1</b>	13.3	13.5	13.2
Base Number (BN)	mg KOH/g	<b>7.8</b>	8.1	9.7	---
Oxidation (PA)	%	<b>59</b>	57	62	55

### CONTAMINATION

Water	%	<b>NEG</b>	NEG	NEG	NEG
Soot %	%	<b>0.3</b>	0.2	0.3	0.3
Nitration (PA)	%	<b>50</b>	49	70	63
Sulfation (PA)	%	<b>56</b>	56	61	57
Glycol	%	<b>NEG</b>	NEG	NEG	NEG
Fuel	%	<b>&lt;1.0</b>	<1.0	<1.0	<1.0
Silicon	ppm	<b>5</b>	4	3	5
Sodium	ppm	<b>0</b>	2	3	4
Potassium	ppm	<b>2</b>	0	3	2

### WEAR METALS

Iron	ppm	<b>6</b>	4	7	5
Copper	ppm	<b>2</b>	3	7	5
Lead	ppm	<b>&lt;1</b>	1	2	0
Tin	ppm	<b>&lt;1</b>	<1	<1	0
Aluminum	ppm	<b>3</b>	2	2	1
Chromium	ppm	<b>&lt;1</b>	<1	<1	<1
Molybdenum	ppm	<b>94</b>	76	8	<1
Nickel	ppm	<b>&lt;1</b>	0	<1	<1
Titanium	ppm	<b>&lt;1</b>	0	<1	<1
Silver	ppm	<b>&lt;1</b>	0	<1	0
Manganese	ppm	<b>0</b>	<1	<1	<1
Vanadium	ppm	<b>&lt;1</b>	0	0	0

### ADDITIVES

Calcium	ppm	<b>1492</b>	1375	1386	1402
Magnesium	ppm	<b>384</b>	430	735	805
Zinc	ppm	<b>1215</b>	1189	1223	1146
Phosphorus	ppm	<b>987</b>	985	1140	990
Barium	ppm	<b>2</b>	0	0	0
Boron	ppm	<b>454</b>	435	125	84

### 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.

**Depot:** GRAGRAVCE  
**Unique No:** 10939518  
**Signed:** Wes Davis  
**Report Date:** 24 Mar 2024



# CONSTRUCTION EQUIPMENT



## VOLVO GRAPHS

