

Lab #: 855615 Job #: 53302 IS-65777 Co. Job#:
Sample Name: NDCS-MPC-WS-1 Co. Lab#:
Company: University of North Dakota - Energy & Environm
API/Well:
Container: 1 Liter Plastic Bottle
Field/Site Name: North Dakota CarbonSafe (NDCS)
Location: Center, ND
Formation/Depth:
Sampling Point:
Date Sampled: 1/10/2023 11:00 Date Received: 1/18/2023 Date Reported: 3/20/2023

δD of water ----- -116.5 ‰ relative to VSMOW
 $\delta^{18}O$ of water ----- -14.31 ‰ relative to VSMOW
Tritium content of water ----- 2.58 ± 0.24 TU
 $\delta^{13}C$ of DIC ----- -11.7 ‰ relative to VPDB
 ^{14}C content of DIC ----- 66.6 ± 0.2 percent modern carbon
 $\delta^{15}N$ of nitrate ----- na
 $\delta^{18}O$ of nitrate ----- na
 $\delta^{34}S$ of sulfate ----- na
 $\delta^{18}O$ of sulfate ----- na
Vacuum Distilled? * ----- No

Remarks:

nd = not detected. na = not analyzed.

*Indicates if vacuum distillation was utilized for hydrogen and oxygen isotopic analysis of water

Lab #: 855616 Job #: 53302 IS-65777 Co. Job#:
Sample Name: NDCS-MPC-WS-1 Dup Co. Lab#:
Company: University of North Dakota - Energy & Environm
API/Well:
Container: 1 Liter Plastic Bottle
Field/Site Name: North Dakota CarbonSafe (NDCS)
Location: Center, ND
Formation/Depth:
Sampling Point:
Date Sampled: 1/10/2023 12:00 Date Received: 1/18/2023 Date Reported: 3/20/2023

δ D of water ----- -117.0 ‰ relative to VSMOW
 δ^{18} O of water ----- -14.33 ‰ relative to VSMOW
Tritium content of water ----- 3.04 ± 0.26 TU
 δ^{13} C of DIC ----- -11.7 ‰ relative to VPDB
 14 C content of DIC ----- 66.9 ± 0.2 percent modern carbon
 δ^{15} N of nitrate ----- na
 δ^{18} O of nitrate ----- na
 δ^{34} S of sulfate ----- na
 δ^{18} O of sulfate ----- na
Vacuum Distilled? * ----- No

Remarks:

nd = not detected. na = not analyzed.

*Indicates if vacuum distillation was utilized for hydrogen and oxygen isotopic analysis of water

Lab #: 855617 Job #: 53302 IS-65777 Co. Job#:
Sample Name: NDCS-MPC-WS-2 Co. Lab#:
Company: University of North Dakota - Energy & Environm
API/Well:
Container: 1 Liter Plastic Bottle
Field/Site Name: North Dakota CarbonSafe (NDCS)
Location: Center, ND
Formation/Depth:
Sampling Point:
Date Sampled: 1/10/2023 13:00 Date Received: 1/18/2023 Date Reported: 3/20/2023

δD of water ----- -122.4 ‰ relative to VSMOW
 $\delta^{18}O$ of water ----- -15.28 ‰ relative to VSMOW
Tritium content of water ----- 4.20 ± 0.29 TU
 $\delta^{13}C$ of DIC ----- -10.3 ‰ relative to VPDB
 ^{14}C content of DIC ----- 55.3 ± 0.2 percent modern carbon
 $\delta^{15}N$ of nitrate ----- na
 $\delta^{18}O$ of nitrate ----- na
 $\delta^{34}S$ of sulfate ----- na
 $\delta^{18}O$ of sulfate ----- na
Vacuum Distilled? * ----- No

Remarks:

nd = not detected. na = not analyzed.

*Indicates if vacuum distillation was utilized for hydrogen and oxygen isotopic analysis of water

Lab #: 855618 Job #: 53302 IS-65777 Co. Job#:
Sample Name: NDCS-W395 Co. Lab#:
Company: University of North Dakota - Energy & Environm
API/Well:
Container: 1 Liter Plastic Bottle
Field/Site Name: North Dakota CarbonSafe (NDCS)
Location: Center, ND
Formation/Depth:
Sampling Point:
Date Sampled: 1/11/2023 12:00 Date Received: 1/18/2023 Date Reported: 3/20/2023

δ D of water ----- -119.6 ‰ relative to VSMOW

$\delta^{18}\text{O}$ of water ----- -15.01 ‰ relative to VSMOW

Tritium content of water ----- < 0.92 TU

$\delta^{13}\text{C}$ of DIC ----- -9.0 ‰ relative to VPDB

^{14}C content of DIC ----- < 0.4 percent modern carbon

$\delta^{15}\text{N}$ of nitrate ----- na

$\delta^{18}\text{O}$ of nitrate ----- na

$\delta^{34}\text{S}$ of sulfate ----- na

$\delta^{18}\text{O}$ of sulfate ----- na

Vacuum Distilled? * ----- No

Remarks:

nd = not detected. na = not analyzed.

*Indicates if vacuum distillation was utilized for hydrogen and oxygen isotopic analysis of water

Lab #: 855619 Job #: 53302 IS-65777 Co. Job#:
Sample Name: NDCS-468 Co. Lab#:
Company: University of North Dakota - Energy & Environm
API/Well:
Container: 1 Liter Plastic Bottle
Field/Site Name: North Dakota CarbonSafe (NDCS)
Location: Center, ND
Formation/Depth:
Sampling Point:
Date Sampled: 1/12/2023 12:00 Date Received: 1/18/2023 Date Reported: 3/20/2023

δD of water ----- -142.9 ‰ relative to VSMOW
 $\delta^{18}O$ of water ----- -18.88 ‰ relative to VSMOW
Tritium content of water ----- 0.65 ± 0.20 TU
 $\delta^{13}C$ of DIC ----- -4.3 ‰ relative to VPDB
 ^{14}C content of DIC ----- 10.0 ± 0.1 percent modern carbon
 $\delta^{15}N$ of nitrate ----- na
 $\delta^{18}O$ of nitrate ----- na
 $\delta^{34}S$ of sulfate ----- na
 $\delta^{18}O$ of sulfate ----- na
Vacuum Distilled? * ----- No

Remarks:

nd = not detected. na = not analyzed.

*Indicates if vacuum distillation was utilized for hydrogen and oxygen isotopic analysis of water

Lab #: 855620 Job #: 53302 IS-65777 Co. Job#:
Sample Name: NDCS-W269 Co. Lab#:
Company: University of North Dakota - Energy & Environm
API/Well:
Container: 1 Liter Plastic Bottle
Field/Site Name: North Dakota CarbonSafe (NDCS)
Location: Center, ND
Formation/Depth:
Sampling Point:
Date Sampled: 1/12/2023 14:00 Date Received: 1/18/2023 Date Reported: 3/20/2023

δ D of water ----- -128.3 ‰ relative to VSMOW
 δ^{18} O of water ----- -16.68 ‰ relative to VSMOW
Tritium content of water ----- 1.59 ± 0.22 TU
 δ^{13} C of DIC ----- -10.8 ‰ relative to VPDB
 14 C content of DIC ----- 60.6 ± 0.2 percent modern carbon
 δ^{15} N of nitrate ----- na
 δ^{18} O of nitrate ----- na
 δ^{34} S of sulfate ----- na
 δ^{18} O of sulfate ----- na
Vacuum Distilled? * ----- No

Remarks:

nd = not detected. na = not analyzed.

*Indicates if vacuum distillation was utilized for hydrogen and oxygen isotopic analysis of water