

WR-35
Rev. 8/23/13

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

API 47 - 051 - 01803 County Marshall District Clay
Quad Glen Easton Pad Name Taylor C Field/Pool Name _____
Farm name Williams Ohio Valley Midstream LLC Well Number Taylor C 4H
Operator (as registered with the OOG) Chevron Appalachia, LLC
Address 700 Cherrington Parkway City Coraopolis State PA Zip 15108

As Drilled location NAD 83/UTM Attach an as-drilled plat, profile view, and deviation survey
Top hole Northing 494597.83 Easting 1632336.89
Landing Point of Curve Northing 494116.25 Easting 1632608.18
Bottom Hole Northing 488080.31 Easting 1637387.99

Elevation (ft) 1257' 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 - barite, fluid loss, emulsifiers, rheological controls

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Date permit issued 3/31/2015 Date drilling commenced 8/26/2015 Date drilling ceased 3/30/16
Date completion activities began 9/8/2016 Date completion activities ceased 3/23/19
Verbal plugging (Y/N) N 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 732' Open mine(s) (Y/N) depths N
Salt water depth(s) ft 2279' Void(s) encountered (Y/N) depths N
Coal depth(s) ft 800' Cavern(s) encountered (Y/N) depths N
Is coal being mined in area (Y/N) Y

Reviewed

Reviewed by:
Jim Verboon

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API 47-051 - 01803

Farm name Williams Ohio Valley Midstream LLC Well number Taylor C 4H

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	26"	20"	75'	New	X-52 / 78.70		Y
Surface	17 1/2"	13 3/8"	541'	New	J-55 / 54.50		Y
Coal	12 1/4"	9 5/8"	818'	New	J-55 / 40		Y
Intermediate 1							
Intermediate 2							
Intermediate 3							
Production	8 1/2"	5 1/2"	15654'	New	P-110 / 20		Y
Tubing							
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	Bulk Cement	Bulk Cement				Surface	8
Surface	Class A	104	15.6	1.19	123	Surface	8
Coal	Class A	818	15.6	1.19	973	Surface	8
Intermediate 1							
Intermediate 2							
Intermediate 3							
Production	Class H	Lead: 1417 Tail: 1713	Lead: 15.2 Tail: 15.2	Lead: 1.12 Tail: 1.15	Lead: 1587 Tail: 1969	Surface	8
Tubing							

Drillers TD (ft) ^{14520'}

Loggers TD (ft) ^{14520'}

Deepest formation penetrated Marcellus

Plug back to (ft) _____

Plug back procedure _____

Kick off depth (ft) ^{5662'}

Check all wireline logs run

- caliper density deviated/directional induction
 neutron resistivity gamma ray temperature

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Well cored Yes No Conventional Sidewall

Were cuttings collected

Yes No

DESCRIBE THE CENTRALIZER PLACEMENT USED FOR EACH CASING STRING

There is a bow spring centralizer every two joints

on the water and intermediate strings. Production string has two centralizers every joint in the lateral and curve, then one every joint from KOP to surface.

WAS WELL COMPLETED AS SHOT HOLE Yes No

DETAILS SEE ATTACHED PERFORATION AND STIMULATION REPORT

WAS WELL COMPLETED OPEN HOLE? Yes No

DETAILS _____

WERE TRACERS USED Yes No

TYPE OF TRACER(S) USED _____

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API 47- 051 - 01803 Farm name Williams Ohio Valley Midstream LLC Well number Taylor C 4H

PERFORATION RECORD

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

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)
		SEE	ATTACHED					

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Please insert additional pages as applicable.

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PRODUCING FORMATION(S)	DEPTHS	
Marcellus	6544' TVD	6764' 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	BOTTOM	TOP	BOTTOM	DESCRIBE ROCK TYPE AND RECORD QUANTITY AND TYPE OF FLUID (FRESHWATER, BRINE, OIL, GAS, H ₂ S, ETC)
	DEPTH IN FT NAME TVD	DEPTH IN FT TVD	DEPTH IN FT MD	DEPTH IN FT MD	
	0		0		
	SEE	ATTACHED			

Please insert additional pages as applicable.

Drilling Contractor SEE ATTACHED
 Address _____ City _____ State _____ Zip _____

Logging Company Stratagraph NE Inc
 Address 116 Ellsworth Avenue City Marietta State OH Zip 45750

Cementing Company Baker Hughes
 Address 5373 West Alabama, Suite 300 City Houston State TX Zip 77056

Stimulating Company Universal Pressure Pumping
 Address 18360 Technology Drive City Meadville State PA Zip 16335

Please insert additional pages as applicable.

Completed by Jackie M. Scholar Telephone 412-865-3422
 Signature  Title Regulatory Compliance Team Lead Date 3/29/19

API: 47-051-01803	Farm Name: Williams Ohio Valley Midstream LLC	Well Number: Taylor C 4H
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PERFORATION RECORD					
Stage No.	Perforation Date	Perforated From TMD Ft.	Perforated To TMD Ft.	Number of Perforations	Formation(s)
1	11/22/16	14382	13932	10	Marcellus
2	12/3/18	13892	13732	47	Marcellus
3	12/3/18	13692	13532	47	Marcellus
4	12/4/18	13492	13332	47	Marcellus
5	12/4/18	13292	13132	47	Marcellus
6	12/4/18	13092	12932	47	Marcellus
7	12/11/18	12892	12732	47	Marcellus
8	12/12/18	12692	12532	47	Marcellus
9	12/12/18	12492	12332	47	Marcellus
10	12/12/18	12292	12132	47	Marcellus
11	12/12/18	12092	11932	47	Marcellus
12	12/13/18	11892	11732	47	Marcellus
13	12/13/18	11692	11532	47	Marcellus
14	12/13/18	11492	11332	47	Marcellus
15	12/14/18	11292	11132	47	Marcellus
16	12/14/18	11092	10932	47	Marcellus
17	12/14/18	10892	10732	47	Marcellus
18	12/14/18	10692	10532	47	Marcellus
19	12/15/18	10492	10332	47	Marcellus
20	12/15/18	10292	10132	47	Marcellus
21	12/15/18	10092	9932	47	Marcellus
22	12/15/18	9892	9732	47	Marcellus
23	12/16/18	9692	9532	47	Marcellus
24	12/16/18	9492	9332	47	Marcellus
25	12/16/18	9292	9132	47	Marcellus
26	12/16/18	9092	8932	47	Marcellus
27	12/16/18	8892	8732	47	Marcellus
28	12/17/18	8692	8532	47	Marcellus
29	12/17/18	8492	8332	47	Marcellus
30	12/17/18	8292	8132	47	Marcellus
31	12/17/18	8092	7932	47	Marcellus
32	12/17/18	7892	7732	47	Marcellus
33	12/18/18	7692	7532	47	Marcellus
34	12/18/18	7492	7332	47	Marcellus
35	12/18/18	7292	7132	47	Marcellus
36	12/18/18	7092	6932	47	Marcellus
37					
38					
39					
40					

Please insert additional copies of this page if additional rows/stages are needed.

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API: 47-051-01803	Well Name: Williams Ohio Valley Midstream LLC	Well Number: Taylor C 4H
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STIMULATION INFORMATION / STAGE								
Complete a separate record for each stimulation stage. (Please insert additional lines for additional stages or additional pages as applicable).								
Stg No.	Stimulation 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)
1	11/22/16	95.6	8710	n/a	4905	1001200	19210	n/a
2	12/3/18	89.9	8985	6316	4717	401379	9599	n/a
3	12/3/18	92.3	9011	6813	4964	400319	9813	n/a
4	12/4/18	95.7	9045	6781	5106	400956	9592	n/a
5	12/4/18	91.2	8652	7118	5082	402066	9556	n/a
6	12/4/18	97.9	8831	6682	4852	400329	9366	n/a
7	12/11/18	83	9010	5803	4776	397370	9490	n/a
8	12/12/18	84.2	8587	6505	4695	399269	9259	n/a
9	12/12/18	98.5	9165	7000	4912	400131	9464	n/a
10	12/12/18	95.2	9070	7100	5100	400591	9421	n/a
11	12/12/18	97.5	9193	6369	4917	400375	9464	n/a
12	12/13/18	98.7	8809	6246	4916	402975	9452	n/a
13	12/13/18	97.5	8921	6808	5106	401952	9530	n/a
14	12/13/18	98.9	8291	6186	4989	401124	9431	n/a
15	12/14/18	100.4	8322	6912	4940	400869	9388	n/a
16	12/14/18	100.3	8267	7230	4980	400176	9351	n/a
17	12/14/18	100.2	8295	6951	5094	399388	9384	n/a
18	12/14/18	99.6	7925	6910	4891	400458	9350	n/a
19	12/15/18	99.7	7710	6559	4984	401431	9305	n/a
20	12/15/18	99.5	7627	6221	4986	401369	9381	n/a
21	12/15/18	98.1	7731	6801	5046	399353	10266	n/a
22	12/15/18	100	7745	6708	4992	401466	9304	n/a
23	12/16/18	100.7	8009	6465	4930	401264	9324	n/a
24	12/16/18	100.1	7952	6551	4840	400663	9379	n/a
25	12/16/18	100.5	8025	6161	4713	400569	9441	n/a
26	12/16/18	100.6	7944	5938	4927	400312	9274	n/a
27	12/16/18	99.6	7760	8187	4872	400060	9262	n/a
28	12/17/18	100.5	7856	6798	4840	400017	9200	n/a
29	12/17/18	99.1	7491	6414	4704	399934	9201	n/a
30	12/17/18	99.5	7516	6233	4735	399906	9133	n/a
31	12/17/18	99.7	7435	6468	4871	401457	9182	n/a
32	12/17/18	98.5	7700	7585	4890	401871	9276	n/a
33	12/18/18	100	7317	6319	4857	402025	9193	n/a
34	12/18/18	100.5	7282	6128	4938	402269	9131	n/a
35	12/18/18	99.9	6924	7536	4740	400934	9206	n/a
36	12/18/18	99.7	7221	6758	4747	400540	9289	n/a
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API: 47-051-01803	Farm Name: Williams Ohio Valley Midstream LLC	Well Number: Taylor C 4H
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Taylor 4H

Formation	TVD	Base	MD	MD Base
Dunkard	0	475	0	475
Waynesburg/Monongahela	475	806	475	806
Pittsburgh Coal	800	806	800	806
Conemaugh	806	1289	806	1289
Salt Sands	1499	1739	1499	1739
Mauch Chunk	1739	1846	1739	1846
Big Lime	1846	1934	1846	1934
Burgoon	1934	2154	1934	2154
Squaw	2154	2279	2154	2279
Weir	2279	2479	2279	2479
Berea	2483	2499	2493	2509
Gordon	2729	2809	2739	2819
Upper Bayard	3082	3114	3092	3124
Rhinestreet	5889	6186	5899	6196
Sycamore	6186	6331	6196	6,372
MDLX	6331	6389	6,372	6,451
BRKT A	6389	6427	6,451	6,510
TLLY	6427	6461	6,510	6,573
S5	6461	6544	6,573	6,764
S3	6544	6564	6,764	6,843
STFD*	6564	6565	6,843	6,857
S2.B	6565	6575	6,857	6,955
S2.A	6575		6,955	

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API: 47-051-01803	Farm Name: Williams Ohio Valley Midstream LLC	Well Number: Taylor C 4H
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DRILLING CONTRACTORS		
Driller	Driller	Driller
Name Rocky Mountain Drilling	Name Highlands Drilling LLC	Name Nabors Drilling USA
Address 185 North Vernal Avenue, Suite 2	Address 900 Virginia Street East	Address 10100 NW 10th Street
City - State - Zip Vernal, UT 84078	City - State - Zip Charlestown, WV 25301	City - State - Zip Oklahoma City, OK 73127

