

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

API 47 - 051 - 01998 County Marshall District Franklin
Quad Powhatan Point Pad Name Corley Field/Pool Name _____
Farm name Corley, James A. and Jill C. Well Number Corley N-10HU
Operator (as registered with the OOG) Tug Hill Operating, LLC
Address 1320 S. University Drive, Suite 215 City Ft. Worth State TX Zip 76107

As Drilled location NAD 83/UTM Attach an as-drilled plat, profile view, and deviation survey
Top hole Northing 4,400,363.60 Easting 520,291.14
Landing Point of Curve Northing 4,400,037.29 Easting 520,740.96
Bottom Hole Northing 4,402,629.22 Easting 519,266.59

Elevation (ft) 1255.4' 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

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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 4/9/2018 Date drilling commenced 4/13/2018 Date drilling ceased 11/30/2018
Date completion activities began 12/21/2018 Date completion activities ceased 2/23/2019
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 1,073' Open mine(s) (Y/N) depths N
Salt water depth(s) ft 1,595' Void(s) encountered (Y/N) depths N
Coal depth(s) ft 974 - 980', 1064 - 1072' Cavern(s) encountered (Y/N) depths N
Is coal being mined in area (Y/N) N

Reviewed by:
Juan Velasco
7/27/2020

API 47-051 - 01998 Farm name Corley, James A. and Jill C. Well number Corley N-10HU

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	BW	N/A	Y
Surface	28"	20"	1,008'	NEW	106.5#	N/A	Y
Coal							
Intermediate 1	17 1/2"	13 3/8"	2,832'	NEW	54.5#	N/A	Y
Intermediate 2	12 1/4"	9 5/8"	10,727'	NEW	47#	N/A	Y
Intermediate 3							
Production	8 3/4"	5 1/2"	22,120'	NEW	23#	N/A	Y
Tubing		2 3/8"	11,060'	NEW	6.5#	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	1.2		0	8
Surface	A	1747	15.6	1.2	2075	0	8
Coal							
Intermediate 1	A	1992	15.6	1.19	2496	0	8
Intermediate 2	A	2412	14.5	1.19	4391	0	8
Intermediate 3							
Production	A	4883	16.5	1.17	5467	0	8
Tubing							

Drillers TD (ft) 22,141' Loggers TD (ft) n/a
 Deepest formation penetrated Point Pleasant Plug back to (ft) n/a
 Plug back procedure n/a

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Kick off depth (ft) 10,790'

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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 third joint.

Production - 1 centralizer every third joint in lateral, one centralizer every joint through curve, one centralizer every third 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 _____

**Corley N-10HU
PEFORATION RECORD**

Stage No.	Perforation Date	Perforated from MD ft.	Perforated to MD. Ft.	Number of Perforations	Formation(s)
1	12/23/2018	21,972	22,020	24	Utica
2	12/25/2018	21,702	21,852	48	Utica
3	12/26/2018	21,502	21,652	48	Utica
4	12/28/2018	21,302	21,452	48	Utica
5	12/28/2018	21,102	21,252	48	Utica
6	12/29/2018	20,902	21,052	48	Utica
7	12/29/2018	20,702	20,852	48	Utica
8	12/30/2018	20,502	20,652	48	Utica
9	12/31/2018	20,302	20,452	48	Utica
10	12/31/2018	20,102	20,252	48	Utica
11	12/31/2018	19,902	20,052	48	Utica
12	1/1/2019	19,702	19,852	48	Utica
13	1/1/2019	19,502	19,652	48	Utica
14	1/2/2019	19,302	19,452	48	Utica
15	1/2/2019	19,102	19,252	48	Utica
16	1/3/2019	18,902	19,052	48	Utica
17	1/3/2019	18,702	18,852	48	Utica
18	1/3/2019	18,502	18,652	48	Utica
19	1/4/2019	18,302	18,452	48	Utica
20	1/4/2019	18,102	18,252	48	Utica
21	1/5/2019	17,902	18,052	48	Utica
22	1/5/2019	17,702	17,852	48	Utica
23	1/5/2019	17,502	17,652	48	Utica
24	1/6/2019	17,302	17,452	48	Utica
25	1/6/2019	17,102	17,252	48	Utica
26	1/7/2019	16,902	17,052	48	Utica
27	1/7/2019	16,702	16,852	48	Utica
28	1/8/2019	16,502	16,652	48	Utica
29	1/8/2019	16,302	16,452	48	Utica
30	1/8/2019	16,102	16,252	48	Utica
31	1/9/2019	15,902	16,052	48	Utica
32	1/9/2019	15,702	15,852	48	Utica
33	1/10/2019	15,502	15,652	48	Utica
34	1/10/2019	15,302	15,452	48	Utica
35	1/10/2019	15,102	15,252	48	Utica
36	1/11/2019	14,902	15,052	48	Utica
37	1/12/2019	14,702	14,852	48	Utica
38	1/12/2019	14,502	14,652	48	Utica
39	1/13/2019	14,302	14,452	48	Utica
40	1/13/2019	14,102	14,252	48	Utica
41	1/14/2019	13,902	14,052	48	Utica

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Stage No.	Perforation Date	Perforated from MD ft.	Perforated to MD. Ft.	Number of Perforations	Formation(s)
42	1/14/2019	13,702	13,852	48	Utica
43	1/14/2019	13,502	13,652	48	Utica
44	1/15/2019	13,302	13,452	48	Utica
45	1/15/2019	13,102	13,252	48	Utica
46	1/15/2019	12,902	13,052	48	Utica
47	1/16/2019	12,702	12,852	48	Utica
48	1/16/2019	12,502	12,652	48	Utica
49	1/16/2019	12,302	12,452	48	Utica

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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	81.8	11234	NA	22526	395400	12738	0
2	78.8	11913	8306	23008	506865	11433	0
3	80.1	12031	8060	23631	506605	11157	0
4	81.1	12034	8579	23912	507445	11522	0
5	85.1	10907	7849	22747	493805	11145	0
6	85.5	10884	7976	22806	520260	11472	0
7	83.3	10582	8143	21602	494000	12505	0
8	83.3	10493	7875	21426	485970	11211	0
9	83.5	10435	8290	21346	506250	11187	0
10	82.7	10368	8483	21005	508630	11425	0
11	82.9	11018	9005	22384	506740	9303	0
12	82.7	10833	8959	21966	507995	11468	0
13	80.5	10724	9001	21162	493375	11139	0
14	83.2	11115	7899	22660	487375	11114	0
15	82.5	10690	8087	21621	492825	10820	0
16	83.4	10428	9332	21314	511405	10655	0
17	80.1	10302	9270	20220	506355	10739	0
18	82.2	10273	9376	20687	505835	9962	0
19	83.1	10458	7150	21293	508390	10397	0
20	82.1	10622	8076	21361	505570	10076	0
21	83	10143	9755	20642	506365	10112	0
22	80.2	10228	8383	20105	510180	10036	0
23	80.3	10182	7938	20027	513110	10161	0
24	83.1	10281	8118	20942	510045	11274	0
25	83.1	10219	8631	20806	507895	10760	0
26	83	10294	99029	20946	508005	9830	0
27	83	10415	99128	21185	511785	9836	0
28	83	10214	7438	20776	506020	9921	0
29	83.2	10352	7960	21120	504570	10021	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)
30	83.4	10258	9276	20979	509350	10039	0
31	83.1	10409	8591	21211	508940	10139	0
32	83.2	10397	8456	21199	511190	11391	0
33	83.6	10047	8735	20579	504820	9930	0
34	80.8	10289	7887	20369	501800	9892	0
35	84	10492	8721	21609	507130	11050	0
36	81.9	10548	7895	21166	505495	10215	0
37	83.4	10415	9469	21289	511525	10104	0
38	84	10358	8891	21313	509105	10025	0
39	84	9952	7734	20480	511225	10244	0
40	83.1	10212	8483	20794	507955	10249	0
41	84.2	10042	8203	20719	507225	10025	0
42	85.1	10145	7948	21160	510865	10180	0
43	83.7	9931	9070	20378	506525	8856	0
44	83.3	9841	7838	20099	512305	8911	0
45	83	10002	7904	20350	504795	8853	0
46	83.6	10050	8293	20595	510955	8885	0
47	83.7	9991	8510	20491	510035	8962	0
48	83.1	9961	7566	20288	510870	8779	0
49	82.9	9593	7672	19492	516310	8773	0

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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	2005	2099	2006	2100	Sandstone
Big Lime	2099	2141	2100	2142	Limestone
Big Injun	2141	2458	2142	2460	Sandstone
Weir	2458	2637	2460	2639	Sandstone
Berea	2637	2917	2639	2921	Sandstone
Gordon	2917	2981	2921	2985	Sandstone
Fifty Foot	2981	3581	2985	3587	Sandstone
Speechley	3581	4995	3587	5006	Sandstone
Benson	4995	5371	5006	5385	Sandstone
Alexander	5371	6003	5385	6050	Siltstone
Rhinestreet	6003	6432	6050	6525	Black shale
Middlesex	6432	6506	6525	6606	Black shale
Geneseo/Burkett	6506	6533	6606	6636	Black shale
Tully	6533	6569	6636	6675	Limestone
Hamilton	6569	6628	6675	6739	Grey shale
Marcellus	6628	6679	6739	6795	Black shale
Onondaga	6679	6911	6795	7051	Limestone
Oriskany	6911	7014	7051	7164	Sandstone
Helderberg	7014	7383	7164	7568	Limestone
Salina	7383	8429	7568	8721	Salt/Anhydrite/LS
Lockport	8429	8804	8721	9133	Dolomite
Rose Hill	8804	9075	9133	9438	Shale
Packer Shell	9075	9283	9438	9671	Limestone
Clinton/Tuscarora	9283	9386	9671	9786	Sandstone
Juniata/Queenston	9386	10220	9786	10700	Red Shale
Reedsville	10220	11156	10700	11688	Grey Shale
Utica	11156	11409	11688	12069	Black Shale
Point Pleasant	11409	-	12069	-	Shale/Limestone

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Well: Corley N-10HU (slot J)
 Site: Corley Pad
 Project: Marshall County, West Virginia.
 Design: rev5
 Rig: Precision 110

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dieg	TFace	Vsect	Annotation
1	10584.00	23.74	136.28	10113.49	-1559.34	1748.02	0.00	0.00	-2142.20	Survey @ 10584.00 MD 10113.49 TVD
2	10775.69	23.74	136.28	10288.96	-1615.12	1801.35	0.00	0.00	-2215.03	KOP Begin 6°/100' drop build/turn
3	11498.00	20.00	331.50	10992.81	-1611.47	1845.00	6.00	-172.48	-2229.74	Begin 8°/100' build/turn
4	12385.62	91.00	330.00	11464.00	-1015.48	1506.15	8.00	-1.59	-1547.00	Begin 91.00° lateral
5	22139.25	91.00	330.00	11293.36	7429.79	-3370.48	0.00	0.00	8158.55	PBHL/TD 22139.25 MD/11293.36 TVD

ANNOTATIONS SURVEYS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Vsect	Annotation
312.00	0.22	68.62	312.00	0.22	0.56	-0.03	MWD surveys
22094.00	90.77	330.66	11299.07	7391.27	-3337.86	8110.00	Survey @ 22093.00 MD 11298.17 TVD
22142.00	90.77	330.66	11298.42	7433.11	-3361.38	8157.82	Survey projected to 22141.00 MD 11297.42 TVD

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

System Datum: Mean Sea Level
 Depth Reference: RKB=1254+28 @ 1282.00usft (Precision 110)

Surface location
 Northing: 14436859.53
 Easting: 1706988.48
 Latitude: 39.75294182
 Longitude: -80.76313833

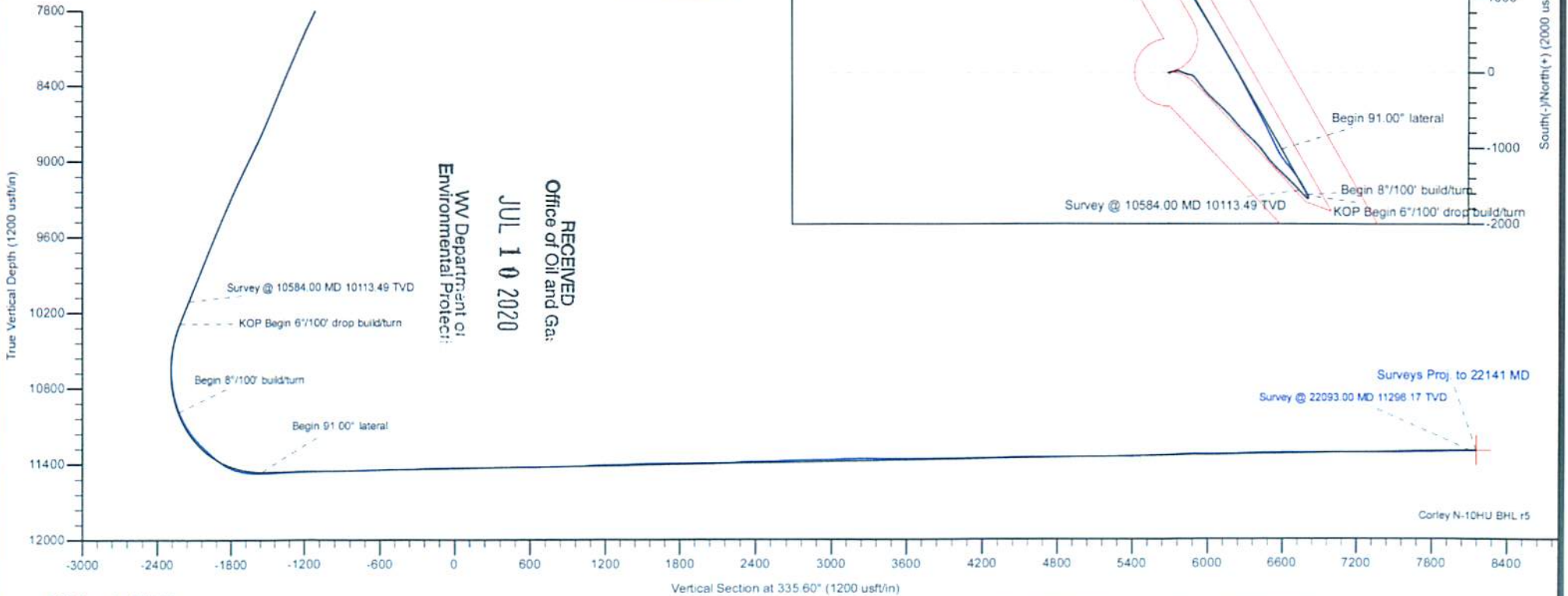


Azimuths to Grid North
 True North: -0.15°
 Magnetic North: -8.84°

Magnetic Field
 Strength: 52001.7nT
 Dip Angle: 66.82°
 Date: 11/8/2018
 Model: IGRF2015



Total Corr (M->G): To convert a Magnetic Direction to a Grid Direction, Subtract 8.84°



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Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	12/23/2018
Job End Date:	1/16/2019
State:	West Virginia
County:	Marshall
API Number:	47-051-01998-00-00
Operator Name:	Tug Hill Operating, LLC
Well Name and Number:	Corley N 10HU
Latitude:	39.75294182
Longitude:	-80.76313833
Datum:	NAD83
Federal Well:	NO
Indian Well:	NO
True Vertical Depth:	11,471
Total Base Water Volume (gal):	22,011,284
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
Fresh Water	Operator	Base Fluid					
			Water	7732-18-5	100.00000	76.05998	Density = 8.330
Produced Water	Operator	Base Fluid					
			Water	7732-18-5	100.00000	13.33965	Density = 9.000

Ingredients	Listed Above	Listed Above					
			Water	7732-18-5	100.00000	0.23210	
SAND-PREMIUM WHITE-40/70, BULK	Halliburton	Proppant					
				Listed Below			
40/70 ProLite	Imerys Oilfield Solutions	Additive					
				Listed Below			
HYDROCHLORIC ACID	Halliburton	Solvent					
				Listed Below			
SP BREAKER	Halliburton	Breaker					
				Listed Below			
WG-36 GELLING AGENT	Halliburton	Gelling Agent					
				Listed Below			
FR-A12	Halliburton	Additive					
				Listed Below			
SAND-COMMON WHITE - 100 MESH, 3307 LB BAG	Halliburton	Proppant					
				Listed Below			

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LD-2850	Multi-Chem	Friction Reducer					
				Listed Below			
OILPERM A	Halliburton	Non-ionic Surfactant					
				Listed Below			
MC MX 8-4743	Multi-Chem	Biocide					
				Listed Below			
FDP-S1296-17	Halliburton	Corrosion Inhibitor					
				Listed Below			
Scalechek(R) LP-65 Scale Inhibitor	Halliburton	Scale Inhibitor					
				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	9.23090	
			Ceramic materials and wares, chemical	66402-68-4	100.00000	1.01844	
			Hydrochloric acid	7647-01-0	15.00000	0.03300	
			Sodium chloride	7647-14-5	30.00000	0.01959	
			Hydrotreated light petroleum distillate	64742-47-8	30.00000	0.01959	
			Sodium Nitrate	7631-99-4	60.00000	0.01861	
			Guar gum	9000-30-0	100.00000	0.01351	
			Organic phosphonate	Proprietary	60.00000	0.01209	
			Ammonium chloride	12125-02-9	10.00000	0.00528	
			9-Octadecenamide,n,n-bis-2(hydroxy-ethyl)-,(Z)	93-83-4	5.00000	0.00326	

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			Alcohols, C 12-16, ethoxylated	68551-12-2	5.00000	0.00326	
			Sodium persulfate	7775-27-1	100.00000	0.00043	
			Methanol	67-56-1	100.00000	0.00031	
			Formaldehyde	50-00-0	1.00000	0.00020	
			Ethanol	64-17-5	60.00000	0.00019	
			Oxyalkylated phenolic resin	Proprietary	30.00000	0.00013	
			Heavy aromatic petroleum naphtha	64742-94-5	30.00000	0.00010	
			Modified thiourea polymer	Proprietary	30.00000	0.00009	
			Proprietary Component	Proprietary	60.00000	0.00002	
			Naphthalene	91-20-3	5.00000	0.00002	
			Poly(oxy-1,2-ethanediyl), alpha-(4-nonylphenyl)-omega-hydroxy-, branched	127087-87-0	5.00000	0.00002	
			Ethoxylated alcohols	Proprietary	5.00000	0.00002	Denise Tuck, Halliburton, 3000 N. Sam Houston Pkwy E., Houston, TX 77032, 281-871-6226
			Propargyl alcohol	107-19-7	5.00000	0.00002	
			1,2,4 Trimethylbenzene	95-63-6	1.00000	0.00000	
			Glycerine	56-81-5	5.00000	0.00000	
			Sodium sulfate	7757-82-6	0.10000	0.00000	

* 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%

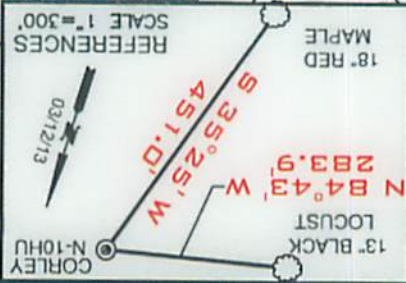
*** If you are calculating a percentage of total ingredients do not add the water volume below the green line to the water volume above the green line

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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CORLEY LEASE
UTICA UNIT - 354.194 AC±
TUG HILL OPERATING
WELL N-10HU
 01340



TOP HOLE LATITUDE: 39° 47' 30"
 BOTTOM HOLE LATITUDE: 39° 47' 30"
 TOP HOLE LONGITUDE: 80° 45' 00"
 BOTTOM HOLE LONGITUDE: 80° 45' 00"

Curve	Chord Bearing	Chord Length	Radius	Arc Length
C1	S 66° 49' E	63.50	116.56	64.32
C2	S 73° 58' E	72.50	225.19	72.82
C3	S 38° 44' E	201.90	982.68	202.26
C4	N 17° 56' E	31.52	20.58	35.90

DETAIL SKETCH "A"
 SCALE 1" = 200'
 REFERENCES: N-7H/M051-01872, N-8H/M051-02005, N-8H/M051-01927, N-8H/M051-1998, N-10HU051-1998, N-8H/M051-01983, N-8H/M051-01437, N-8H/M051-01397, N-8H/M051-01438, N-8H/M051-01439, N-8H/M051-01438P

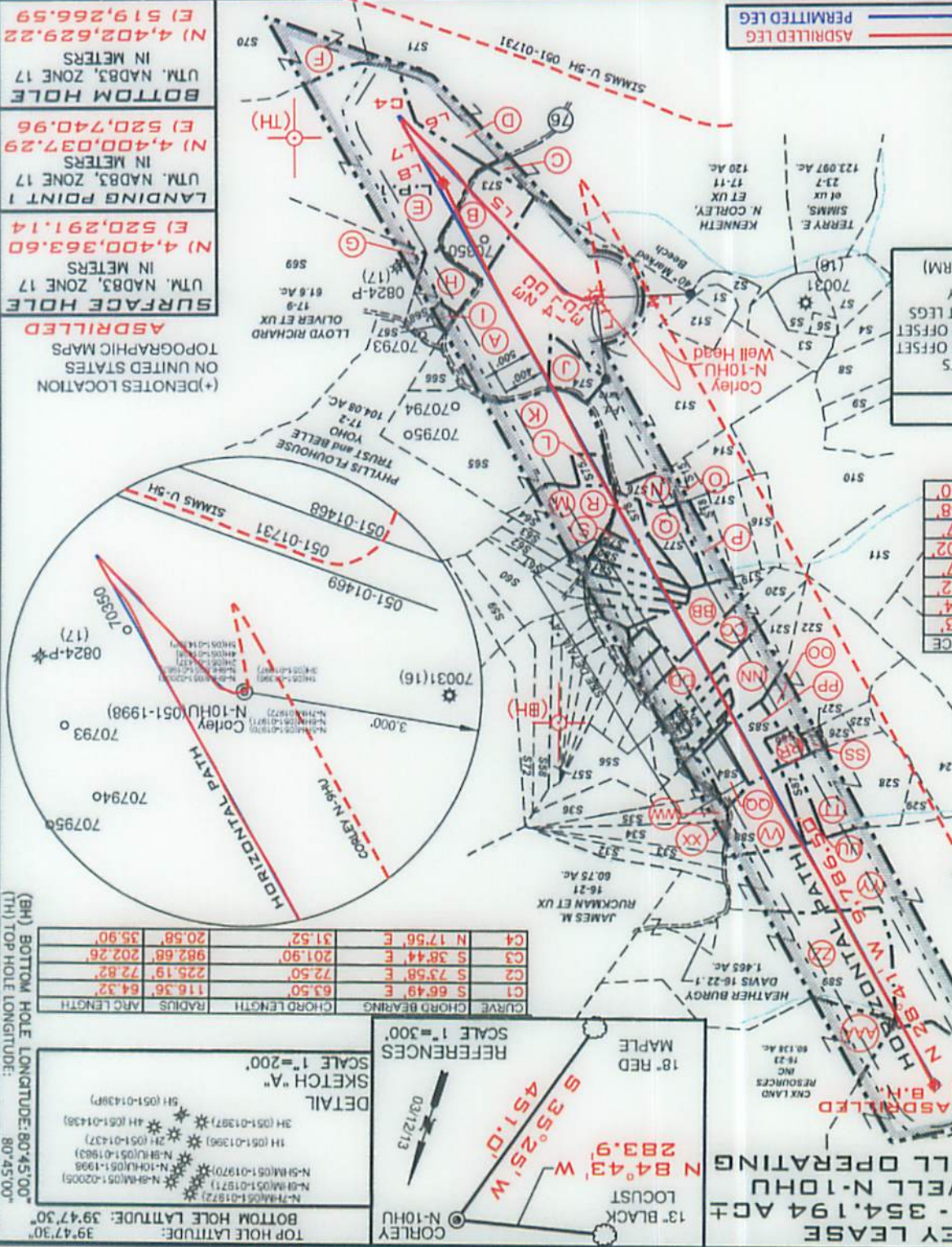
LINE BEARING	DISTANCE
L1	S 06° 59' E 786.83'
L2	N 87° 44' E 894.54'
L3	N 78° 36' E 124.92'
L4	S 68° 36' E 69.37'
L5	S 42° 45' E 1982.02'
L6	S 49° 41' E 56.47'
L7	N 29° 09' W 283.38'
L8	N 36° 55' W 403.90'

LEGEND

- LEASED TRACTS
- SURFACE TRACTS
- 400' WELL BORE OFFSET
- 500' WELL BORE OFFSET
- POINT PLEASANT LEGS
- UNIT BOUNDARY
- LEASE # (SEE 6A1 FORM)

NOTES

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



ASDRILLED
 TOPOGRAPHIC MAPS ON UNITED STATES (+) DENOTES LOCATION

SURFACE HOLE
 UTM, NAD83, ZONE 17
 N) 4,400,363.60 IN METERS
 E) 520,291.14 IN METERS

LANDING POINT 1
 UTM, NAD83, ZONE 17
 N) 4,400,037.29 IN METERS
 E) 520,740.96 IN METERS

BOTTOM HOLE
 UTM, NAD83, ZONE 17
 N) 4,402,629.22 IN METERS
 E) 519,266.59 IN METERS

DAVID JACKSON
 LICENSED
 STATE OF WEST VIRGINIA
 NO. 708
 PROFESSIONAL SURVEYOR
 SEAL

David Jackson
 JACKSON SURVEYING INC.
 2413 East Pike St. #112
 Clarksburg, WV 26301
 304-623-5851

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

P.S. 708

FILE NUMBER
 CORLEY_WP_N-10HU

DRAWING NUMBER
 CORLEY_WP_N-10HU

SCALE
 1" = 1500'

MINIMUM DEGREE
 1/200

OF ACCURACY
 1/200

PROVEN SOURCE
 SUBMETER MAPPING
 GRADE GPS

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

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

LOCATION ELEVATION: 1255.4' Fish Creek WATERSHED (HUC 10)

DISTRICT: Franklin

COUNTY: Marshall

QUADRANGLE: Powhatan Point 7.5'

LEASE NUMBER: SEE WW-6A1 ROYALTY OWNERS

SURFACE OWNER: James A. & Jill C. Corley, et al

OIL & GAS ROYALTY OWNER: James A. & Jill C. Corley, et al - See WW-6A1 Royalty Owners

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

PERFORATE NEW FORMATION: OTHER PHYSICAL CHANGE (SPECIFY) ASDRILLED

PLUG & ABANDON: CLEAN OUT & REPLUG

TARGET FORMATION: Point Pleasant

ESTIMATED DEPTH: TVD: 11,474' TMD: 22,141'

DESIGNATED AGENT: DIANNA STAMPER
 CT CORPORATION SYSTEM

WELL OPERATOR: TUG HILL OPERATING, LLC

ADDRESS: 1320 SOUTH UNIVERSITY DRIVE, SUITE 500
 FORT WORTH, TX 76107

ADDRESS: 5400 D BIG TYLER ROAD
 CHARLESTON, WV 25313

DATE: OCTOBER 07, 2017

OPERATORS WELL NO.: CORLEY N-10HU

API WELL NO.: 47-051-01998

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

STATE: COUNTY PERMIT

COUNTY NAME: ACREAGE 92.61

SURFACE OWNER: James A. & Jill C. Corley, et al

OIL & GAS ROYALTY OWNER: James A. & Jill C. Corley, et al - See WW-6A1 Royalty Owners

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

PERFORATE NEW FORMATION: OTHER PHYSICAL CHANGE (SPECIFY) ASDRILLED

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**CORLEY LEASE
UTICA UNIT - 354.194 AC±
WELL N-10HU
TUG HILL OPERATING**

FORM WWS



TUG HILL OPERATING

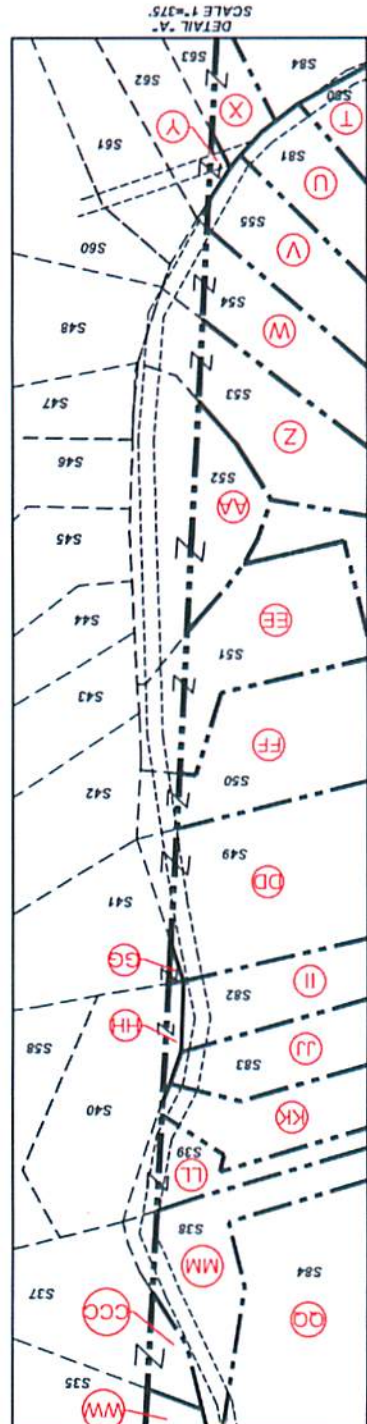
OPERATORS
WELL #: Corley N-10HU
DISTRICT: Franklin
COUNTY: Marshall
STATE: WV
API #: 47-051-01998

WELL PLAT
PAGE 2 OF 3
DATE: 10/07/2019



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JUL 10 2020
WV Department of
Environmental Protection

David Jackson
P.S. 708



Number	TAX MAP - PARCEL	SURFACE OWNER	ACRES
S1	17-12.1	Williams Ohio Valley Midstream LLC	1.67
S2	17-12	James A. & Jill C. Corley	3.33
S3	18-13.8	Lord D. Carpenter	5.45
S4	18-29	Carl G. Berg	5.319
S5	18-32	Kenneth E. Raslall	5.335
S6	18-32.1	Lord D. Carpenter	1.165
S7	18-31	Kenneth E. Raslall	6.94
S8	18-13.10	Carl Berg	10.88
S9	18-30	John Schmidt et al	5.46
S10	18-13	Southern Country Farm Inc.	24.724
S11	18-16	Charles Yeater	17.768
S12	17-10.5	Williams Ohio Valley Midstream LLC	4.24
S13	17-10	James A. Corley & Jill C. Corley, et al	92.61
S14	18-33	Sandra K & Glenn E. Whisler	5.343
S15	18-13.14	Glenn E & Sandra K Whisler	2.116
S16	18-34	Jodi A & Gary A Hall	5.002
S17	18-13.13	Glenn E & Sandra K Whisler	5.59
S18	18-13.6	Glenn Eugene Whisler Et Ux	5.384
S19	18-13.1	Cory A. Holt	9.248
S20	18-17	Michael Fincham & Kezia Winters	6.555
S21	18-13.3	Robert G. Closterman	9.813
S22	18-15.5	Darrell Boley & Teresa Boley	23.547
S23	18-15.3	Charles Yeater	26.44
S24	18-15.4	Edward Lee Burge Jr.	22.34
S25	18-10.1	David Anderson et ux	1.65
S26	18-10.2	David Anderson et ux	1.377
S27	18-10	David & Nancy Anderson	0.907
S28	18-11.1	Edward Lee Burge Jr.	18.0
S29	18-15	Edward Lee Burge Jr.	2.495
S30	15-13	CNX Land Resources Inc.	1.10
S31	15-09	CNX Land Resources Inc.	81.98
S32	18-56	William E. O'Hara	3.965
S33	18-55	William E. O'Hara	3.202
S34	18-28	Dotson Harrison et ux	6.36
S35	18-28.1	Carol Diane Helmick	5.696
S36	18-13.2	Steven G. Bortford	6.023
S37	18-50	Steven G. Bortford	2.170
S38	18-36	Ruth Mulligan Est.	2.003
S39	18-13.5	Bryan Wesley	1.023
S40	18-49	Tanner Butler	2.023
S41	18-37	John Wetzel	2.064
S42	18-38	Marton Connor	2.231
S43	18-39	Marton R. Connor	2.001
S44	18-27.1	Marton R. Connor	2.003
S45	18-27.2	Linda L. Moore	3.009
S46	18-27	Linda L. Moore	2.447
S47	18-26	Linda L. Moore	2.624
S48	18-53	Christopher M. Previtera	2.00
S49	18-14	Michael Fincham & Kezia Winters	6.386
S50	18-40	Cory A. Holt	2.237
S51	18-41	Cory A. Holt	2.308
S52	18-25	Charles & Martha Rayl	2.521
S53	18-44	Renee Straight	2.133
S54	18-43	Roy Butler	2.532
S55	18-51	Roger Hall Jr.	2.505
S56	18-13	Southern Country Farms, Inc.	1.1054
S57	18-13.11	Linda L. Moore	3.156
S58	18-53.1	Christopher M. Previtera	6.283
S59	17-01	Southern Country Farms, Inc.	5.03
S60	18-13	Southern Country Farms Inc	1.1054
S61	18-58	Kevin Roberts	2.635
S62	18-35	Mary Anderson	2.308
S63	18-42	Roger Howard Hall Jr.	2.383
S64	18-19	Roger White Jr.	10.0
S65	17-10.3	James & Jill Corley	37.39
S66	17-10.2	Sidney Pozell et ux Ests.	2.6
S67	17-9.1	Linda L. Moore	1.0
S68	17-9.2	Jeri J. White	7.136
S69	17-9.4	Vicki Bowen	60.3
S70	24-01	Linda Hendrickson & Donald Pickering	175.0
S71	17-11.1	Randy Francis et ux	67.0
S72	18-60	Christopher M. Previtera	6.297
S73	17-9.3	James Corley et ux	12.478
S74	17-10.1	James & Jill Corley	4.51
S75	17-10.4	Ron Murn et al	2.01
S76	18-48	Marvin Dean Roberts et al	2.920
S77	18-13.7	Victor Woods, Jr. & Jessica Woods	5.255
S78	18-18	Linda Coen	3.0
S79	18-57	Marvin Roberts	2.228
S80	18-61	Roger White, Jr.	2.984
S81	18-52	Roger Hall	2.536
S82	18-45	Michael Fincham & Kezia Winters	2.07
S83	18-46	Dale & Patricia Gardener	2.030
S84	18-15.2	Edward Burge	4.171
S85	18-15.1	Jason Blair	5.948
S86	18-12	William Wayne et ux	2.270
S87	18-11.2	Edward Lee Burge, Jr.	2.00
S88	18-11	Benjamin Robinson	12.883
S89	16-22	James M. Ruckman et ux	54.605

**CORLEY LEASE
UTICA UNIT - 354.194 AC±
WELL N-10HU
TUG HILL OPERATING**

GRID NORTH

NUMBER	LEASE NAME OR NO.	TAG	PARCEL	OIL & GAS ROYALTY OWNER	DEED BOOK	PAGE
1	10*14095	A	5-17-10	JAMES A CORLEY AND JILL C CORLEY	666	545
2	10*14096	A	5-17-10	RUTH A CORLEY	666	545
3	10*14095	B	5-17-9.3	JAMES A CORLEY AND JILL C CORLEY	666	545
4	10*14126	C	5-17-11	SHARON MIDCAP	697	152
5	10*14126	D	5-17-11.1	SHARON MIDCAP	697	152
6	10*14066	E	5-17-9.4	VICKI L BOWEN	665	375
7	10*14138	F	5-24-1	LINDA AND DONALD HENDRICKSON	666	528
8	10*14139	G	5-17-9	LLOYD RICHARD OLIVER AND DEANN	666	49
9	10*14135	H	5-17-9.2	GEORGE A WHITE AND JERI J WHITE	706	132
10	10*14135	I	5-17-9.1	GEORGE A WHITE AND JERI J WHITE	706	132
11	10*14096	J	5-17-10.1	RUTH A CORLEY	666	545
12	10*14095	K	5-17-10.3	JAMES A CORLEY AND JILL C CORLEY	666	545
13	10*14095	L	5-17-10.4	JAMES A CORLEY AND JILL C CORLEY	666	545
14	10*14298	M	5-18-19	MICHAEL L WEST	702	115
15	10*14299	M	5-18-19	CONRAD A. FLOUHOUSE	735	271
16	10*18898	N	5-18-48	COLBY ANN FLOUHOUSE HOMER AND THE ESTATE OF PHYLLIS J FLOUHOUSE	940	427
17	10*14099	N	5-18-48	SOUTHERN COUNTRY FARMS INC	666	489
18	10*14099	O	5-18-13.14	SOUTHERN COUNTRY FARMS INC	666	489
19	10*18898	O	5-18-13.14	COLBY ANN FLOUHOUSE HOMER AND THE ESTATE OF PHYLLIS J FLOUHOUSE	940	427
20	10*14099	P	5-18-13.6	SOUTHERN COUNTRY FARMS INC	666	489
21	10*18898	P	5-18-13.6	COLBY ANN FLOUHOUSE HOMER AND THE ESTATE OF PHYLLIS J FLOUHOUSE	940	427
22	10*14099	Q	5-18-13.7	SOUTHERN COUNTRY FARMS INC	666	489
23	10*14099	R	5-18-18	SOUTHERN COUNTRY FARMS INC	666	489
24	10*14099	S	5-18-57	SOUTHERN COUNTRY FARMS INC	666	489
25	10*18898	S	5-18-57	COLBY FLOUHOUSE	940	266
26	10*18898	T	5-18-61	COLBY FLOUHOUSE	940	266
27	10*18143	T	5-18-61	ROGER D WHITE JR	940	279
28	10*17644	U	5-18-52	ROGER HALL	942	404
29	10*18898	U	5-18-52	COLBY FLOUHOUSE	940	266
30	10*17644	V	5-18-51	ROGER HALL	942	404
31	10*18898	V	5-18-51	COLBY FLOUHOUSE	940	266
32	10*14099	W	5-18-43	SOUTHERN COUNTRY FARMS INC	666	489
33	10*14099	W	5-18-43	SOUTHERN COUNTRY FARMS INC	666	489
34	10*17826	X	5-18-42	ALLDALE MINERALS II, LP	940	439
35	10*17812	X	5-18-42	POTOMAC MINERAL GROUP, LLC	940	437
36	10*21463	X	5-18-42	MOLLY D. ASTON, ET VIR	954	131
37	10*21460	X	5-18-42	MAGGY D. ASTON, ET VIR	954	125
38	10*14914	X	5-18-42	CHESTNUT HOLDINGS INC	827	548
39	10*14099	X	5-18-42	SOUTHERN COUNTRY FARMS INC	666	489
40	10*14099	Y	5-18-35	SOUTHERN COUNTRY FARMS INC	666	489
41	10*14099	Z	5-18-44	SOUTHERN COUNTRY FARMS INC	666	489
42	10*17618	AA	5-18-25	CHARLES H RAYL AND MARIA A RAYL	942	329
43	10*19341	BB	5-18-13.1	FRANKLIN BOYD TAGG ET UX	936	569
44	10*19342	BB	5-18-13.1	SONNY MICHAEL TAGG ET UX	936	521
45	10*19343	BB	5-18-13.1	SUZANNA LYNETT GUSEMAN ET CON	936	537
46	10*19222	CC	5-18-17	CHARLES E. GALLOWAY SR. AND LINDA S. GALLOWAY	737	437
47	10*19222	DD	5-18-14	CHARLES E. GALLOWAY SR. AND LINDA S. GALLOWAY	737	437
48	10*14099	EE	5-18-41	SOUTHERN COUNTRY FARMS INC	666	489
49	10*14099	FF	5-18-40	SOUTHERN COUNTRY FARMS INC	666	489
50	10*14099	GG	5-18-37	SOUTHERN COUNTRY FARMS INC	666	489
51	10*14099	HH	5-18-49	SOUTHERN COUNTRY FARMS INC	666	489
52	10*14099	II	5-18-45	SOUTHERN COUNTRY FARMS INC	666	489
53	10*14099	JJ	5-18-46	SOUTHERN COUNTRY FARMS INC	666	489
54	10*14099	KK	5-18-47	SOUTHERN COUNTRY FARMS INC	666	489
55	10*14099	LL	5-18-13.5	SOUTHERN COUNTRY FARMS INC	666	489
56	10*14099	MM	5-18-36	SOUTHERN COUNTRY FARMS INC	666	489
57	10*14099	NN	5-18-13.3	SOUTHERN COUNTRY FARMS INC	666	489
58	10*14503	OO	5-18-15.5	IMA LEE YOHO	756	85
59	10*19155	PP	5-18-15.1	JAMES A WAYNE AND BETTY LUE WAYNE	701	78
60	10*19188	QQ	5-18-15.2	BURGE EDWARD L	781	437
61	10*19145	RR	5-18-12	WILLIAM WAYNE, ET UX	706	87
62	10*19160	SS	5-18-10	ANDERSON DAVID V ET UX	704	319
63	10*19218	TT	5-18-11.1	ROBINSON BENJAMIN	727	211
64	10*19218	UU	5-18-11.2	ROBINSON BENJAMIN	727	211
65	10*19218	VV	5-18-11	ROBINSON BENJAMIN	727	211
66	10*14099	WW	5-18-28.1	SOUTHERN COUNTRY FARMS INC	666	489
67	10*47051.104.0	XX	5-18-28	DOTSON GALE AND DOLLY MARIE HARRISON	873	48
68	10*19339	YY	5-15-10	MARK STANLEY RUCKMAN	664	495
69	10*19338	ZZ	5-16-22	JAMES M AND KIMBERLY L RUCKMAN	741	72
70	10*19294	AAA	5-16-23	BRENDA K BRYAN, ET AL	741	78
71	10*19295	BBB	5-15-9	BRENDA K BRYAN, ET AL	741	78
72	10*14099	CCC	5-18-50	SOUTHERN COUNTRY FARMS INC	666	489

PERMITTED
SURFACE HOLE
UTM. NAD83, ZONE 17
IN METERS
N) 4,400,363.58
E) 520,291.13

LANDING POINT 1
UTM. NAD83, ZONE 17
IN METERS
N) 4,399,995.90
E) 520,783.72

BOTTOM HOLE
UTM. NAD83, ZONE 17
IN METERS
N) 4,402,628.19
E) 519,263.80



P.S. 708 *David L Jackson*

RECEIVED
Office of Oil and Gas
JUL 10 2020
WV Department of Environmental Protection



**TUG HILL
OPERATING**

OPERATOR'S
WELL #: Corley N-10HU
DISTRICT: Franklin
COUNTY: Marshall
STATE: WV
API #: 47-051-01998

WELL PLAT
PAGE 3 OF 3
DATE: 10/07/2019