

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

API 47-009-00274 County BROOKE District BUFFALO
Quad BETHANY Pad Name LINDA GREATHOUSE BRK PAD Field/Pool Name PANHANDEL FIELD WET
Farm name LINDA REEVES GREATHOUSE & VICKI LYNN HAMILTON Well Number LINDA GREATHOUSE BRK 10H
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 4450479.50 Easting 533454.29
Landing Point of Curve Northing 4450442.02 Easting 533541.02
Bottom Hole Northing 4448796.39 Easting 534513.94

Elevation (ft) 1,139.2' 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 2/26/19 Date drilling commenced 10/15/19 Date drilling ceased 10/26/19
Date completion activities began 11/18/19 Date completion activities ceased 12/15/19
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 159' Open mine(s) (Y/N) depths N
Salt water depth(s) ft 454' Void(s) encountered (Y/N) depths N
Coal depth(s) ft 311' Cavern(s) encountered (Y/N) depths N
Is coal being mined in area (Y/N) N

C. J. [Signature]
5.11.20

Reviewed by: _____

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Hydraulic Fracturing Fluid Product Component Information Disclosure



Job Start Date:	11/18/2019
Job End Date:	12/10/2019
State:	West Virginia
County:	Brooke
API Number:	47-009-00274-00-00
Operator Name:	Southwestern Energy
Well Name and Number:	Linda Greathouse BRK 10
Latitude:	40.20405227
Longitude:	-80.60690660
Datum:	NAD83
Federal Well:	NO
Indian Well:	NO
True Vertical Depth:	5,935
Total Base Water Volume (gal):	11,420,374
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
SWN FRW-11LC	SWN Well Services	Friction Reducer					
Base Water	Operator	Base Fluid		Listed Below			
				Listed Below			

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					64-19-7	37.50000	0.00161
					93-83-4	1.50000	0.00129
					68551-12-2	1.50000	0.00129
					67-56-1	80.00000	0.00099
					77-92-9	22.50000	0.00096
					15827-60-8	10.00000	0.00063
					397256-50-7	1.00000	0.00026
					68951-67-7	9.67400	0.00012
					61790-12-3	5.02700	0.00006
					68527-49-1	4.74600	0.00006
					127-08-2	0.02200	0.00000
					50-00-0	0.00400	0.00000

* 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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**WELL NAME
ATTACHMENT 1
PERF REPORT**

STAGE NUM	Perf Date	Perf Top MD	Perf Bottom MD	# SHOTS PER STG
1	11/9/2019	12,505	12,413	36
2	11/18/2019	12,383	12,321	42
3	11/18/2019	12,304	12,242	42
4	11/19/2019	12,223	12,161	42
5	11/19/2019	12,141	12,079	42
6	11/19/2019	12,058	11,996	42
7	11/20/2019	11,977	11,915	42
8	11/20/2019	11,896	11,834	42
9	11/20/2019	11,815	11,753	42
10	11/20/2019	11,735	11,673	42
11	11/20/2019	11,654	11,592	42
12	11/21/2019	11,574	11,512	42
13	11/21/2019	11,493	11,431	42
14	11/21/2019	11,413	11,350	42
15	11/21/2019	11,332	11,270	42
16	11/21/2019	11,252	11,189	42
17	11/22/2019	11,171	11,109	42
18	11/22/2019	11,091	11,028	42
19	11/22/2019	11,010	10,948	42
20	11/22/2019	10,930	10,867	42
21	11/23/2019	10,849	10,787	42
22	11/23/2019	10,769	10,706	42
23	11/23/2019	10,688	10,626	42
24	11/23/2019	10,603	10,545	42
25	11/23/2019	10,527	10,465	42
26	11/23/2019	10,447	10,384	42
27	11/24/2019	10,366	10,304	42
28	11/24/2019	10,286	10,223	42
29	11/24/2019	10,205	10,143	42
30	11/24/2019	10,125	10,062	42
31	11/24/2019	10,044	9,982	42
32	11/25/2019	9,964	9,901	42
33	11/25/2019	9,883	9,821	42
34	11/25/2019	9,802	9,740	42
35	11/25/2019	9,722	9,661	42
36	11/25/2019	9,641	9,579	42
37	11/26/2019	9,561	9,499	42
38	11/26/2019	9,480	9,418	42
39	11/27/2019	9,400	9,337	42
40	11/27/2019	9,319	9,257	42
41	11/28/2019	9,239	9,176	42
42	11/28/2019	9,158	9,096	42
43	11/28/2019	9,078	9,015	42

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**WELL NAME
ATTACHMENT 1
PERF REPORT**

STAGE NUM	Perf Date	Perf Top MD	Perf Bottom MD	# SHOTS PER STG
44	11/29/2019	8,993	8,935	42
45	11/29/2019	8,913	8,854	42
46	11/29/2019	8,836	8,774	42
47	11/30/2019	8,752	8,693	42
48	11/30/2019	8,671	8,613	42
49	12/1/2019	8,592	8,532	42
50	12/1/2019	8,511	8,452	42
51	12/1/2019	8,431	8,371	42
52	12/1/2019	8,350	8,291	42
53	12/2/2019	8,271	8,212	42
54	12/2/2019	8,192	8,130	42
55	12/3/2019	8,108	8,052	42
56	12/3/2019	8,031	7,970	42
57	12/3/2019	7,951	7,893	42
58	12/4/2019	7,870	7,813	42
59	12/4/2019	7,789	7,732	42
60	12/4/2019	7,709	7,652	42
61	12/5/2019	7,628	7,571	42
62	12/5/2019	7,548	7,491	42
63	12/5/2019	7,467	7,405	42
64	12/6/2019	7,385	7,321	42
65	12/6/2019	7,303	7,242	42
66	12/6/2019	7,224	7,162	42
67	12/7/2019	7,145	7,081	42
68	12/7/2019	7,065	7,000	42
69	12/7/2019	6,984	6,919	42
70	12/8/2019	6,901	6,839	42
71	12/8/2019	6,823	6,758	42
72	12/8/2019	6,741	6,678	42
73	12/9/2019	6,662	6,598	42
74	12/9/2019	6,582	6,517	42
75	12/9/2019	6,501	6,439	42
76	12/10/2019	6,421	6,358	41
77	12/10/2019	6,340	6,278	42
78	12/10/2019	6,260	6,197	42

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WELL NAME
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	11/18/2019	83	7,358	7,435	4,127	237,900	5,696	0
2	11/18/2019	93	7,717	4,574	4,752	154,680	4,723	0
3	11/18/2019	89	7,561	4,470	4,920	149,960	3,915	0
4	11/19/2019	89	7,319	4,386	4,417	173,660	4,248	0
5	11/19/2019	90	7,498	4,250	4,471	153,480	4,177	0
6	11/19/2019	90	7,278	4,534	4,795	154,620	3,763	0
7	11/20/2019	89	7,305	4,575	4,759	152,320	3,915	0
8	11/20/2019	91	7,712	5,333	4,531	160,920	4,176	0
9	11/20/2019	85	7,684	5,138	4,298	171,780	4,300	0
10	11/20/2019	93	7,851	5,245	5,000	155,220	3,888	0
11	11/20/2019	92	7,796	5,640	4,730	173,840	4,548	0
12	11/21/2019	97	8,093	4,795	4,821	173,100	4,087	0
13	11/21/2019	88	7,427	5,155	4,455	154,480	3,706	0
14	11/21/2019	91	7,519	5,389	4,767	172,660	3,996	0
15	11/21/2019	91	7,937	5,120	5,070	156,740	3,865	0
16	11/22/2019	89	8,000	5,177	4,828	153,720	3,727	0
17	11/22/2019	88	7,946	5,000	4,565	159,200	4,065	0
18	11/22/2019	84	7,421	4,722	4,762	155,020	3,546	0
19	11/22/2019	84	7,280	5,107	4,717	173,930	3,537	0
20	11/22/2019	86	7,864	5,240	4,810	175,120	3,626	0
21	11/23/2019	94	7,524	5,215	4,952	154,800	3,383	0
22	11/23/2019	89	7,541	5,275	4,806	153,220	3,526	0
23	11/23/2019	88	7,487	5,166	4,798	154,760	3,441	0
24	11/23/2019	93	7,244	4,856	4,544	176,440	3,595	0
25	11/23/2019	94	7,602	5,125	4,675	152,160	3,325	0
26	11/24/2019	93	7,658	4,850	4,845	170,940	3,480	0
27	11/24/2019	94	7,589	5,209	4,840	152,820	3,410	0
28	11/24/2019	90	7,461	5,123	4,496	154,720	3,312	0
29	11/24/2019	84	7,527	5,651	4,247	175,980	3,529	0
30	11/24/2019	96	7,658	5,120	4,927	152,680	3,672	0
31	11/24/2019	90	7,717	5,170	4,755	175,460	3,771	0
32	11/25/2019	95	7,527	5,145	4,596	149,820	3,129	0
33	11/25/2019	87	7,642	5,145	4,568	152,720	3,319	0
34	11/25/2019	88	7,491	5,126	4,568	152,980	3,165	0
35	11/25/2019	96	7,679	5,432	4,542	151,940	3,034	0
36	11/26/2019	95	7,824	5,088	4,560	151,520	2,983	0
37	11/26/2019	89	7,513	5,344	4,431	155,300	3,313	0
38	11/26/2019	82	8,197	4,960	4,322	154,040	3,393	0
39	11/27/2019	91	7,474	5,122	4,250	151,660	3,643	0
40	11/27/2019	87	7,727	5,213	4,181	154,200	3,276	0
41	11/28/2019	92	7,463	4,908	4,365	152,080	3,292	0
42	11/28/2019	100	7,719	5,070	4,987	156,420	3,355	0
43	11/29/2019	96	7,691	4,921	4,605	171,080	3,433	0
44	11/29/2019	95	7,242	5,503	4,605	152,720	3,499	0
45	11/29/2019	94	7,819	5,089	4,757	154,920	3,128	0
46	11/30/2019	95	6,772	5,346	4,602	152,740	3,337	0
47	11/30/2019	91	7,212	5,129	4,602	156,680	3,366	0
48	12/1/2019	97	7,365	4,922	4,612	152,020	3,016	0
49	12/1/2019	96	7,235	5,111	4,760	152,760	3,144	0
50	12/1/2019	96	7,169	5,268	4,760	153,260	3,484	0
51	12/1/2019	96	7,410	4,975	4,485	154,940	3,021	0
52	12/2/2019	94	6,891	4,942	4,502	153,400	3,443	0
53	12/2/2019	97	7,618	5,023	4,944	154,880	3,163	0

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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	12/3/2019	97	7,454	4,965	4,667	153,280	3,086	0
55	12/3/2019	98	6,914	5,174	4,296	160,620	3,594	0
56	12/3/2019	98	7,213	5,218	4,645	152,840	3,150	0
57	12/4/2019	84	7,928	5,232	4,156	149,710	3,644	0
58	12/4/2019	93	7,019	5,338	4,190	142,360	3,212	0
59	12/4/2019	99	7,174	5,225	4,325	170,390	3,370	0
60	12/5/2019	99	7,232	5,254	4,785	169,200	3,495	0
61	12/5/2019	90	7,423	5,631	4,485	164,686	3,275	0
62	12/5/2019	99	7,389	5,218	4,469	152,060	3,263	0
63	12/6/2019	99	6,876	5,315	4,676	151,660	3,190	0
64	12/6/2019	95	6,888	5,019	4,288	158,220	3,285	0
65	12/6/2019	98	6,577	5,241	4,089	153,200	3,476	0
66	12/6/2019	97	7,242	5,021	4,726	166,080	3,143	0
67	12/7/2019	98	6,938	4,621	4,341	153,280	3,045	0
68	12/7/2019	95	7,070	4,827	4,356	155,740	3,240	0
69	12/7/2019	98	6,891	4,821	4,521	151,800	3,058	0
70	12/8/2019	98	6,754	4,955	4,521	172,700	3,479	0
71	12/8/2019	93	7,142	4,810	4,250	152,560	3,480	0
72	12/8/2019	98	6,969	5,425	4,560	151,980	3,090	0
73	12/9/2019	94	6,848	5,487	4,618	166,200	3,439	0
74	12/9/2019	94	6,659	5,932	4,308	150,400	3,305	0
75	12/9/2019	96	6,748	5,560	4,564	172,140	3,388	0
76	12/10/2019	96	7,070	5,230	4,541	167,000	3,245	0
77	12/10/2019	93	7,422	5,422	4,456	148,900	3,329	0
78	12/10/2019	95	6,713	5,355	4,590	174,670	3,082	0

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Well Name: Linda Greathouse BRK 10H

47009002740000

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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	159.00	159.00	
Top of Salt Water	454.00	454.00	NA	NA	
Pittsburgh Coal	311.00	311.00	460.00	460.00	
Pottsville (ss)	460.00	460.00	813.00	813.00	
Raven Cliff (ss)	813.00	813.00	1159.00	1159.00	
Maxton (ss)	1159.00	1159.00	1483.00	1483.00	
Big Injun (ss)	1487.00	1487.00	1891.00	1891.00	
Berea (siltstone)	1891.00	1891.00	5374.00	5315.00	
Rinestreet (shale)	5374.00	5315.00	5651.00	5558.00	
Cashqua (shale)	5651.00	5558.00	5715.00	5607.00	
Middlesex (shale)	5715.00	5607.00	5798.00	5665.00	
Burket (shale)	5798.00	5665.00	5830.00	5686.00	
Tully (ls)	5830.00	5686.00	5926.00	5745.00	
Mahantango (shale)	5926.00	5745.00	6127.00	5840.00	
Marcellus (shale)	6127.00	5840.00	NA	NA	GAS

LATITUDE: 40°12'30" SURFACE HOLE

6637'

LATITUDE: 40°12'30" BOTTOM HOLE

3188'

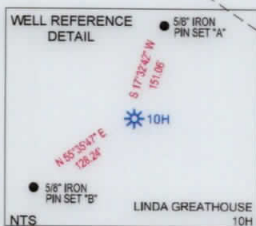
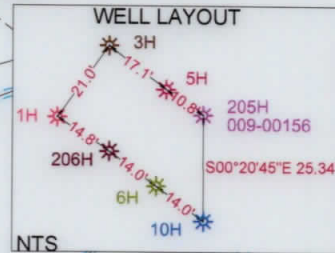


www.jhacompanies.com
68011 Vineyard Road
St. Clairsville, Ohio 43950
740-695-6100

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

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.



SURFACE HOLE LOCATION (SHL):
UTM (NAD83, ZONE 17, METERS): NORTHING: 4450479.50 EASTING: 533454.29
LANDING POINT LOCATION (LPL):
UTM (NAD83, ZONE 17, METERS): NORTHING: 4450442.02 EASTING: 533541.02
BOTTOM HOLE LOCATION (BHL):
UTM (NAD83, ZONE 17, METERS): NORTHING: 4448769.39 EASTING: 534513.94
SURFACE HOLE LOCATION (SHL):
UTM (NAD83, ZONE 17, METERS): NORTHING: 4450479.50 EASTING: 533454.29
LANDING POINT LOCATION (LPL):
UTM (NAD83, ZONE 17, METERS): NORTHING: 4450463.11 EASTING: 533517.90
TURNING POINT LOCATION (TPL):
UTM (NAD83, ZONE 17, METERS): NORTHING: 4449177.61 EASTING: 534342.16
BOTTOM HOLE LOCATION (BHL):
UTM (NAD83, ZONE 17, METERS): NORTHING: 4448769.93 EASTING: 534515.63

LINE	BEARING	DISTANCE
L1	S71°51'56"E	3952.26'
L2	S81°23'08"E	3753.94'

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



(+) 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 (NAVD 88, US FT)

LINDA GREATHOUSE BRK
OPERATOR'S WELL #: 10H
API WELL #: 47 009 00274
STATE COUNTY PERMIT


WELL TYPE: OIL WASTE DISPOSAL PRODUCTION DEEP GAS LIQUID INJECTION STORAGE SHALLOW
WATERSHED: UPPER OHIO SOUTH ELEVATION: 1,139.2'
DISTRICT: BUFFALO COUNTY: BROOKE QUADRANGLE: BETHANY, WV
SURFACE OWNER: LINDA REEVES GREATHOUSE & VICKI LYNN HAMILTON ACREAGE: ±322.84
OIL & GAS ROYALTY OWNER: LINDA REEVES GREATHOUSE & VICKI LYNN HAMILTON ACREAGE: ±322.84
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: 5,972' TVD 12,592' TMD

WELL OPERATOR: SWN PRODUCTION COMPANY, LLC DESIGNATED AGENT: BRITTANY WOODY
ADDRESS: 1300 FORT PIERPONT DRIVE, SUITE 201 ADDRESS: 1300 FORT PIERPONT DRIVE, SUITE 201
CITY: MORGANTOWN STATE: WV ZIP CODE: 26508 CITY: MORGANTOWN STATE: WV ZIP CODE: 26508

LEGEND:	REVISIONS:	DATE: 02-18-2020
● EXISTING BOTTOM HOLE		API #: 47-009-00274
⊙ EXISTING / PRODUCING WELLHEAD	— ACCESS ROAD	DRAWN BY: R. GRIMES
LPL ● EXISTING LANDING POINT LOCATION	- - - PUBLIC ROAD	SCALE: 1" = 2000'
○ PROPOSED SURFACE HOLE / BOTTOM HOLE	— FLOOD PLAIN	DRAWING NO: 2018-204
LPL ● PROPOSED LANDING POINT LOCATION	— LEASE BOUNDARY	WELL LOCATION PLAT
	— AS DRILLED PATH	
	— PROPOSED PATH	

WELL BORE TABLE FOR SURFACE / ROYALTY OWNERS		
TRACT	SURFACE OWNER (S) / ROYALTY OWNER (R)	TAX PARCEL
1	LINDA REEVES GREATHOUSE & VICKI LYNN HAMILTON (S/R)	03-B37-0087.0000
TRACT	SURFACE OWNER	TAX PARCEL
2	JAMES & JO ELLEN HAIZLETT	03-B42-0060.0002
3	AUSTIN WAYNE & JUSTINE ADAH WADE	03-B42-0060.0001
4	AUSTIN WAYNE & JUSTINE ADAH WADE	03-B42-0050.0000
5	CNX LAND, LLC	03-B42-0051.0000
6	THURMAN SPEECE, DOROTHY SPEECE, TRUMAN SPEECE, JR. & MARY SPEECE	03-B42-0058.0000
7	JEFFREY S. WARD & DAWNA J. WARD	03-B42-0059.0004
8	RALPH O. & GINA L. SMITH	03-B42-0070.0000
9	RALPH O. & GINA L. SMITH	03-B42-0039.0000
10	WEST VIRGINIA DEPARTMENT OF TRANSPORTATION, DIVISION OF HIGHWAYS	LAZEAR WILHELM ROAD
11	RICHARD KIMBALL	03-B42-0041.0000
12	NOEL R. & JOYCE L. SCHWERTFEGER	03-B42-0040.0000

ADJOINING OWNERS TABLE		
TRACT	SURFACE OWNER	TAX PARCEL
A	DEBRA F. CYPHERT, MATTHEW H. FAIR & ET AL	03-B37-0091.0000
B	ROBERT BONE	03-B37-0090.0000
C	ROBERT BONE	03-B37-0089.0000
D	ROBERT BONE	03-B37-0090.0001
E	DEBRA F. CYPHERT, MATTHEW H. FAIR & ET AL	03-B37-0088.0000
F	CARL R. & SANDRA S. CLARK	03-B37-0086.0000
G	BRIAN K. & GINA M. HANEY	03-B37-0077.0000
H	LPS INVESTMENT PARTNERSHIP	03-B37-0066.0000
I	EDGAR S. & CECELIA M. ERDMAN	03-B42-0049.0000
J	ELLEN B. SANFORD	03-B37-0076.0000
K	LABELLE FARMS, INC.	03-B42-0060.0000
L	WILLIAM A. & LYNETTE G. HAIZLETT	03-B42-0060.0003
M	THURMAN O. SPEECE, JR. & GOLDIE M. STANLEY	03-B42-0046.0000
N	THURMAN A. & MARY V. SPEECE	03-B42-0059.0001
O	THURMAN O. SPEECE, JR. & GOLDIE M. STANLEY	03-B42-0042.0000
P	THURMAN O. SPEECE, JR. & GOLDIE M. STANLEY	03-B42-0059.0003
Q	THURMAN O. SPEECE, JR. & GOLDIE M. STANLEY	03-B42-0059.0002
R	JOHN E. HARWATT, TERRY D. HARWATT & SHIRLEY MAE NEIL	03-B47-0032.0000
S	CAROL G. DWYER	03-B47-0030.0000
T	MIKE RYNIAWEC	03-B42-0034.0000
U	DOUGLAS L. & BELINDA TURNER	03-B42-0035.0000
V	GREGORY K. & PATRICIA M. TURNER	03-B42-0036.0000
W	LEON W. & OLIVE L. TURNER	03-B42-0037.0000
X	RALPH O. & GINA L. SMITH	03-B42-0066.0000
Y	RALPH O. & GINA L. SMITH	03-B42-0067.0000
Z	RALPH O. & GINA L. SMITH	03-B42-0068.0000
AA	RALPH O. & GINA L. SMITH	03-B42-0069.0000
AB	WINDSOR POWER HOUSE COAL COMPANY	03-B42-0055.0000
AC	WINDSOR POWER HOUSE COAL COMPANY	03-B42-0056.0000
AD	WINDSOR POWER HOUSE COAL COMPANY	03-B42-0057.0000
AE	WINDSOR POWER HOUSE COAL COMPANY	03-B42-0053.0000
AF	PHYLLIS P. MARKER	03-B42-0052.0000
AG	ROCCO BASIL	03-B42-0019.0000
AH	RICKEY & DEBRA CONLEY	03-B42-0018.0000
AI	EDWARD E. & NANCY J. CONLEY	03-B42-0016.0000
AJ	EDWARD E. & NANCY J. CONLEY	03-B42-0015.0000
AK	DANIEL R. GORBY	03-B42-0026.0000
AL	DANIEL R. GORBY	03-B42-0003.0000
AM	ELLEN M. STANLEY & ET AL	03-B42-0001.0000
AN	VICTOR CHARLES SMITH	03-B37-0130.0000
AO	CHRISTOPHER SCOTT MILLER	03-B37-0094.0000
AP	KEVIN CHUMNEY	03-B37-0093.0000

REVISIONS:	COMPANY:	 	
	OPERATOR'S	LINDA GREATHOUSE BRK	
	WELL #:	10H	
	DISTRICT:	COUNTY:	STATE:
	BUFFALO	BROOKE	WV
			DATE: 02-18-2020
			API #: 47-009-00274
			DRAWN BY: R. GRIMES
			SCALE: N/A
			DRAWING NO: 2018-204
			WELL LOCATION PLAT

WELL LOCATION PLAT		DRAWING NO: 2018-204		SCALE: N/A		DRAWN BY: R. GRIMES		API #: 47-009-00274		DATE: 02-18-2020	
BUFFALO		BROOKE		STATE: WV		COUNTY: BROOKE		OPERATOR'S: LINDA GREATHOUSE BRK		COMPANY: SWN Production Company, LLC	
DISTRICT:		COUNTY:		STATE:		WELL #:		10H		LINDA GREATHOUSE BRK	
REVISIONS:											

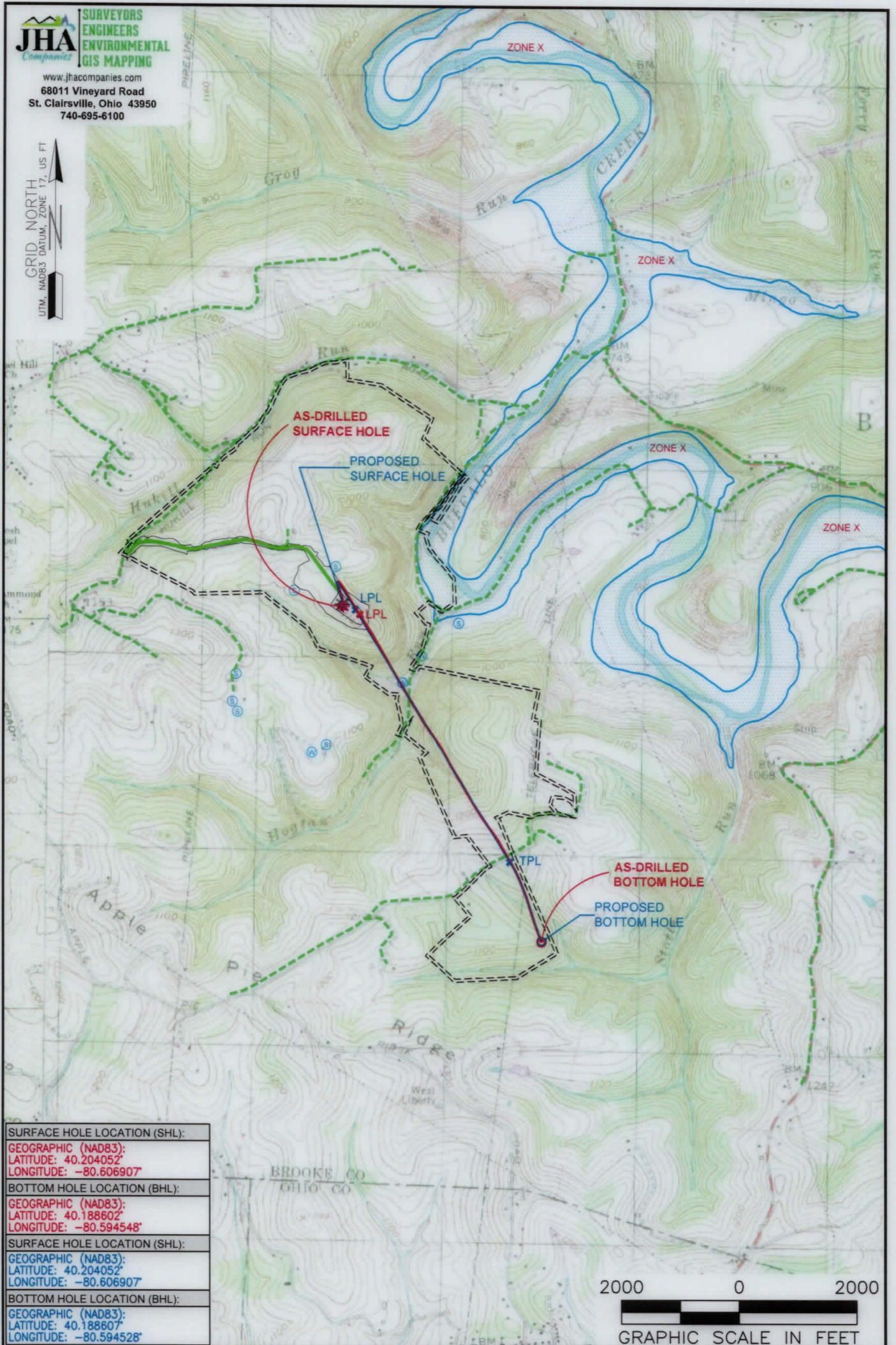
TRACT	SURFACE OWNER	TAX PARCEL
AP	KEVIN CHUMNEY	03-B37-0093.0000
AQ	CHRISTOPHER SCOTT MILLER	03-B37-0094.0000
AN	VICTOR CHARLES SMITH	03-B37-0130.0000
AM	ELLEN M. STANLEY & ET AL	03-B42-0001.0000
AL	DANIEL R. GORBY	03-B42-0003.0000
AK	DANIEL R. GORBY	03-B42-0026.0000
AJ	EDWARD E. & NANCY J. CONLEY	03-B42-0012.0000
AI	EDWARD E. & NANCY J. CONLEY	03-B42-0016.0000
AH	RICKEY & DEBRA CONLEY	03-B42-0018.0000
AG	ROCCO BASIL	03-B42-0019.0000
AF	PHYLLIS P. MARKER	03-B42-0025.0000
AE	WINDSOR POWER HOUSE COAL COMPANY	03-B42-0023.0000
AD	WINDSOR POWER HOUSE COAL COMPANY	03-B42-0027.0000
AC	WINDSOR POWER HOUSE COAL COMPANY	03-B42-0026.0000
AB	WINDSOR POWER HOUSE COAL COMPANY	03-B42-0025.0000
AA	RALPH O. & GINA L. SMITH	03-B42-0069.0000
Z	RALPH O. & GINA L. SMITH	03-B42-0068.0000
Y	RALPH O. & GINA L. SMITH	03-B42-0067.0000
X	RALPH O. & GINA L. SMITH	03-B42-0066.0000
W	LEON W. & OLIVE L. TURNER	03-B42-0037.0000
V	GREGORY K. & PATRICIA M. TURNER	03-B42-0036.0000
U	DOUGLAS L. & BELINDA TURNER	03-B42-0032.0000
T	MIKE RYNIAWEC	03-B42-0034.0000
S	CAROL G. DWYER	03-B47-0030.0000
R	JOHN E. HARWATT, TERRY D. HARWATT & SHIRLEY MAE NEIL	03-B47-0032.0000
Q	THURMAN O. SPEECE, JR. & GOLDIE M. STANLEY	03-B42-0029.0002
P	THURMAN O. SPEECE, JR. & GOLDIE M. STANLEY	03-B42-0029.0003
O	THURMAN O. SPEECE, JR. & GOLDIE M. STANLEY	03-B42-0042.0000
N	THURMAN A. & MARY V. SPEECE	03-B42-0029.0001
M	THURMAN O. SPEECE, JR. & GOLDIE M. STANLEY	03-B42-0046.0000
L	WILLIAM A. & LYNETTE G. HAZLETT	03-B42-0060.0003
K	LABELLE FARMS, INC.	03-B42-0060.0000
J	ELLEN B. SANFORD	03-B37-0076.0000
I	EDGAR S. & CECELIA M. ERDMAN	03-B42-0049.0000
H	LPS INVESTMENT PARTNERSHIP	03-B37-0066.0000
G	BRIAN K. & GINA M. HANEY	03-B37-0077.0000
F	CARL R. & SANDRA S. CLARK	03-B37-0086.0000
E	DEBRA F. CYPHERT, MATTHEW H. FAIR & ET AL	03-B37-0088.0000
D	ROBERT BONE	03-B37-0090.0001
C	ROBERT BONE	03-B37-0089.0000
B	ROBERT BONE	03-B37-0090.0000
A	DEBRA F. CYPHERT, MATTHEW H. FAIR & ET AL	03-B37-0091.0000

ADJOINING OWNERS TABLE

TRACT	SURFACE OWNER	TAX PARCEL
12	NOEL R. & JOYCE L. SCHWERTFEGGER	03-B42-0040.0000
11	RICHARD KIMBALL	03-B42-0041.0000
10	WEST VIRGINIA DEPARTMENT OF TRANSPORTATION, DIVISION OF HIGHWAYS	LAZEAR WILHELM ROAD
9	RALPH O. & GINA L. SMITH	03-B42-0039.0000
8	RALPH O. & GINA L. SMITH	03-B42-0070.0000
7	JEFFREY S. WARD & DAWN J. WARD	03-B42-0029.0004
6	THURMAN SPEECE, DOROTHY SPEECE, TRUMAN SPEECE, JR. & MARY SPEECE	03-B42-0028.0000
5	CNX LAND, LLC	03-B42-0021.0000
4	AUSTIN WAYNE & JUSTINE ADAH WADE	03-B42-0020.0000
3	AUSTIN WAYNE & JUSTINE ADAH WADE	03-B42-0060.0001
2	JAMES & JO ELLEN HAZLETT	03-B42-0060.0002
1	LINDA REEVES GREATHOUSE & VICKI LYNN HAMILTON (2\R)	03-B37-0087.0000

WELL BORE TABLE FOR SURFACE \ ROYALTY OWNERS

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



SURFACE HOLE LOCATION (SHL):
GEOGRAPHIC (NAD83): LATITUDE: 40.204052° LONGITUDE: -80.606907°
BOTTOM HOLE LOCATION (BHL):
GEOGRAPHIC (NAD83): LATITUDE: 40.188602° LONGITUDE: -80.594548°
SURFACE HOLE LOCATION (SHL):
GEOGRAPHIC (NAD83): LATITUDE: 40.204052° LONGITUDE: -80.606907°
BOTTOM HOLE LOCATION (BHL):
GEOGRAPHIC (NAD83): LATITUDE: 40.188607° LONGITUDE: -80.594528°



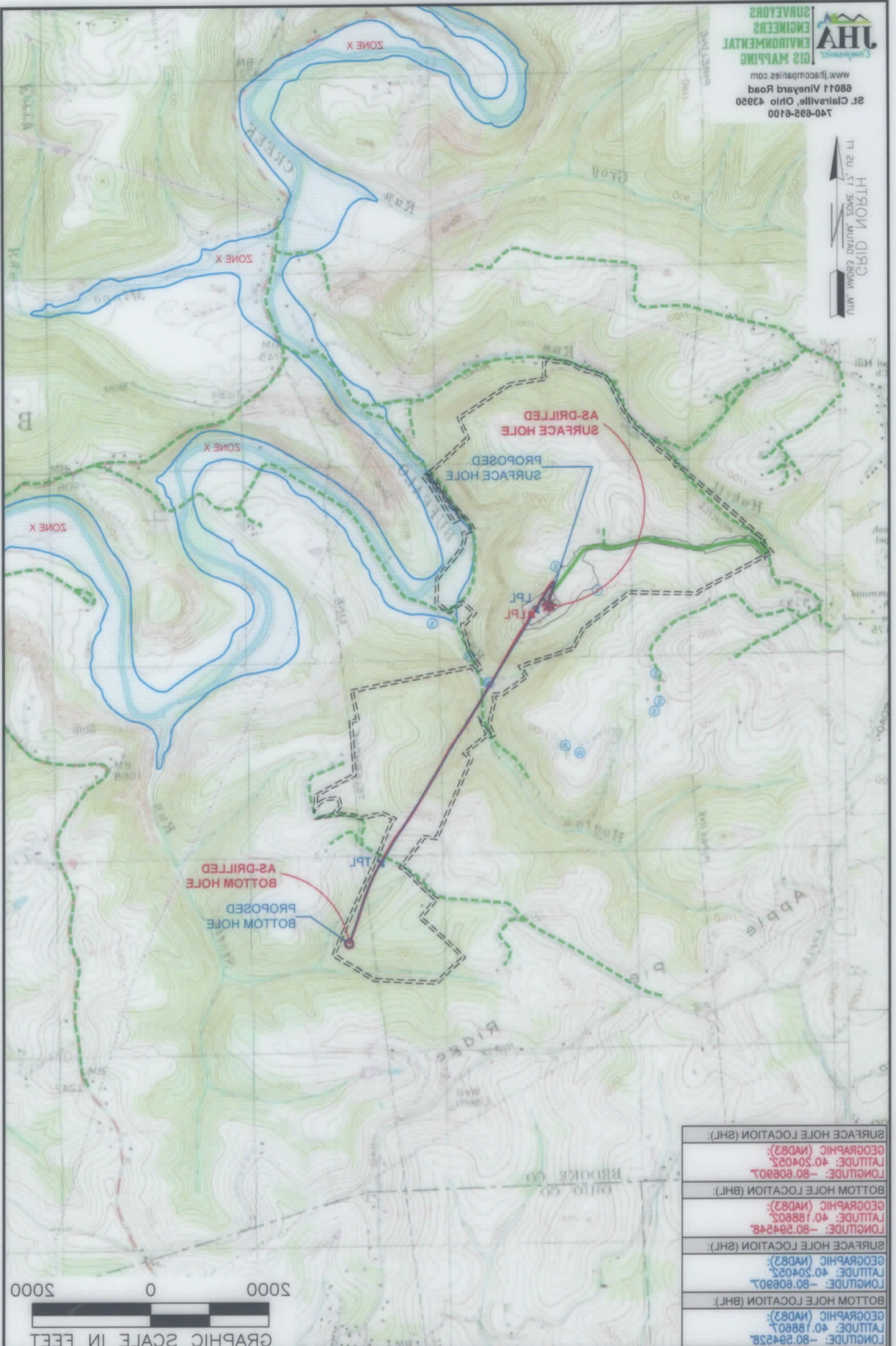
NOTES ON SURVEY

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.

LEGEND:

- ☉ EXISTING BOTTOM HOLE
- ☼ EXISTING / PRODUCING WELLHEAD
- LPL* EXISTING LANDING POINT LOCATION
- PROPOSED SURFACE HOLE / BOTTOM HOLE
- LPL* PROPOSED LANDING POINT LOCATION
- ACCESS ROAD
- - - PUBLIC ROAD
- 🌊 FLOOD PLAIN
- LEASE BOUNDARY
- ASDRILLED PATH
- PROPOSED PATH

WELL OPERATOR: SWN PRODUCTION COMPANY, LLC	WELL (FARM) NAME: LINDA GREATHOUSE BRK	WELL # 10H	SERIAL # XXXX
ADDRESS: 1300 FORT PIERPONT DRIVE, SUITE 201, MORGANTOWN, WV 26508	COUNTY - CODE: BROOKE - 009	DISTRICT: BUFFALO	API: 47-009-00274
SURFACE OWNER: LINDA REEVES GREATHOUSE & VICKI LYNN HAMILTON	USGS 7 1/2 QUADRANGLE MAP NAME: BETHANY, WV		



SURFACE HOLE LOCATION (SHL): GEOGRAPHIC (NAD83): LATITUDE: 40.204052 LONGITUDE: -80.608907
BOTTOM HOLE LOCATION (BHL): GEOGRAPHIC (NAD83): LATITUDE: 40.188602 LONGITUDE: -80.584548
SURFACE HOLE LOCATION (SHL): GEOGRAPHIC (NAD83): LATITUDE: 40.204052 LONGITUDE: -80.608907
BOTTOM HOLE LOCATION (BHL): GEOGRAPHIC (NAD83): LATITUDE: 40.188602 LONGITUDE: -80.584528

LEGEND:

EXISTING BOTTOM HOLE	PROPOSED SURFACE HOLE / BOTTOM HOLE
EXISTING PRODUCING WELLS	PROPOSED SURFACE HOLE / BOTTOM HOLE
EXISTING LANDING POINT LOCATION	PROPOSED SURFACE HOLE / BOTTOM HOLE
PROPOSED SURFACE HOLE / BOTTOM HOLE	PROPOSED SURFACE HOLE / BOTTOM HOLE
PROPOSED SURFACE HOLE / BOTTOM HOLE	PROPOSED SURFACE HOLE / BOTTOM HOLE

NOTES ON SURVEY

1. SURFACE AND ROYALTY OWNER INFORMATION AND THEIR BOUNDARIES SHOWN HEREON WERE PLOTTED FROM DEEDS AND/OR TAX PARCELS 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.

SURFACE OWNER: LINDA REEVE'S GREATHOUSE & VICKI LYNN HAMILTON 1300 FORT PIERPONT DRIVE, SUITE 201, MORGANTOWN, WV 26508 ADDRESS: SWN PRODUCTION COMPANY, LLC WELL OPERATOR:	USGS 7 1/2 QUADRANGLE MAP NAME: BETHANY, WV COUNTY - CODE BROOKE - 009 DISTRICT: BUFFALO API: 47-009-00274
WELL (FARM) NAME: LINDA GREATHOUSE BRK WELL # 10H SERIAL # XXXX	