

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

API 47-033-05871 County Harrison District Grant
Quad Mount Clare Pad Name Tony's Bridge Field/Pool Name _____
Farm name Lynch Farms, LLC Well Number 213
Operator (as registered with the OOG) Mountaineer Keystone, LLC
Address 6031 Wallace Rd Ext., Suite 300 City Wexford State PA Zip 15090

As Drilled location NAD 83/UTM Attach an as-drilled plat, profile view, and deviation survey
Top hole Northing 4342414.15 Easting 555515.05
Landing Point of Curve Northing 4342344.99 Easting 555483.52
Bottom Hole Northing 4344475.09 Easting 554708.19

Elevation (ft) 1139.6 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)
Synthetic Oil-based Mud

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Date permit issued 12/5/2016 Date drilling commenced 1/10/2017 Date drilling ceased 02/3/2017
Date completion activities began 4/03/2017 Date completion activities ceased _____
Verbal plugging (Y/N) NA Date permission granted _____ Granted by _____

Please note: Operator is required to submit a plugging application within 5 days of verbal permission to plug

Freshwater depth(s) ft _____ Open mine(s) (Y/N) depths N
Salt water depth(s) ft _____ Void(s) encountered (Y/N) depths N
Coal depth(s) ft _____ Cavern(s) encountered (Y/N) depths N

Is coal being mined in area (Y/N) N

APPROVED

NAME: Sam Ward

DATE: 8/24/17

Reviewed by:

14C

09/15/2017

API 47- 033 - 05871 Farm name Lynch Farms, LLC Well number 213

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"	24"	80'	New	94.00	NA	Y
Surface	17.5"	13 3/8"	372'	New	54.50	120'	Y
Coal							
Intermediate 1	12 1/4"	9 5/8"	2,402'	New	40.00	NA	Y
Intermediate 2							
Intermediate 3							
Production	8 1/2"	5 1/2"	15,211'	New	20.00	NA	Y
Tubing							
Packer type and depth set							

Comment Details Cement to surface on Conductor, Surface, and Intermediate. Top of Cement at 2460ft

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	230	15.60	1.20	276	Surface	8+
Surface	A	480	15.6	1.20	576	Surface	8+
Coal							
Intermediate 1	A	488/170	14.5/15.7	1.55/1.29	757/220	Surface	8
Intermediate 2							
Intermediate 3							
Production	A	2690	13.8	1.27	3416	2,460	8+
Tubing							

Drillers TD (ft) 15,235 Loggers TD (ft) NA
 Deepest formation penetrated Marcellus Plug back to (ft) NA
 Plug back procedure NA

Kick off depth (ft) KOP of Curve at 6,576 ft, No Plug

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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

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DESCRIBE THE CENTRALIZER PLACEMENT USED FOR EACH CASING STRING _____

24" - No centralizers 13 3/8" - one bow spring centralizer on every other joint 9 5/8" - one bow spring centralizer every third joint from TD to surface 5 1/2" - one semi rigid centralizer on every joint from TD of casing to end of curve. Then every other joint to KOP. Every third joint from KOP to 2,500'; then

WAS WELL COMPLETED AS SHOT HOLE Yes No DETAILS Completed 37 stages, 1,480 perforations

WAS WELL COMPLETED OPEN HOLE? Yes No DETAILS _____

WERE TRACERS USED Yes No TYPE OF TRACER(S) USED _____

Stage No.	Perforation Date	Perforated from MD Ft.	Perforated to MD Ft.	Number of Perforations	Formation(s)
1	4/24/2017 20:09	7763	7925	40	Marcellus Shale
2	4/25/2017 14:00	7963	8125	40	Marcellus Shale
3	4/25/2017 7:00	8163	8328	40	Marcellus Shale
4	4/24/2017 11:40	8363	8525	40	Marcellus Shale
5	4/24/2017 4:45	8563	8725	40	Marcellus Shale
6	4/23/2017 20:06	8763	8925	40	Marcellus Shale
7	4/23/2017 11:40	8963	9117	40	Marcellus Shale
8	4/23/2017 2:14	9153	9307	40	Marcellus Shale
9	4/23/2017 19:48	9343	9497	40	Marcellus Shale
10	4/22/2017 13:01	9533	9687	40	Marcellus Shale
11	4/22/2017 5:00	9723	9877	40	Marcellus Shale
12	4/21/2017 22:47	9913	10067	40	Marcellus Shale
13	4/21/2017 15:30	10103	10257	40	Marcellus Shale
14	4/21/2017 9:31	10293	10447	40	Marcellus Shale
15	4/21/2017 3:01	10483	10637	40	Marcellus Shale
16	4/20/2017 15:00	10673	10827	40	Marcellus Shale
17	4/20/2017 6:00	10863	11017	40	Marcellus Shale
18	4/20/2017 22:41	11053	11207	40	Marcellus Shale
19	4/19/2017 22:41	11243	11397	40	Marcellus Shale
20	4/19/2017 4:15	11433	11587	40	Marcellus Shale
21	4/18/2017 22:28	11623	11777	40	Marcellus Shale
22	4/18/2017 13:49	11813	11967	40	Marcellus Shale
23	4/18/2017 7:01	12003	12157	40	Marcellus Shale
24	4/17/2017 20:29	12193	12347	40	Marcellus Shale
25	4/17/2017 10:53	12383	12537	40	Marcellus Shale
26	4/17/2017 3:22	12573	12727	40	Marcellus Shale
27	4/16/2017 17:17	12975	13129	40	Marcellus Shale
28	4/16/2017 8:19	13165	13324	40	Marcellus Shale
29	4/16/2017 3:00	13362	13524	40	Marcellus Shale
30	4/13/2017 7:50	13562	13724	40	Marcellus Shale
31	4/12/2017 1:33	13762	13924	40	Marcellus Shale
32	4/12/2017 19:45	13962	14124	40	Marcellus Shale
33	4/12/2017 14:00	14162	14324	40	Marcellus Shale
34	4/12/2017 8:26	14362	14524	40	Marcellus Shale
35	4/12/2017 2:04	14562	14724	40	Marcellus Shale
36	4/11/2017 10:37	14762	14924	40	Marcellus Shale
37	4/11/2017 6:00	14962	15125	40	Marcellus Shale

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Stage	Stimulation	Average	Average	Breakdown	ISIP	Sand	Water
Number	Date	Rate	Pressure	Pressure		Volume	Volume
		(bpm)	(psi)	(psi)	(psi)	lbs	Bbls
1	4/11/2017	73	7719	5178	4241	480160	9541
2	4/11/2017	73	7976	6062	4326	461440	12073
3	4/12/2017	72	8118	6878	4727	418100	8519
4	4/12/2017	68	7956	6517	4829	469020	10259
5	4/12/2017	75	8516	6853	4613	459710	9368
6	4/12/2017	79	8562	6465	4892	499380	10329
7	4/13/2017	73	8851	6942	5856	345800	11049
8	4/13/2017	77	8716	6869	5346	496180	11843
9	4/16/2017	72	8376	6700	4707	505380	11706
10	4/16/2017	77	8572	6659	5070	503900	10831
11	4/16/2017	77	8558	6386	5082	480600	11800
12	4/17/2017	70	8755	5956	4812	313000	11643
13	4/17/2017	77	8264	5768	4657	505540	12210
14	4/17/2017	72	8353	6601	4886	493780	12395
15	4/18/2017	79	8199	6174	4742	502060	10379
16	4/18/2017	79	8109	6197	4949	500520	11837
17	4/19/2017	80	7872	6056	4979	502600	9733
18	4/19/2017	80	7886	6147	4756	504460	9931
19	4/19/2017	80	7805	6017	5024	503540	10023
20	4/20/2017	80	7867	6254	5666	446160	9239
21	4/20/2017	80	7714	6071	5068	435640	9388
22	4/20/2017	80	8883	6289	5045	503660	9900
23	4/21/2017	75	8040	6203	4620	502680	12988
24	4/21/2017	82	7630	6185	4483	503160	10242
25	4/21/2017	81	7669	6514	4888	504820	11794
26	4/22/2017	79	7705	6447	4988	501700	11253
27	4/22/2017	81	7470	6330	4769	506440	9719
28	4/22/2017	82	7575	6326	4847	502700	9888
29	4/22/2017	80	7552	6369	4688	498140	11601
30	4/23/2017	79	7237	6497	4994	501480	10162
31	4/23/2017	81	7616	6149	4793	502800	11755
32	4/24/2017	80	7565	6651	4764	500260	10916
33	4/24/2017	81	6964	5383	5979	503820	9626
34	4/24/2017	79	7279	6160	5675	500760	12049
35	4/24/2017	78	7349	6642	4779	501940	10898
36	4/25/2017	81	6924	6668	5264	502880	9024
37	4/25/2017	81	7112	6709	5142	502600	8426

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<u>PRODUCING FORMATION(S)</u>	<u>DEPTHS</u>	
<u>Marcellus Shale</u>	<u>7,211</u> TVD	<u>7,679</u> MD
_____	_____	_____
_____	_____	_____
_____	_____	_____

Please insert additional pages as applicable.

GAS TEST Build up Drawdown Open Flow OIL TEST Flow Pump

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

OPEN FLOW Gas _____ mcfpd Oil _____ 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)
Sand/silt	0	1080	0	1080	Sand/silt
Pittsburgh Coal	1080	1110	1080	1110	Coal
Big Lime	1560	1620	1560	1620	Limestone
Thirty Foot Sand	2130	2160	2130	2160	Sandstone, gas bearing
Balltown	3320	4020	3320	4020	Sandstone
Bradford	4020	4590	4020	4590	Sandstone
Benson	4590	4830	4590	4830	Sandstone
Elk	4830	6931	4830	6931	Siltstone
Burkett	6931	6950	7090	7120	Shale
Tully	6950	6995	7120	7190	Limestone
Mahantango	6995	7122	7190	7410	Shale
Marcellus	7122	7211	7410	7679	Shale, gas bearing
Purcell	7211	7213	7679	7690	Limestone
Lower Marcellus	7213	7239	7690	15235	Shale, gas bearing

Please insert additional pages as applicable.

Drilling Contractor H&P
 Address 1437 South Boulder Ave. City Tulsa State OK Zip 74119
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Logging Company NA
 Address _____ City _____ State _____ Zip _____

Cementing Company Universal Well Services
 Address 18360 Technology Dr Box 4 City Meadville State PA Zip 16335

Stimulating Company Keane Group
 Address 2121 Sage Road City Houston State TX Zip 77056

Please insert additional pages as applicable.

Completed by Arsenal Resources Telephone _____
 Signature [Signature] Title PERMITTING MANAGER Date 8-10-17

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

09/15/2017

Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	4/11/2017
Job End Date:	4/25/2017
State:	West Virginia
County:	Harrison
API Number:	47-033-05871-00-00
Operator Name:	Arsenal Resources
Well Name and Number:	Tonys Bridge 213H
Latitude:	39.22925000
Longitude:	-80.35681000
Datum:	NAD83
Federal Well:	NO
Indian Well:	NO
True Vertical Depth:	7,258
Total Base Water Volume (gal):	16,986,228
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	Ascent	Carrier/Base Fluid	Water	7732-18-5	100.00000	88.33895	None
Sand (Proppant)	Keane	Proppant	Crystalline silica: Quartz (SiO2)	14808-60-7	100.00000	11.13463	None
Hydrochloric Acid (7.5%)	Keane	Acid Inhibitor	Water	7732-18-5	92.50000	0.38062	None
			Hydrochloric Acid	7647-01-0	7.50000	0.03086	None
KFR-16FW	Keane	Friction Reducer	Water	7732-18-5	60.00000	0.05585	None
			Distillates (petroleum), hydrotreated light	64742-47-8	20.00000	0.01862	None
			oleic acid diethanolamide	93-83-4	1.50000	0.00140	None
			ammonium chloride	12125-02-9	1.50000	0.00140	None
			alcohols, C12-16, ethoxylated	68551-12-2	1.00000	0.00093	None
MBC-516	Keane	Biocide	Water	7732-18-5	56.70000	0.00523	None
			Glutaral	111-30-8	26.70000	0.00246	None

