

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

RECEIVED
Office Of Oil and Gas
JUL 26 2023
WV Department of
Environmental Protection

API 47 - 051 - 02384 County Marshall District Liberty
Quad Glen Easton 7.5' Pad Name Fitzgerald Field/Pool Name _____
Farm name Danny and Frances Kerns Estate Well Number Fitzgerald S-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 4,405,760.72 Easting 530,704.87
Landing Point of Curve Northing 4,406,174.6 Easting 529,871.1
Bottom Hole Northing 4,404,196.1 Easting 531,123.2

Elevation (ft) 1,293' 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 7/6/2021 Date drilling commenced 10/21/2021 spud: 10/21/2021 big rig: 11/22/2021 Date drilling ceased 11/5/2022
Date completion activities began 3/31/2023 Date completion activities ceased 4/23/2023
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 1062' Open mine(s) (Y/N) depths N
Salt water depth(s) ft 1501' Void(s) encountered (Y/N) depths N
Coal depth(s) ft 958-964', 1056-1062' Cavern(s) encountered (Y/N) depths N
Is coal being mined in area (Y/N) N

APPROVED

Reviewed by:
[Signature]
09/22/2023

API 47- 051 - 02384 Farm name Danny and Frances Kerns Estate Well number Fitzgerald S-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"	1,160'	NEW	54.5#	N/A	Y
Coal	17 1/2"	13 3/8"	1,160'	NEW	54.5#	N/A	Y
Intermediate 1	12 1/4"	9 5/8"	3,086'	NEW	36#	N/A	Y
Intermediate 2							
Intermediate 3							
Production	8 3/4"	5 1/2"	16,276'	NEW	20#	N/A	Y
Tubing		2 3/8"	8,138'	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	65	15.6	1.21	78	0	8
Surface	A	921	15.6	1.18	1087	0	8
Coal	A	921	15.6	1.18	1087	0	8
Intermediate 1	A	1005	15.6	1.18	1186	0	8
Intermediate 2							
Intermediate 3							
Production	A						
Tubing							

Drillers TD (ft) 16,311' Loggers TD (ft) n/a
 Deepest formation penetrated Marcellus Plug back to (ft) n/a
 Plug back procedure n/a

Kick off depth (ft) 7,081'

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 _____

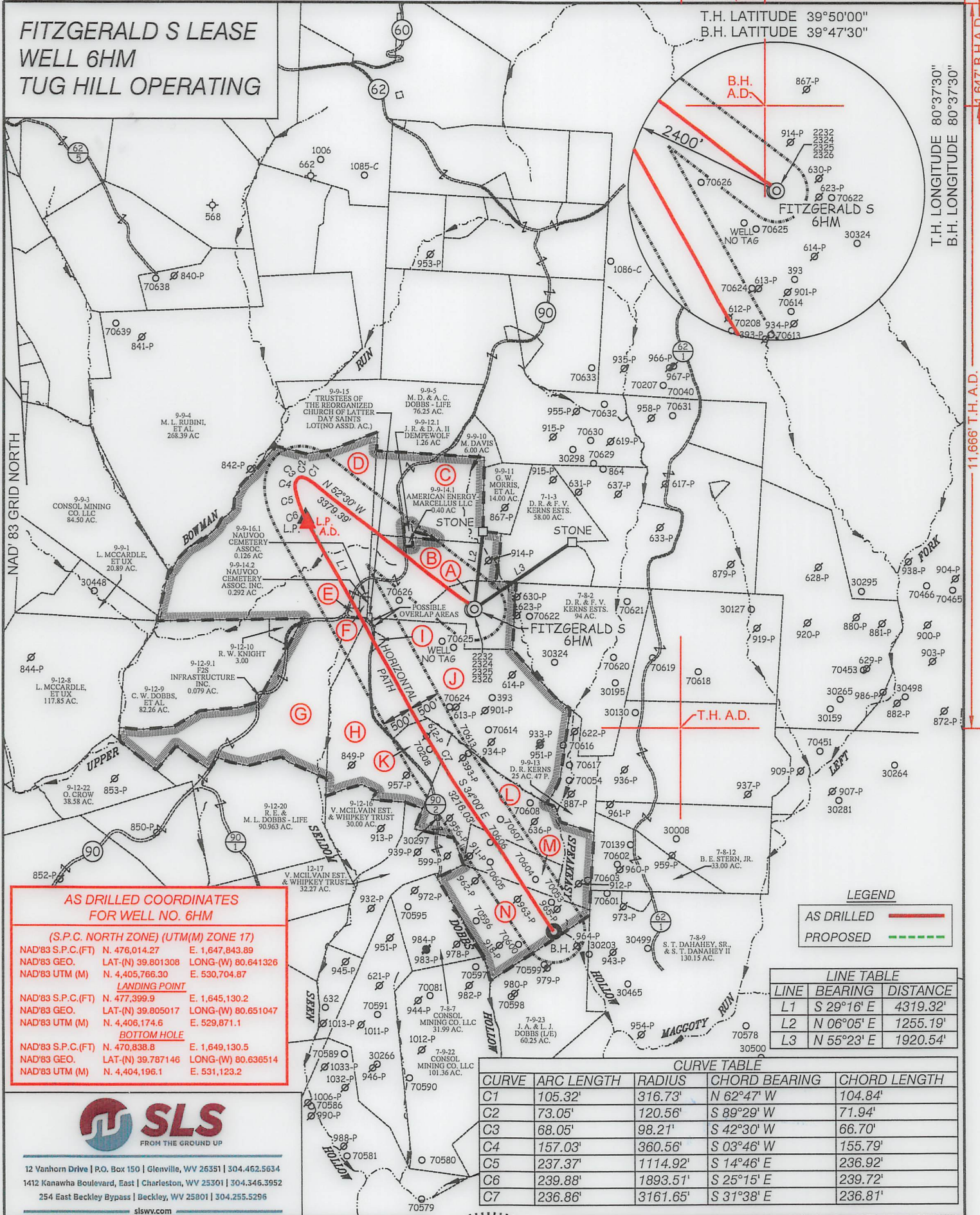
WERE TRACERS USED Yes No TYPE OF TRACER(S) USED _____

**FITZGERALD S LEASE
WELL 6HM
TUG HILL OPERATING**

4,587' T.H.A.D. 3,236' B.H.A.D.

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

T.H. LONGITUDE 80°37'30"
B.H. LONGITUDE 80°37'30"



**AS DRILLED COORDINATES
FOR WELL NO. 6HM**

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

NAD'83 S.P.C.(FT) N. 476,014.27 E. 1,647,843.89
NAD'83 GEO. LAT-(N) 39.801308 LONG-(W) 80.641326
NAD'83 UTM (M) N. 4,405,766.30 E. 530,704.87

LANDING POINT

NAD'83 S.P.C.(FT) N. 477,399.9 E. 1,645,130.2
NAD'83 GEO. LAT-(N) 39.805017 LONG-(W) 80.651047
NAD'83 UTM (M) N. 4,406,174.6 E. 529,871.1

BOTTOM HOLE

NAD'83 S.P.C.(FT) N. 470,838.8 E. 1,649,130.5
NAD'83 GEO. LAT-(N) 39.787146 LONG-(W) 80.636514
NAD'83 UTM (M) N. 4,404,196.1 E. 531,123.2

LEGEND

- AS DRILLED ———
- PROPOSED - - - - -

LINE TABLE		
LINE	BEARING	DISTANCE
L1	S 29°16' E	4319.32'
L2	N 06°05' E	1255.19'
L3	N 55°23' E	1920.54'

CURVE TABLE

CURVE	ARC LENGTH	RADIUS	CHORD BEARING	CHORD LENGTH
C1	105.32'	316.73'	N 62°47' W	104.84'
C2	73.05'	120.56'	S 89°29' W	71.94'
C3	68.05'	98.21'	S 42°30' W	66.70'
C4	157.03'	360.56'	S 03°46' W	155.79'
C5	237.37'	1114.92'	S 14°46' E	236.92'
C6	239.88'	1893.51'	S 25°15' E	239.72'
C7	236.86'	3161.65'	S 31°38' E	236.81'



12 Vanhorn Drive | P.O. Box 150 | Glenview, WV 26351 | 304.462.5634
1412 Kanawha Boulevard, East | Charleston, WV 25301 | 304.346.3952
254 East Beckley Bypass | Beckley, WV 25801 | 304.255.5296
slsvw.com

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

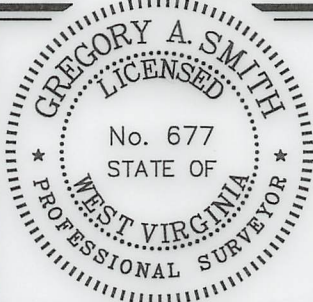
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NAD'83 UTM (M) N. 4,405,766.30 E. 530,704.87

LANDING POINT

NAD'83 S.P.C.(FT) N. 477,468.3 E. 1,645,105.0
NAD'83 GEO. LAT-(N) 39.805204 LONG-(W) 80.651140
NAD'83 UTM (M) N. 4,406,195.3 E. 529,863.1

BOTTOM HOLE

NAD'83 S.P.C.(FT) N. 470,832.5 E. 1,649,139.2
NAD'83 GEO. LAT-(N) 39.787129 LONG-(W) 80.636483
NAD'83 UTM (M) N. 4,404,194.2 E. 531,125.9



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

P.S. 677

Gregory A. Smith

LEGEND

- LEASE LINE
- SURFACE LINE
- WELL LATERAL
- OFFSET LINE
- TIE LINE
- CREEK
- ROAD
- COUNTY ROUTE
- PROPOSED WELL
- EXISTING WELL
- PERMITTED WELL
- TAX MAP-PARCEL
- 00-00
- SURFACE OWNER (SEE TABLE)
- LEASE # (SEE WW-6A1)

SCALE 1" = 2000' FILE NO. 8910P6HMR-AD.dwg
FITZGERALD S 6HM REV5

DATE MARCH 10, 20 23
REVISED _____

OPERATORS WELL NO. FITZGERALD S 6HM
API WELL NO. 47 — 051 — 02384
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 DARREN BROWN - CT CORPORATION
ADDRESS 5098 WASHINGTON ST. W, STE 407
CHARLESTON, WV 25313-1561

COUNTY NAME
PERMIT

09/22/2023

**FITZGERALD S LEASE
WELL 6HM
TUG HILL OPERATING**

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

4,587' T.H.A.D. 3,236' B.H.A.D.

T.H. LONGITUDE 80°37'30"
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11,666' T.H. A.D.

1,647' B.H.A.D.

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TAG	SURFACE OWNER	PARCEL	ACRES
A	DANNY R. & FRANCES V. KERNS ESTATE	7-8-1	27.00
B	DANNY R. & FRANCES V. KERNS ESTATE	9-9-14	48.308
C	GARY W. MORRIS & CYNTHIA PATRELLO	9-9-12	54.69
D	TODD L. SCHERICH, ET AL	9-9-16	168.204
E	GARY W. MORRIS	9-9-22	0.15
F	NAUVOO CEMETERY ASSOCIATION, INC.	9-9-17	1.00
G	MARK D. & SHERYL CHAMBERS	9-12-11	91.00
H	DAVID L. WHIPKEY & DAVID MATTHEW	9-12-12	61.00
I	DAVID & CAROL WHIPKEY TRUST, ET AL	9-9-18	LOT
J	CONSOL MINING CO., LLC	9-12-14	127.61
K	DAVID L. WHIPKEY & DAVID MATTHEW	9-12-15	12.00
L	JOHN ALFRED & LEORA JEAN DOBBS (L/E)	7-8-4	65.65
M	JOHN ALFRED & LEORA JEAN DOBBS (L/E)	7-8-5	24.00
N	JOHN ALFRED & LEORA JEAN DOBBS (L/E)	7-8-8	51.97

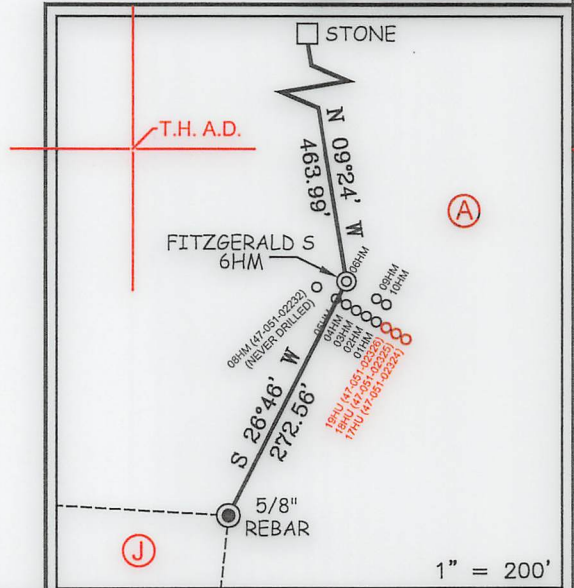
NOTES ON SURVEY

- NO WATER WELLS WERE FOUND WITHIN 250' OF PROPOSED GAS WELL. NO AGRICULTURAL BUILDINGS OR DWELLINGS > 2500 SQ. FT. WERE FOUND WITHIN 625' OF THE CENTER OF PROPOSED WELL PAD.
- WELL SPOT CIRCLE & TOPO MARK SCALE IS 1"=2000'.
- BASED ON WV DOT COUNTY ROUTE 74 IS A 40' STRIP OF LAND ACQUIRED IN NUMEROUS DEEDS.
- PLAT UPDATED TO SHOW AS-DRILLED PATH.
- AS DRILLED DATA PROVIDED BY TUG HILL OPERATING.



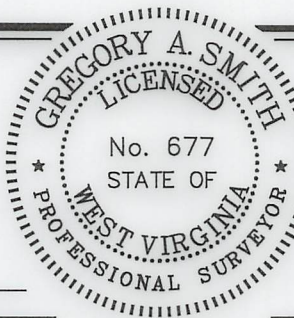
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1412 Kanawha Boulevard, East | Charleston, WV 25301 | 304.346.3952
254 East Beckley Bypass | Beckley, WV 25801 | 304.255.5296
slsvv.com

REFERENCES



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. 677 Gregory A. Smith



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

DATE MARCH 10, 2023

REVISED _____

OPERATORS WELL NO. FITZGERALD S 6HM

API WELL NO. 47 — 051 — 02384
STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1 / 2500 FILE NO. 8910P6HMR-AD.dwg
FITZGERALD S 6HM REV5
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 X LIQUID INJECTION ___ WASTE DISPOSAL ___ IF "GAS" PRODUCTION X STORAGE ___ DEEP ___ SHALLOW X

LOCATION: ELEVATION 1,293.00' WATERSHED SPEAKEASY HOLLOW OF MAGGOTY RUN

DISTRICT LIBERTY COUNTY MARSHALL QUADRANGLE GLEN EASTON 7.5'

SURFACE OWNER DANNY AND FRANCES KERNS ESTATE ACREAGE 27.00±

ROYALTY OWNER DANNY S. KERNS, ET AL ACREAGE 27.00±

PROPOSED WORK: LEASE NO. SEE WW-6A1

DRILL X CONVERT ___ DRILL DEEPER ___ REDRILL ___ FRACTURE OR STIMULATE X PLUG OFF OLD

FORMATION ___ PERFORATE NEW FORMATION ___ PLUG AND ABANDON ___ CLEAN OUT AND REPLUG ___ OTHER ___

PHYSICAL CHANGE IN WELL (SPECIFY) _____ TARGET FORMATION MARCELLUS

ESTIMATED DEPTH TVD: 7,025' / TMD: 16,318'

WELL OPERATOR TUG HILL OPERATING, LLC DESIGNATED AGENT DARREN BROWN - CT CORPORATION
ADDRESS 1320 SOUTH UNIVERSITY DRIVE, SUITE 500 ADDRESS 5098 WASHINGTON ST. W, STE 407
FORT WORTH, TX 76107 CHARLESTON, WV 25313-1561

COUNTY NAME
PERMIT

09/22/2023

**FITZGERALD S-6HM
PEFORATION RECORD**

Stage No.	Perforation Date	Perforated from MD ft.	Perforated to MD. Ft.	Number of Perforations	Formation(s)
1	3/31/2023	16,097	16,144	12	MARCELLUS
2	4/1/2023	15,893	16,047	48	MARCELLUS
3	4/1/2023	15,719	15,873	48	MARCELLUS
4	4/2/2023	15,544	15,698	48	MARCELLUS
5	4/3/2023	15,195	15,349	48	MARCELLUS
6	4/3/2023	15,195	15,349	48	MARCELLUS
7	4/4/2023	15,021	15,175	48	MARCELLUS
8	4/4/2023	14,846	15,000	48	MARCELLUS
9	4/5/2023	14,672	14,826	48	MARCELLUS
10	4/5/2023	14,497	14,651	48	MARCELLUS
11	4/6/2023	14,323	14,477	48	MARCELLUS
12	4/6/2023	14,148	14,302	48	MARCELLUS
13	4/6/2023	13,974	14,128	48	MARCELLUS
14	4/7/2023	13,799	13,953	48	MARCELLUS
15	4/7/2023	13,625	13,779	48	MARCELLUS
16	4/8/2023	13,450	13,604	48	MARCELLUS
17	4/8/2023	13,276	13,430	48	MARCELLUS
18	4/9/2023	13,101	13,255	48	MARCELLUS
19	4/9/2023	12,927	13,081	48	MARCELLUS
20	4/10/2023	12,752	12,906	48	MARCELLUS
21	4/10/2023	12,578	12,732	48	MARCELLUS
22	4/11/2023	12,403	12,557	48	MARCELLUS
23	4/11/2023	12,229	12,383	48	MARCELLUS
24	4/11/2023	12,054	12,208	48	MARCELLUS
25	4/12/2023	11,880	12,034	48	MARCELLUS
26	4/13/2023	11,705	11,859	48	MARCELLUS
27	4/13/2023	11,531	11,685	48	MARCELLUS
28	4/14/2023	11,356	11,510	48	MARCELLUS
29	4/14/2023	11,182	11,336	48	MARCELLUS
30	4/14/2023	11,007	11,161	48	MARCELLUS
31	4/15/2023	10,833	10,987	48	MARCELLUS
32	4/15/2023	10,658	10,812	48	MARCELLUS
33	4/15/2023	10,484	10,638	48	MARCELLUS
34	4/16/2023	10,309	10,463	48	MARCELLUS
35	4/16/2023	10,135	10,289	48	MARCELLUS
36	4/17/2023	9,960	10,114	48	MARCELLUS
37	4/17/2023	9,786	9,940	48	MARCELLUS
38	4/17/2023	9,611	9,765	48	MARCELLUS
39	4/18/2023	9,437	9,591	48	MARCELLUS
40	4/18/2023	9,262	9,416	48	MARCELLUS
41	4/18/2023	9,088	9,242	48	MARCELLUS

09/22/2023

Stage No.	Perforation Date	Perforated from MD ft.	Perforated to MD. Ft.	Number of Perforations	Formation(s)
42	4/19/2023	8,913	9,067	48	MARCELLUS
43	4/19/2023	8,739	8,893	48	MARCELLUS
44	4/20/2023	8,564	8,718		

09/22/2023

FITZGERALD S-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	69.00	8511	7357	3782	252880	6,925	0
2	81.00	8203	6212	5060	443300	8,763	0
3	83.00	8061	5404	5140	441180	8,469	0
4	83.00	7710	5521	5537	436560	8,323	0
5	83.00	7816	5450	5216	436770	8,425	0
6	85.00	7554	5508	5407	444020	8,455	0
7	76.00	7692	5289	4833	441140	10,016	0
8	85.00	7664	5233	5497	446680	8,571	0
9	83.00	7408	5245	5033	440720	8,380	0
10	88.00	7670	5408	5170	445640	8,588	0
11	84.00	7647	5444	4402	443900	8,365	0
12	88.00	7917	5512	5627	437440	8,265	0
13	87.00	7737	5593	5118	445240	8,304	0
14	89.00	7846	5270	4835	446360	8,380	0
15	86.00	7516	5312	4517	442180	8,337	0
16	84.00	7392	5522	5240	446380	8,580	0
17	86.00	7459	5439	5139	440240	8,264	0
18	85.00	7237	5347	5306	442900	8,280	0
19	87.00	7333	5422	5308	441000	8,274	0
20	85.00	7386	5700	5053	434920	8,082	0
21	87.00	7555	5276	4838	446800	8,183	0
22	86.00	7352	5006	5160	446700	8,178	0
23	85.00	7015	5426	5211	442480	8,125	0
24	90.00	7327	5408	4619	439240	8,222	0
25	85.00	6898	5317	4937	439060	8,198	0
26	84.00	7004	5267	4828	431180	8,086	0
27	90.00	7265	5040	4907	432340	8,090	0
28	87.00	6810	5188	5233	440860	8,207	0
29	88.00	6971	5382	4858	439520	8,113	0
30	90.00	7131	5212	4979	443260	8,152	0
31	90.00	7145	5027	4765	434260	8,024	0
32	90.00	7102	5150	5078	439680	8,079	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	7179	5231	4970	437560	8,084	0
34	90.00	7045	5154	5199	437100	8,158	0
35	91.00	7021	5412	4855	436390	7,936	0
36	91.00	7260	5060	4405	437460	8,030	0
37	88.00	6988	4755	4722	440120	8,087	0
38	91.00	6857	4967	4398	440860	7,954	0
39	90.00	6912	5062	7171	435020	8,025	0
40	91.00	6741	4946	5439	435780	7,958	0
41	91.00	6782	5012	4919	441200	7,813	0
42	90.00	6713	4739	5626	438840	7,984	0
43	90.00	6560	4926	4729	432060	7,940	0

FITZGERALD S-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	1916	2128	1928	2157	Sandstone
Big Lime	2128	2266	2157	2310	Limestone
Big Injun	2266	2545	2310	2640	Sandstone
Weir	2545	2761	2640	2917	Sandstone
Berea	2761	3015	2917	3264	Sandstone
Gordon	3015	3171	3264	3478	Sandstone
Fifty Foot	3171	3683	3478	4155	Sandstone
Speechley	3683	5144	4155	6095	Sandstone
Benson	5144	5565	6095	6652	Sandstone
Alexander	5565	6219	6652	7453	Siltstone
Rhinestreet	6219	6708	7453	8019	Black Shale
Middlesex	6708	6781	8019	8128	Black Shale
Geneseo/Burkett	6781	6814	8128	8183	Black Shale
Tully	6814	6838	8183	8227	Limestone
Hamilton	6838	6929	8227	8462	Gray Shale
Marcellus	6929	-	8462	-	Black Shale

Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	3/31/2023
Job End Date:	4/20/2023
State:	West Virginia
County:	Marshall
API Number:	47-051-02384-00-00
Operator Name:	Tug Hill Operating, LLC
Well Name and Number:	Fitzgerald S 6HM
Latitude:	39.80130849
Longitude:	-80.64132625
Datum:	NAD27
Federal Well:	NO
Indian Well:	NO
True Vertical Depth:	6,991
Total Base Water Volume (gal):	15,197,154
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	86.49744	None
Sand (40/70 White Proppant)	Tug Hill Operating	Proppant	Silica Substrate	14808-60-7	100.00000	8.65484	None
Sand (100 Mesh Proppant)	Tug Hill Operating	Proppant	Silica Substrate	14808-60-7	100.00000	3.19310	None
Sand (30/50 White Proppant)	Tug Hill Operating	Proppant	Silica Substrate	14808-60-7	100.00000	1.23580	None
Hydrochloric Acid (7.5%)	CNR	Acidizing	Water	7732-18-5	85.00000	0.23657	None
			Hydrochloric Acid (Hydrogen Chloride)	7647-01-0	37.00000	0.10298	None
StimStream FR 9800	Chemstream	Friction Reducer	Butene, homopolymer	9003-29-6	25.00000	0.02260	None
			Alkanes, C16-20-iso-	90622-59-6	25.00000	0.02260	None
			Ethoxylated alcohols (C12-18)	68213-23-0	3.00000	0.00271	None

MC MX 5-3886	Multi-Chem	Biocide					
			Calcium nitrate	13477-34-4	60.00000	0.02361	None
LD-7750W	Multi-Chem	Scale Inhibitor					
			Methanol	67-56-1	60.00000	0.00529	None
			Phosphonic Acid Salt	Proprietary	5.00000	0.00044	None
ProHib 100	CNR	Acid Inhibitor					
			2-Butoxyethanol	111-76-2	60.00000	0.00053	None
			Proprietary material	Proprietary	30.00000	0.00027	None
			Proprietary non-ionic surfactant	Proprietary	20.00000	0.00018	None
			Proprietary corrosion inhibitor	Proprietary	10.00000	0.00009	None
			Proprietary ethoxylated alcohol	Proprietary	10.00000	0.00009	None
ProFE 105	CNR	Iron Control					
			Citric Acid	77-92-9	20.00000	0.00021	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	0.23657	
			Butene, homopolymer	9003-29-6	25.00000	0.02260	
			Ethoxylated alcohols (C12-18)	68213-23-0	3.00000	0.00271	
			Phosphonic Acid Salt	Proprietary	5.00000	0.00044	
			Proprietary material	Proprietary	30.00000	0.00027	
			Proprietary non-ionic surfactant	Proprietary	20.00000	0.00018	
			Proprietary corrosion inhibitor	Proprietary	10.00000	0.00009	
			Proprietary ethoxylated alcohol	Proprietary	10.00000	0.00009	
			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)