

WATER PERMIT NO. 2545-2

Name of Applicant: **Cedar Investment Property LLC**

Address: **PO Box 914, Rapid City SD 57709** Phone: **605 343-2340**

Amount of Water Claimed: **0.20 cfs** Total Acres: **NA**

Source of Water Supply: **groundwater (one well)**

Water to be used for: **commercial** County: **Pennington**

Type of Waste Disposal System:

Location: **within city limits of Rapid City**

PRIORITY Date Received: **1-3-05** Application/License Fee: **\$275**

Corrected Application Received: Period of Annual Use: **January 1- December 31**

Remarks:

Diversion Point: **SW ¼ NE ¼ Sec 34-T2N-R7E**

Land to be Irrigated:

Depth of Well: **737 feet**

Well Driller: : **Taylor Drilling Co.**

Remarks:

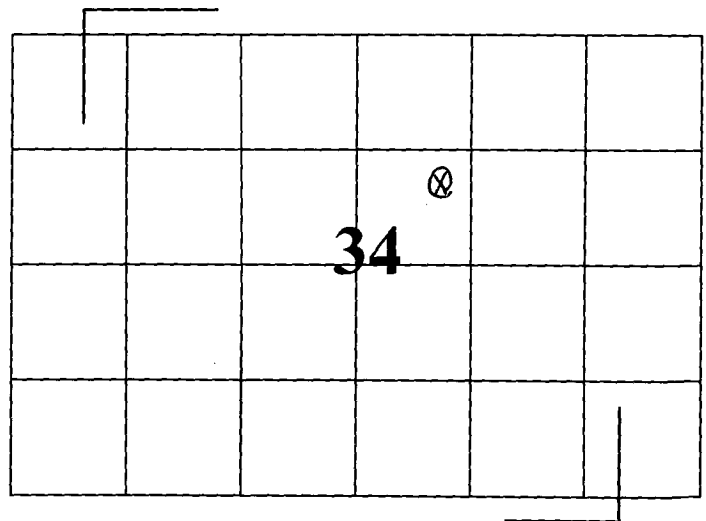
Type of Map: **plat**

Prepared by: **Warren L Fisk, PE**

Reviewed and the Number Assigned on: **1-3-05**

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. <u>2545-2</u> (office use only) Hydrologic Unit <u>10/20110</u>
	Basin <u>Upper Cheyenne</u>
	Newspaper <u>Rapid City Journal, Rapid City</u>

RECEIVED

JAN - 3 2005

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: (check one)
☒ New ☐ Vested Right (Use predates Mar 2, 1955) ☐ Future Use Reservation
☐ 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.)

- Name of Applicant Cedar Investment Property, LLC Phone (605) 343-2390
(check one) ☒ Owner ☐ Tenant/lessee
Mailing Address P.O. Box 914, Rapid City State SD 57709
(Street, RR, or Box and City) (Zip Code)
- Amount of water claimed 0.20 *CFS or **GPM ***AF
(*Cubic Feet per Second) (**Gallons per Minute) (***)Acre Feet - storage capacity of dam/dugout or annual use if applicable
- Source of water supply one well
- Location of point of diversion (example - 3 wells in SW1/4 NE1/4 section 12-T104N-R53W) County Pennington
NE 1/4 SW 1/4 NE 1/4 of Section 34, T2N, R7E, BHM
- County or counties where water will be used Pennington Jan 1 - Dec 31
- Annual period during which water is to be used Intermittently during favorable weather.
- 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)
Applicant to use the water to add to material to be excavated and to the excavated material that will be used for fill for roads and grading purposes (water for compaction).

STATE OF SOUTH DAKOTA)
County of Pennington SS

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, Cedar Investment Property, 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 James V. Bailey

Subscribed and sworn to before me this 30th day of December 2004

Joanne Hutter

Notary Public signature

Comm expires 11-24-2010

**SOUTH DAKOTA
WATER PERMIT NO. 2545-2**

Date of first receipt of application January 3, 2005.

The Chief Engineer, on behalf of the Water Management Board, issues Water Permit No. 2545-2 to Cedar Investment Property, LLC, PO Box 914, Rapid City SD 57709 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. 2545-2 appropriates 0.20 cubic feet of water per second from one well completed into the Minnelusa Formation (737 feet deep) located in the SW ¼ NE ¼ Section 34-T2N-R7E.
2. The water appropriated shall be used for the purpose of commercial use 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. 2545-2 is March 14, 2005.
5. The date from which applicant may claim right is January 3, 2005.
6. One-fifth of the construction is to be completed on or before September 14, 2007.
7. All construction is to be completed on or before March 14, 2010.
8. Water is to be put to beneficial use on or before March 14, 2014.
9. Water rights obtained in compliance with the laws of the State of South Dakota may not be unlawfully impaired by this appropriation.

