NPS Form 10-900
(Rev. 10-90)

OMB No. 1024-0018

United States Department of the Interior
National Park Service

National Register of Historic Places Registration Form

This form is for use in nominating or requesting determinations for individual properties and districts. See instructions in *How to Complete the National Register of Historic Places Registration Form* (National Register Bulletin 16A). Complete each item by marking "x" in the appropriate box or by entering the information requested. If any item does not apply to the property being documented, enter "N/A" for "not applicable." For functions, architectural classification, materials, and areas of significance, enter only categories and subcategories from the instructions. Place additional entries and narrative items on continuation sheets (NPS Form 10-900a). Use a typewriter, word processor, or computer to complete all items.

1. Name of Property

historic name Universal Laboratories Building
other names/site number N/A

2. Location

street & number 901 First Street North not for publication N/A
city or town Dassel vicinity N/A
state Minnesota code MN county Meeker code 093
zip code 55325

3. State/Federal Agency Certification

As the designated authority under the National Historic Preservation Act of 1986, as amended, I hereby certify that this X nomination ___ request for determination of eligibility meets the documentation standards for registering properties in the National Register of Historic Places and meets the procedural and professional requirements set forth in 36 CFR Part 60. In my opinion, the property X meets ___ does not meet the National Register Criteria. I recommend that this property be considered significant X nationally ___ statewide ___ locally.
(___ See continuation sheet for additional comments.)

Signature of certifying official — Date 1/17/96
Ian R. Stewart, Deputy State Historic Preservation Officer, Minnesota Historical Society

State or Federal agency and bureau

In my opinion, the property ___ meets ___ does not meet the National Register criteria.
(___ See continuation sheet for additional comments.)

Signature of commenting or other official — Date

State or Federal agency and bureau

4. National Park Service Certification

I hereby certify that this property is:

✓ entered in the National Register
___ See continuation sheet.

Edson H. Beall 3/4/96
Entered in the
National Register

___ determined eligible for the National Register
___ See continuation sheet.

___ determined not eligible for the National Register

___ removed from the National Register

___ other (explain): _____

Signature of Keeper — Date of Action

5. Classification

Ownership of Property (Check as many boxes as apply)

__ private
_x_ public-local
__ public-State
__ public-Federal

Category of Property (Check only one box)

_x_ building(s)
__ district
__ site
__ structure
__ object

Number of Resources within Property

Contributing	Noncontributing	
1	0	buildings
0	0	sites
0	0	structures
0	0	objects
1	0	Total

Number of contributing resources previously listed in the National Register N/A

Name of related multiple property listing (Enter "N/A" if property is not part of a multiple property listing.)
N/A

6. Function or Use

Historic Functions (Enter categories from instructions)

Cat:	Sub:
INDUSTRY/PROCESSING/ EXTRACTION	processing site

Current Functions (Enter categories from instructions)

Cat:	Sub:
VACANT	

7. Description

Architectural Classification (Enter categories from instructions)

No Style

Materials (Enter categories from instructions)

foundation CONCRETE
roof ASPHALT
walls METAL
other WOOD

Narrative Description (Describe the historic and current condition of the property on one or more continuation sheets.)

8. Statement of Significance

Applicable National Register Criteria (Mark "x" in one or more boxes for the criteria qualifying the property for National Register listing)

_X_ A Property is associated with events that have made a significant contribution to the broad patterns of our history.

___ B Property is associated with the lives of persons significant in our past.

___ C Property embodies the distinctive characteristics of a type, period, or method of construction or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components lack individual distinction.

___ D Property has yielded, or is likely to yield information important in prehistory or history.

Criteria Considerations (Mark "X" in all the boxes that apply.)

___ A owned by a religious institution or used for religious purposes.

___ B removed from its original location.

___ C a birthplace or a grave.

___ D a cemetery.

___ E a reconstructed building, object,or structure.

___ F a commemorative property.

___ G less than 50 years of age or achieved significance within the past 50 years.

Areas of Significance (Enter categories from instructions)

INDUSTRY

Period of Significance 1937-1945

Significant Dates N/A

Significant Person (Complete if Criterion B is marked above)

Cultural Affiliation N/A

Architect/Builder H.E. Swanson (contractor)

Narrative Statement of Significance (Explain the significance of the property on one or more continuation sheets.)

9. Major Bibliographical References

(Cite the books, articles, and other sources used in preparing this form on one or more continuation sheets.)

Previous documentation on file (NPS)
__ preliminary determination of individual listing (36 CFR 67) has been requested.
__ previously listed in the National Register
__ previously determined eligible by the National Register
__ designated a National Historic Landmark
__ recorded by Historic American Buildings Survey # _____
__ recorded by Historic American Engineering Record # _____

Primary Location of Additional Data
x State Historic Preservation Office
__ Other State agency
__ Federal agency
__ Local government
__ University
__ Other
Name of repository: _____

10. Geographical Data

Acreage of Property Approximately .9 acre

UTM References (Place additional UTM references on a continuation sheet)

	Zone	Easting	Northing	Zone	Easting	Northing
1	15	397090	4993150	3		
2				4		

__ See continuation sheet.

Verbal Boundary Description (Describe the boundaries of the property on a continuation sheet.)

Boundary Justification (Explain why the boundaries were selected on a continuation sheet.)

11. Form Prepared By

name/title Cynthia de Miranda and Jeffrey A. Hess
organization Hess, Roise and Company
street & number 405 Cedar Avenue South, Suite 200
city or town Minneapolis state MN zip code 55454
telephone (612) 338-1987
date August 1995

Additional Documentation

Submit the following items with the completed form:

Continuation Sheets

Maps
A USGS map (7.5 or 15 minute series) indicating the property's location.
A sketch map for historic districts and properties having large acreage or numerous resources.

Photographs
Representative black and white photographs of the property.

Additional items (Check with the SHPO or FPO for any additional items)

Property Owner

(Complete this item at the request of the SHPO or FPO.)

name City of Dassel

street & number 460 Third Street, P.O. Box 391 telephone

city or town Dassel state MN zip code 55325-0391

Description

Located in the small farming community of Dassel, Minnesota, about 50 miles west of Minneapolis, the Universal Laboratories Building occupies a grassy lot on the west side of First Street North (Meeker County Highway 15) on the northern outskirts of the city. Bordered by evergreens on the north and west, the lot is just under an acre in size. Immediately to the south is a seed company; across the road to the east stands a church.

The Universal Laboratories Building is a wood-framed structure on a poured concrete foundation. Its exterior walls are sheathed in silver-painted metal siding pressed to resemble brick. Its roof is covered with composition shingles. In terms of massing, the building displays two main gable-roofed blocks: a two-story section, with a north-south roof line, abutting on the north a somewhat taller section, with an east-west roof line. The building's rectangular plan is broken by a small, gable-roofed, freight-elevator wing, located on the east facade at the juncture of the two main blocks. Almost all the building's window openings -- rectangular, irregularly spaced, and mostly boarded -- appear on the two-story block. This section also contains the main entrances: a single-leaf personnel door on the south and a sliding equipment door, overlooking a concrete loading dock, on the west.

In terms of interior plan, the building has a full basement (coal room on the south; boiler room, shop, and storeroom on the north) and two main levels, each with a mezzanine at the north end. A small office enclosure occupies the southeast corner of the first level; otherwise the main floors are mostly undivided space. The building does not contain significant machinery dating from the period of significance (1937-1945). Nor are there detailed descriptions of machinery layout for the historic ergot-processing operation.

The Universal Laboratories Building has not experienced significant expansion or reduction since its construction in 1937.[1] The main alteration, occurring in 1952/1953, was the addition of a small, gabled, roof-top monitor on the west side of the taller north block. Constructed to accommodate an enlarged interior grain-elevator leg, this alteration did not significantly affect the building's original utilitarian industrial character.[2]

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1 Northern States Power Company, Engineering Department, Floor Plans for Rice Laboratories, Inc., undated, in Dassel Area Historical Society, Dassel, Minnesota. Although these plans are undated, they apparently were prepared at the time of construction for electrical wiring.

2 The building's two main pieces of ergot-processing equipment date from this 1950s remodeling. Located near the elevator leg in the northwest corner of the second level, this machinery consists of a 16,000-volt Weston Electrical Corp generator connected to an electrostatic cleaner. According to its nameplate, the cleaner is a "Coronatron Separator" manufactured by "Quaker Oats Company (Mechanical Research Division)." It is dated "12-22-52."

Summary of Significance

The Universal Laboratories Building is nationally significant under Criterion A in the area of industry as a World War II-era supplier of ergot, an important crude drug. The building is also significant under Minnesota's statewide historic context of Railroads and Agricultural Development, 1870-1940. A botanical most often imported from Russia or Spain before the war, ergot is the active ingredient in medicines that treat a variety of ailments, from migraines to postpartum bleeding. Ergot derivatives were also used as a coagulant for wounded soldiers and in the treatment of combat stress. Through the success of its ergot-processing plant in Dassel, Minnesota, Universal Laboratories became the country's first, reliable, domestic producer of the crude drug and demonstrated that there was a sufficient domestic supply for the nation's purposes. This achievement allayed pharmaceutical industry fears of an impending wartime shortage, and eliminated the need for drastic governmental measures. The period of significance for the building extends from 1937, when Universal Laboratories initiated ergot processing, through 1945, the 50-year cutoff period for significance.

Discussion of Significance

Medicinal Value of Ergot

Ergot grows as a fungus on grains and grasses, replacing edible kernels with toxic, purplish bodies known as sclerotia. Such contaminated grain has been the cause of countless outbreaks of fatal ergot poisoning since at least the Middle Ages. Ergotism takes one of two forms, convulsive or gangrenous, and either manifestation may be accompanied by powerful hallucinations. Despite its toxicity, ergot was found to possess a therapeutic value. It is difficult to determine how long the fungus has been used medicinally, but it is known that midwives in the sixteenth century administered ergot in powdered form to hasten delivery. Employed in this fashion, ergot proved to have very unpredictable effects, and its application in obstetrics is now limited to the

use of derivatives in the treatment of postpartum bleeding.[3] Ergot derivatives are also used to treat such ailments as migraines, vascular headaches, vasoconstriction, and hypertension.[4]

Ergot's medicinal value stems from its alkaloidal content. Over fifty alkaloids have been reported in ergot sclerotia, and the presence and potency of specific alkaloids depends upon the host plant. Ergot of rye, possessing the alkaloids most effective in medicine, was the only version accepted by the *United States Pharmacopeia*, generally considered the country's official compendium of medicinal drugs.[5] The first *United States Pharmacopeia*, published in 1820, relegated ergot to a section covering drugs of "secondary or doubtful efficiency."[6] Ergot alkaloids, much more predictable than the crude drug, replaced ergot in the *United States Pharmacopeia* by 1947.[7]

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[3] A number of articles covering the biology of ergot or its role in the medical field also include discussions of early uses of crude ergot as well as descriptions of ergot poisoning. Such articles include Edward Davis, et al., "A New Active Compound in Ergot and its Effects on Uterine Motility," *American Journal of Obstetrics and Gynecology* 29 (February 1935): 155-167; "Ergot in Modern Obstetrics," *Physician's Bulletin* (January-February 1936): 3-12; J. Chassar Moir, "The History and Present-Day Use of Ergot, "*Canadian Medical Association Journal* 72 (15 May 1955): 727-734; and H.W. Youngken, Jr., "Ergot--A Blessing and a Scourge," *Economic Botany* 1 (October -December 1947): 372-380. Also see George Barger's monograph *Ergot and Ergotism* (London: Gurney and Jackson, 1931), 7-19; and Frank James Bove's *The Story of Ergot* (New York: S. Karger, 1970), 134-163. These more extensive works on the subject demonstrate that ergot may have been used in ancient times as well, but no proof exists to definitively support the idea.

[4] Varro E. Tyler, Lynn R. Brady, and James E. Robbers, "Ergot," in *Pharmacognosy*, 9th ed. (Philadelphia: Lea & Febiger, 1988), 234-236.

[5] Julia F. Morton, "Ergot," in *Major Medicinal Plants: Botany, Culture and Uses* (Springfield, IL: Thomas Books, 1977), 5-6.

[6] "Ergot: A Veritable Treasure House," *Tile and Till* 33 (May 1947): 52.

[7] Edward P. Claus, Varro E. Tyler, and Lynn R. Brady, "Ergot," in *Pharmacognosy* (Philadelphia, Lea & Febiger, 1970), 274-275; *Pharmacopeia of the United States*, 13th Revision, (Easton, Pennsylvania: Mack Publishing

Crude Ergot Production Prior to World War II

Although ergot infected American as well as European grain crops, U.S. pharmaceutical firms traditionally relied only on European imports for their supply. In the early years of the twentieth century, ergot was harvested by hand in several European countries. Children collected sclerotia directly from grain in the field; and peasants, working at home, separated ergot from harvested grain.

The labor-intensive nature of harvesting the fungus is significant in explaining the lack of an American ergot industry at the time. The cost of labor in the U.S. was far higher than abroad, making domestic collection unprofitable in competition with cheaper imports. Additionally, there was little interest in encouraging the toxic fungus to develop in American fields. While ergot extractions were clearly valuable in the pharmaceutical market, crude ergot in grain fields was still a danger to people and livestock. American farmers, and the U.S. government, preferred to burn ergoty grains and to discourage further growth in the field.[8]

Russia, then, became the first major ergot supplier, exporting about half a million pounds yearly until the 1917 Russian Revolution interrupted that trade. Spain went on to dominate the market, harvesting and selling what some believed to be the highest quality ergot.[9] In 1936, however, the onset of civil war

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Company, 1947), xc.

8 U.S. Department of Commerce, Bureau of Foreign and Domestic Commerce, *Ergot: Synopsis of Information,* No. 15 of *Industrial Reference Service, Volume 1, Part 2: Chemicals, Drugs and Pharmaceuticals* (Washington, D.C.: Government Printing Office, 1946), 4.

9 In the last years of the 1920s, a controversy arose as to the quality of imported ergot. Howard K. Ambruster, an importer of Spanish ergot, claimed the Food, Drug and Insecticide Administration was allowing substandard ergot (from countries other than Spain) to enter the United States. No proof was found to substantiate the charge, but the incident may have strengthened a belief that Spanish ergot was superior. Twenty years later, H.W. Youngken, Jr. published a paper asserting that ergot of rye grown in the Midwestern states of the U.S. actually yielded more potent alkaloids than that of Spain.

in Spain disrupted the supply of that country's ergot. Toward the end of the 1930s, the war spreading across Europe cut off supplies from other exporting countries, including Germany, Poland, Yugoslavia, Romania, and Hungary. In three years, the number of European countries exporting the crude drug to America dropped from seven to one. By 1942, only Portugal and Canada were shipping ergot to the United States; of the nearly 400,000 pounds imported that year, Portugal provided more than 99 percent.[10] Although the U.S. was still able to import enough ergot for its needs, the events of the past twenty years had clearly demonstrated that the European supply was highly susceptible to political disruptions.

Universal Laboratories Develops a Domestic Crude Ergot Industry

In 1937, Lester R. Peel was managing a Minnesota yeast manufacturing firm known as Rice Laboratories, Inc.[11] Established two years before, Rice Laboratories had just moved into a new building, specifically designed for yeast production, on the northern edge of Dassel, a small town about 55 miles west of Minneapolis.[12] As a purveyor of a farm product--the yeast was an additive for poultry and hog feeds--Peel discovered that

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For more on the Ambruster controversy, see "Ambruster, Rusby--and Ergot," *Journal of the American Medical Association* 95 (6 September 1930): 722-729; and Charles O. Jackson, "The Ergot Controversy: Prologue to the 1938 Food, Drug and Cosmetic Act," *Journal of the History of Medicine* 23 (July 1968): 248-257. For a comparison of domestic ergot to Spanish, see Youngken, 372-380.

10 Portugal was probably shipping Spanish ergot at this time. Information on world supply of ergot, including import statistics for 1938 through 1944, can be found in U.S. Department of Commerce, Bureau of Foreign and Domestic Commerce, 2-4.

11 Rice Laboratories, Inc. was incorporated in Minnesota in 1935 by founder Orville H. Rice and four other men, including Lester R. Peel. See Minnesota Department of State, *Articles of Incorporation for Rice Laboratories, Inc.*(Saint Paul, 1935), 1.

12 The structure was built by H.E. Swanson, a local contractor. The Dassel Area Historical Society has correspondence between Swanson and Rice Laboratories relating to the construction.

farmers in the area were discarding their ergoty rye to avoid contaminating flour and feed.[13] Peel began purchasing the ergoty waste, which was screened from farmers' grain by elevator operators, with plans to clean and market the ergot. He called this new enterprise Universal Laboratories.[14]

Peel ran both businesses out of the same two-story building, and, in the early days of the ergot operation, Universal Laboratories occupied only the northwest corner of the first floor.[15] Screenings purchased from elevator operators--still containing a considerable amount of grain--were fed into small mills, which deposited an even flow of ergoty grain onto a conveyor belt. Women seated beside the belts picked out the grain, leaving the ergot kernels on the belt. The ergot dropped off the end of the conveyor into a trough to await bagging. Universal Laboratories may have had as many as six of these machines at one point, staffed by a dozen women. There was little risk of ergotism,

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13 Standards dictated that grain having more than .2 percent ergot content was "ergoty" and had to be discounted accordingly. Farmers generally burned such grain. Information from Wilton Anderson, Universal Laboratories General Manager, 1959-1975, interview by Jeffrey Hess of Hess, Roise and Company, Dassel, 6 June 1995.

14 Universal Laboratories presumably operated as a sole proprietorship until it was formally incorporated as Universal Laboratories, Incorporated in 1957 by Peel, his wife Margaret, and Arnold R. Anderson. See Minnesota Department of State, *Papers of Incorporation for Universal Laboratories, Incorporated* (Saint Paul, 1957), 1-2.

15 Unless otherwise noted, information on Universal's early history was obtained from news accounts and interviews. See "Major Industries in Dassel Other Than Seed Corn," *Dassel (Minnesota) Dispatch*, 18 September 1941, 4; and *Dassel (Minnesota) Dispatch*, 2 October 1941, 1. Interviews included: Wilton Anderson, Universal Laboratories General Manager, 1959-1975, interview by Jeffrey Hess, Hess, Roise and Company, Dassel, 6 June 1995; Irene Johnson, former secretary of Rice Laboratories and Universal Laboratories, 1935-1944, telephone interview by Cynthia de Miranda, Hess, Roise and Company, Minneapolis, 22 June 1995; and Louise Kosek, former employee of Rice Laboratories and Universal Laboratories, 1934-1943, telephone interview by Cynthia de Miranda, Hess, Roise and Company, Minneapolis, 21 June 1995. Also helpful was a videotaped tour of the building, given by Wilton Anderson and produced by the Dassel Area Historical Society on 28 July 1993.

since the poisoning was brought on by consumption of, not merely exposure to, the grains.

Universal Laboratories increased its output by also establishing a small cottage industry in the Dassel area. Local residents picked up 50-pound sacks of ergoty grain at the lab and, in the manner of their European counterparts, sorted it at home. Compensation was based on the amount of pure ergot returned to the company. After Universal Laboratories reduced the amount of foreign matter in the ergot to less than two percent, the company sold the crude drug to pharmaceutical firms. Universal Laboratories quickly became the exclusive domestic ergot supplier to Eli Lilly and Company, an established firm and a major producer of ergot-derived drugs.[16]

Lilly was willing to purchase as much ergot as Universal Laboratories could collect. To increase his harvest, Peel had to educate farmers and elevator operators about the value of ergot. He authored a pamphlet, perhaps as early as 1939, describing ergot's importance in the pharmaceutical field and explaining how to harvest and clean it.[17] Conventional agricultural wisdom, however, still held that ergot was to be avoided. A 1937 issue of *Grain and Feed Review* outlined ergot's harmful effects and described strategies for reducing the incidence of ergot infection. Although the *Review* article mentioned that ergot

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[16] "'Grass Roots' Publicity," *Lilly Management Report* 7(January 1952), Eli Lilly Archives, Indianapolis, 1; Emil John Staba, Professor of Medicinal Chemistry, University of Minnesota-Twin Cities, telephone interview by Cynthia de Miranda, Hess, Roise and Company, Minneapolis, 23 June 1995.

[17] The pamphlet itself is undated, although authorship is explicitly credited to L. R. Peel of Universal Laboratories. The pamphlet appears to be the basis for at least some of the articles that surfaced around 1941. One such article, which features the same photograph of ergotized rye heads that graced the cover of Peel's pamphlet, reveals that "two years ago an effort was made to acquaint the rye handlers with the value of the by-product and urge that it be saved." See "Ergot, the Rye Fungus, is Valuable," *Grain and Feed Review* 30 (June 1941): 22.

alkaloids were important therapeutic drugs, it stressed their toxic nature more strongly.[18]

Meanwhile, the war placed the world's ergot supply in jeopardy, prompting discussion of ways to avert a shortage. Interest in identifying alternate sources was not limited to the U.S.; Great Britain had also relied on imported ergot. Britain's need at this point was compounded by the fact that an ergot derivative was used to contain internal bleeding for the wounded. Medical research also showed that the drug was effective in treating "bomb shock" or "battle reaction," terms commonly applied to psychological stress induced by combat.[19] A New Zealand grain publication reported that the supply of ergot had been reduced "just when the need is greatest for the treatment of soldiers and air raid victims." The article explained that "country people can help a most worthy war effort" by collecting ergot for shipment to England.[20] An Australian agricultural publication advised growers to cultivate the fungus, and an experimental program was initiated in India "because of wartime suspension of imports."[21]

In the early 1940s, hoping to bolster its own supply of the crude drug, Eli Lilly and Company joined the educational campaign Peel had been conducting since 1937. A Lilly management report, written a decade later, recounted the effort: "The northwestern states were blanketed with publicity. Stores displayed pamphlets; grain publications and rural newspapers printed

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18 "Human and Animal Ills Caused by Ergoty Grain Forces Discounts," *Grain and Feed Review* 27 (December 1937): 39-40.

19 "Produce Ergot Artificially," *New York Times*, 30 May 1941, sec. 1, p. 3; "Drug for War Neurosis," *Science News Letter* 45 (27 May 1944):343.

20 J. C. Neill, "Britain Wants Ergot from N.Z.!" *New Zealand Journal of Agriculture* 63 (15 November 1941): 397-400.

21 "High Values for Rye Ergot,"*Agricultural Gazette of New South Wales* 51 (1 March 1940): 137; Morton, 6.

stories; a dozen radio stations told the facts; Lilly medical service representatives and county agents talked to farmers personally."[22] In conjunction with Lilly's efforts, Universal Laboratories ran advertisements in trade publications telling farmers and elevator operators to "Watch your rye and screenings for ergot. Write us for information and prices."[23]

The success of the publicity campaign can be measured in part by the fact that toward the end of 1941, Universal Laboratories leased the Lindze Pankake Elevator (later demolished) in downtown Dassel from the Farmers Elevator Company for additional storage space. Universal Laboratories sent the ergoty screenings it purchased to the elevator, where preliminary cleaning took place. Screenings were then trucked to the Universal Laboratories Building, which had undergone some changes since its construction in 1937. An elevator leg had been installed in the northwest corner, and screenings were now dumped into an exterior hopper at the base of the leg. Grain was elevated to upper levels on the north end of the building, where it passed through a Clipper mill, to separate material by size, and then through a gravity separator, which segregated the lighter ergot kernels from those of heavier grain. Clean grain was chute-loaded into trucks at the rear of the building, to be returned to the company's downtown elevator for temporary storage. Later, the rye would be sold for feed at the Minneapolis Grain Exchange. The ergot itself was shipped in 100-pound sacks to Lilly.

Universal Laboratories' changes to its building, all necessitated by the ergot operation, demonstrated more than just the company's growth at the time. They also indicated increased mechanization, which made the cleaning process more cost effective and ultimately ensured a reliable source of domestic crude ergot.

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22 "'Grass Roots' Publicity," 1.

23 Ibid.; "Ergot Campaign," reprint from *Tile and Till* (January-February 1952): 1-2, in Eli Lilly and Company Archives, Indianapolis; and "Ergoty Rye Screenings", classified advertisement, *Farmers Elevator Guide*, June-Nov 1941 issues.

Bearing witness to Universal Laboratories' success, the *Grain and Feed Review* reported that 60,000 pounds of ergot were collected domestically in 1940 "through the efforts and co-operation of the small elevators and grain buyers in the Northwest in the vicinity of the Twin Cities."[24] The Department of Commerce estimated that 100,000 pounds of ergot were harvested in the United States the following year from "the rye growing sections, particularly Minnesota, the Dakotas and adjacent States."[25] In 1941, four years after Universal Laboratories opened its processing plant in Dassel, *Business Week* noted that "the United States can supply a major portion of its ergot needs."[26]

After the United States entered World War II, imports of crude ergot dropped from 350,000 tons in 1942 to less than 100,000 tons in 1944. Fortunately, annual domestic production stabilized at roughly 100,000 tons, which apparently was the country's minimum requirement.[27] Virtually all of the contemporary literature that discussed domestic ergot collection identified Minnesota as the center of such activity, and Universal Laboratories was the only firm advertising an ergot operation. Its success cushioned the country's supply of crude ergot and eliminated the need for potentially drastic measures. As the Commerce Department explained:

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[24] "Ergot, the Rye Fungus, is Valuable," *Grain and Feed Review* 30 (June 1941): 22. This is undoubtedly a reference to Universal Laboratories; see note 11. In addition, Universal ran an advertisement on the following page: "Domestic Processors of Ergot. We have been processors of ergot of rye for three seasons. We will gladly give elevator operators and other rye handlers suggestions on handling rye screenings and ergoty rye. Write us for information and quotations."

[25] U.S. Department of Commerce, Bureau of Foreign and Domestic Commerce, 2-3.

[26] "Drugs and the War," *Business Week* (10 May 1941): 28.

[27] U.S. Department of Commerce, Bureau of Foreign and Domestic Commerce, 1-2; "Produce Ergot Artificially," sec. 1, p.3.

> Although ergot was considered sufficiently vital for the Government to maintain a stockpile . . . during the war period, domestic production was not fostered by the Government. Since ergot is actually a dangerous fungus growth, it is considered undesirable to propagate a supply adequate for our normal consumption, except in an emergency.[28]

Post War Years

At the conclusion of World War II, it was generally agreed that "it will probably prove uneconomic for those countries which are producing ergot as a wartime expedient to continue to do so, and it is likely that the old sources will assume their previous importance."[29] Universal Laboratories, however, defied conventional wisdom and remained in the ergot business. Its main customer continued to be Eli Lilly, which credited the Minnesota company with "making the existing domestic ergot available for pharmaceutical manufacturing."[30] Reversing the trend of the pre-war period, Lilly no longer relied on imported ergot, but instead secured the bulk of its supply from Universal Laboratories.[31]

Universal Laboratories remained profitable in the face of European competition by streamlining production. In 1952/1953, the company remodeled its Dassel plant with an electrostatic grain cleaner and a larger elevator leg, necessitating the addition of a gable-roofed monitor on the west side of the building's north end. Thoroughly overshadowed by the expansion of the ergot business, the building's original yeast-manufacturing operation continued in residence, though occupying

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28 U.S. Department of Commerce, Bureau of Foreign and Domestic Commerce, 4.

29 Ibid., 2.

30 "Ergot Campaign," 2.

31 "'Grass Roots' Publicity," 1.

progressively less floor space. Its final demise is unrecorded. As for Universal Laboratories, it continued supplying Lilly until the late 1960s, when the pharmaceutical firm stopped purchasing crude ergot in favor of alkaloids extracted by European firms. Although Universal Laboratories held on for a few years longer by selling to the British-based Burroughs Wellcome Company, it eventually closed down its ergot business in 1975, a victim of low prices and a limited market. The Universal Laboratories Building has been vacant since that time.[32]

Conclusions

The Universal Laboratories Building played a significant role during Wold War II by ensuring that the United States had an adequate domestic supply of an essential crude drug. As war threatened to cut off imported supplies of crude ergot, Universal Laboratories developed an effective collecting and processing operation in Dassel, Minnesota. In so doing, Universal Laboratories introduced to the United States a new industry that continued into the post-war period. After the war, pharmaceutical manufacturer Eli Lilly and Company lauded Universal Laboratories' founder, "energetic, hard-working L. R. Peel of Dassel, Minnesota." Because of Peel and his company, Lilly explained, "the supply of domestic ergot is steady; it doesn't depend on world situations and foreign complications."[33]

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[32] Anderson, interview.

[33] "'Grass Roots' Publicity," 1.

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UNPUBLISHED SOURCES

Northern States Power Company, Engineering Department, Floor Plans for Rice Laboratories, Inc., undated. In Dassel Area Historical Society, Dassel, Minnesota.

Rice Laboratories Construction Correspondence. In Dassel Area Historical Society, Dassel, Minnesota.

AUDIO-VISUAL RESOURCES

Video tour of Universal Laboratories building. Wilton Anderson, former manager, guides tour. Produced by Dassel Area Historical Society, 28 July 1993.

Verbal Boundary Description

Beginning at the northeast corner of the Southeast Quarter of the Northeast Quarter of the Southwest Quarter of Section 27, Township 119, Range 29; thence proceeding west 249.75 feet, along the north line of the Southeast Quarter of the Northeast Quarter of the Southwest Quarter, said section; thence proceeding south 150 feet; thence east 249.75 feet; thence north 150 feet along the east line of the Southeast Quarter of the Northeast Quarter of the Southwest Quarter of said section, to the point of origin. The parcel is now described as Lot 6, Block 20, Auditor's Replat, City of Dassel, Meeker County, Minnesota.

Boundary Justification

The boundary encloses the entire parcel historically associated with the nominated building.