APPENDIX D

Quality Control (Data Validation Reports) and Corrections
## TETRA TECH
### LABORATORY REPORT EVALUATION CHECKLIST

**Project Name:** Actus Hickam  
**Project Number:** 100-580-J26434-02  
**Laboratory Used:** Torrent Labs  
**Lab Project Number:** 1008130  
**Sample Matrix:** Soil  
**Checked By/On:** Mark DeNy  
**Date:** 9-7-10

<table>
<thead>
<tr>
<th>Analysis</th>
<th>Laboratory QC Batch Number</th>
<th>Number of TETRA TECH Samples in Batch</th>
<th>Holding Times Met</th>
<th>Surrogates</th>
<th>Method Blank (MB)</th>
<th>Matrix Spike/Matrix Spike Duplicate (MS/MSD)</th>
<th>Laboratory Control Spike (LCS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>8081</td>
<td>401934</td>
<td>22</td>
<td>Y</td>
<td>Some</td>
<td>OK</td>
<td>MS/MSD outside recovery limits</td>
<td>OK</td>
</tr>
<tr>
<td>SW98014</td>
<td>401940</td>
<td>22</td>
<td>Y</td>
<td>OK</td>
<td>OK</td>
<td>MS/MSD inside recovery limits</td>
<td>OK</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date</th>
<th>Issues and Actions Taken</th>
</tr>
</thead>
<tbody>
<tr>
<td>8/26/10</td>
<td>* Out* 401934 had MS/MSD spike that was not detectable/measureable. Original sample required greater than 10x dilution. Surrogates were deleted out. No corrective action required.</td>
</tr>
<tr>
<td></td>
<td>* Out* 401940: % recoveries for heptachlor in MS/MSD and aldrin, Dieldrin, and 4,4'-DDT in the MS and MS/MSD are above lab control limits. No corrective action required.</td>
</tr>
</tbody>
</table>

**Note:** Sample LAB-14-22C-12 and LAB-14-24C-12 say 9/23 as opposed to 8/13. There is no correction, as it currently says received on 8/17. Sample dates were revised; all MS/MSD ranges are OK.
TETRA TECH
LABORATORY REPORT EVALUATION CHECKLIST

Project Name: **SAME**
Project Number: **SAME**
Laboratory Used: **OTHER**
Lab Project Number: **SIZE**
Sample Matrix: ______
Checked By/On: ______

Is a Quality Assurance Project Plan (QAPP), Work Plan or a Sampling and Analysis (SAP) available?  
X
Was the frequency stated in the QAPP, Work Plan or SAP for field duplicates, rinsate blanks and trip blanks met?  
X

Chain-of-Custody and Request for Analysis (CC/RA) Records:  
Is the CC/RA present and the original copy?  
X
Is the CC/RA complete and signed off as appropriate?  
X
Was the temperature received recorded by the laboratory and was it 4°C, ±2°? If not what ____.

Were any problems noted by the laboratory on the CC/RA?  
What? ________________________

X

CC/RA - Laboratory Report Agreement:  
Were all the samples on the CC/RA analyzed as requested and instructions followed?  
X
Is the Field Sample Identification and the Laboratory Number relationship consistent between  
the CC/RA and the laboratory report?  
X
Do the Sampled and Received dates on the CC/RA match those on the laboratory report for each sample?  
X

Was the report signed and each report page stamped with the TETRA TECH "Date Received..." stamp?  
X

X

Was a project narrative available and read?  
X
Were any problems noted in the narrative? Describe **SAME NS NSD, outside lab control limit**.  
X

X

Were method numbers, matrices, units and reporting limits indicated and appropriate?  
X
Was all other report heading information accurate?  
X

X

Were all field duplicates within relative percent difference (RPD) control limits?  
X

X

Were all results for field, rinsate and trip blanks ND?  
X
<table>
<thead>
<tr>
<th>Analysis</th>
<th>Laboratory QC Batch Number</th>
<th>Number of TETRA TECH Samples in Batch</th>
<th>Holding Times Met</th>
<th>Surrogates</th>
<th>Method Blank (MB)</th>
<th>Matrix Spike/Matrix Spike Duplicate (MS/MSD)</th>
<th>Laboratory Control Spike (LCS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SW8081A</td>
<td>401940</td>
<td>4</td>
<td>Y</td>
<td>OK</td>
<td>OK</td>
<td></td>
<td>OK</td>
</tr>
</tbody>
</table>

Date:  
Issues and Actions Taken:

- No issues or actions taken
- No MS/MSD spike duplicate
TETRA TECH
LABORATORY REPORT EVALUATION CHECKLIST

Project Name: Same
Project Number: Same
Laboratory Used: Other Side
Lab Project Number: Other Side
Sample Matrix: ____________
Checked By/On: ____________

Is a Quality Assurance Project Plan (QAPP), Work Plan or a Sampling and Analysis (SAP) available?  X
Was the frequency stated in the QAPP, Work Plan or SAP for field duplicates, rinsate blanks and trip blanks met?  X

Chain-of-Custody and Request for Analysis (CC/RA) Records:
  Is the CC/RA present and the original copy?  X
  Is the CC/RA complete and signed off as appropriate?  X
  Was the temperature received recorded by the laboratory and was it 4°C, ±2°? if not what ____.
  Were any problems noted by the laboratory on the CC/RA?  X
  What? ________________________________

CC/RA - Laboratory Report Agreement:
  Were all the samples on the CC/RA analyzed as requested and instructions followed?  X
  Is the Field Sample Identification and the Laboratory Number relationship consistent between the CC/RA and the laboratory report?  X
  Do the Sampled and Received dates on the CC/RA match those on the laboratory report for each sample?  X

Was the report signed and each report page stamped with the TETRA TECH “Date Received...” stamp?  X

Was a project narrative available and read?  X
Were any problems noted in the narrative? Describe _______ NO _________________.  X

Were method numbers, matrices, units and reporting limits indicated and appropriate?  X
Was all other report heading information accurate?  X

Were all field duplicates within relative percent difference (RPD) control limits?  X

Were all results for field, rinsate and trip blanks ND?  X
### TETRA TECH
LABORATORY REPORT EVALUATION CHECKLIST

<table>
<thead>
<tr>
<th>Analysis</th>
<th>Laboratory QC Batch Number</th>
<th>Number of TETRA TECH Samples in Batch</th>
<th>Holding Times Met</th>
<th>Surrogates</th>
<th>Method Blank (MB)</th>
<th>Matrix Spike/Matrix Spike Duplicate (MS/MSD)</th>
<th>Laboratory Control Spike (LCS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SUBG11A</td>
<td>401940</td>
<td>2-2</td>
<td>✓</td>
<td>limits raised ✓</td>
<td>✓</td>
<td>missing</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>401956</td>
<td>16-16</td>
<td>✓</td>
<td>all diluted ✓</td>
<td>✓</td>
<td>same outside limits ✓</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>401958</td>
<td>4-5</td>
<td>✓</td>
<td>all diluted ✓</td>
<td>✓</td>
<td>missing</td>
<td>missing</td>
</tr>
</tbody>
</table>

**Date**
- 13 Sept 2010: Time for sample EARZ-RA-43a-06-1 reported as 13:30 in report but 14:30 on GC. Lab ID11A
- 13 Sept 2010: Missing MS/MSD for batches 401940 and 401958
- 13 Sept 2010: Missing MB and LCS for batch 401958
- 11/1/10: Lab revised report so that sample time error on CoC is mentioned in the case narrative. Report OK.
TETRA TECH
LABORATORY REPORT EVALUATION CHECKLIST

Project Name: Hickman RAP Soil Sampling
Project Number: 126431.42

Laboratory Used: Torrent
Lab Project Number: 1068153 Rev 1

Sample Matrix: Soil
Checked By/On: 11-15-08

N/A YES NO

Is a Quality Assurance Project Plan (QAPP), Work Plan or a Sampling and Analysis (SAP) available? ✓ ___ ___
Was the frequency stated in the QAPP, Work Plan or SAP for field duplicates, rinsate blanks and trip blanks met? ✓ ___ ___

Chain-of-Custody and Request for Analysis (CC/RA) Records:
Is the CC/RA present and the original copy? ___ ✓ ___
Is the CC/RA complete and signed off as appropriate? ✓ ___ ___
Was the temperature received recorded by the laboratory and was it 4°C, ±2°? if not what ___. ✓ ___ ___
Were any problems noted by the laboratory on the CC/RA? ___ ✓ ___
What? ___________________________

CC/RA - Laboratory Report Agreement:
Were all the samples on the CC/RA analyzed as requested and instructions followed? ✓ ___ ___
Is the Field Sample Identification and the Laboratory Number relationship consistent between the CC/RA and the laboratory report? ✓ ___ ___
Do the Sampled and Received dates on the CC/RA match those on the laboratory report for each sample? ___ ✓ ___

Was the report signed and each report page stamped with the TETRA TECH "Date Received..." stamp? ✓ ___ ___

Was a project narrative available and read? ✓ ___ ___
Were any problems noted in the narrative? Describe _____________________________ ✓ ___ ___

Were method numbers, matrices, units and reporting limits indicated and appropriate? ___ ✓ ___
Was all other report heading information accurate? ✓ ___ ___

Were all field duplicates within relative percent difference (RPD) control limits? ___ ___ ___

Were all results for field, rinsate and trip blanks ND? ✓ ___ ___
<table>
<thead>
<tr>
<th>Analysis</th>
<th>Laboratory QC Batch Number</th>
<th>Number of TETRA TECH Samples in Batch</th>
<th>Holding Times Met</th>
<th>Surrogates</th>
<th>Method Blank (MB)</th>
<th>Matrix Spike/Matrix Spike Duplicate (MS/MSD)</th>
<th>Laboratory Control Spike (LCS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SW8081A</td>
<td>402000</td>
<td>38</td>
<td>Y</td>
<td>OK</td>
<td>OK</td>
<td>some MS/MSD</td>
<td>OK</td>
</tr>
</tbody>
</table>

Date: 5-31-10

Issues and Actions Taken:

- Batch ID 402000: MSD for Dieldrin outside % recoveries and MS/MSD for 4,4 DDT are outside % recoveries for lab control limits but within % RPD limits.
- No corrective action required.
TETRA TECH
LABORATORY REPORT EVALUATION CHECKLIST

Project Name: ____________________________
Project Number: SAME
Laboratory Used: __________________________________________
Lab Project Number: OTHER
Sample Matrix: ____________________________
Checked By/On: ____________________________

Is a Quality Assurance Project Plan (QAPP), Work Plan or a Sampling and Analysis (SAP) available?  YES  NO  N/A
Was the frequency stated in the QAPP, Work Plan or SAP for field duplicates, rinseate blanks and trip blanks met?  YES  NO  N/A

Chain-of-Custody and Request for Analysis (CC/RA) Records:
Is the CC/RA present and the original copy?  YES  NO  N/A
Is the CC/RA complete and signed off as appropriate?  YES  NO  N/A
Was the temperature received recorded by the laboratory and was it 4°C, ±2°C? if not what ______.
Were any problems noted by the laboratory on the CC/RA?  YES  NO  N/A
What? ____________________________________________

CC/RA - Laboratory Report Agreement:
Were all the samples on the CC/RA analyzed as requested and instructions followed?  YES  NO  N/A
Is the Field Sample Identification and the Laboratory Number, relationship consistent between the CC/RA and the laboratory report?  YES  NO  N/A
Do the Sampled and Received dates on the CC/RA match those on the laboratory report for each sample?  YES  NO  N/A

Was the report signed and each report page stamped with the TETRA TECH "Date Received..." stamp?  YES  NO  N/A

Was a project narrative available and read?  YES  NO  N/A
Were any problems noted in the narrative? Describe ____________________________

Were method numbers, matrices, units and reporting limits indicated and appropriate?  YES  NO  N/A
Was all other report heading information accurate?  YES  NO  N/A

Were all field duplicates within relative percent difference (RPD) control limits?  YES  NO  N/A

Were all results for field, rinseate and trip blanks ND?  YES  NO  N/A
### TETRA TECH
LABORATORY REPORT EVALUATION CHECKLIST

**Project Name:** Actus Hicken  
**Project Number:** 100-580-26434-02  
**Laboratory Used:** Torrent Labs  
**Lab Project Number:** 1008-172  
**Sample Matrix:** So.1  
**Checked By/On:** [Mark Date] 9-7-2010

<table>
<thead>
<tr>
<th>Analysis</th>
<th>Laboratory QC Batch Number</th>
<th>Number of TETRA TECH Samples in Batch</th>
<th>Holding Times Met</th>
<th>Surrogates</th>
<th>Method Blank (MB)</th>
<th>Matrix Spike/Matrix Spike Duplicate (MS/MSD)</th>
<th>Laboratory Control Spike (LCS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SW8081A</td>
<td>402-009</td>
<td>32</td>
<td>Y</td>
<td>OK</td>
<td>OK</td>
<td></td>
<td>OK</td>
</tr>
<tr>
<td>SW8081A</td>
<td>402-513</td>
<td>32</td>
<td>Y</td>
<td>OK</td>
<td>OK</td>
<td></td>
<td>OK</td>
</tr>
</tbody>
</table>

**Date**  
9-1-2010

**Issues and Actions Taken**  
- **MS MSD** was not ran due to high level of dieldrin and aldrin in the spiked sample.
- Sample - 0BA (EAR2-RA-205-06 D130) not matching COC which is EAR2-RA-205-06 130.  
- Sample - 014A (EAR2-RA-205-12 D135) not matching COC which is EAR2-RA-205-12.  
- Sample - 015A (EAR2-RA-205-06) not matching COC which was EAR2-RA-205-06.  

These COC discrepancies were resolved and COC edited.
TETRA TECH
LABORATORY REPORT EVALUATION CHECKLIST

Project Name: SAME AS OTHER SIDE
Project Number: __________
Lab Project Number: __________
Sample Matrix: __________
Checked By/On: __________

N/A YES NO

Is a Quality Assurance Project Plan (QAPP), Work Plan or a Sampling and Analysis (SAP) available? X  
Was the frequency stated in the QAPP, Work Plan or SAP for field duplicates, rinseate blanks and trip blanks met? ___ X ___

Chain-of-Custody and Request for Analysis (CC/RA) Records:  
Is the CC/RA present and the original copy? X ___  
Was the CC/RA complete and signed off as appropriate? X ___  
Was the temperature received recorded by the laboratory and was it 4°C, ±2°? if not what ___ X ___  
Were any problems noted by the laboratory on the CC/RA? X ___  
What? __________ DISCREPANCY BETWEEN SD IDS AND COC ___ X ___

CC/RA - Laboratory Report Agreement:  
Were all the samples on the CC/RA analyzed as requested and instructions followed? X ___  
Is the Field Sample Identification and the Laboratory Number relationship consistent between the CC/RA and the laboratory report? X ___  
Do the Sampled and Received dates on the CC/RA match those on the laboratory report for each sample? ___ X ___  

Was the report signed and each report page stamped with the TETRA TECH "Date Received..." stamp? X ___  

Was a project narrative available and read? X ___  
Were any problems noted in the narrative? Describe ___ X ___  

Were method numbers, matrices, units and reporting limits indicated and appropriate? X ___  
Was all other report heading information accurate? X ___  

Were all field duplicates within relative percent difference (RPD) control limits? X ___  
Were all results for field, rinseate and trip blanks ND? X ___  

G:\EMG - Environmental Mgmt. Group\Field Forms\Forms\Lab Validation Tt.doc
Rev. 11-08-07  Tetra Tech
### TETRA TECH
#### LABORATORY REPORT EVALUATION CHECKLIST

**Project Name:** Hackensack RAP Soil Sampling  
**Project Number:** J22434.02  
**Laboratory Used:** Torrent  
**Lab Project Number:** 1008177  
**Sample Matrix:** Soil  
**Checked By/On:** 16-8-Sept-2010

<table>
<thead>
<tr>
<th>Analysis</th>
<th>Laboratory QC Batch Number</th>
<th>Number of TETRA TECH Samples in Batch</th>
<th>Holding Times Met</th>
<th>Surrogates</th>
<th>Method Blank (MB)</th>
<th>Matrix Spike/Matrix Spike Duplicate (MS/MSD)</th>
<th>Laboratory Control Spike (LCS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SL8081A</td>
<td>402021</td>
<td>8</td>
<td>✓</td>
<td>Diluted OK</td>
<td>✓</td>
<td>Missing</td>
<td>✓</td>
</tr>
<tr>
<td>402029</td>
<td></td>
<td>12</td>
<td>✓</td>
<td>100K/200K</td>
<td>Missing</td>
<td>Missing</td>
<td>Missing</td>
</tr>
<tr>
<td>402027</td>
<td></td>
<td>6+2mg/L 2mg/L</td>
<td></td>
<td>Nil Ori fold out</td>
<td>✓</td>
<td>✓</td>
<td>Missing</td>
</tr>
<tr>
<td>402015</td>
<td></td>
<td>2</td>
<td>✓</td>
<td>OK</td>
<td>Missing</td>
<td>Missing</td>
<td>Missing</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date</th>
<th>Issues and Actions Taken</th>
</tr>
</thead>
</table>
| 8 Sept 2010 | Sample times for Lab ID 17A and 18A  
**14:10** and **14:15**            |
| 8 Sept 2010 | Sample ID for Lab ID 20A — FAR-RA/20K-10 should be 20-12                   |
| 8 Sept 2010 | Missing MB & LCS/LCSO retests                                                |
| 8 Sept 2010 | No RSC(SMS) s                                                                 |
| 9 Sept 2010 | MB and LCS for batch 402027 found in Report w/ Lab Project Number 1008177   |
| 11-1-10   | Lab discusses sample time errors and sample ID in revised report            |

*Note: Sample receipts checklist*
TETRA TECH
LABORATORY REPORT EVALUATION CHECKLIST

Project Name: Hickam RAP Soil Sampling
Project Number: T26434.02

Laboratory Used: Torrent
Lab Project Number: 1008177

Sample Matrix: Soil
Checked By/On: 09-06-2000

Plan

N/A YES NO

Is a Quality Assurance Project Plan (QAPP), Work Plan or a Sampling and Analysis (SAP) available?
Was the frequency stated in the QAPP, Work Plan or SAP for field duplicates, rinsate blanks and trip blanks met?

