

OIL ANALYSIS REPORT

(89946X) Walgreens - Tractor [Walgreens - Tractor] 136A69008 Component

Diesel Engine

PETRO CANADA DURON SHP 10W30 (11 GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

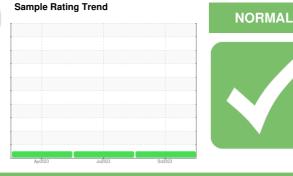
All component wear rates are normal.

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.





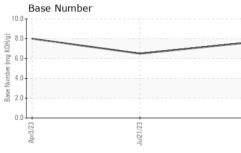
			2020			
SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0105415	PCA0093796	PCA0093779
Sample Date		Client Info		11 Oct 2023	21 Jul 2023	03 Apr 2023
Machine Age	mls	Client Info		546304	518768	497021
Oil Age	mls	Client Info		25000	50000	25000
Oil Changed		Client Info		Not Changd	Changed	Not Changd
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINATI	ON	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Glycol		WC Method		NEG	NEG	NEG
WEAR METALS	6	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>80	10	15	15
Chromium	ppm	ASTM D5185m	>5	<1	1	1
Nickel	ppm	ASTM D5185m	>2	<1	0	<1
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>30	5	10	4
Lead	ppm	ASTM D5185m	>30	0	0	0
Copper	ppm	ASTM D5185m	>150	4	3	3
Tin	ppm	ASTM D5185m	>5	0	<1	<1
Vanadium	ppm	ASTM D5185m		<1	0	0
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	2	0	<1	0
Barium	ppm	ASTM D5185m	0	0	0	0
Molybdenum	ppm	ASTM D5185m	50	61	69	60
Manganese	ppm	ASTM D5185m	0	0	<1	<1
Magnesium	ppm	ASTM D5185m	950	932	1065	941
Calcium	ppm	ASTM D5185m	1050	1070	1168	1036
Phosphorus	ppm	ASTM D5185m	995	963	1092	1000
Zinc	ppm	ASTM D5185m	1180	1246	1380	1251
Sulfur	ppm	ASTM D5185m	2600	3119	3392	2989
CONTAMINANT	ſS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>20	5	10	5
Sodium	ppm	ASTM D5185m		0	1	1
Potassium	ppm	ASTM D5185m	>20	3	<1	4
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	0.6	0.8	0.4

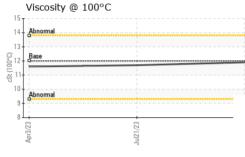
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	0.6	0.8	0.4
Nitration	Abs/cm	*ASTM D7624	>20	8.2	9.1	7.5
Sulfation	Abs/.1mm	*ASTM D7415	>30	20.6	22.0	18.7
FLUID DEGRA	DATION	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.6	18.1	14.8
Base Number (BN)	mg KOH/g	ASTM D2896		7.6	6.5	8.0



