

OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id

9 Component Natural Gas Engine

PETRO CANADA SENTRON LD 3000 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

Wear

All component wear rates are normal.

Contamination

Tests indicate that there is no fuel present in the oil. There is no indication of any contamination in the oil.

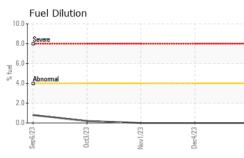
Fluid Condition

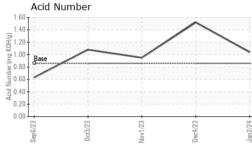
The BN result indicates that there is suitable alkalinity remaining in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

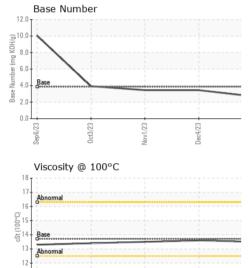
Sample Date Client Info 02 Jan 2024 04 Dec 2023 01 Nov 2023 Machine Age hrs Client Info 136570 135879 135934 Oil Changed Client Info 3823 3132 2347 Oil Changed Client Info Not Changd Not Changd Not Changd Sample Status Imit bos current History1 History2 Water WC Method >0.1 NEG NEG NEG Water WC Method >0.1 NEG NEG NEG Chromium ppm ASTM D5185m >2 0 0 0 Nickel ppm ASTM D5185m >3 0 0 0 Nickel ppm ASTM D5185m >3 0 0 0 0 Nickel ppm ASTM D5185m >3 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	AL)		Sep2023	0ct2023	Nov2023 Dec2023	Jan2024	
Sample Date Client Info 02 Jan 2024 04 Dec 2023 01 Nov 2023 Machine Age hrs Client Info 136570 135879 135094 Oil Age hrs Client Info 3823 3132 2347 Oil Changed Client Info Not Changd Not Changd Not Changd Nor MAL Sample Status Imit box Current history1 history2 Water WC Method >0.1 NEG NEG NEG Wear WC Method >0.1 NEG NEG NEG Vear WC Method >0.1 NEG NEG NEG Variant ppm ASTM D5185m >4 <1 <1 <1 Nickel ppm ASTM D5185m >3 0 0 0 Nickel ppm ASTM D5185m >3 0 0 0 Aumoun ppm ASTM D5185m >3 0 0 0 Silver ppm A	SAMPLE INFOF	RMATION	method	limit/base	current	history1	history2
Machine Age hrs Client Info 38570 135879 135094 Oil Age hrs Client Info 3823 3132 2347 Oil Changed Client Info 3823 3132 2347 Oil Changed Client Info Not Changd Not Changd Not Changd Sample Status Imit/base current History1 History2 Water WC Method >0.1 NEG NEG NEG WEAR METALS method imit/base current History1 History2 Itanium ppm ASTM D5185m >50 8 4 2 Itanium ppm ASTM D5185m >2 0 0 0 Itanium ppm ASTM D5185m >3 0 0 0 1 Copper ppm ASTM D5185m >4 0 0 0 0 Cadmium ppm ASTM D5185m 5 0 0 0 0 0	Sample Number		Client Info		PCA0112027	PCA0111958	PCA0103425
Oil Age hrs Client Info 3823 3132 2347 Oil Changed Client Info Not Changd Not Changd Not Changd Sample Status Imil/base current history1 Not Changd Water WC Method >0.1 NEG NEG NEG Water WC Method >0.1 NEG NEG NEG Controntum ppm ASTM D5185m >50 8 4 2 Chromium ppm ASTM D5185m >2 0 0 0 Nickel ppm ASTM D5185m >3 0 0 0 Adumium ppm ASTM D5185m >3 0 0 0 Adumium ppm ASTM D5185m >3 0 0 0 0 Yanadium ppm ASTM D5185m >3 0 0 0 0 Yanadium ppm ASTM D5185m >0 0 0 0 <	Sample Date		Client Info		02 Jan 2024	04 Dec 2023	01 Nov 2023
