

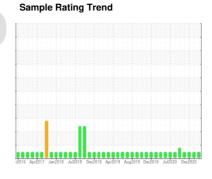
COOLANT REPORT

Fwd Machinery Space [71136596]

Generator - PKSG Lube Oil Cooling Water (S/N Sample Tag CD-86101-S7)

Cooling Water

MAXIGARD DIESEL ENG.WATER TREATMENT (--- GAL)





DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the cooling water.

Fluid Condition

The condition of the cooling water is acceptable for the time in service.

Sample Number	SAMPLE INFOR	MATION	method	limit/base	current	history1	history2	
Machine Age days Client Info 0	Sample Number		Client Info		PC0040409	PC0036557	PC	
Oil Age days Client Info N/A N/A N/A N/A Sample Status Client Info N/A N/A N/A N/A CONTAMINATION method limit/base current history1 history2 Water WC Method >100 NEG NEG NEG PHYSICAL TEST RESULTS method limit/base current history1 history2 Specific Gravity ASTM D1288* 1.100 1.000 1.000 1.000 PH Scale 0-14 ASTM D1287* 9.8 9.97 10.2 9.88 Nitrites ppm Alcan Test Kit* 500 1200 1000 680 Reserve Alkalinity Scale 0-20 ASTM D3221* 0 1.0 1.0 1.0 Freezing Point °C ASTM D3321* 0 -0 -1 -0 Carboxylate reserve Alkalinity method limit/base current history1 history2 Silicon ppm	Sample Date		Client Info		23 Sep 2021	15 Jan 2021	18 Dec 2020	
Oil Changed Sample Status Client Info N/A N/A N/A N/A CONTAMINATION method timit/base current history1 history2 Water WC Method >100 NEG NEG NEG PHYSICAL TEST RESULTS method limit/base current history1 history2 Specific Gravity ASTM D1298* 1.100 1.000 1.000 1.000 pH Scale 0-14 ASTM D1287* 9.8 9.97 10.2 9.88 Nitrites ppm Alcan Test Kit* 500 1200 1000 680 Reserve Alkalinity Scale 020 ASTM D1281* 7.4 15.3 12.4 12.7 Percentage Glycol % ASTM D3321* 0 1.0 1.0 1.0 Freezing Point **C ASTM D3321* 0 -0 -1 -0 Carboxylate CORROSION INHIBITORS method limit/base	Machine Age	days	Client Info		0	0	0	
NORMAL NORMAL NORMAL CONTAMINATION method limit/base current history1 history2	Oil Age	days	Client Info		0	0	0	
CONTAMINATION	Oil Changed		Client Info		N/A	N/A	N/A	
Water WC Method >100 NEG NEG NEG PHYSICAL TEST RESULTS method limit/base current history1 history2 Specific Gravity ASTM D128** 1.100 1.000 1.000 1.000 pH Scale 0-14 ASTM D128** 9.8 9.97 10.2 9.88 Nitrites ppm Alcan Test kit* 500 1200 1000 680 Reserve Alkalinity Scale 0-20 ASTM D1121* 7.4 15.3 12.4 12.7 Percentage Glycol % ASTM D3321* 0 1.0 1.0 1.0 Freezing Point °C ASTM D3321* 0 -0 -1 -0 Carboxylate CORROSION INHIBITORS method limit/base current history1 history2 Silicon ppm ASTM D5185(m) 600 1061 905 905 Molybdenum ppm	Sample Status				NORMAL	NORMAL	NORMAL	
PHYSICAL TEST RESULTS method limit/base current history1 history2	CONTAMINAT	ION	method	limit/base	current	history1	history2	
Specific Gravity	Water		WC Method	>100	NEG	NEG	NEG	
DH	PHYSICAL TEST F	RESULTS	method	limit/base	current	history1	history2	
Nitrites	Specific Gravity		ASTM D1298*	1.100	1.000	1.000	1.000	
Reserve Alkalinity	рН	Scale 0-14	ASTM D1287*	9.8	9.97	10.2	9.88	
Percentage Glycol	Nitrites	ppm	Alcan Test Kit*	500	1200	1000	680	
Freezing Point °C ASTM D3321* 0 -0 -1 -0 -1 -0 Carboxylate -	Reserve Alkalinity	Scale 0-20	ASTM D1121*	7.4	15.3	12.4	12.7	
Carboxylate <th co<="" th=""><th>Percentage Glycol</th><th>%</th><th>ASTM D3321*</th><th>0</th><th>1.0</th><th>1.0</th><th>1.0</th></th>	<th>Percentage Glycol</th> <th>%</th> <th>ASTM D3321*</th> <th>0</th> <th>1.0</th> <th>1.0</th> <th>1.0</th>	Percentage Glycol	%	ASTM D3321*	0	1.0	1.0	1.0
CORROSION INHIBITORS method limit/base current history1 history2	Freezing Point	°C	ASTM D3321*	0	-0	-1	-0	
Silicon ppm ASTM D5185(m) 80 99 50 104 Phosphorus ppm ASTM D5185(m) 0 4 24 24 Boron ppm ASTM D5185(m) 600 1061 905 905 Molybdenum ppm ASTM D5185(m) 0 <1 2 2 CORROSION method limit/base current history1 history2 Iron ppm ASTM D5185(m) <1 2 4 Aluminum ppm ASTM D5185(m) 2 <1 <1 Copper ppm ASTM D5185(m) 1 2 3 Tin ppm ASTM D5185(m) 2 1 <1 Silver ppm ASTM D5185(m) 2 <1 <1 Zinc ppm ASTM D5185(m) 1 1 3 CARRIER SALTS method limit/base current history1 history2 Sodium <td< th=""><th>Carboxylate</th><th></th><th></th><th></th><th></th><th></th><th></th></td<>	Carboxylate							
Phosphorus ppm ASTM D5185(m) 0 4 24 24 Boron ppm ASTM D5185(m) 600 1061 905 905 Molybdenum ppm ASTM D5185(m) 0 <1 2 2 CORROSION method limit/base current history1 history2 Iron ppm ASTM D5185(m) <1 2 4 Aluminum ppm ASTM D5185(m) 2 <1 <1 Copper ppm ASTM D5185(m) 1 2 3 Tin ppm ASTM D5185(m) 2 1 <1 Silver ppm ASTM D5185(m) 2 <1 <1 Zinc ppm ASTM D5185(m) 2 <1 <1 Zinc ppm ASTM D5185(m) 2300 2497 3295 3065 Potassium ppm ASTM D5185(m) 20 10 46 20 SCALE POTENTIAL <th>CORROSION INH</th> <th>IBITORS</th> <th>method</th> <th>limit/base</th> <th>current</th> <th>history1</th> <th>history2</th>	CORROSION INH	IBITORS	method	limit/base	current	history1	history2	
Boron ppm ASTM D5185(m) 600 1061 905 905 Molybdenum ppm ASTM D5185(m) 0 <1	Silicon	ppm	ASTM D5185(m)	80	99	50	104	
Molybdenum ppm ASTM D5185(m) 0 <1	Phosphorus	ppm	ASTM D5185(m)	0	4	24	24	
CORROSION method limit/base current history1 history2 Iron ppm ASTM D5185(m) <1 2 4 Aluminum ppm ASTM D5185(m) 2 <1 <1 Copper ppm ASTM D5185(m) <1 <1 <1 Lead ppm ASTM D5185(m) 2 1 <1 Silver ppm ASTM D5185(m) 2 <1 <1 Silver ppm ASTM D5185(m) 2 <1 <1 Zinc ppm ASTM D5185(m) 1 1 3 CARRIER SALTS method limit/base current history1 history2 Sodium ppm ASTM D5185(m) 20 10 46 20 SCALE POTENTIAL method limit/base current history1 history2 Calcium ppm ASTM D5185(m) 8 6 10	Boron	ppm	ASTM D5185(m)	600	1061	905	905	
Iron ppm ASTM D5185(m) <1	Molybdenum	ppm	ASTM D5185(m)	0	<1	2	2	
Aluminum ppm ASTM D5185(m) 2 <1	CORROSION		method	limit/base	current	history1	history2	
Aluminum ppm ASTM D5185(m) 2 <1	Iron	ppm	ASTM D5185(m)		<1	2	4	
Lead ppm ASTM D5185(m) 1 2 3 Tin ppm ASTM D5185(m) 2 1 <1 Silver ppm ASTM D5185(m) 2 <1 <1 Zinc ppm ASTM D5185(m) 1 1 1 3 CARRIER SALTS method limit/base current history1 history2 Sodium ppm ASTM D5185(m) 2300 2497 3295 3065 Potassium ppm ASTM D5185(m) 20 10 46 20 SCALE POTENTIAL method limit/base current history1 history2 Calcium ppm ASTM D5185(m) 8 6 10	Aluminum		ASTM D5185(m)		2	<1	<1	
Tin ppm ASTM D5185(m) 2 1 <1	Copper	ppm	ASTM D5185(m)		<1	<1	<1	
Silver ppm ASTM D5185(m) 2 <1	Lead	ppm	ASTM D5185(m)		1	2	3	
Zinc ppm ASTM D5185(m) 1 1 3 CARRIER SALTS method limit/base current history1 history2 Sodium ppm ASTM D5185(m) 2300 2497 3295 3065 Potassium ppm ASTM D5185(m) 20 10 46 20 SCALE POTENTIAL method limit/base current history1 history2 Calcium ppm ASTM D5185(m) 8 6 10	Tin	ppm	ASTM D5185(m)		2	1	<1	
CARRIER SALTS method limit/base current history1 history2 Sodium ppm ASTM D5185(m) 2300 2497 3295 3065 Potassium ppm ASTM D5185(m) 20 10 46 20 SCALE POTENTIAL method limit/base current history1 history2 Calcium ppm ASTM D5185(m) 8 6 10	Silver	ppm	ASTM D5185(m)		2	<1	<1	
Sodium ppm ASTM D5185(m) 2300 2497 3295 3065 Potassium ppm ASTM D5185(m) 20 10 46 20 SCALE POTENTIAL method limit/base current history1 history2 Calcium ppm ASTM D5185(m) 8 6 10	Zinc	ppm	ASTM D5185(m)		1	1	3	
Potassium ppm ASTM D5185(m) 20 10 46 20 SCALE POTENTIAL method limit/base current history1 history2 Calcium ppm ASTM D5185(m) 8 6 10	CARRIER SAL	.TS	method	limit/base	current	history1	history2	
Potassium ppm ASTM D5185(m) 20 10 46 20 SCALE POTENTIAL method limit/base current history1 history2 Calcium ppm ASTM D5185(m) 8 6 10	Sodium	ppm	ASTM D5185(m)	2300	2497	3295	3065	
Calcium ppm ASTM D5185(m) 8 6 10	Potassium		ASTM D5185(m)	20	10	46	20	
11 (7	SCALE POTEN	NTIAL	method	limit/base	current	history1	history2	
	Calcium	ppm	ASTM D5185(m)		8	6	10	
	Magnesium		ASTM D5185(m)		1	1	2	



COOLANT REPORT







Laboratory Sample No.

Lab Number : 02448750 Unique Number : 5292285

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 : PC0040409

Tested : 12 Oct 2021 Diagnosed

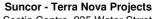
Received

: 12 Oct 2021 - Kevin Marson Test Package : COOL (Additional Tests: Cool, ICP, KF, KV100, KV40, Spat, Visual)

: 06 Oct 2021

To discuss this sample report, contact Customer Service at 1-800-268-2131.

Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab. Validity of results and interpretation are based on the sample and information as supplied.



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