



CONSTRUCTION EQUIPMENT

SWA311351 RANGO VOLVO A60H 350070 - DIESEL ENGINE



Sample No: VCP409121
Oil Type: DIESEL ENGINE OIL SAE 15W40
Job No: SWA311351 RANGO



SAMPLE INFORMATION

Sample Number	VCP409121	VCP382821	---	---
Sample Date	21 Jul 2023	28 Apr 2023	---	---
Machine Hours	11816	11182	---	---
Oil Hours	0	0	---	---
Oil Changed	Changed	Changed	---	---
Sample Status	ABNORMAL	ABNORMAL	---	---

ALTA CONSTRUCTION EQUIPMENT
613 E STEVENSON RD
OTTAWA, IL
US 61350
Contact: KEVIN SKRTICH
KEVIN.SKRTICH@ALTAEQUIPMENT.COM
T:
F:



OIL CONDITION

Visc @ 100°C	cSt	█ 13.6	█ 13.1	---	---
Base Number (BN)	mg KOH/g	█ 8.2	█ 8.3	---	---
Oxidation (PA)	%	59	67	---	---

Diagnosis

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor. The nickel level has decreased, but is still abnormal. All other 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 %	%	█ 0.8	█ 1.3	---	---
Nitration (PA)	%	67	77	---	---
Sulfation (PA)	%	54	61	---	---
Glycol	%	NEG	NEG	---	---
Fuel	%	<1.0	<1.0	---	---
Silicon	ppm	█ 9	▲ 27	---	---
Sodium	ppm	█ 0	█ 3	---	---
Potassium	ppm	█ 2	█ 2	---	---



WEAR METALS

Iron	ppm	█ 24	█ 40	---	---
Copper	ppm	█ 4	█ 10	---	---
Lead	ppm	█ 1	█ 1	---	---
Tin	ppm	█ 1	█ 3	---	---
Aluminum	ppm	█ 2	█ <1	---	---
Chromium	ppm	█ 1	█ <1	---	---
Molybdenum	ppm	█ 88	█ 66	---	---
Nickel	ppm	▲ 9	▲ 14	---	---
Titanium	ppm	█ 0	█ <1	---	---
Silver	ppm	█ <1	█ 0	---	---
Manganese	ppm	█ <1	█ 2	---	---
Vanadium	ppm	0	0	---	---



ADDITIVES

Calcium	ppm	█ 1129	█ 1150	---	---
Magnesium	ppm	█ 905	█ 839	---	---
Zinc	ppm	█ 1202	█ 1162	---	---
Phosphorus	ppm	█ 1016	█ 912	---	---
Barium	ppm	█ 0	█ 0	---	---
Boron	ppm	█ 28	█ 16	---	---

Depot: VOLVO5055
Unique No: 10589087
Signed: Don Baldrige
Report Date: 08 Aug 2023



CONSTRUCTION EQUIPMENT



GRAPHS

