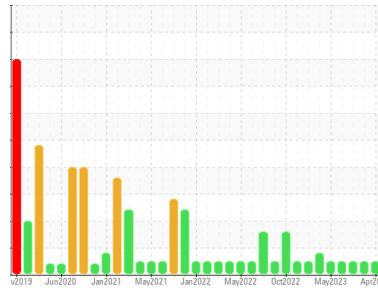


OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
ROOTS 1ST STAGE BLOWER A
 Component
Compressor
 Fluid
CHEVRON CLARITY SYNTHETIC PMO ISO 220 (--- GAL)

DIAGNOSIS

Recommendation
 Resample at the next service interval to monitor.

Wear
 All component wear rates are normal.

Contamination
 There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable.

Fluid Condition
 The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			TO60002360	TO60001073	TO60001100
Sample Date	Client Info			04 Apr 2024	02 Oct 2023	07 Sep 2023
Machine Age	hrs	Client Info		45536	37614	37614
Oil Age	hrs	Client Info		45536	37614	37614
Oil Changed	Client Info			Oil Added	N/A	N/A
Sample Status				NORMAL	NORMAL	NORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	0	<1	2
Chromium	ppm	ASTM D5185m	>5	0	0	0
Nickel	ppm	ASTM D5185m		<1	0	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>15	<1	0	0
Lead	ppm	ASTM D5185m	>65	0	0	0
Copper	ppm	ASTM D5185m	>65	2	0	0
Tin	ppm	ASTM D5185m	>10	<1	0	0
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0

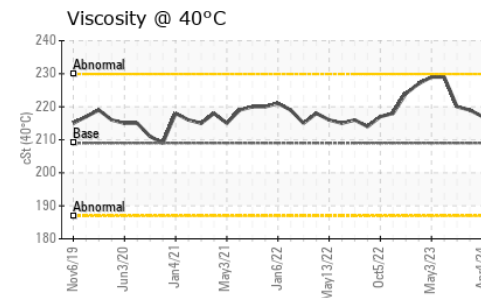
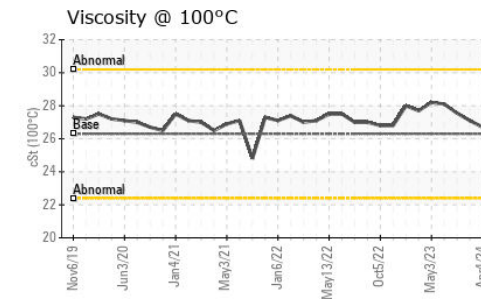
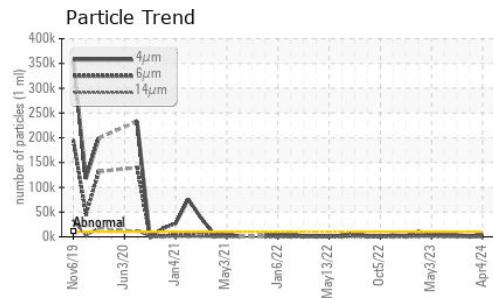
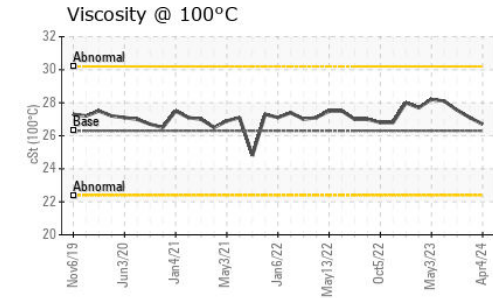
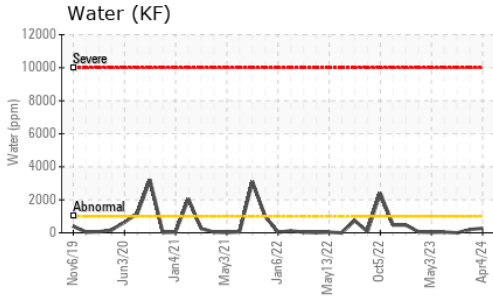
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		0	0	0
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		0	0	0
Manganese	ppm	ASTM D5185m		1	0	0
Magnesium	ppm	ASTM D5185m		2	0	1
Calcium	ppm	ASTM D5185m		<1	0	<1
Phosphorus	ppm	ASTM D5185m		21	29	41
Zinc	ppm	ASTM D5185m		0	0	5
Sulfur	ppm	ASTM D5185m		3212	2384	2806

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>35	<1	0	1
Sodium	ppm	ASTM D5185m		2	0	0
Potassium	ppm	ASTM D5185m	>20	3	0	2
Water	%	ASTM D6304	>0.1	0.027	0.019	0.00
ppm Water	ppm	ASTM D6304	>1000	280	195.5	0.00

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>10000	5867	1387	4185
Particles >6µm		ASTM D7647	>2500	1429	320	1202
Particles >14µm		ASTM D7647	>320	104	21	49
Particles >21µm		ASTM D7647	>80	35	10	10
Particles >38µm		ASTM D7647	>20	3	2	0
Particles >71µm		ASTM D7647	>4	1	1	0
Oil Cleanliness		ISO 4406 (c)	>20/18/15	20/18/14	18/15/12	19/17/13

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		0.25	0.3	0.33

OIL ANALYSIS REPORT

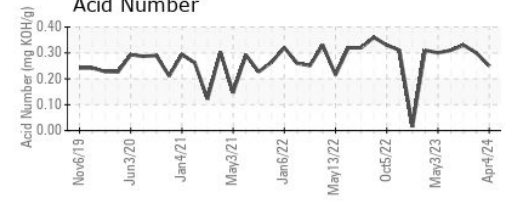
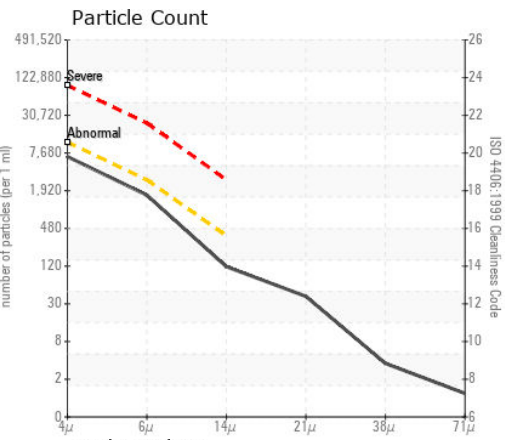
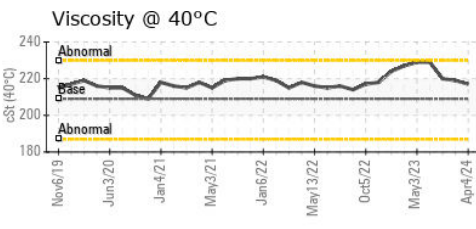
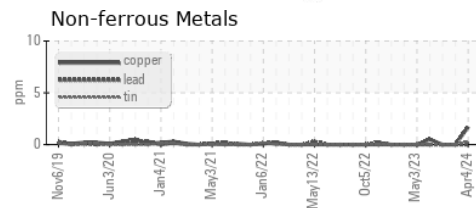
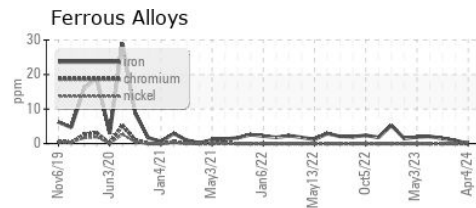


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	LIGHT
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	209	217	219
Visc @ 100°C	cSt	ASTM D445	26.3	26.7	27.1
Viscosity Index (VI)	Scale	ASTM D2270	160	157	158

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : TO60002360 **Received** : 16 Apr 2024
Lab Number : 06151228 **Tested** : 19 Apr 2024
Unique Number : 10981306 **Diagnosed** : 19 Apr 2024 - Don Baldrige
Test Package : IND 2 (Additional Tests: KF, KV100, PrtCount, VI)

BLUE RIDGE RENEWABLES
 2200 FM 521
 FRESNO, TX
 US 77545
 Contact: Ezequiel Tirado
 ztirado@morrowenergy.com
 T: (214)425-5006
 F: x:

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)