[Soil Organic Carbon Stocks 1](#_Toc16153465)

[Soil Organic Carbon Stocks by Landunit 1](#_Toc16153466)

[Rating Class and Values 2](#_Toc16153467)

[Insert identifier(s) string and WKT geometry for each area of interest (AOI) polygon 2](#_Toc16153468)

[Create summary acres for each landunit 3](#_Toc16153469)

[Populate intersected soil polygon table with geometry 3](#_Toc16153470)

[Populate soil geometry with landunit attribute 3](#_Toc16153471)

[Populate soil map unit acres, aggregated by mukey (merges polygons together) 4](#_Toc16153472)

[Component and Layer Tables 5](#_Toc16153473)

[Component Level Data and Mapunit Sum-of-comppct\_r (major components only) 5](#_Toc16153474)

[Acpf table 14](#_Toc16153475)

[Mapunit Component Composition Table 28](#_Toc16153476)

[MUACPF table 28](#_Toc16153477)

[Layer Data 30](#_Toc16153478)

[Acpf Hzn Table 30](#_Toc16153479)

[Set depths used for increments and organize variables for SOC stock calculations. 36](#_Toc16153480)

[Execute SOC layer calculations 50](#_Toc16153481)

[Sum SOC Layers within Each Component 62](#_Toc16153482)

[Weighted average of components within each map unit 64](#_Toc16153483)

[SOC4 table 64](#_Toc16153484)

[Creates weighted average by land unit 67](#_Toc16153485)

[Final Table Output by Landunit 68](#_Toc16153486)

[Global Soil Organic Carbon Output 70](#_Toc16153487)

[Sources and Citations 74](#_Toc16153488)

# Soil Organic Carbon Stocks

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# Soil Organic Carbon Stocks by Landunit

[SQL Script Soil Organic Carbon Stock](https://github.com/jneme910/CART/blob/master/SQL-Library/SDA_CART_SoilsQuery_kitchensink_20190612.txt)

This query runs through the [Soil Data Access](https://sdmdataaccess.nrcs.usda.gov/Query.aspx) tabular data query portal. The portal queries current databases maintained by the U.S. National Cooperative Soil Survey.

Soil organic carbon (SOC) stocks are estimates of the total mass of SOC in a soil profile for a given depth (0 cm up to the depth of the soil profile). SOC stocks in each soil component and map unit are expressed in metric tons (Mg) per hectare for predetermined depth increments. Null values are presented where data are incomplete or not available.

General information about this query:

* It uses all components with horizon data; and
* It does not calculate component SOC below the following component restrictions:
  + Lithic bedrock, paralithic bedrock, densic bedrock, fragipan, duripan, sulfuric, petrocalcic, and petroferic.

\[Layer\ SOC\ stock = (hz\_{T} \* ( ( om / 1.724 ) \* db3 ) \* (100.0 - fragvol) / 100.0)\]

where hz\_{T} = horizon thickness, om = organic matter, db3 = bulk density and fragvol = coarse fragment volume.

## Rating Class and Values

| **Rating Class** | **Value Range** |
| --- | --- |
| Very Low | >0 to <10 |
| Low | >=10 to 25 |
| Moderate | >=25 to <50 |
| Moderately High | >=50 to 100 |
| High | >100 |

#### Insert identifier(s) string and WKT geometry for each area of interest (AOI) polygon

SELECT @aoiGeom = GEOMETRY::STGeomFromText('MULTIPOLYGON (((-102.12335160658608 45.959173206572416, -102.13402890980223 45.959218442561564, -102.13386921506947 45.944643788188387, -102.12327175652177 45.944703605814198, -102.12335160658608 45.959173206572416)))', 4326);

SELECT @aoiGeomFixed = @aoiGeom.MakeValid().STUnion(@aoiGeom.STStartPoint());

INSERT INTO #AoiTable ( landunit, aoigeom )

VALUES ('T9981 Fld3', @aoiGeomFixed);

SELECT @aoiGeom = GEOMETRY::STGeomFromText('MULTIPOLYGON (((-102.1130336443976 45.959162795100383, -102.12335160658608 45.959173206572416, -102.12327175652177 45.944703605814198, -102.1128892282776 45.944710506326032, -102.1130336443976 45.959162795100383)))', 4326);

SELECT @aoiGeomFixed = @aoiGeom.MakeValid().STUnion(@aoiGeom.STStartPoint());

INSERT INTO #AoiTable ( landunit, aoigeom )

VALUES ('T9981 Fld4', @aoiGeomFixed);

| **aoiid** | **landunit** | **aoigeom** |
| --- | --- | --- |
| 1 | T9981 Fld3 | POLYGON ((-102.13386921506947 45.944643788188387, -102.12327175652177 45.9447036058142, -102.12335160658608 45.959173206572416, -102.13402890980223 45.959218442561564, -102.13386921506947 45.944643788188387)) |
| 2 | T9981 Fld4 | POLYGON ((-102.12327175652177 45.9447036058142, -102.1128892282776 45.944710506326032, -102.1130336443976 45.959162795100383, -102.12335160658608 45.959173206572416, -102.12327175652177 45.9447036058142)) |

#### Create summary acres for each landunit

CREATE TABLE #AoiAcres

( aoiid INT,

landunit CHAR(20),

landunit\_acres FLOAT

);

INSERT INTO #AoiAcres (aoiid, landunit, landunit\_acres )\

SELECT aoiid, landunit,

SUM( ROUND( ( ( GEOGRAPHY::STGeomFromWKB(aoigeom.STAsBinary(), 4326 ).STArea() ) / 4046.8564224 ), 3 ) ) AS landunit\_acres

FROM #AoiTable

GROUP BY aoiid, landunit;

| **aoiid** | **landunit** | **landunit\_acres** |
| --- | --- | --- |
| 1 | T9981 Fld3 | 328.952 |
| 2 | T9981 Fld4 | 318.722 |

#### Populate intersected soil polygon table with geometry

-- Create intersected soil polygon table with geometry

CREATE TABLE #AoiSoils

( polyid INT IDENTITY (1,1),

aoiid INT,

landunit CHAR(20),

mukey INT,

soilgeom GEOMETRY

);

INSERT INTO #AoiSoils (aoiid, landunit, mukey, soilgeom)

SELECT A.aoiid, A.landunit, M.mukey, M.mupolygongeo.STIntersection(A.aoigeom ) AS soilgeom

FROM mupolygon M, #AoiTable A

WHERE mupolygongeo.STIntersects(A.aoigeom) = 1;

#### Populate soil geometry with landunit attribute

-- Soil geometry with landunits

CREATE TABLE #AoiSoils2

( aoiid INT,

polyid INT,

landunit CHAR(20),

mukey INT,

poly\_acres FLOAT,

soilgeog GEOGRAPHY

);

-- Populate Soil geometry with landunit attribute

INSERT INTO #AoiSoils2

SELECT aoiid, polyid, landunit, mukey, ROUND((( GEOGRAPHY::STGeomFromWKB(soilgeom.STAsBinary(), 4326 ).STArea() ) / 4046.8564224 ), 3 ) AS poly\_acres, GEOGRAPHY::STGeomFromWKB(soilgeom.STAsBinary(), 4326 ) AS soilgeog

FROM #AoiSoils;

#### Populate soil map unit acres, aggregated by mukey (merges polygons together)

-- Soil map unit acres, aggregated by mukey (merges polygons together)

CREATE TABLE #M2

( aoiid INT,

landunit CHAR(20),

mukey INT,

mapunit\_acres FLOAT

);

INSERT INTO #M2

SELECT DISTINCT M1.aoiid, M1.landunit, M1.mukey,

ROUND (SUM (M1.poly\_acres) OVER(PARTITION BY M1.landunit, M1.mukey), 3) AS mapunit\_acres

FROM #AoiSoils2 AS M1

GROUP BY M1.aoiid, M1.landunit, M1.mukey, M1.poly\_acres;

| **aoiid** | **landunit** | **mukey** | **mapunit\_acres** |
| --- | --- | --- | --- |
| 1 | T9981 Fld3 | 354627 | 0.426 |
| 1 | T9981 Fld3 | 354648 | 0.287 |
| 1 | T9981 Fld3 | 2494708 | 1.729 |
| 1 | T9981 Fld3 | 2525720 | 56.699 |
| 1 | T9981 Fld3 | 2525732 | 1.35 |
| 1 | T9981 Fld3 | 2525733 | 0.129 |
| 1 | T9981 Fld3 | 2525739 | 28.479 |
| 1 | T9981 Fld3 | 2525745 | 4.983 |
| 1 | T9981 Fld3 | 2525746 | 16.106 |
| 1 | T9981 Fld3 | 2525754 | 12.638 |
| 1 | T9981 Fld3 | 2525764 | 17.691 |
| 1 | T9981 Fld3 | 2525766 | 0.032 |
| 1 | T9981 Fld3 | 2525769 | 181.356 |
| 1 | T9981 Fld3 | 2755648 | 2.449 |
| 1 | T9981 Fld3 | 2755654 | 4.599 |
| 2 | T9981 Fld4 | 2525720 | 8.623 |
| 2 | T9981 Fld4 | 2525724 | 0.458 |
| 2 | T9981 Fld4 | 2525730 | 31.514 |
| 2 | T9981 Fld4 | 2525745 | 62.205 |
| 2 | T9981 Fld4 | 2525746 | 63.55 |
| 2 | T9981 Fld4 | 2525754 | 23.138 |
| 2 | T9981 Fld4 | 2525767 | 3.86 |
| 2 | T9981 Fld4 | 2525769 | 103.909 |
| 2 | T9981 Fld4 | 2755639 | 0.443 |
| 2 | T9981 Fld4 | 2755643 | 9.641 |
| 2 | T9981 Fld4 | 2755648 | 11.382 |

## Component and Layer Tables

These tables collect the information needed on map units and components. This includes all map units selected above and all components (typically soil series) within each map unit that do not have a limiting layer within 200 cm. The concepts of components are described by the NSSH (Part 627.034). This example is limited to one mapunit, mukey = 2809839. The information needed for further SOC stock calculations, individual layer information, is selected from each component.

Component variables used in SOC stock calculation (r denotes that the value is representative of the central tendency): \* comppct\_r = the composition of each map unit, reported as the proportion (%) of the map unit made up of that soil component as part of the map unit documentation process (NSSH, 2017 – Part 627.08)

### Component Level Data and Mapunit Sum-of-comppct\_r (major components only)

CREATE TABLE #M4

( aoiid INT,

landunit CHAR(20),

mukey INT,

mapunit\_acres FLOAT,

cokey INT,

compname CHAR(60),

comppct\_r INT,

majcompflag CHAR(3),

mu\_pct\_sum INT,

major\_mu\_pct\_sum INT,

drainagecl CHAR(254)

);

---Populate component level data with cokey, comppct\_r and mapunit sum-of-comppct\_r

INSERT INTO #M4

SELECT M2.aoiid, M2.landunit, M2.mukey, mapunit\_acres, CO.cokey, CO.compname, CO.comppct\_r, CO.majcompflag, (SELECT SUM (CCO.comppct\_r)

FROM #M2 AS MM2

INNER JOIN component AS CCO ON CCO.mukey=MM2.mukey AND M2.mukey=MM2.mukey AND majcompflag = 'Yes' ) AS major\_mu\_pct\_sum,

SUM (CO.comppct\_r) OVER(PARTITION BY M2.landunit, M2.mukey) AS mu\_pct\_sum, drainagecl

FROM #M2 AS M2

INNER JOIN component AS CO ON CO.mukey = M2.mukey

| **aoiid** | **landunit** | **mukey** | **mapunit\_acres** | **cokey** | **compname** | **comppct\_r** | **majcompflag** | **mu\_pct\_sum** | **major\_mu\_pct\_sum** | **drainagecl** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1 | T9981 Fld3 | 354627 | 0.426 | 16464493 | Slickspots | 2 | No | 90 | 100 | Well drained |
| 1 | T9981 Fld3 | 354627 | 0.426 | 16464494 | Daglum | 25 | Yes | 90 | 100 | Well drained |
| 1 | T9981 Fld3 | 354627 | 0.426 | 16464495 | Farnuf | 65 | Yes | 90 | 100 | Well drained |
| 1 | T9981 Fld3 | 354627 | 0.426 | 16464496 | Grail | 3 | No | 90 | 100 | Moderately well drained |
| 1 | T9981 Fld3 | 354627 | 0.426 | 16464497 | Rhoades | 3 | No | 90 | 100 | Well drained |
| 1 | T9981 Fld3 | 354627 | 0.426 | 16464498 | Tally | 2 | No | 90 | 100 | Well drained |
| 1 | T9981 Fld3 | 354648 | 0.287 | 16464607 | Amor | 25 | Yes | 85 | 100 | Well drained |
| 1 | T9981 Fld3 | 354648 | 0.287 | 16464608 | Arnegard | 4 | No | 85 | 100 | Moderately well drained |
| 1 | T9981 Fld3 | 354648 | 0.287 | 16464609 | Belfield | 4 | No | 85 | 100 | Well drained |
| 1 | T9981 Fld3 | 354648 | 0.287 | 16464610 | Heil | 1 | No | 85 | 100 | Poorly drained |
| 1 | T9981 Fld3 | 354648 | 0.287 | 16464611 | Lantry | 3 | No | 85 | 100 | Well drained |
| 1 | T9981 Fld3 | 354648 | 0.287 | 16464612 | Reeder | 60 | Yes | 85 | 100 | Well drained |
| 1 | T9981 Fld3 | 354648 | 0.287 | 16464613 | Vebar | 3 | No | 85 | 100 | Well drained |
| 1 | T9981 Fld3 | 2494708 | 1.729 | 16663928 | Regent | 5 | No | 81 | 100 | Well drained |
| 1 | T9981 Fld3 | 2494708 | 1.729 | 16663929 | Chama | 5 | No | 81 | 100 | Well drained |
| 1 | T9981 Fld3 | 2494708 | 1.729 | 16663930 | Amor | 49 | Yes | 81 | 100 | Well drained |
| 1 | T9981 Fld3 | 2494708 | 1.729 | 16663931 | Cabba | 32 | Yes | 81 | 100 | Well drained |
| 1 | T9981 Fld3 | 2494708 | 1.729 | 16663932 | Shambo | 9 | No | 81 | 100 | Well drained |
| 1 | T9981 Fld3 | 2525720 | 56.699 | 16663899 | Daglum | 33 | Yes | 176 | 100 | Moderately well drained |
| 1 | T9981 Fld3 | 2525720 | 56.699 | 16663900 | Savage | 3 | No | 176 | 100 | Well drained |
| 1 | T9981 Fld3 | 2525720 | 56.699 | 16663901 | Barkof | 2 | No | 176 | 100 | Well drained |
| 1 | T9981 Fld3 | 2525720 | 56.699 | 16663902 | Rhoades | 2 | No | 176 | 100 | Moderately well drained |
| 1 | T9981 Fld3 | 2525720 | 56.699 | 16663903 | Rhoades | 55 | Yes | 176 | 100 | Moderately well drained |
| 1 | T9981 Fld3 | 2525720 | 56.699 | 16663904 | Belfield | 5 | No | 176 | 100 | Moderately well drained |
| 1 | T9981 Fld3 | 2525732 | 1.35 | 16663795 | Lakota | 4 | No | 72 | 100 | Well drained |
| 1 | T9981 Fld3 | 2525732 | 1.35 | 16663796 | Ekalaka | 55 | Yes | 72 | 100 | Well drained |
| 1 | T9981 Fld3 | 2525732 | 1.35 | 16663797 | Yegen | 17 | Yes | 72 | 100 | Well drained |
| 1 | T9981 Fld3 | 2525732 | 1.35 | 16663798 | Desart | 14 | No | 72 | 100 | Well drained |
| 1 | T9981 Fld3 | 2525732 | 1.35 | 16663799 | Parshall | 6 | No | 72 | 100 | Well drained |
| 1 | T9981 Fld3 | 2525732 | 1.35 | 16663800 | Rhoades | 2 | No | 72 | 100 | Moderately well drained |
| 1 | T9981 Fld3 | 2525732 | 1.35 | 16663801 | Vebar | 2 | No | 72 | 100 | Well drained |
| 1 | T9981 Fld3 | 2525733 | 0.129 | 16663950 | Beisigl | 7 | No | 75 | 100 | Somewhat excessively drained |
| 1 | T9981 Fld3 | 2525733 | 0.129 | 16663951 | Vebar | 50 | Yes | 75 | 100 | Well drained |
| 1 | T9981 Fld3 | 2525733 | 0.129 | 16663952 | Cohagen | 25 | Yes | 75 | 100 | Well drained |
| 1 | T9981 Fld3 | 2525733 | 0.129 | 16663953 | Tally | 14 | No | 75 | 100 | Well drained |
| 1 | T9981 Fld3 | 2525733 | 0.129 | 16663954 | Amor | 2 | No | 75 | 100 | Well drained |
| 1 | T9981 Fld3 | 2525733 | 0.129 | 16663955 | Arnegard | 2 | No | 75 | 100 | Well drained |
| 1 | T9981 Fld3 | 2525739 | 28.479 | 16663915 | Parshall | 20 | Yes | 78 | 100 | Well drained |
| 1 | T9981 Fld3 | 2525739 | 28.479 | 16663916 | Tally | 12 | No | 78 | 100 | Well drained |
| 1 | T9981 Fld3 | 2525739 | 28.479 | 16663917 | Vebar | 58 | Yes | 78 | 100 | Well drained |
| 1 | T9981 Fld3 | 2525739 | 28.479 | 16663918 | Arnegard | 8 | No | 78 | 100 | Well drained |
| 1 | T9981 Fld3 | 2525739 | 28.479 | 16663919 | Cohagen | 2 | No | 78 | 100 | Well drained |
| 1 | T9981 Fld3 | 2525745 | 4.983 | 16663920 | Farnuf | 12 | No | 150 | 100 | Well drained |
| 1 | T9981 Fld3 | 2525745 | 4.983 | 16663921 | Shambo | 75 | Yes | 150 | 100 | Well drained |
| 1 | T9981 Fld3 | 2525745 | 4.983 | 16663922 | Arnegard | 10 | No | 150 | 100 | Well drained |
| 1 | T9981 Fld3 | 2525745 | 4.983 | 16663923 | Amor | 3 | No | 150 | 100 | Well drained |
| 1 | T9981 Fld3 | 2525746 | 16.106 | 16663924 | Arnegard | 10 | No | 156 | 100 | Well drained |
| 1 | T9981 Fld3 | 2525746 | 16.106 | 16663925 | Farnuf | 8 | No | 156 | 100 | Well drained |
| 1 | T9981 Fld3 | 2525746 | 16.106 | 16663926 | Amor | 4 | No | 156 | 100 | Well drained |
| 1 | T9981 Fld3 | 2525746 | 16.106 | 16663927 | Shambo | 78 | Yes | 156 | 100 | Well drained |
| 1 | T9981 Fld3 | 2525754 | 12.638 | 16663598 | Heil | 3 | No | 150 | 100 | Poorly drained |
| 1 | T9981 Fld3 | 2525754 | 12.638 | 16663599 | Rhoades | 4 | No | 150 | 100 | Moderately well drained |
| 1 | T9981 Fld3 | 2525754 | 12.638 | 16663600 | Daglum | 2 | No | 150 | 100 | Moderately well drained |
| 1 | T9981 Fld3 | 2525754 | 12.638 | 16663601 | Vanda | 5 | No | 150 | 100 | Well drained |
| 1 | T9981 Fld3 | 2525754 | 12.638 | 16663602 | Harriet | 75 | Yes | 150 | 100 | Poorly drained |
| 1 | T9981 Fld3 | 2525754 | 12.638 | 16663603 | Regan | 6 | No | 150 | 100 | Poorly drained |
| 1 | T9981 Fld3 | 2525754 | 12.638 | 16663604 | Glenross | 5 | No | 150 | 100 | Poorly drained |
| 1 | T9981 Fld3 | 2525764 | 17.691 | 16663605 | Peta | 2 | No | 55 | 100 | Somewhat poorly drained |
| 1 | T9981 Fld3 | 2525764 | 17.691 | 16663606 | Dimmick | 6 | No | 55 | 100 | Very poorly drained |
| 1 | T9981 Fld3 | 2525764 | 17.691 | 16663607 | Arveson | 12 | No | 55 | 100 | Poorly drained |
| 1 | T9981 Fld3 | 2525764 | 17.691 | 16663608 | Regan | 10 | No | 55 | 100 | Poorly drained |
| 1 | T9981 Fld3 | 2525764 | 17.691 | 16663609 | Harriet | 7 | No | 55 | 100 | Poorly drained |
| 1 | T9981 Fld3 | 2525764 | 17.691 | 16663610 | Straw | 3 | No | 55 | 100 | Well drained |
| 1 | T9981 Fld3 | 2525764 | 17.691 | 16663611 | Regan | 55 | Yes | 55 | 100 | Poorly drained |
| 1 | T9981 Fld3 | 2525764 | 17.691 | 16663612 | Marysland | 5 | No | 55 | 100 | Poorly drained |
| 1 | T9981 Fld3 | 2525766 | 0.032 | 16663539 | Water | 100 | Yes | 100 | 100 | NULL |
| 1 | T9981 Fld3 | 2525769 | 181.356 | 16663985 | Belfield | 48 | Yes | 176 | 100 | Moderately well drained |
| 1 | T9981 Fld3 | 2525769 | 181.356 | 16663986 | Grail | 5 | No | 176 | 100 | Moderately well drained |
| 1 | T9981 Fld3 | 2525769 | 181.356 | 16663987 | Daglum | 40 | Yes | 176 | 100 | Moderately well drained |
| 1 | T9981 Fld3 | 2525769 | 181.356 | 16663988 | Savage | 5 | No | 176 | 100 | Well drained |
| 1 | T9981 Fld3 | 2525769 | 181.356 | 16663989 | Rhoades | 2 | No | 176 | 100 | Moderately well drained |
| 1 | T9981 Fld3 | 2755648 | 2.449 | 16663766 | Reeder | 58 | Yes | 156 | 100 | Well drained |
| 1 | T9981 Fld3 | 2755648 | 2.449 | 16663767 | Janesburg | 20 | Yes | 156 | 100 | Well drained |
| 1 | T9981 Fld3 | 2755648 | 2.449 | 16663768 | Amor | 10 | No | 156 | 100 | Well drained |
| 1 | T9981 Fld3 | 2755648 | 2.449 | 16663769 | Dogtooth | 5 | No | 156 | 100 | Well drained |
| 1 | T9981 Fld3 | 2755648 | 2.449 | 16663770 | Regent | 3 | No | 156 | 100 | Well drained |
| 1 | T9981 Fld3 | 2755648 | 2.449 | 16663771 | Belfield | 2 | No | 156 | 100 | Moderately well drained |
| 1 | T9981 Fld3 | 2755648 | 2.449 | 16663772 | Barkof | 2 | No | 156 | 100 | Well drained |
| 1 | T9981 Fld3 | 2755654 | 4.599 | 16663846 | Reeder | 60 | Yes | 85 | 100 | Well drained |
| 1 | T9981 Fld3 | 2755654 | 4.599 | 16663847 | Amor | 25 | Yes | 85 | 100 | Well drained |
| 1 | T9981 Fld3 | 2755654 | 4.599 | 16663848 | Belfield | 4 | No | 85 | 100 | Moderately well drained |
| 1 | T9981 Fld3 | 2755654 | 4.599 | 16663849 | Regent | 3 | No | 85 | 100 | Well drained |
| 1 | T9981 Fld3 | 2755654 | 4.599 | 16663850 | Vebar | 3 | No | 85 | 100 | Well drained |
| 1 | T9981 Fld3 | 2755654 | 4.599 | 16663851 | Chama | 3 | No | 85 | 100 | Well drained |
| 1 | T9981 Fld3 | 2755654 | 4.599 | 16663852 | Arnegard | 2 | No | 85 | 100 | Well drained |
| 2 | T9981 Fld4 | 2525720 | 8.623 | 16663899 | Daglum | 33 | Yes | 176 | 100 | Moderately well drained |
| 2 | T9981 Fld4 | 2525720 | 8.623 | 16663900 | Savage | 3 | No | 176 | 100 | Well drained |
| 2 | T9981 Fld4 | 2525720 | 8.623 | 16663901 | Barkof | 2 | No | 176 | 100 | Well drained |
| 2 | T9981 Fld4 | 2525720 | 8.623 | 16663902 | Rhoades | 2 | No | 176 | 100 | Moderately well drained |
| 2 | T9981 Fld4 | 2525720 | 8.623 | 16663903 | Rhoades | 55 | Yes | 176 | 100 | Moderately well drained |
| 2 | T9981 Fld4 | 2525720 | 8.623 | 16663904 | Belfield | 5 | No | 176 | 100 | Moderately well drained |
| 2 | T9981 Fld4 | 2525724 | 0.458 | 16664017 | Savage | 30 | Yes | 85 | 100 | Well drained |
| 2 | T9981 Fld4 | 2525724 | 0.458 | 16664018 | Daglum | 20 | Yes | 85 | 100 | Moderately well drained |
| 2 | T9981 Fld4 | 2525724 | 0.458 | 16664019 | Grail | 8 | No | 85 | 100 | Moderately well drained |
| 2 | T9981 Fld4 | 2525724 | 0.458 | 16664020 | Regent | 5 | No | 85 | 100 | Well drained |
| 2 | T9981 Fld4 | 2525724 | 0.458 | 16664021 | Rhoades | 2 | No | 85 | 100 | Moderately well drained |
| 2 | T9981 Fld4 | 2525724 | 0.458 | 16664022 | Belfield | 35 | Yes | 85 | 100 | Moderately well drained |
| 2 | T9981 Fld4 | 2525730 | 31.514 | 16663990 | Daglum | 2 | No | 85 | 100 | Moderately well drained |
| 2 | T9981 Fld4 | 2525730 | 31.514 | 16663991 | Regent | 68 | Yes | 85 | 100 | Well drained |
| 2 | T9981 Fld4 | 2525730 | 31.514 | 16663992 | Savage | 17 | Yes | 85 | 100 | Well drained |
| 2 | T9981 Fld4 | 2525730 | 31.514 | 16663993 | Cabba | 2 | No | 85 | 100 | Well drained |
| 2 | T9981 Fld4 | 2525730 | 31.514 | 16663994 | Grail | 6 | No | 85 | 100 | Moderately well drained |
| 2 | T9981 Fld4 | 2525730 | 31.514 | 16663995 | Moreau | 5 | No | 85 | 100 | Well drained |
| 2 | T9981 Fld4 | 2525745 | 62.205 | 16663920 | Farnuf | 12 | No | 150 | 100 | Well drained |
| 2 | T9981 Fld4 | 2525745 | 62.205 | 16663921 | Shambo | 75 | Yes | 150 | 100 | Well drained |
| 2 | T9981 Fld4 | 2525745 | 62.205 | 16663922 | Arnegard | 10 | No | 150 | 100 | Well drained |
| 2 | T9981 Fld4 | 2525745 | 62.205 | 16663923 | Amor | 3 | No | 150 | 100 | Well drained |
| 2 | T9981 Fld4 | 2525746 | 63.55 | 16663924 | Arnegard | 10 | No | 156 | 100 | Well drained |
| 2 | T9981 Fld4 | 2525746 | 63.55 | 16663925 | Farnuf | 8 | No | 156 | 100 | Well drained |
| 2 | T9981 Fld4 | 2525746 | 63.55 | 16663926 | Amor | 4 | No | 156 | 100 | Well drained |
| 2 | T9981 Fld4 | 2525746 | 63.55 | 16663927 | Shambo | 78 | Yes | 156 | 100 | Well drained |
| 2 | T9981 Fld4 | 2525754 | 23.138 | 16663598 | Heil | 3 | No | 150 | 100 | Poorly drained |
| 2 | T9981 Fld4 | 2525754 | 23.138 | 16663599 | Rhoades | 4 | No | 150 | 100 | Moderately well drained |
| 2 | T9981 Fld4 | 2525754 | 23.138 | 16663600 | Daglum | 2 | No | 150 | 100 | Moderately well drained |
| 2 | T9981 Fld4 | 2525754 | 23.138 | 16663601 | Vanda | 5 | No | 150 | 100 | Well drained |
| 2 | T9981 Fld4 | 2525754 | 23.138 | 16663602 | Harriet | 75 | Yes | 150 | 100 | Poorly drained |
| 2 | T9981 Fld4 | 2525754 | 23.138 | 16663603 | Regan | 6 | No | 150 | 100 | Poorly drained |
| 2 | T9981 Fld4 | 2525754 | 23.138 | 16663604 | Glenross | 5 | No | 150 | 100 | Poorly drained |
| 2 | T9981 Fld4 | 2525767 | 3.86 | 16663540 | Water | 100 | Yes | 100 | 100 | NULL |
| 2 | T9981 Fld4 | 2525769 | 103.909 | 16663985 | Belfield | 48 | Yes | 176 | 100 | Moderately well drained |
| 2 | T9981 Fld4 | 2525769 | 103.909 | 16663986 | Grail | 5 | No | 176 | 100 | Moderately well drained |
| 2 | T9981 Fld4 | 2525769 | 103.909 | 16663987 | Daglum | 40 | Yes | 176 | 100 | Moderately well drained |
| 2 | T9981 Fld4 | 2525769 | 103.909 | 16663988 | Savage | 5 | No | 176 | 100 | Well drained |
| 2 | T9981 Fld4 | 2525769 | 103.909 | 16663989 | Rhoades | 2 | No | 176 | 100 | Moderately well drained |
| 2 | T9981 Fld4 | 2755639 | 0.443 | 16663552 | Regent | 3 | No | 80 | 100 | Well drained |
| 2 | T9981 Fld4 | 2755639 | 0.443 | 16663553 | Lawther | 2 | No | 80 | 100 | Well drained |
| 2 | T9981 Fld4 | 2755639 | 0.443 | 16663554 | Savage | 62 | Yes | 80 | 100 | Well drained |
| 2 | T9981 Fld4 | 2755639 | 0.443 | 16663555 | Grail | 18 | Yes | 80 | 100 | Moderately well drained |
| 2 | T9981 Fld4 | 2755639 | 0.443 | 16663556 | Belfield | 8 | No | 80 | 100 | Moderately well drained |
| 2 | T9981 Fld4 | 2755639 | 0.443 | 16663557 | Daglum | 2 | No | 80 | 100 | Moderately well drained |
| 2 | T9981 Fld4 | 2755639 | 0.443 | 16663558 | Farland | 5 | No | 80 | 100 | Well drained |
| 2 | T9981 Fld4 | 2755643 | 9.641 | 16663956 | Telfer | 3 | No | 88 | 100 | Somewhat excessively drained |
| 2 | T9981 Fld4 | 2755643 | 9.641 | 16663957 | Flasher | 30 | Yes | 88 | 100 | Somewhat excessively drained |
| 2 | T9981 Fld4 | 2755643 | 9.641 | 16663958 | Vebar | 40 | Yes | 88 | 100 | Well drained |
| 2 | T9981 Fld4 | 2755643 | 9.641 | 16663959 | Tally | 18 | Yes | 88 | 100 | Well drained |
| 2 | T9981 Fld4 | 2755643 | 9.641 | 16663960 | Parshall | 5 | No | 88 | 100 | Well drained |
| 2 | T9981 Fld4 | 2755643 | 9.641 | 16663961 | Amor | 4 | No | 88 | 100 | Well drained |
| 2 | T9981 Fld4 | 2755648 | 11.382 | 16663766 | Reeder | 58 | Yes | 156 | 100 | Well drained |
| 2 | T9981 Fld4 | 2755648 | 11.382 | 16663767 | Janesburg | 20 | Yes | 156 | 100 | Well drained |
| 2 | T9981 Fld4 | 2755648 | 11.382 | 16663768 | Amor | 10 | No | 156 | 100 | Well drained |
| 2 | T9981 Fld4 | 2755648 | 11.382 | 16663769 | Dogtooth | 5 | No | 156 | 100 | Well drained |
| 2 | T9981 Fld4 | 2755648 | 11.382 | 16663770 | Regent | 3 | No | 156 | 100 | Well drained |
| 2 | T9981 Fld4 | 2755648 | 11.382 | 16663771 | Belfield | 2 | No | 156 | 100 | Moderately well drained |
| 2 | T9981 Fld4 | 2755648 | 11.382 | 16663772 | Barkof | 2 | No | 156 | 100 | Well drained |

#### Acpf table

CREATE TABLE #acpf

( aoiid INT ,

landunit CHAR(20),

mukey INT,

mapunit\_acres FLOAT,

cokey INT,

compname CHAR(60),

comppct\_r INT,

majcompflag CHAR(3),

localphase CHAR(60),

hzname CHAR(20),

hzdept\_r INT,

hzdepb\_r INT,

awc\_r FLOAT,

restrictiondepth INT,

restrictiodepth INT,

TOPrestriction CHAR(80),

tcl CHAR(40),

thickness INT,

om\_r FLOAT,

dbthirdbar\_r FLOAT,

fragvol INT,

texture CHAR(20),

chkey INT,

mu\_pct\_sum INT)

;

INSERT INTO #acpf

SELECT DISTINCT

MA44.aoiid ,

MA44.landunit,

MA44.mukey,

MA44.mapunit\_acres,

MA44.cokey,

MA44.compname,

MA44.comppct\_r,

MA44.majcompflag,

localphase,

hzname,

hzdept\_r,

hzdepb\_r,

awc\_r ,

(SELECT CAST(MIN(resdept\_r) AS INTEGER) FROM component LEFT OUTER JOIN corestrictions ON component.cokey = corestrictions.cokey WHERE component.cokey = coa.cokey AND reskind IS NOT NULL) AS restrictiondepth,

(SELECT CASE WHEN MIN (resdept\_r) IS NULL THEN 200 ELSE CAST (MIN (resdept\_r) AS INT) END FROM component LEFT OUTER JOIN corestrictions ON component.cokey = corestrictions.cokey WHERE component.cokey = coa.cokey AND reskind IS NOT NULL) AS restrictiodepth,

(SELECT TOP 1 reskind FROM component LEFT OUTER JOIN corestrictions ON component.cokey = corestrictions.cokey WHERE component.cokey = coa.cokey AND corestrictions.reskind IN ('Lithic bedrock','Duripan', 'Densic bedrock', 'Paralithic bedrock', 'Fragipan', 'Natric', 'Ortstein', 'Permafrost', 'Petrocalcic', 'Petrogypsic')

AND reskind IS NOT NULL ORDER BY resdept\_r) AS TOPrestriction,

(SELECT TOP 1 texcl FROM chtexturegrp AS chtg INNER JOIN chtexture AS cht ON chtg.chtgkey=cht.chtgkey AND chtg.rvindicator = 'yes' AND chtg.chkey=cha.chkey) AS tcl,

CASE WHEN (hzdepb\_r-hzdept\_r) IS NULL THEN 0 ELSE CAST((hzdepb\_r-hzdept\_r) AS INT) END AS thickness,

CASE WHEN texture LIKE '%PM%' AND (om\_r) IS NULL THEN 35

WHEN texture LIKE '%MUCK%' AND (om\_r) IS NULL THEN 35

WHEN texture LIKE '%PEAT%' AND (om\_r) IS NULL THEN 35 ELSE om\_r END AS om\_r ,

CASE WHEN texture LIKE '%PM%' AND (dbthirdbar\_r) IS NULL THEN 0.25

WHEN texture LIKE '%MUCK%' AND (dbthirdbar\_r) IS NULL THEN 0.25

WHEN texture LIKE '%PEAT%' AND (dbthirdbar\_r) IS NULL THEN 0.25 ELSE dbthirdbar\_r END AS dbthirdbar\_r,

(SELECT CASE WHEN SUM (cf.fragvol\_r) IS NULL THEN 0 ELSE CAST (SUM(cf.fragvol\_r) AS INT) END FROM chfrags cf WHERE cf.chkey = cha.chkey) as fragvol,

texture,

cha.chkey,

mu\_pct\_sum

FROM (#M4 AS MA44 INNER JOIN (component AS coa INNER JOIN chorizon AS cha ON cha.cokey=coa.cokey ) ON MA44.cokey=coa.cokey AND MA44.majcompflag = 'Yes' )

LEFT OUTER JOIN chtexturegrp AS ct ON cha.chkey=ct.chkey and ct.rvindicator = 'Yes'

and CASE WHEN hzdept\_r IS NULL THEN 2

WHEN texture LIKE '%PM%' AND om\_r IS NULL THEN 1

WHEN texture LIKE '%MUCK%' AND om\_r IS NULL THEN 1

WHEN texture LIKE '%PEAT%' AND om\_r IS NULL THEN 1

WHEN texture LIKE '%PM%' AND dbthirdbar\_r IS NULL THEN 1

WHEN texture LIKE '%MUCK%' AND dbthirdbar\_r IS NULL THEN 1

WHEN texture LIKE '%PEAT%' AND dbthirdbar\_r IS NULL THEN 1

WHEN om\_r IS NULL THEN 2

WHEN om\_r = 0 THEN 2

WHEN dbthirdbar\_r IS NULL THEN 2

WHEN dbthirdbar\_r = 0 THEN 2

ELSE 1 END = 1;

---Sums the Component Percent and eliminate duplicate values by cokey

SELECT landunit, aoiid, mapunit\_acres , mukey, cokey, FORMAT ((1.0 \* comppct\_r / mu\_pct\_sum), '#,###,##0.00') AS adj\_comp\_pct

