



Managing and Sharing BP Oil Spill Data from the Gulf of Mexico

Sampling and Monitoring Data

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Tetra Tech, Inc.

April 2010 – September 2010

April 22, 2010



U.S. COAST GUARD

The damaged oil rig sinks two days after the explosion, and a 1-by-5-mile oil slick appears in the water, according to Coast Guard Rear Adm. Mary Landry.

It is not known whether there is a leak on the rig or the well it was connected to underwater. David Rainey, vice president of BP, which leased the rig from Transocean Ltd., said "it certainly has the potential to be a major spill."

June 18, 2010



Sixty days after the explosion on the Deepwater Horizon rig, up to 60,000 barrels a day continue to leak into the Gulf of Mexico.

September 19, 2010

Officials formally declared an end to the worst oil spill in U.S. history. After a weekend of pouring cement into the base of the ruptured well, pressure tests conducted early Sunday confirmed the seal was holding, former Coast Guard Adm. Thad Allen announced. The Interior Department agency that regulates offshore drilling pronounced the well dead at 6:54 a.m. ET.



An Official Website of the United States Government

RestoreTheGulf.gov

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TASK FORCE

ASSISTANCE

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TETRA TECH

Rapid Response Goals

- Water and Sediment samples collected daily
- New sample results available daily.
- New data required screening on a daily basis.
- Report back detections and exceedances of oil related compounds on a daily basis.

Water Quality Benchmarks for Aquatic Life by Chemical

CHEMICAL	CAS Number	Acute Benchmark (µg/L)	Chronic Benchmark (µg/L)	Citation
Metals, µg/L				
Nickel	7440-02-0	74	8.2	1
Vanadium	7440-62-2		50	2

CHEMICAL	CAS Number	Acute Potency Divisor (µg/L)	Chronic Potency Divisor (µg/L)	Citation
PAH Mixtures** (Oil-Related Organic Compounds), µg/L				
Explanation and example of PAH benchmark calculations (PDF) (6pp, 200K)				
PAH Mixtures	--	see NOTE	see NOTE	--
Benzene	71-43-2	27,000	5,300	3
Cyclohexane	110-82-7	1,900	374	3
Ethylbenzene	100-41-4	4,020	790	3
Isopropylbenzene	98-82-8	2,140	420	3
Total xylene	108-38-3	3,560	700	3
Methylcyclohexane	108-87-2	463	91.0	3
Toluene	108-88-3	8,140	1,600	3
Naphthalene	91-20-3	803	193	4
C1-Naphthalenes	--	340	81.7	4
C2-Naphthalenes	--	126	30.2	4
C3-Naphthalenes	--	46.1	11.1	4
C4-Naphthalenes	--	16.9	4.05	4

Overall Goals

- I. Summary analysis of oil related chemical contaminants
 - a. Number of Water and Sediment Samples.
 - b. Number of Detections.
 - c. Number of Chronic and Acute exceedances by chemical against benchmarks.
- II. Migrate data used in analysis to the EPA STORET data warehouse.
 - a. Data Validation

Work Flow for Data Analysis

1. Files (data) received daily from EPA.
2. Imported to Access Database for 'Rapid' Screening.
3. Data Returned to EPA the same day Screened and Summarized.
4. Data Moved to Oracle database (EDAS2) for Security and Additional Analysis.

Incoming Files

- Files received daily from EPA.

Name	Date modified
20100621	6/22/2010 10:10
20100620	6/21/2010 12:35
20100619	6/21/2010 9:44 A
20100618	6/21/2010 9:44 A
20100617	6/18/2010 11:59
20100615	4/19/2012 1:03 P
20100614	
20100613	Date modified: 4/19/2012 1:03 PM
20100609	Size: 20.7 MB
20100609	Files: Samples_TODAY_combined_061510-RT.xls, ...
20100609	rcvd_20100610

Samples_TODAY_SEDIMENT_061510-RT.xls [Compatibility Mode] - Microsoft Excel

SITE_NO	Samp_No	LOCATION	MATRIX	LAB_COC_NO	CAS_NO	SUBSTANCE	RESULT	UNIT_OF_M
97	R06DW	T001-0001-100505-SD-1	T001-0001-100505	Sediment	210050565	132-64-9	Dibenzofuran	13.1 ug/Kg
98	R06DW	T001-0001-100505-SD-1	T001-0001-100505	Sediment	210050565	7440-43-9	Cadmium	0.019 mg/kg
99	R06DW	T001-0001-100505-SD-1	T001-0001-100505	Sediment	210050565	7440-02-0	Nickel	14.3 mg/kg
100	R06DW	T001-0001-100505-SD-1	T001-0001-100505	Sediment	210050565	7440-62-2	Vanadium	15.2 mg/kg
101	R06DW	T001-0001-100505-SD-1	T001-0001-100505	Sediment	210050565	7440-66-6	Zinc	49.7 mg/kg
102	R06DW	T001-0001-100505-SD-1	T001-0001-100505	Sediment	210050565	84-74-2	Di-n-butyl phthalate	9.17 ug/Kg
103	R06DW	T001-0001-100505-SD-1	T001-0001-100505	Sediment	210050565	117-84-0	Di-n-octyl phthalate	12.4 ug/Kg
104	R06DW	T001-0001-100505-SD-1	T001-0001-100505	Sediment	210050565	118-74-1	Hexachlorobenzene	45.4 ug/Kg
105	R06DW	T001-0001-100505-SD-1	T001-0001-100505	Sediment	210050565	87-68-3	Hexachlorobutadiene	25 ug/Kg
106	R06DW	T001-0001-100505-SD-1	T001-0001-100505	Sediment	210050565	92-52-4	Biphenyl	12.7 ug/Kg
107	R06DW	T001-0001-100505-SD-1	T001-0001-100505	Sediment	210050565	111-91-1	Bis(2-Chloroethoxy)methane	20.9 ug/Kg
108	R06DW	T001-0001-100505-SD-1	T001-0001-100505	Sediment	210050565	GCSV-00-44	Oil Range Organics	13000 ug/Kg
109	R06DW	T001-0001-100505-SD-1	T001-0001-100505	Sediment	210050565	117-81-7	Bis(2-Ethylhexyl)phthalate	14.6 ug/Kg
110	R06DW	T001-0001-100505-SD-1	T001-0001-100505	Sediment	210050565	86-74-8	Carbazole	27.3 ug/Kg
111	R06DW	T001-0001-100505-SD-1	T001-0001-100505	Sediment	210050565	218-01-9	Chrysene	17.2 ug/Kg

Ready | Average: 411.1472015 | Count: 7611 | Sum: 477341.9009 | 100%

Initial 'Rapid' Data Processing

BP_Blowlout_DataProcessing_MASTER_ForAnnualReport_20110520_BPOil_forEDAS2 : Database (Access 2007 - 2010) - Microsoft Access

File Home Create External Data Database Tools

View Paste Copy Cut Filter Ascending Selection New Totals Replace
 Views Clipboard Sort & Filter Descending Advanced Refresh Save Spelling Find Go To
 Records Find Select Text Formatting

Tables

- 20110223_Sample_Data_Sediment_Metals
- 20110223_Sample_Data_Sediment_Metals_Exceed
- 20110223_Sample_Data_Sediment_PAH
- 20110223_Sample_Data_Sediment_PAH_Exceed
- 20110223_Sample_Data_Sediment_PAH_inBaseline
- 20110223_Sample_Data_Water_Metals
- 20110223_Sample_Data_Water_Metals_Exceed
- 20110223_Sample_Data_Water_PAH
- 20110223_Sample_Data_Water_PAH_Exceed
- 20110223_Sample_Data_Water_PAH_inBaseline
- 20110223_Sample_Data_Water_Sediment_allStations
- 20110223_Sample_Data_Water_Sediment_allStations_...
- 20110223_Sample_Data_Water_Sediment_SCRIBE_All...
- 20110223_Sample_Data_Water_Sediment_SCRIBE_GO...
- 20110223_Sample_Data_Water_Sediment_SCRIBE_TOC
- 20110223_Sample_Data_Water_Sediment_SCRIBE_Unf...
- 20110223_Sample_Data_Water_Sediment_SCRIBE_USGS
- 20110223_Sample_Data_Water_Sediment_SRIE_NoD...
- 20110223_Sample_Data_Water_Sediment_ToxicityData
- 20110223_SCRIBE_MIG_EDAS2_Activity
- 20110223_SCRIBE_MIG_EDAS2_Result
- 20110223_SCRIBE_MIG_EDASE2_MonLoc
- 60DayPlan_WGTIsNotNull
- 60DayPlanSite_Treda_20110401
- 60daySiteSampleR4
- 60daySitesSampleR6R4
- Benchmarks_AlkylationMultiplier
- Benchmarks_AquaticLife
- Benchmarks_DispersantChemicals_fromJeff
- Benchmarks_EPA_HumanHealth_Criteria
- Benchmarks_HH_ChildSw
- Benchmarks_HumanHealthChildSwimmer
- Benchmarks_Sediment_Chronic
- Benchmarks_SedimentOilRelatedMixtures
- Benchmarks_SedOilPAHwAlkMultiplier

frmDataProcessing

BP Blowlout Data Processing

Sample Data Date (YYYYMMDD) <== Rename if file date is different

1. Import from Excel **Only the first tab will be imported.*

renames file with date (YYYYMMDD_Sample_Data_Water_Sediment)
 be careful of import errors (data types), redo manually if have errors

2. Update "Current" data table; contains only the most recent data

double check number of records

3.0. Export data - Directory

Export File Directory

*Win7 cannot write to C\
 Requires ending "\"

3.1. Export data as Excel *check records, if no detects then don't have to export*

Create 1 Excel file for each "YYYYMMDD_Detects_media.xls"

1.A. Update CAS #s in Import

Then check for any blanks or NAs (use filters)

1.B. Append Previous

WATER
 _00_Detects_WATER _List_of_Surface_Water_SampleIDs
 _01_ResultsDivided_WATER_AquaticLife_OilRelatedCompound
 _02_Narrative_WATER_AquaticLife_OilRelatedCompound
 _03_Water_AquaticLife_Chronic_Exceed
 _02_Narrative_WATER_AquaticLife_Metals
 _03_Water_AquaticLife_Metals_Exceed
 _02_Narrative_WATER_HumanHealth
 _03_Water_HumanHealth_Exceed

SEDIMENT
 _00_Detects_SEDIMENT _List_of_Sediment_SampleIDs

Form View Num Lock

Outgoing Files

File List:

Name	Date/Time	Type
20080812		File folder
20100523		File folder
20100523_Example		File folder
20100525		File folder
20100601		File folder
20100602		File folder
20100603		File folder
20100604		File folder
20100605		File folder
20100608		File folder
20100609		File folder
20100613		File folder
20100614		File folder
20100615	6/18/2010 4:27 PM	File folder
20100617	6/21/2010 8:58 AM	File folder
20100618	3/4/2011 4:36 PM	File folder
20100621	6/21/2010 9:45 AM	File folder
20100621	6/23/2010 9:57 AM	File folder
20100622	6/23/2010 2:20 PM	File folder
20100623	6/24/2010 1:51 PM	File folder
20100624	6/25/2010 5:30 PM	File folder
20100625	6/28/2010 9:40 AM	File folder
20100627	6/28/2010 3:37 PM	File folder
20100628	6/29/2010 3:44 PM	File folder
20100629	6/30/2010 11:28 AM	File folder
20100630	7/2/2010 4:34 PM	File folder

Excel Data Table:

ID	SITE_NO	LOCATION	Samp_No	SAMPLE_DATE	OrgCarb	MATRIX	CAS_NO	Substance Type	SUBSTANCE	RESULT	UNIT_OF_MEASURE
2	54689	R06DW	060810-DC	D005-SD-2016/8/2010	D005-SD-	Sediment	108-88-3	Oil-Related Organic Compounds	Toluene	1.5	ug/Kg
3	54264	R06DW	T001-0001	T001-0001-1(5/5/2010	T001-0001	Sediment	85-01-8	Oil-Related Organic Compounds	Phenanthrene	10.5	ug/Kg
4	54302	R06DW	T001-0001	T001-0001-1(5/5/2010	T001-0001	Sediment	206-44-0	Oil-Related Organic Compounds	Fluoranthene	23	ug/Kg
5	54261	R06DW	T001-0001	T001-0001-1(5/5/2010	T001-0001	Sediment	129-00-0	Oil-Related Organic Compounds	Pyrene	20.7	ug/Kg
6	54293	R06DW	T001-0001	T001-0001-1(5/5/2010	T001-0001	Sediment	218-01-9	Oil-Related Organic Compounds	Chrysene	17.2	ug/Kg
7	54241	R06DW	T001-0001	T001-0001-1(5/5/2010	T001-0001	Sediment	205-99-2	Oil-Related Organic Compounds	Benzo(b)fluorant	13.1	ug/Kg

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PAH Mixtures (Oil-Related Organic Compounds), µg/L**

[Explanation and example of PAH benchmark calculations \(PDF\)](#) (6pp, 200K)

PAH Mixtures	CAS Number	Acute Potency Divisor (µg/L)	Chronic Potency Divisor (µg/L)	Citation
PAH Mixtures	--	see NOTE	see NOTE	--
Benzene	71-43-2	27,000	5,300	3
Cyclohexane	110-82-7	1,900	374	3
Ethylbenzene	100-41-4	4,020	790	3
Isopropylbenzene	98-82-8	2,140	420	3
Total xylene	108-38-3	3,560	700	3
Methylcyclohexane	108-87-2	463	91.0	3
Toluene	108-88-3	8,140	1,600	3
Naphthalene	91-20-3	803	193	4
C1-Naphthalenes	--	340	81.7	4
C2-Naphthalenes	--	126	30.2	4
C3-Naphthalenes	--	46.1	11.1	4
C4-Naphthalenes	--	16.9	4.05	4

Queries and Maps in EDAS2

EDAS2: Ecological Data Analysis System

Projects Help signed in as: **jswhite** Profile MyRoles Home Logout

Monitoring Location Search

Search Monitoring Locations by name...

