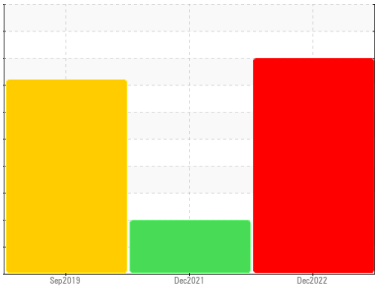
FUEL REPORT

Sample Rating Trend



WATER

Machine Id
COLUMBUS REGIONAL HOSPITAL TANK 2 8K AST
Component
Diesel Fuel
Fluid
No.2 DIESEL FUEL (LOW-SULPHUR) (--- GAL)

DIAGNOSIS

Recommendation

We advise that you follow the water drain-off procedure for this component. We recommend you service and check the fuel filters for mucous-like deposits. Check with fuel supplier for biocides available to destroy the microorganisms in the fuel system.

Corrosion

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

Contaminants

Excessive free water present. Moderate concentration of visible dirt/debris present in the fuel. There is a moderate amount of visible silt present in the sample. There is a light concentration of Bacteria, Yeast and/or Fungus present in the sample.

Fuel Condition

Sulfur value derived by ASTM D5453 method for ULSD validation. Sulfur level is acceptable for ULSD specification.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**WC05713372**	WC05426182	WC04798381
Sample Date		Client Info		**08 Dec 2022**	16 Dec 2021	12 Sep 2019
Machine Age	hrs	Client Info		**0**	0	0
Sample Status				**SEVERE**	ABNORMAL	SEVERE

PHYSICAL PROPERTIES		method	limit/base	current	history1	history2
Specific Gravity		*ASTM D1298	0.839	---	0.840	0.847
Fuel Color	text	*Visual Screen	Yllow	---	Red	Red
ASTM Color	scalar	*ASTM D1500		**L4.0**	L5.0	L5.5
Visc @ 40°C	cSt	ASTM D445	3.0	**2.48**	2.42	2.74
Pensky-Martens Flash Point	°C	*PMCC Calculated	52	**57**	65	60

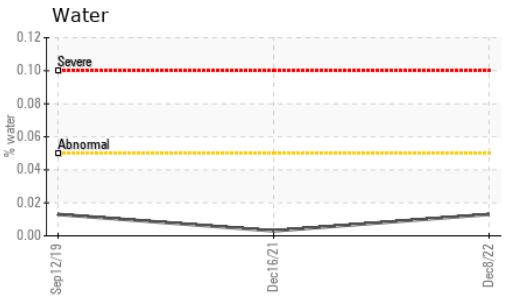
SULFUR CONTENT		method	limit/base	current	history1	history2
Sulfur	ppm	ASTM D5185m	250	**0**	20	0
Sulfur (UVF)	ppm	ASTM D5453		**6**	22	8

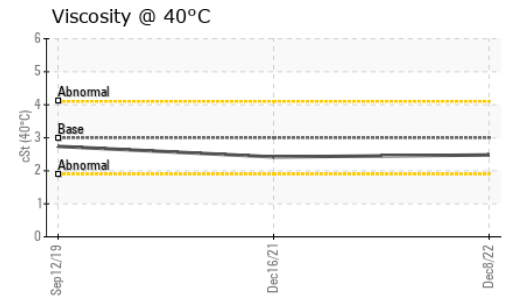
DISTILLATION		method	limit/base	current	history1	history2
Initial Boiling Point	°C	ASTM D86	165	---	172	161
5% Distillation Point	°C	ASTM D86		---	193	191
10% Distill Point	°C	ASTM D86	201	---	202	205
15% Distillation Point	°C	ASTM D86		---	208	215
20% Distill Point	°C	ASTM D86	216	---	216	223
30% Distill Point	°C	ASTM D86	230	---	230	240
40% Distill Point	°C	ASTM D86	243	---	244	253
50% Distill Point	°C	ASTM D86	255	---	257	267
60% Distill Point	°C	ASTM D86	267	---	272	280
70% Distill Point	°C	ASTM D86	280	---	287	294
80% Distill Point	°C	ASTM D86	295	---	304	309
85% Distillation Point	°C	ASTM D86		---	314	318
90% Distill Point	°C	ASTM D86	310	---	325	328
95% Distillation Point	°C	ASTM D86		---	341	343
Final Boiling Point	°C	ASTM D86	341	---	350	352
Distillation Residue	%	ASTM D86	3.0	---	1.4	1.4
Distillation Loss	%	ASTM D86	3.0	---	0.7	0.8

IGNITION QUALITY		method	limit/base	current	history1	history2
API Gravity		ASTM D7777	37.7	---	37.0	35.6
Cetane Index		ASTM D4737	<40.0	---	48.1	47.2

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	<1.0	**<1**	0	0
Sodium	ppm	ASTM D5185m	<0.1	**0**	<1	0
Potassium	ppm	ASTM D5185m	<0.1	**0**	0	0
Water	%	ASTM D6304	<0.05	**0.013**	0.003	0.013
ppm Water	ppm	ASTM D6304	<500	**138.6**	26.9	130
% Gasoline	%	*In-House	<0.50	**0.0**	0.0	0.4
% Biodiesel	%	*In-House	<20.0	**1.8**	0.0	1.1

FUEL REPORT

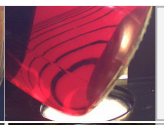
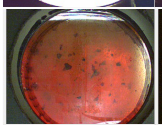
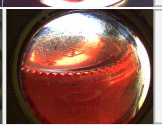




FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>2500	---	▲ 48406	---
Particles >6µm		ASTM D7647	>640	---	▲ 12359	---
Particles >14µm		ASTM D7647	>80	---	▲ 825	---
Particles >21µm		ASTM D7647	>20	---	▲ 142	---
Particles >38µm		ASTM D7647	>4	---	▲ 9	---
Particles >71µm		ASTM D7647	>3	---	0	---
Oil Cleanliness		ISO 4406 (c)	>18/16/13	---	▲ 23/21/17	---

MICROBIAL		method	limit/base	current	history1	history2
Bacteria	CFU/ml	WC-Method	>=100000	**0**	---	0
Yeast	CFU/ml	WC-Method	>=100000	▲ **10**	---	0
Mold	Colonies	WC-Method	MODER	**---**	---	---

HEAVY METALS		method	limit/base	current	history1	history2
Aluminum	ppm	ASTM D5185m	<0.1	**0**	<1	0
Nickel	ppm	ASTM D5185m	<0.1	**0**	1	0
Lead	ppm	ASTM D5185m	<0.1	**0**	0	1
Vanadium	ppm	ASTM D5185m	<0.1	**0**	0	0
Iron	ppm	ASTM D5185m	<0.1	**<1**	0	0
Calcium	ppm	ASTM D5185m	<0.1	**0**	0	0
Magnesium	ppm	ASTM D5185m	<0.1	**0**	0	0
Phosphorus	ppm	ASTM D5185m	<0.1	**2**	0	0
Zinc	ppm	ASTM D5185m	<0.1	**0**	0	<1

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					*no image*
Bottom					*no image*

Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC05713372 **Received** : 08 Dec 2022
Lab Number : 05713372 **Diagnosed** : 16 Dec 2022
Unique Number : 10247947 **Diagnostician** : Doug Bogart
Test Package : DF-2 (Additional Tests: Bacteria, Screen)

To discuss this sample report, contact Customer Service at 1-800-237-1369.
** - 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)

GAINES OIL COMPANY
2346 S MAIN ST
GOLDSTON, NC
US 27252
Contact: CHIP POOLE
chip@gainesoil.com
T: (919)898-2231
F: (919)898-2981