



# CONSTRUCTION EQUIPMENT

W03006477 RIVER BEND VOLVO A25D 72376 - DIESEL ENGINE



**Sample No:** VCP390011  
**Oil Type:** VALVOLINE 15W40  
**Job No:** W03006477 RIVER BEND



## SAMPLE INFORMATION

Sample Number	<b>VCP390011</b>	VCP226213	VCP217175	VCP189340
Sample Date	<b>14 Jun 2023</b>	06 Sep 2018	08 Dec 2017	30 Dec 2016
Machine Hours	<b>13020</b>	9808	9277	8669
Oil Hours	<b>4</b>	0	0	0
Oil Changed	<b>N/A</b>	Changed	Changed	Changed
Sample Status	<b>NORMAL</b>	ABNORMAL	MARGINAL	ABNORMAL

MCCLUNG-LOGAN EQUIPMENT CO INC - FREDERICKSBURG  
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## OIL CONDITION

Visc @ 100°C	cSt	<b>13.5</b>	12.88	13.1	13.38
Base Number (BN)	mg KOH/g	<b>10.0</b>	---	---	---
Oxidation (PA)	%	<b>78</b>	60	64	64



## CONTAMINATION

Water	%	---	▲ 0.115	---	---
Soot %	%	<b>0.1</b>	0.6	0.6	0.9
Nitration (PA)	%	<b>43</b>	81	67	67
Sulfation (PA)	%	<b>61</b>	54	55	58
Glycol	%	<b>NEG</b>	NEG	NEG	NEG
Fuel	%	<b>&lt;1.0</b>	<1.0	<1.0	<1.0
Silicon	ppm	<b>10</b>	▲ 21	▲ 29	▲ 46
Sodium	ppm	<b>7</b>	2	3	4
Potassium	ppm	<b>3</b>	2	0	2

## Diagnosis

Resample at the next service interval to monitor. (believe hydraulic fluid is contaminating engine oil).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 acceptable for the time in service.



## WEAR METALS

Iron	ppm	<b>3</b>	18	32	54
Copper	ppm	<b>2</b>	3	13	▲ 32
Lead	ppm	<b>1</b>	0	2	2
Tin	ppm	<b>1</b>	0	0	1
Aluminum	ppm	<b>3</b>	6	7	▲ 10
Chromium	ppm	<b>&lt;1</b>	1	2	3
Molybdenum	ppm	<b>39</b>	29	44	50
Nickel	ppm	<b>&lt;1</b>	<1	1	3
Titanium	ppm	<b>&lt;1</b>	▲ 14	1	1
Silver	ppm	<b>0</b>	0	0	0
Manganese	ppm	<b>1</b>	<1	<1	1
Vanadium	ppm	<b>&lt;1</b>	0	0	0



## ADDITIVES

Calcium	ppm	<b>1559</b>	1515	1378	1386
Magnesium	ppm	<b>574</b>	771	645	728
Zinc	ppm	<b>1081</b>	785	989	1002
Phosphorus	ppm	<b>866</b>	719	814	881
Barium	ppm	<b>0</b>	0	0	0
Boron	ppm	<b>79</b>	52	28	32

**Depot:** MCCFRE  
**Unique No:** 10519868  
**Signed:** Don Baldrige  
**Report Date:** 17 Jun 2023



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## GRAPHS

