



State of Idaho

## DEPARTMENT OF WATER RESOURCES

322 East Front Street • P.O. Box 83720 • Boise, Idaho 83720-0098  
Phone: (208) 287-4800 • Fax: (208) 287-6700 • Website: [www.idwr.idaho.gov](http://www.idwr.idaho.gov)

C.L. "BUTCH" OTTER  
Governor

GARY SPACKMAN  
Director

August 28, 2014

TANNER LANE RANCH LLLP  
C/O DWIGHT BAKER  
266 W. BRIDGE STREET  
BLACKFOOT ID 83221

**RE:** Denial of Proposal to Rent Water Rights 27-7071, 27-7072 and 27-7073 from the Water Supply Bank

Dear Mr. Baker,

On April 14, 2014, the Water Supply Bank (Bank) received from you a request to rent the above listed water rights from the Bank. The Bank reviewed all materials provided with your application, including the engineering report that analyzed the hydraulic connection between groundwater at your rental place of use and the Blackfoot River. The Idaho Department of Water Resources (IDWR) was unable to confirm the hydraulic connection between groundwater at your rental place of use and the Blackfoot River. Additionally, groundwater below your rental place of use is withdrawn from the Eastern Snake Plain Aquifer (ESPA). The water rights proposed for rental emanate from a different aquifer than the ESPA.

Because IDWR was unable to confirm the hydraulic connection between the Blackfoot River and groundwater at your rental place of use, and because the water rights sought for rental originate from a source other than the ESPA, your rental request as proposed has been denied. In conversations with your attorney, the Bank is aware of alternative water rights that may be proposed in a forthcoming rental request that may suffice to satisfy your original rental request. We will evaluate this new rental request if it is received. This rental request is subsequently being denied.

Regards,

Remington Buyer  
Idaho Department of Water Resources

C: Rob Harris – Holden, Kidwell, Hahn & Crapo LLC  
James Cefalo – Idaho Department of Water Resources

SUPPORT DATA

IN FILE # 27-7071



State of Idaho

## DEPARTMENT OF WATER RESOURCES

322 East Front Street • P.O. Box 83720 • Boise, Idaho 83720-0098

Phone: (208) 287-4800 • Fax: (208) 287-6700 • Website: [www.idwr.idaho.gov](http://www.idwr.idaho.gov)

C.L. "BUTCH" OTTER  
Governor

GARY SPACKMAN  
Director

May 15, 2014

TANNER LANE RANCH LLLP  
266 W BRIDGE ST  
BLACKFOOT ID 83221

**RE: APPLICATION(S) TO RENT WATER FROM THE WATER SUPPLY BANK**

Dear Applicant:

The Idaho Department of Water Resources (Department) acknowledges receipt of your application(s) to rent water from the Water Supply Bank (Bank). The Department will review your application(s) as time allows. If your application cannot be processed for the initial year specified on the application, it is possible that it may be approved for subsequent years.

Filing a rental application does not authorize diversion and use of water. It is unlawful to use water without a valid water right or an approved Water Supply Bank rental agreement. **You are not authorized to divert any water for the purposes described in your application until you have paid the rental fee and you and the Department have both signed and executed a rental agreement.**

You can check the status of your rental application by reviewing the Department's processing spreadsheet, accessible from the Water Supply Bank's website at:  
[http://www.idwr.idaho.gov/WaterManagement/WaterRights/WaterSupply/ws\\_default.htm](http://www.idwr.idaho.gov/WaterManagement/WaterRights/WaterSupply/ws_default.htm)

Regards,

Cherie Palmer  
Sr. Water Resource Agent  
Water Supply Bank Contact

C: Rob Harris, Holden Kidwell Hahn & Crapo  
PO Box 50130  
Idaho Falls ID 83405



Holden Kidwell  
Hahn & Crapo P.L.L.C.  
L A W O F F I C E S

1000 Riverwalk Drive, Suite 200  
PO Box 50130  
Idaho Falls, Idaho 83405

RECEIVED

APR 14 2014

DEPARTMENT OF  
WATER RESOURCES

Tel: (208) 523-0620  
Fax: (208) 523-9518  
www.holdenlegal.com

Email: [rharris@holdenlegal.com](mailto:rharris@holdenlegal.com)

April 10, 2014

Cherie Palmer  
Idaho Water Supply Bank  
Idaho Department of Water Resources  
PO Box 83720  
Boise, ID 83720-0098

**RE: *Tanner Lane Ranch, LLLP Application to Rent Water from the Water Supply Bank.***

Dear Cherie:

Enclosed is an Application to Rent Water from the Water Supply Bank filed on behalf of Tanner Lane Ranch, LLLP. Tanner Lane Ranch owns property southeast of Blackfoot. Recently some issues and concerns have arisen regarding the licensing of Permit No. 27-7549 in that the permit may not be licensed for the 480 acres it originally sought under the permit. Therefore, out of an abundance of caution while we work through these issues, we strongly desire to rent 288 acres of water for this year only to cover 2 pivots on the Tanner Lane Ranch property. We have preliminarily identified water rights on the Blackfoot River drainage that we think could be rented. The well from which the Tanner Lane Ranch pivots are provided water are relatively close to the Blackfoot River, and based on our preliminary assessment, we believe there is a high correlation between flows in the Blackfoot River and this location. The property is very sandy, and the water table stays at around 10 to 20 feet during the irrigation season once flows in the river increase. Attached is an analysis provided by Jason Helms, P.E. explaining this strong correlation.

We have preliminarily identified water rights owned by Louis Brothers, Inc., which are located very near the Blackfoot Reservoir, for rental. The water rights are 27-7071, 27-7072 (27-7073 is also available). Water Right No. 27-7071 diverts from a source known as Hole in the Rock Lake, which is tributary to the Blackfoot River. Water Right No. 27-7072 and Water Right No. 27-7073 are groundwater rights. We believe these rights, in combination that is appropriate, will be an excellent fit for our rental application. Again, please note the rental is only for one year as we sort through the licensing issues associated with 27-7549.

We should also point out that there are a couple of other water rights in the vicinity of the Blackfoot Reservoir, which are in the water supply bank, that may be rented. They are Water Right Nos. 27-2124 and 27-4008, which are owned by the Munns family.

*Established in 1896*

Cherie Palmer  
Idaho Water Supply Bank  
Idaho Department of Water Resources  
April 10, 2014  
Page 2 of 2

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If you have any questions, please do not hesitate to give me a call. If questions do arise, please do not send the documents back until we have visited concerning the rental application. aware of other water rights that may be appropriate for this rental application.

As always, we appreciate your prompt attention to these matters.

Best Regards,

A handwritten signature in blue ink, appearing to read "Robert L. Harris".

Robert L. Harris  
HOLDEN, KIDWELL, HAHN & CRAPO, P.L.L.C.

Enclosures

cc: Dwight Baker

STATE OF IDAHO  
WATER RESOURCE BOARDRECEIVED  
APR 14 2014  
DEPARTMENT OF  
WATER RESOURCESAPPLICATION TO RENT WATER  
FROM THE WATER SUPPLY BANK

This application must be prepared in accordance with the minimum requirements listed to be acceptable for processing by the Department. Incomplete applications will be returned.

Name of Renter(s) Tanner Lane Ranch LLLP C/O Dwight BakerMailing Address 266 W. Bridge Street Blackfoot, ID 83221Phone (208) 785-2310

Email \_\_\_\_\_

## A. DESCRIPTION OF WATER SOUGHT FOR RENT

| 1. <u>Maximum Flow Rate (cfs)</u> | <u>Maximum Volume (ac-ft)</u> | <u>Nature of Use</u> | <u>Period of Use</u>         |
|-----------------------------------|-------------------------------|----------------------|------------------------------|
| <u>5.76</u>                       | <u>1152.0</u>                 | <u>Irrigation</u>    | <u>04/01</u> to <u>10/31</u> |
| _____                             | _____                         | _____                | _____ to _____               |
| _____                             | _____                         | _____                | _____ to _____               |
| Total: <u>5.76</u>                | <u>1152.0</u>                 |                      |                              |

2. Source of water Ground Water / Blackfoot River tributary to Blackfoot River / ESPA

3. Point(s) of Diversion:

| TWP | RGE | SEC | GOVT LOT | 1/4 | 1/4 | 1/4 | County  |
|-----|-----|-----|----------|-----|-----|-----|---------|
| 02S | 36E | 34  |          | SE  | NE  | NE  | Bingham |
| 02S | 36E | 27  |          | SW  | SW  | SE  | Bingham |
|     |     |     |          |     |     |     |         |
|     |     |     |          |     |     |     |         |

4. Lands to be irrigated or place of use:

| TWP | RGE | SEC | NE |    |    |    | NW |    |    |    | SW |    |    |    | SE |    |    |    | Totals |
|-----|-----|-----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|--------|
|     |     |     | NE | NW | SW | SE | NE | NW | SW | SE | NE | NW | SW | SE | NE | NW | SW | SE |        |
| 02S | 36E | 26  |    |    |    |    |    |    |    |    |    | 6  | 3  |    |    |    |    |    | 9      |
|     |     | 27  |    |    |    | 4  |    |    |    |    |    |    |    |    | 39 | 37 | 40 | 35 | 155    |
|     |     | 34  | 23 | 38 | 32 | 31 |    |    |    |    |    |    |    |    |    |    |    |    | 124    |
|     |     |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |        |
|     |     |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |        |

If the use is for irrigation, show total number of acres proposed through rental.

Total Acres 288

## B. OWNERSHIP

1. Do you own the land at the proposed point of diversion?

Yes ☒ No ☐

If no, list owner, contact information, and attach a copy of the agreement or other written authority to use the proposed point of diversion. \_\_\_\_\_

2. Do you own the land at the proposed place of use?

Yes ☒ No ☐

If no, list owner, contact information, and attach a copy of the agreement or other written authority to use the proposed place of use. \_\_\_\_\_

## C. MAP

Attach a map identifying the proposed point(s) of diversion, place(s) of use, and water diversion and distribution system details as described by this application in section A. Include legal description labels.

SUPPORT DATA

IN FILE # 27-7071

#### D. GENERAL INFORMATION

1. Please provide a description of the proposed diversion system.

Two wells with existing mainlines and center pivot systems.

2. Describe any other water rights diverted through the same point(s) of diversion or used for the same purpose(s) as described above.  
See also water rights/permits/applications 27-13B, 27-7549, 27-7568.

3. Will the proposed place of use receive water from any other source? Yes ☐ No ☒

If yes, describe.

4. If the proposed use is not for irrigation, please provide a detailed description of the proposed use and how you determined the amount of water required. Attach additional sheets if needed.

5. Are there any other applications pending before the Department, such as an application for permit or transfer, for the same use(s) proposed by this rental? Yes ☒ No ☐

If yes, describe. 27-7568

6. Was this rental application submitted in response to a Notice of Violation or a pending Notice of Violation? Yes ☐ No ☒

If yes, describe.

#### E. RENTAL TERM

Do you wish to rent water from the Board's bank for more than one (1) year? Yes ☐ No ☒

If yes, please specify the number of years desired through proposed rental.

**I hereby assert that the information contained in this application is true to the best of my knowledge. I understand that any willful misrepresentations made in this application may result in rejection of the application or cancellation of an approval.**

If this application is approved, the applicant agrees to the following:

1. The use of water under this agreement shall be subject to the provisions of Section 42-1766, Idaho Code.
2. Renter shall comply with all applicable state and federal laws while using water under this agreement.
3. Renter shall hold the Board, the Director, and the state of Idaho harmless from all liability on account of negligent acts of the renter.
4. The Director may terminate diversion of water if the Director determines there is not a sufficient water supply for the priority of the right or portion thereof being rented.
5. Failure of the renter to comply with the conditions of this agreement is cause for the Director to rescind approval of the rental agreement.
6. Renter is not authorized to use water proposed by this application until the rental fees are paid in full and the renter receives an executed copy of the agreement signed by the Director.

