

**Idaho Dept of Water Resources
 ESPA Spring Diversion Inventory**

District 36A Date 7/12/04
 Basin _____ Ditch or users association EM Bell
 Diversion Name _____ POD Number 410006
 Spring Name _____ Tributary to _____
 GPS site ID Missing? Inventory Examiner C. Knowles
 Owner BRAD GISTLER? Operator _____

Measuring Device Data	
Type of Device or Method	Standard <input type="checkbox"/> Non-standard <input checked="" type="checkbox"/>
If non-standard describe: <u>RATED SECTION</u>	
Discharge and Measurement Method	
How Measurement was taken: (Staff gauge, current meter, polysonic meter)	
Staff gauge Head Reading <u>silted in</u>	Current Meter/or poly-sonic measurement:
Time of Day	
Table used for Q <u>RATING by CE Brookway dated 4/16/1981</u>	Meter Measurement Confidence 2% 5% 10% +10%
Total Flow =	Does device meet IDWR standards? YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>
Discharge notes attached? YES NO	Measurement Taken by:
Calculations Attached? YES NO	Is follow-up Needed? YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>

Concerns about measuring device: gauge silted in, rating table
 too old & not maintained at any frequency.
 Recommend order for installing new new device.

Current meter measurement

Site: E.M. Bell Ditch
 Date: 7/13/2004
 WMIS ID: 7/22/3022
 Source: Billingsley Creek

Staff gage readings: 1.04 feet @ 7:45 AM
 1.04 feet @ 8:15 AM

Meter type: Old rated section, rating not maintained, staff gage silted in
 Rating curve: Brockway, 1981, rating table only extends to 0.50 feet, equation is $Q = 47.55 \cdot h^{1.42}$
 Meter discharge: 50.27 ft³/s

Measured inside tunnel, approximately 1/3 from entrance

REW	Distance feet	Depth feet	Obs Depth feet	Velocity ft/sec	Width feet	Area ft ²	Discharge ft ³ /s
	0.0	0.25	0.6	1.75	0.25	0.0625	0.0819
	0.5	0.25	0.6	1.75	0.5	0.125	0.2188
	1	0.55	0.6	1.89	0.75	0.4125	0.7796
	2.0	0.55	0.6	1.70	1	0.55	0.9350
	3	0.55	0.6	1.56	1	0.55	0.8580
	4	0.55	0.6	1.87	1	0.55	1.0285
	5	0.52	0.6	1.87	1	0.52	0.9724
	6	0.55	0.6	1.79	1	0.55	0.9845
	7	0.53	0.6	1.66	1	0.53	0.8798
	8	0.55	0.6	1.79	1	0.55	0.9845
	9	0.55	0.6	2.4	0.75	0.4125	0.9900
	9.5	0.25	0.6	1.28	0.5	0.125	0.1600
LEW	10	0.25	0.6	0.83	0.25	0.0625	0.0600
Total					10	5	8.91
Error							462.8%

Average Velocity = 1.79 ft/sec

