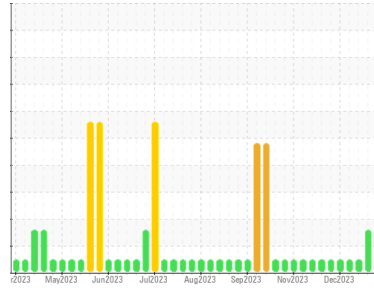




OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id
SJNM01BE
 Component
Biogas Engine
 Fluid
CHEVRON HDAX 6500 LFG GAS ENGINE OIL (--- GAL)

DIAGNOSIS

Recommendation

No corrective action is recommended at this time. The oil change at the time of sampling has been noted. Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

Elemental level of silicon (Si) above normal indicating ingress of seal material.

Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. 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		WC0865709	WC0865655	WC0865661
Sample Date	Client Info		04 Jan 2024	27 Dec 2023	21 Dec 2023
Machine Age	hrs	Client Info	69366	68893	69030
Oil Age	hrs	Client Info	1013	821	677
Oil Changed	Client Info		Changed	Not Changd	Not Changd
Sample Status			ABNORMAL	ABNORMAL	NORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>4.0	<1.0	<1.0	<1.0
Water	WC Method	>0.1	NEG	NEG	NEG
Glycol	WC Method		NEG	NEG	NEG

WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m	>15	5	6	4
Chromium	ppm	ASTM D5185m	>4	<1	<1	<1
Nickel	ppm	ASTM D5185m	>2	<1	0	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m	>5	0	0	0
Aluminum	ppm	ASTM D5185m	>6	2	2	1
Lead	ppm	ASTM D5185m	>9	4	4	1
Copper	ppm	ASTM D5185m	>6	2	2	<1
Tin	ppm	ASTM D5185m	>4	4	3	3
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		4	5	5
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		8	5	4
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		32	33	34
Calcium	ppm	ASTM D5185m		2067	1992	2020
Phosphorus	ppm	ASTM D5185m		355	311	314
Zinc	ppm	ASTM D5185m		410	391	387
Sulfur	ppm	ASTM D5185m		2506	2272	2284

CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m	>181	▲ 197	▲ 188	171
Sodium	ppm	ASTM D5185m		2	5	2
Potassium	ppm	ASTM D5185m	>20	2	4	4

INFRA-RED

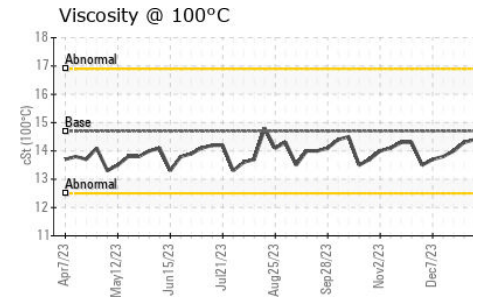
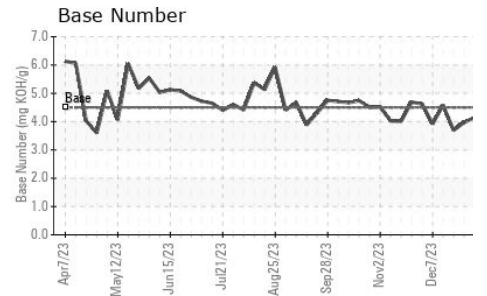
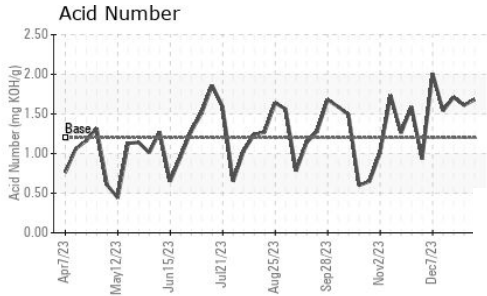
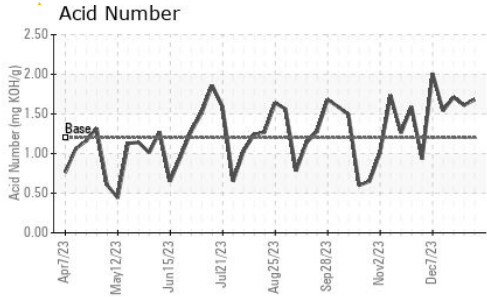
	method	limit/base	current	history1	history2	
Soot %	%	*ASTM D7844		0.1	0.1	0.1
Nitration	Abs/cm	*ASTM D7624	>20	8.2	7.9	7.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	23.4	23.0	21.3

FLUID DEGRADATION

	method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	*ASTM D7414	>25	20.9	20.2	17.1
Acid Number (AN)	mg KOH/g	ASTM D8045	1.2	1.68	1.61	1.71
Base Number (BN)	mg KOH/g	ASTM D2896	4.5	4.14	3.97	3.69



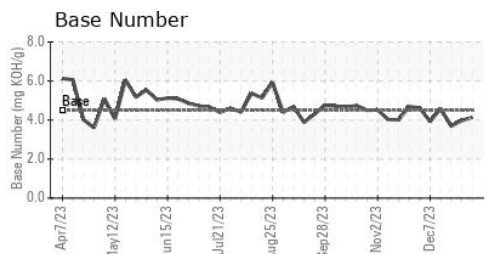
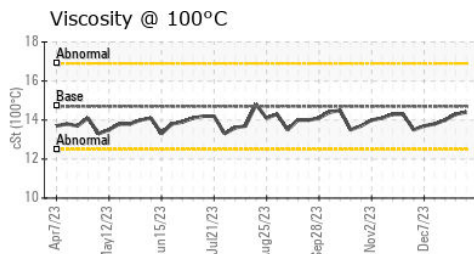
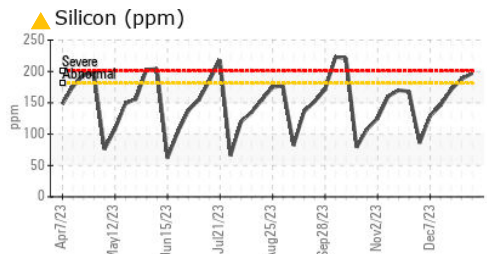
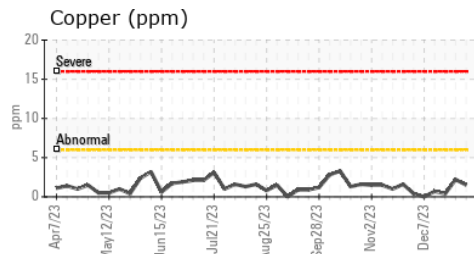
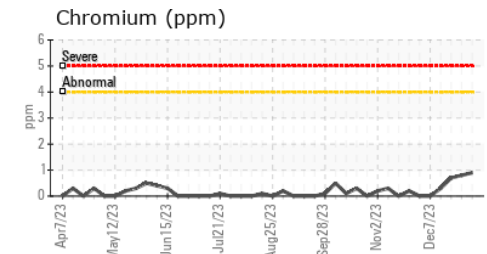
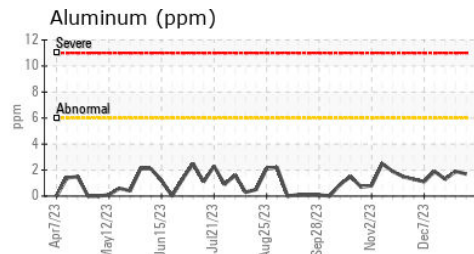
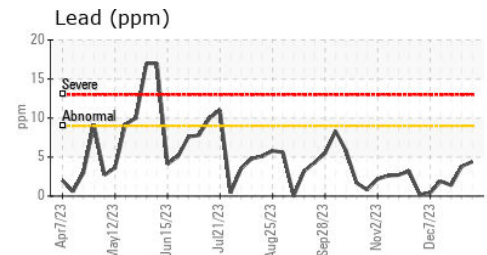
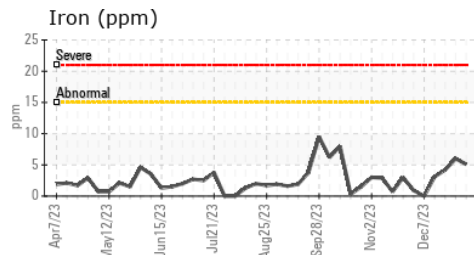
OIL ANALYSIS REPORT



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	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
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	14.7	14.4	14.3

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0865709
Lab Number : 06054079
Unique Number : 10820028
Test Package : MOB 2
Received : 08 Jan 2024
Tested : 09 Jan 2024
Diagnosed : 09 Jan 2024 - Sean Felton

EDL NA Recips-South Jordan
 South Jordan Powerstation, 10473 S. Bacchus Hwy.
 South Jordan, UT
 US 84095
 Contact: Aaron Klein
 aaron.klein@edlenergy.com
 T:
 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)