



State of West Virginia WV Department of Department of Environmental Protection - Office of Oil and Gas Well Operator's Report of Well Work

| API 47 043 03 | 448 County LINCO | OLN | District DUVAL | |
|--------------------------------|--|--|-------------------|---------------------------|
| Quad GRIFFITHSVILLE | 7.5' Pad Name GR | IFFITH, AUSTIN | Field/Pool Name | GRIFFITHSVILLE |
| Farm name ALLEN, TERR | Y & DAWNA | | Well Number | |
| Operator (as registered with t | he OOG) H.G. ENERGY | LC | Park the second | |
| Address 5260 DuPONT R | | ARKERSBURG | State WV | Zip_26101 |
| As Drilled location NAD 8 | ole Northing 4,231,751 M | | d deviation surve | у |
| Landing Point of Cu | | | | |
| Bottom H | ole Northing | Eas | ting | |
| Elevation (ft) 1,018' | GL Type of Wel | ■New □ Existing | Type of Rep | port Interim Final |
| Permit Type Deviated | □ Horizontal □ Horiz | ontal 6A Vertical | Depth Type | e 🛘 Deep 🍍 Shallow |
| Type of Operation Conve | rt 🗆 Deepen 💄 Drill | □ Plug Back □ Redri | illing 🗆 Rewo | rk 🗈 Stimulate |
| Well Type Rring Dienoca | □ CBM □ Gas □ Oil ■ S | Secondary Recovery II S | olution Mining | Storage H Other |
| | | | | |
| Type of Completion Sing | le 🗆 Multiple Fluids Pro | duced □ Brine □Gas | D NGL AO | fil DOther |
| Drilled with 🗆 Cable 🔒 I | Rotary | | | |
| 아이지 점에 보고싶다면 어떻게 하다고요? | e ■ Air □ Mud ■Fresh N Mud □ Fresh Water ■ Br | | hole ■Air □ l | Mud ■ Fresh Water □ Brine |
| N/A | | | | |
| Date permit issued5/31 | /2013 Date drilling co | mmenced 6/24/2014 | 4 Date drill | ling ceased 6/2/14 |
| Date completion activities be | 7/44/44 | Date completion act | ivities ceased | - |
| | N Date permission gran | | Granted by | |
| verous progesting (1711) | Date permission gran | | | |
| Please note: Operator is requ | tired to submit a plugging app | lication within 5 days of v | verbal permission | to plug |
| Freshwater depth(s) ft | N/A | Open mine(s) (Y/N) | depths | N |
| Salt water depth(s) ft | 1160', 1300' | Void(s) encountered | | N |
| Coal depth(s) ft | 600'-608' | Cavern(s) encountere | | N |
| Is coal being mined in area (| Y/N) N | 4 10 10 10 10 10 10 10 10 10 10 10 10 10 | | |
| a same same same in many | | | | Reviewed by: |

WR-35 Rev. 8/23/13

| Kev. 6/23/13 | | | | | | | | | |
|-------------------|-------------------------|---|---|-----------|-------------------|------------------------------|--|-------------------------|-----------------------|
| API 47- 043 | _ 03448 | Farm n | ame_ALLEN, | TERRY & | DAWNA | Wel | l number 21 | 3 | |
| CASING | Hole | Casing | | New or | Grade | | Basket | Did con | nent circulate (Y/ N) |
| STRINGS | Size | Size | Depth | Used | wt/ft | | Depth(s) | • Provide details below | |
| Conductor | 12 1/4" | 11 5/8" | 30' | Used | ı | LS | ······································ | | Sand In |
| Surface | 8 3/4" | 7" | 675' | New | 1 | LS | 84' | | Y |
| Coal | | | · _ · · · · · · · · · · · · · · · · · · | | | | | ĺ | |
| Intermediate 1 | | | | | | | | | |
| Intermediate 2 | | | | | | | | | |
| Intermediate 3 | | | | - | | | | | |
| Production | 6 1/4" | 4 1/2" | 2651' | New | J. | -55 | - | | N |
| Tubing | | · · · · · · · · · · · · · · · · · · · | | | | | | 1 | |
| Packer type and d | epth set | | | 1 | 1 | L | | | |
| Comment Details | Circulated Est. 45 | sks to surface on 7° su | rface cement job. | | | | | | |
| CEMENT DATA | Class/Type of Cement | | | | Yield ì ³/sks) | Volume (ft ²) | Cem Top (1 | | WOC (hrs) |
| Conductor | | | | | | | | | |
| Surface | Reg Neat | 150 | 15.6 | 3 | 1.18 | 177 | Surf | ace | 8 |
| Coal | | | | | | | | | _ |
| Intermediate 1 | | | | | | | | | |
| Intermediate 2 | | | | | | | | | |
| Intermediate 3 | | | | | | | | | |
| Production | 50:50 Pozm | nix 150 | 14.2 | 2 | 1.27 | 254 | 11! | 54' | 8 |
| Tubing | | | | | | | | | |
| Drillers TD (ft | 1 2680 | | | Loggers 7 | D (ft) 268 | 9 | | | |
| - | tion penetrated | Berea | | | to (ft) N/A | | | | |
| Plug back pro | - | | | | | | | | |
| Kick off depth | (ft) <u>N/A</u> | | | | | | | | |
| Check all wire | line logs run | ■ caliper ■ neutron | ■ density ■ resistivity | | ted/direction | | induction temperature | □soni | c |
| Well cored | Yes A No | Conventi | onal Side | wall | W | ere cutting | s collected | ■ Yes | □ No |
| | | | | | | nn 11 1 2 | | | |
| | | LIZER PLACEM relizer placed mld string on 7" | ENT USED FO | R EACH C | ASING S | I'RING _ | | | |
| | | , | | | | | | | |
| | - | | | | | | | | |
| WAS WELL | COMPLETED | AS SHOT HOL | E 🗆 Yes 🖪 | No D | ETAILS | | | | |
| WAS WELL | COMPLETED | OPEN HOLE? | □ Yes ■ N | io DET | AILS | | | | |
| | · | | | | | | | | |
| WERE TRAC | ERS USED | □ Yes 🖪 No | TYPE OF T | RACER(S) | USED _ | | | | |

API 47- 043 - 03448 Farm name_ALLEN, TERRY & DAWNA Well number_213

PERFORATION RECORD

| Stage No. | Perforation date | Perforated from MD ft. | Perforated to MD ft. | Number of Perforations | Formation(s) |
|--------------|------------------|------------------------|----------------------|---------------------------|--------------|
| 1 | 7/15/14 | 2488' | 2502' | 84 | Berea |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | - | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

Please insert additional pages as applicable.

STIMULATION INFORMATION PER STAGE

Complete a separate record for each stimulation stage.

| Stage No. | Stimulations Date | Ave Pump Rate (BPM) | Ave Treatment Pressure (PSI) | Max Breakdown Pressure (PSI) | ISIP (PSI) | Amount of Proppant (lbs) | Amount of Water (bbls) | Amount of Nitrogen/other (units) |
|--------------|----------------------|------------------------|---------------------------------|---------------------------------|------------|-----------------------------|------------------------|----------------------------------|
| 1 | 7/15/14 | 5.3 | 1053 | 1502 | 879 | | 42 | 15 bbls HCL |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | _ | | |
| | | | | | _ | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | _ |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | _ | | | |
| | | | | | | | | |
| | | | | | | | | |

Please insert additional pages as applicable.

| API 47- 043 | - 03448 | Farm | _{name} ALLEN, | TERRY | & DAWNA | Well | number | 213 | |
|--|--------------------------------|-------------------------------|------------------------------|----------------|-------------|---|---------------|------------------|--|
| PRODUCING Berea | FORMATION(| | <u>DEPTHS</u> 2488'-2502' | _ TVD — | 2488'-2502' | MD | | | |
| Please insert ad | ditional pages a | s applicable. | | _ | | | | | |
| GAS TEST | n Build up | Drawdown | □ Open Flow | | OIL TEST | □ Flow □ | Pump | | |
| SHUT-IN PRE | SSURE Surf | ace | _psi Botto | m Hole_ | psi | DURAT | TION O | F TEST | hrs |
| OPEN FLOW | Gas mcf | Oil pd | NGL bpd | bpd | Water bp | GAS N d 🛭 Estir | ÆASU nated | RED BY | □ Pilot |
| LITHOLOGY/ FORMATION | TOP DEPTH IN FT NAME TVD | BOTTOM DEPTH IN I'T TVD | TOP DEPTH IN FT MD | BOTTO DEPTH IN | NFT DESCRI | | | - | NTITYAND ., GAS, H ₂ S, ETC) |
| Sand/Shale | 0 | 600 | 0 | | | , | | , | .,,, |
| Pittsburgh Coal | 600 | 608 | | | | | | | |
| Sand/Shale | 608 | 1764 | | | | | | | |
| Big Lime | 1764 | 1970 | | | | | | | |
| Big Injun | 1970 | 2062 | | | | | | | |
| Shale | 2062 | 2464 | | | | | | | |
| Coffee Shale | 2464 | 2486 | | | | | | | |
| Berea | 2486 | 2504 | | | | | | | |
| Shale | 2504 | 2680 | | | | | | | |
| TD | 2680 | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | _ | | | | | | |
| Please insert ad Drilling Contra Address 11565 | ctor Decker Dril | | City | Vincent | I | State | ОН | Zip_45784 | · · · · · · · · · · · · · · · · · · · |
| | 141455 | d lat | | _ | | | | | |
| Logging Compa | any weatherford | international | | Weston | | 5 4.4 | wv | Zip <u>26452</u> | • |
| Address 777 No | IIII KIVEI AVEITUB | | City | 4492(01) | | State | | Zip <u>20452</u> | · |
| Cementing Con Address 5252 R | npany Universal t 1428 | Services | City | Allen | - | State | KY | Zip <u>41601</u> | |
| Stimulating Co | <u> </u> | ers Service Co | <u> </u> | Zanesville | | ~ | Uh | 7:_ A2704 | |
| Address 109 So | | | City | <u> </u> | <u> </u> | State | | Zip <u>43701</u> | |
| riease insert ad | ditional pages a | s applicable. | | | | | | | |
| Completed by | Roger Heldman | 1 | | | Telepho | ne 304-420 | -1107 | | |
| Signature | In the | lu | Title O | perations M | | | Date 7 | /18/14 | |
| 00 | vdraulic Fractur | ing Chemical 1 | Disclosure Info | rmation | Attach con | v of FRACI | FOCUS | Registry | |

43.03448

| Prepared for: HG Energy Dustin Hendershot | PRODUCERS SERVICE CORP. | | Prepared by: Producers Service Corp Chris Bryan 109 S. Graham St, Zanesville, OH 43702 740-454-6253 | | | |
|---|--|--------|---|-----------|------------|--|
| CUSTOMER PO# | · · · · · · · · · · · · · · · · · · · | | | | | |
| Description | Notes | Amount | Units | Unit Cost | Total Cost | |
| ACID PUMP CHARGE 1000-2000 PSI | III AND THE RESERVE OF THE PERSON OF THE PER | 1 | EA | | | |
| MILEAGE CHARGE PER UNIT ONE WAY | 1 Unit @ 50 Miles | 50 | MI | | | |
| IC ACID 15% | | 500 | | | | |
| ACID DELIVERY | | 2 | HR | | | |
| PRO HIB II | | 0.5 | GAL | | | |
| PRO CLA FIRM LP | | | GAL | | | |
| PRO NE-1 | | 0.5 | | | | |
| PRO PEN | | | GAL | | | |
| DATA VAN | | | STAGE | | | |
| | | | | | | |
| Customer Approval: | | | | | | |