

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

APR 14 2015

API 47-017-06329 County DODDRIDGE District WEST UNION  
Quad OXFORD 7.5' Pad Name OXF156 Field/Pool Name \_\_\_\_\_  
Farm name HEASTER, CHARLES P., ET AL Well Number 513140  
Operator (as registered with the OOG) EQT Production Company  
Address 625 Liberty Ave. EQT Plaza, Suite 1700 City Pittsburgh State PA Zip 15222

As Drilled location NAD 83/UTM Attach an as-drilled plat, profile view, and deviation survey  
Top hole Northing 4342156.5 Easting 518345.4  
Landing Point of Curve Northing 4342363.1 Easting 518532.0  
Bottom Hole Northing 4344567.4 Easting 517441.2

Elevation (ft) 1202 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)  
SBM 12.5ppg - powdered hydrocarbon resin, calcium carbonate, ground almond hulls, barium sulfate, calcium chloride, lecithin liquid, organophilic clay, polyaminated fatty acid, calcium hydroxide, polyimide surfactant, modified fatty acid, dimer.trimer fatty acid, ground walnut hulls, refined base oil.

Date permit issued 11/20/2013 Date drilling commenced 5/7/2014 Date drilling ceased 8/20/2014  
Date completion activities began 1/1/2015 Date completion activities ceased 1/18/2015  
Verbal plugging (Y/N) N Date permission granted N/A Granted by N/A

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

Freshwater depth(s) ft 169,216,320,386,462,600,1084 Open mine(s) (Y/N) depths N  
Salt water depth(s) ft 1456 Void(s) encountered (Y/N) depths N  
Coal depth(s) ft 1272,1312 Cavern(s) encountered (Y/N) depths N  
Is coal being mined in area (Y/N) N

Reviewed by:  
AL. 5/26/15  
W.S. 6/12/2015

API 47-017 - 06329 Farm name HEASTER, CHARLES P., ET AL Well number 513140

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	24"	20"	40'	New	94lb/ft	N/A	Y
Surface	17-1/2"	13-3/8"	1,215'	New	54.5lb/ft	N/A	Y
Coal							
Intermediate 1	12-3/8"	9-5/8"	5,255'	New	40lb/ft	N/A	Y
Intermediate 2							
Intermediate 3							
Production	8-1/2"	5-1/2"	15,344'	New	20lb/ft	N/A	N
Tubing							
Packer type and depth set							

Comment Details \_\_\_\_\_

CEMENT DATA	Class/Type of Cement	Number of Sacks	Slurry wt (ppg)	Yield (ft <sup>3</sup> /sks)	Volume (ft <sup>3</sup> )	Cement Top (MD)	WOC (hrs)
Conductor	Class A	38	15.6	1.18	44.84	0	8
Surface	Class A	975	15.6	1.18	1150	0	8
Coal							
Intermediate 1	Class A 5050 POZ/Class A/Class A	380/340/1115	14.2/15.6/15.6	1.28/1.18/1.18	2203	0	8
Intermediate 2							
Intermediate 3							
Production	Class A/Class H	300/1065	14.2/15.2	1.26/1.97	2476	5,500'	72
Tubing							

Drillers TD (ft) 15,344'      Loggers TD (ft) \_\_\_\_\_  
 Deepest formation penetrated Marcellus      Plug back to (ft) \_\_\_\_\_  
 Plug back procedure \_\_\_\_\_

Kick off depth (ft) 5,286'

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    Conductor- N/A  
 Surface-Bowspring centralizer on shoe track and every 300' to surface  
 Intermediate-Bowspring centralizer on shoe track and every 500' to surface  
 Production- Composite bodied centralizers on every joint from Shoe track up to 4,286'

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 \_\_\_\_\_



API 47- 017 - 06329 Farm name HEASTER, CHARLES P., ET AL Well number 513140

PRODUCING FORMATION(S)	DEPTHS	
Marcellus	6,598'	TVD 7,037' MD

Please insert additional pages as applicable.

