



# CONSTRUCTION EQUIPMENT

SWO-069272 VOLVO A45G 352071 - DIESEL ENGINE



**Sample No:** VCP435598  
**Oil Type:** VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3  
**Job No:** SWO-069272



## SAMPLE INFORMATION

Sample Number	<b>VCP435598</b>	VCP427485	VCP412987	VCP382594
Sample Date	<b>29 Jan 2024</b>	09 Oct 2023	12 Jul 2023	12 Apr 2023
Machine Hours	<b>7545</b>	7028	6523	6049
Oil Hours	<b>0</b>	0	0	0
Oil Changed	<b>Changed</b>	Changed	Changed	Changed
Sample Status	<b>NORMAL</b>	ATTENTION	ATTENTION	ATTENTION

### SAIIA CONSTRUCTION LLC

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## OIL CONDITION

Visc @ 100°C	cSt	<b>12.4</b>	12.2	12.4	12.4
Base Number (BN)	mg KOH/g	<b>7.1</b>	9.9	10.1	8.7
Oxidation (PA)	%	<b>64</b>	77	79	73



## CONTAMINATION

Water	%	<b>NEG</b>	NEG	NEG	NEG
Soot %	%	<b>0.1</b>	0.1	0.1	0.2
Nitration (PA)	%	<b>74</b>	53	55	54
Sulfation (PA)	%	<b>51</b>	59	59	53
Glycol	%	<b>NEG</b>	NEG	NEG	NEG
Fuel	%	<b>&lt;1.0</b>	<1.0	<1.0	<1.0
Silicon	ppm	<b>4</b>	5	5	5
Sodium	ppm	<b>2</b>	2	3	2
Potassium	ppm	<b>&lt;1</b>	<1	0	<1



## WEAR METALS

Iron	ppm	<b>&lt;1</b>	2	4	6
Copper	ppm	<b>1</b>	0	<1	<1
Lead	ppm	<b>1</b>	1	0	<1
Tin	ppm	<b>1</b>	1	0	<1
Aluminum	ppm	<b>3</b>	2	<1	0
Chromium	ppm	<b>&lt;1</b>	0	0	<1
Molybdenum	ppm	<b>92</b>	42	41	43
Nickel	ppm	<b>&lt;1</b>	<1	0	0
Titanium	ppm	<b>&lt;1</b>	0	<1	0
Silver	ppm	<b>0</b>	0	0	0
Manganese	ppm	<b>&lt;1</b>	<1	<1	<1
Vanadium	ppm	<b>&lt;1</b>	0	<1	0



## ADDITIVES

Calcium	ppm	<b>1200</b>	1663	1802	1566
Magnesium	ppm	<b>588</b>	506	539	525
Zinc	ppm	<b>816</b>	959	1139	1078
Phosphorus	ppm	<b>691</b>	794	964	911
Barium	ppm	<b>0</b>	0	0	0
Boron	ppm	<b>102</b>	50	70	53

## 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:** SAIBIR  
**Unique No:** 10858568  
**Signed:** Jonathan Hester  
**Report Date:** 01 Feb 2024

**VOLVO** GRAPHS

