

OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL

Area (90170X) Walgreens Machine Id [Walgreens] 136A66007 Component

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.

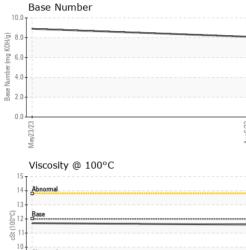
,			May2023	Aug2023		
SAMPLE INFOR	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0094010	PCA0093850	
Sample Date		Client Info		06 Aug 2023	23 May 2023	
Machine Age	mls	Client Info		784617	780913	
Oil Age	mls	Client Info		784617	780913	
Oil Changed		Client Info		Not Changd	N/A	
Sample Status				NORMAL	NORMAL	
CONTAMINAT	ION	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0	<1.0	
Glycol		WC Method		NEG	NEG	
WEAR METAL	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>80	15	13	
Chromium	ppm	ASTM D5185m	>5	1	2	
Nickel	ppm	ASTM D5185m	>2	<1	1	
Titanium	ppm	ASTM D5185m		2	3	
Silver	ppm	ASTM D5185m	>3	0	<1	
Aluminum	ppm	ASTM D5185m	>30	5	<1	
Lead	ppm	ASTM D5185m	>30	<1	<1	
Copper	ppm	ASTM D5185m	>150	4	4	
Tin	ppm	ASTM D5185m	>5	<1	<1	
Vanadium	ppm	ASTM D5185m		0	0	
Cadmium	ppm	ASTM D5185m		0	<1	
				•		
ADDITIVES		method	limit/base	current	history1	history2
ADDITIVES Boron	ppm	method ASTM D5185m	limit/base 2	current 13	history1 14	history2
				current	history1	
Boron	ppm	ASTM D5185m ASTM D5185m ASTM D5185m	2	current 13	history1 14	
Boron Barium	ppm ppm	ASTM D5185m ASTM D5185m	2 0	current 13 0	history1 14 4	
Boron Barium Molybdenum	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50	current 13 0 58	history1 14 4 57	
Boron Barium Molybdenum Manganese	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0	current 13 0 58 <1	history1 14 4 57 <1	
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0 950	current 13 0 58 <1 954	history1 14 4 57 <1 941 1097 988	
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	current 13 0 58 <1 954 1099	history1 14 4 57 <1 941 1097	
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	current 13 0 58 <1 954 1099 1036	history1 14 4 57 <1 941 1097 988	
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	2 0 50 950 1050 995 1180 2600	current 13 0 58 <1 954 1099 1036 1294	history1 14 4 57 <1 941 1097 988 1202	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	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	Current 13 0 58 <1 954 1099 1036 1294 3785	history1 14 4 57 <1 941 1097 988 1202 3476	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	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	current 13 0 58 <1 954 1099 1036 1294 3785 current 4 2	history1 14 4 57 <1 941 1097 988 1202 3476 history1 4 2	 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon	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 method	2 0 50 950 1050 995 1180 2600 limit/base >20	current 13 0 58 <1 954 1099 1036 1294 3785 current 4	history1 14 4 57 <1 941 1097 988 1202 3476 history1 4	 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 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	current 13 0 58 <1 954 1099 1036 1294 3785 current 4 2	history1 14 4 57 <1 941 1097 988 1202 3476 history1 4 2	 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Zinc Sulfur CONTAMINAN Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	2 0 50 950 1050 995 1180 2600 limit/base >20	current 13 0 58 <1 954 1099 1036 1294 3785 current 4 2 2	history1 14 4 57 <1 941 1097 988 1202 3476 history1 4 2 2	 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium 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 Imit/base >20 \$20 Imit/base >3	current 13 0 58 <1 954 1099 1036 1294 3785 current 4 2 2 current	history1 14 4 57 <1 941 1097 988 1202 3476 history1 4 2 2 history1	 history2 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 ppm ppm	ASTM D5185m ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 Imit/base >20 \$20 Imit/base >3	current 13 0 58 <1 954 1099 1036 1294 3785 current 4 2 2 current 0.4	history1 14 4 57 <1 941 1097 988 1202 3476 history1 4 2 history1 0.4	 history2 history2
Boron Barium 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	2 0 50 0 950 1050 995 1180 2600 <i>imit/base</i> >20 <i>imit/base</i> >20	current 13 0 58 <1 954 1099 1036 1294 3785 current 4 2 current 0.4 7.2	history1 14 4 57 <1 941 1097 988 1202 3476 history1 4 2 history1 0.4 6.8	 history2 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 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	current 13 0 58 <1 954 1099 1036 1294 3785 current 4 2 current 0 0.4 7.2 19.3	history1 14 4 57 <1 941 1097 988 1202 3476 history1 4 2 history1 0.4 6.8 19.0	 history2 history2 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 D7844 *ASTM D7624 *ASTM D7415	2 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	current 13 0 58 <1 954 1099 1036 1294 3785 current 4 2 current 0.4 7.2 19.3 current	history1 14 4 57 <1 941 1097 988 1202 3476 history1 4 2 history1 0.4 6.8 19.0 history1	 history2 history2 history2 history2



Abnorma

8 May23/23

OIL ANALYSIS REPORT



	VISUA	41		method	limit/base	current	history1	history2
	White Me			Visual	NONE	NONE	NONE	
	Yellow M			Visual	NONE	NONE	NONE	
	Precipitat			Visual	NONE	NONE	NONE	
	Silt			Visual	NONE	NONE	NONE	
	Debris			Visual	NONE	NONE	NONE	
	Sand/Dirt			Visual	NONE	NONE	NONE	
				Visual	NORML	NORML	NORML	
	CZg Appearar Odor			Visual	NORML	NORML	NORML	
	Emulsifie			Visual	>0.2	NEG	NEG	
	Free Wat			Visual	20.L	NEG	NEG	
		-			l'actifica e e			
		PROPERT		method	limit/base	current	history1	history2
	Visc @ 1		St A	STM D445	12.00	11.6	11.7	
	GRAP							
	¹⁶ T	Alloys						
	14-	iron						
		nickel						
	10							
	ظ 8-							
	6							
	4							
	2-							
	0							
	May23/23				Aug6/23			
	May				Au			
	Non-fer	rous Metals						
	¹⁰	copper 1						
	8	lead						
	********	tin						
	6							
	E dd							
	4							
	2-							
	200000000000000000000000000000000000000							
	0			***********************	53			
	3							
	v23/23				9 B n			
	May23/23	0.40000			Aug6/23			
	Viscosit	y @ 100°C				Base Number		
	Viscosit	y @ 100°C			9.0	Base Number		
	Viscosit	y @ 100°C			9.0· 8.0·	Base Number		
	Viscosit	y @ 100°C			9.0· 8.0·	Base Number		
	Viscosit 15 14 Abnormal 13	у @ 100°С			9.0· 8.0·	Base Number		
	Viscosit 15 14 Abnormal 13	у @ 100°C			9.0· 8.0·	Base Number		
	Viscosit ¹⁵ ¹⁴ ^{Abnormal} ¹³ ¹³ ¹³ ¹⁴ ¹⁵ ¹⁴ ¹⁵ ¹⁵ ¹⁵ ¹⁴ ¹⁵ ¹⁵ ¹⁵ ¹⁴ ¹⁵ ¹⁵ ¹⁴ ¹⁵ ¹	у @ 100°С			9.0· 8.0·	Base Number		
	Viscosit 14 Abnormal 13 14 Base 12 Base Abnormal 13 11 13 13 13 13 13 13 14 Abnormal 13 13 14 Abnormal 13 14 Abnormal 13 13 14 Abnormal 13 13 14 Abnormal 13 14 Abnormal 13 14 Abnormal 13 14 Abnormal 13 14 Abnormal 14 Abno	y @ 100°C			9.0	Base Number		
	Viscosit ¹⁵ ¹⁴ ^{Abnormal} ¹³ ¹³ ¹³ ¹⁴ ¹⁵ ¹⁴ ¹⁵ ¹⁵ ¹⁵ ¹⁴ ¹⁵ ¹⁵ ¹⁵ ¹⁴ ¹⁵ ¹⁵ ¹⁴ ¹⁵ ¹	y @ 100°C			9.0 8.0 (9.7.0 9.0 9.0 9.0 9.0 9.0 9.0 9.0 9.0 9.0 9	Base Number		
	Viscosit 14 Abnormal 13 14 Abnormal 13 12 Base Abnormal 14 Abnormal 13 14 Abnormal 13 14 Abnormal 13 14 Abnormal 14 Abnormal 15 14 Abnormal 15 14 Abnormal 15 14 Abnormal 15 14 Abnormal 15 14 Abnormal 15 14 Abnormal 15 14 Abnormal 15 16 Abnormal 16 Abnormal 17 10 10 10 10 10 10 10 10 10 10	y @ 100°C			9.0 8.0 (0,00 0			
	Viscosit 14 Abnormal 13 14 Abnormal 13 12 Base Abnormal 14 Abnormal 13 14 Abnormal 13 14 Abnormal 13 14 Abnormal 14 Abnormal 15 14 Abnormal 15 14 Abnormal 15 14 Abnormal 15 14 Abnormal 15 14 Abnormal 15 14 Abnormal 15 14 Abnormal 15 16 Abnormal 16 Abnormal 17 10 10 10 10 10 10 10 10 10 10	y @ 100°C			9.0 8.0 (9.7.0 9.0 9.0 9.0 9.0 9.0 9.0 9.0 9.0 9.0 9			
Laborat Sample Lab Nur Unique N tificete 12367 Test Par discuss this sample r	viscosit ¹⁵ ¹⁴ Abnormal ¹³ ¹⁴ Abnormal ¹³ ¹⁴ Abnormal ¹³ ¹⁴ Abnormal ¹³ ¹⁴ Abnormal ¹⁵ ¹⁴ Abnormal ¹⁵ ¹⁵ ¹⁵ ¹⁶ Constant ¹⁶ Constant ¹⁶ Constant ¹⁶ Constant ¹⁷ Constant ¹⁸ Constant ¹⁸ Constant ¹⁸ Constant ¹⁹ Constant ¹⁹ Constant ¹⁹ Constant ¹⁹ Constant ¹⁹ Constant ¹⁹ Constant ¹⁰ Constant ¹	eck USA - 501 4010 Rec 5 Dia 2 Dia	ceived gnosed gnostici	:16 A :17 A ian :Wes	9.0 8.0 9.0 9.0 9.0 9.0 9.0 9.0 9.0 9	Ma/23/23	Mor	eley-Moreno Va 00 Perris Bly eno Valley, (US 925 act: Ryan Cr anservice.cc