

JR

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

API 47-095-02041 County Tyler District Ellsworth
Quad Middlebourne Pad Name Collins Pad Field/Pool Name Middlebourne
Farm name Collins, Earl & Doris Well Number Collins Unit # 1117
Operator (as registered with the OOG) Triad Hunter, LLC
Address 777 Post Oak Blvd. Suite 910 City Houston State Texas Zip 77056

As Drilled location NAD 83/UTM Attach an as-drilled plat, profile view, and deviation survey
Top hole Northing 4371736.7 Easting 507029.3
Landing Point of Curve Northing 4371863 Easting 506824
Bottom Hole Northing 4373165 Easting 505912

Elevation (ft) 740' GL Type of Well New Existing Type of Report Interim Final
Permit Type Deviated Horizontal Horizontal 6A Vertical Depth Type Deep Shallow
Type of Operation Convert Deepen Drill Plug Back Redrilling Rework Stimulate
Well Type Brine Disposal CBM Gas Oil Secondary Recovery Solution Mining Storage Other _____
Type of Completion Single Multiple Fluids Produced Brine Gas NGL Oil Other _____
Drilled with Cable Rotary

Drilling Media Surface hole Air Mud Fresh Water Intermediate hole Air Mud Fresh Water Brine
Production hole Air Mud Fresh Water Brine

Mud Type(s) and Additive(s)
Synthetic Base Mud; HT Light Mineral Oil, Synvert TWA & LWA - thinner and wetting agents, Synvert L-1 primary emulsifier, an Cimbar - weighting and filler material.

Date permit issued 1/31/2012 Date drilling commenced 2/28/2013 Date drilling ceased 9/7/2013
Date completion activities began 10/3/2013 Date completion activities ceased 11/14/2013
Verbal plugging (Y/N) N Date permission granted N/A Granted by N/A

Please note: Operator is required to submit a plugging application within 5 days of verbal permission to plug

Freshwater depth(s) ft Surface - 250' Open mine(s) (Y/N) depths N
Salt water depth(s) ft @ 1,000' Void(s) encountered (Y/N) depths N
Coal depth(s) ft 900' - 1,200' Cavern(s) encountered (Y/N) depths N
Is coal being mined in area (Y/N) N

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Reviewed by: _____

API 47- 095 - 02041 Farm name Collins, Earl & Doris Well number Collins Unit # 1117

| CASING STRINGS | Hole Size | Casing Size | Depth | New or Used | Grade wt/ft | Basket Depth(s) | Did cement circulate (Y/ N) * Provide details below* |
|---------------------------|-----------|-------------|---------|-------------|--------------|-----------------|---|
| Conductor | 24" | 20" | 100' | New | A53B 90 lb. | none | yes |
| Surface | 17 1/2" | 13 3/8" | 403.5' | New | H-40 48 lb. | none | yes - circ. 20 bbls. |
| Coal | | | | | | | |
| Intermediate 1 | 12 3/8" | 9 5/8" | 2002.5' | New | J-55 36 lb. | N/A | yes - circ. 15 bbls. |
| Intermediate 2 | | | | | | | |
| Intermediate 3 | | | | | | | |
| Production | 8 3/4" | 5 1/2" | 11,652' | New | P-110 20 lb. | none | yes - circ. 70 bbls. |
| Tubing | | | | | | | |
| Packer type and depth set | | | | | | | |

Comment Details _____

| CEMENT DATA | Class/Type of Cement | Number of Sacks | Slurry wt (ppg) | Yield (ft ³ /sks) | Volume (ft ³) | Cement Top (MD) | WOC (hrs) |
|----------------|----------------------|-----------------|-----------------|------------------------------|---------------------------|-----------------|-----------|
| Conductor | Class A | 125 | 15.6 | 1.18 | 148 | surface | 12+ |
| Surface | Class A | 350 | 15.6 | 1.21 | 424 | surface | 10 |
| Coal | | | | | | | |
| Intermediate 1 | Class A | 665 | 15.2 | 1.26 | 838 | surface | 12 |
| Intermediate 2 | | | | | | | |
| Intermediate 3 | | | | | | | |
| Production | 50/50 PNE & Class H | 1,000 / 1,242 | 13.5 / 15.2 | 1.44 / 1.62 | 3,452 | surface | 12+ |
| Tubing | | | | | | | |

Drillers TD (ft) TMD = 11,648' TVD = 6,050' Loggers TD (ft) Not Logged to Total Depth
 Deepest formation penetrated Marcellus Shale Plug back to (ft) N/A
 Plug back procedure N/A

Kick off depth (ft) @ 4,800'

Check all wireline logs run caliper density deviated/directional induction
 neutron resistivity gamma ray temperature sonic

Well cored Yes No Conventional Sidewall Were cuttings collected Yes No

DESCRIBE THE CENTRALIZER PLACEMENT USED FOR EACH CASING STRING _____
13 3/8" - Two 2nd & 10th joints
9 5/8" - Five 1 every 10 joints
5 1/2" - Sixty-Two 51 Spiral Centralizers from Toe to KOP, 11 Bow Centralizers from KOP to 250'

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WAS WELL COMPLETED AS SHOT HOLE Yes No DETAILS DEC 11 2014

WAS WELL COMPLETED OPEN HOLE? Yes No DETAILS WV Department of Environmental Protection

WERE TRACERS USED Yes No TYPE OF TRACER(S) USED _____

API 47- 095 - 02041 Farm name Collins, Earl & Doris Well number Collins Unit # 1117

| <u>PRODUCING FORMATION(S)</u> | <u>DEPTHS</u> | | |
|-------------------------------|---------------|-------|------------|
| Marcellus Shale | 6,050' | TVD | 11,648' MD |
| _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ |

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Please insert additional pages as applicable.

GAS TEST Build up Drawdown Open Flow OIL TEST Flow Pump

SHUT-IN PRESSURE Surface 3,100 psi Bottom Hole 5445 psi DURATION OF TEST 312 hrs

OPEN FLOW Gas 8,000 mcfpd Oil 400 bpd NGL _____ bpd Water 480 bpd GAS MEASURED BY Estimated Orifice Pilot

| LITHOLOGY/ FORMATION | TOP DEPTH IN FT NAME TVD | BOTTOM DEPTH IN FT TVD | TOP DEPTH IN FT MD | BOTTOM DEPTH IN FT MD | DESCRIBE ROCK TYPE AND RECORD QUANTITY AND TYPE OF FLUID (FRESHWATER, BRINE, OIL, GAS, H ₂ S, ETC) |
|-------------------------|--------------------------------|------------------------------|--------------------------|-----------------------------|--|
| | 0 | | 0 | | (* No Open Hole Logs run on Collins # 1117) Pilot Hole: Spencer # 1112 (P # 47-095-02033) |
| | | | | | |
| | | | | | <i>See Attached</i> |
| Collins # 1117 | | | | | |
| Tully | 6005' | 6020' | 6192' | 6234' | Limestone |
| Marcellus | 6020' | Not Drilled | 6234' | 11,648' | Organic Shale Show Gas |
| | | | | | |
| | | | | | |
| | | | | | |

Please insert additional pages as applicable.

Drilling Contractor Warren Drilling (Top Hole - Alpha Hunter)
 Address P.O. Box 103 City Dexter City State Oh. Zip 45727

Logging Company Horizontal Wireline Services
 Address 381 Colonial Manor City Irwin State Pa. Zip 15642

Cementing Company Baker Hughes
 Address 2228 Phillippi Pike City Clarksburg State WV Zip 26301

Stimulating Company Producers Service Corporation
 Address 109 S.Graham Street City Zanesville State Oh. Zip 43701

Please insert additional pages as applicable.

Completed by Ben Smeltzer Telephone (740) 760-0570
 Signature *Ben Smeltzer* Title Geologist Date 11/18/2014

Submittal of Hydraulic Fracturing Chemical Disclosure Information Attach copy of FRACFOCUS Registry

95-02041

Spencer Unit # 1112 – Permit # 47-095-02033 (Pilot Well for Collins # 1116, 1117, 1118 & 1119)

WR-35 Pg. 4 Geology Attachment

| <u>FORMATION / LITHOLOGY</u> | <u>DEPTH</u> | <u>SHOWS / COMMENTS</u> |
|---------------------------------|----------------|-------------------------|
| Siltstone & shale | surface – 898' | |
| SECOND COW RUN SAND | 898' – 923' | |
| Shale & siltstone | 923' – 960' | |
| SALT SAND (1 st) | 960' - 1092' | |
| Shale | 1092' – 1148' | |
| SALT SAND (2 nd) | 1148' – 1183' | |
| Shale, siltstone, tr. Sandstone | 1183' – 1394' | |
| SALT SAND (3 rd) | 1394' – 1427' | |
| Shale, siltstone | 1427' – 1552' | |
| GREENBRIER LIMESTONE | 1552' – 1644' | |
| Shale | 1644' – 1650' | |
| BIG INJUN SANDSTONE | 1650' – 1821' | Show Gas |
| Shale | 1821' - 2012' | |
| WEIR SAND | 2012' – 2108' | |
| Shale, siltstone | 2108' – 2182' | |
| BEREA SANDSTONE | 2182' – 2186' | |
| shale & siltstone | 2186' – 2609' | |
| GORDON / Fifth SAND | 2609' – 2626' | |
| Shale & siltstone | 2626' – 3141' | |
| WARREN SANDSTONE | 3141' – 3189' | |
| Shale & siltstone | 3189' – 4504' | |
| Riley | 4504' – 4536' | |

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| | | |
|-----------------------------------|---------------|--|
| Shale, siltstone, tr. organic sh. | 4536' – 5412' | Base Lower Huron @ 4650', volcanic ash @ 4861' |
| RHINESTREET (Java Fm.) | 5412' – 5727' | Organic shale, Show of Gas |
| Shale (Middlesex Fm.) | 5727' – 5883' | |
| GENESEO Formation | 5883' – 5990' | Organic shale |
| TULLY Formation | 5990' – 6014' | limestone |
| MARCELLUS SHALE | 6014' – 6068' | Organic shale, Show of Gas |
| ONONDAGA LIMESTONE | 6068' – 6190' | |

DRILLER'S T.D. = 6215'

LOGGER'S T.D. = 6190'

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Collins Unit 1117

(Permit # 47-095-02041)

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Completion Summary

| Total Depth (ft) | Landing Point MD (ft) | TVD (ft) | Effective Lateral Length (ft) | Stages | Perforation Intervals | Footage | Stage Intervals | Footage | Total Volume (bbl) | Average Rate (bpm) | Formation Break (PSI) | Average Pressure (PSI) | 80/100 Mesh Pumped (Lb) | 40/70 Mesh Pumped (Lb) | 20/40 Mesh Pumped (Lb) | Total Sand Pumped (Lb) | ISIP (PSI) | Completed per design |
|------------------|-----------------------|----------|-------------------------------|--------|-----------------------|---------|-----------------|---------|--------------------|--------------------|-----------------------|------------------------|-------------------------|------------------------|------------------------|------------------------|------------|----------------------|
| 11,648 | 6,050 | 6,050 | 5,598 | | Actual Length | Footage | Actual Length | Footage | | | | | | | | | | |
| Stage 1 | 11,514'-11,349' | 165 | 11,565'-11,318' | 247 | 9,773 | 77 | 7,769 | 6,700 | 30,000 | 189,500 | 155,200 | 374,700 | 4,840 | Yes | | | | |
| Stage 2 | 11,288'-11,102' | 186 | 11,318'-11,071' | 247 | 8,242 | 81 | 5,211 | 6,786 | 31,000 | 327,000 | 101,000 | 459,000 | 3,657 | Yes | | | | |
| Stage 3 | 11,039'-10,855' | 184 | 11,071'-10,824' | 247 | 8,773 | 73 | 5,603 | 7,051 | 102,900 | 26,000 | 301,200 | 430,100 | 3,574 | Yes | | | | |
| Stage 4 | 10,794'-10,698' | 96 | 10,824'-10,572' | 252 | 8,343 | 78 | 5,774 | 6,630 | 29,100 | 310,700 | 100,800 | 440,600 | 4,769 | Yes | | | | |
| Stage 5 | 10,547'-10,361' | 186 | 10,572'-10,336' | 236 | 7,951 | 80 | 5,296 | 6,273 | 30,500 | 310,600 | 101,000 | 442,100 | 4,238 | Yes | | | | |
| Stage 6 | 10,300'-10,124' | 176 | 10,336'-10,083' | 253 | 7,916 | 79 | 5,057 | 6,354 | 30,500 | 301,700 | 100,600 | 441,800 | 3,841 | Yes | | | | |
| Stage 7 | 10,053'-9,867' | 186 | 10,083'-9,836' | 247 | 8,108 | 81 | 5,162 | 6,488 | 32,700 | 310,800 | 121,300 | 464,800 | 4,004 | Yes | | | | |
| Stage 8 | 9,803'-9,620' | 183 | 9,836'-9,589' | 247 | 7,307 | 80 | 5,141 | 6,509 | 30,800 | 310,300 | 100,400 | 441,500 | 4,134 | Yes | | | | |
| Stage 9 | 9,559'-9,373' | 186 | 9,589'-9,342' | 247 | 7,955 | 76 | 5,255 | 6,834 | 30,700 | 311,100 | 106,900 | 448,700 | 5,156 | Yes | | | | |
| Stage 10 | 9,312'-9,126' | 186 | 9,342'-9,095' | 247 | 7,482 | 75 | 5,153 | 6,705 | 30,500 | 316,100 | 100,300 | 446,900 | 4,889 | Yes | | | | |
| Stage 11 | 9,065'-8,879' | 186 | 9,095'-8,848' | 247 | 6,944 | 78 | 4,964 | 6,283 | 31,500 | 309,700 | 99,200 | 440,400 | 4,821 | Yes | | | | |
| Stage 12 | 8,818'-8,632' | 186 | 8,848'-8,601' | 247 | 7,610 | 81 | 5,528 | 6,261 | 30,500 | 310,300 | 100,900 | 441,700 | 3,644 | Yes | | | | |
| Stage 13 | 8,571'-8,385' | 186 | 8,601'-8,354' | 247 | 7,398 | 81 | 5,278 | 6,025 | 30,200 | 309,600 | 99,800 | 439,600 | 3,694 | Yes | | | | |
| Stage 14 | 8,324'-8,141' | 183 | 8,354'-8,107' | 247 | 7,169 | 79 | 5,102 | 6,277 | 30,500 | 311,700 | 100,100 | 442,300 | 3,624 | Yes | | | | |
| Stage 15 | 8,077'-7,891' | 186 | 8,107'-7,860' | 247 | 6,913 | 79 | 5,353 | 6,134 | 30,300 | 309,700 | 100,000 | 440,000 | 4,423 | Yes | | | | |
| Stage 16 | 7,830'-7,644' | 186 | 7,860'-7,613' | 247 | 7,351 | 78 | 5,576 | 6,422 | 30,000 | 311,800 | 99,700 | 441,500 | 4,535 | Yes | | | | |
| Stage 17 | 7,583'-7,397' | 186 | 7,613'-7,366' | 247 | 6,944 | 80 | 5,141 | 6,168 | 30,000 | 310,300 | 101,400 | 441,700 | 4,688 | Yes | | | | |
| Stage 18 | 7,333'-7,150' | 183 | 7,366'-7,119' | 247 | 7,150 | 80 | 5,762 | 6,120 | 30,000 | 310,900 | 100,300 | 441,200 | 4,105 | Yes | | | | |
| Stage 19 | 7,089'-6,903' | 186 | 7,119'-6,872' | 247 | 6,982 | 79 | 5,402 | 6,122 | 29,300 | 309,500 | 99,500 | 438,300 | 4,220 | Yes | | | | |
| Stage 20 | 6,842'-6,656' | 186 | 6,872'-6,625' | 247 | 8,933 | 80 | 5,802 | 6,228 | 29,500 | 310,000 | 99,900 | 439,400 | 4,487 | Yes | | | | |
| Stage 21 | 6,595'-6,414' | 181 | 6,625'- | N/A | 7,176 | 76 | 5,897 | 6,325 | 31,500 | 307,200 | 104,900 | 443,600 | 4,565 | Yes | | | | |

| | | | | | | | | | | | | | | |
|---------|----|--|-------|--|-------|---------|-------|---------|---------|---------|-----------|-----------|-----------|--------|
| Total | 21 | | 3,769 | | 4,940 | 162,420 | 1,651 | 115,226 | 134,695 | 712,000 | 6,124,500 | 2,394,400 | 9,239,900 | 89,908 |
| Average | | | 179 | | 247 | 7,734 | 79 | 5,487 | 6,414 | 33,905 | 291,643 | 114,019 | 439,995 | 4,281 |

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CHEMICAL SUMMARY

Collins 1117H (P# 47-095-02041) Tyler County - Ellsworth District Middlebourne Quadrangle

| STAGE # | SURFACTANT (gals.) | BIOCIDES (gals.) | SCALE INHIBITOR (gals.) | FRICTION REDUCER (gals.) | PRO GEL (gals.) | PRO BREAKER (qts.) | 7.5% HCL ACID (gals.) |
|---------|--------------------|------------------|-------------------------|--------------------------|-----------------|--------------------|-----------------------|
| 1 | 412 | 98 | 50 | 302 | 325 | 1.5 | 2,000 |
| 2 | 302 | 80 | 40 | 280 | 393 | 2 | 2,000 |
| 3 | 303 | 89 | 40 | 335 | 351 | 1.5 | 2,000 |
| 4 | 325 | 85 | 46 | 331 | 385 | 2 | 2,000 |
| 5 | 287 | 88 | 40 | 262 | 370 | 1.5 | 2,000 |
| 6 | 298 | 97 | 44 | 242 | 230 | 1 | 2,000 |
| 7 | 297 | 119 | 41 | 215 | 214 | 1 | 2,000 |
| 8 | 285 | 107 | 41 | 184 | 112 | 0.5 | 2,000 |
| 9 | 325 | 121 | 42 | 297 | 302 | 1.5 | 2,000 |
| 10 | 293 | 110 | 45 | 271 | 285 | 1.5 | 2,000 |
| 11 | 275 | 103 | 41 | 247 | 371 | 1.5 | 2,000 |
| 12 | 297 | 115 | 45 | 269 | 616 | 2.5 | 2,000 |
| 13 | 298 | 112 | 40 | 317 | 282 | 1 | 2,000 |
| 14 | 280 | 110 | 42 | 310 | 430 | 2 | 2,000 |
| 15 | 287 | 105 | 39 | 258 | 460 | 2 | 2,000 |
| 16 | 290 | 120 | 42 | 312 | 382 | 1.5 | 2,000 |
| 17 | 283 | 104 | 40 | 253 | 279 | 1.5 | 2,000 |
| 18 | 282 | 112 | 42 | 265 | 348 | 1.5 | 2,000 |
| 19 | 277 | 100 | 40 | 245 | 480 | 2 | 2,000 |
| 20 | 350 | 132 | 50 | 356 | 455 | 1.5 | 2,000 |
| 21 | 259 | 95 | 37 | 181 | 430 | 2 | 2,000 |
| TOTALS: | 6,305 | 2,202 | 887 | 5,732 | 7,500 | 33 | 42,000 |
| | Gals | Gals | Gals | Gals | Gals | Qts | Gals |

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