



# CONSTRUCTION EQUIPMENT

## SWO-063645 APAC/MIDS VOLVO L180H 5494 - DIESEL ENGINE



**Sample No:** VCP404729  
**Oil Type:** DIESEL ENGINE OIL SAE 40  
**Job No:** SWO-063645 APAC/MIDS



### SAMPLE INFORMATION

Sample Number	<b>VCP404729</b>	VCP410473	VCP369032	VCP375642
Sample Date	<b>07 Jul 2023</b>	03 Apr 2023	10 Nov 2022	25 Aug 2022
Machine Hours	<b>3620</b>	3078	2519	3182
Oil Hours	<b>0</b>	0	0	0
Oil Changed	<b>Changed</b>	Changed	Changed	Changed
Sample Status	<b>NORMAL</b>	NORMAL	NORMAL	NORMAL

### COWIN EQUIPMENT COMPANY

2238 PINSON VALLEY PARKWAY  
 BIRMINGHAM, AL  
 US 35217  
 Contact: BRANTLY CLAY  
 bclay@cowin.com  
 T:  
 F: (205)856-2106



### OIL CONDITION

Visc @ 100°C	cSt	<b>13.1</b>	12.8	12.8	13.0
Base Number (BN)	mg KOH/g	<b>9.8</b>	9.5	11.3	11.1
Oxidation (PA)	%	<b>82</b>	80	87	86



### CONTAMINATION

Soot %	%	<b>0.1</b>	0.2	0.1	0.2
Nitration (PA)	%	<b>62</b>	63	65	64
Sulfation (PA)	%	<b>60</b>	61	65	65
Glycol	%	<b>NEG</b>	NEG	NEG	NEG
Fuel	%	<b>&lt;1.0</b>	<1.0	<1.0	<1.0
Silicon	ppm	<b>4</b>	6	7	6
Sodium	ppm	<b>2</b>	1	1	<1
Potassium	ppm	<b>&lt;1</b>	0	0	0



### WEAR METALS

Iron	ppm	<b>8</b>	7	6	6
Copper	ppm	<b>1</b>	0	<1	1
Lead	ppm	<b>&lt;1</b>	0	<1	<1
Tin	ppm	<b>&lt;1</b>	0	<1	<1
Aluminum	ppm	<b>1</b>	<1	1	1
Chromium	ppm	<b>&lt;1</b>	0	<1	0
Molybdenum	ppm	<b>40</b>	50	37	40
Nickel	ppm	<b>0</b>	0	<1	<1
Titanium	ppm	<b>0</b>	0	0	0
Silver	ppm	<b>0</b>	0	0	<1
Manganese	ppm	<b>&lt;1</b>	<1	<1	<1
Vanadium	ppm	<b>0</b>	0	0	0



### ADDITIVES

Calcium	ppm	<b>1669</b>	1587	1426	1635
Magnesium	ppm	<b>509</b>	505	439	477
Zinc	ppm	<b>1144</b>	1021	923	1080
Phosphorus	ppm	<b>930</b>	856	791	877
Barium	ppm	<b>0</b>	0	8	<1
Boron	ppm	<b>42</b>	79	49	42

### 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:** VOLVO8528  
**Unique No:** 10559758  
**Signed:** Wes Davis  
**Report Date:** 16 Jul 2023



# CONSTRUCTION EQUIPMENT



## VOLVO GRAPHS

