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WR-35
Rev. 8/23/13

Page ___ of ___

WV GEOLOGICAL SURVEY
MORGANTOWN, WV

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

API 47-017-06261 County Doddridge District New Milton
Quad New Milton Pad Name Swisher Pad Field/Pool Name _____
Farm name Swisher, Leona Well Number Josie 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 4,340,185.795m Easting 528,820.634m
Landing Point of Curve Northing 4,340,010.34m Easting 529,066.49m
Bottom Hole Northing 4,337,911.110m Easting 529,704.787m

Elevation (ft) 980' 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 06/26/2013 Date drilling commenced 08/15/2013 Date drilling ceased 11/03/2013
Date completion activities began 02/26/2014 Date completion activities ceased 05/08/2014
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 71', 89' Open mine(s) (Y/N) depths No
Salt water depth(s) ft 1,257' Void(s) encountered (Y/N) depths None
Coal depth(s) ft None Identified Cavern(s) encountered (Y/N) depths None
Is coal being mined in area (Y/N) No

Reviewed by: _____

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JUN 01 2015

WV GEOLOGICAL SURVEY
MORGANTOWN, WV

WR-35
Rev. 8/23/13

Page ___ of ___

API 47-017 - 06261 Farm name Swisher, Leona Well number Josie Unit 2H

Table with 8 columns: CASING STRINGS, Hole Size, Casing Size, Depth, New or Used, Grade wt/ft, Basket Depth(s), Did cement circulate (Y/N). Rows include Conductor, Surface, Coal, Intermediate 1-3, Production, Tubing, and Packer type and depth set.

Comment Details

Table with 8 columns: CEMENT DATA, Class/Type of Cement, Number of Sacks, Slurry wt (ppg), Yield (ft^3/sks), Volume (ft^3), Cement Top (MD), WOC (hrs). Rows include Conductor, Surface, Coal, Intermediate 1-3, Production, Tubing.

Drillers TD (ft) 14,995' MD, 7,001' TVD (BHL); 7,004' TVD (Deepest Point Drilled) Loggers TD (ft) 14,962'
Deepest formation penetrated Marcellus Plug back to (ft) N/A
Plug back procedure N/A

Kick off depth (ft) 6,348'

**This is a subsequent well. Antero only runs wireline logs on one well on a multi-well pad (Josie Unit 1H, API #47-017-06265). Please reference the wireline logs submitted with Form WR-35 for the Josie Unit 1H. A Cement Bond Log has been included with this submittal.

Check all wireline logs run** [] caliper [] density [] deviated/directional [] induction [] neutron [] resistivity [] gamma ray [] temperature [] sonic

Well cored [] Yes [x] No Conventional [] Sidewall Were cuttings collected [] Yes [x] 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 [x] No DETAILS

WAS WELL COMPLETED OPEN HOLE? [] Yes [x] No DETAILS

WERE TRACERS USED [] Yes [x] No TYPE OF TRACER(S) USED

JUN 01 2015

WV GEOLOGICAL SURVEY
MORGANTOWN, WV

WR-35
Rev. 8/23/13

Page ___ of ___

API 47- 017 - 06261 Farm name Swisher, Leoan Well number Josie Unit 2H

PRODUCING FORMATION(S)	DEPTHS	
<u>Marcellus</u>	<u>6,929' (Top)</u> TVD	<u>7,275' (Top)</u> MD
_____	_____	_____
_____	_____	_____
_____	_____	_____

Please insert additional pages as applicable.

GAS TEST Build up Drawdown Open Flow OIL TEST Flow Pump

SHUT-IN PRESSURE Surface 3,950 psi Bottom Hole _____ psi DURATION OF TEST _____ hrs

OPEN FLOW Gas 9,963 mcfpd Oil 6 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 Patterson - UTI Drilling Company LLC
Address 207 Carlton Drive City Eighty four State PA Zip 15330

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 GoFrac
Address 62787 Philips Rd. City Cambridge State OH Zip 43725

Please insert additional pages as applicable.

