

OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id BAILER Component Hydraulic System Fluid AW HYDRAULIC OIL ISO 46 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

Wear

All component wear rates are normal.

Contamination

The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

Fluid Condition

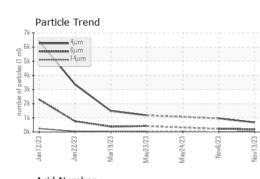
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

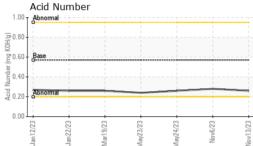
Sample Date Client Info 13 Nov 2023 06 Nov 2023 24 May 2023 Machine Age hrs Client Info 0 0 0 Oil Age hrs Client Info 0 0 0 Oil Age hrs Client Info N/A N/A N/A Sample Status Client Info N/A N/A N/A A/A CONTAMINATION method limit/base current history1 history2 Water WC Method >0.1 NEG NEG NEG WEAR METALS method imit/base current history1 history2 Iron ppm ASTM 05165m<>10 <1 0 0 0 Nickel ppm ASTM 05165m<>10 <1 1 0 0 Silver ppm ASTM 05165m<>10 0 0 0 0 Copper ppm ASTM 05165m 5 0 0 0 Copper ppm			Jan2023	Jan2023 Mar2023	May2023 May2023 Nov2023	Nov2023	
Sample Date Client Info 13 Nov 2023 06 Nov 2023 24 May 2023 Machine Age hrs Client Info 0 0 0 Oll Age hrs Client Info 0 0 0 Oll Changed Client Info N/A N/A N/A N/A Sample Status Client Info N/A N/A N/A N/A CONTAMINATION method Imit/base current history1 history2 Water WC Method >0.1 NEG NEG NEG WEAR METALS method imit/base current history1 history2 Iron ppm ASTM 05165m<>10 <1 0 0 0 Silver ppm ASTM 05165m<>10 <1 1 0 0 Silver ppm ASTM 05165m >10 <1 0 0 Copper ppm ASTM 05165m 5 0 0 0 Adminum ppm	SAMPLE INFORM	1ATION	method	limit/base	current	history1	history2
Machine Age hrs Client Info 0 0 0 Oil Age hrs Client Info 0 0 0 Oil Changed Client Info N/A N/A N/A N/A Sample Status Client Info N/A N/A N/A N/A CONTAMINATION method imit/base current history1 history2 Water WC Method >0.1 NEG NEG NEG WEAR METALS method imit/base current history1 history2 Iron ppm ASTM D5155m >10 <1 0 0 Nickel ppm ASTM D5155m >10 <1 1 0 Copper ppm ASTM D5155m >10 <1 1 0 Clardmium ppm ASTM D5155m >10 <1 0 0 Astm D5155m >10 <1 0 0 0 0 Vanadium ppm </th <th>Sample Number</th> <th></th> <th>Client Info</th> <th></th> <th>PTK0004766</th> <th>PTK0004109</th> <th>PTK0004107</th>	Sample Number		Client Info		PTK0004766	PTK0004109	PTK0004107
Oil Age hrs Client Info 0 0 0 Oil Changed Client Info N/A N/A N/A N/A Sample Status Client Info N/A N/A N/A N/A CONTAMINATION method Imilibase current history1 history2 Water WC Method >0.1 NEG NEG NEG WEAR METALS method Imilibase current history1 history2 Iron ppm ASTM 05185m >10 <1 0 0 Nickel ppm ASTM 05185m >10 <1 0 0 Silver ppm ASTM 05185m >10 2 0 <1 0 Silver ppm ASTM 05185m >10 2 0 <1 0 Copper ppm ASTM 05185m >10 0 0 0 Additionum ppm ASTM 05185m >10 0 0 0 Additionum ppm ASTM 05185m >10 0 0 0 Cademium ppm ASTM 05185m >10 0 0 0 Baradium ppm ASTM 05185m	Sample Date		Client Info		13 Nov 2023	06 Nov 2023	24 May 2023
Ol Changed Client Info N/A N/A N/A Sample Status Client Info N/A N/A N/A CONTAMINATION method Imitbase current history1 history2 Water WC Method >0.1 NEG NEG NEG WEAR METALS method Imitbase current history1 history2 Iron ppm ASTM 05185n >20 2 0 1 Chromium ppm ASTM 05185n >10 <1 0 Nickel ppm ASTM 05185n >10 <1 0 Aluminum ppm ASTM 05185n >10 <1 0 Copper ppm ASTM 05185n >10 <1 0 Cadmium ppm ASTM 05185n >10 <1 0 ADDTIVES method Imitbase current history1 history2 Baraum ppm ASTM 05185n 5 0 0 0 Baraum ppm ASTM 05185n 5 0 0 0 Baraum ppm ASTM 05185n 5 0 0 0 Baraum ppm ASTM 05185n <td>Machine Age</td> <td>hrs</td> <td>Client Info</td> <td></td> <th>0</th> <td>0</td> <td>0</td>	Machine Age	hrs	Client Info		0	0	0
