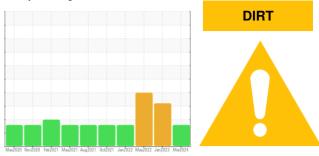


OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id

VOLVO 26424

Component Front Differential

Fluid PETRO CANADA TRAXON E SYNTHETIC 75W-90 (--- GAL)

DIAGNOSIS

A Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

Elemental level of silicon (Si) above normal indicating ingress of dirt/seal material.

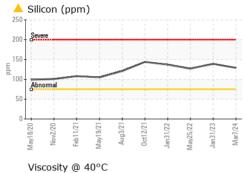
Fluid Condition

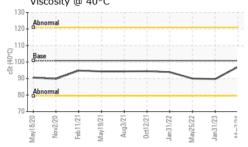
The condition of the oil is acceptable for the time in service.

SAMPLE INFORM		method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0116018	PCA0089388	PCA0074371
Sample Date		Client Info		07 Mar 2024	31 Jan 2023	25 May 2022
Machine Age	mls	Client Info		445614	425250	403289
Oil Age	mls	Client Info		445614	425250	403289
Oil Changed		Client Info		Not Changd	Not Changd	Not Changd
Sample Status				ABNORMAL	ABNORMAL	ABNORMAL
CONTAMINAT	ION	method	limit/base	current	history1	history2
Water		WC Method	>.2	NEG	NEG	NEG
WEAR METAL	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>500	370	5 81	5 27
Chromium	ppm	ASTM D5185m	>10	3	4	4
Nickel	ppm	ASTM D5185m	>10	12	9	8
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>25	2	3	<1
Lead	ppm	ASTM D5185m	>25	0	4 4	A 39
Copper	ppm	ASTM D5185m	>100	4	60	▲ 54
Tin	ppm	ASTM D5185m	>10	<1	3	3
Vanadium	ppm	ASTM D5185m		<1	0	0
Cadmium	ppm	ASTM D5185m		0	<1	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	229	202	145	145
D :						
Barium	ppm	ASTM D5185m	<1	<1	0	0
Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m	<1	<1 <1	0 1	0 <1
			<1			
Molybdenum	ppm	ASTM D5185m	<1	<1	1	<1
Molybdenum Manganese	ppm ppm	ASTM D5185m ASTM D5185m		<1 8	1 13	<1 12
Molybdenum Manganese Magnesium	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m		<1 8 4	1 13 4	<1 12 <1
Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	<1	<1 8 4 15	1 13 4 16	<1 12 <1 14
Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	<1	<1 8 4 15 1545	1 13 4 16 1345	<1 12 <1 14 1306
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	<1 1355	<1 8 4 15 1545 26 27374	1 13 4 16 1345 45	<1 12 <1 14 1306 33
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	<1 1355 22698 limit/base	<1 8 4 15 1545 26 27374	1 13 4 16 1345 45 24941	<1 12 <1 14 1306 33 26417
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method	<1 1355 22698 limit/base	<1 8 4 15 1545 26 27374 current	1 13 4 16 1345 45 24941 history1	<1 12 <1 14 1306 33 26417 history2
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon	ppm ppm ppm ppm ppm ppm ppm TS	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m MSTM D5185m Method ASTM D5185m	<1 1355 22698 limit/base >75	<1 8 4 15 1545 26 27374 current 129	1 13 4 16 1345 45 24941 history1 ▲ 139	<1 12 <1 14 1306 33 26417 history2 127
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm TS	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m ASTM D5185m	<1 1355 22698 limit/base >75	<1 8 4 15 1545 26 27374 <u>current</u> 129 17 8	1 13 4 16 1345 45 24941 history1 ▲ 139 5	<1 12 <1 14 1306 33 26417 history2 127 7
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm TS	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m Method ASTM D5185m ASTM D5185m ASTM D5185m	<1 1355 22698 limit/base >75 >20 limit/base NONE	<1 8 4 15 1545 26 27374 <u>current</u> 129 17 8	1 13 4 16 1345 45 24941 history1 ▲ 139 5 7	<1 12 <1 14 1306 33 26417 history2 ▲ 127 7 3
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium VISUAL	ppm ppm ppm ppm ppm ppm ppm TS ppm ppm ppm	ASTM D5185m ASTM D5185m	<1 1355 22698 limit/base >75 >20 limit/base	<1 8 4 15 1545 26 27374 current 129 17 8 current	1 13 4 16 1345 45 24941 ▲ 139 5 7 history1 NONE NONE	<1 12 <1 14 1306 33 26417 history2 127 7 3 3 history2
