

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

FOR NPS USE ONLY
RECEIVED JUL 18 1979
DATE ENTERED SEP 4 1979

NATIONAL REGISTER OF HISTORIC PLACES
INVENTORY -- NOMINATION FORM

SEE INSTRUCTIONS IN HOW TO COMPLETE NATIONAL REGISTER FORMS
TYPE ALL ENTRIES -- COMPLETE APPLICABLE SECTIONS

1 NAME

HISTORIC

R. W. Meyer Sugar Mill

AND/OR COMMON

2 LOCATION

STREET & NUMBER

HI 47

State Highway 47

NOT FOR PUBLICATION

CITY, TOWN

Kalae, Island of Molokai

CONGRESSIONAL DISTRICT

2

STATE

Hawaii

CODE

15

COUNTY

Maui

CODE

009

3 CLASSIFICATION

CATEGORY

- DISTRICT
- BUILDING(S)
- STRUCTURE
- SITE
- OBJECT

OWNERSHIP

- PUBLIC
- PRIVATE
- BOTH

PUBLIC ACQUISITION

- IN PROCESS
- BEING CONSIDERED

STATUS

- OCCUPIED
- UNOCCUPIED
- WORK IN PROGRESS
- ACCESSIBLE
- YES: RESTRICTED
- YES: UNRESTRICTED
- NO

PRESENT USE

- AGRICULTURE
- COMMERICAL
- EDUCATIONAL
- ENTERTAINMENT
- GOVERNMENT
- INDUSTRIAL
- MILITARY
- MUSEUM
- PARK
- PRIVATE RESIDENCE
- RELIGIOUS
- SCIENTIFIC
- TRANSPORTATION
- OTHER: abandoned

4 OWNER OF PROPERTY

NAME

R. W. Meyer, Ltd.

STREET & NUMBER

P. O. Box 117

CITY, TOWN

Kaunakakai

VICINITY OF

Island of Molokai, Hawaii

STATE

5 LOCATION OF LEGAL DESCRIPTION

COURTHOUSE,
REGISTRY OF DEEDS, ETC.

Maui County Courthouse

STREET & NUMBER

CITY, TOWN

Wailuku, Island of Maui

STATE

Hawaii

6 REPRESENTATION IN EXISTING SURVEYS

TITLE

"R. W. Meyer Sugar Mill: 1876-1889"

DATE

September, 1978

FEDERAL STATE COUNTY LOCAL

DEPOSITORY FOR
SURVEY RECORDS

Historic American Engineering Record

CITY, TOWN

Washington

STATE

District of Columbia

7 DESCRIPTION

CONDITION		CHECK ONE	CHECK ONE
<input type="checkbox"/> EXCELLENT	<input type="checkbox"/> DETERIORATED	<input type="checkbox"/> UNALTERED	<input checked="" type="checkbox"/> ORIGINAL SITE
<input type="checkbox"/> GOOD	<input type="checkbox"/> RUINS	<input type="checkbox"/> ALTERED	<input type="checkbox"/> MOVED DATE _____
<input checked="" type="checkbox"/> FAIR	<input type="checkbox"/> UNEXPOSED		

DESCRIBE THE PRESENT AND ORIGINAL (IF KNOWN) PHYSICAL APPEARANCE

The machinery at the Meyer Mill has, in general, remained in remarkably good condition, far better than the light-weight wooden truss buildings of the Boiling House, Drying Shed, and Engine and Boiler House. The Engine and Boiler House have collapsed completely. Both ends of the Boiling House have collapsed along with portions of the sides. The double floor system - a lower floor covering the molasses vats and an upper floor for walking - have fallen in. The drive shaft for the mill is now lying next to the mill. Many of the mill's brass bearings have been removed and the timber mill bed has rotten away. Some of the Redwood side of the sorghum pass have been removed as have the hard levered sluice gates between the sorghum pan compartments. The masonry furnace and flue running the length of the sorghum pan have deteriorated somewhat and are missing some of the original fire-brick. The centrifugals, steam engine, and boiler are all in good condition. Two pulleys to drive one of the two centrifugals are missing from the countershaft and nearly all of the 22 fire tubes in the boiler have rusted away. Parts of the site are now overgrown with bushes. Aside from the missing copper clarifiers, sugar coolers, and smokestack, and the somewhat deteriorated buildings, the Meyer Mill remains in fine and fairly complete condition.

