



 west virginia department of environmental protection

Office of Oil and Gas
 601 57th Street, S.E.
 Charleston, WV 25304
 (304) 926-0450
 fax: (304) 926-0452

Austin Caperton, Cabinet Secretary
www.dep.wv.gov

Thursday, February 21, 2019
 WELL WORK PERMIT
 Horizontal 6A / New Drill

CHEVRON APPALACHIA, LLC
 700 CHERRINGTON PARKWAY

CORAOPOLIS, PA 15108

Re: Permit approval for HICKS M18H
 47-051-02165-00-00

This well work permit is evidence of permission granted to perform the specified well work at the location described on the attached pages and located on the attached plat, subject to the provisions of Chapter 22 of the West Virginia Code of 1931, as amended, and all rules and regulations promulgated thereunder, and to any additional specific conditions and provisions outlined in the pages attached hereto. Notification shall be given by the operator to the Oil and Gas Inspector at least 24 hours prior to the construction of roads, locations, and/or pits for any permitted work. In addition, the well operator shall notify the same inspector 24 hours before any actual well work is commenced and prior to running and cementing casing. Spills or emergency discharges must be promptly reported by the operator to 1-800-642-3074 and to the Oil and Gas Inspector.

Please be advised that form WR-35, Well Operators Report of Well Work is to be submitted to this office within 90 days of completion of permitted well work, as should form WR-34 Discharge Monitoring Report within 30 days of discharge of pits, if applicable. Failure to abide by all statutory and regulatory provisions governing all duties and operations hereunder may result in suspension or revocation of this permit and, in addition, may result in civil and/or criminal penalties being imposed upon the operators.

Per 35 CSR 4-5.2.g this permit will expire in two (2) years from the issue date unless permitted well work is commenced. If there are any questions, please feel free to contact me at (304) 926- 0450.

James A. Martin
 Chief

Operator's Well Number: HICKS M18H
 Farm Name: THOMAS E. HICKS
 U.S. WELL NUMBER: 47-051-02165-00-00
 Horizontal 6A: New Drill
 Date Issued: 2/21/2019

PERMIT CONDITIONS

West Virginia Code § 22-6A-8(d) allows the Office of Oil and Gas to place specific conditions upon this permit. Permit conditions have the same effect as law. Failure to adhere to the specified permit conditions may result in enforcement action.

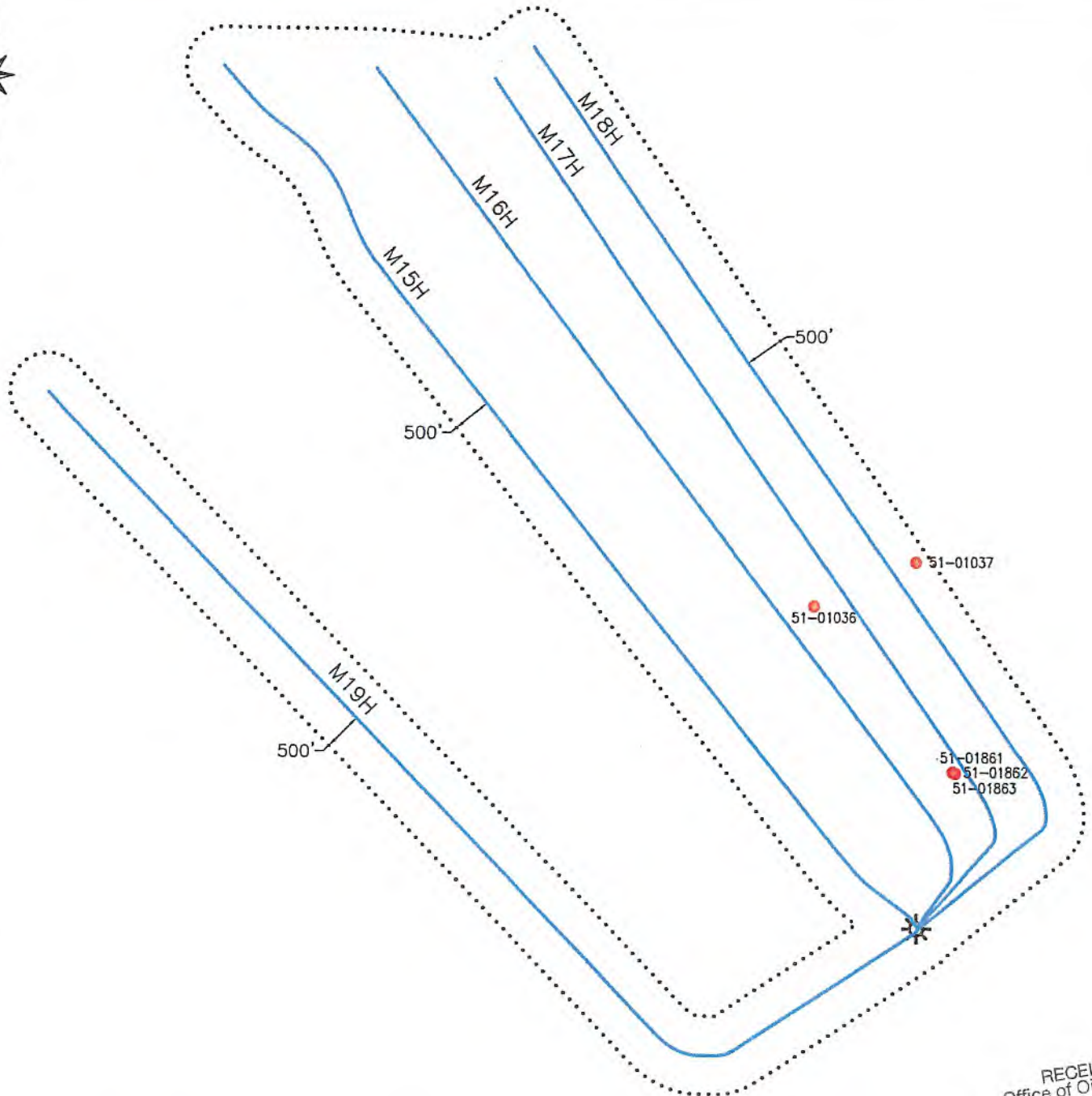
CONDITIONS

1. This proposed activity may require permit coverage from the United States Army Corps of Engineers (USACE). Through this permit, you are hereby being advised to consult with USACE regarding this proposed activity.
2. If the operator encounters an unanticipated void, or an anticipated void at an unanticipated depth, the operator shall notify the inspector within 24 hours. Modifications to the casing program may be necessary to comply with W. Va. Code § 22-6A-5a (12), which requires drilling to a minimum depth of thirty feet below the bottom of the void, and installing a minimum of twenty (20) feet of casing. Under no circumstance should the operator drill more than one hundred (100) feet below the bottom of the void or install less than twenty (20) feet of casing below the bottom of the void.
3. When compacting fills, each lift before compaction shall not be more than 12 inches in height, and the moisture content of the fill material shall be within limits as determined by the Standard Proctor Density test of the actual soils used in specific engineered fill, ASTM D698, Standard Test Method for Laboratory Compaction Characteristics of Soil Using Standard Effort, to achieve 95 % compaction of the optimum density. Each lift shall be tested for compaction, with a minimum of two tests per lift per acre of fill. All test results shall be maintained on site and available for review.
4. Operator shall install signage per § 22-6A-8g (6) (B) at all source water locations included in their approved water management plan within 24 hours of water management plan activation.
5. Oil and gas water supply wells will be registered with the Office of Oil and Gas and all such wells will be constructed and plugged in accordance with the standards of the Bureau for Public Health set forth in its Legislative rule entitled *Water Well Regulations*, 64 C.S.R. 19. Operator is to contact the Bureau of Public Health regarding permit requirements. In lieu of plugging, the operator may transfer the well to the surface owner upon agreement of the parties. All drinking water wells within fifteen hundred feet of the water supply well shall be flow tested by the operator upon request of the drinking well owner prior to operating the water supply well.
6. Pursuant to the requirements pertaining to the sampling of domestic water supply wells/springs the operator shall, no later than thirty (30) days after receipt of analytical data provide a written copy to the Chief and any of the users who may have requested such analyses.
7. 24 hours prior to the initiation of the completion process the operator shall notify the Chief or his designee.
8. During the completion process the operator shall monitor annular pressures and report any anomaly noticed to the chief or his designee immediately.
9. If any explosion or other accident causing loss of life or serious personal injury occurs in or about a well or well work on a well, the well operator or its contractor shall give notice, stating the particulars of the explosion or accident, to the oil and gas inspector and the Chief, within 24 hours of said accident.
10. During the casing and cementing process, in the event cement does not return to the surface, the oil and gas inspector shall be notified within 24 hours.

API Number: 4705102165
02/22/2019

PERMIT CONDITIONS



11. The operator shall provide to the Office of Oil and Gas the dates of each of the following within 30 days of their occurrence: completion of construction of the well pad, commencement of drilling, cessation of drilling, completion of any other permitted well work, and completion of the well. Such notice shall be provided by sending an email to DEPOOGNotify@wv.gov.



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Blue Mountain
10125 MASON DIXON HIGHWAY
BURTON, WV 26562
PHONE: (304) 662-6486

PREPARED FOR:
CHEVRON APPALACHIA, LLC
700 CHERRINGTON PARKWAY
CORAOPOLIS, PA 15108

LEGEND
 - WELL LOCATION
 - ACTIVE WELL

**HICKS BATCH 3
AREA OF REVIEW MAP
MARSHALL COUNTY
CLAY DISTRICT
WEST VIRGINIA**

TOPO QUAD: GLEN EASTON, WV
 SCALE: 1" = 2000'
 DATE: DECEMBER 4, 2018

| Well ID | Prior Operator/On Record | Operator - DEP | Status | Latitude | Longitude | Vertical TD | Producing Formation | Producing Zones NOT Perforated |
|--------------|--------------------------|-------------------------|---------------|-----------|------------|-------------|---------------------|--------------------------------|
| 47-051-01036 | CNX Gas Company LLC | CNX Gas Company LLC | Active | 39.883078 | -80.723078 | 274' | Pittsburgh Seam | None |
| 47-051-01037 | CNX Gas Company LLC | CNX Gas Company LLC | Active | 39.884675 | -80.718315 | 578' | Pittsburgh Seam | None |
| 47-051-01861 | Chevron Appalachia, LLC | Chevron Appalachia, LLC | Permit Issued | 39.877336 | -80.716485 | | Marcellus | |
| 47-051-01862 | Chevron Appalachia, LLC | Chevron Appalachia, LLC | Permit Issued | 39.877314 | -80.71642 | | Marcellus | |
| 47-051-01863 | Chevron Appalachia, LLC | Chevron Appalachia, LLC | Permit Issued | 39.877291 | -80.716355 | | Marcellus | |

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STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS
WELL WORK PERMIT APPLICATION

1) Well Operator: Chevron Appalachia, LLC 49449935 Marshall Clay Glen Easton 7.5'
Operator ID County District Quadrangle

2) Operator's Well Number: M18H Well Pad Name: Hicks

3) Farm Name/Surface Owner: Thomas E Hicks Public Road Access: Fork Ridge Rd/WV-17

4) Elevation, current ground: 1161 Elevation, proposed post-construction: 1161

5) Well Type (a) Gas Oil _____ Underground Storage _____
Other _____

(b) If Gas Shallow Deep _____
Horizontal

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12/10/18

6) Existing Pad: Yes or No Yes

7) Proposed Target Formation(s), Depth(s), Anticipated Thickness and Expected Pressure(s):
Marcellus, 6336 feet Below GL, Thickness: 50 Feet; Pore Pressure Gradient: 0.64 PSI/ft

8) Proposed Total Vertical Depth: 6336 feet below GL

9) Formation at Total Vertical Depth: Marcellus

10) Proposed Total Measured Depth: 18,585

11) Proposed Horizontal Leg Length: 11,283

12) Approximate Fresh Water Strata Depths: 430 feet below GL

13) Method to Determine Fresh Water Depths: Deepest freshwater from water wells within 1 mile radius of the well

14) Approximate Saltwater Depths: 1110 ft, 1688 ft, 1755 ft.

15) Approximate Coal Seam Depths: 684 ft.

16) Approximate Depth to Possible Void (coal mine, karst, other): No void expected

17) Does Proposed well location contain coal seams directly overlying or adjacent to an active mine? Yes _____ No

(a) If Yes, provide Mine Info: Name: _____
Depth: _____
Seam: _____
Owner: _____

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Page 1 of 3

WW-6B
(04/15)

API NO. 47- _____
 OPERATOR WELL NO. M18H _____
 Well Pad Name: Hicks _____

18) CASING AND TUBING PROGRAM

| TYPE | Size (in) | New or Used | Grade | Weight per ft. (lb/ft) | FOOTAGE: For Drilling (ft) | INTERVALS: Left in Well (ft) | CEMENT: Fill-up (Cu. Ft.)/CTS |
|--------------|-----------|-------------|-------|------------------------|----------------------------|------------------------------|--------------------------------|
| Conductor | 20 | New | | | 60 | 60 | CTS |
| Fresh Water | 13.375 | New | J-55 | 54.5 | 480 | 480 | CTS |
| Coal | | | | | | | |
| Intermediate | 9.625 | New | L-80 | 40 | 2,025 | 2,025 | CTS |
| Production | 5.50 | New | P110 | 20 | 18,585 | 18,585 | 2358 (500' below 9,625" shore) |
| Tubing | | | | | | | |
| Liners | | | | | | | |

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12/10/15

| TYPE | Size (in) | Wellbore Diameter (in) | Wall Thickness (in) | Burst Pressure (psi) | Anticipated Max. Internal Pressure (psi) | Cement Type | Cement Yield (cu. ft./k) |
|--------------|-----------|------------------------|---------------------|----------------------|--|------------------|--------------------------|
| Conductor | 20 | 30 | | | | | |
| Fresh Water | 13.375 | 17.5 | 0.38 | 2,730 | 1,911 | Class A | 1.2 |
| Coal | | | | | | | |
| Intermediate | 9.625 | 12.375 & 12.25 | 0.395 | 5,750 | 2,768 | Class A | 1.19 |
| Production | 5.5 | 8.75 & 8.5 | 0.361 | 14,360 | 9,975 | Class A, G, or H | 1.25 |
| Tubing | | | | | | | |
| Liners | | | | | | | |

PACKERS

| | | | | |
|-------------|--|--|--|--|
| Kind: | | | | |
| Sizes: | | | | |
| Depths Set: | | | | |

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WW-6B
(10/14)

470510210019
02/22/2019
API NO. 47- _____
OPERATOR WELL NO. M18H
Well Pad Name: Hicks

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12/10/18

19) Describe proposed well work, including the drilling and plugging back of any pilot hole:

Drill vertical depth to the Marcellus. Drill horizontal leg.

20) Describe fracturing/stimulating methods in detail, including anticipated max pressure and max rate:

9525 bbl fluid - 400,000 lbm sand/stage - 9,400 anticipated max psi - 100 bpm anticipated max rate.

21) Total Area to be disturbed, including roads, stockpile area, pits, etc., (acres): 27.4

22) Area to be disturbed for well pad only, less access road (acres): 19.7

23) Describe centralizer placement for each casing string:

Surface: (1) on shoe track w/stop collar & (1) per jt over coupling to surface; Intermediate: (1) on shoe track w/stop collar & (1) per 3 jts over coupling; Production String: (1) centralizer every jt in the lateral and curve & (1) every other joint from KOP to surface.

24) Describe all cement additives associated with each cement type:

For the Water String the blend will contain class A cement, 3% CaC12, and flake. The intermediate will contain class A cement, 3% CAC12, and flake. The Production cement will have a lead and tail cement. The lead will contain class A, G, or H cement, KCl, dispersant, suspension agent, and retarder. The tail will contain class A, G, or H cement, Calcium Carbonate, KCl, dispersant, de-foamer, suspension agent, and friction reducer.

25) Proposed borehole conditioning procedures:

Air sections ensured to be clean via air circulation once TD is reached. Fluid sections will be circulated a minimum of 2 bottoms up once casing point has been reached and until uniform mud properties are achieved.

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*Note: Attach additional sheets as needed.

Cement Additives

The Water String the blend will contain class A cement, 3% CaCl₂, and flake.

The intermediate will contain class A cement, 10% CaCl₂, Salt, and flake.

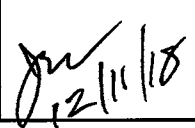
The Production cement will have a lead and tail cement.

The lead will contain class A, G, or H cement, KCl, dispersant, suspension agent, and retarder.

The tail will contain class A, G, or H cement, Calcium Carbonate, KCl, dispersant, de-foamer, suspension agent, and friction reducer.

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Hicks M18H

| Clay Twp, Marshall Co, WV | | | | | | Ground Level Elev. (ft above SL): | | 1,138 | |
|---------------------------------|---|-------------------------|---------|----------|-----------------|-----------------------------------|---|-------|--|
| | | | | | | *All Depths Reference GL* | | | |
| DRILLING FLUID / BIT TYPE / TFA | CENTRALIZER PROGRAM | CASING SIZE / FORMATION | DEPTH | | WELLHEAD DESIGN | HOLE SIZE (IN) | CASING SPECS | | CEMENT PROGRAM |
| | | | MD (FT) | TVD (FT) | | | | | |
| Coro Barrel / Auger | | 20" Conductor | 60 | 60 | INC AZM | 26-36 | Conductor 20" API 5L Minimum 40 ft from GL or at least 10 ft into bedrock | | Grout to Surface |
| | Bow Spring: (1) on shoe track w/ stop collar & (1) per 2 ft over coupling to surface | 13-3/8" Casing | 480 | 480 | | 17.5 | Surface Casing 13-3/8" 54.5# J-55 BTC 0.380" Wall Coupling OD (in) 14.375 ID (in) 12.615 Drift ID (in) 12.459 Burst (psi) 2,730 Collapse (psi) 1,130 Yield (Jt Strength 1,000 lbs) 853 | | Surface Blend (Class A) Cement to Surface |
| | Bow Spring: (1) on shoe track w/ stop collar & (1) per 3 jts over coupling | 9-5/8" Casing | 2,025 | 2,025 | | 12.375 - 12.25 | Intermediate Casing 9-5/8" 40#L-80 BTC 0.395" Wall Coupling OD (in) 10.625 ID (in) 8.835 Drift ID (in) 8.679 Burst (psi) 5,750 Collapse (psi) 3,080 Yield (Jt Strength 1,000 lbs) 916 | | Intermediate II Blend (Class A) Cement to Surface |
| | Bow Spring: (1) per every other jt over coupling SpiraGlider or Centek: (1) per jt of csg to KOP | 5-1/2" Casing | 18,586 | 6,336 | | 8.75 - 8.5 | Production Casing 5-1/2" 20# P-110, 0.361" Wall Coupling OD (in) 6.300 ID (in) 4.778 Drift ID (in) 4.653 Burst (psi) 14,360 Collapse (psi) 12,090 Yield (Jt Strength 1,000 lbs) 729 | | Production Lead Slurry Cement to 500' below 9-5/8" shoe Production Tail Slurry TOC minimum 200' above Marcellus |
| Non-Conservation | Float Equip. (2) Jts of Csg | 5-1/2" Casing | 18,586 | 6,336 | | 8.75 - 8.5 |  | | RECEIVED Office of Oil and Gas DEC 20 2018 WV Department of Environmental Protection |

WW-9
(4/16)

API Number 47 - _____ - _____
Operator's Well No. M18H

STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
OFFICE OF OIL AND GAS

FLUIDS/ CUTTINGS DISPOSAL & RECLAMATION PLAN

Operator Name Chevron Appalachia, LLC OP Code 49449935

Watershed (HUC 10) Middle Grave Creek - Grave Creek Quadrangle Glen Easton, WV 7.5'

Do you anticipate using more than 5,000 bbls of water to complete the proposed well work? Yes No

Will a pit be used? Yes No

If so, please describe anticipated pit waste: _____

Will a synthetic liner be used in the pit? Yes No If so, what ml.? _____

Proposed Disposal Method For Treated Pit Wastes:

- Land Application
- Underground Injection (UIC Permit Number _____)
- Reuse (at API Number at next anticipated well)
- Off Site Disposal (Supply form WW-9 for disposal location)
- Other (Explain _____)

Will closed loop system be used? If so, describe: Yes, we will be utilizing multiple open/closed top tanks

Drilling medium anticipated for this well (vertical and horizontal)? Air, freshwater, oil based, etc. Air to KOP, SBM KOP to TMD

-If oil based, what type? Synthetic, petroleum, etc. Synthetic

Additives to be used in drilling medium? Barite, fluid loss, emulsifiers, rheological control

Drill cuttings disposal method? Leave in pit, landfill, removed offsite, etc. Removed offsite

-If left in pit and plan to solidify what medium will be used? (cement, lime, sawdust) _____

-Landfill or offsite name/permit number? Arden Landfill #100172; South Hills Landfill #100592; Short Creek Landfill #WW0109517

Permittee shall provide written notice to the Office of Oil and Gas of any load of drill cuttings or associated waste rejected at any West Virginia solid waste facility. The notice shall be provided within 24 hours of rejection and the permittee shall also disclose where it was properly disposed.

