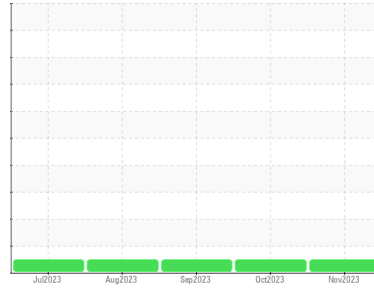


OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Machine Id
MRC-293

Component
Natural Gas Engine

Fluid
LO-ASH ENGINE OIL SAE 40 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. Please specify the component make and model with your next sample. Please specify the brand, type, and viscosity of the oil on your next sample.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

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			TO60001723	TO60001661	TO60001473
Sample Date	Client Info			04 Nov 2023	12 Oct 2023	06 Sep 2023
Machine Age	hrs	Client Info		5803	5809	5810
Oil Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	Not Chngd
Sample Status				NORMAL	NORMAL	NORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	4	4	6
Chromium	ppm	ASTM D5185m	>4	0	<1	0
Nickel	ppm	ASTM D5185m	>2	0	<1	0
Titanium	ppm	ASTM D5185m		0	<1	<1
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>9	<1	2	<1
Lead	ppm	ASTM D5185m	>30	11	13	13
Copper	ppm	ASTM D5185m	>35	2	3	3
Tin	ppm	ASTM D5185m	>4	<1	<1	<1
Vanadium	ppm	ASTM D5185m		0	0	<1
Cadmium	ppm	ASTM D5185m		0	<1	0

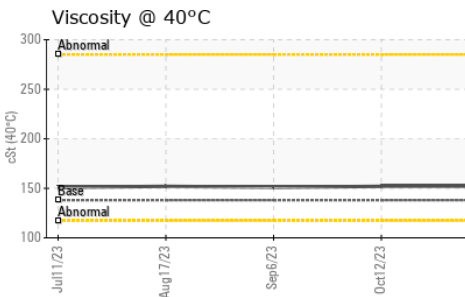
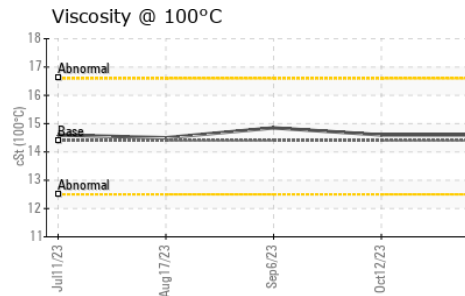
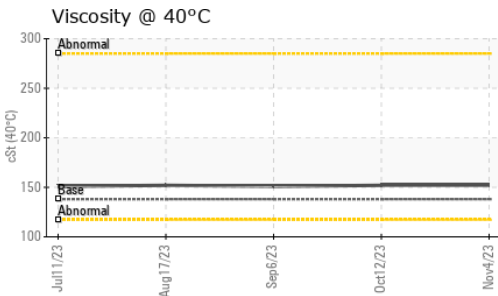
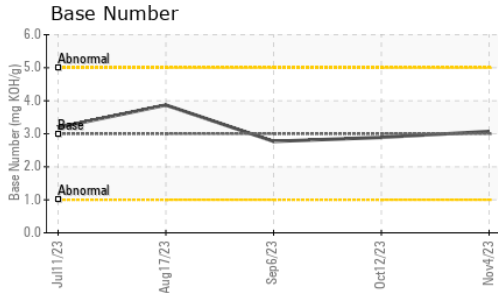
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	37	55	63	65
Barium	ppm	ASTM D5185m	12	0	10	0
Molybdenum	ppm	ASTM D5185m	200	<1	2	2
Manganese	ppm	ASTM D5185m		<1	0	<1
Magnesium	ppm	ASTM D5185m	5	17	17	15
Calcium	ppm	ASTM D5185m	1600	1286	1361	1514
Phosphorus	ppm	ASTM D5185m	300	196	307	284
Zinc	ppm	ASTM D5185m	400	328	357	364
Sulfur	ppm	ASTM D5185m	2600	1612	2114	2026

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>+100	1	2	2
Sodium	ppm	ASTM D5185m		5	<1	5
Potassium	ppm	ASTM D5185m	>20	<1	3	1

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844		0	0	0
Nitration	Abs/cm	*ASTM D7624	>20	9.2	9.3	10.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	19.2	19.2	22.5

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	19.1	19.2	21.4
Acid Number (AN)	mg KOH/g	ASTM D8045		1.35	1.57	1.38
Base Number (BN)	mg KOH/g	ASTM D2896	3.0	3.07	2.89	2.77

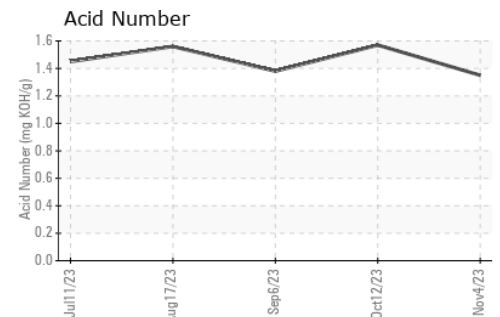
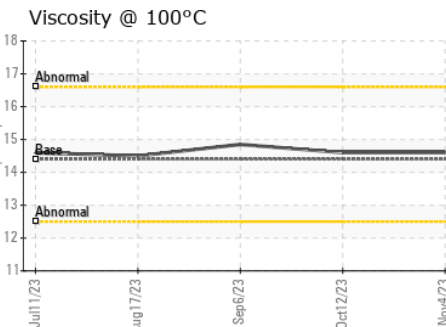
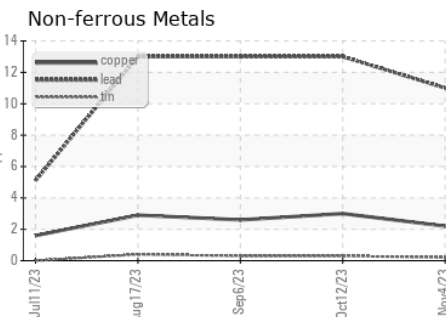
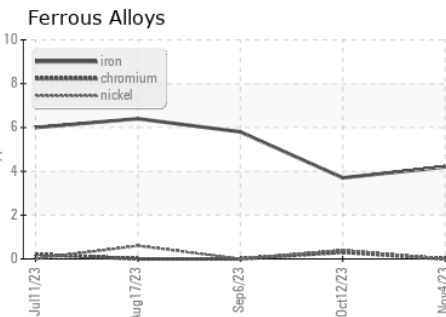
OIL ANALYSIS REPORT



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 @ 40°C	cSt	ASTM D445	138	152	151
Visc @ 100°C	cSt	ASTM D445	14.4	14.6	14.85
Viscosity Index (VI)	Scale	ASTM D2270	102	94	97

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : TO60001723 **Received** : 15 Nov 2023
Lab Number : 06008518 **Diagnosed** : 17 Nov 2023
Unique Number : 10742280 **Diagnostician** : Wes Davis
Test Package : IND 2 (Additional Tests: FT-IR, KV40, VI)

MIDLAND - EOG RESOURCES INC.
 5509 CHAMPIONS DRIVE
 MIDLAND, TX
 US 79706
 Contact: HERMAN GARZA
 herman_garza@eogresources.com
 T: (432)686-3600
 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)