

OIL ANALYSIS REPORT

Area (14245Z) Walgreens - Tractor [Walgreens - Tractor] 136A61448

Diesel Engine Fluic

PETRO CANADA DURON SHP 10W30 (11 GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

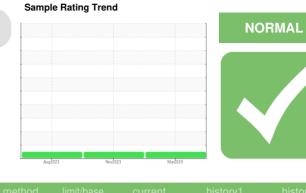
All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

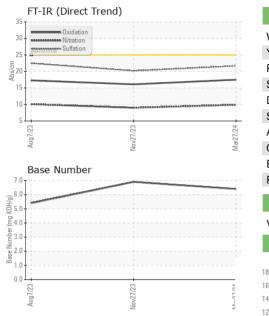
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

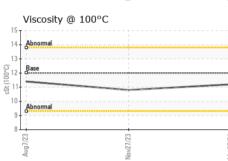


SAMPLE INFOR	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0110584	PCA0110534	PCA0093490
Sample Date		Client Info		27 Mar 2024	27 Nov 2023	07 Aug 2023
Machine Age	mls	Client Info		244760	222678	203506
Oil Age	mls	Client Info		244760	203506	203506
Oil Changed		Client Info		N/A	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINAT	ION	method	limit/base	current	history1	history2
Fuel		WC Method	>2.0	<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
		ASTM D5185m	>100		10	17
Iron	ppm			17 <1	<1	17
Chromium	ppm	ASTM D5185m	>20	<1	<1	0
Nickel	ppm	ASTM D5185m	>4	0 25		
Titanium Silver	ppm	ASTM D5185m	2	-	8	36 0
	ppm	ASTM D5185m	>3	0 3	2	6
Aluminum	ppm	ASTM D5185m	>20	2	2	8
Lead	ppm	ASTM D5185m	>40			
Copper	ppm	ASTM D5185m	>330	<1	<1	<1 2
Tin	ppm	ASTM D5185m	>15	<1	<1	
Vanadium	ppm	ASTM D5185m		0	<1	<1
C a aluacio una		ACTM DE10Em		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES	ppm	method	limit/base	current	history1	history2
ADDITIVES Boron	ppm	method ASTM D5185m	2	current 19	history1 15	history2 15
ADDITIVES Boron Barium	ppm ppm	method ASTM D5185m ASTM D5185m	2 0	current 19 0	history1 15 0	history2 15 0
ADDITIVES Boron Barium Molybdenum	ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50	current 19 0 41	history1 15 0 50	history2 15 0 32
ADDITIVES Boron Barium Molybdenum Manganese	ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0	current 19 0 41 <1	history1 15 0 50 <1	history2 15 0 32 <1
ADDITIVES Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0 950	current 19 0 41 <1 785	history1 15 0 50 <1 868	history2 15 0 32 <1 687
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0 950 1050	current 19 0 41 <1 785 1466	history1 15 0 50 <1 868 1280	history2 15 0 32 <1 687 1721
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0 950 1050 995	current 19 0 41 <1 785 1466 1029	history1 15 0 50 <1 868 1280 1022	history2 15 0 32 <1 687 1721 1077
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 950 1050 995 1180	current 19 0 41 <1 785 1466 1029 1271	history1 15 0 50 <1 868 1280 1022 1223	history2 15 0 32 <1 687 1721 1077 1323
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm ppm	method 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	Current 19 0 41 <11 785 1466 1029 1271 3913	history1 15 0 50 <1 868 1280 1022 1223 2942	history2 15 0 32 <1 687 1721 1077 1323 4118
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN	ppm ppm ppm ppm ppm ppm ppm ppm ppm	method 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	current 19 0 41 <1 785 1466 1029 1271 3913 current	history1 15 0 50 <1 868 1280 1022 1223 2942 history1	history2 15 0 32 <1 687 1721 1077 1323 4118 history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	2 0 50 0 950 1050 995 1180 2600	current 19 0 41 <1 785 1466 1029 1271 3913 current 5	history1 15 0 50 <1 868 1280 1022 1223 2942 history1 4	history2 15 0 32 <1 687 1721 1077 1323 4118 history2 6
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 limit/base	current 19 0 41 <1 785 1466 1029 1271 3913 current 5 1	history1 15 0 50 <1 868 1280 1022 1223 2942 history1 4 2	history2 15 0 32 <1 687 1721 1077 1323 4118 history2 6 2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	2 0 50 950 1050 995 1180 2600 limit/base >25	current 19 0 41 <1 785 1466 1029 1271 3913 current 5 1 5 1 5	history1 15 0 50 <1 868 1280 1022 1223 2942 history1 4 2 <1	history2 15 0 32 <1 687 1721 1077 1323 4118 history2 6 2 6 2 6 2 6 2 6
ADDITIVES 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	method ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 Imit/base >25 >20	current 19 0 41 <1 785 1466 1029 1271 3913 current 5 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1 5 current	history1 15 0 50 <1 868 1280 1022 1223 2942 history1 4 2 <1 history1	history2 15 0 32 <1 687 1721 1077 1323 4118 history2 6 2 6 2 6 2 6 history2
ADDITIVES 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 TS ppm	method ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 limit/base >25 >20 limit/base >3	current 19 0 41 <1 785 1466 1029 1271 3913 current 5 1 5 1 5 0.5	history1 15 0 50 <1 868 1280 1022 1223 2942 history1 4 2 <1 history1 0 0.3	history2 15 0 32 <1 687 1721 1077 1323 4118 history2 6 2 6 2 6 2 6 2 6 2 6 0.3
ADDITIVES 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	method ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 limit/base >25 >20 limit/base >3	current 19 0 41 <1 785 1466 1029 1271 3913 current 5 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1 5 current	history1 15 0 50 <1 868 1280 1022 1223 2942 history1 4 2 <1 history1 0 0.3 9.0	history2 15 0 32 <1 687 1721 1077 1323 4118 history2 6 2 6 2 6 2 6 0.3 10.1
ADDITIVES 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	method ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 limit/base >25 >20 limit/base >3	current 19 0 41 <1 785 1466 1029 1271 3913 current 5 1 5 1 5 0.5	history1 15 0 50 <1 868 1280 1022 1223 2942 history1 4 2 <1 history1 0 0.3	history2 15 0 32 <1 687 1721 1077 1323 4118 history2 6 2 6 2 6 2 6 2 6 2 6 0.3
ADDITIVES 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	method ASTM D5185m ASTM D7844 *ASTM D7624 *ASTM D7415 method	2 0 50 950 1050 995 1180 2600 <i>imit/base</i> >25 >20 <i>imit/base</i> >3 >20	current 19 0 41 <1 785 1466 1029 1271 3913 current 5 1 5 1 5 0.5 9.9	history1 15 0 50 <1 868 1280 1022 1223 2942 history1 4 2 <1 history1 0 0.3 9.0	history2 15 0 32 <1 687 1721 1077 1323 4118 history2 6 2 6 2 6 2 6 0.3 10.1
ADDITIVES 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	method ASTM D5185m ASTM D5185m	2 0 50 950 1050 995 1180 2600 imit/base >25 imit/base >3 >20	current 19 0 41 <1 785 1466 1029 1271 3913 current 5 1 5 1 5 1 5 1.1 5 2.1.7	history1 15 0 50 <1 868 1280 1022 1223 2942 history1 4 2 <1 history1 0.3 9.0 20.2	history2 15 0 32 <1 687 1721 1077 1323 4118 history2 6 2 6 2 6 2 0.3 10.1 22.5



