

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

API 47 - 051 - 02168 County Marshall District Franklin
Quad Powhatan Point 7.5' Pad Name Old Crow Field/Pool Name _____
Farm name Donna Vivian Yoho (TOD) Gary Lance Yoho Well Number Old Crow S-13HM
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 4,403,190.10 Easting 520,302.21
Landing Point of Curve Northing 4,403,995.3 Easting 520,835.8
Bottom Hole Northing 4,401,974.0 Easting 522,017.2

Elevation (ft) 1,265' 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 4/12/2019 Date drilling commenced 4/19/2019 Date drilling ceased 1/4/2020
Date completion activities began 3/8/2021 Date completion activities ceased 3/21/2021
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 912' Open mine(s) (Y/N) depths _____
Salt water depth(s) ft 1346' Void(s) encountered (Y/N) depths _____
Coal depth(s) ft 814-820', 906-912' Cavern(s) encountered (Y/N) depths _____
Is coal being mined in area (Y/N) N

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Reviewed by:

~~06/27/2021~~
8-11-21

API 47-051 - 02168 Farm name Donna Vivian Yoho (TOD) Gary Lance Yoho Well number Old Crow S-13HM

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"	100'	NEW	94.5#	N/A	Y
Surface	17 1/2"	13 3/8"	1,013'	NEW	54.5#	N/A	Y
Coal	17 1/2"	13 3/8"	1,013'	NEW	54.5#	N/A	Y
Intermediate 1	12 1/4"	9 5/8"	2,953'	NEW	36#	N/A	Y
Intermediate 2							
Intermediate 3							
Production	8 3/4"	5 1/2"	15,851'	NEW	20#	N/A	Y
Tubing		2 3/8"	7,925'	NEW	4.7#	N/A	
Packer type and depth set							

Comment Details _____

CEMENT DATA	Class/Type of Cement	Number of Sacks	Slurry wt (ppg)	Yield (ft ³ /sks)	Volume (ft ³)	Cement Top (MD)	WOC (hrs)
Conductor	A		15.6	1.19		0	8
Surface	A	1,069	15.6	1.19	1,291	0	8
Coal	A	1,069	15.6	1.19	1,291	0	8
Intermediate 1	A	855	15.6	1.19	1,178	0	8
Intermediate 2							
Intermediate 3							
Production	A	3,768	14.5	1.17	4,389	0	8
Tubing							

Drillers TD (ft) 15,888' Loggers TD (ft) n/a
 Deepest formation penetrated Marcellus Plug back to (ft) n/a
 Plug back procedure n/a

Kick off depth (ft) 6,822'

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 _____

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**Old Crow S-13HM
PEFORATION RECORD**

Stage No.	Perforation Date	Perforated from MD ft.	Perforated to MD. Ft.	Number of Perforations	Formation(s)
1	3/8/2021	15,478	15,623	48	Marcellus
2	3/9/2021	15,303	15,456	48	Marcellus
3	3/9/2021	15,128	15,281	48	Marcellus
4	3/9/2021	14,953	15,106	48	Marcellus
5	3/9/2021	14,778	14,931	48	Marcellus
6	3/10/2021	14,603	14,756	48	Marcellus
7	3/10/2021	14,428	14,581	48	Marcellus
8	3/10/2021	14,253	14,406	48	Marcellus
9	3/11/2021	14,078	14,231	48	Marcellus
10	3/11/2021	13,903	14,056	48	Marcellus
11	3/11/2021	13,728	13,881	48	Marcellus
12	3/11/2021	13,553	13,706	48	Marcellus
13	3/12/2021	13,378	13,531	48	Marcellus
14	3/12/2021	13,203	13,356	48	Marcellus
15	3/13/2021	13,028	13,181	48	Marcellus
16	3/13/2021	12,853	13,006	48	Marcellus
17	3/13/2021	12,678	12,831	48	Marcellus
18	3/13/2021	12,503	12,656	48	Marcellus
19	3/14/2021	12,328	12,481	48	Marcellus
20	3/14/2021	12,153	12,306	48	Marcellus
21	3/14/2021	11,978	12,131	48	Marcellus
22	3/14/2021	11,803	11,956	48	Marcellus
23	3/15/2021	11,628	11,781	48	Marcellus
24	3/15/2021	11,453	11,606	48	Marcellus
25	3/15/2021	11,278	11,431	48	Marcellus
26	3/16/2021	11,103	11,256	48	Marcellus
27	3/16/2021	10,928	11,081	48	Marcellus
28	3/16/2021	10,753	10,906	48	Marcellus
29	3/17/2021	10,578	10,731	48	Marcellus
30	3/17/2021	10,403	10,556	48	Marcellus
31	3/17/2021	10,228	10,381	48	Marcellus
32	3/18/2021	10,053	10,206	48	Marcellus
33	3/18/2021	9,878	10,031	48	Marcellus
34	3/18/2021	9,703	9,856	48	Marcellus
35	3/18/2021	9,528	9,681	48	Marcellus
36	3/19/2021	9,353	9,506	48	Marcellus
37	3/19/2021	9,178	9,331	48	Marcellus
38	3/19/2021	9,003	9,156	48	Marcellus
39	3/20/2021	8,828	8,981	48	Marcellus
40	3/20/2021	8,653	8,806	48	Marcellus
41	3/20/2021	8,478	8,631	48	Marcellus

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42	3/20/2021	8,303	8,456	48	Marcellus
43	3/21/2021	8,128	8,281	48	Marcellus

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**OLD CROW S-13HM
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 (bbls)
1	86	7569	5000	4,678	436500	8644	0
2	90	7411	5306	4,886	434880	8486	0
3	89	7316	5104	5,019	431020	9004	0
4	90	7336	5138	5,293	438800	8344	0
5	90	7274	5181	4,871	440940	8377	0
6	89	7341	5356	5,338	442000	8381	0
7	90	7517	5367	5,377	444520	8387	0
8	89	7355	5395	5,090	446400	8349	0
9	89	7261	5277	5,270	440060	8389	0
10	89	7272	5447	5,191	446540	8382	0
11	90	7128	5092	6,054	435240	8253	0
12	89	7038	5259	5,160	447920	8417	0
13	90	7252	5279	5,308	440140	8567	0
14	89	7212	5417	5,449	446400	8367	0
15	89	6993	5081	4,851	435500	8209	0
16	89	7077	5307	5,297	448520	8429	0
17	89	7000	5106	5,218	444440	8388	0
18	89	7078	5212	5,339	440480	8309	0
19	89	7001	5165	4,924	442620	8347	0
20	90	7094	5162	5,104	443320	8295	0
21	90	7255	5339	5,127	440860	8213	0
22	89	7009	5128	5,048	436240	8188	0
23	90	7069	5139	4,979	443980	8265	0
24	90	6897	5000	4,966	443940	8315	0
25	89	6779	5038	4,941	439200	8134	0
26	89	6890	5433	4,959	436280	8140	0
27	89	7028	5074	4,623	444360	8213	0
28	89	6920	5132	5,050	436080	8129	0
29	89	6956	5142	4,977	442740	8226	0
30	89	6962	5108	4,764	447920	8268	0
31	89	6961	5472	5,275	444500	8214	0
32	90	6960	5254	4,655	445900	8285	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 (bbls)	Amount of Nitrogen/other (units)
33	90	6900	5515	5,236	438060	8168	0
34	90	6814	5352	5,490	434420	9221	0
35	89	6859	5438	5,333	399380	7723	0
36	90	6724	5411	4,884	436400	8207	0
37	90	6754	5804	5,008	432180	8097	0
38	89	6710	5393	5,251	439340	8326	0
39	90	6630	5234	5,059	435300	8266	0
40	90	6672	5115	4,882	445700	8291	0
41	90	6683	5548	5,125	443780	8244	0
42	90	6499	5138	5,353	447260	8322	0
43	89	6557	5440	5,164	177020	8224	0

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OLD CROW S-13HM

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	2024	2114	2035	2131	Sandstone
Big Lime	2114	2184	2131	2208	Limestone
Big Injun	2184	2468	2208	2538	Sandstone
Weir	2468	2663	2538	2777	Sandstone
Berea	2663	3008	2777	3226	Sandstone
Gordon	3008	3062	3226	3298	Sandstone
Fifty Foot	3062	3610	3298	4007	Sandstone
Speechley	3610	5032	4007	5851	Sandstone
Benson	5032	5387	5851	6321	Sandstone
Alexander	5387	5981	6321	7070	Siltstone
Rhinestreet	5981	6380	7070	7568	Black shale
Middlesex	6380	6458	7568	7692	Black shale
Geneseo/Burkett	6458	6483	7692	7738	Black shale
Tully	6483	6526	7738	7827	Limestone
Hamilton	6526	6579	7827	7975	Grey shale
Marcellus	6579	-	7975	-	Black shale

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Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	3/8/2021
Job End Date:	3/21/2021
State:	West Virginia
County:	Marshall
API Number:	47-051-02168-00-00
Operator Name:	Tug Hill Operating, LLC
Well Name and Number:	Old Crow S 13HM
Latitude:	39.77840875
Longitude:	-80.76292167
Datum:	NAD27
Federal Well:	NO
Indian Well:	NO
True Vertical Depth:	6,633
Total Base Water Volume (gal):	15,036,126
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	86.72376	None
Sand (40/70 White Proppant)	ProFrac	Proppant	Silica Substrate	14808-60-7	100.00000	8.62452	None
Sand (100 Mesh Proppant)	ProFrac	Proppant	Silica Substrate	14808-60-7	100.00000	3.06646	None
Sand (30/50 White Proppant)	ProFrac	Proppant	Silica Substrate	14808-60-7	100.00000	1.20397	None
Hydrochloric Acid (7.5%)	ProFrac	Acidizing	Water	7732-18-5	85.00000	0.22372	None
			Hydrochloric Acid (Hydrogen Chloride)	7647-01-0	37.00000	0.09738	None
StimStream FR 9800	Chemstream	Friction Reducer	Butene, homopolymer	9003-29-6	25.00000	0.01774	None
			Alkanes, C16-20-iso-	90622-59-6	25.00000	0.01774	None
			Ethoxylated alcohols (C12-18)	68213-23-0	3.00000	0.00213	None

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MC MX 9-4743	Multi-Chem	Biocide					
			Sodium Nitrate	7631-99-4	60.00000	0.02213	None
LD-7750W	Multi-Chem	Scale Inhibitor					
			Methanol	67-56-1	60.00000	0.00508	None
			Phosphonic Acid Salt	Proprietary	5.00000	0.00042	None
ProFE 105	ProFrac	Iron Control					
			Citric Acid	77-92-9	100.00000	0.00097	None
ProHib 100	ProFrac	Acid Inhibitor					
			2-Propyn-1-ol compound w/ methyloxirane	38172-91-7	15.00000	0.00012	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	0.22372	
			Butene, homopolymer	9003-29-6	25.00000	0.01774	
			Ethoxylated alcohols (C12-18)	68213-23-0	3.00000	0.00213	
			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)

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9,727' B.H. A.D.

3,632' T.H. A.D.

**OLD CROW S LEASE
WELL 13HM
TUG HILL OPERATING**

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

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

NAD'83 S.P.C.(FT) N. 468,130.93 E. 1,613,566.48
NAD'83 GEO. LAT-(N) 39.778409 LONG-(W) 80.762922
NAD'83 UTM (M) N. 4,403,190.10 E. 520,302.21

LANDING POINT

NAD'83 S.P.C.(FT) N. 470,803.7 E. 1,615,322.4
NAD'83 GEO. LAT-(N) 39.785813 LONG-(W) 80.756808
NAD'83 UTM (M) N. 4,404,013.3 E. 520,823.6

BOTTOM HOLE

NAD'83 S.P.C.(FT) N. 464,043.1 E. 1,619,126.0
NAD'83 GEO. LAT-(N) 39.767400 LONG-(W) 80.742941
NAD'83 UTM (M) N. 4,401,973.0 E. 522,016.8

T.H. LONGITUDE 80°45'00"
B.H. LONGITUDE 80°42'30"

MAP/PARCEL	ADJOINING SURFACE OWNER LIST	ACRES
5-10-12.1	JOHN PAUL SMITH, JR., ET AL	8.86
5-10-19	BRADLEY L. & CONNIE L. HUBBARD	3.209
5-10-20	LOUIS AULENBACHER	3.554
5-10-21	LOUIS AULENBACHER	3.677
5-10-22	LOUIS AULENBACHER	6.461
5-17-1.6	LOLA M. SLAUGHTER	6.347
5-17-3.1	WILBUR L. RIDDLE, ET UX	10.148
5-17-16	GLEN A. GUNTO	9.702

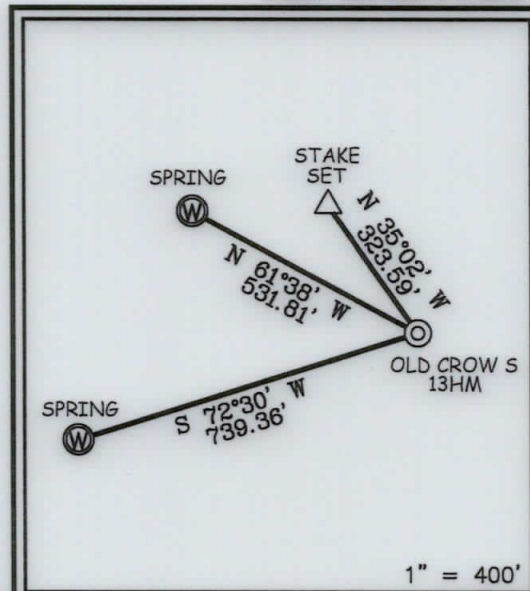
T.H.
A.D.

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'
- AS-DRILLED DATA PROVIDED BY TUG HILL OPERATING, LLC.
- PLAT UPDATED TO SHOW AS-DRILLED PATH.

B.H.
A.D.

REFERENCES

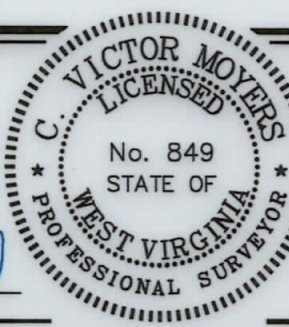


12 Vanhorn Drive | P.O. Box 150 | Glenville, WV 26351 | 304.462.5634
1412 Kanawha Boulevard, East | Charleston, WV 25301 | 304.346.3952
254 East Beckley Bypass | Beckley, WV 25801 | 304.255.5296
slsw.com

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. 849

C. Victor Moyers



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

DATE JUNE 10, 2020

REVISED _____, 20____

OPERATORS WELL NO. OLD CROW S-13HM

API WELL NO. 47 - 051 - 2168
STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1 / 2500 FILE NO. 8796P13HMAD.dwg
OLD CROW NORTH 13HM REV0

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 1,265' WATERSHED TRIBUTARY OF FISH CREEK (HUC-10)

DISTRICT FRANKLIN COUNTY MARSHALL QUADRANGLE POWHATAN POINT 7.5'

SURFACE OWNER DONNA VIVIAN YOHO (TOD) GARY LANCE YOHO ACREAGE 71.205±

ROYALTY OWNER DONNA VIVIAN YOHO, ET AL ACREAGE 71.205±

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: 6,706' / TMD: 15,817'

WELL OPERATOR TUG HILL OPERATING, LLC
ADDRESS 1320 SOUTH UNIVERSITY DRIVE, SUITE 500
FORT WORTH, TX 76107

DESIGNATED AGENT DIANNA STAMPER
CT CORPORATION SYSTEM
ADDRESS 5400 D BIG TYLER ROAD
CHARLESTON, WV 25313

COUNTY NAME

PERMIT

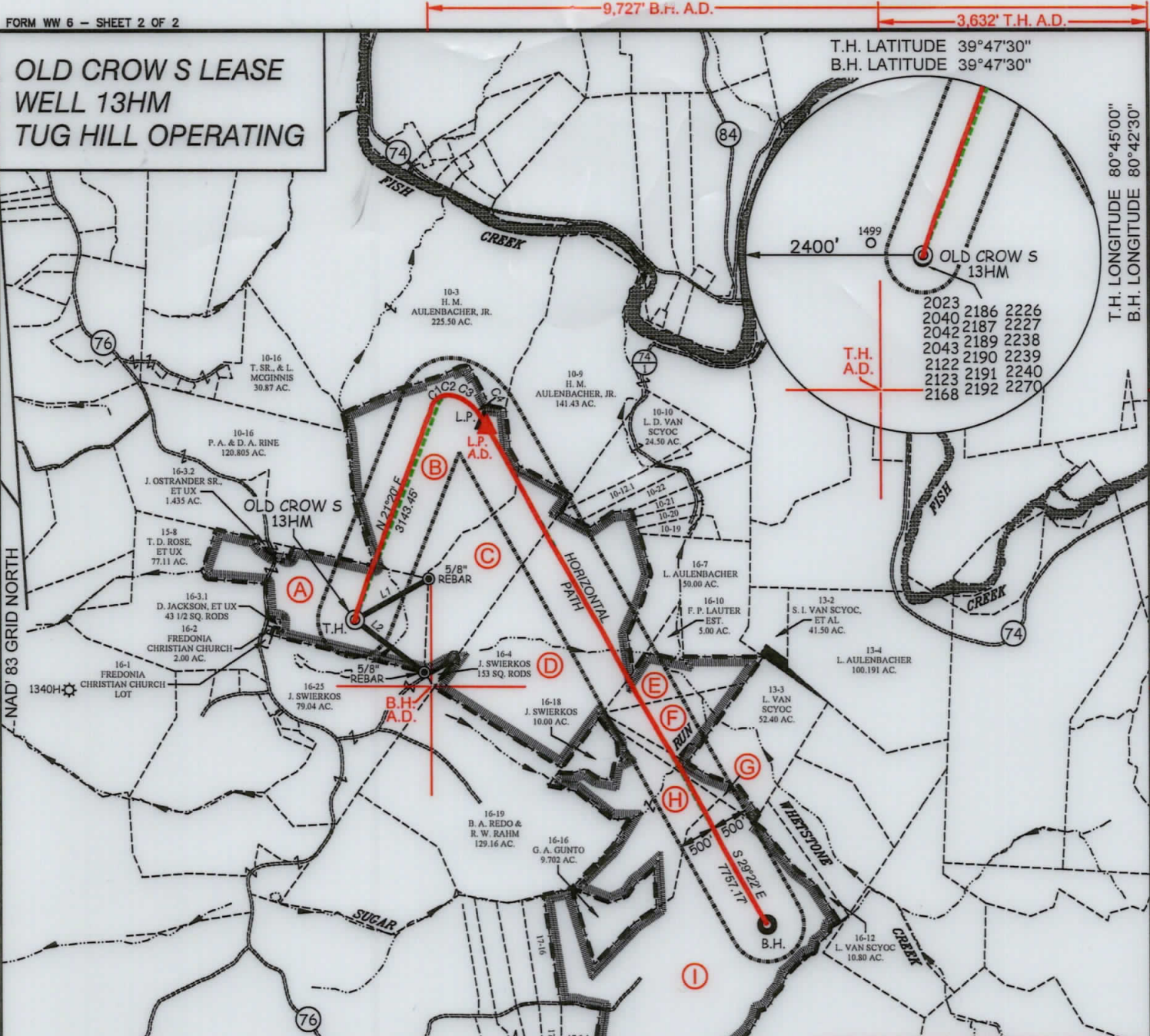
08/27/2021

**OLD CROW S LEASE
WELL 13HM
TUG HILL OPERATING**

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

T.H. LONGITUDE 80°45'00"
B.H. LONGITUDE 80°42'30"

NAD'83 GRID NORTH



CURVE	ARC LENGTH	RADIUS	CHORD BEARING	CHORD LENGTH
C1	138.03'	187.25'	N 43°03' E	134.93'
C2	112.35'	196.39'	N 84°33' E	110.83'
C3	221.47'	453.61'	S 62°53' E	219.28'
C4	342.81'	966.18'	S 39°07' E	341.02'

AS DRILLED COORDINATES FOR WELL NO. 13HM

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

NAD'83 S.P.C.(FT)	N. 468,130.93	E. 1,613,566.48
NAD'83 GEO.	LAT-(N) 39.778409	LONG-(W) 80.762922
NAD'83 UTM (M)	N. 4,403,190.10	E. 520,302.21

LANDING POINT

NAD'83 S.P.C.(FT)	N. 470,743.8	E. 1,615,361.4
NAD'83 GEO.	LAT-(N) 39.785650	LONG-(W) 80.756666
NAD'83 UTM (M)	N. 4,403,995.3	E. 520,835.8

BOTTOM HOLE

NAD'83 S.P.C.(FT)	N. 464,046.3	E. 1,619,127.4
NAD'83 GEO.	LAT-(N) 39.767409	LONG-(W) 80.742936
NAD'83 UTM (M)	N. 4,401,974.0	E. 522,017.2

12 Vanhorn Drive | P.O. Box 150 | Glenville, 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
slswv.com

LEGEND

AS DRILLED ——— (Red line)
PROPOSED - - - - - (Green dashed line)

LINE	BEARING	DISTANCE
L1	N 61°08' E	1138.55'
L2	S 53°02' E	1168.22'

TAG	SURFACE OWNER	PARCEL	ACRES
A	DONNA VIVIAN YOHO (TOD) GARY LANCE YOHO	5-16-3	71.205
B	JOHN SWIERKOS	5-10-14	100.00
C	JOHN SWIERKOS	5-16-5	52.07
D	JOHN SWIERKOS	5-16-6	134.05
E	LOUIS AULENBACHER	5-16-8	21.00
F	LOUIS AULENBACHER	5-16-9	20.00
G	GERTRUDE HOLTZ	5-16-11	9.93
H	CARA DAVIS & BRIAN TESLOVICH, ET AL	5-16-17	55.34
I	SOUTHERN COUNTRY FARMS, INC.	5-17-3	190.132

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

NAD'83 S.P.C.(FT)	N. 468,130.93	E. 1,613,566.48
NAD'83 GEO.	LAT-(N) 39.778409	LONG-(W) 80.762922
NAD'83 UTM (M)	N. 4,403,190.10	E. 520,302.21

LANDING POINT

NAD'83 S.P.C.(FT)	N. 470,803.7	E. 1,615,322.4
NAD'83 GEO.	LAT-(N) 39.785813	LONG-(W) 80.756808
NAD'83 UTM (M)	N. 4,404,013.3	E. 520,823.6

BOTTOM HOLE

NAD'83 S.P.C.(FT)	N. 464,043.1	E. 1,619,126.0
NAD'83 GEO.	LAT-(N) 39.767400	LONG-(W) 80.742941
NAD'83 UTM (M)	N. 4,401,973.0	E. 522,016.8



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

P.S. 849 *C. Victor Moyers*

LEGEND

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

08/27/2021

SCALE 1" = 2000' FILE NO. 8796P13HMAD.dwg
OLD CROW NORTH 13HM REV0

DATE JUNE 10, 2020
REVISED _____, 20____

OPERATORS WELL NO. OLD CROW S-13HM

API WELL NO. 47 — 051 — 2168
STATE COUNTY PERMIT

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

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