



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ATTENTION

Area
Milliken
 Machine Id
INGERSOLL RAND 10462488 - MILLIKEN (S/N EE3749U14162)
 Component
Compressor
 Fluid
INGERSOLL-RAND SSR ULTRA COOLANT (36 GAL)

RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		APC0000505	APC0000507	APC0000508
Sample Date		Client Info		05 Dec 2023	29 Aug 2023	27 Jun 2023
Machine Age	hrs	Client Info		33073	30719	29210
Oil Age	hrs	Client Info		2000	2000	0
Filter Age	hrs	Client Info		2000	0	2000
Oil Changed		Client Info		Not Changed	N/A	Not Changed
Filter Changed		Client Info		Changed	N/A	Changed
Sample Status				ATTENTION	ABNORMAL	ABNORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	1	<1	<1
Chromium	ppm	ASTM D5185m	>10	<1	<1	0
Nickel	ppm	ASTM D5185m		<1	<1	0
Titanium	ppm	ASTM D5185m		<1	<1	0
Silver	ppm	ASTM D5185m		0	<1	0
Aluminum	ppm	ASTM D5185m	>25	2	3	0
Lead	ppm	ASTM D5185m	>25	<1	0	0
Copper	ppm	ASTM D5185m	>50	1	1	<1
Tin	ppm	ASTM D5185m	>15	13	7	9
Vanadium	ppm	ASTM D5185m		0	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

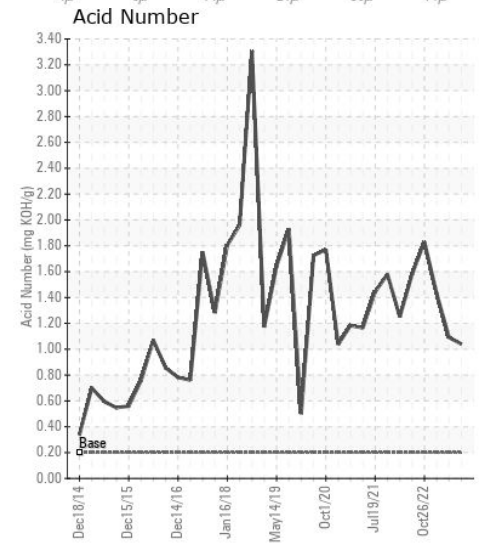
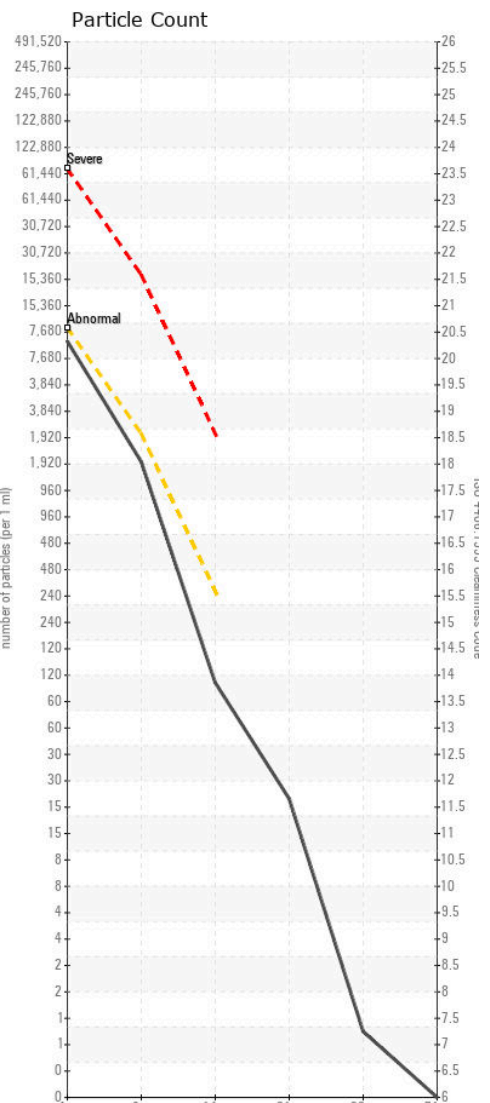
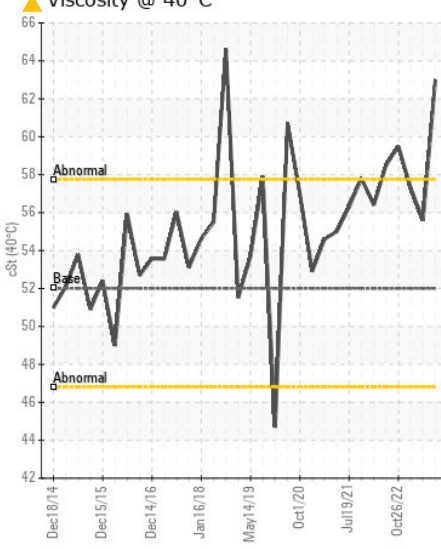
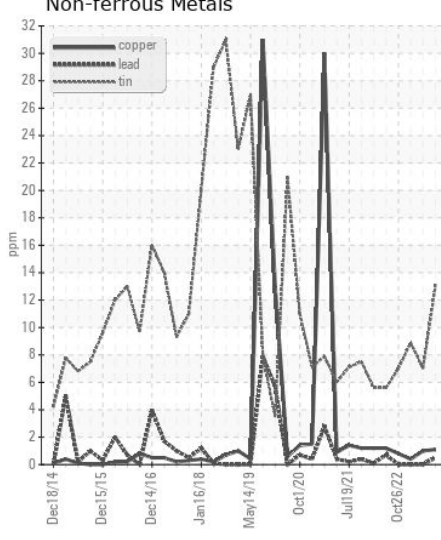
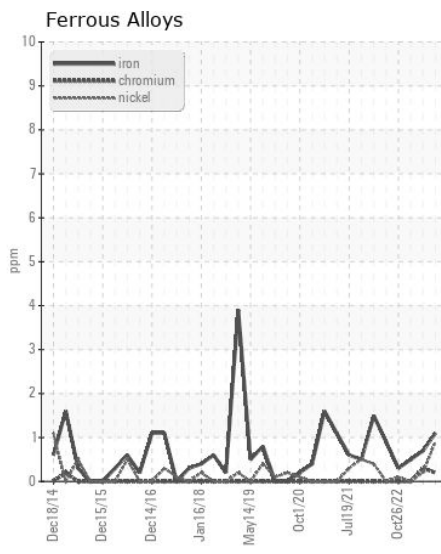
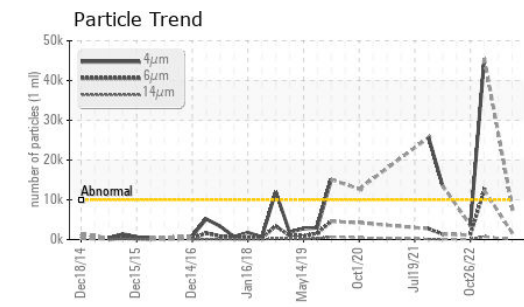
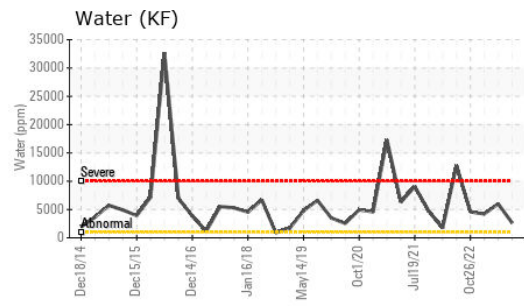
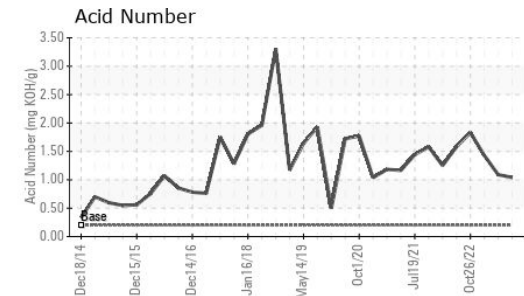
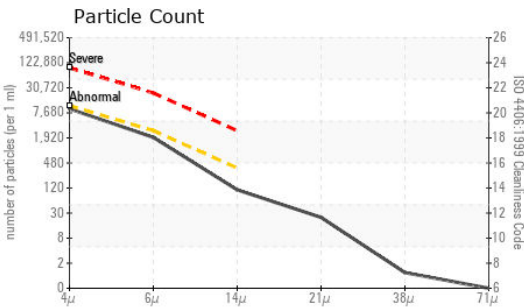
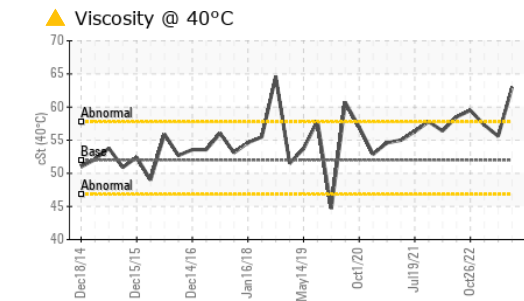
There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable.

