



TRAAP

Texas Refinery Advanced Analysis Program

# OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id  
**CHICAGO PNEUMATIC AC**

Component  
**Diesel Engine**

Fluid  
**TRC MOLY XL PRO-SPEC III SYNTHETIC15W40 (18 QTS)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		TR04784212	TR03895198	TR00493168
Sample Date		Client Info		01 Mar 2019	03 Nov 2015	02 Apr 2003
Machine Age	hrs	Client Info		0	0	2410
Oil Age	hrs	Client Info		4	5	60
Filter Age	hrs	Client Info		0	0	60
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	ABNORMAL	NORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	68	▲ 109	86
Chromium	ppm	ASTM D5185m	>20	2	3	3
Nickel	ppm	ASTM D5185m	>4	<1	1	<1
Titanium	ppm	ASTM D5185m	>3	<1	<1	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	4	3	4
Lead	ppm	ASTM D5185m	>40	7	15	4
Copper	ppm	ASTM D5185m	>330	6	6	6
Tin	ppm	ASTM D5185m	>15	5	13	11
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

## CONTAMINATION

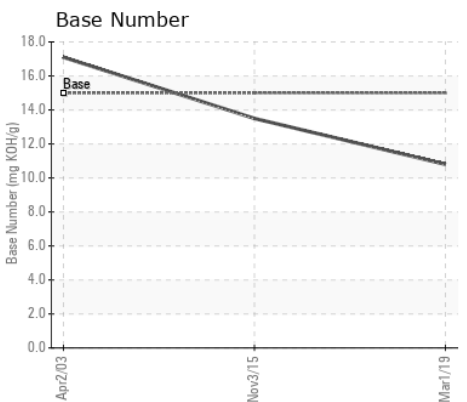
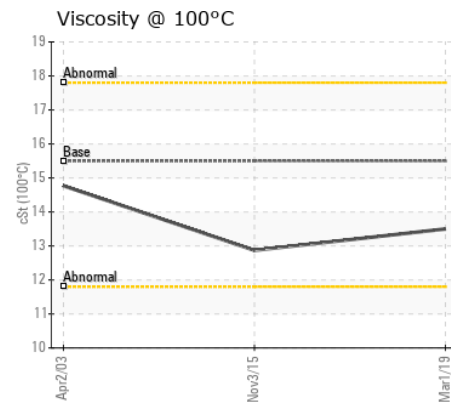
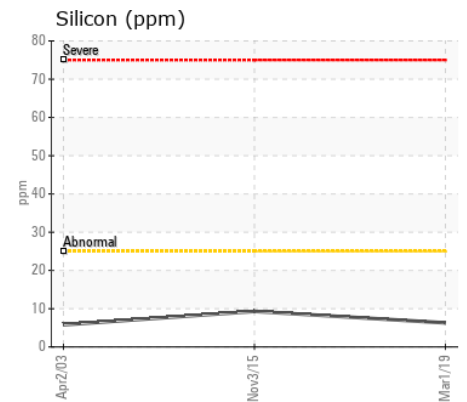
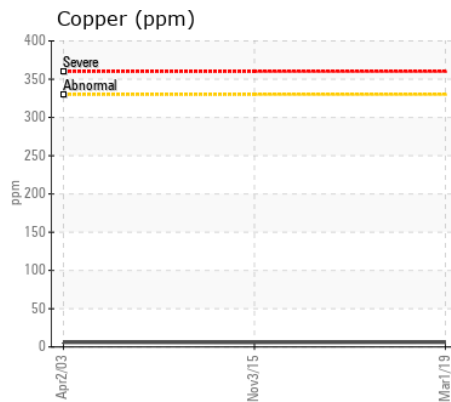
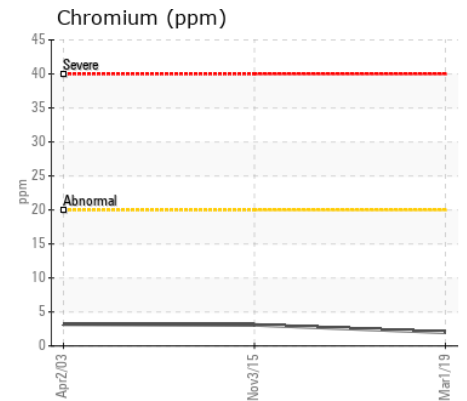
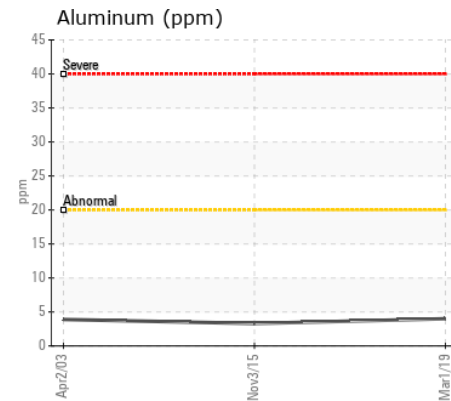
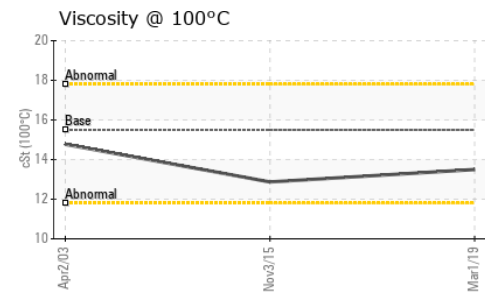
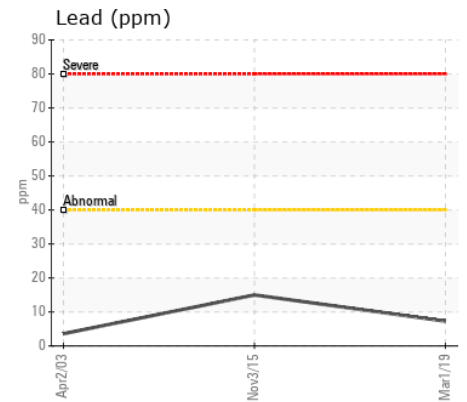
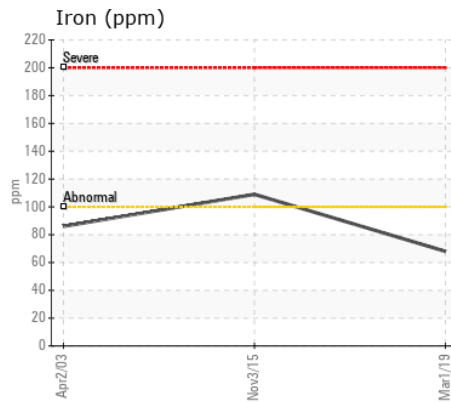
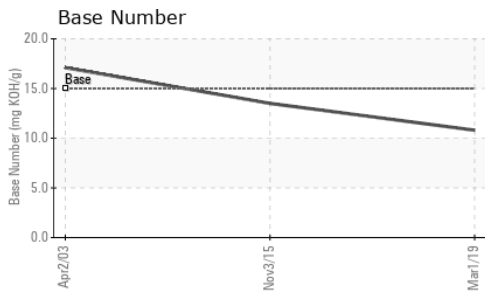
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	6	9	6
Potassium	ppm	ASTM D5185m	>20	0	7	6
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	0.8	0.7	0.9
Nitration	Abs/cm	*ASTM D7624	>20	7.6	5.	0.06
Sulfation	Abs/.1mm	*ASTM D7415	>30	17.6	12.	0.07
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

## 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.

Sodium	ppm	ASTM D5185m		7	7	11
Boron	ppm	ASTM D5185m		12	168	2
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		170	206	197
Manganese	ppm	ASTM D5185m		<1	<1	1
Magnesium	ppm	ASTM D5185m		817	564	397
Calcium	ppm	ASTM D5185m	4500	1907	4423	4581
Phosphorus	ppm	ASTM D5185m		990	918	838
Zinc	ppm	ASTM D5185m	1400	1213	1092	986
Sulfur	ppm	ASTM D5185m		3411	3810	4846
Oxidation	Abs/.1mm	*ASTM D7414	>25	13.2	9.	0.08
Base Number (BN)	mg KOH/g	ASTM D2896	15	10.8	13.5	17.1
Visc @ 100°C	cSt	ASTM D445	15.5	13.5	12.87	14.77



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : TR04784212

Lab Number : 04784212

Unique Number : 8712021

Test Package : MOB 2

Received : 23 Aug 2019

Tested : 26 Aug 2019

Diagnosed : 26 Aug 2019 - Don Baldrige

PHIL HARDER

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MOUNTAIN LAKE, MN

US 56159

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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)