

COOLANT REPORT

Sample Rating Trend

NORMAL

Area

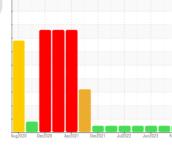
Nashville

[Nashville] Coolant - Port Main Engine

Coolant

Eluid

CAT EXTENDED LIFE COOLANT (ELC) (--- GAL)



DIAGNOSIS

Recommendation

No corrective action is recommended at this time. The fluid is suitable for further service. (Customer Sample Comment: Dparnell)

Corrosion

All metal levels are normal indicating no corrosion in the cooling system.

Contaminants

There is no indication of any contamination in the coolant.

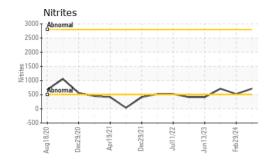
Coolant Condition

Carboxylate test failed. Glycol and nitrite levels are acceptable. The pH level of this fluid is within the acceptable limits.

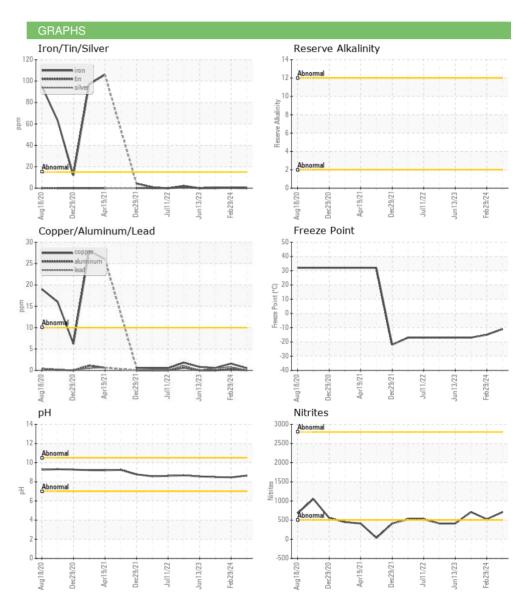
Sample Date	GAL)		40g2020 D	occozo Apizozi bec	SECTION OF STREET	1602024	
Sample Date	SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Machine Age hrs Client Info 59565 0 0 Oil Age hrs Client Info 4441 0 0 Oil Changed Client Info N/A N/A N/A N/A Sample Status NORMAL NORMAL NORMAL NORMAL NORMAL PHYSICAL TEST RESULTS method limit/base current history1 history2 Glycol Type FT-IR Specific Gravity **ASTM D1287 8.65 8.46 8.49 Nitrites ppm AP-053:2009 712 524 712 Reserve Alkalinity \$ale 0:20 *ASTM D1281 39.7 41.6 42.1 Percerantage Glycol *ASTM D3321 -11 -15 -17 15 -17 Freezing Point *F ASTM D3321 -11 -15 -17 15 -17 15 -17 15 -17 15 -11 16 14 </td <td>Sample Number</td> <td></td> <td>Client Info</td> <td></td> <th>WC0874889</th> <td>WC0769320</td> <td>WC0805239</td>	Sample Number		Client Info		WC0874889	WC0769320	WC0805239
Dil Age	Sample Date		Client Info		15 Apr 2024	29 Feb 2024	27 Nov 2023
Dil Changed Client Info N/A N/A N/A N/A NORMAL	Machine Age	hrs	Client Info		59565	0	0
NORMAL NORMAL NORMAL NORMAL	Oil Age	hrs	Client Info		4441	0	0
PHYSICAL TEST RESULTS method limit/base current history1 history2	Oil Changed		Client Info		N/A	N/A	N/A
Specific Gravity	Sample Status				NORMAL	NORMAL	NORMAL
Specific Gravity	PHYSICAL TEST F	RESULTS	method	limit/base	current	history1	history2
Description	Glycol Type		FT-IR				
Nitrites	Specific Gravity		*ASTM D1298		1.054	1.056	1.057
Reserve Alkalinity	рН	Scale 0-14	ASTM D1287		8.65	8.46	8.49
Percentage Glycol % ASTM D3321 39.7 41.6 42.1	Nitrites	ppm	AP-053:2009		712	524	712
Preezing Point	Reserve Alkalinity	Scale 0-20	*ASTM D1121				
Total Dissolved Solids 265.0 317.0 257.5	Percentage Glycol	%	ASTM D3321		39.7	41.6	42.1
Carboxylate fail fail fail fail CORROSION INHIBITORS method limit/base current history1 history2 Silicon ppm ASTM D6130 0 4 8 192 Phosphorus ppm ASTM D6130 0 0 2 0 Boron ppm ASTM D6130 0 23 11 12 Molybdenum ppm ASTM D6130 950 354 395 337 CORROSION method limit/base current history1 history2 Iron ppm ASTM D6130 >15 <1	Freezing Point	°F	ASTM D3321		-11	-15	-17
