

WATER PERMIT NO. 1926-1

Name of Applicant: Gilded Mountain LLC

Address: 123 E Jackson Blvd, Suite #3, Spearfish SD 57783

Phone: 605 641-6482

Amount of Water Claimed: 0.055 cfs

Total Acres: NA

Source of Water Supply: groundwater (one well)

Water to be used for: suburban housing development

County: Lawrence

Type of Waste Disposal System:

Location: 1 mile southwest of Lead

PRIORITY Date Received: 12-29-11

Application/License Fee: \$ 700

Corrected Application Received: 1-3-12

Period of Annual Use: Jan 1- Dec 31

Remarks:

Diversion Point: NW ¼ SE ¼ Sec 6-T4N-R3E

Land to be Irrigated: NA

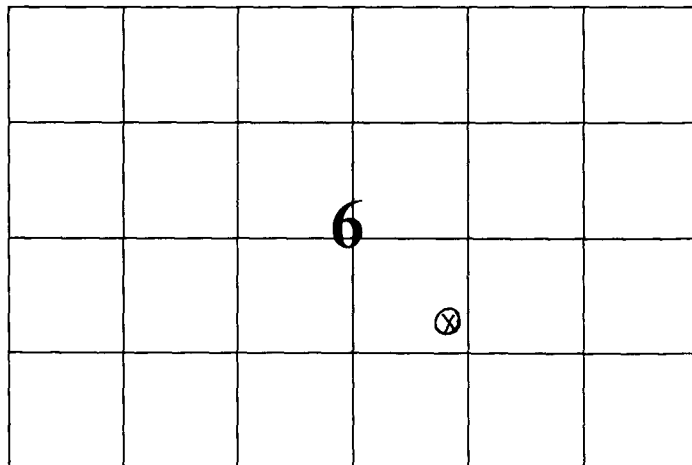
Depth of Well: 1000 feet deep

Well Driller: Alexander Drilling Inc.

Remarks:

Type of Map: plat

Prepared by: Randy L Deibert, RLS



Reviewed and the Number Assigned on: 1-3-12

By: **Karen Schlaak**

Notice of Hearing - date to intervene: _____

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

Mail to: Water Rights Program Joe Foss Building 523 E. Capitol Pierre, SD 57501-3181 (605) 773-3352	No. _____	(office use only) Hydrologic Unit _____
	Basin _____	
	Newspaper _____	

RECEIVED
DEC 29 2011
WATER RIGHTS
PROGRAM

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

Check use(s) of water:

☐ Municipal ☒ Suburban Housing ☐ Recreational ☐ Institutional
☐ Rural Water System ☐ Commercial ☐ Fish & Wildlife ☐ Geothermal Heat
☐ Domestic (over 18 gpm) ☐ Industrial ☐ Other _____

Type of Application: ☒ New ☐ Vested Right (Use predates Mar 2, 1955) ☐ Future Use Reservation
(check one) ☐ Place to Beneficial Use Water Reserved by Future Use Permit No. _____
☐ Amendment/Correction to Permit No. _____

Description of amendment/correction: (i.e. change diversion point(s), add diversion point(s), change use, etc.) _____

1. Name of Applicant Gilded Mountain LLC Phone 605 641 6482
(check one) ☒ Owner ☐ Tenant/lessee
Mailing Address 123 E Jackson Blvd Suite #3 Spearfish State SD 57783
(Street, RR, or Box and City) (Zip Code)

2. Amount of water claimed 25 *CFS or 0.0556 ***AF
(*Cubic Feet per Second) (**Gallons per Minute) (***Acre Feet - storage capacity of dam/dugout or annual use if applicable)

3. Source of water supply well

4. Location of point of diversion (example - 3 wells in SW1/4 NE1/4 section 12-T104N-R53W) 1 well
N 1/2 SE 1/4 Sec 6 Twp 4N Rg 3E County _____

5. County or counties where water will be used Lawrence County

6. Annual period during which water is to be used year round Jan. 1 - Dec. 31

7. Give a description of the 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)

48 lot subdivision with centralized septic and water system with a 25,000 gal holding tank a common use building for residents and an outdoor pool

STATE OF SOUTH DAKOTA)

County of Lawrence)

Attachments: Attach Form 2A if diversion is from a well or dugout, or if storage of water is proposed. Attach map and any other technical information. (see instructions)

I, Scot E. Munro operating member Gilded Mountain LLC, the applicant, certify that I have read this application, have examined the attached map and that the matters stated are true and that I intend, and am able to complete the necessary construction.

Applicant's signature Scot E. Munro

Subscribed and sworn to before me this 27th day of December 20 11



Jamarie Snyder
Notary Public signature

Commission Expires: 3-28-2012

**SOUTH DAKOTA
WATER PERMIT NO. 1926-1**

Date of first receipt of application December 29, 2011.

Date of return to applicant for corrections, amendments or changes December 29, 2011.

Date of receipt of corrected application January 3, 2012.

The Chief Engineer, on behalf of the Water Management Board, issues Water Permit No. 1926-1 to Gilded Mountain LLC, 123 E Jackson Blvd, Suite #3, Spearfish SD 57783 authorizing the construction of the water use system and the placing of water to beneficial use subject to the following limitations, conditions and qualifications:

1. Water Permit No. 1926-1 appropriates 0.055 cubic feet of water per second from one well to be completed into the Crystalline Rock Aquifer (1000 feet deep) located in N 1/2 SE 1/4 Section 6-T4N-R3E.
2. The water appropriated shall be used for the purpose of suburban housing development and may not exceed the amount of water needed for beneficial use.
3. The water is to be used during the following described annual period: January 1 – December 31.
4. The date of approval of Permit No. 1926-1 is March 19, 2012.
5. The date from which applicant may claim right is December 29, 2011.
6. One-fifth of the construction is to be completed on or before September 19, 2014.
7. All construction is to be completed on or before March 19, 2017.
8. Water is to be put to beneficial use on or before March 19, 2021.
9. Water rights obtained in compliance with the laws of the State of South Dakota may not be unlawfully impaired by this appropriation.

QUALIFICATION

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.

WATER MANAGEMENT BOARD

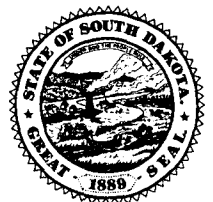
By: Garland Erbele

Garland Erbele, Chief Engineer
Water Rights Program

Department of Environment and Natural Resources

APR 30 2012

date



Supplemental Information

(type or print in ink)

1. Well Information - Proposed Construction

See attached well Report

- a) Drill Hole Diameter 8 3/4" 6" Depth 1,000 ft.
- b) Casing Type 100 PVC Diameter 6" Thickness 160
- c) Screen Type _____ Diameter _____ Thickness _____
- d) Gravel Pack _____ Length of Gravel Pack _____
- e) Depth to Top of Water Bearing Material _____
- f) Depth to Water (ground surface to water level) _____
- g) Distance to nearest existing domestic well: _____
- On applicants property 1 common well On property owned by others approx. 1,000 ft or more

2. Wastewater Disposal System Information

- a) Type of System (i.e. septic tank, drain field) Septic & common drain field (centralized)
- b) System Capacity (gallons) Individual Tanks Year Constructed 2008
- c) Connected to the City of _____ Sanitary System _____

3. Dugout Information

none

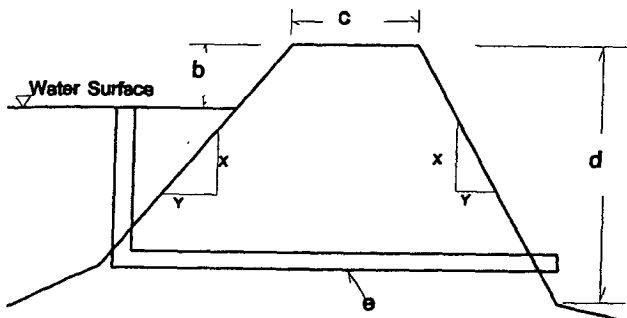
- a) Surface Dimensions _____ Depth _____
- b) Depth to water (ground surface to water level) _____

4. Water Storage Dams

none

If the proposed water use system contains one or more storage dams, please furnish the information requested below for each dam. The locations of the dams need to 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:



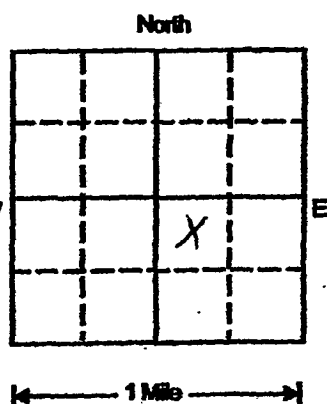
- b) Freeboard _____
- c) Crest Width _____
Crest Length _____
- d) Height _____
- e) Primary Outlet Capacity _____
If pipe, diameter _____
- f) Secondary Spillway Capacity _____
Spillway Width _____
- g) X & Y Slope _____
Upstream _____
Downstream _____
- h) Surface Area of Impoundment _____
- i) Storage _____ Acre Feet
- j) Drainage Area Above Dam _____ Acres

SOUTH DAKOTA WATER WELL COMPLETION REPORT

COPY

Location NW 1/4 SE 1/4 Sec 6 Twp 4N Rg 3E

County Lawrence



Please mark well location with an "X"

Well Completion Date
3/13/08

Distance to nearest potential pollution source (Septic tank, abandoned well, feed lot, etc.)
1/4 mi. Septic (Identify source)

PROPOSED USE:
☒ Domestic/Stock Irrigation
☐ Municipal Industrial
☐ Business Institutional
☐ Test Holes Monitoring well

METHOD OF DRILLING:

Rotary Darwinholt Hammer

CASING DATA: ☐ Steel ☒ Plastic ☐ Other
 If other describe 30 ft of 6" B160 PVC

PIPEWEIGHT	DIAMETER	FROM	TO	HOLE DIAMETER
LB/FT	IN	0 FT	28 FT	8 3/4 IN
LB/FT	IN	28 FT	1000 FT	6 IN
LB/FT	IN	FT	FT	IN

GROUTING DATA:

Grout Type outland 11 No. of Sacks 3 Grout Weight 140 lb/sack From 28 FT To 4 FT

Describe grouting procedure

thru 1" trim pipe

SCREEN: None ☐ Perforated pipe ☐ Manufactured

Diameter _____ Inches Length _____ Feet
 Material _____
 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
open hole

DISINFECTION: Was well disinfected upon completion?

☒ Yes, How? with original Sol.

☐ No, Why Not?

Lab sample sent to for water quality analysis

Well Owner: Scott Monroe
 Business Name: Gilded Mt.
 Address: P.O. Box 310
 City, State, Zip: Spearsfish SD 57783

WELL LOG:

FORMATION	DEPTH	
	FROM	TO
Deadwood	0	370
Fracture 2gpm	370	372
Schist	372	785
Schist frac 6gpm	785	790
Schist	790	1000

STATIC WATER LEVEL 120 FEET

If flowing, closed in pressure _____ PSI

GPM flow 25 through _____ Inch pipe

Controlled by ☐ Valve ☐ Reducers ☐ Other _____

Reduced flow rate _____ GPM

Can well be completely shut in?

WELL TEST DATA:

☒ Pumped Describe: w/air
☐ Bailed
☐ Other

Pumping Level Below Land Surface

_____ Ft. After _____ Hrs. pumped _____ GPM

_____ Ft. After _____ Hrs. pumped _____ GPM

If pump installed, pump rate: _____ GPM

REMARKS

Well made 6 gpm - frac. well 5 settings 80'; 150'; 200'; 250'; 400 well made 25 gpm after frac.

This well was drilled under license # 324

And this report is true and accurate.

Drilling firm: Anderson Drilling Inc.

Signature of License Representative:

Paris Sewell
 Signature of Well Owner or Equitable Property Holder:

Date:

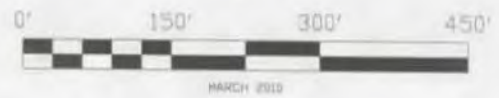
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AND THE SW1/4 OF SECTION 5, T.4N., R.3E., B.H.M.,
LAWRENCE COUNTY, SOUTH DAKOTA .
(SHEET 1 OF 2)

(THAT PORTION, BOOK 293, PAGE 259)



LINE	BEARING	DISTANCE
L1	N 30°34'57" W	44.97'
L2	N 58°03'15" E	9.03'
L3	S 58°58'51" W	50.51'
L4	S 58°50'03" E	39.70'
L5	S 55°20'04" W	97.60'
L6	N 18°46'58" W	41.75'
L7	N 48°53'54" E	88.85'

CURVE	ARC LENGTH	RADIUS	DELTA ANGLE	CHORD BEARING	CHORD LENGTH
C1	226.81'	150.00'	86°38'11"	N 12°44'09" E	205.82'
C2	222.29'	200.00'	83°40'32"	S 19°03'28" W	211.02'

ACREAGE TABLE:

LOT 8 = 21477 SQ. FT. OR 0.49 ACRES±
LOT 9 = 23768 SQ. FT. OR 0.55 ACRES±

PREVIOUSLY PLATTED = 23.75 ACRES±
TOTAL PLATTED THIS PLAT = 1.04 ACRES±
REMAINDER OF GILDED MOUNTAIN SUBDIVISION = 23.59 ACRES±
GILDED MOUNTAIN TOTAL ACREAGE = 48.38 ACRES±

NOTES:

1. ALL AREAS ARE MORE OR LESS.
2. DISTANCES ARE TO ACTUAL CORNERS NOT WITNESS CORNERS.

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WATER RIGHTS PROGRAM

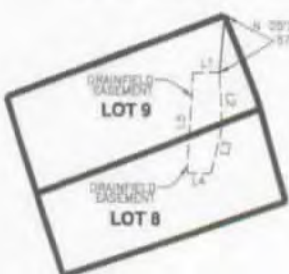
LEGEND:

- FOUND REBAR L.S. 5086
- ⊕ FOUND REBAR L.S. 6577
- △ FOUND STONE
- FOUND BRASS CAP
- FOUND ROW MONUMENT
- ▲ FOUND SODDIT ALUMINUM CAP
- SET REBAR WITH CAP L.S. 5086
- SET 25' WITNESS CORNER WITH REBAR AND CAP L.S. 5086
- × COURSE CHANGE

OWNER DATE OF PLAT:
GILDED MT. LLC
123 E JACKSON BLVD
STE. 3
SPEARFISH, SD
57783

DETAIL

DRAINFIELD EASEMENTS
SHOWN BELOW TO BE
DEDICATED THIS DOCUMENT



LINE	BEARING	DISTANCE
L1	S 89°02'38" W	28.91'
L2	N 02°10'06" W	34.82'
L3	N 14°00'50" E	48.53'
L4	S 89°44'58" E	24.40'
L5	S 03°02'33" W	89.15'

Plat prepared by:

FOUR FRONT
DESIGN, INC.

