

OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id 5227095 (S/N 1016) Component Compressor

Compressor Fluid KAESER SIGMA (OEM) M-460 (--- GAL)

DIAGNOSIS

Recommendation

No corrective action is recommended at this time. Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. We were unable to perform a particle count due to a high concentration of particles present in this sample.

Wear

All component wear rates are normal.

Contamination

Moderate concentration of visible dirt/debris present in the oil.

Fluid Condition

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		KCPA014454	KCPA006500	KCPA003127
Sample Date		Client Info		28 May 2024	25 Oct 2023	09 Jun 2023
Machine Age	hrs	Client Info		4420	4064	38362
Oil Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	N/A	N/A
Sample Status				ABNORMAL	ABNORMAL	ABNORMAL
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	<1	0	0
Chromium	ppm	ASTM D5185m	>10	<1	0	0
Nickel	ppm	ASTM D5185m	>3	<1	0	0
Titanium	ppm	ASTM D5185m	>3	<1	0	<1
Silver	ppm	ASTM D5185m	>2	<1	0	0
Aluminum	ppm	ASTM D5185m	>10	2	0	<1
Lead	ppm	ASTM D5185m	>10	<1	0	0
Copper	ppm	ASTM D5185m	>50	12	6	10
Tin	ppm	ASTM D5185m	>10	<1	0	0
Vanadium	ppm	ASTM D5185m		<1	0	0
Cadmium	ppm	ASTM D5185m		<1	0	0
ADDITIVES		method	limit/base	current	history1	history2
ADDITIVES Boron	ppm	method ASTM D5185m	limit/base	current 0	history1 0	history2 0
	ppm ppm					
Boron		ASTM D5185m	0	0	0	0
Boron Barium	ppm	ASTM D5185m ASTM D5185m	0 90	0 <1	0 0	0 14
Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	0 90	0 <1 <1	0 0 0	0 14 0
Boron Barium Molybdenum Manganese	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 90 0	0 <1 <1 <1	0 0 0 0	0 14 0 0
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 90 0 100	0 <1 <1 <1 3	0 0 0 0	0 14 0 0 14
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 90 0 100 0	0 <1 <1 <1 3 0	0 0 0 0 <1	0 14 0 0 14 1
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 90 0 100 0 0	0 <1 <1 <1 3 0 0	0 0 0 0 <1 <1	0 14 0 0 14 1 4
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 90 0 100 0 0 0	0 <1 <1 3 0 0 5	0 0 0 0 <1 <1 0	0 14 0 0 14 1 4 27
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 90 0 100 0 0 0 23500	0 <1 <1 3 0 0 5 17123	0 0 0 0 <1 <1 <1 0 14572	0 14 0 14 1 4 27 17787
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 90 0 100 0 0 23500 limit/base	0 <1 <1 3 0 0 5 17123 current	0 0 0 0 0 <1 <1 <1 0 14572 history1	0 14 0 14 1 4 27 17787 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m	0 90 0 100 0 0 23500 limit/base	0 <1 <1 3 0 0 0 5 17123 current <1	0 0 0 0 <1 <1 <1 0 14572 history1 <1	0 14 0 14 1 4 27 17787 history2 0
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m ASTM D5185m	0 90 0 100 0 0 23500 limit/base >25	0 <1 <1 <1 3 0 0 0 5 17123 current <1 0	0 0 0 0 <1 <1 <1 0 14572 history1 <1 <1	0 14 0 14 1 4 27 17787 history2 0 1
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	0 90 0 100 0 0 23500 limit/base >25	0 <1 <1 <1 3 0 0 0 5 17123 current <1 0 1	0 0 0 0 <1 <1 <1 0 14572 history1 <1 <1 <1	0 14 0 14 1 4 27 17787 history2 0 1 0
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Water	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	0 90 0 100 0 0 23500 23500 limit/base >25 >20 >20	0 <1 <1 <1 3 0 0 0 5 17123 current <1 0 1 0.007	0 0 0 0 <1 <1 <1 0 14572 history1 <1 <1 <1 <1 <1 0.006	0 14 0 14 1 4 27 17787 history2 0 1 0 1 0 0 0.006



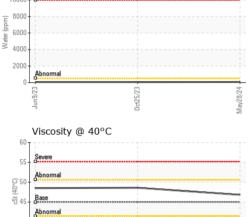
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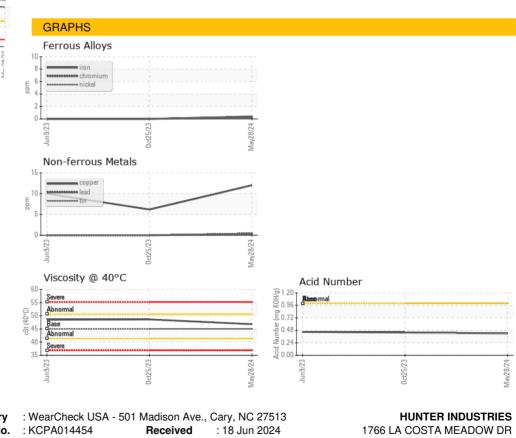
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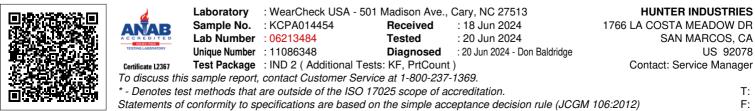
¹²⁰⁰⁰ T	Water (KF)		
10000	Severe		
€ 8000			
Vater (ppm)			
≥ 4000			
2000-	Abnormal		
0-	Jun9/23 -	0ct25/23 .	May28/24
12000 ,	Water (KF)		
12000			



VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	🔺 MODER	NONE
Debris	scalar	*Visual	NONE	A MODER	NONE	🔺 MODER
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	>0.05	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG
FLUID PROPERT	IES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	45	46.8	48.6	48.5
SAMPLE IMAGES	S	method	limit/base	current	history1	history2
Color						

Bottom





Contact/Location: Service Manager - HUNSANCA