INTO #muacpf

FROM #acpf AS acpf2

WHERE acpf2.cokey=cokey

GROUP BY landunit, aoiid, mapunit\_acres , mukey, cokey, comppct\_r, mu\_pct\_sum

| **aoiid** | **landunit** | **mukey** | **mapunit\_acres** | **cokey** | **compname** | **comppct\_r** | **majcompflag** | **localphase** | **hzname** | **hzdept\_r** | **hzdepb\_r** | **awc\_r** | **restrictiondepth** | **restrictiodepth** | **TOPrestriction** | **tcl** | **thickness** | **om\_r** | **dbthirdbar\_r** | **fragvol** | **texture** | **chkey** | **mu\_pct\_sum** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1 | T9981 Fld3 | 354627 | 0.426 | 16464494 | Daglum | 25 | Yes | NULL | H2 | 18 | 43 | 0.129999995 | NULL | 200 | NULL | Clay | 25 | 1.5 | 1.450000048 | 0 | C | 47888422 | 90 |
| 1 | T9981 Fld3 | 354627 | 0.426 | 16464494 | Daglum | 25 | Yes | NULL | H1 | 0 | 18 | 0.140000001 | NULL | 200 | NULL | Loam | 18 | 3 | 1.350000024 | 0 | L | 47888421 | 90 |
| 1 | T9981 Fld3 | 354627 | 0.426 | 16464494 | Daglum | 25 | Yes | NULL | H3 | 43 | 152 | 0.129999995 | NULL | 200 | NULL | Silty clay loam | 109 | 0.5 | 1.600000024 | 0 | SICL | 47888423 | 90 |
| 1 | T9981 Fld3 | 354627 | 0.426 | 16464495 | Farnuf | 65 | Yes | NULL | H2 | 20 | 41 | 0.180000007 | NULL | 200 | NULL | Clay loam | 21 | 1.5 | 1.299999952 | 0 | CL | 47887710 | 90 |
| 1 | T9981 Fld3 | 354627 | 0.426 | 16464495 | Farnuf | 65 | Yes | NULL | H1 | 0 | 20 | 0.189999998 | NULL | 200 | NULL | Loam | 20 | 3 | 1.299999952 | 0 | L | 47887709 | 90 |
| 1 | T9981 Fld3 | 354627 | 0.426 | 16464495 | Farnuf | 65 | Yes | NULL | H3 | 41 | 89 | 0.180000007 | NULL | 200 | NULL | Loam | 48 | 0.75 | 1.330000043 | 0 | L | 47887707 | 90 |
| 1 | T9981 Fld3 | 354627 | 0.426 | 16464495 | Farnuf | 65 | Yes | NULL | H4 | 89 | 152 | 0.180000007 | NULL | 200 | NULL | Loam | 63 | 0.25 | 1.350000024 | 0 | L | 47887708 | 90 |
| 1 | T9981 Fld3 | 354648 | 0.287 | 16464607 | Amor | 25 | Yes | NULL | Cr | 86 | 152 | NULL | 77 | 77 | Paralithic bedrock | NULL | 66 | 0.25 | NULL | 0 | NULL | 47888315 | 85 |
| 1 | T9981 Fld3 | 354648 | 0.287 | 16464607 | Amor | 25 | Yes | NULL | H2 | 20 | 33 | 0.180000007 | 77 | 77 | Paralithic bedrock | Loam | 13 | 2 | 1.299999952 | 2 | L | 47888313 | 85 |
| 1 | T9981 Fld3 | 354648 | 0.287 | 16464607 | Amor | 25 | Yes | NULL | H1 | 0 | 20 | 0.189999998 | 77 | 77 | Paralithic bedrock | Loam | 20 | 4.5 | 1.279999971 | 2 | L | 47888312 | 85 |
| 1 | T9981 Fld3 | 354648 | 0.287 | 16464607 | Amor | 25 | Yes | NULL | H3 | 33 | 86 | 0.170000002 | 77 | 77 | Paralithic bedrock | Loam | 53 | 0.75 | 1.399999976 | 2 | L | 47888314 | 85 |
| 1 | T9981 Fld3 | 354648 | 0.287 | 16464612 | Reeder | 60 | Yes | NULL | Cr | 81 | 152 | 0 | 77 | 77 | Paralithic bedrock | NULL | 71 | NULL | NULL | 0 | NULL | 47887978 | 85 |
| 1 | T9981 Fld3 | 354648 | 0.287 | 16464612 | Reeder | 60 | Yes | NULL | H3 | 48 | 81 | 0.159999996 | 77 | 77 | Paralithic bedrock | Clay loam | 33 | 1.25 | 1.350000024 | 13 | CL | 47887981 | 85 |
| 1 | T9981 Fld3 | 354648 | 0.287 | 16464612 | Reeder | 60 | Yes | NULL | H2 | 13 | 48 | 0.170000002 | 77 | 77 | Paralithic bedrock | Clay loam | 35 | 2 | 1.299999952 | 0 | CL | 47887980 | 85 |
| 1 | T9981 Fld3 | 354648 | 0.287 | 16464612 | Reeder | 60 | Yes | NULL | H1 | 0 | 13 | 0.189999998 | 77 | 77 | Paralithic bedrock | Loam | 13 | 4 | 1.279999971 | 8 | L | 47887979 | 85 |
| 1 | T9981 Fld3 | 2494708 | 1.729 | 16663930 | Amor | 49 | Yes | NULL | Cr | 76 | 200 | NULL | 76 | 76 | Paralithic bedrock | NULL | 124 | NULL | NULL | 0 | NULL | 48509159 | 81 |
| 1 | T9981 Fld3 | 2494708 | 1.729 | 16663930 | Amor | 49 | Yes | NULL | Bw1 | 13 | 23 | 0.189999998 | 76 | 76 | Paralithic bedrock | Loam | 10 | 2 | 1.399999976 | 0 | L | 48509160 | 81 |
| 1 | T9981 Fld3 | 2494708 | 1.729 | 16663930 | Amor | 49 | Yes | NULL | Ap | 0 | 13 | 0.189999998 | 76 | 76 | Paralithic bedrock | Loam | 13 | 3 | 1.399999976 | 2 | L | 48509164 | 81 |
| 1 | T9981 Fld3 | 2494708 | 1.729 | 16663930 | Amor | 49 | Yes | NULL | Bw2 | 23 | 38 | 0.170000002 | 76 | 76 | Paralithic bedrock | Loam | 15 | 1.5 | 1.350000024 | 0 | L | 48509163 | 81 |
| 1 | T9981 Fld3 | 2494708 | 1.729 | 16663930 | Amor | 49 | Yes | NULL | BCk | 58 | 76 | 0.170000002 | 76 | 76 | Paralithic bedrock | Loam | 18 | 0.5 | 1.399999976 | 0 | L | 48509162 | 81 |
| 1 | T9981 Fld3 | 2494708 | 1.729 | 16663930 | Amor | 49 | Yes | NULL | Bk | 38 | 58 | 0.170000002 | 76 | 76 | Paralithic bedrock | Loam | 20 | 0.800000012 | 1.350000024 | 0 | L | 48509161 | 81 |
| 1 | T9981 Fld3 | 2494708 | 1.729 | 16663931 | Cabba | 32 | Yes | NULL | Cr | 38 | 200 | NULL | 38 | 38 | Paralithic bedrock | NULL | 162 | NULL | NULL | 0 | NULL | 48509165 | 81 |
| 1 | T9981 Fld3 | 2494708 | 1.729 | 16663931 | Cabba | 32 | Yes | NULL | Ap | 0 | 13 | 0.189999998 | 38 | 38 | Paralithic bedrock | Loam | 13 | 2 | 1.399999976 | 5 | L | 48509166 | 81 |
| 1 | T9981 Fld3 | 2494708 | 1.729 | 16663931 | Cabba | 32 | Yes | NULL | Bk | 13 | 38 | 0.170000002 | 38 | 38 | Paralithic bedrock | Loam | 25 | 0.800000012 | 1.399999976 | 2 | L | 48509167 | 81 |
| 1 | T9981 Fld3 | 2525720 | 56.699 | 16663899 | Daglum | 33 | Yes | NULL | C | 119 | 200 | 0.100000001 | 12 | 12 | Natric | Clay | 81 | 0.25 | 1.450000048 | 0 | C | 48509110 | 176 |
| 1 | T9981 Fld3 | 2525720 | 56.699 | 16663899 | Daglum | 33 | Yes | NULL | Btkny | 46 | 81 | 0.129999995 | 12 | 12 | Natric | Clay loam | 35 | 0.75 | 1.450000048 | 0 | CL | 48509108 | 176 |
| 1 | T9981 Fld3 | 2525720 | 56.699 | 16663899 | Daglum | 33 | Yes | NULL | BCk | 81 | 119 | 0.109999999 | 12 | 12 | Natric | Clay loam | 38 | 0.5 | 1.399999976 | 0 | CL | 48509109 | 176 |
| 1 | T9981 Fld3 | 2525720 | 56.699 | 16663899 | Daglum | 33 | Yes | NULL | E | 7 | 12 | 0.219999999 | 12 | 12 | Natric | Silt loam | 5 | 3.5 | 1.350000024 | 0 | SIL | 48509106 | 176 |
| 1 | T9981 Fld3 | 2525720 | 56.699 | 16663899 | Daglum | 33 | Yes | NULL | A | 0 | 7 | 0.230000004 | 12 | 12 | Natric | Silt loam | 7 | 5.5 | 1.200000048 | 0 | SIL | 48509105 | 176 |
| 1 | T9981 Fld3 | 2525720 | 56.699 | 16663899 | Daglum | 33 | Yes | NULL | Btn | 12 | 46 | 0.170000002 | 12 | 12 | Natric | Silty clay loam | 34 | 2 | 1.350000024 | 0 | SICL | 48509107 | 176 |
| 1 | T9981 Fld3 | 2525720 | 56.699 | 16663903 | Rhoades | 55 | Yes | NULL | C | 117 | 200 | 0.100000001 | 8 | 8 | Natric | Clay | 83 | 0.25 | 1.450000048 | 0 | C | 48509123 | 176 |
| 1 | T9981 Fld3 | 2525720 | 56.699 | 16663903 | Rhoades | 55 | Yes | NULL | Btn | 8 | 20 | 0.180000007 | 8 | 8 | Natric | Clay loam | 12 | 1.25 | 1.399999976 | 0 | CL | 48509121 | 176 |
| 1 | T9981 Fld3 | 2525720 | 56.699 | 16663903 | Rhoades | 55 | Yes | NULL | Btknyz | 20 | 36 | 0.129999995 | 8 | 8 | Natric | Clay loam | 16 | 1.25 | 1.399999976 | 0 | CL | 48509122 | 176 |
| 1 | T9981 Fld3 | 2525720 | 56.699 | 16663903 | Rhoades | 55 | Yes | NULL | Bkyz | 36 | 117 | 0.109999999 | 8 | 8 | Natric | Clay loam | 81 | 0.25 | 1.450000048 | 0 | CL | 48509124 | 176 |
| 1 | T9981 Fld3 | 2525720 | 56.699 | 16663903 | Rhoades | 55 | Yes | NULL | E | 0 | 8 | 0.209999993 | 8 | 8 | Natric | Loam | 8 | 4 | 1.399999976 | 0 | L | 48509125 | 176 |
| 1 | T9981 Fld3 | 2525732 | 1.35 | 16663796 | Ekalaka | 55 | Yes | NULL | Btn | 30 | 43 | 0.119999997 | 30 | 30 | Natric | Fine sandy loam | 13 | 0.5 | 1.5 | 0 | FSL | 48508966 | 72 |
| 1 | T9981 Fld3 | 2525732 | 1.35 | 16663796 | Ekalaka | 55 | Yes | NULL | Ap | 0 | 15 | 0.170000002 | 30 | 30 | Natric | Fine sandy loam | 15 | 1.5 | 1.399999976 | 0 | FSL | 48508969 | 72 |
| 1 | T9981 Fld3 | 2525732 | 1.35 | 16663796 | Ekalaka | 55 | Yes | NULL | E | 15 | 30 | 0.170000002 | 30 | 30 | Natric | Fine sandy loam | 15 | 1.5 | 1.450000048 | 0 | FSL | 48508965 | 72 |
| 1 | T9981 Fld3 | 2525732 | 1.35 | 16663796 | Ekalaka | 55 | Yes | NULL | Bz | 43 | 84 | 0.150000006 | 30 | 30 | Natric | Fine sandy loam | 41 | 0.5 | 1.5 | 0 | FSL | 48508968 | 72 |
| 1 | T9981 Fld3 | 2525732 | 1.35 | 16663796 | Ekalaka | 55 | Yes | NULL | C | 84 | 152 | 0.090000004 | 30 | 30 | Natric | Loamy fine sand | 68 | 0.25 | 1.450000048 | 0 | LFS | 48508967 | 72 |
| 1 | T9981 Fld3 | 2525732 | 1.35 | 16663797 | Yegen | 17 | Yes | NULL | Ap | 0 | 15 | 0.170000002 | NULL | 200 | NULL | Fine sandy loam | 15 | 3 | 1.25 | 0 | FSL | 48508961 | 72 |
| 1 | T9981 Fld3 | 2525732 | 1.35 | 16663797 | Yegen | 17 | Yes | NULL | Bt | 15 | 71 | 0.170000002 | NULL | 200 | NULL | Sandy clay loam | 56 | 1 | 1.549999952 | 0 | SCL | 48508962 | 72 |
| 1 | T9981 Fld3 | 2525732 | 1.35 | 16663797 | Yegen | 17 | Yes | NULL | Bk | 71 | 86 | 0.129999995 | NULL | 200 | NULL | Sandy loam | 15 | 0.5 | 1.549999952 | 0 | SL | 48508963 | 72 |
| 1 | T9981 Fld3 | 2525732 | 1.35 | 16663797 | Yegen | 17 | Yes | NULL | BC | 86 | 152 | 0.119999997 | NULL | 200 | NULL | Sandy loam | 66 | 0.25 | 1.549999952 | 0 | SL | 48508964 | 72 |
| 1 | T9981 Fld3 | 2525733 | 0.129 | 16663952 | Cohagen | 25 | Yes | NULL | Cr | 43 | 200 | NULL | 43 | 43 | Paralithic bedrock | NULL | 157 | NULL | NULL | 0 | NULL | 48507618 | 75 |
| 1 | T9981 Fld3 | 2525733 | 0.129 | 16663952 | Cohagen | 25 | Yes | NULL | Ap | 0 | 15 | 0.159999996 | 43 | 43 | Paralithic bedrock | Fine sandy loam | 15 | 1 | 1.5 | 3 | FSL | 48507620 | 75 |
| 1 | T9981 Fld3 | 2525733 | 0.129 | 16663952 | Cohagen | 25 | Yes | NULL | C | 15 | 43 | 0.140000001 | 43 | 43 | Paralithic bedrock | Fine sandy loam | 28 | 0.5 | 1.5 | 5 | FSL | 48507619 | 75 |
| 1 | T9981 Fld3 | 2525733 | 0.129 | 16663951 | Vebar | 50 | Yes | NULL | Cr | 74 | 200 | NULL | 74 | 74 | Paralithic bedrock | NULL | 126 | NULL | NULL | 0 | NULL | 48507613 | 75 |
| 1 | T9981 Fld3 | 2525733 | 0.129 | 16663951 | Vebar | 50 | Yes | NULL | Bw1 | 15 | 28 | 0.150000006 | 74 | 74 | Paralithic bedrock | Fine sandy loam | 13 | 1.5 | 1.450000048 | 4 | FSL | 48507615 | 75 |
| 1 | T9981 Fld3 | 2525733 | 0.129 | 16663951 | Vebar | 50 | Yes | NULL | Bw2 | 28 | 43 | 0.140000001 | 74 | 74 | Paralithic bedrock | Fine sandy loam | 15 | 1 | 1.5 | 6 | FSL | 48507616 | 75 |
| 1 | T9981 Fld3 | 2525733 | 0.129 | 16663951 | Vebar | 50 | Yes | NULL | Ap | 0 | 15 | 0.159999996 | 74 | 74 | Paralithic bedrock | Fine sandy loam | 15 | 2 | 1.399999976 | 4 | FSL | 48507614 | 75 |
| 1 | T9981 Fld3 | 2525733 | 0.129 | 16663951 | Vebar | 50 | Yes | NULL | Bk | 43 | 74 | 0.129999995 | 74 | 74 | Paralithic bedrock | Fine sandy loam | 31 | 0.5 | 1.549999952 | 7 | FSL | 48507617 | 75 |
| 1 | T9981 Fld3 | 2525739 | 28.479 | 16663915 | Parshall | 20 | Yes | NULL | Bw2 | 60 | 75 | 0.150000006 | NULL | 200 | NULL | Fine sandy loam | 15 | 1 | 1.549999952 | 2 | FSL | 48509145 | 78 |
| 1 | T9981 Fld3 | 2525739 | 28.479 | 16663915 | Parshall | 20 | Yes | NULL | A | 15 | 30 | 0.170000002 | NULL | 200 | NULL | Fine sandy loam | 15 | 2.5 | 1.450000048 | 1 | FSL | 48509143 | 78 |
| 1 | T9981 Fld3 | 2525739 | 28.479 | 16663915 | Parshall | 20 | Yes | NULL | Ap | 0 | 15 | 0.170000002 | NULL | 200 | NULL | Fine sandy loam | 15 | 3.5 | 1.5 | 1 | FSL | 48509148 | 78 |
| 1 | T9981 Fld3 | 2525739 | 28.479 | 16663915 | Parshall | 20 | Yes | NULL | Bw1 | 30 | 60 | 0.159999996 | NULL | 200 | NULL | Fine sandy loam | 30 | 1.5 | 1.5 | 1 | FSL | 48509144 | 78 |
| 1 | T9981 Fld3 | 2525739 | 28.479 | 16663915 | Parshall | 20 | Yes | NULL | Bk | 75 | 122 | 0.140000001 | NULL | 200 | NULL | Fine sandy loam | 47 | 0.75 | 1.549999952 | 3 | FSL | 48509146 | 78 |
| 1 | T9981 Fld3 | 2525739 | 28.479 | 16663915 | Parshall | 20 | Yes | NULL | C | 122 | 200 | 0.129999995 | NULL | 200 | NULL | Fine sandy loam | 78 | 0.25 | 1.600000024 | 5 | FSL | 48509147 | 78 |
| 1 | T9981 Fld3 | 2525739 | 28.479 | 16663917 | Vebar | 58 | Yes | NULL | Cr | 81 | 200 | NULL | 81 | 81 | Paralithic bedrock | NULL | 119 | NULL | NULL | 0 | NULL | 48507454 | 78 |
| 1 | T9981 Fld3 | 2525739 | 28.479 | 16663917 | Vebar | 58 | Yes | NULL | BCk | 66 | 81 | 0.140000001 | 81 | 81 | Paralithic bedrock | Fine sandy loam | 15 | 0.5 | 1.549999952 | 7 | FSL | 48507456 | 78 |
| 1 | T9981 Fld3 | 2525739 | 28.479 | 16663917 | Vebar | 58 | Yes | NULL | Ap | 0 | 15 | 0.170000002 | 81 | 81 | Paralithic bedrock | Fine sandy loam | 15 | 2 | 1.549999952 | 3 | FSL | 48507458 | 78 |
| 1 | T9981 Fld3 | 2525739 | 28.479 | 16663917 | Vebar | 58 | Yes | NULL | Bw1 | 15 | 32 | 0.159999996 | 81 | 81 | Paralithic bedrock | Fine sandy loam | 17 | 1.5 | 1.5 | 4 | FSL | 48507455 | 78 |
| 1 | T9981 Fld3 | 2525739 | 28.479 | 16663917 | Vebar | 58 | Yes | NULL | Bw2 | 32 | 66 | 0.150000006 | 81 | 81 | Paralithic bedrock | Fine sandy loam | 34 | 1 | 1.5 | 6 | FSL | 48507457 | 78 |
| 1 | T9981 Fld3 | 2525745 | 4.983 | 16663921 | Shambo | 75 | Yes | NULL | A | 15 | 20 | 0.200000003 | NULL | 200 | NULL | Loam | 5 | 3 | 1.299999952 | 0 | L | 48507476 | 150 |
| 1 | T9981 Fld3 | 2525745 | 4.983 | 16663921 | Shambo | 75 | Yes | NULL | Bw1 | 20 | 33 | 0.180000007 | NULL | 200 | NULL | Loam | 13 | 2.5 | 1.299999952 | 0 | L | 48507471 | 150 |
| 1 | T9981 Fld3 | 2525745 | 4.983 | 16663921 | Shambo | 75 | Yes | NULL | BCk | 107 | 122 | 0.170000002 | NULL | 200 | NULL | Loam | 15 | 0.5 | 1.399999976 | 0 | L | 48507473 | 150 |
| 1 | T9981 Fld3 | 2525745 | 4.983 | 16663921 | Shambo | 75 | Yes | NULL | Ap | 0 | 15 | 0.200000003 | NULL | 200 | NULL | Loam | 15 | 3.5 | 1.299999952 | 0 | L | 48507475 | 150 |
| 1 | T9981 Fld3 | 2525745 | 4.983 | 16663921 | Shambo | 75 | Yes | NULL | Bk | 72 | 107 | 0.180000007 | NULL | 200 | NULL | Loam | 35 | 1 | 1.399999976 | 0 | L | 48507477 | 150 |
| 1 | T9981 Fld3 | 2525745 | 4.983 | 16663921 | Shambo | 75 | Yes | NULL | Bw2 | 33 | 72 | 0.180000007 | NULL | 200 | NULL | Loam | 39 | 1.5 | 1.299999952 | 0 | L | 48507472 | 150 |
| 1 | T9981 Fld3 | 2525745 | 4.983 | 16663921 | Shambo | 75 | Yes | NULL | C | 122 | 200 | 0.170000002 | NULL | 200 | NULL | Loam | 78 | 0.25 | 1.5 | 0 | L | 48507474 | 150 |
| 1 | T9981 Fld3 | 2525746 | 16.106 | 16663927 | Shambo | 78 | Yes | NULL | BCk | 107 | 122 | 0.170000002 | NULL | 200 | NULL | Loam | 15 | 0.5 | 1.399999976 | 0 | L | 48507505 | 156 |
| 1 | T9981 Fld3 | 2525746 | 16.106 | 16663927 | Shambo | 78 | Yes | NULL | Ap | 0 | 15 | 0.200000003 | NULL | 200 | NULL | Loam | 15 | 3.5 | 1.299999952 | 0 | L | 48507502 | 156 |
| 1 | T9981 Fld3 | 2525746 | 16.106 | 16663927 | Shambo | 78 | Yes | NULL | Bw1 | 15 | 33 | 0.200000003 | NULL | 200 | NULL | Loam | 18 | 2.5 | 1.350000024 | 0 | L | 48507507 | 156 |
| 1 | T9981 Fld3 | 2525746 | 16.106 | 16663927 | Shambo | 78 | Yes | NULL | Bk | 74 | 107 | 0.180000007 | NULL | 200 | NULL | Loam | 33 | 1 | 1.399999976 | 0 | L | 48507504 | 156 |
| 1 | T9981 Fld3 | 2525746 | 16.106 | 16663927 | Shambo | 78 | Yes | NULL | Bw2 | 33 | 74 | 0.180000007 | NULL | 200 | NULL | Loam | 41 | 1.5 | 1.399999976 | 0 | L | 48507503 | 156 |
| 1 | T9981 Fld3 | 2525746 | 16.106 | 16663927 | Shambo | 78 | Yes | NULL | C | 122 | 200 | 0.170000002 | NULL | 200 | NULL | Loam | 78 | 0.25 | 1.5 | 0 | L | 48507506 | 156 |
| 1 | T9981 Fld3 | 2525754 | 12.638 | 16663602 | Harriet | 75 | Yes | occasionally flooded | 3Ab | 97 | 102 | 0.109999999 | 5 | 5 | Natric | Clay loam | 5 | 0.25 | 1.450000048 | 0 | CL | 48508119 | 150 |
| 1 | T9981 Fld3 | 2525754 | 12.638 | 16663602 | Harriet | 75 | Yes | occasionally flooded | Btn | 5 | 46 | 0.129999995 | 5 | 5 | Natric | Clay loam | 41 | 2 | 1.399999976 | 0 | CL | 48508123 | 150 |
| 1 | T9981 Fld3 | 2525754 | 12.638 | 16663602 | Harriet | 75 | Yes | occasionally flooded | 3C | 102 | 152 | 0.109999999 | 5 | 5 | Natric | Clay loam | 50 | 0.25 | 1.399999976 | 0 | CL | 48508124 | 150 |
| 1 | T9981 Fld3 | 2525754 | 12.638 | 16663602 | Harriet | 75 | Yes | occasionally flooded | E | 0 | 5 | 0.219999999 | 5 | 5 | Natric | Loam | 5 | 4.5 | 1.25 | 0 | L | 48508122 | 150 |
| 1 | T9981 Fld3 | 2525754 | 12.638 | 16663602 | Harriet | 75 | Yes | occasionally flooded | Bz1 | 46 | 71 | 0.129999995 | 5 | 5 | Natric | Loam | 25 | 0.75 | 1.399999976 | 0 | L | 48508120 | 150 |
| 1 | T9981 Fld3 | 2525754 | 12.638 | 16663602 | Harriet | 75 | Yes | occasionally flooded | 2Bz2 | 71 | 97 | 0.119999997 | 5 | 5 | Natric | Very fine sandy loam | 26 | 0.5 | 1.5 | 0 | VFSL | 48508121 | 150 |
| 1 | T9981 Fld3 | 2525764 | 17.691 | 16663611 | Regan | 55 | Yes | saline, occasionally flooded | 2Czg | 71 | 152 | 0.119999997 | NULL | 200 | NULL | Clay loam | 81 | 0.75 | 1.399999976 | 0 | CL | 48508082 | 55 |
| 1 | T9981 Fld3 | 2525764 | 17.691 | 16663611 | Regan | 55 | Yes | saline, occasionally flooded | Az | 0 | 23 | 0.140000001 | NULL | 200 | NULL | Silt loam | 23 | 4 | 1.149999976 | 0 | SIL | 48508083 | 55 |
| 1 | T9981 Fld3 | 2525764 | 17.691 | 16663611 | Regan | 55 | Yes | saline, occasionally flooded | Bkzg | 23 | 71 | 0.140000001 | NULL | 200 | NULL | Silty clay loam | 48 | 2 | 1.399999976 | 0 | SICL | 48508081 | 55 |
| 1 | T9981 Fld3 | 2525769 | 181.356 | 16663985 | Belfield | 48 | Yes | NULL | Btn1 | 33 | 48 | 0.159999996 | NULL | 200 | NULL | Clay | 15 | 2 | 1.350000024 | 0 | C | 48507781 | 176 |
| 1 | T9981 Fld3 | 2525769 | 181.356 | 16663985 | Belfield | 48 | Yes | NULL | E/B | 25 | 33 | 0.189999998 | NULL | 200 | NULL | Clay loam | 8 | 3 | 1.399999976 | 0 | CL | 48507780 | 176 |
| 1 | T9981 Fld3 | 2525769 | 181.356 | 16663985 | Belfield | 48 | Yes | NULL | Btn2 | 48 | 66 | 0.159999996 | NULL | 200 | NULL | Clay loam | 18 | 1.5 | 1.399999976 | 0 | CL | 48507782 | 176 |
| 1 | T9981 Fld3 | 2525769 | 181.356 | 16663985 | Belfield | 48 | Yes | NULL | Bk | 66 | 114 | 0.119999997 | NULL | 200 | NULL | Clay loam | 48 | 1 | 1.399999976 | 0 | CL | 48507783 | 176 |
| 1 | T9981 Fld3 | 2525769 | 181.356 | 16663985 | Belfield | 48 | Yes | NULL | C | 114 | 200 | 0.100000001 | NULL | 200 | NULL | Clay loam | 86 | 0.5 | 1.5 | 0 | CL | 48507784 | 176 |
| 1 | T9981 Fld3 | 2525769 | 181.356 | 16663985 | Belfield | 48 | Yes | NULL | A | 18 | 25 | 0.219999999 | NULL | 200 | NULL | Silt loam | 7 | 4 | 1.299999952 | 0 | SIL | 48507779 | 176 |
| 1 | T9981 Fld3 | 2525769 | 181.356 | 16663985 | Belfield | 48 | Yes | NULL | Ap | 0 | 18 | 0.219999999 | NULL | 200 | NULL | Silt loam | 18 | 4 | 1.299999952 | 0 | SIL | 48507778 | 176 |
| 1 | T9981 Fld3 | 2525769 | 181.356 | 16663987 | Daglum | 40 | Yes | NULL | C | 119 | 200 | 0.090000004 | 22 | 22 | Natric | Clay | 81 | 0.25 | 1.450000048 | 0 | C | 48507795 | 176 |
| 1 | T9981 Fld3 | 2525769 | 181.356 | 16663987 | Daglum | 40 | Yes | NULL | Ap | 0 | 18 | 0.180000007 | 22 | 22 | Natric | Clay loam | 18 | 3 | 1.350000024 | 0 | CL | 48507790 | 176 |
| 1 | T9981 Fld3 | 2525769 | 181.356 | 16663987 | Daglum | 40 | Yes | NULL | Btnky | 47 | 81 | 0.129999995 | 22 | 22 | Natric | Clay loam | 34 | 1.5 | 1.399999976 | 0 | CL | 48507793 | 176 |
| 1 | T9981 Fld3 | 2525769 | 181.356 | 16663987 | Daglum | 40 | Yes | NULL | BCky | 81 | 119 | 0.109999999 | 22 | 22 | Natric | Clay loam | 38 | 0.75 | 1.399999976 | 0 | CL | 48507794 | 176 |
| 1 | T9981 Fld3 | 2525769 | 181.356 | 16663987 | Daglum | 40 | Yes | NULL | E | 18 | 22 | 0.209999993 | 22 | 22 | Natric | Silt loam | 4 | 2.5 | 1.299999952 | 0 | SIL | 48507791 | 176 |
| 1 | T9981 Fld3 | 2525769 | 181.356 | 16663987 | Daglum | 40 | Yes | NULL | Btn | 22 | 47 | 0.159999996 | 22 | 22 | Natric | Silty clay loam | 25 | 2 | 1.350000024 | 0 | SICL | 48507792 | 176 |
| 1 | T9981 Fld3 | 2755648 | 2.449 | 16663767 | Janesburg | 20 | Yes | NULL | Cr | 66 | 152 | 0.079999998 | 25 | 25 | Natric | NULL | 86 | 0.25 | 1.5 | 0 | BR | 48507343 | 156 |
| 1 | T9981 Fld3 | 2755648 | 2.449 | 16663767 | Janesburg | 20 | Yes | NULL | E | 20 | 25 | 0.200000003 | 25 | 25 | Natric | Silt loam | 5 | 2.5 | 1.299999952 | 0 | SIL | 48507341 | 156 |
| 1 | T9981 Fld3 | 2755648 | 2.449 | 16663767 | Janesburg | 20 | Yes | NULL | BCk | 53 | 66 | 0.129999995 | 25 | 25 | Natric | Silt loam | 13 | 0.75 | 1.5 | 0 | SIL | 48507344 | 156 |
| 1 | T9981 Fld3 | 2755648 | 2.449 | 16663767 | Janesburg | 20 | Yes | NULL | Ap | 0 | 20 | 0.219999999 | 25 | 25 | Natric | Silt loam | 20 | 3 | 1.149999976 | 0 | SIL | 48507345 | 156 |
| 1 | T9981 Fld3 | 2755648 | 2.449 | 16663767 | Janesburg | 20 | Yes | NULL | Btn | 25 | 53 | 0.129999995 | 25 | 25 | Natric | Silty clay | 28 | 1.5 | 1.5 | 0 | SIC | 48507342 | 156 |
| 1 | T9981 Fld3 | 2755648 | 2.449 | 16663766 | Reeder | 58 | Yes | NULL | Cr | 91 | 152 | 0.079999998 | 91 | 91 | Paralithic bedrock | NULL | 61 | 0.25 | 1.529999971 | 0 | BR | 48507346 | 156 |
| 1 | T9981 Fld3 | 2755648 | 2.449 | 16663766 | Reeder | 58 | Yes | NULL | Bt | 20 | 43 | 0.170000002 | 91 | 91 | Paralithic bedrock | Clay loam | 23 | 2 | 1.399999976 | 0 | CL | 48507347 | 156 |
| 1 | T9981 Fld3 | 2755648 | 2.449 | 16663766 | Reeder | 58 | Yes | NULL | Ap | 0 | 20 | 0.209999993 | 91 | 91 | Paralithic bedrock | Loam | 20 | 2 | 1.149999976 | 5 | L | 48507349 | 156 |
| 1 | T9981 Fld3 | 2755648 | 2.449 | 16663766 | Reeder | 58 | Yes | NULL | Bk | 43 | 91 | 0.180000007 | 91 | 91 | Paralithic bedrock | Loam | 48 | 1.25 | 1.399999976 | 8 | L | 48507348 | 156 |
| 1 | T9981 Fld3 | 2755654 | 4.599 | 16663847 | Amor | 25 | Yes | NULL | Cr | 79 | 152 | 0.079999998 | 79 | 79 | Paralithic bedrock | NULL | 73 | 0.25 | 1.529999971 | 0 | BR | 48508787 | 85 |
| 1 | T9981 Fld3 | 2755654 | 4.599 | 16663847 | Amor | 25 | Yes | NULL | Ap | 0 | 20 | 0.189999998 | 79 | 79 | Paralithic bedrock | Loam | 20 | 3 | 1.279999971 | 2 | L | 48508784 | 85 |
| 1 | T9981 Fld3 | 2755654 | 4.599 | 16663847 | Amor | 25 | Yes | NULL | Bw | 20 | 48 | 0.180000007 | 79 | 79 | Paralithic bedrock | Loam | 28 | 2 | 1.299999952 | 2 | L | 48508785 | 85 |
| 1 | T9981 Fld3 | 2755654 | 4.599 | 16663847 | Amor | 25 | Yes | NULL | Bk | 48 | 79 | 0.180000007 | 79 | 79 | Paralithic bedrock | Loam | 31 | 0.75 | 1.399999976 | 2 | L | 48508786 | 85 |
| 1 | T9981 Fld3 | 2755654 | 4.599 | 16663846 | Reeder | 60 | Yes | NULL | Cr | 91 | 152 | 0.079999998 | 91 | 91 | Paralithic bedrock | NULL | 61 | 0.25 | 1.529999971 | 0 | BR | 48508790 | 85 |
| 1 | T9981 Fld3 | 2755654 | 4.599 | 16663846 | Reeder | 60 | Yes | NULL | Bt | 20 | 43 | 0.170000002 | 91 | 91 | Paralithic bedrock | Clay loam | 23 | 2 | 1.399999976 | 0 | CL | 48508789 | 85 |
| 1 | T9981 Fld3 | 2755654 | 4.599 | 16663846 | Reeder | 60 | Yes | NULL | Ap | 0 | 20 | 0.209999993 | 91 | 91 | Paralithic bedrock | Loam | 20 | 2 | 1.149999976 | 5 | L | 48508788 | 85 |
| 1 | T9981 Fld3 | 2755654 | 4.599 | 16663846 | Reeder | 60 | Yes | NULL | Bk | 43 | 91 | 0.180000007 | 91 | 91 | Paralithic bedrock | Loam | 48 | 1.25 | 1.399999976 | 8 | L | 48508791 | 85 |
| 2 | T9981 Fld4 | 2525720 | 8.623 | 16663899 | Daglum | 33 | Yes | NULL | C | 119 | 200 | 0.100000001 | 12 | 12 | Natric | Clay | 81 | 0.25 | 1.450000048 | 0 | C | 48509110 | 176 |
| 2 | T9981 Fld4 | 2525720 | 8.623 | 16663899 | Daglum | 33 | Yes | NULL | Btkny | 46 | 81 | 0.129999995 | 12 | 12 | Natric | Clay loam | 35 | 0.75 | 1.450000048 | 0 | CL | 48509108 | 176 |
| 2 | T9981 Fld4 | 2525720 | 8.623 | 16663899 | Daglum | 33 | Yes | NULL | BCk | 81 | 119 | 0.109999999 | 12 | 12 | Natric | Clay loam | 38 | 0.5 | 1.399999976 | 0 | CL | 48509109 | 176 |
| 2 | T9981 Fld4 | 2525720 | 8.623 | 16663899 | Daglum | 33 | Yes | NULL | E | 7 | 12 | 0.219999999 | 12 | 12 | Natric | Silt loam | 5 | 3.5 | 1.350000024 | 0 | SIL | 48509106 | 176 |
| 2 | T9981 Fld4 | 2525720 | 8.623 | 16663899 | Daglum | 33 | Yes | NULL | A | 0 | 7 | 0.230000004 | 12 | 12 | Natric | Silt loam | 7 | 5.5 | 1.200000048 | 0 | SIL | 48509105 | 176 |
| 2 | T9981 Fld4 | 2525720 | 8.623 | 16663899 | Daglum | 33 | Yes | NULL | Btn | 12 | 46 | 0.170000002 | 12 | 12 | Natric | Silty clay loam | 34 | 2 | 1.350000024 | 0 | SICL | 48509107 | 176 |
| 2 | T9981 Fld4 | 2525720 | 8.623 | 16663903 | Rhoades | 55 | Yes | NULL | C | 117 | 200 | 0.100000001 | 8 | 8 | Natric | Clay | 83 | 0.25 | 1.450000048 | 0 | C | 48509123 | 176 |
| 2 | T9981 Fld4 | 2525720 | 8.623 | 16663903 | Rhoades | 55 | Yes | NULL | Btn | 8 | 20 | 0.180000007 | 8 | 8 | Natric | Clay loam | 12 | 1.25 | 1.399999976 | 0 | CL | 48509121 | 176 |
| 2 | T9981 Fld4 | 2525720 | 8.623 | 16663903 | Rhoades | 55 | Yes | NULL | Btknyz | 20 | 36 | 0.129999995 | 8 | 8 | Natric | Clay loam | 16 | 1.25 | 1.399999976 | 0 | CL | 48509122 | 176 |
| 2 | T9981 Fld4 | 2525720 | 8.623 | 16663903 | Rhoades | 55 | Yes | NULL | Bkyz | 36 | 117 | 0.109999999 | 8 | 8 | Natric | Clay loam | 81 | 0.25 | 1.450000048 | 0 | CL | 48509124 | 176 |
| 2 | T9981 Fld4 | 2525720 | 8.623 | 16663903 | Rhoades | 55 | Yes | NULL | E | 0 | 8 | 0.209999993 | 8 | 8 | Natric | Loam | 8 | 4 | 1.399999976 | 0 | L | 48509125 | 176 |
| 2 | T9981 Fld4 | 2525724 | 0.458 | 16664022 | Belfield | 35 | Yes | NULL | Btn | 31 | 46 | 0.159999996 | NULL | 200 | NULL | Clay | 15 | 2 | 1.350000024 | 0 | C | 48509628 | 85 |
| 2 | T9981 Fld4 | 2525724 | 0.458 | 16664022 | Belfield | 35 | Yes | NULL | E/B | 23 | 31 | 0.189999998 | NULL | 200 | NULL | Clay loam | 8 | 3 | 1.350000024 | 0 | CL | 48509623 | 85 |
| 2 | T9981 Fld4 | 2525724 | 0.458 | 16664022 | Belfield | 35 | Yes | NULL | Btnk | 46 | 64 | 0.159999996 | NULL | 200 | NULL | Clay loam | 18 | 1.5 | 1.399999976 | 0 | CL | 48509629 | 85 |
| 2 | T9981 Fld4 | 2525724 | 0.458 | 16664022 | Belfield | 35 | Yes | NULL | Bk | 64 | 110 | 0.119999997 | NULL | 200 | NULL | Clay loam | 46 | 0.75 | 1.450000048 | 0 | CL | 48509624 | 85 |
| 2 | T9981 Fld4 | 2525724 | 0.458 | 16664022 | Belfield | 35 | Yes | NULL | C | 110 | 200 | 0.100000001 | NULL | 200 | NULL | Clay loam | 90 | 0.5 | 1.549999952 | 0 | CL | 48509625 | 85 |
| 2 | T9981 Fld4 | 2525724 | 0.458 | 16664022 | Belfield | 35 | Yes | NULL | A | 15 | 23 | 0.230000004 | NULL | 200 | NULL | Silt loam | 8 | 3 | 1.320000052 | 0 | SIL | 48509627 | 85 |
| 2 | T9981 Fld4 | 2525724 | 0.458 | 16664022 | Belfield | 35 | Yes | NULL | Ap | 0 | 15 | 0.230000004 | NULL | 200 | NULL | Silt loam | 15 | 3 | 1.399999976 | 0 | SIL | 48509626 | 85 |
| 2 | T9981 Fld4 | 2525724 | 0.458 | 16664018 | Daglum | 20 | Yes | NULL | Btn | 22 | 42 | 0.159999996 | 22 | 22 | Natric | Clay | 20 | 2 | 1.399999976 | 0 | C | 48509586 | 85 |
| 2 | T9981 Fld4 | 2525724 | 0.458 | 16664018 | Daglum | 20 | Yes | NULL | C | 93 | 162 | 0.090000004 | 22 | 22 | Natric | Clay | 69 | 0.25 | 1.450000048 | 0 | C | 48509585 | 85 |
| 2 | T9981 Fld4 | 2525724 | 0.458 | 16664018 | Daglum | 20 | Yes | NULL | BCkyz | 78 | 93 | 0.109999999 | 22 | 22 | Natric | Clay loam | 15 | 0.75 | 1.399999976 | 0 | CL | 48509587 | 85 |
| 2 | T9981 Fld4 | 2525724 | 0.458 | 16664018 | Daglum | 20 | Yes | NULL | Ap | 0 | 15 | 0.180000007 | 22 | 22 | Natric | Clay loam | 15 | 3 | 1.350000024 | 0 | CL | 48509584 | 85 |
| 2 | T9981 Fld4 | 2525724 | 0.458 | 16664018 | Daglum | 20 | Yes | NULL | Btnkyz | 42 | 78 | 0.119999997 | 22 | 22 | Natric | Clay loam | 36 | 1.5 | 1.399999976 | 0 | CL | 48509588 | 85 |
| 2 | T9981 Fld4 | 2525724 | 0.458 | 16664018 | Daglum | 20 | Yes | NULL | E | 15 | 22 | 0.209999993 | 22 | 22 | Natric | Loam | 7 | 2.5 | 1.299999952 | 0 | L | 48509583 | 85 |
| 2 | T9981 Fld4 | 2525724 | 0.458 | 16664017 | Savage | 30 | Yes | NULL | Bt | 15 | 35 | 0.170000002 | NULL | 200 | NULL | Clay | 20 | 2 | 1.399999976 | 0 | C | 48509581 | 85 |
| 2 | T9981 Fld4 | 2525724 | 0.458 | 16664017 | Savage | 30 | Yes | NULL | Ap | 0 | 15 | 0.180000007 | NULL | 200 | NULL | Clay loam | 15 | 3 | 1.350000024 | 0 | CL | 48509578 | 85 |
| 2 | T9981 Fld4 | 2525724 | 0.458 | 16664017 | Savage | 30 | Yes | NULL | Btk | 35 | 54 | 0.159999996 | NULL | 200 | NULL | Clay loam | 19 | 1 | 1.399999976 | 0 | CL | 48509582 | 85 |
| 2 | T9981 Fld4 | 2525724 | 0.458 | 16664017 | Savage | 30 | Yes | NULL | Bk | 54 | 125 | 0.150000006 | NULL | 200 | NULL | Clay loam | 71 | 0.75 | 1.450000048 | 0 | CL | 48509579 | 85 |
| 2 | T9981 Fld4 | 2525724 | 0.458 | 16664017 | Savage | 30 | Yes | NULL | C | 125 | 200 | 0.119999997 | NULL | 200 | NULL | Clay loam | 75 | 0.25 | 1.549999952 | 0 | CL | 48509580 | 85 |
| 2 | T9981 Fld4 | 2525730 | 31.514 | 16663991 | Regent | 68 | Yes | NULL | Cr | 91 | 200 | NULL | 91 | 91 | Paralithic bedrock | NULL | 109 | NULL | NULL | 0 | NULL | 48507811 | 85 |
| 2 | T9981 Fld4 | 2525730 | 31.514 | 16663991 | Regent | 68 | Yes | NULL | Bt1 | 18 | 30 | 0.159999996 | 91 | 91 | Paralithic bedrock | Silty clay | 12 | 2 | 1.350000024 | 0 | SIC | 48507814 | 85 |
| 2 | T9981 Fld4 | 2525730 | 31.514 | 16663991 | Regent | 68 | Yes | NULL | Bt2 | 30 | 56 | 0.150000006 | 91 | 91 | Paralithic bedrock | Silty clay | 26 | 1.200000048 | 1.399999976 | 0 | SIC | 48507815 | 85 |
| 2 | T9981 Fld4 | 2525730 | 31.514 | 16663991 | Regent | 68 | Yes | NULL | Bk | 56 | 91 | 0.140000001 | 91 | 91 | Paralithic bedrock | Silty clay | 35 | 0.75 | 1.399999976 | 0 | SIC | 48507813 | 85 |
| 2 | T9981 Fld4 | 2525730 | 31.514 | 16663991 | Regent | 68 | Yes | NULL | Ap | 0 | 18 | 0.189999998 | 91 | 91 | Paralithic bedrock | Silty clay loam | 18 | 3 | 1.350000024 | 0 | SICL | 48507812 | 85 |
| 2 | T9981 Fld4 | 2525730 | 31.514 | 16663992 | Savage | 17 | Yes | NULL | Cr | 170 | 200 | NULL | 170 | 170 | Paralithic bedrock | NULL | 30 | NULL | NULL | 0 | NULL | 48507816 | 85 |
| 2 | T9981 Fld4 | 2525730 | 31.514 | 16663992 | Savage | 17 | Yes | NULL | Bt1 | 18 | 35 | 0.170000002 | 170 | 170 | Paralithic bedrock | Silty clay | 17 | 2 | 1.399999976 | 0 | SIC | 48507820 | 85 |
| 2 | T9981 Fld4 | 2525730 | 31.514 | 16663992 | Savage | 17 | Yes | NULL | Bt2 | 35 | 53 | 0.159999996 | 170 | 170 | Paralithic bedrock | Silty clay loam | 18 | 1.25 | 1.399999976 | 0 | SICL | 48507821 | 85 |
| 2 | T9981 Fld4 | 2525730 | 31.514 | 16663992 | Savage | 17 | Yes | NULL | Ap | 0 | 18 | 0.200000003 | 170 | 170 | Paralithic bedrock | Silty clay loam | 18 | 3 | 1.350000024 | 0 | SICL | 48507817 | 85 |
| 2 | T9981 Fld4 | 2525730 | 31.514 | 16663992 | Savage | 17 | Yes | NULL | C | 116 | 170 | 0.159999996 | 170 | 170 | Paralithic bedrock | Silty clay loam | 54 | 0.25 | 1.399999976 | 0 | SICL | 48507819 | 85 |
| 2 | T9981 Fld4 | 2525730 | 31.514 | 16663992 | Savage | 17 | Yes | NULL | Bk | 53 | 116 | 0.159999996 | 170 | 170 | Paralithic bedrock | Silty clay loam | 63 | 0.75 | 1.399999976 | 0 | SICL | 48507818 | 85 |
| 2 | T9981 Fld4 | 2525745 | 62.205 | 16663921 | Shambo | 75 | Yes | NULL | A | 15 | 20 | 0.200000003 | NULL | 200 | NULL | Loam | 5 | 3 | 1.299999952 | 0 | L | 48507476 | 150 |
| 2 | T9981 Fld4 | 2525745 | 62.205 | 16663921 | Shambo | 75 | Yes | NULL | Bw1 | 20 | 33 | 0.180000007 | NULL | 200 | NULL | Loam | 13 | 2.5 | 1.299999952 | 0 | L | 48507471 | 150 |
| 2 | T9981 Fld4 | 2525745 | 62.205 | 16663921 | Shambo | 75 | Yes | NULL | BCk | 107 | 122 | 0.170000002 | NULL | 200 | NULL | Loam | 15 | 0.5 | 1.399999976 | 0 | L | 48507473 | 150 |
| 2 | T9981 Fld4 | 2525745 | 62.205 | 16663921 | Shambo | 75 | Yes | NULL | Ap | 0 | 15 | 0.200000003 | NULL | 200 | NULL | Loam | 15 | 3.5 | 1.299999952 | 0 | L | 48507475 | 150 |
| 2 | T9981 Fld4 | 2525745 | 62.205 | 16663921 | Shambo | 75 | Yes | NULL | Bk | 72 | 107 | 0.180000007 | NULL | 200 | NULL | Loam | 35 | 1 | 1.399999976 | 0 | L | 48507477 | 150 |
| 2 | T9981 Fld4 | 2525745 | 62.205 | 16663921 | Shambo | 75 | Yes | NULL | Bw2 | 33 | 72 | 0.180000007 | NULL | 200 | NULL | Loam | 39 | 1.5 | 1.299999952 | 0 | L | 48507472 | 150 |
| 2 | T9981 Fld4 | 2525745 | 62.205 | 16663921 | Shambo | 75 | Yes | NULL | C | 122 | 200 | 0.170000002 | NULL | 200 | NULL | Loam | 78 | 0.25 | 1.5 | 0 | L | 48507474 | 150 |
| 2 | T9981 Fld4 | 2525746 | 63.55 | 16663927 | Shambo | 78 | Yes | NULL | BCk | 107 | 122 | 0.170000002 | NULL | 200 | NULL | Loam | 15 | 0.5 | 1.399999976 | 0 | L | 48507505 | 156 |
| 2 | T9981 Fld4 | 2525746 | 63.55 | 16663927 | Shambo | 78 | Yes | NULL | Ap | 0 | 15 | 0.200000003 | NULL | 200 | NULL | Loam | 15 | 3.5 | 1.299999952 | 0 | L | 48507502 | 156 |
| 2 | T9981 Fld4 | 2525746 | 63.55 | 16663927 | Shambo | 78 | Yes | NULL | Bw1 | 15 | 33 | 0.200000003 | NULL | 200 | NULL | Loam | 18 | 2.5 | 1.350000024 | 0 | L | 48507507 | 156 |
| 2 | T9981 Fld4 | 2525746 | 63.55 | 16663927 | Shambo | 78 | Yes | NULL | Bk | 74 | 107 | 0.180000007 | NULL | 200 | NULL | Loam | 33 | 1 | 1.399999976 | 0 | L | 48507504 | 156 |
| 2 | T9981 Fld4 | 2525746 | 63.55 | 16663927 | Shambo | 78 | Yes | NULL | Bw2 | 33 | 74 | 0.180000007 | NULL | 200 | NULL | Loam | 41 | 1.5 | 1.399999976 | 0 | L | 48507503 | 156 |
| 2 | T9981 Fld4 | 2525746 | 63.55 | 16663927 | Shambo | 78 | Yes | NULL | C | 122 | 200 | 0.170000002 | NULL | 200 | NULL | Loam | 78 | 0.25 | 1.5 | 0 | L | 48507506 | 156 |
| 2 | T9981 Fld4 | 2525754 | 23.138 | 16663602 | Harriet | 75 | Yes | occasionally flooded | 3Ab | 97 | 102 | 0.109999999 | 5 | 5 | Natric | Clay loam | 5 | 0.25 | 1.450000048 | 0 | CL | 48508119 | 150 |
| 2 | T9981 Fld4 | 2525754 | 23.138 | 16663602 | Harriet | 75 | Yes | occasionally flooded | Btn | 5 | 46 | 0.129999995 | 5 | 5 | Natric | Clay loam | 41 | 2 | 1.399999976 | 0 | CL | 48508123 | 150 |
| 2 | T9981 Fld4 | 2525754 | 23.138 | 16663602 | Harriet | 75 | Yes | occasionally flooded | 3C | 102 | 152 | 0.109999999 | 5 | 5 | Natric | Clay loam | 50 | 0.25 | 1.399999976 | 0 | CL | 48508124 | 150 |
| 2 | T9981 Fld4 | 2525754 | 23.138 | 16663602 | Harriet | 75 | Yes | occasionally flooded | E | 0 | 5 | 0.219999999 | 5 | 5 | Natric | Loam | 5 | 4.5 | 1.25 | 0 | L | 48508122 | 150 |
| 2 | T9981 Fld4 | 2525754 | 23.138 | 16663602 | Harriet | 75 | Yes | occasionally flooded | Bz1 | 46 | 71 | 0.129999995 | 5 | 5 | Natric | Loam | 25 | 0.75 | 1.399999976 | 0 | L | 48508120 | 150 |
| 2 | T9981 Fld4 | 2525754 | 23.138 | 16663602 | Harriet | 75 | Yes | occasionally flooded | 2Bz2 | 71 | 97 | 0.119999997 | 5 | 5 | Natric | Very fine sandy loam | 26 | 0.5 | 1.5 | 0 | VFSL | 48508121 | 150 |
| 2 | T9981 Fld4 | 2525769 | 103.909 | 16663985 | Belfield | 48 | Yes | NULL | Btn1 | 33 | 48 | 0.159999996 | NULL | 200 | NULL | Clay | 15 | 2 | 1.350000024 | 0 | C | 48507781 | 176 |
| 2 | T9981 Fld4 | 2525769 | 103.909 | 16663985 | Belfield | 48 | Yes | NULL | E/B | 25 | 33 | 0.189999998 | NULL | 200 | NULL | Clay loam | 8 | 3 | 1.399999976 | 0 | CL | 48507780 | 176 |
| 2 | T9981 Fld4 | 2525769 | 103.909 | 16663985 | Belfield | 48 | Yes | NULL | Btn2 | 48 | 66 | 0.159999996 | NULL | 200 | NULL | Clay loam | 18 | 1.5 | 1.399999976 | 0 | CL | 48507782 | 176 |
| 2 | T9981 Fld4 | 2525769 | 103.909 | 16663985 | Belfield | 48 | Yes | NULL | Bk | 66 | 114 | 0.119999997 | NULL | 200 | NULL | Clay loam | 48 | 1 | 1.399999976 | 0 | CL | 48507783 | 176 |
| 2 | T9981 Fld4 | 2525769 | 103.909 | 16663985 | Belfield | 48 | Yes | NULL | C | 114 | 200 | 0.100000001 | NULL | 200 | NULL | Clay loam | 86 | 0.5 | 1.5 | 0 | CL | 48507784 | 176 |
| 2 | T9981 Fld4 | 2525769 | 103.909 | 16663985 | Belfield | 48 | Yes | NULL | A | 18 | 25 | 0.219999999 | NULL | 200 | NULL | Silt loam | 7 | 4 | 1.299999952 | 0 | SIL | 48507779 | 176 |
| 2 | T9981 Fld4 | 2525769 | 103.909 | 16663985 | Belfield | 48 | Yes | NULL | Ap | 0 | 18 | 0.219999999 | NULL | 200 | NULL | Silt loam | 18 | 4 | 1.299999952 | 0 | SIL | 48507778 | 176 |
| 2 | T9981 Fld4 | 2525769 | 103.909 | 16663987 | Daglum | 40 | Yes | NULL | C | 119 | 200 | 0.090000004 | 22 | 22 | Natric | Clay | 81 | 0.25 | 1.450000048 | 0 | C | 48507795 | 176 |
| 2 | T9981 Fld4 | 2525769 | 103.909 | 16663987 | Daglum | 40 | Yes | NULL | Ap | 0 | 18 | 0.180000007 | 22 | 22 | Natric | Clay loam | 18 | 3 | 1.350000024 | 0 | CL | 48507790 | 176 |
| 2 | T9981 Fld4 | 2525769 | 103.909 | 16663987 | Daglum | 40 | Yes | NULL | Btnky | 47 | 81 | 0.129999995 | 22 | 22 | Natric | Clay loam | 34 | 1.5 | 1.399999976 | 0 | CL | 48507793 | 176 |
| 2 | T9981 Fld4 | 2525769 | 103.909 | 16663987 | Daglum | 40 | Yes | NULL | BCky | 81 | 119 | 0.109999999 | 22 | 22 | Natric | Clay loam | 38 | 0.75 | 1.399999976 | 0 | CL | 48507794 | 176 |
| 2 | T9981 Fld4 | 2525769 | 103.909 | 16663987 | Daglum | 40 | Yes | NULL | E | 18 | 22 | 0.209999993 | 22 | 22 | Natric | Silt loam | 4 | 2.5 | 1.299999952 | 0 | SIL | 48507791 | 176 |
| 2 | T9981 Fld4 | 2525769 | 103.909 | 16663987 | Daglum | 40 | Yes | NULL | Btn | 22 | 47 | 0.159999996 | 22 | 22 | Natric | Silty clay loam | 25 | 2 | 1.350000024 | 0 | SICL | 48507792 | 176 |
| 2 | T9981 Fld4 | 2755639 | 0.443 | 16663555 | Grail | 18 | Yes | NULL | Bt | 25 | 61 | 0.159999996 | NULL | 200 | NULL | Silty clay | 36 | 3 | 1.299999952 | 2 | SIC | 48508328 | 80 |
| 2 | T9981 Fld4 | 2755639 | 0.443 | 16663555 | Grail | 18 | Yes | NULL | A | 13 | 25 | 0.219999999 | NULL | 200 | NULL | Silty clay loam | 12 | 5 | 1.200000048 | 2 | SICL | 48508327 | 80 |
| 2 | T9981 Fld4 | 2755639 | 0.443 | 16663555 | Grail | 18 | Yes | NULL | Ap | 0 | 13 | 0.219999999 | NULL | 200 | NULL | Silty clay loam | 13 | 5 | 1.200000048 | 2 | SICL | 48508331 | 80 |
| 2 | T9981 Fld4 | 2755639 | 0.443 | 16663555 | Grail | 18 | Yes | NULL | C | 132 | 152 | 0.180000007 | NULL | 200 | NULL | Silty clay loam | 20 | 0.5 | 1.299999952 | 2 | SICL | 48508329 | 80 |
| 2 | T9981 Fld4 | 2755639 | 0.443 | 16663555 | Grail | 18 | Yes | NULL | Bk | 61 | 132 | 0.170000002 | NULL | 200 | NULL | Silty clay loam | 71 | 1 | 1.299999952 | 1 | SICL | 48508330 | 80 |
| 2 | T9981 Fld4 | 2755639 | 0.443 | 16663554 | Savage | 62 | Yes | NULL | Bt | 18 | 64 | 0.180000007 | NULL | 200 | NULL | Silty clay | 46 | 1.5 | 1.379999995 | 0 | SIC | 48508333 | 80 |
| 2 | T9981 Fld4 | 2755639 | 0.443 | 16663554 | Savage | 62 | Yes | NULL | Ap | 0 | 18 | 0.209999993 | NULL | 200 | NULL | Silty clay loam | 18 | 2 | 1.149999976 | 0 | SICL | 48508334 | 80 |
| 2 | T9981 Fld4 | 2755639 | 0.443 | 16663554 | Savage | 62 | Yes | NULL | Bk | 64 | 130 | 0.180000007 | NULL | 200 | NULL | Silty clay loam | 66 | 0.75 | 1.399999976 | 0 | SICL | 48508335 | 80 |
| 2 | T9981 Fld4 | 2755639 | 0.443 | 16663554 | Savage | 62 | Yes | NULL | C | 130 | 203 | 0.180000007 | NULL | 200 | NULL | Silty clay loam | 73 | 0.25 | 1.399999976 | 0 | SICL | 48508332 | 80 |
| 2 | T9981 Fld4 | 2755643 | 9.641 | 16663957 | Flasher | 30 | Yes | NULL | Cr | 38 | 200 | NULL | 38 | 38 | Paralithic bedrock | NULL | 162 | NULL | NULL | 0 | NULL | 48507642 | 88 |
| 2 | T9981 Fld4 | 2755643 | 9.641 | 16663957 | Flasher | 30 | Yes | NULL | AC | 13 | 25 | 0.100000001 | 38 | 38 | Paralithic bedrock | Loamy fine sand | 12 | 1 | 1.450000048 | 5 | LFS | 48507644 | 88 |
| 2 | T9981 Fld4 | 2755643 | 9.641 | 16663957 | Flasher | 30 | Yes | NULL | C | 25 | 38 | 0.100000001 | 38 | 38 | Paralithic bedrock | Loamy fine sand | 13 | 0.5 | 1.5 | 8 | LFS | 48507645 | 88 |
| 2 | T9981 Fld4 | 2755643 | 9.641 | 16663957 | Flasher | 30 | Yes | NULL | A | 0 | 13 | 0.109999999 | 38 | 38 | Paralithic bedrock | Loamy fine sand | 13 | 1.5 | 1.399999976 | 5 | LFS | 48507643 | 88 |
| 2 | T9981 Fld4 | 2755643 | 9.641 | 16663959 | Tally | 18 | Yes | NULL | Cr | 178 | 200 | NULL | 178 | 178 | Paralithic bedrock | NULL | 22 | NULL | NULL | 0 | NULL | 48507651 | 88 |
| 2 | T9981 Fld4 | 2755643 | 9.641 | 16663959 | Tally | 18 | Yes | NULL | Bw2 | 31 | 46 | 0.140000001 | 178 | 178 | Paralithic bedrock | Fine sandy loam | 15 | 1.5 | 1.5 | 4 | FSL | 48507654 | 88 |
| 2 | T9981 Fld4 | 2755643 | 9.641 | 16663959 | Tally | 18 | Yes | NULL | A | 0 | 15 | 0.170000002 | 178 | 178 | Paralithic bedrock | Fine sandy loam | 15 | 2.5 | 1.5 | 3 | FSL | 48507652 | 88 |
| 2 | T9981 Fld4 | 2755643 | 9.641 | 16663959 | Tally | 18 | Yes | NULL | Bw1 | 15 | 31 | 0.159999996 | 178 | 178 | Paralithic bedrock | Fine sandy loam | 16 | 2 | 1.5 | 3 | FSL | 48507653 | 88 |
| 2 | T9981 Fld4 | 2755643 | 9.641 | 16663959 | Tally | 18 | Yes | NULL | Bk | 46 | 84 | 0.129999995 | 178 | 178 | Paralithic bedrock | Fine sandy loam | 38 | 1 | 1.549999952 | 5 | FSL | 48507655 | 88 |
| 2 | T9981 Fld4 | 2755643 | 9.641 | 16663959 | Tally | 18 | Yes | NULL | C | 84 | 178 | 0.129999995 | 178 | 178 | Paralithic bedrock | Fine sandy loam | 94 | 0.5 | 1.549999952 | 6 | FSL | 48507656 | 88 |
| 2 | T9981 Fld4 | 2755643 | 9.641 | 16663958 | Vebar | 40 | Yes | NULL | Cr | 74 | 200 | NULL | 74 | 74 | Paralithic bedrock | NULL | 126 | NULL | NULL | 0 | NULL | 48507646 | 88 |
| 2 | T9981 Fld4 | 2755643 | 9.641 | 16663958 | Vebar | 40 | Yes | NULL | Bw1 | 15 | 28 | 0.150000006 | 74 | 74 | Paralithic bedrock | Fine sandy loam | 13 | 1.5 | 1.450000048 | 4 | FSL | 48507650 | 88 |
| 2 | T9981 Fld4 | 2755643 | 9.641 | 16663958 | Vebar | 40 | Yes | NULL | Bw2 | 28 | 43 | 0.140000001 | 74 | 74 | Paralithic bedrock | Fine sandy loam | 15 | 1 | 1.5 | 6 | FSL | 48507647 | 88 |
| 2 | T9981 Fld4 | 2755643 | 9.641 | 16663958 | Vebar | 40 | Yes | NULL | A | 0 | 15 | 0.159999996 | 74 | 74 | Paralithic bedrock | Fine sandy loam | 15 | 2 | 1.399999976 | 4 | FSL | 48507649 | 88 |
| 2 | T9981 Fld4 | 2755643 | 9.641 | 16663958 | Vebar | 40 | Yes | NULL | Bk | 43 | 74 | 0.129999995 | 74 | 74 | Paralithic bedrock | Fine sandy loam | 31 | 0.5 | 1.549999952 | 7 | FSL | 48507648 | 88 |
| 2 | T9981 Fld4 | 2755648 | 11.382 | 16663767 | Janesburg | 20 | Yes | NULL | Cr | 66 | 152 | 0.079999998 | 25 | 25 | Natric | NULL | 86 | 0.25 | 1.5 | 0 | BR | 48507343 | 156 |
| 2 | T9981 Fld4 | 2755648 | 11.382 | 16663767 | Janesburg | 20 | Yes | NULL | E | 20 | 25 | 0.200000003 | 25 | 25 | Natric | Silt loam | 5 | 2.5 | 1.299999952 | 0 | SIL | 48507341 | 156 |
| 2 | T9981 Fld4 | 2755648 | 11.382 | 16663767 | Janesburg | 20 | Yes | NULL | BCk | 53 | 66 | 0.129999995 | 25 | 25 | Natric | Silt loam | 13 | 0.75 | 1.5 | 0 | SIL | 48507344 | 156 |
| 2 | T9981 Fld4 | 2755648 | 11.382 | 16663767 | Janesburg | 20 | Yes | NULL | Ap | 0 | 20 | 0.219999999 | 25 | 25 | Natric | Silt loam | 20 | 3 | 1.149999976 | 0 | SIL | 48507345 | 156 |
| 2 | T9981 Fld4 | 2755648 | 11.382 | 16663767 | Janesburg | 20 | Yes | NULL | Btn | 25 | 53 | 0.129999995 | 25 | 25 | Natric | Silty clay | 28 | 1.5 | 1.5 | 0 | SIC | 48507342 | 156 |
| 2 | T9981 Fld4 | 2755648 | 11.382 | 16663766 | Reeder | 58 | Yes | NULL | Cr | 91 | 152 | 0.079999998 | 91 | 91 | Paralithic bedrock | NULL | 61 | 0.25 | 1.529999971 | 0 | BR | 48507346 | 156 |
| 2 | T9981 Fld4 | 2755648 | 11.382 | 16663766 | Reeder | 58 | Yes | NULL | Bt | 20 | 43 | 0.170000002 | 91 | 91 | Paralithic bedrock | Clay loam | 23 | 2 | 1.399999976 | 0 | CL | 48507347 | 156 |
| 2 | T9981 Fld4 | 2755648 | 11.382 | 16663766 | Reeder | 58 | Yes | NULL | Ap | 0 | 20 | 0.209999993 | 91 | 91 | Paralithic bedrock | Loam | 20 | 2 | 1.149999976 | 5 | L | 48507349 | 156 |
| 2 | T9981 Fld4 | 2755648 | 11.382 | 16663766 | Reeder | 58 | Yes | NULL | Bk | 43 | 91 | 0.180000007 | 91 | 91 | Paralithic bedrock | Loam | 48 | 1.25 | 1.399999976 | 8 | L | 48507348 | 156 |

