

OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL

PORTABLE WATER PUMP

Component **Diesel Engine**

NOT GIVEN (--- GAL)

Recommendation

Resample at the next service interval to monitor.

All component wear rates are normal.

Contamination

There is no indication of any contamination in the

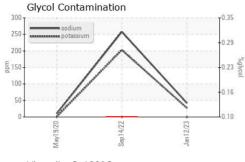
Fluid Condition

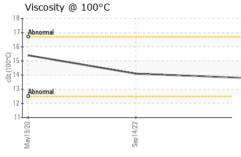
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

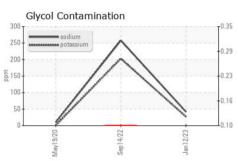
		Ma	y2020	Sep2022 Jan 20	023	
SAMPLE INFOR	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0721338	WC0721140	WCDB3935
Sample Date		Client Info		12 Jan 2023	14 Sep 2022	19 May 2020
Machine Age	hrs	Client Info		3643	3862	7622
Oil Age	hrs	Client Info		500	500	500
Oil Changed		Client Info		Changed	Changed	N/A
Sample Status				NORMAL	SEVERE	NORMAL
CONTAMINATIO	N	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0	<1.0	<1.0
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>51	14	29	31
Chromium	ppm	ASTM D5185m	>11	<1	2	1
Nickel	ppm	ASTM D5185m	>5	0	<1	<1
Titanium	ppm	ASTM D5185m		0	<1	<1
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>31	2	5	2
Lead	ppm	ASTM D5185m	>26	<1	6	2
Copper	ppm	ASTM D5185m	>26	<1	3	2
Tin	ppm	ASTM D5185m	>4	0	0	0
Antimony	ppm	ASTM D5185m				0
Vanadium	ppm	ASTM D5185m		0	1	0
Cadmium	ppm	ASTM D5185m		0	0	<1
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	IIIIII Dasc	13	58	14
	ppm		IIIIIII			
Boron		ASTM D5185m	IIIIII base	13	58	14
Boron Barium	ppm	ASTM D5185m ASTM D5185m	mm/basc	13 0	58 0	14 0
Boron Barium Molybdenum	ppm	ASTM D5185m ASTM D5185m ASTM D5185m		13 0 57	58 0 20	14 0 69
Boron Barium Molybdenum Manganese	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		13 0 57 <1	58 0 20 2	14 0 69 <1
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	iiiiiii basa	13 0 57 <1 877	58 0 20 2 222	14 0 69 <1 1081
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		13 0 57 <1 877 1072	58 0 20 2 2 222 1774	14 0 69 <1 1081 1339
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		13 0 57 <1 877 1072 959	58 0 20 2 2 222 1774 757	14 0 69 <1 1081 1339 1051
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	13 0 57 <1 877 1072 959 1112	58 0 20 2 2 222 1774 757 1025	14 0 69 <1 1081 1339 1051 1345
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		13 0 57 <1 877 1072 959 1112 3633	58 0 20 2 2 222 1774 757 1025 3626	14 0 69 <1 1081 1339 1051 1345 2569
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	limit/base >22	13 0 57 <1 877 1072 959 1112 3633 current	58 0 20 2 222 1774 757 1025 3626 history1	14 0 69 <1 1081 1339 1051 1345 2569 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	limit/base >22	13 0 57 <1 877 1072 959 1112 3633 current	58 0 20 2 222 1774 757 1025 3626 history1	14 0 69 <1 1081 1339 1051 1345 2569 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	limit/base >22 >31	13 0 57 <1 877 1072 959 1112 3633 current 6 42	58 0 20 2 222 1774 757 1025 3626 history1 18 258	14 0 69 <1 1081 1339 1051 1345 2569 history2 5 10
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm	ASTM D5185m	limit/base >22 >31	13 0 57 <1 877 1072 959 1112 3633 current 6 42 27	58 0 20 2 2 222 1774 757 1025 3626 history1 18 258 203	14 0 69 <1 1081 1339 1051 1345 2569 history2 5 10 1
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Glycol	ppm	ASTM D5185m Tethod ASTM D5185m	limit/base >22 >31 >20	13 0 57 <1 877 1072 959 1112 3633 current 6 42 27 NEG	58 0 20 2 222 1774 757 1025 3626 history1 18 258 203 0.10	14 0 69 <1 1081 1339 1051 1345 2569 history2 5 10 1 NEG
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Glycol INFRA-RED	ppm	ASTM D5185m ASTM D2982	limit/base >22 >31 >20 limit/base	13 0 57 <1 877 1072 959 1112 3633 current 6 42 27 NEG current 0.1	58 0 20 2 222 1774 757 1025 3626 history1 18 ▲ 258 ▲ 203 ● 0.10 history1	14 0 69 <1 1081 1339 1051 1345 2569 history2 5 10 1 NEG history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Glycol INFRA-RED Soot %	ppm	ASTM D5185m *ASTM D5185m	limit/base >22 >31 >20 limit/base >3	13 0 57 <1 877 1072 959 1112 3633 current 6 42 27 NEG	58 0 20 2 222 1774 757 1025 3626 history1 18 ▲ 258 ▲ 203 ● 0.10 history1 0.1	14 0 69 <1 1081 1339 1051 1345 2569 history2 5 10 1 NEG history2 0.2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Glycol INFRA-RED Soot % Nitration	ppm	ASTM D5185m *ASTM D7844 *ASTM D7844 *ASTM D7624	limit/base >22 >31 >20 limit/base >3 >20	13 0 57 <1 877 1072 959 1112 3633 current 6 42 27 NEG current 0.1 6.3	58 0 20 2 222 1774 757 1025 3626 history1 18 ▲ 258 ▲ 203 ● 0.10 history1 0.1 11.4	14 0 69 <1 1081 1339 1051 1345 2569 history2 5 10 1 NEG history2 0.2 13.5
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Glycol INFRA-RED Soot % Nitration Sulfation FLUID DEGRAD	ppm	ASTM D5185m *ASTM D5185m *ASTM D5185m *ASTM D5185m *ASTM D5185m *ASTM D5185m *ASTM D2982 *ASTM D7844 *ASTM D7844 *ASTM D7844 *ASTM D7624 *ASTM D7415 *Method	limit/base >22 >31 >20 limit/base >3 >20 >30 limit/base	13 0 57 <1 877 1072 959 1112 3633 current 6 42 27 NEG current 0.1 6.3 17.4 current	58 0 20 2 222 1774 757 1025 3626 history1 18 258 203 0.10 history1 0.1 11.4 24.7 history1	14 0 69 <1 1081 1339 1051 1345 2569 history2 5 10 1 NEG history2 0.2 13.5 23.4 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Glycol INFRA-RED Soot % Nitration Sulfation	ppm	ASTM D5185m *ASTM D78185m *ASTM D78185m *ASTM D78185m *ASTM D7814 *ASTM D7844 *ASTM D7844 *ASTM D7844 *ASTM D7844 *ASTM D7844 *ASTM D7844	limit/base >22 >31 >20 limit/base >3 >20 >30	13 0 57 <1 877 1072 959 1112 3633 current 6 42 27 NEG current 0.1 6.3 17.4	58 0 20 2 222 1774 757 1025 3626 history1 18 ▲ 258 ▲ 203 ● 0.10 history1 0.1 11.4 24.7	14 0 69 <1 1081 1339 1051 1345 2569 history2 5 10 1 NEG history2 0.2 13.5 23.4



