

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

API 47-009-00242 County BROOKE District BUFFALO
Quad BETHANY & TILTONSVILLE Pad Name MIKE RYNIAWEC BRK PAD Field/Pool Name PANHANDLE FIELD WET
Farm name MIKE RYNIAWEC Well Number MIKE RYNIAWEC BRK 1H
Operator (as registered with the OOG) SWN PRODUCTION COMPANY, LLC
Address PO BOX 12359 City SPRING State TX Zip 77391-2359

As Drilled location NAD 83/UTM Attach an as-drilled plat, profile view, and deviation survey
Top hole Northing 4448996.62 Easting 533260.79
Landing Point of Curve Northing 4449177.27 Easting 532940.79
Bottom Hole Northing 4452032.91 Easting 531764.90

Elevation (ft) 1147 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)
SOBM

Date permit issued 2/12/2018 Date drilling commenced 11/27/2017 Date drilling ceased 03/22/2018
Date completion activities began 6/15/2018 Date completion activities ceased 7/27/2018
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 346 Open mine(s) (Y/N) depths N
Salt water depth(s) ft 645 Void(s) encountered (Y/N) depths N
Coal depth(s) ft 342 Cavern(s) encountered (Y/N) depths N
Is coal being mined in area (Y/N) N

RECEIVED
Office of Oil and Gas
OCT 19 2018
WV Department of
Environmental Protection

Reviewed by:
SB 1-17-19

Reviewed
CSH 1-17-19

API 47- 009 - 00242 Farm name MIKE RYNIAWEC Well number MIKE RYNIAWEC BRK 1H

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	126	NEW	J-55/94#		Y
Surface	17.5	13.375	417	NEW	J-55/54.50#	253'	Y, 20 BBLs
Coal	SEE SURFACE						
Intermediate 1	12.25	9.625	1696	NEW	J-55/36#		Y, 30 BBLs
Intermediate 2							
Intermediate 3							
Production	8.75/8.50	5.5	16705	NEW	HCP-110/20#		Y
Tubing		2.375	6247	NEW	L-80/4.7#		N
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	GROUT TO SURFACE				SURFACE	24
Surface	CLASS A	351	15.60	1.20	421.2	SURFACE	8
Coal	SEE SURFACE						
Intermediate 1	CLASS A	650	15.60	1.19	773.5	SURFACE	8
Intermediate 2							
Intermediate 3							
Production	CLASS A	2,740	15.60	1.19	3,260.6	SURFACE	24
Tubing							

Drillers TD (ft) 16,705 Loggers TD (ft) 16,705
 Deepest formation penetrated MARCELLUS Plug back to (ft) N/A
 Plug back procedure N/A

Kick off depth (ft) 5,140

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 _____

SURFACE: 7 CENTRALIZERS - EVERY THIRD JOINT OF CASING
 INTERMEDIATE: 24 CENTRALIZERS - EVERY THIRD JOINT OF CASING
 PRODUCTION: 181 CENTRALIZERS - EVERY THIRD JOINT FROM SURFACE TO TOP OF CURVE, THEN EVERY JOINT UNTIL TD

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 _____

RECEIVED
Office of Oil and Gas
OCT 19 2018
WV Department of Environmental Protection

Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	6/16/2018
Job End Date:	7/15/2018
State:	West Virginia
County:	Brooke
API Number:	47-009-00242-00-00
Operator Name:	Southwestern Energy
Well Name and Number:	Mike Ryniawec Brk 1H
Latitude:	40.19070037
Longitude:	-80.60925575
Datum:	NAD83
Federal Well:	NO
Indian Well:	NO
True Vertical Depth:	5,854
Total Base Water Volume (gal):	19,820,472
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
Fresh Water	Operator	Base Fluid					
			Water	7732-18-5	100.00000	81.62694	Density = 8.340
Ingredients	Listed Above	Listed Above					
			Water	7732-18-5	100.00000	0.87865	

RECEIVED
 Office of Oil and Gas
 WV Department of Environmental Protection
 OCT 19 2018

SAND-PREMIUM WHITE-40/70, BULK	Halliburton	Proppant					
				Listed Below			
SAND-COMMON WHITE-100 MESH, SSA-2, BULK (100003676)	Halliburton	Proppant					
				Listed Below			
SCAL16486A	NALCO	Scale Inhibitor					
				Listed Below			
EXCELERATE LX-1	Halliburton	Friction Reducer					
				Listed Below			
HAI-150E	Halliburton	Corrosion Inhibitor					
				Listed Below			
BIOC11219A	NALCO	Biocide					
				Listed Below			
HYDROCHLORIC ACID	Halliburton	Solvent					
				Listed Below			

RECEIVED
 Office of Oil and Gas
 OCT 19 2018
 WV Department of
 Environmental Protection

Items above are Trade Names with the exception of Base Water . Items below are the individual ingredients.

			Crystalline silica, quartz	14808-60-7	100.00000	17.43874	
			Hydrochloric acid	7647-01-0	15.00000	0.12532	

			Polyacrylate	Proprietary	30.00000	0.02160	
			Hydrotreated light petroleum distillate	64742-47-8	30.00000	0.02160	
			Fatty acid ester	Proprietary	5.00000	0.00720	
			Ethylene Glycol	107-21-1	30.00000	0.00644	
			Amine Triphosphate	Proprietary	30.00000	0.00644	Denise Tuck, Halliburton, 3000 N. Sam Houston Pkwy E., Houston, TX 77032, 281-871-6226
			Ethoxylated fatty acid	Proprietary	5.00000	0.00360	
			Ammonium chloride	12125-02-9	5.00000	0.00360	
			Sodium chloride	7647-14-5	5.00000	0.00360	
			Methanol	67-56-1	60.00000	0.00286	
			Benzyl-(C12-C16 Alkyl)- Dimethyl-Ammonium Chloride	68424-85-1	30.00000	0.00143	
			Non-hazardous food substance	Proprietary	100.00000	0.00064	
			Glutaraldehyde	111-30-8	10.00000	0.00048	

* Total Water Volume sources may include various types of water including fresh water, produced water, and recycled water

** Information is based on the maximum potential for concentration and thus the total may be over 100%

*** If you are calculating a percentage of total ingredients do not add the water volume below the green line to the water volume above the green line

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)

RECEIVED
Office of Oil and Gas
OCT 19 2018
WV Department of
Environmental Protection

**MIKE RYNIAWEC BRK 1H
ATTACHMENT 1
PERF REPORT**

STAGE NUM	Perf Date	Perf Top MD	Perf Bottom MD	# SHOTS PER STG
1	5/24/2018	16,616	16,523	36
2	6/16/2018	16,488	16,381	42
3	6/16/2018	16,348	16,241	42
4	6/17/2018	16,208	16,101	42
5	6/17/2018	16,068	15,961	42
6	6/18/2018	15,948	15,820	40
7	6/18/2018	15,808	15,680	40
8	6/19/2018	15,668	15,540	40
9	6/19/2018	15,528	15,400	40
10	6/19/2018	15,388	15,260	40
11	6/20/2018	15,248	15,120	40
12	6/20/2018	15,108	14,980	40
13	6/21/2018	14,968	14,840	40
14	6/21/2018	14,828	14,700	40
15	6/22/2018	14,688	14,560	40
16	6/22/2018	14,548	14,420	40
17	6/22/2018	14,408	14,280	40
18	6/23/2018	14,268	14,140	40
19	6/23/2018	14,128	14,000	40
20	6/23/2018	13,988	13,860	40
21	6/24/2018	13,848	13,720	40
22	6/24/2018	13,708	13,580	40
23	6/24/2018	13,566	13,440	40
24	6/25/2018	13,428	13,300	40
25	6/25/2018	13,288	13,174	36
26	6/25/2018	13,157	13,020	40
27	6/26/2018	13,008	12,880	40
28	6/26/2018	12,868	12,740	40
29	6/26/2018	12,728	12,600	40
30	6/27/2018	12,588	12,460	40
31	6/27/2018	12,448	12,320	40
32	6/28/2018	12,308	12,180	40
33	6/29/2018	12,168	12,040	40
34	6/29/2018	12,028	11,900	40
35	6/29/2018	11,888	11,760	40
36	6/30/2018	11,748	11,620	40
37	6/30/2018	11,608	11,480	40
38	7/1/2018	11,468	11,340	40
39	7/1/2018	11,328	11,200	40
40	7/1/2018	11,188	11,060	40
41	7/1/2018	11,048	10,920	40
42	7/2/2018	10,908	10,780	40
43	7/2/2018	10,768	10,640	40

RECEIVED
Office of Oil and Gas
OCT 19 2018
WV Department of
Environmental Protection

**MIKE RYNIAWEC BRK 1H
ATTACHMENT 1
PERF REPORT**

STAGE NUM	Perf Date	Perf Top MD	Perf Bottom MD	# SHOTS PER STG
44	7/3/2018	10,628	10,500	40
45	7/3/2018	10,488	10,360	40
46	7/4/2018	10,348	10,222	40
47	7/4/2018	10,208	10,080	40
48	7/4/2018	10,068	9,940	40
49	7/4/2018	9,928	9,800	40
50	7/5/2018	9,788	9,660	40
51	7/6/2018	9,648	9,520	40
52	7/6/2018	9,508	9,380	40
53	7/7/2018	9,368	9,240	40
54	7/7/2018	9,228	9,100	40
55	7/8/2018	9,088	8,960	40
56	7/8/2018	8,948	8,820	40
57	7/8/2018	8,808	8,680	40
58	7/9/2018	8,668	8,540	40
59	7/9/2018	8,528	8,400	40
60	7/9/2018	8,388	8,260	40
61	7/10/2018	8,248	8,120	40
62	7/10/2018	8,108	7,980	40
63	7/10/2018	7,968	7,840	40
64	7/10/2018	7,828	7,700	40
65	7/11/2018	7,688	7,560	40

RECEIVED
Office of Oil and Gas
OCT 19 2018
WV Department of
Environmental Protection

MIKE RYNIAWEC BRK 1H

ATTACHMENT 2

STIM REPORT

STAGE NUM	Stim Date	Ave Pump Rate (BPM)	Ave Treatment	Max Breakdown	ISIP (PSI)	Amount of Proppant (lbs)	Amount of water bbls	Amount of nitrogen/othe
1	6/15/2018	91	7,787	7,977	3,804	272,780	5,174	0
2	6/16/2018	88	7,614	8,970	3,771	495,640	8,188	0
3	6/16/2018	95	7,872	5,425	4,308	491,320	7,659	0
4	6/17/2018	62	7,601	5,450	4,214	36,720	5,936	0
5	6/17/2018	69	7,154	5,306	4,164	474,450	8,101	0
6	6/18/2018	95	7,493	5,468	4,091	495,560	7,706	0
7	6/18/2018	98	7,684	5,238	4,191	493,340	7,331	0
8	6/19/2018	94	7,504	5,070	4,139	503,580	8,534	0
9	6/19/2018	100	7,757	5,198	4,332	499,920	7,294	0
10	6/20/2018	96	7,767	4,867	4,125	490,320	7,872	0
11	6/20/2018	92	7,791	5,193	4,323	508,940	7,313	0
12	6/20/2018	98	7,956	4,862	4,259	491,540	7,342	0
13	6/21/2018	95	7,928	3,621	4,174	499,620	8,168	0
14	6/21/2018	97	7,780	4,875	4,395	481,070	7,105	0
15	6/22/2018	100	7,993	5,325	4,278	482,020	7,251	0
16	6/22/2018	100	7,864	5,195	4,446	488,370	6,591	0
17	6/23/2018	100	7,842	5,440	4,466	481,410	6,628	0
18	6/23/2018	99	7,665	5,215	4,159	497,230	7,447	0
19	6/23/2018	100	7,600	5,165	4,544	480,350	6,735	0
20	6/24/2018	100	8,245	5,580	4,243	496,780	6,353	0
21	6/24/2018	99	7,437	5,305	4,320	479,040	6,586	0
22	6/24/2018	100	7,550	5,138	4,558	496,200	5,768	0
23	6/24/2018	100	7,774	5,653	4,164	497,460	6,387	0
24	6/25/2018	100	7,283	4,779	4,404	481,120	7,128	0
25	6/25/2018	100	7,379	4,519	4,056	471,900	7,921	0
26	6/25/2018	101	7,280	5,263	4,238	496,720	6,268	0
27	6/26/2018	100	7,515	5,409	4,347	498,800	5,558	0
28	6/26/2018	99	7,455	4,859	4,186	490,100	6,011	0
29	6/26/2018	96	7,475	5,354	4,386	496,040	6,374	0
30	6/27/2018	97.2	7,921	5,037	4,509	473,900	6,430	0
31	6/28/2018	99.9	7,309	5,072	4,257	498,160	5,779	0
32	6/28/2018	99.2	7,529	5,392	4,699	491,420	9,749	0
33	6/29/2018	100	7,379	5,262	4,191	494,060	6,845	0
34	6/29/2018	99.6	7,450	5,425	4,673	481,320	5,462	0
35	6/30/2018	99.7	7,147	5,598	4,348	497,540	8,063	0
36	6/30/2018	102	7,164	4,209	4,196	484,640	6,132	0
37	6/30/2018	100.3	7,568	5,734	4,654	489,760	5,381	0
38	7/1/2018	100.1	6,978	5,402	4,227	497,000	5,568	0
39	7/1/2018	99.5	7,130	5,385	4,217	494,820	6,504	0
40	7/1/2018	100.1	7,211	4,758	4,364	479,960	5,284	0
41	7/2/2018	99.8	7,203	5,272	4,548	491,360	5,324	0
42	7/2/2018	96.7	6,852	5,090	4,484	465,030	6,091	0
43	7/3/2018	100.2	7,262	4,765	4,259	499,265	6,456	0
44	7/3/2018	100.2	7,192	4,941	4,474	497,640	6,297	0
45	7/3/2018	99.9	7,266	4,975	4,459	491,120	5,336	0
46	7/4/2018	100.4	6,709	5,240	4,598	498,060	6,788	0
47	7/4/2018	100.6	6,964	4,522	4,350	495,920	6,086	0
48	7/4/2018	100	6,866	4,109	4,503	498,520	6,345	0
49	7/5/2018	100.6	6,950	5,260	4,283	499,660	6,253	0
50	7/6/2018	100	7,031	5,147	4,532	488,660	6,312	0
51	7/6/2018	100.4	7,091	5,388	4,586	489,440	5,994	0
52	7/7/2018	100.3	6,646	5,029	4,370	491,960	6,063	0
53	7/7/2018	100.4	6,894	4,949	4,418	489,820	6,069	0

RECEIVED
Office of Oil and Gas
OCT 19 2018
Environmental Protection Department

MIKE RYNIAWEC BRK 1H
ATTACHMENT 2

STIM REPORT

STAGE NUM	Stim Date	Ave Pump Rate (BPM)	Ave Treatment	Max Breakdown	ISIP (PSI)	Amount of Proppant (lbs)	Amount of water bbls	Amount of nitrogen/othe
54	7/7/2018	99.6	6,540	5,053	4,540	496,220	5,791	0
55	7/8/2018	100.8	6,851	5,476	4,534	491,940	6,388	0
56	7/8/2018	99.8	6,645	5,240	4,486	492,520	5,800	0
57	7/9/2018	100.3	6,744	5,336	4,373	504,700	5,695	0
58	7/9/2018	100	7,013	5,137	4,210	494,660	5,897	0
59	7/9/2018	99.5	6,510	5,138	4,557	499,200	5,717	0
60	7/10/2018	100.6	6,588	5,332	4,678	491,260	5,551	0
61	7/10/2018	97.7	6,638	4,791	4,611	497,840	5,941	0
62	7/10/2018	100.9	6,530	5,149	4,661	495,160	5,628	0
63	7/10/2018	99.7	6,451	5,199	4,705	490,320	5,270	0
64	7/11/2018	72.9	7,926	5,126	4,278	487,300	10,358	0
65	7/11/2018	99.8	6,384	5,043	4,468	487,420	5,508	0

RECEIVED
Office of Oil and Gas
OCT 19 2018
WV Department of
Environmental Protection



Well Name:

MIKE RYNIAWEC BRK 1H

47009002420000

LITHOLOGY/FORMATION	TOP DEPTH, MD (FT)	TOP DEPTH, TVD (FT)	BOTTOM DEPTH, MD (FT)	BOTTOM DEPTH, TVD (FT)	QUANTITY AND TYPE OF FLUID
Base of Fresh Water	0.00	0.00	346.00	346.00	
Top of Salt Water	645.00	645.00	NA	NA	
Pittsburgh Coal	342.00	342.00	348.00	348.00	
Big Injun (ss)	1505.00	1505.00	1933.00	1933.00	
Berea (siltstone)	1933.00	1933.00	5402.00	5402.00	
Rhinestreet (shale)	5402.00	5402.00	5759.00	5544.00	
Cashaqua (shale)	5848.00	5615.00	5917.00	5665.00	
Middlesex (shale)	5768.00	5663.00	5857.00	5730.00	
Burket (shale)	5857.00	5730.00	5776.00	5744.00	
Tully (ls)	5776.00	5744.00	5961.00	5799.00	
Mahantango (shale)	5961.00	5799.00	6247.00	5903.00	
Marcellus (shale)	6247.00	5903.00	NA	NA	GAS

Latitude: 40°12'30" SURFACE HOLE

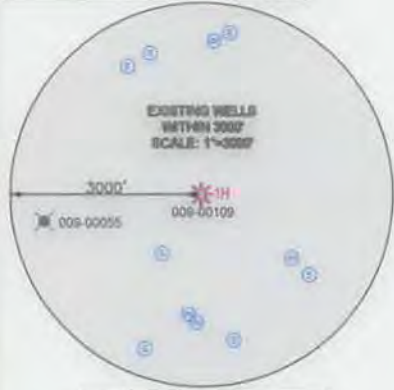
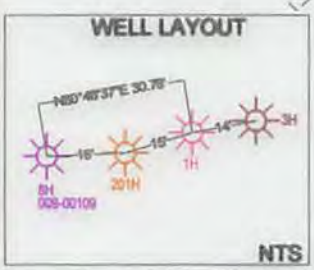
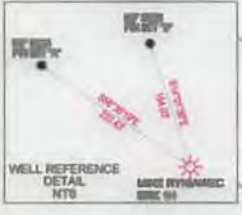
72.32'

Latitude: 40°15'00" BOTTOM HOLE

JHA
SURVEYORS
ENGINEERS
ENVIRONMENTAL
GIS MAPPING
www.jhacompanies.com
66011 Vineyard Road
St. Clairsville, Ohio 43880
740-695-6100

NOTES ON SURVEY

1. COORDINATE SYSTEM IS UTM NAD 83 DATUM, ZONE 17, U.S. FOOT AND WELL COORDINATES ESTABLISHED USING SURVEY GRADE GPS.
2. SURFACE AND ROYALTY OWNER INFORMATION AND THEIR BOUNDARIES SHOWN HEREON WERE PLOTTED FROM DEEDS AND/OR TAX PARCEL MAPS PROVIDED BY CLIENT AND/OR FIELD LOCATIONS.
3. THIS PLAT DOES NOT REPRESENT A BOUNDARY SURVEY OF THE PARCELS SHOWN HEREON.
4. NO DWELLINGS OR BUILDINGS WITHIN 625 FEET OF PROPOSED CENTER OF PAD.
5. NO PERENNIAL STREAMS, LAKES, PONDS, RESERVOIRS OR WETLANDS WITHIN 100 FEET OF THE LIMITS OF DISTURBANCE.
6. NO NATURALLY PRODUCING TROUT STREAM WITHIN 300 FEET OF THE LIMITS OF DISTURBANCE.
7. NO WATER WELLS OR DEVELOPED SPRINGS WITHIN 250 FEET OF PROPOSED WELL.



LINE	BEARING	DISTANCE
L1	N06°28'45"E	1810.28'
L2	S13°36'22"W	1802.98'



SURFACE HOLE LOCATION (SHL): UTM (NAD83, ZONE 17, METERS): NORTHING: 4448996.62 EASTING: 533260.95
LANDING POINT LOCATION (LPL): UTM (NAD83, ZONE 17, METERS): NORTHING: 4449177.27 EASTING: 532940.79
BOTTOM HOLE LOCATION (BHL): UTM (NAD83, ZONE 17, METERS): NORTHING: 4452032.91 EASTING: 531764.90

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 REGULATIONS ISSUED AND PRESCRIBED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION.

P.S. 2041

Handwritten signature and date: 10/10/18



COMPANY:
SWN Production Company, LLC
SWN Production Company™

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS
WVDEP
OFFICE OF OIL & GAS
601 57TH STREET
CHARLESTON, WV 25034

MINIMUM DEGREE OF ACCURACY: 1/200
PROVEN SOURCE OF ELEVATION: SURVEY GRADE GPS (NAD83, US FT)

MIKE RYNIAWEC 1H
OPERATOR'S WELL #: BRK
API WELL #: 47 STATE 009 COUNTY 00242 PERMIT

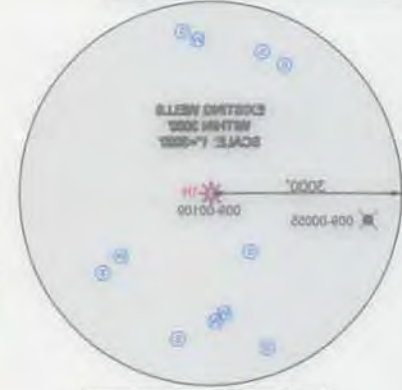
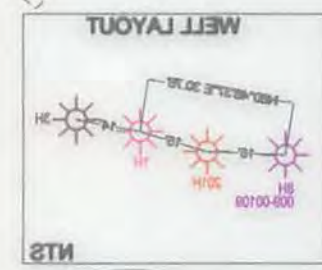
WELL TYPE: OIL WASTE DISPOSAL PRODUCTION DEEP GAS LIQUID INJECTION STORAGE SHALLOW
WATERSHED: UPPER OHIO SOUTH ELEVATION: 1147.0'
DISTRICT: BUFFALO COUNTY: BROOKE QUADRANGLE: BETHANY, WV & TILTONSVILLE, OH-WV
SURFACE OWNER: MIKE RYNIAWEC ACREAGE: ±102.0
OIL & GAS ROYALTY OWNER: MIKE RYNIAWEC ACREAGE: ±102.0
DRILL DRILL DEEPER REDRILL FRACTURE OR STIMULATE PLUG OFF OLD FORMATION PERFORATE NEW FORMATION
CONVERT PLUG & ABANDON CLEAN OUT & REPLUG OTHER CHANGE (SPECIFY) AS-DRILLED
TARGET FORMATION: MARCELLUS ESTIMATED DEPTH: 5,921' TVD 16,705.0' TMD

WELL OPERATOR: SWN PRODUCTION COMPANY, LLC DESIGNATED AGENT: BRITTANY WOODY
ADDRESS: P.O. BOX 1300 ADDRESS: P.O. BOX 1300
CITY: JANE LEW STATE: WV ZIP CODE: 26378 CITY: JANE LEW STATE: WV ZIP CODE: 26378

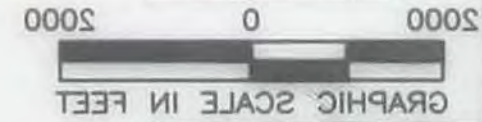
LEGEND:
○ PROPOSED SURFACE HOLE / BOTTOM HOLE
⊙ EXISTING / PRODUCING WELLHEAD
LPL* LANDING POINT LOCATION
⊙ EXISTING WATER WELL
⊙ EXISTING SPRING
— SURVEYED BOUNDARY
===== LEASE BOUNDARY
— ASORILLED PATH
— PROPOSED PATH

REVISIONS:
DATE: 10-10-2018
DRAWN BY: D. REED
SCALE: 1" = 2000'
DRAWING NO: 2017-220
WELL LOCATION PLAT

Longitude: 80°35'00" SURFACE HOLE
Longitude: 80°37'30" BOTTOM HOLE

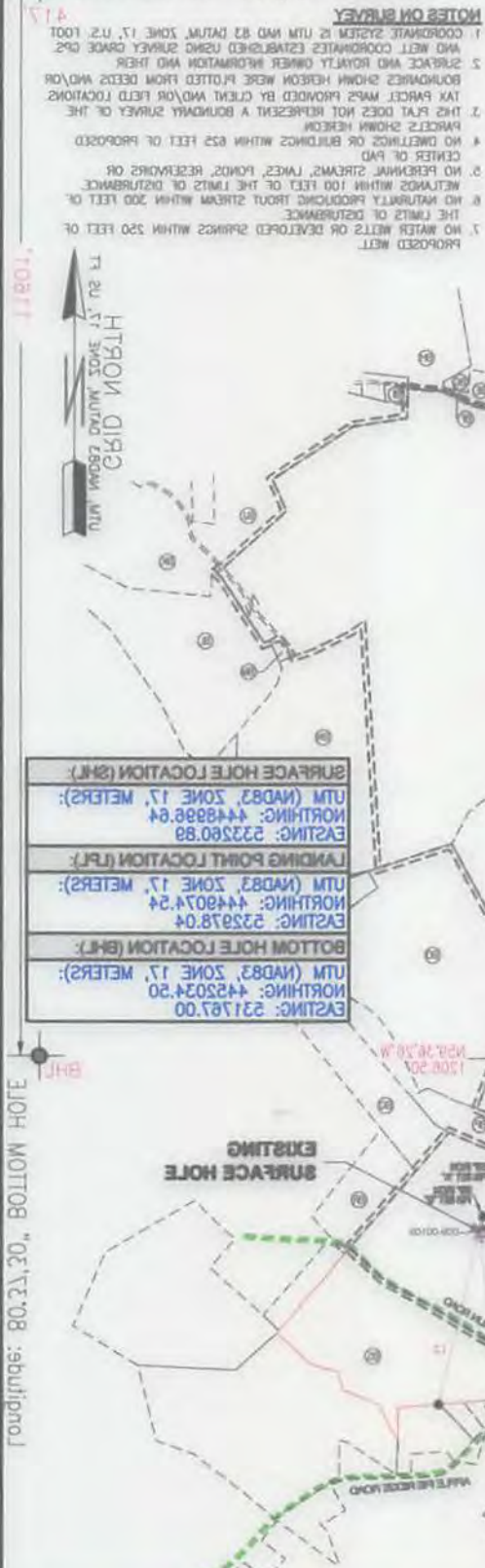


LINE	BEARING	DISTANCE
1	N08°34'27"	1410.38'
2	N13°26'52"W	1402.98'



BOTTOM HOLE LOCATION (BHL)	
UTM (NAD83, ZONE 17, METERS):	NORTHING: 4425034.50 EASTING: 531787.00
LANDING POINT LOCATION (LPL)	
UTM (NAD83, ZONE 17, METERS):	NORTHING: 4449074.54 EASTING: 532978.04
SURFACE HOLE LOCATION (SHL)	
UTM (NAD83, ZONE 17, METERS):	NORTHING: 4448988.84 EASTING: 533280.88

I, THE UNDERSIGNED, HEREBY CERTIFY THAT THE PLAT IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AND SHOWS ALL INFORMATION REQUIRED BY LAW AND REGULATION ORDERED AND PRESCRIBED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION.



COMPANY: **SWN** Production Company, LLC
PRODUCTION COMPANY: **SWN** Production Company, LLC
DATE: 10-10-2018

LEGEND:	REVISIONS:
PROPOSED SURFACE HOLE \ BOTTOM HOLE	DATE: 10-10-2018
EXISTING \ PRODUCING WELLS	DRAWN BY: D. REED
LANDING POINT LOCATION	SCALE: 1" = 2000'
EXISTING WATER WELL	DRAWING NO: 2017-250
EXISTING SPRING	WELL LOCATION PLAT
SURVEYED BOUNDARY	
LEASE BOUNDARY	
ASBILLED PATH	
PROPOSED PATH	

WELL OPERATOR: SWN PRODUCTION COMPANY, LLC	DESIGNATED AGENT: BRITANNY WOODY
ADDRESS: P.O. BOX 1300	ADDRESS: P.O. BOX 1300
CITY: JAME LEW	CITY: JAME LEW
STATE: WA	STATE: WA
ZIP CODE: 98278	ZIP CODE: 98278
WELL NO. 47	STATE: WA
PERMIT NO. 000242	COUNTY: SHALLOW
OPERATOR'S WELL NO. BRK	MIKE RYANWEC 1H
ACCURACY: 1/500	MINIMUM DEGREE OF PROVEN SURVEY
ELEVATION: (NAD 88, US FT)	SOURCE OF GRADE GPS SURVEY
WATERSHED: UPPER OHIO SOUTH	DISTRICT: BUFFALO
SURFACE OWNER: MIKE RYANWEC	DRILL DEEPER
OIL & GAS ROYALTY OWNER: MIKE RYANWEC	REDRILL
FRACTURE OR STIMULATE	PLUG OFF OLD FORMATION
PLUG & ABANDON	PERVAPORATE NEW FORMATION
CLEAN OUT & REPLUG	ACREAGE: ±105.0
OTHER CHANGE (SPECIFY) AS-DRIILLED	ACREAGE: ±105.0
ESTIMATED DEPTH: 2951 TO 16300.0 TMD	QUADRANGLE: BETHANY, WA & TILTONVILLE, OH-WA
	WATERSHED: UPPER OHIO SOUTH
	DISTRICT: BUFFALO
	WELLS: OIL, WASTE DISPOSAL, PRODUCTION, DEEP, GAS, LIQUID INJECTION, STORAGE, SHALLOW

WELL BORE TABLE FOR SURFACE / ROYALTY OWNERS			
TRACT	SURFACE OWNER (S) / ROYALTY OWNER (R)	TAX PARCEL	ACRES
1	RYNIAWEC MIKE (S)/(R)	03-842-0033.0000	102.00
TRACT	SURFACE OWNER	TAX PARCEL	ACRES
2	LUTHER GRIZZEL	03-842-0029.0000	79.13
3	HENZROTH HENRY	03-842-0032.0000	140.52
4	ROCCO A. BASIL, JR.	03-842-0019.0000	104.556
5	BRUCE & DARLENE HENTHORN	03-842-0019.0001	0.08
6	BRUCE & DARLENE HENTHORN	03-842-0014.0000	2.65
7	DEAN S. MILLER AND WIFE, SANDRA D. MILLER	03-842-0024.0000	0.77
8	JOHN KLOWANISH JR. & LEE ANN KLOWANISH	03-842-0025.0000	0.48
9	DANIEL R. GORBY	03-842-0026.0000	1.97
10	DANIEL R. GORBY	03-842-0003.0000	5.00
11	LINDA REEVES GREATHOUSE AND VICKI LYNN HAMILTON	03-837-0087.0000	317.23
12	ROD EDWARD PATTISON JR.	03-842-0002.0000	8.08
13	DALE V. HOPKINS	03-836-0124.0000	34.11
14	DALE V. HOPKINS & DANA M. HOPKINS (SURV)	03-837-0119.0000	23.62
15	LORR MATTHEWS	03-837-0119.0002	2.434
16	MARK A. GRIZZEL (LE-EUGENE (& MARGARET GRIZZEL)	03-837-0113.0000	1.25
17	HERBERT G. WEAVER JR & ANITA H. WEAVER (SURV)	03-836-0125.0000	29.47
18	DANIEL A. NICHOLSON	03-837-0117.0000	1.14
19	JOHN JOSEPH HUFF & CHRISTINE C. HUFF	03-837-0116.0000	1.08
20	GEORGE M. LEWIS & JUDY A. LEWIS (SURV)	03-837-0041.0001	5.56
21	VICKE C. LOUGHERY & SHEENA R. LOUGHERY (SURV)	03-837-0041.0000	41.00

ADJOINING OWNERS TABLE			
TRACT	SURFACE OWNER	TAX PARCEL	ACRES
A	BUREK JOSEPH S & JANE M (SURV)	03-847-0019.0000	117.68
B	FLUHARTY ELIZABETH ELLEN	03-847-0018.0000	52.00
C	MAYHEW KATHY LYNN & MICHEL ETAL (SURV)	03-842-0027.0000	84.74
D	GRIZZEL LUTHER	03-842-0031.0000	18.87
E	GRIZZEL LUTHER	03-842-0030.0000	10.48
F	COLLINS JAY GLEN	03-841-0080.0000	291.93
G	AINSCOUGH FRANK G & KELLY L (SURV)	03-842-0071.0000	12.54
H	KENNY RICHARD HAROLD & JOY LYNN (SURV)	03-842-0020.0000	4.51
I	CONLEY RICKEY D SR & DEBRA	03-842-0013.0000	1.75
J	NORTHERN HANCOCK BANK & TRUST COMPANY	03-842-0023.0000	1.10
K	MILLER DUANE D & BETTY J	03-842-0005.0000	0.73
L	PATTISON ROD EDWARD JR	03-842-0004.0000	13.25
M	SNODERLY ROGER L & KAREN A (SURVIVORSHIP)	03-841-0106.0000	14.58
N	LOY CHRISTOPHER S & INGRID E (SURV)	03-836-0119.0000	13.80
O	FORBKER VIRGINIA MAY HUNT	03-836-0121.0000	2.00
P	ROCKHOLD HOWARD M & DEBROAH S (SURV)	03-836-0122.0000	1.16
Q	JEFFREY ALAN FERRY ETAL	03-836-0117.0000	4.04
R	JOSEPH P. LIZON JR	03-836-0123.0000	0.53
S	CHAPEL HILL CHURCH	03-836-0131.0000	1.10
T	DONNELLY LORE T & HOIT MICHAEL A (SURV)	03-836-0130.0000	5.75
U	IZSO DAVID LEE; ELIZABETH JANE	03-836-0129.0000	3.00
V	COLIN P. KELLY S; NANCY E. TAYLOR (SURV)	03-836-0127.0000	1.01
W	TIMOTHY J. HUFF	03-836-0128.0000	0.75
X	MILLER ZACHARY (CO-TRUSTEES- THOMAS & TONYA MILLER)	03-836-0128.0000	2.00
Y	TESLOWICH BRIAN L	03-836-0145.0000	50.91
Z	CATULLO JOHN A	03-836-0157.0000	39.50
AA	CLAUDIO TARQUINO EMMA M. ANTONIO (SURV)	03-836-0156.0000	24.53
AB	BECKETT CLYDE E & KATHRYN J (SURV)	03-837-0035.0000	6.73
AC	WALDHA RALPH JR & CAROL J	03-837-0034.0000	6.78
AD	LOUGHERY VICKE C & SHEENA R (SURV)	03-837-0103.0000	38.92
AE	SMITH HERS	03-837-0105.0000	3.89
AF	HUFF ROY & VIRGINIA C (SURV)	03-837-0106.0000	2.00
AG	LEWIS GEORGE M & JUDY	03-837-0107.0000	2.00
AH	HUNT BURT E & LOIS M	03-837-0108.0000	2.00
AI	HUNT BURT E & LOIS M	03-837-0109.0000	1.08
AJ	ROBERT LAFRANCE	03-837-0115.0000	1.07
AK	ROBERT LAFRANCE	03-837-0114.0000	1.00
AL	BANK OF AMERICA	03-837-0111.0000	1.00
AM	GRIZZEL MARK A(LE-EUGENE & MARGARET GRIZZEL)	03-837-0112.0000	0.52
AN	EMBREY WILLIAM D JR & MARCIA J (SURV)	03-837-0118.0001	1.00
AO	MCGREW DORIS FERN	03-837-0129.0000	22.52
AP	SMITH VICTOR CHARLES	03-837-0120.0000	3.00
AQ	MILLER CURTIS JOHN	03-837-0119.0001	1.95
AR	WINDSOR POWER HOUSE COAL CO	03-837-0128.0000	1.986
AS	ARACICH DIANNA	03-837-0126.0000	0.81
AT	ARACICH DIANNA	03-837-0127.0000	1.00
AU	MATHESS MICHAEL OWEN	03-837-0125.0000	1.14
AV	HALL SAMUEL M	03-842-0001.0000	18.12
AW	SMITH VICTOR CHARLES	03-837-0130.0000	27.35
AX	CONLEY EDWARD E & NANCY J	03-842-0015.0000	3.10
AY	CONLEY EDWARD E & NANCY J	03-842-0016.0000	0.74
AZ	CONLEY EDWARD E & NANCY J	03-842-0017.0000	0.04
BA	CONLEY RICKEY & DEBRA (SURV)	03-842-0018.0000	2.14
BB	MILLER CHRISTOPHER SCOTT	03-837-0094.0000	24.20
BC	CHUMNEY KEVIN	03-837-0093.0000	5.91
BD	CYPHERT DEBRA; MATTHEW ETAL	03-837-0091.0000	93.93
BE	BONE ROBERT	03-837-0090.0000	2.04
BF	BONE ROBERT	03-837-0090.0001	0.12
BG	BONE ROBERT	03-837-0089.0000	0.78
BH	CYPHERT DEBRA; MATTHEW ETAL	03-837-0088.0000	59.95
BI	CLARK CARL R. & SANDRA S. (SURV)	03-837-0086.0000	0.83
BJ	HANEY BRIAN R. & GINA M. (SURV)	03-837-0077.0000	45.75
BK	LPS INVESTMENT PARTNERSHIP	03-837-0086.0000	65.00
BL	SANFORD ELLEN B.	03-837-0076.0000	66.00
BM	ERDMAN EDGAR S & CECELIA M. (SURV)	03-842-0049.0000	0.83
BN	HAZZETT JAMES & JO ELLEN (SURV)	03-842-0060.0002	65.47
BO	MARKER PHYLLIS P	03-842-0052.0000	81.51
BP	BONAR JAMES L ETAL	03-842-0054.0000	4.83
BQ	WINDSOR POWER HOUSE COAL CO	03-842-0055.0000	21.02
BR	SMITH RALPH O & GINA L (SURV)	03-842-0084.0000	12.60
BS	MIKE RYNIWEC	03-842-0034.0000	61.17

REVISIONS:

COMPANY:

SWN
Production Company, LLC

SWN ^{R₂} ^{V⁺} ⁺
Production Company™

OPERATOR'S MIKE RYNIWEC BRK

DATE: 10-10-2018

WELL #: 1H

DRAWN BY: D. REED

DISTRICT:
BUFFALO

COUNTY:
BROOKE

STATE:
WV

SCALE: N/A
DRAWING NO: 2017-220
WELL LOCATION PLAT

PROPERTY NUMBER 2501168347

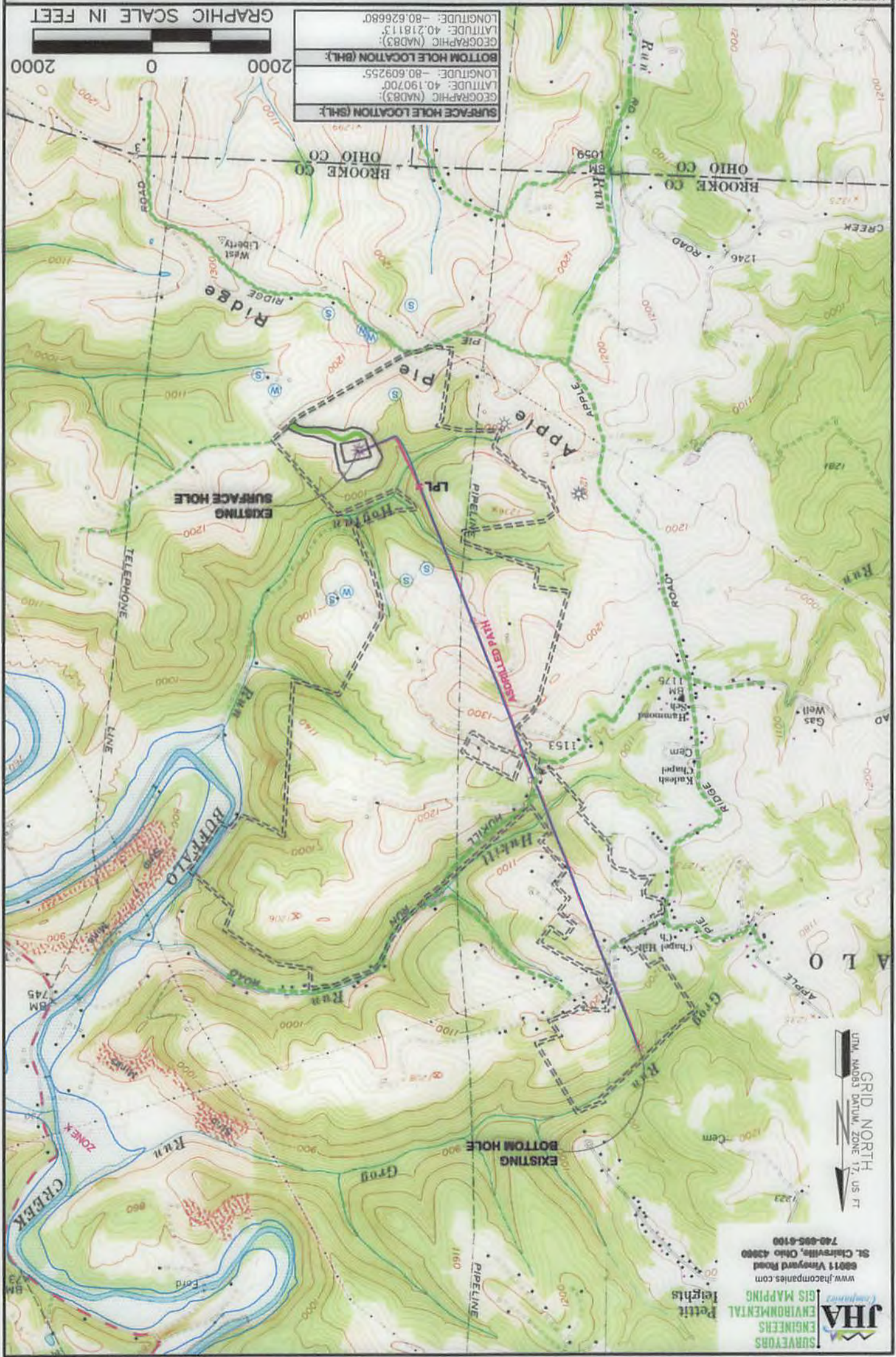
DATE: 10-10-2018

ΒΟΥΛΕΥΤΟ ΔΙΣΤΡΑΧΙ:	ΒΥΘΟΟΚΕ ΣΟΦΙΑ:	ΜΑ ΣΤΑΥΡ:	ΜΕΤ ΓΟΣΥΛΙΟΝ ΕΥΓΙ
ΜΕΤ Γ:	ΗΗ		ΟΡΓΑΝΙΣ ΜΟ: ΣΟΙΣ-ΣΣΟ
ΟΒΕΡΝΟΡ,2	ΜΙΚΕ ΒΑΝΙΛΜΕΣ ΒΥΚ		ΣΧΗΤΕ: Μ/Υ
			ΟΡΓΑΝΙΣ ΒΑ: D' BEED
			ΟΔΙΕ: 10-10-2018
	Προductive Company LLC		Προductive Company Ltd
	ΣΜΜ		ΣΜΜ
ΒΕΛΟΝΙΟΝ:	ΣΟΜΠΑΝΑ:		

ΒΕ	ΟΝΟΜΑΤΑ	ΑΡΙΘΜΟΣ	ΕΠΙΧΕΙΡΗΣΙΑΚΟ
B2	ΜΙΚΕ ΒΑΝΙΛΜΕΣ	02-845-0024 0000	8173
B3	ΣΤΡΩΝ ΒΥΓΓΗ D Φ ΣΩΜ Γ (ΣΤΡΩ)	02-845-0044 0000	1380
B0	ΜΙΝΟΡΟΝ ΛΩΜΕΝ ΗΟΜΕΣ ΣΟΜ' ΣΟ	02-845-0007 0000	5100
B5	ΒΟΜΜΙ ΤΩΜΕΣ Γ ΕΛΥ	02-845-0024 0000	482
B0	ΜΥΚΕΝ ΒΑΝΤΙΣ Β	02-845-0005 0000	8121
B4	ΗΥΣΤΕΛ ΤΩΜΕΣ Φ' ΤΟ ΕΤΕΝ (ΣΤΡΩ)	02-845-0000 0005	8743
B9	ΕΘΡΩΜ ΕΘΩΜ Ζ' Φ ΣΕΣΤΥ Η (ΣΤΡΩ)	02-845-0048 0000	082
B7	ΣΜΙΛΩΘ ΕΤΕΝ Β'	02-825-0038 0000	8600
BK	ΓΕΣ ΗΥΣΤΕΡΕΝΙ ΒΥΚΩΜΕΣΗ	02-825-0088 0000	8200
B1	ΗΜΙΕΛ ΕΘΩΜ Κ' Φ ΣΩΜ Η' (ΣΤΡΩ)	02-825-0033 0000	4732
B1	ΣΤΩΚ ΣΩΜ Β' Φ ΣΩΜΩ Ζ' (ΣΤΡΩ)	02-825-0088 0000	082
B4	ΣΑΜΕΛΙ ΔΕΒΒΥ ΜΥΛΛΗΜ ΕΛΥ	02-825-0088 0000	2882
B0	ΒΟΜΕ ΒΟΒΕΛ	02-825-0088 0000	058
B2	ΒΟΜΕ ΒΟΒΕΛ	02-825-0080 0004	075
B0	ΒΟΜΕ ΒΟΒΕΛ	02-825-0080 0000	504
B0	ΣΑΜΕΛΙ ΔΕΒΒΥ ΜΥΛΛΗΜ ΕΛΥ	02-825-0081 0000	8782
B0	ΣΗΥΜΕΛ ΚΕΛΗ	02-825-0082 0000	201
B0	ΜΥΤΕΝ ΣΗΥΣΙΩΜΕΝ ΣΟΛΛ	02-825-0084 0000	5430
BV	ΣΟΜΕΛ ΜΟΚΕΛ Φ ΔΕΒΒΥ (ΣΤΡΩ)	02-845-0018 0000	574
V5	ΣΟΜΕΛ ΕΔΜΩΔ Ε Φ ΗΜΣΑ 1	02-845-0013 0000	004
V4	ΣΟΜΕΛ ΕΔΜΩΔ Ε Φ ΗΜΣΑ 1	02-845-0018 0000	034
VX	ΣΟΜΕΛ ΕΔΜΩΔ Ε Φ ΗΜΣΑ 1	02-845-0012 0000	210
VW	ΣΤΡΩΝ ΑΣΙΟΝ ΣΗΥΣΕΣ	02-825-0120 0000	5520
V4	ΗΜΤ ΣΩΜΕΤ Η	02-845-0001 0000	1813
V1	ΜΥΛΕΣΣ ΜΙΧΕΛ ΟΜΕΝ	02-825-0152 0000	114
V1	ΜΥΣΙΟΝ ΟΜΩΜ	02-825-0153 0000	100
V2	ΜΥΣΙΟΝ ΟΜΩΜ	02-825-0158 0000	081
V6	ΜΙΝΟΡΟΝ ΛΩΜΕΝ ΗΟΜΕΣ ΣΟΜ' ΣΟ	02-825-0158 0000	1288
V0	ΜΥΤΕΝ ΣΤΩΣΣ ΤΩΜ	02-825-0118 0001	182
V6	ΣΤΡΩΝ ΑΣΙΟΝ ΣΗΥΣΕΣ	02-825-0150 0000	200
V0	ΗΣΟΜΕΝ ΔΟΒΣ ΕΘΜ	02-825-0158 0000	5525
VW	ΕΡΩΒΕΛ ΜΥΤΩΝ D' Φ ΗΜΣΑ Γ (ΣΤΡΩ)	02-825-0118 0001	100
VW	ΟΜΣΣΕΤ ΜΥΚ ΜΥΤΕ-ΕΡΩΒΕ Φ ΜΥΝΩΜΕΤ ΟΜΣΣΕΤ	02-825-0115 0000	025
V7	ΒΥΜ ΟΛ ΜΥΣΙΟΝ	02-825-0111 0000	100
VK	ΒΟΒΕΛ ΓΥΛΩΜΣ	02-825-0114 0000	100
V1	ΒΟΒΕΛ ΓΥΛΩΜΣ	02-825-0118 0000	103
V1	ΗΜΙ ΒΥΒΕ Ε Φ ΓΟΣ Η	02-825-0108 0000	108
V1	ΗΜΙ ΒΥΒΕ Ε Φ ΓΟΣ Η	02-825-0108 0000	500
V0	ΓΕΜΣ ΔΕΟΜΣ Η Φ ΥΠΔ	02-825-0103 0000	500
V0	ΗΥΛ ΜΩ Φ ΑΒΩΜΩ Σ (ΣΤΡΩ)	02-825-0108 0000	500
V0	ΣΤΡΩΝ ΗΕΜΣ	02-825-0102 0000	288
V0	ΓΟΣΟΜΕΛ ΜΟΚΕ Σ Φ ΣΕΣΤΥ Η (ΣΤΡΩ)	02-825-0102 0000	2885
V0	ΜΥΝΩΜΩΝ ΜΥΤΩΝ Η Φ ΣΩΜΩ Γ	02-825-0024 0000	858
V9	ΒΕΚΕΛ ΣΤΑΔΕ Ε Φ ΜΥΣΙΟΝ Γ (ΣΤΡΩ)	02-825-0022 0000	853
VY	ΣΟΛΩΝ ΔΥΟΠΩΜΕΣΗΜ Η' ΜΥΝΩΜ (ΣΤΡΩ)	02-828-0128 0000	5422
Z	ΣΥΛΛΕΤΟ ΤΩΜ Α	02-828-0123 0000	2820
A	ΔΕΣΤΟΜΩΝ ΒΥΜ Γ	02-828-0142 0000	2881
X	ΜΥΤΕΝ ΣΥΟΜΩ (ΣΟ-ΔΥΠΣΕΣΣΕΣ- ΔΥΟΜΣ Φ ΤΩΜ ΜΥΤΕΣ)	02-828-0158 0000	500
M	ΔΥΟΠΩΝ Τ ΗΥΛ	02-828-0158 0000	032
A	ΣΟΠ Β' ΚΕΤΤΑ Η' ΗΜΣΑ Ε ΔΥΑΓΩΝ (ΣΤΡΩ)	02-828-0153 0000	101
Π	ΙΣΣΟ ΔΩΜ ΓΕΣ' ΕΓΩΒΕΜΗ ΤΩΜ	02-828-0158 0000	200
I	ΟΜΜΕΤΑ ΓΟΜΕ Δ' Φ ΜΩ ΜΥΣΙΟΝ Α (ΣΤΡΩ)	02-828-0120 0000	232
Z	ΟΜΜΕΤ ΗΜΤ ΟΜΩΜ	02-828-0121 0000	110
B	ΤΟΣΕΜ Β' ΓΩΣΗ Η	02-828-0132 0000	022
D	ΤΕΛΛΕΛ ΜΥΜ ΕΛΜΑ ΕΛΥ	02-828-0113 0000	404
B	ΜΟΚΩΜΩΔ ΜΩΜΩΝ Η Φ ΔΕΒΒΩΝ Ζ (ΣΤΡΩ)	02-828-0155 0000	178
O	ΛΩΜΕΝ ΑΒΩΜΩ ΜΥΛ ΗΥΜ	02-828-0151 0000	500
H	ΓΟΛ ΣΗΥΣΙΩΜΕΝ Ζ Φ ΜΩΜΩ Ε (ΣΤΡΩ)	02-828-0118 0000	1280
H	ΣΗΥΣΕΣ ΜΟΚΕ Γ Φ ΜΥΣΙΟΝ Α (ΣΤΡΩΜΩΣΗΜ)	02-841-0108 0000	1428
Γ	ΜΥΛΩΜΩΝ ΜΩΔ ΕΔΜΩΔ Η	02-845-0004 0000	1232
K	ΜΥΤΕΝ ΔΥΜΕ D' Φ ΒΕΛΛΑ 1	02-845-0002 0000	032
T	ΜΟΜΜΕΜ ΗΜΣΟΜ ΒΥΜ Φ ΔΥΠΣ ΣΟΜΠΑΝΑ	02-845-0032 0000	110
T	ΣΟΜΕΛ ΜΟΚΕ D' Φ ΔΕΒΒΥ	02-845-0012 0000	152
H	ΚΕΜΜ ΜΩΜΩΔ ΜΩΜΩΔ Φ ΤΟΛ ΓΑΜ (ΣΤΡΩ)	02-845-0030 0000	421
O	ΜΥΣΙΟΜΩΝ ΔΥΜ Σ Φ ΚΕΤΤΑ Γ (ΣΤΡΩ)	02-845-0031 0000	1524
L	ΣΟΤΩΜ ΗΑ ΟΜΕΝ	02-845-0080 0000	58180
E	ΟΜΣΣΕΤ ΓΥΛΩΜ	02-845-0030 0000	1048
D	ΟΜΣΣΕΤ ΓΥΛΩΜ	02-845-0021 0000	1883
C	ΜΥΝΩΜ ΜΥΣΙΟΝ ΓΑΜ Φ ΜΩΜΕΤ ΕΛΥ (ΣΤΡΩ)	02-845-0033 0000	8434
B	ΕΠΥΜΩΛ ΕΠΣΥΣΕΜ ΕΤΕΝ	02-845-0018 0000	2300
V	ΒΥΚ ΜΩΜΩ Ζ Φ ΤΩΜ Η (ΣΤΡΩ)	02-845-0018 0000	11388
TABLE	ΣΥΛΛΕΤΟ ΟΜΜΕΤ	ΔΥΚ ΜΥΣΙΟΝ	ΥΣΕΜ
ADDITIONAL OWNERS TABLE			
51	ΜΟΚΕ Σ ΓΟΣΟΜΕΛ Φ ΣΕΣΤΥ Η' ΓΟΣΟΜΕΛ (ΣΤΡΩ)	02-825-0041 0000	4100
50	ΔΕΟΜΣ Η ΓΕΜΣ Φ ΥΠΔ Α ΓΕΜΣ (ΣΤΡΩ)	02-825-0041 0001	228
18	ΤΩΜ ΤΟΣΕΜ ΗΥΛ Φ ΣΗΥΣΙΟΝ Σ' ΗΥΛ	02-825-0118 0000	108
19	ΟΜΜΕΤ Φ ΜΩΜΩΜΩ	02-825-0113 0000	114
13	ΗΕΒΕΛ Σ' ΜΩΜΩ Η Φ ΜΥΛ Η' ΜΩΜΩ (ΣΤΡΩ)	02-828-0132 0000	5843
18	ΜΥΚ Α' ΟΜΣΣΕΤ (ΓΕ-ΕΡΩΒΕ Φ ΜΥΝΩΜΕΤ ΟΜΣΣΕΤ)	02-825-0112 0000	152
12	ΤΩΜ ΜΥΛΛΗΜΣ	02-825-0118 0005	5424
14	ΟΜΕ Α' ΜΩΜΩΣ Φ ΟΜΩ Η' ΜΩΜΩΣ (ΣΤΡΩ)	02-825-0118 0000	3285
12	ΟΜΕ Α' ΜΩΜΩΣ	02-828-0154 0000	2411
15	ΜΩΔ ΕΔΜΩΔ ΜΥΛΩΜ Η	02-845-0005 0000	808
11	ΓΩΜ ΜΕΛΕΣ ΟΜΩΜΩΣΗΜ ΜΩΔ ΜΩΜ ΓΑΜ ΗΜΩΜΩΜ	02-825-0083 0000	21353
10	ΟΜΜΕΤ Η' ΟΜΩΜ	02-845-0002 0000	200
8	ΟΜΜΕΤ Β' ΟΜΩΜ	02-845-0058 0000	183
9	ΤΩΜ ΚΤΩΜΩΜ Η' Φ ΓΕΣ ΜΩΜ ΚΤΩΜΩΜ	02-845-0032 0000	048
5	ΔΕΜ Ζ' ΜΥΤΕΝ ΜΩΔ ΜΩΛ' ΣΥΜΩΜ D' ΜΥΤΕΝ	02-845-0054 0000	033
8	ΒΥΣΕ Φ ΟΜΩΜΕ ΜΕΜΩΜΩΜ	02-845-0014 0000	582
2	ΒΥΣΕ Φ ΟΜΩΜΕ ΜΕΜΩΜΩΜ	02-845-0018 0001	008
4	ΜΟΚΩ Α' ΒΥΒΕ Η	02-845-0018 0000	104228
2	ΜΕΜΩΜΩΜ ΜΕΜΩ	02-845-0025 0000	14025
5	ΤΥΜΕΣ ΟΜΣΣΕΤ	02-845-0030 0000	1812
TABLE	ΣΥΛΛΕΤΟ ΟΜΜΕΤ	ΔΥΚ ΜΥΣΙΟΝ	ΥΣΕΜ
1	ΜΥΜΩΜΣ ΜΙΚΕ (ΣΤΡΩ)	02-845-0022 0000	10300
TABLE	ΣΥΛΛΕΤΟ ΟΜΜΕΤ (D' ΜΩΜΩΤ Α' ΟΜΜΕΤ D)	ΔΥΚ ΜΥΣΙΟΝ	ΥΣΕΜ
MET BOME TABLE FOR SYLLETO OWNERS			

WELL OPERATOR: SMN PRODUCTION COMPANY, LLC		SURFACE OWNER: MIKE RYNAWEC	
ADDRESS: P.O. BOX 1300 JANE LEW, WV 26378		COUNTY - CODE BROOKE - 009	
WELL (FARM) NAME: MIKE RYNAWEC BRK		USGS 7 1/2 QUADRANGLE MAP NAME: BETHANY, WV & TILTONSVILLE OH-WV	
WELL #	1H	DISTRICT:	BUFFALO
SERIAL #	XXXX		

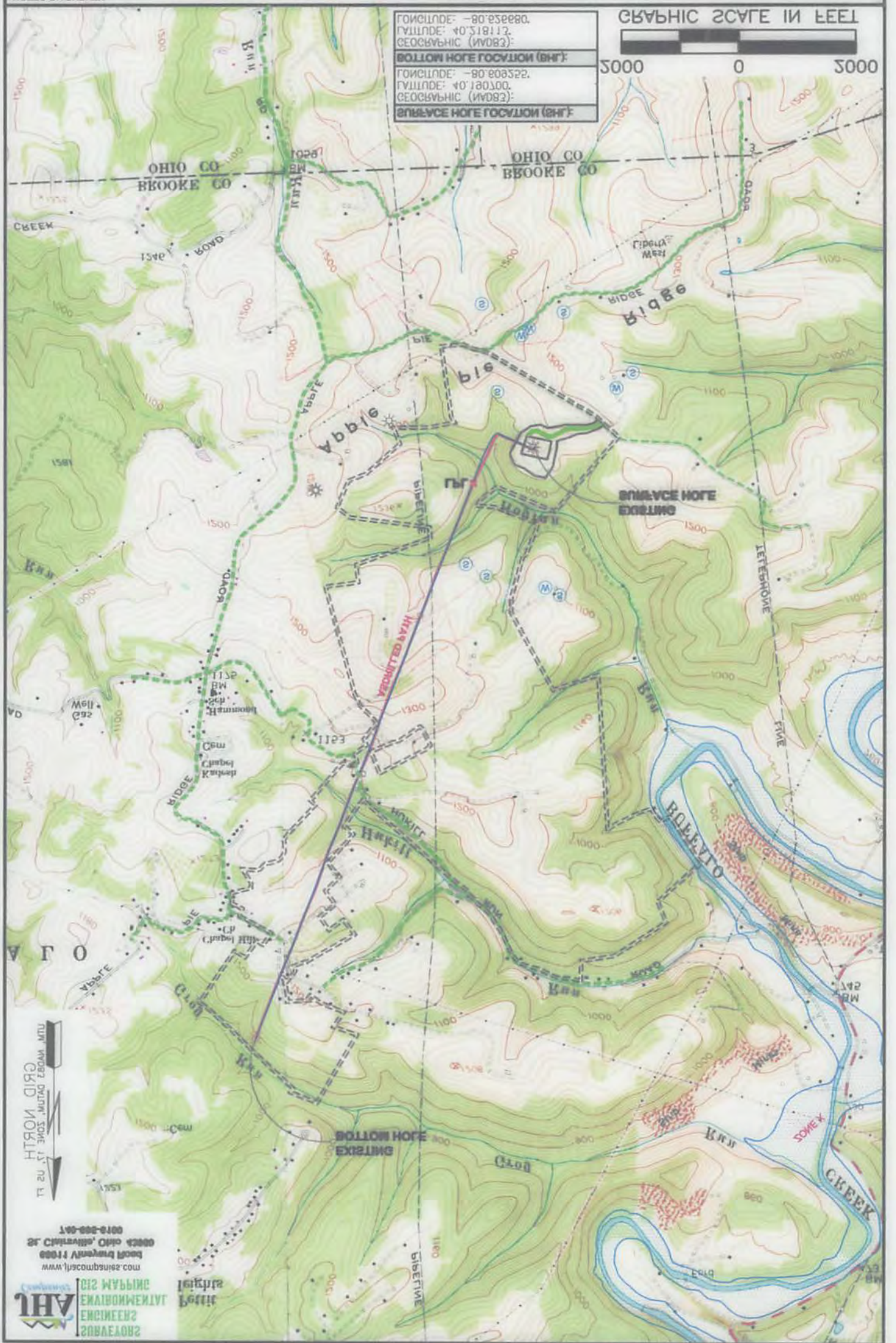
NOTES ON SURVEY:
 1. SURFACE AND ROYALTY OWNER INFORMATION AND THEIR BOUNDARIES SHOWN HEREON WERE PLOTTED FROM DEEDS AND/OR TAX PARCEL MAPS PROVIDED BY CLIENT AND/OR FIELD LOCATIONS.
 2. THIS PLAT DOES NOT REPRESENT A BOUNDARY SURVEY OF THE PARCELS SHOWN HEREON.
 3. ALL INSETS ARE GRID NORTH UNLESS OTHERWISE DEPICTED.



MIKE BAINUMES SURVEY COMPANY: P.O. BOX 1200 WINE TON, MO 65238 ADDRESS: 2011 BROADWAY, SUITE 100 ST. LOUIS, MO 63103	PROJECT NAME & LOCATION: BROOKS - 008 CODE MIKE BAINUMES BSK MET (ELEV) NAME:	DISTRICT: JH XXXX MET
---	---	--------------------------------

7. THE USER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND RIGHTS OF WAY FROM THE APPROPRIATE AGENCIES AND OWNERS OF THE PROPERTY.
8. THIS PLAN DOES NOT REPRESENT A WARRANTY OR GUARANTEE OF THE ACCURACY OF THE INFORMATION PROVIDED BY CLIENT AND/OR FIELD SURVEYORS.
9. SURVEY AND PROPERTY OWNER INFORMATION AND THEIR NOTES ON SHEET

- EOOD BVM
- UNBUILT BVM
- BOUNDARY BVM
- FEUGE BOUNDARY
- USCE22 BOUND TO BREA 21E
- BLMCS BOUND
- USCE22 BOUND
- FUNDING POINT POSITION
- EXISTING \ BOUNDARY METHOD
- BOUNDARY SURVEY HOPE \ BOUNDARY HOPE



1-800-888-8100
 2111 S. Main Street, Suite 100
 St. Louis, MO 63103
 WWW.MIKESURVEYS.COM

MIKE BAINUMES
 CIVIL ENGINEER
 LICENSE NO. 11100