

# **OIL ANALYSIS REPORT**

Sample Rating Trend

NORMAL

# Machine Id

Component Hydraulic System Fluid AW HYDRAULIC OIL ISO 32 (--- 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.

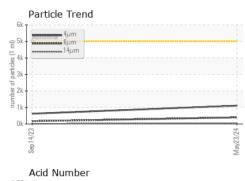
SAMPLE INFORM	IATION	method	limit/base	current	history1	history2			
Sample Number		Client Info		PTK0002497	PTK0004857				
Sample Date		Client Info		23 May 2024	14 Sep 2023				
Machine Age	hrs	Client Info		0	0				
Dil Age	hrs	Client Info		0	0				
Dil Changed		Client Info		Not Changd	Not Changd				
Sample Status				NORMAL	NORMAL				
CONTAMINATION	۷	method	limit/base	current	history1	history2			
Water		WC Method	>0.1	NEG	NEG				
WEAR METALS		method	limit/base	current	history1	history2			
ron	ppm	ASTM D5185m	>20	0	<1				
Chromium	ppm	ASTM D5185m	>10	0	0				
Nickel	ppm	ASTM D5185m	>10	0	<1				
Fitanium	ppm	ASTM D5185m		0	0				
Silver	ppm	ASTM D5185m		0	0				
Aluminum	ppm	ASTM D5185m	>10	0	0				
_ead	ppm	ASTM D5185m	>10	0	0				
Copper	ppm	ASTM D5185m	>75	<1	<1				
Tin	ppm	ASTM D5185m	>10	0	0				
/anadium	ppm	ASTM D5185m		0	0				
Cadmium	ppm	ASTM D5185m		0	0				
ADDITIVES		method	limit/base	current	history1	history2			
Boron	ppm	ASTM D5185m	5	0	0				
Barium	ppm	ASTM D5185m	5	0	0				
Volybdenum	ppm	ASTM D5185m	5	0	<1				
Vanganese	ppm	ASTM D5185m		0	0				
Magnesium	ppm	ASTM D5185m	25	6	10				
Calcium	ppm	ASTM D5185m	200	47	47				
Phosphorus	ppm	ASTM D5185m	300	256	264				
Zinc	ppm	ASTM D5185m	370	283	312				
Sulfur	ppm	ASTM D5185m	2500	912	928				
CONTAMINANTS		method	limit/base	current	history1	history2			
Silicon	ppm	ASTM D5185m	>20	0	0				
Sodium	ppm	ASTM D5185m		<1	0				
Potassium	ppm	ASTM D5185m	>20	0	1				
FLUID CLEANLIN	ESS	method	limit/base	current	history1	history2			
Particles >4µm		ASTM D7647	>5000	1110	625				
Particles >6µm		ASTM D7647	>1300	396	169				
Particles >14µm		ASTM D7647	>160	36	14				
Particles >21µm		ASTM D7647	>40	6	4				
Particles >38µm		ASTM D7647	>10	0	0				
Particles >71µm		ASTM D7647	>3	0	0				
Oil Cleanliness		ISO 4406 (c)	>19/17/14	17/16/12	16/15/11				
FLUID DEGRADA	TION	method	limit/base	current	history1	history2			
Acid Number (AN)	mg KOH/g	ASTM D8045	0.57	0.23	0.26				
:31:34) Rev: 1	Contact/Location: JOSEPH BONNEMA - OLDTACW								

Report Id: OLDTACWA [WUSCAR] 06197597 (Generated: 06/04/2024 13:31:34) Rev: 1

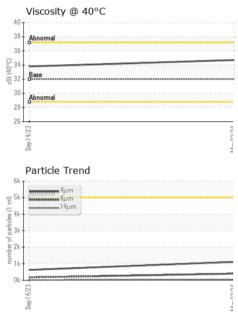
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	VISUAL		method	limit/base	current	history1	history2	
	White Metal	scalar	*Visual	NONE	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE		
	Precipitate	scalar	*Visual	NONE	NONE	NONE		
	Silt	scalar	*Visual	NONE	NONE	NONE		
	Debris	scalar	*Visual	NONE	NONE	NONE		
	Sand/Dirt	scalar	*Visual	NONE	NONE	NONE		
May23/24	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	TIES	method	limit/base	current	history1	history2	
	Visc @ 40°C	cSt	ASTM D445	32	34.7	33.8		
	SAMPLE IMAGES	S	method	limit/base	current	history1	history2	
May23/24 +	Color				5 - C		no image	
	Bottom						no image	
	GRAPHS							
	Ferrous Alloys			491,520	Particle Coun	t	T <sup>26</sup>	
	8 - iron 6 - iron			122,880			-24	
ر. در. – ۱. در در – ۱.	E 4			30,720	Severe		-22	
4	2							
					Abnormal		-20 -18 -16 -14	
	Sep 14/23			May23/24 s (per 1 m)	+		-18	
				Ma cles (p		•		
	Non-ferrous Metal	S		May2021 420 480 150 150 150 150 150 150 150 150 150 15			16	
	s- copper			120			-14	
	E 6 +						-12	
				30			+12	
2	2			8			-10	
							9	
44	Sep14/23			May23/24			N I°	
				₩ 0 <sub>4</sub>	μ 6μ	14µ 21µ	38µ 71µ	
	Viscosity @ 40°C				Acid Number	F	,	
	Abnormal			(B <sup>1.00</sup>	Abnormal			
	ç 35 -			90.80 E.a.a.	Base			
	G 35 G 35 Base 30 Abnormal			는 U.60 월 0.40	0			
	<sup>33</sup> 30 Abnormal			N 10 20	Abnormal			
	25			V.00				
	Sep 14/23			May23/24	Sep 14/23		VC CCW	
	Sep			May	Sep		C. W	
Laboratory Sample No. Lab Number Unique Number Test Package	: PTK0002497 : 06197597 : 11059720	1 Madisor Receiv Testeo Diagn	<b>d</b> : 04 Jun 2024			OLDCASTLE - TACOM. 4110 192ND TACOMA, W. US 9846 Contact: JOSEPH BONNEM.		
discuss this sample report,		ice at 1-8	00-237-1369	9.	ja	seph.bonnema@	oldcastle.cor	

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Contact/Location: JOSEPH BONNEMA - OLDTACWA