



# CONSTRUCTION EQUIPMENT

## SW-25299-2 MAVERICK VOLVO A45G 352700 - DIESEL ENGINE



**Sample No:** VCP430681  
**Oil Type:** VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3  
**Job No:** SW-25299-2 MAVERICK



### SAMPLE INFORMATION

Sample Number	<b>VCP430681</b>	VCP418669	VCP406293	VCP360609
Sample Date	<b>12 Oct 2023</b>	14 Jun 2023	10 Apr 2023	05 Jul 2022
Machine Hours	<b>4590</b>	4003	3671	2456
Oil Hours	<b>587</b>	300	500	500
Oil Changed	<b>Changed</b>	Changed	Changed	Changed
Sample Status	<b>NORMAL</b>	NORMAL	NORMAL	NORMAL

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### OIL CONDITION

Visc @ 100°C	cSt	<b>12.8</b>	13.0	12.6	13.3
Base Number (BN)	mg KOH/g	<b>8.8</b>	9.2	7.7	9.6
Oxidation (PA)	%	<b>58</b>	64	60	70



### CONTAMINATION

Soot %	%	<b>0.3</b>	0.2	0.4	0.6
Nitration (PA)	%	<b>61</b>	55	62	78
Sulfation (PA)	%	<b>53</b>	55	50	62
Glycol	%	<b>NEG</b>	NEG	NEG	NEG
Fuel	%	<b>&lt;1.0</b>	<1.0	<1.0	<1.0
Silicon	ppm	<b>3</b>	2	3	5
Sodium	ppm	<b>3</b>	2	0	2
Potassium	ppm	<b>19</b>	<1	0	2



### WEAR METALS

Iron	ppm	<b>7</b>	3	9	14
Copper	ppm	<b>5</b>	2	3	3
Lead	ppm	<b>&lt;1</b>	0	0	<1
Tin	ppm	<b>&lt;1</b>	0	0	1
Aluminum	ppm	<b>1</b>	10	1	1
Chromium	ppm	<b>&lt;1</b>	0	<1	<1
Molybdenum	ppm	<b>64</b>	62	60	57
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>&lt;1</b>	0	<1	<1
Vanadium	ppm	<b>&lt;1</b>	0	0	0



### ADDITIVES

Calcium	ppm	<b>1171</b>	1200	1238	1369
Magnesium	ppm	<b>1025</b>	945	875	835
Zinc	ppm	<b>1353</b>	1285	1228	1251
Phosphorus	ppm	<b>1083</b>	1031	1023	1028
Barium	ppm	<b>0</b>	0	0	0
Boron	ppm	<b>2</b>	9	30	22

### 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:** VOLVO8770  
**Unique No:** 10702590  
**Signed:** Don Baldrige  
**Report Date:** 24 Oct 2023



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## GRAPHS

