

Well Operator's Report of Well Work



Where energy meets innovation.

Well Number: 513535

API: 47 - 103 - 02825

Submission: Initial Amended

Notes: Resubmitted with as-drilled plat for your records (11/3/2016)

APPROVED

NAME: *Steve M. Bous*
DATE: 12-15-16

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

DATE: 10/16/13
API #: 47-103-02825

Farm name: Richard Dallison et al Operator Well No.: 513535

LOCATION: Elevation: 1,454' Quadrangle: Big Run

District: Grant County: Wetzel, WV
Latitude: 5.125 Feet South of 39 Deg. 32 Min. 30 Sec.
Longitude 11.602 Feet West of 60 Deg. 32 Min. 30 Sec.

Company: EQT Production Company

Address:	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
EQT Plaza, Suite 1700				
625 Liberty Avenue, Pittsburgh, PA 15222	20	40	40	45
Agent: Cecil Ray	13 3/8	875	875	920
Inspector: Bill Hatfield	9 5/8	3,744	3,744	2,083
Date Permit Issued: 10/29/2012	5 1/2	12,649	12,649	2,035
Date Well Work Commenced: 2/25/13				
Date Well Work Completed: 7/23/2013				
Verbal Plugging: N/A				
Date Permission granted on: N/A				
Rotary <input checked="" type="checkbox"/> Cable <input type="checkbox"/> Rig <input checked="" type="checkbox"/>				
Total Vertical Depth (ft.): 7,675'				
Total Measured Depth (ft.): 12,649'				
Fresh Water Depth (ft.): 552', 783'				
Salt Water Depth (ft.): 2,240'				
Is coal being mined in area (N/Y)? No				
Coal Depths (ft.): 737', 607', 922', 1,012', 1,244'				
Void(s) encountered (N/Y) Depth(s) No				

OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)

Producing formation Marcus Pay zone depth (ft) 7.626
Gas: Initial open flow 1,690 MCF/d Oil: Initial open flow 0 Bbl/d
Final open flow 6,458 MCF/d Final open flow 0 Bbl/d
Time of open flow between initial and final tests 86 Hours
Static rock Pressure 2,495 psig (surface pressure) after 88.5 Hours

Second producing formation No second formation Pay zone depth (ft) _____
Gas: Initial open flow _____ MCF/d Oil: Initial open flow _____ Bbl/d
Final open flow _____ MCF/d Final open flow _____ Bbl/d
Time of open flow between initial and final tests _____ Hours
Static rock Pressure _____ psig (surface pressure) after _____ Hours

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I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the 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.


Signature

9/8/2014
Date

Were core samples taken? Yes _____ No

Were cuttings caught during drilling? Yes No _____

Were Electrical, Mechanical or Geophysical logs recorded on this well? If yes, please list MWD, Gamma, and CBL logs

NOTE: IN THE AREA BELOW PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH.

Perforated Intervals, Fracturing, or Stimulating:

See Attachment

Amended Report with Flow Back Data

Performed additional injection test prior to stage 17

Plug Back Details Including Plug Type and Depth(s): N/A

Formations Encountered:

Top Depth

Bottom Depth

Surface:

SAND / SHALE / 0 / 737 / 737 -- COAL / 737 / 738 / 1 -- SAND / SHALE / 738 / 807 / 69 --

COAL / 807 / 817 / 10 -- SAND / SHALE / 817 / 922 / 105 --

COAL / 922 / 927 / 5 -- SAND / SHALE / 927 / 1,012 / 85 --

COAL / 1,012 / 1,022 / 10 -- SAND / SHALE / 1,022 / 1,244 / 222 --

COAL / 1,244 / 1,246 / 2 -- SAND / SHALE / 1,246 / 2,481 / 1,235 --

BIG LIME / 2,481 / 3,963 / 1,482 -- WARREN / 3,963 / 4,114 / 151 --

SPEECHLEY / 4,114 / 5,003 / 889 -- RILEY / 5,003 / 5594 / 591

BENSON / 5,594 / 5,839 / 244 -- ALEXANDER / 5,839 / 6,760 / 921 --

RHINESTREET / 6,760 / 6,765 / 5 -- Sonyea / 6,765 / 6,883 / 118 --

Middlesex / 6,883 / 6,924 / 41 -- Genesee / 6,924 / 6,991 / 67 --

Genesee / 6,991 / 7,513 / 522 -- Tully / 7,513 / 7,543 / 30 --

Hamilton / 7,543 / 7,626 / 83 -- Marcellus / 7,626 / 7,675 / 49 --

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513535 - Perforations

Zone/Stage	Date	Top Plug Depth (ftKB)	Bottom Plug Depth (ftKB)	Top Perf Depth (ftKB)	Bottom Perf Depth (ftKB)	Shots/ft
Toe Pop	3/5/14 2:08	12,486.00	NA	12,621.00	12,624.00	NA
1	3/5/14 20:46	12,486.00	NA	12,500.00	12,592.00	4
2	3/6/14 6:13	12,336.00	12,486.00	12,350.00	12,472.00	4
3	3/6/14 15:33	12,186.00	12,336.00	12,200.00	12,322.00	4
4	3/6/14 20:06	12,034.00	12,186.00	12,050.00	12,172.00	4
5	3/7/14 0:31	11,886.00	12,034.00	11,900.00	12,020.00	4
6	3/7/14 5:34	11,736.00	11,886.00	11,750.00	11,872.00	4
7	3/7/14 10:35	11,586.00	11,736.00	11,600.00	11,722.00	4
8	3/7/14 19:35	11,436.00	11,586.00	11,450.00	11,572.00	4
9	3/8/14 0:18	11,286.00	11,436.00	11,300.00	11,422.00	4
10	3/8/14 4:30	11,136.00	11,286.00	11,150.00	11,272.00	4
11	3/8/14 9:18	10,986.00	11,136.00	11,000.00	11,122.00	4
12	3/8/14 14:44	10,836.00	10,986.00	10,850.00	10,972.00	4
13	3/9/14 0:40	10,686.00	10,836.00	10,700.00	10,822.00	4
14	3/9/14 6:00	10,536.00	10,686.00	10,550.00	10,672.00	4
15	3/9/14 10:12	10,386.00	10,536.00	10,400.00	10,522.00	4
16	3/9/14 14:46	10,236.00	10,386.00	10,250.00	10,372.00	4
17	3/9/14 19:02	10,086.00	10,236.00	10,100.00	10,222.00	4
18	4/4/14 18:20	9,933.00	10,086.00	9,950.00	10,068.00	4
19	4/4/14 23:45	9,786.00	9,933.00	9,800.00	9,922.00	4
20	4/5/14 3:42	9,636.00	9,786.00	9,650.00	9,772.00	4
21	4/5/14 7:33	9,486.00	9,636.00	9,500.00	9,620.00	4
22	4/5/14 11:35	9,336.00	9,486.00	9,350.00	9,486.00	4
23	4/5/14 15:49	9,186.00	9,336.00	9,200.00	9,336.00	4
24	4/5/14 19:47	9,036.00	9,186.00	9,050.00	9,172.00	4
25	4/6/14 0:05	8,886.00	9,036.00	8,900.00	9,020.00	4
26	4/6/14 4:04	8,736.00	8,886.00	8,750.00	8,870.00	4
27	4/6/14 7:36	8,586.00	8,736.00	8,600.00	8,720.00	4
28	4/6/14 11:45	NA	8,586.00	8,450.00	8,570.00	4

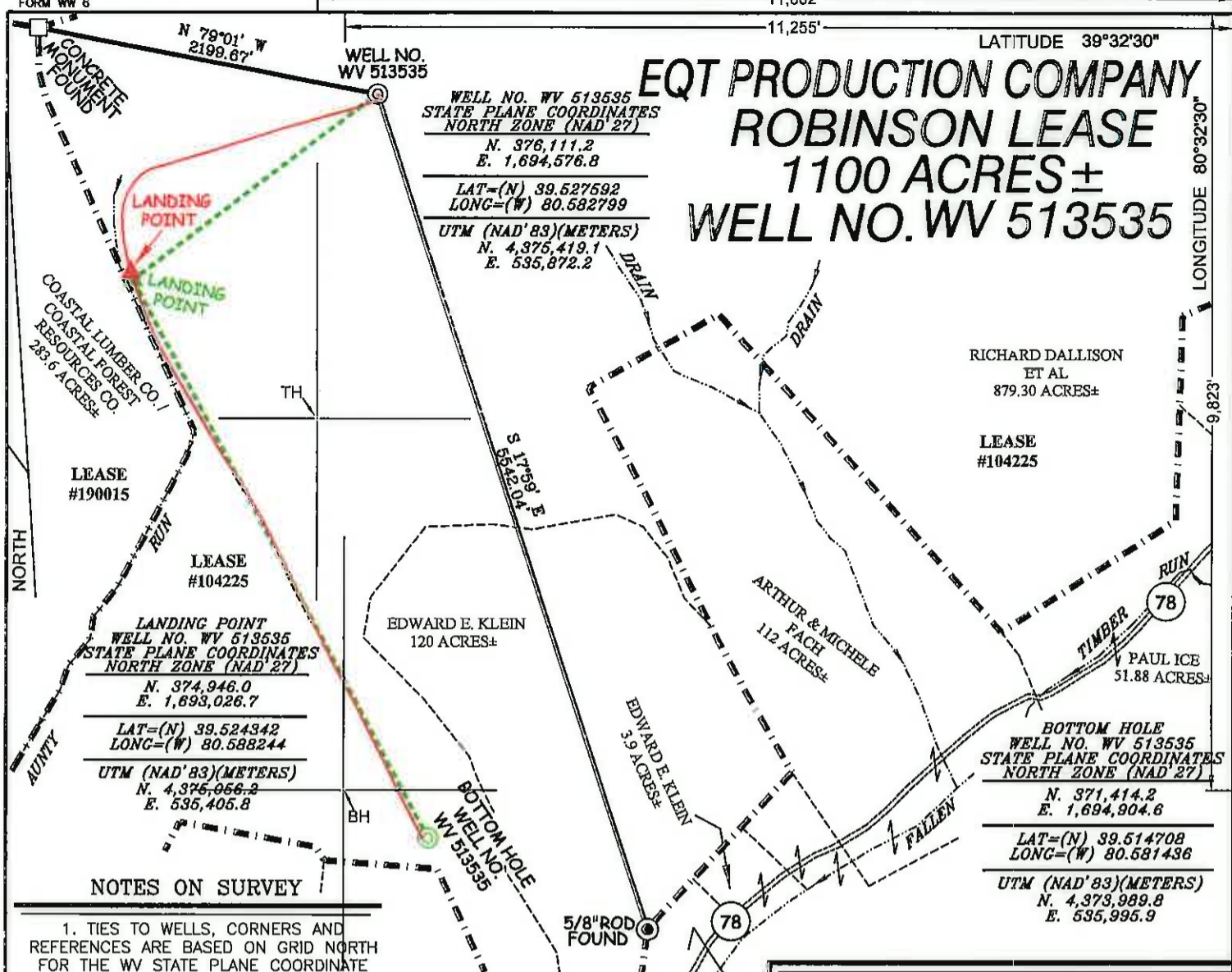
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513535 - Stimulated Stages

Zone/Stage	P Break (psi)	Avg Treat Pressure (psi)	Avg rate (bbl/min)	ISIP (psi)	Frac Gradient (psi/R)	15 Min. SIP (psi)	Fluid Volume (bbl)	Start Date	End Date	Proppant (lb)
Toe Pop	NA	8,330.00	12.2	NA	NA	NA	1,159	3/5/2014 15:11	3/5/2014 16:33	NA
1	4,989.00	8,593.00	81.3	3,960.00	0.95	3,050.00	7,771	3/5/2014 23:56	3/6/2014 4:12	200,200
2	6,034.00	8,472.00	88.3	4,528.00	1.02	3,368.00	5,299	3/6/2014 7:41	3/6/2014 9:01	197,400
3	5,946.00	8,529.00	94.8	4,289.00	0.99	3,370.00	5,040	3/5/2014 17:11	3/5/2014 18:25	202,000
4	7,051.00	8,639.00	96.0	3,990.00	0.95	3,298.00	5,104	3/6/2014 21:28	3/6/2014 22:46	201,600
5	6,737.00	8,452.00	93.4	4,011.00	0.96	3,364.00	5,025	3/7/2014 1:50	3/7/2014 3:09	199,500
6	6,460.00	8,695.00	94.5	4,754.00	1.05	3,610.00	5,135	3/7/2014 7:14	3/7/2014 8:27	195,800
7	7,032.00	8,622.00	93.7	4,752.00	1.05	3,757.00	5,015	3/7/2014 16:35	3/7/2014 17:47	204,100
8	6,965.00	8,666.00	97.1	5,191.00	1.11	3,916.00	5,087	3/7/2014 21:06	3/7/2014 22:17	200,500
9	6,771.00	8,602.00	94.2	4,952.00	1.08	3,967.00	5,099	3/8/2014 1:35	3/8/2014 2:47	199,000
10	6,241.00	8,629.00	96.1	5,154.00	1.1	4,133.00	5,263	3/8/2014 6:00	3/8/2014 7:12	201,000
11	5,960.00	8,529.00	95.7	5,280.00	1.12	4,026.00	5,073	3/8/2014 11:34	3/8/2014 12:46	201,400
12	6,188.00	8,704.00	97.5	5,707.00	1.18	4,568.00	4,986	3/8/2014 21:49	3/8/2014 22:59	200,600
13	6,735.00	8,642.00	96.3	5,606.00	1.16	3,956.00	5,110	3/9/2014 3:01	3/9/2014 4:13	201,300
14	6,092.00	8,665.00	94.9	5,252.00	1.12	4,047.00	5,035	3/9/2014 7:23	3/9/2014 8:34	202,100
15	6,070.00	8,652.00	97.5	5,327.00	1.13	4,165.00	5,327	3/9/2014 11:59	3/9/2014 13:07	201,300
16	6,647.00	8,690.00	98.3	5,175.00	1.11	3,946.00	4,659	3/9/2014 16:16	3/9/2014 17:24	200,200
17	5,996.00	8,660.00	11.1	NA	NA	NA	3,902	4/4/2014 8:13	4/4/2014 15:30	NA
18	6,687.00	8,161.00	97.6	5,314.00	1.13	4,252.00	4,729	4/4/2014 15:35	4/4/2014 16:42	200,100
19	7,641.00	8,656.00	77.8	4,984.00	1.08	4,020.00	5,018	4/4/2014 19:49	4/4/2014 21:32	201,600
20	7,191.00	8,392.00	94.6	5,241.00	1.12	4,164.00	4,810	4/5/2014 0:58	4/5/2014 2:04	200,100
21	7,191.00	8,392.00	99.5	5,264.00	1.12	4,106.00	4,878	4/5/2014 4:53	4/5/2014 5:59	199,100
22	6,211.00	8,426.00	99.9	4,975.00	1.08	3,980.00	4,765	4/5/2014 8:54	4/5/2014 9:59	200,200
23	6,612.00	8,365.00	99.5	5,323.00	1.13	4,215.00	4,764	4/5/2014 13:10	4/5/2014 14:16	195,800
24	7,431.00	7,961.00	99.4	5,477.00	1.15	4,239.00	4,764	4/5/2014 17:20	4/5/2014 18:40	200,900
25	6,844.00	8,218.00	100.8	5,384.00	1.14	4,227.00	5,093	4/5/2014 21:29	4/5/2014 22:41	201,200
26	6,286.00	7,958.00	99.2	5,564.00	1.16	4,099.00	5,921	4/6/2014 1:09	4/6/2014 2:37	202,400
27	6,405.00	8,021.00	99.7	5,536.00	1.16	4,119.00	4,878	4/6/2014 5:00	4/6/2014 6:04	201,900
28	6,327.00	7,789.00	101.2	5,268.00	1.12	4,044.00	4,762	4/6/2014 9:10	4/6/2014 10:12	202,000
29	6,967.00	7,744.00	100.9	4,463.00	1.02	3,533.00	4,895	4/6/2014 13:07	4/6/2014 14:13	200,800

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EQT PRODUCTION COMPANY ROBINSON LEASE 1100 ACRES ± WELL NO. WV 513535



WELL NO. WV 513535
 STATE PLANE COORDINATES
 NORTH ZONE (NAD 27)
 N. 376,111.2
 E. 1,694,576.8
 LAT=(N) 39.527592
 LONG=(W) 80.582799
 UTM (NAD'83)(METERS)
 N. 4,375,419.1
 E. 535,872.2

RICHARD DALLISON
 ET AL
 879.30 ACRES±

LEASE
 #104225

LEASE
 #190015

LEASE
 #104225

LANDING POINT
 WELL NO. WV 513535
 STATE PLANE COORDINATES
 NORTH ZONE (NAD 27)
 N. 374,946.0
 E. 1,693,026.7
 LAT=(N) 39.524342
 LONG=(W) 80.588244
 UTM (NAD'83)(METERS)
 N. 4,375,956.2
 E. 535,405.8

EDWARD E. KLEIN
 120 ACRES±

ARTHUR & MICHELE
 FACK
 112 ACRES±

PAUL ICE
 51.88 ACRES±

BOTTOM HOLE
 WELL NO. WV 513535
 STATE PLANE COORDINATES
 NORTH ZONE (NAD 27)
 N. 371,414.2
 E. 1,694,904.6
 LAT=(N) 39.514708
 LONG=(W) 80.581436
 UTM (NAD'83)(METERS)
 N. 4,373,989.8
 E. 535,995.9

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 DEED BOOK 132 PAGE 336 AND DEED BOOK 349 PAGE 233.
3. SURFACE OWNER AND ADJOINER INFORMATION TAKEN FROM THE ASSESSOR AND COUNTY CLERK RECORDS OF WETZEL COUNTY IN JULY, 2011.
4. WELL LAT./LONG. (NAD'27) ESTABLISHED BY DGPS(SURVEY GRADE)
5. AS DRILLED INFORMATION PROVIDED BY EQT.

LEGEND

AS DRILLED ——— (Red line)

PROPOSED ——— (Dashed green line)

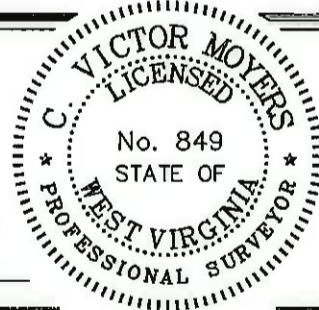
AS DRILLED COORDINATES (BIG192 H2)

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

NAD'27 S.P.C.(FT)	N. 376,110.84	E. 1,694,576.67
NAD'27 GEO.	LAT-(N) 39.527592	LONG-(W) 80.582799
NAD'83 UTM (M)	N. 4,375,418.99	E. 535,872.15
LANDING POINT		
NAD'27 S.P.C.(FT)	N. 374,994.20	E. 1,693,008.54
NAD'27 GEO.	LAT-(N) 39.524474	LONG-(W) 80.588310
NAD'83 UTM (M)	N. 4,375,070.81	E. 535,400.06
BOTTOM HOLE		
NAD'27 S.P.C.(FT)	N. 371,411.20	E. 1,694,869.23
NAD'27 GEO.	LAT-(N) 39.514699	LONG-(W) 80.581562
NAD'83 UTM (M)	N. 4,373,989.80	E. 535,995.12



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. 849 *C. Victor Moyers*

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS.
 DATE AUGUST 3 20 12
 REVISED DATE 09/19/13 & 09/26/16
 OPERATORS WELL NO. WV 513535
 API WELL NO. 47 - 103 - 02825H
 STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1/200
 FILE NO. 7797ASDRILLED513535
 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 1,464' (GROUND) 1,452' (PROPOSED) WATERSHED AUNTY RUN OF SOUTH FORK FISHING CREEK
 DISTRICT GRANT COUNTY WETZEL QUADRANGLE BIG RUN 7.5'

SURFACE OWNER RICHARD DALLISON ET AL ACREAGE 879.30±
 ROYALTY OWNER ED BROOM, INC ET AL (1100 AC.±), ALEX HART ET AL (285 AC.±)

PROPOSED WORK: LEASE NO. 104225 / 190015
 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

COUNTY NAME PERMIT