

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

API 47 - 051 - 01952 County Marshall District Meade
Quad Glen Easton 7.5' Pad Name Heaven Hill 2 Field/Pool Name _____
Farm name Charles R. Hagedorn, Jr., Et Ux Well Number Heaven Hill 2W-12HU
Operator (as registered with the OOG) Tug Hill Operating, LLC
Address 1320 S. University Drive, Suite 215 City Ft. Worth State TX Zip 76107

As Drilled location NAD 83/UTM Attach an as-drilled plat, profile view, and deviation survey
Top hole Northing 4,406,726.20 Easting 524,574.44
Landing Point of Curve Northing 4,406,057.20 Easting 524,045.40
Bottom Hole Northing 4,404,141.60 Easting 525,141.20

Elevation (ft) 1331' 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

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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)
SOBM; Base oil, osmotic inhibitor, weighting agent, viscosifier, emulsifier, hardness buffer, fluid loss additive, LCM, Shale inhibitor, de-foamer, soaping agent, coagulant, flocculant; specific additives per WSSP and Permit.

Date permit issued 10/27/2017 Date drilling commenced 11/13/2017 Date drilling ceased 5/16/2018
Date completion activities began 9/24/2018 Date completion activities ceased 2/9/2019
Verbal plugging (Y/N) N Date permission granted N/A Granted by N/A

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

Freshwater depth(s) ft 1073' Open mine(s) (Y/N) depths N
Salt water depth(s) ft 1595' Void(s) encountered (Y/N) depths N
Coal depth(s) ft 974' - 980', 1064' - 1072' Cavern(s) encountered (Y/N) depths N
Is coal being mined in area (Y/N) n

Reviewed by:
Justin Nichols
7/27/2020

API 47-051 - 01952

Farm name Charles R. Hagedorn, Jr., Et Ux Well number Heaven Hill 2W-12HU

CASING	Hole Size	Casing Size	Depth	New or Used	Grade	Basket Depth(s)	Did cement circulate (Y/N) * Provide details below*
Conductor	36"	30"	120'	NEW	94.5#	N/A	Y
Surface	26"	20"	1,158'	NEW	106.5#	N/A	Y
Coal							
Intermediate 1	17 1/2"	13 3/8"	2,812'	NEW	54.5#	N/A	Y
Intermediate 2	12 1/4"	5 1/2"	19,635'	NEW	23#	N/A	Y
Intermediate 3							
Production	8 1/2"	5 1/2"	19,635'	NEW	23#	N/A	Y
Tubing		2 7/8"	9,818'	NEW	4.7#	N/A	Y

Comment Details

CEMENT	Class/Type	Number of Sacks	Slurry wt (ppg)	Yield (ft ³ /sks)	Volume (ft ³)	Cement Top (MID)	WOC (hrs)
Conductor	A		15.6	1.2		0	8
Surface	A	2025	15.6	1.2	2430	0	8
Coal							
Intermediate 1	A	2371	15.6	1.19	2822	0	8
Intermediate 2	A	3907	14.5	1.19	2012	0	8
Intermediate 3							
Production	A	4389	16.5	1.17	4841	0	8
Tubing							

Drillers TID (ft) 19,703
 Loggers TID (ft) N/A
 Plug back to (ft) n/a
 Plug back procedure n/a

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

Well cored Yes No
 Conventional Sidewall
 Were cuttings collected Yes No

DESCRIBE THE CENTRALIZER PLACEMENT USED FOR EACH CASING STRING
 3 centralizers on surface casing at equal distance

Production - one centralizer every other joint in lateral, one centralizer every joint through curve, one centralizer every other joint to surface.
 Intermediate - 1 centralizer every other joint

WAS WELL COMPLETED AS SHOT HOLE Yes No DETAILS

WAS WELL COMPLETED OPEN HOLE? Yes No DETAILS

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

API 47- 051 - 01952 Farm name Charles R. Hagedorn, Jr., Et Ux Well number Heaven Hill 2W-12HU

PERFORATION RECORD

Stage No.	Perforation date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formation(s)
	see attached				

Please insert additional pages as applicable.

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STIMULATION INFORMATION PER STAGE JUL 10 2020

Complete a separate record for each stimulation stage.

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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)
	attached							

Please insert additional pages as applicable.

API 47- 051 - 01952 Farm name Charles R. Hagedorn, Jr., Et Ux Well number Heaven Hill 2W-12HU

PRODUCING FORMATION(S)	DEPTHS	
Point Pleasant	11,548' - 11,716' TVD	12,179' - 19,712' MD

Please insert additional pages as applicable.

GAS TEST Build up Drawdown Open Flow OIL TEST Flow Pump
 SHUT-IN PRESSURE Surface 8000 psi Bottom Hole _____ psi DURATION OF TEST 24 hrs
 OPEN FLOW Gas 500 mcfpd Oil 0 bpd NGL 0 bpd Water 550 bpd GAS MEASURED BY Estimated Orifice Pilot

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)
*See attachment	0		0		

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Please insert additional pages as applicable.

Drilling Contractor Nabors Drilling USA
 Address 505 West Greens Road, Suite 1000 City Houston State TX Zip 77067

Logging Company n/a
 Address _____ City _____ State _____ Zip _____

Cementing Company C&J Well Services
 Address 380 Southpointe Boulevard, Suite 210 City Canonsburg State PA Zip 15317

Stimulating Company Halliburton Energy Services, Inc.
 Address 121 Champion Way, Suite 200 City Canonsburg State PA Zip 15317

Please insert additional pages as applicable.

Completed by Amy L. Miller Telephone 304-376-0111
 Signature *Amy Miller* Title Permitting Specialist Date 6/10/2020

**Heaven Hill 2W-12HU
PEFORATION RECORD**

Stage No.	Perforation Date	Perforated from MD ft.	Perforated to MD. Ft.	Number of Perforations	Formation(s)
1	12/4/2018	19538	19586	2	Utica
2	12/5/2018	19314	19462	48	Utica
3	12/5/2018	19115	19264	48	Utica
4	12/6/2018	18917	19065	48	Utica
5	12/6/2018	18718	18867	48	Utica
6	12/6/2018	18520	18668	48	Utica
7	12/7/2018	18321	18470	48	Utica
8	12/8/2018	18123	18271	48	Utica
9	12/8/2018	17924	18073	48	Utica
10	12/9/2018	17726	17874	48	Utica
11	12/9/2018	17527	17676	48	Utica
12	12/10/2018	17329	17477	48	Utica
13	12/10/2018	17130	17279	48	Utica
14	12/11/2018	16932	17080	48	Utica
15	12/11/2018	16733	16882	48	Utica
16	12/12/2018	16535	16683	48	Utica
17	12/12/2018	16336	16485	48	Utica
18	12/13/2018	16138	16286	48	Utica
19	12/13/2018	15939	16088	48	Utica
20	12/14/2018	15741	15889	48	Utica
21	12/14/2018	15542	15691	48	Utica
22	12/15/2018	15344	15492	48	Utica
23	12/15/2018	15145	15294	48	Utica
24	12/15/2018	14947	15095	48	Utica
25	12/16/2018	14748	14897	48	Utica
26	12/16/2018	14550	14698	48	Utica
27	12/17/2018	14351	14500	48	Utica
28	12/17/2018	14153	14301	48	Utica
29	12/17/2018	13954	14103	48	Utica
30	12/18/2018	13756	13904	48	Utica
31	12/18/2018	13557	13706	48	Utica
32	12/19/2018	13359	13507	48	Utica
33	12/19/2018	13160	13309	48	Utica
34	12/19/2018	12962	13110	48	Utica
35	12/20/2018	12763	12912	48	Utica
36	12/20/2018	12565	12713	48	Utica
37	12/20/2018	12366	12515	48	Utica

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Heaven Hill 2W-12HU
STIMULATION INFORMATION PER STAGE

Stage No.	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)
1	80.4	80.4	11212	7029	402060	9612	0
2	80.5	80.5	7784	7349	496955	11281	0
3	79.1	79.1	8897	7953	507115	11669	0
4	79.9	79.9	8503	7544	493290	11299	0
5	79.6	79.6	7943	7646	507470	11311	0
6	79.9	79.9	8777	7499	488245	11299	0
7	76.1	76.1	7824	7679	492905	11401	0
8	75.6	75.6	8248	7617	508865	11708	0
9	72.8	72.8	7890	7472	489545	10714	0
10	79.2	79.2	8386	7161	491965	10898	0
11	74.6	74.6	7931	7459	491225	11171	0
12	78.1	78.1	8360	7527	508290	10927	0
13	77.5	77.5	7650	7765	490200	12480	0
14	74.7	74.7	8495	7415	491180	11517	0
15	73.1	73.1	8293	7317	488120	10853	0
16	72.4	72.4	7974	7683	493740	10765	0
17	79.4	79.4	8434	7582	506930	10916	0
18	81.7	81.7	7836	7541	478450	10465	0
19	83.2	83.2	7970	7931	489875	10763	0
20	84.5	84.5	8057	7613	488795	10765	0
21	77.2	77.2	7968	8026	491239	13265	0
22	83.4	83.4	8340	7481	487700	10598	0
23	83.6	83.6	8820	7507	491760	10447	0
24	87.2	87.2	8053	7483	490090	10704	0
25	87.3	87.3	8328	7336	491820	10535	0
26	84.5	84.5	7498	7369	477300	10299	0
27	84.4	84.4	8648	7349	489900	10605	0
28	84.2	84.2	8055	7605	487790	10429	0
29	84.6	84.6	8168	7164	489940	10574	0

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PROJECT

Stage No.	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)
30	84.6	84.6	7905	7347	500010	10544	0
31	84.5	84.5	8139	7640	501665	10935	0
32	84.5	84.5	8038	7704	490250	10741	0
33	84.3	84.3	7821	7297	490570	10479	0
34	84.3	84.3	7737	7310	488910	10698	0
35	84.5	84.5	7679	7754	488290	10305	0
36	84.2	84.2	7944	7546	489115	10506	0
37	84	84	7836	7513	492085	10420	0

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Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	12/4/2018
Job End Date:	12/20/2018
State:	West Virginia
County:	Marshall
API Number:	47-051-01952-00-00
Operator Name:	Tug Hill Operating, LLC
Well Name and Number:	Heaven Hill Unit 2W 12HU
Latitude:	39.81015638
Longitude:	-80.71290095
Datum:	NAD27
Federal Well:	NO
Indian Well:	NO
True Vertical Depth:	11,713
Total Base Water Volume (gal):	17,281,273
Total Base Non Water Volume:	0



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Hydraulic Fracturing Fluid Composition:

Trade Name	Supplier	Purpose	Ingredients	Chemical Abstract Service Number (CAS #)	Maximum Ingredient Concentration in Additive (% by mass)**	Maximum Ingredient Concentration in HF Fluid (% by mass)**	Comments
Fresh Water	Operator	Base Fluid					
			Water	7732-18-5	100.00000	80.43542	Density = 8.330
Produced Water	Operator	Base Fluid					
			Water	7732-18-5	100.00000	8.91430	Density = 9.000

Ingredients	Listed Above	Listed Above					
			Water	7732-18-5	100.00000	0.46863	
WG-36 GELLING AGENT	Halliburton	Gelling Agent					
				Listed Below			
SAND-COMMON WHITE - 100 MESH, 3307 LB BAG	Halliburton	Proppant					
				Listed Below			
HYDROCHLORIC ACID	Halliburton	Solvent					
				Listed Below			
MC MX 2-2822	Halliburton	Scale Inhibitor					
				Listed Below			
40/70 ProLite	Imerys Oilfield Solutions	Additive					
				Listed Below			
FR-A12	Halliburton	Additive					
				Listed Below			
OILPERM A	Halliburton	Non-ionic Surfactant					
				Listed Below			
MC MX 5-2402	Multi-Chem	Biocide					

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				Listed Below			
SP BREAKER	Halliburton	Breaker					
				Listed Below			
MC MX 8-4543	Multi-Chem	Biocide					
				Listed Below			
LD-2850	Multi-Chem	Friction Reducer					
				Listed Below			
FDP-S1296-17	Halliburton	Corrosion Inhibitor					
				Listed Below			
SAND-PREMIUM WHITE-40/70, BULK	Halliburton	Proppant					
				Listed Below			

Items above are Trade Names with the exception of Base Water . Items below are the individual ingredients.

			Crystalline silica, quartz	14808-60-7	100.00000	10.04001	
			Hydrochloric acid	7647-01-0	7.50000	0.03361	
			Guar gum	9000-30-0	100.00000	0.02268	
			Sodium nitrate	7631-99-4	60.00000	0.02190	
			Sodium chloride	7647-14-5	30.00000	0.02017	
			Hydrotreated light petroleum distillate	64742-47-8	30.00000	0.01878	
			Ceramic materials and wares, chemical	66402-68-4	100.00000	0.01138	
			Methanol	67-56-1	100.00000	0.00736	

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			Amines, polyethylenepoly-, ethoxylated, phosphonomethylated, sodium salts	70900-16-2	30.00000	0.00703	
			Alcohols, C 12-16, ethoxylated	68551-12-2	5.00000	0.00313	
			9-Octadecenamide, n, n-bis-2(hydroxy-ethyl)-, (Z)	93-83-4	5.00000	0.00313	
			Ammonium chloride	12125-02-9	5.00000	0.00313	
			Contains no hazardous substances in concentrations above cut-off values according to the competent authority	CAS Not Assigned	100.00000	0.00253	
			Proprietary Component	Proprietary	60.00000	0.00132	
			Sodium persulfate	7775-27-1	100.00000	0.00060	
			Ethanol	64-17-5	60.00000	0.00021	
			Oxyalkylated phenolic resin	Proprietary	30.00000	0.00014	
			Glycerine	56-81-5	5.00000	0.00011	
			Heavy aromatic petroleum naphtha	64742-94-5	30.00000	0.00010	
			Modified thiourea polymer	Proprietary	30.00000	0.00010	
			Formaldehyde	50-00-0	0.09000	0.00002	
			Poly(oxy-1,2-ethanediyl), alpha-(4-nonylphenyl)-omega-hydroxy-, branched	127087-87-0	5.00000	0.00002	
			Naphthalene	91-20-3	5.00000	0.00002	
			Propargyl alcohol	107-19-7	5.00000	0.00002	
			Ethoxylated alcohols	Proprietary	5.00000	0.00002	Denise Tuck, Halliburton, 3000 N. Sam Houston Pkwy E., Houston, TX 77032, 281-871-6226
			1,2,4 Trimethylbenzene	95-63-6	1.00000	0.00000	
			Sodium sulfate	7757-82-6	0.10000	0.00000	

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* Total Water Volume sources may include various types of water including fresh water, produced water, and recycled water
** Information is based on the maximum potential for concentration and thus the total may be over 100%
*** If you are calculating a percentage of total ingredients do not add the water volume below the green line to the water volume above the green line

Note: For Field Development Products (products that begin with FDP), MSDS level only information has been provided.
Ingredient information for chemicals subject to 29 CFR 1910.1200(i) and Appendix D are obtained from suppliers Material Safety Data Sheets (MSDS)

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HEAVEN HILL 2W-12HU

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
Maxton	1896	2068	1896	2069	Sandstone
Big Lime	2068	2200	2069	2202	Limestone
Big Injun	2200	2494	2202	2498	Sandstone
Weir	2494	2692	2498	2697	Sandstone
Berea	2692	2954	2697	2960	Sandstone
Gordon	2954	3039	2960	3045	Sandstone
Fifty Foot	3039	3621	3045	3630	Sandstone
Speechley	3621	5131	3630	5202	Sandstone
Benson	5131	5454	5202	5542	Sandstone
Alexander	5454	6076	5542	6193	Siltstone
Rhinestreet	6076	6591	6193	6738	Black shale
Middlesex	6591	6677	6738	6829	Black shale
Geneseo/Burkett	6677	6693	6829	6845	Black shale
Tully	6693	6724	6845	6878	Limestone
Hamilton	6724	6799	6878	6957	Grey shale
Marcellus	6799	6848	6957	7009	Black shale
Onondaga	6848	7062	7009	7234	Limestone
Oriskany	7062	7166	7234	7343	Sandstone
Helderberg	7166	7536	7343	7731	Limestone
Salina	7536	8530	7731	8771	Salt/Anhydrite/LS
Lockport	8530	8904	8771	9164	Dolomite
Rose Hill	8904	9164	9164	9438	Shale
Packer Shell	9164	9371	9438	9655	Limestone
Clinton/Tuscarora	9371	9483	9655	9774	Sandstone
Juniata/Queenston	9483	10337	9774	10659	Red Shale
Reedsville	10337	11282	10659	11690	Grey Shale
Utica	11282	11548	11690	12179	Black Shale
Point Pleasant	11548		12179		Shale/Limestone

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Well: Heaven Hill 2W-12 HU (slot J)
 Site: Heaven Hill 2
 Project: Marshall County, West Virginia
 Design: rev10

TUG HILL
 OPERATING



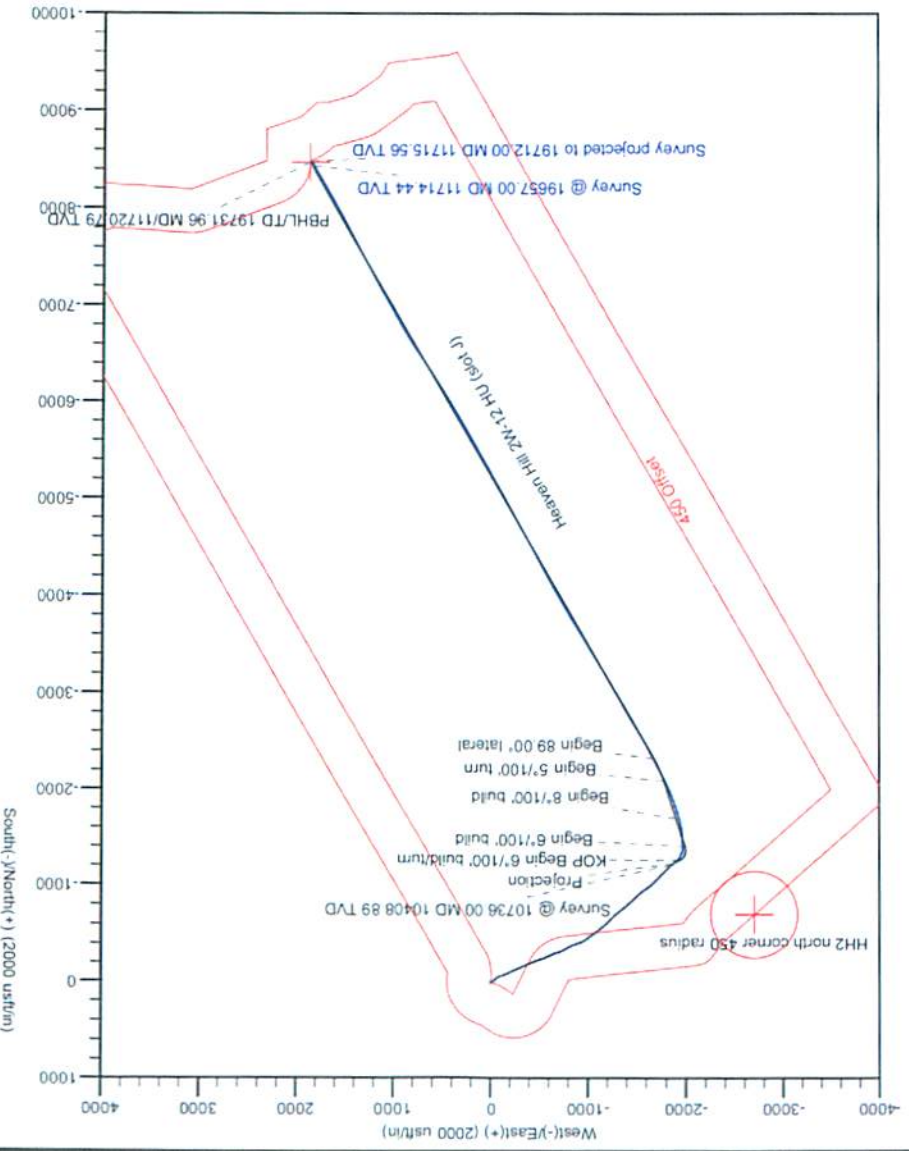
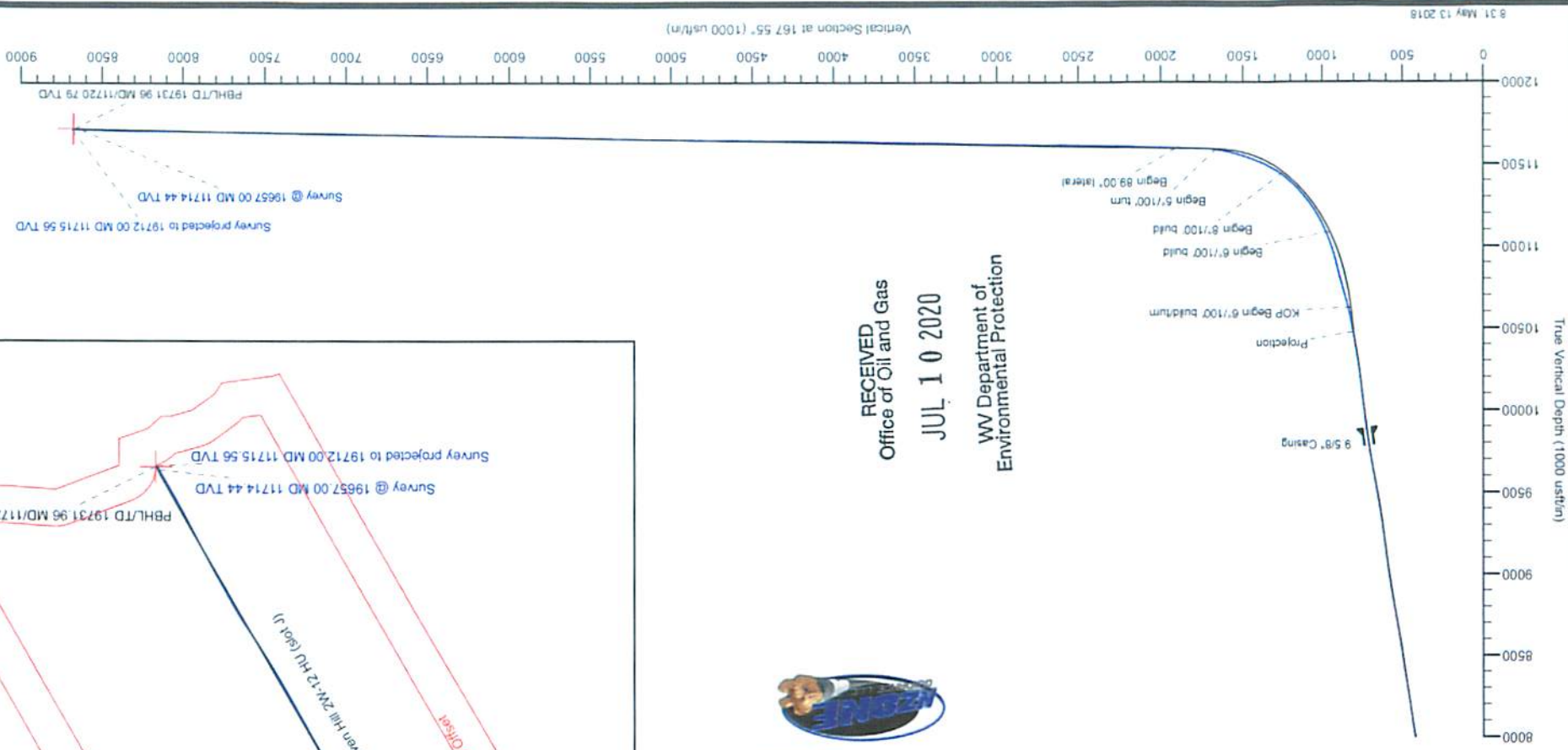
SECTION DETAILS

MD	Inc	Azi	+N/S	+E/W	Vsect	Annotation
107.36	0.00	791.93	0.00	0.00	Diag	Survey @ 107.36 MD 10408.89 TVD
108.11	22.09	104.78	-4.2	-1.82	Pickoff	KOP Begin 6'100' build/turn
109.72	22.09	106.27	-8.6	-1.95	Pickoff	KOP Begin 6'100' build/turn
114.3	53.50	110.88	-5.8	-1.41	Gyro	Begin 6'100' build
119.38	53.50	112.70	-5.8	-1.41	Gyro	Begin 6'100' build
123.82	53.50	114.52	-6.3	-1.66	Gyro	Begin 6'100' build
133.70	69.00	115.83	-6.3	-1.66	Gyro	Begin 6'100' build
145.70	69.00	117.14	-4.4	-0.91	Gyro	Begin 5'100' turn
152.70	69.00	118.53	-4.4	-0.91	Gyro	Begin 5'100' turn
162.70	69.00	119.84	-4.4	-0.91	Gyro	Begin 5'100' turn
176.70	69.00	121.30	-4.4	-0.91	Gyro	Begin 5'100' turn
187.70	69.00	122.83	-4.4	-0.91	Gyro	Begin 5'100' turn
197.20	69.00	124.44	-4.4	-0.91	Gyro	Begin 5'100' turn
197.20	69.00	124.44	-4.4	-0.91	Gyro	Begin 5'100' turn
197.20	69.00	124.44	-4.4	-0.91	Gyro	Begin 5'100' turn

Surface Location: RKB=1331+33 @ 1364.00uht (Nabors X08)
 Universal Transverse Mercator (US Survey Feet)
 Zone 17N (84 W to 78 W)
 Northing 14457734.21
 Easting 1721041.31
 Latitude 39.81015638
 Longitude -80.71290095
 To convert a Magnetic Direction to a Grid Direction, Subtract 8.90°
 Magnetic Field
 Strength: 52085.1uT
 Dip Angle: 66.90°
 Date: 4/30/2018
 Model: IGRF2015



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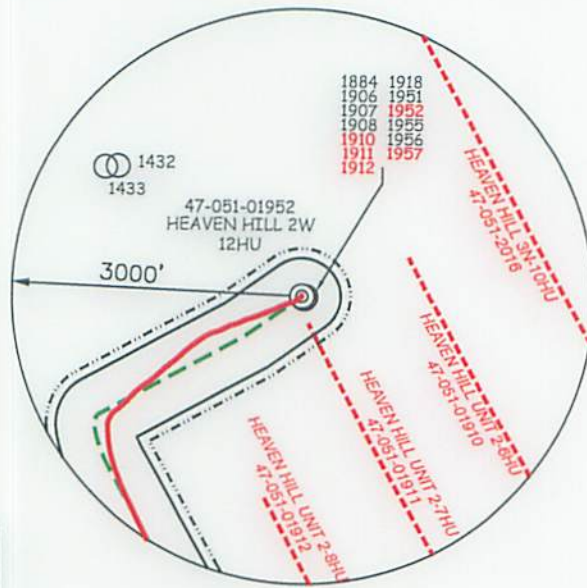
Vertical Section at 167.55° (1000 usft/m)
 8.31 May 13 2018

**HEAVEN HILL 2W LEASE
UTICA UNIT - 572.54 AC. ±
WELL 12HU
TUG HILL OPERATING**

T.H. LATITUDE 39°50'00"
B.H. LATITUDE 39°47'30"

T.H. LONGITUDE 80°42'30"
B.H. LONGITUDE 80°40'00"

B.H.
AS-DRILLED B.H.



(S.P.C. NORTH ZONE) (UTM(M) ZONE 17 NORTH)
 NAD'83 S.P.C.(FT) N. 479,500.35 E. 1,627,779.64
 NAD'83 GEO. LAT-(N) 39.810156 LONG-(W) 80.712901
 NAD'83 UTM (M) N. 4,406,726.20 E. 524,574.44
LANDING POINT
 NAD'83 S.P.C.(FT) N. 477,667.3 E. 1,625,809.9
 NAD'83 GEO. LAT-(N) 39.805051 LONG-(W) 80.719823
 NAD'83 UTM (M) N. 4,406,157.7 E. 523,983.7
BOTTOM HOLE
 NAD'83 S.P.C.(FT) N. 470,998.4 E. 1,629,508.4
 NAD'83 GEO. LAT-(N) 39.786882 LONG-(W) 80.706341
 NAD'83 UTM (M) N. 4,404,144.8 E. 525,144.4

Lease Name or No.	Tag	Parcel	Grantor, Lessor, etc.	Deed Book/Page
10*15521	A	9-7-3	VENANGO 21ST CENTURY ENERGY INC	722 281
10*15608	A	9-7-3	CHARLES R HAGEDORN JR	816 423
10*47051.073.1	A	9-7-3	VENANGO 21ST CENTURY ENERGY INC	888 618
10*47051.073.2	A	9-7-3	PATRIOT RESTORATIONS LLC	908 541
10*47051.073.3	A	9-7-3	TRIENERGY HOLDINGS, LLC	878 330
10*17229	B	9-4-10	STEPHEN MENENDEZ	913 66
10*15661	C	9-6-5	CHESTNUT HOLDINGS LLC	839 170
	D	9-6-4	ROBERT LEE CARNEY AND BONNIE ANNE CARNEY	682 255
10*15510	E	9-6-9	ELAINE PHELPS ET VIR	718 326
10*15511	E	9-6-9	DAVID E CROW	718 376
10*15512	E	9-6-9	FRANCES COFFEY	718 378
10*15513	E	9-6-9	KAY KEYES	718 330
10*15514	E	9-6-9	L PAUL CROW	718 336
10*15515	E	9-6-9	DESIRE L CROW	718 334
10*15516	E	9-6-9	ROSE MARIE KIELGCZEWSKI	718 354
10*15517	E	9-6-9	DIANNE GELLNER & GARY GELLNER	718 345
10*15518	E	9-6-9	JAMES P HOLLIDAY AND JACQUELINE HOLLIDAY	718 347
10*15519	E	9-6-9	JOHN CROW	726 580
10*15520	E	9-6-9	TIMOTHY CROW	726 582
10*47051.123.1	E	9-6-9	LLOYD G BAKER	865 389
10*47051.123.2	E	9-6-9	JAMES P HOLLIDAY AND JACQUELINE HOLLIDAY	873 143
10*15525	F	9-6-12	RONALD KEITH MASON ET UX	772 445
10*15541	F	9-6-12	MARY RUTH FROHNAPFEL	781 312
10*15542	F	9-6-12	KENNETH D SIBURT	781 218
10*15543	F	9-6-12	SANDRA FROWEN	781 307
10*15544	F	9-6-12	VICKI J CHERRY A/K/A VICKIE L CHERRY	793 318
10*15545	F	9-6-12	JAMES B SIBURT ET UX	793 332
10*15546	F	9-6-12	ALAN K SIBURT ET UX	793 325
10*15547	F	9-6-12	RODNEY L SIBURT	793 346
			RAY C. HARTZELL AND CAROL J. HARTZELL,	
10*15507	G	9-6-13	HUSBAND AND WIFE	689 162
10*15504	H	9-6-14	JAMES MASON ET AL	692 461

NOTES ON SURVEY

- NO WATER WELLS WERE FOUND WITHIN 250' OF PROPOSED GAS WELL. NO AGRICULTURAL BUILDINGS ≥ 2500 SQ. FT. OR DWELLINGS WERE FOUND WITHIN 625' OF THE CENTER OF PROPOSED WELL PAD.
- WELL SPOT CIRCLE & TOPO MARK SCALE IS 1"=2000'
- ROYALTY OWNERSHIP PROVIDED BY TUG HILL OPERATING, LLC.
- SURFACE OWNERSHIP PROVIDED WAS NOT ADDRESSED
- AS-DRILLED DATA PROVIDED BY TUG HILL OPERATING, LLC.
- PLAT UPDATED TO SHOW AS-DRILLED PATH.
- THE LATERAL OR TOP OF HEAVEN HILL UNIT 2-12HU (47-051-01952) IS LOCATED WITHIN 3000' OF THE FOLLOWING:
 PROPOSED KNOB CREEK N-12HU,
 PROPOSED KNOB CREEK N-13HU,
 HEAVEN HILL UNIT 2-6HU (47-051-01910),
 HEAVEN HILL UNIT 2-7HU (47-051-01911),
 HEAVEN HILL UNIT 2-8HU (47-051-01912),
 HEAVEN HILL 2W-13HU (47-051-01957),
 HEAVEN HILL 3-10HU (47-051-02016),
 PROPOSED KEITH STERN N-13HU,
 KEITH STERN N-14HU (47-051-02252),
 KEITH STERN N-15HU (47-051-02241).



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 DIVISION OF ENVIRONMENTAL PROTECTION.

P.S. *C. Victor Moyers*
849



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS.
 DATE OCTOBER 29, 20 18
 REVISED SEPTEMBER 6, 20 19
 OPERATORS WELL NO. HEAVEN HILL 2W-12HU
 API WELL NO. 47 - 051 - 1952
 STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1 / 2500 FILE NO. 8703PAD12HUR.dwg
 HORIZONTAL & VERTICAL CONTROL DETERMINED BY DGPS (SURVEY GRADE TIE TO CORS NETWORK) SCALE 1" = 2000'

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

WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL IF "GAS" PRODUCTION STORAGE DEEP SHALLOW

LOCATION: GROUND = 1,350.0' ELEVATION PROPOSED = 1,331.26' WATERSHED WEST FORK OF LOWER BOWMAN RUN OF FISH CREEK (HUC 10)
 DISTRICT MEADE COUNTY MARSHALL QUADRANGLE GLEN EASTON 7.5'

SURFACE OWNER C.R. JR. & A.H. HAGEDORN ACREAGE 203.07±
 ROYALTY OWNER C.R. JR. & A.H. HAGEDORN ET AL (SEE ABOVE & SHEET 3) ACREAGE 203.07±

PROPOSED WORK: LEASE NO. SEE ABOVE & SHEET 3
 DRILL CONVERT DRILL DEEPER REDRILL FRACTURE OR STIMULATE PLUG OFF OLD FORMATION PERFORATE NEW FORMATION PLUG AND ABANDON CLEAN OUT AND REPLUG OTHER
 PHYSICAL CHANGE IN WELL (SPECIFY) _____ TARGET FORMATION POINT PLEASANT
 ESTIMATED DEPTH TVD: 11,784' / TMD: 19,732'

WELL OPERATOR TUG HILL OPERATING, LLC DESIGNATED AGENT DIANNA STAMPER
 ADDRESS 1320 SOUTH UNIVERSITY DRIVE, SUITE 500 ADDRESS 5400 D BIG TYLER ROAD
FORT WORTH, TX 76107 CHARLESTON, WV 25313

COUNTY NAME
PERMIT

ADDRESS 1350 SOUTH UNIVERSITY DRIVE SUITE 200
 MEET OPERATOR TUC HIGG OPERATING LLC

ADDRESS 2400 D BIG LUGER ROAD
 DESIGNATED AGENT C.T. CORPORATION SYSTEM
 DIANNA STAMBER

PHYSICAL CHANGE IN MEET (SPECIFY) _____ ESTIMATED DEPTH 140'
 FORMATION BEFORATE NEW FORMATION _____ BRUG AND AVOIDMENT _____ CLEAN OUT AND REBURG _____ OTHER _____
 DRILL X COMPLET _____ DRILL DEEPER _____ REDRILL _____ FRACTURE OR STIMULATE X BRUG OFF OLD

PROPOSED WORK:
 ROYALTY OWNER C.B. JR. & A.H. HAGEDORN ET AL (SEE ABOVE & SHEET 3)
 SURFACE OWNER C.B. JR. & A.H. HAGEDORN
 DISTRICT MEADE COUNTY MARSHALL QUADRANGLE GREEN EASTON 1.9
 ELEVATION PROPOSED = 1331.59, WATERSHED WEST FORK OF GOMER BOWMAN RUN OF FISH CREEK (HUC 10)
 LOCATION: GROUND = 1320.0
 TYPE: OIL GAS X INJECTION _____ DISPOSAL _____ "GAS" PRODUCTION X STORAGE _____ DEEP X SHALLOW
 MEET LIQUID WASTE IF

CONTROL DETERMINED BY DEGS (SURVEY GRADE TIE TO COBS NETWORK)
 HORIZONTAL & VERTICAL SCALE 1" = 3000'
 OF ACCURACY 1" 13800'
 MINIMUM DEGREE 15'

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



STATE COUNTY PERMIT
 NO. 14 - 021 - 1025
 MEET NO. 14
 OPERATORS MEET NO. HEAVEN HIGG SW-125H
 REVISED SEPTEMBER 9 '50 18
 DATE OCTOBER 28 '50 18
 STATES TOPOGRAPHIC MAPS
 (+) DENOTES LOCATION OF MEET ON UNITED

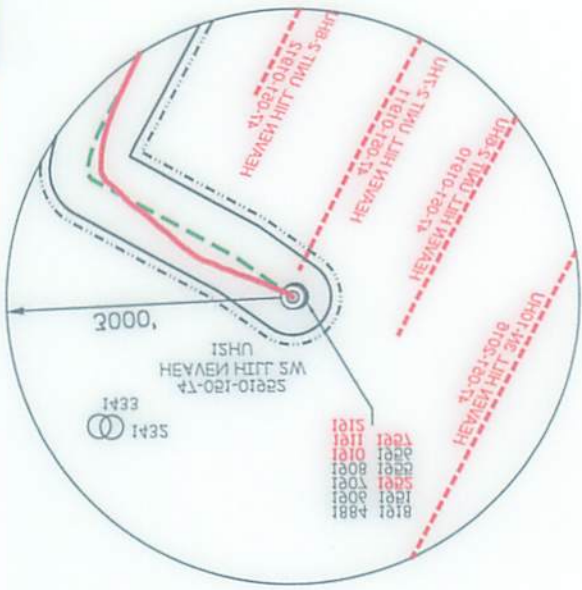


BY THE DIVISION OF ENVIRONMENTAL PROTECTION
 THE REGULATIONS ISSUED AND PRESCRIBED
 THE INFORMATION RECEIVED BY GAM AND
 KNOWLEDGE AND BELIEF AND SHOWS ALL
 THIS PLAN IS CORRECT TO THE BEST OF MY
 THE UNDERSIGNED, HEREBY CERTIFY THAT

212
 Energy Development
 1350 South University Drive, Suite 200
 Charleston, WV 25322
 (304) 483-0034

KELH STEIN N-125H (41-021-05541)
 KELH STEIN N-143H (41-021-05525)
 PROPOSED KELH STEIN N-125H
 HEAVEN HIGG 2-105H (41-021-03010)
 HEAVEN HIGG 3M-125H (41-021-01821)
 HEAVEN HIGG MILL 5-88H (41-021-01813)
 HEAVEN HIGG MILL 5-125H (41-021-01811)
 HEAVEN HIGG MILL 5-88H (41-021-01810)
 PROPOSED KNOB CREEK N-125H
 PROPOSED KNOB CREEK N-125H
 PROPOSED KNOB CREEK N-125H
 IS LOCATED WITHIN 2000' OF THE FOLLOWING:
 HEAVEN HIGG MILL 5-125H (41-021-01823)
 1. THE CENTER OF THE
 B. POINT PROVIDED TO SHOW V2-DRILLED BY IN
 TUC HIGG OPERATING LLC
 2. V2-DRILLED DAILY PROVIDED BY
 YDDRESEED
 4. SURFACE OMIERSHIP PROVIDED MAY NOT
 OPERATING LLC
 2. ROYALTY OMIERSHIP PROVIDED BY TUC HIGG
 1. = 3000,
 3. MEET 2601 SCSG 9' 1060 MARK SCALE IS
 250', OF THE CENTER OF PROPOSED MEET BY'D
 2000' 20' FT. OR DIMENSIONS MESE LONGITUDINAL
 PROPOSED GAS MEET NO. 1433/1435/1436
 1. NO WATER MEETS MESE LONGITUDINAL 350', OF

MEET	TYPE	STATUS	DATE	OPERATOR	EASTING	NORTHING
10472201	H	0-0-24	1948	TUMER WAGON ELAT	885	107
10472203	G	0-0-23	1948	HIGZAVIND AND MIFE BYA C HYVLEITZ AND SVBLOT '1' HYVLEITZ	890	125
10472243	L	0-0-23	1948	RODNEY G BRWEL	389	390
10472248	L	0-0-23	1948	VITIN K ZIBUJEL EL IX	389	352
10472242	L	0-0-23	1948	TUMER B ZIBUJEL EL IX	389	325
10472244	L	0-0-23	1948	LICKI T CHEVA VAVU LICKIE G CHEVA	389	318
10472243	L	0-0-23	1948	ZVI DVA BOWMEN	387	303
10472245	L	0-0-23	1948	KEMIEH D ZIBUJEL	387	518
10472247	L	0-0-23	1948	WVWA WUTIN BROMIYALEL	387	315
10472252	L	0-0-23	1948	WOMYTD KELH WAGON EL IX	335	442
10472273	E	0-0-0	1948	TUMER B HOTIOWA AND TUSCOLEPIE HOTIOWA	833	143
10472250	E	0-0-0	1948	ITDAD G BAKER	882	383
10472250	E	0-0-0	1948	LIMODNA SLOW	350	265
10472270	E	0-0-0	1948	TONIA SLOW	350	290
10472270	E	0-0-0	1948	TUMER B HOTIOWA AND TUSCOLEPIE HOTIOWA	318	241
10472271	E	0-0-0	1948	DIVANIE SETIEM B SVBA SETIEM	318	242
10472270	E	0-0-0	1948	WORE WYBIE KEGOCSEWZKI	318	324
10472272	E	0-0-0	1948	DEZIVE G SLOW	318	334
10472274	E	0-0-0	1948	G VYLG SLOW	318	330
10472273	E	0-0-0	1948	KVA KEAEZ	318	330
10472275	E	0-0-0	1948	BVAICSEZ COFEEA	318	338
10472277	E	0-0-0	1948	DVAID E SLOW	318	338
10472270	E	0-0-0	1948	EVUINE BHEPS ELAV	318	350
10472007	D	0-0-0	1948	VOBEMT FEE SVBINEA AND BOINIE VINE SVBINEA	895	322
10472550	B	0-0-0	1948	CHEZIMLIT HOTIOWOZ ITC	890	120
10472027	V	0-0-0	1948	ZIEHNEI WEHIEDES	873	80
10472027	V	0-0-0	1948	LIMENESCA HOTIOWOZ ITC	858	330
10472027	V	0-0-0	1948	BATVLOT WOSTOPATOWOZ ITC	908	247
10472027	V	0-0-0	1948	LEMAYCO STET SEMITWA ENEMEA INC	880	410
10472009	V	0-0-0	1948	CHVUWES B HAGEDORN JR	870	453
10472027	V	0-0-0	1948	LEMAYCO STET SEMITWA ENEMEA INC	355	387



NAD.83 N1W (M) N 4°40'14.44" E 252°144.4'
 NAD.83 GEO. DATUM 39°18'08.85" LONG. (M) 80°10'08.24"
 NAD.83 S'B'C (E.I) N 4°10'08.84" E 1°05'08.84"
 BOWMAN HOLE
 NAD.83 N1W (M) N 4°40'14.44" E 252°144.4'
 NAD.83 GEO. DATUM 39°18'08.85" LONG. (M) 80°10'08.24"
 NAD.83 S'B'C (E.I) N 4°10'08.84" E 1°05'08.84"
 LANDING POINT
 NAD.83 N1W (M) N 4°40'14.44" E 252°144.4'
 NAD.83 GEO. DATUM 39°18'08.85" LONG. (M) 80°10'08.24"
 NAD.83 S'B'C (E.I) N 4°10'08.84" E 1°05'11.84"
 (S'B'C NORTH ZONE) (U) (M) ZONE 17 NORTH

TUC HIGG OPERATING
 MEET 125H
 WVA 24 25 26 AC
 HEAVEN HIGG SW LEASE

**HEAVEN HILL 2W LEASE
UTICA UNIT - 572.54 AC. ±
WELL 12HU
TUG HILL OPERATING**

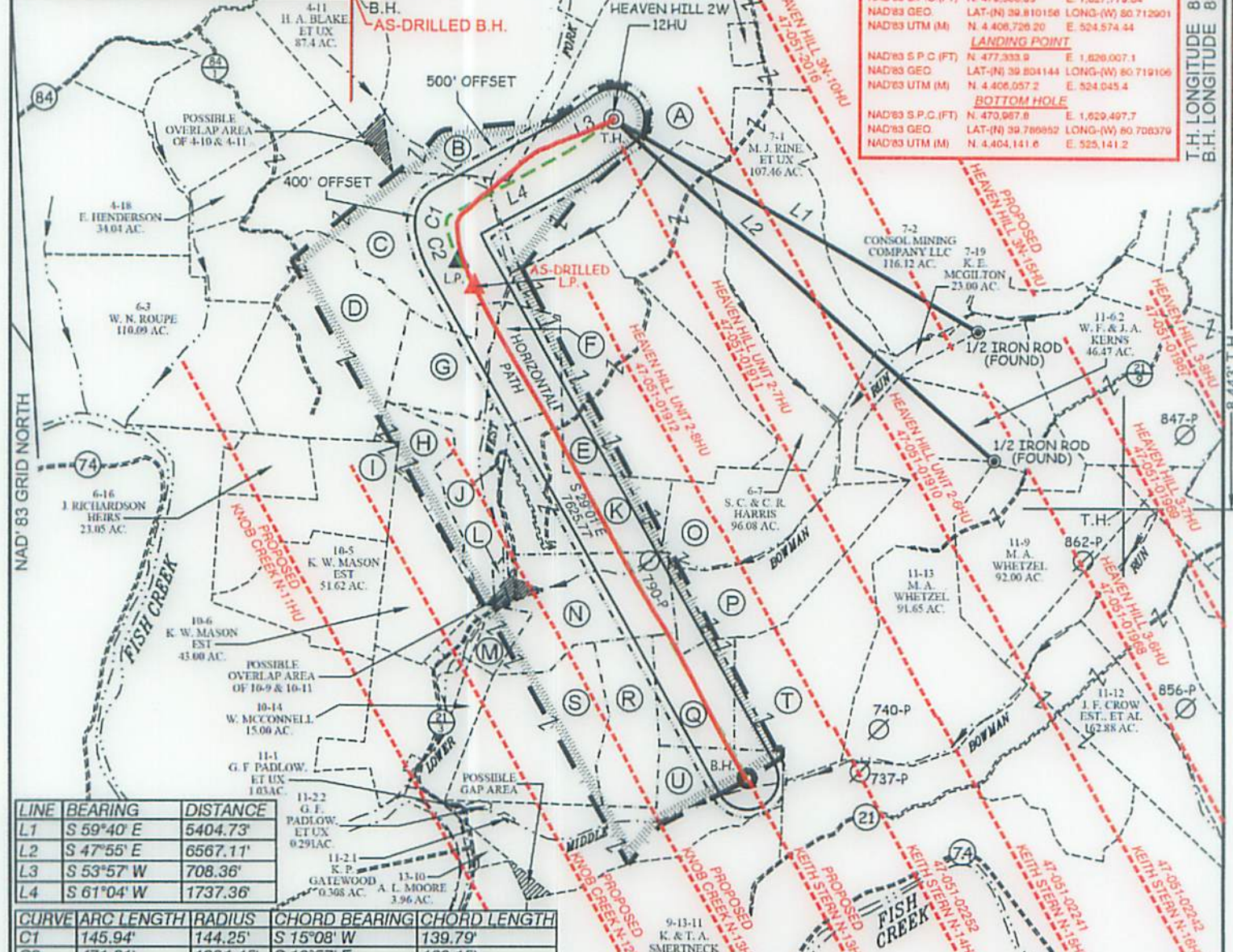
LEGEND
AS DRILLED ———
PROPOSED - - - - -
4-9-4 J. D. & M. ROBERTS 90.00 AC.
5-1 T. L. SAMPSON, ET UX 111.71 AC.
7-3-1 C. R. JR. & A. H. HAGEDORN 4.57 AC.

**T.H. LATITUDE 39°50'00"
B.H. LATITUDE 39°47'30"**

AS DRILLED COORDINATES FOR WELL NO. 12HU

(S.P.C. NORTH ZONE) (UTM(M) ZONE 17 NORTH)

TOP HOLE			
NAD'83 S.P.C. (FT)	N. 479,500.35	E. 1,627,779.64	
NAD'83 GEO.	LAT. (N) 39.810156	LONG. (W) 80.712901	
NAD'83 UTM (M)	N. 4,406,726.20	E. 524,574.44	
LANDING POINT			
NAD'83 S.P.C. (FT)	N. 477,333.9	E. 1,629,007.1	
NAD'83 GEO.	LAT. (N) 39.804144	LONG. (W) 80.719106	
NAD'83 UTM (M)	N. 4,406,057.2	E. 524,045.4	
BOTTOM HOLE			
NAD'83 S.P.C. (FT)	N. 470,967.8	E. 1,629,497.7	
NAD'83 GEO.	LAT. (N) 39.789952	LONG. (W) 80.708379	
NAD'83 UTM (M)	N. 4,404,141.6	E. 525,141.2	



LINE	BEARING	DISTANCE
L1	S 59°40' E	5404.73'
L2	S 47°55' E	6567.11'
L3	S 53°57' W	708.36'
L4	S 61°04' W	1737.36'

CURVE	ARC LENGTH	RADIUS	CHORD BEARING	CHORD LENGTH
C1	145.94'	144.25'	S 15°08' W	139.79'
C2	471.81'	1281.45'	S 19°57' E	469.15'

TAG	SURFACE OWNER	PARCEL	ACRES
A	C & A HAGEDORN	9-7-3	203.07
B	PAUL STEVEN ALLEN ET UX	9-4-10	172.30
C	RONALD MASON ET UX	9-6-5	92.85
D	ROBERT CARNEY ET UX	9-6-4	118.17
E	J. F. CROW ESTATE ET AL.	9-6-9	131.80
F	RONALD & RUBY MASON	9-6-12	59
G	RAY HARTZELL ET AL.	9-6-13	34.50
H	KENNETH MASON ESTATE	9-6-14	19.37

TAG	SURFACE OWNER	PARCEL	ACRES
I	J. F. CROW ESTATE ET AL.	9-6-15	55.23
J	J. F. CROW ESTATE ET AL.	9-6-11	7/8
K	J. F. CROW ESTATE ET AL.	9-6-10	64.01
F	RONALD & RUBY MASON	9-6-12	59
G	RAY HARTZELL ET AL.	9-6-13	34.50
H	KENNETH MASON ESTATE	9-6-14	19.37
I	J. F. CROW ESTATE ET AL.	9-6-15	55.23
J	J. F. CROW ESTATE ET AL.	9-6-11	7/8
K	J. F. CROW ESTATE ET AL.	9-6-10	64.01
L	RALPH MARTIN TAYLOR	9-10-10	2.23
M	J. F. CROW ESTATE ET AL.	9-10-9	17.14
N	J. F. CROW ESTATE ET AL.	9-10-11	60
O	J. F. CROW ESTATE ET AL.	9-6-8	53.33
P	RHDK INVESTMENTS	9-11-4	53
Q	RAY A WHETZAL JR ET AL.	9-11-3	33.33
R	RAY A WHETZAL JR ET AL.	9-10-12	36.51
S	RAY A WHETZAL JR ET AL.	9-10-13	71.119
T	RAY A WHETZAL JR ET AL.	9-11-5	106.89
U	MARGARET FOX LIFE	9-11-2	84.378

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P.S. 849 *C. Victor Moyers*

(S.P.C. NORTH ZONE) (UTM(M) ZONE 17 NORTH)

NAD'83 S.P.C. (FT)	N. 479,500.35	E. 1,627,779.64
NAD'83 GEO.	LAT. (N) 39.810156	LONG. (W) 80.712901
NAD'83 UTM (M)	N. 4,406,726.20	E. 524,574.44

LANDING POINT

NAD'83 S.P.C. (FT)	N. 477,333.9	E. 1,629,007.1
NAD'83 GEO.	LAT. (N) 39.805051	LONG. (W) 80.719823
NAD'83 UTM (M)	N. 4,406,157.7	E. 523,983.7

BOTTOM HOLE

NAD'83 S.P.C. (FT)	N. 470,998.4	E. 1,629,508.4
NAD'83 GEO.	LAT. (N) 39.786882	LONG. (W) 80.708341
NAD'83 UTM (M)	N. 4,404,144.8	E. 525,144.4

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS.

LEGEND

- UNIT BOUNDARY LEASED TRACTS INSIDE
- UNIT BOUNDARY
- DEEP WELL LATERAL WITHIN 3000'
- SURFACE LINE
- WELL LATERAL
- 400' OFFSET LINE
- 500' OFFSET LINE
- TIE LINE
- CREEK
- ROAD
- COUNTY ROUTE
- PROPOSED WELL
- EXISTING WELL
- PERMITTED WELL
- TAX MAP-PARCEL
- LEASE # (SEE PGS. 2 & 3)
- SURFACE OWNER (SEE TABLE)

SCALE 1" = 2000' FILE NO. 8703PAD12HUR.dwg

DATE OCTOBER 29, 20 18

REVISED SEPTEMBER 6, 20 19

OPERATORS WELL NO. HEAVEN HILL 2W-12HU

API WELL NO. 47 - 051 - 1952

NO. STATE COUNTY PERMIT

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

WELL OPERATOR TUG HILL OPERATING, LLC ADDRESS 1320 SOUTH UNIVERSITY DRIVE, SUITE 500 FORT WORTH, TX 76107	DESIGNATED AGENT ADDRESS DIANNA STAMPER CT CORPORATION SYSTEM 5400 D BIG TYLER ROAD CHARLESTON, WV 25313
---	---

**TUG HILL OPERATING
WELL 15HU
UTICA UNIT - 575.54 AC. ±
HEAVEN HILL SW LEASE**

LEGEND

- AS DRILLED
- PROPOSED

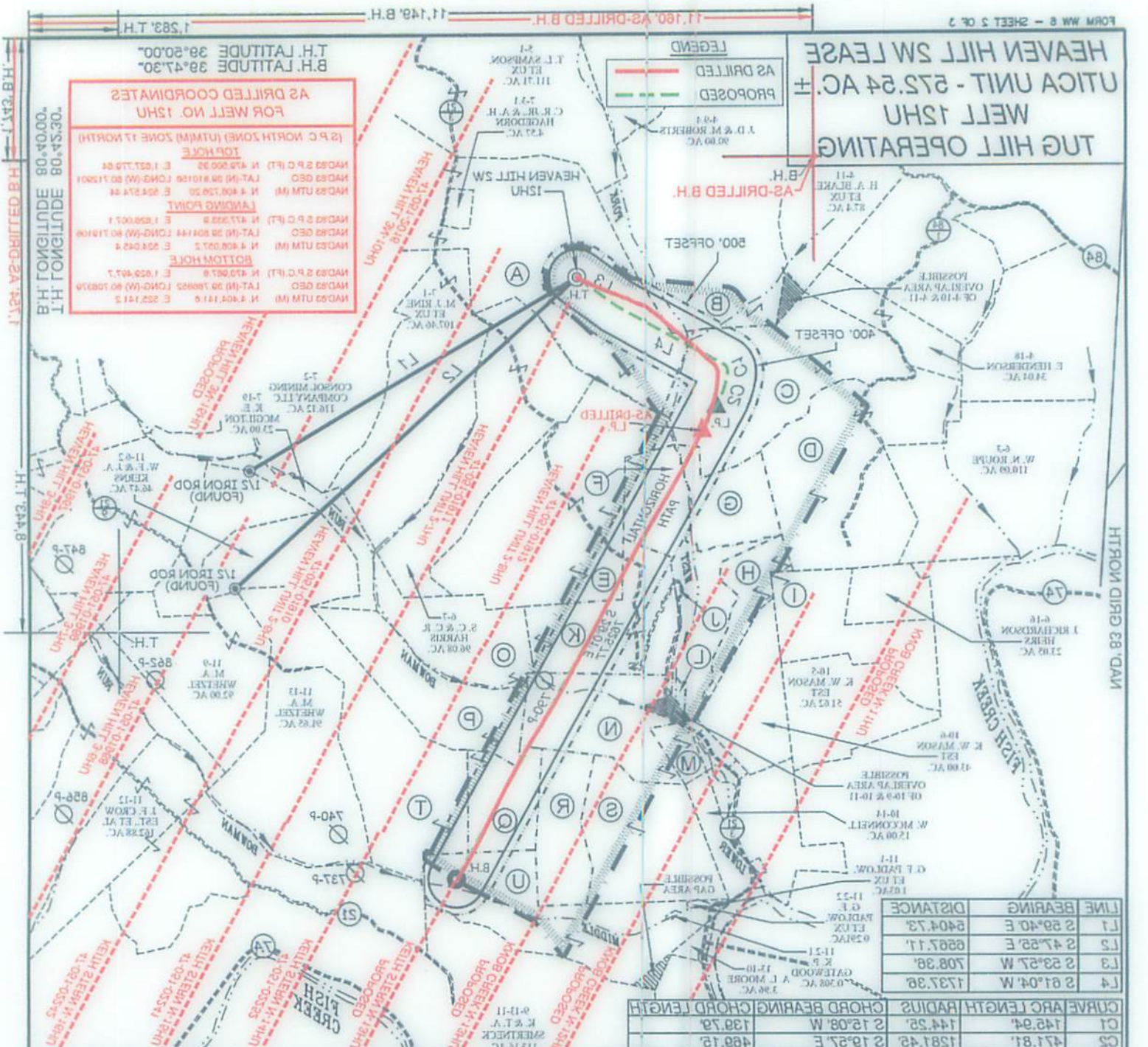
T.H. LATITUDE 39°47'30"
B.H. LATITUDE 39°47'30"
T.H. LONGITUDE 80°50'00"
B.H. LONGITUDE 80°50'30"

**AS DRILLED COORDINATES
FOR WELL NO. 15HU**

TOP HOLE
(2 P.C. NORTH ZONE) (UTM) (ZONE 17 NORTH)

LANDING POINT
NAD83 UTM (M) N 4,408,758.20 E 524,274.44
NAD83 GCS LAT (N) 39.80158 LONG (W) 80.71901
NAD83 S.P.C. (FT) N 4,408,758.20 E 524,274.44

BOTTOM HOLE
NAD83 S.P.C. (FT) N 4,408,758.20 E 524,274.44
NAD83 GCS LAT (N) 39.79882 LONG (W) 80.70834
NAD83 UTM (M) N 4,404,144.8 E 524,144.4



LINE	BEARING	DISTANCE
L1	S 59°40' E	840.73'
L2	S 47°58' E	850.71'
L3	S 53°57' W	708.39'
L4	S 81°04' W	1737.39'

CURVE	ARC LENGTH	RADIUS	CHORD BEARING	CHORD LENGTH
C1	145.94'	144.25'	S 15°08' W	139.75'
C2	471.81'	1581.45'	S 19°57' E	489.15'

TAG	SURFACE OWNER	PARCEL	ACRES
A	C & A HAGEDORN	9-7-3	202.07
B	PAUL STEVEN ALLEN ET UX	9-4-10	172.30
C	RONALD MASON ET UX	9-6-3	52.83
D	ROBERT CARNY ET UX	9-4-4	118.17
E	J. F. CROW ESTATE ET AL.	9-8-9	171.80
F	RONALD & RUBY MASON	9-6-12	29
G	RAY HARTNELL ET AL.	9-6-13	24.30
H	KENNETH MASON ESTATE	9-6-14	19.75
I	J. F. CROW ESTATE ET AL.	9-6-11	7.8
J	J. F. CROW ESTATE ET AL.	9-6-10	64.01
K	J. F. CROW ESTATE ET AL.	9-6-10	2.73
L	RALPH MARTIN TAYLOR	9-10-9	17.14
M	J. F. CROW ESTATE ET AL.	9-10-11	60
N	J. F. CROW ESTATE ET AL.	9-8-8	33.33
O	J. F. CROW ESTATE ET AL.	9-11-4	33
P	RHDK INVESTMENTS	9-11-3	33.33
Q	RAY A WHEATZ JR ET AL.	9-10-13	30.81
R	RAY A WHEATZ JR ET AL.	9-10-13	71.19
S	RAY A WHEATZ JR ET AL.	9-11-3	106.89
T	RAY A WHEATZ JR ET AL.	9-11-3	84.38
U	MARGARET FOX LIFE		

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P.S. 849
C. Victor Moyers



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

(2 P.C. NORTH ZONE) (UTM) (ZONE 17 NORTH)

NAD83 S.P.C. (FT) N 4,408,758.20 E 524,274.44
NAD83 GCS LAT (N) 39.80158 LONG (W) 80.71901
NAD83 UTM (M) N 4,408,758.20 E 524,274.44

LANDING POINT
NAD83 S.P.C. (FT) N 4,408,758.20 E 524,274.44
NAD83 GCS LAT (N) 39.80201 LONG (W) 80.71883
NAD83 UTM (M) N 4,408,758.20 E 524,274.44

BOTTOM HOLE
NAD83 S.P.C. (FT) N 4,404,144.8 E 524,144.4
NAD83 GCS LAT (N) 39.79882 LONG (W) 80.70834
NAD83 UTM (M) N 4,404,144.8 E 524,144.4

SCALE 1" = 5000'
FILE NO. 8703PAD15HUR (4w)

DATE OCTOBER 29, 2018
REVISED SEPTEMBER 6, 2018

OPERATORS WELL NO. HEAVEN HILL SW-15HU
WELL 47 - 051 - 1952
PERMIT COUNTY STATE

LEGEND

- UNIT BOUNDARY
- LEASED TRACTS INSIDE UNIT BOUNDARY
- DEEP WELL LATERAL WITHIN 3000'
- SURFACE LINE
- WELL LATERAL
- 400' OFFSET LINE
- 500' OFFSET LINE
- THE LINE
- CREEK
- ROAD
- COUNTY ROUTE
- PROPOSED WELL
- EXISTING WELL
- PERMITTED WELL
- TAX MAP-PARCEL
- LEASE # (SEE P.G. 2 & 3)
- SURFACE OWNER (SEE TABLE)

COUNTY NAME PERMIT

DESIGNATED AGENT
CT CORPORATION SYSTEM
DIANNA STAMPER
ADDRESS 8400 D BIG TYLER ROAD
CHARLESTON, WV 25313

WELL OPERATOR TUG HILL OPERATING, LLC
ADDRESS 1320 SOUTH UNIVERSITY DRIVE, SUITE 800
FORT WORTH, TX 76107

