

OIL ANALYSIS REPORT

Sample Rating Trend





Hydraulic System Fluid AW HYDRAULIC OIL ISO 32 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on 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

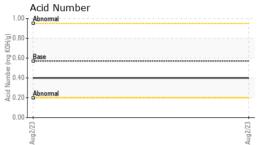
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

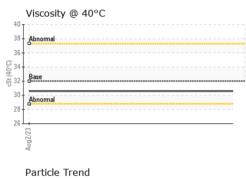
SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0747144		
Sample Date		Client Info		02 Aug 2023		
Machine Age	hrs	Client Info		192		
Oil Age	hrs	Client Info		192		
Oil Changed		Client Info		Not Changd		
Sample Status				NORMAL		
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>20	<1		
Chromium	ppm	ASTM D5185m	>10	<1		
Nickel	ppm	ASTM D5185m	>10	0		
Titanium	ppm	ASTM D5185m		0		
Silver	ppm	ASTM D5185m		0		
Aluminum	ppm	ASTM D5185m	>10	<1		
Lead	ppm	ASTM D5185m	>10	0		
Copper	ppm	ASTM D5185m	>75	<1		
Tin	ppm	ASTM D5185m	>10	0		
Vanadium	ppm	ASTM D5185m		0		
Cadmium	ppm	ASTM D5185m		0		
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	5	2		
Barium	ppm	ASTM D5185m	5	0		
Molybdenum	ppm	ASTM D5185m	5	4		
Manganese	ppm	ASTM D5185m		<1		
Magnesium	ppm	ASTM D5185m	25	35		
Calcium	ppm	ASTM D5185m	200	149		
Phosphorus	ppm	ASTM D5185m	300	264		
Zinc	ppm	ASTM D5185m	370	301		
Sulfur	ppm	ASTM D5185m	2500	1290		
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>20	7		
Sodium	ppm	ASTM D5185m		2		
Potassium	ppm	ASTM D5185m	>20	1		
FLUID CLEANLIN	IESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	4148		
Particles >6µm		ASTM D7647	>1300	434		
Particles >14µm		ASTM D7647	>160	38		
Particles >21µm		ASTM D7647	>40	8		
Particles >38µm		ASTM D7647	>10	0		
Particles >71µm		ASTM D7647	>3	0		
Oil Cleanliness		ISO 4406 (c)	>19/17/14	19/16/12		
FLUID DEGRADA	TION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.57	0.40		



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		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE		
Yellow Metal	scalar	*Visual	NONE	NONE		
Precipitate	scalar	*Visual	NONE	NONE		
Silt	scalar	*Visual	NONE	NONE		
Debris	scalar	*Visual	NONE	NONE		
Sand/Dirt	scalar	*Visual	NONE	NONE		
Appearance	scalar	*Visual	NORML	NORML		
0001	scalar	*Visual				
			>0.1			
				NEG		
FLUID PROPER	TIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	32	30.6		
SAMPLE IMAGE	ES	method	limit/base	current	history1	history2
Color					no image	no image
Bottom					no image	no image
GRAPHS						
Ferrous Alloys				Particle Count		
10			491,520	I		T ²⁶
6 - management chromium			122,880	+		-24
đ 4.			30,720	Severe		-22
2						
				Abnormal		-20
Jug2//			1,920 Jul 1,920	1		-18
	ale		Sap 480			-16
¹⁰ T			of par			+20 +18 +16 +14 +12
8 - copper			120 In 120			14
6-				+		-12
			R		1	+10
			_		/	
g2/23			g2/23	· · · · · · · · · · · · · · · · · · ·)	-8
			N Y	e.,	14. 21.	38µ 71µ
, =			-	Acid Number	ици ди	ουμ /1μ
Abnormal			(B) H	Abnormal		
ç 35 -			Q 0.80	Base		
() 35 00 5 30 Abnormal			د 0.60 بة 2 0.40			
^{3 30} Abnormal			P 0.20	Abnormal		
				L.		
25			Aug2/23	Aug2/23		. 50 Carl
	Sand/Dirt Appearance Odor Emulsified Water Free Water FLUID PROPER Visc @ 40°C SAMPLE IMAGE Color Bottom GRAPHS Ferrous Alloys 10 6 6 6 7 0 0 0 0 0 0 0 0 0 0 0 0 0	Sand/Dirt scalar Appearance scalar Odor scalar Emulsified Water scalar Free Water scalar Free Water scalar FLUID PROPERTIES Visc @ 40°C cSt SAMPLE IMAGES Color Bottom GRAPHS Ferrous Alloys Ferrous Alloys Non-ferrous Metals Uscosity @ 40°C Viscosity @ 40°C	Sand/Dirt scalar *Visual Appearance scalar *Visual Emulsified Water scalar *Visual Emulsified Water scalar *Visual Free Water scalar *Visual Free Water scalar *Visual FLUID PROPERTIES method Visc @ 40°C cSt ASTM D445 SAMPLE IMAGES method Color Bottom GRAPHS Ferrous Alloys ferrous Metals for the stale of the stale o	Sand/Dirt scalar *Visual NONE Appearance scalar *Visual NORML Odor scalar *Visual NORML Emulsified Water scalar *Visual >0.1 Free Water scalar *Visual *0.1 Free Water scalar *Visual *0.1 Free Water scalar *Visual *0.1 Free Water scalar *Visual *0.1 Free Water scalar *0.1 Free Wa	Sand/Dirt scalar *Visual NONE NONE Appearance scalar *Visual NORML NORML Odor scalar *Visual NORML NORML Emulsified Water scalar *Visual >0.1 NEG Free Water scalar *Visual >0.1 NEG Free Water scalar *Visual NORML NORML Visc @ 40°C cSt ASTM D445 32 30.6 SAMPLE IMAGES method imit/base current Color Color Color Bottom Color Bottom Particle Count 491/520 00.20 SAMPHS Ferrous Alloys Ferrous Alloys Viscosity @ 40°C	Sand/Dirt scalar *Visual NONE NONE Appearance scalar *Visual NORML NORML Cdor scalar *Visual NORML NORML Emulsified Water scalar *Visual >0.1 NEG Free Water scalar *Visual >0.1 NEG Free Water scalar *Visual >0.1 NEG FLUID PROPERTIES method limit/base current history1 Visc @ 40°C cSt ASTM D445 32 30.6 SAMPLE IMAGES method limit/base current history1 Color Ino image Bottom Ino image GRAPHS Ferrous Alloys Particle Count Mon-ferrous Metals Viscosity @ 40°C

* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

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

Contact/Location: ANTHONY HARTIGAN - PALJACNJ

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