



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
DARYL PERFEERST [SAM]
Machine Id
ZF 20052584 - INBOARD
Component
Port Gearbox
Fluid
CHEVRON DELO 400 SAE 30 (4 QTS)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		VPA053113	VPA035144	VPA025670
Sample Date		Client Info		19 Apr 2024	13 Jan 2022	04 Sep 2020
Machine Age	hrs	Client Info		645	531	0
Oil Age	hrs	Client Info		114	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	Changed	Not Changd
Filter Changed		Client Info		N/A	N/A	Not Changd
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

PQ		ASTM D8184		27	20	24
Iron	ppm	ASTM D5185m	>150	16	20	23
Chromium	ppm	ASTM D5185m	>10	<1	<1	<1
Nickel	ppm	ASTM D5185m	>10	0	0	<1
Titanium	ppm	ASTM D5185m		0	1	2
Silver	ppm	ASTM D5185m		0	0	<1
Aluminum	ppm	ASTM D5185m	>5	6	18	25
Lead	ppm	ASTM D5185m	>65	7	28	26
Copper	ppm	ASTM D5185m	>80	107	266	252
Tin	ppm	ASTM D5185m	>8	<1	<1	<1
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

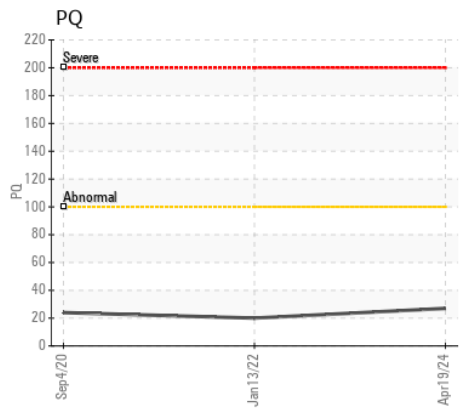
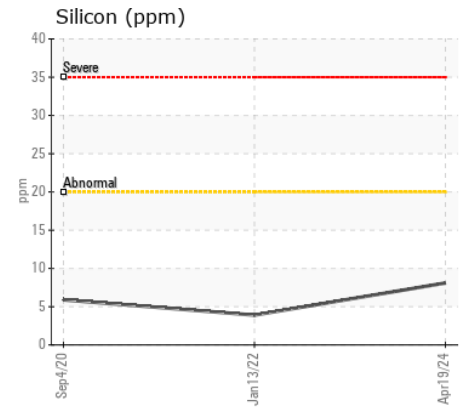
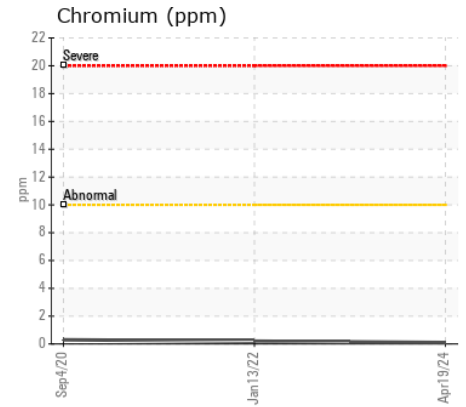
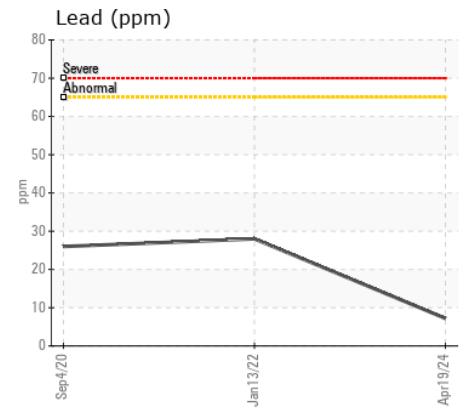
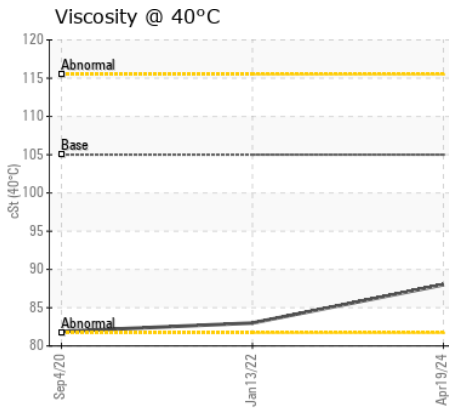
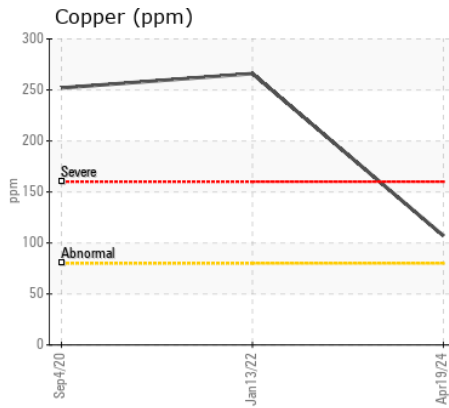
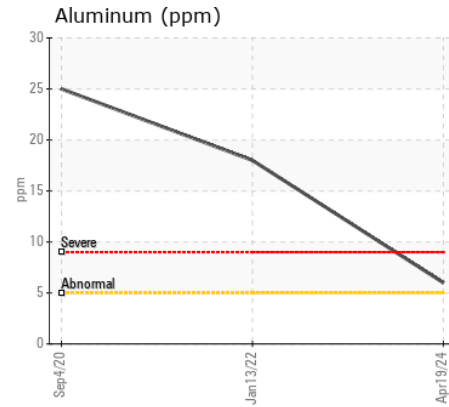