Sample Status NORMAL NORMAL NORMAL ABNORMAL CONTAMINATION method imit/base current history1 history2 Water WC Method >0.1 NEG NEG NEG Wear METALS method imit/base current history1 history2 Iron ppm ASTM D5185m >10 0 0 0 Nickel ppm ASTM D5185m >10 0 0 0 Silver ppm ASTM D5185m >10 2 0 -1 0 Copper ppm ASTM D5185m >10 2 0 -1 0 Copper ppm ASTM D5185m >10 0 0 0 0 Cadmium ppm ASTM D5185m >10 0 0 0 0 ADDITVES method imit/base current history1 history2 Boron ppm ASTM D5185m 5 <t< th=""><th>Oil Age</th><th>hrs</th><th>Client Info</th><th></th><th>0</th><th>0</th><th>0</th></t<>	Oil Age	hrs	Client Info		0	0	0
CONTAMINATION method imit/base current history1 history2 Water WC Method >0.1 NEG NEG NEG WEAR METALS method imit/base current history1 history2 Iron ppm ASTM D5185m >20 2 0 1 Chromium ppm ASTM D5185m >10 0 <1 0 Nickel ppm ASTM D5185m >10 0 <1 0 Silver ppm ASTM D5185m >10 2 0 <1 Lead ppm ASTM D5185m >10 2 0 <1 Lead ppm ASTM D5185m >10 0 0 0 Vanadium ppm ASTM D5185m >10 0 0 0 ASTM D5185m 5 0 0 0 0 1 ASTM D5185m 5 0 0 0 1 1	Oil Changed		Client Info		N/A	N/A	N/A
Water WC Method >0.1 NEG NEG NEG NEG Wear METALS method imit/base current history1 history2 Iron ppm ASTM D5185m >20 2 0 1 Chromium ppm ASTM D5185m >10 0 <1 0 Nickel ppm ASTM D5185m >10 2 0 <1 0 Silver ppm ASTM D5185m >10 2 0 <1 0 Aluminum ppm ASTM D5185m >10 2 0 <1 0 Copper ppm ASTM D5185m >10 0 0 0 0 Vanadium ppm ASTM D5185m >10 0 0 0 0 ASTM D5185m > 0 0 0 <1 0 1 Maganesium ppm ASTM D5185m 5 0 0 <1 1 1	Sample Status				NORMAL	NORMAL	ABNORMAL
WEAR METALS method limit/base current history1 history2 kron ppm ASTM D5185m >20 2 0 1 Chromium ppm ASTM D5185m >10 0 <1 0 Nickel ppm ASTM D5185m >10 0 <1 0 Silver ppm ASTM D5185m >10 2 0 <1 Lead ppm ASTM D5185m >10 2 0 <1 Lead ppm ASTM D5185m >10 0 0 0 Copper ppm ASTM D5185m >10 0 0 0 Cadmium ppm ASTM D5185m 5 0 0 0 Acadmum ppm ASTM D5185m 5 0 0 0 Cadmium ppm ASTM D5185m 5 1 0 <1 Magnases ppm ASTM D5185m 5 1 0 <1 <th>CONTAMINATION</th> <th>١</th> <th>method</th> <th>limit/base</th> <th>current</th> <th>history1</th> <th>history2</th>	CONTAMINATION	١	method	limit/base	current	history1	history2
Iron ppm ASTM D5185m >20 2 0 1 Chromium ppm ASTM D5185m >10 <1 0 0 Nickel ppm ASTM D5185m >10 0 <1 0 0 Silver ppm ASTM D5185m 0 0 0 0 Aluminum ppm ASTM D5185m >10 2 0 <1 Lead ppm ASTM D5185m >10 2 0 0 Vanadium ppm ASTM D5185m >10 0 0 0 Vanadium ppm ASTM D5185m >10 0 0 0 ADDITIVES method imil/base current history1 history2 Boron ppm ASTM D5185m 5 0 0 0 Magnaesum ppm ASTM D5185m 25 17 14 14 Calcium ppm ASTM D5185m 200 75	Water		WC Method	>0.1	NEG	NEG	NEG
Ppm ASTM D5185m >10 <1	WEAR METALS		method	limit/base	current	history1	history2
Nickel ppm ASTM D5185m >10 0 <1 0 Titanium ppm ASTM D5185m 0 0 0 Silver ppm ASTM D5185m 0 0 0 Aluminum ppm ASTM D5185m >10 2 0 <1	Iron	ppm	ASTM D5185m	>20	2	0	1
Titanium ppm ASTM D5185m <1 0 0 Silver ppm ASTM D5185m 0 0 0 Aluminum ppm ASTM D5185m >10 2 0 <1	Chromium	ppm	ASTM D5185m	>10	<1	0	0
Silver ppm ASTM D5185m 0 0 0 0 Aluminum ppm ASTM D5185m >10 2 0 <1	Nickel	ppm	ASTM D5185m	>10	0	<1	0
Aluminum ppm ASTM D5185m >10 2 0 <1 Lead ppm ASTM D5185m >10 <1	Titanium	ppm	ASTM D5185m		<1	0	0
Aluminum ppm ASTM D5185m >10 2 0 <1 Lead ppm ASTM D5185m >10 <1	Silver		ASTM D5185m			0	0
Lead ppm ASTM D5185m >10 <1 1 0 Copper ppm ASTM D5185m >75 6 6 5 Tin ppm ASTM D5185m >10 0 0 0 Vanadium ppm ASTM D5185m 0 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 5 0 0 0 Magnesium ppm ASTM D5185m 5 0 0 <1	Aluminum		ASTM D5185m	>10	2	0	<1
Copper ppm ASTM D5185m >75 6 6 5 Tin ppm ASTM D5185m >10 0 0 0 Vanadium ppm ASTM D5185m >10 0 0 0 Cadmium ppm ASTM D5185m 1 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 5 0 0 0 Magnaese ppm ASTM D5185m 5 <1	Lead		ASTM D5185m	>10	<1	1	0
