

OIL ANALYSIS REPORT

Sample Rating Trend



Area **49** [49] A49 FAN 1 - Id Component Center Gearbox GEAR LIFE 150 (5 GAL)

Recommendation

Resample at the next service interval to monitor. (Customer Sample Comment: Gear Life 150)

Wear

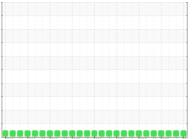
All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

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



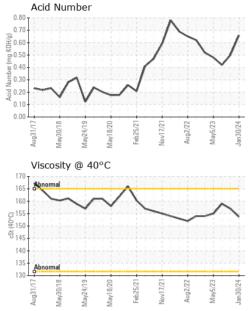


SAMPLE INFORM	ATION	method	limit/base	current	history1	history2
Sample Number		Client Info		HPL0003273	HPL0003580	HPL0003183
Sample Date		Client Info		30 Jan 2024	30 Oct 2023	18 Jul 2023
Machine Age	hrs	Client Info		0	0	0
Oil Age	hrs	Client Info		2160	0	6730
Oil Changed		Client Info		Not Changd	Changed	Not Changd
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINATION	N	method	limit/base	current	history1	history2
Water		WC Method	>0.2	NEG	NEG	NEG
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>200	81	101	160
Chromium	ppm	ASTM D5185m	>10	<1	0	<1
Nickel	ppm	ASTM D5185m	>10	0	0	0
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>25	<1	0	2
Lead	ppm	ASTM D5185m	>50	0	0	0
Copper	ppm	ASTM D5185m	>200	0	0	0
Tin	ppm	ASTM D5185m	>10	<1	0	<1
Vanadium	ppm	ASTM D5185m		<1	0	0
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		0	0	0
Barium	ppm	ASTM D5185m		0	0	<1
Molybdenum	ppm	ASTM D5185m		0	0	<1
Manganese	ppm	ASTM D5185m		1	<1	2
Magnesium	ppm	ASTM D5185m		0	2	4
Calcium	ppm	ASTM D5185m		4	4	12
Phosphorus	ppm	ASTM D5185m		171	169	210
Zinc	ppm	ASTM D5185m		0	20	29
Sulfur	ppm	ASTM D5185m		18468	19811	25822
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>50	<1	<1	<1
Sodium	ppm	ASTM D5185m		<1	<1	2
Potassium	ppm	ASTM D5185m	>20	<1	2	3
FLUID DEGRADA	TION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		0.66	0.50	0.42



OIL ANALYSIS REPORT

VISUAL



Laboratory Sample No. Lab Number	: HPL0003273	501 Madis Recieved Diagnos	d : 31 ed : 06	ary, NC 27513 Jan 2024 Feb 2024 nathan Hester	KENSIN 2525 S KENSINGTON R KANKAKEE, US 6090 Contact: TIM HUBER timothy.hubert@kensingsolutions.co T: (815)939-891 ICGM 106:2012) F:		
	40 120 200 200 200 200 200 200 200 200 20	Feb25/21	Nov17/21 Aug2/22 - May5/23 -	Jan30/24	Aug31/17 May30/18 May24/19	May18/20 - Feb25/21 - Nov17/21 -	Aug2/22
	a 160 - Abnormal	\sim		<u>لَمْ الْمَنْ أ</u>		1	~
	Viscosity @ 40°C			(B/H0 1.0	Acid Number	-	
	Aug31/1 May30/1! May24/1!	Feb25/2	Nov17/2 Aug2/2: May5/23	Jan 30/2.	Aug31/1 May30/1	May18/2 Feb25/2 Nov17/2	Aug2/22 May5/23
	0	21	21			21	Aug2/22 May5/23
	E 400 - Severe			E ¹⁰⁰	Abnormal		
	Copper (ppm)			15/	Silicon (ppm)		
	Aug31 May30 May24, May18,	Feb25	Aug2. May5.	Jan30	Aug31 May30, May24,	May18 Feb25 Nov17	Aug2/22 May5/23
	0	5/21	//21 /22 /23			/20 5/21	/22
	ā. 50-			======================================	Abnormal		
	100 -				Severe	φ m)	
		Feb	Nor Au, Ma	Jan			Au Ma
	331/17 30/18 24/19	b25/21	v17/21			/18/20 525/21	Aug2/22
	E 200 Abnormal						
	600 T				Severe		
	Iron (ppm)				Lead (ppm)		
	GRAPHS						
	Bottom				no image	no image	no image
Aug May Jan3				-			
2/22 5/23 0/24	Color				no image	no image	no image
	SAMPLE IMAGES	8	method	limit/base	current	history1	history2
\sim	Visc @ 40°C	cSt	ASTM D445		153.7	157	159
~	FLUID PROPERT	IES	method	limit/base	current	history1	history2
	Free Water	scalar	*Visual		NEG	NEG	NEG
-	Odor Emulsified Water						NORML NEG
Aug 2/22 //ay5/23 an 30/24	Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
	Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
	Debris	scalar	*Visual	NONE	NONE	NONE	NONE
					-		NONE
$\mathbf{\nabla}$	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
	Laboratory	White Metal Yellow Metal Precipitate Silt Debris Sand/Dirt Appearance Odor Emulsified Water Free Water FLUID PROPERT Visc @ 40°C SAMPLE IMAGES Color Bottom GRAPHS Iron (ppm) Und United Water Free Water Color Bottom Color Emulsified Water Free Water Color Bottom United Water Free Water Color Bottom United Water Free Water Color Emulsified Water Free Water Color Wisc @ 40°C SAMPLE IMAGES Color United Water Free Water Color Wisc @ 40°C Sample Images Color Color Copper (ppm) United Water Free Water Color Emulsified Water Free Water Color Wisc @ 40°C Color Color Copper (ppm) United Water Free Water Color Color Sample Images Color Copper (ppm) United Water Free Water Color Color Sample Images Color Copper (ppm) United Water Free Water Color Color Copper (ppm) United Water Free Water Copper (ppm) Copper (ppm) United Water Free Water Copper (ppm) Copper (ppm)	Yellow Metal scalar Precipitate scalar Sit scalar Debris scalar Sand/Dirt scalar Appearance scalar Odor scalar Emulsified Water scalar Free Water scalar Free Water scalar Color Color Bottom GRAPHS Iron (ppm) Google (ppm) Googl	White Metal scalar *Visual Precipitate scalar *Visual Debris scalar *Visual Debris scalar *Visual Sand/Dirt scalar *Visual Debris scalar *Visual Debris scalar *Visual Codor scalar *Visual Free Water scalar *Visual Free Water scalar *Visual Free Water scalar *Visual Free Water scalar *Visual Color Bottom GRAPHS Iron (ppm) Google (ppm) Google (ppm) Google (ppm) Google (ppm) Graph (ppm) Google (ppm) Graph (ppm) Google (ppm) G	Yellow Metal scalar 'Visual NONE Precipitate scalar 'Visual NONE Sitt scalar 'Visual NONE Debris scalar 'Visual NONE Sand/Dirt scalar 'Visual NONE Sand/Dirt scalar 'Visual NONE Appearance scalar 'Visual NONE Emulsified Water scalar 'Visual NORML Emulsified Water scalar 'Visual 'Visual NORML Emulsified Water scalar 'Visual 'Vis	Yellow Metal scalar 'Visual NONE NONE Precipitate scalar 'Visual NONE NONE Sit scalar 'Visual NONE NONE Sand/Dirt scalar 'Visual NONE NORML NORML MORML NORML MORML NORML Substitution Scalar 'Visual NONE NONE Emulsified Water scalar 'Visual NORML NORML Normation NORML Emulsified Water scalar 'Visual NORML NORML Normation NORML Scalar 'Visual NORML NORML NORML NORML Color cst ASTM D445 153.7 SAMPLE IMAGES method Imit/base current Visc @ 40°C cst ASTM D445 153.7 SAMPLE IMAGES method Imit/base current Color no image Return company Aluminum (ppm) Copper	Yellow Metal scalar Visual NONE NONE NONE NONE NONE State Scalar Visual NONE NONE NONE NONE NONE State Scalar Visual NONE NONE NONE NONE NONE State Scalar Visual NONE NONE NONE NONE NONE NONE State Scalar Visual NORML N