

OIL ANALYSIS REPORT

Area (89648X) Walgreens - Tractor [Walgreens - Tractor] 136A69069

Diesel Engine

PETRO CANADA DURON SHP 10W30 (11 GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

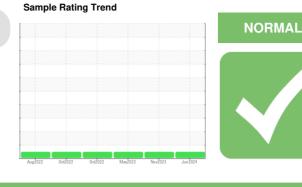
All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

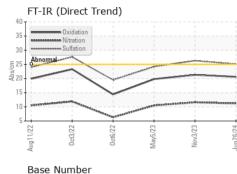
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

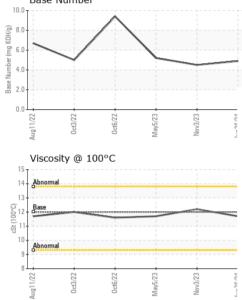


SAMPLE INFOR	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0128185	PCA0111797	PCA0097102
Sample Date		Client Info		26 Jun 2024	03 Nov 2023	05 May 2023
Machine Age	mls	Client Info		802116	747435	685117
Oil Age	mls	Client Info		54681	62318	60508
Oil Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINAT	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
Glycol		WC Method		NEG	NEG	NEG
WEAR METAL	c	method	limit/base		history1	history2
				current		· · · ·
Iron	ppm	ASTM D5185m	>80	53	50	32
Chromium	ppm	ASTM D5185m	>5	2	3	2
Nickel	ppm	ASTM D5185m	>2	<1	<1	0
Titanium	ppm	ASTM D5185m		0	<1	0
Silver	ppm	ASTM D5185m	>3	0	<1	0
Aluminum	ppm	ASTM D5185m	>30	21	21	13
Lead	ppm	ASTM D5185m	>30	0	0	<1
Copper	ppm	ASTM D5185m	>150	4	6	4
Tin	ppm	ASTM D5185m	>5	<1	<1	<1
Vanadium	ppm	ASTM D5185m		0	<1	0
Cadmium	ppm	ASTM D5185m		0	<1	0
				-		
ADDITIVES		method	limit/base	current	history1	history2
ADDITIVES Boron	ppm	method ASTM D5185m	limit/base 2	current 5	history1 3	history2 3
	ppm ppm					
Boron		ASTM D5185m	2	5	3	3
Boron Barium	ppm	ASTM D5185m ASTM D5185m	2 0	5 0	3 0	3 0
Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50	5 0 63	3 0 63	3 0 67
Boron Barium Molybdenum Manganese	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0	5 0 63 1	3 0 63 <1	3 0 67 <1
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0 950	5 0 63 1 935	3 0 63 <1 865	3 0 67 <1 970
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 50 0 950 1050	5 0 63 1 935 1199	3 0 63 <1 865 1269	3 0 67 <1 970 1156
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0 950 1050 995	5 0 63 1 935 1199 1088	3 0 63 <1 865 1269 1002	3 0 67 <1 970 1156 1016
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	2 0 50 950 1050 995 1180	5 0 63 1 935 1199 1088 1268	3 0 63 <1 865 1269 1002 1229	3 0 67 <1 970 1156 1016 1288
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	2 0 50 950 1050 995 1180 2600	5 0 63 1 935 1199 1088 1268 3128	3 0 63 <1 865 1269 1002 1229 2710	3 0 67 <1 970 1156 1016 1288 3111
Boron Barium Molybdenum Magnese 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	2 0 50 950 1050 995 1180 2600	5 0 63 1 935 1199 1088 1268 3128 current	3 0 63 <1 865 1269 1002 1229 2710 history1	3 0 67 <1 970 1156 1016 1288 3111 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 method	2 0 50 950 1050 995 1180 2600	5 0 63 1 935 1199 1088 1268 3128 current 9	3 0 63 <1 865 1269 1002 1229 2710 history1 7	3 0 67 <1 970 1156 1016 1288 3111 history2 7
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm 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 D5185m	2 0 50 950 1050 995 1180 2600 limit/base >20	5 0 63 1 935 1199 1088 1268 3128 current 9 10	3 0 63 <1 865 1269 1002 1229 2710 history1 7 0	3 0 67 <1 970 1156 1016 1288 3111 history2 7 2
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	2 0 50 0 950 1050 995 1180 2600 imit/base >20 imit/base	5 0 63 1 935 1199 1088 1268 3128 current 9 10 9	3 0 63 <1 865 1269 1002 1229 2710 history1 7 0 4 history1	3 0 67 <1 970 1156 1016 1288 3111 history2 7 2 2 2 history2
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	ASTM D5185m ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 limit/base >20 20 limit/base >20	5 0 63 1 935 1199 1088 1268 3128 current 9 10 9 10 9 20 current	3 0 63 <1 865 1269 1002 1229 2710 history1 7 0 4 history1 1.5	3 0 67 <1 970 1156 1016 1288 3111 history2 7 2 2 2 history2 1.1
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	2 0 50 0 950 1050 995 1180 2600 imit/base >20 imit/base	5 0 63 1 935 1199 1088 1268 3128 current 9 10 9	3 0 63 <1 865 1269 1002 1229 2710 history1 7 0 4 history1	3 0 67 <1 970 1156 1016 1288 3111 history2 7 2 2 2 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	2 0 50 950 1050 995 1180 2600 imit/base >20 imit/base >3 >20 >30	5 0 63 1 935 1199 1088 1268 3128 current 9 10 9 10 9 current 1.2 1.2 11.2 25.1	3 0 63 <1 865 1269 1002 1229 2710 history1 7 0 4 <u>history1</u> 1.5 1.5 11.6 26.3	3 0 67 <1 970 1156 1016 1288 3111 history2 7 2 2 2 history2 1.1 10.5 24.2
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 D7624 *ASTM D7415	2 0 0 50 0 950 1050 995 1180 2600 2600 20 20 20 20 20 3 20 20 3 3 20 3 3 20 3 3 20 3 3 3 20 3 3 3 20 3 3 3 20 3 3 3 20 3 3 3 3	5 0 63 1 935 1199 1088 1268 3128 <i>current</i> 9 10 9 10 9 10 9 10 9 10 2 11.2 11.2 25.1	3 0 63 <1 865 1269 1002 1229 2710 history1 7 0 4 4 history1 1.5 11.6 26.3 history1	3 0 67 <1 970 1156 1016 1288 3111 history2 7 2 2 2 history2 1.1 10.5 24.2 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	2 0 50 950 1050 995 1180 2600 imit/base >20 imit/base >3 >20 >30	5 0 63 1 935 1199 1088 1268 3128 current 9 10 9 10 9 current 1.2 1.2 11.2 25.1	3 0 63 <1 865 1269 1002 1229 2710 history1 7 0 4 <u>history1</u> 1.5 1.5 11.6 26.3	3 0 67 <1 970 1156 1016 1288 3111 history2 7 2 2 2 <u>history2</u> 1.1 10.5 24.2

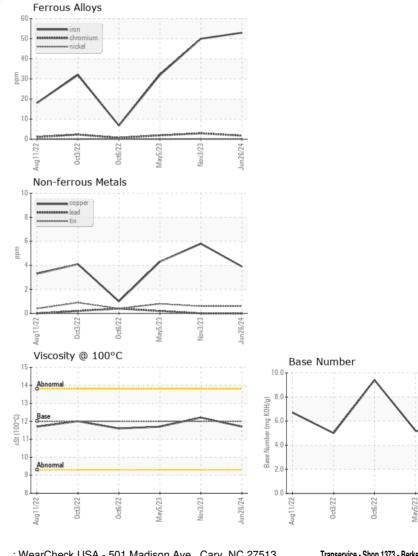


OIL ANALYSIS REPORT





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 PROPE	RTIES	method	limit/base	current	history1	history2
		method	mmubase	Current	Thistory I	Thistoryz
Visc @ 100°C	cSt	ASTM D445	12.00	11.7	12.2	11.7
GRAPHS						



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513 Transervice - Shop 1373 - Berkeley-Anderson/Pendergrass Sample No. : PCA0128185 Received : 02 Jul 2024 101 Alliance Parkway Lab Number : 06226871 Tested : 05 Jul 2024 Willamston, SC Unique Number : 11110364 Diagnosed : 05 Jul 2024 - Wes Davis US 29697 Test Package : FLEET Contact: Sonny Boucher Certificate 12367 To discuss this sample report, contact Customer Service at 1-800-237-1369. sboucher@transervice.com T: (864)226-2304 * - 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) F: (864)226-2329

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Submitted By: Sonny Boucher

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Page 2 of 2