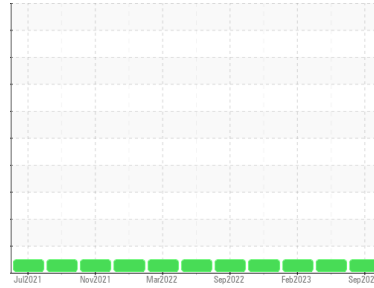




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
UNIT 9 (S/N 923633-010)

Component
Genset
Fluid
CHEVRON GST OIL ISO 32 (--- 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. Color 1.5.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			WC0753796	WC0753791	WC0753779
Sample Date	Client Info			11 Sep 2023	13 Jun 2023	27 Feb 2023
Machine Age	hrs	Client Info		0	0	0
Oil Age	hrs	Client Info		0	0	0
Oil Changed	Client Info			N/A	N/A	N/A
Sample Status				NORMAL	NORMAL	NORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Fuel	WC Method	>4.0		<1.0	<1.0	<1.0
Glycol	WC Method			NEG	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	0	0	0
Chromium	ppm	ASTM D5185m	>4	0	0	0
Nickel	ppm	ASTM D5185m	>2	<1	<1	<1
Titanium	ppm	ASTM D5185m		0	0	<1
Silver	ppm	ASTM D5185m	>5	0	0	<1
Aluminum	ppm	ASTM D5185m	>12	0	<1	0
Lead	ppm	ASTM D5185m	>17	0	0	0
Copper	ppm	ASTM D5185m	>70	0	<1	<1
Tin	ppm	ASTM D5185m	>15	<1	0	0
Vanadium	ppm	ASTM D5185m		0	0	<1
Cadmium	ppm	ASTM D5185m		0	0	0

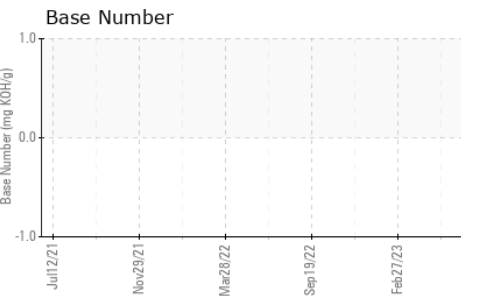
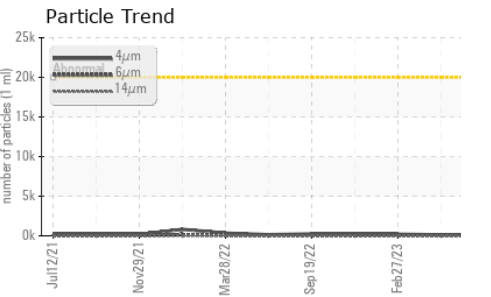
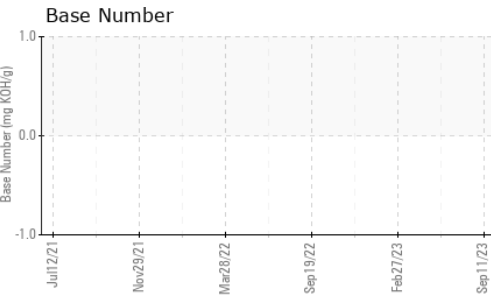
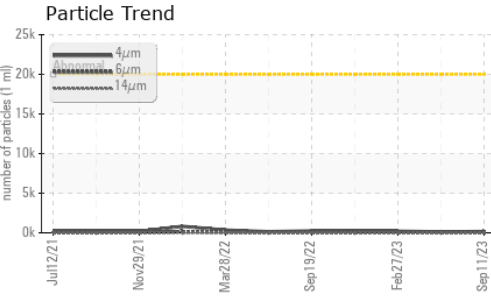
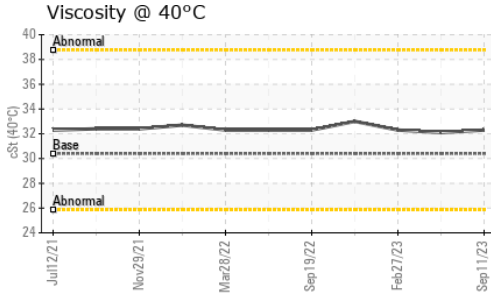
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		0	0	0
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		0	0	0
Manganese	ppm	ASTM D5185m		0	<1	1
Magnesium	ppm	ASTM D5185m		2	0	4
Calcium	ppm	ASTM D5185m		1	<1	<1
Phosphorus	ppm	ASTM D5185m		<1	2	8
Zinc	ppm	ASTM D5185m		<1	0	0
Sulfur	ppm	ASTM D5185m		854	980	587

