



CONSTRUCTION EQUIPMENT

JJ SPRAGUE HITACHI EX450LC-5 16CP007812 - DIESEL ENGINE



Sample No: VCP416028

Oil Type: NOT GIVEN

Job No: JJ SPRAGUE



SAMPLE INFORMATION

Sample Number	VCP416028	---	---	---
Sample Date	28 Aug 2023	---	---	---
Machine Hours	14253	---	---	---
Oil Hours	0	---	---	---
Oil Changed	Not Chngd	---	---	---
Sample Status	ABNORMAL	---	---	---



OIL CONDITION

Visc @ 100°C	cSt	16.8	---	---	---
Base Number (BN)	mg KOH/g	8.8	---	---	---
Oxidation (PA)	%	80	---	---	---



CONTAMINATION

Soot %	%	1.4	---	---	---
Nitration (PA)	%	94	---	---	---
Sulfation (PA)	%	73	---	---	---
Glycol	%	NEG	---	---	---
Fuel	%	<1.0	---	---	---
Silicon	ppm	10	---	---	---
Sodium	ppm	103	---	---	---
Potassium	ppm	97	---	---	---



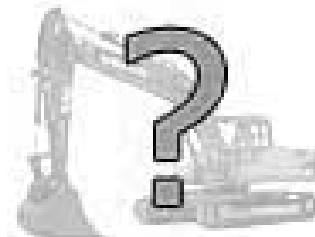
WEAR METALS

Iron	ppm	31	---	---	---
Copper	ppm	35	---	---	---
Lead	ppm	10	---	---	---
Tin	ppm	3	---	---	---
Aluminum	ppm	5	---	---	---
Chromium	ppm	3	---	---	---
Molybdenum	ppm	42	---	---	---
Nickel	ppm	0	---	---	---
Titanium	ppm	<1	---	---	---
Silver	ppm	0	---	---	---
Manganese	ppm	<1	---	---	---
Vanadium	ppm	0	---	---	---



ADDITIVES

Calcium	ppm	2793	---	---	---
Magnesium	ppm	152	---	---	---
Zinc	ppm	1485	---	---	---
Phosphorus	ppm	1203	---	---	---
Barium	ppm	2	---	---	---
Boron	ppm	52	---	---	---



ARNOLD MACHINERY COMPANY

4323 EAST WINSLOW AVENUE
PHOENIX, AZ
US 85040

Contact: RANDY PRZEKURAT
randyp@arnoldmachinery.com

T:
F: (602)414-1904

Diagnosis

We advise that you check for the source of the coolant leak. Check for low coolant level. We recommend an early resample to monitor this condition. Please specify the brand, type, and viscosity of the oil on your next sample. The copper level is abnormal. All other component wear rates are normal. Sodium and/or potassium levels are high. The BN result indicates that there is suitable alkalinity remaining in the oil.

Depot: VOLVO6174

Unique No: 10633988

Signed: Jonathan Hester

Report Date: 08 Sep 2023



CONSTRUCTION EQUIPMENT



GRAPHS

