

<b>Site ID</b>			
<b>15CCT02-GB101 (Estuarine Grab)</b>			
Date	May 30, 2015	Day of Year	150
USGS Field Activity Number (FAN)	2015-315-FA (15CCT02)		
Field Crew	Terry McCloskey, Nancy Dewitt, Cathryn Wheaton		
Platform	R/V Mako	Location	Grand Bay, Alabama/Mississippi
Arrival Time (CDT)	10:34	Departure Time (CDT)	Not recorded
Latitude	30° 21.599'	Longitude	88° 22.084'
Water Depth (m)	3.1		
GPS used ( <i>Manf., Model</i> )	Garmin Echomap 50s	GPS Waypoint	0025
YSI ( <i>Model</i> )	Pro-plus	Camera ( <i>Manf., Model</i> )	N/A
<b>Sample Type/Sample Info</b>		<b>Sample Type/Sample Info</b>	
Y/N, Time, Measurement		Y/N, Time, Measurement	
<b>Surface/Grab: USGS PetitePONAR (Grab)</b>		<b>Radium Water Sampling: Mn Fiber</b>	
Vegetation/Sediment Type	Silty fine sand	Start Time (CDT)	10:38
No. of Ponar grabs combined	1	Stop Time (CDT)	10:55
		Volume Filtered	5 gal.
		<b>LABEL BAG WITH SITE NUMBER</b>	101G
<b>Water Quality Parameters: YSI</b>			
Water Type (Marsh, Estuarine)	Open bay		
Temperature (°C)	27.3		
Barometric Pressure (mmHg)	766.2		
Dissolved Oxygen (DO) (%)	78.5		
DO (mg/L)	7.20		
Specific Conductance (mS/cm)	22.87		
Salinity	13.75		
pH	7.63		
pH (mV)	-91.8		
ORP (mV)	183.5		
<b>Notes</b>			
Created new waypoint offshore of sand bar.			
Ponar surface not flat.			
WP 0025 on Ecomap50s Garmin - Date 30 May-15; 10:37:40AM			
<b>Photos</b>			
No photos, similar to GB165G			

<b>Site ID</b>				<b>15CCT02-GB102 (Estuarine Grab)</b>			
Date	May 30, 2015	Day of Year	150				
USGS Field Activity Number (FAN)	2015-315-FA (15CCT02)						
Field Crew	Terry McCloskey, Nancy Dewitt, Cathryn Wheaton						
Platform	R/V Mako	Location	Grand Bay, Alabama/Mississippi				
Arrival Time (CDT)	12:35	Departure Time (CDT)	Not recorded				
Latitude	30° 22.207'	Longitude	88° 21.518'				
Water Depth (m)	1.5						
GPS used ( <i>Manf., Model</i> )	Garmin Echomap 50s	GPS Waypoint	0051				
YSI ( <i>Model</i> )	Pro-plus	Camera ( <i>Manf., Model</i> )	N/A				
<b>Sample Type/Sample Info</b>		<b>Y/N, Time, Measurement</b>		<b>Sample Type/Sample Info</b>		<b>Y/N, Time, Measurement</b>	
<b>Surface/Grab: USGS PetitePONAR (Grab)</b>				<b>Radium Water Sampling: Mn Fiber</b>			
Vegetation/Sediment Type	Fine sand to med sand	Start Time (CDT)	12:44				
No. of Ponar grabs combined	1	Stop Time (CDT)	Not recorded				
		Volume Filtered	5 gal.				
		<b>LABEL BAG WITH SITE NUMBER</b>	102G				
<b>Water Quality Parameters: YSI</b>							
Water Type (Marsh, Estuarine)	Open bay - atop shoal						
Temperature (°C)	27.7						
Barometric Pressure (mmHg)	765.7						
Dissolved Oxygen (DO) (%)	104.1						
DO (mg/L)	7.63						
Specific Conductance (mS/cm)	21.77						
Salinity	13.03						
pH	7.80						
pH (mV)	-101.4						
ORP (mV)	136.3						
<b>Notes</b>							
<p>Creating a new site location on sand bar.</p> <p>WP0051 on Echomap 50s 30 May -2015 12:48:01PM</p> <p>Site on top shoal east of submerged</p>							
<b>Photos</b>							
No photos, similar to 15CCT02-GB165							

<b>Site ID</b>			
<b>15CCT02-GB103 (Estuarine Grab)</b>			
Date	May 30, 2015	Day of Year	150
USGS Field Activity Number (FAN)	2015-315-FA (15CCT02)		
Field Crew	Terry McCloskey, Nancy Dewitt, Cathryn Wheaton		
Platform	R/V Mako	Location	Grand Bay, Alabama/Mississippi
Arrival Time (CDT)	13:44	Departure Time (CDT)	Not recorded
Latitude	30° 21.724'	Longitude	88° 20.920'
Water Depth (m)	3.0		
GPS used ( <i>Manf., Model</i> )	Garmin Echomap 50s	GPS Waypoint	0052
YSI ( <i>Model</i> )	Pro-plus	Camera ( <i>Manf., Model</i> )	N/A
<b>Sample Type/Sample Info</b>		<b>Sample Type/Sample Info</b>	
Y/N, Time, Measurement		Y/N, Time, Measurement	
<b>Surface/Grab: USGS PetitePONAR (Grab)</b>		<b>Radium Water Sampling: Mn Fiber</b>	
Vegetation/Sediment Type	Silty fine sand	Start Time (CDT)	13:53
No. of Ponar grabs combined	1	Stop Time (CDT)	14:09
		Volume Filtered	5 gal.
		<b>LABEL BAG WITH SITE NUMBER</b>	103G
<b>Water Quality Parameters: YSI</b>			
Water Type (Marsh, Estuarine)	Open bay		
Temperature (°C)	28.7		
Barometric Pressure (mmHg)	765.3		
Dissolved Oxygen (DO) (%)	102.5		
DO (mg/L)	7.35		
Specific Conductance (mS/cm)	22.12		
Salinity	13.22		
pH	7.82		
pH (mV)	-102.8		
ORP (mV)	114.5		
<b>Notes</b>			
WP0052 in Garmin - 30 May-2015 1:52:17			
Creating a new site location offshore of sandbar			
<b>Photos</b>			
No photos, similar to 15CCT02-GB165			

<b>Site ID</b>				<b>15CCT02-GB104 (Estuarine Grab)</b>			
Date	May 30, 2015	Day of Year	150				
USGS Field Activity Number (FAN)	2015-315-FA (15CCT02)						
Field Crew	Terry McCloskey, Nancy Dewitt, Cathryn Wheaton						
Platform	R/V Mako	Location	Grand Bay, Alabama/Mississippi				
Arrival Time (CDT)	~ 14:20	Departure Time (CDT)	~14:40				
Latitude	30° 21.989'	Longitude	88° 19.871'				
Water Depth (m)	3.0						
GPS used ( <i>Manf., Model</i> )	Garmin Echomap 50s	GPS Waypoint	0053				
YSI ( <i>Model</i> )	Pro-plus	Camera ( <i>Manf., Model</i> )	N/A				
<b>Sample Type/Sample Info</b>		<b>Y/N, Time, Measurement</b>		<b>Sample Type/Sample Info</b>		<b>Y/N, Time, Measurement</b>	
<b>Surface/Grab: USGS PetitePONAR (Grab)</b>				<b>Radium Water Sampling: Mn Fiber</b>			
Vegetation/Sediment Type	Silty-mud-stinky	Start Time (CDT)	14:24				
No. of Ponar grabs combined	1	Stop Time (CDT)	14:40				
		Volume Filtered	5 gal.				
		<b>LABEL BAG WITH SITE NUMBER</b>	104G				
<b>Water Quality Parameters: YSI</b>							
Water Type (Marsh, Estuarine)	Open bay not on shoal						
Temperature (°C)	27.6						
Barometric Pressure (mmHg)	765.2						
Dissolved Oxygen (DO) (%)	85.5						
DO (mg/L)	90.7						
Specific Conductance (mS/cm)	24.96						
Salinity	15.57						
pH	7.79						
pH (mV)	-100.6						
ORP (mV)	119.2						
<b>Notes</b>							
WP0053 in Echomap 50s (Garmin) 30 May2015 : 02:25:08PM							
Created new site location offshore of sandbar							
<b>Photos</b>							
No photos, similar to 15CCT02-GB165							

<b>Site ID</b>				<b>15CCT02-GB105 (Estuarine Grab)</b>			
Date	May 30, 2015	Day of Year	150				
USGS Field Activity Number (FAN)	2015-315-FA (15CCT02)						
Field Crew	Terry McCloskey, Nancy Dewitt, Cathryn Wheaton						
Platform	R/V Mako	Location	Grand Bay, Alabama/Mississippi				
Arrival Time (CDT)	~ 15:10	Departure Time (CDT)	Not recorded				
Latitude	30° 22.757'	Longitude	88° 19.351'				
Water Depth (m)	1.5						
GPS used ( <i>Manf., Model</i> )	Garmin Echomap 50s	GPS Waypoint	0054				
YSI ( <i>Model</i> )	Pro-plus	Camera ( <i>Manf., Model</i> )	Nikon D5200				
<b>Sample Type/Sample Info</b>		Y/N, Time, Measurement		<b>Sample Type/Sample Info</b>		Y/N, Time, Measurement	
<b>Surface/Grab: USGS PetitePONAR (Grab)</b>				<b>Radium Water Sampling: Mn Fiber</b>			
Vegetation/Sediment Type	Silty mud	Start Time (CDT)	15:13				
No. of Ponar grabs combined	1	Stop Time (CDT)	15:29				
		Volume Filtered	5 gal.				
		<b>LABEL BAG WITH SITE NUMBER</b>	105G				
<b>Water Quality Parameters: YSI</b>							
Water Type (Marsh, Estuarine)	Estuarine						
Temperature (°C)	29.4						
Barometric Pressure (mmHg)	764.7						
Dissolved Oxygen (DO) (%)	102.9						
DO (mg/L)	7.24						
Specific Conductance (mS/cm)	21.13						
Salinity	12.58						
pH	7.87						
pH (mV)	-105.9						
ORP (mV)	126.8						
<b>Notes</b>							
WP0054 in Echomap50s 30 May2015 : 03:13:33PM							
Created new site east side parallel sandbar							
<b>Photos</b>							
N→E→S→W: 420-425							
N=420-421, E=422-423, S=423-424, W=425							

<b>Site ID</b>				<b>15CCT02-GB106 (Estuarine Grab)</b>			
Date	May 31, 2015	Day of Year	151				
USGS Field Activity Number (FAN)	2015-315-FA (15CCT02)						
Field Crew	Chris Smith, Terry McCloskey, Cathryn Wheaton						
Platform	R/V Mako	Location	Grand Bay, Alabama/Mississippi				
Arrival Time (CDT)	10:18	Departure Time (CDT)	10:46				
Latitude	30° 22' 55.3"	Longitude	88° 20' 40.3"				
Water Depth (m)	2.9						
GPS used ( <i>Manf., Model</i> )	Garmin GPSMAP 62stc	GPS Waypoint	156				
YSI ( <i>Model</i> )	Pro-plus	Camera ( <i>Manf., Model</i> )	N/A				
<b>Sample Type/Sample Info</b>		<b>Y/N, Time, Measurement</b>		<b>Sample Type/Sample Info</b>		<b>Y/N, Time, Measurement</b>	
<b>Surface/Grab: USGS PetitePONAR (Grab)</b>				<b>Radium Water Sampling: Mn Fiber</b>			
Vegetation/Sediment Type	Fine sand, clayey silt	Start Time (CDT)	10:26				
No. of Ponar grabs combined	2	Stop Time (CDT)	10:41				
		Volume Filtered	5 gal.				
		<b>LABEL BAG WITH SITE NUMBER</b>					
<b>Water Quality Parameters: YSI</b>							
Water Type (Marsh, Estuarine)	Open bay						
Temperature (°C)	28.3						
Barometric Pressure (mmHg)	765.0						
Dissolved Oxygen (DO) (%)	87.8						
DO (mg/L)	6.11						
Specific Conductance (mS/cm)	29.37						
Salinity	18.08						
pH	7.66						
pH (mV)	-93.6						
ORP (mV)	137.5						
<b>Notes</b>							
Echo sounder 50s GPS waypoint = 0557							
Benthic algae in ponar							
<b>Photos</b>							
No photos							

<b>Site ID</b>			
<b>15CCT02-GB107 (Estuarine Grab)</b>			
Date	May 31, 2015	Day of Year	151
USGS Field Activity Number (FAN)	2015-315-FA (15CCT02)		
Field Crew	Chris Smith, Terry McCloskey, Cathryn Wheaton		
Platform	R/V Mako	Location	Grand Bay, Alabama/Mississippi
Arrival Time (CDT)	10:59	Departure Time (CDT)	Not recorded
Latitude (DD)	30.37673	Longitude (DD)	-88.36403
Water Depth (m)	2.4		
GPS used ( <i>Manf., Model</i> )	Garmin GPSMAP 62stc	GPS Waypoint	157
YSI ( <i>Model</i> )	Pro-plus	Camera ( <i>Manf., Model</i> )	N/A
<b>Sample Type/Sample Info</b>		<b>Sample Type/Sample Info</b>	
Y/N, Time, Measurement		Y/N, Time, Measurement	
<b>Surface/Grab: USGS PetitePONAR (Grab)</b>		<b>Radium Water Sampling: Mn Fiber</b>	
Vegetation/Sediment Type	N/A	Start Time (CDT)	10:59
No. of Ponar grabs combined	2	Stop Time (CDT)	11:22
		Volume Filtered	5 gal.
		<b>LABEL BAG WITH SITE NUMBER</b>	107G
<b>Water Quality Parameters: YSI</b>			
Water Type (Marsh, Estuarine)	Open bay		
Temperature (°C)	29.1		
Barometric Pressure (mmHg)	764.9		
Dissolved Oxygen (DO) (%)	94.8		
DO (mg/L)	6.79		
Specific Conductance (mS/cm)	20.89		
Salinity	12.42		
pH	7.86		
pH (mV)	-105.6		
ORP (mV)	143.8		
<b>Notes</b>			
Garmin echo sounder 50s waypoint = 0559			
NW corner of deeper portion of Grand Bay proper, open water.			
<b>Photos</b>			
No photos			

<b>Site ID</b>			
<b>15CCT02-GB108 (Estuarine Grab)</b>			
Date	May 31, 2015	Day of Year	151
USGS Field Activity Number (FAN)	2015-315-FA (15CCT02)		
Field Crew	Chris Smith, Terry McCloskey, Cathryn Wheaton		
Platform	R/V Mako	Location	Grand Bay, Alabama/Mississippi
Arrival Time (CDT)	11:41	Departure Time (CDT)	Not recorded
Latitude (DD)	30.39206	Longitude (DD)	-88.37344
Water Depth (m)	0.9		
GPS used ( <i>Manf., Model</i> )	Garmin GPSMAP 62stc	GPS Waypoint	158
YSI ( <i>Model</i> )	Pro-plus	Camera ( <i>Manf., Model</i> )	N/A
<b>Sample Type/Sample Info</b>		<b>Sample Type/Sample Info</b>	
Y/N, Time, Measurement		Y/N, Time, Measurement	
<b>Surface/Grab: USGS PetitePONAR (Grab)</b>		<b>Radium Water Sampling: Mn Fiber</b>	
Vegetation/Sediment Type	Silty/clay/fine sand	Start Time (CDT)	11:42
No. of Ponar grabs combined	2	Stop Time (CDT)	Not recorded
		Volume Filtered	5 gal.
		<b>LABEL BAG WITH SITE NUMBER</b>	108G
<b>Water Quality Parameters: YSI</b>			
Water Type (Marsh, Estuarine)	Upper bay→little Bay		
Temperature (°C)	29.0		
Barometric Pressure (mmHg)	764.7		
Dissolved Oxygen (DO) (%)	82.8		
DO (mg/L)	5.96		
Specific Conductance (mS/cm)	19.92		
Salinity	11.82		
pH	7.72		
pH (mV)	-96.8		
ORP (mV)	126.1		
<b>Notes</b>			
WP on ecomap 50s 0561			
<b>Photos</b>			
No photos			



<b>Site ID</b>			
<b>15CCT02-GB109 (Estuarine Grab)</b>			
Date	June 1, 2015	Day of Year	152
USGS Field Activity Number (FAN)	2015-315-FA (15CCT02)		
Field Crew	Chris Smith, Terry McCloskey, Cathryn Wheaton		
Platform	R/V Mako	Location	Grand Bay, Alabama/Mississippi
Arrival Time (CDT)	9:41	Departure Time (CDT)	Not recorded
Latitude (DD)	30.37952	Longitude (DD)	-88.37947
Water Depth (m)	1.7		
GPS used ( <i>Manf., Model</i> )	Garmin GPSMAP 62stc	GPS Waypoint	160
YSI ( <i>Model</i> )	Pro-plus	Camera ( <i>Manf., Model</i> )	N/A
<b>Sample Type/Sample Info</b>		<b>Sample Type/Sample Info</b>	
Y/N, Time, Measurement		Y/N, Time, Measurement	
<b>Surface/Grab: USGS PetitePONAR (Grab)</b>		<b>Radium Water Sampling: Mn Fiber</b>	
Vegetation/Sediment Type	Fine sand	Start Time (CDT)	9:43
No. of Ponar grabs combined	1	Stop Time (CDT)	10:02
		Volume Filtered	5 gal.
		<b>LABEL BAG WITH SITE NUMBER</b>	
<b>Water Quality Parameters: YSI</b>			
Water Type (Marsh, Estuarine)	Estuarine		
Temperature (°C)	28.0		
Barometric Pressure (mmHg)	764.9		
Dissolved Oxygen (DO) (%)	84.2		
DO (mg/L)	6.11		
Specific Conductance (mS/cm)	22.69		
Salinity	13.63		
pH	7.88		
pH (mV)	-106.1		
ORP (mV)	114.1		
<b>Notes</b>			
Echo sounder 50s wypt 0002			
No forams			
CTD cast 0945			
<b>Photos</b>			
No photos			

<b>Site ID</b>			
<b>15CCT02-GB110 (Estuarine Grab)</b>			
Date	June 1, 2015	Day of Year	152
USGS Field Activity Number (FAN)	2015-315-FA (15CCT02)		
Field Crew	Chris Smith, Terry McCloskey, Cathryn Wheaton		
Platform	R/V Mako	Location	Grand Bay, Alabama/Mississippi
Arrival Time (CDT)	10:43	Departure Time (CDT)	11:03
Latitude (DD)	30.35684	Longitude (DD)	-88.34421
Water Depth (m)	3.3		
GPS used ( <i>Manf., Model</i> )	Garmin GPSMAP 62stc	GPS Waypoint	161
YSI ( <i>Model</i> )	Pro-plus	Camera ( <i>Manf., Model</i> )	N/A
<b>Sample Type/Sample Info</b>		<b>Sample Type/Sample Info</b>	
Y/N, Time, Measurement		Y/N, Time, Measurement	
<b>Surface/Grab: USGS PetitePONAR (Grab)</b>		<b>Radium Water Sampling: Mn Fiber</b>	
Vegetation/Sediment Type	Sl. Silty, fine sand	Start Time (CDT)	10:45
No. of Ponar grabs combined	1	Stop Time (CDT)	11:05
		Volume Filtered	5 gal./19 L
		<b>LABEL BAG WITH SITE NUMBER</b>	
<b>Water Quality Parameters: YSI</b>			
Water Type (Marsh, Estuarine)	Estuarine		
Temperature (°C)	29.4		
Barometric Pressure (mmHg)	764.9		
Dissolved Oxygen (DO) (%)	90.0		
DO (mg/L)	6.39		
Specific Conductance (mS/cm)	28.77		
Salinity	17.67		
pH	8.00		
pH (mV)	-113.1		
ORP (mV)	121.9		
<b>Notes</b>			
Echomap 50s wypt: 0003, 30°21.410 88°20.648			
<b>Photos</b>			
No photos			

<b>Site ID</b>			
<b>15CCT02-GB111 (Estuarine Grab)</b>			
Date	June 1, 2015	Day of Year	152
USGS Field Activity Number (FAN)	2015-315-FA (15CCT02)		
Field Crew	Chris Smith, Terry McCloskey, Cathryn Wheaton		
Platform	R/V Mako	Location	Grand Bay, Alabama/Mississippi
Arrival Time (CDT)	11:15	Departure Time (CDT)	Not recorded
Latitude (DD)	30.36160	Longitude (DD)	-88.32574
Water Depth (m)	2.0		
GPS used ( <i>Manf., Model</i> )	Garmin GPSMAP 62stc	GPS Waypoint	162
YSI ( <i>Model</i> )	Pro-plus	Camera ( <i>Manf., Model</i> )	N/A
<b>Sample Type/Sample Info</b>		<b>Sample Type/Sample Info</b>	
Y/N, Time, Measurement		Y/N, Time, Measurement	
<b>Surface/Grab: USGS PetitePONAR (Grab)</b>		<b>Radium Water Sampling: Mn Fiber</b>	
Vegetation/Sediment Type	Silt	Start Time (CDT)	11:20
No. of Ponar grabs combined	1	Stop Time (CDT)	11:31
		Volume Filtered	5 gal./19 L
		<b>LABEL BAG WITH SITE NUMBER</b>	
<b>Water Quality Parameters: YSI</b>			
Water Type (Marsh, Estuarine)	Open estuary		
Temperature (°C)	28.8		
Barometric Pressure (mmHg)	764.8		
Dissolved Oxygen (DO) (%)	93.8		
DO (mg/L)	6.53		
Specific Conductance (mS/cm)	28.38		
Salinity	17.41		
pH	8.09		
pH (mV)	-118.02		
ORP (mV)	131.6		
<b>Notes</b>			
Echomap 50s wypt: 0004 30°21.695 88°19.543			
TM CTD cast - 11:24			
<b>Photos</b>			
No photos			

<b>Site ID</b>			
<b>15CCT02-GB112 (Estuarine Grab)</b>			
Date	June 1, 2015	Day of Year	152
USGS Field Activity Number (FAN)	2015-315-FA (15CCT02)		
Field Crew	Chris Smith, Terry McCloskey, Cathryn Wheaton		
Platform	R/V Mako	Location	Grand Bay, Alabama/Mississippi
Arrival Time (CDT)	12:36	Departure Time (CDT)	12:58
Latitude (DD)	30.36582	Longitude (DD)	-88.31331
Water Depth (m)	1.2		
GPS used ( <i>Manf., Model</i> )	Garmin GPSMAP 62stc	GPS Waypoint	163
YSI ( <i>Model</i> )	Pro-plus	Camera ( <i>Manf., Model</i> )	N/A
<b>Sample Type/Sample Info</b>		<b>Sample Type/Sample Info</b>	
Y/N, Time, Measurement		Y/N, Time, Measurement	
<b>Surface/Grab: USGS PetitePONAR (Grab)</b>		<b>Radium Water Sampling: Mn Fiber</b>	
Vegetation/Sediment Type	Medium sand	Start Time (CDT)	12:36
No. of Ponar grabs combined	1	Stop Time (CDT)	12:57
		Volume Filtered	5 gal.
		<b>LABEL BAG WITH SITE NUMBER</b>	112B
<b>Water Quality Parameters: YSI</b>			
Water Type (Marsh, Estuarine)			
Temperature (°C)	28.9		
Barometric Pressure (mmHg)	764.3		
Dissolved Oxygen (DO) (%)	109.5		
DO (mg/L)	7.77		
Specific Conductance (mS/cm)	23.82		
Salinity	14.50		
pH	8.04		
pH (mV)	-115.0		
ORP (mV)	73.5		
<b>Notes</b>			
WP 0005 in Echomap 50s 30° 21.951 88° 18.798			
<b>Photos</b>			
No photos			

<b>Site ID</b>			
<b>15CCT02-GB113 (Estuarine Grab)</b>			
Date	June 1, 2015	Day of Year	152
USGS Field Activity Number (FAN)	2015-315-FA (15CCT02)		
Field Crew	Chris Smith, Terry McCloskey		
Platform	R/V Mako	Location	Grand Bay, Alabama/Mississippi
Arrival Time (CDT)	~15:55	Departure Time (CDT)	Not recorded
Latitude (DD)	30.38420	Longitude (DD)	-88.33029
Water Depth (m)	2.1		
GPS used ( <i>Manf., Model</i> )	Garmin GPSMAP 62stc	GPS Waypoint	164
YSI ( <i>Model</i> )	Pro-plus	Camera ( <i>Manf., Model</i> )	N/A
<b>Sample Type/Sample Info</b>		<b>Sample Type/Sample Info</b>	
Y/N, Time, Measurement		Y/N, Time, Measurement	
<b>Surface/Grab: USGS PetitePONAR (Grab)</b>		<b>Radium Water Sampling: Mn Fiber</b>	
Vegetation/Sediment Type	Silty-medium sand	Start Time (CDT)	13:53
No. of Ponar grabs combined	1	Stop Time (CDT)	14:10
		Volume Filtered	5 gal.
		<b>LABEL BAG WITH SITE NUMBER</b>	
<b>Water Quality Parameters: YSI</b>			
Water Type (Marsh, Estuarine)	Estuarine - Inter bay		
Temperature (°C)	29.7		
Barometric Pressure (mmHg)	764.0		
Dissolved Oxygen (DO) (%)	95.8		
DO (mg/L)	6.77		
Specific Conductance (mS/cm)	23.14		
Salinity	13.90		
pH	8.12		
pH (mV)	-120.2		
ORP (mV)	87.3		
<b>Notes</b>			
Echomap 50s = WP 0007 30° 23.053 88° 19.818 01June2015; 01:55:43PM			
<b>Photos</b>			
No photos			

<b>Site ID</b>			
<b>15CCT02-GB114 (Estuarine Grab)</b>			
Date	June 1, 2015	Day of Year	152
USGS Field Activity Number (FAN)	2015-315-FA (15CCT02)		
Field Crew	Chris Smith, Terry McCloskey, Nancy Dewitt		
Platform	R/V Mako	Location	Grand Bay, Alabama/Mississippi
Arrival Time (CDT)	14:35	Departure Time (CDT)	Not recorded
Latitude (DD)	30.39457	Longitude (DD)	-88.34220
Water Depth (m)	0.9		
GPS used ( <i>Manf., Model</i> )	Garmin GPSMAP 62stc	GPS Waypoint	165
YSI ( <i>Model</i> )	Pro-plus	Camera ( <i>Manf., Model</i> )	N/A
<b>Sample Type/Sample Info</b>		<b>Sample Type/Sample Info</b>	
Y/N, Time, Measurement		Y/N, Time, Measurement	
<b>Surface/Grab: USGS PetitePONAR (Grab)</b>		<b>Radium Water Sampling: Mn Fiber</b>	
Vegetation/Sediment Type	Silty-fine sand	Start Time (CDT)	14:35
No. of Ponar grabs combined	1	Stop Time (CDT)	14:50
		Volume Filtered	5 gal.
		<b>LABEL BAG WITH SITE NUMBER</b>	114
<b>Water Quality Parameters: YSI</b>			
Water Type (Marsh, Estuarine)	Estuarine		
Temperature (°C)	29.8		
Barometric Pressure (mmHg)	763.6		
Dissolved Oxygen (DO) (%)	96.5		
DO (mg/L)	6.83		
Specific Conductance (mS/cm)	21.39		
Salinity	12.75		
pH	8.08		
pH (mV)	-117.5		
ORP (mV)	101		
<b>Notes</b>			
WP 008 in Echomap 50s 30° 23.675 88° 20.534			
<b>Photos</b>			
No photos			

<b>Site ID</b>			
<b>15CCT02-GB115 (Estuarine Grab)</b>			
Date	June 1, 2015	Day of Year	152
USGS Field Activity Number (FAN)	2015-315-FA (15CCT02)		
Field Crew	Chris Smith, Terry McCloskey, Nancy Dewitt		
Platform	R/V Mako	Location	Grand Bay, Alabama/Mississippi
Arrival Time (CDT)	~15:15	Departure Time (CDT)	Not recorded
Latitude (DD)	30.38905	Longitude (DD)	-88.35863
Water Depth (m)	1.8		
GPS used ( <i>Manf., Model</i> )	Garmin GPSMAP 62stc	GPS Waypoint	166
YSI ( <i>Model</i> )	Pro-plus	Camera ( <i>Manf., Model</i> )	N/A
<b>Sample Type/Sample Info</b>		<b>Sample Type/Sample Info</b>	
Y/N, Time, Measurement		Y/N, Time, Measurement	
<b>Surface/Grab: USGS PetitePONAR (Grab)</b>		<b>Radium Water Sampling: Mn Fiber</b>	
Vegetation/Sediment Type	Silty fine sand	Start Time (CDT)	15:16
No. of Ponar grabs combined	1	Stop Time (CDT)	15:32
		Volume Filtered	5 gal.
		<b>LABEL BAG WITH SITE NUMBER</b>	115
<b>Water Quality Parameters: YSI</b>			
Water Type (Marsh, Estuarine)	Estuarine		
Temperature (°C)	29.6		
Barometric Pressure (mmHg)	763.4		
Dissolved Oxygen (DO) (%)	100		
DO (mg/L)	7.11		
Specific Conductance (mS/cm)	21.76		
Salinity	12.99		
pH	8.08		
pH (mV)	-117.6		
ORP (mV)	78.4		
<b>Notes</b>			
WP 009 on Echomap 50s = 30° 23.341 88° 21.519 01June2015; 03:15:11PM			
<b>Photos</b>			
No photos			

<b>Site ID</b>				<b>15CCT02-GB116 (Estuarine Grab)</b>			
Date	June 2, 2015	Day of Year	153				
USGS Field Activity Number (FAN)	2015-315-FA (15CCT02)						
Field Crew	Chris Smith, Terry McCloskey, Nancy Dewitt						
Platform	R/V Mako	Location	Grand Bay, Alabama/Mississippi				
Arrival Time (CDT)	~11:12	Departure Time (CDT)	Not recorded				
Latitude (DD)	30.38411	Longitude (DD)	-88.40079				
Water Depth (m)	1.0						
GPS used ( <i>Manf., Model</i> )	Garmin GPSMAP 62stc	GPS Waypoint	171				
YSI ( <i>Model</i> )	Pro-plus	Camera ( <i>Manf., Model</i> )	N/A				
<b>Sample Type/Sample Info</b>		<b>Y/N, Time, Measurement</b>		<b>Sample Type/Sample Info</b>		<b>Y/N, Time, Measurement</b>	
<b>Surface/Grab: USGS PetitePONAR (Grab)</b>				<b>Radium Water Sampling: Mn Fiber</b>			
Vegetation/Sediment Type	Fine sand	Start Time (CDT)	N/A				
No. of Ponar grabs combined	1	Stop Time (CDT)	N/A				
No shells or grass visible.		Volume Filtered	N/A				
		<b>LABEL BAG WITH SITE NUMBER</b>	116				
<b>Water Quality Parameters: YSI</b>							
Water Type (Marsh, Estuarine)	Marsh-Bay						
Temperature (°C)	28.6						
Barometric Pressure (mmHg)	763.6						
Dissolved Oxygen (DO) (%)	90.6						
DO (mg/L)	6.34						
Specific Conductance (mS/cm)	20.58						
Salinity	12.26						
pH	7.82						
pH (mV)	-102.3						
ORP (mV)	180.2						
<b>Notes</b>							
WP 0055 on Echomap 50s = 30.38411 88.40800 02June2015 11:14:25AM  Castaway ✓  Sample for {illegible}							
<b>Photos</b>							
No photos							



<b>Site ID</b>			
<b>15CCT02-GB117 (Estuarine Grab)</b>			
Date	June 2, 2015	Day of Year	153
USGS Field Activity Number (FAN)	2015-315-FA (15CCT02)		
Field Crew	Chris Smith, Terry McCloskey, Nancy Dewitt		
Platform	R/V Mako	Location	Grand Bay, Alabama/Mississippi
Arrival Time (CDT)	11:22	Departure Time (CDT)	Not recorded
Latitude (DD)	30.37738	Longitude (DD)	-88.40844
Water Depth (m)	1.2		
GPS used ( <i>Manf., Model</i> )	Garmin GPSMAP 62stc	GPS Waypoint	172
YSI ( <i>Model</i> )	Pro-plus	Camera ( <i>Manf., Model</i> )	N/A
<b>Sample Type/Sample Info</b>		<b>Sample Type/Sample Info</b>	
Y/N, Time, Measurement		Y/N, Time, Measurement	
<b>Surface/Grab: USGS PetitePONAR (Grab)</b>		<b>Radium Water Sampling: Mn Fiber</b>	
Vegetation/Sediment Type	Sandy-silt	Start Time (CDT)	N/A
No. of Ponar grabs combined	1	Stop Time (CDT)	N/A
		Volume Filtered	N/A
		<b>LABEL BAG WITH SITE NUMBER</b>	117
<b>Water Quality Parameters: YSI</b>			
Water Type (Marsh, Estuarine)	Bay-Marsh		
Temperature (°C)	28.0		
Barometric Pressure (mmHg)	763.3		
Dissolved Oxygen (DO) (%)	87.6		
DO (mg/L)	6.28		
Specific Conductance (mS/cm)	21.25		
Salinity	12.71		
pH	7.90		
pH (mV)	-107.1		
ORP (mV)	176.3		
<b>Notes</b>			
0056 30.37741 88.40844  Sample for {illegible}			
<b>Photos</b>			
No photos			

<b>Site ID</b>				<b>15CCT02-GB118 (Estuarine Grab)</b>			
Date	June 2, 2015	Day of Year	153				
USGS Field Activity Number (FAN)	2015-315-FA (15CCT02)						
Field Crew	Chris Smith, Terry McCloskey, Nancy Dewitt						
Platform	R/V Mako	Location	Grand Bay, Alabama/Mississippi				
Arrival Time (CDT)	~11:57	Departure Time (CDT)	Not recorded				
Latitude (DD)	30.39162	Longitude (DD)	-88.35088				
Water Depth (m)	2.0						
GPS used ( <i>Manf., Model</i> )	Garmin GPSMAP 62stc	GPS Waypoint	173				
YSI ( <i>Model</i> )	Pro-plus	Camera ( <i>Manf., Model</i> )	N/A				
<b>Sample Type/Sample Info</b>		Y/N, Time, Measurement		<b>Sample Type/Sample Info</b>		Y/N, Time, Measurement	
<b>Surface/Grab: USGS PetitePONAR (Grab)</b>				<b>Radium Water Sampling: Mn Fiber</b>			
Vegetation/Sediment Type	Fine sand/silt-sand mixture		Start Time (CDT)	N/A			
No. of Ponar grabs combined	1		Stop Time (CDT)	N/A			
			Volume Filtered	N/A			
			<b>LABEL BAG WITH SITE NUMBER</b>	118			
<b>Water Quality Parameters: YSI</b>							
Water Type (Marsh, Estuarine)	Estuarine						
Temperature (°C)	28.8						
Barometric Pressure (mmHg)	763.2						
Dissolved Oxygen (DO) (%)	103.0						
DO (mg/L)	7.38						
Specific Conductance (mS/cm)	21.56						
Salinity	12.88						
pH	8.07						
pH (mV)	-117.5						
ORP (mV)	157.2						
<b>Notes</b>							
Castaway = √							
Very							
WP0057							
30.33160 88.35091							
02June15							
12:02:03							
Echo							
Sample for {illegible}							
<b>Photos</b>							
No photos							

<b>Site ID</b>			
<b>15CCT02-GB119 (Estuarine Grab)</b>			
Date	June 3, 2015	Day of Year	154
USGS Field Activity Number (FAN)	2015-315-FA (15CCT02)		
Field Crew	Chris Smith, Terry McCloskey, Nancy Dewitt		
Platform	R/V Mako	Location	Grand Bay, Alabama/Mississippi
Arrival Time (CDT)	8:50	Departure Time (CDT)	Not recorded
Latitude (DD)	30.37248	Longitude (DD)	-88.39394
Water Depth (m)	1.8		
GPS used ( <i>Manf., Model</i> )	Garmin GPSMAP 62stc	GPS Waypoint	174
YSI ( <i>Model</i> )	Pro-plus	Camera ( <i>Manf., Model</i> )	N/A
<b>Sample Type/Sample Info</b>		<b>Sample Type/Sample Info</b>	
Y/N, Time, Measurement		Y/N, Time, Measurement	
<b>Surface/Grab: USGS PetitePONAR (Grab)</b>		<b>Radium Water Sampling: Mn Fiber</b>	
Vegetation/Sediment Type	Medium-sand	Start Time (CDT)	N/A
No. of Ponar grabs combined	1	Stop Time (CDT)	N/A
		Volume Filtered	N/A
		<b>LABEL BAG WITH SITE NUMBER</b>	119
<b>Water Quality Parameters: YSI</b>			
Water Type (Marsh, Estuarine)	Estuarine		
Temperature (°C)	27.8		
Barometric Pressure (mmHg)	762.2		
Dissolved Oxygen (DO) (%)	93.6		
DO (mg/L)	6.81		
Specific Conductance (mS/cm)	22.62		
Salinity	13.58		
pH	7.89		
pH (mV)	-106.4		
ORP (mV)	109.1		
<b>Notes</b>			
WP0058 on Echomap 50s 30.37247 88.39395 03June15 08:52:23AM  Castaway = √  {illegible} sample site			
<b>Photos</b>			
No photos			

