

# CONSTRUCTION EQUIPMENT 595224 VOLVO A40G 352787 - DROP BOX



Sample No: VCP416192

Oil Type: VOLVO PREMIUM GEAR OIL 85W-140 GL-5

**Job No:** 595224

SAMPLE INFORMATION						
Sample Number         VCP416192         VCP351672         VCP335398            Sample Date         25 Aug 2023         30 Jun 2022         20 Jan 2022            Machine Hours         4246         1962         940            Oil Hours         4246         1962         940            Oil Changed         Not Changd         Not Changd            Sample Status         ATTENTION         ATTENTION         ATTENTION           CONTAMINATION           VISCOME OF CSt         46.5         46.5         46.1         50.1            CONTAMINATION           Silicon         ppm         34         2         6            Sodium         ppm         8         0         3            Potassium         ppm         41         -            VEAR METALS           Iron         ppm         166         -50         434            Copper         ppm         6         -1         3            Lead         ppm         -1         0         -1	SAMPLE	E INFORMATION				
Sample Date         25 Aug 2023         30 Jun 2022         20 Jan 2022            Machine Hours         4246         1962         940            Oil Hours         4246         1962         940            Oil Changed         Changed         Not Changd         Not Changd            Sample Status         ATTENTION         ATTENTION            CONTAMINATION           VOLVO           CONTAMINATION           Silicon         ppm         34         2         6            Sodium         ppm         8         0         3            VOLVO         WEAR METALS           Iron         ppm         166         50         434            Copper         ppm         6         <1	Sample Number		VCP416192	VCP351672	VCP335398	
Machine Hours       4246       1962       940          Oil Hours       4246       1962       940          Oil Changed       Changed       Not Changd       Not Changd          Sample Status       ATTENTION       ATTENTION       ATTENTION          CONTAMINATION         Silicon       ppm       34       2       6          Sodium       ppm       8       0       3          Sodium       ppm       8       0       3          YOLVOV       WEAR METALS         Iron       ppm       8       0       3          VEAR METALS         Iron       ppm       6      1       3          Iron       ppm       6      1       3          Copper       ppm       6      1       3          Lead       ppm       0       -1       -1          Aluminum       ppm       2       -1       2          Chromium       ppm       1       -1       <			25 Aug 2023	30 Jun 2022	20 Jan 2022	
Oil Changed   Changed   Not Ch	•		_	1962	940	
Sample Status	Oil Hours		4246	1962	940	
VISCO   A0°C   CSt	Oil Changed		Changed	Not Changd	Not Changd	
VISCO   A0°C   CSt	Sample Status		ATTENTION	ATTENTION	ATTENTION	
OIL CONDITION           Visc @ 40°C         CSt         46.5         261         50.1            CONTAMINATION           Silicon         ppm         34         2         6            Sodium         ppm         8         0         3            Potassium         ppm         41          44            VEAR METALS           Iron         ppm         166         50         434            Copper         ppm         6         -1         3            Lead         ppm         0         -1         -1            Aluminum         ppm         2         -1         0         -1            Aluminum         ppm         1         -1             Aluminum         ppm         1         -1             Chromium         ppm         1         -1             Molybdenum         ppm         0         0         0            Silver						
CONTAMINATION  Silicon ppm 34 2 66 Sodium ppm 8 0 3 Potassium ppm 166 50 434 Copper ppm 6 11 3  Nin ppm 1 1 0 1  Chromium ppm 1 1 0 1 7  Molybdenum ppm 1 1 0 9  Nickel ppm 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	OII CON	DITION				
CONTAMINATION  Silicon				A 261	A 50.1	<u> </u>
CONTAMINATION  Silicon ppm	VISC @ 40 C	CSL	40.5	201	50.1	
Solition ppm	VOLVO					
Sodium	CONTAN	MINATION				
Sodium	Silicon	ppm	<b>■34</b>	<b>2</b>	<b>6</b>	
