

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

API 47-059-02266 County Mingo District Hardee
Quad Naugatuck Pad Name Nighbert Land Company Field/Pool Name Devonian Shale
Farm name Nighbert Land Company Well Number 826851
Operator (as registered with the OOG) Core Appalachia Operating, LLC
Address 414 Summers Street City Charleston State WV Zip 25301

As Drilled location NAD 83/UTM Attach an as-drilled plat, profile view, and deviation survey
Top hole Northing 4,187,713.05 M Easting 382,503.39 M
Landing Point of Curve Northing 4,187,645.42 M Easting 382,711.67 M
Bottom Hole Northing 4,187,375.44 M Easting 383,033.03 M

Elevation (ft) 945.07 GL Type of Well New Existing Type of Report Interim Final
Permit Type Deviated Horizontal Horizontal 6A Vertical Depth Type Deep Shallow
Type of Operation Convert Deepen Drill Plug Back Redrilling Rework Stimulate
Well Type Brine Disposal CBM Gas Oil Secondary Recovery Solution Mining Storage Other _____
Type of Completion Single Multiple Fluids Produced Brine Gas NGL Oil Other _____
Drilled with Cable Rotary

Drilling Media Surface hole Air Mud Fresh Water Intermediate hole Air Mud Fresh Water Brine
Production hole Air Mud Fresh Water Brine
Mud Type(s) and Additive(s)
N/A

Date permit issued 5/25/2018 Date drilling commenced 8/3/2018 Date drilling ceased 8/24/2018
Date completion activities began 9/5/2018 Date completion activities ceased 9/19/2018
Verbal plugging (Y/N) No Date permission granted _____ Granted by _____

Please note: Operator is required to submit a plugging application within 5 days of verbal permission to plug

Freshwater depth(s) ft 680 Open mine(s) (Y/N) depths None
Salt water depth(s) ft 1110 Void(s) encountered (Y/N) depths None
Coal depth(s) ft 55 Cavern(s) encountered (Y/N) depths None
Is coal being mined in area (Y/N) Yes

RECEIVED
Office of Oil and Gas
OCT 25 2018

WV Department of
Environmental Protection

Reviewed

Reviewed by:
AF 11-9-2018

API 47-059 - 02266 Farm name Nighbert Land Company Well number 826851

CASING STRINGS	Hole Size	Casing Size	Depth	New or Used	Grade wt/ft	Basket Depth(s)	Did cement circulate (Y/N) * Provide details below*
Conductor	17.5	13 3/8	36	New	L.S., 54.5#	-	Sanded In
Surface							
Coal	12 3/8	9 5/8	439	New	L.S., 36#	120'	Yes
Intermediate 1	8 7/8	7	2660	New	AT-50, 19#	1018', 675'	No, grouted
Intermediate 2							
Intermediate 3							
Production							
Tubing	6 1/4	4 1/2 / 3 1/2 DP	2774 / 4914	New / Used	80K, 13.5 / S135, 13.30	-	Not cemented
Packer type and depth set							

Comment Details The 3 1/2" DP became stuck in hole. it was backed off at 2772' and pulled. An XO sub and 4 1/2" casing was ran and tied back to the 3 1/2" DP.

CEMENT DATA	Class/Type of Cement	Number of Sacks	Slurry wt (ppg)	Yield (ft ³ /sks)	Volume (ft ³)	Cement Top (MD)	WOC (hrs)
Conductor	Sanded In	-	-	-	-	-	-
Surface							
Coal	Class A	160	15.6	1.20	192	Surface	8
Intermediate 1	Poz Mix / Class A	230 / 150	13.2 / 15.6	1.70 / 1.20	391 / 180	Surface	10.5
Intermediate 2							
Intermediate 3							
Production							
Tubing							

Drillers TD (ft) 5225' Loggers TD (ft) Not logged
 Deepest formation penetrated Devonian Shale Plug back to (ft) N/A
 Plug back procedure _____

Kick off depth (ft) 2740'

Check all wireline logs run caliper density deviated/directional induction
 No logs ran neutron resistivity gamma ray temperature sonic

Well cored Yes No Conventional Sidewall Were cuttings collected Yes No

DESCRIBE THE CENTRALIZER PLACEMENT USED FOR EACH CASING STRING _____

9 5/8" centralizers on joints #2 and #8
7" centralizers on joints #78, #76, #52, #17

RECEIVED
Office of Oil and Gas

OCT 25 2018

WV Department of
Environmental Protection

WAS WELL COMPLETED AS SHOT HOLE Yes No DETAILS _____

WAS WELL COMPLETED OPEN HOLE? Yes No DETAILS Natural well, open hole 2660'-5225'

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

API 47- 059 - 02266 Farm name Nighbert Land Company Well number 826851

<u>PRODUCING FORMATION(S)</u>	<u>DEPTHS</u>	
<u>Lower Huron Shale</u>	<u>3278'-3462'</u> TVD	<u>3364'-5225'</u> MD

Please insert additional pages as applicable.

GAS TEST Build up Drawdown Open Flow OIL TEST Flow Pump
 SHUT-IN PRESSURE Surface 26 psi Bottom Hole _____ psi DURATION OF TEST _____ hrs
 OPEN FLOW Gas 650 mcfpd Oil _____ bpd NGL _____ bpd Water _____ bpd GAS MEASURED BY
 Estimated Orifice Pitot Tube

LITHOLOGY/ FORMATION	TOP DEPTH IN FT NAME TVD	BOTTOM DEPTH IN FT TVD	TOP DEPTH IN FT MD	BOTTOM DEPTH IN FT MD	DESCRIBE ROCK TYPE AND RECORD QUANTITY AND TYPE OF FLUID (FRESHWATER, BRINE, OIL, GAS, H ₂ S, ETC)
Sand & Shale	0	1068	0	1068	Coal 55' - 61', water at 680'
Sand Sand	1068	1458	1068	1458	Water at 1110'
Upper Maxon	1506	1562	1506	1562	
Lower Maxon	1614	1684	1614	1684	
Little Lime	1773	1814	1773	1814	
Big Lime	1814	2011	1814	2011	Gas Show
Big Injun	2011	2028	2011	2028	
Pocono Shale	2028	2531	2028	2531	
Sunbury Shale	2531	2560	2531	2560	
Berea Sand	2560	2650	2560	2650	
Bedford Shale	2650	2660	2650	2660	
Cleveland Shale	2660	2730	2660	2730	
Upper Dev. Undiff	2730	3278	2730	3364	
Lower Huron	3278	3462	3364	5225	Gas Shows

Please insert additional pages as applicable.

Drilling Contractor Gasco Drilling Inc.
 Address P.O. Box Drawer 330 City Cedar Bluff State VA Zip 24609

Logging Company N/A
 Address _____ City _____ State _____ Zip _____

Cementing Company C & J Energy Service
 Address 580 Hawthorn Drive City Norton State VA Zip 24273

RECEIVED
Office of Oil and Gas
OCT 25 2018

Stimulating Company N/A
 Address _____ City _____ State _____ Zip _____

WV Department of
Environmental Protection

Please insert additional pages as applicable.

