

**OIL ANALYSIS REPORT** 

# Crown Metal - C02400 A2407095

Hydraulic System

**HYDRAULIC 220 ZNT (--- GAL)** 

# Sample Rating Trend NORMAL

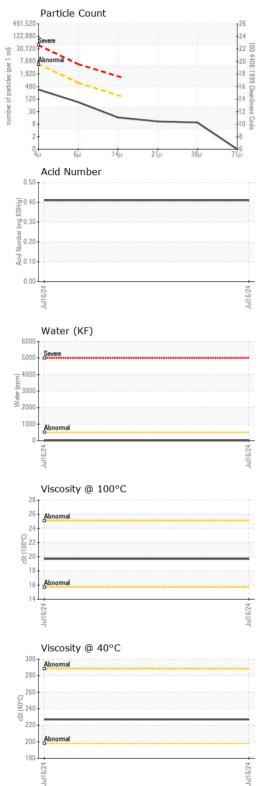
### Recommendation

We certify that this oil is clean, that the additives are at acceptable levels, and that it is suitable for use.

SAMPLE INFORMATION   method   limit/base   current   history1   history2							
Batch #   Client Info   2024 07 9010					Jul2024		
Batch #   Client Info   2024 07 9010	SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Department   Client Info   Production			Client Info		2024 07 9010		
Sample From   Client Info   Final							
Production Stage   Client Info   Final       Sent to WC   Client Info   07/16/2024       Sample Number   Client Info   E30002666       Sample Date   Client Info   16 Jul 2024       Sample Date   Client Info   0         O       O   O       O   O	•						
Sent to WC   Client Info   Client Info   E30002666							
Sample Date   Client Info   16 Jul 2024	-						
Sample Date   Client Info   0   16 Jul 2024	Sample Number		Client Info		E30002666		
Machine Age   hrs			Client Info		16 Jul 2024		
Cilient Info		hrs	Client Info		0		
WEAR METALS	Oil Age	hrs	Client Info		0		
WEAR METALS   method   limit/base   current   history1   history2	-		Client Info		N/A		
Description	-				NORMAL		
Port   Port	WEAR METALS		method	limit/base	current	history1	history2
Chromium	iron	ppm		>20	1		
Nickel	-						
Description			. ,		-		
Silver			. ,				
Astronomega							
Lead			. ,	>20			
Description			( /		-		
Trin			. ,				
Antimony							
Vanadium         ppm         ASTM D5185(m)         0             Beryllium         ppm         ASTM D5185(m)         0             Cadmium         ppm         ASTM D5185(m)         0             ADDITIVES         method         limit/base         current         history1         history2           Boron         ppm         ASTM D5185(m)         0             Barium         ppm         ASTM D5185(m)         0             Molybdenum         ppm         ASTM D5185(m)         0             Manganese         ppm         ASTM D5185(m)         47             Magnesium         ppm         ASTM D5185(m)         47             Calcium         ppm         ASTM D5185(m)         336             Phosphorus         ppm         ASTM D5185(m)         262             Sulfur         ppm         ASTM D5185(m)         1126             Lithium         ppm         ASTM D5185(m)         >15         8 <td>Antimony</td> <td></td> <td>. ,</td> <td></td> <td></td> <td></td> <td></td>	Antimony		. ,				
Description	Vanadium		, ,		0		
Cadmium         ppm         ASTM D5185(m)         0             ADDITIVES         method         limit/base         current         history1         history2           Boron         ppm         ASTM D5185(m)         0             Barium         ppm         ASTM D5185(m)         0             Molybdenum         ppm         ASTM D5185(m)         0             Manganese         ppm         ASTM D5185(m)         47             Magnesium         ppm         ASTM D5185(m)         47             Calcium         ppm         ASTM D5185(m)         336             Phosphorus         ppm         ASTM D5185(m)         262             Sulfur         ppm         ASTM D5185(m)         1126             Lithium         ppm         ASTM D5185(m)         <1	Beryllium		ASTM D5185(m)		0		
Boron   ppm   ASTM D5185(m)   0	-	ppm	ASTM D5185(m)		0		
Barium	ADDITIVES		method	limit/base	current	history1	history2
Description	Boron	ppm	ASTM D5185(m)		0		
Manganese         ppm         ASTM D5185(m)         <1             Magnesium         ppm         ASTM D5185(m)         47             Calcium         ppm         ASTM D5185(m)         47             Phosphorus         ppm         ASTM D5185(m)         336             Zinc         ppm         ASTM D5185(m)         262             Sulfur         ppm         ASTM D5185(m)         1126             Lithium         ppm         ASTM D5185(m)         <1	Barium		ASTM D5185(m)		0		
Magnesium         ppm         ASTM D5185(m)         47             Calcium         ppm         ASTM D5185(m)         47             Phosphorus         ppm         ASTM D5185(m)         336             Zinc         ppm         ASTM D5185(m)         262             Sulfur         ppm         ASTM D5185(m)         1126             Lithium         ppm         ASTM D5185(m)         <1	Molybdenum	ppm	ASTM D5185(m)		0		
Calcium         ppm         ASTM D5185(m)         47             Phosphorus         ppm         ASTM D5185(m)         336             Zinc         ppm         ASTM D5185(m)         262             Sulfur         ppm         ASTM D5185(m)         1126             Lithium         ppm         ASTM D5185(m)         <1	Manganese	ppm	ASTM D5185(m)		<1		
Phosphorus         ppm         ASTM D5185(m)         336             Zinc         ppm         ASTM D5185(m)         262             Sulfur         ppm         ASTM D5185(m)         1126             Lithium         ppm         ASTM D5185(m)         <1             CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185(m)         >15         8             Sodium         ppm         ASTM D5185(m)         <1             Potassium         ppm         ASTM D5185(m)         >20         0             Water         %         ASTM D6304*         >0.05         0.001	Magnesium	ppm	ASTM D5185(m)		47		
Zinc         ppm         ASTM D5185(m)         262             Sulfur         ppm         ASTM D5185(m)         1126             Lithium         ppm         ASTM D5185(m)         <1	Calcium	ppm	ASTM D5185(m)		47		
Sulfur         ppm         ASTM D5185(m)         1126             Lithium         ppm         ASTM D5185(m)         <1             CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185(m)         >15         8             Sodium         ppm         ASTM D5185(m)         <1	Phosphorus	ppm	ASTM D5185(m)		336		
Lithium         ppm         ASTM D5185(m)         <1             CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185(m)         >15         8             Sodium         ppm         ASTM D5185(m)         <1	Zinc	ppm	ASTM D5185(m)		262		
CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185(m)         >15         8             Sodium         ppm         ASTM D5185(m)         <1	Sulfur	ppm	ASTM D5185(m)		1126		
Silicon         ppm         ASTM D5185(m)         >15         8             Sodium         ppm         ASTM D5185(m)         <1             Potassium         ppm         ASTM D5185(m)         >20         0             Water         %         ASTM D6304*         >0.05         0.001	Lithium	ppm	ASTM D5185(m)		<1		
Sodium         ppm         ASTM D5185(m)         <1             Potassium         ppm         ASTM D5185(m)         >20         0             Water         %         ASTM D6304*         >0.05         0.001	CONTAMINANTS	;	method	limit/base	current	history1	history2
Sodium         ppm         ASTM D5185(m)         <1             Potassium         ppm         ASTM D5185(m)         >20         0             Water         %         ASTM D6304*         >0.05         0.001	Silicon	ppm	ASTM D5185(m)	>15	8		
Potassium         ppm         ASTM D5185(m)         >20         0             Water         %         ASTM D6304*         >0.05         0.001			. ,				
Water % ASTM D6304* >0.05 <b>0.001</b>				>20			
			. ,				



## **OIL ANALYSIS REPORT**



ESS	method	limit/base	current	history1	history2
	ASTM D7647	>5000	302		
	ASTM D7647	>640	76		
	ASTM D7647	>160	14		
	ASTM D7647	>40	9		
	ASTM D7647	>10	8		
	ASTM D7647	>3	0		
	ISO 4406 (c)	>19/16/14	15/13/11		
TION	method	limit/base	current	history1	history2
mg KOH/g	ASTM D974*		0.41		
	method	limit/base	current	history1	history2
scalar	Visual*	NONE	NONE		
scalar	Visual*	NONE	NONE		
scalar	Visual*	NONE	NONE		
scalar	Visual*	NONE	NONE		
scalar	Visual*	NONE	NONE		
scalar	Visual*	NONE	NONE		
scalar	Visual*	NORML	NORML		
scalar	Visual*	NORML	NORML		
scalar	Visual*	>0.05	NEG		
scalar	Visual*		NEG		
IES	method	limit/base	current	history1	history2
cSt	ASTM D7279(m)		227		
cSt	ASTM D7279(m)		19.7		
Scale	ASTM D2270*		99		
;	method	limit/base	current	history1	history2
				no image	no image
				no image	no image
	TION mg KOH/g scalar	ASTM D7647  ISO 4406 (c)  TION method  mg KOH/g ASTM D974*  method  scalar Visual*  scalar ASTM D7279(m)  CSt ASTM D7279(m)  Scale ASTM D2270*	ASTM D7647 >5000  ASTM D7647 >640  ASTM D7647 >160  ASTM D7647 >10  ASTM D7647 >10  ASTM D7647 >3  ISO 4406 (c) >19/16/14  TION method limit/base  mg KOH/g ASTM D974*  method limit/base  scalar Visual* NONE  scalar Visual* NORML  scalar Visual* NORML  scalar Visual* Scalar Visual*  scalar Visual* INORML  scalar Visual* Scalar Visual*  scalar Visual* Scalar Visual*  scalar Visual* Inoremal Indit/base  cSt ASTM D7279(m)  cSt ASTM D7279(m)  Scale ASTM D2270*	ASTM D7647 >5000 302  ASTM D7647 >640 76  ASTM D7647 >160 14  ASTM D7647 >40 9  ASTM D7647 >10 8  ASTM D7647 >3 0  ISO 4406 (c) >19/16/14 15/13/11  TION method limit/base current  mg KOH/g ASTM D974* 0.41  method limit/base current  scalar Visual* NONE NONE  scalar Visual* NORML NORML  scalar Visual* NORML  s	ASTM D7647 >5000 302  ASTM D7647 >640 76  ASTM D7647 >160 14  ASTM D7647 >10 8  ASTM D7647 >3 0  ISO 4406 (c) >19/16/14 15/13/11  TION method limit/base current history1  mg KOH/g ASTM D974* 0.41  scalar Visual* NONE NONE scalar Visual* NORML NORML

: 18 Jul 2024

: 19 Jul 2024



CALA ISO 17025:2017 Accredited Laboratory

Laboratory Sample No.

Lab Number : 02648693 Unique Number : 5814245

: E30002666

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9

Received **Tested** Diagnosed

: 22 Jul 2024 - Tatiana Sorkina Test Package : IND 2 (Additional Tests: KF, KV100, VI) To discuss this sample report, contact Customer Service at 1-905-372-2251.

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.

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