



**Jackie M. Scholar**  
Compliance & Reporting Specialist

**CERTIFIED MAIL: 7016 0340 0000 4903 6478**

May 14, 2019

WV DEP  
Office of Oil and Gas  
601 – 57<sup>th</sup> Street  
Charleston, WV 25304

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**MAY 22 2019**

WV Department of  
Environmental Protection

**RE: Final Well Operator's Report of Well Work WR-35  
Taylor B 7H**

Dear Sir/Madam,

Enclosed here within please find one (1) Final Well Operator's Report of Well Work WR-35 for the **Taylor B 7H, (API 47-051-01797)**. The following items have been added:

- **Oil & Gas test**
- **Shut-In Pressure**
- **Open Flow**

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

Sincerely,  
Chevron Appalachia, LLC

Jackie M. Scholar

Enclosure

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

API 47-051-01797 County Marshall District Clay  
Quad Glen Easton Pad Name Taylor B Field/Pool Name \_\_\_\_\_  
Farm name Williams Ohio Valley Midstream LLC Well Number Taylor B 7H  
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 496408.66 Easting 1635049.09  
Landing Point of Curve Northing 495392.91 Easting 1634831.99  
Bottom Hole Northing 488596.45 Easting 1640290.46

Elevation (ft) 1222' 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 control

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Date permit issued 4/7/2015 Date drilling commenced 11/10/2015 Date drilling ceased 11/4/2017  
Date completion activities began 6/4/18 Date completion activities ceased 1/24/19  
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 797' Open mine(s) (Y/N) depths N  
Salt water depth(s) ft \_\_\_\_\_ Void(s) encountered (Y/N) depths N  
Coal depth(s) ft 765' Cavern(s) encountered (Y/N) depths N  
Is coal being mined in area (Y/N) Y

Reviewed

Reviewed by:  
*Jim Neelander*  
5/28/17

API 47-051 - 01797 Farm name Williams Ohio Valley Midstream LLC Well number Taylor B 7H

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"	130'	New			Y
Surface	17 1/2"	13 3/8"	545'	New	J-55 / 54.50#		Y
Coal	12 1/4"	9 5/8"	2209'	New	J-55 / 40#		Y
Intermediate 1							
Intermediate 2							
Intermediate 3							
Production	8 1/2"	5 1/2"	15753"	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 <sup>3</sup> /sks)	Volume (ft <sup>3</sup> )	Cement Top (MD)	WOC (hrs)
Conductor	Bulk Cement	Bulk Cement				Surface	8
Surface	Class A	452	15.6	1.20	542	Surface	8
Coal	Class A	817	15.6	1.19	972	Surface	8
Intermediate 1							
Intermediate 2							
Intermediate 3							
Production	Class H	L - 975 / T - 1900	L - 14.7 / T - 15.2	L - 1.13 / T - 1.15	L - 1111 / T - 2416	Surface	8
Tubing							

Drillers TD (ft) 15912' Loggers TD (ft) 15912'  
 Deepest formation penetrated Marcellus Plug back to (ft) \_\_\_\_\_  
 Plug back procedure \_\_\_\_\_

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Kick off depth (ft) 5441'

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Check all wireline logs run  caliper  density  deviated/directional  induction  
 neutron  resistivity  gamma ray  temperature  sonic  
 WV Department of Environmental Protection

Well cored  Yes  No  Conventional  Sidewall Were cuttings collected  Yes  No

DESCRIBE THE CENTRALIZER PLACEMENT USED FOR EACH CASING STRING A bow string centralizer every two joints  
on the water string and intermediate. The 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 \_\_\_\_\_







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

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API 47 - 051 - 01802 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 3H  
Operator (as registered with the OOG) Chevron Appalachia, LLC (49449935)  
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 494616.90 Easting 1632330.86  
Landing Point of Curve Northing 495608.63 Easting 1632381.75  
Bottom Hole Northing 502696.96 Easting 1626933.83

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

Date permit issued 3/31/2015 Date drilling commenced 8/19/2015 Date drilling ceased 2/14/2018  
Date completion activities began 9/12/18 Date completion activities ceased 3/27/19  
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:  
*[Signature]*  
5/28/19



API 47- 051 - 01802 Farm name Williams Ohio Valley Midstream LLC Well number Taylor C 3H

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"	78'	New	X-52 / 78.70		Y
Surface	17 1/2"	13 3/8"	543'	New	J-55 / 54.50		Y
Coal	12 1/4"	9 5/8"	2211'	New	J-55 / 40		Y
Intermediate 1							
Intermediate 2							
Intermediate 3							
Production	8 1/2"	5 1/2"	16034'	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 <sup>3</sup> /sks)	Volume (ft <sup>3</sup> )	Cement Top (MD)	WOC (hrs)
Conductor	Bulk Cement	Bulk Cement				Surface	8
Surface	Class A	438	15.60	1.20	525	Surface	8
Coal	Class A	746'	15.60	1.19	887	Surface	8
Intermediate 1							
Intermediate 2							
Intermediate 3							
Production	Class H	Lead: 1373 Tail: 2055	Lead: 14.7 Tail: 15.2	Lead: 1.14 Tail: 15.2	Lead: 1565 Tail: 2363	Surface	8
Tubing							

Drillers TD (ft) 16054' Loggers TD (ft) 16054'  
 Deepest formation penetrated Marcellus Plug back to (ft) \_\_\_\_\_  
 Plug back procedure \_\_\_\_\_

Kick off depth (ft) 5155'

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 There is a bow spring centralizer every two joints on the water and intermediate strings. The verticle production has a bow spring centralizer every other joint over coupling. In the curve and lateral there is solid composite, one per joint of casing to KOP.

WAS WELL COMPLETED AS SHOT HOLE  Yes  No DETAILS SEE ATTACHED PERFORATION AND STIMULATION REPORT

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WAS WELL COMPLETED OPEN HOLE?  Yes  No DETAILS \_\_\_\_\_

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WERE TRACERS USED  Yes  No TYPE OF TRACER(S) USED \_\_\_\_\_

WV Department of Environmental Protection

API 47- 051 - 01802 Farm name Williams Ohio Valley Midstream LLC Well number Taylor C 3H

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.



API 47- 051 - 01802 Farm name Williams Ohio Valley Midstream LLC Well number Taylor C 3H

PRODUCING FORMATION(S)	DEPTHS	
	DEPTH	DEPTH
Marcellus	6526' TVD	6892' 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 <sub>2</sub> 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 SEE ATTACHED  
 Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

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 RECEIVED  
 Signature [Signature] Title Regulatory Compliance Team Lead Date 3/29/19 Office of Oil and Gas  
 APR 03 2019

API: 47-051-01802	Farm Name: Williams Ohio Valley Midstream LLC	Well Number:
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PERFORATION RECORD					
Stage No.	Perforation Date	Perforated From TMD Ft.	Perforated To TMD Ft.	Number of Perforations	Formation(s)
1	10/23/18	15213	15053	47	Marcellus
2	10/24/18	15013	14853	47	Marcellus
3	10/24/18	147813	14653	47	Marcellus
4	10/25/18	14613	14453	47	Marcellus
5	10/26/18	14413	14253	47	Marcellus
6	10/26/18	14213	14053	47	Marcellus
7	10/27/18	14013	13853	47	Marcellus
8	10/27/18	13813	13653	47	Marcellus
9	10/28/18	13613	13453	47	Marcellus
10	10/28/18	13413	13253	47	Marcellus
11	10/29/18	13213	13053	47	Marcellus
12	10/31/18	13013	12853	47	Marcellus
13	10/31/18	12813	12653	47	Marcellus
14	11/1/18	12613	12453	47	Marcellus
15	11/1/18	12413	12253	47	Marcellus
16	11/2/18	12213	12053	47	Marcellus
17	11/2/18	12013	11853	47	Marcellus
18	11/3/18	11813	11653	47	Marcellus
19	11/3/18	11613	11453	47	Marcellus
20	11/4/18	11413	11253	47	Marcellus
21	11/4/18	11213	11053	47	Marcellus
22	11/5/18	11013	10853	47	Marcellus
23	11/5/18	10813	10653	47	Marcellus
24	11/5/18	10613	10453	47	Marcellus
25	11/6/18	10413	10253	47	Marcellus
26	11/6/18	10213	10053	47	Marcellus
27	11/7/18	10013	9853	47	Marcellus
28	11/7/18	9813	9653	47	Marcellus
29	11/8/18	9613	9453	47	Marcellus
30	11/8/18	9413	8253	47	Marcellus
31	11/9/18	9213	9053	47	Marcellus
32	11/9/18	9013	8853	47	Marcellus
33	11/9/18	8813	8653	47	Marcellus
34	11/10/18	8613	8453	47	Marcellus
35	11/10/18	8413	8253	47	Marcellus
36	11/11/18	8213	8053	47	Marcellus
37	11/12/18	8013	7853	47	Marcellus
38	11/13/18	7813	7653	47	Marcellus
39	11/13/18	7613	7453	47	Marcellus
40	11/14/18	7413	7253	47	Marcellus
41	11/14/18	7213	7053	47	Marcellus

