

### **OIL ANALYSIS REPORT**

Sample Rating Trend

NORMAL

# Q-1705C MAIN HOIST WINCH

Main Hoist Fluid GEAR OIL SAE 75W90 (16 LTR)

#### DIAGNOSIS

#### Recommendation

Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.

#### Wear

All component wear rates are normal.

#### Contamination

There is no indication of any contamination in the oil.

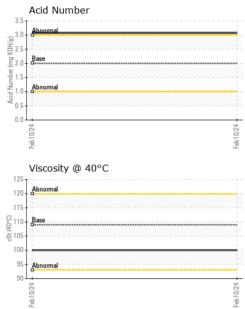
#### **Fluid Condition**

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

				Feb2024		
SAMPLE INFORM	ATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0764324		
Sample Date		Client Info		10 Feb 2024		
Machine Age	hrs	Client Info		0		
Oil Age	hrs	Client Info		0		
Oil Changed		Client Info		Changed		
Sample Status				NORMAL		
CONTAMINATION		method	limit/base	current	history1	history2
Water		WC Method	>0.05	NEG		
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>20	2		
	ppm	ASTM D5185(m)	>20	0		
	ppm	ASTM D5185(m)	>20	0		
	ppm	ASTM D5185(m)		0		
	ppm	ASTM D5185(m)		<1		
	ppm	ASTM D5185(m)	>20	0		
	ppm	ASTM D5185(m)	>20	0		
	ppm	ASTM D5185(m)	>20	1		
	ppm	ASTM D5185(m)	>20	0		
	ppm	ASTM D5185(m)		2		
,	ppm	ASTM D5185(m)		0		
	ppm	ASTM D5185(m)		0		
	ppm	ASTM D5185(m)		0		
ADDITIVES	le le	method	limit/base		history	biotony?
_				current	history1	history2
	ppm	ASTM D5185(m)	400	147		
	ppm	ASTM D5185(m)	200	0		
•	ppm	ASTM D5185(m)	12	0		
Manganese	ppm	ASTM D5185(m)		0		
Magnesium	ppm	ASTM D5185(m)	12	<1		
Magnesium Calcium	ppm	ASTM D5185(m)	150	1		
Magnesium Calcium Phosphorus	ppm ppm	ASTM D5185(m) ASTM D5185(m)	150 1650	1 1001		
Magnesium Calcium Phosphorus Zinc	ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	150 1650 125	1 1001 5		
Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	150 1650	1 1001 5 21278		
Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	150 1650 125	1 1001 5		
Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS	ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) method	150 1650 125 22500 limit/base	1 1001 5 21278	  	
Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS	ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	150 1650 125 22500	1 1001 5 21278 <1		  
Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon	ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) method	150 1650 125 22500 limit/base	1 1001 5 21278 <1 current	    history1	   history2
Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	150 1650 125 22500 limit/base	1 1001 5 21278 <1 current <1	   history1 	   history2
Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	150 1650 125 22500 limit/base >15	1 1001 5 21278 <1 <u>current</u> <1 <1	   history1 	   history2 
Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLINE	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	150 1650 125 22500 limit/base >15 >20	1 1001 5 21278 <1 <u>current</u> <1 <1 <1 <1	   history1  	   history2  
Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLINE Particles >4µm	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	150 1650 125 22500 limit/base >20 limit/base	1 1001 5 21278 <1 current <1 <1 <1 <1 <1 current	   history1   history1	   history2   history2
Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLINE Particles >4µm Particles >6µm	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	150 1650 125 22500 imit/base >20 imit/base >5000	1 1001 5 21278 <1 current <1 <1 <1 <1 <1 eurrent 85647	   history1   history1 	   history2  history2
Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m)	150 1650 125 22500 imit/base >15 >20 imit/base >5000 >1300 >160	1 1001 5 21278 <1 current <1 <1 <1 <1 <1 current 85647 13039	   history1   history1  history1	   history2  history2  history2
Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLINE Particles >4µm Particles >6µm Particles >14µm	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D7647 ASTM D7647 ASTM D7647	150 1650 125 22500 imit/base >15 >20 imit/base >5000 >1300 >160	1 1001 5 21278 <1 current <1 <1 <1 <1 <1 <1 s5647 13039 192	   history1  history1  history1	   history2  history2
Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLINE Particles >4µm Particles >4µm Particles >14µm Particles >21µm Particles >38µm	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	150 1650 125 22500 <b>iimit/base</b> >15 >20 <b>iimit/base</b> >5000 >1300 >160 >40	1 1001 5 21278 <1 current <1 <1 <1 <1 <1 85647 13039 192 27	   history1  history1  history1 	<ul> <li></li> <li></li> <li></li> <li>history2</li> <li></li> <li></li> <li>history2</li> <li></li> <li></li></ul>
Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLINE Particles >4µm Particles >6µm Particles >14µm Particles >21µm	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	150 1650 125 22500 <b>imit/base</b> >15 >20 <b>imit/base</b> >5000 >1300 >160 >40 >10	1 1001 5 21278 <1 current <1 <1 <1 <1 <1 85647 13039 192 27 2	   history1   history1   	<ul> <li></li> <li></li> <li></li> <li>history2</li> <li></li> <li></li> <li>history2</li> <li></li> <li></li></ul>