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05/03/2019

Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	11/22/2016
Job End Date:	11/22/2016
State:	West Virginia
County:	Marshall
API Number:	47-051-01803-00-00
Operator Name:	Chevron USA Inc.
Well Name and Number:	Taylor C 4H
Latitude:	39.85176800
Longitude:	-80.69739600
Datum:	NAD83
Federal Well:	NO
Indian Well:	NO
True Vertical Depth:	6,674
Total Base Water Volume (gal):	806,820
Total Base Non Water Volume:	

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
Sand (Proppant)	Universal Well Services	Proppant					
				Listed Below			
K-Bac 1020	Universal Well Services	Biocide		Listed Below			



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Submitted 12/13/16

Hydrochloric Acid (7.5%)	Universal Well Services	Acidizing		Listed Below					
Scale Hib A	Universal Well Services	Scale Inhibitor		Listed Below					
Unislick ST50	Universal Well Services	Friction Reducer		Listed Below					
Unihb G	Universal Well Services	Acid Inhibitor		Listed Below					
Water	Chevron Appalachia, LLC	Carrier/Base Fluid		Listed Below					
Items above are Trade Names with the exception of Base Water. Items below are the individual ingredients.									
		Water		7732-18-5	100.00000	86.05462			
		Silica		14808-60-7	99.90000	12.78373			
		Hydrogen Chloride		7647-01-0	7.50000	0.07678			
		Petroleum Distillates, Hydro-treated Light		64742-47-8	30.00000	0.02622			
		Ammonium Acetate		631-61-8	13.00000	0.01136			
		Triethanolamine Tri (Phosphate Ester), Sodium Salt		68171-29-9	30.00000	0.00729			
		Ethylene Glycol		107-21-1	30.00000	0.00729			
		Polyethylene Glycol		25322-68-3	50.00000	0.00653			
		Alcohols, ethoxylated		68439-50-9	5.00000	0.00437			
		Alcohols, ethoxylated		68002-97-1	5.00000	0.00437			
		Alcohols, ethoxylated		68551-12-2	5.00000	0.00437			

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	Water	7732-18-5	30.00000	0.00392	
	2,2-Dibromo-3-nitriopropionamide	10222-01-2	21.00000	0.00274	
	Butyl diglycol	112-34-5	75.00000	0.00022	
	Alcohols, C10-16, ethoxylated	68002-97-1	50.00000	0.00019	
	Methanol	67-56-1	5.00000	0.00001	
	Thiourea	62-56-6	1.00000		
	Formaldehyde	50-00-0	1.00000		

* 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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Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	12/3/2018
Job End Date:	12/18/2018
State:	West Virginia
County:	Marshall
API Number:	47-051-01803-00-00
Operator Name:	Chevron USA Inc.
Well Name and Number:	Taylor C 4H
Latitude:	39.85177000
Longitude:	-80.69739600
Datum:	NAD83
Federal Well:	NO
Indian Well:	NO
True Vertical Depth:	6,639
Total Base Water Volume (gal):	13,803,594
Total Base Non Water Volume:	0

Hydraulic Fracturing Fluid Composition:

Trade Name	Supplier	Purpose	Ingredients	Chemical Service Number (CAS #)	Maximum Ingredient Concentration in Additive (% by mass)**	Maximum Ingredient Concentration in HF Fluid (% by mass)**	Comments
Water	Chevron	Carrier/Base Fluid	Water	7732-18-5	100.00000	88.08979None	
Sand	JPP	Proppant	Crystalline Silica in the form of Quartz	14808-60-7	99.90000	10.71471None	
HCL Acid (7.5%)	JPP	Acidizing	Hydrochloric Acid	7647-01-0	7.50000	0.08012None	
Unislick ST50	JPP	Friction reducer	Petroleum distillates, hydro-treated light Ammonium acetate	54742-47-8	30.00000	0.02196None	
			Alcohol, ethoxylated	531-61-8	13.00000	0.00952None	
			Alcohol, ethoxylated	98002-97-1	5.00000	0.00366None	
			Alcohol, ethoxylated	98551-12-2	5.00000	0.00366None	
			Alcohol, ethoxylated	98439-50-9	5.00000	0.00366None	
K-BAC 1020	JPP	Biocide	Polyethylene glycol	25322-68-3	50.00000	0.00541None	
			Water	7732-18-5	30.00000	0.00325None	
			2,2-Dibromo-3-nitropropionamide	10222-01-2	21.00000	0.00227None	



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Submitted 1/10/19

Scale Inhibitor E	JPP	Scale Inhibitor							
			Ethylene Glycol	107-21-1	40.00000	0.00544	None		
			Copolymer of Maleic and Acrylic Acid	52255-49-9	20.00000	0.00272	None		
			Phosphino carboxylic acid polymer	71050-62-9	5.00000	0.00068	None		
			Hexamethylene Triamine Penta (Methylene Phosphonic Acid) DETA phosphonate	34690-00-1 15827-60-8	5.00000 5.00000	0.00068 0.00068	None None		
Iron Control A	JPP	Iron Control Agent	Ethylene Glycol	107-21-1	30.00000	0.00544	None		
Unihib G	JPP	Acid Inhibitor	Butyl diglycol	112-34-5	75.00000	0.00063	None		
			Alcohols, C10-16, ethoxylated	58002-97-1	50.00000	0.00042	None		
			Methanol	67-56-1	5.00000	0.00004	None		
			Thiourea	52-56-6	1.00000	0.00001	None		
			Formaldehyde	50-00-0	1.00000	0.00001	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							
			Ammonium acetate	531-61-8	13.00000	0.00952			
			Ethylene Glycol	107-21-1	40.00000	0.00544			
			Polyethylene glycol	25322-68-3	50.00000	0.00541			
			Alcohols, ethoxylated	58002-97-1	5.00000	0.00366			
			Alcohols, ethoxylated	58439-50-9	5.00000	0.00366			
			Alcohols, ethoxylated	5851-12-2	5.00000	0.00366			
			Water	7732-18-5	30.00000	0.00325			
			Phosphino carboxylic acid polymer	71050-62-9	5.00000	0.00068			
			Hexamethylene Triamine Penta (Methylene Phosphonic Acid) DETA phosphonate	34690-00-1 15827-60-8	5.00000 5.00000	0.00068 0.00068			
			Alcohols, C10-16, ethoxylated	58002-97-1	50.00000	0.00042			
			Methanol	67-56-1	5.00000	0.00004			
			Thiourea	52-56-6	1.00000	0.00001			
			Formaldehyde	50-00-0	1.00000	0.00001			

