



west virginia department of environmental protection

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

Earl Ray Tomblin, Governor
Randy C. Huffman, Cabinet Secretary
www.dep.wv.gov

June 16, 2014

WELL WORK PERMIT

Horizontal 6A Well

This permit, API Well Number: 47-5101748, issued to CHEVRON APPALACHIA, LLC, 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 all 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 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.

In addition to the applicable requirements of this permit, and the statutes and rules governing oil and gas activity in WV, this permit may contain specific conditions which must be followed. Permit conditions are attached to this cover letter.

Per 35CSR-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) 926-0499 ext. 1654.

James Martin
Chief

Operator's Well No: HART 2H
Farm Name: HART, JOHN J. & RENEE
API Well Number: 47-5101748
Permit Type: Horizontal 6A Well
Date Issued: 06/16/2014

Promoting a healthy environment.

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 fifty (50) 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. 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.
8. 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.
9. Operator shall provide the Office of Oil & Gas notification of the date that drilling commenced on this well. Such notice shall be provided by sending an email to DEPOOGNotify@wv.gov within 30 days of commencement of drilling.

51-01748

WW-6B
(9/13)

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

1) Well Operator: Chevron Appalachia, LLC 4944935 Marshall Washington Moundsville
Operator ID County District Quadrangle

2) Operator's Well Number: 2H Well Pad Name: Hart

3) Farm Name/Surface Owner: John Hart Public Road Access: Campbells Run Rd- 38

4) Elevation, current ground: 1329' Elevation, proposed post-construction: 1322'

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

(b) If Gas Shallow Deep
Horizontal

6) Existing Pad: Yes or No Yes

JN 5/28/14

7) Proposed Target Formation(s), Depth(s), Anticipated Thickness and Associated Pressure(s):
Proposed Target: Marcellus; TVD: 6534'; anticipated thickness: 47'; associated pressure: 4,247 psi

8) Proposed Total Vertical Depth: 6565'

9) Formation at Total Vertical Depth: Marcellus

10) Proposed Total Measured Depth: 15168'

11) Proposed Horizontal Leg Length: 7782'

12) Approximate Fresh Water Strata Depths: 247' below final pad grade elevation

13) Method to Determine Fresh Water Depths: offset well data, Hart #1H (P&A) driller's log, USGS local stream base level

14) Approximate Saltwater Depths: 1994' based on offset well data

15) Approximate Coal Seam Depths: 829' from proposed pad elevation

16) Approximate Depth to Possible Void (coal mine, karst, other): 829' mine void possible in Pittsburgh Coal Seam

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: Alexander Mine- Closed & Abandoned
Depth: 829' from proposed pad elevation
Seam: Pittsburgh No. 8 Coal Seam
Owner: Reserve Coal Properties, LLC

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(9/13)

18)

CASING AND TUBING PROGRAM

| TYPE | <u>Size</u> | <u>New or Used</u> | <u>Grade</u> | <u>Weight per ft. (lb/ft)</u> | <u>FOOTAGE: For Drilling</u> | <u>INTERVALS: Left in Well</u> | <u>CEMENT: Fill-up (Cu. Ft.)</u> |
|--------------|-------------|--------------------|--------------|-------------------------------|------------------------------|--------------------------------|----------------------------------|
| Conductor | 30" | New | | | 40' | 40' | 141.8 CTS |
| Fresh Water | 20" | New | J-55 | 94.5# | 354' | 354' | 810 CTS |
| Coal | 13-3/8" | New | J-55 | 54.5# | 941' | 941' | 950.0 CTS |
| Intermediate | 9-5/8" | New | N-80 | 40# | 2,166' | 2166' | 840.0 CTS |
| Production | 5-1/2" | New | P-110 | 20# | 15,168' | 15,168' | 3678 CTS |
| Tubing | | | | | | | |
| Liners | | | | | | | |

JN 5/28/14

| TYPE | <u>Size</u> | <u>Wellbore Diameter</u> | <u>Wall Thickness</u> | <u>Burst Pressure</u> | <u>Cement Type</u> | <u>Cement Yield (cu. ft./k)</u> |
|--------------|-------------|--------------------------|-----------------------|-----------------------|--------------------|---------------------------------|
| Conductor | 30" | 36" | 0.375 | | | |
| Fresh Water | 20" | 26" | 0.438" | 2,110 psi | Class A | 1.18 |
| Coal | 13-3/8" | 17.5" | 0.458" | 2,730 psi | Class A | 1.18 |
| Intermediate | 9-5/8" | 12.25" | 0.395" | 5,750 psi | Class A | 1.29 |
| Production | 5-1/2" | 8.5" | 0.361" | 12,640 psi | Class A | 2.2 |
| Tubing | | | | | | |
| Liners | | | | | | |

PACKERS

| | | | | |
|-------------|------|--|--|--|
| Kind: | None | | | |
| Sizes: | | | | |
| Depths Set: | | | | |

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(9/13)

JN 5/28/14

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

Drill 26" hole to 354' MD then set and cement 20" casing to surface covering the fresh water. Drill 17.5" hole to 941' MD then set and cement to surface 13-3/8" casing covering Pittsburgh coal. Drilling of the 17.5" hole will stop and 13 3/8" casing will be set no more than 100' past the void. A basket will be run with the 13 3/8" casing to place 20' above the mine void. Cement will be backfilled to surface using volume necessary to get cement to surface. Drill 12.25" hole to 2,166' MD then set and cement to surface 9-5/8" casing, covering the Burgoon (50' below Big Injun). Drill 8-1/2" hole to KOP. Drill 8-1/2" hole curve and lateral to 15,168' MD/ 6,565' TVD. Set 5-1/2" production casing and cement back to surface.

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

Complete each stage of the well with #50,000's of 100 mesh and #300,000's of 40/70 along with 300,000 gallons of fresh water. The stages in these wells will be fractured at 90 bpm at an anticipated psi of 8,500 psi.

21) Total Area to be disturbed, including roads, stockpile area, pits, etc., (acres): 11.1 acres

22) Area to be disturbed for well pad only, less access road (acres): 2.27 acres

23) Describe centralizer placement for each casing string:

There will be a bow spring centralizer every two jts on the Water string, Coal string and intermediate. The production string will have two centralizer every jt in the lateral and curve, then one every two jts from KOP to surface.

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

For the Water String and Coal 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 cement, KCl, dispersant, suspension agent, and retarder. The tail will contain class A cement, Calcium Carbonate, KCl, dispersant, de-foamer, suspension agent, and friction reducer.

25) Proposed borehole conditioning procedures:

Well will be circulated a minimum of 3 bottoms up once casing point has been reached on all hole sections and until uniform mud properties are achieved.

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*Note: Attach additional sheets as needed.

Department of
Natural Resources
Protection

Cement Additives: Hart Unit 2H, 3H, 4H, 5H, 6H, 7H, 8H, 9H

✓ For the Water String and Coal 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 cement, KCl, dispersant, suspension agent, and retarder.

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

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Office of
Environmental
Protection
U.S. Environmental Protection Agency
Washington, D.C. 20460

51-01748

Hart 2H

Marshall Co. WV
March 26, 2014

Casing & Cementing Details

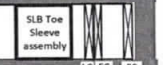
Ground Level Elevation: 1260

Depths are measured from KB 15 ft above GL

| AZM | Casing Formation | DEPTH | | Inclination | HOLE SIZE | CASING SPECS | CEMENT INFO | GENERAL INFO |
|-----|---|----------------------|------------------|-------------|-----------|---|--|---|
| | | MD | TVD | | | | | |
| | 30.0" Conductor | 55' | | | 36" | Conductor | grout to surface | |
| | Bow Spring: 1-shoe jt, 1-every 2nd jt 1 on ea 2-3 jts across previous shoe. Rigid: 2-within 100 ft of surface | | | | | Fresh Water Casing 20" 94.5# J-55 BTC 0.438" wall Capacity = 0.3553 bbl/ft Annulus = 0.2681 bbl/ft (+ 15.6 bbl for shoe track) Burst = 2110 psi | Minimum 40 ft from GL or at least 10 ft into bedrock Cement to surface Class A w/ 3% CaCl ₂ , Salt & Flake Yield = 1.18 cf/sk Weight = 15.6 ppg 144 bbl 686 sks 126 bbl capacity to shoe | 30% excess |
| | 20" Casing | 354' | | | 26" | | 72,095 lbs air wt with water Minimum 50 ft past deepest known fresh water | |
| | Bow Spring: 1-shoe jt, 1-every 2nd jt 1 on ea 2-3 jts across previous shoe. Rigid: 2-within 100 ft of surface | | | | | Coal Casing 13-3/8" 54.5# J-55 BTC 0.458" wall Capacity = 0.1508 bbl/ft Annulus = 0.1237 bbl/ft (+ 6 bbl for shoe track) Burst = 2730 psi | Cement to surface Class A w/ 3% CaCl ₂ , Salt & Flake Yield = 1.18 cf/sk Weight = 15.6 ppg 29 bbl 138 sks 142 bbl capacity to shoe 140 bbl 667 sks | shoe 100% excess to basket 30% excess |
| | 13 3/8" Casing | 941' | | | 17 1/2" | | 98,542 lbs air wt with water Minimum 35 ft, Optimum 50 ft, Maximum 100 ft below the bottom of void | |
| | RED BED 1000' - 1280' | | | | | Intermediate Casing 9-5/8" 40# N-80 BTC 8.835" ID - 8.679" DD Capacity = 0.0758 bbl/ft Annulus = 0.0558 bbl/ft (+ 3.1 bbl for shoe track) Burst = 5750 psi Collapse = 3090 psi | Cement to surface Class A w/ 10% CaCl ₂ , Salt & Flake Yield = 1.29 cf/sk Weight = 15.6 ppg 149.5 bbl 650 sks 161 bbl cap to shoe | 30% excess |
| | Bow Spring: 1-shoe jt, 1-every 2nd jt 1 on ea 2-3 jts across previous shoe. Rigid: 2-within 100 ft of surface | | | | | | | |
| | RED BED 1330' - 1520' | | | | | | | |
| | RED BED 1720' - 2490' | | | | | | | |
| | Burqaon (Biq Injun) | 1,891' | | | | | 1,077 psi lift pressure | |
| | Basket Top Coal Deepest Coal | 821' 841' 851' | | | | | | |
| | 1203 psi test | 9 5/8" Casing | 2,165' | | 12 1/4" | | | |
| | BOPE Class for section 13-5/8" 10K Class III BOPE | Berea | 2,481' | | | Prod. Casing 5-1/2", 20# P-110, New Vam Capacity = .0221 bbl/ft (+1 bbl for shoe track) Burst = 12,640 psi Collapse = 11,080 psi ID = 4.778" Drift = 4.653" | Class A: 1) LEAD SLURRY 301.5 bbbs 1282.5 sacks 15.2 ppg 1.32 cf/sk TOC Lead = 0 ft MD Class A: 2) TAIL SLURRY 383.6 bbbs 1337.7 sacks 15.2 ppg 1.61 cf/sk TOC Tail = 6,843 ft MD Displacement 335.4 bbbs | Lead Length: 6,643' (Surface to 200' above Upper Marcellus plus 10% in open hole) Tail Length: 8,525' (200' above Upper Marcellus to Shoe plus 10% in open hole) |
| | Centralization * 2 Torq glider per jt from shoe to KOP * 1 single bow per 2 jt from KOP to surface | | | | | | | |
| | Planned WBM TD | 5,000' | 5,000' | | | | | |
| | Middlesex | 6,609' | 6,312' | 55.85° | | | | |
| | Burkett Sh. Tully Lm. | 6,749' 6,775' | 6,398' 6,412' | 60.24° | | | | |
| | S5 (Hamilton Sh.) | 6,829' | 6,440' | 75.01° | | | | |
| | S4 (Upper Marcellus) | 7,075' | 6,534' | 79.91° | | | | |
| | Stafford (Cherry Valley) S2b (L. Marcellus) | 7,143' 7,154' | 6,549' 6,551' | 88.65° | | | | |
| | Horizontal Landing Point | 7,386' | 6,565' | 90.0° | | | | |
| | S1b (Basal Marcellus) | | 6,581' | 90.0° | | | | |
| | Onondaga | | 6,585' | | | | | |
| | | | | | 8 1/2" | Office Lateral length = 7,782' 5 1/2" Casing | 45ft Shoe Track 15,168' | |

