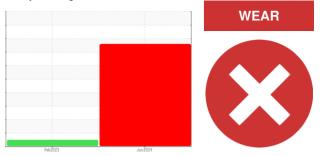


# **PROBLEM SUMMARY**

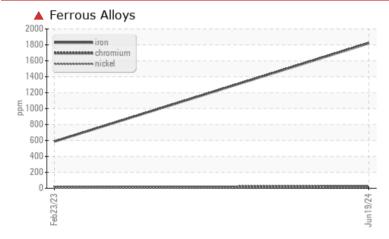
Sample Rating Trend



VOLVO A45G 352364 Drop Box Fluid {not provided} (--- GAL)

Machine Id

## COMPONENT CONDITION SUMMARY



### RECOMMENDATION

We recommend that you drain the oil from the component if this has not already been done. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition. Please specify the brand, type, and viscosity of the oil on your next sample.

PROBLEMATIC T	EST RE	SULTS				
Sample Status				SEVERE	NORMAL	
Iron	ppm	ASTM D5185m	>500	<b>1820</b>	587	
Chromium	ppm	ASTM D5185m	>20	<u> </u>	12	
Nickel	ppm	ASTM D5185m	>10	<u> </u>	5	

Customer Id: VOLVO0002 Sample No.: ML0946546 Lab Number: 06216149 Test Package: CONST



To manage this report scan the QR code

To discuss the diagnosis or test data: Don Baldridge +1 don.b505@comcast.net

*To change component or sample information:* Customer Service +1 1-800-237-1369 <u>customerservice@wearcheck.com</u>

RECOMMENDED ACTIONS							
Action	Status	Date	Done By	Description			
Inspect Wear Source			?	We advise that you inspect for the source(s) of wear.			
Change Fluid			?	We recommend that you drain the oil from the component if this has not already been done.			
Resample			?	We recommend an early resample to monitor this condition.			
Information Required			?	Please specify the brand, type, and viscosity of the oil on your next sample.			

## HISTORICAL DIAGNOSIS

NORMAL

23 Feb 2023 Diag: Angela Borella 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 condition of the oil is acceptable for the time in service.





# **OIL ANALYSIS REPORT**

Sample Rating Trend

WEAR

 $\mathbf{X}$ 



Machine Id VOLVO A45G 352364 Component Drop Box

Fluid {not provided} (--- GAL)

## DIAGNOSIS

#### Recommendation

We recommend that you drain the oil from the component if this has not already been done. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition. Please specify the brand, type, and viscosity of the oil on your next sample.

### 🔺 Wear

Gear wear is indicated.

#### Contamination

There is no indication of any contamination in the oil.

#### Fluid Condition

The oil is no longer serviceable as a result of the abnormal and/or severe wear.

SAMPLE INFORM	ATION	method	limit/base	current	history1	history2
Sample Number		Client Info		ML0946546	VCP400983	
Sample Date		Client Info		19 Jun 2024	23 Feb 2023	
Machine Age	hrs	Client Info		4611	3214	
Oil Age	hrs	Client Info		0	0	
Oil Changed		Client Info		N/A	Changed	
Sample Status				SEVERE	NORMAL	
CONTAMINATION		method	limit/base	current	history1	history2
Water		WC Method	>0.2	NEG	NEG	
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>500	<b>1820</b>	587	
Chromium	ppm	ASTM D5185m	>20	<u> </u>	12	
Nickel	ppm	ASTM D5185m	>10	<b>1</b> 6	5	
Titanium	ppm	ASTM D5185m		<1	<1	
Silver	ppm	ASTM D5185m		0	0	
Aluminum	ppm	ASTM D5185m	>30	5	2	
Lead	ppm	ASTM D5185m	>30	0	0	
Copper	ppm		>30	14	4	
Tin		ASTM D5185m	>20	0	4	
Vanadium	ppm	ASTM D5185m	> <u>_</u> U	-	0	
	ppm			<1		
Cadmium	ppm	ASTM D5185m		0	0	
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		141	115	
Barium	nnm	ASTM D5185m		0	0	
Banam	ppm	ASTIVI DOTODITI		U	0	
	ppm	ASTM D5185m		30	19	
Molybdenum				-		
Molybdenum Manganese	ppm	ASTM D5185m		30	19	
Molybdenum Manganese Magnesium	ppm ppm	ASTM D5185m ASTM D5185m		30 12	19 8	
Molybdenum Manganese Magnesium Calcium	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m		30 12 5	19 8 13	
Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		30 12 5 0	19 8 13 41	
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		30 12 5 0 2337	19 8 13 41 1030	  
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	30 12 5 0 2337 34	19 8 13 41 1030 54	  
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		30 12 5 0 2337 34 26012 current	19 8 13 41 1030 54 24416 history1	   
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon	ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m Method ASTM D5185m		30 12 5 0 2337 34 26012 current 40	19 8 13 41 1030 54 24416 history1 15	     history2
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		30 12 5 0 2337 34 26012 current	19 8 13 41 1030 54 24416 history1	     history2
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m <b>method</b> ASTM D5185m	>50	30 12 5 0 2337 34 26012 <u>current</u> 40 1	19 8 13 41 1030 54 24416 history1 15 4 0	    history2
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium VISUAL	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	>50 >20 limit/base	30 12 5 0 2337 34 26012 <b>current</b> 40 1 2 2	19 8 13 41 1030 54 24416 history1 15 4 0 history1	    history2
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium VISUAL White Metal	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m XSTM D5185m	>50 >20 limit/base NONE	30 12 5 0 2337 34 26012 <u>current</u> 40 1 2 2 <u>current</u> NONE	19 8 13 41 1030 54 24416 history1 15 4 0 history1 NONE	    history2   history2
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium VISUAL White Metal Yellow Metal	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m XW D5185m	>50 >20 limit/base NONE NONE	30 12 5 0 2337 34 26012 <u>current</u> 40 1 2 <u>current</u> NONE NONE	19 8 13 41 1030 54 24416 history1 15 4 0 history1 NONE NONE	    history2  history2
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m XM D5185m *Visual	>50 >20 limit/base NONE NONE NONE	30 12 5 0 2337 34 26012 <u>current</u> 40 1 2 2 <u>current</u> NONE NONE NONE	19 8 13 41 1030 54 24416 <u>history1</u> 15 4 0 <u>history1</u> NONE NONE NONE NONE	     history2   history2
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m *Visual *Visual *Visual	>50 >20 limit/base NONE NONE NONE NONE	30 12 5 0 2337 34 26012 <u>current</u> 40 1 2 2 <u>current</u> NONE NONE NONE NONE	19 8 13 41 1030 54 24416 history1 15 4 0 <u>history1</u> NONE NONE NONE NONE NONE	    history2  history2  history2
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt Debris	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m *Visual *Visual *Visual *Visual *Visual	>50 >20 Imit/base NONE NONE NONE NONE NONE	30 12 5 0 2337 34 26012 current 40 1 2 2 current NONE NONE NONE NONE NONE NONE	19 8 13 41 1030 54 24416 history1 15 4 0 history1 NONE NONE NONE NONE NONE NONE NONE	     history2  history2
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt Debris Sand/Dirt	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m *Visual *Visual *Visual *Visual *Visual *Visual *Visual	>50 >20 Iimit/base NONE NONE NONE NONE NONE	30 12 5 0 2337 34 26012 Current 40 1 2 Current 40 1 2 Current NONE NONE NONE NONE NONE NONE NONE	19 8 13 41 1030 54 24416 history1 15 4 0 history1 NONE NONE NONE NONE NONE NONE NONE NON	     history2   history2
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt Debris Sand/Dirt Appearance	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m *Visual *Visual *Visual *Visual *Visual *Visual *Visual *Visual	>50 >20 Imit/base NONE NONE NONE NONE NONE NONE NONE NONE	30 12 5 0 2337 34 26012 Current 40 1 2 Current 2 NONE NONE NONE NONE NONE NONE NONE NO	19 8 13 41 1030 54 24416 history1 15 4 0 history1 NONE NONE NONE NONE NONE NONE NONE NON	     history2  history2
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt Debris Sand/Dirt Appearance Odor	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m *Visual *Visual *Visual *Visual *Visual *Visual *Visual *Visual *Visual *Visual	>50 220 Iimit/base NONE NONE NONE NONE NONE NONE NONE NONE NONE	30 12 5 0 2337 34 26012 Current 40 1 2 Current 40 1 2 Current NONE NONE NONE NONE NONE NONE NONE NON	19 8 13 41 1030 54 24416 history1 15 4 0 history1 NONE NONE NONE NONE NONE NONE NONE NON	     history2  history2        -
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt Debris Sand/Dirt Appearance	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m *Visual *Visual *Visual *Visual *Visual *Visual *Visual *Visual	>50 >20 Imit/base NONE NONE NONE NONE NONE NONE NONE NONE	30 12 5 0 2337 34 26012 Current 40 1 2 Current 2 NONE NONE NONE NONE NONE NONE NONE NO	19 8 13 41 1030 54 24416 history1 15 4 0 history1 NONE NONE NONE NONE NONE NONE NONE NON	     history2  history2



cSt (40°C)

# **OIL ANALYSIS REPORT**



To discuss this sample report, contact Customer Service at 1-800-237-1369. \* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

T: (703)393-7344 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) F: (703)393-7844

Report Id: VOLVO0002 [WUSCAR] 06216149 (Generated: 06/24/2024 08:56:19) Rev: 1

Contact/Location: MIKE MAYHUGH - VOLVO0002

MANASSAS, VA

US 20110

no image

no image