517 7th street
rapid city sd 57701
ph: 605.342.9470
fax: 605.342.2377
www.4front.biz

ARCHITECTURE | ENGINEERING
GIS | SURVEYING



FOUR FRONT
DESIGN, INC.



Black Hills Land Analysis
Black Hills Land Analysis
13007 Canyon Ridge Road
Spearhead, SD 57733
(605) 674-1336 Home
(605) 674-6025 Cell
info@blackhillslandanalysis.com
www.blackhillslandanalysis.com

Gilded Mountain Subdivision Overview



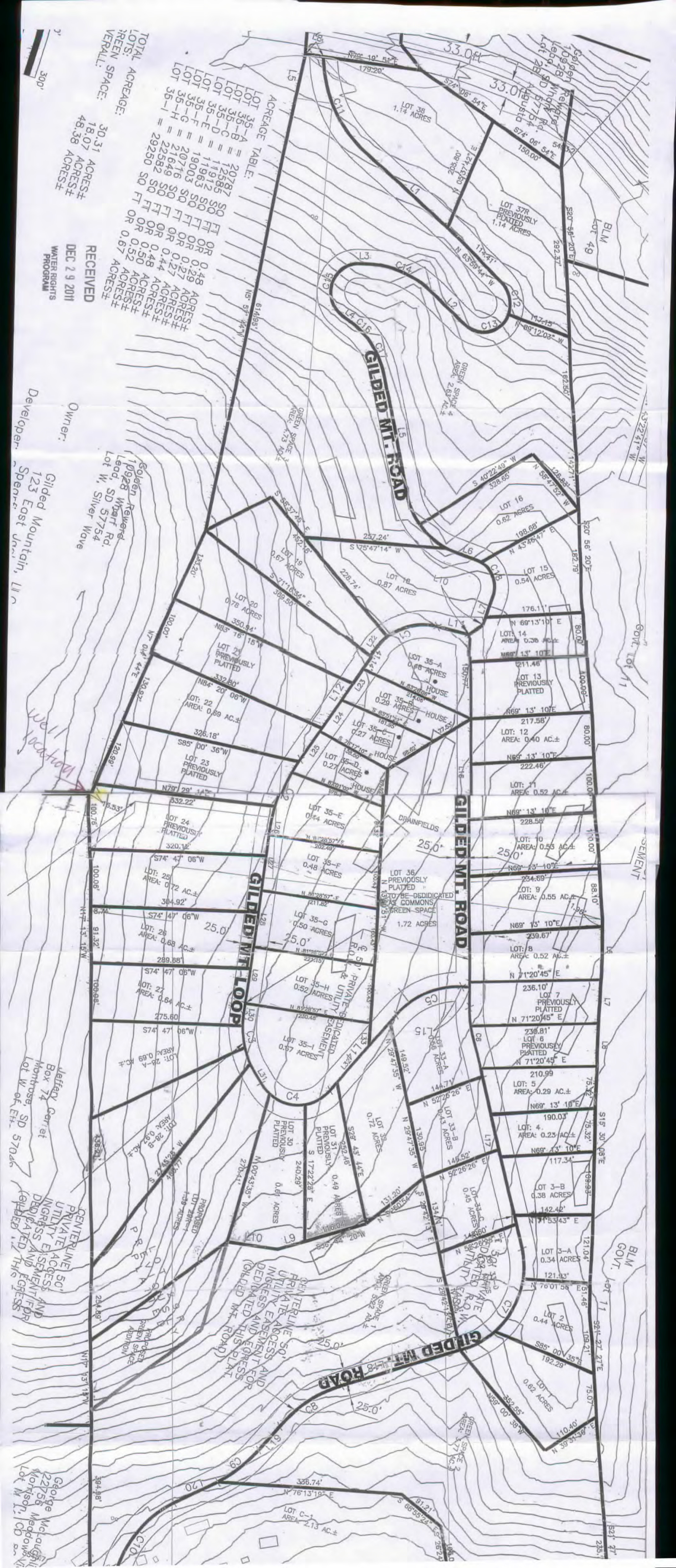
Legend



Gilded Mountain Boundary

Rob Mattox
5/5/2010
Scale 1:4,000

0 500 1,000 2,000 Feet



RECEIPT

WATER RIGHTS PROGRAM

South Dakota Department of Environment and Natural Resources

Date 12/29, 20 11

RECEIVED OF Gilded Mountain LLC 123 E. Jackson Blvd #3 Spearfish SD 57783

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

Fee for Application for Permit No. <u>1926-1</u> to Appropriate Water, to construct and to put water to beneficial use	500	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. <u>1926-1</u>	200	00
Fee for Filing Transfer Form _____		
Fee for _____		
Fee for Issuing New Well Driller's License No. _____ for C.Y. _____		
Fee for Renewal of Well Driller's License No. _____ for C.Y. _____		
Fee for Issuing Well Pump Installer's License No. _____ for C.Y. _____		
Fee for Renewal of Well Pump Installer's License No. _____ for C.Y. _____		
(Any Other Work Provided by Law)	TOTAL	700 00

No. **05185**

By

Gilded Mountain LLC
Chief Engineer



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

PMB 2020
JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182
www.state.sd.us/denr

December 29, 2011

Gilded Mountain LLC
c/o Scot E Munro
123 E Jackson Blvd
Suite #3
Spearfish SD 57783

Dear Mr. Munro:

Thank you for submitting the *Application for a Permit to Appropriate Water* for Gilded Mountain LLC. In order to complete the application, the following is required.

- Enclosed is the map submitted with the application. The map must be signed by one of the following: Registered Land Surveyor, Registered Professional Engineer or by any other government employee who normally prepares maps as a part of his assigned duties. It appears that Randy L Diebert prepared the map, please have him signed it.

If you have any questions, please contact me.

Sincerely,

Karen Schlaak

Karen Schlaak
Water Rights Program
605 773-3352
karen.schlaak@state.sd.us

enclosure



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

PMB 2020
JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182
denr.sd.gov

**RECOMMENDATION OF CHIEF ENGINEER FOR WATER PERMIT
APPLICATION NO. 1926-1, Gilded Mountain LLC**

Pursuant to SDCL 46-2A-2, the following is the recommendation of the Chief Engineer, Water Rights Program, Department of Environment and Natural Resources concerning Water Permit Application No. 1926-1, Gilded Mountain LLC, c/o Scot E Munro, 123 E Jackson Blvd Suite #3, Spearfish SD 57783.

The Chief Engineer is recommending APPROVAL of Application No. 1926-1 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) it is 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.

See report on application for additional information.

Garland Erbele, Chief Engineer
February 23, 2012

REPORT TO THE CHIEF ENGINEER
ON
WATER PERMIT APPLICATION NO. 1926-1
GILDED MOUNTAIN LLC
JANUARY 10, 2012

Water Permit Application No. 1926-1 proposes to appropriate 0.055 cubic feet of water per second from a well completed into the Crystalline Rock aquifer. The existing well is 1000 feet deep and located in the NE¼ SE¼ Section 6, T4N-R3E. Water from the well is used for a suburban housing development.

AQUIFER: Crystalline Rock (CRSL)

AQUIFER CHARACTERISTICS:

This application proposes to appropriate water from a well that was constructed in 2008 to supply the Gilded Mountain development. The application is a consequence of a neighboring domestic well user's inquiry about well interference in the area and Water Rights' staff follow-up.

The South Dakota Water Well Completion Report submitted for the Gilded Mountain well indicates that it is 1000 feet deep and completed with 28 feet of casing and 972 feet of uncased borehole. The well log identifies Deadwood Formation from ground surface to 370 feet below grade and Precambrian aged Schist from 370 feet below grade to the well's terminal depth. The completion report indicates water was encountered between 370-372 feet below grade and between 785-790 feet below grade. The well originally produced six gallons per minute and produced 25 gallons per minute after it was hydraulically fractured (hydrofraced). Hydrofracing of the well was conducted in five stages (i.e. below 80', below 150', below 200', below 250' and below 400') but the zones that were stimulated cannot be identified so are assumed to be enhancement of the water bearing areas identified on the well log as below the Deadwood Formation.

Review of the areal geology (Redden and others, 2010), (Darton, 1925) and (Redden, and DeWitt, 2008); and logs for test wells, monitoring wells and water supply wells from the area (Water Rights, 2012b) shows that this area is fairly complex geologically. There is prolific faulting and folding in the area and Tertiary aged igneous rock (Phonolite and Trachyte) was forcibly injected into the Precambrian (Flag Rock Formation) and overlying Deadwood Formation country rock. A nearby monitoring well (DM16), constructed for Golden Reward Mining Company (Water Rights, 2012b) identifies Tertiary aged Porphyry intrusives in the Deadwood Formation that were either not encountered or not identified in the Gilded Mountain well log. The intrusives are assumed to have not had excess heat and metamorphism of the country rock near the intrusive is probably very limited (Redden, 1975). Since intrusives displaced country rock rather than replacing it, there has been an increase in volume as a result of the emplacement of the igneous rocks. Stress on the country rock as a result of the intrusions has undoubtedly increased the density of secondary permeability features like fractures and joints in both the Pre-Cambrian rock and the Deadwood Formation in the area. The secondary permeability features dominate groundwater flow system in the area and lead to a hydraulically

connected Precambrian rock and Deadwood Formation representing a single hydrologic unit that is basically under unconfined conditions. Locally confined conditions do exist however, where less permeable material overlies more permeable strata. The potentiometric surface of this aquifer generally follows the topography, flowing away from topographic highs toward topographic lows. The general trend of the water table is probably from west to east; however, locally the groundwater flows may be obstructed by faults and the historic underground mine workings that are extensive in this area (Holm).

SDCL 46-2A-9

Pursuant to SDCL 46-2A-9, a permit to appropriate water may be issued only if there is reasonable probability that there is unappropriated water available for the applicant's proposed use, that the proposed diversion can be developed without unlawful impairment of existing rights and that the proposed use is a beneficial use and in the public interest. This report will address water availability and existing rights issues only.

WATER AVAILABILITY:

Recharge versus Withdrawals:

The probability of unappropriated water available from an aquifer can be evaluated by considering SDCL 46-6-3.1 which requires "No application to appropriate groundwater may be approved if, according to the best information reasonably available, it is probable that the quantity of water withdrawn annually from a groundwater source will exceed the quantity of the average estimated annual recharge of water to the groundwater source."

The Crystalline Rock aquifer is exposed at the surface throughout this area and recharge to it occurs locally through infiltration of precipitation. "Recharge conditions are highly transient and have large spatial variability; thus, quantification is not attempted" (Driscoll and Carter, 2001). However, it is clear that recharge is sufficiently large to accommodate withdrawals from the area in the past with excess ground-water discharged to contribute to the base flow of area streams.

Withdrawals:

The crystalline rock should not be considered a regional aquifer but rather numerous localized aquifers. Water Rights/Permits within the immediate area (approximately 2 miles) of the well this application proposes to use are shown in table one.

PERMIT NO	NAME	STATUS	AQUIFER	USE	CFS
1335-1	WHITETAIL COURT	LC	ALQ	COM	0.036
1666-1	GOLDEN REWARD MINING CO	LC	CRSL	IND	1.830
1666A-1	GOLDEN REWARD MINING CO	PE	DDWD	COM	0.000
301-1	BLACK HILLS CHAIR LIFT CO	LC	CRSL	COM	0.020
301A-1	BLACK HILLS CHAIR LIFT CO	LC	CRSL	COM	2.130
LC= Water Right, PE= Water Permit, ALQ= Alluvium, CRSL= Crystalline, DDWD= Deadwood					

Table 1. Water Rights/Permits within approximately two miles of the well Application No. 1926-1 proposes to use

In addition to the appropriations listed in table one; Golden Reward Mining Company had Water Permit No. 1447-1, which was their primary water source when the mine was operating. The Water Permit was cancelled in 1998 due to abandonment. Water Permit No. 1447-1 was approved authorizing a diversion similar to one that was denied by the Board (e.g. Application No. 1441-1) for concerns over base flows in area streams.

Although the Water Management Board held that there was a reasonable probability that there was unappropriated water available to approve Water Permit No. 1447-1, the Board conditioned the permit to require that a minimum of 500 gallons per minute must be by-passed in Stewart Gulch during pumping under the permit. Since only limited flow data was available and the impacts of the proposed groundwater withdrawals on spring flows and stream flows under Golden Reward Mining Company's water permits was uncertain, the Board retained jurisdiction of Golden Reward Mining Company's permits. The retained jurisdiction was to quantify and/or determine if minimum amounts of water must be present in area streams to protect them as cold water permanent fish life propagation waters and to determine any impacts of Golden Reward Mining Company withdrawals on these streams.

The Golden Reward Mining Company operated from 1988 through 1997 and reported pumping a maximum of 21.576 million gallons of groundwater in 1995 (Hudson). The mine has been in post-closure status since 2007 and groundwater use in 2011 was 5.1 million gallons for snow making, and <100,000 gallons for weed spraying and exploration drilling (Hudson).

