

OIL ANALYSIS REPORT

(89613X) Walgreens - Tractor [Walgreens - Tractor] 136A68001

Diesel Engine

Fluid PETRO CANADA DURON SHP 10W30 (11 GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

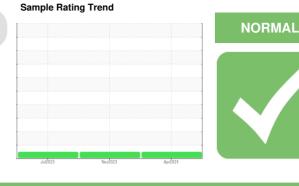
All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

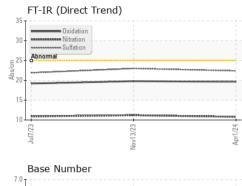
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

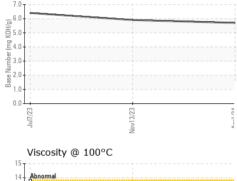


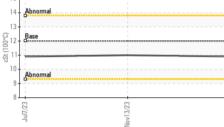
	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0123035	PCA0110544	PCA0093500
Sample Date		Client Info		01 Apr 2024	13 Nov 2023	07 Jul 2023
Machine Age	mls	Client Info		218032	218032	191483
Oil Age	mls	Client Info		218032	218032	0
Oil Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINAT	ON	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
WEAR METAL	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>80	25	26	24
Chromium	ppm	ASTM D5185m	>5	<1	<1	<1
Nickel	ppm	ASTM D5185m	>2	0	<1	0
Titanium	ppm	ASTM D5185m		2	9	3
Silver	ppm	ASTM D5185m	>3	0	<1	0
Aluminum	ppm	ASTM D5185m	>30	3	4	3
Lead	ppm	ASTM D5185m	>30	0	0	0
Copper	ppm	ASTM D5185m	>150	<1	2	2
Tin	ppm	ASTM D5185m	>5	0	<1	0
Vanadium	ppm	ASTM D5185m		0	<1	<1
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	2	8	10	4
			0	0	0	0
Barium	ppm	ASTM D5185m	0	U	0	0
Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m	0 50	57	46	53
				-		
Molybdenum	ppm	ASTM D5185m	50	57	46	53
Molybdenum Manganese	ppm ppm	ASTM D5185m ASTM D5185m	50 0	57 0	46 <1	53 <1
Molybdenum Manganese Magnesium	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	50 0 950	57 0 916	46 <1 767	53 <1 874
Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	50 0 950 1050	57 0 916 1201	46 <1 767 1110	53 <1 874 1202
Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	50 0 950 1050 995	57 0 916 1201 973	46 <1 767 1110 963	53 <1 874 1202 956
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	50 0 950 1050 995 1180	57 0 916 1201 973 1236	46 <1 767 1110 963 1112	53 <1 874 1202 956 1226
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 method	50 0 950 1050 995 1180 2600	57 0 916 1201 973 1236 3471	46 <1 767 1110 963 1112 2847	53 <1 874 1202 956 1226 3401
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 MBTM D5185m	50 0 950 1050 995 1180 2600 limit/base	57 0 916 1201 973 1236 3471 current	46 <1 767 1110 963 1112 2847 history1	53 <1 874 1202 956 1226 3401 history2
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon	ppm ppm ppm ppm ppm ppm ppm TS	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m	50 0 950 1050 995 1180 2600 limit/base >20	57 0 916 1201 973 1236 3471 current 6	46 <1 767 1110 963 1112 2847 history1 7	53 <1 874 1202 956 1226 3401 history2 6
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Sulfur Sulfur Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm TS	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	50 0 950 1050 995 1180 2600 limit/base >20	57 0 916 1201 973 1236 3471 current 6 1	46 <1 767 1110 963 1112 2847 history1 7 3	53 <1 874 1202 956 1226 3401 history2 6 2
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium	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	50 0 950 1050 995 1180 2600 limit/base >20	57 0 916 1201 973 1236 3471 <u>current</u> 6 1 <1	46 <1 767 1110 963 1112 2847 history1 7 3 4	53 <1 874 1202 956 1226 3401 history2 6 2 3
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Sulfur CONTAMINAN Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm TS ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	50 0 950 1050 995 1180 2600 limit/base >20 limit/base	57 0 916 1201 973 1236 3471 current 6 1 <1 <1 current	46 <1 767 1110 963 1112 2847 history1 7 3 4 history1	53 <1 874 1202 956 1226 3401 history2 6 2 3 3 history2
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot %	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	50 0 950 1050 995 1180 2600 <i>limit/base</i> >20 >20 <i>limit/base</i> >3	57 0 916 1201 973 1236 3471 current 6 1 <1 <1 current 0.6	46 <1 767 1110 963 1112 2847 history1 7 3 4 history1 0.6	53 <1 874 1202 956 1226 3401 history2 6 2 3 3 history2 0.6
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	50 0 950 1050 995 1180 2600 limit/base >20 limit/base >20 limit/base	57 0 916 1201 973 1236 3471 <u>current</u> 6 1 <1 <1 current 0.6 10.8	46 <1 767 1110 963 1112 2847 history1 7 3 4 4 history1 0.6 11.2	53 <1 874 1202 956 1226 3401 history2 6 2 3 3 history2 0.6 10.9
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	50 0 950 1050 995 1180 2600 imit/base >20 imit/base >3 >20 >30	57 0 916 1201 973 1236 3471 <u>current</u> 6 1 <1 <1 <u>current</u> 0.6 10.8 22.4	46 <1 767 1110 963 1112 2847 history1 7 3 4 history1 0.6 11.2 23.0	53 <1 874 1202 956 1226 3401 history2 6 2 3 history2 0.6 10.9 21.9
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation FLUID DEGRAC	ppm ppm ppm ppm ppm ppm TS 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 ASTM D7844 *ASTM D7624 *ASTM D7624 *ASTM D7415	50 0 950 1050 995 1180 2600 imit/base >20 20 imit/base >3 >20 30 imit/base	57 0 916 1201 973 1236 3471 current 6 1 <1 <1 current 0.6 10.8 22.4 current	46 <1 767 1110 963 1112 2847 history1 7 3 4 <u>history1</u> 0.6 11.2 23.0 history1	53 <1 874 1202 956 1226 3401 history2 6 2 3 3 history2 0.6 10.9 21.9 kistory2