Completed by Megan Darling Telephone 303-357-7230
Signature Megan C. Darling Title Permitting Agent Date 05/29/2015

Submittal of Hydraulic Fracturing Chemical Disclosure Information Attach copy of FRACFOCUS Registry

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MORGANTOWN, WV

API 47-017-06261 Farm Name Swisher, Leoan. Well Number Josie Unit 2H

EXHIBIT 1

Stage No.	Perforation Date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formations
1	26-Feb-14	14,716	14,905	60	Marcellus
2	14-Mar-14	14,516	14,685	60	Marcellus
3	15-Mar-14	14,316	14,485	60	Marcellus
4	15-Mar-14	14,116	14,285	60	Marcellus
5	15-Mar-14	13,916	14,085	60	Marcellus
6	16-Mar-14	13,716	13,885	60	Marcellus
7	16-Mar-14	13,516	13,685	60	Marcellus
8	16-Mar-14	13,317	13,485	60	Marcellus
9	16-Mar-14	13,117	13,285	60	Marcellus
10	17-Mar-14	12,917	13,085	60	Marcellus
11	17-Mar-14	12,717	12,885	60	Marcellus
12	17-Mar-14	12,517	12,685	60	Marcellus
13	18-Mar-14	12,317	12,486	60	Marcellus
14	19-Mar-14	12,117	12,286	60	Marcellus
15	19-Mar-14	11,917	12,086	60	Marcellus
16	19-Mar-14	11,717	11,886	60	Marcellus
17	19-Mar-14	11,517	11,686	60	Marcellus
18	22-Mar-14	11,317	11,486	60	Marcellus
19	22-Mar-14	11,117	11,286	60	Marcellus
20	22-Mar-14	10,918	11,086	60	Marcellus
21	22-Mar-14	10,718	10,886	60	Marcellus
22	22-Mar-14	10,518	10,686	60	Marcellus
23	23-Mar-14	10,318	10,486	60	Marcellus
24	23-Mar-14	10,118	10,286	60	Marcellus
25	23-Mar-14	9,918	10,087	60	Marcellus
26	23-Mar-14	9,718	9,887	60	Marcellus
27	23-Mar-14	9,518	9,687	60	Marcellus
28	24-Mar-14	9,318	9,487	60	Marcellus
29	24-Mar-14	9,118	9,287	60	Marcellus
30	24-Mar-14	8,918	9,087	60	Marcellus
31	24-Mar-14	8,718	8,887	60	Marcellus
32	24-Mar-14	8,518	8,687	60	Marcellus
33	25-Mar-14	8,319	8,487	60	Marcellus
34	25-Mar-14	8,119	8,287	60	Marcellus
35	25-Mar-14	7,919	8,087	60	Marcellus
36	26-Mar-14	7,719	7,887	60	Marcellus
37	26-Mar-14	7,519	7,687	60	Marcellus
38	26-Mar-14	7,319	7,488	60	Marcellus

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	14-Mar-14	70.6	7,736	5,820	5,166	227,855	6,125	N/A
2	14-Mar-14	72.7	7,964	6,476	5,693	221,985	6,101	N/A
3	15-Mar-14	70.6	7,960	6,756	4,629	225,530	6,175	N/A
4	15-Mar-14	69.2	8,060	6,398	5,483	227,795	5,971	N/A
5	15-Mar-14	69.8	8,326	6,530	5,775	227,360	6,112	N/A
6	16-Mar-14	69.9	8,103	6,788	5,978	225,620	7,234	N/A
7	16-Mar-14	71.3	7,890	6,054	5,547	200,410	6,574	N/A
8	16-Mar-14	71.5	7,870	6,188	5,446	227,703	5,962	N/A
9	16-Mar-14	74.4	7,944	6,816	5,496	227,485	5,990	N/A
10	17-Mar-14	76.2	7,965	6,400	5,604	212,475	5,996	N/A
11	17-Mar-14	72.3	7,925	6,448	4,428	225,660	6,494	N/A
12	17-Mar-14	70.8	7,827	6,285	5,509	228,110	6,159	N/A
13	18-Mar-14	69.9	7,860	6,087	5,568	201,799	5,895	N/A
14	19-Mar-14	69.8	7,830	6,444	6,526	141,815	2,129	N/A
15	19-Mar-14	65.5	8,042	6,152	5,947	164,426	6,369	N/A
16	19-Mar-14	59.1	8,056	6,925	5,960	164,333	5,658	N/A
17	19-Mar-14	62.1	7,796	6,187	5,215	120,397	6,373	N/A
18	22-Mar-14	68.4	7,687	6,300	5,192	152,735	6,409	N/A
19	22-Mar-14	40.8	8,375	6,476	5,125	33,620	6,032	N/A
20	22-Mar-14	74.3	7,554	6,550	4,813	183,485	6,239	N/A
21	22-Mar-14	74.4	7,474	6,308	4,902	226,395	5,820	N/A
22	22-Mar-14	75.1	7,668	6,319	5,292	211,700	5,659	N/A
23	23-Mar-14	78.3	7,627	6,076	5,008	228,000	5,804	N/A
24	23-Mar-14	76.3	7,809	6,046	5,413	230,675	5,784	N/A
25	23-Mar-14	59.8	7,810	6,140	4,832	196,280	6,338	N/A
26	23-Mar-14	77.4	7,674	6,038	4,689	227,915	5,757	N/A
27	23-Mar-14	75.7	7,501	6,238	5,442	227,925	5,753	N/A
28	24-Mar-14	75.0	7,380	5,947	5,012	227,935	5,738	N/A
29	24-Mar-14	70.6	7,260	6,049	4,934	228,898	5,733	N/A
30	24-Mar-14	77.0	7,450	6,103	5,147	224,185	5,724	N/A
31	24-Mar-14	79.1	7,355	6,371	5,250	228,055	5,696	N/A
32	24-Mar-14	78.5	7,447	5,880	5,979	227,980	5,880	N/A
33	25-Mar-14	72.4	7,546	5,747	5,220	213,137	5,396	N/A
34	25-Mar-14	76.3	7,501	5,630	5,889	228,641	5,659	N/A
35	25-Mar-14	76.0	7,491	6,193	4,687	228,015	5,758	N/A
36	26-Mar-14	81.4	6,696	5,235	5,966	180,513	6,045	N/A
37	26-Mar-14	76.8	7,449	5,905	4,572	228,362	5,618	N/A
38	26-Mar-14	73.3	7,396	3,217	5,257	227,910	5,598	N/A
	AVG=	71.6	7,719	6,145	5,331	7,833,119	223,757	TOTAL

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MORGANTOWN, WV

EXHIBIT 3

LITHOLOGY/ FORMATION	TOP DEPTH (TVD) From Surface	BOTTOM DEPTH (TVD) From Surface	TOP DEPTH (MD) From Surface	BOTTOM DEPTH (MD) From Surface
Fresh Water	71'	N/A	71'	N/A
Fresh Water	89'	N/A	89'	N/A
Sandstone	11	337	11	337
Siltstone/COAL	337	381	337	381
Siltstone	381	483	381	483
Sandstone	483	571	483	571
Siltstone	571	956	571	956
Sandstone	956	973	956	973
Siltstone	973	1,005	973	1,005
Sandstone	1,005	1,017	1,005	1,017
Sandstone/Shale	1,017	1,077	1,017	1,077
Sandstone	1,077	1,302	1,077	1,302
Siltstone	1,302	1,337	1,302	1,337
Sanstone	1,337	1,365	1,337	1,365
Siltstone	1,365	1,412	1,365	1,412
Sandstone	1,412	1,467	1,412	1,467
Siltstone/ COAL	1,467	1,497	1,467	1,497
Sanstone	1,497	1,637	1,497	1,637
Siltstone/ Shale	1,637	1,775	1,637	1,775
Sandstone	1,775	1,807	1,775	1,807
Siltstone	1,807	2,042	1,807	2,042
Big Lime	2,042	2,131	2,042	2,131
Big Injun	2,131	2,337	2,131	2,337
Gantz Sand	2,337	2,506	2,337	2,506
Fifty Foot Sandstone	2,506	2,710	2,506	2,710
Gordon	2,710	3,056	2,710	3,056
Fifth Sandstone	3,056	3,119	3,056	3,119
Bayard	3,119	3,401	3,119	3,401
Warren	3,401	3,701	3,401	3,701
Speechley	3,701	3,903	3,701	3,903
Baltown	3,903	4,539	3,903	4,539
Bradford	4,539	4,985	4,539	4,985
Benson	4,985	5,227	4,985	5,227
Alexander	5,227	5,452	5,227	5,452
Elk	5,452	5,992	5,452	5,992
Rhinestreet	5,992	6,504	5,992	6,513
Sycamore	6,504	6,663	6,513	6,710
Middlesex	6,663	6,798	6,710	6,946
Burkett	6,798	6,835	6,946	7,016
Tully	6,835	6,929	7,016	7,275
Marcellus	6,929	NA	7,275	NA

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Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	3/14/2014
Job End Date:	3/26/2014
State:	West Virginia
County:	Doddridge
API Number:	47-017-06261-00-00
Operator Name:	Antero Resources Corporation
Well Name and Number:	Josie Unit 2H
Longitude:	-80.66633890
Latitude:	39.21038060
Datum:	NAD27
Federal/Tribal Well:	NC
True Vertical Depth:	7,004
Total Base Water Volume (gal):	0
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
Freshwater	Antero Resources	Water	Water	7732-18-5	100.00000	90.70898	
40/70 White	US Silica	Proppant	Sand	14808-60-7	100.00000	4.91440	
20/40 White	US Silica	Proppant	Sand	14808-60-7	100.00000	2.92370	
100 Mesh	US Silica	Proppant	Sand	14808-60-7	100.00000	1.26770	
Beta M-4.0	PIP	Guar Gel	Petroleum Distillate	64742-47-8	55.00000	0.04677	
			Guar Gum	9000-30-0	50.00000	0.04252	
			Clay	1302-78-9	5.00000	0.00425	
			Surfactant	154518-36-2	1.00000	0.00085	
Plexslick 953	Chemplex	Friction Reducer	Water	7732-18-5	35.00000	0.02152	
			Polyacrylamide-co-acrylic acid	9003-06-9	32.00000	0.01967	
			Hydrotreated Petroleum Distillate	64742-47-8	30.00000	0.01844	
			Alcohol Ethoxyate Surfactants	Proprietary	8.00000	0.00492	

Hydrochloric Acid 10-15%	Reagent Acid								
						Hydrochloric Acid	7647-01-0	15.00000	0.03424
Plexicide 15G	Biocide					Water	732-18-5	90.00000	0.02285
						Glutaraldehyde	111-30-8	14.00000	0.00355
						Didecyl Dimethyl Ammonium Chloride	7173-51-5	3.00000	0.00076
						Alkyl Dimethyl Benzyl Ammonium Chloride	68424-85-1	3.00000	0.00076
						Ethanol	64-17-5	3.00000	0.00076
Plexaid 673	Scale Inhibitor					Water	732-18-5	85.00000	0.01335
						Methyl Alcohol	67-56-1	25.00000	0.00393
						Sodium Salt of Phosphonodimethylated Diamine	Proprietary	5.00000	0.00079
Sodium Persulfate	Breaker					Sodium Persulfate	7775-27-1	100.00000	0.00123
Plexhib 256	Corrosion					Methyl Alcohol	67-56-1	70.00000	0.00049
						Alcohol Ethoxylate Surfactants	Proprietary	30.00000	0.00021
						thiourea-formaldehyde copolymer	68527-49-1	30.00000	0.00021
						n-Olefins	Proprietary	10.00000	0.00007
Plexbreak 145	Non-emulsifier					Propargyl Alcohol	107-19-7	8.00000	0.00006
						Water	732-18-5	66.00000	0.00052
						Ethylene Glycol Monobutyl Ether	111-76-2	15.00000	0.00012
						Methyl Alcohol	67-56-1	15.00000	0.00012
						Cocamide Diethanolamine Salt	68603-42-9	10.00000	0.00008
Ferriplex 66	Iron Control					Diethanolamine	111-42-2	5.00000	0.00004
						Acetic Acid	64-19-7	50.00000	0.00022
						Water	732-18-5	35.00000	0.00016
						Citric Acid	77-92-9	30.00000	0.00013

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.

* Total Water Volume sources may include fresh water, produced water, and/or recycled water

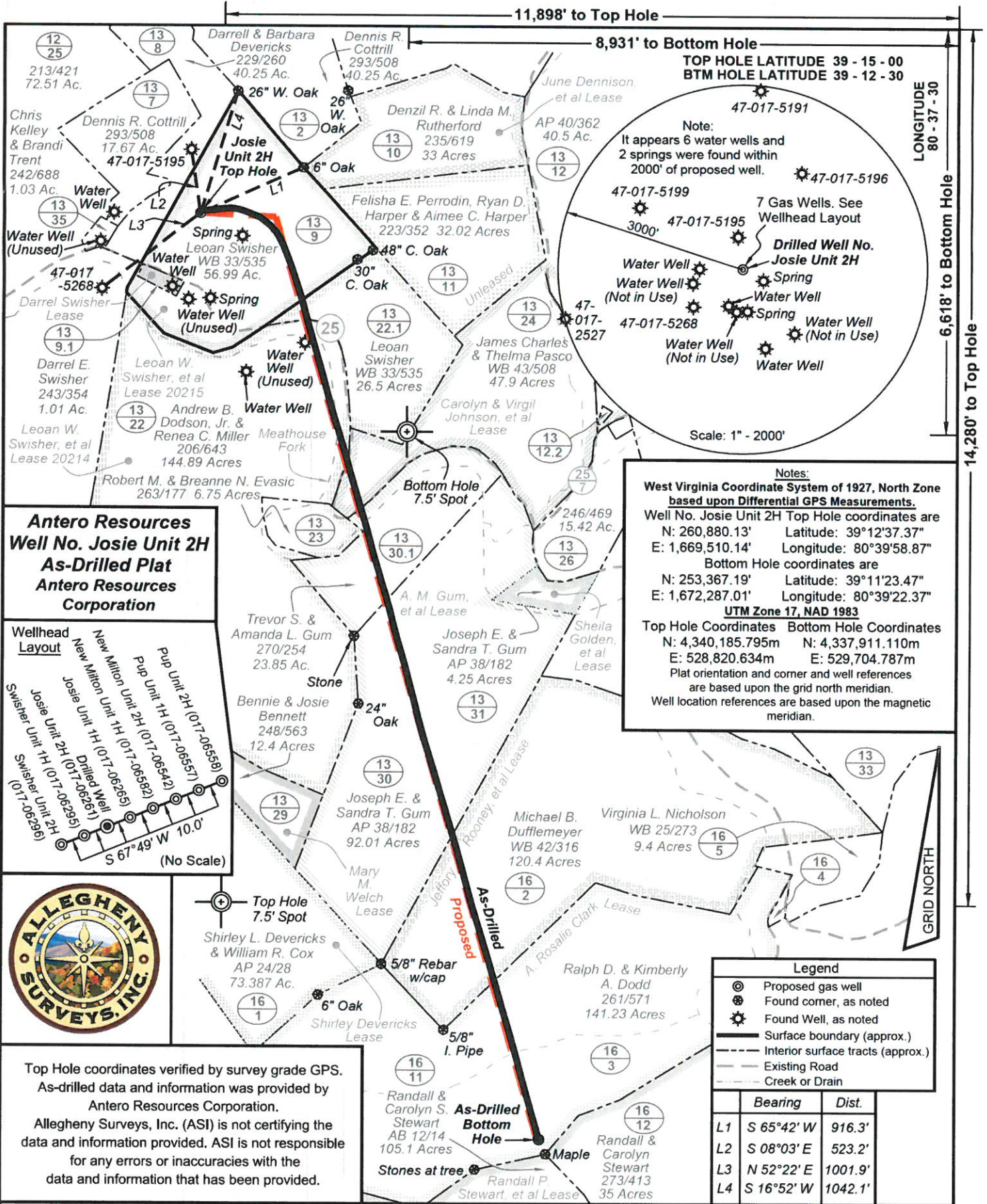
** Information is based on the maximum potential for concentration and thus the total may be over 100%

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)