Silicon	ppm	ASTM D5185m	>25	2	6	3
Potassium	ppm	ASTM D5185m	>20	12	11	9
Water	%	ASTM D6304	>0.1	0.262	▲ 0.601	0.422
ppm Water	ppm	ASTM D6304	>1000	2625	▲ 6010	4220.7
Particles >4µm		ASTM D7647	>10000	8373	---	▲ 45540
Particles >6µm		ASTM D7647	>2500	1729	---	▲ 12377
Particles >14µm		ASTM D7647	>320	96	---	▲ 727
Particles >21µm		ASTM D7647	>80	21	---	▲ 170
Particles >38µm		ASTM D7647	>20	1	---	6
Particles >71µm		ASTM D7647	>4	0	---	0
Oil Cleanliness		ISO 4406 (c)	>20/18/15	20/18/14	---	▲ 23/21/17
Silt	scalar	*Visual	NONE	NONE	NONE	LIGHT
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	>0.1	NEG	▲ 0.2%	NEG

FLUID CONDITION

The oil viscosity is higher than normal. An additive depletion is indicated. The AN level is acceptable for this fluid.

Sodium	ppm	ASTM D5185m		101	58	66
Boron	ppm	ASTM D5185m		2	6	0
Barium	ppm	ASTM D5185m	556	▲ 83	398	333
Molybdenum	ppm	ASTM D5185m		<1	0	0
Manganese	ppm	ASTM D5185m		<1	0	0
Magnesium	ppm	ASTM D5185m		<1	5	1
Calcium	ppm	ASTM D5185m	242	2	50	0
Phosphorus	ppm	ASTM D5185m	0	27	4	0
Zinc	ppm	ASTM D5185m	0	0	5	2
Sulfur	ppm	ASTM D5185m	306	276	320	429
Acid Number (AN)	mg KOH/g	ASTM D8045	0.2	1.04	1.09	1.43
Visc @ 40°C	cSt	ASTM D445	52	▲ 63.0	55.6	57.3



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : APC0000505 **Received** : 08 Jan 2024
Lab Number : 06054944 **Diagnosed** : 10 Jan 2024
Unique Number : 10820893 **Diagnostician** : Jonathan Hester
Test Package : IND 2 (Additional Tests: KF, PrtCount)

AIR PRODUCTS AND CHEMICALS INC - ALLENTOWN
 7201 HAMILTON BLVD
 ALLENTOWN, PA
 US 18195
 Contact: MICHAEL PROTZEK
 protzema@airproducts.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)