

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

API 47-009-00183 County BROOKE District BUFFALO
Quad BETHANY Pad Name JOHN HUPP BRK PAD Field/Pool Name PANHANDLE FIELD WET
Farm name JOHN W. HUPP & LINDA H. DOUBLE Well Number JOHN HUPP BRK 5H
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 4,447,434.062 Easting 536,696.522
Landing Point of Curve Northing 4,447,621.289 Easting 536,883.347
Bottom Hole Northing 4,449,610.375 Easting 536,088.216

Elevation (ft) 1275.7 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 01/13/2017 Date drilling commenced 05/14/2017 Date drilling ceased 09/07/2017
Date completion activities began 12/19/2017 Date completion activities ceased 03/11/2018
Verbal plugging (Y/N) N Date permission granted N/A Granted by N/A

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Please note: Operator is required to submit a plugging application within 5 days of verbal permission to plug MAY 02 2018

Freshwater depth(s) ft 450 Open mine(s) (Y/N) depths N WV Department of Environmental Protection
Salt water depth(s) ft 977 Void(s) encountered (Y/N) depths N
Coal depth(s) ft 497 Cavern(s) encountered (Y/N) depths N
Is coal being mined in area (Y/N) N

Reviewed by: _____

Reviewed
C. J. H. 5-10-18

API 47- 009 - 00183 Farm name JOHN W. HUPP & LINDA H. DOUBLE Well number JOHN HUPP BRK 5H

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	26	20	126	NEW	J-55/94#		Y
Surface	17.5	13.375	581	NEW	J-55/54.5#	481'	Y
Coal	SEE SURFACE						
Intermediate 1	12.25	9.625	1892	NEW	J-55/36#		Y
Intermediate 2							
Intermediate 3							
Production	8.75/8.50	5.5	13976	NEW	HCP-110/20#		Y
Tubing		2.375	6714	NEW	P-110/4.7#		N
Packer type and depth set							

Comment Details External Casing Packer set @ 455.4

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	574/588	15.60	1.18/1.20	677.32/705.6	SURFACE	8
Coal	SEE SURFACE						
Intermediate 1	CLASS A	714	15.60	1.18	842.52	SURFACE	8
Intermediate 2							
Intermediate 3							
Production	CLASS A	872/1700	15.60	1.21/1.19	1055.12/2023	SURFACE	24
Tubing							

Drillers TD (ft) 13976 Loggers TD (ft) 13976
 Deepest formation penetrated MARCELLUS Plug back to (ft) N/A
 Plug back procedure N/A

Kick off depth (ft) 5298

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 _____

WV Department of Environmental Protection

WAS WELL COMPLETED OPEN HOLE? Yes No DETAILS _____

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

**JOHN HUPP BRK 5H
ATTACHMENT 1
PERF REPORT**

STAGE NUM	Perf Date	Perf Top MD	Perf Bottom MD	# SHOTS PER STG
1	12/20/2017	13,740	13,847	42
2	12/21/2017	13,600	13,707	42
3	12/23/2017	13,460	13,567	42
4	12/24/2017	13,320	13,427	42
5	12/24/2017	13,180	13,287	42
6	12/26/2017	13,040	13,147	42
7	12/27/2017	12,900	13,007	42
8	12/29/2017	12,760	12,867	42
9	12/29/2017	12,620	12,727	42
10	12/31/2017	12,480	12,587	42
11	1/1/2018	12,340	12,447	42
12	1/1/2018	12,200	12,307	42
13	1/2/2018	12,060	12,167	42
14	1/3/2018	11,920	12,027	41
15	1/3/2018	11,780	11,887	42
16	1/4/2018	11,675	11,747	33
17	1/4/2018	11,500	11,607	42
18	1/5/2018	11,360	11,467	42
19	1/6/2018	11,220	11,327	42
20	1/6/2018	11,080	11,187	42
21	1/7/2018	10,940	11,047	42
22	1/7/2018	10,800	10,907	42
23	1/8/2018	10,660	10,767	42
24	1/9/2018	10,520	10,627	42
25	1/9/2018	10,380	10,487	42
26	1/9/2018	10,240	10,347	42
27	1/10/2018	10,100	10,207	42
28	1/10/2018	9,960	10,067	42
29	1/10/2018	9,820	9,927	42
30	1/11/2018	9,680	9,787	42
31	1/11/2018	9,540	9,647	42
32	1/11/2018	9,400	9,507	42
33	1/12/2018	9,260	9,367	42
34	1/12/2018	9,120	9,227	42
35	1/14/2018	8,980	9,087	42
36	1/15/2018	8,840	8,947	42
37	1/15/2018	8,700	8,807	42
38	1/16/2018	8,560	8,667	42
39	1/16/2018	8,420	8,527	42
40	1/17/2018	8,280	8,387	42
41	1/18/2018	8,140	8,247	42
42	1/19/2018	8,000	8,107	42
43	1/19/2018	7,860	7,967	42
44	1/19/2018	7,760	7,827	23
45	1/20/2018	7,580	7,687	42
46	1/20/2018	7,440	7,547	36
47	1/20/2018	7,300	7,407	36
48	1/20/2018	7,160	7,267	36
49	1/21/2018	7,020	7,127	36
50	1/21/2018	6,880	6,987	36
51	1/21/2018	6,740	6,847	36

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**JOHN HUPP BRK 5H
ATTACHMENT 2
STIM REPORT**

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	12/21/2017	76	7,860	8,624	4,721	293,320	5,921	
2	12/22/2017	80	7,478	8,432	4,263	291,020	5,797	
3	12/23/2017	72	6,642	9,188	4,302	210,040	8,336	
4	12/24/2017	88	7,821	8,397	4,693	295,000	5,198	
5	12/25/2017	77	7,083	7,934	4,576	283,220	5,320	
6	12/27/2017	89	7,627	8,177	4,558	283,080	4,997	
7	12/29/2017	83	7,212	8,094	4,442	286,520	6,363	
8	12/29/2017	92	7,782	8,439	4,086	286,780	5,174	
9	12/31/2017	87	7,891	8,643	4,063	287,220	4,618	
10	1/1/2018	88	7,517	8,149	4,737	289,760	5,135	
11	1/1/2018	89	7,897	8,118	4,419	291,880	4,596	
12	1/2/2018	91	7,276	7,737	4,147	285,734	5,379	
13	1/3/2018	91	7,437	7,756	4,403	286,160	4,405	
14	1/3/2018	87	7,105	7,791	4,277	285,620	5,605	
15	1/4/2018	90	7,264	7,903	4,534	287,580	4,794	
16	1/4/2018	91	7,492	8,013	4,307	291,880	5,134	
17	1/5/2018	90	7,046	7,622	4,056	285,460	5,272	
18	1/6/2018	91	7,002	7,559	4,060	285,080	4,914	
19	1/6/2018	88	6,846	7,172	4,480	287,960	5,062	
20	1/7/2018	90	6,727	7,813	4,034	286,520	4,404	
21	1/7/2018	88	6,999	7,593	4,567	287,700	4,999	
22	1/8/2018	91	6,798	7,611	4,632	285,180	4,308	
23	1/9/2018	89	6,991	7,647	4,671	278,780	5,211	
24	1/9/2018	96	6,971	7,309	4,291	287,020	5,068	
25	1/9/2018	92	7,005	7,434	4,462	285,040	5,308	
26	1/10/2018	85	6,680	7,201	4,088	282,580	4,973	
27	1/10/2018	83	6,627	7,662	3,824	286,200	5,026	
28	1/10/2018	84	6,764	7,121	4,033	280,000	4,802	
29	1/11/2018	95	7,311	7,946	4,879	282,020	4,963	
30	1/11/2018	96	7,409	8,330	4,218	283,040	4,713	
31	1/11/2018	97	7,523	8,177	3,951	285,940	4,868	
32	1/12/2018	73	6,897	8,915	4,467	241,560	4,978	
33	1/12/2018	93	6,987	7,740	4,410	279,290	6,473	
34	1/14/2018	97	7,059	7,645	4,171	284,180	4,214	
35	1/15/2018	97	7,454	8,273	4,743	287,340	4,532	
36	1/15/2018	98	6,052	8,000	4,345		4,592	
37	1/16/2018	93	7,017	7,400	4,230	275,900	4,527	
38	1/16/2018	89	6,802	7,411	4,404	282,600	4,142	
39	1/17/2018	94	7,313	8,909	4,466	283,220	5,634	
40	1/18/2018	96	5,853	9,336	4,419	277,160	6,617	
41	1/19/2018	100	7,402	7,767	4,323	277,700	4,727	
42	1/19/2018	96	7,311	8,192	4,564	281,160	3,823	
43	1/19/2018	97	7,167	8,087	4,476	280,360	3,991	
44	1/20/2018	98	6,946	7,691	4,378	277,280	4,104	
45	1/20/2018	98	6,832	7,364	4,465	277,700	3,814	
46	1/20/2018	97	6,754	7,144	4,885	283,700	3,713	
47	1/20/2018	97	6,797	8,150	4,369	279,280	3,729	
48	1/21/2018	98	6,724	7,091	4,705	283,680	3,837	
49	1/21/2018	98	6,742	7,187	4,403	284,260	3,887	
50	1/21/2018	99	6,795	7,332	4,545	281,460	3,879	
51	1/21/2018	99	6,849	7,728	4,332	280,960	3,700	

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Well Name: John Hupp BRK 5H

47009001830000

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	450.00	450.00	
Top of Salt Water	977.00	977.00	NA	NA	
Pittsburgh Coal	497.00	497.00	502.00	502.00	
Pottsville (ss)	617.00	617.00	744.00	744.00	
Mauch Chunk (shale)	852.00	852.00	1536.00	1536.00	
Raven Cliff (ss)	959.00	959.00	1226.00	1226.00	
Maxton (ss)	1311.00	1311.00	1434.00	1434.00	
Greenbriar (ls)	1536.00	1536.00	1678.00	1678.00	
Big Injun (ss)	1678.00	1678.00	1813.00	1813.00	
Berea (siltstone)	2167.00	2167.00	2210.00	2210.00	
Rhinstreet (shale)	5887.00	5736.00	6074.00	5889.00	
Cashaqua (shale)	6074.00	5889.00	6146.00	5940.00	
Middlesex (shale)	6146.00	5940.00	6261.00	6012.00	
Burket (shale)	6261.00	6012.00	6288.00	6028.00	
Tully (ls)	6288.00	6028.00	6375.00	6075.00	
Mahantango (shale)	6375.00	6075.00	6569.00	6160.00	
Marcellus (shale)	6680.00	6193.00	NA	NA	Gas

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Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	12/21/2017
Job End Date:	1/21/2018
State:	West Virginia
County:	Brooke
API Number:	47-009-00183-00-00
Operator Name:	Southwestern Energy
Well Name and Number:	John Hupp BRK 5
Latitude:	40.17647948
Longitude:	-80.56898450
Datum:	NAD83
Federal Well:	NO
Indian Well:	NO
True Vertical Depth:	6,165
Total Base Water Volume (gal):	10,252,424
Total Base Non Water Volume:	133,000



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
FLOJET DR 9000LPP	SWN Well Services	Friction Reducer					
Ingredients	Listed Above	Listed Above		Listed Below			
				Listed Below			

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Latitude: 40°12'30" L

7,631'

9,590'

BHL Latitude: 40°12'30"

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: 4,447,434.062
EASTING: 536,696.522

LANDING POINT LOCATION (LPL):

UTM (NAD83, ZONE 17, METERS):
NORTHING: 4,447,621.289
EASTING: 536,883.347

BOTTOM HOLE LOCATION (BHL):

UTM (NAD83, ZONE 17, METERS):
NORTHING: 4,449,610.375
EASTING: 536,088.216

SURFACE HOLE LOCATION (SHL):

UTM (NAD83, ZONE 17, METERS):
NORTHING: 4,447,434.062
EASTING: 536,696.522

LANDING POINT LOCATION (LPL):

UTM (NAD83, ZONE 17, METERS):
NORTHING: 4,447,532.626
EASTING: 536,919.700

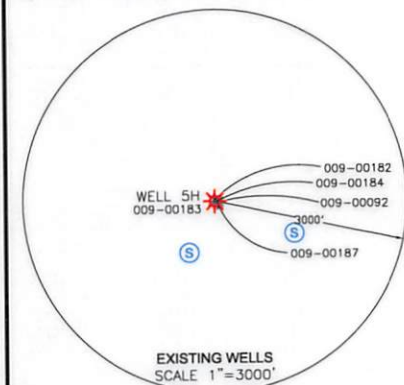
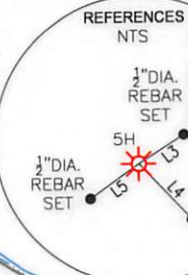
BOTTOM HOLE LOCATION (BHL):

UTM (NAD83, ZONE 17, METERS):
NORTHING: 4,449,686.761
EASTING: 536,060.275

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

LINE	BEARING	DISTANCE	DESCRIPTION	MONUMENT
L1	S 77°05'05" E	992.59'	SHL TO LANDMARK	
L2	S 01°22'22" W	1574.03'	SHL TO LANDMARK	
L3	N 44°53'40" E	215.58'	SHL TO REF. PNT.	1/2"Ø REBAR/CAP
L4	S 41°58'36" E	273.25'	SHL TO REF. PNT.	1/2"Ø REBAR/CAP
L5	S 64°39'50" W	263.11'	SHL TO REF. PNT.	1/2"Ø REBAR SET

AS-DRILLED

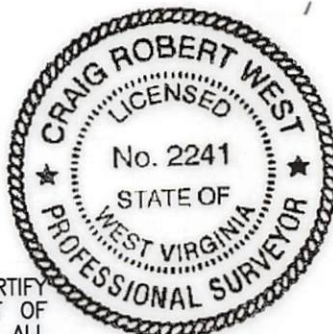


NOTES ON SURVEY

- 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 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.

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. 2241



COMPANY: **SWN** **SWN** ^{REG. A-V+}

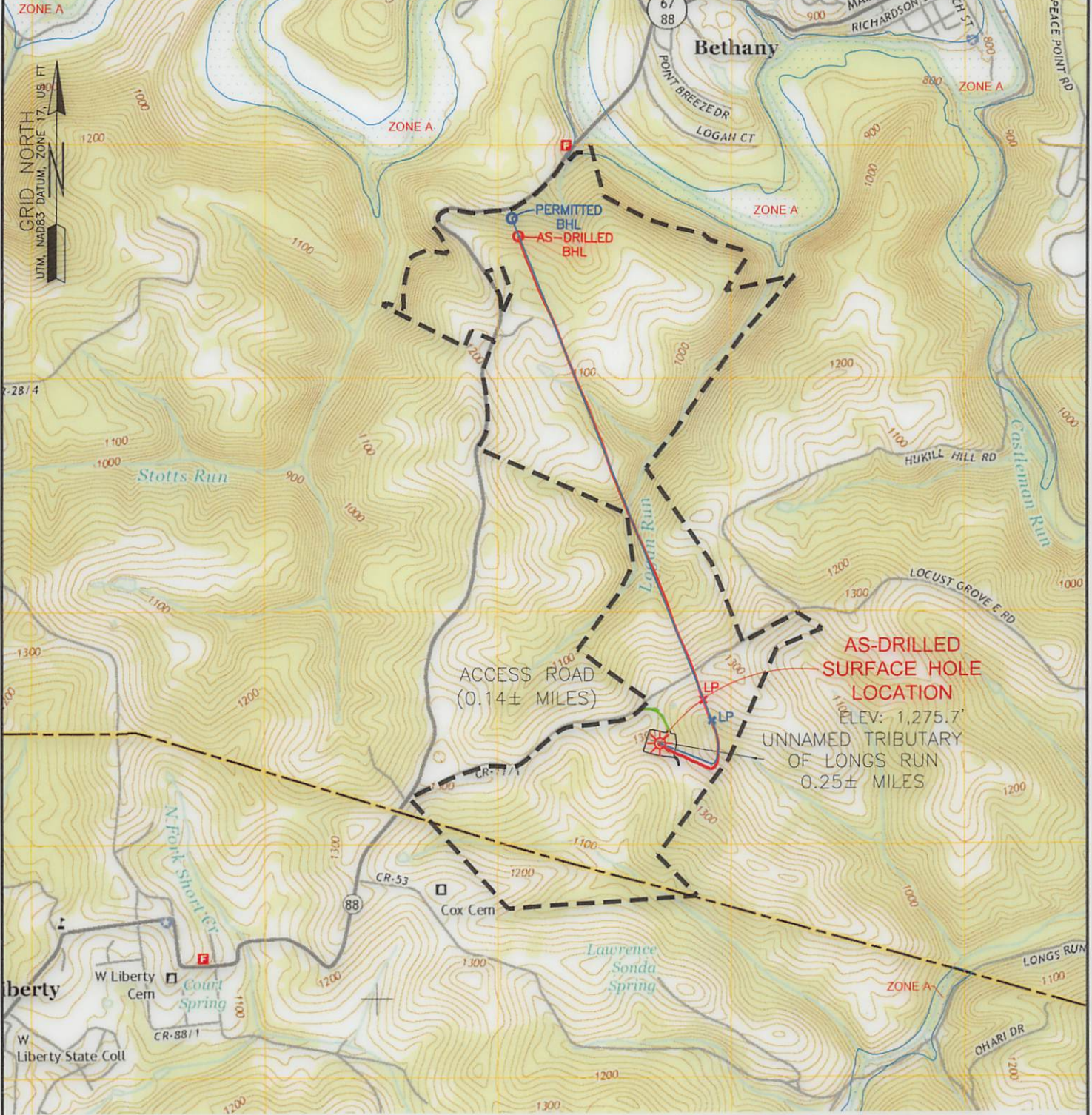
Production Company, LLC Production Company™

<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 SOURCE OF ELEVATION: SURVEY GRADE GPS (NAVD 88, US FT)</p>	<p>JOHN HUPP BRK</p> <p>OPERATOR'S WELL #: 5H</p> <p>API WELL #: 49 009 00183</p> <p>STATE COUNTY PERMIT</p>
	<p>WELL TYPE: OIL <input type="checkbox"/> WASTE DISPOSAL <input type="checkbox"/> PRODUCTION <input checked="" 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: UPPER OHIO NORTH</p> <p>DISTRICT: BUFFALO COUNTY: BROOKE</p> <p>SURFACE OWNER: JOHN W. HUPP & LINDA H. DOUBLE</p> <p>OIL & GAS ROYALTY OWNER: JOHN W. HUPP & LINDA H. DOUBLE</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) As-Drilled</p> <p>TARGET FORMATION: MARCELLUS</p> <p>ESTIMATED DEPTH: 6,217' TVD 13,976' TMD</p>	<p>DESIGNATED AGENT: DEE SOUTHALL</p> <p>ADDRESS: P.O. BOX 1300</p> <p>CITY: JANE LEW STATE: WV ZIP CODE: 26378</p>
<p>WELL OPERATOR: SWN PRODUCTION COMPANY, LLC</p> <p>ADDRESS: P.O. BOX 1300</p> <p>CITY: JANE LEW STATE: WV ZIP CODE: 26378</p>		<p>DATE: 10-13-2016</p> <p>DRAWN BY: B. HERMAN</p> <p>SCALE: 1" = 2000'</p> <p>DRAWING NO: 087569048</p> <p>WELL LOCATION PLAT</p>

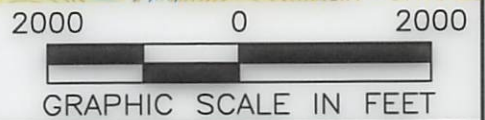
RETTEW

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

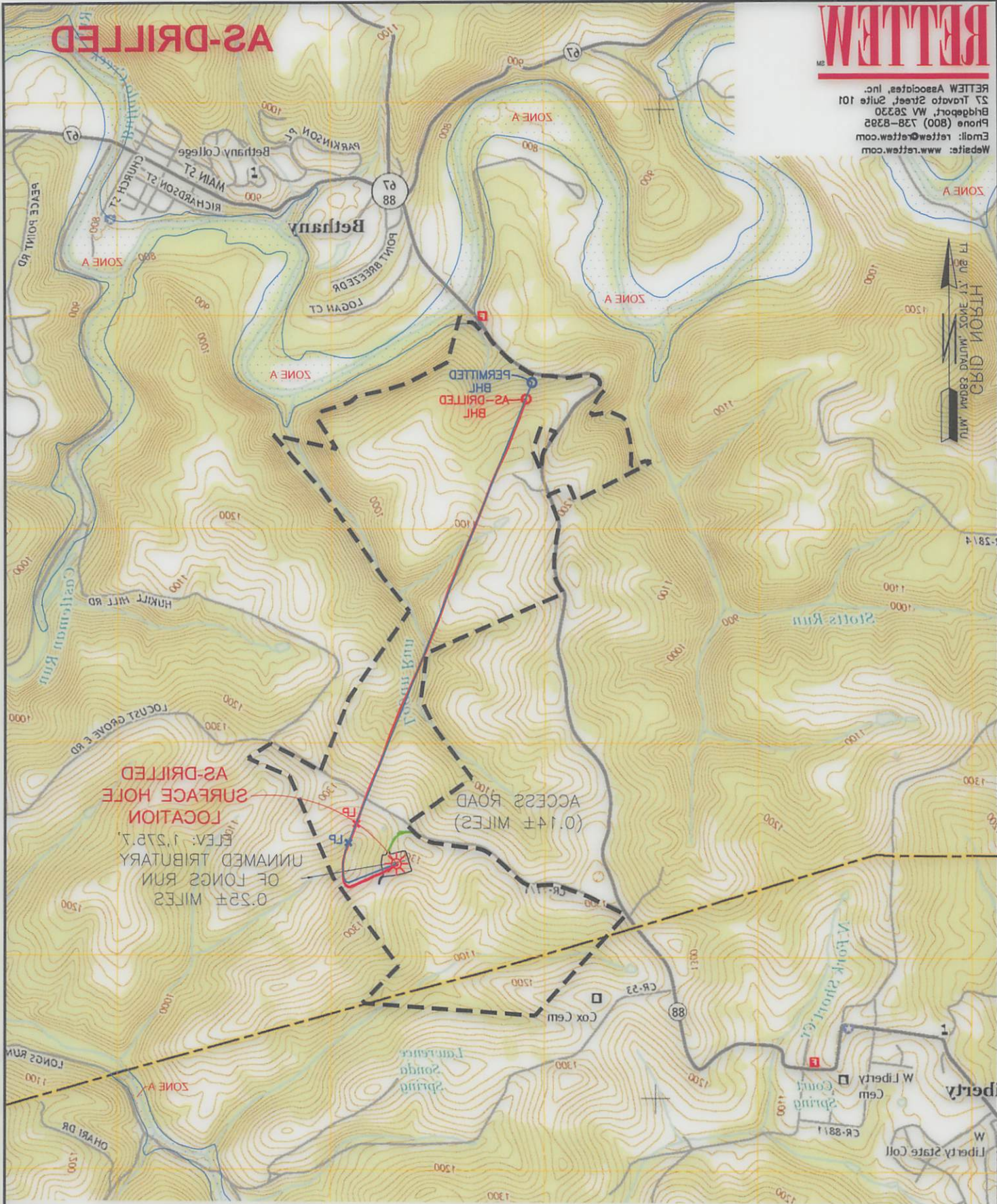
AS-DRILLED



WELL: JOHN HUPP BRK 5H
QUAD: BETHANY, WV-PA



NAME AND DISTANCE TO THE NEAREST STREAM: UN-NAMED TRIBUTARY TO LONGS RUN IS LOCATED ±0.25 MILES SOUTH EAST OF THE CENTER OF THE DRILL PAD.		STREAM CROSSING COORDINATES (NAD 83): NO NEW CROSSINGS.		COMPANY: 	
WELL RESTRICTIONS: WELL PAD, LOD, & E & S CONTROL FEATURES TO PERENNIAL STREAM, LAKE, POND, RESERVOIR OR WETLAND: >100 FEET WELL PAD, LOD, & E & S CONTROL FEATURES TO NATURALLY PRODUCING TROUT STREAM: >300 FEET WELL PAD, LOD, & E & S CONTROL FEATURES TO GROUNDWATER INTAKE OR PUBLIC WATER SUPPLY: >1000 FEET WELL SHL TO EXISTING WATER WELL OR DEVELOPED SPRING: >250 FEET CENTER OF PAD TO OCCUPIED DWELLING STRUCTURE: >625 FEET CENTER OF PAD TO AGRICULTURAL BUILDINGS LARGER THAN 2500 SQ FT: >625 FEET		OPERATOR'S: JOHN HUPP BRK		WELL #: 5H	
FEMA FLOOD INFORMATION: BY GRAPHIC PLOTTING ONLY FEMA FIRM INCORPORATED AREA OF BROOKE COUNTY, WEST VIRGINIA; MAP NUMBERS 54009C0130D, 54009C0135D, 54009C0140D, 54009C0141D, 54009C0145D; EFFECTIVE DATE: APRIL 19, 2010. NO FLOOD ZONES ARE SITUATED WITHIN THE UNIT.		LOCATION: BUFFALO DISTRICT, BROOKE COUNTY, WEST VIRGINIA		SURFACE HOLE LOCATION: GEOGRAPHIC (NAD83): LATITUDE: 40.176479° LONGITUDE: -80.568985°	
LEGEND: ○ PROPOSED SURFACE HOLE / BOTTOM HOLE * EXISTING / PRODUCING WELLHEAD --- LEASE BOUNDARY --- ASDRILLED WELLPATH --- PERMITTED WELLPATH --- ACCESS ROAD --- HIGHWAY/INTERSTATE --- COUNTY ROAD		BOTTOM HOLE LOCATION: GEOGRAPHIC (NAD83): LATITUDE: 40.196113° LONGITUDE: -80.576007°		REVISIONS: DATE: 10-13-2016 DRAWN BY: B. HERMAN SCALE: 1" = 2000' DRAWING NO: 087569048 TOPOGRAPHIC MAP	



QUAD: BETHANY, WV-PA WELL: JOHN HUPP BRK 5H
 GRAPHIC SCALE IN FEET

<p>COMPANY: Production Company, LLC </p>	<p>NAME AND DISTANCE TO THE NEAREST STREAM: NO NEW CROSSINGS.</p> <p>UN-NAMED TRIBUTARY TO LONGS RUN IS LOCATED ±0.25 MILES SOUTH EAST OF THE CENTER OF THE DRILL PAD.</p>
<p>OPERATOR'S: JOHN HUPP BRK 5H</p>	<p>WELL RESTRICTIONS: WELL PAD, LOD, & E & S CONTROL FEATURES TO PERENNIAL STREAM, LAKE, POND, RESERVOIR OR WETLAND: < 100 FEET WELL PAD, LOD, & E & S CONTROL FEATURES TO NATURALLY PRODUCING TROUT STREAM: > 300 FEET WELL PAD, LOD, & E & S CONTROL FEATURES TO GROUNDWATER INTAKE OR PUBLIC WATER SUPPLY: < 1000 FEET WELL SHJ TO EXISTING WATER WELL OR DEVELOPED SPRING: > 250 FEET CENTER OF PAD TO OCCUPIED DWELLING STRUCTURE: > 825 FEET CENTER OF PAD TO AGRICULTURAL BUILDINGS LARGER THAN 2500 SQ FT: > 825 FEET</p>
<p>LOCATION: BROOKE COUNTY, WEST VIRGINIA BUFFALO DISTRICT</p>	<p>FEMA FLOOD INFORMATION: BY GRAPHIC PLOTTING ONLY FEMA FIRM INCORPORATED AREA OF BROOKE COUNTY, WEST VIRGINIA; MAP NUMBERS 24000C0130D, 24000C0132D, 24000C0140D, 24000C0141D, 24000C0142D; EFFECTIVE DATE: APRIL 19, 2010.</p> <p>NO FLOOD ZONES ARE SITUATED WITHIN THE UNIT.</p>
<p>REVISIONS: DATE: 10-13-2016 DRAWN BY: B. HERMAN SCALE: 1" = 2000' DRAWING NO: 087569048 TOPOGRAPHIC MAP</p>	<p>LEGEND:</p> <ul style="list-style-type: none"> EXISTING \ PRODUCING WELLPATH PROPOSED SURFACE HOLE \ BOTTOM HOLE LEASE BOUNDARY ADRIILLED WELLPATH PERMITTED WELLPATH ACCESS ROAD HIGHWAY/INTERSTATE COUNTY ROAD
<p>SURFACE HOLE LOCATION: GEOGRAPHIC (NAD83): LATITUDE: 40.176479 LONGITUDE: -80.268885</p>	<p>BOTTOM HOLE LOCATION: GEOGRAPHIC (NAD83): LATITUDE: 40.186113 LONGITUDE: -80.276007</p>