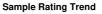


OIL ANALYSIS REPORT

Oil Cleanliness



VISCOSITY

BOBSP 7305

Component Gearbox Fluid MOBIL MOBILGEAR 600 XP ISO 150 (--- GAL)

DIAGNOSIS

Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Wear

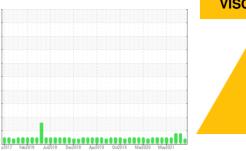
All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable.

Fluid Condition

Viscosity of sample indicates oil is within ISO 100 range, advise investigate. Confirm oil type. The AN level is acceptable for this fluid.



			18 Jul2018 Dec2018		/Jay2021	
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PTK0000390	PTK0000302	PTK0001170
Sample Date		Client Info		09 Nov 2023	13 Jun 2023	23 Nov 2022
Machine Age	mths	Client Info		0	0	0
Oil Age	mths	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Sample Status				ATTENTION	ABNORMAL	ABNORMAL
CONTAMINATIO	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	1	3	2
Chromium	ppm	ASTM D5185m	>10	0	0	0
Nickel	ppm	ASTM D5185m	>10	0	0	<1
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>25	4	0	<1
Lead	ppm	ASTM D5185m	>50	0	<1	<1
Copper	ppm	ASTM D5185m	>200	3	2	2
Tin	ppm	ASTM D5185m	>10	0	0	<1
Antimony	ppm	ASTM D5185m	>5			
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		15	0	0
Barium	ppm	ASTM D5185m		0	2	0
Molybdenum	ppm	ASTM D5185m		0	0	0
Manganese	ppm	ASTM D5185m		0	0	0
Magnesium	ppm	ASTM D5185m		0	2	2
Calcium	ppm	ASTM D5185m		6	5	2
Phosphorus	ppm	ASTM D5185m		315	408	305
Zinc	ppm	ASTM D5185m		15	8	4
Sulfur	ppm	ASTM D5185m		14139	22165	14827
CONTAMINANTS	6	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>50	12	<1	<1
Sodium	ppm	ASTM D5185m		2	0	<1
Potassium	ppm	ASTM D5185m	>20	0	<1	<1
FLUID CLEANLIN	NESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		7921	18483	33770
Particles >6µm		ASTM D7647	0500	1824	▲ 5110	▲ 5364

Particles >6µm ASTM D7647 >2500 1824 5110 5364 Particles >14µm ASTM D7647 >320 270 264 33 69 Particles >21µm ASTM D7647 >80 76 4 Particles >38µm ASTM D7647 >20 4 2 0 Particles >71µm ASTM D7647 >4 0 0 0

18/15

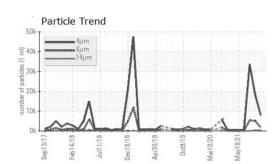
ISO 4406 (c) >18/15

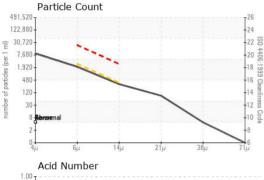
▲ 20/12

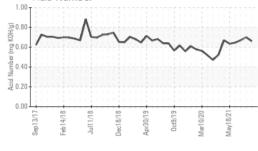
▲ 20/15



OIL ANALYSIS REPORT





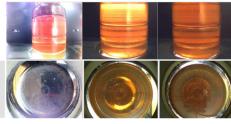


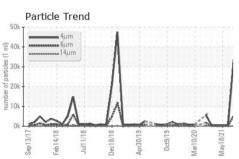
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		0.66	0.70	0.67
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	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	>0.2	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	150	104	147	138
SAMPLE IMAGES		method	limit/base	current	history1	history2

Color

Bottom

GRAPHS





Ferrous Alloys Particle Count 491,520 122,880 30,720 0 -20 7.680 0ct9/1! Sep 13/ lec18/1 Der Feb 1 1,920 18 480 Non-ferrous Metals 16 120 10 30 12 8 Sep13/ Dec18/ ct9/ 11m leb 1 Viscosity @ 40°C Acid Number (B/HOX 180 1.00 ()-0+) 140 55 120 ier (mg] 100 Acid N 0.00 May18/21-Sep13/17 Jul11/18 Jul11/18 May18/21 0ct9/19 Mar10/20 Sep13/17 Feb14/18 Apr30/19 0ct9/19 Feb14/18 Dec18/18 pr30/19 Mar10/20 Dec18/18 : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Laboratory Sample No. : PTK0000390 Received : 24 Nov 2023 1500 NICHOLAS BLVD Lab Number Diagnosed : 01 Dec 2023 ELK GROVE, IL : 06017327 Unique Number : 10756471 Diagnostician : Jonathan Hester US 60017 Test Package : MOB 2 (Additional Tests: PrtCount) Contact: TONY HILDY Certificate L2367 To discuss this sample report, contact Customer Service at 1-800-237-1369. anthonyhildy@graphicpkg.com * - Denotes test methods that are outside of the ISO 17025 scope of accreditation. T: (847)437-1700

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

ISO 4406:1999 Cle