

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

API 47 - 051 - 02057⁹ County Marshall District Franklin
Quad New Martinsville 7.5' Pad Name Accettolo Field/Pool Name _____
Farm name Louis J. & Patricia Accettolo, et al Well Number Evad 4HM
Operator (as registered with the OOG) Tug Hill Operating, LLC
Address 380 Southpointe Boulevard, Plaza II, Suite 200 City Canonsburg State PA Zip 15317

As Drilled location NAD 83/UTM Attach an as-drilled plat, profile view, and deviation survey
Top hole Northing 4,399,405.55 Easting 517,720.78
Landing Point of Curve Northing 4,399,505.93 Easting 518,144.32
Bottom Hole Northing 4,397,121.42 Easting 519,525.24

Elevation (ft) 1290.0' 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; Base oil, osmotic inhibitor, weighting agent, viscosifier, emulsifier, hardness buffer, fluid loss additive, LCM, Shale inhibitor, de-foamer, soaping agent, coagulant, flocculant; specific additives per WSSP and Permit.

Date permit issued 8/30/2018 Date drilling commenced 4/20/2019 Date drilling ceased 5/4/2019
Date completion activities began 6/3/2019 Date completion activities ceased 1/13/2020
Verbal plugging (Y/N) N Date permission granted N/A Granted by N/A **RECEIVED**
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Please note: Operator is required to submit a plugging application within 5 days of verbal permission to plug

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Freshwater depth(s) ft 70' Open mine(s) (Y/N) depths N
Salt water depth(s) ft 1595' Void(s) encountered (Y/N) depths N
Coal depth(s) ft 789-795', 889-895' Cavern(s) encountered (Y/N) depths N
Is coal being mined in area (Y/N) N

Reviewed by:
Jim Nicholas
7/27/2020

API 47-051 - 0205⁹ Farm name Louis J. & Patricia Accettolo, et al Well number Evad 4HM

| 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 | 36" | 30" | 120' | NEW | 94.5# | N/A | Y |
| Surface | 17 1/2" | 13 3/8" | 1,000' | NEW | 54.5# | N/A | Y |
| Coal | 17 1/2" | 13 3/8" | 1,000' | NEW | 54.5# | N/A | Y |
| Intermediate 1 | 12 1/4" | 9 5/8" | 2,874' | NEW | 36# | N/A | Y |
| Intermediate 2 | | | | | | | |
| Intermediate 3 | | | | | | | |
| Production | 8 3/4" | 5 1/2" | 16,171' | NEW | 20# | N/A | Y |
| Tubing | | 2 3/8" | 8,086' | NEW | 4.7# | N/A | Y |
| 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 | A | | 15.6 | 1.19 | | 0 | 8 |
| Surface | A | 1060 | 15.6 | 1.19 | 1268 | 0 | 8 |
| Coal | A | 1060 | 15.6 | 1.19 | 1268 | 0 | 8 |
| Intermediate 1 | A | 1001 | 15.6 | 1.19 | 1187 | 0 | 8 |
| Intermediate 2 | | | | | | | |
| Intermediate 3 | | | | | | | |
| Production | A | 3814 | 14.5 | 1.17 | 4479 | 0 | 8 |
| Tubing | | | | | | | |

Drillers TD (ft) 16,182' Loggers TD (ft) n/a
 Deepest formation penetrated Marcellus Plug back to (ft) n/a
 Plug back procedure n/a

Kick off depth (ft) 6,091'

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 3 centralizers on surface casing at equal distance.
Intermediate - 1 centralizer every other joint.
 Production - one centralizer every other joint in lateral, one centralizer every joint through curve, one centralizer every other joint to surface.

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WAS WELL COMPLETED AS SHOT HOLE Yes No DETAILS _____
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WAS WELL COMPLETED OPEN HOLE? Yes No DETAILS _____

