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APR 03 2012

DEPT. OF WATER RESOURCES
SOUTHERN REGION

AMENDED

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
APPLICATION FOR PERMIT
To appropriate the public waters of the State of IdahoIdent. No. 37-22354

1. Name of applicant(s) The Jude P. and Julia Mandeville Damasco Trust Phone 650-726-4100
Name connector (check one): ☐ and ☐ or ☐ and/or

Mailing address: 700 Monte Vista Way City Half Moon BayState CA Zip 94019 Email: _____

2. Source of water supply Indian Creek which is a tributary of Big Wood River

3. Location of point(s) of diversion:

Twp	Rge	Sec	Govt Lot	1/4	1/4	1/4	County	Source	Local name or tag #
3N	18E	33			NE	SW	Blaine	Indian Creek	

4. Water will be used for the following purposes:

Amount 0.74 cfs for Diversion to Storage purposes from 01/01 to 12/31 (both dates inclusive)
(cfs or acre-feet per year)

Amount 0.74 cfs for WRJ purposes from 01/01 to 12/31 (both dates inclusive)
(cfs or acre-feet per year)

Amount 73 afa for WRJFire ProtectionStorage purposes from 01/01 to 12/31 (both dates inclusive)
(cfs or acre-feet per year)

Amount _____ for _____ purposes from _____ to _____ (both dates inclusive)
(cfs or acre-feet per year)

5. Total quantity to be appropriated is (a) 0.74 cubic feet per second (cfs) and/or (b) 73 acre-feet per year (af).

6. Proposed diverting works:

a. Describe type and size of devices used to divert water from the source. _____

b. Height of storage dam Dug Pond feet; active reservoir capacity 3.8 acre-feet; total reservoir capacity 3.8 acre-feet. If the reservoir will be filled more than once each year, describe the refill plan in item 11.

For dams 10 feet or more in height OR reservoirs with a total storage capacity of 50 acre-feet or more, submit a separate Application for Construction or Enlargement of a New or Existing Dam. Application required? ☐ Yes ☐ No

c. Proposed well diameter is N/A inches; proposed depth of well is _____ feet.

d. Is ground water with a temperature of greater than 85°F being sought? ☐ Yes ☐ No

e. If well is already drilled, when? _____; drilling firm _____;

Well was drilled for (well owner) _____; Drilling Permit No. _____

7. Description of proposed uses (if irrigation only, go to item 8):

a. Hydropower; show total feet of head and proposed capacity in kW. _____

b. Stockwatering; list number and kind of livestock. _____

c. Municipal; show name of municipality or the applicant's qualifications as a municipal provider. _____

d. Domestic; show number of households _____

e. Other; describe fully. Wildlife, Recreation, Aesthetic

8. Description of place of use:

- a. If water is for irrigation, indicate acreage in each subdivision in the tabulation below.
- b. If water is used for other purposes, place a symbol of the use (example: D for Domestic) in the corresponding place of use below. See instructions for standard symbols.

TWP	RGE	SEC	NE				NW				SW				SE				TOTALS
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
3N	18E	33												wrj					
3N	18E	33												f					
2N	18E	04					wrj												
2N	18E	04					f												
							6.13												

Total number of acres to be irrigated: _____

9. Describe any other water rights used for the same purposes as described above. Include water delivered by a municipality, canal company, or irrigation district. If this application is for domestic purposes, do you intend to use this water, water from another source, or both, to irrigate your lawn, garden, and/or landscaping? Water from the Hiawatha Canal, which includes Indian Creek water, is diverted through the pond.

10. a. Who owns the property at the point of diversion? Hiawatha Canal Co.
- b. Who owns the land to be irrigated or place of use? Julia and Jude Damasco, Martin, Rice (see attached narrative)
- c. If the property is owned by a person other than the applicant, describe the arrangement enabling the applicant to make this filing: Agreements with neighbors are pending, applicant is member of the Hiawatha Canal Co.

11. Describe your proposal in narrative form, and provide additional explanation for any of the items above. Attach additional pages if necessary. See attached narrative and aerial photo.

12. Time required for completion of works and application of water to proposed beneficial use is _____ years (minimum 1 year).
13. **MAP OF PROPOSED PROJECT REQUIRED** - Attach an 8½" x 11" map clearly identifying the proposed point of diversion, place of use, section #, township & range. A photocopy of a USGS 7.5 minute topographic quadrangle map is preferred.

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.

Jude P. Damasco, Trustee
 Signature of Applicant
Jude P. Damasco, Trustee
 Print Name (and title, if applicable)

Julia Damasco, Trustee
 Signature of Applicant
Julia Damasco, Trustee
 Print Name (and title, if applicable)

For Department Use:

Received by P. SKINNER Date 4/3/2012 Time PM Preliminary check by _____
 Fee \$ 50.00 Received by P. SKINNER Receipt No. 5032456 Date 4/3/2012
 (re-advertising)



DAMASCO- PERMIT APPLICATION
T.02N, 03N R.18E SEC. 04, 33
2011 NAIP AERIAL PHOTOGRAPH

Legend

-  Damasco- Indian Creek POD
-  Northridge Sub Conveyance Ditch
-  Hiawatha Canal
-  Damasco Pond = 0.95 acres
-  Damasco Lot 5 = 2.0 Acres

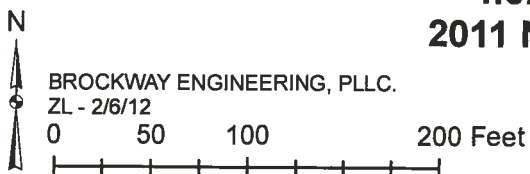
N
BROCKWAY ENGINEERING, PLLC.
ZL - 2/6/12
0 150 300 600 Feet



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BROCKWAY ENGINEERING, PLLC.
ZL - 2/6/12

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DEPT. OF WATER RESOURCES
SOUTHERN REGION**Mitigation Plan and Narrative in Support of Application for Permit and Amended Application for Transfer: Damasco Pond (Formerly Chesnel).**

The pond which is the subject of a Transfer Application No 73743 and permit application 37-22354 filed by Brockway Engineering on behalf of Jean-Pierre and Connie Chesnel in 2008 was constructed between about 1974 and 1979 by the former owner, Hatch Buttram. The property on which the pond is constructed is located adjacent to the Hiawatha Canal in the SE ¼ SW ¼ Section 33 T.03N R.18E and in Lot 3 NE ¼ NW ¼ of Section 4 T.02N R.18E and receives water from the Hiawatha Canal via a ditch which diverts from the Hiawatha Canal and flows south and west to Northridge Subdivision. It is an off-canal pond and neither the Hiawatha Canal nor the ditch to Northridge Subdivision flows through the pond. The outflow from the pond is controlled by a concrete check board structure and an uncontrolled overflow which discharge back into the ditch which flows to Northridge. Flow in the ditch crosses Buttercup road and sinks either in planned infiltration areas or from ponds for irrigation on the Northridge area. Water from Indian Creek flows into the Hiawatha Canal at a point in T3N R18E Sec 33 NE¼ SW¼ during the irrigation season and during the winter time, water is conveyed into the Northridge delivery ditch; this water can be diverted into and out of the pond. According to Allen Merritt, IDWR Southern Region Manager, there are no water rights downstream of the Damasco pond listing Indian Creek as a source. Therefore, Indian Creek will be listed as the source for the pond as no injury to other water right holders is anticipated to occur.

The pond encompasses 0.95 acres and is located on three lots of the Buckhorn Subdivision#1. Lot 4 is owned by Karen Martin, Lot 5 is owned by Julia and Jude Damasco who recently purchased the home and property from the Chesnels and Lot 6 at the south end of the pond is owned by Jeffrey Rice. The inlet to the pond from the ditch is on Lot 4 and the outlet structures are on Lot 6.

The pond comprises about 0.95 acres with the following distribution of pond area among the 3 lots:

Lot 4	(Martin)	0.08 acres or	8.4 %
Lot 5	(Damasco)	0.82 acres or	86.3 %
Lot 6	(Rice)	0.05 acres or	5.3 %
Total:		0.95 acres or	100 %

The pond averages approximately 4.0 feet deep so the estimated pond volume is 3.8 acre feet. The pond is located on three (3) lots of the Buckhorn Subdivision. Lot 4 (Martin) utilizes the pond for irrigation by pumping from the pond under irrigation water right 37-38C and 37-297C which jointly allow irrigation of 2 acres. Lot 5 utilizes the pond for irrigation under water rights 37-297D and 37-20359 also for 2 acres and 0.12 cfs total. No irrigation from the pond is performed by Rice (Lot 6). All of the irrigation water rights have been decreed in the SRBA. Agreements among the three parties for joint use of the pond are pending.

Storage in the pond is for wildlife, aesthetics, and recreation and was not claimed by the former owners in the SRBA. Permit application 37-22354 was submitted in 2008 to obtain a water right for recreation and wildlife on the portion of the pond located on the Damasco (formerly Chesnel) property.

The attached permit application will include the entire pond on all three lots as the place of use (POU). Mitigation for evaporative loss will be secured by offering to reduce the irrigated area and associated Big Wood River discharge allowed under the Damasco water rights 37-297D and 37-20359 from 2.0 acres to 1.05 acres. Thus, mitigation for the entire pond will be provided by drying up acreage only on the Damasco property as outlined in amended water right transfer application attached. The decrease in discharge to provide for pond mitigation is 0.06 cfs total from both water rights, leaving 0.06 cfs from both water rights to irrigate 1.05 acres total.

Analysis of open water evaporation from the 0.95 acre pond shows that the annual open water evaporation from the pond (P_{def}) is 1.27 acre feet per acre based on the Hailey NWS station. The consumptive use from irrigation of grass pasture-low management is 1.64 acre feet per acre. Reduction of the allowed irrigated area under water rights 37-297D and 37-20359 by the area of the pond (0.95 acres) results in a decrease in consumptive use (P_{def}) of $(1.64-1.27) \times 0.95 = 0.035$ acre feet per year. The annual evaporation from the pond has therefore been more than mitigated by drying up the area of the pond. This leaves $2.0-0.95=1.05$ acres of allowable irrigated area under the combined water rights.

The amended water right transfer proposes to retain the diversion discharge rate into the Hiawatha Canal from the combined water rights 37-297D and 37-20359 at 0.12 cfs. However, the delivery from the Hiawatha Canal for irrigation will be reduced proportionately to $(0.12 \times 1.05) / 2.0 = .06$ cfs. An amended transfer 73743 application also seeks to add additional uses for mitigation for wildlife, aesthetic, recreation and diversion to storage uses.

In order to assure that adequate water quality is maintained in the pond for wildlife, recreation, and aesthetic uses, the proposed permit provides a turnover time of three days (72 hours). This will require a non-consumptive discharge through the 3.8 acre foot volume of the pond of 0.64 cfs. A seepage rate of 0.2 ft per day (assumed year round) was used to calculate the additional flow rate into the pond needed to account for seepage, 0.10 cfs. Thus, the total diversion rate into the pond has been amended to 0.74 cfs. A storage volume to account for seepage in the pond ($0.2 \text{ ft per day} \times 365 \text{ days} \times 0.95 \text{ acres}$) or 69.4 acre-feet and the actual pond volume of 3.8 acre-feet were combined for a total storage volume of 73 acre-feet. It is proposed to provide water measurement device(s) as required by the Watermaster of District 37.

Elements of the proposed water right permit would be as follows:

Source:	Indian Creek	via Hiawatha Canal	
Nature of Use:	Diversion to Storage:	01/01 to 12/31	0.74 cfs
	Wildlife, Recreation, Aesthetic	01/01 to 12/31	0.74 cfs
	Aesthetic Storage: *	01/01 to 12/31	73 afa
	Wildlife Storage: *	01/01 to 12/31	73 afa
	Recreation Storage: *	01/01 to 12/31	73 afa
	Fire Protection Storage:	01/01 to 12/31	73 afa
Total:			0.74 cfs and 73 acre feet

Points of Diversion: Indian Creek at Hiawatha Canal T.03N R28E Sec 33 NW ¼ NE ¼ SW ¼

Place of Use: Lot 5, Buckhorn Subdivision T.03N R.18E Sec 33 SE¼ SW¼
Lot 5, Buckhorn Subdivision T.02N R.18E Sec 4 Lot 3 NE ¼ NW ¼

*Storage = Pond volume (3.8 af) and estimated pond seepage (0.2 ft/day x 365 days x 0.95 acres = 69.4 acre feet) Total Storage = 73 acre feet

* Recommended by Shelly Keen (IDWR)

Attachments:

Aerial Photo-Pond Area and Ditches

Buckhorn Subdivision Plat

Consumptive Use Balance and Precipitation Deficit Calculations

Pond Geometry

DAMASCO- AMENDED APPLICATION FOR PERMIT

CONSUMPTIVE USE BALANCE FOR ASSOCIATED WATER RIGHT TRANSFER

Brockway Engineering PLLC

3/23/2012

LINE:	VALUE:	EXPLANATION:
1	1.27	Hailey NWS- Open Water- Shallow Systems- (including precipitation) Annual P_{def} 1.27 ft (387.6) per acre
2	1.64	Hailey NWS- Grass Pasture- Low Management (Annual P_{def}) 1.64 ft (500mm) per acre
3	0.95	Existing Pond Open Water- Acres
4	1.21	Existing Pond Open Water- Consumptive Use (acre-feet)
5	0.74	Acres of Grass Pasture- Low Maintenance, required to be dried up to meet the Existing Pond Evap. (acres)
6	0.95	Area of authorized irrigated area under water right 37-297D and 37-20359 to be dried up for mitigation of pond evap.
Value in line 1- see attached calculation, Value in lines 2 taken from: Allen, Richard G. and Clarence W. Robison, 2009. Evapotranspiration and Consumptive Irrigation Water Requirements for Idaho: Supplement updating the Time Series through December 2008, Research Technical Completion Report, Kimberly Research and Extension Center, University of Idaho, Moscow, ID.		

DAMASCO- APPLICATION FOR PERMIT

CU Analysis Using NWS Hailey Ranger Station:

Daily P_{def} (mm) for Open Water- Shallow Systems (ponds, streams)

3/23/2012

(mm)											
January	February	March	April	May	June	July	August	September	October	November	December
-1.35	-0.84	0.18	1.42	2.24	2.83	3.96	3.33	2.18	1.00	-0.56	-1.78

Date:	(mm)	(inches)	(ft)
1-Jan	-1.35	-0.053	-0.004
2-Jan	-1.35	-0.053	-0.004
3-Jan	-1.35	-0.053	-0.004
4-Jan	-1.35	-0.053	-0.004
5-Jan	-1.35	-0.053	-0.004
6-Jan	-1.35	-0.053	-0.004
7-Jan	-1.35	-0.053	-0.004
8-Jan	-1.35	-0.053	-0.004
9-Jan	-1.35	-0.053	-0.004
10-Jan	-1.35	-0.053	-0.004
11-Jan	-1.35	-0.053	-0.004
12-Jan	-1.35	-0.053	-0.004
13-Jan	-1.35	-0.053	-0.004
14-Jan	-1.35	-0.053	-0.004
15-Jan	-1.35	-0.053	-0.004
16-Jan	-1.35	-0.053	-0.004
17-Jan	-1.35	-0.053	-0.004
18-Jan	-1.35	-0.053	-0.004
19-Jan	-1.35	-0.053	-0.004
20-Jan	-1.35	-0.053	-0.004
21-Jan	-1.35	-0.053	-0.004
22-Jan	-1.35	-0.053	-0.004
23-Jan	-1.35	-0.053	-0.004
24-Jan	-1.35	-0.053	-0.004
25-Jan	-1.35	-0.053	-0.004
26-Jan	-1.35	-0.053	-0.004
27-Jan	-1.35	-0.053	-0.004
28-Jan	-1.35	-0.053	-0.004
29-Jan	-1.35	-0.053	-0.004
30-Jan	-1.35	-0.053	-0.004
31-Jan	-1.35	-0.053	-0.004
1-Feb	-0.84	-0.033	-0.003
2-Feb	-0.84	-0.033	-0.003
3-Feb	-0.84	-0.033	-0.003
4-Feb	-0.84	-0.033	-0.003
5-Feb	-0.84	-0.033	-0.003
6-Feb	-0.84	-0.033	-0.003
7-Feb	-0.84	-0.033	-0.003
8-Feb	-0.84	-0.033	-0.003
9-Feb	-0.84	-0.033	-0.003
10-Feb	-0.84	-0.033	-0.003
11-Feb	-0.84	-0.033	-0.003
12-Feb	-0.84	-0.033	-0.003
13-Feb	-0.84	-0.033	-0.003
14-Feb	-0.84	-0.033	-0.003

Date:	(mm)	(inches)	(ft)
15-Feb	-0.84	-0.033	-0.003
16-Feb	-0.84	-0.033	-0.003
17-Feb	-0.84	-0.033	-0.003
18-Feb	-0.84	-0.033	-0.003
19-Feb	-0.84	-0.033	-0.003
20-Feb	-0.84	-0.033	-0.003
21-Feb	-0.84	-0.033	-0.003
22-Feb	-0.84	-0.033	-0.003
23-Feb	-0.84	-0.033	-0.003
24-Feb	-0.84	-0.033	-0.003
25-Feb	-0.84	-0.033	-0.003
26-Feb	-0.84	-0.033	-0.003
27-Feb	-0.84	-0.033	-0.003
28-Feb	-0.84	-0.033	-0.003
1-Mar	0.18	0.007	0.001
2-Mar	0.18	0.007	0.001
3-Mar	0.18	0.007	0.001
4-Mar	0.18	0.007	0.001
5-Mar	0.18	0.007	0.001
6-Mar	0.18	0.007	0.001
7-Mar	0.18	0.007	0.001
8-Mar	0.18	0.007	0.001
9-Mar	0.18	0.007	0.001
10-Mar	0.18	0.007	0.001
11-Mar	0.18	0.007	0.001
12-Mar	0.18	0.007	0.001
13-Mar	0.18	0.007	0.001
14-Mar	0.18	0.007	0.001
15-Mar	0.18	0.007	0.001
16-Mar	0.18	0.007	0.001
17-Mar	0.18	0.007	0.001
18-Mar	0.18	0.007	0.001
19-Mar	0.18	0.007	0.001
20-Mar	0.18	0.007	0.001
21-Mar	0.18	0.007	0.001
22-Mar	0.18	0.007	0.001
23-Mar	0.18	0.007	0.001
24-Mar	0.18	0.007	0.001
25-Mar	0.18	0.007	0.001
26-Mar	0.18	0.007	0.001
27-Mar	0.18	0.007	0.001
28-Mar	0.18	0.007	0.001
29-Mar	0.18	0.007	0.001
30-Mar	0.18	0.007	0.001
31-Mar	0.18	0.007	0.001
1-Apr	1.42	0.056	0.005
2-Apr	1.42	0.056	0.005
3-Apr	1.42	0.056	0.005
4-Apr	1.42	0.056	0.005
5-Apr	1.42	0.056	0.005
6-Apr	1.42	0.056	0.005
7-Apr	1.42	0.056	0.005
8-Apr	1.42	0.056	0.005

Date:	(mm)	(inches)	(ft)
9-Apr	1.42	0.056	0.005
10-Apr	1.42	0.056	0.005
11-Apr	1.42	0.056	0.005
12-Apr	1.42	0.056	0.005
13-Apr	1.42	0.056	0.005
14-Apr	1.42	0.056	0.005
15-Apr	1.42	0.056	0.005
16-Apr	1.42	0.056	0.005
17-Apr	1.42	0.056	0.005
18-Apr	1.42	0.056	0.005
19-Apr	1.42	0.056	0.005
20-Apr	1.42	0.056	0.005
21-Apr	1.42	0.056	0.005
22-Apr	1.42	0.056	0.005
23-Apr	1.42	0.056	0.005
24-Apr	1.42	0.056	0.005
25-Apr	1.42	0.056	0.005
26-Apr	1.42	0.056	0.005
27-Apr	1.42	0.056	0.005
28-Apr	1.42	0.056	0.005
29-Apr	1.42	0.056	0.005
30-Apr	1.42	0.056	0.005
1-May	2.24	0.088	0.007
2-May	2.24	0.088	0.007
3-May	2.24	0.088	0.007
4-May	2.24	0.088	0.007
5-May	2.24	0.088	0.007
6-May	2.24	0.088	0.007
7-May	2.24	0.088	0.007
8-May	2.24	0.088	0.007
9-May	2.24	0.088	0.007
10-May	2.24	0.088	0.007
11-May	2.24	0.088	0.007
12-May	2.24	0.088	0.007
13-May	2.24	0.088	0.007
14-May	2.24	0.088	0.007
15-May	2.24	0.088	0.007
16-May	2.24	0.088	0.007
17-May	2.24	0.088	0.007
18-May	2.24	0.088	0.007
19-May	2.24	0.088	0.007
20-May	2.24	0.088	0.007
21-May	2.24	0.088	0.007
22-May	2.24	0.088	0.007
23-May	2.24	0.088	0.007
24-May	2.24	0.088	0.007
25-May	2.24	0.088	0.007
26-May	2.24	0.088	0.007
27-May	2.24	0.088	0.007
28-May	2.24	0.088	0.007
29-May	2.24	0.088	0.007
30-May	2.24	0.088	0.007
31-May	2.24	0.088	0.007

Date:	(mm)	(inches)	(ft)
1-Jun	2.83	0.112	0.009
2-Jun	2.83	0.112	0.009
3-Jun	2.83	0.112	0.009
4-Jun	2.83	0.112	0.009
5-Jun	2.83	0.112	0.009
6-Jun	2.83	0.112	0.009
7-Jun	2.83	0.112	0.009
8-Jun	2.83	0.112	0.009
9-Jun	2.83	0.112	0.009
10-Jun	2.83	0.112	0.009
11-Jun	2.83	0.112	0.009
12-Jun	2.83	0.112	0.009
13-Jun	2.83	0.112	0.009
14-Jun	2.83	0.112	0.009
15-Jun	2.83	0.112	0.009
16-Jun	2.83	0.112	0.009
17-Jun	2.83	0.112	0.009
18-Jun	2.83	0.112	0.009
19-Jun	2.83	0.112	0.009
20-Jun	2.83	0.112	0.009
21-Jun	2.83	0.112	0.009
22-Jun	2.83	0.112	0.009
23-Jun	2.83	0.112	0.009
24-Jun	2.83	0.112	0.009
25-Jun	2.83	0.112	0.009
26-Jun	2.83	0.112	0.009
27-Jun	2.83	0.112	0.009
28-Jun	2.83	0.112	0.009
29-Jun	2.83	0.112	0.009
30-Jun	2.83	0.112	0.009
1-Jul	3.96	0.156	0.013
2-Jul	3.96	0.156	0.013
3-Jul	3.96	0.156	0.013
4-Jul	3.96	0.156	0.013
5-Jul	3.96	0.156	0.013
6-Jul	3.96	0.156	0.013
7-Jul	3.96	0.156	0.013
8-Jul	3.96	0.156	0.013
9-Jul	3.96	0.156	0.013
10-Jul	3.96	0.156	0.013
11-Jul	3.96	0.156	0.013
12-Jul	3.96	0.156	0.013
13-Jul	3.96	0.156	0.013
14-Jul	3.96	0.156	0.013
15-Jul	3.96	0.156	0.013
16-Jul	3.96	0.156	0.013
17-Jul	3.96	0.156	0.013
18-Jul	3.96	0.156	0.013
19-Jul	3.96	0.156	0.013
20-Jul	3.96	0.156	0.013
21-Jul	3.96	0.156	0.013
22-Jul	3.96	0.156	0.013
23-Jul	3.96	0.156	0.013

Date:	(mm)	(inches)	(ft)
24-Jul	3.96	0.156	0.013
25-Jul	3.96	0.156	0.013
26-Jul	3.96	0.156	0.013
27-Jul	3.96	0.156	0.013
28-Jul	3.96	0.156	0.013
29-Jul	3.96	0.156	0.013
30-Jul	3.96	0.156	0.013
31-Jul	3.96	0.156	0.013
1-Aug	3.33	0.131	0.011
2-Aug	3.33	0.131	0.011
3-Aug	3.33	0.131	0.011
4-Aug	3.33	0.131	0.011
5-Aug	3.33	0.131	0.011
6-Aug	3.33	0.131	0.011
7-Aug	3.33	0.131	0.011
8-Aug	3.33	0.131	0.011
9-Aug	3.33	0.131	0.011
10-Aug	3.33	0.131	0.011
11-Aug	3.33	0.131	0.011
12-Aug	3.33	0.131	0.011
13-Aug	3.33	0.131	0.011
14-Aug	3.33	0.131	0.011
15-Aug	3.33	0.131	0.011
16-Aug	3.33	0.131	0.011
17-Aug	3.33	0.131	0.011
18-Aug	3.33	0.131	0.011
19-Aug	3.33	0.131	0.011
20-Aug	3.33	0.131	0.011
21-Aug	3.33	0.131	0.011
22-Aug	3.33	0.131	0.011
23-Aug	3.33	0.131	0.011
24-Aug	3.33	0.131	0.011
25-Aug	3.33	0.131	0.011
26-Aug	3.33	0.131	0.011
27-Aug	3.33	0.131	0.011
28-Aug	3.33	0.131	0.011
29-Aug	3.33	0.131	0.011
30-Aug	3.33	0.131	0.011
31-Aug	3.33	0.131	0.011
1-Sep	2.18	0.086	0.007
2-Sep	2.18	0.086	0.007
3-Sep	2.18	0.086	0.007
4-Sep	2.18	0.086	0.007
5-Sep	2.18	0.086	0.007
6-Sep	2.18	0.086	0.007
7-Sep	2.18	0.086	0.007
8-Sep	2.18	0.086	0.007
9-Sep	2.18	0.086	0.007
10-Sep	2.18	0.086	0.007
11-Sep	2.18	0.086	0.007
12-Sep	2.18	0.086	0.007
13-Sep	2.18	0.086	0.007
14-Sep	2.18	0.086	0.007
15-Sep	2.18	0.086	0.007
16-Sep	2.18	0.086	0.007
17-Sep	2.18	0.086	0.007
18-Sep	2.18	0.086	0.007

Date:	(mm)	(inches)	(ft)
19-Sep	2.18	0.086	0.007
20-Sep	2.18	0.086	0.007
21-Sep	2.18	0.086	0.007
22-Sep	2.18	0.086	0.007
23-Sep	2.18	0.086	0.007
24-Sep	2.18	0.086	0.007
25-Sep	2.18	0.086	0.007
26-Sep	2.18	0.086	0.007
27-Sep	2.18	0.086	0.007
28-Sep	2.18	0.086	0.007
29-Sep	2.18	0.086	0.007
30-Sep	2.18	0.086	0.007
1-Oct	1	0.039	0.003
2-Oct	1	0.039	0.003
3-Oct	1	0.039	0.003
4-Oct	1	0.039	0.003
5-Oct	1	0.039	0.003
6-Oct	1	0.039	0.003
7-Oct	1	0.039	0.003
8-Oct	1	0.039	0.003
9-Oct	1	0.039	0.003
10-Oct	1	0.039	0.003
11-Oct	1	0.039	0.003
12-Oct	1	0.039	0.003
13-Oct	1	0.039	0.003
14-Oct	1	0.039	0.003
15-Oct	1	0.039	0.003
16-Oct	1	0.039	0.003
17-Oct	1	0.039	0.003
18-Oct	1	0.039	0.003
19-Oct	1	0.039	0.003
20-Oct	1	0.039	0.003
21-Oct	1	0.039	0.003
22-Oct	1	0.039	0.003
23-Oct	1	0.039	0.003
24-Oct	1	0.039	0.003
25-Oct	1	0.039	0.003
26-Oct	1	0.039	0.003
27-Oct	1	0.039	0.003
28-Oct	1	0.039	0.003
29-Oct	1	0.039	0.003
30-Oct	1	0.039	0.003
31-Oct	1	0.039	0.003
1-Nov	-0.56	-0.022	-0.002
2-Nov	-0.56	-0.022	-0.002
3-Nov	-0.56	-0.022	-0.002
4-Nov	-0.56	-0.022	-0.002
5-Nov	-0.56	-0.022	-0.002
6-Nov	-0.56	-0.022	-0.002
7-Nov	-0.56	-0.022	-0.002
8-Nov	-0.56	-0.022	-0.002
9-Nov	-0.56	-0.022	-0.002
10-Nov	-0.56	-0.022	-0.002
11-Nov	-0.56	-0.022	-0.002
12-Nov	-0.56	-0.022	-0.002
13-Nov	-0.56	-0.022	-0.002
14-Nov	-0.56	-0.022	-0.002

Date:	(mm)	(inches)	(ft)
15-Nov	-0.56	-0.022	-0.002
16-Nov	-0.56	-0.022	-0.002
17-Nov	-0.56	-0.022	-0.002
18-Nov	-0.56	-0.022	-0.002
19-Nov	-0.56	-0.022	-0.002
20-Nov	-0.56	-0.022	-0.002
21-Nov	-0.56	-0.022	-0.002
22-Nov	-0.56	-0.022	-0.002
23-Nov	-0.56	-0.022	-0.002
24-Nov	-0.56	-0.022	-0.002
25-Nov	-0.56	-0.022	-0.002
26-Nov	-0.56	-0.022	-0.002
27-Nov	-0.56	-0.022	-0.002
28-Nov	-0.56	-0.022	-0.002
29-Nov	-0.56	-0.022	-0.002
30-Nov	-0.56	-0.022	-0.002
1-Dec	-1.78	-0.070	-0.006
2-Dec	-1.78	-0.070	-0.006
3-Dec	-1.78	-0.070	-0.006
4-Dec	-1.78	-0.070	-0.006
5-Dec	-1.78	-0.070	-0.006
6-Dec	-1.78	-0.070	-0.006
7-Dec	-1.78	-0.070	-0.006
8-Dec	-1.78	-0.070	-0.006
9-Dec	-1.78	-0.070	-0.006
10-Dec	-1.78	-0.070	-0.006
11-Dec	-1.78	-0.070	-0.006
12-Dec	-1.78	-0.070	-0.006
13-Dec	-1.78	-0.070	-0.006
14-Dec	-1.78	-0.070	-0.006
15-Dec	-1.78	-0.070	-0.006
16-Dec	-1.78	-0.070	-0.006
17-Dec	-1.78	-0.070	-0.006
18-Dec	-1.78	-0.070	-0.006
19-Dec	-1.78	-0.070	-0.006
20-Dec	-1.78	-0.070	-0.006
21-Dec	-1.78	-0.070	-0.006
22-Dec	-1.78	-0.070	-0.006
23-Dec	-1.78	-0.070	-0.006
24-Dec	-1.78	-0.070	-0.006
25-Dec	-1.78	-0.070	-0.006
26-Dec	-1.78	-0.070	-0.006
27-Dec	-1.78	-0.070	-0.006
28-Dec	-1.78	-0.070	-0.006
29-Dec	-1.78	-0.070	-0.006
30-Dec	-1.78	-0.070	-0.006
31-Dec	-1.78	-0.070	-0.006

TOTAL =	387.6	15.27	1.27
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ENGINEER'S SURVEILLANCE
TABLE 1