<b>Site ID</b>			
<b>15CCT02-GB120 (Estuarine Grab)</b>			
Date	June 3, 2015	Day of Year	154
USGS Field Activity Number (FAN)	2015-315-FA (15CCT02)		
Field Crew	Chris Smith, Terry McCloskey, Nancy Dewitt		
Platform	R/V Mako	Location	Grand Bay, Alabama/Mississippi
Arrival Time (CDT)	~9:40	Departure Time (CDT)	Not recorded
Latitude (DD)	30.37491	Longitude (DD)	-88.39433
Water Depth (m)	2.2		
GPS used ( <i>Manf., Model</i> )	Garmin GPSMAP 62stc	GPS Waypoint	175
YSI ( <i>Model</i> )	Pro-plus	Camera ( <i>Manf., Model</i> )	N/A
<b>Sample Type/Sample Info</b>		<b>Sample Type/Sample Info</b>	
Y/N, Time, Measurement		Y/N, Time, Measurement	
<b>Surface/Grab: USGS PetitePONAR (Grab)</b>		<b>Radium Water Sampling: Mn Fiber</b>	
Vegetation/Sediment Type	Very soft mud	Start Time (CDT)	N/A
No. of Ponar grabs combined	1	Stop Time (CDT)	N/A
Black mayo!! In #1		Volume Filtered	N/A
Similar in #2		<b>LABEL BAG WITH SITE NUMBER</b>	120
<b>Water Quality Parameters: YSI</b>			
Water Type (Marsh, Estuarine)	Estuarine		
Temperature (°C)	27.9		
Barometric Pressure (mmHg)	762.1		
Dissolved Oxygen (DO) (%)	88.3		
DO (mg/L)	6.44		
Specific Conductance (mS/cm)	22.86		
Salinity	13.74		
pH	7.94		
pH (mV)	-109.6		
ORP (mV)	103.7		
<b>Notes</b>			
Echomap 50s WP=0060 30.37491 -88.39433 03June15 - 09:05:45AM  #2 ponar is a little overfilled  YSI Castaway = √  {illegible} sample site			
<b>Photos</b>			
No photos			

<b>Site ID</b>			
<b>15CCT02-GB121 (Estuarine Grab)</b>			
Date	June 3, 2015	Day of Year	154
USGS Field Activity Number (FAN)	2015-315-FA (15CCT02)		
Field Crew	Chris Smith, Terry McCloskey, Nancy Dewitt		
Platform	R/V Mako	Location	Grand Bay, Alabama/Mississippi
Arrival Time (CDT)	~9:31	Departure Time (CDT)	Not recorded
Latitude (DD)	30.36782	Longitude (DD)	-88.39443
Water Depth (m)	1.9		
GPS used ( <i>Manf., Model</i> )	Garmin GPSMAP 62stc	GPS Waypoint	176
YSI ( <i>Model</i> )	Pro-plus	Camera ( <i>Manf., Model</i> )	N/A
<b>Sample Type/Sample Info</b>		<b>Sample Type/Sample Info</b>	
Y/N, Time, Measurement		Y/N, Time, Measurement	
<b>Surface/Grab: USGS PetitePONAR (Grab)</b>		<b>Radium Water Sampling: Mn Fiber</b>	
Vegetation/Sediment Type	Clayey-silt	Start Time (CDT)	N/A
No. of Ponar grabs combined	1	Stop Time (CDT)	N/A
		Volume Filtered	N/A
		<b>LABEL BAG WITH SITE NUMBER</b>	121
<b>Water Quality Parameters: YSI</b>			
Water Type (Marsh, Estuarine)	Estuarine to open bay		
Temperature (°C)	27.8		
Barometric Pressure (mmHg)	762.1		
Dissolved Oxygen (DO) (%)	91.9		
DO (mg/L)	6.69		
Specific Conductance (mS/cm)	22.98		
Salinity	13.82		
pH	8.00		
pH (mV)	-112.9		
ORP (mV)	106.7		
<b>Notes</b>			
Castaway = √ → 2 times (second cast may be best)			
Echomap 50s WP=0061 30.36783 -88.39441 03June15 09:33:43  {illegible} sample site			
<b>Photos</b>			
No photos			

<b>Site ID</b>			
<b>15CCT02-GB144 (Estuarine Grab)</b>			
Date	June 3, 2015	Day of Year	154
USGS Field Activity Number (FAN)	2015-315-FA (15CCT02)		
Field Crew	Chris Smith, Terry McCloskey		
Platform	R/V Mako	Location	Grand Bay, Alabama/Mississippi
Arrival Time (CDT)	14:50	Departure Time (CDT)	Not recorded
Latitude (DD)	30.40981	Longitude (DD)	-88.40250
Water Depth (m)	2.2		
GPS used ( <i>Manf., Model</i> )	Garmin GPSMAP 62stc	GPS Waypoint	179
YSI ( <i>Model</i> )	Pro-plus	Camera ( <i>Manf., Model</i> )	N/A
<b>Sample Type/Sample Info</b>		<b>Sample Type/Sample Info</b>	
Y/N, Time, Measurement		Y/N, Time, Measurement	
<b>Surface/Grab: USGS PetitePONAR (Grab)</b>		<b>Radium Water Sampling: Mn Fiber</b>	
Vegetation/Sediment Type	Sand	Start Time (CDT)	14:50
No. of Ponar grabs combined	1	Stop Time (CDT)	Not recorded
		Volume Filtered	Not recorded
		<b>LABEL BAG WITH SITE NUMBER</b>	
<b>Water Quality Parameters: YSI</b>			
Water Type (Marsh, Estuarine)	Channel		
Temperature (°C)	29.6		
Barometric Pressure (mmHg)	761.0		
Dissolved Oxygen (DO) (%)	57.9		
DO (mg/L)	4.13		
Specific Conductance (mS/cm)	14.28		
Salinity	8.35		
pH	7.15		
pH (mV)	-64.5		
ORP (mV)	124		
<b>Notes</b>			
Echomap 50s WP0064 30.40982 88.40248  ~4.23 from previous site  Smith grabbed wrong bag relabeled 146 as 144			
<b>Photos</b>			
No photos			

<b>Site ID</b>				<b>15CCT02-GB147 (Estuarine Grab)</b>			
Date	June 3, 2015	Day of Year	154				
USGS Field Activity Number (FAN)	2015-315-FA (15CCT02)						
Field Crew	Chris Smith						
Platform	R/V Mako	Location	Grand Bay, Alabama/Mississippi				
Arrival Time (CDT)	~12:25	Departure Time (CDT)	~12:38				
Latitude (DD)	30.39470	Longitude (DD)	-88.39982				
Water Depth (m)	3.0						
GPS used ( <i>Manf., Model</i> )	Garmin GPSMAP 62stc	GPS Waypoint	177				
YSI ( <i>Model</i> )	Pro-plus	Camera ( <i>Manf., Model</i> )	N/A				
<b>Sample Type/Sample Info</b>		<b>Y/N, Time, Measurement</b>		<b>Sample Type/Sample Info</b>		<b>Y/N, Time, Measurement</b>	
<b>Surface/Grab: USGS PetitePONAR (Grab)</b>				<b>Radium Water Sampling: Mn Fiber</b>			
Vegetation/Sediment Type	Slightly very fine sand/silt	Start Time (CDT)	N/A				
No. of Ponar grabs combined	1	Stop Time (CDT)	Not recorded				
Oysters		Volume Filtered	Not recorded				
		<b>LABEL BAG WITH SITE NUMBER</b>	147				
<b>Water Quality Parameters: YSI</b>							
Water Type (Marsh, Estuarine)	Middle channel/marsh	Moisture in YSI screen					
Temperature (°C)	no reading						
Barometric Pressure (mmHg)	no reading						
Dissolved Oxygen (DO) (%)	no reading						
DO (mg/L)	no reading						
Specific Conductance (mS/cm)	no reading						
Salinity	12.00						
pH	8.12						
pH (mV)	no reading						
ORP (mV)	no reading						
<b>Notes</b>							
WP0062 = Echomap 50s 30.39468 -88.3998 03June 12:29:00  Castaway YSI							
<b>Photos</b>							
No photos							

<b>Site ID</b>				<b>15CCT02-GB148 (Estuarine Grab)</b>			
Date	June 2, 2015	Day of Year	153				
USGS Field Activity Number (FAN)	2015-315-FA (15CCT02)						
Field Crew	Chris Smith, Terry McCloskey, Nancy Dewitt						
Platform	R/V Mako	Location	Grand Bay, Alabama/Mississippi				
Arrival Time (CDT)	10:30	Departure Time (CDT)	Not recorded				
Latitude (DD)	30.39095	Longitude (DD)	-88.39874				
Water Depth (m)	1.3						
GPS used ( <i>Manf., Model</i> )	Garmin GPSMAP 62stc	GPS Waypoint	169				
YSI ( <i>Model</i> )	Pro-plus	Camera ( <i>Manf., Model</i> )	N/A				
<b>Sample Type/Sample Info</b>		Y/N, Time, Measurement		<b>Sample Type/Sample Info</b>		Y/N, Time, Measurement	
<b>Surface/Grab: USGS PetitePONAR (Grab)</b>				<b>Radium Water Sampling: Mn Fiber</b>			
Vegetation/Sediment Type	Silty-sand (medium?)	Start Time (CDT)	10:35				
No. of Ponar grabs combined	1	Stop Time (CDT)	10:51				
with shell frags (oysters mostly?)		Volume Filtered	5 gal.				
		<b>LABEL BAG WITH SITE NUMBER</b>	148				
<b>Water Quality Parameters: YSI</b>							
Water Type (Marsh, Estuarine)	Channel						
Temperature (°C)	27.7						
Barometric Pressure (mmHg)	763.8						
Dissolved Oxygen (DO) (%)	79.3						
DO (mg/L)	5.85						
Specific Conductance (mS/cm)	19.83						
Salinity	11.77						
pH	7.70						
pH (mV)	-95.7						
ORP (mV)	138.1						
<b>Notes</b>							
Castaway cast = √  WP=0022 on Echomap 50s 30.39093, 88.39874 02June2015 10:36:41							
<b>Photos</b>							
No photos							



<b>Site ID</b>			
<b>15CCT02-GB151 (Estuarine Grab)</b>			
Date	June 3, 2015	Day of Year	154
USGS Field Activity Number (FAN)	2015-315-FA (15CCT02)		
Field Crew	Chris Smith, Terry McCloskey		
Platform	R/V Mako	Location	Grand Bay, Alabama/Mississippi
Arrival Time (CDT)	14:18	Departure Time (CDT)	Not recorded
Latitude (DD)	30.40042	Longitude (DD)	-88.39828
Water Depth (m)	2.2		
GPS used ( <i>Manf., Model</i> )	Garmin GPSMAP 62stc	GPS Waypoint	178
YSI ( <i>Model</i> )	Pro-plus	Camera ( <i>Manf., Model</i> )	N/A
<b>Sample Type/Sample Info</b>		<b>Sample Type/Sample Info</b>	
Y/N, Time, Measurement		Y/N, Time, Measurement	
<b>Surface/Grab: USGS PetitePONAR (Grab)</b>		<b>Radium Water Sampling: Mn Fiber</b>	
Vegetation/Sediment Type	Soft clay	Start Time (CDT)	14:19
No. of Ponar grabs combined	1	Stop Time (CDT)	14:36
		Volume Filtered	18.9L
		<b>LABEL BAG WITH SITE NUMBER</b>	
<b>Water Quality Parameters: YSI</b>			
Water Type (Marsh, Estuarine)	Estuarine Channel		
Temperature (°C)	29.7		
Barometric Pressure (mmHg)	761.2		
Dissolved Oxygen (DO) (%)	81.3		
DO (mg/L)	5.81		
Specific Conductance (mS/cm)	17.16		
Salinity	10.03		
pH	7.41		
pH (mV)	-79.0		
ORP (mV)	128.9		
<b>Notes</b>			
Echomap 50s : WP=0063 30.40044, 88.39829  Start 2.2(?) from {illegible}  Stop 4.6(?) {illegible}			
<b>Photos</b>			
No photos			

<b>Site ID</b>				<b>15CCT02-GB152 (Estuarine Grab)</b>			
Date	May 29, 2015	Day of Year	149				
USGS Field Activity Number (FAN)	2015-315-FA (15CCT02)						
Field Crew	Terry McCloskey, Nancy Dewitt, Cathryn Wheaton						
Platform	R/V Mako	Location	Grand Bay, Alabama/Mississippi				
Arrival Time (CDT)	9:51	Departure Time (CDT)	10:42				
Latitude	30° 23.282'	Longitude	88° 23.893'				
Water Depth (m)	3.4						
GPS used ( <i>Manf., Model</i> )	Garmin Echomap 50s	GPS Waypoint	New waypoint				
YSI ( <i>Model</i> )	Pro-plus	Camera ( <i>Manf., Model</i> )	Nikon D5200				
<b>Sample Type/Sample Info</b>		Y/N, Time, Measurement		<b>Sample Type/Sample Info</b>		Y/N, Time, Measurement	
<b>Surface/Grab: USGS PetitePONAR (Grab)</b>				<b>Radium Water Sampling: Mn Fiber</b>			
Vegetation/Sediment Type	Mud	Start Time (CDT)	10:00				
No. of Ponar grabs combined	1	Stop Time (CDT)	10:13				
		Volume Filtered	5 gal.				
		<b>LABEL BAG WITH SITE NUMBER</b>					
<b>Water Quality Parameters: YSI</b>							
Water Type (Marsh, Estuarine)	Channel						
Temperature (°C)	27.1						
Barometric Pressure (mmHg)	766.6						
Dissolved Oxygen (DO) (%)	91.6						
DO (mg/L)	6.81						
Specific Conductance (mS/cm)	20.64						
Salinity	12.31						
pH	6.84						
pH (mV)	-29.8						
ORP (mV)	189.4						
<b>Notes</b>							
Had to create new waypoint, used lat and long from "reoccupation sites"							
<b>Photos</b>							
N→E→S→W: 0319-0322							

<b>Site ID</b>			
<b>15CCT02-GB158 (Estuarine Grab)</b>			
Date	June 2, 2015	Day of Year	153
USGS Field Activity Number (FAN)	2015-315-FA (15CCT02)		
Field Crew	Chris Smith, Terry McCloskey, Nancy Dewitt		
Platform	R/V Mako	Location	Grand Bay, Alabama/Mississippi
Arrival Time (CDT)	~10:00	Departure Time (CDT)	Not recorded
Latitude (DD)	30.38568	Longitude (DD)	-88.39629
Water Depth (m)	2.7		
GPS used ( <i>Manf., Model</i> )	Garmin GPSMAP 62stc	GPS Waypoint	168
YSI ( <i>Model</i> )	Pro-plus	Camera ( <i>Manf., Model</i> )	N/A
<b>Sample Type/Sample Info</b>		<b>Sample Type/Sample Info</b>	
Y/N, Time, Measurement		Y/N, Time, Measurement	
<b>Surface/Grab: USGS PetitePONAR (Grab)</b>		<b>Radium Water Sampling: Mn Fiber</b>	
Vegetation/Sediment Type	Sandy-clay-silt	Start Time (CDT)	10:02
No. of Ponar grabs combined	1	Stop Time (CDT)	10:18
Few shells		Volume Filtered	5 gal.
		<b>LABEL BAG WITH SITE NUMBER</b>	158
<b>Water Quality Parameters: YSI</b>			
Water Type (Marsh, Estuarine)	Channel/Marsh		
Temperature (°C)	27.7		
Barometric Pressure (mmHg)	763.8		
Dissolved Oxygen (DO) (%)	76.8		
DO (mg/L)	5.63		
Specific Conductance (mS/cm)	20.42		
Salinity	12.16		
pH	7.77		
pH (mV)	-99.4		
ORP (mV)	131.0		
<b>Notes</b>			
Castaway cast = √  WP0021= 30.38567, 88.39629 02June2015 10:04:59			
<b>Photos</b>			
No photos			

<b>Site ID</b>			
<b>15CCT02-GB159 (Estuarine Grab)</b>			
Date	May 29, 2015	Day of Year	149
USGS Field Activity Number (FAN)	2015-315-FA (15CCT02)		
Field Crew	Terry McCloskey, Nancy Dewitt, Cathryn Wheaton		
Platform	R/V Mako	Location	Grand Bay, Alabama/Mississippi
Arrival Time (CDT)	11:45	Departure Time (CDT)	12:20
Latitude	30° 22.735'	Longitude	88° 23.735'
Water Depth (m)	1.2		
GPS used ( <i>Manf., Model</i> )	Garmin Echomap 50s	GPS Waypoint	GB 159
YSI ( <i>Model</i> )	Pro-plus	Camera ( <i>Manf., Model</i> )	Nikon D5200
<b>Sample Type/Sample Info</b>		<b>Sample Type/Sample Info</b>	
Y/N, Time, Measurement		Y/N, Time, Measurement	
<b>Surface/Grab: USGS PetitePONAR (Grab)</b>		<b>Radium Water Sampling: Mn Fiber</b>	
Vegetation/Sediment Type	Silty fine sand	Start Time (CDT)	11:48
No. of Ponar grabs combined	2	Stop Time (CDT)	12:04
		Volume Filtered	5 gal.
		<b>LABEL BAG WITH SITE NUMBER</b>	
<b>Water Quality Parameters: YSI</b>			
Water Type (Marsh, Estuarine)	Open Bay		
Temperature (°C)	27.9		
Barometric Pressure (mmHg)	766.5		
Dissolved Oxygen (DO) (%)	94.8		
DO (mg/L)	6.96		
Specific Conductance (mS/cm)	20.20		
Salinity	12.01		
pH	7.80		
pH (mV)	-79.5		
ORP (mV)	147.5		
<b>Notes</b>			
Had to create new waypoint, used lat and long from "reoccupation site"			
New mark on hand held GPS 30.37891 -88.39590			
<b>Photos</b>			
4 Photo N→E→S→W #324-327 #323 no good			

<b>Site ID</b>				<b>15CCT02-GB161 (Estuarine Grab)</b>			
Date	June 2, 2015	Day of Year	153				
USGS Field Activity Number (FAN)	2015-315-FA (15CCT02)						
Field Crew	Chris Smith, Terry McCloskey, Nancy Dewitt						
Platform	R/V Mako	Location	Grand Bay, Alabama/Mississippi				
Arrival Time (CDT)	9:00	Departure Time (CDT)	Not recorded				
Latitude (DD)	30.37448	Longitude (DD)	-88.39228				
Water Depth (m)	2.2						
GPS used ( <i>Manf., Model</i> )	Garmin GPSMAP 62stc	GPS Waypoint	167				
YSI ( <i>Model</i> )	Pro-plus	Camera ( <i>Manf., Model</i> )	N/A				
<b>Sample Type/Sample Info</b>		<b>Y/N, Time, Measurement</b>		<b>Sample Type/Sample Info</b>		<b>Y/N, Time, Measurement</b>	
<b>Surface/Grab: USGS PetitePONAR (Grab)</b>				<b>Radium Water Sampling: Mn Fiber</b>			
Vegetation/Sediment Type	Clayey silt	Start Time (CDT)	9:02				
No. of Ponar grabs combined	1	Stop Time (CDT)	9:22				
		Volume Filtered	5 gal.				
		<b>LABEL BAG WITH SITE NUMBER</b>	161				
<b>Water Quality Parameters: YSI</b>							
Water Type (Marsh, Estuarine)	Open Bay/Estuarine						
Temperature (°C)	27.8						
Barometric Pressure (mmHg)	763.9						
Dissolved Oxygen (DO) (%)	91.3						
DO (mg/L)	6.64						
Specific Conductance (mS/cm)	22.65						
Salinity	13.61						
pH	7.85						
pH (mV)	-104.6						
ORP (mV)	112.5						
<b>Notes</b>							
Site 161 Sediment 161G Radium 161  WP0020 = 30° 22 27.8, 88° 23 32.1 02June2015 09:08:55 Echomap 50s  Cast w/ YSI SN=C1509004							
<b>Photos</b>							
No photos							

<b>Site ID</b>				<b>15CCT02-GB162 (Estuarine Grab)</b>			
Date	May 31, 2015	Day of Year	151				
USGS Field Activity Number (FAN)	2015-315-FA (15CCT02)						
Field Crew	Chris Smith, Terry McCloskey, Chelsea Stalk						
Platform	R/V Mako	Location	Grand Bay, Alabama/Mississippi				
Arrival Time (CDT)	15:28	Departure Time (CDT)	Not recorded				
Latitude (DD)	30.36999	Longitude (DD)	-88.38802				
Water Depth (m)	1.6						
GPS used ( <i>Manf., Model</i> )	Garmin GPSMAP 62stc	GPS Waypoint	159				
YSI ( <i>Model</i> )	Pro-plus	Camera ( <i>Manf., Model</i> )	N/A				
<b>Sample Type/Sample Info</b>		<b>Y/N, Time, Measurement</b>		<b>Sample Type/Sample Info</b>		<b>Y/N, Time, Measurement</b>	
<b>Surface/Grab: USGS PetitePONAR (Grab)</b>				<b>Radium Water Sampling: Mn Fiber</b>			
Vegetation/Sediment Type	Slightly silty fine sand	Start Time (CDT)	15:28				
No. of Ponar grabs combined	Not recorded	Stop Time (CDT)	15:50				
Few shells		Volume Filtered	19 L				
		<b>LABEL BAG WITH SITE NUMBER</b>	161				
<b>Water Quality Parameters: YSI</b>							
Water Type (Marsh, Estuarine)	Open bay						
Temperature (°C)	30.1						
Barometric Pressure (mmHg)	763.1						
Dissolved Oxygen (DO) (%)	100.7						
DO (mg/L)	7.12						
Specific Conductance (mS/cm)	20.45						
Salinity	12.13						
pH	7.89						
pH (mV)	-107.1						
ORP (mV)	78.1						
<b>Notes</b>							
Vessel [Lat: 30 22.200 Long: 88 23 280 Echosounder 50s] Site/waypoint 562-570							
<b>Photos</b>							
No photos							

<b>Site ID</b>			
<b>15CCT02-GB163 (Estuarine Grab)</b>			
Date	May 31, 2015	Day of Year	151
USGS Field Activity Number (FAN)	2015-315-FA (15CCT02)		
Field Crew	Chris Smith, Terry McCloskey, Cathryn Wheaton		
Platform	R/V Mako	Location	Grand Bay, Alabama/Mississippi
Arrival Time (CDT)	12:58	Departure Time (CDT)	Not recorded
Latitude (DD)	30.36825	Longitude (DD)	-88.38216
Water Depth (m)	1.9		
GPS used ( <i>Manf., Model</i> )	Garmin Echomap 50s	GPS Waypoint	163
YSI ( <i>Model</i> )	Pro-plus	Camera ( <i>Manf., Model</i> )	N/A
<b>Sample Type/Sample Info</b>		<b>Sample Type/Sample Info</b>	
Y/N, Time, Measurement		Y/N, Time, Measurement	
<b>Surface/Grab: USGS PetitePONAR (Grab)</b>		<b>Radium Water Sampling: Mn Fiber</b>	
Vegetation/Sediment Type	Silt/fine clay	Start Time (CDT)	12:58
No. of Ponar grabs combined	2	Stop Time (CDT)	13:22
		Volume Filtered	5 gal.
		<b>LABEL BAG WITH SITE NUMBER</b>	
<b>Water Quality Parameters: YSI</b>			
Water Type (Marsh, Estuarine)	Open bay		
Temperature (°C)	29.2		
Barometric Pressure (mmHg)	764.6		
Dissolved Oxygen (DO) (%)	95.2		
DO (mg/L)	6.85		
Specific Conductance (mS/cm)	21.31		
Salinity	12.71		
pH	7.91		
pH (mV)	-108.1		
ORP (mV)	116.3		
<b>Notes</b>			
<p>on hand held 62stc waypoint 14CCT01-631</p> <p>~3.94 meters from original site</p> <p>Worm tube at top of #1 ponar</p>			
<b>Photos</b>			
No photos			

<b>Site ID</b>				<b>15CCT02-GB165 (Estuarine Grab)</b>			
Date	May 30, 2015	Day of Year	150				
USGS Field Activity Number (FAN)	2015-315-FA (15CCT02)						
Field Crew	Terry McCloskey, Nancy Dewitt, Cathryn Wheaton						
Platform	R/V Mako	Location	Grand Bay, Alabama/Mississippi				
Arrival Time (CDT)	10:00	Departure Time (CDT)	10:30				
Latitude	30° 21.895	Longitude	88° 22.478'				
Water Depth (m)	1.5						
GPS used ( <i>Manf., Model</i> )	Garmin Echomap 50s	GPS Waypoint	GB 161				
YSI ( <i>Model</i> )	Pro-plus	Camera ( <i>Manf., Model</i> )	Nikon D5200				
<b>Sample Type/Sample Info</b>		Y/N, Time, Measurement		<b>Sample Type/Sample Info</b>		Y/N, Time, Measurement	
<b>Surface/Grab: USGS PetitePONAR (Grab)</b>				<b>Radium Water Sampling: Mn Fiber</b>			
Vegetation/Sediment Type	Sand; Fine→Med.	Start Time (CDT)	10:08				
No. of Ponar grabs combined	1	Stop Time (CDT)	10:24				
		Volume Filtered	5 gal.				
		<b>LABEL BAG WITH SITE NUMBER</b>					
<b>Water Quality Parameters: YSI</b>							
Water Type (Marsh, Estuarine)	Open bay						
Temperature (°C)	27.4						
Barometric Pressure (mmHg)	766.1						
Dissolved Oxygen (DO) (%)	101.3						
DO (mg/L)	7.37						
Specific Conductance (mS/cm)	21.53						
Salinity	12.88						
pH	7.18						
pH (mV)	-69.1						
ORP (mV)	Not recorded						
<b>Notes</b>							
Got within 3.5m of desired location!!							
Made new waypoint 0024 [May 30, 2015] 10:04:35AM							
<b>Photos</b>							
N→E→S→W #387-390							
[#391 Terry radium sample]							



<b>Site ID</b>			
<b>15CCT02-GB170 (Marsh Surface)</b>			
Date	May 29, 2015	Day of Year	149
USGS Field Activity Number (FAN)	2015-315-FA (15CCT02)		
Field Crew	Terry McCloskey, Nancy Dewitt, Cathryn Wheaton		
Platform	R/V Mako	Location	Grand Bay, Alabama/Mississippi
Arrival Time (CDT)	13:20	Departure Time (CDT)	Not recorded
Latitude (DD)	30.37653	Longitude (DD)	-88.39072
Water Depth (m)	0.05-0.10		
GPS used ( <i>Manf., Model</i> )	Garmin GPSMAP 62stc	GPS Waypoint	154
YSI ( <i>Model</i> )	N/A	Camera ( <i>Manf., Model</i> )	N/A
<b>Sample Type/Sample Info</b>		<b>Sample Type/Sample Info</b>	
Y/N, Time, Measurement		Y/N, Time, Measurement	
<b>Surface/Grab: USGS PetitePONAR (Grab)</b>		<b>Radium Water Sampling: Mn Fiber</b>	
Vegetation/Sediment Type	Spartina	Start Time (CDT)	
No. of Ponar grabs combined		Stop Time (CDT)	
		Volume Filtered	
		<b>LABEL BAG WITH SITE NUMBER</b>	
<b>Water Quality Parameters: YSI</b>			
Water Type (Marsh, Estuarine)	No YSI reading		
Temperature (°C)			
Barometric Pressure (mmHg)			
Dissolved Oxygen (DO) (%)			
DO (mg/L)			
Specific Conductance (mS/cm)			
Salinity			
pH			
pH (mV)			
ORP (mV)			
<b>Notes</b>			
<p>4 m from south side, , sandier soil / mud, Marsh island [Long Island], Spartina, southern end</p> <p>GPS static session - 06-03-15 same info as site MI03. Session B. (Also was called 15CCT02-MI01, renamed to GB170)  Start time = ~15:59  Stop time = 16:30</p> <p>less standing water = 10→5 cm;</p> <p>*** June 11, 2015: McCloskey &amp; Wheaton devised a new naming scheme from original name. See ReadMe Word document on server</p>			
<b>Photos</b>			
No photos			

<b>Site ID</b>			
<b>15CCT02-GB171 (Marsh Surface)</b>			
Date	May 29, 2015	Day of Year	149
USGS Field Activity Number (FAN)	2015-315-FA (15CCT02)		
Field Crew	Terry McCloskey, Nancy Dewitt, Cathryn Wheaton		
Platform	R/V Mako	Location	Grand Bay, Alabama/Mississippi
Arrival Time (CDT)	13:15	Departure Time (CDT)	Not recorded
Latitude (DD)	30.37660	Longitude (DD)	-88.39073
Water Depth (m)	Not recorded		
GPS used ( <i>Manf., Model</i> )	Garmin GPSMAP 62stc	GPS Waypoint	153
YSI ( <i>Model</i> )	N/A	Camera ( <i>Manf., Model</i> )	N/A
<b>Sample Type/Sample Info</b>		<b>Sample Type/Sample Info</b>	
Y/N, Time, Measurement		Y/N, Time, Measurement	
<i>Surface/Grab: USGS PetitePONAR (Grab)</i>		<i>Radium Water Sampling: Mn Fiber</i>	
Vegetation/Sediment Type	Transition, Spartina→Juncus	Start Time (CDT)	
No. of Ponar grabs combined		Stop Time (CDT)	
		Volume Filtered	
		<b>LABEL BAG WITH SITE NUMBER</b>	
<i>Water Quality Parameters: YSI</i>			
Water Type (Marsh, Estuarine)	No YSI reading		
Temperature (°C)			
Barometric Pressure (mmHg)			
Dissolved Oxygen (DO) (%)			
DO (mg/L)			
Specific Conductance (mS/cm)			
Salinity			
pH			
pH (mV)			
ORP (mV)			
<b>Notes</b>			
<p>Transition from Spartina→Juncus</p> <p>25m s. side</p> <p>GPS session - 06-03-15 (originally MI01 Session C, also called 15CCT02-MI02, renamed to GB171)  Start time = 16:35  Stop time = 17:00</p> <p>*** June 11, 2015: McCloskey &amp; Wheaton devised a new naming scheme from original name. See ReadMe Word document on server</p>			
<b>Photos</b>			
No photos			

<b>Site ID</b>				<b>15CCT02-GB172 (Marsh Surface)</b>			
Date	May 29, 2015	Day of Year	149				
USGS Field Activity Number (FAN)	2015-315-FA (15CCT02)						
Field Crew	Terry McCloskey, Nancy Dewitt, Cathryn Wheaton						
Platform	R/V Mako	Location	Grand Bay, Alabama/Mississippi				
Arrival Time (CDT)	13:34	Departure Time (CDT)	Not recorded				
Latitude (DD)	30.37667	Longitude (DD)	-88.39076				
Water Depth (m)	~0.15						
GPS used ( <i>Manf., Model</i> )	Garmin GPSMAP 62stc	GPS Waypoint	1				
YSI ( <i>Model</i> )	N/A		Camera ( <i>Manf., Model</i> )	N/A			
<b>Sample Type/Sample Info</b>		<b>Y/N, Time, Measurement</b>		<b>Sample Type/Sample Info</b>		<b>Y/N, Time, Measurement</b>	
<b>Surface/Grab: USGS PetitePONAR (Grab)</b>				<b>Radium Water Sampling: Mn Fiber</b>			
Vegetation/Sediment Type	Juncus r.		Start Time (CDT)				
No. of Ponar grabs combined			Stop Time (CDT)				
			Volume Filtered				
			<b>LABEL BAG WITH SITE NUMBER</b>				
<b>Water Quality Parameters: YSI</b>							
Water Type (Marsh, Estuarine)	No YSI reading						
Temperature (°C)							
Barometric Pressure (mmHg)							
Dissolved Oxygen (DO) (%)							
DO (mg/L)							
Specific Conductance (mS/cm)							
Salinity							
pH							
pH (mV)							
ORP (mV)							
<b>Notes</b>							
<p>North side mainly Juncus, but patchy Juncus/Spartina  Much muddier.  Wrack from frontside extends back to this site called MI03 (renamed to GB172). 25 m from S side.  Tide high so ~0.15m standing water  *** June 11, 2015: McCloskey &amp; Wheaton devised a new naming scheme from original name. See ReadMe Word document on server</p> <p>GPS elevation settings, notes in yellow log also  Ashtech Z-xtreme                      Ashtech geodetic ant.  PN = 701975-02 Rev A                  PN 800889 Rev D  SN = 5960                                  SN ZE120052034</p> <p>Site = MI03 @ 1 sec. Session A (note: site renamed GB172)  Start time = 15:22  Stop time = 15:55  Antenna height = 1.209m</p>							
<b>Photos</b>							
No photos							

<b>Site ID</b>				<b>15CCT02-GB173 (Marsh Surface)</b>			
Date	June 3, 2015	Day of Year	154				
USGS Field Activity Number (FAN)	2015-315-FA (15CCT02)						
Field Crew	Terry McCloskey, Nancy Dewitt						
Platform	R/V Mako	Location	Grand Bay, Alabama/Mississippi				
Arrival Time (CDT)	Not recorded	Departure Time (CDT)	Not recorded				
Latitude (DD)	Not recorded	Longitude (DD)	Not recorded				
Water Depth (m)	0.0						
GPS used ( <i>Manf., Model</i> )	N/A		GPS Waypoint	Not recorded			
YSI ( <i>Model</i> )	Pro-plus		Camera ( <i>Manf., Model</i> )	Nikon Coolpix AW100			
<b>Sample Type/Sample Info</b>		Y/N, Time, Measurement		<b>Sample Type/Sample Info</b>		Y/N, Time, Measurement	
<b>Surface/Grab: USGS PetitePONAR (Grab)</b>				<b>DGPS Positioning</b>			
Vegetation/Sediment Type	Juncus / Mud - stiff		GPS Receiver Used	Ashtech Z-xtreme			
Distance from GPS	~1 m		GPS Session ID	D			
Azimuth from GPS	Not recorded		Occupation Time (min)	15			
<b>Water Quality Parameters: YSI</b>							
Water Type (Marsh, Estuarine)	Marsh (dug hole)						
Temperature (°C)	28.0						
Barometric Pressure (mmHg)	761.5						
Dissolved Oxygen (DO) (%)	70.4						
DO (mg/L)	5.20						
Specific Conductance (mS/cm)	5.08						
Salinity	2.72						
pH	6.24						
pH (mV)	-12						
ORP (mV)	175.3						
<b>Notes</b>							
<p>2 foram samples taken that are 80 cm apart.</p> <p>GPS site 6173 Session D = 6173 Start time = 18:08</p> <p>Gant 7 PN 800889 Rev D Antenna rod height - 1209 m Height of plate above marsh surface = 0.181 m Antenna height = 1.390 (above marsh surface)</p> <p>Minimal standing water - unmeasurable Hard mud surface; ~10m from river LOI; bulk; grain size sampled btw the 2 foram sites Mainly Juncus - low height ~3 ft or less</p>							
<b>Photos</b>							
<p>N-E-S-W 764 → 758 2650-2653</p> <p>Plants 757 → 745 2653-2667</p>							

<b>Site ID</b>			
<b>15CCT02-GB174 (Marsh Surface)</b>			
Date	June 3, 2015	Day of Year	154
USGS Field Activity Number (FAN)	2015-315-FA (15CCT02)		
Field Crew	Terry McCloskey, Nancy Dewitt, Chris Smith		
Platform	R/V Mako	Location	Grand Bay, Alabama/Mississippi
Arrival Time (CDT)	Not recorded	Departure Time (CDT)	Not recorded
Latitude (DD)	Not recorded	Longitude (DD)	Not recorded
Water Depth (m)			
GPS used ( <i>Manf., Model</i> )	N/A	GPS Waypoint	Not recorded
YSI ( <i>Model</i> )	N/A	Camera ( <i>Manf., Model</i> )	Nikon Coolpix AW100
<b>Sample Type/Sample Info</b>		<b>Sample Type/Sample Info</b>	
Y/N, Time, Measurement		Y/N, Time, Measurement	
<b>Surface/Grab: USGS PetitePONAR (Grab)</b>		<b>DGPS Positioning</b>	
Vegetation/Sediment Type	Not recorded	GPS Receiver Used	Ashtech Z-xtreme
Distance from GPS	Not recorded	GPS Session ID	E = 6174
Azimuth from GPS	Not recorded	Occupation Time (min)	15
<b>Water Quality Parameters: YSI</b>			
Water Type (Marsh, Estuarine)	No YSI reading		
Temperature (°C)			
Barometric Pressure (mmHg)			
Dissolved Oxygen (DO) (%)			
DO (mg/L)			
Specific Conductance (mS/cm)			
Salinity			
pH			
pH (mV)			
ORP (mV)			
<b>Notes</b>			
<p>*2 groups forams 80 cm apart w/ loj; bulk; grain size in between</p> <p>*Peat soil (?), organic soil thin layer w/silt underneath - not swampy</p> <p>~10-15 m from river</p> <p>-looks like pine island</p> <p>-more diversity</p> <p>Ashtech GPS session 1.209 m + 0.105m Ant Ht. = 1.314 m</p> <p>*Pines, 2 cedar, Backarus (?)</p>			
<b>Photos</b>			
N-E-S-W 744 2668-2691			