GAS TEST  Build up  Drawdown  Open Flow OIL TEST  Flow  Pump  
SHUT-IN PRESSURE Surface 1,995 psi Bottom Hole N/A psi DURATION OF TEST 208.5 hrs

OPEN FLOW Gas 9,788 mcfpd Oil 0 bpd NGL 48 bpd Water 559.7 bpd GAS MEASURED BY  Estimated  Orifice  Pilot

LITHOLOGY/ FORMATION	TOP DEPTH IN FT NAME TVD	BOTTOM DEPTH IN FT TVD	TOP DEPTH IN FT MD	BOTTOM DEPTH IN FT MD	DESCRIBE ROCK TYPE AND RECORD QUANTITY AND TYPE OF FLUID (FRESHWATER, BRINE, OIL, GAS, H <sub>2</sub> S, ETC)
	0		0		

Please insert additional pages as applicable.


Drilling Contractor Savanna Drilling  
Address 2204 Timberloch Place Suite 230 City Woodlands State TX Zip 77380

Logging Company Hoss Co. Services LLC  
Address 614 Trotters Lane City Charleston State WV Zip 25312

Cementing Company Nabors Completion & Production Services Co.  
Address PO BOX 975682 City Dallas State TX Zip 75397-5682

Stimulating Company FTSI  
Address 301 E 18th Street City Cisco State TX Zip 76437

Please insert additional pages as applicable.

Completed by James Helmick Telephone 412-395-5518  
Signature  Title Completions VP Date 4/13/2015

Submittal of Hydraulic Fracturing Chemical Disclosure Information Attach copy of FRACFOCUS Registry

Formation Name	Final Top MD (ftGL) (ft)	Final Top TVD (ft)	Final Btm MD (ftGL) (ft)	Final Btm TVD (ft)
FRESH WATER ZONE	1	1	1,084.00	1,084.00
SAND/SHALE	1,084.00	1,084.00	1,272.00	1,271.90
COAL	1,272.00	1,271.90	1,277.00	1,276.90
SAND/SHALE	1,277.00	1,276.90	1,312.00	1,311.90
COAL	1,312.00	1,311.90	1,318.00	1,317.90
SAND/SHALE	1,318.00	1,317.90	1,513.00	1,512.90
MAXTON	1,513.00	1,512.90	1,865.00	1,864.90
BIG LIME	1,865.00	1,864.90	1,923.00	1,922.90
KEENER	1,923.00	1,922.90	2,163.00	2,162.90
WEIR	2,163.00	2,162.90	2,358.00	2,357.90
BEREA	2,358.00	2,357.90	2,367.00	2,366.90
GANTZ	2,367.00	2,366.90	2,442.00	2,441.90
FIFTY FOOT	2,442.00	2,441.90	2,563.00	2,562.90
THIRTY FOOT	2,563.00	2,562.90	2,612.00	2,611.90
GORDON	2,612.00	2,611.90	2,710.00	2,709.90
FOURTH SAND	2,710.00	2,709.90	2,918.00	2,917.90
BAYARD	2,918.00	2,917.90	3,207.00	3,206.90
WARREN	3,207.00	3,206.90	3,293.00	3,292.90
SPEECHLEY	3,293.00	3,292.90	3,796.00	3,795.90
BALLTOWN A	3,796.00	3,795.90	4,424.00	4,423.70
RILEY	4,424.00	4,423.70	4,871.00	4,870.30
BENSON	4,871.00	4,870.30	5,122.00	5,120.80
ALEXANDER	5,122.00	5,120.80	6,681.00	6,401.50
MIDDLE SEX	6,681.00	6,401.50	6,760.00	6,453.50
GENESSE	6,760.00	6,453.50	6,868.00	6,517.00
GENESO	6,868.00	6,517.00	6,956.00	6,561.80
TULLY	6,956.00	6,561.80	7,007.00	6,585.30
HAMILTON	7,007.00	6,585.30	7,037.00	6,597.90
MARCELLUS	7,037.00	6,597.90	15,344.00	6,693.40

513140 - 47-017-06329-0000 - Perforations

Stage Number	Perforation Date	Top Perf Depth (ftKB)	Bottom Perf Depth (ftKB)	Number of Shots	Formation
Initiation Sleeve	12/26/2014	15,317.00	15,320.00	10	MARCELLUS
1	1/1/2015	15,197.00	15,289.00	32	MARCELLUS
2	1/1/2015	15,045.00	15,169.00	40	MARCELLUS
3	1/2/2015	14,897.00	15,019.00	40	MARCELLUS
4	1/2/2015	14,747.00	14,869.00	40	MARCELLUS
5	1/2/2015	14,597.00	14,719.00	40	MARCELLUS
6	1/3/2015	14,447.00	14,568.00	40	MARCELLUS
7	1/3/2015	14,297.00	14,419.00	40	MARCELLUS
8	1/4/2015	14,147.00	14,269.00	40	MARCELLUS
9	1/4/2015	13,997.00	14,119.00	40	MARCELLUS
10	1/4/2015	13,847.00	13,969.00	40	MARCELLUS
11	1/5/2015	13,697.00	13,817.00	40	MARCELLUS
12	1/5/2015	13,547.00	13,669.00	40	MARCELLUS
13	1/5/2015	13,397.00	13,519.00	40	MARCELLUS
14	1/5/2015	13,247.00	13,369.00	40	MARCELLUS
15	1/6/2015	13,097.00	13,219.00	40	MARCELLUS
16	1/6/2015	12,947.00	13,069.00	40	MARCELLUS
17	1/6/2015	12,797.00	12,919.00	40	MARCELLUS
18	1/7/2015	12,647.00	12,769.00	40	MARCELLUS
19	1/8/2015	12,497.00	12,619.00	40	MARCELLUS
20	1/8/2015	12,347.00	12,469.00	40	MARCELLUS
21	1/9/2015	12,197.00	12,319.00	40	MARCELLUS
22	1/9/2015	12,047.00	12,169.00	40	MARCELLUS
23	1/10/2015	11,897.00	12,019.00	40	MARCELLUS
24	1/10/2015	11,747.00	11,869.00	40	MARCELLUS
25	1/10/2015	11,597.00	11,719.00	40	MARCELLUS
26	1/10/2015	11,447.00	11,566.00	40	MARCELLUS
27	1/11/2015	11,289.00	11,395.00	40	MARCELLUS
28	1/11/2015	11,147.00	11,267.00	40	MARCELLUS
29	1/11/2015	10,997.00	11,119.00	40	MARCELLUS
30	1/12/2015	10,847.00	10,967.00	40	MARCELLUS
31	1/12/2015	10,699.00	10,819.00	40	MARCELLUS
32	1/12/2015	10,547.00	10,669.00	40	MARCELLUS
33	1/12/2015	10,397.00	10,519.00	40	MARCELLUS
34	1/12/2015	10,247.00	10,369.00	40	MARCELLUS
35	1/13/2015	10,097.00	10,219.00	40	MARCELLUS
36	1/13/2015	9,947.00	10,067.00	40	MARCELLUS
37	1/13/2015	9,797.00	9,919.00	40	MARCELLUS
38	1/13/2015	9,647.00	9,765.00	40	MARCELLUS
39	1/14/2015	9,497.00	9,619.00	40	MARCELLUS
40	1/14/2015	9,350.00	9,469.00	40	MARCELLUS
41	1/14/2015	9,197.00	9,319.00	40	MARCELLUS
42	1/15/2015	9,047.00	9,167.00	40	MARCELLUS
43	1/15/2015	8,897.00	9,017.00	40	MARCELLUS
44	1/15/2015	8,747.00	8,869.00	40	MARCELLUS
45	1/15/2015	8,596.00	8,717.00	40	MARCELLUS
46	1/15/2015	8,447.00	8,569.00	40	MARCELLUS
47	1/16/2015	8,297.00	8,419.00	40	MARCELLUS
48	1/16/2015	8,147.00	8,269.00	40	MARCELLUS
49	1/16/2015	7,997.00	8,119.00	40	MARCELLUS
50	1/17/2015	7,847.00	7,967.00	40	MARCELLUS
51	1/17/2015	7,697.00	7,817.00	40	MARCELLUS
52	1/17/2015	7,547.00	7,667.00	40	MARCELLUS
53	1/17/2015	7,397.00	7,519.00	40	MARCELLUS
54	1/18/2015	7,247.00	7,368.00	40	MARCELLUS

