

Date & Time: 3-25-2014 1130

Crew: BT, MP, RK

Sheet 1 of 3

Location: Chulitna 9.5

Weather: Clear

Camera: H4 - SWg - Canon - 1

GPS Unit: PDX

Comments: Flaming water between ice layers Camera-1 Photos #508 view US #509 view NS centered, holes #510 right side channel looking left #511 left side channel looking right

(A) Sample #	(B) GPS Point #	(D) Snow Depth (ft)	(E) Ice Thickness (ft)	(F) Top of Ice to Bed Distance (ft)	(G) Flow Depth (F-E) (ft)	(H) Frazil Ice Present?	(I) Anchor Ice Present?	(J) Freshboard Height (ft)	(K) Camera Height above Bed (ft)	(L) Video #	(M) Comments / Bed Description
51	1	over ice	3.3	92	4.4	Y	N	0.3	43.2	119, 120	1190 4x4 image is turbid 1200 3ft 1210 3ft 1230 2ft
52	2	over ice	3.6	84	3.3	Y	N	-0.1	3.2	121, 123	
53	3	over ice	3.1	83	3.8	Y	N	0.3	2	124	
54	4	over ice	3.5	82	3.3	Y	N	0.6	2	125	
55	5	over ice	3.5	86	3.7	Y	N	0.3	2	126	
56	6	over ice	3.6	87	3.7	Y	N	0.1	2	127	
57	7	over ice	3.5	93	4.3	Y	N	0.4	2	128, 129	128 camera became tilted 129 redo
58	8	over ice	3.5	92	4.2	Y	N	0.3	2	130	
59	9	over ice	3.4	97	4.7	Y	N	0.2	2	131, 132	131 - camera tilted 132 - redo
510	10	over ice	3.7	95	4.2	Y	N	0.2	2	133	
511	11	over ice	3.6	98	4.6	Y	N	0.2	2	134	
512	12	over ice	3.4	93	4.4	Y	N	0.1	2	135, 136	135 possible anchor ice next to red board, 5' left 136 - redo
513	13	over ice	3.6	96	4.4	Y	N	0.2	2	137	
514	14	over ice	3.4	97	4.7	Y	N	0.1	2	138, 139	138 - camera tilted 139 - redo
515	15	over ice	3.6	95	4.3	Y	N	0.2	2	139, 140	

Pole d
Camera
possible anchor ice next to red board, 5' left
136 - redo

QC1 *[Signature]*

Photo Back up # Kilgus Camera 295



TETRA TECH

UNDER ICE BED PHOTO SAMPLING

SUSITNA-WATANA
HYDROELECTRIC PROJECT

Date & Time: 3-25-2014 Crew: BT, MP, RK Sheet 2 of 3

Location: Chulitna 9.5 Weather: clear

Camera: H-SUG-Gopro-1 GPS Unit: PDX

Comments:

(A) Sample #	(B) GPS Point #	(D) Snow Depth (ft)	(E) Ice Thickness (ft)	(F) Top of Ice to Bed Distance (ft)	(G) Flow Depth (F-E) (ft)	(H) Frazil Ice Present?	(I) Anchor Ice Present?	(J) Freeboard Height (ft)	(K) Camera Height above Bed (ft)	(L) Video #	(M) Comments / Bed Description
S16	16	over ice	3.6	97	4.8	Y	N	0.3	2	141	
S17	17	over ice	3.4	88	3.9	Y	N	0.1	2	142	
S18	18	over ice	3.8	87	3.5	Y	N	0.3	2	143	

BT

Photo Back up # Kulgreen Camera 296

Aerial Photos Kilgus Camera
 photos

- 247
- 248
- 249
- 250
- 251
- 252
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- 254
- 255
- 256



River
left

Sheet 3 of 3

ac1 BWD

photo B-up Kilgus camera # 297

3/25/14