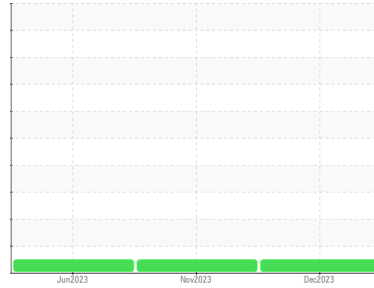


OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL


Area
Extrusion
 Machine Id
KNODLER Extruder 1 Gearbox (S/N G124277)
 Component
Gearbox
 Fluid
SHELL OMALA S2 GX 220 (92 LTR)

DIAGNOSIS
Recommendation

Resample at the next service interval to monitor. (Customer Sample Comment: Production Request)

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

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			PCA0099953	PCA0099954	PCA0099950
Sample Date	Client Info			05 Dec 2023	24 Nov 2023	13 Jun 2023
Machine Age	hrs	Client Info		38680	38524	35841
Oil Age	hrs	Client Info		2839	38524	35841
Oil Changed	Client Info			N/A	Not Changd	Changed
Sample Status				NORMAL	NORMAL	NORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Water	WC Method		>0.2	NEG	NEG	NEG

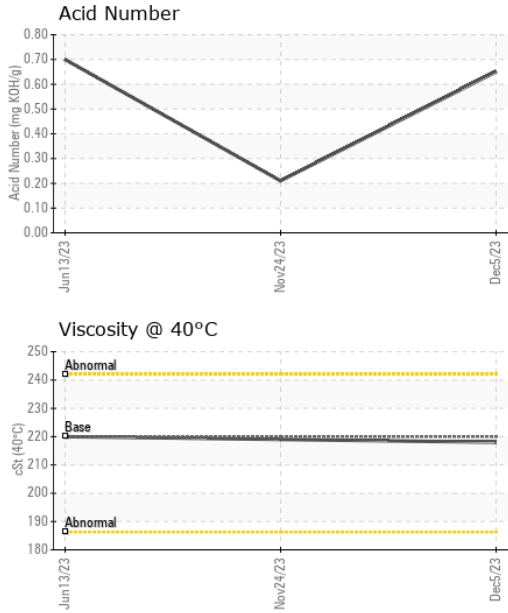
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>200	46	44	47
Chromium	ppm	ASTM D5185m	>15	0	0	<1
Nickel	ppm	ASTM D5185m	>15	0	0	<1
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>25	<1	0	0
Lead	ppm	ASTM D5185m	>100	0	0	0
Copper	ppm	ASTM D5185m	>200	<1	<1	<1
Tin	ppm	ASTM D5185m	>25	0	0	0
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	6.2	2	<1	7
Barium	ppm	ASTM D5185m	0.0	7	0	0
Molybdenum	ppm	ASTM D5185m	0	0	0	0
Manganese	ppm	ASTM D5185m		2	2	2
Magnesium	ppm	ASTM D5185m	0	<1	<1	0
Calcium	ppm	ASTM D5185m	0.0	1	3	8
Phosphorus	ppm	ASTM D5185m	290	229	234	280
Zinc	ppm	ASTM D5185m	3.8	0	1	10
Sulfur	ppm	ASTM D5185m	8167	13163	13019	17258

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>50	2	2	2
Sodium	ppm	ASTM D5185m		2	<1	<1
Potassium	ppm	ASTM D5185m	>20	<1	<1	2

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		0.65	0.21	0.70

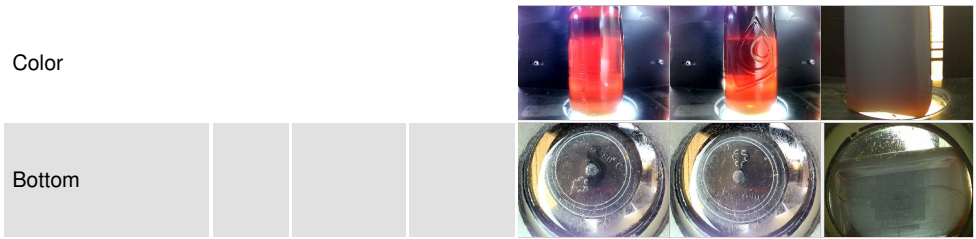
OIL ANALYSIS REPORT



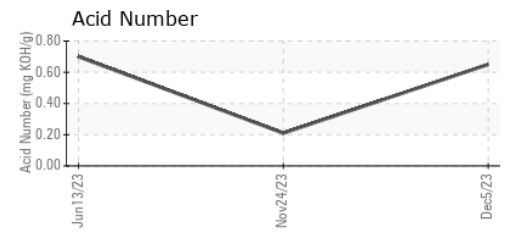
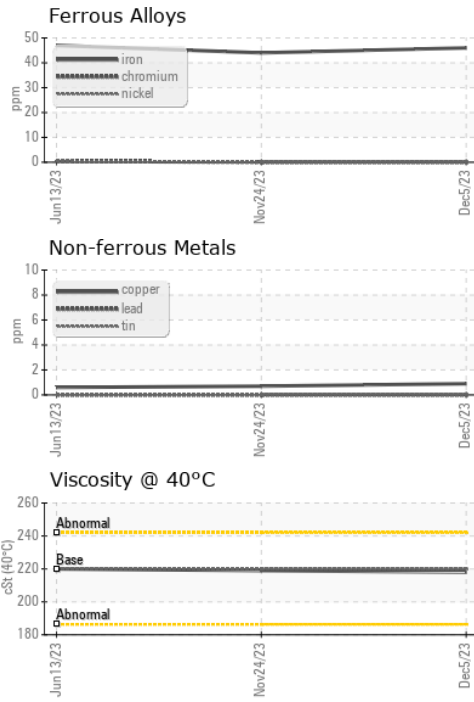
PARAMETER	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

PARAMETER	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	220	218	219

SAMPLE IMAGES



GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0099953 **Received** : 07 Dec 2023
Lab Number : 06028753 **Diagnosed** : 11 Dec 2023
Unique Number : 10778544 **Diagnostician** : Don Baldrige
Test Package : IND 2

MCP USA INC
 6750 DANIEL BURNHAM DRIVE SUITE E
 PORTAGE, IN
 UM 46368
 Contact: DAVE BUCKLAND
 daveb@mcpusainc.com

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)