MAR 27 2014

WV Department of Environmental Protection



WW-9
(9/13)

API Number 47 - 51 - 01748
Operator's Well No. Hart 2H

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 4944935

Watershed (HUC 10) Middle Grave Creek- Grave Creek Quadrangle Moundsville WV 7.5'

Elevation 1329.31' County Marshall District Washington

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: N/A

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)
- Off Site Disposal (Supply form WW-9 for disposal location)
- Other (Explain)

Will closed loop system be used? If so, describe: Collect and treat drill cuttings at rigsite, then transport in boxes to approved disposal/ land fill location

Drilling medium anticipated for this well (vertical and horizontal)? Air, freshwater, oil based, etc. Vertical on air, Horizontal on oil based

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

Additives to be used in drilling medium? Fluid loss control, emulsifier, shale stabilizer

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) N/A

-Landfill or offsite name/permit number? Drill cuttings will be disposed off-site at Waste Management's Arden landfill located in Washington, PA. Permit # PADEP 100172

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 *Branden Weimer*
Company Official (Typed Name) Branden Weimer
Company Official Title Construction Permitting Team Lead

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Office of Oil and Gas
MAR 27 2014

Subscribed and sworn before me this 25 day of February, 2014
Thomas Basinger Notary Public

My commission expires 9/24/2017

COMMONWEALTH OF PENNSYLVANIA
NOTARIAL SEAL
THOMAS BASINGER
Notary Public
CONNELLSVILLE CITY, FAYETTE CNTY
My Commission Expires Sep 24, 2017

COMMONWEALTH OF PENNSYLVANIA

DEPARTMENT OF REVENUE

STATE TAX

100

100

Form WW-9

Operator's Well No. Hart 2H

Chevron Appalachia, LLC

Proposed Revegetation Treatment: Acres Disturbed 13.6 Prevegetation pH 7

Lime 2 Tons/acre or to correct to pH 5.5-7

Fertilizer type Mixed grasses and legumes, legume stands only, grass stands only

Fertilizer amount 1000 lbs/acre

Mulch 2 Tons/acre

Seed Mixtures

Temporary

Permanent

Seed Type lbs/acre

Seed Type lbs/acre

Annual Ryegrass See Pg ES104

Kentucky 31 Fescue See Pg ES104

Barley or Oats See Pg ES104

Red Fescue See Pg ES104

Millet See Pg ES104

Crownvetch See Pg ES104

Cereal Rye or Cereal Wheat See Pg ES104, Hard Fescue See Pg ES 104, Annual Ryegrass See Pg ES104

Attach:

Drawing(s) of road, location, pit and proposed area for land application (unless engineered plans including this info have been provided)

Photocopied section of involved 7.5' topographic sheet.

Plan Approved by: Juan Ambrose Hayden

Comments: DEP Waiver and Permit conditions required for the following well restrictions: Distance to nearest occupied dwelling < 625' from center of pad. and < 100' from LOD to wetlands.

*- dwelling owner waiver
LKC*

pre-6A pad, already built, -LKC restriction does not apply

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MAR 21

Title: Oil and Gas Inspector

Date: 3/4/14

Field Reviewed? () Yes () No

WV Dept of Environmental Protection

Wetland Waiver Request

API Number 5101748

Well Number 2H

Operator Chevron Appalachia, LLC

Pad Name Hart Wells 2H-10H

Submit a conclusive demonstration to justify the proposed activity by addressing the following:

1. Demonstrate that there is not a practical alternative to impact the Waters of the U.S. by including other alternatives that were considered but eliminated.

- a. Include a No-Action Alternative as to show "the future without the project"
- b. Location Alternatives must be shown
- c. Must demonstrate why a 100' buffer cannot be maintained

The Hart Well Pad is an existing well pad that has been purchased by Chevron and has been previously constructed by another well operator. In order to add more wells to the existing pad, Chevron is expanding the well pad surface. The Wetland Waiver Request is for a field identified wetland located approximately 46-ft north of the existing well pad. As the well pad is an existing feature, the No-Action Alternative and the proposed project involve an equal amount of disturbance to the wetland. The proposed expansion implements efforts to minimize impact to Waters of the U.S. on site to the greatest extent practicable – the well pad expansion will not be directed in a manner that further encroaches on Waters of the U.S. on site. Additionally, adding wells to the existing pad not only reduces surface area disturbances by reducing the number of well sites, but also results in fewer access driveways being constructed. The 100-ft buffer cannot be maintained due to the pre-existing conditions on site. Please refer to the attached Environmental Exhibit (EX-1).

2. Show that treatment facilities (Erosion and Sediment Control Features) will be located as close as practical to the source(s) with which it is associated.

The edge of the proposed limit of disturbance is shown as close to the E&S control features (access road cross culvert with rip rap apron & rock filter and super silt fence) and the edge of the well pad/cut slope as possible. Runoff from the access road is collected and routed away from the wetland. Please refer to the Erosion and Sediment Control Plan.

3. Demonstrate that all proposed activity will not impact Waters of the U.S. more than is necessary to accommodate the proper construction and operation of the facility.

- a. Specify and identify wetlands using unique identification and/or perennial streams located within 100' of the pad's limit of disturbance (including erosion and sediment controls).

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MAR 31 2014

Wetland Waiver Request

API Number 5101748Well Number 2HOperator Chevron Appalachia, LLCPad Name Hart Wells 2H-10H

b. Is the proposed project the least environmentally damaging practicable alternative to the waters of the United States, so long as the alternative does not have other environmental consequences.

Multiple Unnamed Tributaries to North Fork Middle Grave Creek are located east and south of the existing well pad. No perennial streams are located within 100-ft of the well pad's limit of disturbance. Five (5) field located wetlands (Wetlands 1-6), all Palustrine Emergent (PEM), are located on site. Wetland #6 is located 46-ft north of the well pad. The limit of disturbance has been adjusted to the greatest extent practicable in order to achieve the 100-ft buffer requirement for five out of six (5/6) field located wetlands on site. As the well pad has already been constructed within 100-ft to Wetland #4 by another operator, Chevron is minimizing any further disturbance to the wetlands on site by expanding the well pad in other directions. The proposed well pad expansion will not further encroach on wetland #6. Please refer to the attached Environmental Exhibit (EX-1).

| Field Located Wetlands On Site | | | | |
|---------------------------------------|-------------------------|---------------------------|---------------------------------|---------------------------------|
| Wetland ID | USACE Water Type | NWI Classification | Approximate Size (Acres) | Distance from LOD (feet) |
| Wetland 1 | RPWWD | PEM | 0.035 | 101 |
| Wetland 2 | RPWWD | PEM | 0.018 | 156 |
| Wetland 3 | ISOLATE | PEM | 0.010 | 100 |
| Wetland 4 | ISOLATE | PEM | 0.014 | 100 |
| Wetland 5 | ISOLATE | PEM | 0.005 | 149 |
| Wetland 6 | ISOLATE | PEM | 0.008 | 46 |

4. Provide mapping, plans, specifications and design analysis for the preferred alternative to the project.

a. Specify in writing what additional controls, measures, devices, monitoring, etc will be utilized to protect these wetlands and/or perennial streams.

The following controls will be utilized to protect the wetland:

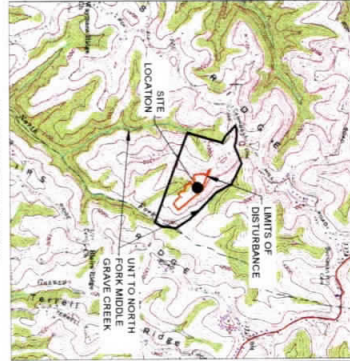
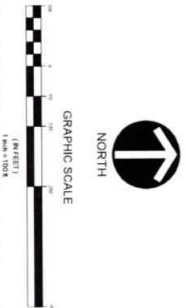
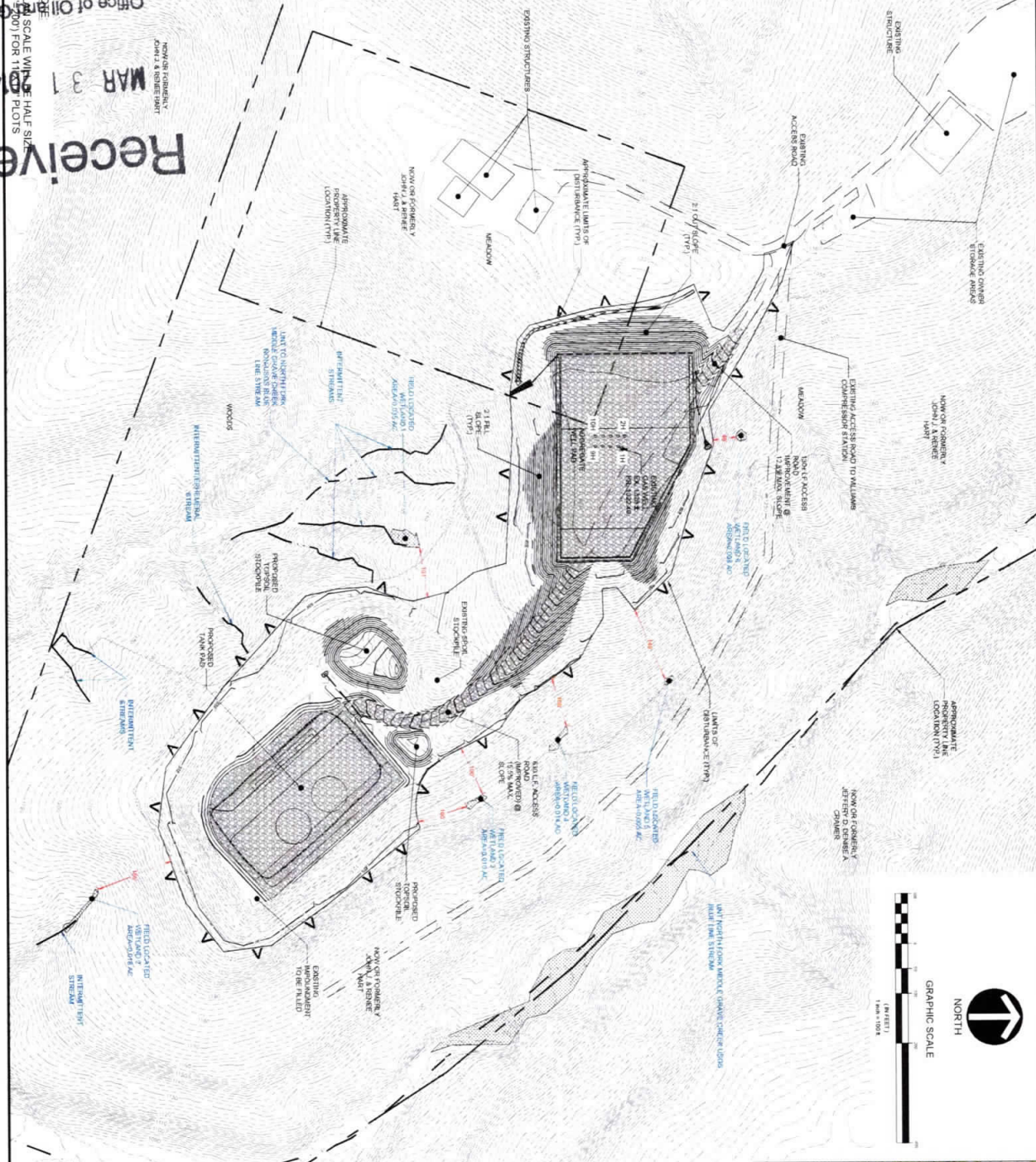
- 1) *The upstream grading operations are entirely in cut, no sediment laced runoff will discharge directly to the wetland.*
- 2) *Super silt fence will act as a sediment barrier.*
- 3) *An endwall with rip rap and rock filter outlet will divert access road flow away from the wetland.*

Received

MAR 31 2014

Plan & Foundation Design 17000 17044 Area Energy 2006 Part Vial 08/24/2002 Sheet 17044-206 CA-1 Envtl Engrg. Inc.
 The design on this drawing is the property of Envtl Engrg. Inc. No part of this drawing may be reproduced or transmitted in any form or by any means electronic or mechanical, including photocopying, recording, or by any information storage or retrieval system without the prior written permission of Envtl Engrg. Inc.

Received
 MAR 31 2004
 OFFICE OF
 ENVIRONMENTAL
 PROTECTION
 DEPT. OF ENVIRONMENTAL
 PROTECTION
 SCALE WITH HALF SIZE
 PLOTS FOR 11x17



SITE LOCATION MAP
 MOUNDSVILLE W. VA. QUAD
 1" = 2000

NOTES

1. THE INFORMATION ON THESE FOUNDATIONS WAS NOT FIELD VERIFIED BY THE DESIGNER. HOWEVER, THE INFORMATION WAS OBTAINED FROM DESIGN DRAWINGS THAT THE ENGINEER AND OTHER ENGINEERS HAVE REVIEWED. THE DESIGNER DOES NOT WARRANT THAT THE INFORMATION ON THESE FOUNDATIONS IS ACCURATE OR THAT THE FOUNDATIONS WILL BE FOUND TO BE ACCURATE BY THE FIELD VERIFICATION. THE DESIGNER WILL NOT BE RESPONSIBLE FOR ANY DAMAGE TO THE FOUNDATIONS OR TO THE SOILS FROM THE INFORMATION ON THESE FOUNDATIONS.
2. THE REPRESENTATION OF THE PLAN, THE CUTS AND THE ELEVATIONS SET FORTH IN THIS PLAN ARE BASED ON THE INFORMATION ON THESE FOUNDATIONS AND THE INFORMATION ON THESE FOUNDATIONS. THE DESIGNER WILL NOT BE RESPONSIBLE FOR ANY DAMAGE TO THE FOUNDATIONS OR TO THE SOILS FROM THE INFORMATION ON THESE FOUNDATIONS.
3. UNLESS ALL CHANNELS TO PROTECT FUTURE FLOW TO THE RIGHT.
4. UNLESS OTHERWISE INDICATED, ALL FOUNDATIONS SHALL BE CONSTRUCTED AS SHOWN IN THIS PLAN AND SHALL BE CONSTRUCTED AS SHOWN IN THIS PLAN AND SHALL BE CONSTRUCTED AS SHOWN IN THIS PLAN.
5. ELEVATIONS ARE IN FEET AND DECIMALS THEREOF. ELEVATIONS ARE NOT TO BE USED FOR REPRESENTATION PURPOSES ONLY AND NOT TO BE USED FOR ANY OTHER PURPOSE.
6. NO RECORDS FROM THE FIELD SHALL BE USED TO CORRECT OR AMEND THIS PLAN UNLESS THE RECORDS SHOW THAT THE RECORDS ARE IN ACCORDANCE WITH THE PLAN.

LIMITS OF DISTURBANCE = 13.6 ACRES

EROSION & SEDIMENT CONTROL LEGEND

- LIMITS OF DISTURBANCE/PROJECT LIMIT
- SUPPLY FILTER FENCE
- ROCK CONSTRUCTION ENTRANCE
- ROCK CONTROL BLANKET
- ROCK FILTER
- INTERCEPT/DIVERSION CHANNEL
- COLLECTOR/DRAIN

Know what's below. Call before you dig.
 811
 SERVICE NO. 1-888-287-2871

REVISION RECORD

| Date | No. | Description |
|------|-----|-------------|
| - | 01 | - |
| - | 02 | - |
| - | 03 | - |
| - | 04 | - |
| - | 05 | - |
| - | 06 | - |
| - | 07 | - |
| - | 08 | - |
| - | 09 | - |
| - | 10 | - |
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| - | 12 | - |
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| - | 22 | - |
| - | 23 | - |
| - | 24 | - |
| - | 25 | - |
| - | 26 | - |
| - | 27 | - |
| - | 28 | - |
| - | 29 | - |
| - | 30 | - |

HART WELL AND TANK PAD SITE
 WAYMANS RIDGE ROAD
 WASHINGTON DISTRICT, MARSHALL COUNTY, WV
 PREPARED FOR
CHEVRON APPALACHIA, LLC
 800 MOUNTAIN VIEW DRIVE
 SMITHFIELD, PA 15478

ENVIRONMENTAL EXHIBIT

Project Number: C-17344555
 Drawing Scale: 1"=50' SITE
 Issue Number: 1
 Checked By: JEC
 Project Manager: JEC

EX-1

GATEWAY
 Consulting Engineers & Surveyors
 400 Holiday Drive, Suite 300 Pittsburgh, PA 15220
 Phone (412) 921-4000 - Fax (412) 921-9950
 e-mail: info@gateway.com
 800-441-2299

STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS
WELL LOCATION RESTRICTION WAIVER

The well operator, Chevron Appalachia, LLC is applying for a permit from the State of West Virginia to conduct oil or gas well work. Please be advised that well work permits are valid for twenty-four (24) months.

Well Location Restrictions

Pursuant to West Virginia Code § 22-6A-12(a), 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.

WAIVER

I, John J. & Renee A. Hart, 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>529491.91</u> |
| County: | <u>Marshall</u> | UTM NAD 83 Northing: | <u>4418225.70</u> |
| District: | <u>Washington</u> | Public Road Access: | <u>Campbells Run Rd. - 38</u> |
| Quadrangle: | <u>Moundsville WV 7.5'</u> | Generally used farm name: | <u>Hart Unit</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 and I therefore waive all well site restrictions listed under West Virginia Code § 22-6A-12(a).

WELL SITE RESTRICTIONS BEING WAIVED

*Please check all that apply

- EXISTING WATER WELLS
- DEVELOPED SPRINGS
- DWELLINGS
- AGRICULTURAL BUILDINGS

Jan Pest
MARSHALL County 12:53:06 PM
Instrument No 1357978
Date Recorded 03/26/2014
Document Type MIS
Pages Recorded 1
Book-Page 21-57
Recording Fee \$5.00
Additional \$6.00

FOR EXECUTION BY A NATURAL PERSON

Signature: John J. & Renee A. Hart
Print Name: John J. & Renee A. Hart
Date: 3-5-14

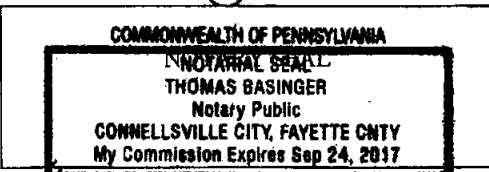
FOR EXECUTION BY A CORPORATION, ETC.

Company: _____
By: _____
Its: _____
Signature: _____
Date: _____

Well Operator: Chevron Appalachia, LLC

By: Jeremy Hirtz
Its: Permitting Team Lead

Signature: Jeremy Hirtz
Telephone: 724-564-3700



Subscribed and sworn before me this 17 day of February 2014
Thomas Basinger Notary Public
My Commission Expires 9/24/2017

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 of your personal information, please contact DEP's Chief Privacy Officer at depprivacyofficer@wv.gov.

CHEVRON
600 MOUNTAINVIEW DRIVE
SMITHVILLE, PA 15478-

**CHEVRON
APPALACHIA, LLC**

Full copy of Site Safety Plan stored
on OOG network drive:

Q://OIL GAS/Permit Scanned Copies



West Virginia Well Site Safety Plan

**Hart Well Site
Hart #2H
Marshall County, West Virginia**

*JW 3/24/14
YgK 3/11/14*

Prepared in Conformance with:

*West Virginia's Code §22-6A and Legislative Rule §35-8-5.7
and*

*West Virginia Department of Environmental Protection's, Office of Oil and Gas documents:
"Well Site Safety Plan Standards" (issued August 25, 2011), and
"Deep Well Drilling Procedures and Site Safety Plan Requirements" (issued October 22, 2012)*

RECEIVED
Office of Oil and Gas

MAR 27 2014

WV Department of
Environmental Protection

Revision 1

Original: September 2012

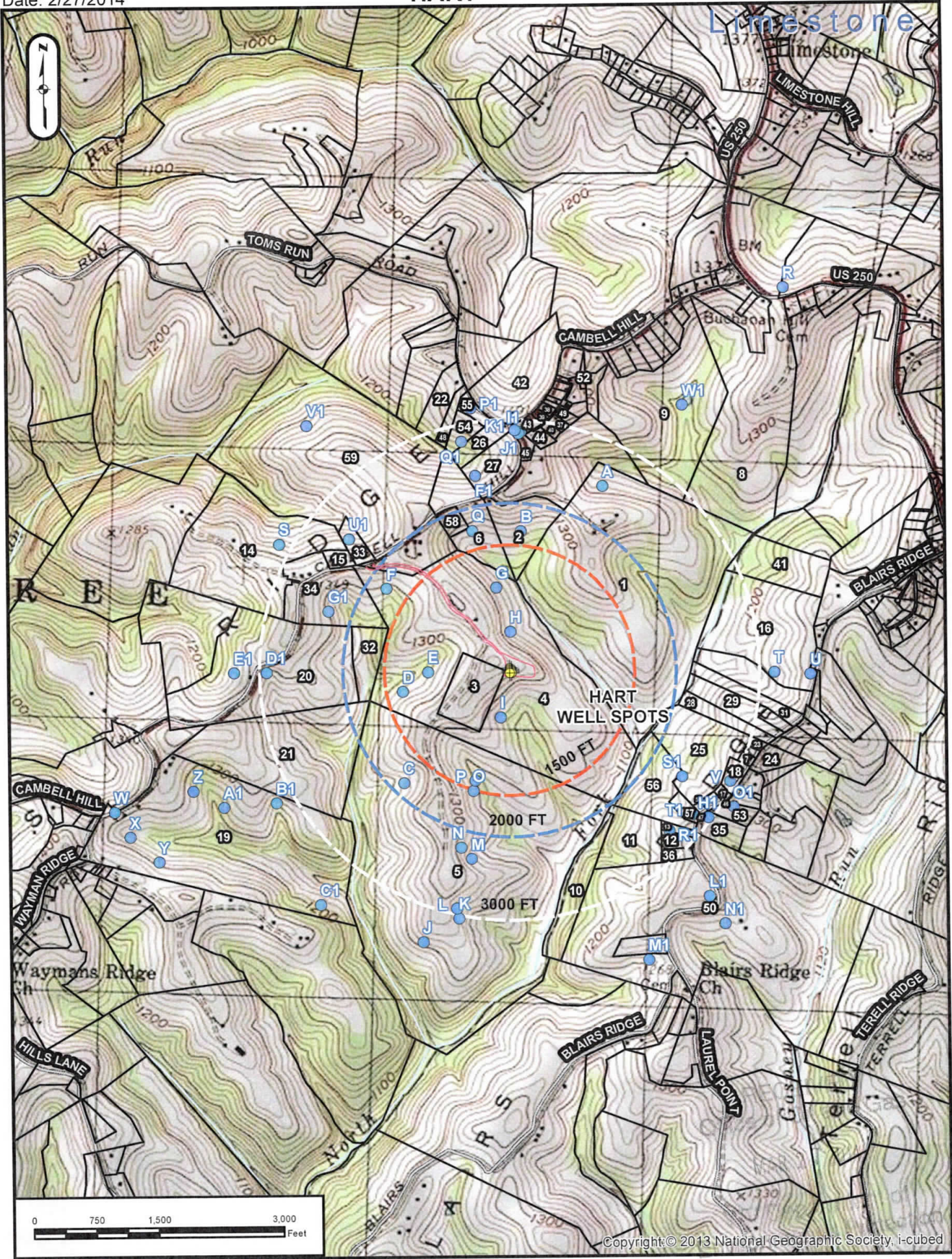
Revised: June 2013

WATER SUPPLY EXHIBIT
HART

SI-01748

Blue Mountain Inc.

Date: 2/27/2014



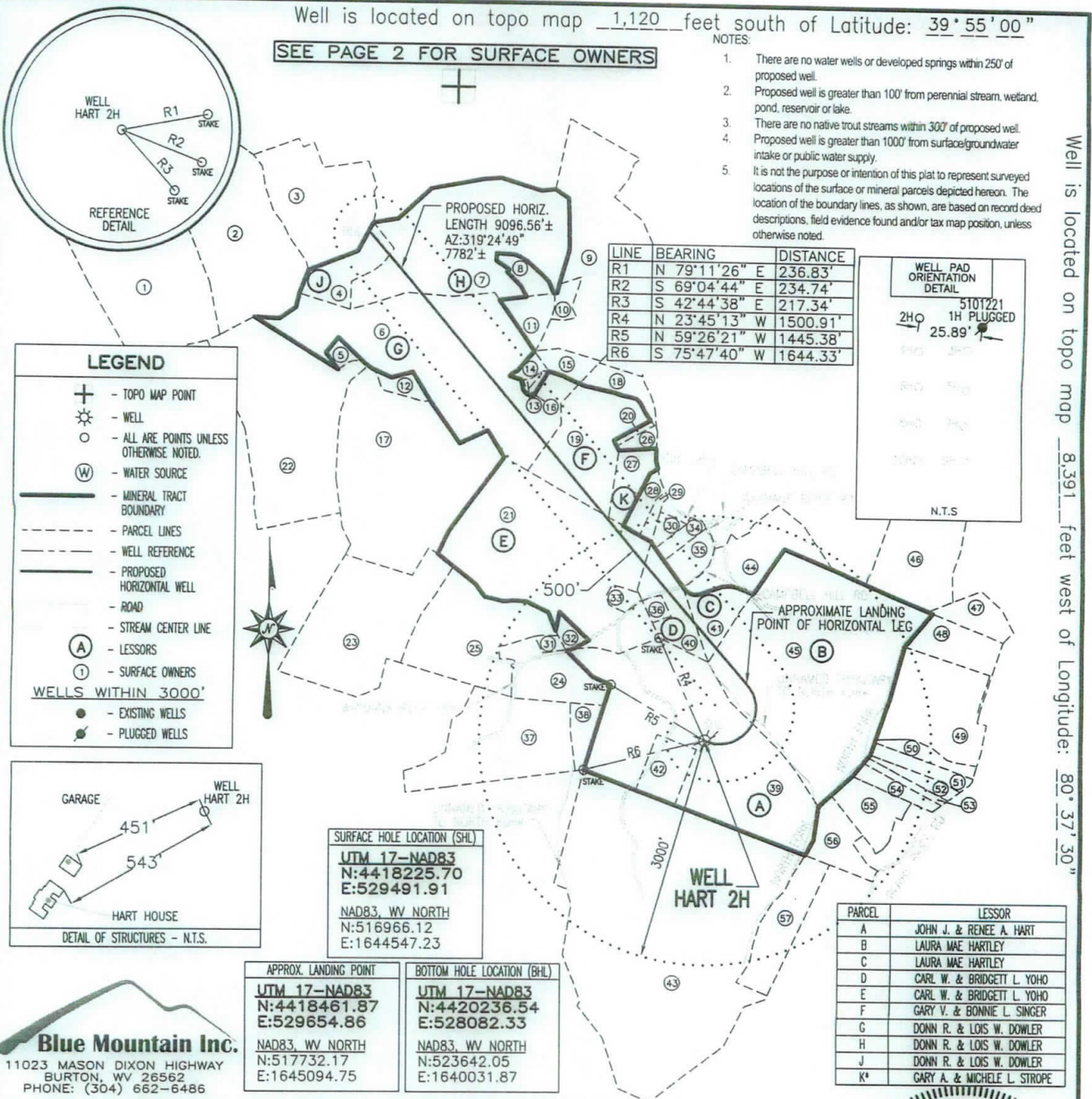
Well is located on topo map 1,120 feet south of Latitude: 39° 55' 00"

SEE PAGE 2 FOR SURFACE OWNERS

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.

Well is located on topo map 8,391 feet west of Longitude: 80° 37' 30"



FILE #: HART 2H
DRAWING #: HART 2H
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: [Signature]
R.P.E.: _____ L.L.S.: P.S. No. 2000

GEORGE D. SIX
LICENSED
No. 2000
STATE OF WEST VIRGINIA
PROFESSIONAL SURVEYOR
PLACE SEAL HERE

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



DATE: MARCH 13, 2014
OPERATOR'S WELL #: HART 2H
API WELL #: 47 51 017484
STATE COUNTY PERMIT

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

WATERSHED: MIDDLE GRAVE CREEK - GRAVE CREEK ELEVATION: 1329.31'
COUNTY/DISTRICT: MARSHALL / WASHINGTON QUADRANGLE: MOUNDSVILLE, WV 7.5'
SURFACE OWNER: JOHN J. & RENEE HART ACREAGE: 108.550±
OIL & GAS ROYALTY OWNER: JOHN J. & RENEE HART ACREAGE: 595.897±

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: 6,565± TMD: 15,168±
WELL OPERATOR CHEVRON APPALACHIA, LLC DESIGNATED AGENT KENNETH E. TAWNEY
Address 800 MOUNTAIN VIEW DRIVE Address 500 LEE STREET, EAST SUITE 1600
City SMITHFIELD State PA Zip Code 15478 City CHARLESTON State WV Zip Code 25301-3202

HART

2H

| | SURFACE OWNER | DIST-TM/PAR |
|----|----------------------------------|-------------|
| 1 | WILLIAM H. III & LINDA BARDALL | 14-7/42 |
| 2 | WILLIAM H. III & LINDA BARDALL | 14-7/41 |
| 3 | MARSHALL COUNTY 4-H LEADERS | 14-7/40 |
| 4 | JOHN R. REGAN & CONNIE L. THOMAS | 14-6/1 |
| 5 | JEFFREY L. & JANET L. ALLEN | 14-6/40 |
| 6 | JEFFREY L. & JANET L. ALLEN | 14-6/38 |
| 7 | JOHN R. REGAN & CONNIE THOMAS | 14-6/2 |
| 8 | DANIEL R. WOOD - SHAWN ALLMAN | 14-6/2.1 |
| 9 | JOHN R. REGAN & CONNIE L. THOMAS | 14-6/3 |
| 10 | ROBERT R. & KATHY D. BROWN | 14-6/3.4 |
| 11 | JOHN R. REGAN & CONNIE L. THOMAS | 14-6/3.3 |
| 12 | JEFFREY L. & JANET L. ALLEN | 14-6/39 |
| 13 | BERRIDGE L. ALLEN ET UX | 14-6/38.1 |
| 14 | BERRIDGE L. ALLEN ET UX | 14-6/38.3 |
| 15 | MARC A. MOLOSKI ET UX | 14-6/3.1 |
| 16 | BERRIDGE L. ALLEN ET UX | 14-6/38.2 |
| 17 | JEFFREY L. & JANET L. ALLEN | 14-6/37 |
| 18 | MARC MOLOSKI | 14-6/34.4 |
| 19 | GARY V. SINGER ET UX | 14-6/34.7 |
| 20 | GARY V. SINGER ET UX | 14-6/34.9 |
| 21 | CARL W. & BRIDGETT L. YOHO | 14-6/35 |
| 22 | JOHN W. & MARY A. MILLER | 14-6/41 |
| 23 | DENNIS BLAKE ET UX | 14-10/10 |
| 24 | JOHN J. II & JENNA E. HART | 14-10/11 |
| 25 | DENNIS & MICHELLE S. BLAKE | 14-10/11.3 |
| 26 | BONNIE L. & GARY V. SINGER | 14-6/34.8 |
| 27 | GARY A. STROPE | 14-6/34.10 |
| 28 | JAMES D. & DONNA J. DRAKE | 14-6/34 |
| 29 | JENNIFER B. READ | 14-6/34.5 |
| 30 | JERRY S. WHORTON ET UX | 14-6/29.1 |
| 31 | JAMES E. BLAKE | 14-10/11.1 |
| 32 | JOHN J. HART ET UX | 14-6/36 |
| 33 | CARL W. YOHO ET AL | 14-6/35.1 |
| 34 | RODNEY J. & CARRIE L. FONNER | 14-6/29 |
| 35 | MARTIN D. FONNER JR. ET UX | 14-6/29.2 |
| 36 | CARL W. & BRIDGETT L. YOHO | 14-6/28.1 |
| 37 | JAMES E. CURRY | 14-10/13 |
| 38 | JOHN J. HART ET UX | 14-10/14 |
| 39 | JOHN J. & RENEE HART | 14-10/19.1 |
| 40 | CARL W. & BRIDGETT L. YOHO | 14-6/28 |
| 41 | JEFFREY D. & DENISE A. CRAMER | 14-6/27 |
| 42 | JOHN J. & RENEE HART | 14-10/19 |
| 43 | JOHN J. HART ET UX | 14-10/18 |
| 44 | ANNE E. MORRIS | 14-6/26 |
| 45 | JEFFREY D. & DENISE A. CRAMER | 14-10/20 |
| 46 | JOHN A. BIERCE ET UX | 14-6/18.4 |
| 47 | LEROY E. MEADOWS ET UX | 15-8/4 |
| 48 | LEROY E. MEADOWS ET UX | 15-8/5.10 |
| 49 | STEVE M. BONAR II | 15-8/5.1 |
| 50 | REX W. & JANET L. GARRISON | 15-8/5 |
| 51 | REX W. & JANET L. GARRISON | 15-8/5.8 |
| 52 | REX W. GARRISON | 15-8/5.6 |
| 53 | REX W. & JANET L. GARRISON | 15-8/5.9 |
| 54 | EDWARD D. & MALLORY J. FORDYCE | 15-8/5.5 |
| 55 | JOHN E. DRAKE ET UX | 15-15/8.16 |
| 56 | HEIKKI & TRISHA YEAGER | 15-15/8.6 |
| 57 | JOHN A. BIERCE II ET UX | 15-15/3 |

MARCH 13, 2014

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

Date of Notice Certification: 2/19/14

API No. 47- 51 - 01748
Operator's Well No. 2H _____
Well Pad Name: Hart Unit

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>529498.19</u> |
| County: | <u>Marshall</u> | | Northing: | <u>4418216.51</u> |
| District: | <u>Washington</u> | Public Road Access: | <u>Campbells Run Rd-38</u> | |
| Quadrangle: | <u>Moundsville, WV 7.5'</u> | Generally used farm name: | <u>Hart</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.

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:

*PLEASE CHECK ALL THAT APPLY

- 1. NOTICE OF SEISMIC ACTIVITY or NOTICE NOT REQUIRED BECAUSE NO SEISMIC ACTIVITY WAS CONDUCTED
- 2. NOTICE OF ENTRY FOR PLAT SURVEY or NO PLAT SURVEY WAS CONDUCTED
- 3. NOTICE OF INTENT TO DRILL or NOTICE NOT REQUIRED BECAUSE NOTICE OF ENTRY FOR PLAT SURVEY WAS CONDUCTED or
 WRITTEN WAIVER BY SURFACE OWNER (PLEASE ATTACH)
- 4. NOTICE OF PLANNED OPERATION
- 5. PUBLIC NOTICE
- 6. NOTICE OF APPLICATION

OOG OFFICE USE ONLY

- RECEIVED/ NOT REQUIRED
- RECEIVED
- RECEIVED/ NOT REQUIRED
- RECEIVED
- RECEIVED
- RECEIVED

Required Attachments:

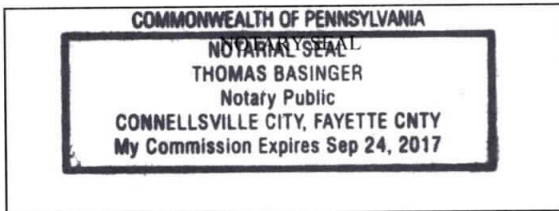
The Operator shall attach to this Notice Certification Form all Notice Forms and Certifications of Notice that have been provided to the required parties and/or any associated written waivers. For the Public Notice, the operator shall attach a copy of the Class II Legal Advertisement with publication 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.

Certification of Notice is hereby given:

THEREFORE, I *Branden Weimer*, 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.

Well Operator: Chevron Appalachia, LLC
By: Branden Weimer
Its: Construction Permitting Team Lead
Telephone: 724-564-3700

Address: 800 Mountain View Drive
Smithfield, PA 15478
Facsimile: 724-564-3894
Email: _____



Subscribed and sworn before me this 25 day of March 2014.
Thomas Basinger Notary Public
My Commission Expires 9/24/17

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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Office of Oil and Gas
MAR 27 2014
WV Department of
Environmental Protection

COMMUNALITÀ PENITENZIARIA

NOTA

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101 AS

WW-6A
(9-13)

API NO. 47-51 - 01748
OPERATOR WELL NO. 2
Well Pad Name: Hart Unit

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: 11/1/2013 **Date Permit Application Filed:** _____

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: John J. & Renee A. Hart ✓
Address: 433 J&R Drive
Moundsville, WV 26041
Name: _____
Address: _____

COAL OWNER OR LESSEE ✓
Name: Consolidation Coal Company
Address: 1000 Consol Energy Dr.
Canonsburg, PA 15317

COAL OPERATOR
Name: _____
Address: _____

SURFACE OWNER(s) (Road and/or Other Disturbance)
Name: John J. & Renee A. Hart
Address: 433 J & R Drive
Moundsville, WV 26041
Name: _____
Address: _____

SURFACE OWNER OF WATER WELL AND/OR WATER PURVEYOR(s)
Name: John J. & Renee A. Hart ✓
Address: 433 J & R Drive
Moundsville, WV 26041

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

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

*Please attach additional forms if necessary

RECEIVED
Office of Oil and Gas

MAR 27 2014

WV Department of
Environmental Protection

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 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.

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

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

OFFICE OF OIL AND GAS
MAR 3 7 2014

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.

WW-6A
(8-13)

API NO. 47- 51 - _____
OPERATOR WELL NO. 2 _____
Well Pad Name: Hart Unit _____

Notice is hereby given by:

Well Operator: Chevron Appalachia, LLC
Telephone: 724-564-3700
Email: katmc@chevron.com

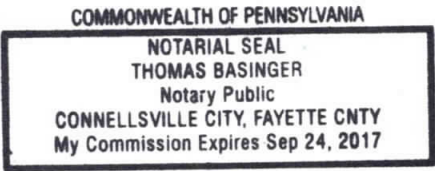
Address: 800 Mountain View Drive
Smithfield, PA 15478
Facsimile: 724-564-3894

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 deprivacyofficer@wv.gov.

Branden Weimer *[Signature]*
Construct Permitting Team Lead
800 Mountain View Drive
Smithfield, PA 15478
724-564-3745

Subscribed and sworn before me this 28 day of October, 2013.
Thomas Basinger Notary Public
My Commission Expires 9/24/2017



RECEIVED
Office of Oil and Gas
MAR 27 2014
WV Department of
Environmental Protection

SECRET



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.

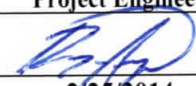
Pursuant to West Virginia Code § 22-6A-8(b) No permit may be issued less than thirty days after the filing date of the application for any well work except plugging or replugging; and no permit for plugging or replugging may be issued less than five days after the filing date of the application except 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, Ryan Arp, 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> | WVSPN NAD 27 | Easting: | <u>1,675,983.031</u> |
| County: | <u>Marshall</u> | | Northing: | <u>516,929.315</u> |
| District: | <u>Washington</u> | Public Road Access: | <u>Waymans Ridge Rd / Campbell Hill Rd (Rt 38)</u> | |
| Quadrangle: | <u>MOUNDSVILLE</u> | Generally used farm name: | <u>HART, JOHN J. & RENEE</u> | |
| Watershed: | <u>Middle 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, **provided that Chevron U.S.A. Inc. drills the well on WV North NAD27 coordinates of North 516,929.315, East 1,675,983.031.**

| | |
|---|---|
| <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 checked="" type="checkbox"/> COAL OWNER OR LESSEE</p> <p><input checked="" 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: _____</p> <p>Print Name: _____</p> <p>Date: _____</p> <p>FOR EXECUTION BY A CORPORATION, ETC.</p> <p>Company: <u>CNX RCPC LLC</u></p> <p>By: <u>Ryan Arp</u></p> <p>Its: <u>Project Engineer</u></p> <p>Signature: </p> <p>Date: <u>2/25/2014</u></p> |
| | <p>RECEIVED</p> <p>Office of Oil and Gas</p> <p>Environmental Protection</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

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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.

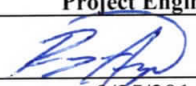
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| | | | | |
|-------------|---------------------------|---------------------------|--|----------------------|
| State: | <u>West Virginia</u> | WVSPN NAD 27 | Easting: | <u>1,676,002.491</u> |
| County: | <u>Marshall</u> | | Northing: | <u>516,870.234</u> |
| District: | <u>Washington</u> | Public Road Access: | <u>Waymans Ridge Rd / Campbell Hill Rd (Rt 38)</u> | |
| Quadrangle: | <u>MOUNDSVILLE</u> | Generally used farm name: | <u>HART, JOHN J. & RENEE</u> | |
| Watershed: | <u>Middle 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, **provided that Chevron U.S.A. Inc. drills the well on WV North NAD27 coordinates of North 516,870.234, East 1,676,002.491.**

| | |
|---|---|
| <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 checked="" type="checkbox"/> COAL OWNER OR LESSEE</p> <p><input checked="" 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: _____</p> <p>Print Name: _____</p> <p>Date: _____</p> |
| | <p>FOR EXECUTION BY A CORPORATION, ETC.</p> <p>Company: <u>CNX RCPC LLC</u></p> <p>By: <u>Ryan Arp</u></p> <p>Its: <u>Project Engineer</u></p> <p>Signature: </p> <p>Date: <u>2/25/2014</u></p> |

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Hart Pad B

FKA: Hart 1H - 11H
Well Pad ID: PAD-47-051-0010

Asset Team: Greater Marshall
County: Marshall
Municipality: Washington



Status: FINAL

DIRECTIONS

1. From the intersection of **US 250 Waynesburg Pike** and **CR 38 Campbell Hill Road**
2. Head West on **CR 38 Campbell Hill Road** for 1.27 miles

Site Entrance located on Left

911 INFORMATION

338 J&R Drive
Moundsville, WV 26041

Latitude: 39.916969
Longitude: -80.661317

AUTHORIZATIONS

CR 38 Campbell Hill Road: Permit 26-2013-0047

ROAD BONDING CONTACT INFORMATION

| | | | |
|------------|---------------|--------------|--|
| PA | Mandy Fordyce | 724-564-3835 | mfordyce@chevron.com |
| PA | Susan Laird | 724-564-3836 | slaird@chevron.com |
| WV, OH | James Kaufman | 724-564-3791 | jkaufman@chevron.com |
| WV, OH | Ryan Progin | 724-564-3860 | rprogin@chevron.com |
| PA, WV, OH | Angie Kerr | 724-812-6872 | akerr@chevron.com |

RECEIVED
Office of Oil and Gas

MAR 27 2014

WV Department of
Environmental Protection

WW-6A5
(1/12)

**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: 2/19/14 **Date Permit Application Filed:** 4/27/14

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: John J. & Renee A. Hart
Address: 433 J & R Drive
Moundsville, WV 26041

Name: _____
Address: _____

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>529491.91</u> |
| County: | <u>Marshall</u> | | Northing: | <u>4418225.70</u> |
| District: | <u>Washington</u> | Public Road Access: | <u>Campbells Run Rd- 38</u> | |
| Quadrangle: | <u>Moundsville, WV 7.5'</u> | Generally used farm name: | <u>Hart</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: 724-564-3700
Email: katmc@chevron.com

Address: 800 Mountain View Drive
Smithfield, PA 15478
Facsimile: 724-564-3894

Oil and Gas Privacy Notice:

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MAR 27 2014

WV Department of
Environmental Protection



WEST VIRGINIA DEPARTMENT OF TRANSPORTATION

Division of Highways

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

Earl Ray Tomblin
Governor

Paul A. Mattox, Jr., P. E.
Secretary of Transportation/
Commissioner of Highways

May 22, 2014

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 Hart Well Pad, Marshall County

| | | | |
|--------------|--------------|--------------|--------------|
| Hart Unit 2H | Hart Unit 3H | Hart Unit 4H | Hart Unit 5H |
| Hart Unit 6H | Hart Unit 7H | Hart Unit 8H | Hart Unit 9H |

Dear Mr. Martin,

The West Virginia Division of Highways has transferred Permit #06-2013-0047 for the subject site to Chevron Appalachia, LLC. for access to the State Road for the well site located off of Marshall County Route 38 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.

RECEIVED
Office of Oil and Gas

JUN 02 2014

WV Department of
Environmental Protection

Very Truly Yours,

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

Cc: Kathleen B. McIntyre
Chevron Appalachia, LLC
CH, OM, D-6
File



WEST VIRGINIA DEPARTMENT OF TRANSPORTATION

Division of Highways

Earl Ray Tomblin
Governor

Office of the District Engineer/Manager
District Six
1 DOT Drive * Moundsville, WV 26041 * 304-843-4000
August 22, 2013

Paul A. Matfox, Jr., P. E.
Secretary of Transportation /
Commissioner of Highways

CHEVRON APPALACHIA LLC
800 MOUNTAIN VIEW DRIVE
SMITHFIELD, PA 15478

Dear Applicant:

Your approved copy of Permit Number 06-2013-0047 for a DP - Drilling Permit permit type is enclosed. A description of the work is on the permit.

Please contact the District Six office:

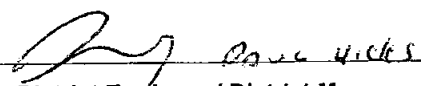
Please notify the County Superintendent, Chuck Sheedy, at (304) 843-4056

at least 48 hours in advance of the date you plan to begin work so arrangements can be made to inspect the work authorized by the permit.

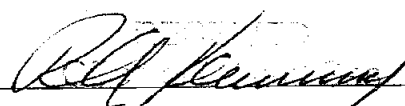
Failure to comply will result in cancellation of your permit.

A copy of this permit is to be available on the job at all times while the work is in progress for inspection by the West Virginia Division of Highways' personnel.

Sincerely,



District Engineer / District Manager



Permit Supervisor
AUG 27 2013

Initials: RAK
Attachments: Yes
Enclosure: No

PERMIT TO ENTER UPON, UNDER, OVER OR ACROSS THE STATE ROADS OF THE STATE OF WEST VIRGINIA, AS PROVIDED FOR IN §§17-16-6, 17-16-9 and 17-4-8, WEST VIRGINIA CODE, 1931, AS AMENDED.

THIS PERMIT, Made this 22nd day of August 2013, between the WEST VIRGINIA DEPARTMENT OF TRANSPORTATION, DIVISION OF HIGHWAYS, a statutory corporation hereinafter called DIVISION and
Name: CHEVRON APPALACHIA LLC
Address: 800 MOUNTAIN VIEW DRIVE
Address: SMITHFIELD, PA 15478 Phone No: (724) 564-3749
EMail: AKERR@CHEVRON.COM hereinafter called APPLICANT.

WITNESSETH

In consideration of the hereinafter set out covenants and in accordance with §§17-16-6, 17-16-9 or 17-4-8, of the Official Code of West Virginia, 1931, as amended, and the rules and regulations promulgated thereunder, APPLICANT does hereby apply to enter:

Route Type & No.: SLS 38 DOH Project No.: _____ (if applicable);
at 0.39 miles west of the intersection with CR 34/1 Mile Post: 4.04
in 26 - Marshall County, for the purposes hereinafter set forth and in accordance with the plans and specifications which are attached hereto and made a part hereof:

To construct and maintain a 50' wide maximum (temporary) approach which will originate on the right-of-way of CR 38 as shown on the attached sketch and plans. All work must comply with the WVDOT DOH Specifications. Line # 4 TRAFFIC CONTROL CASE A-6 ATTACHED

APPLICANT further agrees to accept the conditions hereinafter set forth:

1. APPLICANT shall deposit with DIVISION the sum of \$ 1000000.00 in the form of an official, certified or cashier's check, or executed bond with surety satisfactory to DIVISION to cover any damage and inspection costs DIVISION may sustain by reason of the granting of this permit, including any expense incurred in restoring said highway to its original condition or the proper repair of any and all damages that may result within one (1) year from the date of the completion of said work.
2. APPLICANT agrees to reimburse DIVISION for inspection costs as follows:
 - A. For any inspection costs incurred under this permit.
 - B. At \$ _____ per linear foot for _____ feet of water line installed under this permit.
 - C. At \$ _____ per linear foot for _____ feet of sewer line installed under this permit.
3. APPLICANT shall notify DIVISION at least 48 hours in advance of the date the work will begin. Failure to comply will be cause for cancellation of this permit.
4. APPLICANT agrees to protect its employees, equipment and users of the highway at all times in accordance with the current Division of Highways manual "Traffic Control For Street and Highway Construction and Maintenance Operations".
5. APPLICANT agrees to comply with all applicable state and federal laws in the performance of work under this permit.
6. Supplementary conditions cited on the reverse side of this permit are understood and agreed to be part hereof.
7. The work authorized under this permit shall be completed on or before (Date); August 22, 2014

Applicant's signature on this permit affirms that all text herein is a verbatim reproduction of The West Virginia Division of Highways Encroachment Permit Form MM-109, revision date May 19, 2005. All attachments are inclusive to this permit.

RECOMMENDED:

APPLICANT:

Permit / Utility Supervisor

BOND REQUIREMENT:
BOND NO: 070010540 DATE: 12/12/2011

INSPECTION: Periodic - NoCost

AUTHORIZATION NO. _____

Signature and Title of Applicant
ORIGINAL SIGNED BY
APPROVED: **ACTING DISTRICT ENGINEER**
District Engineer / District Manager
West Virginia Division of Highways

PERMIT NO. 06-2013-0047

MAR 27 2014
APPROVED: _____

CHAPTER 17 WEST VIRGINIA CODE, 1931

§ 17-4-8. Use of roadbed by railroad, telephone company, etc.

No railroad or electric or other railway shall be constructed upon the roadbed of any state road, except to cross the same, nor shall any person, firm or corporation enter upon or construct any works in or upon such road, or lay or maintain thereon or thereunder any drainage, sewer or water pipes, gas pipes, electric conduits or other pipes, nor shall any telephone, telegraph or electric line or power pole, or any other structure whatsoever, be erected upon, in or over any portion of a state road, except under such restrictions, conditions and regulations as may be prescribed by the state road commissioner. Whenever any railroad or electric or other railway, heretofore or hereafter constructed, shall cross any state road, it shall be required to keep its own roadbed, and the bed of the road or highway at such crossing, in proper repair, or else to construct and maintain an overhead or undergrade crossing, subject to the approval of the state road commissioner; and the tracks of such railroad or railway at grade crossings shall be so constructed as to give a safe and easy approach to and across the same, and when the construction of such approaches is made necessary by a change in the railroad grade at the grade crossing, the cost shall be upon the railway company.

§ 17-16-6. Permit by commission or county court for openings in or structures on public roads; franchises and easements of oil, etc., transportation companies.

No opening shall be made in any state or county-district road or highway, nor shall any structure be placed therein or thereover, nor shall any structure, which has been so placed, be changed or removed, except in accordance with a permit from the state road commission or county court, as the case may be. No road or highway shall be dug up for laying or placing pipes, sewers, poles or wires, or for other purposes, and no trees shall be planted or removed or obstructions placed thereon, without the written permit of the commission or county court, or its duly authorized agent, and then only in accordance with the regulations of the commission or court. The work shall be done under the supervision and to the satisfaction of the commission or court; and the entire expense of replacing the highway in as good condition as before shall be paid by the persons to whom the permit was given, or by whom the work was done: Provided, however, That nothing herein contained shall be so construed as to prevent any oil or gas company or person having a proper permit or franchise from transporting oil or gasoline along any of the public highways of this State, nor to give such company a franchise without paying to the landowners through whose lands such road passes the usual and customary compensation paid or to be paid to the landowners for such right of way. Any grant or franchise when made shall be construed to give to such company or person only the right to use the easement in such public road.

A violation of any provision of this section shall be a misdemeanor, and the person or corporation violating the same shall, upon conviction thereof, be fined not less than twenty-five nor more than one hundred dollars for each offense.

§ 17-16-9. Private driveways or approaches to roads; obstruction of ditches.

The owner or tenant of land fronting on any state road shall construct and keep in repair all approaches or driveways to and from the same, under the direction of the state road commission, and, likewise, the owner or tenant of land fronting on any county-district road shall construct and keep in repair approaches or driveways to and from the same, under the direction of the county road engineer, and it shall be unlawful for such owner or tenant to fill up any ditch, or place any material of any kind or character in any ditch, so as in any manner to obstruct or interfere with the purposes for which it was made.

SUPPLEMENTARY CONDITIONS

1. The person, firm or corporation to whom a permit is issued agrees to hold the State of West Virginia and DIVISION harmless on account of any damages to persons or property which may arise during the process of the work authorized by this permit or by reason thereof.
2. Applications for permission to perform work within highway rights of way shall be made on DIVISION'S standard permit form and shall be signed by the authorized representative of the person, firm or corporation applying.
3. The APPLICANT shall give detailed information concerning the work to be performed and the application must include a sketch sufficient to show the nature of the work performed.
4. APPLICANT, his agents, successor, heirs or assigns, contractors or any other person, firm or corporation working under APPLICANT'S real or apparent authority, shall perform the work in a manner satisfactory to DIVISION. Damage to the road resulting at any time from work authorized under this permit shall be repaired by APPLICANT. Unsatisfactory repairs may be corrected by DIVISION or its authorized agent and the cost thereof paid by APPLICANT.
5. DIVISION assumes no liability for damage to the proposed work by reason of construction or maintenance work on the road.
6. This permit is granted subject to removal of the authorized installation by APPLICANT at no cost to DIVISION when required for improvement of the road, and subject to all regulations now or hereafter adopted by DIVISION.
7. Utility installation shall be in accordance with the current manual, "Accommodation of Utilities on Highway Right of Way".
8. Driveways shall be in accordance with the current manual, "Rules and Regulations for Constructing Driveways on State Highway Rights-of-Way."
9. DIVISION reserves the right to cancel this permit at any time, should APPLICANT fail to comply with the terms and conditions under which it is granted.
10. This permit is granted only insofar as the DIVISION has a right to do so.

RECEIVED
 DIVISION OF HIGHWAYS
 WEST VIRGINIA
 1931

Addendum to Permit

This addendum, made this 28th day of August 2013, between the West Virginia Department of Transportation, Division of Highways, a statutory company hereinafter called the Division and Chevron Appalachia LLC

Address: 800 Mountain View Drive, Smithfield, PA 15478 Phone: 724 564 3822

Hereinafter called APPLICANT.

The Applicant has filed with the DIVISION a written application for the following named routes and location:

Leaving US 250:
MCR 88/5, Campbell Hill Road, MP 5.31 to 4.04

Applicant shall properly repair and maintain any and all damages that may result to said bridges, highways, shoulders, and ditches from hauling activities of Applicant, its agents, contractors and employees, to as good a condition as when the permit was issued, as determined by the District Engineer of the DIVISION having jurisdiction over the work permitted, or pay damages therefore in the amount to sufficiently restore such bridges, roads, highways, shoulders, and ditches to original condition; and shall reimburse the DIVISION for all inspection costs incurred by it in connection with said work and repairs of such damages and faithfully comply with all terms and conditions of said permits and save harmless the DIVISION and the State of West Virginia from all losses resulting from the conduct of said work and repairs; then this Bond shall be released ; or otherwise will remain in full force and effect.

Bond Amount: \$1,000,000.00

Bond Number: 070010540 Date: 12/12/2011

RECEIVED
OFFICE OF THE DISTRICT ENGINEER
DIVISION OF HIGHWAYS
WEST VIRGINIA
PERMIT #6 2013 0047

Hydraulic Fracturing Fluid Product Component Information Disclosure

| | |
|----------------------------|------------|
| Fracture Date: | 11/1/2015 |
| State: | WV |
| County: | Marshall |
| API Number: | |
| Operator Name: | Chevron |
| Well Name and Number: | Hart 8H |
| Longitude: | |
| Latitude: | |
| Long/Lat Projection: | |
| Production Type: | |
| True Vertical Depth (TVD): | |
| Total Water Volume (gal)*: | 13,000,000 |

Hydraulic Fracturing Fluid Additives:

| Trade Name | Supplier | Purpose | Ingredients | Chemical Abstract Service Number (CAS #) | Comments |
|--------------------------|--------------|---------------------|--|--|----------|
| Corrosion Inhibitor A264 | Schlumberger | Corrosion Inhibitor | Methanol/Aliphatic Acids/Prop-2-yn-1-ol/Aliphatic Alcohols, ethoxylated #1 | Mixture | |
| 28% HCl Acid | Schlumberger | Used to open perms | Hydrochloric Acid | 7647-01-0 | |
| Breaker J134 | Schlumberger | Gel Breaker | Hemicellulase Enzyme | 9012-54-8 | |
| Water Gelling Agent J580 | Schlumberger | Water Viscosifier | Carbohydrate Polymer | Proprietary | |
| Friction Reducer J609 | Schlumberger | Friction Reducer | Ammonium Sulfate | 7783-20-2 | |
| Iron Stabilizer LS8 | Schlumberger | Iron Stabilizer | Sodium Erythorbate | 6381-77-7 | |
| EC6116A | Nalco | Biocide | Dibromoacetonitrile/2,2-Dibromo-3-nitripropionamide/Polyethylene Glycol | Mixture | |
| EC6486A Scale Inhibitor | Nalco | Scale Inhibitor | Amine Triphosphate/Ethylene Glycol | Mixture | |
| NALCO EC6673W | Nalco | Iron Control | Ethylene Glycol | 107-21-1 | |
| S012-3050 | Schlumberger | Proppant | Crystalline Silica | 14808-60-7 | |
| S012-4070 | Schlumberger | Proppant | Crystalline Silica | 14808-60-7 | |
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* Total Water Volume sources may include fresh water, produced water, and/or recycled water

All component information listed was obtained from the supplier's Material Safety Data Sheets (MSDS). As such, the Operator is not responsible for inaccurate and/or incomplete information. Any questions regarding the content of the MSDS should be directed to the supplier who provided it. The Occupational Safety and Health Administration's (OSHA) regulations govern the criteria for the disclosure of this information. Please note that Federal Law protects "proprietary", "trade secret", and "confidential business information" and the criteria for how this information is reported on an MSDS is subject to 29 CFR 1910.1200(i) and Appendix D.

RECEIVED
Office of Oil and Gas
MAR 27 2014
WV Department of
Environmental Protection

API#5101748
 API#5101749
 API#5101750
 API#5101751
 API#5101752
 API#5101753
 API#5101754
 API#5101755

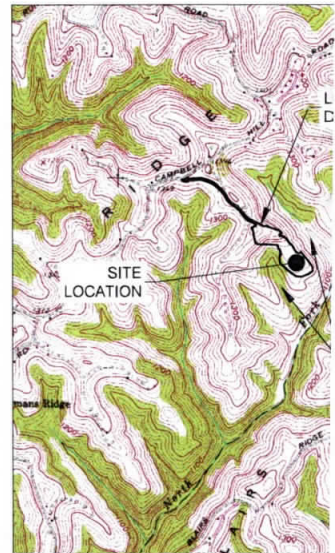
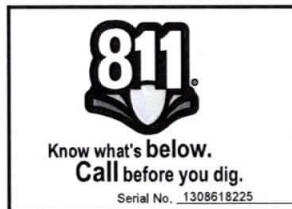
HART WELL AND EROSION AND SEDIMENT CONTROL

WAYMANS RIDGE ROAD CO. ROUTE
 MARSHALL CO

PREPARED BY

CHEVRON APPA

800 MOUNTAIN V
 SMITHFIELD, P



SITE LOCATION
 MOUNDSVILLE (C)
 1" = 200'

Electronic Version of These Plans May Be Available

I:\Path & Filenames\3\Projects\1700017544\Alaska Energy\0366 Hart Well Site\02-Sheet\17544-0366 CS 000 Cover Sheet.dwg
 Plot Date=8/13/2014 5:45 PM John G. Bowers
 Save Date=8/13/2014 5:31 PM

CERTIFICATION:
 THE DRAWING, CONSTRUCTION NOTES, AND REFERENCE
 DIAGRAMS ATTACHED HERETO HAVE BEEN PREPARED IN
 ACCORDANCE WITH THE WEST VIRGINIA CODE OF STATE RULE,
 DIVISION OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND
 GAS CRS 35-8.

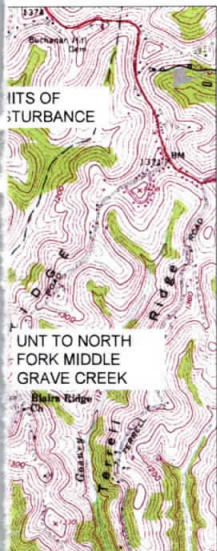
| LEGEND | EXISTING | |
|----------------------|---------------------------|----------------|
| TC - TOP OF CURB | — C — CABLE TV | ○ SHRUB |
| G - GUTTER | - - - - - CONTOUR (MAJOR) | ○ CLEANOUT |
| TW - TOP OF WALL | - - - - - CONTOUR (MINOR) | — ENDWALL |
| BW - BOTTOM OF WALL | D — DATA LINE | — FIRE HYDRANT |
| TS - TOP OF SLOPE | E — ELECTRIC LINE | — GAS VALVE |
| BS - BOTTOM OF SLOPE | ETC — ELEC-TEL-COM | — INLET |
| SAN - SANITARY | x — FENCE LINE | ○ IRON PIPE |
| ST - STORM | fm — FORCE MAIN | — LIGHT |
| MH - MANHOLE | G — GAS LINE | ○ MANHOLE |
| TOP - TOP OF CASTING | — — — — — LOT LINE | — MARKER |
| FL - FLOW LINE | OH — OVERHEAD WIRES | — METER |
| WV - WATER VALVE | - - - - - PROPERTY LINE | — POLE |
| GV - GAS VALVE | — — — — — RIGHT-OF-WAY | — SIGN |
| FH - FIRE HYDRANT | — — — — — ROAD CENTERLINE | — TESTHOLES |
| CO - CLEAN OUT | — — — — — SEWER | — TREE |
| STD - STANDARD | T — TELEPHONE LINE | — VENT |
| PM - PARKING METER | — — — — — TREE LINE | — WATER |
| MB - MAILBOX | — W — WATER LINE | — YARD CURB |
| DS - DOOR SILL | | |

TANK PAD SITE LAND AND SITE RECLAMATION PLAN

0038, WASHINGTON DISTRICT
COUNTY, WV

DR:
APPALACHIA, LLC

VIEW DRIVE
A 15478



MAP
(V) QUAD

Viewed at: Q:\OIL GAS\SAY FILES\REVIEWS

APPROVED
WVDEP OOG
SAY 6/16/2014

GATEWAY
On Call - On Time - On Target

GATEWAY
Consulting Engineers & Surveyors
400 Holiday Drive, Suite 300 Pittsburgh, PA 15220
Phone (412) 921-4030 - Fax (412) 921-9960
• Butler, PA (724) 287-0055 • Washington, PA (724) 229-3362
http://www.gatewayengineers.com



| SHEET INDEX | |
|-------------|---|
| NO. | TITLE |
| CS 000 | COVER SHEET |
| EX 050 | EXISTING TOPOGRAPHIC PLAN |
| ES 100 | OVERALL EROSION AND SEDIMENT CONTROL PLAN |
| ES 101 | EROSION AND SEDIMENT CONTROL PLAN |
| ES 102 | EROSION AND SEDIMENT CONTROL PLAN |
| ES 103 | EROSION AND SEDIMENT CONTROL DETAILS |
| ES 104 | EROSION AND SEDIMENT CONTROL DETAILS |
| ES 105 | EROSION AND SEDIMENT CONTROL DETAILS |
| ES 106 | EROSION AND SEDIMENT CONTROL DETAILS |
| ES 107 | EROSION AND SEDIMENT CONTROL DETAILS |
| ES 108 | EROSION AND SEDIMENT CONTROL DETAILS |
| ES 109 | ACCESS ROAD PROFILE AND MASS HAUL DIAGRAM |
| ES 110 | ACCESS ROAD CROSS SECTIONS |
| ES 111 | WELL PAD CROSS SECTIONS |
| ES 112 | EXISTING ACCESS ROAD PLAN AND PROFILE |
| ES 113 | EXISTING ACCESS ROAD PLAN AND PROFILE |
| PC 601 | SITE RECLAMATION PLAN |
| PC 602 | SITE RECLAMATION PLAN |
| PC 701 | FINAL SITE RECLAMATION PLAN |

GE-504 SLOPE STABILIZATION WITH STANDARD TOE KEY

| REVISION RECORD | | |
|-----------------|-----|-----------------|
| Date | No. | WV DEP COMMENTS |
| 03/12/2014 | 01 | WV DEP COMMENTS |
| 06/12/2014 | 02 | WV DEP COMMENTS |
| - | 03 | - |
| - | 04 | - |
| - | 05 | - |
| - | 06 | - |
| - | 07 | - |
| - | 08 | - |

HART WELL AND TANK PAD SITE
 WAYMANS RIDGE ROAD CO. ROUTE 0038, WASHINGTON DISTRICT
 MARSHALL COUNTY, WV
 PREPARED FOR:
CHEVRON APPALACHIA, LLC
 800 MOUNTAIN VIEW DRIVE
 SMITHFIELD, PA 15478

| PROPOSED | |
|----------|--------------------|
| --- | BLDG SETBACK LINE |
| --- | CABLE TV |
| 910 | CONTOURS (MAJOR) |
| 903 | CONTOURS (MINOR) |
| DAT | DATA LINE |
| --- | EASEMENT |
| --- | ELECTRIC LINE |
| --- | ELEC-TEL-COM |
| X | FENCE LINE |
| --- | FORCE MAIN |
| --- | GAS LINE |
| --- | OVERHEAD WRES |
| --- | PROPERTY LINE |
| --- | RIGHT-OF-WAY |
| --- | ROAD CENTERLINE |
| --- | SANITARY LINE |
| san | SANITARY LATERAL |
| 910 | SPOT ELEVATIONS |
| --- | STORM SEWER |
| --- | TELEPHONE LINE |
| --- | TREE LINE |
| WL | WATER LINE |
| wl | WATER LINE LATERAL |
| ○ | SHRUB |
| ⊕ | CLEANOUT |
| --- | ENDWALL |
| ⊕ | FIRE HYDRANT |
| ⊕ | GAS VALVE |
| ⊕ | INLET |
| * | LIGHT |
| ⊕ | STORM MANHOLE |
| ⊕ | SAN MANHOLE |
| ⊕ | MARKER |
| ⊕ | METER - E, G, W |
| ○ | PERC HOLE |
| ⊕ | POLE |
| ⊕ | SIGN |
| ⊕ | TESTHOLE |
| ○ | TREE |
| ⊕ | VENT |
| ⊕ | WATER VALVE |
| ⊕ | YARD DRAIN |

START OF ACCESS ROAD AT WAYMANS RIDGE ROAD TO WELL

LATITUDE: 39° 54' 51.99" N LONGITUDE: 80° 39' 22.58" W

WELL PIN "1"

LATITUDE: 39° 54' 48.94" N LONGITUDE: 80° 39' 17.45" W

CENTER OF TANK PAD

LATITUDE: 39° 54' 42.86" N LONGITUDE: 80° 39' 08.11" W

*BASED ON NAD 83 PROJECTIONS

WATERSHED NAME: UPPER OHIO SOUTH

RECEIVING STREAM (USGS BLUE LINE): UNT TO NORTH

FORK MIDDLE GRAVE CREEK

DISTANCE TO NEAREST USGS BLUE LINE STREAM = +/- 432 FT

NO ANTICIPATED WETLAND IMPACTS

COVER SHEET

Project Number: C-17544-0365
 Drawing Scale: N.T.S.
 Date Issued: FEB. 2014
 Index Number: -
 Drawn By: JMG
 Checked By: PJG
 Project Manager: DMH

CS 000

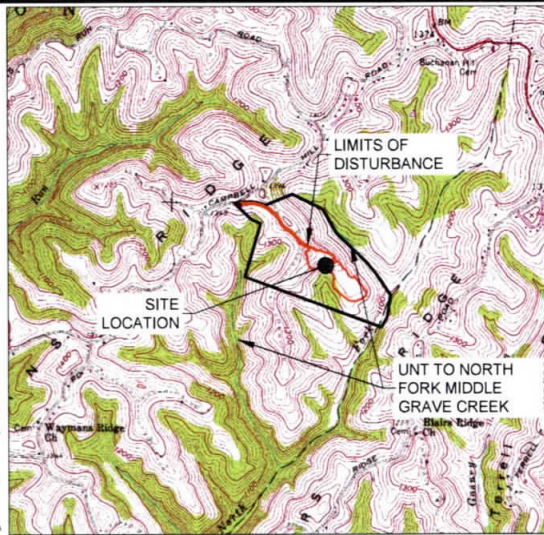


NORTH

APPROVED
WVDEP OOG

SAY 6/16/2014

NOW OR FORMERLY
JOHN J. & RENEE
HART



SITE LOCATION MAP MOUNDSVILLE (WV) QUAD

1" = 2000'

NOTES:

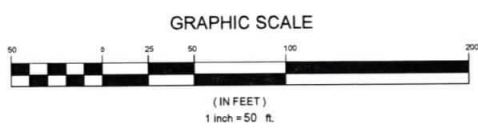
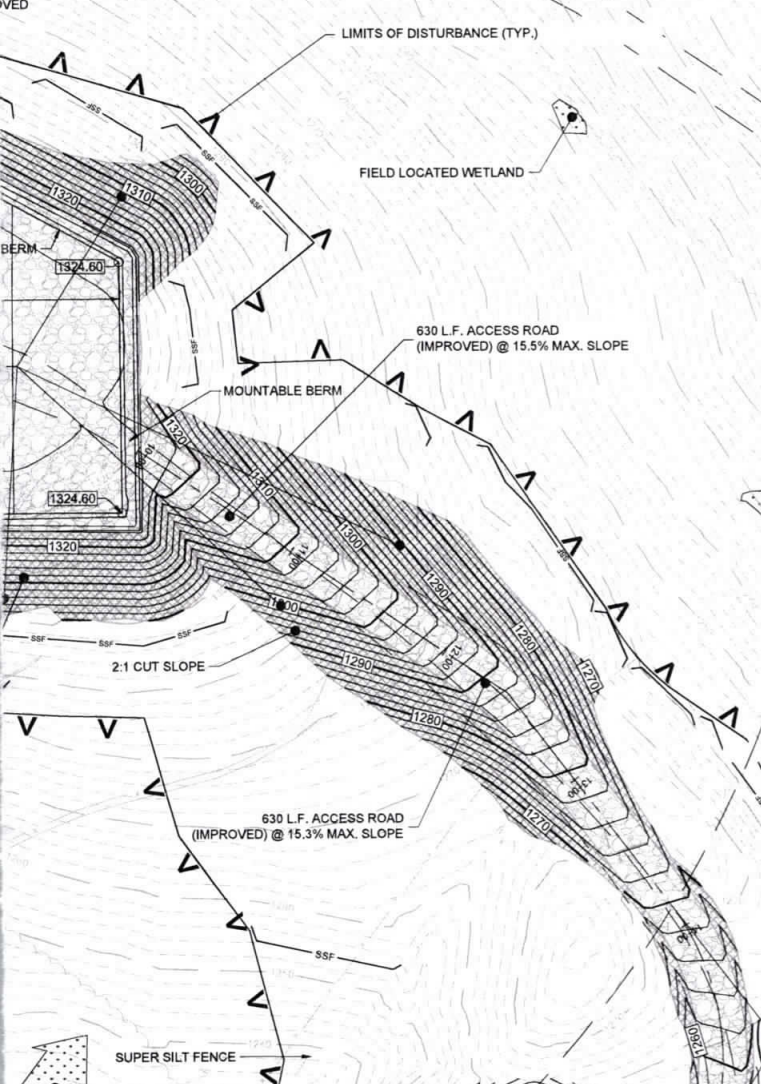
1. THE UNDERGROUND UTILITIES SHOWN HEREON HAVE NOT BEEN PHYSICALLY LOCATED BY THE SURVEYOR. HOWEVER, THE INFORMATION WAS OBTAINED FROM EXISTING PLANS AND/OR SURFACE FACILITIES. THE GATEWAY ENGINEERS, INC. MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE GATEWAY ENGINEERS, INC. DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH THEY ARE SHOWN AS ACCURATELY AS POSSIBLE FROM THE INFORMATION AVAILABLE.
2. IN THE PREPARATION OF THIS PLAN, THE CUTS AND/OR FILLS WERE SET WITHOUT KNOWLEDGE OF THE CAPABILITIES OF THE SOILS LOCATED ON THE SITE. THE GATEWAY ENGINEERS, INC. MAKES NO REPRESENTATION BY THIS PLAN OF THE STABILITY OF THE CUTS AND/OR FILLS SHOWN. ADJUSTMENTS TO PROPOSED CUT AND FILL SLOPES MAY BE REQUIRED BASED ON SUBSURFACE CONDITIONS AND/OR MATERIAL ENCOUNTERED.
3. GRADE ALL CHANNELS TO PROVIDE POSITIVE FLOW TO OUTFALL.
4. ROCK FILTERS BELOW CROSS DRAINS TO BE CONSTRUCTED PER DETAIL.
5. SURROUNDING TOPOGRAPHICAL DATA PROVIDED FROM WV MAP - TOPOGRAPHY SHOWN FOR REPRESENTATION PURPOSES ONLY AND HAS NOT BEEN FIELD VERIFIED.
6. EXISTING PAD IS A AGGREGATE SURFACE. RECYCLE MATERIAL FOR NEW PAD CONSTRUCTION.
7. NO DISCHARGE FROM THE WELL PAD WILL BE PERMITTED DURING DRILLING AND COMPLETION OR ANY TIME THAT THE DRILL RIG IS ON SITE.
8. ENVIRONMENTAL SCREENING PERFORMED ON MARCH 14, 2013 AND JANUARY 9, 2014.
9. THERE ARE NO SCHOOLS OR PUBLIC BUILDINGS WITHIN A 1/2 MILE OF THE LIMIT OF DISTURBANCE.
10. FOR MINIMUM COMPACTION, TOE KEY SPECIFICATIONS, REFER TO GEOTECHNICAL SHEET GE-504. THE MAXIMUM LIFT THICKNESS SHALL BE 12" OR AS SPECIFIED BY THE GEOTECHNICAL ENGINEER.

811
Know what's below.
Call before you dig.
Serial No. 1308618225

LIMITS OF DISTURBANCE= 15.3 ACRES

EROSION & SEDIMENT CONTROL LEGEND

- LIMITS OF DISTURBANCE/PROJECT LIMIT
- SUPER FILTER FENCE
- ROCK CONSTRUCTION ENTRANCE
- EROSION CONTROL BLANKET
**SLOPES MAY BE HYDRO-SEEDED OR BLOWN WITH SEED/MULCH
- ROCK FILTER
- INTERCEPTOR/DIVERSION CHANNEL
- CULVERT/CROSS DRAIN



GATEWAY
On Call On Time On Target
Consulting Engineers & Surveyors
400 Holiday Drive, Suite 300 Pittsburgh, PA 15220
Phone (412) 921-4030 - Fax (412) 921-9960
• Butler, PA (724) 267-0955 • Washington, PA (724) 229-5362
http://www.gatewayengineers.com Copyright © 2008 Gateway Engineers, Inc. All Rights Reserved.



| REVISION RECORD | |
|-----------------|----|
| Date | No |
| 03/31/2014 | 01 |
| 06/12/2014 | 02 |
| | 03 |
| | 04 |
| | 05 |
| | 06 |
| | 07 |
| | 08 |

HART WELL AND TANK PAD SITE
WAYMANS RIDGE ROAD CO. ROUTE 0038, WASHINGTON DISTRICT
MARSHALL COUNTY, WV
PREPARED FOR:
CHEVRON APPALACHIA, LLC
800 MOUNTAIN VIEW DRIVE
SMITHFIELD, PA 15478

EROSION AND SEDIMENT CONTROL PLAN
Project Number: C-17544-0365
Drawing Scale: 1"=50'
Date Issued: FEB, 2014
Index Number:
Drawn By: JMG
Checked By: P.J.G.
Project Manager: DMH
ES 101

Smith & Partners Inc. Project #1700017544, 1000 E. Energy Center Hunt Well, SHINDIGES, Cheyenne, WY 82001
 Date: 08/20/2014 10:46 PM John G. Bowers
 Sheet: 08/20/2014 10:46 PM

