

# **OIL ANALYSIS REPORT**

Sample Rating Trend

SAMPLE INFORMATION method limit/base





NORMAL

Recommendation

Resample at the next service interval to monitor.

## Wear

All component wear rates are normal.

### Contamination

There is no indication of any contamination in the oil.

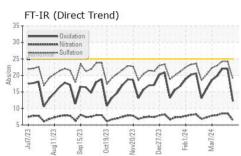
### Fluid Condition

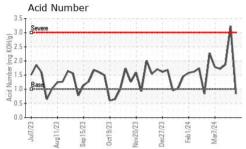
The BN result indicates that there is suitable alkalinity remaining in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

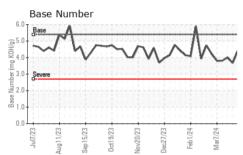
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Sample Number		Client Info		WC0865719	WC0865721	WC0865752
Sample Date		Client Info		04 Apr 2024	28 Mar 2024	21 Mar 2024
Machine Age	hrs	Client Info		71518	71352	71184
Oil Age	hrs	Client Info		166	990	822
Oil Changed		Client Info		Not Changd	Changed	Not Changd
Sample Status				NORMAL	SEVERE	ABNORMAL
CONTAMINATION	N	method	limit/base	current	history1	history2
Fuel		WC Method	>4.0	<1.0	<1.0	<1.0
Water		WC Method		NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>14	0	2	7
Chromium	ppm	ASTM D5185m	>3	0	<1	<1
Nickel	ppm	ASTM D5185m		0	0	<1
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>5	1	2	3
Lead	ppm	ASTM D5185m	>8	<1	4	5
Copper	ppm	ASTM D5185m	>5	0	<1	2
Tin	ppm	ASTM D5185m	>3	1	4	4
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES	1-1-	method	limit/base	current	history1	history2
		ASTM D5185m			3	4
Boron Barium	ppm	ASTM D5185m		3 0	0	4
	ppm	ASTM D5185m		4	5	6
Molybdenum	ppm	ASTM D5185m		4 <1	5 <1	<1
Manganese	ppm				31	37
Magnesium	ppm	ASTM D5185m		31		
Calcium	ppm	ASTM D5185m		1897	2188	2160
Phosphorus	ppm	ASTM D5185m		282	338	334
Zinc	ppm	ASTM D5185m		350	415	408
Sulfur	ppm	ASTM D5185m		1717	2892	2848
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>180	77	▲ 187	<b>▲</b> 185
Sodium	ppm	ASTM D5185m	>20	1	2	2
Potassium	ppm	ASTM D5185m	>20	0	2	2
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844		0	0.1	0.1
Nitration	Abs/cm	*ASTM D7624		6.4	8.5	8.5
Sulfation	Abs/.1mm	*ASTM D7415		18.9	24.2	24.3
FLUID DEGRADA		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414		12.2	22.0	22.1
Oxidation Acid Number (AN)		*ASTM D7414 ASTM D8045	1.0	12.2 0.84	22.0 <b>1</b> 3.23	22.1 1.87
	Abs/.1mm		1.0 5.4			

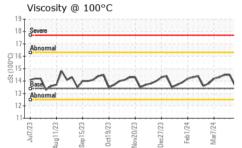


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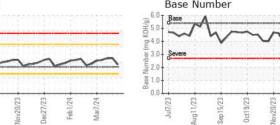








VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual		NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG
FLUID PROPERT	TIES	method	limit/base	current	history1	history
Visc @ 100°C	cSt	ASTM D445	13.4	13.7	14.5	14.5
GRAPHS						
Iron (ppm)				Lead (ppm)		
25 Severe			15	Severe		10070010
0 - Severe	111111		10	1		In the second
5 - Abnormal			mdd	ofbriormal	٨	
M				101		
1-1	m	Lon	A .	VV	WW	VV
1-1-V		1/24	$\overline{\mathbf{V}}$		STO EST	1/24
1-1-1	Nov20/23	Dec27/23		Jul7/23 Aug 11/23 Sep 15/23	Oct19/23	Feb1/24
Aluminum (ppm)	Nov20/23	Feb1/24		Chromium (bi Sqp15/23		Feb1/24
Aluminum (ppm)	Nov20/23	Feb1/24	5	Chromium (p)		Feb 1/24
Aluminum (ppm)	Nov20/23	Feb1/24	4	Chromium (p)		Feb1/24
Aluminum (ppm)	Nov20/23	Dec21/23	4	Chromium (p)		Feb1/24
Aluminum (ppm)	ES02VON	Feb1/23	5	Chromium (p)		Feb1/24
Aluminum (ppm)		~~~~		E2/11 Bny Chromium (pp Severe Abnormal		1
Abnomal	~			E2/11 Bny Chromium (pp Severe Abnormal	om)	1~~~
Aluminum (ppm)	Nov20/23 - 5 Nov20/23 - 5	Dec21/23 + Dec21/23 + Dec21/23 + Dec21/24 + Peb1/24 + Pe		Chromium (p)		1~~~
Copper (ppm)	~			EZULIBINY Chromium (p) EZULIBINY Chromium (p) Severe EZULIBINY	om)	1~~~
Aluminum (ppm)	~			EZ/11/2 Chromium (pp EZ/11/2 Chromium (pp EZ/11/2 Chromium (pp EZ/11/2 Chromium (pp EZ/11/2 Chromium (pp EZ/11/2 Chromium (pp EZ/2 Chromium (pp)) EZ/2 Chromium (pp EZ/2 Chromium (pp)) EZ/2 Chromium	om)	1
Aluminum (ppm)	~			E2/11nv E2/11nv	om)	1~~~
Aluminum (ppm)	~			EZ/21168 (p) EZ/21168 (p) EZ/21169 EZ/21169 EZ/21000 EZ/210000 EZ/21000 EZ/21000 EZ/21000 EZ/21000 EZ/21000 EZ/21000 EZ/210000 EZ/21000 EZ/210000 EZ/21000 EZ/210000 EZ/2100000000 EZ/21000000 EZ/21000000000000000000000000000000000000	om)	1
Copper (ppm)	~			E2/21 das (pp E2/21 das (pp E2/21 das (pp E2/21 das (pp E2/21 das (pp)) E2/21 das (pp)) E2/21 das (pp)) E2/21 das (pp))	om)	1~~~
Abnormal Copper (ppm) Severe Abnormal Abnormal Abnormal	~			E2/g1des (pp E2/g1des (pp E2/g1des (pp E2/g1des (pp E2/g1des (pp E2/g1des (pp E2/g1des (pp))	om)	1
Aluminum (ppm)	Vov20/23 - 5	Feb1/24 + + + + + + + + + + + + + + + + + + +		E2/51 des (p) E2/21 des (p) E2	(mc pec2/123 pec2/123 pec2/123	Feb 1/24
Aluminum (ppm) EZ/SI ldes EZ/II bery EZ/II bery Copper (ppm) Copper (ppm)	~			E2/g1des (pp E2/g1des (pp E2/g1des (pp E2/g1des (pp E2/g1des (pp E2/g1des (pp E2/g1des (pp))	om)	Feb 1/24



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513 **EDL NA Recips-South Jordan** : WC0865719 Sample No. Received : 09 Apr 2024 South Jordan Powerstation, 10473 S. Bacchus Hwy. Lab Number : 06143246 Tested : 10 Apr 2024 South Jordan, UT Unique Number : 10968054 Diagnosed : 10 Apr 2024 - Jonathan Hester US 84095 Test Package : MOB 2 Contact: Aaron Klein Certificate 12367 To discuss this sample report, contact Customer Service at 1-800-237-1369. aaron.klein@edlenergy.com \* - Denotes test methods that are outside of the ISO 17025 scope of accreditation. T: F:

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

Oct19/73

20

> Aug11/23 Sep 15/23

Report Id: EDLSOU [WUSCAR] 06143246 (Generated: 04/10/2024 15:19:22) Rev: 1

Submitted By: Aaron Klein

Feb1/24

Mar7/24

Dec27/23

Page 2 of 2