			didecyldimethylammonium chloride	7173-51-5	8.00000	0.00073	None
			quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides	68424-85-1	5.30000	0.00049	None
			ethonal	64-17-5	2.80000	0.00026	None
KSI-19	Keane	Scale Inhibitor					
			Methanol	67-56-1	30.00000	0.00237	None
KAI-12	Keane	Acid Inhibitor					
			Ethylene glycol	107-21-1	40.00000	0.00075	None
			dipropylene glycol, monomethyl ether	34590-94-8	20.00000	0.00038	None
			Cinnamaldehyde	104-55-2	10.00000	0.00019	None
			formic acid	64-18-6	10.00000	0.00019	None
			Tar bases, quinoline derivs., benzyl chloride-quaternized	72480-70-7	10.00000	0.00019	None
			Ethoxylated alcohol	68131-39-5	10.00000	0.00019	None
			isoproyl alcohol	67-63-0	5.00000	0.00009	None
KFR-17	Keane	Friciton Reducer					
			Distillates (petroleum), hydrotreated light	64742-47-8	45.00000	0.00129	None
			ethanediol	107-21-1	10.00000	0.00029	None
			Fatty alcohols ethoxylated	Proprietary	2.00000	0.00006	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	92.50000	0.38062	
			Distillates (petroleum), hydrotreated light	64742-47-8	20.00000	0.01862	
			Glutaral	111-30-8	26.70000	0.00246	
			ammonium chloride	12125-02-9	1.50000	0.00140	
			oleic acid diethanolamide	93-83-4	1.50000	0.00140	
			alcohols, C12-16, ethoxylated	68551-12-2	1.00000	0.00093	
			didecyldimethylammonium chloride	7173-51-5	8.00000	0.00073	
			quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides	68424-85-1	5.30000	0.00049	
			dipropylene glycol, monomethyl ether	34590-94-8	20.00000	0.00038	
			ethanediol	107-21-1	10.00000	0.00029	
			ethonal	64-17-5	2.80000	0.00026	
			Tar bases, quinoline derivs., benzyl chloride-quaternized	72480-70-7	10.00000	0.00019	
			formic acid	64-18-6	10.00000	0.00019	
			Ethoxylated alcohol	68131-39-5	10.00000	0.00019	
			Cinnamaldehyde	104-55-2	10.00000	0.00019	
			isoproyl alcohol	67-63-0	5.00000	0.00009	
			Fatty alcohols ethoxylated	Proprietary	2.00000	0.00006	
			Water	7732-18-5	85.00000	0.00001	

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* 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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BOTTOM HOLE SURVEYED LONGITUDE 80°21'58.10" SURFACE HOLE SURVEYED LONGITUDE 80°21'24.51" 9,291' 6,650' LATITUDE: 39°15'00"

MOUNTAINEER KEYSTONE, LLC
WELL NO. 213 - TONY'S BRIDGE
47-033-05871

MOUNTAINEER KEYSTONE, LLC
WELL NO. 213 (AS-DRILLED 47-033-05871)

TOP HOLE (T.H.)	LANDING POINT (L.P.)	BOTTOM HOLE (B.H.)
LAT. / LON. (WGS 84): LAT. 39°13'45.30" LON. -80°21'24.51" UTM ZONE 17 (NAD 83) METERS): N. 4342414.15 E. 555515.05	LAT. / LON. (WGS 84): LAT. 39°13'44.52" LON. -80°21'26.43" UTM ZONE 17 (NAD 83) METERS): N. 4342389.82 E. 555469.39	LAT. / LON. (WGS 84): LAT. 39°14'53.34" LON. -80°21'58.10" UTM ZONE 17 (NAD 83) METERS): N. 4344505.94 E. 554695.10

AS-DRILLED
 BOTTOM HOLE
 WELL NO. 213

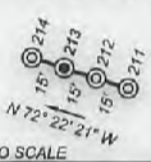
NOTES ON SURVEY

- NO OCCUPIED DWELLINGS OR BUILDINGS 2500 SQUARE FEET OR LARGER USED TO HOUSE OR SHELTER DAIRY CATTLE OR POULTRY HUSBANDRY WITHIN 535 FEET OF THE CENTER OF THE WELL PAD WERE OBSERVED.
- NO WATER WELLS OR DEVELOPED SPRINGS USED FOR HUMAN OR DOMESTIC ANIMAL CONSUMPTION WERE FOUND WITHIN 250 FEET OF THE WELL PAD.
- NO RAILROADS ARE CROSSED BY THE PROPOSED TONY'S BRIDGE 213 LATERAL SURFACE OWNERSHIP TAKEN FROM THE HARRISON COUNTY TAX ASSESSOR AND COUNTY CLERK OFFICES IN FEBRUARY, 2015.
- WELL LATITUDE AND LONGITUDE FROM SURVEY GRADE OPUS SOLUTION DERIVED ON FEBRUARY 20, 2015.
- TIES TO CORNERS AND REFERENCES BASED ON WV STATE PLANE COORDINATE SYSTEM, NAD '83 NORTH ZONE UNLESS OTHERWISE NOTED.
- LEASE INFORMATION PROVIDED BY MOUNTAINEER KEYSTONE, LLC.

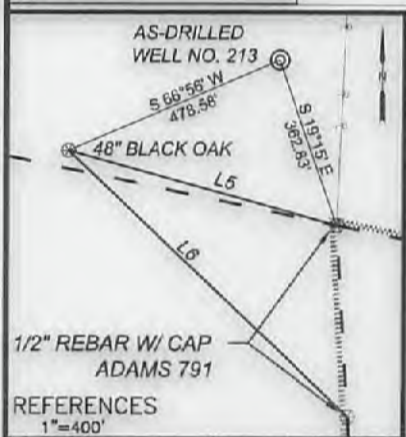
ID	BEARING	DISTANCE
L1	N 34°02' W	1498.42'
L2	N 67°41' W	1897.09'
L3	S 06°57' E	836.73'
L4	N 19°03' W	7439.46'
L5	S 74°31' E	581.08'
L6	S 46°35' E	803.05'

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

TONY'S BRIDGE PAD LAYOUT



NOT TO SCALE



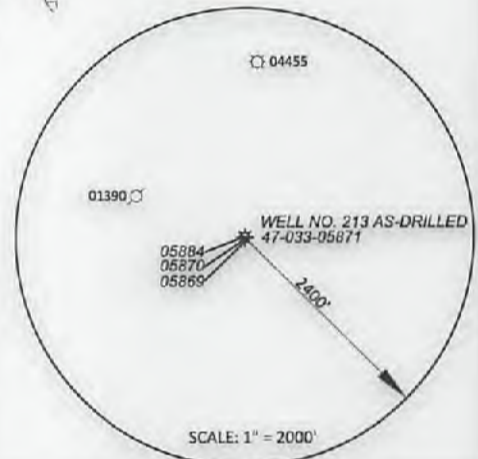
MOUNTAINEER KEYSTONE, LLC
WELL NO. 213 AS-PERMITTED

TOP HOLE (T.H.)	LANDING POINT (L.P.)	BOTTOM HOLE (B.H.)
LAT. / LON. (WGS 84): LAT. 39°13'45.30" LON. -80°21'24.51" UTM ZONE 17 (NAD 83) METERS): N. 4342414.15 E. 555515.05	LAT. / LON. (WGS 84): LAT. 39°13'43.06" LON. -80°21'25.85" UTM ZONE 17 (NAD 83) METERS): N. 4342344.99 E. 555483.52	LAT. / LON. (WGS 84): LAT. 39°14'52.33" LON. -80°21'57.56" UTM ZONE 17 (NAD 83) METERS): N. 4344475.09 E. 554708.19

MOUNTAINEER KEYSTONE, LLC
WELL NO. 213

LEASE NO.	LESSOR	LEASE AC.
WV03130-001-002	ALMETA L. DAWSON, ET AL	100
WV03128-000	FRANK J. MAXWELL	748
WV03140-001-004	MONTANI, INC. ET AL	132

LEASE BOUNDARY
OUTER LEASE BOUNDARY
SURFACE BOUNDARY
CREEK/STREAM
ROADS
AS-DRILLED LATERAL
PROPOSED LATERAL
500' LATERAL OFFSET
EXISTING GAS WELL (active)
EXISTING GAS WELL (plugged)
EXISTING GAS WELL (never permitted)
FOUND MONUMENT (as noted)
TAX MAP AND PARCEL NO.
WHITE OAK FOUND



600 Marketplace Avenue, Suite 200
 Bridgeport, WV 26330
 Toll Free 855-488-9539
 Fax 304-933-3327
Civil & Environmental Consultants, Inc.



