TRAAP
Texas Refinery Advanced Analysis Program

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
BROCE BROOM 0016
Component
Diesel Engine
Fluid
TRC PRO-SPEC III SYNTHETIC BLEND 15W40 (10 QTS)

RECOMMENDATION

Resample at the next service interval to monitor.

WEAR

Metal levels are typical for a new component breaking in.

CONTAMINATION

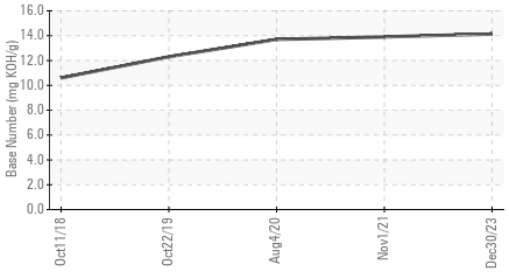
There is no indication of any contamination in the oil.

FLUID CONDITION

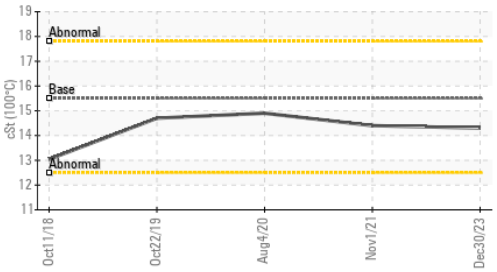
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		TR06062973	TR05444448	TR05045074
Sample Date		Client Info		30 Dec 2023	01 Nov 2021	04 Aug 2020
Machine Age	hrs	Client Info		688	382	220
Oil Age	hrs	Client Info		306	162	40
Filter Age	hrs	Client Info		306	162	40
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL
Iron	ppm	ASTM D5185m	>100	25	17	6
Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
Nickel	ppm	ASTM D5185m	>4	0	0	0
Titanium	ppm	ASTM D5185m		0	<1	<1
Silver	ppm	ASTM D5185m	>3	0	<1	0
Aluminum	ppm	ASTM D5185m	>20	3	5	0
Lead	ppm	ASTM D5185m	>40	4	<1	0
Copper	ppm	ASTM D5185m	>330	324	11	8
Tin	ppm	ASTM D5185m	>15	<1	<1	0
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>25	6	5	2
Potassium	ppm	ASTM D5185m	>20	<1	1	2
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.2	0.1	0.1
Nitration	Abs/cm	*ASTM D7624	>20	6.9	6.2	5.1
Sulfation	Abs/.1mm	*ASTM D7415	>30	18.4	18.8	19.4
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
Sodium	ppm	ASTM D5185m		3	2	4
Boron	ppm	ASTM D5185m		0	3	1
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		<1	1	1
Manganese	ppm	ASTM D5185m		1	1	1
Magnesium	ppm	ASTM D5185m		7	29	27
Calcium	ppm	ASTM D5185m		5020	4806	4125
Phosphorus	ppm	ASTM D5185m		893	1093	1090
Zinc	ppm	ASTM D5185m		1182	1220	1213
Sulfur	ppm	ASTM D5185m		4093	4307	4635
Oxidation	Abs/.1mm	*ASTM D7414	>25	10.6	11.9	13.2
Base Number (BN)	mg KOH/g	ASTM D2896		14.13	13.9	13.7
Visc @ 100°C	cSt	ASTM D445	15.5	14.3	14.4	14.9

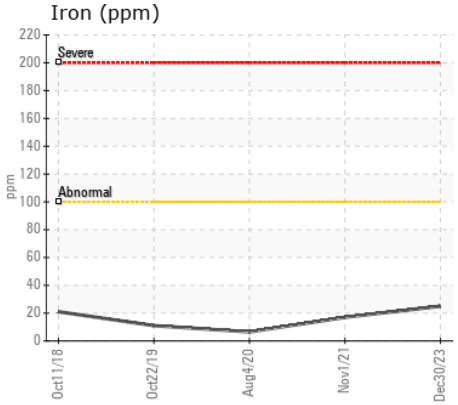
Base Number



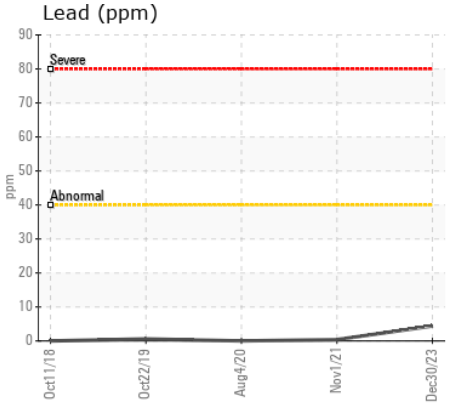
Viscosity @ 100°C



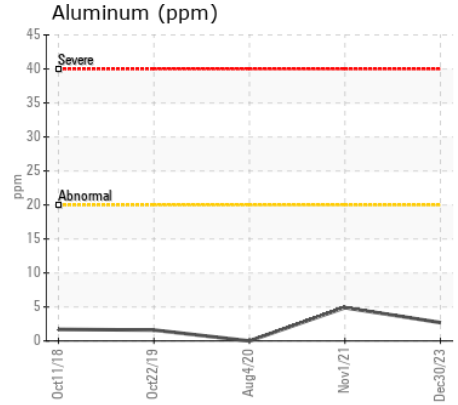
Iron (ppm)



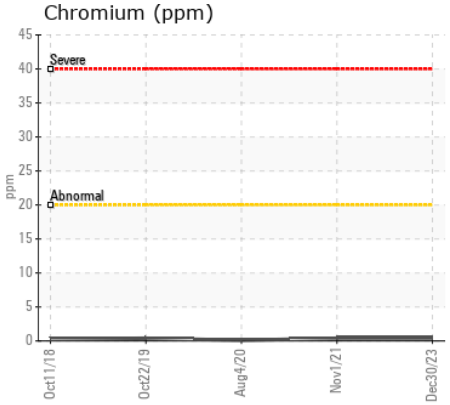
Lead (ppm)



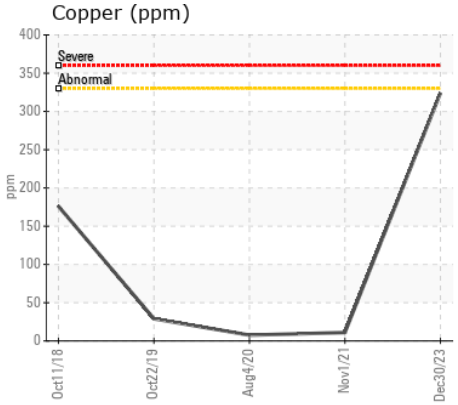
Aluminum (ppm)



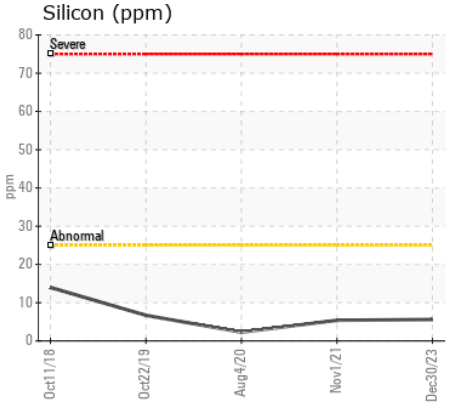
Chromium (ppm)



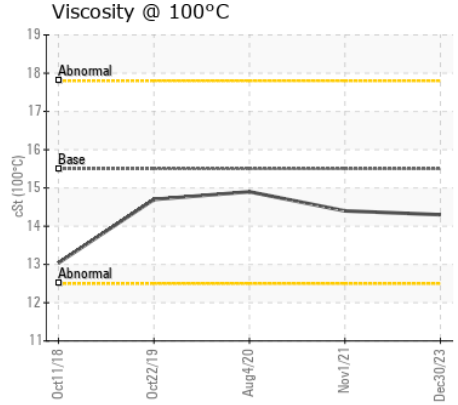
Copper (ppm)



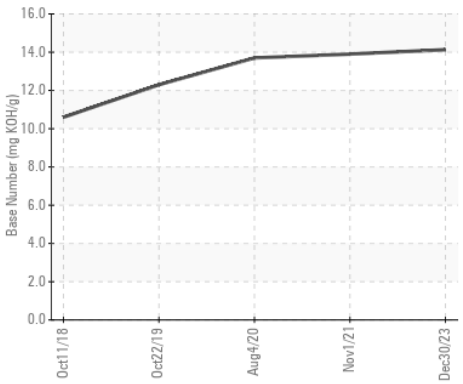
Silicon (ppm)



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory	: WearCheck USA - 501 Madison Ave., Cary, NC 27513		
Sample No.	: TR06062973	**Recieved**	: 17 Jan 2024
Lab Number	: 06062973	**Diagnosed**	: 18 Jan 2024
Unique Number	: 10834355	**Diagnostician**	: Sean Felton
Test Package	: MOB 2		

RANDALL COUNTY ROAD DEPT.
301 WEST HIGHWAY 60
CANYON, TX
US 79015
Contact: MIKE LEWIS

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)

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