



# CONSTRUCTION EQUIPMENT

ASCENDUM MACHINERY 60390 VOLVO A30G ORT-28 (S/N 752410) DIESEL ENGINE



**Sample No:** VCP417915  
**Oil Type:** VOLVO VDS-4.5 Premium Motor Oil 15W40  
**Job No:** 60390



## SAMPLE INFORMATION

Sample Number	<b>VCP417915</b>	ASC0000443	VCP0004108	VCP0001697
Sample Date	<b>14 Nov 2023</b>	20 Jun 2023	24 Oct 2022	21 Apr 2022
Machine Hours	<b>1931</b>	1521	1020	539
Oil Hours	<b>0</b>	501	481	539
Oil Changed	<b>Changed</b>	Changed	Changed	Changed
Sample Status	<b>NORMAL</b>	NORMAL	ATTENTION	ABNORMAL

**PEDULLA EXCAVATING & PAVING**  
1275 SHINN FARM RD  
MOORESVILLE, NC  
US 28115  
Contact: Service Manager

## OIL CONDITION

Visc @ 100°C	cSt	<span style="color: green;">■</span> <b>12.5</b>	<span style="color: green;">■</span> 13.1	<span style="color: orange;">▲</span> 12.3	<span style="color: orange;">▲</span> 11.1
Base Number (BN)	mg KOH/g	<span style="color: green;">■</span> <b>9.6</b>	<span style="color: green;">■</span> 8.4	<span style="color: green;">■</span> 8.6	<span style="color: green;">■</span> 8.7
Oxidation (PA)	%	<b>73</b>	58	65	68

T:  
F:

## 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

Water	%	<b>NEG</b>	NEG	NEG	NEG
Soot %	%	<span style="color: green;">■</span> <b>0.3</b>	<span style="color: green;">■</span> 0.3	<span style="color: green;">■</span> 0.3	<span style="color: green;">■</span> 0.3
Nitration (PA)	%	<b>57</b>	64	68	63
Sulfation (PA)	%	<b>58</b>	53	59	60
Glycol	%	<b>NEG</b>	NEG	NEG	NEG
Fuel	%	<b>&lt;1.0</b>	<1.0	<1.0	<span style="color: green;">■</span> 0.9
Silicon	ppm	<span style="color: green;">■</span> <b>4</b>	<span style="color: green;">■</span> 4	<span style="color: green;">■</span> 8	<span style="color: green;">■</span> 37
Sodium	ppm	<span style="color: green;">■</span> <b>2</b>	<span style="color: green;">■</span> 1	<span style="color: green;">■</span> 33	<span style="color: green;">■</span> 2
Potassium	ppm	<span style="color: green;">■</span> <b>0</b>	<span style="color: green;">■</span> 0	<span style="color: green;">■</span> 2	<span style="color: green;">■</span> 2

## WEAR METALS

Iron	ppm	<span style="color: green;">■</span> <b>5</b>	<span style="color: green;">■</span> 10	<span style="color: green;">■</span> 11	<span style="color: green;">■</span> 24
Copper	ppm	<span style="color: green;">■</span> <b>6</b>	<span style="color: green;">■</span> 25	<span style="color: green;">■</span> 130	<span style="color: orange;">▲</span> 332
Lead	ppm	<span style="color: green;">■</span> <b>0</b>	<span style="color: green;">■</span> <1	<span style="color: green;">■</span> <1	<span style="color: green;">■</span> <1
Tin	ppm	<span style="color: green;">■</span> <b>&lt;1</b>	<span style="color: green;">■</span> <1	<span style="color: green;">■</span> 1	<span style="color: green;">■</span> 3
Aluminum	ppm	<span style="color: green;">■</span> <b>1</b>	<span style="color: green;">■</span> <1	<span style="color: green;">■</span> 0	<span style="color: green;">■</span> 2
Chromium	ppm	<span style="color: green;">■</span> <b>&lt;1</b>	<span style="color: green;">■</span> <1	<span style="color: green;">■</span> <1	<span style="color: green;">■</span> <1
Molybdenum	ppm	<span style="color: green;">■</span> <b>41</b>	<span style="color: green;">■</span> 59	<span style="color: green;">■</span> 55	<span style="color: green;">■</span> 60
Nickel	ppm	<span style="color: green;">■</span> <b>&lt;1</b>	<span style="color: green;">■</span> <1	<span style="color: green;">■</span> 0	<span style="color: green;">■</span> <1
Titanium	ppm	<b>0</b>	0	<1	<1
Silver	ppm	<span style="color: green;">■</span> <b>0</b>	<span style="color: green;">■</span> <1	<span style="color: green;">■</span> <1	<span style="color: green;">■</span> 3
Manganese	ppm	<span style="color: green;">■</span> <b>&lt;1</b>	<span style="color: green;">■</span> <1	<span style="color: green;">■</span> 1	<span style="color: green;">■</span> 3
Vanadium	ppm	<b>0</b>	0	<1	0

## ADDITIVES

Calcium	ppm	<span style="color: green;">■</span> <b>1498</b>	<span style="color: green;">■</span> 1176	<span style="color: green;">■</span> 1620	<span style="color: green;">■</span> 1757
Magnesium	ppm	<b>514</b>	961	<span style="color: green;">■</span> 569	<span style="color: green;">■</span> 437
Zinc	ppm	<span style="color: green;">■</span> <b>1118</b>	<span style="color: green;">■</span> 1297	<span style="color: green;">■</span> 1238	<span style="color: green;">■</span> 1250
Phosphorus	ppm	<span style="color: green;">■</span> <b>943</b>	<span style="color: green;">■</span> 1065	<span style="color: green;">■</span> 956	<span style="color: green;">■</span> 1079
Barium	ppm	<span style="color: green;">■</span> <b>0</b>	<span style="color: green;">■</span> 0	<span style="color: green;">■</span> 0	<span style="color: green;">■</span> 0
Boron	ppm	<span style="color: green;">■</span> <b>38</b>	<span style="color: green;">■</span> 6	<span style="color: green;">■</span> 33	<span style="color: green;">■</span> 97

**Depot:** PEDMOOVC  
**Unique No:** 10743038  
**Signed:** Wes Davis  
**Report Date:** 16 Nov 2023



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## GRAPHS

