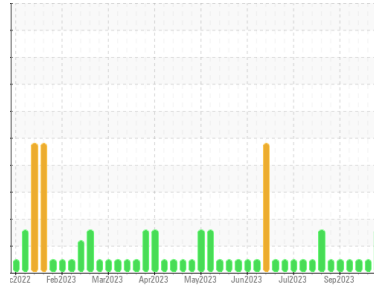




OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id
SJNM03BE
 Component
Biogas Engine
 Fluid
CHEVRON HDAX 6500 LFG GAS ENGINE OIL (--- GAL)

DIAGNOSIS

Recommendation
 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.

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		WC0764360	WC0764400	WC05956570
Sample Date	Client Info		28 Sep 2023	22 Sep 2023	19 Sep 2023
Machine Age	hrs	Client Info	101029	100885	0
Oil Age	hrs	Client Info	985	841	0
Oil Changed	Client Info		Changed	Not Changd	N/A
Sample Status			ABNORMAL	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 >15	2	2	1
Chromium	ppm	ASTM D5185m >4	0	0	0
Nickel	ppm	ASTM D5185m >2	<1	<1	1
Titanium	ppm	ASTM D5185m	<1	0	0
Silver	ppm	ASTM D5185m >5	0	0	0
Aluminum	ppm	ASTM D5185m >6	<1	<1	<1
Lead	ppm	ASTM D5185m >9	2	2	1
Copper	ppm	ASTM D5185m >6	2	<1	<1
Tin	ppm	ASTM D5185m >4	3	3	3
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	5	5	6
Barium	ppm	ASTM D5185m	0	0	0
Molybdenum	ppm	ASTM D5185m	7	7	8
Manganese	ppm	ASTM D5185m	<1	0	<1
Magnesium	ppm	ASTM D5185m	28	28	27
Calcium	ppm	ASTM D5185m	2120	2137	2163
Phosphorus	ppm	ASTM D5185m	346	337	326
Zinc	ppm	ASTM D5185m	420	411	394
Sulfur	ppm	ASTM D5185m	2598	2576	2812

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >181	▲ 192	177	168
Sodium	ppm	ASTM D5185m	<1	1	1
Potassium	ppm	ASTM D5185m >20	1	1	0

INFRA-RED

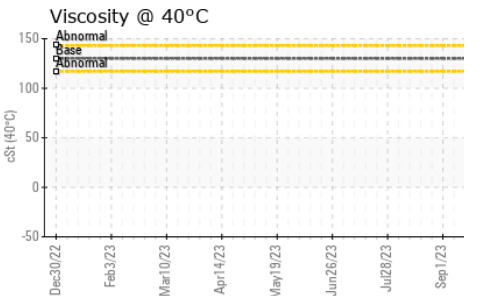
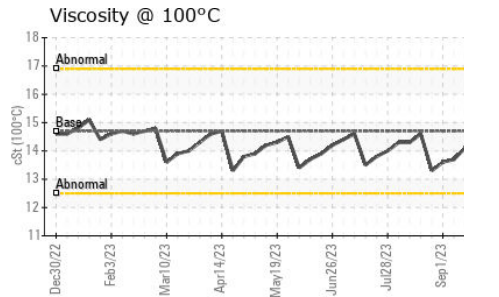
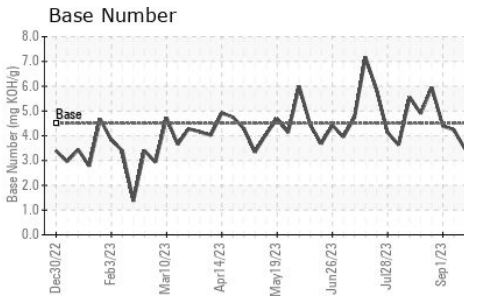
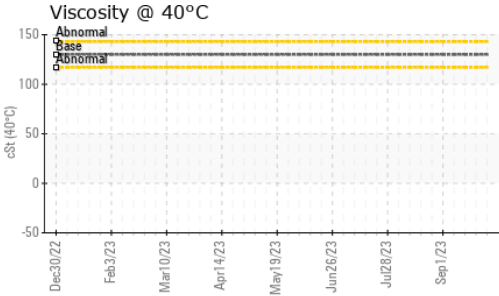
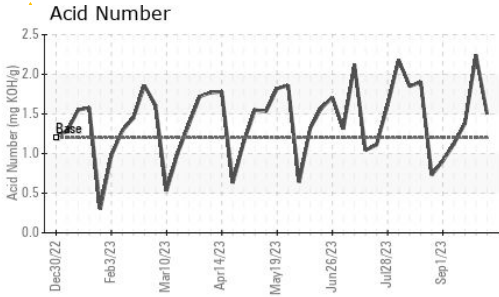
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	0.1	0.1	0
Nitration	Abs/cm	*ASTM D7624 >20	8.1	7.9	8.5
Sulfation	Abs/.1mm	*ASTM D7415 >30	24.5	23.8	26.1

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	21.8	20.3	20.1
Acid Number (AN)	mg KOH/g	ASTM D8045 1.2	1.50	2.24	1.38
Base Number (BN)	mg KOH/g	ASTM D2896 4.5	4.19	3.80	3.47



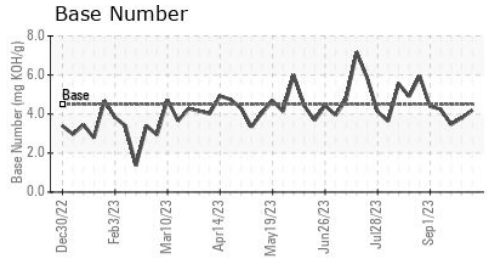
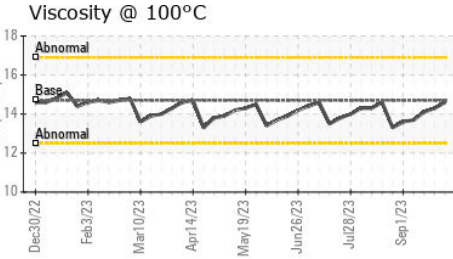
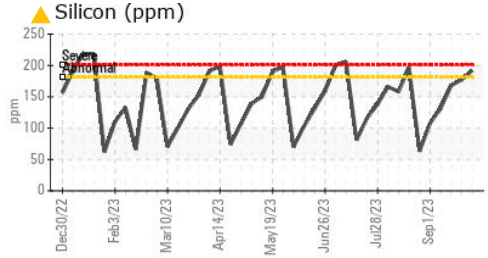
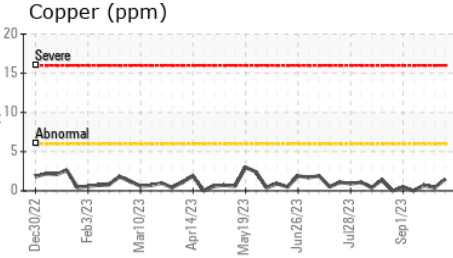
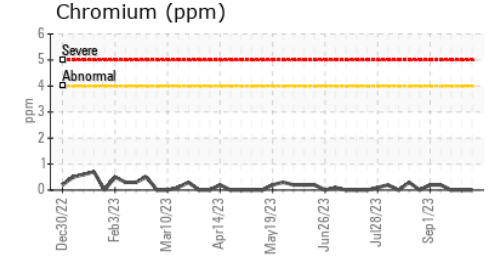
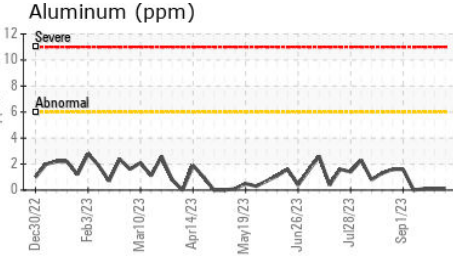
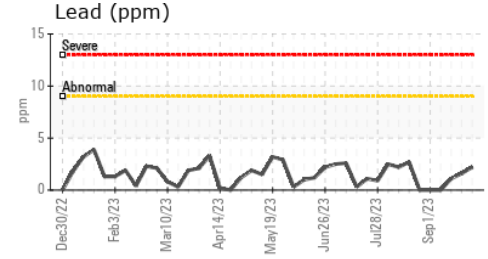
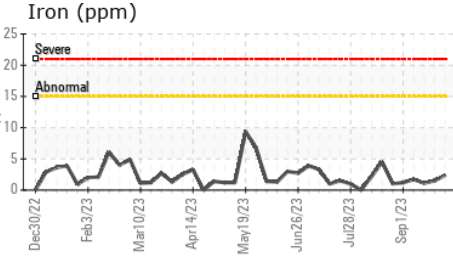
OIL ANALYSIS REPORT



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	14.6	14.3

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0764360 **Received** : 02 Oct 2023
Lab Number : 05966497 **Diagnosed** : 04 Oct 2023
Unique Number : 10673048 **Diagnostician** : Don Baldrige
Test Package : MOB 2 (Additional Tests: KV40)

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

Certificate L2367
 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)