



# CONSTRUCTION EQUIPMENT

SPM633854 ALPINE DEM VOLVO EC480EHR 691030 - DIESEL ENGINE



**Sample No:** VCP440609  
**Oil Type:** DIESEL ENGINE OIL SAE 15W40  
**Job No:** SPM633854 ALPINE DEM



**ALTA EQUIPMENT CO - ORLAND PARK**  
 5000 INDUSTRIAL HWY  
 GARY, IN  
 US 46406  
 Contact: DAVE ENG  
 DAVE.ENG@ALTG.COM  
 T: (312)350-2560  
 F:



## SAMPLE INFORMATION

Sample Number	<b>VCP440609</b>	VCP355045	VCP338598	---
Sample Date	<b>15 Nov 2023</b>	21 Jul 2022	03 Feb 2022	---
Machine Hours	<b>2564</b>	972	552	---
Oil Hours	<b>0</b>	0	0	---
Oil Changed	<b>Changed</b>	Changed	Changed	---
Sample Status	<b>ATTENTION</b>	ABNORMAL	ABNORMAL	---



## OIL CONDITION

Visc @ 100°C	cSt	<b>▲ 11.9</b>	▲ 12.2	▲ 11.1	---
Base Number (BN)	mg KOH/g	<b>■ 7.4</b>	■ 8.0	■ 7.2	---
Oxidation (PA)	%	<b>68</b>	69	76	---



## CONTAMINATION

Water	%	<b>NEG</b>	NEG	NEG	---
Soot %	%	<b>■ 0.1</b>	■ 0.1	■ 0.1	---
Nitration (PA)	%	<b>72</b>	78	75	---
Sulfation (PA)	%	<b>56</b>	59	61	---
Glycol	%	<b>NEG</b>	NEG	NEG	---
Fuel	%	<b>&lt;1.0</b>	<1.0	■ 0.7	---
Silicon	ppm	<b>■ 6</b>	■ 6	■ 23	---
Sodium	ppm	<b>■ &lt;1</b>	■ 4	■ 2	---
Potassium	ppm	<b>■ 1</b>	■ 0	■ 3	---



## WEAR METALS

Iron	ppm	<b>■ 6</b>	■ 7	■ 13	---
Copper	ppm	<b>■ 4</b>	▲ 273	▲ 269	---
Lead	ppm	<b>■ &lt;1</b>	■ 4	■ 1	---
Tin	ppm	<b>■ &lt;1</b>	■ 3	■ 3	---
Aluminum	ppm	<b>■ 1</b>	■ 2	■ 2	---
Chromium	ppm	<b>■ &lt;1</b>	■ <1	■ <1	---
Molybdenum	ppm	<b>■ 60</b>	■ 57	■ 55	---
Nickel	ppm	<b>■ &lt;1</b>	■ 1	■ 0	---
Titanium	ppm	<b>■ &lt;1</b>	■ 0	■ <1	---
Silver	ppm	<b>■ 0</b>	<1	0	---
Manganese	ppm	<b>■ 0</b>	■ <1	■ 3	---
Vanadium	ppm	<b>0</b>	0	0	---



## ADDITIVES

Calcium	ppm	<b>■ 1060</b>	■ 1204	■ 1761	---
Magnesium	ppm	<b>■ 840</b>	■ 916	■ 442	---
Zinc	ppm	<b>■ 1187</b>	■ 1222	■ 1166	---
Phosphorus	ppm	<b>■ 889</b>	■ 1004	■ 1031	---
Barium	ppm	<b>■ 11</b>	■ 0	■ 0	---
Boron	ppm	<b>■ 0</b>	■ 11	■ 71	---

## 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 oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

**Depot:** VOLVO8885  
**Unique No:** 10882797  
**Signed:** Sean Felton  
**Report Date:** 16 Feb 2024



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## GRAPHS

