

Considered: _____

WATER PERMIT NO. 1406-1

MAP No. same

Name of Applicant Wharf Resources

Post Office Address P.O. Box 446, Deadwood, SD 57732

Amount of Water Claimed 0.56 cfs (250 gpm) Total Acres NA

Source of Water Supply ground water 1 well

Water to be used for IND + SHD County Lawrence

About 5 miles W of Lead

PROOF OF PUBLICATION: Received _____ Not Received _____

APPLICATION: Approved _____ Subject to _____

F.F. & C.L. Adopted _____ Not Approved _____ Deferred _____

PRIORITY _____ Date Received July 29, 1987 Fee \$275.00 Remarks _____

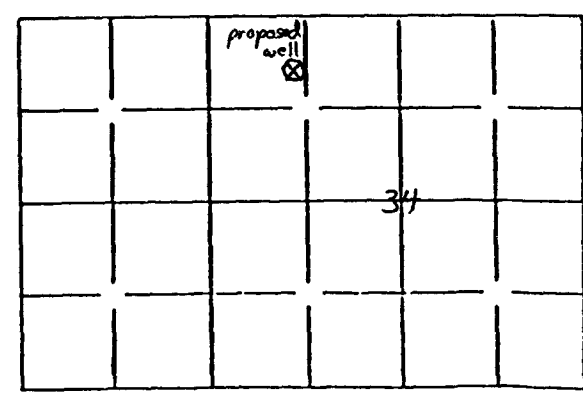
Corrected Application Received _____ Period of Annual Use Jan 1 - Dec 31

WATER QUALITY APPROVAL RECEIVED NA APPROVED/CONDITIONAL (Circle one)

WI-1 Description same as Application YES _____ NO _____ REMARKS _____

Diversion Point well: NW 1/4 NW 1/4 section 34 -
TSN-RZE

Land to be Irrigated NA



Well Log: Driller well not constructed Licensed YES _____ NO _____

Depth of Well 835 Feet REMARKS _____

Type of Map topo PREPARED BY Wharf Resources & Ron Duval Reviewed and the Number
--signed on August 31, 1987 By Ron Duval

FORM 2: Application for uses other than irrigation (type or print)

Mail to: Water Rights Div.
DWNR, Foss Bldg.
Pierre, SD 57501
(605) 773-3352

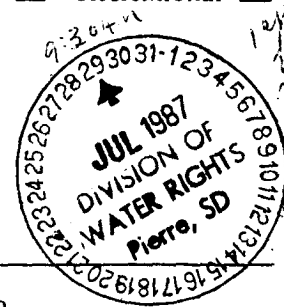
No. 1406-1 Hydrologic Unit 10120203
Map No. same Basin Belle Fourche River
Newspaper Lead Daily Call, PO Box 876

Application For Permit To Appropriate Water Within The State Of South Dakota

Check use of water: Industrial ☒ Commercial ☐ Municipal ☐ Other Common Distribution System ☐
Rural Water System ☒ Suburban Housing ☒ Geothermal Heat ☐ Institutional ☐ Recreational ☐
Domestic ☐ (above 18gpm) Other ☐

Type of Application: Check one or more of the following

New ☒ Vested Right ☐ Future Use ☐ Change Use ☐
☐ Amend Permit No. _____ with old priority date retained
Change diversion point(s) ☐ Add diversion point(s) ☐ Other ☐ _____
☐ Application to: Change diversion point(s) ☐ Add diversion point(s) ☐ on Permit No. _____
☐ Construction to use water reserved by Future Use Permit No. _____



1. Name of Applicant WHARF RESOURCES Phone No. 605-584-1441
Post Office Address PO Box 446, Deadwood State SD 57732
(Street, RR or Box) Zip Code

2. Amount of water claimed (c.f.s) .56 CFS (250 GPM)

3. Source of water supply Well drilled into Two Johns underground mine workings

4. Location of point of diversion Well (See attached map)
NW $\frac{1}{4}$ NW $\frac{1}{4}$ S34 T5N R2E

County Lawrence

5. Counties where water will be used Lawrence

6. Annual period during which water is to be used Year round January 1 - December 31

7. Give a brief description of proposed project. When available include any preliminary engineering report or other reports or information that will help explain the project. (Attach sheet if more space is needed)

Possible well for supplying water for the Wharf Resources Annie Creek Mine operation and suburban housing development.

Attachments: Attach Form 2A if diversion from a well or dugout, or if storage of water, is proposed. Attach map (see instruction)

STATE OF SOUTH DAKOTA)
County of Lawrence)^{ss}

I, Luther J. Russell for Wharf Resources, the applicant, certify that I have read the foregoing application, have examined the attached map and that the matters therein stated are true and that I intend, and am able to complete the necessary construction.

Signed [Signature]

Subscribed and sworn to before me this 24th day of July 1987

MY COMMISSION EXPIRES JULY 16, 1990

[Signature]
Notary Public (or other qualified officer)

WATER PERMIT

The Water Management Board hereby approves Water Permit Application No. 1406-1

Wharf Resources
(Applicant)

PO Box 446
(Street, RR or Box)

Deadwood
(City)

SD
(State)

57732
(Zip Code)

With the following qualifications.

1. The well approved under this Permit will be located near domestic wells and other wells which may obtain water from the same aquifer. The well owner under this Permit shall control his withdrawals so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.
2. The well constructed pursuant to this permit shall be constructed by a licensed well driller and comply with Water Management Board Well Construction Rules, Chapter 74:02:04.
3. That the water supply developed pursuant to Permit No. 1406-1 shall be in an amount equal to in quantity and quality to the existing supply of water provided by Warbonnet, Inc.

Date of first receipt of application July 29, 1987.

Date of return to applicant for correction, amendments or changes required _____, 19____.

Date of receipt of corrected application _____, 19____. Approved December 2, 1987.

The Water Management Board approved this Water Permit No. 1406-1 authorizing the construction of the water use system and the placing of water to beneficial use as stated in the Application and as qualified in the Water Permit approval, subject, however, to the following limitations and conditions:

1. The date from which applicant may claim right is July 29, 1987.
2. The equivalent of at least one-fifth of the specified work is to be completed on or before June 2, 1990.
3. The whole of said work is to be completed on or before December 2, 1992.
4. The limit of time for proof of beneficial use of water appropriated in accordance herewith is December 2, 1996.
5. The water appropriated shall be used for the purpose of industrial use in mining and for suburban housing development
6. The prior right of all persons who, by compliance with the laws of the State of South Dakota, have acquired a right to the use of water must not be unlawfully impaired by this appropriation.
7. The amount of the appropriation granted shall not exceed 0.56 cubic feet per second; neither shall it exceed the amount of water needed for the beneficial uses served and to which water is actually and beneficially applied for industrial use & suburban housing development on or before December 2, 1996. The water is to be used during the following described annual period: Jan 1 - Dec 31

WATER MANAGEMENT BOARD

By: John H. Baker

Chief Engineer

Division of Water Rights

Dept. of Water and Natural Resources

FEB 9 1988

_____, 19____

Supplemental Information

(type or print in ink)

1. Well Information - Proposed construction

- a) Drill Hole Diameter 8-3/4" Depth 835'
- b) Casing Type Steel Class 250 Diameter 7" O.D. Thickness .280
- c) Screen Type None Diameter --- Thickness ---
- d) Gravel Pack Thickness None Length of Gravel Pack ---
- e) Depth to Top of Water Bearing Material 830'
- f) Depth of Water (ground surface to water level) 390'
- g) Distance to nearest existing domestic well:
- On applicants property 5,800' (HDH8A) On property owned by others Unknown

2. Dugout Information Estimates N/A

- a) Surface Dimensions _____ Depth _____
- b) Depth to water (ground surface to water level) _____

3. Water Storage Dams N/A

If the proposed water use system contains one or more storage dams, please furnish the information requested below. The locations of each dam should be shown on the map submitted with the application.

- a) If a private engineering firm or government agency was involved in the design of this dam please give their name and address

b) Freeboard _____

c) Crest Width _____

Crest Length _____

d) Height _____

e) Outlet Dimensions:
Pipe diameter _____

Spillway width _____

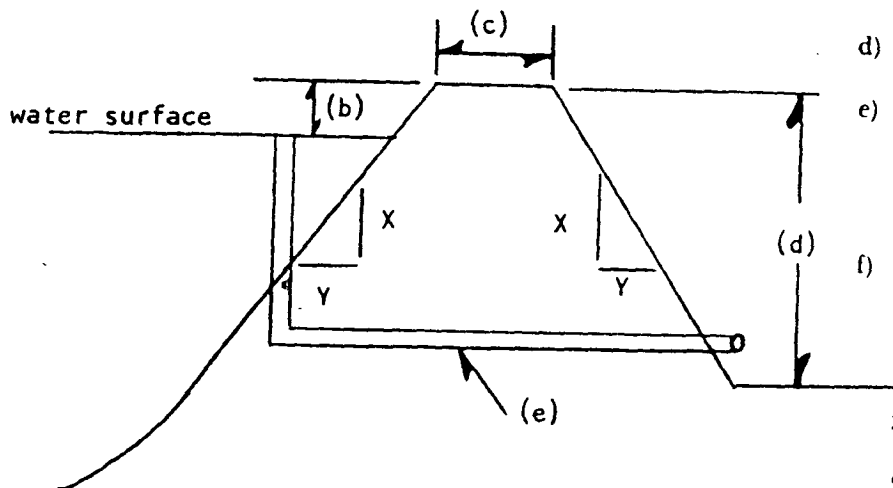
f) X & Y Slope
Upstream _____

Downstream _____

Surface Area of Impoundment _____

Storage _____ acre feet

Drainage area above dam _____



Signature of Applicant _____

5272 NW NW
(MAURICE)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

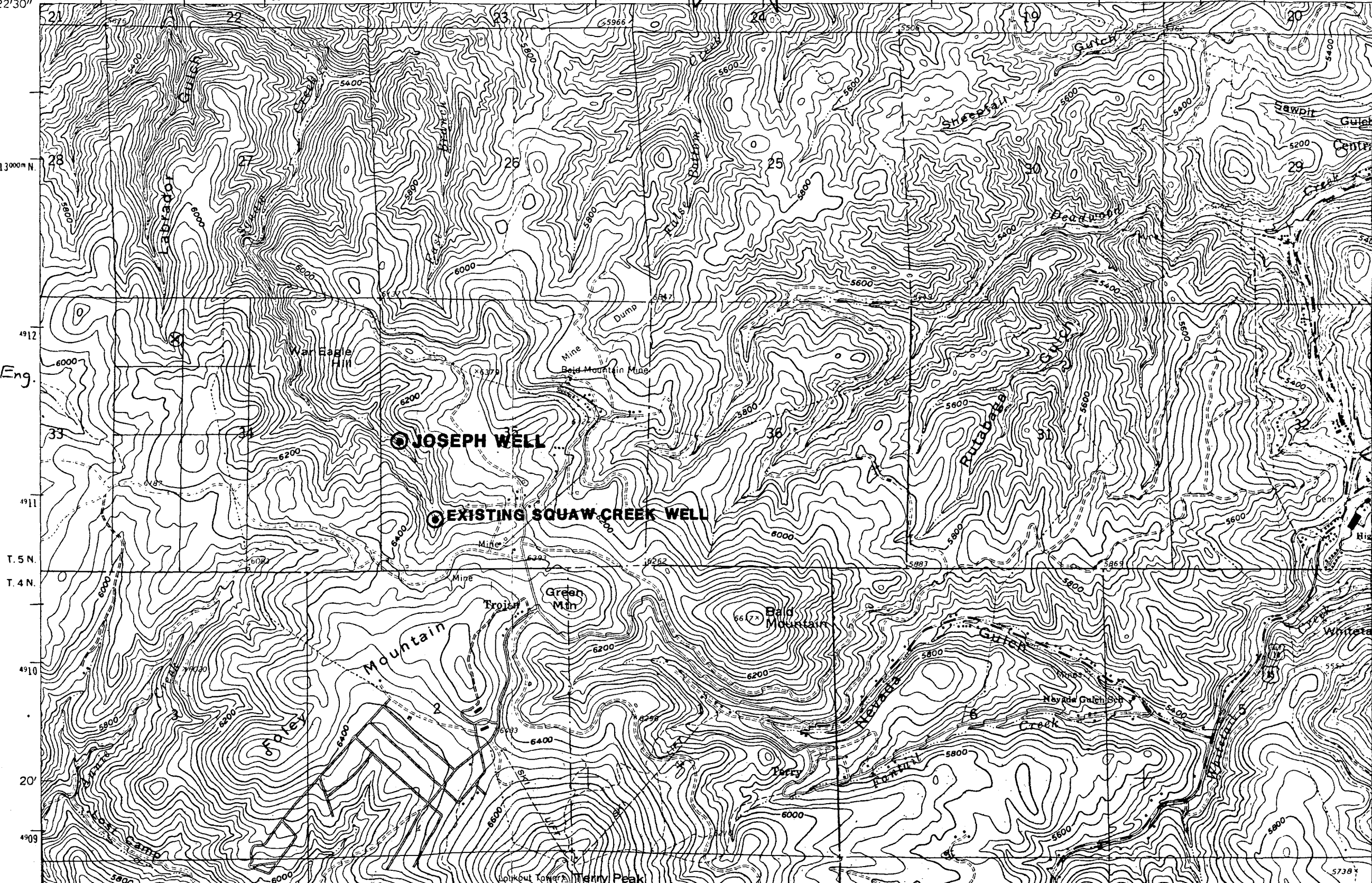
WATER RESOURCES WATER RIGHT APPLICATION - "JOSEPH"

9-12-86

103°52'30" 590000m E 591 592 50' 593 5272 W NE R. 2 E. (SPEARFISH) 595 R. 3 E. 596 47'30" 1010000 FEET

well located by:
Ron Duvall
Natural Resources Eng.
8/31/87

⊗ - proposed well



Appl. No. 1406-1

RECEIPT

Division of Water Rights

South Dakota Department of Water and Natural Resources

Pierre, July 29, 19 87

RECEIVED OF Wharf Resources, PO Box 447, Deadwood, SD 57732

the following amount in fees for services rendered as provided for by law:

Fee for Application for Permit No. <u>1406-1</u> to Appropriate Water, to construct works and to put water to beneficial use _____	275	00
Fee for Application for Permit No. _____ to Appropriate Water for Future Use _____		
Fee to retain Future Use Permit No. _____ after period of seven years.		
Fee for Inspecting Constructed Works, confirming beneficial use and issuing Water License No. _____		
Fee for Filing Transfer Form _____		
Fee for Filing Extension Request _____		
Fee for Certified Copy of _____		
Fee for Print Copy of Map _____		
Fee for Certifying _____		
Fee for _____		
(Any Other Work Provided by Law)	Total	275 00

By John Hatch
Chief Engineer

JOHN HATCH



SOUTH DAKOTA WATER WELL COMPLETION REPORT

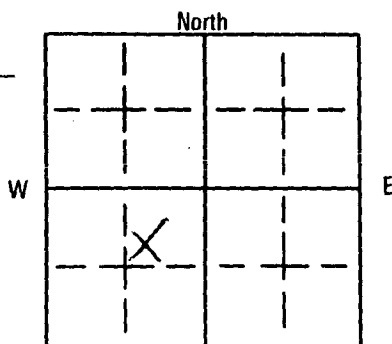
10-85

Location S20 1/4 Sec 35 Twp 5 Rg 2E

County

Lawrence

Please mark well location with an "X"

Start 7-24-86 1 mileWell Completion Date 8-6-86

PROPOSED USE:

☐ Domestic
☐ Irrigation

☐ Municipal
☐ Industrial

☒ Monitor *
☐ Test Holes
☐ Stock

Method of Drilling:

Downhole Hammer

CASING DATA:

☒ Steel ☐ Plastic ☐ Other
If other describe 45' of 6" 250 STEEL

PIPEWEIGHT	DIAMETER	FROM	TO	HOLE DIAMETER
_____ LB/FT	_____ IN	_____ FT	_____ FT	_____ IN
_____ LB/FT	_____ IN	_____ FT	_____ FT	_____ IN
_____ LB/FT	_____ IN	_____ FT	_____ FT	_____ IN
_____ LB/FT	_____ IN	_____ FT	_____ FT	_____ IN

GROUT:

Was the well grouted? ☒ YES ☐ NOTo what depth? 10' to 45' FEETWhat is grouting material? Type III cementIf cement, number of sacks? 6Describe grouting procedure fr-mix pipe

Well Owner:

Name Wharf ResourcesAddress P.O. Box 446, Deadwood, S.D.

Well Log:

Depth

57732

Formation

From

To

<u>DRIFT</u>	<u>0</u>	<u>17</u>
<u>Porphyry - 8" hole</u>	<u>17</u>	<u>42</u>
<u>Porphyry H.L. Brown - 6 1/4" hole</u>	<u>42</u>	<u>135</u>
<u>" med. H.L. Brown</u>	<u>135</u>	<u>140</u>
<u>S.S. Congl. Deadwood</u>	<u>140</u>	<u>210</u>
<u>Quartzite to Porphy</u>	<u>210</u>	<u>225</u>
<u>" " "</u>	<u>225</u>	<u>235</u>
<u>S.S. Congl. purple to wh.</u>	<u>235</u>	<u>250</u>
<u>S.S. wh to pink hd.</u>	<u>250</u>	<u>280</u>
<u>PreCambrian hd</u>	<u>280</u>	<u>310</u>
<u>Quartzite hd. grey</u>	<u>310</u>	<u>330</u>
<u>Quartz - Fracture 34" H₂O</u>	<u>330</u>	<u>332</u>
<u>Quartzite to Quartz</u>	<u>332</u>	<u>400</u>
<u>Quartz - Fracture 54" H₂O</u>	<u>400</u>	<u>405</u>

STATIC WATER LEVEL _____ Feet

Cont. Below

If flowing: closed in pressure _____ PSI

GPM flow _____ through _____ inch pipe

Controlled by ☐ Valve ☐ Reducers ☐ Other

If other, specify _____

Can well be completely shut in? _____

WELL TEST DATA:

☒ Pumped w/ASP 7210 gpm ±☐ Bailed Describe: _____☐ Other _____

Pumping Level Below Land Surface

_____ ft. After _____ Hrs. pumped _____ GPM

_____ ft. After _____ Hrs. pumped _____ GPM

18/CAI

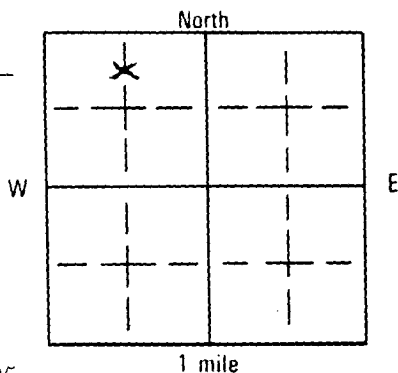
SOUTH DAKOTA WATER WELL COMPLETION REPORT

1406-1

10-85

Location N 1/2 NW 1/4 Sec 34 Twp 51N Rg 2E

County

LawrencePlease mark well
location with
an "X"Two-Johns Mine
Purchase Order #10325Well Completion Date June 29, 1987

PROPOSED USE:

☒ Domestic ☐ Municipal ☐ Test Holes
☐ Irrigation ☐ Industrial ☐ Stock

Method of Drilling:

Air Rotary

CASING DATA:

☒ Steel ☐ Plastic ☐ Other

If other describe _____

PIPEWEIGHT	DIAMETER	FROM	TO	HOLE DIAMETER
<u>23</u> LB/FT	<u>7</u> IN	<u>0</u> FT	<u>277</u> FT	<u>8 3/4</u> IN
_____ LB/FT	_____ IN	_____ FT	_____ FT	_____ IN
_____ LB/FT	_____ IN	_____ FT	_____ FT	_____ IN
_____ LB/FT	_____ IN	_____ FT	_____ FT	_____ IN

GROUT:

Was the well grouted? ☒ YES ☐ NOTo what depth? 297 FEETWhat is grouting material? cementIf cement, number of sacks? 130Describe grouting procedure pressure grouted
through casingWhat was grout weight? 15 LB/GALSCREEN ☐ Perforated pipe ☐ Manufactured

Diameter _____ IN Length _____ FEET

Material _____

Slot Size _____ Set From _____ Feet To _____ Feet

Slot Size _____ Set From _____ Feet To _____ Feet

Slot Size _____ Set From _____ Feet To _____ Feet

Other information _____

Was a packer or seal used? ☐ YES ☒ NO

If so, what material? _____

Describe packer(s) and location? _____

Was well disinfected upon completion? ☒ YES ☐ NOExplain granular chlorine placed in wellBacteriological analysis ☐ YES ☐ NO

Laboratory sent to _____

Well Owner:

Name WILCO Resources, Inc.Address P.O. Box 446 Deadwood, SD 57732

Well Log:

Depth

Formation	From	To
porphyry	0	187
black calc siltstone	187	220
SS	220	235
brown + red siltstone	235	327
shale + siltstone	327	350
porphyry	350	590
red + brown SS + siltstone	590	605
brown + tan siltstone	605	626
porphyry	626	710
SS + siltstone	710	810
broken (no sample)	810	830

STATIC WATER LEVEL 400 Feet

If flowing: closed in pressure _____ PSI

GPM flow _____ through _____ inch pipe

Controlled by ☐ Valve ☐ Reducers ☐ Other

If other; specify _____

Can well be completely shut in? _____

WELL TEST DATA:

☒ Pumped☐ Bailed

Describe: _____

☐ Other

Pumping Level Below Land Surface

600 ft. After 24 Hrs. pumped 210 GPM

_____ ft. After _____ Hrs. pumped _____ GPM

_____ ft. After _____ Hrs. pumped _____ GPM

REMARKS:

This well was drilled under license # 331

And this report is true and accurate.

Drilling firm WVCO Drilling Company

Signature of License Representative:

Ralph Taylor

Signature of Well Owner:

Date _____

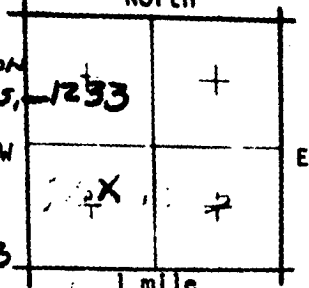
STATE OF SOUTH DAKOTA WELL DRILLERS REPORT

Location SW 1/4 Sec 35 Twp 5 Rg 2E

County

North

Lawrence
SQUATT CR. SHAFT ON
Gen. Jackson Lake ms. 1233
Please mark well
location with
an "X"



Start JUNE 15, 1983

Well Completion Date July 1, 1983

PROPOSED USE:

☒ Domestic ☐ Municipal ☐ Test Holes
☐ Irrigation ☒ Industrial ☐ Stock

Method of Drilling:

Rotary Down Hole Hammer

WELL CONSTRUCTION:

Diameter of hole _____ inches Depth 554 feet

Casing: ☒ Steel ☐ Plastic ☐ Other
Specify _____

Pipe Weight Diameter From To
_____ lb/ft 8 inches 0 feet 63 feet

_____ lb/ft 6 inches 0 feet 83 feet

Was a well screen used? ☐ Yes ☒ No

If Not Specify _____

Screen Type _____ Slot Size _____

Length _____ Diameter _____

Was Casing left open end? ☒ Yes ☐ No

Was a Packer or seal used? ☐ Yes ☐ No

If so what material? _____

Was well gravel packed? ☐ Yes ☒ No

Was well grouted? ☐ Yes ☐ No

Describe grouting procedure _____

DRIVE 6" casing into rock.

To what depth? _____ feet

What was grouting material? _____

If cement, how many sacks? _____

Location of packer(s) and screen or perforated pipe _____

WAS WELL PLUGGED OR ABANDONED ☐ Yes ☒ No
If so how and with what material? _____

Well Owner:

Name WHART RESOURCES & WAR DOWN

Address Lead, S. Dak

Well Log:

Depth

Formation	From	To
<u>DRIFT - BRICKEN PORPHY</u>	<u>0</u>	<u>60</u>
<u>PORPHYRY Hd. BROWN</u>	<u>60</u>	<u>260</u>
<u>S.S. Rd. grey - 1/2 gpm</u>	<u>260</u>	<u>295</u>
<u>S.S. mid. Hd. RUST color</u>	<u>295</u>	<u>298</u>
<u>Grey S.S. to Red S.S.</u>	<u>298</u>	<u>320</u>
<u>Schist Hd. grey</u>	<u>320</u>	<u>335</u>
<u>Quartzite lite colored</u>	<u>335</u>	<u>390</u>
<u>PORPHYRY BROWN Hd. - 335</u>	<u>390</u>	<u>400</u>
<u>PORPHYRY Hd. BROWN</u>	<u>400</u>	<u>520</u>
<u>Schist Hd. Black</u>	<u>520</u>	<u>554</u>

STATIC WATER LEVEL UPPER - 15' Feet

If flowing: closed in pressure _____ PSI

GPM Flow 771 through _____ inch pipe

Controlled by ☐ Valve ☐ Reducers ☐ Other

If other; specify _____

Can well be completely shut off? _____

WELL TEST DATA:

☒ Pumped w/AIR 23 to 25 gpm.

☐ Bailed Describe: _____

☐ Other _____

Pumping Level Below Land Surface

_____ ft. After _____ Hrs. pumped

_____ ft. After _____ Hrs. pumped

_____ ft. After _____ Hrs. pumped

Remarks: BIT - 0-80 - 5' 1/2"
80-260 - 6' 1/2"
260-554 - 5' 1/2"

280' - 159 gpm

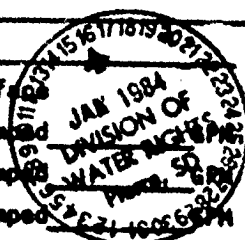
This well was drilled under license A 324
and this report is true and accurate.

Drilling Firm

Signed by

2-11-83

Date



2/11/84
2/3/84



WHARF RESOURCES

(A Montana General Partnership)

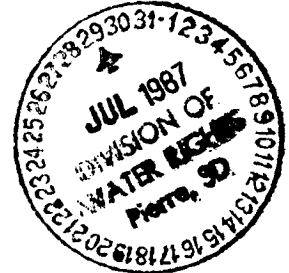
Wharf Resources Ltd.

Wharf Resources (U.S.A.) Inc.

July 24, 1987

CERT/RET REC P 472 421 301

Mr. John Hatch, Chief Engineer
Water Rights Division
Department of Water and Natural Resources
Joe Foss Building, 4th Floor
523 East Capitol
Pierre, South Dakota 57501-3181



Dear Mr. Hatch:

Enclosed please find our Water Right Application to appropriate 0.56 ft³/sec (250 GPM) from a well located in the NW $\frac{1}{4}$ NW $\frac{1}{4}$ S34 T5N R2E. The source of this proposed water well is from the old workings of the Two Johns mine. It is our intent to use this water for mine operation and for suburban housing purposes.

I have enclosed a site location map and our check in the amount of Two Hundred Seventy-five Dollars (\$275.00) for the requested appropriation.

I trust these submissions cover all requirements for making a water right application. If additional information is needed, please contact me at 584-1441.

Sincerely,

Luther J. Russell, Director
Governmental/Environmental Affairs

LJR/lkm

Enclosures

CC: H. A. Scholz
FILE: Water Rights _____

August 27, 1987

Luther J. Russell, Director
Governmental/Environmental Affairs
Wharf Resources
P.O. Box 446
Deadwood, S.D. 57732-0446

Dear Mr. Russell:

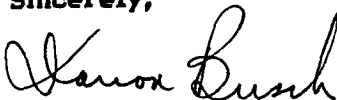
Your recent application for a Water Right Permit indicates your intention to provide water to a suburban housing development, I presume this to be Warbonnet, Inc.

Any additions or alterations to a public water system require submission and approval of plans and specifications to the Office of Drinking Water at least 30 days prior to construction. The plans and specifications are to cover all aspects of the project. If you are to provide for treatment, distribution, or storage in addition to the well, be sure the appropriate items are covered in the plans and specifications.

As the proposed well will provide water to a public water system, it will be necessary to sample the well as soon as possible to determine if the water quality will meet the State Drinking Water Standards. Samples should be collected for "common ion" analysis (hardness, iron, manganese, etc.), the inorganic chemicals (heavy metals), and radionuclides. If the water quality does not meet the standards, the source will need to be treated appropriately or abandoned.

I look forward to the arrival the plans and specifications and water samples. Please feel free to contact me with any questions or comments you may have.

Sincerely,



Darron Busch, Administrator
Office of Drinking Water
Phone: (605) 773-3754

REPORT ON PERMIT APPLICATION NO. 1406-1
WHARF RESOURCES
September 16, 1987

Permit Application No. 1406-1 proposes to appropriate 0.56 cubic feet of water per second from one well 835 feet deep, to be located in the NW 1/4 NW 1/4 Section 34, T5N, R2E. The water is to be used for industrial purposes in the Annie Creek Mine operation and for a suburban housing development.

Aquifer: Crystalline Rocks

Geology and Aquifer Characteristics

A review of the areal geology map of the lead quadrangle (Darton, 1925), identifies the surface geology in the vicinity of the proposed well site as a tertiary intrusive composed of quartz monzonite and rhyolite porphyries. A driller's log for a well located approximately one mile south-east of this proposed well site, suggests the intrusive may be a series of sills forcibly injected into the Cambrian aged, Deadwood Formation. Metamorphism resulting from the intrusion, or intrusions, has undoubtedly altered the constitution of the Deadwood Formation, both structurally and internally to a more crystalline form, quite distinct from it's original sedimentary form. The tertiary igneous rock, the metamorphosed Deadwood Formation, and underlying Pre-Cambrian rock are probably hydraulically connected, and represent a single water table aquifer. These crystalline rocks are distinguished by low porosity, and transmit water to wells along bedding planes, joints, fault, and fractures. Voids in the crystalline rock are mostly in the form of secondary porosity (i.e. fractures, fissures, etc.) rather than intergranular openings (primary porosity). The total porosity of the crystalline rock is estimated to be 3% and the effective porosity, containing recoverable ground water is assumed to be 1% (Rahn, 1979). The hydrologic properties of these igneous and metamorphic rocks make the potential as a water source very difficult to assess, highly variable, and quite site-specific. Few wells completed in the Crystalline rock are capable of a sustained yield of 0.56 cfs because of the rocks limited porosity and permeability. It is possible this proposed well may not produce the requested amount of water (250 gpm).

Recharge to the Crystalline rock occurs through infiltration of precipitation falling directly on the outcrop, runoff over the outcrop, and streamflow. Estimates are not available for the crystalline rock in this area.

Review of Existing Permits

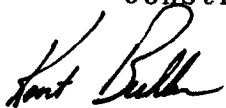
The Division of Water Rights does not have any record of any domestic wells in the immediate area of the proposed well site.

There are six existing ground water permits in this area, they include:

Permit No.	Owner	Diversion Point	Source	Diversion Rate (cfs)
1174-1	Warbonnet, Inc.	SW SW 35, T5N, R2E	Deadwood	0.67
1247-1	Warbonnet, Inc.	NW NW 34, T5N, R2E	Pre-Cambrian	1.20
1278-1	Wharf Resources	SW SE 33, T5N, R2E	Madison	0.25
1288-1	Wharf Resources	SE SW 33, T5N, R2E	Madison	0.25
1346-1	Wharf Resources	NW SW 3, T4N, R2E	Madison	0.25
1365-1	Wharf Resources	NW SW 35, T5N, R2E	Pre-Cambrian	0.25

Conclusions

1. Permit No. 1406-1 proposes to appropriate 0.56 cubic feet of water per second from one well 835 feet deep drilled into the Two Johns Mine.
2. Very little hydrologic data is available for the crystalline rock in this area.
3. Recharge to the crystalline rocks has not been quantified.
4. The aquifer's capability to sustain a yield of 250 gpm is not a given, the well would have to be completed and test pumped to evaluate the aquifer at this site.
5. Because of the distance from existing water rights, interference should not be a problem.
6. It is recommended that testing and permanent monitoring (water levels) be done in order to prevent possible controversy.
7. The well must be completed according to South Dakota Well Construction Standards.



KENT BUHLER
Natural Resources Engineer

Reference

- Darton, N.H., S. Paige, Geologic Atlas of the United States, Central Black Hills Folio, South Dakota, USGS, Folio NO. 219.
- Rahn, P.H., 1979, Groundwater Resources of Western South Dakota, U.S. Army Corps of Engineers, Draft, Final Report.
- Division of Water Rights, Water Permit and Domestic Well Files, SD, DWNR, Joe Foss Building, Pierre SD

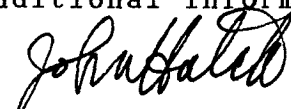
RECOMMENDATION OF CHIEF ENGINEER FOR WATER PERMIT
APPLICATION NO. 1406-1, Wharf Resources

Pursuant to SDCL 46-2A-2, the following is the recommendation of the Chief Engineer, Water Rights Division, Department of Water and Natural Resources concerning Water Permit Application No. 1406-1, Wharf Resources, PO Box 446, Deadwood SD.

The Chief Engineer is recommending APPROVAL of Application No. 1406-1 because 1) there is reasonable probability that there is unappropriated water available for the applicant's proposed use, 2) the proposed diversion can be developed without unlawful impairment of existing rights, 3) the proposed use is a beneficial use and 4) in the public interest with the following qualifications:

1. The well approved under this Permit will be located near domestic wells and other wells which may obtain water from the same aquifer. The well owner under this Permit shall control his withdrawals so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.
2. The well constructed pursuant to this permit shall be constructed by a licensed well driller and comply with Water Management Board Well Construction Rules, Chapter 74:02:04.
3. That the water supply developed pursuant to Permit No. 1406-1 shall be in an amount equal to in quantity and quality to the existing supply of water provided by Warbonnet Inc.

See the attached report for additional information.


JOHN HATCH, Chief Engineer
September 17, 1987



Department of Water & Natural Resources

Joe Foss Building
523 East Capitol
Pierre, South Dakota 57501-3181

Water Rights Division
(605) 773-3352

October 28, 1987

NOTE:

TO BE SURE OF PUBLICATION ON
THE CORRECT DATES, CONTACT THE
NEWSPAPER RIGHT AWAY.

Wharf Resources
PO Box 446
Deadwood, South Dakota 57732

Dear Sir:

Your Application No. 1406-1 for a permit to appropriate water for
industrial & suburban Housing/Dev. use, has been examined and found to
comply with the South Dakota Water Laws and applicable rules. A notice of
your intent to appropriate water has been sent to the Publisher of the

Lead Daily Call printed at Lead

South Dakota. For your information, a copy of this notice, the recommendation
of the Chief Engineer and a report on the application are enclosed. Please
review this notice prior to publication and notify this office, if you have
any corrections or questions.

BE SURE TO CONTACT THE ABOVE NEWSPAPER IMMEDIATELY TO AUTHORIZE PUBLICATION
OF YOUR NOTICE OF INTENT TO APPROPRIATE WATER AND TO ARRANGE FOR PAYMENT.
Early contact with the paper can eliminate delays. The publisher has been
instructed to publish your notice once each week for two consecutive weeks
with the last publication to occur at least twenty days before the board
meeting. We must receive Proof of Publication before the application can be
considered by the Water Management Board.

Sincerely,

RON DUVALL
Natural Resources Engineer

enclosures



Department of Water & Natural Resources

Joe Foss Building

523 East Capitol

Pierre, South Dakota 57501-3181

October 28, 1987

Lead Daily Call
PO Box 876
Lead, South Dakota 57754

Dear Sir:

Enclosed is a Notice of Hearing on Application No. 1406-1. Please publish this notice once each week for two consecutive weeks in your paper. The first publication should be on or before November 4, 1987.

The APPLICANT MUST VERIFY TO YOU THAT THE NOTICE IS TO BE PUBLISHED, before you make the first publication. Please BILL the APPLICANT for the cost of publication. The APPLICANT is Wharf Resources, PO Box 446, Deadwood, South Dakota 57732.

A copy of BOTH publications must be SENT to the WATER RIGHTS DIVISION. IMMEDIATELY return the FIRST publication with the FIRST Transmittal form on the bottom of this page. The first copy is needed to check the publication for errors so any corrections can be made in the second publication. Publication errors can invalidate the public notice and cause the applicant costly delays.

Please be sure the SECOND publication is returned IMMEDIATELY with the enclosed Proof of Publication form. DO NOT WAIT until the end of the month or the billing cycle. The permit application cannot be considered by the Water Management Board until proof of publication has been received.

Sincerely,

Ron Duvall
Natural Resources Engineer
605 773-3352

enclosures

-----CUT HERE-----

FIRST TRANSMITTAL NOTICE
No. _____

TO: Water Rights Division
Joe Foss Building
Pierre SD 57501-3181

Date _____

We are in receipt of your letter of _____ enclosing Notice of Hearing to Appropriate Water by Application No. _____ which was first published in our issue of _____. ENCLOSED IS A COPY OF THIS FIRST PUBLICATION.

Name

Newspaper

Instruction to Newspaper - Publish first publication of the following Notice on or before November 4, 1987 with 2nd publication 1 week later. The applicant is responsible for payment.

NOTICE OF HEARING on Application No. 1406-1 to Appropriate Water
and/or to Amend Water Permit or Water Right No. _____

Notice is hereby given that Wharf Resources whose mailing address is
PO Box 446, Deadwood, South Dakota has made an application for a permit

to appropriate 0.56 cubic feet of water per second from one well into crystalline rocks 835 feet deep to be located in the NW $\frac{1}{4}$ NW $\frac{1}{4}$ Section 34, T5N-R2E. The water is to be used for industrial purposes in the Annie Creek Mine Operation and for suburban housing development.

Pursuant to SDCL 46-2A-2 the Chief Engineer of the Water Rights Division recommends APPROVAL of Application No. 1406-1 because 1) unappropriated water is available, 2) will be no unlawful impairment of existing rights, 3) is beneficial use of water and 4) is in the public interest.

This application will be considered by the Water Management Board at Howard Johnson
Roosevelt & Jefferson rooms, 2211 LaCrosse, Rapid City SD, Dec. 2 19 87 at 10:00 am.

The recommendation of the Chief Engineer is not final or binding upon the Board and the Board is authorized to 1) approve, 2) approve with qualifications, 3) defer, or 4) deny this application after it reaches a conclusion based upon facts presented at the public hearing. Any interested person who may be affected by a Board decision and who intends to participate in the hearing before the Board and present evidence or cross-examine witnesses according to SDCL 1-26, must file a written petition with BOTH the applicant and the Chief Engineer by November 20, 1987. The petition may be informal, but it must include a statement describing the petitioners interest in the application, the reasons for the petitioner's opposition to or support of the application, and the signature and mailing address of the petitioner or his legal counsel if legal counsel is obtained. The applicant need not file a petition.

This application is made pursuant to the provisions of SDCL 46-1-1 thru 46-1-9, 46-1-12 thru 46-1-15; 46-2-3.1, 46-2-9, 46-2-11, 46-2-13, 46-2-17; 46-2A-1 thru 46-2A-10, 46-2A-12, 46-2A-14, 46-2A-15; 46-5-1 thru 46-5-11, 46-5-13 thru 46-5-15, 46-5-24, 46-5-25, 46-5-30.2 46-5-30.4, 46-5-31; (ground) 46-6-3, 46-6-3.1, 46-6-6.1, 46-6-10, 46-6-13, 46-6-14; (future use) 46-5-38 thru 46-5-40; (transfer lands) 46-5-30.4, 46-5-33 thru 46-5-35; (10,000 AFA) 46-5-20.1, 46-5-8.1; and Board Rules ARSD 74:02:01:01 thru 74:02:01:15; (future use) 74:02:01:24 thru 74:02:01:25; (10,000 AFA) 74:02:01:15:02 thru 74:02:01:15:05.

This hearing is an adversary proceeding. The applicant or any person, after filing a petition, has the right to be present or to be represented by a lawyer. These and other due process rights will be forfeited if they are not exercised. Decisions of the Board may be appealed to the Circuit Court and the State Supreme Court as provided by law.

Any person wishing a copy of the Chief Engineer's recommendation, further information on this application or to assure access to the hearing by the handicapped can contact the Water Rights Division, DWNr, Joe Foss Bldg, Pierre SD (605 773-3352) for assistance prior to the hearing date. The time of the hearing will be automatically extended for at least twenty days upon written request of the applicant or any person who has filed a petition to oppose or support the application. The request for extension must be filed with the Chief Engineer by November 20, 1987.

PROOF OF PUBLICATION

STATE OF SOUTH DAKOTA)
County Lawrence) ss.

I, Jimmie R. Stephenson hereby

certify that the annexed printed copy of Notice of Intent to Appropriate

Water was taken from the Lead Daily Call

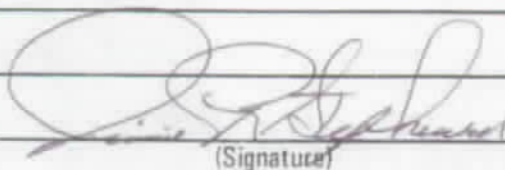
A newspaper which during the whole time of publication of said notice
herein after stated, has been and is printed and published in the

City Lead of Lead

County of Lawrence and State of South Dakota;
that the said notice was published in said newspaper on the following
two dates:

November 4th, 1987

November 11th, 1987



(Signature)

Publisher

(Title)

11-11-87

(Date Signed)



Cost of Printing: _____

93 lines x .2564 = 23.85

93 lines x .2051 = 19.08

Total = 42.93

NOTICE OF HEARING
ON APPLICATION
NO. 1406-1 TO
APPROPRIATE WATER

Notice is hereby given that **Wharf Resources** whose mailing address is **PO Box 446, Deadwood, South Dakota** has made an application for a permit to appropriate 0.56 cubic feet of water per second from one well into crystalline rocks 835 feet deep to be located in the NW1/4NW1/4 Section 34, T5N-R2E. The water is to be used for industrial purposes in the Annie Creek Mine Operation and for suburban housing development.

Pursuant to SDCL 46-2A-2 the Chief Engineer of the Water Rights Division recommends **APPROVAL** of Application No. 1406-1 because 1) unappropriated water is available, 2) will be no unlawful impairment of existing rights, 3) is beneficial use of water and 4) is in the public interest.

This application will be considered by the Water Management Board at **Howard Johnson Roosevelt & Jefferson rooms, 2211 LaCrosse, Rapid City SD, Dec. 2, 1987 at 10:00 am.**

The recommendation of the Chief Engineer is not final or binding upon the Board and the Board is authorized to 1) approve, 2) approve with qualifications, 3) defer, or 4) deny this application after it reaches a conclusion based upon facts presented at the public hearing. Any interested person who may be affected by a Board decision and who intends to participate in the hearing before the Board and present evidence or cross-examine witnesses according to SDCL 1-26, must file a written petition with BOTH the applicant and the Chief Engineer by **November 20, 1987**. The petition may be informal, but it must include a statement describing the petitioners interest in the application, the reasons for the petitioner's opposition to or support of the application, and the signature and mailing address of the petitioner or his legal counsel if legal counsel is obtained. The applicant need not file a petition.

This application is made pursuant to the provisions of SDCL 46-1-1 thru 46-1-9, 46-1-12 thru 46-1-15; 46-2-3.1, 46-2-9, 46-2-11, 46-2-13, 46-2-17; 46-2A-1 thru 46-2A-10, 46-2A-12, 46-2A-14, 46-2A-15; 46-5-1 thru 46-5-11, 46-5-13 thru 46-5-15, 46-5-24, 46-5-25, 46-5-30.2 46-5-30.4, 46-5-31; and Board Rules ARSD 74:02:01:01 thru 74:02:01:15.

Nov 4, 11

This hearing is an adversary proceeding. The applicant or any person, after filing a petition, has the right to be present or to be represented by a lawyer. These and other due process rights will be forfeited if they are not exercised. Decisions of the Board may be appealed to the Circuit Court and the State Supreme Court as provided by law.

Any person wishing a copy of the Chief Engineer's recommendation, for [REDACTED] application, may contact the [REDACTED] by the [REDACTED] can contact the Water Rights Division, Joe Foss Bldg, Pierre SD (605 773-3352) for assistance prior to the hearing date. The time of the hearing will be automatically extended for at least twenty days upon written request of the applicant or any person who has filed a petition to oppose or support the application. The request for extension must be filed with the Chief Engineer by November 20, 1987.



Joe Foss Building
523 East Capitol
Pierre, South Dakota 57501-3181

WATER RIGHTS DIVISION
(605) 773-3352

September 22, 1987

Luther J. Russell, Director
Wharf Resources
PO Box 446
Deadwood, South Dakota 57732

Dear Mr. Russell:

This letter is in response to a phone request on September 21, 1987 from Les Struble for an update regarding the status of Wharf's new permit application and Permit No. 1247-1, Warbonnet Inc. The new permit application has been assigned No. 1406-1 and a draft report has been completed for review by the Chief Engineer. The report needs to be finalized, then the Chief Engineer will make a recommendation to either approve, deny or defer the application. Public notice of hearing on the application will then be given for the December 2, 1987 Board meeting. A copy of the report and Chief Engineer's recommendation will be sent to you with a copy of the public notice.

Water Permit No. 1247-1 was approved June 9, 1982 and the period to construct the water supply system ended on June 9, 1987. The permit can be scheduled for cancellation consideration by the Water Management Board if the project has not been constructed. SDCL 46-2A-8 states that construction needed to put water to beneficial use must be completed within five years from the date the permit is approved. A written request to schedule the permit for cancellation will be needed or an on-site inspection will need to be completed prior to Permit No. 1247-1 being scheduled for cancellation consideration. The project can not be completed after the five year construction period has expired.

Please contact us if you have any questions.

Sincerely,

Ron Duvall
Natural Resources Engineer

RD:ms



WHARF RESOURCES

(A Montana General Partnership)

Wharf Resources Ltd.

Wharf Resources (U.S.A.) Inc.

October 21, 1987

Mr. Ron DuVall
Natural Resources Engineer
Department of Water and Natural Resources
Joe Foss Building, Fourth Floor
Pierre, South Dakota 57501-3181



Dear Mr. DuVall:

Pursuant to your letter of September 22, 1987, in regard to Water Permit No. 1247-1, I relay the following.

It is my understanding that Water Right No. 1247-1 was approved for Warbonnet, Inc., on June 9, 1982, for 1.2 CFS. Warbonnet's Permit No. 1247-1, to the best of our knowledge, has not had the required construction prior to June 9, 1987, to remain a valid permit. You indicated in your letter that a site inspection is needed before this permit can be scheduled for cancellation consideration. As you may know, Wharf Resources will be entering into an agreement to purchase the assets of Warbonnet. To clean up the water rights pursuant to our acquisition of Warbonnet, we request that you schedule an inspection of Warbonnet's Permit No. 1247-1 to verify that the construction activities have not been completed as required by law.

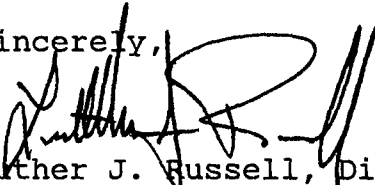
We have applied for a water permit for 0.56 CFS in the proximity of Warbonnet's permit. Our application, as I understand, has been assigned Permit No. 1406-1 and is scheduled for Board hearing in December. Our water right permit is needed for our mining activities and for the purposes of supplying an alternative water source to the existing Warbonnet water system pursuant to our contractual agreement with Warbonnet and the homeowners. Water Right Permit No. 1406-1 has the capability to supply both needs. Priority use for the water, however, would remain with the Warbonnet water distribution system up to the amount specified in our contractual agreement. Wharf desires Water Right Permit No. 1406-1 to justify the heavy capital required to develop this water supply source.

We would like our Water Right Permit No. 1406-1 application and the cancellation of Water Right Permit No. 1247-1 to be heard

Mr. Ron DuVall
October 21, 1987
Page Two

at the December Board meeting. We request that you schedule an inspection prior to that date. If you have any additional questions or concerns in this regard, please feel free to contact me at 584-1441.

Sincerely,



Luther J. Russell, Director
Governmental/Environmental Affairs

LJR/lkm

CC: H. A. Scholz
M. D. Truhe
Don Valentine

JAMES H. WILSON
JAMES W. OLSON
ROBERT M. NASH
STEVEN D. RICH
FRANCES R. BURNETT
JEFFREY P. MAKES

WILSON, OLSON & NASH, P.C.
LAWYERS
CREEKSIDE PROFESSIONAL OFFICES
2640 JACKSON BOULEVARD
P. O. BOX 1552
RAPID CITY, SOUTH DAKOTA 57709
(605) 342-7090

ERNEST GUNDERSEN (1915-1972)
J. H. BOTTUM (1903-1984)

November 24, 1987

Chief Engineer of the Water
Rights Division
Department of Water and
Natural Resources
Joe Foss Building
Pierre, SD

Wharf Resources
P.O. Box 446
Deadwood, SD

RE: Department of Water and Natural Resources 806-11/85
No. 1406-1, Notice of Hearing to Appropriate Water and/or
to Amend Water Permit or Water Right

Gentlemen:

These offices represent the Terry Valley/Trojan Water Project District Committee that is in the process of formation of a water district. It is our understanding that this application affects the water rights to the well located at the Two-Johns mine site, which will be necessary to provide water for domestic purposes to our water system pursuant to contract with Wharf Resources. The Committee favors this location and requests a copy of the Chief Engineer's recommendation to be forwarded to me at the above address. Please consider this a petition on behalf of the Committee pursuant to your notice and rules that would permit us to be present at the hearing on December 2, 1987. If our information is correct and preliminary matters are resolved we intend to support the application.

Very truly yours,

WILSON, OLSON, & NASH P.C.

James W. Olson
James W. Olson

JWO/ddb

cc: George Dunham





Department of Water & Natural Resources

Joe Foss Building
523 East Capitol
Pierre, South Dakota 57501

Water Rights Division
605 773-3352

FEB 9 1988

Wharf Resources
PO Box 446
Deadwood, South Dakota 57732

Dear Sir:

Enclosed herewith is your Water Permit No. 1406-1 as approved by the Water Management Board authorizing you to construct your water diversion system and the water to beneficial use, not exceeding the limits as specified in said Water Permit No. 1406-1.

Also enclosed is Form 10, Notice of Completion of Works and Application of Water to Beneficial Use, which you are to complete and submit to the Chief Engineer when you have completed the system and/or have put the water to beneficial use. An inspection can then be scheduled so that your Water License may be issued to you, thus completing your acquisition of a Water Right.

Very truly yours,

JOHN HATCH, Chief Engineer
Water Rights Division

JH:MS

enclosure

PLEASE NOTE: Certain changes can be made in your permit within the five year construction period, usually without affecting the priority date provided an application to amend your permit is made within the five year period-i.e. changes in location or number of diversion points (wells) or location of land to be irrigated. Well locations for wells into the same aquifer can be moved up to 660 feet without application.

Applications to amend a permit after the five year construction period will be assigned a new priority date. Applications to change water sources, to add lands or increase original diversion rates, if approved will usually receive the date of the new application as a priority date regardless of the five year construction period.



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE SOUTH DAKOTA 57501-3181

APR 23 1998

1406A-1
1493-1

Wharf Resources
Terese Hruska and Jeff Dirkson
HC 37, Box 811
Lead, SD 57754

Dear Ms. Hruska and Mr. Dirkson:

Enclosed are Water License Nos. 1406A-1 and 1493-1. These are the final water right documents completing your process of obtaining a Water Right. Enclosed are Receipt Nos. 415678 and 415679 in the amount of \$50.00 each which you paid for the investigation and issuance of the Water Licenses.

For your information SDCL 46-6-27 requires that if the owner of an existing well, such as the wells authorized by Water Right Nos. 1406A-1 and 1493-1, constructs a replacement well and does not plan to use the old well, the old well is considered abandoned and must be plugged. Also, any well that is being used or is not considered abandoned must be valved and controlled, if flowing, or sealed and capped so that no leaking occurs either underground or at the surface.

As long as you use the water beneficially, as stated in the Water Licenses, the State Water Laws provide that you have a continuing right to use the water. If you have any questions, please contact our office.

Very truly yours,

JOHN HATCH, Chief Engineer
Water Rights Program
(605) 773-3352

ks
enclosures

NOTE: The applicable portions of No. 1406-1 have been incorporated into 1406A-1, and the applicable portions of Water Right Nos. 1278-1 and 1288-1 are incorporated into License No. 1493-1.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

LEAD QUADRANGLE
SOUTH DAKOTA—LAWRENCE
7.5 MINUTE SERIES (TOPOGRAPHIC)

