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

| API <u>47</u> - 103 | 02795 | County Wetzel | | District G | Green | |
|--|--|-----------------------|---|---|----------------------------------|--------------|
| Quad Porters Falls | | Pad Name Howel | L | | Name Mary | y |
| Farm name Howell, Ch | | | | | nber #8H | |
| Operator (as registered v | | | ooration | | | |
| Address 1300 Fort Pie | erpont Drive | City More | gantown | State | WV | Zip 26508 |
| | AD 83/UTM | Attach an as-drilled | d plat, profile view, H | and deviation Easting 517,66 | | |
| Landing Point of | of Curve No | orthing N/A | | asting N/A | | |
| Botto | m Hole No | orthing 4,382,918.7 | E | asting 517,66 | 7.3 | |
| Elevation (ft) 1,300 Permit Type | ated Horonvert Decoposal CBM Single Multiple Rotary | epen Drill | Plug Back | Dept drilling Solution Milas NGL | th Type Rework ning Storag | ge 🗆 Other |
| Mud Type(s) and Additi | | | | | | |
| Date permit issued | 9/26/2012 | Date drilling comm | enced4/5/201 | 13 _{Da} | te drilling ceas | sed4/20/2013 |
| Date completion activitie | | N/A | | | | |
| Verbal plugging (Y/N) | | te permission granted | | | | |
| Please note: Operator is Freshwater depth(s) ft Salt water depth(s) ft Coal depth(s) ft | None R | 96 eported | tion within 5 days of Open mine(s) (Y/N Void(s) encountered |) depths | hs | N N N |
| Is coal being mined in ar | | N | Cavering phose unit | LEAN FAILNEAG | PHP5 | |
| is coal being mined in ar | ca (1/IN) | | MAY | 2 9 2000 | | Reviewed by: |

WV Department of Environmental Protection 12 5/27/50

WR-35 Rev. 8/23/13

| Rev. 8/23/13 | | | | | | | | | | |
|-----------------------------------|--|----------------------|-----------|----------------------|-----------------|----------------------------------|------------------------|------------------------|-----------------|--|
| API 47- 103 | 02795 | _ Farm n | ame_ | lowell, C | harle | es and Ruth | Wel | l number_i | #8H | |
| CASING STRINGS | Hole Size | Casing Size | D |)epth | Nev Us | v or Grade sed wt/ft | | Basket Depth(s) | | ement circulate (Y/ N) vide details below* |
| Conductor | 24" | 20" | , | 90' | N | lew | LS | | | Y - GTS |
| Surface | 17.5" | 13.375" | 1,307° K | B 1,292' GL | N | lew . | J55 | 118' & 194 | · | Y - CTS |
| Coal | 17.5" | 13.375" | 1,307' KI | B 1,292' GL | N | lew J | 155 | 118' & 194 | • | Y-CTS |
| Intermediate 1 | 12.25" | 9.625" | 2, | 404' | N | ew J | J55 | - | | Y - CTS |
| Intermediate 2 | | | | | | | | | | |
| Intermediate 3 | | | | | | | | | | |
| Production | | | | | | | | | | |
| Tubing | | | | | | | | | | |
| Packer type and de | epth set | | | | | | | | | |
| Comment Details | Circulated 40 bbls ceme | nt to surface on 1 | 3.375* st | ring and 40 bbl | s of ce | ement to surface on the | 9.625" string. | | | |
| CEMENT DATA | Class/Type of Cement | Numbe of Sack | | Slurry wt (ppg |) | Yield (ft ³ /sks) | Volume (ft.²_) | | ement p (MD) | WOC |
| Conductor | Type 1 | 34 | | 15.6 | , | 1.18 | 40 | | urface | (hrs) 24.0 |
| Surface | Class "A" | 1,005 | <u> </u> | 15.6 | _ | 1.19 | 1,196 | | urface | 8.0 |
| Coal | Class "A" | 1,005 | | 15.6 | | 1.19 | 1,196 | | urface | 8.0 |
| Intermediate 1 | Lead-Flex Seal Tail-Class "A" | Lead-410 To | ail-420 | Lead-15.0 Tail | -15.5 | Lead-1.26 Tail-1.19 | Lead-516 Tail | | urface | 12.0 |
| Intermediate 2 | | | | | | | | | | 1 .2.0 |
| Intermediate 3 | | | | | | | | | | |
| Production | | | | | _ | | | - | | |
| Tubing | | | | | | | | | | |
| Deepest formate Plug back pro- | 2,440 MD / 2,440 TVD tion penetrated Weir cedure In order to preve | nt a potential colli | | the Howell #3 | Plug H wellt | | 85 p drilling @ 2,4 | | | |
| Check all wire | | □ caliper □ neutron | | ensity esistivity | | deviated/directio gamma ray | | nduction emperature | e □son | ic |
| Well cored \Box | Yes A No | Convention | onal | Sidewa | all | We | ere cuttings | collected | □ Yes | ■ No |
| | HE CENTRALIZEI 0, 23, 26, 29 and 32. Intermediate | | | | | | | | ng had bow sp | ring centralizers placed on |
| | | | | | | | | | PI | CEIVED |
| WAS WELL C | COMPLETED AS S | HOT HOLE | | Yes 🖪 1 | No | DETAILS | | (| | of Oil and Gas |
| WAS WELL C | COMPLETED OPE | N HOLE? | □ Ye | s 🖪 No | | DETAILS | | | | Y 2 9 20:5 |
| WERE TRACE | ERS USED 🗆 Yes | ■ No | TYI | PE OF TR. | ACE | R(S) USED | | En | WV Dovironm | epartment of ental Protecti |

| 95 | į |
|----|----|
| | 95 |

| Farm name | Howell, | Charles | and | Ruth |
|-----------|---------|---------|-----|------|
|-----------|---------|---------|-----|------|

h____Well number_#8H

PERFORATION RECORD

| Stage No. | Perforation date | Perforated from MD ft. | Perforated to MD ft. | Number of Perforations | Formation(s) |
|--------------|------------------|------------------------|----------------------|---------------------------|--------------|
| | Not | Stimulated | | | |
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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) |
|--------------|----------------------|------------------------|---------------------------------|---------------------------------|---------------|-----------------------------|------------------------|-------------------------------------|
| | | Not | Stimulated | | | | | |
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| <u> </u> | | | | | | F | RECEIVE | .D |
| | | | | | | Office | RECEIVE of Oil ar | nd Gas |

Please insert additional pages as applicable.

MAY 2 9 2015

| | | | | TVD | | MD | | | |
|---------------------------------------|--------------------------------|------------------------|--------------------------|-----------------------------|-----------|---------|----------------|--------------------|--|
| Please insert add GAS TEST | | | | | | | | | |
| GAS TEST | itional pages a | as applicable. | | | | | | | |
| | Build up | Drawdown | □ Open Flow | OI | L TEST 🗆 | Flow [| Pump | | |
| SHUT-IN PRES | SURE Surf | face | _psi Botto | om Hole | psi | DURAT | TION O | F TES | Thrs |
| OPEN FLOW - | Gas met | Oil | NGL bpd | bpd | | GAS N | MEASU nated | RED I | BY fice □ Pilot |
| LITHOLOGY/ FORMATION | TOP DEPTH IN FT NAME TVD | BOTTOM DEPTH IN FT TVD | TOP DEPTH IN FT MD | BOTTOM DEPTH IN FT MD | | | | | D QUANTITYAND NE, OIL, GAS, H ₂ S, ETC |
| Sandstone/Shale | 0 | 1,060 | 0 | 1,060 | | F | resh Wat | er - mis | t @ 96' |
| Coal | 1,060 | 1,063 | 1,060 | 1,063 | | | | | |
| Sandstone/Shale | 1,063 | 2,146 | 1,063 | 2,146 | | | | | |
| Little Lime | 2,146 | 2,220 2,253 | 2,146 | 2,220 | | | | | |
| Big Lime Injun | 2,253 | 2,296 | 2,220 | 2,253 2,296 | | | | e Stone idstone | |
| Shale | 2,296 | 2,440 | 2,296 | 2,290 | | | | Shale | |
| TD 2,440 | | 2,200 | 2,440 Total Depth | | | 1 | | | |
| | | | | | | | | | |
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| Please insert add | itional pages a | as applicable. | | | | | | | |
| | | | | | | | | | |
| Drilling Contract Address 171 Locu | | y | City | Mount Morris | | State | PA | Zin | 15349 |
| | | one) | City | - Constant Provide | | _ State | - | _ z.ip | V 2018 |
| Logging Compar | Scientific D | rilling | | 01 | | | DA | | 45000 |
| Address 116 Vista | Drive | | City | Charleroi | | State | PA | _ Zip | 15022 |
| Cementing Comp | | | rger | | | | | | |
| Address 2228 Phil | | | City | Clarksburg / W | /eston | State | WV | _ Zip | 26301 / 26452 |
| Stimulating Com | pany N/A | | | | | | 144.5 | | RECEIVED and |
| Address | | | City | | | State | WV | _ Zip | CENED |
| Please insert addi | | | | | | | | | RECOII and |
| Completed by V | | У | mi. B | rilling England | Telephone | 304-225 | -1600 | 7000 | THICE OF BOX OF DESCRIPTION OF THE PROPERTY WOOD TO SERVICE OF THE PROPERTY OF |
| Signature | 1.4-1 | 000 | Title D | rilling Engineer | | | Date 5/2 | 1/2015 (or | MAY P |



1300 Fort Pierpont Drive – Suite 201 Morgantown, WV 26508 Telephone: (304 225-1600

5/28/2015

Mr. James Martin, Chief WV Office of Oil and Gas 601, 57th Street, SE Charleston, WV 25304-2345

Dear Mr. Martin;

Attached, please find revised "WR-34 – Discharge Monitoring Report and "WR-35 – Well Operator's Report of Well Work" for the well listed below and operated by Stone Energy Corporation, Operator ID 494490923. The attachments are for:

Well Name Howell #8H

<u>API Number</u> 47-103-02795

Should you require additional information or have any questions please feel free to contact me at 304-225-1777.

Sincerely,

W. Lee Hornsby

Drilling Engineer, Appalachia Stone Energy Corporation

Attachments xc: Well Files