

OIL ANALYSIS REPORT

Sample Rating Trend

ISO

Machine Id **100394397** Component **Hydraulic System** Fluid **AW HYDRAULIC OIL ISO 32 (--- GAL)**

DIAGNOSIS

Recommendation

The filter change at the time of sampling has been noted. Resample at the next service interval to monitor. Please specify the component make and model with your next sample. Please specify the brand, type, and viscosity of the oil on your next sample.

Wear

All component wear rates are normal.

Contamination

There is a light amount of silt (particulates < 14 microns in size) 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	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0911862	WC0555138	
Sample Date		Client Info		19 Apr 2024	09 Apr 2021	
Machine Age	mls	Client Info		0	0	
Oil Age	mls	Client Info		0	0	
Oil Changed		Client Info		Not Changd	Not Changd	
Sample Status				ATTENTION	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	>20	3	2	
Chromium	ppm	ASTM D5185m	>10	<1	<1	
Nickel	ppm	ASTM D5185m	>10	0	0	
Titanium	ppm	ASTM D5185m		0	0	
Silver	ppm	ASTM D5185m		0	<1	
Aluminum	ppm	ASTM D5185m	>10	0	0	
Lead	ppm	ASTM D5185m	>10	0	<1	
Copper	ppm	ASTM D5185m	>75	<1	1	
Tin	ppm	ASTM D5185m	>10	0	<1	
Antimony	ppm	ASTM D5185m			0	
Vanadium	ppm	ASTM D5185m		0	0	
Cadmium	ppm	ASTM D5185m		0	0	
ADDITIVES		method	limit/base	current	history1	history2
		ASTM D5185m	5	0	<1	
Boron	ppm	ACTIVI DOTOCITI	0	-		
Boron Barium	ppm ppm	ASTM D5185m	5	0	0	
				-		
Barium	ppm	ASTM D5185m	5	0	0	
Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m	5	0 <1	0 1	
Barium Molybdenum Manganese	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	5 5	0 <1 0	0 1 <1	
Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	5 5 25	0 <1 0 11	0 1 <1 14	
Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	5 5 25 200	0 <1 0 11 91	0 1 <1 14 96	
Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	5 5 25 200 300	0 <1 0 11 91 329	0 1 <1 14 96 354	
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	5 5 25 200 300 370	0 <1 0 11 91 329 422	0 1 <1 14 96 354 445	
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	5 5 25 200 300 370 2500 Limit/base	0 <1 0 11 91 329 422 1210	0 1 <1 14 96 354 445 1013	
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	5 5 25 200 300 370 2500 Limit/base	0 <1 0 11 91 329 422 1210 current	0 1 <1 14 96 354 445 1013 history1	 history2
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 method ASTM D5185m	5 5 25 200 300 370 2500 Limit/base >20	0 <1 0 11 91 329 422 1210 current 1	0 1 <1 14 96 354 445 1013 history1 1	 history2
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 method ASTM D5185m	5 5 25 200 300 370 2500 Limit/base >20	0 <1 0 11 91 329 422 1210 current 1 1 <1 0	0 1 <1 14 96 354 445 1013 history1 1 0	 history2
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	5 5 25 200 300 370 2500 limit/base >20	0 <1 0 11 91 329 422 1210 current 1 1 <1 0	0 1 <1 14 96 354 445 1013 history1 1 0 0	 history2
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	5 5 25 200 300 370 2500 Limit/base >20 >20 Limit/base	0 <1 0 11 91 329 422 1210 current 1 <1 0 current	0 1 <1 14 96 354 445 1013 history1 1 0 0 history1	 history2 history2
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	5 5 25 200 300 370 2500 limit/base >20 limit/base >20 limit/base >5000 >1300	0 <1 0 11 91 329 422 1210 current 1 current 0 current 8691	0 1 <1 14 96 354 445 1013 history1 1 0 0 history1 3445	 history2 history2
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	5 5 25 200 300 370 2500 limit/base >20 limit/base >20 limit/base >5000 >1300	0 <1 0 11 91 329 422 1210 current 1 <1 0 current 0 8691 1018	0 1 <1 14 96 354 445 1013 history1 1 0 0 history1 3445 123	 history2 history2 history2

ASTM D7647 >10

ASTM D7647 >3

0

0

ISO 4406 (c) >19/17/14 **20/17/13**

Particles >38µm

Particles >71µm

Oil Cleanliness

0

0

19/14/10



OIL ANALYSIS REPORT

Particle Trend	FLUID DEGRAD	ATION	method	limit/base	current	history1	history
4μm 6μm	Acid Number (AN)	mg KOH/g	ASTM D8045	0.57	0.31	0.339	
	VISUAL		method	limit/base	current	history1	history
Abnormal	White Metal	scalar	*Visual	NONE	NONE	NONE	
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
	Precipitate	scalar	*Visual	NONE	NONE	NONE	
921	5 Silt	scalar	*Visual	NONE	NONE	NONE	
Арг9/21	Silt Debris	scalar	*Visual	NONE	NONE	NONE	
De ettele Tree e d	Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	
Particle Trend	Appearance	scalar	*Visual	NORML	NORML	NORML	
4μm 6μm	Odor	scalar	*Visual	NORML	NORML	NORML	
••••••••••••••••••••••••••••••••••••••	Emulsified Water	scalar	*Visual	>0.1	NEG	NEG	
Abnormal	Free Water	scalar	*Visual		NEG	NEG	
	FLUID PROPER	TIES	method	limit/base	current	history1	history
	Visc @ 40°C	cSt	ASTM D445	32	32.2	32.2	
April	SAMPLE IMAGE	S	method	limit/base	current	history1	histor
Ϋ́Υ.	Apr						
Acid Number	Color					200	no imag
Abnormal					E F	N BEISE	mag
Base							
	Bottom				1. 0. 0. A.		no imag
Abnomal							
	GRAPHS						
9/21-	Ferrous Alloys				Particle Coun	+	
Арг9/21				491,520	I	-	
Viscosity @ 400C	iron			122,880			
Viscosity @ 40°C	E. 5- nickel			30,720	Severe		
Abnormal				1000			
	Apr9/21				Annormal		
Base	Apr			Apr19/24- 19/24 19/24 19/24 19/24		•	
	Non-ferrous Meta	ls			1		
Abnormal				L 120		•	
				qump			
Apr5/21	5 - tin			= 30	Ī		
≪.				8			
	Apr9/21			Apr19/24	+		
	P			dbr 0	μ 6μ	14µ 21µ	38µ 7
	Viscosity @ 40°C			_	Acid Number	14µ 21µ	30μ 1
	40 Abnormal			(B) 1.00	Abnormal		
	다 35 문 생 30 - Abnormal			E Start	Base		*****
	영 30 + Abnormal			Jangung Nump	Abnormal		
	25			0.00			
	Apr9/21			Apr19/24	Apr9/21		
	Ap			Apr1	Ap		
Labora	-					PALFINGER -	
		Rece Teste		May 2024		415	1 W ST R
	Imber : 06184242 Iumber : 11035568			May 2024 May 2024 - W	es Davis		TIFFIN US 44
Unique l		Diagi		1114 LULH - VV	55 DUVIS	Conto	ct: ERIC H
	ckage : CONST					Conta	

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