QUALIFICATIONS

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 01 2005

date



(type or print in ink)

1. Well Information - Proposed Construction

- a) Drill Hole Diameter 6³/₄ Inch Depth 720 Feet
- b) Casing Type Steel Diameter 5¹/₂ Inch Thickness 1/4 Inch
- c) Screen Type NA Diameter _____ Thickness _____
- d) Gravel Pack NA Length of Gravel Pack _____
- e) Depth to Top of Water Bearing Material Flowing well - 712 Feet
- f) Depth to Water (ground surface to water level) Flowing well plus pump
- g) Distance to nearest existing domestic well:
- On applicants property None On property owned by others 1500 feet ±

2. Wastewater Disposal System Information

- a) Type of System (i.e. septic tank, drain field) Not Applicable - will keep on owned land.
- b) System Capacity (gallons) _____ Year Constructed _____
- c) Connected to the City of _____ Sanitary System

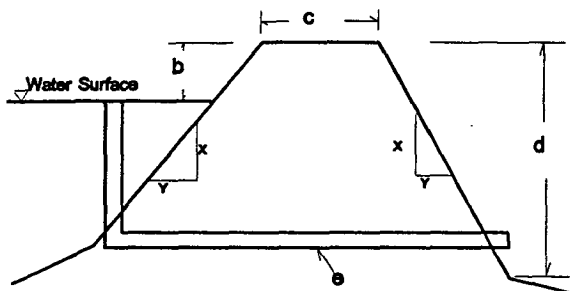
3. Dugout Information Not Applicable

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

4. Water Storage Dams Not Applicable.

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

RECEIPT

WATER RIGHTS PROGRAM

South Dakota Department of Environment and Natural Resources

Date January 3, 20 05

RECEIVED OF Cedar Investment Property LLC, PO Box 914, Rapid City SD 57709

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

Fee for Application for Permit No. <u>2545-2</u> to Appropriate Water, to construct and to put water to beneficial use	225	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>2545-2</u>	50	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	275.00

No.

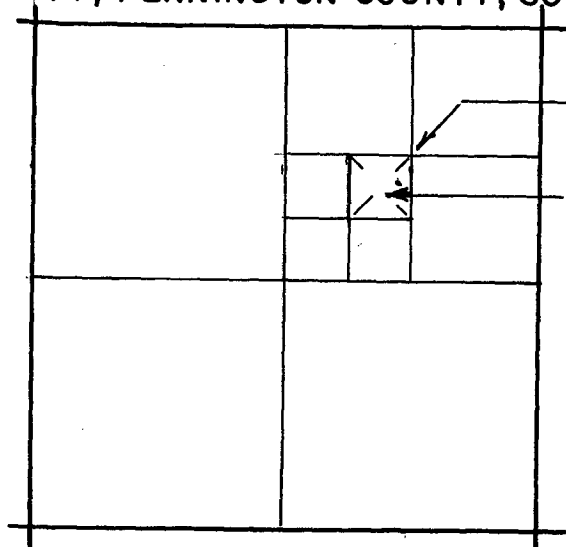
001517

By

Darland Erbe
Chief Engineer
gm

MAP OF DIVERSION POINT (WELL)

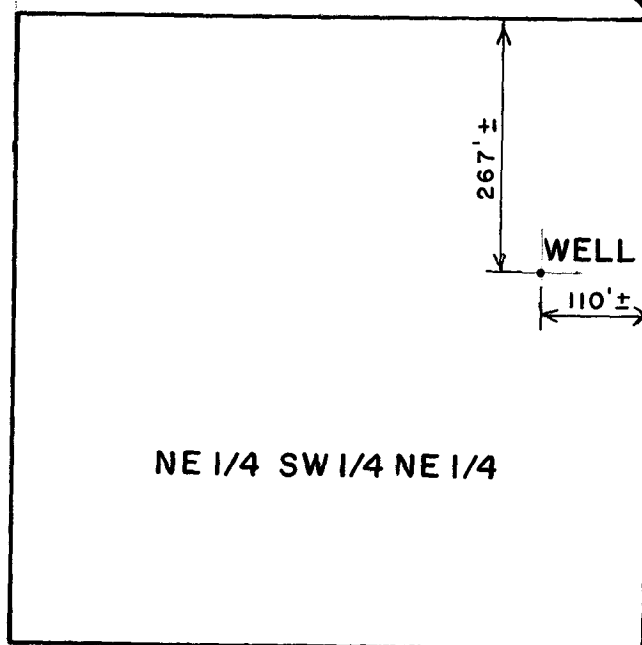
LOCATED IN THE NE 1/4 SW 1/4 NE 1/4 OF SECTION 34, T2N, R7E, BHM
RAPID CITY, PENNINGTON COUNTY, SOUTH DAKOTA



SECTION 34
1" = 2000'



Dec. 28, 2004



PROPERTY
1" = 200'

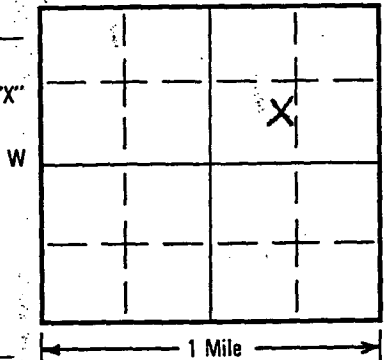
FOR: CEDAR INVESTMENT PROPERTY, LLC
PO BOX 914
RAPID CITY, SD 57709
605 343 2390

SOUTH DAKOTA WATER WELL COMPLETION REPORT

07-92

Location SW 1/4 NE 1/4 Sec 34 Twp 2N Rg 7E
County Pennington North

Please mark well location with an "X"



Well Completion Date

11-26-04

LOCATION:

Distance from nearest potential pollution source (septic tank, abandoned well, feed lot, etc.)? 1500 ft. from septic system (identify source).

