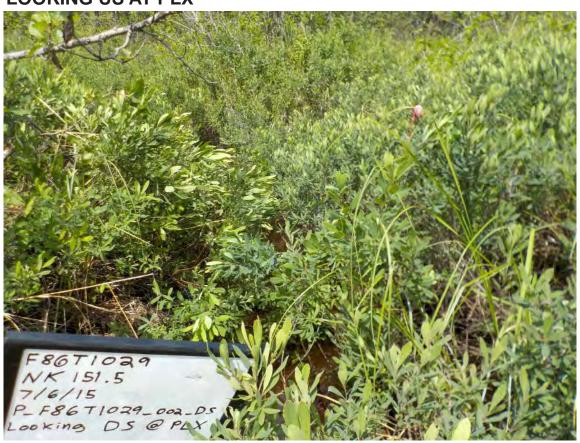
	DOCKET NO. CP17000	DOC NO: USAKE-PT-SRREG-00-
	RESOURCE REPORT NO. 3	000006-000
Alaska LNG	APPENDIX L	APRIL 14, 2017
PROJECT	Part 9 of 10	REVISION: 0
	PUBLIC	

Part 9 of 10 of Appendix L of Resource Report No. 3



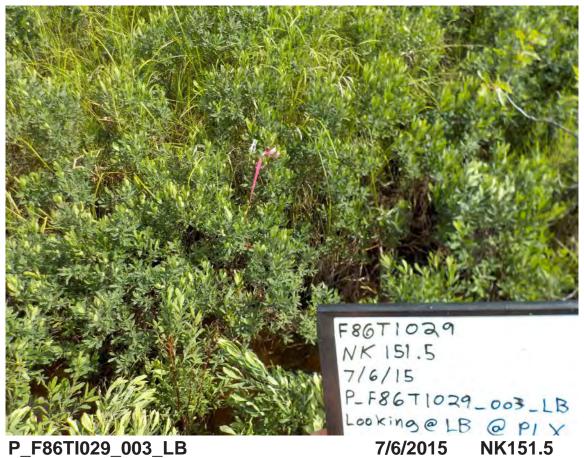
P\_F86TI029\_001\_US LOOKING US AT PLX

7/6/2015 NK151.5



P\_F86TI029\_002\_DS LOOKING DS AT PLX

7/6/2015 NK151.5



LOOKING AT LB AT PLX



P\_F86TI029\_004\_RB LOOKING AT RB AT PLX

7/6/2015 NK151.5



P\_F86TI029\_005\_AERIAL **AERIAL PHOTO** 

7/6/2015

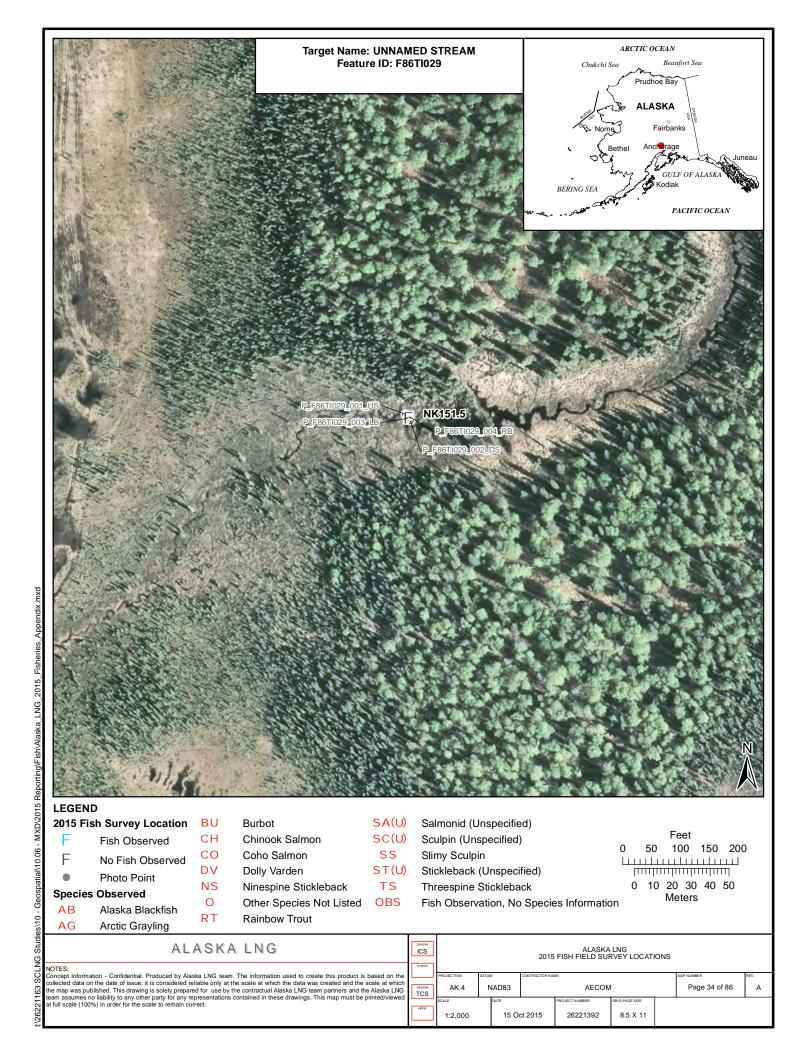
NK151.5



P\_F86TI029\_006\_AERIAL **AERIAL PHOTO** 

7/6/2015

NK151.5



CHE DECEPIONION	生化的生物学的复数形式	<b>阿鲁根据师是数据</b>		THE PROPERTY OF THE PROPERTY O
Date: 7 7 2015 Investigato	ors: 505 NJS	KALL	Team No.: F86 Fe	eature ID: (2/17) 2 D
1 / 1	C 1	) KALH	121	1 66.17050
Stream Name: Unnamed	stream			tream ID: // K / S / S
Pipeline Milepost: 679.2 Stream f	ound as expected (Y/N):	٧		wy MP (N/A if heli accessed):
Latitude: 62° 07 21, 440	0"N	Longitue	de: 150° 1315	59.9371" W
Logbook No.: Logbook Page No.:	18 - 49 Total Fish C	0 (10)		Total Photos:
US @ CL Pic No.: V 5 %6(1030, 001, US Pic N	DCL F 86 T003	RB to LE	1@ CL V 186710 <b>30</b> -003.	LB to RB@ CL LB Pic No.: 6 F 86 H 030-004- RB
Other 8-18671030-005-			030_007.A	
Pic No(s).: P 16671030 - 006				
		W-16 4 10 5 1/4		THE REPORT OF SHIPE BY A STATE OF THE STATE
Weather (Describe):	overcust	Precipitation (I	Describe):	rain
Water Temperature (°C): 6.57	Air Temperature (°C):	17	pH: 4.60	Dissolved Oxygen (mg/l): / . 05
Specific Conductance(µS/cm): 3 5		3.1	ORP (mV): 200.0	Dissolved Oxygen (%): 10.9
Ambient Conductance(µS/cm): 30	Odor: None	Sheen (Y/N): \/	Color: Clear	Last date of Calibration: 7/6/20/5
	alow + hidder	6	illows	Wetted Width (m): 84
		mall lake	Three	Thalweg Depth @ CL (m): , 3
Riparian Veg at 0-5 m at LB: Riparian Veg	at 0-5 m at RB: Strea	m Substrate:	Aquatic Habitats	
20 Grass/Sedge (%) 20 G	rass/Sedge (%) 3	Organics (%)	Sand Bar	Large Woody Debris
Shrubs (%)SI	nrubs (%)	Silt (%)	Mud Bar	Overhanging vegetation
2	rees (%)	Sand (%)	Gravel Bar	Contiguous Wetlands
Diameter DBH (in.)  Diar	neter DBH (in.)	Gravel (%)	Riffles	Emergent Plants
Stream Type:	-//	Cobble (%)	✓ Pools  ✓ Undercut Banks	Submerged Plants
PerennialIntermittent	Ephemeral	Doulders (%)	Olider Cut Baliks	
STREAM PROFILE: Plan View (include direction NORTH:	of flow, centerline, dista	unter IO.	13 ~ deep	
₹/ow	91 m		PLX PLX	hoot + (me Shapping carducted in pond
Revision Date: 3/19/2015		14	- 1	Page 1 of <u>d</u>

Feature ID: <u>F867030</u>

METHODS ATTR	RIBUTES		Her But His	部分 设制制设	DISCOURAGE STREET	建数		NOW HAVE BUILDING
Minnow Traps (	//N):	Hook and Line (Y/N	: \	Beach Seine (Y	(N): 1/A	Fyke No	et (Y/N):	Hoop Net (Y/N):
No. of Minnow	Traps Set: 🥱	Date & Time in: 7	17/2015	Date &Time in:	7011	Date &	Time in:	Date & Time in:
Date & Time in:		(mm/dd/yyyy) / No. of lines in water	15-1240	(mm/dd/yyyy)	1		d/yyyy) Time out:	(mm/dd/yyyy)  Date & Time out/
(mm/dd/yyyy)	1545		O.	No. of passes:			d/yyyy)	(mm/dd/yyyy)
Date & Time out (mm/dd/yyyy)	7/7/2015	Time lines in water:	50	Reach Length (	m):		1	militia   Citizen
ELECTROFISHIN	G ATTRIBUTES	MACHINE SERVICE	<b>新黎野新</b>	The state of the s	<b>斯提出</b>	46	. IF . M Pa	
EF (Y/N): //	EF Start Ti	me:	EF End Time:		EF Time (sec	conds):	EF	Reach Length (m):
Duty Cycle:		Frequency (Hz) :		Waveform:		Sampli	ng Efficiency (% of	
Current (A):	_\	Volts (V):		Power (W):			_	(amp'x volts)
FISH OBSERVAT	ions					S Cole		
ID (Seq. Num)	Gear Type	Species		otal Length nm)	Life Stage (Juvenile or A	Adult)	Disposition (Dead or Alive)	Picture No.
001	vis. Obo	Mood	1000	n/a	juvenal	1	alike	*P. F8617 U30 - 008-WF
002		1	)	1				NA
003				-				P-F867030_009_WF
004	1							P-F867030-010-WF
007	MT2		,		1			* RF867030_011-WF
7	11112	84	1	/	V	/	/	1
				1		/		
4								./
				_	/			
	\				_/		/	
physical materials	itional information	NUMBER OF STREET	是中国的	<b>新工作的</b>		問義問	A.A. (2)	46%。1865年文学等市场24
- Sen	eral ku	7055. ob:	served	and	one (	cango	lut ih	milhan trap
,	U					, V		
- 9	ream	Conne	te +	wo s	mall	(0)	tes	
	1	(01,	,					
- 17	Alow		i.					
	1000							
- flu	13ha	1/2 5	mall	late In	5 0	M	T2 +	adjacent
1 14	L'SI ON	**		sike M				
	+8	MTI						
	,							
MISCELLANEOU	S POINTS (if applie	cable)	12 84 Java		STATE WILL	100	- HARANIC	English White
Point ID:	^	VA:	Description:	NA	9:00:00		100000000000000000000000000000000000000	
Point ID:		N/K	Description:	A/ N	r			
Field		× 11	Field Scientist	1 din	10	11	Technical	
Crew Chief:		2	Technician:	wen	1 on	N	Lead:	

This form is to be completed before leaving the field site.

Feature	ID:	F86T	1030
Feature	ID:_	1861	1030

FT#<u>NK151.</u>1

Date: 7/7/2015

For all items not checked, please provide detailed explanation in the notes section of data form.

### 1. Site Description

- ☑ Was ADF&G contacted before conducting any work in this area?
- ➢ Site Description complete? (Every cell must have entry or N/A)
- ∠ Were all photos taken and labeled correctly?

### 2. Physical/Chemical Attributes

- ☼ Calibration performed prior to sampling?
- A Physical/Chemical attributes complete? (Every cell must have entry or N/A)
- ☐ Water quality data within expected ranges?
  - ∯ pH: 4.0 10.0
  - ☑ NTU: 0 3000

  - ☑ Temp.: 1.0 19.0
  - Specific Conductance: 20 1500



#### 3. Stream Profile

- Stream profile view sketch included?
- Stream profile view captures water depth and wetted width?
- Stream profile view captures where efforts were made to capture fish?
- ☑ Plan view sketch included?

#### 4. Methods Attributes

- Methods attributes complete? (Every cell must have entry or N/A)
- Were methods used adequate (explanation needed if no methods selected)?

### 5. Electrofishing Attributes

NAT

Electrofishing attributes complete? (Every cell must have entry or N/A)

Are units correct?

Feature ID: <u>F867030</u>

#### 6. Fish Observations

- Are all fish captured/observed recorded in the Fish Observation table?
- Are units correct? (Total Length (mm))
- Were adequate photos taken of fish captured? (Take a photo if in doubt)

#### 7. General

- Feature ID and Field Target # are consistent on data forms, logbook entries, photos, and maps?
- All additional data in logbook captured on data form and additional photos noted?
- Were all additional comments on stream habitat, etc. recorded on data form?
- Was any gear missing/damaged for this survey or did you have any problems that should require resampling of this stream for an adequate survey effort?

By signing below, I verify that all field data for this site has been verified for accuracy and completeness.

X Neal Smith X Gelal Smith
Fisheries Biologist (print)
Signature

Fleid Crew Chief (print)

Signature



P\_F86TI030\_001\_US LOOKING UP AT PLX

7/7/2015 NK151.1



P\_F86TI030\_002\_DS LOOKING DS AT PLX

7/7/2015 NK151.1



P\_F86TI030\_003\_LB LOOKING AT LB AT PLX

7/7/2015 NK151.1



P\_F86TI030\_004\_RB LOOKING AT RB AT PLX

7/7/2015 NK151.1



P\_F86TI030\_005\_AERIAL AERIAL PHOTO

7/7/2015

NK151.1



P\_F86TI030\_006\_AERIAL AERIAL PHOTO

7/7/2015

NK151.1



P\_F86TI030\_007\_AERIAL AERIAL PHOTO

7/7/2015 NK151.1



P\_F86TI030\_008\_WF PHOTO OF WOOD FROG

7/7/2015 NK151.1



P\_F86TI030\_009\_WF PHOTO OF WOOD FROG

7/7/2015 NK151.1



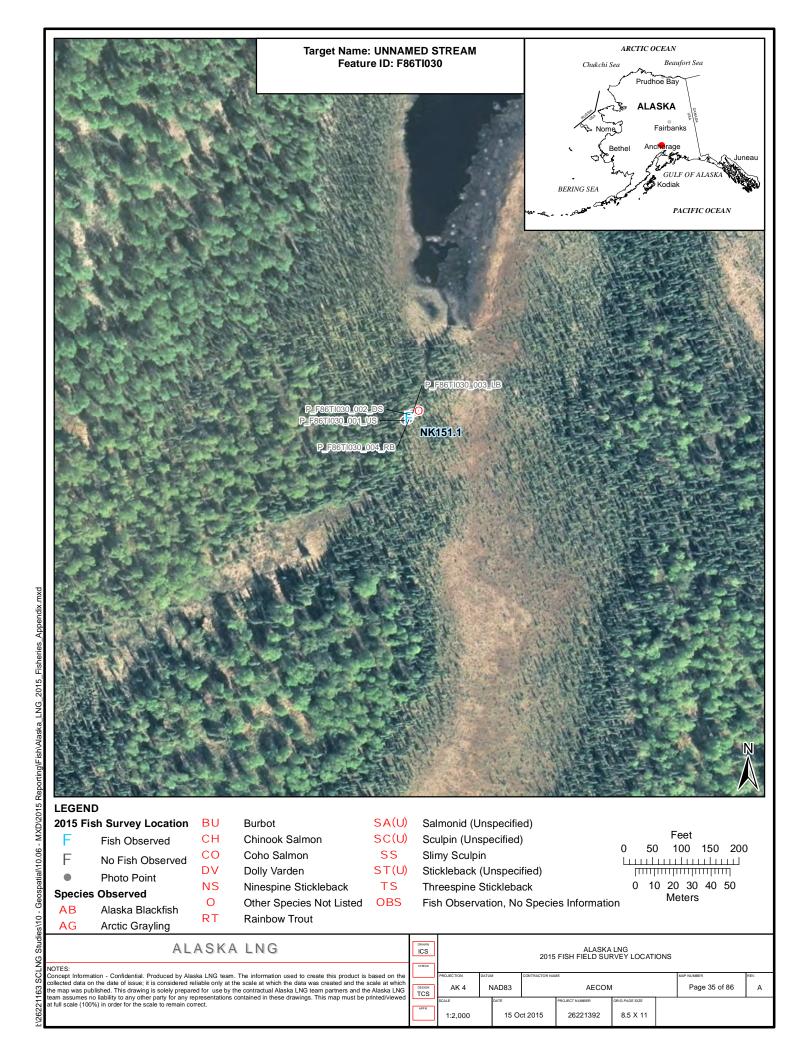
P\_F86TI030\_010\_WF PHOTO OF WOOD FROG

7/7/2015 NK151.1



P\_F86TI030\_011\_WF PHOTO OF WOOD FROG

7/7/2015 NK151.1

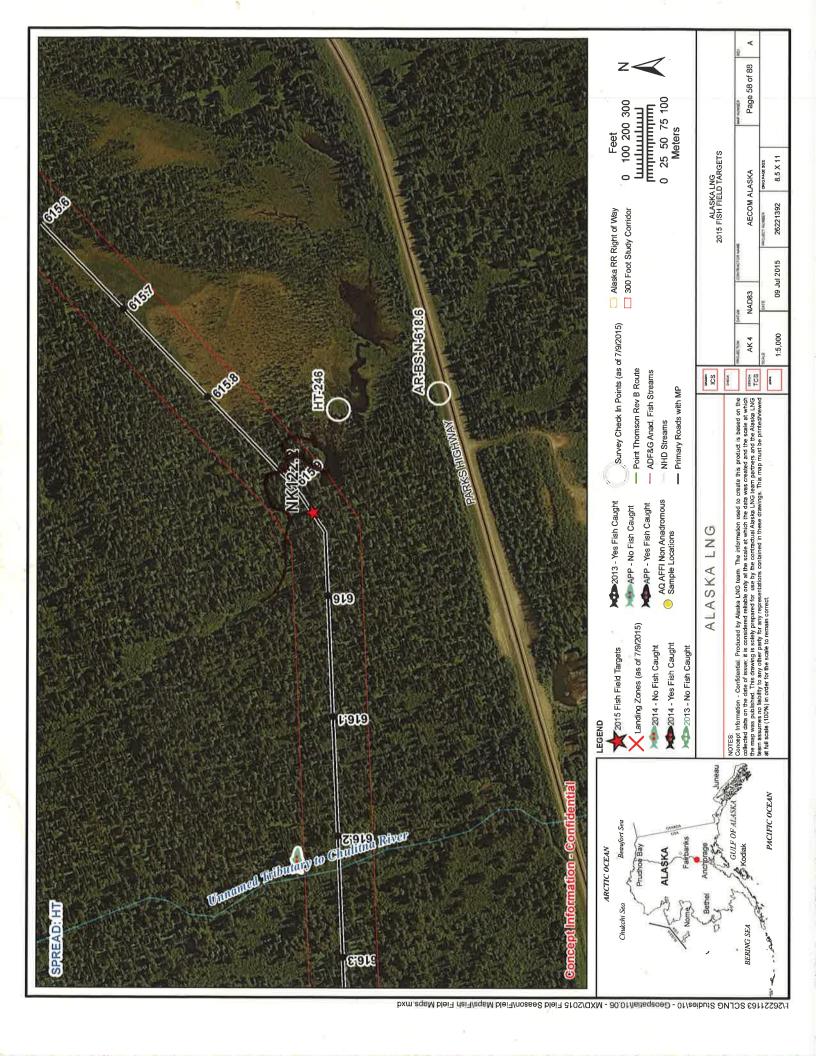


SITE DESCRIPTION		到你能到此下感		
The same of the sa	vestigators: SCS	NJS ANG	Team No.: F8/ F	eature ID: F86H77005
	T 1 1 21	to Chalitin	0	tream ID: NK122.2
MATCA	Stream found as expected (	1.1		lwy MP (N/A if heli accessed): 161.6
Pipeline Milepost: 615.9	4	,		
OV TO	7.0726 N		itude: 149 48	30.3009 W
		Fish Caught: 7	Fish Mortalities:	LB to RB@ CL
US @ CL Pic No.: P_ 8411005-001-US	Pic No.: P-F86 HYDI	05-DO2-DS Pich	D.B. CL 10.: P-F-86 HT005-003	0 0000000000000000000000000000000000000
Other P_F864T005_ Pic No(s).:	.oos. BEAVER PO)	1	4 fish p	rotos
PHYSICAL/ CHEMICAL ATTRIBUTES	。""你。"他,他们就是	STEEL STEEL STEEL STEEL		新教学中国《新教学》(1982年)
	rcast		n (Describe):	
Water Temperature (°C):	Air Temperature	~	pH: ★ 9,57	Dissolved Oxygen (mg/l): 9,62
Specific Conductance(µS/cm):		2.56	ORP (mV): 195, 1	Dissolved Oxygen (%): 86,3
Ambient Conductance(μS/cm): 4	3 Odor: none	1 1	Color: Clear	Last date of Calibration: 9/4/2016
	votes: at valley	between up	1 - 0	Wetted Width (m): 1, 6
	rian Veg at 0-5 m at RB:	Stream Substrate:	Aquatic Habitats	Thalweg Depth @ CL (m): 25
2 -		2	1	Large Woody Debris
	-2	Organics (9	Mud Bar	Overhanging vegetation
2 0	5111 003 (70)	Silt (%)	Gravel Bar	Contiguous Wetlands
10	Trees (%) Diameter DBH (in.)	Sand (%)	X Riffles	Emergent Plants
Diameter DBH (in.)(	Diameter DBH (in.)	Gravel (%) Cobble (%)	Pools	Submerged Plants
Stream Type:		Cobble (%)		
PerennialIntermit	tentEphemeral		"	
STREAM PROFILE: Cross Sectional at	ferns de Cobble	boulder substra	25 m He uf some mos	Steep some steeps s caverage
STREAM PROFILE: Plan View (include	direction of flow, centerline	, distances from centeri	ine, photo locations, sample	locations by gear type and ROW)
150 corner  approx 76 m for	mT3	415	all well a	so condor
76 m from		* (location	wast 1 m	12/ Beaver pard
Revision Date: 3/19/2015		appe		Page 1 of 3

METHODS ATTR	RIBUTES.		NO SECTION AND ADDRESS OF THE PARTY OF THE P	<b>数 / 新聞教</b>		Piore March 1982
Minnow Traps (\	Y/N): Y	look and Line (Y/N):	Beach Seine (	Y/N): Fyke N	Net (Y/N):	Hoop Net (Y/N):
No. of Minnow T	Fraps Set: 2 D	Pate & Time in:	Date &Time I	n: Date 8	& Time in:	Date & Time in:
3	) (1	mm/dd/yyyy)	(mm/dd/yyyy		dd/yyyy)	(mm/dd/yyyy)
Date & Time in: (mm/dd/yyyy)	9/5/2015 N	lo. of lines in water:	No. of passes	The second secon	& Time out: dd/yyyy)	Date & Time out: (mm/dd/yyyy)
Date & Time out	: 9/6/2015 T	ime lines in water:	Reach Length			(min/de////)
(mm/dd/yyyy)	1500	AND REPORT OF THE PARTY OF THE		Management of the Control of the Con		INSERT TO A SERVICE
ELECTROFISHING	ALEX SAND ENDINE AL LINES		14 4 4 4 4 4			
EF (Y/N): Duty Cycle:	EF Start Time:	requency (Hz) :	Waveform:	EF Time (seconds):		F Reach Length (m):
Current (A):		olts (V):	Power (W):	Sampl	ing Efficiency (% of	(amp x volts)
	1 1 1		Prevento score (IS access)	NAMES AND DESCRIPTION OF	White Williams Co.	County of the United States of Williams
FISH OBSERVAT	IONS	Unternative Control	Total Length	Life Stage	Disposition	Market Stant
ID (Seq. Num)	Gear Type	Species	(mm)	(Juvenile or Adult)	(Dead or Alive)	Picture No.
061	MT3	Slimy sculpin	90	Sur/adult	Alive	n/a
062	MT3	11	57	inv/adult	11	n/a
003	MT3	U	70	gar/adult	11	n/a
004	11	coho	80	juvenile	11	* PF86 HT005-006-COM
005	11	Coho	72	1	11	nla
006	11	Coho	70	"	H	Na
007	11	coho	68	( (	11	*P_F86HT005-007-COHO
068	MTZ	Coho	.08	11	11	n/a
009	MTA	Coho	64	"(	11	1/1
010	MTZ	Coho	61	(,	11	1/1
012	MTI	Coho	130	()	11	P-FRHHTIDS DOB COHO
	MTI	Coho	126			\$ P_F864T005_009.CON
NOTES (any addi	tional information)	<b>经验的数据数据</b>	的學出意理和	位数数分别是商品	计从第1年制度	
- cons	ght (one	of reaching ac	my sca	(pih ih N	17	
	V	l= 00=-(1	- 101		- 1:60	Hd
# PH	Was n	of reading ac	curage	y when	Carro	See
,						map
Indian -	al tag	et was lo	rated	on upla	nd - ma	are d 1
01/2/1		Augl				. 0/1/
tare	get o	bbux 940, N	E, u	there SAV	leam cr	osses pu
	9					
- ctroa	en well	defined + co	manic	1 within	Steep 1	banks.
- (000	ited I	)S of beau	ser por	ed compl	ex	
MISCELLANEOUS	POINTS (if applicabl	e) Profesional England	A STATE OF	AND A SERVICE	<b>心湿度的</b>	The second second
Point ID:	MA	Description	11 1/	IA		
Point ID:	MA	Description	1:	14		
Field	1	Field Scient	tist/ Car	VICE	Technical	
Crew Chief: _		Technician	1 1/1 1/1	LONG	Lead:	

Feature ID: <u>F86HT005</u>

ISH OBSERVAT	IONS (continued)					
) (Seq. Num)	Gear Type	Species	Total Length (mm)	Life Stage (Juvenile or Adult)	Disposition (Dead or Alive)	Picture No.
013	MTI	Coho	137	juerile	Alive	n/a
DIY	11	Cohp	133	3.00	11	2/0
014	11	Coho	133	11	11	n/a
016	U	Coho	139	11	()	ala
017	11	Coho	135	(1	1/	nla
017						
				1		
		1				
-					1	
	1					
	1		1	1		
	1		+			
		1	46			
		1				



This form is to be completed before leaving the field site.
Feature ID: <u>F86 HT005</u> FT # NK 122, 2 Date: 9/6/15
For all items not checked, please provide detailed explanation in the notes section of data form.
1. Site Description
Was ADF&G contacted before conducting any work in this area?
Site Description complete? (Every cell must have entry or N/A)
Were all photos taken and labeled correctly?
2. Physical/Chemical Attributes
Calibration performed prior to sampling?
Physical/Chemical attributes complete? (Every cell must have entry or N/A)
Water quality data within expected ranges?
<b>y</b> pH: 4.0 − 10.0
<b>™</b> NTU: 0 – 3000
DO (mg/L): 1.0 15.0
<b>Temp.:</b> 1.0 – 19.0
Specific Conductance: 20 - 1500
ຐຐຐ lf outside expected ranges, was sample re-taken?
Are units correct?
3. Stream Profile
Stream profile view sketch included?
Stream profile view captures water depth and wetted width?
Stream profile view captures where efforts were made to capture fish?
Plan view sketch included?
4. Methods Attributes
☑ Methods attributes complete? (Every cell must have entry or N/A)
Were methods used adequate (explanation needed if no methods selected)?
5. Electrofishing Attributes
N/A DElectrofishing attributes complete? (Every cell must have entry or N/A)
Are units correct?

Feature ID: F86+IT005

6.	Fish Observations		-
	Are all fish captured/observed red	orded in the Fish Observation	table?
	Are units correct? (Total Length ()	nm))	
	Were adequate photos taken of fi	sh captured? (Take a photo if i	n doubt)
7.	General	Ŧ	
	Feature ID and Field Target # are photos, and maps?	consistent on data forms, logb	ook entries,
,	🗷 All additional data in logbook capt	ured on data form and addition	al photos noted?
	Were all additional comments on	stream habitat, etc. recorded o	n data form?
NO, but pH was accurately	<ul><li>Was any gear missing/damaged f</li><li>that should require resampling of</li></ul>	or this survey or did you have a this stream for an adequate su	any problems rvey effort?
	ing below, I verify that all field data fo teness.	r this site has been verified for	accuracy and
	X Neal Smith	Xacal Sat	
	Fisheries Biologist (print)	Signature	
ŧ		A Comment	
2	X Sansimpson	X	
	Fleld Crew Chief (print)	Signature	
4		*	



P\_F86HT005\_001\_US LOOKING US AT PLX

9/5/2015 NK122.2



P\_F86HT005\_002\_DS LOOKING DS AT PLX

9/5/2015 NK122.2



P\_F86HT005\_003\_LB LOOKING AT LB AT PLX

9/5/2015 NK122.2



P\_F86HT005\_004\_RB LOOKING AT RB AT PLX

9/5/2015 NK122.2



P\_F86HT005\_005\_BEAVER POND 9/5/2015 NK122.2 LOOKING AT BEAVER POND COMPLEX US OF PLX



P\_F86HT005\_006\_COHO PHOTO OF COHO SALMON

9/5/2015 NK122.2



P\_F86HT005\_007\_COHO PHOTO OF COHO SALMON

9/5/2015 NK122.2



P\_F86HT005\_008\_COHO PHOTO OF COHO SALMON

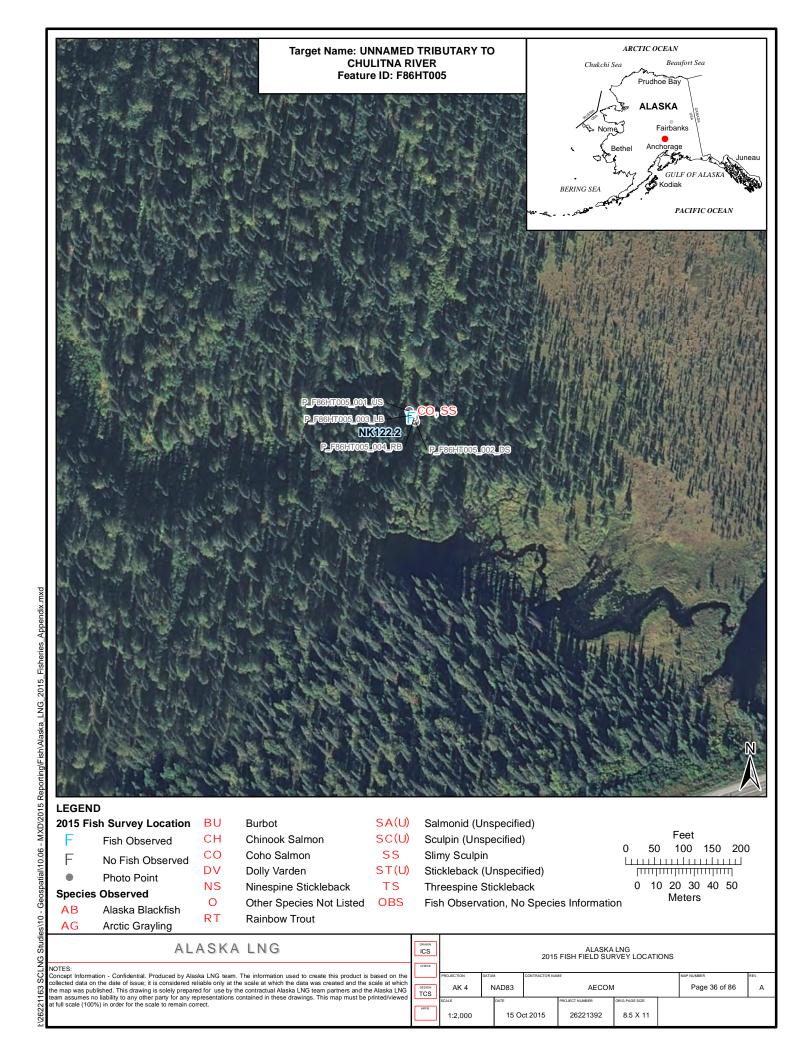
9/5/2015

NK122.2



P\_F86HT005\_009\_COHO PHOTO OF COHO SALMON

9/5/2015 NK122.2



Revision Date: 3/19/2015

SITE DESCRIPTION		Participation of the Participa	
Date: 9/6/2015 Investigat	tors: SCS NJS ADF	Team No.: F86 Fea	ature ID: F86HT004
Stream Name: Unramed	Stream		ream ID: //K/22.1
W.U	found as expected (Y/N):	Hw	vy MP (N/A if heli accessed): 162 - 8
Latitude: 62°53' 12.140		ide: 149° 461	42.5673" W
Logbook No.: 3 Logbook Page No.:		Fish Mortalities:	)/ A Total Photos: 🖵
US @ CI DS	@ CL RB to L	B@ CL	LB to RB@ CL
Pic No.: P F86H T 004-001-US Pic	No.: P. F&6 117004-002-05 Pic No.	P-F86417004-003	-LB PIC NO.: P. F86+1TBOY_DOY_RB
Other	11/1		
Pic No(s).:	MA	P	
PHYSICAL/ CHEMICAL ATTRIBUTES	the least of the season with the least	(Describe): 42 DO	
Weather (Describe): Over Cast	Air Temperature (°C):	1 4 6 1	Dissolved Oxygen (mg/l): 3,34
Water Temperature (°C): 9,96	Air Temperature (°C): 15  Turbidity (NTU): 1 7 4	1011	Dissolved Oxygen (%): 29,6%
Specific Conductance(μS/cm): 238  Ambient Conductance(μS/cm): 1 8 6		ORP (mV): 279,9  Color: brown tint	Last date of Calibration: 9/4/20/5
	channel present but spreads ont		
Flow (Y/N): Notes:	feature is ponded w) no	apparent flor	
100	at 0-5 m at RB: Stream Substrate:	Aquatic Habitats	
2	Grass/Sedge (%) 46 Organics (%)	Sand Bar	Large Woody Debris
A	Shrubs (%)	Mud Bar Gravel Bar	Overhanging vegetationContiguous Wetlands
10	Trees (%)	Riffles	Emergent Plants
	© Cobble (%)	Pools	Submerged Plants
Stream Type:  Perennial Intermittent	Ephemeral Boulders (%)	Undercut Banks	
	(include riparian vegetation, wetted width, w	ater depth, substrate, and a	quatic habitats)
Submerged/emelor	mud/silt gravel	Sm J. 83 m	rasses & Birch  some I Harris
NORTH:  Plan View (include direction)  NORTH:  Plan View (include direction)	mof flow, centerline, distances from centerline  MT=  PSM  From  Torryt  STA  STASSY		Part Provide Action of Part Stassy Wellands

Page 1 of €

Feature ID: F86H700H

METHODS ATTE	RIBUTES	A. A	侧连线照			JOHN P	<b>从</b> 图点制造师	All Seasons and the Control of the C
Minnow Traps (	200	Hook and Line (Y/N	): //	Beach Seine (	Y/N):	Fyke N	let (Y/N):	Hoop Net (Y/N):
'No. of Minnow'	Traps Set: 🤿	Date & Time in:	/ 0	Date &Time in		Date 8	R Time in:	Date & Time In:
	<u> </u>	(mm/dd/yyyy)		(mm/dd/yyyy			dd/yyyy)	(mm/dd/yyyy)
Date & Time in: (mm/dd/yyyy)	1445	No. of lines in wate	r:	No. of passes			k Time out: dd/yyyy)	Date & Time out: (mm/dd/yyyy)
Date & Time ou (mm/dd/yyyy)	1415	Time lines in water		Reach Length	(m):			log 1.5 John Baltyd
ELECTROFISHIN	HARMAN A REFERENCE AS THE RESIDENCE OF THE PERSON OF THE P				WE WE ST	Mary.		
EF (Y/N):	EF Start Ti	me:	EF End Time:	1	EF Time (se	conds):	EF	Reach Length (m):
Duty Cycle:	1	Frequency (Hz) :		Waveform:		Sampl	ing Efficiency (% of	
Current (A):	1	Volts (V):		Power (W):				(amp.x volts)
FISH OBSERVAT	TONS	de la marca de la		otal Length	Life Stage		Disposition	
ID (Seq. Num)	Gear Type	Species		nm)	(Juvenile or	Adult)	(Dead or Alive)	Picture No.
	1	1			)		)	
				-				
				-				-
				1				
				1				
	-1-			1		_	1	
NOTES (any add	litional information	(T) 企图 (A) (A) (A) (B)	CERCES SERVICES		ASSEMBLE MARKET	1002 4500	The table to State and	
				1	HANDSON CONTINUES COM			- 2-12M-017C0000, 027-0-0-0-0-0-0-0-0-0-0-0-0-0-0-0-0-0-0-
- N	a 1,31	h car	tule	11	MI	1		
	WC AND	- reading	accurati	cly wh	en ca	liber	ated	
A PH	was not			/	, ,	,		A1 . A 1
- feat	ure is	a str	ignant	wide	2 pon	q	located	North of
2	ke 11	· frila	o ded)					
ra	rks thu	sy, (culu						
		T .						
- 110	of tare.	at flow			, /	*	1	1
. Subr	rerged /	emergent	Fra SS.	es +	mud/org	ani	c Subst	rate w/
		grave						/
MISCELLANEOU	IS POINTS (if applic		the deferred	SE STEE NO	A STATE OF		W. Sales British	and the second of the second
Point ID:	\/\ /		Description:		1/1/	1	and the last last last last last last last last	
Point ID:	10 1	A	Description:		.///			
Field		1	Field Scientist	1 Cunst	10/		Technical	
Crew Chief:	1	7-	Technician:	ned	Soul		Lead:	
		4						

This form is to be completed before leaving the field site. Date: 9/6/15 Feature ID: F86+IT004 FT # NK 122.1 For all items not checked, please provide detailed explanation in the notes section of data form. 1. Site Description Was ADF&G contacted before conducting any work in this area? Site Description complete? (Every cell must have entry or N/A) Were all photos taken and labeled correctly? 2. Physical/Chemical Attributes Calibration performed prior to sampling? Physical/Chemical attributes complete? (Every cell must have entry or N/A) Water quality data within expected ranges? ∠ pH: 4.0 – 10.0 💢 DO (mg/L): 1.0 – 15.0 **▼** Temp.: 1.0 – 19.0 Specific Conductance: 20 - 1500 N/A If outside expected ranges, was sample re-taken? Are units correct? 3. Stream Profile ★ Stream profile view sketch included? Stream profile view captures water depth and wetted width? Stream profile view captures where efforts were made to capture fish? ✓ Plan view sketch included? 4. Methods Attributes Methods attributes complete? (Every cell must have entry or N/A) Were methods used adequate (explanation needed if no methods selected)? 5. Electrofishing Attributes Electrofishing attributes complete? (Every cell must have entry or N/A) Are units correct?

Feature ID: F86HT004

#### 6. Fish Observations



- Are all fish captured/observed recorded in the Fish Observation table?
- Are units correct? (Total Length (mm))
- Were adequate photos taken of fish captured? (Take a photo if in doubt)

### 7. General

- Feature ID and Field Target # are consistent on data forms, logbook entries, photos, and maps?
- All additional data in logbook captured on data form and additional photos noted?
- Were all additional comments on stream habitat, etc. recorded on data form?
  - Was any gear missing/damaged for this survey or did you have any problems that should require resampling of this stream for an adequate survey effort?

By signing below, I verify that all field data for this site has been verified for accuracy and completeness.

X Neal Smith X great Signature

X San Sinpson X
Field Crew Chief (print)

Signature



P\_F86HT004\_001\_US LOOKING US AT OFF-ROW TARGET



P\_F86HT004\_002\_DS LOOKING DS AT OFF-ROW TARGET

9/5/2015 NK122.1

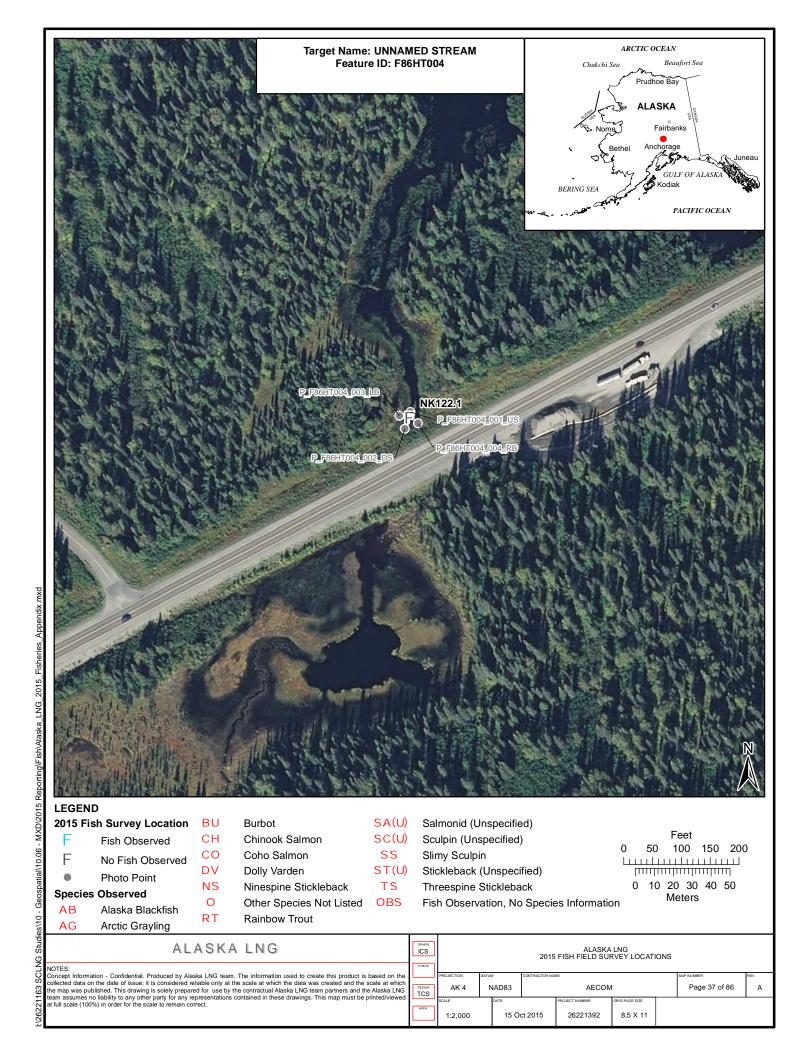


LOOKING AT LB AT OFF-ROW TARGET



P\_F86HT004\_004\_RB
LOOKING AT RB AT OFF-ROW TARGET

9/5/2015 NK122.1



SITE DESCRIPTION	MASHER OF	政治的政治			<b>位于大学</b>	回語解	
Date: 9/4/2015	Investigato	ors: SCS	SCN	ADF		Feature I	D: F86HT002
Stream Name: Unnamed	Tribut	tary to	East	Fork C	hulitra River	Stream II	» NKIIQ
Pipeline Milepost: 593, 9	Stream fo	ound as expected	:(N\Y)	Y		Hwy MP	(N/A If heli accessed): heli
Latitude: 63°0	7' 26.0	0610"N		Longitu	de: 149° 25'	58,	1923" W
Logbook No.: 3 Logboo	k Page No.:	12-45 Tot	al Fish Cau		Fish Mortalities:	NI	Total Photos: 6
US @ CL Pic No.: P_F86HT002_001_1	DS @	) CL lo.: (* (*864T)	- במת במי	RB to LE	8@ CL P_P86H1002_0	03-18	LB to RB@ CL Pic No.: P_F86H1702 - 004-RB
Other P-F86 HT002.		RIAL					
Pic No(s).: P-F86 HTDO							
PHYSICAL/ CHEMICAL ATTRIBUTE		the court was			THE PARTY OF THE P		
	vescas	+		Precipitation (	Describe): /ight	ra	in
Water Temperature (°C):	,62	Air Temperatu	ıre (°C):	12	pH: * 8. 95	Disso	olved Oxygen (mg/l): 14.01
Specific Conductance(µS/cm):	238	Turbidity (NTU	J): 0 .	52	ORP (mV): 210,3	Disso	olved Oxygen (%): /03 _ /
Ambient Conductance(μS/cm):	136	Odor: none	e st	heen (Y/N):/	Color: clear	Last	date of Calibration: 9/4/2015
Defined Channel (Y/N):	Notes:	contained	within	n Steep b	anks		Wetted Width (m): 1.92
Flow (Y/N):		righ grad		ribblos			Thalweg Depth @ CL (m): 34
an		at 0-5 m at RB:	Stream 3	Substrate:	Aquatic Habitats		Large Weedy Debris
diass/seage (xs)		rass/Sedge (%)	7	Organics (%)	Sand Bar Mud Bar		Large Woody Debris Overhanging vegetation
	200	rees (%)	5	Silt (%)	Gravel Bar		Contiguous Wetlands
Trees (%) 5 Diameter DBH (in.)	7	neter DBH (in.)	10	Sand (%)	Riffles		Emergent Plants
	TV TT DIAM	neter Don (in.)	50	Gravel (%)	Pools		Submerged Plants
Stream Type:				Cobble (%)	F00is		Submerged Flants
			1 35	Douldors (9/)	Undercut Bank	<b>'</b> S	
PerennialInte	rmittent	Ephemeral	35	Boulders (%)	Undercut Bank	KS .	
STREAM PROFILE: Cross Sectiona	at Crossing	(include riparian			ter depth, substrate, an	d aquatic	habitats)
	at Crossing					d aquatic	habitats)
STREAM PROFILE: Cross Sectiona	at Crossing	(include riparian	vegetation		ter depth, substrate, an	d aquatic	habitets)
SPY UCO	lat Crossing	Unclude riparian willows	vegetation,	, wetted width, wa	ter depth, substrate, an	d aquatic	habitats)
SPY UCO	lat Crossing	Unclude riparian willows	vegetation,	, wetted width, wa	ter depth, substrate, an	d aquatic	habitats)
STREAM PROFILE: Cross Sectiona	lat Crossing	Unclude riparian willows	vegetation, 2 m	, wetted width, wa	ter depth, substrate, an	d aquatic	habitats)
SPY UCO	ails	linclude riparian willows 1,9	vegetation, 2 m	wetted width, was	ter depth, substrate, an	d aquatic	frabitiets)
SPY UCO	ails	Unclude riparian willows	vegetation, 2 m	wetted width, was	ter depth, substrate, an	d aquatic	habitats)
SPY UCE  STREAM PROFILE: Cross Sections  Crowbern  Spruce  Svass  horses  STREAM PROFILE: Plan View (inc.)	ails	linclude riparian willows  1.9  ciff  cobble/1  some moss	Vegetation,  2 m  Fles  boulders  cove	weited width, was	ter depth, substrate, and	d aquatic ows	s by gear type and ROW).
SPY UCE  STREAM PROFILE: Cross Sections  Crowbern  Spr UCE  Spr UCE  Stream Profile: Plan View (inc. NORTH:	ails	linclude riparian willows  1.9  ciff  cobble/1  some moss	Vegetation,  2 m  Fles  boulders  cove	wetted width, was	ter depth, substrate, and dende will will will will will will will wil	d aquatic ows	A SSES
SPY UCE  STREAM PROFILE: Cross Sections  Crowbern  Spruce  Strass  horses  STREAM PROFILE: Plan View (inc.)	ails	linclude riparian willows  1.9  ciff  cobble/1  some moss	Vegetation,  2 m  Fles  boulders  cove	wetted width, was	ter depth, substrate, and	d aquatic ows	s by gear type and ROW).
STREAM PROFILE: Cross Sections  Crowdern  Soruce  Stream Profile: Plan View (inc. North:	ails	linclude riparian willows  1.9  ciff  cobble/1  some moss	Vegetation,  2 m  Fles  boulders  cove	weited width, was	ter depth, substrate, and dende will will will will will will will wil	d aquatic ows	s by gear type and ROW).
STREAM PROFILE: Cross Sections  Crowderny  Sorver  Sorver  Stream Profile: Plan View line  NORTH:	ails	include riparian willows  1, 9  ciff cobble/s  some moss	Vegetation,  2 m  Fles  boulders  cove	weited width, was	ter depth, substrate, and dende will will will will will will will wil	d aquatic ows	s by gear type and ROW).
STREAM PROFILE: Cross Sections  Crowderny  Sorver  Sorver  Stream Profile: Plan View line  NORTH:	ails	include riparian willows  1, 9  ciff cobble/s  some moss	Vegetation,  2 m  Fles  boulders  cove	weited width, was	ter depth, substrate, and dende will will will will will will will wil	d aquatic ows	s by gear type and ROW).
STREAM PROFILE: Cross Sections  Crowderny  Sorver  Sorver  Stream Profile: Plan View line  NORTH:	ails	include riparian willows  1, 9  ciff cobble/1  some moss of flow, centerlin	Vegetation,  2 m  Fles  boulders  cove	weited width, was	ter depth, substrate, and dende will will will will will will will wil	d aquatic ows	s by gear type and ROW).
STREAM PROFILE: Cross Sections  Crowderny  Sorver  Sorver  Stream Profile: Plan View line  NORTH:	ails	include riparian willows  1, 9  ciff cobble/s  some moss	Vegetation,  2 m  Fles  boulders  cove	weited width, was	ter depth, substrate, and dende will will will will will will will wil	d aquatic ows	s by gear type and ROW).
STREAM PROFILE: Cross Sections  Crowderny  Sorver  Sorver  Stream Profile: Plan View line  NORTH:	ails	include riparian willows  1, 9  ciff cobble/1  some moss of flow, centerlin	Vegetation,  2 m  Fles  boulders  cove	weited width, was	ter depth, substrate, and dende will will will will will will will wil	d aquatic ows	s by gear type and ROW).
SPY UCE  STREAM PROFILE: Cross Sections  Crowderny  Spy UCE  Stream Profile: Plan View Inc.  NORTH:	lat Crossing	Linclude riparian willows  1.9  Cobble / Some moss  of flow centerlin	Vegetation,  2 m  Fles  boulders  cove	weited width, was	ter depth, substrate, and dende will will will will will will will wil	d aquatic ows	s by gear type and ROW.  SO' CONTINUE  TO SO
STREAM PROFILE: Cross Sections  Crowderny  Sorver  Sorver  Stream Profile: Plan View line  NORTH:	lat Crossing	include riparian willows  1, 9  ciff cobble/1  some moss of flow, centerlin	Vegetation,  2 m  Fles  boulders  cove	weited width, was	ter depth, substrate, and dende will will will will will will will wil	d aquatic ows	s by gear type and ROW).

Page 1 of <u>2</u>

Feature ID: F86HT002

METHODS ATTR	RIBUTES	<b>出意外</b> 認為[4]				1 10 h	<b>表的</b> 种语言为		<b>海水场,加州大学</b> 工作。
Minnow Traps (	Y/N): Y	Hook and Line (Y/N):	N	Beach Seine (Y/	N):	Fyke N	let (Y/N):	N	Hoop Net (Y/N):
No. of Minnow 1	Fraps Set: 3	Date & Time in:		Date &Time In:	//		k Time in:	1	Date & Time In:
Date & Time In:	9/4/15	(mm/dd/yyyy) No. of lines in water:		(mm/dd/yyyy) No. of passes:	1		dd/yyyy) & Time out:	-	(mm/dd/yyyy)  Date & Time out:
(mm/dd/yyyy) Date & Time out	1700 9/3/15	Time lines in water:		Reach Length (r	nl:	(mm/c	dd/yyyy)		(mm/dd/yyyy)
(mm/dd/yyyy)	1900	Time intes in water.		nescii tengui (i	of the state of				ester) for away
ELECTROFISHING	STREET, STREET	<b>以帮助战</b> 对自己		10年四年10日					
EF (Y/N): N  Duty Cycle:	EF Start Ti	me: Frequency (Hz) :	EF End Time:	Waveform:	EF Time (sec		ing Efficiency (%	_	each Length (m):
Current (A):		Volts (V):		Power (W):		ou.np.	and american pro-	01 3011	(amp x volts)
FISH OBSERVAT	TONS	AND ARTHUR		<b>与心情感以</b> 数			Marin St.		
ID (Seq. Num)	Gear Type	Species	To	otal Length	Life Stage	W. 161	Disposition (Dead or Alive	, P	Picture No.
			- 0	nm)	(Juvenile or A	Adult)	(Dead or Allve	2)	1
						1			
						+			
						+			
	1					1			\
	1		1			1		1	\
		\		1					
NOTES (any add	itional information	<b>1</b> 5000000000000000000000000000000000000	THE RESERVE	种位数数	いみがけ	N. W.		(3)(1)	<b>第</b> 第 5 7 7 7 7 8 9 8 9 9 9 9 9 9 9 9 9 9 9 9 9
-	o \$3h	caught							
stre	iam is	NATA	J +	meand	ering	-	rapid	11	ow - difficult
+	o and	fools/slow	J Was	ter for	traj	25	,		
- Cobl	ble/bowld	er substro	ite da	ninate-	-,noss	; gr	owing a	~ S	one rocks
MISCELLANEOU	S POINTS (if applie	able)	The State of	MATERIAL SERVICE			<b>以特别的</b>	0-7	<b>心是"心情。"</b> 以此
Point ID:	NI	4	Description:	NIA					
Point ID:	1	VA	Description:	N	A				
Field			ield Scientist	91000	SA		Technical		
Crew Chief:	1		echnician:	vice	Jan	_	Lead:		

## This form is to be completed before leaving the field site.

Feature ID: <u>F86HT002</u> FT # <u>NK II</u> Date: <u>9/4/15</u>
For all items not checked, please provide detailed explanation in the notes section of data form.
1. Site Description
Was ADF&G contacted before conducting any work in this area?
Site Description complete? (Every cell must have entry or N/A)
Were all photos taken and labeled correctly?
2. Physical/Chemical Attributes
∠ Calibration performed prior to sampling?
Physical/Chemical attributes complete? (Every cell must have entry or N/A)
Water quality data within expected ranges?
pH: 4.0 – 10.0
NTU: 0 - 3000
<b>DO</b> (mg/L): 1.0 – 15.0
Temp.: 1.0 – 19.0
Specific Conductance: 20 - 1500
ν/Å□ If outside expected ranges, was sample re-taken?
Are units correct?
3. Stream Profile
Stream profile view sketch included?
Stream profile view captures water depth and wetted width?
Plan view sketch included?
4. Methods Attributes
Methods attributes complete? (Every cell must have entry or N/A)
Were methods used adequate (explanation needed if no methods selected)?
5. Electrofishing Attributes
Electrofishing attributes complete? (Every cell must have entry or N/A)  Are units correct?
Are units correct?

Feature ID: F86HT002

### 6. Fish Observations

Are all fish captured/observed recorded in the Fish Observation table?

N/A are units correct? (Total Length (mm))

Were adequate photos taken of fish captured? (Take a photo if in doubt)

#### 7. General

completeness.

- Feature ID and Field Target # are consistent on data forms, logbook entries, photos, and maps?
- All additional data in logbook captured on data form and additional photos noted?
- Were all additional comments on stream habitat, etc. recorded on data form?

but pH was not lovely that should require resampling of this stream for an adequate survey effort?

Collibertian By signing below, I verify that all field data for this site has been verified for accuracy and

X Meal Smith X lead and Fisherles Biologist (print) Signature

1 Sam SIMP

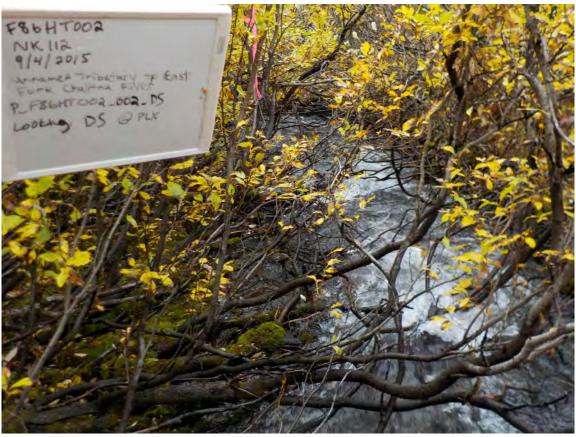
Field Crew Chief (print)

Signature (



P\_F86HT002\_001\_US LOOKING US AT PLX

9/4/2015 NK112



P\_F86HT002\_002\_DS LOOKING DS AT PLX

9/4/2015 NK112



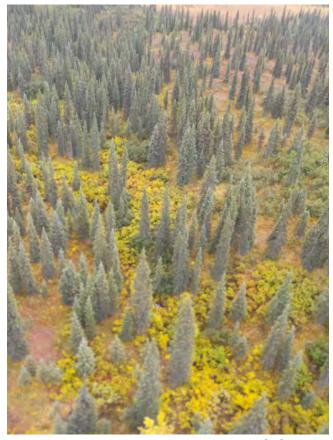
P\_F86HT002\_003\_LB LOOKING AT LB AT PLX

9/4/2015 NK112



P\_F86HT002\_004\_RB LOOKING AT RB AT PLX

9/4/2015 NK112

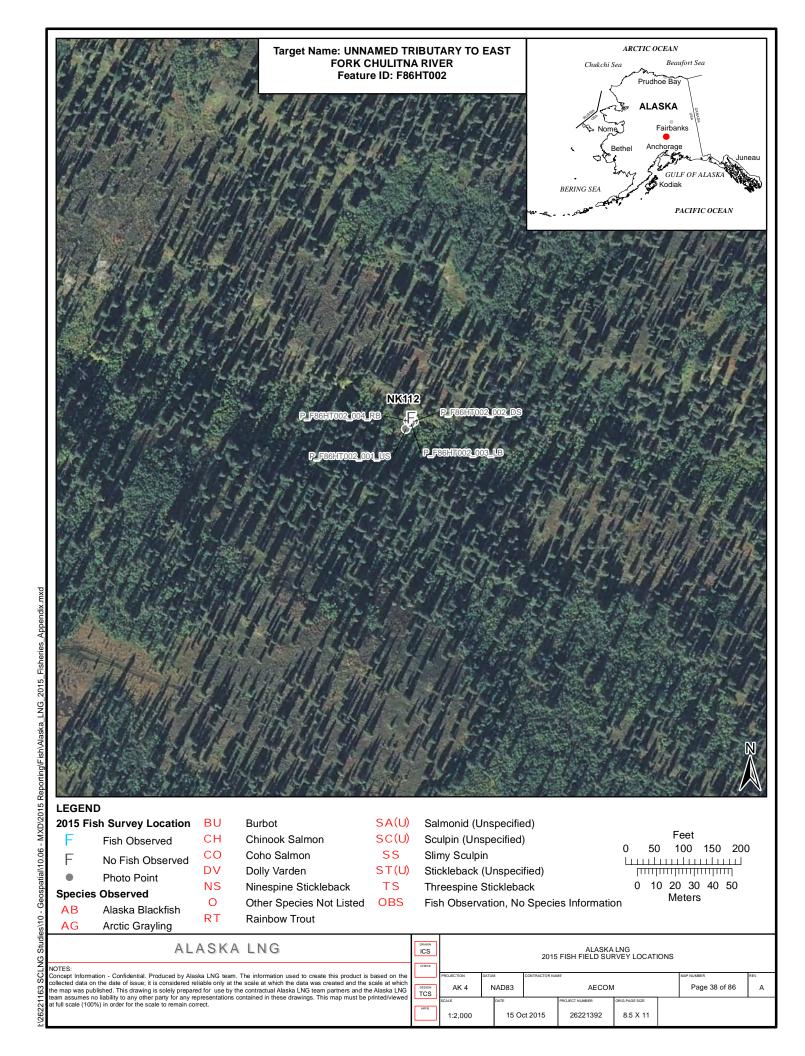


P\_F86HT002\_005\_AERIAL AERIAL PHOTO

9/4/2015 NK112

P\_F86HT002\_006\_AERIAL AERIAL PHOTO

9/4/2015 NK112



Revision Date: 3/19/2015

SITE DESCRIPTION	<b>自然的提供的基本的</b>		<b>建筑是美国政</b>	acade 2011年中国 1916年1916年1916年1916年1916年1916年1916年1916
Date: 9 4 2015 Investigato	rs: SCS NJS +	ADF	Team No.: F86	Feature ID: F86HT001
Stream Name: Hardage Cree	K			Stream ID: NKIII
U I	ound as expected (Y/N):	Y		Hwy MP (N/A if heli accessed):
Latitude: 63° 07' 45,475	13" N	Longitud	de: 149° 25	36.3075" W
Logbook No.: 3 Logbook Page No.: 4	12-44 Total Fish Caugh	nt: Ø	Fish Mortalities:	NA Total Photos: 6
US @ CL Pic No.: P - F86 H T06 L 001-US Pic N	OCL 10:1 - F8 6 + 1 T 801_00	RB to LB	@CL P_PB6HT@OL	LB to RB@ CL Pic No.; P = 86H 1001 - 004-RB
Other P_F86+17001_005	5-AERIAZ			
Pic No(s).: P-F86 HT02	1-006-AERIA	72		
PHYSICAL/ CHEMICAL ATTRIBUTES	A PART OF THE PART	Pada Vida Mill	<b>建国际中央</b>	的复数形式 对重要的现在分词
Weather (Describe):		Precipitation (I	(1077)	
Water Temperature (°C): 4,85	Air Temperature (°C):		рн: № 8.9/4	Dissolved Oxygen (mg/l): 13.13
Specific Conductance(μS/cm): 30 (	1	45	ORP (mV): 190	Dissolved Oxygen (%): 102, 4
Ambient Conductance(µS/cm): 189		een (Y/N): 📢	Color: (lear	Last date of Calibration: 9/4/30/5
	contained with	Lin 1	tanous Va	Wetted Width (m): 5.43 Thalweg Depth @ CL (m):0,30
Flow (Y/N): Notes:  Riparlan Veg at 0-5 m at LB: Riparlan Veg	1 - 2	Substrate:	Aquatic Habitats	Thatweg Deptil @ CL (III).
1	rass/Sedge (%)	Organics (%)	Sand Bar	Large Woody Debris
20	nrubs (%)	Silt (%)	Mud Bar	Overhanging vegetation
0.4	ees (%) 5	Sand (%)	Gravel Bar	Contiguous Wetlands
1000 (///	neter DBH (in.)	Gravel (%)	Riffles	Emergent Plants
	50	Cobble (%)	Pools	Submerged Plants
Stream Type: Perennial Intermittent	Ephemeral 35	Boulders (%)	Undercut Bai	nks
STREAM PROFILE: Cross Sectional at Crossing	(include riparian vegetation,	wetted width, wa	ter depth, substrate, a	nd aquatic habitats)
	willows width = 543,	m W	willows	Breh
	Cobble/bon		trave	- /
		ornihate		
NORTH:	of flow, centerline, distance.	/ 0	photo locations, samp	150' corridor

Page 1 of 2

Feature ID: <u>F86 + 1700)</u>

METHODS ATTR	IBUTES		<b>建于西南亚等地积</b>		<b>阿斯特里斯斯</b>	Will have				<b>经</b> 答用制度
Minnow Traps (Y	nnow Traps (Y/N): Hook and Line (Y/N):			Beach Seine (Y/N):			Net (Y/N):	/	Hoop Net (Y/N):	
No. of Minnow T	. of Minnow Traps Set: 7 Date & Time in:		in:	Date &Time in:		Date & Time in:			Date & Time I	n:
	5	(mm/dd/yyyy	)	(mm/dd	/уууу)	(mm/	dd/yyyy)	1	(mm/dd/yyyy	1
Date & Time in: (mm/dd/yyyy)	1600	No. of lines in	water:	No. of p	asses:		& Time out: dd/yyyy)		Date & Time of (mm/dd/yyyy)	/
Date & Time out		Time lines in	water:	Reach L	ength (m):	4	1		00 S. F.	La signal
(mm/dd/yyyy) ELECTROFISHING	1330 GATTRIBUTES	用原列基的表	相信的意思的知识		SE SERVICE	W. I.L.	WINDSHIP OF THE PROPERTY OF TH	tal in		
EF (Y/N): A	/ EF Start Ti	me:	EF End Time		EP Time (s	econds):	AND THE PERSONS NAMED IN	EF Re	each Length (m):	ALL REPORTS
Duty Cycle:		Frequency (H	z):	Wavefo	rm:	Samp	ling Efficiency (%	of san	nple reach):	1
Current (A):		Volts (V):		Power (	W):					(amp x volts)
FISH OBSERVATI	ions		White he are			Mar a Ma				
ID (Seq. Num)	Gear Type	Spec	les	Total Lengtl (mm)	Life Stage (Juvenile or	r Adult)	Disposition (Dead or Aliv	e) F	Picture No.	
			1			-	1		7	
			1						-	
				-			-	=		
		-								
								-		
	1		1	-		1	1	-		
Name 1	No a reservance	Avenue market	WATER STREET, ST	or Link son	Maria de Comercia	WANT DELL		WEST WA	NE SOFIE STATE OF	
INOTES (any add	itional informatio	n).		<b>网络阿里斯</b>		I THE				
Α.						3	<i>C</i> .	1 ~	/ i	
1 P	) H was	not	reading	a (cu	rate u	wher	Cati	DIZ	anna	
,									\ /	
/V 2	6.34	CO	inght h gradie				1	. 1		
- Str	100 i	s hig	h gradie	2A	1 car	tane	201 a	)/ W		
		_						۲		
Mo	untail	rais	valley-	Rap	A 1/0	V				
			/	,	V					
- cobbl	le/bon/	der c	ubstrate	dom	nate					
	1 - (									
A Response	or course of the same	2 21.5 (		OVER THE REAL PROPERTY.	of a fill that has been a	* J + D 1	COLOR BUILDING	and the same	* 35 -7 DW 14-4 D	ALE SPENISHED S
	S POINTS (if appli	cable)		THE WALL	11/1	1 1 1	1 diament		Part side	
Point ID:	NA,	1 1	Description:	- /	VIH					
Point ID:	N	H	Description:		NIA		Tablette			
Field Crew Chief:		7	Field Scienti Technician:	1 1/1 1/1	ul Sout		Technical Lead:			
	X	~			1		-			

Revision Date: 06/09/2015

Feature ID: F86+1T001

6.	Fish	Obser	rvations
----	------	-------	----------

Are all fish captured/observed recorded in the Fish Observation table?

Are units correct? (Total Length (mm))

Were adequate photos taken of fish captured? (Take a photo if in doubt)

7. General

Feature ID and Field Target # are consistent on data forms, logbook entries, photos, and maps?

All additional data in logbook captured on data form and additional photos noted?

Were all additional comments on stream habitat, etc. recorded on data form?

Was any gear missing/damaged for this survey or did you have any problems that should require resampling of this stream for an adequate survey effort?

By signing below, I verify that all field data for this site has been verified for accuracy and completeness.

X Neal Smith X Wall State

Fisherles Blologist (print)

Signature

Fleld Crew Chief (print)

Signature

370



P\_F86HT001\_001\_US LOOKING US AT PLX



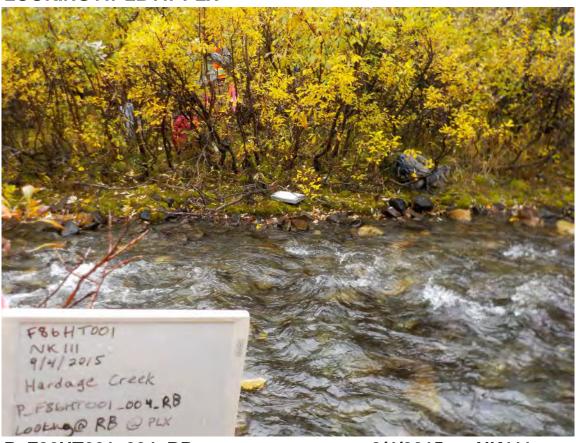
P\_F86HT001\_002\_DS LOOKING DS AT PLX

9/4/2015 NK111



P\_F86HT001\_003\_LB LOOKING AT LB AT PLX

9/4/2015 NK111



P\_F86HT001\_004\_RB LOOKING AT RB AT PLX

9/4/2015 NK111



P\_F86HT001\_005\_AERIAL AERIAL PHOTO

9/4/2015

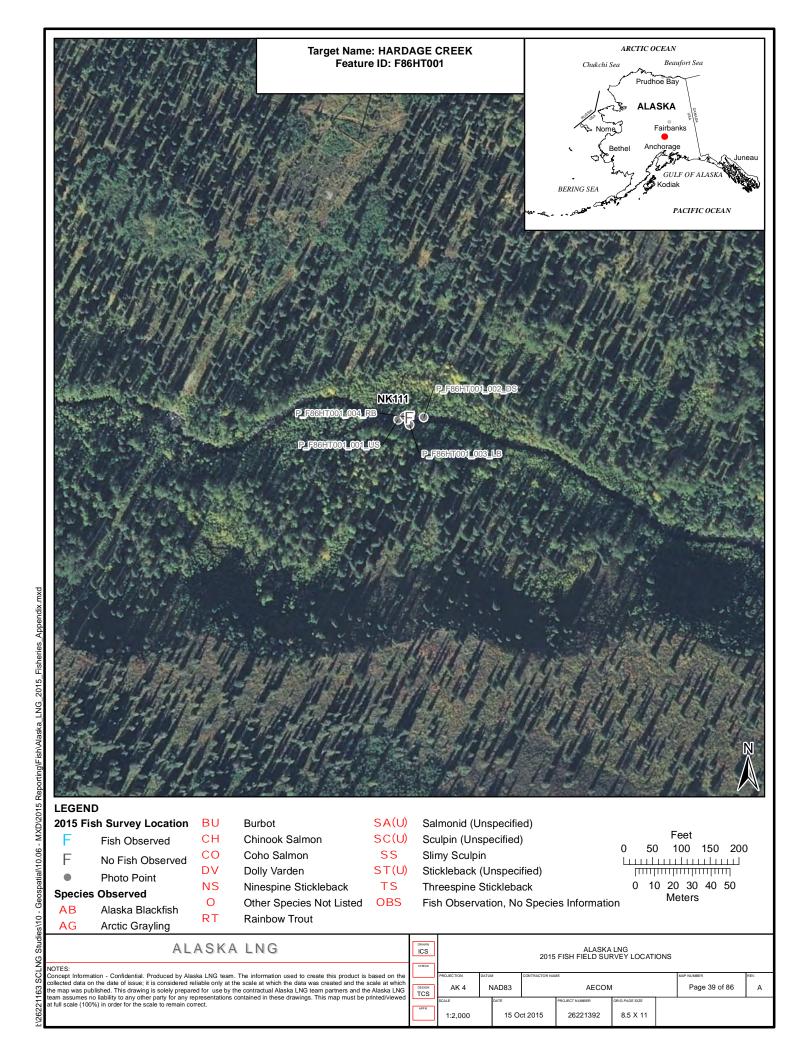
**NK111** 



P\_F86HT001\_006\_AERIAL AERIAL PHOTO

9/4/2015

**NK111** 



SITE DESCRIPTION	· 中国	· · · · · · · · · · · · · · · · · · ·	SECTION DESCRIPTION
Date: 9/4/2015 Investigato	ors: SCS NJS ADF	Team No.: F86 Fea	ature ID: F86HT003
Stream Name: Unnamed Tribute	ary to East Fork Chuli	. 4	ream ID: NK 1/0, 2
	ound as expected (Y/N):		vy MP (N/A if heli accessed):
Latitude: 63° 69' 43.146	9 " N Longitud	de: 1490 2211	11.9833" W
Logbook No.: 3 Logbook Page No.: 4		Fish Mortalities: N	14 1-1-1
UC OCI DO O	, , , , , , , , , , , , , , , , , , ,	3@ CI	LB to RB@ CL
	10.: Y-P86 +(1063_008 - DS   Pic No.:	P.F86 HT003-003	Pic No.: P-FX6417003-004-RB
Other P_F86HT203-005-			
Pic No(s).: P_ F86HT003-006_	AERIAL		
PHYSICALY CHEMICAL ATTRIBUTES	<b>然果。据是你、野农星以下的智慧</b>	建铁管体系等基础	<b>经常用的工作。但是由于1000年代的工作的</b>
Weather (Describe): mostly d		7.0.	
Water Temperature (°C): 7,60	Air Temperature (°C): 13	pH: ★ 8,36	Dissolved Oxygen (mg/l): 11, 97
Specific Conductance(µS/cm): 43	Turbidity (NTU): 4,74	ORP (mV): 179,3	Dissolved Oxygen (%):
Ambient Conductance(µS/cm): 29	Odor: None Sheen (Y/N): N	Color: Clas	Last date of Calibration: 9/4/2-015
Defined Channel (Y/N): \( \frac{1}{2} \) Notes: \( \frac{1}{2} \)	contained with steep and	ig bants	Wetted Width (m): 2.14  Thalweg Depth @ CL (m): .13
Flow (Y/N): Notes:  Riparlan Veg at 0-5 m at LB: Riparlan Veg at 0-5 m at LB: Notes:	at 0-5 m at RB: Stream Substrate:	Aquatic Habitats	Malweg Depth @ Ct (m).
	rass/Sedge (%) Organics (%)	Sand Bar	Large Woody Debris
90 Shrubs (%) 90 Sh	hrubs (%) Silt (%)	Mud Bar	Overhanging vegetation
	rees (%)Sand (%)	Gravel Bar	Contiguous Wetlands
Diameter DBH (in.) NA Diam	meter DBH (in.) Gravel (%)	_ <del></del> Riffles	Emergent Plants
Stream Type:		Pools	Submerged Plants
PerennialIntermittent	EphemeralBoulders (%)	Undercut Banks	3
STREAM PROFILE: Cross Sectional at Crossing		ter depth, substrate, and a	quatic fiabilats)
	2.14 m riffles gravel/cobble	Jaro + Ja	re vegetations
NORTH: 150' comidor	1847		150' condor
		33	3724
11.3	P	1	
Lylow MT3	MTQ PP	scs MT1	
	1	45	1
50 PLX	/		
/	1		

Feature ID: F86 H 706 3

No. of Minnow Traps Set: 3 Date & Time in: (mm/dd/yyyy) (mm/dd/yyy) (mm/dd/yyyy) (mm/dd/yyyy) (mm/dd/yyyy) (m	METHODS ATTR Minnow Traps (\	The Party of the P	Hook and Line (Y/N)	1/	Beach Seine (Y/	'N): N	Fyke N	let (Y/N):	Hoop Net (Y/N):
Date & Time In: 7/3/3015  No. of lines in water:    No. of passes:   Date & Time out:   Date & Time out:   Cimm/dd/yyyy)		1		10	100000	10		N	N
Time lines in water:    Reach Length (m):   (mm/dd/yyy)   (mm/dd/yyy)		5	(mm/dd/yyyy)		(mm/dd/yyyy)	To let	(mm/c	dd/yyyy)	(mm/dd/yyyy)
The line out: 9/1/2015 Time lines in water:  Reach Length (m):  Reach	Date & Time in:	9/3/2015	No. of lines in water		No. of passes:				
EF Time (seconds):  EF Reach Length (m):  Duty Cycle:  Frequency (tq2):  Wrengeform:  Dorrent (A):  SSI OBSERVATIONS  D (Seg. Num)  Gear Type  Species  Total Length (mm)  Life Stage (fumm)  D (Seg. Num)  Gear Type  Species  Total Length (mm)  D (Seg. Num)  Gear Type  Species  Total Length (mm)  Life Stage (fuvenile or Adult)  Dead or Alive)  Picture No.  Dead or Alive)  Picture No.  Picture No.  A PH peaching were not accurate during Calibratian  No high gradient w/ Steep Sloped banks to stream has high gradient w/ Steep Sloped banks to place traps,  Wery little water - Hardly enough depth to place traps,	Date & Time out	t: 9/4/2015	Time lines in water:		Reach Length (	m):		. /	NEW CALL
EF (NN): N EF Start Time: EF End Time: EF End Time: Sampling Efficiency (% of sample reach):  Duty Cycle: Frequency (Hz): Volts (V): Power (W): Sampling Efficiency (% of sample reach):  Duty Cycle: Frequency (Hz): Volts (V): Power (W): Sampling Efficiency (% of sample reach):  Disposition (Dead or Alive) Picture No.  (Mamp x vi  Segon Num) Gear Type Species Total Length (Inventile or Adult) (Dead or Alive) Picture No.  (Mamp x vi  Segon Num) Gear Type Species Total Length (Inventile or Adult) (Dead or Alive) Picture No.  (Mamp x vi  Segon Num) Gear Type Species Total Length (Inventile or Adult) (Dead or Alive) Picture No.  (Dead or Alive) Picture	MANAGE E PROPER	PERSONAL PROPERTY AND ADDRESS OF THE PERSON NAMED IN		The Party of	1907		STATE OF THE PARTY		ACCOMPANY SOURS
Species  Total Length (mm)  Disposition (Dead or Alive)  Pleture No.  Disposition (Dead or Alive)  Pleture No.  Pleture No	Hamilton salts prodrike	STATE OF THE PARTY	ime:	EF End Time:		EF Time (se	conds):	EI	Reach Length (m):
Species Total Length (mm) Uses Stage (Juvenile or Adult) Disposition (Dead or Alive) Picture No.  NOTES (any additional information)  A life stage (Juvenile or Adult) Disposition (Dead or Alive) Picture No.  NOTES (any additional information)  A life stage (Juvenile or Adult) Disposition (Dead or Alive) Picture No.  NOTES (any additional information)  A life stage of accuracy Calibration  No fish caught  No fish caught  Series has high gradient of steep sloped banks to yell liftle water - Hardly enough depth to place traps.		1					Sampl	ing Efficiency (% of	
D(Seq. Num) Gear Type  Species  Total Length (mm)  Ulfe Stage (Juvenile or Adult)  Disposition (Dead or Allve)	Current (A):	-	Volts (V):		Power (W):				(amp x vo
OTES (any additional information)  At the peachings were not accurate during calibration  No 1532 caught  Dense surrounding regeration  Stream has high gradient of streep sloped banks to place traps,	ISH OBSERVAT	tons	Salas day			Life Stage			the state of the
At PH peadings were not accurate during calibration  - No bish caught - Dense surrounding vegetation  - stream has high gradient w/ steep sloped banks to  very little water - Hardly enough depth to place traps.	D (Seq. Num)	Gear Type	Species		_		Adult)		Picture No.
At PH peadings were not accurate during calibration  - No bish caught - Dense surrounding vegetation  - stream has high gradient of steep sloped banks to  very little water - Hardly enough depth to place traps.		1		(			1		1
At PH peadings were not accurate during calibration  - No bish caught - Dense surrounding vegetation  - stream has high gradient of steep sloped banks to  very little water - Hardly enough depth to place traps.			/		-/			-/-	
- stream has high gradient of steep sloped banks to very little water - Hardly enough depth to place traps.			-			-		-	
At PH peadings were not accurate during calibration  - No bish caught - Dense surrounding vegetation  - stream has high gradient of steep sloped banks to  very little water - Hardly enough depth to place traps.									
At PH peadings were not accurate during calibration  - No bish caught - Dense surrounding vegetation  - stream has high gradient w/ steep sloped banks to  very little water - Hardly enough depth to place traps.									
At PH peadings were not accurate during calibration  - No bish caught - Dense surrounding vegetation  - stream has high gradient w/ steep sloped banks to  very little water - Hardly enough depth to place traps.									
At PH peadings were not accurate during calibration  - No 1:3h caught - Dense surrounding regetation  - stream has high gradient w/ steep sloped banks to  very little water - Hardly enough depth to place traps.									
At PH peadings were not accurate during calibration  - No bish caught - Dense surrounding vegetation  - stream has high gradient w/ steep sloped banks to  very little water - Hardly enough depth to place traps.									
At PH peadings were not accurate during calibration  - No bish caught - Dense surrounding vegetation  - stream has high gradient w/ steep sloped banks to  very little water - Hardly enough depth to place traps.									
At PH peadings were not accurate during calibration  - No bish caught - Dense surrounding vegetation  - stream has high gradient of steep sloped banks to  very little water - Hardly enough depth to place traps.	1		1						
At PH peadings were not accurate during calibration  - No 1:3h caught - Dense surrounding regetation  - stream has high gradient w/ steep sloped banks to  very little water - Hardly enough depth to place traps.	NOTES (any add	l Itlonal informatic		Philippin Co.	(A. Antonia	d Light of	MA 157	15次第五人称第一人	不是原理的人因為作品的
	- Strea Very	ithe	no high water -	refre	, , ,				
	MISCELLANEOU Point ID:	S POINTS (if appl	icable)	Description:	N/A		14.1		(4) \$55 (ching) (2)(ching)
Point ID: NA Description: NA	Point ID:	N	A A	-	NA NA		W. 1	- 阿蒙國語	Tal Assistance

This form is to be completed before leaving the field site. Date: 9(4/15 Feature ID: F86 HT003 FT # NK110.2 For all items not checked, please provide detailed explanation in the notes section of data form. 1. Site Description Was ADF&G contacted before conducting any work in this area? Site Description complete? (Every cell must have entry or N/A) Were all photos taken and labeled correctly? 2. Physical/Chemical Attributes ☑ Calibration performed prior to sampling? Physical/Chemical attributes complete? (Every cell must have entry or N/A) □ Water quality data within expected ranges? pH: 4.0 - 10.0 NTU: 0 - 3000 √g∕ DO (mg/L): 1.0 – 15.0 ▼ Temp.: 1.0 – 19.0 Specific Conductance: 20 - 1500 N/A□ If outside expected ranges, was sample re-taken? 3. Stream Profile Stream profile view sketch included? Stream profile view captures water depth and wetted width? Stream profile view captures where efforts were made to capture fish? ➢ Plan view sketch included? 4. Methods Attributes Methods attributes complete? (Every cell must have entry or N/A) Were methods used adequate (explanation needed if no methods selected)? 5. Electrofishing Attributes Electrofishing attributes complete? (Every cell must have entry or N/A)

Are units correct?

Feature ID: <u>F86 HT003</u>

#### 6. Fish Observations

ルドセ Are units correct? (Total Length (mm))

Were adequate photos taken of fish captured? (Take a photo if in doubt)

#### 7. General

- Feature ID and Field Target # are consistent on data forms, logbook entries, photos, and maps?
- All additional data in logbook captured on data form and additional photos noted?
- Were all additional comments on stream habitat, etc. recorded on data form?

Was any gear missing/damaged for this survey or did you have any problems that should require resampling of this stream for an adequate survey effort?

Was any gear missing/damaged for this survey or did you have any problems that should require resampling of this stream for an adequate survey effort?

Was any gear missing/damaged for this survey or did you have any problems that should require resampling of this stream for an adequate survey effort?

by signing below, I verify that all field data for this site has been verified for accuracy and completeness.

X Neal Smith X and State

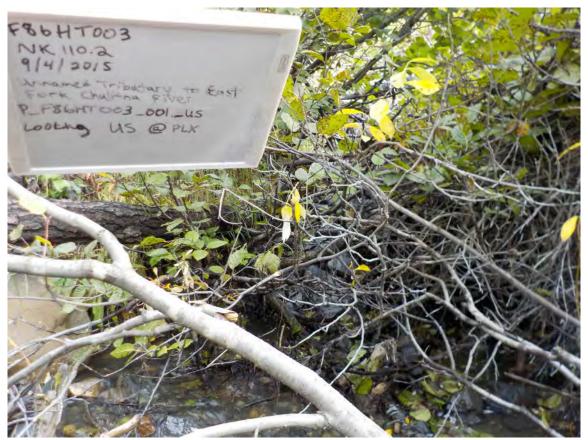
Fisheries Blologist (print)

Signature

Field Crew Chief (nrint)

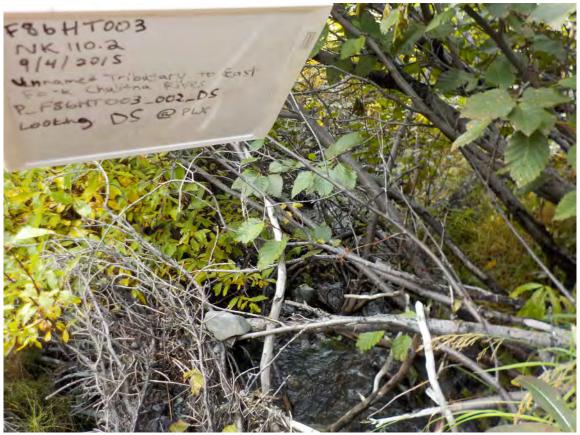
Signature

32%



P\_F86HT003\_001\_US LOOKING US AT PLX

9/4/2015 NK110.2



P\_F86HT003\_002\_DS LOOKING DS AT PLX

9/4/2015 NK110.2



P\_F86HT003\_003\_LB LOOKING AT LB AT PLX

9/4/2015 NK110.2



P\_F86HT003\_004\_RB LOOKING AT RB AT PLX

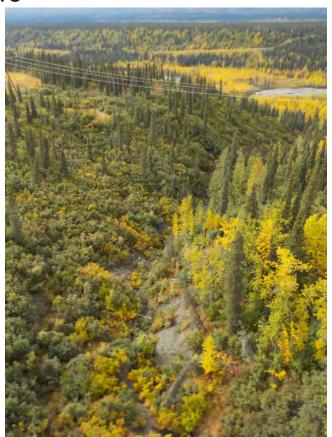
9/4/2015 NK110.2



P\_F86HT003\_005\_AERIAL AERIAL PHOTO

9/4/2015

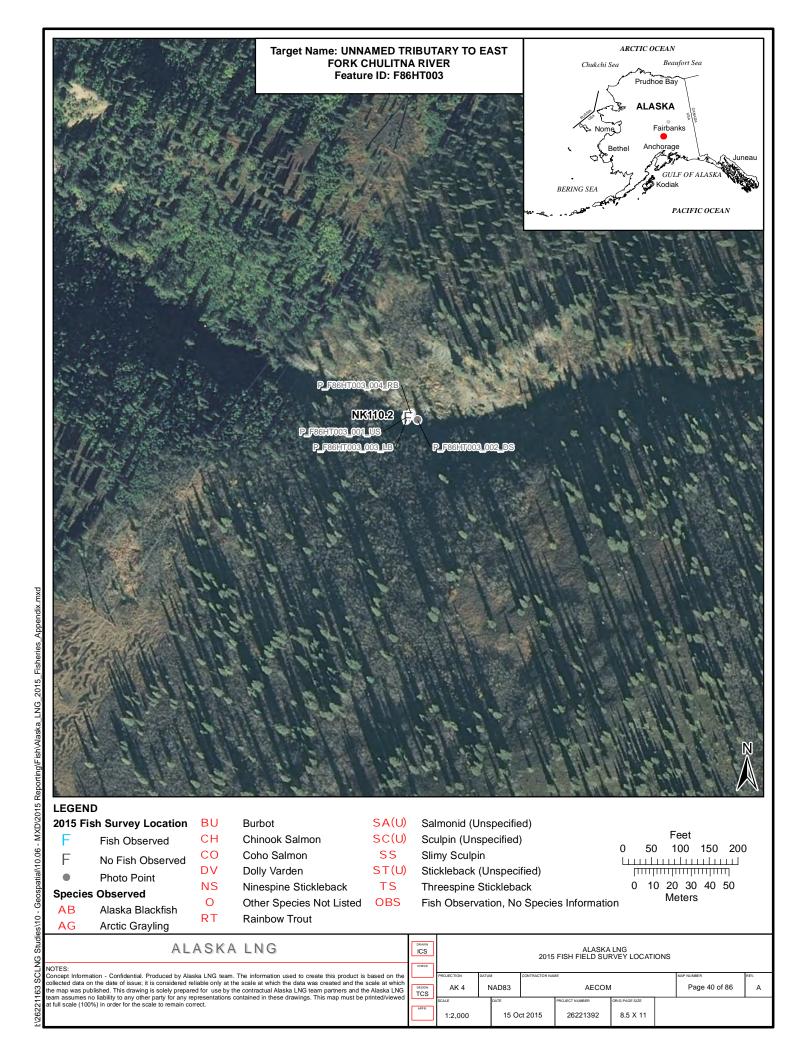
NK110.2



P\_F86HT003\_006\_AERIAL AERIAL PHOTO

9/4/2015

NK110.2



SITE DESCRIPTION	<b>非理论的</b>		中學是對於新譜		A THE PARTY OF THE
Date: 9/6/2015 Investigators:	SCS NJS	ADF	Team No.: 786	Feature ID:	8614001
Stream Name: Appended Tobule	1. to Nena	na Ri	vec	Stream ID: /	VK064
Pipeline Milepost: 508 \ Stream found	as expected (Y/N):	Y		Hwy MP (N/A if	f heli accessed): 266, 6
Latitude: 64° 05' 51, 42 78	1	Longitud	de: 149°13		14
0 1 111:			Fish Mortalities:	4	Total Photos: 5
Logbook No.: DS @ CL	78 Total Pisit Caught	RB to LB		AT LIBIT	o RB@ CL
Pic No.: P- FX6LHOd - Ool Pic No.: P	-F86LHOOL-002-	D.5 Pic No.:	PT864HOOL-00	3-LB Pict	No.: P-186CHOOL-001-RB
Other P. F86 LHOOL 005-5	SCUCPIN				
Pic No(s).:	200.01114				
PHYSICAL/ CHEMICAL ATTRIBUTES	7.00			<b>以来</b> 表示例是	<b>にはおります。マーマーアの時代</b>
Weather (Describe): nvercast		Precipitation (	Describe):	e	
0 0	r Temperature (°C):	12	рн: ★ 9,32	Dissolved (	Oxygen (mg/l): 10,22
Specific Conductance(µS/cm): 200 Tu	erbidity (NTU):	22	ORP (mV): 172.	Q Dissolved (	Oxygen (%): 82.1
Ambient Conductance(μS/cm): 127 Od	dor: none Shee	en (Y/N): /	Color: clear		of Calibration: 9/4/2015
	tained win	vegetate	banks		tted Width (m): 3, 9
Riparlan Veg at 0-5 m at LB: Riparlan Veg at 0-5	m at RB: Stream S	ubstrate.	Aquatic Habitats	Tha	lweg Depth @ CL (m): , 43
	Sedge (%) 5	Organics (%)	Sand Bar		Large Woody Debris
	8	Silt (%)	Mud Bar		Overhanging vegetation
70 Shrubs (%) 60 Shrubs 20 Trees (%)	(%)		Gravel Bar		Contiguous Wetlands
	r DBH (in.)	_Gravel (%)	Riffles		Emergent Plants
Stream Type:		_Cobble (%)	Pools		Submerged Plants
PerennialIntermittent	Ephemeral 90	_Boulders (%)	Undercut Bai	nks	
STREAM PROFILE: Cross Sectional at Crossing (inclu	ude riparian vegetation, w	etted width, wa	ter depth, substrate, a	nd aquatic habit	ats) miles and miles at a least
Spruce 3ms	overhanging 3	9m -1	MAN A grasses		ers sprice
	a Doc	SI	depth = .43 m	`	
			S coverage		
STREAM PROFILE: Plan View (Include direction of flo	ow, centerline, distances i	from centerline,	photo locations, samp		
1	how y	PLX	8	MT3	7
50 m from may	Elon y	N P		though the	LX TO TO PRIVE

Page 1 of 2

Feature ID: F864 001

METHODS ATTE	RIBUTES			HART TO LEE				<b>建加度的基础的基础</b>
:Minnow Traps (	Y/N): Y	Hook a	and Line (Y/N):	Beach Seine (Y	/N): <i>N</i>	Fyke N	let (Y/N):	Hoop Net (Y/N):
No. of Minnow	Traps Set: 3		& Time in:		Date & Time in: Date & Time in:			Date & Time In:
Date & Time in:	9/4/2016	-	dd/yyyy) flines in water:	(mm/dd/yyyy) No. of passes:	1		dd/yyyy) & Time out:	(mm/dd/yyyy)  Date & Time out:
(mm/dd/yyyy)	1115			4-111/95		2.0	dd/yyyy)	(mm/dd/yyyy)
Date & Time out (mm/dd/yyyy)	1045	Time I	lines in water:	Reach Length (	m):		1	√ Linet in
ELECTROFISHIN	G ATTRIBUTES	No.46		HATCH HE WAY	(1) 建建筑		CHEST STATE	
EF (Y/N):	EF Start Ti	_	1100	ne: 1125	EF Time (se			EF Reach Length (m): 91
Duty Cycle:	25	Freque Volts (	ency (Hz): 60	Waveform: Power (W):	PDC	Sampl	ing Efficiency (% of	f sample reach): 90 (amp x volts)
Current (A):		voits (	(v): 350	rowei (w).	350	ungand:		(antip x voits)
FISH OBSERVAT	The state of the s		<b>建造技术社会生产</b>	Total Length	Life Stage	0 0 0	Disposition	
ID (Seq. Num)	Gear Type		Species	(mm)	(Juvenile or		(Dead or Alive)	Picture No.
00/	EF		Sling Sculpin	89 3	1/4 dult	-	ALIVE	X n/a
002	VISOb/E	F		UNIC	Adul		ALIVE	1/2
003	EF		" 11	94	Adul	1	ALIVE	* P- F86LH001.005 SIMI
-	\							
					1			
						1		
	1							
					_			
				Filler Standard Communication		THE REAL PROPERTY.		THE PARTY OF THE PROPERTY OF THE PARTY.
NOTES (any add	Control of the Contro	2510 2410 021	RECEIVED AND MEETING				HARMSTON THE	SAPERIAL STREET
-No	bish	Can	(he toller	MT	3 sl.m	cy S	culpin c	caught w/ EI
A 1.1	10 5	1	roading acc	wately	(1)	_	a di bony	led
No fish caught w) MT; 3 slimy sculpin caught w/ EF								
- bould	er sub	stoa.	te daniha	tes				
1	1 0	11-	2 11 MI	01/00015				1//
- mod	esate	310	w of right	25/100				
- (3)	- boulder substrate daminates  - moderate flow il riples/pools  - stream contained within upland banks							
, >14,				1				
MISCELLANEOU	S POINTS (if applic	able)	CALL MARKET SHEET	ar Alto In	<b>建筑人的</b> 集	ROUT		<b>经验证的债务</b>
Point ID:	NA		Description	n: 1/	14			
Point ID:	1/4		Description	1: 4/	1A			
Field	~ //	7 -	Field Scient	ist/ /// 0	151		Technical	
Crew Chief:	71	>	Technician:	yell	pas	_	Lead:	

This form is to be completed before leaving the field site.
Feature ID: 1864/001 FT # NK 064 Date: 9/6/2015
For all items not checked, please provide detailed explanation in the notes section of data form.
1. Site Description
Was ADF&G contacted before conducting any work in this area?
Site Description complete? (Every cell must have entry or N/A)
Were all photos taken and labeled correctly?
2. Physical/Chemical Attributes
Calibration performed prior to sampling?
Physical/Chemical attributes complete? (Every cell must have entry or N/A)
NTU: 0 – 3000
₩ DO (mg/L): 1.0 – 15.0
√ Temp.: 1.0 – 19.0
Specific Conductance: 20 - 1500
Are units correct?
3. Stream Profile
Stream profile view sketch included?
⟨S Stream profile view captures water depth and wetted width?
Stream profile view captures where efforts were made to capture fish?
Plan view sketch included?
4. Methods Attributes
Methods attributes complete? (Every cell must have entry or N/A)
Were methods used adequate (explanation needed if no methods selected)?
5. Electrofishing Attributes
Electrofishing attributes complete? (Every cell must have entry or N/A)
M Are units correct?

Feature ID: F86LH 001

- Are all fish captured/observed recorded in the Fish Observation table?
- Are units correct? (Total Length (mm))
- Were adequate photos taken of fish captured? (Take a photo if in doubt)

### 7. General

reading

- Feature ID and Field Target # are consistent on data forms, logbook entries, photos, and maps?
- All additional data in logbook captured on data form and additional photos noted?
- Were all additional comments on stream habitat, etc. recorded on data form?
- ☐ Was any gear missing/damaged for this survey or did you have any problems that should require resampling of this stream for an adequate survey effort?

By signing below, I verify that all field data for this site has been verified for accuracy and completeness.

X Neal Smith X eller Fisherles Biologist (print)

Signature

Fleld Crew Chlef (print)

Signature



P\_F86LH001\_001\_US LOOKING US AT PLX

9/5/2015 NK064



P\_F86LH001\_002\_DS LOOKING DS AT PLX

9/5/2015 NK064



P\_F86LH001\_003\_LB LOOKING AT LB AT PLX

9/5/2015 NK064



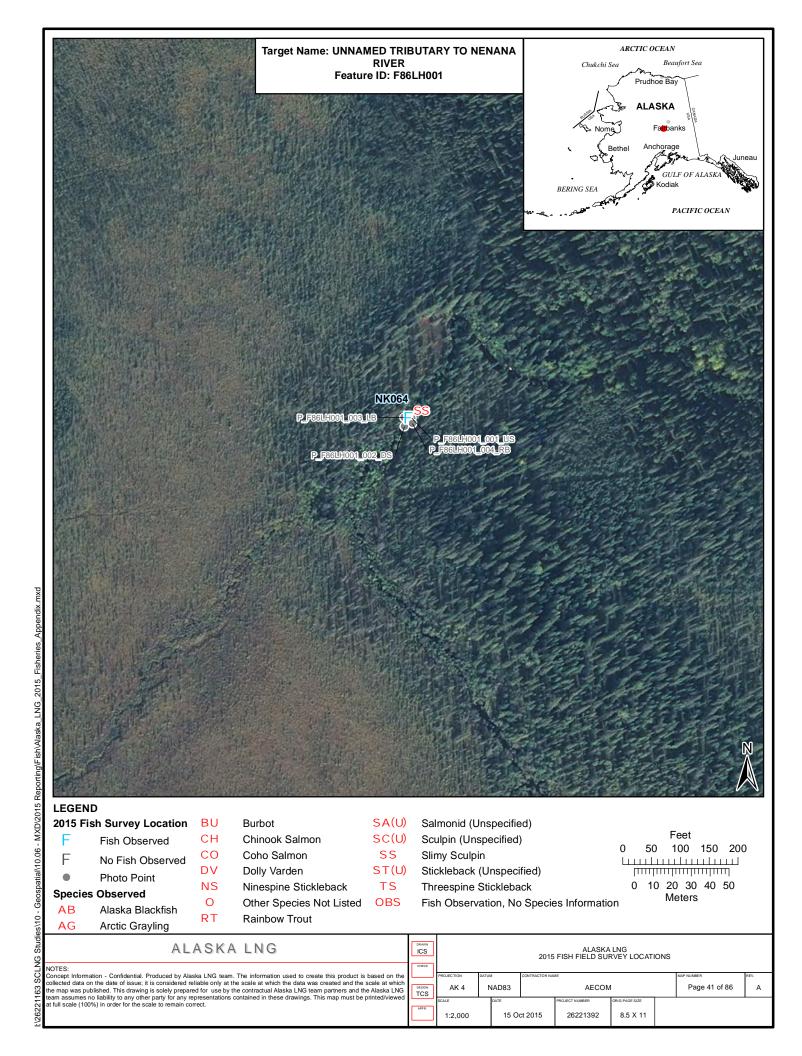
P\_F86LH001\_004\_RB LOOKING AT RB AT PLX

9/5/2015 NK064



P\_F86LH001\_005\_SCULPIN PHOTO OF SLIMY SCULPIN

9/5/2015 NK064



SITE DESCRIPTION	<b>建筑设施。                                    </b>	<b>证用证据</b> ()	没有1950年1978年1978年1978年1978年1978年1978年1978年1978		
Date: 8 - 24-15 Investigato	ors: FAH KRV MPB	Team No.: F94 Fe	eature ID: 194 LHOL3		
Stream Name: Unnamed Stre	St	Stream ID: NK059			
	ound as expected (Y/N):	H	wy MP (N/A If heli accessed):		
1 12 11 11 2 2 4			1.3318" W		
0 1 14 11 12 12					
Logbook No.: Logbook Page No.:	1	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \			
US @ CL DS @ DS @ PIC NO .: P - F942HO 13 -001 - US PIC N	10: P.F94LHO1200Z-DS PICNO.		LB to RB@ CL Pic No.: P-F94Lfto 13 003 -R		
	-004-AERIAL -006	AERIAL			
Pic No(s).: P_ F 442+1013	- OU (SPERME				
PHYSICAL/CHEMICAL ATTRIBUTES					
	ond y Precipitation (	Describe): None	A		
Water Temperature (°C): 12.37	Air Temperature (°C): 14	pH: 8.08	Dissolved Oxygen (mg/l): 13 11		
Specific Conductance(µS/cm): 472	Turbidity (NTU): 33.4	ORP (mV): 484.44.1	Dissolved Oxygen (%): 122.93		
Ambient Conductance(μS/cm): 358	Odor: N Sheen (Y/N): N	Color: Silty	Last date of Calibration: 8 · 22 · (5		
Defined Channel (Y/N): Y Notes: C	1	channel but Pap			
Flow (Y/N): Y Notes:	Plow throughout tate:	Aquatic Habitats	Thalweg Depth @ CL (m): 21" (0.5)		
	rass/Sedge (%) 5 Organics (%)	Sand Bar	∖Large Woody Debris		
	170 Silt (%)	Mud Bar	X Overhanging vegetation		
	rees (%) 25 Sand (%)	Gravel Bar	Contiguous Wetlands		
12 Diameter DBH (in.) 12 Diam	neter DBH (in.)Gravel (%)	XRiffles	X Emergent Plants		
Stream Type:	Cobble (%)	<u>X</u> Pools	Submerged Plants		
PerennialIntermittentX	Boulders (%)	Undercut Banks			
STREAM PROFILE: Plan View (include direction	Silty, mucky banks I water over flowing porry do	and banks	~15' (4.5 m)  -21" unwadeable after (0.5 m) rains		
NORTH:  Revision Date: 3/19/2015	White Joseph	PMTZ	Page 1 of _		

METHODS ATTRIBUTES	·蒙古""		Line Time		1.00	Sept. 12	Bill Discussion	CHIE	TO THE WATER	Magrap S
Minnow Traps (Y/N):	Hook	and Line (Y/N):		Beach Seine (Y/N):		Fyke Net (Y/N):		(COM 7250)	Hoop Net (Y/N):	
No. of Minnow Traps Set:  Date & Time in: (mm/dd/yyyy)			Date &Time In	1	Date 8	& Time in:		Date & Time in:	Water patrices	
		11/10	-	(mm/dd/yyyyy)		dd/yyyy)		(mm/dd/yyyy)		
Date & Time in: 8 24.15 No. of lines in water (mm/dd/yyw) 15.45		MA	No. of passes:	in help to		Date & Time out: (mm/dd/yyyy)		Date & Time out: (mm/dd/yyyy)		
Date & Time out: 8 27:15 Time lines in water: (mm/dd/yyyy)				Reach Length	m):					
ELECTROFISHING ATTRIB	DESCRIPTION OF THE PARTY OF THE		NE SKI	<b>阿拉伯岛数</b> 2.09	是一种社			NAME OF THE OWNER, OWNE		
EF (Y/N): EI	Start Time:		EF End Time:					F Reach Length (m):		
Duty Cycle:		rency (Hž):	Waveform:		Sampling Efficiency (% o					
Current (A):	Volts	(V):		Power (W):					(a	mp x voits)
FISH OBSERVATIONS	Selection (			Fotal Length	Life Stage	情談出	Disposition		1. 3. 166	rational property
ID (Seq. Num) Gear Ty	pe	Species		(mm)	(Juvenile or	Adult)	(Dead or Alive)	Plc	ture No.	
						-				
			. 10							
			190	1.4	-					
			VI	CH.						
		_	M	> (						
NOTES (any additional inf			ST STREET WINDS	Committee of the second	San Marine Marine Marine		A COUNTY THE PARTY	no place	Le ardiffe of leaguests	CONTRACTOR OF STREET
NOTES (any auditional int	ormation)	划五計的情態			MINE PROM	<b>同性 (2014)</b>		htaps		超過過
Probe in s	54n - 3	hallow	stream	Wlober	) canor	s4 -	while d	otes	mina	
101.4	cr all.		nameto			1			}	
V 1 N 1	Just	und b	NAMEN	612						
			Ł							
Brown, si	Ify, clo	ndy w	sater							
Sill-3a	nd, mu	icky 1	banks							
Poorly	dofin	اے لم	nannel	is in	area	See	ms di	sta	, bed	
Retrie	cons	tructi	n l'fer	7 da	15 0	c la	rms. At	2h	water i	unwadea
MISCELLANEOUS POINTS	(if applicable)	PRINCIPLE OF THE PRINCI	ATTEM NOVEM	- WATER ST		Carl To	TANKS STOP		3/6 (1) 5/6	S LOVE
Point ID:			Description:		1			-		
Point ID:	η η		Description:							
Field Crew Chief:	IA		i Field Scientist Fechnician:	t/ Vialle	100/	Mil.	Technical Lead:			

## This form is to be completed before leaving the field site.

Feature ID: F9+LHO13 FT # NKO59 Date: 8-24-15

For all items not checked, please provide detailed explanation in the notes section of data form.

## 1. Site Description

- Was ADF&G contacted before conducting any work in this area?
- Site Description complete? (Every cell must have entry or N/A)
- Were all photos taken and labeled correctly?

## 2. Physical/Chemical Attributes

- ☆ Calibration performed prior to sampling?
- Physical/Chemical attributes complete? (Every cell must have entry or N/A)
- Water quality data within expected ranges?
  - √L pH: 4.0 10.0
  - NTU: 0 3000
  - X DO (mg/L): 1.0 15.0
  - ▼ Temp.: 1.0 19.0
  - 💢 Specific Conductance: 20 1500
- M/A-If outside expected ranges, was sample re-taken?
- Are units correct?

### 3. Stream Profile

- X Stream profile view sketch included?
- Stream profile view captures water depth and wetted width?
- Stream profile view captures where efforts were made to capture fish?
- ★ Plan view sketch included?

### 4. Methods Attributes

- Methods attributes complete? (Every cell must have entry or N/A)
- Were methods used adequate (explanation needed if no methods selected)?

## 5. Electrofishing Attributes

- Electrofishing attributes complete? (Every cell must have entry or N/A)
- NAAre units correct?

Feature ID: <u>F94LH 013</u>

## 6. Fish Observations

Y Are all fish captured/observed recorded in the Fish Observation table?

NA Are units correct? (Total Length (mm))

N#A Were adequate photos taken of fish captured? (Take a photo if in doubt)

## 7. General

- Feature ID and Field Target # are consistent on data forms, logbook entries, photos, and maps?
- All additional data in logbook captured on data form and additional photos noted?
- Were all additional comments on stream habitat, etc. recorded on data form?
- No Was any gear missing/damaged for this survey or did you have any problems that should require resampling of this stream for an adequate survey effort?

By signing below, I verify that all field data for this site has been verified for accuracy and completeness.

X haley Volper X haley Vales
Fisherles Biologist (print) Signature

Field Crew Chief (print)

Signature



P\_F94LH013\_001\_US LOOKING US AT PLX

8/27/2015 NK059



P\_F94LH013\_002\_DS LOOKING DS AT PLX

8/27/2015 NK059



P\_F94LH013\_003\_RB LOOKING AT RB AT PLX

8/27/2015 NK059



P\_F94LH013\_004\_AERIAL AERIAL PHOTO

8/27/2015 NK059



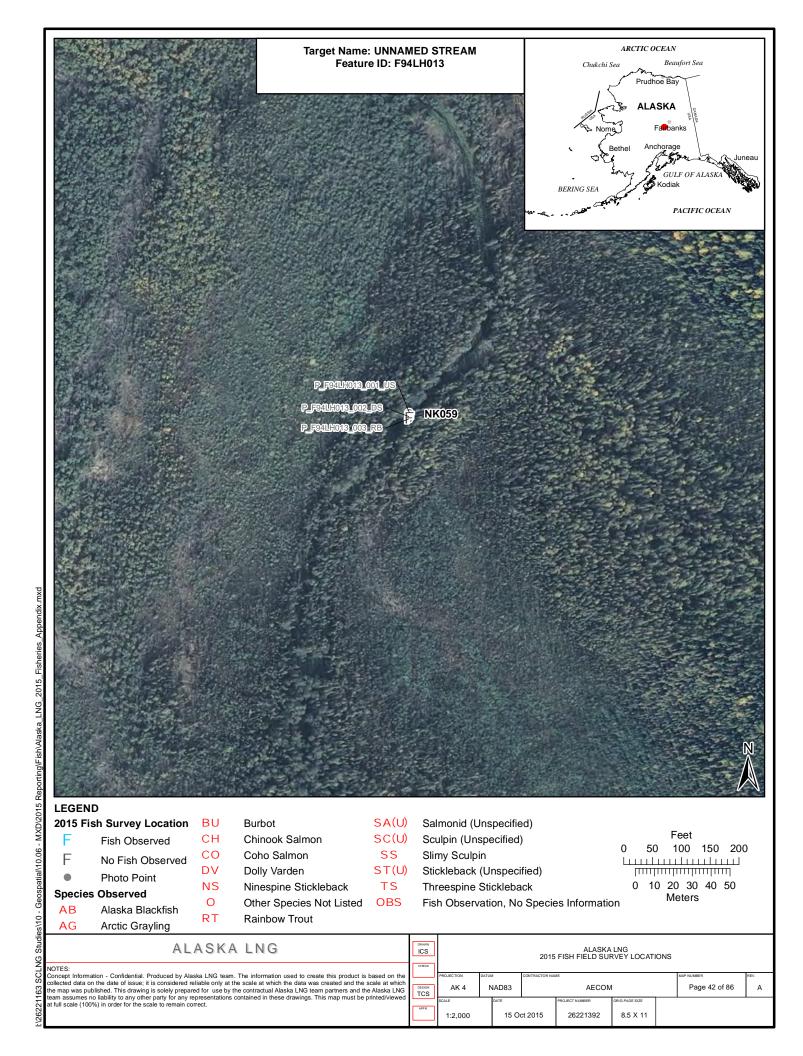
P\_F94LH013\_005\_AERIAL AERIAL PHOTO

8/27/2015 NK059



P\_F94LH013\_006\_AERIAL AERIAL PHOTO

8/27/2015 NK059



SITE DESCRIPTION	是是100000000000000000000000000000000000	THE PROPERTY AND	
	OTS: KAH KRV MPB	Team No.: pg4	Feature ID: F94LHO/2
Stream Name: East Middle	Rivet		Stream ID: NKOSZ
	found as expected (Y/N):		Hwy MP (N/A if heli accessed):
214 5200		itude: 149° 11' C	07.5603" W
Logbook No.: \ Logbook Page No.:		Fish Mortalities:	N/A Total Photos: 6
US @ CLP CONTHOLZ POLICE DS			17/17
Pic No.: 1-1 1 Pic	No.: 12-77-41-12-002-DDPICN	10:: 1-1-11-11-12-2	PICNO:
Other Pic No(s).:	105_AERIAL-006-1	FRIAL	
	all income house to accompany on William Vision	CHARLES MARKETAN PLANTS OF THE	
Weather (Describe): Partly close	Precipitatio	n (Describe): None	
Water Temperature (°C): 947	Air Temperature (°C): 14	pH: 8.08	Dissolved Oxygen (mg/l): (2.0)
Specific Conductance(µS/cm): 479	Turbidity (NTU): 191	ORP (mV): 22,7	Dissolved Oxygen (%): (0537)
Ambient Conductance(µS/cm): 33@	Odor: A Sheen (Y/N): N		Last date of Calibration: 8 22.15
	10 1 0 1 1	innel	Wetted Width (m): UNKNOWN
Flow (Y/N): Y Notes:	Steady Plan throng		Thalweg Depth @ CL (m): UN KNOWA
	at 0-5 m at RB: Stream Substrate:	Aquatic Habitats	V
	irass/Sedge (%) Organics (9		Large Woody Debris
	hrubs (%) Silt (%) Frees (%) Sand (%)	Mud Bar Gravel Bar	Overhanging vegetation Contiguous Wetlands
	rees (%) Sand (%) meter DBH (in.) Gravel (%)	Riffles	X Emergent Plants
	Cobble (%)	Y Pools	Submerged Plants
Stream Type: X Perennial Intermittent	Ephemeral Boulders (%	(a) Undercut Bank	s
STREAM PROFILE: Cross Sectional at Crossing		Total Substantia	· · · · · · · · · · · · · · · · · · ·
VIIII	ally hu	wn water	The peop to Wade
STREAM PROFILE: Plan View (include direction NORTH:	n of flow, centerline, distances from centerl	ne, photo locations, sample	locations by gear type and ROW)
N->	50		OFF-ROW target
41		1	NO NO
	- D. 2	100	
	Out		
		-	/
	W. 5 1		_
	(A)	The same of the sa	
D.As			
Mar	/ *	+	MT-1
1			(A)
Revision Date: 3/19/2015		Anabay dead	Page 1 of 2
Revision Date: 3/19/2015	<del>ተ</del> ጎወ '	Approx 450'	

Feature ID: 4944H012

METHODS ATTRIBUTES	25 36 50 150 150 150 150 150 150 150 150 150	<b>建筑建筑</b>	HARAMET RE	加强和分割		<b>。</b> 第二十二十二十二十二十二十二十二十二十二十二十二十二十二十二十二十二十二十二十
Minnow Traps (Y/N):	Hook and Line (Y/N):	Beach Selr	ne (Y/N):	Fyke Net	(Y/N):	Hoop Net (Y/N):
No. of Minnow Traps Set:	Date & Time in: (mm/dd/yyyy)	Date &Tim		Date & Ti (mm/dd/		Date & Time in:
Date & Time in: 6 24.15	No. of lines in water:	No. of pas	A STATE OF THE STA	Date & Ti	ime dut:	(mm/dd/yyyy)  Date & Time out:
(mm/dd/yyyy) 14:15 Date & Time out: 8 27-15	Time lines in water:	Reach Len	gth (m):	(mm/dd/	(yyvy) / /	(mm/dd/yyyy)
(mm/dd/yyyy) 1+ 45	ALLEGE PROPERTY OF THE PARTY OF		SALES CONTRACTOR	CONTRACTOR OF	THE STATE OF THE S	TO THE REAL PROPERTY OF THE PARTY OF THE PAR
EF (Y/N): EF Start Ti	me: EF End	Time:	EF Time (se	conds):	FF	Reach Length (m):
Duty Cycle:	Frequency (Hz) :	Waveform		I	Efficiency (% of sa	
Current (A):	Volts (V):	Power (W	:		***************************************	(amp x volts)
FISH OBSERVATIONS						of Pylloken in (s)
ID (Seq. Num) Gear Type	Species	Total Length (mm)	Life Stage (Juvenile or		Disposition Dead or Alive)	Picture No.
						a partie
			-		(Sent) Company of the property of the sent	UNA
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	140					
		\$11		1		
	AND STREET	0	_			
Samuel Comments		7/1				
NOTES (any additional information	<b>斯特斯特里斯斯特</b>	語子は神学学		<b>西</b>		<b>阿拉斯斯</b> 电影响
Meander	ring Stream	Worlde	Chanhe	1 6	Silty	water
Stream	n too deep	to Wid	e - Car	rit s	see bo	Hom
(his	stream much	n siltier	than	West	t Midd	le River
B1.	Fish captu	red or	obser	Jad .		
// "	1154 Cappin	,,	77			
Bridge crosses stream at developed durt road.						
MISCELLANEOUS POINTS (if applied	able)	eson line	<b>医阿拉克斯</b>	BUST OF BUSINESS	<b>被推出的</b>	<b>计设备的</b> (1)
Point ID:	Descrip	otion:				
Point ID:	Descrip					
Field Crew Chief:	Field Sci Technici	ientist/	Valke		echnical ad:	

## This form is to be completed before leaving the field site.

Feature ID: F94LHo12

FT# NKO52

Date: 8 24.15

For all items not checked, please provide detailed explanation in the notes section of data form.

## 1. Site Description

- ▼ Was ADF&G contacted before conducting any work in this area?
- Site Description complete? (Every cell must have entry or N/A)
- Were all photos taken and labeled correctly?

## 2. Physical/Chemical Attributes

- Calibration performed prior to sampling?
- Physical/Chemical attributes complete? (Every cell must have entry or N/A)
- Water quality data within expected ranges?
  - pH: 4.0 − 10.0
  - X NTU: 0 3000
  - M DO (mg/L): 1.0 15.0
  - ▼ Temp.: 1.0 19.0
  - Specific Conductance: 20 1500
- If outside expected ranges, was sample re-taken?
- Are units correct?

## 3. Stream Profile

- Stream profile view sketch included?
- Stream profile view captures water depth and wetted width?
- ▼ Stream profile view captures where efforts were made to capture fish?
- Plan view sketch included?

### 4. Methods Attributes

- Methods attributes complete? (Every cell must have entry or N/A)
- Were methods used adequate (explanation needed if no methods selected)?

# 5. Electrofishing Attributes

- 🄀 Electrofishing attributes complete? (Every cell must have entry or N/A)
- Are units correct?

Feature ID: 4942+012

### 6. Fish Observations

Field Crew Chief (print)

- Are all fish captured/observed recorded in the Fish Observation table?
- ATA Are units correct? (Total Length (mm))
- Were adequate photos taken of fish captured? (Take a photo if in doubt)

#### 7. General

- Feature ID and Field Target # are consistent on data forms, logbook entries, photos, and maps?
- All additional data in logbook captured on data form and additional photos noted?
- X Were all additional comments on stream habitat, etc. recorded on data form?
- Was any gear missing/damaged for this survey or did you have any problems that should require resampling of this stream for an adequate survey effort?

By signing below, I verify that all field data for this site has been verified for accuracy and completeness.

X halen lover X halen Valer

Fisherles Biologist (print)

Signature

X bim Holmes

X balance



P\_F94LH012\_001\_US LOOKING US AT OFF ROW TARGET



P\_F94LH012\_002\_DS LOOKING DS AT OFF ROW TARGET

8/27/2015 NK052



P\_F94LH012\_003\_LB 8/27/2015 NK052 LOOKING AT LB AT OFF ROW TARGET



P\_F94LH012\_004\_RB LOOKING AT RB AT OFF ROW TARGET

8/27/2015 NK052



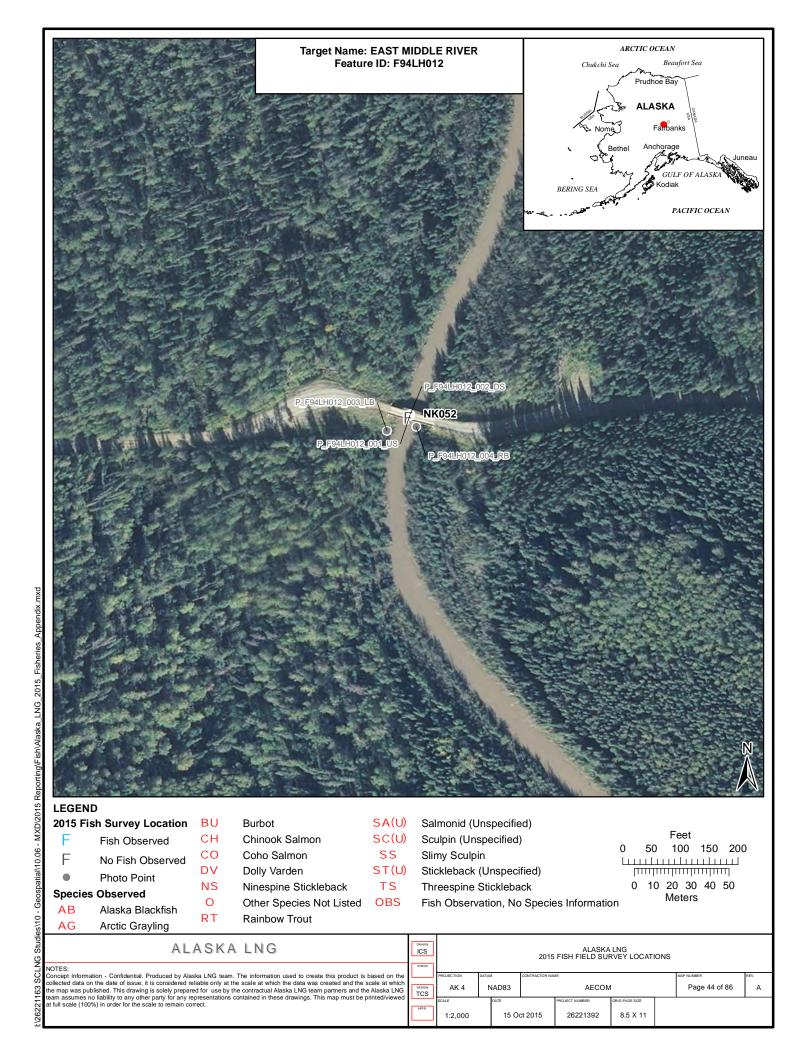
P\_F94LH012\_005\_AERIAL AERIAL PHOTO

8/27/2015 NK052



P\_F94LH012\_006\_AERIAL AERIAL PHOTO

8/27/2015 NK052



STIE DESCRIPTION	学生是是1000年代的1000年代,1000年代的1000年代
Date: 8 24-15 Investigators: KAH, KRV, MP	B Team No.: F94 Feature ID: F942HOII
Stream Name: West Middle River	Stream ID: NKOS1.2
Pipeline Milepost: OFF-ROW Stream found as expected (Y/N):	Hwy MP (N/A if hell accessed):
Latitude: 64° 33' 36.8363" N	Longitude: 149° 13' 2.1490" W
Logbook No.:   Logbook Page No.:   Z-  Total Fish Caught:	35 Fish Mortalitles: P Total Photos:
US@CL PICNO: P-F94LHOLL_ODI_US PICNO: P-F94LHOLL_002	DS RB to LB@ CL PG LHOULDO 3 LB to RB@ CL PF944H & 11-004
Other P_P94LHOUL_005_AERIAL-007_ PIC NO(s).: P_F94LHOUL_008_BLACKPISH-C	
PHYSICAL/CHEMICAL ATTRIBUTES	。 第一个人们的一个人们的一个人们的一个人们的一个人们的一个人们的一个人们的一个人们的
1011	Precipitation (Describe): None
Water Temperature (°C): 8-57-8-78 Air Temperature (°C): 14	pH: 6.95 Dissolved Oxygen (mg/l): 5.92
Specific Conductance(µS/cm): 475 Turbidity (NTU): 9,27	ORP (mV): 98 4 Dissolved Oxygen (%): 51 7
11. 300	(Y/N): N   Color: Yellow   Prewn   Last date of Callbration: 8-22-15   Wetted Width (m): WN KNOW N
Oct 11 car	wetted Width (m): WN FN TWI  Thalweg Depth @ CL (m): WN FN TWI
Riparian Veg at 0-5 m at LB: Riparian Veg at 0-5 m at RB: Stream Sui	1000
85 Grass/Sedge (%) 85 Grass/Sedge (%)	Organics (%) Sand Bar
90 Shrubs (%) 90 Shrubs (%) 7	Silt (%)Mud BarX_Overhanging vegetation
10	Sand (%)Gravel BarContiguous Wetlands
	Gravel (%)  Riffles  Emergent Plants  Y Submorred Plants
Stream Type:	Cobble (%) Pools X Submerged Plants  Boulders (%) Undercut Banks
PerennialIntermittentEphemeral	Boulders (%)Undercut Banks
STREAM PROFILE: Plan View (include direction of flow, centerline, distances for	Stream too deep to Wade  Approx. 70' (21 m)  Too centerline, photo locations, sample locations by gear type and ROW)
NORTH: 2-3  NT-3  O)  O)  O)  O)  O)  O)  O)  O)  O)  O	
	MT-2

# STREAM FISH INVESTIGATION DATA FORM Feature ID: F9+LH0|

		Set that of	00.000 Sec. 10.00		CT IN		San Raid	EA TOUR AND	MARIN 2 E		MANAGE	Section 2 life	
:Minnow Traps (	The state of the s	Hook and Line (Y/N):			Beach Seine (Y/N): Fy				let (Y/N):	NI FA	Hoop Net (Y/I	N):	
41 644			£ .			D.4.077		1	7	-		W. Leine	
No. of Minnow 1	raps Set:	Date & Time in: (mm/dd/yyyy)			(mm/dd/yyyy)				Itme im		Date & Time I (mm/dd/yyyy		
Date & Time in:		No. of lines in water:			No. of passes:				Time out:	A	Date & Time	out:	
(mm/dd/yyyy) Date & Time out	12:40	Time li	nes in water:		(	Reach Length (	m):		(mm/c	ld/yyyy)	11.	(mm/dd/yyyy	
(mm/dd/yyyy)	13:45						18	(1-1-1	(			(COA)	
ELECTROFISHIN	S ATTRIBUTES		产的性质	Market 1		的特殊		(Mark)	图的	WHITE THE		為經濟政治	
EF (Y/N):	EF Start Ti			EF End Tim	ne:	De .	EF Ti	me (seco				ich Length (m):	
Duty Cycle:		_	ency (Hz) :	N	1	Waveform:		_	Sampt	ing Efficiency (%	of sam	ple reach):	(
Current (A):		Volts (	ν):		1	Power (W):							(amp x volts)
FISH OBSERVAT	IONS	10010110	HERME.		191		x 105				2,141	APP A PROFES	
ID (Seq. Num)	Gear Type		Species			otal Length nm)	Life St	age ile or Ad	fult)	Disposition (Dead or Alive	PI	cture No.	3
001	NT.3		Black	154		10	hver	ile Ad	ult		*	P. PAGLHOL	1-008 BLACK
002	MT-3					90		1			X		(_OUT)-BLAC
603	MI	MT-1			C	15		1					
<b>७</b> ०५	1				9	5					TIVE		
605					8	5	1						
004					9	15			13				
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60 8			× .		8								
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010					65								
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NOTES (any add	itional information	引頭流	<b>全計劃 聯</b>	<b>等新产制</b> 。		和地位地域指			14900			THE WAY	<b>地区工厂</b>
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	1	, , ,	road										
<	Stream	- toe	Leep	to	CA	ade							
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F	3lack Fis	.h	Captu	red i	5	a(1)	3 m	inni	0 W	4000	5		
			-							1			
MISCELLANEOU	S POINTS (If appli	cable)	STEEL STORY	1000005	No.	<b>计划的</b>	180	L'ALE		Carle and	No. A		Carried Mac
Point ID:	,			Description	n:							100000000000000000000000000000000000000	A STATE OF THE PARTY.
Point ID:				Description	-								
Field	, , ,		F	ield Scient		Via O.	11.	10	1	Technical			
Crew Chief:	ass	V		echnician		Meller	10	LA	4	Lead:			

Revision Date: 06/09/2015 65, 85, 85, 105, 85

# STREAM FISH INVESTIGATION DATA FORM Feature ID: 1941 Holy

Revision Date: 06/09/2015

Page 3 of <u>4</u>

ID (Seq. Num)	Gear Type	Species	Total Length	Life Stage	Disposition	Picture No.
			(mm)	(Juvenile or Adult)	(Dead or Alive)	Picture No.
013	MEZ MT-1	BlackRish	le5	Juvenile/Adul	H Mive	+
014			85		1	
015			85			
014	PH WEST MIST		105			
017	mar I III .		85			
018	MT-2		65			
019			65			
070			75			
021			85			
022			85			
023			75.			+
0 24			85			
025			85			
024			65			
m 27			95			
028			85			
			65			
630			85			
0 31			85			
			75			
032						
033			85	-	+ + -	NO PONTENTIAL DIO DIA
034	1	V	115			* P P944+611_010_BU
6 35	4	V	85	V	- W	
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	/					
	/					

Feature ID: F94LHOU

FISH OBSERVAT	TONS (continued)	TO SHOW THE PARTY OF THE PARTY	WHAT SET THE		OR MICE COMM	<b>美国民主席的内容等等</b>
D (Seq. Num)	Gear Type	Species	Total Length (mm)	Life Stage (Juvenile or Adult)	Disposition (Dead or Alive)	Picture No.
			finany	(Juverille of Addit)	(Dead of Alive)	
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/						

## This form is to be completed before leaving the field site.

Feature ID: <u>F94LH011</u> FT # NK051. 2 Date: 8.24.15

For all items not checked, please provide detailed explanation in the notes section of data form.

## 1. Site Description

- Was ADF&G contacted before conducting any work in this area?
- ★ Site Description complete? (Every cell must have entry or N/A)
- Were all photos taken and labeled correctly?

## 2. Physical/Chemical Attributes

- Calibration performed prior to sampling?
- Physical/Chemical attributes complete? (Every cell must have entry or N/A)
- Water quality data within expected ranges?
  - X pH: 4.0 10.0
  - **№** NTU: 0 3000
  - ☑ DO (mg/L): 1.0 15.0
  - M Temp.: 1.0 − 19.0
  - Specific Conductance: 20 1500

N₽L If outside expected ranges, was sample re-taken?

M Are units correct?

#### 3. Stream Profile

- ₭ Stream profile view sketch included?
- Stream profile view captures water depth and wetted width?
- Stream profile view captures where efforts were made to capture fish?
- ⋉ Plan view sketch included?

### 4. Methods Attributes

- Methods attributes complete? (Every cell must have entry or N/A)
- Were methods used adequate (explanation needed if no methods selected)?

## 5. Electrofishing Attributes

Electrofishing attributes complete? (Every cell must have entry or N/A)

MARe units correct?

Feature ID: F94LH011

### 6. Fish Observations

- Are all fish captured/observed recorded in the Fish Observation table?
- ► Are units correct? (Total Length (mm))
- Were adequate photos taken of fish captured? (Take a photo if in doubt)

### 7. General

- Feature ID and Field Target # are consistent on data forms, logbook entries, photos, and maps?
- 🛱 All additional data in logbook captured on data form and additional photos noted?
- Were all additional comments on stream habitat, etc. recorded on data form?
- Was any gear missing/damaged for this survey or did you have any problems that should require resampling of this stream for an adequate survey effort?

By signing below, I verify that all field data for this site has been verified for accuracy and completeness.

X have Volper X have Signature

Field Crew Chief (print)



P\_F94LH011\_001\_US 8/27/2015 NK051.2 LOOKING US FROM BRIDGE AT OFF ROW TARGET



P\_F94LH011\_002\_DS 8/27/2015 NK051.2 LOOKING DS FROM BRIDGE AT OFF ROW TARGET



P\_F94LH011\_003\_LB 8/27/2015 NK051.2 LOOKING AT LB AT OFF ROW TARGET



P\_F94LH011\_004\_RB LOOKING AT RB AT OFF ROW TARGET

8/27/2015 NK051.2



P\_F94LH011\_005\_AERIAL AERIAL PHOTO

8/27/2015 NK051.2



P\_F94LH011\_006\_AERIAL AERIAL PHOTO

8/27/2015 NK051.2



P\_F94LH011\_007\_AERIAL AERIAL PHOTO

8/27/2015 NK051.2



P\_F94LH011\_008\_BLACKFISH PHOTO OF ALASKA BLACKFISH

8/27/2015 NK051.2



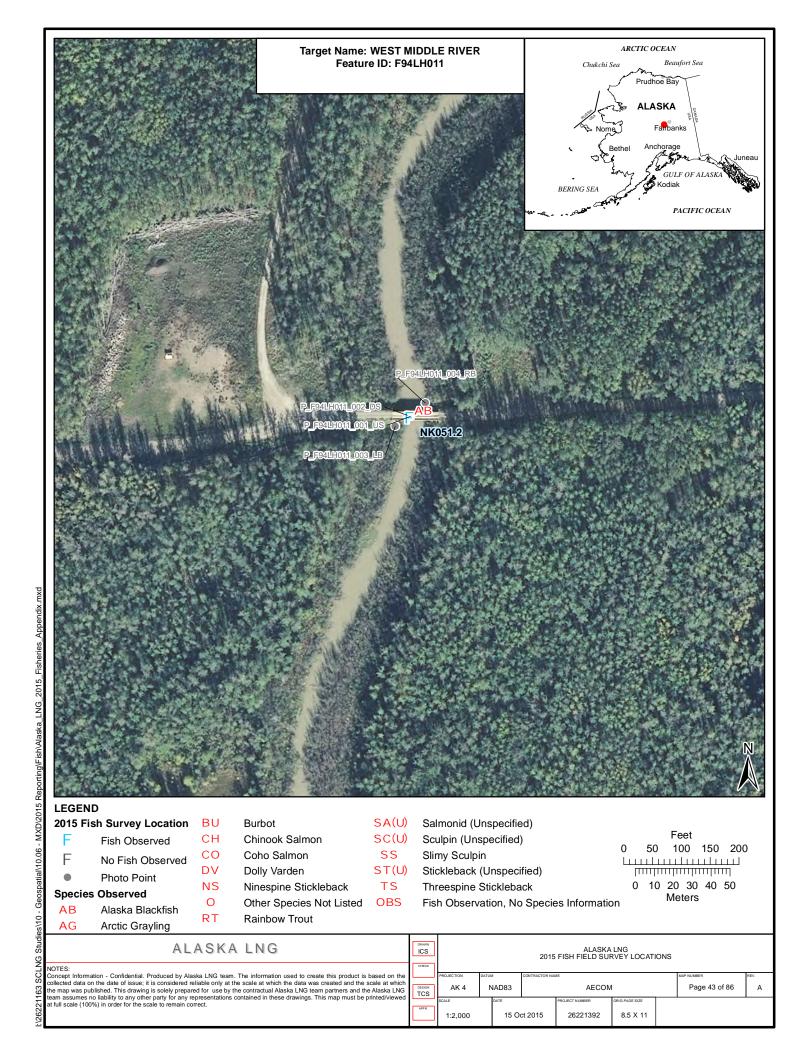
P\_F94LH011\_009\_BLACKFISH PHOTO OF ALASKA BLACKFISH

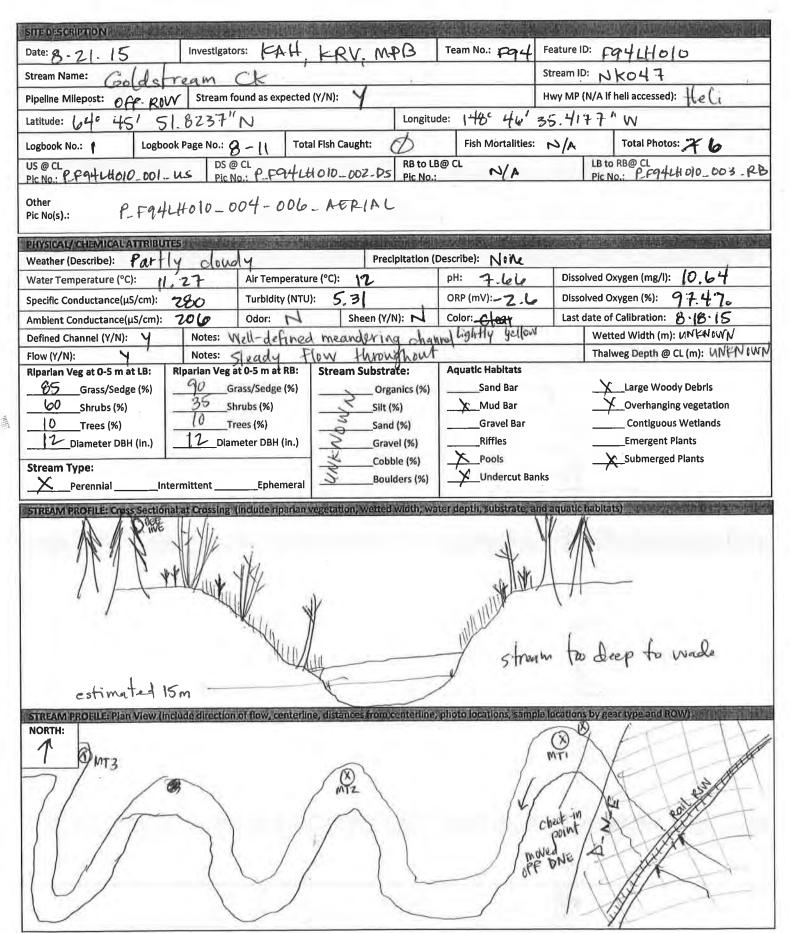
8/27/2015 NK051.2



P\_F94LH011\_010\_BLACKFISH PHOTO OF ALASKA BLACKFISH

8/27/2015 NK051.2





Feature ID: F94 LHOID

Minnow Traps (	Y/N):	Hook a	nd Line (Y/N):		Bea	sch Seine (Y	'/N):	Fyke I	Net (Y/N):	Hoop Net (Y/N):	STATE OF THE PARTY
No. of Minnow	No. of Minnow Traps Set:  Date & Time in: (mm/dd/yyyy)  Date & Time in: 8 2/ 15 No. of lines in water:			Date & Time in:				& Time in:	Date & Time in:		
Date & Time in:				100,000	m/dd/yyyy) of passes:	10210		dd/yyyy) & Time out:	(mm/dd/yyyy)  ADate & Time out:	4-6	
(mm/dd/yyyy)	1670 8 W 15		nes in water:	1.1	9.9	ich Length	(m):		dd/yyyy)	(mm/dd/yyyy)	. Typis
(пписа/уууу)	1550	Time	ics in water.		, sec	ich cengui	Sking well	/		MAN	1100
LECTROFISHIN		地計畫	是好的		story offer		<b>建成熟的</b>	100		加州建筑	<b>皮膚</b> 病
F (Y/N): Outy Cycle:	EF Start T	-	ncy (Hz):	EF End Time	A ()	verer .	EF Time (se	-	ling Efficiency (% of	F Reach-Length (m):	
Current-(A):		Volts (V				ver (W):		Cump	ing Efficiency (78 Of		np x volts
ISH OBSERVAT	ions "	2000	A PARTY	Literal and						Method topological	
(Seq. Num)	Gear Type		Species		Total Le	ength	Life Stage	encomp enc	Disposition	Picture No.	and the latest of the latest o
					(mm)		(Juvenile or	Adult)	(Dead or Alive)		
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orree falls add	itional informatio	Attawes and	and Mark Street	Miscones Municipal	the large	01524	No. 2 - CARD C. 197	Salaty back	Olempia de la responsación de la compansación de la	1. 上于3000元对 3.要c 等5	3.70th, 10th - 3
ores tany audi	india moment		AND EVEN SERVICE	<b>医型型性图</b>	No.		到1000000000000000000000000000000000000	THE SPACE	MINISTER STATE	1169万米4两个各种企图数量	
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			-	cavit	0	5 ser	ve es	ata			
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		Vide	-	d fin	Dec.	5 ser	ve es	ata			
IISCELLANEOU: oint ID: oint ID:	V	Vide	-	cavit	0 T	5 ser	ve es	ata			

### This form is to be completed before leaving the field site.

Feature ID: F94LHolo

FT # N K047

Date: 8 21 15

For all items not checked, please provide detailed explanation in the notes section of data form.

## 1. Site Description

- Was ADF&G contacted before conducting any work in this area?
- Site Description complete? (Every cell must have entry or N/A)
- Were all photos taken and labeled correctly?

## 2. Physical/Chemical Attributes

- 🖔 Calibration performed prior to sampling?
- Physical/Chemical attributes complete? (Every cell must have entry or N/A)
- 🙀 Water quality data within expected ranges?
  - ℃ pH: 4.0 10.0
  - NTU: 0 − 3000
  - <sup>1</sup>√A DO (mg/L): 1.0 15.0
  - ♥ Temp.: 1.0 19.0
  - Specific Conductance: 20 1500
- 也作 If outside expected ranges, was sample re-taken?
- Are units correct?

### 3. Stream Profile

- Stream profile view sketch included?
- Stream profile view captures water depth and wetted width?
- Plan view sketch included?

### 4. Methods Attributes

- Methods attributes complete? (Every cell must have entry or N/A)
- Were methods used adequate (explanation needed if no methods selected)?

# 5. Electrofishing Attributes

- Electrofishing attributes complete? (Every cell must have entry or N/A)
- Are units correct?

Feature ID: F94Ltl 010

#### 6. Fish Observations

Are all fish captured/observed recorded in the Fish Observation table?

MAP Are units correct? (Total Length (mm))

### 7. General

- Feature ID and Field Target # are consistent on data forms, logbook entries, photos, and maps?
- 🔀 All additional data in logbook captured on data form and additional photos noted?
- Were all additional comments on stream habitat, etc. recorded on data form?
- √□ Was any gear missing/damaged for this survey or did you have any problems that should require resampling of this stream for an adequate survey effort?

By signing below, I verify that all field data for this site has been verified for accuracy and completeness.

X haley Volper X hapy Vales

Fisherles Biologist (print)

Signature

Field Crew Chief (print)



P\_F94LH010\_001\_US 8/22/2015 NK047 LOOKING US AT OFF-ROW TARGET. FT MOVED ~500 FT DS



P\_F94LH010\_002\_DS 8/22/2015 NK047 LOOKING DS AT OFF-ROW TARGET. FT MOVED ~500 FT DS



P\_F94LH010\_003\_RB 8/22/2015 NK047 LOOKING AT RB AT OFF ROW TARGET. FT MOVED ~500 FT DS



P\_F94LH010\_004\_AERIAL AERIAL PHOTO

8/22/2015 NK047



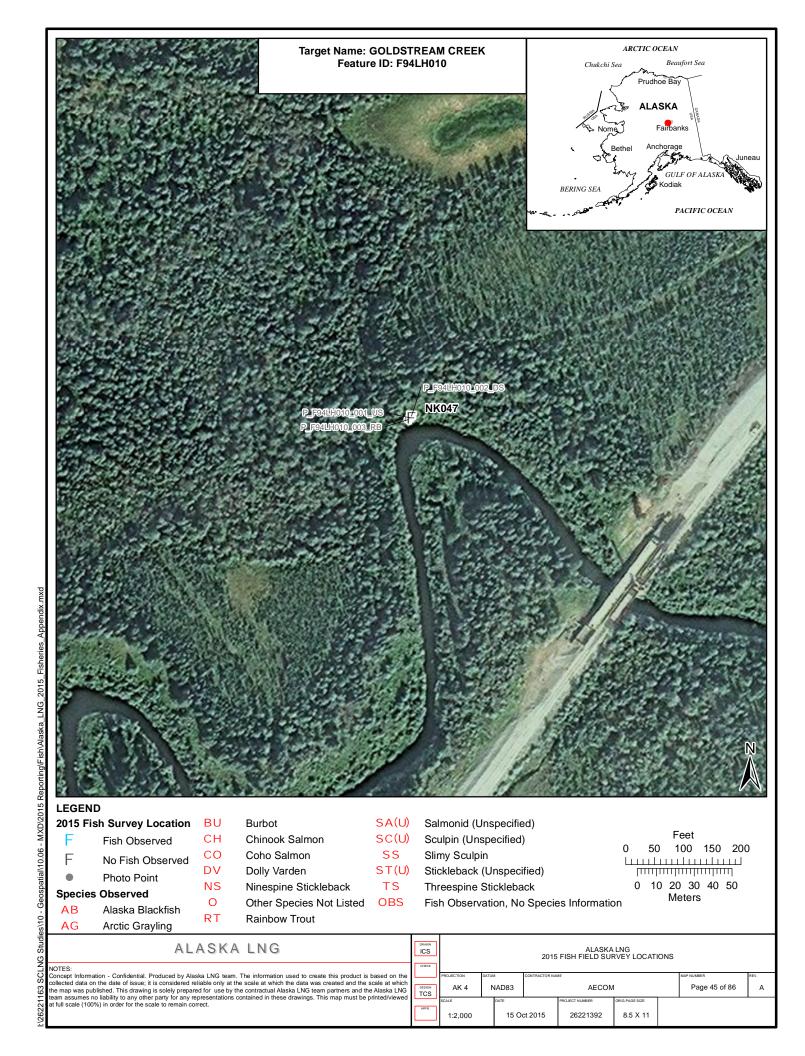
P\_F94LH010\_005\_AERIALN
AERIAL PHOTO LOOKING NORTH

8/22/2015 NK047



P\_F94LH010\_006\_AERIALS
AERIAL PHOTO LOOKING SOUTH

8/22/2015 NK047



THE TAX LANGUAGE WAY IN THE STATE OF THE STA	The state of the s	of Andrews and the last of Anders	2000 DAC 1000 GETT ALVENDED TO THE WARRANT
Date: 6 - 21 - 15 Inve	estigators: L. L. D. C. D. D. D.	Team No.: Fq4 Featu	re ID: F94 LH009
	estigators: KAH, KRV, MPB	Strea	
Stream Name: Mashington	ream found as expected (Y/N):		MP (N/A if heli accessed):
			11-0
	6" N Longit	-	.6719"W
Logbook No.: Logbook Page		Fish Mortalities:	Total Photos:
US @ CL PIC NO.: P-F941.HOO9 CO1US	Die No. 1-1 THE TO I - Die No	LB@ CL N/A	LB to RB@ CL P. F94LHOU9 _002
Other P-F94Ltlooq AERI	AL - 1. P94LHOOR - NERTAL W	VII	
Pic No(s).: Q COH HOW	1009-BURBOT P-F94	LHOW DIO _ WOODPR	06 P-F94CH009-011-WO
PHYSICAL/CHEMICAL ATTRIBUTES	2-007-13URBU 12111		7211100 201200
V AI	loudy Precipitation	(Describe): NONE	5 (1 mm 1
Water Temperature (°C): 9.80	Air Temperature (°C): \Z	pH: 7.37	Dissolved Oxygen (mg/l):  2 +
Specific Conductance(µS/cm): 174	Turbidity (NTU): 8.64	ORP (mV): 150 6	Dissolved Oxygen (%): 106.57
Ambient Conductance(µS/cm):  2	Odor: N Sheen (Y/N): N		ast date of Calibration: 8 - 70 - 15
	tes: Well-defined meandering.	stream	Wetted Width (m): NNKNDW N
11011 (17.10)		reach	Thalweg Depth @ CL (m): V N KN CW N
1.0	in Veg at 0-5 m at RB: Stream Substrate:	Aquatic Habitats Sand Bar	★ Large Woody Debris
Glass/Seage (70)		X Mud Bar	Coverhanging vegetation
70 Shrubs (%) 10 Trees (%)		Gravel Bar	Contiguous Wetlands
b Diameter DBH (in.)	Diameter DBH (in.) S Gravel (%)	Riffles	Emergent Plants
Stream Type:	Cobble (%)	Pools	Submerged Plants
Perennial Intermitte	nt Ephemeral Boulders (%)	Undercut Banks	
Stream too deep to	wade rection of flow centerline, distances from centerline	ate 15m	estimate (5m
NORTH: 2	SANSTRUCTION CORPUTABLE MAN STRUCTION STRUCTIO	TO WANTE STAND	
Revision Date: 3/19/2015	Approx . 1300 Ft	1 Applyon 25%	Page 1 of

Approvi 250

Feature ID: F94LH009

METHODS ATTE	ивитеs.		推动性 特地高级		SET SELVER	<b>医验验</b>	e to		NEW N	
Minnow Traps (	Y/N): Y	Hook	and Line (Y/N):		Beach Seine (Y	/N):	Fyke N	et (Y/N):		Hoop Net (Y/N):
No. of Minnow	Traps Set:		& Time In:	ſ	Date &Time in (mm/dd/yyyy)			Time in:	,	Date & Time In:
Date & Time in:	8.21.15	(mm/dd/yyyy)  No. of lines in water:		P	No. of passes:		Date 8	Time out:	4/4	(mm/dd/yyyy)  Date & Time out:
(mm/dd/yyyy) Date & Time ou	13:00	Time I	ines In water:	-	Reach Length	(m):	(mm/c	ld/yyyy)	1.	(mm/dd/yyyy)
(mm/dd/yyyy) ELECTROFISHIN	1315 GATTRIBUTES		THE REAL PROPERTY AND A STATE OF THE PARTY AND		Manch All March Control	NAMES OF RES		(W) 900 15 TO 10	mide	
EF (Y/N):	EF Start Ti	me:	EF End Tim	e:	/	EF Time (se	conds):	ENGINE SIR TE	EF Re	ach Length (m):
Duty Cycle:			ency (Hz):	1	Waveform:		Sampli	ng Efficiency (%	of sam	nple reach):
Current (A):	Section 18 a Live	Volts (		Servi	Power (W):		WANT PARTY	MUNICIPALITY OF THE PARTY OF TH	- 1.0	(amp x volts)
FISH OBSERVAT  ID (Seq. Num)	Post Plantage State No. of	25 TO 18		To	otal Length	Life Stage	1000000	Disposition		
	Gear Type  MINNOW T	ah Z	Species	_	nm)	(Juvenile or		(Dead or Alive	2)	lcture No.
901	Minnow			_	90	Javanile/		Alive	p.	F944H009-007-009 DURBOT
003	Vis obs		Wood Frog		N/A	) 400 K G [1	4,000			- F9441009 a.O. WOODPR
			7					4		
				-					+	
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								L. Le		
									4	
-				-	-	-	-		-	
NOTES (any add	tional information	d V	PRETABLED ASIA	W.	sight of method	AND THE PARTY OF	EV MIN	<b>发现在时间</b>	ST II	DOUBLO DE LO MANTONO
		a company	;		A STATE OF THE STATE OF	and anomalia	March World		- Contract of the Contract of	and the second s
		Λ ,	4			:				
	Mean	dem	ng stream	N	Jith 5	teep, 1	Nell-	do tive	<b>(</b> )	ben Es
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		1 1109			(	1 :	,	\1 i		
	stre	am	to deep to		wado	2 but	tom	capit 6	re	observed
		- 1	,			n bad				
	- 40	FISH	caught or		Observe	d				
	71	jul 1	of capture	(	2 10	Minho	w f	roops	4	I wood frog observe
MISCELLANEOUS	POINTS (if applic	Si culture		The same	U. ATTO AND		HART T	Cara la	ANATIA	on bard n
Point ID:			Description	:	A STATE OF THE STA					The second second
Point ID:	Λ		Description	:						
Field	WAA	7/	Field Scient	-	halles	Valne		Technical		
Crew Chief:	6.00	V	Technician:	_	MAN	y 120A	12	Lead:		

## This form is to be completed before leaving the field site.

Feature ID: F94LH009

FT# NK027

Date: 8-21-15

For all items not checked, please provide detailed explanation in the notes section of data form.

## 1. Site Description

- Was ADF&G contacted before conducting any work in this area?
- Site Description complete? (Every cell must have entry or N/A)
- Mere all photos taken and labeled correctly?

## 2. Physical/Chemical Attributes

- Calibration performed prior to sampling?
- Physical/Chemical attributes complete? (Every cell must have entry or N/A)
- X Water quality data within expected ranges?
  - '⊠ pH: 4.0 10.0
  - X NTU: 0 − 3000
  - DO (mg/L): 1.0 15.0
  - ★
     Temp.: 1.0 19.0
  - Specific Conductance: 20 1500
- µ thrule If outside expected ranges, was sample re-taken?
  - ★ Are units correct?

## 3. Stream Profile

- X Stream profile view sketch included?
- Stream profile view captures water depth and wetted width?
- Stream profile view captures where efforts were made to capture fish?
- Plan view sketch included?

#### 4. Methods Attributes

- Methods attributes complete? (Every cell must have entry or N/A)
- Were methods used adequate (explanation needed if no methods selected)?

# 5. Electrofishing Attributes

- Electrofishing attributes complete? (Every cell must have entry or N/A)
- Are units correct?

Feature ID: 194LH009

### 6. Fish Observations

- 🕱 Are all fish captured/observed recorded in the Fish Observation table?
- √ Are units correct? (Total Length (mm))
- Were adequate photos taken of fish captured? (Take a photo if in doubt)

### 7. General

- Feature ID and Field Target # are consistent on data forms, logbook entries, photos, and maps?
- All additional data in logbook captured on data form and additional photos noted?
- > Were all additional comments on stream habitat, etc. recorded on data form?
- Was any gear missing/damaged for this survey or did you have any problems that should require resampling of this stream for an adequate survey effort?

By signing below, I verify that all field data for this site has been verified for accuracy and completeness.

X halen Volper	X Maly Valge.
Fisherles Biologist (print)	Signature

Field Crew Chief (prInt)



P\_F94LH009\_001\_US LOOKING US AT PLX

8/22/2015 NK027



P\_F94LH009\_002\_DS LOOKING DS AT PLX

8/22/2015 NK027



P\_F94LH009\_003\_RB LOOKING AT RB AT PLX

8/22/2015 NK027



P\_F94LH009\_004\_AERIAL AERIAL PHOTO

8/22/2015 NK027



P\_F94LH009\_005\_AERIALE
AERIAL PHOTO LOOKING EAST

8/22/2015 NK027



P\_F94LH009\_006\_AERIALW
AERIAL PHOTO LOOKING WEST

8/22/2015 NK027



P\_F94LH009\_007\_BURBOT PHOTO OF BURBOT

8/22/2015 NK027



P\_F94LH009\_008\_BURBOT PHOTO OF BURBOT

8/22/2015 NK027



P\_F94LH009\_009\_BURBOT PHOTO OF BURBOT

8/22/2015 NK027

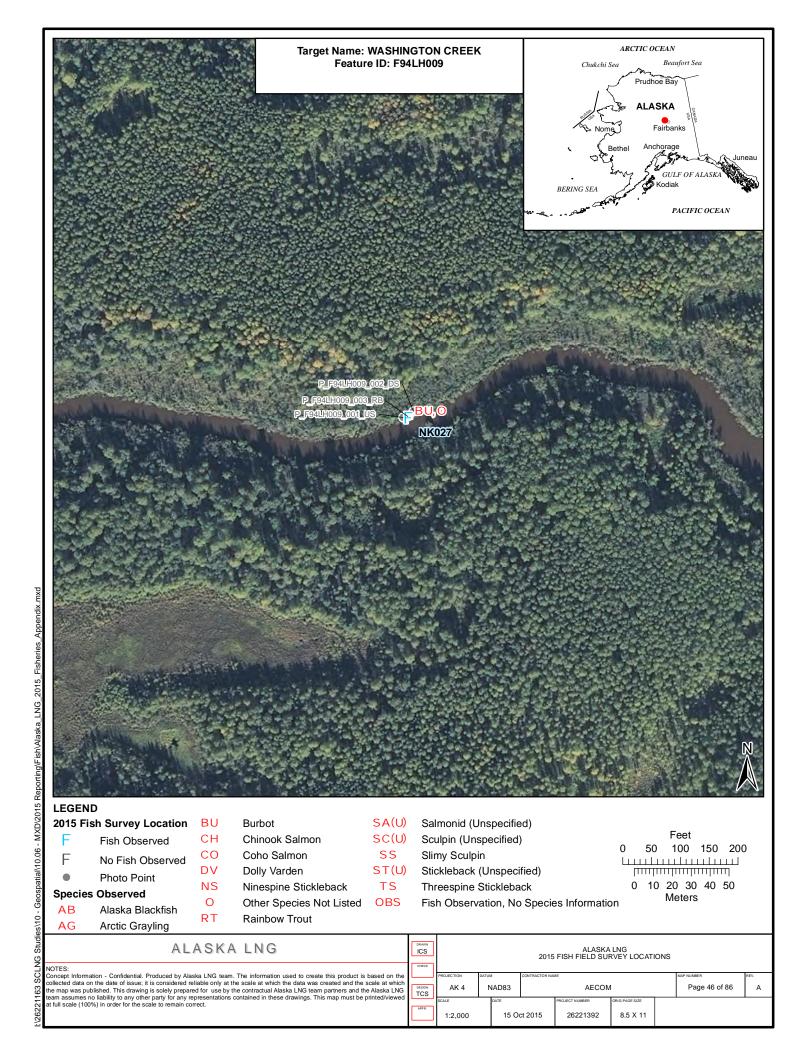


P\_F94LH009\_010\_WOODFROG PHOTO OF WOOD FROG

8/22/2015 NK027



P\_F94LH009\_011\_WQ 8/22/2015 NK027 PHOTO OF FIELD CREW COLLECTING WATER QUALITY DATA



STE DESCRIPTION	新成型 表现 200 新闻 100 × 100 100 100	THE PERSON NAMED IN	THE STREET WELL THE
	ors: KAH, KRV MPB	Team No.: (F91)	Feature ID: F94LH008
	ream		Stream ID: NKOZ6
	ound as expected (Y/N):		Hwy MP (N/A If hell accessed): Heli
Latitude: 65° 04' 42.5748"	Longit		28.5678" W
Logbook No.:   Logbook Page No.:		Fish Mortalitles:	3 Total Photos: 10
		B@CL Quly 11200	. 203 . Bic No.: 1 - F94 LHOOB . 004- RG
No. of the Control of	A: 20: 1:00		
Other P F 94 LHO 6 005		007-KERLAUN	
P-F94 LH008-006-	DERIAL P-F94LHOOG.	008 - BLACKFISH	H-009-BLACKPISH
Weather (Describe): Mostly	oudy Precipitation	(Describe): None	
Weather (Describe): Mostly CU Water Temperature (°C): 11.16	Air Temperature (°C): 12	pH: 5.47	Dissolved Oxygen (mg/l): 1-86
Specific Conductance(µS/cm): 144	Turbidity (NTU): 2,78	ORP (mV): 179.8	Dissolved Oxygen (%): 17.2%
Ambient Conductance(µS/cm): 33	Odor: N Sheen (Y/N): N	Color: Yellowish	Last date of Calibration: 8 · (8 · 15
	befined channel N/ grassy		Wetted Width (m): 21' 6,4 m
Flow (Y/N): Notes:	No Flow- Stagmant water	Il pond sen	The law a Double O Cl (12) and Cl (12)
0. 0.	Stream Substrate:	Aquatic Habitats	X Lavra Wandy Dahrin
	rass/Sedge (%)OD Organics (%) nrubs (%) Silt (%)	Sand Bar Mud Bar	XLarge Woody DebrisXOverhanging vegetation
	rees (%) Sand (%)	Gravel Bar	Contiguous Wetlands
	neter DBH (in.) Gravel (%)	Riffles	M Emergent Plants
Stream Type:	Cobble (%)	X_Pools	Submerged Plants
X Perennial Intermittent	Ephemeral Boulders (%)	Undercut Bank	s
STREAM PROFILE: Cross Sectional at Crossing		ater double substrate and	L MINISTERIO
STREAM PROFILE: Plan View (include direction	at flow centerline distances from centerline	1 24	6.4 m
NORTH:  ANY 23  OR ANY 25  OR ANY	forest my 2  Mixed for N400'	Assumed Flow obser	0 14

	of Minnow Traps Set:  Date & Time in: (mm/dd/yyyy)		nd Line (Y/N):			Beach Selne	(Y/N):	- Fyke	Net (Y/N):		Hoop Net (Y/N):
			Date &Time i			& Time in: dd/yyyy)	NI.	Date & Time in: (mm/sld/yyyy)			
ate & Time in:	8.21.15	No. of lines in water:		A	No. of passes			Date & Time out: / (mm/dd/yyyy)		Date & Time out:	
im/dd/yyyy) ate & Time ou	& Time lines in water:			-	Reach Length	(m):	2 (mm/	dd/yyyy)		(mm/dd/yyyy)	
nm/dd/yyyy)	150						777		/		, i
ECTROFISHIN	G ATTRIBUTES	Michiel .						<b>种等的</b>	的關係	李良	
(Y/N):	EF Start Ti			EF End Tim	-1		EF Tim	e (seconds):			ach Length (m):
uty Cycle:			ncy (Hz):	NE	- 4	Waveform:		Samp	ling Efficiency (9	6 of sam	
ırren <del>t (A):</del>		Volts (	/):	_		Power (W):					(amp x vol
SH OBSERVAT	IONS		测量规划:		Hate			THE PROPERTY OF	NICE NO		
(Seq. Num)	Gear Type		Species		Tot	tal Length	Life Sta	ge e or Adult)	Disposition (Dead or Alix	n) P	icture No.
10	MINNOW TI	nb-1	Blackfi	sh	-	15		le/Adult	1 1	-	1794411008.008.00
02	intitution ti	M.	Directi	211	-	lio	Chart	Tracer	Mertalit	) 1.	17411 WD WO . O.
103	11	- :			-	4			11		
104	((		(1			75			Ativa	P	F94L14008_009_Bi
505	MinneyT	ah. 7		P		105			1	100	1 1 1000 00 1 500
006	TAMATANA (	7				115					
607						95					
DUB						105					
809						90	1 - 10				
010	4					100					
110	Minuow Tra	63				05					7
0/2	A		V	7		100	1		V		7
OTES (any add	itional information	0.00	例期初級	是要語言			Taken in	2000世紀		24	<b>从图示图像图像</b>
Q.	kwater «	ماداد	1 1		· ['	C 1.0	by	100			4 1.
Dae			,	Meon	01	r us	py	beave	rs at	con	struction
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D	ark wa	ter	w/ Dong	sau	m	p alg	ae	out 1	elativoli	1 <	olid hattern -
D	ark wa	ter	w (pone	sau	m	p alg	ae	but 1	elativoli	1 5	olid bottom -on
No	ticable W/chan	low ge :	water of vogo	(N6'	9	n each	ban s, well	k) fr	om norr	nal	welled width
No	ticable W/chan	low ge :	water of vogo	(N6'	9	n each	ban s, well	k) fr	om norr	nal	welled width
No	ticable W/chan	low ge :	water of vogo	(N6'	9	n each	ban s, well	k) fr	om norr	nal	
No.	ficable Wichan  Washerst	low ge e	water of vogo	(N6'	9	n each	ban s, well	k) fr	om norr	nal	welled width
No.	ticable W/chan	low ge e	water of vogo	(N6'	ad	n each	ban s, well	k) fr	om norr	nal	welled width
3 ISCELLANEOU	ficable Wichan  Washerst	low ge e	water of vogo	(N6)	ad	n each	ban s, well	k) fr	om norr	nal	welled width
SCELLANEOU DINT ID:	ficable Wichan  Washerst	low ge e	water of vogo	No (NO)	ad in:	n each	ban s, well	k) fr	oranchis i	nal	welled width
SCELLANEOU Int ID: int ID:	ficable Wichan  Washerst	low ge e	water of vogo	Description Description eld Scient	ad ist/	n each	ban s, well	k) fr	om norr	nal	welled width
SCELLANEOU ant ID:	Hicable Wichan Wakfish SPOINTS (Happill	(ou) ge o	water of vogo	Description Description eld Sciente	ad ist/	n each	ban s, well	k) fr	oranchis i	nal	welled width

I his form is to be completed before leaving the field site.
Feature ID: 19414-008 FT # NK026 Date: 8 · 2   15
For all items not checked, please provide detailed explanation in the notes section of data form.
1. Site Description
Was ADF&G contacted before conducting any work in this area?
Site Description complete? (Every cell must have entry or N/A)
Were all photos taken and labeled correctly?
2. Physical/Chemical Attributes
☼ Calibration performed prior to sampling?
Physical/Chemical attributes complete? (Every cell must have entry or N/A)
Water quality data within expected ranges?
pH: 4.0 10.0
NTU: 0 - 3000
Ď DO (mg/L): 1.0 − 15.0
₩ Temp.: 1.0 – 19.0
Specific Conductance: 20 - 1500
If outside expected ranges, was sample re-taken?
Are units correct?
3. Stream Profile
Stream profile view sketch included?
🕱 Stream profile view captures water depth and wetted width?
🛚 Stream profile view captures where efforts were made to capture fish?
M Plan view sketch included?
4. Methods Attributes
Methods attributes complete? (Every cell must have entry or N/A)
Were methods used adequate (explanation needed if no methods selected)?
5. Electrofishing Attributes
É Electrofishing attributes complete? (Every cell must have entry or N/A)
N±/A-Are units correct?

Feature ID: F941H008

#### 6. Fish Observations

- Are all fish captured/observed recorded in the Fish Observation table?
- Are units correct? (Total Length (mm))
- Were adequate photos taken of fish captured? (Take a photo if in doubt)

#### 7. General

- Feature ID and Field Target # are consistent on data forms, logbook entries, photos, and maps?
- All additional data in logbook captured on data form and additional photos noted?
- Were all additional comments on stream habitat, etc. recorded on data form?
- Was any gear missing/damaged for this survey or did you have any problems that should require resampling of this stream for an adequate survey effort?

By signing below, I verify that all field data for this site has been verified for accuracy and completeness.

Fisherles Biologist (print)

Signature

X hall Volger

Signature

Field Crew Chlef (print)

Signature



P\_F94LH008\_001\_US LOOKING US AT PLX

8/21/2015 NK026



P\_F94LH008\_002\_DS LOOKING DS AT PLX

8/21/2015 NK026



P\_F94LH008\_003\_LB LOOKING AT LB AT PLX

8/21/2015 NK026



P\_F94LH008\_004\_RB LOOKING AT RB AT PLX

8/21/2015 NK026



P\_F94LH008\_005\_AERIAL AERIAL PHOTO

8/21/2015 NK026



P\_F94LH008\_006\_AERIAL AERIAL PHOTO

8/21/2015 NK026



P\_F94LH008\_007\_AERIALW AERIAL PHOTO

8/21/2015 NK026



P\_F94LH008\_008\_BLACKFISH PHOTO OF ALASKA BLACKFISH

8/21/2015 NK026

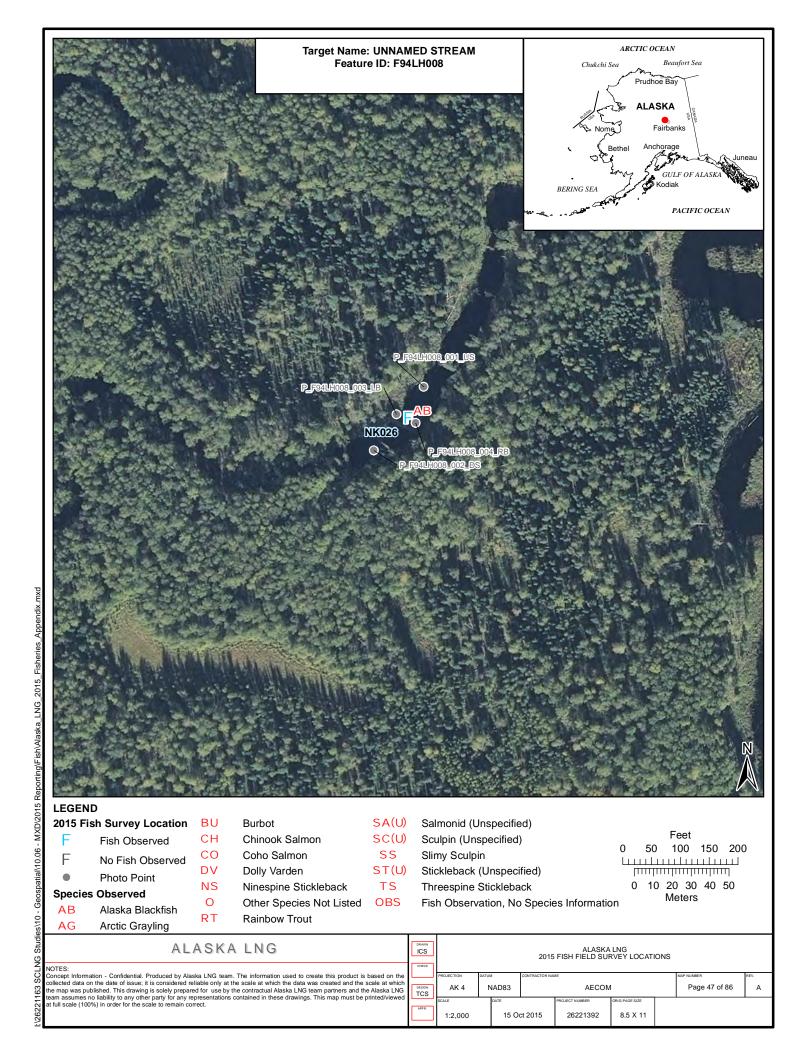


P\_F94LH008\_009\_BLACKFISH PHOTO OF ALASKA BLACKFISH

8/21/2015 NK026



P\_F94LH008\_010\_MINNOWTRAP 8/21/2015 NK026 PHOTO OF FIELD CREW RETRIEVING MINNOW TRAP



Revision Date: 3/19/2015

SITE DESCRIPTION	· 1000000000000000000000000000000000000	19. 10. 10. 10. 10. 10. 10. 10. 10. 10. 10	<b>可是是是外面是国家大型 医多种性原则</b>
	ors: EAH, KRU, MPD	Team No.: F94	Feature ID: F94LH015
Stream Name: Unnamed This	to tatalina		Stream ID: NKO 25
18.13	1 No deta	ned channel nter a pex	Hwy MP (N/A If heli accessed): Heli
Latitude: 65° 05' 51 868	4 10 03		1 37.2684 1 W
		Fish Mortalities:	notal Photos: 13
Logbook No.: Logbook Page No.:	CL RB to L		
PIC NO .: P - F9 1/LHO15 DO LAS PIC N	10.: P. 17411016 602 -05 Pic No.	P. P. 14 LHOIS _	063 BPIC No.: P.F.14 CHOIS CO.4 - FL
Other P- P9424015_005:1			15_009 BLACKPISH -OLL B
Pic No(s) .: P. F94LH015_006.	MERIAL -008. AERIAL	P.F94LHOIS	012 GAMPLING P. F94LHO15013
PHYSICAL/CHEMICAL ATTRIBUTES	是一个一个一个一个一个一个一个一个一个一个一个一个一个一个一个一个一个一个一个	(Describe): No Na	2006年,1000年2月1日 1100年2月 1100年 1100日 1
Weather (Describe): Mostly		pH: 5 & B	Dissolved Oxygen (mg/l): 0,9/
Water Temperature (°C): 6,19	Air Temperature (°C): + Turbidity (NTU): 6.57	ORP (mV): 88 1	Dissolved Oxygen (%): 1 4 7
Specific Conductance(μS/cm): [[[α][α][α][α][α][α][α][α][α][α][α][α][α	Odor: Y Sulfur Sheen (Y/N): N	Color: Brown	Last date of Callbration: 8-24-15
Defined Channel (Y/N): Notes: N			
	No FLOW - No water a Pi	X	Thalweg Depth @ CL (m): N
1	at 0-5 m at RB: Stream Substrate:	Aquatic Habitats	Lance Warnelly Debuts
	irass/Sedge (%) UU Organics (%)	Sand Bar Mud Bar	Large Woody DebrisOverhanging vegetation
	hrubs (%)Silt (%) rees (%)Sand (%)	Gravel Bar	Contiguous Wetlands
11003 (70)	meter DBH (in.) Gravel (%)	Riffles	Emergent Plants
Stream Type:	Cobble (%)	Pools	Submerged Plants
PerennialIntermittent	Ephemeral Boulders (%)	Undercut Ban	ks
STREAM PROFILE: Cross Sectional at Crossing	(include riparian vegetation, wetted width, w	ater depth, substrate, ar	id aquatic habitats)
I water quality parameter	s collected in channel	from Oxbow	N WSW OF PLX
		.17	Mokey mokey law here
NKOZE Sheekin	1- point	NKOZS FEATM	MOKU / MIKU 19
NORTH:	Tataling on Rive	r footo locations, samp	Connected channel
ANTO	wetyand complex	No Connec	ted water orbon
orben unt-3 staglant u	NK025		

Page 1 of \_\_\_

METHODS ATT	TOP ON THE STREET	A THE REPORT OF THE PARTY OF TH	or had for the agency from the same		AND DESCRIPTION OF THE PERSON	Continue de Cultiva de	VENTON INCLUMENTAL PROPERTY OF THE PARTY OF
Minnow Traps (		Hook and Line (Y/N):	Beach Seine	(Y/N):	Fyke N	et (Y/N):	Hoop Net (Y/N):
			* Property	H d			- Inc.
No. of Minnow	Traps Set:	Date & Time in: (mm/dd/yyyy)	Date &Time (mm/dd/yyy	VA.280.11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Date & Time in: (mm/dd/yyyy)		Date & Time in: (mm/dd/yyyy)
Date & Time in:	8.28 15	No. of lines in water:	No. of passe		Date &	Time out:	Date & Time out: (mm/dd/yyyy)
(mm/dd/γγγγ) Date & Time ou	13:30	Time lines in water:	Reach Lengti	h (m):	(mm/d	ld/yyyy)	
(mm/dd/yyyy)	14:20			Straw on the			1991/ 1 1/1 1018 Take(1)
ELECTROFISHIN	Colon I may 100 to 100	MARINE THE STATE OF THE STATE O	<b>经出版</b> (1)	2000年2月10日	in the	<b>则形态于加热</b>	大學的過去學
EF (Y/N):	EF Start Tim		Time:	EF Time (se	1		Reach Length (m):
Duty Cycle: Current (A):		Frequency (Hz) : Volts (V):	Waveform: Power (W):		Sampli	ng Efficiency (% of	sample reach): (amp x volts)
	C. C		Tower (W).				(amp x voits)
FISH OBSERVAT	IONS	<b>多时间的运行</b> 机构整定型的	Total Length	Life Stage		Disposition	Market and Market and St.
ID (Seq. Num)	Gear Type	Species	Total Length (mm)	(Juvenile or A	Adult)	Disposition (Dead or Alive)	Picture No.
00	MT-3	Blackfron	85	Invenile.	/Adul	Mive	
002	- 1		145	2		1	
003			150	Adult			
433			105			114	
COT			70				
Dolo	Sic		150	Adult			
607	V		85				
000	MT-3		80				
009	MT-2		150	Adult			
010			100			1	
011	N/	1	125				
012		V	120	Y	-	V	
Wett	and com	plex w/nod	ofined cho	LANGE COLOR	-	11 X C.	1
119		ponds to th	u sw (~	100 to a	lefina	d Channel	remittent pock of surface wat demnested to a ched to tataling
Old	oxsow ection b	ponds to the and the	two seem	100 to a  E (this bat  so unlik	lefina oxb far	d Channel our Conne ther from	cted to tataline
Old	ection b	ponds to the and the etween the war	two seems	How to a  E (this bat  so unliked as	lefine oxb far	d channel on conne ther from except	cted to tataling for possibly
Old Conn d Minno	ection b	ponds to the and the etween the war high was set in ne	two seems	How to a  E (this bat  so unliked as	lefine oxb far	d channel on conne ther from except	cted to tataling for possibly
Conn d Minno	ection be wring we we traps	ponds to the and the etween the war high was set in ne	two seems three passes	How to a  E (this bat  so unliked as	lefine oxb far	d channel on conne ther from except	cted to tataling for possibly
Old Conn d Minno	ection be wring we we traps	ponds to the and the etween the war high was set in ne	two seems the epison	How to a  E (this bat  so unliked as	lefine oxb far	d channel on conne ther from except	cted to tataline

#### This form is to be completed before leaving the field site.

Feature ID: F9+Ltto15 FT# NK025 Date: 8 28 15

For all items not checked, please provide detailed explanation in the notes section of data form.

#### 1. Site Description

- Was ADF&G contacted before conducting any work in this area?
- Site Description complete? (Every cell must have entry or N/A)
- Were all photos taken and labeled correctly?

#### 2. Physical/Chemical Attributes

- ☼ Calibration performed prior to sampling?
- Physical/Chemical attributes complete? (Every cell must have entry or N/A)
- Water quality data within expected ranges?
  - 🔞 pH: 4.0 10.0
  - NTU: 0 − 3000
  - DO (mg/L): 1.0-15.0 0 91 Explainable due to stagnant

    Temp: 1.0-19.0

    Notare of system + floating

    emergen
  - ⊠ Specific Conductance: 20 1500

⊢ If outside expected ranges, was sample re-taken?

Are units correct?

#### 3. Stream Profile

- Stream profile view sketch included?
- Stream profile view captures water depth and wetted width?
- X Stream profile view captures where efforts were made to capture fish?
- Plan view sketch included?

#### 4. Methods Attributes

- Methods attributes complete? (Every cell must have entry or N/A)
- ★ Were methods used adequate (explanation needed if no methods selected)?

### 5. Electrofishing Attributes

Electrofishing attributes complete? (Every cell must have entry or N/A)

Are units correct?

Feature ID: F94 Ltto 15

#### 6. Fish Observations

Field Crew Chief (print)

- 💢 Are all fish captured/observed recorded in the Fish Observation table?
- Are units correct? (Total Length (mm))
- Were adequate photos taken of fish captured? (Take a photo if in doubt)

#### 7. General

- Feature ID and Field Target # are consistent on data forms, logbook entries, photos, and maps?
- All additional data in logbook captured on data form and additional photos noted?
- ₩ Were all additional comments on stream habitat, etc. recorded on data form?
- Was any gear missing/damaged for this survey or did you have any problems that should require resampling of this stream for an adequate survey effort?

By signing below, I verify that all field data for this site has been verified for accuracy and completeness.

X halen Voloer	X Kally Valer
Fisherles Biologist (print)	Signature
X kin Holnes	x blan

Signature



P\_F94LH015\_001\_US LOOKING US AT PLX

8/29/2015 NK025



P\_F94LH015\_002\_DS LOOKING DS AT PLX

8/29/2015 NK025



P\_F94LH015\_003\_LB LOOKING AT LB AT PLX

8/29/2015 NK025



P\_F94LH015\_004\_RB LOOKING AT RB AT PLX

8/29/2015 NK025



P\_F94LH015\_005\_MISC 8/29/2015 NK025 LOOKING AT END OF WATER CHANNEL ~100 FT FROM PLX



P\_F94LH015\_006\_AERIAL AERIAL PHOTO

8/29/2015 NK025



P\_F94LH015\_007\_AERIAL AERIAL PHOTO

8/29/2015 NK025



P\_F94LH015\_008\_AERIAL AERIAL PHOTO

8/29/2015 NK025



P\_F94LH015\_009\_BLACKFISH PHOTO OF ALASKA BLACKFISH

8/29/2015 NK025



P\_F94LH015\_010\_BLACKFISH PHOTO OF ALASKA BLACKFISH

8/29/2015 NK025



P\_F94LH015\_011\_BLACKFISH PHOTO OF ALASKA BLACKFISH

8/29/2015 NK025

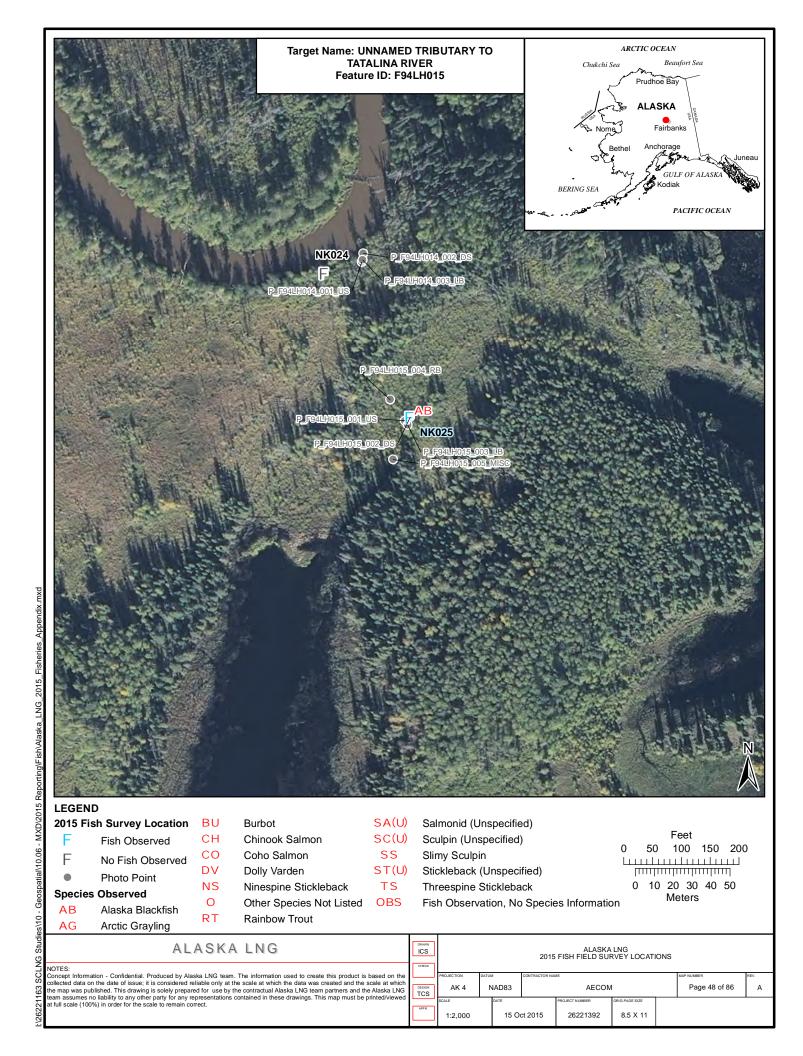


P\_F94LH015\_012\_SAMPLING 8/29/2015 NK025 PHOTO OF FIELD CREW RETRIEVING FISH FROM MINNOW TRAP



P\_F94LH015\_013\_PHOTOS PHOTO OF FIELD CREW

8/29/2015 NK025





SITE DESCRIPTION	(建2)。	ALKAH KATUMAT	新世名[2] [2] [2] [2] [2] [2] [2] [2] [2] [2]
Date: 9 - 28 · 15 Investigators: CAH	CRV MPB Tes	am No.: F94 Fe	eature ID: F94LH014
Stream Name: Tatalina River	į.	St	ream ID: NKO24
Pipeline Milepost: 430.7 Stream found as expected	(Y/N): Y L	H	wy MP (N/A if heli accessed):
Latitude: 65° 55' 54.3886" N	Longitude:	148° 40'	40.3093"W
	al Fish Caught:		N/A Total Photos: (p
PIGNO.: P. F941HO14_001_US DS@CL P. F94LH	1014_002_DS RB to LB@ C	1944HO14_00	23_CB Pic No.: N/A
Other P.F94Ltto14_004_AE	PLAL - 006_A	ERIAL	
Weather (Describe): Partly Cloudy	Precipitation (Descr	ibe): None	。 一种,一种,一种,一种,一种,一种,一种,一种,一种,一种,一种,一种,一种,一
Water Temperature (°C): 6.26 Air Temperatur	re (°C): 7 pH	: 6.12	Dissolved Oxygen (mg/l): 11.34
Specific Conductance(µS/cm): 107 Turbidity (NTU)	1: 264 OR	P (mV): 161.6	Dissolved Oxygen (%): 91-770
Ambient Conductance(µS/cm): 69 Odor: N		lor: Brown	Last date of Calibration: $7-24-2015$
Defined Channel (Y/N): V Notes: Wide channel Flow (Y/N): Y Notes: Steady	of w/ high water a f	The of survey	Wetted Width (m): UNKNOW N  Thalweg Depth @ CL (m): UNKN≀NN
Riparian Veg at 0-5 m at LB: Riparian Veg at 0-5 m at RB:		uatic Habitats	maiweg bepin @ cz (m). Wa Kiata
Grass/Sedge (%) 60 Grass/Sedge (%)	Organics (%)	Sand Bar	Large Woody Debris
Shrubs (%)		Mud Bar	Overhanging vegetation
10 Trees (%) 10 Diameter DBH (In.) 10 Diameter DBH (in.)	Sand (%)	Gravel Bar	Contiguous Wetlands Emergent Plants
Stream Type:	Cobble (%)	Pools	Submerged Plants
PerennialIntermittentEphemeral	Boulders (%)	Undercut Banks	
STREAM PROFILE: Cross Sectional at Crossing (Include riparian v	egetation, worted width, water di	epth, substrate, and a	quatic habitets)
Stream too deep to wade  Est width ~ 70' (21 m)  Brown water & stendy flow			nullulus Att Att Att Att Att Att Att Att Att At
M WY + W			nullulus the second sec

Feature ID: F94LH014

METHODS ATTRIBUTES	TO THE	<b>建一种</b>	<b>""</b> 数例即	(基)				
:Minnow Traps (Y/N):	Hook	and Line (Y/N):		Beach Seine (Y,	/N):	Fyke N	let (Y/N):	Hoop Net (Y/N):
No. of Minnow Traps Set:	3 Date 8	k Time in:	1.	Date &Time in: (mm/dd/yyyy)			time in:	Date & Time in: (mm/dd/yyyy)
Date & Time in: 8 · 2 (mm/dd/yyyy) 12		lines in water:	, N/A	No. of passes:		Date 8	Time out:	Date & Time out: (mm/dd/yyyy)
Date & Time out: 8 29 (mm/dd/yyyy)	Time	ines in water:	,	Reach Length	m):			man and
ELECTROFISHING ATTRIB	UTES	<b>经验</b>	其可認為機	<b>对于特殊</b>	<b>自然到的</b> 特别	門衛		
	Start Time:		EF End Time:		EF Time (sec			F Reach Length (m):
Duty Cycle: Current (A):	Freque Volts (	ency (Hz) :	N	Waveform:	(	Sampl	ing Efficiency (% o	f sample reach):(amp x volts)
	Voits (	VI.	THE ADDRESS OF	/   Power (vv).	- Company Contract Co		an van sain sa	(amp x voits)
FISH OBSERVATIONS	HE DESCRIPTION	图 美国图		Total Length	Life Stage	A SE HIS	Disposition	
ID (Seq. Num) Gear Ty	/pe	Species		(mm)	(Juvenile or A	dult)	(Dead or Alive)	Picture No.
						/		
			1	1	-6	1		
			140	NE		/		-
		/						
No. 2017								
								3
NOTES (any additional info	ormation)	Marie Marie	STATE THE	<b>国际企业</b>			THE PLANTS	NERTH THE RESERVED
wide me	andering	strea	M					
Too deep	to ov.	nde au	ul st	ream for	, murk	4	to see h	settem
Stream	width	approx	imite	701(2	1 m)			
Step	bank o	n sout	h side	and h	one 91	radu	al on a	coth bank
				Survey	O			
o o				obsetva	,			
A COMPANY OF THE PARK	AND DESCRIPTION OF THE PARTY OF	TWICE	or	observa	a	or the same		
MISCELLANEOUS POINTS Point ID:	(п аррисавіе)		Description:		and the second		Suste Build his	and the state of
Point ID:			Description:					
Field A	11	Fi	eld Scientis	t/ \/a \	11-0	0	Technical	
Crew Chief:	1/2		echnician: _	Yall	y vay	Ker	Lead:	

#### This form is to be completed before leaving the field site.

Feature ID: F944tt014

FT#NKOZ4

Date: 8 - 28 · 15

For all items not checked, please provide detailed explanation in the notes section of data form.

#### 1. Site Description

- Was ADF&G contacted before conducting any work in this area?
- ✓ Site Description complete? (Every cell must have entry or N/A)
- Were all photos taken and labeled correctly?

### 2. Physical/Chemical Attributes

- Calibration performed prior to sampling?
- Physical/Chemical attributes complete? (Every cell must have entry or N/A)
- Water quality data within expected ranges?
  - ₩ pH: 4.0 10.0
  - **⊠** NTU: 0 − 3000
  - DO (mg/L): 1.0 15.0
  - X Temp.: 1.0 − 19.0
  - Specific Conductance: 20 1500
- 시대 If outside expected ranges, was sample re-taken?

#### 3. Stream Profile

- X Stream profile view sketch included?
- Stream profile view captures water depth and wetted width?
- Stream profile view captures where efforts were made to capture fish?
- Plan view sketch included?

#### 4. Methods Attributes

- Methods attributes complete? (Every cell must have entry or N/A)
- Were methods used adequate (explanation needed if no methods selected)?

### 5. Electrofishing Attributes

- Electrofishing attributes complete? (Every cell must have entry or N/A)
- N☐ AAre units correct?

Feature ID: f94LHo 14

#### 6. Fish Observations

- Are all fish captured/observed recorded in the Fish Observation table?
- PA Are units correct? (Total Length (mm))
- ⟨\daggardag{\psi}\_{\infty} \text{Were adequate photos taken of fish captured? (Take a photo if in doubt)

#### 7. General

- Feature ID and Field Target # are consistent on data forms, logbook entries, photos, and maps?
- All additional data in logbook captured on data form and additional photos noted?
- Were all additional comments on stream habitat, etc. recorded on data form?
- 他》 Was any gear missing/damaged for this survey or did you have any problems that should require resampling of this stream for an adequate survey effort?

By signing below, I verify that all field data for this site has been verified for accuracy and completeness.

X haley Volper X haley Volper
Fisheries Biologist (print)
Signature

Field Crew Chief (print)

Signature



P\_F94LH014\_001\_US LOOKING US AT PLX

8/29/2015 NK024



P\_F94LH014\_002\_DS LOOKING DS AT PLX

8/29/2015 NK024



P\_F94LH014\_003\_LB LOOKING AT LB AT PLX

8/29/2015 NK024



P\_F94LH014\_004\_AERIAL AERIAL PHOTO

8/29/2015 NK024



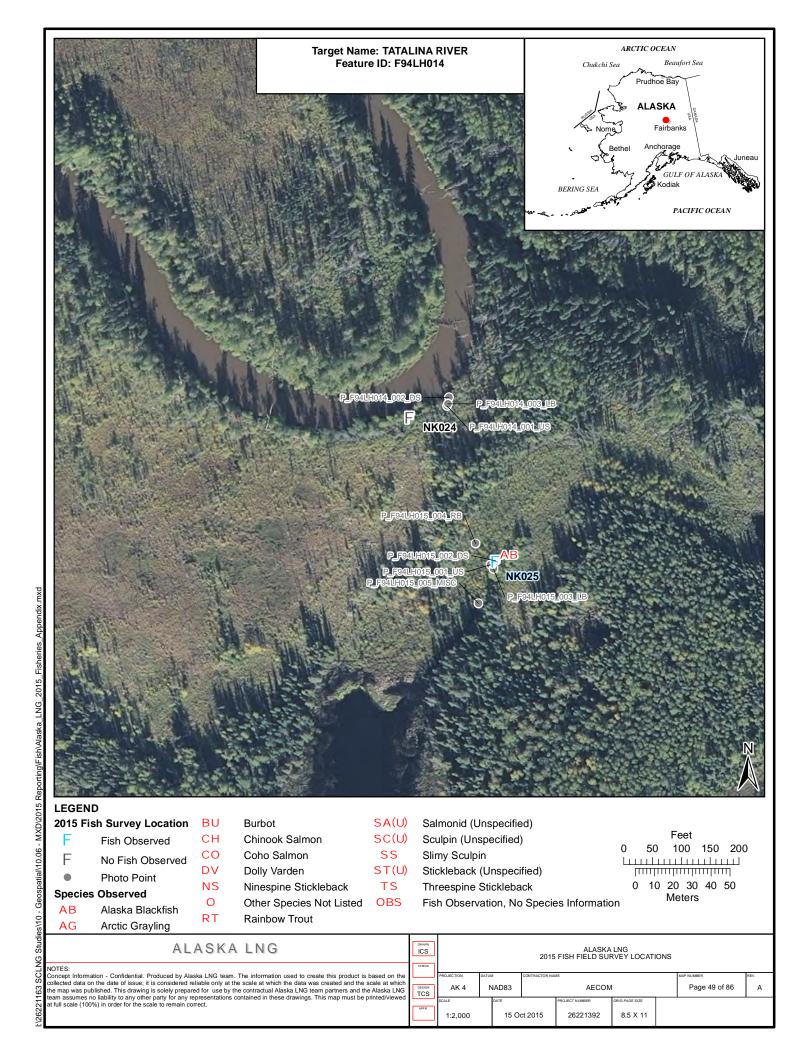
P\_F94LH014\_005\_AERIAL AERIAL PHOTO

8/29/2015 NK024



P\_F94LH014\_006\_AERIAL AERIAL PHOTO

8/29/2015 NK024



Revision Date: 3/19/2015

SITE DESCRIPTION		STATEMENT !	<b>通过的企业的企业的企业</b>					
Date: 8 · 20 · 15	Investigators: EAH KRV MP	B Team No.: Fq4	Feature ID: F9414007					
Stream Name: Unnamed	Trib to Tatalina R		Stream ID: NKOZO,					
Pipeline Milepost: 424.7	Stream found as expected (Y/N):	Dry	Hwy MP (N/A if hell accessed): Heli					
Latitude: 65° 09' 14.5263" N Longitude: 148° 41' 19.9252" W								
Logbook No.: / Logbook Page No.: 6 Total Fish Caught: N/A Fish Mortalities: N/A Total Photos: 7								
US@CL P. F94LH007_001-US DS@CL P. F94LH007_002_DS RB to LB@CL P. F94LH007_003_LB LB to RB@CL PIC No.: P. F94LH007_004-RB								
Other P_F97LH007_005_AERIAL -007_AERIAL								
PHYSICAL/CHEMICAL ATTRIBUTES	新日子·夏古港 多位等的人。1955年1月		(California )					
-	CW.C.	cipitation (Describe): Notice	Completed Occupant (mag/l/)					
Water Temperature (°C):	Air Temperature (°C): 2		Dissolved Oxygen (mg/l): Dissolved Oxygen (%):					
Ambient Conductance(µS/cm):	Odor: Sheen (Y,	ORP (mV):N	Last date of Calibration:					
Defined Channel (Y/N):	2 10 11	amage channel	Wetted Width (m)					
Flow (Y/N):	Notes: No Water / Plou		Thalweg Depth @ CL (m):					
	parlan Veg at 0-5 m at RB: Stream Substi							
Grass/Sedge (%)		ganics (%)Sand Bar	Large Woody Debris					
Shrubs (%)	60 Shrubs (%) Silt 40 Trees (%) San	- \- \	Overhanging vegetation Contiguous Wetlands					
Trees (%) Diameter DBH (in.)	1	d (%) Gravel Bar vel (%) Riffles	N Smergent Plants					
/ V V V V V V V V V V V V V V V V V V V		oble (%) Pools	Submerged Plants					
Stream Type: PerennialIntern	no.	ulders (%)Undercut Ba						
STREAM PROFILE: Cross Sectional	at Crossing (include riparian vegetation, wetter	I width, water depth, substrate, a	and aquatic habitats)					
	A LANDER MANAGEMENT OF THE PARTY OF THE PART							
NORTH:	de direction of flow, centerline, distances from  Spruce  Forest  grassy semb(s)  elevati	Pex /	y drainage channel west has					

Page 1 of \_\_\_

Feature ID: F94LH007

Monow Trips Set.  No. of Kinnow Trips Set.  Date & Time in:  (mm/dd/yry)  Date & Time in:  Date & Time in:  (mm/dd/yry)  Date & Time in:  Date & Tim	METHODS ATT	RIBUTES	The March 4	<b>小性后納無</b>	Maria Maria		Wilder		tion grant the later than
Date & Time In:  (mm/dd/yyyy)  Date & Time Bries in water:  No. of passes:  (mm/dd/yyyy)  Date & Time Good's (mm/dd/yyyy)  EF Exch Longth (m):  EF Exch Longth (m):  EF Exch Longth (m):  EF Exch Longth (m):  Date (Mine Good's)  EF Exch Longth (m):  EF Exch Longth (m):  Date (Mine Good's)  EF Exch Longth (m):  Date (Mine Good's)  EF Exch Longth (m):  EF Exch Longth (m):  Date (Mine Good's)  EF Exch Longth (m):  Disposition (Does of Almy)  Picture No.  (Graph x volts)  Fish Good of Almy)  Picture No.  (Graph x volts)  Fish Go	Minnow Traps (	Y/N):	Hook and Line (Y/N	):	Beach Seine (	Y/N):	Fyke 1	Net (Y/N):	Hoop Net (Y/N):
Date & Time is:  (mm/dd/ym)  Date & Time lines in water:  Time lin	No. of Minnow	Traps Set:	Date & Time in:		Date &Time in:				
Date & Time gots (morpholymy)  The lines in water:  Reach Langth (m)  EF Films (seconds):  EF (V/N):  EF Films (seconds):  EF Reach Langth (m):  EF (V/N):  EF Films (seconds):  EF Reach Langth (m):  EF Films (seconds):  EF Reach Langth (m):  Sampting & fillidency (% of sample reseth):  Cornent (A):  Vots (V):  Fostions SEVANONS  ID (Seq. Num)  Gear Type  Species  Total Length (mm)  Use Stage (tovenile or Adult)  Deposition (read or Alive)  Picture No.  Picture No.  Picture No.  NOTES (fny additional information)  Dry drainage of pearty defined banks four many furbugh aptruct forest in scruz/shrub carridar  Rocked water observed near L2 in connecded system but no water within construction comider  No notable change of substraite  System seems to be running went to each at Pix  Pront ID:  Description:  Pield Scientisty Many Many  Technical	Data & Time in				100000000000000000000000000000000000000		INI /		
EFEND TIME:  Sampling Efficiency (% of sample reach):  (Ging x volts)  ESSI COSSENVATIONS  ID (Seq. Num)  Gear Type  Species  Total Length  ((min)  Life Stage ((uvenile or Adult)  Disposition ((Dead or Alve)  Picture No.  (Dead or Alve)  Picture No.  (Dead or Alve)  Picture No.  Poles Type  Total Length  (min)  Life Stage ((uvenile or Adult)  Disposition (Dead or Alve)  Picture No.  (Dead or Alive)  Picture No.  (Dead or Alve)  Picture No.  (Dead or Alve)  P	(mm/dd/yyyy)	N)		the Park of the					
EF (V/N):	THE RESERVE FRANCISCO OF THE PROPERTY OF	t:	Time lines in water:		Reach Length (m):				- here ( ) - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -
Duty Cycle:  Current (A):  Votes (V):  Pywork (W):  Sampling & Mile and Frequency (Note Sample reach):  Species  Total length (mm)  Total length (mw)  (losed or Adult) (losed or Adult) (losed or Allve)  Picture No.  ROTES (my additional information)  Dry drawage of poorty defined banks parming furbugh spruce forest in scrub/shrub curridar  Pooled water observed near 12 in connected system but no water within construction comider  No notable change of substrate  System seems to be running west to east at PLX  Drawage seems to be used as game trail  Miscellaneous Points (frapplicable)  Point ID:  Description:  Field  Field Scientist/ Mallin Mars  Technical	ELECTROFISHIN	G ATTRIBUTES			Walter Street	国的学游技			
Current (A):  Description:  Species  Total Length (Inm)  Use Stage (Lovenille or Adult)  Disposition (Loveni		EF Start Ti		EF End Time:	1/2	FF Time (se	-		
ID (Seq. Num) Gear Type Species Total Length (mm) Ulfe Stage (Juvenile or Adult) (Disposition (Dead or Alive)) Picture No.  NOTES (Gry Additional Information)  Dry drainage of pearty defined banks pluming turbugh spruce forest in samplishrub corridor Aboled water observed near 12 in connected system but no water within construction corridor No notable change of substrate  System seems to be running went to east at PLX  Discription:  Miscellaneous points (if applicable)  Point ID:  Description:  Field Scientist/ Manny Markey Technical				211		-	Samp	ing Efficiency (% of	
NOTES (Gry Additional information)  NOTES (Gry Additional information)  Dry drainage of poorty defined banks pluring furbugh spruce forest in samijshrub comider Aboled water observed near 12 in connected system but no water within construction comider No notable change of substrate  System seems to be running went to east at PLX  Disposition (Dead or Adviv)  Picture No.  Disposition (Dead or Adviv)	Jan and School 19 and		HOUSE CONTRACTOR OF THE PARTY O	Ser Assessed	Introduce and the	or handel published	H=2 05/0	SHAW VEST FIRST IN	A SAN MARKATAN AND AND AND AND AND AND AND AND AND A
NOTES (my additional information)  NOTES (my additional information)  Dry drainage of peortry dokned banks plunning furough spruce forest in scruis/shrub comider fooled water observed near 12 in connected system but no water within construction comider No notable change of substracte  System Seems to be running west to east at PLX  Drainage Seems to be used as game trail  MISCELLANEOUS POINTS (if applicable)  Point 10:  Description:  Field Scientisty Mallin Mars Technical	- (NO)	The state of the s		<b>学教验 地</b> 华亚	otal Length	Life Stage			
Dry drainage a poorty defined banks pluning furough spruce forest in scrub/shrub carridor  Pooled water observed near LZ in connected system but no water within construction comider  No notable change of substrate  System seems to be running west to east at PLX  Drainage seems to be used as game trail  MISCELLANEOUS POINTS (If applicable)  Point ID:  Description:  Field  Field Scientist/ M. Oliva Mary Technical	ID (Seq. Num)	Gear Type	Species			A CONTRACTOR OF THE PARTY OF TH	Adult)		Picture No.
Dry drainage a poorty defined banks pluning furough spruce forest in scrub/shrub carridor  Pooled water observed near LZ in connected system but no water within construction comider  No notable change of substrate  System seems to be running west to east at PLX  Drainage seems to be used as game trail  MISCELLANEOUS POINTS (If applicable)  Point ID:  Description:  Field  Field Scientist/ M. Oliva Mary Technical								/	
Dry drainage as poorly defined banks pluning furough spruce forest in scrub/shrub corridor  Pooled water observed near LZ in connected system but no water within construction corridor  No notable change of substrate  System seems to be running west to east at PIX  Drainage seems to be used as game trail  MISCELLANEOUS POINTS (If applicable)  Point ID:  Description:  Field  Field Scientist/ MOVIA Mary Technical				-					
Dry drainage as poorly defined banks pluning furough spruce forest in scrub/shrub corridor  Pooled water observed near LZ in connected system but no water within construction corridor  No notable change of substrate  System seems to be running west to east at PIX  Drainage seems to be used as game trail  MISCELLANEOUS POINTS (If applicable)  Point ID:  Description:  Field  Field Scientist/ MOVIA Mary Technical									
Dry drainage a poorty defined banks pluning furough spruce forest in scrub/shrub corridor  Pooled water observed near LZ in connected system but no water within construction corridor  No notable change of substrate  System seems to be running west to east at PIX  Drainage seems to be used as game trail  MISCELLANEOUS POINTS (If applicable)  Point ID:  Description:  Field  Field Scientist/ MOVIA Mary Technical					1	1	/		
Dry drainage as poorly defined banks pluning furough spruce forest in scrub/shrub corridor  Pooled water observed near LZ in connected system but no water within construction corridor  No notable change of substrate  System seems to be running west to east at PIX  Drainage seems to be used as game trail  MISCELLANEOUS POINTS (If applicable)  Point ID:  Description:  Field  Field Scientist/ MOVIA Mary Technical				N	12				
Dry drainage as poorly defined banks pluning furough spruce forest in scrub/shrub corridor  Pooled water observed near LZ in connected system but no water within construction corridor  No notable change of substrate  System seems to be running west to east at PIX  Drainage seems to be used as game trail  MISCELLANEOUS POINTS (If applicable)  Point ID:  Description:  Field  Field Scientist/ MOVIA Mary Technical				1	111				
Dry drainage a poorty defined banks pluning furough spruce forest in scrub/shrub corridor  Pooled water observed near LZ in connected system but no water within construction corridor  No notable change of substrate  System seems to be running west to east at PIX  Drainage seems to be used as game trail  MISCELLANEOUS POINTS (If applicable)  Point ID:  Description:  Field  Field Scientist/ MOVIA Mary Technical						-	(		
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Field Scientist/ \h (10) \ Technical	Point ID:			Description:					
	Point ID:			Description:					
Crew Chief: Lead:	Field Crew Chief:	D.1/	1 -	Field Scientist	t/ Macou	1 Valor	/		

This form is to be completed before leaving the field site.

Feature ID: 19961007 FT# Nate: 9.20.15
For all items not checked, please provide detailed explanation in the notes section of data form.
1. Site Description
∀ Was ADF&G contacted before conducting any work in this area?
★ Site Description complete? (Every cell must have entry or N/A)
₩ Were all photos taken and labeled correctly?
2. Physical/Chemical Attributes
Calibration performed prior to sampling?
Physical/Chemical attributes complete? (Every cell must have entry or N/A)
u $ u$ AWater quality data within expected ranges?
pH: 4.0 – 10.0
NTU: 0 - 3000
DO (mg/L): 1.0 – 15.0
Temp.: 1.0 – 19.0
Specific Conductance: 20 - 1500
√∜pト If outside expected ranges, was sample re-taken?
γ⊠ <sup>t</sup> Are units correct?
3. Stream Profile
Stream profile view sketch included?
N∯A Stream profile view captures water depth and wetted width?
★ Stream profile view captures where efforts were made to capture fish?
Plan view sketch included?
4. Methods Attributes
Methods attributes complete? (Every cell must have entry or N/A)
Were methods used adequate (explanation needed if no methods selected)?
5. Electrofishing Attributes
Electrofishing attributes complete? (Every cell must have entry or N/A)
N  Are units correct? .

Feature ID: F94LH007

#### 6. Fish Observations

Are all fish captured/observed recorded in the Fish Observation table?

Are units correct? (Total Length (mm))

Were adequate photos taken of fish captured? (Take a photo if in doubt)

#### 7. General

- Feature ID and Field Target # are consistent on data forms, logbook entries, photos, and maps?
- X All additional data in logbook captured on data form and additional photos noted?
- Were all additional comments on stream habitat, etc. recorded on data form?
- Was any gear missing/damaged for this survey or did you have any problems that should require resampling of this stream for an adequate survey effort?

By signing below, I verify that all field data for this site has been verified for accuracy and completeness.

Fisheries Biologist (print) Signature X Maley Volleger

Field Crew Chief (print)

Signature



P\_F94LH007\_001\_US LOOKING US AT PLX

8/20/2015 NK020.1



P\_F94LH007\_002\_DS LOOKING DS AT PLX

8/20/2015 NK020.1



P\_F94LH007\_003\_LB LOOKING AT LB AT PLX

8/20/2015 NK020.1



P\_F94LH007\_004\_RB LOOKING AT RB AT PLX

8/20/2015 NK020.1



P\_F94LH007\_005\_AERIAL AERIAL PHOTO

8/20/2015 NK020.1



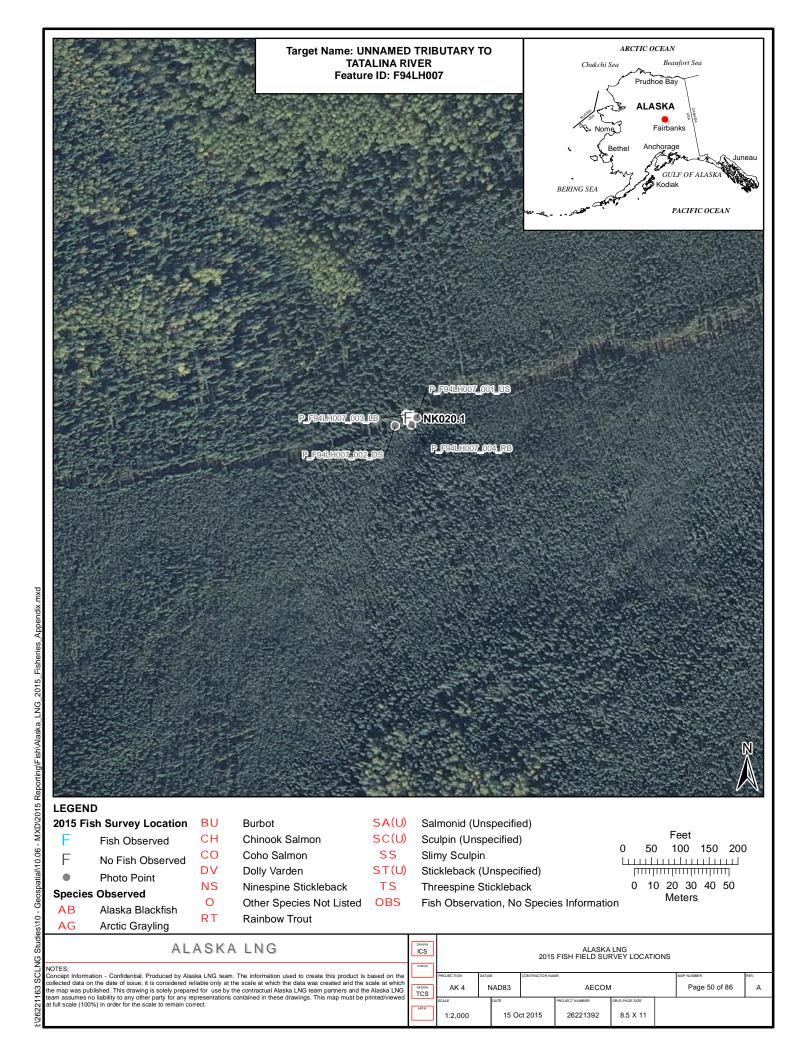
P\_F94LH007\_006\_AERIAL AERIAL PHOTO

8/20/2015 NK020.1



P\_F94LH007\_007\_AERIAL AERIAL PHOTO

8/20/2015 NK020.1



Revision Date: 3/19/2015

SITE DESCRIPTION	J. (1) 10 10 10 10 10 10 10 10 10 10 10 10 10	Mar II gray	W/ 4. B. S. W. W.	LAW ESTERNISH WATER
The state of the s	EAH, KRV, MPB	Team No.: Fa-	Feature ID: F94	LHOOL
	to Tolovana River		Stream ID: NK	
		drainage	Hwy MP (N/A If heli :	11
101-1			6' 31.544	1,53
Latitude: 65° 23' 30.7928		Fish Mortalitles:		tal Photos: 7
Logbook No.:   Logbook Page No.: 4			The second secon	
US@CL P F94LHOO 6 OOLUS PIC No.:	P_F94LH006_002_D\$ Pic No.	P. F94LH006.	003. LB Pic No.:	P.794 LH006-004-
Other P call 1 ac.	005_AERIAL -007	AFRIAL		
Pic No(s).: 1_F 94L#006	ODS_AERIAL			
PHYSICAL/ CHEMICAL ATTRIBUTES		200 1,000 1,700	nagave po segue	是如此相談出版的
Weather (Describe): Partly cloud			11	14 Jain
	ir Temperature (°C):	pH:	Dissolved Oxyge	
1 1	urbidity (NTU):	ORP (mV):	Dissolved Oxyge	
Third circ contact contact and	dor: (Sheen (Y/N):	Color:	1	Vidth (m):
Defined Channel (Y/N): Notes: Notes: Notes:				Depth @ CL (m):
Flow (Y/N): Notes: Note	4 -	Aquatic Habitats	111111111111111111111111111111111111111	popul e la finti
Λ	/Sedge (%) 0 Organics (%)	Sand Bar	La	rge Woody Debris
Shrubs (%)Shrub	s (%) Silt (%)	Mud Bar	0	verhanging vegetation
<u>80</u> Trees (%) <u>80</u> Trees	(%)Sand (%)	Gravel Bar		ontiguous Wetlands
Diameter DBH (In.)Diameter	r DBH (in.)Gravel (%)	Riffles	1	mergent Plants
Stream Type:	Cobble (%)	Pools		ibmerged Plants
Perennial Intermittent	Boulders (%)	Undercut Ba	nks	
STREAM PROFILE: Cross Sectional at Crossing Unic	7.6m			
	75" 22.9 m		THE STATE OF THE S	S. S. S. S. D. O. C. S.
STREAM PROFILE: Plan View (include direction of NORTH:	low, centerline, distances from centerline	, photo locations, samp	ole locations by gear ty	pe and ROW)
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	*/	+c	7	
5	24	Grassy W/ Doct	Inssect &	ding water
		· port		
	Deep incision	on running	through at time	mixed forcet of survey
Revision Date: 3/19/2015	1			Page 1 of

Feature ID: F94LH006

METHODS ATTR	URUTES (1994)		11 24 11	WALL THE TOTAL PROPERTY.		The second		READON FOR THE	· 医斯里里斯 医神经神经
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No. of Minnow 1	Frans Set:	Date 8	Time in:		Date &Time	In:	Date & Time in: /		Date & Time in:
	N. C.	/(mm/c	ld/yyyy)			(mm/dd/yyyy)		dd/yyyy) /	(mm/dd/yyyy)
Date & Time in:				No. of passe	s:	Date & fine out		Date & Time out:	
(mm/dd/yyyy) Date & Time out	Time lines in water:			Reach Lengt	h (m):	(mm/	dd/yyyl)	(mm/dd/yyyy)	
(mm/dd/yyyy)						NAME OF TAXABLE PARTY.	I I I I I I I I I I I I I I I I I I I		
ELECTROFISHING	- STATE OF THE PARTY OF THE PAR	His The				的位置的	影響所		
EF (Y/N): Duty Cycle:	EF Start Ti	_	ency (Hz):	EF End Time	Waveform:	EF Time (se	_		F Reach Length (m):
Current (A):		Volts (		NI	Power (W):		Samp	ling Efficiency (% of	sample reach):  (amp x volts)
	Description of an in-				Olivie Parkant Spill	- V 10 10 10 10	auto de la constante de la con	NAME OF STREET	Company of the Compan
FISH OBSERVAT		k, wind			Total Length	Life Stage	<b>在在</b> 学文件	Disposition	it the same of the same of
ID (Seq. Num)	Gear Type		Species		(mm)	(Juvenile or	Adult)	(Dead or Alive)	Picture No.
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Dr	y Incis	ed	drainao	e tea	tute a	t PLX	wit	h no note	ible substrate
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	OW	ange	or	WATE	h				
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The state of the s	S POINTS (if appli	cable)	THE REAL PROPERTY.	ENERGY N	M. 学习生业		Fall 1		1九部公司和日日四日
Point ID:				Description:					
Point ID:	1011			Description:					
Field Crew Chief:	M			ield Scientis echnician: _	st/ Yall	in Val	Jer-	Technical Lead:	

This form is to be completed before leaving the field site. Feature ID: F94LH006

Date: 8 19 15

FT # NKOOH. 4

For a form.	all items not checked, please provide detailed explanation in the notes section of dat
	. Site Description
	₩ Was ADF&G contacted before conducting any work in this area?
	Site Description complete? (Every cell must have entry or N/A)
	Were all photos taken and labeled correctly?
2	. Physical/Chemical Attributes
	Calibration performed prior to sampling?
	Physical/Chemical attributes complete? (Every cell must have entry or N/A)
	Water quality data within expected ranges?
	pH: 4.0 – 10.0
	T NTU: 0 - 3000
	DO (mg/L): 1.0 – 15.0
	Temp.: 1.0 – 19.0
	Specific Conductance: 20 - 1500
	If outside expected ranges, was sample re-taken?
	Are units correct?
3	Stream Profile
	☑ Stream profile view sketch included?
	N  ☐A Stream profile view captures water depth and wetted width?
	AStream profile view captures where efforts were made to capture fish?
	Plan view sketch included?
4	. Methods Attributes
	Methods attributes complete? (Every cell must have entry or N/A)
	Were methods used adequate (explanation needed if no methods selected)?
5	. Electrofishing Attributes
	Electrofishing attributes complete? (Every cell must have entry or N/A)
	r ∕ t/A Are units correct?

Feature ID: F94LH 006

#### 6. Fish Observations

\*\*Are all fish captured/observed recorded in the Fish Observation table?

N/A Are units correct? (Total Length (mm))

NP/ Were adequate photos taken of fish captured? (Take a photo if in doubt)

#### 7. General

- Feature ID and Field Target # are consistent on data forms, logbook entries, photos, and maps?
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- Were all additional comments on stream habitat, etc. recorded on data form?
- Was any gear missing/damaged for this survey or did you have any problems that should require resampling of this stream for an adequate survey effort?

By signing below, I verify that all field data for this site has been verified for accuracy and completeness.

Fisherles Biologist (print)

Signature

Field Crew Chief (print)

Signature



P\_F94LH006\_001\_US LOOKING US AT PLX

8/19/2015 NK004.4



P\_F94LH006\_002\_DS LOOKING DS AT PLX

8/19/2015 NK004.4



P\_F94LH006\_003\_LB LOOKING AT LB AT PLX

8/19/2015 NK004.4



P\_F94LH006\_004\_RB LOOKING AT RB AT PLX

8/19/2015 NK004.4



P\_F94LH006\_005\_AERIAL AERIAL PHOTO

8/19/2015 NK004.4



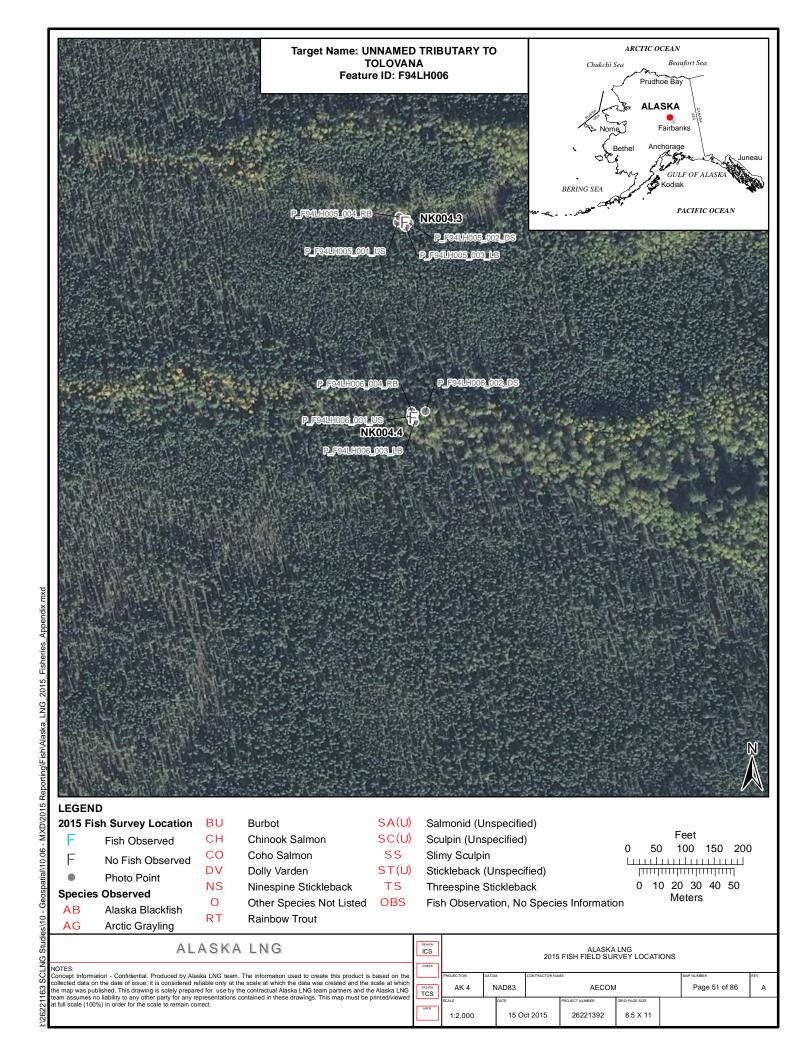
P\_F94LH006\_006\_AERIAL AERIAL PHOTO

8/19/2015 NK004.4



P\_F94LH006\_007\_AERIAL AERIAL PHOTO

8/19/2015 NK004.4



SITE DESCRIPTION	(1) [1] [1] [1] [1] [1] [1] [1] [1] [1] [1]		ALL 1000 A 特别生物。全国产品系统学证证明
Date: 8-19.15	Investigators: KAH KRV, MPB	Team No.:	Feature ID: F94LH005
Stream Name: UNNaw Qu	This to Tolovana River		Stream ID: NKOO4.3
Pipeline Milepost: 407_6	Stream found as expected (Y/N): N - D	my drainage	Hwy MP (N/A If hell accessed): # e ( i
Latitude: 65° 23'	34.0849" N Lor	ngitude: 1480 30	0' 31.2807" W
	k Page No.: 4-5 Total Fish Caught: N/A		L
US @ CL PIC NO .: P F94 LHOOS DO	PICNO: P. P944HOUS DOZ DS PIC	to LB@ CL No.: P_F94LH005_0	03LB PICNO.: P-F941HOUS_004-1
Other Pic No(s).:	HO05_005_AERIAL -00=	7_AERIAL	
PHYSICAL/ CHEMICAL ATTRIBUTE		Menther than to A feet of	
Weather (Describe): Par H	y cloudy Precipitat  Air Temperature (°C):	lon (Describe): Interior	nitteut light Tain Dissolved Oxygen (mg/l):
Water Temperature (°C):	Turbidity (NTU):	ORP (mV):	Discolved Oxygen (%):
Specific Conductance(µS/cm):	Odor: Sheen (Y/N):	Caler:	Last date of Calibration:
Ambient Conductance(µS/cm):  Defined Channel (Y/N):			
Flow (Y/N):	Notes: Pourly defined draining	S MINO MAIN	Thalweg Depth @CL (m):
	Riparian Veg at 0-5 m at RB: Stream Substrate:	Aquatic Habitats	
Grass/Sedge (%)	TO Grass/Sedge (%) 100 Organics	(%)Sand Bar	Large Woody Debris
406 Shrubs (%)		Mud Bar	Overhanging vegetation
80 Trees (%)	80 Trees (%) Sand (%)	Gravel Bar	Contiguous Wetlands
	3 Diameter DBH (In.) Gravel (%		N/AEmergent Plants
Stream Type:	Cobble (%		Submerged Plants
PerennialInte	ermittentEphemeralBoulders	(%)Undercut Ba	nks
STREAM PROFILE: Cross Sections	at Crossing (include riparian vegetation, wetted width	h, water depth, substrate, a	ind aquatic habitats)
STREAM PROFILE: Cross Sections	at at Crossing (Include riparian vegetation, wetted width	A A	
A Add to	dominant drainage property	19.6 m	Second drawage feature (obsert to pl for NKOO4.3)
Pro-	lominant diamage to 1650 feature - Dry Stude direction of flow) centerline, distances from cente	19.6 m	Second drawage feature (obsert to pl for NKOO4.3)
Pro-  STREAM PROFILE: Plan Mew (into NORTH:	lominant diamage to 1650 feature - Dry Stude direction of flow) centerline, distances from cente	19.6 m	Secund dramage feature (obsect to pl for NK004.3)
Pro-	dominant drainage property	19.6 m	Secund dramage feature (obsert to pl for NKOO4.3)
President Plan Mew line NORTH:	lominant drainage properties distances from center Dry Trainage Feat	19.6 m  Pline, photo locations, sample of the dring point	Second drawage feature (object to pl for NK004.3) The locations by gentrype and ROW)
President Plan Mew line North: Wel Shrea	dominant drainage prosper feature or by Trainage feature or the bry Trainage feature or the bry Trainage feature.	rline, photo locations, samp	Second drawage feature (object to pl for NK004.3) The locations by Beartype and ROW)
Pyre.  STREAM PROFILE: Plan View (int. NORTH:  Wel Gave a way me	lominant diamage to 165 feature - Dry diamage feature feature feature feature feature distances from center portets	19.6 m  Pline, photo locations, sample of the dring point	Second drawage feature (obsert to pl for NK004.3) The locations by gentrype and ROW)
Pyre.  STREAM PROFILE: Plan View (int. NORTH:  Wel Gave a way me	dominant drainage prosper succenter distances from center postets  postets  avecated a service postetime distances from center postets  postets	rline, photo locations, samp	Second drawage feature (obsert to pl for NK004.3) The locations by gentrype and ROW)
STREAM PROFILE: Plan View line NORTH:  Wet Qure Wayne	lominant diamage to 165 feature - Dry diamage feature feature feature feature feature distances from center portets	rline, photo locations, samp	Second drawage feature (obsert to pl for NK004.3) The locations by gent type and ROW)
STREAM PROFILE: Plan View line NORTH:  Wel Quie Wayne	lominant drainage problem of feature - Dry drainage features from center Dry drainage features from center pockets beoled water - Dry draftenthre	19.6 m  Interphoto locations, same  Checkin point  NKOOLS  Target	Second drawage feature (about to pl for NK004.3) The locations by generatype and ROW)
STREAM PROFILE: Plan View line NORTH:  Wel Quie Wayne	lominant drainage problem of feature - Dry drainage features from center Dry drainage features from center pockets beoled water - Dry draftenthre	rline, photo locations, samp	Second drawage feature (obsert to pl for NK004.3) The locations by gent type and ROW)
Pyre.  STREAM PROFILE: Plan View (int. NORTH:  Wel Gave a way me	lominant drainage problem of feature - Dry drainage features from center Dry drainage features from center pockets beoled water - Dry draftenthre	Police photo locations, same The Checkin point  NKAOLS  Target  Police in a dirac nage  Police in a di	Second drawage feature (obsert to pl for NK004.3)  The locations by gear type and ROW)

Feature ID: F9+LH005

METHODS ATT	Designation of the last of the			W SHIP				BURNET TYC	<b>建筑建筑建筑建筑建筑</b>
Minnow Traps (	Y/N):	Hook a	nd Line (Y/N):		Beach Seine (	*(N):	Fyke I	Net (Y/N):	Hoop Net (Y/N):
No. of Minnow	Traps Set:		Date & Time In:		Date &Time I			& Time in:	Date & Time in:
Date & Time In:			n/dd/yyyy) of lines in water:		(mm/dd/yyyy No. of passes	1.00		did/yyyy) Sultime out	(mm/dd/yyyy) Date & Time out:
(mm/dd/yyyy)  Date & Time out: Time lines in w		-			Reach Length (m):		dd/yyyy)	(mm/dd/yyyy)	
(mm/dd/yyyy)	L.	Time	ies iii water.		neach cengu	dul.	Market		bobies.
ELECTROFISHIN	The state of the s		<b>开</b> 刺义		Harris State of the State of th			图 医外侧线	
EF (Y/N):	EF Start T	1		EF End Time	1	EF Time (se	1		Reach Length (m):
Duty Cycle: Current (A):		Freque	ncy (Hz) :	N	Waveform:		Samp	ling Efficiency (% of	sample reach):  (amp x volts)
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FISH OBSERVAT			William at the State of State	<b>有效的人的</b>	Total Length	Life Stage		Disposition	工工程是是整体的工作。
ID (Seq. Num)	Gear Type		Species		(mm)	(Juvenile or	Adult)	(Dead or Alive)	Picture No.
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NOTES (any add	litional information	m) = F	DIME THE	<b>各种</b> 属。	H APP 出版計		1040		<b>建</b> 克克拉斯 表数 第一时的
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MISCELLANICO		Con	nstruc	r'm c	corridor	- Au	5	igh was	approx 0.5 %.
Point ID:	IS POINTS (if appl	readle)		Description		A CONTRACTOR OF THE PARTY OF TH	19/2	The second	25-Vent - 41 11 1 1 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1
Point ID:	1	-		Description		1 .		Toolseleel	
Field Crew Chief:		1		eld Scienti echnician:	171 /11 / / /	y Val	fw	Technical Lead:	

This form is to be completed before leaving the field site.

For all items not checked, please provide detailed explanation in the notes section of data form.  1. Site Description  Was ADF&G contacted before conducting any work in this area?  Site Description complete? (Every cell must have entry or N/A)  Were all photos taken and labeled correctly?  2. Physical/Chemical Attributes  Calibration performed prior to sampling?  Physical/Chemical attributes complete? (Every cell must have entry or N/A)  WA Water quality data within expected ranges?  PH: 4.0 – 10.0  NTU: 0 – 3000
<ul> <li>★ Was ADF&amp;G contacted before conducting any work in this area?</li> <li>★ Site Description complete? (Every cell must have entry or N/A)</li> <li>★ Were all photos taken and labeled correctly?</li> <li>2. Physical/Chemical Attributes</li> <li>★ Calibration performed prior to sampling?</li> <li>★ Physical/Chemical attributes complete? (Every cell must have entry or N/A)</li> <li>★ Water quality data within expected ranges?</li> <li>□ pH: 4.0 – 10.0</li> <li>□ NTU: 0 – 3000</li> </ul>
Site Description complete? (Every cell must have entry or N/A)  Were all photos taken and labeled correctly?  Physical/Chemical Attributes  Calibration performed prior to sampling?  Physical/Chemical attributes complete? (Every cell must have entry or N/A)  Water quality data within expected ranges?  PH: 4.0 – 10.0  NTU: 0 – 3000
Were all photos taken and labeled correctly?  2. Physical/Chemical Attributes  ☐ Calibration performed prior to sampling?  ☐ Physical/Chemical attributes complete? (Every cell must have entry or N/A)  ☐ Water quality data within expected ranges?  ☐ pH: 4.0 – 10.0  ☐ NTU: 0 – 3000
2. Physical/Chemical Attributes
Calibration performed prior to sampling?  Physical/Chemical attributes complete? (Every cell must have entry or N/A)  Water quality data within expected ranges?  pH: 4.0 – 10.0  NTU: 0 – 3000
Physical/Chemical attributes complete? (Every cell must have entry or N/A)  Water quality data within expected ranges?  pH: 4.0 – 10.0  NTU: 0 – 3000
Water quality data within expected ranges?  pH: 4.0 – 10.0  NTU: 0 – 3000
pH: 4.0 – 10.0 NTU: 0 – 3000
NTU: 0 – 3000
DO (mm/l): 4.0 45.0
DO (mg/L): 1.0 – 15.0
□ Temp.: 1.0 – 19.0
Specific Conductance: 20 - 1500
$\mathcal{N} \not \sqcup_{\mathcal{P}}$ if outside expected ranges, was sample re-taken?
☐ Are units correct?
3. Stream Profile
Stream profile view sketch included?
Stream profile view captures water depth and wetted width?
Stream profile view captures where efforts were made to capture fish?
Plan view sketch included?
4. Methods Attributes
Methods attributes complete? (Every cell must have entry or N/A)
16 Were methods used adequate (explanation needed if no methods selected)?
5. Electrofishing Attributes
☼ Electrofishing attributes complete? (Every cell must have entry or N/A)
NºVAAre units correct?

Feature ID: F94LH005

#### 6. Fish Observations

Are all fish captured/observed recorded in the Fish Observation table?

Are units correct? (Total Length (mm))

NV/A Were adequate photos taken of fish captured? (Take a photo if in doubt)

#### 7. General

- Feature ID and Field Target # are consistent on data forms, logbook entries, photos, and maps?
- All additional data in logbook captured on data form and additional photos noted?
- Were all additional comments on stream habitat, etc. recorded on data form?
- Was any gear missing/damaged for this survey or did you have any problems that should require resampling of this stream for an adequate survey effort?

By signing below, I verify that all field data for this site has been verified for accuracy and completeness.

Fisheries Biologist (print)

Signature

X Maley Valgar

Field Crew Chief (print)

Skinature



P\_F94LH005\_001\_US LOOKING US AT PLX

8/19/2015 NK004.3



P\_F94LH005\_002\_DS LOOKING DS AT PLX

8/19/2015 NK004.3



P\_F94LH005\_003\_LB LOOKING AT LB AT PLX

8/19/2015 NK004.3



P\_F94LH005\_004\_RB LOOKING AT RB AT PLX

8/19/2015 NK004.3



P\_F94LH005\_005\_AERIAL AERIAL PHOTO

8/19/2015 NK004.3



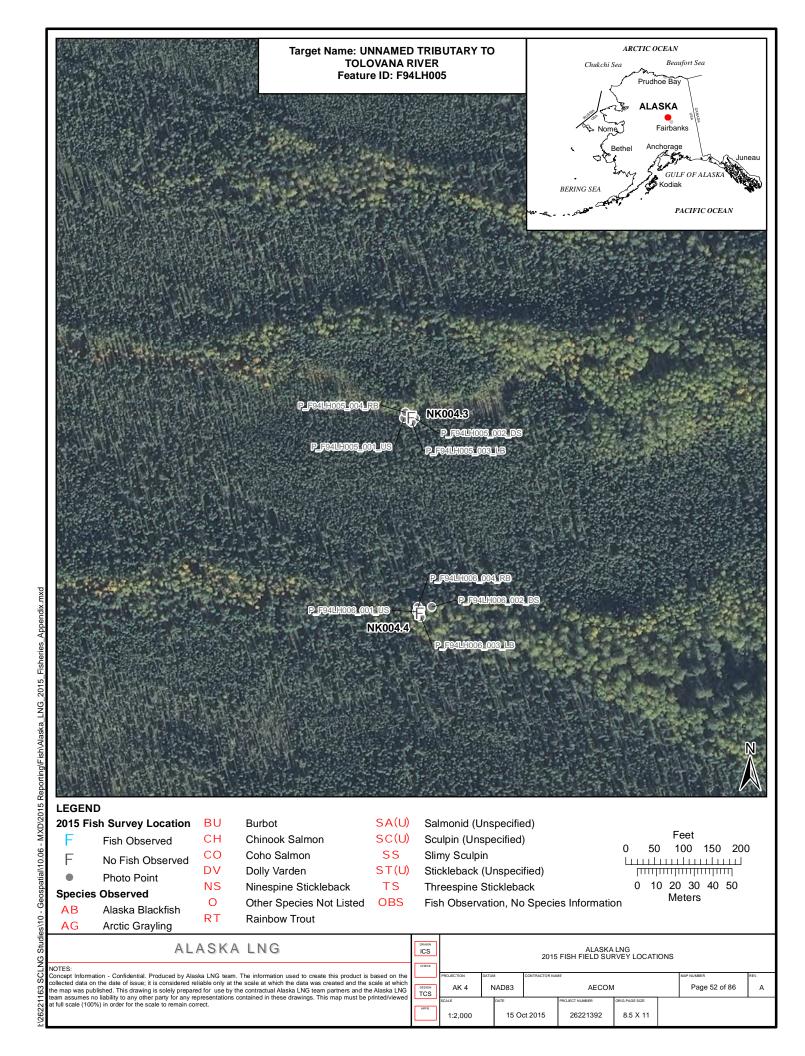
P\_F94LH005\_006\_AERIAL AERIAL PHOTO

8/19/2015 NK004.3



P\_F94LH005\_007\_AERIAL AERIAL PHOTO

8/19/2015 NK004.3



SITE DESCRIPTION		<b>"知识是是是</b>	Variety and the second second
Date: 8 · 18 · 15 Investigat	OTS: KAH KRV, MPB	Team No.: pq4 F	eature ID: F94LH004
Stream Name: Unnamed Tri	1 1	S	tream ID: NK 002.4
Within the same	found as expected (Y/N):		wy MP (N/A If hell accessed):
Latitude: 65° 75′ 50.962			1 37.2995 "W
Logbook No.: Logbook Page No.:	7 - 4 Total Fish Caught:	Fish Mortalities:	
	@ CL P F94LHOON-00 Z DS PIC N		03_ LB to RB@ CL 7/11+100 4_004_
Other PIC No(s).: P. F94LH004	-005_AERIAL - 00	7-AERIAL	
PHYSICAL/ CHEMICAL ATTRIBUTES		MINISTER STATE	1. E. A. L. S. S. S. S. S. L. S. L. S.
Weather (Describe): Cloudy		n (Describe): Light	tain intermittent
Water Temperature (°C): 9.92	Air Temperature (°C):	pH: 7 91	Dissolved Oxygen (mg/l): 10.90
Specific Conductance(µS/cm): 953	Turbldity (NTU): 1.59	ORP (mV):-9 6	Dissolved Oxygen (%): 94.1
Ambient Conductance(µS/cm): 539	Odor: N Sheen (Y/N): N	Color: Newt	Last date of Calibration: TTT  Wetted Width (m): 129 3.9m
Defined Channel (Y/N): Notes:  Notes:	Shallow stream willowed	y defined Muddy	Thalweg Depth @ CL (m): 4 0.1 m
	at 0-5 m at RB: Stream Substrate:	Aquatic Habitats	monteg bepart & cr (m).
	Grass/Sedge (%)Organics (%	Sand Bar	XLarge Woody Debris
	Shrubs (%) <b>ZO_</b> Silt (%)		Overhanging vegetation
15 Trees (%) 15 T	rees (%) <b>70</b> Sand (%)	Gravel Bar	X Contiguous Wetlands
Diameter DBH (in.) Dia	meter DBH (in.) Gravel (%)	Riffles	Emergent Plants
Stream Type:	Cobble (%)	X_Pools	Submerged Plants
X Perennial Intermittent	EphemeralBoulders (%	)Undercut Banks	5
STREAM PROFILE: Cross Sectional at Crossing	Include disurpervariation, watted width	water denth, substrate, and	amustic habitars)
A VIVIII VIII	0.1m	25' 7.6m	
STREAM PROFILE: Plan View (include direction	Main channel - 3.9m		locations by gear type and ROWJ
NORTH:			
	- * >	×V	- ME
**	-	2	
SA CHELDIN	- "		The second second
2 11		DAT P	1
3 6	- (	2/1/	
The state of the s		K. A.	
7		- Cally	
F		2 William	6
KW		1	
7			Page 1 of
Revision Date: 3/19/2015			raye 1 01

Feature ID: <u>F94LH 004</u>

CALIFORNIA PROPERTY.	HEUTES			40000000000000000000000000000000000000	OF THE LAW SELECT	State Sept and	<b>新港林區</b>	<b>。明月前期</b>	<b>计成规律程度以及形式</b>
Minnow Traps (		Hook ar	nd Tine (Y/N):	110000000000000000000000000000000000000	Beach Seine (Y/	N):	Eyke N	let (Y/N):	Hoop Net (Y/N):
No. of Minnow 1	3	(mm/do	Time in: d/yyyy) ines in water:	N	Date & Time in: (mm/dd/yyyy)		Date & Time in: (mm/dd/yyyy)  Date & Time out: (mm/dd/yyyy)		Date & Time in: (mm/dd/yyyy) Date & Time out:
(mm/dd/yyyy)	13:45	Time lir	nes in water:		Reach Length (n	nl:			(mm/dd/yyyy)
(mm/dd/yyyy)	C4 17 103 1		ics in many		neden sangan (	A 19 10		11 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
ELECTROFISHIN	A DESTRUCTION OF REAL PROPERTY.						建造		
EF (Y/N): Duty Cycle: <	EF Start Ti	7	ncy (Hz) :	EF End Time:	Waveform:	EF Time (see	1	Ing Efficiency (% of	Reach Length (m):
Current (A):		Volts (V			Power (W)		-		(amp x volts)
FISH OBSERVAT	TONS			ACTION WHAT			II PARTY		HITTO IN A STATE
ID (Seq. Num)	Gear Type		Species	100	otal Length	Life Stage (Juvenile or /	Adult)	Disposition (Dead or Alive)	Picture No.
			1		,	(Juverine Or )	-tourt)	(Dead of Alive)	
				- 1					
				100			/		
				1		-/			
			-		INNE				
				1		11-			
NOTES (any add	itional information	SPERS STATE	SHEET RES	在2012.数(613)[20]	Mar Comments of		STATE OF THE PARTY.	<b>以</b> 的数据 2.50世纪	
	- I		· ·						
		bar rahhe	nks r	unning h	through in man	alder y plac	Ce	osely def rrider in	spruce forest
MISCELLANEOU	muddy split cl	ban rahhe ion	nks r	unning h flow cker	through in man	alder y plac	Ce		
	muddy Split ch Vegetati	ban rahhe ion	nks r	unning h	through in man	alder y plac	Ce		

	This form is to be completed before leaving the	field site.
Feature ID	D: <u>F941H004</u> FT# <u>NK002</u> Date:	9.18.15
For all iten form.	ems not checked, please provide detailed explanation in	the notes section of da
1. Sit	ite Description	1.4
X	Was ADF&G contacted before conducting any work in	this area?
	Site Description complete? (Every cell must have ent	ry or N/A)
×	Were all photos taken and labeled correctly?	
2. Ph	hysical/Chemical Attributes	
A	Calibration performed prior to sampling?	
X	Physical/Chemical attributes complete? (Every cell mu	ist have entry or N/A)
X	Water quality data within expected ranges?	
	<b>★</b> pH: 4.0 – 10.0	
	✓ NTU: 0 – 3000	ş , 26
	☑ DO (mg/L): 1.0 – 15.0	
	<b>≭</b> Temp.: 1.0 – 19.0	
	■ Specific Conductance: 20 - 1500	
ABA	If outside expected ranges, was sample re-taken?	
×	Are units correct?	
3. Str	tream Profile	
K	Stream profile view sketch included?	
P	Stream profile view captures water depth and wetted v	vidth?
- 10	Stream profile view captures where efforts were made	to capture fish?
Æ.	Plan view sketch included?	
4. Me	lethods Attributes	
X	Methods attributes complete? (Every cell must have e	ntry or N/A)
A	Were methods used adequate (explanation needed if	no methods selected)?
5. Ele	lectrofishing Attributes	
X	Electrofishing attributes complete? (Every cell must h	ave entry or N/A)
MA	Are units correct?	20

Feature ID: F94LH064

Are all fish captured/observed recorded in the Fish Observation table?

Are units correct? (Total Length (mm))

Were adequate photos taken of fish captured? (Take a photo if in doubt)

#### 7. Ġeneral

- Feature ID and Field Target # are consistent on data forms, logbook entries, photos, and maps?
- All additional data in logbook captured on data form and additional photos noted?
- Were all additional comments on stream habitat, etc. recorded on data form?
- (10) Was any gear missing/damaged for this survey or did you have any problems that should require resampling of this stream for an adequate survey effort?

By signing below, I verify that all field data for this site has been verified for accuracy and completeness.

X Maley Volper X Wally Valler
Fisheries Biologist (print) Signature

Field Crew Chlef (print)

Signature



P\_F94LH004\_001\_US LOOKING US AT PLX

8/18/2015 NK002.4



P\_F94LH004\_002\_DS LOOKING DS AT PLX

8/18/2015 NK002.4



P\_F94LH004\_003\_LB LOOKING AT LB AT PLX

8/18/2015 NK002.4



P\_F94LH004\_004\_RB LOOKING AT RB AT PLX

8/18/2015 NK002.4



P\_F94LH004\_005\_AERIAL AERIAL PHOTO

8/18/2015 NK002.4



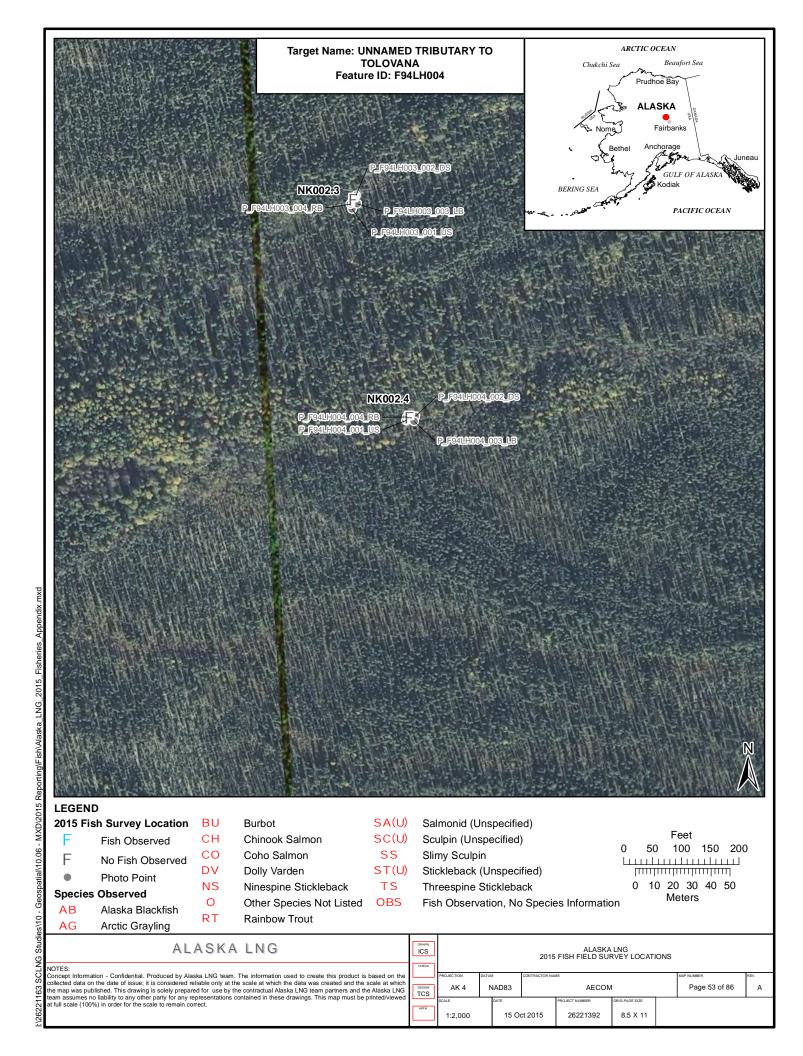
P\_F94LH004\_006\_AERIAL AERIAL PHOTO

8/18/2015 NK002.4



P\_F94LH004\_007\_AERIAL AERIAL PHOTO

8/18/2015 NK002.4



STE DESCRIPTION	THE RESIDENCE OF	<b>国际产品。如何中国企业的基础企业</b>
Date: \$.18-15 Investigators: FAH KRV MPB	Team No.: P94 F	eature ID: C94 LH003
Stream Name: (Innamed Tib to Tolovana Riv	er s	tream ID: NK002.3
Pipeline Milepost: 404.9 Stream found as expected (Y/N):		lwy MP (N/A if heli accessed):
Latitude: 65° 25′ 54.8334" N Longitu	de: 148° 36	38 75,24" W
Logbook No.:   Logbook Page No.: 2-4   Total Fish Caught:	Fish Mortalities:	
US @ CL Pic No.: 1- FQ441003 001 LLS PIC No.: P-FQ441003 002 D Pic No.:		3. LB to RB@ CL PIC NO.: P. F94 LH-003 -004
Other P.F9414003_005_AERIAL - 008-	LERIAL	
		WILE DEFINENCE INTO THE PARTY OF THE PARTY O
Weather (Describe): Precipitation (	Describe): Light	Rain
Water Temperature (°C): 4.81/	pH: 8.17	Dissolved Oxygen (mg/l): 10 48
Specific Conductance(µS/cm): 10-3 Turbidity (NTU): 2.04	ORP (mV): 7 7	Dissolved Oxygen (%): 92.9
Ambient Conductance(µS/cm): 7 3 Odor: N Sheen (Y/N): N	Color: Styl	Last date of Calibration:
Defined Channel (Y/N): P Notes: Grass intel Channel	7 11	Wetted Width (m): 12 3.km
Flow (Y/N): Y Notes: Flow thoughout rea		Thalweg Depth @ CL (m): 0. m
Riparian Veg at 0-5 m at LB: Riparian Veg at 0-5 m at RB: Stream Substrate:	Aquatic Habitats	A Wester Dakets
95 Grass/Sedge (%) 95 Grass/Sedge (%) 460 9 Organics (%)	Sand Bar Mud Bar	Large Woody DebrisOverhanging vegetation
50 Shrubs (%) 50 Shrubs (%) 50 Silt (%)		
Trees (%)  Diameter DBH (in.)  Trees (%)  Sand (%)  Gravel (%)	Riffles	Emergent Plants
Cobble (%)	X Pools	Submerged Plants
Stream Type:	Undercut Banks	
Perennial Intermittent X Ephemeral		
STREAM PROFILE: Cross Sectional at Crossing (include riparian vegetation, wetted width, was	iter depth, substrate, and	aquatic habitats)
The state of the s	10.lm	
12+ 3.6 m		
NORTH:  Revolut Stystem  Wynes-line channels  Hynous Sprua 1	which	locations by gear type and ROW)

Page 1 of \_\_

Feature ID: 19414003

METHODS ATTR	UBUTES	OF THE PARTY OF THE PARTY.			出行在"中国"		馬斯特馬斯	1405年14年18年18年18年18
Minnow Traps (	V	Hook and Line (Y/N):	Bea	ach Seine (Y)	'N):	Fyke N	let (Y/N):	Hoop Net (Y/N):
No. of Minnow	Fraps Set:	Date & Time in:	Dat	te &Time in:	1	Date 8	& Time in:	Date & Time In:
		(mm/dd/yyyy) No. of lines in water:		(mm/dd/yyyy)		(mm/dd/yyyy) ~ Al /		/ (mm/dd/yyyy)
Date & Time in: (mm/dd/yyyy)	12:10			. of passes:	marrown		k Time out: dd/yyyy)	Date & Time out: (mm/dd/yyyy)
Date & Time out (mm/dd/yyyy)	8 19 15	Time lines in water:	Rea	ach Length (	n):			Section 1
ELECTROFISHIN	CONTRACTOR OF THE PARTY OF THE	WEST STATES OF STATES	A Williams	<b>高情况</b>		Carried States		
EF (Y/N):	EF Start Ti	me: EF E	nd Time:		EF Time (sec	onds):	EF	Reach Length (m):
Duty-Cycle:		Frequency (Hz):	1/4	veform: <		Sampl	ing Efficiency (% of	sample reach):
Current (A):		Volts (V):	A Pou	wer (W):				(amp x volts)
FISH OBSERVAT	IONS			种抗生				THE SHEET AND THE REAL PROPERTY.
ID (Seq. Num)	Gear Type	Species	Total Le	ength	Life Stage (Juvenile or A	dult)	Disposition (Dead or Alive)	Picture No.
					to a contract of the		(acad bi / mirc)	
			n I	11				
		``	VOY	VIE	-			
					-			
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				>				
	//						-	
		/						
NOTES (any add	itional Informatio	days when a series	<b>*</b> 标准型。新数	2000 是18	in State of	the state of		学为学术。 经现代证据
	0.11	1 )[	1. 1	1		ALC: A COLOR		1
	Small,	shallow grass.	-lined	chann	el wif	h	consisten	f flow tiple channels throughout (braided)
		Humalinit	. 1	1 1			1 aug	tiple dummals
		- Thorse of wood	Ons	truch	on Co	my	- M. H	hrome hout (braided)
	. / .		1	1		0	. 1	10
	Stream	opens up	to 8	mall	grassy	fil	ld 91 0	edge
	5	Ds const	metin	con	ridor	an	of than	multiple
	01	opens up DS const annels goin	11.	6.0	C.u.		N.c.	
			SACK	4)	Thriwa	<b>T</b>	טיט	
		<u> </u>						
MISCELLANEOU	S POINTS (if appli	able)	1000000	155		W.I	心語傳出其任	AND TOTAL VICTOR
Point ID:		Desc	ription:				20	
Point ID:		Desc	ription:					
Field	011		cientist/	100	Valo	A int	Technical	
Crew Chief:	CU	Techn	ician:Y	SWIN	Anna	01	Lead:	

This form is to be completed before leaving the field site.

Feature ID: 1944003 FT # NK002.3 Date: 8-18-15

For all items not checked, please provide detailed explanation in the notes section of data form.

### 1. Site Description

- ✓ Was ADF&G contacted before conducting any work in this area?
- Site Description complete? (Every cell must have entry or N/A)
- Were all photos taken and labeled correctly?

### 2. Physical/Chemical Attributes

- Calibration performed prior to sampling?
- Physical/Chemical attributes complete? (Every cell must have entry or N/A)
- Water quality data within expected ranges?
  - ★ pH: 4.0 10.0
  - **M** NTU: 0 − 3000
  - ☆ DO (mg/L): 1.0 15.0
  - ☆ Temp.: 1.0 19.0
  - ★ Specific Conductance: 20 1500
- ☐ If outside expected ranges, was sample re-taken?
- ★ Are units correct?

#### 3. Stream Profile

- Stream profile view sketch included?
- Stream profile view captures water depth and wetted width?
- Stream profile view captures where efforts were made to capture fish?
- Plan view sketch included?

#### 4. Methods Attributes

- Methods attributes complete? (Every cell must have entry or N/A)
- Were methods used adequate (explanation needed if no methods selected)?

### 5. Electrofishing Attributes

- Electrofishing attributes complete? (Every cell must have entry or N/A)
- N Are units correct?

Feature ID:\_\_F9

# 6. Fish Observations Are all fish captured/observed recorded in the Fish Observation table? N Are units correct? (Total Length (mm)) Were adequate photos taken of fish captured? (Take a photo if in doubt)

### 7. General

- Feature ID and Field Target # are consistent on data forms, logbook entries, photos, and maps?
- All additional data in logbook captured on data form and additional photos noted?
- Were all additional comments on stream habitat, etc. recorded on data form?
- √ Was any gear missing/damaged for this survey or did you have any problems that should require resampling of this stream for an adequate survey effort?

By signing below, I verify that all field data for this site has been verified for accuracy and completeness.

Fisherles Biologist (print) Signature

Field Crew Chief (print)

Signature



P\_F94LH003\_001\_US LOOKING US AT PLX

8/18/2015 NK002.3



P\_F94LH003\_002\_DS LOOKING DS AT PLX

8/18/2015 NK002.3



P\_F94LH003\_003\_LB LOOKING AT LB AT PLX

8/18/2015 NK002.3



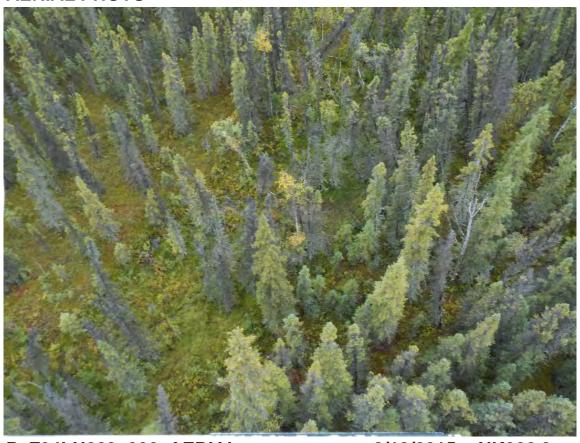
P\_F94LH003\_004\_RB
LOOKING AT RB AT PLX

8/18/2015 NK002.3



P\_F94LH003\_005\_AERIAL AERIAL PHOTO

8/18/2015 NK002.3



P\_F94LH003\_006\_AERIAL AERIAL PHOTO

8/18/2015 NK002.3



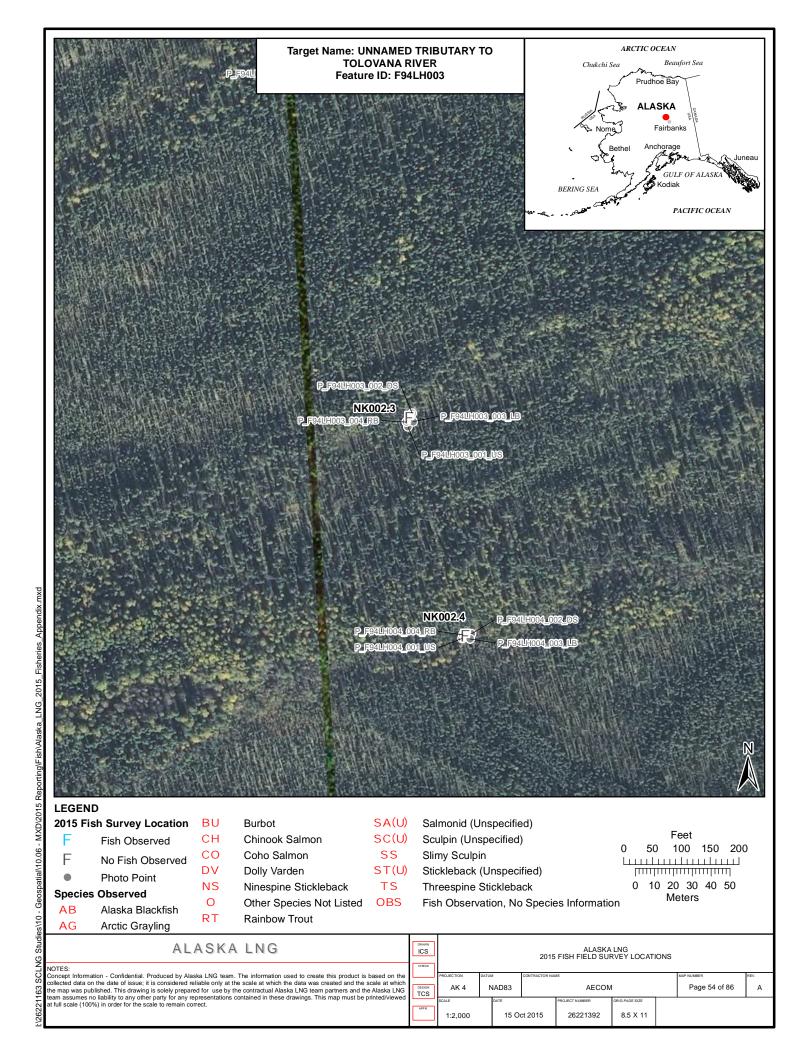
P\_F94LH003\_007\_AERIAL AERIAL PHOTO

8/18/2015 NK002.3



P\_F94LH003\_008\_AERIAL AERIAL PHOTO

8/18/2015 NK002.3



SITE DESCRIPTION	PER ACMORPHE LEVEL TO THE	A STATE OF THE STA					
Date: 8 18 15 Investigators:	U. KRV. MPB	Team No.: FON F	eature ID: F94LH002				
Stream Name: Unrawed Titols to	Tolovaya R	S	itream ID: NKOOZ.2				
Pipeline Milepost: 404.7 Stream found as expe		ŀ	Hwy MP (N/A if heli accessed): 14 e / i				
Latitude: 45° 26' 01.3403" N	de: 148° 36'	41.2827" W					
Logbook No.:   Logbook Page No.: 7 - 3		N A Total Photos: 7					
US @ CL RB to LB @ CL LB to RB @ CL							
Other P P94LH002_005_AERIAL-007_AERIAL Pic No(s).:							
	Market State of the State of th	varna klasnopene kasa or nik	Charles III and the Charles of the C				
Weather (Describe): \(\int \text{U} \text{U} \text{U}	Precipitation (	Describe):	tain				
C/4	rature (°C):	pH: 6.33	Dissolved Oxygen (mg/l): 6.78				
Specific Conductance(µS/cm): 132 Turbidity		ORP (mV): 66.4	Dissolved Oxygen (%): 55.8				
	Sheen (Y/N):	Color: Lightly,	Last date of Calibration: TTT				
	Poorly defined dray	was him min	Wetted Width (m): 475 m				
Flow (Y/N): Notes: Metmite	The Contract of the Contract o		Thalweg Depth @ CL (m): 4 0 lm				
Riparian Veg at 0-5 m at LB:  Riparian Veg at 0-5 m at R  Grass/Sedge (%)  Grass/Sedge (*)	And the second of the second o	Aquatic Habitats Sand Bar	Large Woody Debris				
70 Shrubs (%) 70 Shrubs (%)		Mud Bal	Overhanging vegetation				
25 Trees (%) 25 Trees (%)	Sand (%)	Gravel Bar	Contiguous Wetlands				
	n.)Gravel (%)	Riffles	Emergent Plants				
Stream Type:	Cobble (%)	Pools Undercut Banks	Submerged Plants				
PerennialIntermittentEphem	eralBoulders (%)	Ondercut Banks					
STREAM PROFILE: Cross Sectional at Crossing (include ripa	rian vegetation, wetted width, wa	ter depth, substrate, and	aquatic habitats)				
STREAM PROFILE: Plan View (include direction of flow, cen	#0.1m	about frozione sample	Jonations by generating and ROW				
NORTH:	Surface was						

Feature ID: F94LH002

METHODS ATTRIBUT	TES.		10000000000000000000000000000000000000		SERVICE STO			世紀和海岸衛連門至日日日
Minnow Traps (Y/N):		Hook and Line (Y/N):		Beach Seine (Y	/N):	Fyke N	let (Y/N):	Hoop Net (Y/N):
No. of Minnow Traps	Date & Time (mm/dd/yy)				Date &Time in: (mm/dd/yyyy)		& Time in:	Date & Time In: (mm/dd/yyyy)
Date & Time in:	NIK	No. of lines in water:		No. of passes:		DAte 8	dd/yyyy) & Time out:	Date & Time out:
(mm/dd/yyyy)  Date & Time out:	1. IN	Time lines in water:		Reach Length (	m):	[(mm/	dd/yyyy) <	_(mm/dd/yyyy)
(mm/dd/yyyy)	Mondal Remov		· · · · · · · · · · · · · · · · · · ·	A significant state of the stat	car used more than with	AND DESCRIPTION OF	and the state of the state of	Land C. Land Control of the Control
ELECTROFISHING AT EF (Y/N):	EF Start Tir	ne.	EF End Time:		EF Time (sec	ronds):		F Reach Length (m):
Duty Cycle:	El State III	Frequency (Hz) :	N/ A	Waveform:	Li Time (sec		ing Efficiency (% of	
Current (A):		Volts (V):	FIA	Power (W):				(amp x volts)
FISH OBSERVATIONS	地图制度	<b>建筑的</b>						
ID (Seq: Num) Ge	ar Type	Species		otal Length nm)	Life Stage (Juvenile or A	Adult)	Disposition (Dead or Alive)	Picture No.
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			r	1/4				
	/							
NOTES (any additions	al information	(a) which the second	\$50 mm 200	ALL WILLIAM		11/4 22 11		
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Poorly	define	d darwy	c runnin	y throng	in orlder	161	rule sphu	firest
OA .		• •		_/				'
In let mi	ttent (	packets o	- Wate	A MII	10 Can	MRC	tivity a	r flow observed.
		3						
Slight	14 -	unic Wate	+ with	Nadni	L Sul	354V	ate	
3.0	J P	(**1)	,	0				
-								1
		-						0.00
MISCELLANEOUS PO	INTS (if applic	able)	Service of the			W/h	TO STANDED LINE	计数点数 计简单记忆符号
Point ID:			Description:					
Point ID:	- 0		Description:					
Field Crew Chief:	ald		Field Scientist, Fechnician:	haller	~ Vol	Per	Technical Lead:	

This form is to be completed before leaving the field site.
Feature ID: <u>F941H002</u> FT # NK002.2 Date: <u>Q.16.15</u>
For all items not checked, please provide detailed explanation in the notes section of data form.
1. Site Description
Was ADF&G contacted before conducting any work in this area?
Site Description complete? (Every cell must have entry or N/A)
⚠ Were all photos taken and labeled correctly?
2. Physical/Chemical Attributes
Calibration performed prior to sampling?
Physical/Chemical attributes complete? (Every cell must have entry or N/A)
Water quality data within expected ranges?
7 pH: 4.0 – 10.0
X NTU: 0 – 3000
DO (mg/L): 1.0 – 15.0
∑ Temp.: 1.0 – 19.0
Specific Conductance: 20 - 1500
FT r If outside expected ranges, was sample re-taken?
Are units correct?
3. Stream Profile
X Stream profile view sketch included?
Stream profile view captures water depth and wetted width?
Stream profile view captures where efforts were made to capture fish?
Plan view sketch included?
4. Methods Attributes
Methods attributes complete? (Every cell must have entry or N/A)
Were methods used adequate (explanation needed if no methods selected)?
5. Electrofishing Attributes
Electrofishing attributes complete? (Every cell must have entry or N/A)
NIA Are units correct?

Feature ID: F941H00Z

6. Fish	n Observations
Ya A	Are all fish captured/observed recorded in the Fish Observation table?
NUM	Are units correct? (Total Length (mm))
ф \	Were adequate photos taken of fish captured? (Take a photo if in doubt)
7. Gen	neral
	Feature ID and Field Target # are consistent on data forms, logbook entries, photos, and maps?
Y /	All additional data in logbook captured on data form and additional photos noted?
-50 1	Were all additional comments on stream habitat, etc. recorded on data form?
	Was any gear missing/damaged for this survey or did you have any problems that should require resampling of this stream for an adequate survey effort?
By signing locompletene	below, I verify that all field data for this site has been verified for accuracy and ess.
9.	
<u>_X</u>	haley Volper X Kaley Valper
Fish	herles Biologist (print) Signature
	, 1



P\_F94LH002\_001\_US LOOKING US AT PLX

8/18/2015 NK002.2



P\_F94LH002\_002\_DS LOOKING DS AT PLX

8/18/2015 NK002.2



P\_F94LH002\_003\_LB LOOKING AT LB AT PLX

8/18/2015 NK002.2



P\_F94LH002\_004\_RB LOOKING AT RB AT PLX

8/18/2015 NK002.2



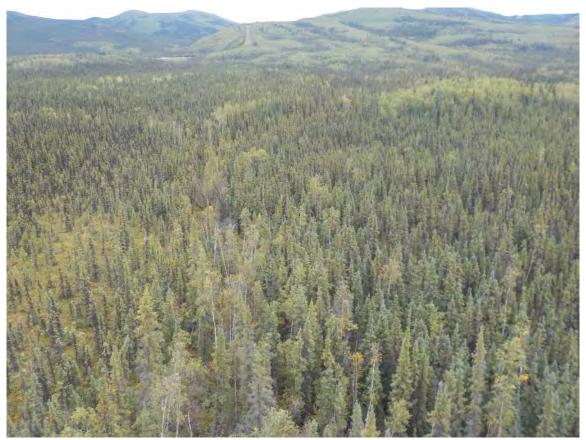
P\_F94LH002\_005\_AERIAL AERIAL PHOTO

8/18/2015 NK002.2



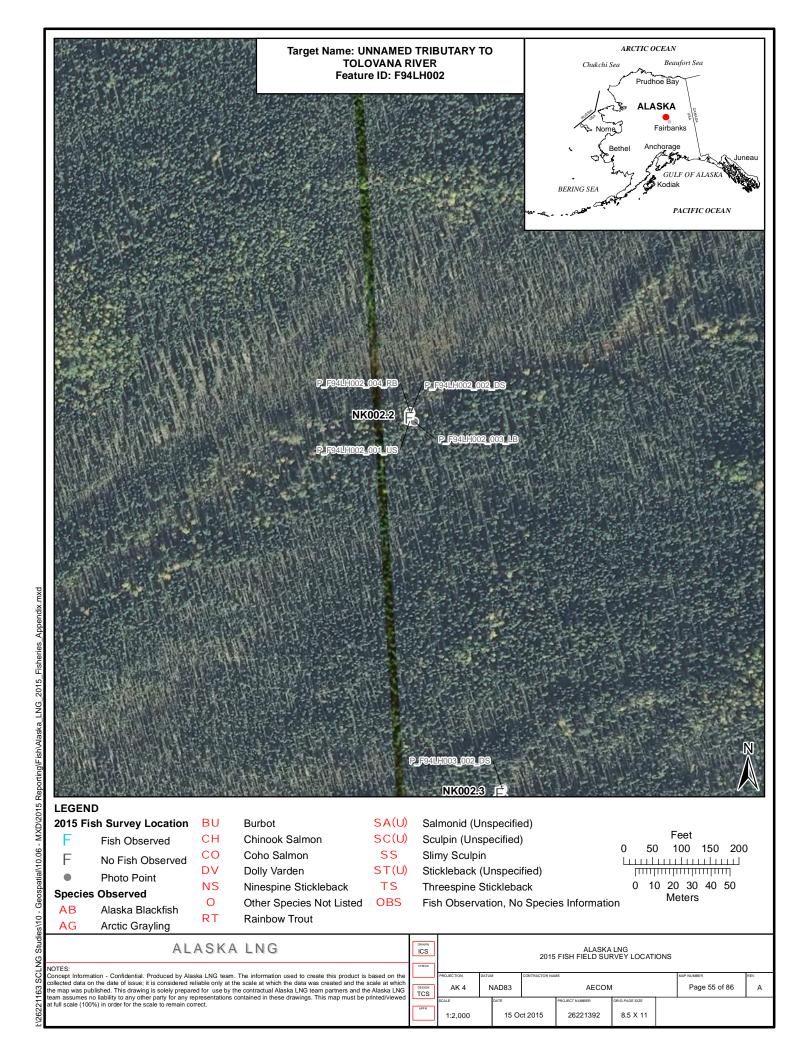
P\_F94LH002\_006\_AERIAL AERIAL PHOTO

8/18/2015 NK002.2



P\_F94LH002\_007\_AERIAL AERIAL PHOTO

8/18/2015 NK002.2



SHE DESCRIPTION WITH THE PROPERTY OF THE PROPE
Date: 8-17.15 Investigators: KAH KRV MPB Team No.: F94 Feature ID: F94 LHOO1
Stream Name: Unnamed Trib to Shorty Creek Stream ID: NK002.1
Pipeline Milepost: 404 2 Stream found as expected (Y/N): N- Dry drainage charine Hwy MP (N/A if heli accessed): Heli
Latitude: 65° 76' 32.0810 Longitude: 146° 36' 59.5265
Logbook No.:   Logbook Page No.:   Total Fish Caught Fish Mortalities: NA Total Photos:
US@CL Pic No.: P.F94LHODI_001_US Pic No.: P.F94LHODI_007_0 S Pic No.: P.F94LHODI_003_LB to RB@CL Pic No.: P.F94LHODI_001_US Pic No.: P.F94LHODI_007_0 S Pic No.: P.F94LHODI_003_LB to RB@CL
Other P_F94LH001.005_AERIAL - 007_AERIAL
Pic No(s).:
PHYSICAL/CHEMICALATTRIBUTES
Weather (Describe): Partially cloudy Precipitation (Describe): None
Water Temperature (°C): pH: Dissolved Oxygen (mg/l):
Specific Conductance(µS/cm): NA   ORP (mV): NA   Dissolved Oxygen (%): NA
Ambient Conductance(µs/cm): Odor: Sheen (Y/N): Color: Last date of Calibration:
Defined Channel (V/N): Notes: Poorly defined Wetted Winth (m):  Flow (Y/N): Notes: No water - dry channel Thalway Depth @ CL (m):
Riparian Veg at 0-5 m at LB: Riparian Veg at 0-5 m at RB: Stream Substrate: Aquatic Habitats
TO Grass/Sedge (%) Crganics (%) Sand Bar Large Woody Debris
Shrubs (%) Shrubs (%) Silt (%) Mud Bar Overhanging vegetation Overhanging vegetation
Trees (%)  Dlameter DBH (in.)  Trees (%)  Gravel (%)  Gravel (%)  Gravel (Bar  Emergent Plants
Cohble (%) Pools Submerged Plants
Stream Type:  Perennial Intermittent X Ephemeral Boulders (%)  Description of the control of the
STREAM PROFILE: Cross Sectional at Crossing (include riparian vegetation, wetted width, water depth, substrate, and aquatic habitats)
Poorly-defined drawage feature - dry
NORTH:  NT   Trainage Pand  beller downstream  but generally poorly defined  w/interm Hent packets of water

Revision Date: 3/19/2015

Page 1 of \_\_\_

Feature ID: <u>F 94 LH00</u>

METHODS ATTR	BUTES	· · · · · · · · · · · · · · · · · · ·	<b>"</b> 他们是是		Water Burn Tex	<b>Called</b>		<b>北城,华代华城间的市场</b> 。
Minnow Traps (	Y/N):	Hook and Line (Y/N)		Beach Seine (Y	/N):	Fyke N	let (Y/N):	Hoop Net (Y/N):
No. of Minnow 1	Traps Set:	Date & Time in:		Date &Time in			& Time in:	Date & Time in:
Date & Time in:	N	(mm/dd/yyyy) No of lines in water		(mm/dd/yyyy) No. of passes:			dd/yyyl) & Time ofta	(mm/dd/yyyy) Date & Time out:
(mm/dd/yyyy)		_		DAME CL.	au).		dd/yyyy)	(mm/dd/yyyy)
Date & Fime out (mm/dd/yyyy)	200	VTime lines in water:		Reach Length (	m):			Marie I washingto
ELECTROFISHING	G ATTRIBUTES			<b>他們的</b>	的战争的兴	港加	<b>。特别的遗址</b> 做	
EF (Y/N):	EF Start Ti		EF End Time:	1/	EF Time (sec			Reach Length (m):
Duty Cycle: Current (A):		Frequency (Hz) ; Volts (V):	3 N	/ Power (W):		Sampl	ing Efficiency (% of	sample reach):  (amp x volts)
	Device States	Company of the case of the Cas		rower (vv).	of the collection to the collection of the colle		SERVICE VI	(amp x voits)
FISH OBSERVAT	IONS	2. 10 10 10 10 10 10 10 10 10 10 10 10 10	E PARTIE TO	otal Length	Life Stage		Disposition	redetermination of the country
ID (Seq. Num)	Gear Type	Species		nm)	(Juvenile or A	Adult)	(Dead or Alive)	Picture No.
						_		
-			1 7	5	-/	_		
			11/	A	-			
	itional informatio			利力を対象を	建學問題	機制		<b>电影外性的概念的形式。</b>
Pa	etly Nof	ined drain	age fe	ature in	Small		11. P	black spruce forest
		•	J		<i>)</i>   • • • • • • • • • • • • • • • • • •	VA	ney a	plack spruce forest
5	mall bo	y of coll	eded v	vater	at P	LX	List m.	octlu
			·		4	- /		31.9
С	lry ch.	unel.						
	· ·	,						
		~						
								Y
MICOSIA	C DOLLARS (II	MALLY RESERVED TO THE PARTY OF	I Sur III years			and the last	1000 TO 34 TO	
Printed and I all the last time	S POINTS (if appli	cable)	A SERVICE SE			a Resident	Contract of the	PROPERTY OF THE PROPERTY OF THE
Point ID:			Description:					
Point ID:	1 / 1		Description:	111 0	i h			
Field Crew Chief:	DIA		Field Scientist, Technician:	Kaller	1 Value	en	Technical Lead:	
	COA	1		1	1	-		

This form is to be completed before leaving the field site.

Featur	e ID: F94LH001 FT # NK002.1 Date: 8-17-15
For all form.	items not checked, please provide detailed explanation in the notes section of data
1.	Site Description
	Was ADF&G contacted before conducting any work in this area?
	Site Description complete? (Every cell must have entry or N/A)
	Were all photos taken and labeled correctly?
2.	Physical/Chemical Attributes
	Calibration performed prior to sampling?
	Physical/Chemical attributes complete? (Every cell must have entry or N/A)
1	Water quality data within expected ranges?
·	pH: 4.0 – 10.0
	p NTU: 0 – 3000
	DO (mg/L): 1.0 – 15.0
	Temp.: 1.0 – 19.0
	Specific Conductance: 20 - 1500
	If outside expected ranges, was sample re-taken?
	Are units correct?
3.	Stream Profile
	Stream profile view sketch included?
1	Stream profile view captures water depth and wetted width?
- 14	Stream profile view captures where efforts were made to capture fish?
	Plan view sketch included?
4.	Methods Attributes
	Methods attributes complete? (Every cell must have entry or N/A)
	Were methods used adequate (explanation needed if no methods selected)?
5.	Electrofishing Attributes
	Electrofishing attributes complete? (Every cell must have entry or N/A)
	Are units correct?
	•

Feature ID: F94LH 801

_			
6	Eich	Ohea	rvations

Are all fish captured/observed recorded in the Fish Observation table?

Are units correct? (Total Length (mm))

Were adequate photos taken of fish captured? (Take a photo if in doubt)

### 7. General

- Feature ID and Field Target # are consistent on data forms, logbook entries, photos, and maps?
- 🔀 All additional data in logbook captured on data form and additional photos noted?
- Were all additional comments on stream habitat, etc. recorded on data form?
- Was any gear missing/damaged for this survey or did you have any problems that should require resampling of this stream for an adequate survey effort?

By signing below, I verify that all field data for this site has been verified for accuracy and completeness.

X haley Volper X hales Valper
Fisheries Biologist (print)

Signature

Field Crew Chief (print)

Signature



P\_F94LH001\_001\_US LOOKING US AT PLX

8/17/2015 NK002.1



P\_F94LH001\_002\_DS LOOKING DS AT PLX

8/17/2015 NK002.1



P\_F94LH001\_003\_LB LOOKING AT LB AT PLX

8/17/2015 NK002.1



P\_F94LH001\_004\_RB LOOKING AT RB AT PLX

8/17/2015 NK002.1



P\_F94LH001\_005\_AERIAL AERIAL PHOTO

8/17/2015 NK002.1



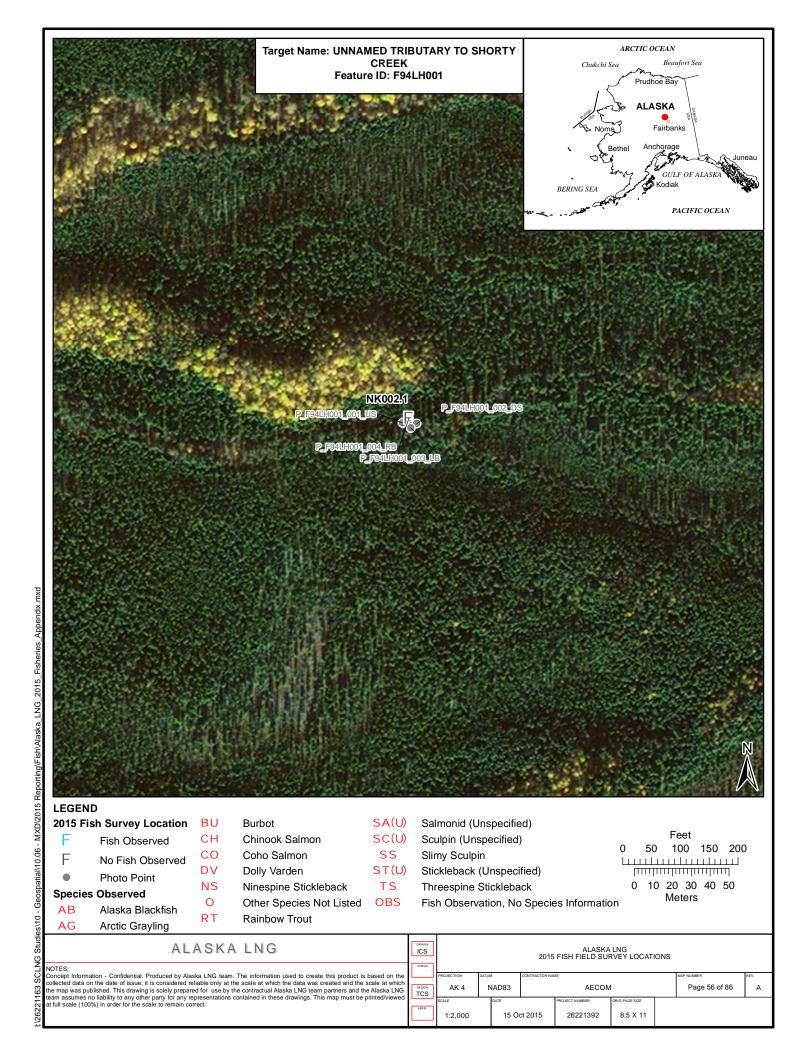
P\_F94LH001\_006\_AERIAL AERIAL PHOTO

8/17/2015 NK002.1



P\_F94LH001\_007\_AERIAL AERIAL PHOTO

8/17/2015 NK002.1



100	SITE DESCRIPTION		CALL DANGERS	LEVEL BERNSTERN	THE REPORT OF THE PARTY AND THE PARTY.
	A STATE OF THE PARTY OF THE PAR	ors: SCS NJS	AD F Team	1 No.: F86 Fea	ature ID: F & A YOO 6
		0	spect a	reek Str	ream ID: AL244.1
8		found as expected (Y/N):		Hw	vy MP (N/A if heli accessed): 134,6
+	Latitude: 66° 46' 46, 2410	)" <i>\</i>	Longitude:	1500 421	20.9168" W
-	Logbook No.: Logbook Page No.:	A	3	Fish Mortalities:	Total Photos:
_			RB to LB@ CL_	. A. mai	LB to RB@ CL
	n: 11 / 1/2 ht 1/10/6 /00/ 1/5   nie	Pic No.: P. P86A YOU COUT - RB			
	Other P- F36A Y006 - 005 _ S	TREAM (general Mo	ITAY Pholo	b siream	near Ma)
	Pic No(s).:				
3	PHYSICAL/ CHEMICAL ATTRIBUTES			作の計画を作り	Early 13 (C), We will be less than the strain
	Weather (Describe): Overca	ΨΤ	recipitation (Describ		10 (1
L	Water Temperature (°C): 5, 29	Air Temperature (°C):	pH:	6.55	Dissolved Oxygen (mg/l): 12.6/
-	Specific Conductance(µS/cm): 103	Turbidity (NTU): 4.8		(mV): 131, 7	Dissolved Oxygen (%): 99,5
-	Ambient Conductance(µS/cm): 65  Defined Channel (Y/N): Y Notes:	contained within	(Y/N): N   Colo	r: clear	Wetted Width (m): 1,05
-	Defined Channel (Y/N): Y Notes: Flow (Y/N): Notes:	Steady Cilly Pour	1 11 3		Thalweg Depth @ CL (m): 0,49
		at 0-5 m at RB: Stream Sub	14 5.5	atlc Habitats	
	30 Grass/Sedge (%) 10 G	Grass/Sedge (%)	Organics (%)	Sand Bar	Large Woody Debris
1	<b>3</b> 0 Shrubs (%) 90 s	ihrubs (%)	ilt (%)	Mud Bar	Overhanging vegetation
			and (%)	Gravel Bar	Contiguous Wetlands
1	MA_Diameter DBH (in.) MA_Dia	meter DBH (in.) 40 G		Riffles	Emergent Plants
-	Stream Type:	· m		Pools	Submerged Plants
	V	V) B	oulders (%)	Undercut Banks	
1	PerennialIntermittent	Ephemeral	STATE OF THE PARTY		
1000	Perennial Intermittent	cpnemeral	ted width, water de		quatic habitats)
	STREAM PROFILE: Cross Sectional at Crossing	cpnemeral	ted width, water de	oth, substrate, and a	equatic habitats)
	STREAM PROFILE: Cross Sectional at Crossing	cpnemeral		oth, substrate, and a	low tundra
		cpnemeral	ted width, water de	oth, substrate, and a	
	STREAM PROFILE: Cross Sectional at Crossing	(include riparian vegetation, wet	ted width, water de	oth, substrate, and a	les tundra
	STREAM PROFILE: Cross Sectional at Crossing	(include riparian vegetation, wet	ted width, water de	oth, substrate, and a	les turdra
	STREAM PROFILE: Cross Sectional at Crossing	(include riparian vegetation, wet	ted width, water de	oth, substrate, and a	ler tundra
	STREAM PROFILE: Cross Sectional at Crossing	Include riparian vegetation, wet	ted width, water de	oth, substrate, and a	les turdra
	STREAM PROFILE: Cross Sectional at Crossing	Include riparian vegetation, wet	ted width, water de	oth, substrate, and a	ler tundra
	STREAM PROFILE: Cross Sectional at Crossing	(include riparian vegetation, wet	ted width, water de	oth, substrate, and a	les turdra
	STREAM PROFILE: Cross Sectional at Crossing  A A A A A A A A A A A A A A A A A A A	dinclude riparian vegetation, wet	ra centerline, photo	oth, substrate, and a	lers tundra
	STREAM PROFILE: Cross Sectional at Crossing	dinclude riparian vegetation, wet	ra centerline, photo	oth, substrate, and a	lers tundra
	STREAM PROFILE: Cross Sectional at Crossing  A A A A A A A A A A A A A A A A A A A	Jinclude riparian vegetation, wet	ted width, water de	oth, substrate, and a	cations by gear type and ROW)
	STREAM PROFILE: Cross Sectional at Crossing  A Condition	findude riparian vegetation, wet	ra centerline, photo	oth, substrate, and a	cations by gear type and ROW)
	STREAM PROFILE: Cross Sectional at Crossing  A Condition	findude riparian vegetation, wet	ra centerline, photo	oth, substrate, and a	lers tundra
	STREAM PROFILE: Cross Sectional at Crossing  A Condition	Jinclude riparian vegetation, wet	m centerline, photo	oth, substrate, and a	cations by gear type and ROW)
	STREAM PROFILE: Cross Sectional at Crossing  A Condition	Jinclude riparian vegetation, wet	m centerline, photo	oth, substrate, and a	cations by gear type and ROW)
	STREAM PROFILE: Cross Sectional at Crossing  A A A A A A A A A A A A A A A A A A A	disclude riparian vegetation, wet	EF offorts	oth, substrate, and a	cations by gear type and ROW)
	STREAM PROFILE: Cross Sectional at Crossing  A Condition	disclude riparian vegetation, wet	EF offorts	oth, substrate, and a	cations by gear type and ROW)
	STREAM PROFILE: Cross Sectional at Crossing  A Condition	disclude riparian vegetation, wet	m centerline, photo	oth, substrate, and a	cations by gear type and ROW)

Feature ID: F86 A Y 0 06

METHODS ATTE	IBUTES	(1) The	<b>然是基础的现在分</b> 价				15 ACAMP 14.0	學是在學典學學的學術
Minnow Traps (		Hook	and Line (Y/N):	Beach Seine (	Y/N): N	Fyke	Net (Y/N):	Hoop Net (Y/N):
No. of Minnow Traps Set: 3  Date & Time In: 7   8   2015   (mm/dd/yyyy)		Date & Time in:		Date &Time In	1		& Time in:	Date & Time in:
			dd/yyyy)  Flines in water:	No. of passess			(dd/yyyy) 8 Time out:	(mm/dd/yyyy)  Date & Time out:
				A report	10		dd/yyyy)	(mm/dd/yyyy)
Date & Time out (mm/dd/yyyy)	1080	Time	lines in water:	Reach Length	(m):		1	investige (Macrise)
ELECTROFISHIN	2 2 12 14 24 24 24	馬門用		AL PROPERTY.	AMELION,	建物		
EF (Y/N): Y	EF Start Tir			ne: 1050	EF Time (sec			Reach Length (m): 60
Duty Cycle: Current (A):	25	Volts	ency (Hz): 60 (V): 406/350	Waveform: Power (W):	PDC	Samp	ling Efficiency (% of	sample reach): 70% (amp x volts)
			400 300	Benderal Patriculation	200/	1+		(amp x voits)
FISH OBSERVAT	Section of the last of the las	75 12		Total Length	Life Stage		Disposition	
ID (Seq. Num)	Gear Type	- 5	Species	(mm)	(Juvenile or A	4.1	(Dead or Alive)	Picture No.
001	Minnow 7	rap		74	Just fadu		Alive	'n/A
002	EF		Stiny Sculpin	79	Jur/adult		ALIVE	* P. 18hA1006-006-5CM *P.186A1006.007-5CM
003			Serny Stalpin		Jul / Mail (+		ALIVE	7 K. 100 K 1 W6 - V7 - 324 CI
			1:		1	171	1	
						-		
								*
+	-				\	1		
1	\	1		-		1	-	
	1	. /	1			1		
NOTES (any add	itional information	超層	CONTRACTOR OF THE PARTY OF THE	<b>以外外,他也</b>	湯茶製料店	粉伽	British Sale	A STATE OF THE STA
~ ope	1.3h C	aus	ght in,	Not /Slin	, scu	10,1		- F 15
M. M.C.			July 1		1	'		
- Se4	1012 003	15	my had a	6.00001	erovers	11	5 1	*
- STRA	1,5	A	+ributan	40	anad.	On	rous to	pospect
C 20	o k		/					- 1 1
CYL	L q		,	, .	10 1			
1.0		- (	ctvoan	w/	Steach	1	flow	+ riffle
- Cll	nivat	$\forall$	211601111	1	1.01	4		40
1-	nool ka	6,7	ati gra	vel su	PSM	N.	( w)	mud h.
- /		<i>'</i>	stream at gra	sme	anla	A		
	S POINTS (if applic		THE CONTRACTOR OF THE PARTY OF	STATE AND				THE RESERVE THE SAME SAME
Point ID:	NA		Description	1: A/A				
Point ID:	NA		Description	1: 1/	W.			
Field	1	1	Field Scient	11/1/1/1/1/1/1/1/1/1/1/1/1/1/1/1/1/1/1/1	1		Technical	
Crew Chief:	X	7	Technician:	- all	a cut		Lead:	
	0	0					1	

	This form is to be completed before leaving the field site.				
Feature ID:_	F86AY706 FT#AL2441 Date: 7/19/2015				
For all items form.	not checked, please provide detailed explanation in the notes section of data				
1. Site	Description				
Δí	Vas ADF&G contacted before conducting any work in this area?				
q s	Site Description complete? (Every cell must have entry or N/A)				
Ø v	Were all photos taken and labeled correctly?				
2. Phys	sical/Chemical Attributes				
ĭ C	alibration performed prior to sampling?				
ĬØ P	Physical/Chemical attributes complete? (Every cell must have entry or N/A)				
A À	Vater quality data within expected ranges?				
4	pH: 4.0 – 10.0				
	NTU: 0 – 3000				
<b>‡</b>	DO (mg/L): 1.0 – 15.0				
ф	Temp.: 1.0 – 19.0				
А ф	Specific Conductance: 20 - 1500				
NA II	f outside expected ranges, was sample re-taken?				
A A	Are units correct?				
3. Stre	am Profile				
<b>&gt;</b> S	Stream profile view sketch included?				
yoi s	Stream profile view captures water depth and wetted width?				
′p⊳ s	Stream profile view captures where efforts were made to capture fish?				
JC F	Plan view sketch included?				
4. Metl	nods Attributes				
,	Methods attributes complete? (Every cell must have entry or N/A)				
<b>7</b> 4 /	Were methods used adequate (explanation needed if no methods selected)?				
5. Elec	trofishing Attributes				
√D E	Electrofishing attributes complete? (Every cell must have entry or N/A)				
# A	Are units correct?				

Feature ID: F86 A YOOb

6	Fieh	Ohe	erva	tions
u.	ııəıı	OD3	CIVA	uulia

- Mare all fish captured/observed recorded in the Fish Observation table?
- □ Are units correct? (Total Length (mm))
- Were adequate photos taken of fish captured? (Take a photo if in doubt)

#### 7. General

- Feature ID and Field Target # are consistent on data forms, logbook entries, photos, and maps?
- ☑ All additional data in logbook captured on data form and additional photos noted?
- Were all additional comments on stream habitat, etc. recorded on data form?
- Was any gear missing/damaged for this survey or did you have any problems that should require resampling of this stream for an adequate survey effort?

By signing below, I verify that all field data for this site has been verified for accuracy and completeness.

X Neal Swith X aleal Las

Fisherles Biologist (print)

Signature

Fleid Crew Chief (print)

Signature



P\_F86AY006\_001\_US LOOKING US AT OFF-ROW TARGET

7/18/2015 AL244.1



P\_F86AY006\_002\_DS LOOKING DS AT OFF-ROW TARGET

7/18/2015 AL244.1





P\_F86AY006\_004\_RB LOOKING AT RB AT OFF-ROW TARGET

7/18/2015 AL244.1



P\_F86AY006\_005\_STREAM 7/18/2015 AL244.1 GENERAL HABITAT PHOTO OF STREAM NEAR MT 1

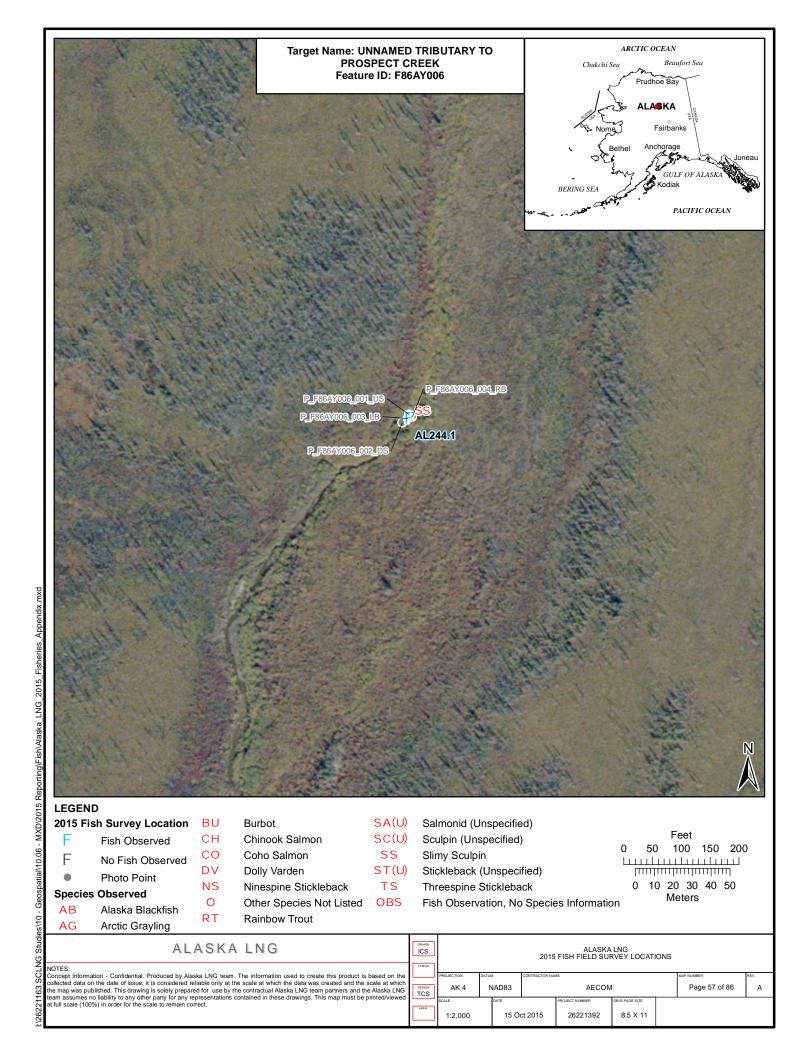


P\_F86AY006\_006\_SCULPIN PHOTO OF SLIMY SCULPIN

7/18/2015 AL244.1



P\_F86AY006\_007\_SCULPIN 7/18/2015 AL244.1 UNDERWATER PHOTO OF SLIMY SCULPIN



STIF DESCRIPTION	是我这个表示的是一些一句,是这一样的一个是是一个是一个事情。
Date: 7/18/2015 Investigators: S(S MJS ADF	Team No.: (%) Feature ID: F86A VOOS
Stream Name: Clara Cole & Over 100	Stream ID: A L 209
Pipeline Milepost: 240, 4 Stream found as expected (Y/N):	Hwy MP (N/A if heli accessed): 176.5
Latitude: 67° 16' 12.8182" N Longitud	5 1 1 1 00 00 11 11
Logbook No.: 2 Logbook Page No.: 9 - 10 Total Fish Caught:	Fish Mortalities: NA Total Photos:
	PF86AY005_003_LB   LB to RB@ CL PF86AY005_003_LB   Pic No.: PF86AY005_004_RB
US @ CL Pic No.: P - F86 A Y005 - 001 - US Pic No.: P - F86 A Y005 - 003 - DS RB to LB Pic No.:	Y-18641005_005_015   Pic No.: 1-18671100 5-001-12
Other PF86AY005-005-DRY (Photo of dry channel	laci ( klas US-location of MTI)
Pic No(s): P F86A YOUS-006-US COLLVERT (Photo of ca	1/414 / 190 H-2 NO- 10CK 1104 1 / 1/11
PHYSICAL/ CHEMICAL ATTRIBUTES	Possibali to 7
Weather (Describe): Precipitation (I  Water Temperature (°C): 7  Air Temperature (°C): 7	pH: 408 Dissolved Oxygen (mg/l): 5.43
Water Temperature (°C): 7,5 Air Temperature (°C): 7  Specific Conductance(μS/cm): 7,5 Turbidity (NTU): 0,97	ORP (mV): 154 6 Dissolved Oxygen (%): 45.7
Ambient Conductance(µS/cm): 50 Odor: Name Sheen (Y/N): \(\seta\)	Color: Class Last date of Calibration: 7/16/2015
Defined Channel (Y/N): Y Notes: SECIMS to be drying out-	lots of mass Wetted Width (m): 2 m
Flow (Y/N): Notes: dry channel w/ Kolatic	Thalweg Depth @ CL (m) 15 m
Riparian Veg at 0-5 m at LB: Riparian Veg at 0-5 m at RB: Stream Substrate:  30 Grass/Sedge (%)  30 Grass/Sedge (%)  70 Organics (%)	Aquatic Habitats Sand BarLarge Woody Debris
Grass/Sedge (%) $\frac{30}{70}$ Grass/Sedge (%) $\frac{70}{20}$ Grass/Sedge (%) $\frac{70}{20}$ Granics (%)	Mud BarOverhanging vegetation
0   5   5   5   5   5   5   5   5   5	Gravel Bar Contiguous Wetlands
5 Diameter DBH (in.) 3 Diameter DBH (in.) 20 Gravel (%)	RifflesEmergent Plants
Stream Type:	PoolsSubmerged Plants
Perennial Intermittent Ephemeral Boulders (%)	Undercut Banks
STREAM PROFILE: Cross Sectional at Crossing (include dipartan vegetation, wetted width, wa	iter depth, substrate, and aquatic habitats)
Sur des (des)	iter depth, substrate, and aquatic habitats)
0.15m I em 2001	- some gravel underreath
STREAM PROFILE: Plan View (include direction of flow, centerline, distances from centerline,	, photo locations, sample locations by gear type and ROW)
NORTH: Culm 3 Maria 130 M	20 m

Feature ID: F86AY005

METHODS ATTE Minnow Traps (  No. of Minnow Traps (  No. of Minnow Traps (  Date & Time in: (mm/dd/yyyy)  Date & Time out (mm/dd/yyyy)  ELECTROFISHING EF (Y/N):  Duty Cycle: Current (A):	Traps Set: 3 7/17/20/5 13/40 t: 7/18/20/5 8/46 GATTRIBUTES  EF Start Tin	Date & (mm/do No. of li Time lin	ines in water:  es in water:  EF End Tim  ncy (Hz):	Beach Selne (Y, Date &Time in: (mm/dd/yyyy) No. of passes: Reach Length ( e: Waveform: Power (W):	m):  Da (m)  EF Time (second	ke Net (Y/N):  Inte & Time in: Inm/dd/yyyy)  Inte & Time out: Inte & Tim	Hoop Net (Y/N):  Date & Time in: (mm/dd/yyyy)  Date & Time out: (mm/dd/yyyy)  F Reach Length (m):  F sample reach):  (amp x volts)
ID (Seq. Num)	Gear Type	,	Species	Total Length (mm)	Life Stage (Juvenile or Adult	Disposition (Dead or Alive)	Picture No.
- No = mov was - Stre an	an de limites	can alli chai ted etri	pht approxy errough mel is to is	present	t but	mostly	where there
Point ID:	S POINTS (if applica	ible)	Description	: NA		10000000000000000000000000000000000000	<b>过</b> 有可能。
Point ID:	NA		Description	1 1	Y		
Field Crew Chief:	5	, /	Field Scient Technician:	/ /// // / //	Sow	Technical Lead:	

Revision Date: 06/09/2015

This form is to be completed before leaving the field site.
Feature ID: <u>F86AY005</u> FT # <u>AL209</u> Date: 7 18 2015
For all items not checked, please provide detailed explanation in the notes section of data form.
1. Site Description
Was ADF&G contacted before conducting any work in this area?
Site Description complete? (Every cell must have entry or N/A)
☼ Were all photos taken and labeled correctly?
2. Physical/Chemical Attributes
☑ Calibration performed prior to sampling?
Physical/Chemical attributes complete? (Every cell must have entry or N/A)
□ Water quality data within expected ranges?
∕∃ pH: 4.0 – 10.0
© Temp.: 1.0 − 19.0
Specific Conductance: 20 - 1500
If outside expected ranges, was sample re-taken?
Are units correct?
3. Stream Profile
Stream profile view sketch included?
Stream profile view captures water depth and wetted width?
Stream profile view captures where efforts were made to capture fish?
Plan view sketch included?
4. Methods Attributes
Methods attributes complete? (Every cell must have entry or N/A)
Were methods used adequate (explanation needed if no methods selected)?
5. Electrofishing Attributes
Electrofishing attributes complete? (Every cell must have entry or N/A)
Are units correct?

Feature ID: F86A Y 005

#### 6. Fish Observations

Are all fish captured/observed recorded in the Fish Observation table?

Are units correct? (Total Length (mm))

Were adequate photos taken of fish captured? (Take a photo if in doubt)

#### 7. General

- Feature ID and Field Target # are consistent on data forms, logbook entries, photos, and maps?
- All additional data in logbook captured on data form and additional photos noted?
- Were all additional comments on stream habitat, etc. recorded on data form?
- Was any gear missing/damaged for this survey or did you have any problems that should require resampling of this stream for an adequate survey effort?

By signing below, I verify that all field data for this site has been verified for accuracy and completeness.

X Neal Swith X Mend State

Fisheries Biologist (print)

Signature

Fleld Crew Chief (print)

Signature



P\_F86AY005\_001\_US LOOKING US AT OFF-ROW TARGET



P\_F86AY005\_002\_DS LOOKING DS AT OFF-ROW TARGET

7/18/2015 AL209



P\_F86AY005\_003\_LB LOOKING AT LB AT OFF-ROW TARGET

7/18/2015 AL209



P\_F86AY005\_004\_RB LOOKING AT RB AT OFF-ROW TARGET

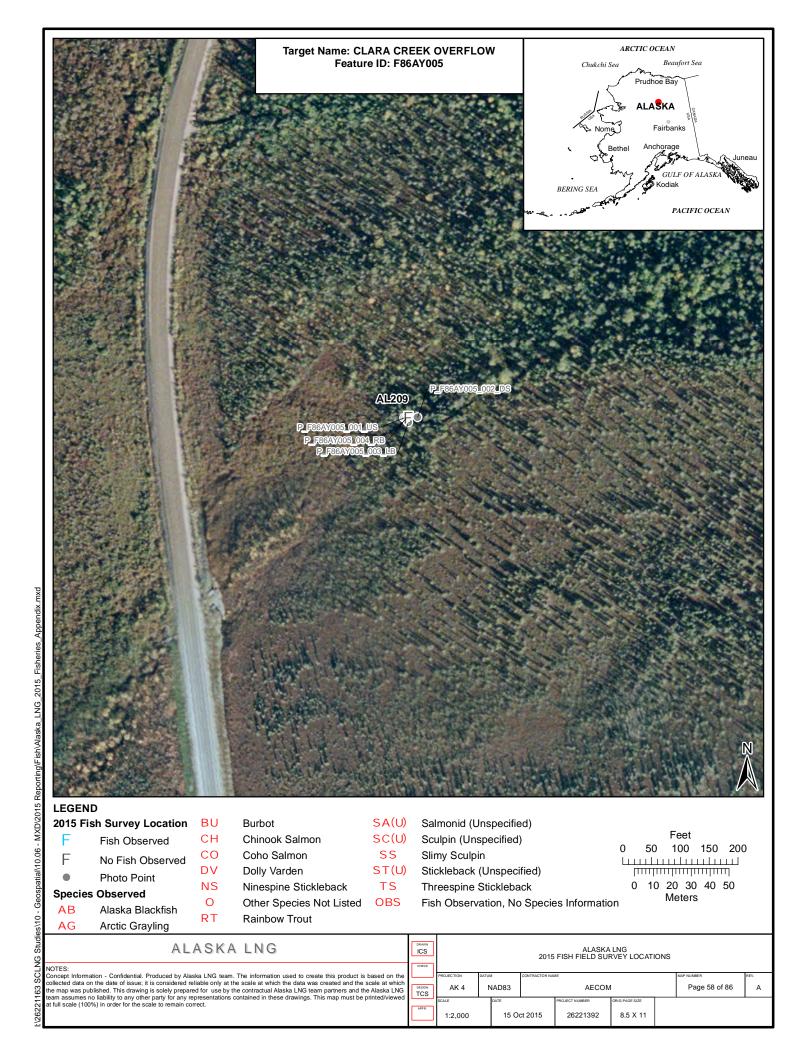
7/18/2015 AL209



P\_F86AY005\_005\_DRY 7/18/2015 AL209
PHOTO OF DRY CHANNEL DS OF OFF-ROW TARGET



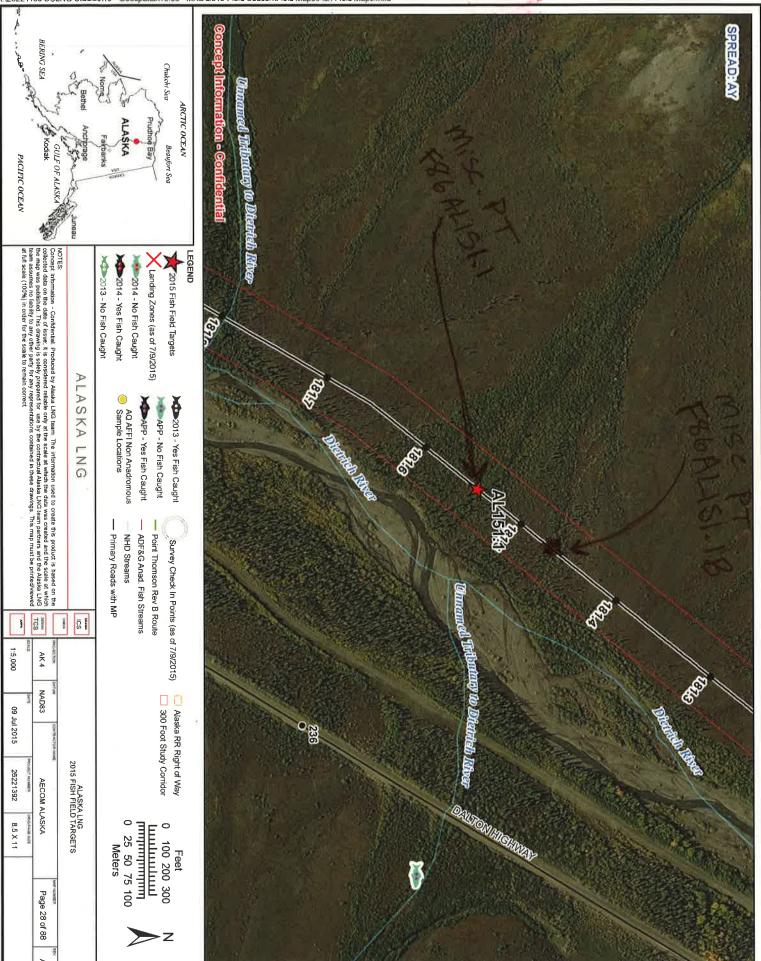
P\_F86AY005\_006\_US CULVERT 7/18/2015 AL209 PHOTO OF CULVERT LOOKING US AT LOCATION OF MT 1



			CONTRACTOR OF THE PARTY OF THE
SITE DESCRIPTION	是相談。其一個問題的		Ali 国际政治的国际支援方式。安徽章
Date: 7 14 2015 II	nvestigators: SCS NJS	ADF Team No.: F86	Feature ID: F81AY007
Stream Name: Undame	d Tributary to	Dietrich River	Stream ID: ALISI. /
Pipeline Milepost: 1815	Stream found as expected (Y/N):	N - dry channe	
Latitude: 68.013 SCS		Longitude:	
	ge No.: 2 -3 Total Fish Caught	1/ A	s; 1/1 A Total Photos: 4 9
	DS @ Cl	RB to LB@ CL	A LB to RB@ CL A / / A
US @ CL Pic No.:	Pic No.:	Plc No.:	Pic No.:
	6ALIST, 1-001-WS		PRACISI. 1-003-AERIAC
Pic No(s) .: MISC PT_ P- F8+	AUSIN -002-DS	MISC PT_ P_ FSG	ACIST 1-004-AERIAL
PHYSICAL/ CHEMICAL ATTRIBUTES	SCHOOL SECTION SECTIONS	CONT.	
	sunny	Precipitation (Describe):	none
Water Temperature (°C):	Air Temperature (°C):	1 pH: 1/1/2	Dissolved Oxygen (mg/l): //
Specific Conductance(µS/cm):	/ Turbidity (NTU):	ORP (mV):	Dissolved Oxygen (%):
Ambient Conductance(μS/cm):		en (Y/N): NA Color:	Last date of Callbration:
		annel Present	Wetted Width (m):
Flow (Y/N): 1/A	Notes: NA		Thalweg Depth @ CL (m):
	rlan Veg at 0-5 m at RB: Stream Su		and the second of the second
Grass/Sedge (%)	Grass/Sedge (%)	Sand Bar	Large Woody Debris Overhanging vegetation
Shrubs (%)	\Shrubs (%)	_Silt (%)Mud Bar Sand (%)Gravel Bar	V I I I
Trees (%) Diameter DBH (in.)	Diameter DBH (in.)	_Sand (%) Gravel Bar Gravel (%) Riffles	Emergent Plants
		Cobble (%) Pools	Submerged Plants
Stream Type:	× 5-1	Boulders (%)Undercut	Banks
Perennialintermit	tentEphemeral		
		A	
		· ·	
CTOP SAA DEGELL S. Dien May findlydd	direction of flow, centerline, distances	from centerline, photo locations, sa	mple locations by gear type and ROW)
NORTH:	SC PT (no Feature ID)=		tontinuous on the stream patenes
F86AL	151 18	PAP dist	SHEAM LIGH
(too	K 5 photos)	X	pateries
dry -		/	M est
dix	Channel -	/500 ft.	Wait
		PAP	- Mr.
		7 -	1/2/
	ORIGINAL		- //
	TARGE PT	( ( Lak 4 )	1 2 /
	F86 ALIS	SI.I (took 4 photos)	W (
	(F86A700	1	y. v
Revision Date: 3/19/2015	(F 864 100	1)	Page 1 of <u>-</u> 2

Feature ID: F86AY007

METHODS ATT	ALBERT STATE OF THE STATE OF TH	<b>Marking Park</b>			<b>电线形式</b>	高級的		
Minnow Traps (	Y/N): N A	Hook and Line (Y/	V): N/A	Beach Seine (Y,	(N): / A	Fyke N	let (Y/N):	Hoop Net (Y/N):
No. of Minnow	Traps Set: \	Date & Time in:		Date &Time In:			Time in:	Date & Time In:
Date & Time in:	The state of the s	(mm/dd/yyyy) No. of lines in wat	er:	(mm/dd/yyyy) No. of passes:	-/-		dd/yyyy)	(mm/dd/yyyy)  Date & Time out:
(mm/dd/yyyy) Date & Time out		Time lines In wate		Reach Length (	m),	(mm/c	ld/yyyy) /	(mm/dd/yyyy)
(mm/dd/yyyy)	1100/44/65	Time lines in wate	. /	keach Length (			1	Section of the section
ELECTROFISHIN	G ATTRIBUTES	<b>机学科</b> 人员		<b>非洲</b> 拉里的	创的特别的政	曾经出		
EF (Y/N):	EF Start Ti	_	EF End Time:	-	EF Time (sec			Reach Length (m):
Duty Cycle: \ Current (A):	\	Frequency (Hz) : Volts (V):		Waveform: Power (W):		Sampli	ing Efficiency (% of	sample reach):  (amp x volts)
	Name and Address of the Owner, where the Owner, which is the Ow	voits (v).	and the second of the same	rower (vv):	HI was Introduction	Inscilling	THE RESERVE OF THE PARTY OF THE	(amp x voits)
FISH OBSERVAT	IONS	"一个一个一个		Total Length	Life Stage		Disposition	TELEVILLE DESIGNATION OF THE
D (Seq. Num)	Gear Type	Species		(mm)	(Juvenile or A	dult)	(Dead or Alive)	Picture No.
					1			
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			1	-				
				,				
IOTES (any add	itional information		B. Salekski	(%) (1) (2) (1) (1)			學編制學出版	
Tarac	+ W85	admy d	annel -	took 2	photos	M	channel	and two acras
photo	S,	1		, -				
1 5 ~ 1	all stone	n wa se	2n north	of tar	get Pap	Prox	5001), =	It was limited
A SP	11 SHOW	مرد دام	Ilm u	9 1 11	(chas	and	Lunder	ground in spots.
to d	N SCOUNT	dallad	channa	0	10100			, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
	4 00 t	defined enough	oranice (	to sa	- ple			
	7/0	Ic MISS	O. J. J.	مامماديم	1	-: +0	DIRCULE	danina
	• 100	see be	lous)	acpicaco		311-		s drawing
		(302	to be	no DIV	ns sid	6 ~ (	1 3 aon	al photos (see below)
	, 702	or a pro	3103 Wred	VE TEX C	7038-0	w.r.g	, 0 0000	(below)
			TANICO PT:	F86ALIST T	B 001-0	106	DE	86AV007_ 005 -009_ALT_
			1					
useri ve virev	c nounce itt	AUTO TRANSPORT	W.	JINEMIN, DO	MAKEM	11/1	remine, 42	RIAL, AERIAL
BUT TO SERVICE AND ADDRESS OF THE PARTY OF T	S POINTS (If applie	CONSTRUCTION OF		門を使用を設置	<b>医型性型性</b>		not long	errough water to
	ALISIIB	photos			Λ	P 4	arget; ""	saxolo
oint ID:	NA		Description:	N	f\		· ·	
Field Crow Chief:	51	< .	Field Scientis	t/			Technical	
Crew Chief:	0		Technician: _			-	Lead:	



NECI



P\_F86AY007\_001\_US
DRY CHANNEL LOOKING US AT PLX

7/14/2015 AL151.1



P\_F86AY007\_002\_DS
DRY CHANNEL LOOKING DS AT PLX

7/14/2015 AL151.1



P\_F86AY007\_003\_AERIAL AERIAL PHOTO OF AL151.1

7/14/2015 AL151.1



P\_F86AY007\_004\_AERIAL AERIAL PHOTO OF AL151.1

7/14/2015 AL151.1



P\_F86AY007\_005\_ALT\_US LOOKING US AT PLX AT AL151.1B

7/14/2015 AL151.1B



P\_F86AY007\_006\_ALT\_DS LOOKING DS AT PLX AT AL151.1B

7/14/2015 AL151.1B



P\_F86AY007\_007\_ALT\_AERIAL AERIAL PHOTO OF AL151.1B

7/14/2015 AL151.1B



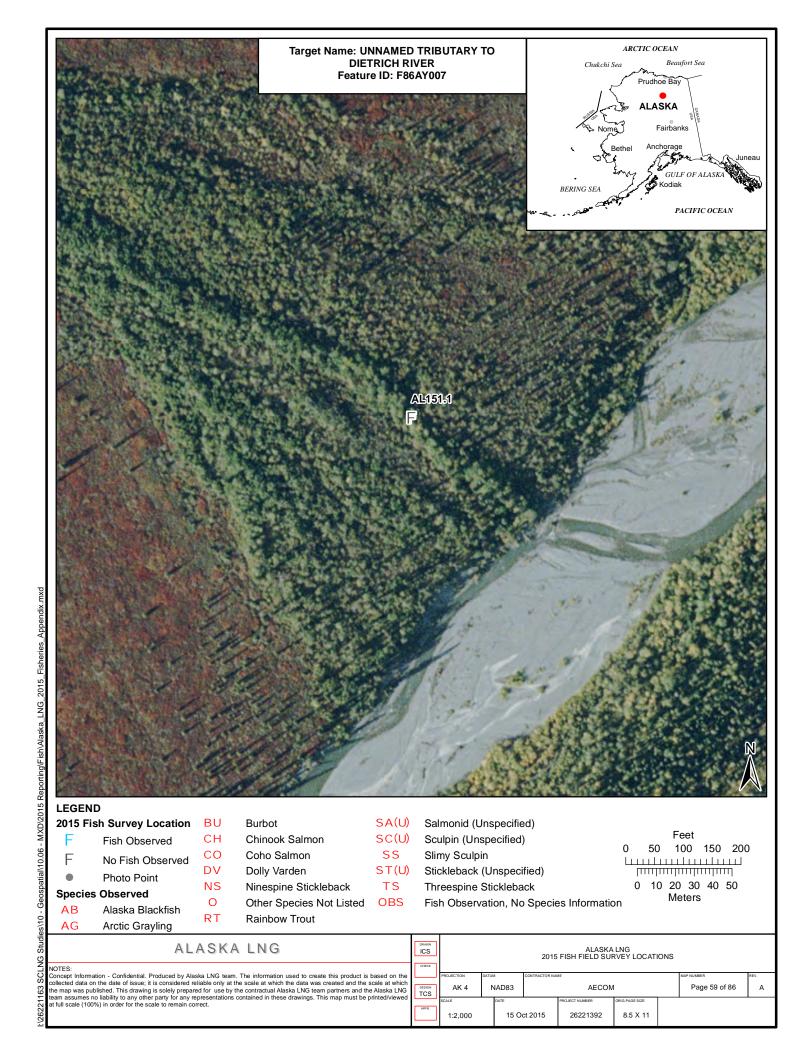
P\_F86AY007\_008\_ALT\_AERIAL AERIAL PHOTO OF AL151.1B

7/14/2015 AL151.1B



P\_F86AY007\_009\_ALT\_AERIAL AERIAL PHOTO OF AL151.1B

7/14/2015 AL151.1B



SITE DESCRIPTION		的控制的法法定的的 計畫的	自由的 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
7	ors: SCS NJS AXF	Team No.: F86 Fe	eature ID: F86AYOOI
112/1	tany to Dietrich.	0	ream ID: A 1 1 4 9 . 1
Militarrece 11	ound as expected (Y/N):	1 / I V	wy MP (N/A if heli accessed): hol 1
Latitude: 68°01121.188			122.7102" W
Logbook No.: 2 Logbook Page No.: 2		Fish Mortalities:	04
US @ CL Pic No.: 2-746 A Y 201 - 001 - US Pic N		LB@ CL .: P F 86 A YOO   - 003	-LB Pic No.: P-F86 AYOO 1 - 004- RB
	18_AERIAL (4 aerials)		
Pic No(s).:			
PHYSICAL/CHEMICAL ATTRIBUTES		DESCRIPTION OF THE PARTY.	<b>一位是不是公共的公司。但是为中国的一个公司</b> 的
Weather (Describe): Sunny	Precipitation	100	
Water Temperature (°C): 7,65	Air Temperature (°C): \ 9	pH: 6.59	Dissolved Oxygen (mg/l): 11,49
Specific Conductance(µS/cm): 337	Turbidity (NTU): 0, 94	ORP (mV): 358, 3	Dissolved Oxygen (%): 97,3
Ambient Conductance(µS/cm): 226	Odor: None Sheen (Y/N): N	Color: Clar	Last date of Calibration: 7/11/2015
Defined Channel (Y/N):  Notes:  Notes:	igh gradient runs dou	0	
	at 0-5 m at RB: Stream Substrate:	Aquatic Habitats	Thalweg Depth @ CL (m): 7,46
	rass/Sedge (%) Organics (%)		Large Woody Debris
<u>60</u> Shrubs (%) <u>60</u> Sh	rrubs (%)Silt (%)	Mud Bar	Overhanging vegetation
	ees (%) Sand (%)	Gravel Bar	Contiguous Wetlands
S Diameter DBH (in.) 3 Diam	neter DBH (in.) Gravel (%)	Riffles	Emergent Plants
Stream Type:	2 Cobble (%)	Pools Undercut Banks	Submerged Plants
PerennialIntermittent	Enhanced Boulders (%)		
- Fereninal Intermittent	EphemeralBoulders (76)	ondereut banks	
STREAM PROFILE: Cross Sectional at Crossing	cpnemeral		aquatic (iabitats)
STREAM PROFILE: Cross Sectional at Crossing	Unclude riparian vegetation, wetted width, u		willows aldows
STREAM PROFILE: Cross Sectional at Crossing	include riparian vegetation, wetted width, v	vater depth, substrate, and a colders E & Grenzella	8 Company
STREAM PROFILE: Cross Sectional at Crossing	include riparian vegetation, wetted width, v	vater depth, substrate, and a colders E & Grenzella	8 Company
STREAM PROFILE: Cross Sectional at Crossing	Unclude riparian vegetation, wetted width, v	vater depth, substrate, and a colders (weare)	8 Company
STREAM PROFILE: Cross Sectional at Crossing	include riparian vegetation, wetted width, v	vater depth, substrate, and a colders (weare)	8 Company
STREAM PROFILE: Cross Sectional at Crossing	S.2 m  Joylan  Gravel/cohble substitution	olders (Neurold)	willows aldors
STREAM PROFILE: Plan View (include direction NORTH:	S.2 m  Joylan  Gravel/cohble substitution	olders (Neurold)	willows aldors
STREAM PROFILE: Plan View (include direction NORTH:	S.2 m  Joylan  Grave 1/Cohble Subskill  of flow, centerline, distances from centerline	olders (Neurold)	willows aldors
STREAM PROFILE: Plan View (include direction NORTH:	S.2 m  Joylan  Sravel/Cohble Substitution, wetted width, we shall be substituted by the substitution of flow, centerline, distances from centerline	olders (Neurold)	willows aldors
STREAM PROFILE: Plan View (include direction NORTH:	S.2 m  Joylon  Sravel/Cohble Substitution  of flow, centerline, distances from centerline  NX	olders (Neurold)	willows aldors
STREAM PROFILE: Plan View (include direction NORTH:	S.2 m  Joylan  Grave 1/Cohble Subskill  of flow, centerline, distances from centerline	pater depth, substrate, and a colders E Report of the colders of t	ocations by gear type and ROW)
STREAM PROFILE: Plan View (include direction NORTH:	S.2 m  Joylon  Sravel/Cohble Substitution  of flow, centerline, distances from centerline  NX	pater depth, substrate, and a colders E Report of the colders of t	ocations by gear type and ROW)
STREAM PROFILE: Plan View (include direction NORTH:	S.2 m  Joylom  Srave I/Cohbit Substition  of flow, centerline, distances from centerline  RX  80 m B  Y efforts	pater depth, substrate, and a colders E Report of the colders of t	ocations by gear type and ROW)
STREAM PROFILE: Plan View (include direction NORTH:	S.2 m  Joylom  Srave I/Cohbit Substition  of flow, centerline, distances from centerline  RX  80 m B  Y efforts	rater depth, substrate, and a colders end of the five property of the colders of	ocations by gear type and ROW)
STREAM PROFILE: Plan View (include direction NORTH:	S.2 m  Joylon  Sravel/Cohble Substitution  of flow, centerline, distances from centerline  NX	Proter depth, substrate, and a colders Eggs of grant g	ocations by gear type and ROW)

Revision Date: 3/19/2015

Feature ID: F86 AYOO

METHODS ATTE	BUTES	NE THE REAL PROPERTY.	Salar di			A PER	格制的		Things to the same of the same
:Minnow Traps (	(/N): Y	Hook and	Line (Y/N):	NA	Beach Seine (Y	/N): /A	Fyke N	let (Y/N): $\mathcal{N}$	Hoop Net (Y/N):
No. of Minnow	Traps Set: 3	Set: 2 Date & Time in: Date & Time in: Date &		k Time in:	Date & Time in: (mm/dd/yyyy)				
Date & Time in:	(mm/dd/yyyy)  1: 7/14/20(5 No. of lines in water:		No. of passes:		Date 8	Time out:	Date & Time out:		
(mm/dd/yyyy) Date & Time out	7/15/2015	Time lines	s in water:		Reach Length (	m):	(mm/c	dd/yyyy)	(mm/dd/yyyy)
(mm/dd/yyyy) ELECTROFISHIN	1000	<b>1</b> 100年11日本			at the bounce of the last	RECORDED OF ANY OF	SAME AND ADDRESS OF		The second second second
EF (Y/N): \	EF Start Tir	ne: 10:	12-	EF End Tim	e: 10: 30	EF Time (sec	conds):	303 EF	F Reach Length (m): 80
	25	Frequency	•	00	Waveform:	PDC		ing Efficiency (% of	
Current (A):	1,7	Volts (V):	300/35	0/400	Power (W):	510 / 5	95	1680	(amp x volts)
FISH OBSERVAT	ions	Walney III							
ID (Seq. Num)	Gear Type	S	pecies		Total Length (mm)	Life Stage (Juvenile or A	Adult)	Disposition (Dead or Alive)	Picture No.
001	Minnow Tr	-P   S	liny.	Sculpin	78	www adu	0 1	Alive	* RF86AY001-009_SCUIP
002				Souldin	85	juv/ad		Alive	N/a
003	" W	T3 A	votic G	rayling	132.	Jusen	لعا	Alive	#P. F84AYOOL 010- AG
1		1		/	-		-/	/	7
		/					1	/-	
	1			1		/	/		
			_/					/	
	_			-				/	
-	1		/		-	/			
NOTES (any add	/ tional information	Ch Charle	West Bar	被Edit USE (19)	A SALA MARKET	m water and	St. 2507	T. SAME THE EAST	THE REPORT OF THE PARTY.
			oik -	+	a accibic	D-5 Mad	like	2 can	d. +
1 00	<i>y</i>	2000(	71.		w arcan	0,7	11.0	7	0.01
- No	63h	obs	ence	or or	e arctic	gut	W	EF	
	10								
- Clear	colle 1	W/	V 17	10 8	LY AGEN	4			
16	ascad ho	AL SU	ulk	Lon	radent in poc	15			
		0							
- 112.16	SE	1. M.	A	Dr. Fr	ans to	Dics	tric	h Riv	er
		Die				)			
V	7								
MISCELLANEOU	S POINTS (if applie	able)	150 148		STANDARD STANDARD	<b>有型性性</b>	neri	<b>"是我们的</b>	以此"是这个大型的APP"的
Point ID:		MA		Description	: )	VA			
Point ID:		NA		Description	-	NA	-		
Field Crew Chief:	00	2-		ield Scient echnician:	1/1/1/18	Lux	4	Technical Lead:	
o. c omen,	X		,	Commodul.		, , , , ,	-		•

This form is to be completed before leaving the field site. Date: 7/15/15 Feature ID: F86 A Y 00 1 FT# ALI49.1 For all items not checked, please provide detailed explanation in the notes section of data form. 1. Site Description Was ADF&G contacted before conducting any work in this area? Site Description complete? (Every cell must have entry or N/A) Were all photos taken and labeled correctly? 2. Physical/Chemical Attributes Calibration performed prior to sampling? Physical/Chemical attributes complete? (Every cell must have entry or N/A) Water quality data within expected ranges? pH: 4.0 - 10.0 **≯** NTU: 0 − 3000 DO (mg/L): 1.0 - 15.0 Temp.: 1.0 – 19.0 Specific Conductance: 20 - 1500 If outside expected ranges, was sample re-taken? Are units correct? 3. Stream Profile Stream profile view sketch included? Stream profile view captures water depth and wetted width? Stream profile view captures where efforts were made to capture fish? M Plan view sketch included? 4. Methods Attributes Methods attributes complete? (Every cell must have entry or N/A) Were methods used adequate (explanation needed if no methods selected)? 5. Electrofishing Attributes Electrofishing attributes complete? (Every cell must have entry or N/A) Are units correct?

Feature ID: <u>F86AY 00</u> |

6.	Fis	h	Ob	Se	rva	tior	16
u.	ı ıə		$\mathbf{v}$	<b>, 3 C</b>	IVa	шог	13

- Are all fish captured/observed recorded in the Fish Observation table?
- Are units correct? (Total Length (mm))
- Were adequate photos taken of fish captured? (Take a photo if in doubt)

#### 7. General

- Feature ID and Field Target # are consistent on data forms, logbook entries, photos, and maps?
- All additional data in logbook captured on data form and additional photos noted?
- Were all additional comments on stream habitat, etc. recorded on data form?
- Was any gear missing/damaged for this survey or did you have any problems that should require resampling of this stream for an adequate survey effort?

By signing below, I verify that all field data for this site has been verified for accuracy and completeness.

X Neal Smith X Well Signature

Fisherles Blologist (print)

Signature

7 Jun Jin

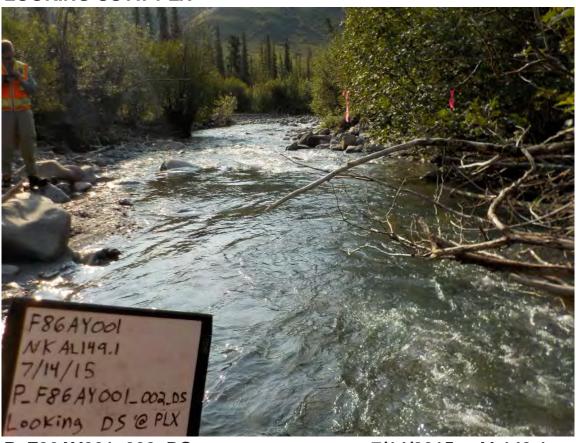
Fleid Crew Chief (print)

Signature



P\_F86AY001\_001\_US LOOKING US AT PLX

7/14/2015 AL149.1



P\_F86AY001\_002\_DS LOOKING DS AT PLX

7/14/2015 AL149.1



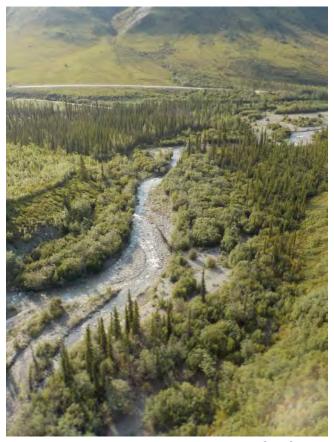
P\_F86AY001\_003\_LB LOOKING AT LB AT PLX

7/14/2015 AL149.1



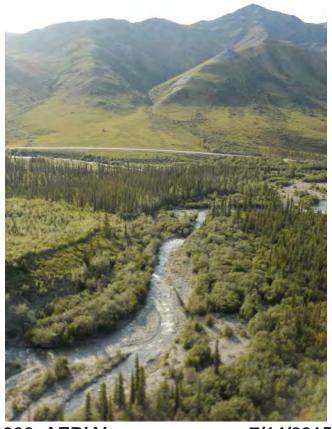
P\_F86AY001\_004\_RB LOOKING AT RB AT PLX

7/14/2015 AL149.1



P\_F86AY001\_005\_AERIAL AERIAL PHOTO

7/14/2015 AL149.1



P\_F86AY001\_006\_AERIAL AERIAL PHOTO

7/14/2015 AL149.1



P\_F86AY001\_007\_AERIAL AERIAL PHOTO

7/14/2015 AL149.1



P\_F86AY001\_008\_AERIAL AERIAL PHOTO

7/14/2015 AL149.1



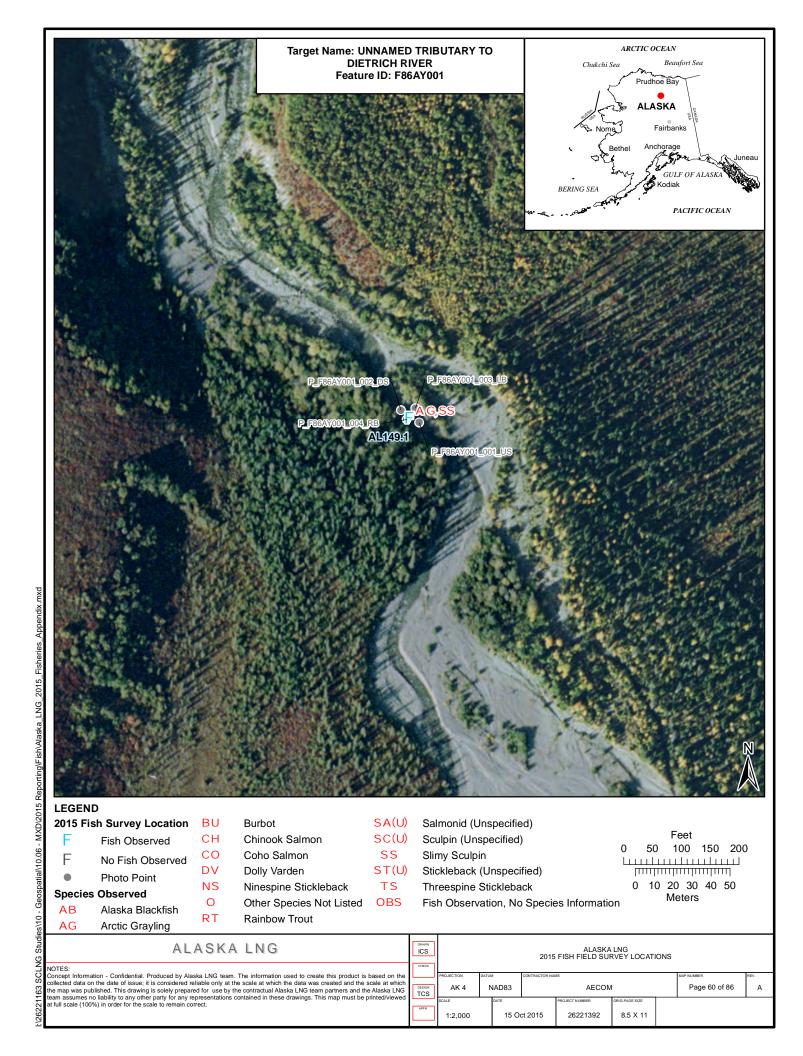
P\_F86AY001\_009\_SCULPIN PHOTO OF SLIMY SCULPIN

7/14/2015 AL149.1



P\_F86AY001\_010\_AG
PHOTO OF ARCTIC GRAYLING

7/14/2015 AL149.1



SITE DESCRIPTION	新加州南部南部城	形式 建原理质整定法	为相关的"在LML"(2)。这个是有是在
	igators: SCS NOS ADF	Team No.: F86	Feature ID: F86AY002
Stream Name: Innamed Tri	6. to North Fork Ch	andalar River	Stream ID: AU45.3.
	am found as expected (Y/N):		Hwy MP (N/A if heli accessed): 239, 4
Latitude: 68° 04' 46.	1897" N	Longitude: 149° 34	127, 4062" W
Logbook No.: 2 Logbook Page N	o.: 6-8 Total Fish Caught:	Fish Mortalities:	Total Photos: 8
US @ CL Pic No.: 2 = 86 Ayoo2 - 001-US	DS @ CL Pic No.: P_F86AY000-002-D S	RB to LB@ CL Pic No.: P_F86 Ayou 2-0	003_LB to RB@ CL Pic No.: P-F86AY002-00H-A-B
Other P-F86A7002-00	5-OVERVIEW	P-F86AY002-007-	DS CULVERT
Pic No(s) .: P FXLAY 002 0	06-OVERVIEW		
PHYSICAL/CHEMICAL ATTRIBUTES	是100mm 100mm 100m	THE PERSON NAMED IN PORT OF THE PERSON NAMED IN PARTY OF THE PERSON NAMED	The Water Control of the Water
Weather (Describe):	dondy P	recipitation (Describe):	
Water Temperature (°C): 5,53	Air Temperature (°C):	9 pH: 6,35	Dissolved Oxygen (mg/l):
Specific Conductance(µS/cm): 746	Turbidity (NTU): 8 1 4	ORP (mV): 173.	7 Dissolved Oxygen (%): 87,3
Ambient Conductance(µS/cm): 468	1010	(Y/N): N Color: tan	Last date of Calibration: 7/15/2015
Defined Channel (Y/N): Note	si is defined US; pon	ded@ target	Wetted Width (m): 33.0
Flow (Y/N): Note			Thalweg Depth @ CL (m): 41
100	Veg at 0-5 m at RB: Stream Subs Grass/Sedge (%) 30 0	Organics (%)Sand Bar	Large Woody Debris
Grass/Sedge (%)	0.0	ilt (%)Sund Bar	Overhanging vegetation
Shrubs (%)		and (%)Gravel Bar	Contiguous Wetlands
I	- C	ravel (%)Riffles	Emergent Plants
		obble (%) Pools	Submerged Plants
Stream Type:  Perennial Intermittent	A B	oulders (%)Undercut Ba	nks
7		and the last the will be the	ing winds (s. talking)
STREAM PROFILE: Cross Sectional at Cros	sing (include ripanan vegetation, wet	teo wioth, water depth, substrate, o	and addied napleas
Zwarf willows	33.0 m wide		durillows
LIST THE THEY	33.0 "	+	155 2 T T WAY
- HAMMAR BENNEY	1 Couldon's	anergies	digth grandle unstable
In the	William Day	51458	5.41 humaak
			banks
- ALM	Mean		bares
hist	Mud bottom		
aguatic	es		
~			Con horse by court transport (POW)
NORTH:   branched p		m centerline, photo locations, sam	Paint on / 1
flow		TI 30 m	NT2 PX Point on 6PS
	· Mavel	Marctic	orayling.
channel w sor	15	10-1-0	6/5V week
7,5	pranched pools	and	Plust perched
	STANGLE	hor hor	Start approx
		muddy hor	Da miz Gran
			/ / miger
14			1/60
	hat points		//
0.0	The form		

Feature ID: F86 A 4002

MFTHODS ATTR	IBUTES		<b>动。有意思的</b>	33736 241			A Britan	Thin the diagram to be	Children Harris Marin Total	and the first
:Minnow Traps (\	'/N):	Hook an	d Line (Y/N):	V	Beach Seine (1	//N):	Fyke N	let (Y/N):	Hoop Net (Y/N):	1
No. of Minnow 1	raps Set: 2	Date &	Time in: 7				Date & Time in:		Date & Time in:	I AND THE REAL PROPERTY.
Date & Time in:	alulmie	(mm/dd	l/yyyy)	1005	(mm/dd/yyyy)			dd/yyyy)	(mm/dd/yyyy)	grands
(mm/dd/yyyy)	1145		nes in water:	12	No. of passes:			k Time out: dd/yyyy)	Date & Time out: (mm/dd/yyyy)	10/160
Date & Time out (mm/dd/yyyy)	7 17/2015	Time lin	es in water:	60 mi	Reach Length	(m): /		1	Mary Line	Self III
ELECTROFISHIN	S ATTRIBUTES	Soft William	阿帕里		THE MORNING THE	ME LOCAL				NEED!
EF (Y/N): /	/ EF Start Tir	ne:	1	EF End Time	8:	EF Time (se	conds):	\ E	F Reach Length (m):	
Duty Cycle: Current (A):	-	Frequen Volts (V)	icy (Hz) :	_	Waveform: Power (W):		Sampl	Ing Efficiency (% of		
				NI SIRVANI		District of Change		Day Month and a self-	(amp x v	/olts)
FISH OBSERVAT					Total Length	Life Stage		Disposition		1,044
ID (Seq. Num)	Gear Type		Species	- 10	(mm)	(Juvenile or	Adult)	(Dead or Alive)	Picture No.	
001	Vis. obs		archiz go	aylin	1/2	juv/ada	ilt	alive	n/a	
003	14		40	')	11	11		11	1	
003	vis.obs	Hª Lin			n/a	(1	-	alive.		
005	11 11		archic	6.6VL	148	- Var Joshy	V tare	alive	* P_F86AY002-00	R GRAV
\	1		1	3/		Juve	-17	\	1-1801100-01	70_ 01/1/
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			1							
			1							
	1									
\ \		1		1	-		1	1		
NOTES lany add	tional information	THE STREET	E LAND TO THE	and the second		THE THOUSE OF	THE SHOW	IA A AMERICAN SPORTS OF	VENERAL SELECTION OF SECURITION OF SECURITIO	THE WAY
MOTES (ally add	ional information	t a so d		- 1 ^	w/adult		10 TO			DVHERE
- Visua	lid ope	er veen	VI O	ma De	LV/AOUNT	arche	July	ind who	m arrival@	
targ	H +	Chec	An P	de	MT			V		
- NO	652	caus	nt	Litmed	ostro	ean,	bus	1 porce	ded w/	
- stree	m 13	/ IN	04.11	0, 1	to a	1- 10	ger	+ near	inter+ @	
uns	table e	bank	-5 -1	DO	10W1 N	A AND	gr	, , ,		
Dal	than H	ighn	Day.		- //			10 1	0-1	
, 1	12L 8	< 0	erche	d $N$	3" on	07	5	ale of	raid	
- Calv	47	1							L catch	
in	armylha	hi	(h) +1	rile 1	NODX x 1	ihe I'	SHIN	J - 419	vat court	
- 000	210 1110	)	1	= 1.10 (1	way of will	hoox	+ 10	he «	1. 1+11 6/60d	
Italia	+(c	19 2N	((155	000		-005	Was	released u	only from t	no eye
MISCELLANEOU	POINTS (if applic	able)	- 1	PAST ACT		<b>全型等等</b>	P. C.		世界 (1917年)	1
Point ID:	NA	/ 10		Description:	N)	4				
Point ID:	Λ	14		Description:	A	1A				
Field Crew Chief:	Son	V		ield Scienti echnician:	1 ////	0	1.1	Technical Lead:		

This form is to be completed before leaving the field site.

Feature ID: F86AY003

FT#AL145.3

Date: 7/17/15

For all items not checked, please provide detailed explanation in the notes section of data form.

#### 1. Site Description

- Was ADF&G contacted before conducting any work in this area?
- Site Description complete? (Every cell must have entry or N/A)
- Were all photos taken and labeled correctly?

#### 2. Physical/Chemical Attributes

- Calibration performed prior to sampling?
- Physical/Chemical attributes complete? (Every cell must have entry or N/A)
- Water quality data within expected ranges?
  - **⋈** pH: 4.0 − 10.0
  - NTU: 0 − 3000
  - DO (mg/L): 1.0 15.0
  - ▼ Temp.: 1.0 19.0
  - Specific Conductance: 20 1500

NIFIG If outside expected ranges, was sample re-taken?

Are units correct?

#### 3. Stream Profile

- ➢ Stream profile view sketch included?
- Stream profile view captures water depth and wetted width?
- Stream profile view captures where efforts were made to capture fish?
- Plan view sketch included?

#### 4. Methods Attributes

- Methods attributes complete? (Every cell must have entry or N/A)
- Were methods used adequate (explanation needed if no methods selected)?

#### 5. Electrofishing Attributes

NA

Electrofishing attributes complete? (Every cell must have entry or N/A)

Are units correct?

Feature ID: F86 AY 003

#### 6. Fish Observations

- Are all fish captured/observed recorded in the Fish Observation table?
- Are units correct? (Total Length (mm))
- Were adequate photos taken of fish captured? (Take a photo if in doubt)

#### 7. General

- Feature ID and Field Target # are consistent on data forms, logbook entries, photos, and maps?
- All additional data in logbook captured on data form and additional photos noted?
- Were all additional comments on stream habitat, etc. recorded on data form?
- Was any gear missing/damaged for this survey or did you have any problems that should require resampling of this stream for an adequate survey effort?

By signing below, I verify that all field data for this site has been verified for accuracy and completeness.

XNeal Smith X gual State
Fisheries Blologist (print)

Signature

Floid Crow Chief (print)

Signature



P\_F86AY002\_001\_US LOOKING US AT OFF-ROW TARGET

7/16/2015 AL145.3



P\_F86AY002\_002\_DS LOOKING DS AT OFF-ROW TARGET

7/16/2015 AL145.3



P\_F86AY002\_003\_LB LOOKING AT LB AT OFF-ROW TARGET



P\_F86AY002\_004\_RB LOOKING AT RB AT OFF-ROW TARGET

7/16/2015 AL145.3



P\_F86AY002\_005\_OVERVIEW OVERVIEW OF SITE

7/16/2015 AL145.3



P\_F86AY002\_006\_OVERVIEW OVERVIEW OF SITE

7/16/2015 AL145.3

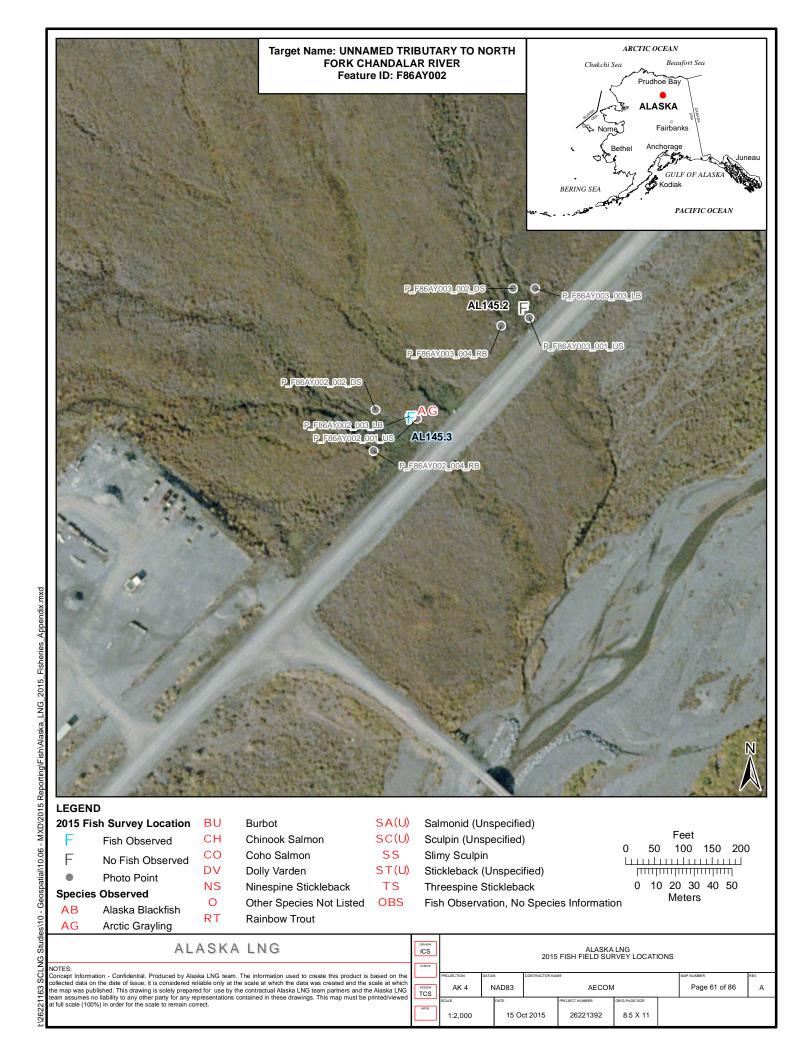


P\_F86AY002\_007\_DS CULVERT 7/16/2015 AL145.3 PHOTO OF PERCHED CULVERT DS OF FT & MINNOW TRAP 3



P\_F86AY002\_008\_GRAYLING PHOTO OF ARCTIC GRAYLING

7/16/2015 AL145.3



	Description of the same of the same	Malos de Mesmuller	(A)
Date: Investigate	ors: SCS ADF NJS	Team No.: 186 Fe	ature ID:
1 1 1 - 1	11 1 = 1 01 11	01 1	ream ID: 1/145 7
Stream Name: Unnamed Trib +	o North Fork Chandalar	NIVCE	11175.0
Pipeline Milepost: 74, + Stream f	ound as expected (Y/N):		wy MP (N/A If heli accessed): 239.5
Latitude: 68° 04' 47	APAN Longitud	le: 149 34	22,0719 W
Logbook No.: Logbook Page No.:	7 - 9 Total Fish Caught:	Fish Mortalities:	Total Photos: 7
US @ CL Pic No.; P-F86A Y 003-00/_ US Pic N		P_F86AY003_003_	B Pic No.: 2-186A Y003-004-RB
Other D CR6AV003-005-1	OVERVIEW P-F8+AY	003.007_ 05	CHECK
Pic No(s).: 0 - F8 6 Ay003 - 006 -	OVERNEW	US	CULVERI
PHYSICAL/ CHEMICAL ATTRIBUTES			<b>特别的意思地位于艾克尔特的</b>
Weather (Describe): Sunny	Precipitation (I	Describe); none	
Water Temperature (°C): \$15	Air Temperature (°C): 20	pH: 6.92	Dissolved Oxygen (mg/l): 9.96
Specific Conductance(µS/cm): 292	Turbidity (NTU): (, 43	ORP (mV): 81, 6	Dissolved Oxygen (%): 84,6
Ambient Conductance(μS/cm): 197	Odor: None Sheen (Y/N):	Color: clear	Last date of Calibration: 7/15/2015
13	have defined U.S. ponded	@ target	Wetted Width (m): 26.1
	Slow @ target, more evid		Thalweg Depth @ CL (m): , 3 2
100	at 0-5 m at RB: Stream Substrate:  orass/Sedge (%) Organics (%)	Aquatic Habitats Sand Bar	Large Woody Debris
7.0	rass/Sedge (%) Organics (%) 40 Silt (%)	→ Mud Bar	Overhanging vegetation
80	rees (%)   Sand (%)	Gravel Bar	Contiguous Wetlands
4.7%	meter DBH (in.) Gravel (%)	Riffles	Emergent Plants
Stream Type:	Cobble (%)	Pools	Submerged Plants
Perennial Intermittent	Ephemeral Boulders (%)	Undercut Banks	
STREAM PROFILE: Cross Sectional at Crossing	To divide describe vegetation, watted width wa	ter denth substrate and	aggratic habitats)
dwarby -	,	((ws)	on was
willas	26 wide (masses/wi	1 and 5	Joel willows
1020 L9 1816	at Sem	(Sland	311 96
OBLE ALL	1 aque veget	1	5 19
	THE MAN THE TOTAL THE TENTH OF THE PARTY OF	T	unstable
	CHILD THE STATE OF		hummock banks
1	THE PARTY OF THE P		banks
	M	nd Bottom	
STREAM PROFILE Plan View (include direction	of flow, centerline, distances from centerline,	photo locations, sample li	ocations by gear type and ROW)
NORTH:	ellasions lotic	11000	_ //
for	birns 1	MT, WW	
	TIN	100 000	Rest / alvert
177	N. W.	WW WAR	1 2 / / /
	0.41	P	100
	1 +	and the same	Note:
24.7	MT	3 WARRY	e) withe
			100
		OR ROLL TAINS	100

Page 1 of 2

# STREAM FISH INVESTIGATION DATA FORM Feature ID: F86 A Y00 3

METHODS ATTI	RIBUTES	<b>"特别"的"特别"。</b>	15,在新州北京	13. 图像		<b>通知其中的</b>	THE PARTY OF THE P
:Minnow Traps (	Y/N): Y	Hook and Line (Y/N):	Beach S	Seine (Y/N):	Fyke N	et (Y/N):	Hoop Net (Y/N):
No. of Minnow	Traps Set: 3	Date & Time in: (mm/dd/yyyy)	Date &	Time in:	1462	Time in:	Date & Time in: (mm/dd/yyyy)
Date & Time In:		No. of lines in water:	No. of		Date &	Time out:	Date & Time out:
(mm/dd/yyyy) Date & Time ou	1300 t: 7/17/2015	Time lines in water:	Reach I	ength (m):	(mm/d	ld/yyyy)	(mm/dd/yyyy)
(mm/dd/yyyy)	1100	A SINGLE OF THE PARTY	t to the state of		agolista #12141a		VOULT.
ELECTROFISHIN EF (Y/N):	EF Start Ti	ne:	F End Time:	EF Time	(seconds):	EFF	Reach Length (m):
Duty Cycle:	12.00	Frequency (Hz) :	Wavefo		-	ng Efficiency (% of	
Current (A):		Volts (V):	Power	(AA)+			(amp x volts)
FISH OBSERVAT	IONS	Alexander of			が開発	<b>HAMILTONIA</b>	
ID (Seq. Num)	Gear Type	Species	Total Lengt (mm)	h Life Stage (Juvenile		Disposition (Dead or Alive)	Picture No.
		1			1		
			- /				
			/				
				1			/
				1/			
				/			
NOTES (any add	ltional information	加州的一种的	2000年,		四村市		A CONTRACTOR OF THE PARTY OF THE
- MO	13h 115	observed	4		4. —		
- 1	Micalt	to find a	rough we	ter for	MI		
VII	8000	7	1. 12.0d	un solve		but b	get/culvert.
- 10	w wat	7 - 15	defined	73000	cary	pul e	1-0,0+
61	- A C	vetland c	anolex/po	nd :	DS n	ear ta	iget/Culler.
1	)		1 / 1				
	/	1.	what	in	1	77	
- 10	1/13	n can	agric C.	1			
	V						
MISCELLANEOU	S POINTS (if applic	ablo	SAN THE PARTY OF THE PARTY.	- 10 H 10 H 10 H 10 H	8-14-14-1	a hand to be to be	1 Photographical States
Point ID:	/V	IV.	escription:	11A			A PART OF THE PART OF THE PARTY.
Point ID:			escription:	NIN			
Field		V 1.1	d Scientist/	0.0	1	Technical	
Crew Chief:		Tec	hnician:	My de	1	Lead:	
	11	/					

Revision Date: 06/09/2015

		This form is to be completed before leaving the field site.
		F86AY003 FT#AL145.2 Date: 7/17/15
For all form.	item	s not checked, please provide detailed explanation in the notes section of data
1.	Site	e Description
	Ø	Was ADF&G contacted before conducting any work in this area?
	$\triangleright$	Site Description complete? (Every cell must have entry or N/A)
	Ø	Were all photos taken and labeled correctly?
2.	Phy	ysical/Chemical Attributes
	<b>3</b>	Calibration performed prior to sampling?
	5	Physical/Chemical attributes complete? (Every cell must have entry or N/A)
	8	Water quality data within expected ranges?
		pH: 4.0 − 10.0
		NTU: 0 − 3000
		DO (mg/L): 1.0 – 15.0
		₹ Temp.: 1.0 – 19.0
	١	Specific Conductance: 20 - 1500
M	HEX	If outside expected ranges, was sample re-taken?
	8	Are units correct?
3.	Str	ream Profile
	<b>X</b>	Stream profile view sketch included?
	Ø	Stream profile view captures water depth and wetted width?
	×	Stream profile view captures where efforts were made to capture fish?
	×	Plan view sketch included?
4.	Me	ethods Attributes
		Methods attributes complete? (Every cell must have entry or N/A)
	X	Were methods used adequate (explanation needed if no methods selected)?
5.	Ele	ectrofishing Attributes
۸ <i>/</i> /۵	· þ	Electrofishing attributes complete? (Every cell must have entry or N/A)
/*//	<b>, b</b>	Are units correct?

Feature ID: F86AY003

#### 6. Fish Observations

- Are all fish captured/observed recorded in the Fish Observation table?
- ★ Are units correct? (Total Length (mm))
- Were adequate photos taken of fish captured? (Take a photo if in doubt)

#### 7. General

- Feature ID and Field Target # are consistent on data forms, logbook entries, photos, and maps?
- All additional data in logbook captured on data form and additional photos noted?
- Were all additional comments on stream habitat, etc. recorded on data form?
- Was any gear missing/damaged for this survey or did you have any problems that should require resampling of this stream for an adequate survey effort?

By signing below, I verify that all field data for this site has been verified for accuracy and completeness.

X/Veal Smith X gcal full Fisheries Blologist (print) Signature

Field Crew Chief (print)



P\_F86AY003\_001\_US LOOKING US AT OFF-ROW TARGET



P\_F86AY003\_002\_DS LOOKING DS AT OFF-ROW TARGET

7/16/2015 AL145.2



P\_F86AY003\_003\_LB LOOKING AT LB AT OFF-ROW TARGET



P\_F86AY003\_004\_RB LOOKING AT RB AT OFF-ROW TARGET

7/16/2015 AL145.2



P\_F86AY003\_005\_OVERVIEW OVERVIEW OF SITE

7/16/2015 AL145.2



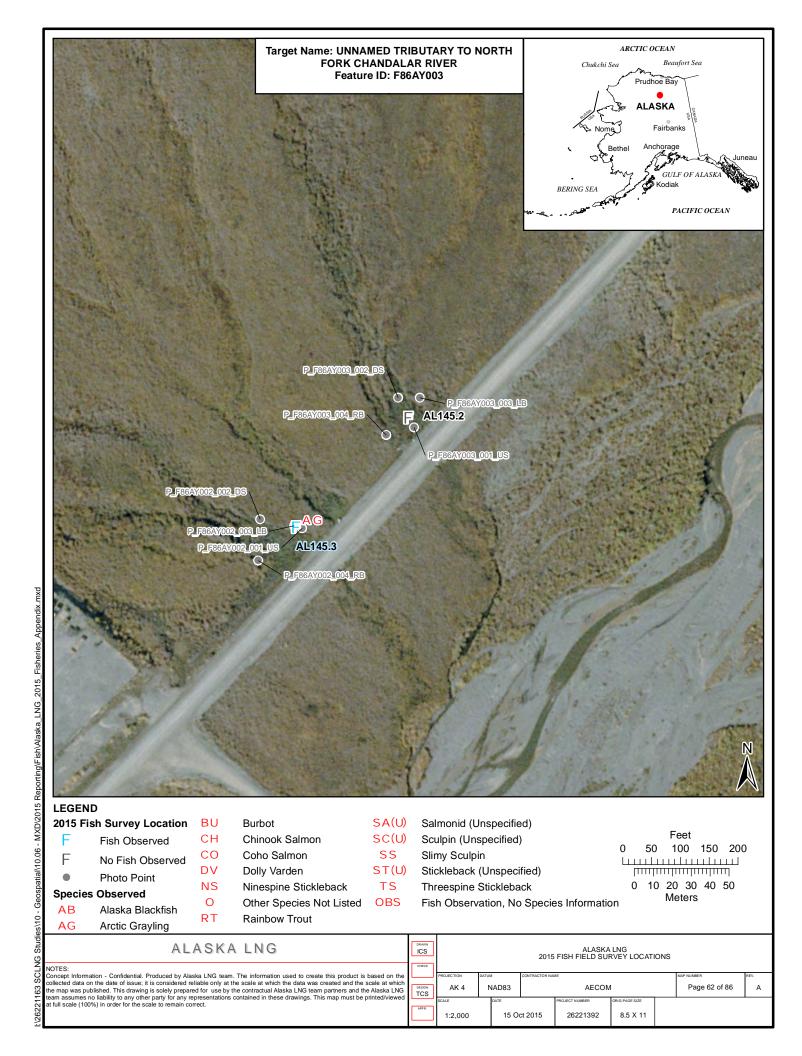
P\_F86AY003\_006\_OVERVIEW OVERVIEW OF SITE

7/16/2015 AL145.2



P\_F86AY003\_007\_DS CULVERT VIEW FROM DS CULVERT

7/16/2015 AL145.2



SITE DESCRIPTION	也可以是不是特殊的。	ATTACK TO BE AND THE	THE TOTAL STATE OF THE STATE OF
	rs: SCS NOS ADF	Team No.:	Feature ID: F & 6 A Y OD 4
7 17 0010			Stream ID: AL 145. I
VINVAI - O. IT DI	to North Fork Chandalan	RIVE	Hwy MP (N/A if heli accessed): 23 9 6
1770	ound as expected (Y/N):		'08.2703"W
Latitude: 68° 04'52.9768	/		1/A Total Photos: 7
Logbook No.: Logbook Page No.:	1 201.10	Fish Mortalities:	I R to PR@ CI
	10.: P-F86 A YOUH DOZ - DS PIC No .:	04-007-DS (	3 LB   Pic No.: P. 182 AYOUY. ODY_ KB
Other P-F86AY004-005-0 Pic No(s).: P-F86AY004_006-0		04_007_95	acrem
PHYSICAL/CHEMICAL ATTRIBUTES		E PROPERTY OF	THE RESERVE THE PARTY OF THE PA
Weather (Describe): Sung	Precipitation (I	Describe):	
Water Temperature (°C): 6.75	Air Temperature (°C):	pH: 6,98	Dissolved Oxygen (mg/l): 7.90
Specific Conductance(µS/cm): 355	Turbidity (NTU): 0,33	ORP (mV): 278,1	Dissolved Oxygen (%): 65, 4
Ambient Conductance(μS/cm): 23	Odor: Note Sheen (Y/N): N	Color: Clear	Last date of Calibration: 7/15/2015
	braided system mos		Wetted Width (m): 77  Thalweg Depth @ CL (m): 04
	at 0-5 m at RB: Stream Substrate:	Aquatic Habitats	Thanweg Depth @ Ct (m).
I mpanian 1-8	rass/Sedge (%), 40 Organics (%)	Sand Bar	Large Woody Debris
7.0	nrubs (%) Silt (%)	 Mud Bar	Overhanging vegetation
	rees (%) 5 _Sand (%)	Gravel Bar	Contiguous Wetlands
	meter DBH (in.) 80 _Gravel (%)	Riffles	Emergent Plants
		Pools	Submerged Plants
Stream Type:	Ephemeral Boulders (%)	Undercut Bank	ss .
		tor double rubdrate and	Laquatic habitats)
STREAM PROFILE: Cross Sectional at Crossing	(Include riparian vegetation, wetten woot), wa	ter deptil, substrate, ain	a aquation and a second
4	d	INDIA.	
deredilli	25	113100	
I William	, , , , , , , , , , , , , , , , , , ,	and at a	O/e
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	V. 1 0.97 n. wide	A TAIL	1
1			
	gare!	1 " deep	
	grave	,	
	DOMNICS		
STREAM PROFILE: Plan-View (include direction		, photo locations, sample	ocations by gear type and ROW)
NORTH:	10w > 1573 20m	PART OF THE PROPERTY OF	7 / /
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	ary (house 15	- Viv	//
	/	76/	1 - culvent
		y .:	X
	M-row	14	
	off-row Tonget	/25/	
	1000	18	
		10/	1/

Page 1 of <u>2</u>

Feature ID: FC6AY004

METHODS ATTR	CONTRACTOR STATES OF THE PARTY	ook and Line (Y/N):	Beach Seine (Y	/N): / Fyke !	Net (Y/N):	Hoop Net (Y/N):
No. of Minnow		te & Time in:	Date & Time in	1 100	& Time in:	Date & Time in:
Date & Time In:		m/dd/yyyy) o. of lines in water:	(mm/dd/yyyy) No. of passes:		dd/yyyy) & Time out:	(mm/dd/yyyy)  Date & Time out:
(mm/dd/yyyy) Date & Time out	11345	ne lines in water:	Reach Length	(mm/	dd/yyyy)	(mm/dd/yyyy)
(mm/dd/yyyy)	t: 1/17/2015 Ti	ne inies in water:	Keach Length	(m):		man land
ELECTROFISHING	The state of the s	例如是特別的學學是		<b>新教的社会的</b>		
EF (Y/N): N	EF Start Time:	EF End Time	-	EF Time (seconds):		Reach Length (m):
Current (A):		lts (V):	Waveform: Power (W):	Sampl	ling Efficiency (% of s	ample reach): (amp x volts)
FISH OBSERVAT	to produce the state of	are the first supplied to the	Select Milliandia		Service of the servic	NUMBER OF ACTUAL OR AND DESCRIPTION
ID (Seq. Num)	Gear Type	Species	Total Length	Life Stage	Disposition	Picture No.
1	ſ		(mm)	(Juvenile or Adult)	(Dead or Alive)	ricture No.
				/	/	
		-				
	1	-/-	-	-	-/	
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the state of the s	itional information)	(cho)性及唯德图度指数		是 中 的 的 的 的 的 的 的 的 的 的 的 的 的	how the same to	<b>建新闻的新华文文。2015年</b>
- 10.10	Anth	caught in most levels went	MT			
- 110	0 0	Certal	/ - \ 1			
- 01	Hous La	m w/ most	channe	5 CUCCINA	no das	
Diald	20 3/3/				L. T.	5 and DS
- low	water	level 5	+ 61	00 00	the U	J and DS
	1 (4)	les A	V			
0	h					- A
	U	14 001	Space	for N		
	noy a	(8)		U		
MISCELLANEOUS	S POINTS (if applicable	1 Charles and the state of				A CONTRACTOR OF THE PARTY OF TH
Point ID:	NA	Description:	1/1	100,000		
Point ID:	M	Description:	111	1 -		
Field	50	Field Scienti	st/ n	111	Technical	
Crew Chief:	2	Technician:	COO	cuff	Lead:	

Revision Date: 06/09/2015

	This form is to be completed before leaving the field site.
Feature ID	: F8GAY004 FT # ALI45. Date: 7/17/15
For all iten form.	ns not checked, please provide detailed explanation in the notes section of data
1. Sit	e Description
<b>3</b> 5	Was ADF&G contacted before conducting any work in this area?
<b>8</b>	Site Description complete? (Every cell must have entry or N/A)
8	Were all photos taken and labeled correctly?
2. Ph	ysical/Chemical Attributes
﴾	Calibration performed prior to sampling?
<b>\$</b>	Physical/Chemical attributes complete? (Every cell must have entry or N/A)
×	Water quality data within expected ranges?
	pH: 4.0 – 10.0
	NTU: 0 – 3000
	DO (mg/L): 1.0 − 15.0
	₹ Temp.: 1.0 – 19.0
	Specific Conductance: 20 - 1500
MINX	If outside expected ranges, was sample re-taken?
×	Are units correct?
3. Stı	ream Profile
8	Stream profile view sketch included?
<b>3</b>	Stream profile view captures water depth and wetted width?
Ø	Stream profile view captures where efforts were made to capture fish?
8	Plan view sketch included?
4. Me	ethods Attributes
8	Methods attributes complete? (Every cell must have entry or N/A)
<b>y</b>	Were methods used adequate (explanation needed if no methods selected)?
5. Ele	ectrofishing Attributes
4.46	Electrofishing attributes complete? (Every cell must have entry or N/A)
/V/# h	Are units correct?

Feature ID: F86 AYOOL

#### 6. Fish Observations

- Are all fish captured/observed recorded in the Fish Observation table?
- Are units correct? (Total Length (mm))
- Were adequate photos taken of fish captured? (Take a photo if in doubt)

#### 7. General

- Feature ID and Field Target # are consistent on data forms, logbook entries, photos, and maps?
- All additional data in logbook captured on data form and additional photos noted?
- Were all additional comments on stream habitat, etc. recorded on data form?
- Was any gear missing/damaged for this survey or did you have any problems that should require resampling of this stream for an adequate survey effort?

By signing below, I verify that all field data for this site has been verified for accuracy and completeness.

X Neal Suith X Well Sait

Fisheries Biologist (print)

Signature

Fleld Crew Chief (print)



P\_F86AY004\_001\_US LOOKING US AT OFF-ROW TARGET



P\_F86AY004\_002\_DS LOOKING DS AT OFF-ROW TARGET

7/16/2015 AL145.1





P\_F86AY004\_004\_RB
LOOKING AT RB AT OFF-ROW TARGET

7/16/2015 AL145.1



P\_F86AY004\_005\_OVERVIEW OVERVIEW OF SITE

7/16/2015 AL145.1



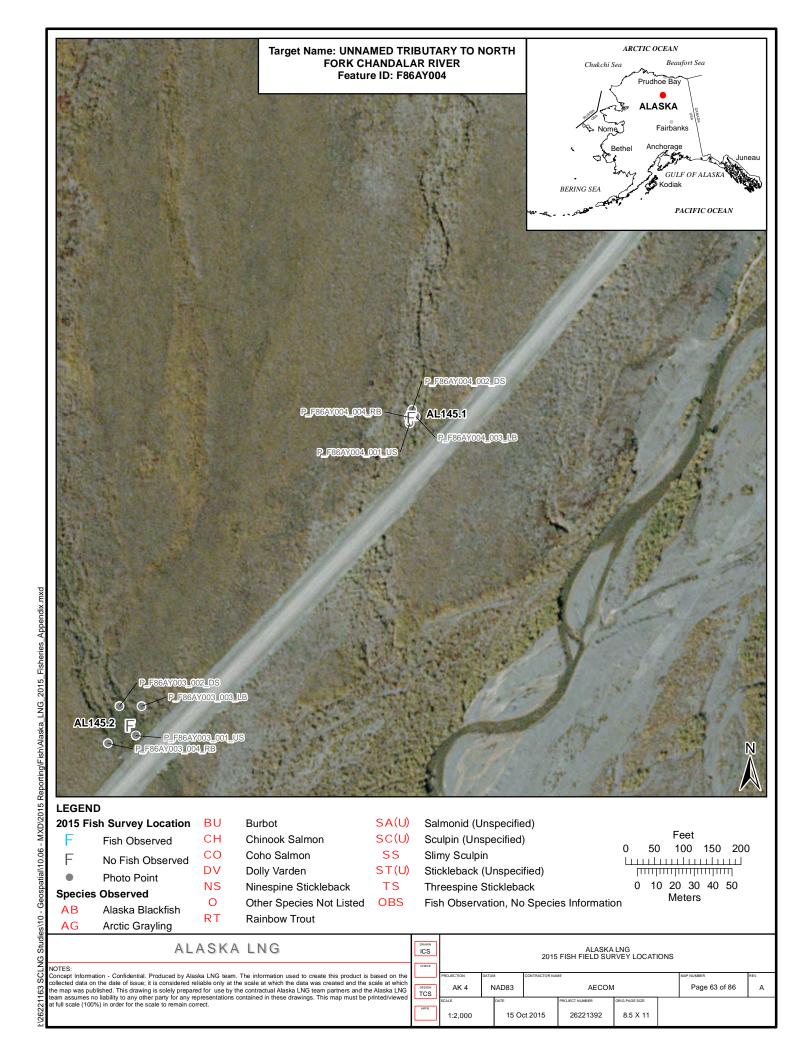
P\_F86AY004\_006\_OVERVIEW OVERVIEW OF SITE

7/16/2015 AL145.1



P\_F86AY004\_007\_DS CULVERT VIEW FROM DS CULVERT

7/16/2015 AL145.1



SITE DESCRIPTION	MAN THE REPORT OF THE PARTY OF	连续整体的现在分类的					
Date: 7/16 Investigators: SCS NJS ADF	Team No.:   86   Fe	eature ID: F86 RA OO					
Stream Name: Unrained Tributary to Atique	River SI	tream ID: AL 135.1					
Pipeline Milepost: /65,5 Stream found as expected (Y/N):	н	wy MP (N/A if heli accessed): La lin					
Latitude: 68°10'51. 5858"N Longitude	de: 149°24'4	9. 1174"W (Patterest 250.6					
Logbook No.: 2 Logbook Page No.: 5-6 Total Fish Caught:	Fish Mortalities:	Total Photos: 8					
US @ CL P / 86/1901-001-US DS @ CL Pic No.: P-F86/PADD1-002-DS RB to LB@ CL Pic No.: P-F86/PADD1-004-RB Pic No.: P-F86/PADD1-004-RB							
Other 0 886 PAOOL - DOS - AERIAL P-F86 PAOOL - 0	07_AERIAL	- I I I I I I I I I I I I I I I I I I I					
Other P F86PADDI - DOS - AERIAL P-F86PADDI - O Pic No(s): P-F86PADDI - DOG - AERIAL P-F86PADDI - O	08-DRY (Dr	rap pull day-7/16					
PHYSICAL/CHEMICAL ATTRIBUTES	CARLE CONTRACTOR	7AP PULL 4AY - 4116					
Weather (Describe): Sunny Precipitation (I	Describe): none	William State Control of the Control					
Water Temperature (°C): 5, & 3 Air Temperature (°C): 22	pH: 6, 09	Dissolved Oxygen (mg/l): 1.53					
Specific Conductance(µS/cm): 200 Turbidity (NTU): 1.02	ORP (mV): 303-1	Dissolved Oxygen (%): 92.0					
Ambient Conductance(µS/cm): 127 Odor: ∩ one Sheen (Y/N): N	Color: Clear	Last date of Calibration: 7/14/20/5					
Defined Channel (Y/N): Notes: braide a System within with	de gravel ba						
Riparian Veg at 0-5 m at LB: Riparian Veg at 0-5 m at RB: Stream Substrate:	Aquatic Habitats	Thalweg Depth @ CL (m): 0.11					
Grass/Sedge (%)  Grass/Sedge (%)  Grass/Sedge (%)  Grass/Sedge (%)	Sand Bar	Large Woody Debris					
Shrubs (%)   3   Shrubs (%)   Silt (%)	Mud Bar	Overhanging vegetation					
	Gravel Bar	Contiguous Wetlands					
	Riffles	Emergent Plants					
Stream Type: 6 O _Cobble (%)	Pools	Submerged Plants					
PerennialIntermittentEphemeralBoulders (%)	Undercut Banks						
depth 0,11 m STREAM PROFILE: Plan View (include direction of flow, centerline, distances from centerline)	nothugus avel/cobble	brassen tundra					
to Survey point	EF efforts	comder edge					

Revision Date: 3/19/2015

Page 1 of 2

# STREAM FISH INVESTIGATION DATA FORM Feature ID: F86PA 00 |

METHODS ATTR Minnow Traps (	Control Control Control Control	Hook and Line (Y/N	i):	Beach Seine (Y/N):	// Fyke	Net (Y/N):	Hoop Net (Y/N):
No. of Minnow	Traps Set: 3	Date & Time in: (mm/dd/yyyy)	r .	Date &Time in: (mm/dd/yyyy)		& Time in: /dd/yyyy)	Date & Time In: (mm/dd/yyyy)
Date & Time in: 7/15/2005 No. of lines in water:			No. of passes:	Date	& Time out:	Date & Time out:	
(mm/dd/yyyy) Date & Time out	1:7/16/2015	Time lines in water		Reach Length (m):	(mm,	/dd/yyyy)	(mm/dd/yyyy)
(mm/dd/yyyy)	1030	W Many I distribute	MALES OF THE PARTY OF THE PARTY.	Se of the late of	100000000000000000000000000000000000000	Land Company	Marin Commence
EF (Y/N): Y	The state of the s	mai da 30	EF End Time:	250 EF	Time (seconds):	208 E	F Reach Length (m): 9/
Duty Cycle: 2		ne: / Z 300 Frequency (Hz) :		Waveform: PT		oling Efficiency (% of	
Current (A):	2.5	Volts (V): 350	<u> </u>	Power (W):	175		(amp x volts)
FISH OBSERVAT	TONS			gylet i reakite	THE PROPERTY OF		ATT WAS A TOTAL OF
ID (Seq. Num)	Gear Type	Species	Tota (mn	. •	Stage enile or Adult)	Disposition (Dead or Alive)	Picture No.
/			1	1	erille of Addity	[Dead of Alive]	
/					1		
			/		/	/	
_/_	/			/	_/_		/
			/	/	-/-		/
1	/		1		/	+/-	/
					1		/
						1	
						/	/
NOTES (any add	itional information	CANCEL CO.		21-42-51		<b>原语图</b> 2017	
- N	o fish	capture	el or a	1680 VC	1/E	1- or	M7
- wide	arave	1 bar	w/ braided	1 chann	els - n	rostly o	hy
	0.	goes un	degroun	d in p	laces	but stil	1 has
		nondi. n	1/10	7- 1			
	7	Harry 1	Me Pl				# 0 CSI O ADOL - T
when	returr	ing on	7/16 to	pull -	trops:	(see phot	0 1- LODIUM-008-6
- Cha	rnel 1	was on	where	MT2 0	and M	T were	- no water
at	a 11	Yet to	here use	5 57:11	1111	er and	21) Curol 1
2	1.00	10 To	. 20 5	10. +	1	1 000	1000
Wh	cre	1113	W4 3.	jen i un	alergro	rund b	* P.F86PA001-008.T - no water Jon US oween
Million and annual and	A STATE OF THE PARTY OF THE PAR	Dr. v. C	MT.	2 ,	J	n a Marija is	
MISCELLANEOU	S POINTS (if applie	table)	THE PARTY OF	A STATE OF THE PARTY OF THE PARTY.	<b>拉是打造工证的</b>	<b>一个对对对外的证明</b>	是一个一个
			1	STATE OF STATE OF STATE OF	4 4 4		
Point ID:	/	M	Description:		VA		
	/	NA	Description: Description: Field Scientist/		VA	Technical	

This form is to be completed before leaving the field site.
Feature ID: F86 PA 00   FT # AL 185.   Date: 7/16/15
For all items not checked, please provide detailed explanation in the notes section of data form.
1. Site Description
Was ADF&G contacted before conducting any work in this area?
Site Description complete? (Every cell must have entry or N/A)
Were all photos taken and labeled correctly?
2. Physical/Chemical Attributes
Calibration performed prior to sampling?
Physical/Chemical attributes complete? (Every cell must have entry or N/A)
Water quality data within expected ranges?
pH: 4.0 – 10.0
NTU: 0 – 3000
DO (mg/L): 1.0 – 15.0
Temp.: 1.0 – 19.0
Specific Conductance: 20 - 1500
If outside expected ranges, was sample re-taken?
✓ Are units correct?
3. Stream Profile
Stream profile view sketch included?
Stream profile view captures water depth and wetted width?
Stream profile view captures where efforts were made to capture fish?
→ Plan view sketch included?
4. Methods Attributes
Methods attributes complete? (Every cell must have entry or N/A)
Were methods used adequate (explanation needed if no methods selected)?
5. Electrofishing Attributes
Electrofishing attributes complete? (Every cell must have entry or N/A)
Are units correct?

Feature ID: F86PA00 /

6.	Fie	h	0	hee	rva	tic	ne
v.	1 13		~	<b>U3</b> C	IVa	LIC	/113

- Are all fish captured/observed recorded in the Fish Observation table?
- Are units correct? (Total Length (mm))
- Were adequate photos taken of fish captured? (Take a photo if in doubt)

### 7. General

- Feature ID and Field Target # are consistent on data forms, logbook entries, photos, and maps?
- All additional data in logbook captured on data form and additional photos noted?
- Were all additional comments on stream habitat, etc. recorded on data form?
- Was any gear missing/damaged for this survey or did you have any problems that should require resampling of this stream for an adequate survey effort?

By signing below, I verify that all field data for this site has been verified for accuracy and completeness.

X Neal Swith X Gundler

Fisheries Blologist (print)

Signature

Field Crew Chief (print)



P\_F86PA001\_001\_US LOOKING US AT PLX

7/15/2015 AL135.1



P\_F86PA001\_002\_DS LOOKING DS AT PLX

7/15/2015 AL135.1



P\_F86PA001\_003\_LB
LOOKING AT LB AT PLX

7/15/2015 AL135.1



P\_F86PA001\_004\_RB LOOKING AT RB AT PLX

7/15/2015 AL135.1



P\_F86PA001\_005\_AERIAL AERIAL PHOTO

7/15/2015 AL135.1



P\_F86PA001\_006\_AERIAL AERIAL PHOTO

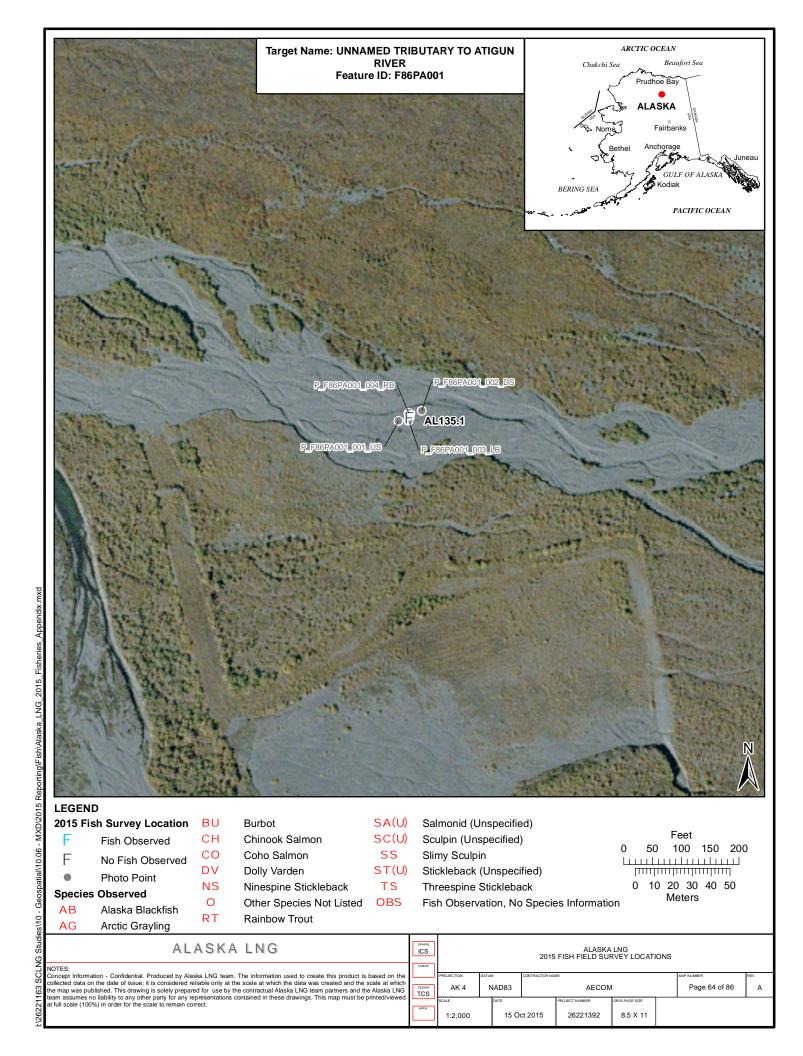
7/15/2015 AL135.1



P\_F86PA001\_007\_AERIAL AERIAL PHOTO

7/15/2015 AL135.1





SITE DESCRIPTION	Marie Control Control	CO LUMB COM		
Date: 8/3/20(5 Investigat	ors: Scs Nas	ADF	Team No.: (-86	Feature ID: F86PA014
5 / 1	- Ten laka	Outles		Stream ID: 41/14.9
1 / Poetki - 1	found as expected (Y/N):	V		Hwy MP (N/A if heli accessed): 269 4
		Longitud	111000	100 68 43 11 11
Latitude: 68° 45' 54.728			ie. 1.(1 ->1	111 -111 //
Logbook No.: 3 Logbook Page No.:		· VI	Fish Mortalities:	Total Photos: 9
US @ CL DS Pic No.: 1 585 4014_001_U.5 Pic	@ CL No.: P_F86PA014_002	RB to LB	P. 686PA014_00	3-18 Pic No.: P-F86( A014-004 R
Other	1// /			
Pic No(s).:	10/4			
PHYSICAL/CHEMICAL ATTRIBUTES			EN HEUTENE	
Weather (Describe):	Invercast	Precipitation (	Describe):	nt snow
Water Temperature (°C): 0 . 40	Air Temperature (°C):	3	рн: 8,45	Dissolved Oxygen (mg/l): [7, 0]
Specific Conductance(µS/cm): 377	Turbidity (NTU):	71	ORP (mV): 3,04,(	
Ambient Conductance(μS/cm): 200		een (Y/N): N	Color: clear	Last date of Calibration: 8/29/2015
	22 (	stable to	undra banki	
	at 0-5 m at RB: Stream	Substrate:	Aquatic Habitats	Thalweg Depth @ CL (m): 28 m
1.0	Grass/Sedge (%)	Organics (%)	Sand Bar	Large Woody Debris
7//	Shrubs (%)	Silt (%)	Mud Bar	Overhanging vegetation
- A	Trees (%)	Sand (%)	Gravel Bar	Contiguous Wetlands
Diameter DBH (in.)	meter DBH (in.)	GraveI (%)	Riffles	Emergent Plants
Stream Type:		Cobble (%)	Pools	Submerged Plants
PerennialIntermittent	Ephemeral	Boulders (%)	Undercut Ban	KS
STREAM PROFILE: Cross Sectional at Crossing  Willows Jawa b  Survey  STREAM PROFILE: Plan View (include direction)	0.75 cooper of copy of the cop	De I la bouder s	Willows JV D. 28 m ubstrate	+ sinces states
NORTH:	~ 85 m ob Wart 5	Off-Row +	MT2 3	PLX PLX
			Target	Page 1 of <u>a</u>

Feature ID: F86 PAOIY

METHODS ATTR	IBUTES	<b>医</b>	是可以必要	<b>经营业的</b>		加强协会		<b>计算机设置</b>	
Minnow Traps (Y	//N):	Hook and Line (Y/s	v):	Beach Seine (Y	/N):	Fyke N	et (Y/N):	Hoop Net	(Y/N):
No. of Minnow T	No. of Minnow Traps Set: 3 Date & Time in: (mm/dd/yyyy)			Date &Time in: (mm/dd/yyyy)		Date & Time in: / (mm/dd/yyyy)		/ Date & Tin (mm/dd/y	
Date & Time In: (mm/dd/yyyy)	8/30/2015	No. of lines in water	er:	No. of passes:		The same of the same	Time out:	Date & Tin (mm/dd/y	
Date & Time out (mm/dd/yyyy)	8/31/2015	Time lines in water	r:	Reach Length (	m):	Į (imių s	(	timin day y	100 0000
ELECTROFISHING	ILO O			STANSFILM	SE ENLA	STATE OF		GEORGE CONTRACTOR	
EF (Y/N):	EF Start Tir	7.77	EF End Time:	11:50	EF Time (see	conds):	304 E	F Reach Length (r	n): 85 m
Duty Cycle: Current (A):	25	Frequency (Hz) : Volts (V):	60	Waveform: 7	PDC		ng Efficiency (% o	f sample reach):	(amp x volts)
			300	rower (vv).	330	WERENING.	The restern		(allip x voits)
ID (Seq. Num)	Gear Type	Species		otal Length nm)	Life Stage (Juvenile or A	Adult)	Disposition (Dead or Alive)	Picture No.	
				7	parame or r	radicy	Spead of Aliver		
				-			-		
				-			-		
								/EDET	
	1								
	tional information			神社及例為	<b>国际</b>		<b>不到心脏</b>		
-No	/13h c	aught	ih M	T					
- No	13h c	aught	w/ E/						
-NFF-RE	ow tare	get loca substra radient	ted adj	jacent	40 1	2.pel	ihe (105	sing	
- a rarel	/cobble	substra	te +	CONSIBA	ent 1:	686	flow w	1 pools;	approx.
3	1,0/	1 ent	_						1 '
~ (	0/0 8	radion							
	V								
MISCELLANEOUS	S POINTS (if applic	able)	THE PERSON NAMED IN	<b>《马斯·西</b> 斯·西斯·	经制度集	50F-1	CANADA CONTRACTOR	<b>经验</b>	20年夏季5
Point ID:	//	A	Description:	NIA	4				
Point ID:	^	Alv	Description:	N	A				
Field Crew Chief: _	C 9	2	Field Scientist, Technician:	her	Lu		Technical Lead:		
o. on onion	10	7		-	1	_			

This form is to be completed before leaving the field site.
Feature ID: F86 PAO14 FT # AL114.9 Date: 8/31/2015
For all items not checked, please provide detailed explanation in the notes section of data form.
1. Site Description
Was ADF&G contacted before conducting any work in this area?
Site Description complete? (Every cell must have entry or N/A)
Were all photos taken and labeled correctly?
2. Physical/Chemical Attributes
☑ Calibration performed prior to sampling?
Physical/Chemical attributes complete? (Every cell must have entry or N/A)
NO□ Water quality data within expected ranges?
<b>≱</b> pH: 4.0 − 10.0
<i>NÒ</i> □ Temp.: 1.0 – 19.0
Specific Conductance: 20 - 1500
If outside expected ranges, was sample re-taken?
Are units correct?
3. Stream Profile
Stream profile view sketch included?
Stream profile view captures water depth and wetted width?
Stream profile view captures where efforts were made to capture fish?
Plan view sketch included?
4. Methods Attributes
Methods attributes complete? (Every cell must have entry or N/A)
Were methods used adequate (explanation needed if no methods selected)?
5. Electrofishing Attributes
Electrofishing attributes complete? (Every cell must have entry or N/A)
Are units correct?

Feature ID: F86 PA014

#### 6. Fish Observations

Are all fish captured/observed recorded in the Fish Observation table?

NIA

- Are units correct? (Total Length (mm))
- Were adequate photos taken of fish captured? (Take a photo if in doubt)

#### 7. General

- Feature ID and Field Target # are consistent on data forms, logbook entries, photos, and maps?
- All additional data in logbook captured on data form and additional photos noted?
- Were all additional comments on stream habitat, etc. recorded on data form?
- NO□ Was any gear missing/damaged for this survey or did you have any problems that should require resampling of this stream for an adequate survey effort?

By signing below, I verify that all field data for this site has been verified for accuracy and completeness.

X Neal Smith X quell List

Fisheries Biologist (print)

Signature

Fleld Crew Chief (nrint)



P\_F86PA014\_001\_US LOOKING US AT OFF-ROW TARGET

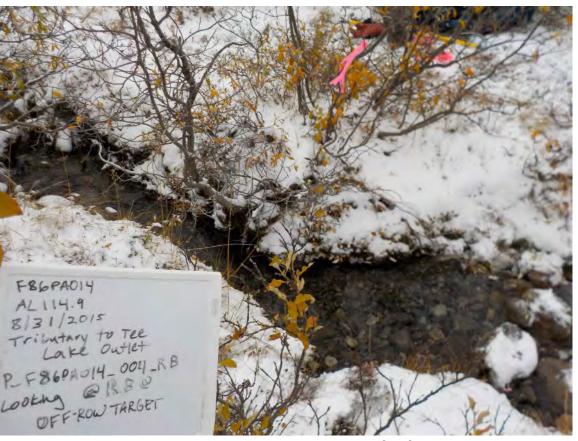
8/31/2015 AL114.9



P\_F86PA014\_002\_DS LOOKING DS AT OFF-ROW TARGET

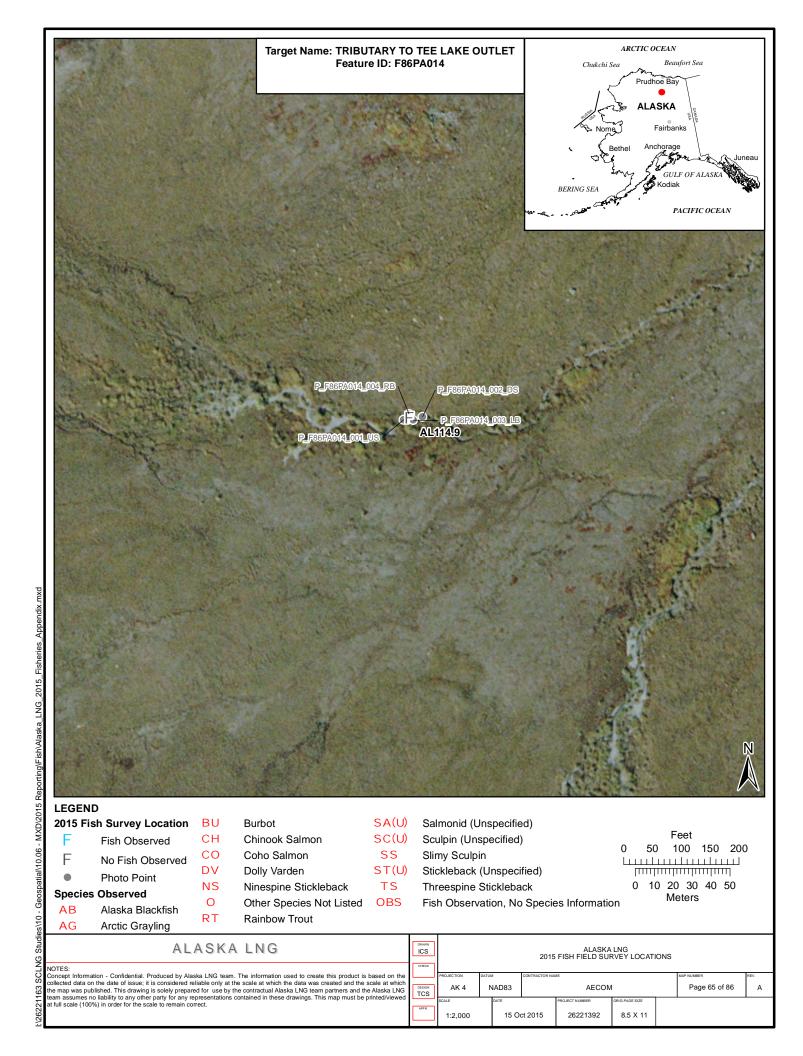
8/31/2015 AL114.9





P\_F86PA014\_004\_RB LOOKING AT RB AT OFF-ROW TARGET

8/31/2015 AL114.9



Revision Date: 3/19/2015

SITE DESCRIPTION	明然。中方面是特別	が開いて		国的数据以上35 DEPERSON 12 12 16 18 18						
Date: 8/29/2019 Investigate	ors: SCS NJ	S ADF	Team No.: F86 Fe	ature ID: F86 PAOII						
Stream Name: Innamed Tribut	. 0 .		-k St	ream ID: ALO61, 3						
VA	ound as expected (Y/N):	Y	HV	wy MP (N/A if heli accessed): heli						
Latitude: 68°54'52.823	7" NI	Longitud	de: 148° 53'	41.3680" W						
Logbook No.: 3 Logbook Page No.: 32-35 Total Fish Caught: Fish Mortalities: N/A Total Photos:										
US @ CI DS @ CI A A RB to I B @ CI LB to RB @ CL										
US @ CL. Pic No.: 1-F86PA011-003-US   DS @ CL. Pic No.: 1-F86PA011-003-US   Pic No.: 1-F86PA011-003-US										
Other P- (869A011-005-	AERIAL									
Pic No(s) .: P- F86PAO(1-80	6-AERIAL									
PHYSICAL/CHEMICAL ATTRIBUTES										
Weather (Describe):		Precipitation (I	1 1 001							
Water Temperature (°C): 3/12	Air Temperature (°C):	6	pH: 2.1/	Dissolved Oxygen (mg/l): /2- 2/						
Specific Conductance(µS/cm):		26	ORP (mV): 359, 9	Dissolved Oxygen (%): 9/.0						
Ambient Conductance(μS/cm):	1010	een (Y/N): //	Color: cloar	Last date of Calibration: 8/29/15						
Defined Channel (Y/N): Notes:	very narrow	111	Wet Surgundin	Thalweg Depth @ CL (m): 0, 15 m						
Flow (Y/N): Notes:  Riparlan Veg at 0-5 m at LB: Riparlan Veg	11120	Substrate:	Aquatic Habitats	manag sepan e se (m), o 175 m						
<u>SO</u> Grass/Sedge (%) <u>QO</u> G	rass/Sedge (%)	Organics (%)	Sand Bar	Large Woody Debris						
	hrubs (%)	Sift (%)	Mud Bar	Overhanging vegetation						
	rees (%)	Sand (%)	Gravel Bar	Contiguous Wetlands						
Diameter DBH (in.)	meter DBH (in.)	Gravel (%)		Emergent Plants Submerged Plants						
Stream Type:	-12	Cobble (%) Boulders (%)	Pools Undercut Banks	Submerged Flames						
PerennialIntermittent	Ephemeral									
STREAM PROFILE: Cross Sectional at Crossing	(include riparian vegetation,	wetted width, wa	ter depth, substrate, and	aquatic fiabitats)						
			demergent							
		0)	as a second	1 sach showbs						
		5 west	Saus	Austr 0						
STREAM PROFILE: Cross Sectional at Crossing (include riparian vegetation, wetted width, water depth, substrate, and aquatic fiabilitats)    Substrate   Substrate										
M + D 5 1/4 3 11/1 7 1001 0	2010 10 10 10 10 10 10 10 10 10 10 10 10									
	+16 5 2 111	MINERY	THE THE	upland						
	+16 5 2 111	WITE	wet wet	tunda tunda						
	+16 5 2 111	MILE	wet	tunda						
defined che depth = 0	mel II		wet	tundons signass organics substrate						
defined cla	anel III	= 7.23 r	nos mos	s/grass organics substrate						
defined che depth = 0	inel III width	= 7.23 r	photo locations, sample l	s/grass organics substrate						
defined cla depth = 0	anel III	= 7.23 r	photo locations, sample l	s/grass organics substrate						
STREAM PROFILE: Plan View (include direction NORTH:	inel III width	= 7.23 r	photo locations, sample I	s/grass organics substrate  ocations by gear type and ROW)  our idor						
STREAM PROFILE: Plan View (include direction NORTH:	inel III width	= 7.23 r	photo locations, sample I	s/grass organics substrate  pocations by gear type and ROW)						
STREAM PROFILE: Plan View (Include direction NORTH:  Haw >	width  and of flow, centerline, distance  (8) consider	= 7.23 r	photo locations, sample I	s/grass organics substrate  pocations by gear type and ROW)  corridor						
STREAM PROFILE: Plan View (Include direction NORTH:  Haw >	width  and of flow, centerline, distance  (8) consider	= 7.23 r	photo locations, sample I	s/grass organics substrate  pocations by gear type and ROW)  corridor						
STREAM PROFILE: Plan View (include direction) NORTH:	mel II width	From centerline	photo locations, sample I	s/grass organics substrate  pocations by gear type and ROW)  corridor						
STREAM PROFILE: Plan View (include direction NORTH:  Allow >	mel II width	From centerline	photo locations, sample 1	s/grass organics substrate  ocations by gear type and ROW)						
STREAM PROFILE: Plan View (include direction NORTH:  Haw >	and I width  width  for flow, centerline, distance  (50' corridor  MANAMANA  mr.  MANAMANA  MANAMANA  MANAMANA  MANAMANA	= 7.23 r	photo locations, sample 1	s/grass organics substrate  pocations by gear type and ROW)  corridor						
STREAM PROFILE: Plan View (include direction NORTH:  Haw >	mel II width	From centerline	photo locations, sample 1	s/grass organics substrate  pocations by gear type and ROW)						
STREAM PROFILE: Plan View (include direction NORTH:	and I width  width  for flow, centerline, distance  (50' corridor  MANAMANA  mr.  MANAMANA  MANAMANA  MANAMANA  MANAMANA	From centerline	photo locations, sample 1	s/grass organics substrate  pocations by gear type and ROW)  corridor						

Feature ID: F86PA01

METHODS ATTR	IBUTES TO THE	1	A SAME THE	N SAME		THE STREET	MAIN		上海 14.4% 上海等 15.4% 上海		
Minnow Traps (Y	(/N): Y	Hook a	nd Line (Y/N):	1	Beach Seine (Y	/N):	Fyke N	let (Y/N):	Hoop Net (Y/N):		
No. of Minnow T	Fraps Set: 2	Date &	Time in:	//	Date &Time in:	//	Date 8	& Time in:	Date & Time in:		
15	9		d/yyyy)		(mm/dd/yyyy)	-		dd/yyyy)	(mm/dd/yyyy)		
Date & Time In: (mm/dd/yyyy)	1545	No. of	f lines in water:		No. of passes:			k Time out: dd/yyyy)	Date & Time out: (mm/dd/yyyy)		
Date & Time out (mm/dd/yyyy)	18/28/2015	Time li	nes in water:		Reach Length (	m):			Marie - Statement		
ELECTROFISHING	1145		C2239.35	TO SUBJECT OF	Mark 183		22674				
EF (Y/N): /	The state of the same of the s	ne:	Value of the same	EF End Time:	TO STATE OF	EF Time (sec	conds):	EF	Reach Length (m):		
Duty Cycle:	1	Freque	ncy (Hz):		Waveform:		Sampl	ing Efficiency (% of	sample reach):		
Current (A):	6	Volts (\	/):		Power (W):	_			(amp x volts)		
FISH OBSERVAT	ions				STOP IN THE				<b>创作品等的特性的</b> 对		
ID (Seq. Num)	Gear Type		Species		otal Length nm)	Life Stage (Juvenile or A	\dult\	Disposition (Dead or Alive)	Picture No.		
				- 10		(Javenne of A	lautej	(Dead of Alive)			
			1								
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							1				
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1											
		1				1					
						-		1	_		
THE SHAPE AND ADDRESS.					a Did to the State of Barbara		Mark Lang				
NOTES (any addi	itional information	des au	唐州器(A) W		2011215 188	<b>确处管理</b> [3]	- 100	A Allian India.	ACRES TO FORESTERNA		
	1		2.7		MY						
- 11	hi3h	0	aux	1/2	11/						
1// 0	HIN	-	101				,		- 1 add as		
,			nam	no de	fred	chann	el	w/ Blo	o riffices		
- feath	are 13	PDSE	d of	1-1	110	2	axe	1 000	of phendra.		
15	- feature is a narrow defined charmed by fire da -										
but light by upstream											
FITC	Site likely present each year our were										
- feature is a narrow defined channel w/ flow of offles.  - feature is a narrow defined channel w/ flow of offles.  Surrounded by but surface water and of transland  show sixty present each year but defined by upstream  of Is likely present each year but defined by upstream											
runoff + preap											
Water is clear but has red/brown hue when substrate is stepped in.											
Water is were stepped in.											
MISCELLANEOUS POINTS (If applicable)											
Point ID:		NI	A	Description:	NA						
Point ID:	Point ID: Description:										
Field	Field Scientist/ GLOS Technical										
Crew Chief: Technician: Lead:											

This form is to be completed before leaving the field site.

Feature ID: <u>F86PAO11</u> FT # <u>ALO61.</u> 3 Date: <u>8/29/15</u>
For all items not checked, please provide detailed explanation in the notes section of data form.
1. Site Description
☑ Was ADF&G contacted before conducting any work in this area?
Site Description complete? (Every cell must have entry or N/A)  ■
Were all photos taken and labeled correctly?
2. Physical/Chemical Attributes
Calibration performed prior to sampling?
Physical/Chemical attributes complete? (Every cell must have entry or N/A)
<b>⊘</b> □ pH: 4.0 – 10.0
∠
★ Temp.: 1.0 - 19.0
No□ Specific Conductance: 20 - 1500
√c⊊ □ If outside expected ranges, was sample re-taken?
Are units correct?
3. Stream Profile
☑ Stream profile view sketch included?
Stream profile view captures water depth and wetted width?
Stream profile view captures where efforts were made to capture fish?
➢ Plan view sketch included?
4. Methods Attributes
Methods attributes complete? (Every cell must have entry or N/A)
Were methods used adequate (explanation needed if no methods selected)?
5. Electrofishing Attributes
Electrofishing attributes complete? (Every cell must have entry or N/A)
Are units correct?

Feature ID: F86 PA 011

#### 6. Fish Observations

Are all fish captured/observed recorded in the Fish Observation table?

Are units correct? (Total Length (mm))

 ☐ Were adequate photos taken of fish captured? (Take a photo if in doubt)

#### 7. General

- Feature ID and Field Target # are consistent on data forms, logbook entries, photos, and maps?
- All additional data in logbook captured on data form and additional photos noted?
- Were all additional comments on stream habitat, etc. recorded on data form?
- Was any gear missing/damaged for this survey or did you have any problems that should require resampling of this stream for an adequate survey effort?

By signing below, I verify that all field data for this site has been verified for accuracy and completeness.

X Neal Smith X Meel Lott

Fisheries Biologist (print) Signature

Field Crow Chlof (print)

Signature



P\_F86PA011\_001\_US LOOKING US AT PLX

8/29/2015 AL061.3



P\_F86PA011\_002\_DS LOOKING DS AT PLX

8/29/2015 AL061.3



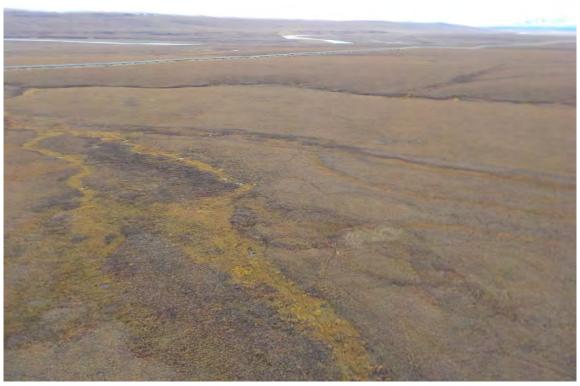
P\_F86PA011\_003\_LB LOOKING AT LB AT PLX

8/29/2015 AL061.3



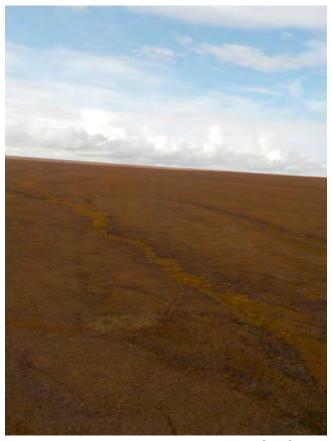
P\_F86PA011\_004\_RB LOOKING AT RB AT PLX

8/29/2015 AL061.3



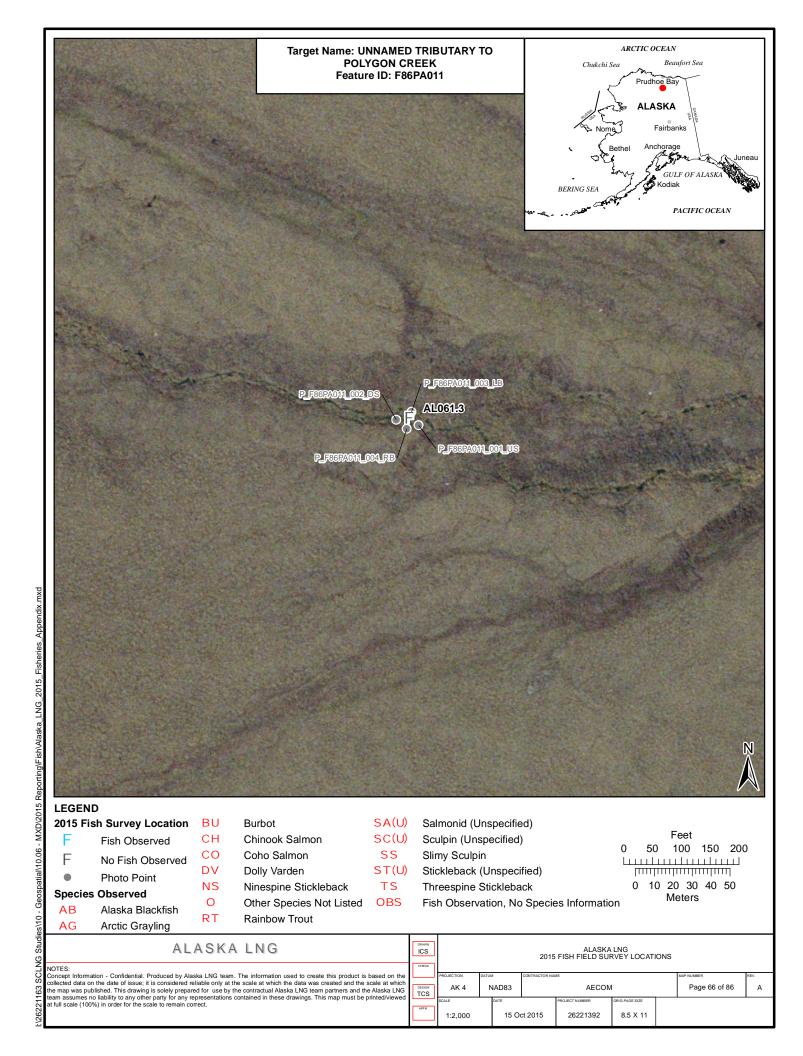
P\_F86PA011\_005\_AERIAL AERIAL PHOTO

8/29/2015 AL061.3



P\_F86PA011\_006\_AERIAL AERIAL PHOTO

8/29/2015 AL061.3



Revision Date: 3/19/2015

to part of the second s	STATE OF THE RESIDENCE OF THE STATE OF THE S		SHIP TO SERVICE STATE	No. 116-20. Helic to secure persons broad afford
Date: 8 20 2015 Investigator	ors: SCS NJ3	5 ADF	Team No.: F86 F	eature ID: F86PAD12
Stream Name: Warrant of Torb		wan ir ktok	RIVEC S	itream ID: ALOSO
VIII MEGG 1710	ound as expected (Y/N):	A LINE		Hwy MP (N/A if heli accessed):
		Longitud	100	131.3173" W
01 01 00,10			Fish Mortalities:	1) A Total Photos:
				LIB to PRØ CI
US @ CL Pic No.: P - F 8 6 9 PO 18 - 0 0 1 - 4 5 Pic N	10:1 - F368AVI3-00	2-DS Pic No.:	P_F8684012.00	3 18 Pic No.: 2 F86PAD1 2-04-RB
Other P_F86PAD12-005-A	ERIAL			
Pic No(s) .: P F86 PAO 12 006.	AERIAL			
PHYSICAL/ CHEMICAL ATTRIBUTES		四本 公司 全面		AND THE TELEPHONE TO SEE THE TELEPHONE
Weather (Describe):		Precipitation (		train
Water Temperature (°C): 4,55	Air Temperature (°C):	7	pH: 5,58	Dissolved Oxygen (mg/l):   2.00
Specific Conductance(µS/cm): 2, 2	Turbidity (NTU): 2	24	ORP (mV): 748.0	Dissolved Oxygen (%): 100 • 7
Ambient Conductance(μS/cm):		heen (Y/N): /	Color: cloal	Last date of Calibration: 8 29/15
	contained within	n tundin	valley	Wetted Width (m): 2 8 5
Flow (Y/N): Notes:	hairly rapid	W) 20015		Thalweg Depth @ CL (m): , 8   ~
0.0	00	Substrate: 20	Aquatic Habitats	I Washington
20	rass/Sedge (%)	Organics (%)	Sand Bar	Large Woody DebrisOverhanging vegetation
12	hrubs (%)	Silt (%) Ø	Mud Bar Gravel Bar	Contiguous Wetlands
ASIA AND AND AND AND AND AND AND AND AND AN	rees (%) meter DBH (in.)	Sand (%) Ø Gravel (%) 20	Riffles	Emergent Plants
	50 50	Cobble (%)	Pools	Submerged Plants
Stream Type:	Ephemeral 105	Boulders (%)	Undercut Bank	
PerennialIntermittent		10		and the supplemental to th
STREAM PROFILE: Cross Sectional as Crossing  Line of the Sectional as Crossing  Willow  Grands  Stream Profile: Plan View (include direction	5.+ 5.6.5 + 05.565	se + bondar	I . 81 m de	orasses Turkin
NORTH: 150' CON	idor 7	1	X MT 2	150' corridor  MT3  91m
Revision Date: 3/19/2015				Page 1 of <u>À</u>

Feature ID: F861A012

METHODS ATTR  Minnow Traps (V  No. of Minnow Traps (V  No. of Minnow Traps (V  Date & Time in: (mm/dd/yyyy)  Date & Time out (mm/dd/yyyy)  ELECTROFISHING  EF (Y/N): Duty Cycle: Current (A):	(/N):	Hook and Line (Y/ Date & Time in: (mm/dd/yyyy) No. of lines in wate Time lines in wate me: Frequency (Hz): Volts (V):	er:	Beach Seine (Y, Date &Time in: (mm/dd/yyyy) No. of passes: Reach Length (  Waveform: Power (W):	N	Date 8 (mm/d Date 8 (mm/d	let (Y/N):  a Time in: dd/yyyy)  a Time out: dd/yyyy)  EF  ing Efficiency (% of s	Hoop Net (Y/N):  Date & Time in: (mm/dd/yyyy)  Date & Time out: (mm/dd/yyyy)  Reach Length (m): sample reach):  (amp x volts)
ID (Seq. Num)	Gear Type	Species		otal Length	Life Stage	Adulas	Disposition	Picture No.
(		Species	1 (1	mm)	(Juvenile or	Adult)	(Dead or Alive)	
					1			
							-	
				-				
	-				-			
	1							
			1					
NOTES (any addi	tional information	de la company	<b>联合型维护</b> 证:	外別途響響			<b>的健康工程的</b>	<b>的数据资料。在1900年</b>
- No - Visu - Strea - cobbi	ally or	caught served deep nrs.	t in t saw and w Rapid of	MT Bis ell ca	to paraic	d ools	W/n	stoped Vs
MISCELLANEOUS	POINTS (if applie	able)	Mary Starter	State of the state	1000		A CAMPION OF C	The State of the State of
Point ID:	11	audic)	Description:	A /	A		- Tolkiellolkan	
Point ID:	NIA		Description:	N	A/1 A			
Field	TV H		Field Scientist	1 /	017	-011	Technical	
Crew Chief:	5		Technician:	mu	S.	2.16	Lead:	

Revision Date: 06/09/2015

This form is to be completed before leaving the field site.
Feature ID: F86140(2 FT # ALOSO Date: 8/31/15
For all items not checked, please provide detailed explanation in the notes section of data form.
1. Site Description
★ Site Description complete? (Every cell must have entry or N/A)
✓ Were all photos taken and labeled correctly?
2. Physical/Chemical Attributes
Calibration performed prior to sampling?
Physical/Chemical attributes complete? (Every cell must have entry or N/A)
Water quality data within expected ranges?
` <b>⊠</b> pH: 4.0 – 10.0
☑ DO (mg/L): 1.0 – 15.0
\
Specific Conductance: 20 - 1500
✓/⁄⁄⁄ If outside expected ranges, was sample re-taken?
Are units correct?
3. Stream Profile
Stream profile view sketch included?
$oldsymbol{lpha}$ Stream profile view captures where efforts were made to capture fish?
Plan view sketch included?
4. Methods Attributes
Methods attributes complete? (Every cell must have entry or N/A)
Were methods used adequate (explanation needed if no methods selected)?

Electrofishing attributes complete? (Every cell must have entry or N/A)

Are units correct?

5. Electrofishing Attributes

Feature ID: <u>F86PA012</u>

#### 6. Fish Observations

Are all fish captured/observed recorded in the Fish Observation table?

MA

- Are units correct? (Total Length (mm))
- Were adequate photos taken of fish captured? (Take a photo if in doubt)

### 7. General

- Feature ID and Field Target # are consistent on data forms, logbook entries, photos, and maps?
- All additional data in logbook captured on data form and additional photos noted?
- Were all additional comments on stream habitat, etc. recorded on data form?
- Was any gear missing/damaged for this survey or did you have any problems that should require resampling of this stream for an adequate survey effort?

By signing below, I verify that all field data for this site has been verified for accuracy and completeness.

X Neal Smith X audul Lat Fisheries Biologist (print) Signature

Field Crow Chief (nrint)

Signature



P\_F86PA012\_001\_US LOOKING US AT PLX

8/30/2015 AL050



P\_F86PA012\_002\_DS LOOKING DS AT PLX

8/30/2015 AL050



P\_F86PA012\_003\_LB LOOKING AT LB AT PLX

8/30/2015 AL050



P\_F86PA012\_004\_RB LOOKING AT RB AT PLX

8/30/2015 AL050



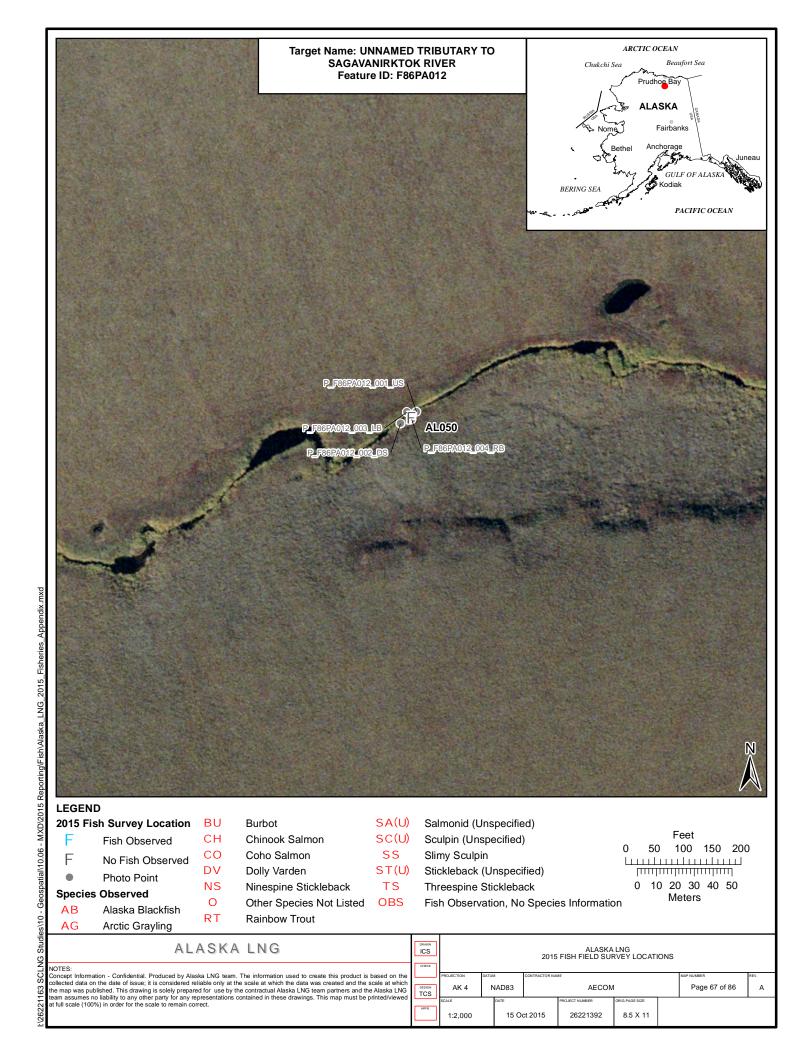
P\_F86PA012\_005\_AERIAL **AERIAL PHOTO** 

8/30/2015 AL050



P\_F86PA012\_006\_AERIAL **AERIAL PHOTO** 

8/30/2015 AL050



SITE DESCRIPTION	<b>美国中国国际国际国际工程</b>	<b>新新城市,1980年</b>	"哈拉"。"是"在这一是是有关的"。 "
Date: 8/30/LS Investigato	orsiscs, NJS, ADF	Team No.: F86	Feature ID: F86 PA 013
Stream Name: Unnamed Tribu			Stream ID: ALO35.32
	ound as expected (Y/N):		Hwy MP (N/A if heli accessed): $349.9$
Latitude: 69° 21' 58,458	7" N Long	tude: 148° 4	5'28,6528"W
Logbook No.: 3 Logbook Page No.: 3		Fish Mortalities:	
US @ CL Pic No.: P-F868A013_001-US Pic N	OCL 10:19-68614013-002-DS Pic N	LB@ CL o.: P-F8674 013 -	LB to RB@ CL Pic No.: 1- F 86 AD13 - OOY - RB
Other P_F86PA013_005			
Pic No(s).: P 5828AD13-	006_AERIAL		
PHYSICAL/CHEMICAL ATTRIBUTES	ather Charles and the late the		
Weather (Describe): Cloudy	Precipitatio	n (Describe): Mist	-/hog
Water Temperature (°C): ⊋ ₀ 3 Ӌ ∫	Air Temperature (°C):	pH: 6.71	Dissolved Oxygen (mg/l): 13 .70
Specific Conductance(µS/cm): 39	Turbidity (NTU): 2.76	ORP (mV): 372.	Dissolved Oxygen (%): 99.6
Ambient Conductance(μS/cm): スメ	Odor: none Sheen (Y/N): N	Color: none	Last date of Calibration: 8/29/15
Defined Channel (Y/N): Notes:	depression / ditch		Wetted Width (m): 5.09
Flow (Y/N): Notes:		resent	Thalweg Depth @ CL (m): 🔗 👢 🚶
	at 0-5 m at RB: Stream Substrate:	Aquatic Habitats	Lana Waadu Dahria
( 6	rass/Sedge (%) 100 Organics (%		Large Woody Debris
O Sindistry	nrubs (%)Silt (%)	Mud Bar	Overhanging vegetation
	rees (%)Sand (%)	Gravel Bar	Contiguous Wetlands
	neter DBH (in.) Gravel (%)	Riffles	Emergent Plants
Stream Type:	Cobble (%)	Pools	Submerged Plants
PerennialIntermittent	EphemeralBoulders (%	Undercut Bank	SS
STREAM PROFILE: Cross Sectional at Crossing	(include riparian vegetation, wetted width,	water depth, substrate, an	d aquatic habitats)
ALL HILLANDER HA	Kv	KINET	AND THE FIRE FIRE
	My 5.09 m	W A	200
		tw \u	flows + grasses
	1 1 11ds 191 D. 1 11 11 11 11	is I want	
1		1	
		IO. IIm depth	
	THE PARTY OF THE P	IO. IIm depth	
emerge	ent plants		o w/ some flow
Emergy STREAM PROFILE: Plan View (include direction	of flow, centerline, distances from centerli	Standing H2	O w/ Some flow  Incations by gear type and ROW)
V	of flow, centerline, distances from centerli	Standing H2	O W/ Some Glow  Tocations by gear type and ROW)
STREAM PROFILE: Plan View (include direction	of flow, centerline, distances from centerli	standing Hz  ne, photo locations, sample  150' corredor	O w/ Some flow  locations by gear type and ROVV)
STREAM PROFILE: Plan View (include direction	of flow, centerline, distances from centerline	standing Hz  ne, photo locations, sample  150' corredor	O w/ Some flow  locations by gear type and ROVV)
STREAM PROFILE: Plan View (include direction	of flow, centerline, distances from centerline,	standing Hz  ne, photo locations, sample  150' corredor	O w/ Some flow  locations by gear type and ROVV)
STREAM PROFILE: Plan View (include direction	of flow, centerline, distances from centerline,	standing Hz  ne, photo locations, sample  150' corredor	O w/ Some flow  locations by gear type and ROVV)
STREAM PROFILE: Plan View (include direction	of flow, centerline, distances from centerline,	standing Hz  ne, photo locations, sample  150' corredor	O w/ Some flow  locations by gear type and ROVV)
STREAM PROFILE: Plan View (include direction	of flow, centerline, distances from centerline,	standing Hz  ne, photo locations, sample  150' corredor	O w/ Some flow  Incations by gear type and ROW)
STREAM PROFILE: Plan View (include direction	of flow, centerline, distances from centerline,	standing Hz  ne, photo locations, sample  150' corredor	O w/ Some flow  locations by gear type and ROVV)
STREAM PROFILE: Plan View (include direction	of flow, centerline, distances from centerline,	standing Hz  ne, photo locations, sample  150' corredor	O w/ Some flow  locations by gear type and ROVV)
STREAM PROFILE: Plan View (include direction	of flow, centerline, distances from centerline,	standing Hz  ne, photo locations, sample  150' corredor	O w/ Some flow  Tocations by gear type and ROW)

Page 1 of <u>2</u>

Feature ID: F86 PA 013

METHODS ATTR	IBUTES			機能		建建建筑		STATE OF STA	<b>计测数操制 医影性表别的现</b>
Minnow Traps (	T	Hook ar	nd Line (Y/N):		Beach Seine (Y	/N): /	Fyke N	Net (Y/N):	Hoop Net (Y/N):
No. of Minnow	Fraps Set: 3	Date & (mm/do	Time in: d/yyyy)		Date &Time in (mm/dd/yyyy)		1.5	& Time in: dd/yyyy)	Date & Time In: (mm/dd/yyyy)
Date & Time in:	1520	No. of lines in water:		No. of passes:			& Time out:	Date & Time out:	
(mm/dd/yyyy) Date & Time out	8/30/15	Time lin	nes in water:		Reach Length (	(m):	(mm/	dd/yyyy)	(mm/dd/yyyy)
(mm/dd/yyyy)	1125	MARKET SE		50 EV		avisan Mas	PROPERTY AND ADDRESS OF		Section (Value)
EF (Y/N):	EF Start Tir	me'	EF End Ti	me.		EF Time (s	econds)	E CONTRACTOR OF THE PERSON OF	F Reach Length (m):
Duty Cycle:	1 El State III		ncy (Hz) :	TIC.	Waveform:	T Li Timie (3	_	ling Efficiency (% of	
Current (A):		Volts (V	1):		Power (W):		1,000,000		(amp x volts)
FISH OBSERVAT	IONS	- Maria	distribute constitution	I W		113.55			
ID (Seq. Num)	Gear Type		Species		tal Length nm)	Life Stage (Juvenile or	Adult)	Disposition (Dead or Alive)	Picture No.
								\	\
	1					1			
							\	1	
			_	-	_		1	\	
	-	-	_	-	-		-		
	1		1	+	1		1		
				$\vdash$	1		1		
\			1			1		9	
CALL STREET, ST. C.	tional information	THE RESERVE	自動性的關係問題		是古姓世界	是沒是	國際	此為此為	
- NO	6.31	h	eartht ted in	1	hM	7			
- stream	n is	loca	ted in	1	depre	155/M	10	inning +	parallel
to	Dal	hon	Hwy.					U	
- or	155	+	Hwy.		subst	ate.	9		
			U			100	+		
- mihi	mal /	low	but it	)	> pr	e sen			
	V								
MISCELLANEOUS	S POINTS (if applic	able)	TE CONTRACTOR	el.	WARTE WA	REAL PROPERTY.	BULL	では最終にあった。	THE SHARE THE SHARE
Point ID:	N	A	Descriptio	n:		NIA			
Point ID:	111	+	Descriptio	n:		WI	4		
Field	7 1/1	2	Field Scien		0.0	4		Technical	
Crew Chief:		>	Technician	:	Wall Jac	ESY_		Lead:	

This form is to be completed before leaving the field site.
Feature ID: F861A013 FT # A(0 35, 32 Date: 8/31/2015
For all items not checked, please provide detailed explanation in the notes section of data
form.
1. Site Description
Was ADF&G contacted before conducting any work in this area?
Site Description complete? (Every cell must have entry or N/A)
2. Physical/Chemical Attributes
Calibration performed prior to sampling?
Physical/Chemical attributes complete? (Every cell must have entry or N/A)
Water quality data within expected ranges?
<b>凌</b> pH: 4.0 – 10.0
<b>№</b> NTU: 0 – 3000
DO (mg/L): 1.0 – 15.0
Temp.: 1.0 – 19.0
Specific Conductance: 20 - 1500
☐ If outside expected ranges, was sample re-taken?
Are units correct?
3. Stream Profile
Stream profile view sketch included?
Stream profile view captures water depth and wetted width?
Stream profile view captures where efforts were made to capture fish?
Plan view sketch included?
4. Methods Attributes
Methods attributes complete? (Every cell must have entry or N/A)
Were methods used adequate (explanation needed if no methods selected)?
5. Electrofishing Attributes
Electrofishing attributes complete? (Every cell must have entry or N/A)
Are units correct?

