

OIL ANALYSIS REPORT

Area INGERSOLL RAND UPR902 - UNION PACIFIC RAILROAD (S/N UP6902) Component Compressor

Recommendation

Resample at the next service interval to monitor.

Wear

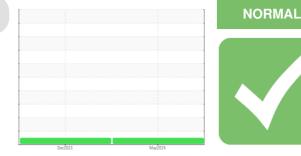
All component wear rates are normal.

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 Rating Trend

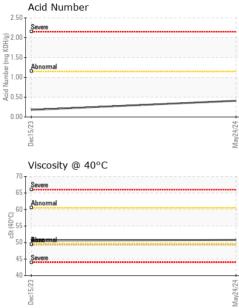


SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		JHF0000109	UCH06043348	
Sample Date		Client Info		24 May 2024	15 Dec 2023	
Machine Age	hrs	Client Info		32818	32815	
Oil Age	hrs	Client Info		3	15	
Oil Changed		Client Info		Oil Added	N/A	
Sample Status				NORMAL	NORMAL	
CONTAMINATIO	N	method	limit/base	current	history1	history2
Water		WC Method	>0.1	NEG	NEG	
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	0	0	
Chromium	ppm	ASTM D5185m	>10	0	0	
Nickel	ppm	ASTM D5185m		0	0	
Titanium	ppm	ASTM D5185m		0	0	
Silver	ppm	ASTM D5185m		0	0	
Aluminum	ppm	ASTM D5185m	>25	0	0	
Lead	ppm	ASTM D5185m	>25	0	0	
Copper	ppm	ASTM D5185m	>50	0	0	
Tin	ppm	ASTM D5185m	>15	0	0	
Vanadium	ppm	ASTM D5185m		0	0	
Cadmium	ppm	ASTM D5185m		0	0	
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	0	0	
Barium	ppm	ASTM D5185m	500	855	772	
Molybdenum	ppm	ASTM D5185m	0	0	0	
Manganese	ppm	ASTM D5185m		0	0	
Magnesium	ppm	ASTM D5185m	0	<1	<1	
Calcium	ppm	ASTM D5185m	0	3	5	
Phosphorus	ppm	ASTM D5185m	20	2	<1	
Zinc	ppm	ASTM D5185m	0	6	2	
Sulfur	ppm	ASTM D5185m	200	361	307	
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	2	4	
Sodium	ppm	ASTM D5185m		11	11	
Potassium	ppm	ASTM D5185m	>20	3	0	
FLUID DEGRADA	TION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		0.409	0.18	



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VISUAL



	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	
May24/24	Appearance	scalar	*Visual	NORML	NORML	NORML	
May	Odor	scalar	*Visual	NORML	NORML	NORML	
	Emulsified Water	scalar	*Visual	>0.1	NEG	NEG	
	Free Water	scalar	*Visual		NEG	NEG	
	FLUID PROPERT	IES	method	limit/base	current	history1	history2
	Visc @ 40°C	cSt	ASTM D445	49.4	50.8	50.6	
	SAMPLE IMAGES	\$	method	limit/base	current	history1	history2
May24/24 +	Color						no image
	Bottom						no image
	GRAPHS						
	Ferrous Alloys						
	10 8 iron						
	6						
	2						
				4			
	Dec15/23			May24/24			
	—			Ma			
	Non-ferrous Metals	5					
	copper						
ş	E 6 -						
	e 4						
	2						
				24			
	Dec15/23			May24/24			
				W			
	Viscosity @ 40°C				Acid Number		
	65 - Abnormal			40,000 (0,0))))))))))	Severe		
J	5 60 Abnormal			E 1 5			
St 140	5 60 + D 5 5 + 3 50 + B B B B B B B B			e 1.0	Abnormal		
	45 Severe			N P 0.5	0		
	40				0		
	Dec15/23			May24/24	Dec15/23		
	Dec			May	Der		
		l Madiso Recei Teste Diagn	ived : 05 d : 06	, NC 27513 5 Jun 2024 6 Jun 2024 5 Jun 2024 - W		N HENRY FOSTE 4700 LEBOUR SAIN	

Submitted By: RACHEL VON HATTEN