OIL ANALYSIS REPORT

Emulsified Water

Free Water

*Visual

scalar *Visual

>0.1

scalar

Area ULTRA **INGERSOLL RAND HANGER 66 - WEST STAR AVIAT** Component

Compressor

DIAGNOSIS

Recommendation

The filter change at the time of sampling has been noted. 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 acceptable for the time in service.

	E00C40\					
IATION (S/N CBV	JYZ04U)					
			Jul2023	Oct2023		
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		UCH05999133	UCH05917691	
Sample Date		Client Info		06 Oct 2023	20 Jul 2023	
Machine Age	hrs	Client Info		29613	28257	
Oil Age	hrs	Client Info		5000	4000	
Oil Changed		Client Info		Not Changd	Not Changd	
Sample Status				NORMAL	NORMAL	
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	1	<1	
Chromium	ppm	ASTM D5185m	>10	<1	0	
Nickel	ppm	ASTM D5185m		<1	0	
Titanium	ppm	ASTM D5185m		0	<1	
Silver	ppm	ASTM D5185m		0	0	
Aluminum	ppm	ASTM D5185m	>25	<1	0	
_ead	ppm	ASTM D5185m	>25	<1	0	
Copper	ppm	ASTM D5185m	>50	<1	<1	
Гin	ppm	ASTM D5185m	>15	0	<1	
/anadium	ppm	ASTM D5185m		0	<1	
Cadmium	ppm	ASTM D5185m		<1	0	
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		<1	0	
Barium	ppm	ASTM D5185m	556	655	780	
Volybdenum	ppm	ASTM D5185m		0	0	
Vanganese	ppm	ASTM D5185m		0	0	
Magnesium	ppm	ASTM D5185m		<1	0	
Calcium	ppm					
Phosphorus		ASTM D5185m	242	4	0	
	ppm	ASTM D5185m	0	9	0	
Zinc	ppm	ASTM D5185m ASTM D5185m	0	9 18	0	
Zinc Sulfur	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	0 0 306	9	0 11 317	
Zinc	ppm ppm	ASTM D5185m ASTM D5185m	0	9 18	0	
Zinc Sulfur CONTAMINANTS	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m	0 0 306	9 18 244	0 11 317 history1 <1	
Zinc Sulfur CONTAMINANTS Silicon	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m method	0 0 306 limit/base	9 18 244 current	0 11 317 history1 <1 40	 history2
Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm 6 ppm	ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m	0 0 306 limit/base >25	9 18 244 current <1	0 11 317 history1 <1	 history2
Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID DEGRAD/	ppm ppm S ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m ASTM D5185m	0 0 306 limit/base >25	9 18 244 current <1 46 3 current	0 11 317 history1 <1 40 1 history1	 history2
Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID DEGRAD/ Acid Number (AN)	ppm ppm S ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m	0 0 306 limit/base >25 >20	9 18 244 current <1 46 3	0 11 317 history1 <1 40 1	 history2
Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID DEGRAD/ Acid Number (AN) VISUAL	ppm ppm ppm ppm ppm ppm ATION mg KOH/g	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D80455 method	0 0 306 >25 >20 limit/base 0.2 limit/base	9 18 244 current <1 46 3 current 0.25 current	0 11 317 history1 <1 40 1 history1 0.20 history1	 history2 history2
Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID DEGRAD/ Acid Number (AN) VISUAL White Metal	ppm ppm ppm ppm ppm ppm ppm ppm mg KOH/g scalar	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D8045 Method *Visual	0 0 306 limit/base >25 >20 limit/base 0.2 limit/base NONE	9 18 244 current <1 46 3 current 0.25 current NONE	0 11 317 history1 <1 40 1 1 history1 0.20 history1 NONE	 history2 history2 history2 history2
Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID DEGRADA Acid Number (AN) VISUAL White Metal Yellow Metal	ppm ppm ppm ppm ppm ppm ppm ATION mg KOH/g scalar scalar	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D8045 Method *Visual	0 0 306 <i>limit/base</i> >25 >20 <i>limit/base</i> 0.2 <i>limit/base</i> NONE NONE	9 18 244 current <1 46 3 current 0.25 current NONE LIGHT	0 11 317 history1 <1 40 1 1 history1 0.20 history1 NONE NONE	 history2 history2 history2 history2
Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID DEGRADA Acid Number (AN) VISUAL White Metal Yellow Metal Precipitate	ppm ppm ppm ppm ppm ppm ATION mg KOH/g scalar scalar scalar	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D8045 CMEthod *Visual *Visual	0 0 306 225 >20 1imit/base >20 1imit/base 0.2 1imit/base NONE NONE NONE	9 18 244 current <1 46 3 current 0.25 current NONE LIGHT NONE	0 11 317 history1 <1 40 1 1 history1 0.20 history1 NONE NONE NONE NONE	 history2 history2 history2 history2
Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID DEGRAD/ Acid Number (AN) VISUAL White Metal Yellow Metal Precipitate Silt	ppm ppm ppm ppm ppm ppm ppm ATION mg KOH/g scalar scalar scalar scalar scalar	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D8045 CMEthod *Visual *Visual *Visual *Visual	0 0 306 225 >25 20 1imit/base 0.2 1imit/base 0.2 NONE NONE NONE NONE	9 18 244 current <1 46 3 current 0.25 current NONE LIGHT NONE NONE NONE	0 11 317 history1 <1 40 1 1 history1 0.20 history1 NONE NONE NONE NONE NONE	 history2 history2 history2
Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID DEGRAD/ Acid Number (AN) VISUAL White Metal Yellow Metal Precipitate Silt Debris	ppm ppm ppm ppm ppm ppm ppm xTION mg KOH/g scalar scalar scalar scalar scalar scalar scalar	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D8045 Method *Visual *Visual *Visual *Visual *Visual	0 0 306 225 >20 1imit/base 0.2 1imit/base 0.2 NONE NONE NONE NONE NONE NONE NONE	9 18 244 current <1 46 3 current 0.25 current NONE LIGHT NONE NONE NONE NONE	0 11 317 history1 <1 40 1 1 history1 0.20 history1 0.20 history1 NONE NONE NONE NONE NONE NONE	 history2 history2 history2
Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID DEGRAD/ Acid Number (AN) VISUAL White Metal Yellow Metal Precipitate Silt Debris Sand/Dirt	ppm ppm ppm ppm ppm ppm ppm xTION mg KOH/g scalar scalar scalar scalar scalar scalar scalar	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D8045 CMEHOOD *Visual *Visual *Visual *Visual *Visual *Visual	0 0 306 306 >25 >20 imit/base 0.2 imit/base 0.2 imit/base NONE NONE NONE NONE NONE NONE NONE	9 18 244 current <1 46 3 current 0.25 current NONE LIGHT NONE NONE NONE NONE NONE	0 11 317 history1 <1 40 1 1 history1 0.20 history1 0.20 history1 NONE NONE NONE NONE NONE NONE NONE	 history2 history2 history2 history2
Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID DEGRAD/ Acid Number (AN)	ppm ppm ppm ppm ppm ppm ppm xTION mg KOH/g scalar scalar scalar scalar scalar scalar scalar	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D8045 Method *Visual *Visual *Visual *Visual *Visual	0 0 306 225 >20 1imit/base 0.2 1imit/base 0.2 NONE NONE NONE NONE NONE NONE NONE	9 18 244 current <1 46 3 current 0.25 current NONE LIGHT NONE NONE NONE NONE	0 11 317 history1 <1 40 1 1 history1 0.20 history1 0.20 history1 NONE NONE NONE NONE NONE NONE	 history2 history2 history2