It did not ever become necessary for the Water Management Board to exercise their retained jurisdiction of Golden Reward's water permit; there were no reported cases of the Stewart Gulch bypass to Stewart Gulch not being met; and the DENR did not have any issues with Golden Reward's NPDES permits which also related to streamflow (Buscher). Therefore, it can be assumed that this basin can support groundwater withdrawals of at least 21.576 million gallons without impacting baseflows to the area streams. The amount of water requested by this application in addition to last year's pumping would be significantly less than historic maximum usage, so there is a reasonable probability that unappropriated water is available for this appropriation.

Observation Well Data:

There are no Water Rights' Observation wells in this area.

EXISTING WATER RIGHTS:

Existing water rights/permits in this area are listed in table one. Well interference is not expected to be adverse due to distance and relatively small diversion rate proposed by this application.

There are a number of domestic wells completed into the crystalline rock aquifer in this area (Water Rights, 2012b). ARSD 74:02:04:20(6) defines an "adequate well" as a well constructed to allow the inlet to the pump to be placed not less than 20 feet into the saturated aquifer. An "adversely impacted domestic well" is defined by ARSD 74:02:04:20(7) as a well in which the pump intake was set at least 20 feet below the top of the aquifer and the water level of the aquifer

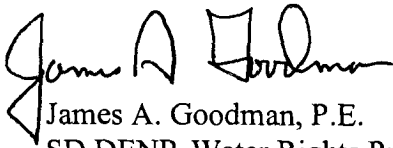
has declined to a level that the pump will no longer deliver sufficient water for the well owner's needs. Since the porosity of the Crystalline aquifer is low, 20 feet of saturated thickness may not be sufficient for a well to be a reliable water supply. In other words, in this hydrogeologic setting, wells that are "adequate" by definition may not be reliable water supplies. Under these circumstances it can be argued that, any measurable interference (drawdown), from a competing well is actually an adverse impact. However, with natural water level fluctuations in this aquifer measured in excess of 45' in monitoring wells in the area (i.e. GRMC DM16) (Hudson); drawdown of a few feet could be considered insignificant and/or not adverse.

CONCLUSIONS:

1. This application proposes an appropriation for an existing water use. The application was made as the result of a 2011 well interference inquiry and staff follow up.
2. Groundwater in this area is found in the crystalline rock (Pre-Cambrian and Tertiary Intrusives) and the Deadwood formation. The three rock types are hydraulically connected and represent a single aquifer.
3. There is a reasonable probability that unappropriated water is available from the crystalline rock aquifer for the appropriation proposed by this application.
4. Well interference is not expected to be adverse.



Ken Buhler
SD DENR-Water Rights Program
Approved by



James A. Goodman, P.E.
SD DENR-Water Rights Program

REFERENCES:

Buscher, Kelli. SD DENR-Surface Water Quality Program. Personal communication. 19 Jan 2012

Darton, N.H. and Paige, S, 1925, Central Black Hills Folio, South Dakota: U.S. Geological Survey Folios of Geologic Atlas 219, 34 p.

Driscoll, D.G., and Carter, J.M., 2001, Hydrologic Conditions and Budgets for the Black Hills of South Dakota, Through water Year 1998: U.S Geological Survey Water-resources Investigations Report 01-4226, 143 p.

Holm, Eric, "FW: GR Underground Workings Map." E-mail to Ken Buhler. 10 Jan. 2012

Hudson, Roberta, "DM16 water levels." E-mail to Ken Buhler. 12 Jan. 2012

Hudson, Roberta, "GR water usage." E-mail to Ken Buhler. 17 Jan. 2012

Hudson, Roberta. SD DENR-Minerals and Mining Program. Personal communication. 17 Jan 2012

Redden, J.A., Lisenbee, A.L., and Fahrenbach, M.D., 2010, Geologic Map of the Lead Quadrangle, South Dakota: SD Geological Survey GQ24K-11, scale 1:24,000

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Water Rights, 2012a, Water Right/Permit Files, SD DENR-Water Rights Program, Joe Foss Bldg, Pierre, SD.

Water Rights, 2012b, Well Completion Report Files, SD DENR-Water Rights Program, Joe Foss Bldg, Pierre, SD.

RECEIVED

MAR 12 2012

WATER RIGHTS
PROGRAM

Affidavit of Publication

STATE OF SOUTH DAKOTA:
COUNTY OF LAWRENCE:

Letitia Lister of said County and State being first duly sworn, on her oath says: That the BLACK HILLS PIONEER is a legal daily newspaper of general circulation, printed and published in the City of Spearfish, in said County and State by Letitia Lister, and has been such a newspaper during the times hereinafter mentioned; and that said newspaper has a bonafide circulation of at least 200 copies weekly, and has been published within said County in the English language for at least one year prior to the first publication of the notice herein mentioned, and is printed in whole or in part in an office maintained at the place of publication; and that I, Letitia Lister, the undersigned, am the Publisher of said newspaper and have personal knowledge of all the facts stated in this affidavit; and that the advertisement headed:

Notice of Application
No. 1926-1

a printed copy of which is hereto attached, was printed and published in said newspaper for 2 successive and consecutive weeks, the first publication being made on the 1st day of March, 2012, and the last publication on the 8th day of March, 2012, that the full amount of fees charged for publishing same, to-wit: The sum of \$ 39.89, insures solely to the benefit of the publisher of the BLACK HILLS PIONEER, that no agreement or understanding for a division thereof has been made with any person and that no part thereof has been agreed to be paid to any other person whomsoever.

Subscribed and sworn to before me this 9th day of March, 2012

Letitia Lister
Notary Public, Lawrence County, South Dakota
My commission expires: 10-24-2016

NOTICE OF APPLICATION NO. 1926-1 to Appropriate Water

Notice is given that Gilded Mountain LLC, c/o Scot E Munro, 123 E Jackson Blvd, Suite #3, Spearfish SD 57783 has filed an application for a water permit to appropriate 0.055 cubic feet of water per second from one well to be completed into the Crystalline Rock Aquifer (1000 feet deep) located in N 1/2 SE 1/4 Section 6-T4N-R3E for a suburban housing development.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 1926-1 because 1) unappropriated water is available, 2) existing rights will not be unlawfully impaired, 3) it is a beneficial use of water, and 4) it is in the public interest. In accordance with SDCL 46-2A-23, the Chief Engineer will act on this application, as recommended, unless a petition is filed opposing the application or the applicant files a petition contesting the Chief Engineer's recommendation. If a petition opposing the application or contesting the recommendation is filed, then a hearing will be scheduled and the Water Management Board will consider this application. Notice of the hearing will be given to the applicant and any person filing a petition.

Any person interested in opposing or supporting this application or recommendation must file a written petition with BOTH the applicant and Chief Engineer. The applicant must file a petition if contesting the Chief Engineer's recommendation. The Chief Engineer's address is "Water Rights Program, Foss Building, 523 E Capitol, Pierre SD 57501 (605 773-3352)" and the applicant's mailing address is given above. A petition filed by either an interested person or the applicant must be filed by March 19, 2012.

The petition may be informal, but must include a statement describing the petitioner's interest in the application, the petitioner's reasons for opposing or supporting the application, and the signature and mailing address of the petitioner or the petitioner's legal counsel, if legal counsel is obtained. Contact Eric Gronlund at the above Water Rights Program address to request copies of information pertaining to this application.

Steven M. Pirner,
Secretary,
Department of
Environment and Natural
Resources
Published twice at the
total approximate cost of
\$23.06.

#472
March 1, 8



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

PMB 2020
JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182
denr.sd.gov

February 24, 2012

Black Hills Pioneer
PO Box 7
Spearfish SD 57783

ATTENTION: Legal Public Notice

Enclosed is a Notice on Application No. 1926-1 to Appropriate Water to be published twice. Please publish the first notice on March 1, 2012 with the second publication 7 days later. The text of the notice can be e-mailed to your paper by contacting Karen Schlaak at (605) 773-3352.

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 Gilded Mountain LLC, c/o Scot E Munro, 123 E Jackson Blvd. # 3, Spearfish SD 57783 (Ph # 605-641-6482).

Please send the Water Rights Program the first publication immediately. The publication is checked for accuracy so any corrections can be made in the second publication. You may use the form below or fax a copy of the first publication. Any fax should be sent to the attention of Karen Schlaak at (605) 773-4068. Publication errors can invalidate the public notice.

After the second publication, **please send us an affidavit or use the enclosed Proof of Publication form.** The applicant pays the cost of publication, but the Water Rights Program records require an affidavit or Proof of Publication. Delays in receiving the affidavit can be costly to the applicant.

Sincerely,

Eric Gronlund
Natural Resources Engineer
605 773-3352

enclosures

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

No. 1926-1

TO: Eric Gronlund
Water Rights Program
Joe Foss Building
Pierre SD 57501-3181

Date _____

We are in receipt of your letter of February 24, 2012 enclosing Notice to Appropriate Water by Application No. 1926-1 which was first published in our issue of _____. ENCLOSED IS A COPY OF THIS FIRST PUBLICATION.

Name Newspaper



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

PMB 2020
JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182
denr.sd.gov

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

February 24, 2012

Gilded Mountain LLC
Scot E Munro
123 E Jackson Blvd # 3
Spearfish SD 57783

Dear Mr. Munro:

Water Permit Application No. 1926-1 for suburban housing use has been examined and found to comply with the South Dakota Water Laws and applicable rules. A notice has been sent to the Publisher of the Black Hills Pioneer printed at Spearfish SD (Ph # 605-642-2761). You will need to contact the newspaper and authorize publication of this notice. For your information, a copy of the notice, the recommendations of the Chief Engineer and reports on the applications are enclosed. Please review the notice prior to publication and notify this office, if you have any corrections or questions.

Be sure to contact the above newspaper to authorize publication of your Notices and to arrange for payment. Early contact with the paper can eliminate delays. Upon receiving authorization, the publisher has been instructed to publish your notice once each week for two consecutive weeks. The newspaper has also been instructed to send us the Proof of Publication. We must receive Proof of Publication before action can be taken on the applications.

Sincerely,


Eric Gronlund
Natural Resources Engineer
(605) 773-3352

enclosures

NOTE: If you plan to contest any part of the Chief Engineer's recommendation, you must file a petition pursuant to the procedures outlined in the attached notice of hearing. The Water Management Board will then consider your concerns during a hearing on the application.

Instruction to Newspaper - Publish first Notice on March 1, 2012 with the second publication 7 days later. The applicant is responsible for payment. The text of the notice can be e-mailed to your paper by contacting Karen Schlaak at (605) 773-3352 or email: Karen.schlaak@state.sd.us.

NOTICE OF APPLICATION NO. 1926-1 to Appropriate Water

Notice is given that Gilded Mountain LLC, c/o Scot E Munro, 123 E Jackson Blvd, Suite #3, Spearfish SD 57783 has filed an application for a water permit to appropriate 0.055 cubic feet of water per second from one well to be completed into the Crystalline Rock Aquifer (1000 feet deep) located in N ½ SE ¼ Section 6-T4N-R3E for a suburban housing development.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 1926-1 because 1) unappropriated water is available, 2) existing rights will not be unlawfully impaired, 3) it is a beneficial use of water, and 4) it is in the public interest. In accordance with SDCL 46-2A-23, the Chief Engineer will act on this application, as recommended, unless a petition is filed opposing the application or the applicant files a petition contesting the Chief Engineer's recommendation. If a petition opposing the application or contesting the recommendation is filed, then a hearing will be scheduled and the Water Management Board will consider this application. Notice of the hearing will be given to the applicant and any person filing a petition.

Any person interested in opposing or supporting this application or recommendation must file a written petition with BOTH the applicant and Chief Engineer. The applicant must file a petition if contesting the Chief Engineer's recommendation. The Chief Engineer's address is "Water Rights Program, Foss Building, 523 E Capitol, Pierre SD 57501 (605 773-3352)" and the applicant's mailing address is given above. A petition filed by either an interested person or the applicant must be filed by March 19, 2012.

The petition may be informal, but must include a statement describing the petitioner's interest in the application, the petitioner's reasons for opposing or supporting the application, and the signature and mailing address of the petitioner or the petitioner's legal counsel, if legal counsel is obtained. Contact Eric Gronlund at the above Water Rights Program address to request copies of information pertaining to this application. Steven M. Pirner, Secretary, Department of Environment and Natural Resources.

Published twice at the total approximate cost of _____.



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

PMB 2020
JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182
denr.sd.gov

APR 30 2012

Gilded Mountain LLC
Scot E Munro
123 E Jackson Blvd #3
Spearfish SD 57783

Dear Mr. Munro:

Enclosed is Water Permit No. 1926-1 authorizing construction of your water diversion system and beneficial use of the water, not exceeding the limits as specified in the Water Permit.

Form 10, *Notice of Completion of Works and Application of Water to Beneficial Use*, is enclosed. Please return this completed form after you have finished the system and have put the water to beneficial use. An investigation can then be scheduled so the water license may be issued, thus completing the acquisition of a water right.

An informational sheet *Common Water Right Questions?* is also enclosed. This sheet is intended to answer some of the questions associated with obtaining and keeping a water right.

Sincerely,

Garland Erbele, Chief Engineer
Water Rights Program
(605) 773-3352

enclosures

COPY

1926-1



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

PMB 2020
JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182

denr.sd.gov

July 16, 2012

Scott Munro
Gilded Mountain LLC
123 E Jackson Blvd Suite #3
Spearfish SD 57783

Dear Mr. Munro:

During our recent phone conversation, you confirmed that a second well was in the process of being drilled for the Gilded Mountain development since the current well is only supplying 1,600 gallons per day. Water Permit No. 1926-1 appropriates a peak diversion rate of 25 gallons per minute (gpm) from one well. It is DENR's understanding that once the well pump engages it quickly draws down the water column in the well casing until the pump saver shuts off the pump. Once the casing fills again, the pump resumes operation. This process of the pump cycling on and off is how the development obtains 1,600 gallon each day. The development requires additional water and the decision was made to drill a second well.