### Mapunit Component Composition Table

This table summarizes the proportion of components in each map unit. The components should sum to 100, but this step ensures that any database errors do not overestimate or underestimate stocks on an areal basis.

#### MUACPF table

---Sums the Component Percent and eliminate duplicate values by cokey

SELECT landunit, aoiid, mapunit\_acres , mukey, cokey, FORMAT ((1.0 \* comppct\_r / mu\_pct\_sum), '#,###,##0.00') AS adj\_comp\_pct

INTO #muacpf

FROM #acpf AS acpf2

WHERE acpf2.cokey=cokey

GROUP BY landunit, aoiid, mapunit\_acres , mukey, cokey, comppct\_r, mu\_pct\_sum

| **landunit** | **aoiid** | **mapunit\_acres** | **mukey** | **cokey** | **adj\_comp\_pct** |
| --- | --- | --- | --- | --- | --- |
| T9981 Fld3 | 1 | 0.129 | 2525733 | 16663951 | 0.67 |
| T9981 Fld3 | 1 | 0.129 | 2525733 | 16663952 | 0.33 |
| T9981 Fld3 | 1 | 0.287 | 354648 | 16464607 | 0.29 |
| T9981 Fld3 | 1 | 0.287 | 354648 | 16464612 | 0.71 |
| T9981 Fld3 | 1 | 0.426 | 354627 | 16464494 | 0.28 |
| T9981 Fld3 | 1 | 0.426 | 354627 | 16464495 | 0.72 |
| T9981 Fld3 | 1 | 1.35 | 2525732 | 16663796 | 0.76 |
| T9981 Fld3 | 1 | 1.35 | 2525732 | 16663797 | 0.24 |
| T9981 Fld3 | 1 | 1.729 | 2494708 | 16663930 | 0.6 |
| T9981 Fld3 | 1 | 1.729 | 2494708 | 16663931 | 0.4 |
| T9981 Fld3 | 1 | 2.449 | 2755648 | 16663766 | 0.37 |
| T9981 Fld3 | 1 | 2.449 | 2755648 | 16663767 | 0.13 |
| T9981 Fld3 | 1 | 4.599 | 2755654 | 16663846 | 0.71 |
| T9981 Fld3 | 1 | 4.599 | 2755654 | 16663847 | 0.29 |
| T9981 Fld3 | 1 | 4.983 | 2525745 | 16663921 | 0.5 |
| T9981 Fld3 | 1 | 12.638 | 2525754 | 16663602 | 0.5 |
| T9981 Fld3 | 1 | 16.106 | 2525746 | 16663927 | 0.5 |
| T9981 Fld3 | 1 | 17.691 | 2525764 | 16663611 | 1 |
| T9981 Fld3 | 1 | 28.479 | 2525739 | 16663915 | 0.26 |
| T9981 Fld3 | 1 | 28.479 | 2525739 | 16663917 | 0.74 |
| T9981 Fld3 | 1 | 56.699 | 2525720 | 16663899 | 0.19 |
| T9981 Fld3 | 1 | 56.699 | 2525720 | 16663903 | 0.31 |
| T9981 Fld3 | 1 | 181.356 | 2525769 | 16663985 | 0.27 |
| T9981 Fld3 | 1 | 181.356 | 2525769 | 16663987 | 0.23 |
| T9981 Fld4 | 2 | 0.443 | 2755639 | 16663554 | 0.78 |
| T9981 Fld4 | 2 | 0.443 | 2755639 | 16663555 | 0.23 |
| T9981 Fld4 | 2 | 0.458 | 2525724 | 16664017 | 0.35 |
| T9981 Fld4 | 2 | 0.458 | 2525724 | 16664018 | 0.24 |
| T9981 Fld4 | 2 | 0.458 | 2525724 | 16664022 | 0.41 |
| T9981 Fld4 | 2 | 8.623 | 2525720 | 16663899 | 0.19 |
| T9981 Fld4 | 2 | 8.623 | 2525720 | 16663903 | 0.31 |
| T9981 Fld4 | 2 | 9.641 | 2755643 | 16663957 | 0.34 |
| T9981 Fld4 | 2 | 9.641 | 2755643 | 16663958 | 0.45 |
| T9981 Fld4 | 2 | 9.641 | 2755643 | 16663959 | 0.2 |
| T9981 Fld4 | 2 | 11.382 | 2755648 | 16663766 | 0.37 |
| T9981 Fld4 | 2 | 11.382 | 2755648 | 16663767 | 0.13 |
| T9981 Fld4 | 2 | 23.138 | 2525754 | 16663602 | 0.5 |
| T9981 Fld4 | 2 | 31.514 | 2525730 | 16663991 | 0.8 |
| T9981 Fld4 | 2 | 31.514 | 2525730 | 16663992 | 0.2 |
| T9981 Fld4 | 2 | 62.205 | 2525745 | 16663921 | 0.5 |
| T9981 Fld4 | 2 | 63.55 | 2525746 | 16663927 | 0.5 |
| T9981 Fld4 | 2 | 103.909 | 2525769 | 16663985 | 0.27 |
| T9981 Fld4 | 2 | 103.909 | 2525769 | 16663987 | 0.23 |

## Layer Data

The following tables collect data by layers (horizons) from each component needed for SOC stock calculation.

Layer variables used in SOC stock calculation (r denotes that the value is representative of the central tendency):

\* hzdept\_r = top depth of layer (NSSH, 2017 – Part 618.36).   
\* hzdepb = bottom depth of layer (NSSH, 2017 – Part 618.35).   
\* om\_r = layer organic matter (%) content. U.S. Soil Survey databases report OM (NSSH, 2017 – Part 618.43). This is typically based on measurement of total combustion carbon and calcium carbonate concentration by calcimeter (KSSL, 2014).   
\* dbthirdbar\_r = bulk density representing field conditions (NSSH, 2017 – Part 618.7). U.S. Soil Survey databases report this on a clod measurement of volume at 1/3-bar and of weight at ovendry water content (KSSL, 2014)   
\* fragvol\_r = volume of coarse fragments (>2 mm in size), typically based on visual estimates (NSSH, 2017 – Part 618.36).

### Acpf Hzn Table

SELECT

mukey,

cokey,

hzname,

restrictiodepth,

hzdept\_r,

hzdepb\_r,

CASE WHEN (hzdepb\_r-hzdept\_r) IS NULL THEN 0 ELSE CAST ((hzdepb\_r-hzdept\_r) AS INT) END AS thickness,

texture,

CASE WHEN dbthirdbar\_r IS NULL THEN 0 ELSE dbthirdbar\_r END AS dbthirdbar\_r,

CASE WHEN fragvol IS NULL THEN 0 ELSE fragvol END AS fragvol,

CASE when om\_r IS NULL THEN 0 ELSE om\_r END AS om\_r,

chkey

INTO #acpfhzn

FROM #acpf

| **mukey** | **cokey** | **hzname** | **restrictiodepth** | **hzdept\_r** | **hzdepb\_r** | **thickness** | **texture** | **dbthirdbar\_r** | **fragvol** | **om\_r** | **chkey** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 354627 | 16464494 | H2 | 200 | 18 | 43 | 25 | C | 1.450000048 | 0 | 1.5 | 47888422 |
| 354627 | 16464494 | H1 | 200 | 0 | 18 | 18 | L | 1.350000024 | 0 | 3 | 47888421 |
| 354627 | 16464494 | H3 | 200 | 43 | 152 | 109 | SICL | 1.600000024 | 0 | 0.5 | 47888423 |
| 354627 | 16464495 | H2 | 200 | 20 | 41 | 21 | CL | 1.299999952 | 0 | 1.5 | 47887710 |
| 354627 | 16464495 | H1 | 200 | 0 | 20 | 20 | L | 1.299999952 | 0 | 3 | 47887709 |
| 354627 | 16464495 | H3 | 200 | 41 | 89 | 48 | L | 1.330000043 | 0 | 0.75 | 47887707 |
| 354627 | 16464495 | H4 | 200 | 89 | 152 | 63 | L | 1.350000024 | 0 | 0.25 | 47887708 |
| 354648 | 16464607 | Cr | 77 | 86 | 152 | 66 | NULL | 0 | 0 | 0.25 | 47888315 |
| 354648 | 16464607 | H2 | 77 | 20 | 33 | 13 | L | 1.299999952 | 2 | 2 | 47888313 |
| 354648 | 16464607 | H1 | 77 | 0 | 20 | 20 | L | 1.279999971 | 2 | 4.5 | 47888312 |
| 354648 | 16464607 | H3 | 77 | 33 | 86 | 53 | L | 1.399999976 | 2 | 0.75 | 47888314 |
| 354648 | 16464612 | Cr | 77 | 81 | 152 | 71 | NULL | 0 | 0 | 0 | 47887978 |
| 354648 | 16464612 | H3 | 77 | 48 | 81 | 33 | CL | 1.350000024 | 13 | 1.25 | 47887981 |
| 354648 | 16464612 | H2 | 77 | 13 | 48 | 35 | CL | 1.299999952 | 0 | 2 | 47887980 |
| 354648 | 16464612 | H1 | 77 | 0 | 13 | 13 | L | 1.279999971 | 8 | 4 | 47887979 |
| 2494708 | 16663930 | Cr | 76 | 76 | 200 | 124 | NULL | 0 | 0 | 0 | 48509159 |
| 2494708 | 16663930 | Bw1 | 76 | 13 | 23 | 10 | L | 1.399999976 | 0 | 2 | 48509160 |
| 2494708 | 16663930 | Ap | 76 | 0 | 13 | 13 | L | 1.399999976 | 2 | 3 | 48509164 |
| 2494708 | 16663930 | Bw2 | 76 | 23 | 38 | 15 | L | 1.350000024 | 0 | 1.5 | 48509163 |
| 2494708 | 16663930 | BCk | 76 | 58 | 76 | 18 | L | 1.399999976 | 0 | 0.5 | 48509162 |
| 2494708 | 16663930 | Bk | 76 | 38 | 58 | 20 | L | 1.350000024 | 0 | 0.800000012 | 48509161 |
| 2494708 | 16663931 | Cr | 38 | 38 | 200 | 162 | NULL | 0 | 0 | 0 | 48509165 |
| 2494708 | 16663931 | Ap | 38 | 0 | 13 | 13 | L | 1.399999976 | 5 | 2 | 48509166 |
| 2494708 | 16663931 | Bk | 38 | 13 | 38 | 25 | L | 1.399999976 | 2 | 0.800000012 | 48509167 |
| 2525720 | 16663899 | C | 12 | 119 | 200 | 81 | C | 1.450000048 | 0 | 0.25 | 48509110 |
| 2525720 | 16663899 | Btkny | 12 | 46 | 81 | 35 | CL | 1.450000048 | 0 | 0.75 | 48509108 |
| 2525720 | 16663899 | BCk | 12 | 81 | 119 | 38 | CL | 1.399999976 | 0 | 0.5 | 48509109 |
| 2525720 | 16663899 | E | 12 | 7 | 12 | 5 | SIL | 1.350000024 | 0 | 3.5 | 48509106 |
| 2525720 | 16663899 | A | 12 | 0 | 7 | 7 | SIL | 1.200000048 | 0 | 5.5 | 48509105 |
| 2525720 | 16663899 | Btn | 12 | 12 | 46 | 34 | SICL | 1.350000024 | 0 | 2 | 48509107 |
| 2525720 | 16663903 | C | 8 | 117 | 200 | 83 | C | 1.450000048 | 0 | 0.25 | 48509123 |
| 2525720 | 16663903 | Btn | 8 | 8 | 20 | 12 | CL | 1.399999976 | 0 | 1.25 | 48509121 |
| 2525720 | 16663903 | Btknyz | 8 | 20 | 36 | 16 | CL | 1.399999976 | 0 | 1.25 | 48509122 |
| 2525720 | 16663903 | Bkyz | 8 | 36 | 117 | 81 | CL | 1.450000048 | 0 | 0.25 | 48509124 |
| 2525720 | 16663903 | E | 8 | 0 | 8 | 8 | L | 1.399999976 | 0 | 4 | 48509125 |
| 2525732 | 16663796 | Btn | 30 | 30 | 43 | 13 | FSL | 1.5 | 0 | 0.5 | 48508966 |
| 2525732 | 16663796 | Ap | 30 | 0 | 15 | 15 | FSL | 1.399999976 | 0 | 1.5 | 48508969 |
| 2525732 | 16663796 | E | 30 | 15 | 30 | 15 | FSL | 1.450000048 | 0 | 1.5 | 48508965 |
| 2525732 | 16663796 | Bz | 30 | 43 | 84 | 41 | FSL | 1.5 | 0 | 0.5 | 48508968 |
| 2525732 | 16663796 | C | 30 | 84 | 152 | 68 | LFS | 1.450000048 | 0 | 0.25 | 48508967 |
| 2525732 | 16663797 | Ap | 200 | 0 | 15 | 15 | FSL | 1.25 | 0 | 3 | 48508961 |
| 2525732 | 16663797 | Bt | 200 | 15 | 71 | 56 | SCL | 1.549999952 | 0 | 1 | 48508962 |
| 2525732 | 16663797 | Bk | 200 | 71 | 86 | 15 | SL | 1.549999952 | 0 | 0.5 | 48508963 |
| 2525732 | 16663797 | BC | 200 | 86 | 152 | 66 | SL | 1.549999952 | 0 | 0.25 | 48508964 |
| 2525733 | 16663952 | Cr | 43 | 43 | 200 | 157 | NULL | 0 | 0 | 0 | 48507618 |
| 2525733 | 16663952 | Ap | 43 | 0 | 15 | 15 | FSL | 1.5 | 3 | 1 | 48507620 |
| 2525733 | 16663952 | C | 43 | 15 | 43 | 28 | FSL | 1.5 | 5 | 0.5 | 48507619 |
| 2525733 | 16663951 | Cr | 74 | 74 | 200 | 126 | NULL | 0 | 0 | 0 | 48507613 |
| 2525733 | 16663951 | Bw1 | 74 | 15 | 28 | 13 | FSL | 1.450000048 | 4 | 1.5 | 48507615 |
| 2525733 | 16663951 | Bw2 | 74 | 28 | 43 | 15 | FSL | 1.5 | 6 | 1 | 48507616 |
| 2525733 | 16663951 | Ap | 74 | 0 | 15 | 15 | FSL | 1.399999976 | 4 | 2 | 48507614 |
| 2525733 | 16663951 | Bk | 74 | 43 | 74 | 31 | FSL | 1.549999952 | 7 | 0.5 | 48507617 |
| 2525739 | 16663915 | Bw2 | 200 | 60 | 75 | 15 | FSL | 1.549999952 | 2 | 1 | 48509145 |
| 2525739 | 16663915 | A | 200 | 15 | 30 | 15 | FSL | 1.450000048 | 1 | 2.5 | 48509143 |
| 2525739 | 16663915 | Ap | 200 | 0 | 15 | 15 | FSL | 1.5 | 1 | 3.5 | 48509148 |
| 2525739 | 16663915 | Bw1 | 200 | 30 | 60 | 30 | FSL | 1.5 | 1 | 1.5 | 48509144 |
| 2525739 | 16663915 | Bk | 200 | 75 | 122 | 47 | FSL | 1.549999952 | 3 | 0.75 | 48509146 |
| 2525739 | 16663915 | C | 200 | 122 | 200 | 78 | FSL | 1.600000024 | 5 | 0.25 | 48509147 |
| 2525739 | 16663917 | Cr | 81 | 81 | 200 | 119 | NULL | 0 | 0 | 0 | 48507454 |
| 2525739 | 16663917 | BCk | 81 | 66 | 81 | 15 | FSL | 1.549999952 | 7 | 0.5 | 48507456 |
| 2525739 | 16663917 | Ap | 81 | 0 | 15 | 15 | FSL | 1.549999952 | 3 | 2 | 48507458 |
| 2525739 | 16663917 | Bw1 | 81 | 15 | 32 | 17 | FSL | 1.5 | 4 | 1.5 | 48507455 |
| 2525739 | 16663917 | Bw2 | 81 | 32 | 66 | 34 | FSL | 1.5 | 6 | 1 | 48507457 |
| 2525745 | 16663921 | A | 200 | 15 | 20 | 5 | L | 1.299999952 | 0 | 3 | 48507476 |
| 2525745 | 16663921 | Bw1 | 200 | 20 | 33 | 13 | L | 1.299999952 | 0 | 2.5 | 48507471 |
| 2525745 | 16663921 | BCk | 200 | 107 | 122 | 15 | L | 1.399999976 | 0 | 0.5 | 48507473 |
| 2525745 | 16663921 | Ap | 200 | 0 | 15 | 15 | L | 1.299999952 | 0 | 3.5 | 48507475 |
| 2525745 | 16663921 | Bk | 200 | 72 | 107 | 35 | L | 1.399999976 | 0 | 1 | 48507477 |
| 2525745 | 16663921 | Bw2 | 200 | 33 | 72 | 39 | L | 1.299999952 | 0 | 1.5 | 48507472 |
| 2525745 | 16663921 | C | 200 | 122 | 200 | 78 | L | 1.5 | 0 | 0.25 | 48507474 |
| 2525746 | 16663927 | BCk | 200 | 107 | 122 | 15 | L | 1.399999976 | 0 | 0.5 | 48507505 |
| 2525746 | 16663927 | Ap | 200 | 0 | 15 | 15 | L | 1.299999952 | 0 | 3.5 | 48507502 |
| 2525746 | 16663927 | Bw1 | 200 | 15 | 33 | 18 | L | 1.350000024 | 0 | 2.5 | 48507507 |
| 2525746 | 16663927 | Bk | 200 | 74 | 107 | 33 | L | 1.399999976 | 0 | 1 | 48507504 |
| 2525746 | 16663927 | Bw2 | 200 | 33 | 74 | 41 | L | 1.399999976 | 0 | 1.5 | 48507503 |
| 2525746 | 16663927 | C | 200 | 122 | 200 | 78 | L | 1.5 | 0 | 0.25 | 48507506 |
| 2525754 | 16663602 | 3Ab | 5 | 97 | 102 | 5 | CL | 1.450000048 | 0 | 0.25 | 48508119 |
| 2525754 | 16663602 | Btn | 5 | 5 | 46 | 41 | CL | 1.399999976 | 0 | 2 | 48508123 |
| 2525754 | 16663602 | 3C | 5 | 102 | 152 | 50 | CL | 1.399999976 | 0 | 0.25 | 48508124 |
| 2525754 | 16663602 | E | 5 | 0 | 5 | 5 | L | 1.25 | 0 | 4.5 | 48508122 |
| 2525754 | 16663602 | Bz1 | 5 | 46 | 71 | 25 | L | 1.399999976 | 0 | 0.75 | 48508120 |
| 2525754 | 16663602 | 2Bz2 | 5 | 71 | 97 | 26 | VFSL | 1.5 | 0 | 0.5 | 48508121 |
| 2525764 | 16663611 | 2Czg | 200 | 71 | 152 | 81 | CL | 1.399999976 | 0 | 0.75 | 48508082 |
| 2525764 | 16663611 | Az | 200 | 0 | 23 | 23 | SIL | 1.149999976 | 0 | 4 | 48508083 |
| 2525764 | 16663611 | Bkzg | 200 | 23 | 71 | 48 | SICL | 1.399999976 | 0 | 2 | 48508081 |
| 2525769 | 16663985 | Btn1 | 200 | 33 | 48 | 15 | C | 1.350000024 | 0 | 2 | 48507781 |
| 2525769 | 16663985 | E/B | 200 | 25 | 33 | 8 | CL | 1.399999976 | 0 | 3 | 48507780 |
| 2525769 | 16663985 | Btn2 | 200 | 48 | 66 | 18 | CL | 1.399999976 | 0 | 1.5 | 48507782 |
| 2525769 | 16663985 | Bk | 200 | 66 | 114 | 48 | CL | 1.399999976 | 0 | 1 | 48507783 |
| 2525769 | 16663985 | C | 200 | 114 | 200 | 86 | CL | 1.5 | 0 | 0.5 | 48507784 |
| 2525769 | 16663985 | A | 200 | 18 | 25 | 7 | SIL | 1.299999952 | 0 | 4 | 48507779 |
| 2525769 | 16663985 | Ap | 200 | 0 | 18 | 18 | SIL | 1.299999952 | 0 | 4 | 48507778 |
| 2525769 | 16663987 | C | 22 | 119 | 200 | 81 | C | 1.450000048 | 0 | 0.25 | 48507795 |
| 2525769 | 16663987 | Ap | 22 | 0 | 18 | 18 | CL | 1.350000024 | 0 | 3 | 48507790 |
| 2525769 | 16663987 | Btnky | 22 | 47 | 81 | 34 | CL | 1.399999976 | 0 | 1.5 | 48507793 |
| 2525769 | 16663987 | BCky | 22 | 81 | 119 | 38 | CL | 1.399999976 | 0 | 0.75 | 48507794 |
| 2525769 | 16663987 | E | 22 | 18 | 22 | 4 | SIL | 1.299999952 | 0 | 2.5 | 48507791 |
| 2525769 | 16663987 | Btn | 22 | 22 | 47 | 25 | SICL | 1.350000024 | 0 | 2 | 48507792 |
| 2755648 | 16663767 | Cr | 25 | 66 | 152 | 86 | BR | 1.5 | 0 | 0.25 | 48507343 |
| 2755648 | 16663767 | E | 25 | 20 | 25 | 5 | SIL | 1.299999952 | 0 | 2.5 | 48507341 |
| 2755648 | 16663767 | BCk | 25 | 53 | 66 | 13 | SIL | 1.5 | 0 | 0.75 | 48507344 |
| 2755648 | 16663767 | Ap | 25 | 0 | 20 | 20 | SIL | 1.149999976 | 0 | 3 | 48507345 |
| 2755648 | 16663767 | Btn | 25 | 25 | 53 | 28 | SIC | 1.5 | 0 | 1.5 | 48507342 |
| 2755648 | 16663766 | Cr | 91 | 91 | 152 | 61 | BR | 1.529999971 | 0 | 0.25 | 48507346 |
| 2755648 | 16663766 | Bt | 91 | 20 | 43 | 23 | CL | 1.399999976 | 0 | 2 | 48507347 |
| 2755648 | 16663766 | Ap | 91 | 0 | 20 | 20 | L | 1.149999976 | 5 | 2 | 48507349 |
| 2755648 | 16663766 | Bk | 91 | 43 | 91 | 48 | L | 1.399999976 | 8 | 1.25 | 48507348 |
| 2755654 | 16663847 | Cr | 79 | 79 | 152 | 73 | BR | 1.529999971 | 0 | 0.25 | 48508787 |
| 2755654 | 16663847 | Ap | 79 | 0 | 20 | 20 | L | 1.279999971 | 2 | 3 | 48508784 |
| 2755654 | 16663847 | Bw | 79 | 20 | 48 | 28 | L | 1.299999952 | 2 | 2 | 48508785 |
| 2755654 | 16663847 | Bk | 79 | 48 | 79 | 31 | L | 1.399999976 | 2 | 0.75 | 48508786 |
| 2755654 | 16663846 | Cr | 91 | 91 | 152 | 61 | BR | 1.529999971 | 0 | 0.25 | 48508790 |
| 2755654 | 16663846 | Bt | 91 | 20 | 43 | 23 | CL | 1.399999976 | 0 | 2 | 48508789 |
| 2755654 | 16663846 | Ap | 91 | 0 | 20 | 20 | L | 1.149999976 | 5 | 2 | 48508788 |
| 2755654 | 16663846 | Bk | 91 | 43 | 91 | 48 | L | 1.399999976 | 8 | 1.25 | 48508791 |
| 2525720 | 16663899 | C | 12 | 119 | 200 | 81 | C | 1.450000048 | 0 | 0.25 | 48509110 |
| 2525720 | 16663899 | Btkny | 12 | 46 | 81 | 35 | CL | 1.450000048 | 0 | 0.75 | 48509108 |
| 2525720 | 16663899 | BCk | 12 | 81 | 119 | 38 | CL | 1.399999976 | 0 | 0.5 | 48509109 |
| 2525720 | 16663899 | E | 12 | 7 | 12 | 5 | SIL | 1.350000024 | 0 | 3.5 | 48509106 |
| 2525720 | 16663899 | A | 12 | 0 | 7 | 7 | SIL | 1.200000048 | 0 | 5.5 | 48509105 |
| 2525720 | 16663899 | Btn | 12 | 12 | 46 | 34 | SICL | 1.350000024 | 0 | 2 | 48509107 |
| 2525720 | 16663903 | C | 8 | 117 | 200 | 83 | C | 1.450000048 | 0 | 0.25 | 48509123 |
| 2525720 | 16663903 | Btn | 8 | 8 | 20 | 12 | CL | 1.399999976 | 0 | 1.25 | 48509121 |
| 2525720 | 16663903 | Btknyz | 8 | 20 | 36 | 16 | CL | 1.399999976 | 0 | 1.25 | 48509122 |
| 2525720 | 16663903 | Bkyz | 8 | 36 | 117 | 81 | CL | 1.450000048 | 0 | 0.25 | 48509124 |
| 2525720 | 16663903 | E | 8 | 0 | 8 | 8 | L | 1.399999976 | 0 | 4 | 48509125 |
| 2525724 | 16664022 | Btn | 200 | 31 | 46 | 15 | C | 1.350000024 | 0 | 2 | 48509628 |
| 2525724 | 16664022 | E/B | 200 | 23 | 31 | 8 | CL | 1.350000024 | 0 | 3 | 48509623 |
| 2525724 | 16664022 | Btnk | 200 | 46 | 64 | 18 | CL | 1.399999976 | 0 | 1.5 | 48509629 |
| 2525724 | 16664022 | Bk | 200 | 64 | 110 | 46 | CL | 1.450000048 | 0 | 0.75 | 48509624 |
| 2525724 | 16664022 | C | 200 | 110 | 200 | 90 | CL | 1.549999952 | 0 | 0.5 | 48509625 |
| 2525724 | 16664022 | A | 200 | 15 | 23 | 8 | SIL | 1.320000052 | 0 | 3 | 48509627 |
| 2525724 | 16664022 | Ap | 200 | 0 | 15 | 15 | SIL | 1.399999976 | 0 | 3 | 48509626 |
| 2525724 | 16664018 | Btn | 22 | 22 | 42 | 20 | C | 1.399999976 | 0 | 2 | 48509586 |
| 2525724 | 16664018 | C | 22 | 93 | 162 | 69 | C | 1.450000048 | 0 | 0.25 | 48509585 |
| 2525724 | 16664018 | BCkyz | 22 | 78 | 93 | 15 | CL | 1.399999976 | 0 | 0.75 | 48509587 |
| 2525724 | 16664018 | Ap | 22 | 0 | 15 | 15 | CL | 1.350000024 | 0 | 3 | 48509584 |
| 2525724 | 16664018 | Btnkyz | 22 | 42 | 78 | 36 | CL | 1.399999976 | 0 | 1.5 | 48509588 |
| 2525724 | 16664018 | E | 22 | 15 | 22 | 7 | L | 1.299999952 | 0 | 2.5 | 48509583 |
| 2525724 | 16664017 | Bt | 200 | 15 | 35 | 20 | C | 1.399999976 | 0 | 2 | 48509581 |
| 2525724 | 16664017 | Ap | 200 | 0 | 15 | 15 | CL | 1.350000024 | 0 | 3 | 48509578 |
| 2525724 | 16664017 | Btk | 200 | 35 | 54 | 19 | CL | 1.399999976 | 0 | 1 | 48509582 |
| 2525724 | 16664017 | Bk | 200 | 54 | 125 | 71 | CL | 1.450000048 | 0 | 0.75 | 48509579 |
| 2525724 | 16664017 | C | 200 | 125 | 200 | 75 | CL | 1.549999952 | 0 | 0.25 | 48509580 |
| 2525730 | 16663991 | Cr | 91 | 91 | 200 | 109 | NULL | 0 | 0 | 0 | 48507811 |
| 2525730 | 16663991 | Bt1 | 91 | 18 | 30 | 12 | SIC | 1.350000024 | 0 | 2 | 48507814 |
| 2525730 | 16663991 | Bt2 | 91 | 30 | 56 | 26 | SIC | 1.399999976 | 0 | 1.200000048 | 48507815 |
| 2525730 | 16663991 | Bk | 91 | 56 | 91 | 35 | SIC | 1.399999976 | 0 | 0.75 | 48507813 |
| 2525730 | 16663991 | Ap | 91 | 0 | 18 | 18 | SICL | 1.350000024 | 0 | 3 | 48507812 |
| 2525730 | 16663992 | Cr | 170 | 170 | 200 | 30 | NULL | 0 | 0 | 0 | 48507816 |
| 2525730 | 16663992 | Bt1 | 170 | 18 | 35 | 17 | SIC | 1.399999976 | 0 | 2 | 48507820 |
| 2525730 | 16663992 | Bt2 | 170 | 35 | 53 | 18 | SICL | 1.399999976 | 0 | 1.25 | 48507821 |
| 2525730 | 16663992 | Ap | 170 | 0 | 18 | 18 | SICL | 1.350000024 | 0 | 3 | 48507817 |
| 2525730 | 16663992 | C | 170 | 116 | 170 | 54 | SICL | 1.399999976 | 0 | 0.25 | 48507819 |
| 2525730 | 16663992 | Bk | 170 | 53 | 116 | 63 | SICL | 1.399999976 | 0 | 0.75 | 48507818 |
| 2525745 | 16663921 | A | 200 | 15 | 20 | 5 | L | 1.299999952 | 0 | 3 | 48507476 |
| 2525745 | 16663921 | Bw1 | 200 | 20 | 33 | 13 | L | 1.299999952 | 0 | 2.5 | 48507471 |
| 2525745 | 16663921 | BCk | 200 | 107 | 122 | 15 | L | 1.399999976 | 0 | 0.5 | 48507473 |
| 2525745 | 16663921 | Ap | 200 | 0 | 15 | 15 | L | 1.299999952 | 0 | 3.5 | 48507475 |
| 2525745 | 16663921 | Bk | 200 | 72 | 107 | 35 | L | 1.399999976 | 0 | 1 | 48507477 |
| 2525745 | 16663921 | Bw2 | 200 | 33 | 72 | 39 | L | 1.299999952 | 0 | 1.5 | 48507472 |
| 2525745 | 16663921 | C | 200 | 122 | 200 | 78 | L | 1.5 | 0 | 0.25 | 48507474 |
| 2525746 | 16663927 | BCk | 200 | 107 | 122 | 15 | L | 1.399999976 | 0 | 0.5 | 48507505 |
| 2525746 | 16663927 | Ap | 200 | 0 | 15 | 15 | L | 1.299999952 | 0 | 3.5 | 48507502 |
| 2525746 | 16663927 | Bw1 | 200 | 15 | 33 | 18 | L | 1.350000024 | 0 | 2.5 | 48507507 |
| 2525746 | 16663927 | Bk | 200 | 74 | 107 | 33 | L | 1.399999976 | 0 | 1 | 48507504 |
| 2525746 | 16663927 | Bw2 | 200 | 33 | 74 | 41 | L | 1.399999976 | 0 | 1.5 | 48507503 |
| 2525746 | 16663927 | C | 200 | 122 | 200 | 78 | L | 1.5 | 0 | 0.25 | 48507506 |
| 2525754 | 16663602 | 3Ab | 5 | 97 | 102 | 5 | CL | 1.450000048 | 0 | 0.25 | 48508119 |
| 2525754 | 16663602 | Btn | 5 | 5 | 46 | 41 | CL | 1.399999976 | 0 | 2 | 48508123 |
| 2525754 | 16663602 | 3C | 5 | 102 | 152 | 50 | CL | 1.399999976 | 0 | 0.25 | 48508124 |
| 2525754 | 16663602 | E | 5 | 0 | 5 | 5 | L | 1.25 | 0 | 4.5 | 48508122 |
| 2525754 | 16663602 | Bz1 | 5 | 46 | 71 | 25 | L | 1.399999976 | 0 | 0.75 | 48508120 |
| 2525754 | 16663602 | 2Bz2 | 5 | 71 | 97 | 26 | VFSL | 1.5 | 0 | 0.5 | 48508121 |
| 2525769 | 16663985 | Btn1 | 200 | 33 | 48 | 15 | C | 1.350000024 | 0 | 2 | 48507781 |
| 2525769 | 16663985 | E/B | 200 | 25 | 33 | 8 | CL | 1.399999976 | 0 | 3 | 48507780 |
| 2525769 | 16663985 | Btn2 | 200 | 48 | 66 | 18 | CL | 1.399999976 | 0 | 1.5 | 48507782 |
| 2525769 | 16663985 | Bk | 200 | 66 | 114 | 48 | CL | 1.399999976 | 0 | 1 | 48507783 |
| 2525769 | 16663985 | C | 200 | 114 | 200 | 86 | CL | 1.5 | 0 | 0.5 | 48507784 |
| 2525769 | 16663985 | A | 200 | 18 | 25 | 7 | SIL | 1.299999952 | 0 | 4 | 48507779 |
| 2525769 | 16663985 | Ap | 200 | 0 | 18 | 18 | SIL | 1.299999952 | 0 | 4 | 48507778 |
| 2525769 | 16663987 | C | 22 | 119 | 200 | 81 | C | 1.450000048 | 0 | 0.25 | 48507795 |
| 2525769 | 16663987 | Ap | 22 | 0 | 18 | 18 | CL | 1.350000024 | 0 | 3 | 48507790 |
| 2525769 | 16663987 | Btnky | 22 | 47 | 81 | 34 | CL | 1.399999976 | 0 | 1.5 | 48507793 |
| 2525769 | 16663987 | BCky | 22 | 81 | 119 | 38 | CL | 1.399999976 | 0 | 0.75 | 48507794 |
| 2525769 | 16663987 | E | 22 | 18 | 22 | 4 | SIL | 1.299999952 | 0 | 2.5 | 48507791 |
| 2525769 | 16663987 | Btn | 22 | 22 | 47 | 25 | SICL | 1.350000024 | 0 | 2 | 48507792 |
| 2755639 | 16663555 | Bt | 200 | 25 | 61 | 36 | SIC | 1.299999952 | 2 | 3 | 48508328 |
| 2755639 | 16663555 | A | 200 | 13 | 25 | 12 | SICL | 1.200000048 | 2 | 5 | 48508327 |
| 2755639 | 16663555 | Ap | 200 | 0 | 13 | 13 | SICL | 1.200000048 | 2 | 5 | 48508331 |
| 2755639 | 16663555 | C | 200 | 132 | 152 | 20 | SICL | 1.299999952 | 2 | 0.5 | 48508329 |
| 2755639 | 16663555 | Bk | 200 | 61 | 132 | 71 | SICL | 1.299999952 | 1 | 1 | 48508330 |
| 2755639 | 16663554 | Bt | 200 | 18 | 64 | 46 | SIC | 1.379999995 | 0 | 1.5 | 48508333 |
| 2755639 | 16663554 | Ap | 200 | 0 | 18 | 18 | SICL | 1.149999976 | 0 | 2 | 48508334 |
| 2755639 | 16663554 | Bk | 200 | 64 | 130 | 66 | SICL | 1.399999976 | 0 | 0.75 | 48508335 |
| 2755639 | 16663554 | C | 200 | 130 | 203 | 73 | SICL | 1.399999976 | 0 | 0.25 | 48508332 |
| 2755643 | 16663957 | Cr | 38 | 38 | 200 | 162 | NULL | 0 | 0 | 0 | 48507642 |
| 2755643 | 16663957 | AC | 38 | 13 | 25 | 12 | LFS | 1.450000048 | 5 | 1 | 48507644 |
| 2755643 | 16663957 | C | 38 | 25 | 38 | 13 | LFS | 1.5 | 8 | 0.5 | 48507645 |
| 2755643 | 16663957 | A | 38 | 0 | 13 | 13 | LFS | 1.399999976 | 5 | 1.5 | 48507643 |
| 2755643 | 16663959 | Cr | 178 | 178 | 200 | 22 | NULL | 0 | 0 | 0 | 48507651 |
| 2755643 | 16663959 | Bw2 | 178 | 31 | 46 | 15 | FSL | 1.5 | 4 | 1.5 | 48507654 |
| 2755643 | 16663959 | A | 178 | 0 | 15 | 15 | FSL | 1.5 | 3 | 2.5 | 48507652 |
| 2755643 | 16663959 | Bw1 | 178 | 15 | 31 | 16 | FSL | 1.5 | 3 | 2 | 48507653 |
| 2755643 | 16663959 | Bk | 178 | 46 | 84 | 38 | FSL | 1.549999952 | 5 | 1 | 48507655 |
| 2755643 | 16663959 | C | 178 | 84 | 178 | 94 | FSL | 1.549999952 | 6 | 0.5 | 48507656 |
| 2755643 | 16663958 | Cr | 74 | 74 | 200 | 126 | NULL | 0 | 0 | 0 | 48507646 |
| 2755643 | 16663958 | Bw1 | 74 | 15 | 28 | 13 | FSL | 1.450000048 | 4 | 1.5 | 48507650 |
| 2755643 | 16663958 | Bw2 | 74 | 28 | 43 | 15 | FSL | 1.5 | 6 | 1 | 48507647 |
| 2755643 | 16663958 | A | 74 | 0 | 15 | 15 | FSL | 1.399999976 | 4 | 2 | 48507649 |
| 2755643 | 16663958 | Bk | 74 | 43 | 74 | 31 | FSL | 1.549999952 | 7 | 0.5 | 48507648 |
| 2755648 | 16663767 | Cr | 25 | 66 | 152 | 86 | BR | 1.5 | 0 | 0.25 | 48507343 |
| 2755648 | 16663767 | E | 25 | 20 | 25 | 5 | SIL | 1.299999952 | 0 | 2.5 | 48507341 |
| 2755648 | 16663767 | BCk | 25 | 53 | 66 | 13 | SIL | 1.5 | 0 | 0.75 | 48507344 |
| 2755648 | 16663767 | Ap | 25 | 0 | 20 | 20 | SIL | 1.149999976 | 0 | 3 | 48507345 |
| 2755648 | 16663767 | Btn | 25 | 25 | 53 | 28 | SIC | 1.5 | 0 | 1.5 | 48507342 |
| 2755648 | 16663766 | Cr | 91 | 91 | 152 | 61 | BR | 1.529999971 | 0 | 0.25 | 48507346 |
| 2755648 | 16663766 | Bt | 91 | 20 | 43 | 23 | CL | 1.399999976 | 0 | 2 | 48507347 |
| 2755648 | 16663766 | Ap | 91 | 0 | 20 | 20 | L | 1.149999976 | 5 | 2 | 48507349 |
| 2755648 | 16663766 | Bk | 91 | 43 | 91 | 48 | L | 1.399999976 | 8 | 1.25 | 48507348 |

#### Set depths used for increments and organize variables for SOC stock calculations.

##### SOC table

SELECT hzname, chkey, comppct\_r, hzdept\_r, hzdepb\_r, thickness,

CASE WHEN hzdept\_r < 150 then hzdept\_r ELSE 0 END AS InRangeTop\_0\_150,

CASE WHEN hzdepb\_r <= 150 THEN hzdepb\_r WHEN hzdepb\_r > 150 and hzdept\_r < 150 THEN 150 ELSE 0 END AS InRangeBot\_0\_150,

CASE WHEN hzdept\_r < 5 then hzdept\_r ELSE 0 END AS InRangeTop\_0\_5,

CASE WHEN hzdepb\_r <= 5 THEN hzdepb\_r WHEN hzdepb\_r > 5 and hzdept\_r < 5 THEN 5 ELSE 0 END AS InRangeBot\_0\_5,

CASE WHEN hzdept\_r < 30 then hzdept\_r ELSE 0 END AS InRangeTop\_0\_30,

CASE WHEN hzdepb\_r <= 30 THEN hzdepb\_r WHEN hzdepb\_r > 30 and hzdept\_r < 30 THEN 30 ELSE 0 END AS InRangeBot\_0\_30,

---5 to 15

CASE WHEN hzdepb\_r < 5 THEN 0

WHEN hzdept\_r >15 THEN 0

WHEN hzdepb\_r >= 5 AND hzdept\_r < 5 THEN 5

WHEN hzdept\_r < 5 THEN 0

WHEN hzdept\_r < 15 then hzdept\_r ELSE 5 END AS InRangeTop\_5\_15 ,

CASE WHEN hzdept\_r > 15 THEN 0

WHEN hzdepb\_r < 5 THEN 0

WHEN hzdepb\_r <= 15 THEN hzdepb\_r WHEN hzdepb\_r > 15 and hzdept\_r < 15 THEN 15 ELSE 5 END AS InRangeBot\_5\_15,

---15 to 30

CASE WHEN hzdepb\_r < 15 THEN 0

WHEN hzdept\_r >30 THEN 0

WHEN hzdepb\_r >= 15 AND hzdept\_r < 15 THEN 15

WHEN hzdept\_r < 15 THEN 0

WHEN hzdept\_r < 30 then hzdept\_r ELSE 15 END AS InRangeTop\_15\_30 ,

CASE WHEN hzdept\_r > 30 THEN 0

WHEN hzdepb\_r < 15 THEN 0

WHEN hzdepb\_r <= 30 THEN hzdepb\_r WHEN hzdepb\_r > 30 and hzdept\_r < 30 THEN 30 ELSE 15 END AS InRangeBot\_15\_30,

--30 to 60

CASE WHEN hzdepb\_r < 30 THEN 0

WHEN hzdept\_r >60 THEN 0

WHEN hzdepb\_r >= 30 AND hzdept\_r < 30 THEN 30

WHEN hzdept\_r < 30 THEN 0

WHEN hzdept\_r < 60 then hzdept\_r ELSE 30 END AS InRangeTop\_30\_60 ,

CASE WHEN hzdept\_r > 60 THEN 0

WHEN hzdepb\_r < 30 THEN 0

WHEN hzdepb\_r <= 60 THEN hzdepb\_r WHEN hzdepb\_r > 60 and hzdept\_r < 60 THEN 60 ELSE 30 END AS InRangeBot\_30\_60,

---60 to 100

CASE WHEN hzdepb\_r < 60 THEN 0

WHEN hzdept\_r >100 THEN 0

WHEN hzdepb\_r >= 60 AND hzdept\_r < 60 THEN 60

WHEN hzdept\_r < 60 THEN 0

WHEN hzdept\_r < 100 then hzdept\_r ELSE 60 END AS InRangeTop\_60\_100 ,

CASE WHEN hzdept\_r > 100 THEN 0

WHEN hzdepb\_r < 60 THEN 0

WHEN hzdepb\_r <= 100 THEN hzdepb\_r WHEN hzdepb\_r > 100 and hzdept\_r < 100 THEN 100 ELSE 60 END AS InRangeBot\_60\_100,

--100 to 200

CASE WHEN hzdepb\_r < 100 THEN 0

WHEN hzdept\_r >200 THEN 0

WHEN hzdepb\_r >= 100 AND hzdept\_r < 100 THEN 100

WHEN hzdept\_r < 100 THEN 0

WHEN hzdept\_r < 200 then hzdept\_r ELSE 100 END AS InRangeTop\_100\_200 ,

CASE WHEN hzdept\_r > 200 THEN 0

WHEN hzdepb\_r < 100 THEN 0

WHEN hzdepb\_r <= 200 THEN hzdepb\_r WHEN hzdepb\_r > 200 and hzdept\_r < 200 THEN 200 ELSE 100 END AS InRangeBot\_100\_200,

CASE WHEN hzdepb\_r < 20 THEN 0

WHEN hzdept\_r >50 THEN 0

WHEN hzdepb\_r >= 20 AND hzdept\_r < 20 THEN 20

WHEN hzdept\_r < 20 THEN 0

WHEN hzdept\_r < 50 then hzdept\_r ELSE 20 END AS InRangeTop\_20\_50 ,

CASE WHEN hzdept\_r > 50 THEN 0

WHEN hzdepb\_r < 20 THEN 0

WHEN hzdepb\_r <= 50 THEN hzdepb\_r WHEN hzdepb\_r > 50 and hzdept\_r < 50 THEN 50 ELSE 20 END AS InRangeBot\_20\_50,

CASE WHEN hzdepb\_r < 50 THEN 0

WHEN hzdept\_r >100 THEN 0

WHEN hzdepb\_r >= 50 AND hzdept\_r < 50 THEN 50

WHEN hzdept\_r < 50 THEN 0

WHEN hzdept\_r < 100 then hzdept\_r ELSE 50 END AS InRangeTop\_50\_100 ,

CASE WHEN hzdept\_r > 100 THEN 0

WHEN hzdepb\_r < 50 THEN 0

WHEN hzdepb\_r <= 100 THEN hzdepb\_r WHEN hzdepb\_r > 100 and hzdept\_r < 100 THEN 100 ELSE 50 END AS InRangeBot\_50\_100,

