

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 and Gas

JUN 10 2020

WV Department of
Environmental Protection

API 47 - 051 - 02037 County Marshall District Franklin
Quad New Martinsville 7.5' Pad Name Lily Field/Pool Name _____
Farm name Ula F. Nelson Well Number Weller 5HM
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 4,398,632.84 Easting 516,586.68
Landing Point of Curve Northing 4,397,687.16 Easting 516,818.50
Bottom Hole Northing 4,396,177.96 Easting 517,691.43

Elevation (ft) 1272.6' 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 6/14/2018 Date drilling commenced 2/16/2019 Date drilling ceased 3/1/2019
Date completion activities began 4/28/2019 Date completion activities ceased 9/10/2019
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 70' Open mine(s) (Y/N) depths N
Salt water depth(s) ft 1595' Void(s) encountered (Y/N) depths N
Coal depth(s) ft N Cavern(s) encountered (Y/N) depths N
Is coal being mined in area (Y/N) N

Reviewed by:
Jim Nicholas
6/22/2020

API 47-051 - 02037 Farm name Ula F. Nelson Well number Weller 5HM

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"	1,007'	NEW	54.5#	N/A	Y
Coal	17 1/2"	13 3/8"	1,007'	NEW	54.5#	N/A	Y
Intermediate 1	12 1/4"	9 5/8"	2,736'	NEW	36#	N/A	Y
Intermediate 2							
Intermediate 3							
Production	8 3/4"	5 1/2"	13,426'	NEW	20#	N/A	Y
Tubing		2 3/8"	6,713'	NEW	4.7#	N/A	Y
Packer type and depth set							

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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	1048	15.6	1.19	1226	0	8
Coal	A	1048	15.6	1.19	1226	0	8
Intermediate 1	A	809	15.6	1.19	1115	0	8
Intermediate 2							
Intermediate 3							
Production	A	3150	14.5	1.17	3669	0	8
Tubing							

Drillers TD (ft) 13,449' Loggers TD (ft) n/a
 Deepest formation penetrated Marcellus Plug back to (ft) n/a
 Plug back procedure n/a

Kick off depth (ft) 6,779'

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 _____

**Weller 5HM
PEFORATION RECORD**

Stage No.	Perforation Date	Perforated from MD ft.	Perforated to MD. Ft.	Number of Perforations	Formation(s)
1	6/23/2019	13117	13233	48	Marcellus
2	6/24/2019	12977	13094	48	Marcellus
3	6/24/2019	12838	12954	48	Marcellus
4	6/25/2019	12698	12814	48	Marcellus
5	6/25/2019	12558	12674	48	Marcellus
6	6/26/2019	12418	12534	48	Marcellus
7	6/26/2019	12279	12395	48	Marcellus
8	6/26/2019	12139	12255	48	Marcellus
9	6/27/2019	12000	12115	48	Marcellus
10	6/27/2019	11860	11976	48	Marcellus
11	6/27/2019	11720	11836	48	Marcellus
12	6/28/2019	11581	11696	48	Marcellus
13	6/28/2019	11441	11556	48	Marcellus
14	6/28/2019	11302	11417	48	Marcellus
15	6/29/2019	11162	11277	48	Marcellus
16	6/29/2019	11022	11137	48	Marcellus
17	6/30/2019	10883	10998	48	Marcellus
18	6/30/2019	10743	10858	48	Marcellus
19	7/1/2019	10604	10718	48	Marcellus
20	7/1/2019	10464	10579	48	Marcellus
21	7/2/2019	10324	10439	48	Marcellus
22	7/2/2019	10185	10299	48	Marcellus
23	7/2/2019	10045	10159	48	Marcellus
24	7/3/2019	9906	10020	48	Marcellus
25	7/3/2019	9766	9880	48	Marcellus
26	7/4/2019	9626	9740	48	Marcellus
27	7/5/2019	9487	9601	48	Marcellus
28	7/5/2019	9347	9461	48	Marcellus
29	7/6/2019	9208	9321	48	Marcellus
30	7/6/2019	9068	9182	48	Marcellus
31	7/6/2019	8928	9042	48	Marcellus
32	7/7/2019	8789	8902	48	Marcellus
33	7/7/2019	8649	8762	48	Marcellus
34	7/7/2019	8510	8623	48	Marcellus
35	7/7/2019	8370	8483	48	Marcellus
36	7/8/2019	8230	8343	48	Marcellus
37	7/8/2019	8091	8204	48	Marcellus
38	7/8/2019	7951	8064	48	Marcellus
39	7/8/2019	7812	7924	48	Marcellus
40	7/8/2019	7672	7785	48	Marcellus
41	7/9/2019	7532	7645	48	Marcellus

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Weller 5HM
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	88.4	7005	4739	3920	350510	6939	291446
2	89.1	7180	5341	3984	349960	6683	280698
3	87.1	7242	5224	4457	350015	7048	296018
4	88.8	7406	5143	4396	350675	6842	287355
5	89.3	7179	5253	4798	361360	7260	304906
6	89.5	7118	5130	4207	344530	6659	279691
7	87.5	6830	5174	4300	346440	6814	286178
8	83.9	7116	5044	4892	349590	6830	286874
9	85.8	6821	5211	4693	350610	6760	283904
10	87.8	6878	5106	4678	351225	6899	289759
11	89.5	7062	5170	4579	351350	6713	281935
12	88.9	7057	5202	4808	351555	6512	273523
13	87.1	6856	5453	4323	350970	7091	297808
14	87.3	6853	5754	4737	353070	6956	292150
15	88.4	6923	5176	4954	351535	6964	292472
16	89.4	7011	5784	4126	350245	6616	277879
17	86.5	6929	5725	4248	351570	7565	317711
18	88.6	6725	5448	4542	350935	7028	295156
19	88.8	6716	5397	4468	350420	8104	340365
20	89.5	6519	5048	4777	360980	7908	332145
21	89.7	6517	5929	4609	352375	7425	311832
22	87.6	6487	5678	4861	352145	7865	330314
23	89.2	6666	5894	4686	352385	7863	330246
24	87.5	6681	3923	4380	349785	7785	326982
25	89.5	6614	5112	4771	349410	7856	329945
26	87.7	6471	5924	4975	351070	7785	326980
27	89.7	6739	5478	4442	347795	7511	315463
28	89.1	6550	5349	4564	351620	7436	312292
29	89.5	6700	5757	4562	351205	8006	336243
30	87.2	6504	5858	4792	351480	7919	332608
31	88.1	6623	5031	4718	352945	7840	329274
32	89.8	6369	4727	4608	352255	7486	314421
33	89.3	6338	4563	4023	349355	7399	310751

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34	89.4	6308	5375	4315	349405	6546	274915
35	89.4	6429	5055	4354	347295	6564	275667
36	89.3	6545	5200	4387	349770	7032	295336
37	87.7	6385	5170	4534	350825	7116	298870
38	87.5	6250	4714	4268	351950	7663	321825
39	87.1	6238	5570	4829	351655	7554	317272
40	89.4	6418	5018	4823	351155	7300	306610
41	89.7	6290	5355	4414	347380	7231	303692

WELLER 5HM

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	1958	2053	1962	2059	Sandstone
Big Lime	2053	2108	2059	2116	Limestone
Big Injun	2108	2410	2116	2430	Sandstone
Weir	2410	2593	2430	2622	Sandstone
Berea	2593	2903	2622	2962	Sandstone
Gordon	2903	2963	2962	3032	Sandstone
Fifty Foot	2963	3541	3032	3715	Sandstone
Speechley	3541	4932	3715	5364	Sandstone
Benson	4932	5308	5364	5808	Sandstone
Alexander	5308	5898	5808	6513	Siltstone
Rhinestreet	5898	5931	6513	6553	Black shale
Middlesex	5931	6031	6553	6672	Black shale
Geneseo/Burkett	6031	6074	6672	6723	Black shale
Tully	6074	6123	6723	6781	Limestone
Hamilton	6123	6198	6781	6873	Grey shale
Marcellus	6198	-	6873	-	Black shale

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Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	6/23/2019
Job End Date:	7/9/2019
State:	West Virginia
County:	Marshall
API Number:	47-051-02037-00-00
Operator Name:	Tug Hill Operating, LLC
Well Name and Number:	Weller 5HM
Latitude:	39.73743000
Longitude:	-80.80642285
Datum:	NAD83
Federal Well:	NO
Indian Well:	NO
True Vertical Depth:	6,559
Total Base Water Volume (gal):	12,745,577
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
Fresh Water	Operator	Base Fluid					
			Water	7732-18-5	100.00000	87.76156	Density = 8.330
Ingredients	Listed Above	Listed Above					
			Water	7732-18-5	100.00000	0.21991	

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Product Name	Manufacturer	Category	Regulatory Status	Other Information	Other Information	Other Information	Other Information	Other Information
HYDROCHLORIC ACID	Halliburton	Solvent	Listed Below					
FDP S1296-17	Halliburton	Corrosion Inhibitor	Listed Below					
SAND-COMMON WHITE-100 MESH	Halliburton	Proppant	Listed Below					
LD-2950	Multi-chem	Friction Reducer	Listed Below					
SAND-PREMIUM WHITE-40/70, BULK	Halliburton	Proppant	Listed Below					
SAND-PREMIUM WHITE-30/50, BULK	Halliburton	Proppant	Listed Below					
MC MX 8-4743	Multi-chem	Biocide	Listed Below					
Legend LD-7750W	Multi-chem	Scale Inhibitor	Listed Below					

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OILPERM A	Halliburton	Non-ionic Surfactant							
				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	11.89560			
			Hydrochloric acid	7647-01-0	15.00000	0.03299			
			Sodium Nitrate	7631-99-4	60.00000	0.02330			
			Hydrotreated light petroleum distillate	64742-47-8	30.00000	0.02206			
			Methanol	67-56-1	100.00000	0.00617			
			Ethoxylated alcohol	Proprietary	5.00000	0.00368			Denise Tuck, Halliburton, 3000 N. Sam Houston Pkwy E., Houston, TX 77032, 281-871-6226
			Poly(oxy-1,2-ethanediyl),alpha-tridecyl-omega-hydroxy-, branched	69011-36-5	5.00000	0.00368			
			Ethanol	64-17-5	60.00000	0.00049			
			Phosphonic Acid Salt	Proprietary	5.00000	0.00045			
			Oxyalkylated phenolic resin	Proprietary	30.00000	0.00032			
			Heavy aromatic petroleum naphtha	64742-94-5	30.00000	0.00024			
			Modified thiourea polymer	Proprietary	30.00000	0.00023			
			Poly(oxy-1,2-ethanediyl), alpha-(4-nonylphenyl)-omega-hydroxy-, branched	127087-87-0	5.00000	0.00004			
			Naphthalene	91-20-3	5.00000	0.00004			
			Ethoxylated alcohols	Proprietary	5.00000	0.00004			
			Propargyl alcohol	107-19-7	5.00000	0.00004			
			1,2,4 Trimethylbenzene	95-63-6	1.00000	0.00001			

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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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Well: Weller 5 HM (B)
Site: Lily/Weller
Project: Marshall County, West Virginia.
Design: rev1
Rig: Nabors B28

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	VFace	VSSect	Annotation
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	1426.00	0.00	0.00	1426.00	0.00	0.00	0.00	0.00	0.00	KOP Begin 2'100' build
3	1926.00	0.00	0.00	1926.00	0.00	0.00	0.00	0.00	0.00	Begin 2'100' build/tum
4	3185.87	20.06	167.48	3054.26	-18.39	2.00	205.00	28.40	0.00	Begin 32.46° tangent
5	5879.65	32.46	167.48	5710.67	-475.71	9.14	2.00	437.45	0.00	Begin 8'100' build/tum
6	7108.95	80.00	150.00	6580.77	-2554.59	484.04	8.00	-20.64	2527.82	Begin 10'100' build/tum
7	7507.56	89.00	150.00	6526.00	-2883.33	544.63	10.00	-14.36	2883.56	Begin 89.00° lateral
8	13477.59	89.00	150.00	6624.00	-8052.54	3629.14	0.00	0.00	8832.56	PBHL/TD 13477.59 MD/6624.00 TVD

Geodetic System: Universal Transverse Mercator (US Survey Feet)
 Datum: NAD83 West Virginia - HARR
 Ellipsoid: GRS 1980
 Zone: Zone 17N (84 W to 78 W)

System Datum: Mean Sea Level
 Depth Reference: RKB=1273+26 @ 1299.00ust (Nabors B28)

Northing: 14431181.14
 Easting: 1694835.22
 Longitude: 39.73742745
 Latitude: -80.80642285

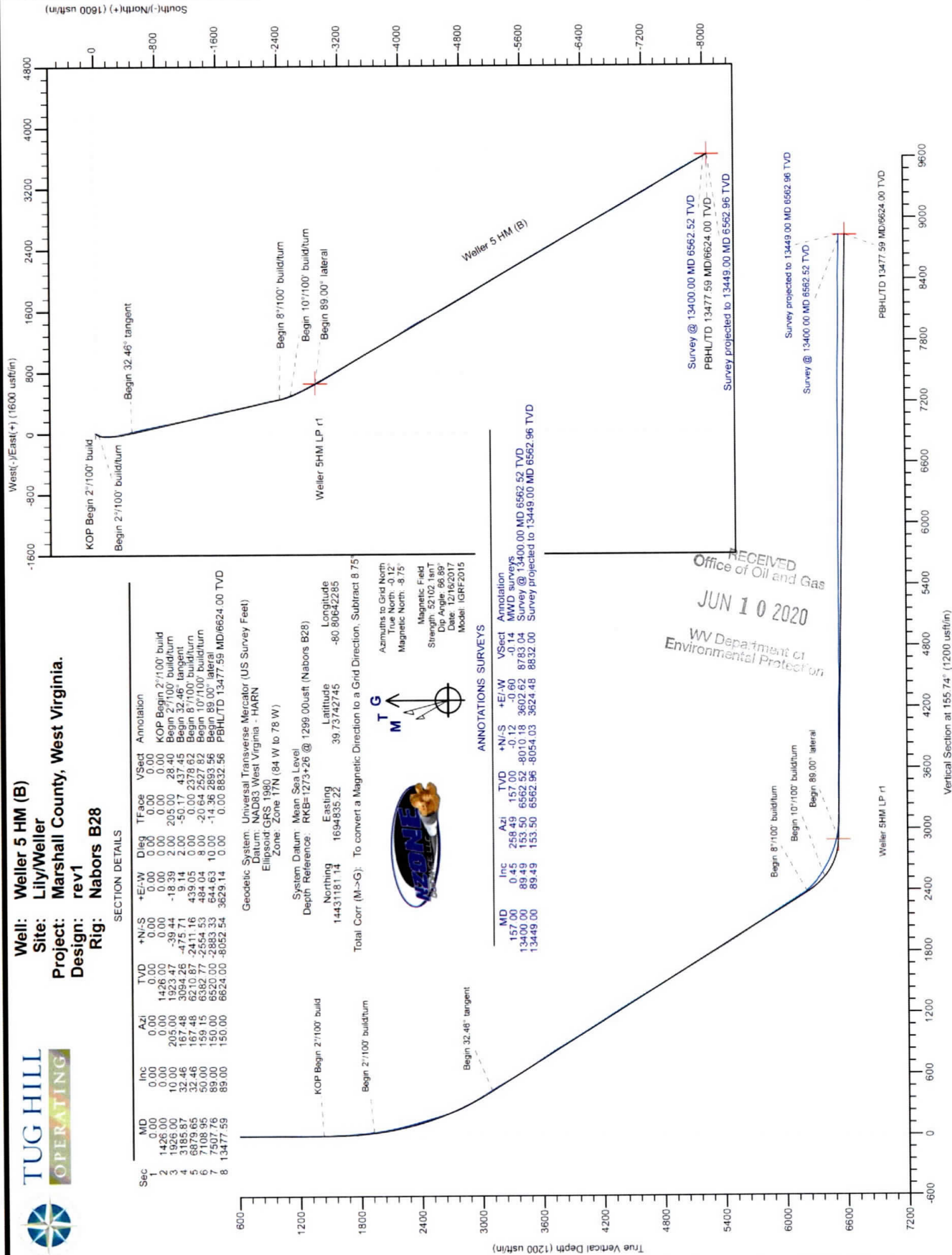
Total Corr (M->G): To convert a Magnetic Direction to a Grid Direction, Subtract 8.75°



Azimuths to Grid North
 True North: -0.12°
 Magnetic North: -8.75°
 Magnetic Field
 Strength: 52102.1nT
 Dip Angle: 66.89°
 Date: 12/16/2017
 Model: IGRF2015

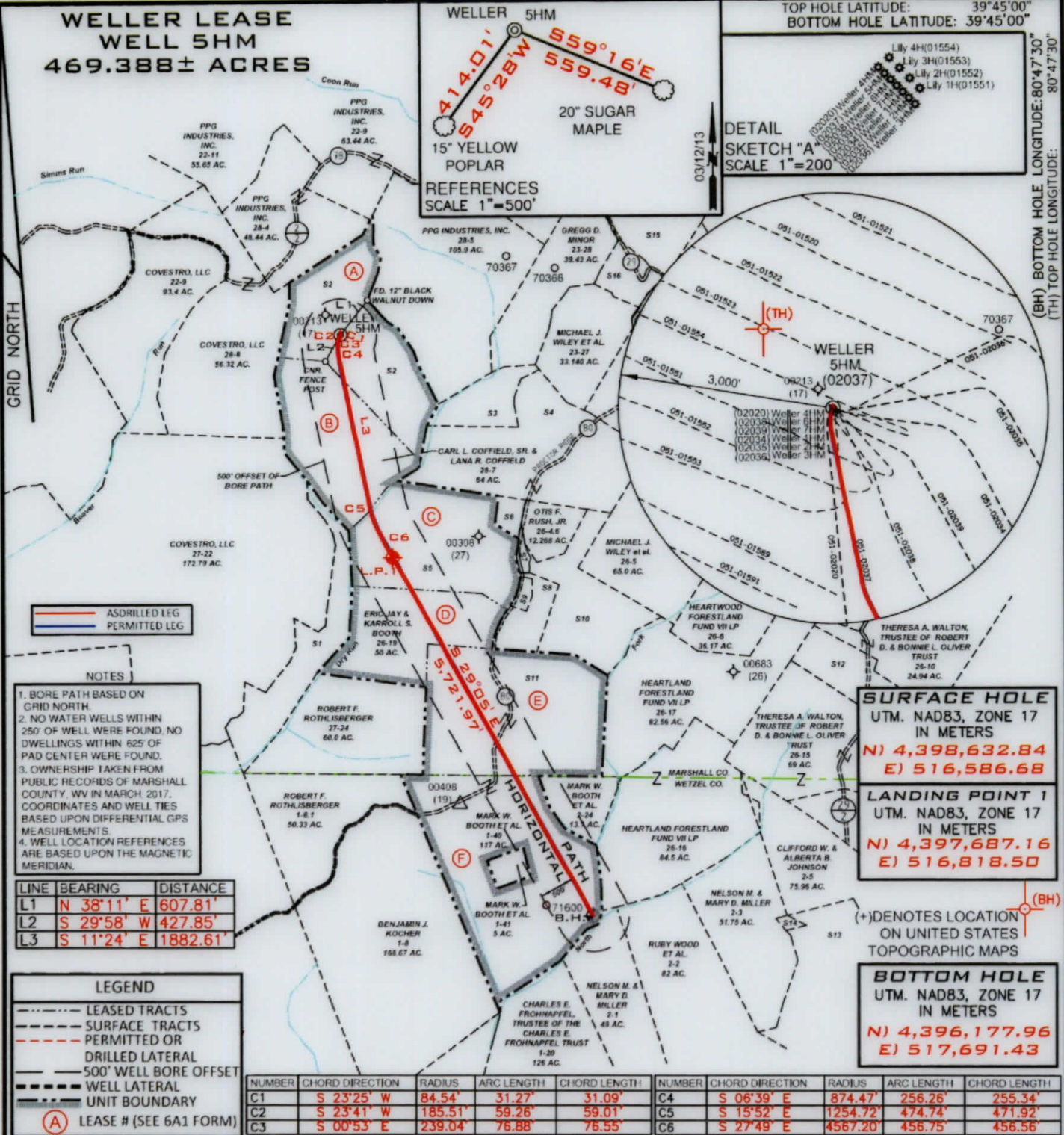
ANNOTATIONS SURVEYS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Vsect	Annotation
157.00	0.45	258.49	157.00	-0.12	-0.60	-0.14	MWD surveys
13400.00	89.49	153.50	6562.52	-8010.18	3602.62	8783.04	Survey @ 13400.00 MD 6562.52 TVD
13449.00	89.49	153.50	6562.96	-8054.03	3624.48	8832.00	Survey projected to 13449.00 MD 6562.96 TVD



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**WELLER LEASE
WELL 5HM
469.388± ACRES**



FILE NUMBER _____

DRAWING NUMBER WELLER_WP_5HM

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 1272.6' WATERSHED (HUC 10) French Creek - Ohio River

DISTRICT Franklin COUNTY Marshall

QUADRANGLE New Martinsville 7 1/2' LEASE NUMBER SEE WW-6A1 Royalty Owners

SURFACE OWNER Ula F. Nelson ACREAGE 70.0

OIL & GAS ROYALTY OWNER Ula F. Nelson - See WW-6A1 Royalty Owners LEASE ACREAGE 70.0

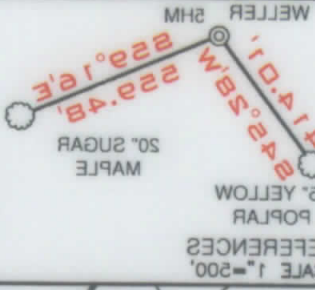
PROPOSED WORK: DRILL ___ CONVERT ___ DRILL DEEPER ___ REDRILL ___ FRACTURE OR STIMULATE ___ PLUG OFF OLD FORMATION ___
PERFORATE NEW FORMATION ___ OTHER PHYSICAL CHANGE (SPECIFY) AS-DRILLED

TARGET FORMATION MARCELLUS ESTIMATED DEPTH TVD: 6,562.96' TMD: 13,449'

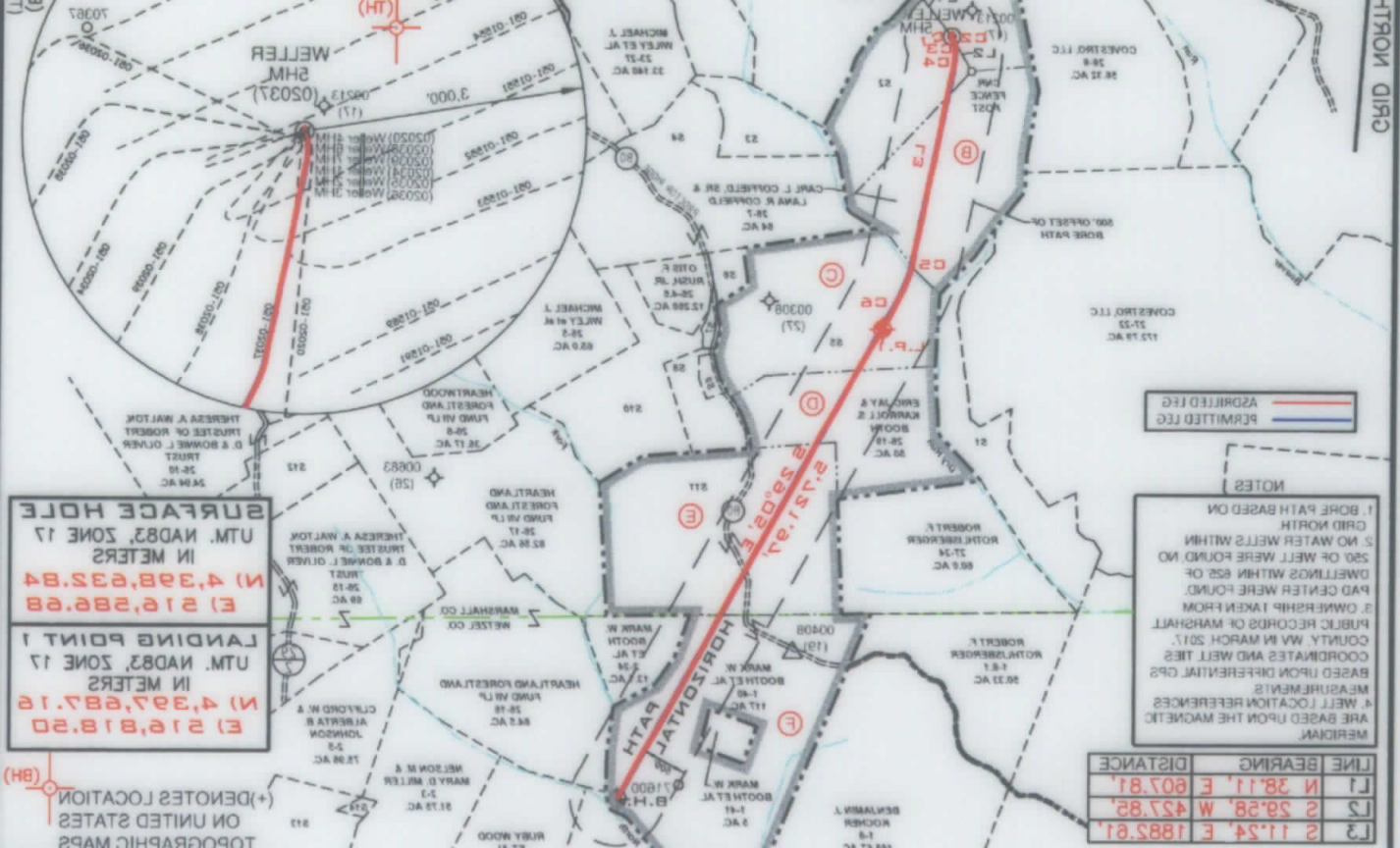
WELL OPERATOR TUG HILL OPERATING, LLC DESIGNATED AGENT DIANNA STAMPER
ADDRESS 1320 SOUTH UNIVERSITY DRIVE, SUITE 500 ADDRESS 5400 D BIG TYLER ROAD
FORT WORTH, TX 76107 CHARLESTON, WV 25313

COUNTY NAME _____ PERMIT _____

WELLER LEASE WELL 5HM 469.388± ACRES



TOP HOLE LATITUDE: 39.4250°
 BOTTOM HOLE LATITUDE: 39.4250°
 (LH) 4.136'
 (RH) 289'



NOTES

- BORER PATH BASED ON GRID NORTH
- NO WATER WELLS WITHIN 250' OF WELL WERE FOUND OR DWELLINGS WITHIN 625' OF PAD CENTER WERE FOUND.
- OWNERSHIP TAKEN FROM PUBLIC RECORDS OF MARSHALL COUNTY, WA IN MARCH 2017. COORDINATES AND WELL DEPTHS BASED UPON DIFFERENTIAL GPS MEASUREMENTS.
- WELL LOCATION REFERENCES ARE BASED UPON THE MAGNETIC MERIDIAN.

LINE	BEARING	DISTANCE
L1	N 38.11' E 607.81'	
L2	S 29.28' W 427.82'	
L3	S 11.24' E 1882.81'	

LEGEND

- LEASED TRACTS
- - - SURFACE TRACTS
- - - PERMITTED OR DRILLED LATERAL
- - - 200' WELL BORE OFFSET
- - - WELL LATERAL
- - - UNIT BOUNDARY
- (A) LEASE # (SEE 6A1 FORM)

BOTTOM HOLE
 UTM. NAD83, ZONE 17
 IN METERS
 (N) 4,398,177.99
 (E) 217,691.43

LANDING POINT 1
 UTM. NAD83, ZONE 17
 IN METERS
 (N) 4,397,887.16
 (E) 216,818.20

SURFACE HOLE
 UTM. NAD83, ZONE 17
 IN METERS
 (N) 4,398,632.84
 (E) 216,286.68

(+) DENOTES LOCATION ON UNITED STATES TOPOGRAPHIC MAPS

NUMBER	CHORD DIRECTION	RADIUS	ARC LENGTH	CHORD LENGTH
C1	S 23.25' W 84.54'	31.37'	31.09'	252.24'
C2	S 23.41' W 182.51'	29.01'	29.01'	471.92'
C3	S 00.23' E 129.04'	78.88'	78.22'	426.28'
C4	S 08.30' E 874.47'	256.28'	256.28'	252.24'

I, THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAN 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

David S Jackson



JACKSON SURVEYING INC.
 P.O. Box 1460
 Clarkburg, WV 25805
 304-823-0881



FILE NUMBER	WELLER_WP_5HM
DRAWING NUMBER	1" = 2000'
SCALE	1/200
MINIMUM DEGREE OF ACCURACY	
PROVEN SOURCE OF ELEVATION	SUBMETER MAPPING
GRADE GPS	

WVDEP OFFICE OF OIL & GAS 601 27TH STREET, SE CHARLESTON, WV 25304

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

LOCATION ELEVATION 1275.6' WATERSHED (HUC TO) French Creek - Ohio River

DISTRICT Franklin COUNTY Marshall

QUADRANGLE New Martinsville 7 1/2' LEASE NUMBER SEE WW-6A1 Royalty Owners

SURFACE OWNER Ulf F. Nelson ACREAGE 70.0
 OIL & GAS ROYALTY OWNER Ulf F. Nelson - See WW-6A1 Royalty Owners LEASE ACREAGE 70.0

PROPOSED WORK: DRILL CONVERT DRILL DEEPER REDRILL FRACTURE OR STIMULATE PLUG OFF OLD FORMATION

PERFORM NEW FORMATION OTHER PHYSICAL CHANGE (SPECIFY) A2-DRILLED

PLUG & ABANDON CLEAN OUT & REPLUG

TARGET FORMATION MARCELLUS
 ESTIMATED DEPTH TVD: 6,262.96', TMD: 13,449'

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 76102 CHARLESTON, WV 25313

DATE: April 14, 2020
 OPERATORS WELL NO. WELLER 5HM
 API WELL NO. 47-051-02037
 STATE WEST VIRGINIA COUNTY MARSHALL PERMIT 02037

**WELLER LEASE
WELL N-5HM
469.388± ACRES**

Number	TAX MAP-PARCEL	SURFACE OWNERS	ACRES
S1	27-23	ROBERT F. ROTH LISBERGER	35.77
S2	28-6	ULA F. NELSON	70.00
S3	26-1	EDWIN BOOTH ANDERSON & MARK W. ANDERSON	12.94
S4	26-2	EDWIN BOOTH ANDERSON & MARK W. ANDERSON	67.50
S5	26-4.5	ERIC JAY BOOTH	74.388
S6	26-4	JAMES R. & MELODY A. ANDERSON	3.887
S7	26-4.2	OTIS S. & GLENDA RUSH	1.58
S8	26-4.1	OTIS S. RUSH ET UX.	12.188
S9	26-4.3	CRYSTAL & RANDOPH F. MATASK	2.253
S10	26-4.4	OTIS F. & GLENDA M. RUSH	39.436
S11	26-18	ERIC JAY BOOTH	94.00
S12	26-14	THERESA A. WALTON, TRUSTEE OF ROBERT D. & BONNIE L. OLIVER TRUST	27.56
S13	2-4	EDITH SALEM & LISA G. LARSON	56.25
S14	2-4.1	TYRONE SULTZBACH & RICHARD WOLF	1.00
S15	23-1	PATRICIA ACCETTOLO ET AL.	146.66
S16	23-28.2	MARK W. TENNANT ET AL.	10.80

SURFACE HOLE
UTM. NAD83, ZONE 17
IN METERS
N) 4,398,632.81
E) 516,586.81

LANDING POINT 1
UTM. NAD83, ZONE 17
IN METERS
N) 4,397,753.98
E) 516,783.30

BOTTOM HOLE
UTM. NAD83, ZONE 17
IN METERS
N) 4,396,178.39
E) 517,692.97



David L Jackson

P.S.
708



TUG HILL
OPERATING

OPERATOR'S
API #: 47-051-02037
WELL #: Weller 5HM
DISTRICT: Franklin
COUNTY: Marshall
STATE: WV

WELL PLAT
PAGE 2 OF 2
DATE: 04/14/2020