



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area  
**DELTA VICTOR 104 MANGUSTA**  
 Machine Id  
**KONGSBERG DV 104 KAMEWA PORT HPP (S/N 53404)**  
 Component  
**Port Hydraulic Power Pack**  
 Fluid  
**CALTEX MEROPA 68 (--- GAL)**

**RECOMMENDATION**

Resample at the next service interval to monitor. ( Customer Sample Comment: Please test for water. )

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0889200</b>	WC0889199	WC0713630
Sample Date		Client Info		<b>04 Jul 2024</b>	10 Mar 2024	16 Sep 2023
Machine Age	hrs	Client Info		<b>699</b>	631	507
Oil Age	hrs	Client Info		<b>69</b>	213	89
Filter Age	hrs	Client Info		<b>69</b>	213	89
Oil Changed		Client Info		<b>Not Chngd</b>	Not Chngd	Not Chngd
Filter Changed		Client Info		<b>Not Chngd</b>	Not Chngd	Not Chngd
Sample Status				<b>NORMAL</b>	ATTENTION	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>20	<b>0</b>	3	3
Chromium	ppm	ASTM D5185m	>20	<b>0</b>	0	0
Nickel	ppm	ASTM D5185m	>20	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m		<b>0</b>	0	0
Silver	ppm	ASTM D5185m		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>0</b>	0	<1
Lead	ppm	ASTM D5185m	>20	<b>0</b>	0	0
Copper	ppm	ASTM D5185m	>20	<b>0</b>	<1	<1
Tin	ppm	ASTM D5185m	>20	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	<1	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

**CONTAMINATION**

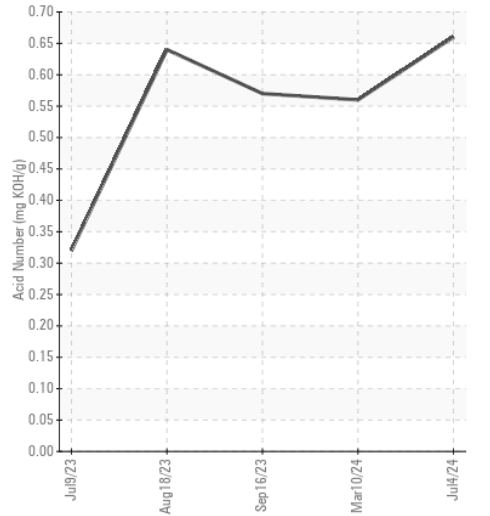
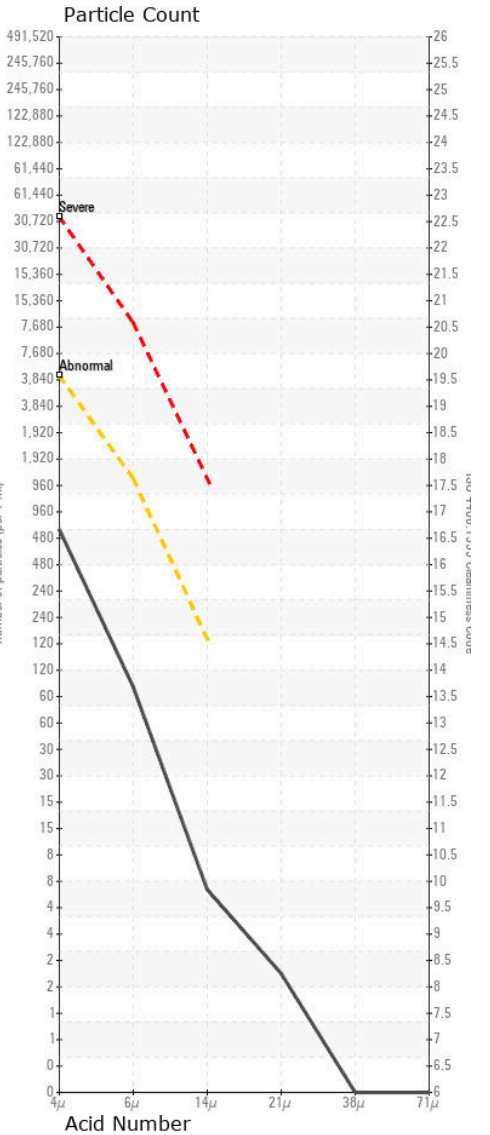
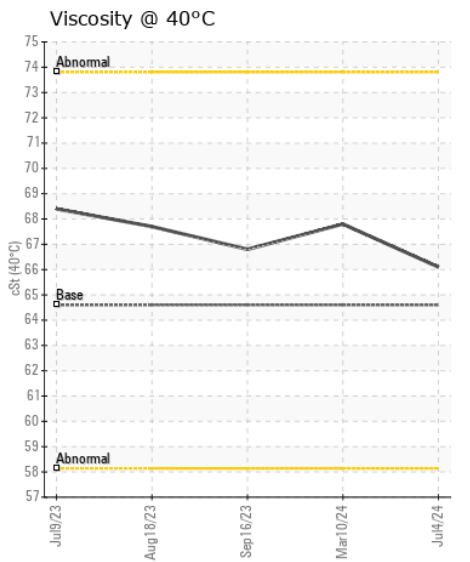
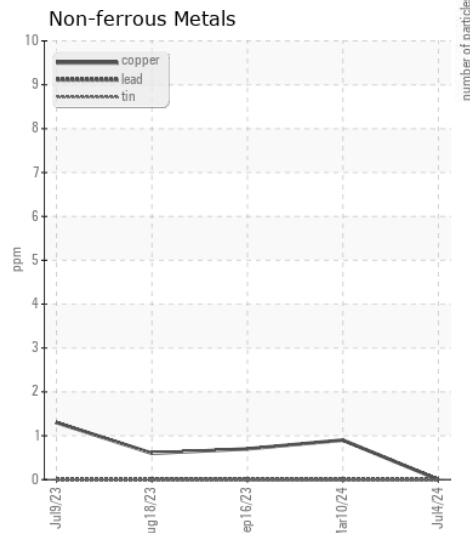
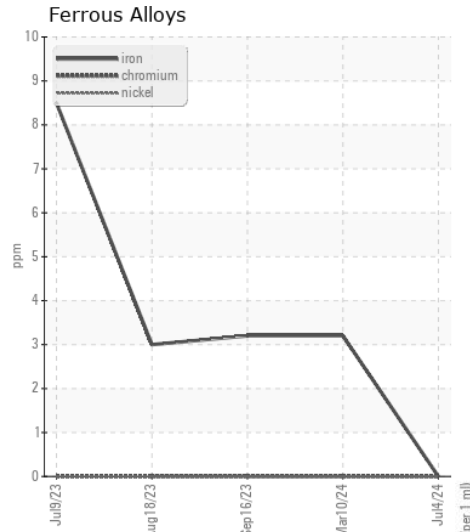
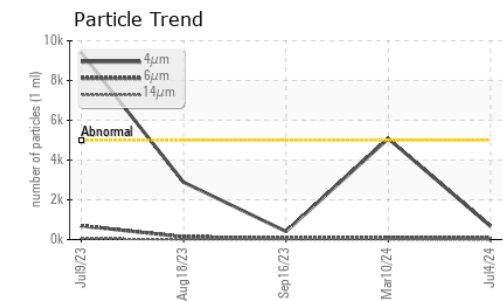
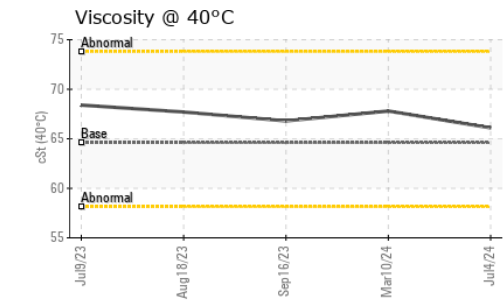
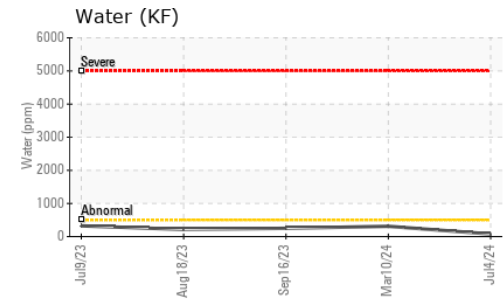
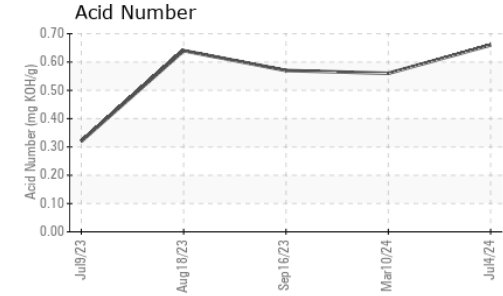
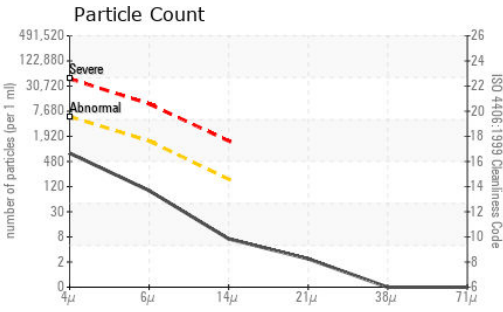
The water content is negligible. There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable.

Silicon	ppm	ASTM D5185m	>15	<b>0</b>	<1	<1
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	<1	1
Water	%	ASTM D6304	>0.05	<b>0.007</b>	0.031	0.025
ppm Water	ppm	ASTM D6304	>500	<b>77</b>	311	249.7
Particles >4µm		ASTM D7647	>5000	<b>668</b>	5076	411
Particles >6µm		ASTM D7647	>1300	<b>85</b>	100	67
Particles >14µm		ASTM D7647	>160	<b>6</b>	10	9
Particles >21µm		ASTM D7647	>40	<b>2</b>	2	2
Particles >38µm		ASTM D7647	>10	<b>0</b>	0	0
Particles >71µm		ASTM D7647	>3	<b>0</b>	0	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	<b>17/14/10</b>	20/14/10	16/13/10
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.05	<b>NEG</b>	NEG	NEG

**FLUID CONDITION**

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		<b>7</b>	29	11
Boron	ppm	ASTM D5185m	0	<b>6</b>	11	12
Barium	ppm	ASTM D5185m	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	0	<b>0</b>	0	<1
Manganese	ppm	ASTM D5185m		<b>0</b>	0	0
Magnesium	ppm	ASTM D5185m	0	<b>4</b>	1	2
Calcium	ppm	ASTM D5185m	0	<b>11</b>	14	10
Phosphorus	ppm	ASTM D5185m	200	<b>249</b>	202	221
Zinc	ppm	ASTM D5185m	100	<b>22</b>	3	7
Sulfur	ppm	ASTM D5185m	3500	<b>9576</b>	10546	11449
Acid Number (AN)	mg KOH/g	ASTM D8045		<b>0.66</b>	0.56	0.57
Visc @ 40°C	cSt	ASTM D445	64.6	<b>66.1</b>	67.8	66.8



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0889200 **Received** : 11 Jul 2024  
**Lab Number** : 06233230 **Tested** : 15 Jul 2024  
**Unique Number** : 11116723 **Diagnosed** : 15 Jul 2024 - Don Baldrige  
**Test Package** : MOB 2 ( Additional Tests: KF )

To discuss this sample report, contact Customer Service at 1-800-237-1369.

\* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

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

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