Compound Taxonomy Sample Date State Other

Sample Date: [] []

Baseline Sample Range: 05/16/2010 08/28/2010

Pre-Event Sample Range: 04/14/2010 05/15/2010

Post-Event Sample Range: 08/29/2010 10/01/2010

Search Criteria: []

Search Remove Clear

Monitoring Location Station Symbols

Result Exceedance Category: PAH Metal Date

Collection Time: Baseline Pre-Event Post-Event

Baseline Pre-Event Post-Event

Reset Apply

Viewing Bench Marks using the Map

Environmental Data Assessment System 2 (EDAS2) - Windows Internet Explorer

http://node2b-edas.tetra-tech.com:8080/edasmap/

Environmental Data Assessment System 2 (EDAS2)

Monitoring Location Search

Search Monitoring Locations by name...

Compound Taxonomy Sample Date State Other

Project:

Media:

Search Criteria

NCA10-1457

NCA10-1457
R04DW
30.29565 -89.0898
Mississippi-DWH

Monitoring Location Station Symbols

Result Exceedance Category PAH Metal Date

Metal Name:

- No detection
- At least one detection
- One or more chronic exceedance
- One or more acute exceedance

Monitoring Location Search Results

ID	Name	Description	HUC 8	HUC 12	Latitude	Longitude	Tag	Status
NCA10-1427	NCA10-1427	R04DW			30.56794905	-87.16493294	Florida-DWH	
2003-100705	2003-100705	R06DW			29.19818333	-89.03826667	Louisiana-DWH	
NCA10-1457	NCA10-1457	R04DW			30.29565	-89.0898	Mississippi-D...	
R629-100902	R629-100902	R06DW			29.11375	-90.61178	Louisiana-DWH	
2354-100813	2354-100813	R06DW			29.57743333	-89.65983334	Louisiana-DWH	

Showing 101 to 150 of 1243

Viewing Sampling Locations

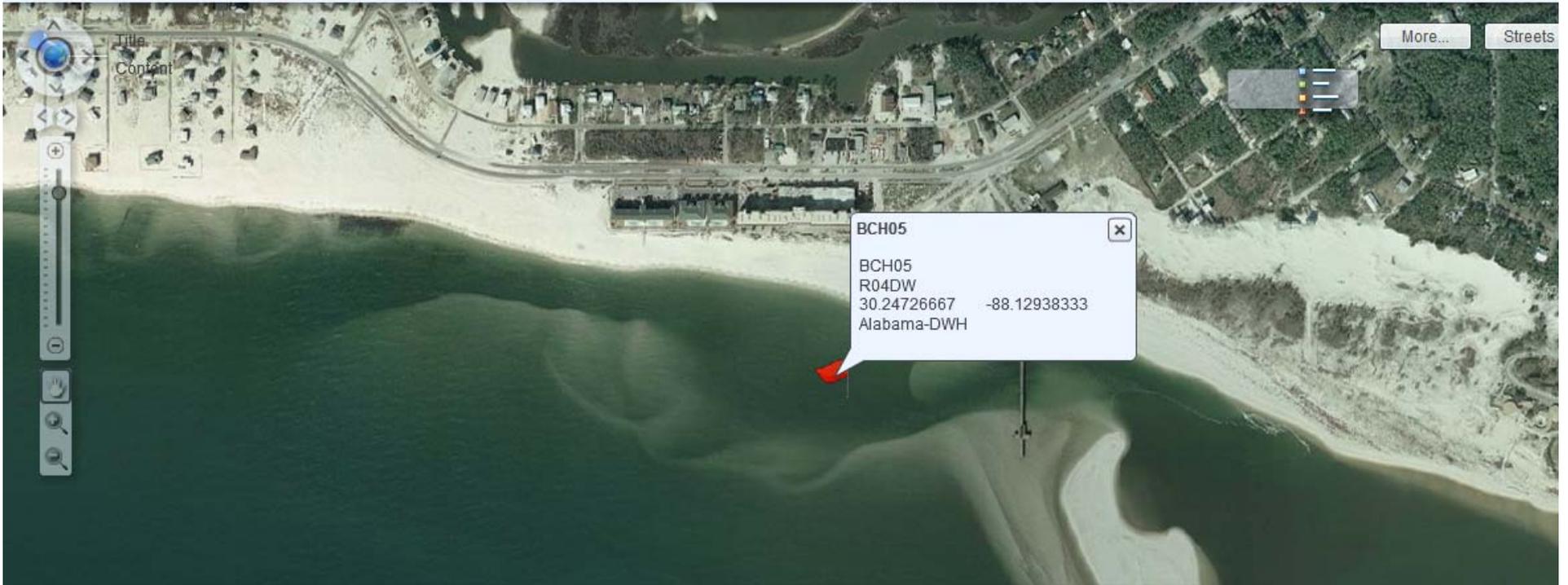
Monitoring Location Search Results

ID	Name	Description	HUC 8	HUC 12	Latitude	Longitude	Tag	Status
MSSnd	MSSnd	R04DW			30.2819254907	-88.1117459933	Alabama-DWH	
NCA10-1294	NCA10-1294	R04DW			29.96728115	-83.94428785	Florida-DWH	
NCA10-1295	NCA10-1295	R04DW			29.97571795	-84.11768884	Florida-DWH	II
NCA10-1297	NCA10-1297	R04DW			30.00958278	-84.30973402	Florida-DWH	

Monitoring Location Search Results

ID	Name	Description	HUC 8	HUC 12	Latitude	Longitude	Tag	Status
MSSnd	MSSnd	R04DW			30.2819254907	-88.1117459933	Alabama-DWH	
NCA10-1294	NCA10-1294	R04DW			29.96728115	-83.94428785	Florida-DWH	
NCA10-1295	NCA10-1295	R04DW			29.97571795	-84.11768884	Florida-DWH	II
NCA10-1297	NCA10-1297	R04DW			30.00958278	-84.30973402	Florida-DWH	

A Closer Look



BCH05
BCH05
R04DW
30.24726667 -88.12938333
Alabama-DWH

Monitoring Location Search Results

Export Data

ID	Name	Description	HUC 8	HUC 12	Latitude	Longitude	Tag	Status
BCH05	BCH05	R04DW			30.24726667	-88.12938333	Alabama-DWH	

Moving the Data to STORET

- The STORET Data Warehouse is a repository for water quality, biological, and physical data and is used by state environmental agencies, EPA and other federal agencies, universities, private citizens, and many others. <http://www.epa.gov/storet/>
- The Water Quality Exchange (WQX) is a framework that makes it easier for organizations submit and share water quality monitoring data over the Internet. <http://www.epa.gov/storet/wqx/index.html>
- STORET is the home for data submitted through WQX.

Scribe Database

- Scribe is a database developed by the USEPA's Environmental Response Team (ERT) to assist in the process of managing environmental data¹.
- Scribe is the official database for managing and distributing analytical sample data collected in response to the Oil Spill. Scribe captures sediment, water, and biota sampling data².

¹http://www.epaosc.org/site/site_profile.aspx?site_id=Scribe

²http://www.restorethegulf.gov/sites/default/files/documents/pdf/OSAT_Report_FINAL_17DEC.pdf

EPA SCRIBE to EPA STORET Data Migration Steps

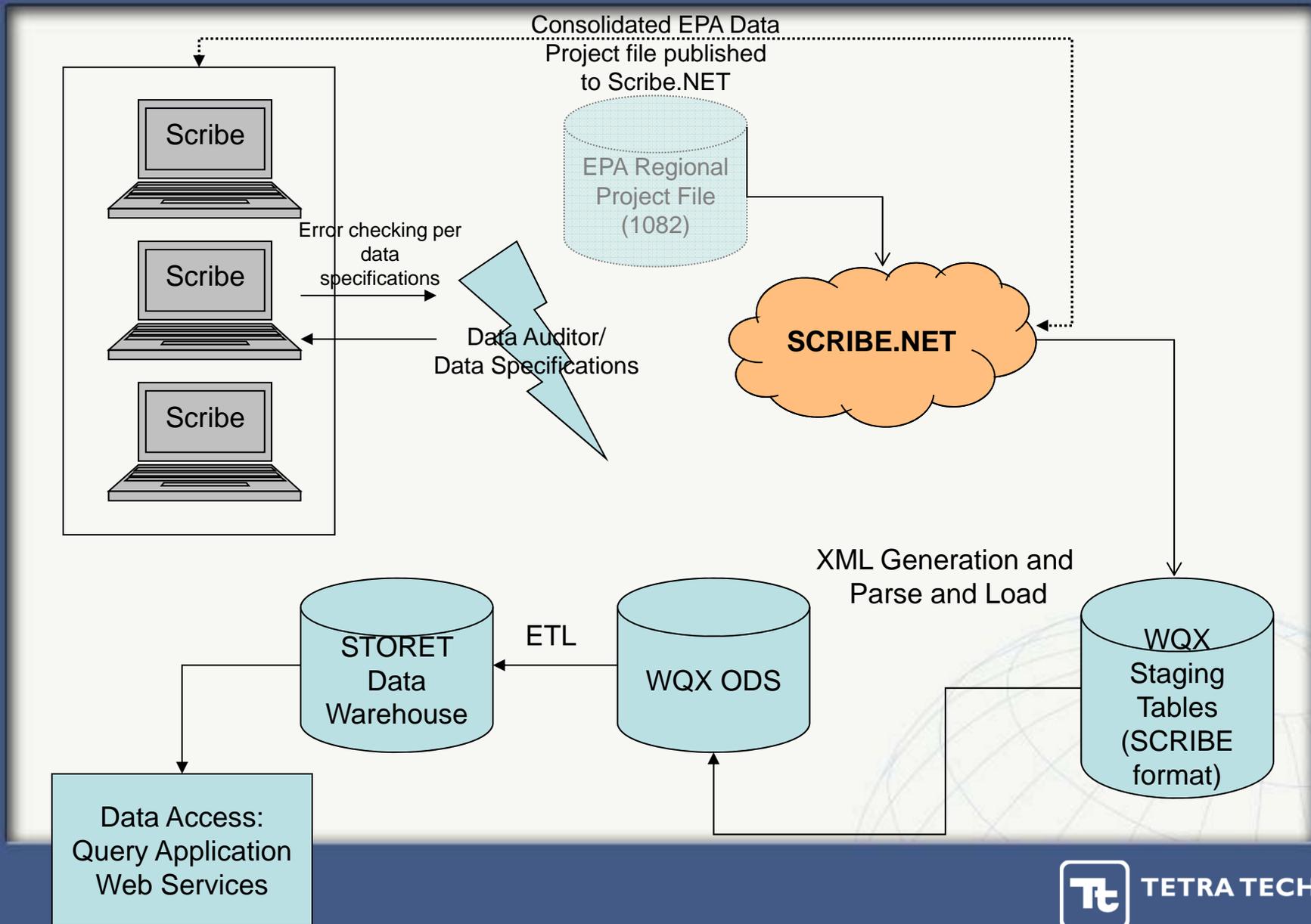
1. Tetra Tech used a web service (Scribe.NET) connected to a local copy of Scribe to maintain and keep water and sediment sampling data up to date.
2. Create a staging database with Scribe tables and tables containing valid WQX domain values and functions to generate XML.

EPA SCRIBE to EPA STORET Data Migration Steps

3. Run scripts from UpdateDomainValues.sql file which updates tables with valid WQX domain values.
4. Create procedure to generate an valid XML file from SCRIBE for import to WQX\STORET.

```
</Header>
- <Payload Operation="Update-Insert">
- <WQX xmlns="http://www.exchangenetwork.net/schema/wqx/2"
  xsi:schemaLocation="http://www.exchangenetwork.net/schema/wqx/2/1/WQX_WQX_v2.1
- <Organization>
- <OrganizationDescription>
  <OrganizationIdentifier>DWH_SCRIBE1082</OrganizationIdentifier>
  <OrganizationFormalName>BP Deep Water Horzon Oil Spill</OrganizationFormalName>
  <OrganizationDescriptionText>Surface water and sediment sampling collected in response to
    Spill</OrganizationDescriptionText>
</OrganizationDescription>
- <Project>
  <ProjectIdentifier>R04DW</ProjectIdentifier>
```

Sharing Data – SCRIBE to WQX / STORET

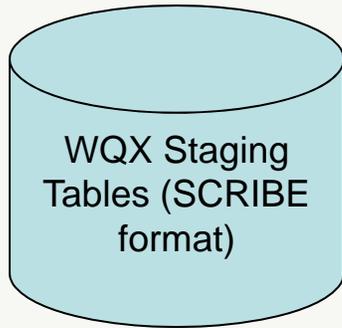


Data Validation and Cross Mapping

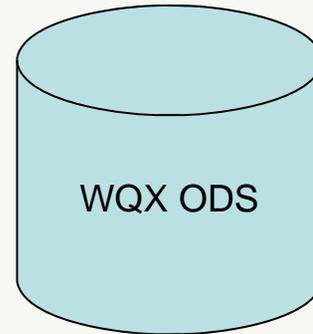
- Are Compounds (Alkyl PAHs and Dispersants) in WQX/STORET or will they need to be updated in WQX/STORET.
- Are all the Data Elements (fields) required in WQX (e.g., Sample Fraction) in SCRIBE?
- Are there missing values?
- Do the Domain Values (Valid Values) match between SCRIBE and WQX (e.g., Monitoring Location Type, Activity Type)?
- Configuration file - Transform values as needed.

