

Appendix D: Field Data Sheets

H-GAC – Ambient Monitoring Data Sheet

Date: _____ / _____ / _____ Station: _____

Time (military): _____ Samples Collected by: _____

Total Water Depth at sampling location	meters		# of Days Since Last Significant Rainfall	
Sampling Depth	meters			
Water Temperature	°C			
Specific Conductance	µS/cm			
Salinity	‰			
pH	standard units			
Dissolved Oxygen	mg/L			

Secchi disk or tube	Observed Turbidity	Water Clarity	Water Color	Water Odor	Present Weather	Wind Intensity	Water Surface	Flow Severity	Tide Stage
meters	1 – low 2 – medium 3 – high	1 – excellent 2 – good 3 – fair 4 – poor	1 – brownish 2 – reddish 3 – greenish 4 – blackish 5 – clear 6 – other	1 – sewage 2 – oily/chemical 3 – rotten egg 4 – musky 5 – fishy 6 – none 7 – other	1 – clear 2 – partly cloudy 3 – cloudy 4 – raining 5 – other	1 – calm 2 – slight 3 – moderate 4 – strong	1 – calm 2 – ripples 3 – waves	1 – no flow 2 – low 3 – normal 4 – flood 5 – high 6 – dry	1 – low 2 – falling 3 – slack 4 – rising 5 – high

Flow	cfs	
Flow Method	1 – gage 2 – electric 3 – mechanical 4 – weir/flume 5 – Doppler	
Primary Contact, # of People Observed (1-10, >10)		
Evidence of Primary Contact, (1- Observed, 0 - Not Observed)		

Maximum Pool Width	meters	
Maximum Pool Depth	meters	
Pool Length	meters	
Percent Pool Coverage in 500 meter Reach	%	
Comments or Observation		

Fresh (non-tidal)

Marine (tidal)

Containers	Preservatives	Analyses	Requested
1 x 500 mL Plastic	Iced	TSS	
1 x 1 L Plastic	Iced, H ₂ SO ₄	TKN, NH ₃ , NO ₂ +NO ₃ , TPO ₄	
1 x 500 mL Plastic	Iced	CL, SO ₄ (fresh only)	
1 x 100 mL Sterile Plastic	Iced	Bacteria: <i>E. coli</i> Enterococcus	

Surveyor SN: _____ Sonde SN: _____



Pollution Control Services Department

101 S. Richey, Suite H
Pasadena, Texas 77506 FAX: 713-274-6475 713-920-2831

SAMPLING RECORD: Clean Rivers Program Sites

ID NO.: _____ PERMIT NO.: _____ OUTFALL: _____ DATE: _____ TIME: _____ AM/PM
 NAME: _____ KEY MAP: _____ MS4?(Y/N): _____
 LATITUDE: _____ LONGITUDE: _____
 SITE: _____ KEYS: _____
 SITE DIRECTIONS: _____

TESTS AND MEASUREMENTS

TEMPERATURE °C SALINITY (ppt)
 pH (standard units) SPECIFIC CONDUCTIVITY (us/cm)
 DISSOLVED OXYGEN (mg/l) SECCHI DISK TRANSPARENCY (meters)

FIELD OBSERVATIONS

SURFACE CONDITIONS: 1-clear 2-scum 3-foam 4-debris 5-sheen PRESENT WEATHER: 1-clear 2-partly cloudy 3-cloudy 4-rain 5-other _____
 TURBIDITY: 1-low 2-medium 3-high DAYS SINCE LAST SIGNIFICANT RAINFALL(Runoff) _____
 WATER SURFACE: 1-calm 2-ripples 3-waves WIND INTENSITY: 1-calm 2-slight 3-moderate 4-strong
 WATER COLOR: 1-brownish 2-reddish 3-greenish 4-blackish 5-clear 6-other TIDE STAGE: 1-low 2-falling 3-slack 4-rising 5-high
 WATER ODOR: 1-sewage 2-chemical 3-rotten egg 4-musky 5-fishy 6-none 7-other _____ - Total depth (meters)

SAMPLES

GRAB DIRECT REPORT: YES NO
 SPLIT INDIRECT

Amt. Col.	Container	Preservative	Analysis Requested	Comments

REMARKS

89978 = _____
 89979 = _____

NOTIFICATION

CONTACT PERSON: _____ PHONE: _____ DATE: _____
 TIME: _____ AM/PM
 PERSON CONTACTED/TITLE: _____ AFFILIATION: _____
 RESPONSE: _____

CUSTODY

INSPECTED/SAMPLED BY: _____ RECEIVED IN LABORATORY BY: _____
 DATE: _____ TIME: _____ AM/PM RUN NUMBER: _____

Field No. _____

City of Houston
 Department of Health and Human Services
 Bureau of Pollution Control and Prevention
 7411 Park Place Blvd
 832.393.5730 FAX 832-393-5726
FIELD FORM & CHAIN OF CUSTODY FORM



Date _____ Samples Collected By: _____

Run No. _____ Station ID _____ Time (24 hr) _____ Field Meter # _____

Stream Name & Intersecting Street _____

FIELD OBSERVATIONS

Number of days since significant rainfall _____

Flow Severity	Tidal Stage	Color	Odor	Water Surface	Current Weather	Wind Intensity

- | | | | | | | |
|-------------|-------------|--------------|-------------------|---------------|-------------------|--------------|
| 1 - no flow | 1 - low | 1 - brownish | 1 - sewage | 1 - calm | 1 - clear | 1 - calm |
| 2 - low | 2 - falling | 2 - reddish | 2 - oily/chemical | 2 - ripples | 2 - partly cloudy | 2 - slight |
| 3 - normal | 3 - slack | 3 - greenish | 3 - rotten egg | 3 - waves | 3 - cloudy | 3 - moderate |
| 4 - flood | 4 - rising | 4 - blackish | 4 - musky | 4 - whitecaps | 4 - rain | 4 - strong |
| 5 - high | 5 - high | 5 - clear | 5 - fishy | | 5 - other | |
| 6 - dry* | | 6 - other* | 6 - none | | | |
| | | | 7 - other* | | | |

Flow Method	Flow (cfs)	Secchi Depth (cm)	Evidence of Primary Contact Recreation	# people observed	Sample Depth (ft)	Total Depth (ft)

- | | | |
|------------------------|------------------|--------|
| 1 - flow-gauge station | 1 - observed | 1 - 10 |
| 5 - Doppler | 0 - not observed | > 10 |

INSTRUMENT READINGS

Temp	Conductivity	Dissolved Oxygen (DO)	pH	Salinity

(1.0 to 38.0 °C) (0.03 to 60 mS/cm) (0.5 to 15.0 mg/L) (5.0 to 10.0) (.009 to 45.0 PSS)

***Other Observations:**

Request for Analysis (circle what is requested):

- | | | |
|------------------|-----------|-------------------|
| 1 - pH | 5 - Cl- | 9 - E. coli |
| 2 - Conductivity | 6 - SO4 | 10 - Enterococcus |
| 3 - TSS | 7 - N-NH3 | |
| 4 - N-NO3 | 8 - T-PO4 | |

No. of Containers:

- | | |
|------------------------------|---------------------------------------|
| _____ 100 mL sterile plastic | _____ 200 mL sterile plastic |
| _____ 1 L plastic | _____ 1 L plastic w/ H2SO4 |
| _____ 1 gallon plastic | _____ 1 L plastic(TKN) bottle w/H2SO4 |

Samples Relinquished By: _____ Date: _____
 Samples Received on Ice: Yes / No _____ (signature only)

Lab Sample No. _____ Received by: _____ Date: _____
 _____ (signature only)

*Note: If site is dry, photo should be taken. If water present within 400 m, and pool is 10+m long, and 0.4+m deep, collect sample and record Maximum pool width, depth, length, and percent pool coverage in 500 m reach (if measureable) in observations section.



CITY OF HOUSTON
DRINKING WATER OPERATIONS LABORATORY
LAKE HOUSTON RECREATIONAL SITE MONITORING
FIELD SHEET & CHAIN OF CUSTODY

Effective Date: 06/16/2015

Document ID: 160

Version: 1.07

Date of Sampling: _____ Air Temperature: _____ Days Since Last Significant Rainfall: _____ Samples Collected By: _____

Sample Run Collected Monthly

Note: All samples taken at a one foot depth by plastic bucket unless specifically designated in 'Sample Depth' column below.

Sample No.	Station Name	TCEQ ID	Sample Depth (ft)	Time	Total Depth (ft)	Water Temp °C	Sp. Cond. µs/cm	pH	DO mg/L	Secchi Depth (m)	Flow Severity	Obs. Turb.	Water Color	Water Color	Present Weather	Wind Intensity	Water Surface	Primary Contact	Evidence of P.C.
1	LAKE PATROL MARINA																		
2	RAILROAD BRIDGE MIDDLE OF LAKE	11208																	
3	LAKE SHADOWS MIDDLE OF LAKE	16688																	
4	DUESSEN PARK MARINA																		
5	WEST FORK MCKAY BRIDGE	11211																	
6	ATASCOCITA POINT	18867																	
7	KINGWOOD MARINA																		
8	WEST FORK Belleau Wood Dr.	20782																	
9	LUCES BAYOU WATER WONDERLAND	18670																	
10	TREASURE ISLAND MAGNOLIA PT.	16623																	
11	BJ'S MARINA																		
12	LAKE HOUSTON MARINA																		
13	EAST FORK MCKAY BRIDGE	11212																	
14	INTAKE TOWER																		

Comments:

Analysis Required: VOC, WQP, T-phos, Ammonia, Total Coliform, E. coli
 Bottles used: 1-100ml sterilized bottle for Bacti analysis, 1-500ml plastic bottle for WQP analysis, 2-40ml VOA bottles with 1:1 HCl, 1-500 ml, plastic bottle acidified with H₂SO₄ for NH₃ analysis, 1-250ml amber bottle for T-phos. & TOC analysis.
 * WQP analysis includes: pH, Cond., TSS, Alk, Hard, NO₂-N, NO₃-N, F, Cl, Br, SO₄

Biol. Samples Relinquished By: _____ Date: _____ Time: _____ Chem. Samples Relinquished By: _____ Date: _____ Time: _____
 Biol. Samples Received By: _____ Date: _____ Time: _____ Chem. Samples Received By: _____ Date: _____ Time: _____

Temperature of Samples when Received at Lab: _____ Matrix: Water



WATER QUALITY LABORATORY
 San Jacinto River Authority - Lake Conroe Division
 LAKE CONROE MONITORING
 FIELD SHEET & CHAIN OF CUSTODY

Effective Date: 09/06/2011

Document ID: 150 Version: 1.05

Date of Sampling: _____ Days Since Last Significant Rainfall: _____ Samples Collected By: _____
 Sample Run Collected Monthly Reservoir Stage: _____ Reservoir % Full: _____ Note: All hydrolab field data is uploaded and sent to H-GAC.

Sample No.	Station Name	Watershed ID	TGEQ ID	Time	Total Depth (ft)	release in CFS	Secchi Depth (m)	Water Color	Water Odor	Present Weather	Wind Intensity	Water Surface	Primary Contact	Evidence Contact
1	Walker County	23	11344											
2	T. James Creek	25	16645											
3	Weir Creek	3	16644											
4	Caney Creek	6	16643											
5	Tim Cude Creek	26	16642											
6	Lost Lake Creek	33	16640											
7	Lewis Creek	4	16641											
8	W.C. Clark Creek	27	16639											
9	Akin Creek	5	16638											
10	Intake Lake Conroe	24	11342											
	SPLIT SAMPLE													

Comments: _____
 Matrix: Water
 WQP*, T-phos, Ammonia, Total Coliform, E. coli
 1-100ml sterilized bottle for Bact analysis, 1-500ml plastic bottle for WQP analysis, 1-500 mL plastic bottle acidified with H₂SO₄ for
 NH₃ analysis, 1-250ml amber bottle acidified with H₂SO₄ for T-phos. & TOC analysis.
 pH, Cond., TSS, Alk, Hard, NO₂-N, NO₃-N, F, Cl, Br, SO₄

* WQP analysis includes:
 Temperature of Samples when Received at Lab: _____
 Biological Samples
 Relinquished By: _____ Date: _____ Time: _____
 Chemical Samples
 Relinquished By: _____ Date: _____ Time: _____
 Biological Samples
 Received By: _____ Date: _____ Time: _____
 Chemical Samples
 Received By: _____ Date: _____ Time: _____

**SAN JACINTO RIVER AUTHORITY
LAKE WOODLANDS 1 AND 2 WATER QUALITY MONITORING**

Date: / / Atmos. Temperature Deg. F: Days Since Last Rain: Date: Inches:
 Instrument Person: Present Weather: Sampler:

MILITARY TIME: GPS COORDINATES = 30 1030.584 N / 95 2818.768 W SECCHI DISK:

SAMPLE LOCATION NO. 1 (Station ID No. 16484 - LW#1) FT. M. TEMP. D.O. pH CONDUCT

SURFACE			°C			DOWN (IN.)
MID-DEPTH			°C			UP (IN.)
BOTTOM			°C			AVG. (IN.)
						AVG. M.(0.00)

CONVENTIONAL CHEM. SAMPLES: YES / NO
 BACTERIOLOGICAL SAMPLES: YES / NO
 ADDIT'L PARAMETERS & METALS YES / NO

COMMENTS (FIELD OBSERVATIONS / UNUSUAL OCCURRENCES / SAMPLE COLLECTION PROBLEMS):

Primary Contact (Code # 89978) Evidence of Primary Contact Recreation (Code # 89979)
 Water Color: Total Depth: Water Odor:

MILITARY TIME: GPS COORDINATES = 30 0945.096 N / 95 2841.156 W SECCHI DISK:

SAMPLE LOCATION NO. 2 (Station ID No. 16483 - LW#2) FT. M. TEMP. D.O. pH CONDUCT

SURFACE			°C			DOWN (IN.)
MID-DEPTH			°C			UP (IN.)
BOTTOM			°C			AVG. (IN.)
						AVG. M.(0.00)

CONVENTIONAL CHEM. SAMPLES: YES / NO
 BACTERIOLOGICAL SAMPLES: YES / NO
 ADDIT'L PARAMETERS & METALS YES / NO

COMMENTS (FIELD OBSERVATIONS / UNUSUAL OCCURRENCES / SAMPLE COLLECTION PROBLEMS):

Primary Contact (Code # 89978) Evidence of Primary Contact Recreation (Code # 89979)
 Water Color: Total Depth: Water Odor:

Field Measurements Depth: <1.5 Ft (=1/3 depth) >1.5' & <5.0' (=1' deep) 5'-10' (= 1' deep, middle, & 1' above btm.)
Fecal Coliform Sampling Depth = 1 Ft. (0.3 M)
Ft. x 0.3048 = Meters

Present Weather: 1 = clear, 2 = partly cloudy, 3 = cloudy, 4 = rain, 5 = other
 Water Color: 1 = brownish, 2 = reddish, 3 = greenish, 4 = blackish, 5 = clear, 6 = other
 Water Odor: 1 = sewage, 2 =Oily/chemical, 3 = rotten egg, 4 = musky, 5 = fishy, 6 = none, 7 = other
 Primary Contact, Observed Activity (# of People Observed) = 0-10, >10
 Evidence of Primary Contact Recreation (1 = Observed, 0 = Not Observed)

**SAN JACINTO RIVER AUTHORITY
LAKE WOODLANDS 3 AND 4 WATER QUALITY MONITORING**

MILITARY TIME: _____ GPS COORDINATES = 30 0936.345 N / 95 2908.586 W

SAMPLE LOCATION NO. 3 (Station ID No. 16481 - LW#3)

	FT.	M.	TEMP.	D.O.	pH	CONDUC
CONVENTIONAL CHEM. SAMPLES: YES / NO			°C			
BACTERIOLOGICAL SAMPLES: YES / NO			°C			
ADDITIONAL PARAMETERS & METALS YES / NO			°C			

SECCHI DISK:
DOWN (IN.) _____
UP (IN.) _____
AVG. (IN.) _____
AVG. M. (0.00) _____

COMMENTS (FIELD OBSERVATIONS / UNUSUAL OCCURRENCES / SAMPLE COLLECTION PROBLEMS): _____

Primary Contact (Code # 89978) _____ Evidence of Primary Contact Recreation (Code # 89979) _____

Water Color: _____ Total Depth: _____ Water Odor: _____

MILITARY TIME: _____ GPS COORDINATES = 30 0918.657 N / 95 2858.184 W

SAMPLE LOCATION NO. 4 (Station ID No. 16482 - LW#4)