If this second well is just an additional well into the same water source without an increase in the peak diversion rate, Guided Mountain can request authorization for the newest well and may not have to go through the formal permitting process depending on if the Chief Engineer can make a finding that no one will be adversely impacted. This will require submitting an application (enclosed) and marking on the map the location of the newer well. Please understand that if both wells are operated at the same time with a combined peak diversion rate greater than 25 gpm, a new water permit for the additional diversion authority will need to be requested in the application and the more formal application process including filing fee and public notice will apply.

Example:

- 1) If existing well and new well each have 25 gpm pumps but operate on an alternating basis and the diversion rate is within the permitted amount, DENR can review the 2nd well to determine if it can be approved without going through the formal process. At his discretion, the Chief Engineer may require the more formal process.
- 2) If the existing well and new well each have 25 gpm pumps and will be operated at the same time, a new permit application will need to be filed for 25 gpm of additional diversion authority.

As I mentioned on the phone, water distribution systems for housing developments that divert at a rate of 18 gpm or less are not required to obtain a permit. For instance if each well had a 9 gpm pump installed for a total peak diversion rate of 18 gpm, state water right permitting is not required.

If you have any questions, please do not hesitate to contact me.

Sincerely,

Eric Gronlund
Water Rights Program, DENR
605 773-3352
eric.gronlund@state.sd.us

enclosures

Report of Examination of Works and/or Application of Water to Beneficial Use For Permit No. 1926-1

I have this day, November 16, 2016, made a thorough examination of the water use system constructed by Gilded Mountain LLC, % Gilded Mountain Home Owners Assn., P.O. Box 584, Spearfish, SD 57783 of Permit No. 1926-1, bearing the priority of 12/29/2011 authorizing the diversion of 0.055 cu. ft. per second of water from one well for suburban housing purposes, in Lawrence County.

Inspection contact & relationship to permit holder, if applicable: **Scot Munro and Heath Gran,**
Gilded Mountain LLC - partners
Steve Ryan, water system manager
605-580-5757

A. Works used to divert the water:

Well Information:

- | | |
|---|--|
| 1) Well Drilling Firm: <u>Alexander Drilling (2008)</u> | Well Drilling Firm: <u>Alexander Drilling (2012)</u> |
| 2) Well No. <u>original well</u> | Well No. <u>2 (north well)</u> |
| 3) Depth <u>1,000</u> feet | Depth <u>400</u> feet |
| 4) Well log <u>Yes</u> | Well log <u>Yes</u> |

Comments: The two wells can operate simultaneously

Casing:

- | | |
|-----------------------------|--------------------------|
| 1) Diameter <u>6</u> inches | Diameter <u>6</u> inches |
| 2) Length <u>30</u> feet | Length <u>30</u> feet |
| 3) Type <u>PVC</u> | Type <u>PVC</u> |

Screen:

- | | |
|---------------------------------------|-----------------------------------|
| 1) Type <u>N/A</u> | Type <u>N/A</u> |
| 2) Length <u>---</u> feet | Length <u>---</u> feet |
| 3) Static water level <u>120</u> feet | Static water level <u>10</u> feet |

Pump:

- | | |
|--|---|
| 1) Make <u>Berkeley</u> | Make <u>Berkeley</u> |
| 2) Model <u>20 gpm MS series</u> | Model <u>10 gpm MS series</u> |
| 3) Size <u>4"</u> | Size <u>4"</u> |
| 4) Capacity <u>15</u> GPM (15 gpm flow restrictor) | Capacity <u>15</u> GPM (15 gpm flow restrictor) |
| 5) Horsepower rating <u>7 1/2</u> hp | Horsepower rating <u>5</u> hp |

Note: The wells are controlled using level switches in the twin 25,000 gallon steel storage tanks. Pump output is currently controlled using a single 15 gpm flow control valve which is not considered totally satisfactory due the pressure/vibration developed when both wells are operating simultaneously. The operator manually switches between the 2008 well and the 2012 well or simultaneous operation of both wells. Determination of which wells are operated depends on the time of year and water usage. The pump brand and horsepower shown was provided by the system manager. (The pump models shown are the only series/sizes from Berkeley suitable for this application and are believed to be the correct model numbers.)

B. Works used to transport water to place of use:

- 1) Type PVC mainline
- 2) Size 6 inches
- 3) Length approx. 3,200 feet

C. Works used to apply water to beneficial use:

The storage tanks (total 50,000 gallons) gravity feed to the 48 residential lots. The typical home is used as a vacation/rental property. Many of the homes utilize a booster pump get adequate pressure.

D. Compliance with Permit Requirements:

- 1) Permit qualifications being abided by Yes
- 2) Exceptions to compliance are: none

E. Condition and Location:

1. The system is in good condition with the points of diversion located as follows:

2008 (south) Well

1,469' N and 1,429' W of the SE corner Section 6 T4N R3E (44.332992, -103.80022)

2012 (north) Well

2,792' N and 1,368' W of the SE corner Section 6 T4N R3E (44.336628, -103.800143)

2. The works are capable of diverting and conveying to the place of use .033 cu. ft. per second (**15 gpm**) of water which is to be used for **suburban development** use and the license should be issued for **.033 cfs**.
3. All structures, wells and lands on map – **Yes**

F. Comments or other permit(s) associated with the project:

Permit No. 1926-1 authorized 1 well of .055cfs. The permittee inquired to DENR about a second well that was in the process of being drilled in July 2012 due to the production capacity of the 2008 well of only 1,600 gallons per day. At that time the Gilded Mountain was notified that if the additional well was into the same water source, without an increase in the peak diversion rate of 25 gpm, they could request authorization for the new well and may not have to go through the formal permitting process depending on whether the chief engineer finds that no one will be adversely impacted.

The second well was air tested at 12-14 gpm after hydrofracking. Gilded Mountain did not request authorization for the 2012 well after completion. The combined peak diversion rate for the two wells when operated simultaneously is 15 gpm due to the single flow control valve. A second 25,000 gallon storage tank was added in 2016 to provide a reliable water supply to the development.



Steven Quissell
Water Rights Inspector
DENR, Water Rights Program

Date report completed: 5/5/2018



2008 well in right foreground and well house

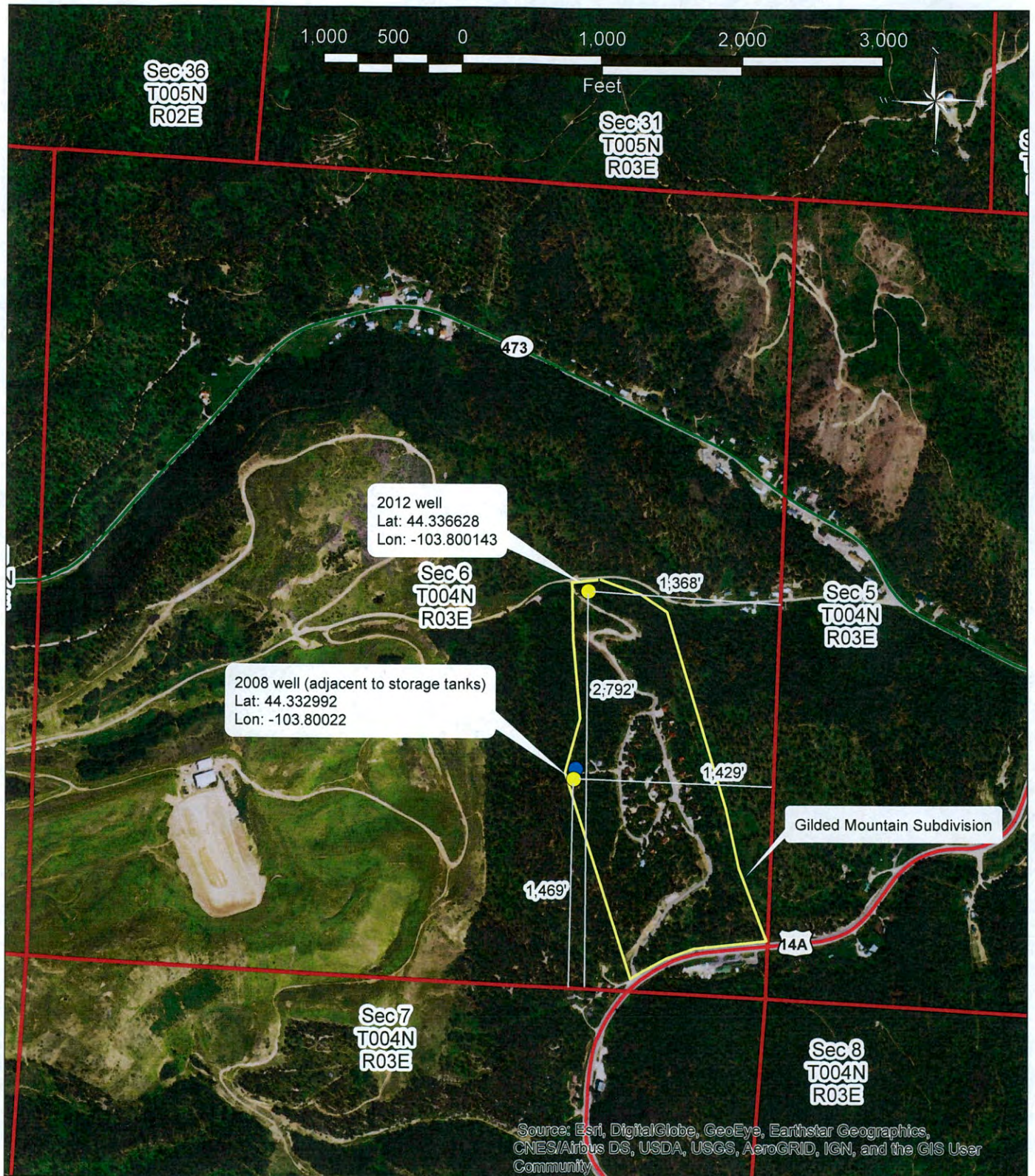


Twin 25,000 gal. storage with well house in foreground



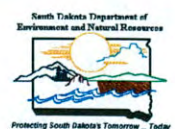
2012 well

Water Right #1926-1
Gilded Mountain LLC
11/16/2016



Steven Quissell

Steven Quissell
Water Rights Inspector
DENR Water Rights Program



**Water Rights Program - DENR
Conversation File Documentation**

NAME OF PERSON OR FILE: Steve Ryan, water system operator
Gilded Mountain Homeowners Assn.

ADDRESS: P.O. Box 584, Spearfish, SD 57783

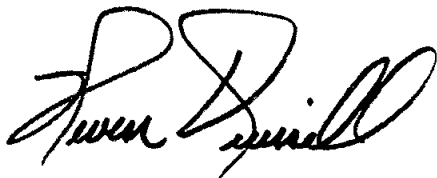
COUNTY: Lawrence County

DATE: April 7, 2017 **TELEPHONE:** (605) 580-5757

RE: Licensing of Water Permit No. 1926-1

COMMENTS: I conducted the site visit last fall for Gilded Mountains EOW and subsequent licensing. I spoke with Steve Ryan today by phone to discuss operation of the wells, specifically as to whether the plumbing layout should be changed to provide a separate flow control valve for each pump (a 15 gpm on the 2008 well and a 10 gpm on the 2012 well) to reduce the extremely high pressures developed at the well head when both pumps are operating simultaneously. Steve thought this suggestion would be strongly considered and if the change was made that the 2008 well should be limited to 10 gpm, and he thought the 2012 well could handle a 15 gpm restrictor since that well yields approximately 13 gpm. If this change were made the system would be licensed for 25 gpm. However, the HOA is currently negotiating to purchase water from a nearby land owner with a high capacity well. If this agreement is finalized, the two Gilded Mountain wells would be used as standby sources and the current plumbing configuration would be kept as is and the license would be issued for 15 gpm. I told Ryan I would hold off on submitting Gilded Mountain's permit for licensing until the HOA decides whether or not to use this offsite source for the main water supply.

NAME: Steven Quissell, Water Rights Inspector

A handwritten signature in black ink, appearing to read "Steven Quissell". The signature is stylized with large, sweeping loops for the first and last names.

**Water Rights Program - DENR
Conversation File Documentation**

NAME OF PERSON OR FILE: Steve Ryan, water system operator
Gilded Mountain Homeowners Assn.

ADDRESS: P.O. Box 584, Spearfish, SD 57783

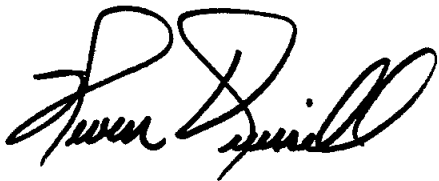
COUNTY: Lawrence County

DATE: May 3, 2018 **TELEPHONE:** (605) 580-5757

RE: Licensing of Water Permit No. 1926-1

COMMENTS: I spoke with Steve Ryan by phone today to ask about any developments concerning additional water sources for Gilded Mountain. The plan being considered last fall to purchase water from a nearby landowner is no longer being considered. The Lead Deadwood Sanitary District is planning an extension of their system which is being considered an option as a water source and the association is also considering a second option of developing a shallow well approximately 800 ft. north of Gilded Mountains 2012 well. A determination of which option is used would be made by this fall. When asked about the plumbing/flow control configuration which was in place at the time of the inspection, Ryan said there had been no modifications. I told Ryan I would go ahead and submit the permit for licensing based on 15 gpm.

NAME: Steven Quissell, Water Rights Inspector

A handwritten signature in black ink, appearing to read "Steven Quissell", with a stylized, cursive script.

