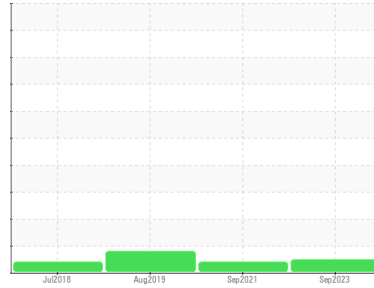




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
NIDEC MOTOR CORP 402 MOTOR (S/N W0720150097-001)
 Component
Left Pump
 Fluid
ROYAL PURPLE SYNFILM 68 (30 QTS)

DIAGNOSIS

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 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		RP0026763	RP0005016	RP184073
Sample Date	Client Info		24 Sep 2023	15 Sep 2021	15 Aug 2019
Machine Age	hrs	Client Info	30385	8856	10930
Oil Age	hrs	Client Info	0	0	3942
Oil Changed	Client Info		N/A	N/A	Not Changd
Sample Status			NORMAL	ATTENTION	ABNORMAL

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >90	<1	<1	0
Chromium	ppm	ASTM D5185m >5	0	0	0
Nickel	ppm	ASTM D5185m >5	0	0	<1
Titanium	ppm	ASTM D5185m >3	<1	0	0
Silver	ppm	ASTM D5185m >3	0	0	<1
Aluminum	ppm	ASTM D5185m >7	2	<1	0
Lead	ppm	ASTM D5185m >12	0	<1	<1
Copper	ppm	ASTM D5185m >30	<1	1	<1
Tin	ppm	ASTM D5185m >9	0	0	0
Antimony	ppm	ASTM D5185m	---	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	0	<1	<1
Barium	ppm	ASTM D5185m	0	<1	0
Molybdenum	ppm	ASTM D5185m	0	0	0
Manganese	ppm	ASTM D5185m	0	0	<1
Magnesium	ppm	ASTM D5185m 90	96	36	59
Calcium	ppm	ASTM D5185m	0	<1	<1
Phosphorus	ppm	ASTM D5185m	0	18	38
Zinc	ppm	ASTM D5185m	0	0	0

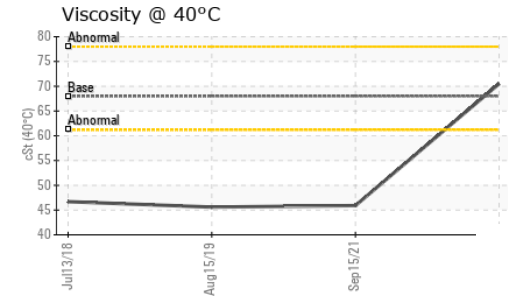
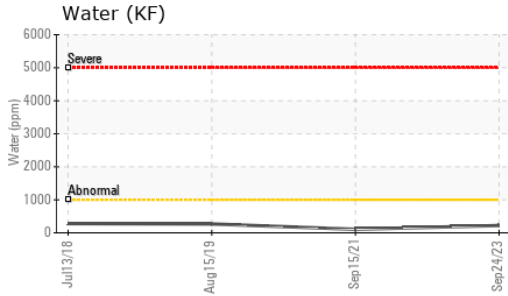
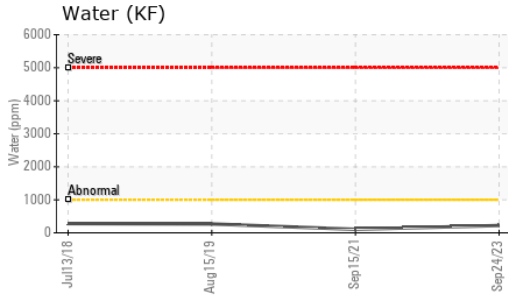
CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >60	<1	1	2
Sodium	ppm	ASTM D5185m	<1	0	1
Potassium	ppm	ASTM D5185m >20	0	0	0
Water	%	ASTM D6304 >.1	0.022	0.010	0.026
ppm Water	ppm	ASTM D6304 >1000	221.5	105.9	269.1

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 0.25	0.41	0.266	0.270

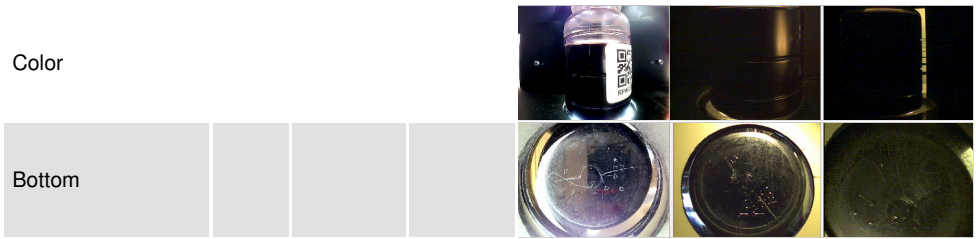
OIL ANALYSIS REPORT



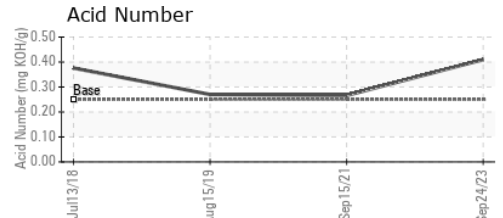
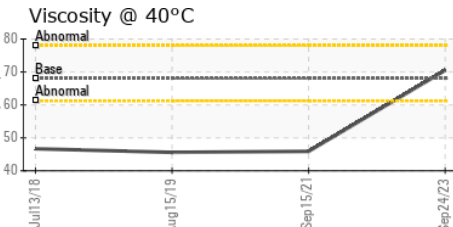
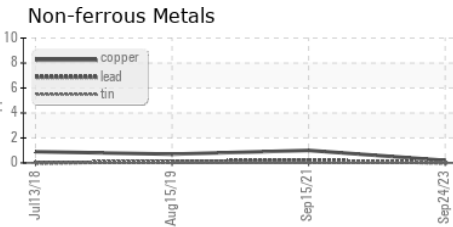
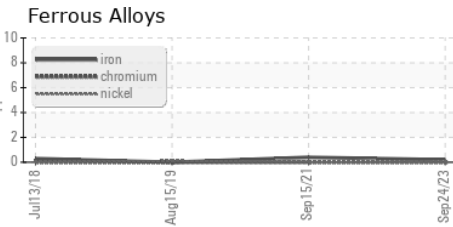
PARAMETER	VISUAL	method	limit/base	current	history1	history2
White Metal		scalar	*Visual	NONE	NONE	NONE
Yellow Metal		scalar	*Visual	NONE	NONE	NONE
Precipitate		scalar	*Visual	NONE	NONE	NONE
Silt		scalar	*Visual	NONE	NONE	NONE
Debris		scalar	*Visual	NONE	LIGHT	▲ MODER
Sand/Dirt		scalar	*Visual	NONE	NONE	NONE
Appearance		scalar	*Visual	NORML	NORML	NORML
Odor		scalar	*Visual	NORML	NORML	NORML
Emulsified Water		scalar	*Visual	>.1	NEG	NEG
Free Water		scalar	*Visual		NEG	NEG

PARAMETER	method	limit/base	current	history1	history2
FLUID PROPERTIES					
Visc @ 40°C	cSt	ASTM D445 68	70.5	▲ 45.9	▲ 45.6

PARAMETER	method	limit/base	current	history1	history2
SAMPLE IMAGES					



GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : RP0026763 **Received** : 28 Sep 2023
Lab Number : 05964253 **Diagnosed** : 01 Oct 2023
Unique Number : 10670804 **Diagnostician** : Don Baldrige
Test Package : IND 2

KINDER MORGAN
 5877 CR 210
 SMILEY, TX
 US 78159
 Contact: JOHN EVANS
 john_evans@kindermorgan.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)

T:
F: