



# CONSTRUCTION EQUIPMENT

## VOLVO L110H 10365 - DIESEL ENGINE



**Sample No:** VCP424050  
**Oil Type:** VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3  
**Job No:**



### SAMPLE INFORMATION

Sample Number	<b>VCP424050</b>	VCP306239	VCP306240	VCP238993
Sample Date	<b>20 Sep 2023</b>	29 Dec 2022	21 Oct 2022	13 Apr 2021
Machine Hours	<b>15596</b>	14586	14145	10914
Oil Hours	<b>0</b>	0	500	500
Oil Changed	<b>N/A</b>	N/A	Changed	Changed
Sample Status	<b>NORMAL</b>	NORMAL	NORMAL	NORMAL

**ULSTER COUNTY RESOURCE RECOVERY AGENCY**  
 999 FLATBUSH AVE  
 KINGSTON, NY  
 US 12401  
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 T: (845)399-2686  
 F:



### OIL CONDITION

Visc @ 100°C	cSt	<b>13.8</b>	14.2	14.2	13.5
Base Number (BN)	mg KOH/g	<b>10.2</b>	10.3	11.4	---
Oxidation (PA)	%	<b>86</b>	94	105	85

### 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

Soot %	%	<b>0.6</b>	0.5	0.7	0.5
Nitration (PA)	%	<b>80</b>	84	98	83
Sulfation (PA)	%	<b>62</b>	65	72	65
Glycol	%	<b>NEG</b>	NEG	NEG	NEG
Fuel	%	<b>&lt;1.0</b>	<1.0	<1.0	<1.0
Silicon	ppm	<b>7</b>	7	10	5
Sodium	ppm	<b>3</b>	4	3	3
Potassium	ppm	<b>3</b>	1	1	<1



### WEAR METALS

Iron	ppm	<b>14</b>	19	20	12
Copper	ppm	<b>1</b>	<1	1	2
Lead	ppm	<b>&lt;1</b>	2	2	<1
Tin	ppm	<b>&lt;1</b>	1	<1	<1
Aluminum	ppm	<b>13</b>	12	15	2
Chromium	ppm	<b>1</b>	2	1	<1
Molybdenum	ppm	<b>53</b>	55	56	69
Nickel	ppm	<b>&lt;1</b>	3	2	<1
Titanium	ppm	<b>&lt;1</b>	0	<1	<1
Silver	ppm	<b>0</b>	0	0	<1
Manganese	ppm	<b>&lt;1</b>	<1	<1	<1
Vanadium	ppm	<b>&lt;1</b>	0	<1	0



### ADDITIVES

Calcium	ppm	<b>1705</b>	2038	2124	1776
Magnesium	ppm	<b>593</b>	627	629	506
Zinc	ppm	<b>1206</b>	1383	1375	1137
Phosphorus	ppm	<b>990</b>	1051	1145	1026
Barium	ppm	<b>12</b>	0	0	0
Boron	ppm	<b>33</b>	39	33	228

**Depot:** ULSKIN  
**Unique No:** 10696069  
**Signed:** Don Baldrige  
**Report Date:** 17 Oct 2023



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## GRAPHS

