TRAAP
Texas Refinery Advanced Analysis Program

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
SIEMENS SIEMENS
Component
Natural Gas Engine
Fluid
TRC LP & NATURAL GAS 40W (120 LTR)

RECOMMENDATION

Resample at the next service interval to monitor.

WEAR

All component wear rates are normal.

CONTAMINATION

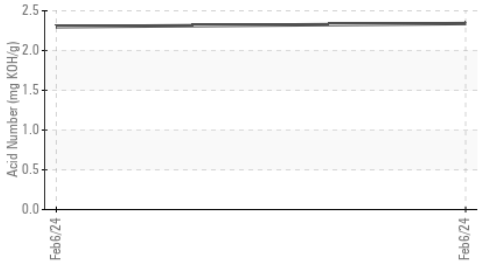
There is no indication of any contamination in the oil.

FLUID CONDITION

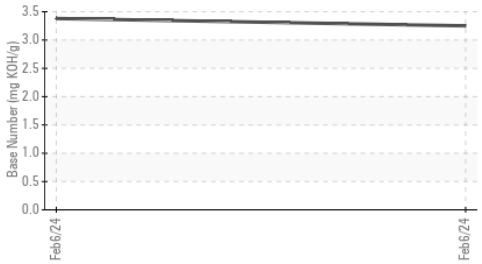
The BN result indicates that there is suitable alkalinity remaining in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		TR02620181	TR02618309	---
Sample Date		Client Info		06 Feb 2024	06 Feb 2024	---
Machine Age	hrs	Client Info		8634	8634	---
Oil Age	hrs	Client Info		862	862	---
Filter Age	hrs	Client Info		862	862	---
Oil Changed		Client Info		Changed	Changed	---
Filter Changed		Client Info		Changed	Changed	---
Sample Status				NORMAL	NORMAL	---
Iron	ppm	ASTM D5185(m)	>50	10	10	---
Chromium	ppm	ASTM D5185(m)	>4	0	0	---
Nickel	ppm	ASTM D5185(m)	>2	0	<1	---
Titanium	ppm	ASTM D5185(m)		0	0	---
Silver	ppm	ASTM D5185(m)	>3	0	0	---
Aluminum	ppm	ASTM D5185(m)	>9	2	2	---
Lead	ppm	ASTM D5185(m)	>30	20	20	---
Copper	ppm	ASTM D5185(m)	>35	3	3	---
Tin	ppm	ASTM D5185(m)	>4	0	0	---
Vanadium	ppm	ASTM D5185(m)		0	0	---
Silicon	ppm	ASTM D5185(m)	>+100	2	2	---
Potassium	ppm	ASTM D5185(m)	>20	2	1	---
Water		WC Method	>0.1	NEG	NEG	---
Soot %	%	ASTM D7844*		0	0	---
Nitration	Abs/cm	ASTM D7624*	>20	7.0	7.0	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	21.9	22.0	---
Emulsified Water	scalar	Visual*	>0.1	NEG	NEG	---
Sodium	ppm	ASTM D5185(m)		1	1	---
Boron	ppm	ASTM D5185(m)		1	1	---
Barium	ppm	ASTM D5185(m)		0	0	---
Molybdenum	ppm	ASTM D5185(m)		<1	<1	---
Manganese	ppm	ASTM D5185(m)		0	0	---
Magnesium	ppm	ASTM D5185(m)		7	6	---
Calcium	ppm	ASTM D5185(m)		1735	1729	---
Phosphorus	ppm	ASTM D5185(m)		296	300	---
Zinc	ppm	ASTM D5185(m)		373	370	---
Sulfur	ppm	ASTM D5185(m)		4996	5027	---
Oxidation	Abs/.1mm	ASTM D7414*	>25	18.3	18.5	---
Acid Number (AN)	mg KOH/g	ASTM D974*		2.34	2.30	---
Base Number (BN)	mg KOH/g	ASTM D2896*		3.25	3.38	---
i-pH	Scale 0-14	ASTM D7946*	<4.5	---	3.62	---
Visc @ 100°C	cSt	ASTM D7279(m)		15.5	15.8	---

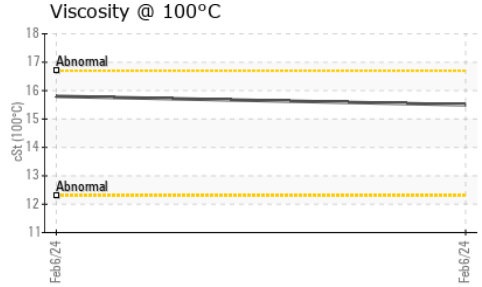
Acid Number



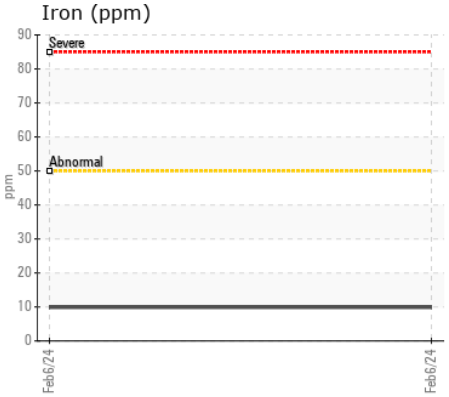
Base Number



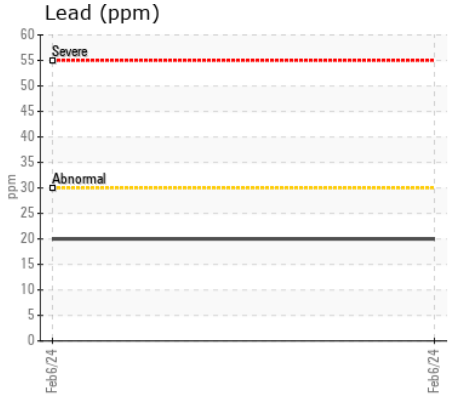
Viscosity @ 100°C



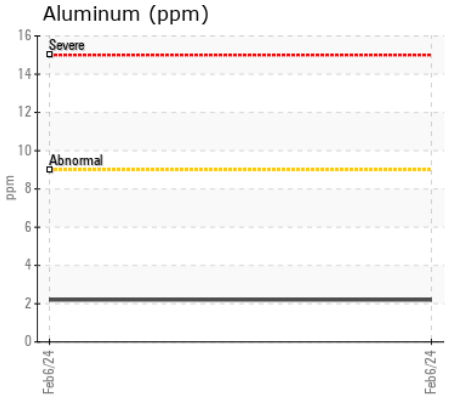
Iron (ppm)



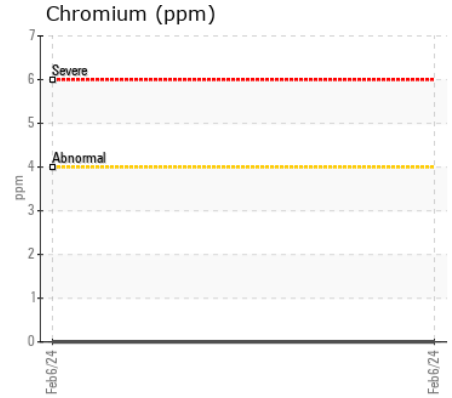
Lead (ppm)



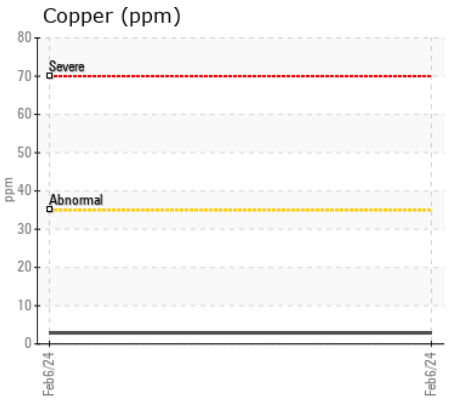
Aluminum (ppm)



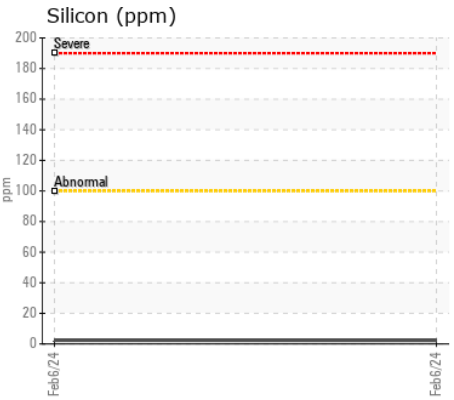
Chromium (ppm)



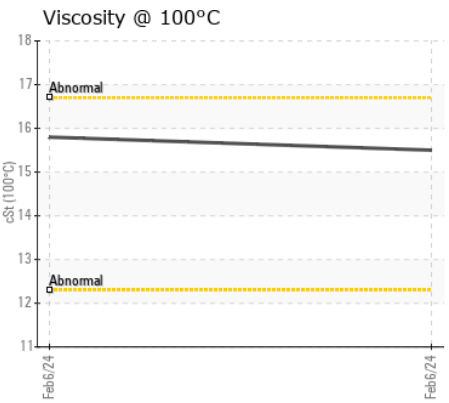
Copper (ppm)



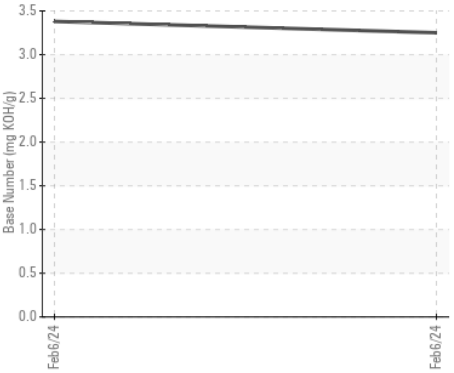
Silicon (ppm)



Viscosity @ 100°C



Base Number



ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : TR02620181
Lab Number : 02620181
Unique Number : 5737291
Test Package : MOB 2 (Additional Tests: i-pH, TAN Auto, TAN Man)

Received : 06 Mar 2024
Tested : 06 Mar 2024
Diagnosed : 06 Mar 2024 - Kevin Marson

HARTLAND COLONY (HLAND FARMING)
RR #1
BASHAW, AB
CA T0B 0H0
Contact: DAVID WALDNER

T: (403)588-9240
F: (780)372-3685

To discuss this sample report, contact Customer Service at 1-800-827-0711.
** - 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)