

**TABLE 1**  
**SOIL SAMPLE ANALYTICAL AND FIELD RESULTS**  
**BUDDY 17-7HZ PAD**  
**WELD COUNTY, COLORADO**  
**KERR-MCGEE OIL & GAS ONSHORE, LP**

| Analyte   | Groundwater Protection Values (GPV) | B01@0.5'     | BG01@0.5'    | B02@2'       | B03@5'      | E01@2'     |
|---|-------------------------------------|--------------|--------------|--------------|-------------|------------|
|   |                                     | 3/9/2021     | 3/9/2021     | 9/10/2021    | 9/22/2021   | 9/22/2021  |
| <b>Photoionization Detector Reading</b>                   |                                     |              |              |              |             |            |
| PID (ppm)   | NA                                  | 3.3          | NA           | 2.2          | 1.1         | 0.0        |
| <b>Total Petroleum Hydrocarbons by USEPA Method 8015D</b> |                                     |              |              |              |             |            |
| TPH-GRO* (mg/kg)  | 500                                 | <0.200       | NA           | NA           | NA          | NA         |
| TPH-DRO* (mg/kg)  | 500                                 | <25.0        | NA           | NA           | NA          | NA         |
| TPH-RRO* (mg/kg)  | 500                                 | <100         | NA           | NA           | NA          | NA         |
| <b>Soil Suitability for Reclamation</b>                   |                                     |              |              |              |             |            |
| EC (mmhos/cm)   | 4                                   | <b>18.3</b>  | 0.401        | 0.508        | NA          | NA         |
| Sodium Adsorption Ratio (SAR)                             | 6                                   | <b>41.98</b> | <b>54.22</b> | NA           | NA          | NA         |
| pH, Lab (pH units)  | 6-8.3                               | 7.08         | 8.27         | <b>NA</b>    | <b>NA</b>   | <b>NA</b>  |
| Boron (mg/L)  | 2                                   | <b>10.1</b>  | 0.6          | 0.359        | NA          | NA         |
| <b>Soil Suitability for Reclamation (GPV for Soil)</b>    |                                     |              |              |              |             |            |
| Benzene (mg/kg)   | 0.0026                              | 0.00204      | NA           | NA           | NA          | NA         |
| Toluene (mg/kg)   | 0.69                                | <0.00200     | NA           | NA           | NA          | NA         |
| Ethylbenzene (mg/kg)                                      | 0.78                                | <0.00200     | NA           | NA           | NA          | NA         |
| Xylenes, Total (mg/kg)                                    | 9.9                                 | <0.00600     | NA           | NA           | NA          | NA         |
| 1,2,4-Trimethylbenzene (mg/kg)                            | 0.0081                              | <0.00200     | NA           | NA           | NA          | NA         |
| 1,3,5-Trimethylbenzene (mg/kg)                            | 0.0087                              | <0.00200     | NA           | NA           | NA          | NA         |
| Acenaphthene (mg/kg)                                      | 0.55                                | <0.00391     | NA           | NA           | NA          | NA         |
| Anthracene (mg/kg)  | 5.8                                 | <0.00391     | NA           | NA           | NA          | NA         |
| Benzo (a) anthracene (mg/kg)                              | 0.011                               | <0.00391     | NA           | NA           | NA          | NA         |
| Benzo (b) fluoranthene (mg/kg)                            | 0.3                                 | <0.00391     | NA           | NA           | NA          | NA         |
| Benzo (k) fluoranthene (mg/kg)                            | 2.9                                 | <0.00391     | NA           | NA           | NA          | NA         |
| Benzo (a) pyrene (mg/kg)                                  | 0.24                                | <0.00391     | NA           | NA           | NA          | NA         |
| Chrysene (mg/kg)  | 9                                   | <0.00391     | NA           | NA           | NA          | NA         |
| Fluoranthene (mg/kg)                                      | 8.9                                 | <0.00391     | NA           | NA           | NA          | NA         |
| Fluorene (mg/kg)  | 0.54                                | <0.00391     | NA           | NA           | NA          | NA         |
| Indeno (1,2,3-cd) pyrene (mg/kg)                          | 0.98                                | <0.00391     | NA           | NA           | NA          | NA         |
| 1-Methylnaphthalene (mg/kg)                               | 0.006                               | <0.00391     | NA           | NA           | NA          | NA         |
| 2-Methylnaphthalene (mg/kg)                               | 0.019                               | <0.00391     | NA           | NA           | NA          | NA         |
| Naphthalene (mg/kg)                                       | 0.0038                              | <0.00391     | NA           | NA           | NA          | NA         |
| Pyrene (mg/kg)  | 1.3                                 | <0.00391     | NA           | NA           | NA          | NA         |
| <b>Metals in Soils (GPV for Soil)</b>                     |                                     |              |              |              |             |            |
| Arsenic (mg/Kg)   | 0.29                                | <b>5.15</b>  | <b>5.54</b>  | <b>3.6</b>   | NA          | NA         |
| Barium (mg/Kg)  | 82                                  | <b>218</b>   | <b>123</b>   | <b>174</b>   | <b>86.8</b> | <b>152</b> |
| Cadmium (mg/Kg)   | 0.38                                | 0.172        | 0.116        | NA           | NA          | NA         |
| Chromium, Hexavalent (mg/Kg)                              | 0.00067                             | NA           | NA           | NA           | NA          | NA         |
| Copper (mg/Kg)  | 46                                  | 11.8         | 9.89         | NA           | NA          | NA         |
| Lead (mg/Kg)  | 14                                  | 12.1         | 9.44         | NA           | NA          | NA         |
| Nickel (mg/Kg)  | 26                                  | 12.7         | 13.5         | NA           | NA          | NA         |
| Selenium (mg/Kg)  | 0.26                                | <b>1.68</b>  | <b>1.31</b>  | <b>0.371</b> | NA          | NA         |
| Silver (mg/Kg)  | 0.8                                 | <0.572       | <0.563       | NA           | NA          | NA         |
| Zinc (mg/Kg)  | 370                                 | 41.5         | 34.9         | NA           | NA          | NA         |

**TABLE 1 (Continued)**  
**SOIL SAMPLE ANALYTICAL AND FIELD RESULTS**  
**BUDDY 17-7HZ PAD**  
**WELD COUNTY, COLORADO**  
**KERR-MCGEE OIL & GAS ONSHORE, LP**

| Analyte   | Groundwater Protection Values (GPV) | N01@2'     | Native-BG02@5' | Native-BG03@5' | Native-BG04@5' | Native-BG05@5' |
|---|-------------------------------------|------------|----------------|----------------|----------------|----------------|
|   |                                     | 9/22/2021  | 9/22/2021      | 9/22/2021      | 9/22/2021      | 9/22/2021      |
| <b>Photoionization Detector Reading</b>                   |                                     |            |                |                |                |                |
| PID (ppm)   | NA                                  | 0.0        | NA             | NA             | NA             | NA             |
| <b>Total Petroleum Hydrocarbons by USEPA Method 8015D</b> |                                     |            |                |                |                |                |
| TPH-GRO* (mg/kg)  | 500                                 | NA         | NA             | NA             | NA             | NA             |
| TPH-DRO* (mg/kg)  | 500                                 | NA         | NA             | NA             | NA             | NA             |
| TPH-RRO* (mg/kg)  | 500                                 | NA         | NA             | NA             | NA             | NA             |
| <b>Soil Suitability for Reclamation</b>                   |                                     |            |                |                |                |                |
| EC (mmhos/cm)   | 4                                   | NA         | 0.742          | 2.16           | 2.35           | 1.46           |
| Sodium Adsorption Ratio (SAR)                             | 6                                   | NA         | 0.397          | 0.983          | 1.06           | 0.894          |
| pH, Lab (pH units)  | 6-8.3                               | NA         | 8.11           | 7.78           | 7.69           | 7.89           |
| Boron (mg/L)  | 2                                   | NA         | 0.954          | 0.719          | 0.897          | 1.24           |
| <b>Soil Suitability for Reclamation (GPV for Soil)</b>    |                                     |            |                |                |                |                |
| Benzene (mg/kg)   | 0.0026                              | NA         | NA             | NA             | NA             | NA             |
| Toluene (mg/kg)   | 0.69                                | NA         | NA             | NA             | NA             | NA             |
| Ethylbenzene (mg/kg)                                      | 0.78                                | NA         | NA             | NA             | NA             | NA             |
| Xylenes, Total (mg/kg)                                    | 9.9                                 | NA         | NA             | NA             | NA             | NA             |
| 1,2,4-Trimethylbenzene (mg/kg)                            | 0.0081                              | NA         | NA             | NA             | NA             | NA             |
| 1,3,5-Trimethylbenzene (mg/kg)                            | 0.0087                              | NA         | NA             | NA             | NA             | NA             |
| Acenaphthene (mg/kg)                                      | 0.55                                | NA         | NA             | NA             | NA             | NA             |
| Anthracene (mg/kg)  | 5.8                                 | NA         | NA             | NA             | NA             | NA             |
| Benzo (a) anthracene (mg/kg)                              | 0.011                               | NA         | NA             | NA             | NA             | NA             |
| Benzo (b) fluoranthene (mg/kg)                            | 0.3                                 | NA         | NA             | NA             | NA             | NA             |
| Benzo (k) fluoranthene (mg/kg)                            | 2.9                                 | NA         | NA             | NA             | NA             | NA             |
| Benzo (a) pyrene (mg/kg)                                  | 0.24                                | NA         | NA             | NA             | NA             | NA             |
| Chrysene (mg/kg)  | 9                                   | NA         | NA             | NA             | NA             | NA             |
| Fluoranthene (mg/kg)                                      | 8.9                                 | NA         | NA             | NA             | NA             | NA             |
| Fluorene (mg/kg)  | 0.54                                | NA         | NA             | NA             | NA             | NA             |
| Indeno (1,2,3-cd) pyrene (mg/kg)                          | 0.98                                | NA         | NA             | NA             | NA             | NA             |
| 1-Methylnaphthalene (mg/kg)                               | 0.006                               | NA         | NA             | NA             | NA             | NA             |
| 2-Methylnaphthalene (mg/kg)                               | 0.019                               | NA         | NA             | NA             | NA             | NA             |
| Naphthalene (mg/kg)                                       | 0.0038                              | NA         | NA             | NA             | NA             | NA             |
| Pyrene (mg/kg)  | 1.3                                 | NA         | NA             | NA             | NA             | NA             |
| <b>Metals in Soils (GPV for Soil)</b>                     |                                     |            |                |                |                |                |
| Arsenic (mg/Kg)   | 0.29                                | NA         | <b>4.78</b>    | <b>2.92</b>    | <b>3.21</b>    | <b>4.55</b>    |
| Barium (mg/Kg)  | 82                                  | <b>155</b> | <b>131</b>     | 77.6           | 75.8           | <b>161</b>     |
| Cadmium (mg/Kg)   | 0.38                                | NA         | 0.219          | 0.186          | 0.142          | 0.211          |
| Chromium, Hexavalent (mg/Kg)                              | 0.00067                             | NA         | <0.5           | <0.512         | <0.512         | <2.5           |
| Copper (mg/Kg)  | 46                                  | NA         | 11             | 5.89           | 6.1            | 13.5           |
| Lead (mg/Kg)  | 14                                  | NA         | 9.53           | 7.31           | 7.58           | 12.7           |
| Nickel (mg/Kg)  | 26                                  | NA         | 15.1           | 9.36           | 9.84           | 16.1           |
| Selenium (mg/Kg)  | 0.26                                | NA         | <b>0.368</b>   | <b>0.306</b>   | <b>0.328</b>   | <b>0.491</b>   |
| Silver (mg/Kg)  | 0.8                                 | NA         | 0.0432         | 0.0243         | 0.0232         | 0.0689         |
| Zinc (mg/Kg)  | 370                                 | NA         | 42.9           | 31.7           | 33.2           | 55.7           |

**TABLE 1 (Continued)**  
**SOIL SAMPLE ANALYTICAL AND FIELD RESULTS**  
**BUDDY 17-7HZ PAD**  
**WELD COUNTY, COLORADO**  
**KERR-MCGEE OIL & GAS ONSHORE, LP**

| Analyte   | Groundwater Protection Values (GPV) | S01@2'     | W01@2'     |
|---|-------------------------------------|------------|------------|
|   |                                     | 9/22/2021  | 9/22/2021  |
| <b>Photoionization Detector Reading</b>                   |                                     |            |            |
| PID (ppm)   | NA                                  | 0.0        | 0.0        |
| <b>Total Petroleum Hydrocarbons by USEPA Method 8015D</b> |                                     |            |            |
| TPH-GRO* (mg/kg)  | 500                                 | NA         | NA         |
| TPH-DRO* (mg/kg)  | 500                                 | NA         | NA         |
| TPH-RRO* (mg/kg)  | 500                                 | NA         | NA         |
| <b>Soil Suitability for Reclamation</b>                   |                                     |            |            |
| EC (mmhos/cm)   | 4                                   | NA         | NA         |
| Sodium Adsorption Ratio (SAR)                             | 6                                   | NA         | NA         |
| pH, Lab (pH units)  | 6-8.3                               | NA         | NA         |
| Boron (mg/L)  | 2                                   | NA         | NA         |
| <b>Soil Suitability for Reclamation (GPV for Soil)</b>    |                                     |            |            |
| Benzene (mg/kg)   | 0.0026                              | NA         | NA         |
| Toluene (mg/kg)   | 0.69                                | NA         | NA         |
| Ethylbenzene (mg/kg)                                      | 0.78                                | NA         | NA         |
| Xylenes, Total (mg/kg)                                    | 9.9                                 | NA         | NA         |
| 1,2,4-Trimethylbenzene (mg/kg)                            | 0.0081                              | NA         | NA         |
| 1,3,5-Trimethylbenzene (mg/kg)                            | 0.0087                              | NA         | NA         |
| Acenaphthene (mg/kg)                                      | 0.55                                | NA         | NA         |
| Anthracene (mg/kg)  | 5.8                                 | NA         | NA         |
| Benzo (a) anthracene (mg/kg)                              | 0.011                               | NA         | NA         |
| Benzo (b) fluoranthene (mg/kg)                            | 0.3                                 | NA         | NA         |
| Benzo (k) fluoranthene (mg/kg)                            | 2.9                                 | NA         | NA         |
| Benzo (a) pyrene (mg/kg)                                  | 0.24                                | NA         | NA         |
| Chrysene (mg/kg)  | 9                                   | NA         | NA         |
| Fluoranthene (mg/kg)                                      | 8.9                                 | NA         | NA         |
| Fluorene (mg/kg)  | 0.54                                | NA         | NA         |
| Indeno (1,2,3-cd) pyrene (mg/kg)                          | 0.98                                | NA         | NA         |
| 1-Methylnaphthalene (mg/kg)                               | 0.006                               | NA         | NA         |
| 2-Methylnaphthalene (mg/kg)                               | 0.019                               | NA         | NA         |
| Naphthalene (mg/kg)                                       | 0.0038                              | NA         | NA         |
| Pyrene (mg/kg)  | 1.3                                 | NA         | NA         |
| <b>Metals in Soils (GPV for Soil)</b>                     |                                     |            |            |
| Arsenic (mg/Kg)   | 0.29                                | NA         | NA         |
| Barium (mg/Kg)  | 82                                  | <b>143</b> | <b>181</b> |
| Cadmium (mg/Kg)   | 0.38                                | NA         | NA         |
| Chromium, Hexavalent (mg/Kg)                              | 0.00067                             | NA         | NA         |
| Copper (mg/Kg)  | 46                                  | NA         | NA         |
| Lead (mg/Kg)  | 14                                  | NA         | NA         |
| Nickel (mg/Kg)  | 26                                  | NA         | NA         |
| Selenium (mg/Kg)  | 0.26                                | NA         | NA         |
| Silver (mg/Kg)  | 0.8                                 | NA         | NA         |
| Zinc (mg/Kg)  | 370                                 | NA         | NA         |

**TABLE 1 (Continued)**  
**SOIL SAMPLE ANALYTICAL AND FIELD RESULTS**  
**BUDDY 17-7HZ PAD**  
**WELD COUNTY, COLORADO**  
**KERR-MCGEE OIL & GAS ONSHORE, LP**

**Notes:**

GPV - groundwater protection values  
mg/kg - milligrams per kilogram  
PID - Photoionization Detector  
ppm - parts per million  
TPH - total petroleum hydrocarbons  
GRO - gasoline range organics  
DRO - diesel range organics  
RRO - residual range organics

EC - electrical conductivity  
SAR - sodium adsorption ratio  
mmhos/cm - millimhos per centimeter  
<0.00200 - less than laboratory reporting limit  
NA - Not Applicable / Not Analyzed  
Bold indicates exceeds allowable level  
\*Allowable level for TPH is 500 mg/kg for combined GRO,  
DRO, and RRO

**TABLE 2**  
**PHOTOIONIZATION DETECTOR FIELD RESULTS**  
**BUDDY 17-7HZ PAD**  
**WELD COUNTY, COLORADO**  
**KERR-MCGEE OIL & GAS ONSHORE, LP**

| Screening Location | Location          | Date      | PID Reading (ppm) |
|--------------------|-------------------|-----------|-------------------|
| B01@0.5'           | Excavation Sample | 3/9/2021  | 3.3               |
| B02@2'             | Excavation Sample | 9/10/2021 | 2.2               |
| B03@5'             | Excavation Sample | 9/22/2021 | 1.1               |
| N01@2'             | Excavation Sample | 9/22/2021 | 0.0               |
| E01@2'             | Excavation Sample | 9/22/2021 | 0.0               |
| S01@2'             | Excavation Sample | 9/22/2021 | 0.0               |
| W01@2'             | Excavation Sample | 9/22/2021 | 0.0               |
| BG01@0.5'          | Background        | 3/9/2021  | NA                |
| Native-BG02@5'     | Background        | 9/22/2021 | NA                |
| Native-BG03@5'     | Background        | 9/22/2021 | NA                |
| Native-BG04@5'     | Background        | 9/22/2021 | NA                |
| Native-BG05@5'     | Background        | 9/22/2021 | NA                |

Notes:

PID - Photoionization Detector

ppm - parts per million

NA - Not Analyzed

March 16, 2021

WSP USA

Brian Sulzberger

4600 W. 60th Ave.

Arvada CO 80003

Project Name - KMG - Buddy 17-7 HZ Pad

Project Number - [none]

Attached are your analytical results for KMG - Buddy 17-7 HZ Pad received by Origins Laboratory, Inc. March 09, 2021. This project is associated with Origins project number Y103176-01.