OIL ANALYSIS REPORT





VISUAL	r	nethod	limit/base	current	history1	history2
White Metal		'isual	NONE	NONE	NONE	NONE
Yellow Metal		'isual	NONE	NONE	NONE	NONE
Precipitate		'isual	NONE	NONE	NONE	NONE
Silt		'isual	NONE	NONE	NONE	NONE
Debris		'isual	NONE	NONE	NONE	NONE
Sand/Dirt		'isual	NONE	NONE	NONE	NONE
Appearance		'isual	NORML	NORML	NORML	NORML
Odor		'isual	NORML	NORML	NORML	NORML
Emulsified Water		'isual	>0.2	NEG	NEG	NEG
Free Water	scalar *V	'isual		NEG	NEG	NEG
FLUID PROPE	RTIES	nethod	limit/base	current	history1	history2
Visc @ 100°C	cSt AS	STM D445	12.00	11.2	10.8	11.4
GRAPHS						
Ferrous Alloys						
16 - iron chromium		/				
14 - nickel		/				
	\checkmark					
E 10						
6						
4 2						
Aug7/23	Vov27/23 -		Mar27/24 -			
Aui	Nov		Mari			
Non-ferrous Meta	s					
10	15					
10 copper						
1						
copper						
8 copper lead						
copper						
8 copper lead						
8 6 4 2						
s copper lead 4 2 0			24			
s copper lead 4 2 0			łar27/24			
8 6 4 2	Nov21/23		Mai21/24	Page Nursch		
Viscosity @ 100°C	Nov21/23		+7/LZIEW 7.0	Base Numb	ber	
Viscosity @ 100°C	Nov21/23		7.0]	per	
Viscosity @ 100°C	Nov21/23		7.0]	ber	
Viscosity @ 100°C	Nov21/23		7.0]	per	
Viscosity @ 100°C	Nov21/23		7.0]	ber	
Viscosity @ 100°C	Nov21/23		7.0]	ber	
Viscosity @ 100°C	Nov21/23		7.0 6.1 (B)H 50, Bul) squark aquark aquark aguar aguark aguark aguark aguar aguar aguar aguar aguar aguar aguar aguar aguar aguar aguar aguar aguar aguar aguar ag ag ag ag ag ag ag ag) - - - - - - - - - - - - - - - - - - -	ber	
Viscosity @ 100°C	Nov21/23		7.(6.((B)HOX B4.) squay aumy sec 1.(D	er	
Viscosity @ 100°C	Vov2123		7.0 6.0 (C) HC 5.0 (L) La La La La La La La La La La La La La			
Viscosity @ 100°C	Vov2123		7.0 6.0 (C) HC 5.0 (L) La La La La La La La La La La La La La	D		
Viscosity @ 100°C	Nov21/23		7.(6.((B)HOX B4.) squay aumy sec 1.(Aug//23	Nov2723	
Viscosity @ 100°C	CZUZZYON EZZUZZYON 1 Madison A		7.0 6.0 (b)(D) Bull 10 +00 CZ2EW 4, NC 27513	Aug//23	EZUZONN EZUZONN service - Shop 1376 -	
Viscosity @ 100°C	EZILZYON EZILZYON 1 Madison A Received	d : 08	7.0 (6,0) (6)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)	Aug//23	EZUZONN EZUZONN service - Shop 1376 -	nley Point Ro
Viscosity @ 100°C	EZUZZYON EZUZZYON 1 Madison A Received Tested	30 : 10 20 :	7.0 (6,0) (6)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)	EZ/LONY Trans	EZUZONN EZUZONN service - Shop 1376 -	• Berkeley-Line nley Point Ro Linden, US 07(
Viscosity @ 100°C	EZILZYON EZILZYON 1 Madison A Received	30 : 10 20 :	7.0 (6,0) (6)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)	EZ/LONY Trans	EZUZONN EZUZONN service - Shop 1376 -	nley Point R Linden US 07

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)

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Certificate L2367

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Submitted By: Ryan Booth Page 2 of 2

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