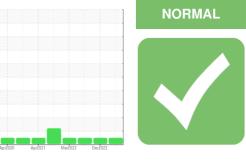


OIL ANALYSIS REPORT

SAMPLE INFORMATION method

Sample Rating Trend



Machine Id HINO 388516

Diesel Engine

Fluid PETRO CANADA DURON SHP 10W30 (16 QTS)

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.

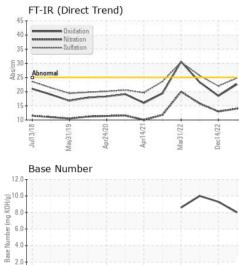
Fluid Condition

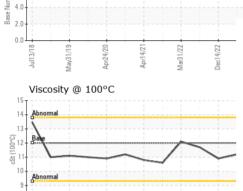
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

				Current		
Sample Number		Client Info		PCA0124069	PCA0077067	PCA0077031
Sample Date		Client Info		10 May 2024	14 Dec 2022	10 Aug 2022
Machine Age	mls	Client Info		276825	196059	176438
Oil Age	mls	Client Info		0	24618	15000
Oil Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL
			11 1.0			
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	50	29	39
Chromium	ppm	ASTM D5185m	>20	1	<1	<1
Nickel	ppm		>4	0	0	0
Titanium	ppm	ASTM D5185m	F.4	<1	0	0
Silver	ppm		>3	<1	0	0
Aluminum	ppm	ASTM D5185m	>20	8	10	13
Lead	ppm	ASTM D5185m	>20	3	2	5
Copper	ppm		>330	3	2	8
Tin			>15	1	1	2
Vanadium	ppm	ASTM D5185m	>15	، <1	0	0
Cadmium	ppm			0	0	0
	ppm	ASTM D5185m		0		-
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	limit/base	2	9	5
	ppm ppm			2 0	9 0	5 0
Boron		ASTM D5185m	2 0 50	2	9 0 66	5 0 66
Boron Barium	ppm	ASTM D5185m ASTM D5185m	2 0	2 0	9 0	5 0
Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50	2 0 72	9 0 66	5 0 66
Boron Barium Molybdenum Manganese	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0	2 0 72 1	9 0 66 <1	5 0 66 <1
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0 950	2 0 72 1 1020	9 0 66 <1 850	5 0 66 <1 891
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0 950 1050	2 0 72 1 1020 1270	9 0 66 <1 850 1130	5 0 66 <1 891 1232
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0 950 1050 995	2 0 72 1 1020 1270 1097	9 0 66 <1 850 1130 963	5 0 66 <1 891 1232 924
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 950 1050 995 1180	2 0 72 1 1020 1270 1097 1296	9 0 66 <1 850 1130 963 1177	5 0 66 <1 891 1232 924 1180
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 950 1050 995 1180 2600	2 0 72 1 1020 1270 1097 1296 3473	9 0 66 <1 850 1130 963 1177 2825	5 0 66 <1 891 1232 924 1180 2873
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 950 1050 995 1180 2600	2 0 72 1 1020 1270 1097 1296 3473 current	9 0 66 <1 850 1130 963 1177 2825 history1	5 0 66 <1 891 1232 924 1180 2873 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon	ppm ppm ppm ppm ppm ppm ppm ppm TS	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m	2 0 50 950 1050 995 1180 2600	2 0 72 1 1020 1270 1097 1296 3473 <i>current</i> 5	9 0 66 <1 850 1130 963 1177 2825 history1 4	5 0 66 <1 891 1232 924 1180 2873 history2 6
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 limit/base >25	2 0 72 1 1020 1270 1097 1296 3473 <u>current</u> 5 10	9 0 66 <1 850 1130 963 1177 2825 history1 4 11	5 0 66 <1 891 1232 924 1180 2873 history2 6 9 9
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED	ppm ppm ppm ppm ppm ppm ppm ppm TS	ASTM D5185m ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 Imit/base >25 >20	2 0 72 1 1020 1270 1097 1296 3473 <i>current</i> 5 10 9	9 0 66 <1 850 1130 963 1177 2825 history1 4 11 7 history1	5 0 66 <1 891 1232 924 1180 2873 history2 6 9 11 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot %	ppm ppm ppm ppm ppm ppm ppm ppm TS	ASTM D5185m ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 limit/base >25 >20 limit/base >3	2 0 72 1 1020 1270 1097 1296 3473 <i>current</i> 5 10 9 <i>current</i>	9 0 66 <1 850 1130 963 1177 2825 history1 4 11 7 <u>history1</u> 1.7	5 0 66 <1 891 1232 924 1180 2873 history2 6 9 11 history2 1.9
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration	ppm ppm ppm ppm ppm ppm ppm TS TS ppm ppm ppm	ASTM D5185m ASTM D5185m	2 0 50 950 1050 995 1180 2600 <i>imit/base</i> >25 >20 <i>imit/base</i> >3 >20	2 0 72 1 1020 1270 1097 1296 3473 <i>current</i> 5 10 9 <i>current</i> 1.7 1.7 14.0	9 0 66 <1 850 1130 963 1177 2825 history1 4 11 7 <u>history1</u> 1.7 1.7 13.0	5 0 66 <1 891 1232 924 1180 2873 history2 6 9 11 6 9 11 1 history2 1.9 15.8
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 imit/base >25 imit/base >3 >20	2 0 72 1 1020 1270 1097 1296 3473 <i>current</i> 5 10 9 <i>current</i> 1.7 14.0 24.8	9 0 66 <1 850 1130 963 1177 2825 history1 4 11 7 <u>history1</u> 1.7 13.0 22.0	5 0 66 <1 891 1232 924 1180 2873 history2 6 9 11 6 9 11 11 history2 1.9 15.8 25.7
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	2 0 50 950 1050 995 1180 2600 <i>imit/base</i> >25 >20 <i>imit/base</i> >3 >20	2 0 72 1 1020 1270 1097 1296 3473 <i>current</i> 5 10 9 <i>current</i> 1.7 1.7 14.0	9 0 66 <1 850 1130 963 1177 2825 history1 4 11 7 <u>history1</u> 1.7 1.7 13.0	5 0 66 <1 891 1232 924 1180 2873 history2 6 9 11 6 9 11 1 history2 1.9 15.8
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 imit/base >25 imit/base >3 >20	2 0 72 1 1020 1270 1097 1296 3473 <i>current</i> 5 10 9 <i>current</i> 1.7 14.0 24.8	9 0 66 <1 850 1130 963 1177 2825 history1 4 11 7 <u>history1</u> 1.7 13.0 22.0	5 0 66 <1 891 1232 924 1180 2873 history2 6 9 11 history2 1.9 1.9 15.8 25.7
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm ppm ppm ppm ppm TS ppm ppm ppm ppm ppm	ASTM D5185m ASTM D7844 *ASTM D7624 *ASTM D7415	2 0 0 50 0 950 1050 995 1180 2600 imit/base >25 >20 >20 >30 >30 imit/base	2 0 72 1 1020 1270 1097 1296 3473 <i>current</i> 5 10 9 <i>current</i> 1.7 14.0 24.8 <i>current</i>	9 0 66 <1 850 1130 963 1177 2825 history1 4 11 7 history1 1.7 13.0 22.0 history1	5 0 66 <1 891 1232 924 1180 2873 history2 6 9 11 6 9 11 1 history2 1.9 15.8 25.7 history2