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	0	0	<1
Sodium	ppm	ASTM D5185m		0	<1	<1
Potassium	ppm	ASTM D5185m	>20	<1	0	0

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844		0	0.1	0
Nitration	Abs/cm	*ASTM D7624	>20	1.5	1.8	1.7
Sulfation	Abs./1mm	*ASTM D7415	>30	10.8	11.9	10.9



OIL ANALYSIS REPORT



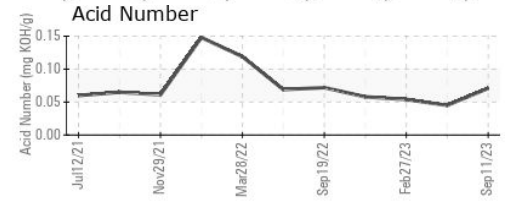
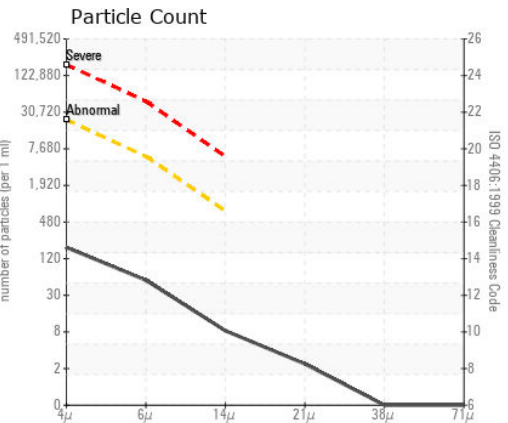
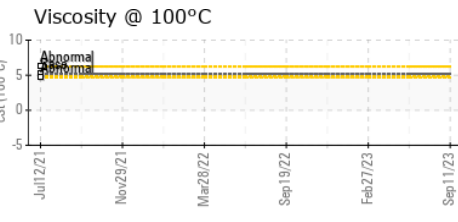
FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>20000	162	124	199
Particles >6µm	ASTM D7647	>5000	47	52	50
Particles >14µm	ASTM D7647	>640	7	7	7
Particles >21µm	ASTM D7647	>160	2	1	3
Particles >38µm	ASTM D7647	>40	0	0	0
Particles >71µm	ASTM D7647	>10	0	0	0
Oil Cleanliness	ISO 4406 (c)	>21/19/16	15/13/10	14/13/10	15/13/10

FLUID DEGRADATION	method	limit/base	current	history1	history2	
Oxidation	Abs./1mm	*ASTM D7414	>25	3.3	5.1	3.1
Acid Number (AN)	mg KOH/g	ASTM D8045		0.071	0.045	0.054

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	NONE	
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	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 40°C	cSt	ASTM D445	30.4	32.3	32.1	32.3
ASTM Color	scalar	*ASTM D1500		L3.5	L3.0	1.5

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0753796 **Received** : 16 Oct 2023
Lab Number : **05980380** **Diagnosed** : 18 Oct 2023
Unique Number : 10697675 **Diagnostician** : Jonathan Hester
Test Package : IND 2 (Additional Tests: Color-ASTM, KV40, PrtCount)

CHUGACH ELECTRIC - SULLIVAN PLANT
 8900 STARVIEW DRIVE
 ANCHORAGE, AK
 US 99504
 Contact: JON RIVERA
 Jon_Rivera@chugachelectric.com
 T: (907)762-7804
 F:

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)