Contact/Location: RACHEL VON HATTEN - UCJOHSAI

NEG

NEG

NEG

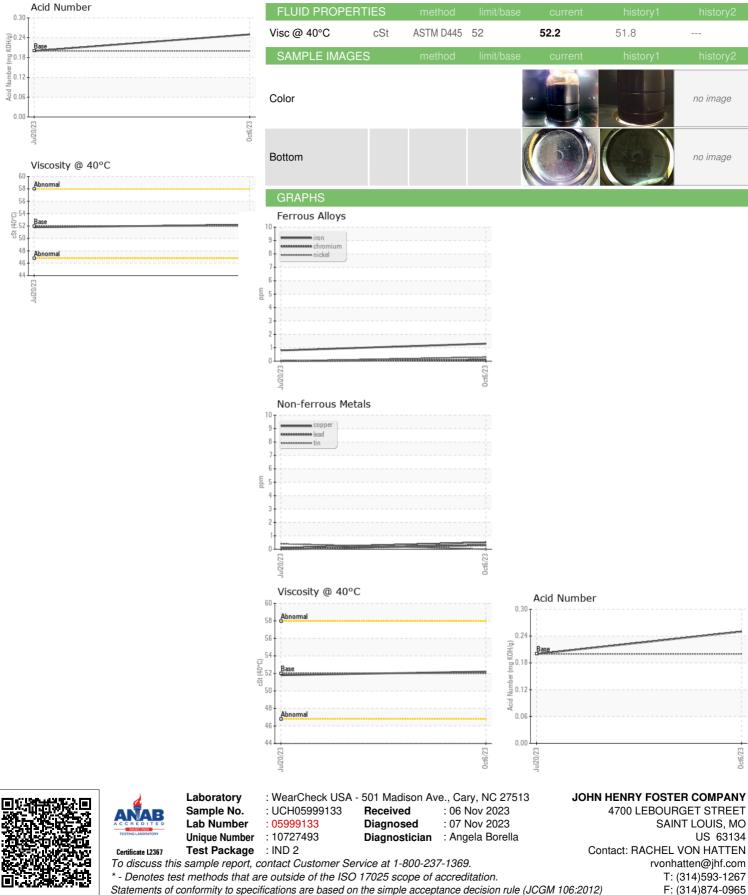
NEG

Sample Rating Trend

NORMAL



OIL ANALYSIS REPORT



Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

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