



# CONSTRUCTION EQUIPMENT

## 687922 NORTH AM MIN VOLVO L150H 6491 - DIESEL ENGINE



**Sample No:** VCP437093  
**Oil Type:** VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3  
**Job No:** 687922 NORTH AM MIN



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### SAMPLE INFORMATION

Sample Number	<b>VCP437093</b>	VCP432167	VCP414751	VCP424439
Sample Date	<b>04 Apr 2024</b>	14 Dec 2023	14 Sep 2023	14 Jun 2023
Machine Hours	<b>6732</b>	9794	5645	4891
Oil Hours	<b>500</b>	0	0	500
Oil Changed	<b>Changed</b>	N/A	Changed	Changed
Sample Status	<b>NORMAL</b>	NORMAL	NORMAL	NORMAL



### OIL CONDITION

Visc @ 100°C	cSt	<b>12.4</b>	12.6	11.9	12.4
Base Number (BN)	mg KOH/g	<b>9.9</b>	10.1	9.7	9.9
Oxidation (PA)	%	<b>75</b>	80	79	81



### CONTAMINATION

Water	%	<b>NEG</b>	NEG	NEG	NEG
Soot %	%	<b>0.1</b>	0.1	0.1	0.3
Nitration (PA)	%	<b>54</b>	55	59	68
Sulfation (PA)	%	<b>57</b>	60	59	61
Glycol	%	<b>NEG</b>	NEG	NEG	NEG
Fuel	%	<b>&lt;1.0</b>	<1.0	1.1	<1.0
Silicon	ppm	<b>3</b>	2	4	4
Sodium	ppm	<b>2</b>	2	0	2
Potassium	ppm	<b>&lt;1</b>	<1	1	<1



### WEAR METALS

Iron	ppm	<b>3</b>	0	4	5
Copper	ppm	<b>2</b>	0	<1	1
Lead	ppm	<b>0</b>	<1	<1	<1
Tin	ppm	<b>&lt;1</b>	0	<1	<1
Aluminum	ppm	<b>2</b>	0	0	3
Chromium	ppm	<b>0</b>	0	0	<1
Molybdenum	ppm	<b>41</b>	37	43	45
Nickel	ppm	<b>0</b>	0	<1	<1
Titanium	ppm	<b>0</b>	0	0	<1
Silver	ppm	<b>0</b>	0	0	0
Manganese	ppm	<b>&lt;1</b>	0	<1	<1
Vanadium	ppm	<b>0</b>	0	0	<1



### ADDITIVES

Calcium	ppm	<b>1612</b>	1654	1498	1638
Magnesium	ppm	<b>545</b>	485	456	476
Zinc	ppm	<b>1113</b>	1153	1060	1037
Phosphorus	ppm	<b>955</b>	876	861	844
Barium	ppm	<b>0</b>	0	1	0
Boron	ppm	<b>51</b>	38	27	34

### 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 suitable for further service.

**Depot:** VOLVO0093  
**Unique No:** 11018403  
**Signed:** Wes Davis  
**Report Date:** 09 May 2024

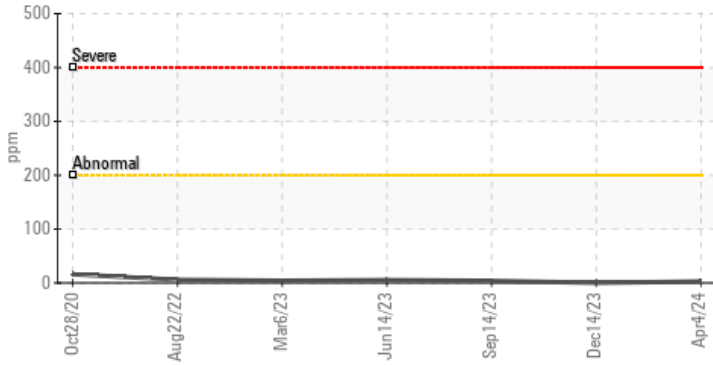


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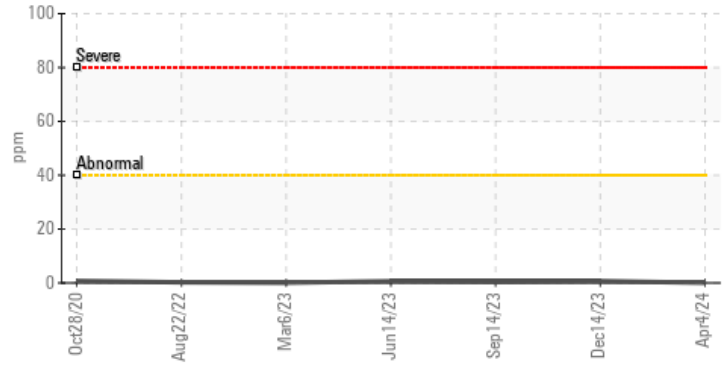


