



# CONSTRUCTION EQUIPMENT

## 18965 VOLVO A45G 353358 - DIESEL ENGINE



**Sample No:** VCP410414  
**Oil Type:** VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3  
**Job No:** 18965



### SAMPLE INFORMATION

Sample Number	<b>VCP410414</b>	VCP395630	---	---
Sample Date	<b>29 Jun 2023</b>	21 Feb 2023	---	---
Machine Hours	<b>984</b>	506	---	---
Oil Hours	<b>478</b>	506	---	---
Oil Changed	<b>Changed</b>	Changed	---	---
Sample Status	<b>NORMAL</b>	ABNORMAL	---	---

**GAINES & CO**  
 526 THREE SISTERS RD  
 KNIGHTDALE, NC  
 US 27545  
 Contact: BEAR PERONE  
 gperone@gainessandco.com  
 T: (919)524-4711  
 F: (919)944-0091



### OIL CONDITION

Visc @ 100°C	cSt	<b>12.9</b>	▲ 11.0	---	---
Base Number (BN)	mg KOH/g	<b>8.4</b>	■ 6.4	---	---
Oxidation (PA)	%	<b>61</b>	61	---	---

### 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.



### CONTAMINATION

Soot %	%	<b>0.3</b>	■ 0.3	---	---
Nitration (PA)	%	<b>63</b>	82	---	---
Sulfation (PA)	%	<b>55</b>	55	---	---
Glycol	%	<b>NEG</b>	NEG	---	---
Fuel	%	<b>&lt;1.0</b>	■ 0.8	---	---
Silicon	ppm	<b>6</b>	■ 24	---	---
Sodium	ppm	<b>0</b>	■ 3	---	---
Potassium	ppm	<b>2</b>	■ 2	---	---



### WEAR METALS

Iron	ppm	<b>10</b>	■ 20	---	---
Copper	ppm	<b>74</b>	▲ 352	---	---
Lead	ppm	<b>&lt;1</b>	■ <1	---	---
Tin	ppm	<b>1</b>	■ 4	---	---
Aluminum	ppm	<b>1</b>	■ 2	---	---
Chromium	ppm	<b>&lt;1</b>	■ <1	---	---
Molybdenum	ppm	<b>66</b>	■ 84	---	---
Nickel	ppm	<b>5</b>	■ 7	---	---
Titanium	ppm	<b>0</b>	0	---	---
Silver	ppm	<b>0</b>	■ 0	---	---
Manganese	ppm	<b>&lt;1</b>	■ 2	---	---
Vanadium	ppm	<b>0</b>	0	---	---



### ADDITIVES

Calcium	ppm	<b>1215</b>	■ 2206	---	---
Magnesium	ppm	<b>809</b>	71	---	---
Zinc	ppm	<b>1236</b>	■ 1185	---	---
Phosphorus	ppm	<b>1044</b>	■ 987	---	---
Barium	ppm	<b>0</b>	■ 0	---	---
Boron	ppm	<b>5</b>	■ 46	---	---

**Depot:** GAIKNI  
**Unique No:** 10552482  
**Signed:** Don Baldrige  
**Report Date:** 14 Jul 2023



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## GRAPHS