Dil Changed Client Info Not Changd NORMAL Not Changd NORMAL Not Changd NORMAL CONTAMINATION method linit/base current history1 history2 Water WC Method >0.1 NEG NEG NEG Water WC Method >0.1 NEG NEG NEG Wear WC Method >0.1 NEG NEG NEG Wickel ppm ASTM D5185m >4 <1 <1 Nitory1 Nickel ppm ASTM D5185m >2 0 0 0 Nickel ppm ASTM D5185m >3 0 0 0 Aluminum ppm ASTM D5185m >30 3 2 <1 Lead ppm ASTM D5185m >30 3 2 <1 Vanadium ppm ASTM D5185m >30 3 2 <1 Vanadium ppm ASTM D5185m >4 0 0 0 AsTM D5185m >4 0 0 0 0 AsTM D5185m 1 0 0 0 0 AsTM D5185m 1 0 0 <1 0 AsTM D5185m	Machine Age	hrs	Client Info		136570	135879	135094
Stample Status NORMAL NORMAL NORMAL NORMAL NORMAL CONTAMINATION 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 >50 8 4 2 Chromium ppm ASTM D5185m >2 0 0 0 Nickel ppm ASTM D5185m >3 0 0 0 Itanium ppm ASTM D5185m >3 0 0 0 Copper ppm ASTM D5185m >3 0 0 0 Copper ppm ASTM D5185m >4 0 0 0 Cadmium ppm ASTM D5185m 2 1 0 0 Cadmium ppm ASTM D5185m 2 1 0 0	Oil Age	hrs	Client Info		3823	3132	2347
CONTAMINATION method limit/base current history1 history2 Water WC Method >0.1 NEG NEG NEG Wear method limit/base current history1 history2 Iron ppm ASTM DS185m >50 8 4 2 Chromium ppm ASTM DS185m >4 -1 <1 <1 Nickel ppm ASTM DS185m >2 0 0 0 Aluminum ppm ASTM DS185m >3 0 0 0 Aluminum ppm ASTM DS185m >30 3 2 <1 <1 Lead ppm ASTM DS185m >30 3 2 <1 <0 Vanadium ppm ASTM DS185m >4 0 0 0 0 Vanadium ppm ASTM DS185m 0 0 0 0 0 Vanadium ppm ASTM DS185m	Oil Changed		Client Info		Not Changd	Not Changd	Not Changd
Water WC Method >0.1 NEG NEG NEG WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185m >50 8 4 2 Chromium ppm ASTM D5185m >2 0 0 0 Nickel ppm ASTM D5185m >2 0 0 0 Silver ppm ASTM D5185m >3 0 0 0 Aduminum ppm ASTM D5185m >35 <1 0 0 0 Adaminum ppm ASTM D5185m >35 <1 0 0 0 Vanadium ppm ASTM D5185m >4 0 0 0 0 Adaminum ppm ASTM D5185m 5 0 0 0 0 Adaminum ppm ASTM D5185m 1 0 0 0 0 Adaminum ppm ASTM D5	Sample Status				NORMAL	NORMAL	NORMAL
WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185m >50 8 4 2 Chromium ppm ASTM D5185m >2 0 0 0 Nickel ppm ASTM D5185m >2 0 0 0 Silver ppm ASTM D5185m >3 0 0 0 Aluminum ppm ASTM D5185m >3 0 0 0 Lead ppm ASTM D5185m >3 0 0 0 1 Vanadium ppm ASTM D5185m >35 <1 0 0 0 Cadmium ppm ASTM D5185m 0 0 0 0 0 Barium ppm ASTM D5185m 5 0 0 0 0 Magaese ppm ASTM D5185m 1 0 0 1 0 Cadrium ppm A	CONTAMINA	ΓΙΟΝ	method	limit/base	current	history1	history2
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Dr. ASTM D5185m >4 <1	WEAR METAI	S	method	limit/base	current	history1	history2
Nickel ppm ASTM D5185m >2 0 0 0 Titanium ppm ASTM D5185m >3 0 0 0 Silver ppm ASTM D5185m >3 0 0 0 Aluminum ppm ASTM D5185m >9 2 <1 <1 Lead ppm ASTM D5185m >30 3 2 <1 Copper ppm ASTM D5185m >30 3 2 <1 Vanadium ppm ASTM D5185m >30 3 0 0 <1 Vanadium ppm ASTM D5185m >4 0 0 0 0 Cadmium ppm ASTM D5185m 5 0 0 0 0 Marganese ppm ASTM D5185m 1 0 0 <1 Marganese ppm ASTM D5185m 2 1 0 <1 Marganesium ppm ASTM D5185m <	Iron	ppm	ASTM D5185m	>50	8	4	2
Titanium ppm ASTM D5185m 0 0 0 0 Silver ppm ASTM D5185m >3 0 0 0 Aluminum ppm ASTM D5185m >9 2 <1 <1 Lead ppm ASTM D5185m >30 3 2 <1 Copper ppm ASTM D5185m >35 <1 0 0 Tin ppm ASTM D5185m >4 0 0 <1 Vanadium ppm ASTM D5185m 2 0 0 0 Cadmium ppm ASTM D5185m 5 0 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 5 0 0 0 Magnesium ppm ASTM D5185m 1220 1401 1398 1327 Phosphorus ppm ASTM D5185m 1220 1401 1398 <th>Chromium</th> <th>ppm</th> <th>ASTM D5185m</th> <th>>4</th> <th><1</th> <th><1</th> <th><1</th>	Chromium	ppm	ASTM D5185m	>4	<1	<1	<1
Silver ppm ASTM D5185m >3 0 0 0 Aluminum ppm ASTM D5185m >9 2 <1 <1 Lead ppm ASTM D5185m >30 3 2 <1 Copper ppm ASTM D5185m >30 3 2 <1 Vanadium ppm ASTM D5185m >30 3 2 <1 Vanadium ppm ASTM D5185m >30 0 0 <1 Vanadium ppm ASTM D5185m 2 0 0 0 0 Cadmium ppm ASTM D5185m 1 0 0 0 0 Barium ppm ASTM D5185m 1 0 0 <1 0 Magnese ppm ASTM D5185m 120 1401 1398 1327 Phosphorus ppm ASTM D5185m 1220 1401 1398 1327 Phosphorus ppm ASTM D	Nickel	ppm	ASTM D5185m	>2	0	0	0
Aluminum ppm ASTM D5185m >9 2 <1	Titanium	ppm	ASTM D5185m		0	0	0
Lead ppm ASTM D5185m >30 3 2 <1	Silver	ppm	ASTM D5185m	>3	0	0	0
Copper ppm ASTM D5185m >35 <1	Aluminum	ppm	ASTM D5185m	>9	2	<1	<1
Tin ppm ASTM D5185m >4 0 0 <1	Lead	ppm	ASTM D5185m	>30	3	2	<1
Vanadium ppm ASTM D5185m 0 0 0 0 Cadmium ppm ASTM D5185m 0 0 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 5 0 0 0 Barium ppm ASTM D5185m 1 0 0 0 Manganese ppm ASTM D5185m 2 1 0 0 Magnesium ppm ASTM D5185m 1220 1401 1398 1327 Phosphorus ppm ASTM D5185m 1220 1401 1398 357 Sulfur ppm ASTM D5185m 298 327 296 295 Zinc ppm ASTM D5185m 1995 2596 24777 2427 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >20 <td< th=""><th>Copper</th><th>ppm</th><th>ASTM D5185m</th><th>>35</th><th><1</th><th>0</th><th>0</th></td<>	Copper	ppm	ASTM D5185m	>35	<1	0	0
Cadmium ppm ASTM D5185m 0 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 5 0 0 0 Barium ppm ASTM D5185m 1 0 0 0 Molybdenum ppm ASTM D5185m 2 1 0 0 <1 Magnese ppm ASTM D5185m 1 0 0 <1 0 Magnesium ppm ASTM D5185m 1220 1401 1398 1327 Phosphorus ppm ASTM D5185m 1220 1401 1398 357 Sulfur ppm ASTM D5185m 1295 2596 2477 2427 CONTAMINANTS method limit/base current history1 history2 Solicon ppm ASTM D5185m >20 1 0 0 0 Potassium ppm ASTM D5185m	Tin	ppm	ASTM D5185m	>4	0	0	<1
ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 5 0 0 0 Barium ppm ASTM D5185m 1 0 0 0 Marganese ppm ASTM D5185m 2 1 0 0 Marganese ppm ASTM D5185m 2 1 0 0 Magnesium ppm ASTM D5185m 2 1 0 0 Calcium ppm ASTM D5185m 1220 1401 1398 1327 Phosphorus ppm ASTM D5185m 1280 354 380 357 Sulfur ppm ASTM D5185m 1995 2596 2477 2427 CONTAMINANTS method limit/base current history1 history2 Solicon ppm ASTM D5185m >40 0 0 0 Potassium ppm ASTM D5185m >20 1<	Vanadium	ppm	ASTM D5185m		0	0	0
Boron ppm ASTM D5185m 5 0 0 0 Barium ppm ASTM D5185m 1 0 0 0 Molybdenum ppm ASTM D5185m 2 1 0 0 Manganese ppm ASTM D5185m 1 0 0 <1 Magnesium ppm ASTM D5185m 5 9 11 10 Calcium ppm ASTM D5185m 1220 1401 1398 1327 Phosphorus ppm ASTM D5185m 1220 1401 1398 1327 Phosphorus ppm ASTM D5185m 298 327 296 295 Zinc ppm ASTM D5185m 350 354 380 357 Sulfur ppm ASTM D5185m 1995 2596 2477 2427 CONTAMINANTS method limit/base current history1 history2 Solicon ppm ASTM D5185m 20	Cadmium	ppm	ASTM D5185m		0	0	0
Barium ppm ASTM D5185m 1 0 0 0 Molybdenum ppm ASTM D5185m 2 1 0 0 Manganese ppm ASTM D5185m 1 0 0 <1 Magnesium ppm ASTM D5185m 5 9 11 10 Calcium ppm ASTM D5185m 1220 1401 1398 1327 Phosphorus ppm ASTM D5185m 298 327 296 295 Zinc ppm ASTM D5185m 350 354 380 357 Sulfur ppm ASTM D5185m 1995 2596 2477 2427 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >10 0 0 0 Potassium ppm ASTM D5185m >20 1 0 0 0 Nitration Abs/cm ASTM D7624	ADDITIVES		method	limit/base	current	history1	history2
Molybdenum ppm ASTM D5185m 2 1 0 0 Manganese ppm ASTM D5185m 1 0 0 <1 Magnesium ppm ASTM D5185m 1 0 0 <1 Calcium ppm ASTM D5185m 1220 1401 1398 1327 Phosphorus ppm ASTM D5185m 298 327 296 295 Zinc ppm ASTM D5185m 350 354 380 357 Sulfur ppm ASTM D5185m 1995 2596 2477 2427 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >+100 2 2 2 Sodium ppm ASTM D5185m >20 1 0 0 Potassium ppm ASTM D5185m >20 1 0 0 Roto ASTM D5185m >20 1 <	Boron	ppm	ASTM D5185m	5	0	0	0
Manganese ppm ASTM D5185m 1 0 0 <1	Barium	ppm	ASTM D5185m	1	0	0	0
Magnesium ppm ASTM D5185m 5 9 11 10 Calcium ppm ASTM D5185m 1220 1401 1398 1327 Phosphorus ppm ASTM D5185m 298 327 296 295 Zinc ppm ASTM D5185m 350 354 380 357 Sulfur ppm ASTM D5185m 1995 2596 2477 2427 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >+100 2 2 2 2 Sodium ppm ASTM D5185m >+100 2 2 2 2 Sodium ppm ASTM D5185m >20 1 0 0 0 Fuel % ASTM D5185m >20 1 0 0 0 Soot % % *ASTM D7844 0 0 0 0 0 0 0 <th>Molybdenum</th> <th>ppm</th> <th></th> <th>2</th> <th>1</th> <th>0</th> <th>0</th>	Molybdenum	ppm		2	1	0	0
Calcium ppm ASTM D5185m 1220 1401 1398 1327 Phosphorus ppm ASTM D5185m 298 327 296 295 Zinc ppm ASTM D5185m 350 354 380 357 Sulfur ppm ASTM D5185m 1995 2596 2477 2427 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >+100 2 2 2 Sodium ppm ASTM D5185m >+100 0 0 0 Potassium ppm ASTM D5185m >20 1 0 0 Fuel % ASTM D3524 >4.0 0.0 0.0 0.0 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 0 0 0 0 Sulfation Abs/cm *ASTM D7624 >20	Manganese	ppm	ASTM D5185m	1	0	0	<1
Phosphorus ppm ASTM D5185m 298 327 296 295 Zinc ppm ASTM D5185m 350 354 380 357 Sulfur ppm ASTM D5185m 1995 2596 2477 2427 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >+100 2 2 2 Sodium ppm ASTM D5185m >+100 2 2 2 Sodium ppm ASTM D5185m >+100 0 0 0 Potassium ppm ASTM D5185m >20 1 0 0 Fuel % ASTM D3524 >4.0 0.0 0.0 0 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 0 0 0 0 Sulfation Abs/.1mm *ASTM D7624 >20 <t< th=""><th>Magnesium</th><th>ppm</th><th>ASTM D5185m</th><th>5</th><th>9</th><th>11</th><th>10</th></t<>	Magnesium	ppm	ASTM D5185m	5	9	11	10
Zinc ppm ASTM D5185m 350 354 380 357 Sulfur ppm ASTM D5185m 1995 2596 2477 2427 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >+100 2 2 2 Sodium ppm ASTM D5185m >+100 2 2 2 Sodium ppm ASTM D5185m >+100 0 0 0 Potassium ppm ASTM D5185m >20 1 0 0 Fuel % ASTM D324 >4.0 0.0 0.0 0.0 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7624 >20 5.0 5.1 4.9 Sulfation Abs/.mm< *ASTM D7415 >30 15.4 15.5 15.2 FLUID DEGRADATION method limit/base current	Calcium	ppm	ASTM D5185m	1220	1401	1398	1327
Sulfur ppm ASTM D5185m 1995 2596 2477 2427 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >+100 2 2 2 2 Sodium ppm ASTM D5185m >+100 2 2 2 2 Sodium ppm ASTM D5185m >+100 2 2 2 2 Sodium ppm ASTM D5185m >20 1 0 0 0 Potassium ppm ASTM D5185m >20 1 0 0 0 Fuel % ASTM D5185m >20 1 0 0 0 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7624 >20 5.0 5.1 4.9 Sulfation Abs/.mm< *ASTM D7415	Phosphorus	ppm	ASTM D5185m	298	327	296	295
CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >+100 2 2 2 2 Sodium ppm ASTM D5185m >+100 2 2 2 2 Sodium ppm ASTM D5185m >20 1 0 0 0 Potassium ppm ASTM D5185m >20 1 0 0 0 Fuel % ASTM D5185m >20 1 0 0 0 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 0 0 0 0 Nitration Abs/cm *ASTM D7624 >20 5.0 5.1 4.9 Sulfation Abs/.1mm *ASTM D7415 >30 15.4 15.5 15.2 FLUID DEGRADATION method limit/base current history1 history2	Zinc	ppm	ASTM D5185m	350	354	380	357
Silicon ppm ASTM D5185m >+100 2 2 2 Sodium ppm ASTM D5185m 0 0 0 0 Potassium ppm ASTM D5185m >20 1 0 0 Fuel % ASTM D3524 >4.0 0.0 0.0 0.0 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7624 >20 5.0 5.1 4.9 Sulfation Abs/cm *ASTM D7415 >30 15.4 15.5 15.2 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 9.3 9.3 8.7 Acid Number (AN) mg KOHg ASTM D8045 0.86 1.04 1.52 0.95	Sulfur	ppm	ASTM D5185m	1995	2596	2477	2427
Sodium ppm ASTM D5185m 0 0 0 0 Potassium ppm ASTM D5185m<>20 1 0 0 0 Fuel % ASTM D5185m<>20 1 0 0.0 0.0 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 0 0 0 0 Nitration Abs/cm *ASTM D7624 >20 5.0 5.1 4.9 Sulfation Abs/.1mm *ASTM D7415 >30 15.4 15.5 15.2 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 9.3 9.3 8.7 Acid Number (AN) mg KOHg ASTM D8045 0.86 1.04 1.52 0.95	CONTAMINA	NTS	method	limit/base	current	history1	history2
Potassium ppm ASTM D5185m >20 1 0 0 Fuel % ASTM D3524 >4.0 0.0 0.0 0.0 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 0 0 0 0 Nitration Abs/cm *ASTM D7624 >20 5.0 5.1 4.9 Sulfation Abs/.1mm *ASTM D7415 >30 15.4 15.5 15.2 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 9.3 9.3 8.7 Acid Number (AN) mg K0Hg ASTM D8045 0.86 1.04 1.52 0.95	Silicon	ppm	ASTM D5185m	>+100	2	2	2
Fuel % ASTM D3524 >4.0 0.0 0.0 0.0 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 0 0 0 0 Nitration Abs/cm *ASTM D7624 >20 5.0 5.1 4.9 Sulfation Abs/.1mm *ASTM D7415 >30 15.4 15.5 15.2 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 9.3 9.3 8.7 Acid Number (AN) mg KOH/g ASTM D8045 0.86 1.04 1.52 0.95	Sodium	ppm	ASTM D5185m		0	0	0
INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 0 0 0 0 Nitration Abs/cm *ASTM D7624 >20 5.0 5.1 4.9 Sulfation Abs/.1mm *ASTM D7415 >30 15.4 15.5 15.2 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 9.3 9.3 8.7 Acid Number (AN) mg KOH/g ASTM D8045 0.86 1.04 1.52 0.95	Potassium	ppm	ASTM D5185m	>20	1	0	0
Soot % % *ASTM D7844 0 0 0 0 Nitration Abs/cm *ASTM D7624 >20 5.0 5.1 4.9 Sulfation Abs/.1mm *ASTM D7415 >30 15.4 15.5 15.2 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 9.3 9.3 8.7 Acid Number (AN) mg KOH/g ASTM D8045 0.86 1.04 1.52 0.95	Fuel	%	ASTM D3524	>4.0	0.0	0.0	0.0
Nitration Abs/cm *ASTM D7624 >20 5.0 5.1 4.9 Sulfation Abs/.1mm *ASTM D7415 >30 15.4 15.5 15.2 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 9.3 9.3 8.7 Acid Number (AN) mg KOH/g ASTM D8045 0.86 1.04 1.52 0.95	INFRA-RED		method	limit/base	current	history1	history2
Sulfation Abs/.1mm *ASTM D7415 >30 15.4 15.5 15.2 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 9.3 9.3 8.7 Acid Number (AN) mg KOH/g ASTM D8045 0.86 1.04 1.52 0.95	Soot %	%	*ASTM D7844		0	0	0
FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 9.3 9.3 8.7 Acid Number (AN) mg KOH/g ASTM D8045 0.86 1.04 1.52 0.95	Nitration	Abs/cm	*ASTM D7624	>20	5.0	5.1	4.9
Oxidation Abs/.1mm *ASTM D7414 >25 9.3 9.3 8.7 Acid Number (AN) mg KOH/g ASTM D8045 0.86 1.04 1.52 0.95	Sulfation	Abs/.1mm	*ASTM D7415	>30	15.4	15.5	15.2
Acid Number (AN) mg KOH/g ASTM D8045 0.86 1.04 1.52 0.95	FLUID DEGRA	DATION	method	limit/base	current	history1	history2
	Oxidation	Abs/.1mm	*ASTM D7414	>25	9.3	9.3	8.7
Base Number (BN) mg KOH/g ASTM D2896 3.85 2.70 3.45 3.45	Acid Number (AN)	mg KOH/g	ASTM D8045	0.86	1.04	1.52	0.95
	Base Number (BN)		ASTM D2896	3.85	2.70	3.45	3.45



OIL ANALYSIS REPORT







11 Sep6/23

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		-,-	VISUAL		method	limit/base	cur	rent	history1	histo	ry2		
		١	White Metal	scalar	*Visual	NONE	NON	E	NONE	NONE			
		١	Yellow Metal	scalar	*Visual	NONE	NON	E	NONE	NONE			
		F	Precipitate	scalar	*Visual	NONE	NON	E	NONE	NONE			
		ę	Silt	scalar	*Visual	NONE	NON	E	NONE	NONE			
		- 0	Debris	scalar	*Visual	NONE	NON	E	NONE	NONE			
			Sand/Dirt	scalar	*Visual	NONE	NON	E	NONE	NONE			
Nov1/23	Dec4/23	Jan2/24	Appearance	scalar	*Visual	NORML	NOR	ML	NORML	NORM	1L		
No	De		Odor	scalar	*Visual	NORML	NOR	ML	NORML	NORM	1L		
		E	Emulsified Water	scalar	*Visual	>0.1	NEG		NEG	NEG			
	\wedge	F	Free Water	scalar	*Visual		NEG		NEG	NEG			
/			FLUID PROP	PERTIES	method	limit/base	cur	rent	history1	histo	ry2		
		- \	Visc @ 100°C	cSt	ASTM D445	13.7	13.5		13.6	13.5			
			GRAPHS										
		100				· ;	Lead (ppm)					
Nov1/23	Dec4/23 -	Jan2/24	Severe	· · · · · · · · · · · ·			0						
Nov	Dec	- 60	Abnormal			E E	0 - Abnormal		· · · · · · · · · · · · · · · · · · ·				
		40					0						
		20					0						
		0	Sep6/23	1/23	Dec4/23	Jan2/24	Sep6/23	0ct3/23	Nov1/23 -	Dec4/23	,		
			Sep6 Oct3	Nov1/23	Dec4	Jan2	Sep6	Octo	Nov1	Dect			
			Aluminum (ppn	ו)			Chrom	nium (pp	m)				
		20	Saura				8			1			
		15	Severe				6 - Severe						
/23	- //23	법 10	Abnormal				4 - Abnormal	1	1	 			
Nov1/23	Dec4/23	5					2						
		0					0						
			Sep 6/23 0ct3/23	Nov1/23	Dec4/23	Jan 2/24	Sep6/23	0ct3/23	Nov1/23	Dec4/23			
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		80	Copper (ppm)			20	Silicon	(ppm)					
			Severe		1								
		60					Abnormal						
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			Sept	Novi	Deck	Jan	Sep(Oct	Novi	Dec	1		
TITICATE L2367	Laboratory Sample No. Lab Number Unique Number Test Packag	: • : er :	PCA0112027 06057453 10823402	Diagnosed : 12 Jan 2024					ENERVEST OPERATING - HAYSI A 1242 WEST WIND ROAL HAYSI, VA US 24256 Contact: CHARLES GREGOR				
discuss thi	s sample repor	t, con	outside of the ISC	ervice at 1-8	300-237-136	9.			regory@usaco				