## GRAPHS

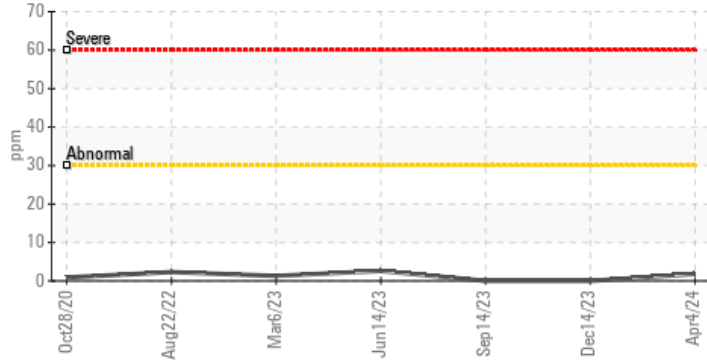
### Iron (ppm)



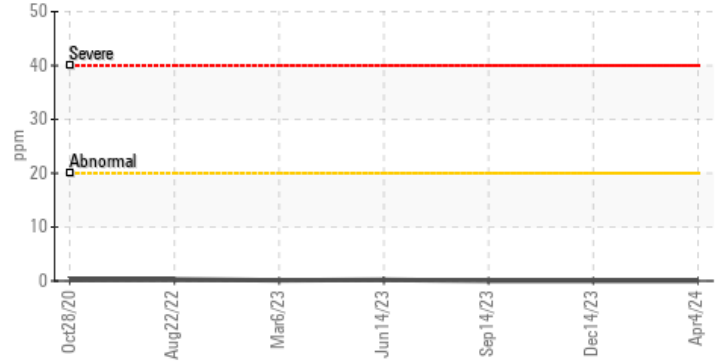
### Lead (ppm)



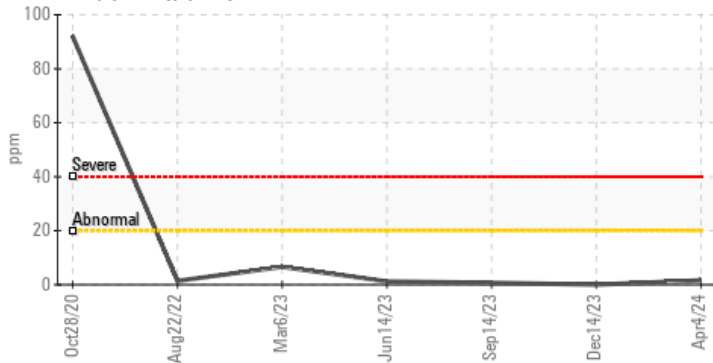
### Aluminum (ppm)



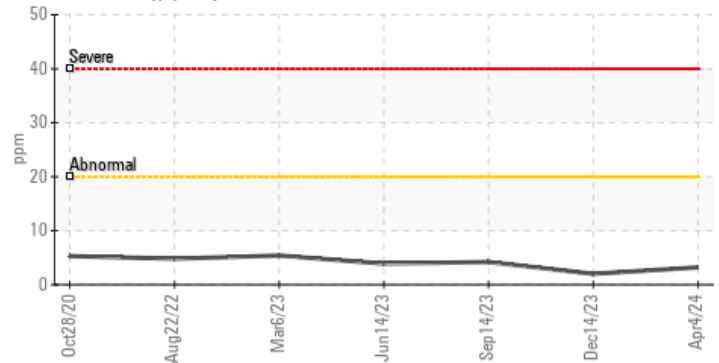
### Chromium (ppm)



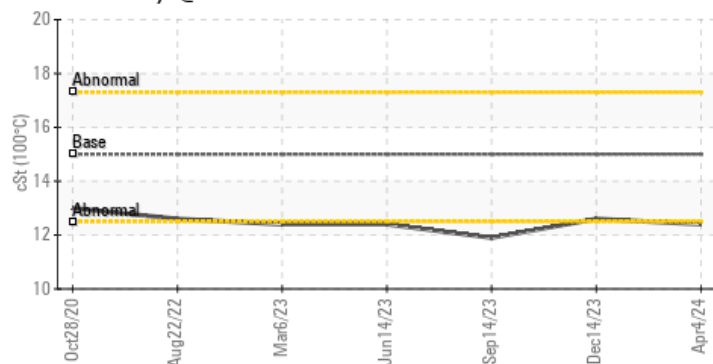
### Copper (ppm)



### Silicon (ppm)



### Viscosity @ 100°C



### Base Number

