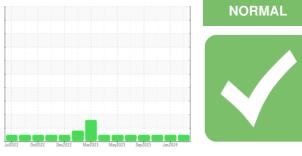


OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id

18130B/E74 Component Hydraulic System Fluid AW HYDRAULIC OIL ISO 46 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

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.

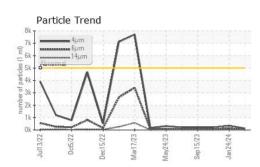
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2		
Sample Number		Client Info		PTK0005325	PTK0005487	PTK0005109		
Sample Date		Client Info		02 Apr 2024	24 Jan 2024	20 Nov 2023		
Machine Age	hrs	Client Info		0	0	0		
Oil Age	hrs	Client Info		0	0	0		
Oil Changed		Client Info		N/A	N/A	N/A		
Sample Status				NORMAL	NORMAL	NORMAL		
CONTAMINATIO	N	method	limit/base	current	history1	history2		
Water		WC Method	>0.05	NEG	NEG	NEG		
WEAR METALS		method	limit/base	current	history1	history2		
Iron	ppm	ASTM D5185m	>20	0	<1	0		
Chromium	ppm	ASTM D5185m	>20	0	<1	0		
Nickel	ppm	ASTM D5185m	>20	0	0	0		
Titanium	ppm	ASTM D5185m		0	0	0		
Silver	ppm	ASTM D5185m		0	0	0		
Aluminum	ppm	ASTM D5185m	>20	0	0	0		
Lead	ppm	ASTM D5185m	>20	0	0	0		
Copper	ppm	ASTM D5185m	>20	11	11	11		
Tin	ppm	ASTM D5185m	>20	0	0	0		
Vanadium	ppm	ASTM D5185m		0	0	0		
Cadmium	ppm	ASTM D5185m		0	0	0		
ADDITIVES		method	limit/base	current	history1	history2		
Boron	ppm	ASTM D5185m	5	0	0	0		
Barium	ppm	ASTM D5185m	5	0	0	0		
Molybdenum	ppm	ASTM D5185m	5	0	0	0		
Manganese	ppm	ASTM D5185m		0	0	0		
Magnesium	ppm	ASTM D5185m	25	0	1	0		
Calcium	ppm	ASTM D5185m	200	24	27	26		
Phosphorus	ppm	ASTM D5185m	300	279	277	296		
Zinc	ppm	ASTM D5185m	370	316	329	345		
Sulfur	ppm	ASTM D5185m	2500	764	785	727		
CONTAMINANTS	\$	method	limit/base	current	history1	history2		
Silicon	ppm	ASTM D5185m	>15	<1	0	<1		
Sodium	ppm	ASTM D5185m		1	<1	0		
Potassium	ppm	ASTM D5185m	>20	0	<1	0		
FLUID CLEANLIN	IESS	method	limit/base	current	history1	history2		
Particles >4µm		ASTM D7647	>5000	121	334	202		
Particles >6µm		ASTM D7647	>1300	28	122	59		
Particles >14µm		ASTM D7647	>160	3	15	7		
Particles >21µm		ASTM D7647		1	6	3		
Particles >38µm		ASTM D7647	>10	0	1	0		
Particles >71µm		ASTM D7647	>3	0	0	0		
Oil Cleanliness		ISO 4406 (c)	>19/17/14	14/12/9	16/14/11	15/13/10		
FLUID DEGRADA	ATION	method	limit/base	current	history1	history2		
Acid Number (AN)	mg KOH/g	ASTM D8045	0.57	0.32	0.36	0.31		
)8:24:38) Rev: 1			Contact/Location: ELISE MARBLE - NORCOTMN					

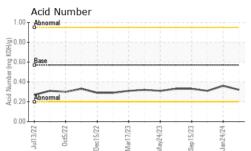
Report Id: NORCOTMN [WUSCAR] 06206456 (Generated: 06/13/2024 08:24:38) Rev: 1

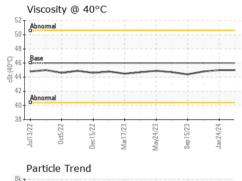
Contact/Location: ELISE MARBLE - NORCOTMN

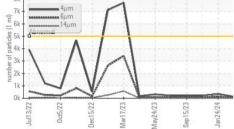


OIL ANALYSIS REPORT

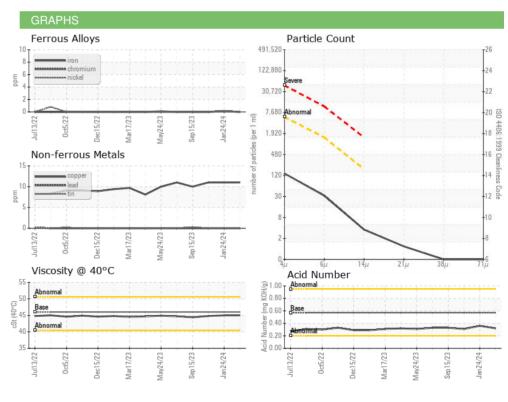








VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.05	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG
FLUID PROPERT	TIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	46	45.0	45.0	44.8
SAMPLE IMAGES		method	limit/base	current	history1	history2
Color				•		•
Bottom						



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513 NORTH STAR SHEETS Sample No. : PTK0005325 Received 7550 91ST ST S : 11 Jun 2024 Lab Number : 06206456 Tested : 13 Jun 2024 COTTAGE GROVE, MN Unique Number : 11073917 Diagnosed : 13 Jun 2024 - Wes Davis US 55016 Test Package : MOB 2 Contact: ELISE MARBLE Certificate 12367 To discuss this sample report, contact Customer Service at 1-800-237-1369. emarble@northstarsheets.com * - Denotes test methods that are outside of the ISO 17025 scope of accreditation. T: (651)888-8506

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

Report Id: NORCOTMN [WUSCAR] 06206456 (Generated: 06/13/2024 08:24:38) Rev: 1

Contact/Location: ELISE MARBLE - NORCOTMN

Page 2 of 2

F: