

OIL ANALYSIS REPORT

FRONT

Customer Information

Customer Name
Address
City, Province
Postal Code
Contact Name
Phone #
Fax #

Unit Information

Unit # :DIESEL
Component :ENGINE
Location :
Manufacturer:ABC MOTORS
Serial # :1234567890
Model :555

Lubricant

Manufacturer:ABC REFINERY
Brand :XYZ
Grade :15W40

FLUID LIFE
EQUIPMENT RELIABILITY SERVICES

Oil Analysis
9321 - 45 Street, Edmonton
Alberta, Canada, T6B 2R4
Phone: 877 962 2400

Sample		Contaminants			Wear Metals										Additives									
Sample Number	Sample Date	Sodium	Potassium	Silicon	Aluminum	Iron	Copper	Lead	Tin	Chromium	Nickel	Titanium	Silver	Vanadium	Antimony	Beryllium	Calcium	Zinc	Phosphorus	Magnesium	Molybdenum	Boron	Barium	Lithium
Ref Sample	2010/08/10	1	0	8	0	0	0	0	1	0	0	0	0	0	0	0	1752	1214	880	320	115	99	1	0
04/05-1032	2010/04/04	1	2	69S	5	131U	14	72S	9	4	2	0	0	0	0	0	1751	1163	874	332	130	64	1	
02/01-1061	2009/01/31	2	2	43U	5	103U	12	50U	7	5	2	0	0	1			1773	1112	877	322	120	77	2	
12/08-1112	2009/12/07	1	2	27R	3	63R	7	27R	7	3	2	0	0	1			1887	1291	809	384	127	76	1	
10/25-1103	2009/10/24	0	2	14	2	33	6	5	5	2	0	0	0	0			1748	1193	860	355	106	96	1	
09/28-1083	2009/09/27	0	2	21R	2	53R	8	3	7	3	4	1	0	3			1654	1362	871	468	99	93	1	
09/08-1202	2009/09/07	0	2	34R	2	62R	9	7	8	2	3	0	0	2			1554	1211	893	453	108	74	3	

Sample Information

Sample Date	Oil Mfr.	Oil Brand	Oil Grade	Comp. Service	Oil Service	Units	Oil Cts	Visc 40°C cSt	Visc 100°C cSt	Visc Index	Water %	Glycol	Fuel %	Sediment %
Mfg Typical	MAN	XYZ	15W40					108.	14.25					
2010/04/04	MAN	XYZ	15W40	549089	34287	Km	Y	127.R	16.75R	127	N	N	N	5.0
2009/01/31	MAN	XYZ	15W40	516802	29527	Km	Y	120.	15.95	120	N	N	N	3.5
2009/12/07	MAN	XYZ	15W40	487275	25569	Km	Y	119.	15.42	119	N	N	N	2.5
2009/10/24	MAN	XYZ	15W40	461706	15985	Km	Y	111.	14.61	111	N	N	N	1.0
2009/09/27	MAN	XYZ	15W40	445721	20421	Km	Y	118.	14.73	118	N	N	N	1.0
2009/09/07	MAN	XYZ	15W40	425300	25327	Km	Y	116.	14.85	116	PR	N	N	0.5

Physical Tests

Additional Tests

Results

2010/04/04 Note wear elements increasing with increase of silicon and solids.

2009/01/31 Assuming normal oil service life, tested wear and contamination are within acceptable limits.

2009/12/07 Tested wear and contamination levels are within acceptable limits.

Recommendations

2010/04/04 Check causes of oil breakdown - overheating, poor cooling, wrong lube, excessive service or contaminated sample.

2009/01/31 Change lubricant and applicable filters. Sample viscosity does not correspond to viscosity of lube reported in use. Confirm identity of lube in use.

2009/12/07 Resample mid - interval to monitor. Check causes of elevated soot - restricted air intake, low turbo pressure, overfueling, blowby or spent oil filter. Severe levels of wear elements can indicate significant engine damage which may lead to imminent

Key: Y - Yes N - Negative P-Positive R - Reportable U - Unacceptable S - Severe I - Insufficient Sample > - More Than < - Less Than _ - User Flag Rule Applied

Results relate only to the samples tested, all testing is done at the above address unless stated. This is presented in abbreviated format. Additional information is available upon request. The Fluid Life Corporation shall not be liable for any loss of profits, business, damages, or losses of purpose, related to this report and recommendations.

The New Oil line shows the reference sample (shown as Ref. sample) if available or the oil manufacture's specification average (shown as Mfg Typical) if a references is not available. Reference sample date will be colored yellow if it is older than one year.

Sample information section provides lists current and previous sample tests for comparison.

Result comments describe key findings and things you should notice about your results. Up to six previous results are noted.

Key: Description of flag meanings

Elements put in categories with related elements together, such as Si and Al, Pb and Sn, Cr and Ni. Elements are also roughly ordered by how common they are in results.

Additional tests requested or as part of your test package are shown here.

Recommendations describe things you should consider doing based upon the findings. Up to six previous recommendations are noted.

Physical Tests have been ordered to put most common tests first and to show the actual tests done.

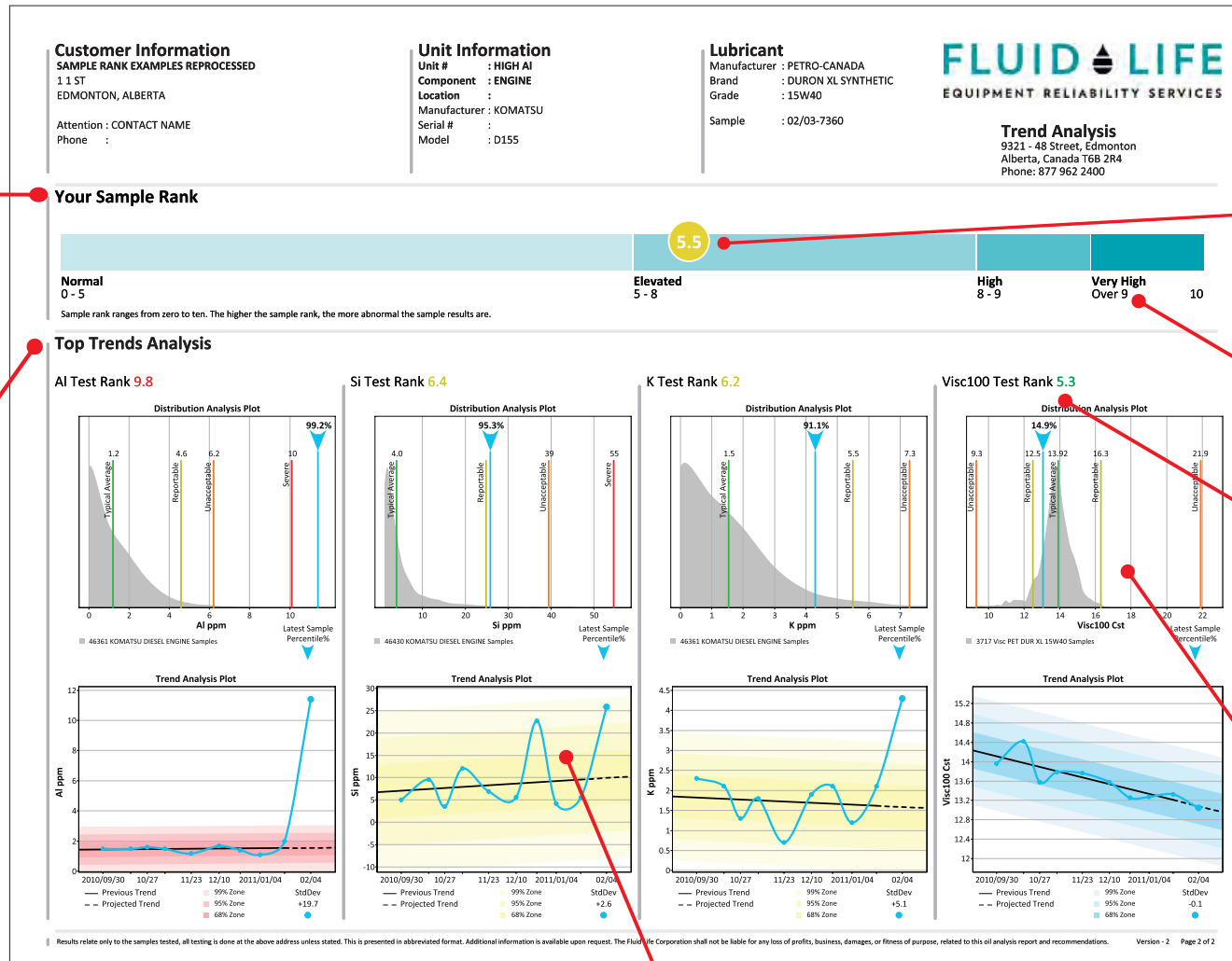
The viscosity index clearly identifies mixing and the use of single versus multi-grade oils.

Sample Rank:

Each sample is assigned a rank from 0 to 10, with higher ranks indicating more abnormal sample results. You should prioritize your review of results by the highest ranked samples you have yet to follow up on.

Top Trends Analysis

This section shows the four most abnormal test results based on how your results compared with similar samples, combined with how far the results are from the predicted trend.



This sample has a rank of 5.5, which is in the lower end of the 'Elevated' zone and shown in yellow. As the rank increases, it moves up the rank bar and changes color.

This text under the bars describe rank zones and indicate where they start and end.

Each test result is also given a rank from 0 to 10. Again, higher is more abnormal. The test and its rank are shown here above the graphs that led to its rank.

This graph shows how the current sample result relates to the results we see from all the samples in our database for similar samples. The flag limits and machine average levels are also shown on this graph if available.

This graph shows how far the current sample is off the trend set by the previous samples. The distance from the current result to the trend is shown.

Distribution Analysis Plot Features

Your latest result percentile* for this test. This is one of the primary pieces of information we use to rank your test results, and your samples.

This is the average or most typical result. 50% of results are lower and higher than it.

This gray area shows the distribution of all of the similar test results we've analyzed.

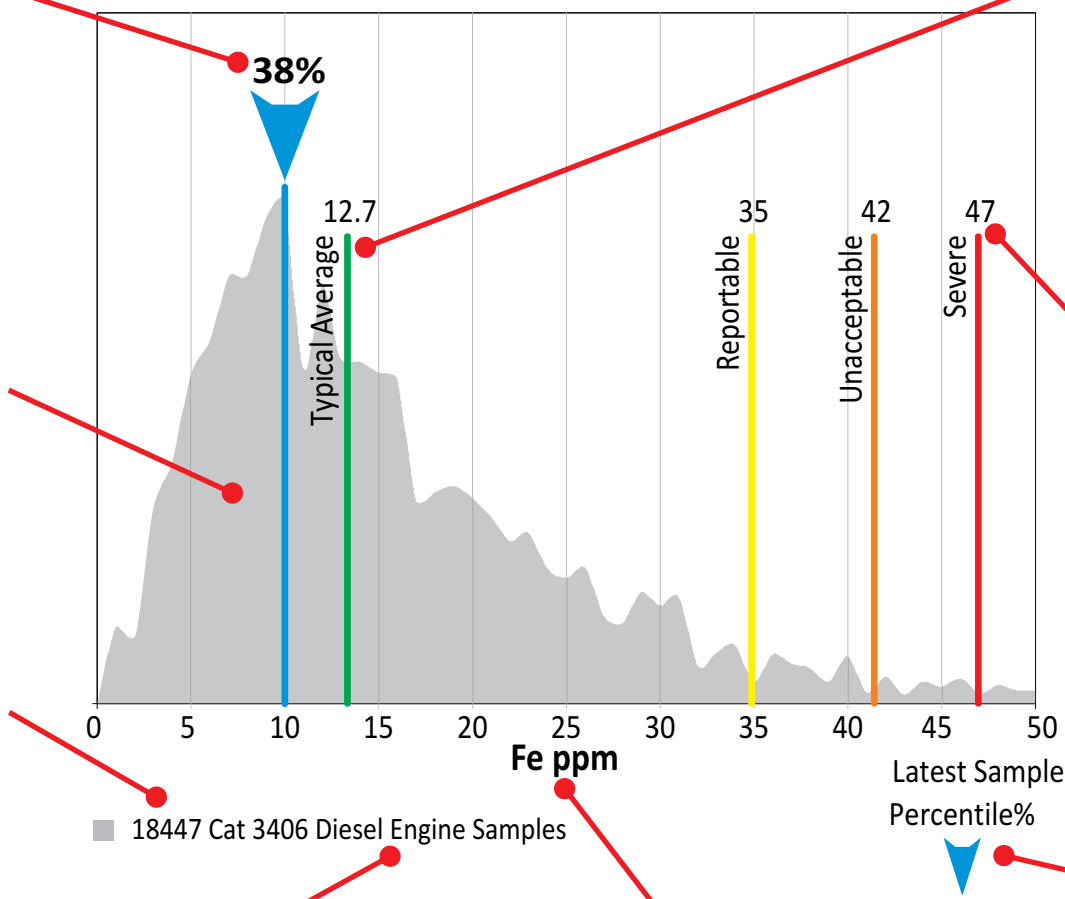
This is the total number of similar samples we're comparing to yours.

This is the type of samples being compared to. Depending on the type of test, we find the most specific match using the equipment and/or oil information provided.

This indicates which test is being graphed and in what units.

These are the flag limits currently applied to this test.