I certify that I understand and agree to the terms and conditions of the GENERAL WATER POLLUTION PERMIT issued on August 1, 2005, by the Office of Oil and Gas of the West Virginia Department of Environmental Protection. I understand that the provisions of the permit are enforceable by law. Violations of any term or condition of the general permit and/or other applicable law or regulation can lead to enforcement action.

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this application form and all attachments thereto and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment.

Company Official Signature Jenny Butchko
Company Official (Typed Name) Jenny Butchko
Company Official Title Permitting Team Lead

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DEC 20 2018

Subscribed and sworn before me this 28th day of November, 2018

Laura Savage

Notary Public

My commission expires September 17, 2022

WV Department of Environmental Protection
Commonwealth of Pennsylvania
County of Allegheny

Commonwealth of Pennsylvania - Notary Seal
Laura Savage, Notary Public
Allegheny County
My commission expires September 17, 2022
Commission number 1285773

Form WW-9

Operator's Well No. M18H

Chevron Appalachia, LLC

Proposed Revegetation Treatment: Acres Disturbed +/- 4 acres Prevegetation pH Per soils testing report

Lime 3 Tons/acre or to correct to pH unless otherwise noted in soils report

Fertilizer type ¹⁰⁻²⁰⁻²⁰ _____

Fertilizer amount 300 lbs/acre

Mulch 3 Tons/acre

Seed Mixtures

Temporary

Permanent

Seed Type lbs/acre

Seed Type lbs/acre

Annual Ryegrass 50

No agricultural Upland and Hayfield, Pastureland and Cropland

Winter Wheat 75

Tall Fescue 100, Orchard Grass 80, Perennial Ryegrass 33,

Timothy 80, Ladino Clover 18, Birdsfoot- Trefoil 20,

Birdsfoot-Trefoil 18, Ladino Clover 20, Red Top 6

Attach:

Maps(s) of road, location, pit and proposed area for land application (unless engineered plans including this info have been provided). If water from the pit will be land applied, include dimensions (L x W x D) of the pit, and dimensions (L x W), and area in acreage, of the land application area.

Photocopied section of involved 7.5' topographic sheet.

Plan Approved by: *Jim Anderson*

Comments: _____

Title: Oil & Gas Inspector

Date: 12/10/18

Field Reviewed? Yes No

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Environmental Protection



Chevron

John
12/11/18

**Appalachian LLC
WV Well Site Safety Plan**

Pad: Hicks Pad A

Well # M18H

**271 Arbor Lane
Moundsville, WV 26041
Clay District
Marshall County, WV**

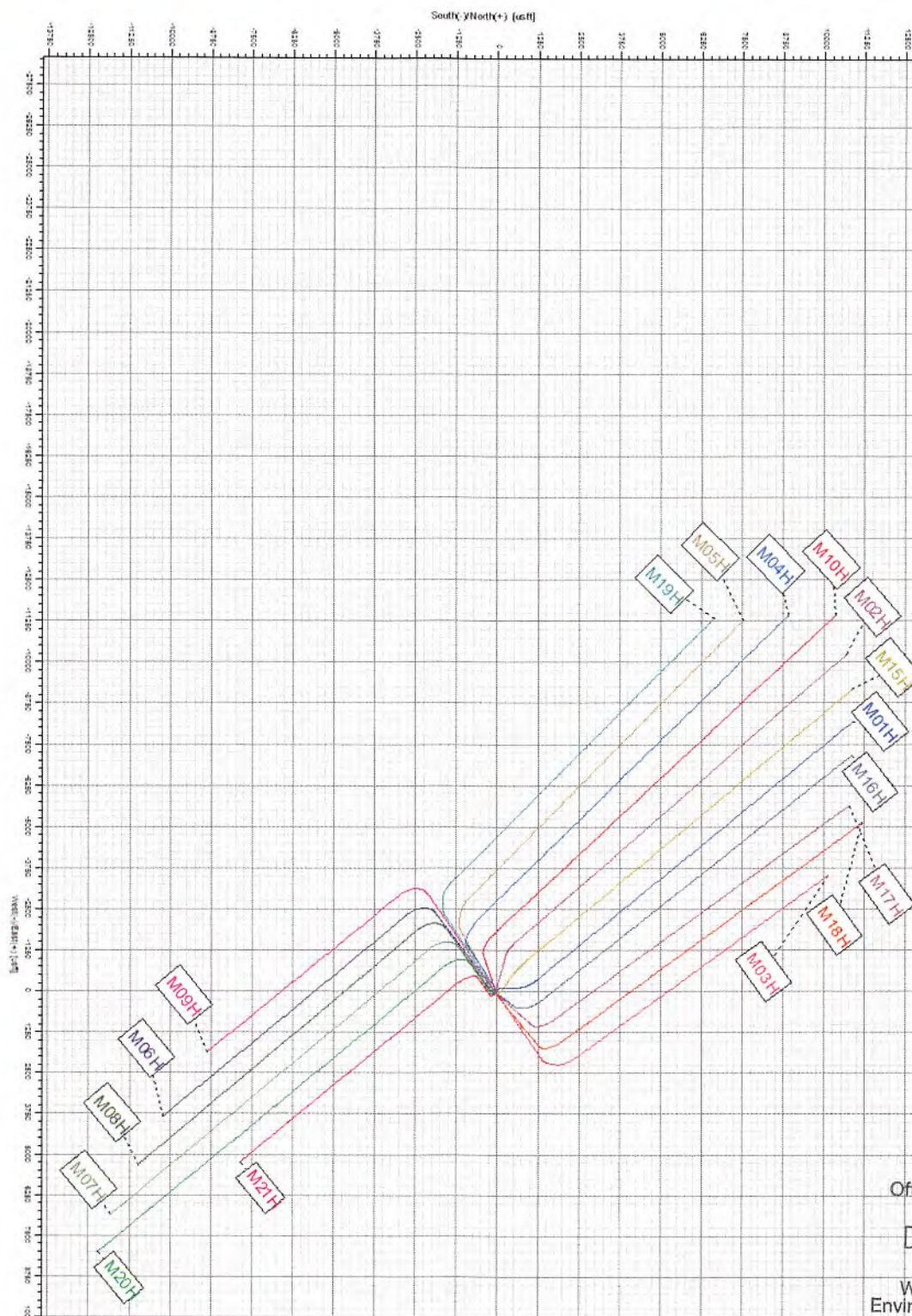
Access Point – [39.872100°N, 80.711825°W]

Well Site – [39.871558°N, 80.717794°W]

Marshall County, West Virginia

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8. Spider Plot

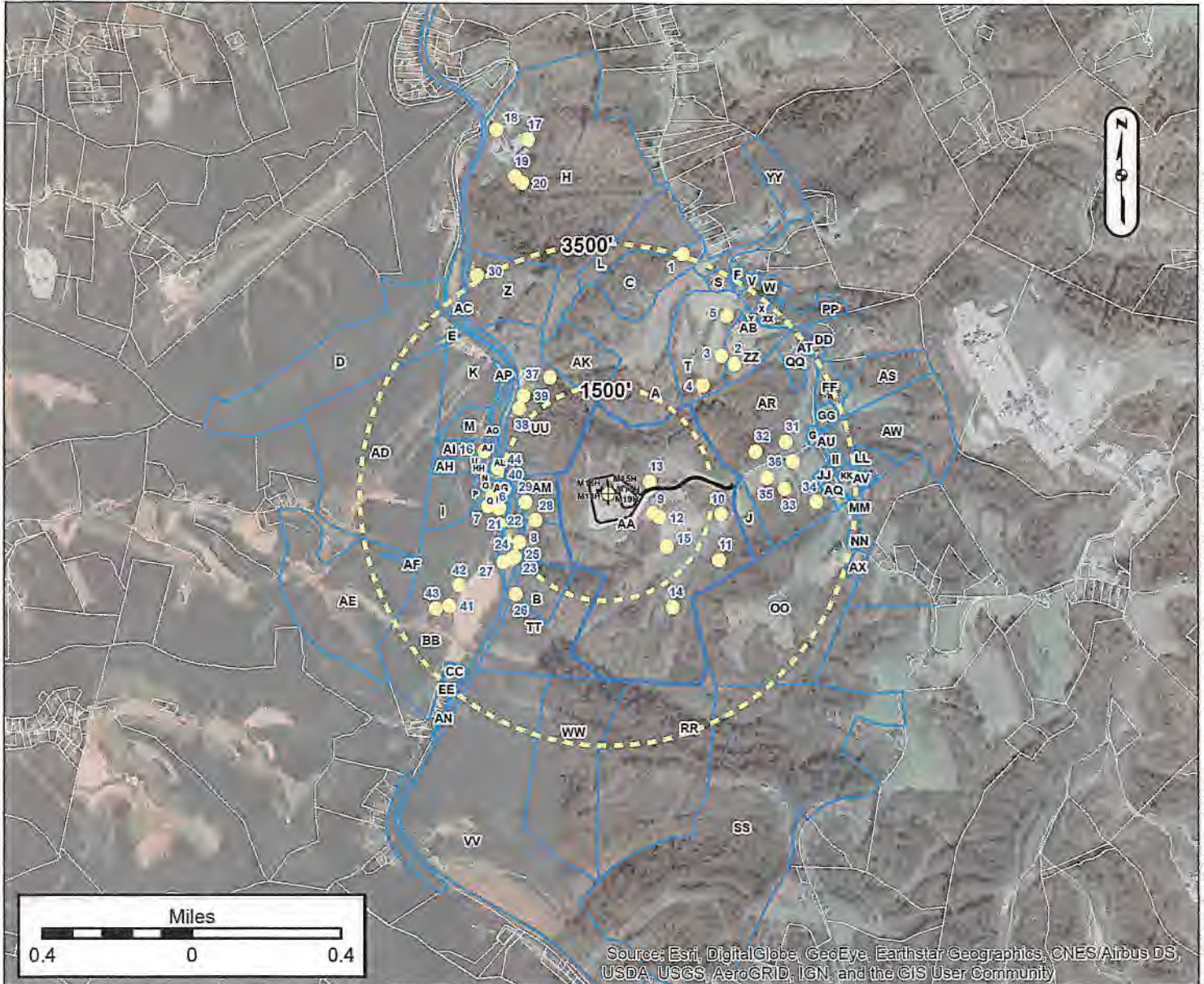


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WATER SUPPLY EXHIBIT HICKS PAD BATCH #3

02/22/2019
GES



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

LOT OWNERS

| Label | OWNER | TIM | Label | OWNER | TIM | Label | OWNER | TIM | Label | OWNER | TIM |
|-------|-----------------------------|----------------------|-------|-------------------------------|----------------------|-------|--------------------------------|----------------------|-------|------------------------------|---------------------|
| A | SCHABER LESLIE B & LORI | 25-04 8003300000000 | Q | CLAYTON RALPH L ET UX | 25-04 8003300000000 | GG | SCHUMAN GUERYRY J & SUZANNE K | 25-04 8000200000000 | WV | COSTER EDWARD B ET UX ESTS- | 25-04 1000010000000 |
| B | POND SIDNEY P ET UX | 25-04 8003600000000 | R | POND SIDNEY P & VICKE L | 25-04 8001500010000 | HH | WHEELER VAL ANDREW ET UX | 25-04 8002300000000 | YZ | FERRILL ROBERT V ET UX | 25-04 4002500010000 |
| C | ADKINS JASON B & DAWN R | 25-04 4007500000000 | S | RICHEY ROBERT L ET AL | 25-04 40058000130000 | II | LOSH ROGER W & JODY L | 25-04 90002000110000 | YY | OCH JOHN W III ET UX | 25-04 4005800100000 |
| D | MERCER CHARLES W JR & JUDY | 25-04 8003400000000 | T | CHAMBERS MONTE J ET UX | 25-04 8003900010000 | JJ | HENRY MINNIE L - LIFE | 25-04 9000000000000 | ZZ | CHAMBERS JELINDA & MONTE | 25-04 4005800110000 |
| E | CLARK PATSY ANN | 25-04 8003300000000 | U | LITMAN RICHARD E JR ET UX | 25-04 80033000010000 | KK | KDORCE MARTHA J & JAMES L | 25-04 90002000100000 | AB | CARPENTER DONALD T ET UX | 25-04 4005800200000 |
| F | LITTLETON HARRY LEBOW ET UX | 25-04 4006300000000 | V | KIDD JAMES E ET UX | 25-04 4005800170000 | LL | MINOR CAROL LYNN ET VIR | 25-04 9000200060000 | AC | CONSOLIDATION COAL COMPANY | 25-04 4007400000000 |
| G | HICKS TERESA M | 25-04 3000200100000 | W | TRIPLETT JASON L & TRICIA L | 25-04 4005800180000 | MM | LYONS CHRISTINA S | 25-04 9000500000000 | AD | ASTON HENRY W & LINDA M-LIFE | 25-04 8001700000000 |
| H | MOUNTAINEER ENTERPRISES LLC | 25-04 4002300000000 | X | STEIN JAMES MARTIN ET UX | 25-04 4002300000000 | NN | GALLER ROBERT D ET UX | 25-04 9001000000000 | AE | SCHNAF FAMILY IRREVOCABLE TR | 25-04 8001500000000 |
| I | LITMAN RICHARD E SR | 25-04 80032000040000 | Y | CARPENTER DONALD T JR | 25-04 4005800120000 | OO | BUCHANAN JAMES E ET UX | 25-04 3001300000000 | AF | WILLIAMS NABEL JUANITA | 25-04 8001500000000 |
| J | HICKS LUCILLE E | 25-04 80033000010000 | Z | RICHMOND JANET ELOWISE | 25-04 40027000000000 | PP | FERRILL ROBERT V ET UX | 25-04 4005800000000 | AG | POND SIDNEY P & VICKE L | 25-04 8002600000000 |
| K | MORRIS DONNIE ET UX | 25-04 80033000010000 | AA | HICKS THOMAS E | 25-04 80037000000000 | QQ | MCCARY RUBY LAVERNE ET AL-LIFE | 25-04 9000200040000 | AH | LITMAN RICHARD E SR | 25-04 8003500000000 |
| L | GONCHOFF JOSEPH | 25-04 4005700000000 | BB | WILLIAMS MABEL JUANITA | 25-04 8002300000000 | RR | COSTER EDWARD B ET UX ESTS- | 25-04 10000300000000 | AJ | LITMAN RICHARD E SR | 25-04 8003500000000 |
| M | THOMAS DENVER D ET UX | 25-04 8003200000000 | CC | MARTIN MARILYN | 25-04 80023000030000 | SS | WINDROVE DENNIS D ET UX | 25-04 10000400000000 | AK | LITMAN RICHARD EARL SR | 25-04 8003100000000 |
| N | WHEELER RICHARD P & JAMIE L | 25-04 8003300000000 | DD | ONE GROVE M E CHURCH | 25-04 80031000000000 | TT | POND SIDNEY P & VICKE L | 25-04 8003500000000 | AL | SCHABER LESLIE B & LORI D | 25-04 8003400000000 |
| O | TASO ELEANOR B | 25-04 8002200000000 | EE | ALLAMAN MICHAEL RAY | 25-04 80022000010000 | UU | STEIN RONALD ELWOOD ET UX | 25-04 8003300000000 | AM | LITMAN RICHARD E SR | 25-04 8001500000000 |
| P | CLAYTON RALPH L ET UX | 25-04 8002900010000 | FF | HINEMAN JASON C & CHRISTINA M | 25-04 9000200170000 | VV | MOUNDSVILLE CITY OF | 25-04 10000100000000 | AN | POND VICKE L B & SIDNEY P | 25-04 8003300010000 |

Surface Owner: THOMAS E. HICKS
 Oil/Gas Owner: THOMAS E. HICKS
 Well Operator: CHEVRON APPALACHIA, LLC
 Address: 700 CHERRINGTON PARKWAY
CORAOPOLIS, PA 15108
 Phone: 724-564-3700

County: MARSHALL
 Township: MOUNDSVILLE, WV
 Groundwater & Environmental Services, Inc.
 Surveyor: SERVICES, INC.
 Address: 301 COMMERCE PARK DR
CRANBERRY TOWNSHIP, PA 16066
 Phone: 800-267-2549

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NOTICE: THE INTENT OF THIS EXHIBIT IS TO IDENTIFY EXISTING WATER SUPPLIES IN THE VICINITY OF A PROPOSED GAS WELL, AND IS NOT A COMPLETE BOUNDARY SURVEY. PROPERTY LINES AND OWNER INFORMATION WERE OBTAINED FROM DEEDS, TAX RECORDS, AERIAL PHOTOGRAPHY, GIS, AND FIELD SURVEYED EVIDENCE.