om\_r, fragvol, dbthirdbar\_r, cokey, mukey, 100.0 - fragvol AS frag\_main

INTO #SOC

FROM #acpf

ORDER BY cokey, hzdept\_r ASC, hzdepb\_r ASC, chkey

| **hzname** | **chkey** | **comppct\_r** | **hzdept\_r** | **hzdepb\_r** | **thickness** | **InRangeTop\_0\_150** | **InRangeBot\_0\_150** | **InRangeTop\_0\_5** | **InRangeBot\_0\_5** | **InRangeTop\_0\_30** | **InRangeBot\_0\_30** | **InRangeTop\_5\_15** | **InRangeBot\_5\_15** | **InRangeTop\_15\_30** | **InRangeBot\_15\_30** | **InRangeTop\_30\_60** | **InRangeBot\_30\_60** | **InRangeTop\_60\_100** | **InRangeBot\_60\_100** | **InRangeTop\_100\_200** | **InRangeBot\_100\_200** | **InRangeTop\_20\_50** | **InRangeBot\_20\_50** | **InRangeTop\_50\_100** | **InRangeBot\_50\_100** | **om\_r** | **fragvol** | **dbthirdbar\_r** | **cokey** | **mukey** | **frag\_main** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| H2 | 47888422 | 25 | 18 | 43 | 25 | 18 | 43 | 0 | 0 | 18 | 30 | 0 | 0 | 18 | 30 | 30 | 43 | 0 | 0 | 0 | 0 | 20 | 43 | 0 | 0 | 1.5 | 0 | 1.450000048 | 16464494 | 354627 | 100 |
| H1 | 47888421 | 25 | 0 | 18 | 18 | 0 | 18 | 0 | 5 | 0 | 18 | 5 | 15 | 15 | 18 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 1.350000024 | 16464494 | 354627 | 100 |
| H3 | 47888423 | 25 | 43 | 152 | 109 | 43 | 150 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 43 | 60 | 60 | 100 | 100 | 152 | 43 | 50 | 50 | 100 | 0.5 | 0 | 1.600000024 | 16464494 | 354627 | 100 |
| H2 | 47887710 | 65 | 20 | 41 | 21 | 20 | 41 | 0 | 0 | 20 | 30 | 0 | 0 | 20 | 30 | 30 | 41 | 0 | 0 | 0 | 0 | 20 | 41 | 0 | 0 | 1.5 | 0 | 1.299999952 | 16464495 | 354627 | 100 |
| H1 | 47887709 | 65 | 0 | 20 | 20 | 0 | 20 | 0 | 5 | 0 | 20 | 5 | 15 | 15 | 20 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 20 | 0 | 0 | 3 | 0 | 1.299999952 | 16464495 | 354627 | 100 |
| H3 | 47887707 | 65 | 41 | 89 | 48 | 41 | 89 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 41 | 60 | 60 | 89 | 0 | 0 | 41 | 50 | 50 | 89 | 0.75 | 0 | 1.330000043 | 16464495 | 354627 | 100 |
| H4 | 47887708 | 65 | 89 | 152 | 63 | 89 | 150 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 89 | 100 | 100 | 152 | 0 | 0 | 89 | 100 | 0.25 | 0 | 1.350000024 | 16464495 | 354627 | 100 |
| Cr | 47888315 | 25 | 86 | 152 | 66 | 86 | 150 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 86 | 100 | 100 | 152 | 0 | 0 | 86 | 100 | 0.25 | 0 | NULL | 16464607 | 354648 | 100 |
| H2 | 47888313 | 25 | 20 | 33 | 13 | 20 | 33 | 0 | 0 | 20 | 30 | 0 | 0 | 20 | 30 | 30 | 33 | 0 | 0 | 0 | 0 | 20 | 33 | 0 | 0 | 2 | 2 | 1.299999952 | 16464607 | 354648 | 98 |
| H1 | 47888312 | 25 | 0 | 20 | 20 | 0 | 20 | 0 | 5 | 0 | 20 | 5 | 15 | 15 | 20 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 20 | 0 | 0 | 4.5 | 2 | 1.279999971 | 16464607 | 354648 | 98 |
| H3 | 47888314 | 25 | 33 | 86 | 53 | 33 | 86 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 33 | 60 | 60 | 86 | 0 | 0 | 33 | 50 | 50 | 86 | 0.75 | 2 | 1.399999976 | 16464607 | 354648 | 98 |
| Cr | 47887978 | 60 | 81 | 152 | 71 | 81 | 150 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 81 | 100 | 100 | 152 | 0 | 0 | 81 | 100 | NULL | 0 | NULL | 16464612 | 354648 | 100 |
| H3 | 47887981 | 60 | 48 | 81 | 33 | 48 | 81 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 48 | 60 | 60 | 81 | 0 | 0 | 48 | 50 | 50 | 81 | 1.25 | 13 | 1.350000024 | 16464612 | 354648 | 87 |
| H2 | 47887980 | 60 | 13 | 48 | 35 | 13 | 48 | 0 | 0 | 13 | 30 | 13 | 15 | 15 | 30 | 30 | 48 | 0 | 0 | 0 | 0 | 20 | 48 | 0 | 0 | 2 | 0 | 1.299999952 | 16464612 | 354648 | 100 |
| H1 | 47887979 | 60 | 0 | 13 | 13 | 0 | 13 | 0 | 5 | 0 | 13 | 5 | 13 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 8 | 1.279999971 | 16464612 | 354648 | 92 |
| Cr | 48509159 | 49 | 76 | 200 | 124 | 76 | 150 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 76 | 100 | 100 | 200 | 0 | 0 | 76 | 100 | NULL | 0 | NULL | 16663930 | 2494708 | 100 |
| Bw1 | 48509160 | 49 | 13 | 23 | 10 | 13 | 23 | 0 | 0 | 13 | 23 | 13 | 15 | 15 | 23 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 23 | 0 | 0 | 2 | 0 | 1.399999976 | 16663930 | 2494708 | 100 |
| Ap | 48509164 | 49 | 0 | 13 | 13 | 0 | 13 | 0 | 5 | 0 | 13 | 5 | 13 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 2 | 1.399999976 | 16663930 | 2494708 | 98 |
| Bw2 | 48509163 | 49 | 23 | 38 | 15 | 23 | 38 | 0 | 0 | 23 | 30 | 0 | 0 | 23 | 30 | 30 | 38 | 0 | 0 | 0 | 0 | 23 | 38 | 0 | 0 | 1.5 | 0 | 1.350000024 | 16663930 | 2494708 | 100 |
| BCk | 48509162 | 49 | 58 | 76 | 18 | 58 | 76 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 58 | 60 | 60 | 76 | 0 | 0 | 0 | 0 | 58 | 76 | 0.5 | 0 | 1.399999976 | 16663930 | 2494708 | 100 |
| Bk | 48509161 | 49 | 38 | 58 | 20 | 38 | 58 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 38 | 58 | 0 | 0 | 0 | 0 | 38 | 50 | 50 | 58 | 0.800000012 | 0 | 1.350000024 | 16663930 | 2494708 | 100 |
| Cr | 48509165 | 32 | 38 | 200 | 162 | 38 | 150 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 38 | 60 | 60 | 100 | 100 | 200 | 38 | 50 | 50 | 100 | NULL | 0 | NULL | 16663931 | 2494708 | 100 |
| Ap | 48509166 | 32 | 0 | 13 | 13 | 0 | 13 | 0 | 5 | 0 | 13 | 5 | 13 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 5 | 1.399999976 | 16663931 | 2494708 | 95 |
| Bk | 48509167 | 32 | 13 | 38 | 25 | 13 | 38 | 0 | 0 | 13 | 30 | 13 | 15 | 15 | 30 | 30 | 38 | 0 | 0 | 0 | 0 | 20 | 38 | 0 | 0 | 0.800000012 | 2 | 1.399999976 | 16663931 | 2494708 | 98 |
| C | 48509110 | 33 | 119 | 200 | 81 | 119 | 150 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 119 | 200 | 0 | 0 | 0 | 0 | 0.25 | 0 | 1.450000048 | 16663899 | 2525720 | 100 |
| Btkny | 48509108 | 33 | 46 | 81 | 35 | 46 | 81 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 46 | 60 | 60 | 81 | 0 | 0 | 46 | 50 | 50 | 81 | 0.75 | 0 | 1.450000048 | 16663899 | 2525720 | 100 |
| BCk | 48509109 | 33 | 81 | 119 | 38 | 81 | 119 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 81 | 100 | 100 | 119 | 0 | 0 | 81 | 100 | 0.5 | 0 | 1.399999976 | 16663899 | 2525720 | 100 |
| E | 48509106 | 33 | 7 | 12 | 5 | 7 | 12 | 0 | 0 | 7 | 12 | 7 | 12 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3.5 | 0 | 1.350000024 | 16663899 | 2525720 | 100 |
| A | 48509105 | 33 | 0 | 7 | 7 | 0 | 7 | 0 | 5 | 0 | 7 | 5 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5.5 | 0 | 1.200000048 | 16663899 | 2525720 | 100 |
| Btn | 48509107 | 33 | 12 | 46 | 34 | 12 | 46 | 0 | 0 | 12 | 30 | 12 | 15 | 15 | 30 | 30 | 46 | 0 | 0 | 0 | 0 | 20 | 46 | 0 | 0 | 2 | 0 | 1.350000024 | 16663899 | 2525720 | 100 |
| C | 48509123 | 55 | 117 | 200 | 83 | 117 | 150 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 117 | 200 | 0 | 0 | 0 | 0 | 0.25 | 0 | 1.450000048 | 16663903 | 2525720 | 100 |
| Btn | 48509121 | 55 | 8 | 20 | 12 | 8 | 20 | 0 | 0 | 8 | 20 | 8 | 15 | 15 | 20 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 20 | 0 | 0 | 1.25 | 0 | 1.399999976 | 16663903 | 2525720 | 100 |
| Btknyz | 48509122 | 55 | 20 | 36 | 16 | 20 | 36 | 0 | 0 | 20 | 30 | 0 | 0 | 20 | 30 | 30 | 36 | 0 | 0 | 0 | 0 | 20 | 36 | 0 | 0 | 1.25 | 0 | 1.399999976 | 16663903 | 2525720 | 100 |
| Bkyz | 48509124 | 55 | 36 | 117 | 81 | 36 | 117 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 36 | 60 | 60 | 100 | 100 | 117 | 36 | 50 | 50 | 100 | 0.25 | 0 | 1.450000048 | 16663903 | 2525720 | 100 |
| E | 48509125 | 55 | 0 | 8 | 8 | 0 | 8 | 0 | 5 | 0 | 8 | 5 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 1.399999976 | 16663903 | 2525720 | 100 |
| Btn | 48508966 | 55 | 30 | 43 | 13 | 30 | 43 | 0 | 0 | 0 | 0 | 0 | 0 | 15 | 15 | 30 | 43 | 0 | 0 | 0 | 0 | 30 | 43 | 0 | 0 | 0.5 | 0 | 1.5 | 16663796 | 2525732 | 100 |
| Ap | 48508969 | 55 | 0 | 15 | 15 | 0 | 15 | 0 | 5 | 0 | 15 | 5 | 15 | 15 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1.5 | 0 | 1.399999976 | 16663796 | 2525732 | 100 |
| E | 48508965 | 55 | 15 | 30 | 15 | 15 | 30 | 0 | 0 | 15 | 30 | 5 | 5 | 15 | 30 | 30 | 30 | 0 | 0 | 0 | 0 | 20 | 30 | 0 | 0 | 1.5 | 0 | 1.450000048 | 16663796 | 2525732 | 100 |
| Bz | 48508968 | 55 | 43 | 84 | 41 | 43 | 84 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 43 | 60 | 60 | 84 | 0 | 0 | 43 | 50 | 50 | 84 | 0.5 | 0 | 1.5 | 16663796 | 2525732 | 100 |
| C | 48508967 | 55 | 84 | 152 | 68 | 84 | 150 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 84 | 100 | 100 | 152 | 0 | 0 | 84 | 100 | 0.25 | 0 | 1.450000048 | 16663796 | 2525732 | 100 |
| Ap | 48508961 | 17 | 0 | 15 | 15 | 0 | 15 | 0 | 5 | 0 | 15 | 5 | 15 | 15 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 1.25 | 16663797 | 2525732 | 100 |
| Bt | 48508962 | 17 | 15 | 71 | 56 | 15 | 71 | 0 | 0 | 15 | 30 | 5 | 5 | 15 | 30 | 30 | 60 | 60 | 71 | 0 | 0 | 20 | 50 | 50 | 71 | 1 | 0 | 1.549999952 | 16663797 | 2525732 | 100 |
| Bk | 48508963 | 17 | 71 | 86 | 15 | 71 | 86 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 71 | 86 | 0 | 0 | 0 | 0 | 71 | 86 | 0.5 | 0 | 1.549999952 | 16663797 | 2525732 | 100 |
| BC | 48508964 | 17 | 86 | 152 | 66 | 86 | 150 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 86 | 100 | 100 | 152 | 0 | 0 | 86 | 100 | 0.25 | 0 | 1.549999952 | 16663797 | 2525732 | 100 |
| Cr | 48507618 | 25 | 43 | 200 | 157 | 43 | 150 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 43 | 60 | 60 | 100 | 100 | 200 | 43 | 50 | 50 | 100 | NULL | 0 | NULL | 16663952 | 2525733 | 100 |
| Ap | 48507620 | 25 | 0 | 15 | 15 | 0 | 15 | 0 | 5 | 0 | 15 | 5 | 15 | 15 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 3 | 1.5 | 16663952 | 2525733 | 97 |
| C | 48507619 | 25 | 15 | 43 | 28 | 15 | 43 | 0 | 0 | 15 | 30 | 5 | 5 | 15 | 30 | 30 | 43 | 0 | 0 | 0 | 0 | 20 | 43 | 0 | 0 | 0.5 | 5 | 1.5 | 16663952 | 2525733 | 95 |
| Cr | 48507613 | 50 | 74 | 200 | 126 | 74 | 150 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 74 | 100 | 100 | 200 | 0 | 0 | 74 | 100 | NULL | 0 | NULL | 16663951 | 2525733 | 100 |
| Bw1 | 48507615 | 50 | 15 | 28 | 13 | 15 | 28 | 0 | 0 | 15 | 28 | 5 | 5 | 15 | 28 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 28 | 0 | 0 | 1.5 | 4 | 1.450000048 | 16663951 | 2525733 | 96 |
| Bw2 | 48507616 | 50 | 28 | 43 | 15 | 28 | 43 | 0 | 0 | 28 | 30 | 0 | 0 | 28 | 30 | 30 | 43 | 0 | 0 | 0 | 0 | 28 | 43 | 0 | 0 | 1 | 6 | 1.5 | 16663951 | 2525733 | 94 |
| Ap | 48507614 | 50 | 0 | 15 | 15 | 0 | 15 | 0 | 5 | 0 | 15 | 5 | 15 | 15 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 4 | 1.399999976 | 16663951 | 2525733 | 96 |
| Bk | 48507617 | 50 | 43 | 74 | 31 | 43 | 74 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 43 | 60 | 60 | 74 | 0 | 0 | 43 | 50 | 50 | 74 | 0.5 | 7 | 1.549999952 | 16663951 | 2525733 | 93 |
| Bw2 | 48509145 | 20 | 60 | 75 | 15 | 60 | 75 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 30 | 30 | 60 | 75 | 0 | 0 | 0 | 0 | 60 | 75 | 1 | 2 | 1.549999952 | 16663915 | 2525739 | 98 |
| A | 48509143 | 20 | 15 | 30 | 15 | 15 | 30 | 0 | 0 | 15 | 30 | 5 | 5 | 15 | 30 | 30 | 30 | 0 | 0 | 0 | 0 | 20 | 30 | 0 | 0 | 2.5 | 1 | 1.450000048 | 16663915 | 2525739 | 99 |
| Ap | 48509148 | 20 | 0 | 15 | 15 | 0 | 15 | 0 | 5 | 0 | 15 | 5 | 15 | 15 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3.5 | 1 | 1.5 | 16663915 | 2525739 | 99 |
| Bw1 | 48509144 | 20 | 30 | 60 | 30 | 30 | 60 | 0 | 0 | 0 | 0 | 0 | 0 | 15 | 15 | 30 | 60 | 60 | 60 | 0 | 0 | 30 | 50 | 50 | 60 | 1.5 | 1 | 1.5 | 16663915 | 2525739 | 99 |
| Bk | 48509146 | 20 | 75 | 122 | 47 | 75 | 122 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 75 | 100 | 100 | 122 | 0 | 0 | 75 | 100 | 0.75 | 3 | 1.549999952 | 16663915 | 2525739 | 97 |
| C | 48509147 | 20 | 122 | 200 | 78 | 122 | 150 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 122 | 200 | 0 | 0 | 0 | 0 | 0.25 | 5 | 1.600000024 | 16663915 | 2525739 | 95 |
| Cr | 48507454 | 58 | 81 | 200 | 119 | 81 | 150 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 81 | 100 | 100 | 200 | 0 | 0 | 81 | 100 | NULL | 0 | NULL | 16663917 | 2525739 | 100 |
| BCk | 48507456 | 58 | 66 | 81 | 15 | 66 | 81 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 66 | 81 | 0 | 0 | 0 | 0 | 66 | 81 | 0.5 | 7 | 1.549999952 | 16663917 | 2525739 | 93 |
| Ap | 48507458 | 58 | 0 | 15 | 15 | 0 | 15 | 0 | 5 | 0 | 15 | 5 | 15 | 15 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 3 | 1.549999952 | 16663917 | 2525739 | 97 |
| Bw1 | 48507455 | 58 | 15 | 32 | 17 | 15 | 32 | 0 | 0 | 15 | 30 | 5 | 5 | 15 | 30 | 30 | 32 | 0 | 0 | 0 | 0 | 20 | 32 | 0 | 0 | 1.5 | 4 | 1.5 | 16663917 | 2525739 | 96 |
| Bw2 | 48507457 | 58 | 32 | 66 | 34 | 32 | 66 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 32 | 60 | 60 | 66 | 0 | 0 | 32 | 50 | 50 | 66 | 1 | 6 | 1.5 | 16663917 | 2525739 | 94 |
| A | 48507476 | 75 | 15 | 20 | 5 | 15 | 20 | 0 | 0 | 15 | 20 | 5 | 5 | 15 | 20 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 20 | 0 | 0 | 3 | 0 | 1.299999952 | 16663921 | 2525745 | 100 |
| Bw1 | 48507471 | 75 | 20 | 33 | 13 | 20 | 33 | 0 | 0 | 20 | 30 | 0 | 0 | 20 | 30 | 30 | 33 | 0 | 0 | 0 | 0 | 20 | 33 | 0 | 0 | 2.5 | 0 | 1.299999952 | 16663921 | 2525745 | 100 |
| BCk | 48507473 | 75 | 107 | 122 | 15 | 107 | 122 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 107 | 122 | 0 | 0 | 0 | 0 | 0.5 | 0 | 1.399999976 | 16663921 | 2525745 | 100 |
| Ap | 48507475 | 75 | 0 | 15 | 15 | 0 | 15 | 0 | 5 | 0 | 15 | 5 | 15 | 15 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3.5 | 0 | 1.299999952 | 16663921 | 2525745 | 100 |
| Bk | 48507477 | 75 | 72 | 107 | 35 | 72 | 107 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 72 | 100 | 100 | 107 | 0 | 0 | 72 | 100 | 1 | 0 | 1.399999976 | 16663921 | 2525745 | 100 |
| Bw2 | 48507472 | 75 | 33 | 72 | 39 | 33 | 72 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 33 | 60 | 60 | 72 | 0 | 0 | 33 | 50 | 50 | 72 | 1.5 | 0 | 1.299999952 | 16663921 | 2525745 | 100 |
| C | 48507474 | 75 | 122 | 200 | 78 | 122 | 150 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 122 | 200 | 0 | 0 | 0 | 0 | 0.25 | 0 | 1.5 | 16663921 | 2525745 | 100 |
| BCk | 48507505 | 78 | 107 | 122 | 15 | 107 | 122 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 107 | 122 | 0 | 0 | 0 | 0 | 0.5 | 0 | 1.399999976 | 16663927 | 2525746 | 100 |
| Ap | 48507502 | 78 | 0 | 15 | 15 | 0 | 15 | 0 | 5 | 0 | 15 | 5 | 15 | 15 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3.5 | 0 | 1.299999952 | 16663927 | 2525746 | 100 |
| Bw1 | 48507507 | 78 | 15 | 33 | 18 | 15 | 33 | 0 | 0 | 15 | 30 | 5 | 5 | 15 | 30 | 30 | 33 | 0 | 0 | 0 | 0 | 20 | 33 | 0 | 0 | 2.5 | 0 | 1.350000024 | 16663927 | 2525746 | 100 |
| Bk | 48507504 | 78 | 74 | 107 | 33 | 74 | 107 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 74 | 100 | 100 | 107 | 0 | 0 | 74 | 100 | 1 | 0 | 1.399999976 | 16663927 | 2525746 | 100 |
| Bw2 | 48507503 | 78 | 33 | 74 | 41 | 33 | 74 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 33 | 60 | 60 | 74 | 0 | 0 | 33 | 50 | 50 | 74 | 1.5 | 0 | 1.399999976 | 16663927 | 2525746 | 100 |
| C | 48507506 | 78 | 122 | 200 | 78 | 122 | 150 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 122 | 200 | 0 | 0 | 0 | 0 | 0.25 | 0 | 1.5 | 16663927 | 2525746 | 100 |
| 3Ab | 48508119 | 75 | 97 | 102 | 5 | 97 | 102 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 97 | 100 | 100 | 102 | 0 | 0 | 97 | 100 | 0.25 | 0 | 1.450000048 | 16663602 | 2525754 | 100 |
| Btn | 48508123 | 75 | 5 | 46 | 41 | 5 | 46 | 0 | 0 | 5 | 30 | 5 | 15 | 15 | 30 | 30 | 46 | 0 | 0 | 0 | 0 | 20 | 46 | 0 | 0 | 2 | 0 | 1.399999976 | 16663602 | 2525754 | 100 |
| 3C | 48508124 | 75 | 102 | 152 | 50 | 102 | 150 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 102 | 152 | 0 | 0 | 0 | 0 | 0.25 | 0 | 1.399999976 | 16663602 | 2525754 | 100 |
| E | 48508122 | 75 | 0 | 5 | 5 | 0 | 5 | 0 | 5 | 0 | 5 | 5 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4.5 | 0 | 1.25 | 16663602 | 2525754 | 100 |
| Bz1 | 48508120 | 75 | 46 | 71 | 25 | 46 | 71 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 46 | 60 | 60 | 71 | 0 | 0 | 46 | 50 | 50 | 71 | 0.75 | 0 | 1.399999976 | 16663602 | 2525754 | 100 |
| 2Bz2 | 48508121 | 75 | 71 | 97 | 26 | 71 | 97 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 71 | 97 | 0 | 0 | 0 | 0 | 71 | 97 | 0.5 | 0 | 1.5 | 16663602 | 2525754 | 100 |
| 2Czg | 48508082 | 55 | 71 | 152 | 81 | 71 | 150 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 71 | 100 | 100 | 152 | 0 | 0 | 71 | 100 | 0.75 | 0 | 1.399999976 | 16663611 | 2525764 | 100 |
| Az | 48508083 | 55 | 0 | 23 | 23 | 0 | 23 | 0 | 5 | 0 | 23 | 5 | 15 | 15 | 23 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 23 | 0 | 0 | 4 | 0 | 1.149999976 | 16663611 | 2525764 | 100 |
| Bkzg | 48508081 | 55 | 23 | 71 | 48 | 23 | 71 | 0 | 0 | 23 | 30 | 0 | 0 | 23 | 30 | 30 | 60 | 60 | 71 | 0 | 0 | 23 | 50 | 50 | 71 | 2 | 0 | 1.399999976 | 16663611 | 2525764 | 100 |
| Btn1 | 48507781 | 48 | 33 | 48 | 15 | 33 | 48 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 33 | 48 | 0 | 0 | 0 | 0 | 33 | 48 | 0 | 0 | 2 | 0 | 1.350000024 | 16663985 | 2525769 | 100 |
| E/B | 48507780 | 48 | 25 | 33 | 8 | 25 | 33 | 0 | 0 | 25 | 30 | 0 | 0 | 25 | 30 | 30 | 33 | 0 | 0 | 0 | 0 | 25 | 33 | 0 | 0 | 3 | 0 | 1.399999976 | 16663985 | 2525769 | 100 |
| Btn2 | 48507782 | 48 | 48 | 66 | 18 | 48 | 66 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 48 | 60 | 60 | 66 | 0 | 0 | 48 | 50 | 50 | 66 | 1.5 | 0 | 1.399999976 | 16663985 | 2525769 | 100 |
| Bk | 48507783 | 48 | 66 | 114 | 48 | 66 | 114 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 66 | 100 | 100 | 114 | 0 | 0 | 66 | 100 | 1 | 0 | 1.399999976 | 16663985 | 2525769 | 100 |
| C | 48507784 | 48 | 114 | 200 | 86 | 114 | 150 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 114 | 200 | 0 | 0 | 0 | 0 | 0.5 | 0 | 1.5 | 16663985 | 2525769 | 100 |
| A | 48507779 | 48 | 18 | 25 | 7 | 18 | 25 | 0 | 0 | 18 | 25 | 0 | 0 | 18 | 25 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 25 | 0 | 0 | 4 | 0 | 1.299999952 | 16663985 | 2525769 | 100 |
| Ap | 48507778 | 48 | 0 | 18 | 18 | 0 | 18 | 0 | 5 | 0 | 18 | 5 | 15 | 15 | 18 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 1.299999952 | 16663985 | 2525769 | 100 |
| C | 48507795 | 40 | 119 | 200 | 81 | 119 | 150 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 119 | 200 | 0 | 0 | 0 | 0 | 0.25 | 0 | 1.450000048 | 16663987 | 2525769 | 100 |
| Ap | 48507790 | 40 | 0 | 18 | 18 | 0 | 18 | 0 | 5 | 0 | 18 | 5 | 15 | 15 | 18 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 1.350000024 | 16663987 | 2525769 | 100 |
| Btnky | 48507793 | 40 | 47 | 81 | 34 | 47 | 81 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 47 | 60 | 60 | 81 | 0 | 0 | 47 | 50 | 50 | 81 | 1.5 | 0 | 1.399999976 | 16663987 | 2525769 | 100 |
| BCky | 48507794 | 40 | 81 | 119 | 38 | 81 | 119 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 81 | 100 | 100 | 119 | 0 | 0 | 81 | 100 | 0.75 | 0 | 1.399999976 | 16663987 | 2525769 | 100 |
| E | 48507791 | 40 | 18 | 22 | 4 | 18 | 22 | 0 | 0 | 18 | 22 | 0 | 0 | 18 | 22 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 22 | 0 | 0 | 2.5 | 0 | 1.299999952 | 16663987 | 2525769 | 100 |
| Btn | 48507792 | 40 | 22 | 47 | 25 | 22 | 47 | 0 | 0 | 22 | 30 | 0 | 0 | 22 | 30 | 30 | 47 | 0 | 0 | 0 | 0 | 22 | 47 | 0 | 0 | 2 | 0 | 1.350000024 | 16663987 | 2525769 | 100 |
| Cr | 48507343 | 20 | 66 | 152 | 86 | 66 | 150 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 66 | 100 | 100 | 152 | 0 | 0 | 66 | 100 | 0.25 | 0 | 1.5 | 16663767 | 2755648 | 100 |
| E | 48507341 | 20 | 20 | 25 | 5 | 20 | 25 | 0 | 0 | 20 | 25 | 0 | 0 | 20 | 25 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 25 | 0 | 0 | 2.5 | 0 | 1.299999952 | 16663767 | 2755648 | 100 |
| BCk | 48507344 | 20 | 53 | 66 | 13 | 53 | 66 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 53 | 60 | 60 | 66 | 0 | 0 | 0 | 0 | 53 | 66 | 0.75 | 0 | 1.5 | 16663767 | 2755648 | 100 |
| Ap | 48507345 | 20 | 0 | 20 | 20 | 0 | 20 | 0 | 5 | 0 | 20 | 5 | 15 | 15 | 20 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 20 | 0 | 0 | 3 | 0 | 1.149999976 | 16663767 | 2755648 | 100 |
| Btn | 48507342 | 20 | 25 | 53 | 28 | 25 | 53 | 0 | 0 | 25 | 30 | 0 | 0 | 25 | 30 | 30 | 53 | 0 | 0 | 0 | 0 | 25 | 50 | 50 | 53 | 1.5 | 0 | 1.5 | 16663767 | 2755648 | 100 |
| Cr | 48507346 | 58 | 91 | 152 | 61 | 91 | 150 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 91 | 100 | 100 | 152 | 0 | 0 | 91 | 100 | 0.25 | 0 | 1.529999971 | 16663766 | 2755648 | 100 |
| Bt | 48507347 | 58 | 20 | 43 | 23 | 20 | 43 | 0 | 0 | 20 | 30 | 0 | 0 | 20 | 30 | 30 | 43 | 0 | 0 | 0 | 0 | 20 | 43 | 0 | 0 | 2 | 0 | 1.399999976 | 16663766 | 2755648 | 100 |
| Ap | 48507349 | 58 | 0 | 20 | 20 | 0 | 20 | 0 | 5 | 0 | 20 | 5 | 15 | 15 | 20 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 20 | 0 | 0 | 2 | 5 | 1.149999976 | 16663766 | 2755648 | 95 |
| Bk | 48507348 | 58 | 43 | 91 | 48 | 43 | 91 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 43 | 60 | 60 | 91 | 0 | 0 | 43 | 50 | 50 | 91 | 1.25 | 8 | 1.399999976 | 16663766 | 2755648 | 92 |
| Cr | 48508787 | 25 | 79 | 152 | 73 | 79 | 150 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 79 | 100 | 100 | 152 | 0 | 0 | 79 | 100 | 0.25 | 0 | 1.529999971 | 16663847 | 2755654 | 100 |
| Ap | 48508784 | 25 | 0 | 20 | 20 | 0 | 20 | 0 | 5 | 0 | 20 | 5 | 15 | 15 | 20 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 20 | 0 | 0 | 3 | 2 | 1.279999971 | 16663847 | 2755654 | 98 |
| Bw | 48508785 | 25 | 20 | 48 | 28 | 20 | 48 | 0 | 0 | 20 | 30 | 0 | 0 | 20 | 30 | 30 | 48 | 0 | 0 | 0 | 0 | 20 | 48 | 0 | 0 | 2 | 2 | 1.299999952 | 16663847 | 2755654 | 98 |
| Bk | 48508786 | 25 | 48 | 79 | 31 | 48 | 79 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 48 | 60 | 60 | 79 | 0 | 0 | 48 | 50 | 50 | 79 | 0.75 | 2 | 1.399999976 | 16663847 | 2755654 | 98 |
| Cr | 48508790 | 60 | 91 | 152 | 61 | 91 | 150 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 91 | 100 | 100 | 152 | 0 | 0 | 91 | 100 | 0.25 | 0 | 1.529999971 | 16663846 | 2755654 | 100 |
| Bt | 48508789 | 60 | 20 | 43 | 23 | 20 | 43 | 0 | 0 | 20 | 30 | 0 | 0 | 20 | 30 | 30 | 43 | 0 | 0 | 0 | 0 | 20 | 43 | 0 | 0 | 2 | 0 | 1.399999976 | 16663846 | 2755654 | 100 |
| Ap | 48508788 | 60 | 0 | 20 | 20 | 0 | 20 | 0 | 5 | 0 | 20 | 5 | 15 | 15 | 20 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 20 | 0 | 0 | 2 | 5 | 1.149999976 | 16663846 | 2755654 | 95 |
| Bk | 48508791 | 60 | 43 | 91 | 48 | 43 | 91 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 43 | 60 | 60 | 91 | 0 | 0 | 43 | 50 | 50 | 91 | 1.25 | 8 | 1.399999976 | 16663846 | 2755654 | 92 |
| C | 48509110 | 33 | 119 | 200 | 81 | 119 | 150 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 119 | 200 | 0 | 0 | 0 | 0 | 0.25 | 0 | 1.450000048 | 16663899 | 2525720 | 100 |
| Btkny | 48509108 | 33 | 46 | 81 | 35 | 46 | 81 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 46 | 60 | 60 | 81 | 0 | 0 | 46 | 50 | 50 | 81 | 0.75 | 0 | 1.450000048 | 16663899 | 2525720 | 100 |
| BCk | 48509109 | 33 | 81 | 119 | 38 | 81 | 119 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 81 | 100 | 100 | 119 | 0 | 0 | 81 | 100 | 0.5 | 0 | 1.399999976 | 16663899 | 2525720 | 100 |
| E | 48509106 | 33 | 7 | 12 | 5 | 7 | 12 | 0 | 0 | 7 | 12 | 7 | 12 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3.5 | 0 | 1.350000024 | 16663899 | 2525720 | 100 |
| A | 48509105 | 33 | 0 | 7 | 7 | 0 | 7 | 0 | 5 | 0 | 7 | 5 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5.5 | 0 | 1.200000048 | 16663899 | 2525720 | 100 |
| Btn | 48509107 | 33 | 12 | 46 | 34 | 12 | 46 | 0 | 0 | 12 | 30 | 12 | 15 | 15 | 30 | 30 | 46 | 0 | 0 | 0 | 0 | 20 | 46 | 0 | 0 | 2 | 0 | 1.350000024 | 16663899 | 2525720 | 100 |
| C | 48509123 | 55 | 117 | 200 | 83 | 117 | 150 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 117 | 200 | 0 | 0 | 0 | 0 | 0.25 | 0 | 1.450000048 | 16663903 | 2525720 | 100 |
| Btn | 48509121 | 55 | 8 | 20 | 12 | 8 | 20 | 0 | 0 | 8 | 20 | 8 | 15 | 15 | 20 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 20 | 0 | 0 | 1.25 | 0 | 1.399999976 | 16663903 | 2525720 | 100 |
| Btknyz | 48509122 | 55 | 20 | 36 | 16 | 20 | 36 | 0 | 0 | 20 | 30 | 0 | 0 | 20 | 30 | 30 | 36 | 0 | 0 | 0 | 0 | 20 | 36 | 0 | 0 | 1.25 | 0 | 1.399999976 | 16663903 | 2525720 | 100 |
| Bkyz | 48509124 | 55 | 36 | 117 | 81 | 36 | 117 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 36 | 60 | 60 | 100 | 100 | 117 | 36 | 50 | 50 | 100 | 0.25 | 0 | 1.450000048 | 16663903 | 2525720 | 100 |
| E | 48509125 | 55 | 0 | 8 | 8 | 0 | 8 | 0 | 5 | 0 | 8 | 5 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 1.399999976 | 16663903 | 2525720 | 100 |
| Btn | 48509628 | 35 | 31 | 46 | 15 | 31 | 46 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 31 | 46 | 0 | 0 | 0 | 0 | 31 | 46 | 0 | 0 | 2 | 0 | 1.350000024 | 16664022 | 2525724 | 100 |
| E/B | 48509623 | 35 | 23 | 31 | 8 | 23 | 31 | 0 | 0 | 23 | 30 | 0 | 0 | 23 | 30 | 30 | 31 | 0 | 0 | 0 | 0 | 23 | 31 | 0 | 0 | 3 | 0 | 1.350000024 | 16664022 | 2525724 | 100 |
| Btnk | 48509629 | 35 | 46 | 64 | 18 | 46 | 64 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 46 | 60 | 60 | 64 | 0 | 0 | 46 | 50 | 50 | 64 | 1.5 | 0 | 1.399999976 | 16664022 | 2525724 | 100 |
| Bk | 48509624 | 35 | 64 | 110 | 46 | 64 | 110 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 64 | 100 | 100 | 110 | 0 | 0 | 64 | 100 | 0.75 | 0 | 1.450000048 | 16664022 | 2525724 | 100 |
| C | 48509625 | 35 | 110 | 200 | 90 | 110 | 150 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 110 | 200 | 0 | 0 | 0 | 0 | 0.5 | 0 | 1.549999952 | 16664022 | 2525724 | 100 |
| A | 48509627 | 35 | 15 | 23 | 8 | 15 | 23 | 0 | 0 | 15 | 23 | 5 | 5 | 15 | 23 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 23 | 0 | 0 | 3 | 0 | 1.320000052 | 16664022 | 2525724 | 100 |
| Ap | 48509626 | 35 | 0 | 15 | 15 | 0 | 15 | 0 | 5 | 0 | 15 | 5 | 15 | 15 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 1.399999976 | 16664022 | 2525724 | 100 |
| Btn | 48509586 | 20 | 22 | 42 | 20 | 22 | 42 | 0 | 0 | 22 | 30 | 0 | 0 | 22 | 30 | 30 | 42 | 0 | 0 | 0 | 0 | 22 | 42 | 0 | 0 | 2 | 0 | 1.399999976 | 16664018 | 2525724 | 100 |
| C | 48509585 | 20 | 93 | 162 | 69 | 93 | 150 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 93 | 100 | 100 | 162 | 0 | 0 | 93 | 100 | 0.25 | 0 | 1.450000048 | 16664018 | 2525724 | 100 |
| BCkyz | 48509587 | 20 | 78 | 93 | 15 | 78 | 93 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 78 | 93 | 0 | 0 | 0 | 0 | 78 | 93 | 0.75 | 0 | 1.399999976 | 16664018 | 2525724 | 100 |
| Ap | 48509584 | 20 | 0 | 15 | 15 | 0 | 15 | 0 | 5 | 0 | 15 | 5 | 15 | 15 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 1.350000024 | 16664018 | 2525724 | 100 |
| Btnkyz | 48509588 | 20 | 42 | 78 | 36 | 42 | 78 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 42 | 60 | 60 | 78 | 0 | 0 | 42 | 50 | 50 | 78 | 1.5 | 0 | 1.399999976 | 16664018 | 2525724 | 100 |
| E | 48509583 | 20 | 15 | 22 | 7 | 15 | 22 | 0 | 0 | 15 | 22 | 5 | 5 | 15 | 22 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 22 | 0 | 0 | 2.5 | 0 | 1.299999952 | 16664018 | 2525724 | 100 |
| Bt | 48509581 | 30 | 15 | 35 | 20 | 15 | 35 | 0 | 0 | 15 | 30 | 5 | 5 | 15 | 30 | 30 | 35 | 0 | 0 | 0 | 0 | 20 | 35 | 0 | 0 | 2 | 0 | 1.399999976 | 16664017 | 2525724 | 100 |
| Ap | 48509578 | 30 | 0 | 15 | 15 | 0 | 15 | 0 | 5 | 0 | 15 | 5 | 15 | 15 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 1.350000024 | 16664017 | 2525724 | 100 |
| Btk | 48509582 | 30 | 35 | 54 | 19 | 35 | 54 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 35 | 54 | 0 | 0 | 0 | 0 | 35 | 50 | 50 | 54 | 1 | 0 | 1.399999976 | 16664017 | 2525724 | 100 |
| Bk | 48509579 | 30 | 54 | 125 | 71 | 54 | 125 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 54 | 60 | 60 | 100 | 100 | 125 | 0 | 0 | 54 | 100 | 0.75 | 0 | 1.450000048 | 16664017 | 2525724 | 100 |
| C | 48509580 | 30 | 125 | 200 | 75 | 125 | 150 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 125 | 200 | 0 | 0 | 0 | 0 | 0.25 | 0 | 1.549999952 | 16664017 | 2525724 | 100 |
| Cr | 48507811 | 68 | 91 | 200 | 109 | 91 | 150 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 91 | 100 | 100 | 200 | 0 | 0 | 91 | 100 | NULL | 0 | NULL | 16663991 | 2525730 | 100 |
| Bt1 | 48507814 | 68 | 18 | 30 | 12 | 18 | 30 | 0 | 0 | 18 | 30 | 0 | 0 | 18 | 30 | 30 | 30 | 0 | 0 | 0 | 0 | 20 | 30 | 0 | 0 | 2 | 0 | 1.350000024 | 16663991 | 2525730 | 100 |
| Bt2 | 48507815 | 68 | 30 | 56 | 26 | 30 | 56 | 0 | 0 | 0 | 0 | 0 | 0 | 15 | 15 | 30 | 56 | 0 | 0 | 0 | 0 | 30 | 50 | 50 | 56 | 1.200000048 | 0 | 1.399999976 | 16663991 | 2525730 | 100 |
| Bk | 48507813 | 68 | 56 | 91 | 35 | 56 | 91 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 56 | 60 | 60 | 91 | 0 | 0 | 0 | 0 | 56 | 91 | 0.75 | 0 | 1.399999976 | 16663991 | 2525730 | 100 |
| Ap | 48507812 | 68 | 0 | 18 | 18 | 0 | 18 | 0 | 5 | 0 | 18 | 5 | 15 | 15 | 18 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 1.350000024 | 16663991 | 2525730 | 100 |
| Cr | 48507816 | 17 | 170 | 200 | 30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 170 | 200 | 0 | 0 | 0 | 0 | NULL | 0 | NULL | 16663992 | 2525730 | 100 |
| Bt1 | 48507820 | 17 | 18 | 35 | 17 | 18 | 35 | 0 | 0 | 18 | 30 | 0 | 0 | 18 | 30 | 30 | 35 | 0 | 0 | 0 | 0 | 20 | 35 | 0 | 0 | 2 | 0 | 1.399999976 | 16663992 | 2525730 | 100 |
| Bt2 | 48507821 | 17 | 35 | 53 | 18 | 35 | 53 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 35 | 53 | 0 | 0 | 0 | 0 | 35 | 50 | 50 | 53 | 1.25 | 0 | 1.399999976 | 16663992 | 2525730 | 100 |
| Ap | 48507817 | 17 | 0 | 18 | 18 | 0 | 18 | 0 | 5 | 0 | 18 | 5 | 15 | 15 | 18 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 1.350000024 | 16663992 | 2525730 | 100 |
| C | 48507819 | 17 | 116 | 170 | 54 | 116 | 150 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 116 | 170 | 0 | 0 | 0 | 0 | 0.25 | 0 | 1.399999976 | 16663992 | 2525730 | 100 |
| Bk | 48507818 | 17 | 53 | 116 | 63 | 53 | 116 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 53 | 60 | 60 | 100 | 100 | 116 | 0 | 0 | 53 | 100 | 0.75 | 0 | 1.399999976 | 16663992 | 2525730 | 100 |
| A | 48507476 | 75 | 15 | 20 | 5 | 15 | 20 | 0 | 0 | 15 | 20 | 5 | 5 | 15 | 20 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 20 | 0 | 0 | 3 | 0 | 1.299999952 | 16663921 | 2525745 | 100 |
| Bw1 | 48507471 | 75 | 20 | 33 | 13 | 20 | 33 | 0 | 0 | 20 | 30 | 0 | 0 | 20 | 30 | 30 | 33 | 0 | 0 | 0 | 0 | 20 | 33 | 0 | 0 | 2.5 | 0 | 1.299999952 | 16663921 | 2525745 | 100 |
| BCk | 48507473 | 75 | 107 | 122 | 15 | 107 | 122 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 107 | 122 | 0 | 0 | 0 | 0 | 0.5 | 0 | 1.399999976 | 16663921 | 2525745 | 100 |
| Ap | 48507475 | 75 | 0 | 15 | 15 | 0 | 15 | 0 | 5 | 0 | 15 | 5 | 15 | 15 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3.5 | 0 | 1.299999952 | 16663921 | 2525745 | 100 |
| Bk | 48507477 | 75 | 72 | 107 | 35 | 72 | 107 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 72 | 100 | 100 | 107 | 0 | 0 | 72 | 100 | 1 | 0 | 1.399999976 | 16663921 | 2525745 | 100 |
| Bw2 | 48507472 | 75 | 33 | 72 | 39 | 33 | 72 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 33 | 60 | 60 | 72 | 0 | 0 | 33 | 50 | 50 | 72 | 1.5 | 0 | 1.299999952 | 16663921 | 2525745 | 100 |
| C | 48507474 | 75 | 122 | 200 | 78 | 122 | 150 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 122 | 200 | 0 | 0 | 0 | 0 | 0.25 | 0 | 1.5 | 16663921 | 2525745 | 100 |
| BCk | 48507505 | 78 | 107 | 122 | 15 | 107 | 122 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 107 | 122 | 0 | 0 | 0 | 0 | 0.5 | 0 | 1.399999976 | 16663927 | 2525746 | 100 |
| Ap | 48507502 | 78 | 0 | 15 | 15 | 0 | 15 | 0 | 5 | 0 | 15 | 5 | 15 | 15 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3.5 | 0 | 1.299999952 | 16663927 | 2525746 | 100 |
| Bw1 | 48507507 | 78 | 15 | 33 | 18 | 15 | 33 | 0 | 0 | 15 | 30 | 5 | 5 | 15 | 30 | 30 | 33 | 0 | 0 | 0 | 0 | 20 | 33 | 0 | 0 | 2.5 | 0 | 1.350000024 | 16663927 | 2525746 | 100 |
| Bk | 48507504 | 78 | 74 | 107 | 33 | 74 | 107 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 74 | 100 | 100 | 107 | 0 | 0 | 74 | 100 | 1 | 0 | 1.399999976 | 16663927 | 2525746 | 100 |
| Bw2 | 48507503 | 78 | 33 | 74 | 41 | 33 | 74 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 33 | 60 | 60 | 74 | 0 | 0 | 33 | 50 | 50 | 74 | 1.5 | 0 | 1.399999976 | 16663927 | 2525746 | 100 |
| C | 48507506 | 78 | 122 | 200 | 78 | 122 | 150 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 122 | 200 | 0 | 0 | 0 | 0 | 0.25 | 0 | 1.5 | 16663927 | 2525746 | 100 |
| 3Ab | 48508119 | 75 | 97 | 102 | 5 | 97 | 102 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 97 | 100 | 100 | 102 | 0 | 0 | 97 | 100 | 0.25 | 0 | 1.450000048 | 16663602 | 2525754 | 100 |
| Btn | 48508123 | 75 | 5 | 46 | 41 | 5 | 46 | 0 | 0 | 5 | 30 | 5 | 15 | 15 | 30 | 30 | 46 | 0 | 0 | 0 | 0 | 20 | 46 | 0 | 0 | 2 | 0 | 1.399999976 | 16663602 | 2525754 | 100 |
| 3C | 48508124 | 75 | 102 | 152 | 50 | 102 | 150 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 102 | 152 | 0 | 0 | 0 | 0 | 0.25 | 0 | 1.399999976 | 16663602 | 2525754 | 100 |
| E | 48508122 | 75 | 0 | 5 | 5 | 0 | 5 | 0 | 5 | 0 | 5 | 5 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4.5 | 0 | 1.25 | 16663602 | 2525754 | 100 |
| Bz1 | 48508120 | 75 | 46 | 71 | 25 | 46 | 71 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 46 | 60 | 60 | 71 | 0 | 0 | 46 | 50 | 50 | 71 | 0.75 | 0 | 1.399999976 | 16663602 | 2525754 | 100 |
| 2Bz2 | 48508121 | 75 | 71 | 97 | 26 | 71 | 97 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 71 | 97 | 0 | 0 | 0 | 0 | 71 | 97 | 0.5 | 0 | 1.5 | 16663602 | 2525754 | 100 |
| Btn1 | 48507781 | 48 | 33 | 48 | 15 | 33 | 48 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 33 | 48 | 0 | 0 | 0 | 0 | 33 | 48 | 0 | 0 | 2 | 0 | 1.350000024 | 16663985 | 2525769 | 100 |
| E/B | 48507780 | 48 | 25 | 33 | 8 | 25 | 33 | 0 | 0 | 25 | 30 | 0 | 0 | 25 | 30 | 30 | 33 | 0 | 0 | 0 | 0 | 25 | 33 | 0 | 0 | 3 | 0 | 1.399999976 | 16663985 | 2525769 | 100 |
| Btn2 | 48507782 | 48 | 48 | 66 | 18 | 48 | 66 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 48 | 60 | 60 | 66 | 0 | 0 | 48 | 50 | 50 | 66 | 1.5 | 0 | 1.399999976 | 16663985 | 2525769 | 100 |
| Bk | 48507783 | 48 | 66 | 114 | 48 | 66 | 114 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 66 | 100 | 100 | 114 | 0 | 0 | 66 | 100 | 1 | 0 | 1.399999976 | 16663985 | 2525769 | 100 |
| C | 48507784 | 48 | 114 | 200 | 86 | 114 | 150 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 114 | 200 | 0 | 0 | 0 | 0 | 0.5 | 0 | 1.5 | 16663985 | 2525769 | 100 |
| A | 48507779 | 48 | 18 | 25 | 7 | 18 | 25 | 0 | 0 | 18 | 25 | 0 | 0 | 18 | 25 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 25 | 0 | 0 | 4 | 0 | 1.299999952 | 16663985 | 2525769 | 100 |
| Ap | 48507778 | 48 | 0 | 18 | 18 | 0 | 18 | 0 | 5 | 0 | 18 | 5 | 15 | 15 | 18 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 1.299999952 | 16663985 | 2525769 | 100 |
| C | 48507795 | 40 | 119 | 200 | 81 | 119 | 150 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 119 | 200 | 0 | 0 | 0 | 0 | 0.25 | 0 | 1.450000048 | 16663987 | 2525769 | 100 |
| Ap | 48507790 | 40 | 0 | 18 | 18 | 0 | 18 | 0 | 5 | 0 | 18 | 5 | 15 | 15 | 18 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 1.350000024 | 16663987 | 2525769 | 100 |
| Btnky | 48507793 | 40 | 47 | 81 | 34 | 47 | 81 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 47 | 60 | 60 | 81 | 0 | 0 | 47 | 50 | 50 | 81 | 1.5 | 0 | 1.399999976 | 16663987 | 2525769 | 100 |
| BCky | 48507794 | 40 | 81 | 119 | 38 | 81 | 119 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 81 | 100 | 100 | 119 | 0 | 0 | 81 | 100 | 0.75 | 0 | 1.399999976 | 16663987 | 2525769 | 100 |
| E | 48507791 | 40 | 18 | 22 | 4 | 18 | 22 | 0 | 0 | 18 | 22 | 0 | 0 | 18 | 22 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 22 | 0 | 0 | 2.5 | 0 | 1.299999952 | 16663987 | 2525769 | 100 |
| Btn | 48507792 | 40 | 22 | 47 | 25 | 22 | 47 | 0 | 0 | 22 | 30 | 0 | 0 | 22 | 30 | 30 | 47 | 0 | 0 | 0 | 0 | 22 | 47 | 0 | 0 | 2 | 0 | 1.350000024 | 16663987 | 2525769 | 100 |
| Bt | 48508328 | 18 | 25 | 61 | 36 | 25 | 61 | 0 | 0 | 25 | 30 | 0 | 0 | 25 | 30 | 30 | 60 | 60 | 61 | 0 | 0 | 25 | 50 | 50 | 61 | 3 | 2 | 1.299999952 | 16663555 | 2755639 | 98 |
| A | 48508327 | 18 | 13 | 25 | 12 | 13 | 25 | 0 | 0 | 13 | 25 | 13 | 15 | 15 | 25 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 25 | 0 | 0 | 5 | 2 | 1.200000048 | 16663555 | 2755639 | 98 |
| Ap | 48508331 | 18 | 0 | 13 | 13 | 0 | 13 | 0 | 5 | 0 | 13 | 5 | 13 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 2 | 1.200000048 | 16663555 | 2755639 | 98 |
| C | 48508329 | 18 | 132 | 152 | 20 | 132 | 150 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 132 | 152 | 0 | 0 | 0 | 0 | 0.5 | 2 | 1.299999952 | 16663555 | 2755639 | 98 |
| Bk | 48508330 | 18 | 61 | 132 | 71 | 61 | 132 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 61 | 100 | 100 | 132 | 0 | 0 | 61 | 100 | 1 | 1 | 1.299999952 | 16663555 | 2755639 | 99 |
| Bt | 48508333 | 62 | 18 | 64 | 46 | 18 | 64 | 0 | 0 | 18 | 30 | 0 | 0 | 18 | 30 | 30 | 60 | 60 | 64 | 0 | 0 | 20 | 50 | 50 | 64 | 1.5 | 0 | 1.379999995 | 16663554 | 2755639 | 100 |
| Ap | 48508334 | 62 | 0 | 18 | 18 | 0 | 18 | 0 | 5 | 0 | 18 | 5 | 15 | 15 | 18 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 1.149999976 | 16663554 | 2755639 | 100 |
| Bk | 48508335 | 62 | 64 | 130 | 66 | 64 | 130 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 64 | 100 | 100 | 130 | 0 | 0 | 64 | 100 | 0.75 | 0 | 1.399999976 | 16663554 | 2755639 | 100 |
| C | 48508332 | 62 | 130 | 203 | 73 | 130 | 150 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 130 | 200 | 0 | 0 | 0 | 0 | 0.25 | 0 | 1.399999976 | 16663554 | 2755639 | 100 |
| Cr | 48507642 | 30 | 38 | 200 | 162 | 38 | 150 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 38 | 60 | 60 | 100 | 100 | 200 | 38 | 50 | 50 | 100 | NULL | 0 | NULL | 16663957 | 2755643 | 100 |
| AC | 48507644 | 30 | 13 | 25 | 12 | 13 | 25 | 0 | 0 | 13 | 25 | 13 | 15 | 15 | 25 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 25 | 0 | 0 | 1 | 5 | 1.450000048 | 16663957 | 2755643 | 95 |
| C | 48507645 | 30 | 25 | 38 | 13 | 25 | 38 | 0 | 0 | 25 | 30 | 0 | 0 | 25 | 30 | 30 | 38 | 0 | 0 | 0 | 0 | 25 | 38 | 0 | 0 | 0.5 | 8 | 1.5 | 16663957 | 2755643 | 92 |
| A | 48507643 | 30 | 0 | 13 | 13 | 0 | 13 | 0 | 5 | 0 | 13 | 5 | 13 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1.5 | 5 | 1.399999976 | 16663957 | 2755643 | 95 |
| Cr | 48507651 | 18 | 178 | 200 | 22 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 178 | 200 | 0 | 0 | 0 | 0 | NULL | 0 | NULL | 16663959 | 2755643 | 100 |
| Bw2 | 48507654 | 18 | 31 | 46 | 15 | 31 | 46 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 31 | 46 | 0 | 0 | 0 | 0 | 31 | 46 | 0 | 0 | 1.5 | 4 | 1.5 | 16663959 | 2755643 | 96 |
| A | 48507652 | 18 | 0 | 15 | 15 | 0 | 15 | 0 | 5 | 0 | 15 | 5 | 15 | 15 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2.5 | 3 | 1.5 | 16663959 | 2755643 | 97 |
| Bw1 | 48507653 | 18 | 15 | 31 | 16 | 15 | 31 | 0 | 0 | 15 | 30 | 5 | 5 | 15 | 30 | 30 | 31 | 0 | 0 | 0 | 0 | 20 | 31 | 0 | 0 | 2 | 3 | 1.5 | 16663959 | 2755643 | 97 |
| Bk | 48507655 | 18 | 46 | 84 | 38 | 46 | 84 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 46 | 60 | 60 | 84 | 0 | 0 | 46 | 50 | 50 | 84 | 1 | 5 | 1.549999952 | 16663959 | 2755643 | 95 |
| C | 48507656 | 18 | 84 | 178 | 94 | 84 | 150 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 84 | 100 | 100 | 178 | 0 | 0 | 84 | 100 | 0.5 | 6 | 1.549999952 | 16663959 | 2755643 | 94 |
| Cr | 48507646 | 40 | 74 | 200 | 126 | 74 | 150 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 74 | 100 | 100 | 200 | 0 | 0 | 74 | 100 | NULL | 0 | NULL | 16663958 | 2755643 | 100 |
| Bw1 | 48507650 | 40 | 15 | 28 | 13 | 15 | 28 | 0 | 0 | 15 | 28 | 5 | 5 | 15 | 28 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 28 | 0 | 0 | 1.5 | 4 | 1.450000048 | 16663958 | 2755643 | 96 |
| Bw2 | 48507647 | 40 | 28 | 43 | 15 | 28 | 43 | 0 | 0 | 28 | 30 | 0 | 0 | 28 | 30 | 30 | 43 | 0 | 0 | 0 | 0 | 28 | 43 | 0 | 0 | 1 | 6 | 1.5 | 16663958 | 2755643 | 94 |
| A | 48507649 | 40 | 0 | 15 | 15 | 0 | 15 | 0 | 5 | 0 | 15 | 5 | 15 | 15 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 4 | 1.399999976 | 16663958 | 2755643 | 96 |
| Bk | 48507648 | 40 | 43 | 74 | 31 | 43 | 74 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 43 | 60 | 60 | 74 | 0 | 0 | 43 | 50 | 50 | 74 | 0.5 | 7 | 1.549999952 | 16663958 | 2755643 | 93 |
| Cr | 48507343 | 20 | 66 | 152 | 86 | 66 | 150 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 66 | 100 | 100 | 152 | 0 | 0 | 66 | 100 | 0.25 | 0 | 1.5 | 16663767 | 2755648 | 100 |
| E | 48507341 | 20 | 20 | 25 | 5 | 20 | 25 | 0 | 0 | 20 | 25 | 0 | 0 | 20 | 25 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 25 | 0 | 0 | 2.5 | 0 | 1.299999952 | 16663767 | 2755648 | 100 |
| BCk | 48507344 | 20 | 53 | 66 | 13 | 53 | 66 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 53 | 60 | 60 | 66 | 0 | 0 | 0 | 0 | 53 | 66 | 0.75 | 0 | 1.5 | 16663767 | 2755648 | 100 |
| Ap | 48507345 | 20 | 0 | 20 | 20 | 0 | 20 | 0 | 5 | 0 | 20 | 5 | 15 | 15 | 20 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 20 | 0 | 0 | 3 | 0 | 1.149999976 | 16663767 | 2755648 | 100 |
| Btn | 48507342 | 20 | 25 | 53 | 28 | 25 | 53 | 0 | 0 | 25 | 30 | 0 | 0 | 25 | 30 | 30 | 53 | 0 | 0 | 0 | 0 | 25 | 50 | 50 | 53 | 1.5 | 0 | 1.5 | 16663767 | 2755648 | 100 |
| Cr | 48507346 | 58 | 91 | 152 | 61 | 91 | 150 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 91 | 100 | 100 | 152 | 0 | 0 | 91 | 100 | 0.25 | 0 | 1.529999971 | 16663766 | 2755648 | 100 |
| Bt | 48507347 | 58 | 20 | 43 | 23 | 20 | 43 | 0 | 0 | 20 | 30 | 0 | 0 | 20 | 30 | 30 | 43 | 0 | 0 | 0 | 0 | 20 | 43 | 0 | 0 | 2 | 0 | 1.399999976 | 16663766 | 2755648 | 100 |
| Ap | 48507349 | 58 | 0 | 20 | 20 | 0 | 20 | 0 | 5 | 0 | 20 | 5 | 15 | 15 | 20 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 20 | 0 | 0 | 2 | 5 | 1.149999976 | 16663766 | 2755648 | 95 |
| Bk | 48507348 | 58 | 43 | 91 | 48 | 43 | 91 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 43 | 60 | 60 | 91 | 0 | 0 | 43 | 50 | 50 | 91 | 1.25 | 8 | 1.399999976 | 16663766 | 2755648 | 92 |

#### Execute SOC layer calculations

Layer SOC stock = ( (hzT \* ( ( om / 1.724 ) \* db3 )) / 100.0 ) \* ((100.0 - fragvol) / 100.0)

\[Layer SOC stock = Thickness \* (om/1.724)/100 \* \rho \* (1-FRAG)\]

where Thickness is the layer/horizon thickness present within the depth increment in question (\(cm\)), \(\rho\) is the bulk density in (\(g oven dried soil in volume at one third bar, cm ^{-3}\)), [om] is the concentration of organic matter in soil (\(% of soil ^{-1}\)), and FRAG is the proportion of sample greater than 2mm in diameter (\(% by volumen\)).

###### SOC2 table

SELECT mukey, cokey, hzname, chkey, comppct\_r, hzdept\_r, hzdepb\_r, thickness,

InRangeTop\_0\_150,

InRangeBot\_0\_150,

InRangeTop\_0\_30,

InRangeBot\_0\_30,

InRangeTop\_20\_50,

InRangeBot\_20\_50,

InRangeTop\_50\_100 ,

InRangeBot\_50\_100,

(( ((InRangeBot\_0\_150 - InRangeTop\_0\_150) \* ( ( om\_r / 1.724 ) \* dbthirdbar\_r )) / 100.0 ) \* ((100.0 - fragvol) / 100.0)) AS HZ\_SOC\_0\_150,

(( ((InRangeBot\_0\_30 - InRangeTop\_0\_30) \* ( ( om\_r / 1.724 ) \* dbthirdbar\_r )) / 100.0 ) \* ((100.0 - fragvol) / 100.0)) AS HZ\_SOC\_0\_30,

---Removed \* ( comppct\_r \* 100 )

((((InRangeBot\_20\_50 - InRangeTop\_20\_50) \* ( ( om\_r / 1.724 ) \* dbthirdbar\_r )) / 100.0 ) \* ((100.0 - fragvol) / 100.0)) AS HZ\_SOC\_20\_50,

---Removed \* ( comppct\_r \* 100 )

((((InRangeBot\_50\_100 - InRangeTop\_50\_100) \* ( ( om\_r / 1.724 ) \* dbthirdbar\_r )) / 100.0 ) \* ((100.0 - fragvol) / 100.0)) AS HZ\_SOC\_50\_100,

(( ((InRangeBot\_0\_5 - InRangeTop\_0\_5) \* ( ( om\_r / 1.724 ) \* dbthirdbar\_r )) / 100.0 ) \* ((100.0 - fragvol) / 100.0)) AS HZ\_SOC\_0\_5,

(( ((InRangeBot\_5\_15 - InRangeTop\_5\_15) \* ( ( om\_r / 1.724 ) \* dbthirdbar\_r )) / 100.0 ) \* ((100.0 - fragvol) / 100.0)) AS HZ\_SOC\_5\_15,

(( ((InRangeBot\_15\_30 - InRangeTop\_15\_30) \* ( ( om\_r / 1.724 ) \* dbthirdbar\_r )) / 100.0 ) \* ((100.0 - fragvol) / 100.0)) AS HZ\_SOC\_15\_30,

(( ((InRangeBot\_30\_60 - InRangeTop\_30\_60) \* ( ( om\_r / 1.724 ) \* dbthirdbar\_r )) / 100.0 ) \* ((100.0 - fragvol) / 100.0)) AS HZ\_SOC\_30\_60,

(( ((InRangeBot\_60\_100 - InRangeTop\_60\_100) \* ( ( om\_r / 1.724 ) \* dbthirdbar\_r )) / 100.0 ) \* ((100.0 - fragvol) / 100.0)) AS HZ\_SOC\_60\_100,

(( ((InRangeBot\_100\_200 - InRangeTop\_100\_200) \* ( ( om\_r / 1.724 ) \* dbthirdbar\_r )) / 100.0 ) \* ((100.0 - fragvol) / 100.0)) AS HZ\_SOC\_100\_200

---Removed \* ( comppct\_r \* 100 )

INTO #SOC2

FROM #SOC

ORDER BY mukey ,cokey, comppct\_r DESC, hzdept\_r ASC, hzdepb\_r ASC, chkey

| **mukey** | **cokey** | **hzname** | **chkey** | **comppct\_r** | **hzdept\_r** | **hzdepb\_r** | **thickness** | **InRangeTop\_0\_150** | **InRangeBot\_0\_150** | **InRangeTop\_0\_30** | **InRangeBot\_0\_30** | **InRangeTop\_20\_50** | **InRangeBot\_20\_50** | **InRangeTop\_50\_100** | **InRangeBot\_50\_100** | **HZ\_SOC\_0\_150** | **HZ\_SOC\_0\_30** | **HZ\_SOC\_20\_50** | **HZ\_SOC\_50\_100** | **HZ\_SOC\_0\_5** | **HZ\_SOC\_5\_15** | **HZ\_SOC\_15\_30** | **HZ\_SOC\_30\_60** | **HZ\_SOC\_60\_100** | **HZ\_SOC\_100\_200** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 354627 | 16464494 | H2 | 47888422 | 25 | 18 | 43 | 25 | 18 | 43 | 18 | 30 | 20 | 43 | 0 | 0 | 0.315400242 | 0.151392116 | 0.290168223 | 0 | 0 | 0 | 0.151392116 | 0.164008126 | 0 | 0 |
| 354627 | 16464494 | H1 | 47888421 | 25 | 0 | 18 | 18 | 0 | 18 | 0 | 18 | 0 | 0 | 0 | 0 | 0.422853836 | 0.422853836 | 0 | 0 | 0.117459399 | 0.234918798 | 0.070475639 | 0 | 0 | 0 |
| 354627 | 16464494 | H3 | 47888423 | 25 | 43 | 152 | 109 | 43 | 150 | 0 | 0 | 43 | 50 | 50 | 100 | 0.496519729 | 0 | 0.032482599 | 0.232018565 | 0 | 0 | 0 | 0.078886312 | 0.185614852 | 0.241299308 |
| 354627 | 16464495 | H2 | 47887710 | 65 | 20 | 41 | 21 | 20 | 41 | 20 | 30 | 20 | 41 | 0 | 0 | 0.237528994 | 0.113109045 | 0.237528994 | 0 | 0 | 0 | 0.113109045 | 0.124419949 | 0 | 0 |
| 354627 | 16464495 | H1 | 47887709 | 65 | 0 | 20 | 20 | 0 | 20 | 0 | 20 | 20 | 20 | 0 | 0 | 0.452436178 | 0.452436178 | 0 | 0 | 0.113109045 | 0.226218089 | 0.113109045 | 0 | 0 | 0 |
| 354627 | 16464495 | H3 | 47887707 | 65 | 41 | 89 | 48 | 41 | 89 | 0 | 0 | 41 | 50 | 50 | 89 | 0.277726227 | 0 | 0.052073668 | 0.225652559 | 0 | 0 | 0 | 0.109933298 | 0.167792929 | 0 |
| 354627 | 16464495 | H4 | 47887708 | 65 | 89 | 152 | 63 | 89 | 150 | 0 | 0 | 0 | 0 | 89 | 100 | 0.119417055 | 0 | 0 | 0.021534223 | 0 | 0 | 0 | 0 | 0.021534223 | 0.101798146 |
| 354648 | 16464607 | Cr | 47888315 | 25 | 86 | 152 | 66 | 86 | 150 | 0 | 0 | 0 | 0 | 86 | 100 | NULL | NULL | NULL | NULL | NULL | NULL | NULL | NULL | NULL | NULL |
| 354648 | 16464607 | H2 | 47888313 | 25 | 20 | 33 | 13 | 20 | 33 | 20 | 30 | 20 | 33 | 0 | 0 | 0.192134564 | 0.147795818 | 0.192134564 | 0 | 0 | 0 | 0.147795818 | 0.044338745 | 0 | 0 |
| 354648 | 16464607 | H1 | 47888312 | 25 | 0 | 20 | 20 | 0 | 20 | 0 | 20 | 20 | 20 | 0 | 0 | 0.654849173 | 0.654849173 | 0 | 0 | 0.163712293 | 0.327424587 | 0.163712293 | 0 | 0 | 0 |
| 354648 | 16464607 | H3 | 47888314 | 25 | 33 | 86 | 53 | 33 | 86 | 0 | 0 | 33 | 50 | 50 | 86 | 0.316339902 | 0 | 0.101467516 | 0.214872386 | 0 | 0 | 0 | 0.16115429 | 0.155185612 | 0 |
| 354648 | 16464612 | Cr | 47887978 | 60 | 81 | 152 | 71 | 81 | 150 | 0 | 0 | 0 | 0 | 81 | 100 | NULL | NULL | NULL | NULL | NULL | NULL | NULL | NULL | NULL | NULL |
| 354648 | 16464612 | H3 | 47887981 | 60 | 48 | 81 | 33 | 48 | 81 | 0 | 0 | 48 | 50 | 50 | 81 | 0.281021612 | 0 | 0.017031613 | 0.263989999 | 0 | 0 | 0 | 0.102189677 | 0.178831935 | 0 |
| 354648 | 16464612 | H2 | 47887980 | 60 | 13 | 48 | 35 | 13 | 48 | 13 | 30 | 20 | 48 | 0 | 0 | 0.527842208 | 0.256380501 | 0.422273766 | 0 | 0 | 0.030162412 | 0.226218089 | 0.271461707 | 0 | 0 |
| 354648 | 16464612 | H1 | 47887979 | 60 | 0 | 13 | 13 | 0 | 13 | 0 | 13 | 0 | 0 | 0 | 0 | 0.355192567 | 0.355192567 | 0 | 0 | 0.136612526 | 0.218580042 | 0 | 0 | 0 | 0 |
| 2494708 | 16663930 | Cr | 48509159 | 49 | 76 | 200 | 124 | 76 | 150 | 0 | 0 | 0 | 0 | 76 | 100 | NULL | NULL | NULL | NULL | NULL | NULL | NULL | NULL | NULL | NULL |
| 2494708 | 16663930 | Bw1 | 48509160 | 49 | 13 | 23 | 10 | 13 | 23 | 13 | 23 | 20 | 23 | 0 | 0 | 0.16241299 | 0.16241299 | 0.048723897 | 0 | 0 | 0.032482598 | 0.129930392 | 0 | 0 | 0 |
| 2494708 | 16663930 | Ap | 48509164 | 49 | 0 | 13 | 13 | 0 | 13 | 0 | 13 | 0 | 0 | 0 | 0 | 0.310371224 | 0.310371224 | 0 | 0 | 0.119373548 | 0.190997677 | 0 | 0 | 0 | 0 |
| 2494708 | 16663930 | Bw2 | 48509163 | 49 | 23 | 38 | 15 | 23 | 38 | 23 | 30 | 23 | 38 | 0 | 0 | 0.176189098 | 0.082221579 | 0.176189098 | 0 | 0 | 0 | 0.082221579 | 0.093967519 | 0 | 0 |
| 2494708 | 16663930 | BCk | 48509162 | 49 | 58 | 76 | 18 | 58 | 76 | 0 | 0 | 0 | 0 | 58 | 76 | 0.073085846 | 0 | 0 | 0.073085846 | 0 | 0 | 0 | 0.00812065 | 0.064965196 | 0 |
| 2494708 | 16663930 | Bk | 48509161 | 49 | 38 | 58 | 20 | 38 | 58 | 0 | 0 | 38 | 50 | 50 | 58 | 0.125290027 | 0 | 0.075174016 | 0.050116011 | 0 | 0 | 0 | 0.125290027 | 0 | 0 |
| 2494708 | 16663931 | Cr | 48509165 | 32 | 38 | 200 | 162 | 38 | 150 | 0 | 0 | 38 | 50 | 50 | 100 | NULL | NULL | NULL | NULL | NULL | NULL | NULL | NULL | NULL | NULL |
| 2494708 | 16663931 | Ap | 48509166 | 32 | 0 | 13 | 13 | 0 | 13 | 0 | 13 | 0 | 0 | 0 | 0 | 0.200580043 | 0.200580043 | 0 | 0 | 0.07714617 | 0.123433873 | 0 | 0 | 0 | 0 |
| 2494708 | 16663931 | Bk | 48509167 | 32 | 13 | 38 | 25 | 13 | 38 | 13 | 30 | 20 | 38 | 0 | 0 | 0.159164733 | 0.108232018 | 0.114598608 | 0 | 0 | 0.012733179 | 0.09549884 | 0.050932715 | 0 | 0 |
| 2525720 | 16663899 | C | 48509110 | 33 | 119 | 200 | 81 | 119 | 150 | 0 | 0 | 0 | 0 | 0 | 0 | 0.065182717 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.170316131 |
| 2525720 | 16663899 | Btkny | 48509108 | 33 | 46 | 81 | 35 | 46 | 81 | 0 | 0 | 46 | 50 | 50 | 81 | 0.22078017 | 0 | 0.025232019 | 0.19554815 | 0 | 0 | 0 | 0.088312068 | 0.132468102 | 0 |
| 2525720 | 16663899 | BCk | 48509109 | 33 | 81 | 119 | 38 | 81 | 119 | 0 | 0 | 0 | 0 | 81 | 100 | 0.154292341 | 0 | 0 | 0.07714617 | 0 | 0 | 0 | 0 | 0.07714617 | 0.07714617 |
| 2525720 | 16663899 | E | 48509106 | 33 | 7 | 12 | 5 | 7 | 12 | 7 | 12 | 0 | 0 | 0 | 0 | 0.137035965 | 0.137035965 | 0 | 0 | 0 | 0.137035965 | 0 | 0 | 0 | 0 |
| 2525720 | 16663899 | A | 48509105 | 33 | 0 | 7 | 7 | 0 | 7 | 0 | 7 | 0 | 0 | 0 | 0 | 0.267981449 | 0.267981449 | 0 | 0 | 0.191415321 | 0.076566128 | 0 | 0 | 0 | 0 |
| 2525720 | 16663899 | Btn | 48509107 | 33 | 12 | 46 | 34 | 12 | 46 | 12 | 30 | 20 | 46 | 0 | 0 | 0.532482608 | 0.281902557 | 0.407192583 | 0 | 0 | 0.04698376 | 0.234918798 | 0.250580051 | 0 | 0 |
| 2525720 | 16663903 | C | 48509123 | 55 | 117 | 200 | 83 | 117 | 150 | 0 | 0 | 0 | 0 | 0 | 0 | 0.069388053 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.174521467 |
| 2525720 | 16663903 | Btn | 48509121 | 55 | 8 | 20 | 12 | 8 | 20 | 8 | 20 | 20 | 20 | 0 | 0 | 0.121809743 | 0.121809743 | 0 | 0 | 0 | 0.071055683 | 0.050754059 | 0 | 0 | 0 |
| 2525720 | 16663903 | Btknyz | 48509122 | 55 | 20 | 36 | 16 | 20 | 36 | 20 | 30 | 20 | 36 | 0 | 0 | 0.16241299 | 0.101508119 | 0.16241299 | 0 | 0 | 0 | 0.101508119 | 0.060904871 | 0 | 0 |
| 2525720 | 16663903 | Bkyz | 48509124 | 55 | 36 | 117 | 81 | 36 | 117 | 0 | 0 | 36 | 50 | 50 | 100 | 0.170316131 | 0 | 0.029437356 | 0.105133414 | 0 | 0 | 0 | 0.050464039 | 0.084106731 | 0.035745361 |
| 2525720 | 16663903 | E | 48509125 | 55 | 0 | 8 | 8 | 0 | 8 | 0 | 8 | 0 | 0 | 0 | 0 | 0.259860784 | 0.259860784 | 0 | 0 | 0.16241299 | 0.097447794 | 0 | 0 | 0 | 0 |
| 2525732 | 16663796 | Btn | 48508966 | 55 | 30 | 43 | 13 | 30 | 43 | 0 | 0 | 30 | 43 | 0 | 0 | 0.056554524 | 0 | 0.056554524 | 0 | 0 | 0 | 0 | 0.056554524 | 0 | 0 |
| 2525732 | 16663796 | Ap | 48508969 | 55 | 0 | 15 | 15 | 0 | 15 | 0 | 15 | 0 | 0 | 0 | 0 | 0.182714614 | 0.182714614 | 0 | 0 | 0.060904871 | 0.121809743 | 0 | 0 | 0 | 0 |
| 2525732 | 16663796 | E | 48508965 | 55 | 15 | 30 | 15 | 15 | 30 | 15 | 30 | 20 | 30 | 0 | 0 | 0.189240145 | 0.189240145 | 0.126160097 | 0 | 0 | 0 | 0.189240145 | 0 | 0 | 0 |
| 2525732 | 16663796 | Bz | 48508968 | 55 | 43 | 84 | 41 | 43 | 84 | 0 | 0 | 43 | 50 | 50 | 84 | 0.178364269 | 0 | 0.030452436 | 0.147911833 | 0 | 0 | 0 | 0.073955916 | 0.104408353 | 0 |
| 2525732 | 16663796 | C | 48508967 | 55 | 84 | 152 | 68 | 84 | 150 | 0 | 0 | 0 | 0 | 84 | 100 | 0.138776107 | 0 | 0 | 0.033642693 | 0 | 0 | 0 | 0 | 0.033642693 | 0.109338751 |
| 2525732 | 16663797 | Ap | 48508961 | 17 | 0 | 15 | 15 | 0 | 15 | 0 | 15 | 0 | 0 | 0 | 0 | 0.326276102 | 0.326276102 | 0 | 0 | 0.108758701 | 0.217517401 | 0 | 0 | 0 | 0 |
| 2525732 | 16663797 | Bt | 48508962 | 17 | 15 | 71 | 56 | 15 | 71 | 15 | 30 | 20 | 50 | 50 | 71 | 0.503480263 | 0.134860785 | 0.269721569 | 0.188805099 | 0 | 0 | 0.134860785 | 0.269721569 | 0.098897909 | 0 |
| 2525732 | 16663797 | Bk | 48508963 | 17 | 71 | 86 | 15 | 71 | 86 | 0 | 0 | 0 | 0 | 71 | 86 | 0.067430392 | 0 | 0 | 0.067430392 | 0 | 0 | 0 | 0 | 0.067430392 | 0 |
| 2525732 | 16663797 | BC | 48508964 | 17 | 86 | 152 | 66 | 86 | 150 | 0 | 0 | 0 | 0 | 86 | 100 | 0.143851504 | 0 | 0 | 0.031467516 | 0 | 0 | 0 | 0 | 0.031467516 | 0.116879347 |
| 2525733 | 16663952 | Cr | 48507618 | 25 | 43 | 200 | 157 | 43 | 150 | 0 | 0 | 43 | 50 | 50 | 100 | NULL | NULL | NULL | NULL | NULL | NULL | NULL | NULL | NULL | NULL |
| 2525733 | 16663952 | Ap | 48507620 | 25 | 0 | 15 | 15 | 0 | 15 | 0 | 15 | 0 | 0 | 0 | 0 | 0.126595128 | 0.126595128 | 0 | 0 | 0.042198376 | 0.084396752 | 0 | 0 | 0 | 0 |
| 2525733 | 16663952 | C | 48507619 | 25 | 15 | 43 | 28 | 15 | 43 | 15 | 30 | 20 | 43 | 0 | 0 | 0.115719258 | 0.061992459 | 0.095055104 | 0 | 0 | 0 | 0.061992459 | 0.053726798 | 0 | 0 |
| 2525733 | 16663951 | Cr | 48507613 | 50 | 74 | 200 | 126 | 74 | 150 | 0 | 0 | 0 | 0 | 74 | 100 | NULL | NULL | NULL | NULL | NULL | NULL | NULL | NULL | NULL | NULL |
| 2525733 | 16663951 | Bw1 | 48507615 | 50 | 15 | 28 | 13 | 15 | 28 | 15 | 28 | 20 | 28 | 0 | 0 | 0.157447801 | 0.157447801 | 0.096890954 | 0 | 0 | 0 | 0.157447801 | 0 | 0 | 0 |
| 2525733 | 16663951 | Bw2 | 48507616 | 50 | 28 | 43 | 15 | 28 | 43 | 28 | 30 | 28 | 43 | 0 | 0 | 0.122679814 | 0.016357309 | 0.122679814 | 0 | 0 | 0 | 0.016357309 | 0.106322506 | 0 | 0 |
| 2525733 | 16663951 | Ap | 48507614 | 50 | 0 | 15 | 15 | 0 | 15 | 0 | 15 | 0 | 0 | 0 | 0 | 0.233874706 | 0.233874706 | 0 | 0 | 0.077958235 | 0.155916471 | 0 | 0 | 0 | 0 |
| 2525733 | 16663951 | Bk | 48507617 | 50 | 43 | 74 | 31 | 43 | 74 | 0 | 0 | 43 | 50 | 50 | 74 | 0.129601214 | 0 | 0.02926479 | 0.100336424 | 0 | 0 | 0 | 0.071071634 | 0.058529581 | 0 |
| 2525739 | 16663915 | Bw2 | 48509145 | 20 | 60 | 75 | 15 | 60 | 75 | 0 | 0 | 0 | 0 | 60 | 75 | 0.132163569 | 0 | 0 | 0.132163569 | 0 | 0 | 0 | 0 | 0.132163569 | 0 |
| 2525739 | 16663915 | A | 48509143 | 20 | 15 | 30 | 15 | 15 | 30 | 15 | 30 | 20 | 30 | 0 | 0 | 0.31224624 | 0.31224624 | 0.20816416 | 0 | 0 | 0 | 0.31224624 | 0 | 0 | 0 |
| 2525739 | 16663915 | Ap | 48509148 | 20 | 0 | 15 | 15 | 0 | 15 | 0 | 15 | 0 | 0 | 0 | 0 | 0.452218677 | 0.452218677 | 0 | 0 | 0.150739559 | 0.301479118 | 0 | 0 | 0 | 0 |
| 2525739 | 16663915 | Bw1 | 48509144 | 20 | 30 | 60 | 30 | 30 | 60 | 0 | 0 | 30 | 50 | 50 | 60 | 0.387616009 | 0 | 0.258410673 | 0.129205336 | 0 | 0 | 0 | 0.387616009 | 0 | 0 |
| 2525739 | 16663915 | Bk | 48509146 | 20 | 75 | 122 | 47 | 75 | 122 | 0 | 0 | 0 | 0 | 75 | 100 | 0.307415159 | 0 | 0 | 0.163518701 | 0 | 0 | 0 | 0 | 0.163518701 | 0.143896457 |
| 2525739 | 16663915 | C | 48509147 | 20 | 122 | 200 | 78 | 122 | 150 | 0 | 0 | 0 | 0 | 0 | 0 | 0.061716938 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.171925757 |
| 2525739 | 16663917 | Cr | 48507454 | 58 | 81 | 200 | 119 | 81 | 150 | 0 | 0 | 0 | 0 | 81 | 100 | NULL | NULL | NULL | NULL | NULL | NULL | NULL | NULL | NULL | NULL |
| 2525739 | 16663917 | BCk | 48507456 | 58 | 66 | 81 | 15 | 66 | 81 | 0 | 0 | 0 | 0 | 66 | 81 | 0.062710265 | 0 | 0 | 0.062710265 | 0 | 0 | 0 | 0 | 0.062710265 | 0 |
| 2525739 | 16663917 | Ap | 48507458 | 58 | 0 | 15 | 15 | 0 | 15 | 0 | 15 | 0 | 0 | 0 | 0 | 0.261629922 | 0.261629922 | 0 | 0 | 0.087209974 | 0.174419948 | 0 | 0 | 0 | 0 |
| 2525739 | 16663917 | Bw1 | 48507455 | 58 | 15 | 32 | 17 | 15 | 32 | 15 | 30 | 20 | 32 | 0 | 0 | 0.212993039 | 0.187935035 | 0.150348028 | 0 | 0 | 0 | 0.187935035 | 0.025058005 | 0 | 0 |
| 2525739 | 16663917 | Bw2 | 48507457 | 58 | 32 | 66 | 34 | 32 | 66 | 0 | 0 | 32 | 50 | 50 | 66 | 0.278074246 | 0 | 0.147215777 | 0.130858469 | 0 | 0 | 0 | 0.22900232 | 0.049071926 | 0 |
| 2525745 | 16663921 | A | 48507476 | 75 | 15 | 20 | 5 | 15 | 20 | 15 | 20 | 20 | 20 | 0 | 0 | 0.113109045 | 0.113109045 | 0 | 0 | 0 | 0 | 0.113109045 | 0 | 0 | 0 |
| 2525745 | 16663921 | Bw1 | 48507471 | 75 | 20 | 33 | 13 | 20 | 33 | 20 | 30 | 20 | 33 | 0 | 0 | 0.245069597 | 0.188515074 | 0.245069597 | 0 | 0 | 0 | 0.188515074 | 0.056554522 | 0 | 0 |
| 2525745 | 16663921 | BCk | 48507473 | 75 | 107 | 122 | 15 | 107 | 122 | 0 | 0 | 0 | 0 | 0 | 0 | 0.060904871 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.060904871 |
| 2525745 | 16663921 | Ap | 48507475 | 75 | 0 | 15 | 15 | 0 | 15 | 0 | 15 | 0 | 0 | 0 | 0 | 0.395881656 | 0.395881656 | 0 | 0 | 0.131960552 | 0.263921104 | 0 | 0 | 0 | 0 |
| 2525745 | 16663921 | Bk | 48507477 | 75 | 72 | 107 | 35 | 72 | 107 | 0 | 0 | 0 | 0 | 72 | 100 | 0.284222733 | 0 | 0 | 0.227378186 | 0 | 0 | 0 | 0 | 0.227378186 | 0.056844547 |
| 2525745 | 16663921 | Bw2 | 48507472 | 75 | 33 | 72 | 39 | 33 | 72 | 0 | 0 | 33 | 50 | 50 | 72 | 0.441125274 | 0 | 0.192285376 | 0.248839898 | 0 | 0 | 0 | 0.30539442 | 0.135730853 | 0 |
| 2525745 | 16663921 | C | 48507474 | 75 | 122 | 200 | 78 | 122 | 150 | 0 | 0 | 0 | 0 | 0 | 0 | 0.060904872 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.169663573 |
| 2525746 | 16663927 | BCk | 48507505 | 78 | 107 | 122 | 15 | 107 | 122 | 0 | 0 | 0 | 0 | 0 | 0 | 0.060904871 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.060904871 |
| 2525746 | 16663927 | Ap | 48507502 | 78 | 0 | 15 | 15 | 0 | 15 | 0 | 15 | 0 | 0 | 0 | 0 | 0.395881656 | 0.395881656 | 0 | 0 | 0.131960552 | 0.263921104 | 0 | 0 | 0 | 0 |
| 2525746 | 16663927 | Bw1 | 48507507 | 78 | 15 | 33 | 18 | 15 | 33 | 15 | 30 | 20 | 33 | 0 | 0 | 0.352378196 | 0.293648497 | 0.254495364 | 0 | 0 | 0 | 0.293648497 | 0.058729699 | 0 | 0 |
| 2525746 | 16663927 | Bk | 48507504 | 78 | 74 | 107 | 33 | 74 | 107 | 0 | 0 | 0 | 0 | 74 | 100 | 0.267981434 | 0 | 0 | 0.211136887 | 0 | 0 | 0 | 0 | 0.211136887 | 0.056844547 |
| 2525746 | 16663927 | Bw2 | 48507503 | 78 | 33 | 74 | 41 | 33 | 74 | 0 | 0 | 33 | 50 | 50 | 74 | 0.499419945 | 0 | 0.207076563 | 0.292343382 | 0 | 0 | 0 | 0.328886305 | 0.17053364 | 0 |
| 2525746 | 16663927 | C | 48507506 | 78 | 122 | 200 | 78 | 122 | 150 | 0 | 0 | 0 | 0 | 0 | 0 | 0.060904872 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.169663573 |
| 2525754 | 16663602 | 3Ab | 48508119 | 75 | 97 | 102 | 5 | 97 | 102 | 0 | 0 | 0 | 0 | 97 | 100 | 0.010513341 | 0 | 0 | 0.006308005 | 0 | 0 | 0 | 0 | 0.006308005 | 0.004205337 |
| 2525754 | 16663602 | Btn | 48508123 | 75 | 5 | 46 | 41 | 5 | 46 | 5 | 30 | 20 | 46 | 0 | 0 | 0.66589326 | 0.406032476 | 0.422273775 | 0 | 0 | 0.16241299 | 0.243619485 | 0.259860784 | 0 | 0 |
| 2525754 | 16663602 | 3C | 48508124 | 75 | 102 | 152 | 50 | 102 | 150 | 0 | 0 | 0 | 0 | 0 | 0 | 0.097447794 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.101508119 |
| 2525754 | 16663602 | E | 48508122 | 75 | 0 | 5 | 5 | 0 | 5 | 0 | 5 | 0 | 0 | 0 | 0 | 0.163138051 | 0.163138051 | 0 | 0 | 0.163138051 | 0 | 0 | 0 | 0 | 0 |
| 2525754 | 16663602 | Bz1 | 48508120 | 75 | 46 | 71 | 25 | 46 | 71 | 0 | 0 | 46 | 50 | 50 | 71 | 0.152262178 | 0 | 0.024361949 | 0.12790023 | 0 | 0 | 0 | 0.08526682 | 0.066995358 | 0 |
| 2525754 | 16663602 | 2Bz2 | 48508121 | 75 | 71 | 97 | 26 | 71 | 97 | 0 | 0 | 0 | 0 | 71 | 97 | 0.113109049 | 0 | 0 | 0.113109049 | 0 | 0 | 0 | 0 | 0.113109049 | 0 |
| 2525764 | 16663611 | 2Czg | 48508082 | 55 | 71 | 152 | 81 | 71 | 150 | 0 | 0 | 0 | 0 | 71 | 100 | 0.481148484 | 0 | 0 | 0.176624127 | 0 | 0 | 0 | 0 | 0.176624127 | 0.316705331 |
| 2525764 | 16663611 | Az | 48508083 | 55 | 0 | 23 | 23 | 0 | 23 | 0 | 23 | 20 | 23 | 0 | 0 | 0.613689082 | 0.613689082 | 0.080046402 | 0 | 0.13341067 | 0.26682134 | 0.213457072 | 0 | 0 | 0 |
| 2525764 | 16663611 | Bkzg | 48508081 | 55 | 23 | 71 | 48 | 23 | 71 | 23 | 30 | 23 | 50 | 50 | 71 | 0.779582353 | 0.113689093 | 0.438515074 | 0.34106728 | 0 | 0 | 0.113689093 | 0.487238971 | 0.178654289 | 0 |
| 2525769 | 16663985 | Btn1 | 48507781 | 48 | 33 | 48 | 15 | 33 | 48 | 0 | 0 | 33 | 48 | 0 | 0 | 0.234918798 | 0 | 0.234918798 | 0 | 0 | 0 | 0 | 0.234918798 | 0 | 0 |
| 2525769 | 16663985 | E/B | 48507780 | 48 | 25 | 33 | 8 | 25 | 33 | 25 | 30 | 25 | 33 | 0 | 0 | 0.194895588 | 0.121809743 | 0.194895588 | 0 | 0 | 0 | 0.121809743 | 0.073085846 | 0 | 0 |
| 2525769 | 16663985 | Btn2 | 48507782 | 48 | 48 | 66 | 18 | 48 | 66 | 0 | 0 | 48 | 50 | 50 | 66 | 0.219257537 | 0 | 0.024361949 | 0.194895588 | 0 | 0 | 0 | 0.146171691 | 0.073085846 | 0 |
| 2525769 | 16663985 | Bk | 48507783 | 48 | 66 | 114 | 48 | 66 | 114 | 0 | 0 | 0 | 0 | 66 | 100 | 0.389791177 | 0 | 0 | 0.276102083 | 0 | 0 | 0 | 0 | 0.276102083 | 0.113689093 |
| 2525769 | 16663985 | C | 48507784 | 48 | 114 | 200 | 86 | 114 | 150 | 0 | 0 | 0 | 0 | 0 | 0 | 0.156612529 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.37412993 |
| 2525769 | 16663985 | A | 48507779 | 48 | 18 | 25 | 7 | 18 | 25 | 18 | 25 | 20 | 25 | 0 | 0 | 0.211136883 | 0.211136883 | 0.150812059 | 0 | 0 | 0 | 0.211136883 | 0 | 0 | 0 |
| 2525769 | 16663985 | Ap | 48507778 | 48 | 0 | 18 | 18 | 0 | 18 | 0 | 18 | 0 | 0 | 0 | 0 | 0.542923414 | 0.542923414 | 0 | 0 | 0.150812059 | 0.301624119 | 0.090487236 | 0 | 0 | 0 |
| 2525769 | 16663987 | C | 48507795 | 40 | 119 | 200 | 81 | 119 | 150 | 0 | 0 | 0 | 0 | 0 | 0 | 0.065182717 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.170316131 |
| 2525769 | 16663987 | Ap | 48507790 | 40 | 0 | 18 | 18 | 0 | 18 | 0 | 18 | 0 | 0 | 0 | 0 | 0.422853836 | 0.422853836 | 0 | 0 | 0.117459399 | 0.234918798 | 0.070475639 | 0 | 0 | 0 |
| 2525769 | 16663987 | Btnky | 48507793 | 40 | 47 | 81 | 34 | 47 | 81 | 0 | 0 | 47 | 50 | 50 | 81 | 0.414153125 | 0 | 0.036542923 | 0.377610202 | 0 | 0 | 0 | 0.158352666 | 0.25580046 | 0 |
| 2525769 | 16663987 | BCky | 48507794 | 40 | 81 | 119 | 38 | 81 | 119 | 0 | 0 | 0 | 0 | 81 | 100 | 0.231438511 | 0 | 0 | 0.115719256 | 0 | 0 | 0 | 0 | 0.115719256 | 0.115719256 |
| 2525769 | 16663987 | E | 48507791 | 40 | 18 | 22 | 4 | 18 | 22 | 18 | 22 | 20 | 22 | 0 | 0 | 0.07540603 | 0.07540603 | 0.037703015 | 0 | 0 | 0 | 0.07540603 | 0 | 0 | 0 |
| 2525769 | 16663987 | Btn | 48507792 | 40 | 22 | 47 | 25 | 22 | 47 | 22 | 30 | 22 | 47 | 0 | 0 | 0.391531329 | 0.125290025 | 0.391531329 | 0 | 0 | 0 | 0.125290025 | 0.266241304 | 0 | 0 |
| 2755648 | 16663767 | Cr | 48507343 | 20 | 66 | 152 | 86 | 66 | 150 | 0 | 0 | 0 | 0 | 66 | 100 | 0.182714617 | 0 | 0 | 0.073955916 | 0 | 0 | 0 | 0 | 0.073955916 | 0.113109049 |
| 2755648 | 16663767 | E | 48507341 | 20 | 20 | 25 | 5 | 20 | 25 | 20 | 25 | 20 | 25 | 0 | 0 | 0.094257537 | 0.094257537 | 0.094257537 | 0 | 0 | 0 | 0.094257537 | 0 | 0 | 0 |
| 2755648 | 16663767 | BCk | 48507344 | 20 | 53 | 66 | 13 | 53 | 66 | 0 | 0 | 0 | 0 | 53 | 66 | 0.084831787 | 0 | 0 | 0.084831787 | 0 | 0 | 0 | 0.045678654 | 0.039153132 | 0 |
| 2755648 | 16663767 | Ap | 48507345 | 20 | 0 | 20 | 20 | 0 | 20 | 0 | 20 | 20 | 20 | 0 | 0 | 0.40023201 | 0.40023201 | 0 | 0 | 0.100058003 | 0.200116005 | 0.100058003 | 0 | 0 | 0 |
| 2755648 | 16663767 | Btn | 48507342 | 20 | 25 | 53 | 28 | 25 | 53 | 25 | 30 | 25 | 50 | 50 | 53 | 0.365429234 | 0.06525522 | 0.326276102 | 0.039153132 | 0 | 0 | 0.06525522 | 0.300174014 | 0 | 0 |
| 2755648 | 16663766 | Cr | 48507346 | 58 | 91 | 152 | 61 | 91 | 150 | 0 | 0 | 0 | 0 | 91 | 100 | 0.13090197 | 0 | 0 | 0.019968097 | 0 | 0 | 0 | 0 | 0.019968097 | 0.115371228 |
| 2755648 | 16663766 | Bt | 48507347 | 58 | 20 | 43 | 23 | 20 | 43 | 20 | 30 | 20 | 43 | 0 | 0 | 0.373549878 | 0.16241299 | 0.373549878 | 0 | 0 | 0 | 0.16241299 | 0.211136887 | 0 | 0 |
| 2755648 | 16663766 | Ap | 48507349 | 58 | 0 | 20 | 20 | 0 | 20 | 0 | 20 | 20 | 20 | 0 | 0 | 0.253480273 | 0.253480273 | 0 | 0 | 0.063370068 | 0.126740137 | 0.063370068 | 0 | 0 | 0 |
| 2755648 | 16663766 | Bk | 48507348 | 58 | 43 | 91 | 48 | 43 | 91 | 0 | 0 | 43 | 50 | 50 | 91 | 0.448259853 | 0 | 0.065371229 | 0.382888625 | 0 | 0 | 0 | 0.158758698 | 0.289501155 | 0 |
| 2755654 | 16663847 | Cr | 48508787 | 25 | 79 | 152 | 73 | 79 | 150 | 0 | 0 | 0 | 0 | 79 | 100 | 0.157526099 | 0 | 0 | 0.046592227 | 0 | 0 | 0 | 0 | 0.046592227 | 0.115371228 |
| 2755654 | 16663847 | Ap | 48508784 | 25 | 0 | 20 | 20 | 0 | 20 | 0 | 20 | 20 | 20 | 0 | 0 | 0.436566116 | 0.436566116 | 0 | 0 | 0.109141529 | 0.218283058 | 0.109141529 | 0 | 0 | 0 |
| 2755654 | 16663847 | Bw | 48508785 | 25 | 20 | 48 | 28 | 20 | 48 | 20 | 30 | 20 | 48 | 0 | 0 | 0.413828291 | 0.147795818 | 0.413828291 | 0 | 0 | 0 | 0.147795818 | 0.266032473 | 0 | 0 |
| 2755654 | 16663847 | Bk | 48508786 | 25 | 48 | 79 | 31 | 48 | 79 | 0 | 0 | 48 | 50 | 50 | 79 | 0.185028999 | 0 | 0.011937355 | 0.173091644 | 0 | 0 | 0 | 0.071624129 | 0.11340487 | 0 |
| 2755654 | 16663846 | Cr | 48508790 | 60 | 91 | 152 | 61 | 91 | 150 | 0 | 0 | 0 | 0 | 91 | 100 | 0.13090197 | 0 | 0 | 0.019968097 | 0 | 0 | 0 | 0 | 0.019968097 | 0.115371228 |
| 2755654 | 16663846 | Bt | 48508789 | 60 | 20 | 43 | 23 | 20 | 43 | 20 | 30 | 20 | 43 | 0 | 0 | 0.373549878 | 0.16241299 | 0.373549878 | 0 | 0 | 0 | 0.16241299 | 0.211136887 | 0 | 0 |
| 2755654 | 16663846 | Ap | 48508788 | 60 | 0 | 20 | 20 | 0 | 20 | 0 | 20 | 20 | 20 | 0 | 0 | 0.253480273 | 0.253480273 | 0 | 0 | 0.063370068 | 0.126740137 | 0.063370068 | 0 | 0 | 0 |
| 2755654 | 16663846 | Bk | 48508791 | 60 | 43 | 91 | 48 | 43 | 91 | 0 | 0 | 43 | 50 | 50 | 91 | 0.448259853 | 0 | 0.065371229 | 0.382888625 | 0 | 0 | 0 | 0.158758698 | 0.289501155 | 0 |
| 2525720 | 16663899 | C | 48509110 | 33 | 119 | 200 | 81 | 119 | 150 | 0 | 0 | 0 | 0 | 0 | 0 | 0.065182717 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.170316131 |
| 2525720 | 16663899 | Btkny | 48509108 | 33 | 46 | 81 | 35 | 46 | 81 | 0 | 0 | 46 | 50 | 50 | 81 | 0.22078017 | 0 | 0.025232019 | 0.19554815 | 0 | 0 | 0 | 0.088312068 | 0.132468102 | 0 |
| 2525720 | 16663899 | BCk | 48509109 | 33 | 81 | 119 | 38 | 81 | 119 | 0 | 0 | 0 | 0 | 81 | 100 | 0.154292341 | 0 | 0 | 0.07714617 | 0 | 0 | 0 | 0 | 0.07714617 | 0.07714617 |
| 2525720 | 16663899 | E | 48509106 | 33 | 7 | 12 | 5 | 7 | 12 | 7 | 12 | 0 | 0 | 0 | 0 | 0.137035965 | 0.137035965 | 0 | 0 | 0 | 0.137035965 | 0 | 0 | 0 | 0 |
| 2525720 | 16663899 | A | 48509105 | 33 | 0 | 7 | 7 | 0 | 7 | 0 | 7 | 0 | 0 | 0 | 0 | 0.267981449 | 0.267981449 | 0 | 0 | 0.191415321 | 0.076566128 | 0 | 0 | 0 | 0 |
| 2525720 | 16663899 | Btn | 48509107 | 33 | 12 | 46 | 34 | 12 | 46 | 12 | 30 | 20 | 46 | 0 | 0 | 0.532482608 | 0.281902557 | 0.407192583 | 0 | 0 | 0.04698376 | 0.234918798 | 0.250580051 | 0 | 0 |
| 2525720 | 16663903 | C | 48509123 | 55 | 117 | 200 | 83 | 117 | 150 | 0 | 0 | 0 | 0 | 0 | 0 | 0.069388053 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.174521467 |
| 2525720 | 16663903 | Btn | 48509121 | 55 | 8 | 20 | 12 | 8 | 20 | 8 | 20 | 20 | 20 | 0 | 0 | 0.121809743 | 0.121809743 | 0 | 0 | 0 | 0.071055683 | 0.050754059 | 0 | 0 | 0 |
| 2525720 | 16663903 | Btknyz | 48509122 | 55 | 20 | 36 | 16 | 20 | 36 | 20 | 30 | 20 | 36 | 0 | 0 | 0.16241299 | 0.101508119 | 0.16241299 | 0 | 0 | 0 | 0.101508119 | 0.060904871 | 0 | 0 |
| 2525720 | 16663903 | Bkyz | 48509124 | 55 | 36 | 117 | 81 | 36 | 117 | 0 | 0 | 36 | 50 | 50 | 100 | 0.170316131 | 0 | 0.029437356 | 0.105133414 | 0 | 0 | 0 | 0.050464039 | 0.084106731 | 0.035745361 |
| 2525720 | 16663903 | E | 48509125 | 55 | 0 | 8 | 8 | 0 | 8 | 0 | 8 | 0 | 0 | 0 | 0 | 0.259860784 | 0.259860784 | 0 | 0 | 0.16241299 | 0.097447794 | 0 | 0 | 0 | 0 |
| 2525724 | 16664022 | Btn | 48509628 | 35 | 31 | 46 | 15 | 31 | 46 | 0 | 0 | 31 | 46 | 0 | 0 | 0.234918798 | 0 | 0.234918798 | 0 | 0 | 0 | 0 | 0.234918798 | 0 | 0 |
| 2525724 | 16664022 | E/B | 48509623 | 35 | 23 | 31 | 8 | 23 | 31 | 23 | 30 | 23 | 31 | 0 | 0 | 0.187935038 | 0.164443158 | 0.187935038 | 0 | 0 | 0 | 0.164443158 | 0.02349188 | 0 | 0 |
| 2525724 | 16664022 | Btnk | 48509629 | 35 | 46 | 64 | 18 | 46 | 64 | 0 | 0 | 46 | 50 | 50 | 64 | 0.219257537 | 0 | 0.048723897 | 0.17053364 | 0 | 0 | 0 | 0.17053364 | 0.048723897 | 0 |
| 2525724 | 16664022 | Bk | 48509624 | 35 | 64 | 110 | 46 | 64 | 110 | 0 | 0 | 0 | 0 | 64 | 100 | 0.290168223 | 0 | 0 | 0.227088175 | 0 | 0 | 0 | 0 | 0.227088175 | 0.063080048 |
| 2525724 | 16664022 | C | 48509625 | 35 | 110 | 200 | 90 | 110 | 150 | 0 | 0 | 0 | 0 | 0 | 0 | 0.17981438 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.404582354 |
| 2525724 | 16664022 | A | 48509627 | 35 | 15 | 23 | 8 | 15 | 23 | 15 | 23 | 20 | 23 | 0 | 0 | 0.183758708 | 0.183758708 | 0.068909515 | 0 | 0 | 0 | 0.183758708 | 0 | 0 | 0 |
| 2525724 | 16664022 | Ap | 48509626 | 35 | 0 | 15 | 15 | 0 | 15 | 0 | 15 | 0 | 0 | 0 | 0 | 0.365429228 | 0.365429228 | 0 | 0 | 0.121809743 | 0.243619485 | 0 | 0 | 0 | 0 |
| 2525724 | 16664018 | Btn | 48509586 | 20 | 22 | 42 | 20 | 22 | 42 | 22 | 30 | 22 | 42 | 0 | 0 | 0.324825981 | 0.129930392 | 0.324825981 | 0 | 0 | 0 | 0.129930392 | 0.194895588 | 0 | 0 |
| 2525724 | 16664018 | C | 48509585 | 20 | 93 | 162 | 69 | 93 | 150 | 0 | 0 | 0 | 0 | 93 | 100 | 0.119852092 | 0 | 0 | 0.014718678 | 0 | 0 | 0 | 0 | 0.014718678 | 0.130365434 |
| 2525724 | 16664018 | BCkyz | 48509587 | 20 | 78 | 93 | 15 | 78 | 93 | 0 | 0 | 0 | 0 | 78 | 93 | 0.091357307 | 0 | 0 | 0.091357307 | 0 | 0 | 0 | 0 | 0.091357307 | 0 |
| 2525724 | 16664018 | Ap | 48509584 | 20 | 0 | 15 | 15 | 0 | 15 | 0 | 15 | 0 | 0 | 0 | 0 | 0.352378196 | 0.352378196 | 0 | 0 | 0.117459399 | 0.234918798 | 0 | 0 | 0 | 0 |
| 2525724 | 16664018 | Btnkyz | 48509588 | 20 | 42 | 78 | 36 | 42 | 78 | 0 | 0 | 42 | 50 | 50 | 78 | 0.438515074 | 0 | 0.097447794 | 0.34106728 | 0 | 0 | 0 | 0.219257537 | 0.219257537 | 0 |
| 2525724 | 16664018 | E | 48509583 | 20 | 15 | 22 | 7 | 15 | 22 | 15 | 22 | 20 | 22 | 0 | 0 | 0.131960552 | 0.131960552 | 0.037703015 | 0 | 0 | 0 | 0.131960552 | 0 | 0 | 0 |
| 2525724 | 16664017 | Bt | 48509581 | 30 | 15 | 35 | 20 | 15 | 35 | 15 | 30 | 20 | 35 | 0 | 0 | 0.324825981 | 0.243619485 | 0.243619485 | 0 | 0 | 0 | 0.243619485 | 0.081206495 | 0 | 0 |
| 2525724 | 16664017 | Ap | 48509578 | 30 | 0 | 15 | 15 | 0 | 15 | 0 | 15 | 0 | 0 | 0 | 0 | 0.352378196 | 0.352378196 | 0 | 0 | 0.117459399 | 0.234918798 | 0 | 0 | 0 | 0 |
| 2525724 | 16664017 | Btk | 48509582 | 30 | 35 | 54 | 19 | 35 | 54 | 0 | 0 | 35 | 50 | 50 | 54 | 0.154292341 | 0 | 0.121809743 | 0.032482598 | 0 | 0 | 0 | 0.154292341 | 0 | 0 |
| 2525724 | 16664017 | Bk | 48509579 | 30 | 54 | 125 | 71 | 54 | 125 | 0 | 0 | 0 | 0 | 54 | 100 | 0.447868344 | 0 | 0 | 0.290168223 | 0 | 0 | 0 | 0.037848029 | 0.252320194 | 0.157700121 |
| 2525724 | 16664017 | C | 48509580 | 30 | 125 | 200 | 75 | 125 | 150 | 0 | 0 | 0 | 0 | 0 | 0 | 0.056191994 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.168575981 |
| 2525730 | 16663991 | Cr | 48507811 | 68 | 91 | 200 | 109 | 91 | 150 | 0 | 0 | 0 | 0 | 91 | 100 | NULL | NULL | NULL | NULL | NULL | NULL | NULL | NULL | NULL | NULL |
| 2525730 | 16663991 | Bt1 | 48507814 | 68 | 18 | 30 | 12 | 18 | 30 | 18 | 30 | 20 | 30 | 0 | 0 | 0.187935038 | 0.187935038 | 0.156612532 | 0 | 0 | 0 | 0.187935038 | 0 | 0 | 0 |
| 2525730 | 16663991 | Bt2 | 48507815 | 68 | 30 | 56 | 26 | 30 | 56 | 0 | 0 | 30 | 50 | 50 | 56 | 0.253364275 | 0 | 0.194895596 | 0.058468679 | 0 | 0 | 0 | 0.253364275 | 0 | 0 |
| 2525730 | 16663991 | Bk | 48507813 | 68 | 56 | 91 | 35 | 56 | 91 | 0 | 0 | 0 | 0 | 56 | 91 | 0.21316705 | 0 | 0 | 0.21316705 | 0 | 0 | 0 | 0.024361949 | 0.188805101 | 0 |
| 2525730 | 16663991 | Ap | 48507812 | 68 | 0 | 18 | 18 | 0 | 18 | 0 | 18 | 0 | 0 | 0 | 0 | 0.422853836 | 0.422853836 | 0 | 0 | 0.117459399 | 0.234918798 | 0.070475639 | 0 | 0 | 0 |
| 2525730 | 16663992 | Cr | 48507816 | 17 | 170 | 200 | 30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | NULL | NULL | NULL | NULL | NULL | NULL | NULL | NULL | NULL | NULL |
| 2525730 | 16663992 | Bt1 | 48507820 | 17 | 18 | 35 | 17 | 18 | 35 | 18 | 30 | 20 | 35 | 0 | 0 | 0.276102083 | 0.194895588 | 0.243619485 | 0 | 0 | 0 | 0.194895588 | 0.081206495 | 0 | 0 |
| 2525730 | 16663992 | Bt2 | 48507821 | 17 | 35 | 53 | 18 | 35 | 53 | 0 | 0 | 35 | 50 | 50 | 53 | 0.182714614 | 0 | 0.152262178 | 0.030452436 | 0 | 0 | 0 | 0.182714614 | 0 | 0 |
| 2525730 | 16663992 | Ap | 48507817 | 17 | 0 | 18 | 18 | 0 | 18 | 0 | 18 | 0 | 0 | 0 | 0 | 0.422853836 | 0.422853836 | 0 | 0 | 0.117459399 | 0.234918798 | 0.070475639 | 0 | 0 | 0 |
| 2525730 | 16663992 | C | 48507819 | 17 | 116 | 170 | 54 | 116 | 150 | 0 | 0 | 0 | 0 | 0 | 0 | 0.069025521 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.109628768 |
| 2525730 | 16663992 | Bk | 48507818 | 17 | 53 | 116 | 63 | 53 | 116 | 0 | 0 | 0 | 0 | 53 | 100 | 0.38370069 | 0 | 0 | 0.286252895 | 0 | 0 | 0 | 0.04263341 | 0.243619485 | 0.097447794 |
| 2525745 | 16663921 | A | 48507476 | 75 | 15 | 20 | 5 | 15 | 20 | 15 | 20 | 20 | 20 | 0 | 0 | 0.113109045 | 0.113109045 | 0 | 0 | 0 | 0 | 0.113109045 | 0 | 0 | 0 |
| 2525745 | 16663921 | Bw1 | 48507471 | 75 | 20 | 33 | 13 | 20 | 33 | 20 | 30 | 20 | 33 | 0 | 0 | 0.245069597 | 0.188515074 | 0.245069597 | 0 | 0 | 0 | 0.188515074 | 0.056554522 | 0 | 0 |
| 2525745 | 16663921 | BCk | 48507473 | 75 | 107 | 122 | 15 | 107 | 122 | 0 | 0 | 0 | 0 | 0 | 0 | 0.060904871 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.060904871 |
| 2525745 | 16663921 | Ap | 48507475 | 75 | 0 | 15 | 15 | 0 | 15 | 0 | 15 | 0 | 0 | 0 | 0 | 0.395881656 | 0.395881656 | 0 | 0 | 0.131960552 | 0.263921104 | 0 | 0 | 0 | 0 |
| 2525745 | 16663921 | Bk | 48507477 | 75 | 72 | 107 | 35 | 72 | 107 | 0 | 0 | 0 | 0 | 72 | 100 | 0.284222733 | 0 | 0 | 0.227378186 | 0 | 0 | 0 | 0 | 0.227378186 | 0.056844547 |
| 2525745 | 16663921 | Bw2 | 48507472 | 75 | 33 | 72 | 39 | 33 | 72 | 0 | 0 | 33 | 50 | 50 | 72 | 0.441125274 | 0 | 0.192285376 | 0.248839898 | 0 | 0 | 0 | 0.30539442 | 0.135730853 | 0 |
| 2525745 | 16663921 | C | 48507474 | 75 | 122 | 200 | 78 | 122 | 150 | 0 | 0 | 0 | 0 | 0 | 0 | 0.060904872 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.169663573 |
| 2525746 | 16663927 | BCk | 48507505 | 78 | 107 | 122 | 15 | 107 | 122 | 0 | 0 | 0 | 0 | 0 | 0 | 0.060904871 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.060904871 |
| 2525746 | 16663927 | Ap | 48507502 | 78 | 0 | 15 | 15 | 0 | 15 | 0 | 15 | 0 | 0 | 0 | 0 | 0.395881656 | 0.395881656 | 0 | 0 | 0.131960552 | 0.263921104 | 0 | 0 | 0 | 0 |
| 2525746 | 16663927 | Bw1 | 48507507 | 78 | 15 | 33 | 18 | 15 | 33 | 15 | 30 | 20 | 33 | 0 | 0 | 0.352378196 | 0.293648497 | 0.254495364 | 0 | 0 | 0 | 0.293648497 | 0.058729699 | 0 | 0 |
| 2525746 | 16663927 | Bk | 48507504 | 78 | 74 | 107 | 33 | 74 | 107 | 0 | 0 | 0 | 0 | 74 | 100 | 0.267981434 | 0 | 0 | 0.211136887 | 0 | 0 | 0 | 0 | 0.211136887 | 0.056844547 |
| 2525746 | 16663927 | Bw2 | 48507503 | 78 | 33 | 74 | 41 | 33 | 74 | 0 | 0 | 33 | 50 | 50 | 74 | 0.499419945 | 0 | 0.207076563 | 0.292343382 | 0 | 0 | 0 | 0.328886305 | 0.17053364 | 0 |
| 2525746 | 16663927 | C | 48507506 | 78 | 122 | 200 | 78 | 122 | 150 | 0 | 0 | 0 | 0 | 0 | 0 | 0.060904872 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.169663573 |
| 2525754 | 16663602 | 3Ab | 48508119 | 75 | 97 | 102 | 5 | 97 | 102 | 0 | 0 | 0 | 0 | 97 | 100 | 0.010513341 | 0 | 0 | 0.006308005 | 0 | 0 | 0 | 0 | 0.006308005 | 0.004205337 |
| 2525754 | 16663602 | Btn | 48508123 | 75 | 5 | 46 | 41 | 5 | 46 | 5 | 30 | 20 | 46 | 0 | 0 | 0.66589326 | 0.406032476 | 0.422273775 | 0 | 0 | 0.16241299 | 0.243619485 | 0.259860784 | 0 | 0 |
| 2525754 | 16663602 | 3C | 48508124 | 75 | 102 | 152 | 50 | 102 | 150 | 0 | 0 | 0 | 0 | 0 | 0 | 0.097447794 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.101508119 |
| 2525754 | 16663602 | E | 48508122 | 75 | 0 | 5 | 5 | 0 | 5 | 0 | 5 | 0 | 0 | 0 | 0 | 0.163138051 | 0.163138051 | 0 | 0 | 0.163138051 | 0 | 0 | 0 | 0 | 0 |
| 2525754 | 16663602 | Bz1 | 48508120 | 75 | 46 | 71 | 25 | 46 | 71 | 0 | 0 | 46 | 50 | 50 | 71 | 0.152262178 | 0 | 0.024361949 | 0.12790023 | 0 | 0 | 0 | 0.08526682 | 0.066995358 | 0 |
| 2525754 | 16663602 | 2Bz2 | 48508121 | 75 | 71 | 97 | 26 | 71 | 97 | 0 | 0 | 0 | 0 | 71 | 97 | 0.113109049 | 0 | 0 | 0.113109049 | 0 | 0 | 0 | 0 | 0.113109049 | 0 |
| 2525769 | 16663985 | Btn1 | 48507781 | 48 | 33 | 48 | 15 | 33 | 48 | 0 | 0 | 33 | 48 | 0 | 0 | 0.234918798 | 0 | 0.234918798 | 0 | 0 | 0 | 0 | 0.234918798 | 0 | 0 |
| 2525769 | 16663985 | E/B | 48507780 | 48 | 25 | 33 | 8 | 25 | 33 | 25 | 30 | 25 | 33 | 0 | 0 | 0.194895588 | 0.121809743 | 0.194895588 | 0 | 0 | 0 | 0.121809743 | 0.073085846 | 0 | 0 |
| 2525769 | 16663985 | Btn2 | 48507782 | 48 | 48 | 66 | 18 | 48 | 66 | 0 | 0 | 48 | 50 | 50 | 66 | 0.219257537 | 0 | 0.024361949 | 0.194895588 | 0 | 0 | 0 | 0.146171691 | 0.073085846 | 0 |
| 2525769 | 16663985 | Bk | 48507783 | 48 | 66 | 114 | 48 | 66 | 114 | 0 | 0 | 0 | 0 | 66 | 100 | 0.389791177 | 0 | 0 | 0.276102083 | 0 | 0 | 0 | 0 | 0.276102083 | 0.113689093 |
| 2525769 | 16663985 | C | 48507784 | 48 | 114 | 200 | 86 | 114 | 150 | 0 | 0 | 0 | 0 | 0 | 0 | 0.156612529 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.37412993 |
| 2525769 | 16663985 | A | 48507779 | 48 | 18 | 25 | 7 | 18 | 25 | 18 | 25 | 20 | 25 | 0 | 0 | 0.211136883 | 0.211136883 | 0.150812059 | 0 | 0 | 0 | 0.211136883 | 0 | 0 | 0 |
| 2525769 | 16663985 | Ap | 48507778 | 48 | 0 | 18 | 18 | 0 | 18 | 0 | 18 | 0 | 0 | 0 | 0 | 0.542923414 | 0.542923414 | 0 | 0 | 0.150812059 | 0.301624119 | 0.090487236 | 0 | 0 | 0 |
| 2525769 | 16663987 | C | 48507795 | 40 | 119 | 200 | 81 | 119 | 150 | 0 | 0 | 0 | 0 | 0 | 0 | 0.065182717 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.170316131 |
| 2525769 | 16663987 | Ap | 48507790 | 40 | 0 | 18 | 18 | 0 | 18 | 0 | 18 | 0 | 0 | 0 | 0 | 0.422853836 | 0.422853836 | 0 | 0 | 0.117459399 | 0.234918798 | 0.070475639 | 0 | 0 | 0 |
| 2525769 | 16663987 | Btnky | 48507793 | 40 | 47 | 81 | 34 | 47 | 81 | 0 | 0 | 47 | 50 | 50 | 81 | 0.414153125 | 0 | 0.036542923 | 0.377610202 | 0 | 0 | 0 | 0.158352666 | 0.25580046 | 0 |
| 2525769 | 16663987 | BCky | 48507794 | 40 | 81 | 119 | 38 | 81 | 119 | 0 | 0 | 0 | 0 | 81 | 100 | 0.231438511 | 0 | 0 | 0.115719256 | 0 | 0 | 0 | 0 | 0.115719256 | 0.115719256 |
| 2525769 | 16663987 | E | 48507791 | 40 | 18 | 22 | 4 | 18 | 22 | 18 | 22 | 20 | 22 | 0 | 0 | 0.07540603 | 0.07540603 | 0.037703015 | 0 | 0 | 0 | 0.07540603 | 0 | 0 | 0 |
| 2525769 | 16663987 | Btn | 48507792 | 40 | 22 | 47 | 25 | 22 | 47 | 22 | 30 | 22 | 47 | 0 | 0 | 0.391531329 | 0.125290025 | 0.391531329 | 0 | 0 | 0 | 0.125290025 | 0.266241304 | 0 | 0 |
| 2755639 | 16663555 | Bt | 48508328 | 18 | 25 | 61 | 36 | 25 | 61 | 25 | 30 | 25 | 50 | 50 | 61 | 0.798097419 | 0.110846864 | 0.554234318 | 0.2438631 | 0 | 0 | 0.110846864 | 0.665081182 | 0.022169373 | 0 |
| 2755639 | 16663555 | A | 48508327 | 18 | 13 | 25 | 12 | 13 | 25 | 13 | 25 | 20 | 25 | 0 | 0 | 0.409280759 | 0.409280759 | 0.170533649 | 0 | 0 | 0.06821346 | 0.341067299 | 0 | 0 | 0 |
| 2755639 | 16663555 | Ap | 48508331 | 18 | 0 | 13 | 13 | 0 | 13 | 0 | 13 | 0 | 0 | 0 | 0 | 0.443387489 | 0.443387489 | 0 | 0 | 0.170533649 | 0.272853839 | 0 | 0 | 0 | 0 |
| 2755639 | 16663555 | C | 48508329 | 18 | 132 | 152 | 20 | 132 | 150 | 0 | 0 | 0 | 0 | 0 | 0 | 0.066508118 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.073897909 |
| 2755639 | 16663555 | Bk | 48508330 | 18 | 61 | 132 | 71 | 61 | 132 | 0 | 0 | 0 | 0 | 61 | 100 | 0.530028983 | 0 | 0 | 0.291142681 | 0 | 0 | 0 | 0 | 0.291142681 | 0.238886302 |
| 2755639 | 16663554 | Bt | 48508333 | 62 | 18 | 64 | 46 | 18 | 64 | 18 | 30 | 20 | 50 | 50 | 64 | 0.552320184 | 0.144083526 | 0.360208815 | 0.168097447 | 0 | 0 | 0.144083526 | 0.360208815 | 0.048027842 | 0 |
| 2755639 | 16663554 | Ap | 48508334 | 62 | 0 | 18 | 18 | 0 | 18 | 0 | 18 | 0 | 0 | 0 | 0 | 0.240139206 | 0.240139206 | 0 | 0 | 0.066705335 | 0.13341067 | 0.040023201 | 0 | 0 | 0 |
| 2755639 | 16663554 | Bk | 48508335 | 62 | 64 | 130 | 66 | 64 | 130 | 0 | 0 | 0 | 0 | 64 | 100 | 0.401972151 | 0 | 0 | 0.219257537 | 0 | 0 | 0 | 0 | 0.219257537 | 0.182714614 |
| 2755639 | 16663554 | C | 48508332 | 62 | 130 | 203 | 73 | 130 | 150 | 0 | 0 | 0 | 0 | 0 | 0 | 0.040603248 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.142111366 |
| 2755643 | 16663957 | Cr | 48507642 | 30 | 38 | 200 | 162 | 38 | 150 | 0 | 0 | 38 | 50 | 50 | 100 | NULL | NULL | NULL | NULL | NULL | NULL | NULL | NULL | NULL | NULL |
| 2755643 | 16663957 | AC | 48507644 | 30 | 13 | 25 | 12 | 13 | 25 | 13 | 25 | 20 | 25 | 0 | 0 | 0.095881674 | 0.095881674 | 0.039950697 | 0 | 0 | 0.015980279 | 0.079901395 | 0 | 0 | 0 |
| 2755643 | 16663957 | C | 48507645 | 30 | 25 | 38 | 13 | 25 | 38 | 25 | 30 | 25 | 38 | 0 | 0 | 0.052030162 | 0.020011601 | 0.052030162 | 0 | 0 | 0 | 0.020011601 | 0.032018561 | 0 | 0 |
| 2755643 | 16663957 | A | 48507643 | 30 | 0 | 13 | 13 | 0 | 13 | 0 | 13 | 0 | 0 | 0 | 0 | 0.150435032 | 0.150435032 | 0 | 0 | 0.057859628 | 0.092575404 | 0 | 0 | 0 | 0 |
| 2755643 | 16663959 | Cr | 48507651 | 18 | 178 | 200 | 22 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | NULL | NULL | NULL | NULL | NULL | NULL | NULL | NULL | NULL | NULL |
| 2755643 | 16663959 | Bw2 | 48507654 | 18 | 31 | 46 | 15 | 31 | 46 | 0 | 0 | 31 | 46 | 0 | 0 | 0.187935035 | 0 | 0.187935035 | 0 | 0 | 0 | 0 | 0.187935035 | 0 | 0 |
| 2755643 | 16663959 | A | 48507652 | 18 | 0 | 15 | 15 | 0 | 15 | 0 | 15 | 0 | 0 | 0 | 0 | 0.316487819 | 0.316487819 | 0 | 0 | 0.10549594 | 0.210991879 | 0 | 0 | 0 | 0 |
| 2755643 | 16663959 | Bw1 | 48507653 | 18 | 15 | 31 | 16 | 15 | 31 | 15 | 30 | 20 | 31 | 0 | 0 | 0.270069606 | 0.253190255 | 0.185672854 | 0 | 0 | 0 | 0.253190255 | 0.01687935 | 0 | 0 |
| 2755643 | 16663959 | Bk | 48507655 | 18 | 46 | 84 | 38 | 46 | 84 | 0 | 0 | 46 | 50 | 50 | 84 | 0.324564955 | 0 | 0.034164732 | 0.290400223 | 0 | 0 | 0 | 0.119576562 | 0.204988393 | 0 |
| 2755643 | 16663959 | C | 48507656 | 18 | 84 | 178 | 94 | 84 | 150 | 0 | 0 | 0 | 0 | 84 | 100 | 0.278892103 | 0 | 0 | 0.067610207 | 0 | 0 | 0 | 0 | 0.067610207 | 0.329599758 |
| 2755643 | 16663958 | Cr | 48507646 | 40 | 74 | 200 | 126 | 74 | 150 | 0 | 0 | 0 | 0 | 74 | 100 | NULL | NULL | NULL | NULL | NULL | NULL | NULL | NULL | NULL | NULL |
| 2755643 | 16663958 | Bw1 | 48507650 | 40 | 15 | 28 | 13 | 15 | 28 | 15 | 28 | 20 | 28 | 0 | 0 | 0.157447801 | 0.157447801 | 0.096890954 | 0 | 0 | 0 | 0.157447801 | 0 | 0 | 0 |
| 2755643 | 16663958 | Bw2 | 48507647 | 40 | 28 | 43 | 15 | 28 | 43 | 28 | 30 | 28 | 43 | 0 | 0 | 0.122679814 | 0.016357309 | 0.122679814 | 0 | 0 | 0 | 0.016357309 | 0.106322506 | 0 | 0 |
| 2755643 | 16663958 | A | 48507649 | 40 | 0 | 15 | 15 | 0 | 15 | 0 | 15 | 0 | 0 | 0 | 0 | 0.233874706 | 0.233874706 | 0 | 0 | 0.077958235 | 0.155916471 | 0 | 0 | 0 | 0 |
| 2755643 | 16663958 | Bk | 48507648 | 40 | 43 | 74 | 31 | 43 | 74 | 0 | 0 | 43 | 50 | 50 | 74 | 0.129601214 | 0 | 0.02926479 | 0.100336424 | 0 | 0 | 0 | 0.071071634 | 0.058529581 | 0 |
| 2755648 | 16663767 | Cr | 48507343 | 20 | 66 | 152 | 86 | 66 | 150 | 0 | 0 | 0 | 0 | 66 | 100 | 0.182714617 | 0 | 0 | 0.073955916 | 0 | 0 | 0 | 0 | 0.073955916 | 0.113109049 |
| 2755648 | 16663767 | E | 48507341 | 20 | 20 | 25 | 5 | 20 | 25 | 20 | 25 | 20 | 25 | 0 | 0 | 0.094257537 | 0.094257537 | 0.094257537 | 0 | 0 | 0 | 0.094257537 | 0 | 0 | 0 |
| 2755648 | 16663767 | BCk | 48507344 | 20 | 53 | 66 | 13 | 53 | 66 | 0 | 0 | 0 | 0 | 53 | 66 | 0.084831787 | 0 | 0 | 0.084831787 | 0 | 0 | 0 | 0.045678654 | 0.039153132 | 0 |
| 2755648 | 16663767 | Ap | 48507345 | 20 | 0 | 20 | 20 | 0 | 20 | 0 | 20 | 20 | 20 | 0 | 0 | 0.40023201 | 0.40023201 | 0 | 0 | 0.100058003 | 0.200116005 | 0.100058003 | 0 | 0 | 0 |
| 2755648 | 16663767 | Btn | 48507342 | 20 | 25 | 53 | 28 | 25 | 53 | 25 | 30 | 25 | 50 | 50 | 53 | 0.365429234 | 0.06525522 | 0.326276102 | 0.039153132 | 0 | 0 | 0.06525522 | 0.300174014 | 0 | 0 |
| 2755648 | 16663766 | Cr | 48507346 | 58 | 91 | 152 | 61 | 91 | 150 | 0 | 0 | 0 | 0 | 91 | 100 | 0.13090197 | 0 | 0 | 0.019968097 | 0 | 0 | 0 | 0 | 0.019968097 | 0.115371228 |
| 2755648 | 16663766 | Bt | 48507347 | 58 | 20 | 43 | 23 | 20 | 43 | 20 | 30 | 20 | 43 | 0 | 0 | 0.373549878 | 0.16241299 | 0.373549878 | 0 | 0 | 0 | 0.16241299 | 0.211136887 | 0 | 0 |
| 2755648 | 16663766 | Ap | 48507349 | 58 | 0 | 20 | 20 | 0 | 20 | 0 | 20 | 20 | 20 | 0 | 0 | 0.253480273 | 0.253480273 | 0 | 0 | 0.063370068 | 0.126740137 | 0.063370068 | 0 | 0 | 0 |
| 2755648 | 16663766 | Bk | 48507348 | 58 | 43 | 91 | 48 | 43 | 91 | 0 | 0 | 43 | 50 | 50 | 91 | 0.448259853 | 0 | 0.065371229 | 0.382888625 | 0 | 0 | 0 | 0.158758698 | 0.289501155 | 0 |

### Sum SOC Layers within Each Component

Summarizes SOC stocks by component. Pedon SOC stock (\(SOCstock\_D\)) were summed for soil depths (D) of 0–5, 0–30, and 0–100 cm using the fixed depth increment approach described by Ellert et al. (2008). Previous work has shown this to be comparable to the spline technique, particularly at shallow depths (such as 0–30 cm)

\[SOCstock\_c = \sum\_{D}^L SOC\_{l} \]

where L is the number of soil layers within the specified soil depth (D).

