



CONSTRUCTION EQUIPMENT

SW-31398-2 ET TECH VOLVO A30G 752287 - DIESEL ENGINE



Sample No: VCP446780
Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3
Job No: SW-31398-2 ET TECH



SAMPLE INFORMATION

Sample Number	VCP446780	VCP395530	VCP316106	---
Sample Date	13 Mar 2024	13 Jan 2023	29 Mar 2022	---
Machine Hours	1542	1014	526	---
Oil Hours	500	500	526	---
Oil Changed	Changed	Changed	Changed	---
Sample Status	ATTENTION	ATTENTION	ABNORMAL	---

ARNOLD MACHINERY COMPANY
 2975 WEST 2100 SOUTH
 SALT LAKE CITY, UT
 US 84119
 Contact: TONY PAYAN
 tpayan@arnoldmachinery.com
 T: (801)972-4000
 F: (801)975-9434



OIL CONDITION

Visc @ 100°C	cSt	12.4	12.3	10.5	---
Base Number (BN)	mg KOH/g	8.4	10.0	9.8	---
Oxidation (PA)	%	63	76	66	---

Diagnosis

Oil and filter change at the time of sampling has been noted. 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.



CONTAMINATION

Water	%	NEG	NEG	NEG	---
Soot %	%	0.3	0.3	0.2	---
Nitration (PA)	%	64	58	65	---
Sulfation (PA)	%	54	60	58	---
Glycol	%	NEG	NEG	NEG	---
Fuel	%	<1.0	<1.0	1.1	---
Silicon	ppm	4	7	31	---
Sodium	ppm	<1	<1	3	---
Potassium	ppm	0	0	4	---



WEAR METALS

Iron	ppm	11	8	25	---
Copper	ppm	3	16	129	---
Lead	ppm	0	0	1	---
Tin	ppm	0	0	4	---
Aluminum	ppm	1	<1	3	---
Chromium	ppm	<1	<1	1	---
Molybdenum	ppm	62	45	60	---
Nickel	ppm	4	2	6	---
Titanium	ppm	0	0	0	---
Silver	ppm	0	<1	2	---
Manganese	ppm	<1	<1	4	---
Vanadium	ppm	0	0	0	---



ADDITIVES

Calcium	ppm	1247	1516	1237	---
Magnesium	ppm	915	577	952	---
Zinc	ppm	1198	997	1234	---
Phosphorus	ppm	1040	850	1099	---
Barium	ppm	0	0	0	---
Boron	ppm	10	43	13	---

Depot: VOLVO8770
Unique No: 10941517
Signed: Don Baldrige
Report Date: 27 Mar 2024



CONSTRUCTION EQUIPMENT



GRAPHS

