



# CONSTRUCTION EQUIPMENT

566430 STONE CO VOLVO L220H 3280 - DIESEL ENGINE



**Sample No:** VCP414120  
**Oil Type:** VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3  
**Job No:** 566430 STONE CO



## SAMPLE INFORMATION

Sample Number	<b>VCP414120</b>	VCP426806	VCP399388	VCP396168
Sample Date	<b>22 Jun 2023</b>	18 Apr 2023	07 Feb 2023	21 Nov 2022
Machine Hours	<b>6010</b>	5504	5009	4511
Oil Hours	<b>510</b>	500	500	500
Oil Changed	<b>Changed</b>	Changed	Changed	Changed
Sample Status	<b>NORMAL</b>	NORMAL	NORMAL	NORMAL



**ALTA EQUIPMENT COMPANY - METRO WEST**  
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## OIL CONDITION

Visc @ 100°C	cSt	<b>14.1</b>	13.9	14.2	14.2
Base Number (BN)	mg KOH/g	<b>9.4</b>	8.9	8.8	9.8
Oxidation (PA)	%	<b>57</b>	55	55	61



## CONTAMINATION

Soot %	%	<b>0.3</b>	0.3	0.3	0.4
Nitration (PA)	%	<b>58</b>	54	57	65
Sulfation (PA)	%	<b>53</b>	50	50	56
Glycol	%	<b>NEG</b>	NEG	NEG	NEG
Fuel	%	<b>&lt;1.0</b>	<1.0	<1.0	<1.0
Silicon	ppm	<b>2</b>	2	2	2
Sodium	ppm	<b>&lt;1</b>	<1	0	2
Potassium	ppm	<b>1</b>	0	0	<1



## WEAR METALS

Iron	ppm	<b>2</b>	4	4	4
Copper	ppm	<b>&lt;1</b>	<1	3	2
Lead	ppm	<b>0</b>	0	<1	<1
Tin	ppm	<b>0</b>	0	<1	<1
Aluminum	ppm	<b>&lt;1</b>	<1	<1	1
Chromium	ppm	<b>0</b>	0	<1	<1
Molybdenum	ppm	<b>60</b>	59	59	59
Nickel	ppm	<b>0</b>	0	<1	<1
Titanium	ppm	<b>&lt;1</b>	0	0	0
Silver	ppm	<b>0</b>	0	0	0
Manganese	ppm	<b>0</b>	<1	<1	<1
Vanadium	ppm	<b>0</b>	0	0	0



## ADDITIVES

Calcium	ppm	<b>1100</b>	1069	1014	1128
Magnesium	ppm	<b>1003</b>	985	941	986
Zinc	ppm	<b>1341</b>	1316	1206	1312
Phosphorus	ppm	<b>1053</b>	1042	982	1053
Barium	ppm	<b>14</b>	0	0	0
Boron	ppm	<b>2</b>	0	0	5

## 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.

**Depot:** VOLVO2990  
**Unique No:** 10538100  
**Signed:** Don Baldrige  
**Report Date:** 04 Jul 2023



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## GRAPHS

