



west virginia department of environmental protection

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

Jim Justice, Governor
Austin Caperton, Cabinet Secretary
www.dep.wv.gov

PERMIT MODIFICATION APPROVAL
Horizontal 6A / Horizontal 6A Well

EQT PRODUCTION COMPANY
120 PROFESSIONAL PLACE
BUILDING II
BRIDGEPORT, WV 26330


Re: Permit Modification Approval for BLIZZARD 4H
47-095-02242-00-00

Changing the Azimuth and Length of Well.
Update WW-6B, Schematics, WW-6A1, Mylar Plat, Rec Plan, Monitoring Plan & Site Safety Plan

EQT PRODUCTION COMPANY

The Office of Oil and Gas has reviewed the attached permit modification for the above referenced permit. The attached modification has been approved and well work may begin. Please be reminded that the oil and gas inspector is to be notified twenty-four (24) hours before permitted well work is commenced.

If there are any questions, please feel free to contact me at (304) 926- 0450.



James A. Martin
Chief

Operator's Well Number: BLIZZARD 4H
Farm Name: BLIZZARDM ROGER D. & SPENCER, RUTH E
U.S. WELL NUMBER: 47-095-02242-00-00
Horizontal 6A / Horizontal 6A Well
Date Issued: 1/20/2017

Promoting a healthy environment.

01/27/2017



December 13, 2016

Mr. Gene Smith
West Virginia Department of Environmental Protection
Office of Oil and Gas
601 57th Street SE
Charleston, WV 25304

Re: Modification of 47-095-02242, 47-095-02216

Dear Mr. Smith,

Enclosed is an updated WW-6B, schematics, WW-6A1, mylar plat, rec plan, monitoring plan and SSP disc. All paperwork is inspector signed. EQT is changing the azimuth of the well and the length.

If you have any questions, please do not hesitate to contact me at (304) 848-0076.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Vicki Roark'.

Vicki Roark
Permitting Supervisor-WV

Enc.

RECEIVED
Office of Oil and Gas

DEC 14 2016

WV Department of
Environmental Protection

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

1) Well Operator: EQT Production Company 306686 Tyler Ellsworth Shirley
Operator ID County District Quadrangle

2) Operator's Well Number: Blizzard H4 Well Pad Name: Blizzard

3) Farm Name/Surface Owner: Roger D Blizzard & Ruth E Spencer Public Road Access: Co Rt 34

4) Elevation, current ground: 1004' Elevation, proposed post-construction: 1004'

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

(b) If Gas Shallow Deep _____
Horizontal _____

*DmH
12-5-16*

6) Existing Pad: Yes or No Yes

7) Proposed Target Formation(s), Depth(s), Anticipated Thickness and Expected Pressure(s):
Marcellus, 6531', 51', 2747 PSI

8) Proposed Total Vertical Depth: 6652

9) Formation at Total Vertical Depth: Onondaga

10) Proposed Total Measured Depth: 18344

11) Proposed Horizontal Leg Length: 10805

12) Approximate Fresh Water Strata Depths: 234,289,571,647

13) Method to Determine Fresh Water Depths: From offset wells

14) Approximate Saltwater Depths: 1443,1670,2074

15) Approximate Coal Seam Depths: None reported

16) Approximate Depth to Possible Void (coal mine, karst, other): None reported

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

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

RECEIVED
Office of Oil and Gas

DEC 14 2016

WV Department of
Environmental Protection
Page 1 of 3

WW-6B
(04/15)

API NO: 47-095 - 02242

OPERATOR WELL NO: Blizzard 3H

Well Pad Name: Blizzard

18) CASING AND TUBING PROGRAM

TYPE	Size (in)	New or Used	Grade	Weight per ft. (lb/ft)	FOOTAGE: For Drilling (ft)	INTERVALS: Left in Well (ft)	CEMENT: Fill-up (Cu. Ft.)/CTS
Conductor	20	New	A-500	78.6	40	40	60 ft ³ / CTS
Fresh Water	13 3/8	New	J-55	54.5	747	747	666 ft ³ / CTS
Coal							
Intermediate	9 5/8	New	A-500	40	2797	2797	1100 ft ³ / CTS
Production	5 1/2	New	P-110	20	18344	18344	800' above top producing zone
Tubing	2 3/8		J-55	4.7		May not be run, if run set 40' above top part of 90° inclination	
Liners							

DMH 11-14-16 JPS 11/14/16

TYPE	Size (in)	Wellbore Diameter (in)	Wall Thickness (in)	Burst Pressure (psi)	Anticipated Max. Internal Pressure (psi)	Cement Type	Cement Yield (cu. ft./k)
Conductor	20	26	.375	1378	1102	Class A	1.18
Fresh Water	13 3/8	17 1/2	.38	2700	2160	See Variance	1.19
Coal							
Intermediate	9 5/8	12 3/8	.395	3950	3160	See Variance	1.19
Production	5 1/2	8 1/2	.361	12640	10112	Class A/H	1.123/2.098
Tubing	2 3/8	NA	.19	7700			
Liners							

PACKERS

Kind:				
Sizes:				
Depths Set:				

WW-6B
(10/14)

API NO. 47-095 - 02242

OPERATOR WELL NO. Blizzard 4H

Well Pad Name: Blizzard

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

Drill and complete a new horizontal well in the Marcellus Formation. Drill the vertical to an approximate depth of 6652'. Tag the Onondaga not more than 100' and run logs. Plug back with a solid cement plug to approximately 3,835'. Kick off and drill curve. Drill the lateral in the Marcellus. Cement casing.

DMH
11-14-16
JPS
11/14/16

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

Hydraulic fracturing is completed in accordance with state regulations using water recycled from previously fractured wells and obtained from freshwater sources. This water is mixed with sand and a small percentage (less than 0.3%) of chemicals (including 15% Hydrochloric acid, friction reducer, biocide, and scale inhibitor), referred to in the industry as a "slickwater" completion. Maximum anticipated internal casing pressure is expected to be approximately 10000 psi, maximum anticipated treating rates are expected to average approximately 100 bpm. Stage lengths vary from 150 to 300 feet. Average approximately 250,000 gallons of water per stage. Sand sizes vary from 100 mesh to 20/40 mesh. Average approximately 250,000 pounds of sand per stage.

21) Total Area to be disturbed, including roads, stockpile area, pits, etc., (acres): no additional

22) Area to be disturbed for well pad only, less access road (acres): no additional

23) Describe centralizer placement for each casing string:

- Surface: Bow spring centralizers – One centralizer at the shoe and one spaced every 500'.
- Intermediate: Bow spring centralizers– One centralizer at the shoe and one spaced every 500'.
- Production: One solid body centralizer spaced every joint from production casing shoe to KOP

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

Conductor: Class A no additives
 Surface (Type 1 Cement): 0-3% Calcium Chloride. Used to speed the setting of cement slurries
 Intermediate (Type 1 Cement): 0-3% Calcium Chloride. Used to speed the setting of cement slurries.
 Production:
 Lead (Class A Cement): 0.2% CD-20 (dispersant makes cement easier to mix). .15% SuperFL-300 (fluid loss/lengthens thickening time). .15% SEC-10 (fluid loss). 50:50 POZ (extender)
 Tail (Class H Cement): 0.2% Super CR-1 (Retarder). Lengthens thickening time. .3% Super FL-200 (fluid loss). .2% SEC-10 (Fluid loss). .2% SuperFL-350 (fluid loss) Reduces amount of water lost to formation. 60 % Calcium Carbonate. Acid solubility.

25) Proposed borehole conditioning procedures:

Surface: Circulate hole clean while rotating & reciprocating the drill string until cuttings diminish at surface.
 Intermediate: Circulate hole clean while rotating & reciprocating the drill string until cuttings diminish at surface.
 Production: Pump marker sweep with nut plug to determine actual hole washout. Calculate a gauge holes bottoms up volume. Perform a cleanup cycle by pumping 3-5 bottoms up or until the shakers are clean. Check volume of cuttings coming across the shakers every 15 minutes.

RECEIVED
Office of Oil and Gas
DEC 14 2016
WV Department of
Environmental Protection

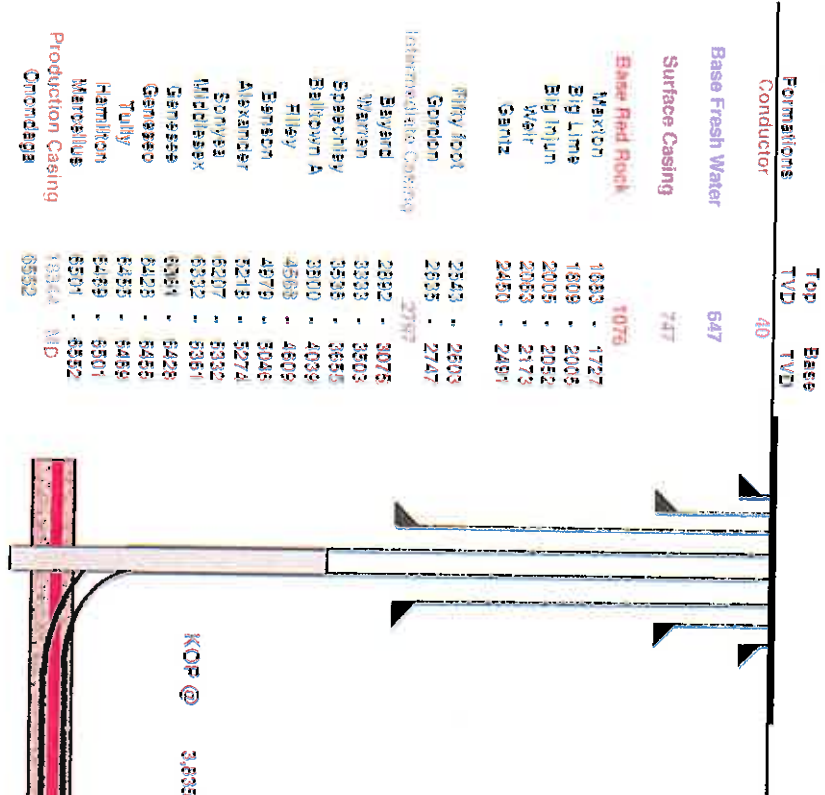
*Note: Attach additional sheets as needed.

Blizzard 4H

Well
EQT Production
Porters Falls Quad
Tyler County, WV

Azimuth 157
Vertical Section 10075

Note: Diagram is not to scale



Casing and Cementing

Type	Conductor	Surface	Intermediate	Production
Hole Size, In	30	17 1/2	12 3/8	8 1/2
Casing Size, OD In	30	18 3/8	9 3/8	9 1/2
Casing Wall Thickness, In	0.375	0.390	0.395	0.361
Depth, MD	40	247	2,797	18,324'
Weight	78.88	64.58	40#	20#
Grade	A-300	J-25	A-300	2-110
New or Used	New	New	New	New
Equivalent	1575	2,700	3,950	12,840
Cement Class	A	A / Type 1	A / Type 1	S / H
Cement Yield	1.15	1.19	1.19	1.123 / 2.058
Top of Cement (planned)	Surface	Surface	Surface	300' above top producing zone
Metric	Displacement	Displacement	Displacement	Displacement
Est. Volume (cu ft)	60	688	1,100	2,980
Possible Additives	N/A	Calcium Chloride	Calcium Chloride	Calcium Chloride, Mud Loss, Extender, Dispersant, Viscosity, Defloccant, Pozz. Binding Agent, Retarder, Anti-Sedimentation Agent

Drill 11-14-16

JPS 11/14/16

Proposed Well Walk:
Drill and complete a new horizontal well in the Marcellus formation.
Drill the vertical to an approximate depth of 6852'.
Tag the Onondaga not more than 100' run logs, then plug back with a solid cement plug to approximately 2835'.



RECEIVED
Office of Oil and Gas
DEC 14 2016
WV Department of Environmental Protection

WW-6A1
(5/13)

Operator's Well No. Blizzard 4H

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

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

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

Lease Name or Number	Grantor, Lessor, etc.	Grantee, Lessee, etc.	Royalty	Book/Page
see attached				

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

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

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

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

Well Operator: EQT Production Company

By: Victoria J. Roark

Its: Permitting Supervisor

Page 1 of 2

01/27/2017

Lease No.	Grantor, Lessor, etc.	Grantee, Lessee, etc.	Royalty	Book/Page
<u>870980</u>	<u>AMIP Fund III LP, et al (current royalty owner)</u> Carol Craig Rich (original lessor) Petroedge Energy LLC Statoil USA Onshore Properties Inc	Petroedge Energy LLC Statoil USA Onshore Properties Inc EQT Production Company	***	411/463 436/1 539/239
<u>870073</u>	<u>William S. Nash, et ux (current royalty owner)</u> William S. Nash, et ux (original lessor) Statoil USA Onshore Properties Inc	Statoil USA Onshore Properties EQT Production Company	***	463/515 539/239
<u>870651</u>	<u>Stephanie Perkins, et al (current royalty owner)</u> Stephanie Perkins (original lessor) Petroedge Energy LLC Statoil USA Onshore Properties Inc	Petroedge Energy LLC Statoil USA Onshore Properties Inc EQT Production Company	***	381/203 406/147 539/239
<u>870350</u>	<u>Mary Sue Tate, et al (current royalty owner)</u> Brian Bruce Seckman (original lessor) Petroedge Energy LLC Statoil USA Onshore Properties Inc	Petroedge Energy LLC Statoil USA Onshore Properties Inc EQT Production Company	***	388/619 406/147 539/239
<u>870375</u>	<u>Ridgetop Capital, et al (current royalty owner)</u> Brian Bruce Seckman (original lessor) Petroedge Energy LLC Statoil USA Onshore Properties Inc	Petroedge Energy LLC Statoil USA Onshore Properties Inc EQT Production Company	***	388/628 406/147 539/239
<u>870015</u>	<u>Anthony B. Parr (current royalty owner)</u> Anthony B. Parr, et ux (original lessor) Chesapeake Appalachia LLC Statoil USA Onshore Properties Inc	Chesapeake Appalachia LLC Statoil USA Onshore Properties Inc EQT Production Company	***	367/774 378/764 539/239
<u>871007</u>	<u>Golden Eagle Resources, LLC et al (current royalty owner)</u> David Alan Smith (original lessor) Statoil USA Onshore Properties Inc	Statoil USA Onshore Properties EQT Production Company	***	462/244 539/239

*** We will pay a minimum one-eighth of the total amount paid to or received by or allowed to the owner of the working interest at the wellhead for the oil or gas so extracted, produced, or marketed before deducting the amount to be paid to or set aside for the owner of the oil or gas in place, on all such oil or gas to be extracted, produced, or marketed from the well.



4709502242

November 1, 2016

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

Re: Blizzard well pad, well number (Blizzard 4H)
Clay District, Ritchie County

Dear Mr. Martin,

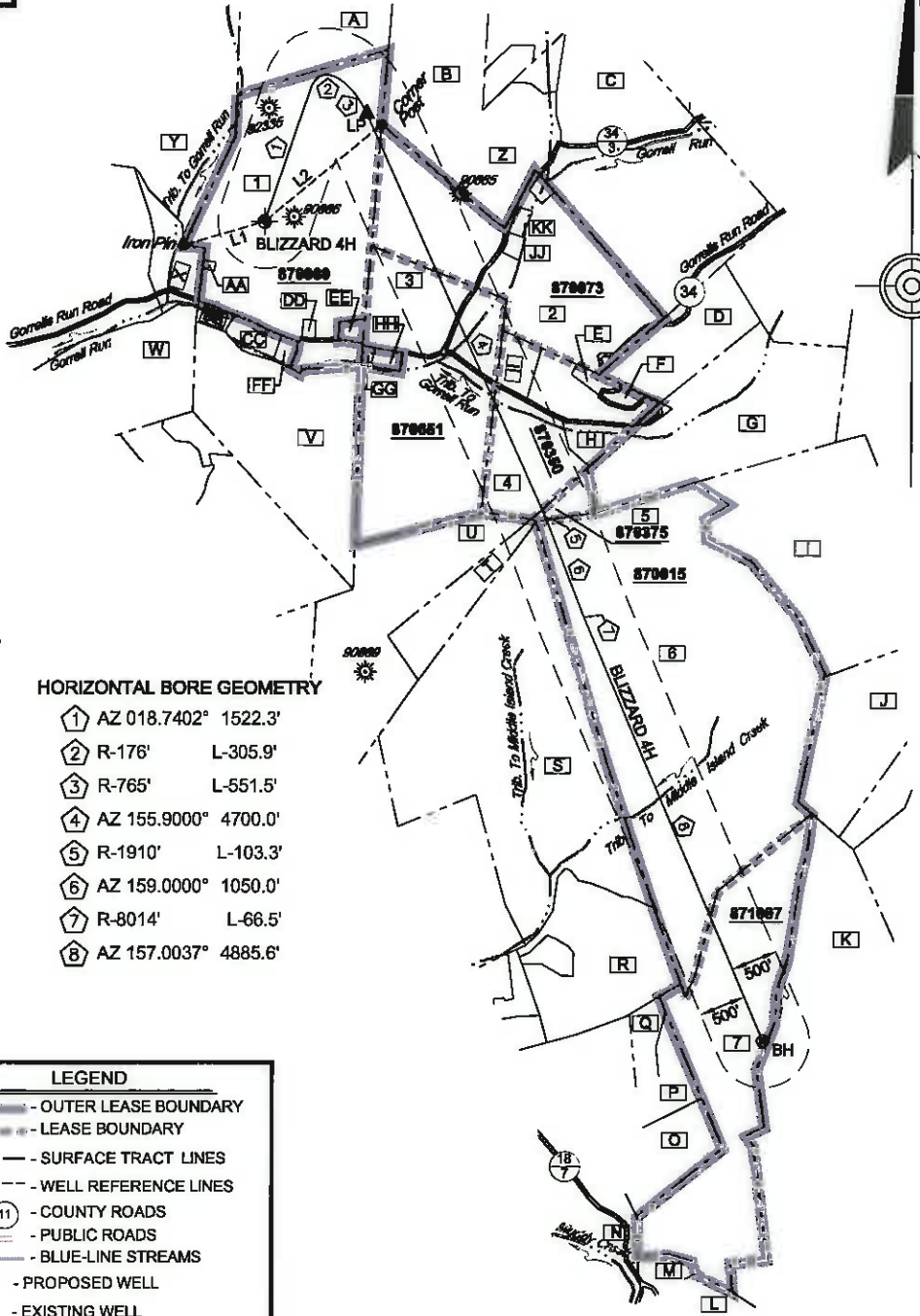
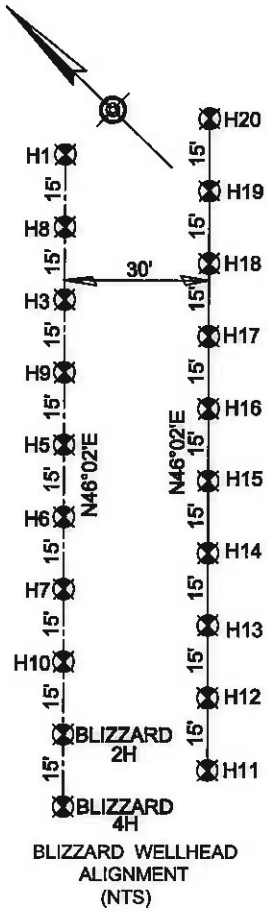
EQT Production Company is submitting an application for a new well work permit for the above well number. Upon information and belief, Operator's lease and/ or other real property rights permit it to conduct drilling operations for the subject well in the location shown on the plat, including under any public roads that the well lateral crosses.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Vicki Roark'.

Vicki Roark
Permitting Supervisor-WV

01/27/2017



HORIZONTAL BORE GEOMETRY

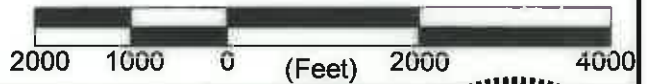
- ① AZ 018.7402° 1522.3'
- ② R-176' L-305.9'
- ③ R-765' L-551.5'
- ④ AZ 155.9000° 4700.0'
- ⑤ R-1910' L-103.3'
- ⑥ AZ 159.0000° 1050.0'
- ⑦ R-8014' L-66.5'
- ⑧ AZ 157.0037° 4885.6'

PROPERTY TIES
 L1 - S73°28'05"W 908.5'
 L2 - N50°03'32"E 1625.8'



LEGEND

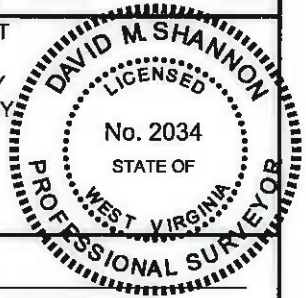
- - - - - OUTER LEASE BOUNDARY
- - - - - LEASE BOUNDARY
- - - - - SURFACE TRACT LINES
- - - - - WELL REFERENCE LINES
- ⊙ ⊙ - COUNTY ROADS
- - - - - PUBLIC ROADS
- - - - - BLUE-LINE STREAMS
- ⊗ - PROPOSED WELL
- ☀ - EXISTING WELL
- ▲ - LANDING POINT
- ⊗ - BOTTOM HOLE
- ① - PROPERTY CROSSED BY BORE
- A - ADJOINER PROPERTY
- 870015 - LEASE NUMBER
- ⑧ - BORE GEOMETRY TAB



FILE NO. 7936-009
 DRAWN BY DMS
 SCALE 1 INCH = 2000 FEET
 MIN DEGREE OF ACCURACY 1 IN 2500
 PROVEN SOURCE OF ELEVATION SURVEY GRADE GPS

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

David M. Shannon PS #2034



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS



W.V.D.E.P.
 OFFICE OF OIL AND GAS
 601 57TH STREET
 CHARLESTON, WV 25304

DATE 10-27-2016

OPERATORS WELL NO. BLIZZARD 4H

API WELL NO. 47 095 02242
 STATE COUNTY PERMIT

WASTE DISPOSAL

SHALLOW

ELEVATION (EXIST) 1004 (PAD) (PROP) N/A

QUADRANGLE SHIRLEY - SEC1

ACREAGE 90.17±

01/27/2017

ACREAGE 95.88± LEASE# 870960

PROPOSED WORK: 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 6501

WELL OPERATOR: EQT PRODUCTION COMPANY

DESIGNATED AGENT REX C. RAY

ADDRESS 115 PROFESSIONAL PLACE, PO BOX 280
 BRIDGEPORT, WV 26330

ADDRESS 115 PROFESSIONAL PLACE, PO BOX 280
 BRIDGEPORT, WV 26330

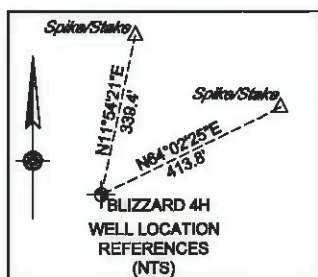
EQT PRODUCTION COMPANY
WELL # BLIZZARD 4H
PAGE 2 OF 2

UTM NAD83 ZONE 17N (METERS)	TOPHOLE	N-4372108.03	E-512800.64
	LANDING PT	N-4372487.79	E-513126.32
	BOT HOLE	N-4369485.83	E-514477.24
NAD27 SPC FEET NORTH ZONE	TOPHOLE	N-388514.84	E-1618688.11
	LANDING PT	N-387874.34	E-1619776.45
	BOT HOLE	N-357749.31	E-1624045.10
NAD27 GEO LAT(N) LONG(W)	TOPHOLE	N039.498425	W080.851294
	LANDING PT	N039.501653	W080.847500
	BOT HOLE	N039.474581	W080.831852

- NOTES
- IT IS NOT THE INTENTION OF THIS PLAT TO REPRESENT A COMPLETE BOUNDARY SURVEY OF THE PARCELS SHOWN HEREON. BOUNDARIES AS SHOWN TAKEN FROM RECORD DEED DESCRIPTIONS, TAX MAPS, AND SUPPLEMENTAL FIELD SURVEY.
 - OWNERSHIP DATA GATHERED FROM COUNTY PUBLIC TAX AND DEED RECORDS.
 - LATERAL GEOMETRY BASED ON WEST VIRGINIA SPC NORTH, NAD 27 DATUM

SURFACE PROPERTIES CROSSED BY BORE					
TAB	OWNER	DISTRICT	TAX MAP	PARCEL #	AREA
1	ROGER DALE BLIZZARD AND RUTH E. SPENCER	ELLSWORTH	2-15	33	90.17
2	WILLIAM S.AND OPAL MARIE NASH	ELLSWORTH	2-15	32	78.92
3	ALFRED ALONZO EDDY	ELLSWORTH	2-21	13	98.58
4	ROBERT I & FLOYD W. REED	ELLSWORTH	2-22	1	42.324
5	ROBERT I & FLOYD W. REED	ELLSWORTH	2-22	1	42.324
6	ANTHONY B. PARR	ELLSWORTH	2-22	41	222
7	DAVID & CHERYL LYNN BARRICK	ELLSWORTH	2-28	9	87.53

SURFACE PROPERTIES ADJOINING THOSE CROSSED BY BORE (ABOVE)					
TAB	OWNER	DISTRICT	TAX MAP	PARCEL #	AREA
A	ROGER DALE BLIZZARD AND RUTH E. SPENCER	ELLSWORTH	2-15	31	25
B	RODNEY A. & CANDACE L. NASH	ELLSWORTH	2-15	38	85.48
C	RICHARD D. & CATHY J. PYLES	ELLSWORTH	2-16	44	87.82
D	HAROLD L. JR. & DEBORAH C. HOLLOWAY	ELLSWORTH	2-22	3	22.95
E	GARY FORRESTER	ELLSWORTH	2-22	13	2.018
F	GARY FORRESTER	ELLSWORTH	2-22	2	1.5
G	STEPHEN H. & BARBARA J. DUNTHORN	ELLSWORTH	2-22	4	59.71
H	ROBERT I. & COREY I. REED	ELLSWORTH	2-22	1.1	4.49
I	STATORL USA ONSHORE	ELLSWORTH	2-22	5	84.874
J	RONALD P & SANDRA L. WEBB	ELLSWORTH	2-22	40	85
K	VICTOR A. & LORRAINE B. WEEKEY	ELLSWORTH	2-26	31	226.25
L	MICHAEL S. & JOYCE E. MERCER	ELLSWORTH	2-28	20	5.98
M	JESSE & KATELYN M. LENZ	ELLSWORTH	2-26	18	2.7
N	JEAN M. GUMP	ELLSWORTH	2-28	10.1	8.199
O	CAROLEE J. DANRELL	ELLSWORTH	2-26	8	30
P	RANDALL L. & KATHRYN M. WISE	ELLSWORTH	2-28	7	9
Q	ROBERT W. & JANICE GOFF	ELLSWORTH	2-22	46	11.25
R	RICHARD G. & LORETTA L. BAKER	ELLSWORTH	2-22	43	42.329
S	JAMES H. HILL ESTATE	ELLSWORTH	2-22	42	144.28
T	HAESSLY LAND & TIMBER CO.	ELLSWORTH	2-21	53	89.88
U	HAESSLY LAND & TIMBER CO	ELLSWORTH	2-21	53	89.88
V	CARL E. & ELSIE M. TAYLOR	ELLSWORTH	2-21	14	87.91
W	CARL E. & ELSIE M. TAYLOR	ELLSWORTH	2-21	8	63.5
X	RANDY & PAMELA L. LANCASTER	ELLSWORTH	2-15	34.1	11.417
Y	STATORL USA ONSHORE	ELLSWORTH	2-15	30	124.078
Z	DAVID M. & AMANDA M. TRIMBLE	ELLSWORTH	2-16	54	1
AA	CEMETERY	ELLSWORTH	2-22	N/A	N/A
BB	GARY O. & ANITA K. BENNETT	ELLSWORTH	2-21	7	1.75
CC	ROGER DALE BLIZZARD AND RUTH E. SPENCER	ELLSWORTH	2-21	8	3.747
DD	CLAYTON M. & RUTH ELEANOR SPENCER	ELLSWORTH	2-21	9	0.71
EE	ROGER DALE BLIZZARD AND RUTH E. SPENCER	ELLSWORTH	2-21	11	1
FF	ROGER DALE BLIZZARD AND RUTH E. SPENCER	ELLSWORTH	2-21	10	5
GG	ALFRED ALONZO EDDY	ELLSWORTH	2-21	13	98.58
HH	MATTHEW SCOTT & CHRISTY LYNN KILE	ELLSWORTH	2-21	13.1	1.418
II	DAVID EARL & JOYCE ANN GILES	ELLSWORTH	2-22	1.2	5.387
JJ	RODNEY A. & CANDACE L. NASH	ELLSWORTH	2-16	57	1
KK	RANDY E. & DANE D. NASH	ELLSWORTH	2-16	58	1

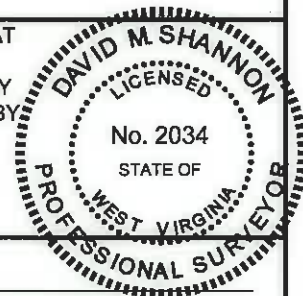


LEASE#	MINERAL OWNERS	AREA
870073	WILLIAM S. NASH, ET UX	79.825±
870651	STEPHANIE PERKINS, ET AL	98.59±
870350	MARY SUE TATE, ET AL	36.616±
870375	RIDGETOP CAPITAL, ET AL	5.61±
870015	ANTHONY B. PARR	222±
871007	GOLDEN EAGLE RESOURCES, LLC ET AL	89.13±

FILE NO. 7936-009
 DRAWN BY DMS
 SCALE 1 INCH = 2000 FEET
 MIN DEGREE OF ACCURACY 1 IN 2500
 PROVEN SOURCE OF ELEVATION SURVEY GRADE GPS

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

David M. Shannon PS #2034



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS



W.V.D.E.P.
 OFFICE OF OIL AND GAS
 601 57TH STREET
 CHARLESTON, WV 25304

DATE 10-27-2016

OPERATORS WELL NO. BLIZZARD 4H

API WELL NO.

47 095 02242

STATE COUNTY PERMIT

WASTE DISPOSAL

SHALLOW

ELEVATION (EXIST) 1004 (PAD) (PROP) N/A

QUADRANGLE SHIRLEY - SEC1

ACREAGE 90.17±

01/27/2017

ACREAGE 95.88±

LEASE# 870960

PROPOSED WORK: 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

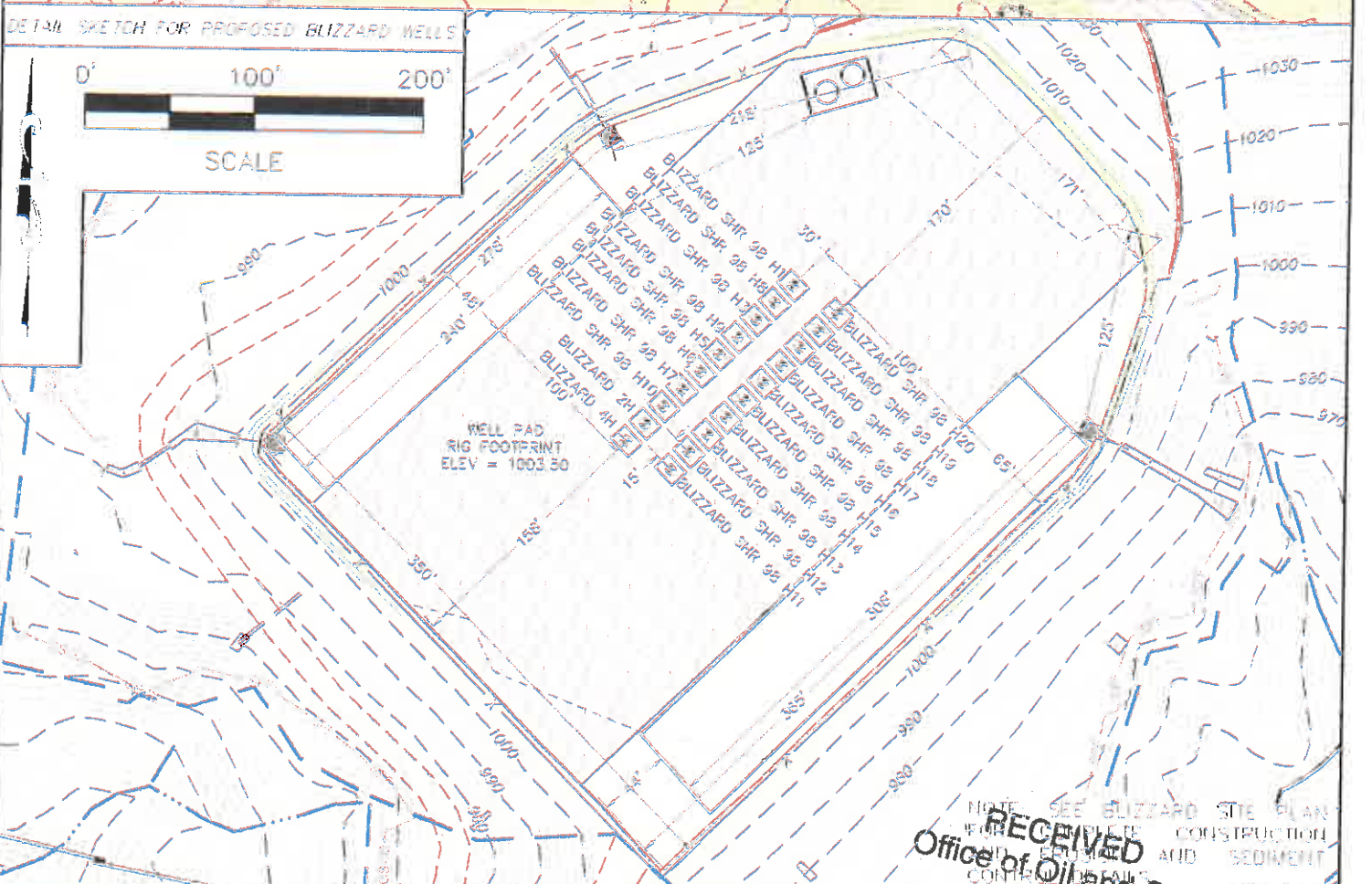
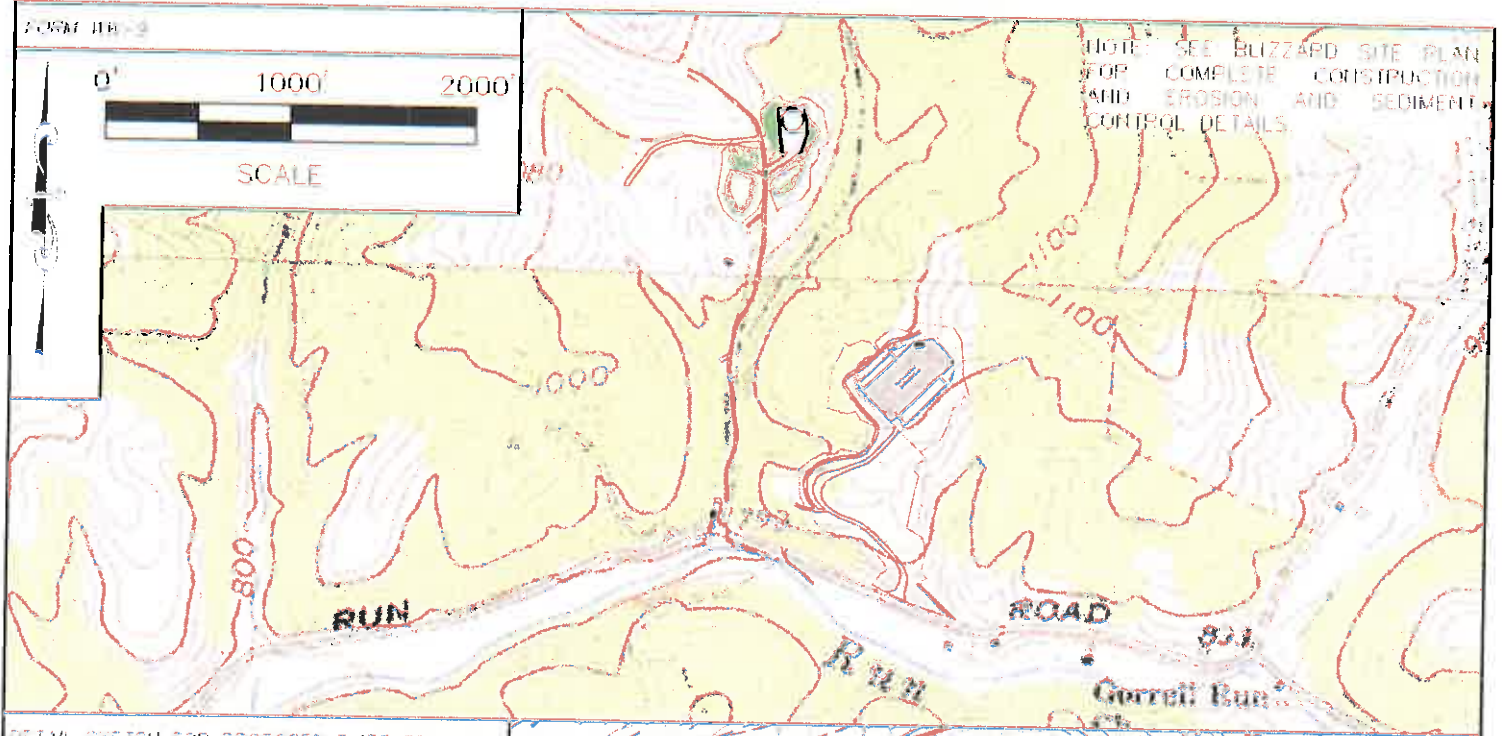
ESTIMATED DEPTH 6501

WELL OPERATOR: EQT PRODUCTION COMPANY

DESIGNATED AGENT REX C. RAY

ADDRESS 115 PROFESSIONAL PLACE, PO BOX 280
BRIDGEPORT, WV 26330

ADDRESS 115 PROFESSIONAL PLACE, PO BOX 280
BRIDGEPORT, WV 26330



RECEIVED
Office of Oil and Gas

Larsen Design Group
Architects Engineers Surveyors
2502 Cranberry Square
Morgantown, WV 26508
PHONE 304.777.2840
TOLL FREE 877.323.8603
FAX 304.777.9902
www.larsendesigngroup.com

RECLAMATION PLAN
EOT BLIZZARD WELL SITE
ELLSWORTH DISTRICT
FOR EOT

DATE	11-2-2016
BY	EMH
PROJECT NO.	7903-003
DRAWN BY	JMD

01/27/2017



November 2, 2016

Mr. Gene Smith
West Virginia Department of Environmental Protection
Office of Oil and Gas
601 57th Street SE
Charleston, WV 25304

Re: Monitoring Plan for Blizzard (2H & 4H)

Dear Mr. Smith,

There are no identifiable wells within 500 feet of the Blizzard well pad, therefore; no monitoring plan has been provided.

If you have any questions, please do not hesitate to contact me at (304) 848-0076.

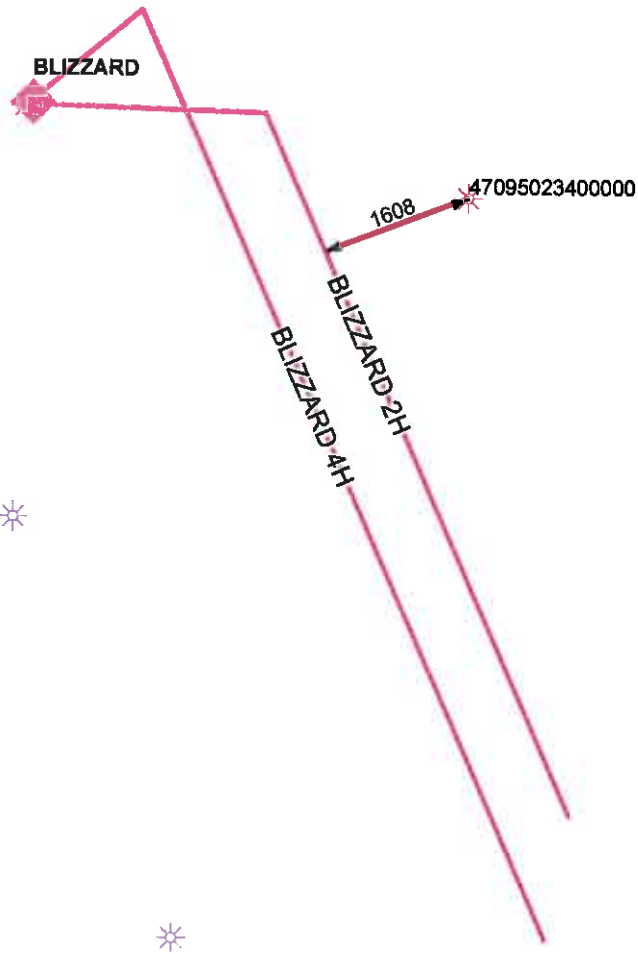
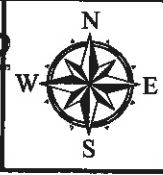
Sincerely,

A handwritten signature in blue ink, appearing to read 'Vicki Roark'.

Vicki Roark
Permitting Supervisor-WV

Enc.

4709502242

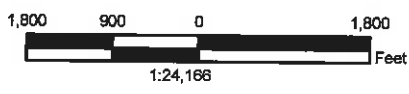


EQT EQT Corporation
625 Liberty Avenue
Pittsburgh, PA 15222

Blizzard Pad

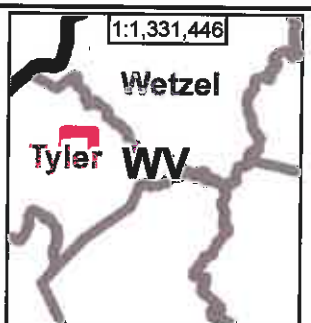
Vertical Offsets and Foreign Laterals within 500'

- Legend
- IHS_UB_WELL_SURFACE
 - SPACING
 - GENESCO
 - MARCELLUS
 - MIDDLESEX
 - POINT PLEASANT
 - LITICA



Disclaimer:

This map is confidential and is to be used only for the express informational purposes for which it was created. Unauthorized use, copying, or dissemination is strictly prohibited. EQT does not warrant the accuracy of the location of any items shown on this map, including, but not limited to, any structures, well or pipeline facilities, property boundaries, topography, roadways, or waterways. The items shown on the map may not have been placed on the map using survey lines or GPS coordinates. The specific location of any of the map items should be determined by a field survey performed by a licensed surveyor upon consultation with EQT.



Created By: Ryan Meats Printed By: meamR on 11/2/2016
Path: W:\COPCS2\dept\GIS_Department\GIS_Users\MeamR\Scratch\Vertical Offsets\Foreign Well Working Map.mxd

01/27/2017



4709502242

Where energy meets innovation.™

JBS
11/14/16

Site Specific Safety Plan

EQT
Blizzard Unit Pad

Middlebourne
Tyler County, WV

For Wells:

Blizzard 2H Blizzard 4H

Date Prepared: October 12, 2016

[Signature]
EQT Production

[Signature]
WV Oil and Gas Inspector

Permitting Supervisor
Title

OIL & GAS INS
Title

11-2-16
Date

11/14/16
Date

01/27/2017