Completed by Robert E. Schindler Telephone 304-353-5000
 Signature R.E. Schindler Title Completions Superintendent Date 10-22-18

Core Operating

Well: Nighbert 19H
 Site: Nighbert
 Project: Mingo County, West Virginia (UTM NAD83)
 Design: plan8 utm
 Rig: Gasco Drilling Rig 12

Section Details

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Annotation
1	2600.00	0.30	155.79	2599.95	-4.26	2.80	0.00	0.00	4.87	Survey @ 2600.00 MD 2599.95 TVD
2	2740.05	0.30	155.79	2740.00	-4.92	3.10	0.00	0.00	5.53	KOP Begin 8°/100' build/turn
3	3859.46	89.71	108.99	3454.00	-239.53	676.35	8.00	-46.80	673.11	Begin 6°/100' turn
4	4270.50	89.71	133.66	3456.11	-451.57	1024.77	6.00	90.06	1076.56	Begin 89.71° lateral section
5	8812.68	89.71	133.66	3479.00	-3587.15	4310.95	0.00	0.00	5608.20	PBHL/TD 8813.65 MD 3479.00 TVD

ANNOTATIONS SURVEYS

MD	Inc	Azi	TVD	+N/-S	+E/-W	VSect	Annotation
2701.00	0.82	303.64	2700.95	-4.10	2.30	4.39	MWD surveys
5100.00	89.60	131.92	3462.46	-1024.35	1644.91	1919.62	Survey @ 5100.00 MD 3462.46 TVD
5225.00	89.60	131.92	3463.33	-1107.87	1737.91	2044.53	Survey projected to 5225.00 MD 3463.33 TVD



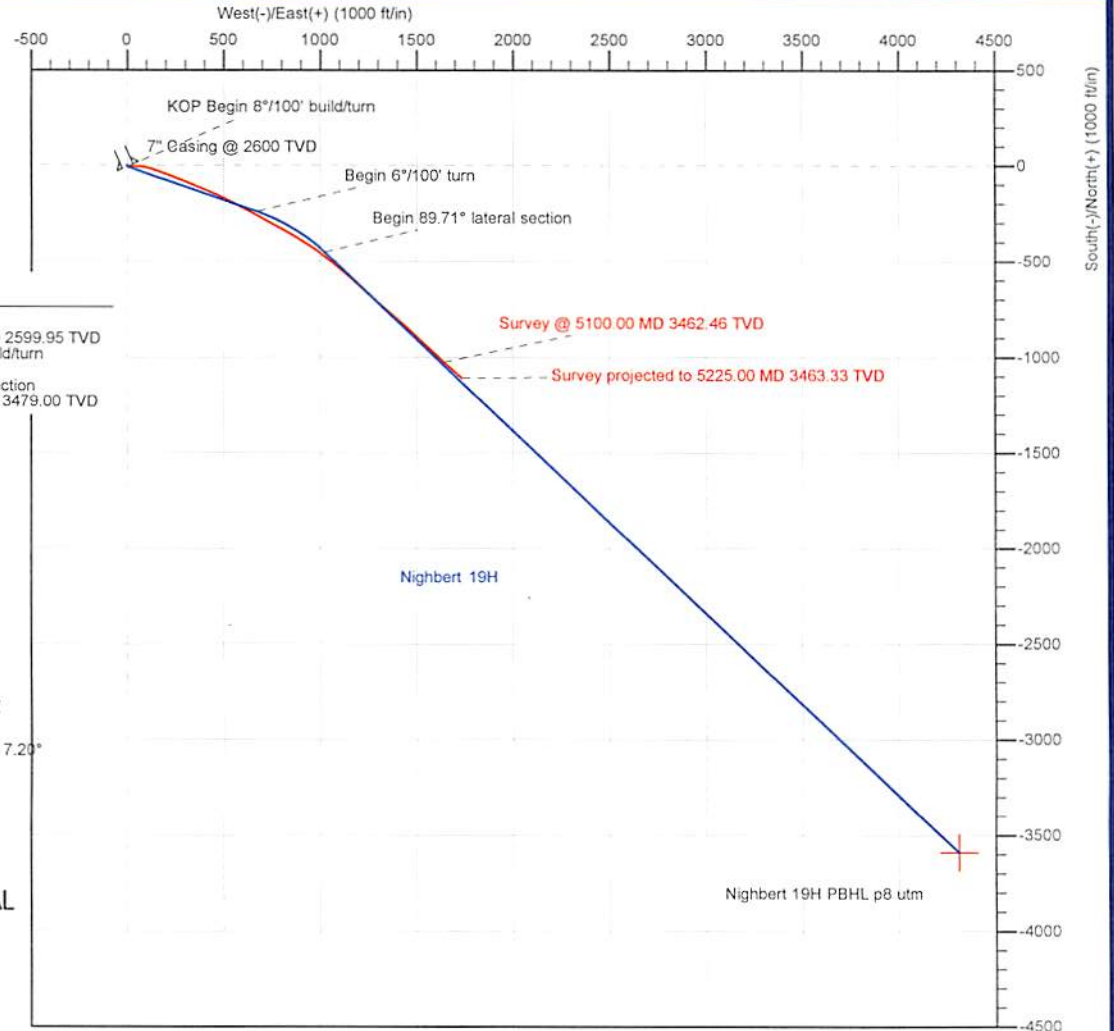
Azimuths to Grid North
 True North: 0.82°
 Magnetic North: -7.20°
 Magnetic Field
 Strength: 51450.9nT
 Dip Angle: 65.70°
 Date: 3/17/2018
 Model: HDGM

Geodetic System: Universal Transverse Mercator (US Survey Feet)
 Datum: NAD83 West Virginia - HARN
 Ellipsoid: GRS 1980
 Zone: Zone 17N (84 W to 78 W)

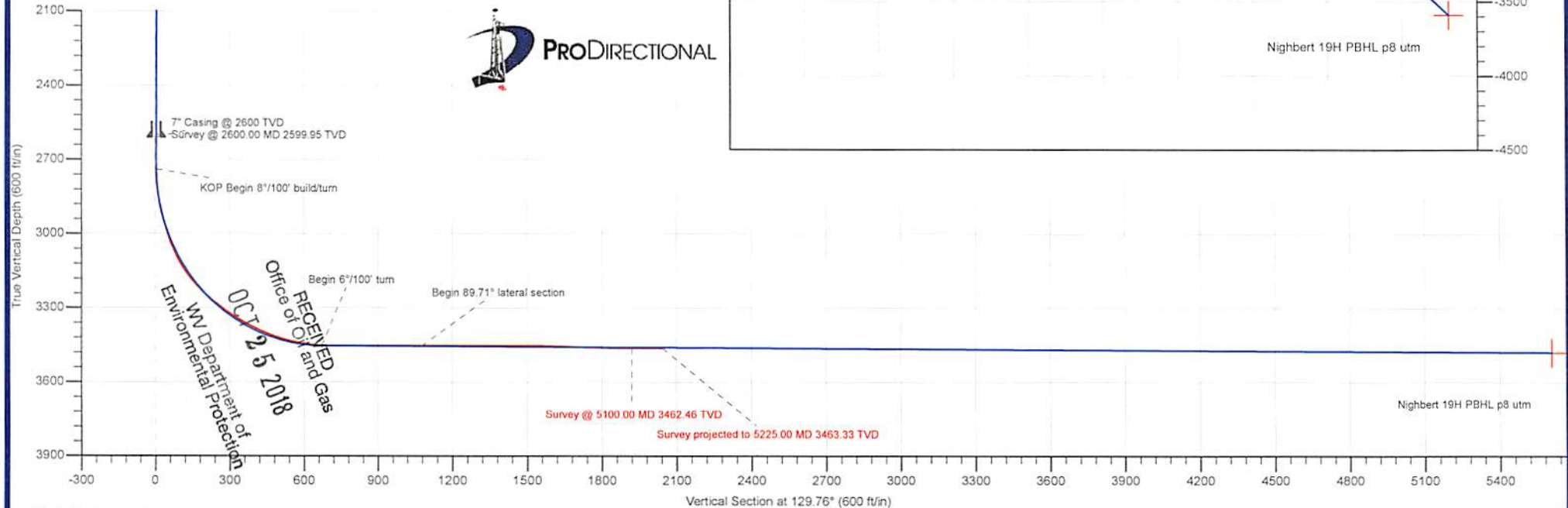
System Datum: Mean Sea Level
 Depth Reference: GL (copy) @ 943.00ft (Gasco Drilling Rig 12)

