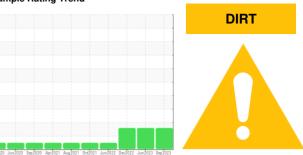


OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id

VOLVO VN12 26594 (S/N 4V4WC9EH1JN598492)

Rear Differential

Fluid

PETRO CANADA TRAXON SYNTHETIC 75W90 (--- GAL)

DIAGNOSIS

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.

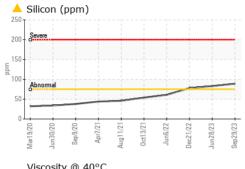
Fluid Condition

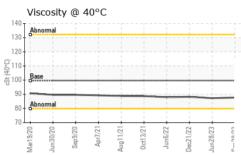
The condition of the oil is acceptable for the time in service.

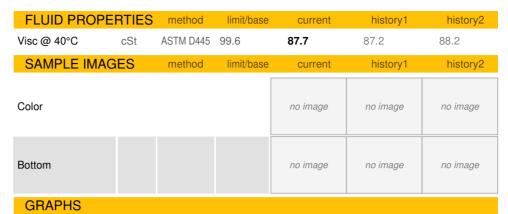
Sample Number Sample Date Machine Age mls Oil Age mls Oil Changed Sample Status CONTAMINATION Water WEAR METALS Iron ppm Chromium ppm Nickel ppm Titanium ppm Silver ppm Aluminum ppm Lead ppm Copper ppm Tin ppm Vanadium ppm Cadmium ppm Barium ppm Molybdenum ppm Manganese ppm Manganese ppm Calcium ppm Calcium ppm Silver ppm Calcium ppm Silver ppm Calcium ppm Contantination ppm Calcium ppm Contantination ppm Calcium ppm Cal	Client Info Method WC Method ASTM D5185m	limit/base	PCA0105549 29 Sep 2023 518714 518714 Not Changd ABNORMAL	PCA0100533 28 Jun 2023 495844 495844 N/A ABNORMAL history1 NEG history1 457 3 11 <1 0 8 0 3 <1	PCA0085281 21 Dec 2022 439639 439639 Not Changd ABNORMAL history2 NEG history2 384 3 10 <1 0 9 0 3
Sample Date Machine Age mls Oil Age mls Oil Changed Sample Status CONTAMINATION Water WEAR METALS Iron ppm Chromium ppm Nickel ppm Titanium ppm Silver ppm Aluminum ppm Lead ppm Copper ppm Tin ppm Vanadium ppm Cadmium ppm Barium ppm Molybdenum ppm Manganese ppm Magnesium ppm Calcium ppm Zinc ppm Sulfur ppm Sulfur ppm CoNTAMINANTS Silicon ppm Sodium ppm Sodium ppm Sodium ppm Contamina ppm Contamina ppm Calcium ppm Visual scalar VISUAL White Metal scalar Vellow Metal	Client Info Client Info Client Info Client Info Client Info Client Info Method WC Method ASTM D5185m	>.2 limit/base >500 >10 >10 >25 >25 >100	29 Sep 2023 518714 518714 Not Changd ABNORMAL	495844 495844 N/A ABNORMAL history1 NEG history1 457 3 11 <1 0 8 0 3	21 Dec 2022 439639 439639 Not Changd ABNORMAL history2 NEG history2 384 3 10 <1 0
Machine Age mls Oil Age oil Age Oil Changed Sample Status CONTAMINATION Water WEAR METALS Iron ppm Chromium ppm Nickel ppm Titanium ppm Silver ppm Aluminum ppm Lead ppm Copper ppm Tin ppm Vanadium ppm Cadmium ppm Barium ppm Molybdenum ppm Manganese ppm Magnesium ppm Calcium ppm Zinc ppm Sulfur ppm Sulfur ppm CONTAMINANTS Silicon ppm Sodium ppm Sodium ppm Sodium ppm VISUAL White Metal scalar Yellow Metal Source Mampel Status MISONTAMINANTS MISONTAMINANTS	Client Info Client Info Client Info Method WC Method ASTM D5185m	>.2 limit/base >500 >10 >10 >25 >25 >100	518714 518714 Not Changd ABNORMAL	495844 N/A ABNORMAL history1 NEG history1 457 3 11 <1 0 8 0 3	439639 Not Changd ABNORMAL history2 NEG history2 384 3 10 <1 0 9 0
Oil Age Oil Changed Sample Status CONTAMINATION Water WEAR METALS Iron ppm Chromium ppm Nickel ppm Titanium ppm Silver ppm Aluminum ppm Lead ppm Copper ppm Tin ppm Vanadium ppm Cadmium ppm Barium ppm Barium ppm Molybdenum ppm Manganese ppm Magnesium ppm Calcium ppm Calcium ppm Zinc ppm Sulfur ppm CONTAMINANTS Silicon ppm Sodium ppm Sodium ppm VISUAL White Metal scalar Vellow Metal Sultanius Wear Metal CONTAMINAL White Metal Scalar Yellow Metal Scalar	method WC Method Method ASTM D5185m	>.2 limit/base >500 >10 >10 >25 >25 >100	Not Changd ABNORMAL current NEG current 486 3 12 <1 0 9 1 5 <1	N/A ABNORMAL history1 NEG history1 457 3 11 <1 0 8 0 3	Not Changd ABNORMAL history2 NEG history2 384 3 10 <1 0 9 0
Oil Changed Sample Status CONTAMINATION Water WEAR METALS Iron ppm Chromium ppm Nickel ppm Titanium ppm Silver ppm Aluminum ppm Lead ppm Copper ppm Tin ppm Vanadium ppm Vanadium ppm Barium ppm Barium ppm Molybdenum ppm Manganese ppm Magnesium ppm Calcium ppm Contamination ppm Silicon ppm Sodium ppm Sodium ppm VISUAL White Metal scalar Yellow Metal	method WC Method Method ASTM D5185m	>.2 limit/base >500 >10 >10 >25 >25 >100	ABNORMAL current NEG current 486 3 12 <1 0 9 1 5 <1	ABNORMAL history1 NEG history1 457 3 111 <1 0 8 0 3	ABNORMAL history2 NEG history2 384 3 10 <1 0 9 0
CONTAMINATION Water WEAR METALS Iron ppm Chromium ppm Nickel ppm Titanium ppm Aluminum ppm Lead ppm Copper ppm Tin ppm Vanadium ppm ADDITIVES Boron ppm Barium ppm Manganese ppm Manganese ppm Manganese ppm Calcium ppm Contaminants Silicon ppm Sodium ppm VISUAL White Metal scalar Yellow Metal scalar	WC Method method ASTM D5185m	>.2 limit/base >500 >10 >10 >25 >25 >100	ABNORMAL current NEG current 486 3 12 <1 0 9 1 5 <1	history1 NEG history1 457 3 11 <1 0 8 0 3	ABNORMAL history2 NEG history2 384 3 10 <1 0 9 0
Water WEAR METALS Iron ppm Chromium ppm Nickel ppm Titanium ppm Silver ppm Aluminum ppm Lead ppm Copper ppm Tin ppm Vanadium ppm ADDITIVES Boron ppm Barium ppm Molybdenum ppm Manganese ppm Magnesium ppm Calcium ppm Calcium ppm Calcium ppm Containe ppm Calcium ppm Containe ppm Solium ppm VISUAL White Metal scalar Yellow Metal scalar	WC Method method ASTM D5185m	>.2 limit/base >500 >10 >10 >25 >25 >100	NEG current 486 3 12 <1 0 9 1 5 <1	NEG history1 457 3 11 <1 0 8 0 3	NEG history2 384 3 10 <1 0 9 0
