



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

API 47-051-01704 County Marshall District Clay
Quad Powhatan, OH-WV Pad Name Berger Field/Pool Name _____
Farm name Berger Well Number 4H
Operator (as registered with the OOG) Chevron Appalachia, LLC
Address 800 Mountain View Drive City Smithfield State PA Zip 15478

As Drilled location NAD 83/UTM Attach an as-drilled plat, profile view, and deviation survey
Top hole Northing 4413871.14 Easting 520985.62
Landing Point of Curve Northing 4414162.43 Easting 520910.16
Bottom Hole Northing 4415716.70 Easting 519818.70

Elevation (ft) 1292' GL Type of Well New Existing Type of Report Interim Final
Permit Type Deviated Horizontal Horizontal 6A Vertical Depth Type Deep Shallow
Type of Operation Convert Deepen Drill Plug Back Redrilling Rework Stimulate
Well Type Brine Disposal CBM Gas Oil Secondary Recovery Solution Mining Storage Other _____
Type of Completion Single Multiple Fluids Produced Brine Gas NGL Oil Other _____
Drilled with Cable Rotary

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

Mud Type(s) and Additive(s)
Non aqueous fluid containing weighting agent, fluid loss additive, emulsifier, viscosity and Rheological control agent, oil-wetting agent, fluid rheology conditioner

Date permit issued 2/26/2014 Date drilling commenced 6/18/2014 Date drilling ceased 1/24/2015
Date completion activities began 8/4/2015 Date completion activities ceased 12/22/2015
Verbal plugging (Y/N) N Date permission granted _____ Granted by _____

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

Freshwater depth(s) ft 169' Open mine(s) (Y/N) depths No
Salt water depth(s) ft _____ Void(s) encountered (Y/N) depths No
Coal depth(s) ft 768'-769', 784'-785', 830'-837', 1411'-1413', 1415'-1418' Cavern(s) encountered (Y/N) depths No
Is coal being mined in area (Y/N) No but not sealed

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Reviewed by: _____
WV Department of Environmental Protection
02/26/2016

API 47- 051 - 01704 Farm name Berger Well number 4H

| CASING STRINGS | Hole Size | Casing Size | Depth | New or Used | Grade wt/ft | Basket Depth(s) | Did cement circulate (Y/N) * Provide details below* |
|---------------------------|-----------|-------------|-------|-------------|--------------|-----------------|--|
| Conductor | 36 | 30 | 40 | New | X-42; 118.76 | | |
| Surface | 17 1/2 | 13 3/8 | 303 | New | J-55; 54.50 | | |
| Coal | | | | | | | |
| Intermediate 1 | | | | | | | |
| Intermediate 2 | 12 1/4 | 9 5/8 | 2677 | New | N-80; 40 | | |
| Intermediate 3 | | | | | | | |
| Production | 8 1/2 | 5 1/2 | 13170 | New | P-110; 20 | | |
| Tubing | | | | | | | |
| Packer type and depth set | | | | | | | |

Comment Details _____

| CEMENT DATA | Class/Type of Cement | Number of Sacks | Slurry wt (ppg) | Yield (ft ³ /sks) | Volume (ft ³) | Cement Top (MD) | WOC (hrs) |
|----------------|----------------------|-----------------|-----------------|------------------------------|---------------------------|-----------------|-----------|
| Conductor | Bulk | 60 | | | | | |
| Surface | Bulk | 382 | 15.60 | 1.21 | 462 | SURFACE | 8 |
| Coal | | | | | | | |
| Intermediate 1 | A | 1031 | 15.60 | 1.24 | 1278 | SURFACE | 8 |
| Intermediate 2 | | | | | | | |
| Intermediate 3 | | | | | | | |
| Production | A | 2518 | 15.2 | 1.31 | 3298 | SURFACE | 8 |
| Tubing | | | | | | | |

Drillers TD (ft) 13,216 Loggers TD (ft) 13216
 Deepest formation penetrated Marcellus Plug back to (ft) N/A
 Plug back procedure N/A

Kick off depth (ft) 5538'

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

Well cored Yes No Conventional Sidewall Were cuttings collected Yes No

DESCRIBE THE CENTRALIZER PLACEMENT USED FOR EACH CASING STRING _____

Surface String: 1 Bow spring centralizer halfway through the shoe track around a stop collar, 1 Bow spring centralizer per joint over connection to base of conductor. One ridged centralizer within top 40" inside conductor.
 Intermediate String: 1 Bow spring centralizer halfway through the shoe track around a stop collar, and 1 bow spring centralizer over every other connection. Production casing 1 Solid Torque Guide Centralizer per joint to KCP, and 1 bow spring centralizer every other joint to surface after that

WAS WELL COMPLETED AS SHOT HOLE Yes No DETAILS _____

WAS WELL COMPLETED OPEN HOLE? Yes No DETAILS _____

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

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API 47-051-01704 Farm name Berger Well number 4H

PERFORATION RECORD

| Stage No. | Perforation date | Perforated from MD ft. | Perforated to MD ft. | Number of Perforations | Formation(s) |
|-----------|------------------|------------------------|----------------------|------------------------|--------------|
| | | SEE | ATTACHED | | |
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Please insert additional pages as applicable.

STIMULATION INFORMATION PER STAGE

Complete a separate record for each stimulation stage.

| Stage No. | Stimulations Date | Ave Pump Rate (BPM) | Ave Treatment Pressure (PSI) | Max Breakdown Pressure (PSI) | ISIP (PSI) | Amount of Proppant (lbs) | Amount of Water (bbls) | Amount of Nitrogen/other (units) |
|-----------|-------------------|---------------------|------------------------------|------------------------------|------------|--------------------------|------------------------|----------------------------------|
| | | SEE | ATTACHED | | | | | |
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|-----------------|-------------------|-----------------|
| API: 47-5101704 | Well Name: Berger | Well Number: 4H |
|-----------------|-------------------|-----------------|

| PERFORATION RECORD | | | | | |
|--------------------|------------------|-------------------------|-----------------------|------------------------|--------------|
| Stage No. | Perforation Date | Perforated From TMD Ft. | Perforated To TMD Ft. | Number of Perforations | Formation(s) |
| 1 | 11/3/15 | 13127 | 12967 | 60 | Marcellus |
| 2 | 11/4/15 | 12813 | 12677 | 50 | Marcellus |
| 3 | 11/4/15 | 12629 | 12424 | 50 | Marcellus |
| 4 | 11/5/15 | 12379 | 12176 | 50 | Marcellus |
| 5 | 11/6/15 | 12129 | 11927 | 50 | Marcellus |
| 6 | 11/6/15 | 11879 | 11677 | 50 | Marcellus |
| 7 | 11/7/15 | 11629 | 11427 | 50 | Marcellus |
| 8 | 11/9/15 | 11379 | 11177 | 50 | Marcellus |
| 9 | 11/10/15 | 11129 | 10927 | 50 | Marcellus |
| 10 | 11/10/15 | 10879 | 10677 | 50 | Marcellus |
| 11 | 11/11/15 | 10629 | 10427 | 50 | Marcellus |
| 12 | 11/12/15 | 10379 | 10177 | 50 | Marcellus |
| 13 | 11/12/15 | 10129 | 9927 | 50 | Marcellus |
| 14 | 11/13/15 | 9877 | 9677 | 50 | Marcellus |
| 15 | 11/14/15 | 9629 | 9427 | 50 | Marcellus |
| 16 | 11/14/15 | 9379 | 9177 | 50 | Marcellus |
| 17 | 11/15/15 | 9129 | 8927 | 50 | Marcellus |
| 18 | 11/15/15 | 8882 | 8677 | 50 | Marcellus |
| 19 | 11/16/15 | 8633 | 8427 | 50 | Marcellus |
| 20 | 11/16/15 | 8384 | 8177 | 50 | Marcellus |
| 21 | 11/17/15 | 8124 | 7927 | 50 | Marcellus |
| 22 | 11/17/15 | 7875 | 7679 | 50 | Marcellus |
| 23 | 11/17/15 | 7629 | 7432 | 50 | Marcellus |
| 24 | 11/17/15 | 7377 | 7182 | 50 | Marcellus |
| 25 | 11/17/15 | 7129 | 6924 | 50 | Marcellus |
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Please insert additional copies of this page if additional rows/stages are needed.

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| | | |
|-----------------|-------------------|-----------------|
| API: 47-5101704 | Well Name: Berger | Well Number: 4H |
|-----------------|-------------------|-----------------|

| STIMULATION INFORMATION / STAGE | | | | | | | | |
|--|------------------|---------------------|------------------------------|------------------------------|------------|--------------------------|------------------------|-----------------------------------|
| Complete a separate record for each stimulation stage. (Please insert additional lines for additional stages or additional pages as applicable). | | | | | | | | |
| Stg No. | Stimulation Date | Ave Pump Rate (BPM) | Ave Treatment Pressure (PSI) | Max Breakdown Pressure (PSI) | ISIP (PSI) | Amount of Proppant (lbs) | Amount of Water (bbls) | Amount of Nitrogen/ other (units) |
| 1 | 11/3/15 | 90 | 8941 | 0 | 3860 | 392336 | 11384 | |
| 2 | 11/4/15 | 98 | 9675 | 5800 | 5111 | 499116 | 12721 | |
| 3 | 11/4/15 | 98 | 7989 | 6075 | 4473 | 501853 | 12620 | |
| 4 | 11/5/15 | 98 | 8246 | 5838 | 4482 | 498610 | 12468 | |
| 5 | 11/6/15 | 98 | 8407 | 5661 | 4444 | 502411 | 12569 | |
| 6 | 11/6/15 | 98 | 8153 | 6228 | 4635 | 480330 | 12357 | |
| 7 | 11/7/15 | 97 | 8192 | 5712 | 3939 | 502257 | 12542 | |
| 8 | 11/9/15 | 96 | 8694 | 5904 | 4040 | 502408 | 12504 | |
| 9 | 11/10/15 | 98 | 8018 | 5430 | 4146 | 499554 | 12458 | |
| 10 | 11/10/15 | 98 | 8045 | 5973 | 4615 | 500841 | 12383 | |
| 11 | 11/11/15 | 98 | 8337 | 6057 | 4548 | 502758 | 12473 | |
| 12 | 11/12/15 | 98 | 7520 | 6160 | 4660 | 499256 | 12397 | |
| 13 | 11/12/15 | 99 | 7666 | 5987 | 4549 | 499198 | 12354 | |
| 14 | 11/13/15 | 99 | 7559 | 6143 | 4413 | 501012 | 12389 | |
| 15 | 11/14/15 | 98 | 7529 | 6662 | 4213 | 500745 | 12302 | |
| 16 | 11/14/15 | 95 | 8527 | 6393 | 5051 | 504026 | 13705 | |
| 17 | 11/15/15 | 98 | 7790 | 6260 | 4370 | 500860 | 12326 | |
| 18 | 11/15/15 | 98 | 7540 | 7009 | 4571 | 470251 | 12016 | |
| 19 | 11/16/15 | 99 | 7272 | 6293 | 4884 | 506882 | 12334 | |
| 20 | 11/16/15 | 98 | 6790 | 6562 | 4571 | 501260 | 12283 | |
| 21 | 11/17/15 | 98 | 8737 | 6339 | 4414 | 501260 | 12288 | |
| 22 | 11/17/15 | 99 | 7531 | 6240 | 4280 | 500134 | 12120 | |
| 23 | 11/17/15 | 99 | 7639 | 6202 | 4582 | 496186 | 12093 | |
| 24 | 11/17/15 | 99 | 7676 | 6762 | 4862 | 501783 | 12156 | |
| 25 | 11/17/15 | 98 | 6844 | 6160 | 4414 | 504517 | 12281 | |
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API 47- 051 - 01704 Farm name Berger Well number 4H

| PRODUCING FORMATION(S) | DEPTHS | |
|------------------------|--------|----|
| | TVD | MD |
| | | |
| | | |
| | | |

Please insert additional pages as applicable.

GAS TEST Build up Drawdown Open Flow OIL TEST Flow Pump

SHUT-IN PRESSURE Surface _____ psi Bottom Hole _____ psi DURATION OF TEST _____ hrs

OPEN FLOW Gas _____ mcfpd Oil _____ bpd NGL _____ bpd Water _____ bpd
GAS MEASURED BY Estimated Orifice Pilot

| LITHOLOGY/ FORMATION | TOP | BOTTOM | TOP | BOTTOM | DESCRIBE ROCK TYPE AND RECORD QUANTITY AND TYPE OF FLUID (FRESHWATER, BRINE, OIL, GAS, H ₂ S, ETC) |
|-------------------------|-------------------------|--------------------|-------------------|-------------------|---|
| | DEPTH IN FT NAME TVD | DEPTH IN FT TVD | DEPTH IN FT MD | DEPTH IN FT MD | |
| | 0 | | 0 | | |
| Dunkard Group Sand | 160 | 169 | 169 | 169 | Fresh Water 169'MD 1" stream |
| Pittsburgh Coal | 830 | 837 | 830 | 837 | Coal |
| Salt Sand | 1538 | 1568 | 1540 | 1570 | Gas Show @ 1550' 6101 units |
| Big Lime | 1848 | 1928 | 1850 | 1930 | Limestone: crm-wh, hd, crpxln |
| Burgoon (Big Injun) | 1927 | 2117 | 1930 | 2120 | SS: offwh, wh, cons, clr, trans, lcemt, fg-mg |
| Weir Sand | 2277 | 2297 | 2280 | 2300 | SLTST: ltgy-mgy, occ mgy, hrd, vf-fg, tcmt, bio, arg, sl calc |
| Berea Sand | 2507 | 2530 | 2510 | 2533 | SS wh, clr, trans, ltgy-gy, cns, lcmt, mg-fg, soang-ang, arg, msph non calc, tr flor, exl fast out, fnt odr, lse pyr |
| Burket Shale | 6287 | 6304 | 6447 | 6482 | SH: drkgy, v. drkgy, frm, slty, grty, sbblky-sbfiss, modcalc, embd calc, lse calct |
| Tully Limestone | 6304 | 6340 | 6482 | 6566 | LS: ltgy, gy, mgy, frm-hrd, dns, cln, mic-fxln, v. arg |
| Hamilton Shale | 6340 | 6378 | 6566 | 6736 | SH: drkgy, v. drkgy, frm, slty, grty, sbblky-sbfiss, carb, modv. calc, lse calct, w/LS |
| Marcellus Shale | 6378 | | 6736 | | SH: drkgy, v. drkgy, frm, slty, grty, sbblky-sbfiss, non calc, lse calct, lse pyr, w/LS, gy, ltgy, hrd, mott, mic, fxln, v. arg |

Please insert additional pages as applicable.

Drilling Contractor SEE ATTACHED
Address _____ City _____ State _____ Zip _____

Logging Company ALS Group USA Corp
Address 3352 128th Avenue City Holland State MI Zip 49424

Cementing Company SEE ATTACHED
Address _____ City _____ State _____ Zip _____

Stimulating Company Schlumberger Technology Corp.
Address 4600 J Barry Court, Suite 200 City Canonsburg State PA Zip 15307

Please insert additional pages as applicable.

Completed by Jackie M. Schlar Telephone 724-564-3721
Signature [Signature] Title Regulatory Compliance Team Lead Date 1/12/2016

Submittal of Hydraulic Fracturing Chemical Disclosure Information

Attach copy of FRACFOCUS Registry

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02/26/2016

| | | |
|-----------------|-------------------|-----------------|
| API: 47-5101704 | Well Name: Berger | Well Number: 4H |
|-----------------|-------------------|-----------------|

| CEMENTING CONTRACTORS | | |
|--|---|--------------------|
| Name Schlumberger Technology Corp | Name Baker Hughes | Name |
| Address Two Robinson Plaza, Suite 200 | Address 5373 West Alabama, Suite 300 | Address |
| City - State - Zip Pittsburgh, PA 15205 | City - State - Zip Houston, TX 77056 | City - State - Zip |

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| | | |
|-----------------|-------------------|-----------------|
| API: 47-5101704 | Well Name: Berger | Well Number: 4H |
|-----------------|-------------------|-----------------|

| DRILLING CONTRACTORS | | |
|---|---|---|
| Driller | Driller | Driller |
| Name Rocky Mountain Drilling | Name Highlands Drilling LLC | Name Nabors Drilling USA |
| Address 185 North Vernal Avenue, Suite 2 | Address 900 Virginia Street East | Address 10100 NW 10th Street |
| City - State - Zip Vernal, UT 84078 | City - State - Zip Charlestown, WV 25301 | City - State - Zip Oklahoma City, OK 73127 |

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NOTES:

- There are no water wells or developed springs within 250' of proposed well.
- There are no existing buildings within 625' of proposed well.
- Proposed well is greater than 100' from perennial stream, wetland, pond, reservoir or lake.
- There are no native trout streams within 300' of proposed well.
- Proposed well is greater than 1000' from surface/groundwater intake or public water supply.
- It is not the purpose or intention of this plat to represent surveyed locations of the surface or mineral parcels depicted herein. 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 127' feet south of Latitude: 39° 52' 30"

AS DRILLED PLAT

| PARCEL | LESSOR |
|--------|-----------------------------|
| A | GARY & LINDA BERGER |
| B | TERRY L. PATTERSON |
| C | MARY E. PERSINGER, ET AL. |
| D | LANE P. & TONI L. RINE |
| E | W. B. MINOR HEIRS |
| F | HOWARD & SHARON A. BLAKE |
| G | CHAD R. & BETSY J. WILLIAMS |
| H | STEVEN & CHRISTINA TROY |
| I | GEORGE W. TRAVIS |



Well is located on topo map 1282' feet west of Longitude: 80° 45' 00"

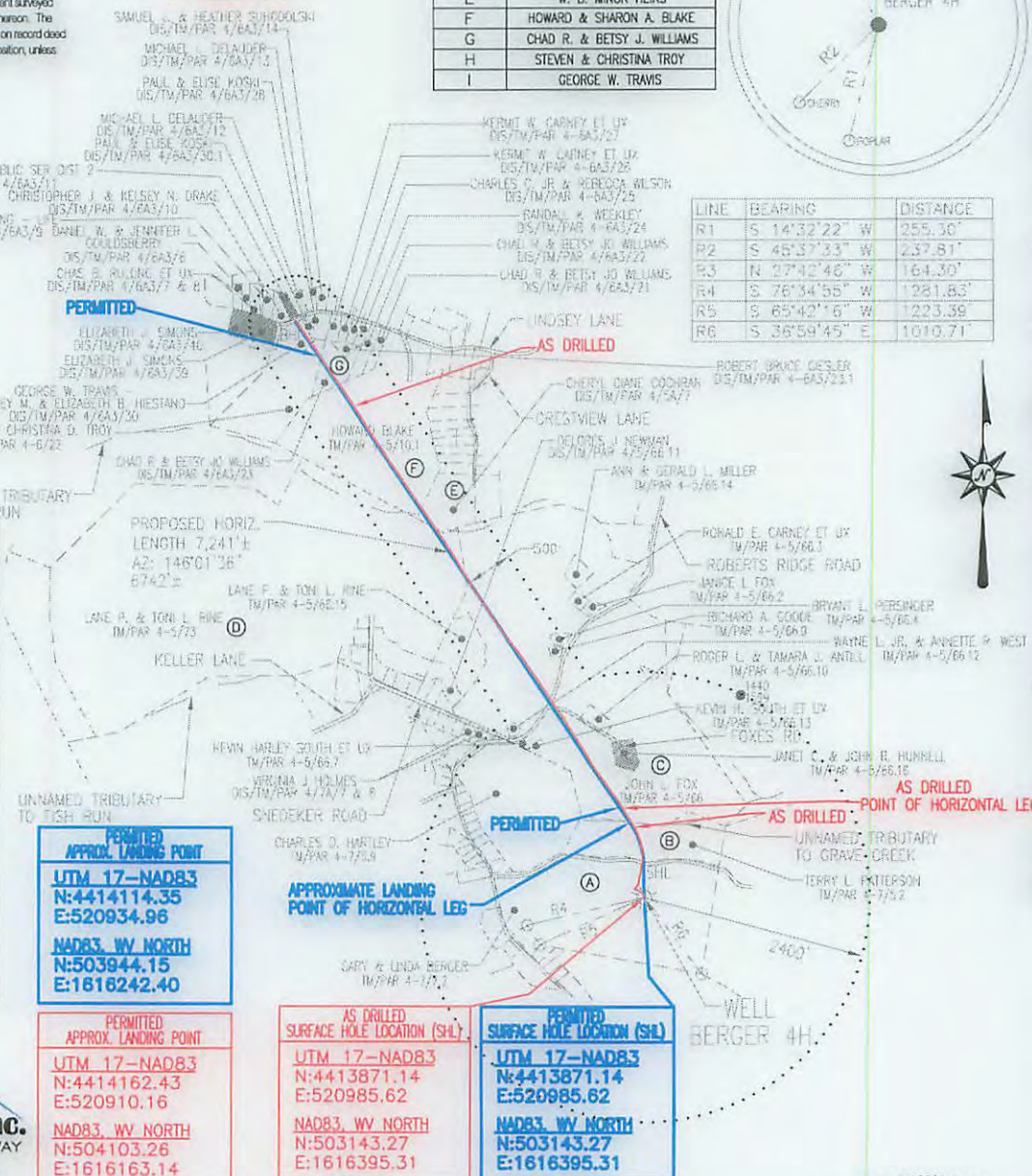
| LINE | BEARING | DISTANCE |
|------|---------------|----------|
| R1 | S 14°32'22" W | 255.30' |
| R2 | S 45°37'33" W | 237.81' |
| R3 | N 27°42'46" W | 164.30' |
| R4 | S 76°34'55" W | 1281.83' |
| R5 | S 65°40'16" W | 1223.39' |
| R6 | S 36°59'45" E | 1010.71' |

PERMITTED BOTTOM HOLE LOCATION (BHL)
UTM 17-NAD83
N:4415715.30
E:519816.83
NAD83, WV NORTH
N:509258.98
E:1612660.51

AS DRILLED BOTTOM HOLE LOCATION (BHL)
UTM 17-NAD83
N:4415716.70
E:519818.70
NAD83, WV NORTH
N:509263.48
E:1612666.74

LEGEND

- ✚ - TOPO MAP POINT
- ☼ - WELL
- - ALL ARE POINTS UNLESS OTHERWISE NOTED.
- (A) - LEASE LETTER
- - - - - MINERAL TRACT BOUNDARY
- - - - - PARCEL LINES
- - - - - WELL REFERENCE
- - - - - PROPOSED HORIZONTAL WELL
- - - - - ROAD
- - - - - STREAM CENTER LINE
- - - - - EXISTING WELLS
- - EXISTING WELLS
- - PLUGGED WELLS



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

PERMITTED APPROX. LANDING POINT
UTM 17-NAD83
N:4414114.35
E:520934.96
NAD83, WV NORTH
N:503944.15
E:1618242.40

PERMITTED APPROX. LANDING POINT
UTM 17-NAD83
N:4414162.43
E:520910.16
NAD83, WV NORTH
N:504103.26
E:1616163.14

AS DRILLED SURFACE HOLE LOCATION (SHL)
UTM 17-NAD83
N:4413871.14
E:520985.62
NAD83, WV NORTH
N:503143.27
E:1616395.31

PERMITTED SURFACE HOLE LOCATION (SHL)
UTM 17-NAD83
N:4413871.14
E:520985.62
NAD83, WV NORTH
N:503143.27
E:1616395.31

FILE #: BERGER 4H-AS DRILLED
 DRAWING #: BERGER 4H-AS DRILLED
 SCALE: 1" = 2000'
 MINIMUM DEGREE OF ACCURACY: 1/2500
 PROVEN SOURCE OF ELEVATION: U.S.G.S. MONUMENT THOMAS 1498.81'

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

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

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: SEPTEMBER 28, 2015
 OPERATOR'S WELL #: BERGER 4H-AS DRILLED
 API WELL #: 47 51 01704
 STATE COUNTY PERMIT

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

WATERSHED: MIDDLE GRAVE CREEK - GRAVE CREEK ELEVATION: 1287.47'

COUNTY/DISTRICT: MARSHALL / CLAY QUADRANGLE: POWHATAN, OH-WV 7.5'

SURFACE OWNER: GARY & LINDA BERGER ACREAGE: 51.753±

OIL & GAS ROYALTY OWNER: GARY & LINDA BERGER ACREAGE: 527.300±

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: 6,538'± TMD: 13,378'±

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

02/26/2016

Hydraulic Fracturing Fluid Product Component Information Disclosure

| | |
|--------------------------------|--------------------|
| Job Start Date: | 11/3/2015 |
| Job End Date: | 11/17/2015 |
| State: | West Virginia |
| County: | Marshall |
| API Number: | 47-051-01704-00-00 |
| Operator Name: | Chevron USA Inc. |
| Well Name and Number: | Berger 4H |
| Longitude: | -80.75459907 |
| Latitude: | 39.87462821 |
| Datum: | NAD83 |
| Federal/Tribal Well: | NO |
| True Vertical Depth: | 6,309 |
| Total Base Water Volume (gal): | 12,811,464 |
| Total Base Non Water Volume: | |



Hydraulic Fracturing Fluid Composition:

| Trade Name | Supplier | Purpose | Ingredients | Chemical Abstract Service Number (CAS #) | Maximum Ingredient Concentration in Additive (% by mass)** | Maximum Ingredient Concentration in HF Fluid (% by mass)** | Comments |
|------------|------------------|----------------------|--|--|--|--|----------|
| Base Fluid | Chevron | Carrier/Base Fluid | | | | | |
| | | | Water (Including Mix Water Supplied by Client) | 7732-18-5 | 100.00000 | 89.52469 | |
| Proppant | Schlumberger | Proppant | | | | | |
| | | | Crystalline Silica | 14808-60-7 | 100.00000 | 10.36184 | |
| 7.5% Acid | Schlumberger | Perf Cleanup | | | | | |
| | | | Hydrochloric Acid | 7647-01-0 | 8.00000 | 0.00725 | |
| J580 | Schlumberger | Gelling Agent | | | | | |
| | | | Carbohydrate Polymer | Proprietary | 100.00000 | 0.00245 | |
| M300 | BASF Corporation | Biocide | | | | | |
| | | | Water | 7732-18-5 | 75.00000 | 0.00169 | |
| | | | Glutaral | 111-30-8 | 25.00000 | 0.00056 | |
| U042 | Schlumberger | Iron Chelating Agent | | | | | |
| | | | Tetrasodium ethylenediaminetetraacetate | 64-02-8 | 60.00000 | 0.00164 | |
| | | | Trisodium nitrilotriacetate (impurity) | 5064-31-3 | 10.00000 | 0.00027 | |
| | | | Sodium hydroxide | 1310-73-2 | 5.00000 | 0.00014 | |
| L058 | Schlumberger | Iron Stabilizer | | | | | |
| | | | Sodium erythorbate | 6381-77-7 | 100.00000 | 0.00033 | |
| B317 | Schlumberger | Scale Inhibitor | | | | | |

| | | | | | | |
|------|--------------|---------------------|------------------------------------|-------------|-----------|---------|
| | | | Ethane-1,2-diol | 107-21-1 | 5.00000 | 0.00011 |
| | | | Trisodium ortho phosphate | 7601-54-9 | 5.00000 | 0.00011 |
| A264 | Schlumberger | Corrosion Inhibitor | | | | |
| | | | Methanol | 67-56-1 | 40.00000 | 0.00004 |
| | | | Aliphatic alcohols, ethoxylated #1 | Proprietary | 30.00000 | 0.00003 |
| | | | Aliphatic acids | Proprietary | 30.00000 | 0.00003 |
| | | | Prop-2-yn-1-ol | 107-19-7 | 10.00000 | 0.00001 |
| J134 | Schlumberger | Gel Breaker | | | | |
| | | | Hemicellulase enzyme | 9012-54-8 | 100.00000 | 0.00007 |

Ingredients shown above are subject to 29 CFR 1910.1200(i) and appear on Material Safety Data Sheets (MSDS). Ingredients shown below are Non-MSDS.

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

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