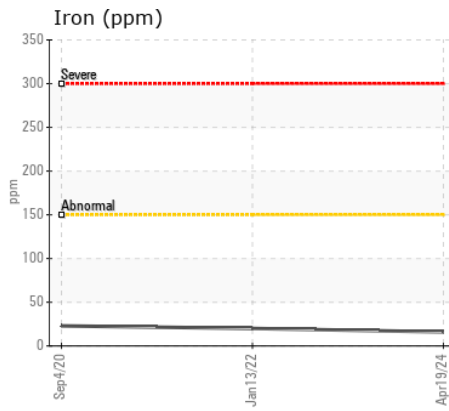
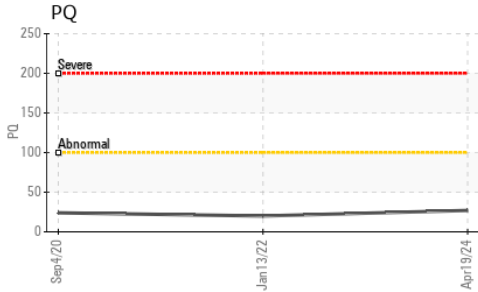
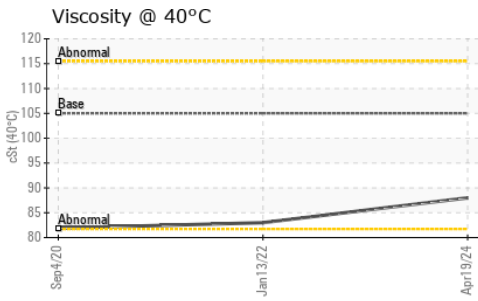
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>20	8	4	6
Potassium	ppm	ASTM D5185m	>20	0	0	1
Water		WC Method	>0.2	NEG	NEG	NEG
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	LIGHT	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

FLUID CONDITION

The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185m		<1	1	<1
Boron	ppm	ASTM D5185m		379	9	14
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		37	2	3
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		17	14	15
Calcium	ppm	ASTM D5185m		3374	2182	2535
Phosphorus	ppm	ASTM D5185m	1160	1050	800	910
Zinc	ppm	ASTM D5185m	1270	1164	945	1067
Sulfur	ppm	ASTM D5185m		5205	4323	4735
Visc @ 40°C	cSt	ASTM D445	105	88.0	83.0	81.9



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : VPA053113 **Received** : 24 Apr 2024
Lab Number : 06159414 **Tested** : 25 Apr 2024
Unique Number : 10994837 **Diagnosed** : 26 Apr 2024 - Jonathan Hester
Test Package : MOB 1 (Additional Tests: PQ)

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To discuss this sample report, contact Customer Service at 1-800-237-1369.

* - 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)