

APPROVED

NAME: *Paul G. Fisher*

DATE: 1/10/2016

Well Operator's Report of Well Work



Where energy meets innovation.

Well Number: 512484

API: 47 - 017 - 06388

Submission: Initial Amended

Notes: Stimulation Notes:

Re-perforated stages 1 (1.1), 16 (16.1)

Combined stages [1, 1.1, 2, 2.1] / [4, 4.1, 5] / [11, 11.1, 12]

Performed additional injection tests prior to stages 1, 1.1, 3

Weatherford International fractured stages 1 - 2

FTS International Services fractured stages 3 - 25

Correction to Production Cement Top (MD)

RECEIVED
Office of Oil and Gas

DEC 21 2015

WV Department of
Environmental Protection

02/12/2016

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

API 47 - 170 - 6388 County DODDRIDGE District WEST UNION
Quad OXFORD 7.50 Pad Name OXF150 Field/Pool Name _____
Farm name HARPER, LUCY E. Well Number 512484
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 4341567.0 Easting 518032.7
Landing Point of Curve Northing 4341578.8 Easting 517720.6
Bottom Hole Northing 4342502.1 Easting 517266.6

Elevation (ft) 1259 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 12.2ppg - 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 1/17/2014 Date drilling commenced 3/26/2014 Date drilling ceased 5/22/2014
Date completion activities began 8/5/2014 Date completion activities ceased 11/25/2014
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 155,165,258,294,395,449 Open mine(s) (Y/N) depths N
Salt water depth(s) ft NONE FOUND Void(s) encountered (Y/N) depths N
Coal depth(s) ft 343,644,1479 Cavern(s) encountered (Y/N) depths N
Is coal being mined in area (Y/N) N

Reviewed by: _____

02/12/2016

API 47-170 - 6388 Farm name HARPER, LUCY E. Well number 512484

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"	1,011'	New	54.5lb/ft	N/A	Y
Coal							
Intermediate 1	12-3/8"	9-5/8"	2,906'	New	40lb/ft	N/A	Y
Intermediate 2							
Intermediate 3							
Production	8-1/2"	5-1/2"	10,823'	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 ³ /sks)	Volume (ft ³)	Cement Top (MD)	WOC (hrs)
Conductor	Class A	38	15.6	1.18	44.84	0	8
Surface	Class A	815	15.6	1.19	970	0	8
Coal							
Intermediate 1	Class A	1060	15.6	1.19	1261	0	8
Intermediate 2							
Intermediate 3							
Production	Class A/Class H	595/480	14.2/15.2	1.26/1.97	1,695	3,444'	72
Tubing							

Drillers TD (ft) 10,824' Loggers TD (ft) N/A
 Deepest formation penetrated Marcellus Plug back to (ft) N/A
 Plug back procedure N/A

Kick off depth (ft) 5,256'

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 4,250'

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 _____

Formation Name	Top MD (ftGL) (ft)	Top TVD (ft)	Btm MD (ftGL) (ft)	Btm TVD (ft)
FRESH WATER ZONE	1	1	449	449
SAND / SHALE	1	1	343	343
COAL	343	343	349	349
SAND / SHALE	349	349	644	644
COAL	644	644	647	647
SAND / SHALE	647	647	1,479.00	1,479.00
COAL	1,479.00	1,479.00	1,485.00	1,485.00
SAND / SHALE	1,485.00	1,485.00	1,593.00	1,593.00
MAXTON	1,593.00	1,593.00	1,662.00	1,662.00
SAND / SHALE	1,662.00	1,662.00	1,774.00	1,774.00
BIG LIME	1,774.00	1,774.00	1,824.00	1,824.00
SAND / SHALE	1,824.00	1,824.00	1,889.00	1,888.90
BIG INJUN	1,889.00	1,888.90	1,911.00	1,910.90
SAND / SHALE	1,911.00	1,910.90	2,058.00	2,057.90
WEIR	2,058.00	2,057.90	2,174.00	2,173.90
SAND / SHALE	2,174.00	2,173.90	2,273.00	2,272.90
GANTZ	2,273.00	2,272.90	2,333.00	2,332.90
SAND / SHALE	2,333.00	2,332.90	2,368.00	2,367.90
FIFTY FOOT	2,368.00	2,367.90	2,417.00	2,416.90
SAND / SHALE	2,417.00	2,416.90	2,465.00	2,464.90
THIRTY FOOT	2,465.00	2,464.90	2,513.00	2,512.90
GORDON	2,513.00	2,512.90	2,613.00	2,612.90
FORTH SAND	2,613.00	2,612.90	2,704.00	2,703.90
SAND / SHALE	2,704.00	2,703.90	2,785.00	2,784.90
BAYARD	2,785.00	2,784.90	2,849.00	2,848.90
SAND / SHALE	2,849.00	2,848.90	3,270.00	3,269.90
WARREN	3,270.00	3,269.90	3,333.00	3,332.90
B-5	3,333.00	3,332.90	3,340.00	3,339.90
SPEECHLEY	3,340.00	3,339.90	3,851.00	3,850.90
BALLTOWN A	3,851.00	3,850.90	4,029.00	4,028.90
BALLTOWN B	4,029.00	4,028.90	4,225.00	4,224.80
BRADFORD	4,225.00	4,224.80	4,482.00	4,481.80
RILEY	4,482.00	4,481.80	4,918.00	4,917.60
BENSON	4,918.00	4,917.60	5,171.00	5,170.50
ALEXANDER	5,171.00	5,170.50	6,131.00	5,974.40
RHINESTREET UPPER	6,131.00	5,974.40	6,269.00	6,086.10
RHINESTREET	6,269.00	6,086.10	6,276.00	6,091.90
SONYEA	6,276.00	6,091.90	6,436.00	6,218.30
MIDDLESEX	6,436.00	6,218.30	6,781.00	6,471.40
GENESSEE	6,781.00	6,471.40	6,960.00	6,569.70
GENESE0	6,960.00	6,569.70	7,032.00	6,599.20
TULLY	7,032.00	6,599.20	7,099.00	6,623.60
HAMILTON	7,099.00	6,623.60	7,138.00	6,636.10
MARCELLUS	7,138.00	6,636.10	10,824.00	6,730.80

512484 - 47-017-06388-0000 - Perforations

Stage Number	Perforation Date	Top Perf Depth (ftKB)	Bottom Perf Depth (ftKB)	Number of Shots	Formation
Initiation Sleeve	8/4/2014	10,795.00	10,797.00	10	MARCELLUS
1	8/8/2014	10,647.00	10,764.00	32	MARCELLUS
1.1 (Re-Perf)	8/13/2014	10,640.00	10,655.00	32	MARCELLUS
2	8/13/2014	10,490.00	10,610.00	40	MARCELLUS
3	11/5/2014	10,326.00	10,476.00	40	MARCELLUS
4	11/18/2014	10,190.00	10,310.00	40	MARCELLUS
5	11/18/2014	10,040.00	10,160.00	40	MARCELLUS
6	11/19/2014	9,890.00	10,010.00	40	MARCELLUS
7	11/19/2014	9,740.00	9,860.00	40	MARCELLUS
8	11/19/2014	9,590.00	9,710.00	40	MARCELLUS
9	11/19/2014	9,438.00	9,560.00	40	MARCELLUS
10	11/20/2014	9,290.00	9,410.00	40	MARCELLUS
11	11/20/2014	9,140.00	9,260.00	40	MARCELLUS
12	11/21/2014	8,990.00	9,110.00	40	MARCELLUS
13	11/21/2014	8,840.00	8,960.00	40	MARCELLUS
14	11/21/2014	8,690.00	8,810.00	40	MARCELLUS
15	11/22/2014	8,540.00	8,660.00	40	MARCELLUS
16	11/22/2014	8,390.00	8,510.00	40	MARCELLUS
16.1 (Re-Perf)	11/23/2014	8,376.00	8,526.00	24	MARCELLUS
17	11/22/2014	8,240.00	8,360.00	40	MARCELLUS
18	11/23/2014	8,090.00	8,206.00	40	MARCELLUS
19	11/23/2014	7,940.00	8,059.00	40	MARCELLUS
20	11/23/2014	7,790.00	7,910.00	40	MARCELLUS
21	11/24/2014	7,642.00	7,760.00	40	MARCELLUS
22	11/24/2014	7,490.00	7,610.00	40	MARCELLUS
23	11/24/2014	7,340.00	7,458.00	40	MARCELLUS
24	11/24/2014	7,190.00	7,310.00	40	MARCELLUS
25	11/24/2014	7,040.00	7,160.00	40	MARCELLUS

512484 - 47-017-06388-0000 - 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	8/7/2014	14.60	7,935.00	8,765.00	5,779	0	503	0
Injection Test	8/7/2014	9.60	8,616.00	8,830.00	7,271	0	452	0
1	8/8/2014	77.70	7,696.00	8,333.00	3,519	124,420	4,005	0
Injection Test	8/12/2014	16.29	7,109.00	8,418.00	5,558	0	290	0
1.1 (Re-Perf)	8/13/2014	69.47	8,798.00	9,294.00	6,069	4,897	3,026	0
2	8/13/2014	93.20	8,107.00	6,394.00	4,127	251,880	6,682	0
Injection Test	8/14/2014	6.00	6,700.00	7,560.00	5,744	0	1,522	0
3	11/18/2014	85.40	7,745.00	8,055.00	5,056	196,849	5,246	0
4	11/18/2014	89.60	7,674.00	8,365.00	5,176	180,790	5,241	0
5	11/19/2014	91.50	7,225.00	7,919.00	5,126	195,291	5,106	0
6	11/19/2014	97.00	7,902.00	8,342.00	5,203	248,566	6,168	0
7	11/19/2014	90.00	8,197.00	8,779.00	4,953	250,729	6,457	0
8	11/20/2014	89.30	8,263.00	9,043.00	4,948	204,079	5,574	0
9	11/20/2014	90.10	8,073.00	8,932.00	5,050	193,890	5,250	0
10	11/21/2014	91.50	7,772.00	8,992.00	4,986	225,006	6,069	0
11	11/21/2014	95.50	7,549.00	8,389.00	5,312	247,129	6,302	0
12	11/21/2014	95.90	7,536.00	7,775.00	5,908	252,703	6,482	0
13	11/22/2014	95.50	7,833.00	8,307.00	5,018	247,183	7,032	0
14	11/22/2014	95.40	7,389.00	7,600.00	5,330	247,381	6,672	0
15	11/22/2014	95.40	7,992.00	8,831.00	5,950	233,249	6,432	0
16	11/22/2014	96.00	7,531.00	7,866.00	4,870	252,476	10,201	0
16.1 (Re-Perf)	11/23/2014							
17	11/23/2014	94.80	7,344.00	7,699.00	5,840	249,224	6,408	0
18	11/23/2014	93.50	7,169.00	7,320.00	4,325	242,826	6,863	0
19	11/23/2014	95.10	7,004.00	7,252.00	5,111	255,004	6,756	0
20	11/24/2014	97.70	7,063.00	7,250.00	4,943	253,418	6,505	0
21	11/24/2014	99.70	7,029.00	7,190.00	4,775	240,388	6,222	0
22	11/24/2014	98.60	7,114.00	7,327.00	3,942	253,158	6,466	0
23	11/24/2014	97.40	7,391.00	8,003.00	5,295	249,744	6,223	0
24	11/24/2014	90.20	6,995.00	8,376.00	4,703	255,667	7,297	0
25	11/25/2014	98.90	6,765.00	8,213.00	3,842	254,806	6,458	0

Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	8/4/2014
Job End Date:	11/24/2014
State:	West Virginia
County:	Doddridge
API Number:	47-017-06388-00-00
Operator Name:	EQT Production
Well Name and Number:	OXF150 - 512484
Longitude:	-80.79109200
Latitude:	39.22320300
Datum:	NAD83
Federal/Tribal Well:	NO
True Vertical Depth:	6,741
Total Base Water Volume (gal):	7,090,188
Total Base Non Water Volume:	297,487



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	FTSI	Carrier	Water	7732-18-5	100.00000	81.09436	
Water	Weatherford	Carrier	Water	7732-18-5	100.00000	9.48660	
Sand	FTSI	Proppant	Crystalline Silica	14808-60-7	100.00000	8.32719	
Sand	Weatherford	Proppant	Crystalline Silica	14808-60-7	100.00000	0.58463	
MX 5-2402	Halliburton	Biocide	Sodium Nitrate	7631-99-4	60.00000	0.05806	
Hydrochloric Acid 15%	FTSI	Acidizing	Hydrochloric Acid	7647-01-0	15.00000	0.02945	
FRW-600	FTSI	Friction Reducer	Hydrotreated light distillate	64742-47-8	30.00000	0.01481	
			Ammonium acetate	631-61-8	6.00000	0.00296	
HVG-1	FTSI	Gel	Petroleum Distillate	64742-47-8	55.00000	0.00779	
			Guar Gum	9000-30-0	50.00000	0.00708	
			Surfactant	68439-51-0	2.00000	0.00028	

			Clay	14808-60-7	2.00000	0.00028
Hydrochloric Acid 15%	Weatherford	Acidizing				
			Hydrochloric Acid	7647-01-0	15.00000	0.01342
MX-8	Halliburton	Biocide				
			Bacteria Culture	N/A	100.00000	0.00986
B-10	FTSI	Buffer Agent				
			Potassium carbonate	584-08-7	48.00000	0.00509
			Potassium hydroxide	1310-58-3	20.00000	0.00212
WFR-65LA	Weatherford	Friction Reducer				
			Distillates, Petroleum, Hydrotreated Light	64742-47-8	40.00000	0.00369
			Ammonium acetate	631-61-8	5.00000	0.00046
WPB-584L	Weatherford	Buffer				
			Potassium Carbonate	584-08-7	40.00000	0.00202
			Potassium Hydroxide	1310-58-3	40.00000	0.00202
APB-1	FTSI	Gel Breaker				
			Ammonium Persulfate	7727-54-0	95.00000	0.00228
CS-500-SI	FTSI	Scale Inhibitor				
			Ethylene Glycol	107-21-1	10.00000	0.00159
WSI-685L	Weatherford	Scale Inhibitor				
			Ammonium Chloride	12125-02-9	15.00000	0.00058
			Monoethanolamine Hydrochloride	2002-24-6	15.00000	0.00058
			Methyl Alcohol	67-56-1	2.50000	0.00010
WGA-15L	Weatherford	Gelling Agent				
			Solvent naphtha, petroleum, heavy aliph	64742-96-7	60.00000	0.00110
WIC-641L	Weatherford	Iron Control				
			Citric Acid	77-92-9	60.00000	0.00072
CI-150	FTSI	Corrosion Inhibitor				
			Isopropanol	67-63-0	30.00000	0.00008
			Ethylene Glycol	107-21-1	30.00000	0.00008
			Organic amine resin salt	Proprietary	30.00000	0.00008
			Dimethylformamide	68-12-2	10.00000	0.00003
			Aromatic aldehyde	Proprietary	10.00000	0.00003
			Quaternary ammonium compound	Proprietary	10.00000	0.00003
FE-100L	FTSI	Iron Control				
			Citric Acid	77-92-9	55.00000	0.00027
WAI-251LC	Weatherford	Acid Inhibitor				
			Ethylene Glycol	107-21-1	40.00000	0.00007
			N,N-Dimethylformamide	68-12-2	20.00000	0.00004
			Cinnamaldehyde	104-55-2	15.00000	0.00003
			2-Butoxyethanol	111-76-2	15.00000	0.00003
			Tar bases, quinoline derivs, benzyl chloride-quaternized	72480-70-7	15.00000	0.00003

			1-Decanol	112-30-1	5.00000	0.00001
			Poly(oxy-1,2-ethaned iyl), alpha.-(4-nonylphen yl)-. omega -hyd roxy- ,bran ched	127087-87-0	5.00000	0.00001
			1-Octanol	111-87-5	2.50000	0.00000
			Triethyl Phosphate	78-40-0	2.50000	0.00000
			Isopropanol	67-63-0	2.50000	0.00000
NE-100	FTSI	Non-Emulsifier				
			2-Butoxyethanol	111-76-2	10.00000	0.00002
			2-Propanol	67-63-0	10.00000	0.00002
			Dodecylbenzenesulfonic acid	27176-87-0	5.00000	0.00001
WBK-133	Weatherford	Breaker				
			Ammonium Persulfate	7727-54-0	100.00000	0.00005

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 512484

BOTTOM HOLE
WELL NO. WV 512484
STATE PLANE COORDINATES
(NORTH ZONE) NAD 27

N. 269,122.9
E. 1,631,732.7

LAT=(N) 39.231585
LONG=(W) 80.800079

UTM (NAD83)(METERS)
N. 4,342,504.8
E. 517,269.8

ZOE K. WALTERS
261.25 ACRES ±

LANDING POINT
WELL NO. WV 512484
STATE PLANE COORDINATES
(NORTH ZONE) NAD 27

N. 266,059.6
E. 1,633,161.2

LAT=(N) 39.223232
LONG=(W) 80.794881

UTM (NAD83)(METERS)
N. 4,341,578.8
E. 517,720.6

BOTTOM HOLE
WELL NO.
WV 512484

N. 266,003.9
E. 1,634,184.8

LAT=(N) 39.223119
LONG=(W) 80.791266

UTM (NAD83)(METERS)
N. 4,341,567.0
E. 518,032.7

WELL NO. WV 512484
STATE PLANE COORDINATES
(NORTH ZONE) NAD 27

N. 266,003.9
E. 1,634,184.8

LAT=(N) 39.223119
LONG=(W) 80.791266

UTM (NAD83)(METERS)
N. 4,341,567.0
E. 518,032.7

MICHAEL P.
HEASTER ET UX
5 ACRES ±

LEASE#
080616

FENCE
POST

N. 15°58' W
7097.34'

N. 26°54' W
4220.39'

MATTHEW
HANGER ET AL
421.9 ACRES ±
TM 23-1

N. 58°26' W
4147.24'

N. 017°-37'01"
500'

N. 017°-59'37"-C
500'

N. 017°-00'69"-P

N. 58°26' W
4147.24'

N. 017°-37'01"
500'

N. 017°-59'37"-C
500'

N. 017°-00'69"-P

N. 58°26' W
4147.24'

N. 017°-37'01"
500'

N. 017°-59'37"-C
500'

N. 017°-00'69"-P

N. 58°26' W
4147.24'

N. 017°-37'01"
500'

N. 017°-59'37"-C
500'

N. 017°-00'69"-P

N. 58°26' W
4147.24'

N. 017°-37'01"
500'

N. 017°-59'37"-C
500'

N. 017°-00'69"-P

N. 58°26' W
4147.24'

N. 017°-37'01"
500'

N. 017°-59'37"-C
500'

N. 017°-00'69"-P

N. 58°26' W
4147.24'

N. 017°-37'01"
500'

N. 017°-59'37"-C
500'

N. 017°-00'69"-P

N. 58°26' W
4147.24'

N. 017°-37'01"
500'

N. 017°-59'37"-C
500'

N. 017°-00'69"-P

N. 58°26' W
4147.24'

N. 017°-37'01"
500'

N. 017°-59'37"-C
500'

N. 017°-00'69"-P

AS DRILLED COORDINATES FOR WELL NO. WV 512484

(S.P.C. NORTH ZONE) (UTM(M) ZONE 17 NORTH)

NAD27 S.P.C. (FT) N. 266,003.9 E. 1,634,184.8

NAD27 GEO. LAT=(N) 39.223119 LONG=(W) 80.791266

NAD'83 UTM (M) N. 4,341,567.0 E. 518,032.7

BOTTOM HOLE

NAD27 S.P.C. (FT) N. 269,114.3 E. 1,631,721.9

NAD27 GEO. LAT=(N) 39.231561 LONG=(W) 80.800117

NAD'83 UTM (M) N. 4,342,502.1 E. 517,266.6

CHARLES P.
HEASTER ET AL
901.72 ACRES ±

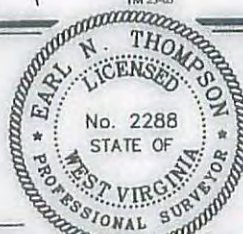
NOTES ON SURVEY

1. TIES TO WELLS, CORNERS AND REFERENCES ARE BASED ON GRID NORTH FOR THE WV STATE PLANE COORDINATE SYSTEM NORTH ZONE NAD'27.
2. LEASE BOUNDARY SHOWN HEREON TAKEN FROM DB 28 PG 177.
3. SURFACE OWNER AND ADJOINER INFORMATION TAKEN FROM THE ASSESSOR AND COUNTY CLERK RECORDS OF DODDRIDGE COUNTY IN JULY, 2013.
4. WELL LAT./LONG. (NAD'27) ESTABLISHED BY DGPS(SURVEY GRADE TIE TO CORS NETWORK).
5. AS DRILLED INFORMATION PROVIDED BY EQT.



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. *Earl N. Thompson*
2288



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

DATE AUGUST 29, 20 13

REVISED JANUARY 29, 20 15

OPERATORS WELL NO. WV 512484

API WELL NO. 47

STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1/200 FILE NO. 6980ASDRILLED512484

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 1,258'(GROUND) 1,258'(PROPOSED) WATERSHED LEFT FORK ARNOLDS CREEK

DISTRICT WEST UNION COUNTY DODDRIDGE QUADRANGLE OXFORD 7.5'

SURFACE OWNER LUCY E. HARPER ACREAGE 442.60 ±

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 ___

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

02/12/2016