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate	ppm ppm ppm ppm ppm ppm ppm TS ppm ppm ppm ppm	ASTM D5185m ASTM D5185m Visual *Visual	<1 1355 22698 22698 imit/base >75 >20 imit/base NONE NONE NONE NONE	<1 8 4 15 1545 26 27374 current 129 17 8 current NONE	1 13 4 16 1345 45 24941 ▲ 139 5 7 7 history1 NONE NONE NONE NONE	12 12 14 1306 33 26417 history2 127 7 3 NONE NONE NONE NONE NONE
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt	ppm ppm ppm ppm ppm ppm ppm TS ppm ppm ppm ppm scalar scalar	ASTM D5185m ASTM D5185m Y Usual	<1 1355 22698 limit/base >75 >20 limit/base NONE NONE	<1 8 4 15 1545 26 27374 <i>current</i> 129 17 8 <i>current</i> NONE NONE NONE NONE	1 13 4 16 1345 45 24941 ▲ 139 5 7 history1 NONE NONE	<1 12 11 14 1306 33 26417 127 7 3 127 7 3 NONE NONE NONE NONE NONE NONE NONE N
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate	ppm ppm ppm ppm ppm ppm ppm TS ppm ppm ppm ppm scalar scalar scalar	ASTM D5185m ASTM D5185m Visual *Visual	<1 1355 22698 22698 imit/base >75 >20 imit/base NONE NONE NONE NONE	<1 8 4 15 1545 26 27374 27374 129 17 8 Current NONE NONE NONE NONE NONE NONE NONE NON	1 13 4 16 1345 24941 ▲ 139 5 7 NONE NONE NONE NONE NONE NONE NONE N	12 12 14 1306 33 26417 history2 127 7 3 NONE NONE NONE NONE NONE
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt	ppm ppm ppm ppm ppm ppm ppm TS ppm ppm ppm ppm scalar scalar scalar scalar	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	<1 1355 22698 22698 imit/base >75 >20 imit/base NONE NONE NONE NONE	<1 8 4 15 1545 26 27374 <i>current</i> 129 17 8 <i>current</i> NONE NONE NONE NONE	1 13 4 16 1345 45 24941 139 5 7 history1 NONE NONE NONE NONE NONE NONE NONE NONE NONE	<1 12 11 14 1306 33 26417 127 7 3 127 7 3 NONE NONE NONE NONE NONE NONE NONE N
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAM Silicon Sodium Potassium VISUAL VISUAL Vhite Metal Yellow Metal Precipitate Silt Debris Sand/Dirt Appearance	ppm ppm ppm ppm ppm ppm ppm TS ppm ppm ppm ppm scalar scalar scalar scalar scalar	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	<1 1355 22698 limit/base >75 >20 limit/base NONE NONE NONE NONE NONE NONE NONE NONE NONE NONE NONE	<1 8 4 15 1545 26 27374 Current 129 17 8 Current NONE	1 13 4 16 1345 45 24941 history1 139 5 7 NONE NORML	 <1 12 <1 1306 33 26417 history2 127 7 3 history2 NONE NORML
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium VISUAL VHIE Metal Yellow Metal Precipitate Silt Debris Sand/Dirt Appearance Odor	ppm ppm ppm ppm ppm ppm ppm TS ppm ppm ppm ppm scalar scalar scalar scalar scalar scalar	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	<1 1355 22698 imit/base >75 20 imit/base NONE	<1 8 4 15 1545 26 27374 27374 129 17 8 Current NONE NONE NONE NONE NONE NONE NONE NO	1 13 4 16 1345 45 24941 history1 139 5 7 history1 NONE NORML NORML 	 <1 12 <1 1306 33 26417 history2 127 7 3 history2 NONE NORML NORML NORML NORML
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAM Silicon Sodium Potassium VISUAL VISUAL Vhite 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	<1 1355 22698 limit/base >75 >20 limit/base NONE NONE NONE NONE NONE NONE NONE NONE NONE NONE NONE	<1 8 4 15 1545 26 27374 Current 129 17 8 Current NONE	1 13 4 16 1345 45 24941 history1 139 5 7 NONE NORML	 <1 12 <1 1306 33 26417 history2 127 7 3 history2 NONE NORML

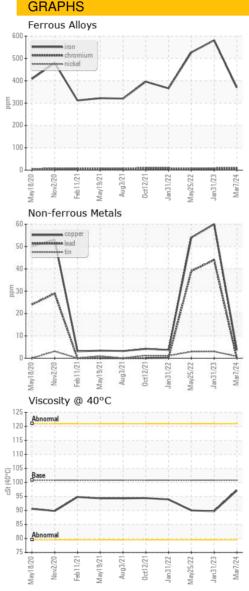


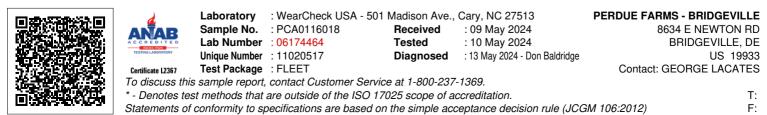
OIL ANALYSIS REPORT





FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	100.8	97.1	89.7	90.0
SAMPLE IMAGES		method	limit/base	current	history1	history2
Color				no image	no image	no image
Bottom				no image	no image	no image





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Submitted By: Jeffrey Mitchell Page 2 of 2