

OIL ANALYSIS REPORT

VOLVO PENTA

ALASKA LUXURY TOURS OPUS-PORT VOLVO PENTA A1202078 - PORT DIESEL ENGINE

Sample No: VPA060139
Oil Type: KIRKLAND 15W40

SAMPLE INFORMATION

Sample Number	VPA060139	VPA060126	VPA056359	VPA056367
Sample Date	23 Sep 2023	25 Aug 2023	29 Jul 2023	02 Jul 2023
Machine Hours	956	788	598	394
Oil Hours	168	190	200	211
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	NORMAL	NORMAL	NORMAL	NORMAL

Sundance Mfg Inc
570 N.E. Tomahawk Isl. Dr.
Portland, OR
US 97217
Contact: DAVID TAYLOR
david@sundanceyachts.com
T: (360)630-1495
F:

OIL CONDITION

Visc @ 100°C	cSt	13.1	14.5	14.4	14.3
Base Number (BN)	mg KOH/g	10.0	10.2	9.8	10.4
Oxidation (PA)	%	55	55	54	57

CONTAMINATION

Soot %	%	0.5	0.6	0.6	0.5
Nitration (PA)	%	51	53	52	55
Sulfation (PA)	%	52	52	51	54
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	5	3	4	6
Sodium	ppm	4	0	2	1
Potassium	ppm	4	<1	0	2

WEAR METALS

Iron	ppm	14	16	21	24
Copper	ppm	5	6	8	11
Lead	ppm	2	2	2	3
Tin	ppm	<1	1	2	2
Aluminum	ppm	1	<1	0	3
Chromium	ppm	<1	<1	1	2
Molybdenum	ppm	64	58	63	58
Nickel	ppm	0	2	2	3
Titanium	ppm	0	0	<1	<1
Silver	ppm	0	0	0	0
Manganese	ppm	1	<1	<1	<1
Vanadium	ppm	0	0	<1	<1

ADDITIVES

Calcium	ppm	1131	977	1167	1093
Magnesium	ppm	1015	884	1049	944
Zinc	ppm	1303	1124	1317	1238
Phosphorus	ppm	1058	954	1094	988
Barium	ppm	0	<1	0	0
Boron	ppm	5	0	0	<1

Diagnosis

Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.

Depot: VP154394
Unique No: 10670475
Signed: Don Baldrige
Report Date: 01 Oct 2023

OIL ANALYSIS REPORT

VOLVO PENTA

GRAPHS