OIL ANALYSIS REPORT

VISUAL





VISUAL		method	a iiniiva	ase	current	riistory i	nistoryz
White Metal	scalar	*Visual	NONE	Ν	IONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	Ν	IONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	Ν	ONE	NONE	NONE
Silt	scalar	*Visual	NONE	Ν	IONE	NONE	NONE
Debris	scalar	*Visual	NONE	N	IONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	N	IONE	NONE	NONE
						NORML	NORML
	scalar	*Visual	NORMI	- N	ORML	NORML	NORML
							NEG
							NEG
			d limit/b				history2
						11.7	11.6
_				-			
Ferrous Alloys							
16 14							
12							
			/				
6							
4							
2-							
0	**********************	*********					
3/23	1/23		1/23				
4 2 0	1/23		1/23				
Aprà	Jul21		0ct11				
Viscosity @ 100°C	С				se Number		
14 Abnormal							
				HO 6.0			
12 - 0				ے۔ ایس 5.0			
11-				- 4.0			
10 Abnormal				2 3.0			
9							
8				0.0			
13/23	:1/23		1/23			:1/23	
Apr3/23	Jul21/23 +		0ct11/23	Apr3/23 0.0		Jul21/23	
: WearCheck USA - : PCA0105415	Received	: (09 Nov 2023	3	Transervio	ce - Shop 1366 - 2370 I	East Main Str
: WearCheck USA - : PCA0105415 : 06002646	Received Diagnosed	:(d::(09 Nov 2023 09 Nov 2023	3	Transervio		Berkeley-Woodl East Main Str Woodland, US 957
: WearCheck USA - : PCA0105415 : 06002646	Received	:(d::(09 Nov 2023	3	Transervi	2370	East Main Str Woodland,
	Yellow Metal Precipitate Silt Debris Sand/Dirt Appearance Odor Emulsified Water Free Water FLUID PROPE Visc @ 100°C GRAPHS Ferrous Alloys ¹⁶ ¹⁴ ¹² ¹⁶ ¹⁴ ¹² ¹⁶ ¹⁴ ¹² ¹⁶ ¹⁴ ¹² ¹⁶ ¹⁴ ¹² ¹⁶ ¹⁴ ¹² ¹⁶ ¹⁴ ¹² ¹⁶ ¹⁴ ¹² ¹⁶ ¹⁴ ¹² ¹⁶ ¹⁴ ¹² ¹⁶ ¹⁴ ¹⁵ ¹⁶ ¹⁴ ¹⁵ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁷ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁷ ¹⁶ ¹⁶ ¹⁷ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁷ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁷ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁷ ¹⁶ ¹⁶ ¹⁶ ¹⁷ ¹⁶ ¹⁶ ¹⁶ ¹⁷ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁷ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁷ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁷ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁷ ¹⁸ ¹⁸ ¹⁹ ¹⁹ ¹⁹ ¹⁹ ¹⁰ ¹⁰ ¹¹ ¹¹ ¹¹ ¹¹ ¹¹ ¹¹ ¹² ¹³ ¹⁴ ¹⁵ ¹⁵ ¹⁵ ¹⁵ ¹⁵ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶ ¹⁶	White Metal scalar Yellow Metal scalar Precipitate scalar Silt scalar Debris scalar Sand/Dirt scalar Appearance scalar Odor scalar Emulsified Water scalar Free Water scalar Free Water scalar Ferrous Alloys Ferrous Alloys Ferrous Metals Non-ferrous Metals 0 0 0 0 0 0 0 0 0 0 0 0 0	White Metal scalar *Visual Yellow Metal scalar *Visual Precipitate scalar *Visual Silt scalar *Visual Debris scalar *Visual Sand/Dirt scalar *Visual Appearance scalar *Visual Cdor scalar *Visual Emulsified Water scalar *Visual Free Water scalar *Visual Free Water scalar *Visual Free Water scalar *Visual Ferrous Alloys Ferrous Alloys Non-ferrous Metals Non-ferrous Metals Viscosity @ 100°C Viscosity @ 100°C	White Metal scalar *Visual NONE Yellow Metal scalar *Visual NONE Precipitate scalar *Visual NONE Silt scalar *Visual NONE Sand/Dirt scalar *Visual NORMI Odor scalar *Visual NORMI Odor scalar *Visual NORMI Codor scalar *Visual NORMI Emulsified Water scalar *Visual NORMI Ferewater scalar *Visual NORMI Visc @ 100°C cSt ASTM D445 12.00 GRAPHS Ferrous Alloys Ferrous Alloys Viscosity @ 100°C Viscosity @ 100°C	White Metal scalar *Visual NONE Yellow Metal scalar *Visual NONE Precipitate scalar *Visual NONE Sitt scalar *Visual NONE Debris scalar *Visual NONE Sand/Dirt scalar *Visual NONE Appearance scalar *Visual NORML Odor scalar *Visual NORML Codor scalar *Visual NORML Emulsified Water scalar *Visual NORML Free Water scalar *Visual >0.2 M Free Water scalar *Visual >0.2 M Some free Water scalar *Visual >0.2 M State of the scalar *Visual *Visu	White Metal scalar *Visual NONE NONE Yellow Metal scalar *Visual NONE NONE Precipitate scalar *Visual NONE NONE Silt scalar *Visual NONE NONE Sand/Dirt scalar *Visual NONE NONE Appearance scalar *Visual NORML NORML Odor scalar *Visual NORML NORML Odor scalar *Visual NORML NORML Odor scalar *Visual NORML NORML MORML Odor scalar *Visual NORML NORML MUSAN Correct scalar *Visual NORML NORML NORML MORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML NORML	White Metal scalar 'Visual NONE NONE NONE NONE Yellow Metal scalar 'Visual NONE NONE NONE NONE Silt scalar 'Visual NONE NONE NONE NONE Silt scalar 'Visual NONE NONE NONE NONE Sand/Dirt scalar 'Visual NOR NONE NONE NONE Appearance scalar 'Visual NORML NORML NORML NORML Odor scalar 'Visual NORML NORML NORML NORML Odor scalar 'Visual NORML NORML NORML NORML Odor scalar 'Visual >0.2 NEG NEG NEG Ferewister scalar 'Visual 12.00 11.9 11.7 GRAPHS Statar Statar Statar Statar Statar Viscosity @ 100°C Statar Statar Statar Statar Statar Statar Statar <

To discuss this sample * - 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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