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

**EVAD 4HM
PEFORATION RECORD**

| Stage No. | Perforation Date | Perforated from MD ft. | Perforated to MD. Ft. | Number of Perforations | Formation(s) |
|-----------|------------------|------------------------|-----------------------|------------------------|--------------|
| 1 | 8/10/2019 | 15770 | 15931 | 48 | Marcellus |
| 2 | 8/10/2019 | 15595 | 15756 | 48 | Marcellus |
| 3 | 8/10/2019 | 15421 | 15581 | 48 | Marcellus |
| 4 | 8/15/2019 | 15246 | 15406 | 48 | Marcellus |
| 5 | 8/15/2019 | 15071 | 15231 | 48 | Marcellus |
| 6 | 8/15/2019 | 14896 | 15056 | 48 | Marcellus |
| 7 | 8/16/2019 | 14721 | 14881 | 48 | Marcellus |
| 8 | 8/16/2019 | 14546 | 14706 | 48 | Marcellus |
| 9 | 8/16/2019 | 14371 | 14532 | 48 | Marcellus |
| 10 | 8/16/2019 | 14196 | 14357 | 48 | Marcellus |
| 11 | 8/17/2019 | 14021 | 14182 | 48 | Marcellus |
| 12 | 8/17/2019 | 13846 | 14007 | 48 | Marcellus |
| 13 | 8/17/2019 | 13672 | 13832 | 48 | Marcellus |
| 14 | 8/18/2019 | 13497 | 13657 | 48 | Marcellus |
| 15 | 8/18/2019 | 13322 | 13482 | 48 | Marcellus |
| 16 | 8/18/2019 | 13147 | 13307 | 48 | Marcellus |
| 17 | 8/18/2019 | 12972 | 13132 | 48 | Marcellus |
| 18 | 8/19/2019 | 12797 | 12957 | 48 | Marcellus |
| 19 | 8/19/2019 | 12622 | 12783 | 48 | Marcellus |
| 20 | 8/19/2019 | 12447 | 12608 | 48 | Marcellus |
| 21 | 8/20/2019 | 12272 | 12433 | 48 | Marcellus |
| 22 | 8/20/2019 | 12097 | 12258 | 48 | Marcellus |
| 23 | 8/20/2019 | 11923 | 12083 | 48 | Marcellus |
| 24 | 8/20/2019 | 11748 | 11908 | 48 | Marcellus |
| 25 | 8/21/2019 | 11573 | 11733 | 48 | Marcellus |
| 26 | 9/8/2019 | 11398 | 11558 | 48 | Marcellus |
| 27 | 9/9/2019 | 11223 | 11383 | 48 | Marcellus |
| 28 | 9/10/2019 | 11048 | 11208 | 48 | Marcellus |
| 29 | 9/10/2019 | 10873 | 11034 | 48 | Marcellus |
| 30 | 9/11/2019 | 10698 | 10859 | 48 | Marcellus |
| 31 | 9/12/2019 | 10523 | 10684 | 48 | Marcellus |
| 32 | 9/13/2019 | 10348 | 10509 | 48 | Marcellus |
| 33 | 9/14/2019 | 10174 | 10334 | 48 | Marcellus |
| 34 | 9/14/2019 | 9999 | 10159 | 48 | Marcellus |
| 35 | 9/15/2019 | 9824 | 9984 | 48 | Marcellus |
| 36 | 9/16/2019 | 9649 | 9809 | 48 | Marcellus |
| 37 | 9/17/2019 | 9474 | 9634 | 48 | Marcellus |
| 38 | 9/18/2019 | 9299 | 9459 | 48 | Marcellus |
| 39 | 9/18/2019 | 9124 | 9285 | 48 | Marcellus |
| 40 | 9/19/2019 | 8948 | 9110 | 48 | Marcellus |
| 41 | 9/20/2019 | 8774 | 8935 | 48 | Marcellus |

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| Stage No. | Perforation Date | Perforated from MD ft. | Perforated to MD. Ft. | Number of Perforations | Formation(s) |
|-----------|------------------|------------------------|-----------------------|------------------------|--------------|
| 42 | 9/21/2019 | 8599 | 8760 | 48 | Marcellus |
| 43 | 9/22/2019 | 8425 | 8585 | 48 | Marcellus |
| 44 | 9/22/2019 | 8250 | 8410 | 48 | Marcellus |
| 45 | 9/23/2019 | 8075 | 8235 | 48 | Marcellus |
| 46 | 9/24/2019 | 7900 | 8060 | 48 | Marcellus |
| 47 | 9/25/2019 | 7725 | 7885 | 48 | Marcellus |
| 48 | 9/26/2019 | 7550 | 7710 | 48 | Marcellus |
| 49 | 9/27/2019 | 7375 | 7536 | 48 | Marcellus |
| 50 | 9/27/2019 | 7200 | 7361 | 48 | Marcellus |

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STIMULATION INFORMATION PER STAGE

| Stage No. | 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 | 83 | 7957 | 5022 | 3405 | 436450 | 9242 | 0 |
| 2 | 81.2 | 7443 | 5252 | 4030 | 417690 | 8802 | 0 |
| 3 | 86.9 | 7683 | 5291 | 4666 | 443830 | 9587 | 0 |
| 4 | 84.7 | 7480 | 4800 | 4640 | 445500 | 9175 | 0 |
| 5 | 81.9 | 7368 | 5219 | 4633 | 443740 | 8901 | 0 |
| 6 | 84.2 | 7606 | 5332 | 4273 | 438320 | 9694 | 0 |
| 7 | 87.2 | 7663 | 5379 | 4562 | 442720 | 9530 | 0 |
| 8 | 85.2 | 7316 | 5301 | 4420 | 437840 | 8881 | 0 |
| 9 | 85.5 | 7350 | 5479 | 5210 | 436750 | 9262 | 0 |
| 10 | 87.3 | 7676 | 5409 | 4341 | 443150 | 9068 | 0 |
| 11 | 87.1 | 7455 | 5365 | 4905 | 452090 | 9369 | 0 |
| 12 | 83.5 | 7508 | 5315 | 4032 | 391750 | 8615 | 0 |
| 13 | 87.3 | 7417 | 5349 | 4220 | 447480 | 9065 | 0 |
| 14 | 87.7 | 7397 | 5359 | 4807 | 446570 | 9134 | 0 |
| 15 | 85.4 | 7238 | 5344 | 4629 | 450760 | 9022 | 0 |
| 16 | 87.5 | 7587 | 5067 | 5091 | 447240 | 8862 | 0 |
| 17 | 87.3 | 7437 | 5512 | 4420 | 451040 | 9002 | 0 |
| 18 | 88 | 7350 | 5476 | 4734 | 449800 | 9066 | 0 |
| 19 | 87.7 | 7311 | 5266 | 4277 | 448590 | 9047 | 0 |
| 20 | 85.8 | 7409 | 5405 | 4097 | 446230 | 9861 | 0 |
| 21 | 88.5 | 7071 | 5485 | 5029 | 449710 | 9004 | 0 |
| 22 | 87.3 | 7301 | 5297 | 4784 | 446000 | 8787 | 0 |
| 23 | 87.8 | 7198 | 5193 | 4380 | 444220 | 9093 | 0 |
| 24 | 89.5 | 7210 | 5086 | 4470 | 441840 | 8963 | 0 |
| 25 | 86.8 | 7061 | 5022 | 4353 | 444370 | 9101 | 0 |
| 26 | 84.2 | 7293 | 5020 | 4496 | 440540 | 8886 | 0 |
| 27 | 87.7 | 7568 | 5134 | 4557 | 402090 | 9076 | 0 |
| 28 | 84.1 | 7403 | 5092 | 3996 | 281140 | 7605 | 0 |
| 29 | 88.7 | 7172 | 5056 | 4188 | 412325 | 8337 | 0 |

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| Stage No. | 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) |
|-----------|----------------------|------------------------------|------------------------------|------------|--------------------------|------------------------|----------------------------------|
| 30 | 88.8 | 7432 | 5097 | 3700 | 402860 | 8402 | 0 |
| 31 | 88.1 | 7249 | 5089 | 4063 | 420770 | 9202 | 0 |
| 32 | 88.9 | 7478 | 5149 | 4309 | 339180 | 8521 | 0 |
| 33 | 92.4 | 7514 | 5372 | 4091 | 439500 | 9472 | 0 |
| 34 | 89.9 | 7259 | 5109 | 4838 | 381870 | 8590 | 0 |
| 35 | 92.4 | 7549 | 5212 | 4290 | 390005 | 9762 | 0 |
| 36 | 91.9 | 6957 | 5369 | 4716 | 437895 | 9603 | 0 |
| 37 | 92.7 | 6871 | 5357 | 4055 | 440660 | 10025 | 0 |
| 38 | 92.4 | 6684 | 5202 | 4104 | 443150 | 10110 | 0 |
| 39 | 91.9 | 6844 | 5030 | 4318 | 398800 | 10371 | 0 |
| 40 | 92.1 | 6762 | 5258 | 4096 | 441040 | 10123 | 0 |
| 41 | 91.2 | 6676 | 5664 | 5015 | 408700 | 9421 | 0 |
| 42 | 92.5 | 6640 | 5732 | 4712 | 443120 | 10130 | 0 |
| 43 | 91.6 | 6667 | 5632 | 4422 | 437870 | 10097 | 0 |
| 44 | 91.1 | 6897 | 5505 | 4266 | 445990 | 10398 | 0 |
| 45 | 92.8 | 6898 | 5419 | 5011 | 449300 | 10935 | 0 |
| 46 | 92.9 | 6520 | 5310 | 4815 | 442890 | 10723 | 0 |
| 47 | 91.9 | 6561 | 5591 | 4323 | 444750 | 10017 | 0 |
| 48 | 92 | 6574 | 5444 | 3777 | 442020 | 9909 | 0 |
| 49 | 92.7 | 6452 | 5065 | 4732 | 441860 | 9824 | 0 |
| 50 | 92.9 | 6410 | 5384 | 4211 | 439780 | 9727 | 0 |

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| 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 |
|---------------------|------------------------------|---------------------------|-----------------------|--------------------------|---|
| Maxton | 1985 | 2080 | 1987 | 2083 | Sandstone |
| Big Lime | 2080 | 2135 | 2083 | 2138 | Limestone |
| Big Injun | 2135 | 2437 | 2138 | 2441 | Sandstone |
| Weir | 2437 | 2620 | 2441 | 2625 | Sandstone |
| Berea | 2620 | 2930 | 2625 | 2936 | Sandstone |
| Gordon | 2930 | 2990 | 2936 | 2997 | Sandstone |
| Fifty Foot | 2990 | 3568 | 2997 | 3583 | Sandstone |
| Speechley | 3568 | 4959 | 3583 | 5079 | Sandstone |
| Benson | 4959 | 5335 | 5079 | 5479 | Sandstone |
| Alexander | 5335 | 5939 | 5479 | 6127 | Siltstone |
| Rhinestreet | 5939 | 6363 | 6127 | 6606 | Black shale |
| Middlesex | 6363 | 6441 | 6606 | 6722 | Black shale |
| Geneseo/Burkett | 6441 | 6464 | 6722 | 6762 | Black shale |
| Tully | 6464 | 6497 | 6762 | 6828 | Limestone |
| Hamilton | 6497 | 6543 | 6828 | 6947 | Grey shale |
| Marcellus | 6543 | - | 6947 | - | Black shale |

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Hydraulic Fracturing Fluid Product Component Information Disclosure

| | |
|--------------------------------|-------------------------|
| Job Start Date: | 8/10/2019 |
| Job End Date: | 9/27/2019 |
| State: | West Virginia |
| County: | Marshall |
| API Number: | 47-051-02059-00-00 |
| Operator Name: | Tug Hill Operating, LLC |
| Well Name and Number: | Evad 4HM |
| Latitude: | 39.74430000 |
| Longitude: | -80.79310000 |
| Datum: | NAD83 |
| Federal Well: | NO |
| Indian Well: | NO |
| True Vertical Depth: | 6,605 |
| Total Base Water Volume (gal): | 20,192,416 |
| 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 |
|----------------|--------------|--------------|-------------|--|--|--|----------------|
| Produced Water | Halliburton | Base Fluid | | | | | |
| | | | Water | 7732-18-5 | 100.00000 | 88.55586 | Density = 8.50 |
| Ingredients | Listed Above | Listed Above | | | | | |
| | | | Water | 7732-18-5 | 100.00000 | 0.29674 | |

| | | | | | | | |
|-----------------------------------|-------------|--------------------------|--|--------------|--|--|--|
| Sand-Common White-100 Mesh, SSA-2 | Halliburton | Proppant | | | | | |
| | | | | Listed Below | | | |
| OilPerm A | Halliburton | Non-ionic Surfactant | | | | | |
| | | | | Listed Below | | | |
| Sand-Premium White-30/50 | Halliburton | Proppant | | | | | |
| | | | | Listed Below | | | |
| Sand-Premium White-40/70 | Halliburton | Proppant | | | | | |
| | | | | Listed Below | | | |
| LD-2950 | MultiChem | Friction Reducer | | | | | |
| | | | | Listed Below | | | |
| HYDROCHLORIC ACID, 22 BAUME | Halliburton | Solvent | | | | | |
| | | | | Listed Below | | | |
| FDP-S1296-17 | Halliburton | Acid Corrosion Inhibitor | | | | | |
| | | | | Listed Below | | | |
| MC MX 8-4743 | MultiChem | Additive | | | | | |
| | | | | Listed Below | | | |
| LEGEND(TM) LD-7750W | MultiChem | Scale Control | | | | | |

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| | | | | Listed Below | | | |
|--|--|--|---|--------------|-----------|----------|--|
| Items above are Trade Names with the exception of Base Water . Items below are the individual ingredients. | | | | | | | |
| | | | Crystalline silica, quartz | 14808-60-7 | 100.00000 | 11.09907 | |
| | | | Hydrochloric acid | 7647-01-0 | 30.00000 | 0.07232 | |
| | | | Methanol | 67-56-1 | 100.00000 | 0.04047 | |
| | | | Sodium nitrate | 7631-99-4 | 60.00000 | 0.02260 | |
| | | | Sodium chloride | 7647-14-5 | 5.00000 | 0.00334 | |
| | | | Phosphoric Acid Salt | Proprietary | 5.00000 | 0.00334 | |
| | | | Hydrotreated light petroleum distillate | 64742-47-8 | 30.00000 | 0.00297 | |
| | | | Ethanol | 64-17-5 | 60.00000 | 0.00024 | |
| | | | Oxyalkylated nonyl phenolic resin | Proprietary | 30.00000 | 0.00012 | |
| | | | Heavy aromatic petroleum naphtha | 64742-94-5 | 30.00000 | 0.00012 | |
| | | | Mixture of dimer and trimer fatty acids of indefinite composition derived from tall oil | 61790-12-3 | 30.00000 | 0.00011 | |
| | | | Modified thiourea polymer | Proprietary | 30.00000 | 0.00011 | |
| | | | Ethoxylated alcohols | Proprietary | 1.00000 | 0.00010 | |
| | | | Poly(oxy-1,2-ethanediyl), alpha-tridecyl-omega-hydroxy-, branched | 69011-36-5 | 1.00000 | 0.00010 | |
| | | | Formaldehyde | 50-00-0 | 0.10000 | 0.00007 | |
| | | | Oxyalkylated phenolic resin | Proprietary | 10.00000 | 0.00004 | |
| | | | Poly(oxy-1,2-ethanediyl), alpha-(4-nonylphenyl)-omega-hydroxy-, branched | 127087-87-0 | 5.00000 | 0.00002 | |
| | | | Naphthalene | 91-20-3 | 5.00000 | 0.00002 | |
| | | | Hexadecene | 629-73-2 | 5.00000 | 0.00002 | |
| | | | Propargyl alcohol | 107-19-7 | 5.00000 | 0.00002 | |
| | | | Ethoxylated alcohols | Proprietary | 5.00000 | 0.00002 | |

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| | | | | | | |
|--|--|--|------------------------|---------|---------|---------|
| | | | 1,2,4 Trimethylbenzene | 95-63-6 | 1.00000 | 0.00000 |
|--|--|--|------------------------|---------|---------|---------|

* Total Water Volume sources may include various types of water including fresh water, produced water, and recycled water
 ** Information is based on the maximum potential for concentration and thus the total may be over 100%
 *** If you are calculating a percentage of total ingredients do not add the water volume below the green line to the water volume above the green line

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(l) and Appendix D are obtained from suppliers Material Safety Data Sheets (MSDS)

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**EVAD LEASE
WELL 4HM
582.8595± ACRES**

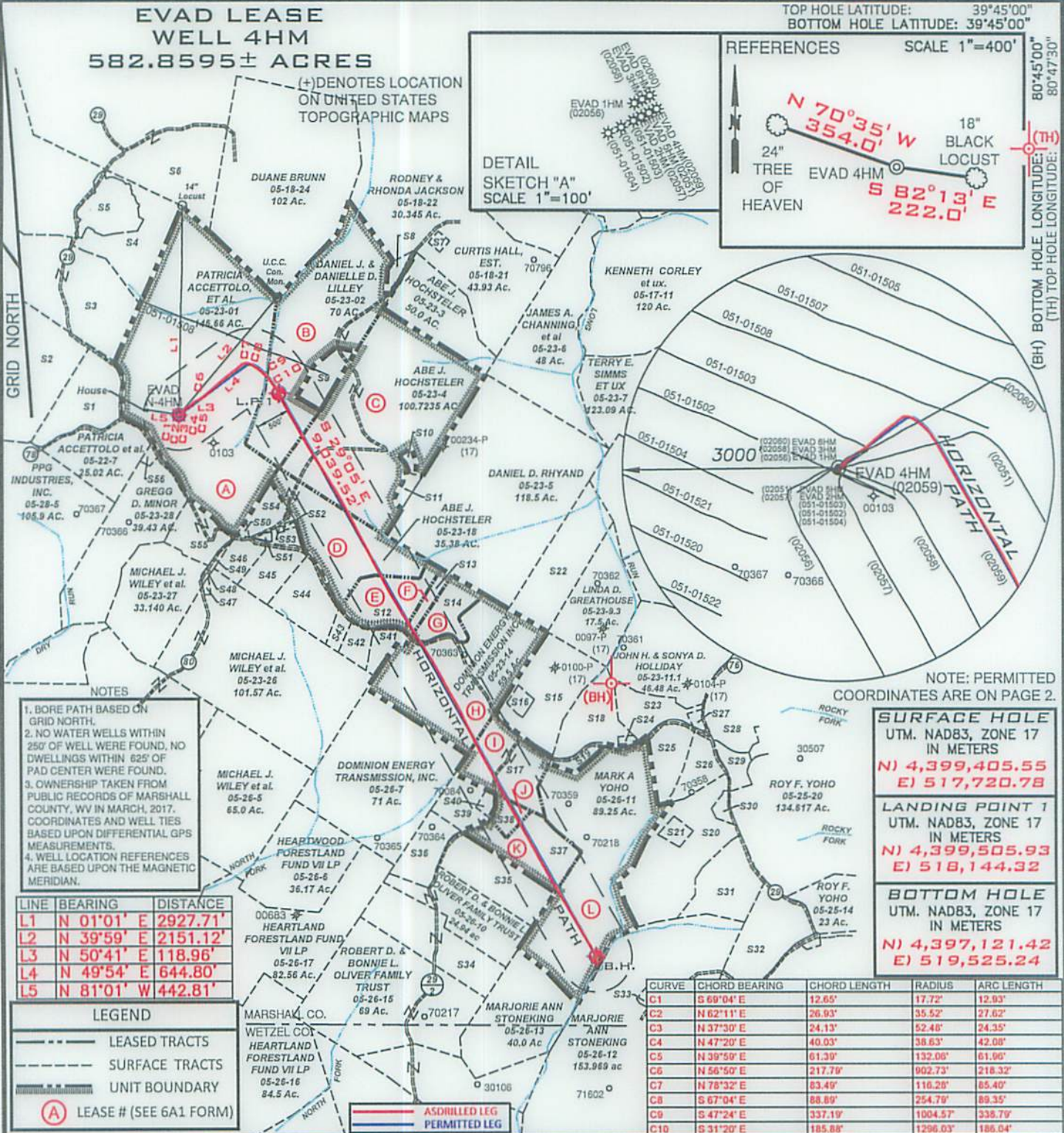
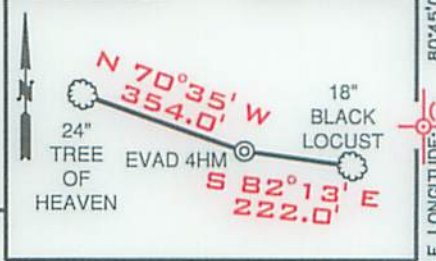
(+) DENOTES LOCATION ON UNITED STATES TOPOGRAPHIC MAPS

DETAIL SKETCH "A" SCALE 1"=100'

REFERENCES

TOP HOLE LATITUDE: 39°45'00"
BOTTOM HOLE LATITUDE: 39°45'00"

SCALE 1"=400'



- NOTES**
1. BORE PATH BASED ON GRID NORTH.
 2. NO WATER WELLS WITHIN 250' OF WELL WERE FOUND, NO DWELLINGS WITHIN 625' OF PAD CENTER WERE FOUND.
 3. OWNERSHIP TAKEN FROM PUBLIC RECORDS OF MARSHALL COUNTY, WV IN MARCH, 2017. COORDINATES AND WELL TIES BASED UPON DIFFERENTIAL GPS MEASUREMENTS.
 4. WELL LOCATION REFERENCES ARE BASED UPON THE MAGNETIC MERIDIAN.

NOTE: PERMITTED COORDINATES ARE ON PAGE 2.

SURFACE HOLE
UTM. NAD83, ZONE 17 IN METERS
N) 4,399,405.55
E) 517,720.78

LANDING POINT 1
UTM. NAD83, ZONE 17 IN METERS
N) 4,399,505.93
E) 518,144.32

BOTTOM HOLE
UTM. NAD83, ZONE 17 IN METERS
N) 4,397,121.42
E) 519,525.24

| CURVE | CHORD BEARING | CHORD LENGTH | RADIUS | ARC LENGTH |
|-------|---------------|--------------|----------|------------|
| C1 | S 69°04' E | 12.65' | 17.72' | 12.93' |
| C2 | N 62°11' E | 26.93' | 35.52' | 27.62' |
| C3 | N 37°30' E | 24.13' | 52.48' | 24.35' |
| C4 | N 47°20' E | 40.03' | 38.63' | 42.08' |
| C5 | N 39°59' E | 61.30' | 132.06' | 61.90' |
| C6 | N 56°50' E | 217.79' | 902.73' | 218.32' |
| C7 | N 78°32' E | 83.49' | 116.28' | 85.40' |
| C8 | S 67°04' E | 88.89' | 254.79' | 89.35' |
| C9 | S 47°24' E | 337.19' | 1004.57' | 338.79' |
| C10 | S 31°20' E | 185.88' | 1296.03' | 186.04' |

FILE NUMBER _____

DRAWING NUMBER EVAD_WP_4HM

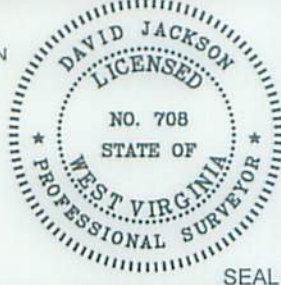
SCALE 1" = 2000'

MINIMUM DEGREE OF ACCURACY 1/200

PROVEN SOURCE OF ELEVATION SUBMETER MAPPING
GRADE GPS

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 THE RULES ISSUED AND PRESCRIBED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION

David L Jackson



JACKSON SURVEYING INC.
P.O. Box 1460
Clarksburg, WV 26302
304-623-5851

WVDEP
OFFICE OF OIL & GAS
601 57TH STREET, SE
CHARLESTON, WV 25304

DATE: JULY 13, 2020

OPERATORS WELL NO. EVAD 4HM

API WELL NO. 47-051-02059

STATE COUNTY PERMIT

WELL TYPE: OIL ___ GAS X LIQUID INJECTION ___ WASTE DISPOSAL ___
(IF "GAS") PRODUCTION X STORAGE ___ DEEP ___ SHALLOW X

LOCATION ELEVATION 1280.8' WATERSHED (HUC 10) FISH CREEK

DISTRICT FRANKLIN COUNTY MARSHALL

QUADRANGLE NEW MARTINSVILLE 7.5' LEASE NUMBER SEE WW-6A1 Form

SURFACE OWNER LOUIS J. & PATRICIA ACCETTOLO ET AL ACREAGE 146.66

OIL & GAS ROYALTY OWNER SEE WW-6A1 Form LEASE ACREAGE 146.66

PROPOSED WORK: DRILL ___ CONVERT ___ DRILL DEEPER ___ REDRILL ___ FRACTURE OR STIMULATE ___ PLUG OFF OLD FORMATION ___
PERFORME NEW FORMATION ___ OTHER PHYSICAL CHANGE (SPECIFY) ASDRILLED

TARGET FORMATION MARCELLUS ESTIMATED DEPTH TVD 6,613' TMD: 16,182'

WELL OPERATOR TUG HILL OPERATING, LLC DESIGNATED AGENT DIANNA STAMPER
CT CORPORATION SYSTEM

ADDRESS 1320 SOUTH UNIVERSITY DRIVE, SUITE 500 FORT WORTH, TX 76107 ADDRESS 5400 D BIG TYLER ROAD CHARLESTON, WV 25313

COUNTY NAME
PERMIT

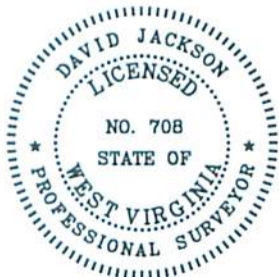
PG 2 OF 2 **EVAD LEASE**
WELL 4HM
582.8595± ACRES

SURFACE HOLE
 UTM. NAD83, ZONE 17
 IN METERS
 N) 4,399,405.66
 E) 517,720.70

LANDING POINT 1
 UTM. NAD83, ZONE 17
 IN METERS
 N) 4,399,506.60
 E) 518,147.12

BOTTOM HOLE
 UTM. NAD83, ZONE 17
 IN METERS
 N) 4,397,121.74
 E) 519,523.42

| Number | TAX MAP - PARCEL | ADJOINER OWNER | ACRES |
|--------|------------------|--|---------|
| S1 | 05-22-7.1 | The Exploration II LLC & Antinum Marcellus LLC | 20.68 |
| S2 | 05-22-8 | PPG Industries Inc. | 48.44 |
| S3 | 05-22-6 | CNX RPCPC LLC | 64.7 |
| S4 | 05-22-5 | CNX RPCPC LLC | 134.425 |
| S5 | 05-22-5.1 | Williams Ohio Valley Midstream LLC | 12.875 |
| S6 | 05-19-18 | Mark E. Yoho Et Ux | 55.948 |
| S7 | 05-18-21.2 | David P. Lassar Et Ux - Life | 1.0 |
| S8 | 05-23-2.1 | William L. & Janice M. Wayne | 2.364 |
| S9 | 05-23-2.2 | Jessica N. & Andrew L. Jones | 7.636 |
| S10 | 05-23-4.2 | James S. & Jeanne B. Hall | 1.169 |
| S11 | 05-23-4.1 | James S. & Jeanna B. Hall | 2.1575 |
| S12 | 05-23-16 | Roy Friend Yoho Sr. | 18.03 |
| S13 | 05-23-16.1 | Doanld B. Henry | 1.97 |
| S14 | 05-23-15 | Henry Virginia Ethel Est. | 15.5 |
| S15 | 05-23-9.2 | Linda D. Greathouse | 25.58 |
| S16 | 05-23-9.4 | Jackson R. Davis Sr. & Deanna L. Davis | 2.087 |
| S17 | 05-23-9.1 | John W. Van Orden Et Ux | 23.376 |
| S18 | 05-23-13 | Linda D. Greathouse | 14.24 |
| S19 | 05-23-12 | Mark A. Yoho | 3.05 |
| S20 | 05-25-18 | Joseph Johnson Et Ux - Life | 37.746 |
| S21 | 05-25-18.1 | Pamela Joan Ferrel Et Vir | 2.491 |
| S22 | 05-23-8 | Carl David & Suzanne L. Guseman | 29.5 |
| S23 | 05-23-18 | Abe J. Hochstetler | 35.382 |
| S24 | 05-23-13.1 | James R. & Pamela J. Ferrel | 0.7625 |
| S25 | 05-23-11.3 | Colin R. Yoho | 11.29 |
| S26 | 05-23-11.5 | Zachary R. Stevey | 9.25 |
| S27 | 05-23-11.2 | Evelyn Hudson | 1.154 |
| S28 | 05-23-11 | Roy F. Yoho | 5.28 |
| S29 | 05-25-20.3 | James A. & Jo C. Estep | 4.49 |
| S30 | 05-25-19 | Joseph Johnson Et Ux - Life | 1.973 |
| S31 | 05-25-17 | Emily Jones Irrevocable Trust | 22.79 |
| S32 | 05-25-16 | Emily Jones Irrevocable Trust | 23.5 |
| S33 | 05-26-12.1 | Alvin F. Stoneking Jr. & Kristen R. Stoneking | 2.011 |
| S34 | 05-26-14 | Robert D. & Bonnie L. Oliver Family Trust | 27.56 |
| S35 | 05-26-9 | Robert D. & Bonnie L. Oliver Family Trust | 21.75 |
| S36 | 05-26-23 | Richard Joseph Otte Et Ux | 11.34 |
| S37 | 05-26-8 | Richard Joseph Otte Et Ux | 18.27 |
| S38 | 05-26-20 | Doanld Lee Anderson Et Al | 4.2 |
| S39 | 05-26-22 | Richard Joseph Otte Et Ux | 8.3 |
| S40 | 05-26-21 | Richard Josphe Otte Et Ux | 1.25 |
| S41 | 05-23-17.3 | William & Catherine Flewelling | 5.018 |
| S42 | 05-23-17 | Thomas E. & Tammy Brown | 4.62 |
| S43 | 05-23-17.4 | Tammy D. Meadows | 2.605 |
| S44 | 05-23-17.2 | Dick Rowan Jr & Carol J. Rowan | 14.92 |
| S45 | 05-23-17.1 | Curtis E. Hall Et Ux | 10.051 |
| S46 | 05-23-22 | Daniel D. Rhyand & Laurel R. Greene | 6.25 |
| S47 | 05-23-25 | Arthur A. Wiley | 0.43 |
| S48 | 05-23-24 | Michael J. Wiley Et Al | 0.25 |
| S49 | 05-23-23 | Michael J. Wiley Et Al | 1.0 |
| S50 | 05-23-29 | James Wiley | 0.25 |
| S51 | 05-23-21 | Mark A. & Mark E. Yoho | 0.588 |
| S52 | 05-23-19 | Doty Cemetery | 1.0 |
| S53 | 05-23-20 | Christian Church | 0.17 |
| S54 | 05-23-18.1 | Mark A. Yoho | 7.8 |
| S55 | 05-23-28.2 | Mark W. & Carolyn L. Tennant | 10.8 |
| S56 | 05-23-28.1 | Troy W. & Erin M. Thomas | 1.0 |



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 Office of Oil and Gas

JUL 20 2020

WV Department of
 Environmental Protection

P.S. 708 *David L Jackson*



TUG HILL
OPERATING

OPERATOR'S
 WELL #: EVAD 4HM
 API #: 47-051-02059
 DISTRICT: Franklin
 COUNTY: Marshall
 STATE: WV

WELL PLAT
 PAGE 2 OF 2
 DATE: 07/13/2020