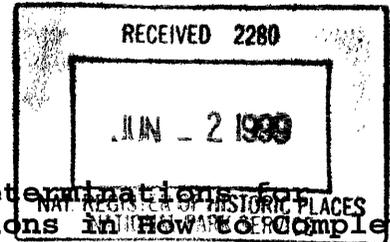


United States Department of the Interior  
National Park Service

NATIONAL REGISTER OF HISTORIC PLACES  
REGISTRATION FORM

250



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 F.E. Company Dredge No. 2

other names/site number Fairbanks Creek Dredge #2

AHRS Site No. LIV-00102

=====

2. Location

=====

street & number Fairbanks Creek

not for publication n/a

city or town Fairbanks vicinity X

state Alaska code AK county Fairbanks North Star code 090

zip code 99701

USDI/NPS NRHP Registration Form

F.E. Company Dredge No. 2  
Fairbanks North Star, Alaska

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        nationally        statewide X locally. (        See continuation sheet for additional comments.)

Judith E. Biltner  
Signature of certifying official

May 27, 1999  
Date

Alaska  
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.
- determined eligible for the  
    National Register  
           See continuation sheet.
- determined not eligible for the  
    National Register
- removed from the National Register
- other (explain): \_\_\_\_\_

B.R. Jyo

6/30/99

        
Signature of Keeper

        
Date of Action

**USDI/NPS NRHP Registration Form**

F.E. Company Dredge No. 2

Fairbanks North Star, Alaska

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=====  
**5. Classification**  
=====

**Ownership of Property (Check as many boxes as apply)**

- private
- public-local
- public-State
- public-Federal

**Category of Property (Check only one box)**

- building(s)
- district
- site
- structure
- object

**Number of Resources within Property**

Contributing	Noncontributing
<u>          </u>	<u>          </u> buildings
<u>          </u>	<u>          </u> sites
<u>    1    </u>	<u>          </u> structures
<u>          </u>	<u>          </u> objects
<u>    1    </u>	<u>    0    </u> 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

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**USDI/NPS NRHP Registration Form**

F.E. Company Dredge No. 2  
Fairbanks North Star, Alaska

=====  
**6. Function or Use**  
=====

**Historic Functions (Enter categories from instructions)**

Cat: industry/processing/ Sub: extractive facility  
extraction

**Current Functions (Enter categories from instructions)**

Cat: vacant/not in use Sub: n/a

=====  
**7. Description**  
=====

**Architectural Classification (Enter categories from instructions)**

no style

**Materials (Enter categories from instructions)**

foundation n/a  
roof asphalt  
walls metal, steel  
other

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

F.E. Company Dredge No. 2 is located on the north side of Fish Creek, approximately two miles east of Fairbanks Creek and twelve and a half miles southeast of Chatanika, a former F.E. Company camp. The dredge is about thirty-five miles north of Fairbanks.

Bethlehem Steel Company's Shipbuilding Division manufactured Dredge No. 2 in 1927. It was shipped in sections by train and ocean barge from Pennsylvania to Fairbanks. During the winter of 1927-1928, F.E. Company workers assembled the dredge in Goldstream Valley where it worked for twenty-two years. During the fall and winter of 1949-1950, the company moved the dredge twenty-one miles to Fairbanks Creek at a cost of \$248,628.71. Dredge No. 2 worked Fairbanks Creek and the lower Fish Creek drainage from August 1950 to 1961.

Dredge No. 2 is a self-contained electrically-powered gold recovery machine capable of digging 16 feet above the face and to depths of 44 feet. A coal fired boiler in the hull provided steam heat and power for some of the on-board machinery. This boiler provided sufficient heat under the conveyors and at other vital locations to prevent cold weather from forcing early shutdowns due to ice build-up.

The dredge has a ship-like compartmented steel hull 128 feet long, 60 feet wide, and 12 feet deep. Its superstructure is steel and wood frame with corrugated metal sheathing. A one-story superstructure covers virtually

**USDI/NPS NRHP Registration Form**

F.E. Company Dredge No. 2

Fairbanks North Star

Page 5

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the entire hull area. The middle third of the structure has a second story. When fully loaded, Dredge No. 2 had a draft of 9'1" and displaced 1,910 tons.

The dredge's bow gantry extends 58'8" above deck, the main gantry 48'6", and the stern gantry 84'2". The digging ladder at the bow of the dredge is 112'6" long and weighs 178,800 pounds. The spuds are I-beam construction, each 65 feet long and weighing 71,400 pounds. The dredge also has an air compressor with 175 cubic foot per minute displacement, a jitney winch, jib crane, fire pump, line winches, and ladder hoist winch.

The digging ladder had 88 buckets, each weighing 3,500 pounds, suspended from it. After scooping gravel, the buckets passed the gravel on to a series of trommel screens to be washed using water pumped from a series of high pressure, low pressure, and hopper pumps at a flow rate of over 12,000 gallons per minute. The upper tumbler is made of nickel steel, has a diameter of 16 feet, and weighs 22,000 pounds. The two piece lower tumbler is made of manganese steel, has a diameter of 8 feet, and weighs 18,615 pounds. Gold saving tables and sluice boxes, with a total surface area of 4,535 feet, recovered the gold. The grade of the steel transverse tables is 1.25, and that of the longitudinal tables is 1.125. A 120' by 36" belt stacker deposited the waste rock, or tailings, behind the dredge. The belt could travel at speeds up to 360 feet per minute with a maximum discharge elevation above water line of 44 feet.

The interior of the dredge retains its original functional appearance. The machinery is in place and in operating condition. The 88 buckets are no longer attached to the digging ladder, but they are on the ground adjacent to the dredge. F.E. Company Dredge No. 2 is one of the best remaining examples of the mechanized gold extraction industrial design of the late 1920s.

USDI/NPS NRHP Registration Form

F.E. Company Dredge No. 2  
Fairbanks North Star, Alaska

=====  
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)

- 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.) n/a

- 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  
engineering  
\_\_\_\_\_

Period of Significance 1928-1961

Significant Dates 1928  
1950  
\_\_\_\_\_

Significant Person (Complete if Criterion B is marked above)  
n/a

Cultural Affiliation n/a

Architect/Builder Bethlehem Steel Company  
\_\_\_\_\_

**USDI/NPS NRHP Registration Form**

F.E. Company Dredge No. 2

Fairbanks North Star

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

With its machinery in place and still in operable condition, F.E. Company Dredge No. 2 is an exceptional example of one of the large industrial machines used to mine gold in the Fairbanks area for over thirty years. The Fairbanks Exploration Company (F.E. Company), a subsidiary of the United States Smelting Refining and Mining Company (USSR&M), operated gold dredges in interior Alaska from 1927 to 1964. Dredge No. 2 was one of the company's first, and is one of seven that remain in the Fairbanks area of the company's fleet of eight dredges. The company used Dredge No. 2 in the Goldstream Valley from 1928 to 1949, and along nearby Fairbanks Creek from 1950 until 1961. The company ceased mining operations in the Fairbanks area in 1964. Because of the dredge's present location in the Fairbanks Creek drainage, the period of significance includes the eleven years the dredge worked that drainage which was less than fifty years ago.

Historic background

Following Felix Pedro's discovery of gold in the area in 1902, more than twenty small mining camps sprang up along creeks within a thirty-mile radius of Fairbanks. Most mines were small, drift mining operations. After the richer, more accessible areas had been mined, activity declined. Gold production in the Fairbanks district fell from \$10.5 million in 1909 to \$3 million in 1915.

Completion of the Alaska Railroad in 1923 provided ready access to coal from the Healy area, about eighty miles south of Fairbanks, and lowered freight shipping costs to interior Alaska. The USSR&M Company of Boston started acquiring mining claims in the Fairbanks Mining District. The F.E. Company, a subsidiary of USSR&M, started gold dredging operations in the district in 1927. Eventually the company had eight dredges operating in interior Alaska.

The F.E. Company was the largest private employer in interior Alaska from the late 1920s until 1964. Before World War II, about one-third of the approximately 3,500 people in Fairbanks worked for the company. Mining operations ceased during World War II because gold mining was not considered essential to the war effort. Although mining resumed after the war, the F.E. Company did not dominate the regional economy as it had before the war. It did, however, account for more than half the gold production in Alaska between 1950 and 1965.

The company assembled Dredge No. 2 during the winter of 1927-1928. The dredge started digging on June 30, 1928, and worked in the Goldstream Valley for 3,630 days in seventeen seasons over a period of twenty-two years. The company moved the dredge twenty-one miles to Fairbanks Creek at a cost of \$248,628 in 1949-1950, and operated it on that drainage until 1961. The company ceased operations in 1964.

On one occasion, Dredge No. 2 required more than routine maintenance. On April 27, 1959, Dredge No. 2 sank when a stern deckhand tried to loosen ice

**USDI/NPS NRHP Registration Form**

F.E. Company Dredge No. 2  
Fairbanks North Star, Alaska

Page 8

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in the rock chute by exploding a stick of dynamite. The blast ripped a 24 by 30 inch hole in the hull two feet below the water line and the dredge went down in half an hour. All crew members got off the dredge safely. When the water had been pumped out of the pond, the hull patched, the broken digging line repaired, and the motors cleaned, the cost of salvage totaled \$49,030. The F.E. Company estimated that it lost \$435,000 in revenue while the dredge was being repaired. Dredge No. 2 returned to service on September 18, 1959.

In its preparations for closing during the early 1960s, the F.E. Company cleaned all of its the dredges, covered the windows with flattened screen plates, closed all openings, and waterproofed all roofs with a heavy coating of pitch. The bucket lines were removed, the level of ponds raised, and the dredges parked on specially prepared sites. After the company discontinued operations, a U.S. Bureau of Mines annual report noted that "U.S.S.R.&M. had long been a leading gold producer in Alaska and in the Nation. The shut-down of the great Nome dredge fields in 1962 and those of Fairbanks in 1964 marked the end of an era in gold mining." The company's care when closing helped preserve Dredge No. 2. It is one of the finest examples in Alaska of the huge giants that dug gold in Alaska through the second quarter of the twentieth century.

**USDI/NPS NRHP Registration Form**

F.E. Company Dredge No. 2

Fairbanks North Star, Alaska

=====  
**9. Major Bibliographical References**  
=====

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

American Society of Mechanical Engineers. Gold Dredge #8. National Historic Mechanical Engineering Landmark pamphlet. May 10, 1986.

Boswell, John C. *History of Alaskan Operations of United States Smelting, Refining, and Mining Company*. Mineral Industries Research Laboratory, University of Alaska Fairbanks, 1979.

Eagan, Pete. Manager of Alaska Gold Company. Personal communication.

Spence, Clark C. *The Northern Gold Fleet: Twentieth-Century Gold Dredging in Alaska*. Champaign: University of Illinois Press, 1996.

U.S. Smelting, Refining and Mining Company. Data on dredges. October 1967.

Previous documentation on file (NPS) n/a

\_\_\_ 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**

State Historic Preservation Office

\_\_\_ Other State agency

\_\_\_ Federal agency

\_\_\_ Local government

\_\_\_ University

\_\_\_ Other

Name of repository: \_\_\_\_\_

=====  
**10. Geographical Data**  
=====

Acreeage of Property less than one

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

	Zone	Easting	Northing	Zone	Easting	Northing
1	06	495644	7212998	3	_____	_____
2	_____	_____	_____	4	_____	_____
	___ See continuation sheet.					

**USDI/NPS NRHP Registration Form**

F.E. Company Dredge No. 2  
Fairbanks North Star, Alaska

=====  
**Verbal Boundary Description (Describe the boundaries of the property.)**

F.E. Company Dredge No. 2 sits on the left limit of Fish Creek, on Claim #3, U.S. Mineral Survey 1691, as recorded in the Fairbanks Recording District, Fourth Judicial District, State of Alaska.

**Boundary Justification (Explain why the boundaries were selected.)**

The boundary encompasses Dredge No. 2 and the 88-bucket line lying on the ground adjacent to it.

=====  
**11. Form Prepared By**

name/title John Reeves, Owner

organization \_\_\_\_\_

date November 1, 1998

street & number P.O. Box 81941

telephone 907-457-2197

city or town Fairbanks state AK zip code 99708-1941

=====  
**Additional Documentation**

Submit the following items with the completed form:

**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 John Reeves

street & number P.O. Box 81941

telephone 907-457-2197

city or town Fairbanks state AK zip code 99708-1941

**USDI/NPS NRHP Registration Form**

F.E. Company Dredge #2  
Fairbanks North Star, Alaska

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**NPS Form 10-900-a**  
**(8-86)**

=====  
**OMB No. 1024-0018**

**United States Department of the Interior**  
**National Park Service**

**NATIONAL REGISTER OF HISTORIC PLACES**  
**CONTINUATION SHEET**

**Section** photograph identification  
=====

1. F.E. Company Dredge No. 2  
Fairbanks North Star, Alaska  
John Reeves  
1997  
P.O. Box 81941, Fairbanks, AK 99708-1941  
looking east at the front or digging ladder end of Dredge No. 2
2. F.E. Company Dredge No. 2  
Fairbanks North Star, Alaska  
John Reeves  
1997  
P.O. Box 81941, Fairbanks, AK 99708-1941  
looking northeast at Dredge No. 2
3. F.E. Company Dredge No. 2  
Fairbanks North Star, Alaska  
John Reeves  
1997  
P.O. Box 81941, Fairbanks, AK 99708-1941  
looking southeast at Dredge No. 2
4. F.E. Company Dredge No. 2  
Fairbanks North Star, Alaska  
John Reeves  
1997  
P.O. Box 81941, Fairbanks, AK 99708-1941  
looking west at the rear or belt stacker end of Dredge No. 2

claim #3

LINE 72

LINE 73

LINE 74

LINE 76

548  
No. 3 LL  
MS 1691

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NO 2

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BM 24

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FECO. BM 25

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FECO

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Dredge  
#2

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2 year lease Northwest Exp  
9-15-85 to 9-14-87  
5 year option commencing 9-

Foot Bridge

EX

24  
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F.E. Company Dredge  
No. 2  
Fairbanks North Star,  
Alaska

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(6A) 32-7

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