513140 - 47-017-06329-0000 - Stimulated Stages

Stage Number	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)
Initiation Sleeve	1/1/2015	14.7	8,211.00	9,258.00	6,159.00	0.00	1883	0
1	1/1/2015	81.1	8,481.00	8,843.00	3,866.00	250,752.00	6820	0
2	1/1/2015	81.8	8,482.00	8,747.00	4,773.00	250,839.00	6324	0
3	1/2/2015	84.9	8,655.00	8,892.00	4,382.00	250,907.00	6280	0
4	1/2/2015	83.1	8,551.00	8,756.00	4,224.00	253,125.00	6225	0
5	1/2/2015	83.5	8,603.00	8,749.00	4,436.00	235,854.00	6776	0
5.01	1/3/2015	6.9	6,004.00	8,691.00	5,009.00	0.00	2124	0
6	1/3/2015	85.7	8,675.00	8,561.00	4,273.00	252,298.00	6201	0
7	1/3/2015	80.8	8,671.00	9,041.00	5,709.00	249,628.00	9694	0
8	1/4/2015	84.3	8,398.00	8,783.00	4,452.00	225,102.00	6267	0
9	1/4/2015	82.9	8,515.00	9,044.00	4,828.00	231,856.00	5925	0
10	1/4/2015	81.7	8,599.00	9,117.00	5,311.00	190,251.00	5581	0
11	1/5/2015	81.7	8,565.00	9,137.00	4,393.00	185,978.00	5891	0
12	1/5/2015	86.5	8,386.00	8,883.00	4,965.00	228,720.00	6201	0
13	1/5/2015	84.9	8,343.00	8,668.00	5,153.00	234,309.00	6001	0
14	1/6/2015	86.5	8,425.00	9,279.00	4,647.00	250,890.00	5974	0
15	1/6/2015	83.3	8,580.00	9,394.00	5,767.00	220,920.00	6083	0
15.01	1/6/2015	9.1	5,102.00	7,153.00	5,302.00	0.00	1632	0
16	1/7/2015	92.5	8,209.00	8,522.00	4,902.00	252,987.00	6655	0
17	1/7/2015	96.6	8,592.00	8,949.00	4,944.00	249,801.00	6411	0
18	1/7/2015	92.1	8,575.00	9,035.00	5,167.00	252,528.00	6095	0
19	1/8/2015	96.5	8,730.00	8,868.00	5,143.00	250,872.00	6326	0
20	1/9/2015	92.5	8,332.00	8,683.00	5,157.00	250,126.00	7060	0
21	1/9/2015	94.2	8,503.00	8,910.00	5,401.00	250,998.00	5723	0
22	1/9/2015	96.2	8,503.00	8,656.00	5,274.00	249,477.00	5609	0
23	1/10/2015	90.6	8,366.00	8,613.00	5,197.00	250,718.00	6069	0
24	1/10/2015	92	8,539.00	9,035.00	5,211.00	249,801.00	6059	0
25	1/10/2015	93.1	8,452.00	8,843.00	5,385.00	249,463.00	5524	0
26	1/11/2015	91.5	8,436.00	8,954.00	4,193.00	241,209.00	5592	0
27	1/11/2015	87.6	8,331.00	9,341.00	5,526.00	244,346.00	6710	0
28	1/11/2015	84.8	8,050.00	8,916.00	5,276.00	250,166.00	6082	0
