



# OIL ANALYSIS REPORT

Sample Rating Trend

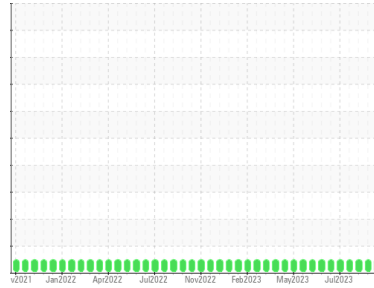
**NORMAL**



Machine Id  
**BULK SHELL MORLINA S3 BA 220**

Component  
**New (Unused) Oil**

Fluid  
**SHELL MORLINA S3 BA 220 (--- GAL)**



## DIAGNOSIS

### Recommendation

This is a baseline read-out on the submitted sample. ( Customer Sample Comment: Bulk oil )

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			<b>WC0775288</b>	WC0775284	WC0775141
Sample Date	Client Info			<b>27 Oct 2023</b>	28 Sep 2023	01 Sep 2023
Machine Age	hrs Client Info			<b>0</b>	0	0
Oil Age	hrs Client Info			<b>0</b>	0	0
Oil Changed	Client Info			<b>N/A</b>	N/A	N/A
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>5	<b>0</b>	0	0
Chromium	ppm	ASTM D5185m	>5	<b>0</b>	0	0
Nickel	ppm	ASTM D5185m	>5	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m		<b>0</b>	0	0
Silver	ppm	ASTM D5185m	>5	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>5	<b>0</b>	<1	<1
Lead	ppm	ASTM D5185m	>5	<b>0</b>	0	0
Copper	ppm	ASTM D5185m	>5	<b>0</b>	0	0
Tin	ppm	ASTM D5185m	>5	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	<1
Cadmium	ppm	ASTM D5185m		<b>0</b>	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		<b>0</b>	0	0
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>0</b>	0	0
Manganese	ppm	ASTM D5185m		<b>0</b>	0	0
Magnesium	ppm	ASTM D5185m		<b>0</b>	0	0
Calcium	ppm	ASTM D5185m		<b>4</b>	19	11
Phosphorus	ppm	ASTM D5185m		<b>9</b>	20	14
Zinc	ppm	ASTM D5185m		<b>7</b>	5	0
Sulfur	ppm	ASTM D5185m		<b>5957</b>	6779	8047

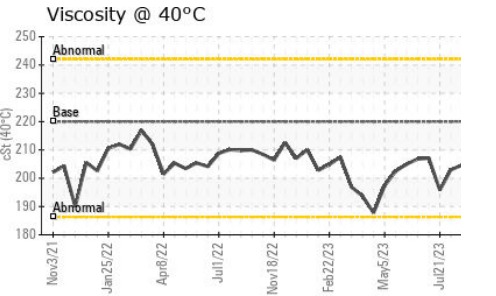
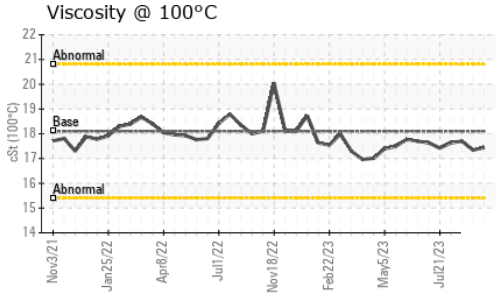
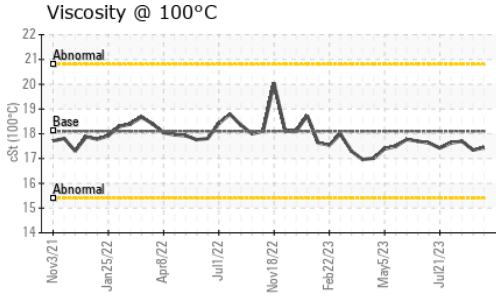
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>15	<b>1</b>	2	2
Sodium	ppm	ASTM D5185m		<b>0</b>	0	<1
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	0	0

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.05	<b>0.062</b>	0.093	0.077

VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Precipitate	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
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		<b>NEG</b>	NEG	NEG
Free Water	scalar	*Visual		<b>NEG</b>	NEG	NEG



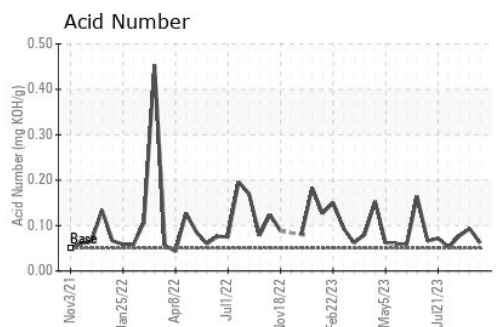
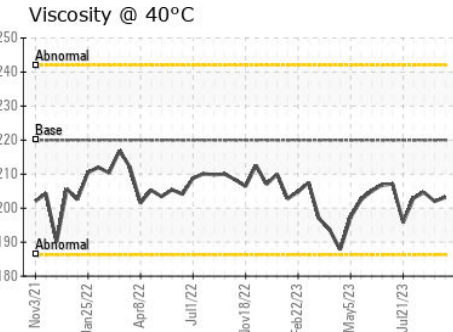
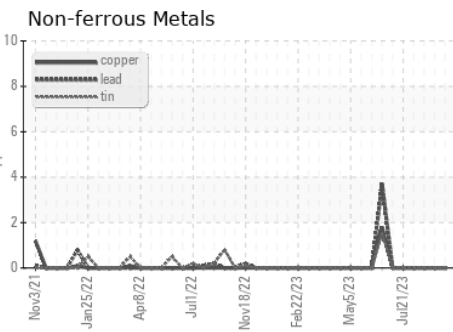
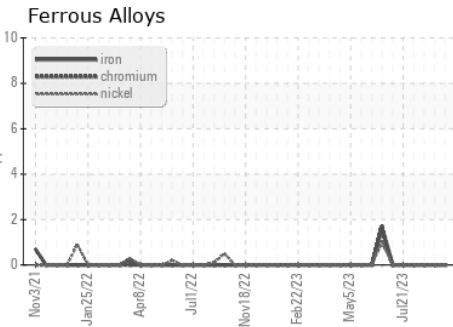
# OIL ANALYSIS REPORT



FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 40°C	cSt	ASTM D445	220	<b>203.2</b>	202	204.6
Visc @ 100°C	cSt	ASTM D445	18.1	<b>17.44</b>	17.34	17.7
Viscosity Index (VI)	Scale	ASTM D2270	95	<b>91</b>	91	93

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color				no image	
Bottom				no image	

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0775288 **Received** : 02 Nov 2023  
**Lab Number** : **05997062** **Diagnosed** : 07 Nov 2023  
**Unique Number** : 10725422 **Diagnostician** : Jonathan Hester  
**Test Package** : MOB 2 ( Additional Tests: FT-IR, KF, KV100, PrtCount, VI )

**EDL NA Recips-Morgantown**  
 Morgantown Powerstation, 950 Shiloh  
 Morgantown, PA  
 US 19543  
 Contact: ARON GUNN  
 aron.gunn@edlenergy.com

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)