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Friday January 29, 2026

Theresa Stiner
Iowa Department of Natural Resources
Land Quality Bureau
502 E 9th Street
Des Moines, IA 50319-0034

Re: Hormel Foods Corp., Austin, MN: Permit # 00-SDP-08-14P-LAN
Land Application of Solid Waste Additional Sites Application

Ms. Stiner,

Enclosed is an application to add four additional land application sites to the referenced permit for Hormel Foods. There will be no increased volume for storage since the previous permit renewal application, so the closure cost estimate has not been revised. Please note, land application sites will be soil sampled as necessary prior to each application for each site when conditions are suitable.

If you have any questions, please do not hesitate to call.

Sincerely,



Michael Klema
Environmental Land Management, LLC

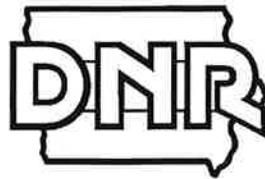
enclosures

Cc: IDNR FO #2, 2300 15th Street, Mason City, IA 50401



IOWA DEPARTMENT OF NATURAL RESOURCES

Land Application of Solid Waste



Additional Sites

Application to add sites to an existing solid waste land application permit must be accompanied by the information required by the applicable solid waste rules under Iowa Administrative Code 567 Chapter 121.

Send completed applications with attached information to:

**Iowa Department of Natural Resources
Land Quality Bureau
Solid Waste Section
502 East Ninth Street
Des Moines, IA 50319-0034**

For questions concerning this application please contact the Department at (515) 281-8646.

SECTION 1. FACILITY CONTACT INFORMATION

Permit # 00 _____ -SDP- 08 _____ - 14 _____ -LAN

Solid Waste Generator Name/Address:

Hormel Foods Corp., 500 14th Ave NE, Austin, MN 55912

Phone #: 507-437-5312 Fax #: 507-437-9805

SECTION 2. PERMIT APPLICATION CHECKLIST

Checking the appropriate boxes below certifies that the documents submitted in conjunction with this application form are complete and in compliance with the applicable chapters of the Iowa Administrative Code. One (1) copy of each document shall be submitted. If an application is found by the department to be incomplete, it may be denied and returned to the applicant.

| Required Documents | | Attached |
|---|----------------------------|-----------------|
| Document/Information | Administrative Code | |
| Section A List of all the sites being added. For each site include: <ul style="list-style-type: none">• Name of site• Legal description of the site• Total acres in the site• Acres to be used for disposal• Name of landowner or tenant | | X |
| Section B Financial Assurance. If the additional site(s) will include additional storage of materials, include a revised cost estimate and proof of financial assurance in the revised amount. | IAC 567 121.8 | *Checklist |

For each site attach the following:

| | | | |
|-----------|--|--|------------|
| Section C | <p>Site map or aerial photo of the site showing the following:</p> <ul style="list-style-type: none"> • The specific area where the material will be applied • Buildings, lakes, ponds, watercourses, wetlands, dry runs, rock outcroppings, roads, and other applicable details. • Soil types and slope • Location of wells <p><i>Please remember that the area to be used for land disposal:</i></p> <ul style="list-style-type: none"> • <i>may not have a slope of greater than 9%,</i> • <i>may not be within 200 feet of an occupied residence</i> • <i>may not be within 500 feet of a well</i> <p><i>If the specific area requested includes any of the above the entire field will not be approved.</i></p> | IAC 567 121.7(1)"a"(1) IAC 567 121.7(1)"a"(1) IAC 567 121.7(1)"a"(2) IAC 567 121.7(1)"a"(1) | X |
| Section D | Soil testing | IAC 567 121.7(1)"a"(9) | *Checklist |
| Section E | Water table levels | IAC 567 121.7(1)"a"(10) | X |
| Section F | <p>Review by Soil Conservation District that includes the following:</p> <ul style="list-style-type: none"> • Soil loss limits applicable to the site • Design soil loss levels for the site • Estimated current soil loss levels <p><i>The review may be done by the Natural Resources Conservation Service or a Professional Agronomist in lieu of the Soil Conservation District.</i></p> | IAC 567 121.7(1)"a"(3) IAC 567 121.7(1)"a"(6) IAC 567 121.7(1)"a"(7) IAC 567 121.7(1)"a"(8) | X |
| Section G | Proof of ownership or legal entitlement to use the site. (Agreement with landowner or tenant) <i>One document may be submitted for multiple sites with the same landowner or tenant.</i> | IAC 567 121.7(1)"b"(6) | X |

SECTION 3. APPLICANT CERTIFICATION

CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete.

I further certify that the construction and operation of the above described facility will be in accordance with the plans, specifications, reports and related communications accepted by the Iowa Department of Natural Resources and on file in its office; and in accordance with conditions imposed in the permit issued by the Iowa Department of Natural Resources.

Signature: 

Date: 1-28-26

Printed Name: Ed Firnegan

Title: Austin Plant Manager

Hormel Foods Corp., Austin, MN

Iowa DNR Land Application Permit # 00-SDP-08-14P
Additional Sites Application Checklist: Sections A-G

A. List of All Sites Being Added

1. See attached Additional Sites List and Table 1 Master Site List including all additional land application sites and all previously approved land application sites. Each site list includes:
 - i. Name of Site
 - ii. Legal Description of Site
 - iii. Total Acres in the Site
 - iv. Acres to be used for disposal / Suitable Acres
 - v. Name of Landowner or Tenant

B. Financial Assurance

1. Financial assurance will not be updated or changed due to this being a new site addition with no additional volumes expected.

C. Site Map or Aerial Photo of Sites

1. See attached aerial site maps of each additional site detailing:
 - i. The specific area where the material will be applied
 1. Site boundaries outlined on each aerial map
 - ii. Buildings, lakes, ponds, watercourses, wetlands, dry runs, rock outcroppings, roads, and other applicable details
 1. Site features and setbacks detailed on aerial maps
 - iii. Soil types and slope
 1. NRCS soil maps attached for each site
 - iv. Location of wells
 1. IDNR Well Search information attached for each site and active wells highlighted on aerial maps by 500 foot circular setback

D. Soil Testing

1. Land application site soil sampling will be completed each time site is used for application and discussed in annual agronomist reports.

E. Water Table Levels

1. See attached Depth to Water Table outline for each specific site provided by NRCS.

F. Review by Professional Agronomist

1. See attached land application site suitability review performed by Extended Ag Services of Lakefield, MN discussing soil loss levels through erosion and flooding potential.
 - i. Extended Ag Services - Jim Nesseth, Certified Agronomist, License # 17118 and Andy Nesseth, Environmental Consultant.
2. See attached T Factor erosion potential outlines for each specific site provided by NRCS.

G. Proof of Ownership or Legal Entitlement to Use the Site

1. See attached Contractual Consent of Landowner, Lessee and/or Land Operator for the specific individual with this additional sites application.

Hormel Austin, Permit # 00-SDP-08-14P: Table 1

| Site Name | Legal Description | Section | Township | Tier, Range | County | State | Suitable Acreage | Farmer Name | Landowner |
|---|--|--------------|---------------------|------------------------|-----------------|-------|------------------|-------------------|-----------------------------|
| Blaser 125 | S1/2 of NE1/4, N1/2 of SE1/4 | 17 | Stacyville | 100 N, 16 W | Mitchell | IA | 125 | Jim Blaser | Rodney Albertson |
| Blaser 66 | W1/2 of NE1/4 | 35 | Liberty | 99 N, 16 W | Mitchell | IA | 66 | Jim Blaser | Jessica Isensee |
| Blaser 80 | S1/2 of NW1/4 | 26 | Liberty | 99 N, 16 W | Mitchell | IA | 80 | Jim Blaser | Rodney Albertson |
| Halvorson 104 | NE 1/4 | 21 | Otranto | 100 N, 18 W | Mitchell | IA | 100 | Curt Halvorson | Curt Halvorson |
| Halvorson 187 | E 1/2 & E 1/2 of SW 1/4 | 14 | Otranto | 100 N, 18 W | Mitchell | IA | 243 | Curt Halvorson | Curt Halvorson |
| Halvorson 30 | NE 1/4 of NE 1/4 | 14 | Otranto | 100 N, 18 W | Mitchell | IA | 35 | Curt Halvorson | Curt Halvorson |
| E 1/2 & E 1/2 of W 1/2 - Sec 23; NE 1/4 of NE 1/4 | | | | | | | | | |
| Halvorson 337 | 1/4 - Sec 26 | 23, 26 | Otranto | 100 N, 18 W | Mitchell | IA | 392 | Curt Halvorson | Curt Halvorson |
| Halvorson 36 | SE 1/4 of SE 1/4 | 21 | Otranto | 100 N, 18 W | Mitchell | IA | 33 | Curt Halvorson | Curt Halvorson |
| Halvorson 39 | W 1/2 of NW 1/4 | 14 | Otranto | 100 N, 18 W | Mitchell | IA | 26 | Curt Halvorson | Curt Halvorson |
| Halvorson 70 | SE 1/4 of SE 1/4 | 34 | Otranto | 100 N, 18 W | Mitchell | IA | 67 | Curt Halvorson | Curt Halvorson |
| Hanke 340 | E 1/2 & SE 1/4 of SW 1/4 | 1 | Liberty | 99 N, 16 W | Mitchell | IA | 411 | Randy Hanke | Randy Hanke |
| Hanke 40 | NE 1/4 of NE 1/4 | 9 | Liberty | 99 N, 16 W | Mitchell | IA | 40 | Randy Hanke | Randy Hanke |
| Hanke 60 | E 1/2 of SW 1/4 | 10 | Liberty | 99 N, 16 W | Mitchell | IA | 56 | Randy Hanke | Randy Hanke |
| N 1/2 of NE 1/4 - Sec 18; SE 1/4 of SE 1/4 - Sec 7; SW 1/4 of SW 1/4 - Sec 8; NW 1/4 of NW 1/4 - Sec 17 | | | | | | | | | |
| Hertel 120 | NW 1/4 - Sec 17 | 7, 8, 17, 18 | Otranto | 100 N, 18 W | Mitchell | IA | 109 | Gene Hertel | Gene Hertel |
| Hertel 330 | SW 1/4 & NW 1/4 of SE 1/4 & E 1/2 of NW 1/4 | 17 | Otranto | 100 N, 18 W | Mitchell | IA | 281 | Gene Hertel | Gene Hertel |
| Hertel 40 | 1/4 & NE 1/4 | 18 | Otranto | 100 N, 18 W | Mitchell | IA | 43 | Gene Hertel | Gene Hertel |
| N 1/4 - Sec 17; S 1/2 - Sec 8; SW 1/4 of SW 1/4 - Sec 9; NW 1/4 of NW 1/4 - Sec 16 | | | | | | | | | |
| Hertel Sand | 1/4 - Sec 9; NW 1/4 of NW 1/4 - Sec 16 | 8, 9, 16, 17 | Otranto | 100 N, 18 W | Mitchell | IA | 298 | Gene Hertel | Hertz Farm Management |
| Hulshizer Conrad | W 1/2 of SW 1/4, SE 1/4 of SW 1/4 | 25 | Deer Creek | 100 N; 19 W | Worth | IA | 98 | Steve Hulshizer | Steve Hulshizer |
| Hulshizer Deer Creek 36 | N 1/2 of SW 1/4, W 1/2 of NW 1/4 | 36 | Deer Creek | 100 N; 19 W | Worth | IA | 154 | Russ Hulshizer | Russ Hulshizer |
| Hulshizer Meltonville SE1/4 Sec 25; SW1/4 Sec 30 | | | | | | | | | |
| Hulshizer Opkis | SW1/4 | 25 | Deer Creek, Otranto | 100 N; 18 W | Worth, Mitchell | IA | 196 | Steve Hulshizer | Watkins Family Trust |
| Hulshizer Parkhurst | SW1/4 SE1/4 | 28 | Otranto | 100 N; 18 W | Mitchell | IA | 152 | Russ Hulshizer | Catherine Opkis |
| Hulshizer Pederson | S1/2 NE1/4 | 35 | Deer Creek | 100 N; 19 W | Worth | IA | 33 | Steve Hulshizer | Allen Parkhurst |
| Hulshizer Ron Home | N1/2 | 19 | Otranto | 100 N; 18 W | Mitchell | IA | 77 | Mike Hulshizer | Steven Pederson |
| Hulshizer Russ Home | SE1/4 Sec 26, N1/2 NE1/4 Sec 35 | 35 | Deer Creek | 100 N; 19 W | Worth | IA | 194 | Ron Hulshizer | Ron Hulshizer |
| Hulshizer Steve Home | NW1/4 | 25 | Deer Creek | 100 N; 19 W | Worth | IA | 206 | Mike Hulshizer | Mike Hulshizer |
| Jax Mona | E1/2 NW1/4 | 14 | Otranto | 100 N; 18 W | Mitchell | IA | 149 | Steve Hulshizer | Steve Hulshizer |
| Jax Otranto 11 | NE 1/4 | 11 | Otranto | 100 N; 18 W | Mitchell | IA | 49 | Roger Jax | Jamie Jax |
| Jax Otranto 13 | NE1/4 NE1/4 | 13 | Otranto | 100 N; 18 W | Mitchell | IA | 70 | Roger Jax | Roger Jax |
| Jax Otranto 14 | SE1/4 SE1/4 | 14 | Otranto | 100 N; 18 W | Mitchell | IA | 40 | Roger Jax | Gary Robertson |
| Jax Otranto 15 | S1/2 NE1/4, SE1/4 | 15 | Otranto | 100 N; 18 W | Mitchell | IA | 30 | Roger Jax | Tim Jax |
| Jax Otranto 18 | NW1/4 SW1/4 | 18 | Otranto | 100 N; 18 W | Mitchell | IA | 188 | Roger Jax | Dairyland Power |
| Jax Staceyville 7 | S 1/2 of SE 1/4 | 7 | Staceyville | T100N, R16W | Mitchell | IA | 38 | Roger Jax | Blanche Greiner |
| Jax Union 11 | SW 1/4 | 11 | Union | T100N, R17W | Mitchell | IA | 148 | Roger Jax | Christopher Jax |
| Jax Union 17 | NE1/4 | 17 | Union | 100 N; 17 W | Mitchell | IA | 153 | Roger Jax | Roger Jax |
| Kephart 160 | SW 1/4 & W 1/2 of SE 1/4 | 29 | Jenkins | 99 N, 15 W | Mitchell | IA | 200 | Randy Kephart | Randy Kephart |
| Klapperich 1709 | NE 1/4 of NE 1/4 | 8 | Liberty | 99 N, 16 W | Mitchell | IA | 22 | Reid Klapperich | Jack Fisher |
| SW 1/4 of NE 1/4 & S 1/2 of SW 1/4 of NW 1/4 & N 1/2 of NW 1/4 & SE 1/4 of NW 1/4 | | | | | | | | | |
| Klapperich 1713 | NW 1/4 | 29 | Stacyville | 100 N, 16 W | Mitchell | IA | 81 | Reid Klapperich | Jack Fisher |
| Klapperich 1832 | SE 1/4 of SW 1/4 - Sec 21; NE 1/4 - Sec 28 | 21, 28 | Stacyville | 100 N, 16 W | Mitchell | IA | 151 | Reid Klapperich | Reid Klapperich |
| Klapperich 1833 | SE 1/4 of SE 1/4 - Sec 19; SW 1/4 of SW 1/4 - Sec 20 | 19, 20 | Stacyville | 100 N, 16 W | Mitchell | IA | 25 | Reid Klapperich | Reid Klapperich |
| Klapperich 2198 | SW 1/4 of NW 1/4 | 9 | Liberty | 99 N, 16 W | Mitchell | IA | 32 | Reid Klapperich | Reid Klapperich |
| Klapperich 8799 | SE 1/4 of SE 1/4 | 17 | Stacyville | 100 N, 16 W | Mitchell | IA | 38 | Reid Klapperich | Bridgid Kern |
| Klapperich 9215 | NW 1/4 | 15 | Liberty | 99 N, 16 W | Mitchell | IA | 131 | Reid Klapperich | Gary Skulzacek |
| Meltnar 160 | NE 1/4 | 36 | Liberty | 99 N, 16 W | Mitchell | IA | 160 | Keith Meltnar | Keith Meltnar |
| Newton Burr Oak 25-36 | SW 1/4 - Sec 25; NW 1/4 - Sec 36 | 25, 36 | Burr Oak | T98-99N, R16W | Mitchell | IA | 320 | Bill Newton | Jackson & Kathryn Steiert |
| Newton Burr Oak 5 | NE 1/4 of NW 1/4 | 5 | Burr Oak | T98-99N, R16W | Mitchell | IA | 22 | Bill Newton | Bill Newton |
| Newton Liberty 10 | W 1/2 of SW 1/4 | 10 | Liberty | T99N, R16W | Mitchell | IA | 74 | Bill Newton | David Rabinowitz |
| Newton Liberty 14 | N 1/2 of NW 1/4 & NW 1/4 of NE 1/4 | 14 | Liberty | T99N, R16W | Mitchell | IA | 96 | Bill Newton | Janice Steiert |
| Newton Liberty 15 | NW 1/4 | 15 | Liberty | T99N, R16W | Mitchell | IA | 134 | Bill Newton | G & J Skulzacek |
| Newton Liberty 18 | SE 1/4 | 18 | Liberty | T99N, R16W | Mitchell | IA | 151 | Bill Newton | Bill & Allen Newton |
| Newton Liberty 19 | S 1/2 | 19 | Liberty | T99N, R16W | Mitchell | IA | 276 | Bill Newton | Allen Newton |
| Newton Liberty 20 | SW 1/4 | 20 | Liberty | T99N, R16W | Mitchell | IA | 152 | Bill Newton | Allen Newton |
| Newton Liberty 22 | NW 1/4 of NW 1/4 | 22 | Liberty | T99N, R16W | Mitchell | IA | 22 | Bill Newton | Bill Newton |
| Newton Newburg 35 | NE 1/4 & E 1/2 of NW 1/4 | 35 | Newburg | T99N, R18W | Mitchell | IA | 87 | Bill Newton | Mary Eggers & Jon Koster |
| Newton Osage 27 | N 1/2 & NE 1/4 of SE 1/4 | 27 | Osage | T98N, R16-17W | Mitchell | IA | 135 | Bill Newton | Bryce Gast & Clarence Kruse |
| Newton Staceyville 30 | NW 1/4 of NE 1/4 | 30 | Staceyville | 39-100N, R16-17 | Mitchell | IA | 21 | Bill Newton | Robert Wasler |
| Newton West Lincoln 36 | S 1/2 of SE 1/4 | 36 | West Lincoln | 97-98N, R16-17V | Mitchell | IA | 54 | Bill Newton | Bill Newton |
| Patterson Union 28 | SE 1/4 | 28 | Union | T100N, R17W | Mitchell | IA | 155 | Virgil Patterson | Carol Meyer |
| Patterson Union 33 | NE 1/4 | 33 | Union | T100N, R17W | Mitchell | IA | 140 | Virgil Patterson | Carol Meyer |
| Pearson 33 | SW 1/4 of NW 1/4 | 30 | Jenkins | 99 N, 15 W | Mitchell | IA | 31 | Travis Sprung | Gary Pearson |
| Pederson Howard 7 | SW 1/4 & S 1/2 of SE 1/4 | 7 | Otranto | 100 N; 18 W | Mitchell | IA | 186 | Jeff Pederson | Howard Trust |
| Pederson Howard 9 | E 1/2 of NE 1/4 Sec 8; NW 1/4 Sec 9 | 8, 9 | Otranto | 100 N; 18 W | Mitchell | IA | 170 | Jeff Pederson | Howard Trust |
| Pederson Howard 17 | S 1/2 of SE 1/4, NE 1/4 of SE 1/4 | 17 | Otranto | 100 N; 18 W | Mitchell | IA | 115 | Jeff Pederson | David Howard |
| Pederson Nelson 14 | NW 1/4 of SW 1/4 | 14 | Otranto | 100 N; 18 W | Mitchell | IA | 38 | Jeff Pederson | Nelson Trust |
| E 1/2 of NE1/4 Sec 21; W 1/2 of NW1/4, W1/4 | | | | | | | | | |
| Rosenberg Buntrock | of SW1/4 Sec 22 | 21, 22 | Union | 100N, 17 W | Mitchell | IA | 197 | Joe Rosenberg | Orie Koehlmoos |
| Rosenberg Gene | NE 1/4 of NW 1/4 & W 1/2 of NE 1/4 | 32 | Newburg | T99N, R18W | Mitchell | IA | 103 | Joe Rosenberg | Gene Rosenberg |
| Rosenberg Goose | N1/2 of NW1/4 | 35 | Deer Creek | 100 N; 19 W | Worth | IA | 102 | Richard Rosenberg | Gerald Nash |
| Rosenberg Hanson | NE1/4 Sec 16, NW1/4 Sec 15 | 15, 16 | Union | 100N, 17 W | Mitchell | IA | 309 | Joe Rosenberg | Orie Koehlmoos |
| Rosenberg Home | SE 1/4 | 19 | Newburg | T99N, R18W | Mitchell | IA | 145 | Joe Rosenberg | Betty Rosenberg |
| Rosenberg Larson | E 1/4 of SW 1/4 Sec 33; NW 1/4 of NW 1/4 Sec | 33, 4 | Newburg; Rock | T98N, R18W; T98N, R18W | Mitchell | IA | 77 | Richard Rosenberg | Lewis Larson Trust |
| Rosenberg Meltonville | E 1/2 of NW 1/4 | 6 | Deer Creek | 100 N, 19 W | Worth | IA | 92 | Joe Rosenberg | Gerald Nash |
| Rosenberg Nash 40 | NE1/4 of SE1/4 | 27 | Deer Creek | 100 N; 19 W | Worth | IA | 37 | Richard Rosenberg | Gerald Nash |
| Rosenberg Nash Home | SE 1/4 & E 1/2 of SW 1/4 | 22 | Deer Creek | 100 N, 19 W | Worth | IA | 192 | Joe Rosenberg | Gerald Nash |
| Rosenberg Neverett | S 1/4 of SE 1/4 - Sec 2; NE 1/4 - Sec 11 | 2, 11 | Union | 98 N, 19 W | Worth | IA | 185 | Joe Rosenberg | Orie Koehlmoos |
| Rosenberg Novack | SW 1/4 | 1 | Union | 98 N, 19 W | Worth | IA | 151 | Joe Rosenberg | Orie Koehlmoos |
| Rosenberg Otranto | S1/2 of NE1/4, N1/2 of SE1/4 Sec 18; SW1/4 of NW1/4, NW1/4 of SW1/4 Sec 17 | 17, 18 | Otranto | 100N, 18 W | Mitchell | IA | 189 | Joe Rosenberg | Orie Koehlmoos |
| Rosenberg Patrick | SW 1/4 - Sec 31 (Newburg); N 1/2 of SE 1/4 - Sec 36 (Barton) | 31, 36 | Newburg, Barton | 99 N, 18 W; 99 N, 19 W | Mitchell, Worth | IA | 194 | Joe Rosenberg | Donald Patrick |
| Rosenberg Tesch | SW 1/4 | 33 | Union | T100N, R17W | Mitchell | IA | 130 | Richard Rosenberg | Rudy Tesch Trust |

| | | | | | | | | | |
|--------------------|--|--------|------------|-------------|----------|----|-----|-------------------|--------------------------|
| | S1/2 & NE1/4 of SW1/4 Sec 28; E1/4 of NW1/4 Sec 33 | 28, 33 | Newburg | 99 N; 18 W | Mitchell | IA | 151 | Richard Rosenberg | Thomas Watts |
| Rosenberg Watts | E 1/2 of SW 1/4 | 25 | Barton | T99N, R19W | Worth | IA | 60 | Richard Rosenberg | Thomas Watts |
| Rosenberg Watts 60 | SE 1/4 | 10 | Deer Creek | 100 N, 19 W | Worth | IA | 101 | Kris Rugland | James Olson |
| Rugland 115 | NE 1/4 & E 1/2 of NW 1/4 | 7 | Hartland | 100 N, 21 W | Worth | IA | 112 | Kris Rugland | Lee Kvam |
| Rugland 132 | NW 1/4 | 29 | Hartland | 100 N, 21 W | Worth | IA | 132 | Kris Rugland | Kris Rugland |
| Rugland 138 | NW 1/4 | 8 | Barton | 99 N, 19 W | Worth | IA | 136 | Kris Rugland | Berton Follmuth |
| Rugland 148 | NE 1/4 - Sec 10; NW 1/4 - 11 | 10, 11 | Grove | 100 N, 20 W | Worth | IA | 104 | Kris Rugland | Lonny Broitzman |
| Rugland 174 | W 1/2 of E 1/2 & SE 1/4 of SE 1/4 - Sec 17; | | | | | | | | |
| Rugland 195 | NW 1/4 of NE 1/4 - Sec 20 | 17, 20 | Hartland | 100N, 21W | Worth | IA | 195 | Kris Rugland | Kris Rugland |
| Rugland 211 | NE 1/4 - Sec 8; NW 1/4 - Sec 9 | 8, 9 | Hartland | 100N, 21W | Worth | IA | 211 | Kris Rugland | Kris Rugland |
| Rugland 51 | W 1/2 of NW 1/4 | 10 | Grove | 100 N, 20 W | Worth | IA | 48 | Kris Rugland | Lonny Broitzman |
| Rugland 54 | NW 1/4 | 9 | Grove | 100 N, 20 W | Worth | IA | 60 | Kris Rugland | Dennis & Lonny Broitzman |
| Rugland 7 | W 1/4 of NW 1/4 | 9 | Grove | 100 N, 20 W | Worth | IA | 14 | Kris Rugland | Dennis Broitzman |
| Rugland Home | E 1/2 of SW 1/4 & W 1/2 of SE 1/4 - Sec 18; S 1/2 of NW 1/4 & W 1/2 of NE 1/4 - Sec 19 | 18, 19 | Hartland | 100N, 21W | Worth | IA | 278 | Kris Rugland | Kris Rugland |
| Sprung 2298 | NE 1/4 of SW 1/4 | 30 | Jenkins | 99 N, 15 W | Mitchell | IA | 37 | Travis Sprung | LR Falk Construction |
| Sprung 3108 | W 1/2 of NW 1/4 | 31 | Jenkins | 99 N, 15 W | Mitchell | IA | 81 | Travis Sprung | Travis Sprung |
| Sprung 3812 | SE 1/4 | 25 | Burr Oak | 99 N, 16 W | Mitchell | IA | 145 | Travis Sprung | Travis Sprung |
| Sprung 3879 | NW 1/4 of SW 1/4 | 30 | Jenkins | 99 N, 15 W | Mitchell | IA | 31 | Travis Sprung | Travis Sprung |
| Sprung CRP 18 | SW 1/4 of SW 1/4 | 30 | Jenkins | 99 N, 15 W | Mitchell | IA | 18 | Travis Sprung | Travis Sprung |

| Farmer | Address | Phone |
|------------------|--|----------------|
| Jim Blaser | 4504 Rampart Ave, Stacyville, IA 50476 | (641) 220-3446 |
| Curt Halvorson | 4830 Epic Ave, St. Ansgar, IA 50472 | (641) 590-2813 |
| Randy Hanke | 2747 450th St., Stacyville, IA 50476 | (641) 220-0681 |
| Gene Hertel | 4916 Beech Road, St. Ansgar, IA 50472 | (641) 220-6108 |
| Steve Hulshizer | 4765 Yarrow Ave, St. Ansgar, IA 50472 | (641) 390-0315 |
| Ron Hulshizer | 1097 485th St., St. Ansgar, IA 50472 | (641) 326-4689 |
| Mike Hulshizer | 4805 Cameo Ave, St. Ansgar, IA 50472 | (641) 736-4399 |
| Roger Jax | 11331 620th Ave, Adams, MN 55909 | (507) 438-0447 |
| Randy Kephart | 2951 Hwy 9, Riceville, IA 50466 | (641) 220-3507 |
| Reid Klapprich | 2456 480th St, Stacyville, IA 50476 | (641) 220-0159 |
| Keith Melchner | 2795 405th St, Osage, IA 50461 | (641) 985-2397 |
| Bill Newton | 2516 430th St., Little Cedar, IA 50454 | (641) 330-0183 |
| Virgil Patterson | 1721 480th St., St. Ansgar, IA 50472 | (641) 590-1207 |
| Jeff Pederson | 52690 130th St, Lyle, MN 55953 | (507) 440-2703 |
| Joe Rosenberg | 1085 420th St, St. Ansgar, IA 50472 | (641) 590-3530 |
| Kris Rugland | 4870 Wheelerwood Rd, Northwood, IA 50459 | (641) 390-0220 |
| Travis Sprung | 4113 Shadow Ave, Riceville, IA 50466 | (641) 220-3213 |

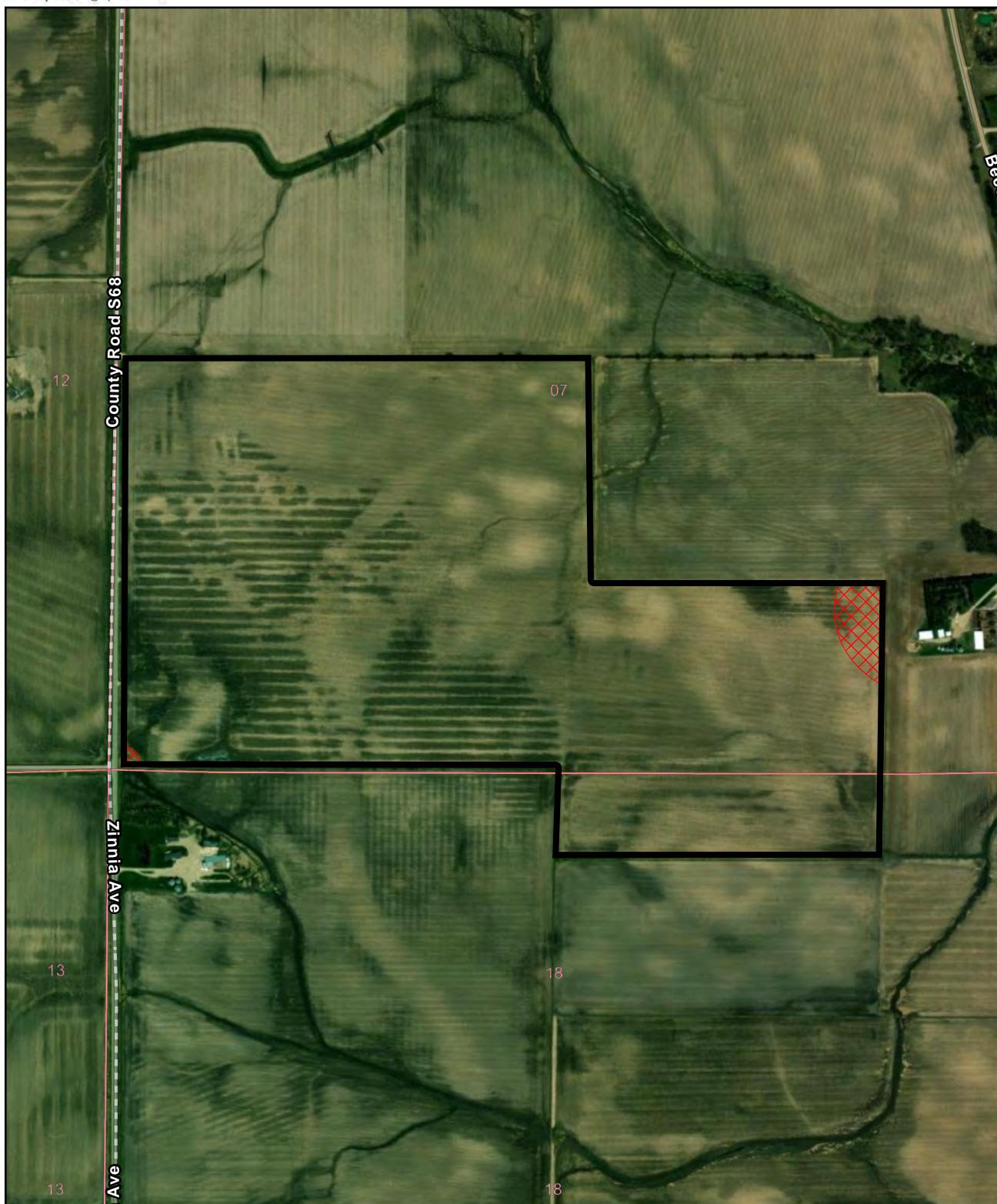
Hormel Austin New Site List 1/27/2026

| Site Name | Legal Description | Section | Township | Tier, Range | County | State | Total Acreage | Suitable Acreage | Farmer Name |
|--------------------|-------------------------------------|----------------|-----------------|--------------------|---------------|--------------|----------------------|-------------------------|--------------------|
| Pederson Howard 7 | SW 1/4 & S 1/2 of SE 1/4 | 7 | Otranto | 100 N; 18W | Mitchell | IA | 186 | 183 | Jeff Pederson |
| Pederson Howard 9 | E 1/2 of NE 1/4 Sec 8; NW 1/4 Sec 9 | 8, 9 | Otranto | 100 N; 18W | Mitchell | IA | 170 | 159 | Jeff Pederson |
| Pederson Howard 17 | S 1/2 of SE 1/4, NE 1/4 of SE 1/4 | 17 | Otranto | 100 N; 18W | Mitchell | IA | 115 | 115 | Jeff Pederson |
| Pederson Nelson 14 | NW 1/4 of SW 1/4 | 14 | Otranto | 100 N; 18W | Mitchell | IA | 38 | 38 | Jeff Pederson |
| Farmer Name | Address | Phone | | | | | | | |
| Jeff Pederson | 52690 130th St, Lyle, MN 55953 | 507-440-2703 | | | | | | | |



**ENVIRONMENTAL
LAND MANAGEMENT LLC**
waste byproduct landspreading specialists

Site Name: Pederson Howard 7



 Unsuitable for Land Application

Jeff Pederson Phone: (507)440-2703 Spreadable Acres: 183 Deliverable Tons: 1462

I certify I have followed all stockpiling and spreading rules provided by ELM.

Signature _____ Date _____

Soil Map—Mitchell County, Iowa



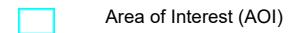
Natural Resources
Conservation Service

Web Soil Survey
National Cooperative Soil Survey

1/27/2026
Page 1 of 3

MAP LEGEND

Area of Interest (AOI)



Area of Interest (AOI)

Soils



Soil Map Unit Polygons



Soil Map Unit Lines



Soil Map Unit Points

Special Point Features



Blowout



Borrow Pit



Clay Spot



Closed Depression



Gravel Pit



Gravelly Spot



Landfill



Lava Flow



Marsh or swamp



Mine or Quarry



Miscellaneous Water



Perennial Water



Rock Outcrop



Saline Spot



Sandy Spot



Severely Eroded Spot



Sinkhole



Slide or Slip



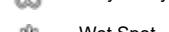
Sodic Spot

Spoil Area



Stony Spot

Very Stony Spot



Wet Spot

Other

Special Line Features

Water Features

Streams and Canals

Transportation

Rails

Interstate Highways

US Routes

Major Roads

Local Roads

Background

Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:15,800.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service

Web Soil Survey URL:

Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Mitchell County, Iowa

Survey Area Data: Version 31, Sep 8, 2025

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Sep 5, 2021—Oct 15, 2021

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.



Map Unit Legend

| Map Unit Symbol | Map Unit Name | Acres in AOI | Percent of AOI |
|------------------------------------|--|--------------|----------------|
| 83 | Kenyon loam, 0 to 2 percent slopes | 4.0 | 2.1% |
| 84 | Clyde silty clay loam, 0 to 3 percent slopes | 0.5 | 0.2% |
| 171B | Bassett loam, 2 to 5 percent slopes | 3.3 | 1.7% |
| 175 | Dickinson fine sandy loam, 0 to 2 percent slopes | 4.4 | 2.3% |
| 175B | Dickinson fine sandy loam, 2 to 5 percent slopes | 0.7 | 0.4% |
| 198B | Floyd loam, 1 to 4 percent slopes | 28.7 | 15.2% |
| 394 | Ostrander loam, 0 to 2 percent slopes | 24.3 | 12.8% |
| 394B | Ostrander loam, 2 to 5 percent slopes | 0.1 | 0.1% |
| 399 | Readlyn silt loam, 1 to 3 percent slopes | 16.3 | 8.6% |
| 407B | Schley silt loam, 1 to 4 percent slopes | 82.4 | 43.5% |
| 471 | Oran loam, 0 to 2 percent slopes | 6.2 | 3.3% |
| 482 | Racine silt loam, 0 to 2 percent slopes | 8.4 | 4.4% |
| 482B | Racine loam, 2 to 5 percent slopes | 5.2 | 2.7% |
| 575 | Dickinson-Ostrander complex, 0 to 2 percent slopes | 2.8 | 1.5% |
| 760 | Ansgar silt loam, 0 to 2 percent slopes | 1.9 | 1.0% |
| Totals for Area of Interest | | 189.2 | 100.0% |

T Factor

| Map unit symbol | Map unit name | Rating (tons per acre per year) | Acres in AOI | Percent of AOI |
|------------------------------------|--|---------------------------------|--------------|----------------|
| 83 | Kenyon loam, 0 to 2 percent slopes | 5 | 4.0 | 2.1% |
| 84 | Clyde silty clay loam, 0 to 3 percent slopes | 5 | 0.5 | 0.2% |
| 171B | Bassett loam, 2 to 5 percent slopes | 5 | 3.3 | 1.7% |
| 175 | Dickinson fine sandy loam, 0 to 2 percent slopes | 3 | 4.4 | 2.3% |
| 175B | Dickinson fine sandy loam, 2 to 5 percent slopes | 3 | 0.7 | 0.4% |
| 198B | Floyd loam, 1 to 4 percent slopes | 5 | 28.7 | 15.2% |
| 394 | Ostrander loam, 0 to 2 percent slopes | 5 | 24.3 | 12.8% |
| 394B | Ostrander loam, 2 to 5 percent slopes | 5 | 0.1 | 0.1% |
| 399 | Readlyn silt loam, 1 to 3 percent slopes | 5 | 16.3 | 8.6% |
| 407B | Schley silt loam, 1 to 4 percent slopes | 5 | 82.4 | 43.5% |
| 471 | Oran loam, 0 to 2 percent slopes | 5 | 6.2 | 3.3% |
| 482 | Racine silt loam, 0 to 2 percent slopes | 5 | 8.4 | 4.4% |
| 482B | Racine loam, 2 to 5 percent slopes | 5 | 5.2 | 2.7% |
| 575 | Dickinson-Ostrander complex, 0 to 2 percent slopes | 3 | 2.8 | 1.5% |
| 760 | Ansgar silt loam, 0 to 2 percent slopes | 5 | 1.9 | 1.0% |
| Totals for Area of Interest | | | 189.2 | 100.0% |

Description

The T factor is an estimate of the maximum average annual rate of soil erosion by wind and/or water that can occur without affecting crop productivity over a sustained period. The rate is in tons per acre per year.



Depth to Water Table

| Map unit symbol | Map unit name | Rating (centimeters) | Acres in AOI | Percent of AOI |
|------------------------------------|--|----------------------|--------------|----------------|
| 83 | Kenyon loam, 0 to 2 percent slopes | 122 | 4.0 | 2.1% |
| 84 | Clyde silty clay loam, 0 to 3 percent slopes | 0 | 0.5 | 0.2% |
| 171B | Bassett loam, 2 to 5 percent slopes | 122 | 3.3 | 1.7% |
| 175 | Dickinson fine sandy loam, 0 to 2 percent slopes | >200 | 4.4 | 2.3% |
| 175B | Dickinson fine sandy loam, 2 to 5 percent slopes | >200 | 0.7 | 0.4% |
| 198B | Floyd loam, 1 to 4 percent slopes | 30 | 28.7 | 15.2% |
| 394 | Ostrander loam, 0 to 2 percent slopes | >200 | 24.3 | 12.8% |
| 394B | Ostrander loam, 2 to 5 percent slopes | >200 | 0.1 | 0.1% |
| 399 | Readlyn silt loam, 1 to 3 percent slopes | 30 | 16.3 | 8.6% |
| 407B | Schley silt loam, 1 to 4 percent slopes | 30 | 82.4 | 43.5% |
| 471 | Oran loam, 0 to 2 percent slopes | 30 | 6.2 | 3.3% |
| 482 | Racine silt loam, 0 to 2 percent slopes | >200 | 8.4 | 4.4% |
| 482B | Racine loam, 2 to 5 percent slopes | >200 | 5.2 | 2.7% |
| 575 | Dickinson-Ostrander complex, 0 to 2 percent slopes | >200 | 2.8 | 1.5% |
| 760 | Ansgar silt loam, 0 to 2 percent slopes | 0 | 1.9 | 1.0% |
| Totals for Area of Interest | | | 189.2 | 100.0% |

Having issues? A prototype of a new version of Facility Explorer is available at <https://facilityexplorer.iowadnr.gov/FacilityExplorer/WellSearch.aspx?...>

X

[FacilityExplorer4/](#)

Well Search



[Print](#) [Help](#)

Well Search Report

Site: Pederson Howard 7

| Included in search | No. of wells | Database |
|--------------------|--------------|--|
| X | 0 | IGS well database General well database maintained by IGS, location accuracy varies 3,730 to 25 ft., last updated 8/2005. |
| X | 0 | Public wells Municipal and nonmunicipal public well databases maintained by IGS, location varies 3,730 to 25 ft., under development. |
| X | 0 | SDWIS public wells Public well database developed from the Safe Drinking Water Information System database maintained by IDNR, estimated locational accuracy varies from 15m. to 3300m. Created from 5/2005 data. |
| X | 0 | Private well tracking system IDNR database management system for Grants-to-counties-covered wells. Locational accuracy unknown, assumed to be +/- 17 m., Last update 7/2005. |
| X | 15 | Wells registered for testing Wells tested under Grant-to-Counties program. Locational accuracy varies 1150 to 150 m.; Last update 9/2001, no future updates planned. |
| X | 1 | Permitted private wells Wells permitted under Grant-to-Counties program. Locational accuracy varies 1150 to 150 m.; Last update 9/2001, no future updates planned. |
| X | 1 | Registered abandoned wells Wells abandoned under Grant-to-Counties program. Locational accuracy varies 1150 to 150 m.; Last update 9/2001, no future updates planned. |
| X | 0 | Water use facilities Wells used by facilities permitted to withdraw >25,000 gallons per day, locational accuracy is +/-20m to 1150 m. Created from 7/2005 data. |
| X | 0 | Municipal wells and intakes Locational accuracy 220 m., last updated 8/96. |
| X | 0 | Ag drainage wells Locational accuracy 100 m., last updated 4/98. |

Well Search Detail

Subject: XY UTM Coordinates: 498712/4815291
 Search Radius (mi): 1

IGS Well Database

| Map ID | Well No. | Location | Accuracy | Dist. From Point | Well Depth | Construction/ Permit Date | Owner/ Permittees | Other Information |
|--------|----------|----------|----------|------------------|------------|---------------------------|-------------------|-------------------|
|--------|----------|----------|----------|------------------|------------|---------------------------|-------------------|-------------------|

No records found from this data source

Public Wells

| Map ID | Well No. | Location | Accuracy | Dist. From Point | Well Depth | Construction/ Permit Date | Owner/ Permittees | Other Information |
|--------|----------|----------|----------|------------------|------------|---------------------------|-------------------|-------------------|
|--------|----------|----------|----------|------------------|------------|---------------------------|-------------------|-------------------|

No records found from this data source

SDWIS public wells

| Map ID | Well No. | Location | Accuracy | Dist. From Point | Well Depth | Construction/ Permit Date | Owner/ Permittees | Other Information |
|--------|----------|----------|----------|------------------|------------|---------------------------|-------------------|-------------------|
|--------|----------|----------|----------|------------------|------------|---------------------------|-------------------|-------------------|

No records found from this data source

Private Well Tracking System

| Map ID | Well No. | Location | Accuracy | Dist. From Point | Well Depth | Construction/ Permit Date | Owner/ Permittees | Other Information |
|--------|----------|----------|----------|------------------|------------|---------------------------|-------------------|-------------------|
|--------|----------|----------|----------|------------------|------------|---------------------------|-------------------|-------------------|

No records found from this data source

Wells Registered For Testing

| Map ID | Well No. | Location | Accuracy | Dist. From Point | Well Depth | Construction/ Permit Date | Owner/ Permittees | Other Information |
|--------|----------|----------------------------------|-----------------|------------------|------------|---------------------------|-------------------|---|
| 57769 | 67511 | T100N, R19W, Sec. 12, SE, SW, NW | Calc. +/- 285m. | 1316 (m) | unkn | 1950 | Davis, Kevin | Drilling method: Drilled; Well depth is uncertain |
| 58757 | 76087 | T100N, R18W, Sec. 8, NW, NW, NE | Calc. +/- 285m. | 1352 (m) | 17 | 1964 | Greibrok, John | Drilling method: Drilled; Estimated well depth |
| 58060 | 80663 | T100N, R18W, Sec. 18, NW, NW, NW | Calc. +/- 285m. | (m) | 45 | unkn | Grundel, George | Drilling method: Drilled; Estimated well depth |

| | | | | | | | | | |
|--|-------|-------|---|--------------------|-------------|------|------|------------------------------|---|
| | 58963 | 12211 | T100N, R18W, Sec. 17, SW, NE, NE | Calc. +/- 285m. | (m) | 55 | unkn | Hertel, Gene | Drilling method: Drilled; Estimated well depth |
| | 58756 | 19877 | T100N, R18W, Sec. 8, SW, NW, SW | Calc. +/- 285m. | 1033 (m) | unkn | unkn | Olsen, Roger | Drilling method: Drilled; Well depth is uncertain |
| | 58933 | 19911 | T100N, R18W, Sec. 8, NW, SE, NW | Calc. +/- 285m. | 1527 (m) | 56 | unkn | Osgood, Jon | Drilling method: Drilled; |
| | 58935 | 76119 | T100N, R18W, Sec. 8, NW, SE, SW | Calc. +/- 285m. | 1523 (m) | 56 | 1972 | Osgood, Jon | Drilling method: Drilled; Known well depth |
| | 58577 | 19917 | T100N, R18W, Sec. 7, SE, SE, NE | Calc. +/- 285m. | (m) | 180 | 1978 | Thurnau, John | Drilling method: Drilled; |
| | 58776 | 12213 | T100N, R18W, Sec. 17, NW, SW, SE | Calc. +/- 285m. | 1403 (m) | 165 | 1979 | Thurnau, Rick | Drilling method: Drilled; Known well depth |
| | 58760 | 12214 | T100N, R18W, Sec. 8, NW, SW, SE | Calc. +/- 285m. | (m) | 40 | unkn | Wilder, Doyle | Drilling method: Drilled; Known well depth |
| | 58755 | 19854 | T100N, R18W, Sec. 8, NW, NW, SE | Calc. +/- 285m. | 1343 (m) | 60 | 1966 | Wilder, Doyle | Drilling method: Drilled; |
| | 58754 | 76001 | T100N, R18W, Sec. 8, NW, NW, SW | Calc. +/- 285m. | 1342 (m) | unkn | unkn | Wilder, Doyle/ Marilyn | Drilling method: Drilled; Well depth is uncertain |
| | 58565 | 12215 | T100N, R18W, Sec. 7, NE, SE, SW | Calc. +/- 285m. | 814 (m) | 35 | 1982 | Wilder, Steve | Drilling method: Sandpoint; Estimated well depth |
| | 58402 | 19852 | T100N, R18W, Sec. 7, NE, SW, NW | Calc. +/- 285m. | 577 (m) | 35 | 1982 | Wilder, Steve | Drilling method: Drilled; |
| | 58408 | 52366 | T100N, R18W, Sec. 7, NE, SW, SE | Calc. +/- 285m. | 569 (m) | 35 | 1982 | Wilder, Steve/May | Drilling method: Drilled; Known well depth |

Permitted Private Wells

| Map ID | Well No. | Location | Accuracy | Dist. From Point | Well Depth | Construction/ Permit Date | Owner/ Permittees | Other Information |
|-----------|-------------|----------|----------|------------------------|---------------|------------------------------|----------------------|----------------------|
|-----------|-------------|----------|----------|------------------------|---------------|------------------------------|----------------------|----------------------|

| | | | | | | | | |
|-------|-------|---------------------------------------|--------------------|-------------|-----|-----------|--------------------|---------------------------|
| 58812 | 28238 | T100N, R18W, Sec. 8, SW, NW, NE | Calc. +/- 140m. | 1169 (m) | 182 | 4/02/2001 | Marsolek, James | Primary use: household |
|-------|-------|---------------------------------------|--------------------|-------------|-----|-----------|--------------------|---------------------------|

Abandoned Wells (plugged)

| Map ID | Well No. | Location | Accuracy | Dist. From Point | Well Depth | Construction/ Permit Date | Owner/ Permittees | Other Information |
|--------|----------|--|--------------------|------------------|------------|---------------------------|-------------------|--|
| 58034 | 46845 | T100N, R18W, Sec. 18, NW, NW, SW | Calc. +/- 140m. | 886 (m) | 25 | n.a. | Grundel, Jerry | Well plugged: 4/26/2001; Well type: < 18" dia. |

Water Use Facilities

| Map ID | Well No. | Location | Accuracy | Dist. From Point | Well Depth | Construction/ Permit Date | Owner/ Permittees | Other Information |
|--|----------|----------|----------|------------------|------------|---------------------------|-------------------|-------------------|
| No records found from this data source | | | | | | | | |

