

OIL ANALYSIS REPORT

Sample Rating Trend

WEAR



Area **2H28**

PETERBILT 348 RTK9844 (S/N 2NP3)

Transmission (Auto)

{not provided} (--- GAL)

DIAGNOSIS

Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor.

The iron level is abnormal. All other component wear rates are normal.

Contamination

There is no indication of any contamination in the fluid.

Fluid Condition

The condition of the fluid is acceptable for the time in service.

3XJ0X8HM44	3144)	Any2017 Jan25	118 Oct2018 Aug2019	Jan2020 Jun2020 Oct/020	Sep. 2022	<u> </u>	
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2	
Sample Number		Client Info		ARI06125258	ARI05636930	ARI0002245	
Sample Date		Client Info		20 Mar 2024	07 Sep 2022	02 Feb 2021	
Machine Age	mls	Client Info		158514	130773	88264	

Sample Date		Client Info		20 Mar 2024	07 Sep 2022	02 Feb 2021
Machine Age	mls	Client Info		158514	130773	88264
Oil Age	mls	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Sample Status				ABNORMAL	NORMAL	NORMAL
CONTAMINATIO	N	method	limit/base	current	history1	history2
Water		WC Method	>0.1	NEG	NEG	NEG
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>160	168	123	70
Chromium	ppm	ASTM D5185m	>5	0	<1	<1
Nickel	ppm	ASTM D5185m	>5	0	0	<1
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m	>5	0	0	<1
Aluminum	ppm	ASTM D5185m	>50	29	23	12
Lead	ppm	ASTM D5185m	>50	2	4	4
Copper	ppm	ASTM D5185m	>225	18	17	7
Tin	ppm	ASTM D5185m	>10	<1	2	<1
Antimony	ppm	ASTM D5185m				0
Vanadium	ppm	ASTM D5185m		0	0	<1
Cadmium	ppm	ASTM D5185m		0	0	<1
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		440	127	131
Doloii	ppiii	AOTIVI DOTODITI		110	12/	131
Barium	ppm	ASTM D5185m		0	0	0
Barium	ppm	ASTM D5185m		0	0	0
Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m		0	0	0
Barium Molybdenum Manganese	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m		0 0 1	0 1 1	0 0 <1
Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		0 0 1 <1	0 1 1 2	0 0 <1 0
Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		0 0 1 <1 32	0 1 1 2 37	0 0 <1 0 32
Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		0 0 1 <1 32 270	0 1 1 2 37 263	0 0 <1 0 32 281
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	limit/base	0 0 1 <1 32 270 8	0 1 1 2 37 263 16	0 0 <1 0 32 281
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		0 0 1 <1 32 270 8 379	0 1 1 2 37 263 16 292	0 0 <1 0 32 281 0 316
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	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		0 0 1 <1 32 270 8 379	0 1 1 2 37 263 16 292 history1	0 0 <1 0 32 281 0 316 history2
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	>20	0 0 1 <1 32 270 8 379 current	0 1 1 2 37 263 16 292 history1	0 0 0 <1 0 32 281 0 316 history2
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	>20	0 0 1 <1 32 270 8 379 current 4	0 1 1 2 37 263 16 292 history1 4	0 0 -<1 0 32 281 0 316 history2 3
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	>20 >20	0 0 1 <1 32 270 8 379 current 4	0 1 1 2 37 263 16 292 history1 4	0 0 0 <1 0 32 281 0 316 history2 3 3
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium VISUAL	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>20 >20 limit/base	0 0 1 <1 32 270 8 379 current 4 4 0	0 1 1 2 37 263 16 292 history1 4 1 0	0 0 <1 0 32 281 0 316 history2
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium VISUAL White Metal	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>20 >20 limit/base NONE	0 0 1 <1 32 270 8 379 current 4 4 0	0 1 1 2 37 263 16 292 history1 4 1 0 history1 NONE	0 0 0 <1 0 32 281 0 316 history2 3 3 6 history2 NONE
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium VISUAL White Metal Yellow Metal	ppm	ASTM D5185m method ASTM D5185m ASTM D5185m **Visual **Visual	>20 >20 limit/base NONE NONE	0 0 1 <1 32 270 8 379 current 4 4 0 current NONE	0 1 1 2 37 263 16 292 history1 4 1 0 history1 NONE NONE	0 0 0 31 2 281 0 316 history2 3 3 6 history2 NONE
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate	ppm	ASTM D5185m METhod ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m Wethod *Visual	>20 >20 limit/base NONE NONE NONE	0 0 1 <1 32 270 8 379 current 4 0 current NONE NONE	0 1 1 2 37 263 16 292 history1 4 1 0 history1 NONE NONE	0 0 0 32 281 0 316 history2 3 3 6 history2 NONE NONE
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt	ppm	ASTM D5185m method ASTM D5185m ASTM D5185m **Visual **Visual **Visual	>20 self-self-self-self-self-self-self-self-	0 0 1 <1 32 270 8 379 current 4 4 0 current NONE NONE NONE	0 1 1 2 37 263 16 292 history1 4 1 0 history1 NONE NONE NONE NONE	0 0 0 32 281 0 316 history2 3 3 6 history2 NONE NONE NONE
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt Debris	ppm	ASTM D5185m method ASTM D5185m ASTM D5185m *Visual *Visual *Visual *Visual *Visual	>20 simit/base NONE NONE NONE NONE NONE NONE NONE	0 0 1 <1 32 270 8 379 current 4 4 0 current NONE NONE NONE NONE NONE NONE NONE	0 1 1 2 37 263 16 292 history1 4 1 0 history1 NONE NONE NONE NONE NONE NONE NONE	0 0 0 31 32 281 0 316 history2 3 3 6 history2 NONE NONE NONE
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt Debris Sand/Dirt	ppm	ASTM D5185m method ASTM D5185m ASTM D5185m *Visual *Visual *Visual *Visual *Visual *Visual *Visual *Visual *Visual	>20 limit/base NONE NONE NONE NONE NONE NONE NONE NONE	0 0 1 <1 32 270 8 379 current 4 4 0 current NONE NONE NONE NONE NONE NONE NONE NON	0 1 1 2 37 263 16 292 history1 4 1 0 history1 NONE NONE NONE NONE NONE NONE NONE NON	0 0 0 32 281 0 316 history2 3 3 6 history2 NONE NONE NONE NONE

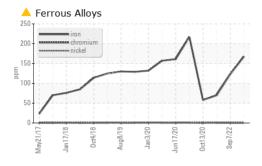
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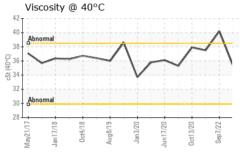
scalar *Visual

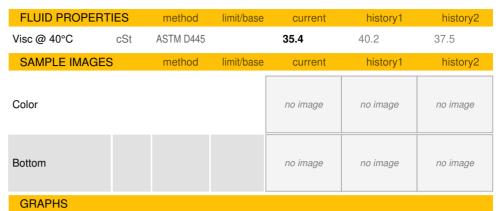
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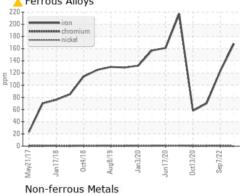
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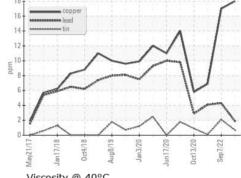




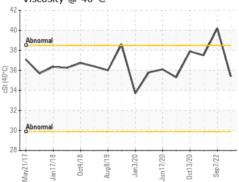


Ferrous Alloys 200





Viscosity @ 40°C







Certificate L2367

Laboratory Sample No. Unique Number : 10939409

Test Package : CONST

: ARI06125258 Lab Number : 06125258

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 21 Mar 2024 **Tested**

: 25 Mar 2024 : 25 Mar 2024 - Don Baldridge Diagnosed

INSITUFORM TECHNOLOGIES, INC

17988 EDISON AVE. CHESTERFIELD, MO US 63005

Contact: JOHN SLOAN

ARICHTER@INSITUFORM.COM T: (314)280-7555

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)

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