

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

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Office of Oil & Gas
OCT 04 2022

API 47 - 051 - 02202 County Marshall District Franklin
Quad New Martinsville 7.5' Pad Name Goudy Field/Pool Name WV Department of Environmental Protection
Farm name TH Exploration III, LLC Well Number Goudy 1S-11HM
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 4,398,576.22 Easting 514,677.19
Landing Point of Curve Northing 4,397,732.06 Easting 514,430.35
Bottom Hole Northing 4,394,579.58 Easting 516,253.96

Elevation (ft) 1242.0' 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 6/6/2019 Date drilling commenced 9/10/2021 spud:10/21/2020 big rig: 5/22/2021 Date drilling ceased 6/13/2021
Date completion activities began 9/10/2021 Date completion activities ceased 10/13/2021
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

Freshwater depth(s) ft 889' Open mine(s) (Y/N) depths N
Salt water depth(s) ft 1506' Void(s) encountered (Y/N) depths N
Coal depth(s) ft 788-794', 883-889' Cavern(s) encountered (Y/N) depths N
Is coal being mined in area (Y/N) _____

APPROVED
Reviewed by:
[Signature]
10/14/2022
10-11-22

API 47- 051 - 02202 Farm name TH Exploration III, LLC Well number Goudy 1S-11HM

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"	1,005'	NEW	48#	N/A	Y
Coal	17 1/2"	13 3/8"	1,005'	NEW	48#	N/A	Y
Intermediate 1	12 1/4"	9 5/8"	2,687'	NEW	36#	N/A	Y
Intermediate 2							
Intermediate 3							
Production	8 1/2"	5 1/2"	19,553'	NEW	20#	N/A	Y
Tubing		2 3/8"		NEW	4.7#	N/A	Y
Packer type and depth set							

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Comment Details _____

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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	547	15.6	1.18	646	0	8
Surface	A	1040	15.6	1.2	1248	0	8
Coal	A	1040	15.6	1.2	1248	0	8
Intermediate 1	A	800	15	1.378	1102.4	0	8
Intermediate 2							
Intermediate 3							
Production	A	4510	14.6	1.2	5412	0	8
Tubing							

Drillers TD (ft) 19,588' Loggers TD (ft) n/a
 Deepest formation penetrated Marcellus Plug back to (ft) n/a
 Plug back procedure n/a

Kick off depth (ft) 6,762'

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.
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 - 02202 Farm name TH Exploration III, LLC Well number Goudy 1S-11HM

PERFORATION RECORD

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

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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)
	attached							

Please insert additional pages as applicable.

API 47- 051 - 02202 Farm name TH Exploration III, LLC Well number Goudy 1S-11HM

PRODUCING FORMATION(S)	DEPTHS	
MARCELLUS	6420'-6519' TVD	7514'-19588' MD

Please insert additional pages as applicable.

GAS TEST Build up Drawdown Open Flow OIL TEST Flow Pump

SHUT-IN PRESSURE Surface 2876 psi Bottom Hole _____ psi DURATION OF TEST 4 hrs

OPEN FLOW Gas 165.00 mcfpd Oil 144 bpd NGL _____ bpd Water 864 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	

*see attached	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 Halliburton Energy Services, Inc.
Address 121 Champion Way, Suite 200 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 304-376-0111
Signature Amy L. Morris Title Permitting Specialist - Appalachia Date 10-3-2022

GOUDY 1S-10HM

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 (bbbls)	Amount of Nitrogen/other (units)
1	74.00	7902	7059	3491	245380	7,823	0
2	81.00	7401	4927	4215	494286	9,214	0
3	90.00	7801	5007	4488	485720	9,359	0
4	89.00	7664	5295	4401	487500	9,397	0
5	88.00	7508	5222	4704	492430	9,321	0
6	89.00	7389	4993	4843	487420	9,227	0
7	88.00	7416	5314	5147	487040	9,382	0
8	89.00	7389	5336	4724	492720	9,286	0
9	90.00	7404	5234	4852	488420	9,239	0
10	88.00	7436	5106	4533	490840	9,328	0
11	88.00	7460	5007	4056	489080	9,236	0
12	89.00	7497	4814	4484	492780	9,276	0
13	89.00	7469	5264	4413	494440	9,299	0
14	90.00	7305	5497	4522	491680	9,251	0
15	90.00	7659	5325	4748	494040	9,320	0
16	88.00	7163	5260	4179	491400	9,267	0
17	90.00	7299	5091	4099	484780	9,176	0
18	89.00	7151	5552	4201	494040	9,232	0
19	89.00	7175	4731	5314	492720	9,392	0
20	90.00	7210	5144	4366	493600	9,294	0
21	89.00	7189	5143	4425	486180	9,155	0
22	90.00	7137	5183	4505	482100	9,050	0
23	88.00	7126	5260	4108	493240	9,198	0
24	90.00	7421	5058	3944	490500	9,203	0
25	89.00	7514	5301	4187	487720	9,164	0
26	90.00	7536	5561	3884	481640	9,052	0
27	89.00	7284	5158	3540	491000	9,136	0
28	90.00	7536	5555	3905	470780	8,859	0
29	89.00	7339	5295	3820	452560	8,645	0
30	90.00	7398	5308	3447	491140	9,556	0
31	90.00	7286	5587	4379	491200	9,204	0
32	89.00	7140	5244	3436	489440	9,089	0

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Stage No.	Ave. Pump Rate (BPM)	Ave Treatment Pressure (PSI)	Max Breakdown Pressure (PSI)	ISIP (PSI)	Amount of Proppant (lbs)	Amount of Water (lbs)	Amount of Nitrogen/other (units)
33	89.00	7122	5332	3318	492100	9,102	0
34	89.00	7138	5448	3748	492160	9,146	0
35	88.00	7033	5765	3756	451700	8,628	0
36	88.00	7036	5564	4659	494320	9,195	0
37	88.00	6857	5784	3939	485040	9,044	0
38	90.00	6913	5520	4072	487540	9,139	0
39	89.00	6896	5873	4320	486160	8,965	0
40	89.00	6974	5674	3846	495500	9,135	0
41	89.00	6876	5968	3998	495240	9,144	0
42	90.00	6908	5663	4343	494500	9,057	0
43	89.00	6812	5794	3733	487660	9,064	0
44	90.00	6984	5532	3875	493420	9,014	0
45	86.00	7085	5387	4291	490120	8,984	0
46	89.00	7031	5866	3441	497740	9,001	0
47	89.00	6788	5762	3529	496100	8,995	0
48	88.00	6902	6027	3478	490620	8,976	0
49	89.00	6725	5454	3987	488460	8,958	0
50	90.00	6813	6374	3837	486120	9,494	0
51	90.00	6841	5507	4209	492460	9,000	0
52	89.00	6884	5842	4850	486500	9,720	0
53	89.00	6891	5366	3162	492980	8,982	0
54	90.00	6828	5351	3963	497980	8,964	0
55	89.00	6844	5661	4364	498200	9,031	0
56	89.00	6758	5424	3368	490320	8,888	0

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**GOUDY 1S-11HM
PERFORATION RECORD**

Stage No.	Perforation Date	Perforated from MD ft.	Perforated to MD. Ft.	Number of Perforations	Formation(s)
1	9/10/2021	19,382	19,424	48	Marcellus
2	9/10/2021	19,181	19,327	48	Marcellus
3	9/11/2021	19,005	19,151	48	Marcellus
4	9/12/2021	18,829	18,976	48	Marcellus
5	9/13/2021	18,653	18,800	48	Marcellus
6	9/13/2021	18,477	18,624	48	Marcellus
7	9/14/2021	18,301	18,448	48	Marcellus
8	9/15/2021	18,125	18,272	48	Marcellus
9	9/15/2021	17,949	18,096	48	Marcellus
10	9/16/2021	17,774	17,920	48	Marcellus
11	9/16/2021	17,598	17,744	48	Marcellus
12	9/17/2021	17,422	17,568	48	Marcellus
13	9/18/2021	17,246	17,392	48	Marcellus
14	9/18/2021	17,070	17,217	48	Marcellus
15	9/19/2021	16,894	17,041	48	Marcellus
16	9/19/2021	16,718	16,865	48	Marcellus
17	9/20/2021	16,542	16,689	48	Marcellus
18	9/20/2021	16,366	16,513	48	Marcellus
19	9/21/2021	16,190	16,337	48	Marcellus
20	9/22/2021	16,015	16,161	48	Marcellus
21	9/22/2021	15,839	15,985	48	Marcellus
22	9/23/2021	15,663	15,809	48	Marcellus
23	9/23/2021	15,487	15,633	48	Marcellus
24	9/24/2021	15,311	15,458	48	Marcellus
25	9/24/2021	15,135	15,282	48	Marcellus
26	9/25/2021	14,959	15,106	48	Marcellus
27	9/25/2021	14,783	14,930	48	Marcellus
28	9/26/2021	14,607	14,754	48	Marcellus
29	9/26/2021	14,431	14,578	48	Marcellus
30	9/27/2021	14,256	14,402	48	Marcellus
31	9/28/2021	14,080	14,226	48	Marcellus
32	9/28/2021	13,904	14,050	48	Marcellus
33	9/29/2021	13,728	13,874	48	Marcellus
34	9/29/2021	13,552	13,699	48	Marcellus
35	9/30/2021	13,376	13,523	48	Marcellus
36	9/30/2021	13,200	13,347	48	Marcellus
37	10/1/2021	13,024	13,171	48	Marcellus
38	10/1/2021	12,848	12,995	48	Marcellus
39	10/2/2021	12,672	12,819	48	Marcellus
40	10/2/2021	12,497	12,643	48	Marcellus
41	10/3/2021	12,321	12,467	48	Marcellus

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Stage No.	Perforation Date	Perforated from MD ft.	Perforated to MD. Ft.	Number of Perforations	Formation(s)
42	10/3/2021	12,145	12,291	48	Marcellus
43	10/4/2021	11,969	12,115	48	Marcellus
44	10/4/2021	11,793	11,940	48	Marcellus
45	10/5/2021	11,617	11,764	48	Marcellus
46	10/5/2021	11,441	11,588	48	Marcellus
47	10/5/2021	11,265	11,412	48	Marcellus
48	10/6/2021	11,089	11,236	48	Marcellus
49	10/6/2021	10,913	11,060	48	Marcellus
50	10/7/2021	10,738	10,884	48	Marcellus
51	10/10/2021	10,562	10,708	48	Marcellus
52	10/10/2021	10,386	10,532	48	Marcellus
53	10/11/2021	10,210	10,356	48	Marcellus
54	10/12/2021	10,034	10,181	48	Marcellus
55	10/13/2021	9,858	10,005	48	Marcellus
56	10/13/2021	9,682	9,829	48	Marcellus

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Goudy 1S-11HM

Lithology Information

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	1875	1975	1877	1977	Sandstone
Big Lime	1975	2056	1977	2059	Limestone
Big Injun	2056	2364	2059	2369	Sandstone
Weir	2364	2554	2369	2560	Sandstone
Berea	2554	2914	2560	2924	Sandstone
Gordon	2914	2976	2924	2987	Sandstone
Fifty Foot	2976	3508	2987	3556	Sandstone
Speechley	3508	4863	3556	5229	Sandstone
Benson	4863	5237	5229	5696	Sandstone
Alexander	5237	5811	5696	6410	Siltstone
Rhinestreet	5811	6228	6410	6943	Black Shale
Middlesex	6228	6314	6943	7079	Black Shale
Geneseo/Burkett	6314	6345	7079	7146	Black Shale
Tully	6345	6365	7146	7200	Limestone
Hamilton	6365	6380	7200	7253	Gray Shale
Marcellus	6380	-	7253	-	Black Shale

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Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	9/10/2021
Job End Date:	10/13/2021
State:	West Virginia
County:	Marshall
API Number:	47-051-02202-00-00
Operator Name:	Tug Hill Operating, LLC
Well Name and Number:	Goudy 1S-11M
Latitude:	39.73695300
Longitude:	-80.82871000
Datum:	NAD27
Federal Well:	NO
Indian Well:	NO
True Vertical Depth:	6,473
Total Base Water Volume (gal):	21,472,752
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
Water	Tug Hill Operating	Carrier/Base Fluid	Water	7732-18-5	100.00000	86.53151	None
Sand (40/70 White Proppant)	ProFrac	Proppant	Silica Substrate	14808-60-7	100.00000	8.93189	None
Sand (100 Mesh Proppant)	ProFrac	Proppant	Silica Substrate	14808-60-7	100.00000	3.08114	None
Sand (30/50 White Proppant)	ProFrac	Proppant	Silica Substrate	14808-60-7	100.00000	1.09334	None
Hydrochloric Acid (7.5%)	CNR	Acidizing	Water	7732-18-5	85.00000	0.21013	None
			Hydrochloric Acid (Hydrogen Chloride)	7647-01-0	37.00000	0.09147	None
StimStream FR 9800	Chemstream	Friction Reducer	Butene, homopolymer	9003-29-6	25.00000	0.01707	None
			Alkanes, C16-20-iso-	90622-59-6	25.00000	0.01707	None
			Ethoxylated alcohols (C12-18)	68213-23-0	3.00000	0.00205	None

MC MX 9-4743	Multi-Chem	Biocide					
			Sodium Nitrate	7631-99-4	60.00000	0.02180	None
LD-7750W	Multi-Chem	Scale Inhibitor					
			Methanol	67-56-1	60.00000	0.00517	None
			Phosphonic Acid Salt	Proprietary	5.00000	0.00043	None
ProHib 100	CNR	Acid Inhibitor					
			2-Butoxyethanol	111-76-2	60.00000	0.00046	None
			Proprietary material	68391-11-7	30.00000	0.00023	None
			Proprietary non-ionic surfactant	9043-30-5	20.00000	0.00015	None
			Proprietary ethoxylated alcohol	84133-50-6	10.00000	0.00008	None
			Proprietary corrosion inhibitor	104-55-2	10.00000	0.00008	None
ProFE 105	CNR	Iron Control					
			Citric Acid	77-92-9	20.00000	0.00018	None
			Acetic Acid	64-19-7	5.00000	0.00005	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	0.21013	
			Butene, homopolymer	9003-29-6	25.00000	0.01707	
			Ethoxylated alcohols (C12-18)	68213-23-0	3.00000	0.00205	
			Phosphonic Acid Salt	Proprietary	5.00000	0.00043	
			Proprietary material	68391-11-7	30.00000	0.00023	
			Proprietary non-ionic surfactant	9043-30-5	20.00000	0.00015	
			Proprietary ethoxylated alcohol	84133-50-6	10.00000	0.00008	
			Proprietary corrosion inhibitor	104-55-2	10.00000	0.00008	
			Acetic Acid	64-19-7	5.00000	0.00005	

* 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%

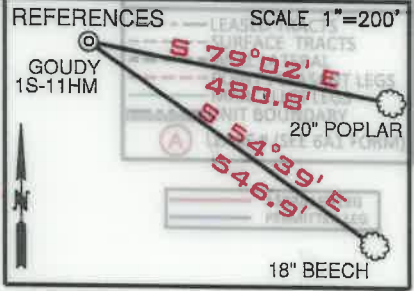
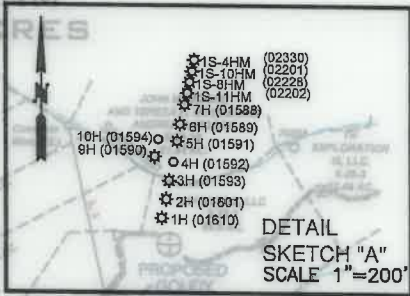
Note: For Field Development Products (products that begin with FDP), MSDS level only information has been provided.

Ingredient information for chemicals subject to 29 CFR 1910.1200(i) and Appendix D are obtained from suppliers Material Safety Data Sheets (MSDS)

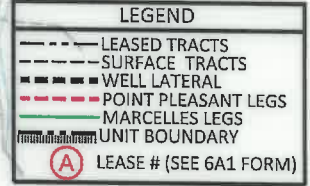
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 Environmental Protection

**GOUDY LEASE
WELL 1S-11HM
592.0527± ACRES**

LINE	BEARING	DISTANCE
L1	N 11°40' W	2299.74'
L2	S 53°14' E	1745.95'
L3	S 43°09' W	175.19'
L4	S 24°14' W	2007.82'



CURVE	CHORD BEARING	CHORD LENGTH	RADIUS	ARC LENGTH
C1	S 30°12' W	104.86'	335.05'	105.32'
C2	S 08°39' W	158.31'	655.47'	158.68'
C3	S 07°09' E	300.89'	900.22'	304.63'
C4	S 26°38' E	282.24'	1978.46'	282.48'



Detail "A"
SCALE 1"=1000'



- NOTES
1. BORE PATH BASED ON GRID NORTH.
 2. NO WATER WELLS WITHIN 250' OF WELL WERE FOUND, NO DWELLINGS WITHIN 625' OF PAD CENTER WERE FOUND.
 3. OWNERSHIP TAKEN FROM PUBLIC RECORDS OF MARSHALL COUNTY, WV IN AUGUST, 2020. COORDINATES AND WELL TIES BASED UPON DIFFERENTIAL GPS MEASUREMENTS.
 4. WELL LOCATION REFERENCES ARE BASED UPON THE MAGNETIC MERIDIAN.
 5. BOUNDARIES ALONG ROADWAYS ARE BASED UPON MEMORANDUM BY DICKIE, MCCAMEY & CHILCOTE, P.C. FILE 0058304.0401147

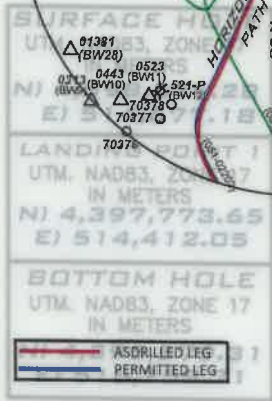
(+) DENOTES LOCATION ON UNITED STATES TOPOGRAPHIC MAPS

SURFACE HOLE
UTM, NAD83, ZONE 17
IN METERS
N) 4,398,576.22
E) 514,677.19

LANDING POINT 1
UTM, NAD83, ZONE 17
IN METERS
N) 4,397,732.06
E) 514,430.35

BOTTOM HOLE
UTM, NAD83, ZONE 17
IN METERS
N) 4,394,579.58
E) 516,253.96

GRID NORTH



FILE NUMBER _____

DRAWING NUMBER GOUDY_1S-11HM_REV4

SCALE 1" = 2000'

MINIMUM DEGREE OF ACCURACY 1/200

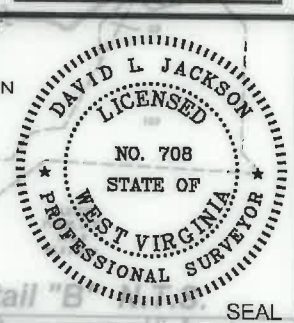
PROVEN SOURCE OF ELEVATION SUBMETER MAPPING GRADE GPS

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

DATE: OCTOBER 03, 2022

OPERATORS WELL NO. GOUDY 1S-11HM

API WELL NO. 47-051-02202

STATE COUNTY PERMIT

STATE COUNTY PERMIT

LOCATION ELEVATION 1242.0' WATERSHED (HUC 10) FRENCH CREEK - OHIO RIVER

DISTRICT FRANKLIN COUNTY MARSHALL

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

SURFACE OWNER TH EXPLORATION III, LLC. ACREAGE 1014/2022

OIL & GAS ROYALTY OWNER PPG INDUSTRIES, INC., ET AL. THEIR SUCCESSORS OR ASSIGNS LEASE ACREAGE 70.0

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

WELL OPERATOR TUG HILL OPERATING, LLC DESIGNATED AGENT DARREN BROWN, CT CORP

ADDRESS 1320 SOUTH UNIVERSITY DRIVE, SUITE 500 FORT WORTH, TX 76107 ADDRESS 5098 WASHINGTON STREET WEST, SUITE 407 CHARLESTON, WV 25313-1561

ESTIMATED DEPTH TVD 6,519' TMD: 19,588'

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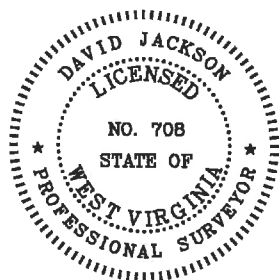
ESTIMATED DEPTH TVD 6,519' TMD: 19,588'

COUNTY NAME PERMIT

**GOUDY LEASE
WELL 1S-11HM
592.0527± ACRES**

Number	TAX MAP -PARCEL	SURFACE OWNER	ACRES
S1	05-28-12	TH Exploration III, LLC	20.226
S2	05-28-11	Carol A. Martin	24.681
S3	05-27-19	Covestro, LLC	33.786
S4	05-27-20	Covestro LLC	93.027
S5	05-27-20.1	Appalachian Power Co.	43.973
S6	05-27-27	James Andrew & Karen Lynne Richmond	8.9353
S7	05-27-25	James Andrew & Karen Lynne Richmond	41.35
S8	12-01-31	Steven Jack & Susan Louise Hafer	20.0
S9	12-01-29	Baxter Farm, LLC	2.0
S10	12-01-28	Steven J. & Susan L. Hafer	88.39
S11	12-01-7.1	Harry Wayman Estate	2.0
S12	12-01-04	Robert F. Rothlisberger	6.0
S13	12-01-03	Charles D. & Edith Feenerly Harrison	7.8
S14	12-01-02	James Andrew & Karen L. Richmond	2.7
S15	12-01-05	Irvin L. Hoyt, Jr. & David L. Hoyt	36.8
S16	12-01-06	Mona Parsons, et al	52.75
S17 P	12-01-16	Vivian A. Parsons, et al	5.125
S18 O	12-01-01	Covestro, LLC	135.0
S19	12-01-1.7	Colombia Gas Transmission, Corp.	0.15
S20	12-23-15	Donna Jo Cain	0.70
S21	12-23-15.1	Robert F. Rothlisberger	0.47
S22	12-23-13	Donna Jo Cain	0.38
S23	05-27-27.2	Donna Jo Cain	0.1767
S24	05-27-27.1	Donald P. Cain	1.645
S25	05-27-27.3	Donna Jo. Cain	1.018
S26	05-27-28	Covestro, LLC	8.0
S27	12-23-12	Donna Jo Cain	0.37
S28	12-23-11	Covestro, LLC	1.25
S29 N	12-23-10	Covestro, LLC	1.28
S30 M	12-23-05	Covestro, LLC	3.69
S31	05-27-40	Covestro, LLC	3.36
S32	12-23-06	Covestro, LLC	0.34
S33	12-27-44	Covestro, LLC	0.21
S34	05-27-43	Covestro, LLC	0.63
S35	05-27-42	Covestro, LLC	0.52
S36	05-27-42.1	Covestro, LLC	0.52
S37	05-27-41	Martha Jean Arrick	0.99
S38 K	05-27-31.2	Appalachian Power Co.	3.33
S39 J	05-27-31	Covestro, LLC	16.1
S40	05-27-30	Covestro, LLC	0.371
S41	05-27-31.1	Covestro, LLC	3.0
S42 I	05-27-32.2	Covestro, LLC	3.95
S43	05-27-29	Covestro, LLC	9.0
S44 G	05-27-45	Covestro, LLC	0.3627
S45 H	05-27-32	Covestro, LLC	33.53
S46	05-27-03	Covestro, LLC	1.27
S47	05-27-04	Covestro, LLC	2.52
S48	05-27-05	Covestro, LLC	2.52
S49	05-27-06	Covestro, LLC	2.52
S50	05-27-07	Covestro, LLC	2.52
S51 F	05-27-08	Covestro, LLC	2.52
S52	05-27-09	Covestro, LLC	1.87
S53	05-27-10	Covestro, LLC	0.52
S54	05-27-12	Covestro, LLC	1.0
S55	05-27-13	Covestro, LLC	0.34
S56	05-27-14	Covestro, LLC	0.25
S57	05-27-15	Covestro, LLC	0.47
S58	05-27-16	Covestro, LLC	0.23
S59	05-27-18	Covestro, LLC	0.97
S60	05-27-17	Covestro, LLC	0.88
S61	05-27-19.3	Cemetery	2.0
S62 E	05-27-02	Covestro, LLC	28.099
S63	05-27-19.2	Wheeling Electric Co.	0.75
S64 D	05-28-12.2	Covestro, LLC	3.1
S65 C	05-28-12.3	Covestro, LLC	18.784
S66 B	05-28-13.1	Air Products & Chemicals, Inc	5.522
S67	05-27-19.1	Covestro, LLC	21.267
S68	05-27-11	Covestro, LLC	0.03
S69 A	05-28-13	TH Exploration III, LLC	70.0
S70	05-28-13.2	Covestro, LLC	11.02
S71	05-28-1.1	Covestro, LLC	5.2217
S72	12-23-14	Robert E. Rothlisberger	0.27
S73	05-21-3.1	Eagle Natrium, LLC	98.613
S74	12-01-19	Steven J. & Susan L. Hafer	36.5
S75	12-01-27	Steven J. & Susan L. Hafer	83.69
S76 R	12-01-18	Travis Darrell Blake & Angela Dawn Mitchell	48.4

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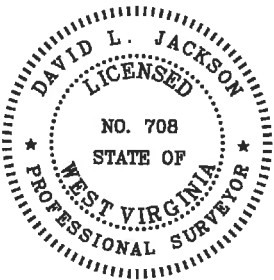
TUG HILL
OPERATING

OPERATOR'S
WELL #: Goudy 1S-11HM
DISTRICT: Franklin
COUNTY: Marshall
STATE: WV
API # 47-051-02202

WELL PLAT
PAGE: 3 OF 4
DATE: 10/03/2022

PG 4 OF 4 **GOUDY LEASE**
WELL 1S-11HM
592.0527± ACRES

Number	TAX MAP -PARCEL	SURFACE OWNER	ACRES
S98	12-6A-02	Ronald E. McCoy	3.49
S99	12-6A-01	Ronald E. McCoy	6.51
S100	12-06-05	Steven & Susan Louis Hafer	9.0
S101	12-06-04	Steven & Susan Hafer	6.5
S102 T	12-01-27	Steven J. & Susan Hafer	83.69
S103 S	12-01-26	William Joseph Blake	13.83
S104	12-01-25	Jack R. & Linda S. Blake	17.42
S105	12-01-15.3	Daniel L. & Vickie L Williams	7.0
S106	12-01-1.1	W.V. D.O.H	10.59
S107	12-01-15.2	Michael Goddard	1.09
S108	12-01-15.1	Marshall & Tara Cecil (L/C), Roy Yoho	1.46
S109	12-01-22	William D. Glover	18.84
S110	12-01-23.2	Raymond L. Pribble	0.782
S111	12-01-23	Raymond L. Pribble	1.55
S112	12-01-23.1	RHL Properties, LLC	34.17
S113	12-01-25.1	Timothy Q. & Ronda K. Bohrer	1.2
S114	12-01-24	Mitzilou Cecil, Trustee of the Tiger Cecil Irrevocable	0.85
S115	12-06-02	Brock T. Conner	23.83
S116	12-06-49	Kirkland Enterprises, LLC.	10.32
S117	12-06-51	Steven & Susan Hafer	0.599
S118	12-06-48	Ronald E. & Susan L. McCoy	0.36
S119 L	05-27-39	Covestro, LLC	3.74
S120	12-23-04	Pittsburgh Plate Glass Corp.	2.41
S121	12-23-09	Covestro, LLC	3.95
S122	12-23-08	Dora N. Moore Hrs., Et al	6.95
S123	12-01-1.5	United States of America	7.14
S124	12-23-02	Covestro, LLC	1.27
S125	12-23-03	Covestro, LLC	4.67
S126	12-27-38	Covestro, LLC	2.72
S127	12-27-37	Covestro, LLC	3.20
S128	12-27-35	Covestro, LLC	1.79
S129	12-27-34	Covestro, LLC	1.91
S130	12-27-36	Covestro, LLC	1.58
S131	12-27-33	Covestro, LLC	1.95
S137	12-01-1.2	West Virginia Dept. of Transportation	0.27
S138	12-22-59	Kenneth R. Morris	2.00
S139	12-22-60	Franklin W. & Barabara J. Cogar	0.5
S140	12-22-09	M.B. Investment	0.20
S141	12-22-10	M.B. Investment	0.24
S142	12-22-12	Jack Ray & Linda S. Blake	0.16
S143	12-22-13	Dewayne E. & Patricia A. Yost	0.07
S144	12-22-28	Kenneth R. Morris	0.12
S145	12-22-29	Jack R. & Linda S. Blake	0.50
S146	12-22-30	Jack R. & Linda S. Blake	0.24
S147	12-22-32	Ren Realty, LLC.	0.27
S148	12-22-33	Ren Realty, LLC.	0.08
S149	12-22-34	Ren Realty, LLC.	0.08
S150	12-22-51	Eric R. & Debra S. Sims	0.10
S151	12-22-52	Eric R. & Debra S. Sims	0.10
S152	12-22-53	Eric R. & Debra S. Sims	0.10
S153	12-22-54	Eric R. & Debra S. Sims	0.10
S154	12-22-55	Eric R. & Debra S. Sims	0.19
S155	12-22-56	Michael L. & Joyce D. Durig	0.22
S156	12-22-57	Michael L. & Joyce D. Durig	0.11
S157	12-22-58	Michael L. & Joyce D. Durig	0.15
S158	12-22-50	Michael L. & Joyce D. Durig	0.17
S159	12-22-49	Daniel J. Stillwagoner	0.13
S160	12-22-62	Virginia Bohrer, et al	0.05
S161	12-22-62.1	John R. & Toni Wright	0.314
S162	12-22-44	John R. & Toni Wright	0.52
S163	12-01-1.9	Grandview Doolin Public Service District	0.13
S164	12-22-27	Grandview Doolin Public Service District	0.27
S165	12-01-1.12	United States of America	22.55
S166	12-01-1.8	Grandview Doolin Public Service District	0.0895



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10/14/2022



TUG HILL
OPERATING

OPERATOR'S
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WELL PLAT
PAGE: 4 OF 4
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