WATER SUPPLY EXHIBIT
HICKS PAD BATCH #3

02/22/2019
GCS

| No. | WATER PURVEYOR | SUPPLY | ELEV. | ADDRESS | PHONE # |
|-----|--------------------------|--------|-------|---------------------------|--------------|
| 1* | ADKINS JASON B & DAWN R | Spring | 1,214 | 148 Nathan Lane | 304-845-9456 |
| 2 | CHAMBERS JELINDA & MONTE | Spring | 1,123 | 3389 Fork Ridge Road | 304-218-8647 |
| 3 | CHAMBERS JELINDA & MONTE | Spring | 1,108 | 3389 Fork Ridge Road | 304-218-8647 |
| 4 | CHAMBERS MONTE J ET UX | Spring | 1,121 | 3389 Fork Ridge Road | 304-218-8647 |
| 5 | CHAMBERS MONTE J ET UX | Pond | 1,176 | 3389 Fork Ridge Road | 304-218-8647 |
| 6 | CLAYTON RALPH L ET UX | Well | 734 | 3307 Big Grave Creek Road | 304-845-3507 |
| 7 | CLAYTON RALPH L ET UX | Stream | 736 | 3307 Big Grave Creek Road | 304-845-3507 |
| 8 | POND SIDNEY P & VICKI L | Well | 539 | 119 Labrador Lane | 304-843-1522 |
| 9 | HICKS THOMAS E | Well | 1,112 | 353 Arbor Lane | 304-559-7031 |
| 10 | HICKS THOMAS E | Well | 1,156 | 353 Arbor Lane | 304-559-7031 |
| 11 | HICKS THOMAS E | Stream | 1,116 | 353 Arbor Lane | 304-559-7031 |
| 12 | HICKS THOMAS E | Stream | 1,111 | 353 Arbor Lane | 304-559-7031 |
| 13 | HICKS THOMAS E | Stream | 1,117 | 353 Arbor Lane | 304-559-7031 |
| 14 | HICKS THOMAS E | Pond | 1,112 | 353 Arbor Lane | 304-559-7031 |
| 15 | HICKS THOMAS E | Pond | 1,111 | 353 Arbor Lane | 304-559-7031 |

| No. | SUPPLY COORDINATES | M15H | M16H | M17H | M18H | M19H | | | | | | | | |
|-----|-----------------------------------|-------|-------|-------|-------|-------|--|--|--|--|--|--|--|--|
| 1 | 39°52'51.56400"N 80°42'52.07400"W | 3,470 | 3,483 | 3,496 | 3,509 | 3,522 | | | | | | | | |
| 2 | 39°52'36.41880"N 80°42'42.33960"W | 2,518 | 2,526 | 2,534 | 2,542 | 2,551 | | | | | | | | |
| 3 | 39°52'37.48800"N 80°42'44.78400"W | 2,469 | 2,478 | 2,487 | 2,497 | 2,506 | | | | | | | | |
| 4 | 39°52'33.37320"N 80°42'48.02040"W | 1,989 | 1,998 | 2,007 | 2,016 | 2,025 | | | | | | | | |
| 5 | 39°52'43.06080"N 80°42'43.80120"W | 2,966 | 2,976 | 2,987 | 2,997 | 3,008 | | | | | | | | |
| 6 | 39°52'17.70240"N 80°43'26.01840"W | 1,633 | 1,635 | 1,638 | 1,640 | 1,643 | | | | | | | | |
| 7 | 39°52'16.34520"N 80°43'26.69160"W | 1,700 | 1,701 | 1,702 | 1,704 | 1,705 | | | | | | | | |
| 8 | 39°52'11.42040"N 80°43'20.97120"W | 1,443 | 1,438 | 1,434 | 1,429 | 1,425 | | | | | | | | |
| 9 | 39°52'15.61800"N 80°42'56.81880"W | 722 | 713 | 703 | 695 | 686 | | | | | | | | |
| 10 | 39°52'15.67920"N 80°42'44.41320"W | 1,644 | 1,639 | 1,633 | 1,627 | 1,622 | | | | | | | | |
| 11 | 39°52'09.33240"N 80°42'44.70120"W | 1,857 | 1,847 | 1,836 | 1,826 | 1,816 | | | | | | | | |
| 12 | 39°52'15.11040"N 80°42'55.73160"W | 821 | 811 | 802 | 793 | 784 | | | | | | | | |
| 13 | 39°52'19.97760"N 80°42'57.50640"W | 606 | 606 | 606 | 607 | 608 | | | | | | | | |
| 14 | 39°52'02.75520"N 80°42'53.05680"W | 1,874 | 1,860 | 1,846 | 1,832 | 1,817 | | | | | | | | |
| 15 | 39°52'11.07840"N 80°42'54.26280"W | 1,150 | 1,138 | 1,126 | 1,114 | 1,102 | | | | | | | | |

*WATER SOURCE PREVIOUSLY LOCATED IN 2016.



WATER SUPPLY EXHIBIT
HICKS PAD BATCH #3

02/22/2019
OGS

| No. | WATER PURVEYOR | SUPPLY | ELEV. | ADDRESS | PHONE # |
|-----|-----------------------------|--------|-------|----------------------|--------------|
| 16 | LITMAN RICHARD EARL SR JR | Well | 733 | 34 Litman Drive | 304-810-2404 |
| 17 | MOUNTAINEER ENTERPRISES LLC | Well | 692 | Big Grave Creek Road | 304-845-7537 |
| 18 | MOUNTAINEER ENTERPRISES LLC | Well | 663 | Big Grave Creek Road | 304-845-7537 |
| 19 | MOUNTAINEER ENTERPRISES LLC | Pond | 697 | Big Grave Creek Road | 304-845-7537 |
| 20 | MOUNTAINEER ENTERPRISES LLC | Pond | 711 | Big Grave Creek Road | 304-845-7537 |
| 21 | POND SIDNEY P & VICKI L | Well | 729 | 119 Labrador Lane | 304-845-6520 |
| 22 | POND SIDNEY P & VICKI L | Stream | 733 | 119 Labrador Lane | 304-845-6520 |
| 23 | POND SIDNEY P & VICKI L | Well | 733 | 119 Labrador Lane | 304-845-6520 |
| 24 | POND SIDNEY P ET UX | Well | 733 | 119 Labrador Lane | 304-845-6520 |
| 25 | POND SIDNEY P ET UX | Stream | 729 | 119 Labrador Lane | 304-845-6520 |
| 26 | POND SIDNEY P ET UX | Stream | 734 | 119 Labrador Lane | 304-845-6520 |
| 27 | POND SIDNEY P ET UX | Stream | 716 | 119 Labrador Lane | 304-845-6520 |
| 28 | POND VICKIE L & SIDNEY P | Spring | 716 | 119 Labrador Lane | 304-845-6520 |
| 29 | POND VICKIE L & SIDNEY P | Spring | 725 | 119 Labrador Lane | 304-845-6520 |
| 30 | RICHMOND, LESTER A. | Spring | 713 | 350 Falls Creek Lane | 304-231-7656 |

| No. | SUPPLY COORDINATES | M15H | M16H | M17H | M18H | M19H | | | | | | | | | | | | |
|-----|-----------------------------------|-------|-------|-------|-------|-------|--|--|--|--|--|--|--|--|--|--|--|--|
| 16 | 39°52'23.84760"N 80°43'27.50880"W | 1,819 | 1,827 | 1,834 | 1,841 | 1,849 | | | | | | | | | | | | |
| 17 | 39°53'06.90360"N 80°43'20.49600"W | 5,015 | 5,030 | 5,045 | 5,060 | 5,075 | | | | | | | | | | | | |
| 18 | 39°53'08.20680"N 80°43'26.22000"W | 5,265 | 5,280 | 5,295 | 5,310 | 5,324 | | | | | | | | | | | | |
| 19 | 39°53'01.81320"N 80°43'22.71360"W | 4,565 | 4,580 | 4,595 | 4,610 | 4,625 | | | | | | | | | | | | |
| 20 | 39°53'00.99240"N 80°43'21.41040"W | 4,456 | 4,471 | 4,486 | 4,501 | 4,516 | | | | | | | | | | | | |
| 21 | 39°52'16.07880"N 80°43'24.79080"W | 1,558 | 1,559 | 1,559 | 1,560 | 1,561 | | | | | | | | | | | | |
| 22 | 39°52'16.09680"N 80°43'24.59280"W | 1,542 | 1,543 | 1,544 | 1,545 | 1,546 | | | | | | | | | | | | |
| 23 | 39°52'09.12000"N 80°43'22.12680"W | 1,647 | 1,641 | 1,635 | 1,630 | 1,624 | | | | | | | | | | | | |
| 24 | 39°52'09.12000"N 80°43'22.12680"W | 1,647 | 1,641 | 1,635 | 1,630 | 1,624 | | | | | | | | | | | | |
| 25 | 39°52'09.37560"N 80°43'21.80280"W | 1,612 | 1,606 | 1,600 | 1,594 | 1,588 | | | | | | | | | | | | |
| 26 | 39°52'04.21680"N 80°43'21.55080"W | 1,953 | 1,944 | 1,935 | 1,926 | 1,917 | | | | | | | | | | | | |
| 27 | 39°52'08.58720"N 80°43'23.84040"W | 1,787 | 1,782 | 1,776 | 1,770 | 1,765 | | | | | | | | | | | | |
| 28 | 39°52'14.48400"N 80°43'18.15960"W | 1,106 | 1,103 | 1,101 | 1,098 | 1,096 | | | | | | | | | | | | |
| 29 | 39°52'16.92840"N 80°43'19.92720"W | 1,170 | 1,171 | 1,172 | 1,173 | 1,174 | | | | | | | | | | | | |
| 30 | 39°52'48.08280"N 80°43'29.22960"W | 3,511 | 3,525 | 3,539 | 3,553 | 3,567 | | | | | | | | | | | | |

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Environmental Protection

*WATER SOURCE PREVIOUSLY LOCATED IN 2016.



WATER SUPPLY EXHIBIT
HICKS PAD BATCH #3

02/22/2019
ES&S

| No. | WATER PURVEYOR | SUPPLY | ELEV. | ADDRESS | PHONE # |
|-----|---------------------------|--------|-------|---------------------------|--------------|
| 31* | RYAN JEFFREY L | Spring | 1,218 | Arbor Lane | 304-845-3267 |
| 32* | RYAN JEFFREY L | Spring | 1,206 | Arbor Lane | 304-845-3267 |
| 33* | RYAN JEFFREY L | Spring | 1,187 | Arbor Lane | 304-845-3267 |
| 34* | RYAN JEFFREY L | Spring | 1,219 | Arbor Lane | 304-845-3267 |
| 35* | RYAN JEFFREY L | Pond | 1,211 | Arbor Lane | 304-845-3267 |
| 36* | RYAN JEFFREY L | Well | 1,251 | Arbor Lane | 304-845-3267 |
| 37 | STERN RONALD ELWOOD ET UX | Stream | 716 | 850 Falls Creek Lane | 304-845-0925 |
| 38 | STERN RONALD ELWOOD ET UX | Pond | 717 | 850 Falls Creek Lane | 304-845-0925 |
| 39 | STERN RONALD ELWOOD ET UX | Pond | 716 | 850 Falls Creek Lane | 304-845-0925 |
| 40 | TAGG KENNETH B | Well | 575 | 3303 Big Grave Creek Road | 304-845-0280 |
| 41 | WILLIAMS MABEL JUANITA | Well | 758 | 3649 Big Grave Creek Road | 304-845-9499 |
| 42 | WILLIAMS MABEL JUANITA | Spring | 730 | 3649 Big Grave Creek Road | 304-845-9499 |
| 43 | WILLIAMS MABEL JUANITA | Spring | 776 | 3649 Big Grave Creek Road | 304-845-9499 |
| 44 | WINER, VAL | Well | 689 | 3209 Big Grave Creek Road | 304-845-4573 |

| No. | SUPPLY COORDINATES | M15H | M16H | M17H | M18H | M19H | | | | | | | | | |
|-----|-----------------------------------|-------|-------|-------|-------|-------|--|--|--|--|--|--|--|--|--|
| 31 | 39°52'25.74120"N 80°42'32.81040"W | 2,615 | 2,616 | 2,617 | 2,618 | 2,620 | | | | | | | | | |
| 32 | 39°52'24.38040"N 80°42'38.32920"W | 2,164 | 2,165 | 2,166 | 2,167 | 2,168 | | | | | | | | | |
| 33 | 39°52'19.25400"N 80°42'32.95440"W | 2,508 | 2,505 | 2,502 | 2,500 | 2,497 | | | | | | | | | |
| 34 | 39°52'17.52240"N 80°42'27.14760"W | 2,963 | 2,959 | 2,956 | 2,952 | 2,948 | | | | | | | | | |
| 35 | 39°52'20.74440"N 80°42'36.21240"W | 2,262 | 2,260 | 2,259 | 2,257 | 2,256 | | | | | | | | | |
| 36 | 39°52'23.03040"N 80°42'31.56120"W | 2,651 | 2,651 | 2,650 | 2,649 | 2,649 | | | | | | | | | |
| 37 | 39°52'34.17960"N 80°43'15.74760"W | 1,765 | 1,779 | 1,794 | 1,808 | 1,823 | | | | | | | | | |
| 38 | 39°52'29.81640"N 80°43'21.30600"W | 1,685 | 1,697 | 1,709 | 1,722 | 1,734 | | | | | | | | | |
| 39 | 39°52'31.56960"N 80°43'20.56800"W | 1,768 | 1,781 | 1,794 | 1,807 | 1,820 | | | | | | | | | |
| 40 | 39°52'18.70320"N 80°43'23.80080"W | 1,457 | 1,460 | 1,463 | 1,467 | 1,470 | | | | | | | | | |
| 41 | 39°52'02.46720"N 80°43'33.52080"W | 2,762 | 2,756 | 2,750 | 2,744 | 2,738 | | | | | | | | | |
| 42 | 39°52'05.32560"N 80°43'31.72080"W | 2,481 | 2,476 | 2,470 | 2,465 | 2,460 | | | | | | | | | |
| 43 | 39°52'02.01720"N 80°43'35.95440"W | 2,942 | 2,937 | 2,931 | 2,925 | 2,920 | | | | | | | | | |
| 44 | 39°52'21.57240"N 80°43'25.11480"W | 1,584 | 1,590 | 1,596 | 1,602 | 1,608 | | | | | | | | | |

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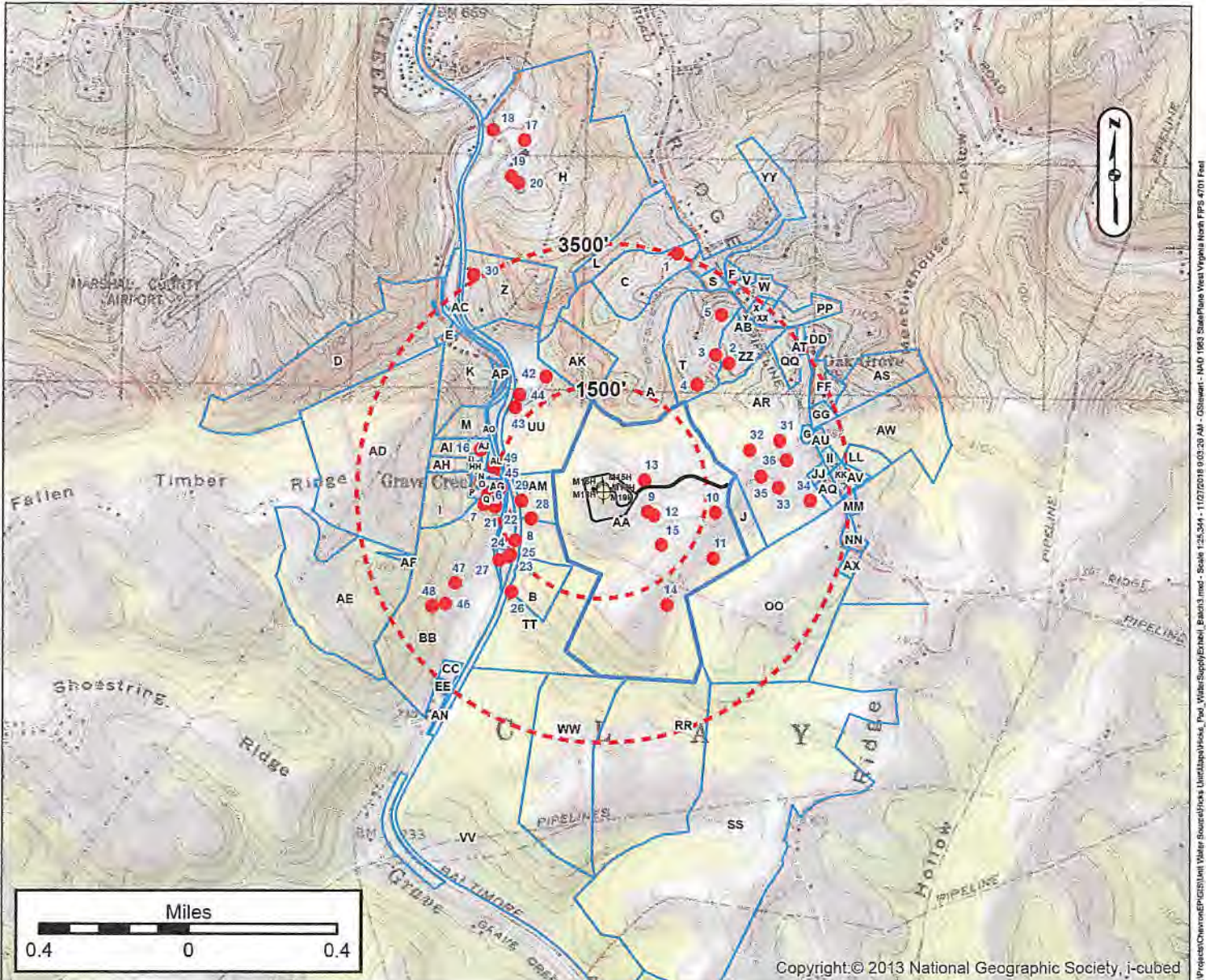
WV Department of
Environmental Protection

*WATER SOURCE PREVIOUSLY LOCATED IN 2016.



WATER SUPPLY EXHIBIT HICKS PAD BATCH #3

02/22/2019
GES



LOT OWNERS

| Label | OWNER | T/M | Label | OWNER | T/M | Label | OWNER | T/M | Label | OWNER | T/M | | | |
|-------|-----------------------------|---------------------|-------|--------------------------------|---------------------|-------|----------------------------------|---------------------|-------|--------------------------------|---------------------|----|-------------------------------|---------------------|
| A | SCHABER LESLIE B & LORRI | 25-04 8003500000000 | Q | CLAYTON RALPH L ET UX | 25-04 8002500000000 | OG | SCHUMANN GLENN J & SUZANNE K | 25-04 8002500000000 | YV | COSTER EDWARD B ET UX ESTS - | 25-04 1000200000000 | AA | CONSOLIDATION COAL COMPANY | 25-04 8003500000000 |
| B | POND SIDNEY P ET UX | 25-04 8002500000000 | R | POND SIDNEY P & VICKI L | 25-04 8002500000000 | HW | WYNER VAL ANDREW ET UX | 25-04 8002500000000 | OX | FERRILL ROBERT V ET UX | 25-04 8002500000000 | AC | CONSOLIDATION COAL COMPANY | 25-04 8003500000000 |
| C | JADKINS JASON B & DAWN R | 25-04 4007500000000 | S | RICHEY ROBERT L ET AL | 25-04 4005800130000 | UH | LOSH ROGER W & JODY L | 25-04 9002000110000 | YV | DECH JOHN W III ET UX | 25-04 4005800100000 | AP | CONSOLIDATION COAL COMPANY | 25-04 8003500000000 |
| D | MERCER CHARLES W JR & JUDY | 25-04 8001500000000 | T | CHAMBERS MONTE J ET UX | 25-04 8003800010000 | JJ | HENRY MINNIE L - LIFE | 25-04 9002000050000 | ZZ | CHAMBERS HELENDA & MONTE | 25-04 4005800110000 | AQ | HENRY MINNIE L - LIFE | 25-04 9002000050000 |
| E | CLARK PATSY ANNY | 25-04 8003300000000 | U | LITMAN RICHARD E JR ET UX | 25-04 8002900010000 | KK | KOONCE MARTHA J & JAMES L | 25-04 9002000100000 | AB | CARPENTER DONALD T ET UX | 25-04 4005800090000 | AR | RYAN JEFFREY L | 25-04 9002000050000 |
| F | LITTLETON HARRY LEROY ET UX | 25-04 4005900090000 | V | KIDD JAMES E ET UX | 25-04 4005800170000 | LL | MENOR CAROL LYNN ET VIR | 25-04 9002000060000 | AC | CONSOLIDATION COAL COMPANY | 25-04 4007400000000 | AS | SCHUMAN QUERRY J & SUZANNE K | 25-04 9002000070000 |
| G | HICKS TERESA M | 25-04 9002001000000 | W | TRIPLETT JASON L & TRICIA L | 25-04 4005800100000 | MM | LYONS CHRISTINA S | 25-04 9005900000000 | AD | ASTON HENRY W & LINDA M - LIFE | 25-04 8001700000000 | AT | RYAN JEFFREY L | 25-04 9002001200000 |
| H | MOUNTAINEER ENTERPRISES LLC | 25-04 4003000000000 | X | STEIN JAMES MARTIN ET UX | 25-04 4005800190000 | HN | MULLER ROBERT D ET UX | 25-04 9001000000000 | AE | BONAR FAMILY IRREVOCABLE TR | 25-04 8001800000000 | AU | LOSH ROGER W & JODY L | 25-04 9002001000000 |
| I | LITMAN RICHARD E SR | 25-04 8002900040000 | Y | CARPENTER DONALD T JR | 25-04 4005800120000 | OO | BULCHANNAN JAMES R ET UX | 25-04 9001100000000 | AF | WILLIAMS MARIE BLANITA | 25-04 8001800000000 | AV | RICHEY JAMES L | 25-04 9002001400000 |
| J | HICKS LUCILLE E | 25-04 8001500010000 | Z | RICHMOND JANET ELDWISE | 25-04 4005900000000 | PP | FERRILL ROBERT V ET UX | 25-04 4005900000000 | AG | POND SIDNEY P & VICKIE L | 25-04 8002500000000 | AW | SCHUMANN QUERRY J & SUZANNE K | 25-04 9002001500000 |
| K | MORRIS DONNIE ET UX | 25-04 8003500010000 | AA | HICKS THOMAS E | 25-04 8003100000000 | OQ | MCGARY RUBY LAVARNE ET AL - LIFE | 25-04 9002000040000 | AH | LITMAN RICHARD E SR | 25-04 8002900000000 | AX | BULCHANNAN JAMES R ET UX | 25-04 9001100010000 |
| L | GONCHOFF JOSEPH | 25-04 4005700000000 | BB | WILLIAMS MAREL JEANITA | 25-04 8003300000000 | PR | COSTER EDWARD B ET UX ESTS - | 25-04 1000030000000 | AI | LITMAN RICHARD E SR | 25-04 8003300000000 | | | |
| M | THOMAS DENVER D ET UX | 25-04 8002900000000 | CC | BAERTIN MARILYN | 25-04 8002900000000 | SS | WINGROVE DENNIS D ET UX | 25-04 1000040000000 | AJ | LITMAN RICHARD EARL SR | 25-04 8003100000000 | | | |
| N | WHITLATCH RICHARD P & JAMEL | 25-04 8002900000000 | DD | COAK GROVE M F CHURCH | 25-04 9002000000000 | TT | POND SIDNEY P & VICKI L | 25-04 8002500000000 | AK | SCHABER LESLIE B & LORRI D | 25-04 8001400000000 | | | |
| O | TAGG KENNETH B | 25-04 8002700000000 | EE | ALLMAN MICHAEL RAY | 25-04 8002300000000 | UU | STEIN RONALD ELWOOD ET UX | 25-04 8001500000000 | AL | LITMAN RICHARD E SR | 25-04 8003300000000 | | | |
| P | CLAYTON RALPH L ET UX | 25-04 8002500010000 | FF | HINERMAN JASON C & CHRISTINA M | 25-04 9002001700000 | VV | MOUNDSVILLE CITY OF | 25-04 1000010000000 | AM | POND VICKIE L & SIDNEY P | 25-04 8003300010000 | | | |

Surface Owner: THOMAS E. HICKS
 Oil/Gas Owner: THOMAS E. HICKS
 Well Operator: CHEVRON APPALACHIA, LLC
 Address: 700 CHERRINGTON PARKWAY
CORAOPOLIS, PA 15108
 Phone: 724-564-3700

County: MARSHALL
 Township: MOUNDSVILLE, WV
 Groundwater & Environmental
 Surveyor: SERVICES, INC.
 Address: 301 COMMERCE PARK DR
CRANBERRY TOWNSHIP, PA 15066
 Phone: 800-267-2549

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 DEC 20 2018
 Environmental Department of
 Natural Protection

NOTICE: THE INTENT OF THIS EXHIBIT IS TO IDENTIFY EXISTING WATER SUPPLIES IN THE VICINITY OF A PROPOSED GAS WELL, AND IS NOT A COMPLETE BOUNDARY SURVEY. PROPERTY LINES AND OWNER INFORMATION WERE OBTAINED FROM DEEDS, TAX RECORDS, AERIAL PHOTOGRAPHY, GIS, AND FIELD SURVEYED EVIDENCE.

BHL is located on topo map 5,150 feet south of Latitude: 39° 55' 00"
 SHL is located on topo map 1,179 feet south of Latitude: 39° 52' 30"

SEE PAGE 2 FOR PLAT DUE TO LENGTH OF LATERAL



BHL is located on topo map 7,918 feet west of Longitude: 80° 42' 30"
 SHL is located on topo map 2,728 feet west of Longitude: 80° 42' 30"

02/22/2019

| SURFACE HOLE LOCATION (SHL) | APPROX. LANDING POINT | BOTTOM HOLE LOCATION (BHL) |
|--|--|--|
| UTM 17-NAD83(M) N:4413562.45 E:524111.89 | UTM 17-NAD83(M) N:4414193.26 E:524543.71 | UTM 17-NAD83(M) N:4416972.09 E:522519.45 |
| NAD83, WV NORTH N:501958.830 E:1626636.690 | NAD83, WV NORTH N:504005.140 E:1628088.310 | NAD83, WV NORTH N:513234.910 E:1621598.120 |



| LESSOR | DIST-TM/PAR |
|---|-------------|
| A CHRISTA DAWN HICKS ET AL | 4-8/37 |
| B JEFFREY LOWELL RYAN | 4-9/2.5 |
| C MONTE J. CHAMBERS ET UX | 4-4/58.11 |
| D MONTE J. CHAMBERS ET UX | 4-8/38.1 |
| E MARGARET E. HOSTUTLER, TRUSTEE | 4-8/38 |
| F MARGARET E. HOSTUTLER, TRUSTEE | 4-4/75 |
| G JOSEPH GONCHOFF | 4-4/57 |
| H CNX GAS COMPANY LLC | 4-4/30 |
| J CNX GAS COMPANY LLC | 4-4/74 |
| K WILLIAM KIDD JR., ET UX | 4-4/28 |
| L HARRY KEITH HYDE ET UX | 4-4/31.1 |
| M THOMAS HAUGHT, ET UX | 4-4/27 |
| N ROGER N. HEMPHILL ET UX | 4-4/32 |
| P PAUL WAYNE LIGHTNER | 4-4/1.1 |
| Q JOHN D. LIGHTNER JR. ET UX | 4-4/1.2 |
| R MARY VIRGINIA GONCHOFF ET AL | 4-3/13 |
| S JOHNNIE LYNN WAYT | 4-3/10 |
| JOHN FREDERICK GUMP JR. | |
| T BRIAN K. CONNER | 4-3/10.1 |
| U MARSHALL COUNTY HUNTING AND FISHING CLUB INC. | 4-3/8 |
| THE HEIRS OF E. S. RICHARDON | |

| SURFACE OWNER | DIST-TM/PAR |
|--|-------------|
| 1 THOMAS E. HICKS | 4-8/37 |
| 2 JEFFREY L. RYAN | 4-9/2.5 |
| 3 JELINDA & MONTE CHAMBERS | 4-4/58.11 |
| 4 MONTE J. CHAMBERS ET UX | 4-8/38.1 |
| 5 CHEVRON USA INC | 4-8/38 |
| 6 JASON B. & DAWN R. ADKINS | 4-4/75 |
| 7 JOSEPH GONCHOFF | 4-4/57 |
| 8 MOUNTAINEER ENTERPRISES LLC | 4-4/30 |
| 9 CONSOLIDATION COAL COMPANY/MURRAY ENERGY C/O LAND DEPT | 4-4/74 |
| 10 RICHARD LEE DAVIS ET UX | 4-4/28.1 |
| 11 WILLIAM KIDD JR. ET UX | 4-4/28 |
| 12 HARRY K. HYDE ET UX | 4-4/31.1 |
| 13 THOMAS L. HAUGHT ET AL | 4-4/27 |
| 14 WILLIAM KIDD JR. ET UX | 4-4/4.8 |
| 15 DARLENE HOGAN LUCAS | 4-4/4.11 |
| 16 GREGORY S. HYDE ET UX | 4-4/31 |
| 17 HARRY K. HYDE ET UX | 4-4/31.2 |
| 18 LARRY M. BUKOSKY ET UX | 4-4/26 |
| 19 LARRY M. BUKOSKY ET UX | 4-4/25 |
| 20 ROBERT & PATSY CLARK | 4-4/24 |
| 21 MELVIN R. WADE | 4-4/21 |
| 22 CLARICE HYDE | 4-4/23 |
| 23 HARRY K. & MARY J. HYDE | 4-4/23.1 |
| 24 RICHARD LEE BURG JR. | 4-4/20 |
| 25 JAMES E. WOODS | 4-4/19 |
| 26 HARRY KEITH HYDE ET UX | 4-4/18 |
| 27 KEVIN J. & TAMERA M. SMITH | 4-4/32.1 |
| 28 ROGER N. HEMPHILL ET UX | 4-4/32 |
| 29 GEORGE R. FINNEGAN | 4-4/17 |
| 30 ROBERT L. CLARK | 4-4/17.1 |
| 31 PAUL WAYNE LIGHTNER | 4-4/1.1 |
| 32 JOHN D., JR. & CATHY L. LIGHTNER | 4-4/1.2 |
| 33 FRANK GONCHOFF ET AL | 4-3/13 |
| 34 ELSIE GUMP - LIFE | 4-3/10 |
| 35 DAVID SHAWN CONNER | 4-3/10.1 |
| 36 MARSHALL COUNTY HUNTING & FISHING | 4-3/8 |
| 37 *DANIEL L. DOBBS | 4-2/48 |



* - DENOTES PARCEL WITHIN 30 FEET OF PLANNED WELL BORE

FILE #: HICKS M18H
 DRAWING #: HICKS M18H
 SCALE: 1" = 2000'
 MINIMUM DEGREE
 OF ACCURACY: 1/2500
 PROVEN SOURCE
 OF ELEVATION: U.S.G.S. MONUMENT THOMAS 1498.81'

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 REGULATIONS ISSUED AND PRESCRIBED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION.

Signed: *George D. Six*
 R.P.E.: _____ L.L.S.: P.S. No. 2000



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS WVDEP
 OFFICE OF OIL & GAS
 601 57TH STREET
 CHARLESTON, WV 25304



DATE: OCTOBER 24, 2018
 OPERATOR'S WELL #: HICKS M18H
 API WELL #: 47 51 02165
 STATE COUNTY PERMIT

Well Type: Oil Waste Disposal Production Deep Gas Liquid Injection Storage Shallow

WATERSHED: MIDDLE GRAVE CREEK-GRAVE CREEK ELEVATION: 1161.57'

COUNTY/DISTRICT: MARSHALL / CLAY QUADRANGLE: GLEN EASTON, WV 7.5'

SURFACE OWNER: THOMAS E. HICKS ACREAGE: 172.100±

OIL & GAS ROYALTY OWNER: CHRISTA DAWN HICKS ET AL ACREAGE: 967.111±

DRILL CONVERT DRILL DEEPER REDRILL FRACTURE OR STIMULATE PLUG OFF OLD FORMATION

PERFORATE NEW FORMATION PLUG & ABANDON CLEAN OUT & REPLUG OTHER CHANGE

(SPECIFY): _____

TARGET FORMATION: MARCELLUS ESTIMATED DEPTH: TVD: 6,336'± TMD: 18,585.58'±

WELL OPERATOR CHEVRON APPALACHIA, LLC DESIGNATED AGENT KENNETH E. TAWNEY
 Address 700 CHERRINGTON PARKWAY Address 500 LEE STREET, EAST SUITE 1600
 City CORAOPOLIS State PA Zip Code 15108 City CHARLESTON State WV Zip Code 25301-3202

HICKS M18H PAGE 2 OF 2



NOTES:

1. There are no water wells or developed springs within 250' of proposed well.
2. Proposed well is greater than 100' from perennial stream, wetland, pond, reservoir or lake.
3. There are no native trout streams within 300' of proposed well.
4. Proposed well is greater than 1000' from surface groundwater intake or public water supply.
5. It is not the purpose or intention of this plat to represent surveyed locations of the surface or mineral parcels depicted hereon. The location of the boundary lines, as shown, are based on record deed descriptions, field evidence found and/or tax map position, unless otherwise noted.
6. There are no existing buildings within 625' of proposed well.

02/22/2019

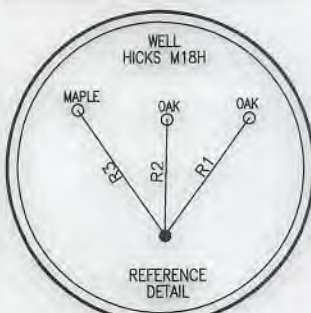
| WELL PAD ORIENTATION DETAIL | | | |
|-----------------------------|------|-------------|------|
| M01H | U14H | M15H | U28H |
| M02H | U13H | M16H | U27H |
| M03H | U12H | M17H | U26H |
| M04H | U11H | M18H | U25H |
| M05H | M10H | M19H | U24H |
| M06H | M09H | M20H | U23H |
| M07H | M08H | M21H | U22H |
| | | | U30H |
| | | | U31H |
| | | | U32H |
| | | | U33H |
| | | | U34H |
| | | | U35H |

N.T.S.

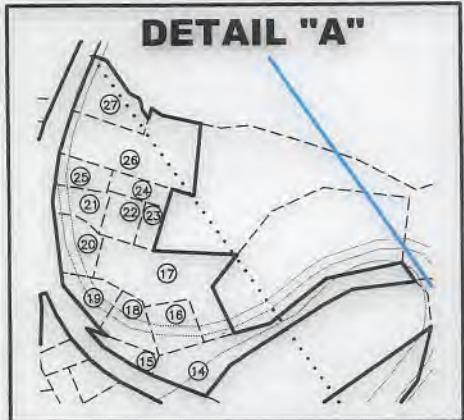
| SURFACE HOLE LOCATION (SHL) | |
|-----------------------------|---------------|
| UTM 17-NAD83(M) | N:4413562.45 |
| | E:524111.89 |
| NAD83, WV NORTH | |
| | N:501958.830 |
| | E:1626636.690 |
| APPROX. LANDING POINT | |
| UTM 17-NAD83(M) | N:4414193.26 |
| | E:524543.71 |
| NAD83, WV NORTH | |
| | N:504005.140 |
| | E:1628088.310 |
| BOTTOM HOLE LOCATION (BHL) | |
| UTM 17-NAD83(M) | N:4416972.09 |
| | E:522519.45 |
| NAD83, WV NORTH | |
| | N:513234.910 |
| | E:1621598.120 |

LEGEND

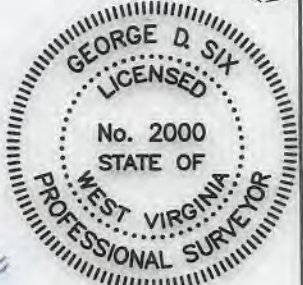
- TOPO MAP POINT
- WELL
- ALL ARE POINTS UNLESS OTHERWISE NOTED.
- MINERAL TRACT BOUNDARY
- PARCEL LINES
- WELL REFERENCE
- PROPOSED HORIZONTAL WELL
- ROAD
- STREAM CENTER LINE
- LESSORS
- SURFACE OWNERS
- DETAIL
- GAS WELLS**
 - EXISTING WELLS
 - PLUGGED WELLS



| LINE | BEARING | DISTANCE |
|------|---------------|----------|
| R1 | N 36°21'27" E | 136.23' |
| R2 | N 01°27'18" E | 108.75' |
| R3 | N 34°56'22" W | 143.60' |
| R4 | N 16°09'27" W | 1321.36' |
| R5 | S 29°51'41" W | 1055.68' |
| R6 | S 03°31'35" W | 1128.18' |



OCTOBER 24, 2018



George D. Six

WW-6A1
(5/13)

Operator's Well No. M18H

**INFORMATION SUPPLIED UNDER WEST VIRGINIA CODE
Chapter 22, Article 6A, Section 5(a)(5)
IN LIEU OF FILING LEASE(S) AND OTHER CONTINUING CONTRACT(S)**

Under the oath required to make the verification on page 1 of this Notice and Application, I depose and say that I am the person who signed the Notice and Application for the Applicant, and that –

- (1) the tract of land is the same tract described in this Application, partly or wholly depicted in the accompanying plat, and described in the Construction and Reclamation Plan;
- (2) the parties and recordation data (if recorded) for lease(s) or other continuing contract(s) by which the Applicant claims the right to extract, produce or market the oil or gas are as follows:

| Lease Name or Number | Grantor, Lessor, etc. | Grantee, Lessee, etc. | Royalty | Book/Page |
|----------------------|-----------------------|-----------------------|---------|-----------|
| See Attached | | | | |

**Acknowledgement of Possible Permitting/Approval
In Addition to the Office of Oil and Gas**

The permit applicant for the proposed well work addressed in this application hereby acknowledges the possibility of the need for permits and/or approvals from local, state, or federal entities in addition to the DEP, Office of Oil and Gas, including but not limited to the following:

- WV Division of Water and Waste Management
- WV Division of Natural Resources WV Division of Highways
- U.S. Army Corps of Engineers
- U.S. Fish and Wildlife Service
- County Floodplain Coordinator

The applicant further acknowledges that any Office of Oil and Gas permit in no way overrides, replaces, or nullifies the need for other permits/approvals that may be necessary and further affirms that all needed permits/approvals should be acquired from the appropriate authority before the affected activity is initiated.

Well Operator: Chevron Appalachia, LLC

By: Jenny Butchko
Its: Permitting Team Lead

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WV Department of Environmental Protection

4705102165

Hicks Unit #18H

| Plat ID | Parcel Number | Lessor | Lessee | Royalty | Book/Page | Assignment #1 | Assignment #2 |
|---------|---------------|---|--|--------------|--------------------|--|---|
| 1 | 4-8-37 | Hicks, Christa Dawn et al | Chevron U.S.A. Inc. | 0.18 | 841/246 | n/a | n/a |
| 2 | 4-9-2.5 | Ryan, Jeffrey Lowell | Chevron U.S.A. Inc. | 0.18 | 841/237 | n/a | n/a |
| 3 | 4-4-58.11 | Chambers, Monte J. et ux | Chevron U.S.A. Inc. | 0.18 | 860/275 | n/a | n/a |
| 4 | 4-8-38.1 | Chambers, Monte J. et ux | Chevron U.S.A. Inc. | 0.18 | 860/275 | n/a | n/a |
| 5 | 4-8-38 | Hostutler, Margaret E. Trustee | Chevron U.S.A. Inc. | 0.16 | 828/346 | n/a | n/a |
| 6 | 4-4-75 | Hostutler, Margaret E. Trustee | Chevron U.S.A. Inc. | 0.16 | 828/346 | n/a | n/a |
| 7 | 4-4-57 | Gonchoff, Joseph | Chevron U.S.A. Inc. | 0.18 | 847/485 | n/a | n/a |
| 8 | 4-4-30 | CNX Gas Company LLC | Chevron U.S.A. Inc. | 0.2 | 818/549 | n/a | n/a |
| 9 | 4-4-74 | CNX Gas Company LLC | Chevron U.S.A. Inc. | 0.2 | 818/549 | n/a | n/a |
| 11 | 4-4-28 | Kidd, William, Jr. et ux | TriEnergy Holdings, LLC | 0.16 | 704/40 | TriEnergy Holdings, LLC to NPAR, LLC 24/180 | NPAR, LLC to Chevron U.S.A. Inc. 756/332 |
| 12 | 4-4-31.1 | Hyde, Harry Keith et ux | TriEnergy Holdings, LLC | 0.18 | 706/623 | TriEnergy Holdings, LLC to NPAR, LLC 24/180 | NPAR, LLC to Chevron U.S.A. Inc. 756/332 |
| 13 | 4-4-27 | Haight, Thomas et ux | TriEnergy Holdings, LLC | 0.18 | 706/89 | TriEnergy Holdings, LLC to NPAR, LLC | NPAR, LLC to Chevron U.S.A. Inc. |
| 28 | 4-4-32 | Hemphill, Roger N. et ux | Chevron U.S.A. Inc. | 0.14 | 816/442 | n/a | n/a |
| 31 | 4-4-1.1 | Lightner, Paul Wayne | Chevron U.S.A. Inc. | 0.18 | 861/643 | n/a | n/a |
| 32 | 4-4-1.2 | Lightner, John D Jr. et ux | Chevron U.S.A. Inc. | 0.18 | 862/1 | n/a | n/a |
| 33 | 4-3-13 | Gonchoff, Mary Virginia et al | Chevron U.S.A. Inc. | 0.18 | 847/493 | n/a | n/a |
| 34 | 4-3-10 | Wayt, Johnnie Lynn - SFX Gump, John Frederick, Jr. - SFX | Chevron U.S.A. Inc. Chevron U.S.A. Inc. | 0.18 0.18 | 840/410 840/413 | n/a n/a | n/a n/a |
| 35 | 4-3-10.1 | Conner, Brian K. | NPAR, LLC | 0.18 | 736/140 | NPAR, LLC to Chevron U.S.A. Inc. 26/201 | n/a |
| | | Marshall County Hunting and Fishing Club Inc. | Chevron U.S.A. Inc. | 0.16 | 795/358 | n/a | n/a |
| | | Pierce, Jo Ann L. - SFX | Chevron U.S.A. Inc. | 0.14 | 806/51 | n/a | n/a |
| | | Stewart, Vicki L. - SFX | Chevron U.S.A. Inc. | 0.14 | 806/381 | n/a | n/a |
| | | Miller, Mary V. - SFX | Chevron U.S.A. Inc. | 0.14 | 811/414 | n/a | n/a |
| | | Hayes, William Wayne - SFX | Chevron U.S.A. Inc. | 0.14 | 805/263 | n/a | n/a |
| | | Berdine, Shirley Jean - SFX | Chevron U.S.A. Inc. | 0.14 | 805/363 | n/a | n/a |
| | | Cutlip, Charlotte - SFX | Chevron U.S.A. Inc. | 0.14 | 804/622 | n/a | n/a |
| | | Dennison, Clifton Gary - SFX | Chevron U.S.A. Inc. | 0.14 | 804/629 | n/a | n/a |

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Environmental Protection

| Plat ID | Parcel Number | Lessor | Lessee | Royalty | Book/Page | Assignment #1 | Assignment #2 |
|---------|---------------|-------------------------------|---------------------|---------|-----------|---------------|---------------|
| | | Dennison, Kevan D. - SFX | Chevron U.S.A. Inc. | 0.14 | 807/313 | n/a | n/a |
| | | McCullough, Nancy Irene - SFX | Chevron U.S.A. Inc. | 0.14 | 805/370 | n/a | n/a |
| | | Robinson, Glenna A. - SFX | Chevron U.S.A. Inc. | 0.14 | 814/406 | n/a | n/a |
| | | Gill, Glenda - SFX | Chevron U.S.A. Inc. | 0.14 | 811/421 | n/a | n/a |
| | | Tait, Betty J. - SFX | Chevron U.S.A. Inc. | 0.14 | 811/433 | n/a | n/a |
| | | Stevens, Albert D. - SFX | Chevron U.S.A. Inc. | 0.14 | 813/84 | n/a | n/a |
| | | Linde, Janis K. - SFX | Chevron U.S.A. Inc. | 0.14 | 813/127 | n/a | n/a |
| | | Stevens, John F. - SFX | Chevron U.S.A. Inc. | 0.14 | 807/170 | n/a | n/a |
| | | Gilbert, Allan E. - SFX | Chevron U.S.A. Inc. | 0.14 | 813/640 | n/a | n/a |
| | | Skidmore, Jeanette - SFX | Chevron U.S.A. Inc. | 0.14 | 814/582 | n/a | n/a |
| | | Bee, Sharon - SFX | Chevron U.S.A. Inc. | 0.14 | 814/446 | n/a | n/a |
| | | Hatcher, Willie V. - SFX | Chevron U.S.A. Inc. | 0.14 | 815/169 | n/a | n/a |
| | | Haslett, Pamela J. - SFX | Chevron U.S.A. Inc. | 0.14 | 815/400 | n/a | n/a |
| | | Dotson, Naomi - SFX | Chevron U.S.A. Inc. | 0.14 | 815/451 | n/a | n/a |
| | | Hart, Donald Andrew - SFX | Chevron U.S.A. Inc. | 0.14 | 817/555 | n/a | n/a |
| | | Hart, Daniel A. - SFX | Chevron U.S.A. Inc. | 0.14 | 817/548 | n/a | n/a |
| | | Wood, Sharon F. - SFX | Chevron U.S.A. Inc. | 0.14 | 817/499 | n/a | n/a |
| | | Hickman, Kenneth A. - SFX | Chevron U.S.A. Inc. | 0.14 | 818/113 | n/a | n/a |
| | | Smith, Donna Marie - SFX | Chevron U.S.A. Inc. | 0.14 | 818/130 | n/a | n/a |
| | | Dennison, James F. - SFX | Chevron U.S.A. Inc. | 0.14 | 817/608 | n/a | n/a |
| | | Snyder, Colleen K. - SFX | Chevron U.S.A. Inc. | 0.14 | 817/582 | n/a | n/a |
| | | Hayes, Janice L. - SFX | Chevron U.S.A. Inc. | 0.14 | 816/449 | n/a | n/a |
| | | Greene, Emma - SFX | Chevron U.S.A. Inc. | 0.14 | 822/383 | n/a | n/a |
| | | Rosenlieb, Tammy - SFX | Chevron U.S.A. Inc. | 0.14 | 822/333 | n/a | n/a |
| | | Price, Kimberly C. - SFX | Chevron U.S.A. Inc. | 0.14 | 822/113 | n/a | n/a |
| | | Cain, Joseph L. et ux - SFX | Chevron U.S.A. Inc. | 0.14 | 822/83 | n/a | n/a |
| | | Cain, Royce D. - SFX | Chevron U.S.A. Inc. | 0.14 | 822/103 | n/a | n/a |
| | | Byard, William - SFX | Chevron U.S.A. Inc. | 0.14 | 829/218 | n/a | n/a |
| | | Nolan, Janice E. - SFX | Chevron U.S.A. Inc. | 0.14 | 829/585 | n/a | n/a |
| | | Metz, Mary M. et vir - SFX | Chevron U.S.A. Inc. | 0.14 | 829/356 | n/a | n/a |
| | | Lancaster, Brenda R. - SFX | Chevron U.S.A. Inc. | 0.14 | 828/381 | n/a | n/a |
| | | Crum, Carolyn - SFX | Chevron U.S.A. Inc. | 0.14 | 828/437 | n/a | n/a |

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| Plat ID | Parcel Number | Lessor | Lessee | Royalty | Book/Page | Assignment #1 | Assignment #2 |
|------------------------------|---------------------|-------------------------------------|---------------------|---------|-----------|---------------|---------------|
| 36 | 4-3-8 | Hatcher, Delores M. - SFX | Chevron U.S.A. Inc. | 0.14 | 828/409 | n/a | n/a |
| | | Fluharty, Elva V. - SFX | Chevron U.S.A. Inc. | 0.14 | 828/416 | n/a | n/a |
| | | Hatcher Revocable Living Trust 2008 | Chevron U.S.A. Inc. | 0.14 | 838/348 | n/a | n/a |
| | | Larimore, Rosemarie - SFX | Chevron U.S.A. Inc. | 0.14 | 836/186 | n/a | n/a |
| | | Quinn, Patricia - SFX | Chevron U.S.A. Inc. | 0.16 | 834/442 | n/a | n/a |
| | | Dennison, Byron G. - SFX | Chevron U.S.A. Inc. | 0.18 | 847/499 | n/a | n/a |
| | | Stewart, Janice F. - SFX | Chevron U.S.A. Inc. | 0.18 | 847/594 | n/a | n/a |
| | | Woods, Thelma J. - SFX | Chevron U.S.A. Inc. | 0.14 | 847/271 | n/a | n/a |
| | | Cunningham, Joann L. - SFX | Chevron U.S.A. Inc. | 0.18 | 847/546 | n/a | n/a |
| | | Sumner, Martha - SFX | Chevron U.S.A. Inc. | 0.18 | 894/256 | n/a | n/a |
| | | Sypher, William E. - SFX | Chevron U.S.A. Inc. | 0.18 | 847/541 | n/a | n/a |
| | | Ensminger, Carolyn J. - SFX | Chevron U.S.A. Inc. | 0.18 | 852/414 | n/a | n/a |
| | | Ensminger, Gerald R. - SFX | Chevron U.S.A. Inc. | 0.18 | 848/396 | n/a | n/a |
| | | Dennison, Brenda F. - SFX | Chevron U.S.A. Inc. | 0.18 | 859/69 | n/a | n/a |
| | | Dennison, Tracee L. - SFX | Chevron U.S.A. Inc. | 0.18 | 848/415 | n/a | n/a |
| | | Robinson, Delbert - SFX | Chevron U.S.A. Inc. | 0.14 | 859/27 | n/a | n/a |
| | | Manning, Melissa - SFX | Chevron U.S.A. Inc. | 0.18 | 848/457 | n/a | n/a |
| | | Parsons, Eileen K. - SFX | Chevron U.S.A. Inc. | 0.18 | 848/424 | n/a | n/a |
| | | Cottrell, Aretta - SFX | Chevron U.S.A. Inc. | 0.18 | 852/418 | n/a | n/a |
| | | Dennison, Robin - SFX | Chevron U.S.A. Inc. | 0.18 | 858/16 | n/a | n/a |
| | | Shaw, Bernard L. - SFX | Chevron U.S.A. Inc. | 0.14 | 897/228 | n/a | n/a |
| | | Dennison, Patricia - SFX | Chevron U.S.A. Inc. | 0.18 | 897/583 | n/a | n/a |
| | | Harrison, Penny - SFX | Chevron U.S.A. Inc. | 0.18 | 897/586 | n/a | n/a |
| | | Dennison, Harold Vaughn Jr. | Chevron U.S.A. Inc. | 0.18 | 897/589 | n/a | n/a |
| | | Goldstein, Crystal Marie - SFX | Chevron U.S.A. Inc. | 0.14 | 897/231 | n/a | n/a |
| | | Mansour, Melissa - SFX | Chevron U.S.A. Inc. | 0.14 | 898/113 | n/a | n/a |
| | | Hayes, Alan D. - SFX | Chevron U.S.A. Inc. | 0.15 | 899/264 | n/a | n/a |
| | | Dennison, Rick Lane | Fee | - | 911/197 | n/a | n/a |
| | | Dennison, David A. | Fee | - | 911/200 | n/a | n/a |
| | | Dennison, Steven W. | Fee | - | 911/203 | n/a | n/a |
| Hart, David Gene | Fee | - | 926/429 | n/a | n/a | | |
| Kilcoyne, John Michael - SFX | Chevron U.S.A. Inc. | 0.20 | 906/188 | n/a | n/a | | |

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| Plat ID | Parcel Number | Lessor | Lessee | Royalty | Book/Page | Assignment #1 | Assignment #2 |
|---------|---------------|---------------------------|---------------------|---------|-----------|---------------|---------------|
| | | Burr, Thomas M. - SFX | Chevron U.S.A. Inc. | 0.20 | 907/21 | n/a | n/a |
| | | Manny, Pamela - SFX | Chevron U.S.A. Inc. | 0.14 | 901/401 | n/a | n/a |
| | | Nicholson, David M. - SFX | Chevron U.S.A. Inc. | 0.14 | 903/152 | n/a | n/a |
| | | Robinson, Jennifer - SFX | Chevron U.S.A. Inc. | 0.14 | 900/70 | n/a | n/a |
| | | Cronin, Penelope - SFX | Chevron U.S.A. Inc. | 0.14 | 900/73 | n/a | n/a |
| | | Shawley, Patricia - SFX | Chevron U.S.A. Inc. | 0.14 | 902/547 | n/a | n/a |
| | | Barthel, Jolene E. - SFX | Chevron U.S.A. Inc. | 0.16 | 902/529 | n/a | n/a |
| | | Beck, Louis J. Jr. - SFX | Chevron U.S.A. Inc. | 0.14 | 899/261 | n/a | n/a |
| | | Richardson, Debra - SFX | Chevron U.S.A. Inc. | 0.18 | 909/459 | n/a | n/a |
| | | Robinson, James - SFX | Chevron U.S.A. Inc. | 0.14 | 898/504 | n/a | n/a |
| | | Ensminger, William - SFX | Chevron U.S.A. Inc. | 0.14 | 898/507 | n/a | n/a |

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Environmental Protection

02/22/2019



Luke Slagel
Land Representative

December 18, 2018

West Virginia D.E.P.
Office of Oil & Gas
601 57th Street SE
Charleston, WV 25304-2345

RE: Hicks 15H, 16H, 17H, 18H, 19H

To whom it may concern:

This letter is to confirm that Chevron U.S.A. Inc. has the rights to access minerals under any road along the above referenced laterals. If you should have any further questions or need additional documentation, please feel free to contact me.

Sincerely,

A handwritten signature in blue ink that reads "Luke Slagel".

Luke Slagel
Land Representative

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Office of Oil and Gas

DEC 20 2018

WV Department of
Environmental Protection

Appalachian Mountain Business Unit
Chevron North America Exploration and Production Company
A Division of Chevron U.S.A. Inc.
700 Cherrington Parkway, Coraopolis, PA 15108
Tel 412 865 1426
Luke.Slagel@chevron.com

STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS
NOTICE CERTIFICATION

Date of Notice Certification: 12/18/18

API No. 47- _____ - _____
Operator's Well No. M18H
Well Pad Name: Hicks

Notice has been given:

Pursuant to the provisions in West Virginia Code § 22-6A, the Operator has provided the required parties with the Notice Forms listed below for the tract of land as follows:

| | | | | |
|-------------|---|---------------------------|----------------------------|-------------------|
| State: | <u>West Virginia</u> | UTM NAD 83 | Easting: | <u>524111.89</u> |
| County: | <u>Marshall</u> | | Northing: | <u>4413562.45</u> |
| District: | <u>Clay</u> | Public Road Access: | <u>Fork Ridge Rd/WV-17</u> | |
| Quadrangle: | <u>Glen Easton, WV 7.5'</u> | Generally used farm name: | <u>Hicks</u> | |
| Watershed: | <u>Middle Grave Creek - Grave Creek</u> | | | |

Pursuant to West Virginia Code § 22-6A-7(b), every permit application filed under this section shall be on a form as may be prescribed by the secretary, shall be verified and shall contain the following information: (14) A certification from the operator that (i) it has provided the owners of the surface described in subdivisions (1), (2) and (4), subsection (b), section ten of this article, the information required by subsections (b) and (c), section sixteen of this article; (ii) that the requirement was deemed satisfied as a result of giving the surface owner notice of entry to survey pursuant to subsection (a), section ten of this article six-a; or (iii) the notice requirements of subsection (b), section sixteen of this article were waived in writing by the surface owner; and Pursuant to West Virginia Code § 22-6A-11(b), the applicant shall tender proof of and certify to the secretary that the notice requirements of section ten of this article have been completed by the applicant.

| | |
|--|---|
| <p>Pursuant to West Virginia Code § 22-6A, the Operator has attached proof to this Notice Certification that the Operator has properly served the required parties with the following:</p> <p>*PLEASE CHECK ALL THAT APPLY</p> <p><input type="checkbox"/> 1. NOTICE OF SEISMIC ACTIVITY or <input type="checkbox"/> NOTICE NOT REQUIRED BECAUSE NO SEISMIC ACTIVITY WAS CONDUCTED</p> <p><input type="checkbox"/> 2. NOTICE OF ENTRY FOR PLAT SURVEY or <input type="checkbox"/> NO PLAT SURVEY WAS CONDUCTED</p> <p><input checked="" type="checkbox"/> 3. NOTICE OF INTENT TO DRILL or <input type="checkbox"/> NOTICE NOT REQUIRED BECAUSE NOTICE OF ENTRY FOR PLAT SURVEY WAS CONDUCTED or</p> <p style="padding-left: 100px;"><input type="checkbox"/> WRITTEN WAIVER BY SURFACE OWNER (PLEASE ATTACH)</p> <p><input checked="" type="checkbox"/> 4. NOTICE OF PLANNED OPERATION</p> <p><input checked="" type="checkbox"/> 5. PUBLIC NOTICE</p> <p><input checked="" type="checkbox"/> 6. NOTICE OF APPLICATION</p> | <p>OOG OFFICE USE ONLY</p> <p><input type="checkbox"/> RECEIVED/ NOT REQUIRED</p> <p><input type="checkbox"/> RECEIVED</p> <p><input type="checkbox"/> RECEIVED/ NOT REQUIRED</p> <p><input type="checkbox"/> RECEIVED</p> <p><input type="checkbox"/> RECEIVED</p> <p><input type="checkbox"/> RECEIVED</p> |
|--|---|

Required Attachments:

The Operator shall attach to this Notice Certification Form all Notice Forms and Certifications of Notice that have been provided to the required parties and/or any associated written waivers. For the Public Notice, the operator shall attach a copy of the Class II Legal Advertisement with publication date verification or the associated Affidavit of Publication. The attached Notice Forms and Certifications of Notice shall serve as proof that the required parties have been noticed as required under West Virginia Code § 22-6A. Pursuant to West Virginia Code § 22-6A-11(b), the Certification of Notice to the person may be made by affidavit of personal service, the return receipt card or other postal receipt for certified mailing.

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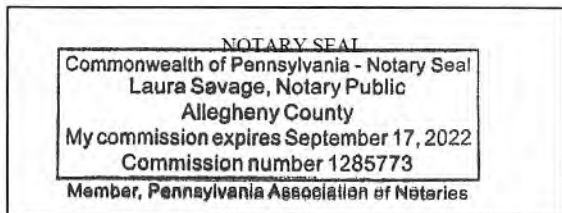
WV Department of
Environmental Protection

Certification of Notice is hereby given:

THEREFORE, I _____, have read and understand the notice requirements within West Virginia Code § 22-6A. I certify that as required under West Virginia Code § 22-6A, I have served the attached copies of the Notice Forms, identified above, to the required parties through personal service, by registered mail or by any method of delivery that requires a receipt or signature confirmation. I certify under penalty of law that I have personally examined and am familiar with the information submitted in this Notice Certification and all attachments, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Jenny Butchko

| | | | |
|----------------|--------------------------------|------------|--------------------------------|
| Well Operator: | <u>Chevron Appalachia, LLC</u> | Address: | <u>700 Cherrington Parkway</u> |
| By: | <u>Jenny Butchko</u> | | <u>Coraopolis, PA 15108</u> |
| Its: | <u>Permitting Team Lead</u> | Facsimile: | <u>412-865-2403</u> |
| Telephone: | <u>412-865-1533</u> | Email: | <u>JZYK@chevron.com</u> |



*Commonwealth of Pennsylvania
County of Allegheny*
 Subscribed and sworn before me this 18th day of December, 2018.
Laura Savage Notary Public
 My Commission Expires September 17, 2022

Oil and Gas Privacy Notice:

The Office of Oil and Gas processes your personal information, such as name, address and telephone number, as part of our regulatory duties. Your personal information may be disclosed to other State agencies or third parties in the normal course of business or as needed to comply with statutory or regulatory requirements, including Freedom of Information Act requests. Our office will appropriately secure your personal information. If you have any questions about our use or your personal information, please contact DEP's Chief Privacy Officer at depprivacyofficer@wv.gov.

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STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS
NOTICE OF APPLICATION

Notice Time Requirement: notice shall be provided no later than the filing date of permit application.

Date of Notice: 1/19/18 Date Permit Application Filed: 12/19/18
Notice of:

- PERMIT FOR ANY WELL WORK CERTIFICATE OF APPROVAL FOR THE CONSTRUCTION OF AN IMPOUNDMENT OR PIT

Delivery method pursuant to West Virginia Code § 22-6A-10(b)

- PERSONAL SERVICE REGISTERED MAIL METHOD OF DELIVERY THAT REQUIRES A RECEIPT OR SIGNATURE CONFIRMATION

Pursuant to W. Va. Code § 22-6A-10(b) no later than the filing date of the application, the applicant for a permit for any well work or for a certificate of approval for the construction of an impoundment or pit as required by this article shall deliver, by personal service or by registered mail or by any method of delivery that requires a receipt or signature confirmation, copies of the application, the erosion and sediment control plan required by section seven of this article, and the well plat to each of the following persons: (1) The owners of record of the surface of the tract on which the well is or is proposed to be located; (2) The owners of record of the surface tract or tracts overlying the oil and gas leasehold being developed by the proposed well work, if the surface tract is to be used for roads or other land disturbance as described in the erosion and sediment control plan submitted pursuant to subsection (c), section seven of this article; (3) The coal owner, operator or lessee, in the event the tract of land on which the well proposed to be drilled is located [sic] is known to be underlain by one or more coal seams; (4) The owners of record of the surface tract or tracts overlying the oil and gas leasehold being developed by the proposed well work, if the surface tract is to be used for the placement, construction, enlargement, alteration, repair, removal or abandonment of any impoundment or pit as described in section nine of this article; (5) Any surface owner or water purveyor who is known to the applicant to have a water well, spring or water supply source located within one thousand five hundred feet of the center of the well pad which is used to provide water for consumption by humans or domestic animals; and (6) The operator of any natural gas storage field within which the proposed well work activity is to take place. (c)(1) If more than three tenants in common or other co-owners of interests described in subsection (b) of this section hold interests in the lands, the applicant may serve the documents required upon the person described in the records of the sheriff required to be maintained pursuant to section eight, article one, chapter eleven-a of this code. (2) Notwithstanding any provision of this article to the contrary, notice to a lien holder is not notice to a landowner, unless the lien holder is the landowner. W. Va. Code R. § 35-8-5.7.a requires, in part, that the operator shall also provide the Well Site Safety Plan ("WSSP") to the surface owner and any water purveyor or surface owner subject to notice and water testing as provided in section 15 of this rule.

Application Notice WSSP Notice E&S Plan Notice Well Plat Notice is hereby provided to:

SURFACE OWNER(s)
Name: Thomas E. Hicks
Address: 353 Arbor Lane
Moundsville, WV 26041

Name: _____
Address: _____

SURFACE OWNER(s) (Road and/or Other Disturbance)
Name: Jeffrey Ryan
Address: 141 Clover Lane
Moundsville, WV 26041

Name: _____
Address: _____

SURFACE OWNER(s) (Impoundments or Pits)
Name: _____
Address: _____

COAL OWNER OR LESSEE
Name: Consol Mining Company, LLC
Address: 1000 Consol Energy Drive
Canonsburg, PA 15317

COAL OPERATOR
Name: Murray Energy Corp.
Address: 46226 National Road
St. Clairsville, OH 43950

SURFACE OWNER OF WATER WELL AND/OR WATER PURVEYOR(s)
Name: See Attached
Address: _____

OPERATOR OF ANY NATURAL GAS STORAGE FIELD
Name: _____
Address: _____

*Please attach additional forms if necessary

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Notice is hereby given:

Pursuant to West Virginia Code § 22-6A-10(b), notice is hereby given that the undersigned well operator has applied for a permit for well work or for a certificate of approval for the construction of an impoundment or pit.

This Notice Shall Include:

Pursuant to W. Va. Code § 22-6A-10(b), this notice shall include: (1) copies of the application; (2) the erosion and sediment control plan required by section seven of this article; and (3) the well plat.

Pursuant to W. Va. Code § 22-6A-10(f), this notice shall include: (1) a statement of the time limits for filing written comments; (2) who may file written comments; (3) the name and address of the secretary for the purpose of filing the comments and obtaining additional information; and (4) a statement that the persons may request, at the time of submitting written comments, notice of the permit decision and a list of persons qualified to test water.

Pursuant to W. Va. Code R. § 35-8-5.7.a, the operator shall provide the Well Site Safety Plan to the surface owner and any water purveyor or surface owner subject to notice and water testing as provided in section 15 of this rule.

Pursuant to W. Va. Code R. § 35-8-15.2.c, this notice shall: (1) contain a statement of the surface owner's and water purveyor's right to request sampling and analysis; (2) advise the surface owner and water purveyor of the rebuttable presumption for contamination or deprivation of a fresh water source or supply; advise the surface owner and water purveyor that refusal to allow the operator to conduct a pre-drilling water well test constitutes a method to rebut the presumption of liability; (3) advise the surface owner and water purveyor of his or her independent right to sample and analyze any water supply at his or her own expense; advise the surface owner and water purveyor whether or not the operator will utilize an independent laboratory to analyze any sample; and (4) advise the surface owner and or water purveyor that he or she can obtain from the Chief a list of water testing laboratories in the subject area capable of and qualified to test water supplies in accordance with standard acceptable methods.

Additional information related to horizontal drilling may be obtained from the Secretary, at the WV Department of Environmental Protection headquarters, located at 601 57th Street, SE, Charleston, WV 25304 (304-926-0450) or by visiting www.dep.wv.gov/oil-and-gas/pages/default.aspx.

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Well Location Restrictions

Pursuant to W. Va. Code § 22-6A-12, Wells may not be drilled within two hundred fifty feet measured horizontally from any existing water well or developed spring used for human or domestic animal consumption. The center of well pads may not be located within six hundred twenty-five feet of an occupied dwelling structure, or a building two thousand five hundred square feet or larger used to house or shelter dairy cattle or poultry husbandry. This limitation is applicable to those wells, developed springs, dwellings or agricultural buildings that existed on the date a notice to the surface owner of planned entry for surveying or staking as provided in section ten of this article or a notice of intent to drill a horizontal well as provided in subsection (b), section sixteen of this article was provided, whichever occurs first, and to any dwelling under construction prior to that date. This limitation may be waived by written consent of the surface owner transmitted to the department and recorded in the real property records maintained by the clerk of the county commission for the county in which such property is located. Furthermore, the well operator may be granted a variance by the secretary from these distance restrictions upon submission of a plan which identifies the sufficient measures, facilities or practices to be employed during well site construction, drilling and operations. The variance, if granted, shall include terms and conditions the department requires to ensure the safety and protection of affected persons and property. The terms and conditions may include insurance, bonding and indemnification, as well as technical requirements. (b) No well pad may be prepared or well drilled within one hundred feet measured horizontally from any perennial stream, natural or artificial lake, pond or reservoir, or a wetland, or within three hundred feet of a naturally reproducing trout stream. No well pad may be located within one thousand feet of a surface or ground water intake of a public water supply. The distance from the public water supply as identified by the department shall be measured as follows: (1) For a surface water intake on a lake or reservoir, the distance shall be measured from the boundary of the lake or reservoir. (2) For a surface water intake on a flowing stream, the distance shall be measured from a semicircular radius extending upstream of the surface water intake. (3) For a groundwater source, the distance shall be measured from the wellhead or spring. The department may, in its discretion, waive these distance restrictions upon submission of a plan identifying sufficient measures, facilities or practices to be employed during well site construction, drilling and operations to protect the waters of the state. A waiver, if granted, shall impose any permit conditions as the secretary considers necessary. (c) Notwithstanding the foregoing provisions of this section, nothing contained in this section prevents an operator from conducting the activities permitted or authorized by a Clean Water Act Section 404 permit or other approval from the United States Army Corps of Engineers within any waters of the state or within the restricted areas referenced in this section. (d) The well location restrictions set forth in this section shall not apply to any well on a multiple well pad if at least one of the wells was permitted prior to the effective date of this article. (e) The secretary shall, by December 31, 2012, report to the Legislature on the noise, light, dust and volatile organic compounds generated by the drilling of horizontal wells as they relate to the well location restrictions regarding occupied dwelling structures pursuant to this section. Upon a finding, if any, by the secretary that the well location restrictions regarding occupied dwelling structures are inadequate or otherwise require alteration to address the items

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examined in the study required by this subsection, the secretary shall have the authority to propose for promulgation legislative rules establishing guidelines and procedures regarding reasonable levels of noise, light, dust and volatile organic compounds relating to drilling horizontal wells, including reasonable means of mitigating such factors, if necessary.

Water Well Testing:

Pursuant to West Virginia Code § 22-6A-10(d), notification shall be made, with respect to surface landowners identified in subsection (b) or water purveyors identified in subdivision (5), subsection (b) of this section, of the opportunity for testing their water well. The operator shall provide an analysis to such surface landowner or water purveyor at their request.

Water Testing Laboratories:

Pursuant to West Virginia Code § 22-6A-10(i), persons entitled to notice pursuant to subsection (b) of this section may contact the department to ascertain the names and locations of water testing laboratories in the subject area capable and qualified to test water supplies in accordance with standard accepted methods. In compiling that list of names the department shall consult with the state Bureau for Public Health and local health departments. A surface owner and water purveyor has an independent right to sample and analyze any water supply at his or her own expense. The laboratory utilized by the operator shall be approved by the agency as being certified and capable of performing sample analyses in accordance with this section.

Rebuttable Presumption for Contamination or Deprivation of a Fresh Water Source or Supply:

W. Va. Code § 22-6A-18 requires that (b) unless rebutted by one of the defenses established in subsection (c) of this section, in any action for contamination or deprivation of a fresh water source or supply within one thousand five hundred feet of the center of the well pad for horizontal well, there is a rebuttable presumption that the drilling and the oil or gas well or either was the proximate cause of the contamination or deprivation of the fresh water source or supply. (c) In order to rebut the presumption of liability established in subsection (b) of this section, the operator must prove by a preponderance of the evidence one of the following defenses: (1) The pollution existed prior to the drilling or alteration activity as determined by a predrilling or prealteration water well test. (2) The landowner or water purveyor refused to allow the operator access to the property to conduct a predrilling or prealteration water well test. (3) The water supply is not within one thousand five hundred feet of the well. (4) The pollution occurred more than six months after completion of drilling or alteration activities. (5) The pollution occurred as the result of some cause other than the drilling or alteration activity. (d) Any operator electing to preserve its defenses under subdivision (1), subsection (c) of this section shall retain the services of an independent certified laboratory to conduct the predrilling or prealteration water well test. A copy of the results of the test shall be submitted to the department and the surface owner or water purveyor in a manner prescribed by the secretary. (e) Any operator shall replace the water supply of an owner of interest in real property who obtains all or part of that owner's supply of water for domestic, agricultural, industrial or other legitimate use from an underground or surface source with a comparable water supply where the secretary determines that the water supply has been affected by contamination, diminution or interruption proximately caused by the oil or gas operation, unless waived in writing by that owner. (f) The secretary may order the operator conducting the oil or gas operation to: (1) Provide an emergency drinking water supply within twenty-four hours; (2) Provide temporary water supply within seventy-two hours; (3) Within thirty days begin activities to establish a permanent water supply or submit a proposal to the secretary outlining the measures and timetables to be used in establishing a permanent supply. The total time in providing a permanent water supply may not exceed two years. If the operator demonstrates that providing a permanent replacement water supply cannot be completed within two years, the secretary may extend the time frame on case-by-case basis; and (4) Pay all reasonable costs incurred by the real property owner in securing a water supply. (g) A person as described in subsection (b) of this section aggrieved under the provisions of subsections (b), (e) or (f) of this section may seek relief in court... (i) Notwithstanding the denial of the operator of responsibility for the damage to the real property owner's water supply or the status of any appeal on determination of liability for the damage to the real property owner's water supply, the operator may not discontinue providing the required water service until authorized to do so by the secretary or a court of competent jurisdiction.

Written Comment:

Pursuant to West Virginia Code § 22-6A-11(a), all persons described in subsection (b), section ten of this article may file written comments with the secretary as to the location or construction of the applicant's proposed well work within thirty days after the application is filed with the secretary. All persons described in West Virginia Code § 22-6A-10(b) may file written comments as to the location or construction of the applicant's proposed well work to the Secretary at:

Chief, Office of Oil and Gas
Department of Environmental Protection
601 57th St. SE
Charleston, WV 25304
(304) 926-0450

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Such persons may request, at the time of submitting written comments, notice of the permit decision and a list of persons qualified to test water. **NOTE: YOU ARE NOT REQUIRED TO FILE ANY COMMENT.**

Time Limits and Methods for Filing Comments.

The law requires these materials to be served on or before the date the operator files its Application. You have **THIRTY (30) DAYS** after the filing date to file your comments. Comments must be filed in person or received in the mail by the Chief's office by the time stated above. You may call the Chief's office to be sure of the date. Check with your postmaster to ensure adequate delivery time or to arrange special expedited handling. If you have been contacted by the well operator and you have signed a "voluntary statement of no objection" to the planned work described in these materials, then the permit may be issued at any time.

Pursuant to West Virginia Code § 22-6A-11(c)(2), Any objections of the affected coal operators and coal seam owners and lessees shall be addressed through the processes and procedures that exist under sections fifteen, seventeen and forty, article six of this chapter, as applicable and as incorporated into this article by section five of this article. The written comments filed by the parties entitled to notice under subdivisions (1), (2), (4), (5) and (6), subsection (b), section ten of this article shall be considered by the secretary in the permit issuance process, but the parties are not entitled to participate in the processes and proceedings that exist under sections fifteen, seventeen or forty, article six of this chapter, as applicable and as incorporated into this article by section five of this article.

Comment Requirements

Your comments must be in writing and include your name, address and telephone number, the well operator's name and well number and the approximate location of the proposed well site including district and county from the application. You may add other documents, such as sketches, maps or photographs to support your comments.

Disclaimer: All comments received will be placed on our web site <http://www.dep.wv.gov/oil-and-gas/Horizontal-Permits/Pages/default.aspx> and the applicant will automatically be forwarded an email notice that such comments have been submitted. The applicant will be expected to provide a response to comments submitted by any surface owner, water purveyor or natural gas storage operator noticed within the application.

Permit Denial or Condition

The Chief has the power to deny or condition a well work permit. Pursuant to West Virginia Code § 22-6A-8(d), the permit may not be issued or be conditioned, including conditions with respect to the location of the well and access roads prior to issuance if the director determines that:

- (1) The proposed well work will constitute a hazard to the safety of persons;
- (2) The plan for soil erosion and sediment control is not adequate or effective;
- (3) Damage would occur to publicly owned lands or resources; or
- (4) The proposed well work fails to protect fresh water sources or supplies.

A permit may also be denied under West Virginia Code § 22-6A-7(k), the secretary shall deny the issuance of a permit if the secretary determines that the applicant has committed a substantial violation of a previously issued permit for a horizontal well, including the applicable erosion and sediment control plan associated with the previously issued permit, or a substantial violation of one or more of the rules promulgated under this article, and in each instance has failed to abate or seek review of the violation within the time prescribed by the secretary pursuant to the provisions of subdivisions (1) and (2), subsection (a), section five of this article and the rules promulgated hereunder, which time may not be unreasonable.

Pursuant to West Virginia Code § 22-6A-10(g), any person entitled to submit written comments to the secretary pursuant to subsection (a), section eleven of this article, shall also be entitled to receive from the secretary a copy of the permit as issued or a copy of the order modifying or denying the permit if the person requests receipt of them as a part of the written comments submitted concerning the permit application. Such persons may request, at the time of submitting written comments, notice of the permit decision and a list of persons qualified to test water.

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WW-6A
(8-13)

API NO. 47- _____ - _____
OPERATOR WELL NO. M187 **02/22/2019**
Well Pad Name: Hicks

Notice is hereby given by:

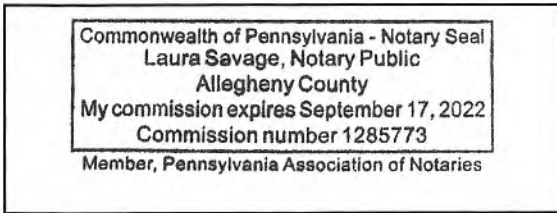
Well Operator: Chevron Appalachia, LLC
Telephone: 412-865-1533
Email: JZYK@chevron.com

Address: 700 Cherrington Parkway
Coraopolis, PA 15108
Facsimile: 412-865-2403

Oil and Gas Privacy Notice:

The Office of Oil and Gas processes your personal information, such as name, address and telephone number, as part of our regulatory duties. Your personal information may be disclosed to other State agencies or third parties in the normal course of business or as needed to comply with statutory or regulatory requirements, including Freedom of Information Act requests. Our office will appropriately secure your personal information. If you have any questions about our use or your personal information, please contact DEP's Chief Privacy Officer at depprivacyofficer@wv.gov.

Jenny Butenko



Commonwealth of Pennsylvania
County of Allegheny
Subscribed and sworn before me this 20th day of November, 2018
Laura Savage Notary Public
My Commission Expires September 17, 2022

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Attachment

API No. 47- ____ - _____

OPERATOR WELL NO. M18H

Well Pad Name: Hicks

COAL OWNER OR LESSEE
Name: Christa Dawn Hicks
Address: 65 Clover Lane
Moundsville, WV 26041

COAL OWNER OR LESSEE
Name: Leslie Mae Hicks
Address: 1611 Skye Drive
Chapel Hill, NC 27516

SURFACE OWNER OF WATER WELL AND/OR WATER PURVEYOR
Name: Vickie L. & Sidney P. Pond
Address: 119 Labrador Lane
Moundsville, WV 26041

SURFACE OWNER OF WATER WELL AND/OR WATER PURVEYOR
Name: Kenneth B. Tagg
Address: 3303 Big Grave Creek Road
Moundsville, WV 26041

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**STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS
NOTICE OF INTENT TO DRILL**

Pursuant to W. Va. Code § 22-6A-16(b), the Notice of Intent to Drill is only required if the notice requirements of W. Va. Code § 22-6A-10(a) have NOT been met or if the Notice of Intent to Drill requirement has NOT been waived in writing by the surface owner.

Notice Time Requirement: Notice shall be provided at least **TEN (10)** days prior to filing a permit application.

Date of Notice: 11/19/18 **Date Permit Application Filed:** 12/19/18

Delivery method pursuant to West Virginia Code § 22-6A-16(b)

- HAND DELIVERY
- CERTIFIED MAIL RETURN RECEIPT REQUESTED

Pursuant to W. Va. Code § 22-6A-16(b), at least ten days prior to filing a permit application, an operator shall, by certified mail return receipt requested or hand delivery, give the surface owner notice of its intent to enter upon the surface owner's land for the purpose of drilling a horizontal well: *Provided*, That notice given pursuant to subsection (a), section ten of this article satisfies the requirements of this subsection as of the date the notice was provided to the surface owner: *Provided, however*, That the notice requirements of this subsection may be waived in writing by the surface owner. The notice, if required, shall include the name, address, telephone number, and if available, facsimile number and electronic mail address of the operator and the operator's authorized representative.

Notice is hereby provided to the SURFACE OWNER(s):

Name: Thomas E. Hicks
Address: 353 Arbor Lane
Moundsville, WV 26041

Name: Jeffrey Ryan
Address: 141 Clover Lane
Moundsville, WV 26041

Notice is hereby given:

Pursuant to West Virginia Code § 22-6A-16(b), notice is hereby given that the undersigned well operator has an intent to enter upon the surface owner's land for the purpose of drilling a horizontal well on the tract of land as follows:

| | | | | |
|-------------|---|---------------------------|----------------------------|-------------------|
| State: | <u>West Virginia</u> | UTM NAD 83 | Easting: | <u>524111.89</u> |
| County: | <u>Marshall</u> | | Northing: | <u>4413562.45</u> |
| District: | <u>Clay</u> | Public Road Access: | <u>Fork Ridge Rd/WV-17</u> | |
| Quadrangle: | <u>Glen Easton, WV 7.5'</u> | Generally used farm name: | <u>Hicks</u> | |
| Watershed: | <u>Middle Grave Creek - Grave Creek</u> | | | |

This Notice Shall Include:

Pursuant to West Virginia Code § 22-6A-16(b), this notice shall include the name, address, telephone number, and if available, facsimile number and electronic mail address of the operator and the operator's authorized representative. Additional information related to horizontal drilling may be obtained from the Secretary, at the WV Department of Environmental Protection headquarters, located at 601 57th Street, SE, Charleston, WV 25304 (304-926-0450) or by visiting www.dep.wv.gov/oil-and-gas/pages/default.aspx.

Notice is hereby given by:

Well Operator: Chevron Appalachia, LLC
Address: 700 Cherrington Parkway
Coraopolis, PA 15108
Telephone: 412-865-1533
Email: JZYK@chevron.com
Facsimile: 412-865-2403

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Authorized Representative: _____
Address: _____ **DEC 20 2018**
Telephone: _____
Email: _____ WV Department of
Facsimile: _____ Environmental Protection

Oil and Gas Privacy Notice:

The Office of Oil and Gas processes your personal information, such as name, address and telephone number, as part of our regulatory duties. Your personal information may be disclosed to other State agencies or third parties in the normal course of business or as needed to comply with statutory or regulatory requirements, including Freedom of Information Act requests. Our office will appropriately secure your personal information. If you have any questions about our use or your personal information, please contact DEP's Chief Privacy Officer at depprivacyofficer@wv.gov.

STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS
NOTICE OF PLANNED OPERATION

Notice Time Requirement: notice shall be provided no later than the filing date of permit application.

Date of Notice: 11/19/18 Date Permit Application Filed: 12/19/18

Delivery method pursuant to West Virginia Code § 22-6A-16(c)

- CERTIFIED MAIL RETURN RECEIPT REQUESTED
- HAND DELIVERY

Pursuant to W. Va. Code § 22-6A-16(c), no later than the date for filing the permit application, an operator shall, by certified mail return receipt requested or hand delivery, give the surface owner whose land will be used for the drilling of a horizontal well notice of the planned operation. The notice required by this subsection shall include: (1) A copy of this code section; (2) The information required to be provided by subsection (b), section ten of this article to a surface owner whose land will be used in conjunction with the drilling of a horizontal well; and (3) A proposed surface use and compensation agreement containing an offer of compensation for damages to the surface affected by oil and gas operations to the extent the damages are compensable under article six-b of this chapter. (d) The notices required by this section shall be given to the surface owner at the address listed in the records of the sheriff at the time of notice.

Notice is hereby provided to the SURFACE OWNER(s)

(at the address listed in the records of the sheriff at the time of notice):

Name: Thomas E. Hicks
Address: 353 Arbor Lane
Moundsville, WV 26041

Name: Jeffrey Ryan
Address: 141 Clover Lane
Moundsville, WV 26041

Notice is hereby given:

Pursuant to West Virginia Code § 22-6A-16(c), notice is hereby given that the undersigned well operator has developed a planned operation on the surface owner's land for the purpose of drilling a horizontal well on the tract of land as follows:

| | |
|--|--|
| State: <u>West Virginia</u> | UTM NAD 83 Easting: <u>524111.89</u> |
| County: <u>Marshall</u> | Northing: <u>4413562.45</u> |
| District: <u>Clay</u> | Public Road Access: <u>Fork Ridge Rd/WV-17</u> |
| Quadrangle: <u>Glen Easton, WV 7.5'</u> | Generally used farm name: <u>Hicks</u> |
| Watershed: <u>Middle Grave Creek - Grave Creek</u> | |

This Notice Shall Include:

Pursuant to West Virginia Code § 22-6A-16(c), this notice shall include: (1) A copy of this code section; (2) The information required to be provided by **W. Va. Code § 22-6A-10(b)** to a surface owner whose land will be used in conjunction with the drilling of a horizontal well; and (3) A proposed surface use and compensation agreement containing an offer of compensation for damages to the surface affected by oil and gas operations to the extent the damages are compensable under article six-b of this chapter. Additional information related to horizontal drilling may be obtained from the Secretary, at the WV Department of Environmental Protection headquarters, located at 601 57th Street, SE, Charleston, WV 25304 (304-926-0450) or by visiting www.dep.wv.gov/oil-and-gas/pages/default.aspx.

Well Operator: Chevron Appalachia, LLC
Telephone: 412-865-1533
Email: JZYK@chevron.com

Address: 700 Cherrington Parkway
Coraopolis, PA 15108
Facsimile: 412-865-2403

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Office of Oil and Gas
DEC 20 2018
WV Department of
Environmental Protection

Oil and Gas Privacy Notice:

The Office of Oil and Gas processes your personal information, such as name, address and telephone number, as part of our regulatory duties. Your personal information may be disclosed to other State agencies or third parties in the normal course of business or as needed to comply with statutory or regulatory requirements, including Freedom of Information Act requests. Our office will appropriately secure your personal information. If you have any questions about our use or your personal information, please contact DEP's Chief Privacy Officer at depprivacyofficer@wv.gov.

WW-6AW
(1-12)

API NO. 47- _____ - _____ **02/22/2019**
OPERATOR WELL NO. M18H
Well Pad Name: Hicks Pad A

STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS
VOLUNTARY STATEMENT OF NO OBJECTION

Instructions to Persons Named on Page WW-6A

The well operator named on page WW-6A is applying for a permit from the State of West Virginia to conduct oil or gas well work. Well work permits are valid for twenty-four (24) months. Please contact the listed well operator and the Office of Oil and Gas if you do not own any interest in the listed surface tract.

Comment and Waiver Provisions

Pursuant to West Virginia Code § 22-6A-11(a), all persons described in subsection (b), section ten of this article may file written comments with the secretary as to the location or construction of the applicant's proposed well work within thirty days after the application is filed with the secretary.

Pursuant to West Virginia Code § 22-6A-8(b) No permit may be issued less than thirty days after the filing date of the application for any well work except plugging or replugging; and no permit for plugging or replugging may be issued less than five days after the filing date of the application except a permit for plugging or replugging a dry hole: *Provided*, That if the applicant certifies that all persons entitled to notice of the application under the provisions of subsection (b), section ten of this article have been served in person or by certified mail, return receipt requested, with a copy of the well work application, including the erosion and sediment control plan, if required, and the well plat, and further files written statements of no objection by all such persons, the secretary may issue the well work permit at any time.

VOLUNTARY STATEMENT OF NO OBJECTION

I, Mason Smith, hereby state that I have read the Instructions to Persons Named on Page WW-6A and the associated provisions listed above, and that I have received copies of a Notice of Application, an Application for a Well Work Permit on Form WW-6A and attachments consisting of pages one (1) through _____, including the erosion and sediment control plan, if required, and the well plat, all for proposed well work on the tract of land as follows:

| | | | | |
|-------------|--------------------------|---------------------------|------------------------|--------------------|
| State: | <u>West Virginia</u> | UTM NAD 83 | Easting: | <u>524111.798</u> |
| County: | <u>Marshall</u> | | Northing: | <u>4413562.331</u> |
| District: | <u>Clay</u> | Public Road Access: | <u>Fork Ridge Road</u> | |
| Quadrangle: | <u>Glen Easton 7.5'</u> | Generally used farm name: | <u>Hicks</u> | |
| Watershed: | <u>Upper Ohio-Beaver</u> | | | |

I further state that I have no objection to the planned work described in these materials, and I have no objection to a permit being issued on those materials.

*Please check the box that applies

SURFACE OWNER

SURFACE OWNER (Road and/or Other Disturbance)

SURFACE OWNER (Impoundments/Pits)

COAL OWNER OR LESSEE

COAL OPERATOR

WATER PURVEYOR

OPERATOR OF ANY NATURAL GAS STORAGE FIELD

FOR EXECUTION BY A NATURAL PERSON

Signature: _____

Print Name: _____


Date: _____

FOR EXECUTION BY A CORPORATION, ETC.

Company: Consolidation Coal Company

By: Mason Smith

Its: Coal, Oil and Gas Relations Manager

Signature: 

Date: 08/23/2018

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Office of Oil and Gas
DEC 20 2018
WV Department of
Environmental Protection

Oil and Gas Privacy Notice:

The Office of Oil and Gas processes your personal information, such as name, address and telephone number, as part of our regulatory duties. Your personal information may be disclosed to other State agencies or third parties in the normal course of business or as needed to comply with statutory or regulatory requirements, including Freedom of Information Act requests. Our office will appropriately secure your personal information. If you have any questions about our use or your personal information, please contact DEP's Chief Privacy Officer at depprivacyofficer@wv.gov.

STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS
VOLUNTARY STATEMENT OF NO OBJECTION

Instructions to Persons Named on Page WW-6A

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Comment and Waiver Provisions

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VOLUNTARY STATEMENT OF NO OBJECTION

I, Kenneth B. Jagg, hereby state that I have read the Instructions to Persons Named on Page WW-6A and the associated provisions listed above, and that I have received copies of a Notice of Application, an Application for a Well Work Permit on Form WW-6A and attachments consisting of pages one (1) through _____, including the erosion and sediment control plan, if required, and the well plat, all for proposed well work on the tract of land as follows:

| | | | | |
|-------------|---|---------------------------|----------------------------|-------------------|
| State: | <u>West Virginia</u> | UTM NAD 83 | Eastings: | <u>524111.89</u> |
| County: | <u>Marshall</u> | | Northing: | <u>4413562.45</u> |
| District: | <u>Clay</u> | Public Road Access: | <u>Fork Ridge Rd/WW-17</u> | |
| Quadrangle: | <u>Glen Easton, WV 7.5'</u> | Generally used farm name: | <u>Hicks</u> | |
| Watershed: | <u>Middle Grave Creek - Grave Creek</u> | | | |

I further state that I have no objection to the planned work described in these materials, and I have no objection to a permit being issued on those materials.

| | |
|---|---|
| <p>*Please check the box that applies</p> <p><input checked="" type="checkbox"/> SURFACE OWNER</p> <p><input checked="" type="checkbox"/> SURFACE OWNER (Road and/or Other Disturbance)</p> <p><input type="checkbox"/> SURFACE OWNER (Impoundments/Pits)</p> <p><input type="checkbox"/> COAL OWNER OR LESSEE</p> <p><input type="checkbox"/> COAL OPERATOR</p> <p><input type="checkbox"/> WATER PURVEYOR</p> <p><input type="checkbox"/> OPERATOR OF ANY NATURAL GAS STORAGE FIELD</p> | <p>FOR EXECUTION BY A NATURAL PERSON</p> <p>Signature: <u>Kenneth B. Jagg</u></p> <p>Print Name: <u>KENNETH B JAGG</u></p> <p>Date: _____</p> <p>FOR EXECUTION BY A CORPORATION, ETC.</p> <p>Company: _____</p> <p>By: _____</p> <p>Its: _____</p> <p>Signature: _____</p> <p>Date: _____</p> |
|---|---|

Oil and Gas Privacy Notice:

The Office of Oil and Gas processes your personal information, such as name, address and telephone number, as part of our regulatory duties. Your personal information may be disclosed to other State agencies or third parties in the normal course of business or as needed to comply with statutory or regulatory requirements, including Freedom of Information Act requests. Our office will appropriately secure your personal information. If you have any questions about our use or your personal information, please contact DEP's Chief Privacy Officer at depprivacyofficer@wv.gov.

STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS
VOLUNTARY STATEMENT OF NO OBJECTION

Instructions to Persons Named on Page WW-6A

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Comment and Waiver Provisions

Pursuant to West Virginia Code § 22-6A-11(a), all persons described in subsection (b), section ten of this article may file written comments with the secretary as to the location or construction of the applicant's proposed well work within thirty days after the application is filed with the secretary.

Pursuant to West Virginia Code § 22-6A-8(b) No permit may be issued less than thirty days after the filing date of the application for any well work except plugging or replugging; and no permit for plugging or replugging may be issued less than five days after the filing date of the application except a permit for plugging or replugging a dry hole: *Provided*, That if the applicant certifies that all persons entitled to notice of the application under the provisions of subsection (b), section ten of this article have been served in person or by certified mail, return receipt requested, with a copy of the well work application, including the erosion and sediment control plan, if required, and the well plat, and further files written statements of no objection by all such persons, the secretary may issue the well work permit at any time.

Vickie L Pond VOLUNTARY STATEMENT OF NO OBJECTION

I, Sidney P Pond, hereby state that I have read the Instructions to Persons Named on Page WW-6A and the associated provisions listed above, and that I have received copies of a Notice of Application, an Application for a Well Work Permit on Form WW-6A and attachments consisting of pages one (1) through _____, including the erosion and sediment control plan, if required, and the well plat, all for proposed well work on the tract of land as follows:

| | | | |
|-------------|---|---------------------------|----------------------------|
| State: | <u>West Virginia</u> | UTM NAD 83 Easting: | <u>524111.89</u> |
| County: | <u>Marshall</u> | Northing: | <u>4413562.45</u> |
| District: | <u>Clay</u> | Public Road Access: | <u>Fork Ridge Rd/WW-17</u> |
| Quadrangle: | <u>Glen Easton, WV 7.5'</u> | Generally used farm name: | <u>Hicks</u> |
| Watershed: | <u>Middle Grave Creek - Grave Creek</u> | | |

I further state that I have no objection to the planned work described in these materials, and I have no objection to a permit being issued on those materials.

| | |
|---|---|
| <p>*Please check the box that applies</p> <p><input type="checkbox"/> SURFACE OWNER</p> <p><input type="checkbox"/> SURFACE OWNER (Road and/or Other Disturbance)</p> <p><input type="checkbox"/> SURFACE OWNER (Impoundments/Pits)</p> <p><input type="checkbox"/> COAL OWNER OR LESSEE</p> <p><input type="checkbox"/> COAL OPERATOR</p> <p><input type="checkbox"/> WATER PURVEYOR</p> <p><input type="checkbox"/> OPERATOR OF ANY NATURAL GAS STORAGE FIELD</p> | <p style="text-align: center;">FOR EXECUTION BY A NATURAL PERSON</p> <p>Signature: <u>[Signature]</u></p> <p>Print Name: <u>Sidney P or Vickie L Pond</u></p> <p>Date: <u>12-9-18</u></p> <p style="text-align: right;">RECEIVED Office of Oil and Gas DEC 20 2018</p> <p style="text-align: center;">FOR EXECUTION BY A CORPORATION, ETC.</p> <p>Company: _____</p> <p>By: _____</p> <p>Its: _____</p> <p>Signature: _____</p> <p>Date: _____</p> <p style="text-align: right;">WV Department of Environmental Protection</p> |
|---|---|

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WEST VIRGINIA DEPARTMENT OF TRANSPORTATION

Division of Highways

1900 Kanawha Boulevard East • Building Five • Room 110
Charleston, West Virginia 25305-0430 • (304) 558-3505

Thomas J. Smith, P. E.
Secretary of Transportation/
Commissioner of Highways

November 1, 2018

Jill M. Newman
Deputy Commissioner

James A. Martin, Chief
Office of Oil and Gas
Department of Environmental Protection
601 57th Street, SE
Charleston, WV 25304

Subject: DOH Permit for the Hicks Pad A Well Site, Marshall County
Hicks M18H

Dear Mr. Martin,

The West Virginia Division of Highways has issued Permit #06-2016-0504 for the subject site to Chevron Appalachia, LLC for access to the State Road for the well site located off of Marshall County Route 17 SLS.

The operator has signed a STATEWIDE OIL AND GAS ROAD MAINTENANCE BONDING AGREEMENT and provided the required Bond. This operator is currently in compliance with the DOH OIL AND GAS POLICY dated January 3, 2012.

Very Truly Yours,

Gary K. Clayton, P.E.
Regional Maintenance Engineer
Central Office Oil & Gas Coordinator

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Office of Oil and Gas

DEC 20 2018

WV Department of
Environmental Protection

Cc: Nikolai Softcheck
Chevron North America Exploration and Production Company
CH, OM, D-6
File

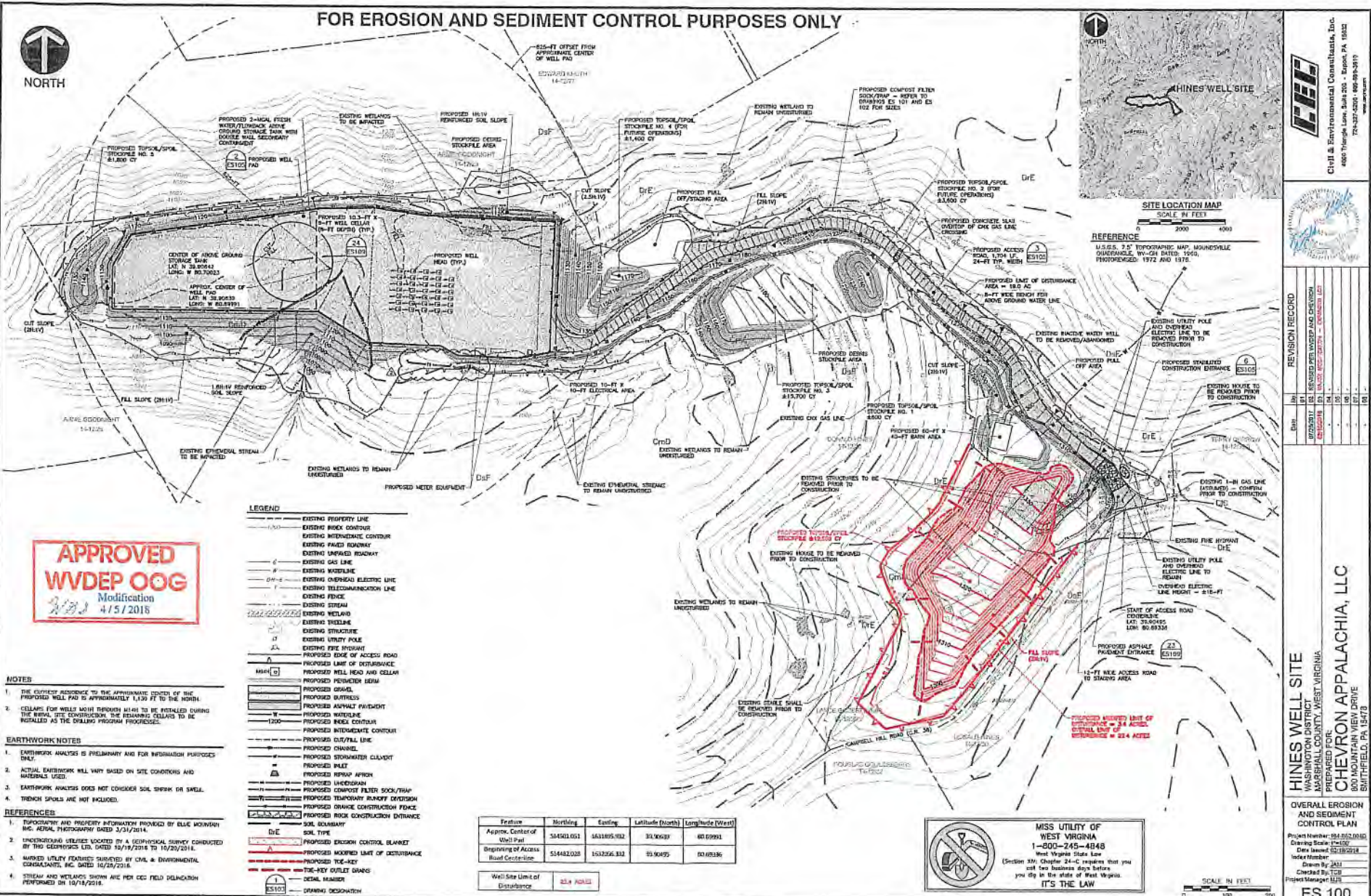
Hydraulic Fracturing Fluid Additives

| Supplier | Name | Purpose |
|-----------|-----------------------|--|
| Universal | 7.5% HCl Acid | Acid - To open perforations |
| Universal | Unislick ST50 | Friction Reducer for Water and Brine (Anionic) |
| Universal | Scale Inhibitor A | Scale Inhibitor |
| Universal | Iron Control A | Iron Control |
| Universal | Unihib G | Corrosion Inhibitor for Acid |
| Universal | K-Bac 1020 | Biocide/Bactericide |
| Universal | CMHPG (Polyfrac Gel) | Gel |
| Universal | LEB 10X | Gel Breaker |
| Universal | 100 Mesh White Sand | Proppant |
| Universal | 40-70 Mesh White Sand | Proppant |

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Environmental Protection

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DEC 20 2018
WV Department of
Environmental Protection

FOR EROSION AND SEDIMENT CONTROL PURPOSES ONLY



SITE LOCATION MAP
SCALE: 1" = 4000'
REFERENCE
U.S.G.S. 3" TOPOGRAPHIC MAP, HUNDSVILLE
QUADRANGLE, WV-GA DATED 1953,
PROPOSED 1972 AND 1976

LEGEND

- EXISTING PROPERTY LINE
- EXISTING ROCK CONTOUR
- EXISTING INTERMEDIATE CONTOUR
- EXISTING PAVED ROADWAY
- EXISTING UNPAVED ROADWAY
- EXISTING GAS LINE
- EXISTING WATERLINE
- EXISTING OVERHEAD ELECTRIC LINE
- EXISTING TELECOMMUNICATION LINE
- EXISTING FENCE
- EXISTING STREAM
- EXISTING WETLAND
- EXISTING TRENCH
- EXISTING STRUCTURE
- EXISTING UTILITY POLE
- EXISTING FIRE HYDRANT
- EXISTING FIRE MANSION
- EXISTING LINE OF ACCESS ROAD
- EXISTING LINE OF DISTURBANCE
- EXISTING WELL HEAD AND CELLAR
- EXISTING PROPOSED BERM
- EXISTING GRASS
- EXISTING ENTRANCE
- EXISTING ASPHALT PAVEMENT
- EXISTING WATERLINE
- EXISTING ROCK CONTOUR
- EXISTING INTERMEDIATE CONTOUR
- EXISTING CUT/FILL LINE
- EXISTING CHANNEL
- EXISTING STORMWATER CULVERT
- EXISTING INLET
- EXISTING RIPRAP APRON
- EXISTING UNDERDRAIN
- EXISTING COMBUSTIBLE FILTER SOCK/TRAP
- EXISTING STORMWATER RUNOFF DIVERSION
- EXISTING DRAINAGE CONSTRUCTION FENCE
- EXISTING ROCK CONSTRUCTION DISTURBANCE
- EXISTING SOIL BOUNDARY
- EXISTING SOIL TYPE
- EXISTING EROSION CONTROL BLANKET
- EXISTING PROPOSED LIMIT OF DISTURBANCE
- EXISTING PROPOSED TIE-IN
- EXISTING TIE-IN OUTLET DRAINS
- EXISTING DETAIL NUMBER
- EXISTING DRAWING DESIGNATION

APPROVED
WVDEP OOG
Modification
4/5/2018

- NOTES**
- THE CURRENT RESIDENCE TO THE APPROXIMATE CENTER OF THE PROPOSED WELL PAD IS APPROXIMATELY 11.50 FT TO THE NORTH.
 - CELLARS FOR WELLS MUST BE INSTALLED DURING THE INITIAL SITE CONSTRUCTION. THE REMAINING CELLARS TO BE INSTALLED AS THE DRILLING PROGRAM PROGRESSES.
- EARTHWORK NOTES**
- EARTHWORK ANALYSIS IS PRELIMINARY AND FOR INFORMATION PURPOSES ONLY.
 - ACTUAL EARTHWORK WILL VARY BASED ON SITE CONDITIONS AND MATERIALS USED.
 - EARTHWORK ANALYSIS DOES NOT CONSIDER SOIL SHRINK OR SWELL.
 - TRENCH SPALLS ARE NOT INCLUDED.
- REFERENCES**
- TOPOGRAPHY AND PROPERTY INFORMATION PROVIDED BY ELITE MOUNTAIN INC. AERIAL PHOTOGRAPHY DATED 3/31/2014.
 - UNDERGROUND UTILITIES LOCATED BY A GEOPHYSICAL SURVEY CONDUCTED BY TRG GEOPHYSICS LTD. DATED 10/18/2018 TO 10/20/2018.
 - MARKED UTILITY FEATURES SURVEYED BY CH2M HILL ENVIRONMENTAL CONSULTANTS, INC. DATED 10/28/2018.
 - STREAM AND WETLANDS SHOWN ARE PER CEC FIELD DELINEATION PERFORMED ON 10/18/2018.

| Feature | Northing | Eastng | Latitude (North) | Longitude (West) |
|-------------------------------------|------------|-------------|------------------|------------------|
| Approx. Center of Well Pad | 514501.051 | 1431805.982 | 39.90637 | 80.62991 |
| Beginning of Access Road Centerline | 514482.028 | 1532266.832 | 39.90495 | 80.63836 |

Well Site Limit of Disturbance: 23.6 ACRES

MISS UTILITY OF WEST VIRGINIA
1-800-245-4848
West Virginia State Law
(Section 16A Chapter 24-4C requires that you call two business days before you dig in the state of West Virginia.)
IT'S THE LAW

Civil & Environmental Consultants, Inc.
4800 Virginia Lane, Suite 205 - South PA 15301
Pittsburgh, Pennsylvania
www.cecinc.com

HINES WELL SITE
MARSHALL COUNTY, WEST VIRGINIA
PREPARED FOR:
CHEVRON APPALACHIA, LLC
800 MOUNTAIN VIEW DRIVE
SOUTHFIELD, PA 15478

OVERALL EROSION AND SEDIMENT CONTROL PLAN

Project Number: 194-0102-0040
Drawing Scale: 1"=50'
Date Issued: 05/18/2018
Issue Number:
Drawn By: JAL
Checked By: TCB
Project Manager: BLR

REVISION RECORD

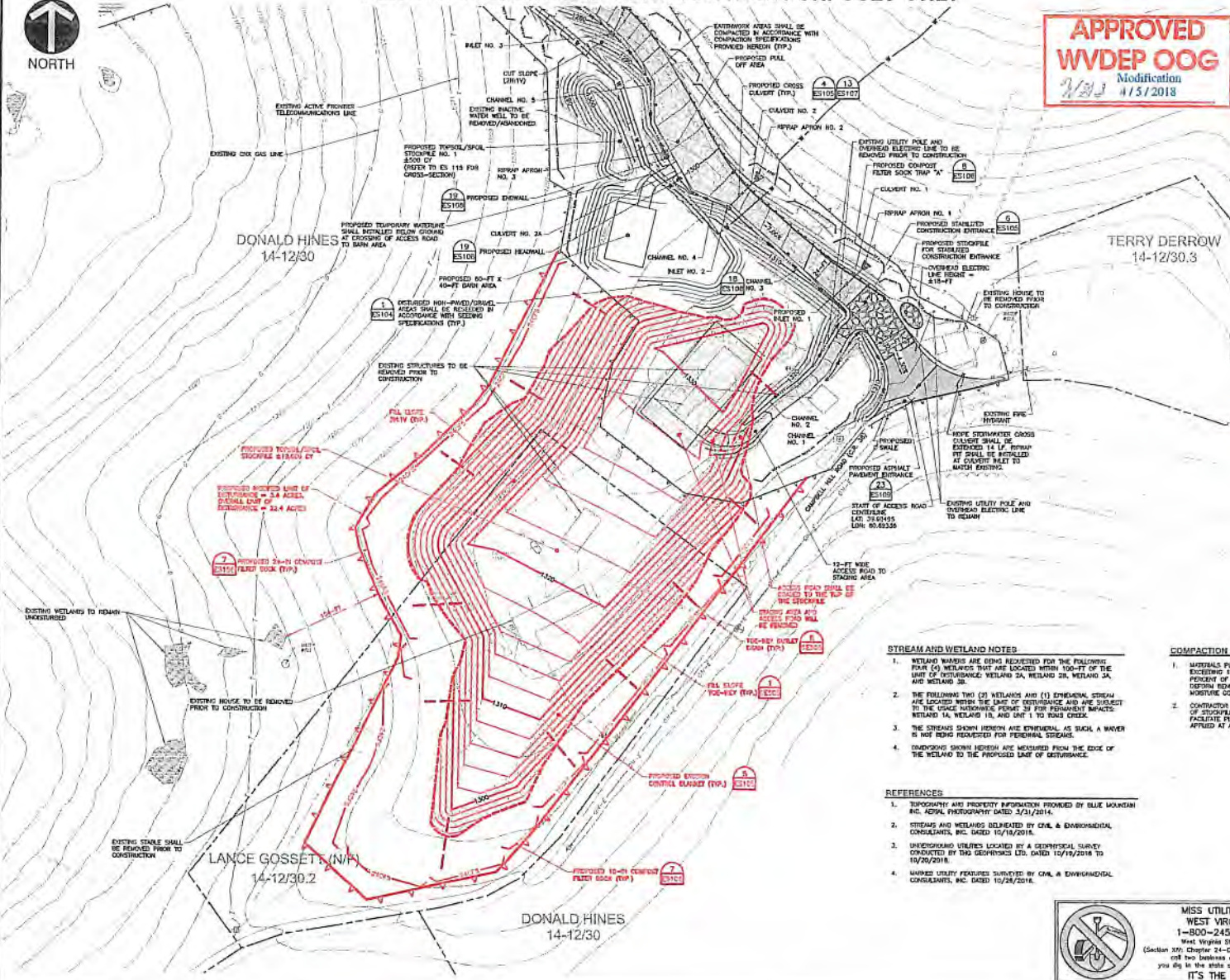
| NO. | DATE | DESCRIPTION |
|-----|------------|------------------------------------|
| 1 | 05/18/2018 | ISSUED FOR PERMIT AND CONSTRUCTION |
| 2 | 05/18/2018 | ISSUED FOR PERMIT AND CONSTRUCTION |
| 3 | 05/18/2018 | ISSUED FOR PERMIT AND CONSTRUCTION |
| 4 | 05/18/2018 | ISSUED FOR PERMIT AND CONSTRUCTION |
| 5 | 05/18/2018 | ISSUED FOR PERMIT AND CONSTRUCTION |
| 6 | 05/18/2018 | ISSUED FOR PERMIT AND CONSTRUCTION |
| 7 | 05/18/2018 | ISSUED FOR PERMIT AND CONSTRUCTION |
| 8 | 05/18/2018 | ISSUED FOR PERMIT AND CONSTRUCTION |
| 9 | 05/18/2018 | ISSUED FOR PERMIT AND CONSTRUCTION |
| 10 | 05/18/2018 | ISSUED FOR PERMIT AND CONSTRUCTION |

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WV Department of
Environmental Protection

FOR EROSION AND SEDIMENT CONTROL PURPOSES ONLY

APPROVED
WVDEP OOG
Modification
4/5/2018



LEGEND

| | |
|----------|---------------------------------------|
| (Symbol) | EXISTING PROPERTY LINE |
| (Symbol) | EXISTING BOUNDARY |
| (Symbol) | EXISTING INTERMEDIATE CONTOUR |
| (Symbol) | EXISTING PAVED ROADWAY |
| (Symbol) | EXISTING DRIVEWAY ROADMAT |
| (Symbol) | EXISTING GAS LINE |
| (Symbol) | EXISTING WATERLINE |
| (Symbol) | EXISTING OVERHEAD ELECTRIC LINE |
| (Symbol) | EXISTING TELECOMMUNICATION LINE |
| (Symbol) | EXISTING FENCE |
| (Symbol) | EXISTING STREAM |
| (Symbol) | EXISTING WETLAND |
| (Symbol) | EXISTING TIELINE |
| (Symbol) | EXISTING STRUCTURE |
| (Symbol) | EXISTING UTILITY POLE |
| (Symbol) | EXISTING FIRE HYDRANT |
| (Symbol) | PROPOSED EDGE OF ACCESS ROAD |
| (Symbol) | PROPOSED LIMIT OF DISTURBANCE |
| (Symbol) | PROPOSED WELL HEAD AND CELLAR |
| (Symbol) | PROPOSED FORMER BED |
| (Symbol) | PROPOSED GRAVEL |
| (Symbol) | PROPOSED BITUMEST |
| (Symbol) | PROPOSED ASPHALT PAVEMENT |
| (Symbol) | PROPOSED WATERLINE |
| (Symbol) | PROPOSED BOUNDARY CONTOUR |
| (Symbol) | PROPOSED INTERMEDIATE CONTOUR |
| (Symbol) | PROPOSED CUT/FILL LINE |
| (Symbol) | PROPOSED SPOT ELEVATION |
| (Symbol) | PROPOSED CHANNEL |
| (Symbol) | PROPOSED STORMWATER CONDUIT |
| (Symbol) | PROPOSED INLET |
| (Symbol) | PROPOSED RETAIN WALL |
| (Symbol) | PROPOSED UNDERDRAIN |
| (Symbol) | PROPOSED COMPOST FILTER SOCK TRAP |
| (Symbol) | PROPOSED 18-IN CONDUIT FILTER SOCK |
| (Symbol) | PROPOSED 24-IN CONDUIT FILTER SOCK |
| (Symbol) | PROPOSED 32-IN CONDUIT FILTER SOCK |
| (Symbol) | PROPOSED TEMPORARY RUNOFF DIVERSION |
| (Symbol) | PROPOSED DRAINAGE CONSTRUCTION FENCE |
| (Symbol) | PROPOSED ROCK CONSTRUCTION ENTRANCE |
| (Symbol) | PROPOSED INLET PROTECTION |
| (Symbol) | PROPOSED EROSION CONTROL, BLANKET |
| (Symbol) | PROPOSED MODIFIED LINE OF DISTURBANCE |
| (Symbol) | PROPOSED 100-KEY |
| (Symbol) | TOE-KEY OUTLET DRAIN |
| (Symbol) | DETAIL NUMBER |
| (Symbol) | GROUND OBSERVATION |

C&E Environmental Consultants, Inc.
4800 Triangle Lane, Suite 208 - Export, PA 15622
724-237-0200 - 800-999-3810
www.candee.com



REVISION RECORD

| Date | Description | By | Check |
|------------|-------------------|-------|-------|
| 02/15/2018 | ISSUED FOR PERMIT | WVDEP | WVDEP |
| 03/22/2018 | REVISION 1 | WVDEP | WVDEP |
| 04/05/2018 | REVISION 2 | WVDEP | WVDEP |
| 04/15/2018 | REVISION 3 | WVDEP | WVDEP |
| 04/15/2018 | REVISION 4 | WVDEP | WVDEP |
| 04/15/2018 | REVISION 5 | WVDEP | WVDEP |
| 04/15/2018 | REVISION 6 | WVDEP | WVDEP |
| 04/15/2018 | REVISION 7 | WVDEP | WVDEP |
| 04/15/2018 | REVISION 8 | WVDEP | WVDEP |
| 04/15/2018 | REVISION 9 | WVDEP | WVDEP |
| 04/15/2018 | REVISION 10 | WVDEP | WVDEP |

STREAM AND WETLAND NOTES

1. WETLAND WAIVERS ARE BEING REQUESTED FOR THE FOLLOWING: (a) WETLANDS THAT ARE LOCATED WITHIN 100-FT OF THE LIMIT OF DISTURBANCE: WETLAND 2A, WETLAND 2B, WETLAND 2C, AND WETLAND 2D.
2. THE FOLLOWING TWO (2) WETLANDS AND (1) EMBODIMENT STREAM ARE LOCATED WITHIN THE LIMIT OF DISTURBANCE AND ARE SUBJECT TO THE WETLAND WAIVER PERMIT 30 FOR PERMANENT IMPACTS: WETLAND 1A, WETLAND 1B, AND UNIT 1 TO ROAD CREEK.
3. THE STREAMS SHOWN HEREON ARE ENVIRONMENTAL, AS SUCH, A WAIVER IS NOT BEING REQUESTED FOR PERMANENT STREAMS.
4. DIMENSIONS SHOWN HEREON ARE MEASURED FROM THE EDGE OF THE WETLAND TO THE PROPOSED LIMIT OF DISTURBANCE.

COMPACTION SPECIFICATIONS

1. MATERIALS PLACED IN THE PERMANENT SOIL FILES SHALL BE PLACED IN LIFTS NOT EXCEEDING 12 INCHES THICK, SHALL BE COMPACTED TO 95% DRY WEIGHT AT 5 PERCENT OF THE OPTIMAL MOISTURE CONTENT, AND SHALL NOT EXCESSIVELY DISTURB THE SURFACE OR THE VEGETATION EQUIPMENT DURING PLACEMENT. POSITIVE COMPACTING OF SOIL MATERIALS MAY BE REQUIRED.
2. CONTRACTOR SHOULD ASSUME FOR PLACING PURPOSES APPROXIMATELY 90 PERCENT OF STRUCTURE MATERIAL WILL NEED ORDER, ON ORDER WITH LINE ON CENTER TO FACILITATE PLACEMENT. CONTRACTOR SHOULD ASSUME LINE ON CENTER SHOULD BE APPLIED AT A RATE OF 8 PERCENT BY WEIGHT.

REFERENCES

1. TOPOGRAPHY AND PROPERTY INFORMATION PROVIDED BY BLUE MOUNTAIN INC. AERIAL PHOTOGRAPHY DATED 3/31/2014.
2. STREAMS AND WETLANDS DELINEATED BY C&E & ENVIRONMENTAL CONSULTANTS, INC. DATED 10/18/2016.
3. UNDERGROUND UTILITIES LOCATED BY A GEOPHYSICAL SURVEY CONDUCTED BY THE GEOPHYSICAL LTD. DATED 10/19/2016 TO 10/20/2016.
4. MARKET UTILITY FEATURES SURVEYED BY C&E & ENVIRONMENTAL CONSULTANTS, INC. DATED 10/28/2016.



MISS UTILITY OF
WEST VIRGINIA
1-800-245-4848
West Virginia State Law
(Section 20X Chapter 24-C requires that you call two business days before you dig in the state of West Virginia.)
IT'S THE LAW

HINES WELL SITE
WASHINGTON DISTRICT
WASHINGTON COUNTY, WEST VIRGINIA
PROJECT FOR
CHEVRON APPALACHIA, LLC
800 MOUNTAIN VIEW DRIVE
SOUTHFIELD, PA 15473

MAJOR MOD. EROSION AND SEDIMENT CONTROL PLAN
Project Number: 156270009
Drawing Scale: 1"=50'
Date Issued: 02/18/2018
Issue Number:
Drawn by: PDE
Checked by: JMM
Printed Manager: TCB

ES 101A

