



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area

[13980022]

Machine Id

CAHE-HPM512154 HP MUD PUMP

Component

Pump

Fluid

MOBIL MOBILGEAR SHC 220 (--- LTR)

RECOMMENDATION

Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

WEAR

All component wear rates are normal.

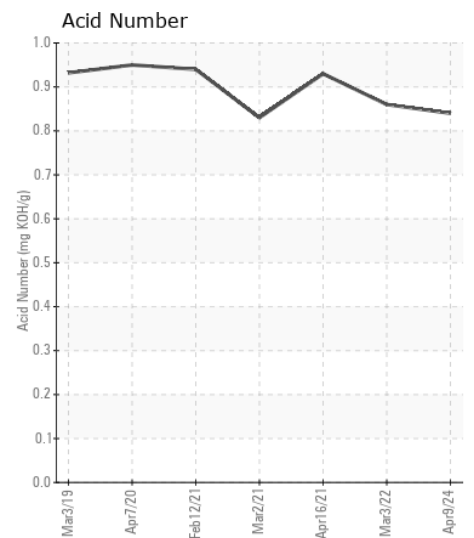
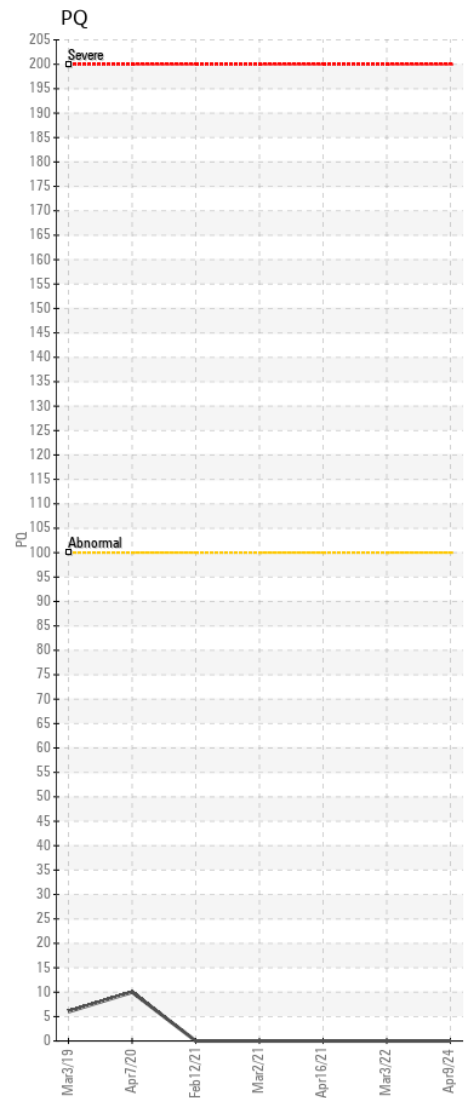
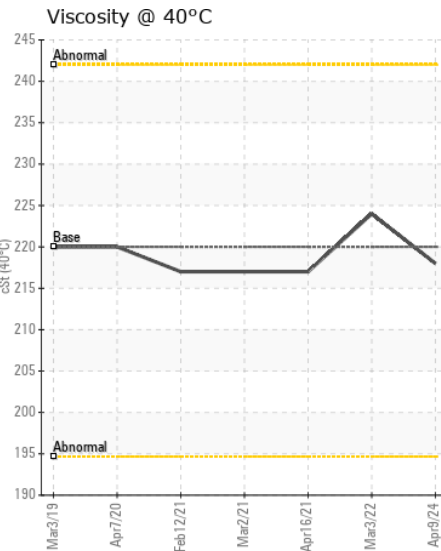
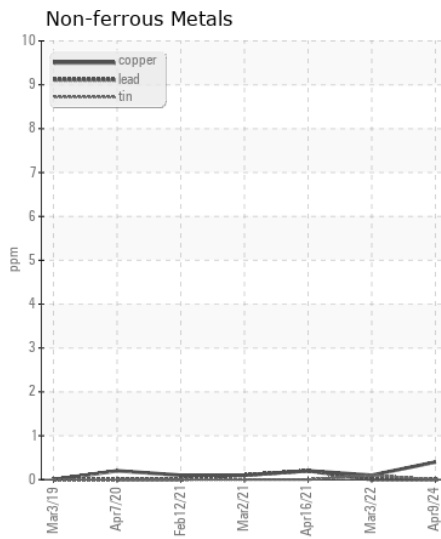
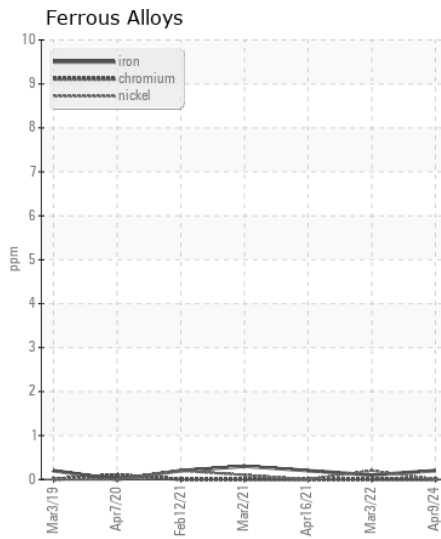
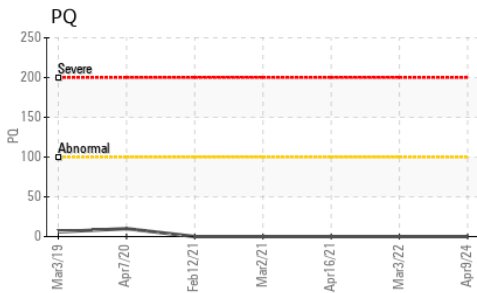
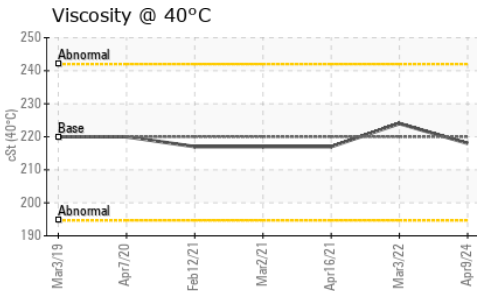
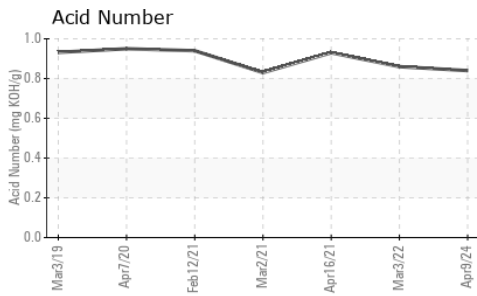
CONTAMINATION