WEAR METALS Iron ppm Chromium ppm Nickel ppm Titanium ppm Silver ppm Aluminum ppm Lead ppm Copper ppm Tin ppm Vanadium ppm Cadmium ppm Barium ppm Molybdenum ppm Manganese ppm Magnesium ppm Calcium ppm Contaminants Silicon ppm Sodium ppm VISUAL White Metal scalar Yellow Metal scalar	Method ASTM D5185m	limit/base	current 486 3 12 <1 0 9 1 5 <1	history1 457 3 11 <1 0 8 0 3	history2 384 3 10 <1 0 9 0
Iron ppm Chromium ppm Nickel ppm Titanium ppm Silver ppm Aluminum ppm Lead ppm Tin ppm Vanadium ppm Cadmium ppm ADDITIVES Boron ppm Barium ppm Manganese ppm Magnesium ppm Calcium ppm Chosphorus ppm Zinc ppm Sulfur ppm Sodium ppm Sodium ppm Sodium ppm VISUAL White Metal scalar Yellow Metal scalar	ASTM D5185m	>500 >10 >10 >10 >25 >25 >25 >100	486 3 12 <1 0 9 1 5 <1	457 3 11 <1 0 8 0 3	384 3 10 <1 0 9
Chromium ppm Nickel ppm Titanium ppm Silver ppm Aluminum ppm Lead ppm Copper ppm Tin ppm Vanadium ppm Cadmium ppm ADDITIVES Boron ppm Barium ppm Molybdenum ppm Manganese ppm Magnesium ppm Calcium ppm Phosphorus ppm Zinc ppm Sulfur ppm CONTAMINANTS Silicon ppm Sodium ppm VISUAL White Metal scalar Yellow Metal scalar	ASTM D5185m	>10 >10 >25 >25 >25 >100	3 12 <1 0 9 1 5 <1	3 11 <1 0 8 0 3	3 10 <1 0 9
Nickel ppm Titanium ppm Silver ppm Aluminum ppm Lead ppm Copper ppm Tin ppm Vanadium ppm Cadmium ppm ADDITIVES Boron ppm Barium ppm Molybdenum ppm Manganese ppm Magnesium ppm Calcium ppm Calcium ppm Calcium ppm Chosphorus ppm Zinc ppm Sulfur ppm CONTAMINANTS Silicon ppm Sodium ppm Sodium ppm VISUAL White Metal scalar Yellow Metal scalar	ASTM D5185m	>10 >25 >25 >100	12 <1 0 9 1 5 <1	11 <1 0 8 0 3	10 <1 0 9
Titanium ppm Silver ppm Aluminum ppm Lead ppm Copper ppm Tin ppm Vanadium ppm Cadmium ppm ADDITIVES Boron ppm Barium ppm Molybdenum ppm Manganese ppm Magnesium ppm Calcium ppm Calcium ppm Chosphorus ppm Zinc ppm Sulfur ppm CONTAMINANTS Silicon ppm Sodium ppm Sodium ppm VISUAL White Metal scalar Yellow Metal scalar	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>25 >25 >100	<1 0 9 1 5 <1	<1 0 8 0 3	<1 0 9 0
Silver ppm Aluminum ppm Lead ppm Copper ppm Tin ppm Vanadium ppm Cadmium ppm ADDITIVES Boron ppm Barium ppm Molybdenum ppm Manganese ppm Magnesium ppm Calcium ppm Calcium ppm Chosphorus ppm Zinc ppm Sulfur ppm CONTAMINANTS Silicon ppm Sodium ppm Potassium ppm VISUAL White Metal scalar Yellow Metal scalar	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>25 >100	0 9 1 5 <1	0 8 0 3	0 9 0
Aluminum ppm Lead ppm Copper ppm Tin ppm Vanadium ppm Cadmium ppm ADDITIVES Boron ppm Barium ppm Molybdenum ppm Manganese ppm Magnesium ppm Calcium ppm Calcium ppm Calcium ppm Calcium ppm Contaminant Silicon ppm Sodium ppm Sodium ppm VISUAL White Metal scalar Yellow Metal scalar	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>25 >100	9 1 5 <1	8 0 3	9