Signature of Applicant

Printed Name and Title\* Chris Drakos GENERAL MANAGER

Date

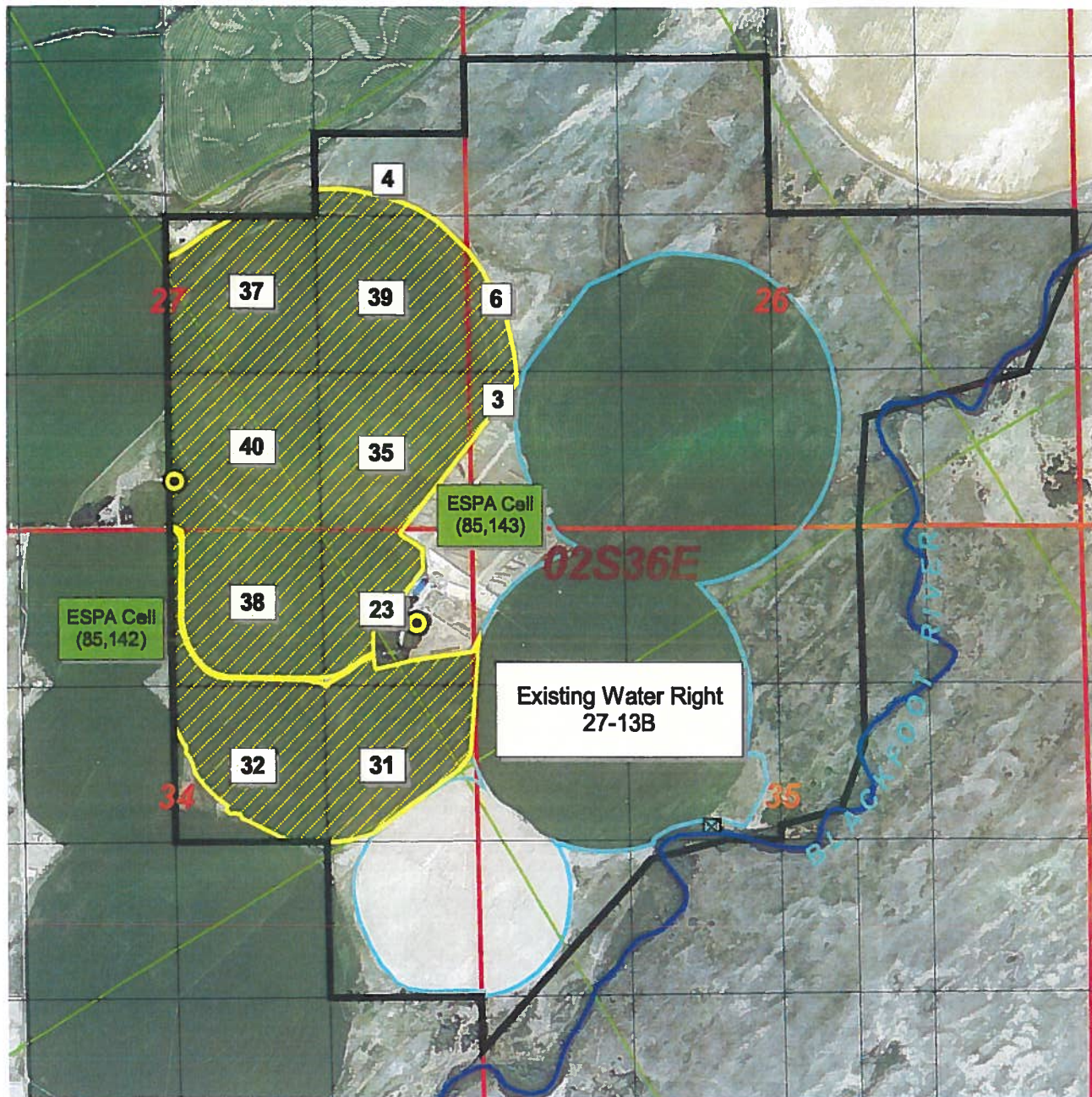
Signature of Applicant

Printed Name and Title\*

Date

\*Please provide title of signatory if signing on behalf of a company or organization or with power of attorney

Mail to: Idaho Department of Water Resources, P.O. Box 83720, Boise, ID 83720-0098



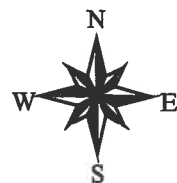
JCH - 2/25/2014

2013 NAIP Aerial Photo

0.5 0 0.5 Miles

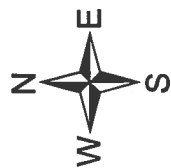
- Tanner Lane Ranch, LLLP Property Boundary
- Proposed Rental Area
- Proposed Rental Diversion Locations
- 27-13B Existing Diversion
- 27-13B Existing POU

- Township & Range
- Sections
- 40s
- ESPA Model Cells



**Application for Water Supply Bank Rental**

# TANNER LANE RANCH LLLP WATER BANK APPLICATION



## Legend

-  TR
-  27-7071
-  27-7073
-  27-7072
-  Tanner\_Lane\_Pship\_Boundary



## Tanner Lane Ranch Water Supply Bank Rental Application Report

Prepared by: Jason C. Helms, P.E.  
Date: April 8, 2014

### General Information

Tanner Lane Ranch is seeking water supply bank rental of ground water within Section 27 of Township 2 South, Range 36 East as shown on the map included with the application for rental. This report seeks to provide local hydrologic data in support of the rental of existing water rights 27-7071 and 27-7072. The location of the leased water rights in relation to the requested rental are shown on **Attachment #1**.

It is generally considered that diversion of tributary surface water rights from ground water sources cannot be approved due to inherent differences in the availability of the source supply. This specific location however, shows close hydraulic connection between the Blackfoot River and appears ideal to produce an appropriate reduction in reach gains to the Blackfoot River system through diversion of ground water from wells in close proximity. Both the leased water rights and the rental diversion location are directly tributary to the Eastern Snake River Plain Aquifer (ESPA).

