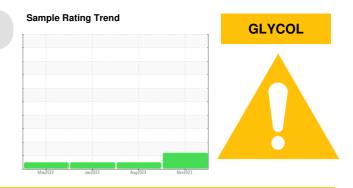


PROBLEM SUMMARY

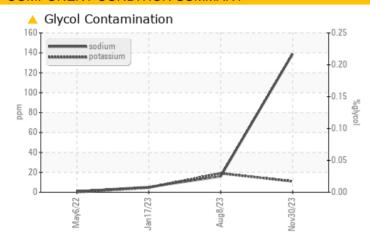
(89968X) Walgreens - Tractor [Walgreens - Tractor] 136A68053

Diesel Engine

PETRO CANADA DURON SHP 10W30 (11 GAL)



COMPONENT CONDITION SUMMARY



RECOMMENDATION

We advise that you check for the source of the coolant leak. Check for low coolant level. Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

PROBLEMATIC TEST RESULTS								
Sample Status				ABNORMAL	NORMAL	NORMAL		
Sodium	mag	ASTM D5185m		139	16	5		

Customer Id: TSV1373
Sample No.: PCA0111782
Lab Number: 06027403
Test Package: FLEET

To manage this report scan the QR code

To discuss the diagnosis or test data:
Jonathan Hester +1 919-379-4092 x4092
jhester@wearcheckusa.com

To change component or sample information:
Customer Service +1 1-800-237-1369

customerservice@wearcheck.com

RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Change Fluid			?	Oil and filter change at the time of sampling has been noted.
Change Filter			?	Oil and filter change at the time of sampling has been noted.
Resample			?	We recommend an early resample to monitor this condition.
Check Glycol Access			?	We advise that you check for the source of the coolant leak.

HISTORICAL DIAGNOSIS

08 Aug 2023 Diag: Wes Davis





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



17 Jan 2023 Diag: Wes Davis

NORMAL



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



06 May 2022 Diag: Wes Davis

NORMAL



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



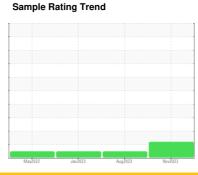


OIL ANALYSIS REPORT

(89968X) Walgreens - Tractor [Walgreens - Tractor] 136A68053

Diesel Engine

PETRO CANADA DURON SHP 10W30 (11 GAL)





DIAGNOSIS

Recommendation

We advise that you check for the source of the coolant leak. Check for low coolant level. Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

Wear

All component wear rates are normal.

Contamination

Sodium and/or potassium levels are high.

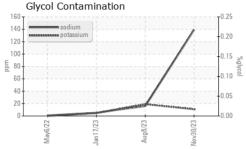
▲ Fluid Condition

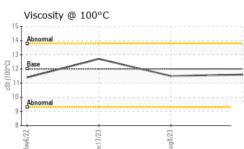
The BN result indicates that there is suitable alkalinity remaining in the oil.

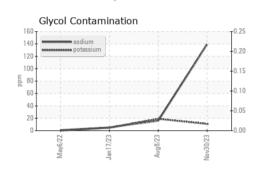
May2022 Jan2023 Aug2023 Nov2023						
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0111782	PCA0101020	PCA0090879
Sample Date		Client Info		30 Nov 2023	08 Aug 2023	17 Jan 2023
Machine Age	mls	Client Info		613018	605882	549078
Oil Age	mls	Client Info		63940	56735	61328
Oil Changed		Client Info		Changed	Changed	Changed
Sample Status				ABNORMAL	NORMAL	NORMAL
CONTAMINATI	ION	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
WEAR METALS	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>80	4	41	36
Chromium	ppm	ASTM D5185m	>5	0	2	2
Nickel	ppm	ASTM D5185m	>2	0	0	<1
Titanium	ppm	ASTM D5185m		0	0	<1
Silver	ppm	ASTM D5185m	>3	0	0	<1
Aluminum	ppm	ASTM D5185m	>30	2	17	18
Lead	ppm	ASTM D5185m	>30	0	0	1
Copper	ppm	ASTM D5185m	>150	<1	12	4
Tin	ppm	ASTM D5185m	>5	0	<1	1
Vanadium	ppm	ASTM D5185m		0	<1	<1
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES						history O
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm			current 2	history1 4	8
	ppm	ASTM D5185m ASTM D5185m	2			-
Boron Barium	ppm	ASTM D5185m	2	2	4	8
Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50	2 0	4 0 61	8 5
Boron Barium Molybdenum Manganese	ppm ppm	ASTM D5185m ASTM D5185m	2 0 50	2 0 64	4	8 5 59
Boron Barium Molybdenum	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0 950	2 0 64 <1 912	4 0 61 <1 874	8 5 59 <1
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0 950 1050	2 0 64 <1 912 1047	4 0 61 <1 874 1223	8 5 59 <1 833 1343
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0 950 1050 995	2 0 64 <1 912 1047 1017	4 0 61 <1 874 1223 983	8 5 59 <1 833 1343 1033
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0 950 1050	2 0 64 <1 912 1047	4 0 61 <1 874 1223	8 5 59 <1 833 1343
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 ASTM D5185m	2 0 50 0 950 1050 995 1180	2 0 64 <1 912 1047 1017	4 0 61 <1 874 1223 983 1247	8 5 59 <1 833 1343 1033 1335
Boron Barium 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 ASTM D5185m ASTM D5185m	2 0 50 0 950 1050 995 1180 2600	2 0 64 <1 912 1047 1017 1221 2998	4 0 61 <1 874 1223 983 1247 3124	8 5 59 <1 833 1343 1033 1335 3189
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN	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	2 0 50 0 950 1050 995 1180 2600 limit/base	2 0 64 <1 912 1047 1017 1221 2998	4 0 61 <1 874 1223 983 1247 3124 history1	8 5 59 <1 833 1343 1033 1335 3189
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 limit/base	2 0 64 <1 912 1047 1017 1221 2998 current	4 0 61 <1 874 1223 983 1247 3124 history1	8 5 59 <1 833 1343 1033 1335 3189 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 limit/base	2 0 64 <1 912 1047 1017 1221 2998 current 5	4 0 61 <1 874 1223 983 1247 3124 history1 9 16	8 5 59 <1 833 1343 1033 1335 3189 history2 7 5
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 limit/base	2 0 64 <1 912 1047 1017 1221 2998 current 5 139 11	4 0 61 <1 874 1223 983 1247 3124 history1 9 16 19	8 5 59 <1 833 1343 1033 1335 3189 history2 7 5 5
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Glycol	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 limit/base >20	2 0 64 <1 912 1047 1017 1221 2998 current 5 139 11 NEG	4 0 61 <1 874 1223 983 1247 3124 history1 9 16 19 NEG	8 5 59 <1 833 1343 1033 1335 3189 history2 7 5 5
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Glycol INFRA-RED	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m *ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 limit/base >20 >20	2 0 64 <1 912 1047 1017 1221 2998 current 5 ▲ 139 11 NEG current 0.3	4 0 61 <1 874 1223 983 1247 3124 history1 9 16 19 NEG	8 5 59 <1 833 1343 1033 1335 3189 history2 7 5 NEG history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Glycol INFRA-RED Soot %	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m *ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 limit/base >20 >20	2 0 64 <1 912 1047 1017 1221 2998 current 5 139 11 NEG	4 0 61 <1 874 1223 983 1247 3124 history1 9 16 19 NEG history1	8 5 59 <1 833 1343 1033 1335 3189 history2 7 5 NEG history2 2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Glycol INFRA-RED Soot % Nitration	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m *ASTM D7844 *ASTM D7624 *ASTM D7624	2 0 50 0 950 1050 995 1180 2600 limit/base >20 >20	2 0 64 <1 912 1047 1017 1221 2998 current 5 139 11 NEG current 0.3 6.0	4 0 61 <1 874 1223 983 1247 3124 history1 9 16 19 NEG history1 1.5 11.8	8 5 59 <1 833 1343 1033 1335 3189 history2 7 5 NEG history2 2 12.3
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Glycol INFRA-RED Soot % Nitration Sulfation FLUID DEGRAG	ppm	ASTM D5185m *ASTM D2982 method *ASTM D7844 *ASTM D7844 *ASTM D7844 *ASTM D7844 *ASTM D7844	2 0 50 0 950 1050 995 1180 2600 limit/base >20 >20 >3 >20 >30 limit/base	2 0 64 <1 912 1047 1017 1221 2998 current 5 139 11 NEG current 0.3 6.0 18.2 current	4 0 61 <1 874 1223 983 1247 3124 history1 9 16 19 NEG history1 1.5 11.8 27.2 history1	8 5 59 <1 833 1343 1033 1335 3189 history2 7 5 NEG history2 2 12.3 27.6 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Glycol INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m *ASTM D7844 *ASTM D7624 *ASTM D7624	2 0 50 0 950 1050 995 1180 2600 limit/base >20 >20 >3 >20 >30 limit/base	2 0 64 <1 912 1047 1017 1221 2998 current 5 ▲ 139 11 NEG current 0.3 6.0 18.2	4 0 61 <1 874 1223 983 1247 3124 history1 9 16 19 NEG history1 1.5 11.8 27.2	8 5 59 <1 833 1343 1033 1335 3189 history2 7 5 NEG history2 2 12.3 27.6



OIL ANALYSIS REPORT



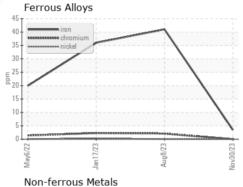


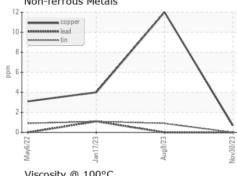


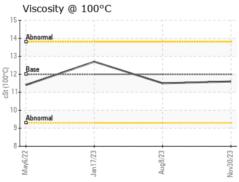
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	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

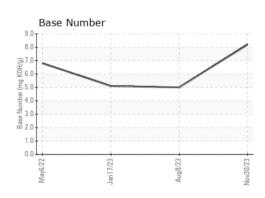
FLUID FROF	ELLIES	memod	IIIIII/Dase	Current	HISTORY	HISTOLYZ
Visc @ 100°C	cSt	ASTM D445	12.00	11.6	11.5	12.7

GRAPHS











Laboratory Sample No. Lab Number

Unique Number : 10777194

: PCA0111782 : 06027403

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

Diagnosed

: 07 Dec 2023 : 11 Dec 2023

Diagnostician : Jonathan Hester

Test Package : FLEET (Additional Tests: Glycol) 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)

Transervice - Shop 1373 - Berkeley-Anderson/Pendergrass

101 Alliance Parkway Willamston, SC US 29697

Contact: Sonny Boucher sboucher@transervice.com

T: (864)226-2304 F: (864)226-2329