11.02
8.69
2.33

1970-3

STATE OF NEBRASKA
DEPARTMENT OF WATER RESOURCES

Meas. No.

Comp. by WHB

Checked by

DISCHARGE MEASUREMENT NOTES

Sta. No. ELKHORN R. NR WINSLOW

Date 2-11, 2010 Party WHB

Width 159 Area 641 Vel. 1.72 G.H. 11.02 Disch. 1105

Method 5.28 No. secs. 23 G.H change 0 in 2.8 hrs. Susp. RO

Method coef. 88 Hor. angle coef. 1.0 Susp. coef. 1.0 Meter No. DSE-205

GAGE READINGS

Time	Hub	Recorder	Inside	Outside
1324	10.72			11.02
1615	10.72			11.02
Weighted M.G.H.				
G.H. correction				
Correct M.G.H.				

Type of meter AA ICE

Date rated ..... for rod, other,

Meter ..... ft. above bottom of weight.

Spin before meas. 2-42" after .....

Meas. plots ..... % diff. from rating .....

Wading, cable, ice, boat, upstr., downstr., side bridge 70 feet, mile, above, below gage, and .....

Check-bar, found 32.56

changed to ..... at .....

Correct .....

Levels obtained .....

Measurement rated excellent (2%), good (5%), fair (8%), poor (over 8%) based on following conditions: Cross section 100% ICE COVER

Flow EVEN Weather CLDY CALM

Other ..... Air 28 °F @ .....

Gage ALMOST OUT OF "N" Water 0.5 °F @ .....

Record removed ..... Intake flushed L

Observer NO HWMs

Control 50/10/35 CHANGED TANK

Remarks NO HWMs

G.H. of zero flow ..... ft.

To: Guy Lindeman
From: Bill Birkel

RECEIVED
FEB 12 2010
DEPARTMENT OF NATURAL RESOURCES
12:15 pm mh

2/12/10
3 pages

DISCHARGE MEASUREMENT NOTES—ICE COVER

River, at

Creek, near

Dist. from initial point	Width	Total depth of water	W.S. to bot. ice	Effective depth	Depth of meter below water surface	Revolutions	Time in seconds	VELOCITY At point	VELOCITY Mean in vertical	Area	Discha
5	2.5	Rec									
10	7.5	2.8	1.1	1.7	.5	1056			.40	12.8	5.1
20	10	4.3	1.0	3.3	.2	3044	1.51	1.42		33.	46.
					.8	3050	1.33				
30	10	3.8	.8	3.0	.2	4046	1.92	2.22		30	66.
					.8	6052	2.53				
40	10	3.9	.9	3.0	.2	4040	2.20	1.92		30	57.
					.8	3040	1.65				
50	10	4.0	1.0	3.0	.2	4040	2.20	2.06		30	61.
					.8	4046	1.92				
60	7.5	4.1	1.1	3.0	.2	5049	2.29	2.08		22.5	46.
					.8	4047	1.88				
65	5.0	4.0	1.0	3.0	.2	5046	2.29	2.12		15	31.
					.8	4049	1.84				
70	7.5	4.4	1.0	3.4		5049	2.24	2.17		25.5	55.
						4042	2.10				
80	7.5	4.9	1.1	3.8		4040	2.20	2.42		28.5	69.
						6050	2.63				
85	5.0	5.0	1.1	3.9		5048	2.29	2.14		19.5	41.
						4044	2.00				
90	7.5	5.1	1.1	4.0		6042	3.13	2.94		30	88.
						4049	2.74				
100	7.5	5.2	1.1	4.1		4044	2.00	1.82		30.8	56.0
						3040	1.65				
105	5.0	4.8	1.0	3.8		4046	1.92	1.84		19	35.0
						4050	1.76				
110	7.5	4.3	1.0	3.3		4052	1.70	1.57		24.8	38.9
						3046	1.44				
120	7.5	3.9	.9	3.0	.2	3046	1.44	1.32		22.5	29.7
					.8	3056	1.19				

					8	30	53	1.25			
130	7.5	8.1	.8	7.3	2	30	50	1.33	1.38	54.8	75
					8	30	46	1.44			
140	7.5	10	1.1	8.9	.5	40	56	1.58	1.58	66.8	10
145	5.0	9.9	1.0	8.9	.5	60	58		2.27	44.5	16
150	6.5	8.8	.70	8.1	.5	30	52		1.28	52.6	67
158	7.0	4.5	1.1	3.4	2	30	50	1.33	1.12	23.8	26
					8	20	48	.92			
164	3.0										
	159										

LEW

1139.6

641.4

.5 SECTIONS = 279.42 X .88 = 245.

.2 & .8 SECTIONS = 859.60 859.6

1105.4