**WEAR** CONTAMINATION **FLUID CONDITION** 

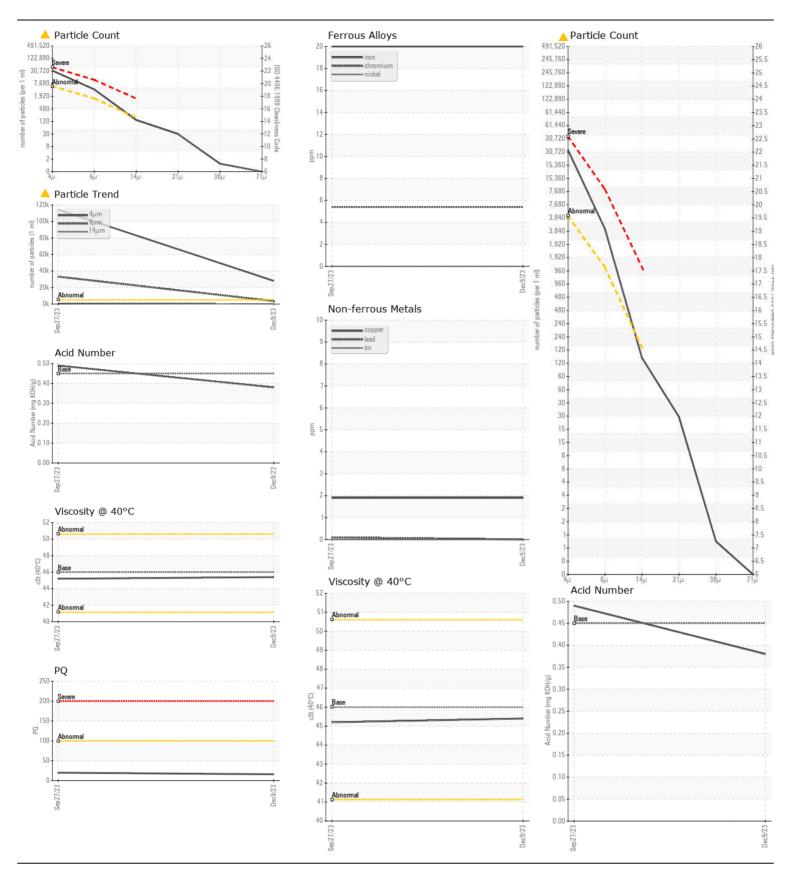
**NORMAL ABNORMAL NORMAL** 

Machine Id

## **COMINGLE BAILER**

Component Hydraulic System

ESSO NUTO H ISO 46 ( QTS)							
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
	Sample Number		Client Info		JR0188552	JR0188553	
No corrective action is recommended at this time. Resample at the next service interval to monitor.	Sample Date		Client Info		09 Dec 2023	27 Sep 2023	
	Machine Age	hrs	Client Info		28697	28093	
	Oil Age	hrs	Client Info		0	0	
	Filter Age	hrs	Client Info		0	0	
	Oil Changed		Client Info		Not Changd	Not Changd	
	Filter Changed		Client Info		Not Changd	Not Changd	
	Sample Status				ABNORMAL	ABNORMAL	
WEAR	PQ		ASTM D8184		16	20	
	Iron	ppm	ASTM D5185m	>20	20	20	
All component wear rates are normal.	Chromium	ppm	ASTM D5185m		5	5	
	Nickel	ppm	ASTM D5185m		0	0	
	Titanium	ppm	ASTM D5185m	>10	<1	0	
	Silver	ppm	ASTM D5185m		0	0	
	Aluminum	ppm	ASTM D5185m	>10	1	0	
	Lead	ppm	ASTM D5185m		0	<1	
	Copper	ppm	ASTM D5185m		2	2	
	Tin	ppm	ASTM D5185m		0	0	
	Vanadium		ASTM D5185m	>10	0	0	
	White Metal	ppm scalar	*Visual	NONE	NONE	NONE	
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
CONT A BAIN A TION	Ciliana		ACTM DE105	00	4	4	
CONTAMINATION	Silicon	ppm	ASTM D5185m		4	4	
There is a high amount of silt (particulates < 14 microns in size) present in the oil.	Potassium	ppm	ASTM D5185m		<1	I NEO	
	Water		WC Method	>0.1	NEG	NEG	
	Particles >4µm		ASTM D7647		<u>^</u> 28061	114335	
	Particles >6µm		ASTM D7647		<u>▲</u> 3550	▲ 33087 ▲ 33087	
	Particles >14µm		ASTM D7647		122	▲ 993 ▲ 405	
	Particles >21µm		ASTM D7647		26	<u> </u>	
	Particles >38µm		ASTM D7647		1	1	
	Particles >71µm		ASTM D7647		0	0	
	Oil Cleanliness		ISO 4406 (c)		<u>^</u> 22/19/14	<u>4</u> 24/22/17	
	Silt	scalar	*Visual	NONE	NONE	NONE	
	Debris	scalar	*Visual	NONE	LIGHT	LIGHT	
	Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	
	Appearance	scalar	*Visual	NORML	NORML	NORML	
	Odor	scalar	*Visual	NORML	NORML	NORML	
	Emulsified Water	scalar	*Visual	>0.1	NEG	NEG	
FLUID CONDITION	Sodium	ppm	ASTM D5185m		<1	0	
	Boron	ppm	ASTM D5185m	0	0	0	
The AN level is acceptable for this fluid. The condition of the oils additive package is suitable for further service.	Barium	ppm	ASTM D5185m		0	0	
	Molybdenum	ppm	ASTM D5185m		<1	<1	
	Manganese	ppm	ASTM D5185m		0	<1	
	Magnesium	ppm	ASTM D5185m	5	5	3	
	Calcium	ppm	ASTM D5185m		66	54	
	Phosphorus	ppm	ASTM D5185m		329	303	
	Zinc	ppm	ASTM D5185m	410	383	384	
	Sulfur	ppm	ASTM D5185m		1961	1958	
	Acid Number (AN)	mg KOH/g	ASTM D3103111		0.38	0.49	
	Visc @ 40°C	cSt	ASTM D6045		45.4	45.2	
	VISC @ 40 C	COL	A3 11VI D443	40	45.4	45.2	





Certificate L2367

Laboratory Sample No. **Lab Number Unique Number** 

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : JR0188552 : 06062548 : 10833930

: 17 Jan 2024 Recieved Diagnosed : 19 Jan 2024 Diagnostician : Jonathan Hester Test Package : CONST ( Additional Tests: PQ )

To discuss this sample report, contact Customer Service at 1-800-237-1369.

US 28215 Contact: DOYLE TYSON WALTER.TYSON@MECKLENBURGCOUNTYNC.GOV T:

\* - 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)

F: (704)587-0748

8007 PENCE RD

CHARLOTTE, NC

**MECKLENBURG COUNTY**