WEAR CONTAMINATION FLUID CONDITION **NORMAL NORMAL NORMAL**

SILVER SEAS [1610117]

VOLVO PENTA 3200005646

Starboard IPS

GEAR OIL LS 80W90 (GAL)							
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor.	Sample Number		Client Info		VPA053179		
	Sample Date		Client Info		10 Jun 2024		
	Machine Age	hrs	Client Info		215		
	Oil Age	hrs	Client Info		0		
	Filter Age	hrs	Client Info		0		
	Oil Changed		Client Info		N/A		
	Filter Changed		Client Info		N/A		
	Sample Status				NORMAL		
WEAR	PQ		ASTM D8184		24		
	Iron	ppm	ASTM D5185m	>275	13		
All component wear rates are normal.	Chromium	ppm	ASTM D5185m		0		
	Nickel	ppm	ASTM D5185m	>4	0		
	Titanium	ppm	ASTM D5185m		0		
	Silver	ppm	ASTM D5185m		0		
	Aluminum	ppm	ASTM D5185m	>10	0		
	Lead	ppm	ASTM D5185m	>4	0		
	Copper	ppm	ASTM D5185m	>30	2		
	Tin	ppm	ASTM D5185m	>3	0		
	Vanadium	ppm	ASTM D5185m		<1		
	White Metal	scalar	*Visual	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE		
CONTAMINATION There is no indication of any contamination in the oil.	Silicon	ppm	ASTM D5185m	>35	3		
	Potassium	ppm	ASTM D5185m	>20	2		
	Water		WC Method	>0.2	NEG		
	Silt	scalar	*Visual	NONE	NONE		
	Debris	scalar	*Visual	NONE	NONE		
	Sand/Dirt	scalar	*Visual	NONE	NONE		
	Appearance	scalar	*Visual	NORML	NORML		
	Odor	scalar	*Visual	NORML	NORML		
	Emulsified Water	scalar	*Visual	>0.2	NEG		
FLUID CONDITION	Sodium	ppm	ASTM D5185m		2		
The condition of the oil is acceptable for the time in service.	Boron	ppm	ASTM D5185m	150	284		
	Barium	ppm	ASTM D5185m		0		
	Molybdenum	ppm	ASTM D5185m		0		
	Manganese	ppm	ASTM D5185m		2		
	Magnesium	ppm	ASTM D5185m	10	<1		
	Calcium	ppm	ASTM D5185m	70	12		
	Phosphorus	ppm	ASTM D5185m	2000	1338		
	Zinc	ppm	ASTM D5185m	50	2		
	Sulfur	ppm	ASTM D5185m	20000	25759		
	Visc @ 40°C	cSt	ASTM D445	140	113		







Certificate L2367

Laboratory Sample No.

Unique Number : 11088919

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : VPA053179 Lab Number : 06216055

Received **Tested** Diagnosed Test Package : MOB 1 (Additional Tests: PQ)

: 20 Jun 2024 : 22 Jun 2024

: 23 Jun 2024 - Don Baldridge

Pacific Power Group - VP981534 7215 S 228th St Kent, WA US 98032

Contact: PAT RYAN pryan@pacificpowergroup.com T: (253)520-5163

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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