Primary sources of information used in preparation of this report are previous studies referenced at the end of this report in addition to available ground water level information available from the United States Geological Survey (USGS) National Water Information System.

### Local Observation Wells & Ground Water Level Trends

Mass ground water level measurements taken from a large number of wells over a period of just a few days have been repeated in this area multiple times. Evaluation of available water table monitoring data at a scale of 1:100,000 showing relative ground elevation in the location of the proposed rental is shown on **Attachment #2**.

**Attachment #3** shows the historical water table trends in several local wells that include long-term measurements. According to the available monitoring data, the water

table in this area appears relatively stable; particularly over the last 10 years, although all wells show a reduction in peak and minimum measured water table elevations of three to five feet over the period of record. Seasonal variation from the annual impacts of irrigation diversions in the local area is apparent with a minimum water table elevation occurring in the spring and a peak water table elevation as much as 20 feet higher as a result of the accumulated seepage of surface water diversions for irrigation. According to the data, the water table in this area averaged 12 feet higher in the fall than the spring of 2008 and has actually risen an average of one foot overall in the five years between the spring, 2008 and spring, 2013 mass measurements.

### **Surface Water-Ground Water Connectivity**

Interpolation of the water depth data relative to the reported elevation of the observation well head approximates the water surface of the local regional water table. The three most recent mass measurements in this area were collected in April of 2008, October of 2008 and April of 2013. **Attachment #4** summarizes the three most recent mass water level measurements including the reported well head elevation, observation dates and depth to water.

**Attachment #5** shows the calculated water table depth contours from the April, 2008 measurements relative to the USGS Digital Elevation Model (DEM). While the contours are only approximate, it is clear the ground water elevation significantly exceeds the elevation of the incised Blackfoot River channel along the southeast portion of the Tanner Lane Ranch property. This is confirmed throughout the area by the presence of a multitude of ponds which may have otherwise been considered to be filled from surface water sources. Evaluation of the combined data also reveals a significant water table mound at the mouth of the Blackfoot River canyon indicating ground water flowing even to the north along the east edge of the property although the data is sparse in this area.

**Attachment #6** shows the calculated water table depth contours from the October, 2008 measurements relative to the DEM. Once again, it is clear the ground water is draining to the Blackfoot River and the additional seepage from irrigation in the area is increasing the water table elevation even further. According to the interpolation of late season data it is actually somewhat surprising that the southeast property isn't flooded every fall and there must be significant drainage to the Blackfoot River in this location as the river stage recedes keeping the lower portions of the property dry.

**Attachment #7** shows the calculated water table depth contours from the most recent mass measurement during April, 2013 relative to the DEM. The results are very similar to the April, 2008 measurement although the water table is raised slightly in some areas while others have decreased. Overall, the average recorded depth to water is approximately 1 foot higher than the measurement 5 years prior and may be the result of recent local precipitation or aggregate reduced water demand from the local aquifer in immediately preceding years.

## **Conclusion**

According to the results of the analysis, an area along the south east boundary of the property is apparent where the water table elevation continuously exceeds the ground surface indicating year-round drainage into the incised channel of the Blackfoot River. The presence of historical perennial ponds within Sections 5, 6, 7 and 8 of Township 3 south, Range 36 East confirm this condition extends much further to the southwest than can be determined from the data which is sparse in this area.

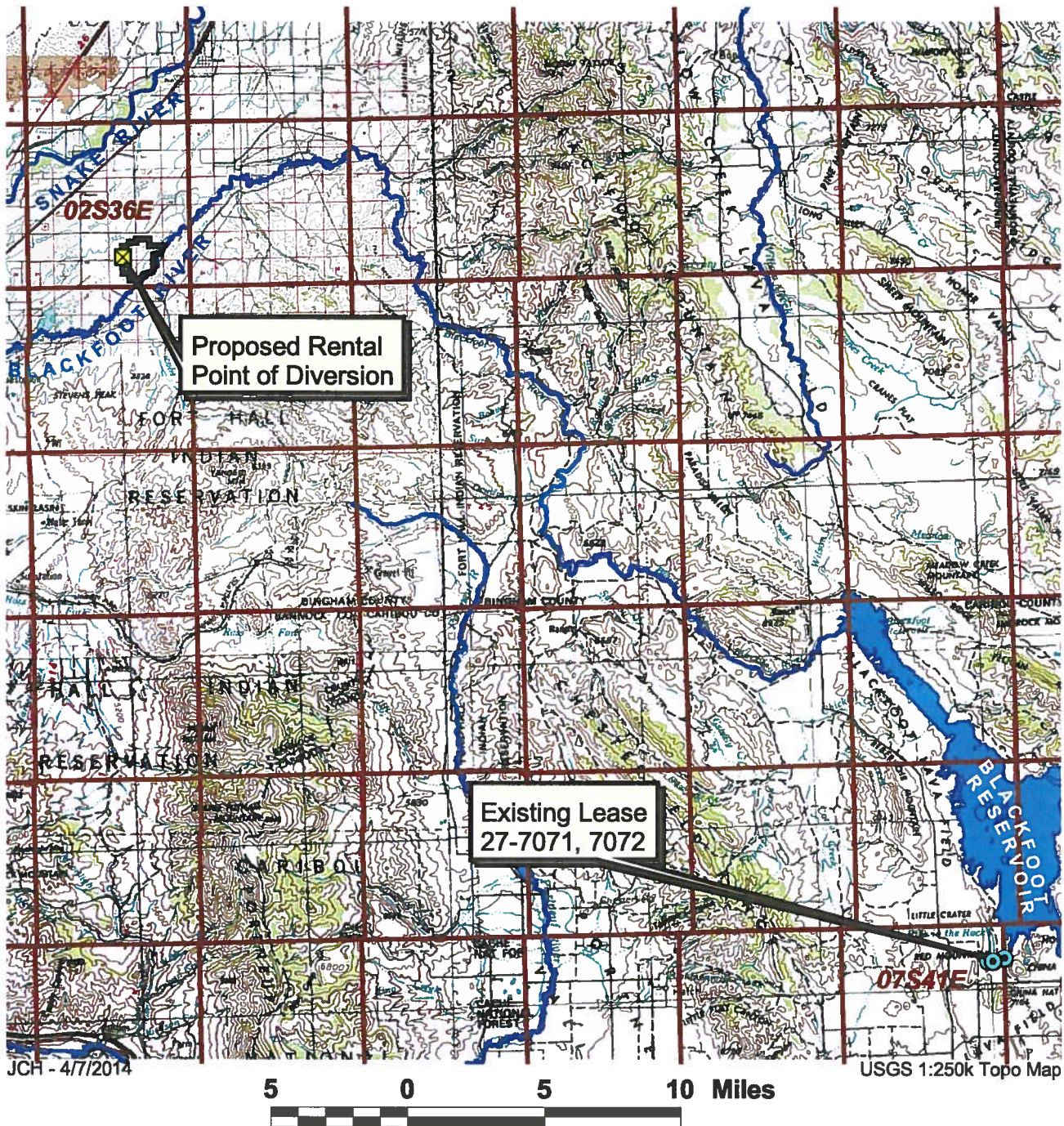
According to the nature of ground water flow, diversions from the proposed rental well will correspond primarily with local depletions to the Blackfoot River within a few miles of the property as the overall gradient to the river is decreased as a result of the water table drawdown from pumping. Existing wells in the area are capable of producing significant amounts of water (2,000-3,000 gpm) from the alluvial formation in this area so the effects of time lag between the well diversions and reduced gains to the river will be negligible. The rental of a portion of existing water rights 27-7071 and/or 27-7072 which are directly tributary to the Blackfoot Reservoir appears appropriate for the proposed use and authorization of the rental is unlikely to cause any injury to existing water rights with proper monitoring and reporting.

