Form 10-300  UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
NATIONAL REGISTER OF HISTORIC PLACES
INVENTORY - NOMINATION FORM

(TYPE ALL ENTRIES - COMPLETE APPLICABLE SECTIONS)

1. NAME
COMMON:
Priestly's Hydraulic Ram

AND/OR HISTORIC:

2. LOCATION
STREET AND NUMBER:
T8S, R14E

CITY OR TOWN:
near Hagerman

PORTION:
CONGRESSIONAL DISTRICT:
District #2

STATE:
Idaho

CITY OR TOWN:
Salt Lake

STATE:
Utah

STREET AND NUMBER:
610 N. Julia Davis Drive

CITY OR TOWN:
Boise

STATE:
Idaho

3. CLASSIFICATION
CATEGORY (CHECK ONE)
☐ District ☐ Site ☐ Structure ☐ Object

OWNERSHIP
☐ Public ☐ Private ☐ Both

PUBLIC ACQUISITION:
☐ In Process ☐ Being Considered

STATUS
☐ Occupied ☐ Unoccupied
☐ Preservation work in progress

ACCESSIBLE TO THE PUBLIC
☐ Yes: □ Restricted ☐ Unrestricted ☐ No

PRESENT USE (CHECK ONE OR MORE AS APPROPRIATE)
☐ Agricultural ☐ Commercial ☐ Educational ☐ Entertainment
☐ Government ☐ Industrial ☐ Military ☐ Museum
☐ Park ☐ Private Residence ☐ Religious ☐ Scientific

☐ Other (Specify)

PRIVATE NON-RESIDENCE

4. OWNER OF PROPERTY
OWNER'S NAME:
Federal District Judge Willis Ritter

STREET AND NUMBER:

CITY OR TOWN:
Salt Lake

STATE:
Utah

CITY OR TOWN:
Gooding

STATE:
Idaho

5. LOCATION OF LEGAL DESCRIPTION
COURTHOUSE, REGISTRY OF DEEDS, ETC:
Gooding County Courthouse

STREET AND NUMBER:

CITY OR TOWN:
Gooding

STATE:
Idaho

CITY OR TOWN:
Boise

STATE:
Idaho

6. REPRESENTATION IN EXISTING SURVEYS
TITLE OF SURVEY:
Idaho State Historic Preservation Plan

DATE OF SURVEY:
1972

DEPOSITORY FOR SURVEY RECORDS:
Idaho State Historical Society

STREET AND NUMBER:
610 N. Julia Davis Drive

CITY OR TOWN:
Boise

STATE:
Idaho

CITY OR TOWN:
Salt Lake

STATE:
Utah

CITY OR TOWN:
Gooding

STATE:
Idaho

CITY OR TOWN:
Boise

STATE:
Idaho
About 1890, a settler near the Snake River named William W. Priestly invented a way to get water to flow uphill 110 feet to irrigate his land lying just above Thousand Springs near Hagerman. His pump consisted of a series of 24" diameter pipes made of 4" boiler plate (a metal reservoir tank) and to operate the pump, he first trained one pipe opening at the largest spring flowing from the cliff, catching the water in such a way that a great deal of air was combined with the water. This aerated water fell through the pipe for a distance of 190 feet to the reservoir at the bottom of the cliff. Here, the water was drained off into the river and the channeled air was forced by great pressure back up the cliff in a second pipe. The air pipe was connected to a third pipe which also caught spring water, although not as much as the first pipe. This pipe dropped the water sixty feet before it met the air pipe. When the air from the second pipe met the water from the third pipe, it pushed up a fourth pipe which fed the water onto the dry farmland above. Parts of the pipeline and the storage tank still remain at the site today.
**PERIOD**
- [ ] Pre-Columbian
- [ ] 16th Century
- [ ] 18th Century
- [ ] 20th Century
- [x] 19th Century

**SPECIFIC DATE(S) (If Applicable and Known)**
- 1890

**AREAS OF SIGNIFICANCE**
- [x] Aboriginal
- [ ] Prehistoric
- [ ] Historic
- [x] Agriculture
- [ ] Architecture
- [ ] Art
- [ ] Commerce
- [ ] Communications
- [ ] Conservation
- [ ] Education
- [ ] Engineering
- [ ] Industry
- [ ] Invention
- [ ] Landscape Architecture
- [ ] Literature
- [ ] Military
- [ ] Music
- [ ] Political
- [ ] Religion/Philosophy
- [ ] Science
- [ ] Sculpture
- [ ] Social/Humanitarian
- [ ] Theater
- [ ] Transportation
- [ ] Urban Planning
- [ ] Other (Specify)

**STATEMENT OF SIGNIFICANCE**

Pioneer inventiveness, wrought of necessity, is dramatically shown in this ingenious device which enabled fertile but arid land to be farmed prosperously with the addition of water. Priestly's arable land was located 110 feet directly above Thousand Springs. Here he had plenty of water and 190 feet of fall to make his pump work well. The boiler plate pipes all had to be riveted together by hand, then lowered from the top of the cliff and set into place. This task alone must have taken considerable doing. To insure the continued success of his pump, in 1894 Priestly claimed the water rights on all of the waters of Thousand Springs.

Priestly's hydraulic ram, a pump with not one moving part, was considered truly marvelous. Although evidence points to a similar less sophisticated device in Arizona in 1886, four years before, Priestly is thought to have come upon his invention independently. Similar hydraulic air compressors were built near Montreal, Quebec in 1896, at Ainsworth, British Columbia in 1898 and at Norwich, Conn. in 1902. However, these pumps, which operated with about 70% efficiency, were displaced by much more efficient steam, gasoline and electric pumps, before any possible development of widespread use of Priestly's pump. The 1947 edition of the Encyclopedia Britannica describes Priestly's invention in detail. Few such original developments in the field of power transmission have been made anywhere in the United States.
LATITUDE AND LONGITUDE COORDINATES DEFINING A RECTANGLE LOCATING THE PROPERTY

<table>
<thead>
<tr>
<th>CORNER</th>
<th>LATITUDE</th>
<th>LONGITUDE</th>
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<tbody>
<tr>
<td>NW</td>
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<td>SW</td>
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LATITUDE AND LONGITUDE COORDINATES DEFINING THE CENTER POINT OF A PROPERTY OF LESS THAN TEN ACRES

<table>
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<th>LATITUDE</th>
<th>LONGITUDE</th>
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</table>
| 42° 44' 40" | 114° 15' 25"

APPROXIMATE ACREAGE OF NOMINATED PROPERTY: less than one acre

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

<table>
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<tr>
<th>STATE</th>
<th>CODE</th>
<th>COUNTY</th>
<th>CODE</th>
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NAME AND TITLE:

Thomas B. Renk, Site Survey Staff

ORGANIZATION

Idaho State Historical Society

STREET AND NUMBER:

610 N. Julia Davis Drive

CITY OR TOWN:

Boise

STATE:

Idaho

12. STATE LIAISON OFFICER CERTIFICATION

As the designated State Liaison 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. The recommended level of significance of this nomination is:

National [ ] State [X] Local [ ]

I hereby certify that this property is included in the National Register.

Name: Merle W. Wells

Title: State Historic Preservation Officer

Date: 1 April 1974

ATTEST:

Date: 7/13/75

Director, Office of Archeology and Historic Preservation

Date: 2-12-75

Keeper of The National Register