PROPOSED USE:

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

METHOD OF DRILLING:

air rotaryCASING DATA: ☒ Steel ☐ Plastic ☐ Other

If other describe _____

PIPEWEIGHT	DIAMETER	FROM	TO	HOLE DIAMETER
<u>15.5</u> LB/FT	<u>5 1/2</u> IN	<u>0</u> FT	<u>720</u> FT	<u>6 3/4</u> IN
<u>26</u> LB/FT	<u>7 5/8</u> IN	<u>0</u> FT	<u>36</u> FT	<u>9 7/8</u> IN
_____ LB/FT	_____ IN	_____ FT	_____ FT	_____ IN

GROUTING DATA

Grout Type	No. of Sacks	Grout Weight	From	To
<u>cement</u>	<u>10</u>	<u>15</u> lb./gal	<u>0</u> ft	<u>36</u> ft
<u>cement</u>	<u>73</u>	<u>15</u> lb./gal	<u>0</u> ft	<u>720</u> ft

Describe grouting procedure pressure grouted
through casing

SCREEN: ☐ Perforated pipe ☐ Manufactured

Diameter _____ IN 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: chlorine solution

____ NO, Why Not? _____

Laboratory sent to for water quality analysis _____

 Well Owner: James Bailey, Member
 Business Name: Cedar Investment Property, LLC
 Address: P.O. Box 914
Rapid City, SD 57709

WELL LOG:

FORMATION	DEPTH	
	FROM	TO
<u>gravel, boulders + silt</u>	<u>0</u>	<u>12</u>
<u>siltstone orange</u>	<u>12</u>	<u>46</u>
<u>shale greenish gray</u>	<u>46</u>	<u>124</u>
<u>gyp</u>	<u>124</u>	<u>135</u>
<u>siltstone orange</u>	<u>135</u>	<u>556</u>
<u>limestone buff</u>	<u>556</u>	<u>596</u>
<u>shale purp to red</u>	<u>596</u>	<u>712</u>
<u>ss yellow</u>	<u>712</u>	<u>735</u>
<u>shale red</u>	<u>735</u>	<u>777</u>

STATIC WATER LEVEL 0 FeetIf flowing: closed in pressure 32 PSIGPM flow 20 through _____ inch pipeControlled by ☒ Valve ☐ Reducers ☐ Other flowing wellReduced Flowrate pitless GPMCan well be completely shut in? yes

WELL TEST DATA:

☐ Pumped Describe: _____
☐ Bailed air developed
☐ Other _____

Pumping Level Below Land Surface

720 ft. After 2 Hrs. pumped >150 GPM

_____ ft. After _____ Hrs. pumped _____ GPM

If pump installed, pump rate _____ GPM

REMARKS

This well was drilled under license # 331

And this report is true and accurate.

Drilling firm Taylor Drilling Co.

Signature of License Representative: _____

Signature of Well Owner or Equitable Property Holder: _____

Date: _____



**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 20, 2004

James V Bailey
PO Box 914
Rapid City SD 57709

Dear Mr. Bailey:

Thank you for your recent call about use of water for compaction purposes. Our web site has the links to all our forms and also contains information on who needs a permit and who does not. The site is located at: <http://www.state.sd.us/denr/des/waterrights/waterprg.htm>

When you get to the site, the left side of the page has a drop down list of our all forms. The forms for regular "non-irrigation" applications and our temporary water permit applications can be downloaded from the site.

Use of water for compaction purposes as you described for road construction can be handled under our temporary water permit application if the project is "temporary" in nature. For example, if you are supplying water for a specific project, then a temporary water permit could be issued. If you intend on using your well to supply other highway projects in your area on a more continuous basis, then a regular appropriative water permit should be obtained.

If after reviewing the web-site and the enclosed forms you have any questions, please contact either myself or Eric Gronlund with our program at (605) 773-3352. Eric is also in our administrative section and deals with water permit applications.

Sincerely,

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

enclosures

WATER PERMIT APPLICATION NO. 2545-2
CEDAR INVESTMENT PROPERTY, LLC
JANUARY 25, 2005

Water Permit Application No.2545-2 proposes to appropriate 0.20 cubic feet of water per second from one existing well completed into the Minnelusa Formation (737 feet deep), located in the SW¼ NE¼ Sec. 34, T2N-R7E, Pennington County. The water is for commercial use.

AQUIFER: Minnelusa aquifer (MNLS)

GENERAL:

The Minnelusa Formation consists of alternating beds of sandstone and dolomitic limestone with lesser amounts of shale and chert, approximately 600 feet thick in this area (Carter and Redden, 1999a; Carter and Redden, 1999b). The Minnelusa Formation outcrops about three miles west of this site (Strobel and others, 1999) and the SD Water Well Completion Report for the existing well that is to be used for this project reports the top of the formation to be 712 feet below grade. The porous portions of the formation form the Minnelusa aquifer. Well sorted sand lenses have porosity's approaching 25%, but generally the sands have porosity's of 10%. The average porosity of the Minnelusa is estimated to be 10% and the effective porosity is assumed to be 5% (Rahn, 1979). The Minnelusa Formation underlies virtually all of western South Dakota and the Minnelusa aquifer contains over 755 million acre-feet of recoverable water in storage (Allen and others, 1985). The Minnelusa aquifer underlies approximately 1,371,520 acres of Pennington County and contains an estimated 51,432,000 acre-feet of recoverable water in storage in the county (Allen and others, 1985). Ground water movement in the aquifer is probably toward the east (Strobel, and others, 2000). The water quality of the aquifer is generally good near the outcrop but deteriorates considerably with distance from the recharge area. Estimates from regional studies of the aquifer indicate the aquifer transmissivity may range from 0.86 to 12,000 ft²/d, and the storage coefficient ranges from 0.003 to 5.0 x10⁻⁹ (Driscoll, and others, 2002). The completion report submitted for this well indicates the well flows 20 gallons per minute and has a shut-in pressure of 32 psi. The report also indicates the well capacity was over 150 gpm during air development.

WATER AVAILABILITY:

The availability of unappropriated water from an aquifer can be evaluated by considering SDCL 46-6-3.1. This statute requires that an application to appropriate groundwater can not 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 average estimated annual recharge.

Recharge to the Minnelusa aquifer is primarily from infiltration of precipitation on the outcrop and stream flow losses. Average annual recharge in the Black Hills area from 1931-1998 is estimated to be approximately 112,000 acre-feet per year (Carter and others, 2001a).

There are a total of 191 appropriations from the Minnelusa aquifer in South Dakota, including two Future Use Reservations (Water Rights, 2005d). The aquifer is used primarily for domestic, commercial, municipal, suburban housing and irrigation uses. There are 45 permits/rights appropriating water from the Minnelusa aquifer in Pennington County, including one future use (Water Rights, 2005c). Water permits and rights represent appropriations up to 11,085.04 acre-feet annually for irrigation use (Water Rights, 2004) and a combined diversion rate of 29.67 cfs for non-irrigation uses (Water Rights, 2005c). The Future Use Permits (No. 902-1 and 969-1) reserve 1,460 acre-feet annually. Maximum well withdrawals from the Minnelusa aquifer, assuming (1) that permits/rights with an annual withdrawal limitation (ac-ft/yr.) will use the maximum allowable; and (2) permits/rights that are limited by a diversion rate only, will use 60% of the maximum allowable (considered reasonable for water distribution systems); would be approximately 25,000 acre-feet per year. The actual amount of water used from the aquifer is considerably less than this estimate, for example the reported pumpage for irrigation use in 2003 was 2,310.83 ac-ft compared with the 11,085.04 ac-ft/yr appropriation. Withdrawals from wells (domestic and appropriative) completed into the Minnelusa aquifer were estimated to be 8,108 acre-feet annually from 1987-1996 (Carter and others, 2001b).

Comparison of annual recharge estimates and estimated annual well withdrawals show that well withdrawals from the Minnelusa are only a fraction of estimated average annual recharge. Therefore, based on a simple water budget, it is clear that unappropriated water is available for this appropriation.

The best information available to evaluate development as it relates to recharge, is historical records and data from observation wells. The difference between withdrawal from an aquifer and recharge is reflected by the water level of the aquifer. If the water level of an aquifer continues to decline, it may suggest that withdrawals exceed recharge. The Water Rights Program monitors 23 observation wells completed into the Minnelusa aquifer in the Black Hills area (Water Rights, 2005b). Water Rights' Observation Well PE-64A is located approximately one-half mile west of this well and Observation Well PE-64B is located approximately one and one-half miles south-southwest of 2545-2. The hydrographs for these wells (figures 1 & 2), are fairly typical for the Minnelusa aquifer. That is, the water levels reach their peak in the early summer each year and gradually decline until spring. The majority of the recharge to the system occurs between March and July. The hydrographs also show the magnitude of fluctuation in the water levels in the area ($\cong 55'$ in PE-64A and $\cong 40'$ in PE-64B).

The water levels measured in PE-64A declined from high levels in the late 1990's to the lowest water level of the period of record in September 2004. The significance of the water level decline is not clear. This may be reflecting the extremely dry conditions that occurred in the area during 2004. However, nearby Minnelusa observation wells including Well PE-64B (figure 2) do not show similar low water levels.

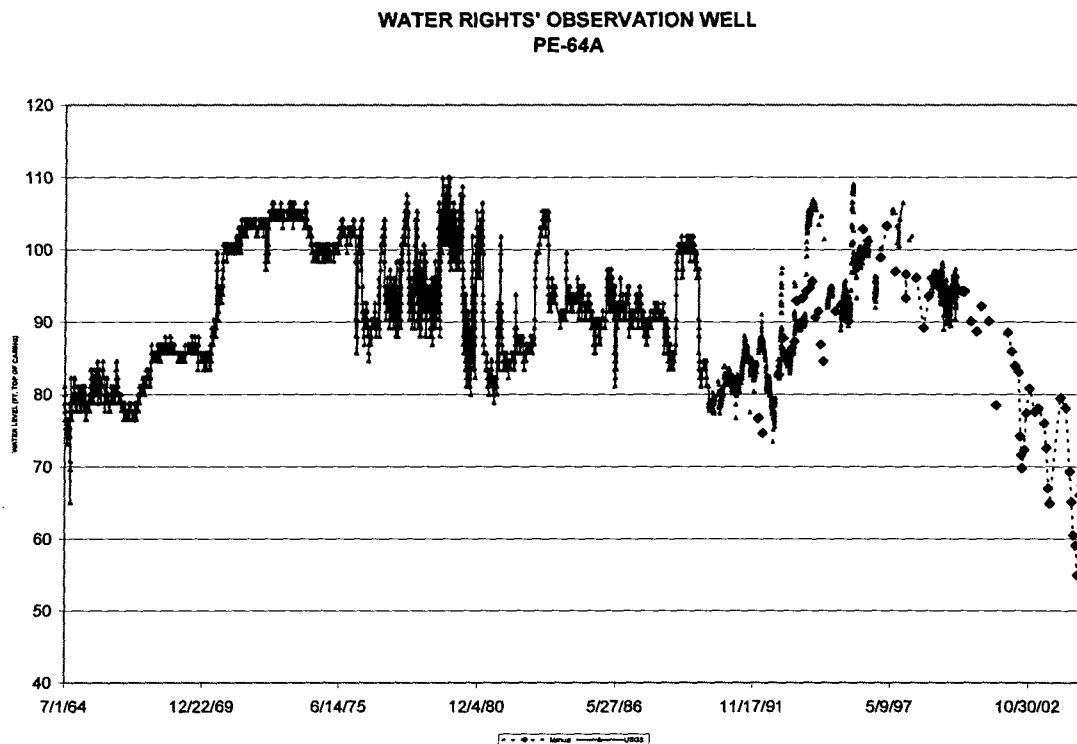


Figure 1. Hydrograph of Water Rights' Minnelusa aquifer Observation Well approximately one-half mile west of 2545-2