Lead ppm Copper ppm Tin ppm Vanadium ppm Cadmium ppm ADDITIVES Boron ppm Barium ppm Molybdenum ppm Manganese ppm Magnesium ppm Calcium ppm Phosphorus ppm Zinc ppm Sulfur ppm CONTAMINANTS Silicon ppm Sodium ppm Potassium ppm VISUAL White Metal scalar Yellow Metal scalar	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>25 >100	1 5 <1	0	0
Copper ppm Tin ppm Vanadium ppm Cadmium ppm ADDITIVES Boron ppm Barium ppm Molybdenum ppm Manganese ppm Magnesium ppm Calcium ppm Phosphorus ppm Zinc ppm Sulfur ppm CONTAMINANTS Silicon ppm Sodium ppm Potassium ppm VISUAL White Metal scalar Yellow Metal scalar	ASTM D5185m ASTM D5185m ASTM D5185m	>100	5 <1	3	
Tin ppm Vanadium ppm Cadmium ppm ADDITIVES Boron ppm Barium ppm Molybdenum ppm Manganese ppm Magnesium ppm Calcium ppm Phosphorus ppm Zinc ppm Sulfur ppm CONTAMINANTS Silicon ppm Sodium ppm Potassium ppm VISUAL White Metal scalar Yellow Metal scalar	ASTM D5185m ASTM D5185m		<1		3
Vanadium ppm Cadmium ppm ADDITIVES Boron ppm Barium ppm Molybdenum ppm Manganese ppm Magnesium ppm Calcium ppm Phosphorus ppm Zinc ppm Sulfur ppm CONTAMINANTS Silicon ppm Sodium ppm Sodium ppm VISUAL White Metal scalar Yellow Metal scalar	ASTM D5185m	>10		<1	
Cadmium ppm ADDITIVES Boron ppm Barium ppm Molybdenum ppm Manganese ppm Magnesium ppm Calcium ppm Phosphorus ppm Zinc ppm Sulfur ppm CONTAMINANTS Silicon ppm Sodium ppm Potassium ppm VISUAL White Metal scalar Yellow Metal scalar			<1	~ 1	<1
ADDITIVES Boron ppm Barium ppm Molybdenum ppm Manganese ppm Magnesium ppm Calcium ppm Phosphorus ppm Zinc ppm Sulfur ppm CONTAMINANTS Silicon ppm Sodium ppm Potassium ppm VISUAL White Metal scalar Yellow Metal scalar	ASTM D5185m			0	<1
Boron ppm Barium ppm Molybdenum ppm Manganese ppm Magnesium ppm Calcium ppm Phosphorus ppm Zinc ppm Sulfur ppm CONTAMINANTS Silicon ppm Sodium ppm Potassium ppm VISUAL White Metal scalar Yellow Metal scalar			<1	0	0
Barium ppm Molybdenum ppm Manganese ppm Magnesium ppm Calcium ppm Phosphorus ppm Zinc ppm Sulfur ppm CONTAMINANTS Silicon ppm Sodium ppm Potassium ppm VISUAL White Metal scalar Yellow Metal scalar	method	limit/base	current	history1	history2
Molybdenum ppm Manganese ppm Magnesium ppm Calcium ppm Phosphorus ppm Zinc ppm Sulfur ppm CONTAMINANTS Silicon ppm Sodium ppm Potassium ppm VISUAL White Metal scalar Yellow Metal scalar	ASTM D5185m	328	177	181	161
Manganese ppm Magnesium ppm Calcium ppm Phosphorus ppm Zinc ppm Sulfur ppm CONTAMINANTS Silicon ppm Sodium ppm VISUAL White Metal scalar Yellow Metal scalar	ASTM D5185m	1	9	2	0
Magnesium ppm Calcium ppm Phosphorus ppm Zinc ppm Sulfur ppm CONTAMINANTS Silicon ppm Sodium ppm Potassium ppm VISUAL White Metal scalar Yellow Metal scalar	ASTM D5185m		<1	<1	<1
Calcium ppm Phosphorus ppm Zinc ppm Sulfur ppm CONTAMINANTS Silicon ppm Sodium ppm Potassium ppm VISUAL White Metal scalar Yellow Metal scalar	ASTM D5185m		13	13	11
Phosphorus ppm Zinc ppm Sulfur ppm CONTAMINANTS Silicon ppm Sodium ppm Potassium ppm VISUAL White Metal scalar Yellow Metal scalar	ASTM D5185m	1	5	2	5
Zinc ppm Sulfur ppm CONTAMINANTS Silicon ppm Sodium ppm Potassium ppm VISUAL White Metal scalar Yellow Metal scalar	ASTM D5185m	7	21	17	23
Sulfur ppm CONTAMINANTS Silicon ppm Sodium ppm Potassium ppm VISUAL White Metal scalar Yellow Metal scalar	ASTM D5185m	1145	1568	1476	1370
CONTAMINANTS Silicon ppm Sodium ppm Potassium ppm VISUAL White Metal scalar Yellow Metal scalar	ASTM D5185m	3	36	30	29
Silicon ppm Sodium ppm Potassium ppm VISUAL White Metal scalar Yellow Metal scalar	ASTM D5185m	17909	26641	28387	24476
Sodium ppm Potassium ppm VISUAL White Metal scalar Yellow Metal scalar	method	limit/base	current	history1	history2
Potassium ppm VISUAL White Metal scalar Yellow Metal scalar	ASTM D5185m	>75	<u>^</u> 89	<u>83</u>	<u>^</u> 78
VISUAL White Metal scalar Yellow Metal scalar	ASTM D5185m		22	22	20
White Metal scalar Yellow Metal scalar	ASTM D5185m	>20	8	6	6
Yellow Metal scalar	method	limit/base	current	history1	history2
	*Visual	NONE	NONE	NONE	NONE
Descriptions :	*Visual	NONE	NONE	NONE	NONE
Precipitate scalar	*Visual	NONE	NONE	NONE	NONE
Silt scalar	*Visual	NONE	NONE	NONE	NONE
Debris scalar		NONE	NONE	NONE	NONE
Sand/Dirt scalar		NONE	NONE	NONE	NONE
Appearance scalar	*Visual	NORML	NORML	NORML	NORML
Odor scalar	*Visual		NORML	NORML	NORML
Emulsified Water scalar	*Visual *Visual *Visual	NORML		NEG	NEG
Free Water scalar	*Visual *Visual *Visual *Visual	NORML >.2	NEG	NEG	NEG

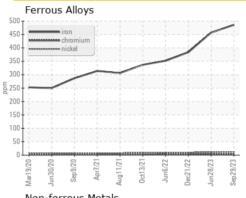


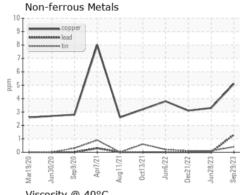
OIL ANALYSIS REPORT

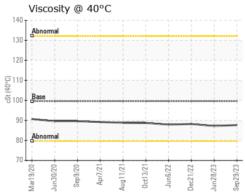
















Certificate 12367

Laboratory Sample No.

Test Package : FLEET

: PCA0105549 Lab Number : 06174469 Unique Number : 11020522

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 09 May 2024

Tested : 10 May 2024 Diagnosed : 13 May 2024 - Don Baldridge **PERDUE FARMS - BRIDGEVILLE**

8634 E NEWTON RD BRIDGEVILLE, DE US 19933

Contact: GEORGE LACATES

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.

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

T:

F: