

west virginia department of environmental protection

Office of Oil and Gas 601 57th Street, S.E. Charleston, WV 25304 (304) 926-0450 fax: (304) 926-0452

Austin Caperton, Cabinet Secretary www.dep.wv.gov

Monday, December 9, 2019 PERMIT MODIFICATION APPROVAL Horizontal 6A / New Drill

HG ENERGY II APPALACHIA, LLC 5260 DUPONT ROAD PARKERSBURG, WV 26101

Re: Permit Modification Approval for 1209 S-7H

47-033-05943-00-00

Increase lateral spacing from 1000' to 1500'. Total measured depth change 17740' to 17587'.

HG ENERGY II APPALACHIA, LLC

The Office of Oil and Gas has reviewed the attached permit modification for the above referenced permit. The attached modification has been approved and well work may begin. Please be reminded that the oil and gas inspector is to be notified twenty-four (24) hours before permitted well work is commenced.

If there are any questions, please feel free to contact me at (304) 926-0450.

James A. Martin Chief

Operator's Well Number: 1209 S-7H

Farm Name: HG ENERGY II APPALACHIA, LLC

U.S. WELL NUMBER: 47-033-05943-00-00

Horizontal 6A New Drill

Date Modification Issued: 12/09/2019

Promoting a healthy environment.

API NO. 47- 033 _ 05943 MOD
OPERATOR WELL NO. Nays 1209 S-7H
Well Pad Name; Nays 1209

1) Well Operator: F	IG Energy II Appalac	chia, 🛔 494519932	Harrison	Union	West Milford 7.5'
		Operator ID	County	District	Quadrangle
2) Operator's Well N	lumber: Nays 1209 S	-7H Well I	ad Name: Nay	/s 1209	
3) Farm Name/Surfac	ce Owner: Nays/HG Ener	rgy II Appalachia Public R	oad Access: K	incheloe Ru	n Rd/SLS 35
4) Elevation, current	ground: 1002'	Elevation, propose	ed post-construc	ction: 1007'	
5) Well Type (a) G Othe		Oil Ur	derground Stor	rage	
(b)If	Gas Shallow x	Deep			-nw
	Horizontal x				50W
6) Existing Pad: Yes	or No No				2/201-
	ormation(s), Depth(s), 6914' and 51' in thicknes			Pressure(s):	
		ss. Anticipated pressur	e at 43 14#.		
B) Proposed Total Ve		each a			
) Formation at Total	The second secon	cellus			
10) Proposed Total M	feasured Depth: 17,5	587'			
11) Proposed Horizor	ntal Leg Length: 9,95	51"			
2) Approximate Fres	sh Water Strata Depths	135', 500'			
13) Method to Detern	nine Fresh Water Deptl	hs: Nearest offset w	ell data		
4) Approximate Salt	water Depths: None	noted in offsets			
5) Approximate Coa	I Seam Depths: 660' t	to 665'			
(6) Approximate Dep	oth to Possible Void (co	oal mine, karst, other):	None		
	ell location contain coa adjacent to an active m		N	o X	
(a) If Yes, provide N	Mine Info: Name:				
Carlo and San Bank and It	Depth:				Office of Oil and G
	Seam:				SEP 2 4 2019
	Owner:				WV Department of
					Environmental Protect

WW-6B	
(04/15)	

API	NO. 47		
	OPERATOR WELL	NO.	Nays 1209 S-7H
	Well Pad Name:	Nays	1209

18)

CASING AND TUBING PROGRAM

TYPE	Size (in)	New or Used	Grade	Weight per ft. (lb/ft)	FOOTAGE: For Drilling (ft)	INTERVALS: Left in Well (ft)	CEMENT: Fill-up (Cu. Ft.)/CTS
Conductor - 1st	36"	New	LS	195.36	100'	100'	Drilled In
Fresh Water	20"	NEW	J-55	94	600'	600'	40% excess, yield =1.20, CTS
Coal	13 3/8"	NEW	J-55	68	1735'	1735'	40% excess yield = 1.20,CTS
Intermediate	9 5/8"	NEW	J -5 5	40	2500'	2500'	40% excess yield Labou 0% Excess Talig
Production	5 1/2"	NEW	P-110	23	17587'		20% excess yield = 1,19, tail yield = 1,04
Tubing							- tul
Liners							

5.DW 01/20/2019

TYPE	Size (in)	Wellbore Diameter (in)	<u>Wall</u> <u>Thickness</u> <u>(in)</u>	Burst Pressure (psi)	Anticipated Max. Internal Pressure (psi)	Cement Type	Cement Yield (cu. ft./k)
Conductor	30"	30"	.500				CTS
Fresh Water	20"	24"	.438	2110	1200	Type 1, Class A	
Coal	13 3/8"	17 1/2"	.480	3450		Type 1/Class A	40% excess yield = 1.20, CTS
Intermediate	9 5/8"	12 1/4"	.395	3950		Type 1/Class A	40% excess yield = 0% Excess Lear_40
Production	5 1/2"	8 1/2"	.415	14520	12500	Type 1/ClassA	20% excess yield = 1,19, tall yield 1,94.6
Tubing							#
Liners							

PACKERS

	i	
Sizes:	RECEIVE Office of Oil a	ED
Depths Set:	SEP 2 4	

WV Department of Environmental Protection

WW-6B	
(04/15)	

API NO. 47	
OPERATOR WELL NO.	Nays 1209 S-7H

Well Pad Name: Nays 1209

18)

CASING AND TUBING PROGRAM

ТҮРЕ	Size (in)	New or Used	Grade	Weight per ft. (lb/ft)	FOOTAGE: For Drilling (ft)	INTERVALS: Left in Well (ft)	CEMENT: Fill-up (Cu. Ft.)/CTS
Conductor - 1st	36"	New	LS	195.36	100'	100'	Drilled In
Fresh Water	20"	NEW	J-55	94	600'	600'	40% excess, yield =1.20,CTS
Coal	13 3/8"	NEW	J-55	68	1735'	1735'	40% excess yield = 1.20,CTS
Intermediate	9 5/8"	NEW	J-55	40	2500'	2500'	40% excess yield Lead/ 0% Excess Tail
Production	5 1/2"	NEW	P-110	23	17267'	17267'	20% excess yield = 1.19, tail yield = 1.04
Tubing							
Liners							

ТҮРЕ	Size (in)	Wellbore Diameter (in)	Wall Thickness (in)	Burst Pressure (psi)	Anticipated Max. Internal Pressure (psi)	Cement Type	Cement Yield (cu. ft./k)
Conductor	30"	30"	.500				CTS
Fresh Water	20"	24"	.438	2110	1200	Type 1, Class A	30 % excess yield = 1.20, CTS
Coal	13 3/8"	17 1/2"	.480	3450		Type 1/Class A	40% excess yield = 1.20, CTS
Intermediate	9 5/8"	12 1/4"	.395	3950		Type 1/Class A	40% excess yield = 0% Excess Lead_40
Production	5 1/2"	8 1/2"	.415	14520	12500	Type 1/ClassA	20% excess yield = 1.19, tail yield 1.94 (
Tubing							
Liners							

Kind:

Sizes:

WV Department of Environmental Protection

WW-6B	
(10/14)	

.PI NO. 47		
OPERATOR WELL	NO.	Nays 1209 S-7H
Well Pad Name:	Nays 1	1209

19) Describe	proposed we	ell work.	including the	he drilling and	plugging l	back of any pilot hole:	
	, 20001100	proposed	• • • • • • • • • • • • • • • • • • • •			. A	back of any phot hole.	

Drill the vertical depth to the Marcellus at an estimated total vertical depth of approximately 6900 feet. Drill horizontal leg to estimated 9631' TMD, stimulate and be capable of producing from the Marcellus Formation. Should we encounter an unanticipated void in the coal, we will install a minimum of 20' of casing below the void but not more than 100' below the void, set a basket and grout to surface.

20) Describe fracturing/stimulating methods in detail, including anticipated max pressure and max rate:

The stimulation will be completed with multiple stages divided over the lateral length of the well. Stage spacing is dependent upon engineering design. Slickwater fracturing technique will be utilized on each stage using sand, water, and chemicals. See attached list. Maximum pressure not to exceed 12,500 psi.

- 21) Total Area to be disturbed, including roads, stockpile area, pits, etc., (acres): 16.148 acres
- 22) Area to be disturbed for well pad only, less access road (acres): 10.834 acres
- 23) Describe centralizer placement for each casing string:

No centralizers will be used with conductor casing.
Freshwater - centralized every 3 joints to surface.
Coal - Bow Spring on every joint in coal case of the coal - Bow Spring on every joint in the coal - Bow Spring on first 2 joints then every third joint to 100' from surface.
Intermediate - Bow Spring on first 2 joints then every third joint to 100' from surface.
Freduction - Run 1 spiral centralizer every 5 joints from the top of the curve to surface. Run 1 spiral centralizer every 3 joints from the 1st 5.5' long joint to the top of the curve.

24) Describe all cement additives associated with each cement type:

Conductor -N/A, Casing to be drilled in w/ Dual Rotary Rig.
Fresh Water - 15.6 ppg PNE-1 + 3% broc CaCl, 40% Excess Yield = 1.20, CTS
Coal - Lead: 15.4 ppg PNE-1 + 2.5% broc CaCl, 40% Excess 7 Tail: 15.9 ppg PNE-1 + 2.5% broc CaCl zero% Excess. CTS
Intermediate - Lead: 15.4 ppg PNE-1 + 2.5% broc CaCl, 40% Excess 7 Tail: 15.9 ppg, PNE-1 + 2.5% broc CaCl zero% Excess. CTS
Production - Lead: 14.5 ppg POZ:PNE-1 + 0.3% broc R3 + 1% broc EC1 + 0.75 gal/sk FP13L + 0.3% broc MPA170, Tail: 14.8 ppg PNE-1 + 0.35% broc R3 + 0.75 gal/sk FP13L + 50% broc ASCA1 + 0.5% broc MPA17020% ExcessLead Yield=1.19Tail Yield=1.94, CTS

25) Proposed borehole conditioning procedures:

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Conductor - Ensure the hole is clean at TD. Fresh Water - Once cashing is a testifing depth, circulate a minimum of one hole volume with Fresh Water prior to pumping cement.

Coal - Once casing is at setting depth, Circulate and condition at TD. Circulate a minimum of one hole volume prior to pumping cement.

Intermediate - Once cashing is at setting depth, Circulate and condition mud at TD. Circulate a minimum of one hole volume prior to pumping cement.

Production - Once on bottom/TD Winch cashing, circulate at max allowable pump rate for at least 2x bottoms up, or until returns and pump pressures indicate the hole is clean. Circulate a minimum of one hole volume prior to pumping cement.

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WV Department of Environmental Protection

*Note: Attach additional sheets as needed.



1209 S-7H Marcellus Shale Horizontal Harrison County, WV

Ground Eleva											
0.0.00000000000000000000000000000000000						1209 5	5-7H SH	L		237394.2N 1732702	2.59E
	ation		1007			1209	S-7H LI	9	2	36541.35N 173118	3.32E
Azm		159.992°				1209 S-7H BHL				227491.7N 1734478	3.59E
WELLBORE DIAG	GRAM	HOLE	CASING	GEOLOGY	TOP	TOP BASE	MUD	CEMENT	CENTRALIZERS	CONDITIONING	COMMENTS
		30"	30" 157.5# LS	Conductor	0	100	AIR	N/A, Casing to be drilled in w/ Dual Rotary Rig	N/A	Ensure the hole is clean at TD.	Conductor casing = 0.5" w thickness
			0.00	Fresh Water	0	135		15.6 ppg PNE-1 + 3% bwoc CaCl 40% Excess Yield=1.20 / CTS		Once casing is at setting depth, circulate a minimum	Surface casing = 0.438" w
	x	24"	20" 94# J-55	Kittaning Coal	660	665	AIR		Centralized every 3 joints to surface	of one hole volume with	thickness
x	x		1	Fresh Water	0	750				Fresh Water prior to pumping cement.	Burst=2110 psi
		17.5"				11.55		Lead: 15.4 ppg PNE-1 + 2.5% bwoc CaCl	Bow Spring on every	Once casing is at setting depth, Circulate and	
			13-3/8" 68# J-55 BTC	Little/Big Lime	1126 / 1167	1151 / 1243	AIR / KCL Salt Polymer	40% Excess / Tail: 15.9	EGF for isolating	condition at TD. Circulate a minimum of one hole volume prior to pumping	Intermediate casing = 0,480 wall thickness Burst=3450 psi
X	X	17.0		Injun / Gantz (Storage)	1243 / 1535	1349 / 1585		ppg PNE-1 + 2.5% bwoc CaCl			
				Intermediate 1	0	1735		zero% Excess. CTS	storage zone*	cement.	
x	X		7	Fifty / Thirty Foot	1650 / 1730	1697 / 1742		Lead: 15.4 ppg PNE-1 +		Once casing is at setting	
130			Section Co.	Gordon Stray / Gordon	1785 / 1850	1850 / 1940	AIR / KCL	2.5% bwoc CaCl	Bow Spring on first 2	depth, Circulate and	Intermediate casing = 0.3
		12.25"	9-5/8" 40# J-55 BTC	5th Sand	2035	2070	Salt	40% Excess / Tail: 15.9 ppg PNE-1 + 2.5% bwoc	joints then every third joint to 100' form	condition mud at TD. Circulate a minimum of one	wall thickness
×	×		0.000.0	Bayard Sand	2125	2160	Polymer	CaCl	surface	hole valume prior to	Burst=3950 psi
1810				Intermediate 2	0	2500		zero% Excess. CTS		pumping cement.	
X >	×	8.5" Vertical	Vertical	Speechley	2745	2763	9.0ppg SOBM	<u>Lead</u> : 14.5 ppg POZ:PNE-1 + 0.3%	Run 1 spiral centralizer every 5 joints from the top of the curve to surface.		
				Balltown	2965	3005					
				Benson	4050	4083					
				West Falls	4620	5865		bwoc R3 + 1% bwoc			
			1	Rhinestreet	5865	6140		EC1 + 0.75 gal/sk FP13L + 0.3% bwoc		Once on bottom/TD with casing, circulate at max	
E I		6	5-1/2" 23#	Cashaqua	6140	6341		MPA170		allowable pump rate for at	Production casing = 0.41
x 5	X SE	£		Middlesex	6341	6421	11.5ppg-	<u>Tail</u> : 14.8 ppg PNE-1 + 0.35% bwoc R3 + 0.75		least 2x bottoms up, or until returns and pump	wall thickness Burst=16240 psi
ing De	T	75" Curve TAECEIVED	P-110 HP	West River	6421	6514	12.5ppg	gal/sk FP13L + 50%	200 1 TO 100 100 TO 100 100 100 100 100 100 100 100 100 10	pressures indicate the hole	Note:Actual centralizer
ota	2 4	\$ E	CDC HTQ	Burkett	6514	6540	SOBM	bwoc ASCA1 + 0.5% bwoc MPA170	Run 1 spiral centralizer every 3 joints from the	is clean. Circulate a minimum of one hole	schedules may be change due to hole conditions
WV Department of Environmental Protection	2	96		Tully Limestone	6540	6644		20% Excess	1st 5.5" long joint to the	The state of the s	
	2019	0		Hamilton	6644	6863		Lead Yield=1.19 Tail Yield=1.94	top of the curve.	cement.	
		*		Marcellus	6863	6914	11 5ppg-	CTS			(
		8.5" Lateral	eral	TMD / TVD (Production)	17267	6900	11.5ppg- 12.5ppg SOBM				
×	×			Onondaga	6914		CODIN				
		X	X	X	X	1000	X	Χ	X	X	*
	LP @ 69	00' TVD / 7636' MD			5" Hole - Cemente 5-1/2" 23# P-110 H				+/-963	1' ft Lateral	TD @ +/-6900' TVD +/-17267' MD

INFORMATION SUPPLIED UNDER WEST VIRGINIA CODE Chapter 22, Article 6A, Section 5(a)(5) IN LIEU OF FILING LEASE(S) AND OTHER CONTINUING CONTRACT(S)

Under the oath required to make the verification on page 1 of this Notice and Application, I depose and say that I am the person who signed the Notice and Application for the Applicant, and that –

- (1) the tract of land is the same tract described in this Application, partly or wholly depicted in the accompanying plat, and described in the Construction and Reclamation Plan;
- (2) the parties and recordation data (if recorded) for lease(s) or other continuing contract(s) by which the Applicant claims the right to extract, produce or market the oil or gas are as follows:

Lease Name or				
Number	Grantor, Lessor, etc.	Grantee, Lessee, etc.	Royalty	Book/Page

"See Attached Sheets"

Acknowledgement of Possible Permitting/Approval In Addition to the Office of Oil and Gas

The permit applicant for the proposed well work addressed in this application hereby acknowledges the possibility of the need for permits and/or approvals from local, state, or federal entities in addition to the DEP, Office of Oil and Gas, including but not limited to the following:

- WV Division of Water and Waste Management
- WV Division of Natural Resources WV Division of Highways
- U.S. Army Corps of Engineers
- U.S. Fish and Wildlife Service
- County Floodplain Coordinator

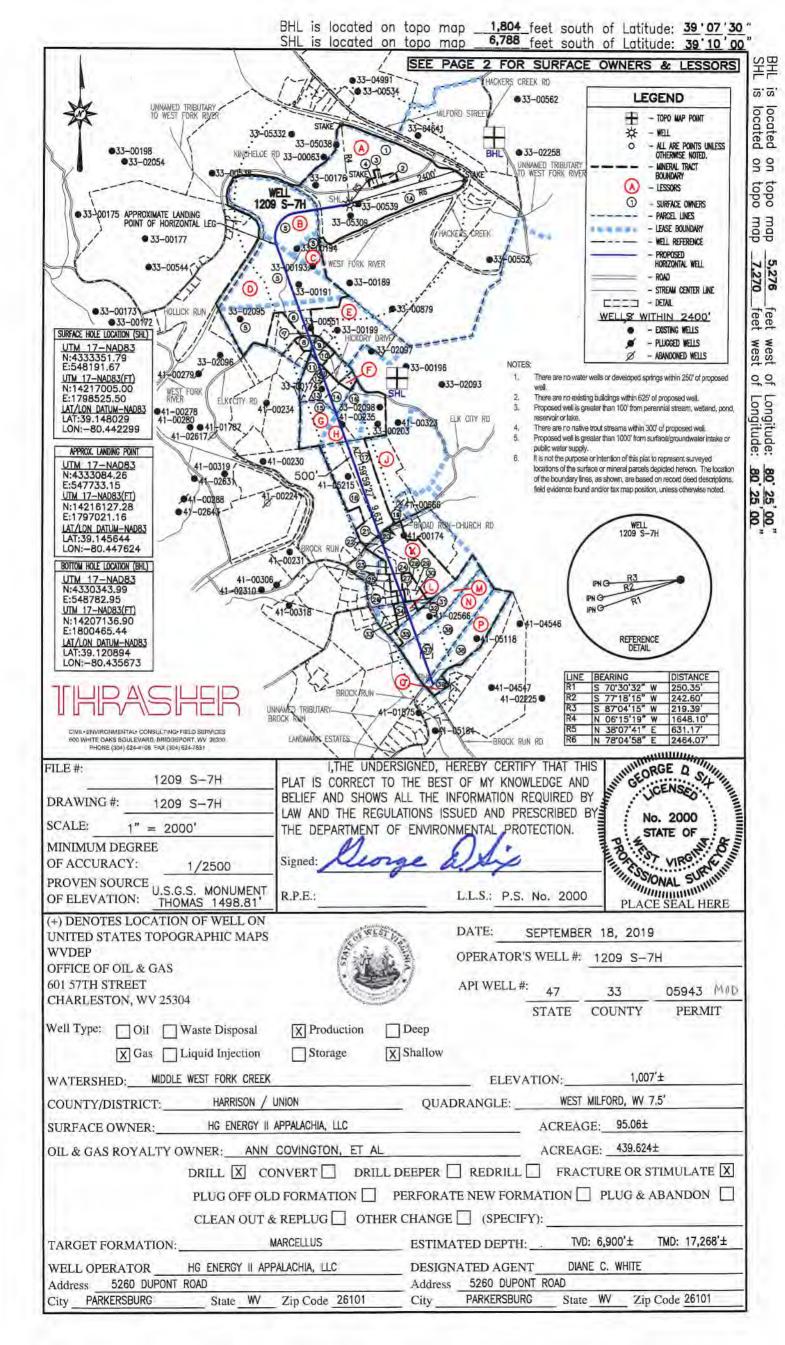
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SEP 2 4 2019

WV Department of Environmental Protection

The applicant further acknowledges that any Office of Oil and Gas permit in no way overrides, replaces, or nullifies the need for other permits/approvals that may be necessary and further affirms that all needed permits/approvals should be acquired from the appropriate authority before the affected activity is initiated.

Well Operator:	HG Energy II Appalachia, LLC				
By:	Diane White	Diane White			
Its:	Agent				



1209 S-7H PAGE 2 OF 2

	SURFACE OWNER	DIST-TM/PAR
1	DANNY LEE & ALICIA A. STICKEL	P/0 20-444/11.2
1A	HG ENERGY II APPALACHIA, LLC	P/0 20-444/11.2
2	HG ENERGY II APPALACHIA, LLC	20-444/11.3
3	AARON C. & CHRISTINA P. MEDINA	20-444/11
4	HG ENERGY II APPALACHIA, LLC	20-444/11.1
5	ROCK GARTON	12-444/26
6	NORMAN W. & MARGARET A. LOHR	12-444/27.2
7	NORMAN W. & MARGARET A. LOHR	12-444/27.1
8	TRAVIS W. & LOGAN M. SWIGER	12-444/28.1
9	BRYAN D. & KIMBERLY J. SMITH	12-444/37.9
10	BRYAN D. & KIMBERLY J. SMITH	12-444/37.8
11	DAKOTA M. DAVIS	12-444/37.1
12	KAREN L. CRISLIP	12-444/37.2
13	KEVIN MARION	12-444/37.3
14	DONALD EARL HONAKER	12-444/37.4
15	ROBERT SCOTT STARKEY	4-7B/59
16	ROBERT SCOTT STARKEY	4-7B/60
17	LEE ARCH & SUSAN B. STALNAKER	4-7B/5.1
18	MARK D. & MARY ELIZABETH REASER	4-7B/5.7
19	HERBERT & VELMA SIAS	4-7B/29.17
20	HERBERT & VELMA SIAS	4-7B/28.1
21	HERBERT & VELMA SIAS	4-7B/28.2
22	DANIEL R. & SARITA M. PRINCE	4-7B/28
23	CEMETERY BROAD RUN	4-7B/25
24	CEMETERY BROAD RUN	4-7B/26
25	ARQUILLA JANE RAINES	4-7B/29.13
26	CARMEN V. BUTCHER	4-7C/74
27	STEPHANIE KIRKPATRICK	4-7C/75
28	VIRGIL B. & MELODY K. WHITE	4-7B/29.10
29	CHARLES E. BYRNE	4-7C/86
30	ALLEN C. & LILLY M. JACKSON	4-7C/73
31	FRANK L. & MARY ELLEN BRAGG	4-7C/68
32	FRANK L. & MARY ELLEN BRAGG	4-70/64
33	FRANK L. & MARY ELLEN BRAGG	4-7C/59
34	RALPH L. COLE	4-7C/62
35	ROBERT G. & ALISA G. GUM	4-7C/30.2
36	ROBERT G. & ALISA G. GUM	4-7C/31
37	ROBERT G. & ALISA G. GUM	4-7C/31.1
38	KEVIN B. & SHERI K. JERDEN	4-8C/1.1
39	*FRANCES JANE HUSTEAD & JUNE STALNAKER PENELO	OPE 4-8C/1

SURFACE HOLE LOCATION (SHL) UTM 17-NAD83 N:4333351.79 E:548191.67 UTM 17-NAD83(FT) N:14217005.00 E:1798525.50 LAT/LON DATUM-NAD83 LAT:39.148029 LON:-80.442299

APPROX. LANDING POINT UTM 17-NAD83 N:4333084.26 E:547733.15 UTM 17-NAD83(FT) N:14216127.28 E:1797021.16 LAT/LON DATUM-NAD83 LAT:39.145644 LON:-80.447624

BOTTOM HOLE LOCATION (BHL) DOTION HOLE LOCATION (BHL)

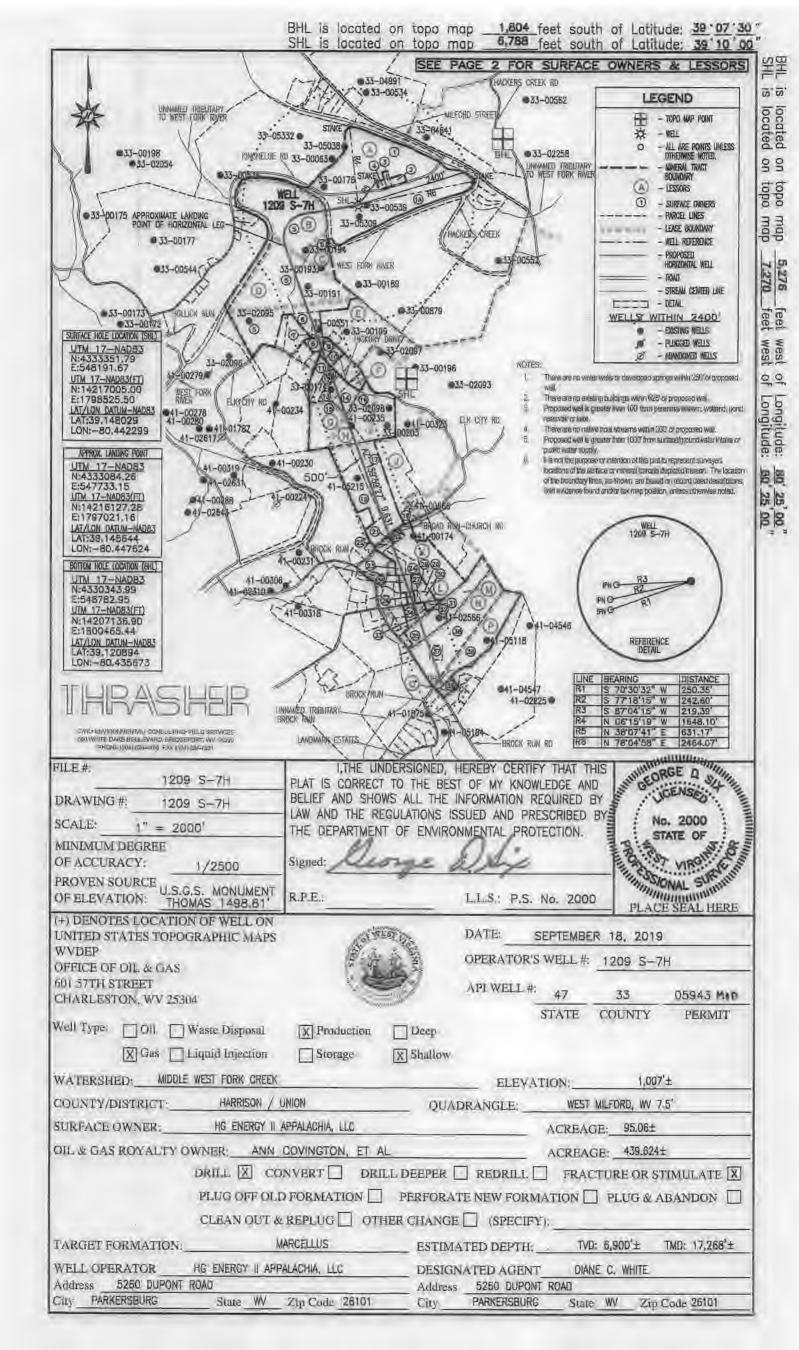
UTM 17—NAD83
N:4330343.99
E:548782.95
UTM 17—NAD83(FT)
N:14207136.90
E:1800465.44
LAT/LON DATUM—NAD83
LAT:39.120894
LON:—80.435673

	LESSOR	LEASE NO.	DIST-TM/PAR	
A	J. B. GUSMAN ET AL	FK020606	20-444/11.2	
В	J. A. HARDWAY ET AL	FK004424	12-444/26	
C	J. Q. MUSSER	FK061781	P. Carrier	
D	W. W. BRANNON ET UX	FK032708		
E	J. K. MUSSER ET UX	FK002243	12-444/26	
	and the second s	10.000	12-444/27.2	
			12-444/27.1	
	A The State of the		12-444/28.1	
F	KENNETH R. SIMONS ET AL	FK064201	12-444/37.1	
	O.B. FRASHUER ET UX	FK064206	12-444/37.2	
	the second second second	1000000	12-444/37.9	
			12-444/37.8	
			12-444/37.3	
			12-444/37.4	
G	ETHEL B. PAINE ET AL	FK064249	4-7B/59	
Н	J. Q. MUSSER ET UX	FK002249	4-7B/59	
	The state of the s	1000000	4-7B/60	
J	S. G. HALL ET UX	FK014031	4-7B/5.1	
	A ASSESSED COUNTY	The state of the s	4-7B/5.7	
K	ALDA V. HITT	FK077958	4-7B/28.1	
	1200	111111111111111111111111111111111111111	4-7B/28.2	
			4-7B/28	
			4-7B/25	
			4-7B/26	
			4-7B/29.13	
			4-7C/74	
1	C. A. BAILY	CNX26831600	4-7C/64	
	7. 7. 6.44	1 2 2 2 2 2 2 3 2 3	4-7C/59	
			4-7C/62	
М	J. H. BAILEY ET AL	Q102176000	4-7C/30.2	
N	ALISA G. GUM	Q102118000	4-7C/31	
	LORI LEE CALDWELL	Q102123000	4-7C/31.1	
	GERALD W. RAMSBURG	Q098757000	1000	
	KARRIE DIANE SIMS	Q102112000		
	DENISE C. CARSON	Q102117000		
	KAREN K. HOBBS	0102122000		
	KATRINA L. WEST	Q102121000		
	DAVID C. GARVIN	Q102119000		
Р	KEVIN B. JERDEN ET UX	Q102115000	4-8C/1.1	
*Q	HUSTEAD FRANCES JANE	Q100607000	4-8C/1	
	PENELOPE JUNE STALNAKER		A 074	

* - DENOTES PARCEL WITHIN 30 FEET OF PLANNED WELL BORE



SEPTEMBER 18, 2019



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1 DANNY LEE & ALICIA A. STICKEL P/O 20-444/11.2			
1A HG ENERGY I APPALACHIA, LLC		SURFACE OWNER	DIST-TM/PAR
2 HG ENERGY II APPALACHIA, LLC 3 AARON C. & CHRISTINA P. MEDINA 4 HG ENERGY II APPALACHIA, LLC 5 ROCK GARTON 5 ROCK GARTON 6 NORMAN W. & MARGARET A. LOHR 7 NORMAN W. & MARGARET A. LOHR 8 TRAVIS W. & LOGAN M. SWIGER 9 BRYAN D. & KIMBERLY J. SMITH 12-444/27.1 10 BRYAN D. & KIMBERLY J. SMITH 12-444/37.8 11 DAKOTA M. DAVIS 11 DAKOTA M. DAVIS 12-444/37.1 12 KAREN L. CRISLIP 13 KEVIN MARION 14 DONALD EARL HONAKER 15 ROBERT SCOTT STARKEY 16 ROBERT SCOTT STARKEY 17 LEE ARCH & SUSAN B. STALNAKER 18 MARK D. & MARY ELIZABETH REASER 19 HERBERT & VELMA SIAS 21 HERBERT & VELMA SIAS 22 DANIEL R. & SARITA M. PRINCE 24 CEMETERY BROAD RUN 25 CARMEN V. BUTCHER 26 CARMEN V. BUTCHER 27 STEPHANIE KIRKPATRICK 28 CARMEN V. BUTCHER 30 ALLEN C. & LILLY M. JACKSON 31 FRANK L. & MARY ELLEN BRAGG 32 FRANK L. & MARY ELLEN BRAGG 34 FRANK L. & MARY ELLEN BRAGG 35 ROBERT G. & LILLY BRAGG 4-7C/53 36 ROBERT G. & LILLY BRAGG 4-7C/59 37 ROBERT G. & ALISA G. GUM 4-7C/51 38 KEVIN B. & SHERI K. JERDEN 4-8C/1.1 38 KEVIN B. & SHERI K. JERDEN 4-8C/1.1 38 KEVIN B. & SHERI K. JERDEN 4-7C/51 31 FRANK L. & MARY ELLEN BRAGG 4-7C/59 34 RALPH L. COLE 4-7C/62 35 ROBERT G. & ALISA G. GUM 4-7C/31.1 38 KEVIN B. & SHERI K. JERDEN	1	DANNY LEE & ALICIA A. STICKEL	P/O 20-444/11.2
3 AARON C. & CHRISTINA P. MEDINA 20-444/11 4 HG ENERGY II APPALACHIA, LLC 20-444/11.1 5 ROCK GARTON 12-444/26 6 NORMAN W. & MARGARET A. LOHR 12-444/27.2 7 NORMAN W. & MARGARET A. LOHR 12-444/27.1 8 TRAVIS W. & LOGAN M. SWIGER 12-444/27.1 9 BRYAN D. & KIMBERLY J. SMITH 12-444/37.9 10 BRYAN D. & KIMBERLY J. SMITH 12-444/37.8 11 DAKOTA M. DAVIS 12-444/37.3 12 KAREN L. CRISLIP 12-444/37.2 13 KEVIN MARION 12-444/37.3 14 DONALD EARL HONAKER 12-444/37.4 15 ROBERT SCOTT STARKEY 4-7B/59 16 ROBERT SCOTT STARKEY 4-7B/60 17 LEE ARCH & SUSAN B. STALNAKER 4-7B/5.1 18 MARK D. & MARY ELIZABETH REASER 4-7B/5.7 19 HERBERT & VELMA SIAS 4-7B/28.1 21 HERBERT & VELMA SIAS 4-7B/28.1 22 DANIEL R. & SARITA M. PRINCE 4-7B/28 23 CEMETERY BROAD RUN 4-7B/26 25 ARQUILLA JANE RAINES 4-7B/29.13 26 CARMEN V. BUTCHER 4-7C/74 27 STEPHANIE KIRKPATRICK 4-7C/75 28 VIRGIL B. & MELODY K. WHITE 4-7C/76 29 CHARLES E. BYRNE 4-7C/68 30 ALLEN C. & LILLY M. JACKSON 4-7C/73 31 FRANK L. & MARY ELLEN BRAGG 4-7C/68 32 FRANK L. & MARY ELLEN BRAGG 4-7C/69 33 RALPH L. COLE 4-7C/59 34 RALPH L. COLE 4-7C/51 35 KEVIN B. & SHERI K. JERDEN 4-8C/1.1	1A	HG ENERGY II APPALACHIA, LLC	P/O 20-444/11.2
3 AARON C. & CHRISTINA P. MEDINA 20-444/11 4 HG ENERGY II APPALACHIA, LLC 20-444/11.1 5 ROCK GARTON 12-444/26 6 NORMAN W. & MARGARET A. LOHR 12-444/27.2 7 NORMAN W. & MARGARET A. LOHR 12-444/27.1 8 TRAVIS W. & LOGAN M. SWIGER 12-444/28.1 9 BRYAN D. & KIMBERLY J. SMITH 12-444/37.9 10 BRYAN D. & KIMBERLY J. SMITH 12-444/37.8 11 DAKOTA M. DAVIS 12-444/37.1 12 KAREN L. CRISIJP 12-444/37.2 13 KEVIN MARION 12-444/37.3 14 DONALD EARL HONAKER 12-444/37.3 15 ROBERT SCOTT STARKEY 4-7B/59 16 ROBERT SCOTT STARKEY 4-7B/60 17 LEE ARCH & SUSAN B. STALNAKER 4-7B/5.1 18 MARK D. & MARY ELIZABETH REASER 4-7B/5.7 19 HERBERT & VELMA SIAS 4-7B/28.1 21 HERBERT & VELMA SIAS 4-7B/28.1 22 DANIEL R. & SARITA M. PRINCE 4-7B/28 23 CEMETERY BROAD RUN 4-7B/26 25 ARQUILLA JANE RAINES 4-7B/29.13 26 CARMEN V. BUTCHER 4-7C/74 27 STEPHANIE KIRKPATRICK 4-7C/75 29 CHARLES E. BYRNE 4-7C/68 30 ALLEN C. & LILLY M. JACKSON 4-7C/73 31 FRANK L. & MARY ELLEN BRAGG 4-7C/68 32 FRANK L. & MARY ELLEN BRAGG 4-7C/59 34 RALPH L. COLE 4-7C/59 35 ROBERT G. & ALISA G. GUM 4-7C/31.1 38 KEVIN B. & SHERI K. JERDEN 4-8C/1.1	2	HG ENERGY II APPALACHIA, LLC	20-444/11.3
5 ROCK GARTON 12-444/26 6 NORMAN W. & MARGARET A. LOHR 12-444/27.2 7 NORMAN W. & MARGARET A. LOHR 12-444/27.1 8 TRAVIS W. & LOGAN M. SWIGER 12-444/28.1 9 BRYAN D. & KIMBERLY J. SMITH 12-444/37.9 10 BRYAN D. & KIMBERLY J. SMITH 12-444/37.8 11 DAKOTA M. DAVIS 12-444/37.1 12 KAREN L. CRISLIP 12-444/37.2 13 KEVIN MARION 12-444/37.3 14 DONALD EARL HONAKER 12-444/37.4 15 ROBERT SCOTT STARKEY 4-78/59 16 ROBERT SCOTT STARKEY 4-78/59 17 LEE ARCH & SUSAN B. STALNAKER 4-78/5.1 18 MARK D. & MARY ELIZABETH REASER 4-78/5.7 19 HERBERT & VELMA SIAS 4-78/29.17 20 HERBERT & VELMA SIAS 4-78/28.1 21 HERBERT & VELMA SIAS 4-78/28.2 22 DANIEL R. & SARITA M. PRINCE 4-78/28.2 23 CEMETIERY BROAD RUN 4-78/28 24	3	AARON C. & CHRISTINA P. MEDINA	
6 NORMAN W. & MARGARET A. LOHR 12-444/27.2 7 NORMAN W. & MARGARET A. LOHR 12-444/27.1 8 TRAVIS W. & LOGAN M. SWIGER 12-444/28.1 9 BRYAN D. & KIMBERLY J. SMITH 12-444/37.9 10 BRYAN D. & KIMBERLY J. SMITH 12-444/37.8 11 DAKOTA M. DAVIS 12-444/37.1 12 KAREN L. CRISLIP 12-444/37.2 13 KEVIN MARION 12-444/37.3 14 DONALD EARL HONAKER 12-444/37.4 15 ROBERT SCOTT STARKEY 4-7B/59 16 ROBERT SCOTT STARKEY 4-7B/50 17 LEE ARCH & SUSAN B. STALNAKER 4-7B/5.1 18 MARK D. & MARY ELIZABETH REASER 4-7B/5.7 19 HERBERT & VELMA SIAS 4-7B/28.17 20 HERBERT & VELMA SIAS 4-7B/28.1 21 HERBERT & VELMA SIAS 4-7B/28.2 22 DANIEL R. & SARITA M. PRINCE 4-7B/28 23 CEMETERY BROAD RUN 4-7B/26 25 ARQUILLA JANE RAINES 4-7B/29.13 26 CARMEN V. BUTCHER 4-7C/74 27 STEPHANIE KIRKPATRICK 4-7C/75 28 VIRGIL B. & MELODY K. WHITE 4-7B/29.10 29 CHARLES E. BYRNE 4-7C/68 30 ALLEN C. & LILLY M. JACKSON 4-7C/63 31 FRANK L. & MARY ELLEN BRAGG 4-7C/68 32 FRANK L. & MARY ELLEN BRAGG 4-7C/68 33 FRANK L. & MARY ELLEN BRAGG 4-7C/62 35 ROBERT G. & ALISA G. GUM 4-7C/31.1 38 KEVIN B. & SHERI K. JERDEN 4-8C/1.1		HG ENERGY II APPALACHIA, LLC	
7 NORMAN W. & MARGARET A. LOHR 12-444/27.1 8 TRAVIS W. & LOGAN M. SWIGER 12-444/28.1 9 BRYAN D. & KIMBERLY J. SMITH 12-444/37.9 10 BRYAN D. & KIMBERLY J. SMITH 12-444/37.8 11 DAKOTA M. DAVIS 12-444/37.1 12 KAREN L. CRISLIP 12-444/37.2 13 KEVIN MARION 12-444/37.3 14 DONALD EARL HONAKER 12-444/37.4 15 ROBERT SCOTTI STARKEY 4-78/59 16 ROBERT SCOTTI STARKEY 4-78/60 17 LEE ARCH & SUSAN B. STALNAKER 4-78/5.7 18 MARK D. & MARY ELIZABETH REASER 4-78/5.7 19 HERBERT & VELMA SIAS 4-78/29.17 20 HERBERT & VELMA SIAS 4-78/28.1 21 HERBERT & VELMA SIAS 4-78/28.2 22 DANIEL R. & SARITA M. PRINCE 4-78/28 23 CEMETERY BROAD RUN 4-78/28 24 CEMETERY BROAD RUN 4-78/29 25 ARQUILLA JANE RAINES 4-78/29.13 26 <td>5</td> <td>ROCK GARTON</td> <td>12-444/26</td>	5	ROCK GARTON	12-444/26
8 TRAVIS W. & LOGAN M. SWIGER 12-444/28.1 9 BRYAN D. & KIMBERLY J. SMITH 12-444/37.9 10 BRYAN D. & KIMBERLY J. SMITH 12-444/37.8 11 DAKOTA M. DAVIS 12-444/37.1 12 KAREN L. CRISLIP 12-444/37.2 13 KEVIN MARION 12-444/37.3 14 DONALD EARL HONAKER 12-444/37.4 15 ROBERT SCOTT STARKEY 4-78/59 16 ROBERT SCOTT STARKEY 4-78/50 17 LEE ARCH & SUSAN B. STALNAKER 4-78/50 18 MARK D. & MARY ELIZABETH REASER 4-78/5.7 19 HERBERT & VELMA SIAS 4-78/28.1 20 HERBERT & VELMA SIAS 4-78/28.1 21 HERBERT & VELMA SIAS 4-78/28.2 22 DANIEL R. & SARITA M. PRINCE 4-78/28.2 23 CEMETERY BROAD RUN 4-78/28 24 CEMETERY BROAD RUN 4-78/26 25 ARQUILLA JANE RAINES 4-76/31 26 CARMEN V. BUTCHER 4-76/75 27 STEP			12-444/27.2
9 BRYAN D. & KIMBERLY J. SMITH 12-444/37.9 10 BRYAN D. & KIMBERLY J. SMITH 12-444/37.8 11 DAKOTA M. DAVIS 12-444/37.1 12 KAREN L. CRISLIP 12-444/37.2 13 KEVIN MARION 12-444/37.3 14 DONALD EARL HONAKER 12-444/37.4 15 ROBERT SCOTT STARKEY 4-78/59 16 ROBERT SCOTT STARKEY 4-78/60 17 LEE ARCH & SUSAN B. STALNAKER 4-78/5.1 18 MARK D. & MARY ELIZABETH REASER 4-78/5.7 19 HERBERT & VELMA SIAS 4-78/29.17 20 HERBERT & VELMA SIAS 4-78/28.1 21 HERBERT & VELMA SIAS 4-78/28.2 22 DANIEL R. & SARITA M. PRINCE 4-78/28 23 CEMETERY BROAD RUN 4-78/25 24 CEMETERY BROAD RUN 4-78/26 25 ARQUILLA JANE RAINES 4-76/74 26 CARMEN V. BUTCHER 4-7C/75 27 STEPHANIE KIRKPATRICK 4-7C/75 28 VIRGIL B. & MELODY K. WHITE 4-76/86 30 ALLEN C. & LILLY M. JACKSON 4-7C/63 31 FRANK L. & MARY ELLEN BRAGG 4-7C/68 32 FRANK L. & MARY ELLEN BRAGG 4-7C/68 33 FRANK L. & MARY ELLEN BRAGG 4-7C/62 34 RALPH L. COLE 4-7C/59 35 ROBERT G. & ALISA G. GUM 4-7C/31 37 ROBERT G. & ALISA G. GUM 4-7C/31 38 KEVIN B. & SHERI K. JERDEN 4-8C/1.1	7	NORMAN W. & MARGARET A. LOHR	12-444/27.1
10 BRYAN D. & KIMBERLY J. SMITH			
11 DAKOTA M. DAVIS 12-444/37.1 12 KAREN L. CRISLIP 12-444/37.2 13 KEVIN MARION 12-444/37.3 14 DONALD EARL HONAKER 12-444/37.4 15 ROBERT SCOTTI STARKEY 4-7B/59 16 ROBERT SCOTTI STARKEY 4-7B/59 17 LEE ARCH & SUSAN B. STALNAKER 4-7B/5.1 18 MARK D. & MARY ELIZABETH REASER 4-7B/5.7 19 HERBERT & VELMA SIAS 4-7B/29.17 20 HERBERT & VELMA SIAS 4-7B/28.1 21 HERBERT & VELMA SIAS 4-7B/28.2 22 DANIEL R. & SARITA M. PRINCE 4-7B/28.2 23 CEMETERY BROAD RUN 4-7B/25 24 CEMETERY BROAD RUN 4-7B/26 25 ARQUILLA JANEI RAINES 4-7B/29.13 26 CARMEN V. BUTCHER 4-7C/75 28 VIRGIL B. & MELODY K. WHITE 4-7B/29.10 29 CHARLES E. BYRNE 4-7C/68 30 ALLEN C. & LILLY M. JACKSON 4-7C/68 31 FRANK L. & MARY ELLEN BRAGG 4-7C/64 33 FRANK L. & MARY ELLEN	9		
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14 DONALD EARL HONAKER 12-444/37.4 15 ROBERT SCOTT STARKEY 4-7B/59 16 ROBERT SCOTT STARKEY 4-7B/50 17 LEE ARCH & SUSAN B. STALNAKER 4-7B/5.1 18 MARK D. & MARY ELIZABETH REASER 4-7B/5.7 19 HERBERT & VELMA SIAS 4-7B/29.17 20 HERBERT & VELMA SIAS 4-7B/29.17 21 HERBERT & VELMA SIAS 4-7B/28.2 22 DANIEL R. & SARITA M. PRINCE 4-7B/28 23 CEMETERY BROAD RUN 4-7B/26 24 CEMETERY BROAD RUN 4-7B/26 25 ARQUILLA JANE RAINES 4-7B/29.13 26 CARMEN V. BUTCHER 4-7C/74 27 STEPHANIE KIRKPATRICK 4-7C/75 28 VIRGIL B. & MELODY K. WHITE 4-7B/29.10 29 CHARLES E. BYRNE 4-7C/86 30 ALLEN C. & LILLY M. JACKSON 4-7C/73 31 FRANK L. & MARY ELLEN BRAGG 4-7C/64 33 FRANK L. & MARY ELLEN BRAGG 4-7C/62 34 RALPH L. COLE 4-7C/62 35 ROBERT G. & ALISA G	13		12-444/37.3
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17 LEE ARCH & SUSAN B. STALNAKER 4-78/5.1 18 MARK D. & MARY ELIZABETH REASER 4-78/5.7 19 HERBERT & VELMA SIAS 4-78/29.17 20 HERBERT & VELMA SIAS 4-78/28.1 21 HERBERT & VELMA SIAS 4-78/28.2 22 DANIEL R. & SARITA M. PRINCE 4-78/28 23 CEMETERY BROAD RUN 4-78/25 24 CEMETERY BROAD RUN 4-78/26 25 ARQUILLA JANE RAINES 4-78/29.13 26 CARMEN V. BUTCHER 4-76/79.29.13 26 CARMEN V. BUTCHER 4-70/74 27 STEPHANIE KIRKPATRICK 4-70/75 28 VIRGIL B. & MELODY K. WHITE 4-78/29.10 29 CHARLES E. BYRNE 4-70/86 30 ALLEN C. & LILLY M. JACKSON 4-70/86 30 ALLEN C. & MARY ELLEN BRAGG 4-70/68 32 FRANK L. & MARY ELLEN BRAGG 4-70/64 33 FRANK L. & MARY ELLEN BRAGG 4-70/59 34 RALPH L. COLE 4-70/30.2 35 <td< td=""><td>15</td><td></td><td>4-7B/59</td></td<>	15		4-7B/59
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19 HERBERT & VELMA SIAS 4-78/29.17 20 HERBERT & VELMA SIAS 4-78/28.1 21 HERBERT & VELMA SIAS 4-78/28.2 22 DANIEL R. & SARITA M. PRINCE 4-78/28 23 CEMETERY BROAD RUN 4-78/25 24 CEMETERY BROAD RUN 4-78/26 25 ARQUILLA JANE RAINES 4-78/29.13 26 CARMEN V. BUTCHER 4-7C/74 27 STEPHANIE KIRKPATRICK 4-7C/75 28 VIRGIL B. & MELODY K. WHITE 4-78/29.10 29 CHARLES E. BYRNE 4-7C/86 30 ALLEN C. & LILLY M. JACKSON 4-7C/73 31 FRANK L. & MARY ELLEN BRAGG 4-7C/68 32 FRANK L. & MARY ELLEN BRAGG 4-7C/64 33 FRANK L. & MARY ELLEN BRAGG 4-7C/59 34 RALPH L. COLE 4-7C/30.2 36 ROBERT G. & ALISA G. GUM 4-7C/31 37 ROBERT G. & ALISA G. GUM 4-7C/31 38 KEVIN B. & SHERI K. JERDEN 4-8C/1.1	17	LEE ARCH & SUSAN B. STALNAKER	4-7B/5.1
19 HERBERT & VELMA SIAS 4-78/29.17 20 HERBERT & VELMA SIAS 4-78/28.1 21 HERBERT & VELMA SIAS 4-78/28.2 22 DANIEL R. & SARITA M. PRINCE 4-78/28 23 CEMETERY BROAD RUN 4-78/25 24 CEMETERY BROAD RUN 4-78/26 25 ARQUILA JANE RAINES 4-78/29.13 26 CARMEN V. BUTCHER 4-7C/74 27 STEPHANIE KIRKPATRICK 4-7C/75 28 VIRGIL B. & MELODY K. WHITE 4-78/29.10 29 CHARLES E. BYRNE 4-7C/86 30 ALLEN C. & LILLY M. JACKSON 4-7C/73 31 FRANK L. & MARY ELLEN BRAGG 4-7C/68 32 FRANK L. & MARY ELLEN BRAGG 4-7C/64 33 FRANK L. & MARY ELLEN BRAGG 4-7C/59 34 RALPH L. COLE 4-7C/62 35 ROBERT G. & ALISA G. GUM 4-7C/31.2 36 ROBERT G. & ALISA G. GUM 4-7C/31.1 38 KEVIN B. & SHERI K. JERDEN 4-8C/1.1	18		4-7B/5.7
21 HERBERT & VELMA SIAS 4-78/28.2 22 DANIEL R. & SARITA M. PRINCE 4-78/28 23 CEMETERY BROAD RUN 4-78/25 24 CEMETERY BROAD RUN 4-78/26 25 ARQUILLA JANE RAINES 4-78/29.13 26 CARMEN V. BUTCHER 4-7C/74 27 STEPHANIE KIRKPATRICK 4-7C/75 28 VIRGIL B. & MELODY K. WHITE 4-78/29.10 29 CHARLES E. BYRNE 4-7C/86 30 ALLEN C. & LILLY M. JACKSON 4-7C/73 31 FRANK L. & MARY ELLEN BRAGG 4-7C/68 32 FRANK L. & MARY ELLEN BRAGG 4-7C/64 33 FRANK L. & MARY ELLEN BRAGG 4-7C/59 34 RALPH L. COLE 4-7C/62 35 ROBERT G. & ALISA G. GUM 4-7C/31 36 ROBERT G. & ALISA G. GUM 4-7C/31 37 ROBERT G. & ALISA G. GUM 4-7C/31.1 38 KEVIN B. & SHERI K. JERDEN 4-8C/1.1		HERBERT & VELMA SIAS	4-7B/29.17
22 DANIEL R. & SARITA M. PRINCE 4-78/28 23 CEMETERY BROAD RUN 4-78/25 24 CEMETERY BROAD RUN 4-78/26 25 ARQUILLA JANE RAINES 4-78/29.13 26 CARMEN V. BUTCHER 4-7C/74 27 STEPHANIE KIRKPATRICK 4-7C/75 28 VIRGIL B. & MELODY K. WHITE 4-7B/29.10 29 CHARLES E. BYRNE 4-7C/86 30 ALLEN C. & LILLY M. JACKSON 4-7C/73 31 FRANK L. & MARY ELLEN BRAGG 4-7C/68 32 FRANK L. & MARY ELLEN BRAGG 4-7C/64 33 FRANK L. & MARY ELLEN BRAGG 4-7C/59 34 RALPH L. COLE 4-7C/62 35 ROBERT G. & ALISA G. GUM 4-7C/31 37 ROBERT G. & ALISA G. GUM 4-7C/31 38 KEVIN B. & SHERI K. JERDEN 4-8C/1.1			4-7B/28.1
23 CEMETERY BROAD RUN 4-78/25 24 CEMETERY BROAD RUN 4-78/26 25 ARQUILLA JANE RAINES 4-78/29.13 26 CARMEN V. BUTCHER 4-7C/74 27 STEPHANIE KIRKPATRICK 4-7C/75 28 VIRGIL B. & MELODY K. WHITE 4-7B/29.10 29 CHARLES E. BYRNE 4-7C/86 30 ALLEN C. & LILLY M. JACKSON 4-7C/73 31 FRANK L. & MARY ELLEN BRAGG 4-7C/68 32 FRANK L. & MARY ELLEN BRAGG 4-7C/64 33 FRANK L. & MARY ELLEN BRAGG 4-7C/59 34 RALPH L. COLE 4-7C/62 35 ROBERT G. & ALISA G. GUM 4-7C/31 36 ROBERT G. & ALISA G. GUM 4-7C/31 37 ROBERT G. & ALISA G. GUM 4-7C/31.1 38 KEVIN B. & SHERI K. JERDEN 4-8C/1.1		HERBERT & VELMA SIAS	
23 CEMETERY BROAD RUN 4-78/25 24 CEMETERY BROAD RUN 4-78/26 25 ARQUILLA JANE RAINES 4-78/29.13 26 CARMEN V. BUTCHER 4-7C/74 27 STEPHANIE KIRKPATRICK 4-7C/75 28 VIRGIL B. & MELODY K. WHITE 4-7B/29.10 29 CHARLES E. BYRNE 4-7C/86 30 ALLEN C. & LILLY M. JACKSON 4-7C/73 31 FRANK L. & MARY ELLEN BRAGG 4-7C/68 32 FRANK L. & MARY ELLEN BRAGG 4-7C/64 33 FRANK L. & MARY ELLEN BRAGG 4-7C/59 34 RALPH L. COLE 4-7C/62 35 ROBERT G. & ALISA G. GUM 4-7C/31 36 ROBERT G. & ALISA G. GUM 4-7C/31 37 ROBERT G. & ALISA G. GUM 4-7C/31.1 38 KEVIN B. & SHERI K. JERDEN 4-8C/1.1			4-7B/28
25 ARQUILLA JANE RAINES 4-78/29.13 26 CARMEN V. BUTCHER 4-7C/74 27 STEPHANIE KIRKPATRICK 4-7C/75 28 VIRGIL B. & MELODY K. WHITE 4-7B/29.10 29 CHARLES E. BYRNE 4-7C/86 30 ALLEN C. & LILLY M. JACKSON 4-7C/73 31 FRANK L. & MARY ELLEN BRAGG 4-7C/68 32 FRANK L. & MARY ELLEN BRAGG 4-7C/64 33 FRANK L. & MARY ELLEN BRAGG 4-7C/59 34 RALPH L. COLE 4-7C/62 35 ROBERT G. & ALISA G. GUM 4-7C/30.2 36 ROBERT G. & ALISA G. GUM 4-7C/31.1 37 ROBERT G. & ALISA G. GUM 4-7C/31.1 38 KEVIN B. & SHERI K. JERDEN 4-8C/1.1			4-7B/25
26 CARMEN V. BUTCHER 4-7C/74 27 STEPHANIE KIRKPATRICK 4-7C/75 28 VIRGIL B. & MELODY K. WHITE 4-7B/29.10 29 CHARLES E. BYRNE 4-7C/86 30 ALLEN C. & LILLY M. JACKSON 4-7C/73 31 FRANK L. & MARY ELLEN BRAGG 4-7C/68 32 FRANK L. & MARY ELLEN BRAGG 4-7C/64 33 FRANK L. & MARY ELLEN BRAGG 4-7C/59 34 RALPH L. COLE 4-7C/62 35 ROBERT G. & ALISA G. GUM 4-7C/30.2 36 ROBERT G. & ALISA G. GUM 4-7C/31 37 ROBERT G. & ALISA G. GUM 4-7C/31.1 38 KEVIN B. & SHERI K. JERDEN 4-8C/1.1		The Property Charles - Control of the Control of th	
27 STEPHANIE KIRKPATRICK 4-7C/75 28 VIRGIL B. & MELODY K. WHITE 4-7B/29.10 29 CHARLES E. BYRNE 4-7C/86 30 ALLEN C. & LILLY M. JACKSON 4-7C/73 31 FRANK L. & MARY ELLEN BRAGG 4-7C/68 32 FRANK L. & MARY ELLEN BRAGG 4-7C/64 33 FRANK L. & MARY ELLEN BRAGG 4-7C/59 34 RALPH L. COLE 4-7C/62 35 ROBERT G. & ALISA G. GUM 4-7C/30.2 36 ROBERT G. & ALISA G. GUM 4-7C/31 37 ROBERT G. & ALISA G. GUM 4-7C/31.1 38 KEVIN B. & SHERI K. JERDEN 4-8C/1.1		11 MATE 11 11	4-7B/29.13
28 VIRGIL B. & MELODY K. WHITE 4-78/29.10 29 CHARLES E. BYRNE 4-7c/86 30 ALLEN C. & LILLY M. JACKSON 4-7c/73 31 FRANK L. & MARY ELLEN BRAGG 4-7c/68 32 FRANK L. & MARY ELLEN BRAGG 4-7c/64 33 FRANK L. & MARY ELLEN BRAGG 4-7c/59 34 RALPH L. COLE 4-7c/62 35 ROBERT G. & ALISA G. GUM 4-7c/30.2 36 ROBERT G. & ALISA G. GUM 4-7c/31 37 ROBERT G. & ALISA G. GUM 4-7c/31.1 38 KEVIN B. & SHERI K. JERDEN 4-8c/1.1			4-7C/74
29 CHARLES E. BYRNE 4-7C/86 30 ALLEN C. & LILLY M. JACKSON 4-7C/73 31 FRANK L. & MARY ELLEN BRAGG 4-7C/68 32 FRANK L. & MARY ELLEN BRAGG 4-7C/64 33 FRANK L. & MARY ELLEN BRAGG 4-7C/59 34 RALPH L. COLE 4-7C/62 35 ROBERT G. & ALISA G. GUM 4-7C/30.2 36 ROBERT G. & ALISA G. GUM 4-7C/31 37 ROBERT G. & ALISA G. GUM 4-7C/31.1 38 KEVIN B. & SHERI K. JERDEN 4-8C/1.1			
30 ALLEN C. & LILLY M. JACKSON 4-7C/73 31 FRANK L. & MARY ELLEN BRAGG 4-7C/68 32 FRANK L. & MARY ELLEN BRAGG 4-7C/64 33 FRANK L. & MARY ELLEN BRAGG 4-7C/59 34 RALPH L. COLE 4-7C/62 35 ROBERT G. & ALISA G. GUM 4-7C/30.2 36 ROBERT G. & ALISA G. GUM 4-7C/31 37 ROBERT G. & ALISA G. GUM 4-7C/31.1 38 KEVIN B. & SHERI K. JERDEN 4-8C/1.1			4-7B/29.10
31 FRANK L. & MARY ELLEN BRAGG 4-7C/68 32 FRANK L. & MARY ELLEN BRAGG 4-7C/64 33 FRANK L. & MARY ELLEN BRAGG 4-7C/59 34 RALPH L. COLE 4-7C/62 35 ROBERT G. & ALISA G. GUM 4-7C/30.2 36 ROBERT G. & ALISA G. GUM 4-7C/31 37 ROBERT G. & ALISA G. GUM 4-7C/31.1 38 KEVIN B. & SHERI K. JERDEN 4-8C/1.1			4-7C/86
32 FRANK L. & MARY ELLEN BRAGG 4-7C/64 33 FRANK L. & MARY ELLEN BRAGG 4-7C/59 34 RALPH L. COLE 4-7C/62 35 ROBERT G. & ALISA G. GUM 4-7C/30.2 36 ROBERT G. & ALISA G. GUM 4-7C/31 37 ROBERT G. & ALISA G. GUM 4-7C/31.1 38 KEVIN B. & SHERI K. JERDEN 4-8C/1.1		ALLEN C. & LILLY M. JACKSON	4-7C/73
33 FRANK L. & MARY ELLEN BRAGG 4-7c/59 34 RALPH L. COLE 4-7c/62 35 ROBERT G. & ALISA G. GUM 4-7c/30.2 36 ROBERT G. & ALISA G. GUM 4-7c/31 37 ROBERT G. & ALISA G. GUM 4-7c/31.1 38 KEVIN B. & SHERI K. JERDEN 4-8c/1.1		FRANK L. & MARY ELLEN BRAGG	4-7C/68
34 RALPH L. COLE 4-7C/62 35 ROBERT G. & ALISA G. GUM 4-7C/30.2 36 ROBERT G. & ALISA G. GUM 4-7C/31 37 ROBERT G. & ALISA G. GUM 4-7C/31.1 38 KEVIN B. & SHERI K. JERDEN 4-8C/1.1			4-7C/64
35 ROBERT G. & ALISA G. GUM 4-7C/30.2 36 ROBERT G. & ALISA G. GUM 4-7C/31 37 ROBERT G. & ALISA G. GUM 4-7C/31.1 38 KEVIN B. & SHERI K. JERDEN 4-8C/1.1			4-7C/59
36 ROBERT G. & ALISA G. GUM 4-7C/31 37 ROBERT G. & ALISA G. GUM 4-7C/31.1 38 KEVIN B. & SHERI K. JERDEN 4-8C/1.1			4-7C/62
37 ROBERT G. & ALISA G. GUM 4-7C/31.1 38 KEVIN B. & SHERI K. JERDEN 4-8C/1.1		ROBERT G. & ALISA G. GUM	4-7C/30.2
37 ROBERT G. & ALISA G. GUM 4-7C/31.1 38 KEVIN B. & SHERI K. JERDEN 4-8C/1.1			4-7C/31
38 KEVIN B. & SHERI K. JERDEN 4-8C/1.1		ROBERT G. & ALISA G. GUM	
39 *FRANCES JANE HUSTEAD & JUNE STALNAKER PENELOPE 4-8C/1		KEVIN B. & SHERI K. JERDEN	4-8C/1.1
	39	*FRANCES JANE HUSTEAD & JUNE STALNAKER PENEL	OPE 4-8C/1

SURFACE HOLE LOCATION (SHL) UTM 17—NAD83 N:4333351.79 E:548191.67 UTM 17—NAD83(FT) N:14217005.00 E:1798525.50 LAT/LON DATUM—NAD83 LAT:39.148029 LON:—80.442299

APPROX. LANDING POINT APPROX. LANDING POINT

UTM 17—NAD83
N:4333084.28
E:547733.15
UTM 17—NAD83(FT)
N:14216127.28
E:1797021.16
LAT/LON DATUM—NAD83
LAT:39.145644
LON:—80.447624

BOTTOM HOLE LOCATION (BHL) UTM 17-NAD83 N:4330343.99 E:548782.95 UTM 17-NAD83(FT) N:14207136.90 E:1800465.44 LAT/LON DATUM-NAD83 LAT:39.120894 LON:-80.435673

	LESSOR	LEASE NO.	DIST-TM/PAR
A	J. B. GUSMAN ET AL	FK020606	20-444/11.2
В	J. A. HARDWAY ET AL	FK004424	12-444/26
c	J. Q. MUSSER	FK061781	1
D	W. W. BRANNON ET UX	FK032708	1
E	J. K. MUSSER ET UX	FK002243	12-444/26 12-444/27.2 12-444/27.1 12-444/28.1
F	KENNETH R. SIMONS ET AL O.B. FRASHUER ET UX	FK064201 FK064206	12-444/37.1 12-444/37.2 12-444/37.9 12-444/37.8 12-444/37.3 12-444/37.4
G	ETHEL B. PAINE ET AL	FKQ64249	4-7B/59
Н	J. Q. MUSSER ET UX	FK002249	4-7B/59 4-7B/60
J	S. G. HALL ET UX	FK014031	4-7B/5.1 4-7B/5.7
K	ALDA V. HITT	FK077958	4-78/28.1 4-78/28.2 4-78/28 4-78/25 4-78/26 4-78/29.13 4-7C/74
L	C. A. BAILY	CNX26B31600	4-7C/64 4-7C/59 4-7C/62
М	J. H. BAILEY ET AL	Q102176000	4-7C/30.2
N	ALISA G. GUM	Q102118000	4-7C/31
	LORI LEE CALDWELL	Q102123000	4-7C/31.1
	GERALD W. RAMSBURG	9098757000	1
	KARRIE DIANE SIMS	0102112000	1
	DENISE C. CARSON	Q102117000	1
	KAREN K. HOBBS	Q102122000	1
	KATRINA L. WEST	Q102121000	1
	DAVID C. GARVIN	Q102119000	1
Р	KEVIN B. JERDEN ET UX	Q102115000	4-8C/1.1
*Q	HUSTEAD FRANCES JANE PENELOPE JUNE STALNAKER	Q100607000	4-8C/1

* - DENOTES PARCEL WITHIN 30 FEET OF PLANNED WELL BORE



SEPTEMBER 18, 2019

API WELL #: 47

05943 MDD

CIVIL- ENVIRONMENTAL- CONSULTING-FIELD SERVICES 600 WHITE OAKS BOULEVARD, BRIDGEPORT, WV 26330 PHONE (304) 624-4108 FAX (304) 624-7831

33 STATE COUNTY

PERMIT

						EIVED Dil and Gas 4 2019	artment of tal Protectio	
				HG Energy II Appala	chia, LLC	of o	ep Jer	_
				1209 S-7H LEASE (fice SEF	.onr	
TRACT #	LEGACY LEASE	TAX MAP	LEASE NUMBER	GRANTOR/LESSOR	GRANTEE	Ö /LESSEE	Envi	

				1209 S-7H I	.EASE CHAIN 말 별 것 > 5			
	LEGACY LEASE				Envis			
TRACT#	NUMBER	TAX MAP	LEASE NUMBER	GRANTOR/LESSOR	GRANTEE/LESSEE	ROYALTY	DEED BOOK	PAG
				J.B. GUSMAN AND ADALINE GUSMAN	TREAT AND CRAWFORD	NOT LESS THAN 1/8	158	
				TREAT AND CRAWFORD	UNITED FUEL GAS COMPANY	ASSIGNMENT	226	3
		17-20-0444-0011-0000,		UNITED FUEL GAS COMPANY	FAYETTE COUNTY GAS COMPANY	ASSIGNMENT	UNRECORDED	
		17-20-0444-0011-0001,		FAYETTE COUNTY GAS COMPANY	HOPE NATURAL GAS	ASSIGNMENT	201	
		17-20-0444-0011-0002,		HOPE NATURAL GAS COMPANY	CONSOLIDATED GAS SUPPLY COMPANY	MERGER/NAME CHANGE	903	1
		17-20-0444-0011-0003,		CONSOLIDATED GAS SUPPLY CORPORATION	CONSOLIDATED GAS TRANSMISSION CORPORATION	ASSIGNMENT	1136	
		17-20-0444-0012-0000,		CONSOLIDATED GAS TRANSMISSION CORPORATION	CNG TRANSMISSION CORPORATION	MERGER/NAME CHANGE	51	
		17-12-0444-0013-0000,		CNG TRANSMISSION CORPORATION	DOMINION TRANSMISSION, INC.	MERGER/NAME CHANGE	58	
		17-12-0444-0014-0000,	Q100370000	DOMINION TRANSMISSION, INC.	DOMINION EXPLORATION & PRODUCTION, INC.	ASSIGNMENT	1409	
Α	FK020606	17-12-0444-0021-0000,	Q100370000	DOMINION TRANSMISSION, INC.	DOMINION EXPLORATION & PRODUCTION, INC.	ASSIGNMENT	1442	
		17-12-0444-0021-0001,		DOMINION EXPLORATION & PRODUCTION, INC.	DOMINION TRANSMISSION, INC.	ASSIGNMENT	1457	
		17-12-0444-0022-0000,		DOMINION TRANSMISSION, INC.	CNX GAS COMPANY LLC	MEMORANDUM FARMOUT AGREEMENT	1522	
		17-12-0445-0001-0000,		CNX GAS COMPANY LLC	NOBLE ENERGY, INC.	LIMITED PARTIAL ASSIGNMENT (50%)	1543	1
		17-12-0445-0002-0000,		DOMINION TRANSMISSION, INC.	CNX GAS COMPANY LLC AND NOBLE ENERGY, INC.	PARTIAL ASSIGNMENT (32%)	1576	
		17-12-0445-0009-0000,		CNX GAS COMPANY LLC	NOBLE ENERGY, INC.	ASSIGNMENT	1584	
		17-12-0445-0010-0000,		NOBLE ENERGY, INC.	HG ENERGY II APPALACHIA, LLC	ASSIGNMENT	1600	
		17-12-0445-0011-0000		DOMINION TRANSMISSION, INC.	DOMINION ENERGY TRANSMISSION, INC.	MERGER/NAME CHANGE	wvsos	
						SECOND AMENDMENT TO MEMORANDUM OF		
				DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	FARMOUT AGREEMENT	1601	
				J.A. HARDWAY AND JANE HARDWAY, HIS WIFE	SOUTH PENN OIL COMPANY	NOT LESS THAN 1/8	113	
				SOUTH PENN OIL COMPANY	HOPE NATURAL GAS COMPANY	ASSIGNMENT	240	
				HOPE NATURAL GAS COMPANY	CONSOLIDATED GAS SUPPLY CORPORATION	MERGER/NAME CHANGE	903	
				CONSOLIDATED GAS SUPPLY CORPORATION	CONSOLIDATED GAS TRANSMISSION CORPORATION	ASSIGNMENT	1136	
		17-20-0444-0005-0000 17-20-0444-0026-0000		CONSOLIDATED GAS TRANSMISSION CORPORATION	CNG TRANSMISSION CORPORATION	MERGER/NAME CHANGE	51	
				CNG TRANSMISSION CORPORATION	DOMINION TRANSMISSION, INC.	MERGER/NAME CHANGE	58	
				DOMINION TRANSMISSION, INC.	CNX GAS COMPANY LLC	MEMORANDUM FARMOUT AGREEMENT	1522	
				CNX GAS COMPANY LLC	NOBLE ENERGY, INC.	LIMITED PARTIAL ASSIGNMENT (50%)	1543	1
В	FK004424		Q100366000	DOMINION TRANSMISSION, INC.	CNX GAS COMPANY LLC AND NOBLE ENERGY, INC.	PARTIAL ASSIGNMENT (32%)	1576	
				CNX GAS COMPANY LLC	NOBLE ENERGY, INC.	ASSIGNMENT	1584	
				NOBLE ENERGY, INC.	HG ENERGY II APPALACHIA, LLC	ASSIGNMENT	1600	
			1	NOBLE ENERGY, INC.	HG ENERGY II APPALACHIA, LLC	ASSIGNMENT	1600	
				DOMINION TRANSMISSION, INC.	DOMINION ENERGY TRANSMISSION, INC.	MERGER/NAME CHANGE	wvsos	
				DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	SECOND AMENDMENT TO MEMORANDUM OF FARMOUT AGREEMENT	1601	
				J.C. MUSSER ETAL	HOPE NATURAL GAS COMPANY	NOT LESS THAN 1/8	696	
			1	J.C. MUSSER ETAL	HOPE NATURAL GAS COMPANY	MODIFICATION	721	
				HOPE NATURAL GAS COMPANY	CONSOLIDATED GAS SUPPLY CORPORATION	MERGER/NAME CHANGE	903	
				CONSOLIDATED GAS SUPPLY CORPORATION	CONSOLIDATED GAS TRANSMISSION CORPORATION	ASSIGNMENT	1136	
				CONSOLIDATED GAS SUPPLY CORPORATION CONSOLIDATED GAS TRANSMISSION CORPORATION	CNG TRANSMISSION CORPORATION	MERGER/NAME CHANGE	51	
				CNG TRANSMISSION CORPORATION	DOMINION TRANSMISSION, INC.	MERGER/NAME CHANGE	58	
				DOMINION TRANSMISSION, INC.	CNX GAS COMPANY LLC	MEMORANDUM OF FARMOUT AGREEMENT	1522	
С	FK061781	p/o 12-444-0026-0000	Q100499000	DOMINION HANDHISSION, INC.		FIRST AMENDMENT TO MEMORANDUM OF		
	1			DOMINION TRANSMISSION, INC.	CNX GAS COMPANY LLC	FARMOUT AGREEMENT	1524	

				CNX GAS COMPANY LLC	NOBLE ENERGY, INC.	LIMITED PARTIAL ASSIGNMENT (50%)	1543	1235
				DOMINION TRANSMISSION, INC.	CNX GAS COMPANY LLC AND NOBLE ENERGY, INC.	PARTIAL ASSIGNMENT (32%)	1576	125
		1		CNX GAS COMPANY LLC	NOBLE ENERGY, INC.	ASSIGNMENT	1584	942
		1		NOBLE ENERGY, INC.	HG ENERGY II APPALACHIA, LLC	ASSIGNMENT	1600	660
				NOBLE ENERGY, INC.	HG ENERGY II APPALACHIA, LLC	ASSIGNMENT	1600	692
				DOMINION TRANSMISSION, INC.	DOMINION ENERGY TRANSMISSION, INC.	MERGER/NAME CHANGE	wvsos	
				DOMINION TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	SECOND AMENDMENT TO MEMORANDUM OF	1601	583
				W.W. BRANNON AND ADDIE BRANNON	THE PHILADELPHIA COMPANY	NOT LESS THAN 1/8	185	107
				THE PHILADELPHIA COMPANY	PITTSBURGH AND WEST VIRGINIA GAS COMPANY	DEED	236	111
				PITTSBURGH AND WEST VIRGINIA GAS COMPANY	HOPE NATURAL GAS COMPANY	AGREEMENT	267	55
				HOPE NATURAL GAS COMPANY	CONSOLIDATED GAS SUPPLY CORPORATION	MERGER/NAME CHANGE	903	179
				CONSOLIDATED GAS SUPPLY CORPORATION	CONSOLIDATED GAS TRANSMISSION CORPORATION	ASSIGNMENT	1136	250
				CONSOLIDATED GAS TRANSMISSION CORPORATION	CNG TRANSMISSION CORPORATION	MERGER/NAME CHANGE	51	795
		1		CNG TRANMISSION CORPORATION	DOMINION TRANSMISSION, INC.	MERGER/NAME CHANGE	58	362
		,		DOMINION TRANSMISSION, INC.	CNX GAS COMPANY LLC	MEMORANDUM FARMOUT AGREEMENT	1522	33
D	FK032708	p/o 17-12-444-0026-0000	Q100260000			FIRST AMENDMENT TO MEMORANDUM OF		
_		p/o 17-12-444-0029-0000		DOMINION TRANSMISSION, INC.	CNX GAS COMPANY LLC	FARMOUT AGREEMENT	1524	49:
		1		CNX GAS COMPANY LLC	NOBLE ENERGY, INC.	LIMITED PARTIAL ASSIGNMENT (50%)	1543	1235
		l		DOMINION TRANSMISSION, INC.	CNX GAS COMPANY LLC AND NOBLE ENERGY, INC.	PARTIAL ASSIGNMENT (32%)	1576	125
				CNX GAS COMPANY LLC	NOBLE ENERGY, INC.	ASSIGNMENT	1584	942
				NOBLE ENERGY, INC.	HG ENERGY II APPALACHIA, LLC	ASSIGNMENT	1600	600
				NOBLE ENERGY, INC.	HG ENERGY II APPALACHIA, LLC	ASSIGNMENT	1600	692
				DOMINION TRANSMISSION, INC.	DOMINION ENERGY TRANSMISSION, INC.	MERGER/NAME CHANGE SECOND AMENDMENT TO MEMORANDUM OF	WVSOS	
				DOMAINION TRANSMISSION INC	HG ENERGY II APPALACHIA, LLC	FARMOUT AGREEMENT	1601	581
				DOMINION TRANSMISSION, INC.	<u></u>			
		}		J.K. MUSSER AND LAURA R. MUSSER, HIS WIFE	F.E. WILLIAMSON AND COMPANY	NOT LESS THAN 1/8	111 118	519 428
				F.E. WILLIAMSON AND COMPANY	THE CARTER OIL COMPANY	ASSIGNMENT ASSIGNMENT	118	262
		p/o 17-20-0444-0026-0000, 17-20-0444-0027-0000, 17-20-0444-0027-0001,		THE CARTER OIL COMPANY	SOUTH PENN OIL COMPANY HOPE NATURAL GAS COMPANY	ASSIGNMENT	240	210
				SOUTH PENN OIL COMPANY THE CARTER OIL COMPANY	HOPE NATURAL GAS COMPANY HOPE NATURAL GAS COMPANY	ASSIGNMENT	203	73
				HOPE NATURAL GAS COMPANY	CONSOLIDATED GAS SUPPLY CORPORATION	MERGER/NAME CHANGE	903	179
				CONSOLIDATED GAS SUPPLY CORPORATION	CONSOLIDATED GAS SUPPLY CORPORATION CONSOLIDATED GAS TRANSMISSION CORPORATION	ASSIGNMENT	1136	250
				CONSOLIDATED GAS TRANSMISSION CORPORATION	CNG TRANSMISSION CORPORATION	MERGER/NAME CHANGE	51	795
		17-20-0444-0027-0002,		CNG TRANSMISSION CORPORATION	DOMINION TRANSMISSION, INC.	MERGER/NAME CHANGE	58	362
		17-20-0444-0027-0003,	Q100651000	DOMINION TRANSMISSION, INC.	CNX GAS COMPANY LLC	MEMORANDUM OF FARMOUT AGREEMENT	1522	33
E	FK002243	17-20-0444-0028-0000,	Q100031000	DOMINION TRANSMISSION, INC.	CHA GAS COMI AIN LEC	FIRST AMENDMENT TO MEMORANDUM OF		
		17-20-0444-0028-0001,		DOMINION TRANSMISSION, INC.	CNX GAS COMPANY LLC	FARMOUT AGREEMENT	1524	491
		17-20-0444-0028-0002,		CNX GAS COMPANY LLC	NOBLE ENERGY, INC.	LIMITED PARTIAL ASSIGNMENT (50%)	1543	1235
		17-20-0444-0028-0003,		DOMINION TRANSMISSION, INC.	CNX GAS COMPANY LLC AND NOBLE ENERGY, INC.	PARTIAL ASSIGNMENT (32%)	1576	125
		17-20-0444-0029-0000,		CNX GAS COMPANY LLC	NOBLE ENERGY, INC.	ASSIGNMENT	1584	942
		17-20-0444-0029-0001		NOBLE ENERGY, INC.	HG ENERGY II APPALACHIA, LLC	ASSIGNMENT	1600	660
ŀ				NOBLE ENERGY, INC.	HG ENERGY II APPALACHIA, LLC	ASSIGNMENT	1600	692
				DOMINION TRANSMISSION, INC.	DOMINION ENERGY TRANSMISSION, INC.	MERGER/NAME CHANGE	wvsos	
		1				SECOND AMENDMENT TO MEMORANDUM OF		
		1		DOMINION TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	FARMOUT AGREEMENT	1601	581
				J.C. MUSSER ETAL	HOPE NATURAL GAS COMPANY	NOT LESS THAN 1/8	696	246
				J.C. MUSSER ETAL	HOPE NATURAL GAS COMPANY	MODIFICATION	721	525
				HOPE NATURAL GAS COMPANY	CONSOLIDATED GAS SUPPLY CORPORATION	MERGER/NAME CHANGE	903	179
				CONSOLIDATED GAS SUPPLY CORPORATION	CONSOLIDATED GAS TRANSMISSION CORPORATION	ASSIGNMENT	1136	250
		p/o 04-007B-0059-000, 12-		CONSOLIDATED GAS TRANSMISSION CORPORATION	CNG TRANSMISSION CORPORATION	MERGER/NAME CHANGE	51	795
		444-0037-0001, 12-444-		CNG TRANSMISSION CORPORATION	DOMINION TRANSMISSION, INC.	MERGER/NAME CHANGE	58	362
		0037-0002, 12-444-		DOMINION TRANSMISSION, INC.	CNX GAS COMPANY LLC	MEMORANDUM OF FARMOUT AGREEMENT	1522	33
				·		FIRST AMENDMENT TO MEMORANDUM OF		
F	FK064201 &			DOMINION TRANSMISSION, INC.	CNX GAS COMPANY LLC	FARMOUT AGREEMENT	1524	491
	FK064206	0037-0005, 12-444-	Q100295000	CNX GAS COMPANY LLC	NOBLE ENERGY, INC.	LIMITED PARTIAL ASSIGNMENT (50%)	1543	1235

	•	10037-0000, 12-777-003/1			Tarriana and an annual and an	DARTIAL ACCIONATEST (220/)	1570	125
1		0007, 12-444-0037-		DOMINION TRANSMISSION, INC.	CNX GAS COMPANY LLC AND NOBLE ENERGY, INC.	PARTIAL ASSIGNMENT (32%)	1576	125 942
		0008, 12-444-0037-		CNX GAS COMPANY LLC	NOBLE ENERGY, INC.	ASSIGNMENT	1584	
		0009		NOBLE ENERGY, INC.	HG ENERGY II APPALACHIA, LLC	ASSIGNMENT	1600	660
				NOBLE ENERGY, INC.	HG ENERGY II APPALACHIA, LLC	ASSIGNMENT	1600	692
				DOMINION TRANSMISSION, INC.	DOMINION ENERGY TRANSMISSION, INC.	MERGER/NAME CHANGE	wvsos	
						SECOND AMENDMENT TO MEMORANDUM OF		
				DOMINION TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	FARMOUT AGREEMENT	1601	581
				ETHEL B. PAYNE; EVELYN BEEGHLEY, WIRT H. BEEGHLEY AND		i		
				ELIZABETH BEEGHLEY, HIS WIFE; VERA I. BAILEY AND H.G. BAILEY, HER				
				HUSBAND; EDWARD BURL BEEGHLEY AND BESSIE T. BEEGHLEY, HIS				
				WIFE AND VERA I. BAILEY	HOPE NATURAL GAS COMPANY	NOT LESS THAN 1/8	230	401
	FK064249			HOPE NATURAL GAS COMPANY	CONSOLIDATED GAS SUPPLY CORPORATION	MERGER/NAME CHANGE	LEWIS 294	89
				CONSOLIDATED GAS SUPPLY CORPORATION	CONSOLIDATED GAS TRANSMISSION CORPORATION	ASSIGNMENT	425	127
				CONSOLIDATED GAS TRANSMISSION CORPORATION	CNG TRANSMISSION CORPORATION	MERGER/NAME CHANGE	wvsos	
i				CNG TRANSMISSION CORPORATION	DOMINION TRANSMISSION, INC.	MERGER/NAME CHANGE	wvsos	-
i				DOMINION TRANSMISSION, INC.	CNX GAS COMPANY LLC	MEMORANDUM OF FARMOUT AGREEMENT	672	154
G		p/o 21-04-007B-0059-0000	Q100297000	CNX GAS COMPANY LLC	NOBLE ENERGY, INC.	LIMITED PARTIAL ASSIGNMENT (50%)	684	57
				DOMINION TRANSMISSION, INC.	CNX GAS COMPANY LLC AND NOBLE ENERGY, INC.	PARTIAL ASSIGNMENT (32%)	712	848
		1		CNX GAS COMPANY LLC	NOBLE ENERGY, INC.	ASSIGNMENT	717	1
				NOBLE ENERGY, INC.	HG ENERGY II APPALACHIA, LLC	ASSIGNMENT	722	170
		1		DOMINION TRANSMISSION, INC.	DOMINION ENERGY TRANSMISSION, INC.	MERGER/NAME CHANGE	WVSOS	
				DOMINION TRANSMISSION, INC.	DOMINION ENERGY TRANSMISSION, INC.	MENCELY HAVIE CHANGE		
				DOMAINION ENERGY TRANSPARICCION, INC	HG ENERGY II APPALACHIA, LLC	AMENDED AND RESTATED PARTIAL ASSIGNMENT	723	527
				DOMINION ENERGY TRANSMISSION, INC.	ING ENERGY II APPALACHIA, ELC	SECOND AMENDMENT TO MEMORANDUM OF	725	32,
				DOMESTICAL TRANSPORTATION INC	LIC FAIGROWII ARRAI ACUITA LLC	FARMOUT AGREEMENT	723	499
			-	DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	CORRECTIVE ASSIGNMENT TO DB 717-1	725	784
				CNX GAS COMPANY LLC	NOBLE ENERGY, INC.			
				J.Q.MUSSER AND ROSA MUSSER	HOPE NATURAL GAS	NOT LESS THAN 1/8	111	522
				HOPE NATURAL GAS	CONSOLIDATED GAS SUPPLY CORPORATION	MERGER/NAME CHANGE	903	179
i l				CONSOLIDATED GAS SUPPLY CORPORATION	CONSOLIDATED GAS TRANSMISSION CORPORATION	ASSIGNMENT	1136	250
				CONSOLIDATED GAS TRANSMISSION CORPORATION	CNG TRANSMISSION CORPORATION	MERGER/NAME CHANGE	51	795
				CNG TRANSMISSION CORPORATION	DOMINION TRANSMISSION, INC.	MERGER/NAME CHANGE	58	362
				DOMINION TRANSMISSION, INC.	CNX GAS COMPANY, LLC	MEMORANDUM FARMOUT AGREEMENT	1522	33
						FIRST AMENDMENT TO MEMORANDUM OF		
				DOMINION TRANSMISSION, INC.	CNX GAS COMPANY, LLC	FARMOUT AGREEMENT	1524	491
		/ 47 42 0444 0000 0000					HARRISON 1543	1235
		p/o 17-12-0444-0029-0000		CNX GAS COMPANY, LLC	NOBLE ENERGY, INC.	LIMITED PARTIAL ASSIGNMENT (50%)	LEWIS 684	57
	FI/0555.5	p/o 17-12-0444-0030-0000	Q100652000				HARRISON 1576	125
H	FK002249	p/o 17-12-0444-0030-0001	-	DOMINION TRANSMISSION, INC.	CNX GAS COMPANY, LLC AND NOBLE ENERGY, NC.	PARTIAL ASSIGNMENT (32%)	LEWIS 712	848
		p/o 21-04-007B-0005-0004					HARRISON 1584	942
		p/o 21-04-007B-0060-0000		CNX GAS COMPANY, LLC	NOBLE ENERGY, INC.	ASSIGNMENT	LEWIS 717	1
		1					HARRISON 1600	660
				NOBLE ENERGY, INC.	HG ENERGY II APPALACHIA, LLC	ASSIGNMENT	LEWIS 722	139
				NOBLE ENERGY, INC.	HG ENERGY II APPALACHIA, LLC	ASSIGNMENT	1600	692
				DOMINION TRANSMISSION, INC.	DOMINION ENERGY TRANSMISSION, INC.	MERGER/NAME CHANGE	wvsos	
				DOMINION IN NOTIONAL PROPERTY OF THE PROPERTY	- Comment of the morning man	SECOND AMENDMENT TO MEMORANDUM OF	HARRISON 1601	581
				DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	FARMOUT AGREEMENT	LEWIS 723	499
				DOMINION ENERGY TRANSPORTING	Ind Enteror II All Factoring Etc		1	
				DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	AMENDED AND RESTATED PARTIAL ASSIGNMENT	LEWIS 723	527
				S.G. HALL AND EMMA HALL, HIS WIFE	HOPE NATURAL GAS COMPANY	NOT LESS THAN 1/8	68	130
					CONSOLIDATED GAS SUPPLY CORPORATION	MERGER/NAME CHANGE	294	89
				HOPE NATURAL GAS COMPANY		ASSIGNMENT	425	127
		21-04-007B-0005-0000;		CONSOLIDATED GAS SUPPLY CORPORATION	CONSOLIDATED GAS TRANSMISSION CORPORATION		WVSOS	127
1		21-04-007B-0005-0001;		CONSOLIDATED GAS TRANSMISSION CORPORATION	CNG TRANSMISSION CORPORATION	MERGER/NAME CHANGE		
1	I	21_04_007R_0005_0002-		CNG TRANSMISSION CORPORATION	DOMINION TRANSMISSION, INC.	MERGER/NAME CHANGE	WVSOS	

	1	22 07 0070 0003 0002,		DOMINION TRANSMISSION INC.	CNX GAS COMPANY LLC	MEMORANDUM OF FARMOUT AGREEMENT	672	
		21-04-007B-0005-0003;		CNX GAS COMPANY LLC	NOBLE ENERGY, INC.	LIMITED PARTIAL ASSIGNMENT (50%)	684	
		21-04-007B-0005-0004;		CHA GAS COMI ANY LLC	HODEL ENERGY, INC.	ENTRE TANTA EXESTENSION (50%)	- 55.	
1	FK014031	21-04-007B-0005-0005;	Q100258000	DOMINION TRANSMISSION, INC.	CNX GAS COMPANY LLC AND NOBLE ENERGY, INC.	PARTIAL ASSIGNMENT (32%)	712	
•	1	21-04-007B-0005-0006;	4	DOMINION TO MISSINGSTON, INC.	CIVI CI D COMPANY LEGITAD PRODES ENTERIORY INCI	The state of the s		
		21-04-007B-0005-0007;		CNX GAS COMPANY LLC	NOBLE ENERGY, INC.	ASSIGNMENT	717	
		21-04-007B-0031-0000;		CIVA GAS CONFANT LLC	NOBLE ENERGY, INC.	ASSIGNMENT	/ <u>1/</u>	
		p/o 21-04-007B-0035-0000;		NOBLE ENERGY, INC.	HG ENERGY II APPALACHIA, LLC	ASSIGNMENT	722	
		p/o 21-04-007B-0035-0004;		NODEL ENERGY, INC.	III ENERGY II ALY ALACHIA, LLC	SECOND AMENDMENT TO MEMORANDUM OF	722	-
		p/o 21-04-007B-35-0005		DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	FARMOUT AGREEMENT	723	1
		1		DOMINION ENERGY THE MINISTERN, INC.	THE ENERGY HAND TOTAL YEAR	Trimino Tricina III	7.20	
	•			DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	AMENDED AND RESTATED PARTIAL ASSIGNMENT	723	
		21-04-007B-0026-0000;		Sommer English that delivers the second seco	R.E. BEERY AND VICTOR BALDINI, PARTNERS DBA BITNER FUEL			
		1		ALDA V. LITT. MIDOM	I .	NOT MORE THAN 1/8	208	
	i	21-04-0078-0028-0000;		ALDA V. HITT, WIDOW	COMPANY	NOT WORE THAN 1/8	200	
		21-04-007B-0028-0001;		R.E. BEERY AND VICTOR BALDINI, PARTNERS DOING BUSINESS AS THE				
		21-04-007B-0028-0002;		BITNER FUEL COMPANY, AND FLKOIRENCE BALDINI, WIFE OF VICTOR	n F DECOV	A CCICAID ATAIT	205	
		21-04-0078-0029-0000;		BALDINI	R.E. BEERY	ASSIGNMENT	295	
		21-04-0078-0029-0001;		EARL BEERY, DECOSTA E. SMITH, JR. AND MARK P. HITT, EXECUTORS				1
		21-04-007B-0029-0002;		AND TRUSTEES UNDER THE LAST WILL AND TESTAMENT OF ROBERT E.		Legion sour]
		21-04-007B-0029-0003;		BEERY, DECEASED	CONSOLIDATED GAS SUPPLY CORPORATION	ASSIGNMENT	312	
		21-04-007B-0029-0004;		CONSOLIDATED GAS SUPPLY CORPORATION	CONSOLIDATED GAS TRANSMISSION CORPORATION	ASSIGNMENT	425	
к	FK077958	21-04-007B-0029-0005;	Q100740000	CONSOLIDATED GAS TRANSMISSION CORPORATION	CNG TRANSMISSION CORPORATION	MERGER/NAME CHANGE	WVSOS	
		21-04-007B-0029-0006;	•	CNG TRANSMISSION CORPORATION	DOMINION TRANSMISSION, INC.	MERGER/NAME CHANGE	wvsos	
		21-04-007B-0029-0007;		DOMINION TRANSMISSION, INC.	CNX GAS COMPANY LLC	MEMORANDUM OF FARMOUT AGREEMENT	672	
		21-04-007B-0029-0009;		CNX GAS COMPANY LLC	NOBLE ENERGY, INC.	LIMITED PARTIAL ASSIGNMENT (50%)	684	
		21-04-007B-0029-0009;		DOMINION TRANSMISSION, INC.	CNX GAS COMPANY LLC AND NOBLE ENERGY, INC.	PARTIAL ASSIGNMENT (32%)	712	
		21-04-007B-0029-0010;		CNX GAS COMPANY LLC	NOBLE ENERGY, INC.	ASSIGNMENT	717	
		21-04-007B-0029-0011;		NOBLE ENERGY, INC.	HG ENERGY II APPALACHIA, LLC	ASSIGNMENT	722	
		21-04-007B-0029-0012;				SECOND AMENDMENT TO MEMORANDUM OF		1
		21-04-007B-0029-0013;		DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	FARMOUT AGREEMENT	723	
		21-04-007B-0029-0014;						
		21-04-0078-0029-0015;		DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	AMENDED AND RESTATED PARTIAL ASSIGNMENT	723	
		04-07C-0060-0000		C.A. BAILEY AND M.C. BAILEY, HER HUSBAND, AND EMMA GOLDSMITH				
		04-07C-0060-0001		AND H.B. GOLDSMITH, HER HUSBAND	CARNEGIE NATURAL GAS COMPANY	NOT LESS THAN 1/8	73	
		04-07C-0058-0000		CARNEGIE NATURAL GAS COMPANY	CARNEGIE PRODUCTION COMPANY	ASSIGNMENT	558	
		04-07C-0055-0000		CARNEGIE PRODUCTION COMPANY	EQUITABLE PRODUCTION-EASTERN STATES, INC.	MERGER	wvsos	
L	268316000	04-07C-0032-0000	CNX268316000		ETBG-APOLLO DIVISION, A DIVISION OF ET BLUE GRASS			
_		04-07C-0064-0000		EQUITABLE PRODUCTION-EASTERN STATES, INC.	COMPANY	ASSIGNMENT OF OPERATING RIGHTS	572	
		04-07C-0059-0000		EQUITABLE PRODUCTION-EASTERN STATES, INC.	EQT PRODUCTION COMPANY	MERGER	wvsos	
		04-07C-0068-0000		EQT PRODUCTION COMPANY	CNX GAS COMPANY, LLC	TERM ASSIGNMENT	687	
		04-07C-0062-0000		CNX GAS COMPANY LLC	HG ENERGY II APPALACHIA, LLC	ASSIGNMENT	737	
	-	0.0.0000000		J. H. BAILEY ETAL	JAMES F. SCOTT	NOT LESS THAN 1/8	369	
	1			JAMES F. SCOTT	GEORGE R. GIBSON	ASSIGNMENT	378	
				GEORGE R. GIBSON ET UX	RANDALL GIBSON	ASSIGNMENT	489	
				GEORGE R. GIBSON ET UX	EMAX OIL COMPANY	ASSIGNMENT	489	
				GEORGE R. GIBSON ET UX	RANDALL GIBSON	ASSIGNMENT	489	
					1.		489	
				GEORGE R. GIBSON ET UX	EMAX OIL COMPANY	ASSIGNMENT		-
	1			JAMES F. SCOTT	SCOTT OIL COMPANY	MERGER/NAME CHANGE	WVSOS	
	1		0.400 / = = = = =	SCOTT OIL COMPANY	EMAX OIL COMPANY	ASSIGNMENT	486	
			Q102176000	EMAX OIL COMPANY, GEORGE R GIBSON, RANDALL GIBSON, AND		l		
М		21-04-007C-0030.0002	Title# 255787000	RICHARD C. GIBSON	CABOT OIL AND GAS CORPORATION	ASSIGNMENT	513	
				JAMES F. SCOTT	CABOT OIL AND GAS CORPORATION	ASSIGNMENT	515	
	1			JAMES F. SCOTT	CABOT OIL AND GAS CORPORATION	QUIT CLAIM ASSIGNMENT	558	
				EMAX OIL COMPANY	CABOT OIL AND GAS CORPORATION	ASSIGNMENT	558	
	1	1		CABOT OIL AND GAS CORPORATION	ENERVEST APPALACHIA L P	ASSIGNMENT	558	1

	!			ENERVEST APPALACHIA L P	CGAS PROPERTIES L P	ASSIGNMENT	621	
	<u> </u>			CGAS PROPERTIES L P	CNX GAS COMPANY LLC	ASSIGNMENT	681	314
			CNX GAS COMPANY, LLC	NOBLE ENERGY, INC.	ASSIGNMENT	717	1	
				NOBLE ENERGY, INC.	HG ENERGY II APPALACHIA, LLC	ASSIGNMENT	722	139
				NOBLE ENERGY, INC.	HG ENERGY II APPALACHIA, LLC	ASSIGNMENT	722	170
				KATRINA L WEST	CNX GAS COMPANY LLC	NOT LESS THAN 1/8	704	563
			Q102121000, Q102119000, Q102118000, Q102123000, Q102120000, Q098757000,	DAVID C GARVIN	CNX GAS COMPANY LLC	NOT LESS THAN 1/8	704	555
				ALISA G GUM	CNX GAS COMPANY LLC	NOT LESS THAN 1/8	704	551
	1			LORI LEE CALDWELL	CNX GAS COMPANY LLC	NOT LESS THAN 1/8	704	571
				KARRIE DIANE SIMS	CNX GAS COMPANY LLC	NOT LESS THAN 1/8	704	559
N	21-	21-04-007C-0031-0000		GERALD W RAMSBURG	CNX GAS COMPANY LLC	NOT LESS THAN 1/8	700	24
				KAREN K HOBBS	CNX GAS COMPANY LLC	NOT LESS THAN 1/8	707	567
				DENISE C CARSON	CNX GAS COMPANY LLC	NOT LESS THAN 1/8	704	547
	1 1		Q102122000,	CNX GAS COMPANY, LLC	NOBLE ENERGY, INC.	. ASSIGNMENT	717	1
	1		Q102117000	NOBLE ENERGY, INC.	HG ENERGY II APPALACHIA, LLC	ASSIGNMENT	722	139
				NOBLE ENERGY, INC.	HG ENERGY II APPALACHIA, LLC	ASSIGNMENT	722	170
		24 24 222 2224 2224		KEVIN B JERDEN ET UX	CNX GAS COMPANY LLC	NOT LESS THAN 1/8	604	
]		0103115000	CNX GAS COMPANY, LLC	NOBLE ENERGY, INC.	ASSIGNMENT	717	
1 '	21-	1-04-008C-0001-0001	Q102115000	NOBLE ENERGY, INC.	HG ENERGY II APPALACHIA, LLC	ASSIGNMENT	722	
			ı	NOBLE ENERGY, INC.	HG ENERGY II APPALACHIA, LLC	ASSIGNMENT	722	170



September 17, 2019

Ms. Laura Adkins WVDEP Division of Oil & Gas 601 57th Street Charleston, West Virginia 25304

RE:

Nays 1209 N-1H thru S-12H Permit Revisions - (47-033-05930, 35, 36, 37, 38, 39, 43, 44, 45, 46, 47, 48)

Union District, Harrison County

West Virginia

Dear Ms. Adkins:

Per our discussions, enclosed are revised forms (survey plats, mylars, WW-6B's, casing schematics and WW6A-1's) for four of the Nays 1209 approved well work permits, (N-1H, N-2H, S-7H and S-10H). Four permits will remain the same, (1209 N-3H, N-6H, S-9H and S-12H). Four of the laterals will be abandoned and plugged, (1209 N-4H, N-5H, S-8H and S-11H). HG will file for these P/A permits shortly.

Based on production data for nearby producing wells in this field; the drilling/engineered plans are being revised to allow for greater distance between the laterals, (increased to 1500' from 1000' previously approved). Six laterals will be modified, two laterals have no changes and four laterals will be abandoned and plugged. There will be no changes to surface locations and the only change to the wells being modified is the lateral spacing being requested.

Please let me know if you have any questions or require additional information. I can be reached at (304) 420-1119 or dwhite@hgenergyllc.com.

Very truly yours, Diane White RECEIVED
Office of Oil and Gas

SEP 2 4 2019

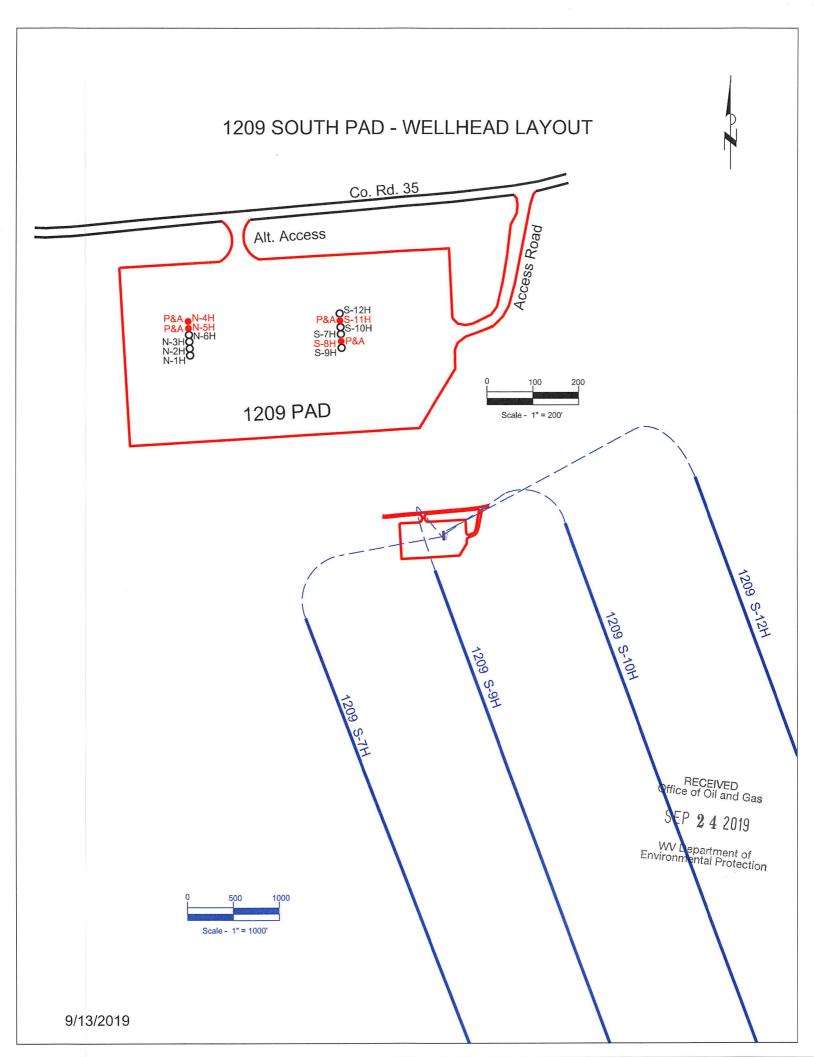
WV Department of Environmental Protection

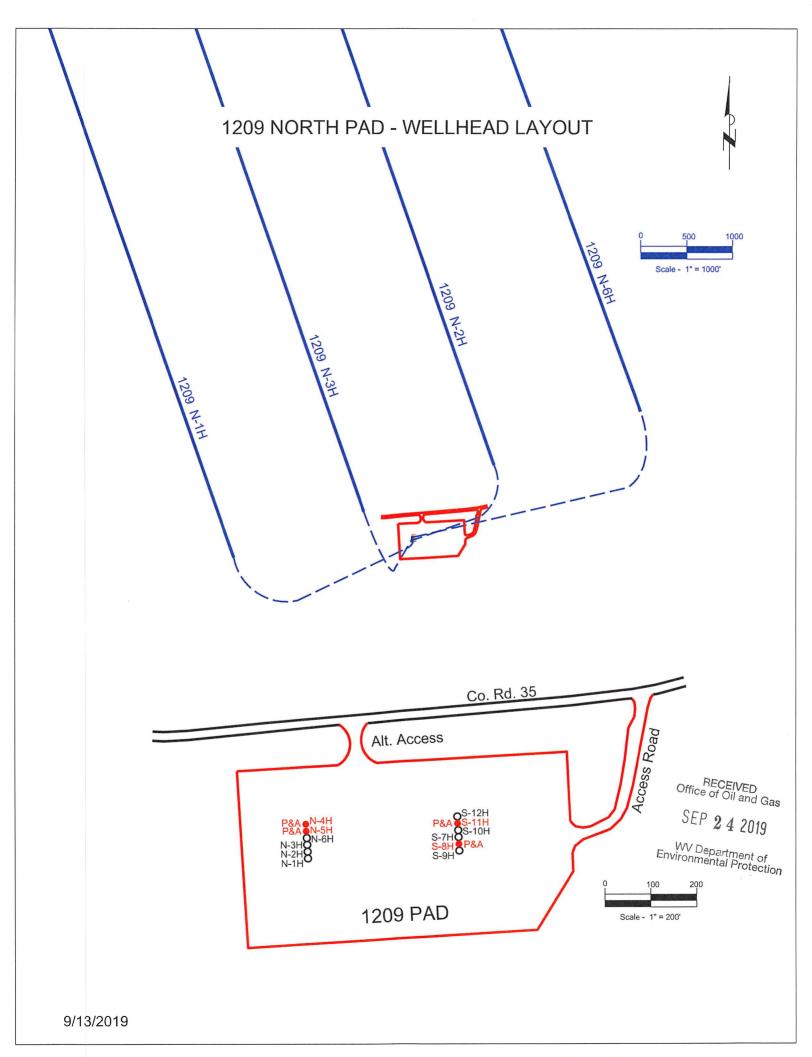
Diane C. White

Enclosures

cc:

Sam Ward - Inspector





API NO. 47	
OPERATOR WELL NO.	Nays 1209 N-1H
Well Pad Name: Navs	1209

1) Well O	perator: H	G Energy	II Appa	lachia, 📙	494519932	Harrison	Union	West Milford 7.5'
					Operator ID	County	District	Quadrangle
2) Operato	or's Well N	umber: Na	ys 1209	N-1H	Well P	ad Name: Nay	s 1209	
3) Farm N	ame/Surfac	ce Owner:	Nays / HG I	Energy II App	alachia Public Ro	oad Access: Kir	ncheloe Ru	n Rd/SLS 35
4) Elevation	on, current	ground:	1002'	Ele	evation, propose	d post-construct	tion: 1007'	
5) Well T	ype (a) G	as X		Oil	Un	derground Stora	age	
	Other	r						
	(b)If		llow	X	Deep			-
	D 1 17		rizontal	X				
	g Pad: Yes						_	
, ,	_	` '		. , .	pated Thickness ticipated pressure	•	Pressure(s):	
8) Propose	ed Total Ve	rtical Dept	h: 6900)'				
9) Format	ion at Total	Vertical D	epth: N	/larcellus				
10) Propo	sed Total M	Ieasured D	epth: 2	20,379'				
11) Propo	sed Horizon	ntal Leg Le	ngth: 1	2,659'				
12) Appro	ximate Fre	sh Water S	trata Dep	oths:	135', 500'			
13) Metho	d to Detern	nine Fresh	Water D	epths: N	learest offset w	ell data		
14) Appro	ximate Salt	twater Dep	ths: No	ne noted	in offsets			
15) Appro	ximate Coa	al Seam De	pths: <u>6</u> 6	60' to 665	j'			
16) Appro	ximate Dep	oth to Possi	ble Void	l (coal mii	ne, karst, other):	None		
	Proposed w verlying or				rs Yes	N	o _X	
(a) If Ye	s, provide N	Mine Info:	Name:					RECEIVED Office of Oil and Gas
			Depth:					CLD a .
			Seam:					3EP 2 4 2019
			Owner				E	WV Department of



API NO. 47-____
OPERATOR WELL NO. Nays 1209 N-2H

Well Pad Name: Nays 1209



1) Well Operate	or: HG En	ergy II Appa	lachia, 📙	4945	19932	Harrison	Union	West Milford 7.5'
•				Oper	ator ID	County	District	Quadrangle
2) Operator's V	Vell Number	. Nays 1209	9 N-2H		_ Well Pad	Name: Nays	1209	
3) Farm Name/	Surface Owi	ner: Nays/HG	Energy II App	oalachia	Public Road	d Access: Kind	cheloe Rur	Rd/SLS 35
4) Elevation, cu	irrent ground	d: 1002'	El	evation	, proposed p	oost-constructi	on: 1007'	
5) Well Type	(a) Gas	Х	_ Oil		Unde	rground Storag	ge	
	Other							
	(b)If Gas	Shallow	X		Deep			
		Horizontal	X		_			
6) Existing Pad								
7) Proposed Ta	· ·	ion(s), Depth and 51' in thic		•		•	ressure(s):	
-			Biolina .	Illoipate	u pressure a	at 43 14#.		
8) Proposed To								
9) Formation at	t Total Verti	ear Bepair.	Marcellus	5				
10) Proposed T	otal Measur	ed Depth:	23,267'					
11) Proposed F	Iorizontal Le	eg Length:	15,801'					
12) Approxima	te Fresh Wa	ter Strata De	pths:	135',	500'			
13) Method to	Determine F	resh Water D	epths: 1	Veares	t offset wel	l data		
14) Approxima	te Saltwater	Depths: No	ne noted	in offs	ets			
15) Approxima	ite Coal Sear	n Depths: 6	60' to 66	5'				
16) Approxima	te Depth to	Possible Voi	d (coal mi	ine, kar	st, other): _	Vone		
17) Doog Prope	and wall los	otion contair	s coal can	m.c				
17) Does Propodirectly overlyi					es	No	X	
(a) If Yes, pro	wide Mine I	nfo: Name						
(a) 11 1 es, pro	ovide wille i	Depth					Office	ECEIVED of Oil and Gas
		•	-					
		Seam:	-					2 4 2019
		Owne					Environm	epartment of ental Protection

API NO. 47	
OPERATOR WELL NO.	Nays 1209 S-7H
Wall Pad Namo: Navs	1209

STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS WELL WORK PERMIT APPLICATION

1) Well Operator: HG Energy II Appalachia, 494519932 Harrison Union West Milford 7	'.5'
Operator ID County District Quadrangle	
2) Operator's Well Number: Nays 1209 S-7H Well Pad Name: Nays 1209	
3) Farm Name/Surface Owner: Nays / HG Energy II Appalachia Public Road Access: Kincheloe Run Rd/SLS 35	
4) Elevation, current ground: 1002' Elevation, proposed post-construction: 1007'	
5) Well Type (a) Gas <u>x</u> Oil Underground Storage	
(b)If Gas Shallow X Deep Horizontal X	
6) Existing Pad: Yes or No No	
7) Proposed Target Formation(s), Depth(s), Anticipated Thickness and Expected Pressure(s): Marcellus at 6863'/6914' and 51' in thickness. Anticipated pressure at 4314#.	
8) Proposed Total Vertical Depth: 6900'	
9) Formation at Total Vertical Depth: Marcellus	
10) Proposed Total Measured Depth: 17,267'	
11) Proposed Horizontal Leg Length: 9,631'	
12) Approximate Fresh Water Strata Depths: 135', 500'	
13) Method to Determine Fresh Water Depths: Nearest offset well data	
14) Approximate Saltwater Depths: None noted in offsets	
15) Approximate Coal Seam Depths: 660' to 665'	
16) Approximate Depth to Possible Void (coal mine, karst, other): None	
17) Does Proposed well location contain coal seams directly overlying or adjacent to an active mine? Yes No _X	
(a) If Yes, provide Mine Info: Name:	
Depth:	
Seam: RECEIVED Office of Oil and Ga	
Owner:	

WV Department of Environmental Protection

API	NO. 47				_
(PERAT	OR WELL	NO.	Nays 1209 S-10H	
,	Mell Pa	d Name	Navs 1	1209	

1) Well Operator:	HG Energy	II Appal	achia, 📙	49451	19932	Harrison	Union	West Milford 7.5'
				Opera	ator ID	County	District	Quadrangle
2) Operator's Well	Number: Na	ys 1209	S-10H		_ Well Pac	d Name: Nay	s 1209	
3) Farm Name/Sur	face Owner: _	Nays / HG E	nergy II App	alachia	Public Roa	d Access: Ki	ncheloe Rui	n Rd/SLS 35
4) Elevation, curre	nt ground:	1002'	Ele	evation	, proposed	post-construc	tion: 1007'	
, , ,	Gas <u>X</u> her		Oil		Unde	erground Stor	age	
(b))If Gas Shal Hor		x x		Deep			OD
6) Existing Pad: Yo	es or No No					_,		
7) Proposed Target Marcellus at 686	` '		, .	•		-	Pressure(s):	
8) Proposed Total	Vertical Depth	n: 6900	1					
9) Formation at To	tal Vertical D	epth: N	larcellus					
10) Proposed Total	l Measured De	epth: 2	1,746'					
11) Proposed Horiz	zontal Leg Lei	ngth: 1	4,221'					
12) Approximate F	Fresh Water St	rata Dep	ths:	135',	500'			
13) Method to Det	ermine Fresh	Water Do	epths: N	leares	offset we	ll data		
14) Approximate S	Saltwater Dept	hs: Nor	ne noted	in offse	ets			
15) Approximate C	Coal Seam Dep	oths: 66	0' to 665	5'				
16) Approximate I	Depth to Possi	ble Void	(coal mi	ne, kars	st, other):	None		
17) Does Proposed directly overlying					es	N	Io X	
(a) If Yes, provid	le Mine Info:	Name:	-					RECEIVED Office of Oil and Gas
		Depth:						SEP 2 4 2019
		Seam:						- WV Department of
		Owner:					E	WV Department of nvironmental Protection