Tin ppm ASTM D5185m >10 0 0 0 Vanadium ppm ASTM D5185m <1			ASTM D5185m	>75		6	5
Vanadium ppm ASTM D5185m 0 0 0 Cadmium ppm ASTM D5185m <1	Tin				0	0	
Cadmium ppm ASTM D5185m <1 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 5 0 0 0 Barium ppm ASTM D5185m 5 0 0 0 0 Manganese ppm ASTM D5185m 5 <1 0 <1 4 Calcium ppm ASTM D5185m 25 17 14 14 Calcium ppm ASTM D5185m 200 75 54 55 Phosphorus ppm ASTM D5185m 200 75 54 55 Sulfur ppm ASTM D5185m 200 1345 1498 1639 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >20 1 2 <1 Sodium ppm ASTM D5185m >20					-	÷	
Boron ppm ASTM D5185m 5 0 0 0 Barium ppm ASTM D5185m 5 0 0 0 Molybdenum ppm ASTM D5185m 5 <1	Cadmium				-		
Boron ppm ASTM D5185m 5 0 0 0 Barium ppm ASTM D5185m 5 0 0 0 Molybdenum ppm ASTM D5185m 5 <1 0 <1 Manganese ppm ASTM D5185m 25 17 14 14 Calcium ppm ASTM D5185m 200 75 54 55 Phosphorus ppm ASTM D5185m 300 291 264 261 Zinc ppm ASTM D5185m 370 333 315 323 Sulfur ppm ASTM D5185m 2500 1345 1498 1639 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >20 1 <1 0 FLUID CLEANLINESS method limit/base current history1 history2 Particles >4µm ASTM D7647 >2500 198 </th <th>ADDITIVES</th> <th></th> <th>method</th> <th>limit/base</th> <th>current</th> <th>history1</th> <th>history2</th>	ADDITIVES		method	limit/base	current	history1	history2
Barium ppm ASTM D5185m 5 0 0 0 Molybdenum ppm ASTM D5185m 5 <1		nnm	ASTM D5185m	5	0		
Molybdenum ppm ASTM D5185m 5 <1 0 <1 Manganese ppm ASTM D5185m 25 17 14 14 Calcium ppm ASTM D5185m 200 75 54 55 Phosphorus ppm ASTM D5185m 200 75 54 261 Zinc ppm ASTM D5185m 300 291 264 261 Zinc ppm ASTM D5185m 370 333 315 323 Sulfur ppm ASTM D5185m 2500 1345 1498 1639 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >20 1 2 <1							
Manganese ppm ASTM D5185m 0 0 <1 Magnesium ppm ASTM D5185m 25 17 14 14 Calcium ppm ASTM D5185m 200 75 54 55 Phosphorus ppm ASTM D5185m 300 291 264 261 Zinc ppm ASTM D5185m 370 333 315 323 Sulfur ppm ASTM D5185m 2500 1345 1498 1639 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >20 1 2 <1					-		
Magnesium ppm ASTM D5185m 25 17 14 14 Calcium ppm ASTM D5185m 200 75 54 55 Phosphorus ppm ASTM D5185m 300 291 264 261 Zinc ppm ASTM D5185m 370 333 315 323 Sulfur ppm ASTM D5185m 2500 1345 1498 1639 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >20 1 2 <1	-			0			
Calcium ppm ASTM D5185m 200 75 54 55 Phosphorus ppm ASTM D5185m 300 291 264 261 Zinc ppm ASTM D5185m 370 333 315 323 Sulfur ppm ASTM D5185m 2500 1345 1498 1639 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >20 1 2 <1	-			25	-		
Phosphorus ppm ASTM D5185m 300 291 264 261 Zinc ppm ASTM D5185m 370 333 315 323 Sulfur ppm ASTM D5185m 2500 1345 1498 1639 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >20 1 2 <1	U						
Zinc ppm ASTM D5185m 370 333 315 323 Sulfur ppm ASTM D5185m 2500 1345 1498 1639 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >20 1 2 <1					-		
Sulfur ppm ASTM D5185m 2500 1345 1498 1639 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >20 1 2 <1 Sodium ppm ASTM D5185m >20 1 2 <1 Sodium ppm ASTM D5185m >20 <1 2 <1 Potassium ppm ASTM D5185m >20 <1 <1 <1 Potassium ppm ASTM D5185m >20 <1 <1 0 FLUID CLEANLINESS method limit/base current history1 history2 Particles >4µm ASTM D7647 >2500 198 220 Particles >6µm ASTM D7647 >320 24 17 Particles >1µm ASTM D7647 >20 0 0 Particles >38µm ASTM D7647 20 0 0 </td <td>•</td> <td></td> <td></td> <td></td> <th>-</th> <td></td> <td></td>	•				-		
CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >20 1 2 <1							
Silicon ppm ASTM D5185m >20 1 2 <1							
Sodium ppm ASTM D5185m 0 1 <1						, , , , , , , , , , , , , , , , , , ,	
Potassium ppm ASTM D5185m >20 <1				>20			
FLUID CLEANLINESS method limit/base current history1 history2 Particles >4µm ASTM D7647 677 955 Particles >6µm ASTM D7647 >2500 198 220 Particles >6µm ASTM D7647 >320 24 17 Particles >14µm ASTM D7647 >80 7 6 Particles >21µm ASTM D7647 >20 0 0 Particles >38µm ASTM D7647 >20 0 0 Particles >38µm ASTM D7647 >20 0 0 Particles >71µm ASTM D7647 >4 0 0 Oil Cleanliness ISO 4406 (c) >/18/15 17/15/12 17/15/11 FLUID DEGRADATION method limit/base current history1 history2 Acid Number (AN) mg KOHg ASTM D8045 0.57 0.26 0.28 0.26		ppm					
Particles >4μm ASTM D7647 677 955 Particles >6μm ASTM D7647 >2500 198 220 Particles >14μm ASTM D7647 >320 24 17 Particles >14μm ASTM D7647 >320 24 17 Particles >21μm ASTM D7647 >80 7 6 Particles >38μm ASTM D7647 >20 0 0 Particles >38μm ASTM D7647 >20 0 0 Particles >71μm ASTM D7647 >4 0 0 Oil Cleanliness ISO 4406 (c) >/18/15 17/15/12 17/15/11 FLUID DEGRADATION method limit/base current history1 history2 Acid Number (AN) mg KOH/g ASTM D8045 0.57 0.26 0.28 0.26	Potassium	ppm	ASTM D5185m	>20	<1	<1	0
Particles >6µm ASTM D7647 >2500 198 220 Particles >14µm ASTM D7647 >320 24 17 Particles >14µm ASTM D7647 >80 7 6 Particles >21µm ASTM D7647 >80 7 6 Particles >38µm ASTM D7647 >20 0 0 Particles >38µm ASTM D7647 >4 0 0 Particles >71µm ASTM D7647 >4 0 0 Oil Cleanliness ISO 4406 (c) >/18/15 17/15/12 17/15/11 FLUID DEGRADATION method limit/base current history1 history2 Acid Number (AN) mg KOHlg ASTM D8045 0.57 0.26 0.28 0.26	FLUID CLEANLIN	ESS	method	limit/base	current	history1	history2
Particles >14µm ASTM D7647 >320 24 17 Particles >21µm ASTM D7647 >80 7 6 Particles >21µm ASTM D7647 >20 0 0 Particles >38µm ASTM D7647 >20 0 0 Particles >71µm ASTM D7647 >4 0 0 Oil Cleanliness ISO 4406 (c) >/18/15 17/15/12 17/15/11 FLUID DEGRADATION method limit/base current history1 history2 Acid Number (AN) mg KOH/g ASTM D8045 0.57 0.26 0.28 0.26	Particles >4µm		ASTM D7647		677	955	
Particles >21μm ASTM D7647 >80 7 6 Particles >38μm ASTM D7647 >20 0 0 Particles >38μm ASTM D7647 >20 0 0 Particles >71μm ASTM D7647 >4 0 0 Oil Cleanliness ISO 4406 (c) >/18/15 17/15/12 17/15/11 FLUID DEGRADATION method limit/base current history1 history2 Acid Number (AN) mg KOH/g ASTM D8045 0.57 0.26 0.28 0.26	Particles >6µm		ASTM D7647	>2500	198	220	
Particles >38μm ASTM D7647 >20 0 0 Particles >71μm ASTM D7647 >4 0 0 Oil Cleanliness ISO 4406 (c) >/18/15 17/15/12 17/15/11 FLUID DEGRADATION method limit/base current history1 history2 Acid Number (AN) mg KOH/g ASTM D8045 0.57 0.26 0.28 0.26	Particles >14µm		ASTM D7647	>320	24	17	
Particles >71μm ASTM D7647 >4 0 0 Oil Cleanliness ISO 4406 (c) >/18/15 17/15/12 17/15/11 FLUID DEGRADATION method limit/base current history1 history2 Acid Number (AN) mg KOH/g ASTM D8045 0.57 0.26 0.28 0.26	Particles >21µm		ASTM D7647	>80	7	6	
Oil Cleanliness ISO 4406 (c) >/18/15 17/15/12 17/15/11 FLUID DEGRADATION method limit/base current history1 history2 Acid Number (AN) mg KOH/g ASTM D8045 0.57 0.26 0.28 0.26	Particles >38µm		ASTM D7647	>20	0	0	
Oil Cleanliness ISO 4406 (c) >/18/15 17/15/12 17/15/11 FLUID DEGRADATION method limit/base current history1 history2 Acid Number (AN) mg KOH/g ASTM D8045 0.57 0.26 0.28 0.26	Particles >71µm		ASTM D7647	>4	0	0	
Acid Number (AN) mg KOH/g ASTM D8045 0.57 0.26 0.28 0.26	Oil Cleanliness				17/15/12	17/15/11	
	FLUID DEGRADA		method	limit/base	current	history1	history2
	Acid Number (AN)	mg KOH/g	ASTM D8045	0.57	0.26	0.28	0.26
	I:32:45) Rev: 1			Con	tact/Location: S		B - PRAHUMTX

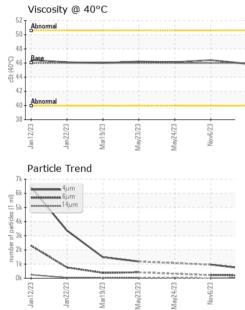
Report Id: PRAHUMTX [WUSCAR] 06015021 (Generated: 11/24/2023 14:32:45) Rev: 1



OIL ANALYSIS REPORT

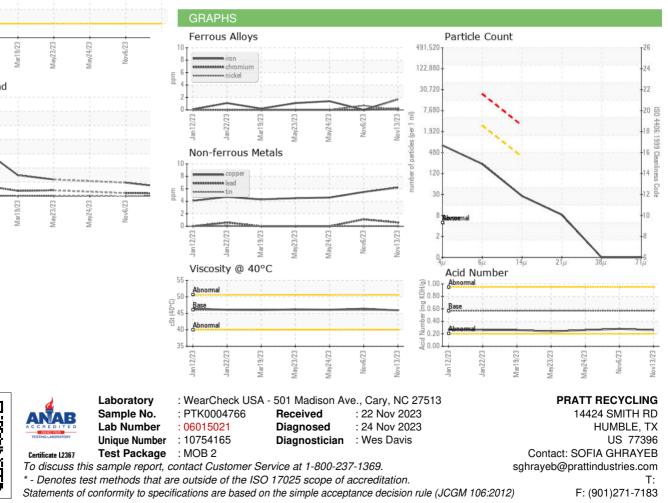






VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	🔺 MODER
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	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	46	45.9	46.4	46.1
SAMPLE IMAGES		method	limit/base	current	history1	history2
Color						
				(Cox)	10 AB	

Bottom



Contact/Location: SOFIA GHRAYEB - PRAHUMTX