* 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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05/03/2019

Jackie M. Scholar
Regulatory Reporting Coordinator

March 28, 2019

CERTIFIED MAIL: 7016 0340 0000 4903 6140

WV DEP
Office of Oil and Gas
601 – 57th Street
Charleston, WV 25304

RE: Well Operator's Report of Well Work WR-35
Taylor C 4H

Dear Sir/Madam,

Enclosed here within please find one (1) Well Operator's Report of Well Work WR-35, one (1) copy of the Plat on Mylar, one (1) copy of the FracFocus report, and one (1) copy of the Directional Survey for **Taylor C 4H, (API 47-051-01803)**.

If you have any questions, please contact me at (412) 865-3422. Thank you.

Sincerely,
Chevron Appalachia, LLC

Jackie M. Scholar

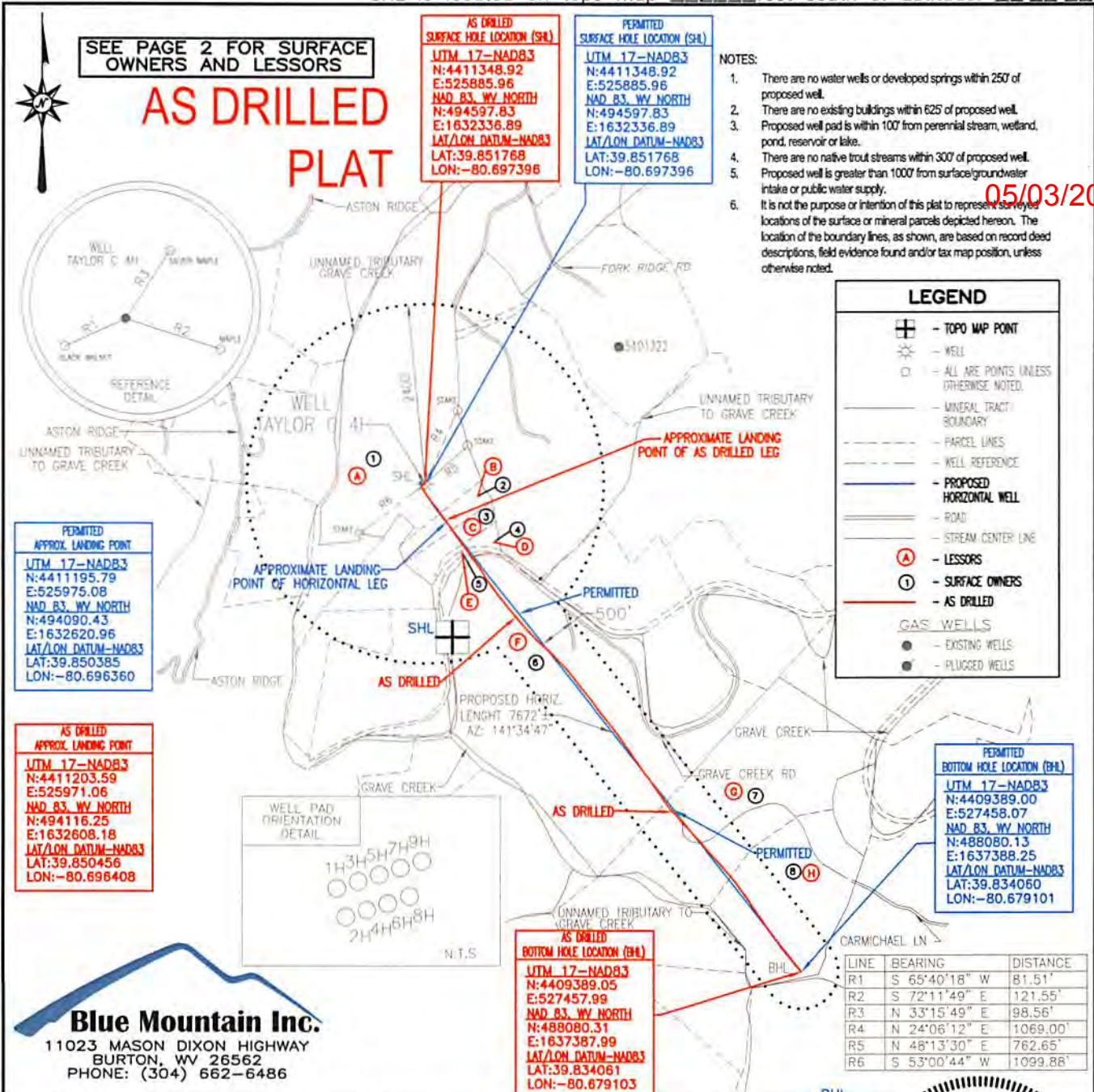
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BHL is located on topo map 14,913 feet south of Latitude: 39° 52' 30"
 SHL is located on topo map 8,462 feet south of Latitude: 39° 52' 30"

BHL is located on topo map 3,492 feet west of Longitude: 80° 40' 40"
 SHL is located on topo map 8,627 feet west of Longitude: 80° 40' 00"

05/03/2019



FILE #: TAYLOR C 4H-AS DRILLED
 DRAWING #: TAYLOR C 4H-AS DRILLED
 SCALE: 1" = 2000'
 MINIMUM DEGREE OF ACCURACY: 1/2500
 PROVEN SOURCE OF ELEVATION: U.S.G.S. MONUMENT THOMAS 1498.81'

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 REGULATIONS ISSUED AND PRESCRIBED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION.

Signed: *George D. Six*
 R.P.E.: _____ L.L.S.: P.S. No. 2000

GEORGE D SIX
 LICENSED
 No. 2000
 STATE OF WEST VIRGINIA
 PROFESSIONAL SURVEYOR

PLACE SEAL HERE

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS WVDEP
 OFFICE OF OIL & GAS
 601 57TH STREET
 CHARLESTON, WV 25304

DATE: MARCH 13, 2018
 OPERATOR'S WELL #: TAYLOR C 4H-AS DRILLED
 API WELL #: 47 STATE 51 COUNTY 01803 PERMIT

Well Type: Oil Waste Disposal Production Deep
 Gas Liquid Injection Storage Shallow

WATERSHED: MIDDLE GRAVE CREEK - GRAVE CREEK ELEVATION: 1257.00'
 COUNTY/DISTRICT: MARSHALL / CLAY QUADRANGLE: GLEN EASTON, WV 7.5'
 SURFACE OWNER: WILLIAMS OHIO VALLEY MIDSTREAM LLC ACREAGE: 265.439±
 OIL & GAS ROYALTY OWNER: LEE R. & SHERRI L. TAYLOR ACREAGE: 630.834±

DRILL CONVERT DRILL DEEPER REDRILL FRACTURE OR STIMULATE
 PLUG OFF OLD FORMATION PERFORATE NEW FORMATION PLUG & ABANDON
 CLEAN OUT & REPLUG OTHER CHANGE (SPECIFY): AS DRILLED

TARGET FORMATION: MARCELLUS ESTIMATED DEPTH: TVD: 6,555± TMD: 14,599.9±
 WELL OPERATOR CHEVRON APPALACHIA, LLC DESIGNATED AGENT KENNETH E. TAWNEY
 Address 700 CHERRINGTON PARKWAY Address 500 LEE STREET, EAST SUITE 1600
 City CORAOPOLIS State PA Zip Code 15108 City CHARLESTON State WV Zip Code 25301-3202

TAYLOR C 4H PAGE 2 OF 2 AS DRILLED

05/03/2019

	SURFACE OWNER	DIST-TM/PAR
1	WILLIAMS OHIO VALLEY MIDSTREAM LLC	4-10/21
2	ROBERT MORRIS SULLIVAN	4-10/22
3	DAVID SHAWN CONNER	4-10/16
4	MURRAY ENERGY	4-10/17
5	MURRAY ENERGY	4-10/23
6	CNX LAND RESOURCES INC.	9-2/3
7	GEORGE B. & MARY L. CROW	9-2/6
8	JAMES POMPEO	9-2/11

	LESSOR
A	LEE R. & SHERRI L. TAYLOR
B	ROBERT MORRIS SULLIVAN
C	DAVID SHAWN CONNER
D	CONSOL
E	CONSOL
F	OKEY D. & JANINA A. BURTON
G	ROSS AVENUE MINERALS, 2012 LLC
	BELMONT ROYALTY AND MINERALS, 2012 LLC
H	FREDDIE C. & VIOLET L. WHITE

PERMITTED SURFACE HOLE LOCATION (SHL)
UTM 17-NAD83 N:4411348.92 E:525885.96 NAD 83, WV NORTH N:494597.83 E:1632336.89 LAT/LON DATUM-NAD83 LAT:39.851768 LON:-80.697396

PERMITTED APPROX. LANDING POINT
UTM 17-NAD83 N:4411195.79 E:525975.08 NAD 83, WV NORTH N:494090.43 E:1632620.96 LAT/LON DATUM-NAD83 LAT:39.850385 LON:-80.696360

PERMITTED BOTTOM HOLE LOCATION (BHL)
UTM 17-NAD83 N:4409389.00 E:527458.07 NAD 83, WV NORTH N:488080.13 E:1637388.25 LAT/LON DATUM-NAD83 LAT:39.834060 LON:-80.679101

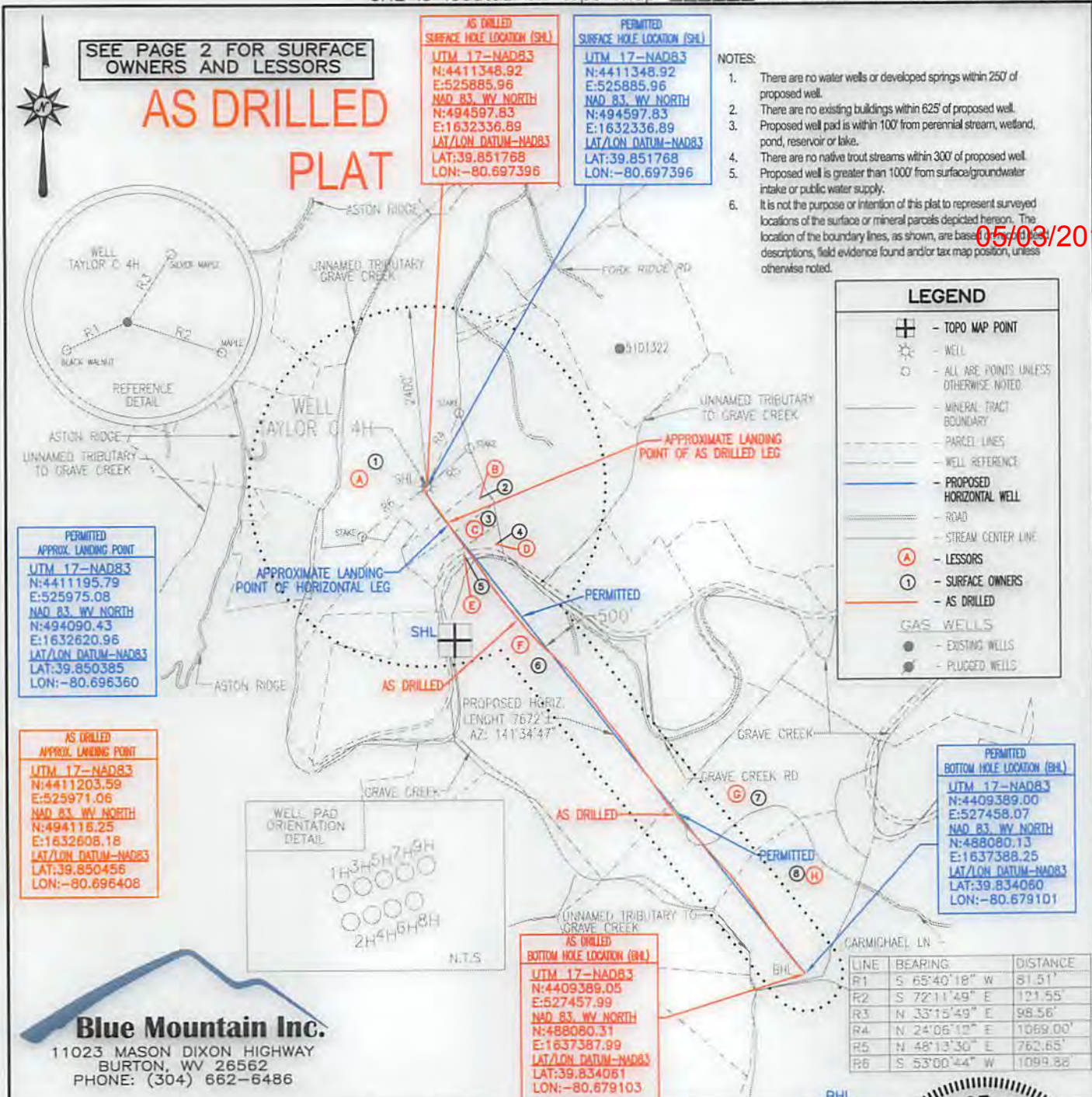
AS DRILLED SURFACE HOLE LOCATION (SHL)
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AS DRILLED APPROX. LANDING POINT
UTM 17-NAD83 N:4411203.59 E:525971.06 NAD 83, WV NORTH N:494116.25 E:1632608.18 LAT/LON DATUM-NAD83 LAT:39.850456 LON:-80.696408

AS DRILLED BOTTOM HOLE LOCATION (BHL)
UTM 17-NAD83 N:4409389.05 E:527457.99 NAD 83, WV NORTH N:488080.31 E:1637387.99 LAT/LON DATUM-NAD83 LAT:39.834061 LON:-80.679103

BHL is located on topo map 14,913 feet south of Latitude: 39° 52' 30"
 SHL is located on topo map 8,462 feet south of Latitude: 39° 52' 30"

BHL is located on topo map 3,492 feet west of Longitude: 80° 40' 40"
 SHL is located on topo map 8,627 feet west of Longitude: 80° 40' 00"



Blue Mountain Inc.
 11023 MASON DIXON HIGHWAY
 BURTON, WV 26562
 PHONE: (304) 662-6486

FILE #: TAYLOR C 4H-AS DRILLED
 DRAWING #: TAYLOR C 4H-AS DRILLED
 SCALE: 1" = 2000'
 MINIMUM DEGREE OF ACCURACY: 1/2500
 PROVEN SOURCE OF ELEVATION: U.S.G.S. MONUMENT THOMAS 1498.81'

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 REGULATIONS ISSUED AND PRESCRIBED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION.

Signed: *George D. Six*
 R.P.E.: _____ L.L.S.: P.S. No. 2000



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS WVDEP
 OFFICE OF OIL & GAS
 601 57TH STREET
 CHARLESTON, WV 25304

DATE: MARCH 13, 2018
 OPERATOR'S WELL #: TAYLOR C 4H-AS DRILLED
 API WELL #: 47 51 01803
 STATE COUNTY PERMIT

Well Type: Oil Waste Disposal Production Deep
 Gas Liquid Injection Storage Shallow

WATERSHED: MIDDLE GRAVE CREEK - GRAVE CREEK ELEVATION: 1257.00'
 COUNTY/DISTRICT: MARSHALL / CLAY QUADRANGLE: GLEN EASTON, WV 7.5'
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DRILL CONVERT DRILL DEEPER REDRILL FRACTURE OR STIMULATE
 PLUG OFF OLD FORMATION PERFORATE NEW FORMATION PLUG & ABANDON
 CLEAN OUT & REPLUG OTHER CHANGE (SPECIFY): AS DRILLED

TARGET FORMATION: MARCELLUS ESTIMATED DEPTH: TVD: 6,555'± TMD: 14,599.9'±
 WELL OPERATOR CHEVRON APPALACHIA, LLC DESIGNATED AGENT KENNETH E. TAWNEY
 Address 700 CHERRINGTON PARKWAY Address 500 LEE STREET, EAST SUITE 1600
 City CORAOPOLIS State PA Zip Code 15108 City CHARLESTON State WV Zip Code 25301-3202

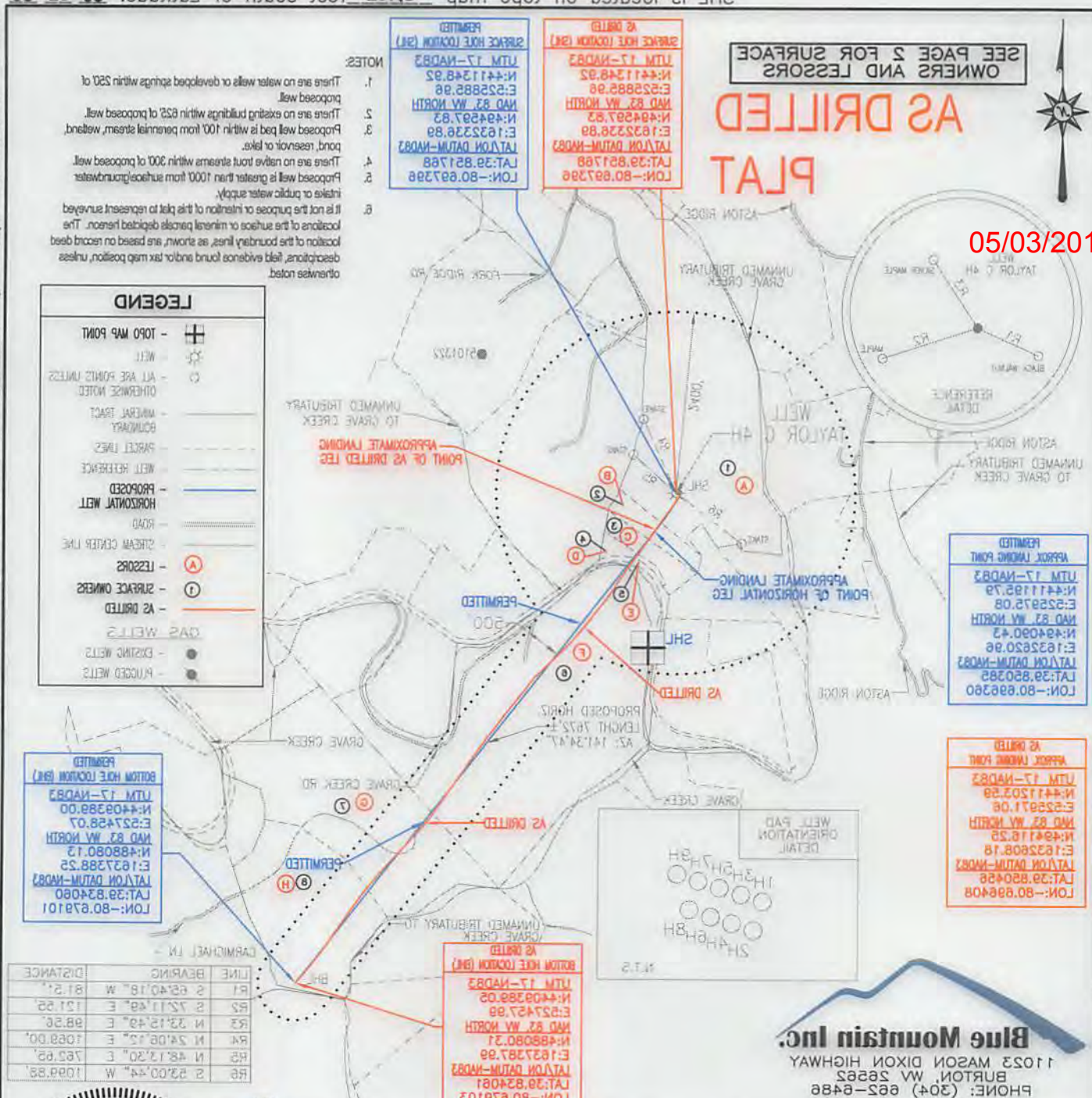
OWNERS AND LESSORS
SEE PAGE 2 FOR SURFACE

AS DRILLED PLAT

05/03/2019



BHL is located on top map 8.462 feet south of latitude: 39.52.30
SHL is located on top map 3.485 feet west of longitude: 80.40.40



LEGEND

- TOP MAP POINT
- WELL
- ALL ARE POINTS UNLESS OTHERWISE NOTED
- MINERAL TRACT
- BOUNDARY
- PARCEL LINES
- WELL REFERENCE
- PROPOSED HORIZONTAL WELL
- ROAD
- STREAM CENTER LINE
- LESSORS
- SURFACE OWNERS
- AS DRILLED
- GAS WELLS
- EXISTING WELLS
- PLUGGED WELLS

LINE	BEARING	DISTANCE
R1	S 63°40'18" W	81.5'
R2	S 77°11'48" E	121.85'
R3	N 32°12'49" E	98.56'
R4	N 24°08'12" E	108.00'
R5	N 48°13'20" E	78.65'
R6	S 83°02'44" W	109.88'

FILE #: TAYLOR C 4H-AS DRILLED
DRAWING #: TAYLOR C 4H-AS DRILLED
SCALE: 1" = 2000'
MINIMUM DEGREE OF ACCURACY: 1/2500
PROVEN SOURCE OF ELEVATION: U.S.G.S. MONUMENT THOMAS 14881'

CHARLESTON, WV 25304
601 57TH STREET
OFFICE OF OIL & GAS
WADSWORTH UNITED STATES TOPOGRAPHIC MAPS
(+) DENOTES LOCATION OF WELL ON

WELL TYPE: Oil Waste Disposal Gas Liquid Injection Storage Production Deep

WATERSHED: MIDDLE GRAVE CREEK - GRAVE CREEK
COUNTY/DISTRICT: MARSHALL \ CLAY
SURFACE OWNER: WILLIAMS OHIO VALLEY MIDSTREAM LLC
OIL & GAS ROYALTY OWNER: LEE R. & SHERRI L. TAYLOR

WELL OPERATOR: CHEVRON APALACHIA, LLC
Address: 700 CHERRINGTON PARKWAY
City: CORAOPOLIS State: PA Zip Code: 15108
WELL OPERATOR: KENNETH E. TAWNEY
Address: 500 LEE STREET, EAST SUITE 1800
City: CHARLESTON State: WV Zip Code: 25301-3505

TARGET FORMATION: MARCELLUS
ESTIMATED DEPTH: TMD: 14,500.0' ±
CLEAN OUT & REPLUG OTHER CHANGE (SPECIFY): AS DRILLED
PLUG OFF OLD FORMATION PERFORATE NEW FORMATION PLUG & ABANDON
DRILL CONVERT DRILL DEEPER REDRILL FRACTURE OR STIMULATE

R.P.E.: L.L.S.: P.S. No. 2000
Signed: *[Signature]*
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DATE: MARCH 13, 2018
OPERATOR'S WELL #: TAYLOR C 4H-AS DRILLED
API WELL #: 47
STATE COUNTY PERMIT 01803



AGREEMENT: 630.834 ±
AGREEMENT: 268.438 ±
QUADRANGLE: GLEN EASTON, W.V. 75
ELEVATION: 1257.00'
DESIGNATED AGENT: KENNETH E. TAWNEY
Address: 500 LEE STREET, EAST SUITE 1800
City: CHARLESTON State: WV Zip Code: 25301-3505

ESTIMATED DEPTH: TMD: 14,500.0' ±
CLEAN OUT & REPLUG OTHER CHANGE (SPECIFY): AS DRILLED
PLUG OFF OLD FORMATION PERFORATE NEW FORMATION PLUG & ABANDON
DRILL CONVERT DRILL DEEPER REDRILL FRACTURE OR STIMULATE

TAYLOR C

4H

PAGE 2 OF 2

AS DRILLED

05/03/2019

	SURFACE OWNER	DIST-TM/PAR
1	WILLIAMS OHIO VALLEY MIDSTREAM LLC	4-10/21
2	ROBERT MORRIS SULLIVAN	4-10/22
3	DAVID SHAWN CONNER	4-10/16
4	MURRAY ENERGY	4-10/17
5	MURRAY ENERGY	4-10/23
6	CNX LAND RESOURCES INC.	9-2/3
7	GEORGE B. & MARY L. CROW	9-2/6
8	JAMES POMPEO	9-2/11

	LESSOR
A	LEE R. & SHERRI L. TAYLOR
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C	DAVID SHAWN CONNER
D	CONSOL
E	CONSOL
F	OKEY D. & JANINA A. BURTON
G	ROSS AVENUE MINERALS, 2012 LLC BELMONT ROYALTY AND MINERALS, 2012 LLC
H	FREDDIE C. & VIOLET L. WHITE

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UTM 17-NAD83 N:4411348.92 E:525885.96 NAD 83, WV NORTH N:494597.83 E:1632336.89 LAT/LON DATUM-NAD83 LAT:39.851768 LON:-80.697396

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UTM 17-NAD83 N:4411195.79 E:525975.08 NAD 83, WV NORTH N:494090.43 E:1632620.96 LAT/LON DATUM-NAD83 LAT:39.850385 LON:-80.696360

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UTM 17-NAD83 N:4409389.00 E:527458.07 NAD 83, WV NORTH N:488080.13 E:1637388.25 LAT/LON DATUM-NAD83 LAT:39.834060 LON:-80.679101

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UTM 17-NAD83 N:4411203.59 E:525971.06 NAD 83, WV NORTH N:494116.25 E:1632608.18 LAT/LON DATUM-NAD83 LAT:39.850456 LON:-80.696408

AS DRILLED BOTTOM HOLE LOCATION (BHL)
UTM 17-NAD83 N:4409389.05 E:527457.99 NAD 83, WV NORTH N:488080.31 E:1637387.99 LAT/LON DATUM-NAD83 LAT:39.834061 LON:-80.679103

MARCH 13, 2018

TAYLOR C 4H PAGE 2 OF 2 AS DRILLED

05/03/2019

8	JAMES POMPEO	9-2\11
7	GEORGE B. & MARY L. CROW	9-2\8
6	CIX LAND RESOURCES INC.	9-2\3
5	MURRAY ENERGY	4-10\23
4	MURRAY ENERGY	4-10\17
3	DAVID SHAWN CONNER	4-10\16
2	ROBERT MORRIS SULLIVAN	4-10\22
1	WILLIAMS OHIO VALLEY MIDSTREAM LLC	4-10\21
	SURFACE OWNER	DIST-TM\PAR

H	FREDIE C. & VIOLET L. WHITE
G	BELMONT ROYALTY AND MINERALS, 2012 LLC
	ROSS AVENUE MINERALS, 2012 LLC
F	OKEY D. & JANINA A. BURTON
E	CONSOL
D	CONSOL
C	DAVID SHAWN CONNER
B	ROBERT MORRIS SULLIVAN
A	LEE R. & SHERRI L. TAYLOR
	LESSOR

PERMITTED
SURFACE HOLE LOCATION (SHL)
UTM 17-12-14083
N:4411348.92
E:525882.98
MAD 83. W/ NORTH
N:48297.82
E:182328.89
LAT:39.881788
LON:-80.882388

PERMITTED
APPROX. LANDING POINT
UTM 17-12-14083
N:441192.79
E:525972.08
MAD 83. W/ NORTH
N:48490.43
E:182320.98
LAT:39.850385
LON:-80.888280

PERMITTED
BOTTOM HOLE LOCATION (BHL)
UTM 17-12-14083
N:4409389.00
E:527457.99
MAD 83. W/ NORTH
N:48808.71
E:182387.99
LAT:39.834081
LON:-80.878102

AS DRILLED
SURFACE HOLE LOCATION (SHL)
UTM 17-12-14083
N:441348.92
E:525882.98
MAD 83. W/ NORTH
N:48297.82
E:182328.89
LAT:39.881788
LON:-80.882388

AS DRILLED
APPROX. LANDING POINT
UTM 17-12-14083
N:441203.89
E:525971.08
MAD 83. W/ NORTH
N:48418.25
E:182308.18
LAT:39.850458
LON:-80.888408

AS DRILLED
BOTTOM HOLE LOCATION (BHL)
UTM 17-12-14083
N:4409389.00
E:527457.99
MAD 83. W/ NORTH
N:48808.71
E:182387.99
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LON:-80.878102

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MARCH 13, 2018

