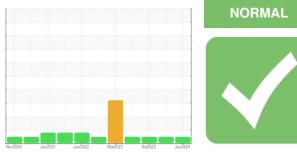


OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id 610704 Component Diesel Engine Fluid PETRO CANADA DURON SHP 10W30 (--- QTS)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

Wear

Metal levels are typical for a new component breaking in.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

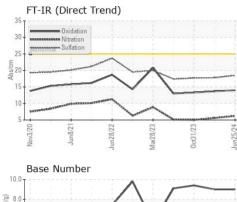
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

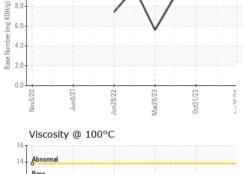
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0128914	PCA0120639	PCA0110472
Sample Date		Client Info		25 Jun 2024	05 Mar 2024	31 Oct 2023
Machine Age	mls	Client Info		35166	32686	29880
Oil Age	mls	Client Info		0	0	0
Oil Changed		Client Info		Changed	Not Changd	Not Changd
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINAT	ION	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	>100	10	6	5
Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
Nickel	ppm	ASTM D5185m	>4	<1	0	<1
Titanium	ppm	ASTM D5185m		<1	0	<1
Silver	ppm	ASTM D5185m	>3	<1	0	<1
Aluminum	ppm	ASTM D5185m	>20	3	2	2
Lead	ppm	ASTM D5185m	>40	0	0	<1
Copper	ppm	ASTM D5185m	>330	37	30	22
Tin	ppm	ASTM D5185m	>15	2	2	2
Vanadium	ppm	ASTM D5185m		0	0	<1
Cadmium	ppm	ASTM D5185m		0	0	<1
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	2	6	2	2
Barium	ppm	ASTM D5185m	0	0	0	0
Molybdenum	ppm	ASTM D5185m	50	60	64	62
Manganese	ppm	ASTM D5185m	0	0	0	<1
Magnesium	ppm	ASTM D5185m	950	924	921	941
Calcium	ppm	ASTM D5185m	1050	1112	1044	1106
Phosphorus	ppm	ASTM D5185m	995	1227	935	1048
Zinc	ppm	ASTM D5185m	1180	1294	1127	1235
Sulfur	ppm	ASTM D5185m	2600	3240	2729	3184
CONTAMINAN	TS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	3	3	2
Sodium	ppm	ASTM D5185m		<1	0	0
Potassium	ppm	ASTM D5185m	>20	6	5	4
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	0.2	0.2	0.1
Nitration	Abs/cm	*ASTM D7624	>20	6.2	5.6	5.0
Sulfation	Abs/.1mm	*ASTM D7415	>30	18.5	17.8	17.7
FLUID DEGRA	DATION	method	limit/base	current	history1	history2
FLUID DEGRAD	DATION Abs/.1mm	method *ASTM D7414	limit/base	current 14.0	history1 13.7	history2 13.3

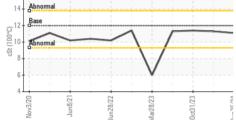


OIL ANALYSIS REPORT

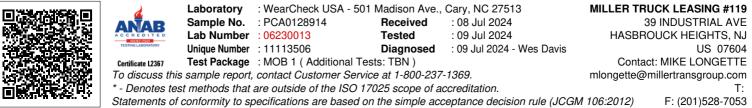
VISUAL







								ry2
White Metal	scalar	*Visual	NONE	NONE	NONE	-	NONE	
Yellow Metal	scalar	*Visual	NONE	NONE			NONE	
Precipitate	scalar	*Visual	NONE	NONE			NONE	
Silt	scalar	*Visual	NONE	NONE			NONE	
Debris	scalar	*Visual	NONE	NONE	NONE		NONE	
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE NO		NONE	
Appearance	scalar	*Visual	NORML	NORML	NORML NO		NORM	
Odor	scalar	*Visual	NORML	NORML	NORM	NORML NOF		1L
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG		NEG	
Free Water	scalar	*Visual		NEG	NEG		NEG	
FLUID PROPER	RTIES	method	limit/base	current	histo	ory1	histo	ry2
Visc @ 100°C	cSt	ASTM D445	12.00	11.1	11.3		11.4	
GRAPHS								
Iron (ppm)				Lead (ppm)				
Severe			100	Severe				
			80	+ 0				
Abnormal			60 탄 40	Abnormal				
			40					
	\checkmark		0	/				
Nov3/20 -	Mar28/23 -	0ct31/23 -	Jun25/24 -	Nov3/20 -	Jun28/22 -	Mar28/23 -	0ct31/23 -	
Jun Jun2	Mar2	0ct3	Junî	Non	Juni	Mar2	Oct5	10,00
Aluminum (ppm)				Chromium (p	pm)			
Severe			50	Severe				
			- 40	+ 0				
Abnormal			20	Abnormal				
Abnormal			10					
	\vee		0					
Nov3/20 - Jun8/21 - Jun28/22 -	Mar28/23 -	0ct31/23 -	Jun25/24 -	Nov3/20 - Jun8/21 -	Jun28/22 -	Mar28/23 -	0ct31/23 -	
Nov Jur Jun2	Mar2	0 ct3	Jun2	Jun	Jun2	Mar2	0ct3	10 JE /94
Copper (ppm)				Silicon (ppm)				
			80	Severe		1		
			60	• • • • • • • • • • • • • • •				
- Stiffimal	\		틆 40					
-			20	Abnormal				
$\overline{\mathbf{A}}$	~	_	n			-		
Nov3/20 - Jun8/21 - Jun28/22 -	Mar28/23 -	0ct31/23 -	Jun25/24 -	Nov3/20 - Jun8/21 -	Jun28/22 -	Mar28/23 -	0ct31/23 -	10
Nov Jur Jun2	Mar2	0 et3	Jun2	Jur	Jun2	Mar2	0ct3	-
Viscosity @ 100°C				Base Number				
Abnormal			(B)H					
Base			0.8 KOH			$\backslash /$		
Abnormal	1		<u>E</u> 6.0			Y		
	$\langle \rangle$	/	(b)H08 8.0 H04 get Burner Base Base Base					
	· · · · · ·		2.0					
Nov3/20 Jun8/21	3/23 -	1/23 -	Jun25/24	Nov3/20	Jun28/22 -	Mar28/23 -	0ct31/23 -	1
Nov3/20 Jun8/21 un28/22	Mar28/23	0ct31/23	un 21	Jun!	32ur	lar2{	let3	



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Contact/Location: MIKE LONGETTE - MILRUT

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