

G2 STEM EPA PERMIT REQUEST REPORT

David A. Weaver #1
Jefferson County, PA
New Well Permit Application

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**United States Environmental Protection Agency Underground Injection
Control (UIC) Program Class II Permit Application Completeness
Review Checklist**

TABLE OF CONTENTS

	Page Number
<u>EPA FORM 7520-6 UIC PERMIT APPLICATION FOR A CLASS II WELL</u>	<u>6</u>
<u>ATTACHMENT A. MAPS AND AREA OF REVIEW</u>	<u>13-33</u>
I. WELL LOCATION(S) AND PERMITTED AREA DESCRIPTION (IF AREA PERMIT) II. AREA OF REVIEW SIZE DETERMINATION – FIXED RADIUS OR EQUATION III. MAPS a. TOPOGRAPHIC MAP EXTENDING ONE MILE BEYOND FACILITY PROPERTY BOUNDARY SHOWING i. INJECTION WELL, WELL PAD, AND PROJECT AREA ii. AREA OF REVIEW BOUNDARY iii. OUTCROPS OF INJECTION AND CONFINING FORMATION, IF PRESENT iv. SURFACE WATER INTAKE AND DISCHARGE STRUCTURES, IF PRESENT v. HAZARDOUS WASTE TREATMENT, STORAGE OR DISPOSAL FACILITY, IF PRESENT b. MAP SHOWING WITHIN ¼ - MILE BEYOND FACILITY PROPERTY BOUNDARY OR AOR (WHICHEVER IS LARGER): i. NAME AND LOCATION OF PRODUCTION WELLS, INJECTION WELLS, ABANDONED WELLS, DRY HOLES, AND ALL WATER WELLS, NOTING ITS TYPE (PUBLIC WATER SYSTEM, DOMESTIC DRINKING WATER, STOCK, ETC.), IF PRESENT ii. SPRINGS AND SURFACE BODIES OF WATERS, IF PRESENT iii. MINES (SURFACE AND SUBSURFACE) AND QUARRIES, IF PRESENT iv. RESIDENCES, SCHOOLS, HOSPITALS, AND ROADS, IF PRESENT IV. AREA OF REVIEW (AOR) WELLS AND CORRECTIVE ACTION PLAN (CAP) a. TABULATION OF AOR WELLS, IF PRESENT b. WELL BORE DIAGRAMS, CBL, COMPLETION RECORDS OF AOR WELLS, IF AVAILABLE c. AOR CAP, IF APPLICABLE V. LANDOWNER INFORMATION a. LIST OF LANDOWNERS AND ADDRESS WITHIN ¼ - MILE b. EVIDENCE OF NOTIFICATION TO LANDOWNER OF INTENT TO APPLY FOR PERMIT, IF APPLICABLE	
<u>ATTACHMENT B. GEOLOGICAL AND GEOPHYSICAL INFORMATION</u>	<u>34-86</u>

I. GEOLOGICAL DATA

- a. LIST OF FORMATIONS FROM SURFACE TO THE BASE OF THE INJECTION WELL, IDENTIFYING ALL THE USDWS AND CONFINING AND INJECTION ZONE(S). LIST INCLUDES THE LITHOLOGICAL DESCRIPTION, GEOLOGICAL NAME, THICKNESS, DEPTH, AND TOTAL DISSOLVED SOLIDS (TDS) CONCENTRATIONS FROM THESE FORMATIONS, IF KNOWN
 - b. SOURCE OF INFORMATION FOR THE GEOLOGICAL DATA AND FORMATION TDS
 - c. POROSITY AND PERMEABILITY OF INJECTION FORMATION, IF AVAILABLE
 - d. GEOLOGICAL CROSS-SECTIONS, IF AVAILABLE
 - e. KNOWN FOR SUSPECTED FAULTS AND FRACTURE SYSTEMS WITHIN AOR, IF IDENTIFIED, PROVIDE PROXIMITY TO THE INJECTION ZONE AND AFFECT FAULT/FRACTURE SYSTEM MAY HAVE ON THE INJECTION ACTIVITIES
 - f. HISTORY OF SEISMIC ACTIVITY IN THE AREA AND PROXIMITY TO CRYSTALLINE (IE. GRANITIC) BASEMENT, IF APPLICABLE
- II. FORMATION TESTING PLAN**
- a. FLUID PRESSURE
 - b. ESTIMATED FRACTURE PRESSURE
 - c. PHYSICAL AND CHEMICAL CHARACTERISTICS OF THE INJECTION ZONE

ATTACHMENT C. WELL CONSTRUCTION/CONVERSION INFORMATION 87-91

- I. WELL SCHEMATIC DIAGRAM**
- a. DETAILED PROPOSED WELL SCHEMATIC DIAGRAM THAT INCLUDES:
 - i. IDENTIFICATION OF USDWS AND CONFINING AND INJECTION ZONES
 - ii. CASING AND CEMENTING DETAILS, INCLUDING DEMONSTRATED OR CALCULATED TOP OF CEMENT
 - iii. TUBING AND PACKER, IF APPLICABLE
 - iv. OPEN HOLE OR PERFORATED INTERVALS
 - v. SURFACE TRACE, IF HORIZONTAL OR DEVIATED WELL
 - vi. *IF CONVERSION TO INJECTION WELL:*
 - 1. WELL COMPLETION AND CEMENTING RECORDS
 - 2. PREVIOUSLY RUN LOG/TESTS

ATTACHMENT D. INJECTION OPERATION AND MONITORING PROGRAM 92-113

- I. FLOW DIAGRAM OF FLUID FLOW THROUGH FACILITY**
- II. CONTINGENCY PLAN(S) TO RESPOND TO WELL FAILURES**
- III. DRAWING OF THE SURFACE CONSTRUCTION**
- IV. LOCATION OF MONITORING PORTS (SHOW ON THE MAP(S) OF REFERENCE IN SECTION A. III ABOVE**
- V. DESCRIPTION OF SAMPLING AND MONITORING DEVICES TO MONITOR THE NATURE OF THE INJECTION FLUIDS, INJECTION PRESSURE, ANNULUS PRESSURE (OF APPLICABLE), FLOWRATE, AND CUMULATIVE VOLUME**
- VI. DESCRIPTION OF MANIFOLD MONITORING PROGRAM AND HOW THE PROGRAM IS COMPARABLE TO INDIVIDUAL WELL MONITORING**
- VII. OPERATING DATA INFORMATION**
 - a. AVERAGE AND MAXIMUM DAILY RATE AND VOLUME OF FLUIDS TO BE INJECTED
 - b. AVERAGE AND MAXIMUM INJECTION PRESSURE

For assistance in accessing this document, contact R3_UIC_Mailbox@epa.gov

I. DESCRIPTION OF THE NATURE OF BUSINESS

ATTACHMENT K. OPTIONAL AND ADDITIONAL PROJECT INFORMATION 127

- I. THE WILD AND SCENIC RIVERS ACT**
 - a. LIST OF NATIONAL WILD AND SCENIC RIVERS THAT MAY BE IMPACTED BY THE ACTIVITIES ASSOCIATED WITH PROPOSED PROJECT**
- II. THE NATIONAL HISTORIC PRESERVATION ACT OF 1966**
 - a. LIST OF PROPERTIES LISTED OR ELEGIBLE FOR LISTING IN THE NATIONALS REGISTER OF HISTORIC PALCES. IF AVAILABLE, HISTORIC AND CULTURAL RESOURCE SURVEY(S) THAT HAVE BEEN CONDUCTED**
- III. THE ENDANGERED SPECIES ACT**
 - a. LIST OF ENDANGERED OR THREATENED SPECIES THAT MY BE AFFECTED BY THE ACTIVITIES ASSOCIATED WITH PROPOSED PROJECT. IF AVAILABLE, PREVIOUS ENDANGERED OR THREATENED SPECIES SURVEYS THAT HAVE BEEN CONDUCTED, IF APPLICABLE**
- IV. THE COASTAL ZONE MANAGEMENT ACT**
 - a. LIST OF COASTAL ZONES THAT MAY BE AFFECTED BY THE ACTIVITIES ASSOCIATED WITH PROPOSED PROJECT, IF APPLICABLE**



United States Environmental Protection Agency
Underground Injection Control
Permit Application for a Class II Well
*(Collected under the authority of the Safe Drinking Water Act.
 Sections 1421, 1422, and 40 CFR Part 144)*

For Official Use Only

Date Received

Permit Number

Read Attached Instructions Before Starting

I. Owner Name, Address, Phone Number and/or Email

G2 STEM LLC
 Fred Gumbinner, Managing Partner
 4826 Piney Branch Road
 Suite 200
 Fairfax, VA 22030

II. Operator Name, Address, Phone Number and/or Email

G2 STEM LLC
 4826 Piney Branch Road
 Suite 200
 Fairfax, VA 22030

III. Commercial Facility

☒ Yes
☐ No

IV. Ownership

☒ Private
☐ Federal
☐ State/Tribal/
 Municipal

V. Permit Action Requested

☒ New Permit
☐ Permit Renewal
☐ Modification
☐ Add Well to Area Permit
☐ Other

VI. SIC Code(s)

1311

VII. Indian Country

☐ Yes
☒ No

VIII. Type of Permit (For multiple wells, use additional page(s) to provide the information requested for each additional well)

☒ A. Individual
☐ B. Area

Number of Wells
 1

Well Field and/or Project Names
 David A Weaver #1

IX. Class and Type of Well (see reverse)

A. Class
 II

B. Type (enter code(s))
 D

C. If type code is "X," explain.

X. Well Status

☐ A. Operating
 Date Injection Started
☐ B. Conversion
 Date Well Constructed
☒ C. Proposed

XI. Well Information

API Number
 Permit (or EPA ID) Number
 Full Well Name David A Weaver #1

XII. Location of Well or, for Multiple Wells, Approximate Center of Field or Project

Locate well in two directions from nearest lines of quarter section and drilling unit

Surface Location

1/4 of 1/4 of Section Township Range

528.0' ft. from (N/S) North Line of quarter section

481.2' ft. from (E/W) West Line of quarter section.

Latitude N40.9665

Longitude W78.9898

XIII. Attachments

In addition to this form, complete Attachments A-U (as appropriate for the specific well class) on separate sheets. Submit complete information, as required in the instructions and list all attachments, maps or other figures, by the applicable letter.

XIV. Certification

I certify under the penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. (Ref. 40 CFR § 144.32)

Name and Official Title (Please Type or Print)

Fredric R. Gumbinner, Managing Partner

Signature

Date Signed

04/22/2022

INSTRUCTIONS FOR FORM 7520-6 (CLASS II WELLS)

A permit application must be completed by all owners or operators of current or proposed Class I, II, and III wells, and some Class V injection wells subject to the requirement to obtain an Underground Injection Control (UIC) permit as described at 40 CFR 144.31 and others directed by a UIC official to apply for a UIC permit. Please note that the information needs vary by well class. These instructions are specific to Class III wells; other versions are available for other well classes. Please note that this form must be signed by a responsible entity as described at 40 CFR 144.32, even if the attachments are prepared by contractors or service companies. If the application covers multiple wells, use additional pages as necessary to provide all the requested information.

I. OWNER NAME, ADDRESS, PHONE AND/OR EMAIL: Enter the name and street address, city/town, state, and ZIP code of the owner of the well, well field, or company. Also provide an email address (if available) and/or a phone number.

II. OPERATOR NAME, ADDRESS, PHONE AND/OR EMAIL: Enter the name and street address, city/town, state, and ZIP code of the operator of well or well field; also provide an email address (if available) and/or a phone number. If the operator is the same as the owner, enter "same as owner."

III. COMMERCIAL FACILITY: Check the appropriate box to indicate the type of facility. A commercial facility is a single or multiple well facility that is specifically engaged in the business of injecting waste fluids generated by third party producers that is originated off-site and transported to the facility by truck for a fee or compensation.

IV. OWNERSHIP: Check the appropriate box to indicate whether the owner of the well/facility is a private, Federal, or State/Tribal/Municipal entity.

V. TYPE OF PERMIT ACTION REQUESTED: Check "new permit" if the well has never been subject to a UIC permit (e.g., for a newly constructed or converted well). Check "permit renewal" for an application associated with extending an expiring UIC permit. Check "modification" for an application to modify an existing permit that is not expiring. Check "add well to area permit" if additional wells are to be covered under an existing UIC area permit. Check "other," if needed and describe the situation.

VI. SIC CODES: List at least one and no more than four Standard Industrial Classification (SIC) Codes that best describe the nature of the business in order of priority. A list of SIC codes is available from the U.S. Department of Labor at <http://www.bls.gov/sic/>

VII. INDIAN COUNTRY: Check yes if the well is located in Indian country. Indian country (as defined in 18 U.S.C. 1151) includes: all land within the limits of any Indian reservation under the jurisdiction of the U.S. government; all dependent Indian communities within the borders of the U.S.; and all Indian allotments, the Indian titles to which have not been extinguished.

VIII. TYPE OF PERMIT: Check "Individual" or "Area" to indicate the type of permit requested. Individual permits cover a single injection well, while area permits may cover more than one injection well. Note that area permits are issued at the discretion of the Director and that wells covered by an area permit must: be at one contiguous site, be under the control of one entity, and may not inject hazardous waste. If an area permit is requested, enter the **number of wells** to be included in the permit. In the case of a project or field that crosses State lines, it may be possible to consider an area permit if EPA has jurisdiction in all affected States (each such case will be considered individually). Also provide the **name of the well field or project**.

IX. CLASS AND TYPE OF WELL: Enter the class (as defined in 40 CFR 144.6) and type of injection well for which a permit is requested. Use the most pertinent code selected from the table below. When selecting type "X", please explain in the space provided.

TABLE OF CLASS II WELL TYPES

A	Annular Disposal Well.
D	Produced Fluid Disposal Well.
H	Hydrocarbon Storage Well (excluding natural gas).
R	Enhanced Recovery Well.
X	Other Class II Wells (not included in Type "A," "D," "H," or "R").

X. WELL STATUS: Check **Box A, Operating** if the well currently operates as an injection well (e.g., if a permit renewal is requested or a permit is sought for an existing rule-authorized injection well). Check **Box B, Conversion** for an existing well not currently being utilized for injection that is proposed to be converted to an injection well. Check **Box C, Proposed** for an underground injection well not yet constructed or completed. Provide relevant dates if A or B are checked.

XI. WELL INFORMATION: Enter the **API number** (the number assigned by the local jurisdiction (usually a State Oil and Gas Agency) using the American Petroleum Institute standard numbering system). Enter the **Permit or EPA ID number** assigned to the injection well by the EPA or the permitting authority. If you do not have a number (e.g., for a new well), this will be provided by EPA or the permitting authority, and you can leave the field blank. Also enter the **Full Name of the Well** or project.

XII. LOCATION: For individual permit applications, in the fields provided, enter the location of the well using latitude and longitude and/or the Public Land Survey System. When using latitude and longitude, use decimal degrees to five or six places after the decimal, if possible; be sure to include a negative sign for the longitude of a well in the Western Hemisphere and a

negative sign for the latitude of a well in the Southern Hemisphere. When using the Public Land Survey System, fill in the complete township, range, and section to the nearest quarter-quarter section. A township is north or south of the baseline, and a range is east or west of the principal meridian (e.g., T12N, R34W). Also include the distance, in feet, from the nearest north or south line and nearest east or west line of the quarter-section. For area permit applications, provide the latitude and longitude of the approximate center of the area.

XIII. ATTACHMENTS: Specific instructions for completing the attachments are presented on pages 3 through 6. Place the permit or EPA ID number (or, if none has been assigned, other identifying information such as an API number or the project name) in the upper right hand corner of each page of the attachments.

XIV. CERTIFICATION: All permit applications must be signed by either: a responsible corporate officer for a corporation, by a general partner for a partnership, by the proprietor of a sole proprietorship, or by a principal executive or ranking elected official for a public agency, or a duly authorized representative of that person.

PAPERWORK REDUCTION ACT NOTICE: The public reporting and recordkeeping burden for this collection of information is estimated to average 61 hours per response for a Class II well permit application. Burden means the total time, effort, or financial resource expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal Agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to the collection of information; search data sources; complete and review the collection of information; and, transmit or otherwise disclose the information. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. Send comments on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including the use of automated collection techniques to Director, Collection Strategies Division, U.S. Environmental Protection Agency (2822), 1200 Pennsylvania Ave., NW, Washington, DC 20460. Include the OMB control number in any correspondence. Do not send the completed forms to this address.

Instructions for Completing Attachments to Form 7520-6 (Class II Wells)

The Underground Injection Control (UIC) program, as promulgated under the Safe Drinking Water Act (SDWA), is designed to prevent injection activity from allowing the movement of fluid containing any contaminant into underground sources of drinking water (USDWs), if the presence of that contaminant may cause a violation of any primary drinking water regulation or may otherwise adversely affect the health of persons as found at Title 40 of the Code of Federal Regulations (40 CFR) section 144.12. Any applicant for a permit under this program shall have the burden of showing that their proposed construction, operation, maintenance, conversion, plugging, abandonment, and injection activity, does not endanger USDWs.

The attachments below have been constructed to provide applicants with clear expectations as to what information EPA needs to make a determination that an applicant's proposed activities will not endanger USDWs.

Pre-Application Coordination

Coordination between the UIC program and the permit applicant prior to submittal of the permit application is an important step for efficient and effective permitting. Early discussions will ensure that the applicant is aware of all the permit application requirements, including state specific requirements found at 40 CFR part 147. These discussions may also help the applicant plan how to invest time and resources needed to develop a comprehensive and complete permit application.

Applicants are encouraged to contact their EPA regional UIC program for a pre-application coordination meeting.

Note: If the owner or operator of *existing rule authorized Class II UIC well(s)* is required by the EPA to apply for a permit (40 CFR § 144.25), consult with EPA staff during the pre-application coordination for additional requirements that may apply.

When completing each attachment, please be sure to specify the units reported, e.g., of depth, pressure, temperature, etc.

Attachment A. Map(s) and Area of Review

Part I. Well Location(s)

For Individual Permits: If the surface location provided in the accompanying 7520-6 form does not adequately describe the well location (i.e., due to deviation, directional, or horizontal drilling), please describe the well's orientation and provide the top- and bottom-hole coordinates, as appropriate. If any monitoring wells are proposed as part of this permit application, provide coordinates for all monitoring wells.

For Area Permits (40 CFR § 144.33): Provide information similar to what is outlined above for individual permits for each well (existing or proposed) to be covered by this permit. In addition, provide a description of the proposed permitted area. At a minimum, this area should include all the proposed or existing wells known at the time of permit application submittal. For circular areas, this description should consist of a defined-radius from a singular point whose coordinates have been given. For polygonal areas, use a series of coordinates describing the vertices or corners of the area. Submit a Geographic Information System (GIS) file, if available.

Part II. Area of Review Size Determination (40 CFR § 146.6)

For All Permits. Give the method (fixed radius or equation) and, if appropriate, all calculations used to determine the size of the area of review (AOR). If you are uncertain as to which method to use, consult with your regional EPA office.

The AOR must be a minimum radius of one-fourth (1/4) mile from the well bore, including a well's lateral, or the proposed area permit boundary for area permits, unless the use of an equation is approved by the Director.

In addition, for Class II enhanced oil recovery well(s). The AOR will be at a minimum the larger of the following: one-fourth (1/4) mile radius or the distance to the nearest active producer in the production formation.

Part III. Map(s) (40 CFR §§ 144.31 & 146.24)

Submit a topographic map (or other map if a topographic map is unavailable) extending one mile beyond the facility property boundary showing:

- project injection well(s), well pad(s) and/or project area,
- applicable area of review,
- all outcrops of injection and confining formations,
- all surface water intake and discharge structures, and
- all hazardous waste treatment, storage, or disposal facilities.

Consult with your EPA regional office for the definition of the facility property boundary.

The information below does not apply to existing rule authorized Class II well(s).

Within the one-fourth (1/4) mile beyond the facility property boundary or the AOR, whichever is larger, the map will also show the:

- name and location of all production wells, injection wells, abandoned wells, dry holes, and all water wells, noting their types (public water system, domestic drinking water, stock, etc.),

- springs and surface bodies of water,
- mines (surface and subsurface) and quarries, and
- other pertinent surface features, including residences, schools, hospitals, and roads.

Only information of public record and pertinent information known to the applicant is required to be included on this map. Multiple maps may be needed to display this information clearly. If a certain feature is not present in the area covered, please state so definitively (e.g., *"There are no known outcrops of the confining formation in the mapped area."*).

Part IV, below does not apply to existing rule authorized Class II well(s).

Part IV. Area of Review Wells and Corrective Action Plans (40 CFR §§ 144.55 & 146.24)

Submit a tabulation of data and wellbore diagrams reasonably available from public records or otherwise known to the applicant on all wells within the AOR included on the map, which penetrate the proposed confining zone(s). Such information will include:

- well name, location and depth,
- well type,
- date well was drilled,
- well construction that includes casing and cement details, including demonstrated or calculated top of cement,
- cement bond logs (if available), and
- record of well completion and plugging (if applicable).

For such wells which are improperly sealed, completed, or abandoned, also submit a plan consisting of such steps or modifications as are necessary to prevent movement of fluid into USDWs.

Part V. Landowners Information (40 CFR § 144.31 and part 147)

Identify and submit a list with the names and addresses of all owners of record of land within one-fourth (1/4) mile of the facility property boundary. This requirement may be waived by the Regional Administrator if the site is in a populous area and the Regional Administrator determines that the requirement would be impracticable.

Consult with your regional EPA office, as additional state landowner notification requirements may apply (40 CFR part 147).

Attachment B. Geological and Geophysical Information

Part I. Geological Data (40 CFR § 146.24)

Provide the following information:

- geological data on all formations from the surface to the base of the injection well, identifying all USDWs and confining and injection zone(s). This data includes the lithologic description, geological name, thickness, depth, and total dissolved solids (TDS) concentrations from these formations (if known),
- source of information for the geologic data and formation TDS,
- porosity and permeability of injection formation (if available),
- geological cross-sections (if available) proximate to the injection well that includes the confining and injection zones. The cross-sections should illustrate the regional geologic setting and show the thickness and lateral continuity of the confining zone(s) through the area of review,
- within the AOR, identify known or suspected faults and fracture systems. If identified, provide proximity to the injection zone and the effect the fault/fracture system may have on the injection activities, and
- a history of seismic activity in the area and proximity to crystalline (i.e., granitic) basement.

Part II. Proposed Formation Testing Program (40 CFR § 146.22)

Provide a formation testing program to obtain data on:

- fluid pressure,
- estimated fracture pressure, and
- physical and chemical characteristics of the injection zone.

Attachment C. Well Construction/Conversion Information

Part I. Well Schematic Diagram (40 CFR § 146.24)

Provide a detailed proposed well schematic diagram that includes:

- identification of USDWs and confining and injection zones,
- casing and cementing details, including demonstrated or calculated top of cement,
- tubing and packer (if applicable),
- open hole or perforated intervals, and

- surface trace (if horizontal or deviated well).

For wells that are drilled and to be converted to an injection well, also provide the current well schematic diagram.

Part II. Well Construction or Conversion Procedures (40 CFR §§ 144.52, 146.22, & 146.24)

Provide detailed description of well construction or conversion procedures, that includes:

- proposed logs and other tests conducted during the drilling and construction of new well(s),
- proposed stimulation plan(s), if planned, and
- description of alarms and shut-down systems at the well (if applicable).

For wells that are drilled and to be converted to an injection well, also provide:

- well completion and cementing records, and
- previously run logs/tests.

Attachment D. Injection Operation and Monitoring Program (40 CFR §§ 146.23 & 146.24)

Submit the following information:

- flow diagram of fluid flow through the facility,
- contingency plan(s) to cope with well failure, so as to prevent migration of contaminating fluids into a USDW,
- drawing of the surface construction,
- locations of all monitoring devices (show on the map(s) referenced in section A.III. above), and
- description of sampling and monitoring devices to monitor the nature of the injected fluids, injection pressure, annulus pressure (if applicable), flowrate, and cumulative volume.

Hydrocarbon storage and enhanced recovery may be monitored on a field or project basis rather than on an individual well basis by manifold monitoring. If a manifold monitoring program is utilized, describe details of the monitoring program and how the program is comparable to individual well monitoring. Also, include on the map in section A.III.B, the distribution manifold applying injection fluid to all wells in the area, including location of all system monitoring locations.

Additionally, submit the following proposed operating data for each well in the individual or area permit:

- average and maximum daily rate and volume of fluids to be injected,
- average and maximum injection pressure,
- source(s) of injection fluids (including field and formation names),
- proposed annular fluid, and
- analysis of the chemical and physical characteristics of the injection fluid. At a minimum, this should include pH, specific gravity, TDS, and conductivity. Consult with the regional EPA office for additional guidance.

Attachment E. Plugging and Abandonment Plan (40 CFR §§ 144.31, 144.51 & 146.24)

Submit a plugging and abandonment (P&A) plan of the well on EPA Form 7520-19 along with a P&A diagram. The plan should include:

- type, and number of plugs to be used,
- placement of each plug including the elevation of top and bottom,
- type, grade, and quantity of cement to be used, and
- method of placement of the plugs.

Provide one or more cost estimates from an independent firm in the business of plugging and abandoning wells to conduct the work proposed in the P&A plan for EPA to contract plugging of the well. This is to ensure that EPA has adequate funding to plug the well(s) if the operator is unable to plug the well(s).

Consult with the regional EPA office for additional guidance on developing the P&A plan and cost estimate calculations.

Attachment F. Financial Assurance (40 CFR § 144.52)

Submit evidence of financial resources, such as a surety bond or financial statement, necessary for a third party to close, plug, or abandon the well in the event an owner or operator is unable to do so. The monetary amount is based on the P&A plan cost estimate provided in Attachment E.

Attachment G. Site Security and Manifest Requirements (Commercial Wells Only)

Provide a proposed site security plan. This could include fencing around the perimeter of the facility. Consult with the regional EPA office for additional guidance on manifest requirements.

Attachment H. Aquifer Exemptions (40 CFR §§ 144.7 & 146.4)

If an aquifer exemption (AE) is requested, submit the information required at 40 CFR § 144.7 and to demonstrate that the criteria found at 40 CFR § 146.4 are met. Consult with your regional EPA office for additional guidance.

Attachment I. Existing EPA Permits (40 CFR § 144.31)

Submit a listing of all permits or construction approvals received or applied for under any of the following programs:

- Hazardous Waste Management program under RCRA,
- UIC program under SDWA,
- NPDES program under CWA,
- Prevention of Significant Deterioration (PSD) program under the Clean Air Act,
- Nonattainment program under the Clean Air Act,
- National Emission Standards for Hazardous Pollutants (NESHAPS) preconstruction approval under the Clean Air Act.
- Ocean dumping permits under the Marine Protection Research and Sanctuaries Act,
- Dredge and fill permits under section 404 of CWA, and
- Other relevant environmental permits, including State permits.

Attachment J. Description of Business (40 CFR § 144.31)

Provide a brief description of the nature of the business.

Attachment K. Optional Additional Project Information (40 CFR § 144.4)

The following is a list of Federal laws that may apply prior to the issuance of permits. When any of these laws are applicable, EPA must ensure that they are followed. The optional additional information requested below will assist EPA in its analyses to satisfy these laws.

- The Wild and Scenic Rivers Act, 16 U.S.C. 1273 et seq.

Identify any national wild and scenic river that may be impacted by the activities associated with the proposed project.

- The National Historic Preservation Act of 1966, 16 U.S.C. 470 et seq.

Identify properties listed or eligible for listing in the National Register of Historic Places that may be affected by the activities associated with the proposed project. If previous historic and cultural resource survey(s) have been conducted, provide the results of the survey(s).

- The Endangered Species Act, 16 U.S.C. 1531 et seq.

Identify any endangered or threatened species that may be affected by the activities associated with the proposed project. If a previous endangered or threatened species survey has been conducted, provide the results of the survey.

- The Coastal Zone Management Act, 16 U.S.C. 1451 et seq.

Identify any coastal zones that may be affected by the activities associated with the proposed project.

ATTACHMENT A. MAPS AND AREA of REVIEW

I. Well Location(s) and Permitted Area Description (if area permit)

- a. See Attachment A, Addendum 7.

II. Area of Review Size Determination – fixed radius or equation

- a. See Attachment A, Addendum 1

III. Maps

- a. See Attachment A, Addendum 1, 2 & 3 to include:
 - i. Topographical Map extending one-mile beyond facility property boundary showing:
 - 1. Injection well, well pad, and project area
 - a. See Attachment A, Addendum 1
 - 2. Area of review boundary
 - a. See Attachment A, Addendum 1,2, &3
 - 3. Outcrops of injection and confining formation, *if present*
 - a. None Present
 - 4. Surface water intake and discharge structures, *if present*
 - a. None Present
 - 5. Hazardous waste treatment, storage or disposal facility, *if present*
 - a. None Present
 - ii. Map showing within ¼-mile beyond facility property boundary or AOR (whichever is larger):
 - 1. Name and location of production wells, injection wells, abandoned wells, dry holes, and all water wells, noting its type (public water system, domestic drinking water, stock, etc.), *if present*
 - a. Attachment A, Addendum 5 & 6
 - b. Attachment A, Addendum 13
 - i. Spreadsheet includes Owner, PAGWIS, Use of Water, Total Depth, Lat, & Long
 - 2. Springs and surface bodies of water, *if present*
 - a. None Present
 - 3. Mines (surface and subsurface) and quarries, *if present*
 - a. None Present
 - 4. Residences, schools, hospitals, and roads, *if present*
 - a. See Attachment A, Addendum 1,2 & 3

IV. Area of Review (AOR) Wells and Corrective Action Plan (CAR)

- a. See Attachment A, Addendum 1
 - i. Tabulation of AOR wells, *if present*
 - 1. Attachment A, Addendum 1
 - ii. Well bore diagrams, CBL, completion records of AOR wells, *if available*
 - 1. Completion Report 065-20460 T.W. Phillips Gas and Oil Co
 - a. See Addendum 10
 - 2. Completion Report JEf-21564 R&P Mary F and Caldwell

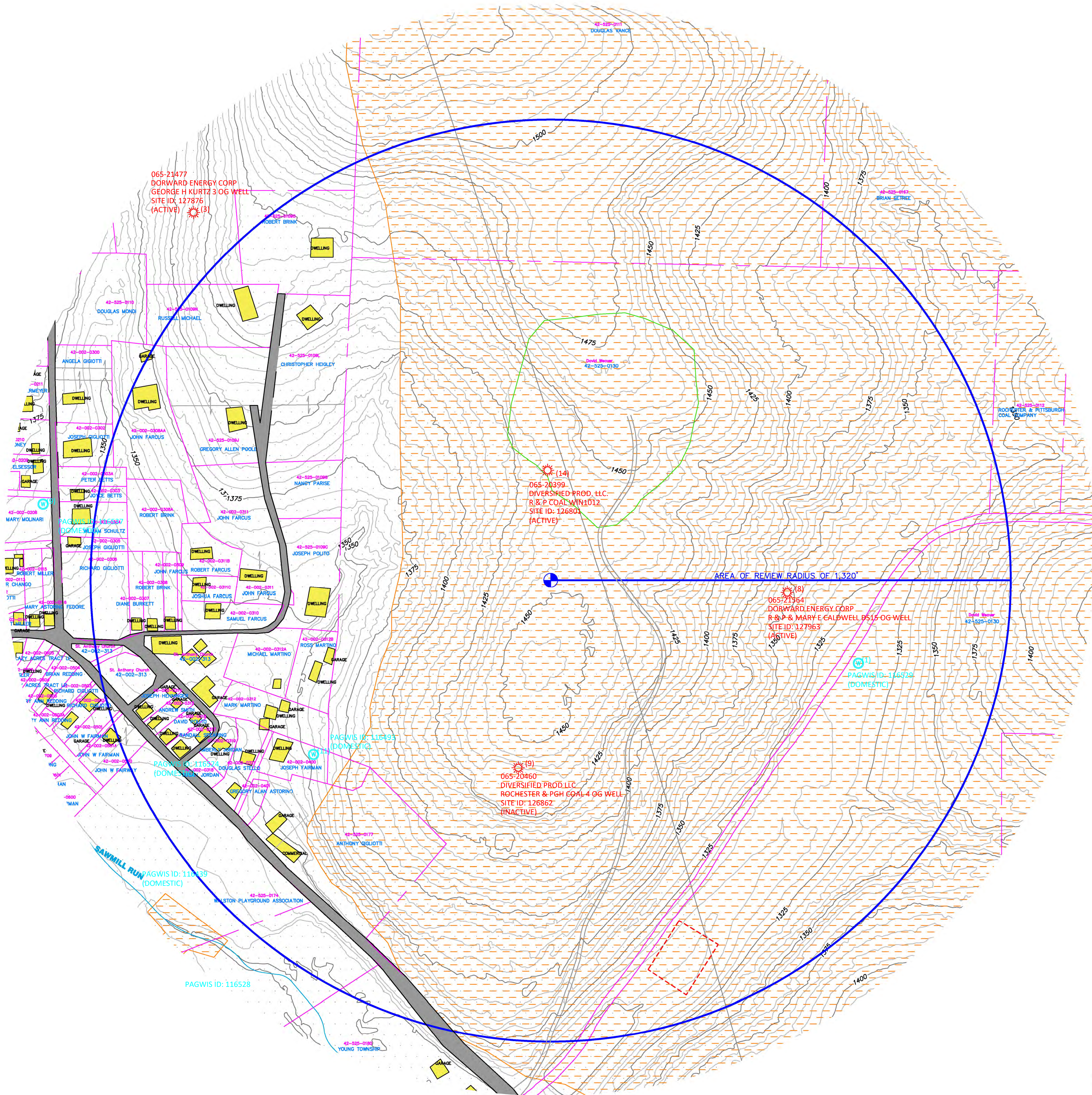
- a. See Addendum 11
 - 3. Completion Report 065-20399 R&P Coal #4
 - a. See Addendum 14
 - 4. Addendum 12
 - a. Spreadsheet detailing API#, Common Well ID, Date Drilled, Total Depth, Status, Lat, & Long
- iii. AOR CAP, *if applicable*
 - 1. **Not Applicable**

V. Landowner Information

- a. List of landowners and address within ¼-mile
 - i. See Attachment A, Addendum 1 & 4
- b. Evidence of notification to landowner of intent to apply for permit, *if applicable*
 - i. See Attachment A, Addendum 9

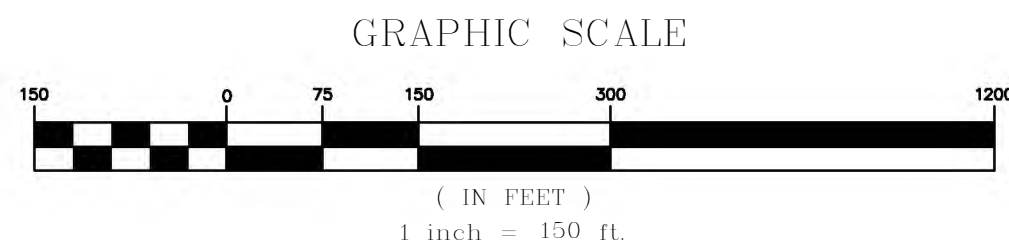
Attachment A, Addendum List

- Addendum 1 - Topographical Map, ¼-mile radius
- Addendum 2 - Topographical Map, ¼-mile Radius with Land Owners
- Addendum 3 - Topographical Map, 1-mile Radius
- Addendum 4 - Landowner List, ¼-mile
- Addendum 5 - Well List, ¼-mile
- Addendum 6 - Water Well List, ¼-mile
- Addendum 7 - Topographical Map Large Radius
- Addendum 8 - Topographical Map
- Addendum 9 - Evidence of Notification to Landowners
- Addendum 10 - Completion Report 065-20460 TW Phillips
- Addendum 11 - Completion Report 065-21564 Mary F Caldwell
- Addendum 12 - AOR Well Information
- Addendum 13 - AOR Drinking Water Well Information
- Addendum 14 - Completion Report 065-20399 R&P Coal #4



- LEGEND**
- EXISTING ROADS
 - PROPERTY LINES
 - EXISTING CONTOURS
 - EXISTING STREAMS
 - AOR BOUNDARY
 - OFFLOADING AREA
 - GAS AND OIL WELL
 - WATER WELL
 - PROPOSED INJECTION WELL
 - EXISTING STRUCTURE
 - PUBLIC WATER SUPPLIED
 - DEEP MINE (INACTIVE)
 - SURFACE MINE (INACTIVE)

- NOTES:**
- No fault lines are present within the herein plat.
 - All Oil and Water wells were identified using Pennsylvania public records from PADEP Efacts and Pennsylvania Groundwater Information System.
 - The majority of residences located within $\frac{1}{4}$ mile of the AOR receive water from the Pennsylvania American Water.



**CLASS II PERMIT APPLICATION
MAP #1 AREA OF REVIEW (AOR)/
FACILITY PROPERTY BOUNDARY
FOR
G2 STEM, LLC RP4 WELL**

YOUNG TOWNSHIP, JEFFERSON COUNTY, PA

ADDENDUM



Scale	1" = 150'
Date	1/24/2022
Drawn By	LRH
Checked By	JPS
Project No.	0230-22-226
File No.	G2 STEM LLC

No.	Sheet Revisions	Date

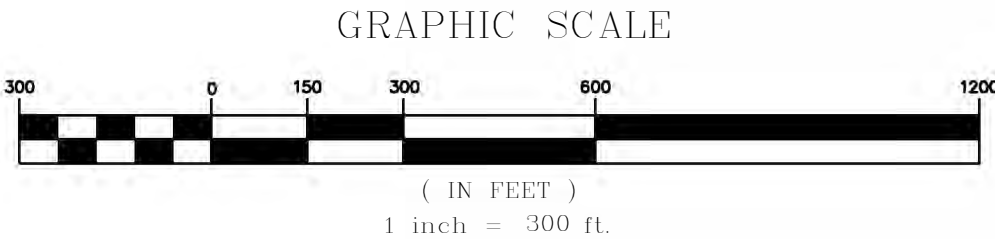
Seal	Date
------	------

- PROPERTY OWNERS
- Anderson Horner
 - Douglas Vance
 - Brian Setree
 - David Weaver
 - Rochester & Pittsburgh Coal Company
 - Franklin Stockdale
 - James P Roberts
 - Keith Shields
 - James Cassidy
 - Young Township
 - Luculle Dib
 - David Szymanski
 - Dialysis Clinic INC
 - D E LTD Family Partnership
 - Punsutawney Area Hospital
 - Walston Playground Association
 - Timothy Molinari
 - Joseph Molinari
 - Sandra L Scialabba
 - Courtney Lynn Praise
 - Thomas Parise
 - Ross A Astorino
 - Beth A Shaffer
 - Anthony J Ross
 - Donald Ross
 - William Joseph Astorino
 - Jane A Lowrey
 - Michael J Adams
 - Damian Foster
 - Carl B Cook
 - Paul R Martino
 - Sheri Miller
 - Jeffrey Miller
 - Nancy A Parise
 - Samuel Farcus
 - Lisa Williams
 - Robert Miller
 - Linda Giesler
 - Lazy Acres Tract LP
 - Brian Redding
 - Mary Ann Redding
 - Richard Gigliotti
 - John Fairman
 - Robert Fairman
 - Michael Gagliardi
 - Anthony Gigliotti
 - Gregory Alan Astorino
 - Not Reported
 - Joseph Fairman
 - Douglas Stello
 - Susan Jordan
 - Amberly Jordan
 - Mark Martino
 - Michael Martino
 - Ross Martino
 - St. Anthony Church
 - Randall Spearing
 - David Polito
 - Andrew Smith
 - Joseph Henninger
 - Joseph Polito
 - Christopher Heigley
 - Robert Brink
 - Russell Michael
 - Gregory Allen Poole
 - John Farcus
 - Joshua Farcus
 - Robert Farcus
 - Diane Burkett
 - Joseph Gigliotti
 - William Schultz
 - Joyce Betts
 - Peter Betts
 - Angela Gigliotti
 - Douglas Mond
 - Joseph Martino
 - Ronald Walker
 - Gary Astorino
 - Avah Parise
 - Joseph Ellermeyer
 - Lori Roney
 - Donald Ellessor
 - Denise Villella
 - Mary Molinari
 - Ronald Astorino
 - John Anthony Astorino
 - Terry Clark
 - Jane Lowry
 - Diane Pfingstler
 - Edward Skarbek
 - James Esposito
 - Reginar Chango
 - Mary Astorino Fedore
 - Michael Klingensmith
 - Timothy Lowmaster
 - Anthony Giavedoni
 - Kenneth Fugate
 - Dorlies Burroughs
 - Lawrence Porada
 - Jeffrey Grube
 - Dennis P O'Brien
 - Joshua Conrad
 - Eric Ray
 - D E LTD Family Partnership



- LEGEND
- EXISTING ROADS
 - PROPERTY LINES
 - EXISTING CONTOURS
 - EXISTING STREAMS
 - AOR BOUNDARY
 - 1/4 MILE BOUNDARY
 - OFFLOADING AREA
 - GAS AND OIL WELL
 - WATER WELL
 - PROPOSED INJECTION WELL
 - EXISTING STRUCTURE
 - PUBLIC WATER SUPPLIED
 - DEEP MINE (INACTIVE)
 - SURFACE MINE (INACTIVE)

- NOTES:
- No fault lines are present within the herein plat.
 - All Oil and Water wells were identified using Pennsylvania public records from PADEP Efacts and Pennsylvania Groundwater Information System.
 - The majority of residences located within $\frac{1}{4}$ mile of the AOR receive water from the Pennsylvania American Water.



CLASS II PERMIT APPLICATION
MAP #2-1/4 MILE BEYOND THE
AREA OF REVIEW (AOR)
FOR
G2 STEM, LLC RP4 WELL

YOUNG TOWNSHIP, JEFFERSON COUNTY, PA

ADDENDUM

Seal

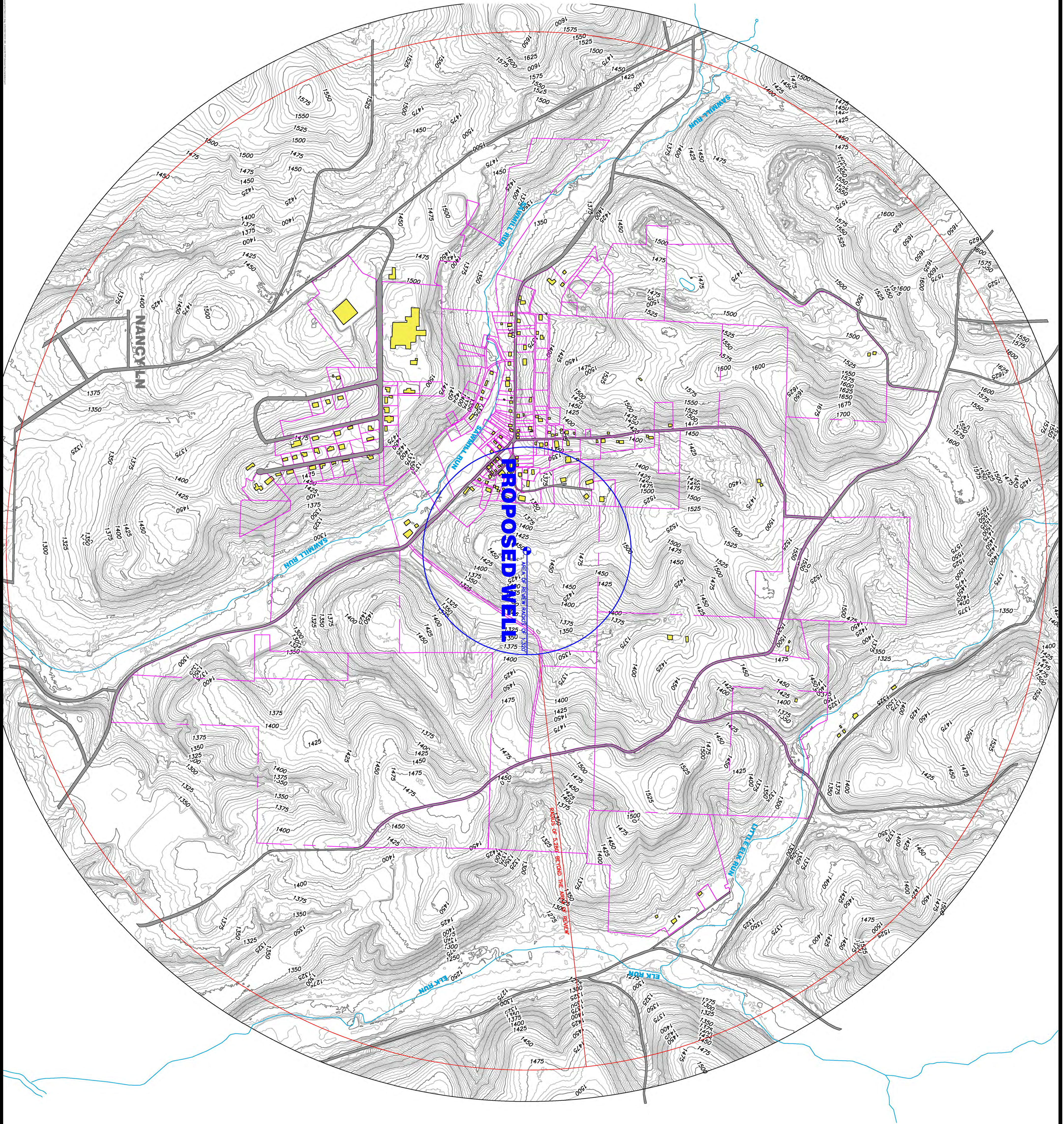
Date

No.	Sheet Revisions	Date

Scale	1"=300'
Date	1/24/2022
Drawn By	LRH
Checked By	JPS
Project No.	0230-22-226
File No.	G2 STEM LLC

CLARION OFFICE
15392 ROUTE 322
CLARION, PA 16014
(814) 764-5000
FAX: (814) 764-5000
E-MAIL: clarion@epa-dot-com





NOTES:

- (1) No fault lines/formation outcrops or confining formation outcrops are present within 1 mile of well.
- (2) No surface water intake and discharge structures are present within 1 mile of well.
- (3) No hazardous waste treatment, storage or disposal facilities are present within 1 mile of well.

	EXISTING STRUCTURE
	PROPOSED INJECTION WELL
	PRELIMINARY WELL PAD
	ONE MILE BOUNDARY
	EXISTING STREAMS
	EXISTING CONTOURS
	PROPERTY LINES
	EXISTING ROADS

**CLASS II PERMIT APPLICATION
MAP #3- ONE MILE BEYOND
AREA OF REVIEW (AOR)
FOR
G2 STEM, LLC RP4 WELL**



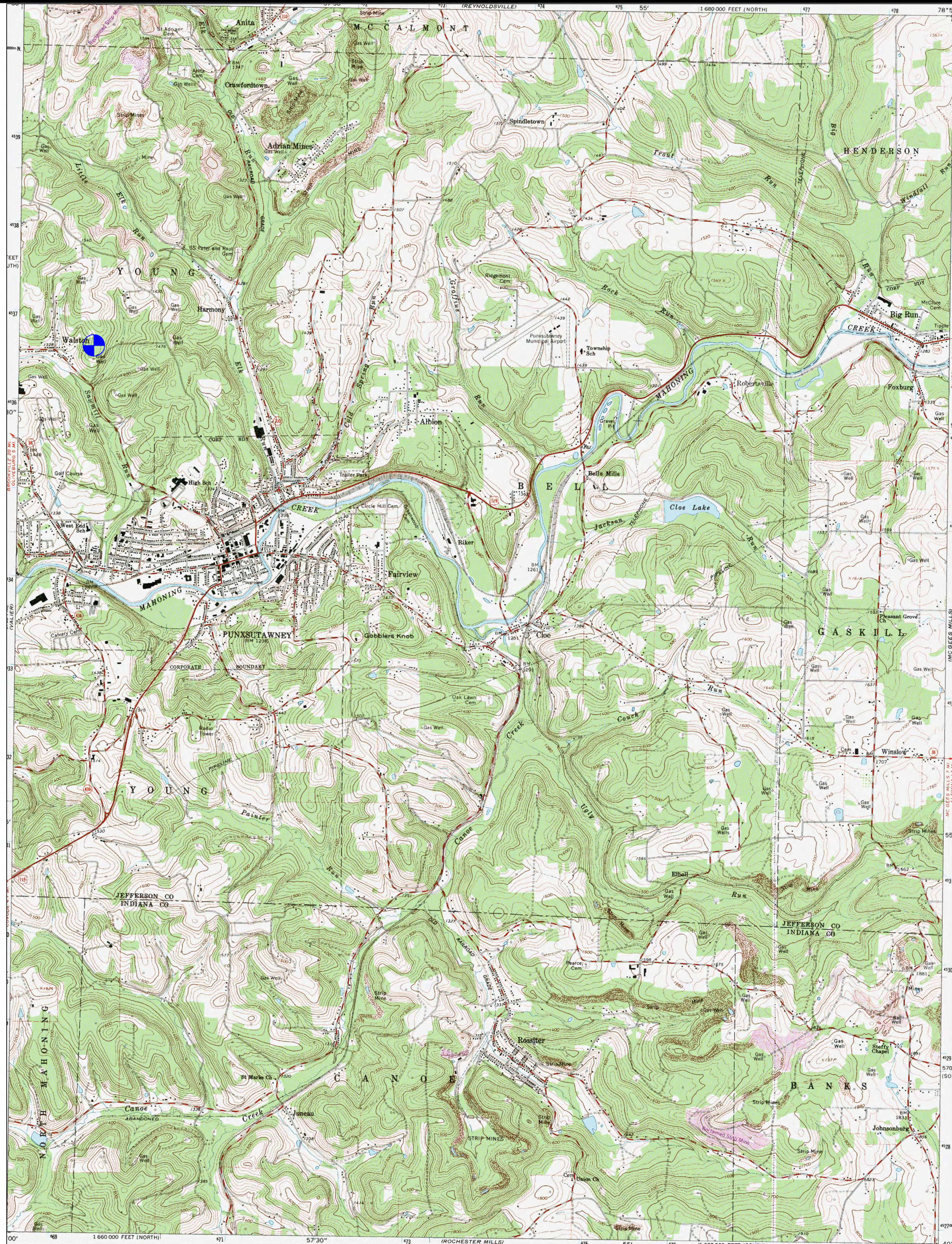
CLARION OFFICE
15362 ROUTE 322
P.O. BOX 684
CLARION PA, 16214
(814) 764-5050
(814) 764-5055 FAX
EMAIL: sales@eadsgroup.com

Scale
Date
Drawn By
Checked By
Project No.
File No.
G2 STEM LLC

No.	Sheet Revisions	Date

Seal

Date



LEGEND

 PROPOSED INJECTION WELL

CLASS II PERMIT APPLICATION
LOCATION MAP
FOR
G2 STEM, LLC RP4 WELL



Scale
Date
Drawn By
Checked By
Project No.
File No.
G2 STEM LLC

No.	Sheet Revisions	Date

Seal	Date

Addendum 4			
Map ID	Name	Tax ID	Address
1	Anderson Horner	42-525-0173	559 Oliveburg, PA 15764
2	Douglas Vance	42-525-0111	304 Ellermeyer Rd, Walston, PA 15781
3	Brian Setree	42-525-0167	580 Setree Rd, Walston, PA 15781
4, 5, 7, 8, 17	David Weaver	42-525-0130	2464 Airport Rd, Punxsutawney, PA 15767
6	Rochester & Pittsburgh Coal Company	42-525-0112	1000 Consol Energy Dr, Suite 400, Canonsburg, PA 15317
9, 10	Franklin Stockdale	42-545-0131	102 Freas Lane, Punxsutawney, PA 15767
		42-545-0130C	
11	James P Roberts	42-545-0130B	129 Aspen Rd, Punxsutawney, PA 15767
12	Keith Shields	42-545-0129-1	101 Aspen Rd, Punxsutawney, PA 15767
13	James Cassidy	42-545-0129-8	100 Aspen Rd, Punxsutawney, PA 15767
14	Young Township	42-525-0180	1517 Walston Rd, Punxsutawney, PA 15767
15	Luculle Dib	42-545-0129-41	109 Hillcrest Dr, Punxsutawney, PA 15767
16	David Szymanski	42-545-0129-42	109 Hillcrest Dr, Punxsutawney, PA 15767
18	Dialysis Clinic INC	42-525-0105K	158 Elmwood Dr, Punxsutawney, PA 15767
19, 159	D E LTD Family Partnership	42-525-0105	1406 N Main St., Punxsutawney, PA 15767
		42-545-0129	
20	Punxsutawney Area Hospital	42-525-0105G	81 Hillcrest Dr, Punxsutawney, PA 15767
21	Walston Playground Association	42-525-0174	Walston, PA 15781
22	Timothy Molinari	42-002-0708A	Box 72 Walston, PA 15781
23, 127, 128	Joseph Molinari	42-002-0205A	8 Cut Ln, Walston, PA 15781 12 Mondi Rd, Punxsutawney, PA 15767,
		42-002-0206A	
		42-002-0707	
24, 28, 32, 35	Sandra L Scialabba	42-002-0701	Mondi Rd, Punxsutawney, PA 157467
		42-002-0619B	
		42-002-0619C	
		42-002-0619A	
25	Courtney Lynn Praise	42-002-0620	8 Mondi Rd, Walston, PA 15781
26	Thomas Parise	42-002-0620B	6 Mondi Rd, Walston, PA 15781
27	Ross A Astorino	42-002-0620A	Box 71, Walston, PA 15781
29	Beth A Shaffer	42-002-0620AA	4 Mondi Rd, Walston, PA 15781
30, 31, 137	Anthony J Ross	42-002-0619	2 Mondi Rd, Walston, PA 15781
		42-002-0106	2060 Walston Rd, Punxsutawney, PA 15767

For assistance in accessing this document, contact R3_UIC_Mailbox@epa.gov

For assistance in accessing this document, contact R3_UIC_Mailbox@epa.gov

[illegible]

[illegible]

ADDENDUM 5						
Map ID	Client Name	Site Name	Site ID	Other ID	Site Status	Status if inactive
1	Peoples Gas Co LLC	Margaret Ann Isenberg	126625	065-20223	Inactive	Plugged OG Well
2	Diversified Prod LLC	CH Straitiff ET UX WNU U OG Well	126813	065-20411	Active	
3	Dorward Energy Corp	George H Kurtz 3 OG Well	127876	065-21477	Active	
4	Peoples Gas Co LLC	J Cummings 1 2A 1 OG Well	125107	065-00433	Inactive	Plugged OG Well
5	Diversified Prod LLC	Vada Bullers Formerly C Campb 2 OG Well	126823	065-20421	Inacvitve	Unknown
6	Diversified Prod LLC	GA HAAG 4 OG Well	686624	065-25899	Active	
7	Diversified Prod LLC	Grover A HAAG Formerly GC 2 OG Well	126806	065-20404	Inactive	Unknown
8	Dorward Energy Corp	R & P & Mary E Caldwell DS15 OG Well	127963	065-21564	Active	
9	Diversified Prod LLC	Rochester & PGH Coal 4 OG Well	126862	065-20460	Inactive	Unknown
10	Susquehanna Energies Inc	Kingman ET AL 1 OG Well	126810	065-20408	Active	
11	Diversified Prod LLC	Rochester & PGH Coal 2 OG Well	126818	065-20416	Inactive	
12	Peoples Gas Co LLC	Rochester & PGH Coal 420A 1 OG Well	125117	065-00443	Inactive	Unknown
13	Diversified Prod LLC	R & P Coal WN1056 OG Well	126887	065-20485	Active	

ADDENDUM 6					
Map ID	Owner	PAGWIS ID	Use of Water	Lat	Long
1	Dan Farbo	116529	Domestic	40.96667	-78.98667
2	Allenbaugh Construction	116505	Domestic	40.96167	-78.99167
3	M. Gaglardi	116480	Domestic	40.96333	-78.99444
4	Robert Day	116528	Domestic	40.96444	-78.99361
5	John Harisman	116439	Domestic	40.965	-78.99472
6	James Keslan	116524	Domestic	40.96583	-78.995
7	Elmer Reed	116468	Domestic	40.965	-78.9975
8	S Yalosky	116469	Domestic	40.965	-78.99806
9	Joe Fairman	116537	Domestic	40.96806	-78.995
10	J Parise	116485	Domestic	40.96972	-78.99611
11	ST. Anthony Church	116493	Domestic	40.96611	-78.99222

ATTACHMENT A, ADDENDUM 8

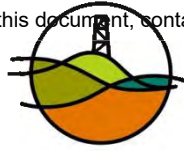
Untitled Map

Write a description for your map.

Legend

- Line Measure
- Polygon Measure
- United States Postal Service





DIVERSIFIED GAS & OIL

C O R P O R A T I O N

November 18, 2021

RE: Proposed Water Injection Well

Ladies and Gentlemen:

G2 STEM LLC ("G2 STEM") is proposing to convert the R&P Coal #4 (API 3706520399) gas well, located near Walston PA, into a water injection well. Diversified Production LLC ("Diversified") is the current operator of the R&P Coal #4 well and is in support of G2 STEM's proposal. Diversified strives to recycle and reuse water produced from its oil and gas operations whenever possible; however, it is sometimes necessary to dispose of produced water.

The United States Environmental Protection Agency ("EPA") recognizes UIC Class 2d water injection wells as a preferred method for water disposal. To promote sustainable natural gas production, Diversified is supporting development of EPA UIC Class 2d facilities. The R&P Coal #4 well is a good candidate to be converted to a water injection well; producing oil and gas from the well and paying royalties thereon is no longer economically viable. Accordingly, Diversified is supporting G2 STEM to be the owner/operator of the UIC facility. G2 STEM has arranged for Mr. Charlie Ehredt to discuss with you an agreement that will allow this project to move forward and, if successful, will again provide royalty payments to you.

Very truly yours,

Paul Hart
Director of Environmental Services
724-349-2777
phart@dgoc.com

FROSTBURG FIELD
ELK RUN POOLCOMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF MINES AND MINERAL INDUSTRIES
OIL AND GAS DIVISION13,100' S of 41°00'00"
8,800' W of 78°57'30"
(1)QUADRANGLE: Punxsutawney ☒ 7 1/2' ☒ 15'PERMIT NO. 065-20460

MAP REFERENCE: _____

KIND OF WELL: Gas
(Oil, Gas, Other)

WELL RECORD

COMPANY: T. W. Phillips Gas and Oil Company	Size of Casing and Tubing	Used in Drilling	Left in Well	Packers: Type, Size and Depth
ADDRESS: 205 N. Main St., Butler, Pa. 16001	14"	105'	105'	8-5/8" O.D. Guide
FARM Rochester & Pgh. Coal Co. ACRES 140	11-3/4"	250'	250'	shoe at 1291'
WELL (FARM) NO. 4 CO. SERIAL NO.	8 5/8" O.D.	1291'	1291'	5 1/2" O.D. Guide
ELEVATION: 1130' LEASE:	5 1/2" O.D.	7195'	7195'	shoe at 7195'
TOWNSHIP: Young COUNTY: Jefferson				
DRILLING COMMENCED: 9-12-66 DRILLING COMPLETED: 9-27-66				
PRODUCTION: Open flow 5,126,760 cu. ft.				PERFORATIONS AT:
ROCK PRESSURE: 2400 psig 48 hrs				
WELL TREATMENT: (Shooting, Acidizing, Fracturing Etc.) None				
	CEMENTING DATA (Size Pipe, Depth, No. Bags, Date)			
	11-3/4", 250' to top, 200 bags cement, 9-13-66			
	8-5/8" O.D., 1291'-1010', 60 Bags cement, 9-15-66			
RESULTS AFTER TREATMENT:	5 1/2" O.D., 7195'-6197', 150 Bags cement, 9-23-66			
ROCK PRESSURE AFTER TREATMENT:				

REMARKS:

Total Depth 7310'

RECEIVED

OCT 13 1966

GEOLOGIC SURVEY

FORMATION	TOP	BOTTOM	GAS AT	OIL AT	WATER AT (Fresh or Salt Water)	REMARKS
Sand & Shale	0	250'				
" "	250'	460'				
Shale	460'	495'				
Sand	495'	730'				
Sand & Shale	730'	757'				
Red Rock	757'	784'				
Sand & Shale	784'	920'				
Sand	920'	930'				
Red Rock	930'	940'				
Sand & Shale	940'	1291'				
Shale	1291'	1580'				
Sand & Shale	1580'	3110'				
Shale	3110'	3510'				
Sand & Shale	3510'	4250'				
Shale	4250'	4680'				
Sand & Shale	4680'	5090'				

(over)

FORMATION	TOP	BOTTOM	GAS AT	OIL AT	WATER AT (Fresh or Salt Water)	REMARKS
Shale	5090'	6050'				
Sandy Shale	6050'	6235'				
Marcellus Shale	6235'	6410'				
Sand & Shale	6410'	6605'				
Tully	6605'	6751'				
Shale	6751'	7176'				
Onondaga	7176'	7192'				
Chert	7192'	7291'				
Oriskany	7291'	7302'				
Shale	7302'	7310'				
Total Depth	7310'					
SEMI						

Date October 11, 1966, 19__

APPROVED T. W. PHILLIPS GAS AND OIL COMPANY, Corner

By *B. J. King*
(Title) Vice President

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL RESOURCES
DIVISION OF OIL AND GAS
PITTSBURGH, PENNSYLVANIA

Office Use

PERMIT NO. **068-20460** 60

PROJECT NO. _____

LOGTYPE OF WELL ☒ Gas

WELL RECORD

DEEP

Frostburg
Dev. (Shallow)

WELL OPERATOR T. W. Phillips Gas and Oil Company

ADDRESS 205 North Main Street, Butler, Pennsylvania ZIP 16001

FARM NAME: Rochester & Fittsburgh Coal Co. FARM NO. 4 SERIAL NO. ACRES 140

TOWNSHIP: Young COUNTY: Jefferson

DRILLING COMMENCEMENT 11-21-73 DRILLING COMPLETED 11-21-73

ELEVATION 1430' QUADRANGLE Punxsutawney ☒ 7 1/2' ☐ 15'

Casing and Tubing Record

Pipe Size	Amt. In Well	Material Behind Pipe Cement (Sks.) Gel (Sks.)		Packer Type Size		Depth	Date Run
14"	105'						9-13-66
O. D. 11-3/4"	250'	200 sks.					9-13-66
O. D. 8-5/8"	1291'	60 sks.					9-15-73
O. D. 4 1/2"	3460'	210 sks.		Float Shoe	4 1/2"	3460'	11-21-73

Perforation Record

Stimulation Record

Date	Interval Perforated From To		Date	Interval Treated	Amt. Fluid	Amt. Sand	Injection Rate
12-7-73	3348'	3390'	12-7-73	3348' 3390'	20,000	24,000	30.1
12-7-73	3181'	3199'	12-7-73	3181' 3199'	18,000	22,000	32.4
12-7-73	2883'	2897'	12-7-73	2883' 2897'	20,000	25,000	33.4
12-7-73	2802'	2805'	12-7-73	2614' 2805'	20,000	20,000	29.0

Natural Open Flow: No Gas Natural Rock Pressure: No Gas

After Treatment Open Flow: 176,000 cu. ft. After Treatment Rock Pressure: 700# 48 hrs.

REMARKS: Well was drilled in 1966 to 7310' and plugged back in 1973 to 3460'; then shallow sands were multifraced.

RECEIVED

MAR 19 1974

PA. GEOLOGIC SURVEY
Oil & Gas Division

FEB 11 1974

Formation or Reverse Side

051774

FORMATIONS						
Name	Top	Bottom	Gas At	Oil At	Water At (Fresh or Salt Water)	Source of Data
Sand & Shale	0	250'	None	None	None	Original Well Record
Sand & Shale	250'	460'				
Shale	460'	495'				
Sand	495'	730'				
Sand & Shale	730'	757'				
Red Rock	757'	784'				
Sand & Shale	784'	920'				
Sand	920'	930'				
Red Rock	930'	940'				
Sand & Shale	940'	1291'				
Shale	1291'	1580'				
Sand & Shale	1580'	3110'				
Shale	3110'	3460'				
Plugged back to 3460'						

Date February 5

19 74

Approved T. W. PHILLIPS GAS AND OIL COMPANY Operator

By

Title

President

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL RESOURCES
DIVISION OF OIL AND GAS
PITTSBURGH, PENNSYLVANIA 15222

Office Use Only

WELL RECORD

PERMIT NO.

JEF-21564

PROJECT NO.

TYPE OF WELL

GAS

WELL OPERATOR

D. A. Dorward

TELEPHONE NO.

(614) 239-1978

ADDRESS

41 N. Chesterfield Road, Columbus, OH

ZIP

43209

FARM NAME

R. & P. Coal Company

FARM NO.

2-A

SERIAL NO.

D-S-15

ACRES

115

TOWNSHIP

Young

COUNTY

Jefferson

DRILLING COMMENCED

12-29-77

DRILLING COMPLETED

1-5-78

ELEVATION

1440'

QUADRANGLE

Punxsutawney

☒ 7 1/2'

☐ 15'

CASING AND TUBING RECORD

PIPE SIZE	AMOUNT IN WELL	MATERIAL BEHIND PIPE		PACKER			DATE RUN
		CEMENT (SKS.)	GEL (SKS.)	TYPE	SIZE	DEPTH	
11 3/4"	71	100	-	-	-	-	12-30-77
8 5/8"	1033	250	-	-	-	-	1-2-78
4 1/2"	3176	250	5	-	-	-	1-6-78

PERFORATION RECORD

STIMULATION RECORD

DATE	INTERVAL PERFORATED		DATE	INTERVAL TREATED	AMOUNT FLUID Gal	AMOUNT SAND	INJECTION RATE
	FROM	TO					
2-3-78	2902	3099	2-3-78	2902-3099	12,000	20,000#	28.7 BPM
2-3-78	2794	2800	2-3-78	2794-2800	23,000	31,000#	29.6 BPM
2-3-78	2694	2704	2-3-78	2694-2704	10,000	17,500#	30.6 BPM
2-3-78	2585	2589	2-3-78	2585-2589	8,000	15,000#	32.5 BPM

NATURAL OPEN FLOW

Est. Show @ 50 MCF

NATURAL ROCK PRESSURE

Not Taken

HRS.
DAYS

AFTER TREATMENT OPEN FLOW

504 MCF

AFTER TREATMENT ROCK PRESSURE

920#/10 days

HRS.
DAYS

REMARKS:

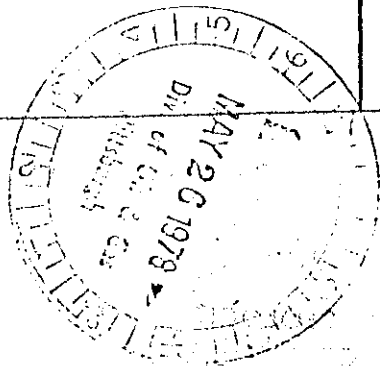
RECEIVED

JUN 5 1978

PA. GEOLOGIC SURVEY
Oil & Gas Division

(FORMATION ON REVERSE SIDE)

FORMATIONS						
NAME	TOP	BOTTOM	GAS AT	OIL AT	WATER AT (FRESH OR SALT WATER)	SOURCE OF DATA
Substructure	0	10				Drillers' Log
Shale	10	28				"
Sand	28	35				"
Shale	35	40				"
Open Mine	40	43				"
Sand & Shale	43	70				"
Sand	70	150				"
Sand & Shale	150	200				"
Shale	200	270				"
Sand & Shale	270	440				"
Sand	440	655				"
Red Rock	655	685				"
Sand	685	770				"
Red Rock	770	775				"
Shale	775	825				"
Sand	825	980				"
Sand & Shale	980	990				"
Sand	990	1115			F. W. @ 1075'	"
Red Rock	1115	1120				"
Sand & Shale	1120	1160				"
Red Rock	1160	1170				"
Sand & Shale	1170	1445				"
Red Rock	1445	1700				"
Shale	1700	2536				"
Sand	2536	2594				"
Shale	2594	2690				"
Sandy Shale	2690	2782				"
Sand	2782	2804				"
Shale	2804	2900				"
Sand & Shale	2900	3350				"
Shale	3350	3708				"
Drillers' Total Depth		3708				
Speechley	2543	2590				Service Co. Log
Balltown	2692	2804				"
Sheffield	2900	2917				"
1st Bradford	3095	3100				"
2nd Bradford	3177	3132				"
3rd Bradford	3245	3290				"
Loggers' Total Depth		3677				



May 24, 19 78

DATE
Donald R. Laughlin

APPROVED BY

Donald R. Laughlin

TITLE Manager-Prod. & Eng.

ATTACHMENT A, ADDENDUM 12

API #	Common Well ID	Date Drilled	Total Depth	Status	Lat	Long
37-065-20399	R & P Coal Co WN1012	11/6/1965	7276'	Active	40.967072	-78.991738
37-065-21564	R & P & Mary E Caldwell DS15	12/29/1977	3677'	Active	40.965426	-78.987211
37-065-20460	Rochester & PGH Coal Co 4	9/12/1966	SEE NOTE 1	Active	40.964053	-78.989926

NOTE 1: WELL DRILLED TO 7310' IN 1966, THEN PLUGGED BACK TO 3460' IN 1973.

ATTACHMETN A, ADDENDUM 13

Owner	PAGWIS ID	Use of Water	Total Depth	Lat	Long
Dan Farbo	116529	Domestic	175'	40.96667	-78.98667
James Keslan	116524	Domestic	60'	40.96583	-78.995
ST. Anthony Church	116493	Domestic	60'	40.96611	-78.99222

PUNXSUTAWNEY

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF MINES

Oil and Gas Division
HARRISBURG

FROSTBURG Field; ELK RUN Pool

QUADRANGLE: Punxsutawney ☒ 7 1/2' ☒ 15'

PERMIT NO. JEFF-300

MAP REFERENCE: 11S 19W S-71, W-130

KIND OF WELL: Gas

WELL RECORD

(Oil, Gas, Other)

COMPANY: Consolidated Gas Supply Corporation	Size of Casing and Tubing	Used in Drilling	Left in Well	Packers: Type, Size and Depth
ADDRESS: <u>445 W. Main St., Clarksburg, W. Va.</u>	<u>20"</u>	<u>29'</u>	<u>29'</u>	
FARM <u>R. & P. Coal Co.</u> ACRES <u>3,783</u>	<u>16" liner</u>	<u>56'</u>	<u>56'</u>	
WELL(FARM)NO. <u>4</u> CO. SERIAL NO. <u>WN-1012</u>	<u>13 3/8"</u>	<u>130'</u>	<u>130'</u>	<u>BHS @ 142'</u>
ELEVATION: <u>1,420.02</u> LEASE: <u>68157</u>	<u>9 5/8"</u>	<u>1,001'</u>	<u>1,001'</u>	<u>BHS @ 1,010'</u>
TOWNSHIP: <u>Young</u> COUNTY: <u>Jefferson</u>	<u>7"</u>	<u>7,218'</u>	<u>7,218'</u>	<u>BHS @ 7,156'</u>
DRILLING COMMENCED: <u>11-6-65</u> DRILLING COMPLETED: <u>11-23-65</u>				
PRODUCTION: <u>3,499,000 cu. ft.</u>				PERFORATIONS AT:
ROCK PRESSURE: <u>3,865 D.W. psig</u> <u>24</u> hrs.				
WELL TREATMENT: (Shooting, Acidizing, Fracturing Etc.) <u>Well not fractured</u>				
CEMENTING DATA: (Size Pipe, Depth, No. Bags, Date)				
<u>11-7-65 - 20" cem. @ 43' w/35 sax</u>				
<u>11-8-65 - 13 3/8" & 16" liner cem. @ 142' w/55 sax</u>				
RESULTS AFTER TREATMENT:	<u>11-11-65 - 9 5/8" cem. @ 1010' w/50 sax</u>			
ROCK PRESSURE AFTER TREATMENT:	<u>11-20-65 - 7" cem. @ 7156' w/175 sax pozmix</u>			
REMARKS: <u>Special logs have been run and will be filed on or before 2/23/66/</u>				

FORMATION	TOP	BOTTOM	GAS AT	OIL AT	WATER AT (Fresh or Salt Water)	REMARKS
Surface	0	18				
Shale	18	50				
Sandy Shale	50	109				
Coal (Gob)	109	111				
No returns	111	144				
Shale	144	180				
Poor return	180	275				
Sandy Shale	275	330				
Sand	330	350				
Sandy Shale	350	445				
Coal	445	452				
Sand & Shale	452	525				
Sand	525	730				
Red Shale	730	785				
Sand	785	840				
Sandy Shale	840	1520	1440' (flare up)			

(Over)

0100 11-49

FORMATION	TOP	BOTTOM	GAS AT	OIL AT	WATER AT (Fresh or Salt Water)	REMARKS
Shale	1520	1945				
Sand & Shale	1945	2565				
Sandy Shale	2565	3090				
Shale	3090	3115				
Sandy Shale	3115	4560				
Shale	4560	4947				
Sand & Shale	4947	5210				
Shale	5210	5715				
Shale & Lime	5715	5740				
Shale	5740	6580				
Lime	6580	6700				
Shale	6700	7138				
Onondaga	7138	7150				
Chert	7150	7236				
Sand	7236	7256	Gas			
Lime	7256					
Total Depth		7276				

DATE January 13, 19 66

APPROVED Consolidated Gas Supply Corp. OWNER

BY W. L. Barger
MANAGER OF PRODUCTION
AND GAS DIVISION
INDUSTRIAL INDUSTRIES

TITLE
Manager of Production

RECEIVED
JAN 19 12 34 PM '66

Def-399

12, ~~240~~ S. 41°00'

~~21,000~~ W 78055

Obtained by

Authority

Quad. Pennsylvanian A. ⁷² Locate by Sketch

[illegible]

Type Job: 320 HCL
 Fluid: 320 HCL
 Fluid Source: Howard & Customer
 API Gravity: — Viscosity: — CPS @ — F
 Sand: Grade 20-40 Lb 52,500 Sack ☐ Bulk ☒
 Sand Grade 12-20 Lb 1000 Sack ☒ Bulk ☐
 Surfactant Type: Soap Gal. — Bbl. Gal. —
 Acid: Type MAA Gal. 500 7 1/2
 Fluid Loss Add. Type: WAF-8 gal 1200
 Perfor. Balls: Type — No —
 Blocking Agent: Type — Gal Lb —
 Gelling Agent: Type — Gal Lb —
 Breaker: Type — Gal —

Hyd. HP Available 4725 Used 4107
 Pumps On T. bing 11 Cost 11
 AVERAGE RATES—BPM
 Treating 45.6 Displ — Overall —
 PRESSURES—PSI
 Breakdown 2650-2400 Maximum 2950
 Minimum 2950 Displacement 4200
 Instant Shut in 3600 5 Min 3350
 VOLUMES: MAA Red.
 Load Bbl Gal 500-4200-700 Breakdown: Bbl. Gal —
 Treatment: Bbl 44,500+500 MAA Displ.: Bbl Gal 11,740
 Total: Bbl. Gal Less Displ (11700)

TREATING LOG

TIME	Operation or Amt. and Type Fluid Pumped	RATE	PUMPS	PRESSURE—PSI		REMARKS
				TUBING	CASING	
10:30 AM	Safety Meeting	—	—	—	—	—
10:47 AM	Test Lines	—	11	—	5100	—
11:05 AM	Start Pumping MAA	5.0	1	—	200	—
11:07 AM	Start Pumping 4200 Gal. Red.	35.0	11	—	200	—
11:11 AM	Start Sand	35.0	11	—	200	—
11:17 AM	MAA on Bottom	45.6	11	—	2900	—
11:20 AM	Pressure	↑	↑	—	3250	—
11:23 AM	"	↑	↑	—	3550	—
11:26 AM	"	↑	↑	—	3650	—
11:30 AM	Finish Sand & Start H ₂ O	↑	↑	—	3675	—
11:33 AM	Finish H ₂ O & Start Flush	↑	↑	—	3800	—
11:35 AM	Pressure	↓	↓	—	3950	—
11:38 AM	"	↓	↓	—	4100	—
11:40 AM	Finish Flush	45.6	11	—	4200	—
11:50 AM	Close O.Well.	—	—	—	3050	—

Soap furnished by Customer

Halliburton Operator

L. Smith

Company Representative

A. B. Fye

ORIGINAL MUST ACCOMPANY TICKET

Copies Requested

Supplying
Lease
Well No. 1012
Date 2-9-66

ATTACHMENT B. GEOLOGICAL and GEOPHYSICAL INFORMATION

I. Geological Data

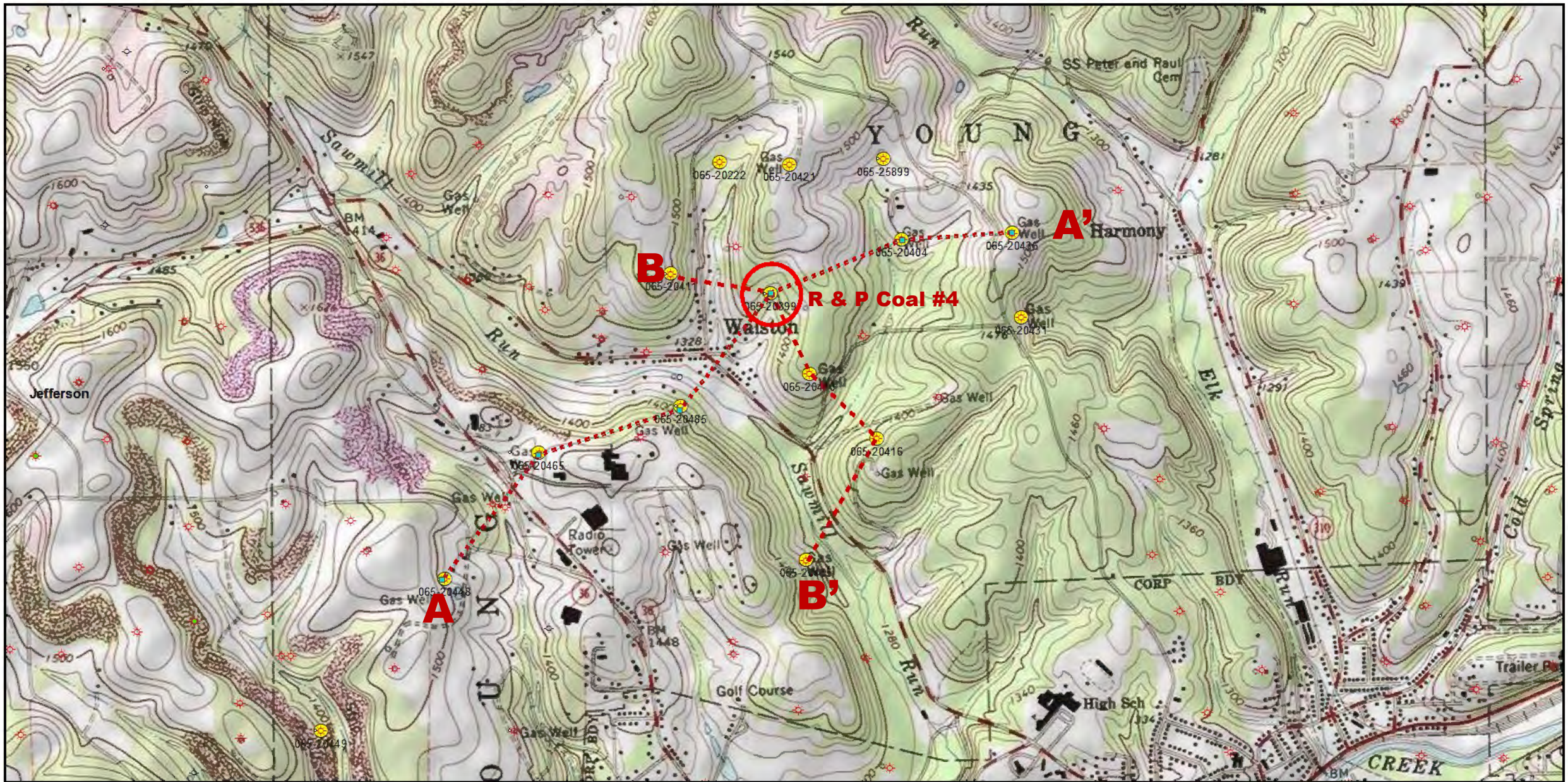
- a. See Attachment B, Addendum 1, 2, &3 to include:
 - i. List of formations from surface to the base of the injection well, identifying all the USDWs and confining and injection zone(s). List includes the lithological description, geological name, thickness, depth, and total dissolved solids (TDS) concentrations from these formations, *if known*
 1. Formations are shown on Addendum 2 & 3
 2. TDS concentrations are not known.
 - ii. Source of information for the geological data and formation TDS
 1. See Attachment B, Addendum 1,2 & 3
 - iii. Porosity and permeability of injection formation, *if available*
 1. Not Available
 - iv. Geological cross-sections, *if available*
 1. Submitted on Attachment 2 & 3
 - v. Known or suspected faults and fracture systems within AOR. If identified, provide proximity to the injection zone and affect fault/fracture system may have on the injection activities
 1. No known or suspected faults or fracture systems.
 - vi. History of seismic activity in the area and proximity to crystalline (i.e. granitic) basement, *if applicable*
 1. Not Applicable as no known history of seismic activity in the area

II. Formation Testing Plan

- a. Fluid pressure
 - i. Unknown
- b. Estimated Fracture Pressure
 - i. Injection test breakdown Pressure (2400-2650 psi), ISIP 3600 psi
- c. Physical and chemical characteristics of the injection zone
 - i. Fine-grained calcareous sandstone

Attachment A, Addendum List

- Addendum 1- RP 4 Area Cross Section Map
- Addendum 2 - RP 4 A Zone Information
- Addendum 3 - RP 4 B Zone Information
- Addendum 4 - Injectivity Test Report, RP#4 Example



RP 4 Area cross section map

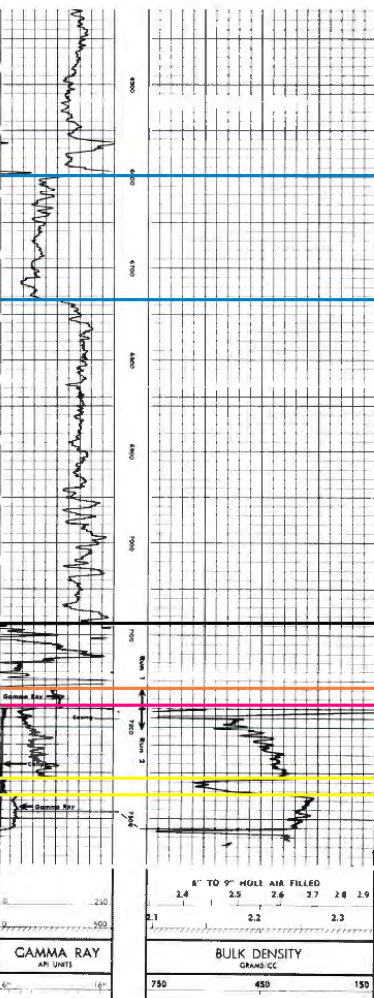
Jefferson County, PA

ATTACHMENT B, ADDENDUM 1

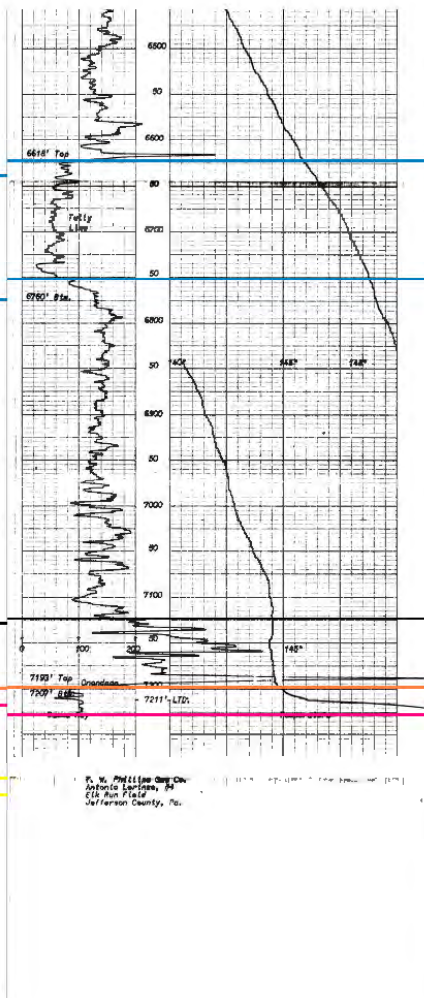
A

A'

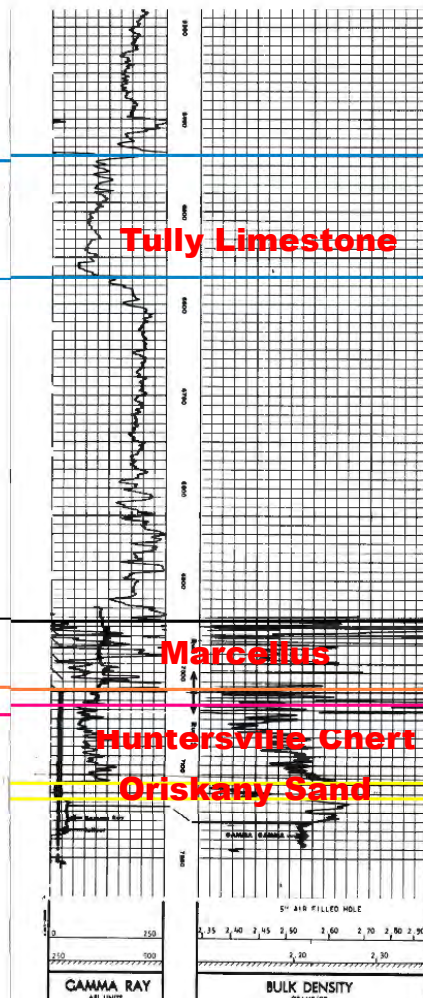
065-20448



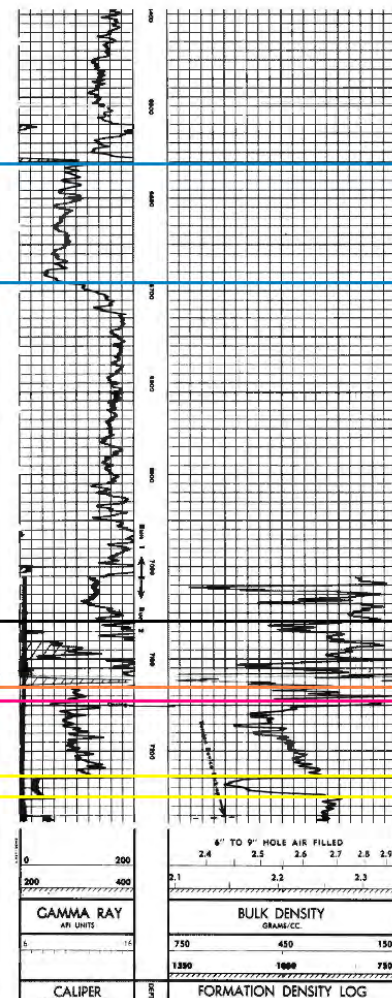
065-20465



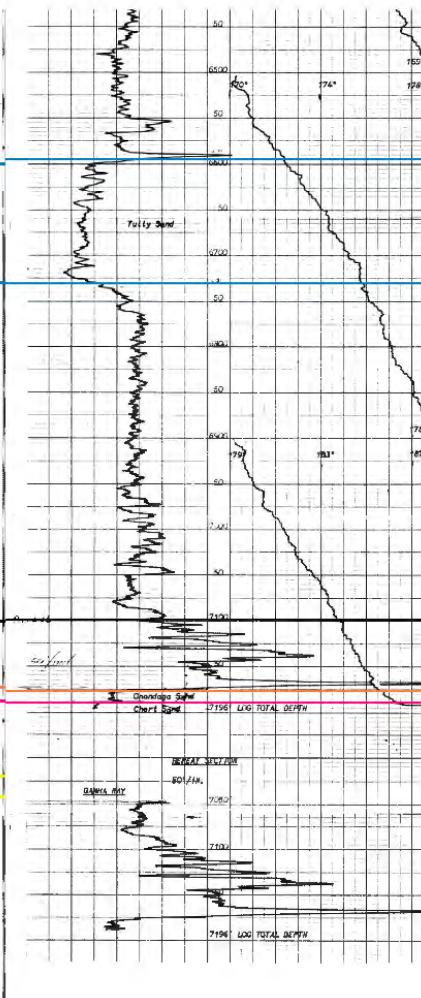
065-20485



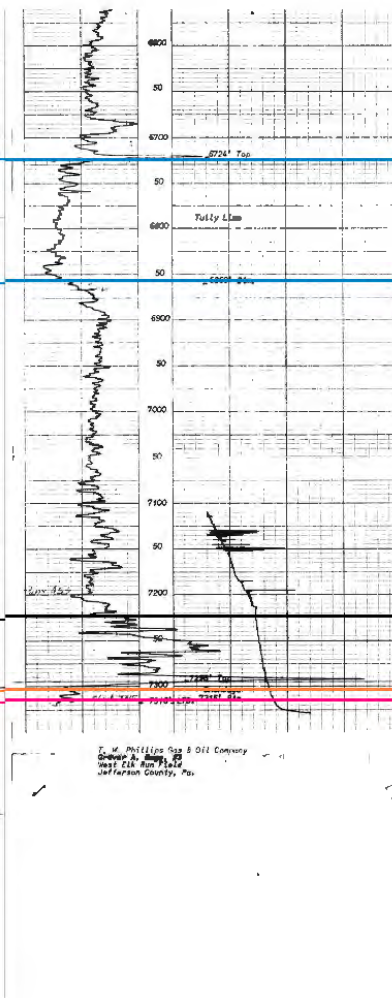
065-20399



065-20404



065-20436



Tully Limestone

Marcellus

Huntersville Chert

Oriskany Sand

ATTACHMENT B, ADDENDUM 2

B**B'**

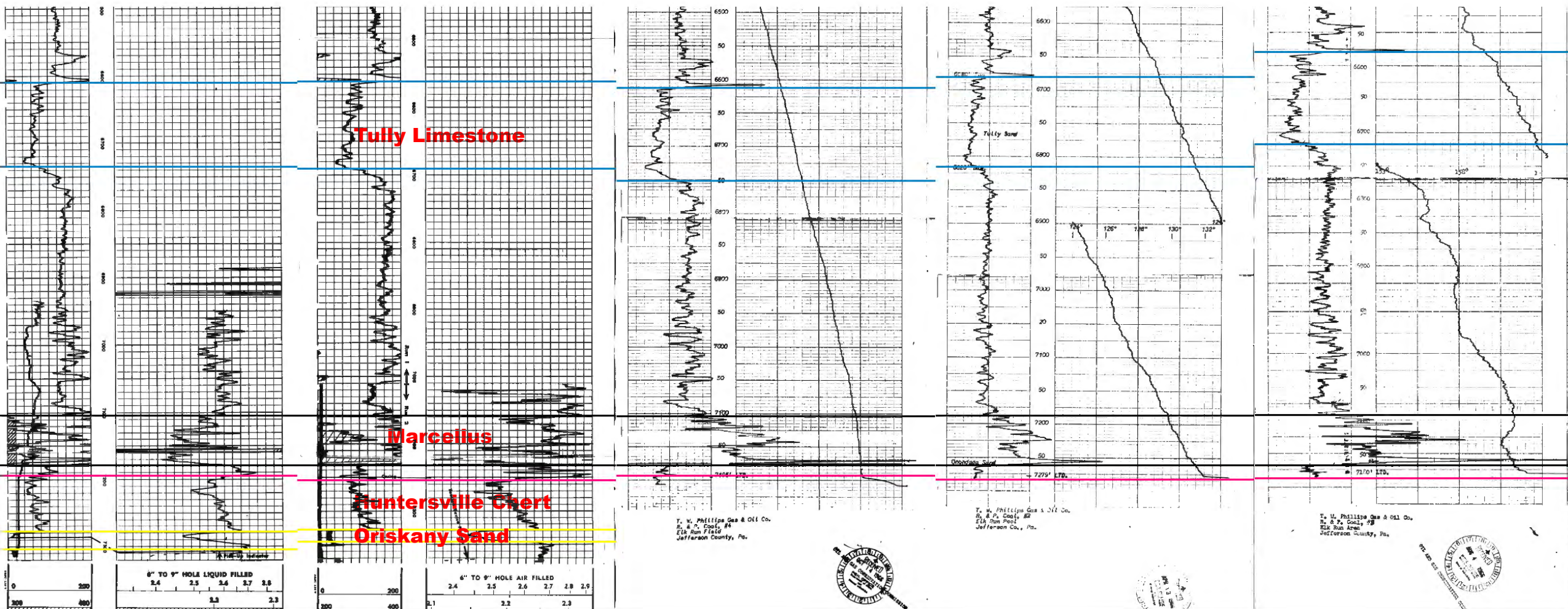
065-20411

065-20399

065-20460

065-20416

065-20435



ATTACHMENT B, ADDEMDUM 3

Injectivity Test Report

Diversified Gas & Oil Corporation

R&P Coal #4 Well

API#: 37-065-20399

Young Township,

Jefferson County, Pennsylvania

August 2021

Prepared for:

Diversified Gas & Oil Corporation

Prepared by:

Tetra Tech, Inc.

6715 Tippecanoe Road, Suite C201
Canfield, OH 44406



TETRA TECH







For assistance in accessing this document, contact R3_UIC_Mailbox@epa.gov

On July 12th, 2" tubing was connected from the well to the two remaining tanks with the consolidated water. Using only the hydrostatic pressure of the introduced fluid column, the tanks were allowed to naturally drain into the well and ultimately into the formation of interest using no external pump or other force. Over the course of the next several hours, the well naturally allowed the remaining volume in tanks to be hydrostatically injected into the formation. This can be observed via the pressure data from the bottom hole gauge on July 12 and presented in Appendix C.

3.0 BOTTOM HOLE PRESSURE ANALYSIS

The BHP transducers were pulled from the well on July 26, 2021, nearly 20 days after completion of the injection portion of the test. The data was via mail to Tetra Tech due to the large file size. The data was formatted and analyzed to evaluate estimated aquifer characteristics. This section summarizes the results of the BHP data analysis.

The plot of bottom-hole pressure and temperature versus time are shown in Figure 3. Figure 4 shows the injection rate versus time for the R&P Coal #4 injection test. The highest step-rate achieved was 4 bpm. For the last approximately 7 hours, the injection rate was held relatively constant between 2.6 and 2.8 bpm.

Analysis of the injection test data was performed using Aqtesolv™ (Version 4.5.002) (HydroSolve, 2007) software. Aqtesolv is a widely-used software program for the interpretation of aquifer tests for confined, leaky and unconfined formations. For the analysis of the R&P Coal #4 injection test, the Theis (1935) solution for a confined formation was used.

Figure 5 shows the semilog plot of pressure versus elapsed time for the falloff portion of the R&P Coal #4 injection test. The dashed line (that portion of the line with constant slope) on Figure 5 indicates the radial flow portion of the falloff curve. This occurred approximately 10 minutes after the well was shut-in. At approximately 16 minutes after shut-in, there was a sudden increase in pressure that lasted until approximately 68 minutes after shut-in. It is not known what caused this increase in pressure. Data collected after this sudden increase in pressure was not considered in the analysis. Figure 6 shows the observed bottomhole pressure and the best-fit curve from Aqtesolv. Data from the last approximately 7 hours of the injection period (when the rate was held relatively constant between 2.6 and 2.8 bpm) and the early portion of the falloff period (i.e., the first approximately 16 minutes of the falloff portion) were used to match the best-fit curve in Aqtesolv. Test data and interpretation results are shown in Table 1. The estimated permeability based on the best-fit curve matching is 28 md and the storage coefficient is 3.13×10^{-3} . This value is reasonable for a confined formation.

Table 1. Test Data and Interpretation Results for R&P Coal #4 Well November 2020 Test.

Parameter	Value
Total Transmissivity (kh/μ)	565 md-ft/cp
Viscosity (μ)	1.0 cp
Interval Thickness (h)	20 ft
Estimated Permeability (k)	28 md
Porosity	13%
Storage Coefficient	3.13×10^{-3}
Specific Gravity (SG)	1.000

- Once the well was shut in, a negative pressure (-3 psi) was noted on the injection pipe. An additional 520 bbls were drained into the well on July 12 in approximately 4 hours for a total 4,557 bbls injected.
- The maximum injection pressure measured during the test was approximately 1,534 psi.
- The maximum bottom-hole pressure during the injection test was approximately 3,816 psi
- The maximum bottom-hole pressure during the gravity feed post injection test was approximately 2,414 psi
- Falloff pressure data analysis indicates an estimated permeability of 28 md.
- No indications of significant geologic boundaries were identified during the test.

In summary, an evaluation of injectivity test data for the July 2021 test on the Diversified R&P Coal #4 indicates that the well has significant potential for brine disposal through injection into the Oriskany Sandstone interval. This is consistent with the porous characteristics of the injection interval based on log analysis, very low static reservoir pressure and the high cumulative production of gas over the life of the well. It is not possible to accurately predict long-term injection well performance based on a relatively short duration test; however, the test results suggest that the well could potentially sustain an injection rate of approximately 2 bpm (approximately 3000 bpd) with pressures remaining under the likely UIC Class IID permit limits for maximum injection pressure, assuming the MIP would be designated at or above the maximum injection pressure identified during the test.

FIGURES

Notes:

1) Topographic map provided by ESRI's ArcGIS Online USA Topo Maps map service (© 2013 National Geographic Society, i-cubed).
2) Quadrangle(s) displayed: Valier, Punxsutawney.

2) Quadrangle(s) displayed: Valier, Punxsutawney.



Legend



Diversified Oil & Gas,
R&P Coal Co. #4



Active Gas Well



Quartermile Radius AOR



TETRA TECH

OIL AND GAS WELLS IN AOR

DIVERSIFIED OIL & GAS R&P COAL CO. #4

JEFFERSON COUNTY, PENNSYLVANIA

DRAWN BY: T. TEAFORD 03/10/2021
CHECKED BY: D. SKOFF 03/10/2021
APPROVED BY:

CONTRACT NUMBER: 212C-PB-01857

FIGURE NUMBER

1

REV

0

Construction Diagram - Proposed Injection Well
Diversified Gas & Oil Corp.
R&P Coal Co. #4
Young Township
Jefferson County, PA
API# 37-065-20399

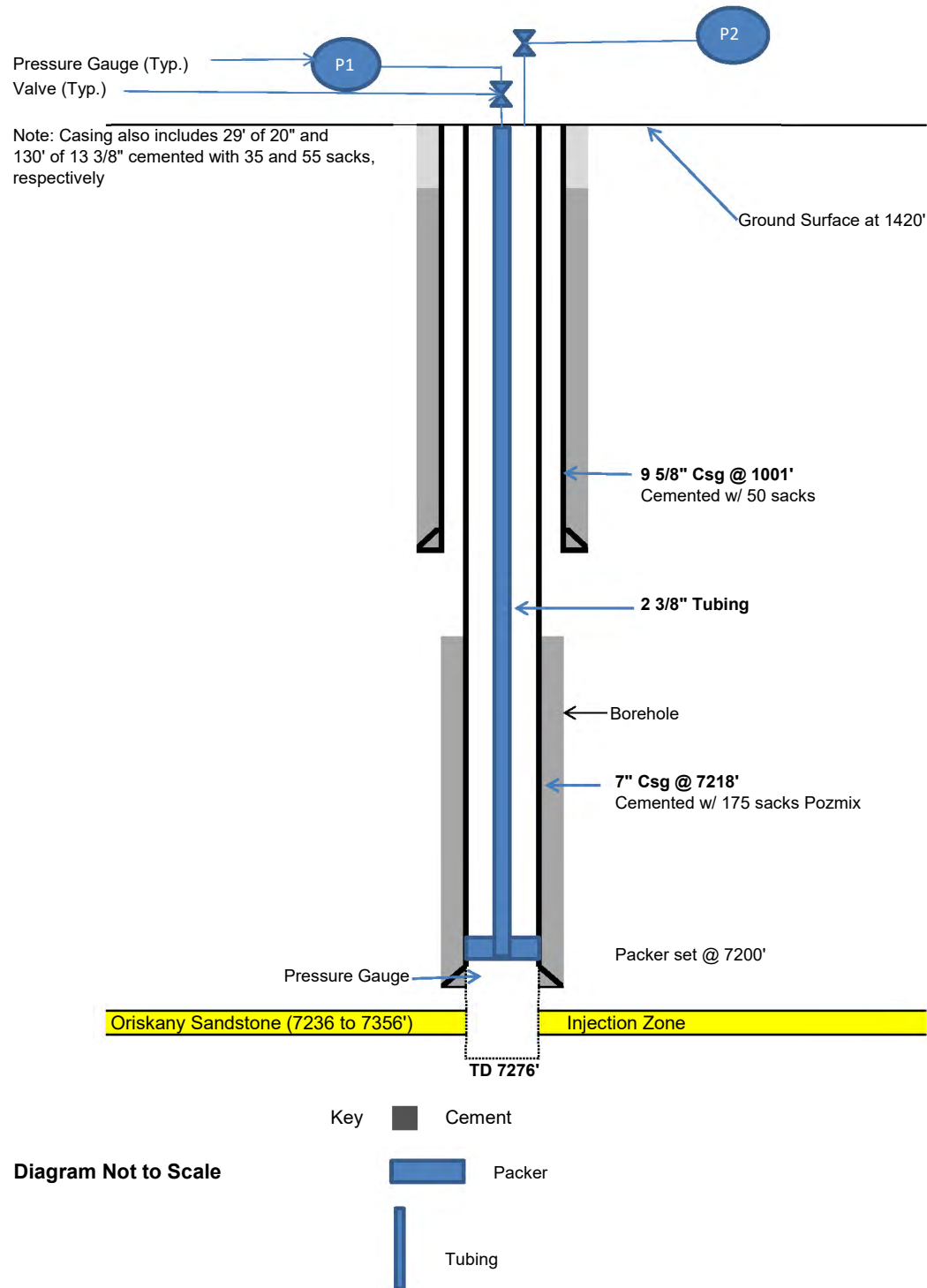


Figure 2

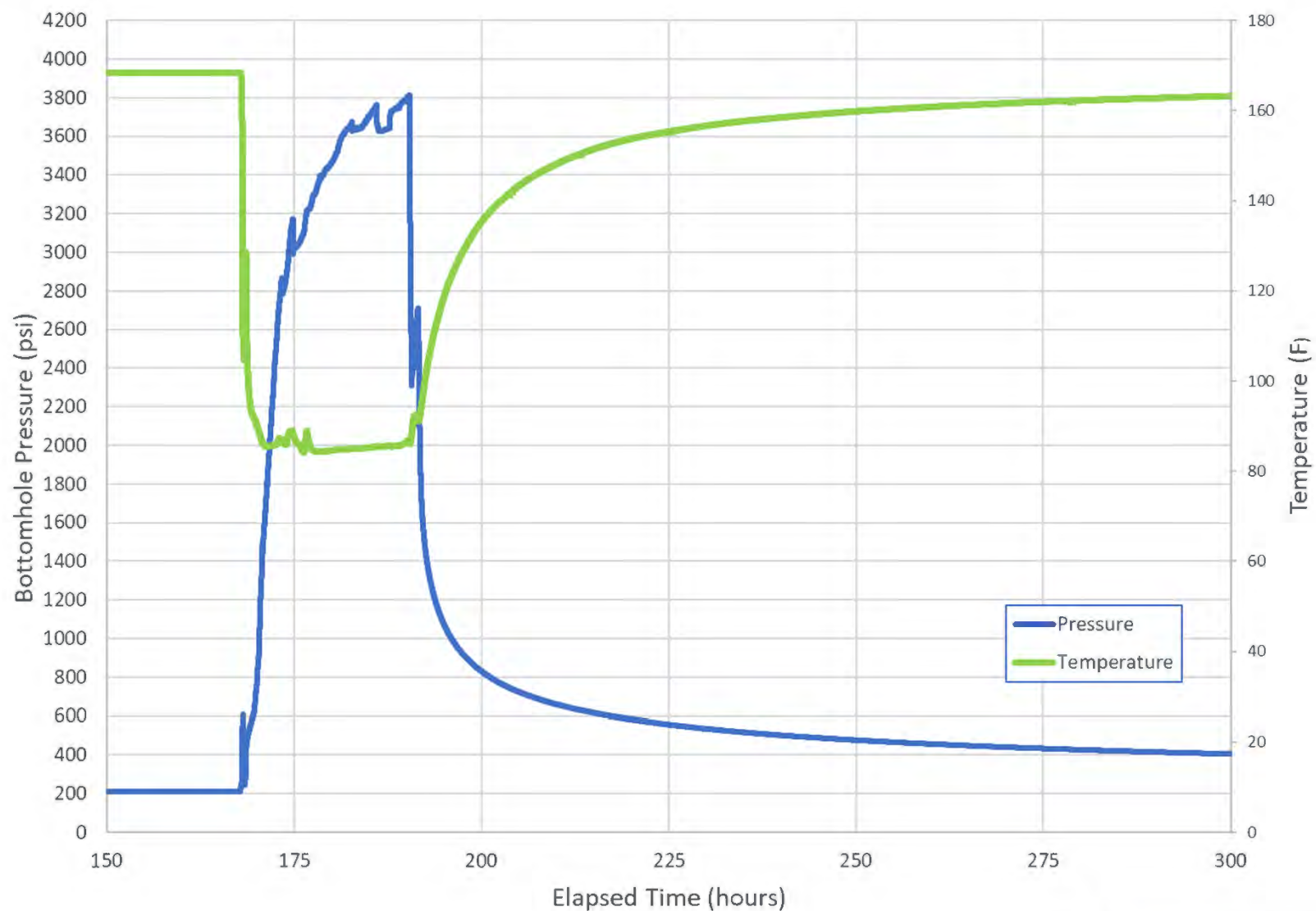


Figure 3. Bottomhole pressure and temperature versus elapsed time for R&P Coal #4 well injection test – July 2021.

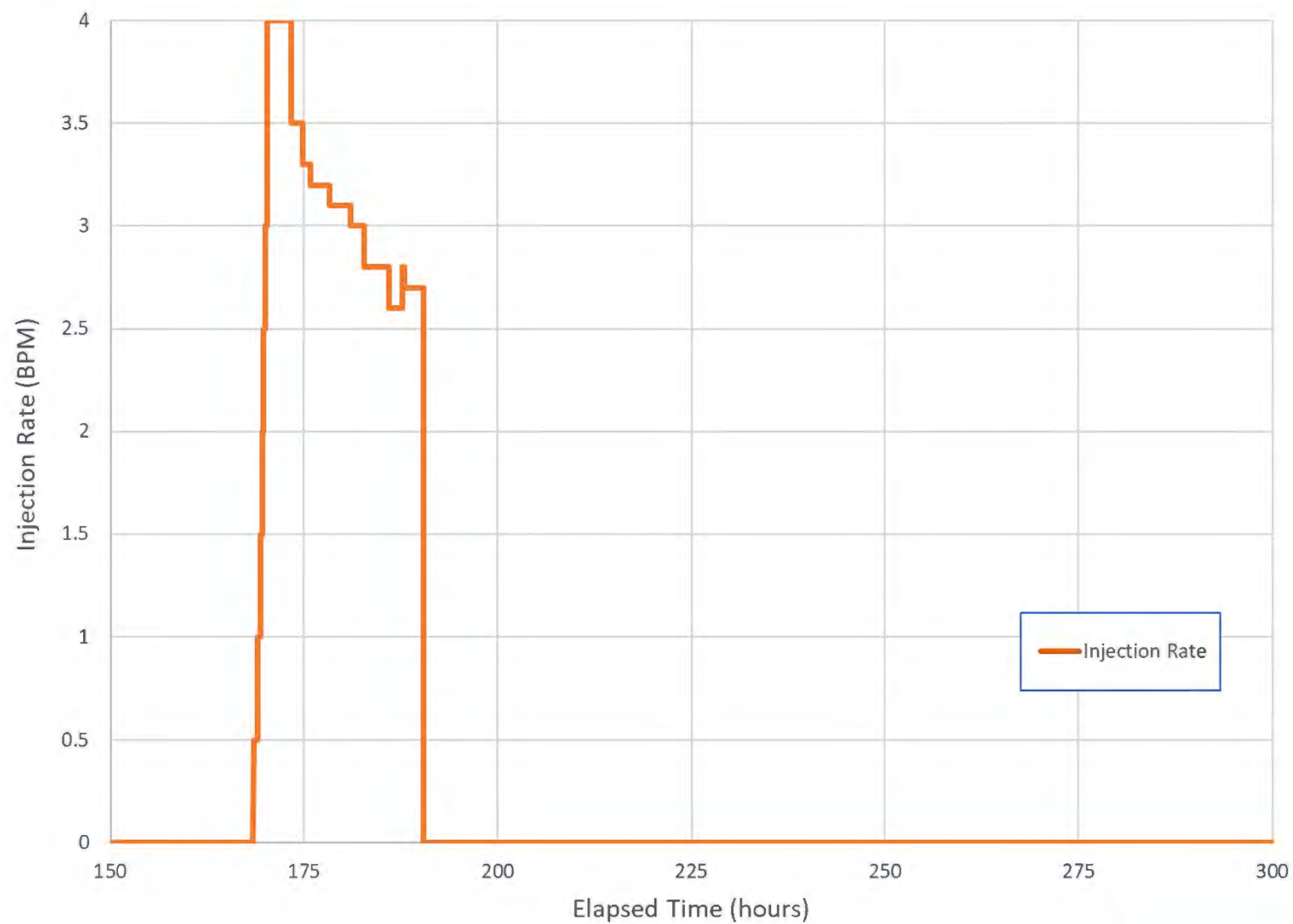


Figure 4. Injection rate versus elapsed time for R&P Coal #4 well injection test – July 2021.

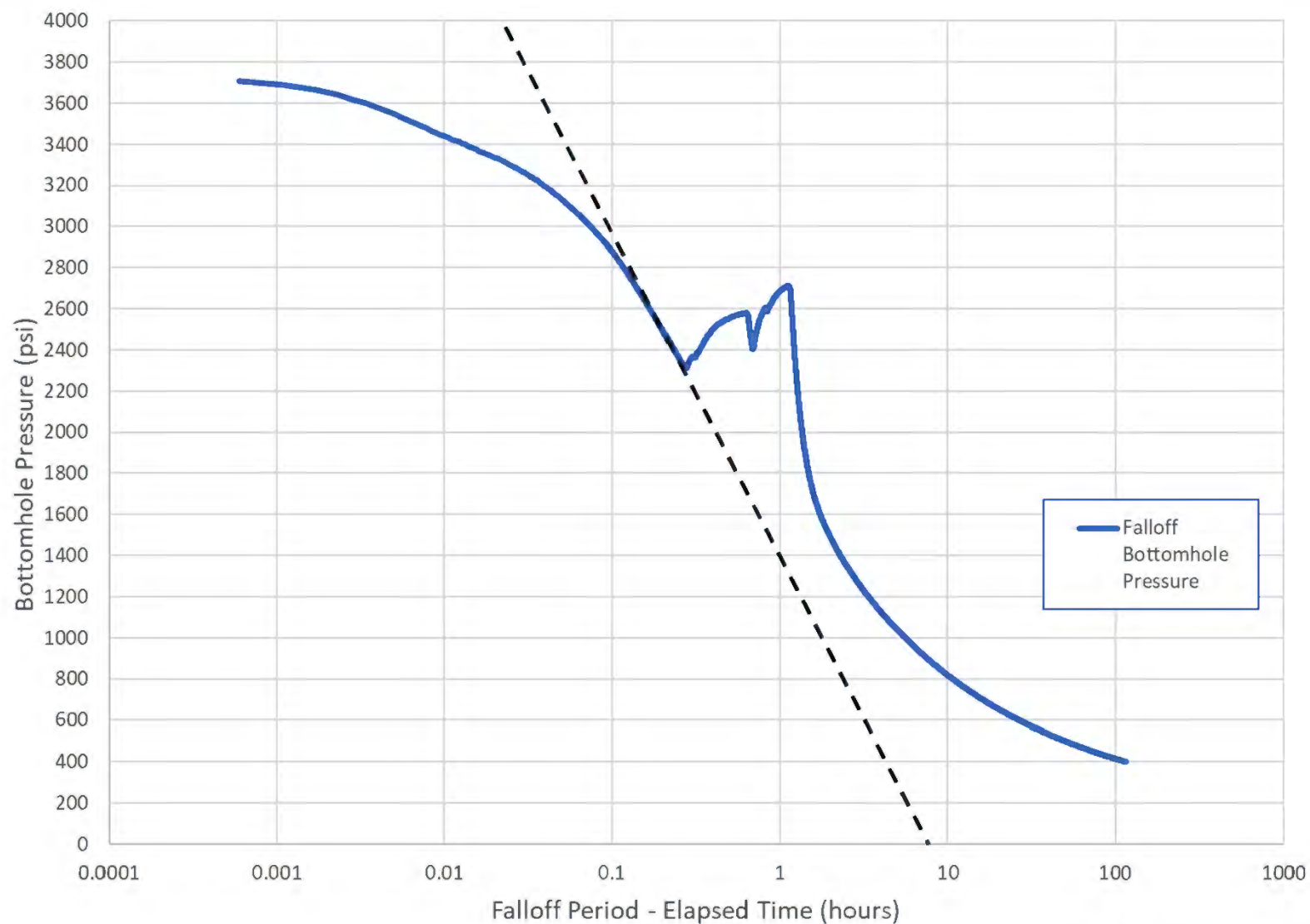


Figure 5. Semilog plot of pressure versus elapsed time for falloff portion of test for R&P Coal #4 well injection test – July 2021.

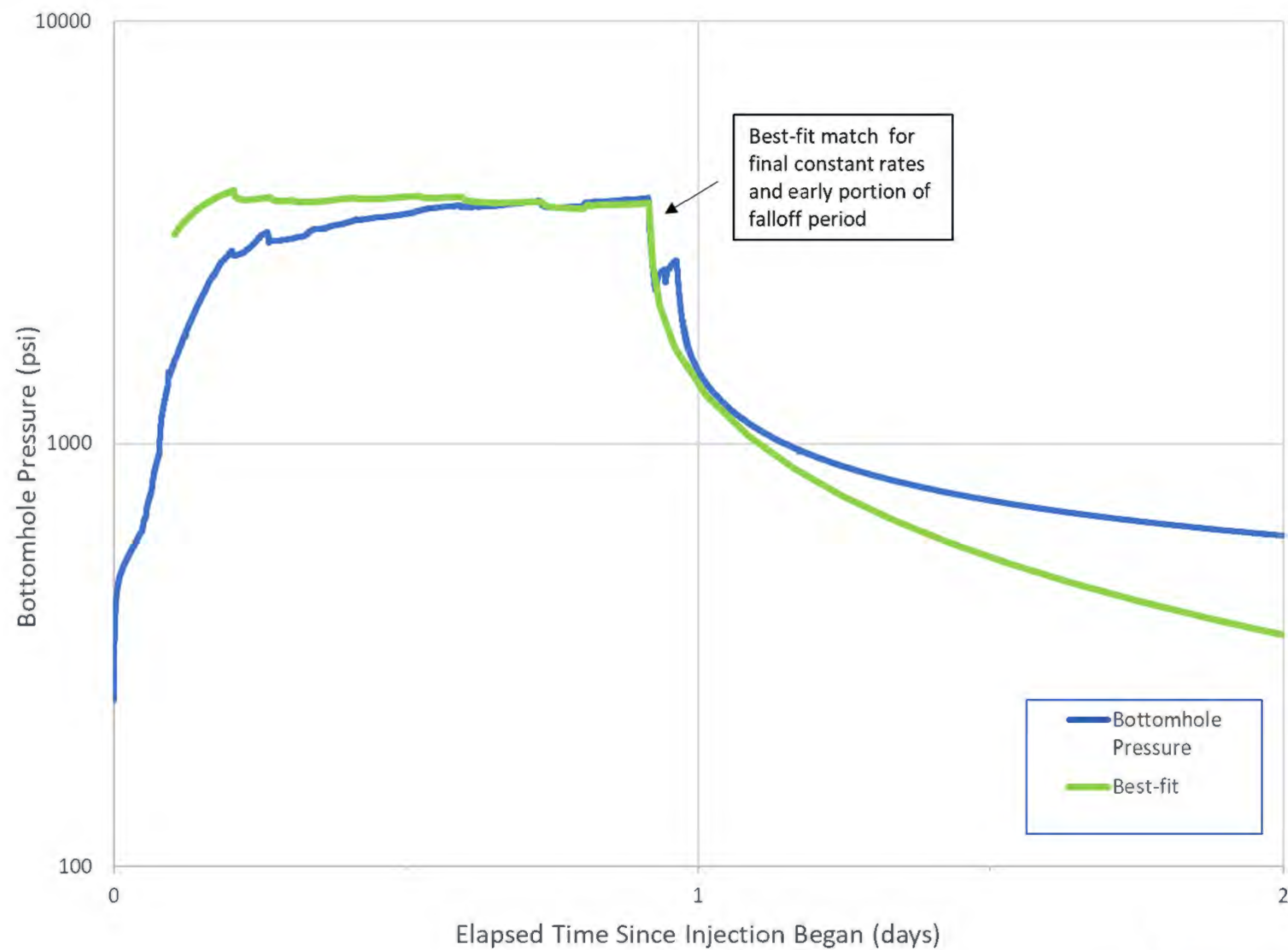


Figure 6. Observed bottomhole pressure and best-fit curve for R&P Coal #4 well injection test – July 2021.

APPENDIX A
WELL COMPLETION INFORMATION

PM-OG-4-36

9300 W. 78° 11' 30"
12000 - 41° 11' 30"

PUNXSUTAWNEY

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF MINES

FROSTBURG Field; ELK RUN Pool.

Oil and Gas Division
HARRISBURG

QUADRANGLE: Punxsutawney ☒ 7 1/2' ☒ 15'

PERMIT NO. JEF-399

MAP REFERENCE: 11S 19W S-71, W-130

KIND OF WELL: Gas

WELL RECORD

(Oil, Gas, Other)

COMPANY: Consolidated Gas Supply Corporation	Size of Casing and Tubing	Used in Drilling	Left in Well	Packers: Type, Size and Depth
ADDRESS: 445 W. Main St., Clarksburg, W. Va.	20"	29'	29'	
FARM R. & P. Coal Co. ACRES 3,783	16" liner	56'	56'	
WELL(FARM)NO. 4 CO. SERIAL NO. WN-1012	13 3/8"	130'	130'	BHS @ 142'
ELEVATION: 1,420.02 LEASE: 68157	9 5/8"	1,001'	1,001'	BHS @ 1,010'
TOWNSHIP: Young COUNTY: Jefferson	7"	7,218'	7,218'	BHS @ 7,156'
DRILLING COMMENCED: 11-6-65 DRILLING COMPLETED: 11-23-65				
PRODUCTION: 3,499,000 cu. ft.				PERFORATIONS AT:
ROCK PRESSURE: 3,865 D.W. psig 24 hrs.				
WELL TREATMENT: (Shooting, Acidizing, Fracturing Etc.) Well not fractured				

CEMENTING DATA: (Size Pipe, Depth, No. Bags, Date)

11-7-65 - 20" cem. @ 43' w/35 sax

11-8-65 - 13 3/8" & 16" liner cem. @ 142' w/55 sax

11-11-65 - 9 5/8" cem. @ 1010' w/50 sax

11-20-65 - 7" cem. @ 7156' w/175 sax pozmix

RESULTS AFTER TREATMENT:

ROCK PRESSURE AFTER TREATMENT:

REMARKS:

Special logs have been run and will be filed on or before 2/23/66/

FORMATION	TOP	BOTTOM	GAS AT	OIL AT	WATER AT (Fresh or Salt Water)	REMARKS
Surface	0	18				
Shale	18	50				
Sandy Shale	50	109				
Coal (Gob)	109	111				
No returns	111	144				
Shale	144	180				
Poor return	180	275				
Sandy Shale	275	330				
Sand	330	350				
Sandy Shale	350	445				
Coal	445	452				
Sand & Shale	452	525				
Sand	525	730				
Red Shale	730	785				
Sand	785	840				
Sandy Shale	840	1520	1440' (flare up)			

(Over)

0165-2-99

FORMATION	TOP	BOTTOM	GAS AT	OIL AT	WATER AT (Fresh or Salt Water)	REMARKS
Shale	1520	1945				
Sand & Shale	1945	2565				
Sandy Shale	2565	3090				
Shale	3090	3115				
Sandy Shale	3115	4560				
Shale	4560	4947				
Sand & Shale	4947	5210				
Shale	5210	5715				
Shale & Lime	5715	5740				
Shale	5740	6580				
Lime	6580	6700				
Shale	6700	7138				
Onondaga	7138	7150				
Chert	7150	7236				
Sand	7236	7256	Gas			
Lime	7256					
Total Depth		7276				

DATE January 13, 19 66

APPROVED Consolidated Gas Supply Corp., OWNER

BY

W. P. Barger

TITLE

Manager of Production

AND GAS DIVISION
INDUSTRIAL MINES
INDUSTRIES

JAN 15 12 34 PM '66

RECEIVED

094-399

Name R & P Coal Co. #4 Co. Jefferson Twp. Young No. 4390 12,200 S. 41°00'
Owner Cansol. Gas Supply #1012 Contr. 21,000 W 78°55'
Date _____ Elev. 1420 Gr _____ Product _____ Drill _____
Obtained by _____ Authority _____ Quad. Pennsylvanian A 121 Locate by Sketch

[illegible]

Type Job 320 HCL
 Fluid 320 HCL
 Fluid Source Owner & Customer
 API Gravity — °Viscosity — CPS @ — °F
 Sand: Grade 20-40 Lb 52,500 Sack ☐ Bulk ☒
 Sand: Grade 12-20 Lb 1000 Sack ☒ Bulk ☐
 Surfactant: Type Soap Gal — in Bbl. Gal —
 Acid: Type MEA Gal 500 % 7 1/2
 Fluid Loss Add.: Type LVAC-8 Gal 1200
 Perfpac Balls: Type — No —
 Blocking Agent: Type — Gal. Lb —
 Gelling Agent: Type — Gal. Lb —
 Breaker: Type — Gal. Lb —

Trucks (No. and Type) —
 Hyd. HP Available 4725 Used 4107
 Pumps On Tubing Casing 11
 AVERAGE RATES—BPM
 Treating 45.6 Displ. — Overall —
 PRESSURES—PSI
 Breakdown 2600-2400 Maximum 2950
 Minimum 2950 Displacement 4200
 Instant Shut In 3600 S Min. 3350
 VOLUMES: MEA Red.
 Load Bbl. Gal 500-4200-700 Breakdown: Bbl. Gal —
 Treatment: Bbl. Gal 44,500+500 MEA Displ.: Bbl. Gal 11,740
 Total: Bbl. Gal Less Displ. (11700)

TREATING LOG

TIME	Operation or Amt. and Type Fluid Pumped	RATE	PUMPS	PRESSURE—PSI		REMARKS
				TUBING	CASING	
10:30 AM	Safety Meeting	—	—	—	—	
10:47 AM	Test Lines	—	11	—	5100	
11:05 AM	Start Pumping MEA	5.0	1	—	200	
11:07 AM	Start Pumping 4200 Gal. Red.	35.0	11	—	200	
11:11 AM	Start Sand	35.0	11	—	200	
11:17 AM	MEA on Bottom	45.6	11	—	2400	
11:20 AM	Pressure	↑	↑	—	3250	
11:23 AM	"	↑	↑	—	3550	
11:26 AM	"	↑	↑	—	3650	
11:34 AM	Finish Sand & Start Huffs	↑	↑	—	3675	
11:35 AM	Finish Huffs & Start Flush	↑	↑	—	3800	
11:35 AM	Pressure	↓	↓	—	3950	
11:38 AM	"	↓	↓	—	4100	
11:40 1/2 AM	Finish Flush	45.6	11	—	4200	
11:50 AM	Close 10 Well.	—	—	—	3050	
Soap furnished by Customer						

Avg. Pressure
3675 PSI.

Halliburton Operator L. L. Smith

Company Representative A. L. Fye

ORIGINAL MUST ACCOMPANY TICKET

Copies Requested —

Supply Corp. Lease # 11011010
 Well No. 1012 Date 2-9-66

APPENDIX B

INJECTION PRESSURE AND RATE FIELD MEASUREMENTS

STEP-RATE TEST DATA

Tetra Tech, Inc.

Well ID: Diversified R&P Coal #4 (Jefferson County, PA)

Injection Formation: Oriskany SS
Interval Depth (ft bgs): 7236 - 7256 ft

Logger:

Date:

7/6/2024

Log Sheet:

____ of ____

Step No.	Time (hr:min)	Cumulative Time (hr:min)	Cumulative Volume (bbls)	Flow Rate		Surface Inj. Pressure (psi)	Annular Pressure (psi)	Specific Gravity	Remarks
				Design (bbl/min)	Actual (bbl/min)				
1	09:00	0	0	0.5		71	0	—	Pre-test
1	09:05	5	1.9	0.5	0.5	80	0		130 psi after loading
	09:10	10	4.4	0.5	0.5	88	0		
	09:15	15	6.8	0.5	0.5	87	0		
	09:20	20	9.4	0.5	0.5	89	0		
	09:25	25	11.6	0.5	0.5	89	0		
	09:30	30	13.8	0.5	0.5	89	0		
	09:35	35	18.6	1.0	1.0	88	0		
	09:40	40	23.9	1.0	1.0	88	0		
	09:45	45	29.0	1.0	1.0	88	0		
	09:50	50	34.2	1.0	1.0	88	0		
	09:55	55	39.4	1.0	1.0	89	0		
	10:00	1:00	46.4	1.5	1.5	89	0		
	10:05	1:05	54.0	1.5	1.5	89	0		
	10:10	1:10	60.0	1.5	1.5	89	0		
	10:15	1:15	70.0	2.0	2.1	94	0		
	10:20	1:20	81.7	2.0	2.1	94	0		
	10:25	1:25	91.8	2.5	2.6	96	0		
	10:30	1:30	105.2	2.5	2.6	97	0		
	10:35	1:35	118	2.5	2.6	98	0		
	10:40	1:40	133.0	2.0	3.1	106	0		
	10:45	1:45	140.0	3.0	3.2	105	0		
	10:50	1:50	164.3	3.0	3.2	103	0		
	10:55	1:55	180.4	4.0	4.0	130	0		
	11:00	2:00	200.9	4.0	4.3	155	0		
	11:05	2:05	222.2	4.0	4.1	149	0		
	11:10	2:10	242.9	4.0	4.1	149	0		
	11:15	2:15	265.0	4.0	4.1	142	0		
	11:20	2:20	284.0	4.0	4.1	138	0		
	11:25	2:25	367.00	4.0	4.1		0		

STEP-RATE TEST DATA

Tetra Tech, Inc.

Well ID: Diversified R&P Coal #4 (Jefferson County, PA)

Injection Formation: Oriskany SS
Interval Depth (ft bgs): 7236 - 7256 ft

Logger:

Date:

Log Sheet:

____ of ____

Step No.	Time (hr:min)	Cumulative Time (hr:min)	Cumulative Volume (bbls)	Flow Rate		Surface Inj. Pressure (psi)	Annular Pressure (psi)	Specific Gravity	Remarks
				Design (bbl/min)	Actual (bbl/min)				
	11:30 AM	2:30	326.4	4.0	4.1	134	0		
	11:35	2:35	350.0	4.0	4.1	170	0		
	11:40	2:40	370.0	4.0	4.1	178	0		
	11:45	2:45	390.5	4.0	4.1	193	0		
	11:50	2:50	411.5	4.0	4.1	271	0		
	11:55	2:55	431.2	4.0	4.1	335	0		
	12:00 PM	3:00	456.1	4.0	4.1	393	0		
	12:05	3:05	482.6	4.0	4.1	424	0		
	12:10	3:10	498.5	4.0	4.1	465	0		
	12:15	3:15	511.3	4.0	4.1	492	0		
	12:20	3:20	533.3	4.0	4.1	547	0		
	12:25	3:25	552.3	4.0	4.1	589	0		
	12:30	3:30	573.6	4.0	4.1	629	0		
	12:35	3:35	593.6	4.0	4.1	694	0		
	12:40	3:40	615.9	4.0	4.1	740	0		
	12:45	3:45	636.9	4.0	4.1	774	0		
	12:50	3:50	658.0	4.0	4.1	824	0		
	12:55	3:55 03:55	676.5	4.0	4.1	874	0		
	1:00	4:00	700.0	4.0	4.2	938	0		
	1:05	4:05	718.9	4.0	4.1	982	0		
	1:10	4:10	741.6	4.0	4.1	1014	0		
	1:15	4:15	759.9	4.0	4.1	1046	0		
	1:20	4:20	782	4.0	4.1	1086	0		
	1:25	4:25	800.0	4.0	4.1	1131	0		
	1:30	4:30	821.7	4.0	4.1	1183	0		
	1:35	4:45:35	847.5	4.0	4.1	1209	0		
	1:40	4:40 4:40	864.5	4.0	4.1	1243	0		
	1:45	4:45 4:45	883.5	4.0	4.1	1272	0		
	1:50	5:00:50	900.9	4.0	4.2	1292	0		
	1:55	5:05	924.7	4.0	4.1	1347	0		

STEP-RATE TEST DATA

Tetra Tech, Inc.

Well ID: Diversified R&P Coal #4 (Jefferson County, PA)

Injection Formation: Oriskany SS
Interval Depth (ft bgs): 7236 - 7256 ft

Logger:

Date:

Log Sheet:

____ of ____

Step No.	Time (hr:min)	Cumulative Time (hr:min)	Cumulative Volume (bbls)	Flow Rate		Surface Inj. Pressure (psi)	Annular Pressure (psi)	Specific Gravity	Remarks
				Design (bbl/min)	Actual (bbl/min)				
	2:00 pm	5:00	9840	3.5	3.7	945	0		
	2:05	5:05	988.6	3.5	3.7	941	0		
	2:10	5:10	983.2	3.5	3.7	957	0		
	2:15	5:15	981000.8	3.5	3.7	966	0		
	2:20	5:20	1024.9	3.5	3.7	970	0		
	2:25	5:25	1036.6	3.5	3.7	985	0		
	2:30	5:30	1061.9	3.5	3.7	1000	0		
	2:35	5:35	1084.2	3.5	3.7	1031	0		
	2:40	5:40	1100	3.5	3.7	1050	0		
	2:45	5:45	1116.5	3.5	3.7	1067	0		
	2:50	5:50	1133.6	3.5	3.7	1134	0		
	2:55	5:55	1156.2	3.5	3.7	1124	0		
	3:00	6:00	1171.6	3.5	3.7	1144	0		
	3:05	6:05	1185	3.5	3.7	1174	0		
	3:10	6:10	1204	3.5	3.7	1216	0		
	3:15	6:15	1222.4	3.5	3.7	1248	0		
	3:20	6:20	1241	3.5	3.7	1262	0		
	3:25	6:25	1260.3	3.5	3.7	1289	0		
	3:30	6:30	1277.8	3.3	3.3	1277.8 807	0		
	3:35	6:35	1295	3.3	3.3	813	0		
	3:40	6:40	1313.4	3.3	3.3	806	0		
	3:45	6:45	1324	3.3	3.3	812	0		
	3:50	6:50	1342	3.3	3.3	814	0		
	3:55	6:55	1359	3.3	3.3	821	0		
	4:00	7:00	1375	3.3	3.3	819	0		
	4:05	7:05	1391.5	3.3	3.3	821	0		
	4:10	7:10	1412	3.3	3.3	830	0		
	4:15	7:15	1431	3.3	3.3	839	0		
	4:20	7:20	1441	3.3	3.3	836	0		
	4:25	7:25	1456	3.3	3.3	846	0		

STEP-RATE TEST DATA

Tetra Tech, Inc.

Well ID: Diversified R&P Coal #4 (Jefferson County, PA)

Injection Formation: Oriskany SS
Interval Depth (ft bgs): 7236 - 7256 ft

Logger:

Date:

Log Sheet:

01

Step No.	Time (hr:min)	Cumulative Time (hr:min)	Cumulative Volume (bbls)	Flow Rate		Surface Inj. Pressure (psi)	Annular Pressure (psi)	Specific Gravity	Remarks
				Design (bbl/min)	Actual (bbl/min)				
	4:30 PM	7:30	1473.7	3.3	3.3	850	0		
	4:35	7:35	1490	3.3	3.3	858	0		
	4:40	7:40	1506.8	3.3	3.3	866	0		
	4:45	7:45	1524	3.2	3.2	869	0		
	4:50	7:50	1540	3.2	3.2	860	0		
	4:55	7:55	1558	3.3	3.3	851	0		
	5:00	8:00	1571	3.3	3.3	851	0		
	5:05	8:05	1586	3.3	3.3	864	0		
	5:10	8:10	1606	3.3	3.3	900	0		
	5:15	8:15	1622	3.2	3.2	925	0		
	5:20	8:20	1635	3.2	3.2	942	0		
	5:25	8:25	1659.8	3.2	3.2	955	0		
	5:30	8:30	1667.4	3.2	3.2	961	0		
	5:35	8:35	1685	3.2	3.2	965	0		
	5:40	8:40	1705.2	3.2	3.2	977	0		
	5:45	8:45	1715.2	3.2	3.2	974	0		
	5:50	8:50	1730.9	3.2	3.2	984	0		
	5:55	8:55	1747.2	3.2	3.2	985	0		
	6:00	9:00	1762.9	3.2	3.2	1006	0		
	6:05	9:05	1778.8	3.2	3.2	1018	0		
	6:10	9:10	1794.9	3.2	3.2	1027	0		
	6:15	9:15	1811.4	3.2	3.2	1028	0		
	6:20	9:20	1827.6	3.2	3.2	1034	0		
	6:25	9:25	1843.3	3.2	3.2	1057	0		
	6:30	9:30	1858.7	3.2	3.2	1044	0		
	6:35	9:35	1874.7	3.2	3.2	1051	0		
	6:40	9:40	1890.7	3.2	3.2	1064	0		
	6:45	9:45	1907.2	3.2	3.2	1073	0		
	6:50	9:50	1923.2	3.2	3.2	1080	0		
	6:55	9:55	1937.9	3.2	3.2	1094	0		

STEP-RATE TEST DATA

Tetra Tech, Inc.

Well ID: Diversified R&P Coal #4 (Jefferson County, PA)

Injection Formation: Oriskany SS
Interval Depth (ft bgs): 7236 -7256 ft

Logger:

Date:

Log Sheet:

____ of ____

Step No.	Time (hr:min)	Cumulative Time (hr:min)	Cumulative Volume (bbls)	Flow Rate		Surface Inj. Pressure (psi)	Annular Pressure (psi)	Specific Gravity	Remarks
				Design (bbl/min)	Actual (bbl/min)				
	7:00 PM	10:00	1954.7	3.1	3.1	1098			
	7:05	10:05	1969.2	3.1	3.1	1104			
	7:10	10:10	1985.0	3.2	3.2	1095			
	7:15	10:15	2000.8	3.1	3.1	1100			
	7:20	10:20	2016.8	3.1	3.1	1100			
	7:25	10:25	2032.5	3.1	3.1	1107			
	7:30	10:30	2048.2	3.1	3.1	1111	0		
	7:35	10:35	2064.4	3.1	3.1	1115			
	7:40	10:40	2079.9	3.1	3.1	1119			
	7:45	10:45	2095.9	3.1	3.1	1124			
	7:50	10:50	2110.9	3.1	3.1	1127			
	7:55	10:55	2127.9	3.1	3.1	1126			
	8:00	11:00	2143.0	3.1	3.1	1129			
	8:05	11:05	2157.5	3.1	3.1	1127			
	8:10	11:10	2173.2	3.1	3.1	1130			
	8:15	11:15	2189	3.1	3.1	1132			
	8:20	11:20	2204.9	3.1	3.1	1135			
	8:25	11:25	2220.5	3.1	3.1	1140			
	8:30	11:30	2236.6	3.1	3.1	1143			
	8:35	11:35	2251.3	3.1	3.1	1144			
	8:40	11:40	2266.5	3.1	3.1	1148			
	8:45	11:45	2282.6	3.1	3.1	1153			
	8:50	11:50	2297.3	3.1	3.1	1157			
	8:55	11:55	2312.8	3.1	3.1	1159			
	9:00	12:00	2328.3	3.1	3.1	1162			
	9:05	12:05	2343.6	3.1	3.1	1168			
	9:10	12:10	2359	3.1	3.1	1172			
	9:15	12:15	2374.4	3.1	3.1	1177			
	9:20	12:20	2390	3.1	3.1	1179			
	9:25	12:25	2405.5	3.1	3.1	1182			

STEP-RATE TEST DATA

Tetra Tech, Inc.

Well ID: Diversified R&P Coal #4 (Jefferson County, PA)

Injection Formation: Oriskany SS
Interval Depth (ft bgs): 7236 -7256 ft

Logger:

Date:

Log Sheet:

___ of ___

Step No.	Time (hr:min)	Cumulative Time (hr:min)	Cumulative Volume (bbbls)	Flow Rate		Surface Inf. Pressure (psi)	Annular Pressure (psi)	Specific Gravity	Remarks
				Design (bbbl/min)	Actual (bbbl/min)				
	9:30	12:30	2420.8	3.1	3.1	1195			
	9:35	12:35	2436.6	3.1	3.1	1202			
	9:40	12:40	2451.4	3.0	3.0	1212			
	9:45	12:45	2466.9	3.0	3.0	1218			
	9:50	12:50	2481.9	3.0	3.0	1223			
	9:55	12:55	2497.6	3.0	3.0	1229			
	10:00	13:00	2512.8	3.0	3.0	1232			
	10:05	13:05	2528	3.0	3.0	1236	0		
	10:10	13:10	2543.3	3.0	3.0	1239			
	10:15	13:15	2557.2	3.0	3.0	1241			
	10:20	13:20	2572.5	3.0	3.0	1243			
	10:25	13:25	2587.8	3.0	3.0	1246			
	10:30	13:30	2602.8	3.0	3.0	1252			
	10:35	13:35	2618	3.0	3.0	1253	0		
	10:40	13:40	2633.3	3.0	3.0	1256			
	10:45	13:45	2647.8	3.0	3.0	1254			
	10:50	13:50	2662.8	3.0	3.0	1254	0		
	10:55	13:55	2677.9	3.0	3.0	1257			
	11:00	14:00	2697	3.0	3.0	1261			
	11:05	14:05	2707.7	3.0	3.0	1260			
	11:10	14:10	2722.9	3.0	3.0	1269			
	11:15	14:15	2737.7	3.0	3.0	1271			
	11:20	14:20	2753.2	3.0	3.0	1274			REDUCE GEAR @ 11:22 AM
	11:25	14:25	2767.8	2.8	2.8	1147			
	11:30	14:30	2781.5	2.8	2.8	1145			
	11:35	14:35	2795.5	2.8	2.8	1144			
	11:40	14:40	2809.7	2.8	2.8	1144			
	11:45	14:45	2824	2.8	2.8	1142			
	11:50	14:50	2838.3	2.8	2.8	1141			
	11:55	14:55	2852.7	2.8	2.8	1150			

CONSTANT RATE TEST DATA

Tetra Tech, Inc.

Well ID: Diversified R&P Coal #4
County, PA)

(Jefferson

Injection Formation: Oriskany SS
Interval Depth (ft bgs): 7236 - 7356 ft.

Logger:

Date:

Log Sheet:
of

Time (hr:min)	Cumulative Time (hr:min)	Cumulative Volume (bbls)	Flow Rate		Surface Inj. Pressure (psi)	Annular Pressure (psi)	Specific Gravity	Remarks
			Design (bbl/min)	Actual (bbl/min)				
12:00 AM	14:05 15	2866.7	2.8	2.8	1150			
12:05	15:05	2880.5	2.8	2.8	1152	0		
12:10	15:10	2894.9	2.8	2.8	1147			
12:15	15:15	2909.2	2.8	2.8	1149			
12:20	15:20	2923.6	2.8	2.8	1149			
12:25	15:25	2937.9	2.8	2.8	1153			
12:30	15:30	2952.2	2.8	2.8	1156	0		
12:35	15:35	2966.6	2.8	2.8	1163			
12:40	15:40	2980.1	2.8	2.8	1149			
12:45	15:45	2994.4	2.8	2.8	1163			
12:50	15:50	3008.8	2.8	2.8	1167			
12:55	15:55	3023.1	2.8	2.8	1180			
1:00	16:00	3037.5	2.8	2.8	1180			
1:05	16:05	3051.7	2.8	2.8	1183			
1:10	16:10	3066.3	2.8	2.8	1186			
1:15	16:15	3079.8	2.8	2.8	1180			
1:20	16:20	3093.8	2.8	2.8	1191			
1:25	16:25	3108.2	2.8	2.8	1195	0		
1:30	16:30	3122.5	2.8	2.8	1206			
1:35	16:35	3136.8	2.8	2.8	1205			
1:40	16:40	3151.2	2.8	2.8	1212			
1:45	16:45	3165.6	2.8	2.8	1216			
1:50	16:50	3179.9	2.8	2.8	1217			
1:55	16:55	3194.5	2.8	2.8	1230			
2:00	17:00	3208.3	2.8	2.8	1233			
2:05	17:05	3223.1	2.8	2.8	1237			
2:10	17:10	3237.7	2.8	2.8	1232			
2:15	17:15	3247.8	2.8	2.8	1237			
2:20	17:20	3264.2	2.8	2.8	1243			
2:25	17:25	3278.6	2.8	2.8	1244			

CONSTANT RATE TEST DATA

Tetra Tech, Inc.

Well ID: Diversified R&P Coal #4
County, PA)

(Jefferson

Injection Formation: Oriskany SS

Interval Depth (ft bgs): 7235 - 7356 ft

Logger:

Date:

Log Sheet:
of

Time (hr:min.)	Cumulative Time (hr:min)	Cumulative Volume (bbls)	Flow Rate		Surface Inj. Pressure (psi)	Annular Pressure (psi)	Specific Gravity	Remarks
			Design (bbl/min)	Actual (bbl/min)				
2:30AM	17:30	3292.4	2.8	2.8	1263	0		
2:35	17:35	3306.5	2.8	2.8	1266			THROTTLED DOWN 2:37AM
2:40	17:40	3320.3	2.6	2.6	1032			
2:45	17:45	3333.3	2.6	2.6	1013			
2:50	17:50	3346.3	2.6	2.6	994			
2:55	17:55	3359.4	2.6	2.6	983			
3:00	18:00	3372.4	2.6	2.6	986			
3:05	18:05	3385	2.6	2.6	986			
3:10	18:10	3397.5	2.6	2.6	987			
3:15	18:15	3410.5	2.6	2.6	988			
3:20	18:20	3423.5	2.6	2.6	984			
3:25	18:25	3436.5	2.6	2.6	987			
3:30	18:30	3449.5	2.6	2.6	984			
3:35	18:35	3462.5	2.6	2.6	980			
3:40	18:40	3475.5	2.6	2.6	991			
3:45	18:45	3488.7	2.6	2.6	986			
3:50	18:50	3501	2.6	2.6	988			
3:55	18:55	3513.6	2.6	2.6	988			
4:00	19:00	3526.6	2.6	2.6	984			
4:05	19:05	3539.6	2.6	2.6	986			
4:10	19:10	3552.6	2.6	2.6	990			
4:15	19:15	3565.6	2.6	2.6	997			
4:20	19:20	3578.7	2.6	2.6	1006			
4:25	19:25	3591.6	2.8	2.8	1174			
4:30	19:30	3605.9	2.8	2.8	1179			
4:35	19:35	3619.5	2.7	2.7	1166			
4:40	19:40	3634.3	2.7	2.7	1174			
4:45	19:45	3646.4	2.7	2.7	1178			
4:50	19:50	3660.3	2.7	2.7	1177			
4:55	19:55	3674.3	2.7	2.7	1192			

CONSTANT RATE TEST DATA

Tetra Tech, Inc.

Well ID: Diversified R&P Coal #4
County, PA)

(Jefferson

Injection Formation: Oriskany SS
Interval Depth (ft bgs): 7235 - 7356 ft

Logger:

Date:

Log Sheet:
of

Time (hr:min)	Cumulative Time (hr:min)	Cumulative Volume (bbls)	Flow Rate		Surface Inj. Pressure (psi)	Annular Pressure (psi)	Specific Gravity	Remarks
			Design (bbl/min)	Actual (bbl/min)				
5:00	20:00	3689.4	2.7	2.7	1187			
5:05	20:05	3702.0	2.7	2.7	1185			
5:10	20:10	3715.3	2.7	2.7	1185			
5:15	20:15	3729.1	2.7	2.7	1189			
5:20	20:20	3743.0	2.7	2.7	1190			
5:25	20:25	3756.2	2.7	2.7	1191			
5:30	20:30	3769.1	2.7	2.7	1207			
5:35	20:35	3782.9	2.7	2.7	1195			
5:40	20:40	3796.5	2.7	2.7	1197			
5:45	20:45	3810.3	2.7	2.7	1210			
5:50	20:50	3824.1	2.7	2.7	1214			
5:55	20:55	3838	2.7	2.7	1210			
6:00	21:00	3852	2.7	2.7	1222			
6:05	21:05	3865.7	2.7	2.7	1217			
6:10	21:10	3878.9	2.7	2.7	1237			
6:15	21:15	3892.5	2.7	2.7	1226			
6:20	21:20	3906.5	2.7	2.7	1224			
6:25	21:25	3920.7	2.7	2.7	1206			
6:30	21:30	3933.7	2.7	2.7	1235			
6:35	21:35	3946.9	2.7	2.7	1230			
6:40	21:40	3963	2.7	2.7	1235			
6:45	21:45	3974.1	2.7	2.7	1239			
6:50	21:50	3987.5	2.7	2.7	1241			
6:55	21:55	4001.2	2.7	2.7	1245			
7:00	22:00	4014.8	2.7	2.7	1249			
7:05	22:05	4028.1	2.7	2.7	1077			
7:10	22:10	4037.5	0	0	70			
7:15	22:15	4037.5	0	0	74			
7:20	22:20	4037.5	0	0	74			
7:25	22:25	4037.5	0	0	72			

CONSTANT RATE TEST DATA

Tetra Tech, Inc.

Well ID: Diversified R&P Coal #4

(Jefferson

Injection Formation: Oriskany SS

Logger:

Date:

Log Sheet:

County, PA)

Interval Depth (ft bgs): 7236 - 7356 ft.

of

Time (hr:min)	Cumulative Time (hr:min)	Cumulative Volume (bbls)	Flow Rate		Surface Inj. Pressure (psl)	Annular Pressure (psi)	Specific Gravity	Remarks
			Design (bbl/min)	Actual (bbl/min)				
7:14		4037.5	0	0	73			
7:15		4037.5	0	0	73			
7:16		4037.5	0	0	73			
7:17		4037.5	0	0	73			
7:18		4037.5	0	0	73			
7:19		4037.5	0	0	72			
7:20		4037.5	0	0	71			
7:21		4037.5	0	0	76			
7:22		4037.5	0	0	77			
7:23		4037.5	0	0	76			
7:24		4037.5	0	0	76			
7:25		4037.5	0	0	76			
7:26		4037.5	0	0	76			
7:27		4037.5	0	0	76			
7:28		4037.5	0	0	76			
7:29		4037.5	0	0	76			
7:30		4037.5	0	0	76			
7:31		4037.5	0	0	76			
7:32		4037.5	0	0	76			
7:33		4037.5	0	0	76			
7:34		4037.5	0	0	76			
7:35		4037.5	0	0	76			
7:36		4037.5	0	0	76			
7:37		4037.5	0	0	76			
7:38		4037.5	0	0	76			
7:39		4037.5	0	0	75			
7:40		4037.5	0	0	75			
8:30					-2			

APPENDIX C

BOTTOM HOLE GAUGE DATA SUMMARY

Company Name	Diversified Gas & Oil Corp.
Well Name	Diversified - R & P Coal #4
Unique Well ID	API# 37-65-20399
Formation	Oriskany Sandstone
Test Type	Injection and Falloff
Start Test Date	2021/06/29
Final Test Date	2021/07/21

Prepared by:

Advantage Data Services
Red Deer, AB
(403) 392-7913
advantagedata@shaw.ca

Pressure Survey Report

General Information

Company Name	Diversified Gas & Oil Corp.
Well Name	Diversified - R & P Coal #4
Unique Well ID	API# 37-65-20399
Surface Location	N/A
Well License Number	N/A
Field	Jefferson County
Well Type	Vertical

Test Information

Test Type	Injection and Falloff	KB Elevation (SL)	ft
Formation	Oriskany Sandstone	CF Elevation (SL)	ft
Well Fluid Type	02 Gas	GL Elevation (SL)	1420.000 ft
Test Purpose (AEUB)	Initial Test	KB-CF Offset	ft
H2S Indicator	No	KB-GL Offset	ft
Test/Production Interval			
Top(Log KB)	7236.00 ft	Top(TVD KB)	7236.000 ft
Bottom(Log KB)	7256.00 ft	Bottom(TVD KB)	7256.000 ft
MPP(Log KB)	7246.00 ft	MPP(TVD KB)	7246.000 ft
Start Test Date	2021/06/29	Start Test Time	08:38:00
Final Test Date	2021/07/21	Final Test Time	08:59:50
Date Well Shut-In	2021/06/29	Time Well Shut-In	14:53:32
Flow Duration		Shut-In Duration	
Tubing Pressure: Initial	14.00 psi(a)	Casing Pressure: Initial	N/A
Tubing Pressure: Final	14.00 psi(a)	Casing Pressure: Final	N/A

Wellbore Information

Flow Path	Tubing	Completion Type	Open Hole
Tubing ID	2.0 in	Casing ID	6.3 in
Tubing OD	2.4 in	Casing OD	7.0 in
Tubing Depth(Log KB)	7215.00000 ft	Tubing Depth(TVD KB)	7215.00000 ft
Casing Depth(Log KB)	7218.00000 ft	Casing Depth(TVD KB)	7218.00000 ft
Packer Indicator Flag	Yes		
PBTD(Log KB)	ft	PBTD(TVD KB)	ft

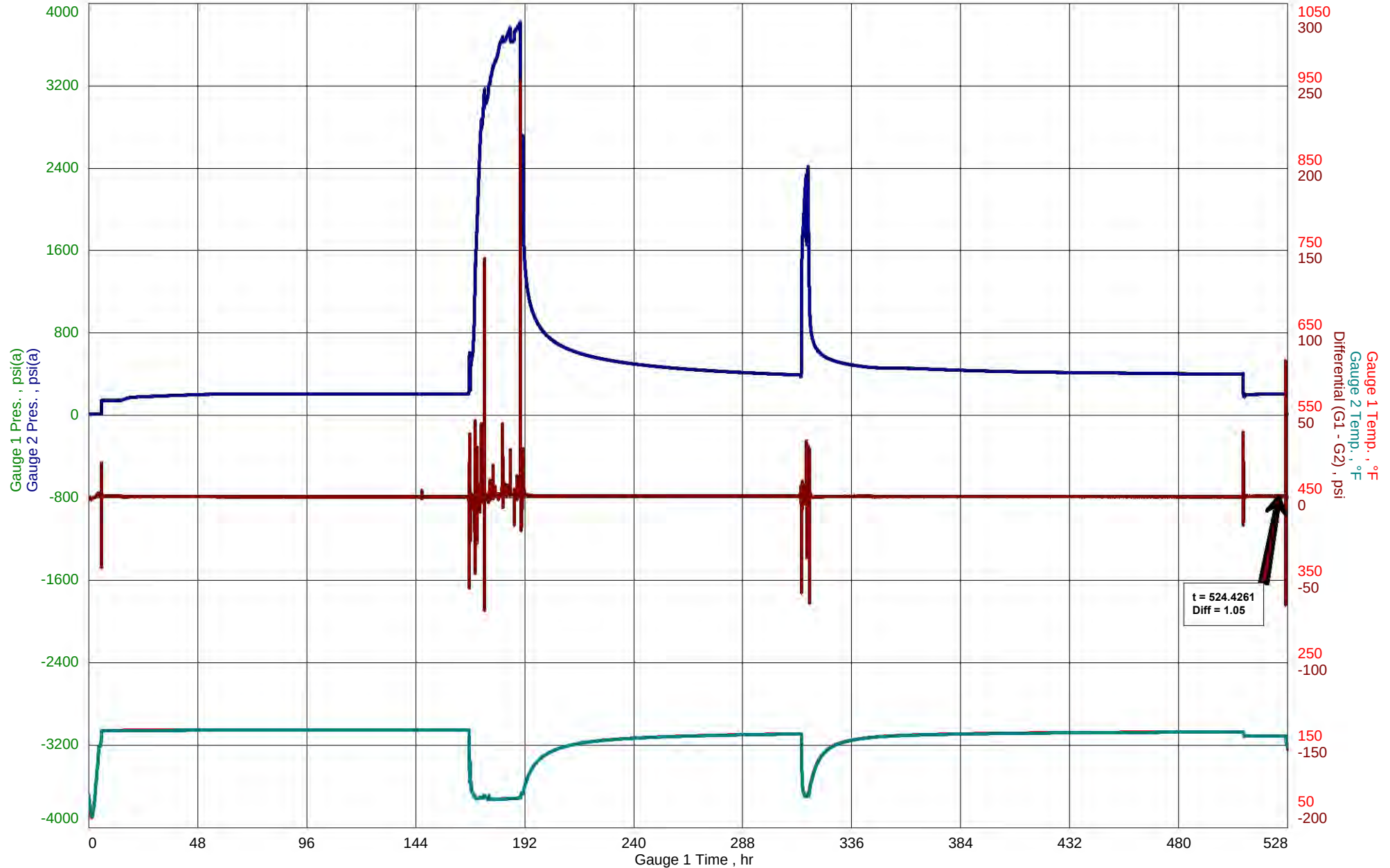
Test Results

Gauge Name	Gauge 1	Gauge Name	Gauge 2
Gauge Serial Number	19491	Gauge Serial Number	19490
Run Depth (Log KB)	7100.00 ft	Run Depth (Log KB)	7100.00 ft
Run Depth (TVD KB)	7100.00 ft	Run Depth (TVD KB)	7100.00 ft
Pressure at Run Depth	207.86 psi(a)	Pressure at Run Depth	206.82 psi(a)
Pressure at MPP	N/A	Pressure at MPP	N/A
Temperature at Run Depth	161.4 °F	Temperature at Run Depth	161.2 °F

No initial/final surface pressures provided.

For assistance in accessing this document, contact R3_UIC_Mailbox@epa.gov

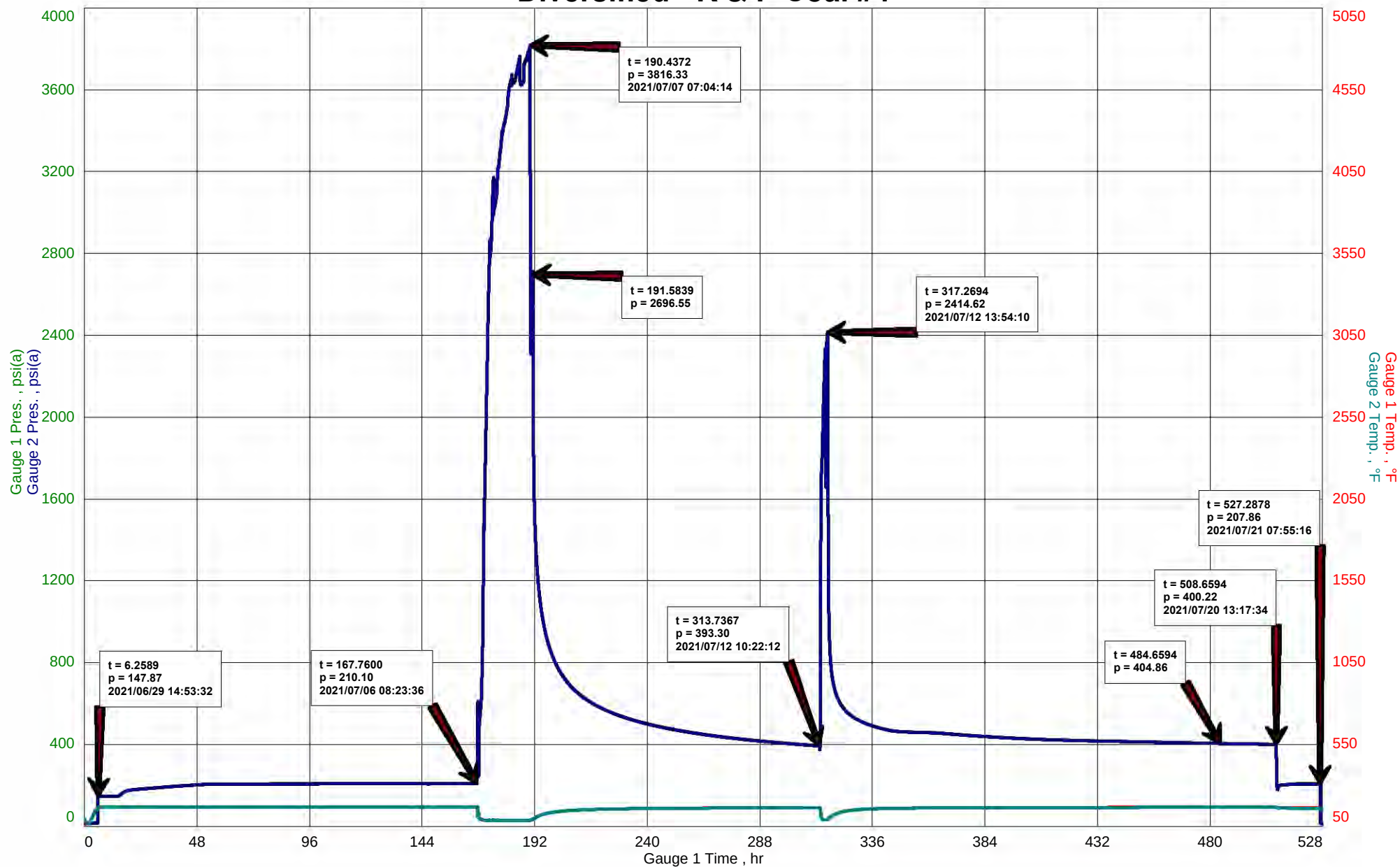
Differential Plot



Diversified Gas & Oil Corp.
 API# 37-65-20399
 Start Test Date: 2021/06/29
 Final Test Date: 2021/07/21

Diversified - R & P Coal #4
 Formation: Oriskany Sandstone
 Pool: N/A

Diversified - R & P Coal #4



Company Name Diversified Gas & Oil Corp.
 Unique Well ID API# 37-65-20399
 Start Test Date 2021/06/29
 Final Test Date 2021/07/21

Well Name Diversified - R & P Coal #4
 Formation Oriskany Sandstone

	Gauge 1 Date	Gauge 1 Time	Gauge 1 Pres.	Gauge 1 Temp.	Gauge 1 G1 - G2	Gauge 2 Time	Gauge 2 Pres.	Gauge 2 Temp.
	YYY/MM/DD HH:mm:ss	h	psi(a)	°F	psi	h	psi(a)	°F
1	2021/06/29 08:38:00	0.0000	11.59	86.36	0.09	0.0000	11.48	86.50
2	2021/06/29 09:44:40	1.1111	11.48	70.28	-0.47	1.1111	11.95	74.09
3	2021/06/29 10:51:20	2.2222	12.27	66.07	-0.32	2.2222	12.58	65.74
4	2021/06/29 11:58:00	3.3333	14.24	91.16	0.55	3.3333	13.68	90.56
5	2021/06/29 13:04:40	4.4444	15.99	125.83	2.05	4.4444	13.92	126.42
6	2021/06/29 14:11:20	5.5556	15.05	149.20	1.22	5.5556	13.81	148.94
7	2021/06/29 15:18:00	6.6667	146.86	167.45	1.17	6.6667	145.68	167.32
8	2021/06/29 16:24:40	7.7778	147.16	167.61	1.15	7.7778	146.01	167.48
9	2021/06/29 17:31:20	8.8889	147.29	167.69	1.11	8.8889	146.17	167.55
10	2021/06/29 18:38:00	10.0000	147.43	167.74	1.08	10.0000	146.26	167.60
11	2021/06/29 19:44:40	11.1111	147.53	167.78	1.14	11.1111	146.38	167.64
12	2021/06/29 20:51:20	12.2222	147.60	167.80	1.11	12.2222	146.48	167.66
13	2021/06/29 21:58:00	13.3333	147.71	167.83	1.14	13.3333	146.58	167.68
14	2021/06/29 23:04:40	14.4444	147.78	167.85	1.12	14.4444	146.67	167.70
15	2021/06/30 00:11:20	15.5556	153.43	167.99	0.69	15.5556	152.72	167.85
16	2021/06/30 01:18:00	16.6667	162.70	168.09	0.72	16.6667	161.97	167.94
17	2021/06/30 02:24:40	17.7778	170.44	168.12	0.73	17.7778	169.69	167.97
18	2021/06/30 03:31:20	18.8889	175.13	168.11	0.73	18.8889	174.39	167.96
19	2021/06/30 04:38:00	20.0000	177.41	168.09	0.73	20.0000	176.70	167.94
20	2021/06/30 05:44:40	21.1111	178.95	168.09	0.72	21.1111	178.23	167.93
21	2021/06/30 06:51:20	22.2222	180.19	168.09	0.74	22.2222	179.44	167.93
22	2021/06/30 07:58:00	23.3333	181.30	168.10	0.74	23.3333	180.57	167.94
23	2021/06/30 09:04:40	24.4444	182.37	168.11	0.74	24.4444	181.61	167.94
24	2021/06/30 10:11:20	25.5556	183.43	168.11	0.75	25.5556	182.68	167.95
25	2021/06/30 11:18:00	26.6667	184.47	168.12	0.74	26.6667	183.73	167.95
26	2021/06/30 12:24:40	27.7778	185.46	168.13	0.72	27.7778	184.74	167.97
27	2021/06/30 13:31:20	28.8889	186.49	168.13	0.72	28.8889	185.76	167.98
28	2021/06/30 14:38:00	30.0000	187.48	168.15	0.74	30.0000	186.74	167.98
29	2021/06/30 15:44:40	31.1111	188.55	168.16	0.76	31.1111	187.79	167.98
30	2021/06/30 16:51:20	32.2222	189.57	168.17	0.74	32.2222	188.83	167.99
31	2021/06/30 17:58:00	33.3333	190.60	168.16	0.74	33.3333	189.85	168.00
32	2021/06/30 19:04:40	34.4444	191.63	168.18	0.77	34.4444	190.85	168.00
33	2021/06/30 20:11:20	35.5556	192.66	168.19	0.76	35.5556	191.90	168.02
34	2021/06/30 21:18:00	36.6667	193.64	168.18	0.76	36.6667	192.89	168.02
35	2021/06/30 22:24:40	37.7778	194.61	168.19	0.77	37.7778	193.83	168.03
36	2021/06/30 23:31:20	38.8889	195.51	168.20	0.81	38.8889	194.70	168.03
37	2021/07/01 00:38:00	40.0000	196.36	168.20	0.72	40.0000	195.63	168.03
38	2021/07/01 01:44:40	41.1111	197.22	168.22	0.77	41.1111	196.47	168.04
39	2021/07/01 02:51:20	42.2222	198.11	168.21	0.78	42.2222	197.32	168.05
40	2021/07/01 03:58:00	43.3333	198.89	168.22	0.74	43.3333	198.16	168.06
41	2021/07/01 05:04:40	44.4444	199.79	168.23	0.77	44.4444	198.99	168.05
42	2021/07/01 06:11:20	45.5556	200.64	168.23	0.76	45.5556	199.87	168.06
43	2021/07/01 07:18:00	46.6667	201.41	168.24	0.78	46.6667	200.62	168.06
44	2021/07/01 08:24:40	47.7778	202.15	168.25	0.78	47.7778	201.36	168.07
45	2021/07/01 09:31:20	48.8889	203.08	168.25	0.79	48.8889	202.30	168.07

Print Filter: Approximately every 2000 lines

Gauge Name	Serial Number	Start Date	Start Time	Run Depth (TVD)
Gauge 1	19491	2021/06/29	08:38:00	7100.00 ft
Gauge 2	19490	2021/06/29	08:38:00	7100.00 ft

Company Name Diversified Gas & Oil Corp.
 Unique Well ID API# 37-65-20399
 Start Test Date 2021/06/29
 Final Test Date 2021/07/21

Well Name Diversified - R & P Coal #4
 Formation Oriskany Sandstone

	Gauge 1 Date	Gauge 1 Time	Gauge 1 Pres.	Gauge 1 Temp.	Gauge 1 G1 - G2	Gauge 2 Time	Gauge 2 Pres.	Gauge 2 Temp.
	YYY/MM/DD HH:mm:ss	h	psi(a)	°F	psi	h	psi(a)	°F
46	2021/07/01 10:38:00	50.0000	203.99	168.25	0.77	50.0000	203.21	168.08
47	2021/07/01 11:44:40	51.1111	204.69	168.25	0.69	51.1111	203.97	168.08
48	2021/07/01 12:51:20	52.2222	205.33	168.26	0.77	52.2222	204.54	168.08
49	2021/07/01 13:58:00	53.3333	205.80	168.26	0.77	53.3333	205.02	168.08
50	2021/07/01 15:04:40	54.4444	206.01	168.25	0.75	54.4444	205.26	168.09
51	2021/07/01 16:11:20	55.5556	206.22	168.26	0.78	55.5556	205.43	168.08
52	2021/07/01 17:18:00	56.6667	206.34	168.26	0.70	56.6667	205.64	168.08
53	2021/07/01 18:24:40	57.7778	206.43	168.26	0.71	57.7778	205.73	168.09
54	2021/07/01 19:31:20	58.8889	206.51	168.25	0.71	58.8889	205.80	168.09
55	2021/07/01 20:38:00	60.0000	206.57	168.26	0.76	60.0000	205.82	168.08
56	2021/07/01 21:44:40	61.1111	206.59	168.27	0.71	61.1111	205.88	168.08
57	2021/07/01 22:51:20	62.2222	206.63	168.27	0.71	62.2222	205.91	168.09
58	2021/07/01 23:58:00	63.3333	206.68	168.27	0.71	63.3333	205.96	168.10
59	2021/07/02 01:04:40	64.4444	206.72	168.27	0.72	64.4444	205.99	168.09
60	2021/07/02 02:11:20	65.5556	206.72	168.27	0.66	65.5556	206.01	168.09
61	2021/07/02 03:18:00	66.6667	206.77	168.28	0.74	66.6667	206.04	168.10
62	2021/07/02 04:24:40	67.7778	206.80	168.28	0.70	67.7778	206.08	168.09
63	2021/07/02 05:31:20	68.8889	206.81	168.29	0.68	68.8889	206.13	168.10
64	2021/07/02 06:38:00	70.0000	206.86	168.29	0.73	70.0000	206.14	168.11
65	2021/07/02 07:44:40	71.1111	206.88	168.29	0.67	71.1111	206.22	168.11
66	2021/07/02 08:51:20	72.2222	206.92	168.29	0.70	72.2222	206.22	168.11
67	2021/07/02 09:58:00	73.3333	206.97	168.30	0.68	73.3333	206.28	168.12
68	2021/07/02 11:04:40	74.4444	207.00	168.29	0.70	74.4444	206.31	168.12
69	2021/07/02 12:11:20	75.5556	207.04	168.29	0.70	75.5556	206.35	168.11
70	2021/07/02 13:18:00	76.6667	207.09	168.30	0.70	76.6667	206.38	168.12
71	2021/07/02 14:24:40	77.7778	207.15	168.31	0.68	77.7778	206.47	168.12
72	2021/07/02 15:31:20	78.8889	207.15	168.31	0.68	78.8889	206.47	168.13
73	2021/07/02 16:38:00	80.0000	207.18	168.32	0.67	80.0000	206.52	168.13
74	2021/07/02 17:44:40	81.1111	207.26	168.32	0.71	81.1111	206.56	168.13
75	2021/07/02 18:51:20	82.2222	207.29	168.32	0.70	82.2222	206.59	168.14
76	2021/07/02 19:58:00	83.3333	207.36	168.32	0.71	83.3333	206.64	168.14
77	2021/07/02 21:04:40	84.4444	207.40	168.32	0.73	84.4444	206.68	168.14
78	2021/07/02 22:11:20	85.5556	207.42	168.33	0.70	85.5556	206.74	168.14
79	2021/07/02 23:18:00	86.6667	207.47	168.32	0.69	86.6667	206.78	168.14
80	2021/07/03 00:24:40	87.7778	207.50	168.34	0.68	87.7778	206.81	168.14
81	2021/07/03 01:31:20	88.8889	207.57	168.33	0.71	88.8889	206.84	168.14
82	2021/07/03 02:38:00	90.0000	207.60	168.34	0.71	90.0000	206.89	168.15
83	2021/07/03 03:44:40	91.1111	207.62	168.33	0.69	91.1111	206.92	168.14
84	2021/07/03 04:51:20	92.2222	207.68	168.34	0.71	92.2222	206.95	168.15
85	2021/07/03 05:58:00	93.3333	207.72	168.35	0.70	93.3333	207.02	168.16
86	2021/07/03 07:04:40	94.4444	207.77	168.35	0.72	94.4444	207.07	168.16
87	2021/07/03 08:11:20	95.5556	207.79	168.35	0.68	95.5556	207.09	168.16
88	2021/07/03 09:18:00	96.6667	207.83	168.35	0.71	96.6667	207.12	168.16
89	2021/07/03 10:24:40	97.7778	207.89	168.36	0.72	97.7778	207.17	168.16
90	2021/07/03 11:31:20	98.8889	207.93	168.36	0.71	98.8889	207.22	168.17

Print Filter: Approximately every 2000 lines

Gauge Name	Serial Number	Start Date	Start Time	Run Depth (TVD)
Gauge 1	19491	2021/06/29	08:38:00	7100.00 ft
Gauge 2	19490	2021/06/29	08:38:00	7100.00 ft

Company Name Diversified Gas & Oil Corp.
 Unique Well ID API# 37-65-20399
 Start Test Date 2021/06/29
 Final Test Date 2021/07/21

Well Name Diversified - R & P Coal #4
 Formation Oriskany Sandstone

	Gauge 1 Date	Gauge 1 Time	Gauge 1 Pres.	Gauge 1 Temp.	Gauge 1 G1 - G2	Gauge 2 Time	Gauge 2 Pres.	Gauge 2 Temp.
	YYY/MM/DD HH:mm:ss	h	psi(a)	°F	psi	h	psi(a)	°F
91	2021/07/03 12:38:00	100.0000	207.96	168.36	0.71	100.0000	207.24	168.17
92	2021/07/03 13:44:40	101.1111	208.02	168.36	0.72	101.1111	207.31	168.17
93	2021/07/03 14:51:20	102.2222	208.02	168.36	0.69	102.2222	207.36	168.17
94	2021/07/03 15:58:00	103.3333	208.06	168.36	0.69	103.3333	207.37	168.17
95	2021/07/03 17:04:40	104.4444	208.12	168.36	0.71	104.4444	207.42	168.17
96	2021/07/03 18:11:20	105.5556	208.14	168.37	0.69	105.5556	207.47	168.17
97	2021/07/03 19:18:00	106.6667	208.19	168.37	0.70	106.6667	207.50	168.18
98	2021/07/03 20:24:40	107.7778	208.25	168.38	0.72	107.7778	207.52	168.18
99	2021/07/03 21:31:20	108.8889	208.27	168.37	0.70	108.8889	207.56	168.18
100	2021/07/03 22:38:00	110.0000	208.33	168.38	0.70	110.0000	207.62	168.18
101	2021/07/03 23:44:40	111.1111	208.33	168.38	0.68	111.1111	207.65	168.18
102	2021/07/04 00:51:20	112.2222	208.38	168.38	0.70	112.2222	207.68	168.19
103	2021/07/04 01:58:00	113.3333	208.45	168.38	0.71	113.3333	207.73	168.20
104	2021/07/04 03:04:40	114.4444	208.48	168.39	0.71	114.4444	207.77	168.19
105	2021/07/04 04:11:20	115.5556	208.51	168.39	0.68	115.5556	207.83	168.19
106	2021/07/04 05:18:00	116.6667	208.55	168.39	0.68	116.6667	207.85	168.20
107	2021/07/04 06:24:40	117.7778	208.59	168.40	0.69	117.7778	207.89	168.20
108	2021/07/04 07:31:20	118.8889	208.65	168.39	0.71	118.8889	207.94	168.19
109	2021/07/04 08:38:00	120.0000	208.66	168.40	0.69	120.0000	207.98	168.20
110	2021/07/04 09:44:40	121.1111	208.69	168.40	0.67	121.1111	208.04	168.20
111	2021/07/04 10:51:20	122.2222	208.70	168.40	0.65	122.2222	208.06	168.20
112	2021/07/04 11:58:00	123.3333	208.77	168.41	0.70	123.3333	208.09	168.20
113	2021/07/04 13:04:40	124.4444	208.80	168.40	0.69	124.4444	208.11	168.21
114	2021/07/04 14:11:20	125.5556	208.83	168.41	0.65	125.5556	208.17	168.21
115	2021/07/04 15:18:00	126.6667	208.88	168.41	0.70	126.6667	208.18	168.21
116	2021/07/04 16:24:40	127.7778	208.89	168.41	0.65	127.7778	208.25	168.21
117	2021/07/04 17:31:20	128.8889	208.96	168.41	0.70	128.8889	208.26	168.21
118	2021/07/04 18:38:00	130.0000	208.99	168.41	0.70	130.0000	208.30	168.21
119	2021/07/04 19:44:40	131.1111	209.04	168.41	0.69	131.1111	208.36	168.21
120	2021/07/04 20:51:20	132.2222	209.08	168.41	0.70	132.2222	208.39	168.22
121	2021/07/04 21:58:00	133.3333	209.10	168.42	0.66	133.3333	208.44	168.21
122	2021/07/04 23:04:40	134.4444	209.17	168.42	0.73	134.4444	208.46	168.22
123	2021/07/05 00:11:20	135.5556	209.19	168.42	0.70	135.5556	208.50	168.22
124	2021/07/05 01:18:00	136.6667	209.25	168.43	0.71	136.6667	208.53	168.22
125	2021/07/05 02:24:40	137.7778	209.26	168.42	0.70	137.7778	208.57	168.22
126	2021/07/05 03:31:20	138.8889	209.28	168.42	0.65	138.8889	208.62	168.22
127	2021/07/05 04:38:00	140.0000	209.33	168.43	0.67	140.0000	208.64	168.22
128	2021/07/05 05:44:40	141.1111	209.36	168.43	0.69	141.1111	208.67	168.23
129	2021/07/05 06:51:20	142.2222	209.38	168.43	0.66	142.2222	208.73	168.22
130	2021/07/05 07:58:00	143.3333	209.44	168.43	0.70	143.3333	208.74	168.23
131	2021/07/05 09:04:40	144.4444	209.48	168.43	0.70	144.4444	208.80	168.23
132	2021/07/05 10:11:20	145.5556	209.51	168.43	0.72	145.5556	208.80	168.23
133	2021/07/05 11:18:00	146.6667	209.51	168.43	0.70	146.6667	208.83	168.24
134	2021/07/05 12:24:40	147.7778	208.83	168.41	0.68	147.7778	208.14	168.22
135	2021/07/05 13:31:20	148.8889	209.20	168.42	0.64	148.8889	208.55	168.25

Print Filter: Approximately every 2000 lines

Gauge Name	Serial Number	Start Date	Start Time	Run Depth (TVD)
Gauge 1	19491	2021/06/29	08:38:00	7100.00 ft
Gauge 2	19490	2021/06/29	08:38:00	7100.00 ft

Company Name Diversified Gas & Oil Corp.
 Unique Well ID API# 37-65-20399
 Start Test Date 2021/06/29
 Final Test Date 2021/07/21

Well Name Diversified - R & P Coal #4
 Formation Oriskany Sandstone

	Gauge 1 Date	Gauge 1 Time	Gauge 1 Pres.	Gauge 1 Temp.	Gauge 1 G1 - G2	Gauge 2 Time	Gauge 2 Pres.	Gauge 2 Temp.
	YYY/MM/DD HH:mm:ss	h	psi(a)	°F	psi	h	psi(a)	°F
136	2021/07/05 14:38:00	150.0000	209.39	168.43	0.67	150.0000	208.72	168.25
137	2021/07/05 15:44:40	151.1111	209.49	168.43	0.70	151.1111	208.79	168.25
138	2021/07/05 16:51:20	152.2222	209.57	168.43	0.68	152.2222	208.91	168.25
139	2021/07/05 17:58:00	153.3333	209.59	168.43	0.67	153.3333	208.93	168.25
140	2021/07/05 19:04:40	154.4444	209.64	168.44	0.64	154.4444	208.99	168.25
141	2021/07/05 20:11:20	155.5556	209.71	168.44	0.69	155.5556	209.02	168.25
142	2021/07/05 21:18:00	156.6667	209.71	168.43	0.67	156.6667	209.04	168.25
143	2021/07/05 22:24:40	157.7778	209.78	168.44	0.68	157.7778	209.09	168.25
144	2021/07/05 23:31:20	158.8889	209.80	168.44	0.66	158.8889	209.14	168.25
145	2021/07/06 00:38:00	160.0000	209.82	168.43	0.65	160.0000	209.19	168.25
146	2021/07/06 01:44:40	161.1111	209.88	168.44	0.68	161.1111	209.19	168.25
147	2021/07/06 02:51:20	162.2222	209.93	168.44	0.67	162.2222	209.25	168.26
148	2021/07/06 03:58:00	163.3333	209.96	168.44	0.67	163.3333	209.30	168.25
149	2021/07/06 05:04:40	164.4444	210.01	168.44	0.67	164.4444	209.31	168.26
150	2021/07/06 06:11:20	165.5556	210.04	168.44	0.67	165.5556	209.39	168.26
151	2021/07/06 07:18:00	166.6667	210.05	168.44	0.64	166.6667	209.41	168.26
152	2021/07/06 08:24:40	167.7778	213.79	168.44	-0.97	167.7778	213.89	168.26
153	2021/07/06 09:31:20	168.8889	519.08	98.58	-0.29	168.8889	518.19	97.01
154	2021/07/06 10:38:00	170.0000	767.30	90.01	-0.74	170.0000	767.85	89.53
155	2021/07/06 11:44:40	171.1111	1653.50	85.42	-2.30	171.1111	1654.60	85.24
156	2021/07/06 12:51:20	172.2222	2310.80	85.76	-1.11	172.2222	2310.94	85.56
157	2021/07/06 13:58:00	173.3333	2815.99	86.79	11.61	173.3333	2806.86	86.54
158	2021/07/06 15:04:40	174.4444	3079.82	88.76	0.01	174.4444	3078.37	88.57
159	2021/07/06 16:11:20	175.5556	3042.59	85.98	1.47	175.5556	3040.94	85.78
160	2021/07/06 17:18:00	176.6667	3214.48	89.07	1.28	176.6667	3213.11	88.87
161	2021/07/06 18:24:40	177.7778	3304.97	84.41	1.50	177.7778	3303.24	84.21
162	2021/07/06 19:31:20	178.8889	3405.23	84.38	1.42	178.8889	3403.60	84.17
163	2021/07/06 20:38:00	180.0000	3466.08	84.60	1.52	180.0000	3464.36	84.39
164	2021/07/06 21:44:40	181.1111	3576.62	84.77	2.07	181.1111	3574.45	84.56
165	2021/07/06 22:51:20	182.2222	3642.69	84.85	1.59	182.2222	3640.85	84.64
166	2021/07/06 23:58:00	183.3333	3643.30	84.93	2.06	183.3333	3641.12	84.73
167	2021/07/07 01:04:40	184.4444	3673.70	85.11	1.19	184.4444	3672.21	84.90
168	2021/07/07 02:11:20	185.5556	3734.44	85.32	1.86	185.5556	3732.43	85.11
169	2021/07/07 03:18:00	186.6667	3627.96	85.38	2.27	186.6667	3625.66	85.17
170	2021/07/07 04:24:40	187.7778	3661.76	85.67	-8.37	187.7778	3665.63	85.47
171	2021/07/07 05:31:20	188.8889	3754.80	85.59	1.96	188.8889	3752.78	85.38
172	2021/07/07 06:38:00	190.0000	3791.03	86.49	1.13	190.0000	3789.25	86.32
173	2021/07/07 07:44:40	191.1111	2440.62	92.31	20.01	191.1111	2429.49	92.09
174	2021/07/07 08:51:20	192.2222	1574.90	97.41	3.62	192.2222	1572.66	97.39
175	2021/07/07 09:58:00	193.3333	1271.15	108.02	1.72	193.3333	1269.89	107.98
176	2021/07/07 11:04:40	194.4444	1124.29	115.57	1.19	194.4444	1123.26	115.57
177	2021/07/07 12:11:20	195.5556	1029.46	121.46	1.25	195.5556	1028.58	121.42
178	2021/07/07 13:18:00	196.6667	960.83	125.88	1.22	196.6667	959.75	125.85
179	2021/07/07 14:24:40	197.7778	907.96	129.49	1.25	197.7778	906.92	129.51
180	2021/07/07 15:31:20	198.8889	865.44	132.68	1.14	198.8889	864.41	132.67

Print Filter: Approximately every 2000 lines

Gauge Name	Serial Number	Start Date	Start Time	Run Depth (TVD)
Gauge 1	19491	2021/06/29	08:38:00	7100.00 ft
Gauge 2	19490	2021/06/29	08:38:00	7100.00 ft

Company Name Diversified Gas & Oil Corp.
 Unique Well ID API# 37-65-20399
 Start Test Date 2021/06/29
 Final Test Date 2021/07/21

Well Name Diversified - R & P Coal #4
 Formation Oriskany Sandstone

	Gauge 1 Date	Gauge 1 Time	Gauge 1 Pres.	Gauge 1 Temp.	Gauge 1 G1 - G2	Gauge 2 Time	Gauge 2 Pres.	Gauge 2 Temp.
	YYY/MM/DD HH:mm:ss	h	psi(a)	°F	psi	h	psi(a)	°F
181	2021/07/07 16:38:00	200.0000	830.20	135.32	1.08	200.0000	829.18	135.27
182	2021/07/07 17:44:40	201.1111	800.55	137.51	1.26	201.1111	799.32	137.46
183	2021/07/07 18:51:20	202.2222	774.91	139.39	1.23	202.2222	773.78	139.33
184	2021/07/07 19:58:00	203.3333	752.45	141.07	1.16	203.3333	751.40	141.03
185	2021/07/07 21:04:40	204.4444	732.69	142.62	1.18	204.4444	731.56	142.57
186	2021/07/07 22:11:20	205.5556	715.05	144.00	1.11	205.5556	713.98	143.93
187	2021/07/07 23:18:00	206.6667	699.20	145.22	1.17	206.6667	698.06	145.13
188	2021/07/08 00:24:40	207.7778	684.80	146.29	1.19	207.7778	683.69	146.20
189	2021/07/08 01:31:20	208.8889	671.69	147.26	1.19	208.8889	670.53	147.16
190	2021/07/08 02:38:00	210.0000	659.68	148.18	1.20	210.0000	658.50	148.06
191	2021/07/08 03:44:40	211.1111	648.56	148.99	1.18	211.1111	647.42	148.87
192	2021/07/08 04:51:20	212.2222	638.27	149.76	1.20	212.2222	637.10	149.64
193	2021/07/08 05:58:00	213.3333	628.67	150.47	1.16	213.3333	627.53	150.35
194	2021/07/08 07:04:40	214.4444	619.77	151.15	1.22	214.4444	618.53	151.02
195	2021/07/08 08:11:20	215.5556	611.39	151.76	1.17	215.5556	610.25	151.63
196	2021/07/08 09:18:00	216.6667	603.52	152.34	1.14	216.6667	602.40	152.21
197	2021/07/08 10:24:40	217.7778	596.12	152.87	1.18	217.7778	594.97	152.73
198	2021/07/08 11:31:20	218.8889	589.13	153.36	1.18	218.8889	587.98	153.21
199	2021/07/08 12:38:00	220.0000	582.51	153.80	1.16	220.0000	581.36	153.66
200	2021/07/08 13:44:40	221.1111	576.23	154.19	1.17	221.1111	575.09	154.05
201	2021/07/08 14:51:20	222.2222	570.24	154.53	1.15	222.2222	569.09	154.37
202	2021/07/08 15:58:00	223.3333	564.50	154.86	1.16	223.3333	563.35	154.70
203	2021/07/08 17:04:40	224.4444	559.02	155.19	1.16	224.4444	557.86	155.02
204	2021/07/08 18:11:20	225.5556	553.83	155.50	1.19	225.5556	552.67	155.34
205	2021/07/08 19:18:00	226.6667	548.86	155.80	1.19	226.6667	547.70	155.64
206	2021/07/08 20:24:40	227.7778	544.08	156.10	1.16	227.7778	542.92	155.93
207	2021/07/08 21:31:20	228.8889	539.49	156.38	1.17	228.8889	538.32	156.21
208	2021/07/08 22:38:00	230.0000	535.08	156.65	1.18	230.0000	533.92	156.48
209	2021/07/08 23:44:40	231.1111	530.85	156.90	1.15	231.1111	529.71	156.74
210	2021/07/09 00:51:20	232.2222	526.76	157.15	1.15	232.2222	525.60	156.99
211	2021/07/09 01:58:00	233.3333	522.78	157.39	1.15	233.3333	521.64	157.22
212	2021/07/09 03:04:40	234.4444	518.99	157.58	1.20	234.4444	517.80	157.43
213	2021/07/09 04:11:20	235.5556	515.26	157.78	1.12	235.5556	514.15	157.62
214	2021/07/09 05:18:00	236.6667	511.68	157.97	1.13	236.6667	510.57	157.81
215	2021/07/09 06:24:40	237.7778	508.32	158.16	1.14	237.7778	507.20	157.99
216	2021/07/09 07:31:20	238.8889	505.02	158.34	1.14	238.8889	503.90	158.18
217	2021/07/09 08:38:00	240.0000	501.81	158.51	1.17	240.0000	500.64	158.35
218	2021/07/09 09:44:40	241.1111	498.75	158.68	1.13	241.1111	497.63	158.51
219	2021/07/09 10:51:20	242.2222	495.68	158.85	1.07	242.2222	494.63	158.68
220	2021/07/09 11:58:00	243.3333	492.84	159.00	1.16	243.3333	491.69	158.83
221	2021/07/09 13:04:40	244.4444	489.94	159.15	1.12	244.4444	488.81	158.99
222	2021/07/09 14:11:20	245.5556	487.23	159.30	1.15	245.5556	486.08	159.14
223	2021/07/09 15:18:00	246.6667	484.51	159.45	1.12	246.6667	483.40	159.28
224	2021/07/09 16:24:40	247.7778	481.91	159.59	1.12	247.7778	480.79	159.42
225	2021/07/09 17:31:20	248.8889	479.39	159.72	1.19	248.8889	478.21	159.55

Print Filter: Approximately every 2000 lines

Gauge Name	Serial Number	Start Date	Start Time	Run Depth (TVD)
Gauge 1	19491	2021/06/29	08:38:00	7100.00 ft
Gauge 2	19490	2021/06/29	08:38:00	7100.00 ft

Company Name Diversified Gas & Oil Corp.
 Unique Well ID API# 37-65-20399
 Start Test Date 2021/06/29
 Final Test Date 2021/07/21

Well Name Diversified - R & P Coal #4
 Formation Oriskany Sandstone

	Gauge 1 Date	Gauge 1 Time	Gauge 1 Pres.	Gauge 1 Temp.	Gauge 1 G1 - G2	Gauge 2 Time	Gauge 2 Pres.	Gauge 2 Temp.
	YYY/MM/DD HH:mm:ss	h	psi(a)	°F	psi	h	psi(a)	°F
226	2021/07/09 18:38:00	250.0000	476.91	159.85	1.12	250.0000	475.78	159.70
227	2021/07/09 19:44:40	251.1111	474.48	159.98	1.13	251.1111	473.36	159.81
228	2021/07/09 20:51:20	252.2222	472.11	160.10	1.14	252.2222	470.98	159.93
229	2021/07/09 21:58:00	253.3333	469.77	160.21	1.16	253.3333	468.62	160.05
230	2021/07/09 23:04:40	254.4444	467.53	160.31	1.18	254.4444	466.37	160.15
231	2021/07/10 00:11:20	255.5556	465.32	160.42	1.16	255.5556	464.14	160.25
232	2021/07/10 01:18:00	256.6667	463.16	160.53	1.17	256.6667	462.00	160.36
233	2021/07/10 02:24:40	257.7778	461.01	160.63	1.12	257.7778	459.89	160.46
234	2021/07/10 03:31:20	258.8889	458.94	160.73	1.13	258.8889	457.83	160.57
235	2021/07/10 04:38:00	260.0000	456.95	160.83	1.14	260.0000	455.79	160.67
236	2021/07/10 05:44:40	261.1111	454.99	160.93	1.16	261.1111	453.83	160.76
237	2021/07/10 06:51:20	262.2222	453.06	161.03	1.18	262.2222	451.89	160.86
238	2021/07/10 07:58:00	263.3333	451.14	161.12	1.12	263.3333	450.03	160.95
239	2021/07/10 09:04:40	264.4444	449.31	161.22	1.14	264.4444	448.19	161.04
240	2021/07/10 10:11:20	265.5556	447.51	161.30	1.16	265.5556	446.37	161.13
241	2021/07/10 11:18:00	266.6667	445.75	161.40	1.14	266.6667	444.60	161.22
242	2021/07/10 12:24:40	267.7778	444.02	161.48	1.17	267.7778	442.86	161.30
243	2021/07/10 13:31:20	268.8889	442.31	161.55	1.11	268.8889	441.20	161.38
244	2021/07/10 14:38:00	270.0000	440.66	161.63	1.13	270.0000	439.52	161.46
245	2021/07/10 15:44:40	271.1111	439.03	161.71	1.15	271.1111	437.88	161.54
246	2021/07/10 16:51:20	272.2222	437.46	161.79	1.16	272.2222	436.29	161.62
247	2021/07/10 17:58:00	273.3333	435.83	161.86	1.09	273.3333	434.77	161.69
248	2021/07/10 19:04:40	274.4444	434.31	161.93	1.10	274.4444	433.22	161.76
249	2021/07/10 20:11:20	275.5556	432.86	162.01	1.15	275.5556	431.70	161.83
250	2021/07/10 21:18:00	276.6667	431.36	162.07	1.14	276.6667	430.23	161.90
251	2021/07/10 22:24:40	277.7778	429.91	162.14	1.11	277.7778	428.80	161.97
252	2021/07/10 23:31:20	278.8889	428.48	162.20	1.15	278.8889	427.34	162.04
253	2021/07/11 00:38:00	280.0000	427.08	162.28	1.10	280.0000	425.97	162.10
254	2021/07/11 01:44:40	281.1111	425.70	162.34	1.17	281.1111	424.54	162.16
255	2021/07/11 02:51:20	282.2222	424.33	162.39	1.12	282.2222	423.21	162.23
256	2021/07/11 03:58:00	283.3333	423.02	162.45	1.13	283.3333	421.91	162.28
257	2021/07/11 05:04:40	284.4444	421.71	162.51	1.15	284.4444	420.57	162.35
258	2021/07/11 06:11:20	285.5556	420.43	162.58	1.13	285.5556	419.30	162.40
259	2021/07/11 07:18:00	286.6667	419.16	162.63	1.16	286.6667	418.03	162.46
260	2021/07/11 08:24:40	287.7778	417.91	162.68	1.13	287.7778	416.80	162.52
261	2021/07/11 09:31:20	288.8889	416.68	162.74	1.12	288.8889	415.56	162.57
262	2021/07/11 10:38:00	290.0000	415.45	162.80	1.10	290.0000	414.36	162.62
263	2021/07/11 11:44:40	291.1111	414.27	162.87	1.13	291.1111	413.14	162.69
264	2021/07/11 12:51:20	292.2222	413.12	162.90	1.16	292.2222	411.96	162.74
265	2021/07/11 13:58:00	293.3333	411.96	162.96	1.13	293.3333	410.85	162.79
266	2021/07/11 15:04:40	294.4444	410.85	163.02	1.17	294.4444	409.68	162.84
267	2021/07/11 16:11:20	295.5556	409.70	163.07	1.12	295.5556	408.59	162.89
268	2021/07/11 17:18:00	296.6667	408.60	163.12	1.13	296.6667	407.47	162.95
269	2021/07/11 18:24:40	297.7778	407.47	163.16	1.10	297.7778	406.40	162.99
270	2021/07/11 19:31:20	298.8889	406.41	163.21	1.14	298.8889	405.29	163.03

Print Filter: Approximately every 2000 lines

Gauge Name	Serial Number	Start Date	Start Time	Run Depth (TVD)
Gauge 1	19491	2021/06/29	08:38:00	7100.00 ft
Gauge 2	19490	2021/06/29	08:38:00	7100.00 ft

Company Name Diversified Gas & Oil Corp.
 Unique Well ID API# 37-65-20399
 Start Test Date 2021/06/29
 Final Test Date 2021/07/21

Well Name Diversified - R & P Coal #4
 Formation Oriskany Sandstone

	Gauge 1 Date	Gauge 1 Time	Gauge 1 Pres.	Gauge 1 Temp.	Gauge 1 G1 - G2	Gauge 2 Time	Gauge 2 Pres.	Gauge 2 Temp.
	YYY/MM/DD HH:mm:ss	h	psi(a)	°F	psi	h	psi(a)	°F
271	2021/07/11 20:38:00	300.0000	405.32	163.25	1.11	300.0000	404.22	163.08
272	2021/07/11 21:44:40	301.1111	404.31	163.30	1.15	301.1111	403.17	163.12
273	2021/07/11 22:51:20	302.2222	403.24	163.34	1.11	302.2222	402.14	163.17
274	2021/07/11 23:58:00	303.3333	402.23	163.39	1.07	303.3333	401.14	163.21
275	2021/07/12 01:04:40	304.4444	401.22	163.43	1.10	304.4444	400.15	163.25
276	2021/07/12 02:11:20	305.5556	400.25	163.47	1.12	305.5556	399.14	163.30
277	2021/07/12 03:18:00	306.6667	399.23	163.51	1.09	306.6667	398.16	163.34
278	2021/07/12 04:24:40	307.7778	398.32	163.55	1.14	307.7778	397.17	163.38
279	2021/07/12 05:31:20	308.8889	397.34	163.59	1.09	308.8889	396.25	163.42
280	2021/07/12 06:38:00	310.0000	396.41	163.63	1.12	310.0000	395.29	163.45
281	2021/07/12 07:44:40	311.1111	395.51	163.67	1.13	311.1111	394.38	163.49
282	2021/07/12 08:51:20	312.2222	394.58	163.71	1.12	312.2222	393.47	163.53
283	2021/07/12 09:58:00	313.3333	393.66	163.74	1.07	313.3333	392.58	163.57
284	2021/07/12 11:04:40	314.4444	1502.84	118.36	-6.19	314.4444	1504.44	119.56
285	2021/07/12 12:11:20	315.5556	2074.61	89.93	-0.37	315.5556	2073.95	89.93
286	2021/07/12 13:18:00	316.6667	2162.61	90.02	-6.31	316.6667	2165.01	89.97
287	2021/07/12 14:24:40	317.7778	1116.41	95.64	6.34	317.7778	1113.55	93.73
288	2021/07/12 15:31:20	318.8889	762.73	109.95	0.85	318.8889	762.14	108.72
289	2021/07/12 16:38:00	320.0000	682.75	120.21	0.73	320.0000	682.26	119.12
290	2021/07/12 17:44:40	321.1111	638.94	127.96	0.63	321.1111	638.31	127.05
291	2021/07/12 18:51:20	322.2222	609.85	133.73	0.67	322.2222	609.24	133.00
292	2021/07/12 19:58:00	323.3333	588.41	138.09	0.75	323.3333	587.68	137.50
293	2021/07/12 21:04:40	324.4444	571.65	141.49	0.84	324.4444	570.80	141.00
294	2021/07/12 22:11:20	325.5556	558.06	144.12	0.81	325.5556	557.29	143.88
295	2021/07/12 23:18:00	326.6667	546.80	146.64	0.89	326.6667	545.95	146.24
296	2021/07/13 00:24:40	327.7778	537.20	148.42	0.89	327.7778	536.32	148.07
297	2021/07/13 01:31:20	328.8889	528.87	149.98	0.95	328.8889	527.95	149.65
298	2021/07/13 02:38:00	330.0000	521.48	151.29	0.93	330.0000	520.56	150.99
299	2021/07/13 03:44:40	331.1111	514.90	152.40	0.95	331.1111	513.95	152.11
300	2021/07/13 04:51:20	332.2222	509.01	153.38	1.01	332.2222	508.00	153.11
301	2021/07/13 05:58:00	333.3333	503.59	154.23	0.96	333.3333	502.64	153.98
302	2021/07/13 07:04:40	334.4444	498.68	154.99	1.01	334.4444	497.69	154.74
303	2021/07/13 08:11:20	335.5556	494.12	155.68	0.95	335.5556	493.16	155.44
304	2021/07/13 09:18:00	336.6667	489.91	156.29	0.99	336.6667	488.94	156.06
305	2021/07/13 10:24:40	337.7778	485.99	156.84	1.05	337.7778	484.96	156.62
306	2021/07/13 11:31:20	338.8889	482.32	157.37	1.01	338.8889	481.32	157.18
307	2021/07/13 12:38:00	340.0000	478.97	157.84	1.03	340.0000	477.94	157.65
308	2021/07/13 13:44:40	341.1111	475.71	158.25	1.00	341.1111	474.72	158.07
309	2021/07/13 14:51:20	342.2222	472.71	158.62	1.01	342.2222	471.72	158.45
310	2021/07/13 15:58:00	343.3333	469.86	159.01	1.05	343.3333	468.83	158.85
311	2021/07/13 17:04:40	344.4444	467.34	159.31	1.03	344.4444	466.30	159.16
312	2021/07/13 18:11:20	345.5556	465.50	159.56	0.72	345.5556	464.77	159.40
313	2021/07/13 19:18:00	346.6667	464.34	159.90	0.72	346.6667	463.62	159.73
314	2021/07/13 20:24:40	347.7778	463.34	160.16	0.71	347.7778	462.63	159.97
315	2021/07/13 21:31:20	348.8889	462.47	160.41	0.73	348.8889	461.73	160.21

Print Filter: Approximately every 2000 lines

Gauge Name	Serial Number	Start Date	Start Time	Run Depth (TVD)
Gauge 1	19491	2021/06/29	08:38:00	7100.00 ft
Gauge 2	19490	2021/06/29	08:38:00	7100.00 ft

Company Name Diversified Gas & Oil Corp.
 Unique Well ID API# 37-65-20399
 Start Test Date 2021/06/29
 Final Test Date 2021/07/21

Well Name Diversified - R & P Coal #4
 Formation Oriskany Sandstone

	Gauge 1 Date	Gauge 1 Time	Gauge 1 Pres.	Gauge 1 Temp.	Gauge 1 G1 - G2	Gauge 2 Time	Gauge 2 Pres.	Gauge 2 Temp.
	YYY/MM/DD HH:mm:ss	h	psi(a)	°F	psi	h	psi(a)	°F
316	2021/07/13 22:38:00	350.0000	461.74	160.62	0.75	350.0000	460.99	160.42
317	2021/07/13 23:44:40	351.1111	461.09	160.82	0.72	351.1111	460.37	160.62
318	2021/07/14 00:51:20	352.2222	460.60	161.01	0.76	352.2222	459.85	160.81
319	2021/07/14 01:58:00	353.3333	460.21	161.19	0.75	353.3333	459.45	160.98
320	2021/07/14 03:04:40	354.4444	459.95	161.36	0.76	354.4444	459.19	161.15
321	2021/07/14 04:11:20	355.5556	459.67	161.52	0.76	355.5556	458.91	161.30
322	2021/07/14 05:18:00	356.6667	459.28	161.65	0.69	356.6667	458.59	161.45
323	2021/07/14 06:24:40	357.7778	458.90	161.79	0.77	357.7778	458.13	161.58
324	2021/07/14 07:31:20	358.8889	458.41	161.92	0.73	358.8889	457.68	161.70
325	2021/07/14 08:38:00	360.0000	457.95	162.04	0.75	360.0000	457.22	161.82
326	2021/07/14 09:44:40	361.1111	457.48	162.16	0.76	361.1111	456.75	161.94
327	2021/07/14 10:51:20	362.2222	457.11	162.27	0.76	362.2222	456.32	162.05
328	2021/07/14 11:58:00	363.3333	456.80	162.38	0.73	363.3333	456.07	162.16
329	2021/07/14 13:04:40	364.4444	456.11	162.46	0.78	364.4444	455.34	162.25
330	2021/07/14 14:11:20	365.5556	455.05	162.54	0.75	365.5556	454.30	162.32
331	2021/07/14 15:18:00	366.6667	454.07	162.63	0.75	366.6667	453.32	162.41
332	2021/07/14 16:24:40	367.7778	453.02	162.71	0.73	367.7778	452.29	162.49
333	2021/07/14 17:31:20	368.8889	451.99	162.79	0.76	368.8889	451.24	162.58
334	2021/07/14 18:38:00	370.0000	450.96	162.87	0.73	370.0000	450.22	162.65
335	2021/07/14 19:44:40	371.1111	449.94	162.95	0.77	371.1111	449.18	162.73
336	2021/07/14 20:51:20	372.2222	448.93	163.03	0.74	372.2222	448.19	162.81
337	2021/07/14 21:58:00	373.3333	447.92	163.09	0.71	373.3333	447.19	162.88
338	2021/07/14 23:04:40	374.4444	446.96	163.17	0.76	374.4444	446.21	162.95
339	2021/07/15 00:11:20	375.5556	446.00	163.24	0.77	375.5556	445.24	163.02
340	2021/07/15 01:18:00	376.6667	445.03	163.31	0.66	376.6667	444.30	163.09
341	2021/07/15 02:24:40	377.7778	444.13	163.36	0.73	377.7778	443.41	163.15
342	2021/07/15 03:31:20	378.8889	443.22	163.43	0.76	378.8889	442.47	163.22
343	2021/07/15 04:38:00	380.0000	442.36	163.50	0.75	380.0000	441.60	163.28
344	2021/07/15 05:44:40	381.1111	441.43	163.55	0.72	381.1111	440.71	163.34
345	2021/07/15 06:51:20	382.2222	440.60	163.62	0.78	382.2222	439.83	163.39
346	2021/07/15 07:58:00	383.3333	439.75	163.66	0.78	383.3333	438.98	163.45
347	2021/07/15 09:04:40	384.4444	438.92	163.72	0.77	384.4444	438.15	163.50
348	2021/07/15 10:11:20	385.5556	438.12	163.77	0.74	385.5556	437.37	163.56
349	2021/07/15 11:18:00	386.6667	437.33	163.82	0.76	386.6667	436.61	163.61
350	2021/07/15 12:24:40	387.7778	436.58	163.88	0.76	387.7778	435.83	163.66
351	2021/07/15 13:31:20	388.8889	435.81	163.93	0.75	388.8889	435.07	163.71
352	2021/07/15 14:38:00	390.0000	435.08	163.97	0.75	390.0000	434.33	163.76
353	2021/07/15 15:44:40	391.1111	434.32	164.02	0.74	391.1111	433.59	163.80
354	2021/07/15 16:51:20	392.2222	433.60	164.07	0.77	392.2222	432.83	163.85
355	2021/07/15 17:58:00	393.3333	432.89	164.12	0.75	393.3333	432.11	163.89
356	2021/07/15 19:04:40	394.4444	432.17	164.17	0.75	394.4444	431.42	163.94
357	2021/07/15 20:11:20	395.5556	431.50	164.19	0.70	395.5556	430.80	163.99
358	2021/07/15 21:18:00	396.6667	430.83	164.23	0.75	396.6667	430.10	164.01
359	2021/07/15 22:24:40	397.7778	430.16	164.27	0.75	397.7778	429.39	164.05
360	2021/07/15 23:31:20	398.8889	429.51	164.32	0.78	398.8889	428.74	164.09

Print Filter: Approximately every 2000 lines

Gauge Name	Serial Number	Start Date	Start Time	Run Depth (TVD)
Gauge 1	19491	2021/06/29	08:38:00	7100.00 ft
Gauge 2	19490	2021/06/29	08:38:00	7100.00 ft

Company Name Diversified Gas & Oil Corp.
 Unique Well ID API# 37-65-20399
 Start Test Date 2021/06/29
 Final Test Date 2021/07/21

Well Name Diversified - R & P Coal #4
 Formation Oriskany Sandstone

	Gauge 1 Date	Gauge 1 Time	Gauge 1 Pres.	Gauge 1 Temp.	Gauge 1 G1 - G2	Gauge 2 Time	Gauge 2 Pres.	Gauge 2 Temp.
	YYY/MM/DD HH:mm:ss	h	psi(a)	°F	psi	h	psi(a)	°F
361	2021/07/16 00:38:00	400.0000	428.90	164.36	0.74	400.0000	428.14	164.14
362	2021/07/16 01:44:40	401.1111	428.29	164.40	0.76	401.1111	427.54	164.18
363	2021/07/16 02:51:20	402.2222	427.71	164.43	0.76	402.2222	426.95	164.21
364	2021/07/16 03:58:00	403.3333	427.12	164.46	0.73	403.3333	426.40	164.26
365	2021/07/16 05:04:40	404.4444	426.61	164.50	0.75	404.4444	425.87	164.29
366	2021/07/16 06:11:20	405.5556	426.07	164.54	0.79	405.5556	425.28	164.32
367	2021/07/16 07:18:00	406.6667	425.53	164.58	0.73	406.6667	424.81	164.35
368	2021/07/16 08:24:40	407.7778	425.08	164.60	0.77	407.7778	424.32	164.40
369	2021/07/16 09:31:20	408.8889	424.62	164.65	0.76	408.8889	423.85	164.43
370	2021/07/16 10:38:00	410.0000	424.14	164.67	0.75	410.0000	423.40	164.46
371	2021/07/16 11:44:40	411.1111	423.72	164.70	0.78	411.1111	422.95	164.49
372	2021/07/16 12:51:20	412.2222	423.30	164.74	0.74	412.2222	422.55	164.52
373	2021/07/16 13:58:00	413.3333	422.99	164.77	0.76	413.3333	422.24	164.56
374	2021/07/16 15:04:40	414.4444	422.56	164.80	0.75	414.4444	421.81	164.59
375	2021/07/16 16:11:20	415.5556	422.21	164.83	0.78	415.5556	421.45	164.61
376	2021/07/16 17:18:00	416.6667	421.82	164.85	0.73	416.6667	421.08	164.64
377	2021/07/16 18:24:40	417.7778	421.45	164.89	0.74	417.7778	420.70	164.67
378	2021/07/16 19:31:20	418.8889	421.07	164.92	0.72	418.8889	420.35	164.69
379	2021/07/16 20:38:00	420.0000	420.74	164.94	0.76	420.0000	419.98	164.73
380	2021/07/16 21:44:40	421.1111	420.39	164.97	0.74	421.1111	419.64	164.76
381	2021/07/16 22:51:20	422.2222	420.07	165.00	0.70	422.2222	419.37	164.78
382	2021/07/16 23:58:00	423.3333	419.78	165.02	0.73	423.3333	419.06	164.81
383	2021/07/17 01:04:40	424.4444	419.51	165.05	0.79	424.4444	418.73	164.84
384	2021/07/17 02:11:20	425.5556	419.11	165.08	0.75	425.5556	418.35	164.86
385	2021/07/17 03:18:00	426.6667	418.74	165.10	0.73	426.6667	418.01	164.88
386	2021/07/17 04:24:40	427.7778	418.41	165.12	0.76	427.7778	417.66	164.90
387	2021/07/17 05:31:20	428.8889	418.08	165.14	0.72	428.8889	417.35	164.93
388	2021/07/17 06:38:00	430.0000	417.79	165.17	0.75	430.0000	417.04	164.96
389	2021/07/17 07:44:40	431.1111	417.53	165.19	0.77	431.1111	416.77	164.98
390	2021/07/17 08:51:20	432.2222	417.24	165.22	0.71	432.2222	416.51	165.00
391	2021/07/17 09:58:00	433.3333	416.93	165.24	0.74	433.3333	416.21	165.03
392	2021/07/17 11:04:40	434.4444	416.71	165.26	0.76	434.4444	415.95	165.05
393	2021/07/17 12:11:20	435.5556	416.39	165.28	0.72	435.5556	415.68	165.07
394	2021/07/17 13:18:00	436.6667	416.17	165.30	0.75	436.6667	415.42	165.09
395	2021/07/17 14:24:40	437.7778	415.94	165.33	0.75	437.7778	415.20	165.11
396	2021/07/17 15:31:20	438.8889	415.70	165.35	0.73	438.8889	414.95	165.13
397	2021/07/17 16:38:00	440.0000	415.46	165.37	0.73	440.0000	414.73	165.14
398	2021/07/17 17:44:40	441.1111	415.15	165.38	0.75	441.1111	414.42	165.17
399	2021/07/17 18:51:20	442.2222	414.89	165.40	0.75	442.2222	414.14	165.19
400	2021/07/17 19:58:00	443.3333	414.60	165.42	0.77	443.3333	413.84	165.21
401	2021/07/17 21:04:40	444.4444	414.32	165.44	0.72	444.4444	413.59	165.23
402	2021/07/17 22:11:20	445.5556	414.10	165.46	0.74	445.5556	413.34	165.25
403	2021/07/17 23:18:00	446.6667	413.89	165.49	0.74	446.6667	413.14	165.27
404	2021/07/18 00:24:40	447.7778	413.64	165.50	0.72	447.7778	412.94	165.30
405	2021/07/18 01:31:20	448.8889	413.42	165.53	0.71	448.8889	412.69	165.31

Print Filter: Approximately every 2000 lines

Gauge Name	Serial Number	Start Date	Start Time	Run Depth (TVD)
Gauge 1	19491	2021/06/29	08:38:00	7100.00 ft
Gauge 2	19490	2021/06/29	08:38:00	7100.00 ft

Company Name Diversified Gas & Oil Corp.
 Unique Well ID API# 37-65-20399
 Start Test Date 2021/06/29
 Final Test Date 2021/07/21

Well Name Diversified - R & P Coal #4
 Formation Oriskany Sandstone

	Gauge 1 Date	Gauge 1 Time	Gauge 1 Pres.	Gauge 1 Temp.	Gauge 1 G1 - G2	Gauge 2 Time	Gauge 2 Pres.	Gauge 2 Temp.
	YYY/MM/DD HH:mm:ss	h	psi(a)	°F	psi	h	psi(a)	°F
406	2021/07/18 02:38:00	450.0000	413.17	165.54	0.73	450.0000	412.44	165.33
407	2021/07/18 03:44:40	451.1111	412.98	165.56	0.72	451.1111	412.25	165.35
408	2021/07/18 04:51:20	452.2222	412.75	165.58	0.71	452.2222	412.05	165.36
409	2021/07/18 05:58:00	453.3333	412.51	165.59	0.77	453.3333	411.74	165.38
410	2021/07/18 07:04:40	454.4444	412.23	165.60	0.71	454.4444	411.51	165.39
411	2021/07/18 08:11:20	455.5556	411.98	165.62	0.73	455.5556	411.24	165.41
412	2021/07/18 09:18:00	456.6667	411.67	165.64	0.72	456.6667	410.94	165.42
413	2021/07/18 10:24:40	457.7778	411.39	165.65	0.74	457.7778	410.64	165.43
414	2021/07/18 11:31:20	458.8889	411.06	165.67	0.70	458.8889	410.37	165.45
415	2021/07/18 12:38:00	460.0000	410.75	165.68	0.72	460.0000	410.03	165.47
416	2021/07/18 13:44:40	461.1111	410.48	165.70	0.76	461.1111	409.73	165.49
417	2021/07/18 14:51:20	462.2222	410.13	165.71	0.72	462.2222	409.41	165.50
418	2021/07/18 15:58:00	463.3333	409.86	165.73	0.76	463.3333	409.09	165.52
419	2021/07/18 17:04:40	464.4444	409.51	165.74	0.71	464.4444	408.81	165.54
420	2021/07/18 18:11:20	465.5556	409.23	165.76	0.71	465.5556	408.54	165.54
421	2021/07/18 19:18:00	466.6667	408.95	165.77	0.72	466.6667	408.23	165.56
422	2021/07/18 20:24:40	467.7778	408.67	165.79	0.70	467.7778	407.96	165.57
423	2021/07/18 21:31:20	468.8889	408.43	165.80	0.73	468.8889	407.72	165.59
424	2021/07/18 22:38:00	470.0000	408.15	165.81	0.71	470.0000	407.45	165.61
425	2021/07/18 23:44:40	471.1111	407.92	165.83	0.72	471.1111	407.20	165.63
426	2021/07/19 00:51:20	472.2222	407.67	165.84	0.72	472.2222	406.95	165.64
427	2021/07/19 01:58:00	473.3333	407.41	165.87	0.73	473.3333	406.68	165.65
428	2021/07/19 03:04:40	474.4444	407.12	165.87	0.67	474.4444	406.41	165.67
429	2021/07/19 04:11:20	475.5556	406.88	165.89	0.71	475.5556	406.19	165.68
430	2021/07/19 05:18:00	476.6667	406.64	165.90	0.70	476.6667	405.92	165.69
431	2021/07/19 06:24:40	477.7778	406.39	165.91	0.72	477.7778	405.68	165.71
432	2021/07/19 07:31:20	478.8889	406.15	165.93	0.72	478.8889	405.41	165.71
433	2021/07/19 08:38:00	480.0000	405.92	165.95	0.72	480.0000	405.18	165.73
434	2021/07/19 09:44:40	481.1111	405.67	165.95	0.75	481.1111	404.92	165.74
435	2021/07/19 10:51:20	482.2222	405.42	165.97	0.70	482.2222	404.71	165.76
436	2021/07/19 11:58:00	483.3333	405.21	165.98	0.76	483.3333	404.46	165.77
437	2021/07/19 13:04:40	484.4444	404.95	166.00	0.72	484.4444	404.24	165.78
438	2021/07/19 14:11:20	485.5556	404.72	166.00	0.75	485.5556	403.96	165.79
439	2021/07/19 15:18:00	486.6667	404.45	166.02	0.69	486.6667	403.76	165.82
440	2021/07/19 16:24:40	487.7778	404.25	166.03	0.68	487.7778	403.58	165.82
441	2021/07/19 17:31:20	488.8889	404.00	166.04	0.69	488.8889	403.32	165.82
442	2021/07/19 18:38:00	490.0000	403.80	166.05	0.74	490.0000	403.09	165.84
443	2021/07/19 19:44:40	491.1111	403.55	166.06	0.69	491.1111	402.88	165.86
444	2021/07/19 20:51:20	492.2222	403.37	166.08	0.70	492.2222	402.64	165.86
445	2021/07/19 21:58:00	493.3333	403.15	166.08	0.71	493.3333	402.45	165.88
446	2021/07/19 23:04:40	494.4444	402.96	166.10	0.73	494.4444	402.23	165.89
447	2021/07/20 00:11:20	495.5556	402.77	166.12	0.75	495.5556	402.02	165.90
448	2021/07/20 01:18:00	496.6667	402.52	166.13	0.72	496.6667	401.79	165.91
449	2021/07/20 02:24:40	497.7778	402.29	166.14	0.71	497.7778	401.59	165.93
450	2021/07/20 03:31:20	498.8889	402.09	166.14	0.67	498.8889	401.40	165.94

Print Filter: Approximately every 2000 lines

Gauge Name	Serial Number	Start Date	Start Time	Run Depth (TVD)
Gauge 1	19491	2021/06/29	08:38:00	7100.00 ft
Gauge 2	19490	2021/06/29	08:38:00	7100.00 ft

Company Name Diversified Gas & Oil Corp.
 Unique Well ID API# 37-65-20399
 Start Test Date 2021/06/29
 Final Test Date 2021/07/21

Well Name Diversified - R & P Coal #4
 Formation Oriskany Sandstone

	Gauge 1 Date	Gauge 1 Time	Gauge 1 Pres.	Gauge 1 Temp.	Gauge 1 G1 - G2	Gauge 2 Time	Gauge 2 Pres.	Gauge 2 Temp.
	YYY/MM/DD HH:mm:ss	h	psi(a)	°F	psi	h	psi(a)	°F
451	2021/07/20 04:38:00	500.0000	401.96	166.16	0.69	500.0000	401.27	165.96
452	2021/07/20 05:44:40	501.1111	401.75	166.17	0.68	501.1111	401.10	165.97
453	2021/07/20 06:51:20	502.2222	401.53	166.18	0.71	502.2222	400.82	165.97
454	2021/07/20 07:58:00	503.3333	401.28	166.19	0.69	503.3333	400.59	165.98
455	2021/07/20 09:04:40	504.4444	401.07	166.20	0.68	504.4444	400.40	165.98
456	2021/07/20 10:11:20	505.5556	400.82	166.21	0.70	505.5556	400.11	166.00
457	2021/07/20 11:18:00	506.6667	400.60	166.22	0.69	506.6667	399.90	166.02
458	2021/07/20 12:24:40	507.7778	400.40	166.23	0.72	507.7778	399.68	166.02
459	2021/07/20 13:31:20	508.8889	206.68	164.55	0.42	508.8889	206.07	164.56
460	2021/07/20 14:38:00	510.0000	198.51	161.51	0.99	510.0000	197.52	161.32
461	2021/07/20 15:44:40	511.1111	202.71	161.53	0.98	511.1111	201.74	161.35
462	2021/07/20 16:51:20	512.2222	203.38	161.46	0.99	512.2222	202.39	161.28
463	2021/07/20 17:58:00	513.3333	204.08	161.40	1.07	513.3333	203.02	161.22
464	2021/07/20 19:04:40	514.4444	205.38	161.39	1.03	514.4444	204.36	161.20
465	2021/07/20 20:11:20	515.5556	206.35	161.39	1.08	515.5556	205.29	161.20
466	2021/07/20 21:18:00	516.6667	206.96	161.37	1.01	516.6667	205.94	161.18
467	2021/07/20 22:24:40	517.7778	207.42	161.35	1.02	517.7778	206.40	161.17
468	2021/07/20 23:31:20	518.8889	207.69	161.34	1.01	518.8889	206.70	161.15
469	2021/07/21 00:38:00	520.0000	207.83	161.34	0.99	520.0000	206.85	161.15
470	2021/07/21 01:44:40	521.1111	207.96	161.33	1.04	521.1111	206.93	161.15
471	2021/07/21 02:51:20	522.2222	208.01	161.33	1.02	522.2222	207.00	161.14
472	2021/07/21 03:58:00	523.3333	208.00	161.33	1.00	523.3333	206.99	161.15
473	2021/07/21 05:04:40	524.4444	208.09	161.34	1.07	524.4444	207.04	161.16
474	2021/07/21 06:11:20	525.5556	208.02	161.35	1.04	525.5556	206.99	161.17
475	2021/07/21 07:18:00	526.6667	207.93	161.36	1.04	526.6667	206.92	161.18
476	2021/07/21 08:24:40	527.7778	13.22	153.06	0.52	527.7778	12.68	152.97
477	2021/07/21 08:59:50	528.3639	13.25	144.93	0.43	528.3639	12.84	146.11

Print Filter: Approximately every 2000 lines

Gauge Name	Serial Number	Start Date	Start Time	Run Depth (TVD)
Gauge 1	19491	2021/06/29	08:38:00	7100.00 ft
Gauge 2	19490	2021/06/29	08:38:00	7100.00 ft

ATTACHMENT C. WELL CONSTRUCTION/CONVERSION INFORMATION

I. Well Schematic Diagram

- a. See Attachment C, Addendum 1
 - i. Detailed proposed well schematic diagram that includes:
 1. Identification of USDWs and confining and injection zones
 - a. USDWs Zone(s)
 - i. Conemaugh Group (IPc)
 1. Depth – Surface
 2. Thickness – 250'
 - ii. Allegheny Group (IPa)
 1. Depth – 250'
 2. Thickness 270' – 320'
 3. Lowest known water level is 570' as shown on Attachment C, Addendum 1
 4. Proposed surface/fresh water cement depth is 650' (80' under lowest fresh water depth)
 - iii. Water Well Depths within ¼ Mile Radius
 1. Addendum 2
 - b. Confining Zone(s)
 - i. Onondaga Formation
 1. Depth - 7140'
 2. Thickness – 10'
 - ii. Huntersville Chert
 1. Depth – 7150'
 2. Thickness – 90'
 - c. Injection Zone
 - i. Oriskany Ss
 1. Depth – 7230'
 2. Thickness – 20'
 2. Casing and cementing details, including demonstrated or calculated top of cement
 - a. See Attachment C, Addendum 1 for detail
 3. Tubing and packer, *if applicable*
 - a. 4.5" N-80 11.60# LTC casing
 - b. 4.5" x 7" AS1-X packer, on off tool
 4. Open hole or perforated levels
 - a. Open Hole
 - b. Perforation levels 7236' to 7256'
 5. Surface trace, *if horizontal or deviated well of conversion to injection well*
 - a. **This well is not a horizontal or deviated well**
 6. Current well schematic diagram
 - a. See Attachment C, Addendum 1

II. Well construction or Conversion Procedure

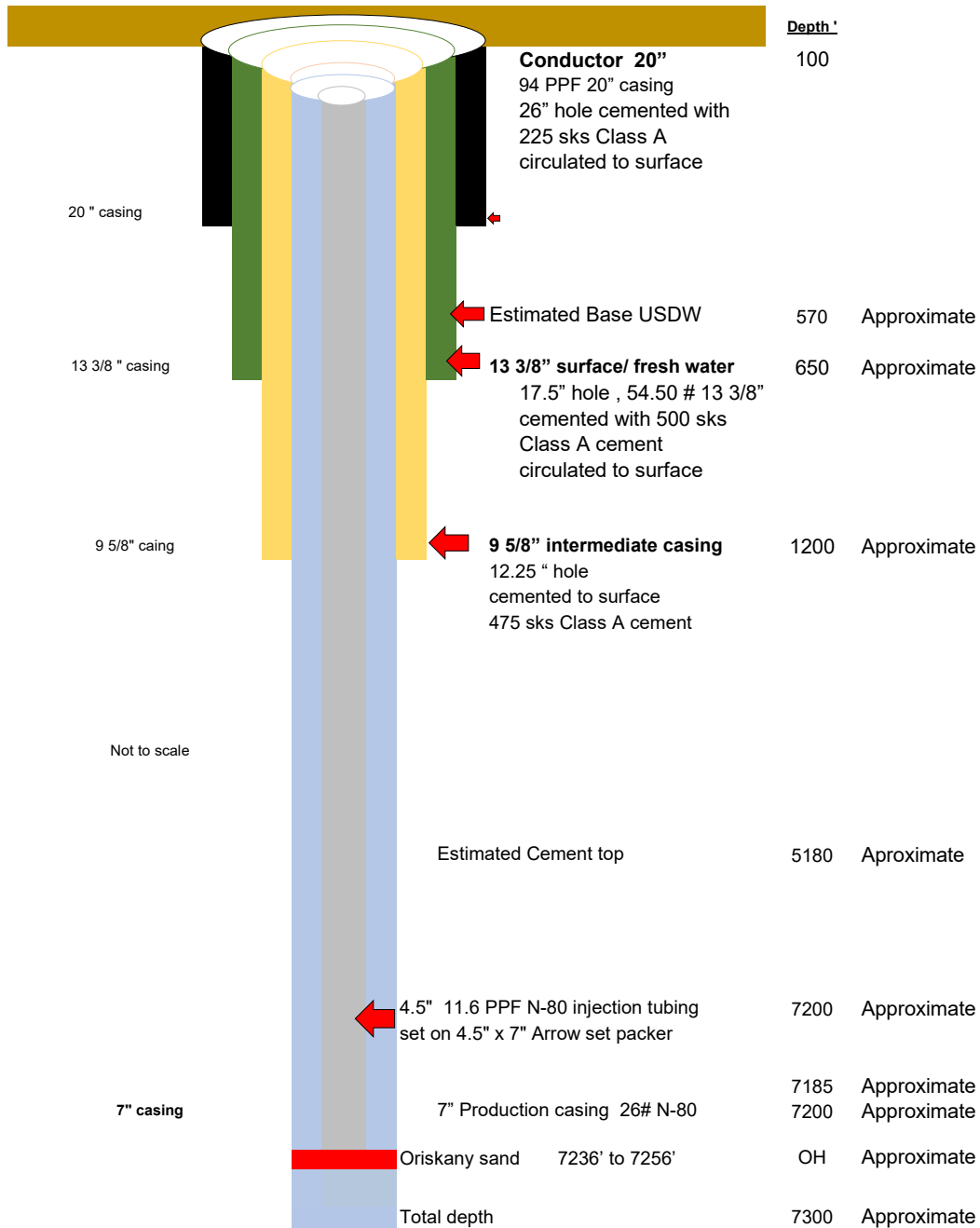
Attachment A, Addendum List

Addendum 1- David A Weaver #1 Well Schematic

Addendum 2 - Water Well Information Reports within ¼ Mile

ATTACHMENT C, ADDENDUM 1

David A Weaver # 1
New Drill
Well Schematic
With 4.5" tubing and packer



WATER WELL INFORMATION REPORT

PA Well ID: **120625** Local Well ID: **X 0185** Local Permit #:

LOCATION INFORMATION

Owner: **FARBO DAN** Original Paper Record Image Available: **No**

Address of Well:

County: **JEFFERSON**

Municipality: **YOUNG TWP.**

Latitude: **40.96667** Coordinate Method:

Longitude: **-78.98667** Data Reliability: **LOCATION MAY NOT BE ACCURATE (WWI paper)**

Description of Well Location and Other Notes:

WELL CONSTRUCTION INFORMATION

Well Driller: **DINGER BROS DRILLING** License: **0807** Driller Well ID:

Type of Activity: **New Well** Date Drilled: **1/1/1968** Drilling Method:

Well Depth (ft): **60** Well Finish: **OPEN HOLE**

CASING

<u>Top (ft)</u>	<u>Bottom (ft)</u>	<u>Diameter (in)</u>	<u>Casing Material</u>	<u>Seal Top</u>	<u>Seal Bottom</u>	<u>Seal Type</u>
0	22	6				

GROUNDWATER AND GEOLOGICAL INFORMATION

Well Yield (GPM - gal per min): **2** Yield Measurement Method: **UNKNOWN**

Water Level when not pumped: (ft below land surface)

Length of Yield Test (minutes):

Use of Well: **WITHDRAWAL** Use of Water: **DOMESTIC**

LEVELS WHERE WATER ENTERS WELL

<u>Top (ft)</u>	<u>Bottom (ft)</u>	<u>Yield (GPM)</u>
34		

Depth to Bedrock (ft): **15** Was Well Drilled Into Bedrock? **Yes**

Date Printed: 4/28/2022

WATER WELL INFORMATION REPORT

PA Well ID: **120589** Local Well ID: **1233N** Local Permit #:

LOCATION INFORMATION

Owner: **ST.ANTHONY CH RECTRY** Original Paper Record Image Available: **No**

Address of Well:

County: **JEFFERSON**

Municipality: **YOUNG TWP.**

Latitude: **40.96611** Coordinate Method:

Longitude: **-78.99222** Data Reliability: **LOCATION MAY NOT BE ACCURATE (WWI paper)**

Description of Well Location and Other Notes: **SHALE/SANDSTONE**

WELL CONSTRUCTION INFORMATION

Well Driller: **M & B DRILLING INC** License: **1398** Driller Well ID:

Type of Activity: **New Well** Date Drilled: **7/1/1985** Drilling Method:

Well Depth (ft): **175** Well Finish:

CASING

<u>Top (ft)</u>	<u>Bottom (ft)</u>	<u>Diameter (in)</u>	<u>Casing Material</u>	<u>Seal Top</u>	<u>Seal Bottom</u>	<u>Seal Type</u>
0	107					

GROUNDWATER AND GEOLOGICAL INFORMATION

Well Yield (GPM - gal per min): **7** Yield Measurement Method: **VOLUMETRIC, WATCH & BUCKET**

Water Level when not pumped: (ft below land surface)

Length of Yield Test (minutes):

Use of Well: **WITHDRAWAL** Use of Water: **DOMESTIC**

LEVELS WHERE WATER ENTERS WELL

<u>Top (ft)</u>	<u>Bottom (ft)</u>	<u>Yield (GPM)</u>
26		
43		
71		

Depth to Bedrock (ft): Was Well Drilled Into Bedrock? **Yes**

Date Printed: **4/28/2022**

ATTACHMENT D. INJECTION OPERATION AND MONITORING PROGRAM

I. Flow diagram of fluid flow through the facility

- a. See Attachment D, Addendum 1.

II. Contingency plan(s) to respond to well failures

- a. The facility will be fully automated. The facility will utilize pressure transmitters as well as pressure switchgauge's serving as a redundant safety system. In the event of a well failure, the system will stop immediately and not restart until the failure is known.
 - i. In the event of well failure, a verbal notification to the EPA will happen withing 24 hours
 - ii. In the event of a well failure, written notification to the EPA will happen within 7 days
- b. Monitoring devices will be installed at the wellhead in addition to the discharge side of the injection equipment. These items constantly monitor pressures.
 - i. Monitoring devices will be analog pressure transmitters
 - ii. Monitoring devices will be a two pin chart recorder
- c. A camera will be installed at the wellhead to visually monitor the wellhead in real time.

III. Drawing of the surface construction

- a. See Attachment D, Addendum 2 & 3.
 - i. Addendum 2 – Projected Site Layout
 - ii. Addendum 3 - Constructed Site layout

IV. Location of monitoring ports (show on the map(s) of reference in section A. III above

- a. See Attachment D, Addendum 4
 - i. Flow Monitoring
 - 1. Flow Meters on the truck offloading area
 - 2. Flow Meter on the filtration skid
 - 3. Flow Meters on the discharge side of each injection pump
 - ii. Pressure Monitoring
 - 1. Pressure Recording
 - a. Injection pump discharge
 - i. Pressure Transmitters
 - ii. Murphy Pressure Switchgages
 - b. Well Head Tubing Pressure
 - i. Pressure Transmitter
 - ii. Chart Recorder
 - c. Annulus (Casing) Pressure
 - i. Pressure Transmitter
 - ii. Chart Recorder

V. Description of sampling and monitoring devices to monitor the nature of the injection fluids, injection pressure, annulus pressure (if applicable), flowrate, and cumulative volume

- a. See Attachment D, Addendum 4 for reference
 - i. FM1 are coriolus flow meters that measures the rate, total, and specific gravity of the incoming fluids to the plant.
 - ii. LT1 and LT2 are level transmitters that measure the fluid height in the tanks
 - iii. MLG1 are level switchgage's that serves as a secondary level switch to ensure that the tanks do not overflow.
 - iv. GPT2 are pressure transmitters on the discharge side of the injection units that measures pump discharge pressure in real time.
 - v. MPG2 are pressure switchgages that serves as a secondary pressure switch so the pump units do not exceed the MAOP of the well.
 - vi. FM2 are flow meters that measures rate and total injection rates for each injection pump.
 - vii. GPT2 are pressure transmitters located on the wellhead and annulus that measures real time pressures. The system will shut down if the maximum pressure on the wellhead is achieved.
 - viii. Two Pin Chart Recorder will be installed at the well head for a continual paper logging report.

VI. Description of manifold monitoring program and how the program is comparable to individual well monitoring

- a. Not Applicable as there is only one well on this location that will be used for injection.

VII. Operating Information

- a. Average and maximum daily rate and volume of fluids to be injected.
 - i. Average Volume Projection = 2500 BPD (Barrels Per Day)
 - ii. Maximum Volume Projection = 4000 BPD
- b. Average Maximum Injection Pressure
 - i. Average Pressure Requested = 1592 PSI Surface Tubing Pressure
 - ii. Maximum Injection Pressure = 1800 PSI Surface Tubing Pressure
- c. Source(s) of injection fluid (including field and formation names)
 - i. Due to this facility being a commercial disposal facility, field and formation names vary. Source water will be produced brine
- d. Proposed Annular Fluid
 - i. 10# Brine

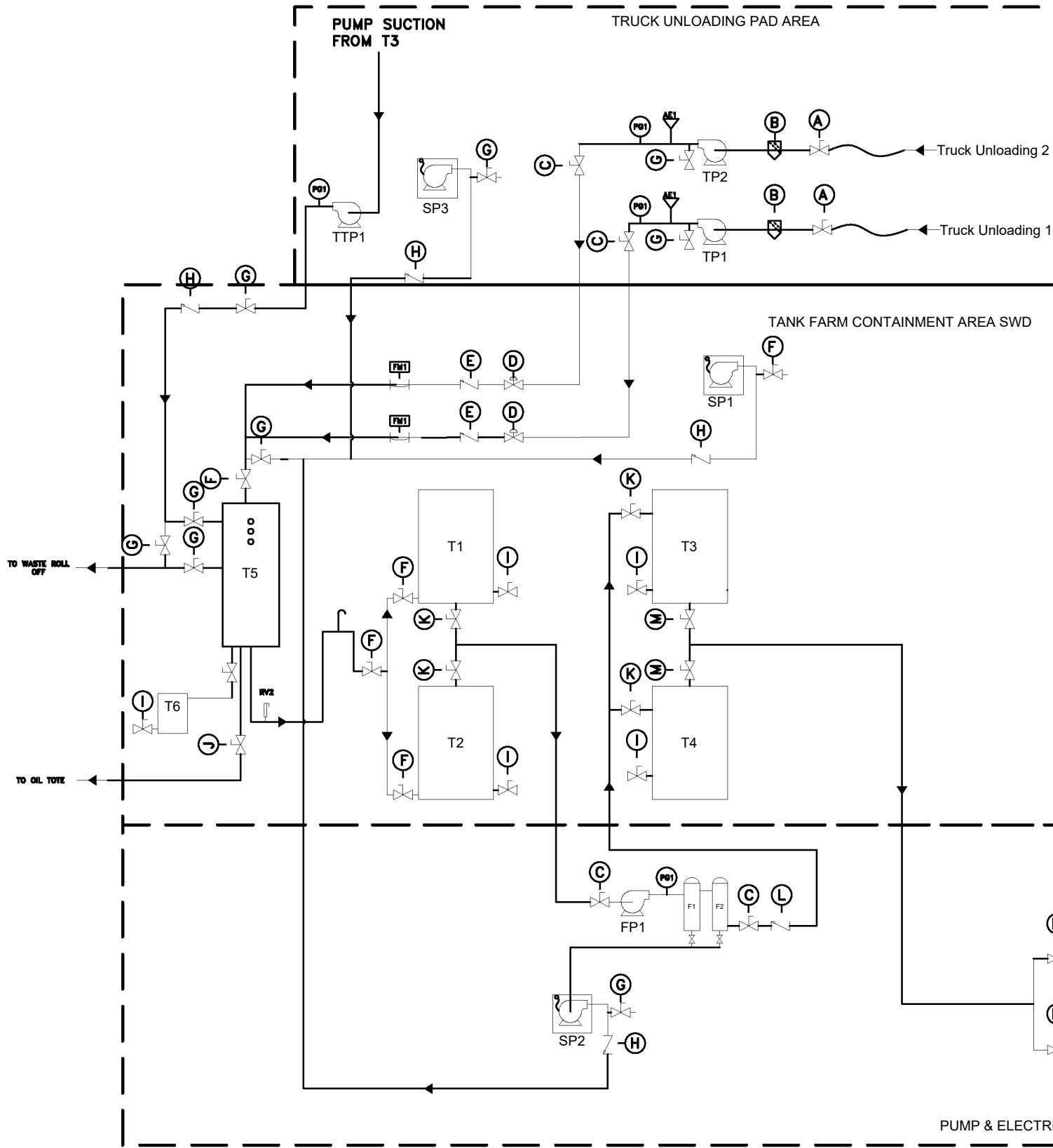
VIII. Analysis of the chemical and physical characteristics of the injection fluid. At a minimum this should include pH, specific gravity, TDS, and conductivity

- a. See Addendum 5 for a sample of the fluid known
 - i. This is the analysis of known water that will be coming into the facility
 - ii. **Requested maximum Specific Gravity is 1.23**

Attachment D. Addendum List

- Addendum 1- Process Flow Diagram (PFD)
- Addendum 2 - Projected Site Layout
- Addendum 3 - Constructed Site Layout
- Addendum 4 - Process & Instrumentation Diagram
- Addendum 5 - Sample Water Analysis
- Addendum 6 - Specific Gravity Central PA

Attachment D, Addendum 1

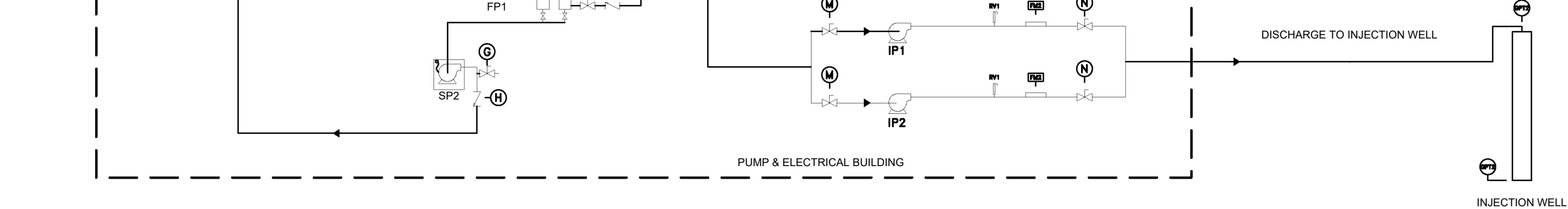


FITTINGS BILL OF MATERIAL		
ITEM #	QTY	DESCRIPTION
A	3	4" BALL VALVE, FULL PORT, CS, 150# FLG
B	3	4" MUELLER STRAINER, CI, SS BASKET, FLGD
C	5	4" BUTTERFLY VALVE, LUG TYPE, 150# FLGD
D	3	2" ELECTRIC ACTUATED CONTROL VALVE, BALL TYPE, FLGD
E	3	3" CHECK VALVE, SWING TYPE, 150# FLGD
F	4	10" BUTTERFLY VALVE, LUG TYPE, 150# FLGD
G	12	2" BALL VALVE, BRZ/SS, THRD
H	4	2" CHECK VALVE, SWING TYPE, THRD
I	5	4" BALL VALVE, STD TRIM, THRD
J	1	3" BALL VALVE, DTD TRIM, THRD
K	4	2" BUTTERFLY VALVE, LUG TYPE, 150# FLGD
L	1	4" CHEC K VALVE, SWING TYPE, 150# FLGD
M	4	2" BUTTERFLY VALVE, LUG TYPE, 150# FLGD
N	2	2" GATE VAVLE, SS TRIM, RATED FOR 2000#, FLGD
AE1	3	AIR ELIMINATOR, VAL-MATIC
RV1	2	BAIRD RELIEF VALVE, 761-7601-1-MP
RV2	1	RELIEF VALVE, GUN BARREL, SET AT 45 PSI
PG1	5	PRESSURE GUAGE, LIQUID FILLED, 0-100 PSI

PUMP BILL OF MATERIAL		
ITEM #	QTY	DESCRIPTION
TP1	1	VAUGHN MODEL HSC6EMCS CENTRIFUGAL PUMP, 20HP, 1800 RPM, 3/60/230-460
TP2	1	VAUGHN MODEL HSC6EMCS CENTRIFUGAL PUMP, 20HP, 1800 RPM, 3/60/230-460
SP1	1	SUMBERSIBLE PUMP, 2", 1 HP, 115V, EXPLOSION PROOF, WI FLOAT SWITCH
SP2	1	SUMBERSIBLE PUMP, 2", 1 HP, 115V, EXPLOSION PROOF, WI FLOAT SWITCH
SP3	1	SUMBERSIBLE PUMP, 2", 1 HP, 115V, EXPLOSION PROOF, WI FLOAT SWITCH
TTP1	1	AMT MODEL 3151-98 CENTRIFUGAL FEED PUMP, 70GPN@70TDH, 3 HP, OR EQUAL
FP1	1	SUMMIT ANSI PUMP, 2X3-13 CENTRIFUGAL PUMP, 15HP, 1800 RPM, SST
IP1	1	NOV MODEL 133T-4M INJECTION PUMP, 100 HP, 2500 BPD @ 1753 PSI
IP2	1	NOV MODEL 133T-4M INJECTION PUMP, 100 HP, 2500 BPD @ 1753 PSI

TANK BILL OF MATERIAL		
ITEM #	QTY	DESCRIPTION
T1	1	AST PROCESS WATER TANK, BOLTED STEEL, 1500 BBL, 29-8 1/2" X 16', EPOXY COATED
T2	1	AST PROCESS WATER TANK, BOLTED STEEL, 1500 BBL, 29-8 1/2" X 16', EPOXY COATED
T3	1	AST PROCESS WATER TANK, BOLTED STEEL, 1500 BBL, 29-8 1/2" X 16', EPOXY COATED
T4	1	AST PROCESS WATER TANK, BOLTED STEEL, 1500 BBL, 29-8 1/2" X 16', EPOXY COATED
T5	1	NOV HORIZONTAL GUN BARREL ASSEMBLY, TORE DIRT REMOVAL SYSTEM, WATER LEG
T6	1	210 BBL OIL TANK, STEEL, 10' X 15'

FILTER SKID BOM		
ITEM #	QTY	DESCRIPTION
F1	1	FILTER TECHNOLOGIES 6 BAG VESSEL, SS CONSTRUCTION, SS BASKETS, CLOSURE LID, 6" CONNECTIONS, OR EQUAL
F2	1	NOVATA AS48 CARTRIDGE VESSEL, SS TRIM, EPOXY LINED, 4" CONNECTIONS, OR EQUAL



GENERAL NOTES
FOR APPROVAL 1: _____

REFERENCE DRAWINGS		REFERENCE DRAWINGS		DRAWING STATUS			REVISIONS			SCALE
DWG. NO.	DESCRIPTION	DWG. NO.	DESCRIPTION	NO.	DATE	BY	DESCRIPTION	NO.	DATE	DESCRIPTION

FMS

Ph: 812/431-7314

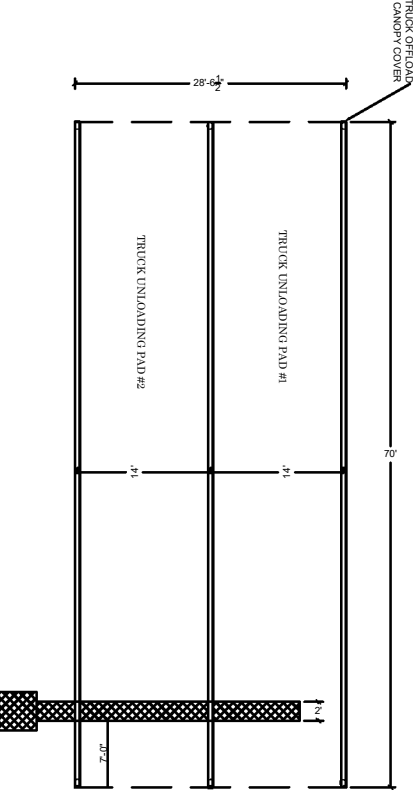
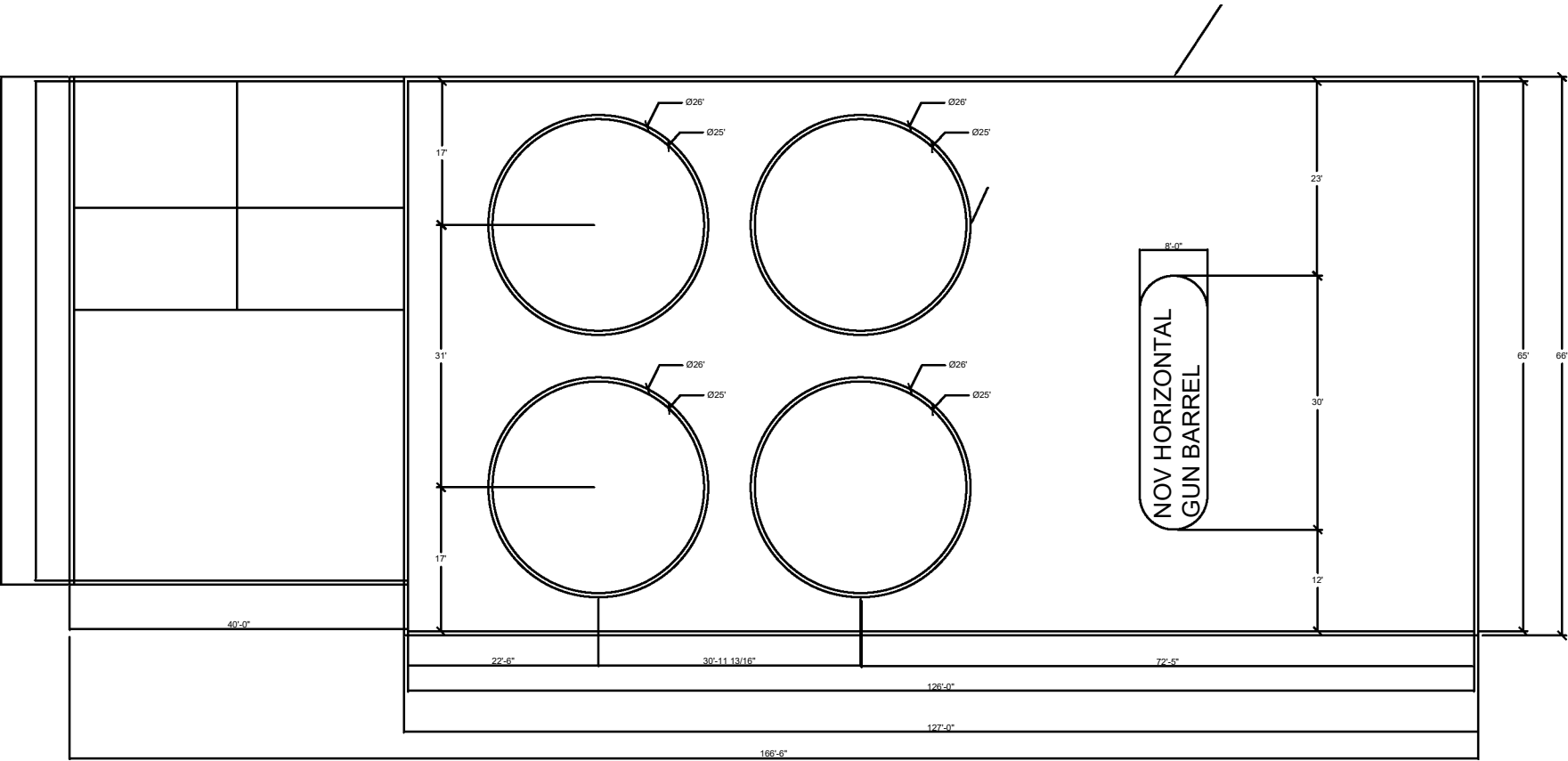
G2 STEM

R&P COAL #4 PROCESS FLOW DIAGRAM

D-7601-A

A

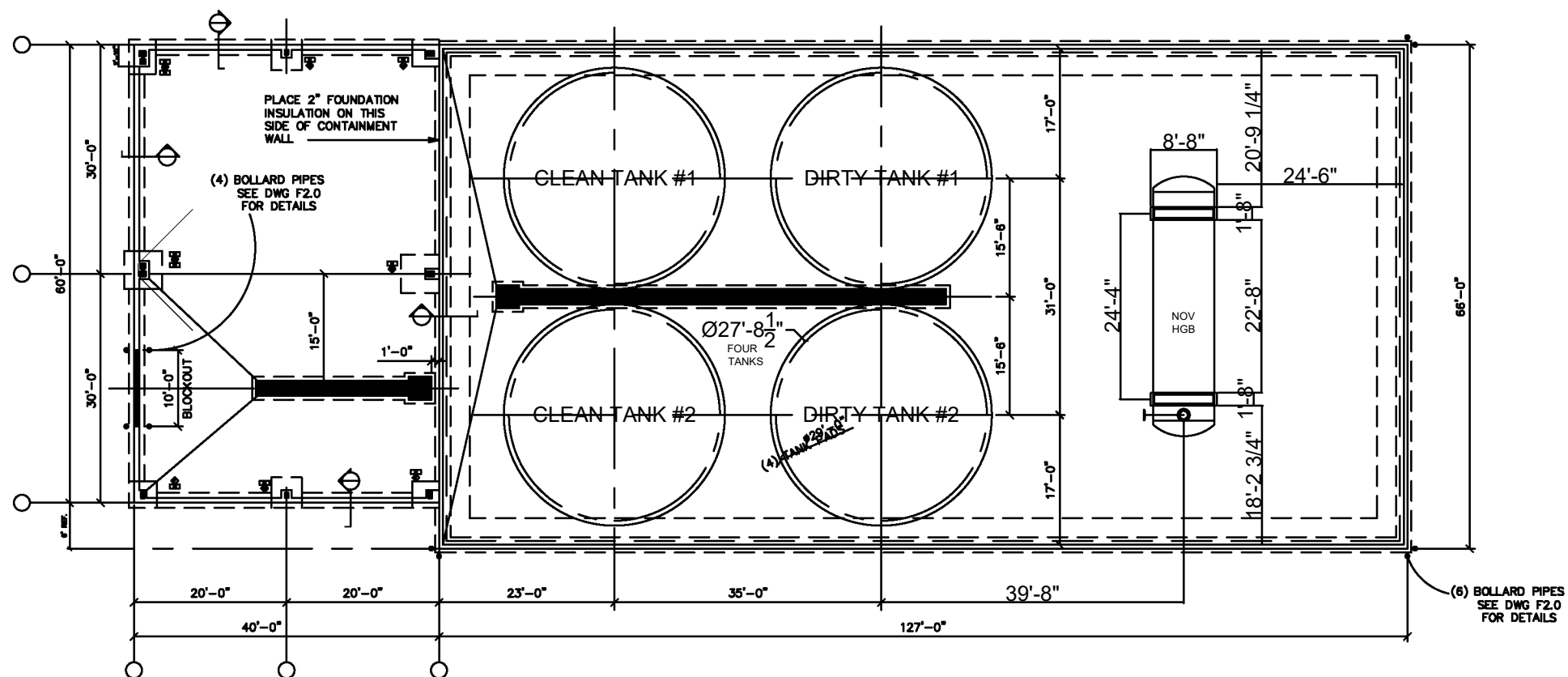
Attachment D, Addendum 2



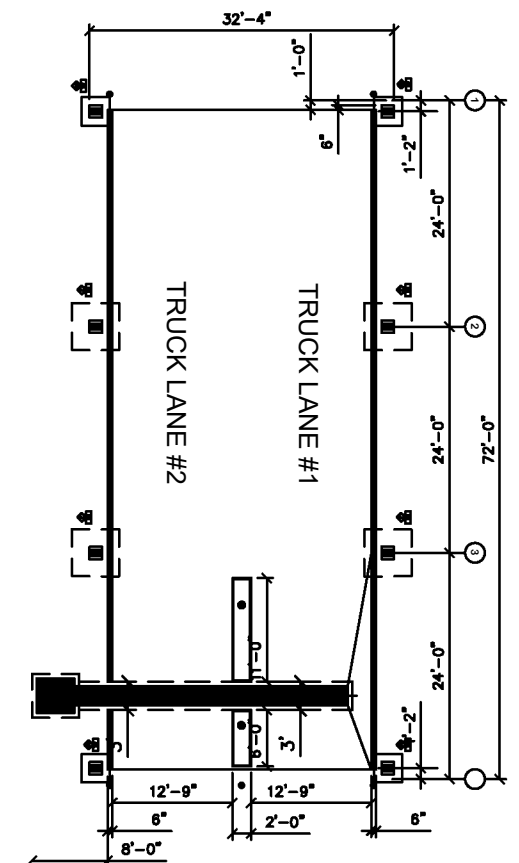
GENERAL NOTES	REFERENCE DRAWINGS		REFERENCE DRAWINGS		DRAWING STATUS				REVISIONS			SCALE		FMS	G2 STEM	
	DWG. NO.	DESCRIPTION	DWG. NO.	DESCRIPTION	NO.	DATE	BY	DESCRIPTION	NO.	DATE	DESCRIPTION	DRAWN	DATE		R & P COAL #4 PROJECTED SITE LAYOUT	
									A	11/30/21	INITIAL DRAWING	CHK'D	DATE			
												APPROVED	DATE			
												EMS JOB NO.				
												AF/EP O.N.O.				
												CLIENT FILE NO.				
												EMS FILE NO.		Ph: 812/431-7314	NO. D-7603-A	REV. A

Attachment D, Addendum 3

BUILDING AND CONTAINMENT CONSTRUCTION
DETAIL, LOCATED ON WELL SITE, WILL BE
CONSTRUCTED PER THE PADEP REGULATIONS

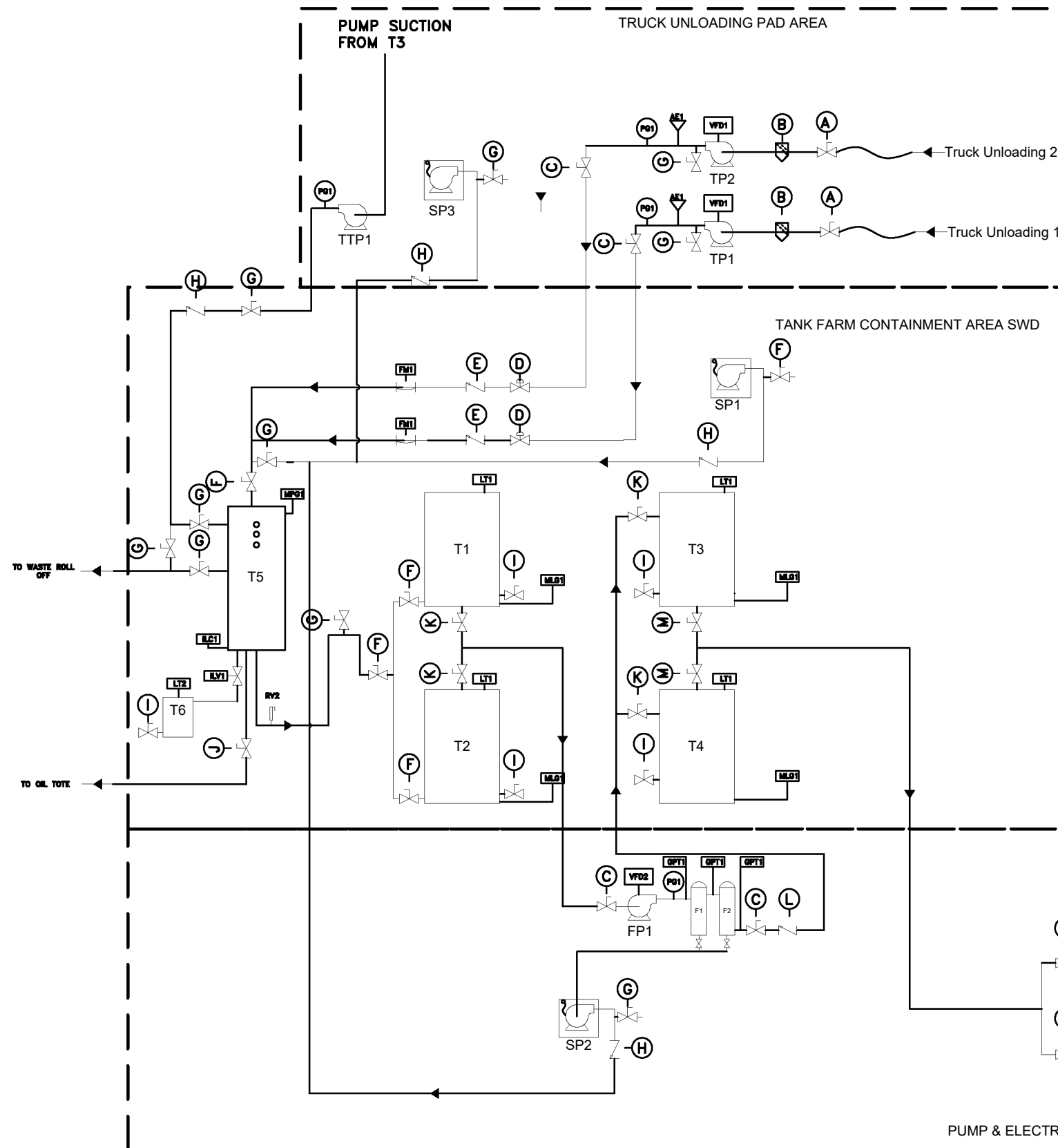


TRUCK OFFLOAD PAD WITH
CANOPY COVER, 2 LANE, REMOTE
LOCATION AT WALSTON ROAD
BUILT PER PADEP REGULATIONS



GENERAL NOTES	REFERENCE DRAWINGS		REFERENCE DRAWINGS		DRAWING STATUS				REVISIONS			SCALE		FMS	G2 STEM				
	DWG. NO.	DESCRIPTION	DWG. NO.	DESCRIPTION	NO.	DATE	BY	DESCRIPTION	NO.	DATE	DESCRIPTION	DRAWN	DATE			R&P COAL #4 CONSTRUCTION LAYOUT			
									A	11/30/21	INITIAL DRAWING	CHKD	DATE						
												APPROVED	DATE						
												TMS JOB NO.							
												AFEP: O NO.							
												CLIENT FILE NO.							
												TMS FILE NO.							
Ph: 812/431-7314															NO.	D-7604-A		REV.	A

Attachment D, Addendum 4



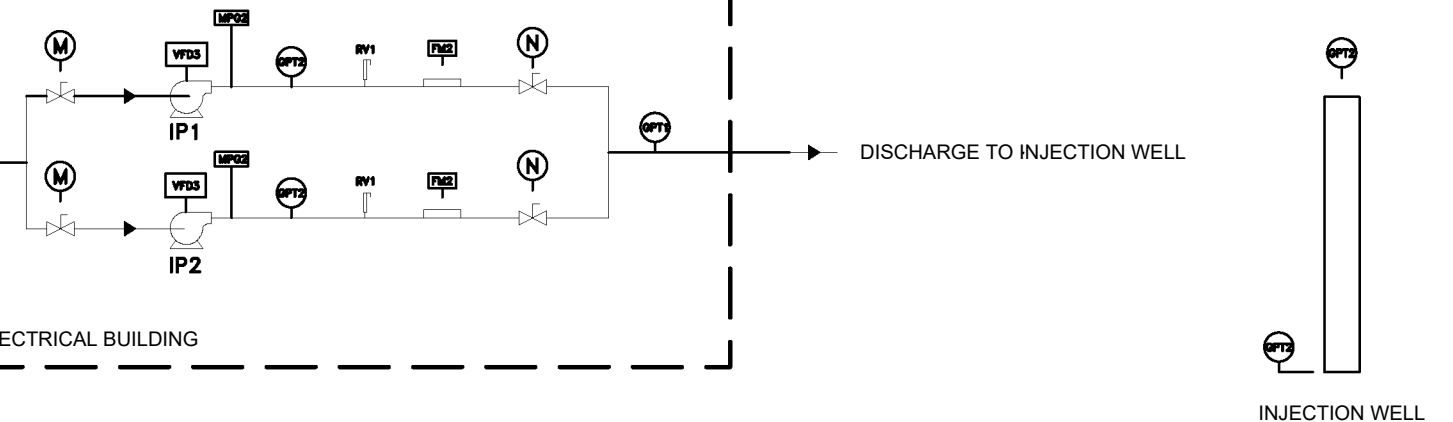
FITTINGS BILL OF MATERIAL		
ITEM #	QTY	DESCRIPTION
A	3	4" BALL VALVE, FULL PORT, CS, 150# FLG
B	3	4" MUELLER STRAINER, CI, SS BASKET, FLGD
C	5	4" BUTTERFLY VALVE, LUG TYPE, 150# FLGD
D	3	3" ELECTRIC ACTUATED CONTROL VALVE, BALL TYPE, FLGD
E	3	3" CHECK VALVE, SWING TYPE, 150# FLGD
F	4	10" BUTTERFLY VALVE, LUG TYPE, 150# FLGD
G	12	2" BALL VALVE, BRZ/SS, THRD
H	4	2" CHECK VALVE, SWING TYPE, THRD
I	5	4" BALL VALVE, STD TRIM, THRD
J	1	3" BALL VALVE, DTD TRIM, THRD
K	4	3" BUTTERFLY VALVE, LUG TYPE, 150# FLGD
L	1	4" CHEC K VALVE, SWING TYPE, 150# FLGD
M	4	8" BUTTERFLY VALVE, LUG TYPE, 150# FLGD
N	2	2" GATE VAVLE, SS TRIM, RATED FOR 2000#, FLGD
AE1	3	AIR ELIMINATOR, VAL-MATIC
RV1	2	BAIRD RELIEF VALVE, 761D-7601-1-MP
RV2	1	RELIEF VALVE, GUN BARREL, SET AT 45 PSI
PG1	5	PRESSURE GUAGE, LIQUID FILLED, 0-100 PSI

PUMP BILL OF MATERIAL		
ITEM #	QTY	DESCRIPTION
TP1	1	VAUGHN MODEL H5C6EMCS CENTRIFUGAL PUMP, 20HP, 1800 RPM, 3/60/230-460
TP2	1	VAUGHN MODEL H5C6EMCS CENTRIFUGAL PUMP, 20HP, 1800 RPM, 3/60/230-460
SP1	1	SUMBERSIBLE PUMP, 2", 1 HP, 115V, EXPLOSION PROOF, W/ FLOAT SWITCH
SP2	1	SUMBERSIBLE PUMP, 2", 1 HP, 115V, EXPLOSION PROOF, W/ FLOAT SWITCH
SP3	1	SUMBERSIBLE PUMP, 2", 1 HP, 115V, EXPLOSION PROOF, W/ FLOAT SWITCH
TTP1	1	AMT MODEL 3151-98 CENTRIFUGAL FEED PUMP, 70GPN@70TDH, 3 HP, OR EQUAL
FP1	1	SUMMIT ANSI PUMP, 2X3-13 INJECTION PUMP, 15HP, 1800 RPM, SST
IP1	1	NOV MODEL 1337-4M INJECTION PUMP, 100 HP, 2500 BPD @ 1753 PSI
IP2	1	NOV MODEL 1337-4M INJECTION PUMP, 100 HP, 2500 BPD @ 1753 PSI

AUTOMATION/INSTRUMENTS BILL OF MATERIAL		
ITEM #	QTY	DESCRIPTION
FM1	2	MICRO MOTION CMF300M355NOAME222 W/2400S1A11BM2222 TRANSMITTER
FM2	2	TURBINES INC FW10110-P FLOW MOUNT WTM02000 FLOW METER, REMOTE MOUNT
VFD1	2	VARIABLE FREQ DRIVE, 20 HP, NEMA 12, 3/60/460
VFD2	2	VARIABLE FREQ DRIVE, 15HP, NEMA 12, 3/60/460
VFD3	2	VARIABLE FREQ DRIVE, 100HP, NEMA 12, 3/60/460
ILC1	1	V100 INTERFACE LEVEL CONTROLLER SWITCH, EX-PRF
ILV1	1	V100 INTERFACE LEVEL CONTROL VALVE
MPG1	2	MURPHY MODEL OPLC-S-100 PRESSURE SWITCHGAGE
MPG2	2	MURPHY MODEL OPLC-S-3000 PRESSURE SWITCHGAGE
MLG1	4	MURPHY OPL-HC-20 LIQUID LEVEL SWITCHGAGE
LT1	4	ROSEMOUNT MODEL 3101LA1FRCNA ULTRASONIC LEVEL TRANSMITTER, 4-20MA, 0-24" RANGE
LT2	1	ROSEMOUNT MODEL 3101LA1FRCNA ULTRASONIC LEVEL TRANSMITTER, 4-20MA, 0-16" RANGE
GPT1	4	ROSEMOUNT MODEL 2088 GAUGE PRESSURE TRANSMITTER, 4-20MA, 0-150 PSI RANGE
GPT2	4	ROSEMOUNT MODEL 2088 GAUGE PRESSURE TRANSMITTER, 4-20MA, 0-4000 PSI RANGE

TANK BILL OF MATERIAL		
ITEM #	QTY	DESCRIPTION
T1	1	AST PROCESS WATER TANK, BOLTED STEEL, 1500 BBL, 29-8 1/2" X 16", EPOXY COATED
T2	1	AST PROCESS WATER TANK, BOLTED STEEL, 1500 BBL, 29-8 1/2" X 16", EPOXY COATED
T3	1	AST PROCESS WATER TANK, BOLTED STEEL, 1500 BBL, 29-8 1/2" X 16", EPOXY COATED
T4	1	AST PROCESS WATER TANK, BOLTED STEEL, 1500 BBL, 29-8 1/2" X 16", EPOXY COATED
T5	1	NOV HORIZONTAL GUN BARREL ASSEMBLY, TORE DIRT REMOVAL SYSTEM, WATER LEG
T6	1	210 BBL OIL TANK, STEEL, 10' X 15'

FILTER SKID BOM		
ITEM #	QTY	DESCRIPTION
F1	1	FILTER TECHNOLOGIES 6 BAG VESSEL, SS CONSTRUCTION, SS BASKETS, CLOSURE LID, 6" CONNECTIONS
F2	1	NOWATA AS48 CARTRIDGE VESSEL, SS TRIM, EPOXY LINED, 4" CONNECTIONS



GENERAL NOTES		REFERENCE DRAWINGS		REFERENCE DRAWINGS		DRAWING STATUS				REVISIONS			SCALE		FMS Ph: 812/431-7314	G2 STEM		
FOR APPROVAL 1: _____		DWG. NO.	DESCRIPTION	DWG. NO.	DESCRIPTION	NO.	DATE	BY	DESCRIPTION	NO.	DATE	DESCRIPTION	DRAWN ☒	DATE		R&P COAL #4 P&ID (PROCESS & INSTRUMENTATION DIAGRAM)		
														DATE				
														DATE				
															NO.	D-7602-A		REV. A



Fairway Laboratories, Inc.

Reviewed and Submitted by:

A handwritten signature in green ink, appearing to read "m. tyler".

Michael P. Tyler
Laboratory Director

Fairway Labs in Altoona, PA is a NELAP (National Environmental Laboratory Accreditation Program) accredited lab, and as such, certifies that all applicable test results meet the requirements of NELAP, unless otherwise stated on the analytical report.

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.

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2019 9th Avenue, P.O. Box 1925, Altoona, PA 16602 • P: 814-946-4306/F: 814-946-8791 • www.fairwaylaboratories.com

Chain of Custody Receiving Document

Receiver: AIPage 2 of 2Date/Time of this check: 10-24-17 1910 Client: Diversified Lab # 7J24134Received on ICE? ☒ * Sample Temperature when delivered to the Lab: 6.9 Acceptable? ☒ * or In cool down process? ☐ *
*(Not applicable for WV compliance)*Custody Seals? NO Intact? NACOC/Labels on bottles agree? ☒ * Correct containers for all the analysis requested? ☒ * Matrix: water

COC #	Number and Type of BOTTLES										Comments
	Poly Non-Pres.	Poly H2SO4	Poly HNO3	Amber H2SO4	Amber Non-Pres. H2SO4	Poly NaOH	VOCS (Head space?)	Other	Properly Preserved	Bacti	
	<u>M 10-24-17</u> <u>76</u>				<u>500</u>			☐ *	☐ *		☐ * Internal notification completed for deviations.
<u>1</u>		<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>		<u>2-HCl</u> <u>2-NP</u>		<u>4</u>		

* DEVIATION PRESENT:

- ☒ No Ice ()
☒ Not at Proper Temperature ()
☒ Wrong Container ()
☒ Missing Information: ()

CLIENT CALLED:

YES ()

By Whom: _____

Date: _____

CLIENT RESPONSE:

- Proceed with analysis; qualify data ()
 Will Resample ()
 Provided Information ()
 No Response; Proceed and qualified ()

Client Contact: _____ Date: _____

* Comments: _____



1803 Philadelphia Street
Indiana, PA 15701
P: (724) 463-8378
F: (724) 465-4209
PADEP: 32-00382

1276 Bentleyville Road
Van Voorhis, PA 15366
P: (724) 258-8378
F: (724) 258-8376
PADEP: 63-04247

435 Broad Street
Montoursville, PA 17754
P: (570) 321-9002
F: (570) 321-1957
PADEP: 41-04880

950 West Main Street
Sharpsville, PA 16150
P: (724) 463-8378 x 500
F: (724) 465-4209
PADEP: 43-04934

19 May 2021

Diversified Gas & Oil - Indiana
Attn: Paul Hart
130 Raymond Drive
Indiana, PA 15701

Work Order: 1051371
Project: Produced Water

Report of Analysis

Client Sample ID	Lab Sample ID	Matrix	Date Sampled	Date Received	Sample Notes
Central PA Marcellus Production Water	1051371-01	Waste Water	05/16/2021 18:00	5/17/21 12:45	

Report Narrative

The results contained in this report are only representative of the samples received. Environmental Service Laboratories, Inc. is not responsible for use or interpretation of the data included herein.

Definitions

RL Reporting Limit

Certifications

Analyses performed by Environmental Service Laboratories, Inc., Indiana PA unless otherwise specified.

Z = Environmental Service Laboratories, Inc., Indiana, PA is not accredited for analysis in the specified matrix.

Approved By

Rebecca Erwin
Project Manager





1803 Philadelphia Street
Indiana, PA 15701
P: (724) 463-8378
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PADEP: 32-00382

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Sharpsville, PA 16150
P: (724) 463-8378 x 500
F: (724) 465-4209
PADEP: 43-04934

Diversified Gas & Oil - Indiana
130 Raymond Drive
Indiana, PA 15701

Reported: 05/19/2021 14:42

Lab Sample ID#: 1051371-01
Sample Type: Waste Water
Sample Source: Composite
Sampler: Client
Client Sample ID: Central PA Marcellus Production Water

Sample Begin Date: 05/16/2021 09:00
Sample End Date: 05/16/2021 18:00
Receipt Date: 05/17/2021 12:45

Analyte	Sample Result	Units	Data Qualifier	RL	Analyst/ Certification	Prep Date/Time	Analysis Date/Time
General Chemistry	Analytical Method: -				Prep Method: No Prep - WetChem		
Specific Gravity	1.18				LMB/Z	05/19/21 09:48	05/19/21 09:48

NORTHWEST DIVISION
950 Main Street
Sharpsville, PA 16150
(724) 463-TEST
FAX: (724) 465-4209

Page 3 of 4

[illegible]

THE UNDERSIGNED PURCHASER HEREBY AGREES TO PAY SERVICE CHARGES ON ACCOUNTS OVER 31 DAYS OLD.

1. THESE SERVICE CHARGES WILL ACCRUE AT THE RATE OF 1 1/2% PER MONTH (18% PER ANNUM OR THE MAXIMUM ALLOWED BY LAW.)
2. THE UNDERSIGNED PURCHASER AGREES TO PAY, IN THE EVENT HIS ACCOUNT BECOMES DELINQUENT AND IS TURNED OVER TO ANY ATTORNEY FOR COLLECTION, REASONABLE ATTORNEY'S FEES PLUS ALL COURT AND ATTENDANT COLLECTION COSTS.

Project Notes:

Sampled By: (Signature) Paul J. Hans Date/ Time 8-17-21 12:45pm

Relinquished By: (Signature) Paul Hart Date/ Time 5-12-21 12:48pm

Relinquished By: (Signature) Date/ Time

Relinquished By: (Signature) Date/ Time

Received By: (Signature) James Y. Sullivan Date/Time 5/17/21 12:45 pm (00389)

Received By: (Signature) Date/ Time

Received By: (Signature) Date/ Time

Company/Name: Diversified Gas & Oil

Address: 395 Airport Rd
Indiana Pa

Contact Person: Paul Hart

Phone / Cell: 724-349-2777

Correct Preservations Y / N / NA

Correct Containers Y / N / NA

Receipt Temperature 20.0°C

Email:



SAMPLE RECEIPT AND REVIEW FORM

Client: <u>Diversified Gas & Oil</u>	Work  1051371
--	--

PART A: GENERAL INFORMATION- SATELLITE LABORATORY

Received by/Lab ID: _____	Date/Time Received: ____/____/____
Method of Delivery: Client Drop-Off ESL Courier Other: _____	Received on Ice? YES NO
Sample Receipt Temperature: _____ °C	IR Gun ID: _____
Containers Removed by Satellite Lab for Analysis of: FECAL TC/EC TC MPN EC MPN TC/EC MPN N/A	

PART B: GENERAL INFORMATION- INDIANA LABORATORY

Received by/Lab ID: <u>CSW (CC382)</u>	Samples Received on Ice? <u>YES</u> NO
Date/Time Received: <u>5/17/21 1245</u>	Date Sampled: <u>5/16/21</u>
Method of Delivery: FedEx UPS <u>Client Drop off</u> ESL courier Other: _____	
Sample Receipt Temperature: <u>20.0</u> °C	IR Gun ID: <u>1</u>
Sample State of Collection: <u>PA</u> NY OH WV Other: _____	PWSID Compliance Drinking Water Samples: YES <u>NO</u>

PART C: Receipt Details Completed (if different from above):

Signature

Date

Time

Sample Receipt Criteria		Comments/Qualifiers (Required for Non-Conforming Items)
Chain of custody documents included with samples?	YES NO	Comments:
COC form is properly signed in relinquished/received sections?	YES NO	Comments:
Sample containers intact and sealed?	YES NO	Circle Applicable: Damaged Container Leaking Container Custody Seal Broken Other: _____
Number of containers received matches number indicated on COC?	YES NO	Sample IDs and Containers Affected:
Sample IDs on COC match IDs on bottles?	YES NO	Sample IDs and Containers Affected:
Date and time on COC match date and time on bottles?	YES NO	Sample IDs and Containers Affected:
Samples received within holding time?	YES NO	Sample IDs and Containers Affected:
Samples received at appropriate pH for analysis requested?	YES NO	Sample IDs and Containers Affected and Observed pH:
Samples requiring thermal preservation within 0 ≤ 6°C? Microbiology within 0 ≤ 10°C?	YES NO	For non-WV samples outside of thermal preservation range sampled same day and received on ice are considered acceptable as long as the cooling process has begun.
Adequate sample volume received?	YES NO	Analyses Affected:
VOA vials free of headspace (defined as < 6 mm bubble)?	YES NO	Sample IDs and Containers Affected:
Other Comments:		Deficiency Log Created: YES NO

Effective Date:

GP.25.A-1 Sample Receipt Log

Addendum 2 - Well Plugging Diagram

Addendum 3 - Well Plugging Estimate



G2 STEM LLC
4826 Piney Branch Road
Suite 200
Fairfax, VA 22030

--	--	--

Pa	Jefferson
----	-----------

					N40.9665
					W78.9898
528.0'		481.2'			
North		West			

☐ ☒ ☐ ☐	☒ ☐ ☐	TBD ☐	☐ ☒ ☐
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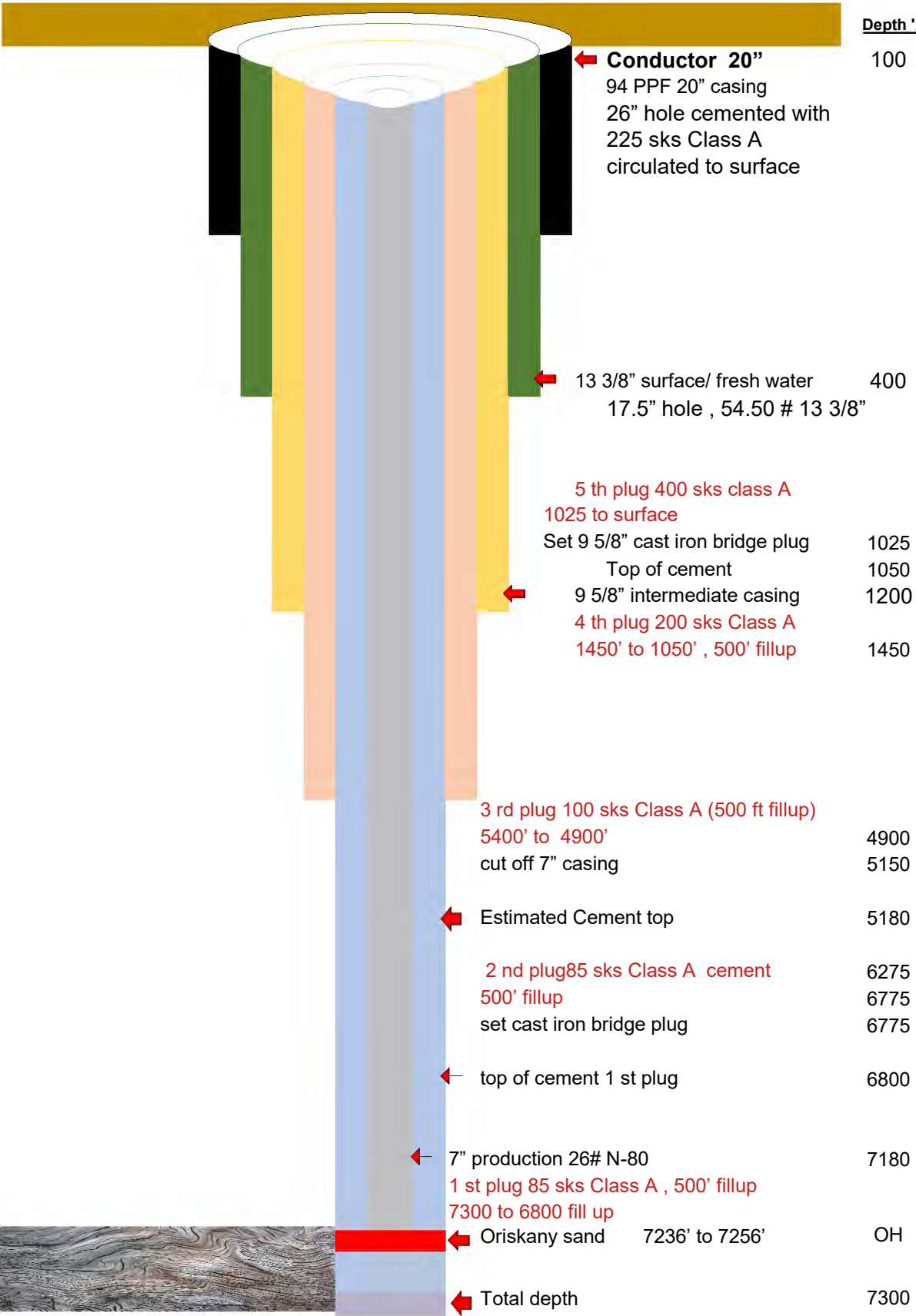
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Fredric R. Gumbinner, Managing Partner	<i>Fredric Gumbinner</i>	04/22/2022
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ATTACHMENT E, ADDENDUM 2

David A Weaver #1
New Drill
Well Schematic
Plugging



ATTACHMENT E, ADDENDUM 3

ATTACHMENT F. FINANCIAL ASSURANCE

- I. Evidence of financial resources, such as a surety bond or financial statement, necessary to close, plug, or abandon the well**
 - a. See Attachment F, Addendum 1

Attachment A, Addendum List

Addendum 1- Financial Documentations

ATTACHMENT F, ADDENDUM 1

ATTACHMENT F. SITE SECURITY and MANIFEST REQUIREMENTS
(COMMERCIAL WELLS ONLY: FORM 7520)

- I. **Site security plan**
 - a. See Attachment G, Addendum 1

- II. **Description of manifest system**
 - a. See Attachment G, Addendum 2

Attachment A, Addendum List

Addendum 1- Site Security Plan

Addendum 2 - Manifest System

ATTACHMENT G. ADDENDUM 1

SITE SECURITY PLAN

G2 STEM, R&P Coal #4 will implement several security protocols. These protocols are as follows:

1. Camera (CCTV) System
 - a. A Lorex Technologies Security Camera System will be installed at R&P Coal #4
 - i. This security system will have the following components
 1. A 16 Channel NVR (Network Video Recorder) System will be utilized to record motion in critical areas. Critical Areas are as follows:
 - a. Incoming Traffic Areas
 - b. Outgoing Traffic Areas
 - c. Well Head
 - d. Pump/Filtration Room
 - e. Office Area
 - f. Truck Ingress
 - g. Truck Egress
 - h. Tank Farm
 2. Eight (8) bullet type security cameras will be installed at R&P Coal #4 to continually record video on motion and activities around the facility.
 - a. These cameras will have a 180° visual range
 - b. These cameras will have night vision capabilities
 - c. Cameras will be POE (Power Over Ethernet)
 3. The NVR to have a memory capacity of no less than 1 TB
2. Gates & Fencing
 - a. Fencing and Gates will be installed at the truck offload ingress and egress. Gates will be locked during times when no company personnel are on site.
3. Automation System Lock Procedures
 - a. A control valve will be installed on each truck offload pad. These controls valves will not open and allow for offloading unless the following permissive are met:
 - i. Trucking company is an approved customer
 - ii. All information in the manifest is completed
 1. NOTE: Manifest data is included in Attachment F, Addendum 2
 - iii. Operator has to approve information and start the system
 - b. The control valve will then open and allow the system to unload the truck
 - c. The truck will continue to offload until empty
 - d. The system will stop
 - e. The control valve will shut 100%
 - f. Truck offload data will be logged.

ATTACHMENT G. ADDENDUM 2

DESCRIPTON OF MANIFEST SYSTEM

G2 STEM, R&P Coal #4 will utilize an automated system along with a paper back up system to record incoming water data. A sequence of operations as well as recorded data is as follows:

1. Sequence of Operations
 - a. A certified G2 STEM customer arrives on site and is directed to a truck offload bay
 - b. The certified customer is mechanically connected to the offload system via a hose
 - c. The certified customer's truck is electrically grounded
 - d. A certified customer's BOL (Bill Of Lading) is handed to a G2 STEM operator and information will be input into the automation system. The input is as, but not limited to the following:
 - i. Trucking Company Name
 - ii. Truck Driver Name
 - iii. Well Operators Name
 - iv. Truck Number
 - v. Well Pad Name/Location
 - vi. Well API Number
 - vii. Source Lease Name
 - viii. BOL Number
 - ix. Multiple Pad Loads
 1. If multiple pad loads, input additional information as above
 - e. The G2 STEM operator starts the system
 - i. The automation control valve will open to 100%
 - ii. The truck offload pump will start and ramp to a set speed
 - iii. The system will measure the following
 1. Flow Rate
 2. Total Flow
 3. Density/Specific Gravity of the Fluid
 - iv. When the truck is empty
 1. The pump will stop
 2. The automated control valve will shut
 3. All data will be logged into the system
 4. A truck offload ticket will be printed in duplicate
 - a. A copy of the ticket with given to the truck driver
 - b. A copy of the ticket is stapled with the truck driver BOL
 - v. The truck leaves the facility
2. All manifest information will be logged and tickets kept for at least 3 years
 - a. Monthly and annual reports will be sent to regulating agencies

ATTACHMENT G, ADDENDUM 3

Facility Operator	
Facility	
Ticket #	4017
Date	February 17, 2022
Start Time	End Time
01:31 PM	01:51 PM
Service Company	
THE BAUER COMPANY, INC	
Driver	John Maxwell
Truck #	Service Ticket #
55	3
Source Operator	
SNYDER BROS INC	
Source Name (Lease)	
NOLDER	
Source #	Well #
	4H
Drilling Permit #	
00531272	
Manifest #	
3	
Material	Volume
PA889 Other O&G Fluid	102.12 bbls

SITEPRO

ATTACHMENT K. OPTIONAL ADDITIONAL PROJECT INFORMATION

- I. **The Wild and Scenic Rivers Act, 16 U.S.C 1273 et seq**
 - a. List of national wild and scenic rivers that may be impacted by the activities associated with proposed project, *if applicable*
 - b. Not Applicable

- II. **The National Historic Preservation Act of 1966, 16 U.S.C. 470 et seq.**
 - a. List of properties listed or eligible for listing in the National Register of Historic Places. If available, historic and cultural resource survey(s) that have been conducted, *if applicable*
 - b. Not applicable, EPA to Review

- III. **The Endangered Species Act, 16 U.S.C. 1531 et seq.**
 - a. List of endangered or threatened species that may be affected by the activities associated with proposed project. If available, previous endangered or threatened species surveys that have been conducted, *if applicable*
 - b. Not Applicable, EPA to Review

- IV. **The Coastal Zone Management Act, 16 U.S.C. 1451 et seq.**
 - a. List of coastal zones that may be affected by the activities associated with the proposed project, *if applicable*
 - b. Not Applicable