29	1/11/2015	91.7	8,344.00	8,667.00	5,426.00	250,003.00	5698	0
30	1/12/2015	93.4	8,208.00	8,531.00	4,764.00	250,581.00	5633	0
31	1/12/2015	91.9	7,914.00	8,410.00	4,987.00	250,869.00	6028	0
32	1/12/2015	93.6	7,785.00	8,463.00	4,636.00	251,245.00	6078	0
33	1/12/2015	100.6	8,150.00	8,574.00	4,607.00	250,150.00	5741	0
34	1/13/2015	99.9	8,267.00	8,561.00	5,119.00	250,463.00	5535	0
35	1/13/2015	101.1	7,869.00	8,229.00	4,801.00	248,901.00	5867	0
36	1/13/2015	95.6	7,754.00	8,024.00	4,925.00	248,806.00	5962	0
37	1/13/2015	95.6	8,076.00	8,300.00	4,676.00	251,749.00	6011	0
38	1/13/2015	99.5	8,177.00	8,756.00	5,464.00	250,652.00	5475	0
39	1/14/2015	100.1	7,729.00	8,188.00	4,366.00	251,704.00	6215	0
40	1/14/2015	93.7	8,269.00	9,138.00	4,305.00	250,456.00	6411	0
41	1/15/2015	99.4	7,928.00	8,103.00	4,643.00	250,770.00	5442	0
42	1/15/2015	98.4	8,090.00	8,722.00	4,855.00	248,021.00	5270	0
43	1/15/2015	100.2	8,027.00	8,234.00	4,492.00	249,692.00	5753	0
44	1/15/2015	100.4	8,106.00	8,749.00	5,047.00	249,217.00	6095	0
45	1/15/2015	100.5	8,020.00	8,635.00	4,495.00	248,741.00	5390	0
46	1/15/2015	100.3	7,889.00	8,521.00	4,574.00	250,709.00	5302	0
47	1/15/2015	99.5	7,759.00	7,890.00	4,662.00	250,700.00	5476	0
48	1/16/2015	100.3	7,826.00	8,124.00	4,987.00	250,481.00	5783	0
49	1/17/2015	90.5	9,026.00	9,376.00	5,241.00	250,711.00	6888	0
50	1/17/2015	96	8,013.00	8,050.00	5,257.00	251,219.00	5767	0
51	1/17/2015	92.3	8,776.00	9,037.00	5,281.00	249,670.00	5695	0
52	1/17/2015	99.2	8,055.00	8,684.00	5,342.00	249,704.00	5395	0
53	1/17/2015	100.2	7,971.00	8,364.00	5,356.00	250,407.00	5280	0
54	1/18/2015	100.8	7,426.00	7,980.00	4,901.00	251,781.00	5320	0

# Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	1/1/2015
Job End Date:	1/18/2015
State:	West Virginia
County:	Doddridge
API Number:	47-017-06329-00-00
Operator Name:	EQT Production
Well Name and Number:	513140
Longitude:	-80.78762700
Latitude:	39.22842400
Datum:	NAD83
Federal/Tribal Well:	NO
True Vertical Depth:	6,598
Total Base Water Volume (gal):	14,669,298
Total Base Non Water Volume:	0



## 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
Water	FTS International	Carrier/Base Fluid	Water	7732-18-5	100.00000	89.91274	None
Sand (Proppant)	FTS International	Proppant	Crystalline Silica	14808-60-7	100.00000	9.74030	None
Hydrochloric Acid (15%)	FTS International	Acidizing	Hydrochloric Acid	7647-01-0	15.00000	0.02951	None
FRW-600	FTS International	Friction reducer	Hydrotreated light distillate	64742-47-8	30.00000	0.02171	None
B-10	FTS International	High pH buffer	Ammonium acetate	631-61-8	6.00000	0.00434	None
HVG-1	FTS International	Gelling agent	Potassium carbonate	584-08-7	48.00000	0.01263	None
			Potassium hydroxide	1310-58-3	20.00000	0.00526	None
			Petroleum distillate	64742-47-8	55.00000	0.00435	None
			Guar gum	9000-30-0	50.00000	0.00395	None
			Surfactant	68439-51-0	2.00000	0.00016	None
			Clay	14808-60-7	2.00000	0.00016	None
ICI-3240	FTS International	Biocide	Dazomet	533-74-4	24.00000	0.00243	None



CS-500-SI	FTS International	Scale inhibitor	Sodium hydroxide	1310-73-2	4.00000	0.00041	None
FRW-900	FTS International	Friction reducer	Ethylene glycol	107-21-1	10.00000	0.00246	None
			Hydrotreated light distillate	64742-47-8	30.00000	0.00096	None
			Alkyl Alcohol	Proprietary	10.00000	0.00032	None
CI-150	FTS International	Acid Corrosion Inhibitor	Oxyalkylated alcohol A	Proprietary	5.00000	0.00016	None
			Isopropanol	67-63-0	30.00000	0.00011	None
			Organic amine resin salt	Proprietary	30.00000	0.00011	None
			Ethylene glycol	107-21-1	30.00000	0.00011	None
			Aromatic aldehyde	Proprietary	10.00000	0.00004	None
			Quaternary ammonium compound	Proprietary	10.00000	0.00004	None
APB-1	FTS International	Breaker	Dimethylformamide	68-12-2	10.00000	0.00004	None
NE-100	FTS International	Non-emulsifier	Ammonium persulfate	7727-54-0	95.00000	0.00011	None
			2-Propanol	67-63-0	10.00000	0.00003	None
			2-Butoxyethanol	111-76-2	10.00000	0.00003	None
FE-100L	FTS International	Iron control	Dodecylbenzenesulfonic acid	27176-87-0	5.00000	0.00002	None
Chlorine Dioxide Solution - SVP-Pure	Neptune	Disinfectant and/or oxidizer	Citric acid	77-92-9	55.00000	0.00005	None
			Chlorine dioxide	10049-04-4	0.30000	0.00001	None

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.

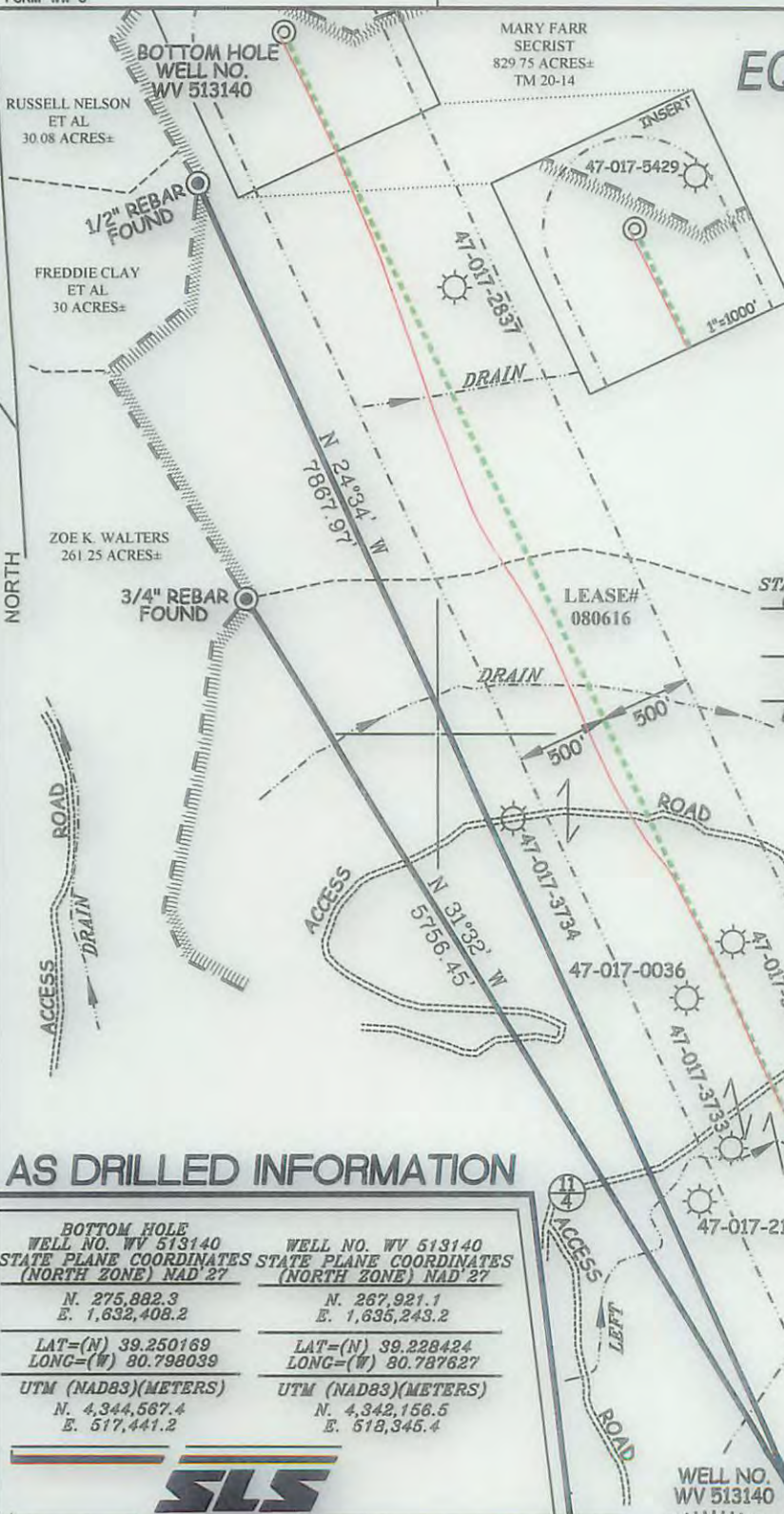
\* Total Water Volume sources may include fresh water, produced water, and/or recycled water

\*\* 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)

# EQT PRODUCTION COMPANY LEWIS MAXWELL LEASE 2654 ACRES± WELL NO. WV 513140

LONGITUDE 80°45'00"



LANDING POINT WELL NO. WV 513140 STATE PLANE COORDINATES (NORTH ZONE) NAD 27	BOTTOM HOLE WELL NO. WV 513140 STATE PLANE COORDINATES (NORTH ZONE) NAD 27
N. 268,715.5 E. 1,635,785.5	N. 275,893.5 E. 1,632,438.3
LAT=(N) 39.230627 LONG=(W) 80.785753	LAT=(N) 39.250200 LONG=(W) 80.797934
UTM (NAD83)(METERS) N. 4,342,401.3 E. 518,506.6	UTM (NAD83)(METERS) N. 4,344,571.0 E. 517,450.4

WELL NO. WV 513140 STATE PLANE COORDINATES (NORTH ZONE) NAD 27
N. 267,921.1 E. 1,635,243.2
LAT=(N) 39.228424 LONG=(W) 80.787627
UTM (NAD83)(METERS) N. 4,342,156.5 E. 518,345.4

