

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

API 47-095-02127 County Tyler District Meade
Quad Pennsboro 7.5' Pad Name Hartley East Pad Field/Pool Name _____
Farm name Hartley, David M. Well Number Freeland Unit 2H
Operator (as registered with the OOG) Antero Resources Corporation
Address 1615 Wynkoop Street City Denver State CO Zip 80202

As Drilled location NAD 83/UTM Attach an as-drilled plat, profile view, and deviation survey
Top hole Northing 4,357,320m Easting 500,598m
Landing Point of Curve Northing 4,357,387.57m Easting 500,241.63m
Bottom Hole Northing 4,359,140m Easting 499,551m

Elevation (ft) 1021' 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)
Air - Foam & 4% KCL
Mud - Polymer

Date permit issued 11/21/2013 Date drilling commenced 5/31/2014 Date drilling ceased 7/16/2014
Date completion activities began 7/28/2014 Date completion activities ceased 9/6/2014
Verbal plugging (Y/N) N/A 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 156' Open mine(s) (Y/N) depths N
Salt water depth(s) ft 2206' Void(s) encountered (Y/N) depths N
Coal depth(s) ft 1546' Cavern(s) encountered (Y/N) depths N
Is coal being mined in area (Y/N) N

Reviewed by: _____

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MORGANTOWN, WV

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API 47-095 - 02127 Farm name Hartley, David M. Well number Freeland Unit 2H

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	30"	20"	40'	New	94#/H-40	N/A	Y
Surface	17-1/2"	13-3/8"	367'	New	48#/H-40	N/A	Y
Coal							
Intermediate 1	12-1/4"	9-5/8"	2569'	New	36#/J-55	N/A	Y
Intermediate 2							
Intermediate 3							
Production	8-3/4"/8-1/2"	5-1/2"	13,206'	New	20#/P-110	N/A	
Tubing		2-3/8"	6530'		4.7#/N-80	N/A	N/A
Packer type and depth set		N/A					

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	Class A	250 sx	15.6	1.18	175 Cu. Ft.	0'	8 hrs
Surface	Class A	425 sx	15.6	1.18	255 Cu. Ft.	0'	8 hrs
Coal							
Intermediate 1	Class A	1002 sx	15.6	1.18	805 Cu. Ft.	0'	8 hrs
Intermediate 2							
Intermediate 3							
Production	Class H	827 sx (Lead), 1110 sx (Tail)	13.5 (Lead), 15.2 (Tail)	1.44 (Lead), 1.80 (Tail)	2551 Cu. Ft.	~500' into Intermediate Casing	8 hrs
Tubing							

Drillers TD (ft) 13,206' MD, 6261' TVD (BHL), 6279' TVD (Deepest Point Drilled) Loggers TD (ft) 13,147' MD
 Deepest formation penetrated Marcellus Plug back to (ft) N/A
 Plug back procedure N/A

Kick off depth (ft) 5951'

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 _____
 Conductor - 0
 Surface - 1 above guide shoe, 1 above insert float, 1 every 4th joint to surface
 Intermediate - 1 above float joint, 1 above float collar, 1 every 4th joint to surface
 Production - 1 above float joint, 1 below float collar, 1 every 3rd joint to top of cement

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 N/A

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Hartley, David M.

API 47- 095 - 02127 Farm name _____ Well number Freeland Unit 2H

PERFORATION RECORD

Stage No.	Perforation date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formation(s)
*PLEASE SEE ATTACHED EXHIBIT 1					

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)
*PLEASE SEE ATTACHED EXHIBIT 2								

Please insert additional pages as applicable.

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PRODUCING FORMATION(S)	DEPTHS	
<u>Marcellus</u>	<u>6210' (Top)</u> TVD	<u>6620' (Top)</u> MD
_____	_____	_____
_____	_____	_____
_____	_____	_____

Please insert additional pages as applicable.

GAS TEST Build up Drawdown Open Flow OIL TEST Flow Pump

SHUT-IN PRESSURE Surface 3000 psi Bottom Hole ---- psi DURATION OF TEST ---- hrs

OPEN FLOW Gas 10,458 mcfpd Oil 81 bpd NGL ---- bpd Water ---- bpd GAS MEASURED BY Estimated Orifice Pilot

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 (FRESHWATER, BRINE, OIL, GAS, H ₂ S, ETC)
	<u>0</u>		<u>0</u>		

*PLEASE SEE ATTACHED EXHIBIT 3

Please insert additional pages as applicable.

Drilling Contractor Frontier Drilling LLC
Address 562 Spring Run Road City Pennsboro State WV Zip 26415

Logging Company Rush Wellsite Services
Address 600 Alpha Drive City Canonsburg State PA Zip 15317

Cementing Company Allied Oil & Gas Services, LLC
Address 1036 East Main Street City Bridgeport State WV Zip 26330

Stimulating Company Halliburton
Address 121 Champion Way, Suite 200 City Canonsburg State PA Zip 15317

Please insert additional pages as applicable.

Completed by Natalie Komp Telephone 303-357-6820
Signature Natalie Komp Title Permitting Agent Date 5/22/2015

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MORGANTOWN, WVAPI 47-095-02127 Farm Name Hartley, David M. Well Number Freeland Unit 2H**EXHIBIT 1**

Stage No.	Perforation Date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formations
1	28-Jul-14	12988'	13116'	60	Marcellus
2	4-Aug-14	12838'	12965'	60	Marcellus
3	5-Aug-14	12687'	12815'	60	Marcellus
4	5-Aug-14	12537'	12664'	60	Marcellus
5	5-Aug-14	12386'	12513'	60	Marcellus
6	5-Aug-14	12235'	12363'	60	Marcellus
7	6-Aug-14	12085'	12212'	60	Marcellus
8	6-Aug-14	11934'	12062'	60	Marcellus
9	6-Aug-14	11784'	11911'	60	Marcellus
10	6-Aug-14	11633'	11761'	60	Marcellus
11	7-Aug-14	11483'	11610'	60	Marcellus
12	7-Aug-14	11332'	11460'	60	Marcellus
13	7-Aug-14	11182'	11309'	60	Marcellus
14	7-Aug-14	11031'	11159'	60	Marcellus
15	7-Aug-14	10881'	11008'	60	Marcellus
16	8-Aug-14	10730'	10858'	60	Marcellus
17	8-Aug-14	10580'	10707'	60	Marcellus
18	8-Aug-14	10429'	10556'	60	Marcellus
19	8-Aug-14	10278'	10406'	60	Marcellus
20	9-Aug-14	10128'	10255'	60	Marcellus
21	10-Aug-14	9977'	10105'	60	Marcellus
22	10-Aug-14	9827'	9954'	60	Marcellus
23	11-Aug-14	9676'	9804'	60	Marcellus
24	12-Aug-14	9526'	9653'	60	Marcellus
25	12-Aug-14	9375'	9503'	60	Marcellus
26	12-Aug-14	9225'	9352'	60	Marcellus
27	12-Aug-14	9074'	9202'	60	Marcellus
28	20-Aug-14	8924'	9051'	60	Marcellus
29	21-Aug-14	8773'	8900'	60	Marcellus
30	21-Aug-14	8622'	8750'	60	Marcellus
31	21-Aug-14	8472'	8574'	60	Marcellus
32	21-Aug-14	8321'	8449'	60	Marcellus
33	21-Aug-14	8171'	8298'	60	Marcellus
34	22-Aug-14	8020'	8148'	60	Marcellus
35	22-Aug-14	7870'	7992'	60	Marcellus
36	22-Aug-14	7719'	7847'	60	Marcellus
37	22-Aug-14	7569'	7696'	60	Marcellus
38	22-Aug-14	7418'	7546'	60	Marcellus
39	23-Aug-14	7268'	7395'	60	Marcellus
40	23-Aug-14	7117'	7245'	60	Marcellus
41	23-Apr-14	6967'	7094'	60	Marcellus
42	23-Aug-14	6816'	6943'	60	Marcellus
43	24-Aug-14	6665'	6793'	60	Marcellus

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API 47-095-02127 Farm Name Hartley, David M. Well Number Freeland Unit 2H

EXHIBIT 2

Stage No.	Stimulations Date	Avg Pump Rate	Avg Treatment Pressure (PSI)	Max Breakdown Pressure (PSI)	ISIP (PSI)	Amount of Proppant (lbs)	Amount of Water (bbls)	Amount of Nitrogen/ other (units)
1	3-Aug-14	59.3	7,326	N/A	9,116	79,342	5,468	N/A
2	4-Aug-14	56.8	8,233	5,489	5,408	17,734	6,487	N/A
3	15-Aug-14	68.2	8,018	5,579	5,066	146,195	5,834	N/A
4	15-Aug-14	58.6	7,896	5,430	5,387	167,244	5,765	N/A
5	5-Aug-14	70.8	7,448	5,532	5,263	175,990	6,399	N/A
6	5-Aug-14	69.0	7,243	5,346	5,116	94,284	5,845	N/A
7	6-Aug-14	69.7	7,034	5,376	5,026	230,742	5,952	N/A
8	6-Aug-14	73.4	7,137	5,317	5,133	228,701	5,935	N/A
9	6-Aug-14	76.2	7,187	5,512	4,713	199,201	6,004	N/A
10	6-Aug-14	76.1	7,073	5,223	4,132	233,280	6,000	N/A
11	7-Aug-14	75.1	7,129	5,426	4,784	175,934	6,220	N/A
12	7-Aug-14	76.2	7,018	5,283	5,255	227,841	5,819	N/A
13	7-Aug-14	75.6	7,092	5,735	5,141	224,692	5,713	N/A
14	7-Aug-14	78.8	6,821	5,096	4,984	227,903	5,991	N/A
15	8-Aug-14	77.6	6,667	5,201	5,021	227,589	5,849	N/A
16	8-Aug-14	73.9	6,482	8,445	5,005	228,675	5,742	N/A
17	8-Aug-14	72.4	6,336	5,263	4,992	145,154	5,712	N/A
18	8-Aug-14	79.0	6,645	5,348	4,747	228,439	5,819	N/A
19	9-Aug-14	77.6	6,830	5,429	4,843	227,283	5,799	N/A
20	9-Aug-14	78.7	6,441	5,376	4,827	227,783	5,715	N/A
21	10-Aug-14	80.5	6,424	5,509	5,110	227,427	5,720	N/A
22	10-Aug-14	79.2	6,330	5,208	5,016	161,042	6,905	N/A
23	12-Aug-14	80.2	6,284	5,064	5,026	227,084	5,927	N/A
24	12-Aug-14	80.0	6,884	5,098	4,977	181,601	6,072	N/A
25	12-Aug-14	74.1	7,396	5,365	4,699	162,590	5,944	N/A
26	12-Aug-14	73.8	7,183	5,444	5,027	210,217	6,502	N/A
27	13-Aug-14	71.6	6,704	5,550	9,325	210,344	7,371	N/A
28	20-Aug-14	80.2	6,688	5,259	5,040	195,329	7,232	N/A
29	21-Aug-14	80.5	7,059	5,344	4,989	186,447	6,378	N/A
30	21-Aug-14	81.7	6,715	5,406	4,815	192,860	6,129	N/A
31	21-Aug-14	78.3	6,806	5,211	5,187	224,004	5,684	N/A
32	21-Aug-14	81.6	6,655	5,224	4,969	226,878	5,743	N/A
33	22-Aug-14	81.8	6,741	5,270	4,591	229,400	5,776	N/A
34	22-Aug-14	77.8	6,414	5,235	5,158	225,978	5,946	N/A
35	22-Aug-14	78.6	6,368	5,221	4,401	225,934	5,691	N/A
36	22-Aug-14	79.0	6,455	5,078	4,764	225,789	5,615	N/A
37	22-Aug-14	81.5	6,273	5,060	4,834	226,740	5,681	N/A
38	22-Aug-14	78.5	6,131	5,218	4,859	228,746	5,746	N/A
39	23-Aug-14	78.3	5,975	5,045	4,345	228,196	5,642	N/A
40	23-Aug-14	81.4	6,162	5,476	4,582	225,400	5,643	N/A
41	23-Aug-14	81.6	6,141	5,356	4,672	225,297	5,644	N/A
42	24-Aug-14	80.3	6,208	6,132	4,869	225,280	5,642	N/A
43	24-Aug-14	78.5	5,962	5,521	4,360	222,419	5,554	N/A
	AVG=	75.9	6,791	5,421	5,106	8,609,008	256,255	TOTAL

EXHIBIT 3

LITHOLOGY/ FORMATION	TOP DEPTH (TVD)	BOTTOM DEPTH (TVD)	TOP DEPTH (MD)	BOTTOM DEPTH (MD)
	From Surface	From Surface	From Surface	From Surface
Freshwater	156	NA	156	NA
Sandstone/Shale	0	410	0	410
Shale/Sandstone	410	424	410	424
Siltstone/Shale	424	452	424	452
Shale	452	746	452	746
Limestone	746	766	746	766
Shale/Siltstone	766	786	766	786
Sandstone	786	806	786	806
Shale/Sandstone	806	876	806	876
Shale	876	1,106	876	1,106
Sandstone	1,106	1,226	1,106	1,226
Shale	1,226	1,306	1,226	1,306
Sandstone	1,306	1,446	1,306	1,446
Shale	1,446	1,526	1,446	1,526
Sandstone	1,526	1,546	1,526	1,546
Coal	1,546	1,566	1,546	1,566
Sandstone	1,566	1,646	1,566	1,646
Shale/Siltstone/Trace Coal	1,646	1,726	1,646	1,726
Sandstone/Siltstone	1,726	1,846	1,726	1,846
Shale	1,846	1,889	1,846	1,889
Big Lime	1,889	2,074	1,889	2,074
Big Injun	2,074	2,694	2,074	2,694
Fifty Foot Sandstone	2,694	2,779	2,694	2,779
Gordon	2,779	3,042	2,779	3,042
Bayard	3,042	3,451	3,042	3,451
Speechley	3,451	4,101	3,451	4,102
Baltown	4,101	4,559	4,102	4,584
Bradford	4,559	4,907	4,584	4,959
Benson	4,907	5,134	4,959	5,204
Alexander	5,134	5,700	5,204	5,834
Rhinestreet	5,700	6,010	5,834	6,211
Sycamore	6,010	6,103	6,211	6,359
Middlesex	6,103	6,188	6,359	6,549
Burkett	6,188	6,202	6,549	6,594
Tully	6,202	6,210	6,594	6,620
Marcellus	6,210	NA	6,620	NA

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Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	8/3/2014
Job End Date:	8/24/2014
State:	West Virginia
County:	Tyler
API Number:	47-095-02127-00-00
Operator Name:	Antero Resources Corporation
Well Name and Number:	Freeland Unit 2H
Longitude:	-80.99305800
Latitude:	39.36533900
Datum:	NAD83
Federal/Tribal Well:	NO
True Vertical Depth:	6,279
Total Base Water Volume (gal):	11,212,767
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					
SAND - COMMON BROWN	Halliburton	Proppant	Fresh Water	7732-18-5	100.00000	91.21049	Density=8.33
SAND - PREMIUM - 20/40, BULK, SK (101272933)	Halliburton	Proppant	Crystalline silica, quartz	14808-60-7	100.00000	5.31062	
SAND - COMMON WHITE	Halliburton	Proppant	Crystalline silica, quartz	14808-60-7	100.00000	2.53105	
HYDROCHLORIC ACID 10-30%	Halliburton	Solvent	Crystalline silica, quartz	14808-60-7	100.00000	0.56959	
WG-36 GELLING AGENT	Halliburton	Gelling Agent	Hydrochloric acid	7647-01-0	30.00000	0.06554	
FR-66	Halliburton	Friction Reducer	Guar gum	9000-30-0	100.00000	0.05242	
Scalechek® LP-65 Scale Inhibitor	Halliburton	Scale Inhibitor	Hydrotreated light petroleum distillate	64742-47-8	30.00000	0.02334	

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SP BREAKER	Halliburton	Breaker	Ammonium chloride	12125-02-9	10.00000	0.00186
			Sodium persulfate	7775-27-1	100.00000	0.00149
BE-9	Halliburton	Biocide	Tributyl tetradecyl phosphonium chloride	81741-28-8	10.00000	0.00093
HAL-OS ACID INHIBITOR	Halliburton	Corrosion Inhibitor	Methanol	67-56-1	60.00000	0.00011
			Propargyl alcohol	107-19-7	10.00000	0.00002
Ingredients shown above are subject to 29 CFR 1910.1200(j) and appear on Material Safety Data Sheets (MSDS). Ingredients shown below are Non-MSDS.						
		Other Ingredient(s)	Water	7732-18-5		0.28560
		Other Ingredient(s)	Polyacrylamide copolymer	Confidential		0.02334
		Other Ingredient(s)	Organic phosphonate	Confidential		0.01115
		Other Ingredient(s)	Ammonium chloride	12125-02-9		0.00389
		Other Ingredient(s)	Sodium chloride	7647-14-5		0.00389
		Other Ingredient(s)	Alcohols, C12-16, ethoxylated	38551-12-2		0.00389
		Other Ingredient(s)	Fatty acid tall oil amide	Confidential		0.00389
						Denise Tuck, Halliburton 3000 N. Sam Houston Pkwy E., Houston, TX 77032 281-871-6226
		Other Ingredient(s)	Bentonite, benzyl(hydrogenated tallow alkyl) dimethylammonium stearate complex	121888-68-4		0.00262
		Other Ingredient(s)	Sorbitan monooleate polyoxyethylene derivative	9005-65-6		0.00078
		Other Ingredient(s)	Sorbitan, mono-9-octadecenoate, (Z)	1338-43-8		0.00078
		Other Ingredient(s)	Silica gel	112926-00-8		0.00052
		Other Ingredient(s)	Surfactant mixture	Confidential		0.00052
		Other Ingredient(s)	Surfactant mixture	Confidential		0.00052
		Other Ingredient(s)	Formaldehyde	50-00-0		0.00019

		Alcohols, C14-C15, ethoxylated	68951-67-7	0.00005
	Other Ingredient(s)	Fatty acids, tall oil	Confidential	0.00005
	Other Ingredient(s)	Reaction product of acetophenone, formaldehyde, thiourea and oleic acid in dimethyl formamide	68527-49-1	0.00005
	Other Ingredient(s)	Crystalline Silica, Quartz	14808-60-7	0.00005
	Other Ingredient(s)	Olefins	Confidential	0.00001
	Other Ingredient(s)	Olefins	Confidential	0.00001
	Other Ingredient(s)	Olefins	Confidential	0.00000
	Other Ingredient(s)	Olefins	Confidential	0.00000
	Other Ingredient(s)	Sodium sulfate	7757-82-6	0.00000

* 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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LATITUDE 39°22'30"

9,865'

1,523' TO BOTTOM HOLE
LATITUDE 39°25'00"

3,548'

LONGITUDE 81°00'00"

12,750' TO BOTTOM HOLE

LONGITUDE 80°57'30"

Antero Resources Corporation
Well No. Freeland Unit 2H
47-095-02127 (AS DRILLED)

WELL NO. 2H
BOTTOM HOLE

2H TOP HOLE

AS DRILLED DATA:
WELL 2H TOP HOLE INFORMATION:
N: 318,654ft E: 1,577,835ft
LAT: 39°21'54.94" LON: 80°59'35.62"
BOTTOM HOLE INFORMATION:
N: 324,683ft E: 1,574,497ft
LAT: 39°22'53.98" LON: 81°00'19.39"
WEST VIRGINIA COORDINATE SYSTEM OF 1927 NORTH ZONE.
ZONE WAS DERIVED FROM MEASUREMENTS TAKEN WITH TRIMBLE GEOXT SUBMETER MAPPING GRADE GPS UNIT. PLAT ORIENTATION, CORNER, AND WELL REFERENCE TIE LINES ARE BASED ON GRID NORTH.

(NAD) 83 (UTM) ZONE 17 COORDS:
WELL 2H TOP HOLE INFORMATION:
N: 4,357,320m E: 500,598
BOTTOM HOLE INFORMATION:
N: 4,359,140m E: 499,551m

- NOTE**
1. NO OCCUPIED DWELLINGS OR BUILDINGS TWO THOUSAND FIVE HUNDRED (2,500) SQUARE FEET OR LARGER USED TO HOUSE OR SHELTER DAIRY CATTLE OR POULTRY HUSBANDRY ARE LOCATED WITHIN SIX HUNDRED TWENTY-FIVE (625) FEET OF THE CENTER OF THE WELL PAD.
 2. TOP HOLE DATA SHOWN HEREON WAS PROVIDED BY ALLEGHENY SURVEYS, INC.
 3. AS DRILLED DATA WAS PROVIDED BY ANTERO RESOURCES CORPORATION.
 4. WLS IS NOT CERTIFYING THE DATA AND INFORMATION PROVIDED LISTED IN NOTES 2 AND 3, ONLY THE RELATIONSHIP TO THE DATA AND INFORMATION PROVIDED TO THE LEASE AND INFORMATION PROVIDED TO THE LEASE BOUNDARIES.
 5. WLS IS BY NO MEANS RESPONSIBLE FOR ANY ERRORS OR INACCURACIES WITH THE DATA AND INFORMATION THAT HAS BEEN PROVIDED.