	FT.	M.	TEMP.	D.O.	pH	CONDUC
CONVENTIONAL CHEM. SAMPLES: YES / NO			°C			
BACTERIOLOGICAL SAMPLES: YES / NO			°C			
ADDITIONAL PARAMETERS & METALS YES / NO			°C			

SECCHI DISK:
DOWN (IN.) _____
UP (IN.) _____
AVG. (IN.) _____
AVG. M. (0.00) _____

COMMENTS (FIELD OBSERVATIONS / UNUSUAL OCCURRENCES / SAMPLE COLLECTION PROBLEMS): _____

Primary Contact (Code # 89978) _____ Evidence of Primary Contact Recreation (Code # 89979) _____

Water Color: _____ Total Depth: _____ Water Odor: _____

Field Measurements Depth: <1.5 Ft (=1/3 depth) >1.5' & <5.0' (=1' deep) 5'-10' (= 1' deep, middle, & 1' above btm.)
Fecal Coliform Sampling Depth = 1 Ft. (0.3 M)
Ft. x 0.3048 = Meters

Present Weather: 1 = clear, 2 = partly cloudy, 3 = cloudy, 4 = rain, 5 = other
Water Color: 1 = brownish, 2 = reddish, 3 = greenish, 4 = blackish, 5 = clear, 6 = other
Water Odor: 1 = sewage, 2 = Oily/chemical, 3 = rotten egg, 4 = musky, 5 = fishy, 6 = none, 7 = other
Primary Contact, Observed Activity (# of People Observed) = 0-10, >10
Evidence of Primary Contact Recreation (1 = Observed, 0 = Not Observed)

**SAN JACINTO RIVER AUTHORITY
UPPER PANTHER BRANCH WATER QUALITY MONITORING**

Date: / / Instrument Person: Sampler:
MONTH DAY YEAR

Present Weather: Atmos. Temperature Deg. F:

Days Since Last Rain: Date: In.

Total Depth: Ft M
 Depth of Measurements: Ft M
 Transparency Tube: cm

UPPER PANTHER BRANCH # 1 (UPSTREAM WWTP #2 OUTFALL)
 Station ID No. 16629 (UPB1) GPS COORDINATES: = 30 1145.435 N 95 2918.592 W

MILITARY TIME	TEMP. C	pH	D.O.	CONDUCTIVITY	COLOR	ODOR	FLOW SEVERITY	AQUATIC ACTIVITY

COMMENTS (FIELD OBSERVATIONS / UNUSUAL OCCURRENCES / SAMPLE COLLECTION PROBLEMS):

Primary Contact (Code # 89978) Evidence of Primary Contact Recreation (Code # 89979)

Total Depth: Ft M
 Depth of Measurements: Ft M
 Transparency Tube: cm

UPPER PANTHER BRANCH # 2 (DOWNSTREAM WWTP #2 OUTFALL)
 Station ID No. 16630 (UPB2) GPS COORDINATES: = 30 1138.175 N 95 2917.488 W

MILITARY TIME	TEMP. C	pH	D.O.	CONDUCTIVITY	COLOR	ODOR	FLOW SEVERITY	AQUATIC ACTIVITY

COMMENTS (FIELD OBSERVATIONS / UNUSUAL OCCURRENCES / SAMPLE COLLECTION PROBLEMS):

Primary Contact (Code # 89978) Evidence of Primary Contact Recreation (Code # 89979)

USGS Gauge (cfs):
 Total Depth: Ft M
 Depth of Measurements: Ft M
 Transparency Tube: cm

UPPER PANTHER BRANCH # 3 (BEAR BRANCH - E.OF BRIDGE)
 Station ID No. 16631 (UPB3) GPS COORDINATES: = 30 1125.450 N 95 2926.883 W

MILITARY TIME	TEMP. C	pH	D.O.	CONDUCTIVITY	COLOR	ODOR	FLOW SEVERITY	AQUATIC ACTIVITY

COMMENTS (FIELD OBSERVATIONS / UNUSUAL OCCURRENCES / SAMPLE COLLECTION PROBLEMS):

Primary Contact (Code # 89978) Evidence of Primary Contact Recreation (Code # 89979)

Field Measurements Depth: <1.5 Ft (=1/3 depth) >1.5' & <5.0' (=1' deep) 5'-10' (= 1' deep, middle, & 1' above btm.)