### NOTES ON SURVEY

- TIES TO WELLS, CORNERS AND REFERENCES ARE BASED ON GRID NORTH FOR THE WV STATE PLANE COORDINATE SYSTEM NORTH ZONE NAD 27.
- LEASE BOUNDARY SHOWN HEREON TAKEN FROM DB 28 PG 177.
- SURFACE OWNER AND ADJOINER INFORMATION TAKEN FROM THE ASSESSOR AND COUNTY CLERK RECORDS OF DODDRIDGE COUNTY IN JULY, 2013.
- WELL LAT./LONG. (NAD 27) ESTABLISHED BY DGPS(SURVEY GRADE TIE TO CORS NETWORK).
- PLAT DATED 07/15/13 REVISED 08/01/13 TO SHOW 500' SPACING FROM PROPOSED LATERAL ETC.
- AS DRILLED INFORMATION PROVIDED BY EQT.

### AS DRILLED INFORMATION

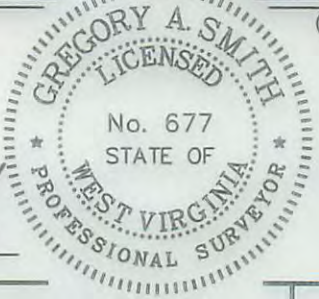
BOTTOM HOLE WELL NO. WV 513140 STATE PLANE COORDINATES (NORTH ZONE) NAD 27	WELL NO. WV 513140 STATE PLANE COORDINATES (NORTH ZONE) NAD 27
N. 275,882.3 E. 1,632,408.2	N. 267,921.1 E. 1,635,243.2
LAT=(N) 39.250169 LONG=(W) 80.798039	LAT=(N) 39.228424 LONG=(W) 80.787627
UTM (NAD83)(METERS) N. 4,344,567.4 E. 517,441.2	UTM (NAD83)(METERS) N. 4,342,156.5 E. 518,345.4



LEGEND	
AS DRILLED	<span style="color: red;">—</span>
PROPOSED	<span style="color: green;">---</span>

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.

P.S. 677  
*Gregory A. Smith*



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS.  
 DATE AUGUST 1, 20 13  
 REVISED DATE AUGUST 27, 20 14  
 OPERATORS WELL NO. WV 513140  
 API WELL NO. 47  
 STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY	1 / 200	FILE NO. 6980ASDRILLED513140
PROVEN SOURCE OF ELEVATION	DGPS (SURVEY GRADE TIE TO CORS NETWORK)	
		SCALE 1" = 1000'

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

WELL TYPE: OIL  GAS  LIQUID INJECTION  WASTE DISPOSAL  IF "GAS" PRODUCTION  STORAGE  DEEP  SHALLOW

LOCATION: ELEVATION 1,244'(GROUND) 1,202'(PROPOSED) WATERSHED LEFT FORK ARNOLDS CREEK  
 DISTRICT WEST UNION COUNTY DODDRIDGE QUADRANGLE OXFORD 7.5'  
 SURFACE OWNER CHARLES P. HEASTER ET AL ACREAGE 901.72 ±  
 ROYALTY OWNER LEWIS MAXWELL HRS ACREAGE 2654 ±

PROPOSED WORK: DRILL  CONVERT  DRILL DEEPER  REDRILL  FRACTURE OR STIMULATE  PLUG OFF OLD FORMATION  PERFORATE NEW FORMATION  PLUG AND ABANDON  CLEAN OUT AND REPLUG  OTHER

PHYSICAL CHANGE IN WELL (SPECIFY) \_\_\_\_\_ TARGET FORMATION MARCELLUS  
 ESTIMATED DEPTH \_\_\_\_\_

06/12/2015

WELL OPERATOR	EQT PRODUCTION COMPANY	DESIGNATED AGENT	REX C. RAY
ADDRESS	115 PROFESSIONAL PLACE P.O. BOX 280 BRIDGEPORT, WV 26330	ADDRESS	115 PROFESSIONAL PLACE P.O. BOX 280 BRIDGEPORT, WV 26330

COUNTY NAME PERMIT