WV NORTH ZONE GRID NORTH

GREGORY A. WESTBROOK ET AL
D.B. 259 PG. 127
T.M. 8 PAR. 9 J
53,164 AC. ±

GREGORY A. WESTBROOK ET AL
D.B. 283 PG. 490
T.M. 8 PAR. 9
69,243 AC. ±

STEFAN J. GUN ET AL
D.B. 241 PG. 201
T.M. 12 PAR. 20
5 AC. ±

ROGER CURRY ET AL
D.B. 349 PG. 99
T.M. 12 PAR. 1
43,639 AC. ±

GARY W. FREELAND ET AL
D.B. 349 PG. 86
T.M. 12 PAR. 2,3
49,465 AC. ±

RICHARD B. REYNOLDS LEASE

JON T. WILSON
D.B. 376 PG. 726
T.M. 12 PAR. 2,1
17,904 AC. ±

NELSON E. BROUGHMAN
D.B. 344 PG. 223
T.M. 12 PAR. 2
10,743 AC. ±

MARK J. CURRY
D.B. 325 PG. 222
T.M. 10 PAR. 30
36,86 AC. ±

ROBERT EVANS ET AL
D.B. 329 PG. 172
T.M. 10 PAR. 21
81,13 AC. ±

BRANDI DEPHINO LEASE
ROBERT EVANS ET AL
D.B. 347 PG. 497
T.M. 12 PAR. 2,4
70 AC. ±

BUDDY ACKMAN ET AL
D.B. 336 PG. 391
T.M. 12 PAR. 8
16,83 AC. ±

DARYL R. JACKSON JR. ET AL
D.B. 325 PG. 21
T.M. 12 PAR. 2,2
37,011 AC. ±

RODGER B. KING LEASE

ANDREW J. WILLIAMSON ET AL
D.B. 336 PG. 468
T.M. 12 PAR. 32
47,763 AC. ±

DAVID M. HARTLEY
D.B. 271 PG. 421
T.M. 12 PAR. 26
110 AC. ±

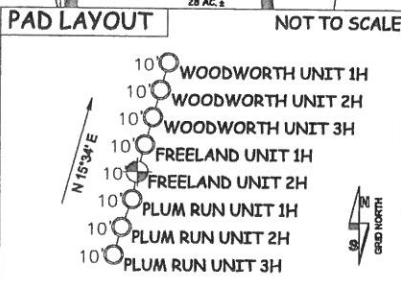
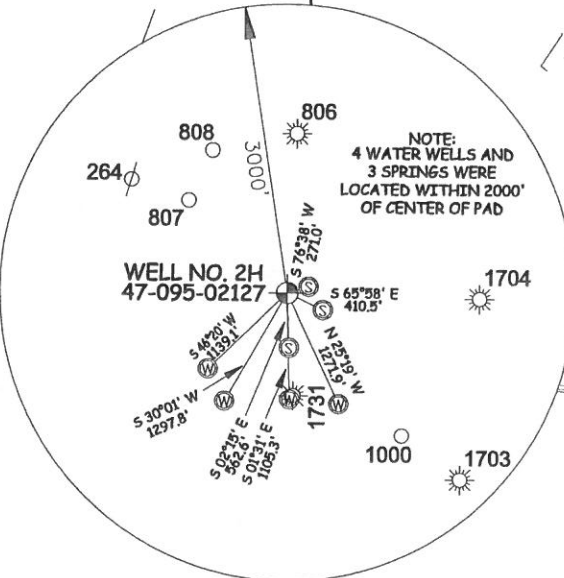
DAVID M. HARTLEY
D.B. 271 PG. 421
T.M. 12 PAR. 27
101,38 AC. ±

DAVID M. HARTLEY
D.B. 271 PG. 421
T.M. 12 PAR. 23
125,83 AC. ±

DAVID M. HARTLEY
D.B. 271 PG. 421
T.M. 12 PAR. 12
46 AC. ±

WALTER JACKSON
D.B. 393 PG. 789
T.M. 12 PAR. 20
18,96 AC. ±

DAVID M. HARTLEY
D.B. 271 PG. 421
T.M. 12 PAR. 21
28 AC. ±



JOB # **13-042WA**
DRAWING # **FREELAND2HAD**
SCALE **1" = 1000'**
MINIMUM DEGREE OF ACCURACY **SUBMETER**
PROVEN SOURCE OF ELEV. **SUBMETER MAPPING GRADE GPS**



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

WILLOW LAND SURVEYING PLLC
P.O. BOX 17
PENNSBORO, WV 26415

- LEGEND**
- Surface Owner Boundary Lines +/-
 - - - Interior Surface Tracts +/-
 - X Existing Fence
 - Found monument, as noted
 - Proposed Well Path
 - ⊗ As Drilled Well Path

STATE OF WEST VIRGINIA
DEPARTMENT OF ENERGY
DIVISION OF OIL AND GAS

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

LOCATION: ELEVATION **1,031' ORIGINAL - 1,021' AS-DRILLED** WATERSHED **OUTLET MIDDLE ISLAND CREEK**
QUADRANGLE **PENNSBORO 7.5' (TOP HOLE) BENS RUN 7.5' (BOTTOM HOLE)** DISTRICT **MEADE** COUNTY **TYLER**

SURFACE OWNER **DAVID M. HARTLEY** ACREAGE **21 ACRES +/-**
OIL & GAS ROYALTY OWNER **MIKE SAMMONS; HOWARD H. HARCHA, III ET AL; RODGER B. KING** LEASE ACREAGE **28 AC.±; 115 AC.±; 43 AC.±**
RICHARD B. REYNOLDS; BRANDI DEPHINO; 710 CORPORATION **100.38 AC.±; 122 ACRES.±; 57 AC.±;**

PROPOSED WORK: DRILL ___ CONVERT ___ DRILL DEEPER ___ REDRILL ___ FRACTURE OR STIMULATE ___
PLUG OFF OLD FORMATION ___ PERFORATE NEW FORMATION ___ OTHER PHYSICAL CHANGE IN WELL
(SPECIFY) **(X) AS DRILLED** PLUG & ABANDON ___ CLEAN OUT & REPLUG ___
TARGET FORMATION **MARCELLUS** ESTIMATED DEPTH **6,260' TVD 13,206' MD**

WELL OPERATOR **ANTERO RESOURCES CORP.** DESIGNATED AGENT **DIANNA STAMPER**
ADDRESS **1615 WYNKOOP STREET** ADDRESS **5400 D BIG TYLER ROAD**
DENVER, CO 80202 **CHARLESTON, WV 25313**

DATE **05/18/15**
OPERATOR'S WELL # **FREELAND UNIT #2H**
API WELL # **47 - 095 - 02127**
STATE COUNTY PERMIT

COUNTY NAME **TYLER**
PERMIT