OIL ANALYSIS REPORT

GLENN FOURIE 1610015 VOLVO PENTA 2013572774 - PORT DIESEL ENGINE

Sample No:

VPA060867

Oil Type: {unknown}

SAMPLE INFORMATION

Sample Number VPA060867 Sample Date 18 Jan 2024 Machine Hours 956 Oil Hours 0 Oil Changed Changed Sample Status NORMAL OIL CONDITION Visc @ 100°C cSt 13.0 Nork (BN) mg KOH/g 9.7 Oxidation (PA) % 57 Soot % % 0.2 Soot % % 0.2 Sulfation (PA) % 52 Sulfation (PA) % S2 Sulfation (PA) % S2 <t< th=""><th></th><th></th><th></th><th></th><th></th></t<>					
Sample Date 18 Jan 2024 Machine Hours 956 Oil Hours 0 Sample Status NORMAL Sample Status NORMAL Oil CONDITION Visc @ 100°C cSt 13.0 Base Number (BN) mg KOH/g 9.7 Coxidation (PA) % 57 Vater % NEG Soot % % 0.2 Sulfation (PA) % 52 Sulfation (PA) % <1.0	Sample Number		VPA060867	 	
Machine Hours 956 Oil Hours 0 Oil Changed Changed Sample Status NORMAL Oil CONDITION Visc @ 100°C cSt 13.0 Base Number (BN) mg KOH/g 9.7 Oxidation (PA) % 57 Vater % NEG Soot % % 0.2 Sulfation (PA) % 52			18 Jan 2024	 	
Oil Changed Sample Status Changed NORMAL OIL CONDITION Visc @ 100°C cSt 113.0 Base Number (BN) mg KOH/g 9.7 Oxidation (PA) % 57 CONTAMINATION **** Water % NEG Soot % % 0.2 Sulfation (PA) % 48 Sulfation (PA) % S2 Sulfation (PA) % 10 Sulfation (PA) % S2 Fuel % <1.0			956	 	
Sample Status NORMAL OIL CONDITION Base Number (BN) mg KOH/g 9.7 Base Number (BN) mg KOH/g 9.7 Oxidation (PA) % 57 CONTAMINATION % 0.2 Soot % % 0.2 Suifation (PA) % 48 Suifation (PA) % 52 Suifation (PA) % 48 Suifation (PA) % 52 Suifation (PA) % <1.0	Oil Hours		0	 	
Sample Status NORMAL OIL CONDITION Base Number (BN) mg KOH/g 9.7 Base Number (BN) mg KOH/g 9.7 Oxidation (PA) % 57 CONTAMINATION **** **** **** **** **** Vater % NEG Soot % % 0.2 Nitration (PA) % 48 Sulfation (PA) % 52 Sulfation (PA) % 52 Sulfation (PA) % <1.0	Oil Changed		Changed	 	
OIL CONDITION Visc @ 100°C cSt 13.0 Base Number (BN) mg KOH/g 9.7 Oxidation (PA) % 57 CONTAMINATION ************************************			-	 	
Visc @ 100°C cSt 13.0 Base Number (BN) mg KOH/g 9.7 Oxidation (PA) % 57 CONTAMINATION ************************************					
Base Number (BN) mg KOH/g 9.7 Oxidation (PA) % 57 CONTAMINATION Vater % NEG Soot % % 0.2 Nitration (PA) % 48 Sulfation (PA) % 52 Sulfation (PA) % 48 Sulfation (PA) % 52 Glycol % NEG Fuel % <1.0	OIL CONDITION				
Base Number (BN) mg KOH/g 9.7 Oxidation (PA) % 57 CONTAMINATION Vater % NEG Soot % % 0.2 Nitration (PA) % 48 Sulfation (PA) % 52 Sulfation (PA) % 48 Sulfation (PA) % 52 Glycol % NEG Fuel % <1.0	Visc @ 100°C	cSt	■13.0	 	
Oxidation (PA) % 57 CONTAMINATION Water % NEG Soot % % 0.2 Nitration (PA) % 48 Sulfation (PA) % 52 Glycol % NEG Fuel % 10 Solicon ppm 1 Solicon ppm 3 VEAR METALS V V Iron ppm 2 Used ppm 1 Iron ppm 2 Lead ppm 2		ma KOH/a	9.7	 	
CONTAMINATION Water % NEG Soot % % 0.2 Nitration (PA) % 48 Sulfation (PA) % 52 Sulfation (PA) % NEG Fuel % <1.0	()	0	_	 	
Water % NEG Soot % % 0.2 Nitration (PA) % 48 Sulfation (PA) % 52 Glycol % NEG Fuel % <1.0			-		
Soot % % 0.2 Nitration (PA) % 48 Sulfation (PA) % 52 Glycol % NEG Fuel % <1.0	CONTAMINATION				
Soot % % 0.2 Nitration (PA) % 48 Sulfation (PA) % 52 Glycol % NEG Fuel % <1.0	Water	%	NEG	 	
Sulfation (PA) % 52 Glycol % NEG Fuel % <1.0 Silicon ppm 4 Sodium ppm 1 Potassium ppm 3 WEAR METALS V V Sodium ppm 2 Iron ppm 2 Copper ppm 1 Lead ppm 1 Aluminum ppm 2 Molybdenum ppm 58	Soot %	%	0.2	 	
Sulfation (PA) % 52 Glycol % NEG Fuel % <1.0 Silicon ppm 4 Sodium ppm 1 Potassium ppm 3 WEAR METALS V V Sodium ppm 2 Iron ppm 2 Copper ppm 1 Lead ppm 1 Aluminum ppm 2 Molybdenum ppm 58	Nitration (PA)	%	48	 	
Glycol % NEG Fuel % <1.0			52	 	
Fuel % <1.0 Silicon ppm 4 Sodium ppm 1 Potassium ppm 3 WEAR METALS Iron ppm 2 Copper ppm 1 Lead ppm 1 Aluminum ppm 2 Molybdenum ppm 58 Nickel ppm <1			NEG	 	
Sodium ppm 1 Potassium ppm 3 WEAR METALS WEAR METALS Iron ppm 2 Copper ppm 2 Lead ppm 1 Aluminum ppm 2 Aluminum ppm 2 Molybdenum ppm 58 Nickel ppm <1	-	%	<1.0	 	
Sodium ppm 1 Potassium ppm 3 WEAR METALS Iron ppm 2 Copper ppm 2 Lead ppm 1 Tin ppm 2 Aluminum ppm 2 Molybdenum ppm 58 Nickel ppm <1	Silicon	ppm	4	 	
Potassium ppm 3 WEAR METALS Iron ppm 2 Copper ppm 2 Lead ppm 1 Tin ppm <1	Sodium		∎1	 	
Iron ppm 2 Copper ppm 2 Lead ppm 1 Tin ppm <1	Potassium	ppm	3	 	
Iron ppm 2 Copper ppm 2 Lead ppm 1 Tin ppm <1	WEAR METALS				
Copper ppm 2			-		
Lead ppm 1 Tin ppm <1				 	
Tin ppm <1 Aluminum ppm 2 Chromium ppm 0 Molybdenum ppm 58 Nickel ppm <1					
Aluminum ppm 2 Chromium ppm 0 Molybdenum ppm 58 Nickel ppm <1				 	
Chromium ppm 0 Molybdenum ppm 58 Nickel ppm <1					
Molybdenum ppm 58 Nickel ppm -1				 	
Nickel ppm					
			_		
	Titanium	ppm	0	 	
Silver ppm 0				 	
Manganese ppm <1	-	ppm		 	
Vanadium ppm <1	Vanadium	ppm	<1	 	

