

OIL ANALYSIS REPORT

Sample Rating Trend

Area Walgreens - Tractor [Walgreens - Tractor] 136A624092

Diesel Engine

PETRO CANADA DURON SHP 10W30 (11 GAL)

DIAGNOSIS

A Recommendation

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

📥 Wear

The copper level is abnormal. In the absence of other significant wear metals, suspect copper due to sources other than wear (i.e. cooling core).

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

AL) SAMPLE INFORM Sample Number Sample Date Machine Age Oil Age Oil Changed Sample Status CONTAMINATIO Fuel Water Glycol WEAR METALS Iron Chromium Nickel Titanium Silver Aluminum Lead Copper Tin Vanadium	mls mls ON	Client Info Client Info Client Info Client Info Client Info WC Method WC Method WC Method WC Method MC Method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	sed003 Iimit/base >5 >0.2 Iimit/base >80 >5 >2 Iimit/base >80 >5 >2 >2 >3 >30		history1 PCA0093862 29 Sep 2023 24042 N/A NORMAL history1 <1.0 NEG NEG history1 34 2 1 <1.0	history2 history2 history2 history2 history2
Sample Number Sample Date Machine Age Oil Age Oil Changed Sample Status CONTAMINATIO Fuel Water Glycol WEAR METALS Iron Chromium Nickel Titanium Silver Aluminum Lead Copper Tin	mls mls ON ON ppm ppm ppm ppm ppm	Client Info Client Info Client Info Client Info Client Info WC Method WC Method WC Method WC Method MC Method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base >5 >0.2 limit/base >80 >5 >2 >2 >3	PCA0093940 01 Mar 2024 79885 79885 Not Changd ABNORMAL current <1.0 NEG NEG NEG 19 2 <1 2 <1 2 <1	PCA0093862 29 Sep 2023 24042 24042 N/A NORMAL 4.1.0 NEG NEG NEG history1 34 2 1 34 2 1 1 <1	 history2 history2
Sample Date Machine Age Oil Age Oil Changed Sample Status CONTAMINATIO Fuel Water Glycol WEAR METALS Iron Chromium Nickel Titanium Silver Aluminum Lead Copper Tin	mls ON ON ppm ppm ppm ppm ppm	Client Info Client Info Client Info Client Info Client Info WC Method WC Method WC Method WC Method WC Method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>5 >0.2 limit/base >80 >5 >2 >2 >3	01 Mar 2024 79885 79885 Not Changd ABNORMAL current <1.0 NEG NEG 0 current 19 2 <1 2 <1 2 <1	29 Sep 2023 24042 24042 N/A NORMAL 4.0 NEG NEG NEG history1 34 2 1 1 <1	 history2 history2
Machine Age Oil Age Oil Changed Sample Status CONTAMINATIO Fuel Water Glycol WEAR METALS Iron Chromium Nickel Titanium Silver Aluminum Lead Copper Tin	mls ON ON ppm ppm ppm ppm ppm	Client Info Client Info Client Info WC Method WC Method WC Method WC Method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>5 >0.2 limit/base >80 >5 >2 >2 >3	79885 79885 Not Changd ABNORMAL current <1.0 NEG NEG 0 Urrent 19 2 <1 2 <1 2 <1	24042 24042 N/A NORMAL <1.0 NEG NEG history1 34 2 1 34 2 1 1 <1	 history2 history2
Machine Age Oil Age Oil Changed Sample Status CONTAMINATIO Fuel Water Glycol WEAR METALS Iron Chromium Nickel Titanium Silver Aluminum Lead Copper Tin	mls ON ON ppm ppm ppm ppm ppm	Client Info Client Info Method WC Method WC Method WC Method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>5 >0.2 limit/base >80 >5 >2 >2 >3	79885 Not Changd ABNORMAL current <1.0 NEG NEG current 19 2 <1 2 <1 2 <1	24042 24042 N/A NORMAL <1.0 NEG NEG history1 34 2 1 34 2 1 1 <1	 history2 history2 -
Oil Changed Sample Status CONTAMINATIO Fuel Water Glycol WEAR METALS Iron Chromium Nickel Titanium Silver Aluminum Lead Copper Tin	ON ppm ppm ppm ppm ppm	Client Info method WC Method WC Method WC Method WC Method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>5 >0.2 limit/base >80 >5 >2 >2 >3	Not Changd ABNORMAL current <1.0 NEG NEG current 19 2 <1 2 <1 2 <1	N/A NORMAL history1 <1.0 NEG NEG history1 34 2 1 34 2 1 1 <1	 history2 history2
Sample Status CONTAMINATIO Fuel Water Glycol WEAR METALS Iron Chromium Nickel Titanium Silver Aluminum Lead Copper Tin	ppm ppm ppm ppm ppm	Method WC Method WC Method WC Method WC Method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>5 >0.2 limit/base >80 >5 >2 >2 >3	ABNORMAL current <1.0 NEG NEG 19 2 <1 2 <1 2 <1	NORMAL history1 <1.0 NEG NEG history1 34 2 1 1 <1	 history2 history2
CONTAMINATIO Fuel Water Glycol WEAR METALS Iron Chromium Nickel Titanium Silver Aluminum Lead Copper Tin	ppm ppm ppm ppm ppm	WC Method WC Method WC Method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>5 >0.2 limit/base >80 >5 >2 >2 >3	current <1.0	history1 <1.0	history2 history2
Fuel Water Glycol WEAR METALS Iron Chromium Nickel Titanium Silver Aluminum Lead Copper Tin	ppm ppm ppm ppm ppm	WC Method WC Method WC Method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>5 >0.2 limit/base >80 >5 >2 >2 >3	<1.0 NEG NEG current 19 2 <1 2 <1 2 <1	<1.0 NEG NEG history1 34 2 1 <1	 history2
Water Glycol WEAR METALS Iron Chromium Nickel Titanium Silver Aluminum Lead Copper Tin	ppm ppm ppm ppm ppm	WC Method WC Method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>0.2 limit/base >80 >5 >2 >2 >3	NEG NEG current 19 2 <1 2 <1 2 <1	NEG NEG history1 34 2 1 <1	 history2
Glycol WEAR METALS Iron Chromium Nickel Titanium Silver Aluminum Lead Copper Tin	ppm ppm ppm ppm ppm	WC Method method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base >80 >5 >2 >3	NEG NEG current 19 2 <1 2 <1 2 <1	NEG history1 34 2 1 <1	 history2
Glycol WEAR METALS Iron Chromium Nickel Titanium Silver Aluminum Lead Copper Tin	ppm ppm ppm ppm ppm	WC Method method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base >80 >5 >2 >3	NEG current 19 2 <1 2 <1 2	NEG history1 34 2 1 <1	history2
WEAR METALS	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>80 >5 >2 >3	19 2 <1 2 <1	34 2 1 <1	
Iron Chromium Nickel Titanium Silver Aluminum Lead Copper Tin	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>80 >5 >2 >3	19 2 <1 2 <1	34 2 1 <1	
Chromium Nickel Titanium Silver Aluminum Lead Copper Tin	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>5 >2 >3	2 <1 2 <1	2 1 <1	
Nickel Titanium Silver Aluminum Lead Copper Tin	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>2 >3	<1 2 <1	1 <1	
Titanium Silver Aluminum Lead Copper Tin	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	>3	2 <1	<1	
Silver Aluminum Lead Copper Tin	ppm	ASTM D5185m ASTM D5185m		<1		
Aluminum Lead Copper Tin		ASTM D5185m			<1	
Lead Copper Tin	ppm		\30			
Copper Tin				50	23	
Tin	ppm	ASTM D5185m	>30	0	0	
	ppm	ASTM D5185m	>150	<u> </u>	176	
Vanadium	ppm	ASTM D5185m	>5	2	5	
	ppm	ASTM D5185m		0	<1	
Cadmium	ppm	ASTM D5185m		0	0	
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	2	0	44	
Barium	ppm	ASTM D5185m	0	0	0	
Molybdenum	ppm	ASTM D5185m	50	57	43	
Manganese	ppm	ASTM D5185m	0	1	3	
Magnesium	ppm	ASTM D5185m	950	872	502	
Calcium	ppm	ASTM D5185m	1050	1232	1684	
Phosphorus	ppm	ASTM D5185m	995	996	713	
Zinc	ppm	ASTM D5185m	1180	1187	896	
Sulfur	ppm	ASTM D5185m	2600	2931	2257	
CONTAMINANT	ΓS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>20	4	7	
Sodium	ppm	ASTM D5185m		2	1	
Potassium	ppm	ASTM D5185m	>20	110	79	
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	0.4	0.3	
Nitration	Abs/cm	*ASTM D7624		7.8	8.3	
Sulfation	Abs/.1mm	*ASTM D7415		19.1	23.1	
FLUID DEGRAD	ATION	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.3	22.3	
	mg KOH/g	ASTM D2896		7.6	8.4	