OIL ANALYSIS REPORT





Apr24/20

8.

Jul13/18

Mav31/19

			VISUAL		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	
_	1 1		Silt	scalar	*Visual	NONE	NONE	NONE	NONE	
0	N		Debris	scalar	*Visual	NONE	NONE	NONE	NONE	
	/	Concession of the local division of the loca	Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE	
4/21	1/22	4/22	Appearance	scalar	*Visual	NORML	NORML	NORML	NORML	
Apr14/2	Mar31/22	Dec14/22	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	11.2	10.9	11.7	
			GRAPHS							
			Iron (ppm)				Lead (ppm))		
			250 Severe	1111		10	Severe			
Apr14/21	Mar31/22	Dec14/22	200 - Severe		1	- 80	T I			
Ap	Mai	Det	Abnormal			udd 40	Alexand			
					\wedge		T I			
			50			2				
				4/21	/22	+ (4/21	1/22	
1			Jul13/18	Apr14/21	Mar31/22	Dec 14/27	Jul13/18 May31/19	Apr24/20 Apr14/21	Mar31/22 Dec14/22	
	1	-	Aluminum (ppm)				Chromium	(ppm)		
	-		⁵⁰ T			50				
	++		40 - Severe			- 41				
21-	2		E 20 Abnormal		1 1	드 31 면 21	Abnormal			
Apr14/21	Mar31/22	Dec14/22			\wedge					
4	×	Ó				10				
			/18//18	121-	/22+			/20 -	722-	
			Jul13/18 - May31/19 - May31/19 - Apr24/20 -	Apr14/21	Mar31/22	Dec1+/22	Jul13/18 May31/19	Apr24/20 Apr14/21	Mar31/22 -	
			Copper (ppm)	-	~ 1	_	Silicon (ppr		- U	
		400 Severe					•••			
		300			60)-				
		튭 200-		1	틀 41					
						Abnormal				
		100		1	2					
			20	21	22			20-	22	
			Jul13/18 May31/19 Apr24/20	Apr14/21	Mar31/22	Dec1+/27	Jul13/18 May31/19	Apr24/20 Apr14/21	Mar31/22 Dec14/22	
			⊸		2 0	-	⊐ ≊ Base Numb		2 0	
			¹⁶							
			14 Abnormal			(b)H0.1 H0.1 Bu) aquini aquini 4.0 seg			\sim	
		(0-001) 12- Base			B 8.0					
					4.0					
			¹⁰ Abnormal							
			8 6 0		5	+ 0.0		51	2	
			Jul13/18 May31/19 Apr24/20	Apr14/21	Mar31/22	Dec 1-1/27	Jul13/18 May31/19	Apr24/20 Apr14/21	Mar31/22 Dec14/22	
			A, Mi	A	≥ 0	2	ل Mi	A A	D N	
1	Labo	ratory	: WearCheck USA - 50	n Ave., Cary, NC 27513			MILLER TRUCK LEASING #12			
	Samp	le No.	: PCA0124069	Recei	ved : 24 May 2024			107 HOW LAN		
REDITES	-		: 06191585	Teste) May 2024		NEW B	RUNSWICK, N	
- LABURATORY			: 11048337			May 2024 - Wes Davis		0	US 0890	
icate L2367	IEST		: MOB 1 (Additional Te contact Customer Serve					Contact acursi@miller	: Anthony Cur	

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

Report Id: MILNEW [WUSCAR] 06191585 (Generated: 05/29/2024 01:35:14) Rev: 1

Contact/Location: Anthony Cursi - MILNEW

F: (732)400-8475