Municipal Wells And Intakes

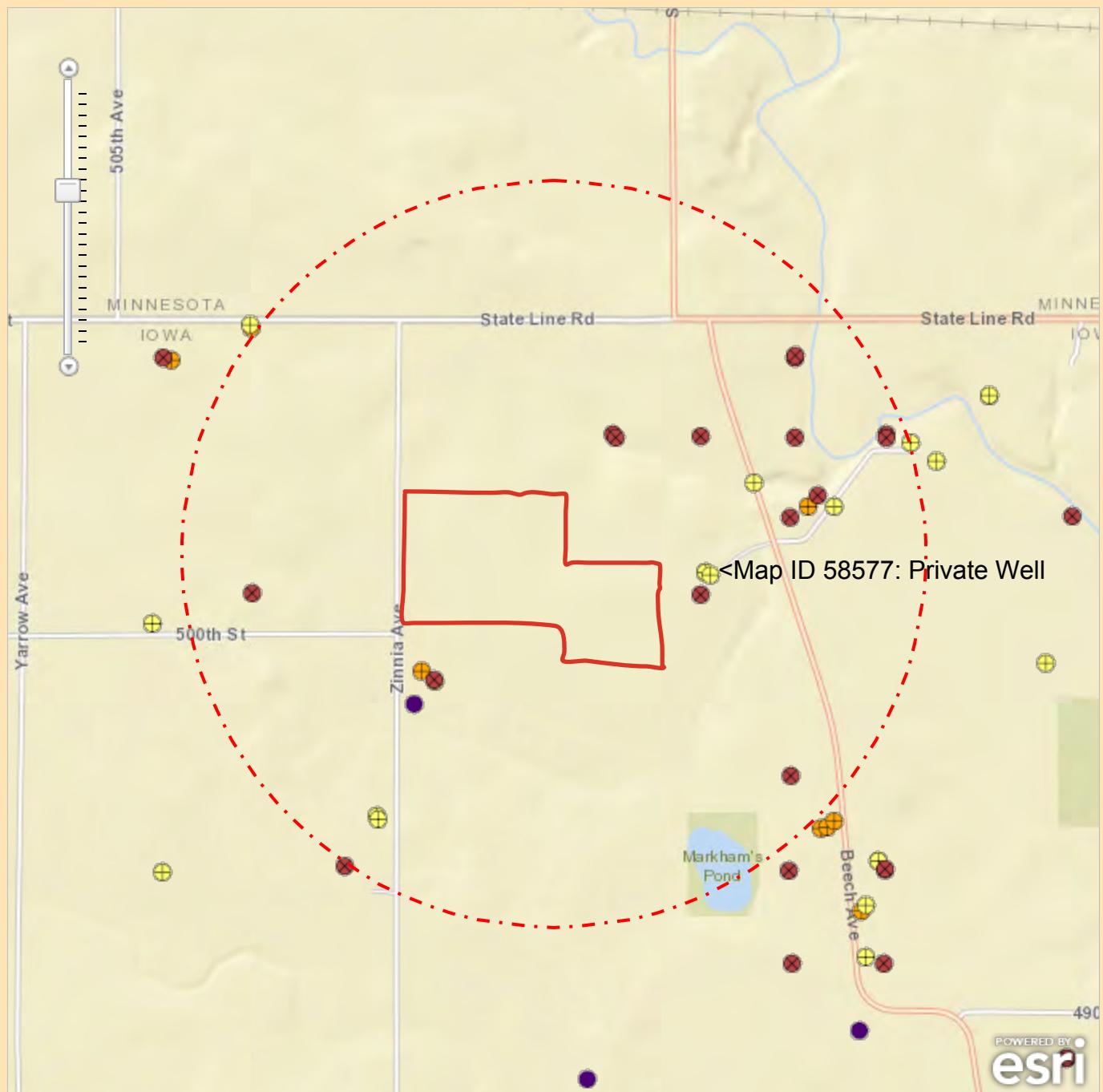
| Map ID | Well No. | Location | Accuracy | Dist. From Point | Well Depth | Construction/ Permit Date | Owner/ Permittees | Other Information |
|--|----------|----------|----------|------------------|------------|---------------------------|-------------------|-------------------|
| No records found from this data source | | | | | | | | |

Ag Drainage Wells

| Map ID | Well No. | Location | Accuracy | Dist. From Point | Well Depth | Construction/ Permit Date | Owner/ Permittees | Other Information |
|--|----------|----------|----------|------------------|------------|---------------------------|-------------------|-------------------|
| No records found from this data source | | | | | | | | |

Well Search Buffered Map

Subject: XY UTM Coordinates: 498712/4815291
Search Radius (mi): 1



Map Notes:

- UST
- ★ LUST
- ✳ Wells

Please refer to the Accuracy column in Well Search Detail.

Since multiple points can be at the same spot (as those located to the center of a quarter section), points were randomly dispersed within 10 meters around that spot so all points can be seen.



**ENVIRONMENTAL
LAND MANAGEMENT LLC**
waste byproduct landspreading specialists

Site Name: Pederson Howard 9



 **Unsuitable for Land Application**

Jeff Pederson Phone: (507)440-2703 Spreadable Acres: 159 Deliverable Tons: 1270

I certify I have followed all stockpiling and spreading rules provided by ELM.

Signature _____ Date _____

Soil Map—Mitchell County, Iowa



Natural Resources
Conservation Service

Web Soil Survey
National Cooperative Soil Survey

1/27/2026
Page 1 of 3

Map Unit Legend

| Map Unit Symbol | Map Unit Name | Acres in AOI | Percent of AOI |
|------------------------------------|--|--------------|----------------|
| 84 | Clyde silty clay loam, 0 to 3 percent slopes | 22.6 | 14.9% |
| 175B | Dickinson fine sandy loam, 2 to 5 percent slopes | 17.5 | 11.6% |
| 177 | Saude loam, 0 to 2 percent slopes | 0.6 | 0.4% |
| 198B | Floyd loam, 1 to 4 percent slopes | 21.4 | 14.2% |
| 221 | Klossner muck, 1 to 4 percent slopes | 0.2 | 0.1% |
| 235 | Coland-Turlin complex, 0 to 2 percent slopes | 0.4 | 0.3% |
| 284 | Flagler sandy loam, 0 to 2 percent slopes | 1.7 | 1.2% |
| 303B | Pinicon loam, 1 to 4 percent slopes | 0.2 | 0.1% |
| 407B | Schley silt loam, 1 to 4 percent slopes | 46.0 | 30.4% |
| 482B | Racine loam, 2 to 5 percent slopes | 6.6 | 4.4% |
| 482C | Racine silt loam, 5 to 9 percent slopes | 0.1 | 0.1% |
| 626 | Hayfield loam, 0 to 2 percent slopes, rarely flooded | 8.3 | 5.5% |
| 777B | Wapsie loam, 2 to 5 percent slopes | 4.2 | 2.8% |
| 782B | Donnan silt loam, 2 to 5 percent slopes | 14.5 | 9.6% |
| 1152 | Marshan clay loam, 0 to 2 percent slopes, rarely flooded | 4.1 | 2.7% |
| 1226 | Lawler loam, 0 to 2 percent slopes, rarely flooded | 2.6 | 1.7% |
| C315 | Alluvial land, channeled | 0.2 | 0.1% |
| Totals for Area of Interest | | 151.1 | 100.0% |

T Factor

| Map unit symbol | Map unit name | Rating (tons per acre per year) | Acres in AOI | Percent of AOI |
|------------------------------------|--|---------------------------------|--------------|----------------|
| 84 | Clyde silty clay loam, 0 to 3 percent slopes | 5 | 22.6 | 14.9% |
| 175B | Dickinson fine sandy loam, 2 to 5 percent slopes | 3 | 17.5 | 11.6% |
| 177 | Saude loam, 0 to 2 percent slopes | 3 | 0.6 | 0.4% |
| 198B | Floyd loam, 1 to 4 percent slopes | 5 | 21.4 | 14.2% |
| 221 | Klossner muck, 1 to 4 percent slopes | 1 | 0.2 | 0.1% |
| 235 | Coland-Turlin complex, 0 to 2 percent slopes | 5 | 0.4 | 0.3% |
| 284 | Flagler sandy loam, 0 to 2 percent slopes | 3 | 1.7 | 1.2% |
| 303B | Pinicon loam, 1 to 4 percent slopes | 5 | 0.2 | 0.1% |
| 407B | Schley silt loam, 1 to 4 percent slopes | 5 | 46.0 | 30.4% |
| 482B | Racine loam, 2 to 5 percent slopes | 5 | 6.6 | 4.4% |
| 482C | Racine silt loam, 5 to 9 percent slopes | 5 | 0.1 | 0.1% |
| 626 | Hayfield loam, 0 to 2 percent slopes, rarely flooded | 3 | 8.3 | 5.5% |
| 777B | Wapsie loam, 2 to 5 percent slopes | 3 | 4.2 | 2.8% |
| 782B | Donnan silt loam, 2 to 5 percent slopes | 3 | 14.5 | 9.6% |
| 1152 | Marshan clay loam, 0 to 2 percent slopes, rarely flooded | 3 | 4.1 | 2.7% |
| 1226 | Lawler loam, 0 to 2 percent slopes, rarely flooded | 3 | 2.6 | 1.7% |
| C315 | Alluvial land, channeled | 5 | 0.2 | 0.1% |
| Totals for Area of Interest | | | 151.1 | 100.0% |

Depth to Water Table

| Map unit symbol | Map unit name | Rating (centimeters) | Acres in AOI | Percent of AOI |
|------------------------------------|--|----------------------|--------------|----------------|
| 84 | Clyde silty clay loam, 0 to 3 percent slopes | 0 | 22.6 | 14.9% |
| 175B | Dickinson fine sandy loam, 2 to 5 percent slopes | >200 | 17.5 | 11.6% |
| 177 | Saude loam, 0 to 2 percent slopes | >200 | 0.6 | 0.4% |
| 198B | Floyd loam, 1 to 4 percent slopes | 30 | 21.4 | 14.2% |
| 221 | Klossner muck, 1 to 4 percent slopes | 0 | 0.2 | 0.1% |
| 235 | Coland-Turlin complex, 0 to 2 percent slopes | 0 | 0.4 | 0.3% |
| 284 | Flagler sandy loam, 0 to 2 percent slopes | >200 | 1.7 | 1.2% |
| 303B | Pinicon loam, 1 to 4 percent slopes | 30 | 0.2 | 0.1% |
| 407B | Schley silt loam, 1 to 4 percent slopes | 30 | 46.0 | 30.4% |
| 482B | Racine loam, 2 to 5 percent slopes | >200 | 6.6 | 4.4% |
| 482C | Racine silt loam, 5 to 9 percent slopes | >200 | 0.1 | 0.1% |
| 626 | Hayfield loam, 0 to 2 percent slopes, rarely flooded | 30 | 8.3 | 5.5% |
| 777B | Wapsie loam, 2 to 5 percent slopes | >200 | 4.2 | 2.8% |
| 782B | Donnan silt loam, 2 to 5 percent slopes | 30 | 14.5 | 9.6% |
| 1152 | Marshan clay loam, 0 to 2 percent slopes, rarely flooded | 0 | 4.1 | 2.7% |
| 1226 | Lawler loam, 0 to 2 percent slopes, rarely flooded | 30 | 2.6 | 1.7% |
| C315 | Alluvial land, channeled | 122 | 0.2 | 0.1% |
| Totals for Area of Interest | | | 151.1 | 100.0% |

Having issues? A prototype of a new version of Facility Explorer is available at <https://facilityexplorer.iowadnr.gov/FacilityExplorer/WellSearch.aspx?...>

X

[FacilityExplorer4/](#)

Well Search



[Print](#) [Help](#)

Well Search Report Site: Pederson Howard 9

| Included in search | No. of wells | Database |
|--------------------|--------------|--|
| X | 0 | IGS well database General well database maintained by IGS, location accuracy varies 3,730 to 25 ft., last updated 8/2005. |
| X | 0 | Public wells Municipal and nonmunicipal public well databases maintained by IGS, location varies 3,730 to 25 ft., under development. |
| X | 0 | SDWIS public wells Public well database developed from the Safe Drinking Water Information System database maintained by IDNR, estimated locational accuracy varies from 15m. to 3300m. Created from 5/2005 data. |
| X | 0 | Private well tracking system IDNR database management system for Grants-to-counties-covered wells. Locational accuracy unknown, assumed to be +/- 17 m., Last update 7/2005. |
| X | 7 | Wells registered for testing Wells tested under Grant-to-Counties program. Locational accuracy varies 1150 to 150 m.; Last update 9/2001, no future updates planned. |
| X | 0 | Permitted private wells Wells permitted under Grant-to-Counties program. Locational accuracy varies 1150 to 150 m.; Last update 9/2001, no future updates planned. |
| X | 1 | Registered abandoned wells Wells abandoned under Grant-to-Counties program. Locational accuracy varies 1150 to 150 m.; Last update 9/2001, no future updates planned. |
| X | 0 | Water use facilities Wells used by facilities permitted to withdraw >25,000 gallons per day, locational accuracy is +/-20m to 1150 m. Created from 7/2005 data. |
| X | 0 | Municipal wells and intakes Locational accuracy 220 m., last updated 8/96. |
| X | 0 | Ag drainage wells Locational accuracy 100 m., last updated 4/98. |

Well Search Detail

Subject: XY UTM Coordinates: 501564/4815979
 Search Radius (mi): 1

IGS Well Database

| Map ID | Well No. | Location | Accuracy | Dist. From Point | Well Depth | Construction/ Permit Date | Owner/ Permittees | Other Information |
|--------|----------|----------|----------|------------------|------------|---------------------------|-------------------|-------------------|
|--------|----------|----------|----------|------------------|------------|---------------------------|-------------------|-------------------|

No records found from this data source

Public Wells

| Map ID | Well No. | Location | Accuracy | Dist. From Point | Well Depth | Construction/ Permit Date | Owner/ Permittees | Other Information |
|--------|----------|----------|----------|------------------|------------|---------------------------|-------------------|-------------------|
|--------|----------|----------|----------|------------------|------------|---------------------------|-------------------|-------------------|

No records found from this data source

SDWIS public wells

| Map ID | Well No. | Location | Accuracy | Dist. From Point | Well Depth | Construction/ Permit Date | Owner/ Permittees | Other Information |
|--------|----------|----------|----------|------------------|------------|---------------------------|-------------------|-------------------|
|--------|----------|----------|----------|------------------|------------|---------------------------|-------------------|-------------------|

No records found from this data source

Private Well Tracking System

| Map ID | Well No. | Location | Accuracy | Dist. From Point | Well Depth | Construction/ Permit Date | Owner/ Permittees | Other Information |
|--------|----------|----------|----------|------------------|------------|---------------------------|-------------------|-------------------|
|--------|----------|----------|----------|------------------|------------|---------------------------|-------------------|-------------------|

No records found from this data source

Wells Registered For Testing

| Map ID | Well No. | Location | Accuracy | Dist. From Point | Well Depth | Construction/ Permit Date | Owner/ Permittees | Other Information |
|--------|----------|---------------------------------|-----------------|------------------|------------|---------------------------|-------------------|--|
| 60092 | 52362 | T100N, R18W, Sec. 9, SE, SE, SE | Calc. +/- 285m. | 1340 (m) | 5 | unkn | Corson, Duane | Drilling method: Drilled; Estimated well depth |
| 60082 | 76104 | T100N, R18W, Sec. 9, NE, SE, SW | Calc. +/- 285m. | 1015 (m) | 23 | 1980 | Follmath, Joe | Drilling method: Drilled; Estimated well depth |
| 60083 | 76103 | T100N, R18W, Sec. 9, NE, SE, NW | Calc. +/- 285m. | 1015 (m) | 23 | 1980 | Follmath, Joe | Drilling method: Drilled; Estimated well depth |
| 58933 | 19911 | T100N, R18W, Sec. 8, NW, SE, NW | Calc. +/- 285m. | 1425 (m) | 56 | unkn | Osgood, Jon | Drilling method: Drilled; |

| | | | | | | | | |
|-------|-------|----------------------------------|-----------------|----------|-----|------|-----------------|--|
| 58935 | 76119 | T100N, R18W, Sec. 8, NW, SE, SW | Calc. +/- 285m. | 1426 (m) | 56 | 1972 | Osgood, Jon | Drilling method: Drilled; Known well depth |
| 59344 | 19895 | T100N, R18W, Sec. 8, SE, NE, NE | Calc. +/- 285m. | 805 (m) | 264 | 1993 | Osgood, Robert | Drilling method: Drilled; |
| 60262 | 76000 | T100N, R18W, Sec. 10, SW, SW, SW | Calc. +/- 285m. | (m) | 60 | unkn | Williams, Keith | Drilling method: Drilled; Known well depth |

Permitted Private Wells

| Map ID | Well No. | Location | Accuracy | Dist. From Point | Well Depth | Construction/ Permit Date | Owner/ Permittees | Other Information |
|--|----------|----------|----------|------------------|------------|---------------------------|-------------------|-------------------|
| No records found from this data source | | | | | | | | |

Abandoned Wells (plugged)

| Map ID | Well No. | Location | Accuracy | Dist. From Point | Well Depth | Construction/ Permit Date | Owner/ Permittees | Other Information |
|--------|----------|---------------------------------|-----------------|------------------|------------|---------------------------|-------------------|---|
| 60135 | 18931 | T100N, R18W, Sec. 9, SE, SE, SE | Calc. +/- 140m. | 1467 (m) | 105 | n.a. | Carson, Duane | Well plugged: 7/6/1995; Well type: not reported |

Water Use Facilities

| Map ID | Well No. | Location | Accuracy | Dist. From Point | Well Depth | Construction/ Permit Date | Owner/ Permittees | Other Information |
|--|----------|----------|----------|------------------|------------|---------------------------|-------------------|-------------------|
| No records found from this data source | | | | | | | | |

Municipal Wells And Intakes

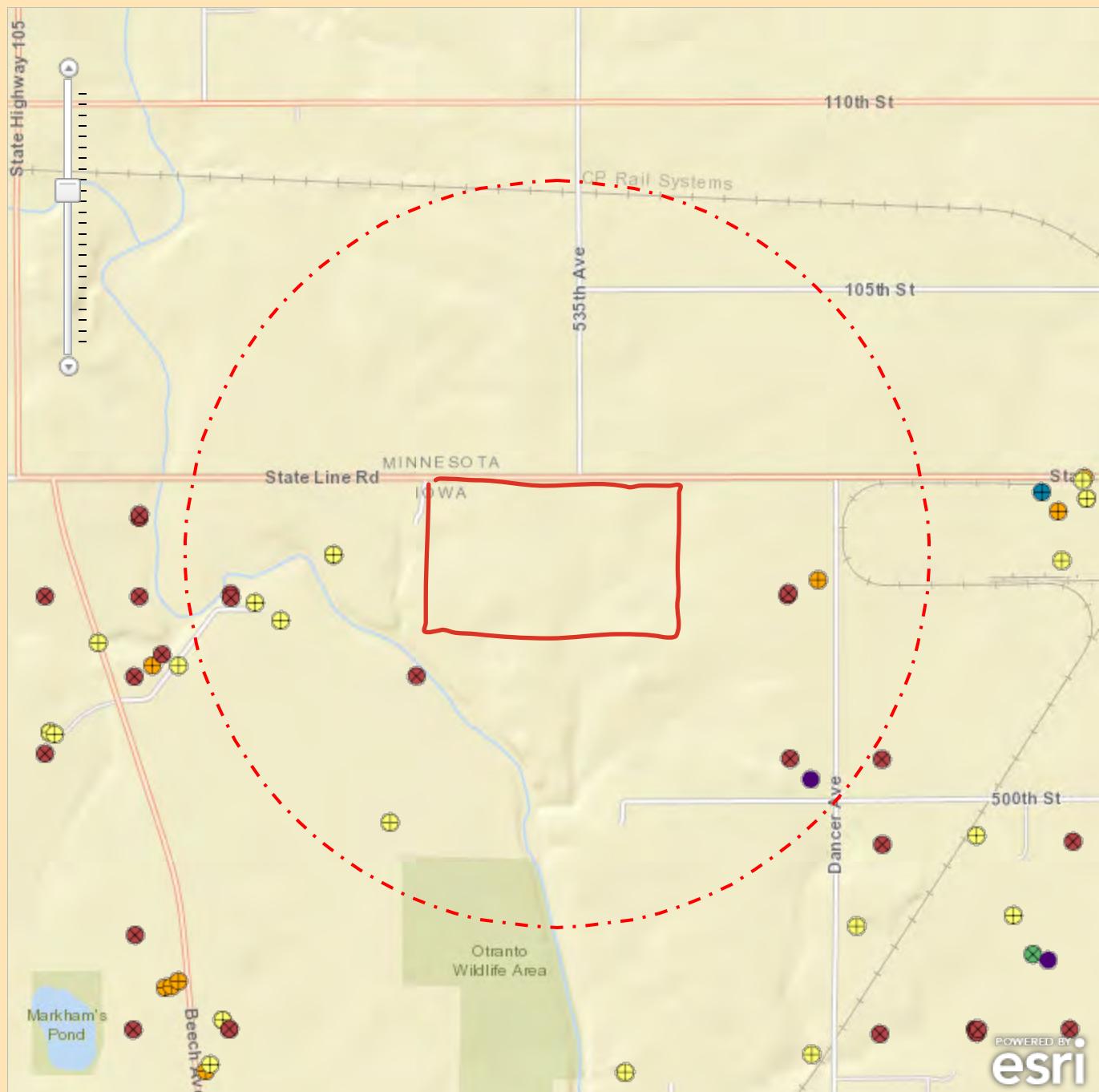
| Map ID | Well No. | Location | Accuracy | Dist. From Point | Well Depth | Construction/ Permit Date | Owner/ Permittees | Other Information |
|--|----------|----------|----------|------------------|------------|---------------------------|-------------------|-------------------|
| No records found from this data source | | | | | | | | |

Ag Drainage Wells

| Map ID | Well No. | Location | Accuracy | Dist. From Point | Well Depth | Construction/ Permit Date | Owner/ Permittees | Other Information |
|--|----------|----------|----------|------------------|------------|---------------------------|-------------------|-------------------|
| No records found from this data source | | | | | | | | |

Well Search Buffered Map

Subject: XY UTM Coordinates: 501564/4815979
Search Radius (mi): 1



Map Notes:

- UST
- ★ LUST
- * Wells

Please refer to the Accuracy column in Well Search Detail.

Since multiple points can be at the same spot (as those located to the center of a quarter section), points were randomly dispersed within 10 meters around that spot so all points can be seen.



**ENVIRONMENTAL
LAND MANAGEMENT LLC**
waste byproduct landspreading specialists

Site Name: Pederson Howard 17



 Unsuitable for Land Application

Jeff Pederson Phone: (507)440-2703 Spreadable Acres: 115 Deliverable Tons: 917

I certify I have followed all stockpiling and spreading rules provided by ELM.

Signature _____ Date _____

Soil Map—Mitchell County, Iowa



Map Scale: 1:6,740 if printed on A landscape (11" x 8.5") sheet.

0 50 100 200 300 Meters



0 300 600 1200 1800 Feet

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 15N WGS84



Natural Resources
Conservation Service

Web Soil Survey
National Cooperative Soil Survey

1/27/2026
Page 1 of 3

Map Unit Legend

| Map Unit Symbol | Map Unit Name | Acres in AOI | Percent of AOI |
|------------------------------------|--|--------------|----------------|
| 83 | Kenyon loam, 0 to 2 percent slopes | 6.1 | 5.2% |
| 83B | Kenyon loam, 2 to 5 percent slopes | 4.2 | 3.6% |
| 84 | Clyde silty clay loam, 0 to 3 percent slopes | 14.4 | 12.3% |
| 178 | Waukee silt loam, 0 to 2 percent slopes | 3.7 | 3.2% |
| 184 | Klinger silty clay loam, 1 to 4 percent slopes | 3.5 | 2.9% |
| 198B | Floyd loam, 1 to 4 percent slopes | 30.7 | 26.1% |
| 221 | Klossner muck, 1 to 4 percent slopes | 2.7 | 2.3% |
| 377 | Dinsdale silty clay loam, 0 to 2 percent slopes | 0.0 | 0.0% |
| 394B | Ostrander loam, 2 to 5 percent slopes | 3.7 | 3.1% |
| 407B | Schley silt loam, 1 to 4 percent slopes | 22.0 | 18.8% |
| 482 | Racine silt loam, 0 to 2 percent slopes | 3.4 | 2.9% |
| 482B | Racine loam, 2 to 5 percent slopes | 7.9 | 6.7% |
| 761 | Franklin silt loam, 1 to 3 percent slopes | 0.1 | 0.1% |
| 782 | Donnan silt loam, 0 to 2 percent slopes | 7.8 | 6.7% |
| 1152 | Marshan clay loam, 0 to 2 percent slopes, rarely flooded | 0.8 | 0.7% |
| 1226 | Lawler loam, 0 to 2 percent slopes, rarely flooded | 6.4 | 5.4% |
| Totals for Area of Interest | | 117.4 | 100.0% |

T Factor

| Map unit symbol | Map unit name | Rating (tons per acre per year) | Acres in AOI | Percent of AOI |
|------------------------------------|--|---------------------------------|--------------|----------------|
| 83 | Kenyon loam, 0 to 2 percent slopes | 5 | 6.1 | 5.2% |
| 83B | Kenyon loam, 2 to 5 percent slopes | 5 | 4.2 | 3.6% |
| 84 | Clyde silty clay loam, 0 to 3 percent slopes | 5 | 14.4 | 12.3% |
| 178 | Waukeee silt loam, 0 to 2 percent slopes | 3 | 3.7 | 3.2% |
| 184 | Klinger silty clay loam, 1 to 4 percent slopes | 5 | 3.5 | 2.9% |
| 198B | Floyd loam, 1 to 4 percent slopes | 5 | 30.7 | 26.1% |
| 221 | Klossner muck, 1 to 4 percent slopes | 1 | 2.7 | 2.3% |
| 377 | Dinsdale silty clay loam, 0 to 2 percent slopes | 5 | 0.0 | 0.0% |
| 394B | Ostrander loam, 2 to 5 percent slopes | 5 | 3.7 | 3.1% |
| 407B | Schley silt loam, 1 to 4 percent slopes | 5 | 22.0 | 18.8% |
| 482 | Racine silt loam, 0 to 2 percent slopes | 5 | 3.4 | 2.9% |
| 482B | Racine loam, 2 to 5 percent slopes | 5 | 7.9 | 6.7% |
| 761 | Franklin silt loam, 1 to 3 percent slopes | 5 | 0.1 | 0.1% |
| 782 | Donnan silt loam, 0 to 2 percent slopes | 3 | 7.8 | 6.7% |
| 1152 | Marshan clay loam, 0 to 2 percent slopes, rarely flooded | 3 | 0.8 | 0.7% |
| 1226 | Lawler loam, 0 to 2 percent slopes, rarely flooded | 3 | 6.4 | 5.4% |
| Totals for Area of Interest | | | 117.4 | 100.0% |

Description

The T factor is an estimate of the maximum average annual rate of soil erosion by wind and/or water that can occur without affecting crop productivity over a sustained period. The rate is in tons per acre per year.



Depth to Water Table

| Map unit symbol | Map unit name | Rating (centimeters) | Acres in AOI | Percent of AOI |
|------------------------------------|--|----------------------|--------------|----------------|
| 83 | Kenyon loam, 0 to 2 percent slopes | 122 | 6.1 | 5.2% |
| 83B | Kenyon loam, 2 to 5 percent slopes | 122 | 4.2 | 3.6% |
| 84 | Clyde silty clay loam, 0 to 3 percent slopes | 0 | 14.4 | 12.3% |
| 178 | Waukee silt loam, 0 to 2 percent slopes | >200 | 3.7 | 3.2% |
| 184 | Klinger silty clay loam, 1 to 4 percent slopes | 30 | 3.5 | 2.9% |
| 198B | Floyd loam, 1 to 4 percent slopes | 30 | 30.7 | 26.1% |
| 221 | Klossner muck, 1 to 4 percent slopes | 0 | 2.7 | 2.3% |
| 377 | Dinsdale silty clay loam, 0 to 2 percent slopes | 122 | 0.0 | 0.0% |
| 394B | Ostrander loam, 2 to 5 percent slopes | >200 | 3.7 | 3.1% |
| 407B | Schley silt loam, 1 to 4 percent slopes | 30 | 22.0 | 18.8% |
| 482 | Racine silt loam, 0 to 2 percent slopes | >200 | 3.4 | 2.9% |
| 482B | Racine loam, 2 to 5 percent slopes | >200 | 7.9 | 6.7% |
| 761 | Franklin silt loam, 1 to 3 percent slopes | 30 | 0.1 | 0.1% |
| 782 | Donnan silt loam, 0 to 2 percent slopes | 30 | 7.8 | 6.7% |
| 1152 | Marshan clay loam, 0 to 2 percent slopes, rarely flooded | 0 | 0.8 | 0.7% |
| 1226 | Lawler loam, 0 to 2 percent slopes, rarely flooded | 30 | 6.4 | 5.4% |
| Totals for Area of Interest | | | 117.4 | 100.0% |

Having issues? A prototype of a new version of Facility Explorer is available at <https://facilityexplorer.iowadnr.gov/FacilityExplorer/WellSearch.aspx?...>

X

[FacilityExplorer4/](#)

Well Search



[Print](#) [Help](#)

Well Search Report

Site: Pederson Howard 17

| Included in search | No. of wells | Database |
|--------------------|--------------|--|
| X | 2 | IGS well database General well database maintained by IGS, location accuracy varies 3,730 to 25 ft., last updated 8/2005. |
| X | 0 | Public wells Municipal and nonmunicipal public well databases maintained by IGS, location varies 3,730 to 25 ft., under development. |
| X | 0 | SDWIS public wells Public well database developed from the Safe Drinking Water Information System database maintained by IDNR, estimated locational accuracy varies from 15m. to 3300m. Created from 5/2005 data. |
| X | 0 | Private well tracking system IDNR database management system for Grants-to-counties-covered wells. Locational accuracy unknown, assumed to be +/- 17 m., Last update 7/2005. |
| X | 29 | Wells registered for testing Wells tested under Grant-to-Counties program. Locational accuracy varies 1150 to 150 m.; Last update 9/2001, no future updates planned. |
| X | 4 | Permitted private wells Wells permitted under Grant-to-Counties program. Locational accuracy varies 1150 to 150 m.; Last update 9/2001, no future updates planned. |
| X | 2 | Registered abandoned wells Wells abandoned under Grant-to-Counties program. Locational accuracy varies 1150 to 150 m.; Last update 9/2001, no future updates planned. |
| X | 0 | Water use facilities Wells used by facilities permitted to withdraw >25,000 gallons per day, locational accuracy is +/-20m to 1150 m. Created from 7/2005 data. |
| X | 0 | Municipal wells and intakes Locational accuracy 220 m., last updated 8/96. |
| X | 0 | Ag drainage wells Locational accuracy 100 m., last updated 4/98. |

Well Search Detail

Subject: XY UTM Coordinates: 500732/4813712
 Search Radius (mi): 1

IGS Well Database

| Map ID | Well No. | Location | Accuracy | Dist. From Point | Well Depth | Construction/ Permit Date | Owner/ Permittees | Other Information |
|--------|------------------------------|---------------------------------------|---------------------------------|------------------|------------|---------------------------|--------------------|--|
| 197672 | <u>24448</u> | T100N, R18W, 21, NW NW NE NE | Maps/Air Photos +/- 20 m. | 954 (m) | 45 | 4/17/1976 | Clausen, Delmar | Bedrock Depth: 5 Well Type: Private |
| 178035 | <u>9240</u> | T100N, R18W, 20, NE SW SW NE | Calc. +/- 230 ft. | 1072 (m) | 72 | 1/19/1957 | Wells, Harold | Bedrock Depth: 15 Well Type: Private |

Public Wells

| Map ID | Well No. | Location | Accuracy | Dist. From Point | Well Depth | Construction/ Permit Date | Owner/ Permittees | Other Information |
|--|----------|----------|----------|------------------|------------|---------------------------|-------------------|-------------------|
| No records found from this data source | | | | | | | | |

SDWIS public wells

| Map ID | Well No. | Location | Accuracy | Dist. From Point | Well Depth | Construction/ Permit Date | Owner/ Permittees | Other Information |
|--|----------|----------|----------|------------------|------------|---------------------------|-------------------|-------------------|
| No records found from this data source | | | | | | | | |

Private Well Tracking System

| Map ID | Well No. | Location | Accuracy | Dist. From Point | Well Depth | Construction/ Permit Date | Owner/ Permittees | Other Information |
|--|----------|----------|----------|------------------|------------|---------------------------|-------------------|-------------------|
| No records found from this data source | | | | | | | | |

