OIL ANALYSIS REPORT

VOLVO PENTA

VOLVO PENTA 3940016080 - STARBOARD IPS

Sample No: VPA031081

Oil Type: GEAR OIL SAE 75W90

SAMPLE INFORMATION Sample Number VPA031081 Sample Date 25 Jul 2023 Machine Hours 622 Oil Hours 0 Oil Changed N/A Sample Status NORMAL OIL CONDITION OIL CONDITION Silicon ppm 12 Sodium ppm 4 Vetassium ppm 4 Vetassium ppm 23 Iron ppm 23 Iron ppm 0 Iron <th></th> <th></th> <th></th> <th></th> <th></th>						
Sample Date 25 Jul 2023 Machine Hours 622 Oil Hours 0 Oil Ghanged N/A Sample Status NORMAL OIL CONDITION Visc @ 40°C cSt 105 CONTAMINATION Sodium ppm 12 Sodium ppm 8 Veranterals Veranterals Iron ppm 8 Iron ppm 1 Iron ppm <td< th=""><th>SAMPLE INFORM</th><th>ATION</th><th></th><th></th><th></th></td<>	SAMPLE INFORM	ATION				
Machine Hours 622 Oil Hours 0 Oil Changed N/A Sample Status NORMAL Oil CONDITION CINTAMINATION Sodium ppm 12 Sodium ppm 8 Vetassium ppm 17 Vetassium ppm 23 Icon ppm 23 Icon ppm 11 Icon ppm 0 Icon ppm 0	Sample Number		VPA031081	 		
Oil Hours O Gil Changed N/A Sample Status NORMAL OIL CONDITION Visc @ 40°C cSt 105 CONTAMINATION Sodium ppm 12 Sodium ppm 4 Potassium ppm 4 Iron ppm 23 Copper ppm 8 Lead ppm 7 Aluminum ppm 0 Molybdenum ppm <1	Sample Date		25 Jul 2023	 		
Oil Changed N/A Sample Status NORMAL OIL CONDITION Visc @ 40°C cSt 105 CONTAMINATION U U Silicon ppm 12 Sodium ppm 8 Sodium ppm 8 Verassium ppm 8 WEAR METALS Verassium ppm 8 PQ 17 Icad ppm 8 Icad ppm 0 Icad ppm 0 Icad			622	 		
Sample Status NORMAL OIL CONDITION Visc @ 40°C cSt 105 CONTAMINATION Sodium ppm 12 Sodium ppm 8 Potassium ppm 4 WEAR METALS PQ 17 Iron ppm 23 Copper ppm 8 Lead ppm 0 Aluminum ppm 1 Molybdenum ppm 1	Oil Hours		0	 		
OIL CONDITION Vise @ 40°C cSt 105 CONTAMINATION File Sodium ppm 12 Sodium ppm 8 Sodium ppm 4 VEAR METALS PQ 17 Iron ppm 23 Copper ppm 8 Iron ppm 0 Copper ppm 0 Lead ppm 7 Aluminum ppm 7 Molybdenum ppm 1 Nickel ppm 3	Oil Changed		N/A	 		
OIL CONDITION Visc @ 40°C cSt 105 CONTAMINATION Feature for the formed fo	Sample Status		NORMAL	 		
Visc @ 40°C cSt 105 CONTAMINATION						
CONTAMINATION Silicon ppm 12 Sodium ppm 8 Potassium ppm 4 WEAR METALS PQ 117 Iron ppm 23 Lead ppm 11 Lead ppm 7 Aluminum ppm 7 Molybdenum ppm 0 Nickel ppm 0 Silver ppm 0 Magaese ppm 3 Vanadium ppm 32	UIL LUNDITION					
Silicon ppm 12 Sodium ppm 8 Potassium ppm 4 WEAR METALS PQ 17 Iron ppm 23 Copper ppm 8 Lead ppm 0 Aluminum ppm 7 Molybdenum ppm 0 Nickel ppm 0 Silver ppm 0 Manganese ppm 3 Magnesium ppm 32 Magnesium ppm 32 Phosphorus	Visc @ 40°C	cSt	105	 		
Sodium ppm 8 Potassium ppm 4 WEAR METALS PQ 17 Iron ppm 23 Copper ppm 8 Lead ppm <1	CONTAMINATION	I				
Sodium ppm 8 Potassium ppm 4 WEAR METALS PQ 17 Iron ppm 23 Copper ppm 8 Lead ppm <1	Silicon	ppm	12	 		
Potassium ppm 4 WEAR METALS PQ 17 Iron ppm 23 Copper ppm 8 Lead ppm 0 Aluminum ppm 7 Aluminum ppm 7 Aluminum ppm 7 Aluminum ppm 0 Molybdenum ppm 0 Nickel ppm 0 Maganese ppm 3 Magnesium ppm 32 <th< td=""><td></td><td></td><td></td><td> </td><td></td></th<>				 		
PQ 17 Iron ppm 23 Copper ppm 8 Lead ppm <1				 		
PQ 17 Iron ppm 23 Copper ppm 8 Lead ppm <1		PP		 		
Iron ppm 23 Copper ppm 8 Lead ppm <1	WEAR METALS					
Copper ppm 8 Lead ppm <1	PQ		1 7	 		
Copper ppm 8 Lead ppm <1	Iron	ppm	23	 		
Lead ppm <1 Tin ppm 0 Aluminum ppm 7 Aluminum ppm 0 Molybdenum ppm Molybdenum ppm Nickel ppm Silver ppm 0 Manganese ppm 3 Vanadium ppm 16 Magnesium ppm 32 Magnesium ppm 1451 Phosphorus ppm 1451	Copper		8	 		
Tin ppm 0 Aluminum ppm 7 Aluminum ppm 0 Chromium ppm 0 Molybdenum ppm <11 Nickel ppm 0 Titanium ppm 0 Silver ppm 0 Manganese ppm 33 Vanadium ppm 16 Magnesium ppm 32 Magnesium ppm 32 Phosphorus ppm 1451 Barium ppm 4			<1	 		
Aluminum ppm 7 Chromium ppm 0 Molybdenum ppm <1 Nickel ppm <1 Nickel ppm <1 Titanium ppm 0 Manganese ppm 0 Vanadium ppm< <th><1</th> ADDITIVES Magnesium ppm 32 Magnesium ppm 32 Phosphorus ppm 1451 Barium ppm 4	<1	Tin		0	 	
Chromium ppm 0 Molybdenum ppm <1	<1	Aluminum		7	 	
Molybdenum ppm <1 Nickel ppm <1	Chromium		0	 		
Nickel ppm <1 Titanium ppm 0 Silver ppm 0 Manganese ppm 3 Vanadium ppm <1 ADDITIVES <	Molybdenum			 		
Titanium ppm 0 Silver ppm 0 Manganese ppm 3 Vanadium ppm <1				 		
Silver ppm 0 Manganese ppm 3 Vanadium ppm <1				 		
Manganese Vanadium ppm 3 Vanadium ppm <1 ADDITIVES Calcium ppm 16 Magnesium ppm 32 Zinc ppm 22 Phosphorus ppm 1451 Barium ppm 4				 		
Vanadium ppm <1 ADDITIVES Calcium ppm 16 Magnesium ppm 32 Zinc ppm 22 Phosphorus ppm 1451 Barium ppm 4				 		
ADDITIVES Calcium ppm 16 Magnesium ppm 32 Zinc ppm 22 Phosphorus ppm 1451 Barium ppm 4	5		—	 		
Calcium ppm 16 Magnesium ppm 32 Zinc ppm 22 Phosphorus ppm 1451 Barium ppm 4				 		
Magnesium ppm 32 Zinc ppm 22 Phosphorus ppm 1451 Barium ppm 4	ADDITIVES					
Zinc ppm 22 Phosphorus ppm 1451 Barium ppm 4	Calcium	ppm	1 6	 		
Phosphorus ppm 1451 Barium ppm 1451	Magnesium	ppm	32	 		
Barium ppm 4	Zinc	ppm	22	 		
	Phosphorus	ppm	1451	 		
Boron ppm 1402	Barium	ppm	4	 		
	Boron	ppm	402	 		

SUNCOAST DIESEL MARINE

6341 PORTER ROAD, SUITE 6 SARASOTA, FL US 34240 Contact: SERVICE MANAGER info@suncoastdmi.com T: (941)342-0033 F:

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

 Depot:
 VP705283

 Unique No:
 10578235

 Signed:
 Don Baldridge

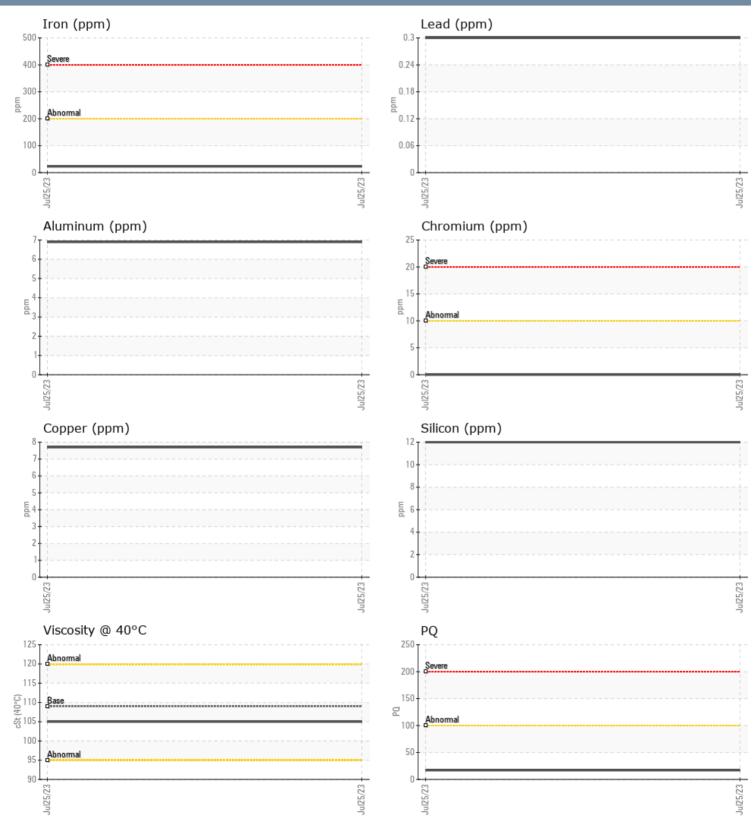
 Report Date:
 01 Aug 2023

Contact/Location: SERVICE MANAGER - VP705283

OIL ANALYSIS REPORT



GRAPHS



Report Id: VP705283 [WUSCAR] 05911583 (Generated: 08/01/2023 15:12:02) Rev: 1

Contact/Location: SERVICE MANAGER - VP705283