

OIL ANALYSIS REPORT

Area (97205X) Walgreens - Tractor [Walgreens - Tractor] 136A62116

Diesel Engine

Fluid PETRO CANADA DURON SHP 10W30 (11 GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

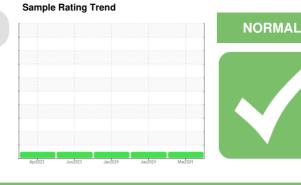
All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

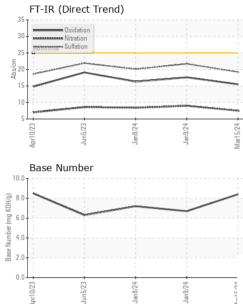
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

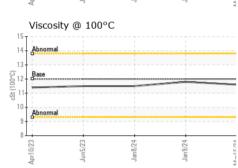


SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0117890	PCA0105445	PCA0105460
Sample Date		Client Info		15 Mar 2024	09 Jan 2024	08 Jan 2024
Machine Age	mls	Client Info		479382	455372	442902
Oil Age	mls	Client Info		25000	46591	29000
Oil Changed		Client Info		Not Changd	Changed	Not Changd
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	20.L	NEG	NEG	NEG
WEAR METAL	\$	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>80	9	12	12
Chromium	ppm	ASTM D5185m	>5	<1	<1	1
Nickel	ppm	ASTM D5185m	>2	0	1	<1
Titanium	ppm	ASTM D5185m	0	0	0	0
Silver	ppm	ASTM D5185m	>3	0	<1	0
Aluminum	ppm	ASTM D5185m	>30	8	8	5
Lead	ppm	ASTM D5185m	>30	0	<1	0
Copper	ppm	ASTM D5185m	>150	3	4	4
Tin	ppm	ASTM D5185m	>5	<1	<1	0
Vanadium	ppm	ASTM D5185m		0	<1	<1
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
ADDITIVES Boron	ppm	method ASTM D5185m	limit/base	current 4	history1 4	history2 5
	ppm ppm					
Boron		ASTM D5185m	2	4	4	5
Boron Barium	ppm	ASTM D5185m ASTM D5185m	2 0	4 0	4	5 0
Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50	4 0 62	4 0 59	5 0 60
Boron Barium Molybdenum Manganese	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0	4 0 62 <1	4 0 59 <1	5 0 60 <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	4 0 62 <1 1022	4 0 59 <1 935	5 0 60 <1 1042
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	4 0 62 <1 1022 1156	4 0 59 <1 935 1003	5 0 60 <1 1042 1156
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	2 0 50 0 950 1050 995	4 0 62 <1 1022 1156 1148	4 0 59 <1 935 1003 998	5 0 60 <1 1042 1156 1054
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	4 0 62 <1 1022 1156 1148 1363	4 0 59 <1 935 1003 998 1259	5 0 60 <1 1042 1156 1054 1342
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 0 950 1050 995 1180 2600	4 0 62 <1 1022 1156 1148 1363 3688	4 0 59 <1 935 1003 998 1259 2615	5 0 60 <1 1042 1156 1054 1342 3034
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN	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	2 0 50 950 1050 995 1180 2600	4 0 62 <1 1022 1156 1148 1363 3688 current	4 0 59 <1 935 1003 998 1259 2615 history1	5 0 60 <1 1042 1156 1054 1342 3034 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	4 0 62 <1 1022 1156 1148 1363 3688 current 6	4 0 59 <1 935 1003 998 1259 2615 history1 6	5 0 60 <1 1042 1156 1054 1342 3034 history2 6
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	2 0 50 950 1050 995 1180 2600 limit/base >20	4 0 62 <1 1022 1156 1148 1363 3688 <u>current</u> 6 1	4 0 59 <1 935 1003 998 1259 2615 history1 6 3	5 0 60 <1 1042 1156 1054 1342 3034 history2 6 <1
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED	ppm ppm ppm ppm ppm ppm ppm ppm TS ppm ppm ppm	ASTM D5185m ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 Imit/base >20 S 20	4 0 62 <1 1022 1156 1148 1363 3688 current 6 1 4 4	4 0 59 <1 935 1003 998 1259 2615 history1 6 3 4 4 history1	5 0 60 <1 1042 1156 1054 1342 3034 history2 6 <1 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 ppm ppm ppm	ASTM D5185m ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 limit/base >20 20 limit/base >20	4 0 62 <1 1022 1156 1148 1363 3688 current 6 1 4 current 0.4	4 0 59 <1 935 1003 998 1259 2615 history1 6 3 4 history1 0.7	5 0 60 <1 1042 1156 1054 1342 3034 history2 6 <1 2 history2 0.5
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED	ppm ppm ppm ppm ppm ppm ppm ppm TS ppm ppm ppm	ASTM D5185m ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 Imit/base >20	4 0 62 <1 1022 1156 1148 1363 3688 current 6 1 4 4	4 0 59 <1 935 1003 998 1259 2615 history1 6 3 4 4 history1	5 0 60 <1 1042 1156 1054 1342 3034 history2 6 <1 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 <i>imit/base</i> >20 <i>imit/base</i> >3 >20	4 0 62 <1 1022 1156 1148 1363 3688 current 6 1 4 current 0.4 7.5	4 0 59 <1 935 1003 998 1259 2615 history1 6 3 4 history1 0.7 9.0	5 0 60 <1 1042 1156 1054 1342 3034 history2 6 <1 2 history2 0.5 8.4 20.1
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation FLUID DEGRAE	ppm ppm ppm ppm ppm ppm ppm ppm TS ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D7844 *ASTM D7844	2 0 0 50 0 950 1050 995 1180 2600 2600 20 20 20 20 20 20 20 20 20 20 20 20 2	4 0 62 <1 1022 1156 1148 1363 3688 <i>current</i> 6 1 4 <i>current</i> 0.4 7.5 19.2 <i>current</i>	4 0 59 <1 935 1003 998 1259 2615 history1 6 3 4 history1 0.7 9.0 21.7 history1	5 0 60 <1 1042 1156 1054 1342 3034 history2 6 <1 2 history2 0.5 8.4 20.1 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 0 50 0 950 1050 995 1180 2600 2600 20 20 20 20 20 20 20 20 20 20 20 20 2	4 0 62 <1 1022 1156 1148 1363 3688 <u>current</u> 6 1 4 <u>current</u> 0.4 7.5 19.2	4 0 59 <1 935 1003 998 1259 2615 history1 6 3 4 history1 0.7 9.0 21.7	5 0 60 <1 1042 1156 1054 1342 3034 history2 6 <1 2 history2 0.5 8.4 20.1



OIL ANALYSIS REPORT





Yellow Metal scalar *Visual NONE NONE NONE N	ONE
	ONL
	ONE
Precipitate scalar *Visual NONE NONE NONE N	ONE
Silt scalar *Visual NONE NONE NONE N	ONE
Debris scalar *Visual NONE NONE NONE N	ONE
	ONE
Appearance scalar *Visual NORML NORML NORML N Odor scalar *Visual NORML NORML NORML N	ORML
	ORML
	EG
Free Water scalar *Visual NEG NEG N	EG
	history2
	1.5
GRAPHS	
Ferrous Alloys	
12 - iron chromium	
10 mickel	
4	
2	
Apr10/23 Jun5/23 Jan8/24 Mar15/24	
Non-ferrous Metals	
copper	
8 - Read	
6+	
2	
and the second	
Apr10/23 Jun5/23 Jan8/24 Jan8/24 Mar15/24	
Viscosity @ 100°C Base Number	
15 I	
14 Abnormal 8.0	
Base 000 000 000 000 000 000 000 000 000 0	
रहु 11-	
10 Abnormal	
9 Abnormal 2.0 1	
8 0.0	
Apr10/23 Jun5/23 Jan6/24 Jan6/24 Apr10/23 Jan6/24 Jan6/24	
Apr Ju Apr Apr Jai Jai	:
ple No. : PCA0117890 Received : 16 Apr 2024 2370 East M	
ple No. : PCA0117890 Received : 16 Apr 2024 2370 East M Number : 06149956 Tested : 17 Apr 2024 Woo	dland, C JS 9577
nple No. : PCA0117890 Received : 16 Apr 2024 2370 East M Number : 06149956 Tested : 17 Apr 2024 Woo	dland, (JS 957

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 L2367

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