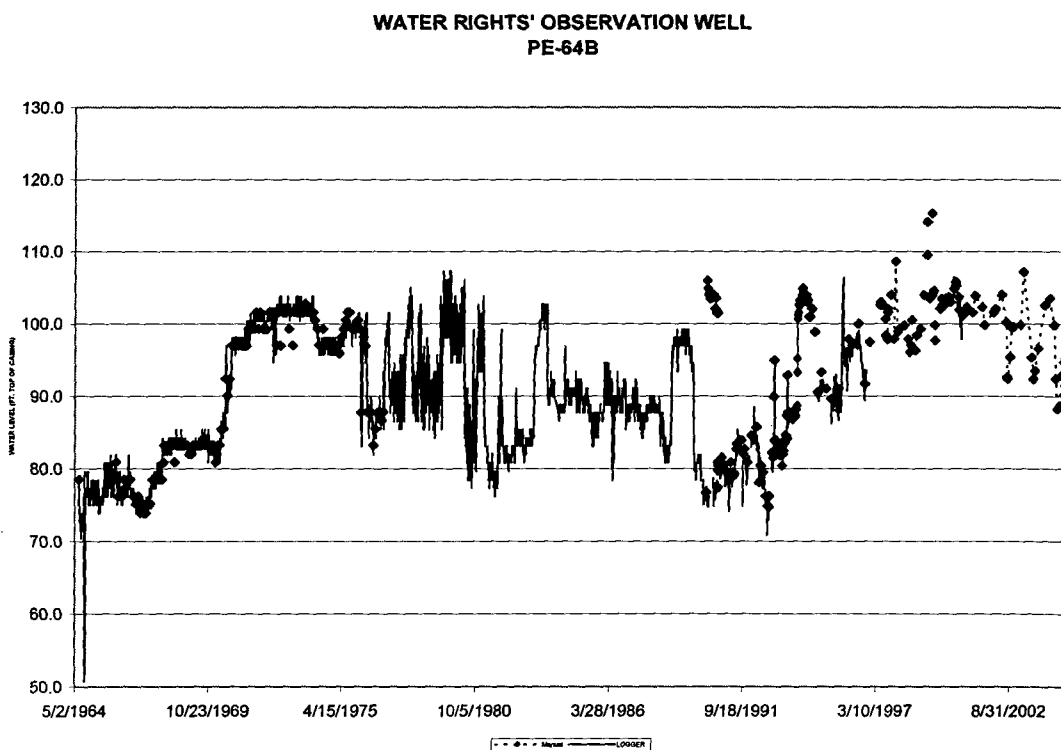


Figure 2. Hydrograph of Water Rights' Minnelusa aquifer Observation Well approximately one and one-half miles south- southwest of 2545-2

It is obvious from the hydrographs of Minnelusa observation wells, that withdrawals have not exceeded recharge for the period of record. The observation well data suggests that the aquifer is capable of sustaining additional withdrawals.

AFFECTS ON EXISTING RIGHTS:

There are 40 Water Rights/Permits appropriating groundwater within approximately three miles of 2545-2, plus there are two future use reservations within this area. Appropriations not supplied by the Minnelusa aquifer should not be affected by withdrawals from this well since the Opeche Shale serves as a confining layer above the Minnelusa, and the thick carbonate sequence in the lower Minnelusa isolates the Minnelusa aquifer from lower aquifers.

There are 24 Water Rights/ Permits appropriating water from the Minnelusa aquifer within approximately three miles of this site, they are shown in table 1. In addition, Future Use Permit No. 902-2, SD Cement Plant, reserves 1,364 acre-feet per year from the Minnelusa aquifer approximately three-fourths of a mile west of this well.

PERMIT NO	NAME	USE	CFS	ACRES
1124-2	CHAPEL LANE WATER CO	SHD	0.56	
1279-2	PETE LIEN & SONS INC	IND	0.68	
1451-2	RAPID CHEVROLET CO INC	COM	0.16	
1656-2	PETE LIEN & SONS INC	IND	2.23	
1761-2	PETE LIEN & SONS INC	DOM	0.10	
1824-2	HIDDEN VALLEY WATER ASSOC	SHD	0.11	
1943-2	LAKE PARK RESORT MOTEL	COM	0.05	
1952-2	MILITARY & VETERANS AFF.	DOM	0.17	
1953-2	MILITARY/VETERANS AFFAIRS	IRR	0.17	13.00
2036-2	MILITARY & VETERANS AFF.	INS	0.16	
2121-2	CITY OF RAPID CITY	MUN	0.17	
2137-2	FRANK SIMPSON	IRR	0.17	100.00
2166-2	HARLAND C DANIELSEN	COM	0.02	
2215-2	MAC CONSTRUCTION	COM	0.02	
2297-2	FRANKLIN SIMPSON	COM	0.10	
2370-2	MIKE SWEET	COM	0.13	
2438-2	STAN HOUSTON EQUIPMENT	COM	0.13	
2466-2	BLACK HILLS GENERATION	IND	0.56	
2482-2	SIOUX SAN HOSPITAL	INS	0.08	
435-2	CITY OF RAPID CITY	MUN	1.78	
436-2	CITY OF RAPID CITY	MUN	1.55	

506-2	BIRDSALL SAND & GRAVEL	IND	0.34
716-2	JULIAN STAVEN	MPL	0.07
815-2	GCC DACOTAH, INC	IND	1.57

Table 1. Minnelusa appropriations within three miles of 2545-2

The nearest well appropriating water from the Minnelusa aquifer is Water Right No. 2370-2, Mike Sweet, located approximately one-quarter mile west-northwest of this well.

In addition to the wells supplying Water Permits/Rights, there are a number of domestic wells completed into the Minnelusa aquifer on file with the Water Rights Program (Water Rights, 2005a).

Although the impact of approving this application cannot be quantified precisely, it is still possible to address whether this appropriation can be made without adversely affecting water rights, including domestic wells. Water Management Board rules 74:02:04 and 74:02:05, which were promulgated pursuant to SDCL 46-6-6.1, provide protection to prior appropriators only to the degree necessary to maintain an adequate depth of water in wells that have the ability to produce water independent of artesian pressure. Simply put, the pump placement, or artesian flow, in a prior appropriator's well is not necessarily protected. In fact, in past action, the Water Management Board has concluded that if increased cost or decreased production is considered an adverse impact, it could be in conflict with SDCL 46-1-4, which requires South Dakota's water resources to be put to beneficial use to the fullest extent of which they are capable.

Since the Minnelusa is under artesian conditions in this area and pumping may cause a decline in the potentiometric surface over a fairly widespread area. Considering the Board's past actions, any well interference this proposed use would have on area water rights/permits and domestic wells is not expected to be significant or adverse. It may be necessary to lower pumps in some wells to maintain water use at the present level.

Any interference this proposed use would have on these or other water rights/permits is not expected to be adverse due to the relatively low diversion rate requested by this application.

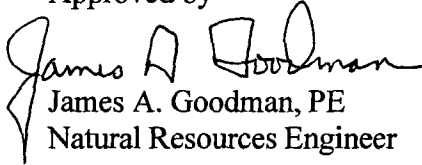
CONCLUSIONS:

1. The Minnelusa aquifer is a viable aquifer in this area, and water is available for this appropriation.
2. The Minnelusa aquifer is under artesian conditions and drawdown due to this diversion can be expected. This drawdown is not expected to adversely affect adequate wells in the area.
3. The Completion Report submitted with this application indicates the existing well has been constructed in compliance with the SD Well Construction Standards.



Ken Buhler
Natural Resources Engineer

Approved by



James A. Goodman, PE
Natural Resources Engineer

REFERENCES:

- Allen, J.C., Iles, D.L., and Petres, A.K., 1984, Analysis of Groundwater and Streamflow Data Western Dakotas Region of South Dakota, Task 3A. B.C. and 4A. B.: Groundwater Resource Inventory: South Dakota Department of Water and Natural Resources,
- Carter, J.M., and Redden J.A., 1999a, Altitude of the Top of the Minnelusa Formation in the Black Hills Area, South Dakota: U.S. Geological Survey Hydrologic Investigations Atlas HA-744-C, 2 sheets, scale 1:100,000
- Carter, J.M., and Redden J.A., 1999b, Altitude of the Top of the Madison Limestone in the Black Hills Area, South Dakota: U.S. Geological Survey: Hydrologic Investigations Atlas HA-744-D, 2 sheets, scale 1:100,000
- Carter, J.M., Driscoll, D.G., and Hamade, G.R., 2001a, Estimated Recharge to the Madison and Minnelusa Aquifers in the Black Hills Area, South Dakota and Wyoming, Water Years, 1931-98: U.S. Geological Survey Water Resources Investigations Report 00-4278, 66 p.
- Carter, J.M., Driscoll, D.G., Hamade, G.R., and Jarrell, G.J., 2001b, Hydrologic Budgets for the Madison and Minnelusa Aquifers, Black Hills of South Dakota and Wyoming, Water Years 1987-96: U.S. Geological Survey Water-Resources Investigations Report 01-4119, 53 p.
- Driscoll, D.G., Carter, J.M., Williamson, J.E., and Putnam, L.D., 2002, Hydrology of the Black Hills Area, South Dakota: U.S. Geological Survey Water Resources Investigations Report 02-4094, 150 p.
- Rahn, P.H., 1979, Ground Water Resources of Western South Dakota, US Army Corps of Engineers, Draft Report-Final

Strobel, M.L., Jarrell, G.J., Sawyer, J.F., Schleicher, J.R., and Fahrenbach, M.D., 1999, Distribution of Hydrogeologic Units in the Black Hills Area, South Dakota: U.S. Geological Survey Hydrologic Investigations Atlas HA-744-C, 3 sheets, scale 1:100,000

Strobel, M.L., Galloway, J.M., Hamade, and G.R., Jarrell, G.J., 2000, Potentiometric Surface of the Minnelusa Aquifer in the Black hills Area, South Dakota: U.S. Geological Survey Hydrologic Investigations Atlas HA-745-C, 2 sheets, scale 1:100,000

Water Rights Program, 2004, "2003 Irrigation Summary by Aquifer": DENR-Water Rights Program

Water Rights Program, 2005a, "Domestic Well Log Files": DENR-Water Rights Program,

Water Rights Program, 2005b, "Observation Well Files": DENR-Water Rights Program

Water Rights Program, 2005c, "Water Permit Files": DENR-Water Rights Program,



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

**RECOMMENDATION OF CHIEF ENGINEER FOR WATER PERMIT
APPLICATION NO. 2545-2, Cedar Investment Property, 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. 2545-2, Cedar Investment Property, LLC., c/o James V. Bailey, PO Box 914, Rapid City SD 57709.

The Chief Engineer is recommending APPROVAL of Application No. 2545-2 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 qualification:

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 17, 2005

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MAR - 4 2005

WATER RIGHTS
PROGRAM

PROOF OF PUBLICATION

STATE OF SOUTH DAKOTA)
) SS
 County of Pennington)

I, Patricia K. Van Patten

certify that the attached printed Notice was
 taken

from the Rapid City Journal

printed and published in Rapid City

County of Pennington and

state of South Dakota. The notice was published

in the newspaper on the following two dates:

February 24, 2005

March 3, 2005

Cost of Printing Eighty-seven Dollars

and forty-eight cents (\$87.48)

Patricia K. Van Patten
 (Signature)

Legal Advertising Rep.
 (Title)

3/3/05
 (Date Signed)

Feb. 24, March 3 L1883482

**NOTICE OF
 APPLICATION NO. 2545-2
 TO APPROPRIATE WATER**

Notice is given that Cedar Investment Property, LLC, c/o James V. Bailey, P.O. Box 914, Rapid City, SD 57709, has filed an application for a water permit to appropriate 0.20 cubic feet of water per second from one well completed into the Minnelusa Formation (737 feet deep) located in the SW¼ NE¼ Section 34-T2N-R7E. The water is for commercial use.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 2545-2 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 the 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 the 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 14, 2005.

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 Granlund 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

Instruction to Newspaper - Publish first Notice on February 24, 2005 with the second publication 7 days later. The applicant is responsible for payment.

NOTICE OF APPLICATION NO. 2545-2 to Appropriate Water

Notice is given that Cedar Investment Property, LLC, c/o James V Bailey, PO Box 914, Rapid City SD 57709 has filed an application for a water permit to appropriate 0.20 cubic feet of water per second from one well completed into the Minnelusa Formation (737 feet deep) located in the SW ¼ NE ¼ Section 34-T2N-R7E. The water is for commercial use.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 2545-2_ 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 the 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 the 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 14, 2005.

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.



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February 17, 2005

Rapid City Journal
PO Box 450
Rapid City SD 57709-0450

ATTENTION: Legal Public Notice

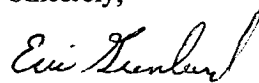
Enclosed is a Notice on Application No. 2545-2 to Appropriate Water to be published twice. Please publish the first notice on February 24, 2005 with the second publication 7 days later. The text of the notice can be e-mailed to your paper by contacting Karen Schlaak at (605) 773-3352.

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 Cedar Investment Property LLC, % James V Bailey, PO Box 914, Rapid City, SD (Ph # 605-343-2390).

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. 2545-2

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

Date _____

We are in receipt of your letter of February 17, 2005 enclosing Notice to Appropriate Water by Application No. 2545-2 which was first published in our issue of _____. **ENCLOSED IS A COPY OF THIS FIRST PUBLICATION.**

Name

Newspaper



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

February 17, 2005

Cedar Investment Property LLC
% James V Bailey
PO Box 914
Rapid City SD 57709

Dear Mr. Bailey:

Water Permit Application No. 2545-2 for commercial 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 Rapid City Journal printed at Rapid City, SD (Ph # 605-394-8300). You will need to contact the newspaper and authorize publication of this notice. For your information, a copy of the notice, the recommendation of the Chief Engineer and a report on the application 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 Notice 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 application.

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.



APR 01 2005

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Cedar Investment Property LLC
% James V Bailey
PO Box 914
Rapid City SD 57709

Dear Mr. Bailey:

Enclosed is Water Permit No. 2545-2 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

NOTICE OF COMPLETION OF WORKS AND
APPLICATION OF WATER TO BENEFICIAL USE

Date September 27, 2005

TO: Water Rights Program, DENR
523 E. Capitol
Pierre, SD 57501-3181

FROM: Cedar Investment Property, LLC
c/o James V. Bailey
(name)

P.O. Box 914
(address)

Rapid City, SD 57709
(city, state, zip)

(605) 343-2390
(phone)

I have completed the construction of the water use system and I have put the water to beneficial use to the maximum extent it is going to be used.

Water Permit No. 2545-2 states that the water use system is to be constructed by March 14, 2010, and water is to be put to beneficial use by March 14, 2014.
(date) (date)

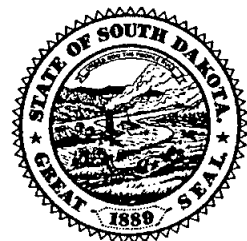
The water use system was completed on March 23, 2005.
(date)

Applying the water to beneficial use was completed on March 23, 2005.
(date)

You may schedule an investigation so that the water license may be issued.

James V. Bailey
(signature)
James V. Bailey, member

7-98



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Permit No. 2545-2
Upper Cheyenne River - Water District

Report of Examination of Works and/or Application of Water to Beneficial Use

TO: Chief Engineer, Water Rights Program, DENR, Foss Bldg., Pierre, SD 57501

I have on this day, 6/10/2010, made a thorough examination of the water use system constructed by Cedar Investment Property LLC, PO Box 914, Rapid City, SD 57709 holder of Permit No. 2545-2, bearing the priority date of January 3, 2005. Permit No. 2545-2 is authorized to appropriate a total of 0.20 cfs (87 acre-feet annually) from one groundwater well (Minnelusa Aquifer) for commercial purposes, in Pennington County.

Inspection contact and relationship to
permit holder, if applicable:

James Bailey,
Member

A. Works used to divert the water:

A Grundfos submersible pump - 89 gallons per minute capacity (0.20 cfs).

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

10 feet of 2" PVC pipe, pressure tank and spigot.

The system is in the following condition good. The point of diversion (well) is located specifically at Lat/Lon - N44.092292/W-103.257416 which is the approximately 1,600 feet south and 1425 feet west of the NE corner of Section 34, T2N, R7E. The works are capable of diverting 0.20 cfs which is to be used for commercial purposes.

Water has been put to beneficial use to the maximum extent and the license should be issued for 0.20 cfs (87 acre feet annually).

All structures, wells and lands on map Y

Exceptions to compliance are: none.

Comments:

Aaron R. Tieman

Aaron Tieman
Natural Resources Project Engineer
DENR, Water Rights Program

Date report completed: June 29, 2010

FIELD INVESTIGATION REPORT FOR PERMIT NO. 2545-2

DATE OF INVESTIGATION:	June 10, 2010
NAME & ADDRESS OF PERMIT HOLDER	Cedar Investment Property, LLC PO Box 914 Rapid City, SD 57709
NAME & ADDRESS OF INVESTIGATION CONTACT/ RELATIONSHIP TO PERMIT HOLDER, IF APPLICABLE	James Bailey (Member)
DIVERSION POINT LEGAL LOCATION	SW¼ NE¼ Section 34, T2N-R7E
WATER SUPPLY SOURCE	Ground water, Minnelusa Aquifer

Other permit(s) associated with the project:

WELL INFORMATION:

- 1) Well Drilling Firm: **Taylor Drilling**
- 2) No. of Wells **One**
- 3) Depth(s) **737** feet
- 4) Well log is available **yes**
- 5) Comment:

Casing:

- 1) Diameter: **7⁵/₈** inches Diameter **5½** inches
- 2) Length: **36** feet Length: **720** feet
- 3) Type: **Steel** Type: **Steel**

Screen:

- 1) Type: **Open Hole**
- 2) Length: **N/A** feet
- 3) Static water level: **0** feet (Flowing well)

Pump:

- 1) Make: **Grundfos**
- 2) Model: **75S100-16**
- 3) Capacity: **89** GPM

Motor:

- 1) Make: **Grundfos**
- 2) Model No.: **96440318**
- 3) Horsepower rating: **10** hp

DISTRIBUTION LINES OR CANALS:

- 1) Type: **10 feet of 2" PVC, pressure tank and spigot.**

PERMIT QUALIFICATIONS:

- 1) Special qualifications to permit being abided by **Yes**
- 2) All structures, wells and lands on map **Yes**

COMMENTS:

Water Right 2545-2
Cedar Investment Property, LLC
June 29, 2010



Sec 28
T002N
R07E

Sec 27
T002N
R07E

Sec 26
T002N
R07E

Sec 33
T002N
R07E

Sec 34
T002N
R07E

Sec 35
T002N
R07E

Sec 4
T001N
R07E

Sec 3
T001N
R07E

Sec 2
T001N
R07E

Water Well
Lat. 44.092292
Lon. -103.257416



0 0.25 0.5 1 Miles



Aaron R. Tieman
Aaron Tieman
Natural Resources Project Engineer
DENR Water Rights Program



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JUL 14 2010

2545-2

James Bailey
Cedar Investment Property LLC
PO Box 914
Rapid City SD 57709 0914

Dear Mr. Bailey:

Enclosed is Water License No. 2545-2. 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 the owner of an existing well, such as the well authorized by Water Right No. 2545-2, 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,

A handwritten signature in black ink, reading "Garland Erbele". The signature is fluid and cursive, with the first name "Garland" being more prominent than the last name "Erbele".

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

enclosures

STATE OF SOUTH DAKOTA

WATER LICENSE NO. 2545-2

(1) Cedar Investment Property LLC, PO Box 914, Rapid City SD 57709 made Application No. 2545-2, January 3, 2005 for a water permit to divert 0.20 cubic feet of water per second from ground water (one well – Minnelusa Formation), Pennington County, South Dakota for commercial purposes. Permit No. 2545-2, with a priority date of January 3, 2005 was approved March 14, 2005 and issued to the applicant for diversion of water with construction of the described water supply system to be completed on or before March 14, 2010 and for the application to beneficial use of said water on or before March 14, 2014.

(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 0.20 cubic feet of water per second for beneficial use.

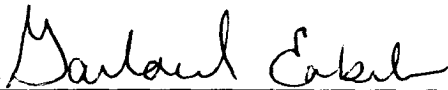
The location of the diversion point is 1,600 feet south and 1,425 feet west of the NE corner of Section 34, T2N, R7E (SW ¼ NE ¼).

(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 Cedar Investment Property LLC, PO Box 914, Rapid City SD 57709-0914 the holder and/or owner of Water Right No. 2545-2 is issued a license to appropriate water, the right to use 0.20 cubic feet of water per second from ground water (one well – Minnelusa Formation) with a priority date of January 3, 2005 from the location specified in (2) of this license for commercial use purposes.

This license is subject to South Dakota Water Law, any limitations or conditions listed in Water Right No. 2545-2 and subject to the following 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.



Garland Erbele, Chief Engineer
Water Rights Program
Department of Environment and Natural Resources

'JUL 14 2010

date

