

OIL ANALYSIS REPORT

Sample Rating Trend







E041191 Component **Unknown Component** NOT GIVEN (--- GAL)

[450169801]

DIAGNOSIS

Recommendation

Little or no information is provided as to the component and lubricant being tested. Recommendations are therefore generic in nature and may not apply to the current application. Please forward information as to equipment type, reservoir capacity, lubricant type and any pertinent information to allow for a more accurate assessment. Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample. Please specify the brand, type, and viscosity of the oil on your next sample. Please provide more complete information 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

Viscosity of sample indicates oil is within ISO 46 range, advise investigate. The AN level is acceptable for this fluid. The condition of the sample is suitable for further service.

SAMPLE INFORM	IATION	method	limit/base	current	history1	history2	
Sample Number		Client Info		PC0040107			
Sample Date		Client Info		12 Jul 2023			
Machine Age	hrs	Client Info		0			
Oil Age	hrs	Client Info					
Oil Changed		Client Info	0 N/A				
Sample Status				NORMAL			
WEAR METALS	;	method	limit/base	current	history1	history2	
PQ		ASTM D8184*		0			
Iron	ppm	ASTM D5185(m)		2			
Chromium	ppm	ASTM D5185(m)		0			
Nickel	ppm	ASTM D5185(m)		0			
Titanium	ppm	ASTM D5185(m)		0			
Silver	ppm	ASTM D5185(m)		0			
Aluminum	ppm	ASTM D5185(m)		<1			
Lead	ppm	ASTM D5185(m)		<1			
Copper	ppm	ASTM D5185(m)		4			
Tin	ppm	ASTM D5185(m)		0			
Antimony	ppm	ASTM D5185(m)		0			
Vanadium	ppm	ASTM D5185(m)		0			
Beryllium	ppm	ASTM D5185(m)		0			
Cadmium		ASTM D5185(m)		0			
	ppm			U			
ADDITIVES		method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185(m)		<1			
Barium	ppm	ASTM D5185(m)		0			
Molybdenum	ppm	ASTM D5185(m)		0			
Manganese	ppm	ASTM D5185(m)		0			
Magnesium	ppm	ASTM D5185(m)		<1			
Calcium	ppm	ASTM D5185(m)		5			
Phosphorus	ppm	ASTM D5185(m)		350			
Zinc	ppm	ASTM D5185(m)		41			
Sulfur	ppm	ASTM D5185(m)		3142			
Lithium	ppm	ASTM D5185(m)		<1			
CONTAMINANT	ſS	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)		<1			
Sodium	ppm	ASTM D5185(m)		<1			
Potassium	ppm	ASTM D5185(m)	>20	<1			
FLUID CLEANL	INESS	method	limit/base	current	history1	history2	
Particles >4µm		ASTM D7647	>5000	947			
Particles >6µm		ASTM D7647	>1300	174			
Particles >14µm		ASTM D7647	>160	11			
Particles >21µm		ASTM D7647	>40	3			
Particles >38µm		ASTM D7647	>10	0			
Particles >71µm		ASTM D7647	>3	0			
Oil Cleanliness		ISO 4406 (c)	>19/17/14	17/15/11			
		(3)					



16 T Abnormal

14

cSt (100°C) 10 cSt (100°C)

PQ 250 200 S 150. Б

Abnorma 100 50. 0.

6k Ê 21 1 1 4k 3k a 2k Ē 1k 0k L

110.

100 90 Ab

cSt (40°C) 80 70 60. 50. 40 Jul12/23

ΡQ 250 200 Se

Abnormal 100-50. 0

150 PO

OIL ANALYSIS REPORT

16-	Viscosity @ 100°C	FLUID DEGRAD	ATION	method	limit/base	current	history1	history2
14	Abnormal	Acid Number (AN)	mg KOH/g	ASTM D974*		0.19		
2		VISUAL		method	limit/base	current	history1	history2
	Abnormal	White Metal	scalar	Visual*	NONE	NONE		
		Yellow Metal	scalar	Visual*	NONE	NONE		
°		Precipitate	scalar	Visual*	NONE	NONE		
61	2/23 +	Silt	scalar	Visual*	NONE	NONE		
	Jull 2/23	Debris	scalar	Visual*	NONE	NONE		
	PQ	Sand/Dirt	scalar	Visual*	NONE	NONE		
⁵⁰ T	1 Q	Appearance	scalar	Visual*	NORML	NORML		
00	Severe	Odor	scalar	Visual*	NORML	NORML		
50		Emulsified Water Free Water	scalar scalar	Visual* Visual*		NEG NEG		
10-	Abnormal							
0		FLUID PROPE	RHES	method	limit/base	current	history1	history2
0		Visc @ 40°C	cSt	ASTM D7279(m)		42.5		
	Jul12/23 - Jul12/23 -	Visc @ 100°C	cSt	ASTM D7279(m)		7.1		
	luu Luu Luu Luu	Viscosity Index (VI)	Scale	ASTM D2270*		127		
	Particle Trend	SAMPLE IMAG	ES	method	limit/base	current	history1	history2
ľ	ponoma 4µm							
ik i		Color					no image	no image
ik-								
!k -								
k-		Bottom					no image	no image
ık I								
	Juli 2/23	GRAPHS						
		Ferrous Alloys				Particle Count		
0 T	Viscosity @ 40°C	¹⁰ T			491,520			I ²⁶
10-	Abnormal	E 5			122,880	Severe		-24
10 -	Abnormal				30,720			-22
0		2/23			7,680 Juli 7,680 Juli 7,680 Juli 2,680 Juli	Abnormal		-20 4406:1999 Cle
0-		Jull			비미 이 1,920 Sa		· · · · · · · · · · · · · · · · · · ·	-18 -18 -199
0		Non-ferrous Metals	5		pitied 480	1		4
-04	Juli 2/23	copper			120 angunt 30			-14 iness
		E. 5 -			2 30			-12 Code
	PQ					•		-10
⁰ T		Juit 2/23			Jul12/23			- 18
0	Severe	Viscosity @ 40°C			4	μ 6μ Acid Number	14μ 21μ	38µ 71µ
0		120 Abaamal			(B/HO) 0.20	Acid Number		
0	Abnormal				723 Viting K			
0	a	1			quin			
0		40 40	_		2/23 - Acid	2/23		//23
	Juli 2/23	Jul12/22			Jul12/23 Ac	Jul12/23		Jul12/23
	Laboratory Sample No. Liso 17025:2017 Accredited Laboratory To discuss this sample report, Test denoted (*) outside scope Validity of results and interpret	: 02569708 : 5606754 : MAR 2 (Additional T contact Customer Servit of accreditation, (m) me	Received Diagnost Diagnost Tests: KV ce at 1-8 ethod mo	ed : 13 . ician : Kew 100, PQ, PF 00-268-213 bdified, (e) te	Jul 2023 Jul 2023 rin Marson RTCOUNT, V r. sted at exterr	S I) nal lab.	dbadcoc T:	

Contact/Location: Deanne Badcock - TERHAM