CORROSION INHIBITORS method limit/base current history1 history2	Total Dissolved Solids				265.0	317.0	257.5
Silicon	Carboxylate				fail	fail	fail
Phosphorus ppm ASTM D6130 0 2 0 Boron ppm ASTM D6130 0 23 11 12 Molybdenum ppm ASTM D6130 950 354 395 337 CORROSION method limit/base current history1 history2 Iron ppm ASTM D6130 >15 <1 <1 0 Aluminum ppm ASTM D6130 >10 0 <1 0 Copper ppm ASTM D6130 >10 <1 2 <1 Lead ppm ASTM D6130 >10 0 <1 <1 Tin ppm ASTM D6130 >10 0 <1 <1 Zinc ppm ASTM D6130 0 0 0 0 CONTAMINANTS method limit/base current history1 history2 Chlorine ppm ASTM D6130 3259 4088 2991	CORROSION INH	IBITORS	method	limit/base	current	history1	history2
Boron	Silicon	ppm	ASTM D6130	0	4	8	192
Molybdenum ppm ASTM D6130 950 354 395 337 CORROSION method limit/base current history1 history2 Iron ppm ASTM D6130 >15 <1	Phosphorus	ppm	ASTM D6130	0	0	2	0
CORROSION method limit/base current history1 history2 Iron ppm ASTM D6130 >15 <1	Boron	ppm	ASTM D6130	0	23	11	12
Iron ppm ASTM D6130 >15 <1 <1 0 Aluminum ppm ASTM D6130 >10 0 <1 0 Copper ppm ASTM D6130 >10 <1 2 <1 Lead ppm ASTM D6130 >10 0 <1 <1 Tin ppm ASTM D6130 >10 0 <1 <1 Zinc ppm ASTM D6130 0 0 0 0 CONTAMINANTS method limit/base current history1 history2 Chlorine ppm ASTM D6130 18 11 8 CARRIER SALTS method limit/base current history1 history2 Sodium ppm ASTM D6130 3259 4088 2991 Potassium ppm ASTM D6130 6 14 8 SCALE POTENTIAL method limit/base current history1 history2 C	Molybdenum	ppm	ASTM D6130	950	354	395	337
Aluminum ppm ASTM D6130 >10 0 <1	CORROSION		method	limit/base	current	history1	history2
Copper ppm ASTM D6130 >10 <1 2 <1 Lead ppm ASTM D6130 >10 0 <1 <1 Tin ppm ASTM D6130 >10 0 <1 <1 Zinc ppm ASTM D6130 0 0 0 0 CONTAMINANTS method limit/base current history1 history2 Chlorine ppm ASTM D6130 18 11 8 CARRIER SALTS method limit/base current history1 history2 Sodium ppm ASTM D6130 3259 4088 2991 Potassium ppm ASTM D6130 6 14 8 SCALE POTENTIAL method limit/base current history1 history2 Calcium ppm ASTM D6130 7 4 9	Iron	ppm	ASTM D6130	>15	<1	<1	0
Lead ppm ASTM D6130 >10 0 <1 <1 Tin ppm ASTM D6130 >10 0 <1	Aluminum	ppm	ASTM D6130	>10	0	<1	0
Tin ppm ASTM D6130 >10 0 <1 <1 Zinc ppm ASTM D6130 0 0 0 0 CONTAMINANTS method limit/base current history1 history2 Chlorine ppm ASTM D6130 18 11 8 CARRIER SALTS method limit/base current history1 history2 Sodium ppm ASTM D6130 3259 4088 2991 Potassium ppm ASTM D6130 6 14 8 SCALE POTENTIAL method limit/base current history1 history2 Calcium ppm ASTM D6130 7 4 9	Copper	ppm	ASTM D6130	>10	<1	2	<1
Zinc ppm ASTM D6130 0 0 0 CONTAMINANTS method limit/base current history1 history2 Chlorine ppm ASTM D6130 18 11 8 CARRIER SALTS method limit/base current history1 history2 Sodium ppm ASTM D6130 3259 4088 2991 Potassium ppm ASTM D6130 6 14 8 SCALE POTENTIAL method limit/base current history1 history2 Calcium ppm ASTM D6130 7 4 9	Lead	ppm	ASTM D6130	>10	0	<1	<1
CONTAMINANTS method limit/base current history1 history2 Chlorine ppm ASTM D6130 18 11 8 CARRIER SALTS method limit/base current history1 history2 Sodium ppm ASTM D6130 3259 4088 2991 Potassium ppm ASTM D6130 6 14 8 SCALE POTENTIAL method limit/base current history1 history2 Calcium ppm ASTM D6130 7 4 9	Tin	ppm	ASTM D6130	>10	0	<1	<1
Chlorine ppm ASTM D6130 18 11 8 CARRIER SALTS method limit/base current history1 history2 Sodium ppm ASTM D6130 3259 4088 2991 Potassium ppm ASTM D6130 6 14 8 SCALE POTENTIAL method limit/base current history1 history2 Calcium ppm ASTM D6130 7 4 9	Zinc	ppm	ASTM D6130		0	0	0
CARRIER SALTS method limit/base current history1 history2 Sodium ppm ASTM D6130 3259 4088 2991 Potassium ppm ASTM D6130 6 14 8 SCALE POTENTIAL method limit/base current history1 history2 Calcium ppm ASTM D6130 7 4 9	CONTAMINANTS	;	method	limit/base	current	history1	history2
Sodium ppm ASTM D6130 3259 4088 2991 Potassium ppm ASTM D6130 6 14 8 SCALE POTENTIAL method limit/base current history1 history2 Calcium ppm ASTM D6130 7 4 9	Chlorine	ppm	ASTM D6130		18	11	8
Potassium ppm ASTM D6130 6 14 8 SCALE POTENTIAL method limit/base current history1 history2 Calcium ppm ASTM D6130 7 4 9	CARRIER SALTS		method	limit/base	current	history1	history2
SCALE POTENTIAL method limit/base current history1 history2 Calcium ppm ASTM D6130 7 4 9	Sodium	ppm	ASTM D6130		3259	4088	2991
Calcium ppm ASTM D6130 7 4 9	Potassium	ppm	ASTM D6130		6	14	8
P. T.	SCALE POTENTI	AL	method	limit/base	current	history1	history2
Magnesium ppm ASTM D6130 3 6 4	Calcium	ppm	ASTM D6130		7	4	9
	Magnesium	ppm	ASTM D6130		3	6	4



COOLANT REPORT



VISUAL	method	limit/base	current	history1	history2
Coolant Color	*Visual		Red	Orange	Red
Coolant Appearance	*Visual	Clear	oil	normal	normal
Color					
Bottom					







Laboratory Sample No.

Lab Number : 06158226

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : WC0874889

Unique Number : 10993649

Received : 23 Apr 2024 **Tested** Diagnosed

: 29 Apr 2024 : 29 Apr 2024 - Jonathan Hester

MARATHON PETROLEUM CO. 101 12TH ST CATLETTSBURG, KY US 41169

Certificate 12367

Test Package : COOL- (Additional Tests: BoilingPoint, COOL, GlycolType, ICP, KF) To discuss this sample report, contact Customer Service at 1-800-237-1369.

Contact: CORY GUMBERT cagumbert@marathonpetroleum.com

* - 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) T: (606)585-3950 F: x: