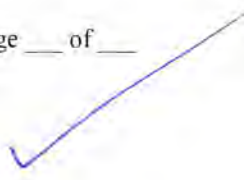


State of West Virginia
Department of Environmental Protection - Office of Oil and Gas
Well Operator's Report of Well Work



API 47 - 103 - 03111 County Wetzel District Grant
Quad Big Run 7.5 Pad Name BIG192 Field/Pool Name _____
Farm name Richard Dallison, et al Well Number 515949
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 4,375,427.00 Easting 535,880.45
Landing Point of Curve Northing 4,375,747.64 Easting 536,950.94
Bottom Hole Northing 4,374,781.24 Easting 537,915.85

Elevation (ft) 1452' 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)
Water base Mud 13.0 ppg barium sulfate, sodium chloride, xanthan gum, polyanionic cellulose, modified starch, sodium hydroxide, phosphonates and alkyl phosphates, glutaraldehyde solution, calcium hydroxide, partially hydrolyzed polyacrylamide/polyacrylate, potassium chloride, sodium carbonate, ground walnut shells, alcohol and modified fatty acid, ferrochrome lignosulfonate, calcium carbonate, fibrous cellulose

Date permit issued 8/18/2015 Date drilling commenced 8/24/2015 Date drilling ceased 12/21/2015
Date completion activities began 2/5/2016 Date completion activities ceased 2/13/2016
Verbal plugging (Y/N) N Date permission granted N/A Granted by N/A

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

Freshwater depth(s) ft 549', 581', 780' Open mine(s) (Y/N) depths _____
Salt water depth(s) ft 2257', 2370' Void(s) encountered (Y/N) depths N
Coal depth(s) ft 743', 804', 919', 1009', 1240' Cavern(s) encountered (Y/N) depths N
Is coal being mined in area (Y/N) N

WV Department of
Environmental Protection

APPROVED

NAME: Dennis R. Haughit
DATE: 5/14/16

Reviewed by: DMH
AX 05/27/2016

API 47-103 - 03111

Farm name Richard Dallison, et al

Well number 515949

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	30"	26"	80'	NEW	A-500	N/A	Y
Surface	17 1/2"	13 3/8"	977'	NEW	J-55	420'	Y
Coal							
Intermediate 1	12 3/8"	9 5/8"	2762'	NEW	A-500	1,013'	Y
Intermediate 2							
Intermediate 3							
Production	8 1/2"	5 1/2"	13,705'	NEW	P-110	N/A	N
Tubing							
Packer type and depth set							

Comment Details N/A

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	98	15.6	1.18	115.6	0	8
Surface	CLASS A	941	15.6	1.20	1129.2	0	8
Coal							
Intermediate 1	CLASS A	1045	15.6	1.18	1233.1	0	8
Intermediate 2							
Intermediate 3							
Production	Class H / Class H	1502 / 648	15.2/15.6	1.07/1.84	2799.46	1,692'	72
Tubing							

Drillers TD (ft) 13,710

Loggers TD (ft) N/A

Deepest formation penetrated MARCELLUS

Plug back to (ft) N/A

Plug back procedure N/A

Kick off depth (ft) 3,369'

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: none
 SURFACE: 3 CENTRALIZERS AT 934', 514', & 96'
 INTERMEDIATE: 6 CENTRALIZERS PLACED EVERY 500'
 PRODUCTION: Composite body centralizers installed every other joint from bottom to 3,326', one centralizer placed at 2,702'

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WAS WELL COMPLETED AS SHOT HOLE Yes No DETAILS

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WAS WELL COMPLETED OPEN HOLE? Yes No DETAILS

WV Department of
Environmental Protection

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

API 47- 103 - 03111 Farm name Richard Dallison, et al Well number 515949

PRODUCING FORMATION(S)	DEPTHS		
MARCELLUS	7,645.80	TVD	9,089.00 MD

Please insert additional pages as applicable.

GAS TEST Build up Drawdown Open Flow OIL TEST Flow Pump

SHUT-IN PRESSURE Surface 1,470 psi Bottom Hole N/A psi DURATION OF TEST 72.00 hrs

OPEN FLOW Gas 11,697 mcfpd Oil N/A bpd NGL 0.0 bpd Water 1,071 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		

Please insert additional pages as applicable.


Drilling Contractor ALPHA HUNTER DRILLING (RIG 5)
Address P.O. BOX 430 City RENO State OH Zip 45773

Logging Company GYRODATA
Address 601 MAYER ST City BRIDGEVILLE State PA Zip 15017

Cementing Company C&J Energy Services (Nabors)
Address 2504 Smith Creek Road City Waynesburg State PA Zip 15370

Stimulating Company FTS International
Address 301 E. 18th Street City Cisco State TX Zip 76417

Please insert additional pages as applicable.

Completed by Jim Helmick Telephone (412) 395-5518
Signature  Title VP Completions Date 5/9/2016

Submittal of Hydraulic Fracturing Chemical Disclosure Information Attach copy of FRACFOCUS Registry
WV Department of Environmental Protection
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API 47- 103 - 03111 Farm name Richard Dallison, et al Well number 515949

Drilling Contractor Pioneer Drilling Services (Rig 72)
Address 1083 North 88 Road City Rices Landing State PA Zip 15357

Logging Company Pro Directional
Address 750 Conroe Park N Dr. City Conroe State TX Zip 77043

Logging Company _____
Address _____ City _____ State _____ Zip _____

Cementing Company Baker Hughes
Address 837 Philippi Pike City Clarksburg State WV Zip 26301

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515949 Final Formations (API #47-10303111)

Formation Name	Final Top MD (ftGL) (ft)	Final Top TVD (ft)	Final Btm MD (ftGL) (ft)	Final Btm TVD (ft)
SAND/SHALE	1	1	746	746
WASHINGTON COAL	746	746	748	748
SAND/SHALE	748	748	807	807
COAL	807	807	817	817
SAND/SHALE	817	817	922	922
COAL	922	922	927	927
SAND/SHALE	927	927	1,012.00	1,012.00
COAL	1,012.00	1,012.00	1,022.00	1,022.00
SAND/SHALE	1,022.00	1,022.00	1,243.00	1,243.00
PITTSBURGH COAL	1,243.00	1,243.00	1,248.00	1,248.00
SAND/SHALE	1,248.00	1,248.00	2,444.00	2,444.00
MAXTON	2,444.00	2,444.00	2,484.00	2,484.00
BIG LIME	2,484.00	2,484.00	2,623.00	2,623.00
BIG INJUN	2,623.00	2,623.00	2,874.00	2,874.00
WEIR	2,874.00	2,874.00	3,082.00	3,082.00
GANTZ	3,082.00	3,082.00	3,108.00	3,108.00
50F	3,108.00	3,108.00	3,193.00	3,193.00
30F	3,193.00	3,193.00	3,310.00	3,310.00
GORDON	3,310.00	3,310.00	3,390.00	3,385.80
4TH	3,390.00	3,385.80	3,539.00	3,532.90
BAYARD	3,539.00	3,532.90	3,965.00	3,891.90
WARREN	3,965.00	3,891.90	4,117.00	4,007.70
SPEECHLEY	4,117.00	4,007.70	5,006.00	4,683.70
RILEY	5,006.00	4,683.70	5,641.00	5,167.50
BENSON	5,641.00	5,167.50	5,967.00	5,414.50
ALEXANDER	5,967.00	5,414.50	6,546.00	5,852.30
RHINESTREET	6,546.00	5,852.30	7,192.00	6,343.00
SONYEA	7,192.00	6,343.00	7,355.00	6,465.90
MIDDLESEX	7,355.00	6,465.90	7,409.00	6,506.60
GENESSEE	7,409.00	6,506.60	8,724.00	7,490.30
GENESE0	8,724.00	7,490.30	8,796.00	7,532.70
TULLY	8,796.00	7,532.70	8,838.00	7,554.90
HAMILTON	8,838.00	7,554.90	9,089.00	7,645.80
MARCELLUS	9,089.00	7,645.80		

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515949- 47-103-03111-0000 - Perforations

Stage Number	Perforation Date	Top Perf Depth (ftKB)	Bottom Perf Depth (ftKB)	Number of Shots	Formation
Initiation Sleeve	1/16/2016	13,704	13,705	10	MARCELLUS
1	2/6/2016	13,558	13,650	32	MARCELLUS
2	2/6/2016	13,408	13,530	40	MARCELLUS
3	2/6/2016	13,258	13,380	40	MARCELLUS
4	2/7/2016	13,108	13,230	40	MARCELLUS
5	2/7/2016	12,958	13,080	40	MARCELLUS
6	2/7/2016	12,808	12,930	40	MARCELLUS
7	2/7/2016	12,658	12,780	40	MARCELLUS
8	2/7/2016	12,508	12,630	40	MARCELLUS
9	2/8/2016	12,358	12,480	40	MARCELLUS
10	2/8/2016	12,208	12,330	40	MARCELLUS
11	2/8/2016	12,058	12,180	40	MARCELLUS
12	2/8/2016	11,908	12,030	40	MARCELLUS
13	2/8/2016	11,758	11,880	40	MARCELLUS
14	2/8/2016	11,608	11,730	40	MARCELLUS
15	2/9/2016	11,458	11,580	40	MARCELLUS
16	2/9/2016	11,308	11,430	40	MARCELLUS
17	2/9/2016	11,158	11,280	40	MARCELLUS
18	2/9/2016	11,008	11,130	40	MARCELLUS
19	2/10/2016	10,858	10,980	40	MARCELLUS
20	2/10/2016	10,708	10,830	40	MARCELLUS
21	2/10/2016	10,558	10,680	40	MARCELLUS
22	2/10/2016	10,408	10,530	40	MARCELLUS
23	2/11/2016	10,258	10,380	40	MARCELLUS
24	2/11/2016	10,108	10,230	40	MARCELLUS
25	2/11/2016	9,958	10,080	40	MARCELLUS
26	2/11/2016	9,808	9,930	40	MARCELLUS
27	2/12/2016	9,658	9,780	40	MARCELLUS
28	2/12/2016	9,508	9,630	40	MARCELLUS
29	2/13/2016	9,358	9,480	40	MARCELLUS
30	2/13/2016	9,208	9,330	40	MARCELLUS
31	2/13/2016	9,058	9,180	40	MARCELLUS

515949-47-103-03111-0000- 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	2/5/2016	18.4	8,320	9,438	5,431	0	1,407	0
1	2/6/2016	75.3	9,120	9,368	4,449	249,052.00	6,893	0
2	2/6/2016	88.8	9,010	9,250	5,026	252,004.00	6,146	0
3	2/6/2016	88.4	8,841	9,283	4,624	247,823.00	6,146	0
4	2/7/2016	85.9	8,834	9,259	4,807	248,757.00	6,077	0
5	2/7/2016	87.8	8,981	9,353	5,356	250,018.00	6,037	0
6	2/7/2016	85.5	8,978	9,380	5,532	248,322.00	6,069	0
7	2/7/2016	90.6	9,142	9,454	5,393	249,030.00	6,155	0
8	2/7/2016	89.6	8,897	9,375	5,417	247,896.00	6,186	0
9	2/8/2016	88	8,166	9,169	5,319	247,347.00	5,990	0
10	2/8/2016	89.1	8,961	9,281	5,889	249,917.00	6,022	0
11	2/8/2016	91.7	9,204	9,560	5,147	249,577.00	6,077	0
12	2/8/2016	90.8	9,057	9,404	5,513	249,921.00	6,078	0
13	2/8/2016	90.8	9,107	9,373	5,670	248,540.00	5,986	0
14	2/8/2016	90.5	9,016	9,303	5,794	247,025.00	6,228	0
15	2/9/2016	93	9,066	9,312	5,695	248,391.00	6,124	0
16	2/9/2016	94.2	9,066	9,276	5,547	249,975.00	7,054	0
17	2/9/2016	98.8	8,985	9,244	5,460	249,632.00	5,979	0
18	2/9/2016	99.6	8,880	9,120	5,421	247,263.00	5,860	0
19	2/10/2016	97.2	8,771	9,367	4,839	248,378.00	6,098	0
20	2/10/2016	100.4	8,870	9,149	5,402	249,961.00	5,892	0
21	2/10/2016	100.8	9,029	9,188	5,512	249,875.00	6,006	0
22	2/10/2016	94.4	9,124	9,529	5,417	248,734.00	5,764	0
23	2/11/2016	98.4	9,138	9,789	5,502	248,749.00	5,933	0
24	2/11/2016	98.2	9,169	9,360	5,609	249,308.00	5,991	0
25	2/11/2016	98.4	9,059	9,228	5,563	249,409.00	6,118	0
26	2/11/2016	91.1	9,174	9,323	5,683	251,309.00	5,937	0
27	2/12/2016	89.6	9,187	9,333	5,496	248,932.00	5,607	0
28	2/12/2016	96.8	9,090	9,247	5,546	251,972.00	5,745	0
29	2/13/2016	90.4	9,200	9,385	5,631	251,635.00	5,768	0
30	2/13/2016	93.6	9,215	9,403	5,407	251,037.00	5,647	0
31	2/13/2016	96.3	9,165	9,345	4,453	249,988.00	5,442	0

Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	2/5/2016
Job End Date:	2/13/2016
State:	West Virginia
County:	Wetzel
API Number:	47-103-03111-00-00
Operator Name:	EQT Production
Well Name and Number:	515949
Longitude:	-80.58270300
Latitude:	39.53270300
Datum:	NAD83
Federal/Tribal Well:	NO
True Vertical Depth:	7,646
Total Base Water Volume (gal):	7,915,404
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	89.14835	None
Sand (Proppant)	FTS International	Proppant	Silica Substrate	14808-60-7	100.00000	10.43232	None
MC MX 5-3886	Multi-Chem	Specialty Brine	Calcium nitrate.4H2O	13477-34-4	100.00000	0.10889	None
FRW-900	FTS International	Friction Reducer	Hydrotreated Light Distillate	64742-47-8	30.00000	0.02142	None
			Alkyl Alcohol	Proprietary	10.00000	0.00714	None
			Oxyalkylated alcohol A	Proprietary	5.00000	0.00357	None
Hydrochloric Acid (15%)	FTS International	Acidizing	Hydrochloric Acid	7647-01-0	15.00000	0.03073	None
MC MX 8-2544	Multi-Chem	Live Culture - Nitrate Reducing Bacteria	Sodium chloride	7647-14-5	100.00000	0.00961	None
			Sodium nitrate	7631-99-4	5.00000	0.00048	None
CS-500 SI	FTS International	Scale inhibitor	Ethylene glycol	107-21-1	10.00000	0.00242	None
CI-150	FTS International	Acid Corrosion Inhibitor					

			Organic amine resin salt	Proprietary	30.00000	0.00011	None
			Ethylene Glycol	107-21-1	30.00000	0.00011	None
			Isopropanol	67-63-0	30.00000	0.00011	None
			Aromatic aldehyde	Proprietary	10.00000	0.00004	None
			Dimethylformamide	68-12-2	10.00000	0.00004	None
			Quaternary ammonium compound	Proprietary	10.00000	0.00004	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)

LEGEND

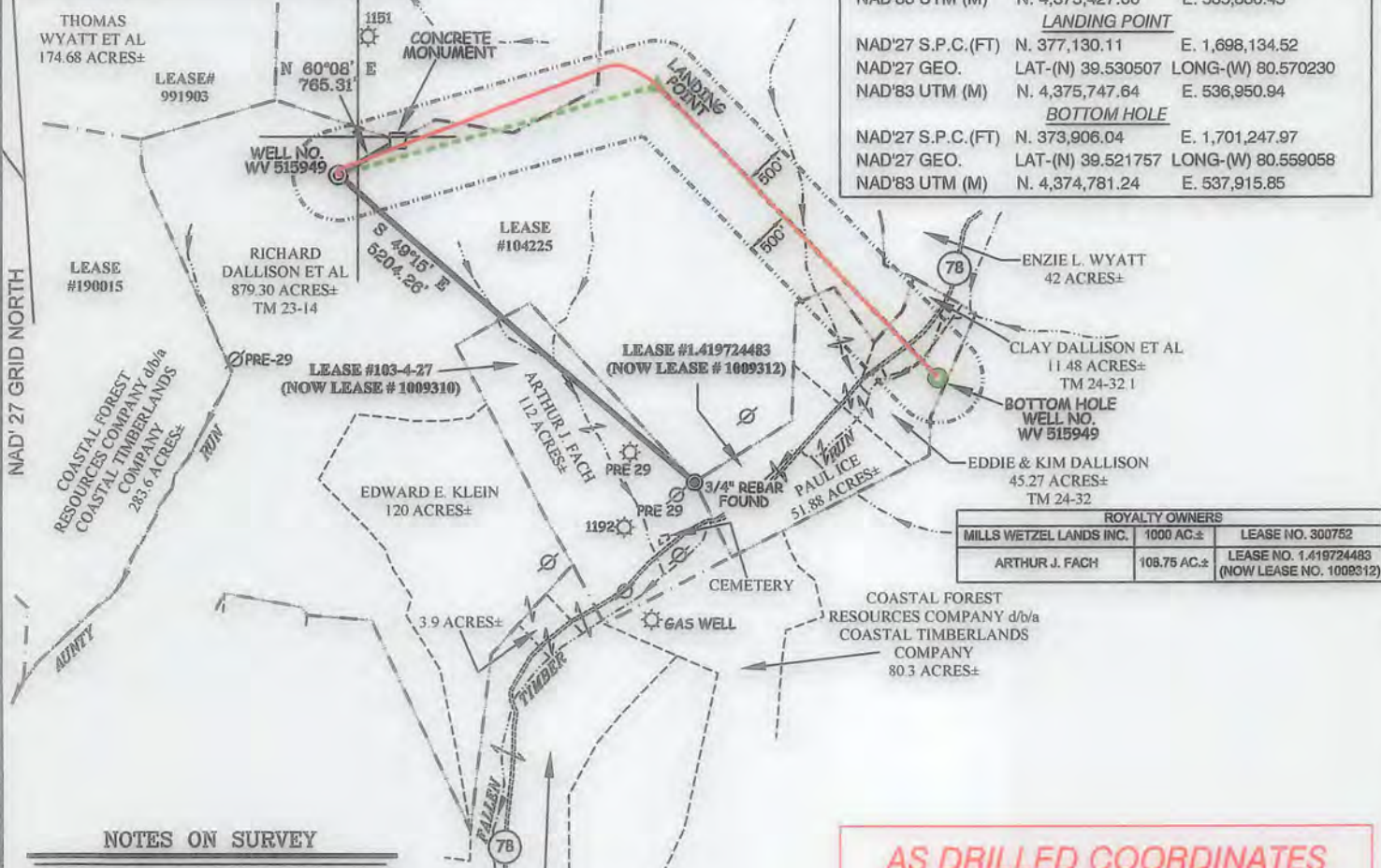
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SURFACE LINE	----
PROPOSED PATH	---
AS DRILLED PATH	---
OFFSET LINE	---
TIE LINE	---
CREEK	~ ~ ~
ROAD	==
COUNTY ROUTE	⊙
PROPOSED WELL	⊙
PLUGGED WELL	⊙
EXISTING WELL	⊙
TAX MAP-PARCEL	00-00

COASTAL FOREST RESOURCES COMPANY d/b/a COASTAL TIMBERLANDS COMPANY
1,627.6 ACRES±
TM 17-14

**EQT PRODUCTION COMPANY
ROBINSON LEASE
1,100 ACRES±
WELL NO. WV 515949
(BIG192 H19)**

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

NAD'27 S.P.C.(FT)	N. 376,136.67	E. 1,694,604.33
NAD'27 GEO.	LAT-(N) 39.527663	LONG-(W) 80.582702
NAD'83 UTM (M)	N. 4,375,427.00	E. 535,880.45
LANDING POINT		
NAD'27 S.P.C.(FT)	N. 377,130.11	E. 1,698,134.52
NAD'27 GEO.	LAT-(N) 39.530507	LONG-(W) 80.570230
NAD'83 UTM (M)	N. 4,375,747.64	E. 536,950.94
BOTTOM HOLE		
NAD'27 S.P.C.(FT)	N. 373,906.04	E. 1,701,247.97
NAD'27 GEO.	LAT-(N) 39.521757	LONG-(W) 80.559058
NAD'83 UTM (M)	N. 4,374,781.24	E. 537,915.85



NOTES ON SURVEY

1. NO WATER WELLS WERE FOUND WITHIN 250' OF PROPOSED GAS WELL. NO AGRICULTURAL BUILDINGS ≥ 2500 SQ. FT. OR DWELLINGS WERE FOUND WITHIN 625' OF THE CENTER OF PROPOSED WELL PAD.
2. AS DRILLED INFORMATION PROVIDED BY EQT.

AS DRILLED COORDINATES FOR WELL NO. WV 515949

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

NAD'27 S.P.C.(FT)	N. 376,136.67	E. 1,694,604.33
NAD'27 GEO.	LAT-(N) 39.527663	LONG-(W) 80.582702
NAD'83 UTM (M)	N. 4,375,427.00	E. 535,880.45
BOTTOM HOLE		
NAD'27 S.P.C.(FT)	N. 373,905.38	E. 1,701,246.78
NAD'27 GEO.	LAT-(N) 39.521755	LONG-(W) 80.559082
NAD'83 UTM (M)	N. 4,374,781.04	E. 537,915.49

Professional Energy Consultants
A DIVISION OF SMITHLAND SURVEYING, INC.

SURVEYORS
ENGINEERS
ENVIRONMENTAL
PROJECT MGMT.

(904) 482-5834 WWW.SLSURVEYS.COM

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. 2288 *Earl N. Thompson*



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

DATE FEBRUARY 23, 20 15

REVISED 03/25/15, 07/21/15 & 01/14/16

OPERATORS WELL NO. WV 515949

API WELL NO. 47 - 103 - 03111H

STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1 / 200 FILE NO. 7797AD515949

HORIZONTAL & VERTICAL CONTROL DETERMINED BY DGPS (SURVEY GRADE TIE TO CORS NETWORK) SCALE 1" = 2000'

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 1,452' (PAD ELEVATION) 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 BROOME, INC ET AL ACREAGE 1,100±

PROPOSED WORK: LEASE NO. 104225

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 TVD 7,631'

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

05/27/2016