The legend indicates that your latest samples percentile for this test are shown above the teal arrow icon.



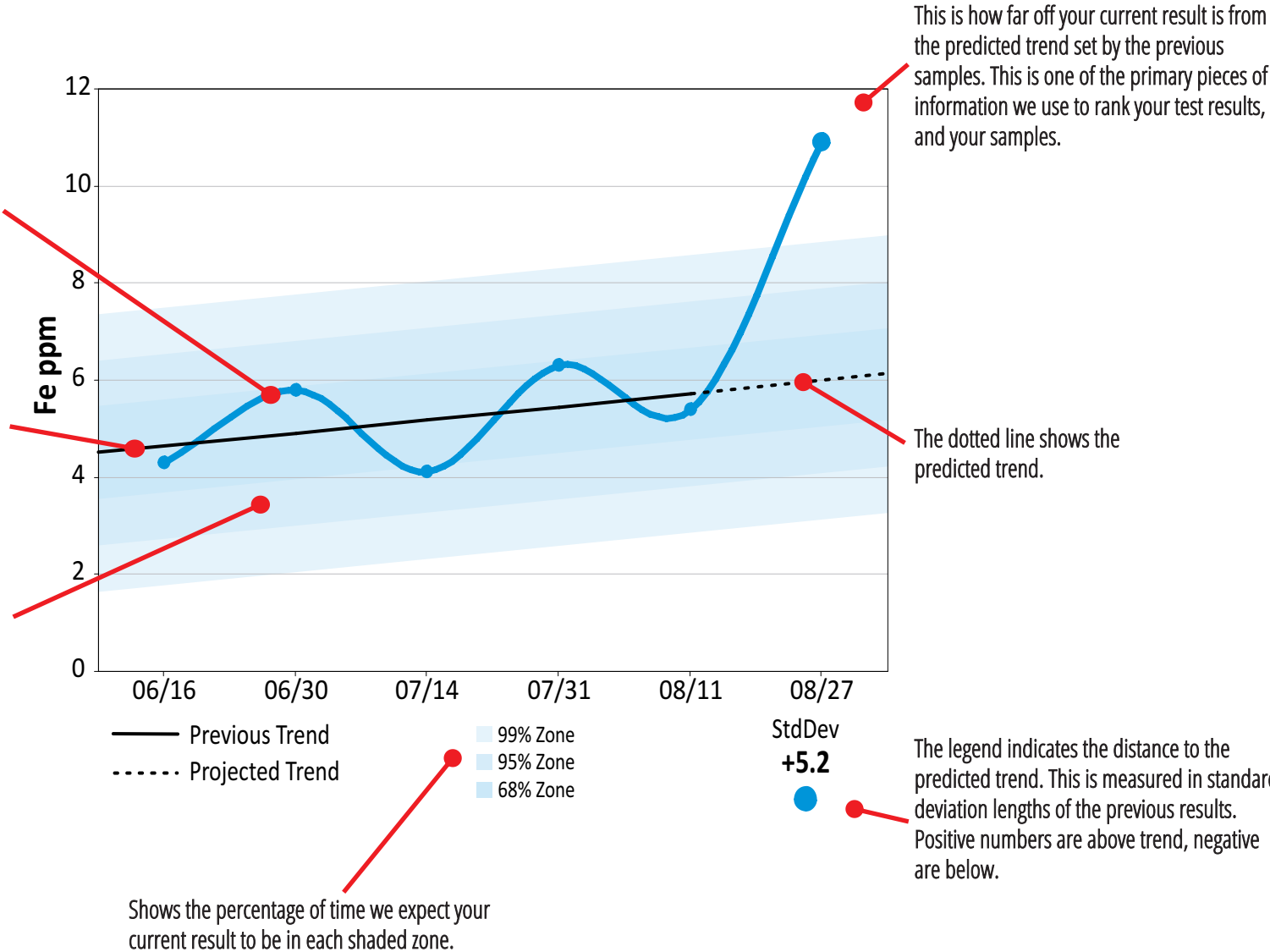
*Percentile is a measure of the percentage of similar test results that are lower than yours. For example, the 38th percentile shown in this example means that 38% of similar test results are lower than yours, and also that 62% are higher.

Trend Analysis Plot Features

Your previous results for this test are plotted by sample date.

This solid black line shows the trend set by your previous sample results.

The shaded areas show where we expect your current result to be based on the previous trend. The darker the shaded area, the closer to trend the result would be.



The trend set by your previous samples will be flat if there are less than four. The standard deviation we use has a minimum value based on the limitations of the instrumentation used to measure your results.