The analytical results in the following report were analyzed under the guidelines of EPA Methods. These methods are identified as follows; "SW" are defined in SW-846, "EPA" are defined in 40CFR part 136 and "SM" are defined in the most current revision of Standard Methods For the Examination of Water and Wastewater.

The analytical results apply specifically to the samples and analyses specified per the attached Chain of Custody. As such, this report shall not be reproduced except in full, without the written approval of Origin's laboratory.

Unless otherwise noted, the analytical results for all soil samples are reported on a wet weight basis. All analytical analyses were performed under NELAP guidelines unless noted by a data qualifier.

Any holding time exceedances, deviations from the method specifications or deviations from Origins Laboratory's Standard Operating Procedures are outlined in the case narrative.

Thank you for selecting Origins for your analytical needs. Please contact us with any questions concerning this report, or if we can help with anything at all.

Origins Laboratory, Inc.  
303.433.1322  
o-squad@oelabinc.com



WSP USA  
4600 W. 60th Ave.  
Arvada CO 80003

Brian Sulzberger  
Project Number: [none]  
Project: KMG - Buddy 17-7 HZ Pad

CROSS REFERENCE REPORT

| Sample ID | Laboratory ID | Matrix | Date Sampled        | Date Received    |
|-----------|---------------|--------|---------------------|------------------|
| B01@.5'   | Y103176-01    | Soil   | March 9, 2021 10:02 | 03/09/2021 16:26 |
| BG01@.5'  | Y103176-02    | Soil   | March 9, 2021 10:08 | 03/09/2021 16:26 |

Origins Laboratory, Inc.



*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*



WSP USA  
 4600 W. 60th Ave.  
 Arvada CO 80003

Brian Sulzberger  
 Project Number: [none]  
 Project: KMG - Buddy 17-7 HZ Pad

Origins Laboratory  
 F-012207-01-R1  
 Effective Date: 01/09/12

**Sample Receipt Checklist**

Origins Work Order: Y103174  
 Client: WSP USA  
 Client Project ID: KMG-Buddy

Checklist Completed by: JA dm  
 Shipped Via: HD  
 (UPS, FedEx, Hand Delivered, Pick-up, etc.)  
 Date/time completed: 3/9/12  
 Airbill #: N/A

Matrix(s) Received: (Check all that apply):  Soil/Solid  Water  Other: \_\_\_\_\_  
 Cooler Number/Temperature: 173 °C / \_\_\_\_\_ °C / \_\_\_\_\_ °C / \_\_\_\_\_ °C (Describe)  
 Thermometer ID: T003

| Requirement Description   | Yes | No | N/A | Comments (if any) |
|---|-----|----|-----|-------------------|
| If samples require cooling, was the temperature between 0°C to ≤ 6°C <sup>(1)</sup> ?   |     | X  |     |                   |
| Is there ice present (document if blue ice is used)   | X   |    |     | Same day          |
| Are custody seals present on cooler? (if so, document in comments if they are signed and dated, broken or intact)   |     |    | X   |                   |
| Are custody seals present on each sample container? (if so, document in comments if they are signed and dated, broken or intact)  |     |    | X   |                   |
| Were all samples received intact <sup>(1)</sup> ?   | X   |    |     |                   |
| Was adequate sample volume provided <sup>(1)</sup> ?  | X   |    |     |                   |
| Are short holding time analytes or samples with HTs due within 48 hours present <sup>(1)</sup> ?  |     |    | X   |                   |
| Is a chain-of-custody (COC) present and filled out completely <sup>(1)</sup> ?  | X   |    |     |                   |
| Does the COC agree with the number and type of sample bottles received <sup>(1)</sup> ?   | X   |    |     |                   |
| Do the sample IDs on the bottle labels match the COC <sup>(1)</sup> ?   | X   |    |     |                   |
| Is the COC properly relinquished by the client with date and time recorded <sup>(1)</sup> ?   | X   |    |     |                   |
| For volatiles in water – is there headspace (> ¼ inch bubble) present? If yes, contact client and note in narrative.  |     |    | X   |                   |
| Are samples preserved that require preservation and was it checked <sup>(1)</sup> ? (note ID of confirmation instrument used in comments) / (preservation is not confirmed for subcontracted analyses in order to insure sample integrity) (pH <2 for samples preserved with HNO <sub>3</sub> , HCl, H <sub>2</sub> SO <sub>4</sub> ) / (pH >10 for samples preserved with Na <sub>2</sub> O <sub>2</sub> +NaOH, ZnAc+NaOH) |     |    | X   |                   |
| Additional Comments (if any):   |     |    |     |                   |

<sup>(1)</sup>if NO, then contact the client before proceeding with analysis and note date/time and person contacted as well as the corrective action to in the additional comments (above) and the case narrative.

Reviewed by: dm (Project Manager) Date/Time Reviewed: 3-9-12

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

WSP USA  
 4600 W. 60th Ave.  
 Arvada CO 80003

Brian Sulzberger  
 Project Number: [none]  
 Project: KMG - Buddy 17-7 HZ Pad

**B01@.5'**  
**3/9/2021 10:02:00AM**

| Analyte | Result | Min Detection Limit | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Notes |
|---------|--------|---------------------|-----------------|-------|----------|-------|----------|----------|-------|
|---------|--------|---------------------|-----------------|-------|----------|-------|----------|----------|-------|

**AAL, Inc.**  
**Y103176-01 (Soil)**

**Boron (Sorbitol)**

|       |      |  |  |      |   |        |            |            |  |
|-------|------|--|--|------|---|--------|------------|------------|--|
| Boron | 10.1 |  |  | mg/L | 1 | [none] | 03/11/2021 | 03/15/2021 |  |
|-------|------|--|--|------|---|--------|------------|------------|--|

**DRO/ORO by EPA 8015D**

|                                   |    |  |      |       |   |         |            |            |    |
|-----------------------------------|----|--|------|-------|---|---------|------------|------------|----|
| Diesel (C10-C28)                  | ND |  | 25.0 | mg/kg | 1 | B1C0906 | 03/09/2021 | 03/09/2021 | Ua |
| Residual Range Organics (C28-C40) | ND |  | 100  | "     | " | "       | "          | "          | Ua |

|                                |        |  |        |  |  |   |   |   |  |
|--------------------------------|--------|--|--------|--|--|---|---|---|--|
| Surrogate: <i>o</i> -Terphenyl | 68.4 % |  | 50-150 |  |  | " | " | " |  |
|--------------------------------|--------|--|--------|--|--|---|---|---|--|

**GBTEX+TMBs**

|                             |                |  |         |       |   |         |            |            |    |
|-----------------------------|----------------|--|---------|-------|---|---------|------------|------------|----|
| 1,2,4-Trimethylbenzene      | ND             |  | 0.00200 | mg/kg | 1 | B1C0905 | 03/09/2021 | 03/09/2021 | Ua |
| 1,3,5-Trimethylbenzene      | ND             |  | 0.00200 | "     | " | "       | "          | "          | Ua |
| Benzene                     | <b>0.00204</b> |  | 0.00200 | "     | " | "       | "          | "          |    |
| Ethylbenzene                | ND             |  | 0.00200 | "     | " | "       | "          | "          | Ua |
| m,p-Xylene                  | ND             |  | 0.00400 | "     | " | "       | "          | "          | Ua |
| o-Xylene                    | ND             |  | 0.00200 | "     | " | "       | "          | "          | Ua |
| Toluene                     | ND             |  | 0.00200 | "     | " | "       | "          | "          | Ua |
| Gasoline Range Hydrocarbons | ND             |  | 0.200   | "     | " | "       | "          | "          | Ua |

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WSP USA  
 4600 W. 60th Ave.  
 Arvada CO 80003

Brian Sulzberger  
 Project Number: [none]  
 Project: KMG - Buddy 17-7 HZ Pad

**B01@.5'**  
**3/9/2021 10:02:00AM**

| Analyte | Result | Min Detection Limit | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Notes |
|---------|--------|---------------------|-----------------|-------|----------|-------|----------|----------|-------|
|---------|--------|---------------------|-----------------|-------|----------|-------|----------|----------|-------|

**Origins Laboratory, Inc.**  
**Y103176-01 (Soil)**

**GBTEX+TMBs**

|                                  |        |  |        |  |  |             |            |            |  |
|----------------------------------|--------|--|--------|--|--|-------------|------------|------------|--|
| Surrogate: 1,2-Dichloroethane-d4 | 109 %  |  | 70-130 |  |  | B1C09<br>05 | 03/09/2021 | 03/09/2021 |  |
| Surrogate: Toluene-d8            | 92.1 % |  | 70-130 |  |  | "           | "          | "          |  |
| Surrogate: 4-Bromofluorobenzene  | 90.7 % |  | 70-130 |  |  | "           | "          | "          |  |

**Metals (Saturated Paste Prep)**

|           |        |  |  |      |   |        |            |            |  |
|-----------|--------|--|--|------|---|--------|------------|------------|--|
| Calcium   | 53.43  |  |  | me/L | 1 | [none] | 03/11/2021 | 03/15/2021 |  |
| Magnesium | 23.90  |  |  | "    | " | "      | "          | "          |  |
| Sodium    | 261.06 |  |  | "    | " | "      | "          | "          |  |

**PAH by 8270D SIM**

|                        |    |         |         |           |   |         |            |            |   |
|------------------------|----|---------|---------|-----------|---|---------|------------|------------|---|
| 1-Methylnaphthalene    | ND | 0.00129 | 0.00391 | mg/kg dry | 1 | 2101819 | 03/12/2021 | 03/12/2021 | U |
| 2-Methylnaphthalene    | ND | 0.00129 | 0.00391 | "         | " | "       | "          | "          | U |
| Acenaphthene           | ND | 0.00129 | 0.00391 | "         | " | "       | "          | "          | U |
| Anthracene             | ND | 0.00129 | 0.00391 | "         | " | "       | "          | "          | U |
| Benzo(a)anthracene     | ND | 0.00129 | 0.00391 | "         | " | "       | "          | "          | U |
| Benzo(a)pyrene         | ND | 0.00129 | 0.00391 | "         | " | "       | "          | "          | U |
| Benzo(b)fluoranthene   | ND | 0.00129 | 0.00391 | "         | " | "       | "          | "          | U |
| Benzo(k)fluoranthene   | ND | 0.00129 | 0.00391 | "         | " | "       | "          | "          | U |
| Chrysene               | ND | 0.00129 | 0.00391 | "         | " | "       | "          | "          | U |
| Dibenzo(a,h)anthracene | ND | 0.00129 | 0.00391 | "         | " | "       | "          | "          | U |

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WSP USA  
 4600 W. 60th Ave.  
 Arvada CO 80003

Brian Sulzberger  
 Project Number: [none]  
 Project: KMG - Buddy 17-7 HZ Pad

**B01@.5'**

**3/9/2021 10:02:00AM**

| Analyte | Result | Min Detection Limit | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Notes |
|---------|--------|---------------------|-----------------|-------|----------|-------|----------|----------|-------|
|---------|--------|---------------------|-----------------|-------|----------|-------|----------|----------|-------|

**GEL Laboratories, LLC**  
**Y103176-01 (Soil)**

**PAH by 8270D SIM**

|                        |    |         |         |           |   |         |            |            |   |
|------------------------|----|---------|---------|-----------|---|---------|------------|------------|---|
| Fluoranthene           | ND | 0.00129 | 0.00391 | mg/kg dry | 1 | 2101819 | 03/12/2021 | 03/12/2021 | U |
| Fluorene               | ND | 0.00129 | 0.00391 | "         | " | "       | "          | "          | U |
| Indeno(1,2,3-cd)pyrene | ND | 0.00129 | 0.00391 | "         | " | "       | "          | "          | U |
| Naphthalene            | ND | 0.00129 | 0.00391 | "         | " | "       | "          | "          | U |
| Pyrene                 | ND | 0.00129 | 0.00391 | "         | " | "       | "          | "          | U |

Surrogate: 5-alpha-Androstane 62 % 25-121 " " "

**pH in Soil by EPA 9045D**

|    |      |  |  |          |   |         |            |            |  |
|----|------|--|--|----------|---|---------|------------|------------|--|
| pH | 7.08 |  |  | pH Units | 1 | B1C1008 | 03/10/2021 | 03/10/2021 |  |
|----|------|--|--|----------|---|---------|------------|------------|--|

**SAR by 20B Saturated Paste**

|     |       |  |  |  |   |        |            |            |  |
|-----|-------|--|--|--|---|--------|------------|------------|--|
| SAR | 41.98 |  |  |  | 1 | [none] | 03/11/2021 | 03/15/2021 |  |
|-----|-------|--|--|--|---|--------|------------|------------|--|

**Specific Conductance by Modified 9050A**

|                           |      |  |         |          |   |         |            |            |  |
|---------------------------|------|--|---------|----------|---|---------|------------|------------|--|
| Specific Conductance (EC) | 18.3 |  | 0.00500 | mmhos/cm | 1 | B1C1009 | 03/10/2021 | 03/10/2021 |  |
|---------------------------|------|--|---------|----------|---|---------|------------|------------|--|

**Total Metals by 6010C**

|        |    |       |       |           |   |         |            |            |   |
|--------|----|-------|-------|-----------|---|---------|------------|------------|---|
| Silver | ND | 0.114 | 0.572 | mg/kg dry | 1 | 2101913 | 03/11/2021 | 03/11/2021 | U |
|--------|----|-------|-------|-----------|---|---------|------------|------------|---|

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WSP USA  
 4600 W. 60th Ave.  
 Arvada CO 80003

Brian Sulzberger  
 Project Number: [none]  
 Project: KMG - Buddy 17-7 HZ Pad

**B01@.5'**  
**3/9/2021 10:02:00AM**

| Analyte | Result | Min Detection Limit | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Notes |
|---------|--------|---------------------|-----------------|-------|----------|-------|----------|----------|-------|
|---------|--------|---------------------|-----------------|-------|----------|-------|----------|----------|-------|

**GEL Laboratories, LLC**  
**Y103176-01 (Soil)**

**Total Metals by 6020A**

|          |       |        |       |           |   |         |            |            |   |
|----------|-------|--------|-------|-----------|---|---------|------------|------------|---|
| Arsenic  | 5.15  | 0.373  | 1.10  | mg/kg dry | 2 | 2101911 | 03/11/2021 | 03/15/2021 |   |
| Barium   | 218   | 0.110  | 0.882 | "         | " | "       | "          | "          |   |
| Cadmium  | 0.172 | 0.0221 | 0.221 | "         | " | "       | "          | "          | J |
| Copper   | 11.8  | 0.0728 | 0.441 | "         | " | "       | "          | "          |   |
| Lead     | 12.1  | 0.110  | 0.441 | "         | " | "       | "          | "          |   |
| Nickel   | 12.7  | 0.110  | 0.441 | "         | " | "       | "          | "          |   |
| Selenium | 1.68  | 0.397  | 1.10  | "         | " | "       | "          | "          |   |
| Zinc     | 41.5  | 0.882  | 4.41  | "         | " | "       | "          | "          |   |

**Total Metals by 7196A**

|                     |    |       |       |           |   |         |            |            |   |
|---------------------|----|-------|-------|-----------|---|---------|------------|------------|---|
| Hexavalent Chromium | ND | 0.184 | 0.459 | mg/kg dry | 1 | 2101801 | 03/12/2021 | 03/15/2021 | U |
|---------------------|----|-------|-------|-----------|---|---------|------------|------------|---|

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WSP USA  
 4600 W. 60th Ave.  
 Arvada CO 80003

Brian Sulzberger  
 Project Number: [none]  
 Project: KMG - Buddy 17-7 HZ Pad

**BG01@.5'**  
**3/9/2021 10:08:00AM**

| Analyte | Result | Min Detection Limit | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Notes |
|---------|--------|---------------------|-----------------|-------|----------|-------|----------|----------|-------|
|---------|--------|---------------------|-----------------|-------|----------|-------|----------|----------|-------|

**AAL, Inc.**  
**Y103176-02 (Soil)**

**Boron (Sorbitol)**

|       |     |  |  |      |   |        |            |            |  |
|-------|-----|--|--|------|---|--------|------------|------------|--|
| Boron | 0.6 |  |  | mg/L | 1 | [none] | 03/11/2021 | 03/15/2021 |  |
|-------|-----|--|--|------|---|--------|------------|------------|--|

**Metals (Saturated Paste Prep)**

|           |        |  |  |      |   |        |   |            |  |
|-----------|--------|--|--|------|---|--------|---|------------|--|
| Calcium   | 48.59  |  |  | me/L | 1 | [none] | " | 03/15/2021 |  |
| Magnesium | 19.70  |  |  | "    | " | "      | " | "          |  |
| Sodium    | 316.80 |  |  | "    | " | "      | " | "          |  |

**pH in Soil by EPA 9045D**

|    |      |  |  |          |   |         |            |            |  |
|----|------|--|--|----------|---|---------|------------|------------|--|
| pH | 8.27 |  |  | pH Units | 1 | B1C1008 | 03/10/2021 | 03/10/2021 |  |
|----|------|--|--|----------|---|---------|------------|------------|--|

**SAR by 20B Saturated Paste**

|     |       |  |  |  |   |        |            |            |  |
|-----|-------|--|--|--|---|--------|------------|------------|--|
| SAR | 54.22 |  |  |  | 1 | [none] | 03/11/2021 | 03/15/2021 |  |
|-----|-------|--|--|--|---|--------|------------|------------|--|

**Specific Conductance by Modified 9050A**

|                           |       |  |         |          |   |         |            |            |  |
|---------------------------|-------|--|---------|----------|---|---------|------------|------------|--|
| Specific Conductance (EC) | 0.401 |  | 0.00500 | mmhos/cm | 1 | B1C1009 | 03/10/2021 | 03/10/2021 |  |
|---------------------------|-------|--|---------|----------|---|---------|------------|------------|--|

**Total Metals by 6010C**

|        |    |       |       |           |   |         |            |            |   |
|--------|----|-------|-------|-----------|---|---------|------------|------------|---|
| Silver | ND | 0.113 | 0.563 | mg/kg dry | 1 | 2101913 | 03/11/2021 | 03/11/2021 | U |
|--------|----|-------|-------|-----------|---|---------|------------|------------|---|

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WSP USA  
 4600 W. 60th Ave.  
 Arvada CO 80003

Brian Sulzberger  
 Project Number: [none]  
 Project: KMG - Buddy 17-7 HZ Pad

**BG01@.5'**

**3/9/2021 10:08:00AM**

| Analyte | Result | Min Detection Limit | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Notes |
|---------|--------|---------------------|-----------------|-------|----------|-------|----------|----------|-------|
|---------|--------|---------------------|-----------------|-------|----------|-------|----------|----------|-------|

**GEL Laboratories, LLC**  
**Y103176-02 (Soil)**

**Total Metals by 6020A**

|          |       |        |       |           |   |         |   |            |   |
|----------|-------|--------|-------|-----------|---|---------|---|------------|---|
| Arsenic  | 5.54  | 0.370  | 1.09  | mg/kg dry | 2 | 2101911 | " | 03/15/2021 |   |
| Barium   | 123   | 0.109  | 0.876 | "         | " | "       | " | "          |   |
| Cadmium  | 0.116 | 0.0219 | 0.219 | "         | " | "       | " | "          | J |
| Copper   | 9.89  | 0.0723 | 0.438 | "         | " | "       | " | "          |   |
| Lead     | 9.44  | 0.109  | 0.438 | "         | " | "       | " | "          |   |
| Nickel   | 13.5  | 0.109  | 0.438 | "         | " | "       | " | "          |   |
| Selenium | 1.31  | 0.394  | 1.09  | "         | " | "       | " | "          |   |
| Zinc     | 34.9  | 0.876  | 4.38  | "         | " | "       | " | "          |   |

**Total Metals by 7196A**

|                     |    |       |       |           |   |         |            |            |   |
|---------------------|----|-------|-------|-----------|---|---------|------------|------------|---|
| Hexavalent Chromium | ND | 0.172 | 0.429 | mg/kg dry | 1 | 2101801 | 03/12/2021 | 03/15/2021 | U |
|---------------------|----|-------|-------|-----------|---|---------|------------|------------|---|

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WSP USA  
 4600 W. 60th Ave.  
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Brian Sulzberger  
 Project Number: [none]  
 Project: KMG - Buddy 17-7 HZ Pad

**Volatile Organic Compounds by GC/MS SW846 8260D - Quality Control**  
**Origins Laboratory, Inc.**

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---------|--------|-----------------|-------|-------------|---------------|------|-------------|-----|-----------|-------|
|---------|--------|-----------------|-------|-------------|---------------|------|-------------|-----|-----------|-------|

**Batch B1C0905 - EPA 5030 (soil)**

**Blank (B1C0905-BLK1)**

Prepared: 03/09/2021 Analyzed: 03/09/2021

|                                  |      |         |       |       |  |      |        |  |  |    |
|----------------------------------|------|---------|-------|-------|--|------|--------|--|--|----|
| 1,2,4-Trimethylbenzene           | ND   | 0.00200 | mg/kg |       |  |      |        |  |  | Ua |
| Naphthalene                      | ND   | 0.0100  | "     |       |  |      |        |  |  | Ua |
| 1,3,5-Trimethylbenzene           | ND   | 0.00200 | "     |       |  |      |        |  |  | Ua |
| Benzene                          | ND   | 0.00200 | "     |       |  |      |        |  |  | Ua |
| Ethylbenzene                     | ND   | 0.00200 | "     |       |  |      |        |  |  | Ua |
| m,p-Xylene                       | ND   | 0.00400 | "     |       |  |      |        |  |  | Ua |
| o-Xylene                         | ND   | 0.00200 | "     |       |  |      |        |  |  | Ua |
| Toluene                          | ND   | 0.00200 | "     |       |  |      |        |  |  | Ua |
| Gasoline Range Hydrocarbons      | ND   | 0.200   | "     |       |  |      |        |  |  | Ua |
| Surrogate: 1,2-Dichloroethane-d4 | 0.13 |         | "     | 0.125 |  | 107  | 70-130 |  |  |    |
| Surrogate: Toluene-d8            | 0.12 |         | "     | 0.125 |  | 92.8 | 70-130 |  |  |    |
| Surrogate: 4-Bromofluorobenzene  | 0.11 |         | "     | 0.125 |  | 90.8 | 70-130 |  |  |    |

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WSP USA  
 4600 W. 60th Ave.  
 Arvada CO 80003

Brian Sulzberger  
 Project Number: [none]  
 Project: KMG - Buddy 17-7 HZ Pad

**Volatile Organic Compounds by GC/MS SW846 8260D - Quality Control**  
**Origins Laboratory, Inc.**

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---------|--------|-----------------|-------|-------------|---------------|------|-------------|-----|-----------|-------|
|---------|--------|-----------------|-------|-------------|---------------|------|-------------|-----|-----------|-------|

Batch B1C0905 - EPA 5030 (soil)

**LCS (B1C0905-BS1)**

Prepared: 03/09/2021 Analyzed: 03/09/2021

|                                  |        |         |       |        |  |      |        |  |  |  |
|----------------------------------|--------|---------|-------|--------|--|------|--------|--|--|--|
| 1,2,4-Trimethylbenzene           | 0.0521 | 0.00200 | mg/kg | 0.0500 |  | 104  | 70-130 |  |  |  |
| Naphthalene                      | 0.0409 | 0.0100  | "     | 0.0500 |  | 81.7 | 70-130 |  |  |  |
| 1,3,5-Trimethylbenzene           | 0.0529 | 0.00200 | "     | 0.0500 |  | 106  | 70-130 |  |  |  |
| Benzene                          | 0.0495 | 0.00200 | "     | 0.0500 |  | 99.0 | 70-130 |  |  |  |
| Ethylbenzene                     | 0.0470 | 0.00200 | "     | 0.0500 |  | 94.1 | 70-130 |  |  |  |
| m,p-Xylene                       | 0.0970 | 0.00400 | "     | 0.100  |  | 97.0 | 70-130 |  |  |  |
| o-Xylene                         | 0.0486 | 0.00200 | "     | 0.0500 |  | 97.2 | 70-130 |  |  |  |
| Toluene                          | 0.0484 | 0.00200 | "     | 0.0500 |  | 96.8 | 70-130 |  |  |  |
| Surrogate: 1,2-Dichloroethane-d4 | 0.13   |         | "     | 0.125  |  | 106  | 70-130 |  |  |  |
| Surrogate: Toluene-d8            | 0.12   |         | "     | 0.125  |  | 93.6 | 70-130 |  |  |  |
| Surrogate: 4-Bromofluorobenzene  | 0.11   |         | "     | 0.125  |  | 89.1 | 70-130 |  |  |  |

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WSP USA  
 4600 W. 60th Ave.  
 Arvada CO 80003

Brian Sulzberger  
 Project Number: [none]  
 Project: KMG - Buddy 17-7 HZ Pad

**Volatile Organic Compounds by GC/MS SW846 8260D - Quality Control**  
**Origins Laboratory, Inc.**

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---------|--------|-----------------|-------|-------------|---------------|------|-------------|-----|-----------|-------|
|---------|--------|-----------------|-------|-------------|---------------|------|-------------|-----|-----------|-------|

Batch B1C0905 - EPA 5030 (soil)

| Matrix Spike (B1C0905-MS1)       | Source: Y103142-01 |         |       | Prepared: 03/09/2021 Analyzed: 03/09/2021 |         |      |        |  |  |  |
|----------------------------------|--------------------|---------|-------|---|---------|------|--------|--|--|--|
| 1,2,4-Trimethylbenzene           | 0.0537             | 0.00200 | mg/kg | 0.0500                                    | ND      | 107  | 70-130 |  |  |  |
| Naphthalene                      | 0.0413             | 0.0100  | "     | 0.0500                                    | 0.00142 | 79.8 | 70-130 |  |  |  |
| 1,3,5-Trimethylbenzene           | 0.0537             | 0.00200 | "     | 0.0500                                    | ND      | 107  | 70-130 |  |  |  |
| Benzene                          | 0.0537             | 0.00200 | "     | 0.0500                                    | ND      | 107  | 70-130 |  |  |  |
| Ethylbenzene                     | 0.0499             | 0.00200 | "     | 0.0500                                    | ND      | 99.7 | 70-130 |  |  |  |
| m,p-Xylene                       | 0.105              | 0.00400 | "     | 0.100                                     | ND      | 105  | 70-130 |  |  |  |
| o-Xylene                         | 0.0544             | 0.00200 | "     | 0.0500                                    | ND      | 109  | 70-130 |  |  |  |
| Toluene                          | 0.0514             | 0.00200 | "     | 0.0500                                    | ND      | 103  | 70-130 |  |  |  |
| Surrogate: 1,2-Dichloroethane-d4 | 0.13               |         | "     | 0.125                                     |         | 105  | 70-130 |  |  |  |
| Surrogate: Toluene-d8            | 0.11               |         | "     | 0.125                                     |         | 92.0 | 70-130 |  |  |  |
| Surrogate: 4-Bromofluorobenzene  | 0.11               |         | "     | 0.125                                     |         | 90.3 | 70-130 |  |  |  |

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WSP USA  
 4600 W. 60th Ave.  
 Arvada CO 80003

Brian Sulzberger  
 Project Number: [none]  
 Project: KMG - Buddy 17-7 HZ Pad

**Volatile Organic Compounds by GC/MS SW846 8260D - Quality Control**  
**Origins Laboratory, Inc.**

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---------|--------|-----------------|-------|-------------|---------------|------|-------------|-----|-----------|-------|
|---------|--------|-----------------|-------|-------------|---------------|------|-------------|-----|-----------|-------|

Batch B1C0905 - EPA 5030 (soil)

| Matrix Spike Dup (B1C0905-MSD1)  | Source: Y103142-01 |         |       | Prepared: 03/09/2021 Analyzed: 03/09/2021 |         |      |        |       |    |  |
|----------------------------------|--------------------|---------|-------|---|---------|------|--------|-------|----|--|
| 1,2,4-Trimethylbenzene           | 0.0557             | 0.00200 | mg/kg | 0.0500                                    | ND      | 111  | 70-130 | 3.73  | 20 |  |
| Naphthalene                      | 0.0454             | 0.0100  | "     | 0.0500                                    | 0.00142 | 87.9 | 70-130 | 9.41  | 20 |  |
| 1,3,5-Trimethylbenzene           | 0.0560             | 0.00200 | "     | 0.0500                                    | ND      | 112  | 70-130 | 4.19  | 20 |  |
| Benzene                          | 0.0536             | 0.00200 | "     | 0.0500                                    | ND      | 107  | 70-130 | 0.261 | 20 |  |
| Ethylbenzene                     | 0.0506             | 0.00200 | "     | 0.0500                                    | ND      | 101  | 70-130 | 1.47  | 20 |  |
| m,p-Xylene                       | 0.106              | 0.00400 | "     | 0.100                                     | ND      | 106  | 70-130 | 1.21  | 20 |  |
| o-Xylene                         | 0.0552             | 0.00200 | "     | 0.0500                                    | ND      | 110  | 70-130 | 1.50  | 20 |  |
| Toluene                          | 0.0519             | 0.00200 | "     | 0.0500                                    | ND      | 104  | 70-130 | 0.929 | 20 |  |
| Surrogate: 1,2-Dichloroethane-d4 | 0.14               |         | "     | 0.125                                     |         | 109  | 70-130 |       |    |  |
| Surrogate: Toluene-d8            | 0.11               |         | "     | 0.125                                     |         | 92.0 | 70-130 |       |    |  |
| Surrogate: 4-Bromofluorobenzene  | 0.11               |         | "     | 0.125                                     |         | 89.3 | 70-130 |       |    |  |

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WSP USA  
 4600 W. 60th Ave.  
 Arvada CO 80003

Brian Sulzberger  
 Project Number: [none]  
 Project: KMG - Buddy 17-7 HZ Pad

**Volatile Organic Compounds by GC/MS SW846 8260D - Quality Control**  
**Origins Laboratory, Inc.**

| Analyte                           | Result | Reporting Limit | Units | Spike Level | Source Result                             | %REC | %REC Limits | RPD | RPD Limit | Notes |
|-----------------------------------|--------|-----------------|-------|-------------|---|------|-------------|-----|-----------|-------|
| <b>Batch B1C0906 - EPA 3550B</b>  |        |                 |       |             |   |      |             |     |           |       |
| <b>Blank (B1C0906-BLK1)</b>       |        |                 |       |             |   |      |             |     |           |       |
|                                   |        |                 |       |             | Prepared: 03/09/2021 Analyzed: 03/09/2021 |      |             |     |           |       |
| Diesel (C10-C28)                  | ND     | 50.0            | mg/kg |             |   |      |             |     |           | Ua    |
| Residual Range Organics (C28-C40) | ND     | 200             | "     |             |   |      |             |     |           | Ua    |
| Surrogate: o-Terphenyl            | 32     |                 | "     | 50.0        |   | 63.7 | 50-150      |     |           |       |

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WSP USA  
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 Arvada CO 80003

Brian Sulzberger  
 Project Number: [none]  
 Project: KMG - Buddy 17-7 HZ Pad

**Extractable Petroleum Hydrocarbons by 8015D - Quality Control**  
**Origins Laboratory, Inc.**

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---------|--------|-----------------|-------|-------------|---------------|------|-------------|-----|-----------|-------|
|---------|--------|-----------------|-------|-------------|---------------|------|-------------|-----|-----------|-------|

**Batch B1C0906 - EPA 3550B**

**LCS (B1C0906-BS1)**

Prepared: 03/09/2021 Analyzed: 03/09/2021

|                                   |      |      |       |      |  |      |        |  |  |  |
|-----------------------------------|------|------|-------|------|--|------|--------|--|--|--|
| Diesel (C10-C28)                  | 1110 | 50.0 | mg/kg | 1000 |  | 111  | 70-130 |  |  |  |
| Residual Range Organics (C28-C40) | 1140 | 200  | "     | 1000 |  | 114  | 70-130 |  |  |  |
| Surrogate: o-Terphenyl            | 45   |      | "     | 50.0 |  | 90.6 | 50-150 |  |  |  |

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WSP USA  
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Brian Sulzberger  
 Project Number: [none]  
 Project: KMG - Buddy 17-7 HZ Pad

**Extractable Petroleum Hydrocarbons by 8015D - Quality Control**  
**Origins Laboratory, Inc.**

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---------|--------|-----------------|-------|-------------|---------------|------|-------------|-----|-----------|-------|
|---------|--------|-----------------|-------|-------------|---------------|------|-------------|-----|-----------|-------|

**Batch B1C0906 - EPA 3550B**

| <b>Matrix Spike (B1C0906-MS1)</b> | <b>Source: Y103159-01</b> |      |       | Prepared: 03/09/2021 Analyzed: 03/09/2021 |      |      |        |  |  |  |
|-----------------------------------|---------------------------|------|-------|---|------|------|--------|--|--|--|
| Diesel (C10-C28)                  | 1040                      | 50.0 | mg/kg | 1000                                      | ND   | 104  | 70-130 |  |  |  |
| Residual Range Organics (C28-C40) | 1090                      | 200  | "     | 1000                                      | 58.3 | 103  | 70-130 |  |  |  |
| Surrogate: o-Terphenyl            | 41                        |      | "     | 50.0                                      |      | 81.5 | 50-150 |  |  |  |

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Brian Sulzberger  
 Project Number: [none]  
 Project: KMG - Buddy 17-7 HZ Pad

**Extractable Petroleum Hydrocarbons by 8015D - Quality Control**  
**Origins Laboratory, Inc.**

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---------|--------|-----------------|-------|-------------|---------------|------|-------------|-----|-----------|-------|
|---------|--------|-----------------|-------|-------------|---------------|------|-------------|-----|-----------|-------|

**Batch B1C0906 - EPA 3550B**

| <b>Matrix Spike Dup (B1C0906-MSD1)</b> | <b>Source: Y103159-01</b> |      |       | <b>Prepared: 03/09/2021 Analyzed: 03/09/2021</b> |      |      |        |      |    |  |
|--|---------------------------|------|-------|--|------|------|--------|------|----|--|
| Diesel (C10-C28)                       | 1150                      | 50.0 | mg/kg | 1000   | ND   | 115  | 70-130 | 10.5 | 35 |  |
| Residual Range Organics (C28-C40)      | 1200                      | 200  | "     | 1000   | 58.3 | 114  | 70-130 | 9.71 | 35 |  |
| <i>Surrogate: o-Terphenyl</i>          | 46                        |      | "     | 50.0   |      | 91.9 | 50-150 |      |    |  |

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Brian Sulzberger  
 Project Number: [none]  
 Project: KMG - Buddy 17-7 HZ Pad

**PAH by 8270D SIM - Quality Control**  
**GEL Laboratories, LLC**

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---------|--------|-----------------|-------|-------------|---------------|------|-------------|-----|-----------|-------|
|---------|--------|-----------------|-------|-------------|---------------|------|-------------|-----|-----------|-------|

**Batch 2101819 - SW846 3541**

**BLANK (1204771370-BLK)**

Prepared: 03/12/2021 Analyzed: 03/12/2021

|                        |    |         |       |  |  |  |   |  |  |   |
|------------------------|----|---------|-------|--|--|--|---|--|--|---|
| Chrysene               | ND | 0.00328 | mg/kg |  |  |  | - |  |  | U |
| Naphthalene            | ND | 0.00328 | "     |  |  |  | - |  |  | U |
| Indeno(1,2,3-cd)pyrene | ND | 0.00328 | "     |  |  |  | - |  |  | U |
| Fluorene               | ND | 0.00328 | "     |  |  |  | - |  |  | U |
| Pyrene                 | ND | 0.00328 | "     |  |  |  | - |  |  | U |
| Fluoranthene           | ND | 0.00328 | "     |  |  |  | - |  |  | U |
| Dibenzo(a,h)anthracene | ND | 0.00328 | "     |  |  |  | - |  |  | U |
| Benzo(b)fluoranthene   | ND | 0.00328 | "     |  |  |  | - |  |  | U |
| Benzo(a)pyrene         | ND | 0.00328 | "     |  |  |  | - |  |  | U |
| Benzo(a)anthracene     | ND | 0.00328 | "     |  |  |  | - |  |  | U |
| Acenaphthene           | ND | 0.00328 | "     |  |  |  | - |  |  | U |
| 2-Methylnaphthalene    | ND | 0.00328 | "     |  |  |  | - |  |  | U |
| 1-Methylnaphthalene    | ND | 0.00328 | "     |  |  |  | - |  |  | U |
| Benzo(k)fluoranthene   | ND | 0.00328 | "     |  |  |  | - |  |  | U |
| Anthracene             | ND | 0.00328 | "     |  |  |  | - |  |  | U |

Surrogate: 5-alpha-Androstane

0.146

"

0.164

89

25-121

**LCS (1204771371-BKS)**

Prepared: 03/12/2021 Analyzed: 03/12/2021

|                        |       |         |       |       |  |    |        |
|------------------------|-------|---------|-------|-------|--|----|--------|
| 2-Methylnaphthalene    | 0.247 | 0.00324 | mg/kg | 0.324 |  | 76 | 50-109 |
| Fluoranthene           | 0.249 | 0.00324 | "     | 0.324 |  | 77 | 43-116 |
| Chrysene               | 0.269 | 0.00324 | "     | 0.324 |  | 83 | 53-108 |
| Dibenzo(a,h)anthracene | 0.280 | 0.00324 | "     | 0.324 |  | 86 | 40-137 |
| Benzo(b)fluoranthene   | 0.252 | 0.00324 | "     | 0.324 |  | 78 | 42-119 |
| Benzo(a)pyrene         | 0.269 | 0.00324 | "     | 0.324 |  | 83 | 42-123 |
| Benzo(a)anthracene     | 0.231 | 0.00324 | "     | 0.324 |  | 71 | 51-118 |
| Anthracene             | 0.252 | 0.00324 | "     | 0.324 |  | 78 | 49-113 |
| 1-Methylnaphthalene    | 0.243 | 0.00324 | "     | 0.324 |  | 75 | 50-109 |

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Brian Sulzberger  
 Project Number: [none]  
 Project: KMG - Buddy 17-7 HZ Pad

**PAH by 8270D SIM - Quality Control**  
**GEL Laboratories, LLC**

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---------|--------|-----------------|-------|-------------|---------------|------|-------------|-----|-----------|-------|
|---------|--------|-----------------|-------|-------------|---------------|------|-------------|-----|-----------|-------|

**Batch 2101819 - SW846 3541**

**LCS (1204771371-BKS)**

Prepared: 03/12/2021 Analyzed: 03/12/2021

|                               |       |         |       |       |  |    |        |  |  |  |
|-------------------------------|-------|---------|-------|-------|--|----|--------|--|--|--|
| Fluorene                      | 0.254 | 0.00324 | mg/kg | 0.324 |  | 78 | 42-113 |  |  |  |
| Acenaphthene                  | 0.241 | 0.00324 | "     | 0.324 |  | 74 | 48-107 |  |  |  |
| Naphthalene                   | 0.244 | 0.00324 | "     | 0.324 |  | 75 | 52-106 |  |  |  |
| Benzo(k)fluoranthene          | 0.245 | 0.00324 | "     | 0.324 |  | 76 | 39-119 |  |  |  |
| Pyrene                        | 0.263 | 0.00324 | "     | 0.324 |  | 81 | 42-114 |  |  |  |
| Indeno(1,2,3-cd)pyrene        | 0.282 | 0.00324 | "     | 0.324 |  | 87 | 40-132 |  |  |  |
| Surrogate: 5-alpha-Androstane | 0.149 |         | "     | 0.162 |  | 92 | 25-121 |  |  |  |

**LCSD (1204771372-BKSD)**

Prepared: 03/12/2021 Analyzed: 03/12/2021

|                               |       |         |       |       |  |    |        |    |    |  |
|-------------------------------|-------|---------|-------|-------|--|----|--------|----|----|--|
| Chrysene                      | 0.288 | 0.00327 | mg/kg | 0.327 |  | 88 | 53-108 | 7  | 30 |  |
| Pyrene                        | 0.269 | 0.00327 | "     | 0.327 |  | 82 | 42-114 | 2  | 30 |  |
| Naphthalene                   | 0.246 | 0.00327 | "     | 0.327 |  | 75 | 52-106 | 1  | 30 |  |
| Indeno(1,2,3-cd)pyrene        | 0.282 | 0.00327 | "     | 0.327 |  | 86 | 40-132 | 0  | 30 |  |
| Fluorene                      | 0.268 | 0.00327 | "     | 0.327 |  | 82 | 42-113 | 5  | 30 |  |
| Dibenzo(a,h)anthracene        | 0.273 | 0.00327 | "     | 0.327 |  | 83 | 40-137 | 3  | 30 |  |
| Benzo(k)fluoranthene          | 0.270 | 0.00327 | "     | 0.327 |  | 82 | 39-119 | 10 | 30 |  |
| 1-Methylnaphthalene           | 0.247 | 0.00327 | "     | 0.327 |  | 76 | 50-109 | 2  | 30 |  |
| Fluoranthene                  | 0.270 | 0.00327 | "     | 0.327 |  | 83 | 43-116 | 8  | 30 |  |
| 2-Methylnaphthalene           | 0.251 | 0.00327 | "     | 0.327 |  | 77 | 50-109 | 1  | 30 |  |
| Benzo(b)fluoranthene          | 0.273 | 0.00327 | "     | 0.327 |  | 83 | 42-119 | 8  | 30 |  |
| Acenaphthene                  | 0.255 | 0.00327 | "     | 0.327 |  | 78 | 48-107 | 6  | 30 |  |
| Anthracene                    | 0.270 | 0.00327 | "     | 0.327 |  | 83 | 49-113 | 7  | 30 |  |
| Benzo(a)anthracene            | 0.246 | 0.00327 | "     | 0.327 |  | 75 | 51-118 | 7  | 30 |  |
| Benzo(a)pyrene                | 0.288 | 0.00327 | "     | 0.327 |  | 88 | 42-123 | 7  | 30 |  |
| Surrogate: 5-alpha-Androstane | 0.155 |         | "     | 0.164 |  | 94 | 25-121 |    |    |  |

**MS (1204771373 S)**

Source: 537409001

Prepared: 03/12/2021 Analyzed: 03/12/2021

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Brian Sulzberger  
 Project Number: [none]  
 Project: KMG - Buddy 17-7 HZ Pad

**PAH by 8270D SIM - Quality Control**  
**GEL Laboratories, LLC**

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---------|--------|-----------------|-------|-------------|---------------|------|-------------|-----|-----------|-------|
|---------|--------|-----------------|-------|-------------|---------------|------|-------------|-----|-----------|-------|

**Batch 2101819 - SW846 3541**

**MS (1204771373 S)**

**Source: 537409001**

Prepared: 03/12/2021 Analyzed: 03/12/2021

|                        |       |       |           |       |       |     |        |  |  |  |
|------------------------|-------|-------|-----------|-------|-------|-----|--------|--|--|--|
| Chrysene               | 3.40  | 0.382 | mg/kg dry | 0.382 | 2.52  | 229 | 31-119 |  |  |  |
| Naphthalene            | 0.763 | 0.382 | "         | 0.382 | 0.489 | 72  | 29-122 |  |  |  |
| Indeno(1,2,3-cd)pyrene | 1.87  | 0.382 | "         | 0.382 | 1.35  | 135 | 14-132 |  |  |  |
| Fluorene               | 1.26  | 0.382 | "         | 0.382 | 0.828 | 113 | 26-123 |  |  |  |
| Fluoranthene           | 5.61  | 0.382 | "         | 0.382 | 3.91  | 444 | 21-122 |  |  |  |
| Dibenzo(a,h)anthracene | 0.840 | 0.382 | "         | 0.382 | 0.565 | 72  | 16-139 |  |  |  |
| Pyrene                 | 5.42  | 0.382 | "         | 0.382 | 4.06  | 355 | 19-139 |  |  |  |
| Acenaphthene           | 0.763 | 0.382 | "         | 0.382 | 0.527 | 62  | 29-118 |  |  |  |
| Benzo(b)fluoranthene   | 3.40  | 0.382 | "         | 0.382 | 2.45  | 249 | 22-130 |  |  |  |
| Benzo(a)pyrene         | 3.36  | 0.382 | "         | 0.382 | 2.48  | 229 | 24-129 |  |  |  |
| Benzo(a)anthracene     | 3.40  | 0.382 | "         | 0.382 | 2.37  | 269 | 31-124 |  |  |  |
| Benzo(k)fluoranthene   | 1.60  | 0.382 | "         | 0.382 | 1.05  | 144 | 26-130 |  |  |  |
| 1-Methylnaphthalene    | 0.649 | 0.382 | "         | 0.382 | 0.376 | 71  | 30-129 |  |  |  |
| Anthracene             | 1.98  | 0.382 | "         | 0.382 | 1.32  | 175 | 29-127 |  |  |  |
| 2-Methylnaphthalene    | 0.725 | 0.382 | "         | 0.382 | 0.452 | 72  | 23-124 |  |  |  |

Surrogate: 5-alpha-Androstane

0.191

"

0.191

0.226

100

25-121

**MSD (1204771374 SD)**

**Source: 537409001**

Prepared: 03/12/2021 Analyzed: 03/12/2021

|                        |       |       |           |       |       |    |        |    |    |  |
|------------------------|-------|-------|-----------|-------|-------|----|--------|----|----|--|
| Benzo(a)pyrene         | 1.68  | 0.382 | mg/kg dry | 0.382 | 2.48  | 0  | 24-129 | 67 | 30 |  |
| Pyrene                 | 2.56  | 0.382 | "         | 0.382 | 4.06  | 0  | 19-139 | 72 | 30 |  |
| Benzo(k)fluoranthene   | 0.879 | 0.382 | "         | 0.382 | 1.05  | 0  | 26-130 | 58 | 30 |  |
| Chrysene               | 1.64  | 0.382 | "         | 0.382 | 2.52  | 0  | 31-119 | 70 | 30 |  |
| Dibenzo(a,h)anthracene | 0.497 | 0.382 | "         | 0.382 | 0.565 | 0  | 16-139 | 51 | 30 |  |
| Fluoranthene           | 2.52  | 0.382 | "         | 0.382 | 3.91  | 0  | 21-122 | 76 | 30 |  |
| Fluorene               | 0.650 | 0.382 | "         | 0.382 | 0.828 | 0  | 26-123 | 64 | 30 |  |
| Indeno(1,2,3-cd)pyrene | 0.956 | 0.382 | "         | 0.382 | 1.35  | 0  | 14-132 | 65 | 30 |  |
| Naphthalene            | 0.535 | 0.382 | "         | 0.382 | 0.489 | 12 | 29-122 | 35 | 30 |  |

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Brian Sulzberger  
 Project Number: [none]  
 Project: KMG - Buddy 17-7 HZ Pad

**PAH by 8270D SIM - Quality Control**  
**GEL Laboratories, LLC**

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---------|--------|-----------------|-------|-------------|---------------|------|-------------|-----|-----------|-------|
|---------|--------|-----------------|-------|-------------|---------------|------|-------------|-----|-----------|-------|

Batch 2101819 - SW846 3541

| MSD (1204771374 SD)           | Source: 537409001 |       |           | Prepared: 03/12/2021 Analyzed: 03/12/2021 |       |    |        |    |    |  |
|-------------------------------|-------------------|-------|-----------|---|-------|----|--------|----|----|--|
| Benzo(a)anthracene            | 1.61              | 0.382 | mg/kg dry | 0.382                                     | 2.37  | 0  | 31-124 | 72 | 30 |  |
| Benzo(b)fluoranthene          | 1.72              | 0.382 | "         | 0.382                                     | 2.45  | 0  | 22-130 | 66 | 30 |  |
| Acenaphthene                  | 0.535             | 0.382 | "         | 0.382                                     | 0.527 | 2  | 29-118 | 35 | 30 |  |
| 2-Methylnaphthalene           | 0.459             | 0.382 | "         | 0.382                                     | 0.452 | 2  | 23-124 | 45 | 30 |  |
| 1-Methylnaphthalene           | 0.420             | 0.382 | "         | 0.382                                     | 0.376 | 12 | 30-129 | 43 | 30 |  |
| Anthracene                    | 0.994             | 0.382 | "         | 0.382                                     | 1.32  | 0  | 29-127 | 67 | 30 |  |
| Surrogate: 5-alpha-Androstane | 0.115             |       | "         | 0.191                                     | 0.226 | 60 | 25-121 |    |    |  |

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Brian Sulzberger  
 Project Number: [none]  
 Project: KMG - Buddy 17-7 HZ Pad

**Total Metals by 6010C - Quality Control**  
**GEL Laboratories, LLC**

| Analyte                            | Result | Reporting Limit | Units     | Spike Level | Source Result                             | %REC | %REC Limits | RPD  | RPD Limit | Notes |
|------------------------------------|--------|-----------------|-----------|-------------|---|------|-------------|------|-----------|-------|
| <b>Batch 2101913 - SW846 3050B</b> |        |                 |           |             |   |      |             |      |           |       |
| <b>BLANK (1204771578-BLK)</b>      |        |                 |           |             | Prepared: 03/11/2021 Analyzed: 03/11/2021 |      |             |      |           |       |
| Silver                             | 0.106  | 0.463           | mg/kg     |             |   |      | -           |      |           | J     |
| <b>LCS (1204771579-BKS)</b>        |        |                 |           |             | Prepared: 03/11/2021 Analyzed: 03/11/2021 |      |             |      |           |       |
| Silver                             | 9.83   | 0.484           | mg/kg     | 9.69        |   | 101  | 80-120      |      |           |       |
| <b>DUP (1204771580 D)</b>          |        |                 |           |             | Prepared: 03/11/2021 Analyzed: 03/11/2021 |      |             |      |           |       |
|                                    |        |                 |           |             | <b>Source: 537409001</b>                  |      |             |      |           |       |
| Silver                             | 0.472  | 0.565           | mg/kg dry |             | 0.326                                     |      | 0-20        | 36.5 | 20        | J     |
| <b>MS (1204771581 S)</b>           |        |                 |           |             | Prepared: 03/11/2021 Analyzed: 03/11/2021 |      |             |      |           |       |
|                                    |        |                 |           |             | <b>Source: 537409001</b>                  |      |             |      |           |       |
| Silver                             | 11.0   | 0.553           | mg/kg dry | 11.1        | 0.326                                     | 96.5 | 75-125      |      |           |       |

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Brian Sulzberger  
 Project Number: [none]  
 Project: KMG - Buddy 17-7 HZ Pad

**Total Metals by 6020A - Quality Control**  
**GEL Laboratories, LLC**

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---------|--------|-----------------|-------|-------------|---------------|------|-------------|-----|-----------|-------|
|---------|--------|-----------------|-------|-------------|---------------|------|-------------|-----|-----------|-------|

**Batch 2101911 - SW846 3050B**

**BLANK (1204771569-BLK)**

Prepared: 03/11/2021 Analyzed: 03/15/2021

|          |    |       |       |  |  |  |   |  |  |   |
|----------|----|-------|-------|--|--|--|---|--|--|---|
| Zinc     | ND | 3.68  | mg/kg |  |  |  | - |  |  | U |
| Selenium | ND | 0.919 | "     |  |  |  | - |  |  | U |
| Nickel   | ND | 0.368 | "     |  |  |  | - |  |  | U |
| Lead     | ND | 0.368 | "     |  |  |  | - |  |  | U |
| Copper   | ND | 0.368 | "     |  |  |  | - |  |  | U |
| Cadmium  | ND | 0.184 | "     |  |  |  | - |  |  | U |
| Arsenic  | ND | 0.919 | "     |  |  |  | - |  |  | U |
| Barium   | ND | 0.735 | "     |  |  |  | - |  |  | U |

**LCS (1204771570-BKS)**

Prepared: 03/11/2021 Analyzed: 03/15/2021

|          |      |       |       |      |  |      |        |  |  |  |
|----------|------|-------|-------|------|--|------|--------|--|--|--|
| Copper   | 5.16 | 0.391 | mg/kg | 4.88 |  | 106  | 80-120 |  |  |  |
| Lead     | 5.11 | 0.391 | "     | 4.88 |  | 105  | 80-120 |  |  |  |
| Nickel   | 5.17 | 0.391 | "     | 4.88 |  | 106  | 80-120 |  |  |  |
| Zinc     | 4.57 | 3.91  | "     | 4.88 |  | 93.6 | 80-120 |  |  |  |
| Barium   | 5.21 | 0.781 | "     | 4.88 |  | 107  | 80-120 |  |  |  |
| Arsenic  | 4.30 | 0.977 | "     | 4.88 |  | 88   | 80-120 |  |  |  |
| Selenium | 3.95 | 0.977 | "     | 4.88 |  | 80.9 | 80-120 |  |  |  |
| Cadmium  | 4.55 | 0.195 | "     | 4.88 |  | 93.2 | 80-120 |  |  |  |

**DUP (1204771571 D)**

Source: Y103176-01

Prepared: 03/11/2021 Analyzed: 03/15/2021

|          |       |       |           |  |       |  |      |      |    |   |
|----------|-------|-------|-----------|--|-------|--|------|------|----|---|
| Cadmium  | 0.165 | 0.230 | mg/kg dry |  | 0.172 |  | 0-20 | 4.13 | 20 | J |
| Selenium | 1.64  | 1.15  | "         |  | 1.68  |  | 0-20 | 2.38 | 20 |   |
| Nickel   | 12.3  | 0.460 | "         |  | 12.7  |  | 0-20 | 3.12 | 20 |   |
| Copper   | 11.6  | 0.460 | "         |  | 11.8  |  | 0-20 | 2.06 | 20 |   |
| Zinc     | 39.7  | 4.60  | "         |  | 41.5  |  | 0-20 | 4.59 | 20 |   |
| Barium   | 187   | 0.921 | "         |  | 218   |  | 0-20 | 15.3 | 20 |   |
| Arsenic  | 4.43  | 1.15  | "         |  | 5.15  |  | 0-20 | 15.1 | 20 |   |

Origins Laboratory, Inc.



*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

WSP USA  
 4600 W. 60th Ave.  
 Arvada CO 80003

Brian Sulzberger  
 Project Number: [none]  
 Project: KMG - Buddy 17-7 HZ Pad

**Total Metals by 6020A - Quality Control**  
**GEL Laboratories, LLC**

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---------|--------|-----------------|-------|-------------|---------------|------|-------------|-----|-----------|-------|
|---------|--------|-----------------|-------|-------------|---------------|------|-------------|-----|-----------|-------|

**Batch 2101911 - SW846 3050B**

**DUP (1204771571 D)**

**Source: Y103176-01**

Prepared: 03/11/2021 Analyzed: 03/15/2021

|      |      |       |           |  |      |  |      |      |    |  |
|------|------|-------|-----------|--|------|--|------|------|----|--|
| Lead | 10.1 | 0.460 | mg/kg dry |  | 12.1 |  | 0-20 | 18.4 | 20 |  |
|------|------|-------|-----------|--|------|--|------|------|----|--|

**MS (1204771572 S)**

**Source: Y103176-01**

Prepared: 03/11/2021 Analyzed: 03/15/2021

|          |      |       |           |      |       |      |        |  |  |  |
|----------|------|-------|-----------|------|-------|------|--------|--|--|--|
| Lead     | 16.1 | 0.450 | mg/kg dry | 5.63 | 12.1  | 70.1 | 75-125 |  |  |  |
| Selenium | 5.95 | 1.13  | "         | 5.63 | 1.68  | 75.9 | 75-125 |  |  |  |
| Nickel   | 18.2 | 0.450 | "         | 5.63 | 12.7  | 97.9 | 75-125 |  |  |  |
| Zinc     | 45.2 | 4.50  | "         | 5.63 | 41.5  | 0    | 75-125 |  |  |  |
| Copper   | 17.0 | 0.450 | "         | 5.63 | 11.8  | 92.5 | 75-125 |  |  |  |
| Cadmium  | 5.10 | 0.225 | "         | 5.63 | 0.172 | 87.5 | 75-125 |  |  |  |
| Arsenic  | 9.41 | 1.13  | "         | 5.63 | 5.15  | 75.7 | 75-125 |  |  |  |
| Barium   | 186  | 0.900 | "         | 5.63 | 218   | 0    | 75-125 |  |  |  |

**PS (1204773230 S)**

**Source: Y103176-01**

Prepared: 03/11/2021 Analyzed: 03/15/2021

|      |       |         |           |        |  |     |        |  |  |  |
|------|-------|---------|-----------|--------|--|-----|--------|--|--|--|
| Lead | 0.193 | 0.00483 | mg/kg dry | 0.0250 |  | 101 | 80-120 |  |  |  |
|------|-------|---------|-----------|--------|--|-----|--------|--|--|--|

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*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

WSP USA  
 4600 W. 60th Ave.  
 Arvada CO 80003

Brian Sulzberger  
 Project Number: [none]  
 Project: KMG - Buddy 17-7 HZ Pad

**Total Metals by 7196A - Quality Control**  
**GEL Laboratories, LLC**

| Analyte                            | Result | Reporting Limit | Units     | Spike Level | Source Result   | %REC | %REC Limits | RPD | RPD Limit | Notes |
|------------------------------------|--------|-----------------|-----------|-------------|---|------|-------------|-----|-----------|-------|
| <b>Batch 2101801 - SW846 3060A</b> |        |                 |           |             |   |      |             |     |           |       |
| <b>BLANK (1204771355-BLK)</b>      |        |                 |           |             | Prepared: 03/12/2021 Analyzed: 03/15/2021                       |      |             |     |           |       |
| Hexavalent Chromium                | ND     | 0.386           | mg/kg     |             |   |      | -           |     |           | U     |
| <b>LCS (1204771356-BKS)</b>        |        |                 |           |             | Prepared: 03/12/2021 Analyzed: 03/15/2021                       |      |             |     |           |       |
| Hexavalent Chromium                | 3.80   | 0.372           | mg/kg     | 3.72        |   | 102  | 80-120      |     |           |       |
| <b>ILCS (1204771357-ILCS)</b>      |        |                 |           |             | Prepared: 03/12/2021 Analyzed: 03/15/2021                       |      |             |     |           |       |
| Hexavalent Chromium                | 7.35   | 0.376           | mg/kg     | 7.52        |   | 97.7 | 80-120      |     |           |       |
| <b>DUP (1204771358 D)</b>          |        |                 |           |             | Source: Y103176-01<br>Prepared: 03/12/2021 Analyzed: 03/15/2021 |      |             |     |           |       |
| Hexavalent Chromium                | ND     | 0.459           | mg/kg dry |             | <0.184  |      | 0-50        | NR  | 50        | U     |
| <b>MS (1204771359 S)</b>           |        |                 |           |             | Source: Y103176-01<br>Prepared: 03/12/2021 Analyzed: 03/15/2021 |      |             |     |           |       |
| Hexavalent Chromium                | 4.38   | 0.443           | mg/kg dry | 4.43        | <0.177  | 98.2 | 75-125      |     |           |       |

Origins Laboratory, Inc.



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WSP USA  
4600 W. 60th Ave.  
Arvada CO 80003

Brian Sulzberger  
Project Number: [none]  
Project: KMG - Buddy 17-7 HZ Pad

---

**Notes and Definitions**

- Ua Sample is Non-Detect.
- U Result not detected above the detection limit
- J Greater than the detection limit but less than the reporting limit
- ND Analyte NOT DETECTED at or above the reporting limit
- RPD Relative Percent Difference
- All soil results are reported on a wet weight basis.

Origins Laboratory, Inc.



*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

September 20, 2021

**WSP USA**

**Brian Sulzberger**

**4600 W. 60th Ave.**

**Arvada**

**CO 80003**

**Project Name - KMG - Buddy 17-7 HZ Pad**

**Project Number - [none]**

Attached are your analytical results for KMG - Buddy 17-7 HZ Pad received by Origins Laboratory, Inc. September 10, 2021. This project is associated with Origins project number Y109204-01.

The analytical results in the following report were analyzed under the guidelines of EPA Methods. These methods are identified as follows; "SW" are defined in SW-846, "EPA" are defined in 40CFR part 136 and "SM" are defined in the most current revision of Standard Methods For the Examination of Water and Wastewater.

The analytical results apply specifically to the samples and analyses specified per the attached Chain of Custody. As such, this report shall not be reproduced except in full, without the written approval of Origin's laboratory.

Unless otherwise noted, the analytical results for all soil samples are reported on a wet weight basis. All analytical analyses were performed under NELAP guidelines unless noted by a data qualifier.

Any holding time exceedances, deviations from the method specifications or deviations from Origins Laboratory's Standard Operating Procedures are outlined in the case narrative.

Thank you for selecting Origins for your analytical needs. Please contact us with any questions concerning this report, or if we can help with anything at all.

Origins Laboratory, Inc.  
303.433.1322  
o-squad@oelabinc.com



WSP USA  
4600 W. 60th Ave.  
Arvada CO 80003

Brian Sulzberger  
Project Number: [none]  
Project: KMG - Buddy 17-7 HZ Pad

CROSS REFERENCE REPORT

| Sample ID | Laboratory ID | Matrix | Date Sampled            | Date Received    |
|-----------|---------------|--------|-------------------------|------------------|
| B02@2'    | Y109204-01    | Soil   | September 10, 2021 9:50 | 09/10/2021 14:21 |

Origins Laboratory, Inc.



*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

WSP USA  
 4600 W. 60th Ave.  
 Arvada CO 80003

Brian Sulzberger  
 Project Number: [none]  
 Project: KMG - Buddy 17-7 HZ Pad

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page | of |

**ORIGINS**  
 LABORATORY, INC

Client: WSP, USA  
 Address: 4600 W 60<sup>th</sup> Ave  
Arvada, Co 80003  
 Telephone Number: (303) 887-1143  
 Email Address: KMG

Project Manager: Brian Sulzberger  
 Project Name: Buddy 17-7 HZ  
 Project Number: 31403177.14  
 Samples Collected By: Kyle Mathis

1725 Elk Place | Denver, CO 80211 | Phone: 303.433.1322 | Fax: 303.265.9645

| Sample ID Description | Date Sampled | Time Sampled | # of Containers | Preservative       |         |                  |       | Matrix             |         |            | Analysis |  |                                |          | Sample Instructions |                        |
|-----------------------|--------------|--------------|-----------------|--------------------|---------|------------------|-------|--------------------|---------|------------|----------|--|--------------------------------|----------|---------------------|------------------------|
|                       |              |              |                 | Unpreserved        | HCl     | HNO <sub>3</sub> | Other | Groundwater        | Soil    | Air Summ # | Other    | Asenic                                       | Boron                          | Selenium |                     |                        |
| B202                  | 9/10/12      | 0950         | 2               | X                  |         |                  |       |                    | X       |            |          |  | X                              | X        | X                   | Blood Water Analysis 1 |
|                       |              |              |                 |                    |         |                  |       |                    |         |            |          |  |                                |          |                     | 2                      |
|                       |              |              |                 |                    |         |                  |       |                    |         |            |          |  |                                |          |                     | 3                      |
|                       |              |              |                 |                    |         |                  |       |                    |         |            |          |  |                                |          |                     | 4                      |
|                       |              |              |                 |                    |         |                  |       |                    |         |            |          |  |                                |          |                     | 5                      |
|                       |              |              |                 |                    |         |                  |       |                    |         |            |          |  |                                |          |                     | 6                      |
|                       |              |              |                 |                    |         |                  |       |                    |         |            |          |  |                                |          |                     | 7                      |
|                       |              |              |                 |                    |         |                  |       |                    |         |            |          |  |                                |          |                     | 8                      |
|                       |              |              |                 |                    |         |                  |       |                    |         |            |          |  |                                |          |                     | 9                      |
|                       |              |              |                 |                    |         |                  |       |                    |         |            |          |  |                                |          |                     | 10                     |
| Relinquished By:      | Date:        | Time:        | Time:           | Received By:       | Date:   | Time:            | Time: | Received By:       | Date:   | Time:      | Time:    | Turnaround Time:                             |                                |          |                     |                        |
| <i>Kyle Mathis</i>    | 9/10/12      | 1421         | 1421            | <i>[Signature]</i> | 9/10/12 | 1421             | 1421  | <i>[Signature]</i> | 9/10/12 | 1421       | 1421     | Some Day <input checked="" type="checkbox"/> | 24 Hr <input type="checkbox"/> |          |                     |                        |
| Relinquished By:      | Date:        | Time:        | Time:           | Received By:       | Date:   | Time:            | Time: | Received By:       | Date:   | Time:      | Time:    | 48 Hr <input type="checkbox"/>               | 72 Hr <input type="checkbox"/> |          |                     |                        |
|                       |              |              |                 |                    |         |                  |       |                    |         |            |          | Standard <input type="checkbox"/>            |                                |          |                     |                        |

Temp Received: 5.9 Date Results Needed

Origins Laboratory, Inc.

*Jordan A. Merrill*

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

WSP USA  
 4600 W. 60th Ave.  
 Arvada CO 80003

Brian Sulzberger  
 Project Number: [none]  
 Project: KMG - Buddy 17-7 HZ Pad

Origins Laboratory F-012207-01-R1  
Effective Date: 01/09/12

**Sample Receipt Checklist**

Origins Work Order: Y109204 Client: WSP  
 Client Project ID: Buddy 17-7 HZ

Checklist Completed by: JG Shipped Via: HD  
 Date/time completed: 9/10/21 (UPS, FedEx, Hand Delivered, Pick-up, etc.)  
 Airbill #: N/A

Matrix(s) Received: (Check all that apply):  Soil/Solid  Water  Other: \_\_\_\_\_  
 Cooler Number/Temperature: 1, 5.7 °C \_\_\_\_\_ °C \_\_\_\_\_ °C \_\_\_\_\_ °C (Describe)  
 Thermometer ID: T003

| Requirement Description   | Yes | No | N/A | Comments (if any) |
|---|-----|----|-----|-------------------|
| If samples require cooling, was the temperature between 0°C to ≤ 6°C <sup>(1)</sup> ?   | /   |    |     |                   |
| Is there ice present (document if blue ice is used)   | /   |    |     |                   |
| Are custody seals present on cooler? (if so, document in comments if they are signed and dated, broken or intact)   |     | /  |     |                   |
| Are custody seals present on each sample container? (if so, document in comments if they are signed and dated, broken or intact)  |     | /  |     |                   |
| Were all samples received intact <sup>(1)</sup> ?   | /   |    |     |                   |
| Was adequate sample volume provided <sup>(1)</sup> ?  | /   |    |     |                   |
| Are short holding time analytes or samples with HTs due within 48 hours present <sup>(1)</sup> ?  |     | /  |     |                   |
| Is a chain-of-custody (COC) present and filled out completely <sup>(1)</sup> ?  | /   |    |     |                   |
| Does the COC agree with the number and type of sample bottles received <sup>(1)</sup> ?   | /   |    |     |                   |
| Do the sample IDs on the bottle labels match the COC <sup>(1)</sup> ?   | /   |    |     |                   |
| Is the COC properly relinquished by the client with date and time recorded <sup>(1)</sup> ?   | /   |    |     |                   |
| For volatiles in water – is there headspace (> ¼ inch bubble) present? If yes, contact client and note in narrative.  |     |    | /   |                   |
| Are samples preserved that require preservation and was it checked <sup>(1)</sup> ? (note ID of confirmation instrument used in comments) / (preservation is not confirmed for subcontracted analyses in order to insure sample integrity)/(pH ≤ 2 for samples preserved with HNO <sub>3</sub> , HCL, H <sub>2</sub> SO <sub>4</sub> ) / (pH > 10 for samples preserved with NaAsO <sub>2</sub> +NaOH, ZnAc+NaOH) |     |    | /   |                   |
| Additional Comments (if any):   |     |    |     |                   |

<sup>(1)</sup>If NO, then contact the client before proceeding with analysis and note date/time and person contacted as well as the corrective action to in the additional comments (above) and the case narrative.

Reviewed by (Project Manager) [Signature] Date/Time Reviewed 9/10/21

Origins Laboratory, Inc.

*Jordan A. Merrill*

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

WSP USA  
 4600 W. 60th Ave.  
 Arvada CO 80003

Brian Sulzberger  
 Project Number: [none]  
 Project: KMG - Buddy 17-7 HZ Pad

**B02@2'**

**9/10/2021 9:50:00AM**

| Analyte | Result | Reporting Limit | Units | Dilution | Batch | Analyst | Prepared | Analyzed | Notes |
|---------|--------|-----------------|-------|----------|-------|---------|----------|----------|-------|
|---------|--------|-----------------|-------|----------|-------|---------|----------|----------|-------|

**Origins Laboratory, Inc.**  
**Y109204-01 (Soil)**

**Boron (DTPA Sorbitol)**

|       |              |       |      |   |         |     |            |            |  |
|-------|--------------|-------|------|---|---------|-----|------------|------------|--|
| Boron | <b>0.359</b> | 0.199 | mg/L | 1 | B111303 | KAP | 09/13/2021 | 09/13/2021 |  |
|-------|--------------|-------|------|---|---------|-----|------------|------------|--|

**Specific Conductance Mod. 9050A**

|                           |              |         |          |   |         |     |            |            |  |
|---------------------------|--------------|---------|----------|---|---------|-----|------------|------------|--|
| Specific Conductance (EC) | <b>0.508</b> | 0.00500 | mmhos/cm | 1 | B111707 | JSM | 09/17/2021 | 09/17/2021 |  |
|---------------------------|--------------|---------|----------|---|---------|-----|------------|------------|--|

**Total Metals by 6020B**

|          |              |      |       |   |         |  |            |            |  |
|----------|--------------|------|-------|---|---------|--|------------|------------|--|
| Arsenic  | <b>3.6</b>   | 0.25 | mg/Kg | 5 | L573652 |  | 09/13/2021 | 09/14/2021 |  |
| Barium   | <b>174</b>   | 0.25 | "     | " | "       |  | "          | "          |  |
| Selenium | <b>0.371</b> | 0.25 | "     | " | "       |  | "          | "          |  |

Origins Laboratory, Inc.



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WSP USA  
 4600 W. 60th Ave.  
 Arvada CO 80003

Brian Sulzberger  
 Project Number: [none]  
 Project: KMG - Buddy 17-7 HZ Pad

**Saturated Paste - Quality Control**  
**Origins Laboratory, Inc.**

| Analyte                         | Result  | Reporting Limit           | Units    | Spike Level | Source Result                             | %REC | %REC Limits | RPD  | RPD Limit | Notes |
|---------------------------------|---------|---------------------------|----------|-------------|---|------|-------------|------|-----------|-------|
| <b>Batch B111707 - NO PREP</b>  |         |                           |          |             |   |      |             |      |           |       |
| <b>Blank (B111707-BLK1)</b>     |         |                           |          |             | Prepared: 09/17/2021 Analyzed: 09/17/2021 |      |             |      |           |       |
| Specific Conductance (EC)       | 0.00320 | 0.00500                   | mmhos/cm |             |   |      |             |      |           |       |
| <b>Duplicate (B111707-DUP1)</b> |         | <b>Source: Y109325-01</b> |          |             | Prepared: 09/17/2021 Analyzed: 09/17/2021 |      |             |      |           |       |
| Specific Conductance (EC)       | 0.893   | 0.00500                   | mmhos/cm |             | 0.922                                     |      |             | 3.16 | 25        |       |

Origins Laboratory, Inc.



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WSP USA  
 4600 W. 60th Ave.  
 Arvada CO 80003

Brian Sulzberger  
 Project Number: [none]  
 Project: KMG - Buddy 17-7 HZ Pad

**Total Metals by 6020B - Quality Control**  
**Waypoint Analytical, LLC.**

| Analyte                          | Result | Reporting Limit | Units                | Spike Level | Source Result | %REC                                      | %REC Limits | RPD | RPD Limit | Notes |
|----------------------------------|--------|-----------------|----------------------|-------------|---------------|---|-------------|-----|-----------|-------|
| <b>Batch L573652 - 3050B</b>     |        |                 |                      |             |               |   |             |     |           |       |
| <b>MSD (L 86423-MSD-L573652)</b> |        |                 | <b>Source: 86423</b> |             |               | Prepared: 09/13/2021 Analyzed: 09/14/2021 |             |     |           |       |
| Selenium                         | 3.66   | 0.103           | mg/Kg                | 4.84        | 0.496         | 65  | 75-125      | 6.4 | 80        | *     |
| Barium                           | 66.3   | 0.042           | "                    | 4.84        | 62.4          | 80  | 75-125      | 2.4 | 80        |       |
| Arsenic                          | 4.87   | 0.0855          | "                    | 2.42        | 2.94          | 80  | 75-125      | 4.4 | 80        |       |
| <b>MS (L 86423-MS-L573652)</b>   |        |                 | <b>Source: 86423</b> |             |               | Prepared: 09/13/2021 Analyzed: 09/14/2021 |             |     |           |       |
| Selenium                         | 3.43   | 0.103           | mg/Kg                | 4.68        | 0.496         | 63  | 75-125      |     |           | *     |
| Barium                           | 64.7   | 0.042           | "                    | 4.68        | 62.4          | 49  | 75-125      |     |           | *     |
| Arsenic                          | 5.09   | 0.0855          | "                    | 2.34        | 2.94          | 92  | 75-125      |     |           |       |
| <b>LCS (LCS-L573652)</b>         |        |                 |                      |             |               | Prepared: 09/13/2021 Analyzed: 09/14/2021 |             |     |           |       |
| Selenium                         | 5.26   | 0.103           | mg/Kg                | 5           |               | 105                                       | 80-120      |     |           |       |
| Barium                           | 4.95   | 0.042           | "                    | 5           |               | 99  | 80-120      |     |           |       |
| Arsenic                          | 2.5    | 0.0855          | "                    | 2.5         |               | 100                                       | 80-120      |     |           |       |
| <b>LRB (LRB-L573652)</b>         |        |                 |                      |             |               | Prepared: 09/13/2021 Analyzed: 09/15/2021 |             |     |           |       |
| Selenium                         | ND     | 0.25            | mg/Kg                |             |               |   | -           |     |           |       |
| Barium                           | ND     | 0.25            | "                    |             |               |   | -           |     |           |       |
| Arsenic                          | ND     | 0.25            | "                    |             |               |   | -           |     |           |       |

Origins Laboratory, Inc.



*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

WSP USA  
4600 W. 60th Ave.  
Arvada CO 80003

Brian Sulzberger  
Project Number: [none]  
Project: KMG - Buddy 17-7 HZ Pad

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**Notes and Definitions**

\* QC Failure

ND Analyte NOT DETECTED at or above the reporting limit

RPD Relative Percent Difference

All soil results are reported at a wet weight basis.

Origins Laboratory, Inc.



*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

September 30, 2021

WSP USA

Brian Sulzberger

4600 W. 60th Ave.

Arvada CO 80003

Project Name - KMG - Buddy 17-7 HZ Pad

Project Number - [none]

Attached are your analytical results for KMG - Buddy 17-7 HZ Pad received by Origins Laboratory, Inc. September 22, 2021. This project is associated with Origins project number Y109468-01.

The analytical results in the following report were analyzed under the guidelines of EPA Methods. These methods are identified as follows; "SW" are defined in SW-846, "EPA" are defined in 40CFR part 136 and "SM" are defined in the most current revision of Standard Methods For the Examination of Water and Wastewater.

The analytical results apply specifically to the samples and analyses specified per the attached Chain of Custody. As such, this report shall not be reproduced except in full, without the written approval of Origin's laboratory.

Unless otherwise noted, the analytical results for all soil samples are reported on a wet weight basis. All analytical analyses were performed under NELAP guidelines unless noted by a data qualifier.

Any holding time exceedances, deviations from the method specifications or deviations from Origins Laboratory's Standard Operating Procedures are outlined in the case narrative.

Thank you for selecting Origins for your analytical needs. Please contact us with any questions concerning this report, or if we can help with anything at all.

Origins Laboratory, Inc.  
303.433.1322  
o-squad@oelabinc.com



WSP USA  
4600 W. 60th Ave.  
Arvada CO 80003

Brian Sulzberger  
Project Number: [none]  
Project: KMG - Buddy 17-7 HZ Pad

## CROSS REFERENCE REPORT

| Sample ID      | Laboratory ID | Matrix | Date Sampled             | Date Received    |
|----------------|---------------|--------|--------------------------|------------------|
| N01@2'         | Y109468-01    | Soil   | September 22, 2021 15:03 | 09/22/2021 16:55 |
| E01@2'         | Y109468-02    | Soil   | September 22, 2021 15:10 | 09/22/2021 16:55 |
| S01@2'         | Y109468-03    | Soil   | September 22, 2021 15:16 | 09/22/2021 16:55 |
| W01@2'         | Y109468-04    | Soil   | September 22, 2021 15:20 | 09/22/2021 16:55 |
| B03@5'         | Y109468-05    | Soil   | September 22, 2021 15:23 | 09/22/2021 16:55 |
| Native-BG02@5' | Y109468-06    | Soil   | September 22, 2021 15:32 | 09/22/2021 16:55 |
| Native-BG03@5' | Y109468-07    | Soil   | September 22, 2021 15:40 | 09/22/2021 16:55 |
| Native-BG04@5' | Y109468-08    | Soil   | September 22, 2021 15:45 | 09/22/2021 16:55 |
| Native-BG05@5' | Y109468-09    | Soil   | September 22, 2021 15:50 | 09/22/2021 16:55 |

Origins Laboratory, Inc.



*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

WSP USA  
 4600 W. 60th Ave.  
 Arvada CO 80003

Brian Sulzberger  
 Project Number: [none]  
 Project: KMG - Buddy 17-7 HZ Pad

**ORIGINS**  
 LABORATORY, INC

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410946x

page 1 of 1

Client: WSP USA  
 Address: 4600 W. 60th Ave. Arvada 80003  
 Telephone Number: [Redacted]  
 Email Address: [AMC@originslab.com](mailto:AMC@originslab.com)

Project Manager: Brian Sulzberger  
 Project Name: Buddy 17-7 HZ Pad  
 Project Number: 31403177-14  
 Samples Collected By: DH

| Sample ID Description        | Date Sampled  | Time Sampled | # of Containers | Preservative    |               |                  |   | Matrix      |      |            | Analysis | Sample Instructions |
|------------------------------|---------------|--------------|-----------------|-----------------|---------------|------------------|---|-------------|------|------------|----------|---------------------|
|                              |               |              |                 | Unpreserved     | HCl           | HNO <sub>3</sub> | Other   | Groundwater | Soil | At Summa # |          |                     |
| N0102'                       | 9-22-21       | 1503         | 2               | X               |               |                  |   | X           |      |            |          | GW PUMP             |
| E0102'                       |               | 1510         |                 |                 |               |                  |   |             |      |            |          |                     |
| S0102'                       |               | 1516         |                 |                 |               |                  |   |             |      |            |          |                     |
| W0102'                       |               | 1520         |                 |                 |               |                  |   |             |      |            |          |                     |
| B0305'                       |               | 1523         | X               |                 |               |                  |   |             |      |            |          |                     |
| NATIVE-B0102@5'              |               | 1532         |                 |                 |               |                  |   |             |      |            |          |                     |
| NATIVE-B0305@5'              |               | 1540         |                 |                 |               |                  |   |             |      |            |          |                     |
| NATIVE-B0405@5'              |               | 1545         |                 |                 |               |                  |   |             |      |            |          |                     |
| NATIVE-B0505@5'              |               | 1550         |                 |                 |               |                  |   |             |      |            |          |                     |
| Relinquished By: [Signature] | Date: 9-22-21 | Time: 1655   | Time: 1655      | Received By: AH | Date: 9-22-21 | Time: 1659       | Turnaround Time: 24 Hr <input type="checkbox"/> 48 Hr <input type="checkbox"/> 72 Hr <input type="checkbox"/> Standard <input type="checkbox"/> |             |      |            |          |                     |
| Relinquished By:             | Date:         | Time:        | Time:           | Received By:    | Date:         | Time:            |   |             |      |            |          |                     |

Date Results Needed: 8-2

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WSP USA  
 4600 W. 60th Ave.  
 Arvada CO 80003

Brian Sulzberger  
 Project Number: [none]  
 Project: KMG - Buddy 17-7 HZ Pad

Origins Laboratory F-012207-01-R1  
Effective Date: 01/09/12

**Sample Receipt Checklist**

Origins Work Order: Y109468 Client: WSP  
 Client Project ID: Buddy 17-7

Checklist Completed by: JG Shipped Via: HD  
 Date/Time completed: 9/22/21 (UPS, FedEx, Hand Delivered, Pick-up, etc.)  
 Airbill #: N/A

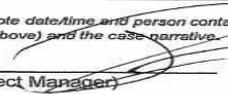
Matrix(s) Received: (Check all that apply):  Soil/Solid  Water  Other: \_\_\_\_\_ (Describe)

Cooler Number/Temperature: 1152 °C 1 °C 1 °C 1 °C

Thermometer ID: T003

| Requirement Description  | Yes                                 | No                                  | N/A                                 | Comments (if any) |
|--|-------------------------------------|-------------------------------------|-------------------------------------|-------------------|
| If samples require cooling, was the temperature between 0°C to ≤ 6°C <sup>(1)</sup> ?  |                                     | <input checked="" type="checkbox"/> |                                     | same day          |
| Is there ice present (document if blue ice is used)  | <input checked="" type="checkbox"/> |                                     |                                     |                   |
| Are custody seals present on cooler? (If so, document in comments if they are signed and dated, broken or intact)  |                                     | <input checked="" type="checkbox"/> |                                     |                   |
| Are custody seals present on each sample container? (If so, document in comments if they are signed and dated, broken or intact)   |                                     | <input checked="" type="checkbox"/> |                                     |                   |
| Were all samples received intact <sup>(1)</sup> ?  | <input checked="" type="checkbox"/> |                                     |                                     |                   |
| Was adequate sample volume provided <sup>(1)</sup> ?   | <input checked="" type="checkbox"/> |                                     |                                     |                   |
| Are short holding time analytes or samples with HTs due within 48 hours present <sup>(1)</sup> ?   |                                     | <input checked="" type="checkbox"/> |                                     |                   |
| Is a chain-of-custody (COC) present and filled out completely <sup>(1)</sup> ?   | <input checked="" type="checkbox"/> |                                     |                                     |                   |
| Does the COC agree with the number and type of sample bottles received <sup>(1)</sup> ?  | <input checked="" type="checkbox"/> |                                     |                                     |                   |
| Do the sample IDs on the bottle labels match the COC <sup>(1)</sup> ?  | <input checked="" type="checkbox"/> |                                     |                                     |                   |
| Is the COC properly relinquished by the client with date and time recorded <sup>(1)</sup> ?  | <input checked="" type="checkbox"/> |                                     |                                     |                   |
| For volatiles in water – is there headspace (> ¼ inch bubble) present? If yes, contact client and note in narrative.   |                                     |                                     | <input checked="" type="checkbox"/> |                   |
| Are samples preserved that require preservation and was it checked <sup>(1)</sup> ? (note ID of confirmation instrument used in comments) / (preservation is not confirmed for subcontracted analyses in order to insure sample integrity)(pH <2 for samples preserved with HNO <sub>3</sub> , HCl, H <sub>2</sub> SO <sub>4</sub> ) / (pH >10 for samples preserved with NaAsO <sub>2</sub> +NaOH, ZnAc+NaOH) |                                     |                                     | <input checked="" type="checkbox"/> |                   |
| Additional Comments (if any):  |                                     |                                     |                                     |                   |

<sup>(1)</sup>If NO, then contact the client before proceeding with analysis and note date/time and person contacted as well as the corrective action to be taken in the additional comments (above) and the case narrative.

Reviewed by (Project Manager) 

Date/Time Reviewed 9/22/21

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WSP USA  
4600 W. 60th Ave.  
Arvada CO 80003

Brian Sulzberger  
Project Number: [none]  
Project: KMG - Buddy 17-7 HZ Pad

N01@2'

9/22/2021 3:03:00PM

| Analyte | Result | Min Detection Limit | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Notes |
|---------|--------|---------------------|-----------------|-------|----------|-------|----------|----------|-------|
|---------|--------|---------------------|-----------------|-------|----------|-------|----------|----------|-------|

**Waypoint Analytical, LLC.**  
Y109468-01 (Soil)

**Total Metals by 6020B**

|        |     |       |      |       |   |         |            |            |  |
|--------|-----|-------|------|-------|---|---------|------------|------------|--|
| Barium | 155 | 0.042 | 0.25 | mg/Kg | 5 | L575874 | 09/24/2021 | 09/28/2021 |  |
|--------|-----|-------|------|-------|---|---------|------------|------------|--|

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WSP USA  
4600 W. 60th Ave.  
Arvada CO 80003

Brian Sulzberger  
Project Number: [none]  
Project: KMG - Buddy 17-7 HZ Pad

E01@2'

9/22/2021 3:10:00PM

| Analyte | Result | Min Detection Limit | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Notes |
|---------|--------|---------------------|-----------------|-------|----------|-------|----------|----------|-------|
|---------|--------|---------------------|-----------------|-------|----------|-------|----------|----------|-------|

**Waypoint Analytical, LLC.**  
Y109468-02 (Soil)

**Total Metals by 6020B**

|        |     |       |      |       |   |         |            |            |  |
|--------|-----|-------|------|-------|---|---------|------------|------------|--|
| Barium | 152 | 0.042 | 0.25 | mg/Kg | 5 | L575874 | 09/24/2021 | 09/28/2021 |  |
|--------|-----|-------|------|-------|---|---------|------------|------------|--|

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WSP USA  
4600 W. 60th Ave.  
Arvada CO 80003

Brian Sulzberger  
Project Number: [none]  
Project: KMG - Buddy 17-7 HZ Pad

S01@2'

9/22/2021 3:16:00PM

| Analyte | Result | Min Detection Limit | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Notes |
|---------|--------|---------------------|-----------------|-------|----------|-------|----------|----------|-------|
|---------|--------|---------------------|-----------------|-------|----------|-------|----------|----------|-------|

**Waypoint Analytical, LLC.**  
Y109468-03 (Soil)

**Total Metals by 6020B**

|        |     |       |      |       |   |         |            |            |  |
|--------|-----|-------|------|-------|---|---------|------------|------------|--|
| Barium | 143 | 0.042 | 0.25 | mg/Kg | 5 | L575874 | 09/24/2021 | 09/28/2021 |  |
|--------|-----|-------|------|-------|---|---------|------------|------------|--|

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WSP USA  
4600 W. 60th Ave.  
Arvada CO 80003

Brian Sulzberger  
Project Number: [none]  
Project: KMG - Buddy 17-7 HZ Pad

W01@2'

9/22/2021 3:20:00PM

| Analyte | Result | Min Detection Limit | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Notes |
|---------|--------|---------------------|-----------------|-------|----------|-------|----------|----------|-------|
|---------|--------|---------------------|-----------------|-------|----------|-------|----------|----------|-------|

**Waypoint Analytical, LLC.**  
Y109468-04 (Soil)

**Total Metals by 6020B**

|        |     |       |      |       |   |         |            |            |  |
|--------|-----|-------|------|-------|---|---------|------------|------------|--|
| Barium | 181 | 0.042 | 0.25 | mg/Kg | 5 | L575874 | 09/24/2021 | 09/28/2021 |  |
|--------|-----|-------|------|-------|---|---------|------------|------------|--|

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WSP USA  
4600 W. 60th Ave.  
Arvada CO 80003

Brian Sulzberger  
Project Number: [none]  
Project: KMG - Buddy 17-7 HZ Pad

**B03@5'**

**9/22/2021 3:23:00PM**

| Analyte | Result | Min Detection Limit | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Notes |
|---------|--------|---------------------|-----------------|-------|----------|-------|----------|----------|-------|
|---------|--------|---------------------|-----------------|-------|----------|-------|----------|----------|-------|

**Waypoint Analytical, LLC.**  
**Y109468-05 (Soil)**

**Total Metals by 6020B**

|        |      |       |      |       |   |         |            |            |  |
|--------|------|-------|------|-------|---|---------|------------|------------|--|
| Barium | 86.8 | 0.042 | 0.25 | mg/Kg | 5 | L575874 | 09/24/2021 | 09/28/2021 |  |
|--------|------|-------|------|-------|---|---------|------------|------------|--|

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WSP USA  
 4600 W. 60th Ave.  
 Arvada CO 80003

Brian Sulzberger  
 Project Number: [none]  
 Project: KMG - Buddy 17-7 HZ Pad

**Native-BG02@5'**  
**9/22/2021 3:32:00PM**

| Analyte | Result | Min Detection Limit | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Notes |
|---------|--------|---------------------|-----------------|-------|----------|-------|----------|----------|-------|
|---------|--------|---------------------|-----------------|-------|----------|-------|----------|----------|-------|

**Origins Laboratory, Inc.**  
**Y109468-06 (Soil)**

**Boron (DTPA Sorbitol)**

|       |       |  |       |      |   |         |            |            |  |
|-------|-------|--|-------|------|---|---------|------------|------------|--|
| Boron | 0.954 |  | 0.199 | mg/L | 1 | B112226 | 09/22/2021 | 09/23/2021 |  |
|-------|-------|--|-------|------|---|---------|------------|------------|--|

**Metals by Saturated Paste**

|           |      |  |       |       |    |        |            |            |  |
|-----------|------|--|-------|-------|----|--------|------------|------------|--|
| Calcium   | 1.40 |  | 0.499 | meq/L | 10 | [CALC] | 09/22/2021 | 09/23/2021 |  |
| Magnesium | 4.13 |  | 0.823 | "     | "  | "      | "          | "          |  |
| Sodium    | 2.09 |  | 0.435 | "     | "  | "      | "          | "          |  |

**pH in Soil by 9045D**

|    |      |  |  |          |   |         |            |            |  |
|----|------|--|--|----------|---|---------|------------|------------|--|
| pH | 8.11 |  |  | pH Units | 1 | B112232 | 09/22/2021 | 09/24/2021 |  |
|----|------|--|--|----------|---|---------|------------|------------|--|

**SAR by 20B Saturated Paste**

|     |       |  |  |     |   |         |            |            |  |
|-----|-------|--|--|-----|---|---------|------------|------------|--|
| SAR | 0.397 |  |  | SAR | 1 | B112225 | 09/22/2021 | 09/23/2021 |  |
|-----|-------|--|--|-----|---|---------|------------|------------|--|

**Specific Conductance Mod. 9050A**

|                           |       |  |         |          |   |         |            |            |  |
|---------------------------|-------|--|---------|----------|---|---------|------------|------------|--|
| Specific Conductance (EC) | 0.742 |  | 0.00500 | mmhos/cm | 1 | B112233 | 09/22/2021 | 09/24/2021 |  |
|---------------------------|-------|--|---------|----------|---|---------|------------|------------|--|

**Total Metals by 6020B**

|         |       |        |      |       |   |         |            |            |   |
|---------|-------|--------|------|-------|---|---------|------------|------------|---|
| Arsenic | 4.78  | 0.0855 | 0.25 | mg/Kg | 5 | L575874 | 09/24/2021 | 09/28/2021 |   |
| Barium  | 131   | 0.042  | 0.25 | "     | " | "       | "          | "          |   |
| Cadmium | 0.219 | 0.0259 | 0.25 | "     | " | "       | "          | "          | J |
| Copper  | 11    | 0.0806 | 0.25 | "     | " | "       | "          | "          |   |

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WSP USA  
 4600 W. 60th Ave.  
 Arvada CO 80003

Brian Sulzberger  
 Project Number: [none]  
 Project: KMG - Buddy 17-7 HZ Pad

**Native-BG02@5'**  
**9/22/2021 3:32:00PM**

| Analyte | Result | Min Detection Limit | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Notes |
|---------|--------|---------------------|-----------------|-------|----------|-------|----------|----------|-------|
|---------|--------|---------------------|-----------------|-------|----------|-------|----------|----------|-------|

**Waypoint Analytical, LLC.**  
**Y109468-06 (Soil)**

**Total Metals by 6020B**

|          |        |        |      |       |   |         |            |            |   |
|----------|--------|--------|------|-------|---|---------|------------|------------|---|
| Lead     | 9.53   | 0.031  | 0.25 | mg/Kg | 5 | L575874 | 09/24/2021 | 09/28/2021 |   |
| Nickel   | 15.1   | 0.0633 | 0.25 | "     | " | "       | "          | "          |   |
| Selenium | 0.368  | 0.103  | 0.25 | "     | " | "       | "          | "          |   |
| Silver   | 0.0432 | 0.0067 | 0.25 | "     | " | "       | "          | "          | J |
| Zinc     | 42.9   | 0.534  | 2.5  | "     | " | "       | "          | "          |   |

**Total Metals by 7196A**

|                      |    |       |     |       |   |         |            |            |  |
|----------------------|----|-------|-----|-------|---|---------|------------|------------|--|
| Chromium, Hexavalent | ND | 0.244 | 0.5 | mg/Kg | 1 | L575959 | 09/22/2021 | 09/27/2021 |  |
|----------------------|----|-------|-----|-------|---|---------|------------|------------|--|

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WSP USA  
 4600 W. 60th Ave.  
 Arvada CO 80003

Brian Sulzberger  
 Project Number: [none]  
 Project: KMG - Buddy 17-7 HZ Pad

**Native-BG03@5'**  
**9/22/2021 3:40:00PM**

| Analyte | Result | Min Detection Limit | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Notes |
|---------|--------|---------------------|-----------------|-------|----------|-------|----------|----------|-------|
|---------|--------|---------------------|-----------------|-------|----------|-------|----------|----------|-------|

**Origins Laboratory, Inc.**  
**Y109468-07 (Soil)**

**Boron (DTPA Sorbitol)**

|       |       |  |       |      |   |         |            |            |  |
|-------|-------|--|-------|------|---|---------|------------|------------|--|
| Boron | 0.719 |  | 0.200 | mg/L | 1 | B112226 | 09/22/2021 | 09/23/2021 |  |
|-------|-------|--|-------|------|---|---------|------------|------------|--|

**Metals by Saturated Paste**

|           |      |  |       |       |    |        |            |            |  |
|-----------|------|--|-------|-------|----|--------|------------|------------|--|
| Calcium   | 12.0 |  | 0.499 | meq/L | 10 | [CALC] | 09/22/2021 | 09/23/2021 |  |
| Magnesium | 11.1 |  | 0.823 | "     | "  | "      | "          | "          |  |
| Sodium    | 3.34 |  | 0.435 | "     | "  | "      | "          | "          |  |

**pH in Soil by 9045D**

|    |      |  |  |          |   |         |            |            |  |
|----|------|--|--|----------|---|---------|------------|------------|--|
| pH | 7.78 |  |  | pH Units | 1 | B112232 | 09/22/2021 | 09/24/2021 |  |
|----|------|--|--|----------|---|---------|------------|------------|--|

**SAR by 20B Saturated Paste**

|     |       |  |  |     |   |         |            |            |  |
|-----|-------|--|--|-----|---|---------|------------|------------|--|
| SAR | 0.983 |  |  | SAR | 1 | B112225 | 09/22/2021 | 09/23/2021 |  |
|-----|-------|--|--|-----|---|---------|------------|------------|--|

**Specific Conductance Mod. 9050A**

|                           |      |  |         |          |   |         |            |            |  |
|---------------------------|------|--|---------|----------|---|---------|------------|------------|--|
| Specific Conductance (EC) | 2.16 |  | 0.00500 | mmhos/cm | 1 | B112233 | 09/22/2021 | 09/24/2021 |  |
|---------------------------|------|--|---------|----------|---|---------|------------|------------|--|

**Total Metals by 6020B**

|         |       |        |      |       |   |         |            |            |   |
|---------|-------|--------|------|-------|---|---------|------------|------------|---|
| Arsenic | 2.92  | 0.0855 | 0.25 | mg/Kg | 5 | L575874 | 09/24/2021 | 09/28/2021 |   |
| Barium  | 77.6  | 0.042  | 0.25 | "     | " | "       | "          | "          |   |
| Cadmium | 0.186 | 0.0259 | 0.25 | "     | " | "       | "          | "          | J |
| Copper  | 5.89  | 0.0806 | 0.25 | "     | " | "       | "          | "          |   |

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WSP USA  
 4600 W. 60th Ave.  
 Arvada CO 80003

Brian Sulzberger  
 Project Number: [none]  
 Project: KMG - Buddy 17-7 HZ Pad

**Native-BG03@5'**  
**9/22/2021 3:40:00PM**

| Analyte | Result | Min Detection Limit | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Notes |
|---------|--------|---------------------|-----------------|-------|----------|-------|----------|----------|-------|
|---------|--------|---------------------|-----------------|-------|----------|-------|----------|----------|-------|

**Waypoint Analytical, LLC.**  
**Y109468-07 (Soil)**

**Total Metals by 6020B**

|          |        |        |      |       |   |         |            |            |   |
|----------|--------|--------|------|-------|---|---------|------------|------------|---|
| Lead     | 7.31   | 0.031  | 0.25 | mg/Kg | 5 | L575874 | 09/24/2021 | 09/28/2021 |   |
| Nickel   | 9.36   | 0.0633 | 0.25 | "     | " | "       | "          | "          |   |
| Selenium | 0.306  | 0.103  | 0.25 | "     | " | "       | "          | "          |   |
| Silver   | 0.0243 | 0.0067 | 0.25 | "     | " | "       | "          | "          | J |
| Zinc     | 31.7   | 0.534  | 2.5  | "     | " | "       | "          | "          |   |

**Total Metals by 7196A**

|                      |    |       |       |       |   |         |            |            |  |
|----------------------|----|-------|-------|-------|---|---------|------------|------------|--|
| Chromium, Hexavalent | ND | 0.249 | 0.512 | mg/Kg | 1 | L575959 | 09/22/2021 | 09/27/2021 |  |
|----------------------|----|-------|-------|-------|---|---------|------------|------------|--|

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WSP USA  
 4600 W. 60th Ave.  
 Arvada CO 80003

Brian Sulzberger  
 Project Number: [none]  
 Project: KMG - Buddy 17-7 HZ Pad

**Native-BG04@5'**  
**9/22/2021 3:45:00PM**

| Analyte | Result | Min Detection Limit | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Notes |
|---------|--------|---------------------|-----------------|-------|----------|-------|----------|----------|-------|
|---------|--------|---------------------|-----------------|-------|----------|-------|----------|----------|-------|

**Origins Laboratory, Inc.**  
**Y109468-08 (Soil)**

**Boron (DTPA Sorbitol)**

|       |       |  |       |      |   |         |            |            |  |
|-------|-------|--|-------|------|---|---------|------------|------------|--|
| Boron | 0.897 |  | 0.199 | mg/L | 1 | B112226 | 09/22/2021 | 09/23/2021 |  |
|-------|-------|--|-------|------|---|---------|------------|------------|--|

**Metals by Saturated Paste**

|           |      |  |       |       |    |        |            |            |  |
|-----------|------|--|-------|-------|----|--------|------------|------------|--|
| Calcium   | 13.0 |  | 0.499 | meq/L | 10 | [CALC] | 09/22/2021 | 09/23/2021 |  |
| Magnesium | 12.4 |  | 0.823 | "     | "  | "      | "          | "          |  |
| Sodium    | 3.78 |  | 0.435 | "     | "  | "      | "          | "          |  |

**pH in Soil by 9045D**

|    |      |  |  |          |   |         |            |            |  |
|----|------|--|--|----------|---|---------|------------|------------|--|
| pH | 7.69 |  |  | pH Units | 1 | B112232 | 09/22/2021 | 09/24/2021 |  |
|----|------|--|--|----------|---|---------|------------|------------|--|

**SAR by 20B Saturated Paste**

|     |      |  |  |     |   |         |            |            |  |
|-----|------|--|--|-----|---|---------|------------|------------|--|
| SAR | 1.06 |  |  | SAR | 1 | B112225 | 09/22/2021 | 09/23/2021 |  |
|-----|------|--|--|-----|---|---------|------------|------------|--|

**Specific Conductance Mod. 9050A**

|                           |      |  |         |          |   |         |            |            |  |
|---------------------------|------|--|---------|----------|---|---------|------------|------------|--|
| Specific Conductance (EC) | 2.35 |  | 0.00500 | mmhos/cm | 1 | B112233 | 09/22/2021 | 09/24/2021 |  |
|---------------------------|------|--|---------|----------|---|---------|------------|------------|--|

**Total Metals by 6020B**

|         |       |        |      |       |   |         |            |            |   |
|---------|-------|--------|------|-------|---|---------|------------|------------|---|
| Arsenic | 3.21  | 0.0855 | 0.25 | mg/Kg | 5 | L575874 | 09/24/2021 | 09/28/2021 |   |
| Barium  | 75.8  | 0.042  | 0.25 | "     | " | "       | "          | "          |   |
| Cadmium | 0.142 | 0.0259 | 0.25 | "     | " | "       | "          | "          | J |
| Copper  | 6.1   | 0.0806 | 0.25 | "     | " | "       | "          | "          |   |

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WSP USA  
 4600 W. 60th Ave.  
 Arvada CO 80003

Brian Sulzberger  
 Project Number: [none]  
 Project: KMG - Buddy 17-7 HZ Pad

**Native-BG04@5'**  
**9/22/2021 3:45:00PM**

| Analyte | Result | Min Detection Limit | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Notes |
|---------|--------|---------------------|-----------------|-------|----------|-------|----------|----------|-------|
|---------|--------|---------------------|-----------------|-------|----------|-------|----------|----------|-------|

**Waypoint Analytical, LLC.**  
**Y109468-08 (Soil)**

**Total Metals by 6020B**

|          |        |        |      |       |   |         |            |            |   |
|----------|--------|--------|------|-------|---|---------|------------|------------|---|
| Lead     | 7.58   | 0.031  | 0.25 | mg/Kg | 5 | L575874 | 09/24/2021 | 09/28/2021 |   |
| Nickel   | 9.84   | 0.0633 | 0.25 | "     | " | "       | "          | "          |   |
| Selenium | 0.328  | 0.103  | 0.25 | "     | " | "       | "          | "          |   |
| Silver   | 0.0232 | 0.0067 | 0.25 | "     | " | "       | "          | "          | J |
| Zinc     | 33.2   | 0.534  | 2.5  | "     | " | "       | "          | "          |   |

**Total Metals by 7196A**

|                      |    |       |       |       |   |         |            |            |  |
|----------------------|----|-------|-------|-------|---|---------|------------|------------|--|
| Chromium, Hexavalent | ND | 0.249 | 0.512 | mg/Kg | 1 | L575959 | 09/22/2021 | 09/27/2021 |  |
|----------------------|----|-------|-------|-------|---|---------|------------|------------|--|

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WSP USA  
 4600 W. 60th Ave.  
 Arvada CO 80003

Brian Sulzberger  
 Project Number: [none]  
 Project: KMG - Buddy 17-7 HZ Pad

**Native-BG05@5'**  
**9/22/2021 3:50:00PM**

| Analyte | Result | Min Detection Limit | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Notes |
|---------|--------|---------------------|-----------------|-------|----------|-------|----------|----------|-------|
|---------|--------|---------------------|-----------------|-------|----------|-------|----------|----------|-------|

**Origins Laboratory, Inc.**  
**Y109468-09 (Soil)**

**Boron (DTPA Sorbitol)**

|       |      |  |       |      |   |         |            |            |  |
|-------|------|--|-------|------|---|---------|------------|------------|--|
| Boron | 1.24 |  | 0.200 | mg/L | 1 | B112226 | 09/22/2021 | 09/23/2021 |  |
|-------|------|--|-------|------|---|---------|------------|------------|--|

**Metals by Saturated Paste**

|           |      |  |       |       |    |        |            |            |  |
|-----------|------|--|-------|-------|----|--------|------------|------------|--|
| Calcium   | 6.79 |  | 0.499 | meq/L | 10 | [CALC] | 09/22/2021 | 09/23/2021 |  |
| Magnesium | 6.82 |  | 0.823 | "     | "  | "      | "          | "          |  |
| Sodium    | 2.33 |  | 0.435 | "     | "  | "      | "          | "          |  |

**pH in Soil by 9045D**

|    |      |  |  |          |   |         |            |            |  |
|----|------|--|--|----------|---|---------|------------|------------|--|
| pH | 7.89 |  |  | pH Units | 1 | B112232 | 09/22/2021 | 09/24/2021 |  |
|----|------|--|--|----------|---|---------|------------|------------|--|

**SAR by 20B Saturated Paste**

|     |       |  |  |     |   |         |            |            |  |
|-----|-------|--|--|-----|---|---------|------------|------------|--|
| SAR | 0.894 |  |  | SAR | 1 | B112225 | 09/22/2021 | 09/23/2021 |  |
|-----|-------|--|--|-----|---|---------|------------|------------|--|

**Specific Conductance Mod. 9050A**

|                           |      |  |         |          |   |         |            |            |  |
|---------------------------|------|--|---------|----------|---|---------|------------|------------|--|
| Specific Conductance (EC) | 1.46 |  | 0.00500 | mmhos/cm | 1 | B112233 | 09/22/2021 | 09/24/2021 |  |
|---------------------------|------|--|---------|----------|---|---------|------------|------------|--|

**Total Metals by 6020B**

|         |       |        |      |       |   |         |            |            |   |
|---------|-------|--------|------|-------|---|---------|------------|------------|---|
| Arsenic | 4.55  | 0.0855 | 0.25 | mg/Kg | 5 | L575874 | 09/24/2021 | 09/28/2021 |   |
| Barium  | 161   | 0.042  | 0.25 | "     | " | "       | "          | "          |   |
| Cadmium | 0.211 | 0.0259 | 0.25 | "     | " | "       | "          | "          | J |
| Copper  | 13.5  | 0.0806 | 0.25 | "     | " | "       | "          | "          |   |

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WSP USA  
 4600 W. 60th Ave.  
 Arvada CO 80003

Brian Sulzberger  
 Project Number: [none]  
 Project: KMG - Buddy 17-7 HZ Pad

**Native-BG05@5'**  
**9/22/2021 3:50:00PM**

| Analyte | Result | Min Detection Limit | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Notes |
|---------|--------|---------------------|-----------------|-------|----------|-------|----------|----------|-------|
|---------|--------|---------------------|-----------------|-------|----------|-------|----------|----------|-------|

**Waypoint Analytical, LLC.**  
**Y109468-09 (Soil)**

**Total Metals by 6020B**

|          |        |        |      |       |   |         |            |            |   |
|----------|--------|--------|------|-------|---|---------|------------|------------|---|
| Lead     | 12.7   | 0.031  | 0.25 | mg/Kg | 5 | L575874 | 09/24/2021 | 09/28/2021 |   |
| Nickel   | 16.1   | 0.0633 | 0.25 | "     | " | "       | "          | "          |   |
| Selenium | 0.491  | 0.103  | 0.25 | "     | " | "       | "          | "          |   |
| Silver   | 0.0689 | 0.0067 | 0.25 | "     | " | "       | "          | "          | J |
| Zinc     | 55.7   | 0.534  | 2.5  | "     | " | "       | "          | "          |   |

**Total Metals by 7196A**

|                      |    |      |     |       |   |         |            |            |  |
|----------------------|----|------|-----|-------|---|---------|------------|------------|--|
| Chromium, Hexavalent | ND | 1.22 | 2.5 | mg/Kg | 5 | L575959 | 09/22/2021 | 09/27/2021 |  |
|----------------------|----|------|-----|-------|---|---------|------------|------------|--|

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Brian Sulzberger  
 Project Number: [none]  
 Project: KMG - Buddy 17-7 HZ Pad

**Saturated Paste - Quality Control**  
**Origins Laboratory, Inc.**

| Analyte                         | Result  | Reporting Limit                           | Units    | Spike Level | Source Result                             | %REC | %REC Limits | RPD   | RPD Limit | Notes |
|---------------------------------|---------|---|----------|-------------|---|------|-------------|-------|-----------|-------|
| <b>Batch B1I2232 - NO PREP</b>  |         |   |          |             |   |      |             |       |           |       |
| <b>Duplicate (B1I2232-DUP1)</b> |         | <b>Source: Y109466-01</b>                 |          |             | Prepared: 09/22/2021 Analyzed: 09/24/2021 |      |             |       |           |       |
| pH                              | 7.54    |   | pH Units |             | 7.53                                      |      |             | 0.133 | 25        |       |
| <b>Batch B1I2233 - NO PREP</b>  |         |   |          |             |   |      |             |       |           |       |
| <b>Blank (B1I2233-BLK1)</b>     |         | Prepared: 09/22/2021 Analyzed: 09/24/2021 |          |             |   |      |             |       |           |       |
| Specific Conductance (EC)       | 0.00430 | 0.00500                                   | mmhos/cm |             |   |      |             |       |           |       |
| <b>Duplicate (B1I2233-DUP1)</b> |         | <b>Source: Y109466-01</b>                 |          |             | Prepared: 09/22/2021 Analyzed: 09/24/2021 |      |             |       |           |       |
| Specific Conductance (EC)       | 0.900   | 0.00500                                   | mmhos/cm |             | 0.881                                     |      |             | 2.12  | 25        |       |

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WSP USA  
 4600 W. 60th Ave.  
 Arvada CO 80003

Brian Sulzberger  
 Project Number: [none]  
 Project: KMG - Buddy 17-7 HZ Pad

**Total Metals by 6020B - Quality Control**  
**Waypoint Analytical, LLC.**

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---------|--------|-----------------|-------|-------------|---------------|------|-------------|-----|-----------|-------|
|---------|--------|-----------------|-------|-------------|---------------|------|-------------|-----|-----------|-------|

**Batch L575874 - 3050B**

| <b>MSD (L 91917-MSD-L575874)</b> |       | <b>Source: 91917</b> |       |       | Prepared: 09/24/2021 Analyzed: 09/28/2021 |     |        |      |    |   |
|----------------------------------|-------|----------------------|-------|-------|---|-----|--------|------|----|---|
| Selenium                         | 4.75  | 0.103                | mg/Kg | 4.95  | 0.249                                     | 96  | 75-125 | 4.3  | 80 |   |
| Arsenic                          | 3.29  | 0.0855               | "     | 2.48  | 1.26                                      | 82  | 75-125 | 2.1  | 80 |   |
| Silver                           | 0.51  | 0.0067               | "     | 0.495 | 0.0283                                    | 103 | 75-125 | 0.9  | 80 |   |
| Nickel                           | 5.5   | 0.0633               | "     | 2.48  | 3.65                                      | 75  | 75-125 | 14.8 | 80 |   |
| Lead                             | 7.47  | 0.031                | "     | 2.48  | 6.45                                      | 41  | 75-125 | 3    | 80 | * |
| Copper                           | 6.12  | 0.0806               | "     | 2.48  | 4.82                                      | 53  | 75-125 | 3    | 80 | * |
| Cadmium                          | 0.568 | 0.0259               | "     | 0.495 | 0.101                                     | 115 | 75-125 | 5.6  | 80 |   |
| Barium                           | 59.5  | 0.042                | "     | 4.95  | 78.8                                      | NR  | 75-125 | 31.4 | 80 | * |
| Zinc                             | 44.1  | 0.534                | "     | 24.8  | 18.8                                      | 102 | 75-125 | 8.2  | 80 |   |

| <b>MS (L 91917-MS-L575874)</b> |       | <b>Source: 91917</b> |       |       | Prepared: 09/24/2021 Analyzed: 09/28/2021 |     |        |  |  |   |
|--------------------------------|-------|----------------------|-------|-------|---|-----|--------|--|--|---|
| Zinc                           | 40.6  | 0.534                | mg/Kg | 24.2  | 18.8                                      | 90  | 75-125 |  |  |   |
| Arsenic                        | 3.22  | 0.0855               | "     | 2.42  | 1.26                                      | 81  | 75-125 |  |  |   |
| Barium                         | 81.7  | 0.042                | "     | 4.83  | 78.8                                      | 60  | 75-125 |  |  | * |
| Cadmium                        | 0.537 | 0.0259               | "     | 0.483 | 0.101                                     | 111 | 75-125 |  |  |   |
| Copper                         | 6.31  | 0.0806               | "     | 2.42  | 4.82                                      | 62  | 75-125 |  |  | * |
| Lead                           | 7.7   | 0.031                | "     | 2.42  | 6.45                                      | 52  | 75-125 |  |  | * |
| Nickel                         | 6.38  | 0.0633               | "     | 2.42  | 3.65                                      | 113 | 75-125 |  |  |   |
| Selenium                       | 4.55  | 0.103                | "     | 4.83  | 0.249                                     | 94  | 75-125 |  |  |   |
| Silver                         | 0.505 | 0.0067               | "     | 0.483 | 0.0283                                    | 105 | 75-125 |  |  |   |

| <b>LCS (LCS-L575874)</b> |       |        |       |     | Prepared: 09/24/2021 Analyzed: 09/28/2021 |     |        |  |  |  |
|--------------------------|-------|--------|-------|-----|---|-----|--------|--|--|--|
| Cadmium                  | 0.473 | 0.0259 | mg/Kg | 0.5 |   | 95  | 80-120 |  |  |  |
| Copper                   | 2.61  | 0.0806 | "     | 2.5 |   | 104 | 80-120 |  |  |  |
| Lead                     | 2.46  | 0.031  | "     | 2.5 |   | 98  | 80-120 |  |  |  |
| Nickel                   | 2.64  | 0.0633 | "     | 2.5 |   | 106 | 80-120 |  |  |  |
| Selenium                 | 5.52  | 0.103  | "     | 5   |   | 110 | 80-120 |  |  |  |

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WSP USA  
 4600 W. 60th Ave.  
 Arvada CO 80003

Brian Sulzberger  
 Project Number: [none]  
 Project: KMG - Buddy 17-7 HZ Pad

**Total Metals by 6020B - Quality Control**  
**Waypoint Analytical, LLC.**

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---------|--------|-----------------|-------|-------------|---------------|------|-------------|-----|-----------|-------|
|---------|--------|-----------------|-------|-------------|---------------|------|-------------|-----|-----------|-------|

**Batch L575874 - 3050B**

**LCS (LCS-L575874)**

Prepared: 09/24/2021 Analyzed: 09/28/2021

|         |      |        |       |     |  |     |        |  |  |  |
|---------|------|--------|-------|-----|--|-----|--------|--|--|--|
| Silver  | 0.5  | 0.0067 | mg/Kg | 0.5 |  | 100 | 80-120 |  |  |  |
| Zinc    | 25.6 | 0.534  | "     | 25  |  | 102 | 80-120 |  |  |  |
| Barium  | 5.09 | 0.042  | "     | 5   |  | 102 | 80-120 |  |  |  |
| Arsenic | 2.7  | 0.0855 | "     | 2.5 |  | 108 | 80-120 |  |  |  |

**LRB (LRB-L575874)**

Prepared: 09/24/2021 Analyzed: 09/28/2021

|          |    |      |       |  |  |  |   |  |  |  |
|----------|----|------|-------|--|--|--|---|--|--|--|
| Barium   | ND | 0.25 | mg/Kg |  |  |  | - |  |  |  |
| Zinc     | ND | 2.5  | "     |  |  |  | - |  |  |  |
| Silver   | ND | 0.25 | "     |  |  |  | - |  |  |  |
| Selenium | ND | 0.25 | "     |  |  |  | - |  |  |  |
| Nickel   | ND | 0.25 | "     |  |  |  | - |  |  |  |
| Lead     | ND | 0.25 | "     |  |  |  | - |  |  |  |
| Cadmium  | ND | 0.25 | "     |  |  |  | - |  |  |  |
| Arsenic  | ND | 0.25 | "     |  |  |  | - |  |  |  |
| Copper   | ND | 0.25 | "     |  |  |  | - |  |  |  |

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 4600 W. 60th Ave.  
 Arvada CO 80003

Brian Sulzberger  
 Project Number: [none]  
 Project: KMG - Buddy 17-7 HZ Pad

**Total Metals by 7196A - Quality Control**  
**Waypoint Analytical, LLC.**

| Analyte                  | Result | Reporting Limit                | Units | Spike Level | Source Result                  | %REC | %REC Limits | RPD | RPD Limit | Notes |
|--------------------------|--------|--------------------------------|-------|-------------|--------------------------------|------|-------------|-----|-----------|-------|
| <b>Batch L575959 -</b>   |        |                                |       |             |                                |      |             |     |           |       |
| <b>DUP (L 91907-DUP)</b> |        | <b>Source: Y109468-06</b>      |       |             | Prepared: Analyzed: 09/27/2021 |      |             |     |           |       |
| Chromium, Hexavalent     | ND     | 0.253                          | mg/Kg |             | 91907                          |      | -           | 0   | 20        |       |
| <b>MS (L 91907-MS)</b>   |        | <b>Source: Y109468-06</b>      |       |             | Prepared: Analyzed: 09/27/2021 |      |             |     |           |       |
| Chromium, Hexavalent     | 5.11   | 0.244                          | mg/Kg | 7.75        | 91907                          | 66   | 75-125      |     |           | *     |
| <b>LCS (LCS)</b>         |        | Prepared: Analyzed: 09/27/2021 |       |             |                                |      |             |     |           |       |
| Chromium, Hexavalent     | 6.69   | 0.244                          | mg/Kg | 8           |                                | 84   | 75-125      |     |           |       |
| <b>LRB (LRB)</b>         |        | Prepared: Analyzed: 09/27/2021 |       |             |                                |      |             |     |           |       |
| Chromium, Hexavalent     | ND     | 0.5                            | mg/Kg |             |                                |      | -           |     |           |       |

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WSP USA  
4600 W. 60th Ave.  
Arvada CO 80003

Brian Sulzberger  
Project Number: [none]  
Project: KMG - Buddy 17-7 HZ Pad

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**Notes and Definitions**

J Estimated Value. Analyte below reported quantitation limit.

\* QC Failure

ND Analyte NOT DETECTED at or above the reporting limit

RPD Relative Percent Difference

All soil results are reported on a wet weight basis.

Origins Laboratory, Inc.



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