**CONSTRUCTION EQUIPMENT** CANNINGTON 8-375957 VOLVO ECR305C 110771 (S/N 10217) -

Sample No:	VCP394509
Oil Type:	GEAR OIL SAE 80W90
Job No:	8-375957

## SAMPLE INFORMATION

VOLV

Sample Number	-	VCP394509	VCP222947	VCP222950		
Sample Date		22 Aug 2023	19 Mar 2019	11 Mar 2019		
Machine Hours		3955	960	8960		
Oil Hours		0	0	0		
Oil Changed		Changed	Changed	Changed		
Sample Status		SEVERE	ABNORMAL	NORMAL		
OIL CON	IDITION					
Visc @ 40°C	cSt	<b>A</b> 271	174	174		
	MINATION					
	-				<u>.</u> .	
Silicon	ppm	5092	<b>▲</b> 287	140		
Sodium	ppm	273	14	9		
Potassium	ppm	384	34	17		
WEAR N	METALS					
PQ	-	<b>A</b> 1003				
Iron	ppm	9041	300	193		
Copper	ppm	<b>1</b> 8	<1	<1		
Lead	ppm	2	<b></b> <1	<b></b> <1		
Tin	ppm	0	0	0		
Aluminum	ppm	<u> </u>	▲ 88	43		
Chromium	ppm	• 112	9	6		
Molyhdonum	nom	<b>— 11</b>	<b>—</b> < 1	<b>—</b> <1		

Chiomun	ppiii	- 112	9		
Molybdenum	ppm	<b>11</b>	<1	<b></b> <1	
Nickel	ppm	3	<1	<1	
Titanium	ppm	🔺 59	5	2	
Silver	ppm	0	0	0	
Manganese	ppm	<b>74</b>	6	4	
Vanadium	ppm	2	<1	<1	

**ADDITIVES** 3008 51 25 Calcium ppm 357 22 11 Magnesium ppm 13 Zinc ppm 22 🔲 13 Phosphorus 763 422 440 ppm Barium 13 5 3 ppm 83 <1 | <1 Boron ppm



STRONGCO EQUIPMENT INC.

1640 ENTERPRISE ROAD MISSISSAUGA, ON CA L4W 4L4 Contact: Janice Cripps jcripps@strongco.com T: (905)565-3876 F: (905)670-2338

## Diagnosis

We advise that you check all areas where dirt can enter the system. The oil change at the time of sampling has been noted. Confirm the source of the lubricant being utilized for topup/fill. We recommend an early resample to monitor this condition.Chromium and iron ppm levels are severe. PQ levels are abnormal. Titanium ppm levels are abnormal. Aluminum ppm levels are noted. Gear wear is indicated. The high ferrous density (PQ) index indicates that abnormal wear is occurring. Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress. High amount of ingressed dirt has caused abrasive wear to the component. Viscosity of sample indicates oil is within SAE 80W140 range, advise investigate. This plus the additive levels indicates that this is not the same brand, or type of oil as reported. The oil is no longer serviceable as a result of the abnormal and/or severe wear.

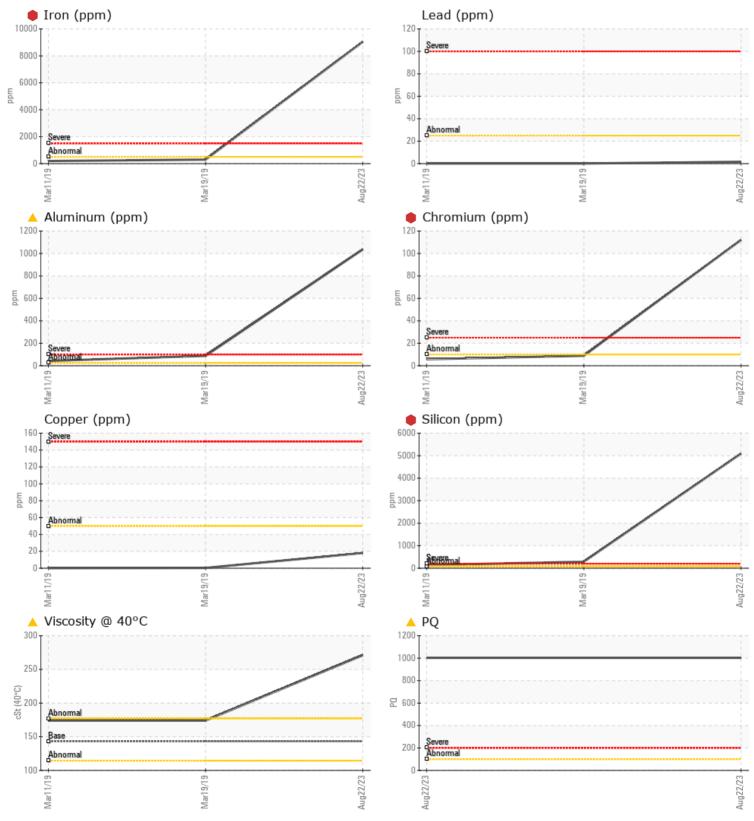
Depot:	SHEMIS
Unique No:	5631597
Signed:	Kevin Marson
Report Date:	28 Aug 2023

## **CONSTRUCTION EQUIPMENT**



GRAPHS

VOLVO



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Contact/Location: Janice Cripps - SHEMIS