Feature ID: F86PA035, 32

#### 6. Fish Observations

Are all fish captured/observed recorded in the Fish Observation table?

ルボ Are units correct? (Total Length (mm))

Were adequate photos taken of fish captured? (Take a photo if in doubt)

### 7. General

- Feature ID and Field Target # are consistent on data forms, logbook entries, photos, and maps?
- All additional data in logbook captured on data form and additional photos noted?
- Were all additional comments on stream habitat, etc. recorded on data form?
- Was any gear missing/damaged for this survey or did you have any problems that should require resampling of this stream for an adequate survey effort?

By signing below, I verify that all field data for this site has been verified for accuracy and completeness.

X Neal Smith X Well Smith

Fisherles Blologist (print)

Signature

Fleld Crew Chlef (print)

Signature



P\_F86PA013\_001\_US LOOKING US AT PLX

8/30/2015 AL035.32



P\_F86PA013\_002\_DS LOOKING DS AT PLX

8/30/2015 AL035.32



P\_F86PA013\_003\_LB LOOKING AT LB AT PLX

8/30/2015 AL035.32



P\_F86PA013\_004\_RB LOOKING AT RB AT PLX

8/30/2015 AL035.32



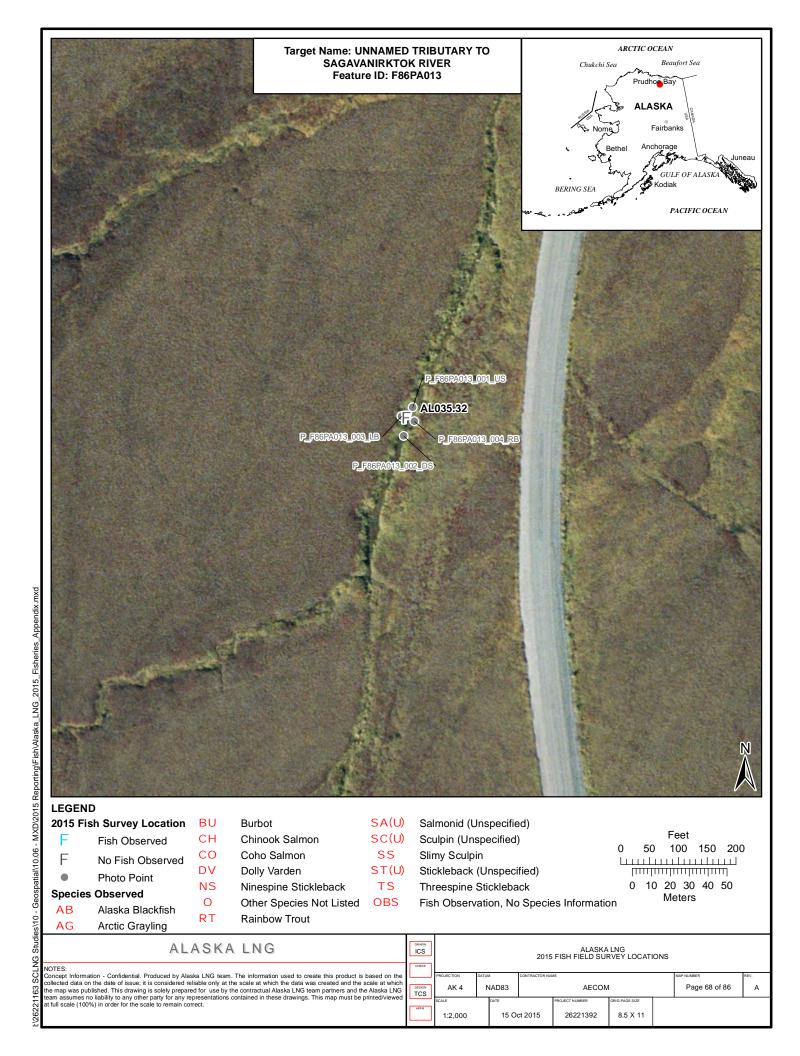
P\_F86PA013\_005\_AERIAL AERIAL PHOTO

8/30/2015 AL035.32



P\_F86PA013\_006\_AERIAL AERIAL PHOTO

8/30/2015 AL035.32



SITE DESCRIPTION	the backward in the other	<b>建设银金工厂</b> 牌位	AND DESCRIPTION OF THE PARTY OF	有政治会共和国的高级的任命中的基础的
The state of the s	irs: SCS NJS	ADF	Team No.: F86	Feature ID: F86PA008
	RAM	110.	1 00	Stream ID: ALT9.4 505 A(019.4.
4/1///	ound as expected (Y/N):	V	- 10	Hwy MP (N/A if heli accessed): 377, 4
Latitude: 69° 43 02. 783		Longitude	e: 140.43	148.5797" W
	76 - 29 Total Fish Cau		Fish Mortalities:	Total Photory
				LB to RB@ CL
Pic No.: 1867 1108 001-03 Pic N		Pic No.;		03_LB PIC NO .: P. F X6FA008 - 004-RB
Other P-F86PA008-005.				
Pic No(s).: P_F86PA008_00	06-NS			
PRYSICAL/ CHEMICAL ATTRIBUTES	(中国) (中国) (中国) (中国) (中国) (中国) (中国) (中国)	e Fair William		<b>以通过的时间的时间</b>
Weather (Describe):	/ cloudy	Precipitation (De	1101	1571 L MACA (1901)
Water Temperature (°C): 10.43	Air Temperature (°C):	5	рн: 5.91	Dissolved Oxygen (mg/l): 9 9 9 0
Specific Conductance(μS/cm): U 5 8	Turbidity (NTU): 0.7		ORP (mV): 68.6	A 1.1
Ambient Conductance(µS/cm): 336		heen (Y/N): N	Color: clear	Last date of Calibration: 8/16/2015
	grossy wetland very light + a	1 1	11.	Wetted Width (m): 30', 2
, , , , , , , , , , , , , , , , , , ,		Substrate:	Aquatic Habitats	
Grass/Sedge (%) 95 Gi	rass/Sedge (%)	Organics (%)	Sand Bar	Large Woody Debris
and the second	rubs (%)	Silt (%)	Mud Bar	Overhanging vegetation
TA TA	ees (%)	Sand (%)	Gravel Bar	Contiguous Wetlands
	neter DBH (in.)	Gravel (%)	Riffles	Emergent Plants
		Cabble /0/\	Pools	Submerged Plants
Stream Type:	Enhancial 8	Cobble (%) Boulders (%)	PoolsUndercut Ban	Submerged Plants
PerennialIntermittent	Ephemeral	Boulders (%)	Undercut Ban	iks
PerennialIntermittent  STREAM PROFILE: Cross Sectional at Crossing	Ephemeral	Boulders (%)	Undercut Ban	nd aquatic habitats)
PerennialIntermittent  STREAM PROFILE: Cross Sectional at Crossing	Ephemeral	Boulders (%)	Undercut Ban	iks
PerennialIntermittent	Ephemeral	Boulders (%)	Undercut Ban	nd aquatic habitats)
PerennialIntermittent  STREAM PROFILE: Cross Sectional at Crossing	Ephemeral (include riparian vegetation	Boulders (%)	Undercut Ban	nd aquatic habitats)
PerennialIntermittent  STREAM PROFILE: Cross Sectional at Crossing	Ephemeral	Boulders (%)	Undercut Ban	nd aquatic habitats)
Perennial Intermittent  STREAM PROFILE: Cross Sectional at Crossing of the control of the contro	Ephemeral (include riparian vegetation	Boulders (%)	Undercut Ban	nd aquatic habitats)
Perennial Intermittent  STREAM PROFILE: Cross Sectional at Crossing  word will in s  S(asses)	Ephemeral (include riparian vegetation	Boulders (%)	Undercut Ban	nd aquatic habitats)
PerennialIntermittent  STREAM PROFILE: Cross Sectional at Crossing  work will two s  Scasses  Low  Gradual	Ephemeral (include riparian vegetation	Boulders (%)	Undercut Ban	ad aquatic babitats)  Grasse  Land  Grasse
Perennial	Ephemeral  Include ripartan vegetation  N = 30, 2	Boulders (%)	Undercut Ban	ad aquatic habitats)  Sea s se s
Perennial Intermittent  STREAM PROFILE: Cross Sectional at Crossing  work will in a  grasses  low  graduaf	Ephemeral (include riparian vegetation	Boulders (%)	Undercut Ban er depth, substrate, an	adaquatic Babitats)  Sasses  was be  wallows  stacking  water
Perennial	Ephemeral  Include ripartan vegetation  N = 30, 2	Boulders (%)	Undercut Ban	adaquatic Babitats)  Sasses  was be  wallows  stacking  water
Perennial	Ephemeral  Include ripartan vegetation  N = 30, 2	Boulders (%)	Undercut Ban er depth, substrate, an	ad aquatic habitats)  San 5 se such the second seco
Perennial	Ephemeral  Include ripartan vegetation  N = 30, 2	Boulders (%)	Undercut Ban er depth, substrate, ar thoto locations, sample	adaquatic habitats)  Gasse  Jacob  Willow  Stading  Water  Flow  flow
Perennial	Ephemeral  Include ripartan vegetation  N = 30, 2	Boulders (%)	Undercut Ban er depth, substrate, ar thoto locations, sample	adaquatic habitats)  Gasse  Jacob  Willow  Stading  Water  Flow  flow
Perennial	Ephemeral  Include ripartan vegetation  N = 30, 2	Boulders (%)	Undercut Ban er depth, substrate, ar thoto locations, sample	adaquatic habitats)  Gasse  Jacob  Willow  Stading  Water  Flow  flow
Perennial	Ephemeral  Include ripartan vegetation  N = 30, 2	Boulders (%)	Undercut Ban er depth, substrate, an	adaquatic habitats)  Gasse  Jacob  Willow  Stading  Water  Flow  flow
Perennial	Ephemeral  Include ripartan vegetation  N = 30, 2	Boulders (%)	Undercut Ban er depth, substrate, ar thoto locations, sample	adaquatic habitats)  Gasse  Jacob  Willow  Stading  Water  Flow  flow
Perennial	Ephemeral  Include ripartan vegetation  N = 30, 2	Boulders (%)	Undercut Ban er depth, substrate, ar thoto locations, sample	adaquatic flabitats)  Gasse  John Services  Standing  Substrate  E locations by gear type and ROW;
Perennial	Ephemeral  Include ripartan vegetation  N = 30, 2	Boulders (%)	Undercut Ban er depth, substrate, ar thoto locations, sample	adaquatic habitats)  Gasses  Landing  Salashate  E locations by gear type and ROW)

250

FIG

Revision Date: 3/19/2015

Page 1 of  $\frac{\checkmark}{}$ 

Feature ID: F86PA008

No. of Minnow T	raps Set: 2	Date & Time in: (mm/dd/yyyy)	N	Date &Time (mm/dd/yyy	Λ	4.0	& Time in:	Date & Time		ET HUED
Date & Time In:		No. of lines in water:		No. of passe		Date	& Time out:	Date & Time	out:	
(mm/dd/yyyy) Date & Time out	8/27/2015	Time lines in water:	1	Reach Lengt	h (m):	(mm/	dd/yyyy)	(mm/dd/yy)	<u>(v)</u>	1
(mm/dd/yyyy) ELECTROFISHING	1345		100000	Signatura de la composição de la composi	Wild Company	AND THE PARTY OF	and the second of the	and the wall made	5504005	di letta
EF (Y/N):	/ EF Start Ti	me:	EF End Time		EF Time (	seconds):		EF Reach Length (m)	);	
Duty Cycle:		Frequency (Hz):		Waveform:			ling Efficiency (% o		1	
Current (A):		Volts (V):		Power (W):					(amp	x volts)
FISH OBSERVAT	IONS			Phylide	是沙洋的	PHY SE				
ID (Seq. Núm)	Gear Type	Species		Total Length (mm)	Life Stage (Juvenile d	or Adult)	Disposition (Dead or Alive)	Picture No.		
001	MT2	nhesome st	chloback	51	jurlado	-	alive	#P-F86PAO	08-00	S_N
002	MT3	7 11	COMP I	53	3/11	VI./1	Alive	NIA	- 22-0-0	
003		11		50	11		11	NIA		
004	1 (	1 (		53	11		11	11		
005	- 11	11		51	[1		11	1,		
066	11	11		52	[]		11	L		
067	11	11		54	1.		11	11		
008	- 11	[ ]		49'	Juren	118	((	1 (		
069		[1]		55	JUV/A	dult	1(	1(		
010				56	1		11	(1		
011		11		55	11		11	(1	-	
012	tional information		-1	7		THE REAL PROPERTY.			NI WINST	and the same of
- Mari	or are in elimed wo dis	spike sti injured stram stram	due +	o gills welland	stuck Cha	ih in inel	NIT. mesh No	real vater	dee	d
MISCELLANEOUS Point ID: Point ID: Field	S POINTS (if applic	(1.	Description: Description:			NA	Technical	<b>克斯特别的</b>	<b>松</b>	
Crew Chief:	8	1	echnician:	Ulle	of sto	4_	Lead:	Page :		_

Feature ID: F86PA008

AND REAL PROPERTY.	IONS (continued)					
ID (Seq. Num)	Gear Type	Species	Total Length (mm)	Life Stage (Juvenile or Adult)	Disposition (Dead or Alive)	Picture No.
013	MT3	Ninespire Stickleback	48	Juvenile	Alive	NIA
014	(1	11	46	11	Alive	11
015	(I	U	56	Jul AdoH	11	11
010	ι(	11	50	11	U	l1
017	LI	1	53	11	11	11
018	(1	11	49	Turenile		11
019	(1	LI .	44	11	11	U
020	l (	[]	51	JUNIAGUIT	11	11
021	11	11	56	11	11	()
023	11	1	54	11	(	
023	11	1)	48	Juvenile	11	1(
024	1(	11	45	(1	11	( )
025	(1	1 1 1	41	- 11	11	11
026	11	1(	45	30 L1		11
027	U	(1	47	( . U	11	11
028	11	11	46	l l	11	
029	U	11	47	1 (1	11	
030	11	l l	48	13161		[1
031		11	46	1111	11	
032	((		41	11	11	11
033	((	11	46	11	11	11
034	11	) (	44	1.1	11	l1
035	11	11	41	> 11	1(	
036	[(		44	11	(1	
037	[(	11	43	1 (	11	
038	11	11	48	11	11	11
039	()	11	44	[]	11	[]
040	11	11	148.	111	) (	
041	11	ii	42.	()	11	11
CNO	11	11	43	11	1(	l l
043 043 044	(1	LI	51	Juv/Adutt	1(	11
044	1 (	il	45	Juvenile	11	111
045	11	li	51	Juv/Adult		
046	11	111	48	Juvenile	VI	11
047	1	111	41	11	11	
048	11	1	51	Jur/Adilt	11	
049	[]		44	Juvenil	11	
050	(1		51	JurlAdutt	dead	* P_F86 PAOO8_006_NS
061	1		57	II	Alive	1/A
0 2	11	111	42	Jurenile	Alive	IVIA
051	11		46	Juvenile	1 LIVE	11
054	((	11	46	Juvenile	11	1,

Page 3 of <u>4</u>

Feature ID: \_\_\_\_\_\_F 86PA 0 08

FISH OBSERVAT	(ONS (continued)		A SECTION AS			
ID (Seq. Num)	Gear Type	Species	Total Length (mm)	Life Stage (Juvenile or Adult)	Disposition (Dead or Alive)	Picture No.
055	MT3	Ninesphe Stikleba		Juvenile	alive	NA
056	11	((	41	1(	dead	11
057	U	11	50	Juv/Adult	alive	LI .
058	11	11	53	11		11
059	11	LI	42	Juvenile	alive	(I
060.	(.)	LI.	45	11	alive	1(
061	11	ll	50	Juv/Adult	dead	(1
662	MT1	11	48	Juvenile	dead	11
063			50	Juv/Adult	dead	11
064		U	50	l'I	dead	11
OGS		1	50	L	alive	l li
066		11	48	Jurenile	dead	11
067		11	42	11 11	dead	LI .
067		11	51	Jnv/Adult	Alite sus	[4
069		(1	50	li li	deed	1
070		((	41	Juvenile	alive.	\(
150		11	51	JUV /Adult	alive.	
072		111	53	l l	dead	
073		1.1	43	Juvenile	alive.	1
074		1.1	48	LI	alive -	()
075			42	11	alive -	
076		13	43	l li	alive .	
077		16	45		dond.	
078		11	50	Juv/Adult	avad	1
		8 (	45	Juvenile	alive -	11
079		11	42	l	dead	
026		[1		111	alive -	[]
085	1	1	48	111	alive -	
VOC		11	49		dead	11
202 120	A		11 -	7 11	Avv	IN THE THE THE WEEK THE
083-120	MT 1	11	40	Juvenile	Alive	11 11 11 11 11 11 11 11 11 11 11 11 11
21-172	MTI	11	45	VI	Alive	मिर्ना भी भी भी भी भी
73-224	mt l	l1	50	Jun/Adult	Alive	THA 111 THE THE IT
25-232	MT	l (	55	VI	Alive	
.33-234	MTI	-11	60	11	Alive	11
Scs	MT	- 11	65	Adult	Alivy	
			1			

This form is to be completed before leaving the field site.
Feature ID: F869 A008 FT # AL019.4 Date: 8/27/2015
For all items not checked, please provide detailed explanation in the notes section of data form.
1. Site Description
Site Description complete? (Every cell must have entry or N/A)
Were all photos taken and labeled correctly?
2. Physical/Chemical Attributes
Water quality data within expected ranges?
<b>p</b> pH: 4.0 – 10.0
<b>∀</b> NTU: 0 – 3000
<b>DO</b> (mg/L): 1.0 – 15.0
<b>y</b> Temp.: 1.0 19.0
Specific Conductance: 20 - 1500
NIA If outside expected ranges, was sample re-taken?
Are units correct?
3. Stream Profile
Stream profile view sketch included?
Stream profile view captures water depth and wetted width?.
Stream profile view captures where efforts were made to capture fish?
Plan view sketch included?
4. Methods Attributes
Methods attributes complete? (Every cell must have entry or N/A)
Were methods used adequate (explanation needed if no methods selected)?
5. Electrofishing Attributes
Electrofishing attributes complete? (Every cell must have entry or N/A)
Are units correct?

Feature ID: F86PA 0008

6.	Fis	h Ob	serv	ations
----	-----	------	------	--------

- Are all fish captured/observed recorded in the Fish Observation table?
- Are units correct? (Total Length (mm))
- Were adequate photos taken of fish captured? (Take a photo if in doubt)

### 7. General

- Feature ID and Field Target # are consistent on data forms, logbook entries, photos, and maps?
- All additional data in logbook captured on data form and additional photos noted?
- Were all additional comments on stream habitat, etc. recorded on data form?
- Was any gear missing/damaged for this survey or did you have any problems that should require resampling of this stream for an adequate survey effort?

By signing below, I verify that all field data for this site has been verified for accuracy and completeness.

X Neal Smith X Great Signature

Signature

Fleid Crew Chief (nrint)

Skanature



P\_F86PA008\_001\_US LOOKING US AT OFF-ROW TARGET



P\_F86PA008\_002\_DS
LOOKING DS AT OFF-ROW TARGET

8/26/2015 AL019.4





P\_F86PA008\_004\_RB LOOKING AT RB AT OFF-ROW TARGET

8/26/2015 AL019.4



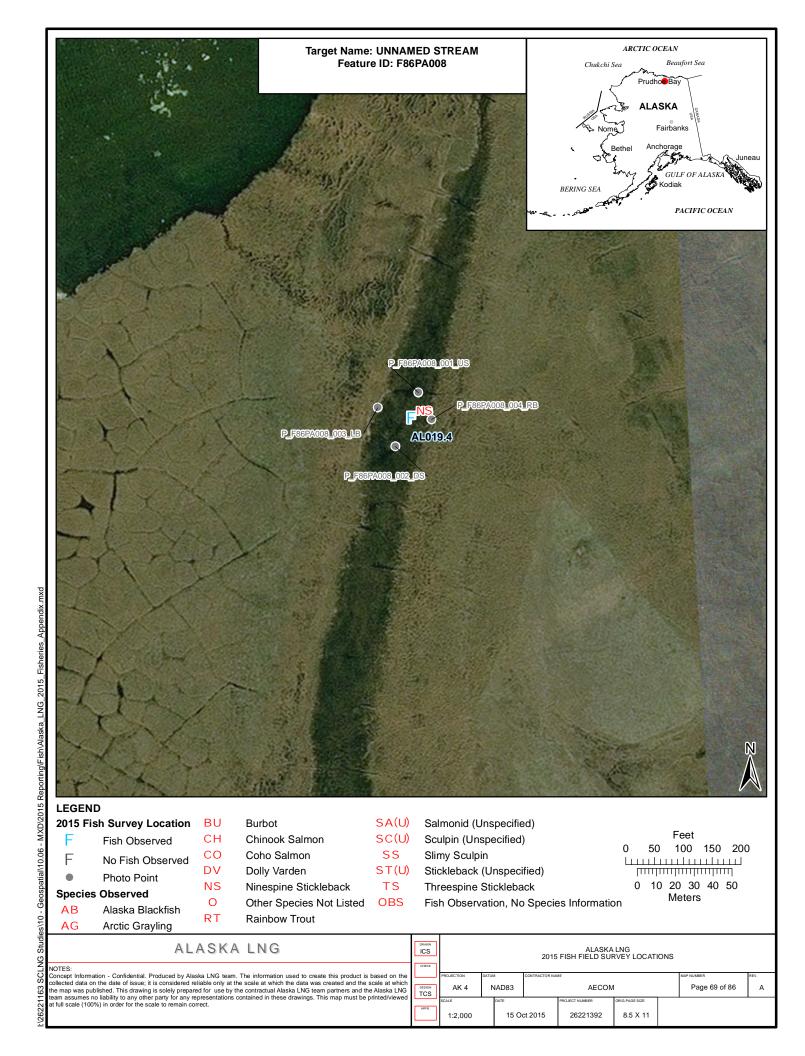
P\_F86PA008\_005\_NS
PHOTO OF NINESPINE STICKLEBACK

8/26/2015 AL019.4



P\_F86PA008\_006\_NS
PHOTO OF NINESPINE STICKLEBACK

8/26/2015 AL019.4



Revision Date: 3/19/2015

SITE DESCRIPTION	The state of the s		5.6 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Date: 8/26/2015 Investigate	ors: SCS NOS ADF	Team No.: <b>F</b> 86	Feature ID: F86 PAOO 7
	tream		Stream ID: A 619.12
	found as expected (Y/N):		Hwy MP (N/A if heli accessed): 3 8/
Latitude: 69° 46' 01.9389	Longitu	de: 148°42'	42.0791" W
Logbook No.: 3 Logbook Page No.: 6		Fish Mortalities:	N/A Total Photos: 4
	9 Cl	B@ CL P_P86PA007_00	I I B to PR CI
	No.: 1-180111007-002-03   Pic.No.	1-1861 ADD 1-00	3-LB Pic No.: P FX6PAW7_W1-RB
Other Pic No(s).:  N/A			
			CONTRACTOR STREET, STR
Weather (Describe): NUCCAST	Precipitation (	Describe):	One
Water Temperature (°C): 12, 2 9	Air Temperature (°C): \4	pH: 5.17	Dissolved Oxygen (mg/l): / 0, 4 3
Specific Conductance(µS/cm): 556	Turbidity (NTU): 0.76	ORP (mV): 195.8	Dissolved Oxygen (%): 98.5 ' 96.7
Ambient Conductance(μS/cm): 42\	Odor: none Sheen (Y/N): N	Color: clear	Last date of Calibration: 8/16/2015
	geature is a wetland d	epressian	Wetted Width (m): 25.2
Flow (Y/N): Notes:  Riparian Veg at 0-5 m at LB: Riparian Veg	at 0-5 m at RB: Stream Substrate:	Aquatic Habitats	Thalweg Depth @ CL (m): 0.14 m
00	rass/Sedge (%) (OOOrganics (%)	Sand Bar	Large Woody Debris
	hrubs (%)	Mud Bar	Overhanging vegetation
1.4	rees (%)Sand (%)	Gravel Bar	Contiguous Wetlands
	meter DBH (in.) Gravel (%)	Riffles	Emergent Plants
Stream Type:	Cobble (%)	Pools Undercut Bank	Submerged Plants
PerennialIntermittent	Ephemeral Boulders (%)	Officer cut balls	•
		100	
STREAM PROFILE: Cross Sectional at Crossing	(include riparian vegetation, wetted width, w.	l iter depth, substrate, and	Jaquatic habitats)
STREAM PROFILE: Cross Sectional at Crossing		iter depth, substrate, and	Jaquatic habitats)
	w5		I aquatic fiabitats)
			J'aquatic fiabitats)
grasses i dwarb willow	w5		
grasses i dwarb willow	w5		
grasses i dwarb willow	25,2 m u	nidth	Talks)
grasses i dwarb willow	w5	nidth	Talks)
grasses i dwarf willow  gradual  Jow Stopes	25,2 m w	rorulory y	of the standing ware
grasses i dwarf willow  gradual  Jow Stopes	V VI V VI AI V V	ridth rorulory	depth = 0.14m
grasses i dwarf willow  gradual  100 Sopes  STREAM PROFILE: Plan View (include direction  NORTH:	JS, 2 m w  JS, 2 m w  V VV VI AT V  OSS+ grass Substration of flow, centerline, distances from centerline	photo locations, sample	depth = 0.14m
grasses i dwarf willow  gradual  100 Sopes  STREAM PROFILE: Plan View (include direction	JS, 2 m w  JS, 2 m w  V VV VI AT V  OSS+ grass Substration of flow, centerline, distances from centerline	photo locations, sample	depth = 0.14m
grasses i dwarf willow  gradual  100 Sopes  STREAM PROFILE: Plan View (include direction  NORTH:	JS, 2 m w  JS, 2 m w  V VV VI AT V  OSS+ grass Substration of flow, centerline, distances from centerline	photo locations, sample	depth = 0.14m
grasses i dwarf willow  gradual  100 Sopes  STREAM PROFILE: Plan View (include direction  NORTH:	JS, 2 m w  JS, 2 m w  V VV VI AT V  OSS+ grass Substration of flow, centerline, distances from centerline	photo locations, sample	depth = 0.14m
grasses i dwarf willow  gradual  100 Sopes  STREAM PROFILE: Plan View (include direction  NORTH:	JS, 2 m w  JS, 2 m w  V VV VI AT V  OSS+ grass Substration of flow, centerline, distances from centerline	photo locations, sample	depth = 0.14m
grasses idward willow  gradual  low  Stopes  STREAM PROFILE: Plan View (include direction  NORTH:	JS, 2 m w  JS, 2 m w  V VV VI AT V  OSS+ grass Substration of flow, centerline, distances from centerline	ridth rorulory	depth = 0.14m
grasses idward willow  gradual  low  Stopes  STREAM PROFILE: Plan View (include direction  NORTH:	25, 2 m w  V VV VI AT V V  1055+ grass substrator conterline  P  # 016	photo locations, sample	depth = 0.14m
gradual  Jow Stopes  STREAM PROFILE: Plan View (include direction NORTH:  12 (105 m from) Tayset	25, 2 m w  V VV V VI AT V V  1055+ grass substrations from centerline  P  * Off	photo locations, sample	depth = 0.14m
gradual Jow Stopes  STREAM PROFILE: Plan View Include direction NORTH:  T  105 m from Tarset	25, 2 m w  V VV VI AT V V  1055+ grass substrator conterline  P  # 016	photo locations, sample	depth = 0.14m

Page 1 of <u>2</u>

Feature ID: F86PAOO 7

Ainnow Traps (\	HBUTES Y/N):	Hook and Line (Y/N)	): /	Beach Seine (Y	/N): N	Fykė Net (Y/N):	Hoop Net (Y/N):
No. of Minnow Traps Set: 3 Date & Time in: (mm/dd/yyyy)		Date & Time in:	1	Date &Time in: (mm/dd/yyyy)		Date & Time in: (mm/dd/yyyy)	Date & Time In: (mm/dd/yyyy)
ate & Time in:		No. of lines in water	r:	No. of passes:		Date & Time out:	Date & Time out:
71/97 / 1096/13		Time lines in water:		Reach Length (		(mm/dd/yyyy)	(mm/dd/yyyy)
nm/dd/yyyy) LECTROFISHING	1230	<b>网络美洲人</b> 自由于2016年3	a register from the			1月2月2日 日本大学 2月1日 日本	Mary Mary Street,
Y/N):	The second secon	me:	EF End Time:	No. of Contract of	EF Time (seco	nds): E	F Reach Length (m):
uty Cycle:	\	Frequency (Hz):		Waveform:		Sampling Efficiency (% of	
ırrent (A):		Volts (V):		Power (W):			(amp x vol
SH OBSERVAT	IONS			生物性物		NAME OF THE PARTY OF	
(Seq. Num)	Gear Type	Species		Total Length (mm)	Life Stage (Juvenile or Ad	Disposition (Dead or Alive)	Picture No.
NA	NA	NI	A	NA	NI	MA	NA
	- 1		1	"	l'	1	//
-				-	1		-64
-			-	-	/		
1							
	1		1		-		
TES (any add	itional information	And bearing that the state	Carlo Jakan	Voltage and State	Mark Street		ALMO (SALE) STATE OF THE
No - Lear	fish ture is	caught a we	in hand d	MT	<b>₩</b> - ,	not a stree	ed no define
	,				tle to	10 flor	~
- 50	hannel  ASS (w)  SPOINTS (If applie	cable)	S ubst			10 flo	

### This form is to be completed before leaving the field site.

Feature ID: F86PA007

FT # AL019.12

Date: 8 37/15

For all items not checked, please provide detailed explanation in the notes section of data form.

### 1. Site Description

- Was ADF&G contacted before conducting any work in this area?
- Site Description complete? (Every cell must have entry or N/A)
- Were all photos taken and labeled correctly?

### 2. Physical/Chemical Attributes

- Calibration performed prior to sampling?
- Physical/Chemical attributes complete? (Every cell must have entry or N/A)
- Water quality data within expected ranges?
  - ₽<sub>5</sub> pH: 4.0 − 10.0
  - № NTU: 0 3000
  - Ŋ DO (mg/L): 1.0 − 15.0
  - ▼ Temp.: 1.0 19.0
  - Specific Conductance: 20 1500

NIA If outside expected ranges, was sample re-taken?

Are units correct?

### 3. Stream Profile

- Stream profile view sketch included?
- Stream profile view captures water depth and wetted width?
- Stream profile view captures where efforts were made to capture fish?

#### 4. Methods Attributes

- Methods attributes complete? (Every cell must have entry or N/A)
- Were methods used adequate (explanation needed if no methods selected)?

### 5. Electrofishing Attributes

MA

Electrofishing attributes complete? (Every cell must have entry or N/A)

Are units correct?

Feature ID: F36 PHOO?

#### 6. Fish Observations

Are all fish captured/observed recorded in the Fish Observation table?

Are units correct? (Total Length (mm))

Were adequate photos taken of fish captured? (Take a photo if in doubt)

#### 7. General

- Feature ID and Field Target # are consistent on data forms, logbook entries, photos, and maps?
- All additional data in logbook captured on data form and additional photos noted?
- Were all additional comments on stream habitat, etc. recorded on data form?
- Was any gear missing/damaged for this survey or did you have any problems that should require resampling of this stream for an adequate survey effort?

By signing below, I verify that all field data for this site has been verified for accuracy and completeness.

X Neal Smith X Grand Signature

Signature

Fleid Crew Chief (print)

Skanature



P\_F86PA007\_001\_US LOOKING US AT OFF-ROW TARGET



P\_F86PA007\_002\_DS LOOKING DS AT OFF-ROW TARGET

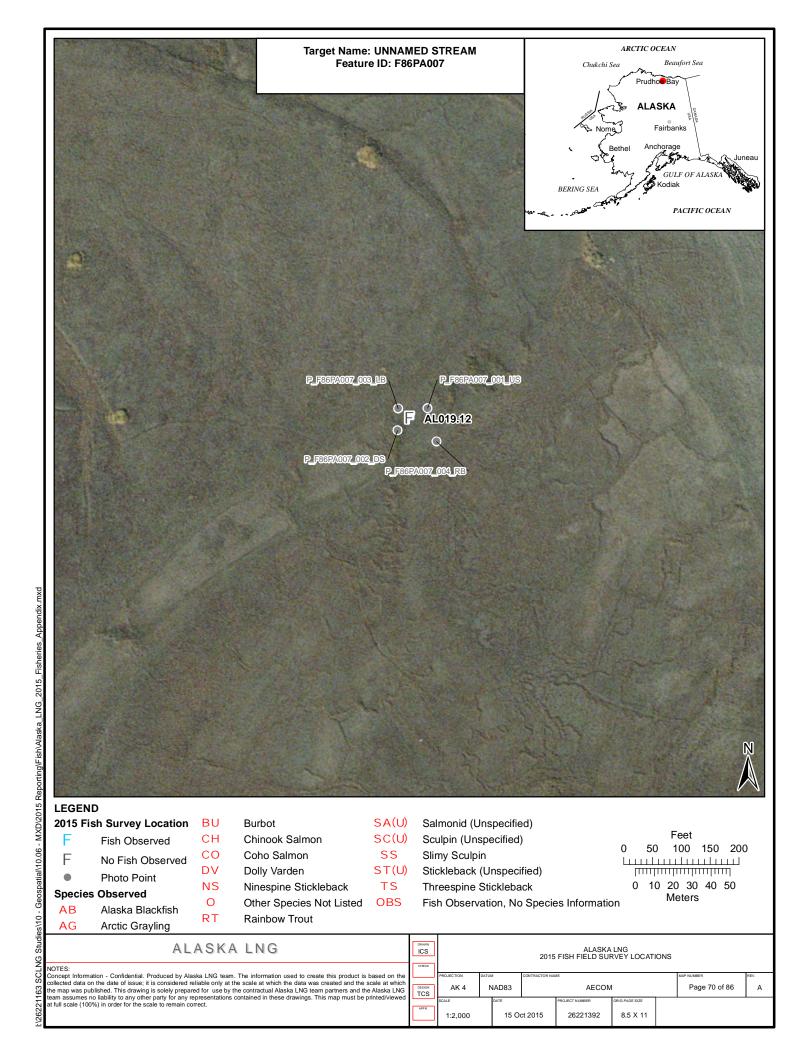
8/26/2015 AL019.12





P\_F86PA007\_004\_RB LOOKING AT RB AT OFF-ROW TARGET

8/26/2015 AL019.12



SITE DESCRIPTION	<b>位对多类形成的有关。但可以到此是各种的自然</b>				
Date: 8/27/2015 Investigators: SCS NSS ASF	Team No.: F86   Feature ID: F86   A00 9				
Stream Name: Thelma Creek	Stream ID: ALO 15				
Pipeline Milepost: 37 / Stream found as expected (Y/N):	Hwy MP (N/A if heli accessed): 384				
100 401 411 26014 .					
US @ CI RB to II	B@ CL LB to RB@ CL				
Pic No.: P-F86/A009-00/-US Pic No.: P-F86/A009-009-DS Pic No.:	P_F 86PA009-003-1B Pic No.: EF86FA009-004-RB				
Other					
Pic No(s).:					
PHYSICAL/ CHEMICAL ATTRIBUTES:					
Weather (Describe): Over Cast, windy Precipitation (					
Water Temperature (°C): 4.62 Air Temperature (°C): 4	pH: 6.04 Dissolved Oxygen (mg/l): 13.9/				
Specific Conductance(µS/cm): 36 3 Turbidity (NTU): 0.69	ORP (mV): 891, 9 Dissolved Oxygen (%): 107, 9				
Ambient Conductance(µS/cm): 223 Odor: Nove Sheen (Y/N): N	Color: Clast date of Calibration: 8/26/2015				
Defined Channel (Y/N): Notes: wetland pools / puddles					
Riparlan Veg at 0-5 m at LB: Riparlan Veg at 0-5 m at RB: Stream Substrate:	Thalweg Depth @ CL (m): . 15 m				
15 Grass/Sedge (%) 15 Grass/Sedge (%) 16 O Organics (%)	Sand BarLarge Woody Debris				
5 Shrubs (%) 5 Shrubs (%) Silt (%)	Mud BarOverhanging vegetation				
	Gravel Bar Contiguous Wetlands				
MA Diameter DBH (in.) MA Diameter DBH (in.) Gravel (%)	RifflesEmergent Plants				
Stream Type: © Cobble (%)	Pools Submerged Plants				
7 Pauldana (0/)	Undercut Banks				
PerennialIntermittentEphemeralBoulders (%)					
Perennialintermittent/cpnemeral					
Perennialintermittent/cpnemeral	ater depth, substrate, and aquatic habitats)				
Perennialintermittent/cpnemeral	ater depth, substrate, and aquatic habitats)				
Perennialintermittent/cpnemeral	ater depth, substrate, and aquatic habitats)				
Perennialintermittent/cpnemeral	ater depth, substrate, and aquatic habitats)				
Perennialintermittent/cpnemeral	ater depth, substrate, and aquatic habitats)  d wend willows  grasses				
Perennialintermittentcpnemeral	ater depth, substrate, and aquatic habitats)  d wend willows  grasses				
Perennialintermittent/cpneineral	ater depth, substrate, and aquatic habitats)				
Perennialintermittent/cpneineral	ater depth, substrate, and aquatic habitats)  Sweet willows  Grasses				
STREAM PROFILE: Cross Sectional at Crossing (include riparian vegetation, wetted width, was a sign of the sign of	ater depth, substrate, and aquatic habitats)  8 werd willows  9 ra 5585				
STREAM PROFILE: Cross Sectional at Crossing (include ripartan vegetation, wetted width, was a section of the second of the secon	ater depth, substrate, and aquatic habitats)  J wend willows  Grasses  Grasses  MALLENA  grass/moss substate				
STREAM PROFILE: Cross Sectional at Crossing (include riparian vegetation, wetted width, was a sectional at Crossing (include riparian vegetation, wetted width, was a sectional at Crossing (include riparian vegetation, wetted width, was a sectional at Crossing (include riparian vegetation, wetted width, was a section of the section centerline distances from centerline to the section of the sect	ater depth, substrate, and aquatic habitats)  Sweet willows  Grasses  Lift   North All Market   Market				
STREAM PROFILE: Cross Sectional at Crossing (include riparian vegetation, wetted width, was a sectional at Crossing (include riparian vegetation, wetted width, was a sectional at Crossing (include riparian vegetation, wetted width, was a sectional at Crossing (include riparian vegetation, wetted width, was a section of the section centerline distances from centerline to the section of the sect	ater depth, substrate, and aquatic habitats)  Sweet willows  Grasses  Lift   North All Market   Market				
STREAM PROFILE: Cross Sectional at Crossing (include riparian vegetation, wetted width, was a sectional at Crossing (include riparian vegetation, wetted width, was a sectional at Crossing (include riparian vegetation, wetted width, was a sectional at Crossing (include riparian vegetation, wetted width, was a section of the section centerline distances from centerline to the section of the sect	ater depth, substrate, and aquatic habitats)  I wend willows  Grasses  Grasses  grass/moss substate				
STREAM PROFILE: Cross Sectional at Crossing (include riparian vegetation, wetted width, was a sectional at Crossing (include riparian vegetation, wetted width, was a sectional at Crossing (include riparian vegetation, wetted width, was a section of section of flow).  The section of flow centerline distances from centerline north:  The section of flow centerline distances from centerline pools.	ater depth, substrate, and aquatic habitats)  Joseph Willows  Grasses  Grasses  grass/moss substate  photo locations, sample locations by gear type and ROW)  Feature is series of arthurous puddles				
STREAM PROFILE: Cross Sectional at Crossing (include riparian vegetation, wetted width, was a sectional at Crossing (include riparian vegetation, wetted width, was a sectional at Crossing (include riparian vegetation, wetted width, was a section of section of flow).  The section of flow centerline distances from centerline north:  The section of flow centerline distances from centerline pools.	ater depth, substrate, and aquatic habitats)  Joseph Willows  Grasses  Grasses  grass/moss substate  photo locations, sample locations by gear type and ROW)  Feature is series of arthurous puddles				
STREAM PROFILE: Cross Sectional at Crossing (include riparian vegetation, wetted width, was a sectional at Crossing (include riparian vegetation, wetted width, was a sectional at Crossing (include riparian vegetation, wetted width, was a section of section of flow).  The section of flow centerline distances from centerline north:  The section of flow centerline distances from centerline pools.	ater depth, substrate, and aquatic habitats)  Sweet willows  Grasses  Lift   North All Market   Market				
STREAM PROFILE: Cross Sectional at Crossing (include riparian vegetation, wetted width, we discontinuous Stagnant Puddles = depth of 15.  STREAM PROFILE: Plan View (include direction of flow, centerline, distances from centerline)  NORTH:  Pools  Photograph	ater depth, substrate, and aquatic habitats)  Joseph Willows  Grasses  Grasses  grass/moss substate  photo locations, sample locations by gear type and ROW)  Feature is series of arthurous puddles				
STREAM PROFILE: Cross Sectional at Crossing (include riparian vegetation, wetted width, we discontinuous Stagnant Puddles = depth of 15.  STREAM PROFILE: Plan View (include direction of flow, centerline, distances from centerline)  NORTH:  Pools  Photograph	atter depth, substrate, and aquatic habitats)  Javen willows  Grasses  Mark HAM HAM A HAM				
STREAM PROFILE: Cross Sectional at Crossing (include riparian vegetation, wetted width, was a sectional at Crossing (include riparian vegetation, wetted width, was a sectional at Crossing (include riparian vegetation, wetted width, was a section of section of flow).  The section of flow centerline distances from centerline north:  The section of flow centerline distances from centerline pools.	ater depth, substrate, and aquatic habitats)  Joseph Willows  Grasses  Grasses  grass/moss substate  photo locations, sample locations by gear type and ROW)  Feature is series of arthurous puddles				

Feature ID: F86PADO9

Minnow Traps (Y/N): Hook and Line (Y/N): Beach Seine (Y/N): Fyke Net (Y/N): Hook	oop Net (Y/N):
No. of Minnow Traps Set: 2 Date & Time in: Date & Time in: Date & Time in: Date	ate & Time in:
(mm/dd/yyyy) (mm/dd/yyyy) / (mm/dd/yyyy) /	nm/dd/yyyy) 1
	ate & Time out: nm/dd/yyyy)
Date & Time out: 8/24/2015 Time lines in water: Reach Length (m):	1
(mm/dd/yyyy) 1045  ELECTROFISHING ATTRIBUTES	STATE OF THE PARTY
EF (Y/N):	Length (m):
Duty Cycle: \ Frequency (Hz): Waveform: Sampling Efficiency (% of sample re	
Current (A): Volts (V): Power (W):	(amp x volts)
FISH OBSERVATIONS	
ID (Seq. Num) Gear Type Species Total Length (Juvenile or Adult) Disposition (Dead or Alive) Picture	re No.
N/A N/A N/A N/A N/A N/A	11
WIN MIN WITH MIN	11
	,
	1
	1
	1
NOTES (any additional information)	1000年第二十四十二十二十二十二十二十二十二十二十二十二十二十二十二十二十二十二十二十二
-no fish caught in MT	
- 'stream' future is a sell's of disconnected pools/public	es in
- 'stream' justine is a series of disconnected pools/puddle welland complexe. No flow + very shallow	
withing confuses in flow + very sichline	
- grass longanic substrate	
-77 A)	
MISCELLANEOUS POINTS (if applicable)	Service and Manager
Point ID: Description:	性。 自 的是 医四种
Point ID: Description:	
Field Scientist/ Technical	
Crew Chief: Technician: Lead:	

Revision Date: 06/09/2015

# Stream Fish Investigations Field Form QA/QC Checklist

This form is to be completed before leaving the field site. Date: 8/27/15 Feature ID: F86PA009 FT# ALDIS For all items not checked, please provide detailed explanation in the notes section of data form. 1. Site Description Was ADF&G contacted before conducting any work in this area? Site Description complete? (Every cell must have entry or N/A) Were all photos taken and labeled correctly? 2. Physical/Chemical Attributes Calibration performed prior to sampling? Physical/Chemical attributes complete? (Every cell must have entry or N/A) Water quality data within expected ranges? ➢ NTU: 0 − 3000 DO (mg/L): 1.0 - 15.0 ▼ Temp.: 1.0 – 19.0 Specific Conductance: 20 - 1500 If outside expected ranges, was sample re-taken? Are units correct? 3. Stream Profile Stream profile view sketch included? Stream profile view captures water depth and wetted width? Stream profile view captures where efforts were made to capture fish? Plan view sketch included? 4. Methods Attributes Methods attributes complete? (Every cell must have entry or N/A) Were methods used adequate (explanation needed if no methods selected)? 5. Electrofishing Attributes

Electrofishing attributes complete? (Every cell must have entry or N/A)

Are units correct?

# Stream Fish Investigations Field Form QA/QC Checklist

Feature ID: F86P7009

#### 6. Fish Observations

Are all fish captured/observed recorded in the Fish Observation table?

Are units correct? (Total Length (mm))

Were adequate photos taken of fish captured? (Take a photo if in doubt)

### 7. General

- Feature ID and Field Target # are consistent on data forms, logbook entries, photos, and maps?
- All additional data in logbook captured on data form and additional photos noted?
- Were all additional comments on stream habitat, etc. recorded on data form?
- Was any gear missing/damaged for this survey or did you have any problems that should require resampling of this stream for an adequate survey effort?

By signing below, I verify that all field data for this site has been verified for accuracy and completeness.

X Neal Smith X Well Later Signature

Signature

Field Crew Chief (print)

Signature



P\_F86PA009\_001\_US LOOKING US AT OFF-ROW TARGET



P\_F86PA009\_002\_DS LOOKING DS AT OFF-ROW TARGET

8/27/2015 AL015

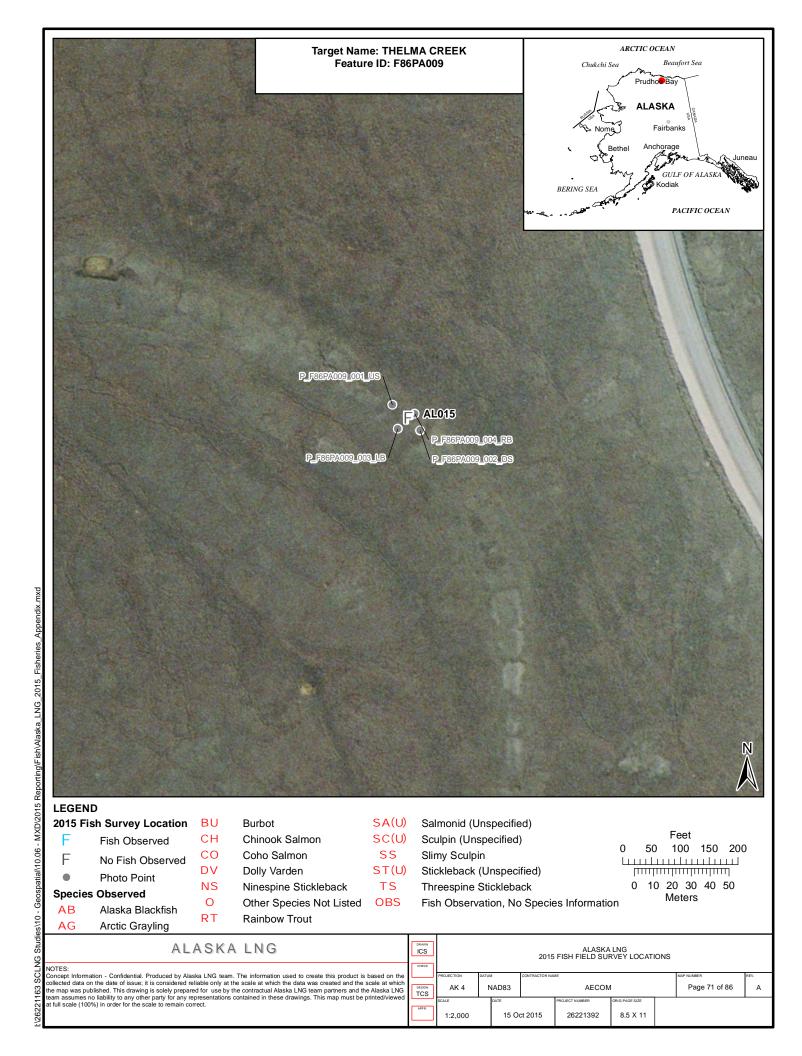


P\_F86PA009\_003\_LB 8/27/2015 AL015 LOOKING AT LB AT OFF-ROW TARGET



P\_F86PA009\_004\_RB LOOKING AT RB AT OFF-ROW TARGET

8/27/2015 AL015



Revision Date: 3/19/2015

SITE DESCRIPTION	THE RESERVE THE PARTY OF THE PA				
The state of the s	tors: SCS NJS ADF	Team No.: F86	Feature ID: F86PAOQ6		
111111111111111111111111111111111111111	Stream ID: AL 005./				
Stream Name: Stream ID: AL 705-/  Pipeline Milepost: 32, 7 Stream found as expected (Y/N): Y Hwy MP (N/A if heli accessed): heli					
Latitude: \$6 69° 52'21,7408" N Longitude: 148° 49'17,2084" W					
Logbook No.: 3 Logbook Page No.:		Fish Mortalities:	1 Total Photos: 7		
IIS @ CI DS	@ CI RB to	LB@ CL	LB to RB@ CL		
Pic No.: P-F86 PAODE -ODI - US Pic	No.: P- 7867 A DOG -002 - DS Pich	10: P-186971006-003_	LB Pic No.: P_F86PA006_004_8B		
Other P_F86PA006_00S_ 4EE					
Pic No(s).: P-F86PA006-006-AE	ethr.				
PHYSICAL/ CHEMICAL ATTRIBUTES	Purchiston of the state of the	n (Describe): PO	<b>的复数存货的交流存货的 医克里特斯科</b>		
Weather (Describe): Mostly CI	Air Temperature (°C):	pH: 7.72	Dissolved Oxygen (mg/l): 12.17		
Water Temperature (°C): 10.01 Specific Conductance(µS/cm): 252	Turbidity (NTU): 1,6 H	ORP (mV): [89.7			
Ambient Conductance(µS/cm): 180	Odor: none Sheen (Y/N): N	Color: Cloar	Last date of Calibration: 8/16/2015		
Defined Channel (Y/N): Notes:	defined outflow for	- large lak	Wetted Width (m): 2.43		
Flow (Y/N): Y Notes:	ribles 120015		Thalweg Depth @ CL (m): , 34 m		
1 110	g at 0 5/m at RB: Stream Substrate:  Grass/Sedge (%) 70 Organics (9	Aquatic Habitats Sand Bar	Large Woody Debris		
1-	Grass/Sedge (%)	Mud Bar	Overhanging vegetation		
	Trees (%) Sand (%)	Gravel Bar	Contiguous Wetlands		
14	ameter DBH (in.) Gravel (%)	Riffles	Emergent Plants		
Stream Type:	Cobble (%)	Pools	Submerged Plants		
Perennial Intermittent	O Roulders (9	() Undercut Bank	ks		
STREAM PROFILE; Cross Sectional at Crossing		water depth, substrate, an	d aquatic habitats)		
STREET THE STREET STREET					
		Willows			
	) U2	WILLIAMS	ies		
# X. X	2.43 m	willows grass			
1 a de de de la constante de l	2.43 m	grass	es which arey		
M June Charley	The state of the s	中的	MINGANAX		
M	The state of the s	中的	MINGANAX		
Vide well with the state of the	34m J	grass grass submerged/energ	MINGANAX		
M	The state of the s	中的	MINGANAX		
side channel	mud/silt + organics	submerged/energ	ent neg.		
M	mud /sil+ or ganics	Submerged/energe	ent meg ( sargacine)		
STREAM PROFILE: Plan View (Include direction	mud /sil+ or ganics	submerged/energ	ent meg ( sargacine)		
STREAM PROFILE: Plan View (Include direction	mud /sil+ or ganics on of flow, centerline, distances from centerl  WT3 = 41	Submerged/energe	ent meg ( sargacine)		
STREAM PROFILE: Plan View (Include direction	mud /sil+ or ganics mod flow, centerline, distances from centerl mr2  mr2	submerged/energe	ent weg , sargacter to the formation of the sargacter of		
STREAM PROFILE: Plan View (Include direction	mud /sil+ or ganics mod flow, centerline, distances from centerl mr2  mr2	submerged/energe	ent weg , sargacter to the formation of the sargacter of		
STREAM PROFILE: Plan View (Include direction	mud /sil+ or ganics on of flow, centerline, distances from centerl  WT3 = 41	submerged/energe	ent weg , sargacter to the formation of the sargacter of		
STREAM PROFILE: Plan View (Include direction	mud /sil+ or ganics mod flow, centerline, distances from centerl mr2  mr2	submerged/energe	ent weg , sargacter to the formation of the sargacter of		
STREAM PROFILE: Plan View (Include direction	mud /sil+ or ganics  mid /sil+ or ganics	submerged/energy ine, photo locations, sample on from target	ent weg , sargacter to the formation of the sargacter of		
STREAM PROFILE: Plan View (Include direction	mud /sil+ or ganics  mid /sil+ or ganics	submerged/energy ine, photo locations, sample on from target	ent meg ( sargacine)		
STREAM PROFILE: Plan View (Include direction	mud /sil+ or ganics mod flow, centerline, distances from centerl mr2  mr2	submerged/energy ine, photo locations, sample on from target	ent weg , sargace and ROW)		

Page 1 of  $\frac{4}{2}$ 

# STREAM FISH INVESTIGATION DATA FORM Feature ID: F86PADO6

METHODS ATTR	IBUTES.	生性學是自然的地	能能用原則	<b>发展的时间的时</b>	位胜的是(3)	<b>建设的企业设计</b>
Minnow Traps (	(/N):	Hook and Line (Y/N):	Beach Seine	(Y/N): Fyke	Net (Y/N):	Hoop Net (Y/N):
No. of Minnow	Fraps Set: 3	Date & Time in: (mm/dd/yyyy)	Date &Time (mm/dd/yyy		e & Time in:	Date & Time In: (mm/dd/yyyy)
Date & Time in:		No. of lines in water:	No. of passes		& Time out:	Date & Time out:
(mm/dd/yyyy) Date & Time out (mm/dd/yyyy)	8/17/2015	Time lines in water:	Reach Length		n/dd/yyyy)	(mm/dd/yyyy)
ELECTROFISHIN	Control of the Contro	FARE TO A STATE OF	WANTED BY		4. 机带色带石油	CONTRACTOR OF THE PARTY
EF (Y/N): /	EF Start Tin	ne: EF End Ti	ime:	EF Time (seconds)	EI	F Reach Length (m):
Duty Cycle:		Frequency (Hz):	Waveform:	Sam	pling Efficiency (% of	sample reach):
Current (A):		Volts (V):	Power (W):			(amp x volts)
FISH OBSERVAT	IONS			<b>医温度性性</b>	California de Como	Marine Marine State of the State of
ID (Seq. Num)	Gear Type	Species	Total Length (mm)	Life Stage (Juvenile or Adult)	Disposition (Dead or Alive)	Picture No.
001	m+ 3	niversine stellar		juvenile	alve	Na
002	11	11	46	11	alive	nla
003	Ly.	()	46	L.	alip	na
604	1 7	11	38	(1	dead	na
005	94	' '	41	",	alse	nja
006	( )		42	16	alike	NA
607	11	()	43	17	1.5	n/2
009	4	()	47	11	(1	MA
009	((	11	46	u	(1	Ma
010	MTZ		50	Juladuet	alor	/U/A
011	((	( (	41	juvenile	alive	NA
01			41	Inverse	anve	NIA
	tional information		學是自然性質			和特型基本体的基础
- Targu	one of	ninospine e nortality-her ated at 1 fined channel	ake on	the range	of the A	o wetlands
Point ID: Point ID: Field Crew Chief:	S POINTS (If applica	Description  Description  Field Scient  Technician	on:	W/A X/A	Technical Lead:	24公平10年10年10日

Revision Date: 06/09/2015

# STREAM FISH INVESTIGATION DATA FORM Feature ID: 486 P A 006

ID (Seq. Num)	Gear Type	Species	Total Length (mm)	Life Stage (Juvenile or Adult)	Disposition (Dead or Alive)	Picture No.
00 013	MT2	nivespine stekloback	43		alve	NIA
04	1110	111450114 30 664 10-61	47	Juv	201-	11/13
015			50	Surla de Ot		
016			43	Suv		
017			52	Sur/adult Sur/adult		
018,			51	3 111		
011			43	juv.		
020	La= .		47	11		
621			55 51	Surladult		
623 024	20.00					
623			43	Sur.		
024			46			
026		11/2 22 23	48	11		
026			41	11		7
027			52	jur/adult		
02-6			45	Suv		
029			50 38	Juladult		
030				Sur		
031			47	11		
031			45	11		
033			44	11		
034	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\		46	11		
035			42	11		V
836			44	()	1	
637			46	( )		
038			43	( )	1	
039	m+1		45	juvenila	doad	Na
040			48		alive	#P. F. 86 PAOOG_007.N
041			42		alive	n/a
042			52	juvladult	alive	na
043			45	juverile	alive	nla
044			52	juy/adult	(%	n/a
049			51		11	n/a
046		4	52	l l	( )	n/a
047			\$5 \$3	11	11	n/a
048			53	11	()	nla
049			55		19	1/19
050			43	juverila	(1	nla
051			53	Jurladal +		nla
052			52	J 11	11	0/1
053			50	' \	11	n/a
00,4	A.	V	48	Juv.	11	1/1

Feature ID: F86PADO6

FISH OBSERVAT	IONS (continued)		<b>经销售产品</b>		的可以持续	10年2月1日 10月1日
D (Seq. Num)	Gear Type	Species	Total Length (mm)	Life Stage (Juvenile or Adult)	Disposition (Dead or Alive)	Picture No.
)55	MTI	rine sur sictle has		juv	dive	-n/a
056		1	47	11	11	nla
657			56	jur/adilt	11	2/4
058			56	311	- 16	n/a
159			52	11	1 (	nla
M60			43	5 ./	11	h/R
061			47	Sur	11	* /
062			41	11	11	n/a
063			47	11		n/a
(1)				Fig.	11	11/1
064			43		( )	n/a
065			45	( )		n/K
066	1		47	11	At .	n/a
767	1		44	17	( )	n/a
168			43	11	11	nla
169			44	Į l	1 (	Na
70			42	( \	11	nla
) F C	1		48	11	1.0	nla
7 -1 1			=			1110
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# Stream Fish Investigations Field Form QA/QC Checklist

This form is to be completed before leaving the field site. Feature ID: F86PA006 FT#ALOOS. For all items not checked, please provide detailed explanation in the notes section of data form. 1. Site Description Was ADF&G contacted before conducting any work in this area? Site Description complete? (Every cell must have entry or N/A) Were all photos taken and labeled correctly? 2. Physical/Chemical Attributes Calibration performed prior to sampling? Physical/Chemical attributes complete? (Every cell must have entry or N/A) Water quality data within expected ranges? pH: 4.0 − 10.0 NTU: 0 − 3000 DO (mg/L): 1.0 - 15.0 **★** Temp.: 1.0 – 19.0 Specific Conductance: 20 - 1500 N/A□ If outside expected ranges, was sample re-taken? Are units correct? 3. Stream Profile Stream profile view sketch included? Stream profile view captures water depth and wetted width? Stream profile view captures where efforts were made to capture fish? Plan view sketch included? 4. Methods Attributes Methods attributes complete? (Every cell must have entry or N/A) Were methods used adequate (explanation needed if no methods selected)? 5. Electrofishing Attributes Electrofishing attributes complete? (Every cell must have entry or N/A) Are units correct?

1 14 5 7

# Stream Fish Investigations Field Form QA/QC Checklist

Feature ID: <u>F86 PA00</u>6

#### 6. Fish Observations

- Are all fish captured/observed recorded in the Fish Observation table?
- Are units correct? (Total Length (mm))
- Were adequate photos taken of fish captured? (Take a photo if in doubt)

### 7. General

- Feature ID and Field Target # are consistent on data forms, logbook entries, photos, and maps?
- All additional data in logbook captured on data form and additional photos noted?
- Were all additional comments on stream habitat, etc. recorded on data form?
- Was any gear missing/damaged for this survey or did you have any problems that should require resampling of this stream for an adequate survey effort?

By signing below, I verify that all field data for this site has been verified for accuracy and completeness.

XNeal Smith X heal Later Signature

Fleld Crew Chief (print)

Signature