

## **OIL ANALYSIS REPORT**

Sample Rating Trend



(AT649T) Supermarket - Tractor MACK 107A1851

Component Diesel Engine Fluid

PETRO CANADA DURON SHP 10W30 (11 GAL)

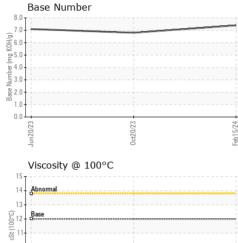
DIAGNOSIS	SAMPLE INFOR	MATION	method	limit/base	current	history1	history2
Recommendation	Sample Number		Client Info		PCA0116497	PCA0104837	PCA0096011
Resample at the next service interval to monitor.	Sample Date		Client Info		15 Feb 2024	20 Oct 2023	20 Jun 2023
Wear	Machine Age	mls	Client Info		395603	386333	373081
All component wear rates are normal.	Oil Age	mls	Client Info		9270	23475	18209
Contamination	Oil Changed		Client Info		Changed	Changed	Changed
There is no indication of any contamination in the	Sample Status				NORMAL	NORMAL	NORMAL
oil.	CONTAMINAT	ION	method	limit/base	current	history1	history2
Fluid Condition	Fuel		WC Method		<1.0	<1.0	<1.0
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the	Water		WC Method	>0.2	NEG	NEG	NEG
oil is suitable for further service.	Glycol		WC Method		NEG	NEG	NEG
	WEAR METAL	.S	method	limit/base	current	history1	history2
	Iron	ppm	ASTM D5185m	>120	13	10	20
	Chromium	ppm	ASTM D5185m		<1	0	<1
	Nickel	ppm	ASTM D5185m		0	0	<1
	Titanium	ppm	ASTM D5185m		<1	0	0
	Silver	ppm	ASTM D5185m		0	<1	<1
	Aluminum	ppm	ASTM D5185m		2	3	3
	Lead	ppm	ASTM D5185m		- <1	0	1
	Copper	ppm	ASTM D5185m		3	4	4
	Tin	ppm	ASTM D5185m		۰ <1	<1	<1
	Vanadium	ppm	ASTM D5185m	210	0	0	0
	Cadmium	ppm	ASTM D5185m		0	0	0
	ADDITIVES		method	limit/base	current	history1	history2
	Boron	ppm	ASTM D5185m	2	5	11	5
	Barium	ppm	ASTM D5185m	0	0	0	0
	Molybdenum	ppm	ASTM D5185m	50	53	46	57
	Manganese	ppm	ASTM D5185m		<1	<1	<1
	Magnesium	ppm	ASTM D5185m	950	801	715	924
	Calcium	ppm	ASTM D5185m		1016	1038	1154
	Phosphorus	ppm	ASTM D5185m	995	924	902	1016
	Zinc	ppm	ASTM D5185m		1068	1068	1312
	Sulfur	ppm	ASTM D5185m		2648	2618	3712
	CONTAMINAN	ITS	method	limit/base	current	history1	history2
	Silicon	ppm	ASTM D5185m	>25	3	3	5
	Sodium	ppm	ASTM D5185m		4	6	9
	Potassium	ppm	ASTM D5185m	>20	0	2	2
	INFRA-RED		method	limit/base	current	history1	history2
	Soot %	%	*ASTM D7844	>4	0.3	0.3	0.4
	Nitration	Abs/cm	*ASTM D7624	>20	7.6	8.4	9.5
	Sulfation	Abs/.1mm	*ASTM D7415	>30	18.5	19.7	20.3
	FLUID DEGRAI	DATION	method	limit/base	current	history1	history2
	Oxidation	Abs/.1mm	*ASTM D7414	>25	14.3	15.5	16.6
	Base Number (BN)			-	7.4	6.8	7.1
		0 9					



10 Abnormal

8. Jun20/23

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		VISUAL		method	limit/base	current	history1	history2
	v	White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
	Y	ellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
		Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
	S	Silt	scalar	*Visual	NONE	NONE	NONE	NONE
		Debris	scalar	*Visual	NONE	NONE	NONE	NONE
-		Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
0ct20/23	Feb15/24	Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Oct	E C	Odor	scalar	*Visual	NORML	NORML	NORML	NORML
	E	Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
	F	Free Water	scalar	*Visual		NEG	NEG	NEG
		FLUID PROP	PERTIES	method	limit/base	current	history1	history2
	····· \	/isc @ 100°C	cSt	ASTM D445	12.00	9.9	9.9	10.2
		GRAPHS						
	20	Ferrous Alloys						
9/23 +	V G	iron						
0ct20/23	15	nickel						
	_							
	퉙 10-	1						
	-							
	5							
	0.							
	0	0/23	0ct20/23 .		5/24 -			
		Jun20/23	0ct2		Feb 15/24			
		Non-ferrous Met	tals					
	10-	copper						
	8	lead						
		tin						
	6 ·	• • • • • • • • • • • • • • • • • • • •						
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	0.	Concession of the second	THE R. LEWIS CO.					
		un 20/23	0ct20/23		eb15/24			
		-unf	Oct		Feb			
	15	Viscosity @ 100	°C			Base Number		
	14	Abnormal			8.			
	13-							
	Q 12	Base			Ŋ	.0 -		
	() 0-012 10-02 11- 12- 11-				(B/HOX 55. 5. 9 gunny 3. 9 gunny 3.	.0		
					Mn 3	.0 -		
	10-	Abnormal			88 2.	.0		
	9.				1	.0 -		
	8	53	23 -					
		Jun20/23	0ct20/23		Feb15/24	Jun20/23	0ct20/23	
		ت آ	0		LE.	5	D	
Labor		earCheck USA - 5				Transervi	ce - Shop 1072 - Sup	
Sampl Lab N	ie No. : PC umber : 06	CA0116497 099584	Recei Teste		Feb 2024 Feb 2024		505	Division Stre Elizabeth, I
-0.NEC 17025	Number : 10		Diagr		Feb 2024 - V	Ves Davis		US 072
Unique					-		Contact: N	Jormand Briz
icate L2367 Test Pa	ackage : FL							
	e report, con	tact Customer Se						ranservice.co