ADDITIVES				
Calcium	ppm	996	 	
Magnesium	ppm	952	 	
Zinc	ppm	1276	 	
Phosphorus	ppm	1103	 	
Barium	ppm	0	 	
Boron	ppm	3	 	

Pacific Power Group - VP981534 7215 S 228th St Kent, WA US 98032 Contact: PAT RYAN pryan@pacificpowergroup.com T: (253)520-5163 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 BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.

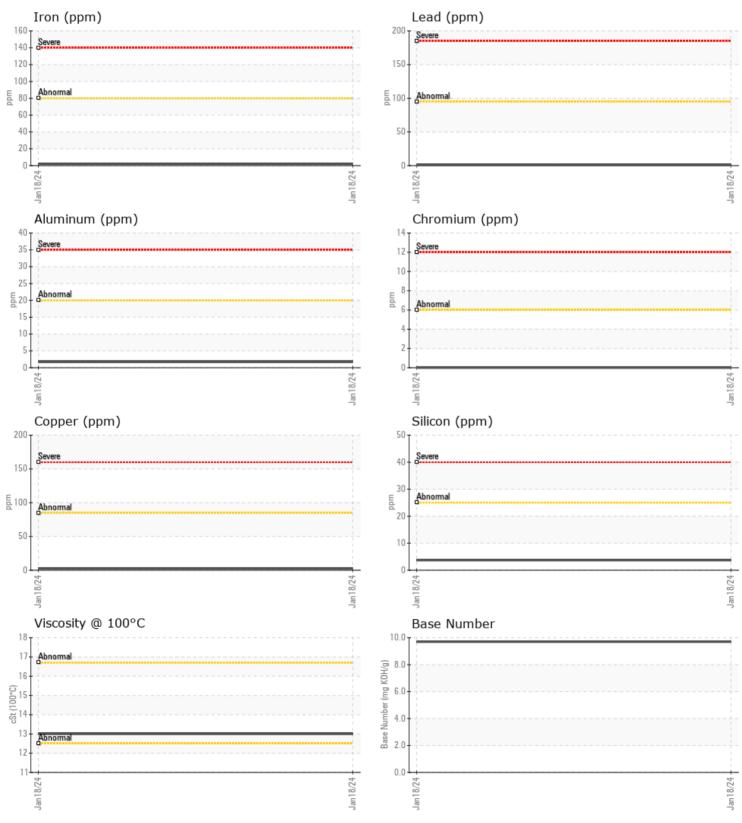
Depot: VP99031103 Unique No: 10857549 Signed: Don Baldridge Report Date: 01 Feb 2024

Contact/Location: PAT RYAN - VP99031103

OIL ANALYSIS REPORT



GRAPHS



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Contact/Location: PAT RYAN - VP99031103