



# CONSTRUCTION EQUIPMENT

566273 AMERICAN/IMPO VOLVO ECR235EL 311427 - DIESEL ENGINE



**Sample No:** VCP425840  
**Oil Type:** VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3  
**Job No:** 566273 AMERICAN/IMPO



## SAMPLE INFORMATION

Sample Number	<b>VCP425840</b>	VCP392754	VCP376276	VCP344368
Sample Date	<b>15 Jun 2023</b>	09 Mar 2023	21 Jul 2022	23 Feb 2022
Machine Hours	<b>4260</b>	3792	2768	2210
Oil Hours	<b>500</b>	500	500	500
Oil Changed	<b>Changed</b>	Changed	Changed	Changed
Sample Status	<b>ABNORMAL</b>	ABNORMAL	NORMAL	ABNORMAL

ALTA EQUIPMENT/FLAGLER CONSTRUCTION EQUIPMENT LLC  
 8418 PALM RIVER ROAD  
 TAMPA, FL  
 US 33619  
 Contact: JOHN FARDELLA  
 JFARDELLA@ALTAEQUIPFL.COM  
 T: (813)630-0077  
 F: (813)630-2233



## OIL CONDITION

Visc @ 100°C	cSt	<b>13.3</b>	12.9	13.6	13.1
Base Number (BN)	mg KOH/g	<b>9.4</b>	9.3	10.8	9.1
Oxidation (PA)	%	<b>94</b>	89	92	78

## Diagnosis



## CONTAMINATION

Soot %	%	<b>0.3</b>	0.4	0.2	0.2
Nitration (PA)	%	<b>81</b>	74	73	58
Sulfation (PA)	%	<b>65</b>	64	67	61
Glycol	%	<b>NEG</b>	NEG	NEG	NEG
Fuel	%	<b>&lt;1.0</b>	<1.0	<1.0	<1.0
Silicon	ppm	<b>5</b>	7	6	8
Sodium	ppm	<b>2</b>	2	1	2
Potassium	ppm	<b>1</b>	0	0	0



## WEAR METALS

Iron	ppm	<b>23</b>	22	22	36
Copper	ppm	<b>2</b>	2	2	3
Lead	ppm	<b>1</b>	0	0	1
Tin	ppm	<b>&lt;1</b>	<1	2	1
Aluminum	ppm	<b>▲ 11</b>	▲ 11	10	▲ 25
Chromium	ppm	<b>1</b>	2	2	3
Molybdenum	ppm	<b>46</b>	49	40	34
Nickel	ppm	<b>&lt;1</b>	0	<1	0
Titanium	ppm	<b>&lt;1</b>	0	0	<1
Silver	ppm	<b>0</b>	0	0	0
Manganese	ppm	<b>&lt;1</b>	1	<1	<1
Vanadium	ppm	<b>&lt;1</b>	<1	0	<1



## ADDITIVES

Calcium	ppm	<b>1796</b>	1635	1696	1722
Magnesium	ppm	<b>529</b>	583	519	458
Zinc	ppm	<b>1128</b>	1122	1140	1083
Phosphorus	ppm	<b>900</b>	921	905	941
Barium	ppm	<b>0</b>	0	0	0
Boron	ppm	<b>19</b>	25	19	37

**Depot:** VOLVO0093  
**Unique No:** 10550572  
**Signed:** Don Baldrige  
**Report Date:** 12 Jul 2023



# CONSTRUCTION EQUIPMENT



## GRAPHS

