# HEBEIVER Office of Oil and Gas

MAY 1 2 2017

WR-35 Rev. 8/23/13

WV Department of Environmental Protection State of West Virginia APPROVED

NAME: Enz Blad

DATE: 6-14-17

Page 1 of 4

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

API 47- 09 - 00	O156 County BR	OOKE	District BUFFALO	•
Quad BETHANY, WV	Pad Name LI	INDA GREATHOUSE-BRK-PAD		
Farm name LINDA REEVI				A GREATHOUSE BRK 205H
Operator (as registered with		ICTION COMPANY, LL	 .C	
Address PO BOX 12359				Zip 77391-2359
As Drilled location NAD Top I		drilled plat, profile view, a 5.933 Ea	and deviation survey asting 533,454.421	
Landing Point of C		3.062 Ea	sting 533,796.356	
Bottom F	Iole Northing 4,453,098		sting 532,938.967	
Elevation (ft) 1139'	GL Type of W	/ell ■New □ Existing	Type of Report	□Interim <b>BFina</b> l
Permit Type   Deviated	□ Horizontal ■ Ho	rizontal 6A 🛛 Vertical	Depth Type	□ Deep ■ Shallow
Type of Operation □ Conve	ert 🗆 Deepen 🗂 Drill	□ Plug Back □ Red	rilling   Rework	<b>■</b> Stimulate
Well Type   Brine Disposa	ıl □ CBM	□ Secondary Recovery □	Solution Mining 🗆 Ste	orage 🗆 Other
Type of Completion ■ Sing Drilled with □ Cable ■	<u>-</u>	Produced □ Brine ■Gas	s □ NGL □ Oil	□ Other
Drilling Media Surface ho	e ■ Air □ Mud ■Fresl	h Water Intermediate	ehole BAir □Mud	l □ Fresh Water □ Brine
Production hole Air				
Mud Type(s) and Additive(s				
Date permit issued7/23	<del>_</del>	commenced 8/12/201	5 Date drilling	ceased 10/14/2015
Date completion activities be	egan 2/15/2017	Date completion ac	tivities ceased	3/16/2017
Verbal plugging (Y/N)	N Date permission gr	ranted N/A	Granted by	N/A
Please note: Operator is req	uired to submit a plugging a	pplication within 5 days of	verbal permission to p	ılug
Freshwater depth(s) ft	300'	Open mine(s) (Y/N)	depths	N
Salt water depth(s) ft	1025'	Void(s) encountered	•	N
Coal depth(s) ft	300.99'		ed (Y/N) depths	N
Is coal being mined in area (	Y/N) N		· · · · · · · · · · · · · · · · · · ·	

Reviewed by 715/2017

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WR-35		WV	Departm	ent of					Page 2	_ of <u>4</u> _
Rev. 8/23/13		Enviro	nmental F	rotection	1					
API 47- 09	00156	Farm na	ime LINDA R	REEVES G	REATHO	OUSE Wel	l numbe	er_LINDA	GREATHOUSE	BRK 205
CASING STRINGS	Hole Size	Casing Size	Depth	New or Used	Grade wt/ft		Basket Depth(s)		Did cement circulate * Provide details b	. ,
Conductor	28	20	150	NEW	J-8	55/94#			Y	
Surface	17.5	13.375	450	NEW	J-5	5/54.5#			Y, 19 BBL	.s
Coal	SURFACE									
Intermediate 1	12.25	9.625	2083	NEW	J-5	55/40#			Y, 46 BBL	.s
Intermediate 2									-	
Intermediate 3										
Production	8.75/8.50	5.5	13981	NEW	P-1	10/20#	-		Υ	
Tubing		2.375	6628	NEW	P-1	10/4.7#			N	
Packer type and d	epth set	1			1	<u> </u>				
Comment Details										
CEMENT DATA	Class/Type of Cement	Number of Sack	-		Yield t ³/sks)	Volume		Cement Top (MD	W( ) (hr	
Conductor	CLASS A	370	17.2		1.29	477.3		SURFAC		24
Surface	CLASS A	530	15.6	io .	1.19	630.7		SURFAC	E	8
Coal	SURFACE									
Intermediate 1	CLASS A	810	15.6	0	1.19	963.9		SURFAC	E	8
Intermediate 2	, ,									
Intermediate 3										
Production	CLASS A	795/182	1 15.6	0	1.23	977.85/2239	.83	SURFAC	E :	24
Tubing										
Drillers TD (ft Deepest forma Plug back pro	tion penetrated	MARCELLUS		Loggers T Plug back						
Kick off depth Check all wire		■ caliper	density		ed/directi a ray		nduction empera		□sonic	
Well cored DESCRIBE TI		Convention							es ■ No	
	ALIZERS - EVERY THIF CENTRALIZERS - EVE	RD JOINT OF CASING RY THIRD JOINT OF CA	SING							
		RY THIRD JOINT FROM		F CURVE, THEN E	VERY JOINT I	UNTIL TD				
WAS WELL (	COMPLETED A	AS SHOT HOLE	□ Yes 🖪	No DI	ETAILS					
WASWELL	OMPLETED (	DEN HOLF?	□ Vec ■ N	o DET	2112					

WERE TRACERS USED □ Yes ■ No TYPE OF TRACER(S) USED \_

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MAY 1 2 2017

WR-35 Rev. 8/23/13

# WV Department of Environmental Protection

Page 3 of 4

API 47- 09 _ 00156	Farm name LINDA REEVES GREATHOUSE	Well number LINDA GREATHOUSE BRK 205H
	1 drin name	

#### PERFORATION RECORD

Stage No.	Perforation date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formation(s)
	SEE	ATTACHMEN面	1		
- "					
				<u> </u>	
<u> </u>					1000

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	ATTACHMEN面	2				
					ı		·	
		-					-	

Page 4 of 4 WR-35 Rev. 8/23/13 API 47- 09 \_ 00156 Farm name LINDA REEVES GREATHOUSE Well number LINDA GREATHOUSE BRK 205H PRODUCING FORMATION(S) **DEPTHS** HEGEIVED **MARCELLUS** 5733.35' 6484.35' **TVD** MD Office of Oil and Gas MAY 1 2 2017 WV Department of Please insert additional pages as applicable. **Environmental Protection GAS TEST** □ Build up □ Drawdown □ Open Flow □ Pump Surface 1400 SHUT-IN PRESSURE DURATION OF TEST \_\_\_\_\_ hrs psi Bottom Hole\_ psi OPEN FLOW Gas Oil **NGL** Water GAS MEASURED BY 1340 mcfpd 223 bpd bpd 478 bpd □ Estimated □ Orifice □ Pilot TOP LITHOLOGY/ **BOTTOM** TOP **BOTTOM FORMATION** DEPTH IN FT DEPTH IN FT DEPTH IN FT DEPTH IN FT DESCRIBE ROCK TYPE AND RECORD QUANTITYAND NAME TVD TVD MD MD TYPE OF FLUID (FRESHWATER, BRINE, OIL, GAS, H2S, ETC) 0 0 SEE **ATTACHMENT** 3 Please insert additional pages as applicable. Drilling Contractor SWN DRILLING COMPANY Address PO BOX 12359 Zip 77391-2359 **SPRING** State TX City Logging Company BAKER HUGHES Address 9110 GORGANS MILL RD THE WOODLANDS State TX Zip 77380 City Cementing Company SCHLUMBERGER WELL SERVICES Address 110 SCHLUMBERGER DRIVE SUGAR LAND Zip 77478 State TX Stimulating Company KEANE GROUP (FRAC) Address 2121 SAGE ROAD HOUSTON City State TX Zip 77056 Please insert additional pages as applicable. Telephone 832-796-6139 DENISE GRANTHAM Completed

Witle REGULATORY TECHNICIAN

Signature

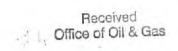
Date 5/10/2017

#### LINDA GREATHOUSE BRK 205H PERF SUMMARY

STAGE NUM		Perf Date	Perf Top MD	Perf Bottom MD	# SHOTS PER STG
	1	2/16/2017	13,765	13,872	42
	2	2/16/2017	13,625	13,732	42
	3	2/16/2017	13,485	13,592	42
	4	2/16/2017	13,345	13,452	42
	5	2/17/2017	13,205	13,312	42
	6	2/17/2017	13,065	13,172	42
	7	2/17/2017	12,925	13,032	42
	8	2/17/2017	12,785	12,892	42
	9	2/17/2017	12,645		42
	10	2/18/2017	12,505	12,612	42
	11	2/18/2017		12,472	42
	12	2/18/2017			42
	13	2/18/2017			
	14	2/18/2017		12,052	
	15	2/19/2017			
	16	2/19/2017			42
	17	2/19/2017			42
	18	2/19/2017			42
	19	2/19/2017		11,352	42
	20	2/19/2017			42
	21	2/20/2017			42
	22	2/20/2017			
	23				
	_	2/20/2017			
	24	2/20/2017			42
	25	2/20/2017			42
	26	2/20/2017			42
	27	2/21/2017	12 2 2		
	28	2/21/2017			
	29	2/21/2017			42
	30	2/21/2017			42
	31	2/21/2017			
	32	2/21/2017		9,532	42
	33	2/22/2017		9,392	42
	34	2/22/2017	9,145	9,252	42
	35	2/22/2017	9,005	9,112	42
	36	2/22/2017	8,865	8,972	42
	37	2/22/2017	8,725	8,832	42
	38	2/22/2017	8,585	8,692	42
	39	2/22/2017	8,445	8,552	42
	40	2/23/2017	8,305	8,412	42
	41	2/22/2017	8,165	8,272	42
	42	2/23/2017	8,025	8,132	42
-	43	2/23/2017	7,885	7,992	42
	44	2/23/2017	7,745	7,852	42
	45	2/23/2017		7,712	42
	46	2/24/2017		7,572	42
	47	2/24/2017	7,325	7,432	42
	48	2/24/2017			42
	49	2/24/2017			42
	50	2/24/2017			42
	51	2/25/2017			
	52	2/25/2017			42

