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AUG 2 2017  
WV Department of  
Environmental Protection

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

API 47-009-00178 County BROOKE District BUFFALO  
Quad STEUENVILLE Pad Name RUSSELL HERVEY-BRK-PAD1 Field/Pool Name PANHANDLE FIELD  
Farm name RUSSELL D. HERVEY & LISA K. HERVEY Well Number RUSSELL HERVEY BRK 1H  
Operator (as registered with the OOG) SWN PRODUCTION COMPANY, LLC  
Address PO BOX 12359 City SPRING State TX Zip 77391-2359

As Drilled location NAD 83/UTM Attach an as-drilled plat, profile view, and deviation survey  
Top hole Northing 4,456,505.809 Easting 537,701.383  
Landing Point of Curve Northing 4,456,633.924 Easting 537,727.842  
Bottom Hole Northing 4,458,542.274 Easting 536,530.997

Elevation (ft) 1166' 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)  
SOBM

Date permit issued 4/06/2016 Date drilling commenced 7/26/2016 Date drilling ceased 10/06/2016  
Date completion activities began 4/13/2017 Date completion activities ceased 5/3/2017  
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 221' Open mine(s) (Y/N) depths N  
Salt water depth(s) ft 881' Void(s) encountered (Y/N) depths N  
Coal depth(s) ft 255' Cavern(s) encountered (Y/N) depths N  
Is coal being mined in area (Y/N) \_\_\_\_\_

**APPROVED**

NAME: Eric Beard  
DATE: 9/12/17

Reviewed by: \_\_\_\_\_

API 47- 009 - 00178 Farm name RUSSELL D. HERVEY & LISA K. HERVEY Well number RUSSELL HERVEY BRK 1H

| CASING STRINGS            | Hole Size   | Casing Size | Depth | New or Used | Grade wt/ft | Basket Depth(s) | Did cement circulate (Y/N)<br>* Provide details below* |
|---------------------------|-------------|-------------|-------|-------------|-------------|-----------------|--|
| Conductor                 | 24          | 20.00       | 126   | NEW         | K-55/94#    |                 | Y  |
| Surface                   | 17.5        | 13.375      | 379   | NEW         | H-40/48#    |                 | Y; 14 BBLS RETURNED                                    |
| Coal                      | SEE SURFACE |             |       |             |             |                 |  |
| Intermediate 1            | 12.25       | 9.625       | 2020  | NEW         | J-55/36#    |                 | Y; 30 BBLS RETURNED                                    |
| Intermediate 2            |             |             |       |             |             |                 |  |
| Intermediate 3            |             |             |       |             |             |                 |  |
| Production                | 8.75/8.50   | 5.5         | 13124 | NEW         | HCP-110/20# |                 | Y  |
| Tubing                    |             | 2.375       | 6371  | NEW         | P-110/4.7#  |                 | N  |
| Packer type and depth set |             |             |       |             |             |                 |  |

Comment Details \_\_\_\_\_

| CEMENT DATA    | Class/Type of Cement | Number of Sacks  | Slurry wt (ppg) | Yield (ft <sup>3</sup> /sks) | Volume (ft <sup>3</sup> ) | Cement Top (MD) | WOC (hrs) |
|----------------|----------------------|------------------|-----------------|------------------------------|---------------------------|-----------------|-----------|
| Conductor      | CLASS A              | GROUT TO SURFACE |                 | 1.20                         |                           | SURFACE         | 24        |
| Surface        | CLASS A              | 400              | 15.60           | 1.20                         | 480                       | SURFACE         | 8         |
| Coal           | SEE SURFACE          |                  |                 |                              |                           |                 |           |
| Intermediate 1 | CLASS A              | 780              | 15.60           | 1.20                         | 936                       | SURFACE         | 8         |
| Intermediate 2 |                      |                  |                 |                              |                           |                 |           |
| Intermediate 3 |                      |                  |                 |                              |                           |                 |           |
| Production     | CLASS A              | 800/1495         | 15.60           | 1.23/1.19                    | 984/1779.05               | SURFACE         | 24        |
| Tubing         |                      |                  |                 |                              |                           |                 |           |

Drillers TD (ft) 13,124' Loggers TD (ft) 13,124'

Deepest formation penetrated MARCELLUS Plug back to (ft) N/A

Plug back procedure \_\_\_\_\_

Kick off depth (ft) 5,435'

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 \_\_\_\_\_

SURFACE: 7 CENTRALIZERS - EVERY THIRD JOINT OF CASING  
 INTERMEDIATE: 24 CENTRALIZERS - EVERY THIRD JOINT OF CASING  
 PRODUCTION: 181 CENTRALIZERS - EVERY THIRD JOINT FROM SURFACE TO TOP OF CURVE, THEN EVERY JOINT UNTIL TD

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WAS WELL COMPLETED AS SHOT HOLE  Yes  No DETAILS \_\_\_\_\_

WAS WELL COMPLETED OPEN HOLE?  Yes  No DETAILS \_\_\_\_\_

WERE TRACERS USED  Yes  No TYPE OF TRACER(S) USED \_\_\_\_\_

API 47- 009 - 00178

Farm name RUSSELL D. HERVEY & LISA K. HERVEY

Well number RUSSELL HERVEY BRK 1H

PERFORATION RECORD

| Stage No. | Perforation date | Perforated from MD ft. | Perforated to MD ft. | Number of Perforations | Formation(s) |
|-----------|------------------|------------------------|----------------------|------------------------|--------------|
|           | SEE              | ATTACHMENT             | 1                    |                        |              |
|           |                  |                        |                      |                        |              |
|           |                  |                        |                      |                        |              |
|           |                  |                        |                      |                        |              |
|           |                  |                        |                      |                        |              |
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|           |                  |                        |                      |                        |              |
|           |                  |                        |                      |                        |              |

Please insert additional pages as applicable.

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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) |
|-----------|-------------------|---------------------|------------------------------|------------------------------|------------|--------------------------|------------------------|----------------------------------|
|           |                   | SEE                 | ATTACHMENT                   | 2                            |            |                          |                        |                                  |
|           |                   |                     |                              |                              |            |                          |                        |                                  |
|           |                   |                     |                              |                              |            |                          |                        |                                  |
|           |                   |                     |                              |                              |            |                          |                        |                                  |
|           |                   |                     |                              |                              |            |                          |                        |                                  |
|           |                   |                     |                              |                              |            |                          |                        |                                  |
|           |                   |                     |                              |                              |            |                          |                        |                                  |
|           |                   |                     |                              |                              |            |                          |                        |                                  |
|           |                   |                     |                              |                              |            |                          |                        |                                  |
|           |                   |                     |                              |                              |            |                          |                        |                                  |
|           |                   |                     |                              |                              |            |                          |                        |                                  |
|           |                   |                     |                              |                              |            |                          |                        |                                  |
|           |                   |                     |                              |                              |            |                          |                        |                                  |
|           |                   |                     |                              |                              |            |                          |                        |                                  |
|           |                   |                     |                              |                              |            |                          |                        |                                  |
|           |                   |                     |                              |                              |            |                          |                        |                                  |
|           |                   |                     |                              |                              |            |                          |                        |                                  |
|           |                   |                     |                              |                              |            |                          |                        |                                  |
|           |                   |                     |                              |                              |            |                          |                        |                                  |
|           |                   |                     |                              |                              |            |                          |                        |                                  |
|           |                   |                     |                              |                              |            |                          |                        |                                  |
|           |                   |                     |                              |                              |            |                          |                        |                                  |
|           |                   |                     |                              |                              |            |                          |                        |                                  |
|           |                   |                     |                              |                              |            |                          |                        |                                  |
|           |                   |                     |                              |                              |            |                          |                        |                                  |
|           |                   |                     |                              |                              |            |                          |                        |                                  |
|           |                   |                     |                              |                              |            |                          |                        |                                  |
|           |                   |                     |                              |                              |            |                          |                        |                                  |

Please insert additional pages as applicable.

API 47- 009 - 00178 Farm name RUSSELL D. HERVEY & LISA K. HERVEY Well number RUSSELL HERVEY BRK 1H

| <u>PRODUCING FORMATION(S)</u> | <u>DEPTHS</u>        |                     |
|-------------------------------|----------------------|---------------------|
| <u>MARCELLUS</u>              | <u>5,855.18'</u> TVD | <u>6,226.70'</u> MD |
| _____                         | _____                | _____               |
| _____                         | _____                | _____               |
| _____                         | _____                | _____               |

Please insert additional pages as applicable.

GAS TEST  Build up  Drawdown  Open Flow OIL TEST  Flow  Pump

SHUT-IN PRESSURE Surface 1250 psi Bottom Hole \_\_\_\_\_ psi DURATION OF TEST \_\_\_\_\_ hrs

OPEN FLOW Gas 1409 mcfpd Oil 205 bpd NGL \_\_\_\_\_ bpd Water 377 bpd GAS MEASURED BY  Estimated  Orifice  Pilot

| <u>LITHOLOGY/<br/>FORMATION</u> | <u>TOP</u>                      | <u>BOTTOM</u>              | <u>TOP</u>                | <u>BOTTOM</u>             | <u>DESCRIBE ROCK TYPE AND RECORD QUANTITY AND<br/>TYPE OF FLUID (FRESHWATER, BRINE, OIL, GAS, H<sub>2</sub>S, ETC)</u> |
|---------------------------------|---------------------------------|----------------------------|---------------------------|---------------------------|--|
|                                 | <u>DEPTH IN FT<br/>NAME TVD</u> | <u>DEPTH IN FT<br/>TVD</u> | <u>DEPTH IN FT<br/>MD</u> | <u>DEPTH IN FT<br/>MD</u> |  |
|                                 | <u>0</u>                        |                            | <u>0</u>                  |                           |  |
|                                 | <u>SEE</u>                      | <u>ATTACHMENT</u>          | <u>3</u>                  |                           |  |
|                                 |                                 |                            |                           |                           |  |
|                                 |                                 |                            |                           |                           |  |
|                                 |                                 |                            |                           |                           |  |
|                                 |                                 |                            |                           |                           |  |
|                                 |                                 |                            |                           |                           |  |
|                                 |                                 |                            |                           |                           |  |
|                                 |                                 |                            |                           |                           |  |
|                                 |                                 |                            |                           |                           |  |
|                                 |                                 |                            |                           |                           |  |
|                                 |                                 |                            |                           |                           |  |
|                                 |                                 |                            |                           |                           |  |

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Drilling Contractor SWN DRILLING COMPANY  
Address PO BOX 12359 City SPRING State TX Zip 77391-2359

Logging Company NINE ENERGY  
Address 16945 NORTHCASE DRIVE, STE 1600 City HOUSTON State TX Zip 77060

Cementing Company SCHLUMBERGER WELL SERVICES  
Address 110 SCHLUMBERGER DRIVE City SUGAR LAND State TX Zip 77478

Stimulating Company KEANE  
Address 2121 SAGE ROAD City HOUSTON State TX Zip 77056

Please insert additional pages as applicable.

Completed by DENISE GRANTHAM Telephone 832-796-6139  
Signature *Denise Grantham* Title REGULATORY TECHNICIAN Date 8/1/2017

RUSSELL HERVEY BRK 1H  
PERF SUMMARY

| STAGE<br>NUM | Perf Date | Perf Top MD | Perf Bottom MD | # SHOTS<br>PER STG |
|--------------|-----------|-------------|----------------|--------------------|
| 1            | 4/14/2017 | 12,775      | 12,990         | 53                 |
| 2            | 4/14/2017 | 12,525      | 12,715         | 53                 |
| 3            | 4/14/2017 | 12,259      | 12,464         | 53                 |
| 4            | 4/15/2017 | 11,999      | 12,197         | 53                 |
| 5            | 4/15/2017 | 11,741      | 11,934         | 53                 |
| 6            | 4/15/2017 | 11,479      | 11,684         | 53                 |
| 7            | 4/15/2017 | 11,217      | 11,421         | 42                 |
| 8            | 4/15/2017 | 10,957      | 11,153         | 42                 |
| 9            | 4/16/2017 | 10,709      | 10,893         | 42                 |
| 10           | 4/16/2017 | 10,439      | 10,651         | 42                 |
| 11           | 4/16/2017 | 10,173      | 10,381         | 42                 |
| 12           | 4/16/2017 | 9,913       | 10,111         | 42                 |
| 13           | 4/17/2017 | 9,661       | 9,845          | 42                 |
| 14           | 4/17/2017 | 9,409       | 9,601          | 42                 |
| 15           | 4/17/2017 | 9,144       | 9,351          | 42                 |
| 16           | 4/18/2017 | 8,893       | 9,081          | 42                 |
| 17           | 4/18/2017 | 8,621       | 8,831          | 42                 |
| 18           | 4/18/2017 | 8,363       | 8,564          | 42                 |
| 19           | 4/26/2017 | 8,109       | 8,291          | 42                 |
| 20           | 4/26/2017 | 7,833       | 8,044          | 42                 |
| 21           | 4/27/2017 | 7,571       | 7,765          | 42                 |
| 22           | 4/27/2017 | 7,312       | 7,509          | 42                 |
| 23           | 4/27/2017 | 7,061       | 7,254          | 42                 |
| 24           | 4/27/2017 | 6,731       | 6,985          | 42                 |
| 25           | 4/27/2017 | 6,414       | 6,685          | 42                 |

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RUSSELL HERVEY BRK 1H  
FRAC STAGE SUMMARY

| STAGE<br>NUM | Stim Date | Ave Pump<br>Rate (BPM) | Ave Treatment<br>Pressure (PSI) | Max Breakdown<br>Pressure (PSI) | ISIP (PSI) | Amount of<br>Proppant (lbs) | Amount of<br>water bbls | Amount of<br>nitrogen/other |
|--------------|-----------|------------------------|---------------------------------|---------------------------------|------------|-----------------------------|-------------------------|-----------------------------|
| 1            | 4/14/2017 | 99                     | 7822                            | 8125                            | 3898       | 505720                      | 9124                    |                             |
| 2            | 4/14/2017 | 94                     | 7315                            | 8698                            | 4288       | 500500                      | 7441                    |                             |
| 3            | 4/14/2017 | 91                     | 7349                            | 8705                            | 4238       | 500600                      | 7453                    |                             |
| 4            | 4/15/2017 | 99                     | 7771                            | 8444                            | 4624       | 499000                      | 7415                    |                             |
| 5            | 4/15/2017 | 98                     | 7625                            | 8540                            | 4259       | 504100                      | 7232                    |                             |
| 6            | 4/15/2017 | 98                     | 8022                            | 8801                            | 4106       | 503340                      | 7246                    |                             |
| 7            | 4/15/2017 | 95                     | 7604                            | 8447                            | 4377       | 503000                      | 7205                    |                             |
| 8            | 4/15/2017 | 97                     | 7173                            | 8472                            | 4395       | 499120                      | 7240                    |                             |
| 9            | 4/16/2017 | 100                    | 7164                            | 8376                            | 4603       | 507360                      | 7151                    |                             |
| 10           | 4/16/2017 | 99                     | 7265                            | 8494                            | 4424       | 501780                      | 6949                    |                             |
| 11           | 4/16/2017 | 95                     | 7589                            | 9198                            | 4349       | 499300                      | 7110                    |                             |
| 12           | 4/16/2017 | 97                     | 7946                            | 8894                            | 4249       | 499960                      | 7099                    |                             |
| 13           | 4/17/2017 | 99                     | 7455                            | 7685                            | 4803       | 498520                      | 7364                    |                             |
| 14           | 4/17/2017 | 101                    | 7127                            | 8204                            | 4463       | 502140                      | 7031                    |                             |
| 15           | 4/17/2017 | 101                    | 7440                            | 9137                            | 4424       | 503500                      | 7083                    |                             |
| 16           | 4/18/2017 | 99                     | 6993                            | 8211                            | 4599       | 502380                      | 6915                    |                             |
| 17           | 4/18/2017 | 99                     | 7144                            | 7392                            | 4463       | 491680                      | 6951                    |                             |
| 18           | 4/18/2017 | 101                    | 6826                            | 8454                            | 4102       | 414600                      | 6228                    |                             |
| 19           | 4/26/2017 | 100                    | 7057                            | 7799                            | 4703       | 498740                      | 6894                    |                             |
| 20           | 4/26/2017 | 101                    | 6493                            | 6849                            | 4513       | 501380                      | 6978                    |                             |
| 21           | 4/27/2017 | 101                    | 6616                            | 8100                            | 4596       | 501900                      | 6846                    |                             |
| 22           | 4/27/2017 | 101                    | 6521                            | 7389                            | 4259       | 501520                      | 6790                    |                             |
| 23           | 4/27/2017 | 100                    | 6519                            | 7929                            | 4481       | 503280                      | 6772                    |                             |
| 24           | 4/27/2017 | 100                    | 6147                            | 7671                            | 4531       | 503360                      | 6752                    |                             |
| 25           | 4/27/2017 | 100                    | 6361                            | 7138                            | 4463       | 523500                      | 6855                    |                             |

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Well Name:

RUSSELL HERVEY BRK 1H

47009001780000

| LITHOLOGY/FORMATION | TOP DEPTH, MD (FT) | TOP DEPTH, TVD (FT) | BOTTOM DEPTH, MD (FT) | BOTTOM DEPTH, TVD (FT) | QUANTITY AND TYPE OF FLUID |
|---------------------|--------------------|---------------------|-----------------------|------------------------|----------------------------|
| Base of Fresh Water | N.A.               | N.A.                | 221.00                | 221.00                 |                            |
| Top of Salt Water   | 881.00             | 881.00              | NA                    | NA                     |                            |
| Pittsburgh Coal     | 255.00             | 255.00              | 260.00                | 260.00                 |                            |
| Big Injun (ss)      | 1570.00            | 1568.37             | 1584.00               | 1582.30                |                            |
| Berea (siltstone)   | 1914.00            | 1910.82             | 1932.00               | 1928.73                |                            |
| Rhinestreet (shale) | 5550.30            | 5406.65             | 5717.26               | 5554.49                |                            |
| Cashaqua (shale)    | 5717.26            | 5554.49             | 5775.36               | 5601.75                |                            |
| Middlesex (shale)   | 5775.36            | 5601.75             | 5855.91               | 5664.24                |                            |
| Burket (shale)      | 5855.91            | 5664.24             | 5878.81               | 5680.91                |                            |
| Tully (ls)          | 5878.81            | 5680.91             | 5964.04               | 5738.55                |                            |
| Mahantango (shale)  | 5964.04            | 5738.55             | 6226.70               | 5855.18                |                            |
| Marcellus (shale)   | 6226.70            | 5855.18             | N.A.                  | N.A.                   | GAS                        |

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# Hydraulic Fracturing Fluid Product Component Information Disclosure

|                                |                      |
|--------------------------------|----------------------|
| Job Start Date:                | 4/14/2017            |
| Job End Date:                  | 4/28/2017            |
| State:                         | West Virginia        |
| County:                        | Brooke               |
| API Number:                    | 47-009-00178-00-00   |
| Operator Name:                 | Southwestern Energy  |
| Well Name and Number:          | Russel Hervey BRK 1H |
| Latitude:                      | 40.25816400          |
| Longitude:                     | -80.55665000         |
| Datum:                         | NAD83                |
| Federal Well:                  | NO                   |
| Indian Well:                   | NO                   |
| True Vertical Depth:           | 5,879                |
| Total Base Water Volume (gal): | 7,380,142            |
| Total Base Non Water Volume:   | 0                    |



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## Hydraulic Fracturing Fluid Composition:

| Trade Name             | Supplier                | Purpose                   | Ingredients                                  | Chemical Abstract Service Number (CAS #) | Maximum Ingredient Concentration in Additive (% by mass)** | Maximum Ingredient Concentration in HF Fluid (% by mass)** | Comments |
|------------------------|-------------------------|---------------------------|--|--|--|--|----------|
| Water                  | Southwestern Energy     | Carrier/Base Fluid        | Water  | 7732-18-5                                | 100.00000  | 82.11493   |          |
| Sand                   | U.S. Well Services, LLC | Proppant                  | Crystalline Silica, quartz                   | 14808-60-7                               | 100.00000  | 16.63671   |          |
| HCL Acid (12.6%-17.5%) | U.S. Well Services, LLC | Bulk Acid                 | Water  | 7732-18-5                                | 87.40000   | 0.98314  |          |
|                        |                         |                           | Hydrogen Chloride                            | 7647-01-0                                | 17.50000   | 0.22858  |          |
| WFRA-2000              | U.S. Well Services, LLC | Friction Reducer          | 2-Propenoic acid, polymer with 2 propenamide | 9003-06-9                                | 30.00000   | 0.01973  |          |
|                        |                         |                           | Hydrated light distillate (petroleum)        | 64742-47-8                               | 30.00000   | 0.01618  |          |
| AI-303                 | U.S. Well Services, LLC | Acid Corrosion Inhibitors | Ethylene glycol                              | 107-21-1                                 | 40.00000   | 0.00032  |          |
|                        |                         |                           | Cinnamaldehyde                               | 104-55-2                                 | 20.00000   | 0.00012  |          |
|                        |                         |                           | Formic acid                                  | 64-18-6                                  | 20.00000   | 0.00011  |          |
|                        |                         |                           | Butyl cellosolve                             | 111-76-2                                 | 20.00000   | 0.00010  |          |



|  |  |  |  |  |          |         |
|--|--|--|--|--|----------|---------|
|  |  |  |  | 60828-78-6                                   | 10.00000 | 0.00006 |
|  |  |  |  | Acetophenone, thiourea, formaldehyde polymer | 5.00000  | 0.00003 |
| Ingredients shown above are subject to 29 CFR 1910.1200(i) and appear on Material Safety Data Sheets (MSDS). Ingredients shown below are Non-MSDS. |  |  |  |  |          |         |

\* Total Water Volume sources may include fresh water, produced water, and/or recycled water  
 \*\* Information is based on the maximum potential for concentration and thus the total may be over 100%

Note: For Field Development Products (products that begin with FDP), MSDS level only information has been provided. Ingredient information for chemicals subject to 29 CFR 1910.1200(i) and Appendix D are obtained from suppliers Material Safety Data Sheets (MSDS)

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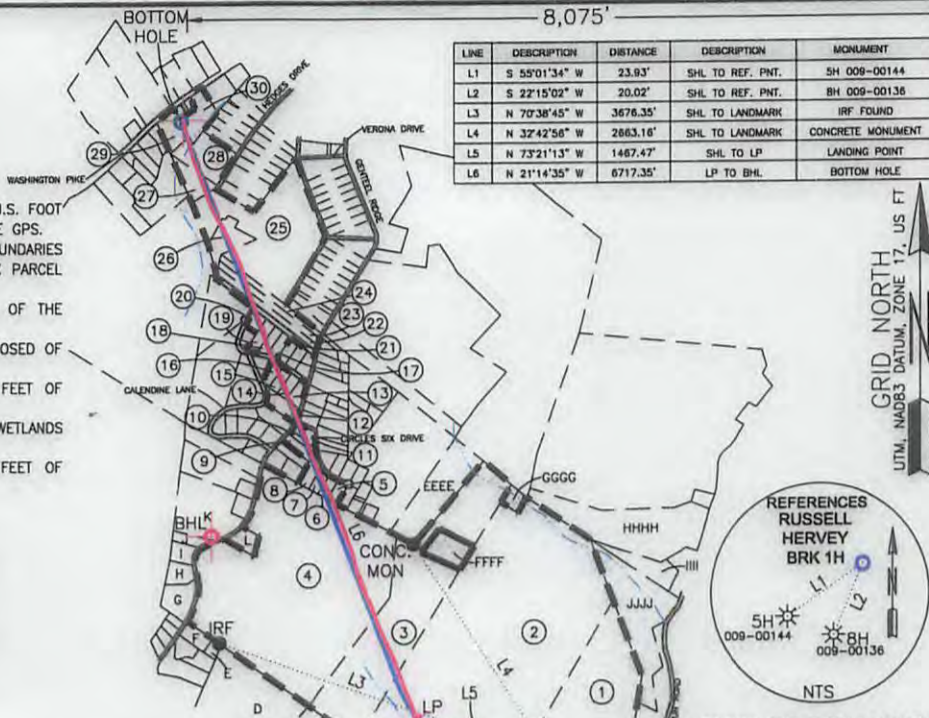
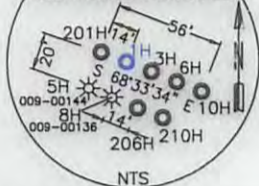
# THRASHER

THE THRASHER GROUP, INC.  
600 WHITE OAKS BLVD.  
BRIDGEPORT, WV 26330  
PHONE 304-624-4108

### NOTES ON SURVEY

- COORDINATES SYSTEM IS UTM, NAD 83 DATUM, ZONE 17, U.S. FOOT AND WELL COORDINATES ESTABLISHED USING SURVEY GRADE GPS.
- SURFACE AND ROYALTY OWNER INFORMATION AND THEIR BOUNDARIES SHOWN HEREON WERE PLOTTED FROM DEEDS AND/OR TAX PARCEL MAPS PROVIDED BY CLIENT AND FIELD LOCATIONS.
- THIS PLAT DOES NOT REPRESENT A BOUNDARY SURVEY OF THE PARCELS SHOWN HEREON.
- NO DWELLINGS AND BUILDINGS WITHIN 625 FEET OF PROPOSED OF CENTER OF PAD.
- NO WATER WELLS OR DEVELOPED SPRINGS WITHIN 250 FEET OF PROPOSED WELL.
- NO PERENNIAL STREAMS, LAKES, PONDS, RESERVOIRS OR WETLANDS WITHIN 100 FEET OF THE LIMITS OF DISTURBANCE.
- NO NATURALLY PRODUCING TROUT STREAM WITHIN 300 FEET OF LIMITS OF DISTURBANCE.

### REFERENCES TO PROPOSED HORIZONTAL WELLS SURFACE LOCATIONS



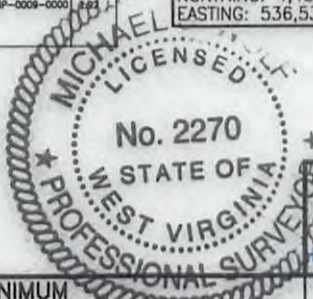
**SWN PRODUCTION COMPANY, LLC**  
**RUSSELL HERVEY BRK 1H"**  
**SURFACE HOLE**  
ELEV: 1166' (AS-DRILLED)

| TRACT | SURFACE OWNER (S) / ROYALTY OWNER (R)            | TAX PARCEL           | ACRES  |
|-------|--|----------------------|--------|
| 1     | (S)RUSSELL D. HERVEY                             | 05-03-828-0045-0000  | 37.84  |
| 2     | (R)RUSSELL D. HERVEY & LISA K. HERVEY            | 05-03-828-0045-0002  | 112.51 |
| 3     | (S)WILLIAM JUDSON HERVEY, II & THERESA J. HERVEY | 05-03-828-0045-0001  | 37.84  |
| 4     | (S)FREDERICK L. HERVEY & CATHY JO HERVEY         | 05-03-828-0044-0000  | 74.88  |
| 5     | (S)ROBERT G. STANLEY & ELLEN STANLEY             | 05-03-828-0031-0000  | 0.60   |
| 6     | (S)ROBERT G. STANLEY & ELLEN STANLEY             | 05-03-828-0029-0000  | 0.74   |
| 7     | (S)ROBERT G. STANLEY & ELLEN STANLEY             | 05-03-828-0028-0000  | 1.05   |
| 8     | (S)ROBERT G. STANLEY & ELLEN STANLEY             | 05-03-828-0028-0000  | 1.12   |
| 9     | (S)ROBERT G. STANLEY & ELLEN STANLEY             | 05-03-828-0038-0000  | 0.36   |
| 10    | (S)ROBERT G. STANLEY & ELLEN STANLEY             | 05-03-828-0038-0000  | 0.36   |
| 11    | (S)ROBERT G. STANLEY & ELLEN STANLEY             | 05-03-828-0040-0000  | 0.78   |
| 12    | (S)ROBERT G. STANLEY & ELLEN STANLEY             | 05-03-828-0011-0000  | 1.87   |
| 13    | (S)ROBERT G. STANLEY & ELLEN STANLEY             | 05-03-828-0005-0000  | 0.56   |
| 14    | (S)ROBERT G. STANLEY & ELLEN STANLEY             | 05-03-828-0006-0000  | 0.63   |
| 15    | (S)ROBERT G. STANLEY & ELLEN STANLEY             | 05-03-828-0007-0000  | 0.63   |
| 16    | (S)ROBERT G. STANLEY & ELLEN STANLEY             | 05-03-828-0008-0000  | 0.30   |
| 17    | (S)ROBERT G. STANLEY & ELLEN STANLEY             | 05-03-828-0001-0000  | 0.69   |
| 18    | (S)ROBERT G. STANLEY & ELLEN STANLEY             | 05-03-828-0031-0000  | 0.83   |
| 19    | (S)ROBERT G. STANLEY & ELLEN STANLEY             | 05-03-828-0032-0000  | 1.08   |
| 20    | (S)ROBERT G. STANLEY & ELLEN STANLEY             | 05-03-828-0034-0000  | 0.70   |
| 21    | (S)ROBERT G. STANLEY & ELLEN STANLEY             | 05-03-828-0030-0000  | 1.46   |
| 22    | (S)ROBERT G. STANLEY & ELLEN STANLEY             | 05-03-828-0029-0000  | 1.98   |
| 23    | (S)ROBERT G. STANLEY & ELLEN STANLEY             | 05-03-828-0028-0000  | 1.98   |
| 24    | (S)ROBERT G. STANLEY & ELLEN STANLEY             | 05-03-828-0027-0000  | 1.78   |
| 25    | (S)ROBERT G. STANLEY & ELLEN STANLEY             | 05-03-828-0014-0000  | 23.06  |
| 26    | (S)ROBERT G. STANLEY & ELLEN STANLEY             | 05-03-828-0015-0000  | 2.73   |
| 27    | (S)ROBERT G. STANLEY & ELLEN STANLEY             | 05-03-828-0002-0000  | 2.13   |
| 28    | (S)ROBERT G. STANLEY & ELLEN STANLEY             | 05-03-823P-0027-0000 | 4.30   |
| 29    | (S)ROBERT G. STANLEY & ELLEN STANLEY             | 05-03-823P-0005-0000 | 2.25   |
| 30    | (S)ROBERT G. STANLEY & ELLEN STANLEY             | 05-03-823P-0009-0000 | 2.23   |

| SURFACE HOLE LOCATION (SHL):   | SURFACE HOLE LOCATION (SHL):   |
|--|--|
| UTM (NAD83, ZONE 17, METERS):<br>NORTHING: 4,456,505.809<br>EASTING: 537,701.383 | UTM (NAD83, ZONE 17, METERS):<br>NORTHING: 4,456,505.809<br>EASTING: 537,701.383 |
| LANDING POINT LOCATION (LPL):  | LANDING POINT LOCATION (LPL):  |
| UTM (NAD83, ZONE 17, METERS):<br>NORTHING: 4,456,633.924<br>EASTING: 537,727.842 | UTM (NAD83, ZONE 17, METERS):<br>NORTHING: 4,456,513.274<br>EASTING: 537,526.906 |
| BOTTOM HOLE LOCATION (BHL):  | BOTTOM HOLE LOCATION (BHL):  |
| UTM (NAD83, ZONE 17, METERS):<br>NORTHING: 4,458,542.274<br>EASTING: 536,530.997 | UTM (NAD83, ZONE 17, METERS):<br>NORTHING: 4,458,538.631<br>EASTING: 536,524.103 |

I, THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAT IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AND SHOWS ALL THE INFORMATION REQUIRED BY LAW AND REGULATIONS ISSUED AND PRESCRIBED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION.

P.S. 2270



2000 0 2000

GRAPHIC SCALE IN FEET

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS  
WVDEP  
OFFICE OF OIL & GAS  
601 57TH STREET  
CHARLESTON, WV 25034

MINIMUM DEGREE OF ACCURACY: 1/200  
PROVEN SOURCE OF SURVEY GRADE GPS ELEVATION: (NAVD 88, US FT)

COMPANY: **SWN** Production Company, LLC  
**SWN** Production Company™  
OPERATOR'S WELL #: RUSSELL HERVEY BRK 1H  
API WELL #: 47 STATE 009 COUNTY PERMIT 00178

WELL TYPE: OIL  WASTE DISPOSAL  PRODUCTION  DEEP  GAS  LIQUID INJECTION  STORAGE  SHALLOW   
WATERSHED: BUFFALO CREEK ELEVATION: 1166' AS-DRILLED  
DISTRICT: BUFFALO COUNTY: BROOKE QUADRANGLE: STEUBENVILLE  
SURFACE OWNER: RUSSELL D. HERVEY ACREAGE: ±37.84  
OIL & GAS ROYALTY OWNER: RUSSELL D. HERVEY & LISA K. HERVEY ACREAGE: ±37.84  
DRILL  DRILL DEEPER  REDRILL  FRACTURE OR STIMULATE  PLUG OFF OLD FORMATION  PERFORATE NEW FORMATION   
CONVERT  PLUG & ABANDON  CLEAN OUT & REPLUG  OTHER CHANGE  (SPECIFY)  
TARGET FORMATION: MARCELLUS ESTIMATED DEPTH: 5,818' TVD 13,124' TMD

WELL OPERATOR: SWN PRODUCTION COMPANY, LLC DESIGNATED AGENT: DEE SOUTHALL  
ADDRESS: P.O. BOX 1300 ADDRESS: P.O. BOX 1300  
CITY: JANE LEW STATE: WV ZIP CODE: 26378 CITY: JANE LEW STATE: WV ZIP CODE: 26378

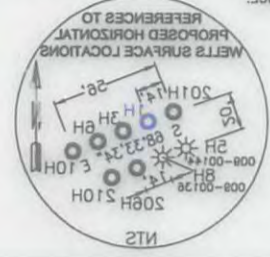
LEGEND:  
○ PROPOSED SURFACE HOLE / BOTTOM HOLE  
\* EXISTING / PRODUCING WELLHEAD  
X ABANDONED WELL  
X PLUGGED & ABANDONED WELL  
△ CUT CONDUCTOR  
--- LEASE BOUNDARY  
--- AS-DRILLED PATH  
--- PROPOSED PATH  
--- ABANDONED PATH  
REVISIONS:  
DATE: 06-27-2017  
DRAWN BY: R. DOERR  
SCALE: 1" = 2000'  
DRAWING NO: 050-5495  
WELL LOCATION PLAT

# THRASHER

THE THRASHER GROUP, INC.  
800 WHITE OAKS BLVD.  
BRIDGEPORT, WV 26330  
PHONE 304-624-4108

## NOTES ON SURVEY

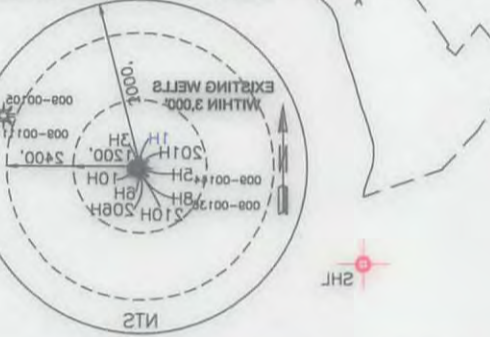
1. COORDINATES SYSTEM IS UTM, NAD 83 DATUM, ZONE 17, U.S. FOOT AND WELL COORDINATES ESTABLISHED USING SURVEY GRADE GPS.
2. SURFACE AND ROYALTY OWNER INFORMATION AND THEIR BOUNDARIES SHOWN HEREON WERE PLOTTED FROM DEEDS AND/OR TAX PARCEL MAPS PROVIDED BY CLIENT AND FIELD LOCATIONS.
3. THIS PLAN DOES NOT REPRESENT A BOUNDARY SURVEY OF THE PARCELS SHOWN HEREON.
4. NO DWELLINGS AND BUILDINGS WITHIN 625 FEET OF PROPOSED OR CENTER OF PAD.
5. NO WATER WELLS OR DEVELOPED SPRINGS WITHIN 250 FEET OF PROPOSED WELL.
6. NO PERMANENT STREAMS, LAKES, PONDS, RESERVOIRS OR WETLANDS WITHIN 100 FEET OF THE LIMITS OF DISTURBANCE.
7. NO NATURALLY PRODUCING TROUT STREAM WITHIN 300 FEET OF LIMITS OF DISTURBANCE.



| LINE | DESCRIPTION   | DISTANCE |
|------|---------------|----------|
| L1   | S 50°12'34" W | 22.92'   |
| L2   | S 22°18'02" W | 20.02'   |
| L3   | N 70°28'42" W | 28.18'±  |
| L4   | N 22°42'58" W | 28.62'±  |
| L5   | N 73°21'12" W | 14.82'±  |
| L6   | N 21°42'28" W | 87.12'±  |



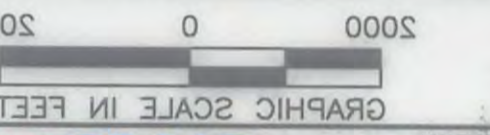
**SWN PRODUCTION COMPANY, LLC**  
**RUSSELL HERVEY BRK**  
**1H**  
**SURFACE HOLE**  
ELEV: 1166' (AS-DRILLED)SURFACE HOLE LOCATION (SHL):



| LOCATION                             | UTM (NAD83, ZONE 17, METERS) | NORTHING     | EASTING     |
|--------------------------------------|------------------------------|--------------|-------------|
| <b>SURFACE HOLE LOCATION (SHL):</b>  |                              | 4458,502,808 | 527,701,382 |
| <b>LANDING POINT LOCATION (LPL):</b> |                              | 4458,523,924 | 527,227,842 |
| <b>BOTTOM HOLE LOCATION (BHL):</b>   |                              | 4458,538,231 | 528,524,102 |

| TRACT | SURFACE OWNER (OR ROYALTY OWNER IF APPLICABLE)  | TAX PARCEL NUMBER   |
|-------|---|---------------------|
| 1     | (RUSSELL D. HERVEY & LISA K. HERVEY)            | 02-02-828-0042-0000 |
| 2     | (WILLIAM JUDSON HERVEY, JR. & TERESA J. HERVEY) | 02-02-828-0044-0000 |
| 3     | (RUSSELL D. HERVEY & LISA K. HERVEY)            | 02-02-828-0044-0000 |
| 4     | (RUSSELL D. HERVEY & LISA K. HERVEY)            | 02-02-828-0044-0000 |
| 5     | (RUSSELL D. HERVEY & LISA K. HERVEY)            | 02-02-828-0044-0000 |
| 6     | (RUSSELL D. HERVEY & LISA K. HERVEY)            | 02-02-828-0044-0000 |
| 7     | (RUSSELL D. HERVEY & LISA K. HERVEY)            | 02-02-828-0044-0000 |
| 8     | (RUSSELL D. HERVEY & LISA K. HERVEY)            | 02-02-828-0044-0000 |
| 9     | (RUSSELL D. HERVEY & LISA K. HERVEY)            | 02-02-828-0044-0000 |
| 10    | (RUSSELL D. HERVEY & LISA K. HERVEY)            | 02-02-828-0044-0000 |
| 11    | (RUSSELL D. HERVEY & LISA K. HERVEY)            | 02-02-828-0044-0000 |
| 12    | (RUSSELL D. HERVEY & LISA K. HERVEY)            | 02-02-828-0044-0000 |
| 13    | (RUSSELL D. HERVEY & LISA K. HERVEY)            | 02-02-828-0044-0000 |
| 14    | (RUSSELL D. HERVEY & LISA K. HERVEY)            | 02-02-828-0044-0000 |
| 15    | (RUSSELL D. HERVEY & LISA K. HERVEY)            | 02-02-828-0044-0000 |
| 16    | (RUSSELL D. HERVEY & LISA K. HERVEY)            | 02-02-828-0044-0000 |
| 17    | (RUSSELL D. HERVEY & LISA K. HERVEY)            | 02-02-828-0044-0000 |
| 18    | (RUSSELL D. HERVEY & LISA K. HERVEY)            | 02-02-828-0044-0000 |
| 19    | (RUSSELL D. HERVEY & LISA K. HERVEY)            | 02-02-828-0044-0000 |
| 20    | (RUSSELL D. HERVEY & LISA K. HERVEY)            | 02-02-828-0044-0000 |
| 21    | (RUSSELL D. HERVEY & LISA K. HERVEY)            | 02-02-828-0044-0000 |
| 22    | (RUSSELL D. HERVEY & LISA K. HERVEY)            | 02-02-828-0044-0000 |
| 23    | (RUSSELL D. HERVEY & LISA K. HERVEY)            | 02-02-828-0044-0000 |
| 24    | (RUSSELL D. HERVEY & LISA K. HERVEY)            | 02-02-828-0044-0000 |
| 25    | (RUSSELL D. HERVEY & LISA K. HERVEY)            | 02-02-828-0044-0000 |
| 26    | (RUSSELL D. HERVEY & LISA K. HERVEY)            | 02-02-828-0044-0000 |
| 27    | (RUSSELL D. HERVEY & LISA K. HERVEY)            | 02-02-828-0044-0000 |
| 28    | (RUSSELL D. HERVEY & LISA K. HERVEY)            | 02-02-828-0044-0000 |
| 29    | (RUSSELL D. HERVEY & LISA K. HERVEY)            | 02-02-828-0044-0000 |
| 30    | (RUSSELL D. HERVEY & LISA K. HERVEY)            | 02-02-828-0044-0000 |

Latitude: 40°17'30" N  
Longitude: 80°25'30" W



SWN PRODUCTION COMPANY, LLC  
Production Company, LLC



I, THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAN IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AND SHOWS ALL THE INFORMATION REQUIRED BY LAW AND REGULATIONS ISSUED AND PRESCRIBED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION.

WELL OPERATOR: SWN PRODUCTION COMPANY, LLC  
ADDRESS: P.O. BOX 1300  
CITY: JANE LEW STATE: WV ZIP CODE: 26378

DESIGNATED AGENT: DEE SOUTHAL  
ADDRESS: P.O. BOX 1300  
CITY: JANE LEW STATE: WV ZIP CODE: 26378

DATE: 08-27-2017  
DRAWN BY: R. DOERR  
SCALE: 1" = 2000'  
DRAWING NO: 050-5492  
WELL LOCATION PLAN

REVISIONS:

LEGEND:  
 ○ PROPOSED SURFACE HOLE / BOTTOM HOLE  
 \* EXISTING / PRODUCING WELLHEAD  
 ✕ ABANDONED WELL  
 ✕ PLUGGED & ABANDONED WELL  
 △ CUT CONDUCTOR  
 --- LEASE BOUNDARY  
 --- AS-DRILLED PATH  
 --- PROPOSED PATH  
 --- ABANDONED PATH

WELL TYPE: OIL  WASTE DISPOSAL  PRODUCTION  DEEP  SHALLOW

WATERSHED: BUFFALO CREEK  
DISTRICT: BUFFALO  
COUNTY: BROOK

SURFACE OWNER: RUSSELL D. HERVEY & LISA K. HERVEY  
OIL & GAS ROYALTY OWNER: RUSSELL D. HERVEY & LISA K. HERVEY

DRILL DEEPER  REDRILL  CLEAN OUT & REPLUG  OTHER CHANGE  (SPECIFY)  
 CONVERT  PLUG & ABANDON  DRILL DEEPER  REDRILL  CLEAN OUT & REPLUG  OTHER CHANGE  (SPECIFY)  
 ESTIMATED DEPTH: 5818' TVD 13124' TMD

PERFORATE NEW FORMATION  PLUG OFF OLD FORMATION  FRACTURE OR STIMULATE

WELL OPERATOR: SWN PRODUCTION COMPANY, LLC  
ADDRESS: P.O. BOX 1300  
CITY: JANE LEW STATE: WV ZIP CODE: 26378

DESIGNATED AGENT: DEE SOUTHAL  
ADDRESS: P.O. BOX 1300  
CITY: JANE LEW STATE: WV ZIP CODE: 26378

DATE: 08-27-2017  
DRAWN BY: R. DOERR  
SCALE: 1" = 2000'  
DRAWING NO: 050-5492  
WELL LOCATION PLAN

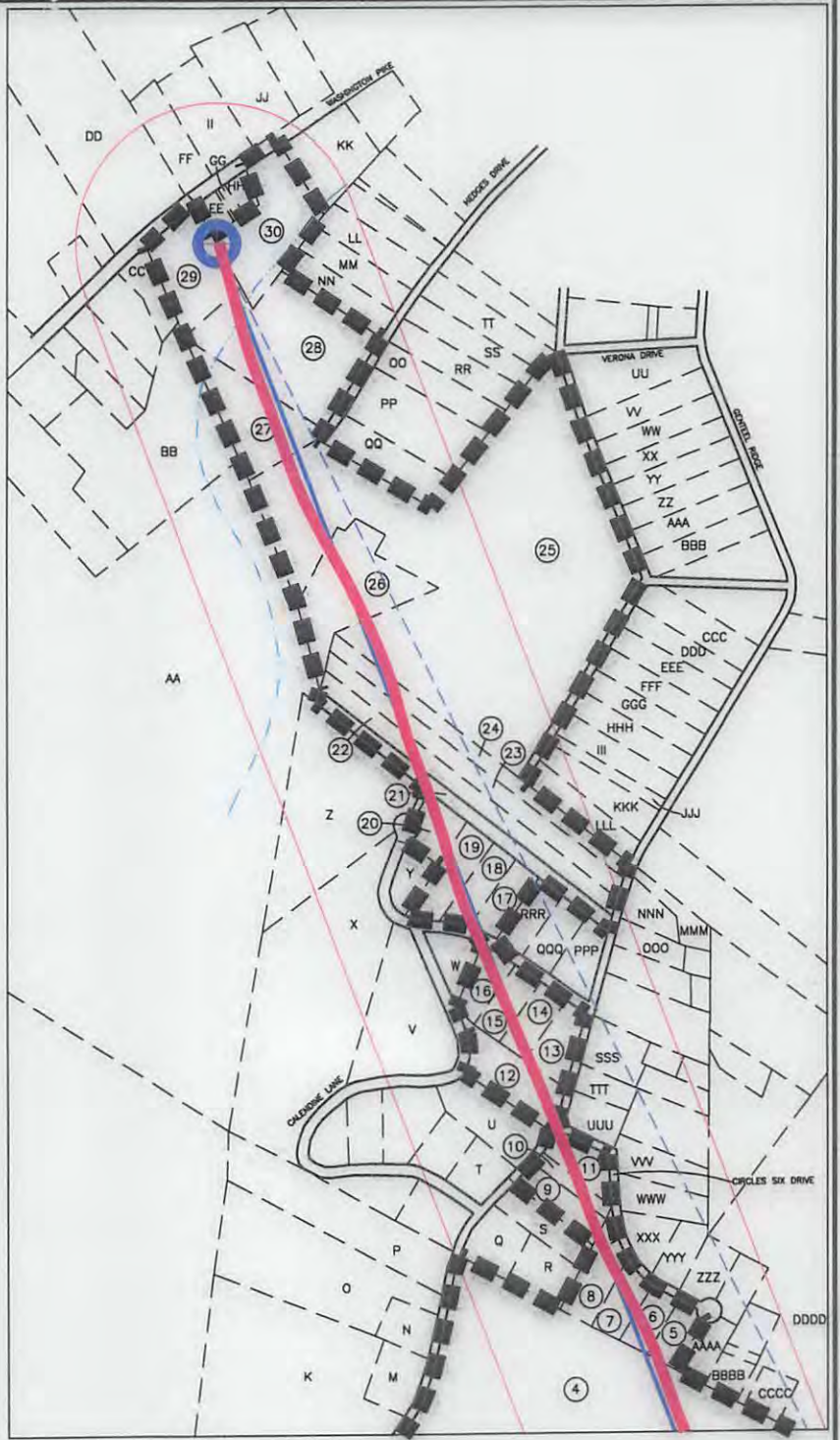
REVISIONS:

LEGEND:  
 ○ PROPOSED SURFACE HOLE / BOTTOM HOLE  
 \* EXISTING / PRODUCING WELLHEAD  
 ✕ ABANDONED WELL  
 ✕ PLUGGED & ABANDONED WELL  
 △ CUT CONDUCTOR  
 --- LEASE BOUNDARY  
 --- AS-DRILLED PATH  
 --- PROPOSED PATH  
 --- ABANDONED PATH

# THRASHER

THE THRASHER GROUP, INC.  
600 WHITE OAKS BLVD.  
BRIDGEPORT, WV 26330  
PHONE 304-624-4108

| TRACT | ADJONER   | PARCEL               |
|-------|---|----------------------|
| A     | STARAGO INDUSTRIES, INC.  | 05-03-833-0025-0000  |
| B     | MICHAEL WHITCO & PATRICIA WHITCO  | 05-03-828-0043-0000  |
| C     | RANDY R. GRAHAM & PATRICIA J. GRAHAM  | 05-03-828-0042-0000  |
| D     | MICHAEL WHITCO, ET AL   | 05-03-828-0029-0000  |
| E     | DAVID F. POSTLETHWAT & ROSANNE POSTLETHWAT                                      | 05-03-828-0041-0000  |
| F     | DAVID F. POSTLETHWAT & ROSANNE POSTLETHWAT                                      | 05-03-828-0040-0000  |
| G     | DANIEL J STANLEY  | 05-03-828-0003-0001  |
| H     | ALLISON H STANLEY & TIMOTHY M WILLIAMS  | 05-03-828-0003-0000  |
| I     | CALVIN D STANLEY & LYNETTE I STANLEY  | 05-03-828-0002-0000  |
| J     | CALVIN D STANLEY  | 05-03-828-0001-0000  |
| K     | DEWITT STANLEY  | 05-03-828-0061-0000  |
| L     | ROBERT STANLEY & ELLIEN STANLEY   | 05-03-828-0024-0000  |
| M     | ROBERT C STANLEY  | 05-03-828-0023-0000  |
| N     | MELISSA RICHARDSON  | 05-03-828-0022-0000  |
| O     | THERESA A KING  | 05-03-828-0021-0000  |
| P     | THERESA A KING  | 05-03-828-0020-0000  |
| Q     | BRIAN SOLY, ET AL   | 05-03-828-0016-0000  |
| R     | THOMAS R BLOOM  | 05-03-828-0027-0000  |
| S     | THOMAS H BLOOM & LOS J BLOOM  | 05-03-828-0037-0000  |
| T     | DAVID A FILLINGER & DARLENE M FILLINGER   | 05-03-828-0013-0000  |
| U     | HEATHER L MENNING   | 05-03-828-0012-0000  |
| V     | JEFFREY W DORRANCE JR   | 05-03-828-0010-0000  |
| W     | JEFFREY W DORRANCE JR   | 05-03-828-0009-0000  |
| X     | RICHARD I SIMS & PATRICIA A SIMS  | 05-03-828-0036-0000  |
| Y     | RICHARD I SIMS & PATRICIA A SIMS  | 05-03-828-0033-0000  |
| Z     | MICHAEL E COX & DOROTHY M COX   | 05-03-828-0035-0000  |
| AA    | FOUR SWANS LP   | 05-03-828-0039-0000  |
| BB    | DANIEL L GILCHRIST & JOANNE GILCHRIST   | 05-03-828-0056-0000  |
| CC    | BETTY L HARRIS  | 05-03-828-0004-0000  |
| DD    | EDITH E MCCOMB  | 05-04-CC23-0239-0000 |
| EE    | KATHERINE B METZ & STEVEN L METZ  | 05-03-828-0006-0000  |
| FF    | JAMES W FERGUSON & CONSTANCE N FERGUSON,<br>TRUSTEES OF THE 1997 FERGUSON TRUST | 05-04-CC23-0240-0000 |
| GG    | STEVEN L METZ II  | 05-03-828-0007-0000  |
| HH    | STEVEN L METZ II  | 05-03-828-0008-0000  |
| II    | LOIS E DAUGHERTY  | 05-04-CC23-0241-0000 |
| JJ    | JOYCE S WILSON  | 05-04-CC23-0242-0000 |
| KK    | ROBERT L FRESHWATER   | 05-03-828-0010-0000  |
| LL    | RONALD G PHELPS & RUTH L PHELPS   | 05-03-828-0024-0000  |
| MM    | JOSEPH W CASEMAN & GRETCHEEN D CASEMAN  | 05-03-828-0025-0000  |
| NN    | TIMOTHY P MCKEE   | 05-03-828-0026-0000  |
| OO    | ROBERT CLARK  | 05-03-828-0028-0000  |
| PP    | GREGORY A SMITH & KELLI J SMITH   | 05-03-828-0004-0000  |
| QQ    | JOHN FOLIO  | 05-03-828-0003-0000  |
| RR    | ROBERT CLARK  | 05-03-828-0005-0000  |
| SS    | RONALD MISCH & LENNIS MISCH   | 05-03-828-0030-0000  |
| TT    | CHARLES D KIRCHNER & KAREN S KIRCHNER   | 05-03-828-0031-0000  |
| UU    | HARRY M MYERS & ANNETTE M MYERS   | 05-03-828-0005-0000  |
| VV    | JOHN E LEONARD JR & JOYCE L LEONARD   | 05-03-828-0006-0000  |
| WW    | FRIEND A LANCASTER  | 05-03-828-0007-0000  |
| XX    | DONALD C TENNAHT & JOYCE A TENNAHT  | 05-03-828-0008-0000  |
| YY    | TONYA DAVIDSON  | 05-03-828-0009-0000  |
| ZZ    | LUTHER W HOLDEN   | 05-03-828-0010-0000  |
| AAA   | KENNETH R KEMPER JR ET AL   | 05-03-828-0011-0000  |
| BBB   | KENNETH R KEMPER JR ET AL   | 05-03-828-0012-0000  |
| CCC   | JANICE L RUMYAN   | 05-03-828-0018-0000  |
| DDD   | JANICE L RUMYAN   | 05-03-828-0019-0000  |
| EEE   | DONALD L SMITH & CAROLYN J SMITH  | 05-03-828-0020-0000  |
| FFF   | PHILIP A CONLEY ET AL   | 05-03-828-0021-0000  |
| GGG   | WILLIAM J WELLS & PATRICIA L WELLS  | 05-03-828-0022-0000  |
| HHH   | NATHAN GAGICH   | 05-03-828-0023-0000  |
| III   | AMANDA J BENZO  | 05-03-828-0024-0000  |
| JJJ   | HARRY M MYERS III & SARAH M MYERS   | 05-03-828-0025-0000  |
| KKK   | WALTER L STATEN & JULIA P STATEN  | 05-03-828-0026-0000  |
| LLL   | DENNIS M POLEGA & KAREN L POLEGA  | 05-03-828-0027-0000  |
| NNN   | DENNIS M POLEGA & KAREN L POLEGA  | 05-03-828-0028-0000  |
| OOO   | JOHN S KORBIN & BEVERLY J KORBIN  | 05-03-828-0029-0000  |
| PPP   | VIROL E COEN & ALFREDA COEN   | 05-03-828-0030-0000  |
| QQQ   | VIROL E COEN & ALFREDA COEN   | 05-03-828-0031-0000  |
| RRR   | JOHN W MOSSGROVE & MELODY B MOSSGROVE   | 05-03-828-0032-0000  |
| SSS   | US BANK NA  | 05-03-828-0033-0000  |
| TTT   | KENNETH C CHIVERS & ETHEL C CHIVERS   | 05-03-828-0034-0000  |
| UUU   | FARE N MOON II & LINDA N MOON   | 05-03-828-0035-0000  |
| VVV   | STEPHEN J HUNTER  | 05-03-828-0036-0000  |
| WWW   | JAMES V FIDAZZO JR & CHRIS FIDAZZO  | 05-03-828-0037-0000  |
| XXX   | JAMES V FIDAZZO JR & CHRIS FIDAZZO  | 05-03-828-0038-0000  |
| YYY   | JAMES V FIDAZZO JR & CHRIS FIDAZZO  | 05-03-828-0039-0000  |
| ZZZ   | CHARLES F BAKER & SHERYL L BAKER  | 05-03-828-0040-0000  |
| AAA   | JAMES L STOCK & DIANNE L STOCK  | 05-03-828-0041-0000  |
| BBB   | MICHAEL E DIGHT & DIANE M DIGHT   | 05-03-828-0042-0000  |
| CCC   | DAVID PERINE & DIANA PERINE   | 05-03-828-0043-0000  |
| DDD   | KENNETH DIGHT & JANE C DIGHT  | 05-03-828-0044-0000  |
| EEE   | THOMAS J MILLER & TONYA S MILLER  | 05-03-828-0045-0000  |
| FFF   | CHARLE D FARRIS & BRITNEY L FARRIS  | 05-03-828-0046-0000  |
| GGG   | JAMES R HERVEY & KAREN L HERVEY   | 05-03-828-0047-0000  |
| HHH   | DONALD EATON & JANICE EATON   | 05-03-828-0048-0000  |
| III   | BERNARD J KNORR III & NICOLE C KNORR  | 05-03-828-0049-0000  |
| JJJ   | BERNARD J KNORR III & NICOLE C KNORR  | 05-03-828-0050-0000  |
| KKK   | BROOKE COUNTY PARK COMMISSION   | 05-03-828-0051-0000  |



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Production Company, LLC Production Company™

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| REVISIONS: | DATE: 06-27-2017     |
|            | SHEET 2 OF 2         |
|            | DRAWN BY: R. DOERR   |
|            | SCALE: NOT TO SCALE  |
|            | DRAWING NO: 050-5495 |
|            | WELL LOCATION PLAT   |

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|----------------------|
| МЕГТ ГОСУДИОН БГАЛ   |
| БРУМНИС ИО: 020-2482 |
| ЗСУТЕ: ИОЛ 10 ЗСУТЕ  |
| БРУМИ ВЛ: В' ДООЕВВ  |
| ШЕЕТ 3 ОЕ 3          |
| DATE: 08-33-3013     |

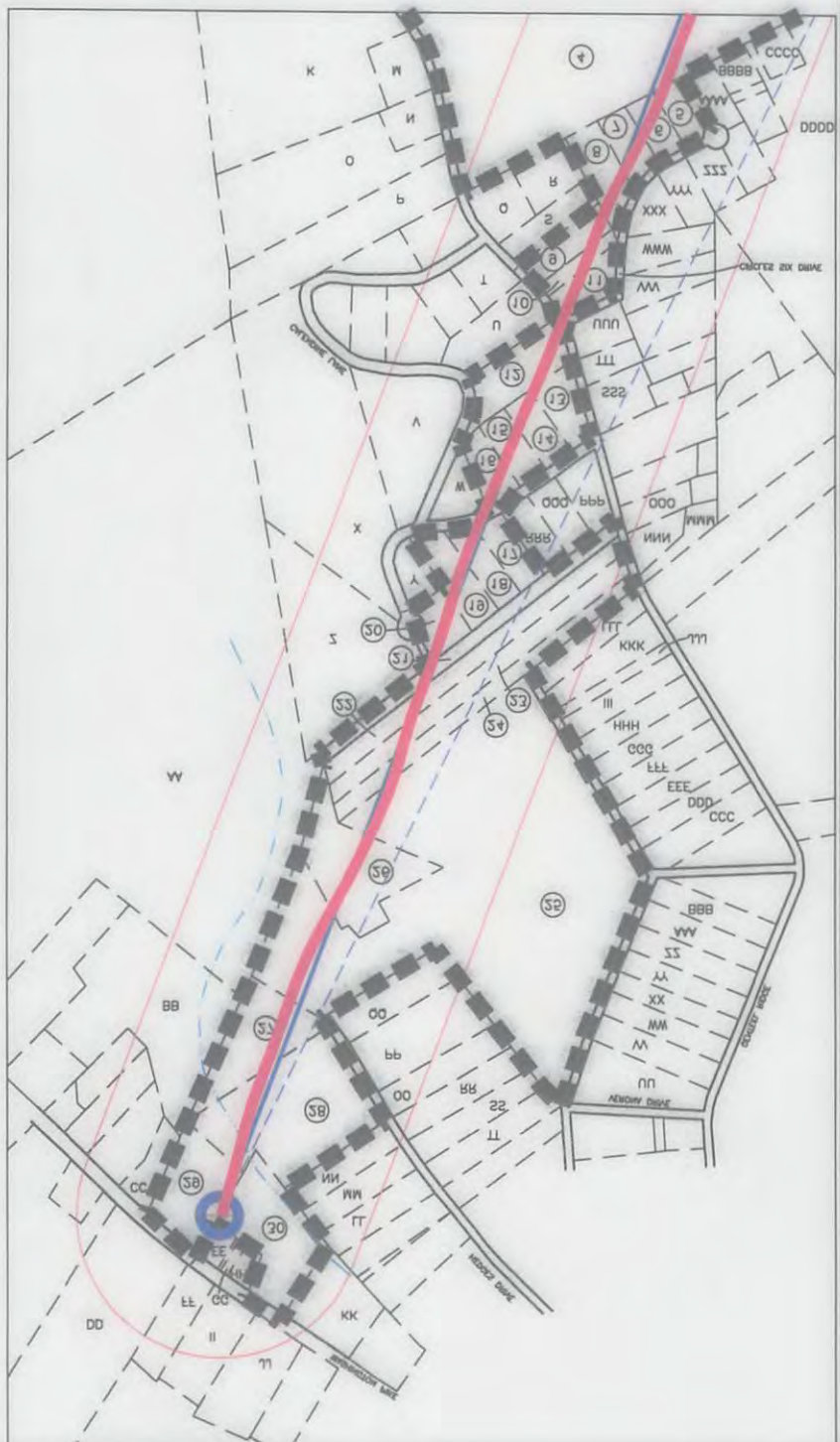
Производствен Компану, ГГС

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ЗМУ  
КОМПАНИА

ЗМУ  
КОМПАНИА

|       |                                  |                     |
|-------|----------------------------------|---------------------|
| KKKK  | ВООКЕ СОПЛА БУК КОМПОЗИЦИОН      | 02-07-838-0001-0000 |
| TTTT  | ВЕРАМО Т КЮКОВ И В ИКОДЕ С КЮКОВ | 02-07-838-0002-0000 |
| IIII  | ВЕРАМО Т КЮКОВ И В ИКОДЕ С КЮКОВ | 02-07-838-0003-0000 |
| HHHH  | ДОИМО ЕВЛОИ В ТИКЕ ЕВЛОИ         | 02-07-838-0004-0000 |
| OOOO  | ТИКЕ В НЕМАЕ В КЮКОВ Г НЕМАЕ     | 02-07-838-0005-0000 |
| LLLL  | ОИКЕ О ИМАЕ В ИМАЕ Г ИМАЕ        | 02-07-838-0006-0000 |
| EEEE  | ИКОДЕ Т ИКОДЕ В ИКОДЕ Г ИКОДЕ    | 02-07-838-0007-0000 |
| DDDD  | КЕИКЕИ ИКОДЕ В ИКОДЕ Г ИКОДЕ     | 02-07-838-0008-0000 |
| CCCC  | ИКОДЕ ИКОДЕ В ИКОДЕ Г ИКОДЕ      | 02-07-838-0009-0000 |
| BBBB  | ИКОДЕ Е ИКОДЕ В ИКОДЕ Г ИКОДЕ    | 02-07-838-0010-0000 |
| YYYY  | ТИКЕ Г ИКОДЕ В ИКОДЕ Г ИКОДЕ     | 02-07-838-0011-0000 |
| ZZZ   | ОИКЕ Т ИКОДЕ В ИКОДЕ Г ИКОДЕ     | 02-07-838-0012-0000 |
| AAA   | ТИКЕ А ИКОДЕ В ИКОДЕ Г ИКОДЕ     | 02-07-838-0013-0000 |
| XXX   | ТИКЕ А ИКОДЕ В ИКОДЕ Г ИКОДЕ     | 02-07-838-0014-0000 |
| MMM   | ТИКЕ А ИКОДЕ В ИКОДЕ Г ИКОДЕ     | 02-07-838-0015-0000 |
| AAA   | ИКОДЕ Т ИКОДЕ                    | 02-07-838-0016-0000 |
| TTTT  | ИКОДЕ И ИКОДЕ В ИКОДЕ Г ИКОДЕ    | 02-07-838-0017-0000 |
| IIII  | КЕИКЕИ С ИКОДЕ В ИКОДЕ Г ИКОДЕ   | 02-07-838-0018-0000 |
| 222   | ОЗ БУК ИВ                        | 02-07-838-0019-0000 |
| HHH   | ЮНИ В ИКОДЕ В ИКОДЕ Г ИКОДЕ      | 02-07-838-0020-0000 |
| OOO   | ИКОДЕ Е ИКОДЕ В ИКОДЕ Г ИКОДЕ    | 02-07-838-0021-0000 |
| bbb   | ИКОДЕ Е ИКОДЕ В ИКОДЕ Г ИКОДЕ    | 02-07-838-0022-0000 |
| ooo   | ЮНИ В ИКОДЕ В ИКОДЕ Г ИКОДЕ      | 02-07-838-0023-0000 |
| HHH   | ИКОДЕ И ИКОДЕ В ИКОДЕ Г ИКОДЕ    | 02-07-838-0024-0000 |
| HHH   | ИКОДЕ И ИКОДЕ В ИКОДЕ Г ИКОДЕ    | 02-07-838-0025-0000 |
| TTT   | ИКОДЕ Г ИКОДЕ В ИКОДЕ Г ИКОДЕ    | 02-07-838-0026-0000 |
| KKK   | ИКОДЕ И ИКОДЕ В ИКОДЕ Г ИКОДЕ    | 02-07-838-0027-0000 |
| TTTT  | ИКОДЕ Т ИКОДЕ                    | 02-07-838-0028-0000 |
| IIII  | ИКОДЕ И ИКОДЕ                    | 02-07-838-0029-0000 |
| OOO   | ИКОДЕ Т ИКОДЕ                    | 02-07-838-0030-0000 |
| LLL   | ИКОДЕ В ИКОДЕ ЕЛ В               | 02-07-838-0031-0000 |
| EEE   | ИКОДЕ Г ИКОДЕ В ИКОДЕ Г ИКОДЕ    | 02-07-838-0032-0000 |
| OOO   | ТИКЕ Г ИКОДЕ                     | 02-07-838-0033-0000 |
| BBB   | КЕИКЕИ И ИКОДЕ В ИКОДЕ Г ИКОДЕ   | 02-07-838-0034-0000 |
| VVV   | КЕИКЕИ И ИКОДЕ В ИКОДЕ Г ИКОДЕ   | 02-07-838-0035-0000 |
| ZZ    | ИКОДЕ И ИКОДЕ                    | 02-07-838-0036-0000 |
| AA    | ИКОДЕ ИКОДЕ                      | 02-07-838-0037-0000 |
| XX    | ДОИМО С ИКОДЕ В ИКОДЕ Г ИКОДЕ    | 02-07-838-0038-0000 |
| AAA   | ИКОДЕ В ИКОДЕ Г ИКОДЕ            | 02-07-838-0039-0000 |
| AA    | ЮНИ В ИКОДЕ В ИКОДЕ Г ИКОДЕ      | 02-07-838-0040-0000 |
| PPP   | ИКОДЕ И ИКОДЕ В ИКОДЕ Г ИКОДЕ    | 02-07-838-0041-0000 |
| II    | ИКОДЕ Т ИКОДЕ В ИКОДЕ Г ИКОДЕ    | 02-07-838-0042-0000 |
| DD    | ИКОДЕ Г ИКОДЕ                    | 02-07-838-0043-0000 |
| HH    | ИКОДЕ И ИКОДЕ В ИКОДЕ Г ИКОДЕ    | 02-07-838-0044-0000 |
| OO    | ИКОДЕ Г ИКОДЕ                    | 02-07-838-0045-0000 |
| LL    | ИКОДЕ О И ИКОДЕ В ИКОДЕ Г ИКОДЕ  | 02-07-838-0046-0000 |
| EE    | ИКОДЕ И ИКОДЕ В ИКОДЕ Г ИКОДЕ    | 02-07-838-0047-0000 |
| DD    | ИКОДЕ Е ИКОДЕ                    | 02-07-838-0048-0000 |
| CC    | ИКОДЕ Г ИКОДЕ В ИКОДЕ Г ИКОДЕ    | 02-07-838-0049-0000 |
| BB    | ИКОДЕ Г ИКОДЕ В ИКОДЕ Г ИКОДЕ    | 02-07-838-0050-0000 |
| WW    | ИКОДЕ И ИКОДЕ В ИКОДЕ Г ИКОДЕ    | 02-07-838-0051-0000 |
| X     | ИКОДЕ Е ИКОДЕ В ИКОДЕ Г ИКОДЕ    | 02-07-838-0052-0000 |
| A     | ИКОДЕ Т ИКОДЕ В ИКОДЕ Г ИКОДЕ    | 02-07-838-0053-0000 |
| X     | ИКОДЕ Т ИКОДЕ В ИКОДЕ Г ИКОДЕ    | 02-07-838-0054-0000 |
| II    | ИКОДЕ И ИКОДЕ В ИКОДЕ Г ИКОДЕ    | 02-07-838-0055-0000 |
| A     | ИКОДЕ И ИКОДЕ В ИКОДЕ Г ИКОДЕ    | 02-07-838-0056-0000 |
| P     | ИКОДЕ И ИКОДЕ В ИКОДЕ Г ИКОДЕ    | 02-07-838-0057-0000 |
| J     | ИКОДЕ А ИКОДЕ В ИКОДЕ Г ИКОДЕ    | 02-07-838-0058-0000 |
| Z     | ИКОДЕ И ИКОДЕ В ИКОДЕ Г ИКОДЕ    | 02-07-838-0059-0000 |
| II    | ИКОДЕ И ИКОДЕ В ИКОДЕ Г ИКОДЕ    | 02-07-838-0060-0000 |
| O     | ИКОДЕ В ИКОДЕ В ИКОДЕ Г ИКОДЕ    | 02-07-838-0061-0000 |
| b     | ИКОДЕ В ИКОДЕ В ИКОДЕ Г ИКОДЕ    | 02-07-838-0062-0000 |
| O     | ИКОДЕ В ИКОДЕ В ИКОДЕ Г ИКОДЕ    | 02-07-838-0063-0000 |
| II    | ИКОДЕ И ИКОДЕ В ИКОДЕ Г ИКОДЕ    | 02-07-838-0064-0000 |
| II    | ИКОДЕ С ИКОДЕ                    | 02-07-838-0065-0000 |
| G     | ИКОДЕ С ИКОДЕ В ИКОДЕ Г ИКОДЕ    | 02-07-838-0066-0000 |
| K     | ИКОДЕ С ИКОДЕ                    | 02-07-838-0067-0000 |
| T     | ИКОДЕ С ИКОДЕ В ИКОДЕ Г ИКОДЕ    | 02-07-838-0068-0000 |
| I     | ИКОДЕ С ИКОДЕ В ИКОДЕ Г ИКОДЕ    | 02-07-838-0069-0000 |
| H     | ИКОДЕ И ИКОДЕ В ИКОДЕ Г ИКОДЕ    | 02-07-838-0070-0000 |
| O     | ИКОДЕ Т ИКОДЕ                    | 02-07-838-0071-0000 |
| E     | ИКОДЕ С ИКОДЕ В ИКОДЕ Г ИКОДЕ    | 02-07-838-0072-0000 |
| O     | ИКОДЕ С ИКОДЕ В ИКОДЕ Г ИКОДЕ    | 02-07-838-0073-0000 |
| C     | ИКОДЕ И ИКОДЕ В ИКОДЕ Г ИКОДЕ    | 02-07-838-0074-0000 |
| B     | ИКОДЕ И ИКОДЕ В ИКОДЕ Г ИКОДЕ    | 02-07-838-0075-0000 |
| V     | ИКОДЕ И ИКОДЕ В ИКОДЕ Г ИКОДЕ    | 02-07-838-0076-0000 |
| BAKCI | ИКОДЕ                            | 02-07-838-0077-0000 |



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