Site Name	Boarhead Farms Site	Charge No.	103G3995001.011
Data Reviewer (signature and date)		Technical Reviewer	
(Signature una date)	29 October 2018	(signature and date)	
Laboratory Report No.	P1805379	Laboratory	ALS Environmental/Simi Valley, California
Analyses	alyses Selected volatile organic compounds (VOC) by EPA Method TO-15		
Samples and Matrix	Nine air samples		
Field Duplicate Pairs	None		
Field Blanks	None		

INTRODUCTION

This checklist summarizes the Stage 4 validation performed on the subject laboratory report, in accordance with the U.S. Environmental Protection Agency (EPA) *Guidance for Labeling Externally Validated Laboratory Analytical Data for Superfund Use* (January 2009). Analytical data were evaluated in general accordance with the EPA *National Functional Guidelines (NFG) for Organic Superfund Methods Data Review* (January 2017)7).

OVERALL EVALUATION

Results were neither rejected nor qualified. All may be used as reported by the laboratory.

Data completeness:

Within Criteria	Exceedance/Notes
У	

Sample preservation, receipt, and holding times:

Within Criteria	Exceedance/Notes
Υ	



Instrument Performance Checks:

Within Criteria	Exceedance/Notes
Υ	

Initial Calibration:

	thin eria	Exceedance/Notes
`	Υ	

Continuing Calibration:

Within Criteria	Exceedance/Notes
Υ	

Calibration Verification:

Within Criteria	Exceedance/Notes
Υ	

Method blanks:

Within Criteria	Exceedance/Notes
Υ	

Field blanks:

Within Criteria	Exceedance/Notes
NA	



Interference Check Samples (ICS) (ICP metals only):

Within Criteria	Exceedance/Notes
NA	

System monitoring compounds (surrogates and labeled compounds):

Within Criteria	Exceedance/Notes
Υ	

MS/MSD:

Within Criteria	Exceedance/Notes
NA	

Post digestion spikes:

Within	Evenedance/Notes
Criteria	Exceedance/Notes
NA	

Serial dilutions:

Within Criteria	Exceedance/Notes
NA	

Laboratory duplicates:

Within Criteria	Exceedance/Notes
Υ	



Field duplicates:

Within Criteria	Exceedance/Notes
NA	

LCSs/LCSDs:

Within Criteria	Exceedance/Notes
Υ	

Sample dilutions:

Within Criteria	Exceedance/Notes
Y	All samples were analyzed at the dilution factor (ranging from 1.58 to 1.70) inherent in the standard 1 liter volume into the instrument and the residual vacuum in the canister.

Re-extraction and reanalysis:

Within Criteria	Exceedance/Notes
Υ	Samples BF-B1-100218 and BF-B2-100218 were re-analyzed at a further 5-fold dilution to bring their high concentrations of
	trichloroethene within calibration range. This succeeded, so no qualifications were applied.

Second column confirmation (GC and HPLC analyses only):

Within Criteria	Exceedance/Notes
NA	



Internal Standards:

Within Criteria	Exceedance/Notes
Υ	

Target analyte identification:

Within Criteria	Exceedance/Notes
Υ	

Analyte quantitation and MDLs/RLs:

Within Criteria	Exceedance/Notes
Υ	Analytes detected at concentrations below their sample reporting limit were qualified as estimated and flagged "J".

Tentatively identified compounds:

	,
Within	Exceedance/Notes
Criteria	Exceedance/Notes
NA	

System performance and instrument stability:

Within Criteria	Exceedance/Notes
Υ	

Other [specify]:

other [specify].	
Within	Exceedance/Notes
Criteria	
NA	



Overall Qualifications:

See results summary pages attached for changes to the laboratory qualifiers based upon this validation. The following is a list of qualifiers and definitions that may be used for the validation of this data package:

J	The analyte was positively identified; the associated value is the approximate concentration of the analyte in the sample.
J+	The analyte was positively identified; the associated value is the approximate concentration of the analyte in the sample and may be biased high.
J-	The analyte was positively identified; the associated value is the approximate concentration of the analyte in the sample and may be biased low.
NJ	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated value is the approximate concentration of the analyte in the sample.
R	The sample result is rejected as unusable due to serious deficiencies in one or more quality control criteria. The analyte may or may not be present in the sample.
U	The analyte was analyzed for, but was not detected at or above the associated value (reporting limit).
UJ	The analyte was analyzed for, but was not detected at or above the associated value (reporting limit), which is considered approximate due to deficiencies in one or more quality control criteria.

