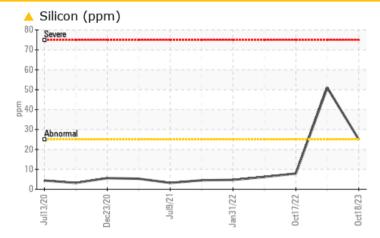


COMPONENT CONDITION SUMMARY



RECOMMENDATION

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

PROBLEMATIC TEST RESULTS							
Sample Status				MARGINAL	ABNORMAL	NORMAL	
Silicon	ppm	ASTM D5185m	>25	<u> </u>	<u> </u>	8	

Customer Id: AVRAPP Sample No.: PCA0082823 Lab Number: 05986208 Test Package: FLEET



To manage this report scan the QR code

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

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

RECOMMENDED ACTIONS

There are no recommended actions for this sample.

HISTORICAL DIAGNOSIS

26 Sep 2023 Diag: Don Baldridge

DIRT



We advise that you check the air filter, air induction system, and any areas where dirt may enter the component. Resample at the next service interval to monitor.All component wear rates are normal. Elemental level of silicon (Si) above normal. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.

17 Oct 2022 Diag: Wes Davis



Resample at the next service interval to monitor. Please specify the component make and model with your next sample.All component wear rates are normal. There is no indication of any contamination in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

12 Jul 2022 Diag: Wes Davis

NORMAL



Resample at the next service interval to monitor. Please specify the component make and model with your next sample.All component wear rates are normal. There is no indication of any contamination in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.



view report







OIL ANALYSIS REPORT

Sample Rating Trend



Diesel Engine Fluid PETRO CANADA DURON HP 15W40 (11 GAL)

DIAGNOSIS

A Recommendation

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

Wear

Machine Id 553 Component

All component wear rates are normal.

Contamination

Elemental level of silicon (Si) above normal.

Fluid Condition

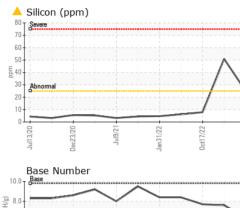
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.

SAMPLE INFORI	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0082823	PCA0082839	PCA0069309
Sample Date		Client Info		18 Oct 2023	26 Sep 2023	17 Oct 2022
Machine Age	hrs	Client Info		0	0	8733
Oil Age	hrs	Client Info		0	0	8733
Oil Changed		Client Info		Not Changd	Not Changd	N/A
Sample Status				MARGINAL	ABNORMAL	NORMAL
CONTAMINAT	ION	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Glycol		WC Method	20	NEG	NEG	NEG
,	~		1			
WEAR METAL	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	20	15	12
Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
Nickel	ppm	ASTM D5185m	>4	<1	<1	<1
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	3	0	2
Lead	ppm	ASTM D5185m	>40	6	2	4
Copper	ppm	ASTM D5185m	>330	1	1	1
Tin	ppm	ASTM D5185m	>15	<1	<1	<1
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
ADDITIVES Boron	ppm	ASTM D5185m	limit/base	current 2	history1 2	4
	ppm ppm		limit/base			
Boron		ASTM D5185m	limit/base	2	2	4
Boron Barium	ppm	ASTM D5185m ASTM D5185m	limit/base	2 0	2	4
Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	2 0 68	2 2 63	4 0 64
Boron Barium Molybdenum Manganese	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	2 0 68 0	2 2 63 <1	4 0 64 <1
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	2 0 68 0 978	2 2 63 <1 846	4 0 64 <1 1078
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	2 0 68 0 978 1171	2 2 63 <1 846 1079	4 0 64 <1 1078 1277
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		2 0 68 0 978 1171 1119	2 2 63 <1 846 1079 974	4 0 64 <1 1078 1277 1061
Boron Barium 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 ASTM D5185m	limit/base	2 0 68 0 978 1171 1119 1302	2 2 63 <1 846 1079 974 1146	4 0 64 <1 1078 1277 1061 1464
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	2 0 68 0 978 1171 1119 1302 3269	2 2 63 <1 846 1079 974 1146 2797	4 0 64 <1 1078 1277 1061 1464 3786
Boron Barium 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 ASTM D5185m	limit/base	2 0 68 0 978 1171 1119 1302 3269 current	2 2 63 <1 846 1079 974 1146 2797 history1	4 0 64 <1 1078 1277 1061 1464 3786 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon	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	limit/base >25	2 0 68 0 978 1171 1119 1302 3269 current ▲ 25	2 2 63 <1 846 1079 974 1146 2797 history1 ▲ 51	4 0 64 <1 1078 1277 1061 1464 3786 history2 8
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm TS	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base >25	2 0 68 0 978 1171 1119 1302 3269 current 25 0	2 2 63 <1 846 1079 974 1146 2797 history1 ▲ 51 0	4 0 64 <1 1078 1277 1061 1464 3786 history2 8 1
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm TS	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base >25 >20 limit/base	2 0 68 0 978 1171 1119 1302 3269 current ▲ 25 0 7	2 2 63 <1 846 1079 974 1146 2797 history1 ▲ 51 0 3	4 0 64 <1 1078 1277 1061 1464 3786 history2 8 1 4
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot %	ppm ppm ppm ppm ppm ppm ppm ppm TS ppm ppm ppm	ASTM D5185m ASTM D5185m	limit/base >25 >20 limit/base >3	2 0 68 0 978 1171 1119 1302 3269 current 25 0 7 7 current 0.4	2 2 63 <1 846 1079 974 1146 2797 history1 51 0 3 history1 0.3 	4 0 64 <1 1078 1277 1061 1464 3786 history2 8 1 4 history2 0.4
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED	ppm ppm ppm ppm ppm ppm ppm ppm TS	ASTM D5185m ASTM D5185m	limit/base >25 >20 limit/base >3	2 0 68 0 978 1171 1119 1302 3269 current 25 0 7	2 2 63 <1 846 1079 974 1146 2797 history1 ↓ 51 0 3 history1	4 0 64 <1 1078 1277 1061 1464 3786 history2 8 1 4 4
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	limit/base >25 >20 limit/base >3 >20	2 0 68 0 978 1171 1119 1302 3269 current ▲ 25 0 7 25 0 7 current 0.4 10.2	2 2 63 <1 846 1079 974 1146 2797 history1 ▲ 51 0 3 history1 0.3 9.0	4 0 64 <1 1078 1277 1061 1464 3786 history2 8 1 4 4 history2 0.4 9.8
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D7844 *ASTM D7844 *ASTM D7844	limit/base >25 >20 limit/base >3 >20 >30 >30 limit/base	2 0 68 0 978 1171 1119 1302 3269 current 25 0 7 current 0.4 10.2 21.8 current	2 2 63 <1 846 1079 974 1146 2797 history1 ▲ 51 0 3 history1 0.3 9.0 20.0 history1	4 0 64 <1 1078 1277 1061 1464 3786 history2 8 1 4 4 history2 0.4 9.8 21.3 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	limit/base >25 >20 limit/base >3 >20 >3 >20	2 0 68 0 978 1171 1119 1302 3269 current 25 0 7 25 0 7 current 0.4 10.2 21.8	2 2 63 <1 846 1079 974 1146 2797 history1 51 0 3 history1 0.3 9.0 20.0 	4 0 64 <1 1078 1277 1061 1464 3786 history2 8 1 4 history2 0.4 9.8 21.3



OIL ANALYSIS REPORT

VISUAL

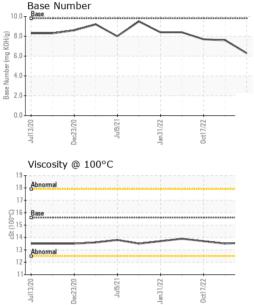


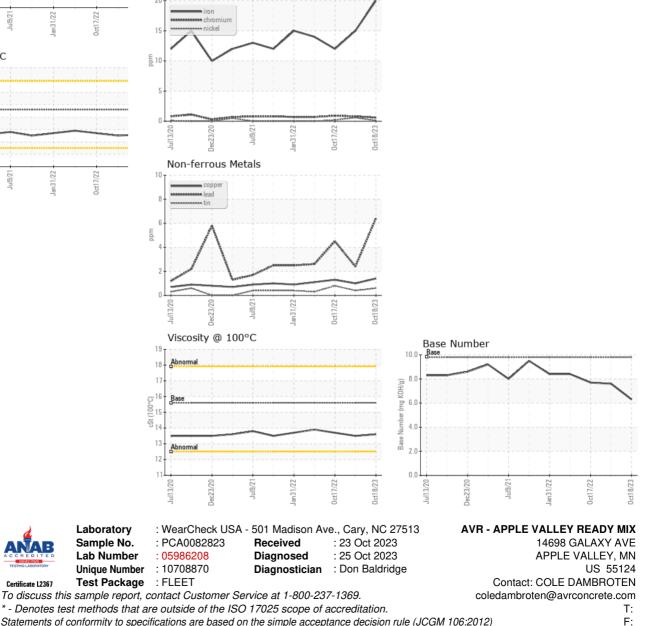
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG
FLUID PROPE	RTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.6	13.6	13.5	13.7
GRAPHS						
Ferrous Alloys						
iron			/			

method limit/base current

history1

history2





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