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 Division of Environmental Protection.

[Signature]

DATE JULY 11, 2017
 SCALE 1" = 2,000' ACCURACY 1:200
 OPERATORS WELL No. 213 AS-DRILLED
47 - 033 - 05871
 API No.

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



GAS:
 Production Storage *Deep *Shallow

PROPOSED WORK ON LOCATION:
 Drill Drill Deeper Redrill Convert
 Fracture/ Stimulate *Plug off to Formation
 Perforate New Formation Plug and Abandon
 Clean/ Replug Other Than Above
 If "Other" Please see Details below
 DETAILS OF PROPOSED WORK AS-DRILLED
 *TARGET FORMATION MARCELLUS
 ESTIMATED DEPTH TVD: ~7,239', TMD: ~15,235'

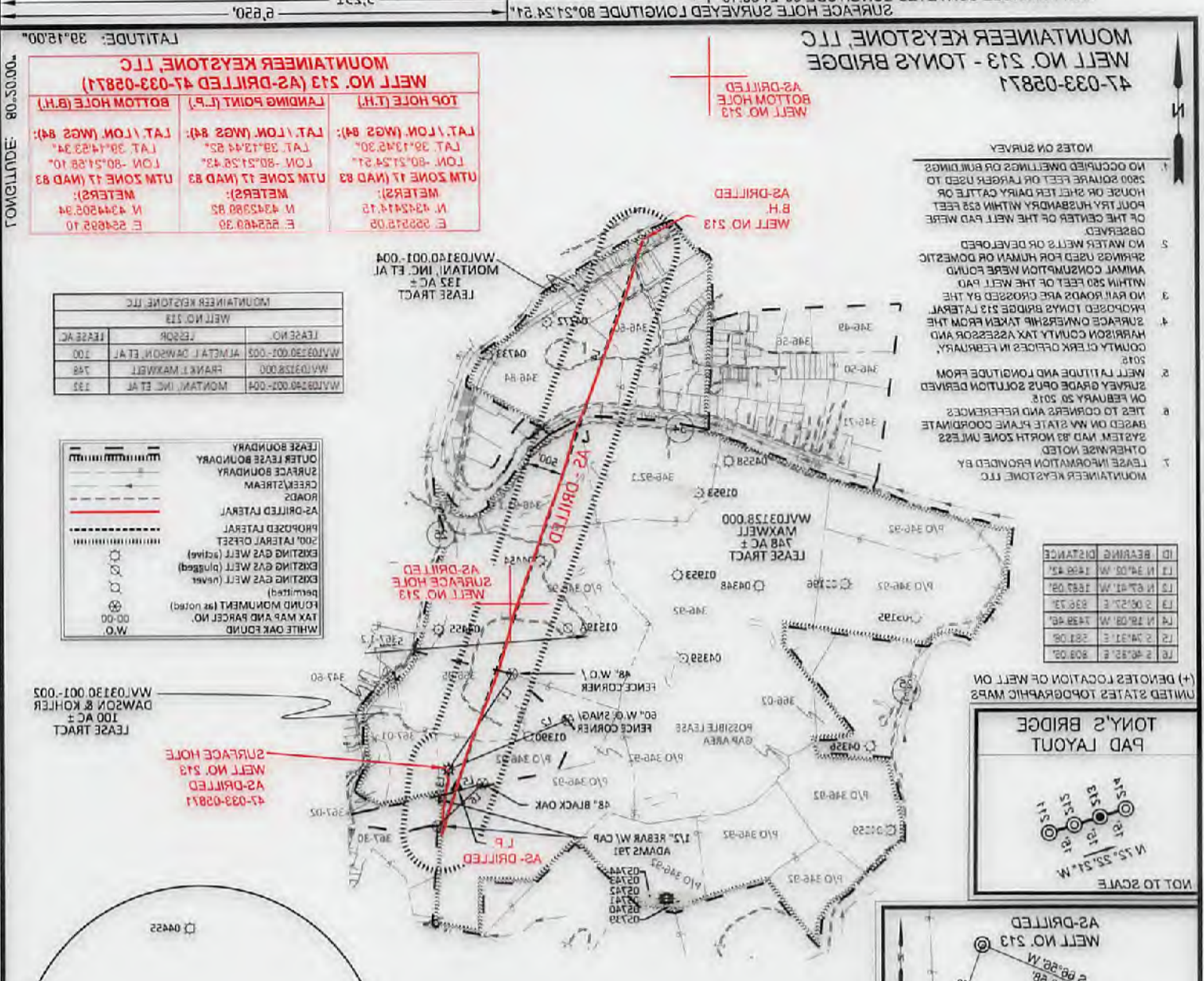
WELL AREA & LOCATION INFORMATION:
 ELEVATION SOURCE DGPS (OPUS)
 ELEVATION 1139.6' (GROUND), 1140.5' (PROPOSED)
 WATERSHED BROWN'S CREEK OF WEST FORK RIVER DISTRICT, GRANT
 COUNTY HARRISON TOPO QUAD MOUNT CLARE
 SURFACE OWNER LYNCH FARM, LLC
 ACREAGE P/O 662.80 AC±
 ROYALTY OWNER ALMETA L. DAWSON & PATRICIA ANN VORE KOHLER
 LEASE ACREAGE 748, 132, 100 ±