SCRIBE to WQX / STORET

- Cross map SCRIBE tables and fields to appropriate WQX data elements

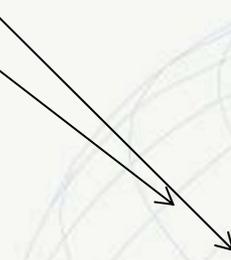


SN_SITE
 SN_LABANALYSES
 SN_LABRESULTS
 SN_INSTRUMENTS
 SN_LOCATION
 SN_MONITORING
 SN_PROPERTYOCCUPANT
 SN_PROPERTYINFO
 SN_SAMPLES
 SN_SAMPLESBIOTA
 SN_SAMPLESMEASUREMTS
 SN_SAMPLESSOIL
 SN_SAMPLESSOILGAS
 SN_SAMPLESTAGS
 SN_SAMPLESWATER
 SN_SAMPLESWIPE



SCRIBE.Samples	WQX.Activity
Samples->Samp_No	*ActivityIdentifier
Samples->SampeType	*ActivityTypeCode
Samples->Matrix	*ActivityMediaName
Samples->SampleDate	*ActivityStartDate

CHARACTERISTIC
 CHARACTERISTIC_TYPE
 CHARACTERISTIC_TYPE_MEDIA
 CITATION
 COMPOSITE
 COMPOSITE_ACTIVITY
 COMPOSITE_FREQUENCY_CLASS
 COMPOSITE_INDIVIDUAL
 COMPOSITE_SAMPLING_EVENT
 CONTAINER_COLOR
 CONTAINER_TYPE
 COUNTRY
 COUNTY
 COUNTY
 DETECTION_QUANT_LIMIT_TYPE
 ELECTRONIC_ADDRESS_TYPE
 FISH_TAXON
 FREQUENCY_CLASS_DESCRIPTOR
 FREQUENCY_CLASS_TYPE
 FUNCTIONAL_FEEDING_GROUPS
 HABIT
 HORIZONTAL_REFERENCE_DATUM
 HRZNTL_COLLECTION_METHOD
 HUC_EIGHT
 HUC_TWELVE
 IMPAIRMENT_CAUSE
 INDEX_TYPE
 MEASUREMENT_UNIT
 METHOD_SPECIATION
 METRIC_TYPE
 METRIC_TYPE_CONTEXT
 MONITOR_LOCATION_ALTERNATE
 MONITOR_LOCATION_PLACE
 MONITOR_LOCATION_PROJECT
 MONITORING_LOCATION
 MONITORING_LOCATION_IMAGE
 MONITORING_LOCATION_STATUS
 MONITORING_LOCATION_TYPE



SCRIBE Data Validation

- No apparent Domain List to enforce consistent naming.
- No or minimal required fields to minimize missing data.

WQX Requirement Data Requirement	SCRIBE Table	Default Value submitted to WQX	Notes
SampleFraction	Total or Dissolved from LabResults	Total or Dissolved, WQX valid values	WQX valid value are Total or Dissolve, will transform T or D from SCRIBE, many values in SCRIBE are null
CharacteristicName	Analyte from LabResults	Only Valid characteristic names have been mapped,	Waiting on input/decision on non matching names.
MeasureUnitCode	Result Unit from LabResults	Valid mapped WQX domain values	Some unit codes in SCRIBE are not valid in WQX
ResultStatusIdentifier	Not in SCRIBE	'Accepted', a WQX valid value	Domain list in WQX is Result Status
ResultValueTypeName	Not in SCRIBE	'Actual', a WQX valid value	TIC/TRG/MS/Null values in SCRIBE are not valid in WQX

Generating a WQX Compatible XML File

- Processing Report
- XML File

```
- <Payload Operation="Update-Insert">
- <WQX xmlns="http://www.exchangenetwork.net/schema/wqx/2"
  xsi:schemaLocation="http://www.exchangenetwork.net/schema/wqx/2/1/WQX_WQX
- <Organization>
  - <OrganizationDescription>
    <OrganizationIdentifier>DWH_SCRIBE1082</OrganizationIdentifier>
    <OrganizationFormalName>BP Deep Water Horzon Oil Spill</OrganizationFormalName>
    <OrganizationDescriptionText>Surface water and sediment sampling collected in response to the BP Gulf of M
      Spill</OrganizationDescriptionText>
  </OrganizationDescription>
- <Project>
  <ProjectIdentifier>R04DW</ProjectIdentifier>
  <ProjectName>Deepwater (R04)</ProjectName>
  <ProjectDescriptionText>Deepwater (R04)</ProjectDescriptionText>
</Project>
- <MonitoringLocation>
  - <MonitoringLocationIdentity>
    <MonitoringLocationIdentifier>#R4DART#</MonitoringLocationIdentifier>
    <MonitoringLocationName>#R4DART#</MonitoringLocationName>
    <MonitoringLocationTypeName>Ocean</MonitoringLocationTypeName>
    <MonitoringLocationDescriptionText>Near Shore</MonitoringLocationDescriptionText>
```

Processing Report	
Transaction ID: _e366863e-edfa-49c4-a54a-ae3cfcbb5d0	
Status: Completed	
Software Information	
Component Version	
WQX Node	2.30
WQX Database	2.26
Summary Information	
# Errors:	0
# Warnings:	0
Items Successfully Processed:	
Projects	
Insert	1
Monitoring Locations	
Insert	945

Destination STORET



U.S. ENVIRONMENTAL PROTECTION AGENCY

STORET

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Results by Project (stormod_)

Project

Step 1: Select a Single Organization from the List

ORG ID	ORGANIZATION NAME
DWH SCRIBE1082	BP Deep Water Horzon Oil Spill

Step 2: Select a Single Project by Clicking "Look Up"

Select a Project

STORET: Select a Project - Windows Internet Explorer

http://ofmpub.epa.gov/storpubl/DW_PROJ_POPUP?v_org=1555

File Edit View Favorites Tools Help

Select a Project for the Organization: BP Deep Water Horzon Oil Spill

Project ID	Project Name
R04DW	Deepwater (R04)
R06DW	Deepwater (R06)

Downloading from STORET

- Success, the sampling data are now in STORET and downloadable by the public.

From: STORET Web Site <storet@epa.gov> Sent: Thu 4/19/2012 7:50 AM
 To: White, Jeffrey
 Cc:
 Subject: STORET data request submitted (PROCESSING). Request_ID: 875830

Request Mode : Immediate batch
 File Name : RO4_20120419_114939.zip
 URL : http://www.epa.gov/storpubl/modern/downloads/RO4_20120419_114939.zip
 Email provided: jeffrey.white@tetrattech.com

You will be notified when the request is processed

List of Filters: ~Organization~Project~
 Query Parameter Values:
 Organization(s): DWH_SCRIBE1082<
 Project(s): R04DW - Deepwater (R04)

Data_RO4_20120419_114939_RegResults.txt - Notepad

Org Name	Station ID	State	County	HUC	Generated	HUC	Station	Latitude	Longitude	Horizontal	Datum
1	Actual	A		.3599999999999999	mg/kg	USEPA 60108BP Deep water	Horzon oil Spill	MSSnd	ALABAMA		
81925	-88.111746	NAD83		MSSnd-SD-20100503	2010-05-03 00:00:00						
002	mg/kg	USEPA 60108BP Deep water	Horzon oil spill	MSSnd	ALABAMA						
00	Sediment	Sample-Routine	Sample-Routine			Sodium Total	Actual				
erB	ALABAMA	03160205		30.280653	-87.735037	NAD83					
Sediment	Sample-Routine	Sample-Routine				Barium Total	Actual				
205	30.280653	-87.735037	NAD83			OysterB-SD-20100504	2010-05-04 00:00:00				
	Nickel	Total	Actual			mg/kg	USEPA 60108BP Deep water	Horzon oil Spill			
87.735037	NAD83										

Book1 - Microsoft Excel

1	Org Name	Station ID	State	Station Lat	Station Lon	Station Hc	Activity IC	Activity Start	Activity M	Activity T	Activity C	Activity D	Characteristic Name	Sample Fr	Value Typ	S	Resul	Result Val	Units	An
35	BP Deep Water Horzon Oil Spill	OysterB	ALABAMA	30.280653	-87.73504	NAD83	OysterB-S	5/4/2010 0:00	Sediment	Sample-Ri	Sample-Routine		Manganese	Total	Actual	A	190	mg/kg	USI	
36	BP Deep Water Horzon Oil Spill	OysterB	ALABAMA	30.280653	-87.73504	NAD83	OysterB-S	5/4/2010 0:00	Sediment	Sample-Ri	Sample-Routine		Nickel	Total	Actual	A	3.6	mg/kg	USI	
37	BP Deep Water Horzon Oil Spill	OysterB	ALABAMA	30.280653	-87.73504	NAD83	OysterB-S	5/4/2010 0:00	Sediment	Sample-Ri	Sample-Routine		Lead	Total	Actual	A	5.2	mg/kg	USI	
38	BP Deep Water Horzon Oil Spill	OysterB	ALABAMA	30.280653	-87.73504	NAD83	OysterB-S	5/4/2010 0:00	Sediment	Sample-Ri	Sample-Routine		Vanadium	Total	Actual	A	14	mg/kg	USI	

Conclusions and Data Needs

- Require use of domain lists (valid values) to:
 - To reduce data entry errors or omissions in the metadata (such as information on sample location and depth) associated with sediment and water samples collected for PAH (and other) analysis².
 - New values may be added to domain lists.
- Data fields that require unique names, for example station or sample identifier².
- Minimizing inconsistencies at the time of data entry will reduce the need to re-analyze the data.
- Submission of data from multiple labs.

References:

- Scribe website:

1. http://www.epaossc.org/site/site_profile.aspx?site_id=Scribe

- Summary Report Sub-Sea and Sub-Surface Oil and Dispersant Detection: Sampling and Monitoring, Dec 17, 2010

2. http://www.restorethegulf.gov/sites/default/files/documents/pdf/OSAT_Report_FINAL_17DEC.pdf

- STORET \ WQX

<http://www.epa.gov/storet/wqx/index.html>

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