8 SIGNIFICANCE

PERIOD	AREAS OF SIGNIFICANCE -- CHECK AND JUSTIFY BELOW			
<input type="checkbox"/> PREHISTORIC	<input type="checkbox"/> ARCHEOLOGY-PREHISTORIC	<input type="checkbox"/> COMMUNITY PLANNING	<input type="checkbox"/> LANDSCAPE ARCHITECTURE	<input type="checkbox"/> RELIGION
<input type="checkbox"/> 1400-1499	<input type="checkbox"/> ARCHEOLOGY-HISTORIC	<input type="checkbox"/> CONSERVATION	<input type="checkbox"/> LAW	<input type="checkbox"/> SCIENCE
<input type="checkbox"/> 1500-1599	<input checked="" type="checkbox"/> AGRICULTURE	<input type="checkbox"/> ECONOMICS	<input type="checkbox"/> LITERATURE	<input type="checkbox"/> SCULPTURE
<input type="checkbox"/> 1600-1699	<input type="checkbox"/> ARCHITECTURE	<input type="checkbox"/> EDUCATION	<input type="checkbox"/> MILITARY	<input type="checkbox"/> SOCIAL/HUMANITARIAN
<input type="checkbox"/> 1700-1799	<input type="checkbox"/> ART	<input checked="" type="checkbox"/> ENGINEERING	<input type="checkbox"/> MUSIC	<input type="checkbox"/> THEATER
<input checked="" type="checkbox"/> 1800-1899	<input checked="" type="checkbox"/> COMMERCE	<input type="checkbox"/> EXPLORATION/SETTLEMENT	<input type="checkbox"/> PHILOSOPHY	<input type="checkbox"/> TRANSPORTATION
<input type="checkbox"/> 1900-	<input type="checkbox"/> COMMUNICATIONS	<input checked="" type="checkbox"/> INDUSTRY	<input type="checkbox"/> POLITICS/GOVERNMENT	<input type="checkbox"/> OTHER (SPECIFY)
		<input type="checkbox"/> INVENTION		

SPECIFIC DATES 1876-1889

BUILDER/ARCHITECT Rudolph Wilhelm Meyer

STATEMENT OF SIGNIFICANCE

Constructed in the 1870's the R. W. Meyer Sugar Mill is today (1978) the only site in Hawaii with sufficient material remains intact to demonstrate fairly completely a nineteenth century process of sugar manufacture. The ruins of several nineteenth century sugar mills still exist throughout Hawaii, as do various nineteenth century sugar processing artifacts; however, the Meyer Mill is the only mill site with nineteenth century sugar processing equipment in place.

The major pieces of equipment still in place include an animal-powered three roll cane mill, with 15" x 22" rolls for extracting the cane juice from the cane, manufactured by Edwin Maw, Liverpool, England; a 30' x 5' sorghum pan evaporator for evaporating the cane juice, manufactured by John Nott & Co. of Honolulu, Hawaii; two 30" wide centrifugals of drying the sugar and separating the sugar crystals from the molasses; a small steam engine and a 5" diameter cylinder and 10" stroke for driving the centrifugals, manufactured by the Ames Iron Works, Oswego, New York; and a fire tube locomotive boiler to provide steam for the engine, manufactured by the Ames Iron Works, Oswego, New York. The site also includes the masonry mill pit in which the mill sat, four molasses pits below the Boiling House floor, the masonry furnace and flue, and the Boiling House and Drying Shed constructed of Redwood and Northwest Pine and roofed with corrugated metal. The only major piece of sugar processing equipment missing from the Meyer Mill are two copper clarifiers where the initial boiling and liming of the cane juice took place and the iron smokestacks connected to the end of the open-fire flue which ran under the sorghum pan evaporator. In short, the sites significance came from the remarkable integrity of the equipment connected with its original process.

At the age of twenty-five Rudolph Wilhelm Meyer emigrated from Germany to Hawaii where he arrived on January 20, 1850. In 1853 Meyer settled on Molokai where he lived until his death in 1897. Meyer supported himself and his family in part by holding a number of local commissions from the Royal Hawaiian government but primarily from his diverse agricultural activity. He planted at various times coffee, corn, wheat, oats, taro, potatoes, beets, cassava, peaches, mangoes, bananas, and grapes. For over a decade between 1876 and 1889 Meyer cultivated sugar cane.

9 MAJOR BIBLIOGRAPHICAL REFERENCES

Meyer Family Papers, Alexander and Wilhelm C. Meyer, Island of Molokai, Hawaii.

See also, Daniel M. Bluestone, "R. W. Meyer Sugar Mill: 1876-1889," in files of Historic American Engineering Record, HCRS, Washington, D.C.

10 GEOGRAPHICAL DATA

ACREAGE OF NOMINATED PROPERTY 2 acres

UTM REFERENCES

A	0,2	7,0,6	6,4,0	2,3	4,1	7,2,0	B			
	ZONE	EASTING	NORTHING	ZONE	EASTING	NORTHING				
C				D						

VERBAL BOUNDARY DESCRIPTION

This property occupies tax map parcel 5-2-16:45 and is 200 feet from State Highway #47.

LIST ALL STATES AND COUNTIES FOR PROPERTIES OVERLAPPING STATE OR COUNTY BOUNDARIES

STATE	CODE	COUNTY	CODE
<u>Hawaii</u>		<u>Maui</u>	
STATE	CODE	COUNTY	CODE

11 FORM PREPARED BY

NAME / TITLE

Daniel M. Bluestone

30 August 1978

ORGANIZATION

(Historic American Engineering Record)

DATE

STREET & NUMBER

5509 S. Hyde Park Boulevard, Third Floor

TELEPHONE

(312) 752-3437

CITY OR TOWN

Chicago

STATE

Illinois 60637

12 STATE HISTORIC PRESERVATION OFFICER CERTIFICATION

THE EVALUATED SIGNIFICANCE OF THIS PROPERTY WITHIN THE STATE IS:

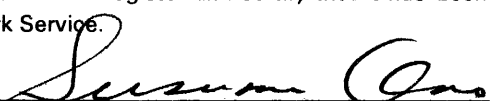
NATIONAL X

STATE

LOCAL

As the designated State Historic Preservation Officer for the National Historic Preservation Act of 1966 (Public Law 89-665), I hereby nominate this property for inclusion in the National Register and certify that it has been evaluated according to the criteria and procedures set forth by the National Park Service.

STATE HISTORIC PRESERVATION OFFICER SIGNATURE

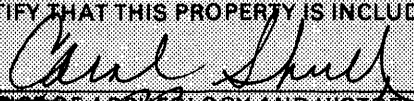


TITLE State Historic Preservation Officer

DATE 7/05/79

FOR NPS USE ONLY

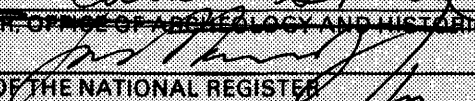
I HEREBY CERTIFY THAT THIS PROPERTY IS INCLUDED IN THE NATIONAL REGISTER



DATE

9-4-79

ATTEST



DATE

9-4-79

KEEPER OF THE NATIONAL REGISTER

UNITED STATES DEPARTMENT OF THE INTERIOR
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CONTINUATION SHEET

ITEM NUMBER 8

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Meyer started to grow sugar at the time when the 1876 Reciprocity Treaty between the United States and Hawaii just removed the tariff on Hawaiian sugar sold in the United States. The Treaty effected large new investment in the sugar industry which supported massive expansion in sugar production, rapid modernization of old sugar mills, and the introduction of many technical improvements in sugar cultivation, irrigation, and manufacture. Although Meyer built his mill during this period he did not really share in the Reciprocity Treaty era expansion or technical innovation. Meyer instead built a small mill adequate to handle the modest 50 ton annual production from his family's 30 acres of sugar cane. In the early 1880's when the average investment in Hawaii's fifth-six sugar plantations exceeded \$280,000, the Meyer family investment of \$10,000 made their mill the smallest one in Hawaii. In nearly all of its major sugar manufacturing operations-grinding, clarifying, concentrating, cooling, and drying - Meyer adopted and followed mill practices more representative of the 1850's and the 1860's than the 1870's and 1880's. The mill and plantation system thus recapitulated an earlier technical and agricultural period in the growth of the Hawaiian sugar industry. In the 1850's animal power still operated as a motive power in cane mills, not yet replaced by steam and water power. In the early 1850's centrifugals drying of sugar just started. It was in the early 1860's, that the open-fire sorghum pan evaporator was adapted in the Hawaiian sugar industry. In the 1870's Meyer used the sorghum pan process, which was ideally suited to smaller manufacturer, at a time when most Hawaiian mills relied on more advanced and expensive applications of steam to provide the heat for evaporation.

The Meyer Mill easily accommodated the milling requirements of the family's sugar lands and repaid the investment within a few years; however, during the 1880's the price paid for sugar steadily declined. The Planters' Monthly reported in July, 1887, that "Low prices of sugar still prevail...and many a man who once thought himself assured of reasonable wealth through sugar, now finds that it will not even yield him a competence...only running the sugar business on a large scale can it be made to pay." In 1892 C. M. Hyde reported that the Meyer Mill stopped producing sugar cane when "The low price of the product for the last few years...made it more than unprofitable to engage in sugar manufacturer in a small way. Now the lands are given up to graying." The Meyer Mill was distinguished in its time by its small size; technically it incorporated the equipment and process that the entire sugar industry passed through in developing into one of Hawaii's leading industry.

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