CONSTRUCTION EQUIPMENT
VOLVO L70H 624676 - DIESEL ENGINE

Sample No: VCP411612

Oil Type: CITGO CITGARD 700 15W40

Job No:

SAMPLE INFORMATION

Sample Number		**VCP411612**	VCP355082	---	---
Sample Date		**14 Aug 2023**	20 Jun 2022	---	---
Machine Hours		**2061**	428	---	---
Oil Hours		**500**	200	---	---
Oil Changed		**Changed**	Not Changd	---	---
Sample Status		**ABNORMAL**	NORMAL	---	---

OIL CONDITION

Visc @ 100°C	cSt	**13.4**	13.5	---	---
Base Number (BN)	mg KOH/g	**8.1**	10.2	---	---
Oxidation (PA)	%	**59**	59	---	---

CONTAMINATION

Soot %	%	**0.4**	0.2	---	---
Nitration (PA)	%	**66**	50	---	---
Sulfation (PA)	%	**52**	53	---	---
Glycol	%	**NEG**	NEG	---	---
Fuel	%	**<1.0**	<1.0	---	---
Silicon	ppm	**6**	5	---	---
Sodium	ppm	**2**	<1	---	---
Potassium	ppm	**0**	1	---	---

WEAR METALS

Iron	ppm	⚠ **207**	142	---	---
Copper	ppm	**3**	1	---	---
Lead	ppm	**0**	<1	---	---
Tin	ppm	**1**	<1	---	---
Aluminum	ppm	**<1**	2	---	---
Chromium	ppm	**3**	2	---	---
Molybdenum	ppm	**64**	55	---	---
Nickel	ppm	**0**	0	---	---
Titanium	ppm	**<1**	0	---	---
Silver	ppm	**0**	0	---	---
Manganese	ppm	**3**	2	---	---
Vanadium	ppm	**<1**	0	---	---

ADDITIVES

Calcium	ppm	**1948**	1660	---	---
Magnesium	ppm	**438**	397	---	---
Zinc	ppm	**1281**	1143	---	---
Phosphorus	ppm	**1058**	953	---	---
Barium	ppm	**0**	0	---	---
Boron	ppm	**0**	9	---	---

ALTA EQUIPMENT/FLAGLER CONSTRUCTION EQUIPMENT LLC
8418 PALM RIVER ROAD
TAMPA, FL
US 33619
Contact: KENNY HANEY
khaney@flaglerce.com
T: (813)630-0077
F: (813)630-2233

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.Cylinder, crank, or cam shaft wear is indicated. 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.

Depot: VOLVO0093
Unique No: 10609119
Signed: Sean Felton
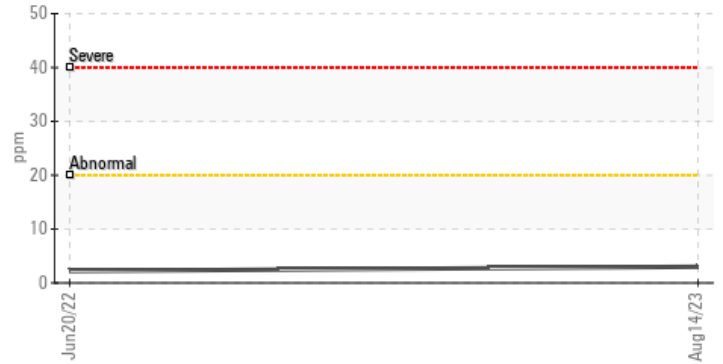**Report Date:** 22 Aug 2023

GRAPHS

Iron (ppm)

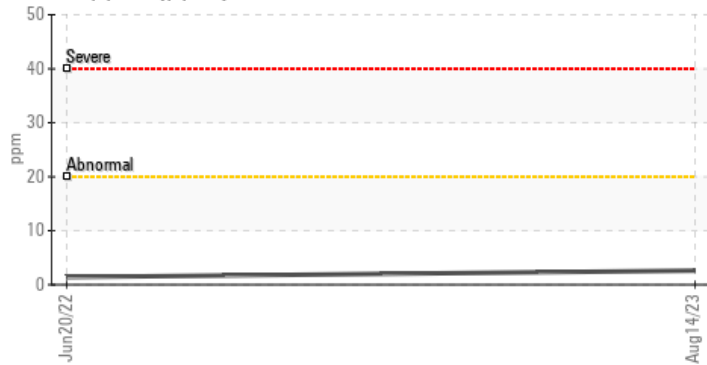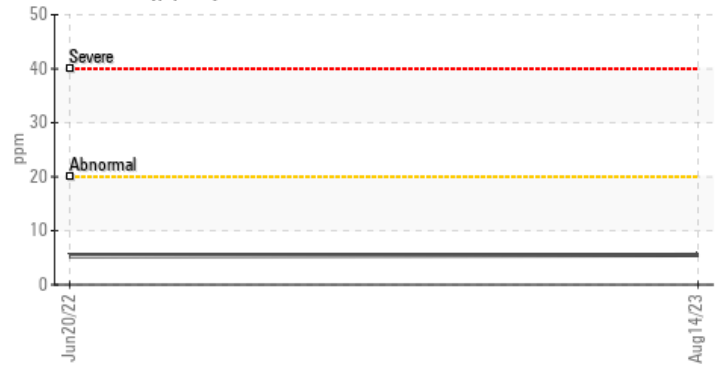### Lead (ppm)

Aluminum (ppm)
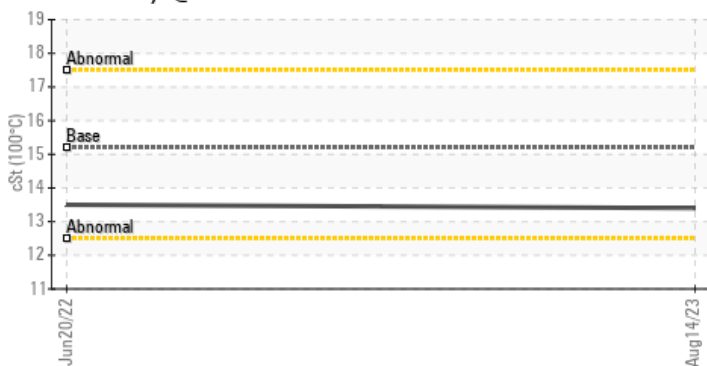

Chromium (ppm)

Copper (ppm)

Silicon (ppm)

Viscosity @ 100°C

Base Number