

OIL ANALYSIS REPORT

Sample Rating Trend



Area Assy 787 NLG/Rig 22 DEC 7139

Component Hydraulic System Fluid ESSO HYJET V (--- GAL)

DIAGNOSIS

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

The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

Fluid Condition

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

SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0926863	WC0920412	
Sample Date		Client Info		03 Apr 2024	12 Mar 2024	
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	
CONTAMINATION	J	method	limit/base	current	history1	history2
Water		WC Method	>0.05	NEG	NEG	
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>20	<1	<1	
Chromium	ppm	ASTM D5185(m)	>20	0	0	
Nickel	ppm	ASTM D5185(m)	>20	0	0	
Titanium	ppm	ASTM D5185(m)		0	0	
Silver	ppm	ASTM D5185(m)		0	0	
Aluminum	ppm	ASTM D5185(m)	>20	0	<1	
Lead	ppm	ASTM D5185(m)	>20	0	0	
Copper	ppm	ASTM D5185(m)	>20	0	<1	
Tin	ppm	ASTM D5185(m)	>20	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				history2
Boron	ppm	ASTM D5185(m)		2	1	
Barium	ppm ppm	ASTM D5185(m)		2 0	1 0	
Barium Molybdenum	ppm ppm	ASTM D5185(m) ASTM D5185(m)		2 0 0	1 0 0	
Barium Molybdenum Manganese	ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)		2 0 0 0	1 0 0 0	
Barium Molybdenum Manganese Magnesium	ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)		2 0 0 <1	1 0 0 0 <1	
Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)		2 0 0 <1 13	1 0 0 0 <1 13	
Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)		2 0 0 <0 <1 13 42283	1 0 0 <1 13 39060	
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	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)	4	2 0 0 <1 13 42283 2	1 0 0 <1 13 39060 1	
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	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)		2 0 0 <1 13 42283 2 78	1 0 0 <1 13 39060 1 70	
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	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)	4	2 0 0 <1 13 42283 2	1 0 0 <1 13 39060 1	
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS	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)	4 50 limit/base	2 0 0 <1 13 42283 2 78 <1	1 0 0 <1 13 39060 1 70 <1 history1	
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon	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)	4 50	2 0 0 <1 13 42283 2 78 <1 current 0	1 0 0 <1 13 39060 1 70 <1 history1 <1	
Barium Molybdenum Manganese 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) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	4 50 limit/base >15	2 0 0 <1 13 42283 2 78 <1 2 78 <1 0 3	1 0 0 <1 13 39060 1 70 <1 history1	 history2
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium	ppm ppm 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)	4 50 limit/base >15	2 0 0 <1 13 42283 2 78 <1 current 0	1 0 0 <1 13 39060 1 70 <1 history1 <1	 history2
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m)	4 50 50 >15 >20 imit/base	2 0 0 () () () () () () () () () () () () ()	1 0 0 (1 13 39060 1 1 70 <1 history1 <1 3 36 history1	 history2
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m)	4 50 50 >15 >20 limit/base >20 limit/base >5000	2 0 0 (0 <1 13 42283 2 78 <1 current 0 3 37 current 1166	1 0 0 (1 13 39060 1 1 70 <1 history1 <1 3 36 history1 360	 history2
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m)	4 50 50 50 515 >15 >20 1imit/base >5000 >1300	2 0 0 (0 <1 13 42283 2 78 <1 current 0 3 37 current 1166 251	1 0 0 (1 13 39060 1 1 70 <1 history1 <1 3 36 history1 360 86	 history2 history2
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >14µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D7647 ASTM D7647 ASTM D7647	4 50 50 50 515 >15 >20 1imit/base >20 1imit/base >5000 >1300 >160	2 0 0 () () () () () () () () () () () () ()	1 0 0 (1 13 39060 1 1 70 <1 history1 <1 3 36 history1 360 86 86 8	 history2 history2
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >14µm Particles >21µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	4 50 50 3 50 3 50 3 50 3 5 0 3 1 3 0 3 1 300 3 1 60 3 40	2 0 0 () () () () () () () () () () () () ()	1 0 0 () () () () () () () () () () () () ()	 history2 history2
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium Potassium Particles >4µm Particles >6µm Particles >21µm Particles >38µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	4 50 50 50 515 >15 >20 20 10 5000 >1300 >160 >40 >10	2 0 0 () () () () () () () () () () () () ()	1 0 0 (1 13 39060 1 1 70 <1 history1 <1 3 36 history1 360 86 8 8 5 1	 history2 history2 history2
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm Particles >21µm Particles >38µm Particles >71µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	4 50 50 215 20 20 20 20 20 20 20 20 20 20 20 20 20	2 0 0 () () () () () () () () () () () () ()	1 0 0 -1 13 39060 1 70 <1 history1 <1 3 36 history1 360 86 8 5 1 1 1 1	 history2 history2 history2
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >5µm Particles >21µm Particles >38µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	4 50 50 50 515 >15 >20 20 10 5000 >1300 >160 >40 >10	2 0 0 () () () () () () () () () () () () ()	1 0 0 (1 13 39060 1 1 70 <1 history1 <1 3 36 history1 360 86 8 8 5 1	 history2 history2



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0k Mar12/24

0.06 (B)HOX 0.04 Base

Bu 0.04 U.02 Pice 40.01 0.00

13 12 Abnorm

cSt (40°C) 11 10 Base Abnorm

6k

in 1k 0k -Mar12/24

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OIL ANALYSIS REPORT

Particle Trend	FLUID DEGRAD	ATION	method	limit/base	current	history1	history2
χοποιται 4 μm 6μm	Acid Number (AN)	mg KOH/g	ASTM D974*	0.04	0.05	0.03	
	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	
- 1 7	^{42/Eldy} Debris	scalar	Visual*	NONE	NONE	NONE	
	Debris	scalar	Visual*	NONE	NONE	NONE	
Acid Number	Sand/Dirt	scalar	Visual*	NONE	NONE	NONE	
	Appearance	scalar	Visual*	NORML	NORML	NORML	
	Odor	scalar	Visual*	NORML	NORML	NORML	
Base	Emulsified Water Free Water	scalar scalar	Visual* Visual*	>0.05	NEG NEG	NEG NEG	
	FLUID PROPER		method	limit/base	current	history1	history2
	Visc @ 40°C	cSt	ASTM D7279(m)	10.6	10.0	10.1	
1777 - 179 M		S	method	limit/base	current	history1	history2
[≊] ∕iscosity @ 40°C					A LE CONTRACTOR		
	Color						no image
Abnormal							
Base					6	(Comit	
Abnormal	Bottom				Carin		no image
Q							
	GRAPHS						
4777 LRW	Ferrous Alloys			491,520	Particle Cour	nt	т26
Š	iron						
Particle Trend	E. 5-			122,880	Severe		-24
Abnonna 4µm				30,720			-22
ματασταστα 6μm 				2 6	Abnormal		-20
	Mar12/24			Apr3/24 1.950		N	-18
	Non-ferrous Meta	als		sappti 480	1		-18
	10 T			ed jo 120		~	-14
	E C			quin			-12
4-7 / 7				= 30	1		
a na	<			3			-10
	r12/24			Apr3/24	2-		
	Mart			ď () 4μ 6μ	14µ 21µ	38µ 71µ
	Viscosity @ 40°C				Acid Numbo		1
	12 Abnormal			(B)H0.06 0.04 00 0.04 10 0.02	Base		
	(0-01) Base 73 10 - 70000000 700000000000000000000000000			ළී 0.04 ස	0		
	بع المربع (Abnormal 9			đ 0.02	2		
	8			ši 0.00)		
	Mar12/24			Apr3/24	Mar1 2/24		A CLEAN
	Ma			4	W		<
	ory : WearCheck - C8-117	75 Annleh	/ Line, Burlin	naton, ON I 71	_ 5H9	Safran I an	ding System
Sample	No. : WC0926863	Recei	i ved : 04	4 Apr 2024			4 Monarch Av
	nber : 02626822	Teste		5 Apr 2024			Ajax, Ol
	umber : 5759954			5 Apr 2024 - W	les Davis	Contra	CA L1S 2G
	kage : IND 2 (Additional Te eport, contact Customer Serv			1.		stuart.potter@sa	t: Stuart Potte frangroup.com
	scope of accreditation, (m) n				nal lab.		T
	terpretation are based on the					F:	(905)683-698

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