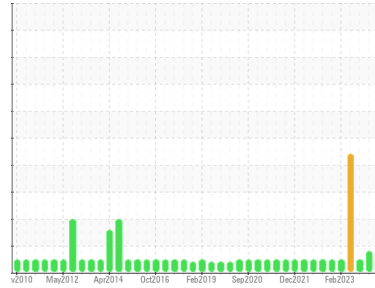




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
2146-C-1 N FES 700 (S/N AB10744V)

Component
Refrigeration Compressor
Fluid
USPI 1009-68 SC (130 GAL)

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 component. The amount and size of particulates present in the system is acceptable.

Fluid Condition

The TAN level is acceptable for this fluid. The condition of the oil is suitable for further service. Viscosity confirmed.

SAMPLE INFORMATION

method	limit/base	current	history1	history2	
Sample Number	Client Info	USP0006154	USP0005008	USP0002038	
Sample Date	Client Info	13 Mar 2024	09 Dec 2023	06 Sep 2023	
Machine Age	hrs	Client Info	0	0	10751
Oil Age	hrs	Client Info	0	0	0
Oil Changed	Client Info	N/A	N/A	N/A	
Sample Status		NORMAL	ATTENTION	NORMAL	

WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m >8	0	0	0
Chromium	ppm	ASTM D5185m >2	0	<1	<1
Nickel	ppm	ASTM D5185m	0	0	0
Titanium	ppm	ASTM D5185m	0	0	<1
Silver	ppm	ASTM D5185m >2	0	0	0
Aluminum	ppm	ASTM D5185m >3	0	0	<1
Lead	ppm	ASTM D5185m >2	0	0	0
Copper	ppm	ASTM D5185m >8	0	0	0
Tin	ppm	ASTM D5185m >4	<1	0	<1
Vanadium	ppm	ASTM D5185m	0	0	<1
Cadmium	ppm	ASTM D5185m	0	0	<1

ADDITIVES

method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m	0	0	0
Barium	ppm	ASTM D5185m	0	0	0
Molybdenum	ppm	ASTM D5185m	0	0	0
Manganese	ppm	ASTM D5185m	<1	0	<1
Magnesium	ppm	ASTM D5185m	0	0	0
Calcium	ppm	ASTM D5185m	0	0	0
Phosphorus	ppm	ASTM D5185m	0	0	0
Zinc	ppm	ASTM D5185m	0	0	0
Sulfur	ppm	ASTM D5185m 50	0	0	0

CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >15	<1	<1	1
Sodium	ppm	ASTM D5185m	0	0	1
Potassium	ppm	ASTM D5185m >20	0	<1	3
Water	%	ASTM D6304 >0.01	0.002	0.004	0.001
ppm Water	ppm	ASTM D6304 >100	22	47	0.00

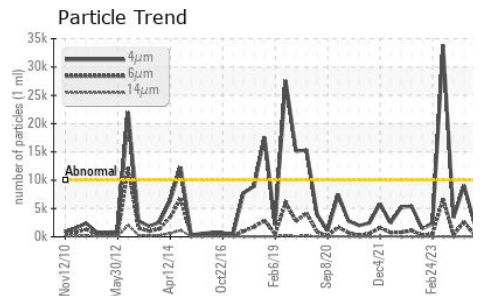
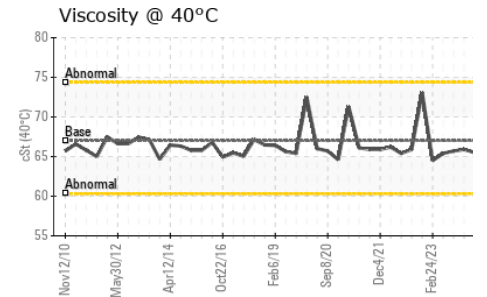
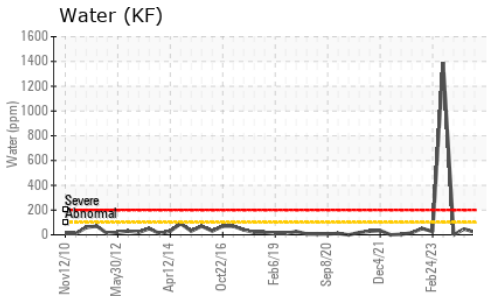
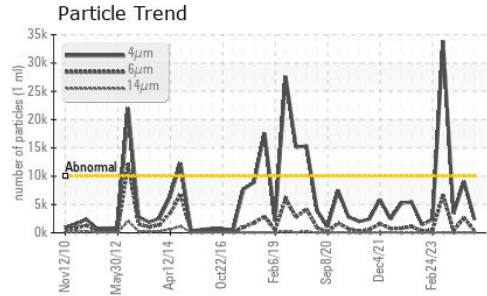
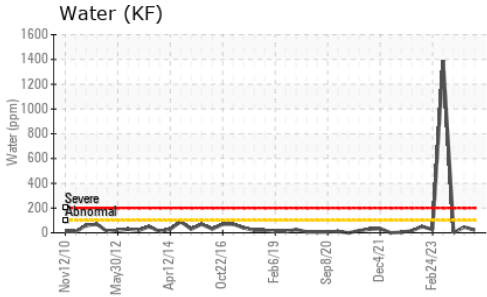
FLUID CLEANLINESS

