



**MOUNTAIN
RESEARCH, LLC**

August 10, 2011

Corporate Office & Laboratory:

825 25th Street
Altoona, PA 16601
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Fax (814) 949-9591
PADEP #07-418 EPA Lab #PA00165

Baltimore Office:

6400 Baltimore National Pike
170-A, #127
Catonsville, MD 21228
(410) 980-7619
Fax (877) 746-0704

DuBois Office & Laboratory:

110 McCracken Run Road
DuBois, PA 15801
(814) 371-6030
Fax (814) 375-0823
PADEP #33-258 EPA Lab #PA00155

Chuck Hess
Boro of Punxsutawney STP
301 East Mahoning
Punxsutawney, PA 15767
TEL: (814) 938-4396
FAX: (814) 938-0455

RE: Analysis of Effluent for Dannic Energy

Order No.: 1107284

Dear Chuck Hess,

Mountain Research, LLC ~ DuBois Office received 1 sample on 7/19/2011 for the analyses presented in the following report.

There were no problems with the analyses and all data for associated QC met EPA or laboratory specifications except where noted in the Case Narrative.

If you have any questions regarding these tests results, please feel free to call.

Sincerely,

Mountain Research, LLC ~ DuBois Office

Date: 10-Aug-11

CLIENT: Boro of Punxsutawney STP
Project: Analysis of Effluent for Dannic Energy
Lab Order: 1107284

CASE NARRATIVE

No problems were encountered during analysis of this work order number.

Laboratory Key:

MR-A Mountain Research, LLC - Altoona PA DEP #07-418

MR-D Mountain Research, LLC - DuBois PA DEP #33-258

ASI Analytical Services PA DEP #33-00411

SET Summit Environmental Tech PA DEP #68-01335



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Mountain Research, LLC ~ DuBois Office

Date: 10-Aug-11

CLIENT: Chuck Hess
Boro of Punxsutawney STP
301 East Mahoning
Punxsutawney, PA 15767
Project Denise Foradori
Project Name: Analysis of Effluent for Dannic Energy
Project Id: 6025.11.01

Lab Order: 1107284
Lab ID: 1107284-01
Collected By: R. BUTLER
Tag Number:
Collection Date: 7/19/2011 7:00:00 AM
Matrix: Waste Water - COMPOSITE
Client Sample ID: EFFLUENT

| Test Name Analyses | Test Code | Result | Detection Limit Units | Date | Laboratory |
|--|--|--------|--------------------------|-----------|------------|
| ALKALINITY Alkalinity | EPA 310.2, SM2320B | 93 | 15 mg/L | 7/26/2011 | MR-A |
| BROMIDE Bromide | E300.0-BR | 19.7 | 0.1 mg/L | 7/27/2011 | ASI |
| CHLORIDE Chloride | EPA325.2 & SM4500CHLORIDE-E | 1600 | 100 mg/L | 7/28/2011 | MR-A |
| SULFATE IN WATER SULFATE | D 516-90 | 150 | 25 mg/L | 7/26/2011 | MR-A |
| TOTAL DISSOLVED SOLIDS Total Dissolved Solids (Residue, Filterable) | SM2540C, EPA160.1 | 3700 | 10 mg/L | 7/20/2011 | MR-A |
| URANIUM Uranium | EPA_200.8 | ND | 1 ug/L | 7/22/2011 | SET |

| Test Name Analyses | Test Code | Result | LOQ | Units | Date | Analyst |
|--|------------------|---------------|-----|-------|----------|---------|
| Radium-226 Radium-226 | EPA 903.0 | 1.96+/-0.3 | 1 | pCi/L | 08/02/11 | SET |
| Radium-228 Radium-228 | EPA 904.0 | 5.01+/-0.38 | 1 | pCi/L | 08/01/11 | SET |
| Gross Alpha/Beta Gross Alpha | EPA 900.0 | 12.78+/-10.94 | 3 | pCi/L | 07/28/11 | SET |

Qualifiers: ND - Not Detected at the Reporting Limit

| CLIENT PROJECT # B6025 | | BAES PROJECT NAME <i>Dannic Bi-Monthly Samples</i> | | MOUNTAIN RESEARCH, LLC - DUBOIS OFFICE 110 McCracken Run Road DuBois, PA 15801 Phone: (814) 371-6030 Fax: (814) 375-0823 CHAIN OF CUSTODY RECORD | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| BAES PROJECT # 6025.11.01 | | SITE LOCATION <i>Punxsy WWTP ETL.</i> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CLIENT PUNXSU BOROUGH | | SAMPLER <i>R Butler</i> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ADDRESS: WATER STREET EXT. PUNXSUTAWNEY, PA 15767 | | | | <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2" style="writing-mode: vertical-rl; transform: rotate(180deg);">NUMBER OF CONTAINERS</th> <th rowspan="2" style="writing-mode: vertical-rl; transform: rotate(180deg);">TDS, ALKALINITY, CHLORIDE, SULFATE</th> <th rowspan="2" style="writing-mode: vertical-rl; transform: rotate(180deg);">BROMIDE</th> <th rowspan="2" style="writing-mode: vertical-rl; transform: rotate(180deg);">GROSS ALPHA</th> <th rowspan="2" style="writing-mode: vertical-rl; transform: rotate(180deg);">RADIUM 226</th> <th rowspan="2" style="writing-mode: vertical-rl; transform: rotate(180deg);">RADIUM 228</th> <th rowspan="2" style="writing-mode: vertical-rl; transform: rotate(180deg);">URANIUM</th> <th colspan="10">PARAMETERS</th> <th rowspan="2" style="writing-mode: vertical-rl; transform: rotate(180deg);">MR PROJ. MGR.</th> </tr> <tr> <th colspan="10"> </th> </tr> </thead> <tbody> <tr> <td colspan="13" style="text-align: center;">SAMPLE TEMP. <i>8</i></td> </tr> <tr> <td colspan="13" style="text-align: center;"> </td> </tr> </tbody> </table> | | | | | | | | | | | | NUMBER OF CONTAINERS | TDS, ALKALINITY, CHLORIDE, SULFATE | BROMIDE | GROSS ALPHA | RADIUM 226 | RADIUM 228 | URANIUM | PARAMETERS | | | | | | | | | | MR PROJ. MGR. | | | | | | | | | | | SAMPLE TEMP. <i>8</i> | | | | | | | | | | | | | | | | | | | | | | | | | |
| NUMBER OF CONTAINERS | TDS, ALKALINITY, CHLORIDE, SULFATE | BROMIDE | GROSS ALPHA | | | | | | | | | | | | | | | | | | | | RADIUM 226 | RADIUM 228 | URANIUM | PARAMETERS | | | | | | | | | | MR PROJ. MGR. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| SAMPLE TEMP. <i>8</i> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| PHONE: (814) 938-4396 FAX: (814) 938-0455 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CONTACT: CHUCK HESS | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| COMMENTS: INVOICE DANNIC ENERGY | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| FIELD ID.NO. | LOCATION | DATE | TIME | GRAB | COMP | | | | | | | | | | | | | | | | | | PRESER | LAB NUMBER | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | <i>ETL</i> | <i>7/19</i> | <i>7:02</i> | | X | 1-500 ML | X | | | | | | | | | | | | | | | | NONE | <i>OIA</i> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | ↓ | ↓ | ↓ | | | 1-PL 250 ML | | X | | | | | | | | | | | | | | | NONE | <i>OIB</i> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | ↓ | ↓ | ↓ | | | 1-PL LTR | | | X | | | | | | | | | | | | | | HN05 | <i>OIC</i> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | ↓ | ↓ | ↓ | | | 1-PL LTR | | | | X | | | | | | | | | | | | | HN05 | <i>OID</i> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | ↓ | ↓ | ↓ | | | 1-PL LTR | | | | | X | | | | | | | | | | | | HN03 | <i>OIE</i> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | ↓ | ↓ | ↓ | | | 1-PL 250 ML | | | | | | X | | | | | | | | | | | HN05 | <i>OIF</i> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| RELINQUISHED BY: <i>R Butler</i> | | DATE <i>7/19/11</i> | TIME <i>7:15</i> | RECEIVED BY: <i>Michelle R...</i> | | DATE <i>7/19/11</i> | TIME <i>10:12</i> | Logged In By: <i>DS 7-19-11 1346</i> | | Labeled By: <i>DS</i> | | SPECIAL HANDLING RUSH NORMAL FAX QA/QC | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| RELINQUISHED BY: <i>Michelle Rose</i> | | DATE <i>7/19/11</i> | TIME <i>12:20</i> | RECEIVED BY LABORATORY: <i>D Shannon</i> | | DATE <i>7-19-11</i> | TIME <i>1253</i> | COC # <i>1107234</i> | | Scheduled By: | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |