

CONSTRUCTION EQUIPMENT
SW-30262-2 KIAID BLD VOLVO EC380EL 311600 - DIESEL ENGIN

Sample No: VCP440336

Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3

Job No: SW-30262-2 KIAID BLD

SAMPLE	NFORMATION				
Sample Number	-	VCP440336	VCP357490	VCP292632	
Sample Date		20 Feb 2024	20 Oct 2022	04 Nov 2020	
Machine Hours		3465	3151	1979	
Oil Hours		300	300	0	
Oil Changed		Changed	Changed	Changed	
Sample Status		NORMAL	NORMAL	ABNORMAL	
OIL COND	ITION				
Visc @ 100°C	cSt	<b>12.7</b>	<b>12.7</b>	<b>12.4</b>	
Base Number (BN)	mg KOH/g	■ 9.5	<b>11.5</b>		
Oxidation (PA)	%	65	88	67	
CONTAMI	NATION				
Water	%	NEG	NEG	NEG	
Soot %	%	■ 0.1	0.1	□ 0.1	
Nitration (PA)	%	53	63	73	
Sulfation (PA)	%	55	66	59	
Glycol	%	NEG	NEG	NEG	
Fuel	%	<1.0	<1.0	■1.2	
Silicon	ppm	<b>4</b>	<b>6</b>	<b>6</b>	
Sodium	ppm	<b>2</b>	<b></b>	<b>2</b>	
Potassium	ppm	<b>0</b>	< 1	< 1	

WEAR N	AFTAL C				
WLAIN	IL I VL7	<u> </u>			
Iron	ppm	<b>5</b>	■3	■8	
Copper	ppm	■8	■8	<b>△</b> 78	
Lead	ppm	<b>■</b> 0	□ 0	<b>1</b>	
Tin	ppm	■0	<b>-</b> <1	<b>-</b> <1	
Aluminum	ppm	<b>■&lt;1</b>	<b>1</b>	<b>0</b>	
Chromium	ppm	■0	<b></b> <1	<b>-</b> <1	
Molybdenum	ppm	<b>■</b> 53	<b>■</b> 36	<b>4</b> 9	
Nickel	ppm	■0	<b>0</b>	<b>-</b> <1	
Titanium	ppm	0	<1	<1	
Silver	ppm	■0	0	0	
Manganese	ppm	<b>■&lt;1</b>	< 1	<1	
Vanadium	ppm	0	<1	0	

VES					
ppm	<b>1318</b>	<b>1715</b>	<b>1105</b>		
ppm	832	<b>475</b>	<b>775</b>		
ppm	<b>1136</b>	■1082	<b>1086</b>		
ppm	■999	■857	774		
ppm	■0	<b>0</b>	<b>0</b>		
ppm	<b>17</b>	<b>5</b> 1	<b>2</b>		
	ppm ppm ppm ppm	ppm	ppm	ppm     1318     1715     1105       ppm     832     475     775       ppm     1136     1082     1086       ppm     999     857     774       ppm     0     0     0	ppm     1318     1715     1105        ppm     832     475     775        ppm     1136     1082     1086        ppm     999     857     774        ppm     0     0



### ARNOLD MACHINERY COMPANY 2975 WEST 2100 SOUTH SALT LAKE CITY, UT US 84119 Contact: TONY PAYAN tpayan@arnoldmachinery.com

T: (801)972-4000 F: (801)975-9434

## 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: VOLVO8770 **Unique No:** 10899515 Signed: Wes Davis Report Date: 28 Feb 2024



# **CONSTRUCTION EQUIPMENT**





