

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

Harold D. Ward, Cabinet Secretary www.dep.wv.gov

Tuesday, February 9, 2021 PERMIT MODIFICATION APPROVAL Horizontal 6A / New Drill

HG ENERGY II APPALACHIA, LLC 5260 DUPONT ROAD

PARKERSBURG, WV 26101

Re: Permit Modification Approval for SCHOEN 1205 S-7H

47-033-05995-00-00

Modified Well Bore and Leases

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: SCHOEN 1205 S-7H

Farm Name: GEORGE & ROSANNE SCHOEN

U.S. WELL NUMBER: 47-033-05995-00-00

Horizontal 6A New Drill Date Modification Issued: 2/9/2021

Promoting a healthy environment.

WW-6B (04/15) API NO. 47-33 - 05995 MeV.
OPERATOR WELL NO. Schoen 1205 S-7H

Well Pad Name: Schoen 1205

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

1) Well Operato	HG Ene	rgy II Appa	lachia, L	494519932	Harrison	Grant	Mount Clare 7.5'
i) wen operate				Operator ID	County	District	Quadrangle
2) Operator's W	Vell Number:	Schoen 12	205 S-7H		ad Name: Sch		
3) Farm Name/	Surface Own	er: George	e Schoen	Public Ro	oad Access:	AcWhorter F	Road / SR25
4) Elevation, cu	irrent ground	: 1410'	El	evation, propose	d post-constru	ction: 1407	
		Κ	_ Oil	Un	derground Sto	rage	
	(b)If Gas	Shallow	Х	Deep			-50w
		Horizontal	X	-			-50W 1112/21
6) Existing Pad			0.000	D. AUSC. CONT	-		
7) Proposed Ta	rget Formation	on(s), Depth	(s), Antic	ipated Thickness	and Expected	Pressure(s):	
Marcellus at	7214' / 7315'	and 101' in t	hickness.	Anticipated press	sure at 4314#.		
8) Proposed To	tal Vertical I	Depth: 724	0'				
9) Formation at	t Total Vertic	al Depth:	Marcellus				
10) Proposed T	otal Measure	ed Depth:	21,833'				
11) Proposed H	Iorizontal Le	g Length:	13,935'				
12) Approxima	ite Fresh Wat	er Strata De	pths:	135', 480', 640	0', 728'		
13) Method to	Determine F	resh Water I	Depths:	Nearest offset w	vell data		
14) Approxima			730, 1780	, 2010			
15) Approxima	nte Coal Sean	n Depths: 5	01, 650',	730', 736' (Surf	ace casing is	being extend	ded to cover the coal)
16) Approxima	ate Depth to I	Possible Voi	d (coal m	ine, karst, other)	: None		
17) Does Propo directly overlyi	osed well loc ing or adjace	ation contain nt to an activ	n coal sear ve mine?	ms Yes		No X	
(a) If Yes, pro							RECEIVED Office of Oil and Ga
(a) or a sell by	130000000000000000000000000000000000000	Depth					JAN 1 9 2021
		Seam					WV Department of
		Owne	er:				Environmental Protec

WW-6B (04/15) API NO. 47-4703305995

OPERATOR WELL NO. Schoen 1205 S-7H
Well Pad Name: Schoen 1205

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	30"	New	LS	157.5	120'	120'	Drilled In
Fresh Water/Coal	20"	NEW	J-55	94	1200'	1200'	40% excess,CTS
Intermediate 1	13 3/8"	NEW	J-55	68	2100'	2100'	40% excess,CTS
Intermediate 2	9 5/8"	NEW	J-55	40	2950'	2950'	40% excess tail, CTS
Production	5 1/2"	NEW	P-110	23	21833'	21833'	20% excess tail, CTS
Tubing							
Liners	1						

1/12/21

TYPE	Size (in)	Wellbore Diameter (in)	Wall Thickness (in)	Burst Pressure (psi)	Anticipated Max. Internal Pressure (psi)	Cement Type	<u>Cement</u> <u>Yield</u> (cu. ft./k)
Conductor	30"	30"	.500				Drilled In
Fresh Water/Coal	20"	24"	.438	2110	1200	Type 1, Class A	40 % excess yield = 1.20, CTS
Intermediate1	13 3/8"	17 1/2"	.480	3450		Type 1/Class A	Lead 40% excess, Tail 0% excess
Intermediate 2	9 5/8"	12 1/4"	.395	3950		Type 1/Class A	Lead 40% excess, Tail 0% Excess ca
Production	5 1/2"	8 1/2"	.415	16240	12500	Type 1/ClassA	20% excess yield = 1.19, tall yield 1.94 f
Tubing							
Liners							

PACKERS

Kind:	
Sizes:	
Depths Set:	RECEIVED Office of Oil and Ga

JAN 1 9 2021

WV Department of Environmental Protection WW-6B (10/14) API NO. 47-____OPERATOR WELL NO. Schoen 1205 S-7H
Well Pad Name: Schoen 1205

19) Describe proposed well work, including the drilling and plugging back of any pilot hole:

Drill the vertical depth to the Marcellus at an estimated total vertical depth of approximately 7240 feet. Drill horizontal leg to estimated 13,935' lateral length, 21,833' TMD. Hydraulically fracture 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. We plan to run an ACP above the Gantz/Dominion Storage interval to aid in sealing off and isolating the storage interval.

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): 29.485 acres
- 22) Area to be disturbed for well pad only, less access road (acres): 9.246 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, will also be running ACP for isolating storage zone
Intermediate - Bow Spring on first 2 joints the nevery third joint to 100° from surface.
Intermediate - Bow Spring on first 2 joints the nevery third joint to 100° from surface.
Production - 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 wi Dual Rotary Rig.
Firsh Water - 15.6 pgg PNE-1 + 3% bwoc CaCl, 40% Excess Yield = 1.20, CTS Intermediate 1 - 1-2ed: 15.4 pgp PNE-1 + 2.5% bwoc CaCl Card Service Excess. CTS' Intermediate 1 - 1-2ed: 15.4 pgp PNE-1 + 2.5% bwoc CaCl Card Service Excess. CTS' Intermediate 2 - 1-2ed: 15.4 pgp PNE-1 + 2.5% bwoc CaCl Card Service Excess. CTS' Intermediate 2 - 1-2ed: 15.4 pgp PNE-1 + 2.5% bwoc CaCl Card Service Excess. CTS' Intermediate 2 - 1-2ed: 15.4 pgp PNE-1 + 2.5% bwoc CaCl Card Service Excess. CTS' Intermediate 2 - 1-2ed: 15.4 pgp PNE-1 + 2.5% bwoc CaCl Card Service Excess. CTS' Intermediate 2 - 1-2ed: 15.4 pgp PNE-1 + 2.5% bwoc CaCl Card Service Excess. CTS' Intermediate 2 - 1-2ed: 15.4 pgp PNE-1 + 2.5% bwoc R3 + 5.7 pg PNE-1 + 2.5% bw

25) Proposed borehole conditioning procedures:

Conductor - Ensure the hole is clean at TD.
Fresh Water - Once cashing is at setting depth, circulate a minimum of one hole volume with Fresh Water prior to pumping cement.
Cast - Once cashing is a testing 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 With cashin, circulate at max allowable pump rate for at least 25 bottoms up, or undil returns and pump pump pump pumping cement.

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Office of Oil and Gas

JAN 19 2021

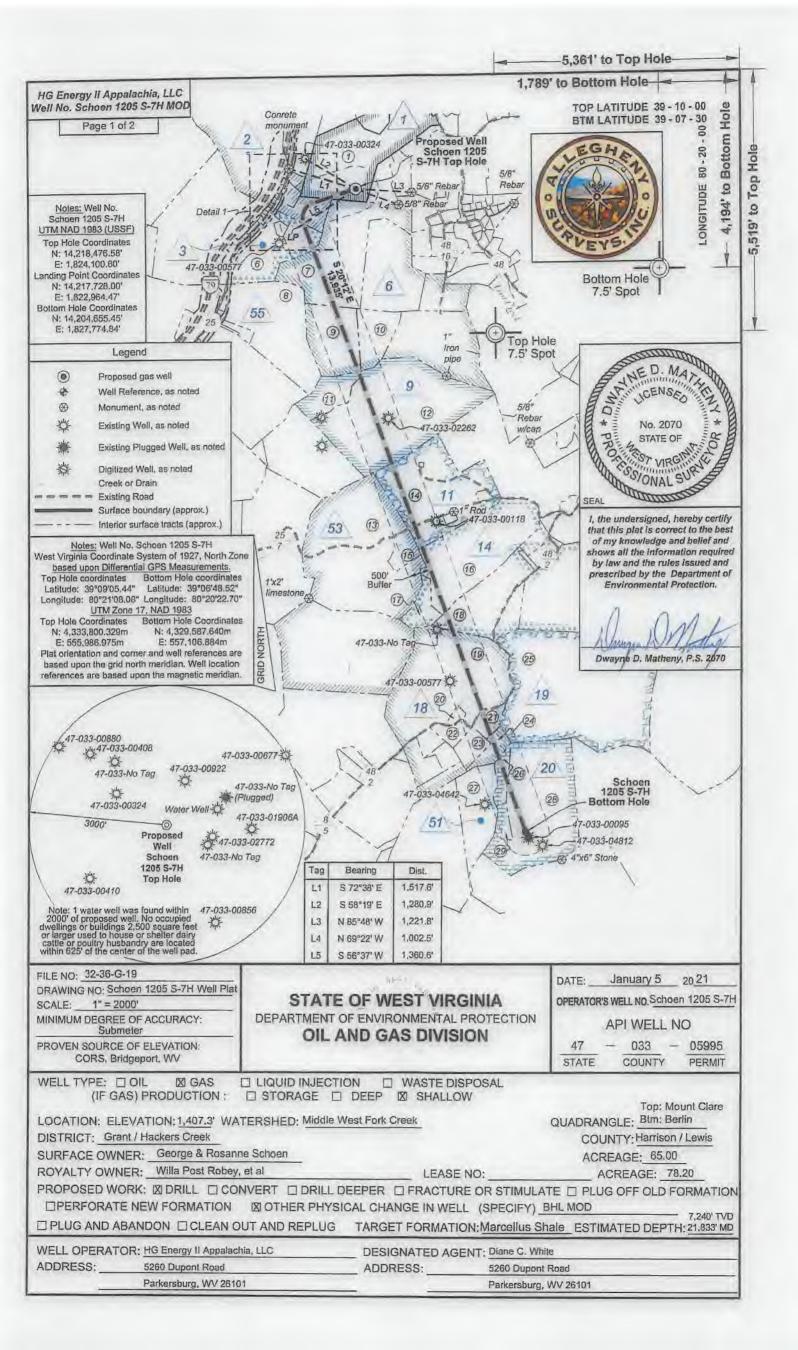
WV Department of Environmental Protection

*Note: Attach additional sheets as needed.



1205 S-7H Marcellus Shale Horizontal

	30" 24"	1407,: 159.79 CASING 30" 157.5# LS		TOP 0	1205 1205 \$ BASE	S-7H SH S-7H LI G-7H BH MUD	,	1	218476.58N 18241 4217728N 1822964 204655.45N 182777 CONDITIONING	.47E 74.84E	
	30"	159.79 CASING 30" 157.5# LS	8° GEOLOGY Conductor		1205 S BASE	5-7H BH	IL	14	204655.45N 182777	74.84E	
	30"	30" 157.5# LS	GEOLOGY		BASE						
	30"	30" 157.5# LS	Conductor			MUD	CEMENT	CENTRALIZERS	CONDITIONING	COMMENTS	
		LS 20"	7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	0	400					COMMENTS	
	24 ⁿ		Fresh Water		120	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" wall thickness	
	24 ⁿ			0	135, 480, 640, 728		15.6 ppg PNE-1 ± 3%	0.000	Once casing is at setting depth, circulate a minimum	Surface casing = 0.438" wal	
			Coal	730	736	AIR	bwoc CaCl 40% Excess	Centralized every 3 joints to surface	of one hole volume with	thickness	
			Surface / FW	0	1200		Yield=1.20 / CTS		Fresh Water prior to pumping cement.	Burst=2110 psi	
			Tuncher No.	Var - North			Lead: 15.4 ppg PNE-1 + 2.5% bwoc CaCl	Bow Spring on every	Once casing is at setting depth, Circulate and		
	17.5"	13-3/8" 68#	Little/Big Lime	1467 / 1510	1482 / 1556	AIR / KCL Salt	40% Excess / Tail: 15.9 ppg PNE-1 + 2.5% bwoc		condition at TD. Circulate a	Intermediate casing = 0.480 wall thickness	
		J-55 BTC	Injun / Gantz (Storage)	1565 / 1900	1690 / 1970	Polymer	CaCl	ACP for isolating storage zone*	minimum of one hole volume prior to pumping	Burst=3450 psi	
			Intermediate 1	0	2100		zero% Excess. CTS	Storage zone	cement.		
			Fifty / Thirty Foot	Lead, 15,4 ppg PN	Lead: 15,4 ppg PNE-1 +	3 3 3 3 3 3 3 3 3 3 3 3	Once casing is at setting				
	10.050	9-5/8" 40#	Gordon Stray / Gordon	2195 / 2250	2250 / 2310	HAIR / KUL	2,5% bwoc CaCl 40% Excess / Tail: 15.9	Bow Spring on first 2 joints then every third	depth, Circulate and condition mud at TD.	Intermediate casing = 0.395	
	12.25"	J-55 BTC	5th Sand	2440	2468	Salt Polymer	ppg PNE-1 + 2.5% bwoc j		Circulate a minimum of one hole volume prior to pumping cement.	wall thickness Burst=3950 psi	
	1		Warren	2835	2860		CaCl zero% Excess. CTS				
-			Intermediate 2	3028	2950						
1			Speechley Bradford	3342	3162 3367	Salva.	11	Run 1 spiral centralizer		very 5 joints from the	
8.	.5" Vertical		Benson	4420	4455	9.0ppg SOBM	<u>Lead</u> : 14.5 ppg	top of the curve to			
			DOTISOT	4420	4455		POZ:PNE-1 + 0.3% bwoc R3 + 1% bwoc	surface.		t Production casing = 0.415"	
	-		Rhinestreet	5872	6549		EC1 + 0.75 gal/sk		Once on bottom/TD with		
			Cashaqua	6549	6740		FP13L + 0.3% bwoc MPA170		casing, circulate at max allowable pump rate for at		
1		5-1/2" 23#	Middlesex	6740	6870	dd Fana	Tail: 14.8 ppg PNE-1 +		least 2x bottoms up, or until	wall thickness	
8	3.5" Curve	P-110 HP	West River	6870	7003	11.5ppg- 12.5ppg	0.35% bwoc R3 + 0.75 gal/sk FP13L + 50%		returns and pump pressures indicate the hole	Burst=16240 psi Note:Actual centralizer	
		CDC HTQ	Burkett	7003	7048	SOBM	bwoc ASCA1 + 0.5%	Run 1 spiral centralizer	is clean. Circulate a	schedules may be changed due to hole conditions	
			Tully Limestone	7048	7149		20% Excess	1st 5.5" long joint to the	volume prior to pumping	ade to hole collations	
			Hamilton	7149	7214			top of the curve.	cement.		
l F			Marcellus	7214	7315	11 Enna	CTS				
8	3.5" Lateral		TMD / TVD (Production)	21832	7240	12.5ppg- 12.5ppg SOBM	1 4 1				
			Onondaga	7315		4.36					
		А			ad Long Stein		^			TD @ +/-7240' TVD	
	8	8.5" Curve 8.5" Lateral 40' TVD / 7898' MD	8.5" Curve P-110 HP CDC HTQ 8.5" Lateral 40' TVD / 7898' MD	8.5" Curve P-110 HP CDC HTQ Burkett Tully Limestone Hamilton Marcellus TMD / TVD (Production) Onondaga X X X A0' TVD / 7898' MD	B.5" Curve	B.5" Curve	B.5" Curve	B.5" Curve	8.5" Curve	8.5" Curve	

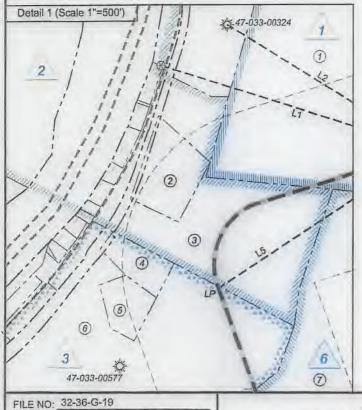


Page 2 of 2



ID	Lease
1	Willa Post Robey
2	H.D. & Marcella R. Bond, et al
3	Emma A. Waggoner, et al
6	Susan V. Curry & Ida M. Curry
9	L.D. & Addie Swisher
11	P.T. Allman
14	M.M.F. & S.F. Randolph
18	Sidney Cookman, et al
19	Sidney Haymond
20	Alcinda B. & M.E. Jackson
51	J.W. & Sarah Lewis
53	B. & I.M. Swisher
55	Willa E. Ware, et al

	T	Harrison County		
No.	TM / Par	Owner	Bk/Pg	Ac.
1	447/2	George & Rosanne Schoen	1148 / 1059	65,00
2	446 / 12	Marilyn Gaines	1192 / 300	2.93
3	446 / 15	Vera E. Oral K. Haught	1582 / 896	14.40
4	446 / 28.5	Robert L. Vanhorn	1352 / 91	1.52
5	446 / 28.4	Bradford Vanhorn	1381 / 1181	1.52
6	446 / 28.2	David D. Vanhorn, et al	W177 / 92	42.66
7	446 / 29	John F. McCuskey II, et al	1121 / 25	75.00
8	446 / 38	Sandra J. Hogsed	1257 / 137	70.16
9	447 / 32	Joseph C. Queen	1349 / 508	36.00
10	447 / 33	Joseph Queen	1349 / 508	20.00
11	447 / 43.1	Joseph C. Queen	1349 / 508	17.16
12	447 / 43	Betty J. & Isaac H. Maxwell III	1543 / 141	123.95
13	467 / 29.1	Charles R. & Franklin L. Sutton	/	129.61
14	467 / 1	Margaret L. Gyimesi	1306 / 775	78.79
15	467 / 29	Gretna J. Adkins	1207 / 424	8.39
16	467 / 30	William L. Randolph, et ux	1518 / 19	73.73
17	467 / 30.1	Charles R. & Franklin L. Sutton	/	11.05
18	467 / 33	Charles R. & Franklin L. Sutton	1472 / 181	39.20
19	466 / 49	Charles R. & Franklin L. Sutton	/	105.17
20	467 / 49.1	Jane E. & Cody R. Ball	1570 / 114	2.08
21	467 / 51	Gary Jedrosko	1561 / 1064	5.76
22	467 / 50	David L. & Celia K. Radcliff	1314 / 1289	6.00
23	467 / 51.2	Gary Jedrosko	1561 / 1064	8.38
24	467 / 51.1	Gary Jedrosko	1561 / 1064	8.87
25	467 / 52	David L. & Lisle C. Hinkle	1282 / 389	175.50
26	487 / 4.2	Catherine A. Mauro	1244 / 135	5.00
27	487 / 3	Myrtle B. Arbogast	W148 / 426	29.17
28	487 / 4.1	Catherine A. Mauro	1244 / 135	95.45
29	487 / 4	Catherine A. Mauro	1244 / 135	4.36



Wellhead Layoul (NTS) Schoen 1205 S-6H O Proposed Well | Schoen 1205 S-7H (47-033-05995) Schoen 1205 S-10H Schoen 1205 S-9H (Schoen 1205 S-8H@

Well Location References Not to Scale Proposed Well Schoen 1205 1205 S-7H Pad 325 5/8" rebar w/yellow plastic cap

DRAWING NO: Schoen 1205 S-7H Well Plat 1" = 2000' SCALE:

MINIMUM DEGREE OF ACCURACY: Submeter

PROVEN SOURCE OF ELEVATION: CORS, Bridgeport, WV

STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION OIL AND GAS DIVISION

January 5 DATE: _ 20 21 OPERATOR'S WELL NO. Schoen 1205 S-7H API WELL NO

47 033 05995 STATE COUNTY PERMIT

WELL T	YPE:	OIL	X GAS	☐ LIQUID	NJECTIO	□ NC	W	ASTE DISPOSAL	
	(IF	GAS) PRO	DUCTION:	☐ STORA	GE 🗆	DEEP	X	SHALLOW	
LOCATI	ON: E	ELEVATION	N: 1,407.3' W	ATERSHED:	Middle W	est Fork C	Creek	(
DIOTOLO	- 0	reset / Healt	on Canali						

DISTRICT: Grant / Hackers Creek

SURFACE OWNER: George & Rosanne Schoen ROYALTY OWNER: Willa Post Robey, et al

LEASE NO:

QUADRANGLE: Btm: Berlin COUNTY: Harrison / Lewis ACREAGE: 65.00

Top: Mount Clare

ACREAGE: 78.20 PROPOSED WORK: ☑ DRILL ☐ CONVERT ☐ DRILL DEEPER ☐ FRACTURE OR STIMULATE ☐ PLUG OFF OLD FORMATION

LIPERFORATE NEW FORMATION	MOTHER PHYSIC	AL CHANGE IN WELL	(SPECIFY)	BHT MOD	7,240° TVE
☐ PLUG AND ABANDON ☐ CLEAN OU	JT AND REPLUG	TARGET FORMATION	:Marcellus Shale	ESTIMATED	

WELL OPERAT	OR; HG Energy II Appalachia, LLC	DESIGNATED AGENT: Diane C. White				
ADDRESS:	5260 Dupont Road	ADDRESS:	5260 Dupont Road			
_	Parkersburg, WV 26101		Parkersburg, WV 26101			

WW-6A	
(5/13)	

Operator's Well No.	Schoen 1205 S-7H
Operator's well no.	

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

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 A	Appalachia, LLC		
By:	Diane White	Diane	White	
Its:	Accountant			

Page 1 of ____

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Office of Oil and Gas

FEB 05 2021

WV Department of Environmental Protection

HG Energy II Appalachia, LLC - 1205 Schoen S-7H

A. B. POST, WIDOWER; P. S. ROBEY AND WILLA ROBEY, EACH IN HIS OWN RIGHT AS HUSBAND AND WIFE; ELLA LOUISE MAXWEUL, HER HUSBAND AND WIFE; ELLA LOUISE MAXWEUL, AND ISACH, MAXWEUL, HER HUSBAND HOPE NATURAL GAS COMPANY NOT LESS THAN 1/8 90 HOPE NATURAL GAS COMPANY CONSOLIDATED GAS SUPPLY CORPORATION CONFIRMATORY DEED 90 CONSOLIDATED GAS TRANSMISSION CORPORATION CORPORATION ASSIGNMENT 113 CONSOLIDATED GAS TRANSMISSION CORPORATION CORPORATION MERGER/NAME CHANGE 55 CONSOLIDATED GAS TRANSMISSION, INC. COX GAS COMPANY LLC MEMORANDUM AGREEMENT 152 CONSOLIDATED GAS TRANSMISSION, INC. COX GAS COMPANY LLC MEMORANDUM AGREEMENT 152 CONSOLIDATED GAS TRANSMISSION, INC. COX GAS COMPANY LLC MEMORANDUM AGREEMENT 152 CONSOLIDATED GAS TRANSMISSION, INC. COX GAS COMPANY LLC MEMORANDUM AGREEMENT 152 CONSOLIDATED GAS TRANSMISSION, INC. COX GAS COMPANY LLC MEMORANDUM AGREEMENT 152 CONSOLIDATED GAS TRANSMISSION, INC. COX GAS COMPANY LLC MEMORANDUM AGREEMENT 152 CONSOLIDATED GAS TRANSMISSION, INC. COX GAS COMPANY LLC MEMORANDUM AGREEMENT 152 CONSOLIDATED GAS TRANSMISSION, INC. COX GAS COMPANY LLC MEMORANDUM AGREEMENT 152 CONSOLIDATED GAS TRANSMISSION, INC. UMITED PARTIAL ASSIGNMENT (50%) 154: CONSOLIDATED GAS TRANSMISSION, INC. MERGER/NAME CHANGE WYSO: DOMINION TRANSMISSION, INC. MERGER/NAME CHANGE WYSO: DOMINION TRANSMISSION, INC. MERGER/NAME CHANGE WYSO: DOMINION TRANSMISSION, INC. MERGER/NAME CHANGE WYSO:		LEGACY						<u> </u>	
A. B. POST, WIDOWER; P. S. ROBEY AND WILLA ROBEY, EACH IN HIS OWN RIGHT AS HUSBAND AND WIFE; ELLA LOUISE MAXWELL, HER HUSBAND AND WIFE; ELLA LOUISE MAXWELL, HER HUSBAND HOPE NATURAL GAS COMPANY NOT LESS THAN 1/8 90 HOPE NATURAL GAS COMPANY CONSOLIDATED GAS SUPPLY CORPORATION CONFIRMATORY DEED 90 CONSOLIDATED GAS TRANSMISSION CORPORATION CORPORATION ASSIGNMENT 113 CONSOLIDATED GAS TRANSMISSION CORPORATION CORPORATION MERGER/NAME CHANGE 5 CONSOLIDATED GAS TRANSMISSION CORPORATION DOMINION TRANSMISSION, INC. MERGER/NAME CHANGE 5 CONSOLIDATED GAS TRANSMISSION CORPORATION DOMINION TRANSMISSION, INC. MERGER/NAME CHANGE 5 CONSOLIDATED GAS TRANSMISSION CORPORATION DOMINION TRANSMISSION, INC. MERGER/NAME CHANGE 5 DOMINION TRANSMISSION, INC. CINK GAS COMPANY LIC MEMORANDUM FARMOUT AGREEMENT 152 DOMINION TRANSMISSION, INC. CINK GAS COMPANY LIC FARMOUT AGREEMENT 152 CONSOLIDATED GAS TRANSMISSION, INC. CINK GAS COMPANY LIC FARMOUT AGREEMENT 152 DOMINION TRANSMISSION, INC. CINK GAS COMPANY LIC FARMOUT AGREEMENT 152 CONSOLIDATED GAS TRANSMISSION, INC. CINK GAS COMPANY LIC FARMOUT AGREEMENT 152 DOMINION TRANSMISSION, INC. CINK GAS COMPANY LIC MEMORANDUM OF FIRST AMERICAN EMEROPMENT ON TO MEMORANDUM OF CONTROL CINK GAS COMPANY LIC ASSIGNMENT 152 CONTROL CINK GAS COMPANY LIC NOBLE ENERGY, INC. LIMITED PARTIAL ASSIGNMENT 152 CONTROL CINK GAS COMPANY LIC NOBLE ENERGY, INC. ASSIGNMENT 152 DOMINION TRANSMISSION, INC. HIGENERGY IN APPALACHIA, LIC ASSIGNMENT 156 DOMINION TRANSMISSION, INC. DOMINION ENERGY TRANSMISSION, INC. MERGER/NAME CHANGE WYSO.	12055	LEASE		LEASE					
LC074399 12-0447-0001-0000 12-0447-0002-0000 10-0447-0002-0000 10-0447-0001-0000	7H	NUMBER	TAX MAP	NUMBER	GRANTOR/LESSOR	GRANTEE/LESSEE	ROYALTY	DEED BOOK	PAGE
DOMINION ENERGY TRANSMISSION, INC. HG ENERGY II APPALACHIA, LLC FARMOUT AGREEMENT 1603 THIRD AMENDMENT TO MEMORANDUM OF DOMINION ENERGY TRANSMISSION, INC. HG ENERGY II APPALACHIA, LLC FARMOUT AGREEMENT 1623	1		12-0447-0001-0000	Q100514000	A. B. POST, WIDOWER; P. S. ROBEY AND WILLA ROBEY, EACH IN HIS OWN RIGHT AS HUSBAND AND WIFE; ELLA LOUISE MAXWELL AND ISAAC H. MAXWELL, HER HUSBAND; FRANCES AND GEORGE B. VIEWEG, HER HUSBAND HOPE NATURAL GAS COMPANY CONSOLIDATED GAS SUPPLY CORPORATION CONSOLIDATED GAS TRANSMISSION CORPORATION CONG TRANSMISSION CORPORATION DOMINION TRANSMISSION, INC. CNX GAS COMPANY LLC DOMINION TRANSMISSION, INC. CNX GAS COMPANY LLC NOBLE ENERGY, INC. DOMINION TRANSMISSION, INC. CONSOLIDATED GAS TRANSMISSION, INC. COMINION TRANSMISSION, INC. COMINION TRANSMISSION, INC. COMINION TRANSMISSION, INC.	HOPE NATURAL GAS COMPANY CONSOLIDATED GAS SUPPLY CORPORATION CONSOLIDATED GAS TRANSMISSION CORPORATION CNG TRANSMISSION CORPORATION DOMINION TRANSMISSION, INC. CNX GAS COMPANY LLC CNX GAS COMPANY LLC CNX GAS COMPANY LLC NOBLE ENERGY, INC. CNX GAS COMPANY LLC AND NOBLE ENERGY, INC. NOBLE ENERGY, INC. HG ENERGY II APPALACHIA, LLC DOMINION ENERGY TRANSMISSION, INC. HG ENERGY II APPALACHIA, LLC HG ENERGY II APPALACHIA, LLC	NOT LESS THAN 1/8 CONFIRMATORY DEED ASSIGNMENT MERGER/NAME CHANGE MERGER/NAME CHANGE MEMORANDUM FARMOUT AGREEMENT FIRST AMENDMENT TO MEMORANDUM OF FARMOUT AGREEMENT LIMITED PARTIAL ASSIGNMENT (50%) PARTIAL ASSIGNMENT (32%) ASSIGNMENT ASSIGNMENT MERGER/NAME CHANGE SECOND AMENDMENT TO MEMORANDUM OF FARMOUT AGREEMENT THIRD AMENDMENT TO MEMORANDUM OF FARMOUT AGREEMENT	900 903 1136 51 58 1522 1524 1543 1576 1584 1600 WVSOS	26 17: 25: 79: 36: 3: 49: 123: 94: 69:

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		г			Office of Oil and 1345 FEB 05 2021	WV Departmontariari Environmental Protection	!	
				MARCELLA R. BOND AND H. D. BOND, HER HUSBAND; S. ERLOW DAVIS AND ANTHA DAVIS, HIS WIFE; HUGH C. DAVIS AND MARTHA DAVIS, HIS WIFE; GEORGIA A. BARNES, WIDOW; ALTHEA J. RANDOLPH, WIDOW; JANE D.	RE Office of	onmental		
				POST AND JACOB S. POST, HER HUSBAND; ROXIE VEITH,		Niv.		1
				SINGLE; JOHN A. VEITH, SINGLE; HALLIS VEITH, SINGLE;		Ψ I		
				GRACE VEITH, SINGLE; JESSIE S. DAVIS, WIDOW; JOHN B. GRUMBEIN, WIDOWER; JOHN D. PICKENS AND HELEN N.				
1				PICKENS, HIS WIFE; LOUISE B. BELCHER AND EARL J.				
1				BELCHER, HER HUSBAND; LEWIS E. DAVIS AND LENORE		1		
1				DAVIS, HIS WIFE; LETTA M. BOND, SINGLE; PAUL V. BOND				
				AND EVALEEN K. BOND, HIS WIFE; EVERETT O. DAVIS AND				
				RUTH M. DAVIS, HIS WIFE; G. M. BASSEL AND MAUDE S.				
				BASSEL, HIS WIFE; CLETT MOUNT AND HELEN MOUNT,				
				HIS WIFE	HOPE NATURAL GAS COMPANY	NOT LESS THAN 1/8	787	418
				HOPE NATURAL GAS COMPANY	CONSOLIDATED GAS SUPPLY CORPORATION	CONFIRMATORY DEED	903	179
2	LC066976	12-0446-0007-000 et al	Q100894000	HOFE NATURAL GAS COMPANT	CONSOLIDATED GAS TRANSMISSION	CONTINUENTONI DELD	303	
1				CONSOLIDATED GAS SUPPLY CORPORATION	CORPORATION	ASSIGNMENT	1136	250
1				CONSOLIDATED GAS TRANSMISSION CORPORATION	CNG TRANSMISSION CORPORATION	MERGER/NAME CHANGE	51	795
1		1		CNG TRANSMISSION CORPORATION	DOMINION TRANSMISSION, INC.	MERGER/NAME CHANGE	58	362
1				DOMINION TRANSMISSION, INC.	CNX GAS COMPANY LLC	MEMORANDUM FARMOUT AGREEMENT	1522	33
- [FIRST AMENDMENT TO MEMORANDUM OF		
1				DOMINION ENERGY TRANSMISSION, INC.	CNX GAS COMPANY LLC	FARMOUT AGREEMENT	1524	491
1				CNX GAS COMPANY LLC	NOBLE ENERGY, INC.	LIMITED PARTIAL ASSIGNMENT (50%)	1543	1235
l l				DOMAINION TRANSPAICEON INC	CNX GAS COMPANY LLC AND NOBLE ENERGY, INC.	DARTIAL ASSIGNMENT (22%)	1576	125
İ	1			DOMINION TRANSMISSION, INC. CNX GAS COMPANY LLC	NOBLE ENERGY, INC.	PARTIAL ASSIGNMENT (32%) ASSIGNMENT	1584	942
				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		
1				DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	FARMOUT AGREEMENT	1601	581
						THIRD AMENDMENT TO MEMORANDUM OF		
				DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	FARMOUT AGREEMENT	1621 1637	1295 1081
				DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	ASSIGNMENT (68%)	1057	1001
1				EMMA A. WAGGONER, WIDOW; W. A. WAGGONER AND MINNIE WAGGONER, HIS WIFE; AND W. GEORGE			l	1
1	1			WAGGONER AND VIRGINIA WAGGONER, HIS WIFE	HOPE NATURAL GAS COMPANY	NOT LESS THAN 1/8	777	396
1				THOSONER CHO THORIST THOOONERS HO WILL				
				HOPE NATURAL GAS COMPANY	CONSOLIDATED GAS SUPPLY CORPORATION	CONFIRMATORY DEED	903	179
1					CONSOLIDATED GAS TRANSMISSION			
1	1		l	CONSOLIDATED GAS SUPPLY CORPORATION	CORPORATION	ASSIGNMENT	1136	250
		12-0446-0028-0000		CONSOLIDATED GAS TRANSMISSION CORPORATION	CNG TRANSMISSION CORPORATION	MERGER/NAME CHANGE	51	795
1	1	12-0446-0028-0011		CNG TRANSMISSION CORPORATION	DOMINION TRANSMISSION, INC.	MERGER/NAME CHANGE	58 1522	362 33
ı	1	12-0446-0028 0002	I	DOMINION TRANSMISSION, INC.	CNX GAS COMPANY LLC	MEMORANDUM FARMOUT AGREEMENT	1277	33

3	LC066702	12 0445 0038 0002	Q101137000	CNX GAS COMPANY LLC	NOBLE ENERGY, INC.	LIMITED PARTIAL ASSIGNMENT (50%)	1543	123	
		12-0446-0028-0003 12-0446-0028-0004			CNX GAS COMPANY LLC AND NOBLE ENERGY,				
				DOMINION TRANSMISSION, INC.	INC.	PARTIAL ASSIGNMENT (32%)	1576	12	
		12-0446-0028-0005		CNX GAS COMPANY LLC	NOBLE ENERGY, INC.	ASSIGNMENT	1584	94	
				DOMINION TRANSMISSION, INC.	DOMINION ENERGY TRANSMISSION, INC.	MERGER/NAME CHANGE	wvsos		
				NOBLE ENERGY, INC.	HG ENERGY II APPALACHIA, LLC	ASSIGNMENT	1600	69	
						SECOND AMENDMENT TO MEMORANDUM OF	į		
				DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	FARMOUT AGREEMENT	1601	58	
		•	1			THIRD AMENDMENT TO MEMORANDUM OF			
				DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	FARMOUT AGREEMENT	1621	129	
				DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	ASSIGNMENT (68%)	1637	108	
				SUSAN V. CURRY, SINGLE; AND IDA M. CURRY, SINGLE	HOPE NATURAL GAS COMPANY	NOT LESS THAN 1/8	193	26	
		į	HOPE NATURAL GAS COMPANY	CONSOLIDATED GAS SUPPLY CORPORATION	CONFIRMATORY DEED	903	17		
		CONSOLIDATED GAS SUPPLY CORPORATION	CORPORATION	ASSIGNMENT	1136	25			
			CONSOLIDATED GAS TRANSMISSION CORPORATION	CNG TRANSMISSION CORPORATION	MERGER/NAME CHANGE	51	79		
			CNG TRANSMISSION CORPORATION	DOMINION TRANSMISSION, INC.	MERGER/NAME CHANGE	58	36		
		12-0446-0029-0000	1	DOMINION TRANSMISSION, INC.	CNX GAS COMPANY LLC	MEMORANDUM FARMOUT AGREEMENT	1522		
	1	12-0447-0020-0000		CNX GAS COMPANY LLC	NOBLE ENERGY, INC.	ASSIGNMENT	1543	123	
_	LC098171 FEE,	12-0447-0022-0000	Q100631000	DOMINION TRANSMISSION, INC.	INC.	ASSIGNMENT	1576	12	
6	LC020404	12-0447-0032-0000 12-0447-0033-0000 12-0447-0034-0000 12-0447-0035-0000	1 (CO98171 FF	LC098171 FEE	CNX GAS COMPANY LLC	NOBLE ENERGY, INC.	ASSIGNMENT	1584	9
	1		1	NOBLE ENERGY, INC.	HG ENERGY II APPALACHIA, LLC	ASSIGNMENT	1600	6	
				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	58	
			1			THIRD AMENDMENT TO MEMORANDUM OF			
				DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	FARMOUT AGREEMENT	1621	129	
				DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	ASSIGNMENT (68%)	1637	108	
		·	1	L. D. SWISHER AND ADDIE SWISHER, HIS WIFE	HOPE NATURAL GAS COMPANY	NOT LESS THAN 1/8	152	25	
					CONTOURNETED CAS SURRIY CORROBATION	CONCIDENTATION OFFI	903	17	
			1	HOPE NATURAL GAS COMPANY	CONSOLIDATED GAS SUPPLY CORPORATION CONSOLIDATED GAS TRANSMISSION	CONFIRMATORY DEED	903	17	
				CONSOLIDATED GAS SUPPLY CORPORATION	CORPORATION	ASSIGNMENT	1136	2!	
	1			CONSOLIDATED GAS TRANSMISSION CORPORATION	CNG TRANSMISSION CORPORATION	MERGER/NAME CHANGE	51	79	
	1		1	CNG TRANSMISSION CORPORATION	DOMINION TRANSMISSION, INC.	MERGER/NAME CHANGE	58	36	
			l	DOMINION TRANSMISSION, INC.	CNX GAS COMPANY LLC	MEMORANDUM FARMOUT AGREEMENT	1522		
9 LC005124			ı	Sommer instantionally and		FIRST AMENDMENT TO MEMORANDUM OF		·	
	12-0447-0043-0000	l	DOMINION ENERGY TRANSMISSION, INC.	CNX GAS COMPANY LLC	FARMOUT AGREEMENT	1524	49		
	12-0447-0043-0001	FK005124	CNX GAS COMPANY LLC	NOBLE ENERGY, INC.	LIMITED PARTIAL ASSIGNMENT (50%)	1543	12:		
	12-044/-0043-0001			CNX GAS COMPANY LLC AND NOBLE ENERGY,					
	1		1	DOMINION TRANSMISSION, INC.	INC.	PARTIAL ASSIGNMENT (32%)	1576	17	
			1	CNX GAS COMPANY LLC	NOBLE ENERGY, INC.	ASSIGNMENT	1584	94	
	Į.	İ	1	DOMINION TRANSMISSION, INC.	DOMINION ENERGY TRANSMISSION, INC.	MERGER/NAME CHANGE	wvsos		
			1			SECOND AMENDMENT TO MEMORANDUM OF			
	1	นอนูร์ มอนูร์	i	DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	FARMOUT AGREEMENT	1601	58	

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	ı	1	1			THIRD AMENDMENT TO MEMORANDUM OF	1621	129
1	ŀ	i		DOMINATION ENERGY THE MAJERIAN STREET, M	HG ENERGY II APPALACHIA, LLC	FARMOUT AGREEMENT ASSIGNMENT	1637	108
1				DOMINION ENERGY PROPERTY.	HG ENERGY II APPALACHIA, LLC			
				P. T. ALLMAN	HOPE NATURAL GAS COMPANY	NOT LESS THAN 1/8	193	28
				HOPE NATURAL GAS COMPANY	CONSOLIDATED GAS SUPPLY CORPORATION	CONFIRMATORY DEED	903	17
				CONSOLIDATED GAS SUPPLY CORPORATION	CONSOLIDATED GAS TRANSMISSION CORPORATION	ASSIGNMENT	1136	25
		1		CONSOLIDATED GAS TRANSMISSION CORPORATION	CNG TRANSMISSION CORPORATION	MERGER/NAME CHANGE	51	79
ı		1		CNG TRANSMISSION CORPORATION	DOMINION TRANSMISSION, INC.	MERGER/NAME CHANGE	58	36
- 1	I	1		DOMINION TRANSMISSION, INC.	CNX GAS COMPANY LLC	MEMORANDUM FARMOUT AGREEMENT	1522	
1		12-0467-0001-0000				FIRST AMENDMENT TO MEMORANDUM OF		
l	İ	12-0467-0001-0001		DOMINION TRANSMISSION, INC.	CNX GAS COMPANY LLC	FARMOUT AGREEMENT	1524	49
11	LC020456	12-0467-0001-0002	Q100320000	CNX GAS COMPANY LLC	NOBLE ENERGY, INC.	LIMITED PARTIAL ASSIGNMENT (50%)	1543	123
	2020430	12-0467-0001-0003	4		CNX GAS COMPANY LLC AND NOBLE ENERGY,			
		11 010, 0001 0000		DOMINION TRANSMISSION, INC.	INC.	PARTIAL ASSIGNMENT (32%)	1576	12
l				CNX GAS COMPANY LLC	NOBLE ENERGY, INC.	ASSIGNMENT	1584	94
				NOBLE ENERGY, INC.	HG ENERGY II APPALACHIA, LLC	ASSIGNMENT	1600	69
				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	58
				DOMINION ENERGY (MAINSTON, MO)		THIRD AMENDMENT TO MEMORANDUM OF		
1				DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	FARMOUT AGREEMENT	1621	129
				DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	ASSIGNMENT	1637	108
				M.M.F. RANDOLPH AND S. F. RANDOLPH, HUSBAND AND				
				WIFE	HOPE NATURAL GAS COMPANY	NOT LESS THAN 1/8	152	26
				WIFE				
			İ	HOPE NATURAL GAS COMPANY	CONSOLIDATED GAS SUPPLY CORPORATION	CONFIRMATORY DEED	903	17
				HOPE NATURAL DAS COMPANY	CONSOLIDATED GAS TRANSMISSION			
		12-0467-0030-0000		CONSOLIDATED GAS SUPPLY CORPORATION	CORPORATION	ASSIGNMENT	1136	25
				CONSOLIDATED GAS SOPPET COST CHATTON CONSOLIDATED GAS TRANSMISSION CORPORATION	CNG TRANSMISSION CORPORATION	MERGER/NAME CHANGE	51	79
		12-0467-0030-0001		CNG TRANSMISSION CORPORATION	DOMINION TRANSMISSION, INC.	MERGER/NAME CHANGE	58	36
		p/o 12-0467-0032-0003		DOMINION TRANSMISSION, INC.	CNX GAS COMPANY LLC	MEMORANDUM FARMOUT AGREEMENT	1522	a
		12-0467-033-0000		CNX GAS COMPANY LLC	NOBLE ENERGY, INC.	LIMITED PARTIAL ASSIGNMENT (50%)	1543	123
14	LC005043	p/o 12-0467-0033-0001	Q100542000	CNX GAS COMPANY LLC	CNX GAS COMPANY LLC AND NOBLE ENERGY,			
		12-0467-0034-0000	Ì	DOMINION TRANSMISSION, INC.	INC.	PARTIAL ASSIGNMENT (32%)	1576	12
		12-0467-0035-0000		CNX GAS COMPANY LLC	NOBLE ENERGY, INC.	ASSIGNMENT	1584	94
		12-0467-0036-0000		DOMINION TRANSMISSION, INC.	DOMINION ENERGY TRANSMISSION, INC.	MERGER/NAME CHANGE	wvsos	
		12-0467-0036-0001		NOBLE ENERGY, INC.	HG ENERGY II APPALACHIA, LLC	ASSIGNMENT	1600	69
	1	p/o 12-467-0032-0000		INCOLE ENERGY, INC.	He withing I is the result of the second of	SECOND AMENDMENT TO MEMORANDUM OF		
	i		I	DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	FARMOUT AGREEMENT	1601	58
	1		•	DOMINATOR CHERGI TRANSPIRESTON, INC.	The property I in it is the term y and	THIRD AMENDMENT TO MEMORANDUM OF		
		l	1		I			
				DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	FARMOUT AGREEMENT	1621	129

T				SIDNEY COOKMAN; A. B. COOKMAN; I. S. COOKMAN;				
1		İ		ALICE MCCARTNEY AND I. W. MCCARTNEY, HER			1	
1	i			HUSBAND;, MAUD CLEAVENGER AND J. R. CLEAVENGER,		1		
i i				HER HUSBAND; AND, P. B. COOKMAN	SOUTH PENN OIL COMPANY	NOT LESS THAN 1/8	118	1
1				SOUTH PENN OIL COMPANY	HOPE NATURAL GAS COMPANY	ASSIGNMENT	204	40
				HOPE NATURAL GAS COMPANY	CONSOLIDATED GAS SUPPLY CORPORATION	CONFIRMATORY DEED	903	17
					CONSOLIDATED GAS TRANSMISSION			
1	12-0467-0049-0000 12-0467-0049-0001 12-0467-0050-0000		CONSOLIDATED GAS SUPPLY CORPORATION	CORPORATION	ASSIGNMENT	1136	25	
1 1			CONSOLIDATED GAS TRANSMISSION CORPORATION	CNG TRANSMISSION CORPORATION	MERGER/NAME CHANGE	51	79	
				CNG TRANSMISSION CORPORATION	DOMINION TRANSMISSION, INC.	MERGER/NAME CHANGE	58	36
i i		12-0467-0051-0000		DOMINION TRANSMISSION, INC.	CNX GAS COMPANY LLC	MEMORANDUM FARMOUT AGREEMENT	1522	3
18 LC008461 12-0467-0051-0001 12-0457-0051-0002	Q100617000			FIRST AMENDMENT TO MEMORANDUM OF				
		FEEHGII0041	DOMINION TRANSMISSION, INC.	CNX GAS COMPANY LLC	FARMOUT AGREEMENT	1524	49	
1		12-0487-0002-0000		CNX GAS COMPANY LLC	NOBLE ENERGY, INC.	LIMITED PARTIAL ASSIGNMENT (50%)	1543	123
		12-0487-0002-0001			CNX GAS COMPANY LLC AND NOBLE ENERGY,			
1		12-0487-0002-0002		DOMINION TRANSMISSION, INC.	INC.	PARTIAL ASSIGNMENT (32%)	1576	12
		12-0487-0010-0000		CNX GAS COMPANY LLC	NOBLE ENERGY, INC.	ASSIGNMENT	1584	94
				NOBLE ENERGY, INC.	HG ENERGY II APPALACHIA, LLC	ASSIGNMENT	1600	69
				DOMINION TRANSMISSION, INC.	DOMINION ENERGY TRANSMISSION, INC.	MERGER/NAME CHANGE	wvsos	
						SECOND AMENDMENT TO MEMORANDUM OF		
i				DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	FARMOUT AGREEMENT	1601	58
i						THIRD AMENDMENT TO MEMORANDUM OF		
1			į.	DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	FARMOUT AGREEMENT	1621	129
1			1	DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	ASSIGNMENT	1637	108
			 					
1				ALCINDA B. JACKSON AND M. E. JACKSON, HER HUSBAND	HOPE NATURAL GAS COMPANY	NOT LESS THAN 1/8	497	
	12-0487-0004-01			LICE WATER OF GREEN BANK	CONSOLIDATED GAS SUPPLY CORPORATION	CONFIRMATORY DEED	903	17
1			l	HOPE NATURAL GAS COMPANY		CONFINIMATORY DEED	303	1/
1				CONSOLIDATED GAS SUPPLY CORPORATION	CONSOLIDATED GAS TRANSMISSION CORPORATION	ASSIGNMENT	1136	25
1				CONSOLIDATED GAS SUPPLY CORPORATION		1	51	79
]			Ì	CONSOLIDATED GAS TRANSMISSION CORPORATION	CNG TRANSMISSION CORPORATION	MERGER/NAME CHANGE		36
l		12-0487-0004-0000	:	CNG TRANSMISSION CORPORATION	DOMINION TRANSMISSION, INC.	MERGER/NAME CHANGE MEMORANDUM FARMOUT AGREEMENT	58 1522	36
20	LC051844	12-0487-0004-0001	Q100873000	DOMINION TRANSMISSION, INC.	CNX GAS COMPANY LLC		1522	123
1	20 LC051844	12-0487-0004-0002		CNX GAS COMPANY LLC	NOBLE ENERGY, INC.	LIMITED PARTIAL ASSIGNMENT (50%)	1545	125
1		12-0487-0004-0002	l		CNX GAS COMPANY LLC AND NOBLE ENERGY,			
1			1	DOMINION TRANSMISSION, INC.	INC.	PARTIAL ASSIGNMENT (32%)	1576	12
			Ī	CNX GAS COMPANY LLC	NOBLE ENERGY, INC.	ASSIGNMENT	1584	94
1		ļ	1	DOMINION TRANSMISSION, INC.	DOMINION ENERGY TRANSMISSION, INC.	MERGER/NAME CHANGE	wvsos	
1	1	1	1	NOBLE ENERGY, INC.	HG ENERGY II APPALACHIA, LLC	ASSIGNMENT	1600	69
		1	1			SECOND AMENDMENT TO MEMORANDUM OF		
1	1	1	1	DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	FARMOUT AGREEMENT	1601	58
1		1	1	DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	ASSIGNMENT	1637	108

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Environmental Protection



HG Energy, LLC 5260 Dupont Road Parkersburg, WV 26101 (304) 420-1100 - Office (304) 863-3172 - Fax

January 6, 2021

WV DEP Division of Oil & Gas Attn: Kelly Kees 601 57th Street Charleston, West Virginia 25304

RE:

Schoen 1205 S-7H Request for Permit Revision – (47-033-05995)

Grant Creek District, Harrison County

West Virginia

Office of Oil and Gas

JAN 1 9 2021

WV Department of Environmental Protection

Dear Ms. Kees -

Per our discussions, enclosed are revised forms (survey plat, mylar, WW-6B, casing schematic and WW6A-1) for the 1205 S-7H well work permit. We request the permit be modified for lease and engineering design revisions.

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.

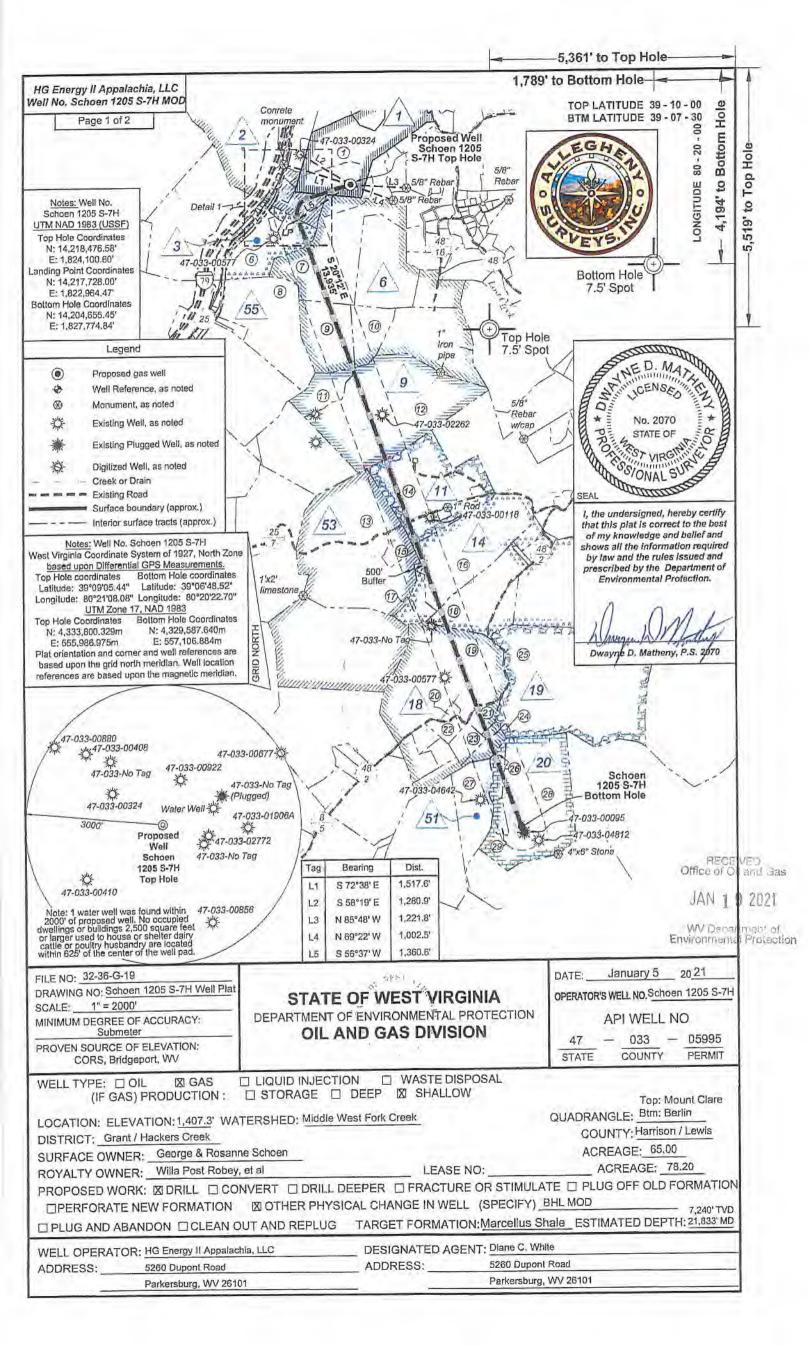
Very truly yours,

Diane White

Diane C. White

Enclosures

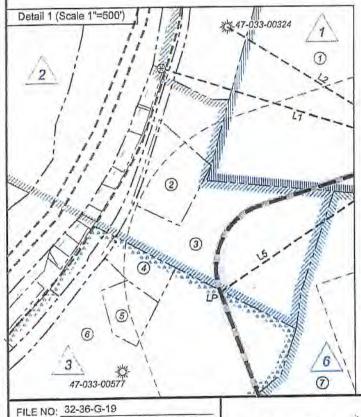
cc: Sam Ward - DEP State Inspector





ID	Lease
1	Willa Post Robey
2	H.D. & Marcella R. Bond, et al
3	Emma A. Waggoner, et al
6	Susan V. Curry & Ida M. Curry
9	L.D. & Addle Swisher
11	P.T. Allman
14	M.M.F. & S.F. Randolph
18	Sidney Cookman, et al
19	Sidney Haymond
20	Alcinda B. & M.E. Jackson
51	J.W. & Sarah Lewis
53	B. & I.M. Swisher
55	Willa E, Ware, et al

	I	Harrison County		
No.	TM / Par	Owner	Bk/Pg	Ac.
1	447/2	George & Rosanne Schoen	1148 / 1059	65.00
2	446 / 12	Marilyn Gaines	1192/300	2,93
3	446 / 15	Vera E. Oral K. Haught	1582 / 896	14.40
4	446 / 28.5	Robert L. Vanhorn	1352 / 91	1.52
5	446 / 28.4	Bradford Vanhorn	1381 / 1181	1.52
6	446 / 28.2	David D. Vanhorn, et al	W177 / 92	42.68
7	446 / 29	John F. McCuskey II, et al	1121 / 25	75.00
8	446 / 38	Sandra J. Hogsed	1257 / 137	70.16
9	447 / 32	Joseph C. Queen	1349 / 508	36.00
10	447 / 33	Joseph Queen	1349 / 508	20.00
11	447 / 43.1	Joseph C. Queen	1349 / 508	17.16
12	447 / 43	Betty J. & Isaac H. Maxwell III	1543 / 141	123.95
13	467 / 29.1	Charles R. & Franklin L. Sutton	/	129.61
14	467 / 1	Margaret L. Gyimesi	1306 / 775	78.79
15	467 / 29	Gretna J. Adkins	1207 / 424	8.39
16	467 / 30	William L. Randolph, et ux	1518 / 19	73.73
17	467 / 30.1	Charles R. & Franklin L. Sutton	/	11.05
18	467 / 33	Charles R. & Franklin L. Sutton	1472 / 181	39.20
19	466 / 49	Charles R. & Franklin L. Sutton	/	105.17
20	467 / 49.1	Jane E. & Cody R. Ball	1570 / 114	2.08
21	467 / 51	Gary Jedrosko	1561 / 1064	5.76
22	467 / 50	David L. & Celia K. Radcliff	1314 / 1289	6.00
23	467 / 51.2	Gary Jedrosko	1561 / 1064	8.38
24	467 / 51.1	Gary Jedrosko	1561 / 1064	8.87
25	467 / 52	David L. & Lisle C. Hinkle	1282 / 389	175.50
26	487 / 4.2	Catherine A. Mauro	1244 / 135	5.00
27	487/3	Myrtle B. Arbogast	W148 / 426	29,17
28	487 / 4.1	Catherine A. Mauro	1244 / 135	95.45
29	487 / 4	Catherine A. Mauro	1244 / 135	4.36



Schoen 1205 S-6H Proposed Well Schoen 1205 S-7H Schoen 1205 S-10H Schoen 1205 S-9H Schoen 1205 S-8H Schoen 1

Well Location References
Not to Scale

Schoon
1205
South
Pad

5/8" rebar
Wyellow
plastic cap

DRAWING NO: Schoen 1205 S-7H Well Plat
SCALE: 1" = 2000'
MINIMUM DEGREE OF ACCURACY:
Submeter
PROVEN SOURCE OF ELEVATION:

STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
OIL AND GAS DIVISION

1240

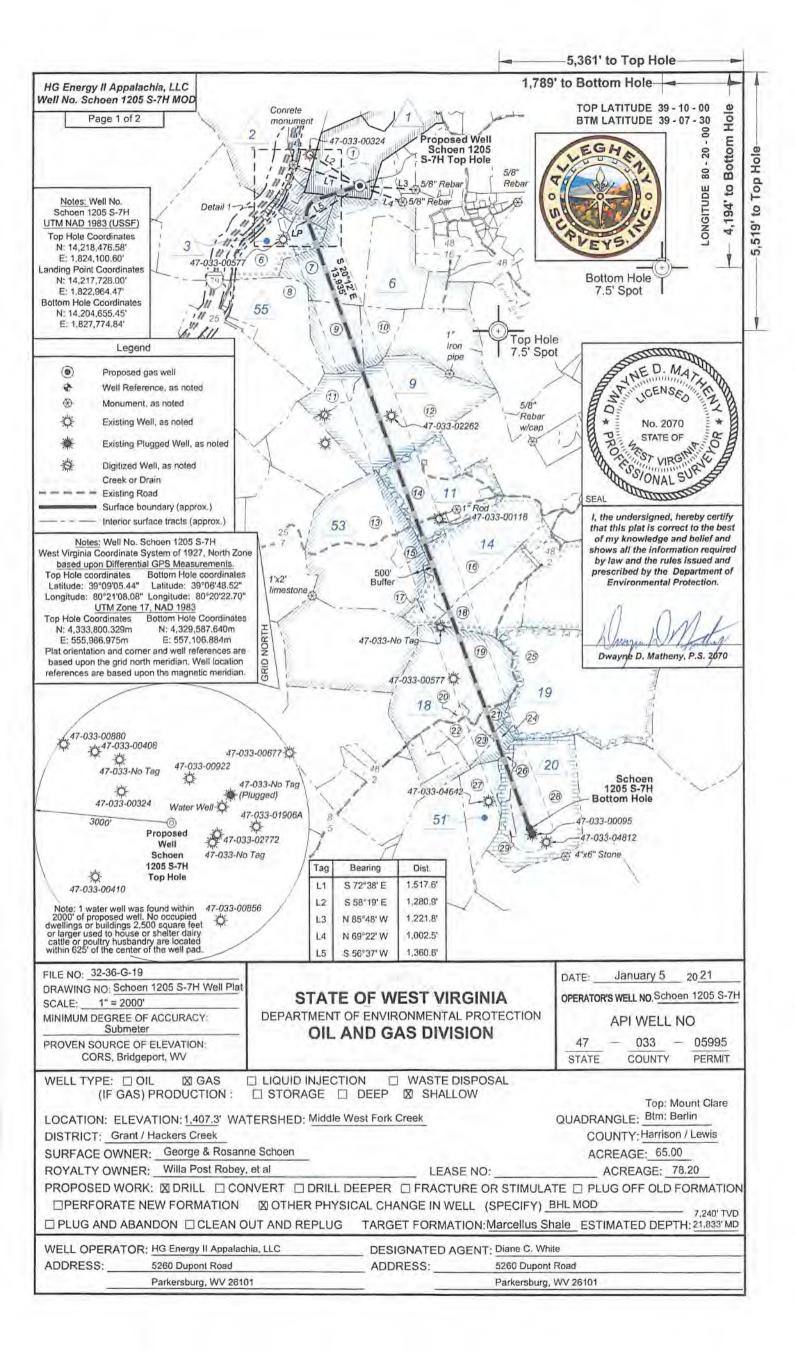
DATE: January 5 20 21

OPERATOR'S WELL NO. Schoen 1205 S-7H

API WELL NO

47 - 033 - 05995

MINIMUM DEGREE OF ACCURACY: Submeter		ND GAS DIVISION		API WELL I	- 05995
PROVEN SOURCE OF ELEVATION: CORS, Bridgeport, WV				ATE COUNTY	PERMIT
WELL TYPE: ☐ OIL ☐ GAS (IF GAS) PRODUCTION: LOCATION: ELEVATION: 1,407.3' WA DISTRICT: Grant / Hackers Creek SURFACE OWNER: George & Rosan		DEEP X SHALLOW		Top: M DRANGLE: Btm: Be COUNTY: Harrisor ACREAGE: 65.00	1 / Lewis
ROYALTY OWNER: Willa Post Robey	, et al	LEASE NO:			
PROPOSED WORK: ⊠ DRILL □ CO □PERFORATE NEW FORMATION □ PLUG AND ABANDON □ CLEAN (NVERT □ DRILL D INVERT □ DRILL D	DEEPER FRACTURE O	R STIMULATE [SPECIFY) B] PLUG OFF OLD F HL MOD	ORMATION 7,240' TVD
WELL OPERATOR: HG Energy II Appalar	chia, LLC	DESIGNATED AGENT	Diane C. White		
ADDRESS: 5260 Dupont Road		ADDRESS:	5260 Dupont Road		
Parkershura WV 261	01		Parkersburg, WV 26	5101	

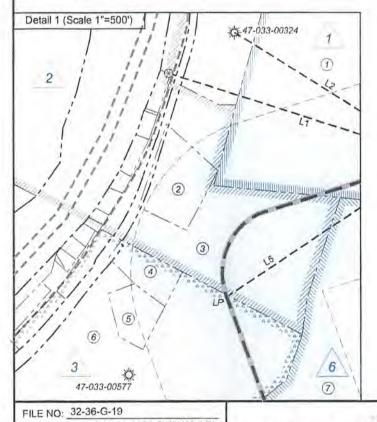


Page 2 of 2



ID	Lease
1	Willa Post Robey
2	H.D. & Marcella R. Bond, et al
3	Emma A Waggoner, et al
6	Susan V. Curry & Ida M. Curry
9	L.D. & Addie Swisher
11	P.T. Allman
14	M.M.F. & S.F. Randolph
18	Sidney Cookman, et al
19	Sidney Haymond
20	Alcinda B. & M.E. Jackson
51	J.W. & Sarah Lewis
53	B. & I.M. Swisher
55	Willa E. Ware, et al

		Harrison County		
No.	TM / Par	Owner	Bk/Pg	Ac.
1	447/2	George & Rosanne Schoen	1148 / 1059	65.00
2	446 / 12	Marilyn Gaines	1192 / 300	2.93
3	446 / 15	Vera E. Oral K. Haught	1582 / 896	14.40
4	446 / 28.5	Robert L. Vanhom	1352 / 91	1.52
5	446 / 28.4	Bradford Vanhorn	1381 / 1181	1.52
6	446 / 28.2	David D. Vanhorn, et al	W177 / 92	42.66
7	446 / 29	John F. McCuskey II, et al	1121 / 25	75.00
8	446 / 38	Sandra J. Hogsed	1257 / 137	70.16
9	447 / 32	Joseph C. Queen	1349 / 508	36.00
10	447 / 33	Joseph Queen	1349 / 508	20.00
11	447 / 43.1	Joseph C. Queen	1349 / 508	17.16
12	447 / 43	Betty J. & Isaac H. Maxwell III	1543 / 141	123.95
13	467 / 29.1	Charles R. & Franklin L. Sutton	/	129.61
14	467 / 1	Margaret L. Gyimesi	1306 / 775	78.79
15	467 / 29	Gretna J. Adkins	1207 / 424	8.39
16	467 / 30	William L. Randolph, et ux	1518 / 19	73.73
17	467 / 30.1	Charles R. & Franklin L. Sutton	/	11.05
18	467 / 33	Charles R. & Franklin L. Sutton	1472 / 181	39.20
19	466 / 49	Charles R. & Franklin L. Sutton	/	105.17
20	467 / 49.1	Jane E. & Cody R. Ball	1570 / 114	2.08
21	467 / 51	Gary Jedrosko	1561 / 1064	5.76
22	467 / 50	David L. & Celia K. Radcliff	1314 / 1289	6.00
23	467 / 51.2	Gary Jedrosko	1561 / 1064	8.38
24	467 / 51.1	Gary Jedrosko	1561 / 1064	8.87
25	467 / 52	David L. & Lisle C. Hinkle	1282 / 389	175.50
26	487 / 4.2	Catherine A. Mauro	1244 / 135	5.00
27	487 / 3	Myrtle B. Arbogast	W148 / 426	29.17
28	487 / 4.1	Catherine A. Mauro	1244 / 135	95.45
29	487 / 4	Catherine A. Mauro	1244 / 135	4.36



Well Location References Not to Scale Wellhead Layout (NTS) Schoen 1205 S-6H @ Schoen 1205 S-7H Proposed Well | Schoen 1205 S-7H (47-033-05995) 1205 South 1 96°58' € 1 Pad Schoen 1205 S-10H @ 325 5/8" rebar Schoen 1205 S-9H w/yellow plastic cap 5/8" rebar w/yellow plastic cap Schoen 1205 S-8H ©

DRAWING NO: Schoen 1205 S-7H Well Plat SCALE: 1" = 2000' MINIMUM DEGREE OF ACCURACY: Submeter

PROVEN SOURCE OF ELEVATION: CORS, Bridgeport, WV

STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION OIL AND GAS DIVISION

DATE: January 5 20 21 OPERATOR'S WELL NO. Schoen 1205 S-7H API WELL NO 47 033 05995 COUNTY PERMIT STATE

COUNTY: Harrison / Lewis

QUADRANGLE: Btm: Berlin

Top: Mount Clare

WELL TYPE: OIL (IF GAS) PR	or had been been been a first of the same	☐ LIQUID INJE ☐ STORAGE		WASTE DISPOSAL SHALLOW	
LOCATION: ELEVAT DISTRICT: Grant / Ha		ATERSHED: Midd	lle West Fork Cr	eek	
SURFACE OWNER:	George & Rosar	nne Schoen			
ROYALTY OWNER:	Willa Post Robe	y, et al		LEASE NO:	

ACREAGE: 65.00 ACREAGE: 78.20 PROPOSED WORK: ☑ DRILL ☐ CONVERT ☐ DRILL DEEPER ☐ FRACTURE OR STIMULATE ☐ PLUG OFF OLD FORMATION

PERFORATE NEW FORMATION	MOTHER PHYSIC	CAL CHANGE IN WELL	(SPECIFY)	BHL MOD	7.240' TVD
PLUG AND ABANDON CLEAN OU	JT AND REPLUG	TARGET FORMATION	:Marcellus Shale	ESTIMATED DEF	2 (20)

WELL OPERAT	OR: HG Energy II Appalachia, LLC	DESIGNATED AG	SENT: Diane C. White	
ADDRESS:	5260 Dupont Road	ADDRESS:	5260 Dupont Road	
	Parkersburg, WV 26101		Parkersburg, WV 26101	

4	rcneaave		八ていいなみせいいり		CONSOLIDATED GAS TRANSMISSION	Assessed to account	100	
				CONSOLIDATED GAS SUPPLY CORPORATION	CORPORATION	ASSIGNMENT	1136	25
				CONSOLIDATED GAS TRANSMISSION CORPORATION	CNG TRANSMISSION CORPORATION	MERGER/NAME CHANGE	51	79
- 1				CNG TRANSMISSION CORPORATION	DOMINION TRANSMISSION, INC.	MERGER/NAME CHANGE	58	36
				DOMINION TRANSMISSION, INC.	CNX GAS COMPANY LLC	MEMORANDUM FARMOUT AGREEMENT FIRST AMENDMENT TO MEMORANDUM OF	1522	3
1				DOMINION ENERGY TRANSMISSION, INC.	CNX GAS COMPANY LLC	FARMOUT AGREEMENT	1524	49
- 1				CNX GAS COMPANY LLC	NOBLE ENERGY, INC.	LIMITED PARTIAL ASSIGNMENT (50%)	1543	123
				DOMINION TRANSMISSION, INC.	CNX GAS COMPANY LLC AND NOBLE ENERGY, INC.	PARTIAL ASSIGNMENT (32%)	1576	12
- 0				CNX GAS COMPANY LLC	NOBLE ENERGY, INC.	ASSIGNMENT	1584	94
				NOBLE ENERGY, INC.	HG ENERGY II APPALACHIA, LLC	ASSIGNMENT	1600	69
			1	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	58
				VANCOURAGE	And the second of the second s	THIRD AMENDMENT TO MEMORANDUM OF FARMOUT AGREEMENT	1621	129
				DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC HG ENERGY II APPALACHIA, LLC	ASSIGNMENT (68%)	1637	108
		/		DOMINION ENERGY TRANSMISSION, INC.	ITO ENERGY ITAL PARACHIA, ELC	i positivitati porej	2007	200
				EMMA A. WAGGONER, WIDOW; W. A. WAGGONER AND MINNIE WAGGONER, HIS WIFE; AND W. GEORGE WAGGONER AND VIRGINIA WAGGONER, HIS WIFE	HOPE NATURAL GAS COMPANY	NOT LESS THAN 1/8	777	39
				HOPE NATURAL GAS COMPANY	CONSOLIDATED GAS SUPPLY CORPORATION	CONFIRMATORY DEED	903	17
				CONSOLIDATED GAS SUPPLY CORPORATION	CONSOLIDATED GAS TRANSMISSION CORPORATION	ASSIGNMENT	1136	25
			1	CONSOLIDATED GAS TRANSMISSION CORPORATION	CNG TRANSMISSION CORPORATION	MERGER/NAME CHANGE	51	79
		12-0446-0028-0000	1	CNG TRANSMISSION CORPORATION	DOMINION TRANSMISSION, INC.	MERGER/NAME CHANGE	58	36
		12-0445-0028-0011		DOMINION TRANSMISSION, INC.	CNX GAS COMPANY LLC	MEMORANDUM FARMOUT AGREEMENT	1522	3
3	LC066702	12-0446-0028 0002	Q101137000	CNX GAS COMPANY LLC	NOBLE ENERGY, INC.	LIMITED PARTIAL ASSIGNMENT (50%)	1543	123
		12-0446-0028-0003 12-0446-0028-0004		DOMINION TRANSMISSION, INC.	CNX GAS COMPANY LLC AND NOBLE ENERGY, INC.	PARTIAL ASSIGNMENT (32%)	1576	12
- 1		12-0446-0028-0005		CNX GAS COMPANY LLC	NOBLE ENERGY, INC.	ASSIGNMENT	1584	94
				DOMINION TRANSMISSION, INC.	DOMINION ENERGY TRANSMISSION, INC.	MERGER/NAME CHANGE	WVSOS	
				NOBLE ENERGY, INC.	HG ENERGY II APPALACHIA, LLC	ASSIGNMENT	1600	69
	1			DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	SECOND AMENDMENT TO MEMORANDUM OF FARMOUT AGREEMENT	1601	58
		JAN 1		DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	THIRD AMENDMENT TO MEMORANDUM OF FARMOUT AGREEMENT	1621	129
				DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	ASSIGNMENT (68%)	1637	108
		and and 20		SUSAN V. CURRY, SINGLE; AND IDA M. CURRY, SINGLE	HOPE NATURAL GAS COMPANY	NOT LESS THAN 1/8	193	20
				HOPE NATURAL GAS COMPANY	CONSOLIDATED GAS SUPPLY CORPORATION	CONFIRMATORY DEED	903	17
		Gas 21		CONSOLIDATED GAS SUPPLY CORPORATION	CORPORATION	ASSIGNMENT	1136	2.
	V 1	Ö		CONSOLIDATED GAS TRANSMISSION CORPORATION	CNG TRANSMISSION CORPORATION	MERGER/NAME CHANGE	51	75
		20 0115 0000 0000		CNG TRANSMISSION CORPORATION	DOMINION TRANSMISSION, INC.	MERGER/NAME CHANGE	58	3
		12-0446-0029-0000	1	DOMINION TRANSMISSION, INC.	CNX GAS COMPANY LLC	MEMORANDUM FARMOUT AGREEMENT	1522	13
		12-0447-0020-0000		CNX GAS COMPANY LLC	NOBLE ENERGY, INC.	ASSIGNMENT	1543	12
	LC098171 FEE,	12-0447-0022-0000	Q100631000	DOMINION TRANSMISSION, INC.	INC.	ASSIGNMENT	1576	1
6	LC020404	12-0447-0032-0000	LC098171 FE	E CNX GAS COMPANY LLC	NOBLE ENERGY, INC.	ASSIGNMENT	1584	9
	1	12-0447-0033-0000	Land State of the land	NOBLE ENERGY, INC.	HG ENERGY II APPALACHIA, LLC	ASSIGNMENT	1600	6
		12-0447-0034-0000 12-0447-0035-0000		DOMINION TRANSMISSION, INC.	DOMINION ENERGY TRANSMISSION, INC.	MERGER/NAME CHANGE	WVSOS	
		12-044/-0033-0000		DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	SECOND AMENDMENT TO MEMORANDUM OF FARMOUT AGREEMENT	1601	5
				DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	THIRD AMENDMENT TO MEMORANDUM OF FARMOUT AGREEMENT	1621	12

1	1	j.	Tr.	DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	ASSIGNMENT (68%)	1637	10
-					HOPE NATURAL GAS COMPANY	NOT LESS THAN 1/8	152	2
1				v tolove soo o blotokrava	CONSOLIDATED GAS SUPPLY CORPORATION	CONFIRMATORY DEED	903	
			1	IOI E MATORIAE CAS COMITAIN	CONSOLIDATED GAS SUPPET CORPORATION	CONTINUATION DELD	303	
			C		CORPORATION	ASSIGNMENT	1136	
			1	CONSOLIDATED GAS TRANSMISSION CORPORATION	CNG TRANSMISSION CORPORATION	MERGER/NAME CHANGE	51	
			-		DOMINION TRANSMISSION, INC.	MERGER/NAME CHANGE	58	
			-		CNX GAS COMPANY LLC	MEMORANDUM FARMOUT AGREEMENT	1522	
		12-0447-0043-0000		DOMINION ENERGY TRANSMISSION, INC.	CNX GAS COMPANY LLC	FIRST AMENDMENT TO MEMORANDUM OF FARMOUT AGREEMENT	1524	
	LC005124		ERUIDIZA I-	CNX GAS COMPANY LLC	NOBLE ENERGY, INC.	LIMITED PARTIAL ASSIGNMENT (50%)	1543	- 4
		12-0447-0043-0001			CNX GAS COMPANY LLC AND NOBLE ENERGY,			
				DOMINION TRANSMISSION, INC.	INC.	PARTIAL ASSIGNMENT (32%)	1576	
- 1				CNX GAS COMPANY LLC	NOBLE ENERGY, INC.	ASSIGNMENT	1584	
				DOMINION TRANSMISSION, INC.	DOMINION ENERGY TRANSMISSION, INC.	MERGER/NAME CHANGE	WVSOS	
- 1			1	DOMINION TRANSPISSION, INC.	DOMINICA ENERGY WARRENGE SAY	SECOND AMENDMENT TO MEMORANDUM OF		
				DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	FARMOUT AGREEMENT	1601	
				DOMINION ENERGY INCHISMOSION/INCI		THIRD AMENDMENT TO MEMORANDUM OF		
- 1				DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	FARMOUT AGREEMENT	1621	3
- 1				DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	ASSIGNMENT	1637	
-			-	P. T. ALLMAN	HOPE NATURAL GAS COMPANY	NOT LESS THAN 1/8	193	
				F. T. PLEIMPIN				
				HOPE NATURAL GAS COMPANY	CONSOLIDATED GAS SUPPLY CORPORATION	CONFIRMATORY DEED	903	
- 1				HOLE MATORIAL CAD CONTITUE	CONSOLIDATED GAS TRANSMISSION		-	
- 1				CONSOLIDATED GAS SUPPLY CORPORATION	CORPORATION	ASSIGNMENT	1136	
- 1		Y		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	
		12-0467-0001-0000		DOMINION TRANSPORTS		FIRST AMENDMENT TO MEMORANDUM OF	TERMEL	
		12-0467-0001-0000		DOMINION TRANSMISSION, INC.	CNX GAS COMPANY LLC	FARMOUT AGREEMENT	1524	
	1,000,0456	12-0467-0001-0001	Q100320000	CNX GAS COMPANY LLC	NOBLE ENERGY, INC.	LIMITED PARTIAL ASSIGNMENT (50%)	1543	L
.1	LC020456	12-0467-0001-0002	Q255520000	CHA CHI COMPTENT AND	CNX GAS COMPANY LLC AND NOBLE ENERGY,		3,000	14
		12-0407-0001-0003		DOMINION TRANSMISSION, INC.	INC.	PARTIAL ASSIGNMENT (32%)	1576	TI
				CNX GAS COMPANY LLC	NOBLE ENERGY, INC.	ASSIGNMENT	1584	1
				NOBLE ENERGY, INC.	HG ENERGY II APPALACHIA, LLC	ASSIGNMENT	1600	
				DOMINION TRANSMISSION, INC.	DOMINION ENERGY TRANSMISSION, INC.	MERGER/NAME CHANGE	WVSOS	
				a sound a to a series of a series		SECOND AMENDMENT TO MEMORANDUM OF	7	
				DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	FARMOUT AGREEMENT	1601	
				Burging of the Assessment of the State of th		THIRD AMENDMENT TO MEMORANDUM OF		
				DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	FARMOUT AGREEMENT	1621	
				DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	ASSIGNMENT	1637	
-				M.M.F. RANDOLPH AND S. F. RANDOLPH, HUSBAND AND				
)	WIFE	HOPE NATURAL GAS COMPANY	NOT LESS THAN 1/8	152	
				HOPE NATURAL GAS COMPANY	CONSOLIDATED GAS SUPPLY CORPORATION	CONFIRMATORY DEED	903	
			1	HOLE INVIOUNE ONE COMMENTAL	CONSOLIDATED GAS TRANSMISSION			
				CONSOLIDATED GAS SUPPLY CORPORATION	CORPORATION	ASSIGNMENT	1136	
		12-0467-0030-0000		CONSOLIDATED GAS SUPPLY CORPORATION CONSOLIDATED GAS TRANSMISSION CORPORATION	CNG TRANSMISSION CORPORATION	MERGER/NAME CHANGE	51	
		12-0467-0030-0001			DOMINION TRANSMISSION, INC.	MERGER/NAME CHANGE	58	_
		p/o 12-0467-0032-0003		CNG TRANSMISSION CORPORATION DOMINION TRANSMISSION, INC.	CNX GAS COMPANY LLC	MEMORANDUM FARMOUT AGREEMENT	1522	
		12-0467-033-0000		STATE OF THE STATE	NOBLE ENERGY, INC.	LIMITED PARTIAL ASSIGNMENT (50%)	1543	100
4.4	LC005043	p/o 12-0467-0033-0001	Q100542000	CNX GAS COMPANY LLC	CNX GAS COMPANY LLC AND NOBLE ENERGY,			
14		12-0467-0034-0000		The second secon	Sin, Silv Committee and the Harris Harrison	PARTIAL ASSIGNMENT (32%)	1576	

1	1	12-0467-0036-0000		CNX GAS COMPANY LLC	NOBLE ENERGY, INC.	ASSIGNMENT	1584	9
- 1	1	12-0467-0036-0001		DOMINION TRANSMISSION, INC.	DOMINION ENERGY TRANSMISSION, INC.	MERGER/NAME CHANGE	WVSOS	
- 1		p/o 12-467-0032-0000	1	NOBLE ENERGY, INC.	HG ENERGY II APPALACHIA, LLC	ASSIGNMENT	1600	6
- 1		p/0 12-407 0032 0000				SECOND AMENDMENT TO MEMORANDUM OF		
- 1				DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	FARMOUT AGREEMENT	1601	5
- 4			1			THIRD AMENDMENT TO MEMORANDUM OF		
- 1			10.	DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	FARMOUT AGREEMENT	1621	12
				DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	ASSIGNMENT	1637	10
-				SIDNEY COOKMAN; A. B. COOKMAN; I. S. COOKMAN;				
				ALICE MCCARTNEY AND I. W. MCCARTNEY, HER	A Company of the Comp			
- 1				HUSBAND;, MAUD CLEAVENGER AND J. R. CLEAVENGER,	A STATE OF THE STA	1. The state of th		
				HER HUSBAND; AND, P. B. COOKMAN	SOUTH PENN OIL COMPANY	NOT LESS THAN 1/8	118	
- 1				SOUTH PENN OIL COMPANY	HOPE NATURAL GAS COMPANY	ASSIGNMENT	204	4
- 1					Was a confirmation of the confirmation	Lorence Laboratory		
				HOPE NATURAL GAS COMPANY	CONSOLIDATED GAS SUPPLY CORPORATION	CONFIRMATORY DEED	903	1
- 1		- A 5500000000000000			CONSOLIDATED GAS TRANSMISSION	No. aut (Sano)	30.51	- 5
- 1		12-0467-0049-0000	1	CONSOLIDATED GAS SUPPLY CORPORATION	CORPORATION	ASSIGNMENT	1136	2
		12-0467-0049-0001	1	CONSOLIDATED GAS TRANSMISSION CORPORATION	CNG TRANSMISSION CORPORATION	MERGER/NAME CHANGE	51	7
		12-0467-0050-0000		CNG TRANSMISSION CORPORATION	DOMINION TRANSMISSION, INC.	MERGER/NAME CHANGE	58	3
		12-0467-0051-0000		DOMINION TRANSMISSION, INC.	CNX GAS COMPANY LLC	MEMORANDUM FARMOUT AGREEMENT	1522	
18	LC008461	12-0467-0051-0001	Q100617000			FIRST AMENDMENT TO MEMORANDUM OF	7.7	
-0		12-0467-0051-0002	FEEHGII0041	DOMINION TRANSMISSION, INC.	CNX GAS COMPANY LLC	FARMOUT AGREEMENT	1524	4
		12-0487-0002-0000		CNX GAS COMPANY LLC	NOBLE ENERGY, INC.	LIMITED PARTIAL ASSIGNMENT (50%)	1543	13
		12-0487-0002-0001			CNX GAS COMPANY LLC AND NOBLE ENERGY,	A county manufacture designation (10.04	
		12-0487-0002-0002		DOMINION TRANSMISSION, INC.	INC.	PARTIAL ASSIGNMENT (32%)	1576	- 3
		12-0487-0010-0000	1	CNX GAS COMPANY LLC	NOBLE ENERGY, INC.	ASSIGNMENT	1584	9
				NOBLE ENERGY, INC.	HG ENERGY II APPALACHIA, LLC	ASSIGNMENT	1600	E
				DOMINION TRANSMISSION, INC.	DOMINION ENERGY TRANSMISSION, INC.	MERGER/NAME CHANGE	WVSOS	
					is a contract and a contract of the	SECOND AMENDMENT TO MEMORANDUM OF	a be	
			A	DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	FARMOUT AGREEMENT	1601	5
					Control of the control of the	THIRD AMENDMENT TO MEMORANDUM OF 14.	1	
			1	DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	FARMOUT AGREEMENT	1621	12
				DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	ASSIGNMENT	1037	10
				- Various and a second second second second	a decrea subservation that the same	NOT LEGETHAN 4 /D	474	1
				SIDNEY HAYMOND AND VIRGINIA HAYMOND, HIS WIFE	SOUTH PENN OIL COMPANY	NOT LESS THAN 1/8	121	1
				SOUTH PENN OIL COMPANY	HOPE NATURAL GAS COMPANY	ASSIGNMENT	204	- 4
					CONSOLIDATED CAC CURRLY CORROBATION	CONFIRMATORY DEED	903	1
				HOPE NATURAL GAS COMPANY	CONSOLIDATED GAS SUPPLY CORPORATION	CONFINITATION DEED	903	-
				Control of the Contro	CONSOLIDATED GAS TRANSMISSION CORPORATION	ASSIGNMENT	1136	
				CONSOLIDATED GAS SUPPLY CORPORATION	CNG TRANSMISSION CORPORATION	MERGER/NAME CHANGE	51	
				CONSOLIDATED GAS TRANSMISSION CORPORATION		MERGER/NAME CHANGE	58	1
				CNG TRANSMISSION CORPORATION	DOMINION TRANSMISSION, INC. CNX GAS COMPANY LLC	MEMORANDUM FARMOUT AGREEMENT	1522	
	ATMETERS	17.7 (Tex prit 0.100)	-000000000	DOMINION TRANSMISSION, INC.	NOBLE ENERGY, INC.	LIMITED PARTIAL ASSIGNMENT (50%)	1543	12
19	LC008514	12-0467-0052-0000	Q100306000	CNX GAS COMPANY LLC	CNX GAS COMPANY LLC AND NOBLE ENERGY,	BINITED PARTIAL ASSIGNMENT (50%)	1545	
				The state of the s	INC.	PARTIAL ASSIGNMENT (32%)	1576	3
				DOMINION TRANSMISSION, INC.	NOBLE ENERGY, INC.	ASSIGNMENT	1584	
				CNX GAS COMPANY LLC	DOMINION ENERGY TRANSMISSION, INC.	MERGER/NAME CHANGE	WVSOS	
				DOMINION TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	ASSIGNMENT	1600	(
				NOBLE ENERGY, INC.	HIG ENERGY II APPALACHIA, CLC	A THE STATE OF STATE	1,000	
				NOBEL ENGINEER, III-E		SECOND AMENDIMENT TO MEMORANDUM OF I		
					HG ENERGY II APPALACHIA. LLC	SECOND AMENDMENT TO MEMORANDUM OF FARMOUT AGREEMENT	1601	
				DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC		1601	4
					HG ENERGY II APPALACHIA, LLC	FARMOUT AGREEMENT	1601 1621	12

	F 1			ALCINDA B. JACKSON AND M. E. JACKSON, HER HUSBAND	HOPE NATURAL GAS COMPANY	NOT LESS THAN 1/8	497	
		10 - 1		HOPE NATURAL GAS COMPANY	CONSOLIDATED GAS SUPPLY CORPORATION	CONFIRMATORY DEED	903	
		- 1		CONSOLIDATED GAS SUPPLY CORPORATION	CONSOLIDATED GAS TRANSMISSION CORPORATION	ASSIGNMENT	1136	
- 1						MERGER/NAME CHANGE	51	
				CONSOLIDATED GAS TRANSMISSION CORPORATION	DOMINION TRANSMISSION, INC.	MERGER/NAME CHANGE	58	
- 1		12-0487-0004-0000		CNG TRANSMISSION CORPORATION	CNX GAS COMPANY LLC	MEMORANDUM FARMOUT AGREEMENT	1522	
0	LC051844	12-0487-0004-0001	Q100873000	DOMINION TRANSMISSION, INC. CNX GAS COMPANY LLC	NOBLE ENERGY, INC.	LIMITED PARTIAL ASSIGNMENT (50%)	1543	
		12-0487-0004-0002		Less to the second seco	CNX GAS COMPANY LLC AND NOBLE ENERGY, INC.	PARTIAL ASSIGNMENT (32%)	1576	
				DOMINION TRANSMISSION, INC.	NOBLE ENERGY, INC.	ASSIGNMENT	1584	-
- 1				CNX GAS COMPANY LLC	DOMINION ENERGY TRANSMISSION, INC.	MERGER/NAME CHANGE	WVSOS	-
- 1				DOMINION TRANSMISSION, INC.		ASSIGNMENT	1600	-
				NOBLE ENERGY, INC.	HG ENERGY II APPALACHIA, LLC	SECOND AMENDMENT TO MEMORANDUM OF	1,000	1
- 1				Control of the Contro	UC ENERGY II ADDALACHIA LLC	FARMOUT AGREEMENT	1601	
				DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC HG ENERGY II APPALACHIA, LLC	ASSIGNMENT	1637	1
				DOMINION ENERGY TRANSMISSION, INC.	THE PROPERTY OF THE PARTY OF TH	7 - COV		-
				J. W. LEWIS AND SARAH LEWIS, HUSBAND AND WIFE	SOUTH PENN OIL COMPANY	NOT LESS THAN 1/8	121	-
				SOUTH PENN OIL COMPANY	HOPE NATURAL GAS COMPANY	ASSIGNMENT	HARRISON 903	-
				HOPE NATURAL GAS COMPANY	CONSOLIDATED GAS SUPPLY CORPORATION	CONFIRMATORY DEED	LEWIS 294	1
				and the second s	CONSOLIDATED GAS TRANSMISSION	- constitution	HARRISON 1136	
			1	CONSOLIDATED GAS SUPPLY CORPORATION	CORPORATION	ASSIGNMENT	LEWIS 425	+
				CONSOLIDATED GAS TRANSMISSION CORPORATION	CNG TRANSMISSION CORPORATION	MERGER/NAME CHANGE	HARRISON 51 WVSOS	5
				CNG TRANSMISSION CORPORATION	DOMINION TRANSMISSION, INC.	MERGER/NAME CHANGE	HARRISON 58 WV50S	5
				DOMINION TRANSMISSION, INC.	CNX GAS COMPANY LLC	MEMORANDUM FARMOUT AGREEMENT	HARRISON 1522 LEWIS 672	to the to
51	LC008516	12-0487-0003-0000	Q100545000	CNX GAS COMPANY LLC	NOBLE ENERGY, INC.	LIMITED PARTIAL ASSIGNMENT (50%)	HARRISON 1543 LEWIS 684	
		4-010C-0021-0000			CNX GAS COMPANY LLC AND NOBLE ENERGY, INC.	PARTIAL ASSIGNMENT (32%)	HARRISON 1576 LEWIS 712	
				DOMINION TRANSMISSION, INC.	INC.	TANTO SE STATE OF THE SECOND S	HARRISON 1584	-
			1	and the second s	NOBLE ENERGY, INC.	ASSIGNMENT	LEWIS 717	
			1	CNX GAS COMPANY LLC	DOMINION ENERGY TRANSMISSION, INC.	MERGER/NAME CHANGE	WVSOS	-
				DOMINION TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	ASSIGNMENT	HARRISON 1600 LEWIS 722	-1
				NOBLE ENERGY, INC.	nd ENERGY II AFFALACIIIA, LCC	A STATISTICS OF THE STATE OF TH		
				No.	HG ENERGY II APPALACHIA, LLC	SECOND AMENDMENT TO MEMORANDUM OF FARMOUT AGREEMENT	HARRISON 1601 LEWIS 723	1
				DOMINION ENERGY TRANSMISSION, INC.		THIRD AMENDMENT TO MEMORANDUM OF FARMOUT AGREEMENT	HARRISON 1621 LEWIS 734	1
			1	DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	NOT LESS THAN 1/8	121	-
	1			B. SWISHER AND I. M. SWISHER, HIS WIFE	SOUTH PENN OIL COMPANY	ASSIGNMENT	204	_
			1	SOUTH PENN OIL COMPANY	HOPE NATURAL GAS COMPANY	ASSIGNIVILIA	204	1
				HOPE NATURAL GAS COMPANY	CONSOLIDATED GAS SUPPLY CORPORATION	CONFIRMATORY DEED	903	3
			1	Control of the surface of the surfac	CONSOLIDATED GAS TRANSMISSION	ASSIGNMENT	1136	6
				CONSOLIDATED GAS SUPPLY CORPORATION	CORPORATION CORPORATION	MERGER/NAME CHANGE	51	-
				CONSOLIDATED GAS TRANSMISSION CORPORATION	CNG TRANSMISSION CORPORATION	MERGER/NAME CHANGE	58	_
				CNG TRANSMISSION CORPORATION	DOMINION TRANSMISSION, INC.	MEMORANDUM FARMOUT AGREEMENT	1527	_
			1	DOMINION TRANSMISSION, INC.	CNX GAS COMPANY LLC	INICIAIOUVIADOINI LYUMOO I MOUTEMENT	134	-

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J.J.	CC000422	12-0467-0029-0001	Q100303000	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
			Y .	DOMINION TRANSMISSION, INC.	DOMINION ENERGY TRANSMISSION, INC.	MERGER/NAME CHANGE	WVSOS	
			Y I	NOBLE ENERGY, INC.	HG ENERGY II APPALACHIA, LLC	ASSIGNMENT	1600	692
		1		DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	SECOND AMENDMENT TO MEMORANDUM OF FARMOUT AGREEMENT	1601	581
				DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY İI APPALACHIA, LLC	THIRD AMENDMENT TO MEMORANDUM OF FARMOUT AGREEMENT	1621	1295
				DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	ASSIGNMENT (68%)	1637	1081
				WILLA E. WARE AND JOHN P. WARE, HER HUSBAND; AND THE HARRISON COUNTY BANK	CONSOLIDATED GAS SUPPLY CORPORATION	NOT LESS THAN 1/8	1011	167
				CONSOLIDATED GAS SUPPLY CORPORATION	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
				CNX GAS COMPANY LLC	NOBLE ENERGY, INC.	LIMITED PARTIAL ASSIGNMENT (50%)	1543	1235
				DOMINION TRANSMISSION, INC.	INC.	PARTIAL ASSIGNMENT (32%)	1576	125
55	LC084263	12-0446-0038-0000	Q100951000	CNX GAS COMPANY LLC	NOBLE ENERGY, INC.	ASSIGNMENT	1584	942
55	LCU64205	12-0446-0037-0000	Q100551000	NOBLE ENERGY, INC.	HG ENERGY II APPALACHIA, LLC	ASSIGNMENT	1600	692
				DOMINION TRANSMISSION, INC.	DOMINION ENERGY TRANSMISSION, INC.	MERGER/NAME CHANGE	WVSOS	T
	V			DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	SECOND AMENDMENT TO MEMORANDUM OF FARMOUT AGREEMENT	1601	58:
				DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	THIRD AMENDMENT TO MEMORANDUM OF FARMOUT AGREEMENT	1621	129
				DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	ASSIGNMENT (68%)	1637	1083

Office of Oil and Gas

Permit Modification

Received date: 1/19/2/	Well Name: 5-7
Operator: HG	API: 33-059
Pad Name: 1 School	

	MODIFIED PERMIT	ORIGINAL PERMIT
TVD	7240 ~	7240 -
TMD	21833-	22015
HL	139351	13807
FW	Same	135, 450, 640, 728
SW	Sance	1730,1780,2018
COAL	Seence	501, 650, 730, 73
CONDUCTOR	120	120 -
FRESHWATER	1200:	1200 4
INTERMEDIATE 1	2100	2100 -
INTERMEDIATE 2	2950	2950 -
PRODUCTION	2/833	22014

Notes: Parcels 1, 2, 59, 3, 6, 55, 9, 54, 53; 19, 18

52, 51, 20

1,2,3,6,9,11,14,18,20 - 19,51,53,55

Nest necessary
Outside well bette