#### List of Attachments:

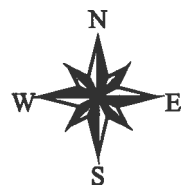
- Attachment #1: Map: Existing Lease & Proposed Rental Well Locations
- Attachment #2: Map: Ground Elevation & Local Observation Well Locations
- Attachment #3: Chart: Local Historical Monitoring Well Data
- Attachment #4: Table: Recent Observation Well Mass Measurements
- Attachment #5: Map: April, 2008 Calculated Water Table Elevation
- Attachment #6: Map: October, 2008 Calculated Water Table Elevation
- Attachment #7: Map: April, 2013 Calculated Water Table Elevation

#### References:

- Garabedian, S.P., 1992, *Hydrology and digital simulation of the regional aquifer system, eastern Snake River Plain, Idaho*: U.S. Geological Survey Professional Paper 1408-F, 102 p., 10 pls. (Also available at <http://pubs.usgs.gov/pp/1408f/>.)
- Whitehead, R.L., 1992, *Geohydrologic framework of the Snake River Plain regional aquifer system, Idaho and Eastern Oregon*. U.S. Geological Survey Professional Paper 1408-B, 32 p., 6 pls.
- Lindholm, G.F., 1996, *Summary of the Snake River Plain Regional Aquifer-System Analysis in Idaho and Eastern Oregon*. U.S. Geological Survey Professional Paper 1408-A, 68 p., 1 pls.
- U.S. Geological Survey, 2013c, *National Water Information System—Web interface*, USGS water data for Idaho: U.S. Geological Survey database, accessed April, 2014, at <http://waterdata.usgs.gov/id/nwis/nwis>.
- Desborough, George A.; Raymond, W. H.; Marvin, R. F.; Kellogg, K. S., 1992 *Pleistocene sediments and basalts along the Snake River in the area between Blackfoot and Eagle Rock, southeastern Snake River Plain, southeastern Idaho*. USGS Open-File Report: 89-436
- Kjelstrom, L. C., 1988, *Estimates of gains and losses for reservoirs on the Snake River from Blackfoot to Milner, Idaho, for selected periods, 1912 to 1983*. USGS Water-Resources Investigations Report: 87-4063
- Dion, N. P., 1974, *An Estimate of Leakage From Blackfoot Reservoir to Bear River Basin, Southeastern Idaho*. Water Information Bulletin No. 34.



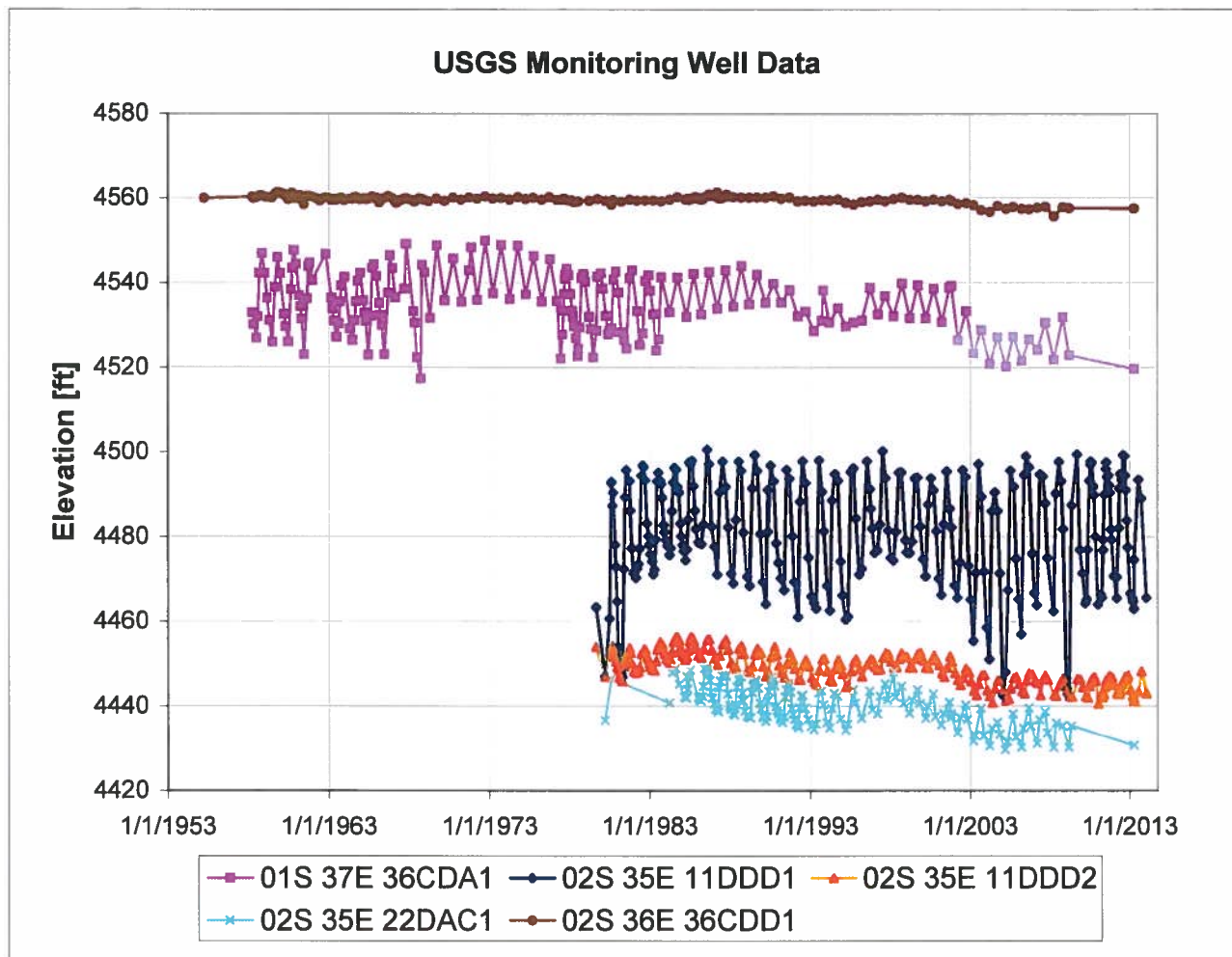
- ✕ Rental Well (Twp. 2S, Rng. 36E, Section 27)
- 27-7071, 27-7072 Authorized Points of Diversion
- ▭ Tanner Lane Ranch Property
- ▭ Township & Range



## Attachment #1

Tanner Lane Ranch: Existing Lease & Proposed Rental Locations





### Attachment #3

JCH - 4/7/2014

Local Historical Monitoring Well Data

| Observation Well | Ground Elevation | Date      | Observed Depth | Elevation | Date       | Observed Depth | Elevation | Change from 4/2008 | Date      | Depth  | Elevation | Change from 4/2008 |
|------------------|------------------|-----------|----------------|-----------|------------|----------------|-----------|--------------------|-----------|--------|-----------|--------------------|
| 01S 36E 32CCC2   | 4542             | 4/3/2008  | 59.88          | 4482.12   | 10/23/2008 | 56.85          | 4485.15   | 3.0                | 4/10/2013 | 59.02  | 4482.98   | 0.9                |
| 01S 37E 30CCD1   | 4581             | 4/2/2008  | 46.16          | 4534.84   | 10/23/2008 | 25.24          | 4555.76   | 20.9               | 4/10/2013 | 45.57  | 4535.43   | 0.6                |
| 01S 37E 35AAA1   | 4710             | 4/2/2008  | 197.64         | 4512.36   | 10/23/2008 | 190.53         | 4519.47   | 7.1                | 4/9/2013  | 196.61 | 4513.39   | 1.0                |
| 01S 37E 36CDA1   | 4780             | 4/2/2008  | 258.16         | 4521.84   | 10/23/2008 | 248.14         | 4531.86   | 10.0               | 4/9/2013  | 260.35 | 4519.65   | -2.2               |
| 02S 35E 02DAB1   | 4538             | 4/2/2008  | 91.38          | 4446.62   | 10/23/2008 | 88.86          | 4449.14   | 2.5                | 4/15/2013 | 91.59  | 4446.41   | -0.2               |
| 02S 35E 09BCC1   | 4499             | 4/2/2008  | 73.47          | 4425.53   | 10/29/2008 | 71.83          | 4427.17   | 1.6                | 4/9/2013  | 73.33  | 4425.67   | 0.1                |
| 02S 35E 10CAA1   | 4515             | 4/2/2008  | 83.27          | 4431.73   |            |                |           |                    |           |        |           |                    |
| 02S 35E 11ADC1   | 4524             | 4/2/2008  | 79.84          | 4444.16   | 10/28/2008 | 76.43          | 4447.57   | 3.4                | 4/9/2013  | 79.52  | 4444.48   | 0.3                |
| 02S 35E 11DDD1   | 4518.38          | 4/2/2008  | 55.93          | 4462.45   | 11/4/2008  | 36.55          | 4481.83   | 19.4               | 4/10/2013 | 55.45  | 4462.93   | 0.5                |
| 02S 35E 11DDD2   | 4518.38          | 4/2/2008  | 75.76          | 4442.62   | 11/4/2008  | 71.78          | 4446.60   | 4.0                | 4/10/2013 | 76.85  | 4441.53   | -1.1               |
| 02S 35E 11DDD3   | 4518.38          | 4/2/2008  | 76.39          | 4441.99   | 11/4/2008  | 71.28          | 4447.10   | 5.1                | 4/11/2013 | 76.4   | 4441.98   | 0.0                |
| 02S 35E 11DDD4   | 4518.38          | 4/2/2008  | 76.76          | 4441.62   | 11/4/2008  | 71.66          | 4446.72   | 5.1                | 4/11/2013 | 76.8   | 4441.58   | 0.0                |
| 02S 35E 20DCB1   | 4490             | 4/1/2008  | 72.60          | 4417.40   | 10/29/2008 | 70.09          | 4419.91   | 2.5                | 4/9/2013  | 72.61  | 4417.39   | 0.0                |
| 02S 35E 21ADA1   | 4500             | 4/2/2008  | 83.28          | 4416.72   | 10/29/2008 | 79.56          | 4420.44   | 3.7                | 4/9/2013  | 82.93  | 4417.07   | 0.3                |
| 02S 35E 22DAC1   | 4525             | 4/1/2008  | 94.73          | 4430.27   | 10/29/2008 | 89.65          | 4435.35   | 5.1                | 4/9/2013  | 94.22  | 4430.78   | 0.5                |
| 02S 35E 24CCD1   | 4514             | 4/3/2008  | 43.08          | 4470.92   | 10/23/2008 | 25.84          | 4488.16   | 17.2               | 4/11/2013 | 42.26  | 4471.74   | 0.8                |
| 02S 35E 25CBC1   | 4513.5           | 4/3/2008  | 63.11          | 4450.39   | 10/23/2008 | 43.46          | 4470.04   | 19.6               | 4/11/2013 | 62.05  | 4451.45   | 1.1                |
| 02S 35E 27DBA1   | 4490             | 4/3/2008  | 46.42          | 4443.58   | 10/24/2008 | 25.57          | 4464.43   | 20.9               | 4/11/2013 | 44.7   | 4445.3    | 1.7                |
| 02S 35E 27DBDA1  | 4487.44          | 4/3/2008  | 46.21          | 4441.23   | 10/24/2008 | 24.93          | 4462.51   | 21.3               | 4/11/2013 | 44.49  | 4442.95   | 1.7                |
| 02S 35E 28CDD1   | 4483             | 4/10/2008 | 58.19          | 4424.81   | 10/29/2008 | 43.62          | 4439.38   | 14.6               | 4/9/2013  | 54.01  | 4428.99   | 4.2                |
| 02S 35E 28DBAA1  | 4487.59          | 4/1/2008  | 62.71          | 4424.88   | 10/28/2008 | 53.85          | 4433.74   | 8.9                | 4/9/2013  | 61.62  | 4425.97   | 1.1                |
| 02S 35E 30DCD1   | 4474.12          | 4/3/2008  | 54.65          | 4419.47   | 10/23/2008 | 50.72          | 4423.40   | 3.9                | 4/10/2013 | 54.28  | 4419.84   | 0.4                |
| 02S 35E 31DDC2   | 4462             | 4/3/2008  | 43.08          | 4418.92   | 10/23/2008 | 35.16          | 4426.84   | 7.9                | 4/10/2013 | 41.73  | 4420.27   | 1.4                |
| 02S 35E 32ACC1   | 4476.9           | 4/3/2008  | 52.57          | 4424.33   | 10/23/2008 | 41.30          | 4435.60   | 11.3               | 4/10/2013 | 50.49  | 4426.41   | 2.1                |
| 02S 35E 32BAA1   | 4481.3           | 4/10/2008 | 57.32          | 4423.98   | 10/29/2008 | 48.12          | 4433.18   | 9.2                | 4/9/2013  | 55.67  | 4425.63   | 1.6                |
| 02S 35E 32CCCD1  | 4469.69          | 4/3/2008  | 46.45          | 4423.24   | 10/23/2008 | 36.51          | 4433.18   | 9.9                | 4/10/2013 | 45.05  | 4424.64   | 1.4                |
| 02S 35E 32CDAC1  | 4471             | 4/3/2008  | 47.56          | 4423.44   | 10/23/2008 | 35.32          | 4435.68   | 12.2               | 4/10/2013 | 44.37  | 4426.63   | 3.2                |
| 02S 35E 32DDCB1  | 4475.09          | 4/3/2008  | 47.45          | 4427.64   | 10/23/2008 | 33.85          | 4441.24   | 13.6               | 4/10/2013 | 44.18  | 4430.91   | 3.3                |
| 02S 35E 33BCBD1  | 4481.27          | 4/1/2008  | 54.97          | 4426.30   | 10/29/2008 | 42.88          | 4438.39   | 12.1               | 4/9/2013  | 52.58  | 4428.69   | 2.4                |
| 02S 35E 33BCBD2  | 4481             | 4/1/2008  | 55.15          | 4425.85   | 10/29/2008 | 44.22          | 4436.78   | 10.9               | 4/9/2013  | 52.58  | 4428.42   | 2.6                |
| 02S 35E 33CABC3  | 4482.01          | 4/1/2008  | 54.46          | 4427.55   | 10/29/2008 | 42.28          | 4439.73   | 12.2               | 4/9/2013  | 54.29  | 4427.72   | 0.2                |
| 02S 35E 33DABC1  | 4478.26          | 4/4/2008  | 16.60          | 4461.66   | 10/24/2008 | 6.15           | 4472.11   | 10.5               | 4/11/2013 | 12.98  | 4465.28   | 3.6                |
| 02S 35E 33DABC1  | 4477.88          | 4/4/2008  | 16.03          | 4461.85   | 10/24/2008 | 5.90           | 4471.98   | 10.1               | 4/11/2013 | 7.71   | 4470.17   | 8.3                |

## Attachment #4

| Observation Well | Ground Elevation | Date     | Observed Depth | Elevation | Date       | Observed Depth | Elevation | Change from 4/2008 | Date      | Depth | Elevation | Change from 4/2008 |
|------------------|------------------|----------|----------------|-----------|------------|----------------|-----------|--------------------|-----------|-------|-----------|--------------------|
| 02S 35E 34BDBA1  | 4481.93          | 4/4/2008 | 36.01          | 4445.92   | 10/24/2008 | 14.78          | 4467.15   | 21.2               | 4/11/2013 | 28.1  | 4453.83   | 7.9                |
| 02S 35E 35BAA1   | 4505             | 4/3/2008 | 62.09          | 4442.91   | 10/24/2008 | 39.93          | 4465.07   | 22.2               | 4/11/2013 | 60.67 | 4444.33   | 1.4                |
| 02S 36E 01AAC1   | 4576             | 4/2/2008 | 39.38          | 4536.62   | 10/23/2008 | 19.95          | 4556.05   | 19.4               | 4/11/2013 | 39.07 | 4536.93   | 0.3                |
| 02S 36E 01DAA2   | 4574             | 4/2/2008 | 36.42          | 4537.58   | 10/23/2008 | 17.21          | 4556.79   | 19.2               | 4/11/2013 | 36.14 | 4537.86   | 0.3                |
| 02S 36E 02DDC1   | 4567             | 4/2/2008 | 35.76          | 4531.24   | 10/23/2008 | 20.21          | 4546.79   | 15.6               | 4/11/2013 | 36.49 | 4530.51   | -0.7               |
| 02S 36E 04CCB1   | 4530             | 4/3/2008 | 16.88          | 4513.12   | 10/28/2008 | 11.57          | 4518.43   | 5.3                | 4/11/2013 | 13.9  | 4516.1    | 3.0                |
| 02S 36E 05ACA1   | 4532             | 4/3/2008 | 35.81          | 4496.19   | 10/23/2008 | 27.67          | 4504.33   | 8.1                | 4/11/2013 | 32.38 | 4499.62   | 3.4                |
| 02S 36E 05BDC1   | 4530             | 4/3/2008 | 38.16          | 4491.84   | 10/23/2008 | 30.46          | 4499.54   | 7.7                | 4/11/2013 | 34.79 | 4495.21   | 3.4                |
| 02S 36E 09DAB1   | 4551             | 4/3/2008 | 30.62          | 4520.38   | 10/23/2008 | 18.22          | 4532.78   | 12.4               | 4/11/2013 | 30.98 | 4520.02   | -0.4               |
| 02S 36E 10CCC1   | 4549             | 4/2/2008 | 26.39          | 4522.61   |            |                |           |                    |           |       |           |                    |
| 02S 36E 11CCC1   | 4557             | 4/2/2008 | 24.95          | 4532.05   | 10/23/2008 | 8.90           | 4548.10   | 16.1               | 4/11/2013 | 24.45 | 4532.55   | 0.5                |
| 02S 36E 14AAB1   | 4561             | 4/2/2008 | 27.04          | 4533.96   | 10/23/2008 | 11.16          | 4549.84   | 15.9               | 4/11/2013 | 26.74 | 4534.26   | 0.3                |
| 02S 36E 15DAA1   | 4550             | 4/3/2008 | 22.24          | 4527.76   | 10/23/2008 | 6.59           | 4543.41   | 15.6               | 4/11/2013 | 21.62 | 4528.38   | 0.6                |
| 02S 36E 16CBB1   | 4541             | 4/2/2008 | 34.49          | 4506.51   | 10/23/2008 | 20.10          | 4520.90   | 14.4               | 4/11/2013 | 35.46 | 4505.54   | -1.0               |
| 02S 36E 17DBD1   | 4540             | 4/2/2008 | 32.41          | 4507.59   | 10/23/2008 | 18.51          | 4521.49   | 13.9               | 4/11/2013 | 30.62 | 4509.38   | 1.8                |
| 02S 36E 23ADC1   | 4556             | 4/3/2008 | 21.20          | 4534.80   | 10/23/2008 | 10.52          | 4545.48   | 10.7               | 4/11/2013 | 20.7  | 4535.3    | 0.5                |
| 02S 36E 26BBA1   | 4549             | 4/3/2008 | 17.30          | 4531.70   | 10/23/2008 | 7.34           | 4541.66   | 10.0               | 4/11/2013 | 16.39 | 4532.61   | 0.9                |
| 02S 36E 29BAC1   | 4533             | 4/3/2008 | 29.66          | 4503.34   | 10/23/2008 | 16.03          | 4516.97   | 13.6               | 4/11/2013 | 29.06 | 4503.94   | 0.6                |
| 02S 36E 29DCC1   | 4526             | 4/3/2008 | 15.46          | 4510.54   | 10/23/2008 | 5.17           | 4520.83   | 10.3               | 4/11/2013 | 14.95 | 4511.05   | 0.5                |
| 02S 36E 30BBA1   | 4524             | 4/3/2008 | 40.77          | 4483.23   | 10/23/2008 | 25.49          | 4498.51   | 15.3               | 4/11/2013 | 40.01 | 4483.99   | 0.8                |
| 02S 36E 31AAA1   | 4528             | 4/3/2008 | 23.91          | 4504.09   | 10/23/2008 | 8.26           | 4519.74   | 15.6               | 4/11/2013 | 23.18 | 4504.82   | 0.7                |
| 02S 36E 31CDA1   | 4520             | 4/3/2008 | 24.45          | 4495.55   | 10/23/2008 | 8.72           | 4511.28   | 15.7               | 4/11/2013 | 23.81 | 4496.19   | 0.6                |
| 02S 36E 31DCA1   | 4522             | 4/3/2008 | 22.31          | 4499.69   | 10/23/2008 | 8.38           | 4513.62   | 13.9               | 4/11/2013 | 20.64 | 4501.36   | 1.7                |
| 02S 36E 32AAA1   | 4534             | 4/3/2008 | 12.65          | 4521.35   | 10/23/2008 | 5.18           | 4528.82   | 7.5                | 4/11/2013 | 12.33 | 4521.67   | 0.3                |
| 02S 36E 36CDD1   | 4636             | 4/3/2008 | 80.29          | 4555.71   | 10/23/2008 | 78.14          | 4557.86   | 2.1                | 4/11/2013 | 78.41 | 4557.59   | 1.9                |
| 03S 35E 03DAC1   | 4498             | 4/4/2008 | 60.87          | 4437.13   | 10/24/2008 | 36.91          | 4461.09   | 24.0               | 4/11/2013 | 59.72 | 4438.28   | 1.1                |
| 03S 35E 04CAD1   | 4490             | 4/4/2008 | 57.98          | 4432.02   | 10/24/2008 | 39.58          | 4450.42   | 18.4               | 4/11/2013 | 55.35 | 4434.65   | 2.6                |
| 03S 35E 10BBB1   | 4493             | 4/4/2008 | 54.38          | 4438.62   | 10/24/2008 | 31.47          | 4461.53   | 22.9               | 4/11/2013 | 52.95 | 4440.05   | 1.4                |

## Attachment #4