OIL ANALYSIS REPORT







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	>0.21	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG
ELLID DDODEDT	150	l	15 14-/1		la fact a const	la la la va o

Visc @ 100°C	cSt	ASTM D445	13.8	14.1	15.4

	GRAPHS						
	Iron (ppm)				Lead (ppm)		
200	Severe			100 T	Severe	1	
150							
퉙 100-				툽 4n			
50-	Abnormal			20 -	Abnormal		
0	0	2		0		2	3
	May19/20	Sep14/22	Jan 12/23		May1 9/20	Sep14/22	Jan12/23
	≥ Aluminum (ppm)	09	¬		≅ Chromium (ppm)	69	7
60 T	Severe			²⁵ T	Severe		
50 -				20 -	Q	1	
표30-	Abnormal			E 15	Abnormal		
20 10				5			
0				0			_
	May19/20	Sep 14/22	Jan 12/23		May19/20	Sep14/22	Jan 12/23
		S.	Jai			S	Ja
150 T	Copper (ppm)			40 T	Silicon (ppm)		
	Severe			30 -	Severe		
100- E				틆20-	Abnormal		
50	Abarrad			10			
0	Abnormal			0			
	9/20	Sep14/22	Jan12/23		9/20 -	Sep14/22	Jan 12/23
	May19/20	Sep1	Jan1		May19/20	Sep1	Jan1
18 -	Viscosity @ 100°C			12.0 _T	Base Number		
	Abnormal		DH/a)	10.0			_
0.00			(ma K	8.0			
cSt (100°C)	Abnormal		mber	6.0	Abnormal		
12-			N ase	8.0 + 6.0 + 4.0 +	Severe		
101				0.0 ±			- 62
	May19/20	Sep 14/22	Jan 12/23	;	May1 9/20	Sep 14/22	Jan12/23





Certificate L2367

Laboratory Sample No. Lab Number Test Package : MOB 2

Unique Number : 10322459

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : WC0721338 : 05757852

Received Diagnosed

: 02 Feb 2023 : 06 Feb 2023 Diagnostician : Jonathan Hester TRESCA BROS SAND & GRAVEL INC

66 MAIN ST MILLIS, MA US 02054

F: (508)376-4333

Contact: FRAN ROSSI frossi@trescaconcrete.com T: (508)376-2957

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)