Northing	Easting	Latitude	Longitude
13739187.59	1254929.99	37.82927539	-82.33515087

Total Corr (M->G): To convert a Magnetic Direction to a Grid Direction, Subtract 7.20°



ALL DEPTHS ARE REFERENCED TO GROUND ELEVATION



RECEIVED
 Office of Oil and Gas
 OCT 25 2018
 WV Department of
 Environmental Protection

Survey Report

Company: Core Operating	Local Co-ordinate Reference: Well Nighbert 19H
Project: Mingo County, West Virginia (UTM NAD83)	TVD Reference: GL (copy) @ 943.00ft (Gasco Drilling Rig 12)
Site: Nighbert	MD Reference: GL (copy) @ 943.00ft (Gasco Drilling Rig 12)
Well: Nighbert 19H	North Reference: Grid
Wellbore: Original Hole	Survey Calculation Method: Minimum Curvature
Design: Surveys Original Hole	Database: DB_Jul2216dt_v14

Project Mingo County, West Virginia (UTM NAD83)	
Map System: Universal Transverse Mercator (US Survey Feet)	System Datum: Mean Sea Level
Geo Datum: NAD83 West Virginia - HARN	
Map Zone: Zone 17N (84 W to 78 W)	

Site Nighbert		
Site Position:	Northing: 13,739,187.59 usft	Latitude: 37.82927539
From: Map	Easting: 1,254,929.99 usft	Longitude: -82.33515087
Position Uncertainty: 0.00 ft	Slot Radius: 13-3/16 "	Grid Convergence: -0.82 °

Well Nighbert 19H			
Well Position	+N/-S 0.00 ft	Northing: 13,739,187.59 usft	Latitude: 37.82927539
	+E/-W 0.00 ft	Easting: 1,254,929.99 usft	Longitude: -82.33515087
Position Uncertainty	0.00 ft	Wellhead Elevation: ft	Ground Level: 943.00 ft

Wellbore Original Hole					
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM	3/17/2018	-8.02	65.70	51,450.90000000

Design Surveys Original Hole				
Audit Notes:				
Version: 1.0	Phase: ACTUAL	Tie On Depth: 0.00		
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.00	0.00	0.00	129.76

Survey Program		Date			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
100.00	2,600.00	Gyro (Original Hole)	GYRO-NS	OWSG Gyrocompass Gyro	
2,701.00	5,100.00	MWD (Original Hole)	MWD	OWSG MWD - Standard	
5,225.00	5,225.00	Projection (Original Hole)	MWD	OWSG MWD - Standard	

RECEIVED
 Office of Oil and Gas
OCT 25 2018
 WV Department of
 Environmental Protection

Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.34	33.59	100.00	0.25	0.16	-0.03	0.34	0.34	0.00	
200.00	0.41	185.09	200.00	0.14	0.30	0.14	0.73	0.07	151.50	
300.00	0.56	170.39	300.00	-0.70	0.35	0.71	0.19	0.15	-14.70	
400.00	0.25	130.79	399.99	-1.32	0.59	1.30	0.40	-0.31	-39.60	
500.00	0.26	111.79	499.99	-1.55	0.97	1.74	0.08	0.01	-19.00	
600.00	0.40	187.69	599.99	-1.98	1.13	2.14	0.42	0.14	75.90	
700.00	0.64	141.59	699.99	-2.77	1.43	2.87	0.46	0.24	-46.10	
800.00	0.56	118.19	799.98	-3.43	2.21	3.90	0.26	-0.08	-23.40	

Survey Report

Company:	Core Operating	Local Co-ordinate Reference:	Well Nighbert 19H
Project:	Mingo County, West Virginia (UTM NAD83)	TVD Reference:	GL (copy) @ 943.00ft (Gasco Drilling Rig 12)
Site:	Nighbert	MD Reference:	GL (copy) @ 943.00ft (Gasco Drilling Rig 12)
Well:	Nighbert 19H	North Reference:	Grid
Wellbore:	Original Hole	Survey Calculation Method:	Minimum Curvature
Design:	Surveys Original Hole	Database:	DB_Jul2216dt_v14

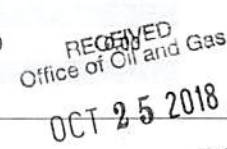
RECEIVED
Office of Oil and Gas
OCT 25 2018
WV Department of
Environmental Protection

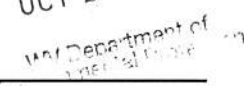
Survey	Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
	900.00	0.08	170.89	899.98	-3.73	2.65	4.43	0.52	-0.48	52.70
	1,000.00	0.08	106.09	999.98	-3.82	2.73	4.54	0.09	0.00	-64.80
	1,100.00	0.65	149.69	1,099.98	-4.33	3.08	5.14	0.59	0.57	43.60
	1,200.00	0.63	148.59	1,199.97	-5.29	3.66	6.19	0.02	-0.02	-1.10
	1,300.00	0.17	69.19	1,299.97	-5.71	4.08	6.79	0.62	-0.46	-79.40
	1,400.00	0.48	181.89	1,399.97	-6.07	4.21	7.12	0.57	0.31	112.70
	1,500.00	0.33	87.49	1,499.97	-6.48	4.48	7.59	0.60	-0.15	-94.40
	1,600.00	0.24	337.79	1,599.96	-6.27	4.69	7.62	0.47	-0.09	-109.70
	1,700.00	0.28	343.59	1,699.96	-5.84	4.54	7.23	0.05	0.04	5.80
	1,800.00	0.30	353.39	1,799.96	-5.35	4.44	6.84	0.05	0.02	9.80
	1,900.00	0.32	271.69	1,899.96	-5.08	4.13	6.43	0.41	0.02	-81.70
	2,000.00	0.24	163.99	1,999.96	-5.27	3.91	6.38	0.45	-0.08	-107.70
	2,100.00	0.34	314.69	2,099.96	-5.27	3.76	6.26	0.56	0.10	150.70
	2,200.00	0.34	292.19	2,199.96	-4.95	3.27	5.68	0.13	0.00	-22.50
	2,300.00	0.30	226.39	2,299.96	-5.01	2.81	5.37	0.35	-0.04	-65.80
	2,400.00	0.35	9.09	2,399.96	-4.89	2.67	5.18	0.62	0.05	142.70
	2,500.00	0.33	357.29	2,499.96	-4.30	2.70	4.83	0.07	-0.02	-11.80
	2,600.00	0.30	155.79	2,599.95	-4.26	2.80	4.87	0.62	-0.03	158.50
	2,701.00	0.82	303.64	2,700.95	-4.10	2.30	4.39	1.08	0.51	146.39
MWD surveys										
	2,733.00	0.57	23.68	2,732.95	-3.82	2.18	4.12	2.86	-0.78	250.13
	2,764.00	3.71	82.63	2,763.93	-3.55	3.23	4.76	11.13	10.13	190.16
	2,797.00	7.54	86.08	2,796.76	-3.27	6.45	7.05	11.65	11.61	10.45
	2,828.00	10.79	86.39	2,827.36	-2.95	11.38	10.63	10.49	10.48	1.00
	2,859.00	13.50	86.91	2,857.66	-2.57	17.89	15.39	8.75	8.74	1.68
	2,892.00	15.38	89.31	2,889.62	-2.31	26.11	21.55	5.98	5.70	7.27
	2,923.00	16.98	92.04	2,919.39	-2.42	34.75	28.26	5.71	5.16	8.81
	2,955.00	17.61	95.42	2,949.95	-3.05	44.24	35.95	3.71	1.97	10.56
	2,986.00	19.47	97.25	2,979.34	-4.14	54.03	44.18	6.29	6.00	5.90
	3,017.00	22.01	96.17	3,008.33	-5.42	64.93	53.38	8.29	8.19	-3.48
	3,049.00	24.87	95.92	3,037.68	-6.76	77.59	63.97	8.94	8.94	-0.78
	3,080.00	27.30	96.79	3,065.52	-8.27	91.13	75.35	7.94	7.84	2.81
	3,112.00	29.00	102.73	3,093.74	-10.85	105.99	88.42	10.24	5.31	18.56
	3,144.00	32.05	106.42	3,121.31	-14.96	121.71	103.13	11.18	9.53	11.53
	3,176.00	35.85	108.14	3,147.85	-20.28	138.76	119.64	12.25	11.88	5.38
	3,207.00	39.28	109.91	3,172.42	-26.45	156.62	137.31	11.60	11.06	5.71
	3,239.00	42.32	111.06	3,196.64	-33.78	176.20	157.05	9.79	9.50	3.59
	3,270.00	45.03	111.05	3,219.06	-41.47	196.18	177.33	8.74	8.74	-0.03
	3,302.00	47.51	111.67	3,241.18	-49.89	217.71	199.27	7.88	7.75	1.94
	3,333.00	49.71	111.31	3,261.67	-58.41	239.35	221.35	7.15	7.10	-1.16
	3,365.00	52.44	111.44	3,281.77	-67.49	262.53	244.97	8.54	8.53	0.41
	3,397.00	54.85	111.51	3,300.74	-76.92	286.51	269.44	7.53	7.53	0.22
	3,428.00	57.01	112.43	3,318.11	-86.53	310.32	293.89	7.39	6.97	2.97

Survey Report

Company:	Core Operating	Local Co-ordinate Reference:	Well Nighbert 19H
Project:	Mingo County, West Virginia (UTM NAD83)	TVD Reference:	GL (copy) @ 943.00ft (Gasco Drilling Rig 12)
Site:	Nighbert	MD Reference:	GL (copy) @ 943.00ft (Gasco Drilling Rig 12)
Well:	Nighbert 19H	North Reference:	Grid
Wellbore:	Original Hole	Survey Calculation Method:	Minimum Curvature
Design:	Surveys Original Hole	Database:	DB_Jul2216dt_v14

Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
3,460.00	58.87	112.64	3,335.09	-96.93	335.37	319.79	5.84	5.81	0.66	
3,491.00	60.35	113.33	3,350.77	-107.37	359.98	345.39	5.15	4.77	2.23	
3,522.00	62.11	113.23	3,365.69	-118.11	384.94	371.45	5.68	5.68	-0.32	
3,554.00	64.58	112.36	3,380.05	-129.19	411.31	398.80	8.09	7.72	-2.72	
3,585.00	66.41	112.84	3,392.91	-140.04	437.34	425.75	6.07	5.90	1.55	
3,617.00	68.76	113.45	3,405.11	-151.67	464.54	454.10	7.55	7.34	1.91	
3,649.00	71.31	115.23	3,416.03	-164.06	491.94	483.09	9.53	7.97	5.56	
3,680.00	73.71	116.40	3,425.35	-176.94	518.55	511.78	8.54	7.74	3.77	
3,712.00	76.15	117.27	3,433.67	-190.89	546.12	541.90	8.06	7.63	2.72	
3,743.00	79.30	117.16	3,440.26	-204.75	573.05	571.46	10.17	10.16	-0.35	
3,775.00	81.88	117.99	3,445.49	-219.36	601.03	602.32	8.46	8.06	2.59	
3,807.00	83.46	118.40	3,449.57	-234.36	629.00	633.41	5.10	4.94	1.28	
3,838.00	86.02	117.93	3,452.42	-248.93	656.21	663.65	8.39	8.26	-1.52	
3,869.00	88.39	118.97	3,453.93	-263.68	683.44	694.01	8.35	7.65	3.35	
3,900.00	89.13	119.16	3,454.60	-278.74	710.52	724.46	2.46	2.39	0.61	
3,931.00	89.29	118.76	3,455.03	-293.75	737.64	754.91	1.39	0.52	-1.29	
3,964.00	90.46	118.46	3,455.10	-309.55	766.61	787.28	3.66	3.55	-0.91	
3,996.00	90.84	118.76	3,454.73	-324.88	794.70	818.68	1.51	1.19	0.94	
4,027.00	90.70	118.88	3,454.32	-339.82	821.86	849.11	0.59	-0.45	0.39	
4,090.00	90.19	121.83	3,453.83	-371.66	876.21	911.26	4.75	-0.81	4.68	
4,122.00	90.57	121.83	3,453.62	-388.53	903.40	942.95	1.19	1.19	0.00	
4,153.00	90.85	123.23	3,453.23	-405.20	929.53	973.70	4.61	0.90	4.52	
4,216.00	89.42	126.40	3,453.08	-441.17	981.25	1,036.46	5.52	-2.27	5.03	
4,247.00	89.42	128.05	3,453.40	-459.92	1,005.93	1,067.42	5.32	0.00	5.32	
4,279.00	89.61	127.85	3,453.67	-479.60	1,031.16	1,099.41	0.86	0.59	-0.63	
4,310.00	89.89	128.56	3,453.80	-498.78	1,055.52	1,130.39	2.46	0.90	2.29	
4,342.00	90.07	129.35	3,453.81	-518.90	1,080.40	1,162.39	2.53	0.56	2.47	
4,373.00	90.19	129.69	3,453.74	-538.63	1,104.31	1,193.39	1.16	0.39	1.10	
4,405.00	90.07	130.36	3,453.67	-559.21	1,128.81	1,225.39	2.13	-0.38	2.09	
4,436.00	89.63	131.77	3,453.75	-579.57	1,152.18	1,256.38	4.76	-1.42	4.55	
4,468.00	89.81	132.47	3,453.91	-601.03	1,175.92	1,288.35	2.26	0.56	2.19	
4,564.00	90.46	131.96	3,453.68	-665.54	1,247.01	1,384.26	0.86	0.68	-0.53	
4,627.00	90.94	132.01	3,452.91	-707.68	1,293.84	1,447.21	0.77	0.76	0.08	
4,722.00	88.49	130.02	3,453.39	-770.02	1,365.50	1,542.17	3.32	-2.58	-2.09	
4,816.00	87.77	132.09	3,456.45	-831.73	1,436.34	1,636.09	2.33	-0.77	2.20	
4,910.00	88.08	132.74	3,459.86	-895.09	1,505.69	1,729.93	0.77	0.33	0.69	
5,006.00	89.60	133.41	3,461.80	-960.65	1,575.79	1,825.75	1.73	1.58	0.70	
5,100.00	89.60	131.92	3,462.46	-1,024.35	1,644.91	1,919.62	1.59	0.00	-1.59	
Survey @ 5100.00 MD 3462.46 TVD										
5,225.00	89.60	131.92	3,463.33	-1,107.87	1,737.91	2,044.53	0.00	0.00		
Survey projected to 5225.00 MD 3463.33 TVD										





Survey Report

Company:	Core Operating	Local Co-ordinate Reference:	Well Nighbert 19H
Project:	Mingo County, West Virginia (UTM NAD83)	TVD Reference:	GL (copy) @ 943.00ft (Gasco Drilling Rig 12)
Site:	Nighbert	MD Reference:	GL (copy) @ 943.00ft (Gasco Drilling Rig 12)
Well:	Nighbert 19H	North Reference:	Grid
Wellbore:	Original Hole	Survey Calculation Method:	Minimum Curvature
Design:	Surveys Original Hole	Database:	DB_Jul2216dt_v14

Design Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment	
		+N/-S (ft)	+E/-W (ft)		
2,701.00	2,700.95	-4.10	2.30	MWD surveys	
5,100.00	3,462.46	-1,024.35	1,644.91	Survey @ 5100.00 MD 3462.46 TVD	
5,225.00	3,463.33	-1,107.87	1,737.91	Survey projected to 5225.00 MD 3463.33 TVD	

RECEIVED
 Office of Oil and Gas
OCT 25 2018
 WV Department of
 Environmental Protection

Survey Report - Geographic

Company:	Core Operating	Local Co-ordinate Reference:	Well Nighbert 19H
Project:	Mingo County, West Virginia (UTM NAD83)	TVD Reference:	GL (copy) @ 943.00ft (Gasco Drilling Rig 12)
Site:	Nighbert	MD Reference:	GL (copy) @ 943.00ft (Gasco Drilling Rig 12)
Well:	Nighbert 19H	North Reference:	Grid
Wellbore:	Original Hole	Survey Calculation Method:	Minimum Curvature
Design:	Surveys Original Hole	Database:	DB_Jul2216dt_v14

Project	Mingo County, West Virginia (UTM NAD83)		
Map System:	Universal Transverse Mercator (US Survey Feet)	System Datum:	Mean Sea Level
Geo Datum:	NAD83 West Virginia - HARN		
Map Zone:	Zone 17N (84 W to 78 W)		

Site	Nighbert			
Site Position:	Northing:	13,739,187.59 usft	Latitude:	37.82927539
From: Map	Easting:	1,254,929.99 usft	Longitude:	-82.33515087
Position Uncertainty: 0.00 ft	Slot Radius:	13-3/16 "	Grid Convergence:	-0.82 °

Well	Nighbert 19H			
Well Position	+N/-S	0.00 ft	Northing:	13,739,187.59 usft
	+E/-W	0.00 ft	Easting:	1,254,929.99 usft
Position Uncertainty	0.00 ft		Wellhead Elevation:	ft
			Ground Level:	943.00 ft

Wellbore	Original Hole				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM	3/17/2018	-8.02	65.70	51,450.90000000

Design	Surveys Original Hole			
Audit Notes:				
Version: 1.0	Phase:	ACTUAL	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.00	0.00	0.00	129.76

Survey Program	Date	Tool Name	Description
From (ft)	To (ft)	Survey (Wellbore)	
100.00	2,600.00	Gyro (Original Hole)	GYRO-NS OWSG Gyrocompass Gyro
2,701.00	5,100.00	MWD (Original Hole)	MWD OWSG MWD - Standard
5,225.00	5,225.00	Projection (Original Hole)	MWD OWSG MWD - Standard

RECEIVED
Office of Oil and Gas
OCT 25 2018

Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude	
0.00	0.00	0.00	0.00	0.00	0.00	13,739,187.59	1,254,929.99	37.82927539	-82.33515087	
100.00	0.34	33.59	100.00	0.25	0.16	13,739,187.83	1,254,930.15	37.82927608	-82.33515031	
200.00	0.41	185.09	200.00	0.14	0.30	13,739,187.73	1,254,930.28	37.82927578	-82.33514985	
300.00	0.56	170.39	300.00	-0.70	0.35	13,739,186.89	1,254,930.33	37.82927348	-82.33514964	
400.00	0.25	130.79	399.99	-1.32	0.59	13,739,186.26	1,254,930.58	37.82927178	-82.33514875	
500.00	0.26	111.79	499.99	-1.55	0.97	13,739,186.04	1,254,930.95	37.82927117	-82.33514744	
600.00	0.40	187.69	599.99	-1.98	1.13	13,739,185.61	1,254,931.12	37.82926999	-82.33514685	
700.00	0.64	141.59	699.99	-2.77	1.43	13,739,184.82	1,254,931.42	37.82926785	-82.33514577	
800.00	0.56	118.19	799.98	-3.43	2.21	13,739,184.15	1,254,932.20	37.82926605	-82.33514305	
900.00	0.08	170.89	899.98	-3.73	2.65	13,739,183.85	1,254,932.64	37.82926524	-82.33514150	

WV Department of
Environmental Protection

Survey Report - Geographic

Company:	Core Operating	Local Co-ordinate Reference:	Well Nighbert 19H
Project:	Mingo County, West Virginia (UTM NAD83)	TVD Reference:	GL (copy) @ 943.00ft (Gasco Drilling Rig 12)
Site:	Nighbert	MD Reference:	GL (copy) @ 943.00ft (Gasco Drilling Rig 12)
Well:	Nighbert 19H	North Reference:	Grid
Wellbore:	Original Hole	Survey Calculation Method:	Minimum Curvature
Design:	Surveys Original Hole	Database:	DB_Jul2216dt_v14

RECEIVED
Office of Oil and Gas
OCT 25 2018

WV Department of
Environmental Protection

Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude	
1,000.00	0.08	106.09	999.98	-3.82	2.73	13,739,183.77	1,254,932.72	37.82926500	-82.33514123	
1,100.00	0.65	149.69	1,099.98	-4.33	3.08	13,739,183.26	1,254,933.07	37.82926362	-82.33513998	
1,200.00	0.63	148.59	1,199.97	-5.29	3.66	13,739,182.30	1,254,933.64	37.82926101	-82.33513795	
1,300.00	0.17	69.19	1,299.97	-5.71	4.08	13,739,181.88	1,254,934.07	37.82925988	-82.33513645	
1,400.00	0.48	181.89	1,399.97	-6.07	4.21	13,739,181.51	1,254,934.19	37.82925888	-82.33513600	
1,500.00	0.33	87.49	1,499.97	-6.48	4.48	13,739,181.11	1,254,934.47	37.82925778	-82.33513504	
1,600.00	0.24	337.79	1,599.96	-6.27	4.69	13,739,181.32	1,254,934.67	37.82925835	-82.33513432	
1,700.00	0.28	343.59	1,699.96	-5.84	4.54	13,739,181.74	1,254,934.53	37.82925952	-82.33513486	
1,800.00	0.30	353.39	1,799.96	-5.35	4.44	13,739,182.24	1,254,934.43	37.82926088	-82.33513523	
1,900.00	0.32	271.69	1,899.96	-5.08	4.13	13,739,182.51	1,254,934.12	37.82926160	-82.33513631	
2,000.00	0.24	163.99	1,999.96	-5.27	3.91	13,739,182.31	1,254,933.90	37.82926106	-82.33513707	
2,100.00	0.34	314.69	2,099.96	-5.27	3.76	13,739,182.32	1,254,933.74	37.82926108	-82.33513760	
2,200.00	0.34	292.19	2,199.96	-4.95	3.27	13,739,182.64	1,254,933.26	37.82926194	-82.33513930	
2,300.00	0.30	226.39	2,299.96	-5.01	2.81	13,739,182.57	1,254,932.79	37.82926173	-82.33514090	
2,400.00	0.35	9.09	2,399.96	-4.89	2.67	13,739,182.69	1,254,932.65	37.82926206	-82.33514139	
2,500.00	0.33	357.29	2,499.96	-4.30	2.70	13,739,183.28	1,254,932.69	37.82926368	-82.33514130	
2,600.00	0.30	155.79	2,599.95	-4.26	2.80	13,739,183.33	1,254,932.78	37.82926382	-82.33514098	
2,701.00	0.82	303.64	2,700.95	-4.10	2.30	13,739,183.49	1,254,932.29	37.82926423	-82.33514270	
MWD surveys										
2,733.00	0.57	23.68	2,732.95	-3.82	2.18	13,739,183.76	1,254,932.16	37.82926498	-82.33514315	
2,764.00	3.71	82.63	2,763.93	-3.55	3.23	13,739,184.03	1,254,933.22	37.82926576	-82.33513950	
2,797.00	7.54	86.08	2,796.76	-3.27	6.45	13,739,184.32	1,254,936.44	37.82926667	-82.33512837	
2,828.00	10.79	86.39	2,827.36	-2.95	11.38	13,739,184.64	1,254,941.36	37.82926775	-82.33511132	
2,859.00	13.50	86.91	2,857.66	-2.57	17.89	13,739,185.02	1,254,947.87	37.82926904	-82.33508880	
2,892.00	15.38	89.31	2,889.62	-2.31	26.11	13,739,185.28	1,254,956.10	37.82927007	-82.33506034	
2,923.00	16.98	92.04	2,919.39	-2.42	34.75	13,739,185.17	1,254,964.73	37.82927011	-82.33503043	
2,955.00	17.61	95.42	2,949.95	-3.05	44.24	13,739,184.54	1,254,974.22	37.82926876	-82.33499755	
2,986.00	19.47	97.25	2,979.34	-4.14	54.03	13,739,183.45	1,254,984.02	37.82926614	-82.33496358	
3,017.00	22.01	96.17	3,008.33	-5.42	64.93	13,739,182.17	1,254,994.92	37.82926306	-82.33492576	
3,049.00	24.87	95.92	3,037.68	-6.76	77.59	13,739,180.83	1,255,007.57	37.82925988	-82.33488187	
3,080.00	27.30	96.79	3,065.52	-8.27	91.13	13,739,179.31	1,255,021.12	37.82925625	-82.33483489	
3,112.00	29.00	102.73	3,093.74	-10.85	105.99	13,739,176.74	1,255,035.98	37.82924975	-82.33478332	
3,144.00	32.05	106.42	3,121.31	-14.96	121.71	13,739,172.62	1,255,051.69	37.82923908	-82.33472870	
3,176.00	35.85	108.14	3,147.85	-20.28	138.76	13,739,167.30	1,255,068.75	37.82922513	-82.33466938	
3,207.00	39.28	109.91	3,172.42	-26.45	156.62	13,739,161.13	1,255,086.61	37.82920888	-82.33460723	
3,239.00	42.32	111.06	3,196.64	-33.78	176.20	13,739,153.81	1,255,106.19	37.82918954	-82.33453907	
3,270.00	45.03	111.05	3,219.06	-41.47	196.18	13,739,146.12	1,255,126.16	37.82916920	-82.33446952	
3,302.00	47.51	111.67	3,241.18	-49.89	217.71	13,739,137.69	1,255,147.70	37.82914690	-82.33439454	
3,333.00	49.71	111.31	3,261.67	-58.41	239.35	13,739,129.17	1,255,169.33	37.82912435	-82.33431919	
3,365.00	52.44	111.44	3,281.77	-67.49	262.53	13,739,120.10	1,255,192.51	37.82910034	-82.33423848	
3,397.00	54.85	111.51	3,300.74	-76.92	286.51	13,739,110.66	1,255,216.49	37.82907537	-82.33415498	
3,428.00	57.01	112.43	3,318.11	-86.53	310.32	13,739,101.05	1,255,240.30	37.82894991	-82.33407206	
3,460.00	58.87	112.64	3,335.09	-96.93	335.37	13,739,090.66	1,255,265.35	37.82902234	-82.33398481	
3,491.00	60.35	113.33	3,350.77	-107.37	359.98	13,739,080.21	1,255,289.97	37.82899462	-82.33389906	
3,522.00	62.11	113.23	3,365.69	-118.11	384.94	13,739,069.47	1,255,314.93	37.82896610	-82.33381210	
3,554.00	64.58	112.36	3,380.05	-129.19	411.31	13,739,058.39	1,255,341.29	37.82893671	-82.33372027	
3,585.00	66.41	112.84	3,392.91	-140.04	437.34	13,739,047.55	1,255,367.33	37.82890795	-82.33362957	
3,617.00	68.76	113.45	3,405.11	-151.67	464.54	13,739,035.92	1,255,394.53	37.82887708	-82.33353481	
3,649.00	71.31	115.23	3,416.03	-164.06	491.94	13,739,023.52	1,255,421.92	37.82884410	-82.33343933	
3,680.00	73.71	116.40	3,425.35	-176.94	518.55	13,739,010.65	1,255,448.54	37.82880977	-82.33334655	
3,712.00	76.15	117.27	3,433.67	-190.89	546.12	13,738,996.69	1,255,476.10	37.82877254	-82.33325040	
3,743.00	79.30	117.16	3,440.26	-204.75	573.05	13,738,982.84	1,255,503.04	37.82873555	-82.33315645	
3,775.00	81.88	117.99	3,445.49	-219.36	601.03	13,738,968.23	1,255,531.02	37.82869650	-82.33305885	
3,807.00	83.46	118.40	3,449.57	-234.36	629.00	13,738,953.23	1,255,558.99	37.82865641	-82.33296125	
3,838.00	86.02	117.93	3,452.42	-248.93	656.21	13,738,938.66	1,255,586.20	37.82861746	-82.33286631	

Survey Report - Geographic

Company:	Core Operating	Local Co-ordinate Reference:	Well Nighbert 19H
Project:	Mingo County, West Virginia (UTM NAD83)	TVD Reference:	GL (copy) @ 943.00ft (Gasco Drilling Rig 12)
Site:	Nighbert	MD Reference:	GL (copy) @ 943.00ft (Gasco Drilling Rig 12)
Well:	Nighbert 19H	North Reference:	Grid
Wellbore:	Original Hole	Survey Calculation Method:	Minimum Curvature
Design:	Surveys Original Hole	Database:	DB_Jul2216dt_v14

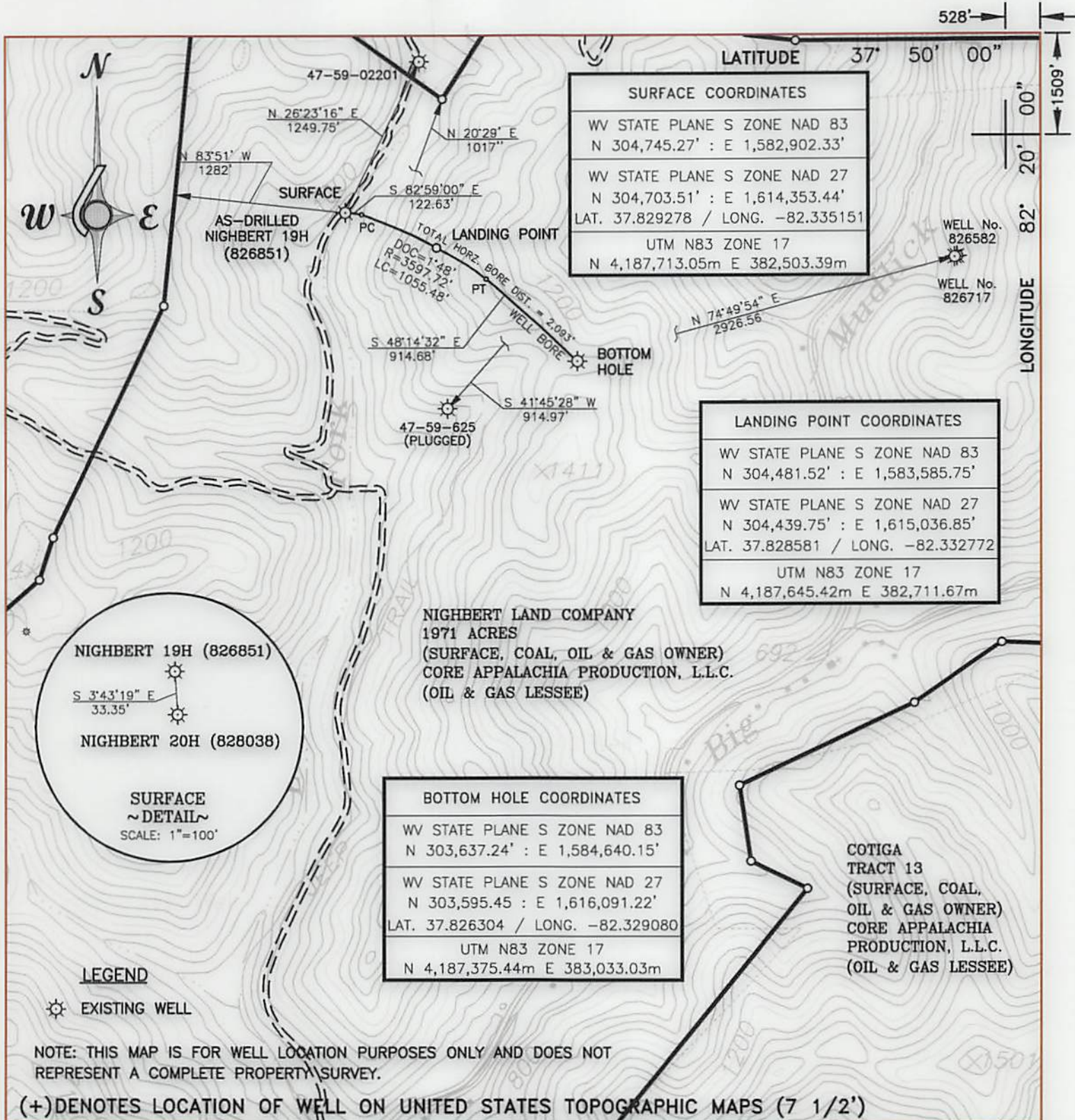
Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
3,869.00	88.39	118.97	3,453.93	-263.68	683.44	13,738,923.91	1,255,613.42	37.82857801	-82.33277133
3,900.00	89.13	119.16	3,454.60	-278.74	710.52	13,738,908.85	1,255,640.51	37.82853772	-82.33267678
3,931.00	89.29	118.76	3,455.03	-293.75	737.64	13,738,893.84	1,255,667.63	37.82849755	-82.33258214
3,964.00	90.46	118.46	3,455.10	-309.55	766.61	13,738,878.04	1,255,696.60	37.82845529	-82.33248105
3,996.00	90.84	118.76	3,454.73	-324.88	794.70	13,738,862.71	1,255,724.69	37.82841430	-82.33238302
4,027.00	90.70	118.88	3,454.32	-339.82	821.86	13,738,847.77	1,255,751.84	37.82837432	-82.33228825
4,090.00	90.19	121.83	3,453.83	-371.66	876.21	13,738,815.93	1,255,806.20	37.82828901	-82.33209847
4,122.00	90.57	121.83	3,453.62	-388.53	903.40	13,738,799.05	1,255,833.38	37.82824372	-82.33200350
4,153.00	90.85	123.23	3,453.23	-405.20	929.53	13,738,782.38	1,255,859.52	37.82819896	-82.33191219
4,216.00	89.42	126.40	3,453.08	-441.17	981.25	13,738,746.42	1,255,911.23	37.82810221	-82.33173135
4,247.00	89.42	128.05	3,453.40	-459.92	1,005.93	13,738,727.67	1,255,935.91	37.82805167	-82.33164497
4,279.00	89.61	127.85	3,453.67	-479.60	1,031.16	13,738,707.99	1,255,961.14	37.82799861	-82.33155663
4,310.00	89.89	128.56	3,453.80	-498.78	1,055.52	13,738,688.81	1,255,985.50	37.82794690	-82.33147134
4,342.00	90.07	129.35	3,453.81	-518.90	1,080.40	13,738,668.69	1,256,010.38	37.82789261	-82.33138419
4,373.00	90.19	129.69	3,453.74	-538.63	1,104.31	13,738,648.96	1,256,034.29	37.82783937	-82.33130041
4,405.00	90.07	130.36	3,453.67	-559.21	1,128.81	13,738,628.38	1,256,058.80	37.82778380	-82.33121455
4,436.00	89.63	131.77	3,453.75	-579.57	1,152.18	13,738,608.02	1,256,082.17	37.82772878	-82.33113262
4,468.00	89.81	132.47	3,453.91	-601.03	1,175.92	13,738,586.55	1,256,105.90	37.82767077	-82.33104938
4,564.00	90.46	131.96	3,453.68	-665.54	1,247.01	13,738,522.05	1,256,177.00	37.82749638	-82.33080003
4,627.00	90.94	132.01	3,452.91	-707.68	1,293.84	13,738,479.90	1,256,223.82	37.82738247	-82.33063582
4,722.00	88.49	130.02	3,453.39	-770.02	1,365.50	13,738,417.56	1,256,295.49	37.82721406	-82.33038459
4,816.00	87.77	132.09	3,456.45	-831.73	1,436.34	13,738,355.86	1,256,366.32	37.82704736	-82.33013627
4,910.00	88.08	132.74	3,459.86	-895.09	1,505.69	13,738,292.49	1,256,435.67	37.82687604	-82.32989302
5,006.00	89.60	133.41	3,461.80	-960.65	1,575.79	13,738,226.94	1,256,505.78	37.82669874	-82.32964705
5,100.00	89.60	131.92	3,462.46	-1,024.35	1,644.91	13,738,163.24	1,256,574.89	37.82652648	-82.32940460
Survey @ 5100.00 MD 3462.46 TVD									
5,225.00	89.60	131.92	3,463.33	-1,107.87	1,737.91	13,738,079.72	1,256,667.89	37.82630074	-82.32907846
Survey projected to 5225.00 MD 3463.33 TVD									

Design Annotations				
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
2,701.00	2,700.95	-4.10	2.30	MWD surveys
5,100.00	3,462.46	-1,024.35	1,644.91	Survey @ 5100.00 MD 3462.46 TVD
5,225.00	3,463.33	-1,107.87	1,737.91	Survey projected to 5225.00 MD 3463.33 TVD

RECEIVED
Office of Oil and Gas

OCT 25 2018

WV Department of
Environmental Protection



NIGHBERT LAND COMPANY
1971 ACRES
(SURFACE, COAL, OIL & GAS OWNER)
CORE APPALACHIA PRODUCTION, L.L.C.
(OIL & GAS LESSEE)

COTIGA TRACT 13
(SURFACE, COAL, OIL & GAS OWNER)
CORE APPALACHIA PRODUCTION, L.L.C.
(OIL & GAS LESSEE)

FILE NO. _____
DRAWING NO. GSE1068_19H
SCALE 1" = 1000'
MINIMUM DEGREE OF ACCURACY 1/200
PROVEN SOURCE OF ELEVATION GPS

I THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAT IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AND SHOWS ALL THE INFORMATION REQUIRED BY LAW AND THE REGULATIONS ISSUED AND PRESCRIBED BY THE DEPARTMENT OF ENERGY.

(SIGNED)
DEWEY L. BOCOOK, JR.
R.P.E. 6778 L.L.S. 1054



STATE OF WEST VIRGINIA
DIVISION OF ENVIRONMENTAL PROTECTION
SECTION OF OIL & GAS

WELL TYPE: OIL ___ GAS X LIQUID INJECTION ___ WASTE DISPOSAL ___ 47 059 02266
(IF "GAS,") PRODUCTION X STORAGE ___ DEEP ___ SHALLOW STATE COUNTY PERMIT

LOCATION: ELEVATION 945.07 WATER SHED LEFT FORK OF BIG BRANCH
DISTRICT HARDEE COUNTY MINGO

QUADRANGLE NAUGATUCK NAD 27 COORDINATES LAT: 37.829278 LONG: -82.335151

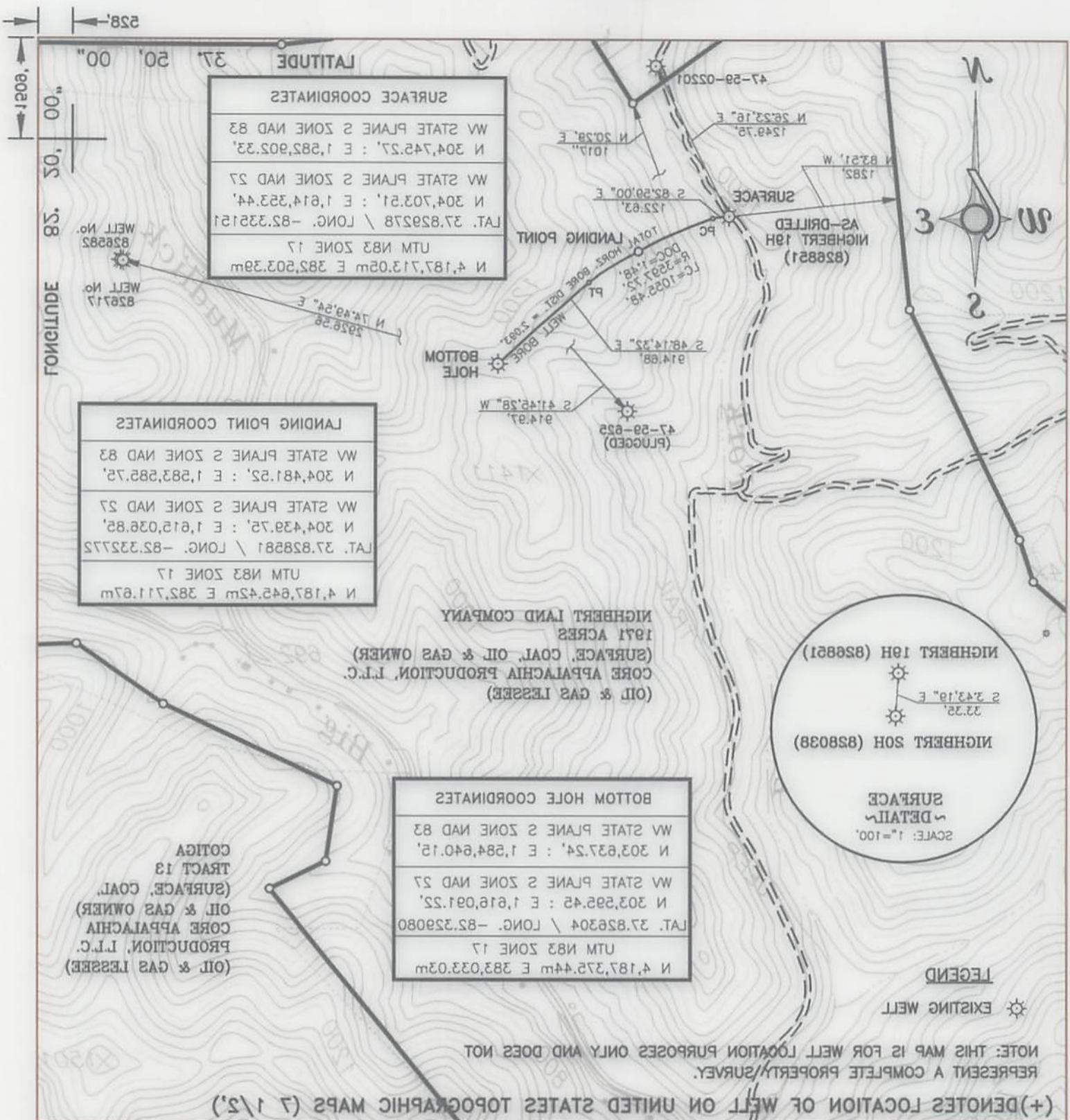
SURFACE OWNER NIGHBERT LAND COMPANY ACREAGE 1971
OIL & GAS ROYALTY OWNER NIGHBERT LAND COMPANY LEASE ACREAGE 1971
COAL OWNER NIGHBERT LAND COMPANY LEASE NO. 1026481

PROPOSED WORK: DRILL X CONVERT ___ DRILL DEEPER ___ REDRILL ___ FRACTURE OR
STIMULATE X PLUG OFF OLD FORMATION ___ PERFORATE NEW **AS-DRILLED**
FORMATION ___ OTHER PHYSICAL CHANGE IN WELL (SPECIFY) _____

PLUG AND ABANDON ___ CLEAN OUT AND REPLUG ___
TARGET FORMATION DEVONIAN SHALE ESTIMATED DEPTH TOTAL VERTICAL DEPTH - 3480' / MEASURED DEPTH - 9010'

WELL OPERATOR CORE APPALACHIA OPERATING, LLC DESIGNATED AGENT JESSICA GREATHOUSE
ADDRESS 414 SUMMERS STREET; CHARLESTON, WV 25301 ADDRESS 414 SUMMERS STREET; CHARLESTON, WV 25301

COUNTY NAME **MINGO**
PERMIT **02266**



FILE NO. _____
 DRAWING NO. GSE1068_19H
 SCALE 1" = 100'
 MINIMUM DEGREE OF ACCURACY 1/200
 PROVEN SOURCE OF ELEVATION GPS

(SIGNED) _____
 DEWEY L. BOOCOK, JR.
 R.P.E. 6778 L.L.S. 1024

I, THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAN IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AND SHOWS ALL THE INFORMATION REQUIRED BY LAW AND THE REGULATIONS ISSUED AND PRESCRIBED BY THE DEPARTMENT OF ENERGY.

DEWEY L. BOOCOK, JR.
 LICENSED PROFESSIONAL SURVEYOR
 STATE OF WEST VIRGINIA
 No. 1024

STATE OF WEST VIRGINIA
 DIVISION OF ENVIRONMENTAL PROTECTION
 SECTION OF OIL & GAS

WELL TYPE: OIL GAS X LIQUID INJECTION WASTE DISPOSAL
 (IF "GAS") PRODUCTION X STORAGE DEEP SHALLOW
 LOCATION: ELEVATION 945.07 WATER SHED LEFT FORK OF BIG BRANCH
 DISTRICT HARDEE COUNTY MINGO

QUADRANGLE NAUGATUCK NAD 27 COORDINATES LAT: 37.829278 LONG: -82.325121
 SURFACE OWNER NIGHBERT LAND COMPANY ACREAGE 1971
 OIL & GAS ROYALTY OWNER NIGHBERT LAND COMPANY LEASE NO. 1026481
 COAL OWNER NIGHBERT LAND COMPANY
 PROPOSED WORK: DRILL X CONVERT DRILL DEEPER REDRILL FRACTURE OR STIMULATE X PLUG OFF OLD FORMATION PERFORATE NEW FORMATION OTHER PHYSICAL CHANGE IN WELL (SPECIFY) **A2-DRILLED**

PLUG AND ABANDON CLEAN OUT AND REPLUG
 TARGET FORMATION DEVONIAN SHALE ESTIMATED DEPTH TOTAL VERTICAL DEPTH - 3480' \ MEASURED DEPTH - 9010'
 WELL OPERATOR CORE APALACHIA OPERATING, LLC DESIGNATED AGENT JESSICA GREATHOUSE
 ADDRESS 414 SUMMERS STREET; CHARLESTON, WV 25301 ADDRESS 414 SUMMERS STREET; CHARLESTON, WV 25301

PERMIT 05266
 COUNTY MINGO
 DATE: OCTOBER 10, 2018
 OPERATOR'S WELL NO. 826821
 API WELL NO. 0256
 WASTE DISPOSAL STATE COUNTY PERMIT 02566