

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 87-7162

Exam Date: 10/31/2007

1. Current Owner: UNIVERSITY OF IDAHO REGENTS
C/O REAL ESTATE OFFICER
ADMINISTRATIVE AFFAIRS
PO BOX 443162
MOSCOW ID 83844-3182

2. Accompanied by: MICHAEL HOLTHAUS

Phone No: 208-885-6288

Address: DEPT OF FACILITIES MANAGEMENT, MOSCOW ID 83844

Relationship to Permit Holder: EMPLOYEE

3. SOURCE

WASTE WATER

TRIBUTARY

PARADISE CREEK

B. OVERLAP REVIEW

1. Other water rights with the same place of use: 87-2031, 87-7012, 87-7026, 87-2018, 87-2014, 87-7141
2. Other water rights with the same point of diversion: NONE

C. DIVERSION AND DELIVERY SYSTEM1. LOCATION OF POINT(S) OF DIVERSION:

WASTE WATER

SE1/4SW1/4

Sec. 12, Twp 39N, Rge 06W, B.M.

LATAH County

Method of Determination: GPS

2.

PLACE OF USE:

IRRIGATION

Twp Rge Sec	NE				NW				SW				SE				Totals
	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
39N 05W 7											33.0 L 4	35.0			5.5		73.5
39N 05W 18		8.5	28.0		40.0	41.0 L 1	41.0 L 2	40.0	20.0	41.0 L 3	41.0 L 4	11.0					309.5
39N 05W 19					2.3 L 1	5.1											7.4
39N 06W 12										6.1 L 4	26.0			23.0	31.0		86.1
39N 06W 13	40.0	40.0	40.0	40.0	40.0	9.1 L 1	9.1 L 2	40.0					1.5	.5		.7	260.9

Total Acres: 737.4

Method of Determination:

3. ☐ Delivery System Diagram Attached (required). Indicate all major components and distances between components. Indicate weir size/pipe as applicable.
- ☒ Map Attached Showing Location(s) of point(s) of diversion and place(s) of use (required). Scale must be 1:24,000 or greater.
- ☒ Aerial Photo Attached (required for irrigation of 10+ acres).
- ☒ Photo of Diversion and System Attached

4.

<u>Well or Diversion ID No.*</u>	<u>Motor Make</u>	<u>Hp</u>	<u>Motor Serial No.</u>	<u>Pump Make</u>	<u>Pump Serial No. or Discharge Size</u>
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

*Code to correspond with No. on map and aerial photo

D. FLOW MEASUREMENTS

1.

<u>Measurement Equipment</u>	<u>Type</u>	<u>Make</u>	<u>Model No.</u>	<u>Serial No.</u>	<u>Size</u>	<u>Calib. Date</u>
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____

2. Measurements:

Flow meter
see Attached

E. FLOW CALCULATIONS

☐ Additional Computation Sheets Attached

Measured Method:

$$\frac{1,100,000}{24} = \frac{45833.3}{60} = 763.9 \text{ gpm} = 1.71 \text{ cfs}$$

F. VOLUME CALCULATIONS**1. Volume Calculations for Irrigation:**

$$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 788.9 \times 3 = 2216.7 \text{ AF}$$

$$V_{D.R.} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = 1.71 \times 246 \times 1.9835 = 834.4 \text{ AF}$$

$$V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} = 834.4 \text{ AF}$$

2. Volume Calculations for Other Uses:**G. NARRATIVE/REMARKS/COMMENTS**

THIS SYSTEM USES WASTEWATER FOR IRRIGATION. THE WASTEWATER IS DIVERTED INTO A HOLDING POND FROM THE OUTFLOW OF THE CITY OF MOSCOW WASTEWATER TREATMENT PLANT. FROM THE HOLDING POND IT IS THEN PUMPED FOR IRRIGATION OF THE UNIVERSITY OF IDAHO CAMPUS GROUNDS.

Have conditions of permit approval been met? ☒ Yes ☐ No

H. RECOMMENDATIONS**1. Recommended Amounts**

<u>BENEFICIAL USE</u>	<u>PERIOD OF USE</u>	<u>DIVERSION RATE</u>	<u>ANNUAL VOLUME</u>
IRRIGATION	03/15 to 11/15	1.710 CFS	834.40 AF
<u>Totals:</u>		1.710 CFS	834.40 AF

2. Recommended Amendments

☐ Change P.D. as reflected above ☐ Add P.D. as reflected above ☐ None

☒ Change P.U. as reflected above ☐ Add P.U. as reflected above ☐ Other

I. AUTHENTICATION

Field Examiner's Name [Signature] Date 1-9-08
 Reviewer [Signature] Date 1/31/8

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DATE	Total MG	MGD
05/13/2007 07:00:00	0.00	
05/14/2007 07:00:00	0.57	0.57
05/15/2007 07:00:00	1.15	0.58
05/16/2007 07:00:00	1.95	0.80
05/17/2007 07:00:00	2.51	0.56
05/18/2007 07:00:00	3.11	0.60
05/19/2007 07:00:00	3.57	0.46
05/20/2007 07:00:00	4.00	0.43
05/21/2007 07:00:00	4.49	0.49
05/22/2007 07:00:00	4.67	0.18
05/23/2007 07:00:00	4.88	0.21
05/24/2007 07:00:00	5.12	0.24
05/25/2007 07:00:00	5.43	0.31
05/26/2007 07:00:00	5.79	0.36
05/27/2007 07:00:00	6.08	0.29
05/28/2007 07:00:00	6.18	0.10
05/29/2007 07:00:00	6.53	0.35
05/30/2007 07:00:00	7.15	0.62
05/31/2007 07:00:00	7.87	0.72
06/01/2007 07:00:00	8.42	0.55
06/02/2007 07:00:00	8.98	0.56
06/03/2007 07:00:00	9.53	0.55
06/04/2007 07:00:00	10.32	0.79
06/05/2007 07:00:00	10.61	0.29
06/06/2007 07:00:00	10.80	0.19
06/07/2007 07:00:00	11.05	0.25
06/08/2007 07:00:00	11.40	0.35
06/09/2007 07:00:00	11.63	0.23
06/10/2007 07:00:00	11.83	0.20
06/11/2007 07:00:00	12.18	0.35
06/12/2007 07:00:00	12.63	0.45
06/13/2007 07:00:00	13.03	0.40
06/14/2007 07:00:00	13.47	0.44
06/15/2007 07:00:00	13.81	0.34
06/16/2007 07:00:00	13.97	0.16
06/17/2007 07:00:00	14.04	0.07
06/18/2007 07:00:00	14.49	0.45
06/19/2007 07:00:00	15.04	0.55
06/20/2007 07:00:00	15.36	0.32
06/21/2007 07:00:00	16.27	0.91
06/22/2007 07:00:00	17.01	0.74
06/23/2007 07:00:00	17.57	0.56
06/24/2007 07:00:00	18.10	0.53
06/25/2007 07:00:00	18.65	0.55
06/26/2007 07:00:00	19.46	0.81
06/27/2007 07:00:00	20.40	0.94
06/28/2007 07:00:00	21.24	0.84
06/29/2007 07:00:00	21.95	0.71
06/30/2007 07:00:00	22.22	0.27
07/01/2007 07:00:00	22.49	0.27
07/02/2007 07:00:00	23.22	0.73

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07/03/2007 07:00:00	24.09	0.87
07/04/2007 07:00:00	24.88	0.79
07/05/2007 07:00:00	25.82	0.94
07/06/2007 07:00:00	26.73	0.91
07/07/2007 07:00:00	27.43	0.70
07/08/2007 07:00:00	28.12	0.69
07/09/2007 07:00:00	28.96	0.84
07/10/2007 07:00:00	29.91	0.95
07/11/2007 07:00:00	30.92	1.01
07/12/2007 07:00:00	31.86	0.94
07/13/2007 07:00:00	32.69	0.83
07/14/2007 07:00:00	33.45	0.76
07/15/2007 07:00:00	34.15	0.70
07/16/2007 07:00:00	35.12	0.97
07/17/2007 07:00:00	36.12	1.00
07/18/2007 07:00:00	36.99	0.87
07/19/2007 07:00:00	37.67	0.68
07/20/2007 07:00:00	38.23	0.56
07/21/2007 07:00:00	38.86	0.63
07/22/2007 07:00:00		
07/23/2007 07:00:00	41.35	2.49
07/24/2007 07:00:00	41.35	0.00
07/25/2007 07:00:00	42.29	0.94
07/26/2007 07:00:00	43.29	1.00
07/27/2007 07:00:00	43.87	0.58
07/28/2007 07:00:00	44.69	0.82
07/29/2007 07:00:00	45.45	0.76
07/30/2007 07:00:00	46.39	0.94
07/31/2007 07:00:00	47.34	0.95
08/01/2007 07:00:00	48.27	0.93
08/02/2007 07:00:00	49.00	0.73
08/03/2007 07:00:00	49.24	0.24
08/04/2007 07:00:00	50.14	0.90
08/05/2007 07:00:00	50.89	0.75
08/06/2007 07:00:00	51.47	0.58
08/07/2007 07:00:00	52.41	0.94
08/08/2007 07:00:00	53.45	1.04
08/09/2007 07:00:00	54.44	0.99
08/10/2007 07:00:00	55.26	0.82
08/11/2007 07:00:00	56.08	0.81
08/12/2007 07:00:00	56.67	0.60
08/13/2007 07:00:00	57.23	0.55
08/14/2007 07:00:00	58.14	0.91
08/15/2007 07:00:00	59.22	1.08
08/16/2007 07:00:00	60.31	1.09
08/17/2007 07:00:00	61.31	1.00
08/18/2007 07:00:00	62.15	0.84
08/19/2007 07:00:00	62.71	0.56
08/20/2007 07:00:00	63.01	0.30
08/21/2007 07:00:00	63.66	0.65
08/22/2007 07:00:00	64.12	0.46
08/23/2007 07:00:00	64.89	0.77

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Max. Diversion $\div 2 = 0.83$

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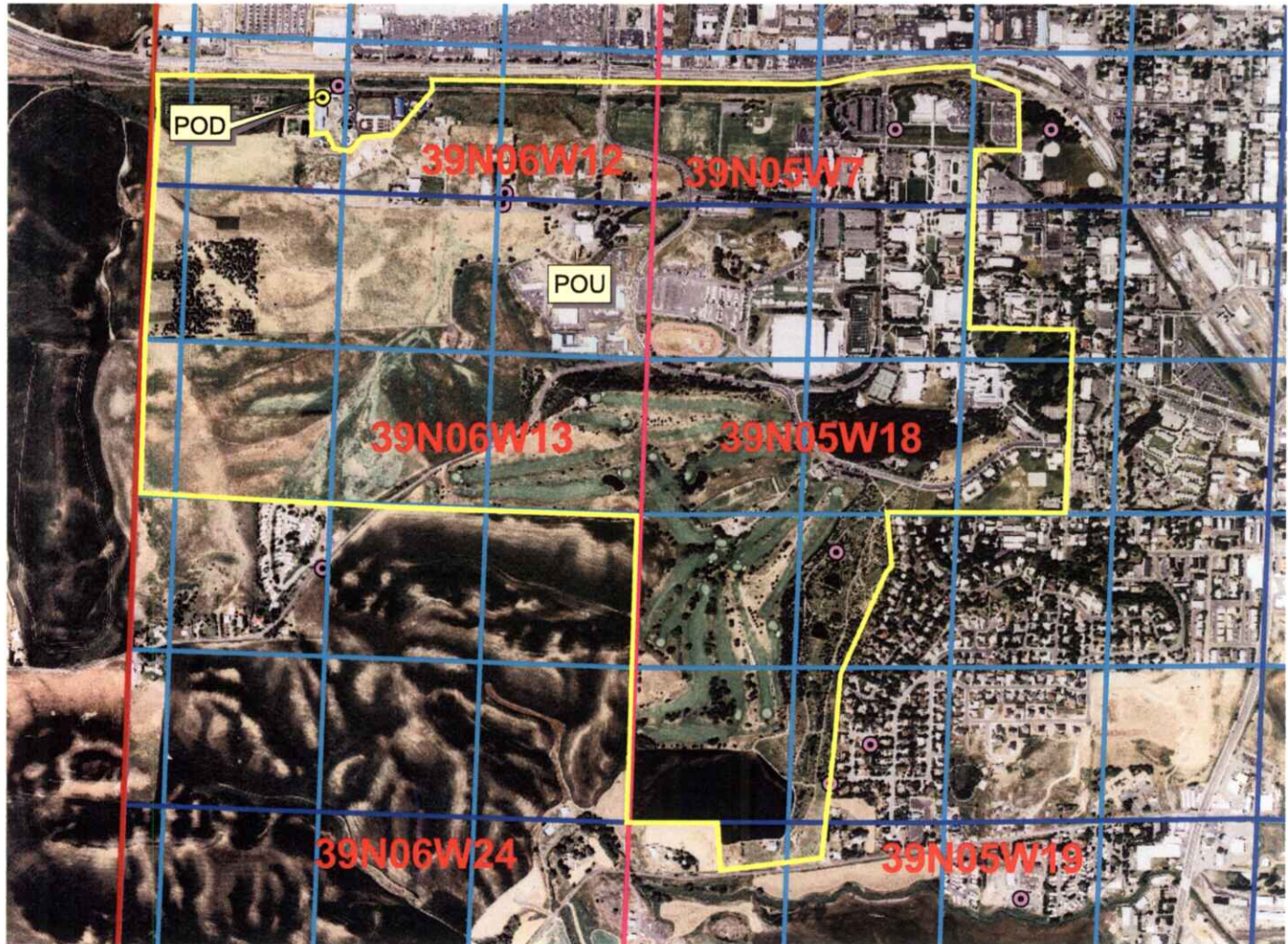
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08/25/2007 07:00:00	66.63	0.90
08/26/2007 07:00:00	67.26	0.63
08/27/2007 07:00:00	67.64	0.38
08/28/2007 07:00:00	68.59	0.95
08/29/2007 07:00:00	69.50	0.90
08/30/2007 07:00:00	70.53	1.04
08/31/2007 07:00:00	71.63	1.10
09/01/2007 07:00:00	72.48	0.85
09/02/2007 07:00:00	72.78	0.30
09/03/2007 07:00:00	73.15	0.38
09/04/2007 07:00:00	73.76	0.60
09/05/2007 07:00:00	74.40	0.65
09/06/2007 07:00:00	74.94	0.54
09/07/2007 07:00:00	75.44	0.50
09/08/2007 07:00:00	75.79	0.35
09/09/2007 07:00:00	76.15	0.36
09/10/2007 07:00:00	76.36	0.21
09/11/2007 07:00:00	77.16	0.80
09/12/2007 07:00:00	78.05	0.89
09/13/2007 07:00:00	78.98	0.93
09/14/2007 07:00:00	79.86	0.87
09/15/2007 07:00:00	80.59	0.73
09/16/2007 07:00:00	81.01	0.42
09/17/2007 07:00:00	81.63	0.62
09/18/2007 07:00:00	82.07	0.44
09/19/2007 07:00:00	82.69	0.62
09/20/2007 07:00:00	83.54	0.84
09/21/2007 07:00:00	84.31	0.78
09/22/2007 07:00:00	85.01	0.70
09/23/2007 07:00:00	85.49	0.48
09/24/2007 07:00:00	86.01	0.52
09/25/2007 07:00:00	86.72	0.72
09/26/2007 07:00:00	87.46	0.74
09/27/2007 07:00:00	88.16	0.70
09/28/2007 07:00:00	88.72	0.56
09/29/2007 07:00:00	89.21	0.49
09/30/2007 07:00:00	89.50	0.30
10/01/2007 07:00:00	89.77	0.27
10/02/2007 07:00:00	89.89	0.11
10/03/2007 07:00:00	90.02	0.13
10/04/2007 07:00:00	90.08	0.06
10/05/2007 07:00:00	90.22	0.14
10/06/2007 07:00:00	90.22	0.00
10/07/2007 07:00:00	90.22	0.00
10/08/2007 07:00:00	90.22	0.00
10/09/2007 07:00:00	90.22	0.00
10/10/2007 07:00:00	90.22	0.00
10/11/2007 07:00:00	90.22	0.00
10/12/2007 07:00:00	90.22	0.00
10/13/2007 07:00:00	90.22	0.00
10/14/2007 07:00:00	90.22	0.00

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-  Pou.shp
-  Administrative BasinsAdminbas.shp
-  Township/Range
-  Sections
-  QQ
-  Right POD
-  GCDB39N05W GCDB
-  GCDB39N06W GCDB





150 HP IRRIGATION PUMP



HOLDING POND AND
PUMP HOUSE



PLACE OF USE



POINT OF DIVERSION

87-7162



87-7162





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