WELL OPERATOR MOUNTAINEER KEYSTONE, LLC
 ADDRESS 6031 WALLACE RD. EXT. SUITE 300
WEXFORD, PA 15090

DESIGNATED AGENT NATHAN SKEEN
 ADDRESS 45 PROFESSIONAL PLACE
BRIDGEPORT, WV 26330

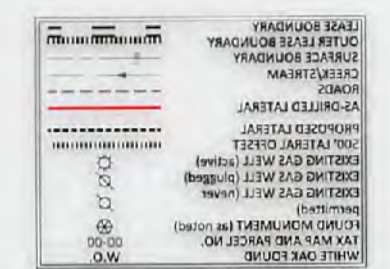
LONGITUDE: 80°20'00" 7,558' BOTTOM HOLE SURVEYED LATITUDE 39°14'53.34" SURFACE HOLE SURVEYED LATITUDE 39°13'45.30"

BOTTOM HOLE SURVEYED LATITUDE 38°13'42.30" LONGITUDE 80°21'24.51" SURFACE HOLE SURVEYED LATITUDE 38°13'42.30" LONGITUDE 80°21'24.51"

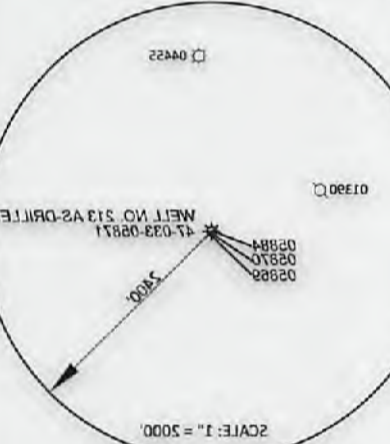


TOP HOLE (T.H.)	LANDING POINT (L.P.)	BOTTOM HOLE (B.H.)
LAT. 1.0N (WGS 84): LAT. 38°13'42.30" LON. -80°21'24.51" UTM ZONE 17 (NAD 83) METERS: N 434244.15 E 525218.05	LAT. 1.0N (WGS 84): LAT. 38°13'42.30" LON. -80°21'24.51" UTM ZONE 17 (NAD 83) METERS: N 434238.95 E 52488.99	LAT. 1.0N (WGS 84): LAT. 38°13'42.30" LON. -80°21'24.51" UTM ZONE 17 (NAD 83) METERS: N 434238.94 E 52488.10

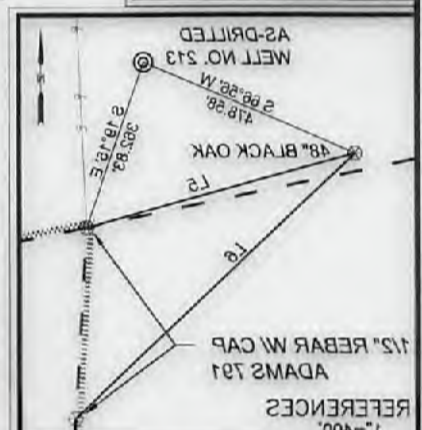
LEASE NO.	LESSOR	LEASE AC.
WV10328-001-000	ALMETA J. DAWSON ET AL	1.00
WV10328-000	FRANK J. MAXWELL	1.28
WV10328-002-000	MOUNTAIN, INC. ET AL	1.33



