

## **OIL ANALYSIS REPORT**

Sample Rating Trend



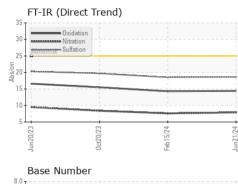
(AT649T) Supermarket - Tractor MACK 107A1851 Diesel Engine

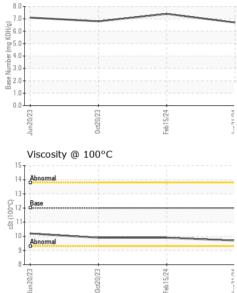
PETRO CANADA DURON SHP 10W30 (11 GAL)

DIAGNOSIS	SAMPLE INFOR	MATION	method	limit/base	current	history1	history2
Recommendation	Sample Number		Client Info		PCA0124724	PCA0116497	PCA0104837
Resample at the next service interval to monitor.	Sample Date		Client Info		21 Jun 2024	15 Feb 2024	20 Oct 2023
Wear	Machine Age	mls	Client Info		408426	395603	386333
All component wear rates are normal.	Oil Age	mls	Client Info		12823	9270	23475
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 The BN result indicates that there is suitable	Fuel		WC Method	>3.0	<1.0	<1.0	<1.0
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	12	13	10
	Chromium	ppm	ASTM D5185m		<1	<1	0
	Nickel	ppm	ASTM D5185m		<1	0	0
	Titanium	ppm	ASTM D5185m		<1	<1	0
	Silver	ppm	ASTM D5185m		<1	0	<1
	Aluminum	ppm	ASTM D5185m		3	2	3
	Lead	ppm	ASTM D5185m		1	<1	0
	Copper	ppm	ASTM D5185m		4	3	4
	Tin	ppm	ASTM D5185m		+ <1	<1	<1
	Vanadium	ppm	ASTM D5185m	>15	<1	0	0
	Cadmium	ppm	ASTM D5185m		<1	0	0
	ADDITIVES	ρριιι	method	limit/base		history1	history2
	Boron	ppm	ASTM D5185m		3	5	11
	Barium	ppm	ASTM D5185m		1	0	0
	Molybdenum	ppm		50	56	53	46
	Manganese	ppm	ASTM D5185m		<1	<1	<1
	Magnesium	ppm	ASTM D5185m	950	831	801	715
	Calcium	ppm	ASTM D5185m		999	1016	1038
	Phosphorus	ppm	ASTM D5185m	995	976	924	902
	Zinc	ppm	ASTM D5185m		1087	1068	1068
	Sulfur CONTAMINAN	ppm	ASTM D5185m	2600	2716	2648	2618
	Silicon	ppm	method ASTM D5185m	limit/base	current 3	history1 3	history2 3
	Sodium	ppm	ASTM D5185m	220	2	4	6
	Potassium	ppm	ASTM D5185m	>20	4	0	2
	INFRA-RED	ppm	method	limit/base		history1	history2
	Soot %	%	*ASTM D7844		0.3	0.3	0.3
	Nitration	Abs/cm	*ASTM D7624		7.9	7.6	8.4
	Sulfation		*ASTM D7024		18.6	18.5	19.7
	FLUID DEGRA			limit/base		history1	history2
	Oxidation		*ASTM D7414	>25	14.4	14.3	15.5
	Base Number (BN)	mg KOH/g	ASTM D2896		6.7	7.4	6.8



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		method	limit/base	current	history1	history2
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 PROPE	RTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	12.00	9.7	9.9	9.9
GRAPHS						
Ferrous Alloys						
Terrous Alloys						
iron						
sessesses chromium						
nickel						
	-					
			(TEELENIN)			
		4	4			
Jun 20/23 0ct20/23		Feb 15/24 .	Jun21/24			
Octí Inní		ep	un			
,			7			
Non-ferrous Metals	S					
) T 3						
copper						
*****************						
essesses tin						
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	_					
		The second s				
ALTERNATION OF THE OWNER		2/24	124			
ALTERNATION OF THE OWNER		sb15/24	m21/24			
And the other designment of the local division of the local divisi		Feb 15/24	Jun21/24			
Jun20/23		Feb15/24	Jun21/24			
Viscosity @ 100°C		Feb15/24	,-	Base Number		
cz/02unr Viscosity @ 100°C		Feb 15/24		Base Number		
EZ/07unr Viscosity @ 100°C		Feb15/24	,-	Base Number		
Viscosity @ 100°C		Feb 15/24	-5 8.0· 7.0·	Base Number		
Viscosity @ 100°C		Feb 15/24	-5 8.0· 7.0·	Base Number		
E2002unr Viscosity @ 100°C		Feb15/24	-5 8.0· 7.0·	Base Number		
E2002unr Viscosity @ 100°C		Feb15/24	-5 8.0· 7.0·	Base Number		
EZODZING Viscosity @ 100°C		Febi 15/24	-5 8.0· 7.0·	Base Number		
Viscosity @ 100°C		Feb 15/24	-5 8.0· 7.0·	Base Number		
CZO02Unf Viscosity @ 100°C		Feb15/24	-5 8.0· 7.0·	Base Number		
Viscosity @ 100°C		Feb15/24	5 7.0 (0)(6.0 but 5.0 but 4.0 s, 0 s, 0 but 3.0 eeg 2.0	Base Number		
EZODZING Viscosity @ 100°C		Feb15/24	-5 8.0· 7.0·	Base Number		
Viscosity @ 100°C		Feb 15/24	5 7.0 (0)(A(0,0) but squ1,0,0 squ1,0,0 squ1,0,0 squ2,0,0 1.0	Base Number		
CZO02Unf Viscosity @ 100°C		Feb 15/24	5 7.0 (0)(6.0 but 5.0 but 4.0 s, 0 s, 0 but 3.0 eeg 2.0		0dr20/23	

Transervice - Shop 1072 - Supermarket-Elizabeth Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513 Sample No. : PCA0124724 Received : 24 Jun 2024 505 Division Street Lab Number : 06219196 Tested : 25 Jun 2024 Elizabeth, NJ Unique Number : 11097393 : 25 Jun 2024 - Wes Davis US 07207 Diagnosed Test Package : FLEET Contact: Normand Brizak Certificate 12367 To discuss this sample report, contact Customer Service at 1-800-237-1369. nbrizak@transervice.com \* - Denotes test methods that are outside of the ISO 17025 scope of accreditation. T: F:

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

Submitted By: Normand Brizak