

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

API 47-051-02061 County Marshall District Franklin
Quad New Martinsville 7.5' Pad Name Simms Field/Pool Name _____
Farm name Terry E. & Deborah Simms Well Number Hillrock 6HM
Operator (as registered with the OOG) Tug Hill Operating, LLC
Address 380 Southpointe Boulevard, Plaza II, Suite 200 City Canonsburg State PA Zip 15317

As Drilled location NAD 83/UTM Attach an as-drilled plat, profile view, and deviation survey
Top hole Northing 4,399,580.75 Easting 519,682.65
Landing Point of Curve Northing 4,400,100.78 Easting 518,868.63
Bottom Hole Northing 4,397,263.49 Easting 520,497.19

Elevation (ft) 1,219.3' 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)
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 8/10/2018 Date drilling commenced Conduc. 8/27/2019; Top Hole 10/18/2019 Date drilling ceased 11/9/2019
Date completion activities began 6/9/2021 Date completion activities ceased 7/11/2021
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

RECEIVED
Office of Oil and Gas
AUG 27 2021

Freshwater depth(s) ft 830' Open mine(s) (Y/N) depths N WV Department of Environmental Protection
Salt water depth(s) ft 1,365' Void(s) encountered (Y/N) depths N
Coal depth(s) ft 724-730', 824-830' Cavern(s) encountered (Y/N) depths N
Is coal being mined in area (Y/N) N

Reviewed by:
[Signature]
10/01/2021

API 47-051 - 02061 Farm name Terry E. & Deborah Simms Well number Hillrock 6HM

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	36"	30"	120'	NEW	94.5#	N/A	Y
Surface	17 1/2"	13 3/8"	948'	NEW	54.5#	N/A	Y
Coal	17 1/2"	13 3/8"	948'	NEW	54.5#	N/A	Y
Intermediate 1	12 1/4"	9 5/8"	2,848'	NEW	36#	N/A	Y
Intermediate 2							
Intermediate 3							
Production	8 3/4"	5 1/2"	19,116'	NEW	20#	N/A	Y
Tubing		2 3/8"	9,558'	NEW	4.7#	N/A	Y
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	A	628	15.6	1.18	741	0	8
Surface	A	993	15.6	1.18	1172	0	8
Coal	A	993	15.6	1.18	1172	0	8
Intermediate 1	A	998	15.6	1.18	1178	0	8
Intermediate 2							
Intermediate 3							
Production	A	4490	14.5	1.16	5298	0	8
Tubing							

Drillers TD (ft) 19,143' Loggers TD (ft) n/a

Deepest formation penetrated Marcellus Plug back to (ft) n/a

Plug back procedure n/a

Kick off depth (ft) 6,838'

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 3 centralizers on surface casing at equal distance.

Intermediate - 1 centralizer every other joint.

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

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 - 02061 Farm name Terry E. & Deborah Simms Well number Hillrock 6HM

PRODUCING FORMATION(S)	DEPTHS	
MARCELLUS	6,501'-6,545' TVD	8,371'-19,143' MD

Please insert additional pages as applicable.

GAS TEST Build up Drawdown Open Flow OIL TEST Flow Pump

SHUT-IN PRESSURE Surface 1300 psi Bottom Hole _____ psi DURATION OF TEST 24 hrs

OPEN FLOW Gas 0 mcfpd Oil 0 bpd NGL 0 bpd Water 600 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	
*attached	0		0		

Please insert additional pages as applicable.

Drilling Contractor Precision
Address 10350 Richmond Avenue, Suite 700 City Houston State TX Zip 77042

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

Cementing Company BJ Cementing Services
Address 4000 Town Center Boulevard City Canonsburg State PA Zip 15317

Stimulating Company PRO-FRAC
Address 333 Shops Boulevard City Willow Park State TX Zip 76087

Please insert additional pages as applicable.

Completed by Amy L. Morris Telephone 304-376-01111
Signature *Amy L. Morris* Title Permitting Specialist - Appalachia Region Date _____

**HILLROCK 6HM
PEFORATION RECORD**

Stage No.	Perforation Date	Perforated from MD ft.	Perforated to MD. Ft.	Number of Perforations	Formation(s)
1	6/9/2021	18,928	18,976	16	Marcellus
2	6/10/2021	18,727	18,874	48	Marcellus
3	6/10/2021	18,551	18,699	48	Marcellus
4	6/10/2021	18,375	18,523	48	Marcellus
5	6/11/2021	18,199	18,347	48	Marcellus
6	6/11/2021	18,024	18,171	48	Marcellus
7	6/12/2021	17,848	17,995	48	Marcellus
8	6/12/2021	17,672	17,820	48	Marcellus
9	6/13/2021	17,496	17,644	48	Marcellus
10	6/13/2021	17,320	17,468	48	Marcellus
11	6/14/2021	17,145	17,292	48	Marcellus
12	6/14/2021	16,969	17,116	48	Marcellus
13	6/15/2021	16,793	16,941	48	Marcellus
14	6/15/2021	16,617	16,765	48	Marcellus
15	6/16/2021	16,441	16,589	48	Marcellus
16	6/16/2021	16,266	16,413	48	Marcellus
17	6/17/2021	16,090	16,237	48	Marcellus
18	6/17/2021	15,914	16,062	48	Marcellus
19	6/17/2021	15,738	15,886	48	Marcellus
20	6/18/2021	15,562	15,710	48	Marcellus
21	6/19/2021	15,387	15,534	48	Marcellus
22	6/19/2021	15,211	15,358	48	Marcellus
23	6/20/2021	15,035	15,183	48	Marcellus
24	6/20/2021	14,859	15,007	48	Marcellus
25	6/20/2021	14,683	14,831	48	Marcellus
26	6/21/2021	14,508	14,655	48	Marcellus
27	6/21/2021	14,332	14,479	48	Marcellus
28	6/21/2021	14,156	14,304	48	Marcellus
29	6/22/2021	13,980	14,128	48	Marcellus
30	6/22/2021	13,804	13,952	48	Marcellus
31	6/22/2021	13,629	13,776	48	Marcellus
32	6/23/2021	13,453	13,600	48	Marcellus
33	6/23/2021	13,277	13,425	48	Marcellus
34	6/23/2021	13,101	13,249	48	Marcellus
35	6/23/2021	12,925	13,073	48	Marcellus
36	6/24/2021	12,750	12,897	48	Marcellus
37	6/24/2021	12,574	12,721	48	Marcellus
38	6/24/2021	12,398	12,546	48	Marcellus
39	6/24/2021	12,222	12,370	48	Marcellus
40	6/25/2021	12,046	12,194	48	Marcellus
41	6/25/2021	11,871	12,018	48	Marcellus

10/01/2021

Stage No.	Perforation Date	Perforated from MD ft.	Perforated to MD. Ft.	Number of Perforations	Formation(s)
42	6/25/2021	11,695	11,842	48	Marcellus
43	6/26/2021	11,519	11,667	48	Marcellus
44	6/26/2021	11,343	11,491	48	Marcellus
45	6/27/2021	11,167	11,315	48	Marcellus
46	6/27/2021	10,992	11,139	48	Marcellus
47	6/27/2021	10,816	10,963	48	Marcellus
48	6/27/2021	10,640	10,788	48	Marcellus
49	6/28/2021	10,464	10,612	48	Marcellus
50	6/28/2021	10,288	10,436	48	Marcellus
51	6/28/2021	10,113	10,260	48	Marcellus
52	6/29/2021	9,937	10,084	48	Marcellus
53	7/6/2021	9,761	9,909	48	Marcellus
54	7/7/2021	9,585	9,733	48	Marcellus
55	7/8/2021	9,409	9,557	48	Marcellus
56	7/8/2021	9,234	9,381	48	Marcellus
57	7/9/2021	9,058	9,205	48	Marcellus
58	7/9/2021	8,882	9,030	48	Marcellus
59	7/10/2021	8,706	8,854	48	Marcellus
60	7/10/2021	8,530	8,678	48	Marcellus
61	7/11/2021	8,355	8,502	48	Marcellus

10/01/2021

HILLROCK 6HM
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	75.00	7,833	5000	3659	240860	6,726	0
2	89.00	8,042	5953	4697	522980	9,841	0
3	90.00	7,800	5690	4976	520700	9,679	0
4	88.00	7,790	5836	5304	529080	9,800	0
5	90.00	7,789	5416	5310	532400	9,732	0
6	90.00	7,573	5294	5206	523940	9,759	0
7	90.00	7,762	5715	4981	521000	9,702	0
8	90.00	7,648	5249	5225	530800	9,835	0
9	90.00	7,695	5531	4804	520220	9,731	0
10	89.00	7,792	5583	4232	519220	9,915	0
11	90.00	7,724	5463	4994	524640	9,816	0
12	89.00	7,782	5353	4674	524860	10,930	0
13	88.00	7,723	5299	5015	524500	9,770	0
14	87.00	7,552	5356	5030	534260	9,794	0
15	89.00	7,627	5673	5073	525240	9,745	0
16	89.00	7,646	5222	4794	520540	9,657	0
17	90.00	7,609	5577	5040	522020	9,636	0
18	90.00	7,519	5000	4955	524060	9,660	0
19	88.00	7,845	5238	5034	523880	9,584	0
20	89.00	7,618	5548	5425	521700	9,689	0
21	89.00	7,825	5777	5130	517920	9,603	0
22	88.00	7,751	5758	4741	525680	9,560	0
23	88.00	7,641	5661	4771	531660	9,642	0
24	89.00	7,570	5483	5316	525700	9,654	0
25	89.00	7,644	5277	4673	528460	9,812	0
26	89.00	7,532	5463	5052	530360	9,669	0
27	89.00	7,482	5194	4901	521720	9,587	0
28	88.00	7,406	5253	5226	519920	9,607	0
29	90.00	7,528	5505	4982	525120	9,546	0
30	89.00	7,398	5347	4933	525480	9,514	0
31	89.00	7,426	5269	4941	524660	9,575	0
32	90.00	7,565	5428	5005	516520	9,475	0

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)
33	89.00	7,379	5206	5360	531900	9,624	0
34	90.00	7,247	5142	5506	525700	9,606	0
35	90.00	7,392	5243	5219	525880	9,497	0
36	89.00	7,325	5168	5158	520440	9,508	0
37	89.00	7,335	5289	4883	533060	9,625	0
38	88.00	7,348	5230	5091	453500	8,676	0
39	89.00	7,260	5349	4652	525760	9,502	0
40	88.00	7,324	5380	4624	532720	9,539	0
41	88.00	7,276	5387	5089	476120	8,880	0
42	89.00	7,360	5258	4956	526860	9,542	0
43	89.00	7,388	5624	5029	526700	9,485	0
44	89.00	7,060	5435	5536	527200	9,508	0
45	90.00	7,111	5354	3963	532100	9,472	0
46	90.00	7,004	5184	4807	532160	9,550	0
47	89.00	7,183	5286	5141	534020	9,558	0
48	89.00	7,092	5147	4692	529040	9,426	0
49	89.00	7,089	5423	4657	526380	9,405	0
50	90.00	7,128	5868	5495	521700	9,383	0
51	89.00	6,965	6239	3929	521120	9,321	0
52	90.00	6,944	5767	4740	531060	9,492	0
53	89.00	6,773	5286	5308	534500	9,553	0
54	89.00	6,911	5471	4749	525220	9,404	0
55	89.00	6,959	5334	4941	526280	9,359	0
56	90.00	6,860	5692	4045	516360	9,462	0
57	89.00	6,849	5325	4576	528140	9,444	0
58	89.00	6,743	5337	4595	518720	9,300	0
59	89.00	6,752	5085	4382	535860	9,481	0
60	88.00	6,665	5262	5024	528220	9,316	0
61	90.00	6,734	5562	5022	518440	9,225	0

HILLROCK 6HM

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	1884	1978	1897	1997	Sandstone
Big Lime	1978	2020	1997	2042	Limestone
Big Injun	2020	2337	2042	2395	Sandstone
Weir	2337	2552	2395	2642	Sandstone
Berea	2552	2794	2642	2957	Sandstone
Gordon	2794	2860	2957	3052	Sandstone
Fifty Foot	2860	3460	3052	3976	Sandstone
Speechley	3460	4874	3976	6067	Sandstone
Benson	4874	5250	6067	6626	Sandstone
Alexander	5250	5852	6626	7356	Siltstone
Rhinestreet	5852	6288	7356	7849	Black Shale
Middlesex	6288	6361	7849	7962	Black Shale
Geneseo/Burkett	6361	6389	7962	8012	Black Shale
Tully	6389	6422	8012	8083	Limestone
Hamilton	6422	6473	8083	8222	Gray Shale
Marcellus	6473	-	8222	-	Black Shale

Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	6/9/2021
Job End Date:	7/11/2021
State:	West Virginia
County:	Marshall
API Number:	47-051-02061-00-00
Operator Name:	Tug Hill Operating, LLC
Well Name and Number:	Hillrock S 6HM
Latitude:	39.74590295
Longitude:	-80.77026353
Datum:	NAD27
Federal Well:	NO
Indian Well:	NO
True Vertical Depth:	6,527
Total Base Water Volume (gal):	24,418,296
Total Base Non Water Volume:	0



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
Water	Tug Hill Operating	Carrier/Base Fluid					
			Water	7732-18-5	100.00000	86.25035	None
Sand (40/70 White Proppant)	ProFrac	Proppant					
			Silica Substrate	14808-60-7	100.00000	9.15171	None
Sand (100 Mesh Proppant)	ProFrac	Proppant					
			Silica Substrate	14808-60-7	100.00000	3.05983	None
Sand (30/50 White Proppant)	ProFrac	Proppant					
			Silica Substrate	14808-60-7	100.00000	1.19147	None
Hydrochloric Acid (7.5%)	PVS	Acidizing					
			Water	7732-18-5	85.00000	0.19977	None
			Hydrochloric Acid (Hydrogen Chloride)	7647-01-0	37.00000	0.08696	None
StimStream FR 9800	Chemstream	Friction Reducer					
			Alkanes, C16-20-iso-	90622-59-6	25.00000	0.01630	None
			Butene, homopolymer	9003-29-6	25.00000	0.01630	None
			Ethoxylated alcohols (C12-18)	68213-23-0	3.00000	0.00196	None

MC MX 9-4743	Multi-Chem	Biocide					
			Sodium Nitrate	7631-99-4	60.00000	0.02192	None
LD-7750W	Multi-Chem	Scale Inhibitor					
			Methanol	67-56-1	60.00000	0.00499	None
			Phosphonic Acid Salt	Proprietary	5.00000	0.00042	None
ProFE 105	ProFrac	Iron Control					
			Citric Acid	77-92-9	100.00000	0.00086	None
ProHib 100	ProFrac	Acid Inhibitor					
			2-Propyn-1-ol compound w/ methyloxirane	38172-91-7	15.00000	0.00011	None
Ingredients shown above are subject to 29 CFR 1910.1200(i) and appear on Material Safety Data Sheets (MSDS). Ingredients shown below are Non-MSDS.							
Other Chemical(s)	Listed Above	See Trade Name(s) List					
			Water	7732-18-5	85.00000	0.19977	
			Butene, homopolymer	9003-29-6	25.00000	0.01630	
			Ethoxylated alcohols (C12-18)	68213-23-0	3.00000	0.00196	
			Phosphonic Acid Salt	Proprietary	5.00000	0.00042	

* Total Water Volume sources may include fresh water, produced water, and/or recycled water

** Information is based on the maximum potential for concentration and thus the total may be over 100%

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)

HILLROCK LEASE WELL 6HM 798.472± ACRES

DETAIL SKETCH "A" SCALE 1"=100'

- HILLROCK 11HM (02173)
- HILLROCK 10HM (02064)
- HILLROCK 9HM (02063)
- HILLROCK 8HM (01731)
- HILLROCK 7HM (02052)
- HILLROCK 6HM (02051)
- HILLROCK 5HM (02055)
- HILLROCK 4HM (02263)
- HILLROCK 3HM (02262)
- HILLROCK 2HM (02273)
- HILLROCK 1HM (02272)

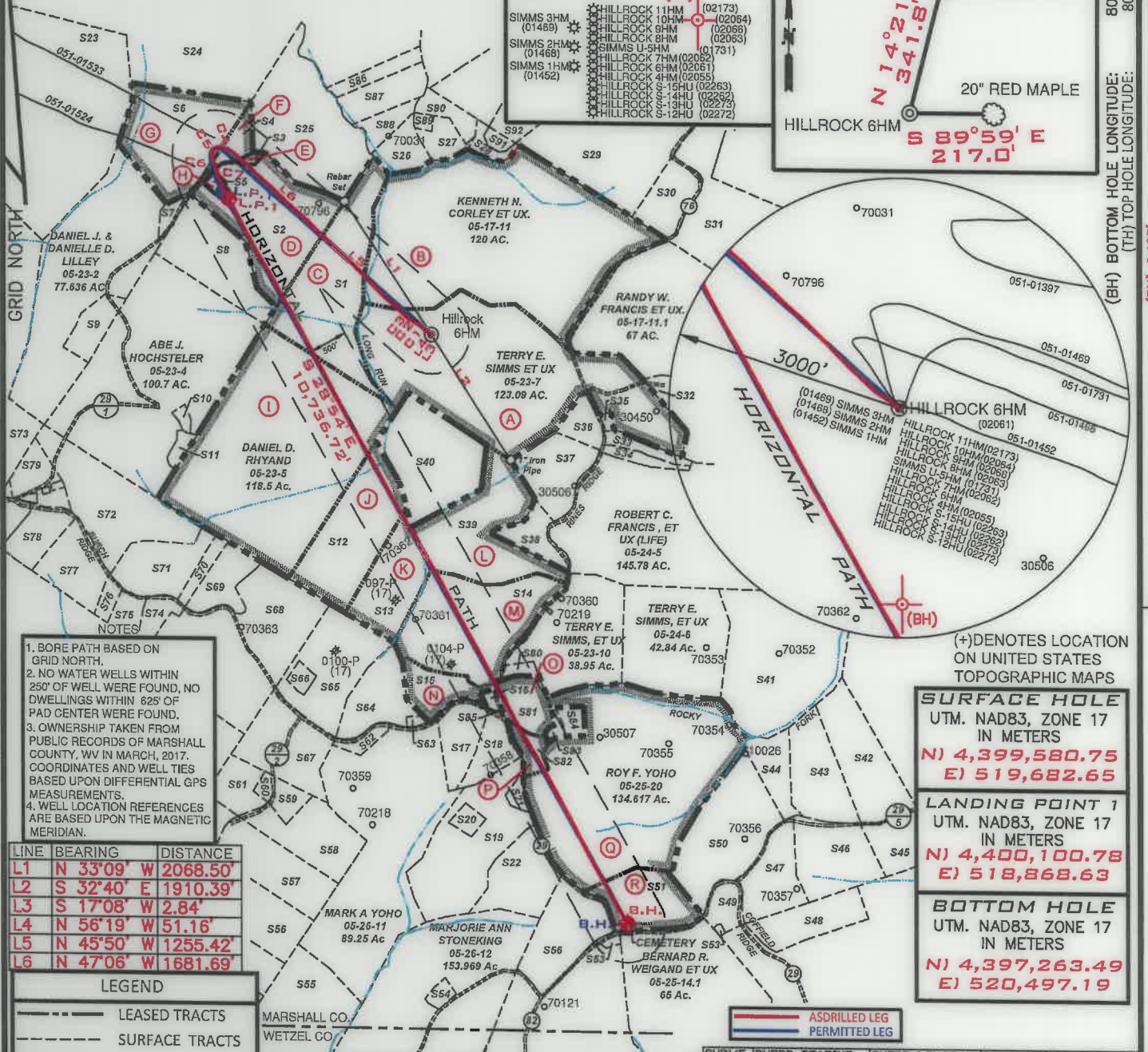
REFERENCES SCALE 1"=400'

TOP HOLE LATITUDE: 39°45'00"
BOTTOM HOLE LATITUDE: 39°45'00"

N 14°21' W 341.8'
S 89°59' E 217.0'

HILLROCK 6HM

24" RED MAPLE
20" RED MAPLE



- NOTES**
- BORE PATH BASED ON GRID NORTH.
 - NO WATER WELLS WITHIN 250' OF WELL WERE FOUND, NO DWELLINGS WITHIN 825' OF PAD CENTER WERE FOUND.
 - OWNERSHIP TAKEN FROM PUBLIC RECORDS OF MARSHALL COUNTY, WV IN MARCH, 2017. COORDINATES AND WELL TIES BASED UPON DIFFERENTIAL GPS MEASUREMENTS.
 - WELL LOCATION REFERENCES ARE BASED UPON THE MAGNETIC MERIDIAN.

LINE	BEARING	DISTANCE
L1	N 33°09' W	2068.50'
L2	S 32°40' E	1910.39'
L3	S 17°08' W	2.84'
L4	N 56°19' W	51.16'
L5	N 45°50' W	1255.42'
L6	N 47°06' W	1681.69'

LEGEND

- LEASED TRACTS
- SURFACE TRACTS
- UNIT BOUNDARY
- LEASE # (SEE 6A1 FORM)

CURVE	CHORD BEARING	CHORD LENGTH	RADIUS	ARC LENGTH
C1	N 59°22'00" V	109.01'	2456.90'	109.02'
C2	N 57°49'48" V	166.07'	996.75'	166.26'
C3	N 49°22'38" V	199.06'	736.26'	199.69'
C4	N 63°28'12" V	233.34'	333.38'	238.39'
C5	S 40°03'27" V	150.12'	101.81'	168.80'
C6	S 17°15'58" E	252.71'	1482.30'	253.02'
C7	S 22°53'03" E	357.70'	2389.28'	358.04'

SURFACE HOLE
UTM. NAD83, ZONE 17
IN METERS
N) 4,399,580.75
E) 519,682.65

LANDING POINT 1
UTM. NAD83, ZONE 17
IN METERS
N) 4,400,100.78
E) 518,868.63

BOTTOM HOLE
UTM. NAD83, ZONE 17
IN METERS
N) 4,397,263.49
E) 520,497.19

FILE NUMBER _____

DRAWING NUMBER HILLROCK_WP_6HM

SCALE 1" = 2000'

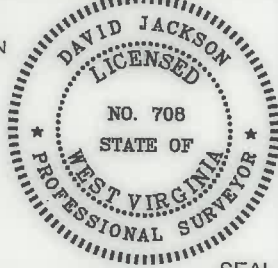
MINIMUM DEGREE OF ACCURACY 1/200

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 RULES ISSUED AND PRESCRIBED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION

P.S. 708 *David L Jackson*

JACKSON SURVEYING INC.
P.O. Box 1460
Clarksburg, WV 26302
304-623-5851



WVDEP
OFFICE OF OIL & GAS
601 57TH STREET, SE
CHARLESTON, WV 25304

WELL TYPE: OIL ___ GAS X LIQUID INJECTION ___ WASTE DISPOSAL ___
(IF "GAS") PRODUCTION X STORAGE ___ DEEP ___ SHALLOW X

LOCATION ELEVATION 1219.3' WATERSHED (HUC 10) FISH CREEK

DISTRICT FRANKLIN COUNTY MARSHALL

QUADRANGLE NEW MARTINSVILLE 7.5' LEASE NUMBER SEE WW-6A1 Form

SURFACE OWNER TERRY E. & DEBORAH SIMMS ACREAGE 10,101/2021

OIL & GAS ROYALTY OWNER TERRY E. & DEBORAH L. SIMMS, ET AL - SEE WW-6A1 FORM LEASE ACREAGE 319.91

PROPOSED WORK: DRILL ___ CONVERT ___ DRILL DEEPER ___ REDRILL ___ FRACTURE OR STIMULATE ___ PLUG OFF OLD FORMATION ___
PERFORATE NEW FORMATION ___ OTHER PHYSICAL CHANGE (SPECIFY) ASDRILLED

TARGET FORMATION MARCELLUS PLUG & ABANDON ___ CLEAN OUT & REPLUG ___
ESTIMATED DEPTH TVD: 6,545' TMD: 19,143'

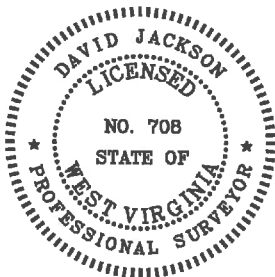
WELL OPERATOR TUG HILL OPERATING, LLC DESIGNATED AGENT DIANNA STAMPER CT CORPORATION SYSTEM
ADDRESS 1320 SOUTH UNIVERSITY DRIVE, SUITE 500 FORT WORTH, TX 76107 ADDRESS 5400 D BIG TYLER ROAD CHARLESTON, WV 25313

COUNTY NAME
PERMIT

PG 2 OF 2 **HILLROCK LEASE**
WELL 6HM
798.472± ACRES

Number	TAX MAP-PARCEL	ADJOINER OWNER	ACRES
S1	05-23-06	James A. Channing, et al	48.0
S2	05-18-21	Curtis E. & Michelle J. Hall	43.119
S3	05-18-21.3	T.H. Exploration, LLC	0.811
S4	05-18-21.1	Rodney & Rhonda Jackson	5.47
S5	05-18-21.2	David P. Lassar, et ux (Life)	1.0
S6	05-18-22	Rodney & Rhonda Jackson	30.345
S7	05-23-2.1	William L. Janice M. Wayne	2.364
S8	05-23-03	Abe J. Hochstetler	50.0
S9	05-23-2.2	Jessica N. & Andrew L. Jones	7.636
S10	05-23-4.2	James S. & Jeanne B. Hall	1.169
S11	05-23-4.1	James S. & Jeanne B. Hall	2.1575
S12	05-23-08	Carl David & Suzanne L. Guseman	29.5
S13	05-23-9.3	Linda D. Greathouse	17.5
S14	05-23-11.1	John H. & Sonya D. Holliday	46.482
S15	05-23-11.4	Evelyn L. Hudson	10.879
S16	05-23-11.2	Evelyn Hudson	1.154
S17	05-23-11.3	Colin R. Yoho	11.29
S18	05-23-11.5	Roy F. Yoho	9.25
S19	05-23-18	Joseph Johnson, et ux (Life)	37.746
S20	05-25-18.1	Pamela Joan Ferrell, et vir	2.491
S21	05-25-19	Joseph Johnson, et ux (Life)	1.973
S22	05-25-17	Emily Jones Irrevocable Trust	22.79
S23	05-18-24	Duane Brunn	102.0
S24	05-18-23	Blaine E. Channing, et al	110.0
S25	05-18-20	Wayne E. Channing, et al	75.6
S26	05-18-31	Kenneth E. Rastall	6.94
S27	05-18-32	Kenneth E. Rastall	5.335
S28	05-17-12	James A. & Jill C. Corley	3.33
S29	05-17-10	James A. Corley, et al	92.61
S30	05-17-9.3	James A. Corley, et ux	12.478
S31	05-17-9.4	Vicki L. Bowen	60.3
S32	05-24-01	Linda L. Hendrickson	175.0
S33	05-24-5.1	James D. Watkins, et ux	4.6
S34	05-24-5.2	James D. Watkins, et ux	3.151
S35	05-23-7.1	H.J. Weigand, et ux	0.549
S36	05-23-7.2	H.J. Weigand, et ux	6.354
S37	05-24-5.5	H.J. Weigand, et ux	17.194
S38	05-24-5.3	Thomas V. Tuttle, et ux	8.543
S39	05-24-5.4	Thomas V. Tuttle, et ux	38.224
S40	05-23-8.1	William & Virginia Roupe	34.0
S41	05-23-04	Abe J. Hochstetler	100.7235
S42	05-25-1.3	Michael E. & Annie A. Chapman	26.2
S43	05-25-1.2	William Jr. & Andrea J. Dubiel	20.1
S44	05-25-1.1	Ryan A. & Jacqueline E. Layman	9.79
S45	05-25-13.3	William M. Sr. & Cynthia A. Ferda	17.21
S46	05-25-1.5	Ryan J. Bratton	21.35
S47	05-25-13	Nicholas J. & Debra L. Klug	16.014
S48	05-25-12.1	Kent & Betty Mason	15.0
S49	05-25-13.2	David A. Klug	5.89

Number	TAX MAP-PARCEL	ADJOINER OWNER	ACRES
S50	05-25-01	Michael L. Mason	35.43
S51	05-25-14	Roy F. Yoho	23.0
S52	05-25-16	Emily Jones Irrevocable Trust	23.5
S53	05-25-16.2	Rodney J. Loy	1.087
S54	05-26-12.1	Alvin F. Jr. & Kristen R. Stoneking	2.011
S55	05-26-13	Marjorie Ann Stoneking (Life)	40.0
S56	05-26-10	Robert D. & Bonnie L. Oliver Family Trust	24.94
S57	05-26-09	Robert D. & Bonnie L. Oliver Family Trust	21.75
S58	05-26-08	Richard Joseph Otte, et ux	18.27
S59	05-26-20	Donald Lee Anderson, et al	4.2
S60	05-26-21	Richard Joseph Otte, et ux	1.25
S61	05-26-22	Richard Joseph Otte, et ux	8.3
S62	05-23-12	Mark A. Yoho	3.05
S63	05-23-13.1	James R. & Pamela J. Ferrell	0.7625
S64	05-23-13	Linda D. Greathouse	14.24
S65	05-23-9.2	Linda D. Greathouse	25.58
S66	05-23-9.4	Jackson R. Sr. & Deanna L. Davis	2.087
S67	05-23-9.1	John W. Van Orden	23.376
S68	05-23-14	Dominion Transmission, Inc.	59.5
S69	05-23-15	Virginia Ethel Henry Est.	15.5
S70	05-23-16.1	Donald B. Henry	1.97
S71	05-23-16	Roy Friend Yoho Sr.	18.03
S72	05-23-18	Abe J. Hochstetler	35.382
S73	05-23-01	Patricia Accetolo, et al	146.66
S74	05-23-17.3	William & Katherine Flewelling	5.018
S75	05-23-17	Tammy & Thomas E. Brown	4.62
S76	05-23-17.4	Tammy D. Meadows	2.605
S77	05-23-17.2	Dick Jr. & Carol J. Rowan	14.92
S78	05-23-17.1	Curtis E. Hall, et ux	10.051
S79	05-23-18.1	Mark A. Yoho	7.8
S80	05-25-11.9	Bryan L. Huggins	1.835
S81	05-25-11	Roy F. Yoho	3.445
S82	05-25-20.3	James A. & Jo C. Estep	4.49
S83	05-25-20.2	James M. Zombotti	1.347
S84	05-25-20.1	James M. Zombotti	2.746
S85	05-23-11.6	T.H. Exploration II, LLC & Atinum Marcellus I, LLC	0.094
S86	05-18-30	Jon Schmidt, et al	5.46
S87	05-18-13.10	Carl Berg	10.88
S88	05-18-29	Carl B. Berg	5.319
S89	05-18-32.1	Lori D. Carpenter	1.165
S90	05-18-13.8	Lori D. Carpenter	5.545
S91	05-17-12.1	Williams Ohio Valley Midstream, LLC	1.67
S92	05-17-10.5	Williams Ohio Valley Midstream, LLC	4.24



P.S. 708

David L Jackson

SURFACE HOLE UTM. NAD83, ZONE 17 IN METERS N) 4,399,580.78 E) 519,682.74
LANDING POINT 1 UTM. NAD83, ZONE 17 IN METERS N) 4,400,125.30 E) 518,845.76
BOTTOM HOLE UTM. NAD83, ZONE 17 IN METERS N) 4,397,262.98 E) 520,496.98

10/01/2021



TUG HILL
OPERATING

OPERATOR'S
 WELL #: HILLROCK 6HM
 DISTRICT: Franklin
 COUNTY: Marshall
 STATE: WV
 API #: 47-051-02061

WELL PLAT
 PAGE 2 OF 2
 DATE: 04/07/2021