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.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		PP	PP	PP
Sample Date		Client Info		09 Apr 2024	03 Mar 2022	16 Apr 2021
Machine Age	hrs	Client Info		0	0	0
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				NORMAL	NORMAL	NORMAL
PQ		ASTM D8184*		0	0	0
Iron	ppm	ASTM D5185(m)	>90	<1	<1	<1
Chromium	ppm	ASTM D5185(m)	>5	0	0	0
Nickel	ppm	ASTM D5185(m)	>5	0	<1	0
Titanium	ppm	ASTM D5185(m)	>3	0	0	0
Silver	ppm	ASTM D5185(m)	>3	0	0	<1
Aluminum	ppm	ASTM D5185(m)	>7	0	0	0
Lead	ppm	ASTM D5185(m)	>12	0	0	<1
Copper	ppm	ASTM D5185(m)	>30	<1	<1	<1
Tin	ppm	ASTM D5185(m)	>9	0	<1	0
Vanadium	ppm	ASTM D5185(m)		0	0	0
White Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185(m)	>60	21	16	12
Potassium	ppm	ASTM D5185(m)	>20	0	<1	<1
Water		WC Method	>.1	NEG	NEG	NEG
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*	>.1	NEG	NEG	NEG
Sodium	ppm	ASTM D5185(m)		<1	0	<1
Boron	ppm	ASTM D5185(m)		<1	<1	1
Barium	ppm	ASTM D5185(m)		0	0	0
Molybdenum	ppm	ASTM D5185(m)		0	0	0
Manganese	ppm	ASTM D5185(m)		0	<1	<1
Magnesium	ppm	ASTM D5185(m)		<1	0	<1
Calcium	ppm	ASTM D5185(m)		<1	2	2
Phosphorus	ppm	ASTM D5185(m)		422	447	442
Zinc	ppm	ASTM D5185(m)		2	<1	<1
Sulfur	ppm	ASTM D5185(m)		1663	1745	1922
Acid Number (AN)	mg KOH/g	ASTM D974*		0.84	0.86	0.93
Visc @ 40°C	cSt	ASTM D7279(m)	220	218	224	217



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PP
Lab Number : 02631673
Unique Number : 5772826
Test Package : MAR 2
Received : 26 Apr 2024
Tested : 29 Apr 2024
Diagnosed : 29 Apr 2024 - Wes Davis

KCA Deutag Drilling Canada Inc.
 Suite 201, 45 Hebron Way
 St. John's, NL
 CA A1A 0P9
 Contact: Reg Costello
 Hebron.MaintSuperintendent@kcadeutag.com
 T: (709)778-6228
 F: (709)730-1834

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.