## **OIL ANALYSIS REPORT**



	Acid Number (AN)	ma KOll/a		2.00	3.07	,	,, <b>,</b>
	. ,	iliy KOn/g	ASTM D974*				
	VISUAL		method	limit/base	current	history1	history2
	White Metal	scalar	Visual*	NONE	NONE		
1	Yellow Metal	scalar	Visual*	NONE	NONE		
	Precipitate	scalar	Visual*	NONE	NONE		
Feb 10/24	Silt		Visual*	NONE	NONE		
Fet	Debris	scalar	Visual*	NONE	NONE		
	Sand/Dirt	scalar	Visual* Visual*	NONE	NONE NORML		
	Appearance Odor		Visual*	NORML	NORML		
	Emulsified Water	scalar	Visual*	>0.05	NEG		
	Free Water		Visual*	, 0100	NEG		
				limit/booo		biotom	biotory 0
	FLUID PROPER		method	limit/base	current	history1	history2
	Visc @ 40°C	cSt	ASTM D7279(m)	109	100		
Feb 10/24	SAMPLE IMAGE	S	method	limit/base	current	history1	history2
Ľ	Color					no image	no image
	Bottom					no image	no image
	GRAPHS						
	Ferrous Alloys			491,520	Particle Count		т26
	iron			122,880			-24
	a. 5-				Severe		
				30,720			-22
	042	*************		1,680	Abnormal		-20 8
	Feb 10/24			(per 1 m); (per 1 m);		•	+20 5 +18 5 +16 5 +16 5 +14 1 14 1 12 5 +12 5
	Non-ferrous Meta	ls		90 11 480			-16 g
				Feb10/280 12.00 hatticles (per 1 ml) 12.00 hatticles (per 1 ml)			+14
	REFERENCES lead			4 30			12 00
	E 5 • • • • • • • • • • • • • • • • • •			30			
				8	İ		10
	Feb 10/24			Feb10/24	+		8
				0 E	μ 6μ	14µ 21µ	38µ 71µ
	Viscosity @ 40°C				Acid Number	40 ÅI	
	A1			(b)H0, 3.0 Bml 22.0 1.0 Vorumper 0.0	Abnormal		
	(120 - Annomal (2010) - Base (110 - Base			ຍັ ຍັ 2.0	Base		
	3 100 Abnormal				Abnormal		
	90 4 7			Acid 0.0	54		4
	Feb 10/24			Feb 10/24	Feb 10/24		Feb 10/24
	kalan.			Laine (			LL.
o discuss this sample report	: 5750580 : IND 2 ( Additional Te ; contact Customer Serv	Rece Teste Diagr sts: TAN vice at 1-8	ived : 28 ed : 0 <sup>-1</sup> nosed : 01 Man ) 800-268-213	3 Mar 2024 1 Apr 2024 Apr 2024 - Kevi 1.	215 Wat n Marson Contact: I hmdc.mate	Pa er Street, Suite HMDC Material Co rial.control.coordinat	St. John`s, NL CA A1C 6C9 ontrol Coordinator or@exxonmobil.com
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Validity of results a Report Id: PAR215STJ [WCAMIS] 02625461 (Generated: 04/01/2024 09:42:35) Rev: 1

Contact/Location: HMDC Material Control Coordinator - PAR215STJ