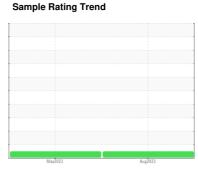


OIL ANALYSIS REPORT

DECK EQUIPMENT UNDERTUN UNDERTUN GANGWAY (CAL020) (S/N 230)

Hydraulic System

MOBIL DTE 10 EXCEL 32 (50 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).

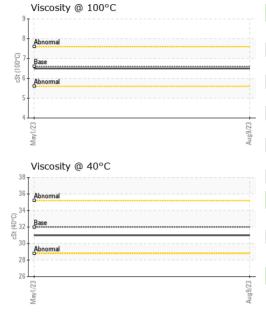
Fluid Condition

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

			May2023	Aug2023		
SAMPLE INFO	RMATIO	V method	limit/base	current	history1	history2
Sample Number		Client Info		PC0011624	PC0011817	
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	
CONTAMINA	TION	method	limit/base	current	history1	history2
Water		WC Method	>0.05	NEG	NEG	
WEAR META	LS	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>20	13	11	
Chromium	ppm	ASTM D5185(m)	>10	<1	<1	
Nickel	ppm	ASTM D5185(m)	>10	<1	0	
Titanium	ppm	ASTM D5185(m)		0	0	
Silver	ppm	ASTM D5185(m)		<1	0	
Aluminum	ppm	ASTM D5185(m)	>10	<1	<1	
Lead	ppm	ASTM D5185(m)	>20	<1	<1	
Copper	ppm	ASTM D5185(m)	>20	<1	<1	
Tin	ppm	ASTM D5185(m)	>10	0	0	
Antimony	ppm	ASTM D5185(m)		0	0	
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	<1	
Magnesium	ppm	ASTM D5185(m)		<1	1	
Calcium	ppm	ASTM D5185(m)	120	114	115	
Phosphorus	ppm	ASTM D5185(m)	475	392	408	
Zinc	ppm	ASTM D5185(m)		84	76	
Sulfur	ppm	ASTM D5185(m)	1275	1708	1708	
Lithium	ppm	ASTM D5185(m)		<1	<1	
CONTAMINA	NTS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>15	1	<1	
Sodium	ppm	ASTM D5185(m)		3	3	
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	VLITE		
Appearance	scalar	Visual*	NORML	NORML	NORML		
Odor Emulsified Water	scalar scalar	Visual* Visual*	NORML	NORML NEG	NORML NEG		
Free Water	scalar	Visual*	>0.05	NEG	NEG		
FLUID PROPE	RHES	method	limit/base	current	history1	history2	
Visc @ 40°C	cSt	ASTM D7279(m)	32	31.0	31.0		
Visc @ 100°C	cSt	ASTM D7279(m)	6.6	6.5	6.5		
Viscosity Index (VI)	Scale	ASTM D2270*	164	170	170		
SAMPLE IMAG	ES	method	limit/base	current	history1	history2	
Bottom						no image	
GRAPHS							
Iron (ppm) Lead (ppm)							
Savere E. Savere							
Abornal							
May1/2			Augs/23	May1/23		Aug9/23	
Aluminum (ppm) Chromium (ppm)							
Severe Abnormal		Severe Abnormal					
2			- E2	8		22	
May1			Auga	May1/		Aug9	
Copper (ppm)				Silicon (ppm)			
Severe				Severe			
Abnormal				Abnormal			
May1/23			Aug9/23 -	May1/23		Aug3/23	
Viscosity @ 40°C			1000	Additives			
Abnormal Sase 30 Ginneral			<u> </u>	calcium		***************************************	
3 1 -				terresonnesse ZIDC			



CALA ISO 17025:2017 Accredited Laboratory

Laboratory Sample No. Lab Number Unique Number : 5696957

: PC0011624

: 02603872

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 Ocean Choice International - MV Calvert Recieved

: 18 Dec 2023 Diagnosed : 18 Dec 2023 Diagnostician : Wes Davis

Test Package : MOB 1 (Additional Tests: KV100, VI)

1315 Topsail Rd, P.O. Box 8190

Contact: Calvert Engine Control Room calvertengine@oceanchoice.com

To discuss this sample report, contact Customer Service at 1-800-268-2131.

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:

St. John's, NL

CA A1B 3N4