



# CONSTRUCTION EQUIPMENT

LAKESIDE 8-379790 VOLVO ECR145E 310919 - DIESEL ENGINE



**Sample No:** VCP430264  
**Oil Type:** DIESEL ENGINE OIL SAE 40  
**Job No:** 8-379790



## SAMPLE INFORMATION

Sample Number	<b>VCP430264</b>	VCP352581	VCP352268	VCP333594
Sample Date	<b>04 Oct 2023</b>	09 Feb 2023	28 Jul 2022	11 Apr 2022
Machine Hours	<b>4990</b>	4510	4022	3502
Oil Hours	<b>0</b>	0	0	0
Oil Changed	<b>Changed</b>	Changed	Changed	Changed
Sample Status	<b>SEVERE</b>	NORMAL	NORMAL	NORMAL

### STRONGCO EQUIPMENT INC.

1640 ENTERPRISE ROAD  
MISSISSAUGA, ON  
CA L4W 4L4

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## OIL CONDITION

Visc @ 100°C	cSt	<b>13.3</b>	12.8	13.4	13.5
Oxidation (PA)	%	<b>84</b>	92	26	33



## CONTAMINATION

Soot %	%	<b>0.8</b>	0.4	0	0
Nitration (PA)	%	<b>72</b>	75	27	35
Sulfation (PA)	%	<b>66</b>	71	38	45
Glycol	%	<b>NEG</b>	NEG	NEG	NEG
Fuel	%	<b>&lt;1.0</b>	<1.0	<1.0	<1.0
Silicon	ppm	<b>8</b>	11	5	9
Sodium	ppm	<b>4</b>	8	3	3
Potassium	ppm	<b>&lt;1</b>	2	<1	<1

### Diagnosis

The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition. Aluminum ppm levels are severe. Piston wear is indicated. There is no indication of any contamination in the oil. The oil is no longer serviceable as a result of the abnormal and/or severe wear.



## WEAR METALS

Iron	ppm	<b>51</b>	22	12	25
Copper	ppm	<b>3</b>	4	3	3
Lead	ppm	<b>&lt;1</b>	<1	0	0
Tin	ppm	<b>&lt;1</b>	<1	<1	<1
Aluminum	ppm	<b>25</b>	9	4	6
Chromium	ppm	<b>3</b>	2	<1	1
Molybdenum	ppm	<b>44</b>	45	40	48
Nickel	ppm	<b>&lt;1</b>	<1	<1	<1
Titanium	ppm	<b>0</b>	<1	<1	0
Silver	ppm	<b>&lt;1</b>	0	0	0
Manganese	ppm	<b>&lt;1</b>	<1	<1	<1
Vanadium	ppm	<b>0</b>	0	0	0



## ADDITIVES

Calcium	ppm	<b>1754</b>	1815	1714	1546
Magnesium	ppm	<b>528</b>	514	494	466
Zinc	ppm	<b>1114</b>	1124	1100	1137
Phosphorus	ppm	<b>948</b>	1030	939	989
Barium	ppm	<b>&lt;1</b>	0	0	0
Boron	ppm	<b>42</b>	41	43	52

**Depot:** SHEMIS  
**Unique No:** 5657655  
**Signed:** Kevin Marson  
**Report Date:** 12 Oct 2023



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## VOLVO GRAPHS

