

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

API 47-009-00279 County BROOKE District BUFFALO
Quad BETHANY, WV Pad Name MARGARET CORBIN-BRK-PAD1 Field/Pool Name PANHANDLE FIELD WET
Farm name LOUIS W. HENSLER, JR. & MARGARET HENSLER Well Number MARGARET CORBIN 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 4,453,525.794 Easting 540,639.552
Landing Point of Curve Northing 4,453,472.795 Easting 540,862.124
Bottom Hole Northing 4,450,719.147 Easting 540,882.744

Elevation (ft) 1150.2' 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

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Date permit issued 4/29/2019 Date drilling commenced 6/15/2019 Date drilling ceased 6/27/2019
Date completion activities began 7/22/2019 Date completion activities ceased 8/17/2019
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 495' Open mine(s) (Y/N) depths N
Salt water depth(s) ft 372' Void(s) encountered (Y/N) depths N
Coal depth(s) ft 318' Cavern(s) encountered (Y/N) depths N
Is coal being mined in area (Y/N) N

Reviewed

C. J. Bell 12-17-19

Reviewed by:
B. J. 12-17-19

API 47-009 - 00279 Farm name MARGARET H. CORBIN, WIDOW Well number MARGARET CORBIN BRK 10H

CASING STRINGS	Hole Size	Casing Size	Depth	New or Used	Grade wt/ft	Basket Depth(s)	Did cement circulate (Y/ N) * Provide details below*
Conductor	24	20	126	NEW	J-55/94#		Y
Surface	17.5	13.375	465	NEW	J-55/54.50#		Y
Coal							
Intermediate 1	12.25	9.625	1,687	NEW	J-55/36#		Y; 42 BBLS
Intermediate 2							
Intermediate 3							
Production	8.75/8.50	5.5	15,830	NEW	P-110/20#		Y
Tubing		2.875	6,523	NEW	P-110/6.50#		N
Packer type and depth set							

Comment Details _____

CEMENT DATA	Class/Type of Cement	Number of Sacks	Slurry wt (ppg)	Yield (ft ³ /sks)	Volume (ft ³)	Cement Top (MD)	WOC (hrs)
Conductor	CLASS A	GROUT TO SURFACE				SURFACE	24
Surface	CLASS A	436	15.60	1.20	523.20	SURFACE	8
Coal	SEE SURFACE						
Intermediate 1	CLASS A	681	15.60	1.19	810.39	SURFACE	8
Intermediate 2							
Intermediate 3							
Production	CLASS A	2,764	15.60	1.19	3,289.16	SURFACE	24
Tubing							

Drillers TD (ft) 15,830' Loggers TD (ft) 15,830'
 Deepest formation penetrated MARCELLUS Plug back to (ft) N/A
 Plug back procedure N/A

Kick off depth (ft) 5,517'

Check all wireline logs run caliper density deviated/directional induction
 neutron resistivity gamma ray temperature sonic

Well cored Yes No Conventional Sidewall Were cuttings collected Yes No

DESCRIBE THE CENTRALIZER PLACEMENT USED FOR EACH CASING STRING _____

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

WAS WELL COMPLETED AS SHOT HOLE Yes No DETAILS _____

WAS WELL COMPLETED OPEN HOLE? Yes No DETAILS _____

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

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API 47-009 - 00279 Farm name MARGARET H. CORBIN, WIDOW Well number MARGARET CORBIN BRK 10H

PERFORATION RECORD

Stage No.	Perforation date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formation(s)
	SEE	ATTACHMENT	1		

Please insert additional pages as applicable.

STIMULATION INFORMATION PER STAGE

Complete a separate record for each stimulation stage.

Stage No.	Stimulations 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 (units)
		SEE	ATTACHMENT	2				

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Please insert additional pages as applicable.

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SOUTHWESTERN ENERGY

Location: Brooke County, WV
 Field: Brooke
 Facility: Margaret Corbin Pad
 Slot: Slot 10H
 Well: Margaret Corbin BRK 10H
 Wellbore: Margaret Corbin BRK 10H PWB

Plot reference wellpath as Margaret Corbin BRK 10H PWB Rev-D 0	Grid System: NAD83 / UTM Zone 17 North, US feet
True vertical depths are referenced to SDC 41 (RKB)	North Reference: Grid north
Measured depths are referenced to SDC 41 (RKB)	Scale: True distance
SDC 41 (RKB) to Mean Sea Level: 1176.2 feet	Depths are in feet
Mean Sea Level to Ground level (At Slot: Slot 10H): -1150.2 feet	Created by: hllpshp on 2019-07-02
Coordinates are in feet referenced to Slot	Database: WA_MPL_EASTERNUS_Defn

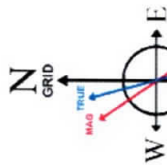
Location Information

Facility Name	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
Margaret Corbin Pad	1773742.165	14611288.452	40°13'52.370"N	80°31'20.316"W
Slot	Local N (ft)	Grid East (US ft)	Latitude	Longitude
Slot 10H	-12.88	1773748.290	40°13'52.242"N	80°31'20.238"W
Comment	Slot 4			
SDC 41 (RKB) to Ground level (At Slot: Slot 10H)			26ft	
Mean Sea Level to Ground level (At Slot: Slot 10H)			-1150.2ft	
SDC 41 (RKB) to Mean Sea Level			1176.2ft	

API: 47-009-00279-0000
 BH Job #: 109858213
 Rig: SDC 41
 Duration: 6/16/19 - 6/25/19



APS EM <-17-1/2">(145'-416') : 1.07" Inc, 145.00ft MD, 144.99ft TVD, -0.38ft VS
 APS EM <-12-1/4">(505'-1635') : 0.10" Inc, 505.00ft MD, 504.98ft TVD, -1.24ft VS
 APS EM <-8-3/4">(1697'-5956') : 0.20" Inc, 1697.00ft MD, 1696.92ft TVD, -9.31ft VS



User specified (HDGM) Dip: 67.56° Field: 52539 nT
 Magnetic North is 8.50 degrees West of True North (at 16/Jun/2019)
 Grid North is 0.31 degrees East of True North
 To correct azimuth from True to Grid subtract 0.31 degrees
 To correct azimuth from Magnetic to Grid subtract 8.81 degrees

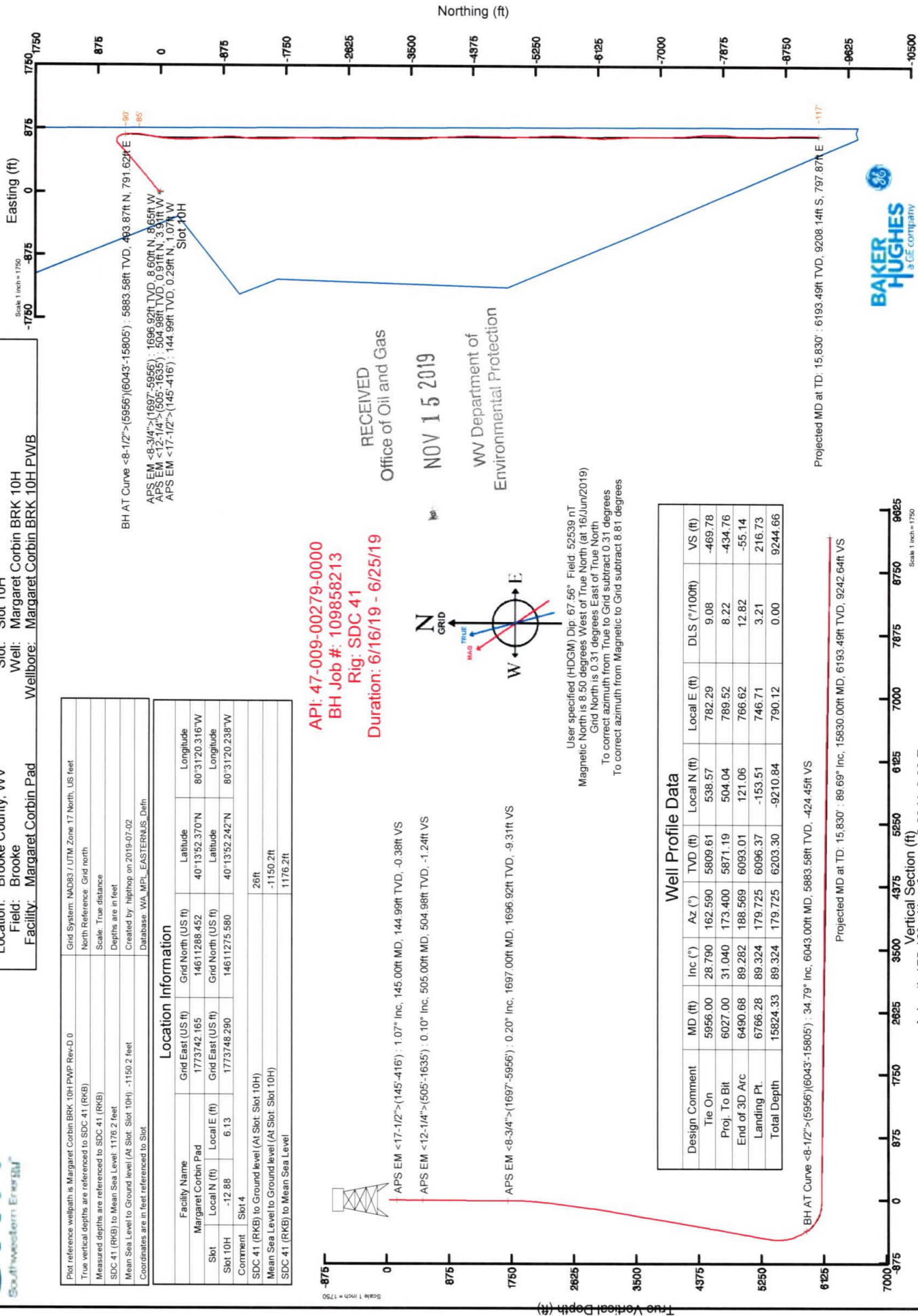
Well Profile Data

Design Comment	MD (ft)	Inc (")	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
Tie On	5956.00	28.790	162.590	5809.61	538.57	782.29	9.08	-469.76
Proj. To Bit	6027.00	31.040	173.400	5871.19	504.04	789.52	8.22	-434.76
End of 3D Arc	6490.68	89.282	188.569	6093.01	121.06	766.62	12.82	-55.14
Landing Pt.	6766.28	89.324	179.725	6096.37	-153.51	746.71	3.21	216.73
Total Depth	15824.33	89.324	179.725	6203.30	-9210.84	790.12	0.00	9244.66

BH AT Curve <-8-1/2">(5956')(6043'-15805') : 34.79" Inc, 6043.00ft MD, 5883.58ft TVD, -424.45ft VS

Projected MD at TD: 15,830' : 89.69" Inc, 15830.00ft MD, 6193.49ft TVD, 9242.64ft VS

Vertical Section (ft)
 Azimuth 175.10° with reference 0.00 N, 0.00 E



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Hydraulic Fracturing Fluid Product Component Information Disclosure

WV Department of Environmental Protection

Job Start Date:	7/23/2019
Job End Date:	8/12/2019
State:	West Virginia
County:	Brooke
API Number:	47-009-00279-00-00
Operator Name:	Southwestern Energy
Well Name and Number:	Margaret Corbin BRK 10
Latitude:	40.23117800
Longitude:	-80.52228800
Datum:	NAD83
Federal Well:	NO
Indian Well:	NO
True Vertical Depth:	6,137
Total Base Water Volume (gal):	12,789,030
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
Econo-CI200	SWN Well Services	Corrosion Inhibitor					
				Listed Below			
SCAL16486A	Nalco	Scale Inhibitor					
				Listed Below			

BIOC11219A	Nalco	Biocide									
					Listed Below						
Ecopol-FEAC	SWN Well Services	Iron Control									
					Listed Below						
SWN FRW-13LA	SWN Well Services	Friction Reducer									
					Listed Below						
Sand	SWN Well Services	Proppant									
					Listed Below						
Base Water	Operator	Base Fluid									
					Listed Below						
HCL	SWN Well Services	Solvent									
					Listed Below						
Items above are Trade Names with the exception of Base Water. Items below are the individual ingredients.											
						Water	7732-18-5	100.00000	84.52036	Density = 8.345	
						Crystalline Silica, quartz	14808-60-7	100.00000	15.00288		
	RECEIVED Office of Oil and Gas					Water	7732-18-5	85.00000	0.36650		
	NOV 15 2019					Hydrochloric Acid	7647-01-0	15.00000	0.05410		
						Petroleum Distillates, Hydrotreated	64742-47-8	25.00000	0.02012		
	WV Department of Environmental Protection					Methanol	67-56-1	60.00000	0.01548		
						Benzyl-(C12-C16 Alkyl)- Dimethyl-Ammonium	68424-85-1	30.00000	0.00774		
						Chloride Glutaraldehyde	111-30-8	10.00000	0.00258		

	Ethylene glycol	107-21-1	30.00000	0.00184	
	Amine Triphosphate	Proprietary	30.00000	0.00184	
	Ammonium Chloride	12125-02-9	2.00000	0.00161	
	Alcohols, C12-1, ethoxylated	68551-12-2	1.50000	0.00121	
	Oleic Acid Diethanolamide	93-83-4	1.50000	0.00121	
	Acetic Acid	64-19-7	37.50000	0.00108	
	Methanol	67-56-1	80.00000	0.00066	
	Citric Acid	77-92-9	22.50000	0.00065	
	Oxyalkylated fatty acid	68951-67-7	9.67400	0.00008	
	Fatty acids	61790-12-3	5.02700	0.00004	
	Modified thiourea polymer	68527-49-1	4.74600	0.00004	
	Potassium acetate	127-08-2	0.02200	0.00000	
	Formaldehyde	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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MARGARET CORBIN BRK 10H

ATTACHMENT 1

PERF REPORT

STAGE NUM	Perf Date	Perf Top MD	Perf Bottom MD	# SHOTS PER STG
1	7/19/2019	15,785	15,695	36
2	7/24/2019	15,662	15,555	42
3	7/27/2019	15,522	15,414	42
4	7/27/2019	15,381	15,274	42
5	7/28/2019	15,244	15,134	42
6	7/28/2019	15,100	14,990	42
7	7/28/2019	14,960	14,853	42
8	7/28/2019	14,820	14,712	42
9	7/29/2019	14,679	14,572	42
10	7/29/2019	14,539	14,432	42
11	7/29/2019	14,398	14,296	42
12	7/30/2019	14,258	14,151	42
13	7/30/2019	14,118	14,010	42
14	7/30/2019	13,977	13,870	42
15	7/31/2019	13,837	13,730	42
16	7/31/2019	13,696	13,589	42
17	7/31/2019	13,556	13,449	42
18	8/1/2019	13,416	13,308	42
19	8/1/2019	13,275	13,168	42
20	8/1/2019	13,135	13,028	42
21	8/1/2019	12,994	12,887	42
22	8/2/2019	12,854	12,744	42
23	8/2/2019	12,714	12,606	42
24	8/3/2019	12,573	12,466	42
25	8/3/2019	12,433	12,326	42
26	8/3/2019	12,292	12,185	42
27	8/3/2019	12,152	12,045	42
28	8/4/2019	12,012	11,904	42
29	8/4/2019	11,871	11,764	42
30	8/4/2019	11,731	11,624	42
31	8/4/2019	11,590	11,483	42
32	8/5/2019	11,450	11,342	42
33	8/5/2019	11,310	11,202	42
34	8/5/2019	11,169	11,062	42
35	8/6/2019	11,029	10,922	42
36	8/6/2019	10,888	10,781	42
37	8/6/2019	10,748	10,641	42
38	8/7/2019	10,608	10,500	42
39	8/7/2019	10,470	10,360	42
40	8/7/2019	10,327	10,219	42
41	8/8/2019	10,186	10,079	42
42	8/8/2019	10,046	9,939	42
43	8/8/2019	9,904	9,798	42
44	8/9/2019	9,765	9,663	42
45	8/9/2019	9,625	9,517	42
46	8/9/2019	9,484	9,377	42
47	8/9/2019	9,344	9,237	42

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48	8/9/2019	9,204	9,096	42
49	8/9/2019	9,063	8,956	42
50	8/10/2019	8,924	8,815	42
51	8/10/2019	8,782	8,677	42
52	8/10/2019	8,642	8,535	42
53	8/10/2019	8,502	8,394	42
54	8/10/2019	8,361	8,252	42
55	8/10/2019	8,221	8,113	42
56	8/11/2019	8,080	7,973	42
57	8/11/2019	7,940	7,833	42
58	8/11/2019	7,800	7,692	42
59	8/11/2019	7,659	7,552	42
60	8/11/2019	7,520	7,411	42
61	8/11/2019	7,378	7,271	42
62	8/11/2019	7,238	7,131	42
63	8/12/2019	7,098	6,990	42
64	8/12/2019	6,957	6,855	42
65	8/12/2019	6,817	6,709	42
66	8/12/2019	6,676	6,569	42
67	8/12/2019	6,536	6,429	42
68	8/12/2019	6,395	6,288	42

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MARGARET CORBIN BRK 10H

ATTACHMENT 2

STIM REPORT

STAGE NUM	Stim Date	Ave Pump Rate (BPM)	Ave Treatment Pressure (PSI)	Max Breakdown		Amount of Proppant (lbs)	Amount of water bbls	Amount of nitrogen/other
				Pressure (PSI)	ISIP (PSI)			
1	7/23/2019	80	7,834	7,356	4,286	236,150	5,282	0
2	7/24/2019	85	7,576	5,876	4,368	285,460	5,507	0
3	7/27/2019	89	7,978	5,233	4,638	280,997	5,594	0
4	7/27/2019	83	7,869	5,580	4,679	278,273	5,234	0
5	7/28/2019	83	7,860	5,405	4,725	281,072	5,259	0
6	7/28/2019	81	8,008	5,547	5,477	280,726	5,186	0
7	7/28/2019	84	8,053	6,214	4,630	280,726	5,106	0
8	7/28/2019	86	7,941	6,112	5,054	283,805	5,686	0
9	7/29/2019	88	8,072	5,052	4,621	278,704	4,736	0
10	7/29/2019	84	7,928	6,190	4,814	280,559	4,874	0
11	7/29/2019	87	7,927	6,135	4,950	274,475	5,333	0
12	7/30/2019	83	7,969	6,714	4,688	277,980	4,881	0
13	7/30/2019	79	8,285	6,453	5,074	280,724	4,844	0
14	7/31/2019	83	7,774	6,650	4,729	286,389	4,932	0
15	7/31/2019	86	8,040	6,413	5,868	284,838	4,770	0
16	7/31/2019	84	7,636	6,122	4,478	282,759	4,875	0
17	8/1/2019	83	7,698	6,457	4,791	282,759	4,759	0
18	8/1/2019	94	7,915	6,420	5,120	279,436	4,654	0
19	8/1/2019	86	8,022	6,481	4,776	280,650	4,733	0
20	8/1/2019	85	7,615	6,217	5,420	283,641	5,016	0
21	8/2/2019	86	7,659	6,002	4,865	284,498	4,678	0
22	8/2/2019	89	8,066	6,106	5,132	279,034	4,635	0
23	8/2/2019	85	7,425	5,805	5,068	284,190	4,812	0
24	8/3/2019	89	7,645	6,362	5,003	282,456	4,816	0
25	8/3/2019	87	7,968	6,214	5,052	280,269	4,569	0
26	8/3/2019	89	7,952	6,150	5,158	285,240	4,645	0
27	8/3/2019	87	7,587	6,052	4,909	284,678	4,631	0
28	8/4/2019	89	7,669	6,013	5,082	270,990	4,458	0
29	8/4/2019	92	7,798	6,013	4,713	280,782	4,574	0
30	8/4/2019	84	7,410	6,037	4,905	284,613	4,795	0
31	8/5/2019	84	7,814	6,324	5,015	277,281	4,714	0
32	8/5/2019	92	7,945	6,251	5,236	279,566	4,499	0
33	8/5/2019	83	7,582	5,808	5,040	284,673	4,664	0
34	8/6/2019	94	7,511	6,241	4,711	286,420	4,533	0
35	8/6/2019	91	7,279	5,809	5,019	280,760	4,541	0
36	8/6/2019	88	7,418	5,816	4,761	280,651	4,618	0
37	8/7/2019	92	7,304	5,710	5,160	276,240	4,492	0
38	8/7/2019	93	7,250	6,010	5,065	285,140	4,904	0
39	8/7/2019	85	7,456	6,253	4,588	288,280	4,140	0
40	8/8/2019	65	7,949	6,094	4,757	273,590	5,089	0
41	8/8/2019	90	7,206	6,110	4,486	280,338	4,446	0
42	8/8/2019	87	7,748	6,187	5,376	281,615	3,968	0
43	8/9/2019	89	7,578	6,274	4,885	274,310	4,015	0
44	8/9/2019	92	7,202	6,298	4,230	279,490	4,516	0
45	8/9/2019	90	7,408	6,255	4,780	273,530	4,382	0
46	8/9/2019	89	7,042	5,786	4,780	282,395	4,381	0
47	8/9/2019	91	7,583	6,267	5,128	283,715	3,986	0
48	8/9/2019	92	7,502	6,458	5,469	268,740	3,929	0
49	8/10/2019	90	7,635	6,088	4,853	274,120	3,574	0
50	8/10/2019	92	7,563	5,846	5,063	274,720	3,819	0
51	8/10/2019	91	7,092	26	4,424	272,060	4,323	0
52	8/10/2019	91	7,148	6,035	4,431	282,965	4,357	0
53	8/10/2019	89	7,557	6,240	4,765	274,460	3,770	0
54	8/10/2019	92	7,456	6,380	5,136	273,680	3,871	0

55	8/11/2019	90	7,421	6,308	4,603	279,910	3,874	0
56	8/11/2019	91	7,555	6,128	4,845	273,300	3,700	0
57	8/11/2019	92	7,054	17	4,325	271,380	4,336	0
58	8/11/2019	91	7,111	5,815	4,391	272,070	4,316	0
59	8/11/2019	90	7,135	5,790	4,538	277,840	3,682	0
60	8/11/2019	92	7,367	6,238	4,895	275,390	3,778	0
61	8/11/2019	91	7,430	6,741	4,955	271,910	3,799	0
62	8/12/2019	90	7,352	6,441	466	274,600	3,798	0
63	8/12/2019	92	7,237	6,375	4,480	276,150	3,327	0
64	8/12/2019	92	7,199	6,433	4,293	284,970	4,367	0
65	8/12/2019	92	92	6,130	4,548	274,660	4,162	0
66	8/12/2019	94	7,190	6,084	5,067	273,610	3,706	0
67	8/12/2019	90	7,235	5,740	4,906	276,420	3,727	0
68	8/12/2019	89	6,962	5,680	4,906	276,420	3,705	0

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Well Name: Margaret Corbin BRK 10H 47009002790000

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	372.00	372.00	
Top of Salt Water	495.00	495.00	NA	NA	
Pittsburgh Coal	318.00	318.00	323.00	323.00	
Pottsville (ss)	666.00	666.00	1221.00	1221.00	
Maxton (ss)	1221.00	1221.00	1530.00	1530.00	
Big Injun (ss)	1530.00	1530.00	1943.00	1919.00	
Berea (siltstone)	1926.00	1926.00	5594.00	5471.00	
Rhinestreet (shale)	5594.00	5471.00	5870.00	5732.00	
Cashaqua (shale)	5870.00	5732.00	5935.00	5791.00	
Middlesex (shale)	5935.00	5791.00	6021.00	5865.00	
Burket (shale)	6021.00	5865.00	6032.00	5874.00	
Tully (ls)	6032.00	5874.00	6102.00	5929.00	
Mahantango (shale)	6102.00	5929.00	6340.00	6061.00	
Marcellus (shale)	6340.00	6061.00	NA	NA	GAS

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Office of Oil and Gas

NOV 15 2019

WV Department of
Environmental Protection

Latitude: 40°15'00" SURFACE HOLE 6222'

Latitude: 40°12'30" BOTTOM HOLE 5477'

BOTTOM HOLE 893'

Longitude: 80°30'00"

Longitude: 80°30'00"

Longitude: 80°30'00"

Longitude: 80°30'00"

Longitude: 80°30'00"

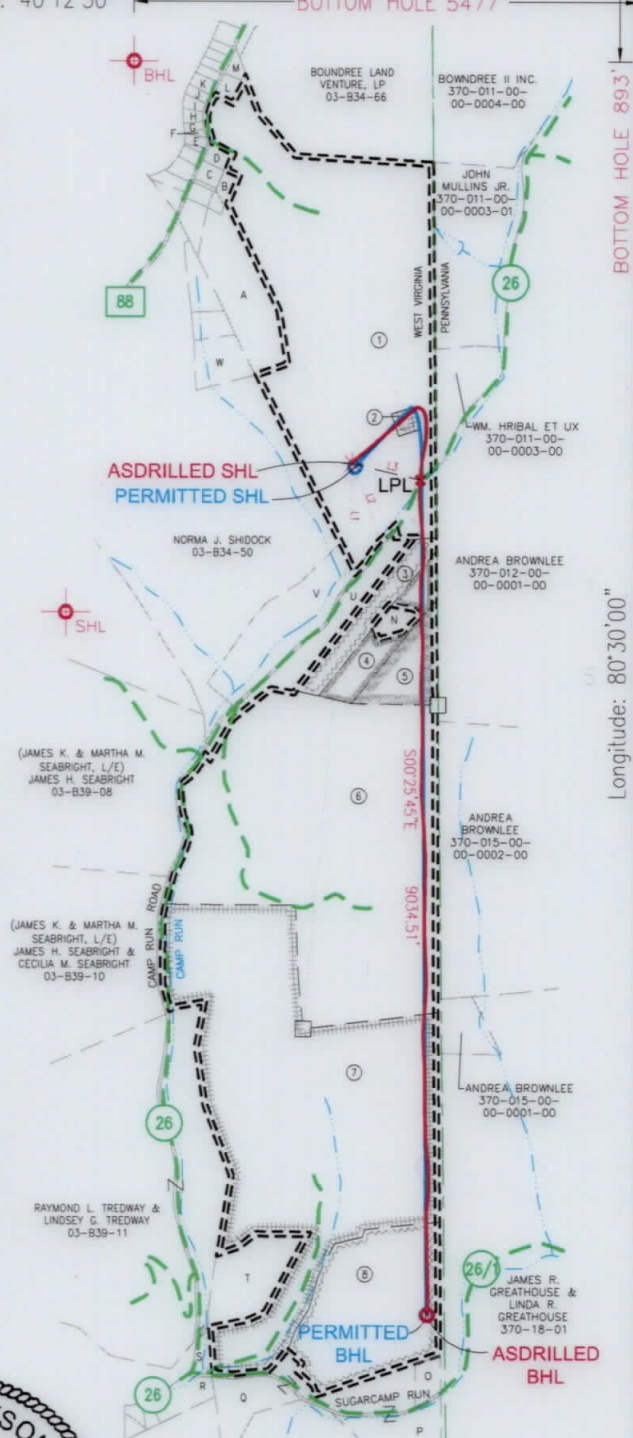
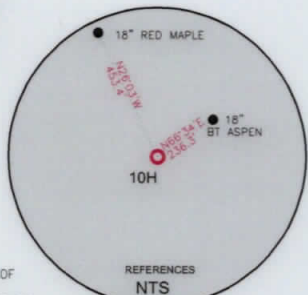
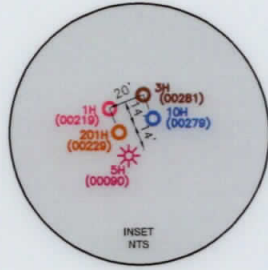
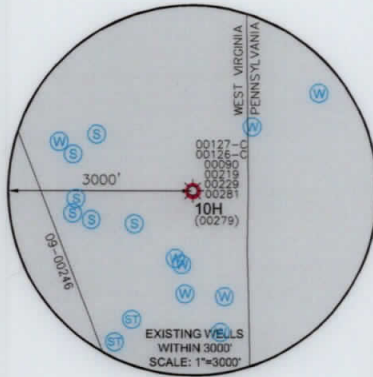
JACKSON SURVEYING INC. 2413 EAST PIKE ST. # 112 Clarksburg, WV 26302 304-623-5851

Table with 3 rows: SURFACE HOLE LOCATION (SHL), LANDING POINT LOCATION (LPL), BOTTOM HOLE LOCATION (BHL). Each row contains UTM coordinates (NORTHING, EASTING).

Table with 3 rows: SURFACE HOLE LOCATION (SHL), LANDING POINT LOCATION (LPL), BOTTOM HOLE LOCATION (BHL). Each row contains UTM coordinates (NORTHING, EASTING).

Table with 5 columns: LINE, BEARING, DISTANCE, DESCRIPTION, MONUMENT. Contains 3 lines of survey data.

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



WELL RESTRICTIONS

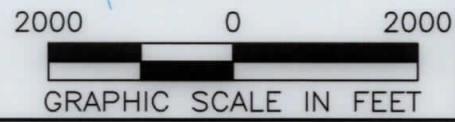
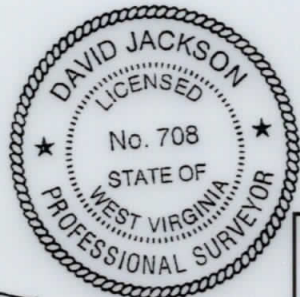
- 1. NO OCCUPIED DWELLINGS > 2500 SQ FT. WITHIN 625 FEET OF CENTER OF PAD.
2. NO AGRICULTURE BUILDINGS > 2500 SQ FT. WITHIN 625 FEET OF CENTER OF PAD.
3. NO WATER WELLS OR DEVELOPED SPRINGS ARE WITHIN 250 FEET OF PROPOSED WELL.
4. NO PERENNIAL STREAMS, LAKES, PONDS, OR RESERVOIRS WITHIN 100 FEET OF THE LIMITS OF DISTURBANCE.
5. NO NATURALLY PRODUCING TROUT STREAM WITHIN 300 FEET OF LIMITS OF DISTURBANCE.
6. NO GROUND INTAKE OR PUBLIC WATER SUPPLY WITHIN 1000 FEET OF WELL PAD, LIMITS OF DISTURBANCE, E & S CONTROLS OR PUBLIC WATER SUPPLY.

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.
4. ALL INSETS ARE GRID NORTH UNLESS OTHERWISE DEPICTED.

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. 708 David L Jackson



COMPANY: SWN Production Company, LLC SWN Production Company™

Table with 3 columns: Well information (WVDEP address), Accuracy (1/200), and Well numbers (MARGARET CORBIN BRK, OPERATOR'S WELL #: 10H, API WELL #: 47 009 00279).

Table with 2 columns: Well type and location (WELL TYPE: OIL, WASTE DISPOSAL, PRODUCTION, DEEP, GAS, LIQUID INJECTION, STORAGE, SHALLOW; WATERSHED: CAMP RUN OF BUFFALO CREEK (HUC-10); DISTRICT: BUFFALO COUNTY: BROOKE; SURFACE OWNER: LOUIS W. HENSLER, JR. & MARGARET HENSLER; OIL & GAS ROYALTY OWNER: MARGARET H. CORBIN, WIDOW; DRILL, CONVERT, TARGET FORMATION: MARCELLUS; ESTIMATED DEPTH: 6,193 TVD 15,830 TMD).

Table with 2 columns: Well operator and designated agent (WELL OPERATOR: SWN PRODUCTION COMPANY, LLC; ADDRESS: 1300 FORT PIERPONT ROAD, SUITE 200; CITY: MORGANTOWN STATE: WV ZIP CODE: 26508; DESIGNATED AGENT: BRITTANY WOODY; ADDRESS: 1300 FORT PIERPONT ROAD, SUITE 200; CITY: MORGANTOWN STATE: WV ZIP CODE: 26508).

Table with 2 columns: Legend (PROPOSED SURFACE HOLE / BOTTOM HOLE, EXISTING / PRODUCING WELLHEAD, LPL, EXISTING WATER WELL, EXISTING SPRING, SURVEYED BOUNDARY, DRILLING UNIT, LEASE BOUNDARY, ASDRILLED PATH, PROPOSED PATH) and Revisions/Date (REVISIONS, DATE: 11-12-2019, DRAWN BY: N. MANO, SCALE: 1\"=2000', DRAWING NO., WELL LOCATION PLAT).



JACKSON SURVEYING

INC.

P.O. Box 1460
677 W. Main St.
Clarksburg, WV 26302
304-623-5851

WELL BORE TABLE FOR SURFACE / ROYALTY OWNERS		
TRACT	SURFACE OWNER (S) / ROYALTY OWNER (R)	TAX PARCEL
1	LOUIS W. HENSLER JR. & MARGARET HENSLER (S)/ MARGARET H. CORBIN, WIDOW (R)	03-B34-57
TRACT	SURFACE OWNER	TAX PARCEL
2	STEPHEN S. GRIZZEL (S)	03-B34-58
3	TAMMY M. WITHERS (S)	03-B39-04
4	TAMMY M. WITHERS (S)	03-B39-06
5	PHILIP M. GREATHOUSE & MARY GREATHOUSE (S)	03-B39-07
6	JAMES B. CALDWELL (S)	03-B39-09
7	JAMES R. GREATHOUSE & LINDA R. GREATHOUSE (S)	03-B39-12
8	JAMES R. GREATHOUSE & LINDA R. GREATHOUSE (S)	03-B44-03

ADJOINING OWNERS TABLE		
TRACT	SURFACE OWNER	TAX PARCEL
A	MICHAEL M. HENSLER, JR. & DEBORAH HENSLER	03-B34-57.4
B	LOUIS W. HENSLER, JR. & MARGARET R. HENSLER	03-B34-57.3
C	LOUIS W. HENSLER, JR. & MARGARET R. HENSLER	03-B34-55
D	WILLIAM W. ROADMAN & PAULA L. ROADMAN	03-B34-56
E	MENEELY IRREVOCABLE TRUST 7/22/16, LEE R. MENEELY & CLEA C. MENEELY, TRUSTEES	03-B34-42
F	MENEELY IRREVOCABLE TRUST 7/22/16, LEE R. MENEELY & CLEA C. MENEELY, TRUSTEES	03-B34-41
G	DOLORIS A. PLESS & RATTIGAN PLESS	03-B34-40
H	WILLIAM MATTHEW GADD & BARBARA ESTELLE GADD	03-B34-39
I	ERIK MAZELLA	03-B34-38
J	CORY J. SCHIDEK & DARIAN A. SCHIDEK	03-B34-37
K	CORY J. SCHIDEK & DARIAN A. SCHIDEK	03-B34-36
L	WILLIAM J. WALES & MARSHA E. WALES	03-B34-59
M	WILLIAM J. WALES & MARSHA E. WALES	03-B34-57.2
N	TAMMY M. WITHERS	03-B39-05
O	LARRY THOMAS MAIN II	03-B44-04.1
P	MILDRED MAIN	03-B44-04
Q	MILDRED MAIN	03-B44-06
R	CURTIS LEE NEEL & LOUANN L. NEEL	03-B44-07
S	DONNA M. WEEKLEY	03-B44-02
T	VICKI G. HAMILTON & SHAWN P. HAMILTON	03-B44-01
U	JOHN DANA GARNER	03-B39-03
V	RICKY VON HUDSON	03-B39-02
W	KEVIN L. MINOR & RULETTA K. MINOR	03-B34-50.1

REVISIONS:	COMPANY:		 					
	OPERATOR'S	MARGARET CORBIN BRK	API #:	DATE: 11-12-2019				
	WELL #:	10H	47-009-00228	DRAWN BY: N. MANO				
	DISTRICT:	BUFFALO	COUNTY:	BROOKE	STATE:	WV	SCALE:	N/A
							DRAWING NO:	WELL LOCATION PLAT 2