Chain-of-Custody and Request for Analysis (CC/RA) Records:
Is the CC/RA present and the original copy?
Is the CC/RA complete and signed off as appropriate?
Was the temperature received recorded by the laboratory and was it 4°C ± 2°C? if not what ________.
Were any problems noted by the laboratory on the CC/RA?
What? ____________________________

CC/RA - Laboratory Report Agreement:
Were all the samples on the CC/RA analyzed as requested and instructions followed?
Is the Field Sample Identification and the Laboratory Number relationship consistent between
the CC/RA and the laboratory report?
Do the Sampled and Received dates on the CC/RA match those on the laboratory report for each sample?

Was the report signed and each report page stamped with the TETRA TECH "Data Received..." stamp?

Was a project narrative available and read?
Were any problems noted in the narrative? Describe ________________________________.

Were method numbers, matrices, units and reporting limits indicated and appropriate?
Was all other report heading information accurate?

Were all field duplicates within relative percent difference (RPD) control limits?

Were all results for field, rinsate and trip blanks ND?
<table>
<thead>
<tr>
<th>Analysis</th>
<th>Laboratory QC Batch Number</th>
<th>Number of TETRA TECH Samples in Batch</th>
<th>Holding Times Met</th>
<th>Surrogates</th>
<th>Method Blank (MB)</th>
<th>Matrix Spike/Matrix Spike Duplicate (MS/MSD)</th>
<th>Laboratory Control Spike (LCS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SW8081A</td>
<td>402015</td>
<td>7</td>
<td>✓</td>
<td>Scheduled Z not recovered, Missing</td>
<td></td>
<td></td>
<td>Missing</td>
</tr>
<tr>
<td></td>
<td>402041</td>
<td>21 + 1</td>
<td>✓</td>
<td>Balanced 13 not recoverable</td>
<td>✓</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>402050</td>
<td>4</td>
<td>✓</td>
<td>All nit recoverable</td>
<td>✓</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>402027</td>
<td>20</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date</th>
<th>Issues and Actions Taken</th>
</tr>
</thead>
<tbody>
<tr>
<td>9 Sept 2010</td>
<td>MB and LCS for batch 402015 included in this report</td>
</tr>
<tr>
<td>9 Sept 2010</td>
<td>Missing MB and LCS for batch 402015</td>
</tr>
<tr>
<td>9 Sept 2010</td>
<td>No MS/MSDs</td>
</tr>
<tr>
<td>1 Sept 2010</td>
<td>Lab IDs from 013A to 032A using &quot;A&quot; on cc.</td>
</tr>
<tr>
<td>10/21/10</td>
<td>Sample date in LIS for 62C-06 says 8/25 instead of 8/23, it correct in sample results page through</td>
</tr>
<tr>
<td>11/11/10</td>
<td>Lab sent revision for sample date error, report validated OK</td>
</tr>
</tbody>
</table>
TETRA TECH
LABORATORY REPORT EVALUATION CHECKLIST

Project Name: Hickam RAP Soil Sampling
Project Number: 126439.02

Laboratory Used: Torrent
Lab Project Number: 1008192

Sample Matrix: Soil
Checked By/On: 11-9-2010

N/A YES NO

Is a Quality Assurance Project Plan (QAPP), Work Plan or a Sampling and Analysis (SAP) available?  
Was the frequency stated in the QAPP, Work Plan or SAP for field duplicates, rinsate blanks and trip blanks met?  

Chain-of-Custody and Request for Analysis (CC/RA) Records:
  Is the CC/RA present and the original copy?  
  Is the CC/RA complete and signed off as appropriate?  
  Was the temperature received recorded by the laboratory and was it 4°C, ±2°? if not what _____.  
  Were any problems noted by the laboratory on the CC/RA?  
  What?  

CC/RA - Laboratory Report Agreement:
  Were all the samples on the CC/RA analyzed as requested and instructions followed?  
  Is the Field Sample Identification and the Laboratory Number relationship consistent between 
    the CC/RA and the laboratory report?  
  Do the Sampled and Received dates on the CC/RA match those on the laboratory report for each sample?  

Was the report signed and each report page stamped with the TETRA TECH "Date Received..." stamp?  

Was a project narrative available and read?  
Were any problems noted in the narrative? Describe _____________________________________________________.  

Were method numbers, matrices, units and reporting limits indicated and appropriate?  
Was all other report heading information accurate?  

Were all field duplicates within relative percent difference (RPD) control limits?  

Were all results for field, rinsate and trip blanks ND?
TETRA TECH
LABORATORY REPORT EVALUATION CHECKLIST

Project Name: Hickam RAP Soil Sampling
Project Number: 728404.02
Laboratory Used: Torrent
Lab Project Number: 1008202
Sample Matrix: Soil
Checked By/On: 1K-9 Sept. 2010

<table>
<thead>
<tr>
<th>Analysis</th>
<th>Laboratory QC Batch Number</th>
<th>Number of TETRA TECH Samples in Batch</th>
<th>Holding Times Met</th>
<th>Surrogates</th>
<th>Method Blank (MB)</th>
<th>Matrix Spike/Matrix Spike Duplicate (MS/MSD)</th>
<th>Laboratory Control Spike (LCS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SW8081A</td>
<td>402050 0470</td>
<td>16 + 5</td>
<td>✓</td>
<td>All Nut Recoverable.</td>
<td>✓</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>402061 0470</td>
<td>18 + 11</td>
<td>✓</td>
<td>17 Nut Recoverable 1 - Damaged</td>
<td>✓</td>
<td></td>
<td>✓</td>
</tr>
</tbody>
</table>

Date | Issues and Actions Taken
--- | --------------------------
9 Sept 2010 | “Sample Receipt Checklist” is incomplete
9 Sept 2010 | Missing MS/MSD
9 Sept 2010 | Lab ID missing letter “A” in report that was written in Cap. “Sample Result Summary”
11/1/10    | Lab completed checklist in revised report > validated OK
TETRA TECH
LABORATORY REPORT EVALUATION CHECKLIST

Project Name: Hucknow RAD Soil Sampling
Project Number: T26K34.02

Laboratory Used: Tarrant
Lab Project Number: 1008702

Sample Matrix: Soil
Checked By/On: 9 Sept 2010

Is a Quality Assurance Project Plan (QAPP), Work Plan or a Sampling and Analysis (SAP) available?  
Was the frequency stated in the QAPP, Work Plan or SAP for field duplicates, rinsate blanks and trip blanks met?  

Chain-of-Custody and Request for Analysis (CC/RA) Records: 
- Is the CC/RA present and the original copy?  
- Is the CC/RA complete and signed off as appropriate?  
- Was the temperature received recorded by the laboratory and was it 4°C, ±2°? if not what ______.  
- Were any problems noted by the laboratory on the CC/RA?  
  What? ________________________________

CC/RA - Laboratory Report Agreement: 
- Were all the samples on the CC/RA analyzed as requested and instructions followed?  
- Is the Field Sample Identification and the Laboratory Number relationship consistent between the CC/RA and the laboratory report?  
- Do the Sampled and Received dates on the CC/RA match those on the laboratory report for each sample?  

Was the report signed and each report page stamped with the TETRA TECH "Date Received..." stamp?  

Was a project narrative available and read?  
Were any problems noted in the narrative? Describe ________________________________.

Were method numbers, matrices, units and reporting limits indicated and appropriate?  
Was all other report heading information accurate?  

Were all field duplicates within relative percent difference (RPD) control limits?  

Were all results for field, rinsate and trip blanks ND?  

N/A  YES  NO
## TETRA TECH
### LABORATORY REPORT EVALUATION CHECKLIST

<table>
<thead>
<tr>
<th>Analysis</th>
<th>Laboratory QC Batch Number</th>
<th>Number of TETRA TECH Samples in Batch</th>
<th>Holding Times Met</th>
<th>Surrogates</th>
<th>Method Blank (MB)</th>
<th>Matrix Spike/Matrix Spike 'Duplicate (MS/MSD)</th>
<th>Laboratory Control Spike (LCS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SJW981A</td>
<td>402080</td>
<td>10 + 6</td>
<td>✓</td>
<td>All not recoverable</td>
<td>Missing</td>
<td></td>
<td>Missing</td>
</tr>
<tr>
<td></td>
<td>402087</td>
<td>5 + 4</td>
<td>✓</td>
<td>3 not recoverable Z confirmed</td>
<td>Missing</td>
<td></td>
<td>Missing</td>
</tr>
<tr>
<td></td>
<td>402082</td>
<td>8 + 3</td>
<td>✓</td>
<td>All not recoverable</td>
<td>FO 0.0490 x 2</td>
<td></td>
<td>Missing</td>
</tr>
<tr>
<td></td>
<td>402088</td>
<td>15</td>
<td>✓</td>
<td>10 not recoverable Z confirmed</td>
<td>Missing</td>
<td></td>
<td>Missing</td>
</tr>
</tbody>
</table>

### Issues and Actions Taken
- **9 Sept 2010**: Lab Report lists sample IDs as "EAR..." and not "EAR2..." as they are listed in CC
- **9 Sept 2010**: Missing MB and LCS for Batches 402080, 402087, and 402089
- **9 Sept 2010**: Missing MS/MSD
- **11/1/10**: Lab revised sample ID to match CC > validated / OK
TETRA TECH
LABORATORY REPORT EVALUATION CHECKLIST

Project Name: Hickman RAP Soil Sampling
Project Number: T26434.02
Laboratory Used: Torrent
Lab Project Number: 100821C
Sample Matrix: Soil
Checked By/On: 16 Sept 2010

Is a Quality Assurance Project Plan (QAPP), Work Plan or a Sampling and Analysis (SAP) available?  
Was the frequency stated in the QAPP, Work Plan or SAP for field duplicates, rinsate blanks and trip blanks met?  

Chain-of-Custody and Request for Analysis (CC/RA) Records:
- Is the CC/RA present and the original copy?  
- Is the CC/RA complete and signed off as appropriate?  
- Was the temperature recorded by the laboratory and was it 4°C, ±2°C if not what _____?  
- Were any problems noted by the laboratory on the CC/RA?  
- What? __________________________

CC/RA - Laboratory Report Agreement:
- Were all the samples on the CC/RA analyzed as requested and instructions followed?  
- Is the Field Sample Identification and the Laboratory Number relationship consistent between the CC/RA and the laboratory report?  
- Do the Sampled and Received dates on the CC/RA match those on the laboratory report for each sample?  
- Was the report signed and each report page stamped with the TETRA TECH "Date Received..." stamp?  

Was a project narrative available and read?  
Were any problems noted in the narrative? Describe _____________________________.

Were method numbers, matrices, units and reporting limits indicated and appropriate?  
Was all other report heading information accurate?  

Were all field duplicates within relative percent difference (RPD) control limits?  

Were all results for field, rinsate and trip blanks ND?
<table>
<thead>
<tr>
<th>Question</th>
<th>N/A</th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is a Quality Assurance Project Plan (QAPP), Work Plan or a Sampling and Analysis (SAP) available?</td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Was the frequency stated in the QAPP, Work Plan or SAP for field duplicates, rinsate blanks and trip blanks met?</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chain-of-Custody and Request for Analysis (CC/RA) Records:</td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Is the CC/RA present and the original copy?</td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Is the CC/RA complete and signed off as appropriate?</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Was the temperature received recorded by the laboratory and was it 4°C ±2°C? if not what ___</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Were any problems noted by the laboratory on the CC/RA?</td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>What?</td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>CC/RA - Laboratory Report Agreement:</td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Were all the samples on the CC/RA analyzed as requested and instructions followed?</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Is the Field Sample Identification and the Laboratory Number relationship consistent between the CC/RA and the laboratory report?</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Do the Sampled and Received dates on the CC/RA match those on the laboratory report for each sample?</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Was the report signed and each report page stamped with the TETRA TECH &quot;Date Received...&quot; stamp?</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Was a project narrative available and read?</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Were any problems noted in the narrative? Describe _________________</td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Were method numbers, matrices, units and reporting limits indicated and appropriate?</td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Was all other report heading information accurate?</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Were all field duplicates within relative percent difference (RPD) control limits?</td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Were all results for field, rinsate and trip blanks ND?</td>
<td></td>
<td>✓</td>
<td></td>
</tr>
</tbody>
</table>
## TETRA TECH
### LABORATORY REPORT EVALUATION CHECKLIST

**Project Name:** Hickman RAP Soil Sampling  
**Project Number:** TEC 334.02  
**Laboratory Used:** Torrent  
**Sample Matrix:** Soil  
**Lab Project Number:** 1008726  
**Checked By/On:** NC 10 Sept 2010

<table>
<thead>
<tr>
<th>Analysis</th>
<th>Laboratory QC Batch Number</th>
<th>Number of TETRA TECH Samples in Batch</th>
<th>Holding Times Met</th>
<th>Surrogates</th>
<th>Method Blank (MB)</th>
<th>Matrix Spike/Matrix Spike Duplicate (MS/MSD)</th>
<th>Laboratory Control Spike (LCS)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>SW8081A</td>
<td>402108</td>
<td>5</td>
<td>All not recoverable</td>
<td>Mussang</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>402109</td>
<td>33 +11</td>
<td>All not recoverable</td>
<td>Mussang</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>402103 0047</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>402103 0046</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Date

- 10 Sept 2010: Missing MB and LCS for batch 402108 and 402109
- 10 Sept 2010: MB and LCS for Prep Batch 0046 and 0047 for batch 402103 included

---

G:\EMG - Environmental Mgt. Group\Field Forms\Forms\Lab Validation Tl.doc  
Rev. 11-08-07
<table>
<thead>
<tr>
<th>Analysis</th>
<th>Laboratory QC Batch Number</th>
<th>Number of TETRA TECH Samples in Batch</th>
<th>Holding Times Met</th>
<th>Surrogates</th>
<th>Method Blank (MB)</th>
<th>Matrix Spike/Matrix Spike Duplicate (MS/MSD)</th>
<th>Laboratory Control Spike (LCS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SW8081A</td>
<td>402129 1001</td>
<td>38 + Z</td>
<td>✅</td>
<td>All added - 36 not recognizable</td>
<td>✅</td>
<td></td>
<td>✅</td>
</tr>
<tr>
<td></td>
<td>402088 0948</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>402141 1023</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date</th>
<th>Issues and Actions Taken</th>
</tr>
</thead>
<tbody>
<tr>
<td>14 Sept 2010</td>
<td>Lab ID 27A is listed as collected at 14:15 while CC states 14:25</td>
</tr>
<tr>
<td>14 Sept 2010</td>
<td>Missing MS/MSD</td>
</tr>
<tr>
<td>14 Sept 2010</td>
<td>MBs and LCSs for 402088 and 402141 added</td>
</tr>
<tr>
<td>14 Sept 2010</td>
<td>CC Incomplete! (missing recipient signature)</td>
</tr>
<tr>
<td>11 Feb 2010</td>
<td>Lab ID 108234 1001 determined to be 91d-014, had been changed in database, but needs to be addressed in report (as well as signed CoC)</td>
</tr>
</tbody>
</table>

GAEML: Environmental Mgt. Group Field Forms Forms Lab Validation Ttdoc Rev. 11-08-07
TETRA TECH
LABORATORY REPORT EVALUATION CHECKLIST

Project Name: Hickory RAP Soil Sampling  Laboratory Used: Torrent  Sample Matrix: Soil
Project Number: 124734.07  Lab Project Number: 1008234  Checked By/On: 16, 14 Sept 2010

N/A  YES  NO

Is a Quality Assurance Project Plan (QAPP), Work Plan or a Sampling and Analysis (SAP) available?  
Was the frequency stated in the QAPP, Work Plan or SAP for field duplicates, rinsate blanks and trip blanks met?  

Chain-of-Custody and Request for Analysis (CC/RA) Records:
  Is the CC/RA present and the original copy?  
  Is the CC/RA complete and signed off as appropriate?  
  Was the temperature received recorded by the laboratory and was it 4°C, ±2°? if not what ___.
  Were any problems noted by the laboratory on the CC/RA?  
    What? ________________________________

CC/RA - Laboratory Report Agreement:
  Were all the samples on the CC/RA analyzed as requested and instructions followed?  
  Is the Field Sample Identification and the Laboratory Number relationship consistent between 
    the CC/RA and the laboratory report?  
  Do the Sampled and Received dates on the CC/RA match those on the laboratory report for each sample?  

Was the report signed and each report page stamped with the TETRA TECH “Date Received...” stamp?  

Was a project narrative available and read?
Were any problems noted in the narrative? Describe _________________________________.

Were method numbers, matrices, units and reporting limits indicated and appropriate?
Was all other report heading information accurate?

Were all field duplicates within relative percent difference (RPD) control limits?  
Were all results for field, rinsate and trip blanks ND?
## TETRA TECH

**LABORATORY REPORT EVALUATION CHECKLIST**

<table>
<thead>
<tr>
<th>Project Name: Hackensack RAP Soil Sampling</th>
<th>Laboratory Used: Torrence</th>
<th>Sample Matrix: Soil</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Number: 726934.07</td>
<td>Lab Project Number: 1509003</td>
<td>Checked By/On: UK 14 Sep 2010</td>
</tr>
</tbody>
</table>

### N/A YES NO

1. **Is a Quality Assurance Project Plan (QAPP), Work Plan or a Sampling and Analysis (SAP) available?**
   - Yes [✓]

2. **Was the frequency stated in the QAPP, Work Plan or SAP for field duplicates, rinse blanks and trip blanks met?**
   - Yes [✓]

3. **Chain-of-Custody and Request for Analysis (CC/RA) Records:**
   - **Is the CC/RA present and the original copy?**
     - Yes [✓]
   - **Is the CC/RA complete and signed off as appropriate?**
     - Yes [✓]
   - **Was the temperature received recorded by the laboratory and was it 4°C ±2°? If not what?**
     - Yes [✓]
   - **Were any problems noted by the laboratory on the CC/RA?**
     - Yes [✓]

4. **CC/RA - Laboratory Report Agreement:**
   - **Were all the samples on the CC/RA analyzed as requested and instructions followed?**
     - Yes [✓]
   - **Is the Field Sample Identification and the Laboratory Number relationship consistent between the CC/RA and the laboratory report?**
     - Yes [✓]
   - **Do the Sampled and Received dates on the CC/RA match those on the laboratory report for each sample?**
     - Yes [✓]

5. **Was the report signed and each report page stamped with the TETRA TECH “Date Received…” stamp?**
   - Yes [✓]

6. **Was a project narrative available and read?**
   - Yes [✓]

7. **Were any problems noted in the narrative? Describe:**
   - Yes [✓]

8. **Were method numbers, matrices, units and reporting limits indicated and appropriate?**
   - Yes [✓]

9. **Was all other report heading information accurate?**
   - Yes [✓]

10. **Were all field duplicates within relative percent difference (RPD) control limits?**
    - Yes [✓]

11. **Were all results for field, rinse and trip blanks ND?**
    - Yes [✓]
## TETRA TECH
### LABORATORY REPORT EVALUATION CHECKLIST

**Project Name:** Helium RAP Soil Sampling  
**Project Number:** 1234567.02  
**Laboratory Used:** Torrent  
**Lab Project Number:** 1009003  
**Sample Matrix:** Soil  
**Checked By/On:** 14 Sept 2010

<table>
<thead>
<tr>
<th>Analysis</th>
<th>Laboratory QC Batch Number</th>
<th>Number of TETRA TECH Samples in Batch</th>
<th>Holding Times Met</th>
<th>Surrogates</th>
<th>Method Blank (MB)</th>
<th>Matrix Spike/Matrix Spike Duplicate (MS/MSD)</th>
<th>Laboratory Control Spike (LCS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SW9281A</td>
<td>402151 1024</td>
<td>20</td>
<td>✔</td>
<td>All diluted - IT met reasonable</td>
<td>✔</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>402141 1023</td>
<td>8 - 1</td>
<td>✔</td>
<td>All diluted - IT met reasonable</td>
<td>✔</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date</th>
<th>Issues and Actions Taken</th>
</tr>
</thead>
<tbody>
<tr>
<td>14 Sept 2010</td>
<td>No MS/MSD</td>
</tr>
</tbody>
</table>
TETRA TECH
LABORATORY REPORT EVALUATION CHECKLIST

Project Name: Hutchinson Bay Soil Sampling
Project Number: 7Z6034-02
Laboratory Used: Torrend
Lab Project Number: 1069023
Sample Matrix: 53
Checked By/On: 11/15 August 2016

N/A YES NO

Is a Quality Assurance Project Plan (QAPP), Work Plan or a Sampling and Analysis (SAP) available?

Was the frequency stated in the QAPP, Work Plan or SAP for field duplicates, rinsate blanks and trip blanks met? ✓ □ □

Chain-of-Custody and Request for Analysis (CC/RA) Records:
  Is the CC/RA present and the original copy? ✓ □ □
  Is the CC/RA complete and signed off as appropriate? ✓ □ □
  Was the temperature received recorded by the laboratory and was it 4°C, ±2°? if not what ___
  Were any problems noted by the laboratory on the CC/RA? ✓ □ □
  What? ________________________________

CC/RA - Laboratory Report Agreement:
  Were all the samples on the CC/RA analyzed as requested and instructions followed? ✓ □ □
  Is the Field Sample Identification and the Laboratory Number relationship consistent between the CC/RA and the laboratory report? ✓ □ □
  Do the Sampled and Received dates on the CC/RA match those on the laboratory report for each sample? ✓ □ □
  Was the report signed and each report page stamped with the TETRA-TECH "Date Received..." stamp? ✓ □ □

Was a project narrative available and read?
  Were any problems noted in the narrative? Describe ___________________________ ✓ □ □

Were method numbers, matrices, units and reporting limits indicated and appropriate? ✓ □ □
  Was all other report heading information accurate? ✓ □ □

Were all field duplicates within relative percent difference (RPD) control limits? ✓ □ □

Were all results for field, rinsate and trip blanks ND? ✓ □ □
# TETRA TECH
## LABORATORY REPORT EVALUATION CHECKLIST

<table>
<thead>
<tr>
<th>Analysis</th>
<th>Laboratory QC Batch Number</th>
<th>Number of TETRA TECH Samples in Batch</th>
<th>Holding Times Met</th>
<th>Surrogates</th>
<th>Method Blank (MB)</th>
<th>Matrix Spike/Matrix Spike 'Duplicate (MS/MSD)</th>
<th>Laboratory Control Spike (LCS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SW8081A</td>
<td>402157</td>
<td>20 + 4</td>
<td>√</td>
<td>All added - not recovered</td>
<td>√</td>
<td></td>
<td>√</td>
</tr>
<tr>
<td></td>
<td>402158</td>
<td>20 + 2</td>
<td>√</td>
<td>All added - increased by 17 MB</td>
<td>√</td>
<td></td>
<td>√</td>
</tr>
</tbody>
</table>

**Date**: 15 Sept 2010

**Issues and Actions Taken**: Missing MS/MSDs
TETRA TECH
LABORATORY REPORT EVALUATION CHECKLIST

Project Name: [Hidden] RAP Soil Sampling
Project Number: T26436.02
Laboratory Used: Torrent
Lab Project Number: 1000630
Sample Matrix: Soil
Checked By/On: 14.16 Sep 2010

N/A YES NO

Is a Quality Assurance Project Plan (QAPP), Work Plan or a Sampling and Analysis (SAP) available?
Was the frequency stated in the QAPP, Work Plan or SAP for field duplicates, rinsate blanks and trip blanks met? ✔ ___ ___

Chain-of-Custody and Request for Analysis (CC/RA) Records:
Is the CC/RA present and the original copy? ✔ ___ ___
Is the CC/RA complete and signed off as appropriate? ✔ ___ ___
Was the temperature received recorded by the laboratory and was it 4°C, ±2°C? if not what ______
Were any problems noted by the laboratory on the CC/RA? ✔ ___ ___
What? _____________________________________________

CC/RA - Laboratory Report Agreement:
Were all the samples on the CC/RA analyzed as requested and instructions followed? ✔ ___ ___
Is the Field Sample Identification and the Laboratory Number relationship consistent between the CC/RA and the laboratory report? ✔ ___ ___
Do the Sampled and Received dates on the CC/RA match those on the laboratory report for each sample? ✔ ___ ___

Was the report signed and each report page stamped with the TETRA-TECH "Date Received..." stamp? ✔ ___ ___

Was a project narrative available and read? ✔ ___ ___
Were any problems noted in the narrative? Describe ________________________________________________.

Were method numbers, matrices, units and reporting limits indicated and appropriate? ✔ ___ ___
Was all other report heading information accurate? ✔ ___ ___

Were all field duplicates within relative percent difference (RPD) control limits? ✔ ___ ___

Were all results for field, rinsate and trip blanks ND? ✔ ___ ___

G:\EMG - Environmental Mgt. Group\Field Forms\Forms\Lab Validation TL.doc
Rev. 11-06-07
# TETRA TECH
## LABORATORY REPORT EVALUATION CHECKLIST

**Project Name:** Hickman BAP Soil Sampling  
**Project Number:** 176034.02  
**Laboratory Used:** Torrent  
**Lab Project Number:** 1609030  
**Sample Matrix:** Soil  
**Checked By/On:** 16-18 Sept 2010

<table>
<thead>
<tr>
<th>Analysis</th>
<th>Laboratory QC Batch Number</th>
<th>Number of TETRA TECH Samples in Batch</th>
<th>Holding Times Met</th>
<th>Surrogates</th>
<th>Method Blank (MB)</th>
<th>Matrix Spike/Matrix Spike Duplicate (MS/MSD)</th>
<th>Laboratory Control Spike (LCS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SU8081A</td>
<td>402172 1026</td>
<td>20 + 1</td>
<td>✓</td>
<td>All diluted -Quadrupled</td>
<td>✓</td>
<td>—</td>
<td>✓</td>
</tr>
<tr>
<td>SU8081B</td>
<td>402184 1033</td>
<td>20 + 6</td>
<td>✓</td>
<td>All diluted -Quadrupled</td>
<td>✓</td>
<td>—</td>
<td>✓</td>
</tr>
</tbody>
</table>

**Date**  
16 Sept 2010

**Issues and Actions Taken**  
No MS/MSDs
TETRA TECH
LABORATORY REPORT EVALUATION CHECKLIST

<table>
<thead>
<tr>
<th>N/A</th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
</table>

**Project Name:** Hudson RAP Soil Sampling  
**Project Number:** T264335-02  
**Laboratory Used:** Torrent  
**Lab Project Number:** 1609043  
**Sample Matrix:** Soil  
**Checked By/On:** 11/11/2007

---

Is a Quality Assurance Project Plan (QAPP), Work Plan or a Sampling and Analysis (SAP) available?  
Was the frequency stated in the QAPP, Work Plan or SAP for field duplicates, rinsate blanks and trip blanks met?  

---

Chain-of-Custody and Request for Analysis (CC/RA) Records:  
Is the CC/RA present and the original copy?  
Is the CC/RA complete and signed off as appropriate?  
Was the temperature received recorded by the laboratory and was it 4°C, ±2°? if not what _____?  
Were any problems noted by the laboratory on the CC/RA?  
What? ____________________________

---

CC/RA - Laboratory Report Agreement:  
Were all the samples on the CC/RA analyzed as requested and instructions followed?  
Is the Field Sample Identification and the Laboratory Number relationship consistent between the CC/RA and the laboratory report?  
Do the Sampled and Received dates on the CC/RA match those on the laboratory report for each sample?  

---

Was the report signed and each report page stamped with the TETRA-TECH "Date-Received..." stamp?  

---

Was a project narrative available and read?  
Were any problems noted in the narrative? Describe ________________________________  

---

Were method numbers, matrices, units and reporting limits indicated and appropriate?  
Was all other report heading information accurate?  

---

Were all field duplicates within relative percent difference (RPD) control limits?  

---

Were all results for field, rinsate and trip blanks ND?  

---
## TETRA TECH
### LABORATORY REPORT EVALUATION CHECKLIST

**Project Name:** Hackensack RAP Sed Sampling  
**Project Number:** T20134-02  
**Laboratory Used:** Torrecraft  
**Lab Project Number:** 10090-13  
**Sample Matrix:** Soil  
**Checked By/On:** VK, 17 Sept, 2010

<table>
<thead>
<tr>
<th>Analysis Q/C Batch Number</th>
<th>Number of TETRA TECH Samples in Batch</th>
<th>Holding Times Met</th>
<th>Surrogates</th>
<th>Method Blank (MB)</th>
<th>Matrix Spike/Matrix Spike Duplicate (MS/MSD)</th>
<th>Laboratory Control Spike (LCS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SW8081A</td>
<td>20 + 11</td>
<td>✔</td>
<td>All diluted - U/R</td>
<td>✔</td>
<td></td>
<td>✔</td>
</tr>
<tr>
<td>402187</td>
<td>10</td>
<td>✔</td>
<td>All diluted - 5% increase</td>
<td>✔</td>
<td></td>
<td></td>
</tr>
<tr>
<td>402287</td>
<td>2</td>
<td>✔</td>
<td>Diluted w/increase</td>
<td>✔</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Date:** 17 Sept 2010  
**Issues and Actions Taken:** Missing MS/MSDs
## TETRA TECH
### LABORATORY REPORT EVALUATION CHECKLIST

<table>
<thead>
<tr>
<th>Project Name:</th>
<th>Hudson R&amp;D Soil Sampling</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Number:</td>
<td>120334.03</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Laboratory Used:</td>
<td>Torrent</td>
</tr>
<tr>
<td>Lab Project Number:</td>
<td>1004055</td>
</tr>
<tr>
<td>Sample Matrix:</td>
<td>Soil</td>
</tr>
<tr>
<td>Checked By/On:</td>
<td>16 Nov 2020</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Analysis</th>
<th>Laboratory QC Batch Number</th>
<th>Number of TETRA TECH Samples in Batch</th>
<th>Holding Times Met</th>
<th>Surrogates</th>
<th>Method Blank (MB)</th>
<th>Matrix Spike/Matrix Spike Duplicate (MS/MSD)</th>
<th>Laboratory Control Spike (LCS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Swg0201a</td>
<td>4022222</td>
<td>1062</td>
<td>☑</td>
<td>☑</td>
<td>🟢</td>
<td>Speed - 140°C</td>
<td>☑</td>
</tr>
<tr>
<td></td>
<td>4022222</td>
<td>1062</td>
<td>☑</td>
<td>☑</td>
<td>🟢</td>
<td>Speed - 140°C</td>
<td>☑</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date</th>
<th>Issues and Actions Taken</th>
</tr>
</thead>
<tbody>
<tr>
<td>20 Sept 2010</td>
<td>Temperature missing on COC</td>
</tr>
<tr>
<td>20 Sept 2010</td>
<td>Missing HS/MSD for batch 402222</td>
</tr>
<tr>
<td>11/11/10</td>
<td>Lab completed temp on COC in revised report &gt; validated &gt; OK</td>
</tr>
</tbody>
</table>

G:\EMG - Environmental Mgt. Group\Field Forms\Forms\Lab Validation Tt.doc
Rev. 11-08-07
Tetra Tech
TETRA TECH
LABORATORY REPORT EVALUATION CHECKLIST

Project Name: [Handwritten: Shell Sample]
Project Number: [Handwritten: 126434.02]
Laboratory Used: [Handwritten: Torrco]
Lab Project Number: [Handwritten: 1644055]
Sample Matrix: [Handwritten: Soil]
Checked By/On: [Handwritten: 24 Oct 2000]

N/A  YES  NO

Is a Quality Assurance Project Plan (QAPP), Work Plan or a Sampling and Analysis (SAP) available?  __  ___  ___
Was the frequency stated in the QAPP, Work Plan or SAP for field duplicates, rinsate blanks and trip blanks met?  ___  ___  ___

Chain-of-Custody and Request for Analysis (CC/RA) Records:
- Is the CC/RA present and the original copy?  ___  ___  ___
- Is the CC/RA complete and signed off as appropriate?  ___  ___  ___
- Was the temperature received recorded by the laboratory and was it 4°C, ±2°C if not what?  ___  ___  ___
- Were any problems noted by the laboratory on the CC/RA?  ___  ___  ___
  What? ____________________________________________________________

CC/RA - Laboratory Report Agreement:
- Were all the samples on the CC/RA analyzed as requested and instructions followed?  ___  ___  ___
- Is the Field Sample Identification and the Laboratory Number, relationship consistent between
  the CC/RA and the laboratory report?  ___  ___  ___
- Do the Sampled and Received dates on the CC/RA match those on the laboratory report for each sample?  ___  ___  ___

Was the report signed and each report page stamped with the TETRA TECH Date Received... stamp?  ___  ___  ___

Was a project narrative available and read?  ___  ___  ___
Were any problems noted in the narrative? Describe _____________________________.  ___  ___  ___

Were method numbers, matrices, units and reporting limits indicated and appropriate?  ___  ___  ___
Was all other report heading information accurate?  ___  ___  ___

Were all field duplicates within relative percent difference (RPD) control limits?  ___  ___  ___

Were all results for field, rinsate and trip blanks ND?  ___  ___  ___
TETRA TECH
LABORATORY REPORT EVALUATION CHECKLIST

Project Name: Helium RAP Soil Sampling
Project Number: 72434-02
Laboratory Used: Torro-L
Lab Project Number: 109164
Sample Matrix: Soil
Checked By/On: YC 29 Sep 2010

N/A  YES  NO

Is a Quality Assurance Project Plan (QAPP), Work Plan or a Sampling and Analysis (SAP) available?
Yes

Was the frequency stated in the QAPP, Work Plan or SAP for field duplicates, rinsate blanks and trip blanks met?
Yes

Chain-of-Custody and Request for Analysis (CC/RA) Records:
Is the CC/RA present and the original copy?
Yes

Is the CC/RA complete and signed off as appropriate?
Yes

Was the temperature received recorded by the laboratory and was it 4°C, ±2°? if not what ______
Yes

Were any problems noted by the laboratory on the CC/RA?
Yes

What? ________________________________

CC/RA - Laboratory Report Agreement:
Were all the samples on the CC/RA analyzed as requested and instructions followed?
Yes

Is the Field Sample Identification and the Laboratory Number relationship consistent between
the CC/RA and the laboratory report?
Yes

Do the Sampled and Received dates on the CC/RA match those on the laboratory report for each sample?
Yes

Was the report signed and each report page stamped with the TETRA TECH "Date Received..." stamp?
Yes

Was a project narrative available and read?
Yes

Were any problems noted in the narrative? Describe ________________________________
Yes

Were method numbers, matrices, units and reporting limits indicated and appropriate?
Yes

Was all other report heading information accurate?
Yes

Were all field duplicates within relative percent difference (RPD) control limits?
Yes

Were all results for field, rinsate and trip blanks ND?
Yes

G:\EMG - Environmental Mgt. Group\Field Forms\Forms\Lab Validation Tt.doc
Rev. 11-08-07  Tetra Tech
## TETRA TECH
### LABORATORY REPORT EVALUATION CHECKLIST

<table>
<thead>
<tr>
<th>Analysis</th>
<th>Laboratory QC Batch Number</th>
<th>Number of TETRA TECH Samples in Batch</th>
<th>Holding Times Met</th>
<th>Surrogates</th>
<th>Method Blank (MB)</th>
<th>Matrix Spike/Matrix Spike Duplicate (MS/MSD)</th>
<th>Laboratory Control Spike (LCS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SL18081A</td>
<td>462226 1060</td>
<td>20</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>402240 1071</td>
<td>4</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td>✓</td>
</tr>
</tbody>
</table>

**Date**

21 Sept 2010

**Issues and Actions Taken**

No MS/MSD for 402240
TETRA TECH
LABORATORY REPORT EVALUATION CHECKLIST

Project Name: Hudson RAP Soil Sampling
Project Number: T26434.02
Laboratory Used: Torrent
Lab Project Number: 1001077
Sample Matrix: Soil
Checked By/On: Jul 22 Sept 2010

N/A YES NO

Is a Quality Assurance Project Plan (QAPP), Work Plan or a Sampling and Analysis (SAP) available?  ✓
Was the frequency stated in the QAPP, Work Plan or SAP for field duplicates, rinse blanks and trip blanks met? ✓

Chain-of-Custody and Request for Analysis (CC/RA) Records:
Is the CC/RA present and the original copy? ✓
Is the CC/RA complete and signed off as appropriate? ✓
Was the temperature received recorded by the laboratory and was it 4°C, ±2°? if not what? ✓
Were any problems noted by the laboratory on the CC/RA? ✓
What? 

CC/RA - Laboratory Report Agreement:
Were all the samples on the CC/RA analyzed as requested and instructions followed? ✓
Is the Field Sample Identification and the Laboratory Number relationship consistent between the CC/RA and the laboratory report? ✓
Do the Sampled and Received dates on the CC/RA match those on the laboratory report for each sample? ✓

Was the report signed and each report page stamped with the TETRA TECH "Date Received..." stamp? ✓

Was a project narrative available and read? ✓
Were any problems noted in the narrative? Describe 

Were method numbers, matrices, units and reporting limits indicated and appropriate? ✓
Was all other report heading information accurate? ✓

Were all field duplicates within relative percent difference (RPD) control limits? ✓

Were all results for field, rinse and trip blanks ND? ✓
## TETRA TECH
LABORATORY REPORT EVALUATION CHECKLIST

**Project Name:** Herrera RAP Soil Sampling  
**Project Number:** T26434.02  
**Laboratory Used:** Target  
**Lab Project Number:** 1094273  
**Sample Matrix:** Soil  
**Checked By/On:** W. 22 Sept 2010

<table>
<thead>
<tr>
<th>Analysis</th>
<th>Laboratory QC Batch Number</th>
<th>Number of TETRA TECH Samples in Batch</th>
<th>Holding Times Met</th>
<th>Surrogates</th>
<th>Method Blank (MB)</th>
<th>Matrix Spike/Matrix Spike 'Duplicate (MS/MSD)</th>
<th>Laboratory Control Spike (LCS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SW081A</td>
<td>402240 1071</td>
<td>13</td>
<td>✓</td>
<td>All diluted = 1 increased</td>
<td>✓</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>402249 1075</td>
<td>10</td>
<td>✓</td>
<td>All diluted = 2 increased</td>
<td>✓</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>402250 1076</td>
<td>16</td>
<td>✓</td>
<td>All diluted = 5 increased</td>
<td>✓</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>402260 1044</td>
<td>1</td>
<td>✓</td>
<td>All diluted not recovered</td>
<td>✓</td>
<td></td>
<td>✓</td>
</tr>
</tbody>
</table>

**Date**  
22 Sept 2010  

**Issues and Actions Taken**  
Monitor MS/MSDs
TETRA TECH
LABORATORY REPORT EVALUATION CHECKLIST

Project Name: Hackens RAP Soil Sampling
Project Number: T2011040.02

Laboratory Used: Torrent
Lab Project Number: 1002683

Sample Matrix: Soil
Checked By/On: 31st Aug 2010

Is a Quality Assurance Project Plan (QAPP), Work Plan or a Sampling and Analysis (SAP) available?  Yes  __  No  __
Was the frequency stated in the QAPP, Work Plan or SAP for field duplicates, rinsate blanks and trip blanks met?  Yes  __  No  __

Chain-of-Custody and Request for Analysis (CC/RA) Records:
Is the CC/RA present and the original copy?  Yes  __
Is the CC/RA complete and signed off as appropriate?  Yes  __
Was the temperature received recorded by the laboratory and was it 4°C, ±2°? if not what?  Yes  __
Were any problems noted by the laboratory on the CC/RA?  Yes  __
What?  

CC/RA - Laboratory Report Agreement:
Were all the samples on the CC/RA analyzed as requested and instructions followed?  Yes  __
Is the Field Sample Identification and the Laboratory Number relationship consistent between the CC/RA and the laboratory report?  Yes  __
Do the Sampled and Received dates on the CC/RA match those on the laboratory report for each sample?  Yes  __

Was the report signed and each report page stamped with the TETRA TECH "Date Received..." stamp?  Yes  __

Was a project narrative available and read?  Yes  __
Were any problems noted in the narrative? Describe  

Were method numbers, matrices, units and reporting limits indicated and appropriate?  Yes  __
Was all other report heading information accurate?  Yes  __

Were all field duplicates within relative percent difference (RPD) control limits?  Yes  __

Were all results for field, rinsate and trip blanks ND?  Yes  __
# Laboratory Report Evaluation Checklist

**Project Name:** Hickman RAP Soil Sampling  
**Project Number:** T2C494.02  
**Laboratory Used:** Torrent  
**Sample Matrix:** Soil  
**Lab Project Number:** 123456789  
**Checked By/On:** 25 Sep 2010

<table>
<thead>
<tr>
<th>Analysis</th>
<th>Laboratory QC Batch Number</th>
<th>Number of TETRA TECH Samples in Batch</th>
<th>Holding Times Met</th>
<th>Surrogates</th>
<th>Method Blank (MB)</th>
<th>Matrix Spike/Matrix Spike Duplicate (MS/MSD)</th>
<th>Laboratory Control Spike (LCS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SW061A</td>
<td>402266</td>
<td>19</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>402250</td>
<td>10</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>402267</td>
<td>16</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

**Date:** 23 Sep 2010  
**Issues and Actions Taken:** Missing MS/MSD
TETRA TECH
LABORATORY REPORT EVALUATION CHECKLIST

Project Name: Hutchinson RAP Soil Sampling
Project Number: 176454.62

Laboratory Used: Torrent
Lab Project Number: 1069295

Sample Matrix: Sed
Checked By/On: 16-24 Sept 2010

N/A YES NO

Is a Quality Assurance Project Plan (QAPP), Work Plan or a Sampling and Analysis (SAP) available?
Was the frequency stated in the QAPP, Work Plan or SAP for field duplicates, rinsate blanks and trip blanks met? ✓ ✓

Chain-of-Custody and Request for Analysis (CC/RA) Records:
Is the CC/RA present and the original copy? ✓
Is the CC/RA complete and signed off as appropriate? ✓
Was the temperature received recorded by the laboratory and was it 4°C ±2°? if not what? ✓ ✓
Were any problems noted by the laboratory on the CC/RA? ✓
What? ________________

CC/RA - Laboratory Report Agreement:
Were all the samples on the CC/RA analyzed as requested and instructions followed? ✓
Is the Field Sample identification and the Laboratory Number relationship consistent between the CC/RA and the laboratory report? ✓
Do the Sampled and Received dates on the CC/RA match those on the laboratory report for each sample? ✓

Was the report signed and each report page stamped with the TETRA TECH "Date Received..." stamp? ✓

Was a project narrative available and read?
Were any problems noted in the narrative? Describe ________________________________ ✓ ✓

Were method numbers, matrices, units and reporting limits indicated and appropriate? ✓
Were all other report heading information accurate? ✓

Were all field duplicates within relative percent difference (RPD) control limits? ✓
Were all results for field, rinsate and trip blanks ND? ✓
<table>
<thead>
<tr>
<th>Analysis</th>
<th>Laboratory QC Batch Number</th>
<th>Number of TETRA TECH Samples in Batch</th>
<th>Holding Times Met</th>
<th>Surrogates</th>
<th>Method Blank (MB)</th>
<th>Matrix Spike/Matrix Spike Duplicate (MS/MSD)</th>
<th>Laboratory Control Spike (LCS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SW8081.A</td>
<td>402260 1098</td>
<td>19 + 2</td>
<td>✓</td>
<td>All UV Recoverable</td>
<td>✓</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>402289 1098</td>
<td>7</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
<td>✓</td>
</tr>
</tbody>
</table>

Date: 24 Sept 2010

Issues and Actions Taken:

Missing MS/MSD for batch 402260
## TETRA TECH
### LABORATORY REPORT EVALUATION CHECKLIST

<table>
<thead>
<tr>
<th>Project Name:</th>
<th>Lab Project Number:</th>
<th>Sample Matrix:</th>
<th>Checked By/On:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arkansas PDP Soil Sampling</td>
<td>12043.02</td>
<td>Soil</td>
<td>JK &amp; CO 2010</td>
</tr>
<tr>
<td>Lab Used: Turf</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Question</th>
<th>N/A</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is a Quality Assurance Project Plan (QAPP), Work Plan or a Sampling and Analysis (SAP) available?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Was the frequency stated in the QAPP, Work Plan or SAP for field duplicates, rinsate blanks and trip blanks met?</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chain-of-Custody and Request for Analysis (CC/RA) Records:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Is the CC/RA present and the original copy?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Is the CC/RA complete and signed off as appropriate?</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Was the temperature received recorded by the laboratory and was it 4°C, ±2°? if not what ______.</td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Were any problems noted by the laboratory on the CC/RA?</td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>What?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CC/RA - Laboratory Report Agreement:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Were all the samples on the CC/RA analyzed as requested and instructions followed?</td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Is the Field Sample Identification and the Laboratory Number relationship consistent between the CC/RA and the laboratory report?</td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Do the Sampled and Received dates on the CC/RA match those on the laboratory report for each sample?</td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Was the report signed and each report page stamped with the TETRA-TECH &quot;Date-Received...&quot; stamp?</td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Was a project narrative available and read?</td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Were any problems noted in the narrative? Describe</td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Were method numbers, matrices, units and reporting limits indicated and appropriate?</td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Was all other report heading information accurate?</td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Were all field duplicates within relative percent difference (RPD) control limits?</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Were all results for field, rinsate and trip blanks ND?</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

C:\Documents and Settings\jon.mollison\Local Settings\Temporary Internet Files\Content\5E5038LUR5\Lab_Validation_TT[1].doc
Rev. 11-08-07
# TETRA TECH
LABORATORY REPORT EVALUATION CHECKLIST

Project Name: [Project Name]
Project Number: [Project Number]
Laboratory Used: [Laboratory Used]
Lab Project Number: [Lab Project Number]
Sample Matrix: [Sample Matrix]
Checked By/On: [Checked By/On]

<table>
<thead>
<tr>
<th>Analysis</th>
<th>Laboratory QC Batch Number</th>
<th>Number of TETRA TECH Samples in Batch</th>
<th>Holding Times Met</th>
<th>Surrogates</th>
<th>Method Blank (MB)</th>
<th>Matrix Spike/Matrix Spike Duplicate (MS/MSD)</th>
<th>Laboratory Control Spike (LCS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SWAS008A</td>
<td>462-362</td>
<td>20</td>
<td>✓</td>
<td>1/1 - Not Recovered</td>
<td>✓</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>462-387</td>
<td>2</td>
<td>✓</td>
<td>1/1 - Not Recovered</td>
<td>✓</td>
<td></td>
<td>✓</td>
</tr>
</tbody>
</table>

Date: 6 Oct 2016
Issues and Actions Taken: Missing MS/MS Datas

C:\Documents and Settings\jon.mollison\Local Settings\Temporary Internet Files\Content\IE038\UIR5\Lab_Validation_TR[1].doc
Tetra Tech
Rev. 11-08-07
## TETRA TECH
### LABORATORY REPORT EVALUATION CHECKLIST

<table>
<thead>
<tr>
<th>Project Name:</th>
<th>Laboratory Used:</th>
<th>Sample Matrix:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hickory BAP Site Sampling</td>
<td>Torrent</td>
<td>Soil</td>
</tr>
<tr>
<td>Project Number:</td>
<td>Lab Project Number:</td>
<td>Checked By/On:</td>
</tr>
<tr>
<td>724934.02</td>
<td>1004.16</td>
<td>31 Oct 2016</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>N/A</th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Is a Quality Assurance Project Plan (QAPP), Work Plan or a Sampling and Analysis (SAP) available?**

Was the frequency stated in the QAPP, Work Plan or SAP for field duplicates, rinsate blanks and trip blanks met?

- [ ] Yes
- [ ] No

**Chain-of-Custody and Request for Analysis (CC/RA) Records:**

- [ ] Is the CC/RA present and the original copy?
- [ ] Was the CC/RA complete and signed off as appropriate?
- [ ] Was the temperature received recorded by the laboratory and was it 4°C, ±2°C if not what ___
- [ ] Were any problems noted by the laboratory on the CC/RA?
- [ ] What? ___

**CC/RA - Laboratory Report Agreement:**

- [ ] Were all the samples on the CC/RA analyzed as requested and instructions followed?
- [ ] Is the Field Sample Identification and the Laboratory Number relationship consistent between the CC/RA and the laboratory report?
- [ ] Do the Sampled and Received dates on the CC/RA match those on the laboratory report for each sample?

- [ ] Was the report signed and each report page stamped with the TETRA TECH "Date Received..." stamp?

- [ ] Was a project narrative available and read?
- [ ] Were any problems noted in the narrative? Describe ___

- [ ] Were method numbers, matrices, units and reporting limits indicated and appropriate?
- [ ] Was all other report heading information accurate?

- [ ] Were all field duplicates within relative percent difference (RPD) control limits?

- [ ] Were all results for field, rinsate and trip blanks ND?
# TETRA TECH
## LABORATORY REPORT EVALUATION CHECKLIST

<table>
<thead>
<tr>
<th>Analysis</th>
<th>Laboratory QC Batch Number</th>
<th>Number of TETRA TECH Samples in Batch</th>
<th>Holding Times Met</th>
<th>Surrogates</th>
<th>Method Blank (MB)</th>
<th>Matrix Spike/Matrix Spike Duplicate (MS/MSD)</th>
<th>Laboratory Control Spike (LCS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>S42291A</td>
<td>4023167</td>
<td>18</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>402316</td>
<td>28</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Date
6 Oct 2018

**Issues and Actions Taken**

Missed MS/MSD for batch 402316
TETRA TECH
LABORATORY REPORT EVALUATION CHECKLIST

Project Name: Aquifer Bore Soil Sampling
Project Number: T 254-04-07
Laboratory Used: Terracon
Lab Project Number: 1010013
Sample Matrix: Soil
Checked By/On: TK, 11 Oct 2010

Is a Quality Assurance Project Plan (QAPP), Work Plan or a Sampling and Analysis (SAP) available?
Was the frequency stated in the QAPP, Work Plan or SAP for field duplicates, rinsate blanks and trip blanks met?

Chain-of-Custody and Request for Analysis (CC/RA) Records:
Is the CC/RA present and the original copy?
Is the CC/RA complete and signed off as appropriate?
Was the temperature received recorded by the laboratory and was it 4°C, ±2°? if not what ______.
Were any problems noted by the laboratory on the CC/RA? What? __________________________

CC/RA - Laboratory Report Agreement:
Were all the samples on the CC/RA analyzed as requested and instructions followed?
Is the Field Sample Identification and the Laboratory Number relationship consistent between the CC/RA and the laboratory report?
Do the Sampled and Received dates on the CC/RA match those on the laboratory report for each sample?

Was the report signed and each report page stamped with the TETRA-TECH "Date Received..." stamp?

Was a project narrative available and read?
Were any problems noted in the narrative? Describe __________________________

Were method numbers, matrices, units and reporting limits indicated and appropriate?
Was all other report heading information accurate?

Were all field duplicates within relative percent difference (RPD) control limits?

Were all results for field, rinsate and trip blanks ND?
## TETRA TECH
### LABORATORY REPORT EVALUATION CHECKLIST

<table>
<thead>
<tr>
<th>Analysis</th>
<th>Laboratory QC Batch Number</th>
<th>Number of TETRA TECH Samples in Batch</th>
<th>Holding Times Met</th>
<th>Surrogates</th>
<th>Method Blank (MB)</th>
<th>Matrix Spike/Matrix Spike Duplicate (MS/MSD)</th>
<th>Laboratory Control Spike (LCS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SW0061A</td>
<td>402567 1274</td>
<td>13</td>
<td>✓</td>
<td>Not Recoverable</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>402577 1276</td>
<td>7</td>
<td>✓</td>
<td>Not Recoverable</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Date
14 Oct 2010

### Issues and Actions Taken
Missing MS/MSDs
<table>
<thead>
<tr>
<th>Analysis</th>
<th>Laboratory QC Batch Number</th>
<th>Number of TETRA TECH Samples in Batch</th>
<th>Holding Times Met</th>
<th>Surrogates</th>
<th>Method Blank (MB)</th>
<th>Matrix Spike/Matrix Spike Duplicate (MS/MSD)</th>
<th>Laboratory Control Spike (LCS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SW0821A</td>
<td>402-720</td>
<td>2</td>
<td>Yes</td>
<td>Not Recoverable</td>
<td>✔</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Date**

**Issues and Actions Taken**

---

G:\EMG - Environmental Mgt. Group\Field Forms\Forms\Lab Validation T\doc
Rev. 11-08-07
TETRA TECH
LABORATORY REPORT EVALUATION CHECKLIST

Project Name: ____________________________
Project Number: ____________________________
Laboratory Used: ____________________________
Lab Project Number: ____________________________
Sample Matrix: ____________________________
Checked By/On: ____________________________

Is a Quality Assurance Project Plan (QAPP), Work Plan or a Sampling and Analysis (SAP) available?
Was the frequency stated in the QAPP, Work Plan or SAP for field duplicates, rinsate blanks and trip blanks met?

Chain-of-Custody and Request for Analysis (CC/RA) Records:
Is the CC/RA present and the original copy?
Is the CC/RA complete and signed off as appropriate?
Was the temperature received recorded by the laboratory and was it 4°C, ±2°? if not what ______
Were any problems noted by the laboratory on the CC/RA?
What? ____________________________

CC/RA - Laboratory Report Agreement:
Were all the samples on the CC/RA analyzed as requested and instructions followed?
Is the Field Sample Identification and the Laboratory Number relationship consistent between the CC/RA and the laboratory report?
Do the Sample and Received dates on the CC/RA match those on the laboratory report for each sample?

Was the report signed and each report page stamped with the TETRA TECH “Date Received...” stamp?

Was a project narrative available and read?
Were any problems noted in the narrative? Describe ____________________________

Were method numbers, matrices, units and reporting limits indicated and appropriate?
Was all other report heading information accurate?

Were all field duplicates within relative percent difference (RPD) control limits?

Were all results for field, rinsate and trip blanks ND?
**TETRA TECH**
**LABORATORY REPORT EVALUATION CHECKLIST**

**Project Name:** Hickman Rehab Soil Sampling  
**Project Number:** 124474-00

**Laboratory Used:** Torrent  
**Lab Project Number:** 104430

**Sample Matrix:** S-1  
**Checked By/On:** SK Cor 2016

<table>
<thead>
<tr>
<th>Analysis</th>
<th>Laboratory QC Batch Number</th>
<th>Number of TETRA TECH Samples in Batch</th>
<th>Holding Times Met</th>
<th>Surrogates</th>
<th>Method Blank (MB)</th>
<th>Matrix Spike/Matrix Spike Duplicate (MS/MSD)</th>
<th>Laboratory Control Spike (LCS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>58.8251A</td>
<td>462321</td>
<td>4</td>
<td>√</td>
<td>3.4.5-Neurotoxin 1.2.3-Benzene</td>
<td>√</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>462333</td>
<td>10 + 1</td>
<td>√</td>
<td>5.6.7-Neurotoxin 1.2.3-Benzene</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>462345</td>
<td>3</td>
<td>√</td>
<td>1.2.3-Benzene 2.3-Benzene</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>462346</td>
<td>5</td>
<td>√</td>
<td>1.2.3-Benzene 2.3-Benzene</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Date**  
6 Oct 2011 Missing MS/MSDs  
6 Oct 2011 Missing LCS for batches 462333 and 462345  
6 Oct 2011 Missing LCS for batches 462333 and 462345  
10/21/16 2 QC batches were reported, Lab does not run prep QC for all analytical runs = report validated OK (2 batches alreadyQC'd)

C:\Documents and Settings\jon.mollison\Local Settings\Temporary Internet Files\Content\1E5038LUIR5\Lab Validation_T1[1].doc  
Tetra Tech  
Rev. 11-08-07
TETRA TECH
LABORATORY REPORT EVALUATION CHECKLIST

Project Name: Valero Ode S1 Sampling
Project Number: TX413-62
Laboratory Used: Terrecon
Lab Project Number: 403-11-10
Sample Matrix: Soil
Checked By/On: 2K Oct 2010

100-91130

N/A YES NO

Is a Quality Assurance Project Plan (QAPP), Work Plan or a Sampling and Analysis (SAP) available?
Was the frequency stated in the QAPP, Work Plan or SAP for field duplicates, rinsate blanks and trip blanks met?

Chain-of-Custody and Request for Analysis (CC/RA) Records:
Is the CC/RA present and the original copy?
Is the CC/RA complete and signed off as appropriate?
Was the temperature received recorded by the laboratory and was it 4°C, ±2°? if not what _____.
Were any problems noted by the laboratory on the CC/RA?
What? ____________________________

CC/RA - Laboratory Report Agreement:
Were all the samples on the CC/RA analyzed as requested and instructions followed?
Is the Field Sample Identification and the Laboratory Number relationship consistent between the CC/RA and the laboratory report?
Do the Sampled and Received dates on the CC/RA match those on the laboratory report for each sample?

Was the report signed and each report page stamped with the TETRA-TECH "Date Received..." stamp?

Was a project narrative available and read?
Were any problems noted in the narrative? Describe ____________________________

Were method numbers, matrices, units and reporting limits indicated and appropriate?
Was all other report heading information accurate?

Were all field duplicates within relative percent difference (RPD) control limits?

Were all results for field, rinsate and trip blanks ND?
TETRA TECH
LABORATORY REPORT EVALUATION CHECKLIST

<table>
<thead>
<tr>
<th>Project Name:</th>
<th>Laboratory Used:</th>
<th>Sample Matrix:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Torrent</td>
<td>Soil</td>
</tr>
<tr>
<td>Project Number:</td>
<td>Lab Project Number:</td>
<td>Checked By/On:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1/6/2016</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>N/A</th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
</table>

Is a Quality Assurance Project Plan (QAPP), Work Plan or a Sampling and Analysis (SAP) available?  
Was the frequency stated in the QAPP, Work Plan or SAP for field duplicates, rinsate blanks and trip blanks met?  

Chain-of-Custody and Request for Analysis (CC/RA) Records:  
Is the CC/RA present and the original copy?  
Is the CC/RA complete and signed off as appropriate?  
Was the temperature received recorded by the laboratory and was it 4°C, ±2°? if not what ______  
Were any problems noted by the laboratory on the CC/RA?  
What?  

CC/RA - Laboratory Report Agreement:  
Were all the samples on the CC/RA analyzed as requested and instructions followed?  
Is the Field Sample Identification and the Laboratory Number relationship consistent between the CC/RA and the laboratory report?  
Do the Sampled and Received dates on the CC/RA match those on the laboratory report for each sample?  

Was the report signed and each report page stamped with the TETRA TECH "Date-Received..." stamp?  

Was a project narrative available and read?  
Were any problems noted in the narrative? Describe  

Were method numbers, matrices, units and reporting limits indicated and appropriate?  
Was all other report heading information accurate?  

Were all field duplicates within relative percent difference (RPD) control limits?  

Were all results for field, rinsate and trip blanks ND?
# TETRA TECH
## LABORATORY REPORT EVALUATION CHECKLIST

<table>
<thead>
<tr>
<th>Analysis</th>
<th>Laboratory QC Batch Number</th>
<th>Number of TETRA TECH Samples in Batch</th>
<th>Holding Times Met</th>
<th>Surrogates</th>
<th>Method Blank (MB)</th>
<th>Matrix Spike/Matrix Spike Duplicate (MS/MSD)</th>
<th>Laboratory Control Spike (LCS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sk8031A</td>
<td>4025416</td>
<td>3</td>
<td>✓</td>
<td>Not Recovered</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>402571</td>
<td>3 + 3</td>
<td>✓</td>
<td>Not Recovered</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date</th>
<th>Issues and Actions Taken</th>
</tr>
</thead>
<tbody>
<tr>
<td>6 Sep 2018</td>
<td>Missing MS/MSDs</td>
</tr>
<tr>
<td>6 Oct 2018</td>
<td>Missing MB and LCS for batch 402571</td>
</tr>
</tbody>
</table>

C:\Documents and Settings\jon.mollison\Local Settings\Temporary Internet Files\Content.1E5038LUIR5\Lab_Validation_TI.doc

Tetra Tech
Rev. 11-08-07
<table>
<thead>
<tr>
<th>N/A</th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
</table>

**Is a Quality Assurance Project Plan (QAPP), Work Plan or a Sampling and Analysis (SAP) available?**  
Was the frequency stated in the QAPP, Work Plan or SAP for field duplicates, rinsate blanks and trip blanks met?  

- \( \checkmark \)  

**Chain-of-Custody and Request for Analysis (CC/RA) Records:**  
- Is the CC/RA present and the original copy?  
  - \( \checkmark \)  
- Is the CC/RA complete and signed off as appropriate?  
  - \( \checkmark \)  
- Was the temperature received recorded by the laboratory and was it 4°C ±2°C? if not what _____?  
  - \( \checkmark \)  
- Were any problems noted by the laboratory on the CC/RA?  
  - \( \checkmark \)  

**CC/RA - Laboratory Report Agreement:**  
- Were all the samples on the CC/RA analyzed as requested and instructions followed?  
  - \( \checkmark \)  
- Is the Field Sample Identification and the Laboratory Number relationship consistent between the CC/RA and the laboratory report?  
  - \( \checkmark \)  
- Do the Sampled and Received dates on the CC/RA match those on the laboratory report for each sample?  
  - \( \checkmark \)  

Was the report signed and each report page stamped with the TETRA TECH "Date Received:" stamp?  

- \( \checkmark \)  

Was a project narrative available and read?  
Were any problems noted in the narrative? Describe _____________________________  

- \( \checkmark \)  

Were method numbers, matrices, units and reporting limits indicated and appropriate?  
Was all other report heading information accurate?  

- \( \checkmark \)  

Were all field duplicates within relative percent difference (RPD) control limits?  

- \( \checkmark \)  

Were all results for field, rinsate and trip blanks ND?  

- \( \checkmark \)
<table>
<thead>
<tr>
<th>Analysis</th>
<th>Laboratory QC Batch Number</th>
<th>Number of TETRA TECH Samples in Batch</th>
<th>Holding Times Met</th>
<th>Surrogates</th>
<th>Method Blank (MB)</th>
<th>Matrix Spike/Matrix Spike Duplicate (MS/MSD)</th>
<th>Laboratory Control Spike (LCS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sw888ia</td>
<td>402377</td>
<td>8</td>
<td>✓</td>
<td>✓ - Not Recovered</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Date**

6 Oct 2016

**Issues and Actions Taken**

MS/MSD Missing
TETRA TECH
LABORATORY REPORT EVALUATION CHECKLIST

Project Name: Hairpin Rd Soil Samples
Project Number: TR 4741.62

Laboratory Used: To record
Lab Project Number: 1603131

Sample Matrix: Soil

Checked By/On: N/A 6 Dec 2006

N/A YES NO

Is a Quality Assurance Project Plan (QAPP), Work Plan or a Sampling and Analysis (SAP) available?
Was the frequency stated in the QAPP, Work Plan or SAP for field duplicates, rinsate blanks and trip blanks met? ✓ ■ ■

Chain-of-Custody and Request for Analysis (CC/RA) Records:
Is the CC/RA present and the original copy? ■ ✓
Is the CC/RA complete and signed off as appropriate? ✓ ■ ■
Was the temperature received recorded by the laboratory and was it 4°C, ±2°C? if not what ___? ■ □ □
Were any problems noted by the laboratory on the CC/RA? ____________
      ✓      ✓

CC/RA - Laboratory Report Agreement:
Were all the samples on the CC/RA analyzed as requested and instructions followed? ✓ ■ ■
Is the Field Sample Identification and the Laboratory Number relationship consistent between the CC/RA and the laboratory report? ✓ ■ ■
Do the Sampled and Received dates on the CC/RA match those on the laboratory report for each sample? ✓ ■ ■

Was the report signed and each report page stamped with the TETRA-TECH "Date Received..." stamp? ✓ ■ ■

Was a project narrative available and read? ✓ ■ ■
Were any problems noted in the narrative? Describe ________________________________________________________________________ ✓ ■ ■

Were method numbers, matrices, units and reporting limits indicated and appropriate? ✓ ■ ■
Was all other report heading information accurate? ✓ ■ ■

Were all field duplicates within relative percent difference (RPD) control limits? ✓ ■ ■
Were all results for field, rinsate and trip blanks ND? ✓ ■ ■

C:\Documents and Settings\jared.kreiger\Local Settings\Temporary Internet Files\Content.IES\488ERDS7\Lab_Validation_Tl[1].doc
Tetra Tech
Rev. 11-06-07
# TETRA TECH
**LABORATORY REPORT EVALUATION CHECKLIST**

<table>
<thead>
<tr>
<th>Analysis</th>
<th>Laboratory QC Batch Number</th>
<th>Number of TETRA TECH Samples in Batch</th>
<th>Holding Times Met</th>
<th>Surrogates</th>
<th>Method Blank (MB)</th>
<th>Matrix Spike/Matrix Spike Duplicate (MS/MSD)</th>
<th>Laboratory Control Spike (LCS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SW3091A</td>
<td>462786 m2</td>
<td>14</td>
<td>✓</td>
<td>Not Recoverable</td>
<td>✓</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>462793 m2</td>
<td>24</td>
<td>✓</td>
<td>18 - Recoverable</td>
<td>✓</td>
<td></td>
<td>✓</td>
</tr>
</tbody>
</table>

**Date**
6 Oct 2016

**Issues and Actions Taken**
Missing, MS/MSDs

---

Rev. 11-08-07
## TETRA TECH
### LABORATORY REPORT EVALUATION CHECKLIST

<table>
<thead>
<tr>
<th>Analysis</th>
<th>Laboratory QC Batch Number</th>
<th>Number of TETRA TECH Samples in Batch</th>
<th>Holding Times Met</th>
<th>Surrogates</th>
<th>Method Blank (MB)</th>
<th>Matrix Spike/Matrix Spike Duplicate (MS/MSD)</th>
<th>Laboratory Control Spike (LCS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SW6681A</td>
<td>462464</td>
<td>10</td>
<td>✓</td>
<td>H1- Not Recoverable</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>402465</td>
<td>3</td>
<td>✓</td>
<td>Not Recoverable</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>402468</td>
<td>2</td>
<td>✓</td>
<td>H1- Not Recoverable</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date</th>
<th>Issues and Actions Taken</th>
</tr>
</thead>
<tbody>
<tr>
<td>6 Oct 2016</td>
<td>Missing Analyses for samples 24A; 25A; 26A; 27A; 28A; 29A; 30A - curves rejected</td>
</tr>
<tr>
<td>6 Oct 2016</td>
<td>Missing MS/MS for batches 402464 and 402468</td>
</tr>
<tr>
<td>10 Nov 2016</td>
<td>EP2E-DA 34&quot;-0&quot; should be 34&quot;-0&quot; (34&quot; already in WO 10998)</td>
</tr>
<tr>
<td>11 Nov 2016</td>
<td>Lab revised report to discuss these issues in case narrative and reused lab 1Ds for 34 L &gt; validated/OK</td>
</tr>
</tbody>
</table>
TETRA TECH
LABORATORY REPORT EVALUATION CHECKLIST

Project Name: Hawley BAP Soil Samples
Project Number: 26454-42
Laboratory Used: Torrent
Lab Project Number: 182-3156
Sample Matrix: Soil
Checked By/On: 16 Oct 2010

Is a Quality Assurance Project Plan (QAPP), Work Plan or a Sampling and Analysis (SAP) available?
Was the frequency stated in the QAPP, Work Plan or SAP for field duplicates, rinsate blanks and trip blanks met?

Chain-of-Custody and Request for Analysis (CC/RA) Records:
- Is the CC/RA present and the original copy?
- Is the CC/RA complete and signed off as appropriate?
- Was the temperature received recorded by the laboratory and was it 4°C, ±2°? If not what ______.
- Were any problems noted by the laboratory on the CC/RA?
  What? ____________________________

CC/RA - Laboratory Report Agreement:
- Were all the samples on the CC/RA analyzed as requested and instructions followed?
- Is the Field Sample Identification and the Laboratory Number relationship consistent between
  the CC/RA and the laboratory report?
- Do the Sampled and Received dates on the CC/RA match those on the laboratory report for each sample?
- Was the report signed and each report page stamped with the TETRA TECH "Date Received..." stamp?

Was a project narrative available and read?
Were any problems noted in the narrative? Describe: 7 samples sealed with water 24A, 25A, 36A, 27A, 28A
34A, 30A

Were method numbers, matrices, units and reporting limits indicated and appropriate?
Was all other report heading information accurate?

Were all field duplicates within relative percent difference (RPD) control limits?
Were all results for field, rinsate and trip blanks ND?
# TETRA TECH
LABORATORY REPORT EVALUATION CHECKLIST

Project Name: Hockessin RAP Soil Samples  
Project Number: T24434 - 02  
Laboratory Used: Terrent  
Lab Project Number: 109168  
Sample Matrix: Clay  
Checked By/On: 14 & 16 Oct 2010

<table>
<thead>
<tr>
<th>Analysis</th>
<th>Laboratory QC Batch Number</th>
<th>Number of TETRA TECH Samples in Batch</th>
<th>Holding Times Met</th>
<th>Surrogates</th>
<th>Method Blank (MB)</th>
<th>Matrix Spike/Matrix Spike Duplicate (MS/MSD)</th>
<th>Laboratory Control Spike (LCS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SW8001A</td>
<td>402408</td>
<td>8</td>
<td>✔</td>
<td>7-µg Reamined</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>402429</td>
<td>22</td>
<td>✔</td>
<td>Increased</td>
<td>✔</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>402430</td>
<td>18</td>
<td>✔</td>
<td>Not Recognized</td>
<td>✔</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>402431</td>
<td>7</td>
<td>✔</td>
<td>Increased</td>
<td>✔</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date</th>
<th>Issues and Actions Taken</th>
</tr>
</thead>
</table>
| 6 Oct 2010 | Missing, 115/MSD
| 3 Oct 2010 | Missing, MB and LCS for batch 402408
| 11/11/10  | Lab did report appropriate MS/MSD & LCS > validated/OK
TETRA TECH
LABORATORY REPORT EVALUATION CHECKLIST

Project Name: Hickman RAP Soil Sampling
Project Number: 72437

Laboratory Used: TerraMet
Lab Project Number: A0 169165
Sample Matrix: Soil
Checked By/On: 14 Oct 2010

N/A YES NO

Is a Quality Assurance Project Plan (QAPP), Work Plan or a Sampling and Analysis (SAP) available?  
Was the frequency stated in the QAPP, Work Plan or SAP for field duplicates, rinsate blanks and trip blanks met?  

Chain-of-Custody and Request for Analysis (CC/RA) Records:
  Is the CC/RA present and the original copy?  
  Is the CC/RA complete and signed off as appropriate?  
  Was the temperature received recorded by the laboratory and was it 4°C ±2°C if not what?  
  Were any problems noted by the laboratory on the CC/RA?  
  What?  

CC/RA - Laboratory Report Agreement:
  Were all the samples on the CC/RA analyzed as requested and instructions followed?  
  Is the Field Sample Identification and the Laboratory Number relationship consistent between the CC/RA and the laboratory report?  
  Do the Sampled and Received dates on the CC/RA match those on the laboratory report for each sample?  

Was the report signed and each report page stamped with the TETRA TECH "Date Received..." stamp?  

Was a project narrative available and read?  
Were any problems noted in the narrative? Describe  

Were method numbers, matrices, units and reporting limits indicated and appropriate?  
Was all other report heading information accurate?  

Were all field duplicates within relative percent difference (RPD) control limits?  

Were all results for field, rinsate and trip blanks ND?
# TETRA TECH
## LABORATORY REPORT EVALUATION CHECKLIST

**Project Name:** Hickory PAH Soil Sampling  
**Project Number:** 12345.02  
**Laboratory Used:** Torrent  
**Lab Project Number:** 1045376  
**Sample Matrix:** Soil  
**Checked By/On:** N.E. Oct 2010

<table>
<thead>
<tr>
<th>Analysis</th>
<th>Laboratory QC Batch Number</th>
<th>Number of TETRA TECH Samples in Batch</th>
<th>Holding Times Met</th>
<th>Surrogates</th>
<th>Method Blank (MB)</th>
<th>Matrix Spike/Matrix Spike Duplicate (MS/MSD)</th>
<th>Laboratory Control Spike (LCS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SW8081A</td>
<td>402405</td>
<td>6</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>402408</td>
<td>1</td>
<td>✓</td>
<td>Increased</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Date  
<table>
<thead>
<tr>
<th>Date</th>
<th>Issues and Actions Taken</th>
</tr>
</thead>
<tbody>
<tr>
<td>6 Oct 2010</td>
<td>CC is missing</td>
</tr>
<tr>
<td>6 Oct 2010</td>
<td>Temp not in compliance according to lab. Temp unknown.</td>
</tr>
<tr>
<td>6 Oct 2010</td>
<td>Missing MS/MSD</td>
</tr>
<tr>
<td>6 Oct 2010</td>
<td>Missing MB and LCS for batch 402408</td>
</tr>
<tr>
<td>20 Oct rev. COC sent on 10/19/10</td>
<td></td>
</tr>
</tbody>
</table>

C:/Documents and Settings\jared.kreiger\Local Settings\Temporary Internet Files\Content\IE5488ERDS7\Lab_Validation_TT[1].doc  
Tetra Tech  
Rev. 11-06-07  
11/1/10 Lab reported MS/MSD and LCS - report validated/OK
TETRA TECH
LABORATORY REPORT EVALUATION CHECKLIST

Project Name: 10044-02  Sample
Project Number: 3

Laboratory Used: Target
Lab Project Number: 10044-076
Sample Matrix: Soil
Checked By/On: 3K C at 8am

<table>
<thead>
<tr>
<th>N/A</th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
</table>

Is a Quality Assurance Project Plan (QAPP), Work Plan or a Sampling and Analysis (SAP) available?
Was the frequency stated in the QAPP, Work Plan or SAP for field duplicates, rinsate blanks and trip blanks met?

Chain-of-Custody and Request for Analysis (CC/RA) Records:
- Is the CC/RA present and the original copy?
- Is the CC/RA complete and signed off as appropriate?
- Was the temperature received recorded by the laboratory and was it 4°C, ±2°C? if not what N/A.
- Were any problems noted by the laboratory on the CC/RA?
  What? Not C to made on

CC/RA - Laboratory Report Agreement:
- Were all the samples on the CC/RA analyzed as requested and instructions followed?
- Is the Field Sample Identification and the Laboratory Number relationship consistent between the CC/RA and the laboratory report?
- Do the Sampled and Received dates on the CC/RA match those on the laboratory report for each sample?

Was the report signed and each report page stamped with the TETRA TECH "Date Received..." stamp?

Was a project narrative available and read?
Were any problems noted in the narrative? Describe

Were method numbers, matrices, units and reporting limits indicated and appropriate?
Was all other report heading information accurate?

Were all field duplicates within relative percent difference (RPD) control limits?
Were all results for field, rinsate and trip blanks ND?
## TETRA TECH

**LABORATORY REPORT EVALUATION CHECKLIST**

### Project Information
- **Project Name:** [Redacted]
- **Project Number:** TE8404.62
- **Laboratory Used:** [Redacted]
- **Lab Project Number:** 1021183
- **Sample Matrix:** Soil
- **Checked By/On:** 14/7 Oct 2016

### Analysis Table

<table>
<thead>
<tr>
<th>Analysis</th>
<th>Laboratory QC Batch Number</th>
<th>Number of TETRA TECH Samples in Batch</th>
<th>Holding Times Met</th>
<th>Surrogates</th>
<th>Method Blank (MB)</th>
<th>Matrix Spike/Matrix Spike Duplicate (MS/MSD)</th>
<th>Laboratory Control Spike (LCS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SU8061A</td>
<td>4021456</td>
<td>20</td>
<td>Yes</td>
<td>Not Recoverable</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>4023457</td>
<td>12</td>
<td>Yes</td>
<td>Not Recoverable</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Date and Issues
- **7 Oct 2016:** Missing All MBs, MS/MSDs, and LCS.
- **10/19:** CoC was missing but was sent on 10/19/10 validated/OK.
TETRA TECH
LABORATORY REPORT EVALUATION CHECKLIST

Project Name: Hickory RAP Sediment
Project Number: T26 507 12

Laboratory Used: Terrent
Lab Project Number: 1004185

Sample Matrix: Sed
Checked By/On: 7/6/2021 2:46 PM

N/A YES NO

Is a Quality Assurance Project Plan (QAPP), Work Plan or a Sampling and Analysis (SAP) available?
Was the frequency stated in the QAPP, Work Plan or SAP for field duplicates, rinsate blanks and trip blanks met? ✓

Chain-of-Custody and Request for Analysis (CC/RA) Records:
Is the CC/RA present and the original copy? ✓ ✓
Is the CC/RA complete and signed off as appropriate? ✓
Was the temperature recorded by the laboratory and was it 4°C ± 2°? If not what? ✓ ✓
Were any problems noted by the laboratory on the CC/RA?
What? __________________________________________

CC/RA - Laboratory Report Agreement:
Were all the samples on the CC/RA analyzed as requested and instructions followed? ✓
Is the Field Sample Identification and the Laboratory Number relationship consistent between the CC/RA and the laboratory report? ✓
Do the Sampled and Received dates on the CC/RA match those on the laboratory report for each sample? ✓

Was the report signed, and each report page stamped with the TETRA TECH "Date Received..." stamp? ✓

Was a project narrative available and read? ✓
Were any problems noted in the narrative? Describe ________________________________ ✓

Were method numbers, matrices, units and reporting limits indicated and appropriate? ✓
Was all other report heading information accurate? ✓

Were all field duplicates within relative percent difference (RPD) control limits? ✓

Were all results for field, rinsate and trip blanks ND? ✓
TETRA TECH
LABORATORY REPORT EVALUATION CHECKLIST

<table>
<thead>
<tr>
<th>Project Name: Vicksburg DAP Soil Samples</th>
<th>Laboratory Used:</th>
<th>Sample Matrix: Soil</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Number: 724-34, 52</td>
<td>Torrey</td>
<td></td>
</tr>
<tr>
<td>Lab Project Number: 100-12-1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Checked By/On: 5/4/04</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>N/A</th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Is a Quality Assurance Project Plan (QAPP), Work Plan or a Sampling and Analysis (SAP) available?
Was the frequency stated in the QAPP, Work Plan or SAP for field duplicates, rinsate blanks and trip blanks met? ✔

Chain-of-Custody and Request for Analysis (CC/RA) Records:
  - Is the CC/RA present and the original copy? ✔
  - Is the CC/RA complete and signed off as appropriate? ✔
  - Was the temperature received recorded by the laboratory and was it 4°C, ±2°? if not what ___.
  - Were any problems noted by the laboratory on the CC/RA? ✔
    - What? _________

CC/RA - Laboratory Report Agreement:
  - Were all the samples on the CC/RA analyzed as requested and instructions followed? ✔
  - Is the Field Sample Identification and the Laboratory Number relationship consistent between the CC/RA and the laboratory report? ✔
  - Do the Sampled and Received dates on the CC/RA match those on the laboratory report for each sample? ✔

  - Was the report signed and each report page stamped with the TETRA TECH "Date Received..." stamp? ✔
  - Was a project narrative available and read? ✔
    - Were any problems noted in the narrative? Describe ________________________________
  - Were method numbers, matrices, units and reporting limits indicated and appropriate? ✔
  - Was all other report heading information accurate? ✔
  - Were all field duplicates within relative percent difference (RPD) control limits? ✔
  - Were all results for field, rinsate and trip blanks ND? ✔

C:Documents and Settings\jared.kreiger\Local Settings\Temporary Internet Files\Content.IES\YGLHN5CX\Lab_Validation_Ti[1].doc
Tetra Tech
Rev. 11-08-07
# Laboratory Report Evaluation Checklist

**Project Name:** Halema Wellfield BAP Soil Sampling  
**Project Number:** T26484-02  
**Lab Project Number:** 120314  
**Laboratory Used:** Terront  
**Sample Matrix:** Soil  
**Checked By/On:** 06/7/2010

<table>
<thead>
<tr>
<th>Analysis</th>
<th>Laboratory QC Batch Number</th>
<th>Number of TETRA TECH Samples in Batch</th>
<th>Holding Times Met</th>
<th>Surrogates</th>
<th>Method Blank (MB)</th>
<th>Matrix Spike/Matrix Spike Duplicate (MS/MSD)</th>
<th>Laboratory Control Spike (LCS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SW26561</td>
<td>402460 1218</td>
<td>20</td>
<td>✓</td>
<td>Is-Na Recoverable 3 Increased</td>
<td>✓</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>SW26861</td>
<td>402469 1212</td>
<td>20</td>
<td>✓</td>
<td>Is-Na Recoverable 3 Increased</td>
<td>✓</td>
<td></td>
<td>✓</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date</th>
<th>Issues and Actions Taken</th>
</tr>
</thead>
<tbody>
<tr>
<td>7/3/2010</td>
<td>Missing MB/MSD</td>
</tr>
</tbody>
</table>

---

C:\Documents and Settings\jared.kreiger\Local Settings\Temporary Internet Files\Content\EES\YGLHNS\CXLab\Validation_Tf[1].docn  
Rev. 11-08-07
TETRA TECH
LABORATORY REPORT EVALUATION CHECKLIST

Project Name: Indigexx P&G site sampling
Project Number: 104316-62
Laboratory Used: TECOL
Lab Project Number: 1009194
Sample Matrix: Soil
Checked By/On: NC Tech 2008

N/A  YES  NO

Is a Quality Assurance Project Plan (QAPP), Work Plan or a Sampling and Analysis (SAP) available? __ __ __

Was the frequency stated in the QAPP, Work Plan or SAP for field duplicates, rinsate blanks and trip blanks met? __ __ __

Chain-of-Custody and Request for Analysis (CC/RA) Records:

Is the CC/RA present and the original copy? __ __ __

Is the CC/RA complete and signed off as appropriate? __ __ __

Was the temperature received recorded by the laboratory and was it 4°C, ±2°? if not what: __ __ __

Were any problems noted by the laboratory on the CC/RA? __ __ __

CC/RA - Laboratory Report Agreement:

Were all the samples on the CC/RA analyzed as requested and instructions followed? __ __ __

Is the Field Sample Identification and the Laboratory Number relationship consistent between the CC/RA and the laboratory report? __ __ __

Do the Sampled and Received dates on the CC/RA match those on the laboratory report for each sample? __ __ __

Was the report signed and each report page stamped with the TETRA TECH "Date Received..." stamp? __ __ __

Was a project narrative available and read? __ __ __

Were any problems noted in the narrative? Describe: __ __ __

Were method numbers, matrices, units and reporting limits indicated and appropriate? __ __ __

Was all other report heading information accurate? __ __ __

Were all field duplicates within relative percent difference (RPD) control limits? __ __ __

Were all results for field, rinsate and trip blanks ND? __ __ __
# TETRA TECH
LABORATORY REPORT EVALUATION CHECKLIST

<table>
<thead>
<tr>
<th>Analysis</th>
<th>Laboratory QC Batch Number</th>
<th>Number of TETRA TECH Samples in Batch</th>
<th>Holding Times Met</th>
<th>Surrogates</th>
<th>Method Blank (MB)</th>
<th>Matrix Spike/Matrix Spike Duplicate (MS/MSD)</th>
<th>Laboratory Control Spike (LCS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>5W3081A</td>
<td>4102465</td>
<td>18</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date</th>
<th>Issues and Actions Taken</th>
</tr>
</thead>
<tbody>
<tr>
<td>7 Oct 2018</td>
<td>完善WQMS/MSD</td>
</tr>
</tbody>
</table>
### TETRA TECH
#### LABORATORY REPORT EVALUATION CHECKLIST

**Project Name:** Helenea RAP Sed Sampling  
**Project Number:** P26434-02  
**Laboratory Used:** TerraNet  
**Lab Project Number:** 604217  
**Sample Matrix:** Soil  
**Checked By/On:** Jul 11, 2016

<table>
<thead>
<tr>
<th>N/A</th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
</table>

**Is a Quality Assurance Project Plan (QAPP), Work Plan or a Sampling and Analysis (SAP) available?**

<table>
<thead>
<tr>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
</table>

**Was the frequency stated in the QAPP, Work Plan or SAP for field duplicates, rinsate blanks and trip blanks met?**

<table>
<thead>
<tr>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
</table>

**Chain-of-Custody and Request for Analysis (CC/RA) Records:**

- **Is the CC/RA present and the original copy?**
  - YES | NO |
- **Is the CC/RA complete and signed off as appropriate?**
  - YES | NO |
- **Was the temperature received recorded by the laboratory and was it 4°C, ±2°? if not what?**
  - YES | NO |
- **Were any problems noted by the laboratory on the CC/RA?**
  - YES | NO |
  - What?_________________________________________

**CC/RA - Laboratory Report Agreement:**

- **Were all the samples on the CC/RA analyzed as requested and instructions followed?**
  - YES | NO |
- **Is the Field Sample Identification and the Laboratory Number relationship consistent between the CC/RA and the laboratory report?**
  - YES | NO |
- **Do the Sampled and Received dates on the CC/RA match those on the laboratory report for each sample?**
  - YES | NO |

**Was the report signed and each report page stamped with the TETRA TECH "Date Received..." stamp?**

<table>
<thead>
<tr>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
</table>

**Was a project narrative available and read?**

<table>
<thead>
<tr>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
</table>

**Were any problems noted in the narrative?**

<table>
<thead>
<tr>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
</table>

**Were method numbers, matrices, units and reporting limits indicated and appropriate?**

<table>
<thead>
<tr>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
</table>

**Was all other report heading information accurate?**

<table>
<thead>
<tr>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
</table>

**Were all field duplicates within relative percent difference (RPD) control limits?**

<table>
<thead>
<tr>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
</table>

**Were all results for field, rinsate and trip blanks ND?**

<table>
<thead>
<tr>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
</table>
## TETRA TECH
### LABORATORY REPORT EVALUATION CHECKLIST

Project Name: Holcomb RAP soil samples  
Project Number: 705439.02  
Laboratory Used: Torrent  
Lab Project Number: 1064217  
Sample Matrix: Soil  
Checked By/On: 11 Oct 2010

<table>
<thead>
<tr>
<th>Analysis</th>
<th>Laboratory QC Batch Number</th>
<th>Number of TETRA TECH Samples in Batch</th>
<th>Holding Times Met</th>
<th>Surrogates</th>
<th>Method Blank (MB)</th>
<th>Matrix Spike/Matrix Spike Duplicate (MS/MSD)</th>
<th>Laboratory Control Spike (LCS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SW8081A</td>
<td>402493</td>
<td>18</td>
<td>✓</td>
<td>Not Recoverable</td>
<td>✓</td>
<td></td>
<td>✓</td>
</tr>
</tbody>
</table>

Date: 11 Oct 2010  
Issues and Actions Taken: 
- [ ] Review MS/MSD
<table>
<thead>
<tr>
<th>Analysis</th>
<th>Laboratory QC Batch Number</th>
<th>Number of TETRA TECH Samples in Batch</th>
<th>Holding Times Met</th>
<th>Surrogates</th>
<th>Method Blank (MB)</th>
<th>Matrix Spike/Matrix Spike 'Duplicate (MS/MSD)</th>
<th>Laboratory Control Spike (LCS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SW8081A</td>
<td>402542 1248</td>
<td>2.0</td>
<td>YES</td>
<td>25 not recovered/stopped</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SW8081A</td>
<td>402551 1248</td>
<td>2.0</td>
<td>YES</td>
<td>25 not recovered/stopped</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Date

10/21/10 Missing MB & LCS for batch 402551 and 402542 - 1248

11/1/10 Lab reported appropriate MS/MSD and LCS, validated OK
TETRA TECH
LABORATORY REPORT EVALUATION CHECKLIST

Project Name: **SAME AS OTHER**
Project Number: 
Lab Project Number: 1009230

Laboratory Used: 
Sample Matrix: 
Checked By/On: 

<table>
<thead>
<tr>
<th>N/A</th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
</table>

Is a Quality Assurance Project Plan (QAPP), Work Plan or a Sampling and Analysis (SAP) available?
Was the frequency stated in the QAPP, Work Plan or SAP for field duplicates, rinsate blanks and trip blanks met? ✓ ✓ __

Chain-of-Custody and Request for Analysis (CC/RA) Records:
Is the CC/RA present and the original copy? ✓ ___
Is the CC/RA complete and signed off as appropriate? ✓ ___
Was the temperature received recorded by the laboratory and was it 4°C, ±2°? if not what ____.
Were any problems noted by the laboratory on the CC/RA?
What? ________________ ✓

CC/RA - Laboratory Report Agreement:
Were all the samples on the CC/RA analyzed as requested and instructions followed? ✓ __
Is the Field Sample Identification and the Laboratory Number relationship consistent between the CC/RA and the laboratory report? ✓ __
Do the Sampled and Received dates on the CC/RA match those on the laboratory report for each sample? ✓ __

Was the report signed and each report page stamped with the TETRA TECH "Date Received..." stamp? __ __

Was a project narrative available and read? ✓ __
Were any problems noted in the narrative? Describe ________________ ✓__

Were method numbers, matrices, units and reporting limits indicated and appropriate? ✓ __
Was all other report heading information accurate? ✓ __

Were all field duplicates within relative percent difference (RPD) control limits? ✓ __

Were all results for field, rinsate and trip blanks ND? ✓ __
### TETRA TECH
#### LABORATORY REPORT EVALUATION CHECKLIST

**Project Name:** Hickam RAP soil sampling  
**Project Number:** 210434.03  
**Laboratory Used:** Torrent  
**Lab Project Number:** 1010002  
**Sample Matrix:** Soil  
**Checked By/On:** NMO 10/20/2010

<table>
<thead>
<tr>
<th>Analysis</th>
<th>Laboratory QC Batch Number</th>
<th>Number of TETRA TECH Samples in Batch</th>
<th>Holding Times Met</th>
<th>Surrogates</th>
<th>Method Blank (MB)</th>
<th>Matrix Spike/Matrix Spike Duplicate (MS/MSD)</th>
<th>Laboratory Control Spike (LCS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sw8081 A</td>
<td>402556 229 274</td>
<td>38</td>
<td>✔</td>
<td>All diluted 39, not receivable</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date</th>
<th>Issues and Actions Taken</th>
</tr>
</thead>
<tbody>
<tr>
<td>10/21/10</td>
<td>MBs and LCS missing</td>
</tr>
<tr>
<td>11/1/10</td>
<td>Lab sent revised report w/ MS/MSD + LCS validated OK</td>
</tr>
</tbody>
</table>
TETRA TECH
LABORATORY REPORT EVALUATION CHECKLIST

Project Name: Same as other side
Project Number: ____________

Laboratory Used: ____________
Lab Project Number: 101002

Sample Matrix: ____________
Checked By/On: ____________

Is a Quality Assurance Project Plan (QAPP), Work Plan or a Sampling and Analysis (SAP) available? ____________
Was the frequency stated in the QAPP, Work Plan or SAP for field duplicates, rinsate blanks and trip blanks met? ____________

Chain-of-Custody and Request for Analysis (CC/RA) Records:
  Is the CC/RA present and the original copy? ____________
  Is the CC/RA complete and signed off as appropriate? ____________
  Was the temperature received recorded by the laboratory and was it 4°C, ±2°? if not what ______.
  Were any problems noted by the laboratory on the CC/RA? ______. ____________
  What? ________________________________

CC/RA - Laboratory Report Agreement:
  Were all the samples on the CC/RA analyzed as requested and instructions followed? ____________
  Is the Field Sample Identification and the Laboratory Number relationship consistent between the CC/RA and the laboratory report? ____________
  Do the Sampled and Received dates on the CC/RA match those on the laboratory report for each sample? ____________
  Was the report signed and each report page stamped with the TETRA TECH "Date Received..." stamp? ____________

Was a project narrative available and read? ____________
Were any problems noted in the narrative? Describe ________________________________. ____________

Were method numbers, matrices, units and reporting limits indicated and appropriate? ____________
Was all other report heading information accurate? ____________

Were all field duplicates within relative percent difference (RPD) control limits? ____________

Were all results for field, rinsate and trip blanks ND? ____________
<table>
<thead>
<tr>
<th>Analysis</th>
<th>Laboratory QC Batch Number</th>
<th>Number of TETRA TECH Samples in Batch</th>
<th>Holding Times Met</th>
<th>Surrogates</th>
<th>Method Blank (MB)</th>
<th>Matrix Spike/Matrix Spike Duplicate (MS/MSD)</th>
<th>Laboratory Control Spike (LCS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>5W90581A</td>
<td>402577 12a0l</td>
<td>18</td>
<td>✓</td>
<td>All D, 2. recorded</td>
<td>✓</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>402595</td>
<td>12106</td>
<td>1</td>
<td>✓</td>
<td>D, not recorded</td>
<td>✓</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>402583</td>
<td>1904</td>
<td>17</td>
<td>✓</td>
<td>All D, not recorded</td>
<td>✓</td>
<td></td>
<td>✓</td>
</tr>
</tbody>
</table>

**Date** | **Issues and Actions Taken**
--- | ---
10/21/10 | Sample EAR3-RA-40F-6 is listed twice in sample results and LIS, which is in place of EAR3-RA-40F-12 as stated in the CC - the results are different, which could mean it's just mislabeled.
10/21/10 | The time is inconsistent in sample results for EAR3-RA-15c-12, says 11:15, should be 14:15 as stated in CC.
10/28/10 | YKP requested re-run of high DDT concentrations in 15-A (3rd replicate).
11/22/10 | Lab revised report to address all issues, including reanalyzing triplicates; report validated OK.
TETRA TECH
LABORATORY REPORT EVALUATION CHECKLIST

Project Name: Same as other side  Laboratory Used: 
Project Number: _______________ Lab Project Number: 1010014
Sample Matrix: 
Checked By/On: 

Is a Quality Assurance Project Plan (QAPP), Work Plan or a Sampling and Analysis (SAP) available?  
Was the frequency stated in the QAPP, Work Plan or SAP for field duplicates, rinse blanks and trip blanks met?  

Chain-of-Custody and Request for Analysis (CC/RA) Records:
   Is the CC/RA present and the original copy?   
   Is the CC/RA complete and signed off as appropriate?    
   Was the temperature received recorded by the laboratory and was it 4°C, ±2°? if not what _____.   
   Were any problems noted by the laboratory on the CC/RA?    
      What? ________________________________

CC/RA - Laboratory Report Agreement:
   Were all the samples on the CC/RA analyzed as requested and instructions followed?   
   Is the Field Sample Identification and the Laboratory Number relationship consistent between 
      the CC/RA and the laboratory report?   
   Do the Sampled and Received dates on the CC/RA match those on the laboratory report for each sample?  

Was the report signed and each report page stamped with the TETRA TECH "Date Received..." stamp?  

Was a project narrative available and read?  
Were any problems noted in the narrative? Describe _________________________________.  

Were method numbers, matrices, units and reporting limits indicated and appropriate?  
Was all other report heading information accurate?  

Were all field duplicates within relative percent difference (RPD) control limits?  

Were all results for field, rinse and trip blanks ND?
<table>
<thead>
<tr>
<th>Analysis</th>
<th>Laboratory QC Batch Number</th>
<th>Number of TETRA TECH Samples in Batch</th>
<th>Holding Times Met</th>
<th>Surrogates</th>
<th>Method Blank (MB)</th>
<th>Matrix Spike/Matrix Spike Duplicate (MS/MSD)</th>
<th>Laboratory Control Spike (LCS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SW8081A</td>
<td>402595 1312</td>
<td>20</td>
<td>✓</td>
<td>25 not recovered 1 - 2 within limits</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date</th>
<th>Issues and Actions Taken</th>
</tr>
</thead>
<tbody>
<tr>
<td>10/21/10</td>
<td>Temperature not on CC, but is stated in sample receipt checklist from lab</td>
</tr>
<tr>
<td>10/21/10</td>
<td>Missing MB &amp; LCS for batch 402595, prep batch 1312</td>
</tr>
<tr>
<td>10/21/10</td>
<td>Don't have &quot;revised report&quot; but we have a revised ETD</td>
</tr>
<tr>
<td>11/1/10</td>
<td>Lab sent revised report &gt; validated/OK</td>
</tr>
</tbody>
</table>

G:\EMG - Environmental Mgt. Group\Field Forms\Forms\Lab Validation Tk.doc
Rev. 11-08-07
TETRA TECH
LABORATORY REPORT EVALUATION CHECKLIST

Project Name: ______________
Project Number: _____________
Laboratory Used: _____________
Lab Project Number: 1010031
Sample Matrix: _______________
Checked By/On: _______________

Is a Quality Assurance Project Plan (QAPP), Work Plan or a Sampling and Analysis (SAP) available?  
Was the frequency stated in the QAPP, Work Plan or SAP for field duplicates, rinsate blanks and trip blanks met?  

Chain-of-Custody and Request for Analysis (CC/RA) Records:  
Is the CC/RA present and the original copy?  
Is the CC/RA complete and signed off as appropriate?  
Was the temperature received recorded by the laboratory and was it 4°C, ±2°C? if not what_____.  
Were any problems noted by the laboratory on the CC/RA?  
What? ___________________________

CC/RA - Laboratory Report Agreement:  
Were all the samples on the CC/RA analyzed as requested and instructions followed?  
Is the Field Sample Identification and the Laboratory Number relationship consistent between the CC/RA and the laboratory report?  
Do the Sampled and Received dates on the CC/RA match those on the laboratory report for each sample?  

Was the report signed and each report page stamped with the TETRA TECH "Date Received..." stamp?  

Was a project narrative available and read?  
Were any problems noted in the narrative? Describe _________________________________.  

Were method numbers, matrices, units and reporting limits indicated and appropriate?  
Was all other report heading information accurate?  

Were all field duplicates within relative percent difference (RPD) control limits?  

Were all results for field, rinsate and trip blanks ND?
<table>
<thead>
<tr>
<th>Analysis</th>
<th>Laboratory QC Batch Number</th>
<th>Number of TETRA TECH Samples in Batch</th>
<th>Holding Times Met</th>
<th>Surrogates</th>
<th>Method Blank (MB)</th>
<th>Matrix Spike/Matrix Spike Duplicate (MS/MSD)</th>
<th>Laboratory Control Spike (LCS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SW8081A</td>
<td>402642 1335</td>
<td>7</td>
<td>✓</td>
<td>all diluted</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Date: 10/21/10  
Issues and Actions Taken: missing MB & LCS for batch 402642
TETRA TECH
LABORATORY REPORT EVALUATION CHECKLIST

Project Name: Same as other side
Project Number: _______________ Laboratory Used: _______________
Lab Project Number: 101005
Sample Matrix: _______________
Checked By/On: _______________

<table>
<thead>
<tr>
<th>N/A</th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

Is a Quality Assurance Project Plan (QAPP), Work Plan or a Sampling and Analysis (SAP) available?
Was the frequency stated in the QAPP, Work Plan or SAP for field duplicates, rinsate blanks and trip blanks met?

Chain-of-Custody and Request for Analysis (CC/RA) Records:
Is the CC/RA present and the original copy?
Is the CC/RA complete and signed off as appropriate?
Was the temperature received recorded by the laboratory and was it 4°C, ±2°? if not what ______.
Were any problems noted by the laboratory on the CC/RA?
What? ____________________________

CC/RA - Laboratory Report Agreement:
Were all the samples on the CC/RA analyzed as requested and instructions followed?
Is the Field Sample Identification and the Laboratory Number relationship consistent between the CC/RA and the laboratory report?
Do the Sampled and Received dates on the CC/RA match those on the laboratory report for each sample?

Was the report signed and each report page stamped with the TETRA TECH "Date Received..." stamp?

Was a project narrative available and read?
Were any problems noted in the narrative? Describe _________________________________.

Were method numbers, matrices, units and reporting limits indicated and appropriate?
Was all other report heading information accurate?

Were all field duplicates within relative percent difference (RPD) control limits?

Were all results for field, rinsate and trip blanks ND?
<table>
<thead>
<tr>
<th>Analysis</th>
<th>Laboratory QC Batch Number</th>
<th>Number of TETRA TECH Samples in Batch</th>
<th>Holding Times Met</th>
<th>Surrogates</th>
<th>Method Blank (MB)</th>
<th>Matrix Spike/Matrix Spike 'Duplicate (MS/MSD)</th>
<th>Laboratory Control Spike (LCS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SW8081A</td>
<td>4021642</td>
<td>2</td>
<td>✓</td>
<td>Not Recovered</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Date:  
Issues and Actions Taken:  

Checked By/On: 10/21/10
## TETRA TECH
### LABORATORY REPORT EVALUATION CHECKLIST

<table>
<thead>
<tr>
<th>Project Name:</th>
<th>Same as other side</th>
<th>Laboratory Used:</th>
<th>Sample Matrix:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Number:</td>
<td>_____________</td>
<td>Lab Project Number:</td>
<td>_____________</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>QAPP</th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work Plan or SAP</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Field duplicates, rinsate blanks and trip blanks met</td>
<td>✓</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CC/RA</th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chain-of-Custody and Request for Analysis (CC/RA) Records:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Is the CC/RA present and the original copy?</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Is the CC/RA complete and signed off as appropriate?</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Was the temperature received recorded by the laboratory and was it 4°C, ±2°C? if not what _____</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Were any problems noted by the laboratory on the CC/RA?</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>What?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CC/RA</th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>CC/RA - Laboratory Report Agreement:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Were all the samples on the CC/RA analyzed as requested and instructions followed?</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Is the Field Sample Identification and the Laboratory Number relationship consistent between the CC/RA and the laboratory report?</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Do the Sampled and Received dates on the CC/RA match those on the laboratory report for each sample?</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Was the report signed and each report page stamped with the TETRA TECH &quot;Date Received...&quot; stamp?</td>
<td>✓</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Was a project narrative available and read?</td>
<td></td>
</tr>
<tr>
<td>Were any problems noted in the narrative? Describe _________________________________</td>
<td>✓</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Were method numbers, matrices, units and reporting limits indicated and appropriate?</td>
<td>✓</td>
</tr>
<tr>
<td>Was all other report heading information accurate?</td>
<td>✓</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Were all field duplicates within relative percent difference (RPD) control limits?</td>
<td>✓</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Were all results for field, rinsate and trip blanks ND?</td>
<td>✓</td>
</tr>
</tbody>
</table>
## Tetra Tech
### Laboratory Report Evaluation Checklist

**Project Name:** Hickam RAP Soil Sampling  
**Project Number:** 20434-03  
**Laboratory Used:** Torrent  
**Lab Project Number:** 1010042  
**Sample Matrix:** Soil  
**Checked By/On:** NWO 10/21/10

<table>
<thead>
<tr>
<th>Analysis</th>
<th>Laboratory QC Batch Number</th>
<th>Number of TETRA TECH Samples in Batch</th>
<th>Holding Times Met</th>
<th>Surrogates</th>
<th>Method Blank (MB)</th>
<th>Matrix Spike/Matrix Spike Duplicate (MS/MSD)</th>
<th>Laboratory Control Spike (LCS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SW8081A</td>
<td>4026116 13x6</td>
<td>9</td>
<td>✓</td>
<td>4 recovered-ok</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>402628 13x3</td>
<td>3</td>
<td>✓</td>
<td>3 recovered-ok</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>402629 13x3</td>
<td>17</td>
<td>✓</td>
<td>17 recovered-ok</td>
<td>✓</td>
<td>-</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>402630 13x4</td>
<td>1</td>
<td>✓</td>
<td>recovered-ok</td>
<td>✓</td>
<td>-</td>
<td>✓</td>
</tr>
</tbody>
</table>

### Issues and Actions Taken

- **10/21/10**  
  MB & LCS missing for 4026116 and 402628

- **10/21/10**  
  Missing 3rd page of CC, wrong CC page attached (from 10/1031)

- **11/21/10**  
  Transcription error for 1010042-10A, -91A should have been ON1- EA "16" not "16" but this was already revised

- **10/27/10**  
  Lab sent correct 3rd page of CC -> report validated / OK

---

G:\EMG - Environmental Mgt. Group\Field Forms\Forms\Lab Validation Ti.doc  
Rev. 11-08-07  
Tetra Tech
TETRA TECH
LABORATORY REPORT EVALUATION CHECKLIST

Project Name: ____________________________  Laboratory Used: ____________________________  Sample Matrix: ____________________________
Project Number: ___________________________  Lab Project Number: 1010042  Checked By/On: ____________________________

Is a Quality Assurance Project Plan (QAPP), Work Plan or a Sampling and Analysis (SAP) available?  
Was the frequency stated in the QAPP, Work Plan or SAP for field duplicates, rinsate blanks and trip blanks met?  

Chain-of-Custody and Request for Analysis (CC/RA) Records:  
Is the CC/RA present and the original copy?  
Is the CC/RA complete and signed off as appropriate?  
Was the temperature received recorded by the laboratory and was it 4°C, ±2°? if not what _______.  
Were any problems noted by the laboratory on the CC/RA?  
What? ____________________________

CC/RA - Laboratory Report Agreement:  
Were all the samples on the CC/RA analyzed as requested and instructions followed?  
Is the Field Sample Identification and the Laboratory Number relationship consistent between the CC/RA and the laboratory report?  
Do the Sampled and Received dates on the CC/RA match those on the laboratory report for each sample?  

Was the report signed and each report page stamped with the TETRA TECH "Date Received..." stamp?  

Was a project narrative available and read?  
Were any problems noted in the narrative? Describe ____________________________

Were method numbers, matrices, units and reporting limits indicated and appropriate?  
Was all other report heading information accurate?  

Were all field duplicates within relative percent difference (RPD) control limits?  

Were all results for field, rinsate and trip blanks ND?  

N/A  YES  NO  

__________________________  
__________________________  
3rd page missing
<table>
<thead>
<tr>
<th>Analysis</th>
<th>Laboratory QC Batch Number</th>
<th>Number of TETRA TECH Samples in Batch</th>
<th>Holding Times Met</th>
<th>Surrogates</th>
<th>Method Blank (MB)</th>
<th>Matrix Spike/Matrix Spike Duplicate (MS/MSD)</th>
<th>Laboratory Control Spike (LCS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SW8081A</td>
<td>402042 42 1374 1325</td>
<td>140</td>
<td></td>
<td>√</td>
<td>11-most recovered OK</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Date

Issues and Actions Taken

Sample Matrix: Soil
Checked By/On: MW 10/21/10
**TETRA TECH**  
LABORATORY REPORT EVALUATION CHECKLIST

<table>
<thead>
<tr>
<th>Project Name: Hickam RAP soil sampling</th>
<th>Laboratory Used: Torrent</th>
<th>Sample Matrix: Soil</th>
<th>Checked By/On: NW 10/21/10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Number: 264 34.03</td>
<td>Lab Project Number: 101 0052</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Is a Quality Assurance Project Plan (QAPP), Work Plan or a Sampling and Analysis (SAP) available? <em><strong>YES</strong></em></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Was the frequency stated in the QAPP, Work Plan or SAP for field duplicates, rinsate blanks and trip blanks met? <em><strong>YES</strong></em></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chain-of-Custody and Request for Analysis (CC/RA) Records:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Is the CC/RA present and the original copy? <em><strong>YES</strong></em></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Is the CC/RA complete and signed off as appropriate? <em><strong>YES</strong></em></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Was the temperature received recorded by the laboratory and was it 4°C, ±2°? if not what ___?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Were any problems noted by the laboratory on the CC/RA? <strong>What?</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CC/RA - Laboratory Report Agreement:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Were all the samples on the CC/RA analyzed as requested and instructions followed? <strong>Yes</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Is the Field Sample Identification and the Laboratory Number relationship consistent between the CC/RA and the laboratory report? <strong>Yes</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Do the Sampled and Received dates on the CC/RA match those on the laboratory report for each sample? <strong>Yes</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Was the report signed and each report page stamped with the TETRA TECH &quot;Date Received...&quot; stamp? <strong>Yes</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Was a project narrative available and read? <strong>Yes</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Were any problems noted in the narrative? Describe <strong>Describe</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Were method numbers, matrices, units and reporting limits indicated and appropriate? <strong>No</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Was all other report heading information accurate? <strong>Yes</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Were all field duplicates within relative percent difference (RPD) control limits? <strong>Yes</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Were all results for field, rinsate and trip blanks ND? <strong>Yes</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>