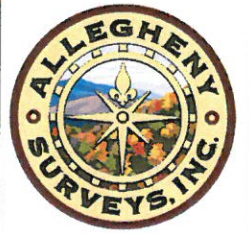
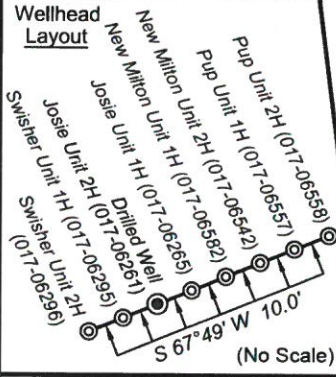
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WV GEOLOGICAL SURVEY
MORGANTOWN, WV



**Antero Resources
Well No. Josie Unit 2H
As-Drilled Plat
Antero Resources
Corporation**



Top Hole coordinates verified by survey grade GPS. As-drilled data and information was provided by Antero Resources Corporation. Allegheny Surveys, Inc. (ASI) is not certifying the data and information provided. ASI is not responsible for any errors or inaccuracies with the data and information that has been provided.

FILE NO: 72-30-NM-13
DRAWING NO: 72-13 Josie Drilled Unit 2H
SCALE: 1" = 1000'
MINIMUM DEGREE OF ACCURACY: Submeter
PROVEN SOURCE OF ELEVATION: WVDOT, Bridgeport, WV

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

Notes:
West Virginia Coordinate System of 1927, North Zone based upon Differential GPS Measurements.
Well No. Josie Unit 2H Top Hole coordinates are
N: 260,880.13' Latitude: 39°12'37.37"
E: 1,669,510.14' Longitude: 80°39'58.87"
Bottom Hole coordinates are
N: 253,367.19' Latitude: 39°11'23.47"
E: 1,672,287.01' Longitude: 80°39'22.37"
UTM Zone 17, NAD 1983
Top Hole Coordinates Bottom Hole Coordinates
N: 4,340,185.795m N: 4,337,911.110m
E: 528,820.634m E: 529,704.787m
Plat orientation and corner and well references are based upon the grid north meridian.
Well location references are based upon the magnetic meridian.

Legend

- ⊙ Proposed gas well
- ⊙ Found corner, as noted
- ⊙ Found Well, as noted
- Surface boundary (approx.)
- - - Interior surface tracts (approx.)
- - - Existing Road
- - - Creek or Drain

	Bearing	Dist.
L1	S 65°42' W	916.3'
L2	S 08°03' E	523.2'
L3	N 52°22' E	1001.9'
L4	S 16°52' W	1042.1'

DATE: April 14 2015
OPERATOR'S WELL NO. Josie Unit 2H
API WELL NO
47 - 017 - 06261
STATE COUNTY PERMIT

WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL
(IF GAS) PRODUCTION: STORAGE DEEP SHALLOW
Original 995'
ELEVATION: Existing 980' WATERSHED: Headwaters Middle Island Creek QUADRANGLE: New Milton
DISTRICT: New Milton Carolyn & Virgil Johnson, et al COUNTY: Doddridge 120
SURFACE OWNER: Leonan Swisher A. M. Gum, et al; A. Rosalie Clark 72.54
OIL & GAS ROYALTY OWNER: Jeffory Rooney, et al; Leonan W. Swisher, et al 20215 ACREAGE: 56.99 178.14
LEASE #: 20214 ACREAGE: 56.99; 116; 141.46
PROPOSED WORK: DRILL CONVERT DRILL DEEPER FRACTURE OR STIMULATE PLUG OFF OLD FORMATION
 PERFORATE NEW FORMATION OTHER PHYSICAL CHANGE IN WELL (SPECIFY) As-Drilled 7,000' TVD
 PLUG AND ABANDON CLEAN OUT AND REPLUG TARGET FORMATION: Marcellus Shale DEPTH: 14,995' MD

WELL OPERATOR: Antero Resources Corporation DESIGNATED AGENT: Dianna Stamper - CT Corporation System
ADDRESS: 1615 Wynkoop Street ADDRESS: 5400 D Big Tyler Road
Denver, CO 80202 Charleston, WV 25313