Fecal Coliform Sampling Depth = 1 Ft. (0.3 M). Ft. x 0.3048 = Meters

Present Weather: 1 = clear, 2 = partly cloudy, 3 = cloudy, 4 = rain, 5 = other

Water Clarity: 1 = excellent, 2 = good, 3 = fair, 4 = poor, 5 = other

Water Color: 1 = brownish, 2 = reddish, 3 = greenish, 4 = blackish, 5 = clear, 6 = other

Water Odor: 1 = sewage, 2 = oily/chemical, 3 = rotten egg, 4 = musky, 5 = fishy, 6 = none, 7 = other

Flow Severity: 1 = no flow, 2 = low, 3 = normal, 4 = flood, 5 = high, 6 = dry

Primary Contact, Observed Activity (# of People Observed) = 0-10, >10

Evidence of Primary Contact Recreation (1 = Observed, 0 = Not Observed)

**Environmental Institute of Houston - University of Houston Clear Lake
Clean Rivers Program Field Data/Sampling Sheet**

Station ID: _____ Date: _____ Sample Time: _____
 Location: _____ Lat: _____ Long: _____
 Collected By: _____

FIELD MEASUREMENTS (If < 1.5m deep - record @ 0.3m from surface; If ≥ 1.5m deep - perform profile @ 0.3m from bottom, @ middle, and @ 0.3m from surface)

	1	2	3	4	5
Temp (C)					
Conductivity (uS)					
Salinity (psu)					
DO (%sat)					
DO mg/L					
pH					
Depth (m)					

FIELD OBSERVATIONS

<input type="text"/> TOTAL DEPTH (m)	<input type="text"/> PRESENT WEATHER	1-clear 2-partly cloudy 3-cloudy 4-rain 5-other
<input type="text"/> WATER ODOR 1-sewage 2-oily/chemical 3-rotten egg 4-musky 5-fishy 6-none 7-other	<input type="text"/> FLOW SEVERITY	1-no flow 2-low 3-normal 4-flood 5-high 6-dry
<input type="text"/> WATER SURFACE 1-calm 2-ripples 3-waves 4-whitecap	<input type="text"/> FLOW (cfs)	
<input type="text"/> WIND INTENSITY 1-calm 2-slight 3-moderate 4-strong	<input type="text"/> FLOW METHOD	1-gage 2-electric 3-mechanical 4-weir/flume 5-doppler
<input type="text"/> WATER COLOR 1-brownish 2-reddish 3-greenish 4-blackish 5-clear 6-other	<input type="text"/> SECCHI DISK (m)	
<input type="text"/> TIDE STAGE 1-low 2-falling 3-slack 4-rising 5-high	<input type="text"/> RECREATIONAL USE	1=1° observed, 2=2° observed, 3=non-contact observed, 4=1° evidence, 5=2° evidence, 6=non- contact evidence, 7=no evidence
<input type="text"/> DAYS SINCE LAST SIG. RAINFALL	<input type="text"/> Primary Contact Rec. Observed	(enter number of people)
	<input type="text"/> Evidence of Primary Contact Rec. Observed	0= no evidence observed, 1= evidence observed

WATER SAMPLES

FRESH (Non-Tidal) **MARINE** (Tidal) Field Split Collected (yes/no)
 E. coli *Enterococcus*

Container	Preservative	Analysis Requested	Comments
2 x 1L - Plastic	Ice	TSS	
2 x 1L - Plastic	Ice, 2 mL H ₂ SO ₄ added	NH ₃ , TPO ₄ , NO ₂ +NO ₃	
2 x 500ml - Plastic	Ice, 1 mL H ₂ SO ₄ added	TKN	
2 x 500ml - Plastic	Ice	Cl, SO ₄ (fresh water only)	
2 x 4L - Plastic (amber)	Ice	Chlorophyll-a (select sites)	
1 x 100ml - Plastic	Ice, Na ₂ S ₂ O ₃ tablet	Bacteria (Entero and/or <i>E. coli</i>)	

ADDITIONAL INFORMATION & REMARKS

* If site is dry, determine if there is any pool with 500m reach. If pool(s) exists (> 10 m in length and 0.4m deep) record: Lat _____ Long _____ of largest pool in reach
 Maximum pool width _____ (m), Maximum pool depth _____ (m), Pool length _____ (m), and percent pool coverage in 500m reach _____ %.