WEAR



OIL ANALYSIS REPORT

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Laboratory

Sample No.

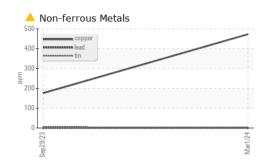
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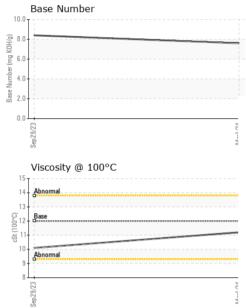
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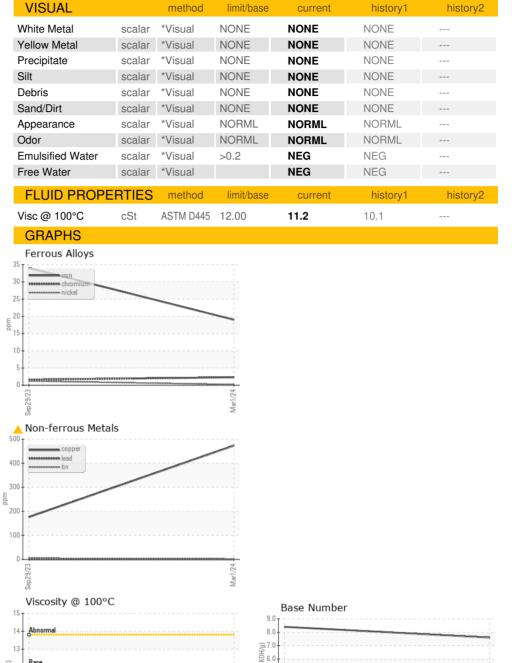
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: 14 Mar 2024 - Jonathan Hester Unique Number : 10925173 Diagnosed Test Package : FLEET Contact: Ryan Cruz Certificate L2367 To discuss this sample report, contact Customer Service at 1-800-237-1369. rcruz@transervice.com * - Denotes test methods that are outside of the ISO 17025 scope of accreditation. T: (951)924-7131 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) F: (951)924-7151

: WearCheck USA - 501 Madison Ave., Cary, NC 27513

Received

Tested

17500 Perris Blvd.

Moreno Valley, CA

Transervice - Shop 1372 - Berkeley-Moreno Valley

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