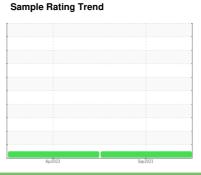


OIL ANALYSIS REPORT

(51471Z) Walgreens - Tractor [Walgreens - Tractor] 136A63325

Diesel Engine

PETRO CANADA DURON SHP 10W30 (11 GAL)





DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

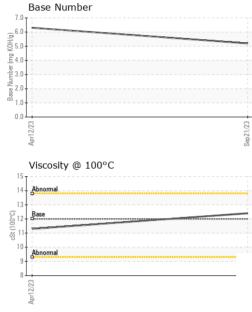
Fluid Condition

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

GAL)			Apr2023	Sep.2023		
SAMPLE INFOR	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0103526	PCA0094962	
Sample Date		Client Info		21 Sep 2023	12 Apr 2023	
Machine Age	mls	Client Info		148024	83506	
Oil Age	mls	Client Info		60000	83506	
Oil Changed	11110	Client Info		Changed	Changed	
Sample Status		Chorte trillo		NORMAL	NORMAL	
CONTAMINAT	ION	method	limit/base			
Fuel	ION	WC Method	>5	current	history1	history2
			>0	<1.0 NEG	<1.0 NEG	
Glycol		WC Method		NEG	NEG	
WEAR METAL	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>80	51	39	
Chromium	ppm	ASTM D5185m	>5	9	4	
Nickel	ppm	ASTM D5185m	>2	<1	<1	
Titanium	ppm	ASTM D5185m		0	0	
Silver	ppm	ASTM D5185m	>3	0	0	
Aluminum	ppm	ASTM D5185m	>30	38	33	
Lead	ppm	ASTM D5185m	>30	<1	0	
Copper	ppm	ASTM D5185m	>150	50	90	
Tin	ppm	ASTM D5185m	>5	<1	1	
Vanadium	ppm	ASTM D5185m		<1	0	
Cadmium	ppm	ASTM D5185m		0	0	
ADDITIVES		method	limit/base	current	history1	history2
ADDITIVES Boron	ppm	method ASTM D5185m	limit/base	current	history1	history2
	ppm					
Boron		ASTM D5185m	2	3	6	
Boron Barium	ppm	ASTM D5185m ASTM D5185m	2	3 0	6	
Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50	3 0 63	6 0 61	
Boron Barium Molybdenum Manganese	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0	3 0 63 2	6 0 61 2	
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0 950	3 0 63 2 995	6 0 61 2 951	
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0 950 1050	3 0 63 2 995 1177	6 0 61 2 951 1354	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	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	3 0 63 2 995 1177 996	6 0 61 2 951 1354 954	
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	3 0 63 2 995 1177 996	6 0 61 2 951 1354 954 1215	
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	3 0 63 2 995 1177 996 1269 2189	6 0 61 2 951 1354 954 1215 2574 history1	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 limit/base	3 0 63 2 995 1177 996 1269 2189 current	6 0 61 2 951 1354 954 1215 2574	 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 limit/base	3 0 63 2 995 1177 996 1269 2189	6 0 61 2 951 1354 954 1215 2574 history1	history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm	ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 limit/base	3 0 63 2 995 1177 996 1269 2189 current 8 3	6 0 61 2 951 1354 954 1215 2574 history1	history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED	ppm	ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 limit/base >20	3 0 63 2 995 1177 996 1269 2189 current 8 3 76	6 0 61 2 951 1354 954 1215 2574 history1 5 3 67 history1	history2 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot %	ppm	ASTM D5185m Method *ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 limit/base >20 	3 0 63 2 995 1177 996 1269 2189 current 8 3 76 current	6 0 61 2 951 1354 954 1215 2574 history1 5 3 67 history1 0.7	history2 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration	ppm	ASTM D5185m method *ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 limit/base >20 >20 limit/base	3 0 63 2 995 1177 996 1269 2189 current 8 3 76 current 1	6 0 61 2 951 1354 954 1215 2574 history1 5 3 67 history1 0.7 9.8	history2 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation	ppm	ASTM D5185m method ASTM D5185m ASTM D7844 *ASTM D7624 *ASTM D76145	2 0 50 0 950 1050 995 1180 2600 limit/base >20 >20 limit/base >3 >20 >3	3 0 63 2 995 1177 996 1269 2189 current 8 3 76 current 1 10.8 25.9	6 0 61 2 951 1354 954 1215 2574 history1 5 3 67 history1 0.7 9.8 21.6	history2 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation FLUID DEGRAI	ppm	ASTM D5185m Method *ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m Method *ASTM D7844 *ASTM D7624 *ASTM D7415 Method	2 0 50 0 950 1050 995 1180 2600 limit/base >20 >20 limit/base >3 >20 >3 limit/base	3 0 63 2 995 1177 996 1269 2189 current 8 3 76 current 1 10.8 25.9	6 0 61 2 951 1354 954 1215 2574 history1 5 3 67 history1 0.7 9.8 21.6 history1	history2 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation	ppm	ASTM D5185m method ASTM D5185m ASTM D7844 *ASTM D7624 *ASTM D76145	2 0 50 0 950 1050 995 1180 2600 limit/base >20 >20 limit/base >3 >20 >3	3 0 63 2 995 1177 996 1269 2189 current 8 3 76 current 1 10.8 25.9	6 0 61 2 951 1354 954 1215 2574 history1 5 3 67 history1 0.7 9.8 21.6	history2 history2



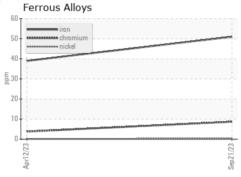
OIL ANALYSIS REPORT



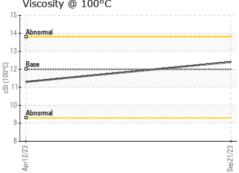
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
Precipitate	scalar	*Visual	NONE	NONE	NONE	
Silt	scalar	*Visual	NONE	NONE	NONE	
Debris	scalar	*Visual	NONE	NONE	NONE	
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	
Appearance	scalar	*Visual	NORML	NORML	NORML	
Odor	scalar	*Visual	NORML	NORML	NORML	
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	
Free Water	scalar	*Visual		NEG	NEG	

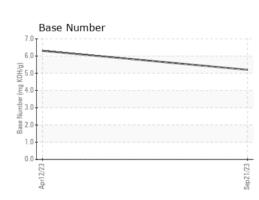
FLUID FROF	ENTIES	method			HISTOLAL	HISTOLYZ
Visc @ 100°C	cSt	ASTM D445	12.00	12.4	11.3	

GRAPHS



90 80 copper	
70 -	
60	_
50	
40	
30	
20	
10	
0 Literania	2
Apr12/23	Co. 27 1 77
	Š
Viscosity @ 100°C	







Certificate L2367

Laboratory Sample No. Lab Number Unique Number : 10673503 Test Package : FLEET

: PCA0103526 : 05966952

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 02 Oct 2023 : 04 Oct 2023

Diagnosed Diagnostician : Jonathan Hester

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 1369 - Berkeley-Waxahachie

710 Ovilla Road Waxahachie, TX US 75167

Contact: Robert Beal rbeal@transervice.com

T: (972)923-9928 F: (972)923-9919