

west virginia department of environmental protection

Office of Oil and Gas 601 57th Street, S.E. Charleston, WV 25304 (304) 926-0450 fax: (304) 926-0452

Austin Caperton, Cabinet Secretary www.dep.wv.gov

Wednesday, August 15, 2018 WELL WORK PERMIT Vertical / New Drill

ALLIED ENERGY, INC. 35 RIDGEWOOD BLVD

BELPRE, OH 45714 000

Re:

Permit approval for VALENTINE 5

47-085-10325-00-00

This well work permit is evidence of permission granted to perform the specified well work at the location described on the attached pages and located on the attached plat, subject to the provisions of Chapter 22 of the West Virginia Code of 1931, as amended, and all rules and regulations promulgated thereunder, and to any additional specific conditions and provisions outlined in the pages attached hereto. Notification shall be given by the operator to the Oil and Gas Inspector at least 24 hours prior to the construction of roads, locations, and/or pits for any permitted work. In addition, the well operator shall notify the same inspector 24 hours before any actual well work is commenced and prior to running and cementing casing. Spills or emergency discharges must be promptly reported by the operator to 1-800-642-3074 and to the Oil and Gas Inspector.

Please be advised that form WR-35, Well Operators Report of Well Work is to be submitted to this office within 90 days of completion of permitted well work, as should form WR-34 Discharge Monitoring Report within 30 days of discharge of pits, if applicable. Failure to abide by all statutory and regulatory provisions governing all duties and operations hereunder may result in suspension or revocation of this permit and, in addition, may result in civil and/or criminal penalties being imposed upon the operators.

Per 35 CSR 4-5.2.g this permit will expire in two (2) years from the issue date unless permitted well work is commenced. If there are any questions, please feel free to contact me at (304) 926-0450.

James A. Martin

Operator's Well Number: VALENTINE 5

Farm Name: PAUL D. & BETTY W. METZ

U.S. WELL NUMBER: 47-085-10325-00-00

Date Issued: 8/15/2018

Vertical New Drill

Promoting a healthy environment.

PERMIT CONDITIONS

West Virginia Code §22-6-11 allows the Office of Oil and Gas to place specific conditions upon this permit. Permit conditions have the same effect as law. Failure to adhere to the specified permit conditions may result in enforcement action.

CONDITIONS

- 1. If the operator encounters an unanticipated void, or an anticipated void at an unanticipated depth, the operator shall notify the inspector within 24 hours. Modifications to the casing program may be necessary to comply with W. Va. Code §22-6-20, which requires drilling to a minimum depth of thirty feet below the bottom of the void, and installing a minimum of twenty (20) feet of casing. Under no circumstance should the operator drill more than fifty (50) feet below the bottom of the void or install less than twenty (20) feet of casing below the bottom of the void.
- 2. Pursuant to 35 CSR 4-19.1.a, at the request of the surface owner all water wells or springs within 1000 feet of the proposed well that are actually utilized for human consumption, domestic animals or other general use shall be sampled and analyzed.
- 3. Pursuant to 35 CSR 4-19.1.c, if the operator is unable to sample and analyze any water well or spring with one thousand (1,000) feet of the permitted well location, the Office of Oil and Gas requires the operator to sample, at a minimum, one water well or spring located between one thousand (1,000) feet and two thousand (2,000) feet of the permitted well location.
- 4. All pits must be lined with a minimum of 20 mil thickness synthetic liner.
- 5. In the event of an accident or explosion causing loss of life or serious personal injury in or about the well or while working on the well, the well operator or its contractor shall give notice, stating the particulars of the accident or explosion, to the oil and gas inspector and the Chief within twenty-four (24) hours.
- 6. During the surface casing and cementing process, in the event cement does not return to the surface, or any other casing string that is permitted to circulate cement to the surface and does not return to the surface, the oil and gas inspector shall be notified within twenty-four (24) hours
- 7. Well work activities shall not constitute a hazard to the safety of persons.
- 8. Operator shall provide the Office of Oil & Gas notification of the date that drilling commenced on this well. Such notice shall be provided by sending an email to DEPOOGNotify@wv.gov within 30 days of commencement of drilling.

WW - 2B (Rev. 8/10) ch# 1160 \$65000

STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS WELL WORK PERMIT APPLICATION

| 1) Well Operate | or: ALLIE | ED EN | ERGY, IN | C. | 309558 | 085-Ritchie | 02-Grant | 544-Petroleum |
|--|--------------|--------------|----------------|-----------|-------------|---------------|---------------|---------------------|
| | ************ | | | | Operator ID | County | District | Quadrangle |
| 2) Operator's V | Vell Numb | er:Va | lentine #5 | | | 3) Elevation: | 818' | |
| 4) Well Type: (a) Oil_X or Gas_X | | | | | | | | |
| (b) If Gas: Production X / Underground Storage | | | | | | | | |
| | | Deep | o | / Sha | allow X | | | |
| 5) Proposed Ta 6) Proposed To 7) Approximate 8) Approximate | fresh wa | ter strata | depths:16 | 55' offse | et well | Proposed Targ | get Depth: 2 | 580' onian Shale |
| 9) Approximate | coal sea | m depths | s: _600' off | set w | ell 085-051 | 68 | | |
| 10) Approximat | te void de | oths.(coa | al. Karst. oth | er): | N/A on offs | set | | |
| | | | | | | | | |
| 11) Does land | contain co | oal seam | s tributary to | active | e mine? | INO | | |
| 12) Describe pro | | | | | | | | |
| WELL NEVER | | 170.00 | | | | | | |
| perforate the c | | | | | | | | |
| 13) | | CA | SING AND | TUBII | NG PROGR | АМ | | |
| | PECIFIC | - | | | OOTAGE | INTERVALS | CEMEN | <u>1T</u> |
| | <u>Size</u> | <u>Grade</u> | Weight per | ft F | or Drilling | Left in Well | Fill -up (Cu. | <u>Ft.)</u> |
| Conductor | 13 3/8 | A-500 | 48# | | 42' | 42' | CTS | į. |
| Fresh Water | 9 5/8 | A-500 | 26# | | 400' | 400' | CTS | |
| Coal | 7" | A-500 | 17# | | 1600' | 1600' | CTS | |
| Intermediate | | | | | | | | |
| Production | 4 1/2" | J-55 | 10.5# | 4 | 1000 of | 4000' on TD | 200' ABOVE | FRACK ZONE. |
| Tubing | | | | | | | | |
| Liners | | | 8 | | | | | |
| Packers: Kind | d: | | | | | | | |
| Size | | | | | | | | |
| Dep | ths Set | | | | | | | |

| WW-2 | 2A |
|-------|-------|
| (Rev. | 6-14) |

| 1). Date: | | | _ | |
|----------------------------|-------|--------------|---------|--|
| 2.) Operator's Well Number | | Valentine #5 | | |
| | State | County | Permit | |
| 3.) API Well No.: | 47- | 085 | - 10325 | |

STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS NOTICE AND APPLICATION FOR A WELL WORK PERMIT

| 4) Surfa | ace Ow | ner(s) to be served: | / 5) (| (a) Coal Ope | erator | |
|-------------|-----------|--|---------------|-----------------|--|--------------------------------------|
| • | lame | Betty W. Metz | | Name | N/A | |
| Addr | | 95 Paul Metz Lane | | Address | | |
| | | Petroleum, WV 26161-64 | 41 | | (and a second s | |
| (h) N | lame | 1 Choleani, VVV 20101 04 | | (b) Coal Ov | wner(s) with De | claration |
| Addr | | | | Name | N/A | Ciaration |
| Addi | C33 | - | | Address | IN/A | |
| | | 1 Process Committee Commit | (| Address | (| |
| (c) N | lame | | | Name | N/A | |
| Addr | | | | Address | - | |
| | | | | | | |
| 6) Inspe | ctor | Michael Goff | | (c) Coal Le | ssee with Decla | aration |
| Addre | ess | P. O. Box 134 | | Name | N/A | |
| | | Petroleum, WV 26412-01 | 34 | Address | | |
| Telep | hone | | | | | |
| | | TO THE PERSONS | NAMED | ABOVE TA | KE NOTICE T | HAT: |
| Inclu | ded is th | e lease or leases or other contin | uing conf | tract or contra | cts by which I ho | old the right to extract oil and gas |
| <u>OR</u> | | | | | | |
| | | e information required by Chapte | | | | |
| | | | | | | served copies of this notice and |
| application | | ation plat, and accompanying doc | | | igh on the ab | pove named parties by: |
| | X | | | | | |
| | | Certified Mail (Postmarked | | | d) | |
| | | Publication (Notice of Publi | | | | |
| | | | and 35 | CSR 4, and I | agree to the te | rms and conditions of any permit |
| | | application. | norconal | ly examined a | and am familiar | with the information submitted on |
| | | | | | | duals immediately responsible for |
| | | rmation, I believe that the information | | | | idals immediately responsible for |
| | | | | | | icluding the possibility of fine and |
| imprison | | a mat more are eignmeant pene | | out in its rest | | including the processing or mile and |
| , | | Well Oper | ator AL | LIED ENE | RGY, INC. | |
| - Marin | | OFFICIAL SEAL NOTARY PUBLIC | By: T | Davida | wiggers | David W. Wiggers |
| D. 4 | ST | ATE OF WEST VIRGINIA | Its: Aq | ent | J) | |
| 25 | | munity Bank of Parkershurg Addre | ess: 35 | Ridgewood | d Blvd | |
| 100 | - | Vienna, WV 26105 ssien Expires Desember 07, 2021 | Ве | Ipre, OH 4 | 5714-8218 | |
| * ** (34°) | | Telepho | one: (74 | 40) 423-88 | 20 | |
| | | En | nail: dw | /wiggers@y | ahoo.com | |
| Subscribe | ed and s | worn before me this 30 da | ay of _ | May | , | 2017 |
| | | 1611 1 | M | | NI-4 F | blic |
| My Com | nicoion ! | TONOW J. | 710 | sey | Notary F | PUDIIC |
| My Comr | | | - 202 | 210 | | |
| Oil and Gas | Privacy | Notice | | | | |

The Office of Oil and Gas processes your personal information, such as name, address and phone number, as a part of our regulatory duties. Your personal information may be disclosed to other State agencies or third parties in the normal course of business or as needed to comply with statutory or regulatory requirements, including Freedom of Information Act requests. Our office will appropriately secure your personal information. If you have any questions about our use of your personal information, please contact DEP's Chief Privacy Officer at depprivacyofficer@wv.gov

WW-70 Rev. 7/01 Well Name: <u>Valentine #5</u>
API: <u>47-085-</u> 10325

Affidavit of Personal Service

| State of West Virginia |
|--|
| County of Wood |
| The undersigned, being first duly sworn, says that the undersigned served a true and complete copy of all sides of — (1) Notice on Form WW-2(A)_X/ WW-3(A)/ WW-4(A)/ WW-5(A)/ WW-6(A) (2) Application on Form WW-2(B)_X_/ WW-3(B)/ WW-4(B)/ WW-5(B)/ WW-6(B) (3) Plat showing the well location on Form WW-6, and (4) Construction and Reclamation Plan on Form WW-9 — all with respect to operator's Well No Valentine #5, located in Grant District, Ritchie County, West Virginia, upon the person or organization named — |
| |
| (COMPLETE THE APPROPRIATE SECTION) For an individual: |
| [X] Handing it to him/ herX/ or, because he/ she/ refused to take it when offered it, by leaving it in his/ her/ presence. [] Handing it to a member of his or her family above the age of 16 years named who resides at the usual place of abode of the person to be served, and asking the |
| family member to give it to the person to be served as soon as possible. |
| For a partnership: |
| [] Handing it to, a partner of the partnership or, because the general partner refused to take it when I tried to hand it over, by leaving it in the presence of the general partner. |
| For a limited partnership: |
| [] Handing it to the general partner, named, or, because the general partner refused to take it when I tried to hand it over, by leaving it in the presence of the general partner. |
| For a corporation: |
| [] Handing it to the corporation's employee/ officer/ director/ attorney in fact/ named |
| My commission expires: 12-7-2021 My commission expires: 12-7-2021 Motary Public |

(AFFIX SEAL IF NOTARIZED OUTSIDE THE STATE)

WW-2A Surface Waiver (4/16)

SURFACE OWNER WAIVER

| County | 085 - Ritchie | Operator | ALLIED ENERGY, INC. | |
|--------|---------------|----------------------|---------------------|--|
| | | Operator well number | Valentine #5 | |

INSTRUCTIONS TO SURFACE OWNERS NAMED ON PAGE WW2-A

The well operator named on page WW2A is applying for a permit from the State to do oil or gas well work. (Note: If the surface tract is owned by more than three persons, then these materials were served on you because your name appeared on the Sheriff's tax ticket on the land or because you actually occupy the surface tract. In either case, you may be the only owner who will actually receive these materials.) See Chapter 22 of the West Virginia Code. Well work permits are valid for 24 months. If you do not own any interest in the surface tract, please forward these materials to the true owner immediately if you know who it is. Also, please notify the well operator and the Office of Oil and Gas.

NOTE: YOU ARE NOT REQUIRED TO FILE ANY COMMENT.
WHERE TO FILE COMMENTS AND OBTAIN ADDITIONAL INFORMATION:

Chief, Office of Oil and Gas Department of Environmental Protection 601 57th St. SE Charleston, WV 25304 (304) 926-0450

Time Limits and methods for filing comments. The law requires these materials to be served on or before the date the operator files his Application. You have FIFTEEN (15) DAYS after the filing date to file your comments. Comments must be filed in person or received in the mail by the Chief's office by the time stated above. You may call the Chief's office to be sure of the date. Check with your postmaster to ensure adequate delivery time or to arrange special expedited handling. If you have been contacted by the well operator and you have signed a "voluntary statement of no objection" to the planned work described in these materials, then the permit may be issued at any time.

<u>Comments must be in writing.</u> Your comments must include your name, address and telephone number, the well operator's name and well number and the approximate location of the proposed well site including district and county from the application. You may add other documents, such as sketches, maps or photographs to support your comments.

The Chief has the power to deny or condition a well work permit based on comments on the following grounds:

- 1) The proposed well work will constitute a hazard to the safety of persons.
- 2) The soil erosion and sediment control plan is not adequate or effective:
- 3) Damage would occur to publicly owned lands or resources;
- 4) The proposed well work fails to protect fresh water sources or supplies;
- 5) The applicant has committed a substantial violation of a previous permit or a substantial violation of one or more of the rules promulgated under Chapter 22, and has failed to abate or seek review of the violation...".

If you want a copy of the permit as it is issued or a copy of the order denying the permit, you should request a copy from the Chief.

<u>List of Water Testing Laboratories</u>. The Office maintains a list of water testing laboratories which you can hire to test your water to establish water quality prior to and after drilling. Contact the Chief to obtain a copy.

VOLUNTARY STATEMENT OF NO OBJECTION

I hereby state that I have read the instructions to surface owners and that I have received copies of a Notice and Application for a Well Work Permit on Form WW2-A, and attachments consisting of pages 1 through ____ including a work order on Form WW2-B, a survey plat, WW-9, and a soil and erosion plan, all for proposed well work on my surface land as described therein.

I further state that I have no objection to the planned work described in these materials, and I have no objection to a permit being issued on those materials.

| FOR EXECUTION BY A NATURAL PERSON | FOR EXECUTION BY A CORPORATION, ETC. | |
|-----------------------------------|--------------------------------------|---|
| Betty W. Metz Date 5/7 | Company Name By Its Date | _ |
| Print Name | Signature Date | |

COAL OPERATOR, OWNER, OR LESSEE WAIVER

| County ⁰⁸⁵ -Ritchie Operator ALLIED ENERGY, INC. | Operator' | s Well Nur | mber | Valentine #5 |
|---|--|-------------------------------|---------------------|--|
| | | | | |
| INSTRUCTIONS | TO COAL OPER | ATOR, OV | WNER | R, OR LESSEE |
| To the coal operator, owner, any objection you wish to make or a with the Chief of the Office of Oil a by the Office. Mail objections to: | are required to ma | ake by WV | Code | · · · · · · · · · · · · · · · · · · · |
| Chief, Office of Oil and Gas Department of Environmental Prote 601 57 th St. SE Charleston, WV 25304 (304) 926-0499 extension 1654 | ction | | | |
| | WAIVI | ≣R | | |
| The undersigned coal operation has examined this propose location, the well location has been work proposed to be done at this location requirements of the West Virginia Comments of the | d well location. If added to the min cation, provided, | a mine map. The map. The map. | ap exine und erator | dersigned has no objection to the r has complied with all applicable |
| FOR EXECUTION BY A NATURAL PERSO | ON | FOR | REXEC | CUTION BY A CORPORATION, ETC. |
| | Date | Company Name | N/A | |
| Signature | | By Its | | Date |
| | | | | |
| | | | Signa | ature Date |

Operator's Well Number Valentine #5 API: 47-085-10325

INFORMATION SUPPLIED UNDER WEST VIRGINIA CODE Chapter 22, Article 6, Section 8(d) IN LIEU OF FILING LEASE(S) AND OTHER CONTINUING CONTRACT(S)

Under the oath required to make the verification on page 1 of this Notice and Application, I depose and say that I am the person who signed the Notice and Application for the Applicant, and that –

- (1) the tract of land is the same tract described in this Application, partly or wholly depicted in the accompanying plat, and described in the Construction and Reclamation Plan;
- (2) the parties and recordation data (if recorded) for lease(s) or other continuing contract(s) by which the Applicant claims the right to extract, produce or market the oil or gas are as follows:

| Grantor, Lessor, etc. | Grantee, Lessee, etc. | Royalty | Book/Page |
|-----------------------|-----------------------|---------|--------------|
| Betty W. Metz | Allied Energy, Inc. | 12.5% | LB 247 / 913 |

Acknowledgement of Possible Permitting/Approval In Addition to the Office of Oil and Gas

The permit applicant for the proposed well work addressed in this application hereby a cknowledges the possibility of the need for permits and/or approvals from local, state, or federal entities in addition to the DEP, Office of Oil and Gas, including but not limited to the following:

- WV Division of Water and Waste Management
- WV Division of Natural Resources
- WV Division of Highways
- U.S. Army Corps of Engineers
- U.S. Fish and Wildlife Service
- County Floodplain Coordinator

The applicant further acknowledges that any Office of Oil and Gas permit in no way overrides, replaces, or nullifies the need for other permits/approvals that may be necessary and further affirms that all needed permits/approvals should be ac quired from the appr opriate aut hority before the affected activity is initiated.

Well Operator:

ALLIED ENERGY, INC.

By: Its:

David W. Wiggers, Agent

| WW-2B1 |
|--------|
| (5-12) |

| Well No | Valentine #5 |
|---------|--------------|
| | |

West Virginia Department of Environmental Protection Office of Oil and Gas

NOTICE TO SURFACE OWNERS

The well operator named below is preparing to file for a permit from the state to drill a new well. Before a well work permit can be filed with the Chief of the Office of Oil and Gas, the well operator is required to have given notice of the right to request water well or spring analytical testing. This notice shall be given to the owners or occupants of land which have a water well or spring being utilized for human consumption, domestic animals, or other general use and which is located within 1000 feet of the proposed well site.

With this form, the operator is giving you notice of your right to request analytical testing. The operator is required to sample and analyze the water wells or springs of all owners or occupants who request it. Therefore, if you wish to have your water well or spring tested, contact the operator named below.

All sampling shall be completed prior to drilling. Within thirty (30) days of the receipt of such sample analyses the operator shall submit the results to the Chief of the Office of Oil and Gas and to the owners or occupants who may have requested them.

Be advised, you have the right to sample and analyze any water supply at your own expense.

Listed below is the laboratory chosen by operator to perform analysis, and contactor chosen to collect sample.

| Certified Laboratory Name Sampling Contractor | | Reliance Laboratoried, Bridgeport, WV | |
|---|--------------|---------------------------------------|--|
| | | Smith Land Surveying, Glenville, WV | |
| | | | |
| Well Operator | ALLIED ENE | ERGY, INC. | |
| Address | 35 Ridgewood | 35 Ridgewood Blvd | |
| | Belpre, OH 4 | 45714-8218 | |

Telephone (740) 423-8820

FOR OPERATOR'S USE ONLY: Below, or on an attached page, list those persons which were given this notice. Place an asterisk beside the one(s) that contacted you and requested sampling and analyses. If there were no requests made, indicate by underling which one you have selected to sample and analyze. If there are no water wells or springs within 1000 feet of the proposed site, the Chief may require the operator to test wells up to 2000 feet from the proposed site.

Betty W. Metz 95 Paul Metz Lane Petroleum, WV 26161-6441 (5/16)

| API Number | 47 - | 085 | - 10325 |
|---------------|--------|--------|-----------|
| Operator's We | ell No | . Vale | entine #5 |

STATE OF WEST VINGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION

OFFICE OF OIL AND GAS

FLUIDS/ CUTTINGS DISPOSAL & RECLAMATION PLAN

| Operator Name_ALLIED ENERGY, INC. OP Code 309558 |
|---|
| Watershed (HUC 10) Goose Creek Quadrangle 544 - Petroleum |
| Do you anticipate using more than 5,000 bbls of water to complete the proposed well work? Yes No |
| Will a pix be used? Yes V No V |
| If so, please describe anticipated pit waste: Two pits, 1. Solid material drill cuttings 2. Fresh and/or salt water from drilling |
| Will a synthetic liner be used in the pit? Yes No If so, what ml.? 20 mil |
| Proposed Disposal Method For Treated Pit Wastes: Land Application (if selected provide a completed form WW-9-GPP) |
| Underground Injection (UIC Permit Number) |
| Reuse (at A.P.) Number Off Site Disposal (Supply form WW-9 for disposal location) |
| JUL 3 0 2018 |
| Will closed loop system be used? If so, describe: No WV Department of |
| Drilling medium anticipated for this well (vertical and horizontal)? Air, freshwater, oil based, etc. Air Environmental Protection |
| -If oil based, what type? Synthetic, petroleum, etc. N/A |
| Additives to be used in drilling medium? None |
| Drill cuttings disposal method? Leave in pit, landfill, removed offsite, etc. Test, treat to correct pH, allow to dry and bury |
| -ir ieri in pit and pian to solidify what medium will be used? (cement, lime, sawdust) time |
| -Landfill or offsite name/permit number? No |
| Permittee shall provide written notice to the Office of Oil and Cas of any load of drill cuttings or associated waste rejected at any West Virginia sollie waste facility. The notice small be provided within 24 hours of rejection and the permittee small also disclose where it was properly disposed. |
| I certify that I understand and agree to the terms and conditions of the GENERAL WATER POLLUTION PERMIT issued on April 1, 2016, by the Office of Oil and Gas of the West Virginia Department of Environmental Protection. I understand that the provisions of the permit are enforceable by law. Violations of any term or condition of the general permit and/or other applicable law or regulation can lead to enforcement action. I certify under penalty of law that I have personally examined and am familiar with the information submitted on this application form and all attachments thereto and that, based on my inquiry of those individuals immediately responsible for o braining 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 or imprisonment. |
| Company Official Signature David Wwggers |
| Company Official (Typed Name) David W. Wiggers, Agent for Allied Energy, Inc. |
| Company Official Title Bookkeeper |
| Subscribed and sworn before me this 29th day of November, 20 The Notary Public State Of West Viriginia Holland G. Massey Commission expires Dec. 7, 2021 My commission expires Dec. 7, 2021 OFFICIAL SEAL NOTARY Public STATE OF WEST VIRIGINIA Holland G. Massey Commission Expires December 07, 2021 My Commission Expires December 07, 2021 |

| Proposed Revegetation Treatment: Acres Disturbed 1 acre | Preveg etation pl | 6.0 |
|---|---|---|
| Lime 2 Tons/acre or to correct to p | 6.5 | |
| Fertilizer type 10-20-20 or equivalent | - . | |
| Fertilizer amount 600 | _lbs/acre | |
| Mulch 90 bakes Ton | as/acre | |
| <u>S</u> 4 | eed Mixtures | |
| Temporary | Perma | nent |
| Seed Type lbs/acre | Seed Type Contractor's Mix | lbs/acre |
| Contractor's Mix 100 | | 100 |
| | | |
| | | |
| Maps(s) of road, location, pit and proposed area for land approvided). If water from the pit will be land applied, provide | lication (unicss engineered plans inclu water volume, include dimensions (L, | ding fals info have been W, D) of the pit, and dim |
| Maps(s) of road, location, pit and proposed area for land approvided). If water from the pit will be land applied, provide L, W), and area in acres, of the land application area. Photocopied section of involved 7.5' topographic sheet. | water volume, include dimensions (L, | W, D) of the pit, and dim |
| Mans(s) of road, location, pit and proposed area for land approvided). If water from the pit will be land applied, provide (L, W), and area in acres, of the land application area. Photocopied section of involved 7.5' topographic sheet. | water volume, include dimensions (L, | W, D) of the pit, and dim |
| Maps(s) of road, location, pit and proposed area for land approvided). If water from the pit will be land applied, provide L, W), and area in acres, of the land application area. Photocopied section of involved 7.5' topographic sheet. | water volume, include dimensions (L, | W, D) of the pit, and dim |
| Maps(s) of road, location, pit and proposed area for land approvided). If water from the pit will be land applied, provide L, W), and area in acres, of the land application area. Photocopied section of involved 7.5' topographic sheet. | water volume, include dimensions (L, | W, D) of the pit, and dim |
| Attach: Maps(s) of road, location, pit and proposed area for land approvided). If water from the pit will be land applied, provide (L, W), and area in acres, of the land application area. Photocopied section of involved 7.5' topographic sheet. Pian Approved by: Michael 14 Comments: Present 4 mulch a | water volume, include dimensions (L, | RECEIVED Office of Oil and G |

WW-9- GPP Rev. 5/16

| | Page | one | of | two |
|-------------------|----------|----------|-------|-----|
| API Number 47 - | 085 | | 10325 | |
| Operator's Well N | lo. Vale | ntine #5 | 5 | |

STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION OFFICE OF OIL AND GAS GROUNDWATER PROTECTION PLAN

| Operator Name: ALLIED ENERGY, INC. | |
|---|---|
| Watershed (HUC 10): Goose Creek | Quad: 544 - Petroleum |
| Farm Name: Betty W. Metz | |
| List the procedures used for the treatment and discharge of groundwater. | of fluids. Include a list of all operations that could contaminate the |
| Excess fluids to be directed to lined pit(s). Upo completed, fluids in pit will be tested, treated, anot allowed to puddle and/or pond. Solid drill cisite. | on reaching TD, with casing and cementing erated, and sprayed across land (as rain) uttings will be left to dry in pit(s) then be buried on |
| Inadequate pit size, pit liner not large enough to | contain contents of pit. |
| Describe procedures and equipment used to protect ground | dwater quality from the list of potential contaminant sources above |
| Pit(s) have dikes sufficient to contain effluent f 30 ml plastic. | rom drilling process and pits are lined with |
| List the closest water body, distance to closest water bo discharge area. | dy, and distance from closest Well Head Protection Area to the |
| Goose creek is closest body of water at appro | ximately 700 feet from well site. |
| • | - |
| 4. Summarize all activities at your facility that are already reg | gulated for groundwater protection. |
| All pit(s) have sufficient volume to contain well tanks are moved to well sites to hold any exce | waste and are lined with 20 mil plastic. Water ss fresh and/or salt water from the well. |
| | |

5. Discuss any existing groundwater quality data for your facility or an adjacent property.

WW-9- GPP Rev. 5/16

| | Page 1 | two | of two |
|-------------------|----------|----------|--------|
| API Number 47 - | 085 | - | 10325 |
| Operator's Well N | o. Valer | ntine #5 | |

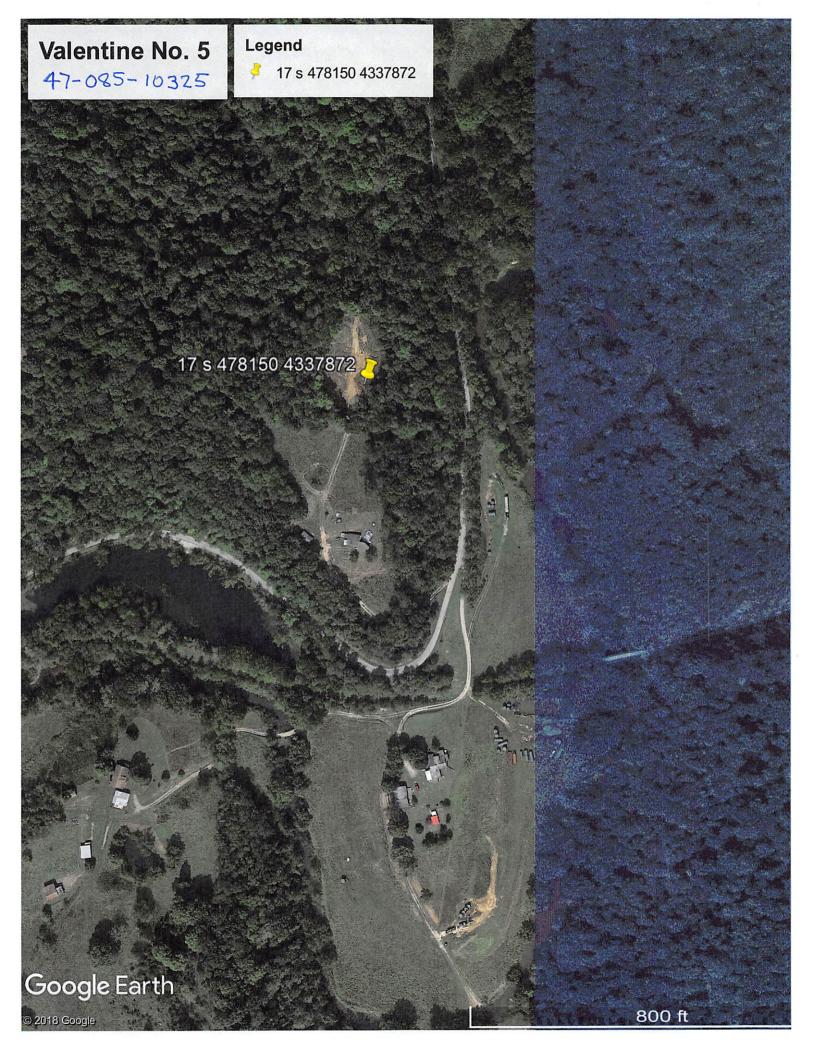
| | , |
|---|---|
| | |
| At this time, we are not aware of any issues with | n groundwater |
| The closest water well is approximately a quarte | er mile away |
| | |
| 6. Provide a statement that no waste material will be used for the | elcing or fill material on the property. |
| No waste material will be used for fill or deicing | at any well |
| | |
| | |
| Describe the groundwater protection instruction and training provide direction on how to prevent groundwater contaminat | g to be provided to the employees. Job procedures shall ion. |
| Rig operator is directed to only use the pit as need | eded |
| Liquids will be tested, treated, brought to the con across the landscape without making puddles or | rect pH, then aerated and sprayed (as rain) ponds. |
| Solids will be left to dry and buried on site. | |
| | |
| | |
| | |
| | |
| Provide provisions and frequency for inspections of all GPP e | elements and equipment. |
| Inspections will be daily during the drilling proces production of the well, monitored by the Well Ten | ss, and on a weekly basis during the ongoing or and Field Manager |
| | |
| | |
| Signature: David (1) iggers | RECEIVED Office of Oil and Gas |

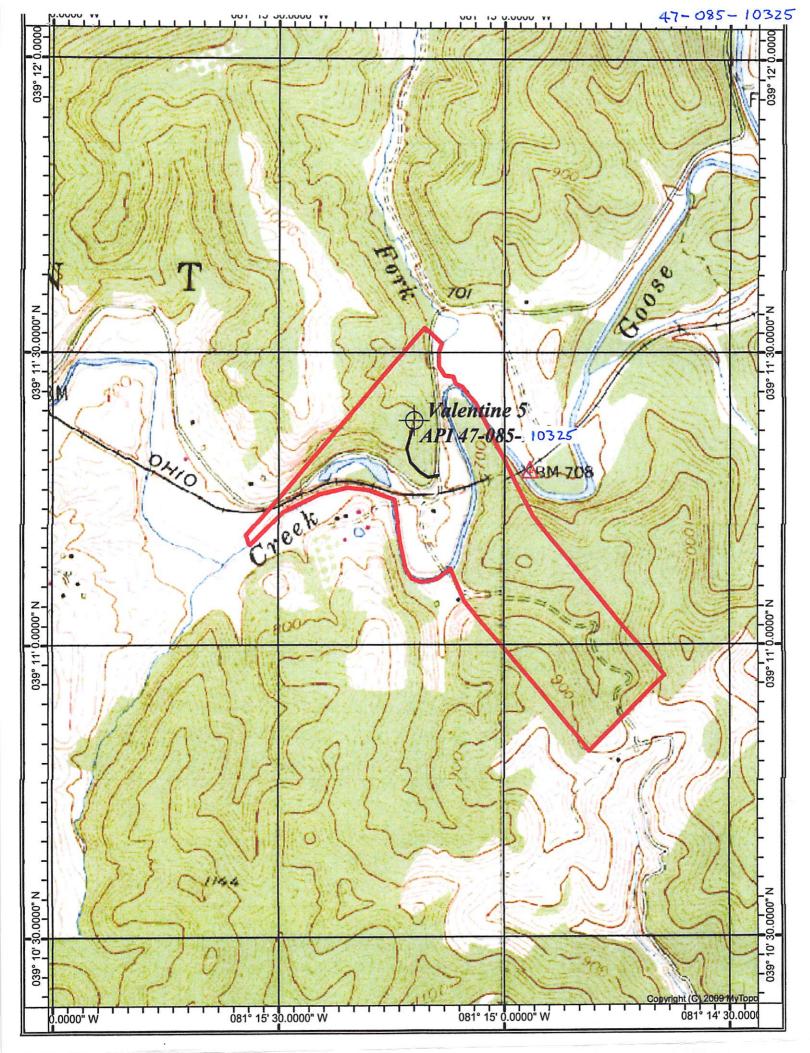
Office of Oil and Gas

JUL 3 0 2018

WV Department of Environmental Protection

Well: Valentine #5 API: 47-085-10325 Florence Valentine **Grant District** Allied Energy, Inc. NOT TO SCALE West Virginia RECEIVED
Office of Oil and Gas Ritchie County JUL 3 0 2018 111.5 acre Lease WV Department of Environmental Protection 6916 9016732ib tiq inamibas floor used on location raq tanks to be Annual ne pays @ 10% 225' 375' NL used on location raq tanks to be sediment pit discharge area 175' @ 20% County Route 18/5 slopes. will be placed as needed. district inspector. sediment field manual and/or directed by used as per West Virginia erosion and placed where needed. Erosion and sediment control will be Paul Metz Lane Cut and stack all trees 6 inches and Amount and size of culverts to be Temorarily seed and mulch all Stockpile top soil for reclamation Cross drains and sediment control Valentine # 1 -085-5168 **API 47** Goose Creek





PETROLEUM QUADRANGLE

SCALE 1' = 1000'

ALLIED ENERGY, INC.

WELL: VALENTINE #5 API 47-085-_ 10325 MARK & MARY MASON 111.5 ACRE LEASE

GRANT DISTRICT RITCHIE COUNTY WEST VIRGINIA

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JUL 3 0 2018

WV Department of Environmental Protection

