

SWN

Southwestern Energy®

PO Box 1300
Jane Lew, WV 26378
PHONE: (832) 796-1610

December 30, 2015

Ms. Laura Cooper
Office of Oil & Gas
601 57th Street
Charleston, WV 25304

RE: Betty Schafer MSH 201H and Betty Schafer MSH 210H WR-35 and 36 Forms

Dear Ms. Cooper:

Enclosed please find the Well Record reports and first production reports for the above captioned wells. The Frac Focus portion is missing and the person responsible is out of town until Monday. As soon as we sort out this issue I will send the frac reports in.

If you have any questions or desire additional information, please call me at 832-796-6215.

Thank you.

Sincerely,


Cody Magby

Cody Magby
Regulatory Analyst
10000 Energy Drive
Houston, TX 77389

$\frac{R^2}{A} \rightarrow V^+$

The Right People doing the Right Things,
wisely Investing the cash flow from
our underlying Assets, will create Value+

WS AX 02/23/16


2-22-16

02/26/2016

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



API 47-051-01777 County 51-Marshall District 6-Sand Hill
Quad 486-Moundsville Pad Name Betty Schafer MSH Pad1 Field/Pool Name Panhandle
Farm name Betty Jane Schafer Well Number 210
Operator (as registered with the OOG) SWN Production CO., LLC
Address 10000 Energy Drive City Spring State TX Zip 77380

As Drilled location NAD 83/UTM Attach an as-drilled plat, profile view, and deviation survey
Top hole Northing 4426810.708 Easting 531105.246
Landing Point of Curve Northing 4426676.766 Easting 531885.235
Bottom Hole Northing 4424409.653 Easting 532929.699

Elevation (ft) 849 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 5/15/15 Date drilling commenced 6/23/15 Date drilling ceased 8/17/15
Date completion activities began 8/24/15 Date completion activities ceased 10/5/15
Verbal plugging (Y/N) N Date permission granted _____ Granted by _____

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

Freshwater depth(s) ft 106 Open mine(s) (Y/N) depths _____
Salt water depth(s) ft 2000 Void(s) encountered (Y/N) depths _____
Coal depth(s) ft 360 Cavern(s) encountered (Y/N) depths _____
Is coal being mined in area (Y/N) Y

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N
JAN 04 2016
N
WV Department of
Environmental Protection
Reviewed by:

EB 2-22-16
02/26/2016

API 47-051 - 01777 Farm name Betty Jane Schafer Well number 210

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	N	94/F-25		Y, GTS
Surface	17.5	13.375	302	N	54.50/J-55		Y
Coal	12.250	9.625	1634.20	N	40/J-55		Y
Intermediate 1							
Intermediate 2							
Intermediate 3							
Production	8.5	5.5	16395	N	20/HCP-110		Y
Tubing		2.375	6488.20	N	L-80		
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	120	120	1.19	143	SURFACE	TOP JOB, GTS
Surface	CLASS A	316	15.6	1.2	379		8
Coal	CLASS A	644	15.55	1.18	760		8
Intermediate 1							
Intermediate 2							
Intermediate 3							
Production	CLASS A	1158/2262	15.6/15.6	1.24/1.19	1435/2692		24
Tubing							

Drillers TD (ft) 16416 Loggers TD (ft) 16416

Deepest formation penetrated MARCELLUS Plug back to (ft) _____

Plug back procedure _____

Kick off depth (ft) 5470

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 _____

1 in the middle and top of the shoe joint, then 1 on the top of the 3rd joint, and then 1 at the top of every 3rd joint to surface.

1 solid body centralizer locked in against the float collar, one solid body centralizer on each joint from the float collar to 30 degrees.

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 _____

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API 47- 051 - 01777 Farm name Betty Jane Schafer Well number 210

PRODUCING FORMATION(S)	DEPTHS		
MARCELLUS	6014	TVD	16416 MD

Please insert additional pages as applicable.

GAS TEST Build up Drawdown Open Flow OIL TEST Flow Pump
 SHUT-IN PRESSURE Surface 175 psi Bottom Hole psi DURATION OF TEST NA hrs
 OPEN FLOW Gas 1538 mcfpd Oil 30 bpd NGL bpd Water 24 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		
		SEE ATTACHED			

Please insert additional pages as applicable.

Drilling Contractor SWN DRILLING CO.
 Address 10000 Energy Drive City Spring State TX Zip 77389
 Logging Company WEATHERFORD US LP
 Address 121 HILLPOINTE DR., SUITE 300 City Canonsburg State TX Zip 15317
 Cementing Company SCHLUMBERGER OIL FIELD SERVICES and ALLIED OIL AND GAS
 Address 1325 S. DAIRY ASHFORD DRIVE City Houston State TX Zip 77077
 Stimulating Company BAKER HUGHES
 Address 17021 ALDINE WESTFIELD ROAD City Houston State TX Zip 77073

Please insert additional pages as applicable.

Completed by CODY MAGBY Telephone 832-796-6215
 Signature *Cody Magby* Title SR. REGULATORY ANALYST Date 12/30/15

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WR-36
Rev. 5/08

Date: 12-30-2015
Operators Well Number: 210H
API Well No: 47-051 - 01777

**State of West Virginia
Department of Environmental Protection
Office of Oil and Gas**

**Well Operator's Report of
Initial Gas-Oil Ratio**

Well Operator SWN PRODUCTION CO., LLC Designated Agent _____
Address 10000 ENERGY DRIVE Address _____
SPRING, TX 77389 _____

Geological Target Formation: MARCELLUS SHALE Depth 16,518' MD feet
Perforation Interval 5,554' TVD-16,518' MD feet

Guidelines for testing:

1. A minimum of gas vented or flared.
2. A 24 hour pre-flow into pipelines or tanks.
3. Uniform producing rate during the 24 hour test per test period.
4. Measurement standards as for Form WR-39, "Report of Annual Production" (see 35CSR4-15)
5. Separate Form WR-36 for each producing formation in a multiple completion.

TEST DATA

Start of Test Date	Time	End of Test Date	Time	Duration of Test
Tubing Pressure	Casing Pressure	Separator Pressure	Separator Temperature	
Oil Production During Test	Gas Production During Test	Water Production During Test		
BBLS	MCF	BBls	-Salinity	
Oil Gravity	Producing Method (flowing, pumping, gas lift etc.)			
API				

GAS PRODUCTION

Measurement Method Flange Tap <input type="checkbox"/> Pipe Tap <input type="checkbox"/> L-10 <input type="checkbox"/>		Positive Choke <input type="checkbox"/>
		Positive flow prover <input type="checkbox"/>
Orifice diameter	Pipe Diameter (inside)	Nominal Choke Size inches
Differential Pressure range	Max. Static pressure range	Prover and Orifice diameter - inches
Differential		Static
Gas Gravity (Air = 1.0)	Flowing Temperature	Gas Temperature
Measured	Estimated	
24 Hour Coefficient	24 Hour coefficient pressure PSIA	

TEST RESULTS

Daily Oil 30	Daily Water 24	Daily Gas 1538	Gas-Oil Ratio 51.27 MCF/BBL
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SWN PRODUCTION CO., LLC **RECEIVED**
Well Operator
BY CODY MAGBY **Office of Oil and Gas**
ITS: STAFF REGULATORY ANALYST JAN 04 2016

BETTY SCHAFFER MSH 210		API # 4705101777		STIMULATION CHART					
WELL NAME	STAGE NUM	Stim 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
BETTY SCHAFFER MSH 210	1	9/15/2015	87	8,751	8,751	9,279	4,062	410,849	8,959
BETTY SCHAFFER MSH 210	2	9/15/2015	97	8,846	8,846	9,041	4,442	699,939	10,780
BETTY SCHAFFER MSH 210	3	9/15/2015	96	8,780	8,780	9,380	4,490	701,564	10,744
BETTY SCHAFFER MSH 210	4	9/16/2015	98	8,509	8,509	9,013	4,516	703,642	10,871
BETTY SCHAFFER MSH 210	5	9/16/2015	98	8,368	8,368	8,596	4,816	698,380	10,715
BETTY SCHAFFER MSH 210	6	9/17/2015	99	8,334	8,334	8,540	4,699	702,343	11,026
BETTY SCHAFFER MSH 210	7	9/17/2015	98	8,332	8,332	9,097	4,761	703,137	10,786
BETTY SCHAFFER MSH 210	8	9/18/2015	100	8,343	8,343	8,656	4,600	702,889	10,693
BETTY SCHAFFER MSH 210	9	9/18/2015	100	8,264	8,264	8,687	4,789	703,951	10,775
BETTY SCHAFFER MSH 210	10	9/18/2015	97	8,173	8,173	8,711	4,657	701,253	10,610
BETTY SCHAFFER MSH 210	11	9/19/2015	100	8,192	8,192	8,600	4,627	702,924	10,664
BETTY SCHAFFER MSH 210	12	9/19/2015	101	8,069	8,069	8,489	4,723	702,520	10,760
BETTY SCHAFFER MSH 210	13	9/19/2015	99	8,373	8,373	8,976	4,678	702,117	10,379
BETTY SCHAFFER MSH 210	14	9/20/2015	100	8,063	8,063	8,614	4,703	701,233	10,748
BETTY SCHAFFER MSH 210	15	9/20/2015	99	8,092	8,092	8,509	4,626	701,735	10,515
BETTY SCHAFFER MSH 210	16	9/20/2015	99	8,510	8,510	8,766	4,563	699,287	10,235
BETTY SCHAFFER MSH 210	17	9/21/2015	97	8,336	8,336	8,984	4,432	662,453	9,970
BETTY SCHAFFER MSH 210	18	9/21/2015	90	7,930	7,930	8,870	4,838	700,397	11,947
BETTY SCHAFFER MSH 210	19	9/26/2015	98	7,843	7,843	8,944	4,613	701,460	10,476
BETTY SCHAFFER MSH 210	20	9/26/2015	101	7,594	7,594	8,067	4,470	703,266	10,508
BETTY SCHAFFER MSH 210	21	9/26/2015	101	7,416	7,416	7,649	4,711	700,940	11,104
BETTY SCHAFFER MSH 210	22	9/26/2015	99	7,663	7,663	8,211	4,221	701,602	10,264
BETTY SCHAFFER MSH 210	23	9/27/2015	101	7,319	7,319	7,866	4,451	701,628	10,588
BETTY SCHAFFER MSH 210	24	9/27/2015	101	7,296	7,296	7,903	4,432	708,089	11,006
BETTY SCHAFFER MSH 210	25	9/27/2015	99	7,937	7,937	8,971	4,530	700,068	10,339
BETTY SCHAFFER MSH 210	26	9/28/2015	100	7,329	7,329	8,186	4,587	706,249	11,300
BETTY SCHAFFER MSH 210	27	9/28/2015	100	7,690	7,690	9,113	4,525	705,403	10,618
BETTY SCHAFFER MSH 210	28	9/28/2015	99	7,465	7,465	8,186	4,337	699,958	10,285
BETTY SCHAFFER MSH 210	29	9/29/1930	100	7,112	7,112	7,545	4,393	698,286	10,949
BETTY SCHAFFER MSH 210	30	9/29/2015	99	7,643	7,643	9,118	4,177	700,814	12,060
BETTY SCHAFFER MSH 210	31	10/1/2015	101	7,561	7,561	9,042	4,470	657,855	9,621

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API # 4705101777

PERFORATION CHART

WELL NAME	STAGE NUM	Perf Date	Perf Top MD	Perf Bottom MD	# SHOTS PER STG
BETTY SCHAFFER MSH 210	1	9/15/2015	16,052	16,234	42
BETTY SCHAFFER MSH 210	2		15,812	15,994	42
BETTY SCHAFFER MSH 210	3		15,572	15,754	42
BETTY SCHAFFER MSH 210	4	9/16/2015	15,332	15,514	42
BETTY SCHAFFER MSH 210	5	9/16/2015	15,092	15,274	42
BETTY SCHAFFER MSH 210	6	9/17/2015	14,852	15,034	42
BETTY SCHAFFER MSH 210	7	9/17/2015	14,612	14,794	42
BETTY SCHAFFER MSH 210	8	9/18/2015	14,372	14,554	42
BETTY SCHAFFER MSH 210	9	9/18/2015	14,132	14,314	42
BETTY SCHAFFER MSH 210	10	9/18/2015	13,892	14,074	42
BETTY SCHAFFER MSH 210	11	9/19/2015	13,652	13,834	42
BETTY SCHAFFER MSH 210	12	9/19/2015	13,412	13,594	42
BETTY SCHAFFER MSH 210	13		13,172	13,354	42
BETTY SCHAFFER MSH 210	14	9/20/2015	12,932	13,114	42
BETTY SCHAFFER MSH 210	15	9/20/2015	12,692	12,874	42
BETTY SCHAFFER MSH 210	16	9/20/2015	12,452	12,636	42
BETTY SCHAFFER MSH 210	17	9/21/2015	12,212	12,390	43
BETTY SCHAFFER MSH 210	18	9/21/2015	11,972	12,154	42
BETTY SCHAFFER MSH 210	19	9/26/2015	11,732	11,914	42
BETTY SCHAFFER MSH 210	20	9/26/2015	11,492	11,674	42
BETTY SCHAFFER MSH 210	21	9/26/2015	11,252	11,432	42
BETTY SCHAFFER MSH 210	22	9/26/2015	11,012	11,194	42
BETTY SCHAFFER MSH 210	23		10,772	10,954	42
BETTY SCHAFFER MSH 210	24		10,532	10,714	42
BETTY SCHAFFER MSH 210	25	9/27/2015	10,292	10,476	32
BETTY SCHAFFER MSH 210	26		10,052	10,234	42
BETTY SCHAFFER MSH 210	27	9/28/2015	9,812	9,994	42
BETTY SCHAFFER MSH 210	28	9/28/2015	9,572	9,754	42
BETTY SCHAFFER MSH 210	29		9,332	9,514	42
BETTY SCHAFFER MSH 210	30	9/29/2015	9,092	9,274	42
BETTY SCHAFFER MSH 210	31		8,852	9,274	84

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Well Name: BETTY SCHAFER MSH 210H

LITHOLOGY/FORMATION	TOP DEPTH, TVD (FT)	BOTTOM DEPTH, TVD (FT)	TOP DEPTH, MD (FT)	BOTTOM DEPTH, MD (FT)	QUANTITY AND TYPE OF FLUID
Base of Fresh Water	N.A.	106.00	N.A.	106.00	
Top of Salt Water	535.00	N.A.	535.00	N.A.	
Pittsburgh Coal	352.69	1379.94	352.70	1380.00	?
Big Injun (ss)	1379.94	1932.66	1380.00	1932.80	?
Berea (siltstone)	1932.66	5381.95	1932.80	5395.66	?
Rhinestreet (shale)	5381.95	5666.74	5395.66	5698.70	?
Cashaqua (shale)	5666.74	5738.02	5698.70	5785.02	?
Middlesex (shale)	5738.02	5811.17	5785.02	5886.17	?
Burket (shale)	5811.17	5838.14	5886.17	5928.42	?
Tully (ls)	5838.14	5871.26	5928.42	5984.22	?
Mahantango (shale)	5871.26	5992.55	5984.22	6299.71	?
Marcellus (shale)	5992.55	N.A.	6299.71	N.A.	?

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Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	8/26/2015
Job End Date:	10/1/2015
State:	West Virginia
County:	Marshall
API Number:	47-051-01777-00-00
Operator Name:	Southwestern Energy
Well Name and Number:	SCHAFFER BETTY MSH 210H
Longitude:	-80.61464000
Latitude:	39.96912000
Datum:	NAD27
Federal/Tribal Well:	NO
True Vertical Depth:	6,096
Total Base Water Volume (gal):	13,870,382
Total Base Non Water Volume:	0



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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	Operator	Carrier					
			Water	7732-18-5	100.00000	80.54687	
Sand, non-API, 40/70 mesh	Baker Hughes	Proppant					
			MSDS and Non-MSDS Ingredients Listed Below	N/A		8.08470	
Sand, White, 100 mesh	Baker Hughes	Proppant					
			MSDS and Non-MSDS Ingredients Listed Below	N/A		6.21404	
DustPro Chemical Coating	Baker Hughes	Dust Suppression					
			MSDS and Non-MSDS Ingredients Listed Below	N/A		4.02575	
HCl, 10.1 - 15%	Baker Hughes	Acidizing					
			MSDS and Non-MSDS Ingredients Listed Below	N/A		0.82185	SmartCare Product
MaxPerm-20A, 265 gallon tote	Baker Hughes	Friction Reducer					
			MSDS and Non-MSDS Ingredients Listed Below	N/A		0.07348	SmartCare Product
Alpha 1427	Baker Hughes	Biocide					
			MSDS and Non-MSDS Ingredients Listed Below	N/A		0.00919	SmartCare Product
Scaletrol 720	Baker Hughes	Scale Inhibitor					

			MSDS and Non-MSDS Ingredients Listed Below	N/A		0.00906	SmartCare Product
Ferrotrol 300L	Baker Hughes	Iron Control					
			MSDS and Non-MSDS Ingredients Listed Below	N/A		0.00558	SmartCare Product
CI-39	Baker Hughes	Corrosion Inhibitor					
			MSDS and Non-MSDS Ingredients Listed Below	N/A		0.00163	
GBW-5	Baker Hughes	Breaker					
			MSDS and Non-MSDS Ingredients Listed Below	N/A		0.00065	SmartCare Product
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.							
Ingredients in Additive (s) (MSDS and non- MSDS)	Baker Hughes	See Trade Name(s) List					
			Crystalline Silica (Quartz)	14808-60-7	100.00000	14.26214	
			Non-hazardous acrylic polymer	NA	75.00000	3.01158	
			Propylene glycol	57-55-6	30.00000	1.20463	
			Water	7732-18-5	85.00000	0.75370	
			Hydrochloric Acid	7647-01-0	15.00000	0.12296	
			1-Propanesulfonic acid, 2- methyl-2-[(1-oxo-2-propen-1-yl) amino]-, polymer with 2- propenamido, sodium salt	83446-68-8	60.00000	0.04398	
			Hydrotreated Light Distillate	64742-47-8	30.00000	0.02199	
			Ethylene Glycol	107-21-1	45.00000	0.00407	
			Sodium Chloride	7647-14-5	5.00000	0.00376	
			Polyoxyethylene sorbitan monooleate	9005-65-6	5.00000	0.00366	
			Sorbitan, mono-(9Z)-9- octadecenoate	1338-43-8	5.00000	0.00366	
			Oxyalkylated alcohol	78330-21-9	5.00000	0.00366	
			Citric Acid	77-92-9	60.00000	0.00334	
			Glutaraldehyde	111-30-8	30.00000	0.00275	
			2-Propenoic, Polymer with Sodium Phosphinate, Sodium Salt	71050-62-9	20.00000	0.00181	
			Didecyl Dimethyl Ammonium Chloride	7173-51-5	10.00000	0.00092	
			Oxyalkylated Fatty Acid	61791-002	40.00000	0.00065	
			Ammonium Persulphate	7727-54-0	100.00000	0.00065	
			Quaternary Ammonium Compound	68424-85-1	5.00000	0.00054	
			Formic Acid	64-18-6	30.00000	0.00049	
			Aldehyde	104-55-2	30.00000	0.00049	
			Tar Bases, Quinoline Derivs., Benzyl Chloride-Quaternized	72480-70-7	30.00000	0.00049	
			Ethanol	64-17-5	5.00000	0.00046	
			Calcium Chloride	10043-52-4	5.00000	0.00045	
			Potassium Chloride	7447-40-7	1.00000	0.00009	
			Isopropanol	67-63-0	5.00000	0.00008	
			Sulfurized polyolefin	68037-13-8	5.00000	0.00008	

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	Potassium Iodide	7681-11-0	2.00000	0.00003
	Polyakylene	7756-94-7	1.00000	0.00002
	Potassium Acetate	127-08-2	0.50000	0.00001

* 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)

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RETTEW

RETTEW Associates, Inc.
27 Travato Street, Suite 101
Bridgeport, WV 26330
Phone (800) 738-8395
Email: rette@rette.com
Website: www.rette.com

SURFACE HOLE LOCATION (SHL):
UTM (NAD83, ZONE 17, METERS): NORTHING: 4,426,810.708 EASTING: 531,105.246
LANDING POINT LOCATION (LPL):
UTM (NAD83, ZONE 17, METERS): NORTHING: 4,426,676.766 EASTING: 531,885.235
BOTTOM HOLE LOCATION (BHL):
UTM (NAD83, ZONE 17, METERS): NORTHING: 4,424,409.653 EASTING: 532,929.699

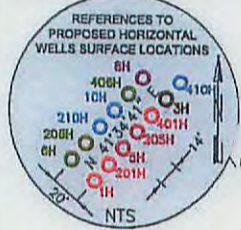
GRID NORTH
UTM, NAD83 DATUM, ZONE 17, US FT

LINE	BEARING	DISTANCE	DESCRIPTION	MONUMENT
L1	N 52°19'50" W	775.67'	SHL TO LANDMARK	
L2	S 15°38'31" E	2705.27'	SHL TO LANDMARK	
L3	N 06°31'10" E	103.86'	SHL TO REF. PNT.	1/2"Ø REBAR SET
L4	S 34°55'18" W	228.35'	SHL TO REF. PNT.	1/2"Ø REBAR SET
L5	S 80°15'35" E	2596.35'	SHL TO LP	
L6	S 24°44'08" E	8189.41'	LP TO BHL	
L7	S 44°14'32" E	378.53'	ASDRILLED BORE	
L8	S 32°46'11" E	284.89'	ASDRILLED BORE	
L9	S 23°26'52" E	633.84'	ASDRILLED BORE	
L10	S 23°25'13" E	2338.64'	ASDRILLED BORE	
L11	S 26°06'00" E	366.94'	ASDRILLED BORE	
L12	S 23°05'12" E	1980.11'	ASDRILLED BORE	
L13	S 19°49'44" E	378.70'	ASDRILLED BORE	
L14	S 24°05'02" E	1419.66'	ASDRILLED BORE	
L15	S 26°06'19" E	189.99'	ASDRILLED BORE	
L16	S 23°18'30" E	215.93'	ASDRILLED BORE	

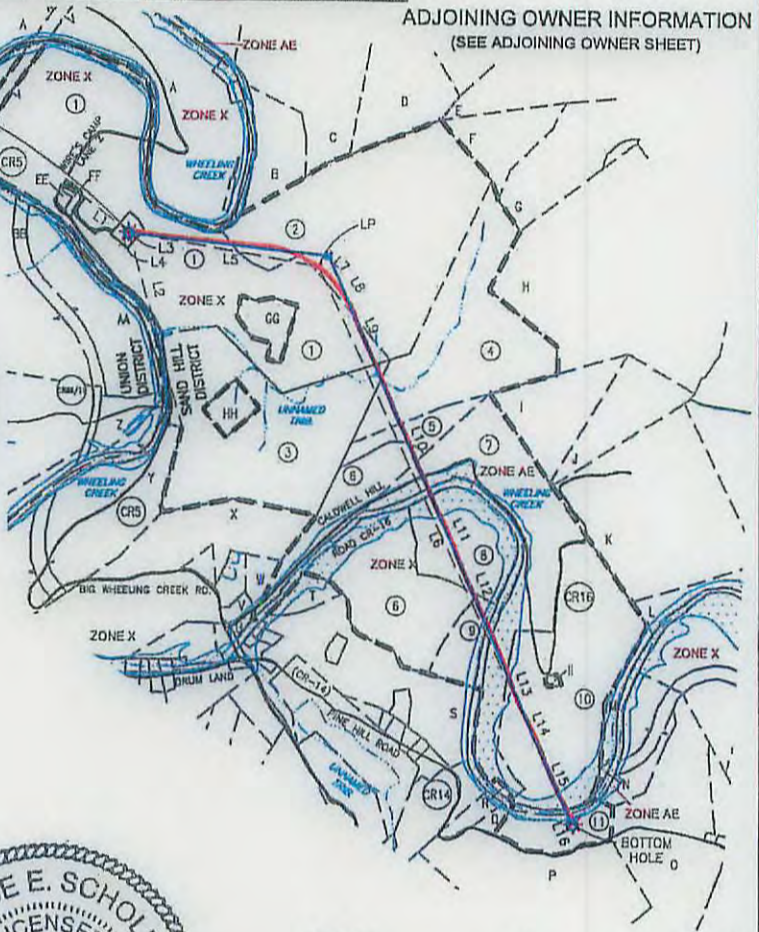
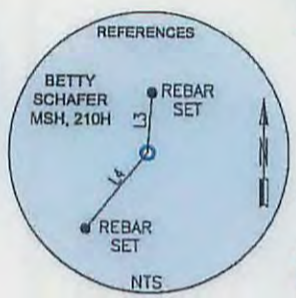
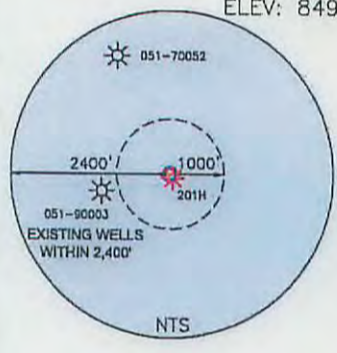
2,968'
Latitude: 40°00'00"
Longitude: 80°37'30"

TRACT	SURFACE OWNER	TAX PARCEL	ACRES
1	BETTY JANE SCHAFER, LIFE ESTATE; ROY ALVIN SCHAFER, REMAINDERMAN; EDWARD J. SCHAFER, REMAINDERMAN	12-09-00220000	±205.06
2	CHARLES B. AND CARLA S. FISHER	12-08-00200000	±132.66
3	OLIVE P. GROSKOPF	12-10-00010002	±85.43
4	CALVIN C. MERINAR	12-09-00190000	±85.50
5	CALVIN C. MERINAR	12-10-00070000	±13.40
6	GEETA	15-01-00020000	±82.91
7	KENNETH L. MERINAR ET AL	12-10-00090000	±90.09
8	DOUGLAS FINTEL	15-01-00020001	±41.30
9	ROBERT E. AND DEBRA A. BAUER	15-01-00020002	±10.79
10	GLENN M. HICKEY	12-10-00080000	±29.03
11	KENNETH L. MERINAR ET AL	15-01-00060003	±13.96

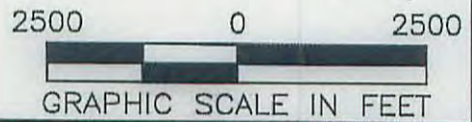
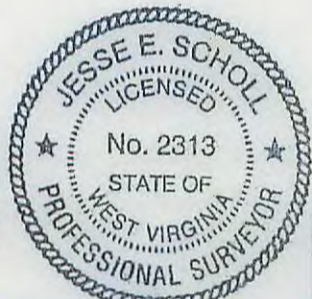
SHL
AS-DRILLED



SWN PRODUCTION COMPANY, LLC
"BETTY SCHAFER MSH, 210H"
SURFACE HOLE
ELEV: 849.00' (AS-DRILLED)



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



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. 2313

COMPANY: **SWN** Production Company, LLC

<p>(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS</p> <p>WVDEP OFFICE OF OIL & GAS 601 57TH STREET CHARLESTON, WV 25034</p>	<p>MINIMUM DEGREE OF ACCURACY: 1/200</p> <p>PROVEN SURVEY SOURCE OF GRADE GPS ELEVATION: (NAVD 88, US FT)</p>	<p>COMPANY: BETTY SCHAFER MSH</p> <p>OPERATOR'S WELL #: 210H</p> <p>API WELL #: 47 51 01777</p> <p>STATE COUNTY PERMIT</p>
	<p>WELL TYPE: OIL <input type="checkbox"/> WASTE DISPOSAL <input type="checkbox"/> PRODUCTION <input type="checkbox"/> DEEP <input type="checkbox"/> GAS <input checked="" type="checkbox"/> LIQUID INJECTION <input type="checkbox"/> STORAGE <input type="checkbox"/> SHALLOW <input checked="" type="checkbox"/></p> <p>WATERSHED: MIDDLE OHIO NORTH</p> <p>DISTRICT: SAND HILL COUNTY: MARSHALL</p> <p>SURFACE OWNER: SCHAFER, BETTY JANE</p> <p>OIL & GAS ROYALTY OWNER: SCHAFER, BETTY JANE</p> <p>DRILL <input type="checkbox"/> DRILL DEEPER <input type="checkbox"/> REDRILL <input type="checkbox"/> FRACTURE OR STIMULATE <input type="checkbox"/> PLUG OFF OLD FORMATION <input type="checkbox"/> PERFORATE NEW FORMATION <input type="checkbox"/></p> <p>CONVERT <input type="checkbox"/> PLUG & ABANDON <input type="checkbox"/> CLEAN OUT & REPLUG <input type="checkbox"/> OTHER CHANGE <input checked="" type="checkbox"/> (SPECIFY)</p> <p>TARGET FORMATION: MARCELLUS ESTIMATED DEPTH: 6,097' TVD 16,416' TVD</p>	<p>DATE: 12-29-2015</p> <p>DRAWN BY: B. HERMAN</p> <p>SCALE: 1" = 2500'</p> <p>DRAWING NO: 087569000</p> <p>WELL LOCATION PLAT</p>

WELL OPERATOR: SWN PRODUCTION COMPANY, LLC DESIGNATED AGENT: DEE SOUTHALL
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:	REVISIONS:	DATE: 12-29-2015
● PROPOSED SURFACE HOLE / BOTTOM HOLE	— PERMITTED DHP	
⊙ EXISTING/PRODUCING WELLHEAD/BOTTOM HOLE	- - - TIE LINE	
⊗ ABANDONED WELL	- - - LEASE BOUNDARY	
⊕ PLUGGED & ABANDONED WELL	- - - AS-DRILLED DHP	
△ CUT CONDUCTOR	- - - ABANDONED PATH	

RETTEW Associates, Inc.
 37 Travis Street, Suite 101
 Bidsborough, WV 26030
 Phone (800) 738-8388
 Email: rettew@rettew.com
 Website: www.rettew.com

SURFACE HOLE LOCATION (SHL):
UTM (NAD83, ZONE 17 METERS): NORTHING: 4428,810.708 EASTING: 531,105.248
LANDING POINT LOCATION (LPL):
UTM (NAD83, ZONE 17 METERS): NORTHING: 4428,810.788 EASTING: 531,885.235
BOTTOM HOLE LOCATION (BHL):
UTM (NAD83, ZONE 17 METERS): NORTHING: 4424,408.823 EASTING: 532,928.888

GRID NORTH
 1" = 100 FEET

LINE	BEARING	DISTANCE	DESCRIPTION	MONUMENT
L1	N 82°18'50" W	272.87	SHL TO LANDMARK	
L2	S 12°38'31" E	270.27	SHL TO LANDMARK	
L3	N 06°31'10" E	103.88	SHL TO REF. PNT.	1 1/2" REBAR SET
L4	S 34°52'18" W	238.38	SHL TO REF. PNT.	1 1/2" REBAR SET
L5	S 80°12'32" E	288.32	SHL TO LP	
L6	S 24°44'08" E	81.84	LP TO BHL	
L7	S 44°14'32" E	278.57	AS-DRILLED BORE	
L8	S 32°48'11" E	284.88	AS-DRILLED BORE	
L9	S 23°28'52" E	63.84	AS-DRILLED BORE	
L10	S 23°22'13" E	232.84	AS-DRILLED BORE	
L11	S 28°08'00" E	288.84	AS-DRILLED BORE	
L12	S 23°02'12" E	180.11	AS-DRILLED BORE	
L13	S 12°49'44" E	278.70	AS-DRILLED BORE	
L14	S 24°02'02" E	141.88	AS-DRILLED BORE	
L15	S 28°08'18" E	188.88	AS-DRILLED BORE	
L16	S 23°18'20" E	212.92	AS-DRILLED BORE	

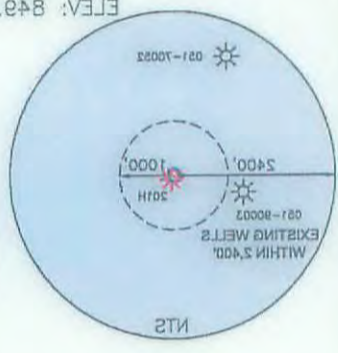
TRACT	SURFACE OWNER	TAX PARCEL	ACRES
1	BETTY JANE SCHAFER, THE ESTATE; EDWARD J. SCHAFER, SCHAFER REMANUFACTURING, REMANUFACTURING	13-08-0023000	±202.08
2	CHARLES B. AND CARLA S. FISHER	13-08-0023000	±132.88
3	OLIVE P. GROSZKOPF	13-10-0001002	±82.43
4	CALVIN C. MEINER	13-08-0018000	±82.50
5	CALVIN C. MEINER	13-10-0007000	±13.40
6	GEETA	13-01-0002000	±82.81
7	KENNETH L. MEINER ET AL	13-10-0008000	±80.08
8	DOUGLAS FINTE	13-01-0002001	±41.30
9	ROBERT E. AND DEBRA A. BAUER	13-01-0003002	±10.78
10	GLENN M. HICKEY	13-10-0008000	±29.92
11	KENNETH L. MEINER ET AL	13-01-0008002	±12.98

AS-DRILLED

ADJOINING OWNER INFORMATION
 (SEE ADJOINING OWNER SHEET)



SURFACE HOLE
"210H"
BETTY SCHAFER MSH,
COMPANY, LLC
SWN PRODUCTION

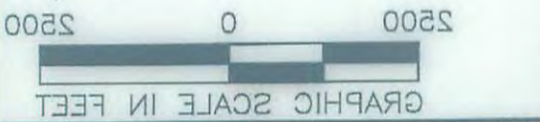


NOTES ON SURVEY

- COORDINATES SYSTEM IS UTM, NAD 83 DATUM, ZONE 17, U.S. FOOT AND WELL COORDINATES ESTABLISHED USING SURVEY GRADE GPS.
- SURFACE AND ROYALTY OWNER INFORMATION AND THEIR BOUNDARIES SHOWN HEREON WERE PLOTTED FROM DEEDS AND/OR TAX PARCEL MAPS PROVIDED BY CLIENT AND FIELD LOCATIONS. THIS PLAN DOES NOT REPRESENT A BOUNDARY SURVEY OF THE PARCELS SHOWN HEREON.
- NO DWELLINGS AND BUILDINGS WITHIN 825 FEET OF PROPOSED CENTER OF PAD.
- NO WATER WELLS OR DEVELOPED SPRINGS WITHIN 250 FEET OF PROPOSED WELL.
- NO PERENNIAL STREAMS, LAKES, PONDS, RESERVOIRS OR WETLANDS WITHIN 100 FEET OF THE LIMITS OF DISTURBANCE.
- NO NATURALLY PRODUCING TIGHT STREAM WITHIN 200 FEET OF LIMITS OF DISTURBANCE.



I, THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAN 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.



COMPANY: **swm**
 Production Company, LLC. Production Company

P. 2. 2313

OFFICE OF OIL & GAS
 801 57TH STREET
 CHARLESTON, WV 25034

WV DEP

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

MINIMUM DEGREE OF ACCURACY: 1/200

PROVEN SOURCE OF GRADE GPS SURVEY

ELEVATION: (NAD 88, US FT)

APL WELL #: 47 STATE: 51 COUNTY: PERMIT

OPERATOR'S WELL #: 210H BETTY SCHAFER MSH

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

WATERSHED: MIDDLE OHIO NORTH

DISTRICT: SAND HILL COUNTY: MARSHALL

SURFACE OWNER: SCHAFER, BETTY JANE

OIL & GAS ROYALTY OWNER: SCHAFER, BETTY JANE

ACREAGE: ±202.08

ACREAGE: ±202.08

DRILL: DRILL DEEPER REDRILL FRACTURE OR STIMULATE PLUG OFF OLD FORMATION PERFORATE NEW FORMATION

CONVERT: PLUG & ABANDON CLEAN OUT & REPLUG OTHER CHANGE (SPECIFY)

TARGET FORMATION: MARCELLUS

ESTIMATED DEPTH: 6027' TVD 16416' TMD

DESIGNATED AGENT: DEE SOUTHAHL

WELL OPERATOR: SWN PRODUCTION COMPANY, LLC

ADDRESS: P.O. BOX 1300

CITY: JANE LEW STATE: WV ZIP CODE: 26238

LEGEND:

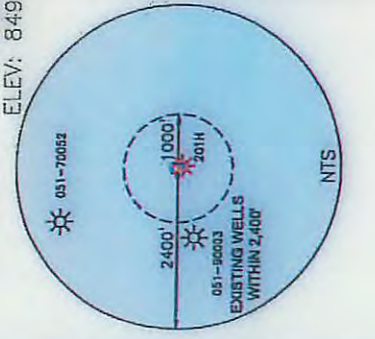
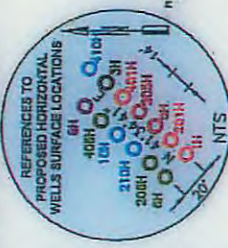
- PROPOSED SURFACE HOLE \ BOTTOM HOLE
- EXISTING PRODUCING WELLS \ BOTTOM HOLE
- ABANDONED WELL
- PLUGGED & ABANDONED WELL
- CUT CONDUCTOR
- PERMITTED DHP
- TIE LINE
- LEASE BOUNDARY
- AS-DRILLED DHP
- ABANDONED PATH

RETTEW Associates, Inc.
27 Travata Street, Suite 101
Bridgeport, WV 26330
Phone (800) 738-8395
Email: raitaw@rettew.com
Website: www.rettew.com

SURFACE HOLE LOCATION (BHL):
UTM (NAD83, ZONE 17, METERS):
NORTHING: 4,426,810.708
EASTING: 531,105.246

LANDING POINT LOCATION (LPL):
UTM (NAD83, ZONE 17, METERS):
NORTHING: 531,885.235
EASTING: 532,929.699

BOTTOM HOLE LOCATION (BHL):
UTM (NAD83, ZONE 17, METERS):
NORTHING: 4,426,676.766
EASTING: 531,885.235



NOTES ON SURVEY

- COORDINATES SYSTEM IS UTM, NAD 83 DATUM, ZONE 17, U.S. FOOT AND WELL COORDINATES ESTABLISHED USING SURVEY GRADE GPS.
- SURFACE AND ROYALTY OWNER INFORMATION AND THEIR BOUNDARIES SHOWN HEREON WERE PLOTTED FROM DEEDS AND/OR TAX PARCEL MAPS PROVIDED BY CLIENT AND FIELD LOCATIONS.
- THIS PLAN DOES NOT REPRESENT A BOUNDARY SURVEY OF THE PARCELS SHOWN HEREON.
- NO DWELLINGS AND BUILDINGS WITHIN 925 FEET OF PROPOSED CENTER OF PAD.
- NO WATER WELLS OR DEVELOPED SPRINGS WITHIN 250 FEET OF PROPOSED WELL.
- NO PERENNIAL STREAMS, LAKES, PONDS, OR RESERVOIRS OR WETLANDS WITHIN 100 FEET OF THE LIMITS OF DISTURBANCE.
- NO NATURALLY PRODUCING TROUT STREAM WITHIN 300 FEET OF LIMITS OF DISTURBANCE.

I, THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAN 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. 2313



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

LINE	BEARING	DISTANCE	DESCRIPTION	MONUMENT
L1	N 52°19'50" W	775.67'	SHL TO LANDMARK	
L2	S 15°38'31" E	2705.27'	SHL TO LANDMARK	
L3	N 06°31'10" E	103.86'	SHL TO REF. PNT.	1/2" Ø REBAR SET
L4	S 34°55'18" W	226.35'	SHL TO REF. PNT.	1/2" Ø REBAR SET
L5	S 60°15'35" E	2596.35'	SHL TO LP	
L6	S 44°14'32" E	378.53'	LP TO BHL	
L7	S 24°44'08" E	8189.41'	ASDRILLED BORE	
L8	S 32°46'11" E	284.89'	ASDRILLED BORE	
L9	S 23°26'52" E	633.84'	ASDRILLED BORE	
L10	S 23°25'13" E	2338.64'	ASDRILLED BORE	
L11	S 26°06'00" E	366.94'	ASDRILLED BORE	
L12	S 23°05'12" E	1980.11'	ASDRILLED BORE	
L13	S 19°49'44" E	378.70'	ASDRILLED BORE	
L14	S 24°05'02" E	1419.86'	ASDRILLED BORE	
L15	S 26°06'19" E	189.99'	ASDRILLED BORE	
L16	S 23°18'30" E	215.93'	ASDRILLED BORE	

TRACT	SURFACE OWNER	TAX PARCEL	ACRES
1	BETTY JANE SCHAFER, LIFE ESTATE; ROYALTY ALVIN SCHAFER, REMAINDERMAN; EDWARD J. SCHAFER, REMAINDERMAN	12-09-00220000	±205.06
2	CHARLES B. AND CARLA S. FISHER	12-09-00200000	±132.66
3	OLIVE P. GROSSKOPF	12-10-00010002	±85.43
4	CALVIN C. MERRINAR	12-09-00190000	±85.50
5	CALVIN C. MERRINAR	12-10-00070000	±13.40
6	BETA	15-01-00020000	±82.91
7	KENNETH L. MERRINAR, ET AL.	12-10-00080000	±80.09
8	DOUGLAS FINTE	15-01-00020001	±41.30
9	ROBERT E. AND DEBRA A. BAUER	15-01-00020002	±10.79
10	GLENN M. HICKEY	12-10-00080000	±29.03
11	KENNETH L. MERRINAR, ET AL.	15-01-00080003	±13.96

SWN PRODUCTION COMPANY, LLC
"BETTY SCHAFER MSH, 210H"
SURFACE HOLE
ELEV: 849.00' (AS-DRILLED)

ADJOINING OWNER INFORMATION
(SEE ADJOINING OWNER SHEET)



COMPANY: **SWN**
Production Company, LLC Production Company™

OPERATOR'S WELL #: BETTY SCHAFER MSH
API WELL #: 47 51 01777 HGA
STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY: 1/200
PROVEN SURVEY SOURCE OF GRADE GPS
ELEVATION: (NAVD 88, US FT)

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

WATERSHED: MIDDLE OHIO NORTH
DISTRICT: SAND HILL COUNTY: MARSHALL

SURFACE OWNER: SCHAFER, BETTY JANE
OIL & GAS ROYALTY OWNER: SCHAFER, BETTY JANE

DRILL DRILL DEEPER REDRILL FRACTURE OR STIMULATE PLUG OFF OLD FORMATION PERFORATE NEW FORMATION

CONVERT PLUG & ABANDON CLEAN OUT & REPLUG OTHER CHANGE (SPECIFY)

TARGET FORMATION: MARCELLUS

ELEVATION: ±849.00 (AS-DRILLED)
QUADRANGLE: MOUNDSVILLE, WV-OH
ACREAGE: ±205.06
ACREAGE: ±205.06

ESTIMATED DEPTH: 6,097' TVD 16,416' TMD

DESIGNATED AGENT: DEE SOUTHLAND
ADDRESS: P.O. BOX 1300
CITY: JANE LEW STATE: WV ZIP CODE: 26378

LEGEND:

REVISIONS:
 DATE: 12-29-2015
 DRAWN BY: B. HERMAN
 SCALE: 1" = 2500'
 DRAWING NO: 087569000
 WELL LOCATION PLAN

<input type="checkbox"/> OIL CONDUIT <input type="checkbox"/> PROPOSED & UNDRILLED WELL <input type="checkbox"/> UNDRILLED WELL <input type="checkbox"/> EXISTING/PROPOSED METHANE/BOTTOM HOPE <input type="checkbox"/> PROPOSED SURFACE HOPE / BOTTOM HOPE	<input type="checkbox"/> UNDRILLED BATH <input type="checkbox"/> V2-DRILLED BHP <input type="checkbox"/> GEOTE BOUNDARY <input type="checkbox"/> THE PIPE <input type="checkbox"/> PERMITTED BHP
---	--

CITY: WINE TOWN STATE: WV ZIP CODE: 26078
 ADDRESS: P.O. BOX 1300
 MET OPERATOR: 2MI PRODUCTION COMPANY LLC
 DESIGNATED AGENCY: DEE SCHWARTZ
 ESTIMATED DEPTH: 8'00", LAD 10'10", LAD

COMPLETE BONE & UNDRILL OTHER CHANGE (SPECIAL)
 DRILL DRILL DEEPER REDRILL RESTRUCTURE OR SHIMMATE BONE OFF OLD FORMATION REEVALUATE NEW FORMATION
 OIL & GAS BOUQUET OWNER: SCHAFER, BETTY WINE
 SURFACE OWNER: SCHAFER, BETTY WINE
 DISTRICT: SAND HILL COUNTY: MARSHALL
 MUTILATED: MIDDLE OHIO NORTH
 WELL TYPE: OIL WASTE DISPOSAL PRODUCTION DEEP GAS FLUID INJECTION STORAGE SHALLOW

CHARGESTON, WV 26024
 801 21TH STREET
 OFFICE OF OIL & GAS
 MADEP
 UNITED STATES TOPOGRAPHIC MAPS
 (+) DENOTES LOCATION OF WELL ON MAP

ELEVATION: (INVD 88' US FT)
 SOURCE OF GRADE CHG SURVEY
 ACCURACY: 1/500
 DEGREE OF MINIMUM

WPI WELL #: 74
 OPERATOR'S WELL #: 210H
 BETTY SCHAFER MSH

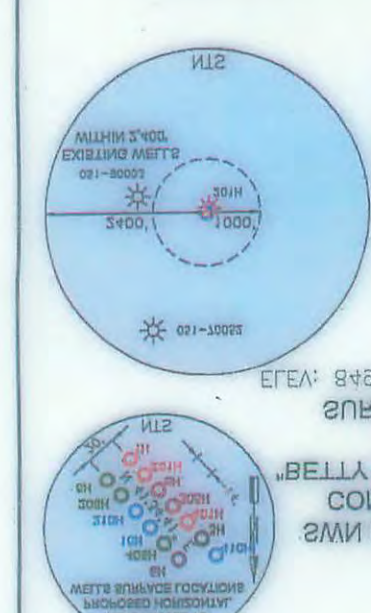
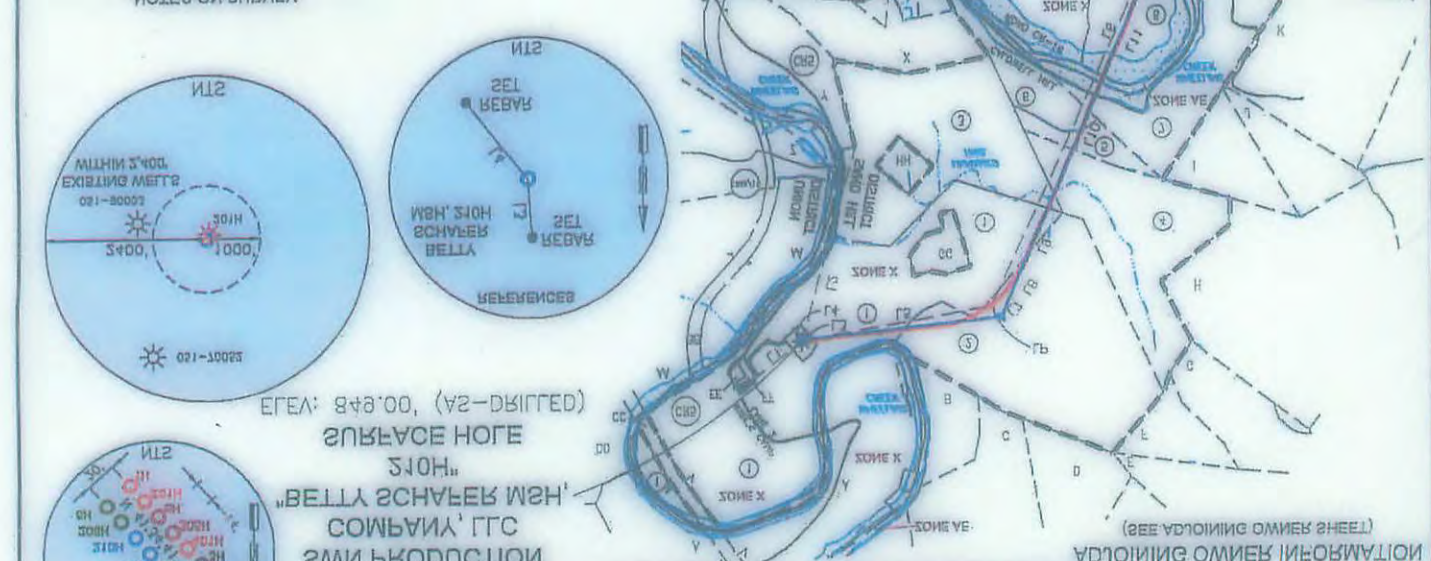
DEPARTMENT OF ENVIRONMENTAL PROTECTION
 REGULATIONS ISSUED AND PRESCRIBED BY THE
 THE INFORMATION RECEIVED BY LAW AND
 MY KNOWLEDGE AND BELIEF AND SHOWS ALL
 THAT THIS PLAN IS CORRECT TO THE BEST OF
 THE UNDERSIGNED HEREBY CERTIFY

PROFESSIONAL SUPERVISOR
 STATE OF WEST VIRGINIA
 NO. 5813
 TESSE E. SCHOTT

GRAPHIC SCALE IN FEET
 5000 0 5000

2MI PRODUCTION COMPANY, LLC
 2MI PRODUCTION COMPANY, INC.

100 FEET OF PILES OF DISTURBANCE:
 1. NO UNLAWFUL PROPOSING THREAT SIBREW WITHIN THE PILES OF DISTURBANCE
 2. NO UNLAWFUL PROPOSING WITHIN 100 FEET OF BOUNDARIES OF MOUNTAINS WITHIN 100 FEET OF 300 FEET OF PROPOSED WELL
 3. NO UNLAWFUL PROPOSING WITHIN 100 FEET OF PROPOSED OR DELEGATED SURFACES WITHIN 100 FEET OF CENTER OF BYD
 4. NO UNLAWFUL PROPOSING WITHIN 250 FEET SURFACE OF THE SURFACE ZONE'S HEREON
 5. THIS PLAN DOES NOT REPRESENT A BOUNDARY MAPS BOUNDED BY SPENT AND FIELD LOCATIONS BOTTLED FROM DEEDS AND/OR TAX PARCEL THEIR BOUNDARIES SHOWS HEREON HERE
 6. SURFACE AND BOUQUET OWNER INFORMATION AND ESTABLISHED BEING SURFACE GRADE OBS
 7. SOME 13' 11" FOOT AND MET COORDINATES
 8. COORDINATE SYSTEM IS UTM AND 83 DYNAMIC
 NOTES ON SURVEY



ELEVATION: 848'00" (V2-DRILLED)
SURFACE HOPE
210H
BETTY SCHAFER MSH
COMPANY, LLC
2MI PRODUCTION

ELEVATION: 235'838'888
NORTHING: 4434408'823
UTM (INVD83, ZONE 17, METERS):
BOTTOM HOPE LOCATION (BHG):
ELEVATION: 231'882'322
NORTHING: 4438'810'308
UTM (INVD83, ZONE 17, METERS):
LANDING POINT LOCATION (LPG):
ELEVATION: 231'108'348
NORTHING: 4438'810'308
UTM (INVD83, ZONE 17, METERS):
SURFACE HOPE LOCATION (SHG):

METEM ASSOCIATES, INC.
 3737 W. MARKET STREET, SUITE 101
 WASHINGTON, DC 20007
 (800) 238-8262
 WWW.METEM.COM

BELTEM

(SEE ADJOINING OWNER SHEET)
ADJOINING OWNER INFORMATION

NO.	NAME	DATE	DEPTH	STATUS
11	KENNETH G. MERRIN, ET AL	12-01-00080002	712'82	
10	WENDELL H. HICKEL	15-10-00080000	758'02	
9	BOBEN E. AND DEBRA Y. WILSON	12-01-00080003	710'30	
8	DOLGUS E. WILSON	12-01-00080001	741'20	
7	KENNETH G. MERRIN, ET AL	15-10-00080000	780'80	
6	DEEVI	12-01-00080000	795'81	
5	SUGAM C. MERRIN	15-10-00080000	712'40	
4	SUGAM C. MERRIN	15-08-00180000	782'20	
3	OLIVE B. OSWALD	15-10-00010005	782'42	
2	SCHAFER B. AND SUGAM C. WISNER	15-08-00080000	712'88	
1	UNDRILLED SCHAFER, BERNARD; SCHAFER, EDWARD J. SCHAFER, BETTY WINE SCHAFER THE ESTABLISHED METHANE BATH BOUNDARY MAPS	15-03-00080000	7302'80	
TOTAL				

NO.	E	N	DEPTH	STATUS
F18	232.18.20	E	312'82	UNDRILLED BONE
F12	238.08.18	E	188'88	UNDRILLED BONE
F14	234.08.03	E	141'88	UNDRILLED BONE
F12	238.48.44	E	238'30	UNDRILLED BONE
F13	232.02.15	E	188'01	UNDRILLED BONE
F11	238.08.00	E	388'84	UNDRILLED BONE
F10	232.52.12	E	322'84	UNDRILLED BONE
F8	232.58.25	E	222'84	UNDRILLED BONE
F9	232.48.11	E	284'88	UNDRILLED BONE
F3	244.14.25	E	238'82	UNDRILLED BONE
F7	234.44.08	E	818'41	F5 TO BHG
F2	280.12.28	E	588'88	SHG TO F5
F4	224.28.18	W	338'82	SHG TO REF. BHT
F2	280.21.10	E	102'88	SHG TO REF. BHT
F5	232.28.21	E	322'82	SHG TO LANDINGARK
F1	232.18.20	W	322'82	SHG TO LANDINGARK
LINE				

02/26/2016
 Grid: 80.21.30.
 2'358.
 1'888.