

OIL ANALYSIS REPORT

Sample Rating Trend



595381 Component Diesel Engine

Fluid PETRO CANADA DURON SHP 10W30 (--- QTS)

DIAGNOSIS

Machine Id

Recommendation

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

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.

SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0128918	PCA0118911	PCA0113386
Sample Date		Client Info		15 Jun 2024	17 Feb 2024	30 Nov 2023
Machine Age	mls	Client Info		467881	0	432476
Oil Age	mls	Client Info		0	0	0
Oil Changed		Client Info		Not Changd	N/A	Not Changd
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINATI	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 METALS	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	16	34	29
Chromium	ppm	ASTM D5185m	>20	<1	2	1
Nickel	ppm	ASTM D5185m	>4	0	0	0
Titanium	ppm	ASTM D5185m		0	<1	<1
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	11	17	13
Lead	ppm	ASTM D5185m	>40	0	0	0
Copper	ppm	ASTM D5185m	>330	6	11	8
Tin	ppm	ASTM D5185m	>15	1	2	2
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	4	4
Barium	ppm	ASTM D5185m	0	0	0	0
Molybdenum	ppm	ASTM D5185m	50	64	65	66
Manganese	ppm	ASTM D5185m	0	<1	1	<1
Magnesium	ppm	ASTM D5185m	950	1008	946	973
Calcium	ppm	ASTM D5185m	1050	1130	1130	1112
Phosphorus	ppm	ASTM D5185m	995	1144	1001	1033
Zinc	ppm	ASTM D5185m	1180	1359	1225	1334
Sulfur	ppm	ASTM D5185m	2600	3494	2505	2677
CONTAMINAN	TS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	7	6	8
Sodium	ppm	ASTM D5185m		5	3	2
Potassium	ppm	ASTM D5185m	>20	7	4	6
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	0.7	0.9	1.3
Nitration	Abs/cm	*ASTM D7624	>20	8.5	8.9	10.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	20.1	22.3	24.2
FLUID DEGRAD	DATION	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.0	18.7	20.6
Base Number (BN)	mg KOH/g	ASTM D2896		7.5	6.3	5.4

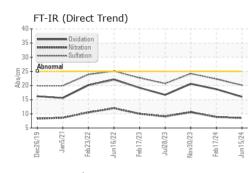


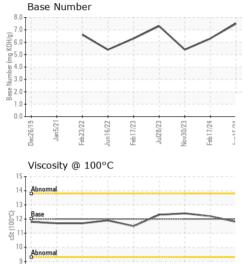
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Dec26/19

Jan5/21. eb23/22 Jun16/22 Feb17/23 Jul28/23

OIL ANALYSIS REPORT





ıd)			VISUAL		method	limit/base	current	history1	history2	
			White Metal	scalar	*Visual	NONE	NONE	NONE	NONE	
			Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE	
	and the second s		Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE	
	-		Silt	scalar	*Visual	NONE	NONE	NONE	NONE	
the average of the second second	and the Diversion of the local diversion of t		Debris	scalar	*Visual	NONE	NONE	NONE	NONE	
			Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE	
Feb17/23 Jul28/23	Nov30/23	Feb17/24 Jun15/24	Appearance	scalar	*Visual	NORML	NORML	NORML	NORML	
Let Fet	Nov	Jur Fet	Odor	scalar	*Visual	NORML	NORML	NORML	NORML	
			Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG	
	i i	/	Free Water	scalar	*Visual		NEG	NEG	NEG	
	\checkmark		FLUID PROPI	ERTIES	method	limit/base	current	history1	history2	
			Visc @ 100°C	cSt	ASTM D445	12.00	11.8	12.2	12.4	
			GRAPHS							
		Iron (ppm)			10	Lead (ppm)				
3 53	53		250 200	1		10	Severe			
Feb 17/23 Jul28/23	Nov30/23	Feb17/24	200							
ш ,	Z	u -	150 100 - Abnormal			udd 4	Abaranal			
			50-			2	0			
				-	m m 4			3 3	4 4	
			Dec26/19 Jan5/21 Feb23/22	Feb17/23	Jul28/23 Nov30/23 Feb17/24	Jun 15/24	Dec26/19 Jan5/21 Feb23/22	Jun 16/22 Feb 17/23 Jul 28/23	Nov30/23 Feb17/24 Jun15/24	
	1					ημ	Chromium (p	-	Ju Fe No	
			Aluminum (ppm)	, 		5		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
1 1			40 - Severe	1		4	0 - Severe			
	~	+ <	E 20 Abnormal			<u>الم</u>	0-			
Feb 17/23 Jul28/23	Nov30/23	Feb17/24								
Ľ,	2	LL -					0			
			Dec26/19 - Jan5/21 - Feb23/22 -	Feb17/23	Jul26/23 - Nov30/23 - Feb17/24 -	Jun15/24 -	Dec26/19	Jun16/22 - Feb17/23 - Jul28/23 -	Nov30/23 - Feb17/24 - Jun15/24 -	
			Dec2 Jar Feb2	Feb 1	Julz Nov3 Feb1	Junl	Jai Jai	Jun1 Feb1 Jul2	Nov3 Feb1 Jun1	
			Copper (ppm)			Sili ⁸⁰ T Seve	Silicon (ppm)	on (ppm)		
		300 -			6					
			툡 200 -			<u></u> 4	Abnormal			
			100-			2	0			
			Dec26/19 + Jan5/21 + Feb23/22 -	Feb17/23	Jui28/23 - Nov30/23 - Feb17/24 +	Jun15/24	Dec26/19	Jun 16/22 - Feb 17/23 - Jul 28/23 -	Nov30/23 + Feb17/24 + Jun15/24 +	
					Nov Ju	Jun			Nov Jun	
		Viscosity @ 100°	C		- 8.	Base Number				
			14 Abnormal			B/HOX 6	•	\sim	\smallsetminus	
			() 001 12 33 30 00 12 4 33 30 00 12 4 33 35 12 4 35 12 12 12 12 12 12 12 12 12 12	-		Bu Ja 4	0	-	-	
						(B)/HOX HOX Bull HOX Bull HOX HOX HOX Bull HOX HOX HOX HOX HOX HOX HOX HOX HOX HOX	0			
			10 Abnormal			Base B				
			ec26/19 +	1/23	3/23 - 1/23 -	0.	0	5/22 - 1/23 - 1/23 -)/23 + 1/24 +	
			Dec26/19 Jan5/21 Feb23/22	Feb17/23	Jui28/23 Nov30/23 Feb17/24	Jun15/24	Dec26/19 Jan5/21 Feb23/22	Jun 16/22 Feb 17/23 Jul28/23	Nov30/23 Feb17/24 Jun15/24	
Laboratory Sample No. Lab Number Unique Number Test Package To discuss this sample report,		: PCA0128918 : 06216632 : 11089496 : MOB 1 (Additional T	Recei Teste Diagr			Ves Davis	MILLER TRUCK LEASING #119 39 INDUSTRIAL AVE HASBROUCK HEIGHTS, NJ US 07604 Contact: MIKE LONGETTE mlongette@millertransgroup.com			

* - 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) F: (201)528-7053

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Contact/Location: MIKE LONGETTE - MILRUT