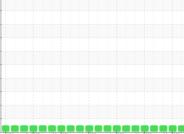


OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL





	- - 111)		lay2020 0	t2020 May2021 Ja	n2022 Jun2022 Nov2022	May2023	
	SAMPLE INFOR	MATION	method	limit/base	current	history1	history2
	Sample Number		Client Info		GFL0083866	GFL0061468	GFL0061499
interval to monitor.	Sample Date		Client Info		10 Aug 2023	19 May 2023	28 Feb 2023
	Machine Age	hrs	Client Info		183695	183695	183695
e normal.	Oil Age	hrs	Client Info		183695	183695	183695
	Oil Changed		Client Info		N/A	N/A	N/A
contamination in the	Sample Status				NORMAL	NORMAL	NORMAL
	CONTAMINAT	ION	method	limit/base	current	history1	history2
hara ia avitabla	Fuel		WC Method	>5	<1.0	<1.0	<1.0
there is suitable . The condition of the ice.	Glycol		WC Method		NEG	NEG	NEG
	WEAR METAL	.S	method	limit/base	current	history1	history2
	Iron	ppm	ASTM D5185m	>110	27	13	6
	Chromium	ppm	ASTM D5185m		2	0	<1
	Nickel	ppm	ASTM D5185m		0	0	0
	Titanium	ppm	ASTM D5185m		<1	<1	0
	Silver	ppm	ASTM D5185m	>2	0	0	<1
	Aluminum	ppm	ASTM D5185m		5	<1	2
	Lead	ppm	ASTM D5185m		1	<1	<1
			ASTM D5185m		<1	<1	<1
	Copper Tin	ppm					
		ppm	ASTM D5185m	>4	<1	<1	<1
	Vanadium	ppm	ASTM D5185m		0	0	<1
	Cadmium	ppm	ASTM D5185m		0	<1	0
	ADDITIVES		method	limit/base	current	history1	history2
	Boron	ppm	ASTM D5185m	0	4	4	8
	Barium	ppm	ASTM D5185m	0	0	0	0
	Molybdenum	ppm	ASTM D5185m	60	60	60	61
	Manganese	ppm	ASTM D5185m	0	<1	<1	<1
	Magnesium	ppm	ASTM D5185m	1010	949	966	876
	Calcium	ppm	ASTM D5185m	1070	1073	1159	1103
	Phosphorus	ppm	ASTM D5185m	1150	1045	1021	1011
	Zinc	ppm	ASTM D5185m	1270	1271	1351	1219
	Sulfur	ppm	ASTM D5185m	2060	3439	3367	3453
	CONTAMINAN	ITS	method	limit/base	current	history1	history2
	Silicon	ppm	ASTM D5185m	>30	11	5	4
	Sodium	ppm	ASTM D5185m		5	3	<1
	Potassium	ppm	ASTM D5185m	>20	2	2	3
	INFRA-RED		method	limit/base	current	history1	history2
	Soot %	%	*ASTM D7844	>3	0.6	0.4	0.2
	Nitration	Abs/cm	*ASTM D7624	>20	10.1	9.3	6.5
	Sulfation	Abs/.1mm	*ASTM D7415		21.2	21.0	18.7
	FLUID DEGRA	DATION	method	limit/base	current	history1	history2
	Oxidation	Abs/.1mm	*ASTM D7414	>25	17.8	17.4	14.3
	Base Number (BN)	mg KOH/g	ASTM D2896	9.8	7.0	7.8	8.6
	. ,	- 0					

Component

Diesel Engine

PETRO CANADA DURON SHP 15W40 (--- LTR)

DIAGNOSIS

Recommendation

Resample at the next serv

Wear

All component wear rates

Contamination

There is no indication of a oil.

Fluid Condition

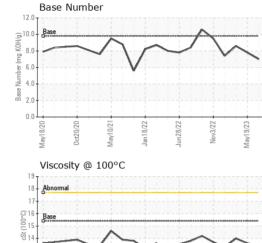
The BN result indicates that alkalinity remaining in the oil is suitable for further se



13 Abnorma 12 11 May18/20 -

OIL ANALYSIS REPORT

VISUAL



May10/21

lan18/22

Jun28/22

\sim	White Metal Yellow Metal Precipitate	scalar	*) //				LIGHT
\sim			*Visual	NONE	NONE	NONE	LIGHT
	Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
		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
9/23	Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
May19/23	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	15.4	13.4	13.6	14.0
\sim	GRAPHS						
	Ferrous Alloys						
	⁸⁰ T		1				
5	70 - iron	A					
;C/blr∝W	co.	Λ					
ne p	60 - nickel	-	h = + = = = = = = = = = = = = = = = = =				
4	50	1 .					
	50-	1 1					
	Era						
	틆 40	1 11					
	30	V	4				
		V	1 .				
	20		1 A				
				/			
	10		VV				
	0	All Long Long and Long	TILL CONTRACTOR	angestiff			
		22	22	53.			
	May18/20 0ct20/20 May10/21	Jan 18/2	Jun28/22 Nov3/22	May 19/23			
	ay1 ct2	[up	VoV	av1			
	Ma M	5	л Г	Š			
	New Francis Make	-					
	Non-ferrous Meta	s					
	Non-ferrous Meta ³⁰ T	ls					
		ls A					
	30 copper	ls A					
	30 copper	ls					
	25 copper tin	ls					
	30 copper	s					
	25 20						
	25 20	ls					
	25 copper tin	ls					
	25 20	ls					
	25 20 <u>E</u> 15	ls					
	30 25 20 Щ 15 10						
	25 20 <u>E</u> 15						
	30 25 20 Eg 15- 10- 5-						
	20 Eg 15 0	1	22				
	20 Eg 15 0	1	28/22				
	20 Eg 15 0	1	lun28/22				
	25 20 15 10 5 00 02/81/rew 02/81/rew	Jan 18/22	Jun28/22 -				
	20 Eg 15 0	Jan 18/22	Jun2ki22 -		Daga Murrah -		
	25 20 15 10 5 00 02/81/rew 02/81/rew	Jan 18/22	Jun 28/27	May19/23	Base Numbe	r	
	25 20 15 10 5 00 028 / MeW Viscosity @ 100°C	Jan 18/22	Jun28/22		Dabe mannbe	ï	
	25 20 15 10 5 000281/kew Viscosity @ 100°0	Jan 18/22	Jun26/22 -	E2761/AeW 12.0		r	
	25 20 udd 15 0 00280/kew Viscosity @ 100°0	Jan 18/22	Jun28/22 4	CZO61/APM 12.0		۲	
	25 20 15 10 5 00 028 / MeW Viscosity @ 100°C	Jan 18/22	Jun28/22	CZO61/APM 12.0		r	
	25 20 udd 15 0 00281/kew Viscosity @ 100°0	Jan 18/22	Nov3/22	CZO61/APM 12.0	0 - Base	r	\wedge
	25 20 udd 15 0 00281/kew Viscosity @ 100°0	Jan 18/22	Jun28/22	CZO61/APM 12.0	0 - Base	r A	\sim
	25 20 udd 15 0 00281/kew Viscosity @ 100°0	Jan 18/22	Jun28/22	CZO61/APM 12.0		r	\wedge
	25 20 udd 15 0 00281/kew Viscosity @ 100°0	Jan 18/22	Jun28/22	CZO61/APM 12.0		ır	\wedge
	30 25 20 15 10 5 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Jan 18/22	Jun28/22 -	CZO61/APM 12.0	0 - Base	r	\wedge
	25 20 20 25 20 20 25 20 20 20 20 20 20 20 20 20 20 20 20 20	Jan 18/22	Jun2822	CZO61/APM 12.0	0 - Base	r	\wedge
	25 20 20 25 20 20 20 20 20 20 20 20 20 20 20 20 20	Jan 18/22	Jun28/22	12.1 10.1 10.4 10.8 10.8 10.4 10.4 10.4 10.4 10.4 10.4 10.4 10.4		ır	\wedge
	25 20 20 25 20 20 25 20 20 20 20 20 20 20 20 20 20 20 20 20	Jan 18/22	22/22/ul	CZO61/APM 12.0		17	\wedge
	25 20 20 20 20 20 20 20 20 20 20 20 20 20	Jan 18/22	Jun2822	12.1 (b)HOX Du) a 6.1 aquiny seg 2.1	D - Rase	r	^
	25 20 15 10 5 0 0200 key Viscosity @ 100°C 10 10 10 10 10 10 10 10 10 10	Jan 18/22	, 	12.0 (D)HOX DUI Jaquinin 4.4 2.1 0.1		\sim	
	25 20 15 10 5 0 0200 key Viscosity @ 100°C 10 10 10 10 10 10 10 10 10 10	Jan 18/22	, 	12.0 (D)HOX DUI Jaquinin 4.4 2.1 0.1		\sim	3/22
	25 20 20 20 20 20 20 20 20 20 20 20 20 20	Jan 18/22	Jun28/22	12.1 (b)HOX Du) a 6.1 aquiny seg 2.1	D - Rase	May10/21	Mov3/22

10954 Houser Drive

Fredericksburg, VA

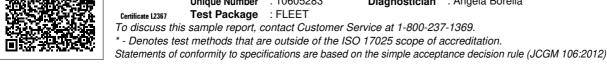
wmilo@gflenv.com

Contact: WILLIAM MILO

US 22408

T:

F:



Sample No.

Lab Number

Unique Number : 10605283

Test Package : FLEET

: GFL0083866

: 05925336

Received

Diagnosed

: 15 Aug 2023

: 16 Aug 2023

Diagnostician : Angela Borella