OIL ANALYSIS REPORT







VISUAL NONE *Visual NONE NONE NONE White Metal scalar Yellow Metal NONE NONE NONE NONE scalar *Visual Precipitate scalar *Visual NONE NONE NONE NONE Silt scalar *Visual NONE NONE NONE NONE NONE Debris *Visual NONE NONE NONE scalar Sand/Dirt NONE scalar *Visual NONE NONE NONE NORML Appearance *Visual NORML NORML NORML scalar Odor NORML NORML NORML scalar *Visual NORML **Emulsified Water** scalar *Visual >0.2 NEG NEG NEG Free Water scalar *Visual NEG NEG NEG **FLUID PROPERTIES** Visc @ 100°C cSt ASTM D445 12.00 10.9 11.0 10.9 GRAPHS Ferrous Alloys 30 2! nicke 20 E 15 10 Non-ferrous Metals lead Viscosity @ 100°C Base Number 7. 14 6. (B/HO) 5.0 13 E 4.0 cSt (1 Ê 3.0 器 2.0 Abnorma 1.0 0.0 Apr1/24 Nov13/23 Nov13/23 : WearCheck USA - 501 Madison Ave., Cary, NC 27513 Transervice - Shop 1376 - Berkeley-Linden : PCA0123035 Received : 08 Apr 2024 3425 Tremley Point Road Lab Number : 06141987 Tested : 09 Apr 2024 Linden, NJ Diagnosed Unique Number : 10966795 : 09 Apr 2024 - Wes Davis US 07036 Test Package : FLEET Contact: Shop 1376 Oil Analysis shop1376@transervice.com

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)

Certificate 12367

Laboratory

Sample No.

T:

F: