

United States Department of the Interior
National Park Service

**NATIONAL REGISTER OF HISTORIC PLACES
CONTINUATION SHEET**

Section number 7 Page 1

**Snowstorm Dredge
Park County, Colorado**

Narrative Description

The Snowstorm Dredge was built by the Bodinson Manufacturing Company in San Francisco, 1939-1941, for Timberline Dredging Company specifically for working the Snowstorm Placer. Delivered by train and truck to Park County in 1941, it was assembled at the placer and worked its way 200 feet up the hill where it started working near its present location. It is also known as a floating gold washing machine, since it was fed by dragline crane rather than by an attached (or integral) bucketline. It was idle from 1942, when all gold mining operations were shut down under L208 during World War II, until 1947. The dredge was in production for a total of only 16 months before it was finally closed down in 1948. It also operated briefly in 1976. The Snowstorm Dredge retains most of the major elements of its processing system, and the exterior is in good to fair condition.

The Snowstorm Dredge is a four-level, 483-ton boat approximately 50 feet wide and 86 feet long made of steel framing clad with corrugated metal. Windows are fixed wood frame. The original doors have been replaced with plywood panels for security. Wood decking underlies the asphalt roofing at the walk decks. Most of the machinery is intact and in fair to good condition, although a number of sheets of metal are bent or have blown off the structure, some glass has broken, some components have been removed, and the asphalt roofing has deteriorated. The dredge sits in a dry gravel pit approximately 20 feet deep within river cobbles that were reprocessed from the tailings created by the dredge.

The Gately Motor Company of Alma, Park County, Colorado, trucked all parts for the dredge 36 miles from the railroad at Buena Vista, Colorado, to the site north of Fairplay. The dredge was erected in 1941 on a site just east of Highway 9 two miles north of Fairplay at an elevation of 10,125 feet. During 1941 massive amounts of gravel were moved to raise the dredge 200 feet to the location where full-scale dredging operations commenced in 1942, approximately 1/4 mile from where it was assembled. All gold-mining operations were shut down under L208 in October, 1941, during World War II, so the Snowstorm was idle until 1947. It operated a total of 16 months between 1941 and 1948, when it ceased operation. It operated for a short period in 1976. Further research will be required to determine how far the dredge moved in total.

The plant consists of a steel receiving hopper with grizzly bars spaced 18 inches apart and 24 feet long. Inside, it has a 64-foot-long trommel which is 7 feet in diameter with 5/8-inch steel plates perforated to permit passage of material up to one inch in diameter onto the riffles. It has 1,000 square feet of Hungarian-type riffles on each side of the trommel, designed to collect

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**Snowstorm Dredge
Park County, Colorado**

Narrative Description (continued)

coarse gold. Mercury boil boxes are located at the foot of each riffle. More recent clean-up of the accumulated gold without using the boil boxes was accomplished by removing the riffles, recovering heavy material and washing it in a side sluice which emptied into a (missing) Anilay Bowl concentrator. On the port side, a water filtering screen remains through which pond water entered the pump that fed the recovery system. The large steam boiler that remains on the gold recovery deck fed steam to three-inch pipes through the entire recovery system to keep the water moving through the riffles during cold weather. The metal chimney from the boiler protrudes from the sloping roof of the third level. All power was provided by electricity. Many elements of the electrical system remain, though much has been scavenged. Waste materials were ejected on a 40-inch-wide conveyor belt through the 110-foot-long, corrugated metal clad stacker on the stern of the boat. The stacker is supported by cables attached to a steel gantry anchored to the third level.

The top level of the structure is the pilot house. It is wood-framed, clad in corrugated metal, and surrounded almost completely by aluminum-framed sliding windows to provide the pilot with 360-degree visibility. The roof of the pilot house is rounded on the edges, giving the structure a vaguely art-deco appearance. Inside this top level are electrical panels, most of which have been removed. Also on this level and intact are a four-drum Bodinson hoist with four 3/4-inch cables that remain anchored to the sides of the pit within which the dredge sits. The pilot moved the boat using the levers that operated this hoist. A gangplank in poor condition extends from the east side of the pit to the pilot house level.

The level below the pilot house is taken up primarily by the receiving hopper, trommel, riffles, and a catwalk to access these features from all sides. Metal stairs in the forward portion of the gold recovery deck that reached the catwalk have been removed.

The floor of the gold recovery deck is the top of the pontoons that make up the hull. The pump is located on the port side of the gold recovery deck, and the oil-fired steam boiler is located to starboard. A tool and repair area is located in the central portion of this deck. There was once a gold table here where amalgamation took place. Retorting was done in the company offices in Fairplay. The side sluice that emptied into the missing Anilay Bowl concentrator is located on this level.

The lower level, the hull, consists of steel pontoons approximately six feet high, eight feet wide, and 45 feet long. A bolted hatch allows access to each pontoon. Fuel oil may have been stored in one of the pontoons. Preliminary inspection indicates they are in good condition.

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**Snowstorm Dredge
Park County, Colorado**

NARRATIVE STATEMENT OF SIGNIFICANCE

The Snowstorm Dredge is historically significant for its association with the mining industry in the South Park region of Colorado. It represents one of the last attempts to recover economically viable amounts of gold from placer deposits in Colorado. The Snowstorm is the only surviving intact example in Colorado of a dredge, an important type of mining technology.

Introduction: The Timberline Dredging Company bought the Snowstorm Placer, between Alma and Fairplay, Colorado, in 1933, and conducted extensive testing in 1934 and 1935. The Bodinson Manufacturing Company in San Francisco, California, then manufactured the Timberline Dredging Co. Dredge No. 2, now commonly known as the Snowstorm Dredge, to Timberline's specifications. It arrived at the Snowstorm Placer in 1941, having been transported by rail to Buena Vista, and then by trucks to a site two miles north of Fairplay on State Highway 9 where it was assembled. It began recovering significant amounts of gold in 1942.

The dredge closed down for the year in September of 1942. In October, 1942, Federal Limitation Order L208 closed most domestic gold mines so that scarce equipment, supplies, and skilled workers could be focused on mining essential base metals. Snowstorm Dredge operations resumed in May, 1946, with a more efficient bucket that appeared to resolve the problems with large boulders noted in 1942. It operated again during the 1947 and 1948 seasons, for a total of approximately 16 months between 1942 and 1948.

In 1975-76, the dredge was renewed, painted, and floated by a new lessee as a stationary plant. It was fed by belt conveyor during 1976 operations. Substantial amounts of fine gold, shot-gold, and nuggets up to ½ ounce were recovered in the dredge riffles. Late in the summer of 1983 a new, more efficient stationary gold plant was installed near the dredge on the Snowstorm property, and operated for about 2-1/2 months. For various reasons, it was impossible to continue operations economically. At present, gold recovery at the Snowstorm Placer is merely a by-product of gravel operations.

Context: The Snowstorm Dredge is associated with the history of the mining industry in South Park. Dredging was the last of a series of technologies used on Colorado gold streams, beginning with rocker and longtom in 1859. Dredges were perfected at the turn of the century to work the low grade golden gravels of mineral regions. They floated in ponds and dredge gravel in front of them, advancing up and down a creek processing gravel.

The South Park region of Park County played an important role in Colorado mining history, producing quantities of gold, silver, lead, copper, and coal. Between 1859 and 1922, Park County produced about \$10.3 million worth of gold, ranking tenth among Colorado counties and capturing 1.5 percent of the state total.

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**Snowstorm Dredge
Park County, Colorado**

Statement of Significance (continued)

Early, small-scale placer mining rapidly gave way to larger-scale sluicing and hydraulic operations during the rush era. A mining revival occurred with the introduction of large-scale dredging operations. South Park in the 1920-1952 period, like large-scale dredging operations in Summit and Lake counties, which border Park County on the north and west, added to Colorado gold output. The presence of extensive gold-bearing gravel deposits along accessible streams made dredging economically feasible.

The wages and associated economic benefits of the Snowstorm Placer from 1902, when hydraulic operations began, until 1948, when the dredge closed down, were more important to the viability of the Fairplay-Alma area than was the gold that was sent away. The local newspapers, which traditionally overstated gold yields, consistently reported the beginning and end of operations each year, and noted the number of employees on site at various times. As many as 12 men were employed during seasonal preparation and operation, a large crew for an area with a small population.

No mining-related historic resources in the South Park regions of Park County, Colorado, are presently listed in the National or State Registers of Historic Places. A handful of dredges from other states are listed: two in Alaska, one in Idaho, and one in Oregon. Dredges are included as a specific property type under the mining context for South Park.

Period of Significance: The period of significance for the dredge begins with its construction in 1939, continues with its transportation to the site and assembly in 1941 and its first recovery of viable amounts of gold in 1942, and ends with the cessation of regular operation in 1948. Few mines opened again after the L208 closure for World War II was rescinded, due to increased cost and rehabilitation problems. In 1949, only the large South Platte No. 1 Dredge south of Fairplay was in operation; the other dredges in the district had been closed down due to rising steel, supply and labor costs, and a stationary price on gold. Operation in 1976 could be considered significant since it is apparently the last operation of a gold dredge in Colorado, but this was a brief anomaly in the history of the plant, probably stimulated by the high price of gold at that time.

Integrity: The Snowstorm Dredge was designed to be a movable object, both within specific placer deposits as well as between noncontiguous locations. The Bodinson Manufacturing Co. catalog of dragline gold dredges states: "A distinguishing feature of Bodinson equipment is that it is sectionalized. When a given piece of property has been worked, the plant is dismantled easily and quickly. Sections or parts, being within the load-carrying capacity of a motor truck, are transported to a new location....Bodinson plants are usually dismantled and reassembled within a week. Parts are sometimes designed to facilitate transportation to seemingly inaccessible locations."

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Snowstorm Dredge
Park County, Colorado

Statement of Significance (continued)

The Snowstorm Dredge was manufactured in San Francisco, California, and transported by rail and truck to the site where it was assembled. It worked its way uphill 200 feet in elevation, approximately 1/4 mile, before it began to yield significant amounts of gold. It presently is unknown how much it moved within the placer, since the tailings have been reprocessed for gravel. Many gold dredges were disassembled for relocation elsewhere, sometimes great distances away. In 1938, a dredge in Summit County, Colorado, was taken apart and reassembled to operate on Beaver Creek in Park County. The famous South Platte Dredge No. 1 that worked south of Fairplay was disassembled and shipped to South America in the 1980s. Dragline dredges had little market value compared to gold yield and transportation costs to distant sites. Therefore, the Snowstorm was left in Colorado. A few attempts were made to convert it into a stationary plant, but it was eventually abandoned and the gravel mining operation on the site works around it.

The selection of a dredge for this vicinity was determined by the set of mining problems the deposits presented. Careful assessment of the depth and type of deposits to be worked determined the type of processing plant to be used. Deeper, more valuable deposits merited the use of a more expensive bucketline dredge. Bodinson Dredge Co. stated, "When our engineers have data relative to a particular property, they design equipment to handle the maximum daily average yardage at maximum profit. It is only through competent engineering and efficient machinery that many placers can be exploited on a basis of satisfactory profits." Apparently the design of the Snowstorm Dredge cut the margin a bit too close; there is no evidence the dredge was ever profitable, even taking into account the possibility of high-grading. Even superficial reading of the available information about depth to bedrock, size of boulders to be handled and expected yield indicates that the Snowstorm, although the largest dragline dredge in Colorado, was not up to the task at this particular site. The plant has sat idle and derelict for most of the past 51 years.

The processing machinery remains surprisingly intact: grizzly, hopper, trommel, sluices, pump, boiler, stacker conveyor belt. The four-drum hoist holding the cables that moved the boat is intact, as are the cables and operating levers. Much of the electrical wiring has been removed. A few pieces that could be used in other operations, such as a metal ladder to the trommel catwalk and the pump that brought water into the dredge, are gone, as is the gold table. There is no dragline on-site.

The construction materials also are surprisingly intact. Some of the exterior has deteriorated; corrugated metal siding panels are bent by the wind or have blown away, and some are rusted; the asphalt composition roof of the third level is disintegrating, exposing the wood roof decking; original doors are missing, replaced by plywood panels; much of the glass is broken out. The interior of the dredge was painted silver in 1976.

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Section number 9, 10 Page 6

Snowstorm Dredge
Park County, Colorado

Bibliography

Colorado Mining Directory. Various years.

Engineer and Mining Journal, 1940-1954.

The Fairplay Flume, Fairplay, Colorado. 1902-1976.

Gilsinger, Jane. Chronology of Snowstorm Placer and Snowstorm Dredge [Cites various descriptions from a wide range of sources, some of which are listed below. Lists sources consulted and sources yet to be consulted.]
Manuscript. Bailey, Colorado, 1999.

Heylmum, Edgar B. *Placer Gold Near Fairplay, Colorado*. January 1991.

Merrill, C.W. "Dragline Dredges: A New Way to Mind Placer Gold" in *Mining and Metallurgy*, December 1938.

Mining World. "Big Boulders Beaten" 1948.

Neuscheler, Roger C. *Snowstorm Placer Evaluation*. Manuscript. 1984.

Parker, Ben H., Jr. *Gold Planning and Placering in Colorado: How and Where*.
Denver, Colorado: Colorado Geological Survey, Department of Natural Resources, 1992.

Simmons, Tom and Laurie. *South Park Historic Contexts*. Front Range Research Associates, Inc. Denver, Colorado 1999.

Truskolaski, Len, *Snowstorm Placer Report*. Manuscript. 1984.

Verbal Boundary Description

The dredge itself, within the placer deposits of the upper Middle Fork of the South Platte River, for which vicinity it was designed.

Justification

The resource is the dredge itself, since it is a structure inherently designed to move, or to be disassembled and then reassembled at another site. (See *Integrity*, Section 8, Page 4)

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Section number 11 Page 7

**Snowstorm Dredge
Park County, Colorado**

Photographs - August 1999

Photographer: Gary W. Higgins

Location of Original Negatives: Fairplay, Colorado

Photograph Number	Description	View
1	Snowstorm Dredge, starboard	Southeast
2	Stern, showing disturbed nature of present location	Southwest
3	Bow and starboard side, showing hopper	Northeast
4	Bow and port side, showing gangplank and pump screen	Northwest
5	Stern and starboard side, showing stacker gantry and pontoons (red)	Southeast
6	Stern and starboard side, showing stacker	Southeast
7	Stern and port side, showing pilot house	Southwest
8	Pilot house deck, showing roof deterioration	North
9	Hopper, showing trommel intake	North
10	Interior: Trommel, lower end	East
11	Interior: Riffles; trommel to left, sandwheel in background	North
12	Interior: Stacker	North
13	Interior: Electrical boxes, pilot house	West
14	Interior: Four-drum Bodinson hoist, pilot house	Southwest
15	Interior: Intake pump, gold recovery deck, port side	Northeast
16	Interior: Oil-fired steam boiler	Southwest

NATIONAL REGISTER OF HISTORIC PLACES REGISTRATION FORM

1. Name of Property

historic name	Snowstorm Dredge
other names/site number	Timberline Dredging Co. Dredge No. 2 Site # 5PA1253

2. Location

street & number Highway 9 North not for publication
city or town Fairplay vicinity N/A
state CO code 063 county Park zip code 80440

3. State/Federal Agency Certification

As the designated authority under the National Historic Preservation Act of 1986, as amended, I hereby certify that this _____ 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 _____ meets _____ does not meet the National Register Criteria. I recommend that this property be considered significant _____ nationally _____ statewide _____ locally. (_____ See continuation sheet for additional comments.)

Signature of certifying official _____ Date _____

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
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State or Federal agency and bureau

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4. National Park Service Certification

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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): _____	_____	_____

Signature of Keeper

Date
of Action

=====

5. Classification

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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
_____	_____ buildings
_____	_____ sites
<u> 1 </u>	_____ structures
_____	_____ 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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6. Function or Use

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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

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7. Description

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Architectural Classification (Enter categories from instructions)

No Style Listed

Materials (Enter categories from instructions)

foundation None
roof Metal
walls Metal
other Asphalt roof walk decks

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

See continuation sheets.

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8. Statement of Significance

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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.)

- ☐ **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)

Engineering

Industry

Period of Significance 1941-1948 Significant Dates 1939
1942

Significant Person
(Complete if Criterion B is marked above) N/A

Cultural Affiliation N/A

Architect/Builder Bodinson Manufacturing Co., Inc.

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

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9. Major Bibliographical References

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

- ☒ State Historic Preservation Office
- ☐ Other State agency
- ☒ Federal agency (US Geological Survey, Bureau of Land Management, Bureau of Mines, US Forest Service)
- ☒ Local government (County Clerk's Records, County Assessor's Records)
- ☒ University (Colorado School of Mines)
- ☒ Other (Denver Public Library Western History Collection, Private Individuals)

Name of repository: See Above.

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10. Geographical Data

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Acreage of Property < 1 acre

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

	Zone	Easting	Northing	Zone	Easting	Northing
1	—	—	—	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.)

*NE 1/4 of SE 1/4 of SEC. 19,
T9S, R77W.*

=====

11. Form Prepared By

=====

name/title Jackie W. Powell, Historic Preservation Planner

organization Park County Historical Society date August 12, 1999

street & number P.O. Box 99 telephone (719) 836-0993

city or town Fairplay state CO zip code 80440

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Additional Documentation

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Submit the following items with the completed form:

Continuation Sheets

7 continuation sheets

Maps

A USGS map (7.5 or 15 minute series) indicating the property's location.

Photographs

Representative photographs of the property.

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

Owner consent form for Park County Landmarks Register

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Property Owner

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

name Bart van Eeuwijk, Managing Member, Snowstorm Sand & Gravel LLC

street & number P.O. Box 388 telephone (719) 836-0817

city or town Fairplay state CO zip code 80440