LEASE TRACT
 100 AC ±
 DAWSON & KOHLER
 WV10328-001-000

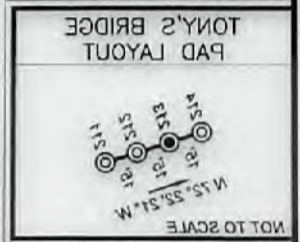


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NOTES ON SURVEY
 1. NO OCCUPIED DWELLINGS OR BUILDINGS
 2500 SQUARE FEET OR LARGER USED TO
 HOUSE OR SHEAR DAIRY CATTLE OR
 FOUR RY HUSBANDRY WITHIN 525 FEET
 OF THE CENTER OF THE WELL PAD WERE
 OBSERVED.
 2. NO WATER WELLS OR DEVELOPED
 SPRINGS USED FOR HUMAN OR DOMESTIC
 ANIMAL CONSUMPTION WERE FOUND
 WITHIN 525 FEET OF THE WELL PAD.
 3. NO RAILROADS ARE CROSSED BY THE
 PROPOSED TONY'S BRIDGE 213 LATERAL.
 4. SURFACE OWNERSHIP TAKEN FROM THE
 HARRISON COUNTY TAX ASSESSOR AND
 HARRISON COUNTY CLERK OFFICES IN FEBRUARY,
 2017.
 5. WELL LATITUDE AND LONGITUDE FROM
 SURVEY GRADE ORUS SOLUTION DERIVED
 ON FEBRUARY 28, 2017.
 6. TIES TO CORNERS AND REFERENCES
 BASED ON WV STATE PLANE COORDINATE
 SYSTEM, NAD 83 NORTH ZONE UNLESS
 OTHERWISE NOTED.
 7. LEASE INFORMATION PROVIDED BY
 MOUNTAINEER KEYSTONE, LLC.

ID	BEARING	DISTANCE
1	N 34°02' W	148.43'
2	N 67°41' W	152.09'
3	S 00°27' E	93.73'
4	N 28°08' W	148.48'
5	S 2°41' E	281.09'
6	S 46°52' E	808.05'



I, the undersigned, hereby certify that this
 plot 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 Division of
 Environmental Protection.



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

DESIGNATED AGENT NATHAN SKEEN
 ADDRESS 45 PROFESSIONAL PLACE
 BRIDGEPORT, WV 26330

LEASE ACREAGE 748.132, 100 ±
 ROYALTY OWNER ALMETA J. DAWSON & PATRICIA ANN VORE KOHLER
 SURFACE OWNER LYNCH FARM, LLC
 COUNTY HARRISON
 WATERSHED BROWN'S CREEK OF WEST FORK RIVER DISTRICT GRANT
 ELEVATION 1139.6' (GROUND), 1140.5' (PROPOSED)
 ELEVATION SOURCE DGPS (OPUS)
 WELL AREA & LOCATION INFORMATION:

Civil & Environmental Consultants, Inc.
 600 Marketplace Avenue, Suite 200
 Bridgeport, WV 26330
 Toll Free 852-488-8239
 Fax 304-833-3327

DATE JULY 11, 2017
 SCALE 1" = 2,000' ACCURACY 1:200
 OPERATORS 213 AS-DRILLED
 WELL No. 47-033-05871
 API No.

TYPE OF WELL: GAS: Production Storage *Deep *Shallow

PROPOSED WORK ON LOCATION:
 Drill — Drill Deeper — Redrill — Convert —
 Fracture / Stimulate — *Plug off to Formation —
 Perform New Formation — Plug and Abandon —
 Clear / Replug Other Than Above X
 If "Other" Please see Details below —
 DETAILS OF PROPOSED WORK AS-DRILLED

ESTIMATED DEPTH TVD: ~7,239', TMD: ~12,232'.
 TARGET FORMATION MARCELLUS

09/15/2017

