

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

API 47-061-01755 County Monongalia District Clay
Quad Blacksville Pad Name MEPCO Field/Pool Name _____
Farm name MEPCO, LLC Well Number MEPCO 1H
Operator (as registered with the OOG) Northeast Natural Energy LLC
Address 707 Virginia Street E., Suite 1200 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 4390702.6 Easting 572697.8
Landing Point of Curve Northing 4390654.4 Easting 572389.0
Bottom Hole Northing 4392927.8 Easting 570612.3

Elevation (ft) 1,420' 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)
Synthetic Based Mud - Horizontal Section: BIO-BASE 365, CALCIUM CHLORIDE POWDER, G-SEAL PLUS, HRP, LIME, M-I WATE (BARITE),
M-I-X II MEDIUM, MEGADRIL P SYSTEM, MEGADRIL P SYSTEM RENTAL, MEGAMUL, SAFE-CARB 250, VERSATHIN HF, VERSAWET, VG-PLUS, VINSEAL MEDIUM, WALNUT NUT PLUG MEDIUM

Date permit issued 11/02/2017 Date drilling commenced 02/05/2018 Date drilling ceased 7/5/2018
Date completion activities began 11/8/2018 Date completion activities ceased 12/2/2018
Verbal plugging (Y/N) NA Date permission granted NA Granted by NA

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

Freshwater depth(s) ft 906' Open mine(s) (Y/N) depths _____
Salt water depth(s) ft 2027', 2250', 2460' Void(s) encountered (Y/N) depths _____
Coal depth(s) ft 848', 930' Cavern(s) encountered (Y/N) depths _____
Is coal being mined in area (Y/N) N

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reviewed

Reviewed by:
MJK 10/28/2019

API 47-061 - 01755 Farm name MEPCO, LLC Well number MEPCO 1H

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	30"	24"	40'	N	NA	N/A	Grouted In
Surface	17-1/2"	13-3/8"	1,400'	N	54.5	N/A	Y, 65 bbl
Coal							
Intermediate 1	12-1/4"	9-5/8"	2,425'	N	40	N/A	Y, 25 bbl
Intermediate 2							
Intermediate 3							
Production	8-3/4"	5-1/2"	18,097'	N	20	N/A	Y, 41 bbl
Tubing	N/A	2-7/8"		N	6.5	N/A	
Packer type and depth set							

Comment Details _____

CEMENT DATA	Class/Type of Cement	Number of Sacks	Slurry wt (ppg)	Yield (ft ³ /sks)	Volume (ft ³)	Cement Top (MD)	WOC (hrs)
Conductor	4,500 PSI Grout	-	-	3 Yds	-	CTS	-
Surface	Class A + 2%	1,146	15.6	1.20	1,375	CTS	8
Coal							
Intermediate 1	Class A + 1%	800	15.6	1.18	944	CTS	8
Intermediate 2							
Intermediate 3							
Production	50:50 Class A + Additives	3,425	14.5	1.16	3,882	1,800	48
Tubing							

Drillers TD (ft) 18,133' Loggers TD (ft) 18,103'

Deepest formation penetrated Marcellus Plug back to (ft) NA

Plug back procedure NA

Kick off depth (ft) 6,377'

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

Well cored Yes No Conventional Sidewall Were cuttings collected Yes No

DESCRIBE THE CENTRALIZER PLACEMENT USED FOR EACH CASING STRING _____

Surface: Bow spring centralizers every 3rd joint or approximately 120'

Intermediate: Bow spring centralizers every 3rd joint or approximately 120'

Production: Rigid body centralizers placed at a minimum of every other joint (~80') from TD to surface

WAS WELL COMPLETED AS SHOT HOLE Yes No DETAILS _____

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WAS WELL COMPLETED OPEN HOLE? Yes No DETAILS _____

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

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API 47-061 - 01755 Farm name MEPCO, LLC Well number MEPCO 1H

PERFORATION RECORD

Stage No.	Perforation date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formation(s)
			Please	See	Attachment

Please insert additional pages as applicable.

STIMULATION INFORMATION PER STAGE

Complete a separate record for each stimulation stage.

Stage No.	Stimulations Date	Ave Pump Rate (BPM)	Ave Treatment Pressure (PSI)	Max Breakdown Pressure (PSI)	ISIP (PSI)	Amount of Proppant (lbs)	Amount of Water (bbls)	Amount of Nitrogen/other (units)
						Please	See	Attachment

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Please insert additional pages as applicable.

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API 47-061-01755 Farm name MEPCO, LLC Well number MEPCO 1H

PRODUCING FORMATION(S)	DEPTHS		
<u>Marcellus</u>	<u>7,890'</u>	<u>TVD</u>	<u>18,133'</u> <u>MD</u>
_____	_____	_____	_____
_____	_____	_____	_____

Please insert additional pages as applicable.

GAS TEST Build up Drawdown Open Flow OIL TEST Flow Pump

SHUT-IN PRESSURE Surface 3100 psi Bottom Hole 4045 psi DURATION OF TEST 48 hrs

OPEN FLOW Gas 2273 mcfpd Oil _____ bpd NGL _____ bpd Water _____ bpd GAS MEASURED BY Estimated Orifice Pilot

LITHOLOGY/ FORMATION	TOP	BOTTOM	TOP	BOTTOM	DESCRIBE ROCK TYPE AND RECORD QUANTITY AND TYPE OF FLUID (FRESHWATER, BRINE, OIL, GAS, H ₂ S, ETC)
	DEPTH IN FT NAME TVD	DEPTH IN FT TVD	DEPTH IN FT MD	DEPTH IN FT MD	
	<u>0</u>		<u>0</u>		<u>Please See Attachment</u>

Please insert additional pages as applicable.

Drilling Contractor Highlands
Address 900 Virginia Street E. City Charleston State WV Zip 25301

Logging Company Baker Hughes
Address 837 Philippi Pike City Clarksburg State WV Zip 26301

Cementing Company Universal Pressure Pumping
Address 2198 University Dr City Lemont Furnace State PA Zip 15456

Stimulating Company Producers Service Corporation
Address 109 Graham St. City Zanesville State OH Zip 43701

Please insert additional pages as applicable.

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Completed by Hollie Medley Telephone 304-212-0422
Signature Hollie Medley Title Regulatory Manager Date 08/08/2019 **SEP 9 2019**

Lithology/Formation	Top Depth in FT TVD	Bottom Depth in FT TVD	Describe rock type and record quantity and type of fluid (freshwater, brine, oil, gas, H2S, etc)
Shale/Sand	0	384	Shale/Sand
Shale	384	400	Shale
sand/shale	400	466	sand/shale
shale	466	470	shale
Sandstone/shale/coal	470	570	Sandstone/shale/coal
sand/shale	570	848	sand/shale
coal	848	853	coal
sand/shale	853	930	sand/shale
coal	930	933	sandstone/shale/coal - water @ 906'
sand/shale	933	1214	sand/shale
shale/red rock	1214	1651	shale/red rock
sand/shale	1651	2010	sand/shale
red rock	2010	2110	red rock
Big Lime	2110	2248	Big Lime
Big Injun	2248	2370	Big Injun
siltstone	2370	2430	siltstone
Berea	2430	2450	Berea
siltstone	2450	2610	siltstone
Gantz	2610	2630	Gantz
Upper Devonian undifferentiated	2630	2920	Upper Devonian undifferentiated
red rock/siltstone	2920	3080	red rock/siltstone
Devonian silt/sand/shale	3080	7290	Devonian silt/sand/shale
Middlesex	7290	7530	Middlesex
Burkett	7530	7710	Burkett
Geneseo	7710	7770	Geneseo
Tully	7710	7830	Tully
Hamilton	7830	7890	Hamilton
Marcellus	7890	8082	Marcellus
Onondaga	8082	8114	Onondaga
Huntersville chert	8114		Huntersville chert

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Mepco 1H Perforation Record				
Stage Number	Report Date	Cluster 5 Bottom TD	Cluster 1 Top TD	Total Shots
1	11/7/2018	17,958	-	-
2	11/7/2018	17,752	17,912	40
3	11/8/2018	17,550	17,710	40
4	11/8/2018	17,347	17,507	40
5	11/9/2018	17,145	17,305	40
6	11/9/2018	16,942	17,102	40
7	11/10/2018	16,740	16,900	40
8	11/11/2018	16,538	16,697	40
9	11/11/2018	16,335	16,495	40
10	11/12/2018	16,133	16,293	40
11	11/12/2018	15,930	16,090	40
12	11/13/2018	15,728	15,888	40
13	11/13/2018	15,525	15,685	40
14	11/14/2018	15,323	15,483	40
15	11/14/2018	15,121	15,281	40
16	11/17/2018	14,918	15,078	40
17	11/17/2018	14,716	14,876	40
18	11/17/2018	14,513	14,673	40
19	11/18/2018	14,311	14,471	40
20	11/18/2018	14,109	14,268	40
21	11/19/2018	13,906	14,066	40
22	11/19/2018	13,704	13,864	40
23	11/20/2018	13,501	13,661	40
24	11/20/2018	13,299	13,459	40
25	11/21/2018	13,096	13,256	40
26	11/21/2018	12,894	13,054	40
27	11/22/2018	12,692	12,852	40
28	11/22/2018	12,489	12,649	40
29	11/22/2018	12,287	12,447	40
30	11/23/2018	12,084	12,244	40
31	11/23/2018	11,882	12,042	40
32	11/24/2018	11,680	11,840	40
33	11/24/2018	11,477	11,637	40
34	11/25/2018	11,275	11,435	40
35	11/25/2018	11,072	11,232	40
36	11/26/2018	10,870	11,030	40
37	11/26/2018	10,668	10,827	40
38	11/26/2018	10,465	10,625	40
39	11/27/2018	10,263	10,423	40
40	11/27/2018	10,060	10,220	40
41	11/28/2018	9,858	10,018	40
42	11/29/2018	9,655	9,815	40
43	11/29/2018	9,453	9,613	40
44	11/30/2018	9,251	9,411	40
45	11/30/2018	9,048	9,208	40
46	12/1/2018	8,846	9,006	40
47	12/1/2018	8,643	8,803	40
48	12/2/2018	8,441	8,601	40

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MEPCO 1H Stimulation Information

Stage Number	Report Date	ISIP (psi)	Breakdown Pressure (psi)	Avg Treating Pressure (psi)	Avg Treating Rate (BPM)	Pad Volume (bbls)	Total Clean Fluid (Bbls)	Total Proppant Amount (lbs)	Flush Volume (bbls)
1	11/7/2018	5,667	7,609	8,723	74	480	6,831	306,940	400
2	11/7/2018	5,606	7,792	8,920	75	240	8,209	401,384	397
3	11/8/2018	5,393	7,800	8,955	69	148	8,347	400,350	397
4	11/8/2018	5,713	7,681	9,325	70	537	7,689	310,120	390
5	11/9/2018	5,598	7,510	9,156	71	150	8,205	401,570	383
6	11/9/2018	5,348	7,579	9,419	72	459	8,197	402,720	379
7	11/10/2018	5,351	7,283	9,144	72	242	8,439	400,560	376
8	11/11/2018	5,619	7,046	9,085	74	164	8,273	400,140	380
9	11/11/2018	5,414	7,025	9,352	74	429	8,494	406,870	365
10	11/12/2018	5,893	7,328	9,106	74	206	8,296	403,040	364
11	11/12/2018	5,303	6,889	9,291	75	430	8,540	400,400	357
12	11/13/2018	5,785	7,719	9,154	71	218	8,124	390,730	355
13	11/13/2018	5,253	7,248	9,233	78	465	8,779	405,657	345
14	11/14/2018	5,502	7,772	9,177	75	119	8,221	399,640	345
15	11/14/2018	6,324	7,257	9,288	77	429	8,574	400,680	337
16	11/17/2018	6,283	7,111	9,220	80	490	9,444	400,900	332
17	11/17/2018	5,785	7,280	9,014	79	470	8,841	400,840	329
18	11/17/2018	5,758	7,519	8,894	79	440	8,436	400,080	326
19	11/18/2018	5,538	7,009	8,942	79	50	8,332	399,560	321
20	11/18/2018	5,448	7,087	9,101	78	491	8,341	400,180	318
21	11/19/2018	6,018	6,670	9,008	79	50	8,600	400,480	312
22	11/19/2018	5,806	7,474	9,090	77	450	7,983	401,900	311
23	11/20/2018	5,691	7,202	9,051	78	25	8,823	401,440	304
24	11/20/2018	5,386	7,417	9,130	78	400	8,427	402,120	300
25	11/21/2018	5,800	7,681	9,112	78	400	8,584	400,000	295
26	11/21/2018	5,889	7,173	8,995	77	429	8,293	405,180	290
27	11/22/2018	5,106	6,876	8,998	80	400	8,527	400,980	290
28	11/22/2018	5,316	7,068	9,002	77	429	8,297	403,940	280
29	11/22/2018	5,315	7,822	8,917	79	392	8,255	400,390	284
30	11/23/2018	5,582	6,780	8,759	75	429	9,045	400,109	271
31	11/23/2018	6,247	7,169	8,859	80	500	8,523	399,860	269
32	11/24/2018	5,546	7,512	8,729	79	430	8,395	406,550	267
33	11/24/2018	6,094	7,759	8,553	79	390	8,658	402,940	264
34	11/25/2018	5,074	7,569	8,505	80	396	8,231	403,600	253
35	11/25/2018	5,788	7,783	8,642	75	429	8,620	399,540	247
36	11/26/2018	5,414	7,632	8,621	80	410	8,610	400,070	247
37	11/26/2018	4,695	7,491	8,641	82	429	8,299	401,470	246
38	11/26/2018	4,998	7,776	8,564	83	400	8,613	399,570	238
39	11/27/2018	6,232	6,580	8,364	80	429	8,087	399,940	237
40	11/27/2018	5,856	6,768	8,317	83	462	8,788	403,550	229
41	11/28/2018	6,046	6,710	8,259	80	429	8,012	399,960	225
42	11/29/2018	6,080	6,240	8,306	82	419	8,802	399,580	217
43	11/29/2018	5,958	7,230	8,138	82	75	7,764	400,000	213
44	11/30/2018	4,733	6,772	8,461	84	429	8,531	399,460	208
45	11/30/2018	4,995	7,116	8,155	84	103	7,862	401,020	209
46	12/1/2018	5,197	7,316	8,078	84	64	7,867	400,540	201
47	12/1/2018	5,802	6,857	7,955	80	429	8,152	403,060	195
48	12/2/2018	5,280	7,252	7,982	84	90	7,195	400,780	194

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API Permit #: 47-061-01755

Customer: Northeast

Lease and Well Name: Mepco 1-H

A.F.E #: 100371-602



Job Type: 13 3-8

Cement Operator: Brian Fullem

Date Cemented: 2/6/2018

Drilling Contractor: Highlands #8

Cement Slurry Information

Table with 8 columns: No. of Sacks, Cement Blend Composition, Yield (ft³/sk), MixWater (gal/sk), Density (lb/gal), (bbl) Mix Water, (ft3) Of Slurry, (bbl) Of Slurry. Includes a Totals row.

Wellbore Information

Table with 10 columns: New/Used, Diameter (in), Weight (lb/ft), Top (ft), Bottom (ft), Collapse/Burst Pressures (psi), Requested TOC (ft), Surface, TVD (ft), Displacement Depth (ft), Displacement (bbl).

Pumping Returns

Cement Slurry Temperature Record (°F)

Fluid Information

Summary table for Pumping Returns, Cement Slurry Temperature Record, and Fluid Information.

Main log table with 5 columns: Time, Rate (bpm), Volume (bbl), Pressure (psi), Event or Stage Description.

Comments:

PH-7 SG 1.001 Hardness 250

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Thank You for your Business

UWS Cement Operator Signature:

Brian Fullem

Customer Representative Signature:

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Cement Job Log

Customer: NORTHEAST NATURAL ENERGY LLC	Date: 7/4/2018	Serv. Supervisor: Ryan Stout
Cust. Rep.: Ross	Ticket #: JWV1807-0012	Serv. Center: Jane Lew, WV
Lease: Mepco 1H	API Well #: 100371-603	County: Monongalia State: West Virginia
Well Type:	Rig: Patterson 334	Type of Job: Production Casing

Materials Furnished by C&J ENERGY SERVICES

Plugs	Casing Hardware	Physical Slurry Properties					
		Sacks of Cement	Fluid Dens (lb/gal)	Yield (cuft/sk)	Mix Water (gal/sk)	Fluid Volume (bbbls)	Mix Water (bbbls)
Spacer 1:	CJ810 PureScrub Spacer + 1 gal/bbl CPC35	-	13.5			100	
Lead							
Tail:	50:50 CJ010:CJ910 + 0.25% CJ210F + 0.1% CJ501 + 0.2% CJ504 + 0.2% CJX157011	3425	14.5	1.16	4.91	706	400

Displacement Chemicals:


OPEN HOLE DATA			TUBULAR DATA								
SIZE (in)	EXCESS (%)	DEPTH (ft)	TYPE (CSG/TBG/CFP)	OD (in)	WEIGHT (lbs/ft)	THREAD	DEPTH (ft)	GRADE	ID (in)	BURST (psi)	COLLAPSE (psi)
8 3/4		6402	Casing	5 1/2	20		18097		4.79		
8 1/2		18097									

PREVIOUS CASING DATA				PERFORATED INTERVAL DATA				CASING EQUIPMENT DEPTHS			
SIZE (in)	WEIGHT (lbs/ft)	ID (in)	DEPTH (ft)	TOP	BTM	SPF	SIZE	SHOE	FLOAT	STAGE	ACP
9 5/8	40	8.84	2425					18097	18017		

WELL FLUID		DISPLACEMENT FLUID (STG 1)			DISPLACEMENT FLUID (STG 2)			WATER ON LOC (bbl)	DIFF PRESS (psi)	CSG LIFT (psi)	MAX PRESS (psi)
TYPE	DENSITY	VOLUME	TYPE	DENSITY	VOLUME	TYPE	DENSITY				
mud	12.3 ppg	401 bbl	h2o	8.3 ppg				1500	2489	6820	6000

Time	Rate (bbl/min)	Csg. Press. (psi)	Tbg. Press. (psi)	Ann. Press. (psi)	Stg. Vol. (bbl)	Cum. Vol. (bbl)	Stage Details
2:30 PM						0	arrive on location
2:45 PM						0	spot trucks/ rig up
5:30 PM						0	safety meeting
6:05 PM						0	test lines 6000 psi
6:10 PM	9	1700			100	100	spacer @ 13.5 (scaled to weight)
6:25 PM	8.5	1700			707	807	tail @ 14.5 (scaled to weight)
8:00 PM						807	drop plug
8:05 PM	9	1700			401	1208	displacement
8:15 PM	8.5	2400				1208	displacement
8:30 PM	7	3900				1208	displacement
8:45 PM	8	4200				1208	displacement
8:55 PM	7	4300				1208	spacer to surface 41 bbl return
9:00 PM	3	3700				1208	slow rate
9:03 PM	3	4150				1208	land plug
9:08 PM						1208	bleed off (float held) 8 bbl return
9:30 PM						1208	wash up/ rig down
11:00 PM						1208	leave location
						1208	
						1208	
						1208	41 bbl spacer to surface
						1208	CJES flushed rig stack 40 bbl sugar water.
						1208	
						1208	

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Left Yard	1pm			Left Loc.	11pm			Start Pump	Office of Oil and Gas 6pm		
Arrived Loc.	230pm			Returned Yd	1am			End Pump	9pm		
Bumped Plug (psi)	Final Differential (psi)	Floats Held (Y/N)	PSI Left on Casing	Cement to Surface (bbl)	Full Circ. During Job (Y/N)	Max Pump Pressure (psi)	Standby Charged (hrs)	 9 2019 Service Supervisor			
yes	3700	yes	0	0	yes	6000	5				

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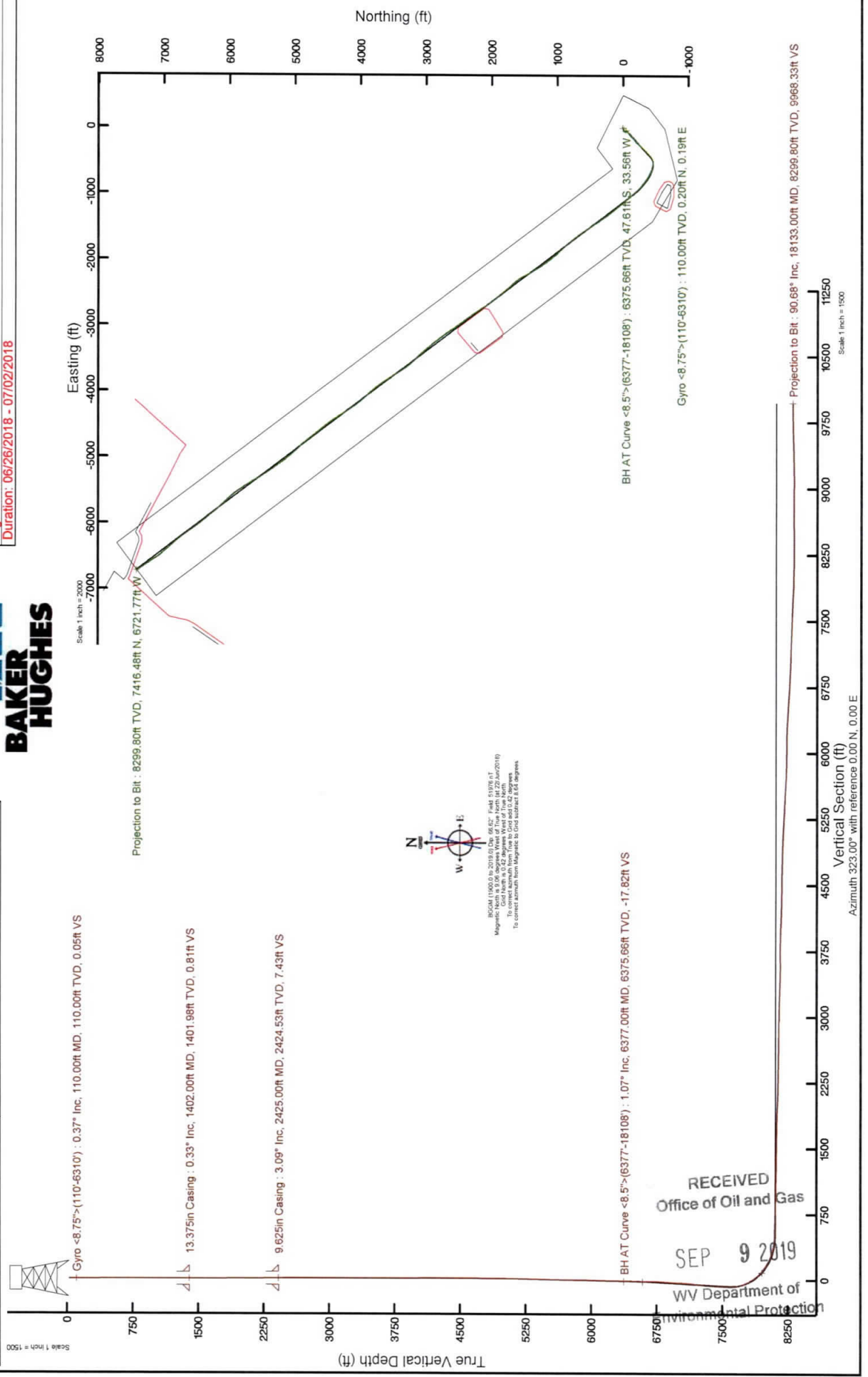
NORTHEAST NATURAL ENERGY, LLC

Location: Monongalia County, WV
 Field: Monongalia
 Facility: MEPCO Pad
 Slot: MEPCO LLC 1H
 Well: MEPCO LLC 1H PWB
 Wellbore: MEPCO LLC 1H PWB

Grid System: NAD83 / Lambert West Virginia SP, Northern Zone (NAD83), US feet
True vertical depths are referenced to Patterson 334 (KB)
Measured depths are referenced to Patterson 334 (KB)
Patterson 334 (KB) to Mean Sea Level: 1449 feet
Mean Sea Level to Ground level (At Slot Slot #01): -1624 feet
Coordinates are in feet referenced to Slot
Database: WA, Pennsylvania



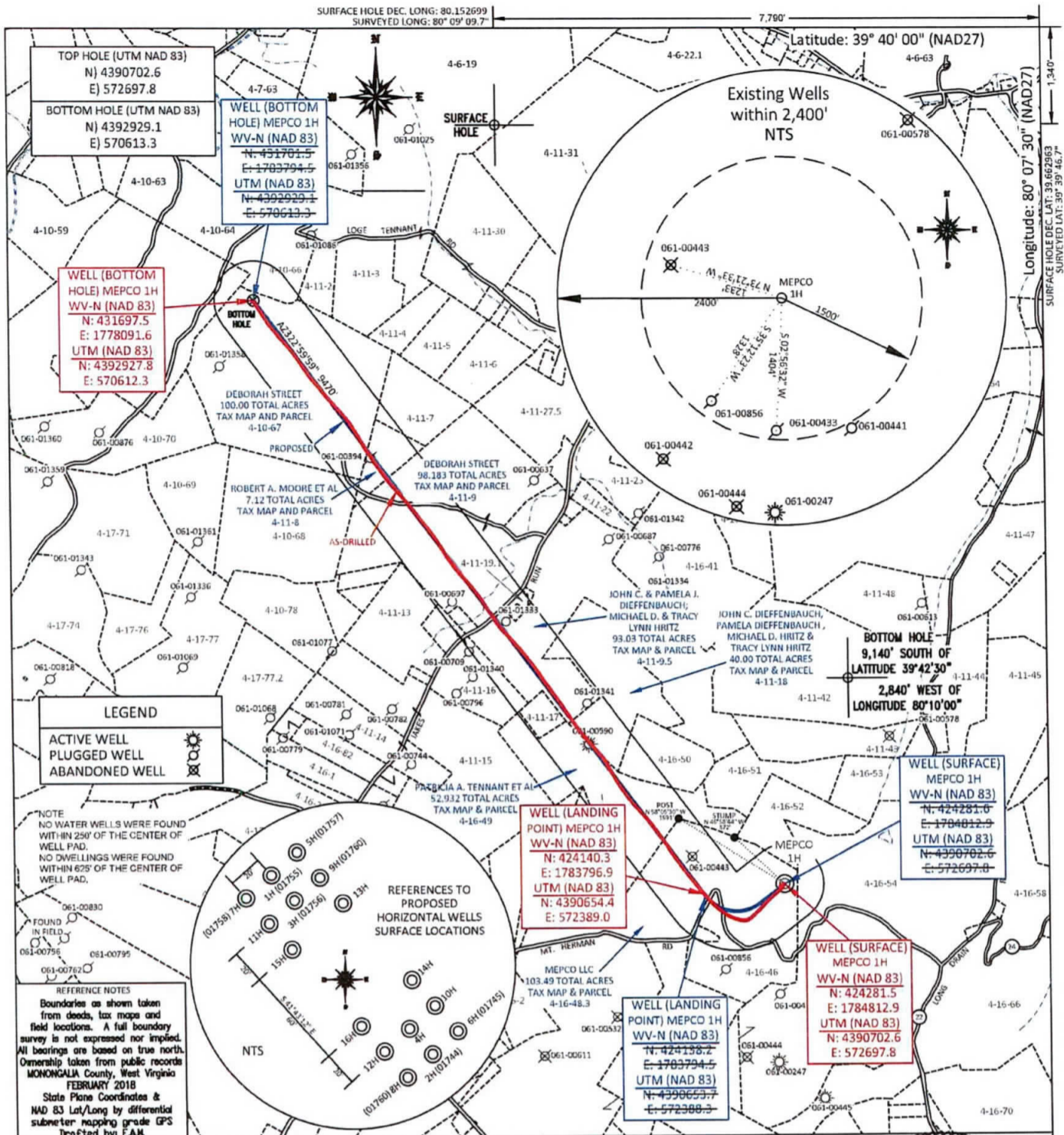
Location Information			
Facility Name	MEPCO Pad	Grid East (US ft)	Grid North (US ft)
MEPCO Pad	1784821.230	424282.090	39°39'46.962"N
Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)
-0.50	-8.36	1784812.870	424281.590
Slot #01			
Patterson 334 (KB) to Ground level (At Slot Slot #01)			25ft
Mean Sea Level to Ground level (At Slot Slot #01)			-1424ft
Patterson 334 (KB) to Mean Sea Level			1449ft
Comments			
API: 47-061-01755-0000			
BH Job #: 9230657			
Rig: Patterson 334			
Duration: 06/26/2018 - 07/02/2018			



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Vertical Section (ft)
 Azimuth 323.00° with reference 0.00 N, 0.00 E

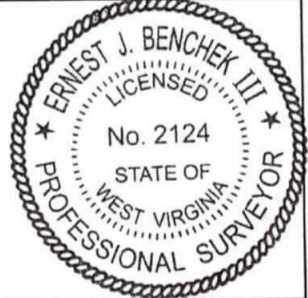
Scale 1 inch = 1500



FILE #: NNE16
 DRAWING #: 2932
 SCALE: PLAT: 1" = 1800'
TICK: 1" = 2000'
 MINIMUM DEGREE OF ACCURACY: 1/200
 PROVEN SOURCE OF ELEVATION: SUBMETER MAPPING GRADE 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 ENVIRONMENTAL PROTECTION.

Signed: [Signature]
 L.L.S. #2124 : Ernest J. Benchek III



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS WVDEP
 OFFICE OF OIL & GAS
 601 57TH STREET
 CHARLESTON, WV 25304

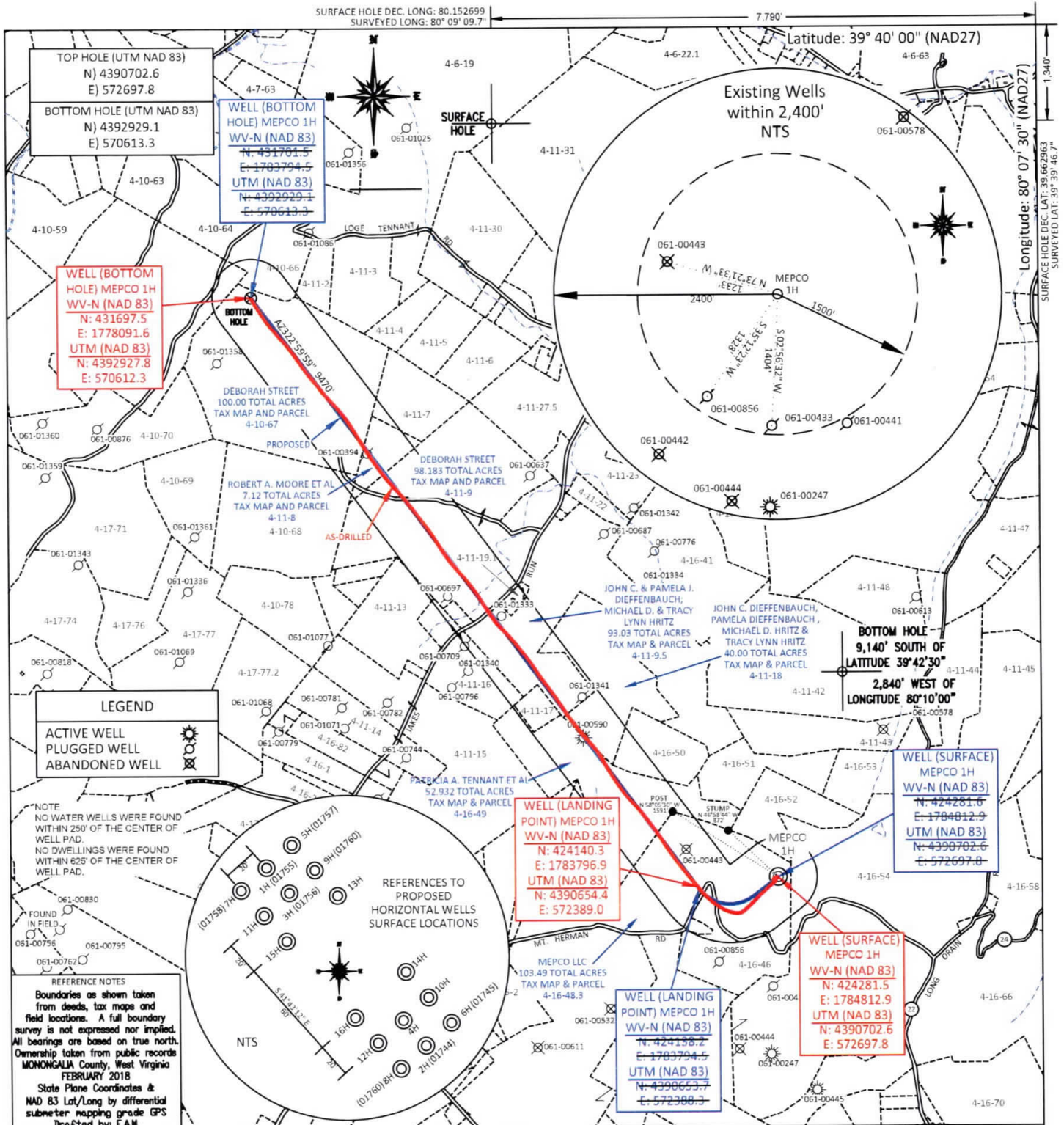
Well Type: Oil Waste Diposal Production Deep
 Gas Liquid Injection Storage Shallow

WATERSHED: DUNKARD CREEK
 COUNTY/DISTRICT: MONONGALIA / CLAY
 SURFACE OWNER: MEPCO LLC
 OIL & GAS ROYALTY OWNER: NNE LLC ET AL
 LEASE NUMBERS: _____

DATE: AUGUST 5, 2019
 OPERATOR'S WELL #: MEPCO 1H (AS-DRILLED)
 API WELL #: 47 61 01755
 STATE COUNTY PERMIT
 AS-BUILT ELEVATION: 1,420.20'
 QUADRANGLE: BLACKSVILLE
 ACREAGE: 103.49 +/-
 ACREAGE: 361.72 +/-
 SEP 9 2019

DRILL CONVERT DRILL DEEPER REDRILL FRACTURE OR STIMULATE
 PLUG OFF FORMATION PERFORATE NEW FORMATION PLUG & ABANDON
 CLEAN OUT & REPLUG OTHER CHANGE (SPECIFY): _____

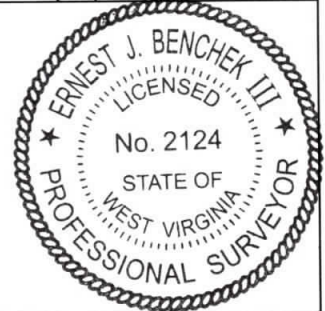
TARGET FORMATION: MARCELLUS ESTIMATED DEPTH: TVD: 8,222' TMD: 18,245.88'
 WELL OPERATOR: NORTHEAST NATURAL ENERGY LLC DESIGNATED AGENT: JOHN ADAMS
 ADDRESS: 707 VIRGINIA STREET EAST, SUITE 1200 ADDRESS: 707 VIRGINIA STREET EAST, SUITE 1200
 CITY: CHARLESTON STATE: WV ZIP CODE: 25301 CITY: CHARLESTON STATE: WV ZIP CODE: 25301



FILE #: NNE16
 DRAWING #: 2932
 SCALE: PLAT: 1" = 1800'
TICK: 1" = 2000'
 MINIMUM DEGREE OF ACCURACY: 1/200
 PROVEN SOURCE OF ELEVATION: SUBMETER MAPPING GRADE 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 ENVIRONMENTAL PROTECTION.

Signed: [Signature]
 L.L.S. #2124 : Ernest J. Benchek III



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS WVDEP
 OFFICE OF OIL & GAS
 601 57TH STREET
 CHARLESTON, WV 25304
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 STATE COUNTY PERMITTED
 Office of Oil and Gas
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 QUADRANGLE: BLACKSVILLE
 ACREAGE: 103.49 Department of Environmental Protection
 ACREAGE: 36 F.72 +/-
 ESTIMATED DEPTH: TVD: 8,222' TMD: 18,245.88'
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