

Appendix J

Blank Electronic Forms Used in the Review

DATA LOG SHEET

General Site Information

Site Name:

BRRTS#

Facility ID#

Closure Date

File Analyzed by

Date:

Street Address

City

State Zip

Phone #

Consulting Firm _____

Facility Name _____

Location WTM_E (m)

County

WTM_N (m)

Township:

N

Range:

Qtr / Qtr / Qtr:

¼ of

¼ of

¼ of

Section

Other Descriptors

Setting

Number of UST sites within ¼ mi (1320 ft)

Distance to closest UST (ft) _____

No. of GW receptors within ¼ mile of the source

Distance of center of source to closest GW receptor (ft)

Other receptors of concern (list)

Distance (ft) _____

Site Dimensions Length (ft):

Width (ft):

QA/QC Review

Date

Joint review of source zone & plume

Peer review of file _____

Peer review of data log entry

Characteristics of interest

YES

NO

Unknown

Extensive GW analytical record?

MTBE monitoring? _____

Piezometers on site?

Possible Water Level / Concentration relationship? _____

NA monitoring parameters?

Degradation rate data? _____

Others (List):

Number of downgradient monitoring wells > 250 ft away from site

Contaminant Setting

Facility ID#

BRRTS#

Spill Description	<u>Product (check all that apply):</u>	YES	NO	
Year spill reported	Gasoline			} Volume (gallons)
Year service station opened	Diesel			
Date tanks removed / upgraded	Waste Oil			
	Other			
	Active service station at closure date?			

Point of release	<u>Release points (check all that apply):</u>	YES	NO	
	Tanks			
Number of recorded releases	Lines			
Distance from center of source to downgradient property boundary (ft)	Dispensers			
	Unknown			
Number of tanks removed from the site				
	<u>Total number</u>	<u>No. inside SZ</u>	<u>No. outside SZ</u>	<u>Unknown</u>

Soil Borings:

Source Zone (SZ)	Consultant Report	Reviewer Interpreted		
Length (Maximum dimension, ft)				
Width (Perpendicular to Max. dir., ft)				
	<u>Criteria used to delineate source:</u>	YES	NO	
	Soil data (Conc. > NR 746 Table 1?)			
	GW data { Benzene > 10 mg/l?			
	{ Total BTEX > 50 mg/l?			
	Free product zone (including sheen)			
	Soil-gas survey?			
	Drill cutting observation (staining, odor?)			
	Tank bed used to determine SZ?			
	Is there more than 1 source zone on site?			
	Does SZ extend off the property boundary?			
Most-recent sheen observation date:	Has sheen been observed?			
	Maximum thickness (ft) ever observed of free product (Enter 0, if no FP observed):			
	Date when max. thickness was observed:			
	If FP was present, most recent date observed:			

Monitoring Wells	Total number of wells with groundwater data:				
	<u>Upgradient</u>	<u>In SZ</u>	<u>Downgradient</u>	<u>Crossgradient</u>	<u>Unknown</u>
Number of wells relative to SZ:					
				YES	NO
	Wells too few to determine groundwater flow direction?				
	(If yes, skip hydrogeologic setting, groundwater data tables or WIF sections.)				

Remediation	YES	NO		
Excavation			Exc. Date:	Volume excavated (yd ³):
Free Product Removal			—If yes—>	Volume of FP pumped (gallons):
Active Bioremediation				
Vapor Extraction			} Mass of contaminant removed (kg)	
Air / Bio Sparge				
Pump and Treat				
Date remedy stopped				
Nat. Att. assessed after remedy(ies)				
Natural Attenuation			<u>NA Based on:</u>	YES NO
	GW trends along plume centerline?			
	GW degradation rates?			
	Statistical tests (e.g. Mann-Kendall)?			
List technique(s) used to assess NA:			Other	
			Unknown	

Hydrogeologic Setting

Facility ID#

BRRTS#

Hydrogeologic District

Bedrock Encountered? YES NO

Vadose Zone

Saturated Zone

Bedrock
Unconsolidated Sediments

Groundwater

Flow

Direction

Direction from closure report¹

Horizontal hydraulic gradient (H.Grad.)²

Vertical hydraulic gradient (V.Grad.)²

Reviewer Interpreted: Horizontal hydraulic gradient³

Reviewer Interpreted: Vertical hydraulic gradient³

Reviewer Interpreted: Range of flow Azimuth parameters based on OWL analyses H.Grad.

MinValue Date MaxValue Date

Azimuth of plume axis (for purposes of determining well position)

Azimuth H.Grad. V.Grad.

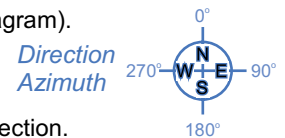
Reviewer Interpreted: Estimate of actual flow, based on all data⁴

¹ Values should include maximum arc of fluctuation in groundwater flow, based on azimuth 0° to 359° (see diagram).

² Gradient reported for the particular date.

³ Reviewer should re-interpret if there appears to be error in the reported gradients.

⁴ All data include water level, gw contaminant distribution, or other factors affected by the groundwater flow direction.



Aquifer

Characteristics

Hydraulic conductivity (K)

Min K

Max K

Units

Data from

Consultant Report, Date/Page

Water Level

Fluctuation

Ground surface elevation at tanks or dispenser, based on nearest well (ft msl)

Nearest Well Name:

Minimum Maximum

Depth to water below ground surface (ft bsg):

Water table fluctuation: Long-term rising

Approx. rise (ft)

Long-term falling

Approx. drop (ft)

Seasonal trends

Approx. range (ft)

Based on how many years of monitoring?

Contaminant

from other

Sources

Any upgradient well(s) contaminated with HC?

If yes, is contamination site related?

Is site within an area-wide GW casing restriction?

If yes, what type of contamination?

Are non-petroleum contaminants found on the property, or co-mingled with petroleum in the groundwater plume?

If yes, what type of contamination?

YES NO

Extent of

Groundwater

Monitoring

Data

Number of rounds of groundwater samples

Frequency of sampling

Sampling conducted over how many years?

Any significant break in sampling record (i.e, more than 2 consecutive rounds)?

All monitoring wells sampled throughout monitoring life?

Are contaminant concentrations for any monitoring wells below ES levels throughout monitoring history?

(If yes, do not fill out analyte spreadsheets for those wells.)

YES NO

Soil Boring Label:

Information	Brief Description	Soil-Boring Data
General	Date of Boring: Depth of Boring (ft): Boring Method: Number of Lab Soil Samples (excludes GW): Borehole Located within the Source Zone? Boring Encountered GW? Lab GW Sample Collected?	YES NO Unknown
Staining / Odor	Staining or Odor Observed? Maximum Depth Observed (ft bgs):	
Benzene	Maximum Concentration (<i>mg/kg</i> or ppm): Depth Benzene Max. was Observed (ft bgs):	<i>DL:</i>
MTBE	Maximum Concentration (<i>mg/kg</i> or ppm): Depth MTBE Max. was Observed (ft bgs):	<i>DL:</i>
Total BTEX	Maximum Concentration (<i>mg/kg</i> or ppm): Depth BTEX Max. was Observed (ft bgs):	
Water Sample	If <i>collected</i> , enter observed concentrations - Benzene (<i>ug/l</i> or ppb): MTBE (<i>ug/l</i> or ppb): Total BTEX (<i>ug/l</i> or ppb):	<i>DL:</i> <i>DL:</i>

