

OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL

Area (89757X) Walgreens Machine Id [Walgreens] 136A67196 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.

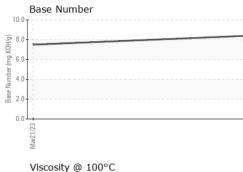
Fluid Condition

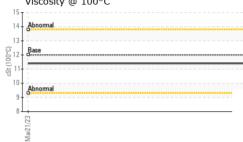
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

SAMPLE INFORM	ATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0093565	PCA0082337	
Sample Date		Client Info		27 Jul 2023	21 Mar 2023	
Machine Age	mls	Client Info		626547	614096	
Oil Age	mls	Client Info		12451	0	
Oil Changed		Client Info		Changed	Changed	
Sample Status				NORMAL	NORMAL	
CONTAMINATIO	DN	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0	<1.0	
Glycol		WC Method		NEG	NEG	
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>110	13	23	
Chromium	ppm	ASTM D5185m	>4	<1	<1	
Nickel	ppm	ASTM D5185m	>2	0	0	
Titanium	ppm	ASTM D5185m		4	0	
Silver	ppm	ASTM D5185m	>2	0	0	
Aluminum	ppm	ASTM D5185m	>25	5	9	
Lead	ppm	ASTM D5185m	>45	0	0	
Copper	ppm	ASTM D5185m	>85	1	2	
Tin	ppm	ASTM D5185m	>4	0	<1	
Vanadium	ppm	ASTM D5185m		<1	0	
Cadmium	ppm	ASTM D5185m		0	0	
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	2	7	4	
Barium	ppm	ASTM D5185m	0	0	0	
Molybdenum	ppm	ASTM D5185m	50	55	61	
Manganese	ppm	ASTM D5185m	0	<1	<1	
Magnesium	ppm	ACTM DE10Em	050	894	005	
	pp	ASTM D5185m	950	004	935	
Calcium	ppm	ASTM D5185m	1050	1170	935 1247	
Phosphorus	ppm	ASTM D5185m	1050	1170	1247	
Phosphorus Zinc	ppm ppm	ASTM D5185m ASTM D5185m	1050 995	1170 1053	1247 1039	
Phosphorus Zinc	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	1050 995 1180	1170 1053 1242	1247 1039 1279	
Phosphorus Zinc Sulfur CONTAMINANT	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method	1050 995 1180 2600	1170 1053 1242 3662	1247 1039 1279 3397	
Phosphorus Zinc Sulfur CONTAMINANT Silicon	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method	1050 995 1180 2600 limit/base	1170 1053 1242 3662 current	1247 1039 1279 3397 history1	
Phosphorus Zinc Sulfur CONTAMINANT Silicon Sodium	ppm ppm ppm ppm S	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m Method ASTM D5185m	1050 995 1180 2600 limit/base >30	1170 1053 1242 3662 current 12	1247 1039 1279 3397 history1 21	 history2
Phosphorus Zinc Sulfur CONTAMINANT Silicon Sodium	ppm ppm ppm ppm S ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	1050 995 1180 2600 limit/base >30	1170 1053 1242 3662 current 12 3	1247 1039 1279 3397 history1 21 3	 history2
Phosphorus Zinc Sulfur CONTAMINANT Silicon Sodium Potassium INFRA-RED	ppm ppm ppm ppm S ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	1050 995 1180 2600 <i>limit/base</i> >30 >20	1170 1053 1242 3662 current 12 3 0	1247 1039 1279 3397 history1 21 3 1	 history2
Phosphorus Zinc Sulfur CONTAMINANT Silicon Sodium Potassium INFRA-RED Soot %	ppm ppm ppm ppm S ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	1050 995 1180 2600 limit/base >30 >20 limit/base	1170 1053 1242 3662 current 12 3 0 current	1247 1039 1279 3397 history1 21 3 1 1 history1	 history2 history2
Phosphorus Zinc Sulfur CONTAMINANT Silicon Sodium Potassium INFRA-RED Soot % Nitration	ppm ppm ppm ppm S ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	1050 995 1180 2600 limit/base >30 >20 limit/base >3	1170 1053 1242 3662 current 12 3 0 current 0.6	1247 1039 1279 3397 history1 21 3 1 1 history1 1	 history2 history2
Phosphorus Zinc Sulfur CONTAMINANT Silicon Sodium Potassium INFRA-RED Soot % Nitration	ppm ppm ppm ppm S ppm ppm ppm ppm % Abs/cm Abs/.1mm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	1050 995 1180 2600 Iimit/base >30 >20 Iimit/base >3 >20	1170 1053 1242 3662 current 12 3 0 current 0.6 7.3	1247 1039 1279 3397 history1 21 3 1 1 history1 1 9.6	 history2 history2
Phosphorus Zinc Sulfur CONTAMINANT Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm S ppm ppm ppm ppm % Abs/cm Abs/.1mm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D7844 *ASTM D7844	1050 995 1180 2600 imit/base >30 >20 imit/base >3 >20 >30 >30	1170 1053 1242 3662 current 12 3 0 current 0.6 7.3 17.9	1247 1039 1279 3397 history1 21 3 1 1 history1 1 9.6 21.5	 history2 history2 history2
Phosphorus Zinc Sulfur CONTAMINANT Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation FLUID DEGRADA Oxidation	ppm ppm ppm S ppm ppm ppm ppm ppm % Abs/cm Abs/cm Abs/1mm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D7844 *ASTM D7844 *ASTM D7624	1050 995 1180 2600 imit/base >30 >20 imit/base >3 >20 >30 >30	1170 1053 1242 3662 current 12 3 0 current 0.6 7.3 17.9 current	1247 1039 1279 3397 history1 21 3 1 1 history1 1 9.6 21.5 history1	 history2 history2 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 PROPE	ERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	12.00	11.4	11.4	
GRAPHS						
Ferrous Alloys						
25 iron						
20 - nickel						
15			_			
10						
5						
0						
Mar2 1/23			Jul27/23			
Mar			Juľ			
Non-ferrous Meta	ls					
10 copper 1						
8 - Beauting lead						
PROPERTY LIN						
6 -						
4						
2						
0						
			7/23			
Mar21/23			Jul27/23			
Viscosity @ 100°	С			Base Number	-	
15			9.0			
14 - Abnormal			8.0			
13			(B) 7.0			
12 Base			(B/HQ) (B/HQ) (B/HQ) (B) (B) (B) (B) (B) (B) (B) (B) (B) (B			
11						
1			S.0			
10			SP			

ase 6 2.0 1.0 0.0

Mar21/23

Jul27/23 .

: 22 Aug 2023

: 23 Aug 2023



Unique Number : 10616690 Diagnostician : Wes Davis Test Package : FLEET Certificate L2367 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)

: WearCheck USA - 501 Madison Ave., Cary, NC 27513

Received

Diagnosed

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Laboratory Sample No.

Lab Number

Mar21/23

: PCA0093565

: 05931419

Contact/Location: Stephen Mackes - TSV1365

Transervice - Shop 1365 - Berkeley-Nazareth

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US 18014

Jul27/23