WEAR CONTAMINATION FLUID CONDITION

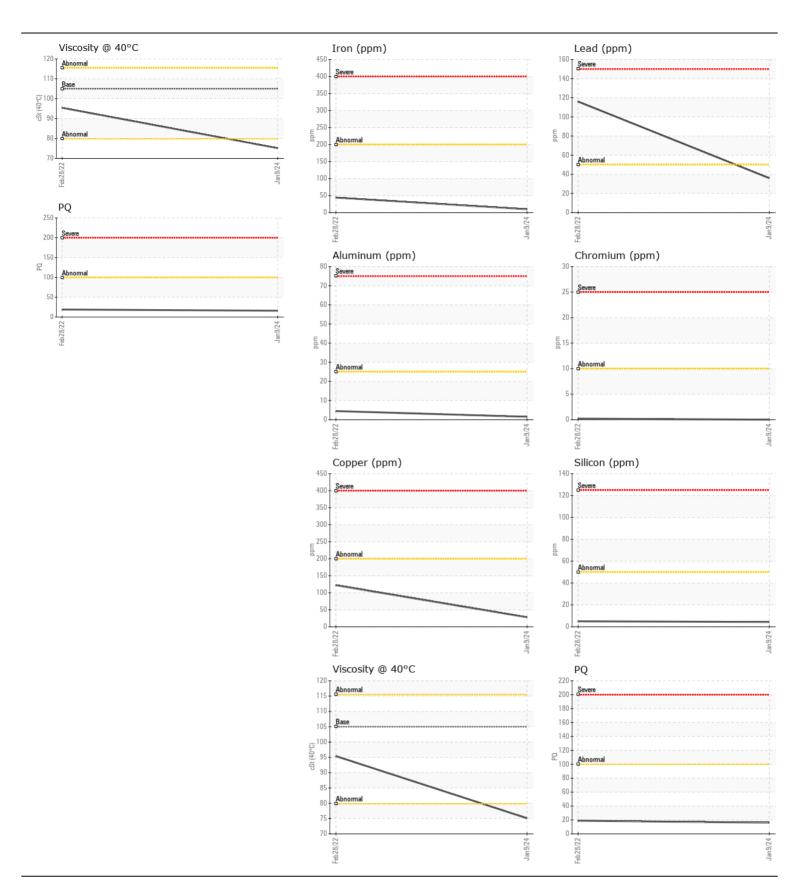
NORMAL NORMAL NORMAL

TREVOR SKELLY [7718151]

ZF 95-15031 - INBOARD (S/N 96-15031)

Starboard Gearbox

CHEVRON DELO 400 SAE 30 (9 LTR)							
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor.	Sample Number		Client Info		VPA060841	VPA033467	
	Sample Date		Client Info		09 Jan 2024	28 Feb 2022	
	Machine Age	hrs	Client Info		1710	1388	
	Oil Age	hrs	Client Info		310	200	
	Filter Age	hrs	Client Info		0	0	
	Oil Changed		Client Info		Changed	Changed	
	Filter Changed		Client Info		Changed	Changed	
	Sample Status				NORMAL	ATTENTION	
WEAR	PQ		ASTM D8184		16	19	
All component wear rates are normal.	Iron	ppm	ASTM D5185m	>200	10	44	
	Chromium	ppm	ASTM D5185m	>10	0	<1	
	Nickel	ppm	ASTM D5185m	>10	0	<1	
	Titanium	ppm	ASTM D5185m		0	0	
	Silver	ppm	ASTM D5185m		0	1	
	Aluminum	ppm	ASTM D5185m	>25	2	4	
	Lead	ppm	ASTM D5185m	>50	36	1 16	
	Copper	ppm	ASTM D5185m	>200	28	▲ 122	
	Tin	ppm	ASTM D5185m	>10	<1	9	
	Vanadium	ppm	ASTM D5185m		0	0	
	White Metal	scalar	*Visual	NONE	NONE	NONE	
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
CONTAMINATION There is no indication of any contamination in the oil.	Silicon	ppm	ASTM D5185m	>50	4	5	
	Potassium	ppm	ASTM D5185m	>20	0	0	
	Water		WC Method	>0.2	NEG	NEG	
	Silt	scalar	*Visual	NONE	NONE	NONE	
	Debris	scalar	*Visual	NONE	LIGHT	NONE	
	Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	
	Appearance	scalar	*Visual	NORML	NORML	NORML	
	Odor	scalar	*Visual	NORML	NORML	NORML	
	Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	
FLUID CONDITION	Sodium	ppm	ASTM D5185m		3	2	
The condition of the oil is acceptable for the time in service.	Boron	ppm	ASTM D5185m		45	217	
	Barium	ppm	ASTM D5185m		0	0	
	Molybdenum	ppm	ASTM D5185m		65	87	
	Manganese	ppm	ASTM D5185m		0	<1	
	Magnesium	ppm	ASTM D5185m		960	833	
	Calcium	ppm	ASTM D5185m		1111	1187	
	Phosphorus	ppm	ASTM D5185m	1160	1102	1023	
	Zinc	ppm	ASTM D5185m	1270	1182	1085	
	Sulfur	ppm	ASTM D5185m		3438	3432	
	Visc @ 40°C	cSt	ASTM D445	105	75.1	95.4	





Certificate L2367

Laboratory Sample No. Lab Number **Unique Number**

: VPA060841 : 06063109 : 10834491 Test Package : MOB 1 (Additional Tests: PQ)

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Recieved : 17 Jan 2024 : 18 Jan 2024 Diagnosed

Diagnostician : Sean Felton

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)

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