WEAR METALS  Iron ppm   166   50   434    Copper   ppm   6   -1   3    Lead   ppm   0   -1    Tin   ppm   2   -1   2    Chromium   ppm   1   -1   7    Molybdenum   ppm   11   1   9    Nickel   ppm   0   0   0   2    Titanium   ppm   0   0   0   0    Silver   ppm   0   0   0   0    Manganese   ppm   4   2   16    Vanadium   ppm   0   0   0    Magnesium   ppm   0   0   0    Magnesium   ppm   123   67   14    Phosphorus   ppm   2266   846   2765    Barium   ppm   0   0   0    Titanium   123   167   14    Phosphorus   ppm   0   0   0    Barium   ppm   0   0   0    Barium   ppm   0   0   0	Sodium	ppm	■8	0	<b>3</b>	
Tron	Potassium	ppm	<b>■&lt;1</b>	< 1	<b>4</b>	
Tron						
Copper	WEAR N	METALS				
Lead	Iron	ppm	<b>166</b>	<b>5</b> 0	<b>434</b>	
Tin ppm	Copper	ppm	<b>6</b>	<b>-</b> <1	■3	
Aluminum ppm 2		ppm	<b>■</b> 0	<b>-</b> <1	<b></b>	
Chromium ppm 11	Tin	ppm	<b>■</b> <1	0	<b></b>	
Molybdenum         ppm         11         1         9            Nickel         ppm         <1	Aluminum	ppm	<b>■</b> 2	<b>&lt;</b> 1	_	
Nickel         ppm         Image: square squa		ppm		<b>-</b> <1		
Titanium ppm 0 0 0 0 Silver ppm 0 0 0 0 Manganese ppm 4 2 16 Vanadium ppm 0 0 0 0  ADDITIVES  Calcium ppm 47 31 38 Magnesium ppm 123 67 14 Phosphorus ppm 2266 846 2765 Barium ppm 0 0 2 0	•	ppm	_	_	_	
Silver ppm 0 0 0 0  Manganese ppm 4 2 16  Vanadium ppm 0 0 0 0  ADDITIVES  Calcium ppm 47 31 38  Magnesium ppm < 1 4 0 0  Zinc ppm 123 67 14  Phosphorus ppm 2266 846 2765  Barium ppm 0 2 0 0		ppm	_			
Manganese         ppm         4         2         16            Vanadium         ppm         0         0            ADDITIVES           Calcium         ppm         47         31         38            Magnesium         ppm         <1         4         0            Zinc         ppm         123         67         114            Phosphorus         ppm         2266         846         2765            Barium         ppm         0         2         0		ppm	-			
Vanadium         ppm         0         0            ADDITIVES           Calcium         ppm         47         31         38            Magnesium         ppm         <1         4         0            Zinc         ppm         123         67         14            Phosphorus         ppm         2266         846         2765            Barium         ppm         0         2         0		ppm	•		-	
ADDITIVES  Calcium ppm 47 31 38  Magnesium ppm <1 4 00  Zinc ppm 123 67 14  Phosphorus ppm 2266 846 2765  Barium ppm 0 2 0 0						
ADDITIVES           Calcium         ppm         47         31         38            Magnesium         ppm         <1	Vanadium	ppm	0	0	0	
ADDITIVES           Calcium         ppm         47         31         38            Magnesium         ppm         <1	VOLVO					
Magnesium         ppm         4         0            Zinc         ppm         123         67         14            Phosphorus         ppm         2266         846         2765            Barium         ppm         0         2         0	ADDITIN	VES				
Magnesium         ppm         4         0            Zinc         ppm         123         67         14            Phosphorus         ppm         2266         846         2765            Barium         ppm         0         2         0	Calcium	ppm	<b>47</b>	<b>3</b> 1	□38	
Zinc         ppm         123         67         14            Phosphorus         ppm         2266         846         2765            Barium         ppm         0         2         0	Magnesium		<u> </u>	4	<b>0</b>	
Phosphorus         ppm         2266         846         2765            Barium         ppm         0         2         0	•		<b>123</b>	<b>6</b> 7	■14	
<b>Barium</b> ppm <b>■0</b> ■2 ■0	Phosphorus		2266	■846	■2765	
Boron ppm <b>■87</b> ■167 ■283	•		■0	<b>2</b>	<b>0</b>	
	Boron		<b>■87</b>	<b>167</b>	<b>283</b>	



#### **RIPA AND ASSOCIATES**

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### Diagnosis

The oil change at the time of sampling has been noted. 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 oil viscosity is lower than normal. Confirm oil type.

Depot:RIPTAMUnique No:10669035Signed:Don BaldridgeReport Date:28 Sep 2023



## **CONSTRUCTION EQUIPMENT**





