

Explanation of Laboratory Results

You will notice that the data report comes with several laboratory descriptions that may not be familiar to you. The following definitions of those descriptions may assist you in understanding your sample results:

Analyte The chemical or substance of interest

CAS No. *Chemical Abstracts Service Number*
A universal system to provide a unique, unmistakable identifier for chemical substances

Result (ng/L) *nanogram(s) per liter*
The amount of an analyte (chemical or substance of interest) determined to be present in the sample analyzed by the laboratory
1 nanogram per liter = 1 part per trillion

ND *Non-Detect*
Indicates the analyte was not detected

DL *Detection Limit*
The lowest analyte concentration that can confidently be distinguished from zero (or a blank) concentration

LOD *Limit of Detection*
The lowest analyte concentration that must be present in a sample to be confidently (i.e., consistently) detectable

LOQ *Limit of Quantitation*
The lowest concentration that produces a verified result within known and recorded precision and accuracy.

Qualifiers

"J" *Estimated Value*
Indicates the value reported for the analyte is above the DL but below the LOQ and was detected. The value reported is considered estimated.

"B" *Blank*
Indicates that this compound was also detected in the blank

"D" *Diluted Sample*
Indicates that this sample result was determined from a dilution analysis

Example of Lab Report with Definitions and Explanations



Project Client:
Project Name:
Project No.:

Client ID

Battelle ID 13392-F5
Sample Type SA
Collection Date 05/24/2019
Extraction Date 05/28/2019
Analysis Date 05/30/2019
Analytical Instrument Sciex 5500 LC/MS/MS
% Moisture NA
Matrix DW
Sample Size 0.260
Size Unit-Basis L

1 ng/L = 1 ppt
nanogram(s) part(s) per
per liter trillion

The result for PFOA:
PFOA was not detected in the sample, represented as "ND".
The result for PFOS:
PFOS was detected in the sample at 0.13 J ng/L (0.13 J ppt).
The result for PFOA + PFOS:
PFOA + PFOS was detected in the sample at 0.13 ng/L (0.13 ppt).

Analyte was not detected in this sample.
Represented as "ND" (Non-Detect).

Analyte	CAS No.	Result (ng/L)	DL	LOD	LOQ
DV QUALIFIER					
PFHxA	307-24-4	0.17	0.22	0.48	2.40
PFHpA	375-85-9	ND	0.22	0.48	2.40
PFOA	335-67-1	ND	0.19	0.48	2.40
PFNA	375-95-1	0.21 J	0.12	0.38	2.40
PFDA	335-76-2	ND	0.11	0.38	2.40
PFUnA	2058-94-8	ND	0.10	0.38	2.40
PFDoA	307-55-1	ND	0.13	0.48	2.40
PFTrDA	72629-94-8	ND	0.10	0.38	2.40
PFTeDA	376-06-7	ND	0.21	0.48	2.40
NMeFOSAA	2355-31-9	ND	0.19	0.48	2.40
NEtFOSAA	2991-50-6	ND	0.16	0.48	2.40
PFBS	375-73-5	ND	0.12	0.38	2.40
PFHxS	355-46-4	0.56 J	0.12	0.38	2.40
PFOS	1763-23-1	0.13 J	0.14	0.48	2.40
HFPO-DA	13252-13-6	ND	0.09	0.38	2.40
Adona	919005-14-4	ND	0.12	0.38	2.40
11Cl-PF3OUdS	763051-92-9	ND	0.10	0.38	2.40
9Cl-PF3ONS	756426-58-1	ND	0.12	0.38	2.40

Surrogate Recoveries (%)	Recovery
13C2-PFHxA	129
13C2-PFDA	113
d5-EtFOSAA	95
13C3-HFPO-DA	116

Data Validator's Signature

6/10/2019

The detection limit (**DL**) is the lowest analyte concentration that can confidently be distinguished from zero (or a blank) concentration.
The limit of detection (**LOD**) is the lowest analyte concentration that must be present in a sample to be confidently (i.e., consistently) detectable.
The limit of quantitation (**LOQ**) is the lowest concentration that produces a verified result within known and recorded precision and accuracy.

This is a data qualifier for this result. Possible qualifiers are:

"J" (Estimated Value) - Indicates the value reported for the analyte is greater than the DL but below the LOQ and was detected. The value reported is considered estimated.

"B" (Blank) - Indicates the compound also was detected in the blank.