method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >10000	2328	9060	3429
Particles >6µm	ASTM D7647 >2500	300	2625	364
Particles >14µm	ASTM D7647 >320	13	74	13
Particles >21µm	ASTM D7647 >80	3	7	3
Particles >38µm	ASTM D7647 >20	0	0	0
Particles >71µm	ASTM D7647 >4	0	0	0
Oil Cleanliness	ISO 4406 (c) >20/18/15	18/15/11	20/19/13	19/16/11

FLUID DEGRADATION

method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D974 0.005	0.014	0.014	0.013

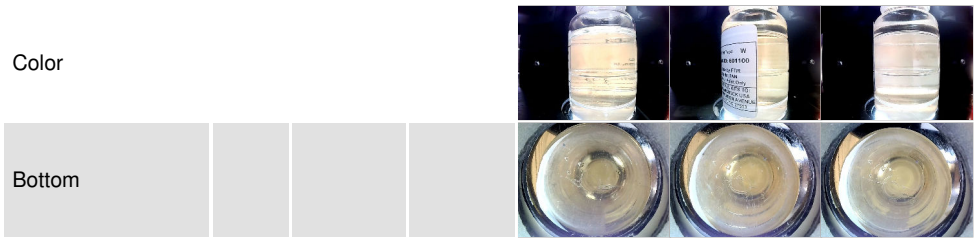
OIL ANALYSIS REPORT



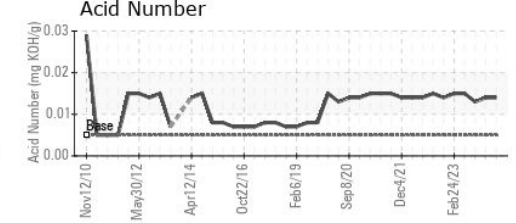
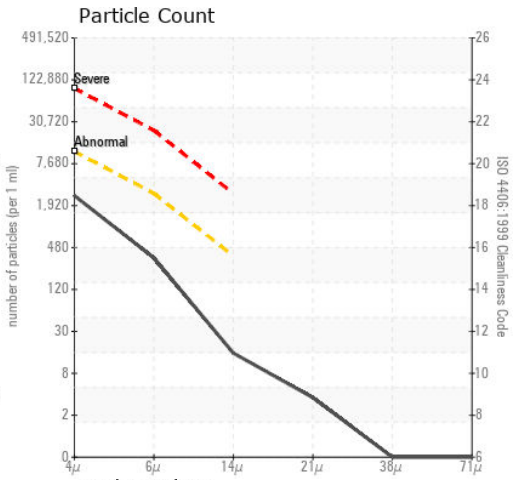
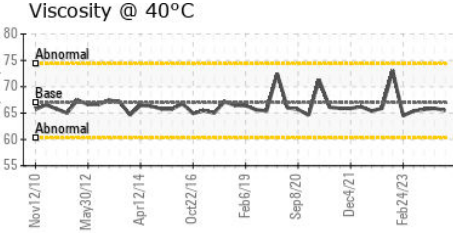
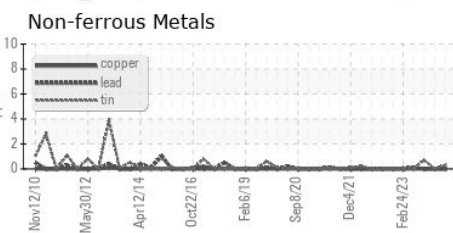
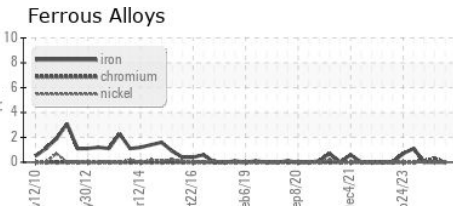
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.01	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 67	65.5	65.9	65.7

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : USP0006154 **Received** : 20 Mar 2024
Lab Number : 06123716 **Tested** : 25 Mar 2024
Unique Number : 10937867 **Diagnosed** : 25 Mar 2024 - Jonathan Hester
Test Package : IND 2

SMITHFIELD - DENISON - SMIDENIOW
 800 INDUSTRIAL ROAD
 DENISON, IA
 US 51442
 Contact: SERVICE MANAGER

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)

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