

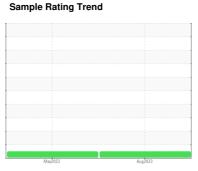
OIL ANALYSIS REPORT

DECK EQUIPMENT

IBERCISA IBERCISA WINCH HPU (CAL015) (S/N CALVERT15)

Hydraulic System

MOBIL DTE 10 EXCEL 32 (100 LTR)





DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. Please contact your representative for information regarding the proper sampling kits for your service. NOTE: We recommend using MOB 2 test kits, this testkit includes Particle Count to determine the ISO cleanliness of the fluid.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the component(unconfirmed).

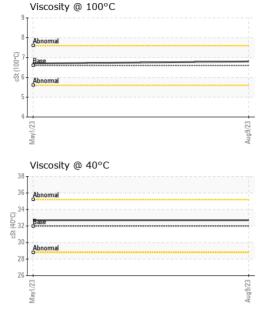
Fluid Condition

The condition of the oil is acceptable for the time in service.

			May2023	Aug ² 023		
SAMPLE INFORI	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PC0011620	PC0011814	
Sample Date		Client Info		09 Aug 2023	01 May 2023	
Machine Age	hrs	Client Info		0	0	
Oil Age	hrs	Client Info		0	0	
Oil Changed		Client Info		N/A	N/A	
Sample Status				NORMAL	NORMAL	
CONTAMINAT	ION	method	limit/base	current	history1	history2
Water		WC Method	>0.05	NEG	NEG	
WEAR METAL	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>20	<1	<1	
Chromium	ppm	ASTM D5185(m)	>10	0	0	
Nickel	ppm	ASTM D5185(m)	>10	<1	<1	
Titanium	ppm	ASTM D5185(m)		0	0	
Silver	ppm	ASTM D5185(m)		<1	0	
Aluminum	ppm	ASTM D5185(m)	>10	0	0	
Lead	ppm	ASTM D5185(m)	>20	<1	<1	
Copper	ppm	ASTM D5185(m)	>20	7	7	
Tin	ppm	ASTM D5185(m)	>10	0	0	
Antimony	ppm	ASTM D5185(m)		0	<1	
Vanadium	ppm	ASTM D5185(m)		0	0	
Beryllium	ppm	ASTM D5185(m)		0	0	
Cadmium	ppm	ASTM D5185(m)		0	0	
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)		<1	<1	
Barium	ppm	ASTM D5185(m)		<1	0	
Molybdenum	ppm	ASTM D5185(m)		0	0	
Manganese	ppm	ASTM D5185(m)		0	0	
Magnesium	ppm	ASTM D5185(m)		<1	1	
Calcium	ppm	ASTM D5185(m)	120	104	103	
Phosphorus	ppm	ASTM D5185(m)	475	443	471	
Zinc	ppm	ASTM D5185(m)		67	63	
Sulfur	ppm	ASTM D5185(m)	1275	2254	2301	
Lithium	ppm	ASTM D5185(m)		<1	<1	
CONTAMINAN	TS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>15	2	2	
Sodium	ppm	ASTM D5185(m)		<1	1	
Potassium	ppm	ASTM D5185(m)	>20	0	<1	



OIL ANALYSIS REPORT



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	
Appearance	scalar	Visual*	NORML	NORML	NORML	
Odor	scalar	Visual*	NORML	NORML	NORML	
Emulsified Water	scalar	Visual*	>0.05	NEG	NEG	
Free Water	scalar	Visual*		NEG	NEG	
FLUID PROPE	RTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	32	32.7	32.7	
Visc @ 100°C	cSt	ASTM D7279(m)	6.6	6.8	6.7	
Viscosity Index (VI)	Scale	ASTM D2270*	164	173	167	
SAMPLE IMAG	ES	method	limit/base	current	history1	history2
Color						no image
GRAPHS						
Iron (ppm)				Lead (ppm)		
Severe				00		
Abnormal				Abnormal		
May1/23			Aug9/23	May1/23		Aug9/23
aluminum (ppm)			ৰ	Ehromium (p	nm)	ৰ
⁴⁰ T				*T	PIII)	
20 Severe Abnormal				20 Severe Abnormal		
8			=======================================	0 8		73
May1/7			Aug9/7	May1/7		Aug9/
Copper (ppm)				Silicon (ppm)		
Severe Abnormal				Severe Abnormal		
May1/23			Aug9/23	May1/23		Aug9/23
2			A	≦		A



CALA ISO 17025:2017 Accredited Laboratory

Laboratory Sample No. Lab Number Unique Number : 5696956

: PC0011620 : 02603871

Recieved

Viscosity @ 40°C

Diagnosed Diagnostician : Wes Davis

: 18 Dec 2023 : 18 Dec 2023

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 Ocean Choice International - MV Calvert 1315 Topsail Rd, P.O. Box 8190 St. John's, NL

CA A1B 3N4

Test Package : MOB 1 (Additional Tests: KV100, VI) Contact: Calvert Engine Control Room To discuss this sample report, contact Customer Service at 1-800-268-2131. calvertengine@oceanchoice.com

Additives

Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab. Validity of results and interpretation are based on the sample and information as supplied.

T:

F: