

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

RECEIVED
Office of Oil and Gas

JUL 3 2017

WV Department of
Environmental Protection

API 47-069-00207 County OHIO District LIBERTY
Quad BETHANY Pad Name SHAWN COUCH-OHI-PAD1 Field/Pool Name PANHANDLE FIELD
Farm name SHAWN W. COUCH TRUST Well Number SHAWN COUCH OHI 206H
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 4,444,241.300 Easting 535,031.840
Landing Point of Curve Northing 4,443,868.008 Easting 534,691.835
Bottom Hole Northing 4,441,330.604 Easting 535,533.249

Elevation (ft) 1247' 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 01/21/2016 Date drilling commenced 09/24/2016 Date drilling ceased 11/07/2016
Date completion activities began 03/16/2017 Date completion activities ceased 4/6/2017
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 299' Open mine(s) (Y/N) depths N
Salt water depth(s) ft 672' Void(s) encountered (Y/N) depths N
Coal depth(s) ft 465' Cavern(s) encountered (Y/N) depths _____
Is coal being mined in area (Y/N) N

APPROVED

NAME: Eric Blend Reviewed by: _____
DATE: 9/12/17

API 47-069 - 00207 Farm name SHAWN W. COUCH TRUST Well number SHAWN COUCH OHI 206H

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	28	20	126	NEW	K-55/94#		Y
Surface	17.5	13.375	411	NEW	H-40/48#		Y; 16 BBLS RETURNED
Coal	SEE INTERMEDIATE						
Intermediate 1	12.25	9.625	1888	NEW	J-55/36#		Y; 32 BBLS RETURNED
Intermediate 2							
Intermediate 3							
Production	8.75/8.50	5.5	15650	NEW	P-110/20#		Y
Tubing		2.375	6724	NEW	P-110/4.7#		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	435	15.70	1.29	100	SURFACE	24
Surface	CLASS A	410	15.60	1.20	492	SURFACE	8
Coal	SEE INTERMEDIATE						
Intermediate 1	CLASS A	716	15.60	1.20	859.2	SURFACE	8
Intermediate 2							
Intermediate 3							
Production	CLASS A	940/1900	15.60	1.23/1.19	1156.2/2261	SURFACE	24
Tubing							

Drillers TD (ft) 15,650' Loggers TD (ft) 15,650'
 Deepest formation penetrated MARCELLUS Plug back to (ft) N/A
 Plug back procedure _____

Kick off depth (ft) 5,521'

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

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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 _____

API 47- 069 - 00207 Farm name SHAWN W. COUCH TRUST Well number SHAWN COUCH OHI 206H

<u>PRODUCING FORMATION(S)</u>	<u>DEPTHS</u>	
<u>MARCELLUS</u>	<u>6,161.24'</u> TVD	<u>6,657'</u> MD
_____	_____	_____
_____	_____	_____
_____	_____	_____

Please insert additional pages as applicable.

GAS TEST Build up Drawdown Open Flow OIL TEST Flow Pump

SHUT-IN PRESSURE Surface 1350 psi Bottom Hole _____ psi DURATION OF TEST _____ hrs

OPEN FLOW Gas _____ mcfpd Oil _____ bpd NGL _____ bpd Water _____ 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	

	<u>0</u>		<u>0</u>		
	<u>SEE</u>	<u>ATTACHMENT</u>	<u>3</u>		

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Please insert additional pages as applicable.

Drilling Contractor SWN DRILLING COMPANY
Address PO BOX 12359 City SPRING State TX Zip 77391-2359

Logging Company WEATHERFORD
Address 2000 ST. JAMES PLACE City HOUSTON State TX Zip 77056

Cementing Company SCHLUMBERGER WELL SERVICES
Address 110 SCHLUMBERGER DRIVE City SUGAR LAND State TX Zip 77478

Stimulating Company HALLIBURTON ENERGY SERVICES
Address 14851 MILNER ROAD, GATE 5A City HOUSTON State TX Zip 77032

Please insert additional pages as applicable.

Completed by DENISE GRANTHAM Telephone 832-796-6139
Signature Denise Grantham Title REGULATORY TECHNICIAN Date 6/30/2017

SHAWN COUCH OHI 206H

PERF SUMMARY

STAGE NUM	# SHOTS PER STG	Perf Top MD	Perf Bottom MD	Perf Date
1	84	15,344	15,541	3/17/2017
2	84	15,084	15,281	3/17/2017
3	84	14,824	15,021	3/17/2017
4	84	14,564	14,761	3/18/2017
5	84	14,304	14,501	3/18/2017
6	84	14,044	14,241	3/18/2017
7	84	13,784	13,981	3/18/2017
8	84	13,524	13,721	3/18/2017
9	84	13,264	13,461	3/19/2017
10	84	13,004	13,201	3/19/2017
11	84	12,744	12,941	3/19/2017
12	84	12,484	12,681	3/19/2017
13	84	12,224	12,421	3/19/2017
14	84	11,964	12,161	3/20/2017
15	84	11,704	11,901	3/20/2017
16	84	11,444	11,641	3/20/2017
17	84	11,184	11,381	3/20/2017
18	66	10,926	11,121	3/20/2017
19	84	10,664	10,861	3/21/2017
20	84	10,404	10,601	3/21/2017
21	84	10,144	10,341	3/21/2017
22	84	9,884	10,081	3/21/2017
23	84	9,624	9,821	3/21/2017
24	84	9,364	9,561	3/21/2017
25	66	9,106	9,301	3/22/2017
26	84	8,844	9,041	3/22/2017
27	84	8,584	8,781	3/22/2017
28	84	8,324	8,521	3/22/2017
29	84	8,064	8,261	3/22/2017
30	84	7,804	8,001	3/22/2017
31	84	7,544	7,741	3/23/2017
32	84	7,284	7,481	3/23/2017
33	84	7,024	7,221	3/23/2017
34	84	6,764	6,961	3/23/2017

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SHAWN COUCH OHI 206H
FRAC STAGE SUMMARY

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
1	3/17/2017	99	8,072	8,415	4,447	987,590	17,560	
2	3/17/2017	100	8,346	8,974	4,633	1,000,568	15,288	
3	3/17/2017	100	8,244	8,919	4,455	1,014,202	15,124	
4	3/18/2017	96	8,217	8,505	4,510	998,992	14,994	
5	3/18/2017	96	8,090	8,385	4,716	1,000,250	15,064	
6	3/18/2017	100	7,980	8,279	4,446	1,005,502	14,612	
7	3/18/2017	101	8,204	8,896	4,424	999,406	15,170	
8	3/18/2017	101	8,257	9,069	4,537	1,000,394	14,858	
9	3/19/2017	100	7,992	8,823	4,466	999,090	14,532	
10	3/19/2017	99	7,695	5,734	4,432	1,013,760	14,498	
11	3/19/2017	99	8,193	8,452	4,577	1,008,080	14,408	
12	3/19/2017	101	7,775	8,702	4,709	1,021,800	14,820	
13	3/19/2017	100	7,870	8,830	4,446	1,009,320	14,718	
14	3/20/2017	100	7,736	8,168	4,286	1,002,080	14,464	
15	3/20/2017	100	8,041	8,436	4,426	1,004,560	14,446	
16	3/20/2017	99	7,855	8,647	4,278	977,800	14,042	
17	3/20/2017	100	7,390	9,009	4,520	1,001,240	14,804	
18	3/20/2017	100	7,090	8,507	4,392	999,680	14,224	
19	3/21/2017	100	7,490	9,003	4,389	994,320	14,386	
20	3/21/2017	96	8,047	8,780	4,516	1,000,440	488	
21	3/21/2017	93	8,117	8,557	4,361	961,200	13,574	
22	3/21/2017	100	7,438	8,425	4,714	1,000,000	13,786	
23	3/21/2017	101	6,731	7,606	4,397	1,000,672	14,384	
24	3/21/2017	101	7,121	7,688	4,432	1,019,806	14,348	
25	3/22/2017	101	7,162	8,400	4,366	996,500	13,856	
26	3/22/2017	100	7,758	8,387	4,570	1,000,348	13,350	
27	3/22/2017	100	7,207	7,749	4,359	1,000,220	13,682	
28	3/22/2017	100	7,506	8,017	4,211	1,008,736	13,568	
29	3/22/2017	100	6,922	8,509	4,520	1,001,142	13,714	
30	3/22/2017	101	6,904	7,459	4,500	1,000,278	13,794	
31	3/23/2017	100	7,240	8,067	4,353	1,000,440	13,532	
32	3/23/2017	100	6,836	7,929	4,415	999,806	13,486	
33	3/23/2017	100	6,927	8,053	4,100	998,576	13,332	
34	3/23/2017	97	6,526	7,237	4,104	963,840	13,354	

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Well Name:

SHAWN COUCH OHI 206H

47069002070000

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	N/A	N/A	299.00	299.00	
Top of Salt Water	672.00	672.00	N/A	N/A	
Pittsburgh Coal	465.00	465.00	471.00	470.99	
Big Injun (ss)	1707.00	1703.66	1820.00	1816.42	
Berea (siltstone)	2167.00	2162.30	5791.00	5586.77	
Rhinestreet (shale)	5791.00	5586.77	6098.00	5844.62	
Cashaqua (shale)	6098.00	5844.62	6175.00	5902.99	
Middlesex (shale)	6175.00	5902.99	6298.00	5986.85	
Burket (shale)	6298.00	5986.85	6301.59	5989.12	
Tully (ls)	6301.59	5989.12	6384.29	6038.53	
Mahantango (shale)	6384.29	6038.53	6657.00	6161.24	
Marcellus (shale)	6657.00	6161.24	N/A	N/A	GAS

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Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	3/17/2017
Job End Date:	3/23/2017
State:	West Virginia
County:	Ohio
API Number:	47-069-00207-00-00
Operator Name:	Southwestern Energy
Well Name and Number:	Shawn Couch OHI 206H
Latitude:	40.14778600
Longitude:	-80.58871000
Datum:	NAD27
Federal Well:	NO
Indian Well:	NO
True Vertical Depth:	6,882
Total Base Water Volume (gal):	10,107,452
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
Fresh Water	Operator	Base Fluid					
			Water	7732-18-5	100.00000	82.16701	Density = 8.360
Ingredients	Listed Above	Listed Above					
			Water	7732-18-5	100.00000	1.21843	

SAND-COMMON WHITE - 100 MESH, 3307 LB BAG	Halliburton	Proppant					
				Listed Below			
Bactron K-219	Nalco	Biocide					
				Listed Below			
SAND- PREMIUM WHITE-40/70, BULK	Halliburton	Proppant					
				Listed Below			
HYDROCHLORI C ACID	Halliburton	Solvent					
				Listed Below			
EC6486A	Nalco	Scale Inhibitor					
				Listed Below			
HAI-150E	Halliburton	Corrosion Inhibitor					
				Listed Below			
FDP-S1176-15	Halliburton	Friction Reducer					
				Listed Below			
SAND- PREMIUM WHITE-40/70, BULK	Halliburton	Proppant					

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				Listed Below			
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	16.52648	
			Hydrochloric acid	7647-01-0	15.00000	0.18277	
			Hydrotreated light petroleum distillate	64742-47-8	30.00000	0.01953	
			Polyacrylate	Proprietary	30.00000	0.01953	
			Methanol	67-56-1	60.00000	0.01075	
			Benzyl-(C12-C16 Alkyl)-Dimethyl-Ammonium Chloride	68424-85-1	30.00000	0.00538	
			Glutaraldehyde	111-30-8	10.00000	0.00179	
			Ethylene Glycol	107-21-1	30.00000	0.00147	
			Amine Triphosphate	Proprietary	30.00000	0.00147	Denise Tuck, Halliburton, 3000 N. Sam Houston Pkwy E., Houston, TX 77032, 281-871-6226
			Non-hazardous food substance	Proprietary	100.00000	0.00014	

* 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)

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THRASHER

THE THRASHER GROUP, INC.
600 WHITE OAKS BLVD.
BRIDGEPORT, WV 26330
PHONE 304-624-4108

- 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 OF 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.

TRACT	SURFACE OWNER (S) / ROYALTY OWNER (R)	TAX PARCEL	ACRES
1	SHAWN W. COUCH TRUST (S) / GEORGE W. COUCH (R)	3-L-4011000000000	121.56
2	MICHAEL J. MILLER AND PENELOPE T. MILLER (S/R)	3-L-4011700000000	139.51
3	EDWARD L & B W STUPAK (S/R)	3-L-4011800010000	23.60
4	JAMES W. LOEW & HELEN LOUISE LOEW (R)	3-L-4012000000000	198.35
5	HERBERT P. MINCH AND CAROL A. MINCH (S/R)	3-L-7000400000000	184.75
6	WAYNE L. WILHELM AND MARQUETTE B. WILHELM (S/R)	3-L-7001000000000	3.04
7	JAMES A. PARSONS AND CAROL L. PARSONS (S/R)	3-L-7001100000000	109.36
8	JOHN L. SMITH II AND JOAN MARIE SMITH A/K/A JOAN M. SMITH (S/R)	3-L-7004800000000	120.49

LINE	DESCRIPTION	DISTANCE	DESCRIPTION	MONUMENT
L1	N 65°26'55" E	55.99'	SHL TO 069-00105	EXISTING WELL HEAD
L2	N 39°49'15" W	46.71'	SHL TO 069-00072	EXISTING WELL HEAD
L3	S 75°24'23" W	1575.04'	SHL TO LANDMARK	IRF FOUND
L4	N 87°29'35" W	169.307'	SHL TO LANDMARK	IRF FOUND
L5	S 50°13'24" W	1540.91'	SHL TO LP	LANDING POINT

SURFACE HOLE LOCATION (SHL)

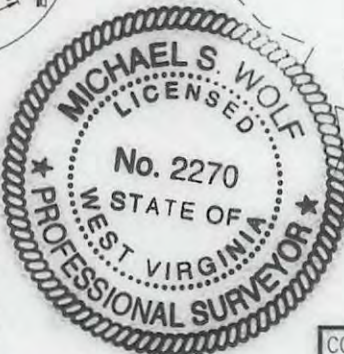
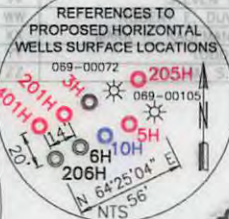
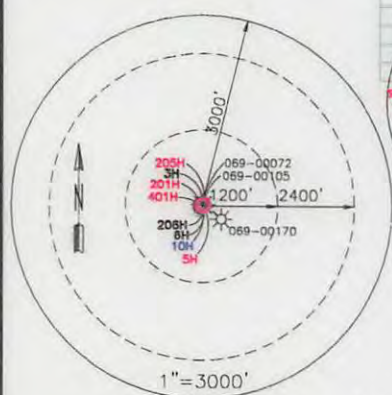
UTM (NAD83, ZONE 17, METERS):
NORTHING: 4,444,241.300
EASTING: 535,031.840
NORTHING: 4,444,241.297
EASTING: 535,031.756

LANDING POINT LOCATION (LPL)

UTM (NAD83, ZONE 17, METERS):
NORTHING: 4,443,868.008
EASTING: 534,691.835
NORTHING: 4,443,940.804
EASTING: 534,670.790

BOTTOM HOLE LOCATION (BHL)

UTM (NAD83, ZONE 17, METERS):
NORTHING: 4,441,330.604
EASTING: 535,533.249
NORTHING: 4,441,326.584
EASTING: 535,534.095



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. 2270 *M.S. Wolf* 4/28/17



(+) 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 SURVEY SOURCE OF GRADE GPS ELEVATION: (NAVD 88, US FT)

COMPANY:	SWN Production Company, LLC	SWN Production Company, LLC
OPERATOR'S WELL #:	SHAWN COUCH OHI 206H	
API WELL #:	47	069 00207
	STATE	COUNTY PERMIT

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

WATERSHED: WEIDMANS RUN ELEVATION: 1247

DISTRICT: LIBERTY COUNTY: OHIO QUADRANGLE: BETHANY

SURFACE OWNER: SHAWN W. COUCH TRUST ACREAGE: 121.56

OIL & GAS ROYALTY OWNER: GEORGE W. COUCH ACREAGE: 121.56

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: 6,177 TVD 15,750 TMD

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:

- PROPOSED SURFACE HOLE / BOTTOM HOLE
- ☼ EXISTING / PRODUCING WELLHEAD
- ⊗ ABANDONED WELL
- ⊗ PLUGGED & ABANDONED WELL
- △ CUT CONDUCTOR
- LEASE BOUNDARY
- PROPOSED DHP
- AS-DRILLED DHP
- ABANDONED DHP

REVISIONS:	DATE: 04-28-2017
REVISIONS:	DRAWN BY: K. POTH
	SCALE: 1" = 2000'
	DRAWING NO: 050-5635
	WELL LOCATION PLAT

THRASHER

THE THRASHER GROUP, INC.
600 WHITE OAKS BLVD.
BRIDGEPORT, WV 26330
PHONE 304-624-4108

"SHAWN COUCH OHI 208H"
SURFACE HOLE
ELEV. 1248
SWN PRODUCTION
COMPANY, LLC

ADJOINING OWNER INSET

TRACT	SURFACE OWNER	TAX PARCEL	ACRES
ZZ	WILLIAM S. PATTERSON, JR.	3-401250000000	3.00
YY	TODD E. PORTER	3-401250000000	0.23
XX	MARK R. KAUFMAN & ANNELESE KAUFMAN	3-200020000000	102.08
WW	ROBERT E. DUVALL & E. C. DUVALL	3-401100000000	0.24
VV	STEVEN M. MCGILVER	3-401100000000	189.84
UU	DIXIE M. LAUDERMILT & LAUDERMILT	3-401080000000	0.19
TT	B. G. RIDLER & J. M. TALLON	3-401080000000	1.08
SS	DONALD E. BRETT, JR.	3-401120000000	0.71
RR	B. G. RIDLER & J. M. TALLON	3-401120000000	1.03
QQ	WINDSOR POWER HOUSE COAL COMPANY	3-401050000000	3.81
PP	HOLLAND PARK LIMITED LIABILITY	3-401050000000	147.83
OO	JOHN C. MYERS & A.F. MYERS	3-401050000000	3.88
NN	LEE C. PAULL, III & JUNE W. PAULL	3-401090000000	204.00
MM	ROBERT J. GRIMES	3-200020000000	28.21
LL	ROBERT WALTER LASH & DONNA LASH (LIFE ESTATE); LINDA JEAN STONE	3-200180000000	80.40
KK	BEVERLY J. HOFFER	3-200120000000	5.10
JJ	ELLSWORTH R. RINE & J. K. HINE	3-200120000000	4.14
II	JAMES PURPURA FAMILY TRUST	3-200120000000	9.71
HH	ERNEST J. HERRON & D. HERRON	3-200140000000	1.85
GG	ROBERT WALTER LASH & DONNA LASH (LIFE ESTATE); LINDA JEAN STONE	3-200160000000	19.00
FF	J. P. HUDNALL & M. L. HUDNALL	3-200140000000	17.25
EE	TUNNEL RIDGE LLC	3-200450000000	80.88
DD	EILEEN B. GILMORE	3-200480000000	8.43
CC	PAUL J. ROBERTS	3-200480000000	4.89
BB	JOSEPH A. DOUGLAS & DIANNA C. DOUGLAS	3-200480000000	12.02
AA	WILLIAM F. STRAUB & N. F. STRAUB	3-110001000000	24.82
Z	STEVE VARGO & SHARON K. VARGO	3-800240000000	25.14
Y	JAMES E. CARRINGTON & SHANDRA D. CARRINGTON	3-800240000000	4.00
X	COREY M. SOBOTA	3-800240000000	8.00
W	MICHELLE LYNN BONHAM & AARON BONHAM	3-800240000000	5.00
V	COREY M. SOBOTA	3-800240000000	4.00
U	JAMES P. MILLER	3-200080000000	0.24
T	MILD H. CRISWELL	3-200080000000	23.08
S	RENEE LYNN MOSA	3-200080000000	7.89
R	RICHARD J. SCHNELLE & CALVIN W. SCHNELLE	3-200080000000	5.00
Q	RICHARD J. SCHNELLE & CALVIN W. SCHNELLE	3-200080000000	5.00
P	ROMAN D. FEKETE & MARY LEE FEKETE	3-200020000000	40.18
N	CINDY L. LINTON & B. A. FARMER (LIFE ESTATE)	3-200020000000	1.00
M	CARL HARLIER & ELISE HARLIER	3-401200000000	1.29
L	HERBERT P. MINCH, JR. & ASHLEY R. MINCH	3-401200000000	1.43
K	JOSEPH F. BIRPUS, SR. ET AL	3-401200000000	98.08
J	JOSEPH F. BIRPUS, SR. ET AL	3-401200000000	6.12
I	JOSEPH F. BIRPUS, SR. ET AL	3-200020000000	102.22
H	DAVID ANA BELLAGO & DEBRA KAY BELLAGO	3-200020000000	5.87
G	DONALD T. RIKO	3-200180000000	10.91
F	KEVIN J. KIMMINS & RHONDA L. KIMMINS	3-401180000000	43.39
E	KEVIN J. KIMMINS & RHONDA L. KIMMINS	3-401180000000	29.00
D	JAMES W. LOWE & HELEN J. LOWE	3-401180000000	12.00
C	MARK E. NORMAN	3-401100000000	2.44
B	PAUL TYRAN & RHONDA TYRAN	3-401100000000	1.24
A	SHAWN W. COUCH TRUST	3-401100000000	1.18

SURFACE HOLE LOCATION (SHT)

UTM (NAD83) ZONE 17T METERS)

NORTHING: 4443.247 237
EASTING: 525.871 252

LANDING POINT LOCATION (SHT)

UTM (NAD83) ZONE 17T METERS)

NORTHING: 4423.848 824
EASTING: 524.870 252

BOTTOM HOLE LOCATION (SHT)

UTM (NAD83) ZONE 17T METERS)

NORTHING: 4441.216 254
EASTING: 525.870 252



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.



GRAPHIC SCALE IN FEET

SWN F.V. COMPANY: SWN Production Company LLC

LEGEND:

- PROPOSED SURFACE HOLE / BOTTOM HOLE
- EXISTING / PROPOSED WELLS
- ABANDONED WELL
- PLUGGED & ABANDONED WELL
- OUT CONDUIT
- UNMAPPED PATH
- RE-DRILLED WELL
- PROPOSED DRP
- LAST BOUNDARY

WELL OPERATOR: SWN PRODUCTION COMPANY, LLC
ADDRESS: P.O. BOX 1300
CITY: JANE LEW STATE: WV ZIP CODE: 26278

REVISIONS:
DATE: 04-28-2017
INSET FROM SHEET 1
DRAWN BY: K. POTH
SCALE: [blank]
DRAWING NO: 050-2625
WELL LOCATION PLAN

PROPERTY NUMBER 2501152482
P&ID 300125644

FRIDAY APRIL 28 2017 10:21AM
I:\050-2625-SHAWN COUCH WELL PLAN-SOUTHWESTERN-SURVEY-AS-DRILLED-SHAWN COUCH OHI 208H AS-DRILLED 03-14-2017.DWG

WELL TYPE: OIL WASTE DISPOSAL
WATERSHED: WEIDMANS RUN
DISTRICT: LIBERTY
COUNTY: OHIO
SURFACE OWNER: SHAWN W. COUCH TRUST
OIL & GAS ROYALTY OWNER: GEORGE W. COUCH

WELL DEPTH: 1247
ELEVATION: 1247
QUADRANGLE: BETHWY
ACREAGE: 121.28
ACREAGE: 121.28

PERFORATE NEW FORMATION
PLUG OFF OLD FORMATION
FRACURE OR STIMULATE
REDRILL
DRILL DEEPER
CONVERT
PLUG & ABANDON
CLEAN OUT & REPLUG
OTHER CHANGE (SPECIFY AS-DRILLED)

ESTIMATED DEPTH: 1247 TD 1248 TMD

WELL TYPE: OIL
WASTE DISPOSAL
WATERSHED: WEIDMANS RUN
DISTRICT: LIBERTY
COUNTY: OHIO
SURFACE OWNER: SHAWN W. COUCH TRUST
OIL & GAS ROYALTY OWNER: GEORGE W. COUCH

WELL OPERATOR: SWN PRODUCTION COMPANY, LLC
ADDRESS: P.O. BOX 1300
CITY: JANE LEW STATE: WV ZIP CODE: 26278

REVISIONS:
DATE: 04-28-2017
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WELL LOCATION PLAN

PROPERTY NUMBER 2501152482
P&ID 300125644

FRIDAY APRIL 28 2017 10:21AM
I:\050-2625-SHAWN COUCH WELL PLAN-SOUTHWESTERN-SURVEY-AS-DRILLED-SHAWN COUCH OHI 208H AS-DRILLED 03-14-2017.DWG



THE THRASHER GROUP, INC.
600 WHITE OAKS BLVD.
BRIDGEPORT, WV 26330
PHONE 304-624-4108

ADJOINING OWNER INSET

TRACT	SURFACE OWNER	TAX PARCEL	ACRES
A	SHAWN W. COUCH TRUST	3-L4011000010000	1.16
B	PAUL TYRNA & RHONDA TYRNA	3-L4011400000000	1.24
C	MARK E. NORMAN	3-L4011000020000	2.44
D	JAMES W. LOWE & HELEN L. LOWE	3-L4011800020000	15.00
E	KEVIN L. KIMMINS & RHONDA L. KIMMINS	3-L4011800030000	29.00
F	KEVIN L. KIMMINS & RHONDA L. KIMMINS	3-L4011800000000	33.39
G	DONALD T. PIKO	3-L5001600000000	10.91
H	DAVID ALAN BELLANCO & DEBRA KAY BELLANCO	3-L5002000110000	2.87
I	JOSEPH F. BIPPUS, SR., ET AL	3-L5002000010000	105.22
J	TUNNEL RIDGE LLC	3-L4012000030000	6.12
K	JOSEPH F. BIPPUS, SR., ET AL	3-L8000100050000	96.05
L	HERBERT P. MINCH, JR. & ASHLEA R. MINCH	3-L4012000020000	1.45
M	CARL HARTLIEB & ELSIE HARTLIEB	3-L4012000010000	1.29
N	CINDY L. LINTON & B. A. FARMER (LIFE ESTATE)	3-L7005000000000	1.00
O	RONALD D. FEKETE & MARY LEE FEKETE	3-L7000500000000	40.18
P	RICHARD J. SCHNELLE & CALVIN W. SCHNELLE	3-L7000500010000	4.81
Q	RICHARD J. SCHNELLE & CALVIN W. SCHNELLE	3-L7000800000000	2.00
R	RENEE LYNN MOSA	3-L7000900000000	0.94
S	JAMES P. MILLER	3-L7000900020000	7.59
T	JAMES P. MILLER	3-L7000900010000	0.34
U	MILO H. CRISWELL	3-L7000600030000	27.08
V	COREY M. SOBOTA	3-L8002400000000	4.00
W	MICHELLE LYNN BONHAM & AARON BONHAM	3-L8002400100000	2.00
X	COREY M. SOBOTA	3-L8002400010000	6.00
Y	JAMES E. CARRINGTON & SHANDRA D. CARRINGTON	3-L8002400050000	4.00
Z	STEVE VARGO & SHARON K. VARGO	3-L8002900000000	52.14
AA	WILLIAM F. STRAUB & N. F. STRAUB	3-L1100010003000	24.52
BB	JOSEPH A. DOUGLAS & DIANNA C. DOUGLAS	3-L7004800010000	12.02
CC	PAUL J. ROBRECHT	3-L7004700000000	46.49
DD	EILEEN B. GILMORE	3-L7004600000000	6.43
EE	TUNNEL RIDGE LLC	3-L7004500000000	60.66
FF	L. P. HUDNALL & M. L. HUDNALL	3-L7004100000000	7.72
GG	ROBERT WALTER LASCH & DONNA LASCH (LIFE ESTATE); LINDA JEAN STONE	3-L7001600010000	19.00
HH	ERNEST L. HERRON & H. D. HERRON	3-L7001400010000	1.85
II	JAMES PURPURA FAMILY TRUST	3-L7001200000000	9.71
JJ	ELLSWORTH R. RINE & L. K. HINE	3-L7001300000000	4.14
KK	BEVERLY J. HOFFER	3-L7001500000000	2.10
LL	ROBERT WALTER LASCH & DONNA LASCH (LIFE ESTATE); LINDA JEAN STONE	3-L7001600000000	60.40
MM	ROBERT J. GRIMES	3-L7000300000000	28.21
NN	LEE C. PAULL, III & JUNE W. PAULL	3-L4010900000000	204.00
OO	JOHN C. MYERS & A.F. MYERS	3-L4010700000000	3.68
PP	HOLLAND PARK LIMITED LIABILITY	3-L4010500000000	141.82
QQ	WINDSOR POWER HOUSE COAL COMPANY	3-L4010500070000	3.81
RR	B. G. RIDLER & J. M. TALLMON	3-L4011300000000	1.03
SS	DONALD E. GILBERT JR.	3-L4011200000000	0.71
TT	B. G. RIDLER & J. M. TALLMON	3-L4010600000000	1.06
UU	DIXIE M. LAUDERMILT & L. LAUDERMILT	3-L4010600010000	0.19
VV	STEVEN M. MCGLUMPHY	3-L4011000030000	189.84
WW	ROBERT E. DUVALL & E. C. DUVALL	3-L4011100000000	0.34
XX	MARK P. KAUFMAN & ANNELIESE KAUFMAN	3-L5000200000000	102.08
YY	TODD E. PORTER	3-L4012500000000	0.53
ZZ	WILLIAM S. PATTERSON, JR.	3-L4011500000000	3.00

COMPANY:	SWN Production Company, LLC	swN ^{R-V+} _A Production Company™
REVISIONS:		DATE: 04-28-2017
		INSET FROM SHEET 1
		DRAWN BY: K. POTH
		SCALE:
		DRAWING NO: 050-5635
		WELL LOCATION PLAT

TRACT	SUBSPACE OWNER	TAX PARCEL	ACRES
ZZ	WILLIAM S. PATTERSON, JR.	2-401150000000	3.00
YY	TODD E. PORTER	2-401250000000	0.57
XX	MARK P. KAUFMAN & ANNELESE KAUFMAN	2-500230000000	102.08
WW	ROBERT E. DUVAL & E. C. DUVAL	2-401170000000	0.24
VV	STEVEN M. MCGILVER	2-401100003000	189.84
UU	DIXIE M. LAUDERMILT & J. LAUDERMILT	2-401080001000	0.19
TT	B. G. RIDLER & J. M. TALLMAN	2-401080000000	1.08
SS	DONALD E. GILBERT JR.	2-401120000000	0.71
RR	B. G. RIDLER & J. M. TALLMAN	2-401120000000	1.03
QQ	WINDSOR POWER HOUSE COAL COMPANY	2-401050007000	3.81
PP	HOLLAND PARK LIMITED LIABILITY	2-401050000000	141.82
OO	JOHN C. MYERS & A.F. MYERS	2-401070000000	3.88
NN	LEE C. PAULL III & JUNE W. PAULL	2-401090000000	204.00
MM	ROBERT J. GRIMES	2-700230000000	28.21
LL	ROBERT WALTER LASCH & DONNA LASCH (LIFE ESTATE); LINDA JEAN STONE	2-700180000000	80.40
KK	BEVERLY J. HOFFER	2-700120000000	2.10
JJ	ELLSWORTH R. RINE & J. K. HINE	2-700130000000	4.14
II	JAMES PURPURA FAMILY TRUST	2-700120000000	9.71
HH	ERNEST J. HERRON & H. D. HERRON	2-700140001000	1.85
GG	ROBERT WALTER LASCH & DONNA LASCH (LIFE ESTATE); LINDA JEAN STONE	2-700180001000	19.00
FF	L. P. HUDNALL & M. L. HUDNALL	2-700410000000	7.72
EE	TUNNEL RIDGE LLC	2-700480000000	60.88
DD	EILEEN B. GILMORE	2-700480000000	8.42
CC	PAUL J. ROBRICHT	2-700470000000	48.48
BB	JOSEPH A. DOUGLAS & DIANNA C. DOUGLAS	2-700480001000	12.02
AA	WILLIAM F. STRAUB & N. F. STRAUB	2-1100010002000	24.22
Z	STEVE VARGO & SHARON K. VARGO	2-800290000000	22.14
Y	JAMES E. CARRINGTON & SHANDRA D. CARRINGTON	2-800240008000	4.00
X	COREY M. SOBOTA	2-800240001000	8.00
W	MICHELLE LYNN BONHAM & AARON BONHAM	2-800240010000	2.00
V	COREY M. SOBOTA	2-800240000000	4.00
U	MILD. H. CRISWELL	2-700080003000	27.08
T	JAMES P. MILLER	2-700090001000	0.24
S	JAMES P. MILLER	2-700090002000	7.29
R	RENEE LYNN MOZA	2-700090000000	0.94
Q	RICHARD J. SCHNELLE & CALVIN W. SCHNELLE	2-700080000000	2.00
P	RICHARD J. SCHNELLE & CALVIN W. SCHNELLE	2-700050001000	4.81
O	HOWARD D. FEKETE & MARY LEE FEKETE	2-700050000000	40.18
N	CINDY L. LINTON & B. A. FARMER (LIFE ESTATE)	2-700200000000	1.00
M	CARL HARTLER & ELISIE HARTLER	2-401200001000	1.29
L	HERBERT P. MINCH, JR. & ASHLEY R. MINCH	2-401200002000	1.42
K	JOSEPH F. BIRPUS, SR., ET AL	2-800010002000	98.02
J	TUNNEL RIDGE LLC	2-401200003000	8.12
I	JOSEPH F. BIRPUS, SR., ET AL	2-500200001000	102.22
H	DAVID ALAN BELLANCO & DEBRA KAY BELLANCO	2-500200011000	22.82
G	DONALD T. PIKO	2-500180000000	10.91
F	KEVIN L. KIMMINS & RHONDA L. KIMMINS	2-401180000000	23.29
E	KEVIN L. KIMMINS & RHONDA L. KIMMINS	2-401180003000	29.00
D	JAMES W. LOWE & HELEN L. LOWE	2-401180002000	12.00
C	MARK E. NORMAN	2-401100002000	2.44
B	PAUL TYRNA & RHONDA TYRNA	2-401140000000	1.24
A	SHAWN W. COUCH TRUST	2-401100001000	1.18

COMPANY: **swn** Production Company, LLC

DATE: 04-28-2017

INSET FROM SHEET 1

DRAWN BY: K. POTH

SCALE:

DRAWING NO: 050-5835

WELL LOCATION PLAT