

TRIS GAGING Z

7/28/14 - 7/31/14

(NON SURVEY NOTES)

**DURA**<sup>®</sup>  
WATERPROOF

**FIELD**

No 658

CONTENTS

PAGE	REFERENCE	DATE
NOTES		
1.	Dudley left saw at Half Moon Slough. Retrace or replace	
2.	Fog Creek STA 25.5 ISSUE <sup>Flow Indicator</sup>	
3.	Fog Creek manure wait gone	
4.	Some Chain shaving minor corrosion. If sites to be left over number, replace?	
5.	Photo 114 - 0116 - Gear that's left @ GCC for stilling wells	
6.	Additional photos exist on Dudley's camera that are not logged in this book	
7.	All surveys done in extra book authored by Stuart Beck	
8.	Recommend to do 2-peg test before next use of auto-level	
9.	Many stilling wells had sediment fill in. Discuss/devis solution?	

7/29/14 Half Moon Bay Slough

IN	OUT
Time: 1100	<del>1155</del> 1210
Install PT. Establish TBMS	
LEUCOCER # 0102030100	
CREW: M. JENSEN, D. PETERSON, S. BECK	
BOAT CAPTAIN: KEITH	
PEARL GUARD: DUSTIN	
LEUCOCER FUTURE START @ 1130	
PT installed @ 1120	
Surveyed ~ 1135	
GPS POINTS: HALF MOON SLough Bm1	
(DUSTIN)	" Bm2
(GPS)	" PT
and tie in to FA128 STRZ	
SEE OTHER FIELD BOOK FOR LEUCOCER	
- INCLUDING TIE IN TO FA128 STRZ	
PHOTO: 113-0085 SITE BEFORE (new 114-0116)	
113-0086 SITE AFTER (logger in place)	

87 - Looking Dis @ PT file 89-11010 - Logging DURA  
 88 - " " Part of file (Beaver Dam)



PONTAGE CREEK

7/29/14

Photo log: 113-0090 Site upon arrival  
113-0091 Staff gage

GRAB CREEK

7/29/14

Time	IN	OUT	Crew
10:10		14:50	Same
1:41		1:42	as
→ Q started @ 17:05			previes
			AKDT
See other beds for level loop			

Main levellogger # ~~1614~~ 2033874

Rained @ 16:14 Download @ 16:20

→ logger was partially buried in sediment. Unknown & affects.

4442 readings

Not stopped. Continued logging @ 15 Min intervals

Reinstalled @ 14:24

(see additional notes that follow)

Backup levellogger # 2033907

Revised @ 14:25

Brick ~ 1/2 buried in sediment.

PVC tube ~ 2/3 full of sediment

Orifice of levellogger full of

fine sediment. Unknown effect

on data. (See photos)

Creek 7/29/14

Downloaded, 4442 readings.  
(note 1430 reading no good tubes  
out of water)

Logger not stopped, continue with  
15 min readings  
Reinstalled @ 1440

When redeploying main unit, the logger  
touched bottom with chain length  
to spare. The extra chain measures  
@ 0.54 ft, indicating the well had  
been filled in a that much.

FLOW TRANSECT  
TAPE TIED TO  
LEFT STAKE AT 158.2 ft  
LINE @ 145.2 ft

Q = 62.19 cfs with FlowTraker

End unit @ 1720. leave site. SG = 1.42  
Photos: 13-0092 - site @ arrival  
113-0093 and 94 - sediment in backup unit

F05 CREEK 7/30/14

Time	SS	Extreme
IN 0930	NA	Mr. Pederman
OUT 1251	0.98	D. Besser
Unit start 1137	0.98	S Beck
Staff gage damaged and completely bent over		BG: DeStin
Survey site before teaching bent well to establish shaft (see other book, start survey)		Chris Kontan
CREWS Lands: Permit # 2014-091		
Main unit removed at 1043. Unable to straighten, costs bent too much over (value at substrate)		
Not possible to re-establish old main unit in bottom material. For clarity purposes, better to favor the "backup" unit, as it was broken mounted @ install and photo: more stable		

• Installed a staff gage (no logger or well) ~ 50 ft upstream  
 Will use as a check.  
 After install... SG = 1.00 (0.95 - 1.05)  
 → large fluctuations

• Note a suspected diameter shift in Bore, the hand below the tree seems to have had a partial failure

- New bottom mounted unit # 2023495  
 Furr start 7/30/14 @ 11:15  
 Logging @ 15 min intervals  
 Installed at 11:13

• Backup unit removed @ 11:20  
 Downloaded #4706 readings  
 - Brick and heavily abraded (see photos)  
 - Brick PAV clamp set up a damaged and loose in packets  
 - 100% batteries, 1 Pod wire and logger twice the same.  
 - Logger not stopped continue 15 min  
 Reinstalled @ 11:35

Fog Creek 7/30/14

Q-transsect  
 - LWP = 3.0 (same as)  
 - DWP = 88.3 (June 2014)

Note @ station 25.5' the water was left in 0.7/0.6/0.8 m/s, it did was taken, i.e. 3.0 ft marks were taken and averaged

Q = 3.75 cfs  
 with FlowTracker

• Upon return to helicopter disassembled that the main logger in removed. Missing well was gone. Unknown what happened  
 → Note it must have been lost in well damage

• Photo log 114-0099-Fog sit P arrival  
 100-101 - "

103 - Tubing post purling new staff site

104 - Fog site after main well removal and new bottom mounted unit install

105 - 106 - Jackup unit damage / Brick caving

107-108 - New and packing bottom

Mounted units

T SUSANNA CREEK 7/30/14

IN	OUT
1403	1503
1.48	1.48

Crew: same as Fog Creek

CIRWS level: Permit #2014-001

See other book for backloop

- Main level logger #2033902

summed @ 1417

4710 readings 100% to battery

downloaded @ 1427

1 Pod time: 1431 (logger time: 1430:47)

Note: When retrieving logger chain

was pulled 2.10 (measured) before

tension. Appear as if sediment

had filled in. Logger office was

partially clogged with small sediment.

Reinstalled @ 1440 w/o stopping

main tanned 15 min intervals

T SUSANNA CREEK 7/30/14

- Backup Unit # 2033277 Reused 1450

100% batt. Downloaded @ 1454

with 4720 readings

1 Pod time: 1455 - logger: 1454:47

Reinstalled @ 1459 without stopping

Maintained 15 min intervals

- See survey book for void flag

We started B1111 = 100.00

was used @ 0.03 - 0.04 ft,

causing whole survey to shift up

Photo log 14:0109 S6 site @ arrival

111-0110 - Backup before arrival

0111-0111 " " "

0112 - Site marker download and reinstall

0114-0115 - Staff photo @ PTH

SHEEP CREEK 7/31/14

IN | OUT

Time 0910 | 1045

SG 1.78 | 1.78

Crew: M. Trueman, 1 Kiser, S. Pocz

See star back for level loop

Q-mant with Flow Tracker

RWP = 1.0 LWP = 1.21

Q = 333.3 cfs finished @ 1000

Backup unit # 2033881 100% battery

4410 readings downloaded @ 1016

iPod time: 1019 Logger time: 10:19:00 ✓

Reinstalled @ 10205 w/o stopping

Main tunnel 15 min interval

Main unit # 2023480 100% batt

Removed @ 1036 4411 readings

downloaded @ 1032

iPod time: 10:37 Logger time: 10:37:10

Reinstalled @ 1040 w/o stopping

Monitored 15 min interval

Caswell Creek 7/31/14

IN | OUT

Time 1110 | 1205

SG 2.57 | 2.57

Q-mant same as Sheep Creek

See star back for level loop

Q-mant with Flow Tracker is relevant

Q = 21.56

Main unit # 2033896 100% battery

Removed @ 1140 1416 readings

Downloaded @ 1154 iPod time: 1155 Logger time: 11:51:55

Reinstalled @ 1158 w/o stopping 15 min interval

Backup unit 2033897 100% batt

Removed @ 1140 Download @ 1157

4416 readings

iPod time: 11:50 Logger time: 11:57:25

Reinstalled @ 1202 w/o stopping 15 min interval

Whole site secured backwatered, suspect

Denver claim on some blockage down stream.

Rating curve will be affected.

DESHKA RIVER 7/31/14

No stopped, continued logging @ 15 min interval

Unit with FlowTracker  
Start @ 1508  
@ 000.9!

Photo 115-121 Main logger site before download

Deshka River 7/31/14

IN / OUT  
Time 1340 / 1415 / 1555  
WSE - / 93.76 / 93.78

Crew: MCNT, SB Boat: Phett

See other book for foreloop

Main unit download unit # 2023483  
Renewed @ 1420 Downloaded @ 1423  
4238 readings 100% batt

Prod time: 1424 logger time: 14:25:48  
Reinstalled @ 1428 w/o stopping  
15 min interval

Backup unit # 2022436  
Renewed @ 1433 + Downloaded @ 1435  
4239 readings 100% batt

Prod time: 1436 logger time: 14:35:42  
Reinstalled @ 1439 w/o stopping  
15 min interval

Bar logger # 2022079 100% battery  
Downloaded @ 1444 4229 readings  
Prod time: 1446 longer time: 14:46:09



D. REISER  
S. BECK

July 27, 2014

Shoop Creek Staff Gauge

1.94 ft @ 2:30 PM  
AKDT

7/28/14

D. REISER

S. BECK

D. PORTEN (BFA  
WARD)

R. HILL (PILOT)

MIDDLE SUSITNA  
RIVER RECON

FOG CREEK

STAFF GAGE

BLUNN OUT  
W.S. about 3.5 ft

below BM 1

10:38 AM

270 RWF

271 RWF

272 RWF

273 RWF

274 LWF

275 LWF

276 LWF

277 LWF

7/29/14

FA 128

HALF MOON SLOUGH

STA	F.S.	H.I.	BS	FLEV
BM1	2.34	102.35	100.00	100.00
BM2		2.64	99.70	
PIN TETHER		A.B	98.22	
W.S.		S.11	97.24	
TPI		3.40	98.95	
TPI	3.54	102.49	98.95	
WS		5.23	97.28	11:00 AKDT
BM2		2.78	99.70	
BM1		2.50	99.99	
STA	F.S.	H.I.	BS	FLEV
BM1	3.51	103.51		100.00
BM2			3.79	99.72
REBAR			5.39	98.12
FA 128 STR2				

PORTAGE CREEK

STA	F.S.	H.I.	BS	FLEV
BM1	3.55	103.55		100.00
BM2			3.17	100.38
BM3			4.75	98.80
TOP PVC			5.48	98.07
TOP WOOD			5.88	97.67
TOP STAFF			6.55	97.00
WS			8.04	95.51
TP			7.26	96.29
TP	7.10	103.39		96.29
WS			7.81	95.58
TOP STAFF			6.40	66.99
TOP WOOD			5.71	97.68
TOP PVC			5.32	98.07
BM3			4.59	98.80
BM2			3.00	100.39
BM1			3.39	100.00
WS			7.87	95.50

2:15 PM  
AKDT

# GOLD CREEK

STA	FS	HI	BS	ELEV
BM1	3.76	103.81		100.00
BM2			5.07	98.74
BM3			5.13	98.68
TOP PVC			8.19	95.62
TOP WOOD			8.91	94.90
TOP STAFF			9.57	94.24
WS			11.46	92.35
TP			8.28	95.58
TP	8.46	103.99		95.53
WS			11.65	92.34
TOP STAFF			9.76	94.23
TOP WOOD			9.11	94.88
TOP PVC			8.38	95.61
BMS			5.32	98.69
BM2			5.26	98.73
BM1			3.99	100.00
WS			11.65	92.34

4:30 PM  
AKDT

# 7/30/14 FOG CREEK

STA	FS	HI	BS	ELEV
BM1	3.68	103.68		100.00
BM2			4.14	99.54
BMS			3.20	100.48
WS ORIGINAL			7.59	96.09
TP GAGE SITE			4.00	97.68
TP	4.15	103.83		97.68
BM1			3.83	100.00
BM2			4.29	99.54
BMS			3.35	100.48
WS ORIGINAL GAGE SITE			7.74	96.09

10:00  
AKDT

note: BM2 and BMS are about 0.05 ft higher than on previous trip. BM1 is close to the steel near woodshed bank where gage was tipped over. BM1 was likely sunk 0.05 ft and BM2 and BMS were likely not changed.

FOG CREEK  
 NEW STAFF GAGE  
 BMI 383 10383  
 BMI 336 10047  
 TOP WOOD 487 98.99  
 TOP GAGE 552 98.31  
 WS NEW GAGE 7.82 96.01 10:30AM  
 STAFF GAGE - 1.00 ft  
 WS 3.10 ft  
 below TOP of wood 95.89  
 WS ORIGINAL GAGE SITE 7.80 96.03  
 NEW STAFF GAGE  
 INSTALLED 19 ft  
 U/S from BMI  
 WS ORIGINAL BACKUP 7.75 11:20  
 WS NEW BACKUP 7.80 AKDT  
 STAFF GAGE 11:35 AM  
 0.98 ft

FOG CREEK  
 FLOW MEASUREMENT  
 TAKE ON RIGHT BANK  
 AT 88.3 ft  
 RWF ≈ 76.5 ft ±  
 TROSENA CREEK  
 STA FS HI BS FLFV  
 BMI 0.42 100.42 2.45 10.00  
 BMI2 4.83 95.59 7.57 92.85  
 BMI3 8.09 92.33 8.75 91.67  
 TOP PVC 10.55 89.87 10.57 89.85  
 TOP WOOD 10.03 90.39 10.14 90.39  
 TOP GAGE 10.53 10.69 89.84  
 WS GAGE 10.72 89.81 A  
 WS BACKUP 9.86 91.67 V  
 WS BACKUP 8.19 92.34 V  
 WS GAGE 7.67 92.86 V  
 WS BACKUP 4.93 95.60  
 WS GAGE 2.56 97.97  
 WS BACKUP 0.53 100.00  
 WS GAGE  
 WS BACKUP  
 TP 10.14 100.53  
 WS BACKUP  
 WS GAGE  
 TOP GAGE  
 TOP WOOD  
 TOP PVC  
 BMI3  
 BMI2  
 BMI

BH1 has appeared  
to have risen about  
0.03 ft.

WS BACKUP 10.69 89.84  
WS GAGE 10.75 89.78  
BM3 4.74 95.59

7/31/14

SHEEP CREEK  
STA FS HI BS ELEV  
BM1 4.69 104.69 100.00  
BM2 5.53 101.16  
BM3 8.62 96.07

WS BACKUP 11.11 93.58  
TOP WOOD 8.84 95.85  
TOP GAGE 9.54 95.15

WS GAGE 11.06 93.63  
TP 9.42 95.27

TP 9.51 104.78  
TOP WOOD 8.98 95.85  
TOP GAGE 9.63 93.15

WS GAGE 11.15 93.63

BH1 4.77 100.01  
BM2 3.61 101.17  
BM3 8.71 96.07  
WS BACKUP 11.17 93.61 10:05  
ARVT

BM2 15.04 116.20 101.16  
TP 14.33

BM2 2.25 103.41 101.16  
TOP EYE BOLT 6.95 10° ANGLE  
GROUND SURFACE 8.14 10° ANGLE  
WS 9.83 95.58 10:38

CASSWELL CREEK  
STA FS HI BS ELEV  
BM1 4.69 104.69 100.20  
BM2 6.59 98.10

BM3 7.07 97.62  
TOP PVC 5.24 94.45  
TOP WOOD 6.32 98.57  
TOP 7.02 97.67

WS GAGE 7.75 96.94 11:15  
WS BACKUP 7.75 96.94  
TP 6.90 97.79

WS			10.35	93.78
Switara River at Dushka				
BMI	3.64	103.64		100.00
BMI2			4.83	98.81
TOP PVC			8.54	95.10
TOP WOOD			8.68	
TOP GAGE			9.37	
WS			11.69	91.95
TOP PVC	8.45	103.55		95.10
WS			11.59	91.96
TOP SEAGE			9.28	AKDT
TOP WOOD			8.60	
BMI2			4.74	98.81
BMI			3.55	100.00

TP	6.98	104.17		97.79
TOP PVC			6.35	98.92
TOP WOOD			6.42	98.35
TOP GAGE			7.10	97.67
WS GAGE			7.85	96.92
WS BACKUP			7.83	96.94
BMI			4.76	100.01
BMI3			7.15	97.62
BMI2			6.68	96.09
DUSHKA RIVER				
STA FS	HI	BS		ELEV
TT	3.87	103.87		
BMA			0.08	103.79
BMB			0.86	103.01
WS GAGE			10.12	93.75
WS BACKUP			10.12	93.75
TP			10.19	93.68
TP	10.45	104.13		93.68
WS	BACKUP		10.36	93.77
WS	GAGE		10.36	93.77
7/5	at 13:30	WS	10.29	93.84
BMI3			1.13	103.00
BMA			0.34	103.79
TT	D9R		4.15	99.98