SOUTH DAKOTA WATER WELL COMPLETION REPORT

1926-1

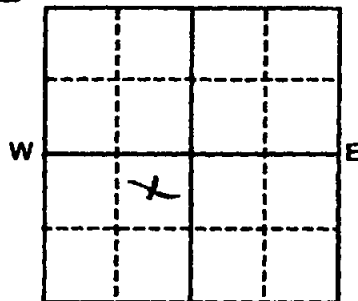
Location NE 1/4 SW 1/4 Sec 6 Twp 4N Rg 3E

Well Owner: Scott Monroe Gilded Mt Home Owners
 Business Name: Assn.
 Address: PO Box 310 125 Colorado Blvd Ste 20
 City, State, Zip: Spearfish SD 57783

City Lawrence

North

Please mark well location with an "X"



Well Completion Date

7-19-2012

1 Mile

Distance to nearest potential pollution source (septic tank, abandoned well, feed lot, etc.)?
500.0 ft. from septic (Identify source)

PROPOSED USE:

☒ Domestic/Stock ☐ Municipal ☐ Business ☐ Test holes
☐ Irrigation ☐ Industrial ☐ Institutional ☐ Monitoring well

METHOD OF DRILLING:

Rotary Drilling

CASING DATA:

☐ Steel ☒ Plastic ☐ Other

If other describe 30' of 6" PVC

WEIGHT	DIAMETER	FROM	TO	HOLE DIAMETER
LB/FT	IN	0.0 FT	28.0 FT	8.75 IN
LB/FT	IN	28.0 FT	400.0 FT	6.00 IN
LB/FT	IN	FT	FT	IN

GROUTING DATA:

Grout Type	No. of Sacks	Grout Weight	From	To
Portland II	3	Lb/gal	28.0 Ft	4.0 Ft
		Lb/gal	Ft	Ft

Describe grouting procedure through 1" trim pipe

SCREEN:

☐ Perforated pipe ☐ Manufactured
 Diameter _____ Inches Length _____ Feet
 Material _____
 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

DISINFECTION: Was well disinfected upon completion?

☒ Yes, How? w/chlorine solution
☐ No, Why Not?
 L. which water
 Q. sample sent for analysis

WELL LOG:

FORMATION	DEPTH	
	FROM	TO
Drift	0	10
Deadwood Hard	10	70
Fracture 5 gpm	70	72
Deadwood Hard	72	130
Hard grey/black schist	130	280
Schist fracture 6 gpm	281	285
hard grey/black schist	285	400

STATIC WATER LEVEL

10.0 FEET

If flowing: closed in pressure _____ PSI

GPM flow 7.0 through _____ Inch pipe

Controlled by ☐ Valve ☐ Reducers ☐ Other _____

Reduced flow rate _____ GPM

Can well be completely shut in?

WELL TEST DATA:

☒ Pumped Describe: w/air
☐ Bailed
☐ Other

Pumping Level Below Land Surface

_____ Ft. After _____ Hrs. pumped _____ GPM

_____ Ft. After _____ Hrs. pumped _____ GPM

If pump installed, pump rate: _____ GPM

REMARKS

well hydro-frac - made 7 gpm before and 12-14 after hydrofracing

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

Drilling firm: Alexander Drilling Inc.

Signature of License Representative:

Signature of Well Owner or Equitable Property Holder:

Date:

10-1-12

RECEIVED

OCT 19 2012

WATER RIGHTS PROGRAM

Approval of Additional Diversion Point

NAME: Gilded Mountain LLC

ADDRESS: PO Box 584, Spearfish SD 57783

DATE: May 22, 2018

COUNTY: Lawrence

TELEPHONE: 605 580-5757 (Steve Ryan)

AUTHORITY:

Pursuant to SDCL 46-5-13.1, the location of a diversion point may be changed or additional diversion points may be licensed provided the following conditions are met and the potential for interference with other existing diversions is not increased.

Water Permit No. 1926-1 appropriates 0.055 cubic feet of water per second from one well to be completed into the Crystalline Rock aquifer located in the N ½ SE ¼ Section 6-T4N-R3E.

- **Developed water source same as permitted source and no additional water appropriated**

An additional well was constructed in 2012 into the Crystalline Rock aquifer which is the same aquifer that is authorized by Water Permit No. 1926-1. The well is located in the SW ¼ NE ¼ Section 6-T4N-R3E. A licensing investigation was conducted that found the system limited to 15 gpm by a flow control valve. The pump rate is less than the 0.055 cfs (25 gpm) authorized by Permit No. 1926-1.

- **If irrigation, no new land is irrigated**

Not applicable.

- **Review of Existing Diversions**

The nearest water right from the Crystalline Rock is approximately 2,000 feet west and held by Golden Reward Mining Company. The drawdown characteristics from the Crystalline Rock aquifer are site specific and highly variable. The effects of drawdown are not necessarily dependent on distance between wells because drawdown is not expected to be uniform in all directions due to fractures within the rock.

It is not anticipated that the additional well will increase the potential for adverse effect to existing diversions. The total water use developed under Permit No. 1926-1 is less than originally permitted. Also the second well has been in place since 2012 with no known complaints of impairment.

RECOMMENDED ACTION

Based on the above criteria, it is recommended that the additional diversion point(s) be licensed as developed.



Eric Gronlund, Natural Resources Engineer
Water Rights Program

The Chief Engineer makes a finding pursuant SDCL 46-5-13.1 and ARSD 74:02:01:14.01 that:

This additional diversion point(s) does not increase the potential for adverse effects to existing diversions.



Jeanne Goodman, Chief Engineer
Water Rights Program



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE SOUTH DAKOTA 57501-3182
<http://denr.sd.gov>

JUN 04 2018

1926-1

Scot Munro
Gilded Mountain LLC
PO Box 584
Spearfish SD 57783-0584

Dear Mr. Munro:

Enclosed is Water License No. 1926-1. This is the final water right document completing your process of obtaining a Water Right. Included with your license is a map prepared by the staff engineer who conducted the field investigation.

For your information SDCL 46-6-27 requires that if in the future, the owner of an existing well, 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 License, the State Water Laws provide that you have a continuing right to use the water. If you have any questions, please contact our office.

Sincerely,

Jeanne Goodman, Chief Engineer
Water Rights Program
(605) 773-3352

enclosures

**STATE OF SOUTH DAKOTA
WATER LICENSE NO. 1926-1**

(1) Gilded Mountain LLC, PO Box 584, Spearfish SD 57783 made Application No. 1926-1, December 29, 2011 for a water permit to divert 0.055 cubic feet of water per second (cfs) from ground water, one well (Crystalline Rock), Lawrence County, South Dakota for suburban housing development purposes. Permit No. 1926-1, with a priority date of December 29, 2011 was approved March 19, 2012 and issued to the applicant for diversion of water with construction of the described water supply system to be completed on or before March 19, 2017 and for the application to beneficial use of said water on or before March 29, 2021.

An investigation of the water use system found the existence of a second well drilled in 2012. The additional well was constructed into the same aquifer. The combined diversion rate for the two wells is limited to 15 gallons per minute (0.033 cfs) by a flow control valve. The Chief Engineer makes a finding pursuant SDCL 46-5-13.1 and ARSD 74:02:01:14.01 that the additional diversion point does not increase the potential for adverse effects to existing diversions.

(2) It is certified that the permit holder has complied with the provisions of South Dakota State Law relating to completion of the construction of the water supply system and is entitled to divert 0.033 cubic feet of water per second for beneficial use. The location of the diversion points are:

- 2008 (south) Well: 1,469' N and 1,429' W of the SE corner Section 6 T4N R3E (NW ¼ SE ¼)
Latitude 44.332992, Longitude -103.80022
- 2012 (north) Well: 2,792' N and 1,368' W of the SE corner Section 6 T4N R3E (SW ¼ NE ¼)
Latitude 44.336628, Longitude -103.800143

(3) The permit holder has complied with the provisions of South Dakota State Law relating to the application of water to beneficial use.

(4) Pursuant to South Dakota Water Law 46-5-30.1 Gilded Mountain LLC, PO Box 584, Spearfish SD 57783 the holder and/or owner of Water Right No. 1926-1 is issued a license to appropriate water, the right to use 0.033 cubic feet of water per second from ground water, two wells (Crystalline Rock) with a priority date of December 29, 2011 from the locations specified in (2) of this license for suburban housing development purposes.

This license is subject to South Dakota Water Law, any limitations or conditions listed in Water Right No. 1926-1 and subject to the following qualification:

- The wells 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.


Jeanne Goodman, Chief Engineer
Water Rights Program
Department of Environment and Natural Resources

JUN 04 2018

date





1926-1
**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182

September 10, 2018

denr.sd.gov

McDirt Excavations
20168 Weyrich Lane
Whitewood SD 57793

Sir:

The Department of Environment and Natural Resources (DENR) received information that McDirt Excavations completed a shallow well using an excavator for the Gilded Mountain LLC water distribution system.

DENR understands that McDirt Excavations commonly may install cisterns in your area. A cistern is a vessel for holding water. On the other hand, a well is an artificial excavation or opening in the ground, made by means of digging, boring, drilling, jetting, or by any other artificial method, for the purpose of obtaining groundwater. I am writing to determine if the construction activity by McDirt Excavation is a cistern or a well. If it is a well, there are well construction requirements for the well as well as requirements to be a licensed well driller to construct wells in South Dakota.

South Dakota law provides that any well driller, before doing any well drilling and before contracting for any such work, shall first secure a well driller license. In addition, the law requires on each well drilled that the driller shall keep accurate records and complete a record of well construction. Within one month of completed of a driller's work on a well, the well driller shall file all well construction records with the chief engineer. The Water Management Board has promulgated Administrative Rules of South Dakota 74:02:04.

Attached is the following:

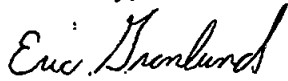
1. South Dakota Water Well Completion Report forms
2. Well Driller License Application Instructions and Application Form
3. South Dakota Well Driller License Examination
4. South Dakota Well Construction Standards
5. Water Rights Law
6. General Administrative Rules of South Dakota involving water rights.

The intent of the well construction standards is to protect the health of the public by providing water which is bacteriologically safe that complies with established drinking water standards. There are limitations on use of certain types of casing for public water supply wells.

Please respond by September 21, 2018 by completing a well completion report or document that what was constructed is not a well. Do not construct any wells until you are a licensed well

driller. Based on the well's construction, there may be compliance issues from a water rights and drinking water perspective.

Sincerely,

A handwritten signature in black ink, appearing to read "Eric Gronlund". The signature is fluid and cursive, with the first name "Eric" and last name "Gronlund" clearly distinguishable.

Eric Gronlund
Water Rights Program, DENR
605 773-3352
Eric.gronlund@state.sd.us

enclosures

C: Steve Ryan, Water System Manager, Gilded Mountain LLC, PO Box 584, Spearfish SD
57783 (without enclosures)



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182

denr.sd.gov

September 26, 2018

McDirt Excavations
20168 Weyrich Lane
Whitewood SD 57793

Sir:

The Department of Environment and Natural Resources (DENR) has not received a response regarding work done by McDirt Excavations on a shallow well for the Gilded Mountain LLC water distribution system. A copy of my September 10, 2018, letter is attached.

DENR did receive a call from Scot Munro with Gilded Mountain LLC in response to the letter indicating that he would provide information regarding the well. However, this does not negate the need for McDirt Excavations, as the contractor that conducted the work, from providing DENR with the information requested so a determination can be made regarding compliance with South Dakota well construction standards and drinking water standards.

Sincerely,

Eric Gronlund
Water Rights Program, DENR
605 773-3352
Eric.gronlund@state.sd.us



12273 Plateau Loop
Whitewood, SD 57793
Cell 605-645-2852
Ph. 605-269-2012
Fx. 605-269-2052
mcdirt@rushmore.com

RECEIVED
NOV 02 2018
WATER RIGHTS
PROGRAM

October 30, 2018

Department of Environment
and Natural Resources
Joe Foss Building
523 East Capitol
Pierre, SD 57501

Dear Eric,

I am writing in response to your letter, originally sent, September 10, 2018. In the letter, the point in question was whether McDirt Excavation, Inc. constructed a well or a cistern.

Steve Ryan, Gilded Mtn. LLC, Water System Manger, was in contact with the state regarding the improvement of an existing shallow well. We asked Steve if the plans/design were approved by the state and he responded "Yes". Steve Ryan's points of contact at the state were Steven M. Pirner and Barb ? - (Water Rights Program -DENR).

The only involvement with the well McDirt had was to stack 48" concrete tiles, 22 feet deep and back fill with clean rock. We also installed a distribution pipe. Steve Ryan took over from there. We know he had Alexander Drilling come in and install a pump to feed the water system from the improved well.

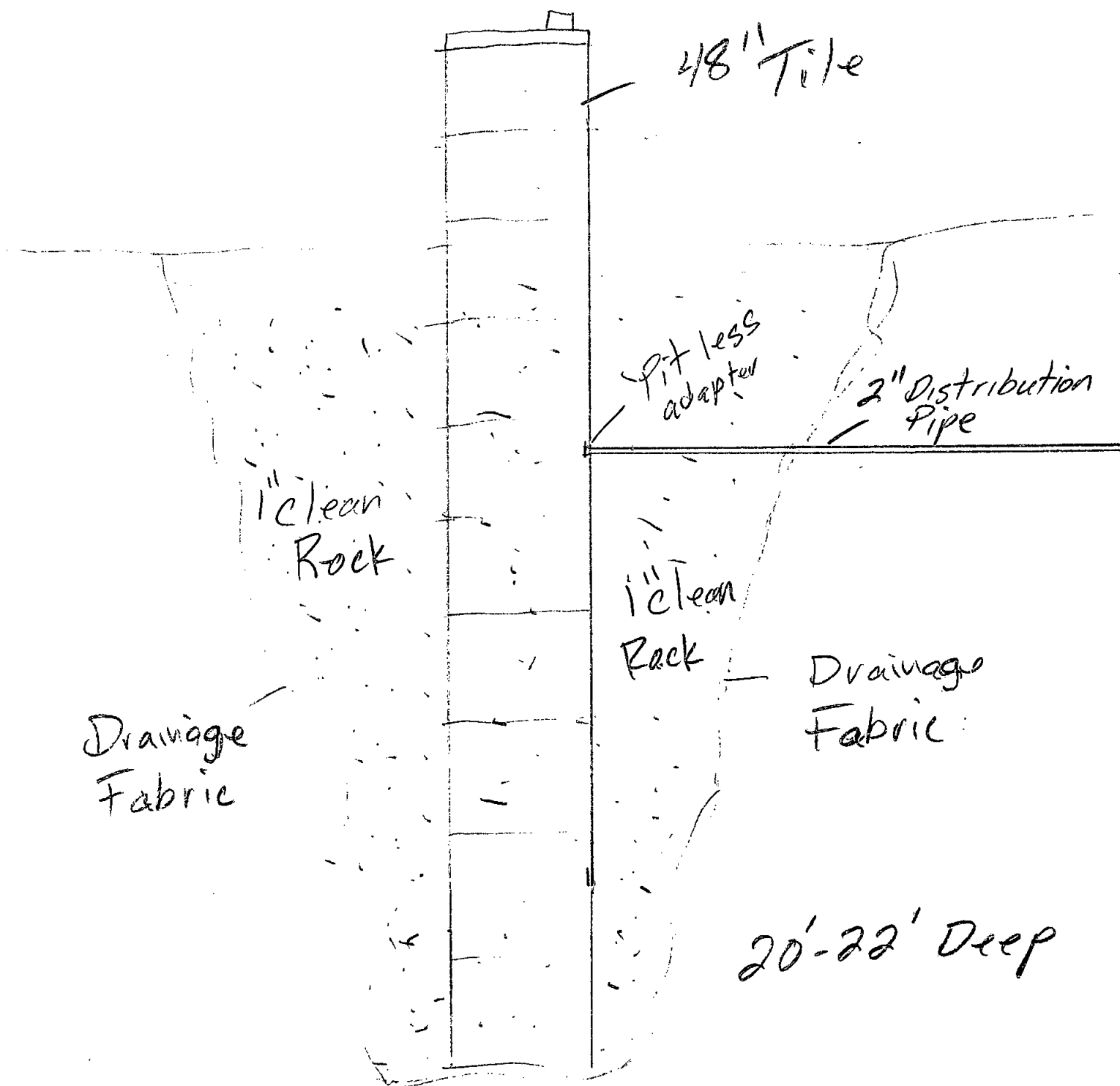
I have enclosed the water well completion report, but am unable to fill out the majority of the form as it does not pertain to me. The existing well test was performed by Steve Ryan. His contact information is 605-580-5757.

Please find enclosed, diagram of existing well by Scot Munro, whom you have been in contact with regarding the situation, as well as a diagram of what we did.

McDirt Excavation, Inc. was not involved in the design or engineering of the water system/wells. We were directed by Steve Ryan and Gilded Mountain LLC.

Sincerely,

Rick McGrath
McDirt Excavation, Inc.
mcdirt@rushmore.com
605-645-2852



SOUTH DAKOTA WATER WELL COMPLETION REPORT

11-02

MS 1755 LOT 3712
 Location 1/4 1/4 Sec 06 Twp 004 Rg 03

County Lawrence

North

Please mark well location with an "X"

W

E

Well completion Date _____

1 Mile

Distance to nearest potential pollution source (Septic tank, abandoned well, feed lot, etc.)

? _____ ft. from _____ (Identify source)

PROPOSED USE:

- ☐ Domestic/Stock ☐ Municipal ☐ Business ☐ Test Holes
☐ Irrigation ☐ Industrial ☐ Institutional ☐ Monitoring well

METHOD OF DRILLING:

CASING DATA:

- ☐ Steel ☐ Plastic ☐ Other

If other describe _____

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

GROUTING DATA:

Grout Type	No. of Sacks	Grout Weight	From	To
		Lb/gal	FT	FT
		Lb/gal	FT	FT

Describe grouting procedure _____

SCREEN:

- ☐ Perforated pipe ☐ Manufactured

Diameter _____ Inches Length _____ Feet

Material _____

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 _____

DISINFECTION: Was well disinfected upon completion?

- ☐ Yes, How? _____

- ☐ No, Why Not? _____

Lab sample sent to for water quality analysis _____

Well Owner: Gilded mtn. LLC

Business Name: _____

Address: PO Box 584

City, State, Zip: Spearsfish SD 57783

WELL LOG:

DEPTH

FORMATION

FROM

TO

STATIC WATER LEVEL

FEET

If flowing: closed in pressure _____

PSI

GPM flow _____

through _____

Inch pipe

Controlled by ☐ Valve

☐ Reducers

☐ Other _____

Reduced flow rate _____

GPM

Can well be completely shut in? _____

WELL TEST DATA:

☐ Pumped Describe: _____

☐ Bailed _____

☐ Other _____

Pumping Level Below Land Surface

_____ Ft. After _____

Hrs. pumped _____

GPM

_____ Ft. After _____

Hrs. pumped _____

GPM

If pump installed, pump rate: _____

GPM

REMARKS

Steve Ryan has all data pertaining to this Report

This well was drilled under license # _____

And this report is true and accurate.

Drilling firm: _____

Signature of License Representative: _____

RECEIVED

Signature of Well Owner or Equitable Property Holder: _____

NOV 02 2018

WATER RIGHTS PROGRAM

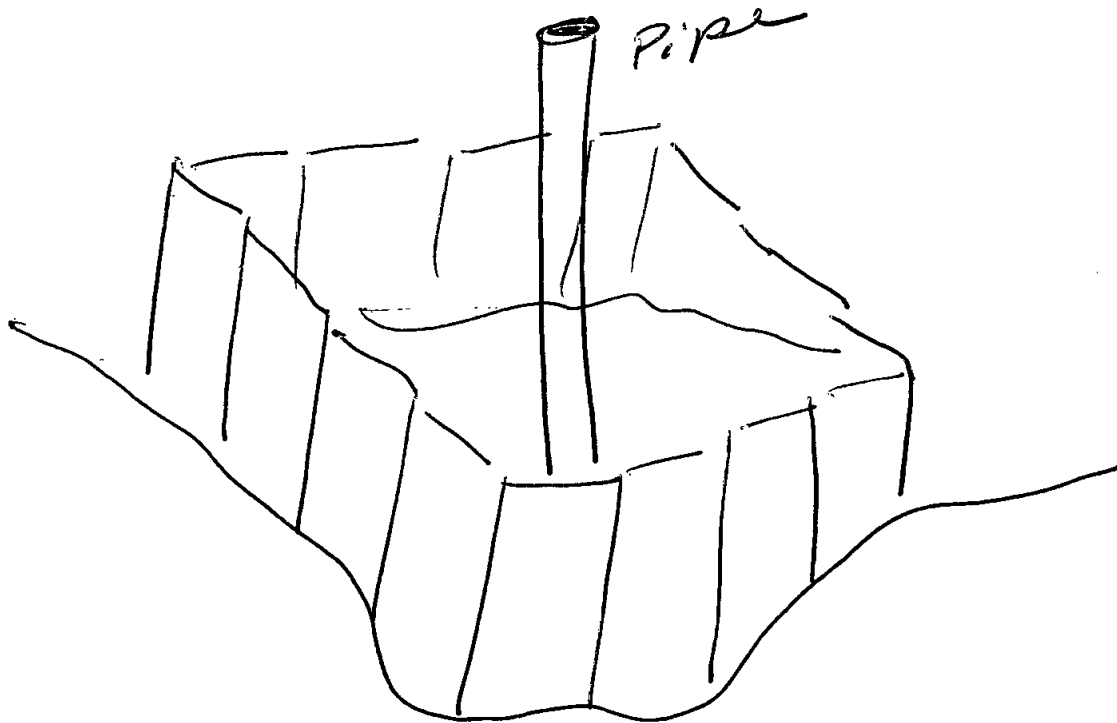
Date: _____

Please return **WHITE COPY** to: **DENR Water Rights**

523 E Capitol Ave. Pierre SD 57501

existing well

approximately $4\frac{1}{2}' \times 4\frac{1}{2}'$ wood enclosure



Depth approx 12'-14'



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182

denr.sd.gov

November 13, 2018

McDirt Excavation, Inc.
12273 Plateau Loop
Whitewood, SD 57793

Mr. McGrath,

This letter is a follow-up to the letter and well completion report you submitted to Eric Gronlund on October 30, 2018, for work done at Gilded Mountain LLC. The DENR-Water Rights Program is charged with licensing water well drillers and pump installers for the State of South Dakota. Adam Mathiowetz with my staff reviewed the information you provided for the work you performed at Gilded Mountain. For your convenience, copies of the laws or rules referenced below have been enclosed with this letter.

The letter and well completion report you submitted indicates you performed well construction work without a license as required by South Dakota Codified Law (SDCL) 46-6-9 and 46-6-9.2. The well, as constructed, does not meet South Dakota Well Construction Standards for construction method and allowable use of the well. Administrative Rule of South Dakota (ARSD) 74:02:04:46 regulates the method of construction and allowable uses for wells constructed with precast curbing or concrete casing. Based on the information you provided, the well you constructed was not grouted as required by ARSD 74:02:04:46(3) and defined in ARSD 74:02:04:28 nor was the alternative method of constructing a concrete casing well as described in ARSD 74:02:04:46(3) used.

ARSD 74:02:04:46 does not allow a well constructed with precast or concrete curbing to be used as a public water supply well or for any wells which require water permits. A well constructed for Gilded Mountain LLC qualifies as a public water supply well as defined in ARSD 74:02:04:20(42), and Gilded Mountain LLC is a water distribution system as defined in SDCL 46-1-6(17).

You cannot conduct any well drilling activities until such time as you obtain a South Dakota Well Driller's License from the DENR-Water Rights Program or come under contract to act as a sub-contractor for a South Dakota Licensed Well Driller. Any work done as a sub-contractor for a South Dakota Licensed Well Driller must meet South Dakota Well Construction Standards. For your information, a violation of SDCL 46-6-9.2 is a class 2

misdeemeanor and can result in a civil fine of not more than \$500 for each day of violation per SDCL 46-1-11.

Please contact Adam Mathiowetz or Whitney Kilts with my office at (605) 773-3352 if you have any questions regarding well driller licensure or well construction standards.

Sincerely,

A handwritten signature in black ink, reading "Jeanne Goodman". The signature is fluid and cursive, with the first name "Jeanne" written in a larger, more prominent script than the last name "Goodman".

Jeanne Goodman
Chief Engineer
DENR-Water Rights Program

Enclosure

CC:

Scot E Munro
Gilded Mountain LLC
123 E Jackson Blvd, Suite 3
Spearfish SD 57783

Steve Ryan, Water System Manager
Gilded Mountain LLC
PO Box 584
Spearfish SD 57783

Ann Mines Bailey, Assistant Attorney General
1302 East Highway 14, Suite 1
Pierre, SD 57501-8501

South Dakota Codified Laws (SDCL) can be found at:
https://sdlegislature.gov/statutes/Codified_Laws/Default.aspx

SDCL 46-6-9. Well driller license--Fee--Issuance. Any well driller, before doing any well drilling and before contracting for any such work, shall first secure and thereafter maintain a license. The words "South Dakota Licensed Well Driller No." shall be plainly displayed at a conspicuous place on the premises where the work is being conducted. The fee for the license is two hundred dollars for a resident, and three hundred dollars for a nonresident. The same amounts shall be paid each calendar year for renewal of the license. A resident is any person whose primary residence is located in South Dakota and has not claimed residency in any other state within ninety days of filing an application to become licensed. The fee shall be paid to the Department of Environment and Natural Resources and deposited with the state treasurer in the environment and natural resources fee fund established in § 1-40-30. The license shall be issued pursuant to the procedures contained in chapter 46-2A. No license may be issued unless the applicant is experienced and knowledgeable in good well construction methods. The Water Management Board shall promulgate rules pursuant to chapter 1-26 establishing qualifications for well drillers.

Source: SL 1955, ch 431, § 1; SDC Supp 1960, § 61.0415; SL 1977, ch 365; SL 1981, ch 317; SL 1983, ch 314, § 98; SL 1993, ch 256, § 59; SL 2009, ch 13, § 9.

SDCL 46-6-9.2. Well driller's license or well pump installer's license required for certain persons. Any person who performs work for compensation in the repair of wells or as a well pump installer shall obtain a well driller's license issued pursuant to § 46-6-9 or a well pump installer's license issued pursuant to § 46-6-9.3 before conducting or contracting for such work.

Source: SL 2001, ch 241, § 5.

SDCL 46-1-6. Definition of terms. Terms used in this title mean: ...

(17) "Water distribution system," a system of piping, valves, storage tanks, pumps, and appurtenances by which water is conveyed for domestic or municipal use by a common distribution system, including a municipality as defined in § 9-1-1, a nonprofit rural water supply company as defined in § 10-36A-1, a water user district as defined in § 46A-9-2, a sanitary district as defined in chapter 34A-5, or homes, including mobile homes as defined in § 32-3-1, and manufactured homes as defined in § 34-34A-1.1 supplied by a common distribution system;

(18) "Well," an artificial excavation or opening in the ground, made by means of digging, boring, drilling, jetting, or by any other artificial method, for the purpose of obtaining groundwater. Any series of openings, borings, or drillings developed and pumped collectively by a single pump unit shall be considered as one well;

(19) "Well driller," any person or persons engaged in the commercial drilling or construction, redrilling, and rebuilding of wells in this state.

Source: SL 1955, ch 430, § 1; SL 1955, ch 431, § 1; SDC Supp 1960, §§ 61.0102, 61.0401 (1) to (9); SL 1966, ch 259, § 2; SL 1972, ch 237, §§ 3, 4; SL 1973, ch 279, § 1; SL 1978, ch 314, §§ 1, 2; SL 1981 (2d SS), ch 1, §§ 2, 8; SL 1982, ch 309, § 2; SL 1983, ch 314, §§ 3 to 8; SL 1987, ch 324; SL 1989, ch 382; SL 1991, ch 17 (Ex. Ord. 91-4), § 17; SL 1994, ch 351, § 111; SL 2012, ch 213, § 1.

SDCL 46-1-11. Violations of water use laws as misdemeanors--Civil fine in addition--Each day as separate violation--Exemption of board and commission actions. Unless otherwise provided in this title, any person, firm, or corporation violating any of the provisions of chapters 46-4 to 46-10, inclusive, is guilty of a Class 2 misdemeanor. In addition, a civil fine of not more than five hundred dollars may be imposed for the violation. Each day of noncompliance with the provisions of this title shall be deemed a separate violation. Administrative actions of the department or Board of Water and Natural Resources, the Water Management Board, or the conservation commission are exempt from this section.

Source: SL 1955, ch 430, § 2; SL 1955, ch 431, § 2; SDC Supp 1960, §§ 61.9920, 61.9921; SL 1977, ch 347, § 1; SL 1981, ch 316, § 11.

Administrative Rules of South Dakota (ARSD) can be found at:
<https://sdlegislature.gov/Rules/RulesList.aspx>

ARSD 74:02:04:46. Precast curbing and concrete casing use limitations. Precast curbing or concrete casing may be used to construct wells for private and reasonable domestic use, irrigation wells, and noncommercial livestock watering wells. Precast curbing or concrete curbing may not be used for public water supply wells or any other wells which require water permits. When used, construction must meet the following requirements:

(1) The top of the precast curbing or concrete casing shall be covered with a cover with a downward flange which will overlap the edge of the curbing or casing;

(2) The casing must be located deep enough into the saturated aquifer material to allow placement of the pump to meet the definition for adequate wells in subdivision 74:02:04:20(6);

(3) Pressure grouting as required by § 74:02:04:28 must be completed or, as an alternative, the precast curbing or concrete casing may be terminated 10 feet below the ground surface and the terminated casing covered with a concrete or steel cover. A concrete cover must have a hole in the center formed by a short section of pipe 10 inches in diameter or less. The pipe section must be an integral part of the cover and in place when the concrete cover is poured. A steel cover must have a hole in the center with a pipe 10 inches in diameter or less welded over the opening. The cover shall be placed on the terminated casing and the annular space outside the casing below the cover and the cover joint shall be sealed to a depth of no more than 2 feet above the top of the aquifer or to a depth of 20 feet below grade, whichever is nearest to ground surface, by pouring dry granular bentonite into the annular space through a tremie pipe. The space around the pipe extension to the surface shall be filled with bentonite to at least one foot above the cover and with clay or native soil to the ground surface. The pipe extension to the surface and any joints in the pipe must be watertight.

See Appendix G at the end of this chapter.

Source: 12 SDR 50, effective September 29, 1985; 13 SDR 129, 13 SDR 141, effective July 1, 1987; 18 SDR 224, effective July 16, 1992.

General Authority: SDCL 46-2-5, 46-6-6.1, 46-6-20, 46-6-27.

Law Implemented: SDCL 46-6-6.1, 46-6-10, 46-6-20, 46-6-27.

ARSD 74:02:04:28. Minimum grouting requirements for wells -- Exceptions. The annular space between the wellbore and casing of all public water supply wells and all other wells except those wells described in §§ 74:02:04:31, 74:02:04:35, 74:02:04:36, and 74:02:04:46, shall be pressure-grouted as follows:

(1) All wells completed into confined aquifers shall be pressure-grouted with bentonite grout or cement grout from the top of the producing aquifer to the ground surface or to the base of the pitless unit;

(2) All wells completed into unconfined aquifers shall be pressure-grouted with bentonite grout or cement grout from a depth no more than 4 feet above the top of the aquifer or to a depth of 20 feet below grade, whichever is nearest to ground surface, up to the ground surface or to the base of the pitless unit. Monitoring wells in which the well screen extends above the top of the unconfined aquifer shall be grouted from a depth beginning no more than 4 feet above the top of the well screen or to a depth of 20 feet below grade, whichever is nearest to the ground surface, up to the ground surface or to the base of the pitless unit;

(3) Any permanent casing installed for the purpose of stabilizing the upper wellbore so the drilling of the well can proceed to the intended total depth or any surface casing as required by §§ 74:02:04:35 and 74:02:04:36 must be pressure grouted with cement grout from the bottom to the top.

See Appendix D at the end of this chapter.

Source: 12 SDR 50, effective September 29, 1985; 13 SDR 129, 13 SDR 141, effective July 1, 1987; 18 SDR 224, effective July 16, 2002; 31 SDR 62, effective November 8, 2004.

General Authority: SDCL 46-2-5, 46-6-20, 46-6-27.

Law Implemented: SDCL 46-6-6.1, 46-6-10, 46-6-20, 46-6-27.

Notes: Bentonite manufactured for use as a drilling fluid does not meet the requirements for bentonite grout. The driller should be aware of the limitations inherent in bentonite grout. The low density of bentonite grout may make it inappropriate for use as a grout when higher hydrostatic pressure is required.

Section 74:53:05:02 requires submission of plans and specifications for review and approval prior to construction of wells to supply community water systems defined by subdivision 74:04:05:01(3).

ARSD 74:02:04:20. Definitions. Terms defined by SDCL chapters 46-1 to 46-6, inclusive, have the same meanings when used in this chapter. In addition, terms used in this chapter mean: ...

(42) "Public water supply well," a well that supplies water to one or more of the following:

- (a) Water distribution systems as defined by SDCL 46-1-6(17);
- (b) Community water systems as defined by subdivision 74:04:05:01(3);
- (c) Water supplied from other than a common water distribution system to the public from such facilities as campgrounds, tourist attractions, roadside parks, rest areas, churches, hospitals, nursing homes, schools, or eating, drinking, lodging, and other commercial business establishments or for commercial use as defined by subdivision 74:02:01:01(1) or for manufacturing or industrial operations; and
- (d) Noncommunity water systems as defined by subdivision 74:04:05:01(27);

...

Source: SL 1975, ch 16, § 1; transferred from §§ 52:01:02:01 and 52:01:04:01, effective July 1, 1979; transferred from §§ 74:02:02:01 and 74:02:04:01, 12 SDR 50, effective September 29, 1985; 13 SDR 129, 13 SDR 141, effective July 1, 1987; 18 SDR 224, effective July 16, 1992.

General Authority: SDCL 46-2-5, 46-6-6.1, 46-6-20, 46-6-27.

Law Implemented: SDCL 46-2-9, 46-6-6.1, 46-6-10, 46-6-14, 46-6-18, 46-6-20, 46-6-21, 46-6-27.

References: ANSI/AWWA Standards C600-87, "Installation of Ductile-Iron Water Mains and Their Appurtenances," approved June 14, 1987; C603-90, "Installation of Asbestos-Cement Pressure Pipe," approved June 17, 1990, and effective February 1, 1991; and C900-89, "Polyvinyl Chloride (PVC) Pressure Pipe, 4 in. through 12 in., for Water Distribution," approved January 29, 1989, and effective July 1, 1989. Published by American Water Works Association, 1987, 1991, and 1989, respectively. Copies may be obtained from American Water Works Association, 6666 West Quincy Avenue, Denver, CO 80235. Cost: C600-87, \$12; C603-90, \$8; C900-89, \$12.

ASTM Standard C150-89, "Standard Specification for Portland Cement," approved May 26, 1989. Published by the American Society for Testing and Materials, July 1989. Copies may be obtained from the American Society for Testing and Materials, 1916 Race Street, Philadelphia, PA 19103. Cost: \$12.



1926-1

**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182

denr.sd.gov

November 13, 2018

ORDER

Scot E Munro
Gilded Mountain LLC
123 E Jackson Blvd, Suite 3
Spearfish SD 57783

Steve Ryan, Water System Manager
Gilded Mountain LLC
PO Box 584
Spearfish SD 57783

SUBJECT: Order to Discontinue Use of Recently Constructed Third Well for Gilded Mountain LLC

Mr. Munro and Mr. Ryan:

Gilded Mountain LLC holds Water Right No. 1926-1 appropriating 0.033 cubic feet of water per second (15 gallons per minute) from two wells to supply the water distribution system.

The Department of Environment and Natural Resources (DENR) received information in September that McDirt Excavations either completed a third well for the Gilded Mountain LLC water distribution system or repaired an unauthorized third well which was subsequently connected to the water distribution system. This well is not authorized by Water Right No. 1926-1. DENR sent a letter on September 10, 2018, requesting information regarding the work completed on the third well. McDirt Excavation's response received November 2, 2018, leads to serious concerns regarding the construction of this well.

First, this well was not constructed or repaired by a licensed well driller. South Dakota Codified Law (SDCL) 46-6-9 and 46-6-9.2 require a SD well driller's license for those who perform work for compensation in the construction and repair of wells. Additionally, construction must comply with South Dakota Well Construction Standards. McDirt Excavation does not hold a SD well driller's license nor is it DENR's understanding that their work was conducted under the supervision of a licensed well driller. DENR is sending McDirt Excavation a letter under separate cover regarding this matter.

Second, there are material flaws with the method used in constructing the third well. McDirt Excavation's response indicates they stacked 48 inch concrete tiles, 22 feet deep and back filled with clean rock. A well constructed in this manner does not meet South Dakota Well Construction Standards. Administrative Rules of South Dakota regulates the method of construction and allowable uses for wells constructed with precast curbing or concrete casing. Based on the information provided, the well casing was not grouted as required nor was the alternative method of constructing a concrete casing well used.

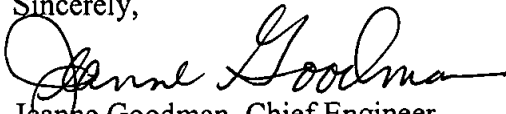
Further, Administrative Rules of South Dakota do not allow a well constructed with precast or concrete curbing to be used as a public water supply well or for any wells which require water permits. Gilded Mountain is a public water supply and holds a water right for its water use. A public water supply well is a well that supplies water to one or more of the following: 1) water distribution system; 2) community water system; 3) water supplied from other than a common distribution system to the public; and 4) noncommunity water system. Therefore, the well construction using precast concrete is not allowed.

Pursuant to SDCL 46-2-18 as Chief Engineer, I order discontinuance of use of water to which the user has no legal right. Gilded Mountain's water right does not authorize this third well and, given the improper well construction, it cannot be used by Gilded Mountain LLC as part of the water distribution system. **Therefore I am ordering Gilded Mountain LLC to cease use of this third well.** Failure to obey the order may result in DENR seeking a temporary restraining order or injunction with the court of proper jurisdiction.

I am unaware of a rehabilitation technique that will allow a precast concrete to be allowed for use as a public water supply. Therefore, DENR is not able to authorize this well as an additional diversion point to Water Right No. 1926-1.

If you have any questions, please contact Eric Gronlund or Adam Mathiowetz at (605) 773-3352.

Sincerely,


Jeanne Goodman, Chief Engineer
Water Rights Program, DENR

C: Mark Mayer, Administrator, Drinking Water Program, DENR



1926-1
**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182

denr.sd.gov

November 20, 2018

Scott E Munro
Great Peaks Realty
115 E Hudson St
Spearfish SD 57783

Dear Mr. Munro:

Please find enclosed the order to discontinue use of the recently constructed third well for Gilded Mountain LLC as well as the letter sent to McDirt Excavation.

The original order was sent to the address listed on Water Right No. 1926-1 for Gilded Mountain LLC which is 123 E Jackson Blvd, Suite 3, Spearfish SD. That mailing came back as undeliverable. Therefore, I am resending to the address of Great Peaks Realty.

Please let us know the correct address to use for Gilded Mountain LLC.

Sincerely,

A handwritten signature in cursive script that reads 'Eric Gronlund'.

Eric Gronlund
Water Rights Program, DENR
605 773-3352
Eric.gronlund@state.sd.us

enclosure



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182

denr.sd.gov

February 21, 2019

Scot E Munro
Gilded Mountain LLC
123 E Jackson Blvd, Suite 3
Spearfish SD 57783

Steve Ryan, Water System Manager
Gilded Mountain LLC
PO Box 584
Spearfish SD 57783

SUBJECT: New Well Recently Constructed Well for Gilded Mountain LLC

Mr. Munro and Mr. Ryan:

DENR received a well completion report from Alexander Drilling on February 19, 2019 for a well drilled to supply the Gilded Mountain water system. A copy of the well completion report is attached. The new well meets South Dakota well construction standards.

Gilded Mountain LLC holds Water Right No. 1926-1 appropriating 0.033 cubic feet of water per second (15 gallons per minute [gpm]) from two wells to supply the water distribution system.

As you are aware, DENR issued an order on November 13, 2018, for Gilded Mountain to discontinue use of a well that was completed by McDirt Excavation since it was not constructed or repaired by a licensed well driller and the well did not meet well construction standards. I presume this recent well was drilled to replace the well that Gilded Mountain was ordered to cease using.

The purpose of this letter is to discuss potential water permitting for this newest well. DENR presumes that Gilded Mountain continues to maintain the two original wells and this newest well will be a third well capable of supplying the water system. The question then becomes whether the combined diversion rate from the three wells will exceed the 15 gpm authorized by Water Right No. 1926-1.

- If combined diversion from the wells will exceed 15 gpm, a new water right permit is needed for the additional diversion. The new well completion report indicates the well is capable of producing 15 gpm. However, a licensing investigation last spring by our water rights inspector found the capacity from the wells limited to 15 gpm by a single flow control valve.
- If the combined diversion from the well does not exceed 15 gpm, then Gilded Mountain can request the third well be authorized by the Chief Engineer.

I have attached questions for either of you to answer and a aerial photo the section 6-T4N-R3E to mark the location of this newest well. Please complete and return in the self-addressed stamped envelope.

If you have any questions, please contact me at (605) 773-3352.

Sincerely,

A handwritten signature in cursive script, appearing to read "Eric Gronlund".

Eric Gronlund
Water Rights Program, DENR

Enclosures

Gilded Mountain LLC – Information

1. Will all three wells be used to supply Gilded Mountain's water system:

2. Will the wells be in use at the same time or used on an alternating basis?

3. What is the maximum pump rate from the wells to the water system at one time in gallons per minute?

4. Please mark the location on the newest well on the attached map.

Please return to Eric Gronlund in the self-addressed stamped envelope.

The matter will be reviewed to determine if a new water permit application needs to be filed or if DENR can administrative authorize the third well to be included under Water Right No. 1926-1

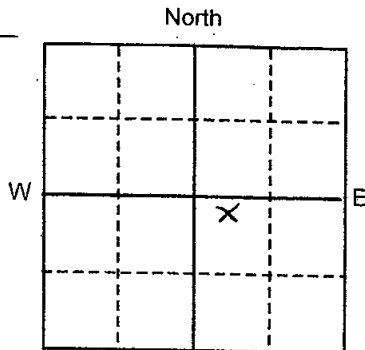


SOUTH DAKOTA WATER WELL COMPLETION REPORT

11-02

Location NW ¼ SE ¼ Sec 6 Twp 4N Rg 3E

County Lawrence

Please mark well
location with an "X"

1 Mile

Well Completion Date

January 31, 2019

Distance to nearest potential pollution source (septic tank, abandoned well, feed lot, etc.)?
500.0 ft. from septic (identify source)

PROPOSED USE:

☒ Domestic/Stock ☐ Municipal ☐ Business ☐ Test holes
☐ Irrigation ☐ Industrial ☐ Institutional ☐ Monitoring well

METHOD OF DRILLING:

Rotary downhole hammer

CASING DATA:

☒ Steel ☐ Plastic ☐ Other
 If other describe Set 32' of 6" sch 40 steel

PIPEWEIGHT	DIAMETER	FROM	TO	HOLE DIAMETER
LB/FT	IN	0.0 FT	30.0 FT	8.75 IN
LB/FT	IN	30.0 FT	40.0 FT	6.00 IN
LB/FT	IN	FT	FT	IN

GROUTING DATA:

Grout Type	No. of Sacks	Grout Weight	From	To
Portland II	3	Lb/gal	20.0 Ft	0.0 Ft
		Lb/gal	Ft	Ft

Describe grouting procedure
with trimmie pipe while driving casing.

SCREEN:

☒ Perforated pipe ☐ Manufactured
 Diameter 6.00 Inches Length 10.0 Feet

Material

Slot Size .25 Set From 20.0 Feet to 30.0 Feet

Other information

WAS A PACKER OR SEAL USED?

☐ Yes ☒ No

If so, what material?

Describe packer(s) and location

DISINFECTION: Was well disinfected upon completion?

☒ Yes, How? w/chlorine solution

☐ No, Why Not?
 Lab to which water
 quality sample sent for analysis

Well Owner: Gilded Mountain Home Owners Assn.

Business Name:

Address: PO Box 584

City, State, Zip: Spearfish SD 57783

WELL LOG:

FORMATION	DEPTH	
	FROM	TO
Drift	0	20
Gravel - 15+ gpm	20	25
Grey Schist	25	40

STATIC WATER LEVEL 12.0 FEET

If flowing: closed in pressure PSI

GPM flow 15.0 through Inch pipe

Controlled by ☐ Valve ☐ Reducers ☐ Other

Reduced flow rate GPM

Can well be completely shut in?

WELL TEST DATA:

☒ Pumped Describe: w/air

☐ Bailed

☐ Other

Pumping Level Below Land Surface

Ft. After Hrs. pumped GPM

Ft. After Hrs. pumped GPM

If pump installed, pump rate: GPM

REMARKS

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

Drilling firm: Alexander Drilling Inc.

Signature of License Representative:

Signature of Well Owner or Equitable Property Holder:

RECEIVED

Date:

FEB 19 2019

WATER RIGHTS
PROGRAM



1926-1
DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182

denr.sd.gov

March 25, 2019

Gilded Mountain Home Owners Association
c/o Scot Munro
115 E Hudson St
Spearfish SD 57783

Dear Mr. Munro:

Thank you for submitting the *Application for a Permit to Appropriate Water* for the additional well and increasing the diversion rate authorized by Water Right No. 1926-1. In order to complete the application, the following is required.

- The application lists the well is located in the N 1/2 SE 1/4 Section 6-T4N-R3N. We have reviewed the aerial photo map and it appears the new well is located very near the boundary line of the SE 1/4 NE 1/4 and the NE 1/4 SE 1/4 Section 6. Do you agree with this location?
- Also, please submit the application/license fee of \$300 and also the \$50 transfer of ownership fee (total \$350).

If you have any questions, please contact Eric Gronlund or me.

Sincerely,

Karen Schlaak

Karen Schlaak
Water Rights Program
605 773-3352
karen.schlaak@state.sd.us

NOTICE OF TRANSFER OF OWNERSHIP

To: Chief Engineer
Water Rights Program, DENR
523 E. Capitol
Pierre, SD 57501-3181

RECEIVED

MAR 22 2019

WATER RIGHTS
PROGRAM

No. 1926-1

Date: 3/4/19

I/We request that Water Right/Permit No. 1926-1

formerly owned by: Gilded Mountain LLC

be transferred to: (name & address) Gilded Mountain Home Owners Association
PO Box 584, Spearfish SD 57783

Telephone No. X 605 641 6482

Title to the following described land(s)/property has been transferred as described above:

one well located in the N 1/2 SE 1/4 Section 6-T4N-R3E

I/We understand that the validity of Water Right/Permit No. 1926-1 has not been determined by this transfer action. If I/We have any questions on validity, I/We understand that only the Water Management Board has the authority to determine if a water permit/right is valid (see note).

You are requested to file this "Notice of Transfer" in the appropriate file with the Water Rights Program, as evidence of the change of ownership.

A fee of Fifty Dollars (\$50.00) is required to cover the filing fees as required under SDCL 46-2-13. This form must be signed by the new owner.

I/We Scot E Munro, the new owner, certify that the above information is true and correct.

Gilded Mountain Homeowners Association

Scot E Munro
Director Gilded Mtn Home Owners Association
(Signed by new owner)

NOTE: Water permits may be cancelled for nonconstruction after the five year construction period has expired. Once a water permit is developed and the water used, the permit becomes a right. A water right may be lost for three reasons:

1. Abandonment - no intent to use water and use is abandoned.
2. Forfeiture - no use of water for three year period without legal excuse.
3. For a third violation of a condition of a water permit/right.

RECEIPT

WATER RIGHTS PROGRAM

South Dakota Department of Environment and Natural Resources

Date April 16, 20 19

RECEIVED OF Gilded Mountain HOA Inc PO Box 584 Spearfish SD 57783

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

Fee for Application for Permit No. _____ to Appropriate Water, to construct and to put water to beneficial use	50	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 _____ 1928-1		
Fee for _____	50	00
Fee for Issuing New Well Driller's License No. _____ for C.Y. _____		
Fee for Renewal of Well Driller's License No. _____ for C.Y. _____		
Fee for Issuing Well Pump Installer's License No. _____ for C.Y. _____		
Fee for Renewal of Well Pump Installer's License No. _____ for C.Y. _____		
(Any Other Work Provided by Law)	TOTAL	50 00

No. **09123**

By Jeannie Goodman
Chief Engineer *vm*



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE SOUTH DAKOTA 57501-3182
www.denr.sd.gov

April 24, 2019

1926-1

Scott Munro
Gilded Mountain Home Owners Association
PO Box 584
Spearfish SD 57783-0584

Dear Mr. Munro:

Thank you for following up on the transfer of Water Right No. 1926-1.

The ownership/name change has been completed. No. 1926-1 formerly listed under Gilded Mountain LLC is now listed in the name of Gilded Mountain Home Owners Association.

Enclosed for your records is Receipt No. 09123 in the amount of \$50 which you paid for filing the transfer.

If you have any questions, please contact me.

Sincerely,

Genny McMath
Water Rights Program
(605) 773-3352
email: genny.mcmath@state.sd.us

enclosure

1926-1

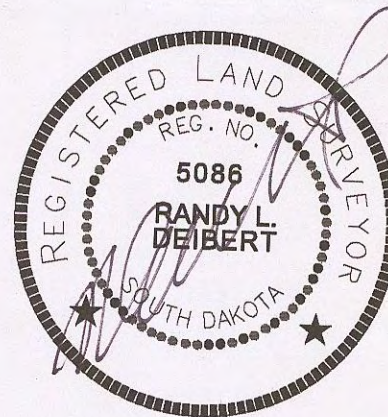
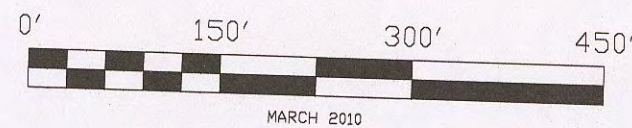
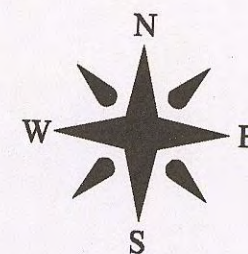
**PLAT OF LOT 8 AND LOT 9
OF GILDED MOUNTAIN SUBDIVISION,
BEING PORTIONS OF GILDED MOUNTAIN TRACT,
INCLUDING MARY HAMMER M.S. 1755, GRAND EASTERN M.S. 1755,
PEWABIC M.S. 1755, MAPLE M.S. 1755,
SHANNON M.S. 1755, LESS LOT H-1, LESS LOT H-4,
AND LESS THAT PORTION OF M.S. 1755 LYING SOUTH OF HIGHWAY 85,
ALL LOCATED IN THE E1/2 OF SECTION 6
AND THE SW1/4 OF SECTION 5, T.4N., R.3E., B.H.M.,
LAWRENCE COUNTY, SOUTH DAKOTA .
(SHEET 1 OF 2)**

RECEIVED

JAN - 3 2012

WATER RIGHTS
PROGRAM

(THAT PORTION, BOOK 293, PAGE 259)



LINE	BEARING	DISTANCE
L1	N 30°34'57" W	44.97'
L2	N 56°03'15" E	9.03'
L3	S 56°58'51" W	50.51'
L4	S 56°50'03" E	39.70'
L5	S 55°20'04" W	97.60'
L6	N 16°46'58" W	41.75'
L7	N 46°53'54" E	86.86'

CURVE	ARC LENGTH	RADIUS	DELTA ANGLE	CHORD BEARING	CHORD LENGTH
C1	226.81'	150.00'	86°38'11"	N 12°44'09" E	205.82'
C2	222.29'	200.00'	63°40'52"	S 15°03'28" W	211.02'

ACREAGE TABLE:

LOT 8 = 21477 SQ FT OR 0.49 ACRES±
LOT 9 = 23768 SQ FT OR 0.55 ACRES±

PREVIOUSLY PLATTED = 23.75 ACRES±
TOTAL PLATTED THIS PLAT = 1.04 ACRES±
REMAINDER OF GILDED MOUNTAIN SUBDIVISION = 23.59 ACRES±

GILDED MOUNTAIN
TOTAL ACREAGE = 48.38 ACRES±

NOTES:

1. ALL AREAS ARE MORE OR LESS.
2. DISTANCES ARE TO ACTUAL CORNERS NOT WITNESS CORNERS.

B.L.M.
GOV. LOT 11

RECEIVED

DEC 29 2011

WATER RIGHTS
PROGRAM

CENTERLINE OF 66'
RIGHT-OF-WAY OF
TERRY GULCH ROAD.

GOV. LOT 9

LOT 23
AUGUSTA
M.S. 1606

33.0ft

LOT 37R
PREVIOUSLY
PLATTED

CENTERLINE OF 66'
RIGHT-OF-WAY OF
TERRY GULCH ROAD.

TRACT 49

BASES OF BEARING

B.L.M.
GOV. LOT 11

CENTERLINE 50'
PRIVATE ACCESS
AND UTILITY EASEMENT
FOR INGRESS AND
EGRESS
PREVIOUSLY DEDICATED.
(GILDED MT. ROAD)

CENTERLINE 50'
PRIVATE ACCESS
AND UTILITY EASEMENT
FOR INGRESS AND
EGRESS
PREVIOUSLY DEDICATED
(GILDED MT. LOOP)

LOT V
SILVER WAVE
M.S. 1039

GRAND EASTERN

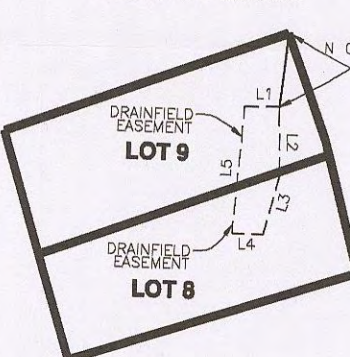
MARY HAMMER

Well
Location

LOT W
ETTA
M.S. 1039

DETAIL

DRAINFIELD EASEMENTS
SHOWN BELOW TO BE
DEDICATED THIS DOCUMENT



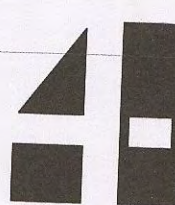
LINE	BEARING	DISTANCE
L1	S 82°05'38" W	26.97'
L2	N 02°10'08" E	54.82'
L3	N 14°00'50" E	46.53'
L4	S 89°44'56" E	24.40'
L5	S 03°52'33" W	99.15'

Plat prepared by:

**FOUR FRONT
DESIGN, INC.**

517 7th street
rapid city sd 57701
ph: 605.342.9470
fax: 605.342.2377
www.4front.biz

ARCHITECTURE | ENGINEERING
GIS SURVEYING



FOUR FRONT
DESIGN, INC.