##### SOC3 table

SELECT DISTINCT cokey, mukey,

ROUND (SUM (HZ\_SOC\_0\_150) over(PARTITION BY cokey) ,4) AS CO\_SOC\_0\_150,

ROUND (SUM (HZ\_SOC\_0\_30) over(PARTITION BY cokey) ,4) AS CO\_SOC\_0\_30,

ROUND (SUM (HZ\_SOC\_20\_50) over(PARTITION BY cokey),4) AS CO\_SOC\_20\_50,

ROUND (SUM (HZ\_SOC\_50\_100) over(PARTITION BY cokey),4) AS CO\_SOC\_50\_100,

ROUND (SUM (HZ\_SOC\_0\_5) over(PARTITION BY cokey),4) AS CO\_SOC\_0\_5,

ROUND (SUM (HZ\_SOC\_5\_15) over(PARTITION BY cokey),4) AS CO\_SOC\_5\_15,

ROUND (SUM (HZ\_SOC\_15\_30) over(PARTITION BY cokey),4) AS CO\_SOC\_15\_30,

ROUND (SUM (HZ\_SOC\_30\_60) over(PARTITION BY cokey),4) AS CO\_SOC\_30\_60,

ROUND (SUM (HZ\_SOC\_60\_100) over(PARTITION BY cokey),4) AS CO\_SOC\_60\_100,

ROUND (SUM (HZ\_SOC\_100\_200) over(PARTITION BY cokey),4) AS CO\_SOC\_100\_200

INTO #SOC3

FROM #SOC2

GROUP BY mukey, cokey, HZ\_SOC\_0\_150, HZ\_SOC\_0\_30, HZ\_SOC\_20\_50, HZ\_SOC\_50\_100, HZ\_SOC\_0\_5, HZ\_SOC\_5\_15, HZ\_SOC\_15\_30, HZ\_SOC\_30\_60, HZ\_SOC\_60\_100, HZ\_SOC\_100\_200

| **cokey** | **mukey** | **CO\_SOC\_0\_150** | **CO\_SOC\_0\_30** | **CO\_SOC\_20\_50** | **CO\_SOC\_50\_100** | **CO\_SOC\_0\_5** | **CO\_SOC\_5\_15** | **CO\_SOC\_15\_30** | **CO\_SOC\_30\_60** | **CO\_SOC\_60\_100** | **CO\_SOC\_100\_200** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 16464494 | 354627 | 1.2348 | 0.5742 | 0.3227 | 0.232 | 0.1175 | 0.2349 | 0.2219 | 0.2429 | 0.1856 | 0.2413 |
| 16464495 | 354627 | 1.0871 | 0.5655 | 0.2896 | 0.2472 | 0.1131 | 0.2262 | 0.2262 | 0.2344 | 0.1893 | 0.1018 |
| 16464607 | 354648 | 1.1633 | 0.8026 | 0.2936 | 0.2149 | 0.1637 | 0.3274 | 0.3115 | 0.2055 | 0.1552 | 0 |
| 16464612 | 354648 | 1.1641 | 0.6116 | 0.4393 | 0.264 | 0.1366 | 0.2487 | 0.2262 | 0.3737 | 0.1788 | 0 |
| 16663554 | 2755639 | 1.235 | 0.3842 | 0.3602 | 0.3874 | 0.0667 | 0.1334 | 0.1841 | 0.3602 | 0.2673 | 0.3248 |
| 16663555 | 2755639 | 2.2473 | 0.9635 | 0.7248 | 0.535 | 0.1705 | 0.3411 | 0.4519 | 0.6651 | 0.3133 | 0.3128 |
| 16663602 | 2525754 | 1.2024 | 0.5692 | 0.4466 | 0.2473 | 0.1631 | 0.1624 | 0.2436 | 0.3451 | 0.1864 | 0.1057 |
| 16663611 | 2525764 | 1.8744 | 0.7274 | 0.5186 | 0.5177 | 0.1334 | 0.2668 | 0.3271 | 0.4872 | 0.3553 | 0.3167 |
| 16663766 | 2755648 | 1.2062 | 0.4159 | 0.4389 | 0.4029 | 0.0634 | 0.1267 | 0.2258 | 0.3699 | 0.3095 | 0.1154 |
| 16663767 | 2755648 | 1.1275 | 0.5597 | 0.4205 | 0.1979 | 0.1001 | 0.2001 | 0.2596 | 0.3459 | 0.1131 | 0.1131 |
| 16663796 | 2525732 | 0.7456 | 0.372 | 0.2132 | 0.1816 | 0.0609 | 0.1218 | 0.1892 | 0.1305 | 0.1381 | 0.1093 |
| 16663797 | 2525732 | 1.041 | 0.4611 | 0.2697 | 0.2877 | 0.1088 | 0.2175 | 0.1349 | 0.2697 | 0.1978 | 0.1169 |
| 16663846 | 2755654 | 1.2062 | 0.4159 | 0.4389 | 0.4029 | 0.0634 | 0.1267 | 0.2258 | 0.3699 | 0.3095 | 0.1154 |
| 16663847 | 2755654 | 1.1929 | 0.5844 | 0.4258 | 0.2197 | 0.1091 | 0.2183 | 0.2569 | 0.3377 | 0.16 | 0.1154 |
| 16663899 | 2525720 | 1.3778 | 0.6869 | 0.4324 | 0.2727 | 0.1914 | 0.2606 | 0.2349 | 0.3389 | 0.2096 | 0.2475 |
| 16663903 | 2525720 | 0.7838 | 0.4832 | 0.1919 | 0.1051 | 0.1624 | 0.1685 | 0.1523 | 0.1114 | 0.0841 | 0.2103 |
| 16663915 | 2525739 | 1.6534 | 0.7645 | 0.4666 | 0.4249 | 0.1507 | 0.3015 | 0.3122 | 0.3876 | 0.2957 | 0.3158 |
| 16663917 | 2525739 | 0.8154 | 0.4496 | 0.2976 | 0.1936 | 0.0872 | 0.1744 | 0.1879 | 0.2541 | 0.1118 | 0 |
| 16663921 | 2525745 | 1.6012 | 0.6975 | 0.4374 | 0.4762 | 0.132 | 0.2639 | 0.3016 | 0.3619 | 0.3631 | 0.2874 |
| 16663927 | 2525746 | 1.6375 | 0.6895 | 0.4616 | 0.5035 | 0.132 | 0.2639 | 0.2936 | 0.3876 | 0.3817 | 0.2874 |
| 16663930 | 2494708 | 0.8473 | 0.555 | 0.3001 | 0.1232 | 0.1194 | 0.2235 | 0.2122 | 0.2274 | 0.065 | 0 |
| 16663931 | 2494708 | 0.3597 | 0.3088 | 0.1146 | 0 | 0.0771 | 0.1362 | 0.0955 | 0.0509 | 0 | 0 |
| 16663951 | 2525733 | 0.6436 | 0.4077 | 0.2488 | 0.1003 | 0.078 | 0.1559 | 0.1738 | 0.1774 | 0.0585 | 0 |
| 16663952 | 2525733 | 0.2423 | 0.1886 | 0.0951 | 0 | 0.0422 | 0.0844 | 0.062 | 0.0537 | 0 | 0 |
| 16663957 | 2755643 | 0.2983 | 0.2663 | 0.092 | 0 | 0.0579 | 0.1086 | 0.0999 | 0.032 | 0 | 0 |
| 16663958 | 2755643 | 0.6436 | 0.4077 | 0.2488 | 0.1003 | 0.078 | 0.1559 | 0.1738 | 0.1774 | 0.0585 | 0 |
| 16663959 | 2755643 | 1.3779 | 0.5697 | 0.4078 | 0.358 | 0.1055 | 0.211 | 0.2532 | 0.3244 | 0.2726 | 0.3296 |
| 16663985 | 2525769 | 1.9495 | 0.8759 | 0.605 | 0.471 | 0.1508 | 0.3016 | 0.4234 | 0.4542 | 0.3492 | 0.4878 |
| 16663987 | 2525769 | 1.6006 | 0.6235 | 0.4658 | 0.4933 | 0.1175 | 0.2349 | 0.2712 | 0.4246 | 0.3715 | 0.286 |
| 16663991 | 2525730 | 1.0773 | 0.6108 | 0.3515 | 0.2716 | 0.1175 | 0.2349 | 0.2584 | 0.2777 | 0.1888 | 0 |
| 16663992 | 2525730 | 1.3344 | 0.6177 | 0.3959 | 0.3167 | 0.1175 | 0.2349 | 0.2654 | 0.3066 | 0.2436 | 0.2071 |
| 16664017 | 2525724 | 1.3356 | 0.596 | 0.3654 | 0.3227 | 0.1175 | 0.2349 | 0.2436 | 0.2733 | 0.2523 | 0.3263 |
| 16664018 | 2525724 | 1.4589 | 0.6143 | 0.46 | 0.4471 | 0.1175 | 0.2349 | 0.2619 | 0.4142 | 0.3253 | 0.1304 |
| 16664022 | 2525724 | 1.6613 | 0.7136 | 0.5405 | 0.3976 | 0.1218 | 0.2436 | 0.3482 | 0.4289 | 0.2758 | 0.4677 |

#### Weighted average of components within each map unit

\[SOC\_{mu} = (\sum\_{C}^n SOC\_d\*Cpct) \* 100\] where SOCmu is the average SOC stock in each map unit, c is the number of components, Cpct is the proportion of each component within the map unit, and SOCd is the carbon stock within a given depth increment. Converted for expression in units of \(Mg C ha ^{-1}\):

#### SOC4 table

SELECT DISTINCT #SOC3.cokey, #SOC3.mukey, adj\_comp\_pct AS WEIGHTED\_COMP\_PCT,

CO\_SOC\_0\_30, CO\_SOC\_0\_30 \* adj\_comp\_pct AS WEIGHTED\_CO\_SOC\_0\_30,

CO\_SOC\_20\_50, CO\_SOC\_20\_50 \* adj\_comp\_pct AS WEIGHTED\_CO\_SOC\_20\_50,

CO\_SOC\_50\_100, CO\_SOC\_50\_100 \* adj\_comp\_pct AS WEIGHTED\_CO\_SOC\_50\_100,

CO\_SOC\_0\_150, CO\_SOC\_0\_150 \* adj\_comp\_pct AS WEIGHTED\_CO\_SOC\_0\_150,

CO\_SOC\_0\_5, CO\_SOC\_0\_5 \* adj\_comp\_pct AS WEIGHTED\_CO\_SOC\_0\_5,

CO\_SOC\_5\_15, CO\_SOC\_5\_15 \* adj\_comp\_pct AS WEIGHTED\_CO\_SOC\_5\_15,

CO\_SOC\_15\_30, CO\_SOC\_15\_30 \* adj\_comp\_pct AS WEIGHTED\_CO\_SOC\_15\_30,

CO\_SOC\_30\_60, CO\_SOC\_30\_60 \* adj\_comp\_pct AS WEIGHTED\_CO\_SOC\_30\_60,

CO\_SOC\_60\_100, CO\_SOC\_60\_100 \* adj\_comp\_pct AS WEIGHTED\_CO\_SOC\_60\_100,

CO\_SOC\_100\_200 , CO\_SOC\_100\_200 \* adj\_comp\_pct AS WEIGHTED\_CO\_SOC\_100\_200

INTO #SOC4

FROM #SOC3

INNER JOIN #muacpf ON #muacpf.cokey=#SOC3.cokey

GROUP BY #SOC3.cokey, #SOC3.mukey, adj\_comp\_pct , CO\_SOC\_0\_30, CO\_SOC\_20\_50,CO\_SOC\_50\_100, CO\_SOC\_0\_150, CO\_SOC\_0\_5, CO\_SOC\_5\_15, CO\_SOC\_15\_30, CO\_SOC\_30\_60,CO\_SOC\_60\_100, CO\_SOC\_100\_200

| **cokey** | **mukey** | **WEIGHTED\_COMP\_PCT** | **CO\_SOC\_0\_30** | **WEIGHTED\_CO\_SOC\_0\_30** |
| --- | --- | --- | --- | --- |
| 16464494 | 354627 | 0.28 | 0.5742 | 0.160776 |
| 16464495 | 354627 | 0.72 | 0.5655 | 0.40716 |
| 16464607 | 354648 | 0.29 | 0.8026 | 0.232754 |
| 16464612 | 354648 | 0.71 | 0.6116 | 0.434236 |
| 16663554 | 2755639 | 0.78 | 0.3842 | 0.299676 |
| 16663555 | 2755639 | 0.23 | 0.9635 | 0.221605 |
| 16663602 | 2525754 | 0.50 | 0.5692 | 0.2846 |
| 16663611 | 2525764 | 1 | 0.7274 | 0.7274 |
| 16663766 | 2755648 | 0.37 | 0.4159 | 0.153883 |
| 16663767 | 2755648 | 0.13 | 0.5597 | 0.072761 |
| 16663796 | 2525732 | 0.76 | 0.372 | 0.28272 |
| 16663797 | 2525732 | 0.24 | 0.4611 | 0.110664 |
| 16663846 | 2755654 | 0.71 | 0.4159 | 0.295289 |
| 16663847 | 2755654 | 0.29 | 0.5844 | 0.169476 |
| 16663899 | 2525720 | 0.19 | 0.6869 | 0.130511 |
| 16663903 | 2525720 | 0.31 | 0.4832 | 0.149792 |
| 16663915 | 2525739 | 0.26 | 0.7645 | 0.19877 |
| 16663917 | 2525739 | 0.74 | 0.4496 | 0.332704 |
| 16663921 | 2525745 | 0.5 | 0.6975 | 0.34875 |
| 16663927 | 2525746 | 0.5 | 0.6895 | 0.34475 |
| 16663930 | 2494708 | 0.6 | 0.555 | 0.333 |
| 16663931 | 2494708 | 0.4 | 0.3088 | 0.12352 |
| 16663951 | 2525733 | 0.67 | 0.4077 | 0.273159 |
| 16663952 | 2525733 | 0.33 | 0.1886 | 0.062238 |
| 16663957 | 2755643 | 0.34 | 0.2663 | 0.090542 |
| 16663958 | 2755643 | 0.45 | 0.4077 | 0.183465 |
| 16663959 | 2755643 | 0.2 | 0.5697 | 0.11394 |
| 16663985 | 2525769 | 0.27 | 0.8759 | 0.236493 |
| 16663987 | 2525769 | 0.23 | 0.6235 | 0.143405 |
| 16663991 | 2525730 | 0.8 | 0.6108 | 0.48864 |
| 16663992 | 2525730 | 0.2 | 0.6177 | 0.12354 |
| 16664017 | 2525724 | 0.35 | 0.596 | 0.2086 |
| 16664018 | 2525724 | 0.24 | 0.6143 | 0.147432 |
| 16664022 | 2525724 | 0.41 | 0.7136 | 0.292576 |

##### Link to map unit table

1. Unit conversion to a 100
2. Links to the landunit

SELECT DISTINCT #M4.mukey, #M4.aoiid ,

#M4.landunit,

landunit\_acres, mapunit\_acres, ROUND (SUM (WEIGHTED\_CO\_SOC\_0\_30) over(PARTITION BY #M4.aoiid ,#SOC4.mukey) ,4) \*100 AS SOCSTOCK\_0\_30 ,

ROUND (SUM (WEIGHTED\_CO\_SOC\_20\_50) over(PARTITION BY #M4.aoiid ,#SOC4.mukey) ,4) \*100 AS SOCSTOCK\_20\_50 ,

ROUND (SUM (WEIGHTED\_CO\_SOC\_50\_100) over(PARTITION BY #M4.aoiid ,#SOC4.mukey) ,4) \*100 AS SOCSTOCK\_50\_100,

ROUND (SUM (WEIGHTED\_CO\_SOC\_0\_150) over(PARTITION BY #M4.aoiid ,#SOC4.mukey) ,4) \*100 AS SOCSTOCK\_0\_150,

ROUND (SUM (WEIGHTED\_CO\_SOC\_0\_5) over(PARTITION BY #M4.aoiid ,#SOC4.mukey) ,4) \*100 AS SOCSTOCK\_0\_5 ,

ROUND (SUM (WEIGHTED\_CO\_SOC\_5\_15) over(PARTITION BY #M4.aoiid ,#SOC4.mukey) ,4) \*100 AS SOCSTOCK\_5\_15 ,

ROUND (SUM (WEIGHTED\_CO\_SOC\_15\_30) over(PARTITION BY #M4.aoiid ,#SOC4.mukey) ,4) \*100 AS SOCSTOCK\_15\_30 ,

ROUND (SUM (WEIGHTED\_CO\_SOC\_30\_60) over(PARTITION BY #M4.aoiid ,#SOC4.mukey) ,4) \*100 AS SOCSTOCK\_30\_60 ,

ROUND (SUM (WEIGHTED\_CO\_SOC\_60\_100) over(PARTITION BY #M4.aoiid ,#SOC4.mukey) ,4) \*100 AS SOCSTOCK\_60\_100 ,

ROUND (SUM (WEIGHTED\_CO\_SOC\_100\_200) over(PARTITION BY #M4.aoiid ,#SOC4.mukey) ,4) \*100 AS SOCSTOCK\_100\_200

INTO #SOC5

FROM #SOC4

LEFT OUTER JOIN #M4 ON #M4.mukey=#SOC4.mukey

LEFT OUTER JOIN #AoiAcres ON #AoiAcres.aoiid=#M4.aoiid

GROUP BY #M4.mukey, #SOC4.mukey, #M4.aoiid ,

#M4.landunit,

landunit\_acres, mapunit\_acres,WEIGHTED\_CO\_SOC\_0\_30, WEIGHTED\_CO\_SOC\_20\_50, WEIGHTED\_CO\_SOC\_50\_100, WEIGHTED\_CO\_SOC\_0\_5, WEIGHTED\_CO\_SOC\_5\_15, WEIGHTED\_CO\_SOC\_15\_30, WEIGHTED\_CO\_SOC\_30\_60, WEIGHTED\_CO\_SOC\_60\_100, WEIGHTED\_CO\_SOC\_100\_200, #SOC4.WEIGHTED\_CO\_SOC\_0\_150

| **mukey** | **aoiid** | **landunit** | **SOCSTOCK\_0\_30** |
| --- | --- | --- | --- |
| 354627 | 1 | T9981 Fld3 | 56.79 |
| 354648 | 1 | T9981 Fld3 | 66.7 |
| 2494708 | 1 | T9981 Fld3 | 45.65 |
| 2525720 | 1 | T9981 Fld3 | 28.03 |
| 2525720 | 2 | T9981 Fld4 | 28.03 |
| 2525724 | 2 | T9981 Fld4 | 64.86 |
| 2525730 | 2 | T9981 Fld4 | 61.22 |
| 2525732 | 1 | T9981 Fld3 | 39.34 |
| 2525733 | 1 | T9981 Fld3 | 33.54 |
| 2525739 | 1 | T9981 Fld3 | 53.15 |
| 2525745 | 1 | T9981 Fld3 | 34.88 |
| 2525745 | 2 | T9981 Fld4 | 34.88 |
| 2525746 | 1 | T9981 Fld3 | 34.48 |
| 2525746 | 2 | T9981 Fld4 | 34.48 |
| 2525754 | 1 | T9981 Fld3 | 28.46 |
| 2525754 | 2 | T9981 Fld4 | 28.46 |
| 2525764 | 1 | T9981 Fld3 | 72.74 |
| 2525769 | 1 | T9981 Fld3 | 37.99 |
| 2525769 | 2 | T9981 Fld4 | 37.99 |
| 2755639 | 2 | T9981 Fld4 | 52.13 |
| 2755643 | 2 | T9981 Fld4 | 38.79 |
| 2755648 | 1 | T9981 Fld3 | 22.66 |
| 2755648 | 2 | T9981 Fld4 | 22.66 |
| 2755654 | 1 | T9981 Fld3 | 46.48 |

SELECT DISTINCT #M4.mukey, #M4.aoiid ,

#M4.landunit,

landunit\_acres, mapunit\_acres, ROUND (SUM (WEIGHTED\_CO\_SOC\_0\_30) over(PARTITION BY #M4.aoiid ,#SOC4.mukey) ,4) \*100 AS SOCSTOCK\_0\_30 ,

ROUND (SUM (WEIGHTED\_CO\_SOC\_20\_50) over(PARTITION BY #M4.aoiid ,#SOC4.mukey) ,4) \*100 AS SOCSTOCK\_20\_50 ,

ROUND (SUM (WEIGHTED\_CO\_SOC\_50\_100) over(PARTITION BY #M4.aoiid ,#SOC4.mukey) ,4) \*100 AS SOCSTOCK\_50\_100,

ROUND (SUM (WEIGHTED\_CO\_SOC\_0\_150) over(PARTITION BY #M4.aoiid ,#SOC4.mukey) ,4) \*100 AS SOCSTOCK\_0\_150,

ROUND (SUM (WEIGHTED\_CO\_SOC\_0\_5) over(PARTITION BY #M4.aoiid ,#SOC4.mukey) ,4) \*100 AS SOCSTOCK\_0\_5 ,

ROUND (SUM (WEIGHTED\_CO\_SOC\_5\_15) over(PARTITION BY #M4.aoiid ,#SOC4.mukey) ,4) \*100 AS SOCSTOCK\_5\_15 ,

ROUND (SUM (WEIGHTED\_CO\_SOC\_15\_30) over(PARTITION BY #M4.aoiid ,#SOC4.mukey) ,4) \*100 AS SOCSTOCK\_15\_30 ,

ROUND (SUM (WEIGHTED\_CO\_SOC\_30\_60) over(PARTITION BY #M4.aoiid ,#SOC4.mukey) ,4) \*100 AS SOCSTOCK\_30\_60 ,

ROUND (SUM (WEIGHTED\_CO\_SOC\_60\_100) over(PARTITION BY #M4.aoiid ,#SOC4.mukey) ,4) \*100 AS SOCSTOCK\_60\_100 ,

ROUND (SUM (WEIGHTED\_CO\_SOC\_100\_200) over(PARTITION BY #M4.aoiid ,#SOC4.mukey) ,4) \*100 AS SOCSTOCK\_100\_200

INTO #SOC5

FROM #SOC4

LEFT OUTER JOIN #M4 ON #M4.mukey=#SOC4.mukey

LEFT OUTER JOIN #AoiAcres ON #AoiAcres.aoiid=#M4.aoiid

GROUP BY #M4.mukey, #SOC4.mukey, #M4.aoiid ,

#M4.landunit,

landunit\_acres, mapunit\_acres,WEIGHTED\_CO\_SOC\_0\_30, WEIGHTED\_CO\_SOC\_20\_50, WEIGHTED\_CO\_SOC\_50\_100, WEIGHTED\_CO\_SOC\_0\_5, WEIGHTED\_CO\_SOC\_5\_15, WEIGHTED\_CO\_SOC\_15\_30, WEIGHTED\_CO\_SOC\_30\_60, WEIGHTED\_CO\_SOC\_60\_100, WEIGHTED\_CO\_SOC\_100\_200, #SOC4.WEIGHTED\_CO\_SOC\_0\_150

#### Creates weighted average by land unit

CREATE TABLE #SOC6

( aoiid INT,

landunit CHAR(20),

landunit\_acres FLOAT,

SOCSTOCK\_0\_5\_Weighted\_Average FLOAT,

SOCSTOCK\_0\_30\_Weighted\_Average FLOAT,

SOCSTOCK\_0\_150\_Weighted\_Average FLOAT

)

;

INSERT INTO #SOC6

SELECT DISTINCT

aoiid ,

landunit,

landunit\_acres,

FORMAT (SUM ((mapunit\_acres/landunit\_acres)\*SOCSTOCK\_0\_5) over(partition by aoiid) , '#,###,##0.00') AS SOCSTOCK\_0\_5\_Weighted\_Average,

FORMAT (SUM ((mapunit\_acres/landunit\_acres)\*SOCSTOCK\_0\_30 ) over(partition by aoiid) , '#,###,##0.00') AS SOCSTOCK\_0\_30\_Weighted\_Average,

FORMAT (SUM ((mapunit\_acres/landunit\_acres)\*SOCSTOCK\_0\_150) over(partition by aoiid) , '#,###,##0.00') AS SOCSTOCK\_0\_150\_Weighted\_Average

FROM #SOC5

GROUP BY aoiid, landunit, mapunit\_acres, landunit\_acres, SOCSTOCK\_0\_5, SOCSTOCK\_0\_30, SOCSTOCK\_0\_150;

SELECT DISTINCT landunit, landunit\_acres,

CASE WHEN SOCSTOCK\_0\_30\_Weighted\_Average = 0 THEN CONCAT ('Soil Organic Carbon Stock' , ':' , 0)

WHEN SOCSTOCK\_0\_30\_Weighted\_Average >0 AND SOCSTOCK\_0\_30\_Weighted\_Average < 10 THEN CONCAT ('Soil Organic Carbon Stock' , ':' , 1)

WHEN SOCSTOCK\_0\_30\_Weighted\_Average >=10 AND SOCSTOCK\_0\_30\_Weighted\_Average < 25 THEN CONCAT ('Soil Organic Carbon Stock' , ':' , 2)

WHEN SOCSTOCK\_0\_30\_Weighted\_Average >=25 AND SOCSTOCK\_0\_30\_Weighted\_Average < 50 THEN CONCAT ('Soil Organic Carbon Stock' , ':' , 3)

WHEN SOCSTOCK\_0\_30\_Weighted\_Average >=50 AND SOCSTOCK\_0\_30\_Weighted\_Average < 100 THEN CONCAT ('Soil Organic Carbon Stock' , ':' , 4)

WHEN SOCSTOCK\_0\_30\_Weighted\_Average >=100 THEN CONCAT ('Soil Organic Carbon Stock' , ':' , 5)

WHEN SOCSTOCK\_0\_30\_Weighted\_Average IS NULL THEN CONCAT ('Soil Organic Carbon Stock' , ':' , 'Not Rated') END AS rating\_key,

'Soil Organic Carbon Stock' AS attributename,

SOCSTOCK\_0\_5\_Weighted\_Average AS [SOC\_0\_5],

SOCSTOCK\_0\_30\_Weighted\_Average AS [SOC\_0\_30],

SOCSTOCK\_0\_150\_Weighted\_Average AS [SOC\_0\_150],

CASE WHEN SOCSTOCK\_0\_30\_Weighted\_Average IS NULL THEN NULL

WHEN SOCSTOCK\_0\_30\_Weighted\_Average = 0 THEN 'None'

WHEN SOCSTOCK\_0\_30\_Weighted\_Average >0 AND SOCSTOCK\_0\_30\_Weighted\_Average < 10 THEN 'Very low'

WHEN SOCSTOCK\_0\_30\_Weighted\_Average >=10 AND SOCSTOCK\_0\_30\_Weighted\_Average < 25 THEN 'Low'

WHEN SOCSTOCK\_0\_30\_Weighted\_Average >=25 AND SOCSTOCK\_0\_30\_Weighted\_Average < 50 THEN 'Moderate'

WHEN SOCSTOCK\_0\_30\_Weighted\_Average >=50 AND SOCSTOCK\_0\_30\_Weighted\_Average < 100 THEN 'Moderately High'

WHEN SOCSTOCK\_0\_30\_Weighted\_Average >=100 THEN 'High' END AS [SOC\_0\_30\_High\_Class]

FROM #SOC6

### Final Table Output by Landunit

| **landunit** | **landunit\_acres** | **rating\_key** | **attributename** | **SOC\_0\_5** | **SOC\_0\_30** | **SOC\_0\_150** | **SOC\_0\_30\_\_Class** |
| --- | --- | --- | --- | --- | --- | --- | --- |
| T9981 Fld3 | 328.952 | Soil Organic Carbon Stock:3 | Soil Organic Carbon Stock | 7.83 | 38.96 | 87.64 | Moderate |
| T9981 Fld4 | 318.722 | Soil Organic Carbon Stock:3 | Soil Organic Carbon Stock | 7.19 | 37.09 | 82.56 | Moderate |

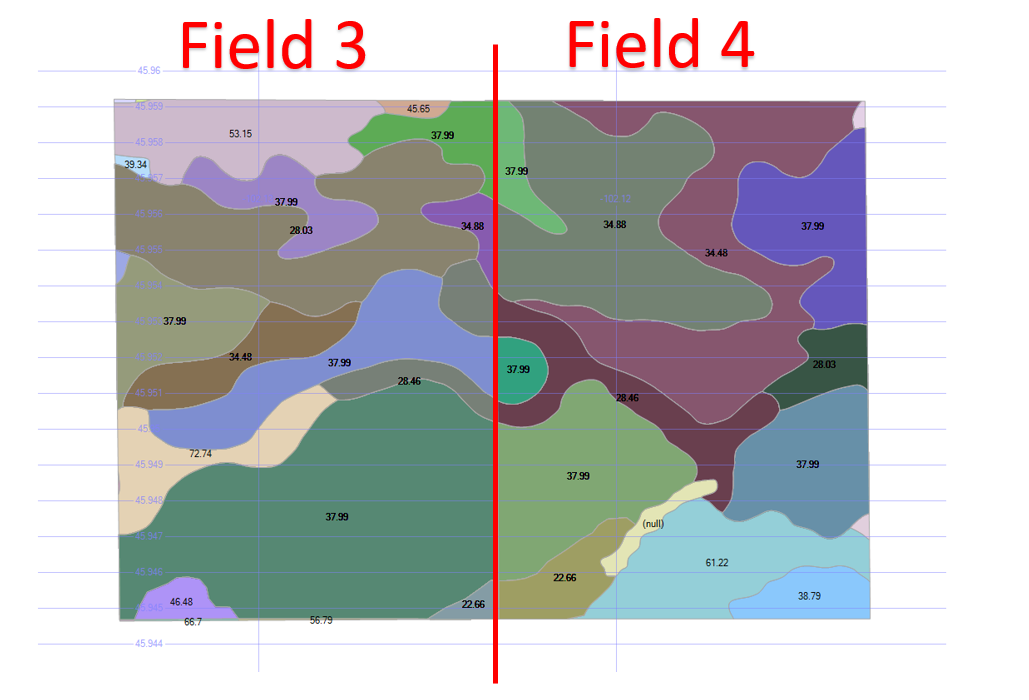


Figure 1.---Final output by land unit.

In field 3, the rating is “Moderate” with a weighted average landunit value of 38.96. In field 4, the rating class is “Moderate” and the value is 37.09.

## Global Soil Organic Carbon Output

The SOC stock for 0–30cm (high, rv, and low) was exported for further GIS interpolation and extrapolation.

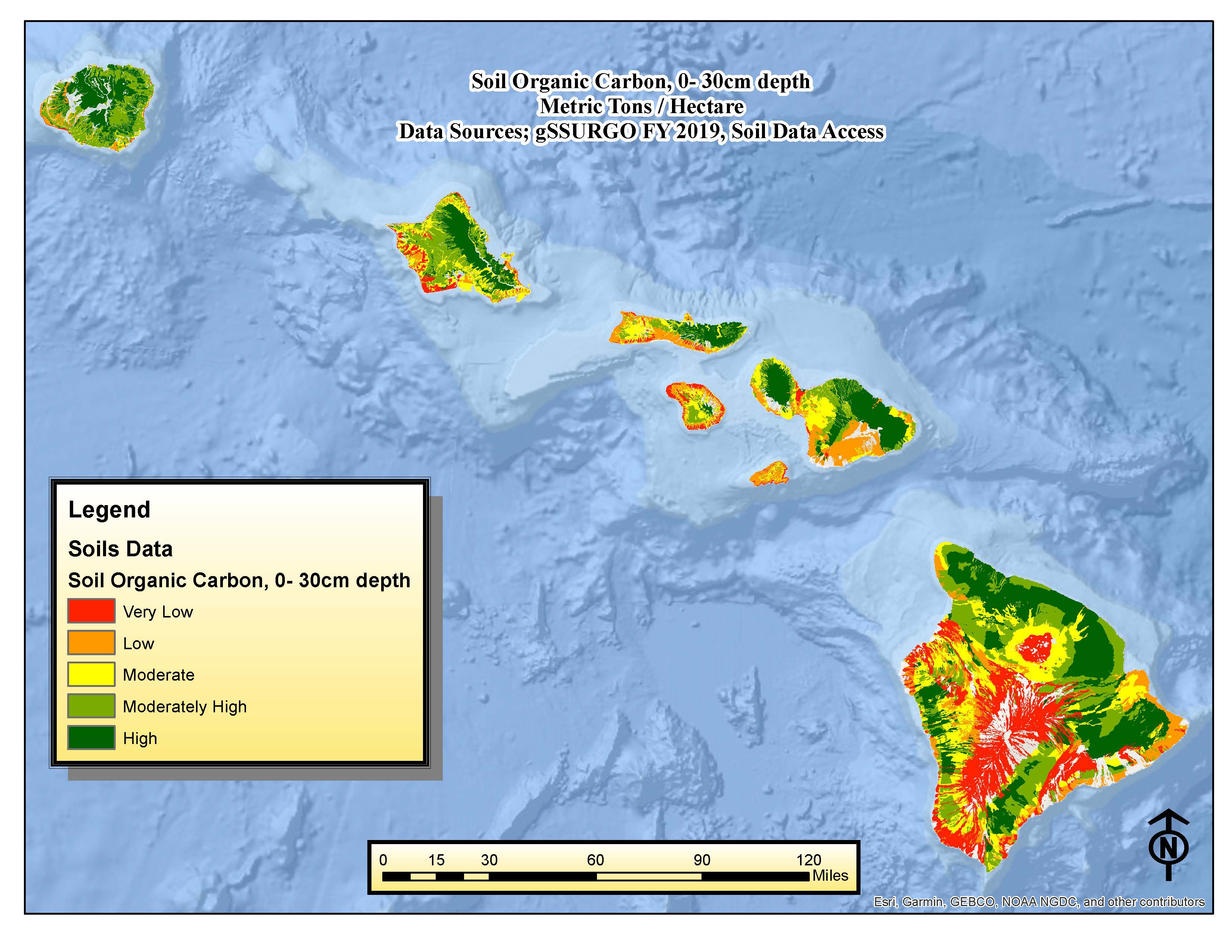


Figure 2.—Soil organic carbon stock: Hawaii

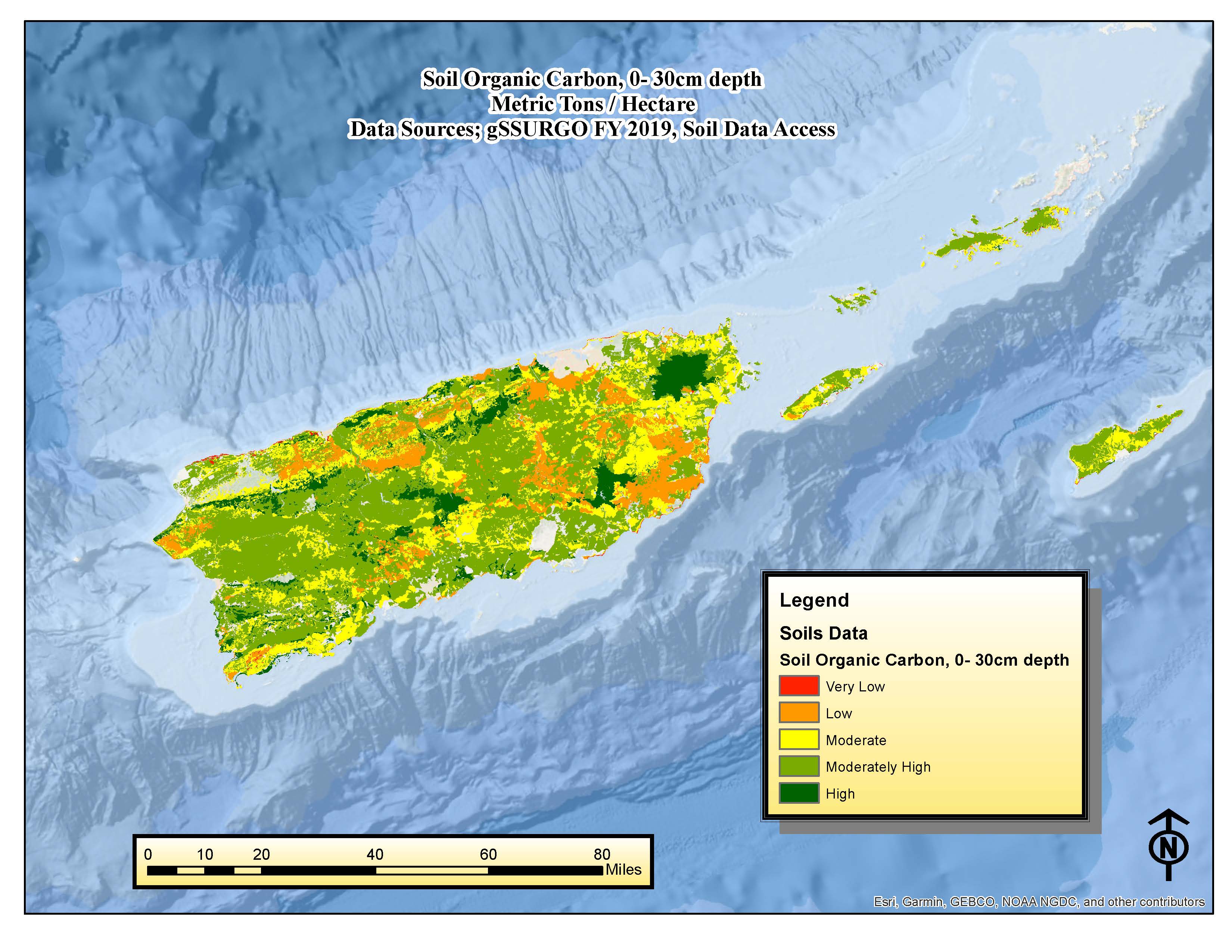


Figure 3.—Soil organic carbon stock: Puerto Rico

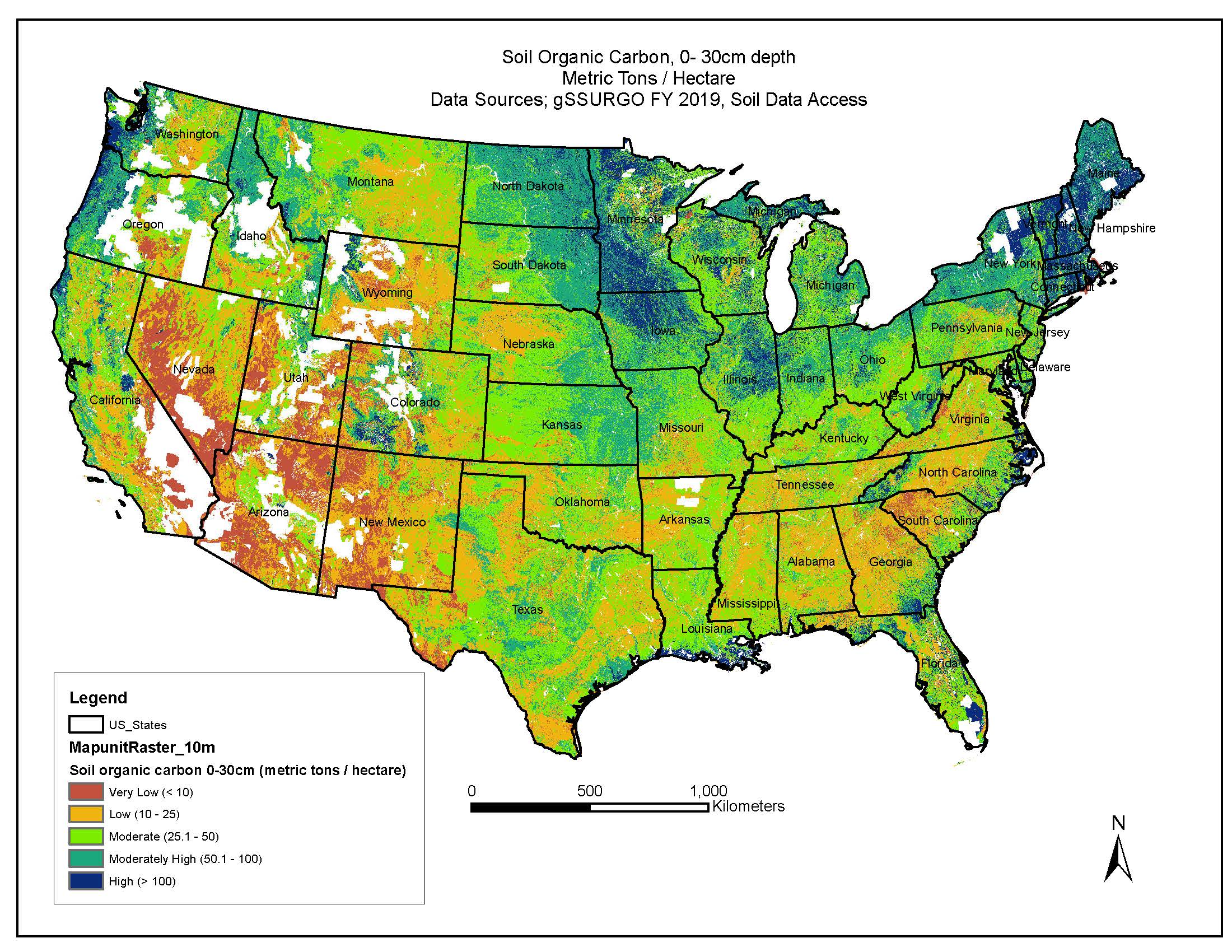


Figure 4.—Soil organic carbon stock: CONUS (Credit Steve Campbell)

## Sources and Citations

The source of this data is STATSGO and SSURGO from the U.S. National Cooperative Soil Survey. The following references cover data definitions, derivation, and quality procedures.

1. U.S. Department of Agriculture, Natural Resources Conservation Service. National soil survey handbook, title 430-VI. <http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/ref/?cid=nrcs142p2_054242> (accessed 13 October 2017).
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5. Ellert, B.H., H.H. Janzen, A.J. VandenBygaart, and E. Bremer. 2008. Measuring change in soil organic carbon storage. \_*In:\_* Carter, M.R., and E.G. Gregorich, editors, Soil sampling and methods of analysis, 2nd edition. CRC Press, Boca Raton, FL, pp. 25--38.