Office of Oil and Gas MAY 1.2 2017

WV Department of Environmental Protection



MAY 1 2 2017

#### LINDA GREATHOUSE BRK 205H FRAC STAGE SUMMARY

E				k Breakdown ssure (PSI) SSI		mount of roppant (lbs)	Amount of Amount of water bbls nitrogen/oth
1	2/16/2017	97	8,231	9,101	4,033	276,960	
2	2/16/2017	91	8,031	8,520	4,189	279,760	
3	2/16/2017	92	7,940	8,615	4,190	300,840	
4	2/16/2017	92	7,699	8,771	4,310	280,548	
5	2/17/2017	90	8,358	9,038	5,547	282,100	
6	2/17/2017	88	7,758	9,196	4,157	279,800	
7		94					
	2/17/2017		7,647	8,471	4,239	279,040	
8	2/17/2017	97	7,750	8,203	4,554	280,120	4,876 5,133
9	2/17/2017	92 93	7,655	9,209	4,493	280,680	
10	2/18/2017		7,639	8,256	4,175	284,100	
11	2/18/2017	91	7,722	8,166	4,491	280,180	
12	2/18/2017	92	7,355	7,787	4,396	281,760	5,150
13	2/18/2017	98	7,804	8,032	4,499	281,960	4,655
14	2/18/2017	97	7,653	7,935	4,254	281,740	4,623
15	2/19/2017	94	7,438	7,716	4,351	283,480	5,273
16	2/19/2017	91	7,310	7,735	4,246	280,020	4,874
17	2/19/2017	92	7,353	7,784	4,351	275,980	5,077
18	2/19/2017	100	7,804	8,152	4,337	277,980	4,885
19	2/19/2017	94	7,603	8,654	4,395	278,900	4,546
20	2/19/2017	97	7,839	8,620	4,140	280,120	4,670
21	2/20/2017	91	7,395	8,745	4,384	280,760	4,809
22	2/20/2017	99	7,777	8,485	4,409	281,780	4,773
23	2/20/2017	99	7,580	8,418	4,335	281,960	4,675
24	2/20/2017	100	7,544	7,842	4,383	281,800	4,405
25	2/20/2017	98	7,410	7,812	4,581	281,160	4,416
26	2/20/2017	98	7,536	7,994	4,286	277,460	4,313
27	2/21/2017	98	7,611	8,930	4,409	282,660	5,698
28	2/21/2017	86	7,846	8,966	4,163	283,380	5,789
29	2/21/2017	98	7,473	8,387	4,557	277,100	4,497
30	2/21/2017	97	7,400	7,709	4,236	282,500	4,429
31	2/21/2017	98	7,381	8,228	4,360	280,740	4,376
32	2/21/2017	99	7,475	7,926	4,310	280,860	4,619
33	2/22/2017	100	7,281	7,917	4,409	277,100	4,436
34	2/22/2017	99	7,348	9,138	4,483	281,980	4,502
35	2/22/2017	100	7,022	8,292	4,384	281,800	4,429
36	2/22/2017	99	6,957	7,453	4,507	283,800	4,425
37	2/22/2017	99	6,928	7,746	4,310	277,080	4,342
38	2/22/2017	99	6,973	7,598	4,491	281,400	4,511
39	2/22/2017	99	7,136	8,364	4,360	282,900	4,378
40	2/23/2017	100	7,069	8,094	4,483	278,120	
41	2/22/2017	101	7,080	8,028	4,212	280,080	4,345
42	2/23/2017	100	6,944	7,890	4,335	281,400	4,253
43	2/23/2017	99	6,756	7,876	4,360	282,920	4,244
44	2/23/2017	99	6,768	8,137	4,310	282,580	4,261
45	2/23/2017	98	6,796	7,892	4,335	276,260	4,976
46	2/24/2017	98	6,460	7,384	4,261	251,800	4,465
47	2/24/2017	92	6,419	7,631	4,286	279,960	4,510
48	2/24/2017	100	6,350	6,863	3,976	280,880	
49	2/24/2017	97	6,745	7,780	4,056	283,760	4,499
50	2/24/2017	99	6,699	7,720	4,030	278,380	4,269
51	2/25/2017	100	6,720	7,735	4,132	277,040	4,552
52	2/25/2017	99	6,626	8,017	4,409	280,040	4,210

### Hydraulic Fracturing Fluid Product Component Information Disclosure

Office of Oil and Gas

MAY 1 2 2017

Job Start Date:	2/16/2017
Job End Date:	2/25/2017
State:	West Virginia
County:	Brooke
API Number:	47-009-00156-00-00
Operator Name:	Southwestern Energy
Well Name and Number:	Linda Greathouse BRK 205H
Latitude:	40.20411900
Longitude:	-80.60605000
Datum:	NAD83
Federal Well:	NO
Indian Well:	NO
True Vertical Depth:	5,783
Total Base Water Volume (gal):	10,320,828
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
Water	SWN	Carrier/Base Fluid					
			Water	7732-18-5	100.00000	83.67844	None
Sand (Proppant)	Keane	Proppant					
			Crystalline silica: Quartz (SiO2)	14808-60-7	100.00000	14.44352	None
Hydrochloric Acid 15%)	Keane	Acidizing					
			Water	7732-18-5	85.00000	1.52336	None
			Hydrochloric Acid	7647-01-0	15.00000	0.26883	None
(FR-17	Keane	Friction Reducer					
			Distillates (petroleum), hydrotreated light	64742-47-8	45.00000	0.03357	None
			ethanediol	107-21-1	10.00000	0.00746	None
			Fatty alcohols ethoxylated	Proprietary	2.00000	0.00149	None
			Alcohols, C12-16, ethoxylated	68213-24-1	2.00000	0.00149	None
(FEAC-30	Keane	Iron Control					
			acetic acid	64-19-7	60.00000	0.00452	None
			Citric acid	77-92-9	40.00000	0.00301	None
(AI-13	Keane	Acid Inhibitor					
			ethanediol	107-21-1	40.00000	0.00149	None

			dipropylene gylcol, monomethyl ether	34590-94-8	20.00000	0.00075	None
			Cinnamaldehyde	104-55-2	10.00000	0.00037	Vone
			Tar bases, quinoline derivs., benzyl chloride-quaternized	72480-70-7	10.00000	0.00037	None
			Ethoxylated alcohol	68131-39-5	10.00000	0.00037	Vone
			formic acid	64-18-6	10.00000	0.00037	Vone
	N .		propan-2-ol	67-63-0	5.00000	0.00019	Vone
igredients shown at	bove are subject to 2	9 CFR 1910.1200(i) and ap	ppear on Material Safety Data She	ets (MSDS). Ingredie	ents shown below are Non-N	ISDS.	
ther Chemical(s)	Listed Above	See Trade Name(s) List					
			Water	7732-18-5	85.00000	1.52336	
			ethanediol	107-21-1	10.00000	0.00746	
			Citric acid	77-92-9	40.00000	0.00301	
			Alcohols, C12-16, ethoxylated	68213-24-1	2.00000	0.00149	
			Fatty alcohols ethoxylated	Proprietary	2.00000	0.00149	
			dipropylene gylcol, monomethyl ether	34590-94-8	20.00000	0.00075	
			Cinnamaldehyde	104-55-2	10.00000	0.00037	
			formic acid	64-18-6	10.00000	0.00037	
			Ethoxylated alcohol	68131-39-5	10.00000	0.00037	
			Tar bases, quinoline derivs., benzyl chloride-quaternized	72480-70-7	10.00000	0.00037	
			propan-2-ol	67-63-0	5.00000	0.00019	
			Water	7732-18-5	92.50000		
			ammonium chloride	12125-02-9	5.00000		
			Oxyalkylated alcohol	Proprietary	5.00000		

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)

<sup>\*</sup> Total Water Volume sources may include fresh water, produced water, and/or recycled water
\*\* Information is based on the maximum potential for concentration and thus the total may be over 100%

#### Well Name: LINDA GREATHOUSE BRK 205H

LITHOLOGY/FORMATION	TOP DEPTH, TVD (FT)	BOTTOM DEPTH, TVD (FT)	TOP DEPTH, MD (FT)	BOTTOM DEPTH, MD (FT)	QUANTITY AND TYPE OF FLUID
Base of Fresh Water	N.A.	300.00	N.A.	300.00	
Top of Salt Water	1025.00	N.A.	1025.00	N.A.	
Pittsburgh Coal	300.99	306.99	301.00	307.00	
Big Injun (ss)	1470.53	1961.90	1472.00	1969.00	
Berea (siltstone)	1961.90	5309.05	1969.00	5591.00	
Rhinestreet (shale)	5309.05	5557.66	5591.00	5880.96	
Cashaqua (shale)	5557.66	5609.05	5880.96	5949.91	
Middlesex (shale)	5609.05	5654.17	5949.91	6017.23	
Burket (shale)	5654.17	5676.05	6017.23	6053.89	
Tully (is)	5676.05	5733.35	6053.89	6161.28	
Mahantango (shale)	5733.35	5733.35	6161.28	6484.35	
Marcellus (shale)	5733.35	N.A.	6484.35	N.A.	Gas

General And Gas

MAY 1 2 2017

WV Department of Environmental Protection



## **AS-DRILLED**

#### PROPERTY OWNERS

TRACT	SURFACE OWNER (S) / ROYALTY OWNER (R)	TAX PARCEL	ACRES
1	LINDA REEVES GREATHOUSE (S)/(R) VICKI LYNN HAMILTON (S)/(R)	03-837-0087-0000	±323.19
2	JAMES & JO ELLEN HAIZLETT (S)	03-B42-0060-0002	±65.47
3	BRIAN K. & GINA M. HANEY (S)	03-837-0077-0000	±45.75
4	DEBRA FCYPHERI 1/4 (S)/(R) MATTHEW H. FAIR,1/4, ETAL (S)/(R)	03-837-0088-0000	±59.95
5	DEBRA FCYPHERT 1/4 (S)/(R) MATTHEW H. FAIR,1/4, ETAL (S)/(R)	03-837-0091-0000	±93.93
6	SCHIAPPA & COMPANY INC. (5)	03-837-0023-0000	±90.91
7	SCHIAPPA & COMPANY INC. (S)/(R)	03-837-0022-0000	±145.96
8	HARLEY J. LEMASTERS (S)/(R)	03-837-0013-0000	±33,54

TRACT	ADJOINING PROPERTY OWNERS	TAX PARCEL	ACRES
A	ROCCO BASIL	03-842-0019-0000	±100.05
В	RICKEY & DEBRA CONLEY	03-B42-0018-0000	±2.14
C	EDWARD E. & NANCY J. CONLEY	03-B42-0016-0000	±0.74
D	EDWARD E. & NANCY J. CONLEY	03-B42-0015-0000	±3.10
E	DANIEL R. GORBY	03-B42-0026-0000	±1.97
F	DANIEL R. GORBY	03-B42-0003-0000	±5.00
G	SAMUEL M. HALL	03-B42-0001-0000	±18.12
H	VICTOR CHARLES SMITH	03-B37-0130-0000	±27.35
1	CHRISTOPHER SCOTT MILLER	03-B37-0094-0000	±24.20
J	KEVIN CHUMNEY	03-B37-0093-0000	±5.91
K	DONALD G. CONAWAY	03-B37-0092-0000	±3.97
L	WAYNE ALLEN RICHMOND	03-B37-0095-0000	±19.67
M	VICKIE C. & SHEENA R. LOUGHERY	03-B37-0103-0000	±40.00
N	VICKIE C. & SHEENA R. LOUGHERY	03-B37-0041-0000	±41.00
0	RALPH JR & CAROL J. WALNDHA	03-837-0034-0000	±6.79
P	RALPH JR & CAROL J. WALNDHA	03-B37-0033-0000	±0.80
0	JAMES W. & USA GIBSON	03-B37-0028-0000	±4.05
R	HARLEY J. LEMASTERS	03-B37-0021-0000	±31.17
5	THOMAS & CAROLYN CARBASHO	03-B37-0016-0000	±7.29
T	THOMAS W. & CAROLYN L. CARBASHO	03-B37-0015-0000	±5.00
U	MICHAEL MCCLOUD	03-B37-0018-0000	±1.08
V	RONALD D. & JEAN A. TAYLOR	03-B37-0019-0000	±1.08
W	HARLEY J. LEMASTERS	03-B37-0019-0000	±2.00
X	RONALD D. & JEAN A. TAYLOR	03-B37-0012-0000	±11.96
Y		03-B32-0146-0000	+29.05
	NILA BOYD, CLINTON MCCORD, JOHN JOHN, REBA JOHN, & CAROLYN JONES		15,46,705
Z	CITY OF WELLSBURG COMBINED WATER & SEWER BOARD	03-B32-0140-0002	±89.58
AA	MARILYN ROSETTA MCCORD	03-B37-0042-0000	±34.26
BB	JOHN A. & BARBARA A. MCCREARY	03-B37-0043-0000	±29.00
CC	VIVIAN LUCILLE MAZZELLA	03-B37-0045-0000	±110.58
DD	WILLIAM E. & HAZEL E. JOHNSTON	03-B37-0050-0000	±166:50
EE	ROBERT O. BONE	03-B37-0081-0000	±81.99
FF	DAVID E. DEGARMO	03-B37-0082-0000	±1.00
GG	TERRENCE & SUSAN BONE	03-B37-0080-0000	±2.58
HH	JOHN T., HARVEY JR & SANDRA JOHNSTON, ETAL	03-B37-0079-0000	±2.17
11	BENJAMIN M. MOSA & CHRISTINE L. HEISE	03-B37-0074-0000	±24.41
JJ	WILLIAM A. III & JENNA L. SPERRINGER	03-B37-0078-0000	±2.35
KK	LPS INVESTMENT PARTNERSHIP	03-B37-0065-0000	±65.00
LL	ELLEN B. SANFORD	03-B37-0076-0000	±66.00
MM	EDGAR S. & CECELIA M. ERDMAN	0.3-B42-0049-0000	±0.83
NN	LABELLE FARMS INC.	03-B42-0060-0000	±349.88
00	JEFFREY S. & DAWNA J. WARD	03-B42-0059-0004	±98.11
PP	AUSTIN WAYNE & JUSTINE ADAH WADE	03-B42-0050-0000	±4.94
QQ	AUSTIN WAYNE & JUSTINE ADAH WADE	03-B42-0060-0001	±0.67
RR	PHYLLIS P. MARKER	03-B42-0052-0000	±91.51
SS	STEPHEN KOREN	03-B37-0090-0000	±2.04
11	ROBERT BONE	03-B37-0089-0000	±2.04 ±0.78
ULI	CARL R. & SANDRA S. CLARK	03-B37-0086-0000	
W		03-B37-0085-0000	±0.83
WW	MICHAEL ARACICH KAREN K. TOBER	03-B37-0085-0000 03-B37-0084-0000	±0.72
	10.000001 111 10.0001		Section.
XX	EUGENE EDWARD RINDERER	03-B37-0083-0000	±0.13

REVISIONS:	COMPANY:	SWN Production Company, LLC	SVI Production Company	A W + ®
	OPERATOR'S WELL #:	LINDA GREATHOUSE BRK 205H		DATE: 12-16-2015  DRAWN BY: B. HERMAN
	LOCATION:	BUFFALO DISTRICT, BROOKE COUNTY, WEST VIRG	INIA	SCALE: N/A DRAWING NO:087569015 ADJOINING OWNERS



RETIEW Associates, Inc.
27 Travoto Street, Suite 101
Bridgeport, WV 26530
Phone (800) 738-8395
Email: rettew@rettew.com
Website: www.rettew.com

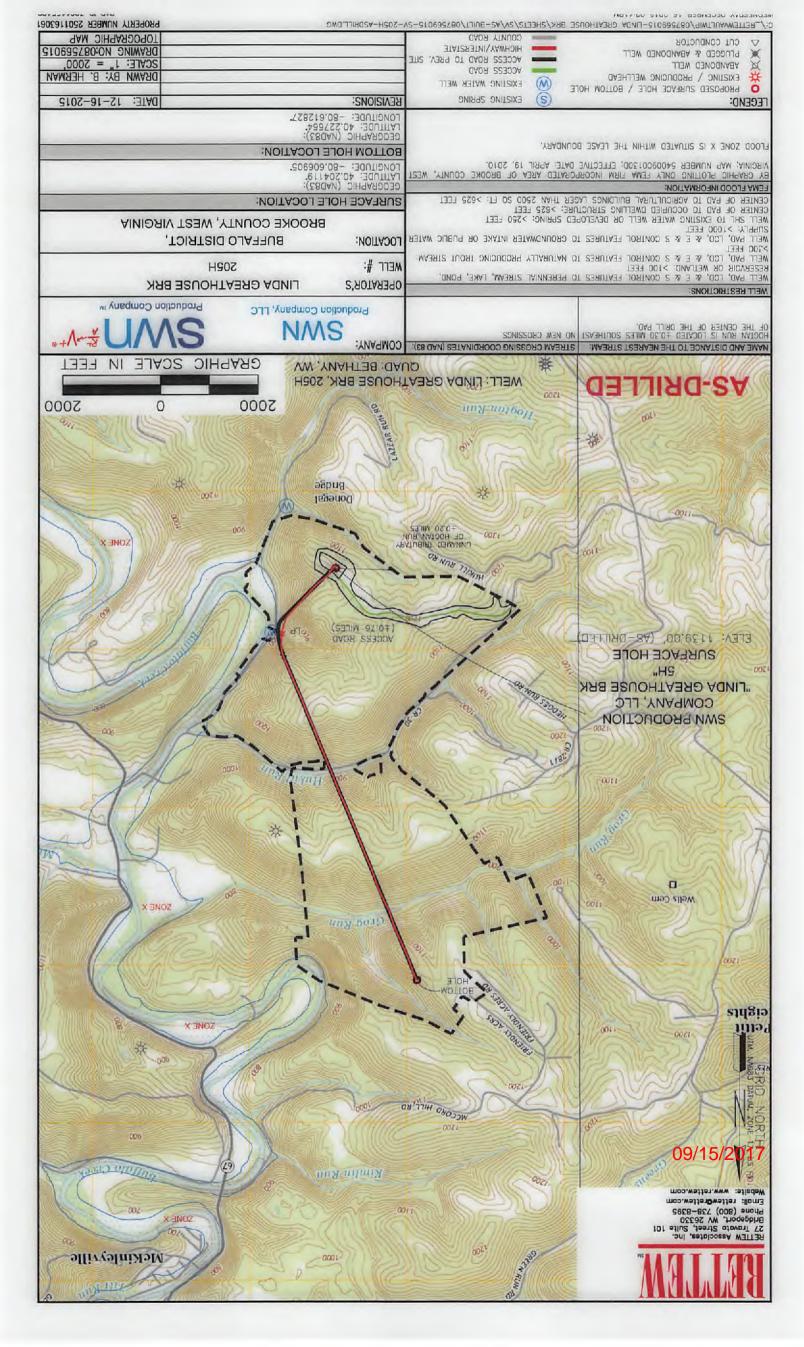
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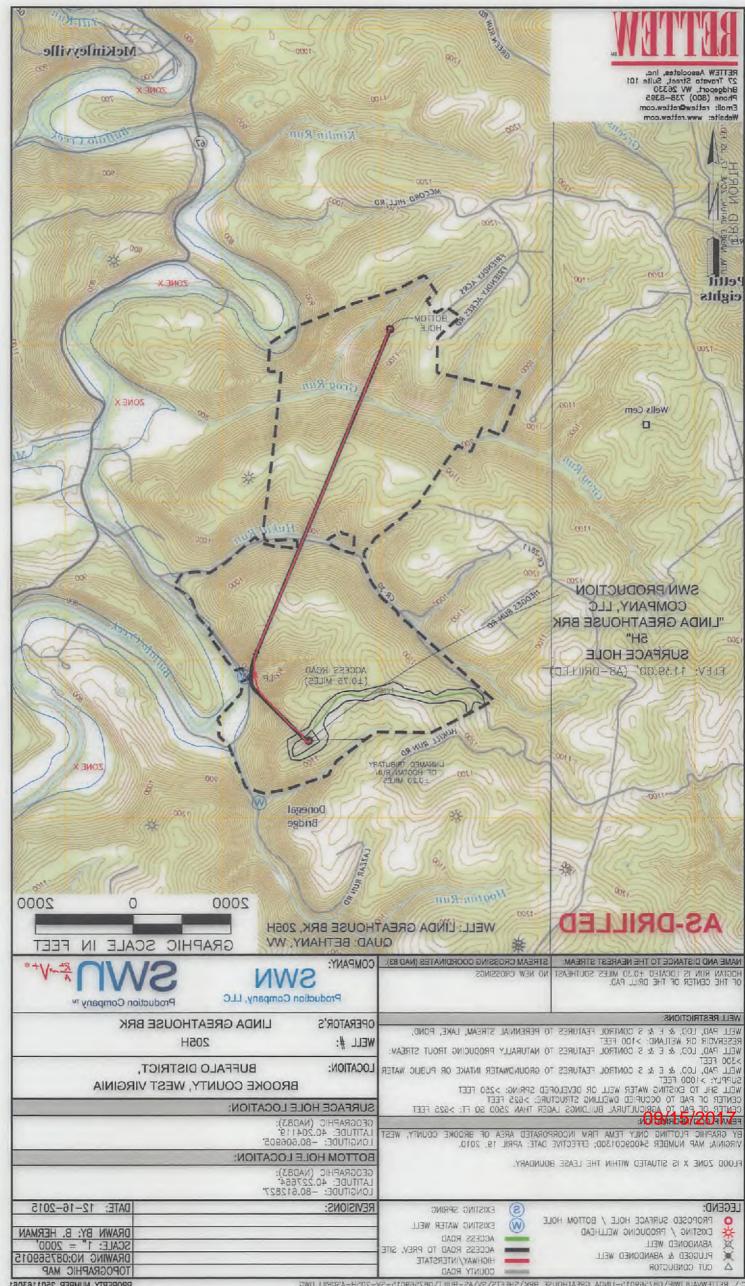
#### PROPERTY OWNERS

ACRES	TAX PARCEL	SURFACE OWNER (S) I ROYALTY OWNER (R)	TRACT
±323.19	03-837-0087-0000	LINDA REEVES GREATHOUSE (S)/(R) VICKI LYNN HAMILTON (S)/(R)	ı
±65.47	03-842-0060-0002	JAMES & JO ELLEN HAIZLETT (S)	2
±45.75	03-837-0077-0000	BRIAN K. & GINA M. HANEY (S)	3
±59.95	03-B37-008B-0000	DEBRA FCYPHERT 1/4 (S)/(R) MATTHEW H. FAIR,1/4, ETAL (S)/(R)	4
±93.93	03-837-0091-0000	DEBRA FCYPHERT 1/4 (S)/(R) MATTHEW H. FAIR,1/4, ETAL (S)/(R)	9
±90.91	03-837-0023-0000	SCHIAPPA & COMPANY INC. (S)	8
±145.96	03-B37-0022-0000	SCHIAPPA & COMPANY INC. (S)/(R)	7
±33.54	03-837-0013-0000	HARLEY J. LEMASTERS (S)/(R)	8

ACRES	TAX PARCEL	ADJOINING PROPERTY OWNERS	RAGT
±100.05	03-842-0019-0000	ROCCO BASIL	A
±2.14	03-B42-0018-0000	RICKEY & DEBRA CONLEY	8
±0.74	03-B42-0016-0000	EDWARD E. & NANCY J. CONLEY	0
±3.10	03-842-0015-0000	EDWARD E, & NANCY J. CONLEY	0
±1.97	03-842-0026-0000	DANIEL R. CORBY	3
±5.00	03-B42-0003-0000	DANIEL R. GORBY	7
±18.12	G3-B42-0001-0000	SAMUEL M. HALL	0
±27.35	03-837-0130-0000	VICTOR CHARLES SMITH	H
±24.20	03-837-0094-0000	CHRISTOPHER SCOTT MILLER	
±5.91	03-837-0093-0000	KEVIN CHUMNEY	L
±3.97	03-B37-0092-0000	DONALD G. CONAWAY	К
±19.67	03-837-0096-0000	WAYNE ALLEN RICHMOND	J
±40,00	03-837-0103-0000	VICKIE C. & SHEENA R. LOUGHERY	M
±41,00	03-B37-0041-0000	VICKIE C. & SHEENA R. LOUGHERY	И
±6.79	03-837-0034-0000	RALPH JR & CAROL J. WALNOHA	.0
08.0±	03-837-0033-0000	RALPH JR & CAROL J. WALNOHA	q
±4.06	03-B37-0028-0000	JAMES W. & LISA GIBSON	0
±31.17	03-837-0021-0000	HARLEY J. LEMASTERS	8
±7.29	03-B37-0016-0000	THOMAS & CAROLYN CARBASHO	5
±5.00	03-837-0015-0000		T
±1.08	03-B37-001B-0000	MICHAEL MCCLOUD	U
±1.08	03-837-0019-0000	RDNALD D. & JEAN A. TAYLOR	V
±2.00	03-837-0012-0000	HARLEY J. LEMASTERS	W
±11.96	03-837-0011-0000	ROUALD D. & JEAN A. TAYLOR	X
±29,06	03-B32-0146-0000	NILA BOYD, CLINTON MCCORD, JOHN	Ŷ
00.627	0000-0110-200-00	JOHN, REBA JOHN, & CAROLYN JONES	
±89.58	03-832-0140-0002	CITY OF WELLSBURG COMBINED WATER & SEWER BOARD	Z
±34.26	03-B37-0042-0000	MARILYN ROSETTA MCCORD	AA
±29.00	03-837-0043-0000	JOHN A. & BARBARA A. MCCREARY	88
±110.58	03-B37-0045-0000	VIVIAN LUCILLE MAZZELLA	22
±155.50	03-837-0050-0000	WILLIAM E. & HAZEL E. JOHNSTON	00
±81.99	D3-837-0081-0000	ROBERT C. BONE	33
±1.00	03-837-0082-0000	DAVID E, DEGARMO	77
±2.58	03-837-0080-0000	TERRENCE & SUSAN BONE	99
±2.17	03-837-0079-0000		HH
±24,41	03-837-0074-0000	BENJAMIN M. MOSA & CHRISTINE L. HEISE	11
±2.36	03-837-0078-0000	WILLIAM A. III & JENNA L. SPERRINGER	LL.
±65.00	03-837-0066-0000		KK
±66.00	03-837-0076-0000	ELLEN B. SANFORD	JJ
±0.83	03-842-0049-0000	EDCAR S. & CECELIA M. ERDMAN	MM
±349.88	03-842-0060-0000	LABELLE FARMS INC.	NN
198.11	03-842-0059-0004	JEFFREY S. & DAWNA J. WARD	00
±4.94	03-842-0050-0000	AUSTIN WAYNE & JUSTINE ADAH WADE	99
±0.67	03-842-0060-0001		00
±91.51	03-842-0052-0000	PHYLLIS P. MARKER	RR
±2.04	03-837-0090-0000	STEPHEN KOREN	55
±0.78	03-837-0089-0000		TT
	03-837-0086-0000		UU
±0.83 ±0.72	03-837-0085-0000		W
	0000-0000-108-00	HUJUANA JOANUM	VV.
±0.72	03-837-0084-0000	KAREN K. TOBER	WW

Ny TM	SWF Production Compan	SWN Production Company, LLC	COMPANY:	REVISIONS:
DATE: 12-16-2015  DRAWN BY: B. HERMAN	. 1	LINDA GREATHOUSE BRK 205H	OPERATOR'S WELL #:	
SCALE: N/A DRAWING NO:087569015 ADJOINING OWNERS	AINIA	BUFFALO DISTRICT, BROOKE COUNTY, WEST VIRG	LOCATION:	

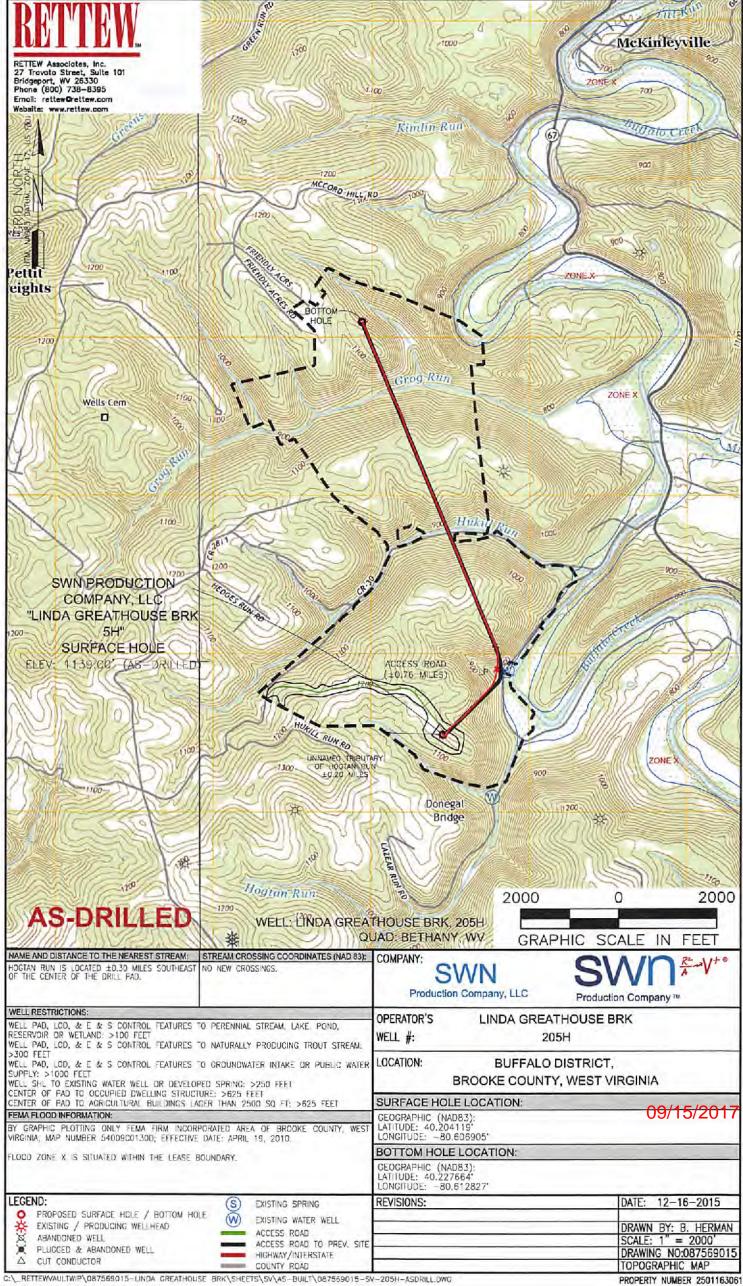




ABANCONED PATH

CUT CONDUCTOR

WELL LOCATION PLAT





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**

#### PROPERTY OWNERS

TRACT	SURFACE OWNER (S) / ROYALTY OWNER (R)	TAX PARCEL	ACRES
1	LINDA REEVES GREATHOUSE (S)/(R) VICKI LYNN HAMILTON (S)/(R)	03-837-0087-0000	±323.19
2	JAMES & JO ELLEN HAIZLETT (S)	03-B42-0060-0002	±65.47
3	BRIAN K. & GINA M. HANEY (S)	03-B37-0077-0000	±45.75
4	DEBRA FCYPHERT 1/4 (S)/(R) MATTHEW H. FAIR,1/4, ETAL (S)/(R)	03-B37-0088-0000	±59.95
5	DEBRA F.—CYPHERT 1/4 (S)/(R) MATTHEW H. FAIR,1/4, ETAL (S)/(R)	03-B37-0091-0000	±93.93
6	SCHIAPPA & COMPANY INC. (S)	03-B37-0023-0000	±90.91
7	SCHIAPPA & COMPANY INC. (S)/(R)	03-B37-0022-0000	±145.96
8	HARLEY J. LEMASTERS (S)/(R)	03-B37-0013-0000	±33.54

RACT	ADJOINING PROPERTY OWNERS	TAX PARCEL	ACRES
A	ROCCO BASIL	03-B42-0019-0000	±100.05
В	RICKEY & DEBRA CONLEY	03-B42-0018-0000	±2.14
C	EDWARD E. & NANCY J. CONLEY	03-B42-0015-0000	±0.74
D	EDWARD E. & NANCY J. CONLEY	03-B42-0015-0000	±3.10
E	DANIEL R. GORBY	03-B42-0025-0000	±1.97
F	DANIEL R. GORBY	03-B42-0003-0000	±5.00
G	SAMUEL M. HALL	03-B42-0001-0000	±18.12
Н	VICTOR CHARLES SMITH	03-B37-0130-0000	±27.35
1	CHRISTOPHER SCOTT MILLER	03-B37-0094-0000	±24.20
d.	KEVIN CHUMNEY	03-B37-0093-0000	±5.91
K	DONALD G. CONAWAY	03-B37-0092-0000	±3.97
L	WAYNE ALLEN RICHMOND	03-B37-0095-000D	±19.67
м	VICKIE C. & SHEENA R. LOUGHERY	03-B37-0103-0000	±40.00
N	VICKIE C. & SHEENA R. LOUGHERY	03-B37-0041-0000	±41.00
0	RALPH JR & CAROL J. WALNOHA	03-B37-0034-0000	±6.79
P	RALPH JR & CAROL J. WALNOHA	03-B37-0033-0000	±0.80
Q	JAMES W. & LISA GIBSON	03-B37-0035-0000	±4.06
R	HARLEY J. LEMASTERS	03-B37-0021-0000	±31.17
S	THOMAS & CAROLYN CARBASHO	03-B37-0021-0000	±7.29
T	THOMAS W. & CAROLYN L. CARBASHO	03-837-0015-0000	
U		03-B37-0013-0000 03-B37-0018-0000	±5.00
_	MICHAEL MCCLOUD		±1.08
V	RONALD D. & JEAN A. TAYLOR	03-B37-0019-0000	±1.08
W	HARLEY J. LEMASTERS	03-B37-0012-0000	±2.00
X	RONALD D. & JEAN A. TAYLOR	03-B37-0011-0000	±11.95
Y	NILA BOYD, CLINTON MCCORD, JOHN JOHN, REBA JOHN, & CAROLYN JONES	03-832-0146-0000	±29.06
Z	CITY OF WELLSBURG COMBINED WATER & SEWER BOARD	03-832-0140-0002	±89.58
AA	MARILYN ROSETTA MCCORD	03-837-0042-0000	±34.26
BB	JOHN A. & BARBARA A. MCCREARY	03-837-0043-0000	±29.00
CC	VIVIAN LUCILLE MAZZELLA	03-837-0045-0000	±110.58
DD	WILLIAM E. & HAZEL E. JOHNSTON	03-837-0050-0000	±166.50
EE	ROBERT O. BONE	03-837-0081-0000	±81.99
FF	DAVID E. DEGARMO	03-837-0082-0000	±1.00
GG	TERRENCE & SUSAN BONE	03-837-0080-0000	±2.58
HH	JOHN T., HARVEY JR & SANDRA JOHNSTON, ETAL	03-837-0079-0000	±2.17
11	BENJAMIN M. MOSA & CHRISTINE L. HEISE	03-837-0074-0000	±24.41
JJ	WILLIAM A. III & JENNA L. SPERRINGER	03-837-0078-0000	±2.36
KK	LPS INVESTMENT PARTNERSHIP	03-B37-0066-0000	±65.00
LL	ELLEN B. SANFORD	03-837-0076-0000	±66.00
MM	EDGAR S. & CECELIA M. ERDMAN	03-842-0049-0000	±0.83
NN	LABELLE FARMS INC.	03-B42-0060-0000	±349.88
00	JEFFREY S. & DAWNA J. WARD	03-B42-0059-0004	±98.11
PP	AUSTIN WAYNE & JUSTINE ADAH WADE	03-B42-0050-0000	14.94
00	AUSTIN WAYNE & JUSTINE ADAH WADE	03-B42-0060-0001	±0.67
RR	PHYLLIS P. MARKER	03-842-0052-0000	±91.51
SS	STEPHEN KOREN	03-B37-D090-0000	12.04
TT	ROBERT BONE	03-B37-D089-0000	±0.78
UU	CARL R. & SANDRA S. CLARK	03-837-0089-0000	±0.78
W		03-837-0086-0000	
WW	MICHAEL ARACICH KAREN K. TOBER	03-837-0085-0000 03-837-0084-0000	±0.72
			±0.24

Office of Oil and Gas

MAY 1 2 2017

WV Department of Environmental Protection

REVISIONS:	COMPANY:	SWN Production Company, LLC	SWI Production Compan	) R - V + 0
	OPERATOR'S WELL #:	LINDA GREATHOUSE BRK 205H		DATE: 12-16-2015  DRAWN BY: B. HERMAN
	LOCATION:	BUFFALO DISTRICT, BROOKE COUNTY, WEST VIRO	SINIA	SCALE: N/A DRAWING NO:087569015 ADJOINING OWNERS