Wells Registered For Testing

| Map ID | Well No. | Location | Accuracy | Dist. From Point | Well Depth | Construction/ Permit Date | Owner/ Permittees | Other Information |
|--------|----------|---|---------------------|------------------|------------|---------------------------|---------------------|---|
| 59072 | 51305 | T100N, R18W, Sec. 20, SW, NE, NE | Calc. +/- 1135m. | 1257 (m) | unkn | unkn | Anderson, Russel | Drilling method: Drilled; Well depth is uncertain |

| | | | | | | | | | |
|--|-------|-------|---|---------------------|-------------|------|------|---------------------------|---|
| | 59374 | 19866 | T100N, R18W, Sec. 20, NE, NE, SW | Calc. +/- 285m. | 630 (m) | 50 | 1976 | Clausen, Del | Drilling method: Drilled; |
| | 59375 | 76123 | T100N, R18W, Sec. 20, NE, NE, SE | Calc. +/- 285m. | 627 (m) | 50 | 1976 | Clausen, Del | Drilling method: Drilled; Known well depth |
| | 59064 | 51400 | T100N, R18W, Sec. 20, SW, NE, NE | Calc. +/- 1135m. | 1266 (m) | 208 | 1989 | Cock, Geraldine | Drilling method: Drilled; Known well depth |
| | 59066 | 51401 | T100N, R18W, Sec. 20, SW, NE, NE | Calc. +/- 1135m. | 1262 (m) | 208 | 1989 | Cock, Geraldine | Drilling method: Drilled; Known well depth |
| | 59080 | 76097 | T100N, R18W, Sec. 20, SE, NW, NW | Calc. +/- 1135m. | 1262 (m) | unkn | 1974 | Cowell, Corine | Drilling method: Drilled; Well depth is uncertain |
| | 59081 | 51402 | T100N, R18W, Sec. 20, NE, SW, SW | Calc. +/- 1135m. | 1253 (m) | unkn | 1917 | Diedrich, John | Drilling method: Drilled; Well depth is uncertain |
| | 59068 | 51405 | T100N, R18W, Sec. 20, NW, SE, SE | Calc. +/- 1135m. | 1254 (m) | unkn | unkn | Feldt, Lany | Drilling method: Drilled; Well depth is uncertain |
| | 59397 | 76077 | T100N, R18W, Sec. 20, SE, NE, SW | Calc. +/- 285m. | 1421 (m) | unkn | 1980 | Ferguson, Bert | Drilling method: Unknown; Well depth is uncertain |
| | 59069 | 51407 | T100N, R18W, Sec. 20, SW, NE, NE | Calc. +/- 1135m. | 1258 (m) | unkn | unkn | Heimer, Keith | Drilling method: Drilled; Well depth is uncertain |
| | 59071 | 51406 | T100N, R18W, Sec. 20, NW, SE, SE | Calc. +/- 1135m. | 1251 (m) | unkn | unkn | Heimer, Keith | Drilling method: Drilled; Well depth is uncertain |
| | 58971 | 19919 | T100N, R18W, Sec. 17, SW, SE, SE | Calc. +/- 285m. | 619 (m) | unkn | unkn | Herdel, Gene And Cindy | Drilling method: Unknown; Well depth is uncertain |
| | 58962 | 80665 | T100N, R18W, Sec. 17, SW, NE, NE | Calc. +/- 285m. | 626 (m) | 90 | unkn | Hertel, Al | Drilling method: Drilled; Estimated well depth |

| | | | | | | | | | |
|--|-------|-------|---|---------------------|-------------|------|------|----------------------------|---|
| | 58788 | 12212 | T100N, R18W, Sec. 17, SW, SW, SE | Calc. +/- 285m. | 1004 (m) | unkn | unkn | Hertel, Cindy | Drilling method: Drilled; Well depth is uncertain |
| | 58963 | 12211 | T100N, R18W, Sec. 17, SW, NE, NE | Calc. +/- 285m. | 625 (m) | 55 | unkn | Hertel, Gene | Drilling method: Drilled; Estimated well depth |
| | 59082 | 76099 | T100N, R18W, Sec. 20, NE, SW, SW | Calc. +/- 1135m. | 1249 (m) | unkn | unkn | Hulshizer, Mike | Drilling method: Drilled; Well depth is uncertain |
| | 58610 | 12198 | T100N, R18W, Sec. 19, NE, SE, NE | Calc. +/- 285m. | (m) | 230 | 1980 | Hulshizer, Ronald | Drilling method: Drilled; Known well depth |
| | 59904 | 19962 | T100N, R18W, Sec. 16, SE, SW, NE | Calc. +/- 285m. | 1439 (m) | 85 | 1979 | Johnson, Leroy | Drilling method: Drilled; |
| | 59897 | 76118 | T100N, R18W, Sec. 16, SE, SW, SW | Calc. +/- 285m. | 1427 (m) | 70 | 1979 | Johnson, Leroy S | Drilling method: Drilled; Known well depth |
| | 59077 | 51399 | T100N, R18W, Sec. 20, NW, SE, SE | Calc. +/- 1135m. | 1249 (m) | 100 | unkn | Julien, Earl | Drilling method: Drilled; Estimated well depth |
| | 58975 | 76125 | T100N, R18W, Sec. 20, NW, SE, NW | Calc. +/- 285m. | 1159 (m) | 85 | 1958 | Koch, Dennis | Drilling method: Drilled; Known well depth |
| | 58988 | 20726 | T100N, R18W, Sec. 20, NW, SE, SE | Calc. +/- 285m. | 1158 (m) | 82 | unkn | Koch, Dennis | Drilling method: Drilled; |
| | 58617 | 19869 | T100N, R18W, Sec. 19, SE, NE, SE | Calc. +/- 285m. | (m) | 62 | unkn | Leidall, Terry & Marsha | Drilling method: Drilled; |
| | 59065 | 76098 | T100N, R18W, Sec. 20, NW, SE, SE | Calc. +/- 1135m. | 1251 (m) | 18 | 1985 | Michell, Joann | Drilling method: Drilled; Known well depth |
| | 59083 | 51409 | T100N, R18W, Sec. 20, SE, NW, NW | Calc. +/- 1135m. | 1256 (m) | unkn | unkn | Neuman, Darwin | Drilling method: Drilled; Well depth is uncertain |

| | | | | | | | | | |
|--|-------|-------|---|---------------------|-------------|------|------|-------------------|---|
| | 59075 | 51408 | T100N, R18W, Sec. 20, SW, NE, NE | Calc. +/- 1135m. | 1264 (m) | unkn | unkn | Neuman, Darwin | Drilling method: Drilled; Well depth is uncertain |
| | 59078 | 51397 | T100N, R18W, Sec. 20, NE, SW, SW | Calc. +/- 1135m. | 1253 (m) | unkn | unkn | Schaffer, Jeff | Drilling method: Drilled; Well depth is uncertain |
| | 58776 | 12213 | T100N, R18W, Sec. 17, NW, SW, SE | Calc. +/- 285m. | (m) | 165 | 1979 | Thurnau, Rick | Drilling method: Drilled; Known well depth |
| | 58777 | 76127 | T100N, R18W, Sec. 17, SW, NW, SW | Calc. +/- 285m. | 1024 (m) | 165 | 1979 | Thurnau, Rick | Drilling method: Drilled; Known well depth |

Permitted Private Wells

| Map ID | Well No. | Location | Accuracy | Dist. From Point | Well Depth | Construction/ Permit Date | Owner/ Permittees | Other Information |
|--------|----------|--|---------------------|------------------|------------|---------------------------|-------------------|--|
| 59534 | 2015 | T100N, R18W, Sec. 21, NW, NW, NW | Calc. +/- 140m. | 706 (m) | 150 | unkn | Shawver Well | Primary use: Domestic/ household |
| 59570 | 11065 | T100N, R18W, Sec. 21, NW, NW, NW | Calc. +/- 285m. | 844 (m) | 150 | 3/16/1993 | Unknown | Primary use: Domestic/ household |
| 59531 | 15230 | T100N, R18W, Sec. 21, NW, NW, NW | Calc. +/- 140m. | 707 (m) | 150 | 3/16/1993 | Unknown | Primary use: Domestic/ household |
| 59067 | 15240 | T100N, R18W, Sec. 20, SW, NE, NE | Calc. +/- 1135m. | 1262 (m) | 200 | unkn | Unknown | Primary use: Domestic/ household |

Abandoned Wells (plugged)

| Map ID | Well No. | Location | Accuracy | Dist. From Point | Well Depth | Construction/ Permit Date | Owner/ Permittees | Other Information |
|--------|----------|--|--------------------|------------------|------------|---------------------------|-----------------------|--|
| 59613 | 32178 | T100N, R18W, Sec. 16, SW, SW, SE | Calc. +/- 140m. | (m) | 30 | n.a. | Hugo, Guenther | Well plugged: 3/27/1998; Well type: < 18" dia. |
| 58922 | 1800 | T100N, R18W, Sec. 20, NW, NE, NW | Calc. +/- 140m. | 845 (m) | 22 | n.a. | Koch, R. Geraldine | Well plugged: 4/25/1990; Well type: unkn |

Water Use Facilities

| Map ID | Well No. | Location | Accuracy | Dist. From Point | Well Depth | Construction/ Permit Date | Owner/ Permittees | Other Information |
|--|----------|----------|----------|------------------|------------|---------------------------|-------------------|-------------------|
| No records found from this data source | | | | | | | | |

Municipal Wells And Intakes

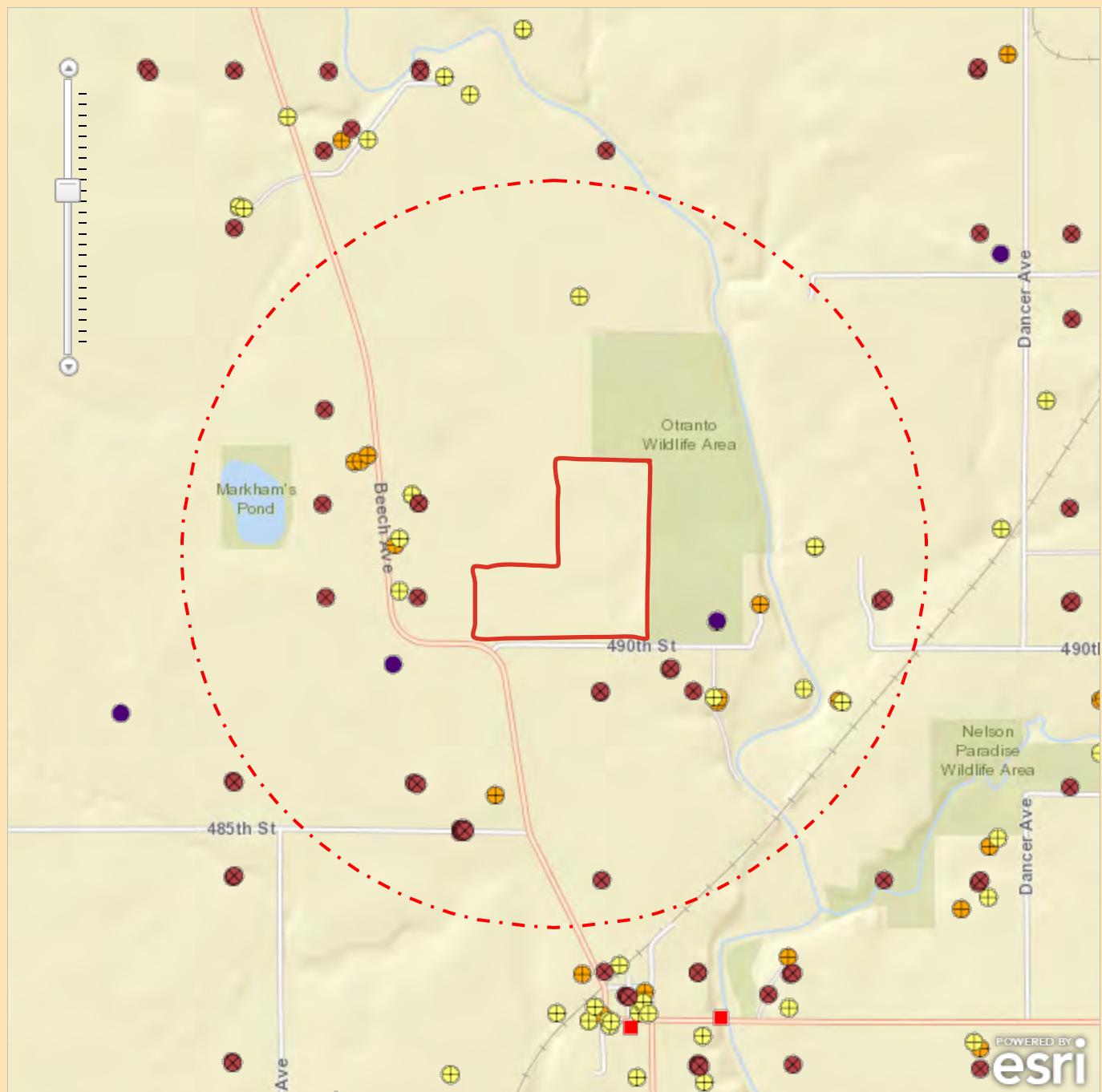
| Map ID | Well No. | Location | Accuracy | Dist. From Point | Well Depth | Construction/ Permit Date | Owner/ Permittees | Other Information |
|--|----------|----------|----------|------------------|------------|---------------------------|-------------------|-------------------|
| No records found from this data source | | | | | | | | |

Ag Drainage Wells

| Map ID | Well No. | Location | Accuracy | Dist. From Point | Well Depth | Construction/ Permit Date | Owner/ Permittees | Other Information |
|--|----------|----------|----------|------------------|------------|---------------------------|-------------------|-------------------|
| No records found from this data source | | | | | | | | |

Well Search Buffered Map

Subject: XY UTM Coordinates: 500732/4813712
Search Radius (mi): 1



Map Notes:

- UST
- ★ LUST
- ✿ Wells

Please refer to the Accuracy column in Well Search Detail.

Since multiple points can be at the same spot (as those located to the center of a quarter section), points were randomly dispersed within 10 meters around that spot so all points can be seen.



**ENVIRONMENTAL
LAND MANAGEMENT LLC**
waste byproduct landspreading specialists

Site Name: Pederson Nelson 14



 Unsuitable for Land Application

Jeff Pederson Phone: (507)440-2703 Spreadable Acres: 38 Deliverable Tons: 307

I certify I have followed all stockpiling and spreading rules provided by ELM.

Signature _____ Date _____

Soil Map—Mitchell County, Iowa



Natural Resources
Conservation Service

Web Soil Survey
National Cooperative Soil Survey

Map Unit Legend

| Map Unit Symbol | Map Unit Name | Acres in AOI | Percent of AOI |
|------------------------------------|--|--------------|----------------|
| 84 | Clyde silty clay loam, 0 to 3 percent slopes | 2.2 | 5.7% |
| 110B | Lamont fine sandy loam, 2 to 5 percent slopes | 0.4 | 0.9% |
| 175B | Dickinson fine sandy loam, 2 to 5 percent slopes | 5.1 | 13.0% |
| 407B | Schley silt loam, 1 to 4 percent slopes | 18.9 | 48.2% |
| 482 | Racine silt loam, 0 to 2 percent slopes | 0.1 | 0.3% |
| 482B | Racine loam, 2 to 5 percent slopes | 3.7 | 9.4% |
| 626 | Hayfield loam, 0 to 2 percent slopes, rarely flooded | 6.0 | 15.3% |
| 714B | Winneshiek loam, 20 to 30 inches to limestone, till plain, 2 to 5 percent slopes | 1.4 | 3.6% |
| 913B | Waucoma silt loam, till plain, 2 to 5 percent slopes | 1.4 | 3.6% |
| C235 | Coland-Turlin complex, channeled, 0 to 2 percent slopes | 0.0 | 0.0% |
| Totals for Area of Interest | | 39.1 | 100.0% |

T Factor

| Map unit symbol | Map unit name | Rating (tons per acre per year) | Acres in AOI | Percent of AOI |
|------------------------------------|---|---------------------------------|--------------|----------------|
| 84 | Clyde silty clay loam, 0 to 3 percent slopes | 5 | 2.2 | 5.7% |
| 110B | Lamont fine sandy loam, 2 to 5 percent slopes | 4 | 0.4 | 0.9% |
| 175B | Dickinson fine sandy loam, 2 to 5 percent slopes | 3 | 5.1 | 13.0% |
| 407B | Schley silt loam, 1 to 4 percent slopes | 5 | 18.9 | 48.2% |
| 482 | Racine silt loam, 0 to 2 percent slopes | 5 | 0.1 | 0.3% |
| 482B | Racine loam, 2 to 5 percent slopes | 5 | 3.7 | 9.4% |
| 626 | Hayfield loam, 0 to 2 percent slopes, rarely flooded | 3 | 6.0 | 15.3% |
| 714B | Winnesiek loam, 20 to 30 inches to limestone, till plain, 2 to 5 percent slopes | 2 | 1.4 | 3.6% |
| 913B | Waucoma silt loam, till plain, 2 to 5 percent slopes | 3 | 1.4 | 3.6% |
| C235 | Coland-Turlin complex, channeled, 0 to 2 percent slopes | 5 | 0.0 | 0.0% |
| Totals for Area of Interest | | | 39.1 | 100.0% |

Description

The T factor is an estimate of the maximum average annual rate of soil erosion by wind and/or water that can occur without affecting crop productivity over a sustained period. The rate is in tons per acre per year.

Rating Options

Units of Measure: tons per acre per year

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Lower

Interpret Nulls as Zero: No



Depth to Water Table

| Map unit symbol | Map unit name | Rating (centimeters) | Acres in AOI | Percent of AOI |
|------------------------------------|--|----------------------|--------------|----------------|
| 84 | Clyde silty clay loam, 0 to 3 percent slopes | 0 | 2.2 | 5.7% |
| 110B | Lamont fine sandy loam, 2 to 5 percent slopes | >200 | 0.4 | 0.9% |
| 175B | Dickinson fine sandy loam, 2 to 5 percent slopes | >200 | 5.1 | 13.0% |
| 407B | Schley silt loam, 1 to 4 percent slopes | 30 | 18.9 | 48.2% |
| 482 | Racine silt loam, 0 to 2 percent slopes | >200 | 0.1 | 0.3% |
| 482B | Racine loam, 2 to 5 percent slopes | >200 | 3.7 | 9.4% |
| 626 | Hayfield loam, 0 to 2 percent slopes, rarely flooded | 30 | 6.0 | 15.3% |
| 714B | Winneshiek loam, 20 to 30 inches to limestone, till plain, 2 to 5 percent slopes | >200 | 1.4 | 3.6% |
| 913B | Waucoma silt loam, till plain, 2 to 5 percent slopes | >200 | 1.4 | 3.6% |
| C235 | Coland-Turlin complex, channeled, 0 to 2 percent slopes | 0 | 0.0 | 0.0% |
| Totals for Area of Interest | | | 39.1 | 100.0% |

Description

"Water table" refers to a saturated zone in the soil. It occurs during specified months. Estimates of the upper limit are based mainly on observations of the water table at selected sites and on evidence of a saturated zone, namely grayish colors (redoximorphic features) in the soil. A saturated zone that lasts for less than a month is not considered a water table.

This attribute is actually recorded as three separate values in the database. A low value and a high value indicate the range of this attribute for the soil component. A "representative" value indicates the expected value of this attribute for the component. For this soil property, only the representative value is used.

Rating Options

Units of Measure: centimeters



Having issues? A prototype of a new version of Facility Explorer is available at <https://facilityexplorer.iowadnr.gov/FacilityExplorer/WellSearch.aspx?...>

X

[FacilityExplorer4/](#)

Well Search



[Print](#) [Help](#)

Well Search Report

Site: Pederson Nelson 14

| Included in search | No. of wells | Database |
|--------------------|--------------|--|
| X | 3 | IGS well database General well database maintained by IGS, location accuracy varies 3,730 to 25 ft., last updated 8/2005. |
| X | 0 | Public wells Municipal and nonmunicipal public well databases maintained by IGS, location varies 3,730 to 25 ft., under development. |
| X | 0 | SDWIS public wells Public well database developed from the Safe Drinking Water Information System database maintained by IDNR, estimated locational accuracy varies from 15m. to 3300m. Created from 5/2005 data. |
| X | 0 | Private well tracking system IDNR database management system for Grants-to-counties-covered wells. Locational accuracy unknown, assumed to be +/- 17 m., Last update 7/2005. |
| X | 62 | Wells registered for testing Wells tested under Grant-to-Counties program. Locational accuracy varies 1150 to 150 m.; Last update 9/2001, no future updates planned. |
| X | 1 | Permitted private wells Wells permitted under Grant-to-Counties program. Locational accuracy varies 1150 to 150 m.; Last update 9/2001, no future updates planned. |
| X | 8 | Registered abandoned wells Wells abandoned under Grant-to-Counties program. Locational accuracy varies 1150 to 150 m.; Last update 9/2001, no future updates planned. |
| X | 0 | Water use facilities Wells used by facilities permitted to withdraw >25,000 gallons per day, locational accuracy is +/-20m to 1150 m. Created from 7/2005 data. |
| X | 0 | Municipal wells and intakes Locational accuracy 220 m., last updated 8/96. |
| X | 1 | Ag drainage wells Locational accuracy 100 m., last updated 4/98. |

Well Search Detail

Subject: XY UTM Coordinates: 504599/4813940
 Search Radius (mi): 1

IGS Well Database

| Map ID | Well No. | Location | Accuracy | Dist. From Point | Well Depth | Construction/ Permit Date | Owner/ Permittees | Other Information |
|--------|------------------------------|---------------------------------------|---------------------------------|------------------|------------|---------------------------|--------------------|--|
| 189860 | <u>19412</u> | T100N, R18W, 14, NW NW SW NE | Unknown | 753 (m) | 63 | 4/4/1967 | Brush, Ed | Bedrock Depth: 20 Well Type: Private |
| 188813 | <u>18997</u> | T100N, R18W, 14, NW NW NE NE | Calc. +/- 230 ft. | 768 (m) | 65 | 6/16/1966 | Hagelund, Peter | Bedrock Depth: 45 Well Type: Private |
| 197159 | <u>24433</u> | T100N, R18W, 14, NE NE SE NW | Maps/Air Photos +/- 20 m. | 1535 (m) | 38 | 5/30/1975 | Hinsman, Darell | Bedrock Depth: 10 Well Type: Private |

Public Wells

| Map ID | Well No. | Location | Accuracy | Dist. From Point | Well Depth | Construction/ Permit Date | Owner/ Permittees | Other Information |
|--|----------|----------|----------|------------------|------------|---------------------------|-------------------|-------------------|
| No records found from this data source | | | | | | | | |

SDWIS public wells

| Map ID | Well No. | Location | Accuracy | Dist. From Point | Well Depth | Construction/ Permit Date | Owner/ Permittees | Other Information |
|--|----------|----------|----------|------------------|------------|---------------------------|-------------------|-------------------|
| No records found from this data source | | | | | | | | |

Private Well Tracking System

| Map ID | Well No. | Location | Accuracy | Dist. From Point | Well Depth | Construction/ Permit Date | Owner/ Permittees | Other Information |
|--|----------|----------|----------|------------------|------------|---------------------------|-------------------|-------------------|
| No records found from this data source | | | | | | | | |

Wells Registered For Testing

| Map ID | Well No. | Location | Accuracy | Dist. From Point | Well Depth | Construction/ Permit Date | Owner/ Permittees | Other Information |
|--|----------|----------|----------|------------------|------------|---------------------------|-------------------|-------------------|
| No records found from this data source | | | | | | | | |

| | | | | | | | | | |
|--|-------|-------|---|--------------------|-------------|------|------|----------------------|---|
| | 60679 | 76019 | T100N, R18W, Sec. 22, NE, NW, SW | Calc. +/- 285m. | 1174 (m) | unkn | unkn | Anderson, Melvin | Drilling method: Drilled; Well depth is uncertain |
| | 60485 | 10963 | T100N, R18W, Sec. 15, SW, SE, NE | Calc. +/- 285m. | (m) | unkn | unkn | Anderson, Russell | Drilling method: Drilled; Well depth is uncertain |
| | 60487 | 16595 | T100N, R18W, Sec. 15, SW, SE, SE | Calc. +/- 285m. | 1293 (m) | unkn | unkn | Anderson, Russell | Well depth is uncertain |
| | 60469 | 13110 | T100N, R18W, Sec. 15, SW, SE, SW | Calc. +/- 285m. | 1306 (m) | unkn | unkn | Anderson, Russell | Well depth is uncertain |
| | 60471 | 13106 | T100N, R18W, Sec. 15, SW, SE, NW | Calc. +/- 285m. | 1300 (m) | unkn | unkn | Anderson, Russell | Well depth is uncertain |
| | 60472 | 13111 | T100N, R18W, Sec. 15, SW, SE, NW | Calc. +/- 285m. | 1300 (m) | unkn | unkn | Anderson, Russell | Well depth is uncertain |
| | 60466 | 19957 | T100N, R18W, Sec. 15, SW, SE, SW | Calc. +/- 285m. | 1307 (m) | unkn | unkn | Anderson, Russell | |
| | 60474 | 10964 | T100N, R18W, Sec. 15, SW, SE, SW | Calc. +/- 285m. | 1303 (m) | unkn | unkn | Anderson, Russell | Drilling method: Drilled; Well depth is uncertain |
| | 60478 | 13112 | T100N, R18W, Sec. 15, SW, SE, NW | Calc. +/- 285m. | 1297 (m) | unkn | unkn | Anderson, Russell | Well depth is uncertain |
| | 60480 | 16594 | T100N, R18W, Sec. 15, SW, SE, NE | Calc. +/- 285m. | 1297 (m) | unkn | unkn | Anderson, Russell | Well depth is uncertain |
| | 60482 | 13109 | T100N, R18W, Sec. 15, SW, SE, NE | Calc. +/- 285m. | 1297 (m) | unkn | unkn | Anderson, Russell | Well depth is uncertain |
| | 61003 | 76121 | T100N, R18W, Sec. 14, NW, NW, SW | Calc. +/- 285m. | 798 (m) | 68 | 1967 | Bensend, Dale | Drilling method: Drilled; Known well depth |

| | | | | | | | | | |
|--|-------|-------|---|--------------------|-------------|------|------|---------------------|---|
| | 61161 | 80692 | T100N, R18W, Sec. 14, SW, NE, SW | Calc. +/- 285m. | (m) | 40 | unkn | Bruggeman, Henry | Drilling method: Unknown; Known well depth |
| | 61304 | 80838 | T100N, R18W, Sec. 14, SE, SW, SE | Calc. +/- 285m. | 919 (m) | 39 | 1957 | Duenow, Dene | Drilling method: Driven; Known well depth |
| | 61020 | 19953 | T100N, R18W, Sec. 14, SW, SW, SW | Calc. +/- 285m. | 419 (m) | unkn | 1955 | Hanson, Wayne | Drilling method: Drilled; Well depth is uncertain |
| | 61015 | 51398 | T100N, R18W, Sec. 14, SW, SW, NW | Calc. +/- 285m. | 415 (m) | unkn | unkn | Hanson, Wayne A. | Drilling method: Drilled; Well depth is uncertain |
| | 61274 | 12987 | T100N, R18W, Sec. 11, SE, SW, SW | Calc. +/- 285m. | (m) | unkn | unkn | Knudsen, Anders | Well depth is uncertain |
| | 61275 | 12986 | T100N, R18W, Sec. 11, SE, SW, SW | Calc. +/- 285m. | 1441 (m) | unkn | unkn | Knudsen, Anders | Well depth is uncertain |
| | 61156 | 80733 | T100N, R18W, Sec. 11, SW, SE, NE | Calc. +/- 285m. | 1260 (m) | unkn | 1930 | Knudsen, Anders | Drilling method: Drilled; Well depth is uncertain |
| | 61282 | 10941 | T100N, R18W, Sec. 11, SE, SW, NE | Calc. +/- 285m. | 1450 (m) | unkn | 1995 | Knudsen, Anders | |
| | 61287 | 12989 | T100N, R18W, Sec. 11, SE, SW, SE | Calc. +/- 285m. | 1450 (m) | unkn | unkn | Knudsen, Anders | Well depth is uncertain |
| | 61288 | 12988 | T100N, R18W, Sec. 11, SE, SW, SE | Calc. +/- 285m. | 1451 (m) | unkn | unkn | Knudsen, Anders | Well depth is uncertain |
| | 61290 | 10938 | T100N, R18W, Sec. 11, SE, SW, NE | Calc. +/- 285m. | 1455 (m) | unkn | 1995 | Knudsen, Anders | |
| | 61291 | 12990 | T100N, R18W, Sec. 11, SE, SW, SE | Calc. +/- 285m. | 1446 (m) | unkn | 1995 | Knudsen, Anders | Well depth is uncertain |

| | | | | | | | | | |
|--|-------|-------|---|--------------------|-------------|-----|------|---------------------|--|
| | 60685 | 19932 | T100N, R18W, Sec. 22, NE, NW, NE | Calc. +/- 285m. | (m) | 65 | unkn | Meyer, Loren | Drilling method: Drilled; |
| | 60854 | 76074 | T100N, R18W, Sec. 22, NE, NE, SW | Calc. +/- 285m. | 932 (m) | 35 | 1988 | Nitardy, Steve | Drilling method: Drilled; Known well depth |
| | 60488 | 16633 | T100N, R18W, Sec. 15, SW, SE, SE | Calc. +/- 285m. | 1294 (m) | 100 | unkn | Roberts, Laverne | Estimated well depth |
| | 60483 | 16634 | T100N, R18W, Sec. 15, SW, SE, SE | Calc. +/- 285m. | 1300 (m) | 100 | unkn | Roberts, Laverne | Estimated well depth |
| | 60477 | 12918 | T100N, R18W, Sec. 15, SW, NE, NE | Calc. +/- 285m. | 1213 (m) | 100 | unkn | Roberts, Laverne | Estimated well depth |
| | 60473 | 12920 | T100N, R18W, Sec. 15, SW, NE, SE | Calc. +/- 285m. | 1216 (m) | 100 | unkn | Roberts, Laverne | Estimated well depth |
| | 60458 | 12919 | T100N, R18W, Sec. 15, SW, NE, NE | Calc. +/- 285m. | 1222 (m) | 100 | unkn | Roberts, Laverne | Estimated well depth |
| | 60459 | 12917 | T100N, R18W, Sec. 15, SW, NE, NE | Calc. +/- 285m. | 1222 (m) | 100 | unkn | Roberts, Laverne | Estimated well depth |
| | 60460 | 10887 | T100N, R18W, Sec. 15, SW, NE, NE | Calc. +/- 285m. | 1221 (m) | 100 | unkn | Roberts, Laverne | |
| | 60464 | 10890 | T100N, R18W, Sec. 15, SW, NE, NE | Calc. +/- 285m. | 1218 (m) | 100 | unkn | Roberts, Laverne | |
| | 60465 | 12911 | T100N, R18W, Sec. 15, SW, NE, SE | Calc. +/- 285m. | 1218 (m) | 100 | unkn | Roberts, Laverne | Estimated well depth |
| | 61025 | 19930 | T100N, R18W, Sec. 23, NW, NW, NW | Calc. +/- 285m. | 816 (m) | 100 | 1984 | Rohde, Karen | Drilling method: Drilled; |

| | | | | | | | | | |
|--|-------|-------|---|--------------------|-------------|------|------|---------------------|---|
| | 61004 | 76109 | T100N, R18W, Sec. 14, NW, NW, SW | Calc. +/- 285m. | 800 (m) | 20 | unkn | Rohde, Raymond | Drilling method: Unknown; Known well depth |
| | 61155 | 20021 | T100N, R18W, Sec. 11, SW, NE, NE | Calc. +/- 285m. | 1590 (m) | unkn | unkn | Sievert, Doug | Well depth is uncertain |
| | 60856 | 52364 | T100N, R18W, Sec. 22, NE, NE, NW | Calc. +/- 285m. | 923 (m) | 40 | 1968 | Slinder, Juliene | Drilling method: Drilled; Known well depth |
| | 60853 | 19926 | T100N, R18W, Sec. 22, NE, NE, SW | Calc. +/- 285m. | 928 (m) | unkn | unkn | Slinder, June | Drilling method: Unknown; Well depth is uncertain |
| | 60660 | 76002 | T100N, R18W, Sec. 15, NE, NW, NE | Calc. +/- 285m. | 1131 (m) | unkn | 1957 | Straif, Fay | Drilling method: Drilled; Well depth is uncertain |
| | 60831 | 16583 | T100N, R18W, Sec. 15, NE, SE, SW | Calc. +/- 285m. | 564 (m) | 80 | unkn | Thoma, Roger | |
| | 60833 | 16586 | T100N, R18W, Sec. 15, NE, SE, SW | Calc. +/- 285m. | 562 (m) | 80 | unkn | Thoma, Roger | |
| | 60835 | 16585 | T100N, R18W, Sec. 15, NE, SE, NE | Calc. +/- 285m. | 563 (m) | 80 | unkn | Thoma, Roger | |
| | 60847 | 16584 | T100N, R18W, Sec. 15, NE, SE, SE | Calc. +/- 285m. | 554 (m) | 80 | unkn | Thoma, Roger | |
| | 60839 | 16587 | T100N, R18W, Sec. 15, NE, SE, NE | Calc. +/- 285m. | 564 (m) | 80 | unkn | Thoma, Roger | |
| | 60857 | 19955 | T100N, R18W, Sec. 15, SE, SE, SE | Calc. +/- 285m. | 583 (m) | unkn | unkn | Thome, Dan | Drilling method: Drilled; Well depth is uncertain |
| | 60840 | 12912 | T100N, R18W, Sec. 15, NE, SE, NE | Calc. +/- 285m. | 561 (m) | 80 | unkn | Thome, Roger | Estimated well depth |

| | | | | | | | | | |
|--|-------|-------|---|--------------------|-------------|------|------|--------------------------|---|
| | 60842 | 12924 | T100N, R18W, Sec. 15, NE, SE, NE | Calc. +/- 285m. | 560 (m) | 80 | unkn | Thome, Roger | Estimated well depth |
| | 60845 | 10892 | T100N, R18W, Sec. 15, NE, SE, NE | Calc. +/- 285m. | 559 (m) | 80 | unkn | Thome, Roger | Estimated well depth |
| | 60830 | 76106 | T100N, R18W, Sec. 15, NE, SE, NW | Calc. +/- 285m. | 574 (m) | unkn | 1978 | Thome, Roger | Drilling method: Drilled; Well depth is uncertain |
| | 60836 | 10891 | T100N, R18W, Sec. 15, NE, SE, NE | Calc. +/- 285m. | 562 (m) | 80 | unkn | Thome, Roger | Estimated well depth |
| | 60837 | 12922 | T100N, R18W, Sec. 15, NE, SE, NE | Calc. +/- 285m. | 563 (m) | 80 | unkn | Thome, Roger | Estimated well depth |
| | 60838 | 76105 | T100N, R18W, Sec. 15, NE, SE, SE | Calc. +/- 285m. | 557 (m) | unkn | 1978 | Thome, Roger | Drilling method: Drilled; Well depth is uncertain |
| | 60834 | 12921 | T100N, R18W, Sec. 15, NE, SE, NE | Calc. +/- 285m. | 568 (m) | 80 | unkn | Thome, Roger | Estimated well depth |
| | 60832 | 12923 | T100N, R18W, Sec. 15, NE, SE, NW | Calc. +/- 285m. | 569 (m) | 80 | unkn | Thome, Roger | Estimated well depth |
| | 61400 | 20027 | T100N, R18W, Sec. 14, NE, NE, SW | Calc. +/- 285m. | 1478 (m) | unkn | unkn | Thurnau, Deb | Well depth is uncertain |
| | 61007 | 76091 | T100N, R18W, Sec. 14, NW, NW, SW | Calc. +/- 285m. | 804 (m) | unkn | 1920 | Warrington, Lorraine | Drilling method: Drilled; Well depth is uncertain |
| | 60822 | 76089 | T100N, R18W, Sec. 10, SE, SE, SW | Calc. +/- 285m. | 1234 (m) | 120 | 1996 | Williams, Mrs. Calvin | Drilling method: Drilled; Known well depth |
| | 61413 | 80732 | T100N, R18W, Sec. 14, SE, SE, SW | Calc. +/- 285m. | 1294 (m) | unkn | unkn | Wright, Tony | Well depth is uncertain |

| | | | | | | | | | |
|--|-------|-------|---|--------------------|-------------|------|------|--------------|---|
| | 61418 | 80690 | T100N, R18W, Sec. 14, SE, SE, NE | Calc. +/- 285m. | 1298 (m) | unkn | unkn | Wright, Tony | Drilling method: Unknown; |
| | 60468 | 51391 | T100N, R18W, Sec. 15, SW, SE, SW | Calc. +/- 285m. | 1306 (m) | unkn | unkn | Yost, Dale | Drilling method: Drilled; Well depth is uncertain |

Permitted Private Wells

| Map ID | Well No. | Location | Accuracy | Dist. From Point | Well Depth | Construction/ Permit Date | Owner/ Permittees | Other Information |
|--------|----------|--|--------------------|------------------|------------|---------------------------|-------------------|----------------------------|
| 60664 | 15248 | T100N, R18W, Sec. 15, SE, NW, NE | Calc. +/- 285m. | 814 (m) | 200 | 1/10/1989 | Unknown | Primary use: Irrigation |

Abandoned Wells (plugged)

| Map ID | Well No. | Location | Accuracy | Dist. From Point | Well Depth | Construction/ Permit Date | Owner/ Permittees | Other Information |
|--------|----------|---|--------------------|------------------|------------|---------------------------|--------------------|--|
| 61119 | 9376 | T100N, R18W, Sec. 14, NW, NE, NW | Calc. +/- 140m. | 963 (m) | unkn | n.a. | Duenow, Dene | Well plugged: 7/30/1992; Well type: < 18" dia. |
| 60958 | 18949 | T100N, R18W, Sec. 14, NW, NW, NW | Calc. +/- 140m. | 907 (m) | 10 | n.a. | Faas, George | Well plugged: 7/31/1995; Well type: < 18" dia. |
| 60959 | 18950 | T100N, R18W, Sec. 14, NW, NW, NW | Calc. +/- 140m. | 905 (m) | 26 | n.a. | Faas, George | Well plugged: 7/31/1995; Well type: < 18" dia. |
| 61322 | 16907 | T100N, R18W, Sec. 14, NE, SW, NE | Calc. +/- 140m. | 1060 (m) | 11 | n.a. | Hanson, Wayne | Well plugged: 5/27/1994; Well type: > 18" dia. |
| 61281 | 7353 | T100N, R18W, Sec. 11, SE, SW, SE | Calc. +/- 285m. | 1444 (m) | 27 | n.a. | Knudsen, Anders | Well plugged: 6/25/1992; Well type: > 18" dia. |
| 61088 | 19001 | T100N, R18W, Sec. 11, SW, SE, NW | Calc. +/- 570m. | 1369 (m) | 30 | n.a. | Knudson, Anders | Well plugged: 7/30/1995; Well type: Sandpoint |

| | | | | | | | | |
|-------|-------|---|--------------------|-------------|----|------|--|--|
| 61242 | 10674 | T100N, R18W, Sec. 14, NE, NW, NW | Calc. +/- 140m. | 1171 (m) | 32 | n.a. | Mona Luthern Church, Mona Luthern Church | Well plugged: 5/11/1993; Well type: < 18" dia. |
| 60623 | 28575 | T100N, R18W, Sec. 15, NE, SW, SW | Calc. +/- 140m. | 953 (m) | 44 | n.a. | Thome, W. Roger & Linda C. | Well plugged: 5/1/1997; Well type: < 18" dia. |

Water Use Facilities

| Map ID | Well No. | Location | Accuracy | Dist. From Point | Well Depth | Construction/ Permit Date | Owner/ Permittees | Other Information |
|--|----------|----------|----------|------------------|------------|---------------------------|-------------------|-------------------|
| No records found from this data source | | | | | | | | |

Municipal Wells And Intakes

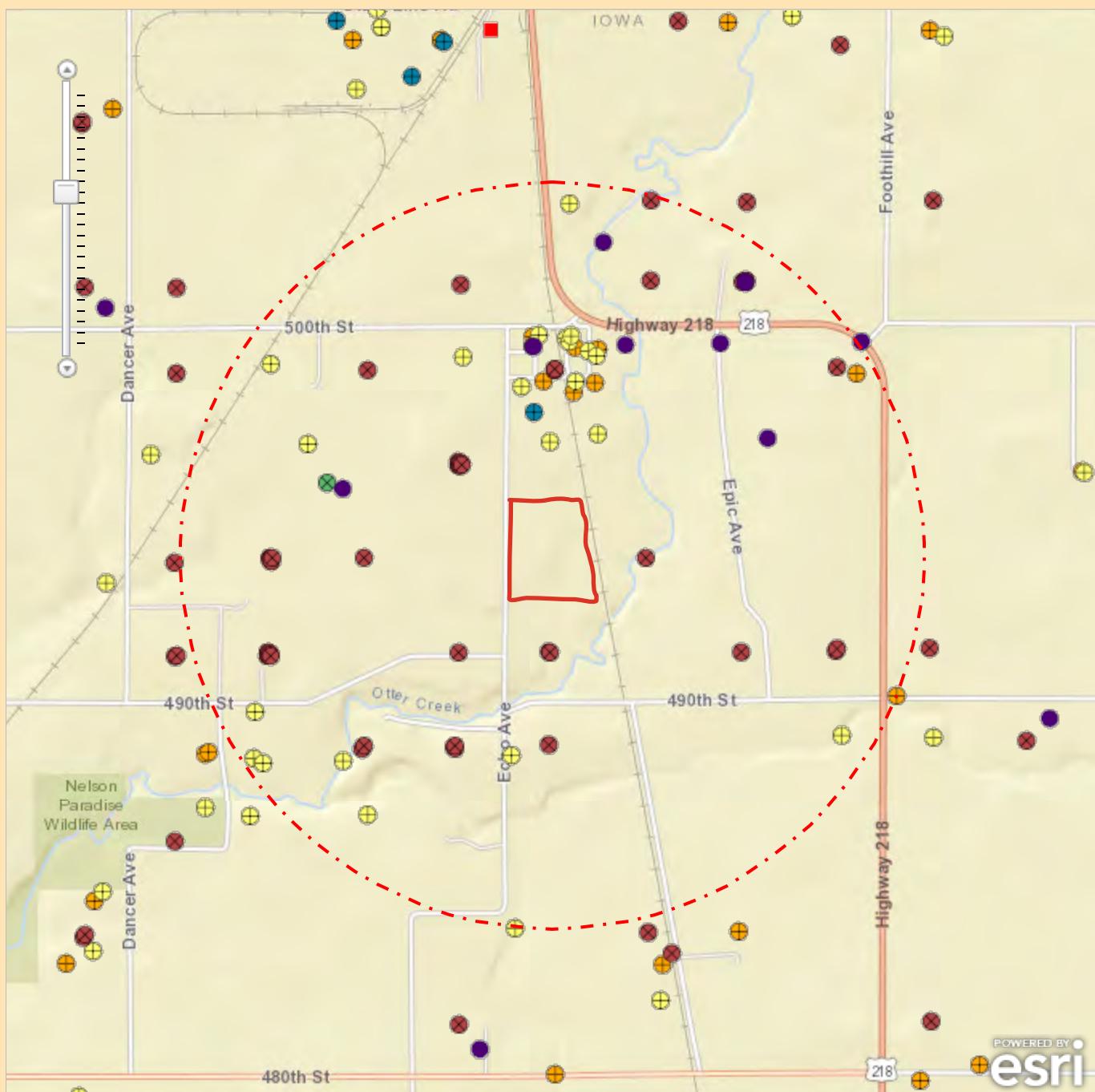
| Map ID | Well No. | Location | Accuracy | Dist. From Point | Well Depth | Construction/ Permit Date | Owner/ Permittees | Other Information |
|--|----------|----------|----------|------------------|------------|---------------------------|-------------------|-------------------|
| No records found from this data source | | | | | | | | |

Ag Drainage Wells

| Map ID | Well No. | Location | Accuracy | Dist. From Point | Well Depth | Construction/ Permit Date | Owner/ Permittees | Other Information |
|--------|--------------|---|------------|------------------|------------|---------------------------|--------------------|--------------------------------------|
| 60592 | 10018W15AC01 | no data 18W., Sec. 15, NE, SW, SW | +/- 100 m. | 1022 (m) | 0 | no data | Thome, W. Roger | Status: Closed or reclassified |

Well Search Buffered Map

Subject: XY UTM Coordinates: 504599/4813940
Search Radius (mi): 1



Map Notes:

- UST
- ★ LUST
- ✿ Wells

Please refer to the Accuracy column in Well Search Detail.

Since multiple points can be at the same spot (as those located to the center of a quarter section), points were randomly dispersed within 10 meters around that spot so all points can be seen.



ExTended Ag Services, Inc.

202 South Highway 86
Lakefield, MN 56150
507.662.5005 phone
507.662.5105 fax
info@extendedag.com

January 21, 2026

Environmental Land Management

1602 11th Drive NE
Austin, MN 55912

RE: Review of Potential Land Application Sites – Mitchell County

Michael,

We have completed our review of the proposed land application site for the Hormel facility in Austin, Minnesota. Thank you for the opportunity to provide our input on this project. The following fields were included in this review; all acres are approximate:

| Site Name | Acres |
|--------------------|---------------|
| Pederson Howard 17 | 114.55 |
| Pederson Howard 7 | 185.72 |
| Pederson Howard 9 | 170.77 |
| Pederson Nelson 14 | 38.39 |
| Grand Total | 509.43 |

Imagery provided by the National Ag Imagery Program (2021) was utilized to determine whether the land application sites were in crop production, pasture/hay or non-farmed land. Overall, the land application sites have few limitations regarding slope steepness and length and general erosion potential.

There are approximately 509.4 acres available for land application of the industrial by-product. The land application site is dominated by silt loams and loams. Approximately 35.2 acres are classified as a fine sandy loam. This soil has the *potential* to exceed the allowable sand content for biosolid application. Site investigation of the soil type may be warranted to determine the percent sand and silt content. All other soils have an acceptable soil texture for land application.

According to the NRCS, 100% of the sites have acceptable slopes for the land application of the Cargill byproducts (0-9%). Regarding erosion concerns, 96.6% of the identified soils are classified as having 'slight' concerns. Approximately 0.1% of the soils are classified as highly erodible soil, 9.4% as potentially highly erodible and the remainder are classified as non-highly erodible soils.

Field specific planning and/or residue management should be utilized when applying the byproduct to reduce the potential for movement offsite, on all sites. Application can and should be limited to areas with the lowest slope first and then be directed to areas the furthest from sensitive features such as water. The application of the byproduct is not expected to conflict with any Conservation Plans associated with the observed soils. A summary of slope ratings for the potential land application sites is included below:

| Slope Range | Acres |
|--------------------|---------------|
| N/A | 4.01 |
| 0-2% | 134.04 |
| 0-3% | 39.27 |
| 1-3% | 0.04 |
| 1-4% | 247.66 |
| 2-5% | 84.22 |
| 5-9% | 0.19 |
| Grand Total | 509.43 |

Approximately 1.3% of the soils identified as potential land application sites are listed by the NRCS soil survey as ponded, commonly or frequently flooded. It is assumed that agricultural drain tile has been installed, to varying degrees, on soils with poor or somewhat poor drainage. Flooding frequency is not expected to be a limiting factor for land application. However, land application on saturated soils should be avoided at all times. Further, land application on fields with higher slope ranges and predicted rainfall within 24 hours should be limited. A complete breakdown of flooding frequency ratings is shown below:

| NRCS FLOODING FREQUENCY | Acres |
|-------------------------|---------------|
| . | 4.01 |
| NONE | 498.13 |
| OCCASSIONAL | 0.50 |
| PONDED | 6.77 |
| FREQUENT | 0.02 |
| Grand Total | 509.43 |

Determining appropriate land application rates for any by-product is dependent on the most restrictive variable. This can be either slope, erosivity, flooding potential, soil fertility levels, soil texture or byproduct characteristics, to name a few. The recommendations given herein are independent of any byproduct reviews and only consider the known field characteristics discussed in this review.

Application rates of approximately 15 Wet Tons per acre are appropriate for the field conditions of the land application sites discussed in this review. Appropriate measures should be taken to ensure minimal movement of the waste respect to adequate setbacks from sensitive features (surface water, karst features, conduits to water and high slopes) and land application rates. Special care should be given to applying wastes no less than 48 hours prior to rainfall events of greater than 0.5 inches. Wastes should be incorporated whenever possible, if such practices do not conflict with existing NRCS conservation plans. Applications of organic by-products can result in improved soil fertility, tilth and structure, if properly managed. The soils and parent material on the

proposed land application site are naturally acidic in nature. Agricultural lime should be applied to ensure the soil pH is above 6.0 prior to land application of any byproducts.

Summary

The specified land application material should be evaluated for constituents that pose a risk to the general health and welfare of the public. In general, land utilized for the land application of solid waste containing nutrients needed for pasture or crop production will benefit from such applications. Careful consideration should be taken to ensure nutrients are not applied at levels greater than crop need, once soils have reached the high fertility range as defined by Iowa State University.

In summary, we believe the field conditions are suitable for land application of solid wastes if done in accordance with all applicable rules, permits and laws. If you have any questions, please do not hesitate to contact us.

Sincerely,



Jim Nesseth
Certified Agronomist
License #: 17118

Andrew Nesseth
Environmental Consultant
NRCS Technical Service Provider

Contractual Consent of Landowner

Landowner, Lessee and/or Landoperator: Jeff Pederson

Location of storage sites and spreading site(s): All permitted sites owned, leased and rented.

Description of byproduct to be stored and land applied on site(s): Byproduct waste consisting of cleaning water and animal residue is generated from Hormel Foods' pork processing plant. The facility has a pre-treatment plant and a de-watering process, in which solids are recovered. The byproduct is treated with hydrated lime to stabilize the material. The paunch material is undigested and/or partially digested feed removed from the hogs' intestines and stomachs (3% or less of the total will be paunch).

Pretreat and paunch is generated from: Hormel Foods Corporation - Austin, MN

Analysis of pretreat byproduct on a "dry" basis:

****Analysis is not guaranteed for agronomic value. Byproduct output will be variable.*

| | | | |
|-----------------------|--------|------------|---------------|
| Total Solids | 35.0 % | Arsenic | none detected |
| pH | 12.5 | Barium | 19.5 mg/kg |
| Tot.Kjeldahl Nitrogen | 2.76 % | Cadmium | none detected |
| Ammonia Nitrogen | 0.12 % | Chromium | 21.7 mg/kg |
| Phosphorus | 1.01 % | Copper | 33.8 mg/kg |
| P2O5 | 2.31 % | Manganese | 73.1 mg/kg |
| Potassium | 0.04 % | Mercury | none detected |
| K2O | 0.04 % | Molybdenum | none detected |
| Chloride | 0.20 % | Nickel | 6.2 mg/kg |
| Sodium | 0.14 % | Selenium | none detected |
| Calcium | 17.0 % | Silver | none detected |
| Magnesium | 0.40 % | Zinc | 64.5 mg/kg |

****Check with your Agronomist to verify that these nutrients and other constituents are not harmful to the crops you are growing during the coming year.*

I have reviewed this information and am authorized to hereby give permission to Environmental Land Management, LLC to store and land apply pretreat and paunch on the spreading sites. If, in the future, I decide not to allow Environmental Land Management, LLC to store and land apply the aforementioned byproducts on these sites, I will inform them before it is delivered to the sites.

Signed: 

Date: 02/28/2022

| CROP | ADDITIONAL NITROGEN |
|------------------------|---------------------|
| SWEET CORN ON SOYBEANS | 60 LBS |
| CORN ON SOYBEANS | 80 LBS |
| CORN ON SWEET CORN | 100 LBS |