

## **OIL ANALYSIS REPORT**

Sample Number

mls

mls

Sample Date

Machine Age

Oil Changed

Sample Status

Oil Age

### (16099Z) Walgreens - Tractor [Walgreens - Tractor] 136A61397 Componen

**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.



CONTAMINATION	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		NEG	NEG	NEG

WEAR METAL	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>80	3	4	8
Chromium	ppm	ASTM D5185m	>5	0	<1	1
Nickel	ppm	ASTM D5185m	>2	0	0	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>30	2	2	4
Lead	ppm	ASTM D5185m	>30	0	0	0
Copper	ppm	ASTM D5185m	>150	<1	3	3
Tin	ppm	ASTM D5185m	>5	<1	<1	0
Vanadium	ppm	ASTM D5185m		0	<1	0
Cadmium	ppm	ASTM D5185m		0	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	2	4	6	2
Barium	ppm	ASTM D5185m	0	0	0	0
Molybdenum	ppm	ASTM D5185m	50	57	56	61
Manganese	ppm	ASTM D5185m	0	<1	0	<1
Magnesium	ppm	ASTM D5185m	950	944	943	1007
Calcium	ppm	ASTM D5185m	1050	1014	1072	1112
Phosphorus	ppm	ASTM D5185m	995	1022	1053	1042
Zinc	ppm	ASTM D5185m	1180	1231	1205	1306
Sulfur	ppm	ASTM D5185m	2600	3562	2823	3623
CONTAMINA	NTS	method	limit/base	current	history1	history2
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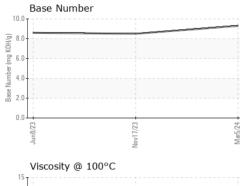
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Silicon	ppm	ASTM D5185m	>20	5	3	6	
Sodium	ppm	ASTM D5185m		<1	<1	1	
Potassium	ppm	ASTM D5185m	>20	1	2	2	

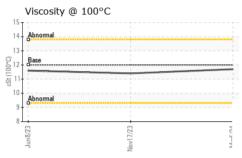
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	0.1	0.3	0.5
Nitration	Abs/cm	*ASTM D7624	>20	4.8	6.4	8.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	17.4	19.1	19.5
FLUID DEGRA	DATION	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	13.0	14.5	15.2
Base Number (BN)	mg KOH/g	ASTM D2896		9.3	8.5	8.6



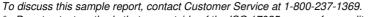
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VISUAL





VISUAL		method	limit/base	current	history1	history
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG
FLUID PROP	PERTIES	method	limit/base	current	history1	history
Visc @ 100°C	cSt	ASTM D445	12.00	11.7	11.4	11.6
GRAPHS						
Ferrous Alloys						
10 iron						
8 - chromium						
HICKEI						
E 6						
mdd 4						
2						
******	**********					
23	23		24			
Jun8/23	Vov17/23		Mar5/24			
	-					
Non-ferrous Me						
copper						
8 - Instantion lead						
6						
_						
dd						
변 년 4						
4-						
4 2						
4 2 0						
4 2 0	17/23		#5/24			
4-	Nov17/23		Mar5/24			
Viscosity @ 100			Mar5/24	Base Numbe	r	
Viscosity @ 100			+72/SteM	Base Numbe	r	
Viscosity @ 100			10.0	Base Numbe	r	
Viscosity @ 100			10.0	Base Numbe	r	
Viscosity @ 100			10.0	Base Numbe	r	
Viscosity @ 100			10.0	Base Numbe	r	
Viscosity @ 100			10.0	Base Numbe	r	
Viscosity @ 100			10.0 (D)HOX BU) Jaquunyl ese	Base Numbe	r 	
Viscosity @ 100			10.0	Base Numbe	r	
Viscosity @ 100	0°C		10.0 (0)(0) B0() (0)(0) B0() (0)(0) B0() (0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(			
Viscosity @ 100	0°C		10.0 (0)(0) B0() (0)(0) B0() (0)(0) B0() (0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0)(			
Viscosity @ 100			10.0 (0)HOX Buu Jaguny See 2.0	Base Numbe	L	
Viscosity @ 100			10.0 (0/HOX Bull January Bar Bar Bar Bar Bar Bar Bar Bar Bar Bar	Jun6/23	Nov17/23	
Viscosity @ 100 Viscosity @ 100 Abnomal Base EXEMPTION EXEMPTION E	501 Madisc		10.0 (0)HOX bull Jaguny See 2.0 +72/Sterw 7, NC 27513	Jun6/23	EZZLINN Vice - Shop 1366 - E	
Viscosity @ 100 Viscosity @ 100 Base Base Base County Base County Coun	501 Madisco Recei	ived : 2	10.0 (0)HOX bul Jaguny Bul Jaguny	Jun6/23	EZZLINN Vice - Shop 1366 - E	ast Main St
Viscosity @ 100 Viscosity @ 100 Abnomal Base EXEMPTION EXEMPTION E	501 Madisco Recei Teste	ived : 2 d : 2	10.0 (0)HOX bull Jaguny See 2.0 +72/Sterw 7, NC 27513	EZQuin	EZZLINN Vice - Shop 1366 - E	Berkeley-Wood East Main St Woodland, US 95



\* - 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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