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

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API: 47-051-01802	Well Name: Williams Ohio Valley Midstream LLC	Well Number:
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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	10/23/18	85.5	8778	n/a	3669	400949	9727	n/a
2	10/24/18	88.1	8997	5600	4594	400341	9695	n/a
3	10/24/18	90.8	8434	6030	4483	398725	10200	n/a
4	10/25/18	93	9110	6007	4737	400443	9641	n/a
5	10/26/18	97.3	8873	5586	4848	401366	9629	n/a
6	10/26/18	99.7	8727	5785	4593	401435	9672	n/a
7	10/27/18	100	8532	6318	4755	400663	9585	n/a
8	10/27/18	100.4	8350	5543	4851	401144	9641	n/a
9	10/28/18	99.7	8399	5731	4841	402658	9568	n/a
10	10/28/18	100.1	8585	6507	4744	368680	10244	n/a
11	10/29/18	94.3	8968	6159	4734	400688	9625	n/a
12	10/31/18	100	8447	6303	4421	402709	9661	n/a
13	10/31/18	98.9	8281	6565	4735	400662	9461	n/a
14	11/1/18	99.9	8446	6242	4501	401024	9557	n/a
15	11/1/18	100.5	8375	6245	4682	401306	9642	n/a
16	11/2/18	98.3	8078	6708	4551	400068	9313	n/a
17	11/2/18	100.4	8482	6083	4545	397978	9810	n/a
18	11/3/18	100.1	8106	5927	4772	398742	9420	n/a
19	11/3/18	99.4	8670	6948	4567	400617	9516	n/a
20	11/4/18	100.4	8328	5743	4949	400158	9480	n/a
21	11/4/18	99.9	8610	5951	4583	400266	9461	n/a
22	11/5/18	100.6	8340	6475	4923	400179	9393	n/a
23	11/5/18	99.2	8281	5835	4792	400453	10292	n/a
24	11/5/18	100.4	8436	5719	4860	400363	9433	n/a
25	11/6/18	100.2	7885	6350	4855	400116	9304	n/a
26	11/6/18	99.6	8538	6116	4997	399134	9323	n/a
27	11/7/18	99.7	8280	5759	5038	400361	9378	n/a
28	11/7/18	100.4	8086	6219	4768	399939	9373	n/a
29	11/8/18	100	7839	6163	5006	400748	9319	n/a
30	11/8/18	99.9	7774	5935	4820	400799	9254	n/a
31	11/9/18	100	7852	n/a	4765	400729	9236	n/a
32	11/9/18	100.3	7724	6244	4848	400860	9252	n/a
33	11/9/18	99.7	7551	6360	4826	400086	9248	n/a
34	11/10/18	99.4	7774	6428	4786	400500	9193	n/a
35	11/10/18	100.1	7501	6153	4396	401089	9558	n/a
36	11/11/18	99.2	7414	6271	4837	401504	8996	n/a
37	11/12/18	99.7	7674	7707	4749	401069	9328	n/a
38	11/13/18	100	7347	5537	4770	401958	9201	n/a
39	11/13/18	100.1	7667	6689	4676	400800	9189	n/a
40	11/14/18	100.3	7414	6541	4697	400732	9312	n/a
41	11/14/18	100.3	8198	6249	4854	399986	9288	n/a

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API: 47-051-01802	Farm Name: Williams Ohio Valley Midstream LLC	Well Number: Taylor C 3H
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Taylor 3H				
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	6314	6196	6462
MDLX	6314	6341	6462	6502
PYAN	6341	6370	6502	6546
BRKT	6370	6397	6546	6590
BRKT A	6397	6411	6590	6615
TLLY	6411	6444	6615	6677
S5	6444	6526	6677	6891
S3	6526	6541	6891	6964
STFD*	6541	6543	6964	6976
S2.B	6543	6550	6976	7024
S2.A	6550		7024	

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API: 47-051-01802	Farm Name: Williams Ohio Valley Midstream	Well Number: Taylor C 3H
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DRILLING CONTRACTORS		
Driller	Driller	Driller
Name Rocky Mountain Drilling	Name Highlands Drilling LLC	Name Precision Drilling Holdings Company
Address 185 North Vernal Avenue, Suite 2	Address 900 Virginia Street East	Address 10350 Richmond Avenue, Suite 700
City - State - Zip Vernal, UT 84078	City - State - Zip Charlestown, WV 25301	City - State - Zip Houston, TX 77042

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API: 47-051-01802	Farm Name: Williams Ohio Valley Midstream LLC	Well Number: Taylor C 3H
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CEMENTING CONTRACTORS		
Name Baker Hughes	Name BJ Services	Name
Address 5373 West Alabama, Suite 300	Address 3415 Mellennium Boulevard SE	Address
City - State - Zip Houston, TX 77056	City - State - Zip Massillon, OH 44646	City - State - Zip

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# Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	10/23/2018
Job End Date:	11/14/2018
State:	West Virginia
County:	Marshall
API Number:	47-051-01802-00-00
Operator Name:	Chevron USA Inc.
Well Name and Number:	Taylor C 3H
Latitude:	39.85182000
Longitude:	-80.69741900
Datum:	NAD83
Federal Well:	NO
Indian Well:	NO
True Vertical Depth:	6,531
Total Base Water Volume (gal):	16,355,556
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	Chevron	Carrier/Base Fluid	Water	7732-18-5	100.00000	88.22888	None
Sand	JPP	Proppant	Crystalline Silica in the form of Quartz	14808-60-7	99.90000	10.58564	None
HCL Acid (7.5%)	JPP	Acidizing	Hydrochloric Acid	7647-01-0	7.50000	0.07919	None
Unislick ST50	JPP	Friction reducer	Petroleum distillates, hydrotreated light Ammonium acetate	54742-47-8	30.00000	0.02225	None
			Alcohols, ethoxylated	531-61-8	13.00000	0.00978	None
			Alcohols, ethoxylated	58439-50-9	5.00000	0.00376	None
			Alcohols, ethoxylated	58002-97-1	5.00000	0.00376	None
			Alcohols, ethoxylated	58551-12-2	5.00000	0.00376	None
K-BAC 1020	JPP	Biocide	Polyethylene glycol	25322-68-3	50.00000	0.00548	None
			Water	7732-18-5	30.00000	0.00329	None
			2,2-Dibromo-3-nitriopropanamide	10222-01-2	21.00000	0.00230	None



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Submitted 12/11/18

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Iron Control A	Upp	Iron Control Agent	Ethylene Glycol	107-21-1	30.00000	0.00546	None
Scale Inhibitor E	Upp	Scale Inhibitor	Copolymer of Maleic and Acrylic Acid	52255-49-9	20.00000	0.00277	None
			Hexamethylene Triamine Penta (Methylene Phosphonic Acid)	34690-00-1	5.00000	0.00069	None
Uninh G	Upp	Acid Inhibitor	DETA phosphonate	15827-60-8	5.00000	0.00069	None
			Butyl diglycol	112-34-5	75.00000	0.00062	None
			Alcohol, C10-16, ethoxylated	38002-97-1	50.00000	0.00041	None
			Methanol	37-56-1	5.00000	0.00004	None
			Formaldehyde	50-00-0	1.00000	0.00001	None
			Thiourea	32-56-6	1.00000	0.00001	None
Ingredients shown above are subject to 29 CFR 1910.1200(f) 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	0.00978	
			Polyethylene glycol	25322-68-3	50.00000	0.00548	
			Alcohol, ethoxylated	38439-50-9	5.00000	0.00376	
			Alcohol, ethoxylated	38551-12-2	5.00000	0.00376	
			Alcohol, ethoxylated	38002-97-1	5.00000	0.00376	
			Water	7732-18-5	30.00000	0.00329	
			DETA phosphonate	15827-60-8	5.00000	0.00069	
			Hexamethylene Triamine Penta (Methylene Phosphonic Acid)	34690-00-1	5.00000	0.00069	
			Alcohol, C10-16, ethoxylated	38002-97-1	50.00000	0.00041	
			Methanol	37-56-1	5.00000	0.00004	
			Formaldehyde	50-00-0	1.00000	0.00001	
			Thiourea	32-56-6	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(f) and Appendix D are obtained from suppliers Material Safety Data Sheets (MSDS)

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**Jackie M. Scholar**  
Regulatory Reporting Coordinator

March 28, 2019

**CERTIFIED MAIL: 7016 0340 0000 4903 6157**

WV DEP  
Office of Oil and Gas  
601 – 57<sup>th</sup> Street  
Charleston, WV 25304

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RE: Well Operator's Report of Well Work WR-35  
**Taylor C 3H**

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 3H, (API 47-051-01802)**.

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

Sincerely,  
Chevron Appalachia, LLC

Jackie M. Scholar

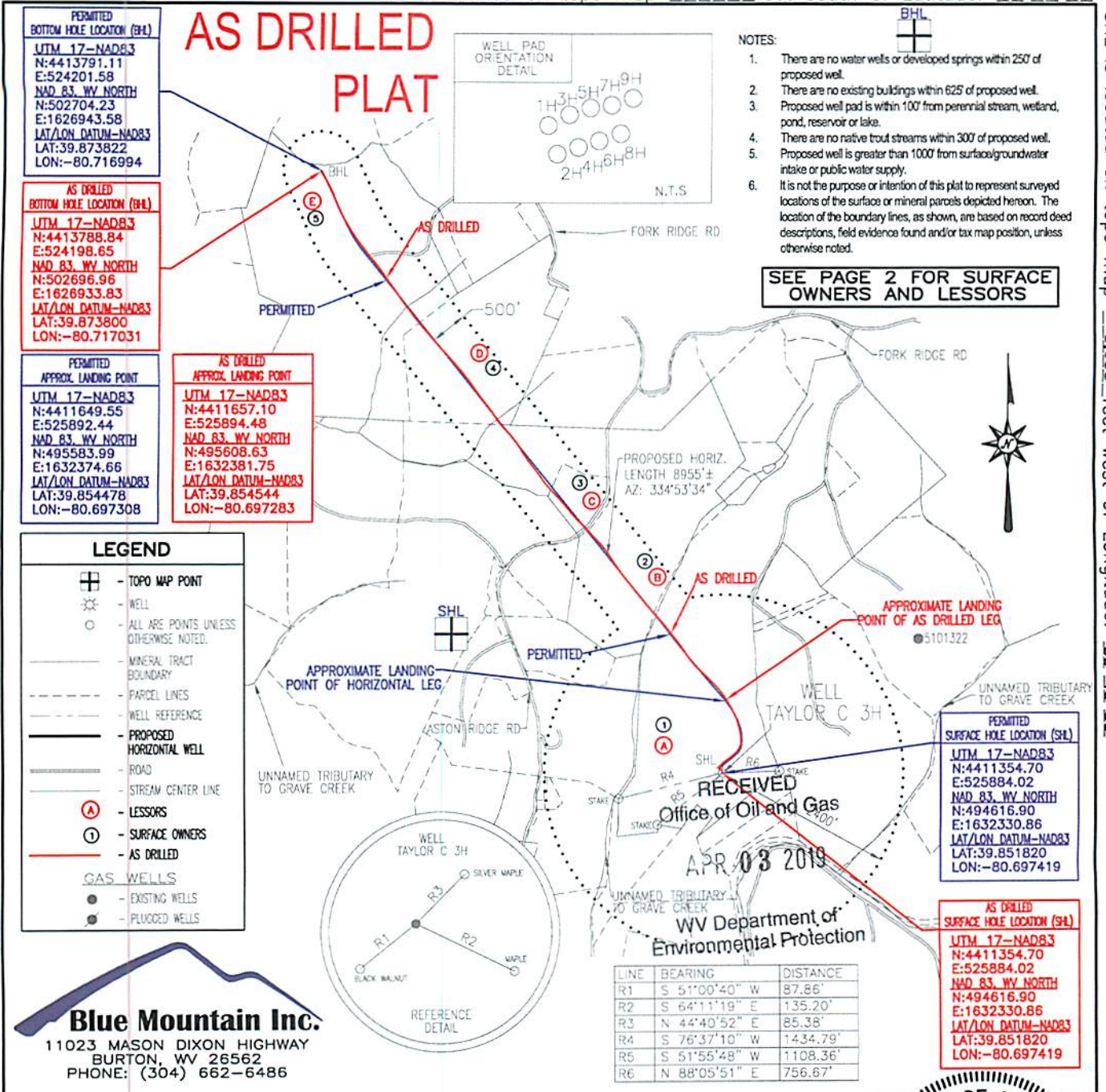
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BHL is located on topo map 427 feet south of Latitude: 39°52'30"  
 SHL is located on topo map 8,441 feet south of Latitude: 39°52'30"

BHL is located on topo map 2,441 feet west of Longitude: 80°42'30"  
 SHL is located on topo map 8,633 feet west of Longitude: 80°40'00"



FILE #: TAYLOR C 3H-AS DRILLED  
 DRAWING #: TAYLOR C 3H-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 3H-AS DRILLED  
 API WELL #: 47 51 01802  
 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'  
 SURFACE OWNER: WILLIAMS OHIO VALLEY MIDSTREAM LLC ACREAGE: 265.439±  
 OIL & GAS ROYALTY OWNER: LEE R. & SHERRI L. TAYLOR ACREAGE: 643.246±

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: 6,465.23' ± TMD 16,102.55' ±  
 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

## 3H

### PAGE 2 OF 2

## AS DRILLED

	SURFACE OWNER	DIST-TM/PAR
1	WILLIAMS OHIO VALLEY MIDSTREAM LLC	4-10/21
2	LEWIS A. ASTON JR. ET UX	4-10/6
3	GEORGE K. HOWARD ET UX	4-10/6.1
4	MARNIE KAY BUCHANAN EST	4-9/11
5	THOMAS E. HICKS	4-8/37

	LESSOR
A	LEE R. & SHERRI L. TAYLOR
B	LEWIS A. ASTON JR. & CATHY ASTON
C	LEWIS A. ASTON JR. & CATHY ASTON
D	JAMES & MARNIE BUCHANAN
E	CHRISTA D. HICKS & LESLIE M. HICKS

PERMITTED SURFACE HOLE LOCATION (SHL)
UTM 17-NAD83 N:4411354.70 E:525884.02 NAD 83, WV NORTH N:494616.90 E:1632330.86 LAT/LON DATUM-NAD83 LAT:39.851820 LON:-80.697419

PERMITTED APPROX. LANDING POINT
UTM 17-NAD83 N:4411649.55 E:525892.44 NAD 83, WV NORTH N:495583.99 E:1632374.66 LAT/LON DATUM-NAD83 LAT:39.854478 LON:-80.697308

PERMITTED BOTTOM HOLE LOCATION (BHL)
UTM 17-NAD83 N:4413791.11 E:524201.58 NAD 83, WV NORTH N:502704.23 E:1626943.58 LAT/LON DATUM-NAD83 LAT:39.873822 LON:-80.716994

AS DRILLED SURFACE HOLE LOCATION (SHL)
UTM 17-NAD83 N:4411354.70 E:525884.02 NAD 83, WV NORTH N:494616.90 E:1632330.86 LAT/LON DATUM-NAD83 LAT:39.851820 LON:-80.697419

AS DRILLED APPROX. LANDING POINT
UTM 17-NAD83 N:4411657.10 E:525894.48 NAD 83, WV NORTH N:495608.63 E:1632381.75 LAT/LON DATUM-NAD83 LAT:39.854544 LON:-80.697283

AS DRILLED BOTTOM HOLE LOCATION (BHL)
UTM 17-NAD83 N:4413788.84 E:524198.65 NAD 83, WV NORTH N:502696.96 E:1626933.83 LAT/LON DATUM-NAD83 LAT:39.873800 LON:-80.717031

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MARCH 13, 2018

REFERENCE WELLPATH IDENTIFICATION

Operator CHEVRON APPALACHIA, LLC  
 Area Marshall County, WV  
 Field Marshall County  
 Facility Taylor C Pad  
 Slot Slot #03  
 Well Taylor C 3H  
 Wellbore Taylor C 3H AWB  
 Wellpath Taylor C 3H AWP Proj: 16079'  
 Sidetrack (none)

REPORT SETUP INFORMATION

Projection : NAD83 / Lambert West Virginia SP, Northern Zone (4701), US feet  
 North Refe TRUE  
 Scale 0.9999948  
 Convergence 0.77° West  
 Software S: WellArchitect® 5.1  
 User Delaset  
 Report Ger 01/Mar/2018 at 15:52  
 Database/S/WA\_MPL\_EasternUS\_Defn/ev1210.xml

WELLPATH Local North Local East Easting Northing Latitude Longitude

	(ft)	(ft)	(US ft)	(US ft)		
Slot Locatic	4.71	14.24	1632331	494616.9	39°51'06.5	80°41'50.707"W
Facility Ref			1632317	494612.4	39°51'06.5	80°41'50.889"W
Field Refer			1644569	516963.8	39°54'48.9	80°39'17.476"W

WELLPATH DATUM

Calculation Minimum curvature  
 Horizontal Slot  
 Vertical Ref Precision 560 (RKB)  
 MD Refere Precision 560 (RKB)  
 Field Vertic Mean Sea Level  
 Precision 5 25.00ft  
 Precision 5 1260.00ft  
 Precision 5 25.00ft  
 Section Ori N 0.00, E 0.00 ft  
 Section Azi 320.28°

WELLPATH DATA † = interpolated/extrapolated station

MD	Inclination	Azimuth	TVD	Vert Sect	North	East	Grid East	Grid North	Latitude	Longitude	Closure Dis	Closure Dir	DLS	Build Rate	Turn Rate	Comments
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(ft)	[US ft]	[US ft]			(ft)	(°)	(°/100ft)	(°/100ft)	(°/100ft)	

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0	0	351.49	0	0	0	1632331	494616.9	39°51'06.5	80°41'50.7	0	0	0	0	0	0	0	0	0	0
25	0	351.49	25	0	0	1632331	494616.9	39°51'06.5	80°41'50.7	0	0	0	0	0	0	0	0	0	0
58.33	0.45	351.49	58.33	0.11	0.13	1632331	494617.3	39°51'06.5	80°41'50.7	0.13	0.13	351.49	1.35	1.35	0	0	0	0	0
83.33	0.39	338.27	83.33	0.28	0.31	1632331	494617.2	39°51'06.5	80°41'50.7	0.31	0.31	347.92	0.45	0.45	-0.24	-0.24	-25.53	Gyrodata MS Gyro <17-1/2">(50°509')	
108.33	0.29	313.22	108.33	0.42	0.43	1632331	494617.3	39°51'06.5	80°41'50.7	0.45	0.45	341.522	0.71	0.71	-0.4	-100.2	-52.88		
133.33	0.27	255.66	133.33	0.51	0.46	1632331	494617.4	39°51'06.5	80°41'50.7	0.52	0.52	331.672	1.08	1.08	-0.08	-230.24	-94.6		
158.33	0.41	232.01	158.33	0.54	0.39	1632330	494617.3	39°51'06.5	80°41'50.7	0.54	0.54	316.001	0.78	0.78	0.56	-94.6	-94.6		
183.33	0.22	257.89	183.33	0.56	0.32	1632330	494617.2	39°51'06.5	80°41'50.7	0.59	0.59	303.24	0.93	0.93	-0.76	103.52	103.52		
208.33	0.18	315.56	208.33	0.62	0.34	1632330	494617.3	39°51'06.5	80°41'50.7	0.66	0.66	301.002	0.78	0.78	-0.16	230.68	230.68		
233.33	0.13	324.56	233.33	0.69	0.39	1632330	494617.3	39°51'06.5	80°41'50.7	0.72	0.72	302.68	0.22	0.22	-0.2	36	36		
258.33	0.2	338.9	258.33	0.76	0.45	1632330	494617.4	39°51'06.5	80°41'50.7	0.79	0.79	305.329	0.32	0.32	0.28	57.36	57.36		
283.33	0.24	325.57	283.33	0.85	0.54	1632330	494617.5	39°51'06.5	80°41'50.7	0.87	0.87	308.103	0.26	0.26	0.16	-53.32	-53.32		
308.33	0.11	337.43	308.33	0.93	0.6	1632330	494617.5	39°51'06.5	80°41'50.7	0.94	0.94	309.77	0.54	0.54	-0.52	47.44	47.44		
333.33	0.05	6.98	333.33	0.96	0.64	1632330	494617.6	39°51'06.5	80°41'50.7	0.97	0.97	310.968	0.28	0.28	-0.24	118.2	118.2		
358.33	0.17	319.64	358.33	1	0.68	1632330	494617.6	39°51'06.5	80°41'50.7	1.01	1.01	311.794	0.56	0.56	0.48	-189.36	-189.36		
383.33	0.17	326.51	383.33	1.08	0.74	1632330	494617.7	39°51'06.5	80°41'50.7	1.09	1.09	312.557	0.08	0.08	0	27.48	27.48		
408.33	0.08	345.96	408.33	1.13	0.78	1632330	494617.7	39°51'06.5	80°41'50.7	1.14	1.14	313.492	0.39	0.39	-0.36	77.8	77.8		
433.33	0.1	70.33	433.33	1.14	0.81	1632330	494617.7	39°51'06.5	80°41'50.7	1.14	1.14	314.937	0.49	0.49	0.08	337.48	337.48		
458.33	0.07	52.31	458.33	1.13	0.82	1632330	494617.7	39°51'06.5	80°41'50.7	1.13	1.13	316.701	0.16	0.16	-0.12	-72.08	-72.08		
483.33	0.03	106.43	483.33	1.12	0.83	1632330	494617.7	39°51'06.5	80°41'50.7	1.13	1.13	317.642	0.23	0.23	-0.16	216.48	216.48		
508.33	0.07	33.69	508.33	1.12	0.84	1632330	494617.8	39°51'06.5	80°41'50.7	1.12	1.12	318.571	0.27	0.27	0.16	-290.96	-290.96		
517.33	0.06	31.38	517.33	1.13	0.85	1632330	494617.8	39°51'06.5	80°41'50.7	1.13	1.13	319.07	0.11	0.11	-0.11	-25.67	-25.67		
665	0.24	40.42	665	1.2	1.15	1632330	494618.1	39°51'06.5	80°41'50.7	1.26	1.26	336.664	0.12	0.12	0.12	6.12	6.12	BHI NavTrak IFR Axial <12-1/4">(517.33)(665°-2185°)	
688	0.1	19.19	688	1.22	1.21	1632330	494618.1	39°51'06.5	80°41'50.7	1.29	1.29	339.182	0.66	0.66	-0.61	-92.3	-92.3		
754	0.38	29.58	754	1.33	1.45	1632331	494618.4	39°51'06.5	80°41'50.7	1.49	1.49	347.113	0.43	0.43	0.42	15.74	15.74		
843	0.8	9.76	842.99	1.84	2.32	1632331	494619.2	39°51'06.5	80°41'50.7	2.32	2.32	357.992	0.52	0.52	0.47	-22.27	-22.27		
933	3.81	344.48	932.91	4.97	5.82	1632330	494622.7	39°51'06.6	80°41'50.7	5.87	5.87	352.418	3.45	3.45	3.34	-28.09	-28.09		
1022	6.32	344.48	1021.55	12.14	13.39	1632328	494630.3	39°51'06.6	80°41'50.7	13.7	13.7	347.875	2.82	2.82	2.82	0	0		
1112	6.53	341.47	1110.99	21.43	23.02	1632325	494640	39°51'06.7	80°41'50.7	23.75	23.75	345.789	0.44	0.44	0.23	-3.34	-3.34		
1201	6.47	337.48	1199.42	30.94	32.45	1632322	494649.5	39°51'06.8	80°41'50.8	33.77	33.77	343.913	0.51	0.51	-0.07	-4.48	-4.48		
1291	6.42	332.45	1288.85	40.7	41.59	1632318	494658.7	39°51'06.9	80°41'50.8	43.77	43.77	341.86	0.63	0.63	-0.06	-5.59	-5.59		
1380	6.45	332.65	1377.29	50.45	50.45	1632313	494667.6	39°51'07.0	80°41'50.9	53.64	53.64	340.136	0.04	0.04	0.03	0.22	0.22		
1469	6.14	327.28	1465.75	60.06	58.89	1632309	494676.1	39°51'07.1	80°41'51.0	63.26	63.26	338.586	0.75	0.75	-0.35	-6.03	-6.03		
1559	4.82	326.99	1555.34	68.59	66.11	1632304	494683.4	39°51'07.2	80°41'51.0	71.7	71.7	337.225	1.47	1.47	-1.47	-0.32	-0.32		
1648	4.25	326.88	1644.06	75.58	72.01	1632300	494689.3	39°51'07.2	80°41'51.1	78.64	78.64	336.309	0.64	0.64	-0.64	-0.12	-0.12		
1738	3.42	324.64	1733.86	81.57	76.99	1632297	494694.4	39°51'07.3	80°41'51.1	84.56	84.56	335.571	0.94	0.94	-0.92	-2.49	-2.49		
1827	1.86	320.81	1822.76	85.66	80.28	1632295	494697.7	39°51'07.3	80°41'51.1	88.57	88.57	335.007	1.76	1.76	-1.75	-4.3	-4.3		
1917	0.57	307.67	1912.74	87.56	81.68	1632293	494699.1	39°51'07.3	80°41'51.2	90.38	90.38	334.65	1.46	1.46	-1.43	-14.6	-14.6		
2007	0.24	250.16	2002.74	88.06	81.89	1632293	494699.3	39°51'07.3	80°41'51.2	90.8	90.8	334.403	0.54	0.54	-0.37	-63.9	-63.9		
2096	1.01	187.88	2091.73	87.59	81.05	1632292	494698.5	39°51'07.3	80°41'51.2	90.17	90.17	334.011	1.04	1.04	0.87	-69.98	-69.98		
2185	1.44	162.85	2180.71	86.03	79.21	1632293	494696.6	39°51'07.3	80°41'51.2	88.42	88.42	333.616	0.76	0.76	0.48	-28.12	-28.12		
2260	1.7	150.13	2255.68	84.06	77.34	1632293	494694.7	39°51'07.3	80°41'51.2	86.37	86.37	333.561	0.58	0.58	0.35	-16.96	-16.96	BHI NavTrak IFR Axial <8-1/2">(2185)(2260°-5386°)	
2349	1.79	143.95	2344.64	81.38	75.07	1632295	494692.5	39°51'07.2	80°41'51.1	83.69	83.69	333.774	0.23	0.23	0.1	-6.94	-6.94		
2438	1.57	145.06	2433.6	78.77	72.95	1632296	494690.3	39°51'07.2	80°41'51.1	81.11	81.11	334.071	0.25	0.25	-0.25	1.25	1.25		
2528	0.51	236.94	2523.59	77.59	71.72	1632297	494689.1	39°51'07.2	80°41'51.1	79.85	79.85	333.925	1.85	1.85	-1.18	102.09	102.09		
2617	0.53	259.19	2612.59	77.84	71.43	1632296	494688.8	39°51'07.2	80°41'51.1	79.91	79.91	333.358	0.23	0.23	0.02	25	25		
2706	0.44	236.44	2701.58	78.07	71.16	1632295	494688.5	39°51'07.2	80°41'51.1	79.98	79.98	332.832	0.24	0.24	-0.1	-25.56	-25.56		

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2795	0.51	232.7	2790.58	78.13	70.73	-37.12	1632295	494688.1	39°51'07.2	80°41'51.1	79.88	332.308	0.09	0.08	-4.2
2884	0.36	204.94	2879.58	78.02	70.24	-37.55	1632294	494687.6	39°51'07.2	80°41'51.1	79.65	331.867	0.29	-0.17	-31.19
2974	0.19	217.45	2969.58	77.87	69.86	-37.76	1632294	494687.3	39°51'07.2	80°41'51.1	79.42	331.606	0.2	-0.19	13.9
3063	0.1	210.42	3058.58	77.81	69.68	-37.89	1632294	494687.1	39°51'07.2	80°41'51.1	79.32	331.461	0.1	-0.1	-7.9
3152	0.12	315.05	3147.58	77.88	69.68	-38	1632294	494687.1	39°51'07.2	80°41'51.1	79.36	331.394	0.2	0.02	117.56
3242	0.2	312.26	3237.58	78.13	69.85	-38.18	1632294	494687.3	39°51'07.2	80°41'51.1	79.6	331.338	0.09	0.09	-3.1
3331	0.22	330.75	3326.58	78.45	70.1	-38.38	1632293	494687.5	39°51'07.2	80°41'51.1	79.92	331.3	0.08	0.02	20.78
3420	0.28	295.18	3415.58	78.81	70.34	-38.66	1632293	494687.8	39°51'07.2	80°41'51.2	80.27	331.208	0.18	0.07	-39.97
3510	0.33	292.23	3505.57	79.24	70.54	-39.1	1632293	494688.39°51'07.2	80°41'51.2	80.65	331	0.06	0.06	-3.28	
3599	0.36	294.67	3594.57	79.72	70.75	-39.59	1632292	494688.2	39°51'07.2	80°41'51.2	81.07	330.769	0.04	0.03	2.74
3688	0.59	295.86	3683.57	80.39	71.07	-40.26	1632292	494688.5	39°51'07.2	80°41'51.2	81.68	330.47	0.26	0.26	1.34
3778	0.57	287.32	3773.57	81.19	71.4	-41.1	1632291	494688.8	39°51'07.2	80°41'51.2	82.39	330.074	0.1	-0.02	-9.49
3867	0.69	288.29	3862.56	82.01	71.7	-42.03	1632290	494689.2	39°51'07.2	80°41'51.2	83.11	329.621	0.14	0.13	1.09
3957	0.61	299.35	3952.55	82.92	72.11	-42.96	1632289	494689.6	39°51'07.2	80°41'51.2	83.94	329.211	0.16	-0.09	12.29
4046	0.76	282.61	4041.55	83.83	72.47	-43.95	1632288	494689.9	39°51'07.2	80°41'51.2	84.76	328.762	0.28	0.17	-18.81
4135	0.66	276.66	4130.54	84.67	72.66	-45.04	1632287	494690.2	39°51'07.2	80°41'51.2	85.48	328.206	0.14	-0.11	-6.69
4225	0.31	269.51	4220.54	85.2	72.71	-45.8	1632286	494690.2	39°51'07.2	80°41'51.2	85.93	327.796	0.39	-0.39	-7.94
4314	0.41	281.8	4309.54	85.6	72.78	-46.35	1632285	494690.3	39°51'07.2	80°41'51.3	86.28	327.508	0.14	0.11	13.81
4403	0.14	252.55	4398.53	85.89	72.81	-46.77	1632285	494690.3	39°51'07.2	80°41'51.3	86.53	327.288	0.33	-0.3	-32.87
4492	0.07	260.3	4487.53	85.96	72.77	-46.92	1632285	494690.3	39°51'07.2	80°41'51.3	86.58	327.185	0.08	-0.08	8.71
4582	0.15	283.9	4577.53	86.08	72.79	-47.09	1632285	494690.3	39°51'07.2	80°41'51.3	86.69	327.098	0.1	0.09	26.22
4671	0.13	224.85	4666.53	86.16	72.74	-47.28	1632284	494690.2	39°51'07.2	80°41'51.3	86.76	326.981	0.16	-0.02	-66.35
4760	0.39	277.57	4755.53	86.38	72.71	-47.65	1632284	494690.2	39°51'07.2	80°41'51.3	86.93	326.764	0.37	0.29	59.24
4850	0.39	279.13	4845.53	86.83	72.8	-48.25	1632284	494690.3	39°51'07.2	80°41'51.3	87.34	326.463	0.01	0	1.73
4939	0.22	312.25	4934.53	87.23	72.96	-48.68	1632283	494690.5	39°51'07.2	80°41'51.3	87.71	326.29	0.27	0.27	37.21
5028	0.4	291.6	5023.53	87.67	73.19	-49.09	1632283	494690.7	39°51'07.2	80°41'51.3	88.13	326.148	0.23	0.2	-23.2
5118	0.28	280.06	5113.53	88.11	73.35	-49.6	1632282	494690.9	39°51'07.2	80°41'51.3	88.54	325.931	0.15	-0.13	-12.82
5207	0.32	292.04	5202.53	88.5	73.48	-50.05	1632282	494691.39°51'07.2	80°41'51.3	88.9	325.741	0.08	0.04	13.46	
5296	1.54	13.58	5291.51	89.43	74.73	-50	1632282	494692.3	39°51'07.2	80°41'51.3	89.92	326.218	1.71	1.37	91.62
5386	6.43	21.69	5381.27	92.57	80.6	-47.85	1632284	494698.1	39°51'07.3	80°41'51.3	93.73	329.303	5.46	5.43	9.01
5470	9.25	26.38	5464.48	97.56	91.02	-43.11	1632289	494708.5	39°51'07.4	80°41'51.2	100.71	334.656	3.44	3.36	5.58
5494	9.24	29.11	5488.17	99.03	94.43	-41.32	1632291	494711.9	39°51'07.4	80°41'51.2	103.07	336.369	1.83	-0.04	11.37
5583	14.28	45.4	5575.29	102.55	108.39	-30.01	1632302	494725.7	39°51'07.6	80°41'51.0	112.47	344.523	6.73	5.66	18.3
5673	20.64	49.77	5661.11	103.64	126.45	-9.98	1632323	494743.5	39°51'07.8	80°41'50.8	126.84	355.488	7.21	7.07	4.86
5762	27.74	52.44	5742.24	103	149.24	18.45	1632351	494765.9	39°51'08.0	80°41'50.4	150.37	7.049	8.07	7.98	3
5852	32.91	51.15	5819.9	101.83	177.36	54.12	1632387	494793.5	39°51'08.3	80°41'50.0	185.43	16.97	5.79	5.74	-1.43
5941	32.65	50.47	5894.73	101.39	207.81	91.47	1632425	494823.5	39°51'08.6	80°41'49.5	227.05	23.758	0.51	-0.29	-0.76
6031	33.49	51.41	5970.15	100.82	238.75	129.6	1632464	494853.9	39°51'08.9	80°41'49.0	271.66	28.495	1.09	0.93	1.04
6120	33.59	49.85	6044.33	100.52	269.94	167.62	1632502	494884.6	39°51'09.2	80°41'48.5	317.75	31.838	0.97	0.11	-1.75
6209	34.7	35.86	6118.1	107.02	306.4	201.33	1632536	494920.6	39°51'09.5	80°41'48.1	366.63	33.308	8.89	-1.25	-15.72
6299	37.42	19.27	6191.03	127.54	353.1	225.42	1632561	494966.9	39°51'10.0	80°41'47.8	418.92	32.555	11.23	3.02	-18.43
6388	41.21	5.33	6260.01	162.27	407.94	237.1	1632573	495021.6	39°51'10.5	80°41'47.6	471.84	30.165	10.78	4.26	-15.66
6477	46.25	356.06	6324.37	209.14	469.31	237.61	1632575	495083	39°51'11.1	80°41'47.6	526.03	26.853	9.15	5.66	-10.42
6567	52.53	350.26	6382.95	266.53	537.04	229.32	1632567	495150.8	39°51'11.8	80°41'47.7	583.95	23.123	8.52	6.98	-6.44
6657	59.09	347.1	6433.5	332.01	609.96	214.64	1632554	495223.9	39°51'12.5	80°41'47.9	646.63	19.387	7.84	7.29	-3.51
6746	64.33	342.23	6475.69	403.36	685.46	193.86	1632534	495299.7	39°51'13.3	80°41'48.2	712.35	15.791	7.61	5.89	-5.47
6835	70.85	335.87	6509.63	481.21	762.17	164.37	1632505	495376.8	39°51'14.0	80°41'48.5	779.69	12.17	9.86	7.33	-7.15

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6924	77.82	331.88	6533.66	564.44	839.02	126.62	1632469	495454.1	39°51'14.8	80°41'49.0	848.52	8.582	8.94	7.83	-4.48
7014	82.63	329.7	6548.93	651.62	916.4	83.35	1632426	495532.1	39°51'15.6	80°41'49.6	920.19	5.197	5.85	5.34	-2.42
7103	87.45	328.27	6556.63	739.23	992.37	37.67	1632382	495608.6	39°51'16.3	80°41'50.2	993.08	2.174	5.65	5.42	-1.61
7193	91.41	325.89	6557.52	828.57	1067.89	-11.23	1632334	495684.8	39°51'17.1	80°41'50.8	1067.95	359.398	5.13	4.4	-2.64
7282	90.4	320.07	6556.11	917.42	1138.91	-64.78	1632281	495756.5	39°51'17.8	80°41'51.5	1140.75	356.744	6.64	-1.13	-6.54
7371	90.43	315.46	6555.47	1006.31	1204.79	-124.59	1632222	495823.2	39°51'18.4	80°41'52.3	1211.21	354.096	5.18	0.03	-5.18
7461	91.35	314.37	6554.07	1095.9	1268.32	-188.31	1632159	495887.6	39°51'19.0	80°41'53.1	1282.23	351.555	1.58	1.02	-1.21
7550	89.82	312.63	6553.16	1184.27	1329.58	-252.86	1632096	495949.7	39°51'19.6	80°41'53.9	1353.41	349.232	2.6	-1.72	-1.96
7640	89.72	314.68	6553.52	1273.66	1391.7	-317.98	1632031	496012.6	39°51'20.3	80°41'54.7	1427.57	347.13	2.28	-0.11	2.28
7729	89.75	317.79	6553.94	1362.43	1455.97	-379.53	1631971	496077.7	39°51'20.9	80°41'55.5	1504.62	345.39	3.49	0.03	3.49
7819	89.57	322.72	6554.47	1452.4	1525.15	-437.05	1631914	496147.7	39°51'21.6	80°41'56.3	1586.53	344.01	5.48	-0.2	5.48
7908	90.83	325.24	6554.16	1541.21	1597.12	-489.39	1631863	496220.3	39°51'22.3	80°41'56.9	1670.42	342.964	3.17	1.42	2.83
7997	90.77	324.22	6552.92	1629.93	1669.78	-540.77	1631812	496293.7	39°51'23.0	80°41'57.6	1755.16	342.055	1.15	-0.07	-1.15
8087	90.8	322.67	6551.68	1719.78	1742.07	-594.37	1631760	496366.6	39°51'23.7	80°41'58.3	1840.67	341.161	1.72	0.03	-1.72
8176	90.77	320.39	6550.46	1808.74	1811.74	-649.73	1631705	496437.3	39°51'24.4	80°41'59.0	1924.72	340.271	2.56	-0.03	-2.56
8266	90.86	319.12	6549.18	1898.73	1880.42	-707.87	1631648	496506.5	39°51'25.1	80°41'59.7	2009.25	339.372	1.41	0.1	-1.41
8355	90.77	317.77	6547.92	1987.67	1947.02	-766.9	1631590	496573.9	39°51'25.7	80°42'00.5	2092.61	338.501	1.52	-0.1	-1.52
8445	91.23	318.02	6546.35	2077.58	2013.78	-827.23	1631531	496641.4	39°51'26.4	80°42'01.3	2177.06	337.668	0.58	0.51	0.28
8534	89.2	316.96	6546.01	2166.47	2079.38	-887.37	1631471	496707.8	39°51'27.1	80°42'02.0	2260.8	336.89	2.57	-2.28	-1.19
8624	90.4	320.32	6546.33	2256.42	2146.92	-946.83	1631413	496776.1	39°51'27.7	80°42'02.8	2346.43	336.202	3.96	1.33	3.73
8713	90.03	318.75	6545.99	2345.41	2214.63	-1004.58	1631356	496844.6	39°51'28.4	80°42'03.5	2431.82	335.6	1.81	-0.42	-1.76
8803	90.06	319.9	6545.92	2435.39	2282.89	-1063.24	1631298	496913.6	39°51'29.1	80°42'04.3	2518.34	335.027	1.28	0.03	1.28
8892	89.97	320.01	6545.9	2524.39	2351.02	-1120.5	1631242	496982.5	39°51'29.7	80°42'05.0	2604.38	334.517	0.16	-0.1	0.12
8982	90.09	319.9	6545.85	2614.39	2419.92	-1178.41	1631185	497052.2	39°51'30.4	80°42'05.8	2691.59	334.036	0.18	0.13	-0.12
9071	90	321.64	6545.78	2703.38	2488.86	-1234.69	1631130	497121.9	39°51'31.1	80°42'06.5	2778.28	333.615	1.96	-0.1	1.96
9161	90.06	320.07	6545.74	2793.37	2558.65	-1291.51	1631074	497192.4	39°51'31.8	80°42'07.2	2866.13	333.217	1.75	0.07	-1.74
9251	89.97	320.42	6545.71	2883.37	2627.84	-1349.06	1631017	497262.4	39°51'32.5	80°42'08.0	2953.9	332.825	0.4	-0.1	0.39
9340	90.4	324.19	6545.42	2972.3	2698.25	-1403.47	1630964	497333.5	39°51'33.2	80°42'08.7	3041.43	332.519	4.26	0.48	4.24
9430	90.58	324.51	6544.66	3062.07	2771.38	-1455.92	1630912	497407.3	39°51'33.9	80°42'09.3	3130.54	332.285	0.41	0.2	0.36
9519	90.77	326.2	6543.61	3150.71	2844.6	-1506.51	1630862	497481.2	39°51'34.6	80°42'10.0	3218.9	332.094	1.91	0.21	1.9
9609	91.63	326.48	6541.72	3240.19	2919.49	-1556.39	1630814	497556.7	39°51'35.4	80°42'10.6	3308.44	331.938	1	0.96	0.31
9698	91.45	321.16	6539.33	3328.96	2991.27	-1608.89	1630762	497629.2	39°51'36.1	80°42'11.3	3396.5	331.726	5.98	-0.2	-5.98
9787	90.95	316.76	6537.46	3417.89	3058.37	-1667.3	1630705	497697.1	39°51'36.7	80°42'12.0	3483.32	331.403	4.97	-0.56	-4.94
9877	90.83	313.94	6536.07	3507.54	3122.38	-1730.53	1630642	497761.9	39°51'37.4	80°42'12.8	3569.88	331.003	3.14	-0.13	-3.13
9966	90.58	317.61	6534.97	3596.24	3186.15	-1792.59	1630581	497826.5	39°51'38.0	80°42'13.6	3655.81	330.637	4.13	-0.28	4.12
10055	90.89	319.23	6533.83	3685.18	3252.71	-1851.65	1630523	497893.8	39°51'38.6	80°42'14.4	3742.83	330.349	1.85	0.35	1.82
10145	90.8	312.27	6532.5	3774.84	3317.13	-1914.41	1630461	497959.1	39°51'39.3	80°42'15.2	3829.93	330.01	7.73	-0.1	-7.73
10234	90.37	312.65	6531.59	3863.01	3377.21	-1980.06	1630396	498020.3	39°51'39.9	80°42'16.0	3914.87	329.617	0.64	-0.48	0.43
10324	90.31	318.2	6531.06	3952.65	3441.3	-2043.2	1630334	498084.9	39°51'40.5	80°42'16.9	4002.15	329.301	6.17	-0.07	6.17
10413	90.8	321.4	6530.19	4041.63	3509.26	-2100.64	1630277	498153.7	39°51'41.2	80°42'17.6	4089.94	329.095	3.64	-0.55	3.6
10502	90.86	318.73	6528.9	4130.61	3577.49	-2157.76	1630221	498222.6	39°51'41.9	80°42'18.3	4177.84	328.904	3	0.07	-3
10592	90.8	316.28	6527.6	4220.49	3643.84	-2218.54	1630161	498289.8	39°51'42.5	80°42'19.1	4266.09	328.665	2.72	-0.07	-2.72
10681	90.52	315.95	6526.58	4309.25	3707.98	-2280.24	1630100	498354.7	39°51'43.1	80°42'19.9	4353	328.41	0.49	-0.31	-0.37
10771	90.37	315.49	6525.88	4398.96	3772.41	-2343.07	1630038	498420.3	39°51'43.8	80°42'20.7	4440.84	328.155	0.54	-0.17	-0.51
10860	90.18	318.22	6525.45	4487.79	3837.34	-2403.93	1629978	498485.7	39°51'44.4	80°42'21.5	4528.14	327.935	3.07	-0.21	3.07
10950	89.94	323.53	6525.35	4577.75	3907.14	-2460.7	1629923	498556.3	39°51'45.1	80°42'22.2	4617.44	327.797	5.91	-0.27	5.9
11039	90.62	324.43	6524.92	4666.56	3979.12	-2513.03	1629871	498629.3	39°51'45.8	80°42'22.9	4706.24	327.725	1.27	0.76	1.01

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11129	90.52	320.59	6524.02	4756.47	4050.51	-2567.8	1629817	498701.1	39°51'46.5"	80°42'23.6"	4795.86	327.628	4.27	-0.11	-4.27
11218	90.37	320.55	6523.33	4845.47	4119.25	-2624.32	1629762	498770.5	39°51'47.2"	80°42'24.3"	4884.19	327.499	0.17	-0.17	-0.04
11308	90.52	325.16	6522.63	4935.35	4190.97	-2678.65	1629708	498843	39°51'47.9"	80°42'25.0"	4973.87	327.415	5.12	0.17	5.12
11397	90.43	327.58	6521.9	5023.84	4265.07	-2727.94	1629660	498917.7	39°51'48.7"	80°42'25.6"	5062.85	327.397	2.72	-0.1	2.72
11487	91.82	327.16	6520.13	5113.13	4340.85	-2776.45	1629613	498994.1	39°51'49.4"	80°42'26.3"	5152.83	327.397	1.61	1.54	-0.47
11576	92.65	323.39	6516.66	5201.71	4413.93	-2827.1	1629563	499067.9	39°51'50.1"	80°42'26.9"	5241.69	327.361	4.33	0.93	-4.24
11665	91.26	319.29	6513.62	5290.62	4483.37	-2882.66	1629508	499138.1	39°51'50.8"	80°42'27.6"	5330.13	327.26	4.86	-1.56	-4.61
11755	90.92	316.06	6511.91	5380.5	4549.89	-2943.24	1629449	499205.4	39°51'51.5"	80°42'28.4"	5418.87	327.102	3.61	-0.38	-3.59
11844	90.28	316.3	6510.97	5469.27	4614.1	-3004.86	1629388	499270.4	39°51'52.1"	80°42'29.2"	5506.27	326.926	0.77	-0.72	0.27
11934	89.63	320.55	6511.05	5559.2	4681.41	-3064.57	1629329	499338.5	39°51'52.8"	80°42'30.0"	5595.28	326.79	4.78	-0.72	4.72
12024	91.11	326.99	6510.46	5648.98	4753.97	-3117.73	1629277	499411.7	39°51'53.5"	80°42'30.6"	5685.11	326.742	7.34	1.64	7.16
12113	90.95	324.03	6508.86	5737.59	4827.3	-3168.11	1629228	499485.7	39°51'54.2"	80°42'31.3"	5774.06	326.723	3.33	-0.18	-3.33
12203	90.92	320.95	6507.39	5827.5	4898.68	-3222.9	1629174	499557.8	39°51'54.9"	80°42'32.0"	5863.8	326.659	3.42	-0.03	-3.42
12293	90.77	319.98	6506.07	5917.49	4968.08	-3280.18	1629117	499628	39°51'55.6"	80°42'32.7"	5953.27	326.565	1.09	-0.17	-1.08
12382	90.8	321.94	6504.85	6006.47	5037.2	-3336.23	1629062	499697.8	39°51'56.3"	80°42'33.4"	6041.84	326.483	2.2	0.03	2.2
12472	90.92	323.97	6503.5	6096.35	5109.02	-3390.44	1629009	499770.4	39°51'57.0"	80°42'34.1"	6131.65	326.431	2.26	0.13	2.26
12562	90.83	322.75	6502.12	6186.21	5181.23	-3444.15	1628956	499843.3	39°51'57.7"	80°42'34.8"	6221.51	326.387	1.36	-0.1	-1.36
12652	90.83	321.57	6500.82	6276.15	5252.29	-3499.35	1628802	499915.1	39°51'58.4"	80°42'35.5"	6311.26	326.326	1.31	0	-1.31
12741	90.8	319.8	6499.55	6365.14	5321.14	-3555.73	1628647	499984.7	39°51'59.1"	80°42'36.3"	6399.82	326.248	1.99	-0.03	-1.99
12831	90.77	318.69	6498.32	6455.11	5389.31	-3614.48	1628789	500053.6	39°51'59.8"	80°42'37.0"	6489.15	326.151	1.23	-0.03	-1.23
12920	90.8	317	6497.1	6544.02	5455.28	-3674.2	1628730	500120.4	39°52'00.4"	80°42'37.8"	6577.22	326.039	1.9	0.03	-1.9
13009	90.8	316.17	6495.86	6632.83	5519.92	-3735.36	1628670	500185.8	39°52'01.1"	80°42'38.6"	6665.02	325.914	0.93	0	-0.93
13099	90.74	316.47	6494.65	6722.6	5585	-3797.52	1628608	500251.7	39°52'01.7"	80°42'39.4"	6753.77	325.786	0.34	-0.07	0.33
13188	90.74	317.83	6493.5	6811.46	5650.24	-3858.04	1628549	500317.8	39°52'02.3"	80°42'40.1"	6841.76	325.674	1.53	0	1.53
13278	90.86	318.83	6492.24	6901.4	5717.47	-3917.87	1628490	500385.8	39°52'03.0"	80°42'40.9"	6931.02	325.579	1.12	0.13	1.11
13367	90.74	319.5	6491	6990.37	5784.8	-3976.05	1628432	500453.9	39°52'03.7"	80°42'41.6"	7019.46	325.498	0.76	-0.13	0.75
13457	90.77	319.19	6489.81	7080.35	5853.07	-4034.68	1628375	500522.9	39°52'04.3"	80°42'42.4"	7108.94	325.42	0.35	0.03	-0.34
13547	90.77	317.03	6488.6	7170.27	5920.06	-4094.77	1628316	500590.7	39°52'05.0"	80°42'43.2"	7198.21	325.329	2.4	0	-2.4
13636	90.77	317.93	6487.41	7259.16	5985.65	-4154.91	1628256	500657.1	39°52'05.7"	80°42'43.9"	7286.38	325.234	1.01	0	1.01
13726	90.68	320.27	6486.27	7349.13	6053.66	-4213.83	1628198	500725.9	39°52'06.3"	80°42'44.7"	7375.85	325.159	2.6	-0.1	2.6
13815	90.71	321.7	6485.19	7438.11	6122.81	-4269.85	1628143	500795.7	39°52'07.0"	80°42'45.4"	7464.61	325.109	1.61	0.03	1.61
13905	90.8	322.96	6484	7528.04	6194.04	-4324.85	1628089	500867.7	39°52'07.7"	80°42'46.1"	7554.5	325.076	1.4	0.1	1.4
13995	90.83	322.87	6482.72	7617.94	6265.83	-4379.11	1628036	500940.2	39°52'08.4"	80°42'46.8"	7644.42	325.051	0.11	0.03	-0.1
14084	90.83	323.74	6481.43	7706.81	6337.18	-4432.29	1627984	501012.3	39°52'09.1"	80°42'47.5"	7733.37	325.031	0.98	0	0.98
14174	90.86	324.48	6480.11	7796.59	6410.09	-4485.04	1627932	501085.9	39°52'09.8"	80°42'48.2"	7823.35	325.02	0.82	0.03	0.82
14264	90.77	323.98	6478.83	7886.37	6483.1	-4537.65	1627880	501159.6	39°52'10.6"	80°42'48.9"	7913.33	325.011	0.56	-0.1	-0.56
14353	90.8	324.53	6477.61	7975.15	6555.33	-4589.63	1627829	501232.5	39°52'11.3"	80°42'49.5"	8002.32	325.003	0.62	0.03	0.62
14443	90.68	323.52	6476.44	8064.95	6628.16	-4642.5	1627777	501306	39°52'12.0"	80°42'50.2"	8092.3	324.992	1.13	-0.13	-1.12
14532	90.83	322.57	6475.27	8153.84	6699.27	-4696	1627725	501377.8	39°52'12.7"	80°42'50.9"	8181.24	324.971	1.08	0.17	-1.07
14622	90.71	320.62	6474.06	8243.8	6769.79	-4751.9	1627670	501449.1	39°52'13.4"	80°42'51.6"	8271.07	324.934	2.17	-0.13	-2.17
14711	90.8	319.51	6472.89	8332.79	6838.03	-4809.02	1627614	501518.1	39°52'14.1"	80°42'52.3"	8359.74	324.882	1.25	0.1	-1.25
14801	90.8	320.75	6471.63	8422.78	6907.09	-4866.71	1627557	501587.9	39°52'14.8"	80°42'53.1"	8449.43	324.832	1.38	0	1.38
14890	90.77	322.31	6470.41	8511.75	6976.77	-4922.07	1627502	501658.3	39°52'15.4"	80°42'53.8"	8538.27	324.797	1.75	-0.03	1.75
14980	90.74	322.48	6469.23	8601.68	7048.06	-4976.99	1627449	501730.3	39°52'16.2"	80°42'54.5"	8628.18	324.772	0.19	-0.03	0.19
15070	90.68	322.86	6468.11	8691.59	7119.62	-5031.56	1627395	501802.6	39°52'16.9"	80°42'55.2"	8718.12	324.75	0.43	-0.07	0.42
15159	90.34	326.55	6467.32	8780.31	7192.24	-5082.97	1627344	501875.9	39°52'17.6"	80°42'55.8"	8807.1	324.75	4.16	-0.38	4.15
15249	90.74	330.02	6466.47	8869.41	7268.79	-5130.27	1627298	501953	39°52'18.3"	80°42'56.5"	8896.91	324.786	3.88	0.44	3.86

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15339	90.71	329.16	6465.33	8958.22	7346.4	-5175.83	1627254	502031.2	39°52'19.1	80°42'57.0'	8986.59	324.834	0.96	-0.03	-0.96
15428	90.74	332.72	6464.21	9045.66	7424.18	-5219.04	1627212	502109.6	39°52'19.9	80°42'57.6'	9075.07	324.894	4	0.03	4
15517	90.74	335.7	6463.06	9132.03	7504.3	-5257.76	1627174	502190.2	39°52'20.7	80°42'58.1'	9162.89	324.984	3.35	0	3.35
15607	90.83	336.92	6461.82	9218.52	7586.7	-5293.92	1627139	502273.1	39°52'21.5	80°42'58.6'	9251.14	325.093	1.36	0.1	1.36
15697	90.77	338.08	6460.57	9304.47	7669.84	-5328.35	1627105	502356.7	39°52'22.3	80°42'59.0'	9339.05	325.212	1.29	-0.07	1.29
15786	91.42	336.89	6458.87	9389.47	7752.04	-5362.43	1627073	502439.3	39°52'23.1	80°42'59.4'	9426.02	325.327	1.52	0.73	-1.34
15875	90.34	332.61	6457.5	9475.62	7832.51	-5400.38	1627036	502520.3	39°52'23.9	80°42'59.9'	9513.79	325.414	4.96	-1.21	-4.81
15965	90.03	328.72	6457.21	9564.13	7910.95	-5444.46	1626993	502599.3	39°52'24.7	80°43'00.5'	9603.4	325.464	4.34	-0.34	-4.32
16054	90.03	327.86	6457.16	9652.26	7986.67	-5491.24	1626947	502675.6	39°52'25.4	80°43'01.1'	9692.29	325.489	0.97	0	-0.97
16079	90.03	327.86	6457.15	9677.04	8007.84	-5504.54	1626934	502697	39°52'25.6	80°43'01.3'	9717.27	325.496	0	0	0

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HOLE AND CASING SECTIONS Ref Wellbore: Taylor C 3H AWB Ref Wellpath: Taylor C 3H AWP Proj: 16079'

String/Dian Start MD	End MD	Interval	Start TVD	End TVD	Start N/S	Start E/W	End N/S	End E/W
17.5in Ope	25	558.33	533.33	25	558.33	0	0	-0.7
13.375in C	25	558.33	533.33	25	558.33	0	0	-0.7
12.25in Op	558.33	2200	1641.67	558.33	2195.71	0.9	-0.7	78.84
9.625in Cas	25	2200	2175	25	2195.71	0	0	78.84
8.5in Open	2200	16079	13879	2195.71	6457.15	78.84	-39.17	8007.84
5.5in Casin	25	16079	16054	25	6457.15	0	0	8007.84

T A R G E T S

Name	TVD	North	East	Grid East	Grid North	Latitude	Longitude	Shape	Comment
Taylor C 3H	6475.59	8015.24	-5494.89	1626944	502704.2	39°52'25.7	80°43'01.1	point	
Taylor C 3H	6486.48	6919.29	-4913.11	1627511	501600.7	39°52'14.9	80°42'53.7	point	
Taylor C 3H	6554	967.64	30.91	1632375	495584	39°51'16.1	80°41'50.3	point	
Taylor C LL	7008.33	-4.71	-14.24	1632317	494612.4	39°51'06.5	80°41'50.8	polygon	
Taylor C LL	7008.33	-4.71	-14.24	1632317	494612.4	39°51'06.5	80°41'50.8	polygon	
Taylor C LL	7008.33	-4.71	-14.24	1632317	494612.4	39°51'06.5	80°41'50.8	polygon	

WELLPATH COMPOSITION Ref Wellbore: Taylor C 3H AWB Ref Wellpath: Taylor C 3H AWP Proj: 16079'

Log Name/ Start MD	End MD	Pos Unc Model
01_Gyroda	25	517.33 BHI Generic gyro - northseeking (Standard)
02_BHI Nav	517.33	2185 NavITrak (Magcorr+IFR1)
03_BHI Nav	2185	5386 NavITrak (Magcorr+IFR1)
04_BH AT (	5386	16054 BHI AutoTrak Curve (IFR1, Short)
Projection	16054	16079 Blind Drilling (std)

C O M M E N T S

Wellpath general comments  
 APl: 47-051-01802-0000  
 BHI Job #: 8903716  
 Rig: Precision 560  
 Duration: 02/09/2018-02/14/2018

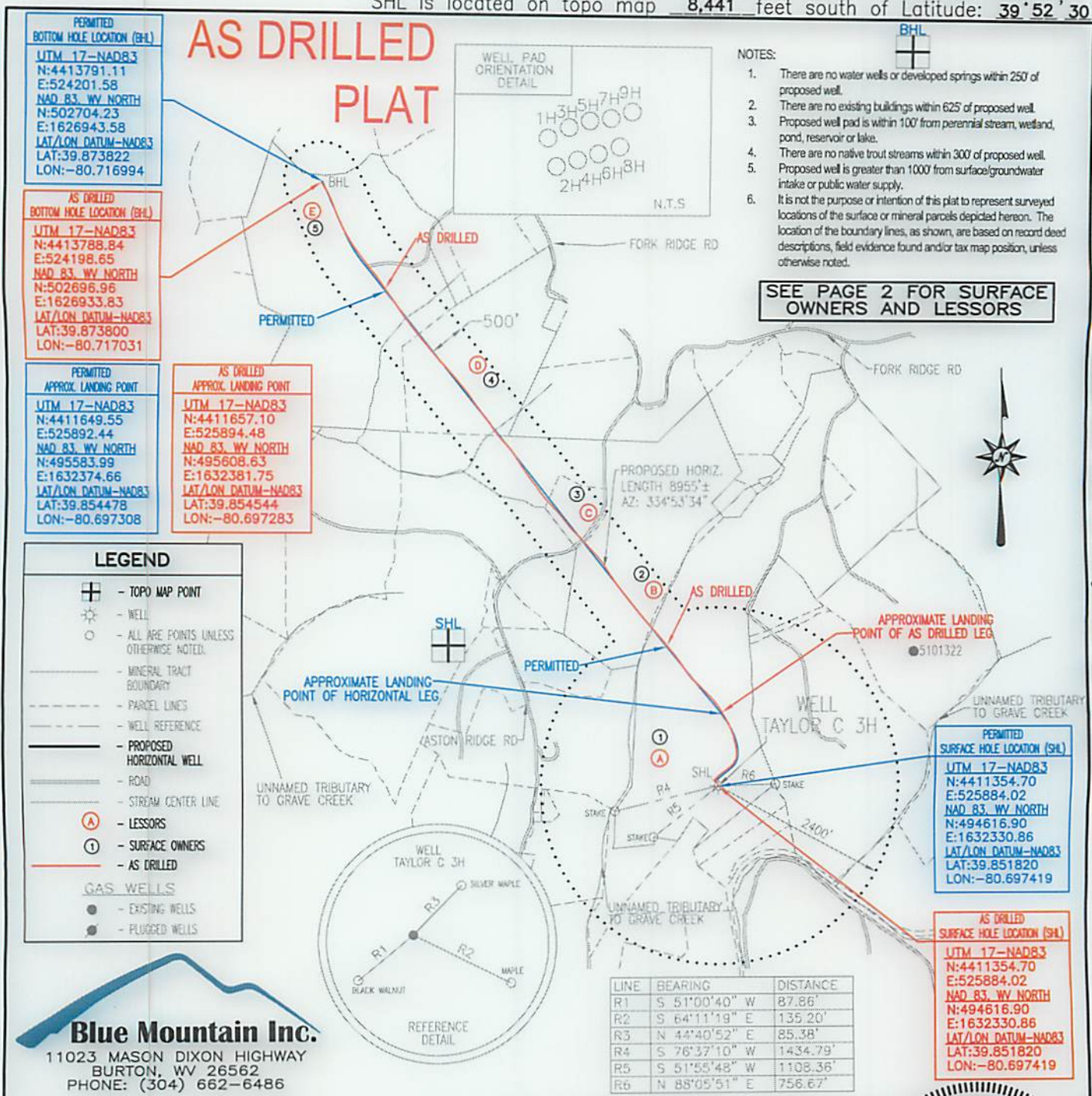
Gyrodatta MS Gyro <17-1/2>(50'-509')"  
BHI Navitrak IFR Axial <12-1/4>(517.33')(665'-2185')"  
BHI Navitrak IFR Axial <8-1/2> (2185')(2260'-5386')"  
BHI AT Curve IFR <8-1/2> (5386')(5470'-16054')"  
Projected MD at TD: 16079'

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BHL is located on topo map 427 feet south of Latitude: 39°52'30"  
 SHL is located on topo map 8,441 feet south of Latitude: 39°52'30"

BHL is located on topo map 2,441 feet west of Longitude: 80°42'30"  
 SHL is located on topo map 8,633 feet west of Longitude: 80°40'00"



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

FILE #: TAYLOR C 3H-AS DRILLED  
 DRAWING #: TAYLOR C 3H-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 A. 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 3H-AS DRILLED  
 API WELL #: 47 51 01802  
 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'  
 SURFACE OWNER: WILLIAMS OHIO VALLEY MIDSTREAM LLC ACREAGE: 265.439±  
 OIL & GAS ROYALTY OWNER: LEE R. & SHERRI L. TAYLOR ACREAGE: 643.246±

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: 6,465.23'± TMD 16,102.55'±  
 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



City CORAOPOLIS State PA Zip Code 15108  
 WELL OPERATOR CHEVRON APPALACHIA, LLC  
 Address 700 CHERINGTON PARKWAY  
 500 LEE STREET, EAST SUITE 1600  
 DESIGNATED AGENT KENNETH E. TAWNEY  
 City CHARLESTON State WV Zip Code 25301-3205

TARGET FORMATION: MARCELLUS  
 ESTIMATED DEPTH: TMD 16,105.25'±  
 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

OIL & GAS ROYALTY OWNER: LEE R. & SHERRI L. TAYLOR ACREAGE: 643.246±  
 SURFACE OWNER: WILLIAMS OHIO VALLEY MIDSTREAM LLC ACREAGE: 265.43±  
 COUNTY/DISTRICT: MARSHALL \ CLAY QUADRANGLE: GLEN EASTON, WV 7.5'  
 WATERSHED: MIDDLE GRAVE CREEK - GRAVE CREEK ELEVATION: 1257.00'

Well Type:  Gas  Liquid Injection  Storage  Shallow  Deep  
 Oil  Waste Disposal  Production  Other  
 CHARLESTON, WV 25304  
 601 27TH STREET  
 OFFICE OF OIL & GAS  
 WADEP  
 UNITED STATES TOPOGRAPHIC MAPS  
 (+) DENOTES LOCATION OF WELL ON

OF ELEVATION: THOMAS 1498.81'  
 PROVEN SOURCE: U.S.G.S. MONUMENT  
 OF ACCURACY: 1/2500  
 MINIMUM DEGREE  
 SCALE: 1" = 2000'  
 DRAWING #: TAYLOR C 3H-AS DRILLED  
 FILE #: TAYLOR C 3H-AS DRILLED

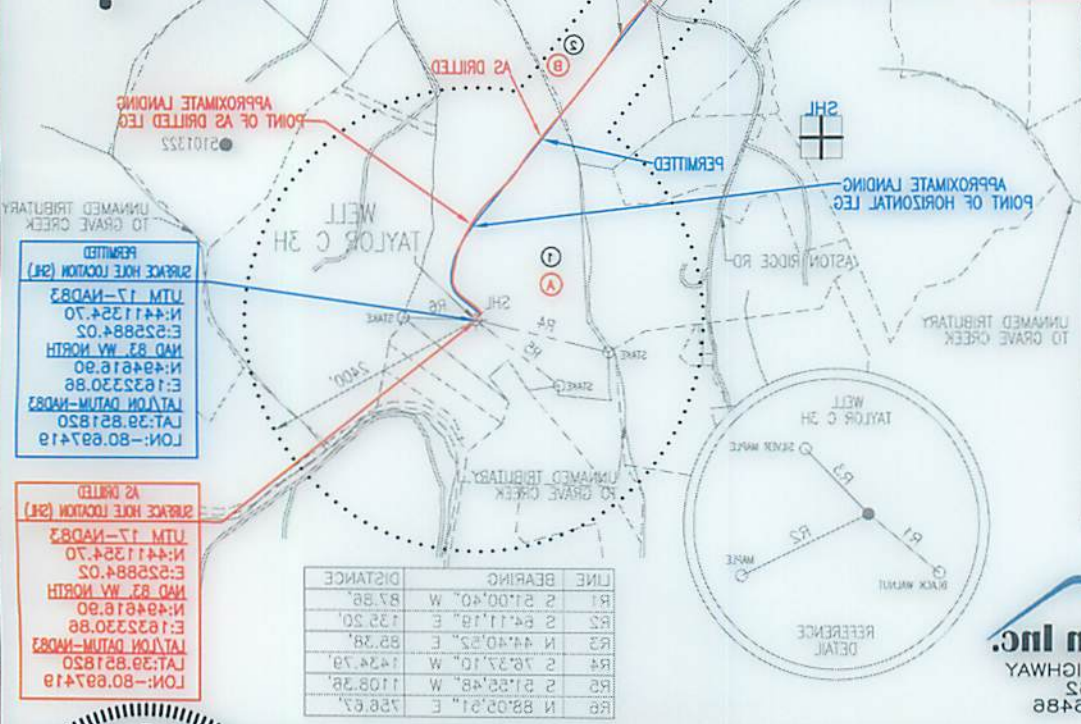
R.P.E.: \_\_\_\_\_  
 L.L.S.: P.S. No. 2000  
 Signed: *George Davis*



**Blue Mountain Inc.**  
 1103 MASON DIXON HIGHWAY  
 BURTON, WV 25622  
 PHONE: (304) 682-6486

**LEGEND**

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



LINE	BEARING	DISTANCE
R1	S 21°00'40" W	83.88'
R2	S 64°11'19" E	132.20'
R3	N 44°40'23" E	88.28'
R4	S 78°37'10" W	142.49'
R5	S 1°55'48" W	1108.28'
R6	N 88°05'21" E	758.63'

**SEE PAGE 2 FOR SURFACE OWNERS AND LESSORS**

**NOTES:**

- There are no water wells or developed springs within 250' of proposed well.
- There are no existing buildings within 650' of proposed well.
- Proposed well pad is within 100' from perennial stream, wetland, pond, reservoir or lake.
- There are no navigable streams within 300' of proposed well.
- Proposed well is greater than 1000' from surface groundwaters intake or public water supply.
- If not for the purpose or intention of this plat to represent surveyed locations of this surface or mineral parcels obligated hereon. The location of the boundary lines, as shown, are based on record descriptions, field evidence found and/or tax map position, unless otherwise noted.

**AS DRILLED PLAT**

WELL PAD ORIENTATION DETAIL

WELL R1  
WELL R2  
WELL R3  
WELL R4  
WELL R5  
WELL R6

**PERMITTED**

APPROX. LANDING POINT  
 UTM 17-11AD83  
 N: 441184.25  
 E: 252892.44  
 NAD 83, WV NORTH  
 N: 48282.98  
 E: 182327.66  
 TAYLOR DATUM-WAD83  
 LAT: 39.854478  
 LON: -80.692308

APPROX. LANDING POINT  
 UTM 17-11AD83  
 N: 441184.25  
 E: 252892.44  
 NAD 83, WV NORTH  
 N: 48282.98  
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 TAYLOR DATUM-WAD83  
 LAT: 39.854478  
 LON: -80.692308

BHL is located on topo map 427 feet south of Latitude: 39.85, 30  
 BHL is located on topo map 8,441 feet south of Latitude: 39.85, 30

BHL is located on topo map 8,633 feet west of Longitude: 80.43, 30  
 BHL is located on topo map 5,441 feet west of Longitude: 80.43, 30



# TAYLOR C

## 3H

### PAGE 2 OF 2

## AS DRILLED

	SURFACE OWNER	DIST-TM/PAR
1	WILLIAMS OHIO VALLEY MIDSTREAM LLC	4-10/21
2	LEWIS A. ASTON JR. ET UX	4-10/6
3	GEORGE K. HOWARD ET UX	4-10/6.1
4	MARNIE KAY BUCHANAN EST	4-9/11
5	THOMAS E. HICKS	4-8/37

	LESSOR
A	LEE R. & SHERRI L. TAYLOR
B	LEWIS A. ASTON JR. & CATHY ASTON
C	LEWIS A. ASTON JR. & CATHY ASTON
D	JAMES & MARNIE BUCHANAN
E	CHRISTA D. HICKS & LESLIE M. HICKS

PERMITTED SURFACE HOLE LOCATION (SHL)
UTM 17-NAD83 N:4411354.70 E:525884.02 NAD 83, WY NORTH N:494616.90 E:1632330.86 LAT/LON DATUM-NAD83 LAT:39.851820 LON:-80.697419

PERMITTED APPROX. LANDING POINT
UTM 17-NAD83 N:4411649.55 E:525892.44 NAD 83, WY NORTH N:495583.99 E:1632374.66 LAT/LON DATUM-NAD83 LAT:39.854478 LON:-80.697308

PERMITTED BOTTOM HOLE LOCATION (BHL)
UTM 17-NAD83 N:4413791.11 E:524201.58 NAD 83, WY NORTH N:502704.23 E:1626943.58 LAT/LON DATUM-NAD83 LAT:39.873822 LON:-80.716994

AS DRILLED SURFACE HOLE LOCATION (SHL)
UTM 17-NAD83 N:4411354.70 E:525884.02 NAD 83, WY NORTH N:494616.90 E:1632330.86 LAT/LON DATUM-NAD83 LAT:39.851820 LON:-80.697419

AS DRILLED APPROX. LANDING POINT
UTM 17-NAD83 N:4411657.10 E:525894.48 NAD 83, WY NORTH N:495608.63 E:1632381.75 LAT/LON DATUM-NAD83 LAT:39.854544 LON:-80.697283

AS DRILLED BOTTOM HOLE LOCATION (BHL)
UTM 17-NAD83 N:4413788.84 E:524198.65 NAD 83, WY NORTH N:502696.96 E:1626933.83 LAT/LON DATUM-NAD83 LAT:39.873800 LON:-80.717031

**MARCH 13, 2018**



**TAYLOR C**  
**3H**  
**PAGE 2 OF 2**  
**AS DRILLED**

4-8\37	THOMAS E. HICKS	SURFACE OWNER	DIST-TM\PAR
4-9\11	MARNIE KAY BUCHANAN EST		
4-10\6.1	GEORGE K. HOWARD ET UX		
4-10\6	LEWIS A. ASTON JR. ET UX		
4-10\21	WILLIAMS OHIO VALLEY MIDSTREAM LLC		

CHRISTA D. HICKS & LESLIE M. HICKS	LESSOR
JAMES & MARNIE BUCHANAN	
LEWIS A. ASTON JR. & CATHY ASTON	
LEWIS A. ASTON JR. & CATHY ASTON	
LEE R. & SHERRI L. TAYLOR	

PERMITTED  
SURFACE HOLE LOCATION (SH)

UTM 17-NAD83  
N:4411324.70  
E:525884.02  
NAD 83 WY NORTH  
N:494818.90  
E:163230.88  
LAT:39.851820  
LON:-80.697419

PERMITTED  
APPROX LANDING POINT

UTM 17-NAD83  
N:4411849.25  
E:525892.44  
NAD 83 WY NORTH  
N:495893.99  
E:163237.66  
LAT:39.854478  
LON:-80.697308

PERMITTED  
BOTTOM HOLE LOCATION (BH)

UTM 17-NAD83  
N:4413791.11  
E:524201.28  
NAD 83 WY NORTH  
N:502704.23  
E:162894.28  
LAT:39.873822  
LON:-80.71894

AS DRILLED  
SURFACE HOLE LOCATION (SH)

UTM 17-NAD83  
N:4411324.70  
E:525884.02  
NAD 83 WY NORTH  
N:494818.90  
E:163230.88  
LAT:39.851820  
LON:-80.697419

AS DRILLED  
APPROX LANDING POINT

UTM 17-NAD83  
N:4411857.10  
E:525894.48  
NAD 83 WY NORTH  
N:495893.99  
E:163237.66  
LAT:39.854478  
LON:-80.697308

AS DRILLED  
BOTTOM HOLE LOCATION (BH)

UTM 17-NAD83  
N:4413788.84  
E:524198.85  
NAD 83 WY NORTH  
N:502898.98  
E:162893.83  
LAT:39.873800  
LON:-80.712031

AS DRILLED  
SURFACE HOLE LOCATION (SH)

UTM 17-NAD83  
N:4411324.70  
E:525884.02  
NAD 83 WY NORTH  
N:494818.90  
E:163230.88  
LAT:39.851820  
LON:-80.697419

AS DRILLED  
APPROX LANDING POINT

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N:4411857.10  
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NAD 83 WY NORTH  
N:495893.99  
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LAT:39.854478  
LON:-80.697308

AS DRILLED  
BOTTOM HOLE LOCATION (BH)

UTM 17-NAD83  
N:4413788.84  
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NAD 83 WY NORTH  
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E:162893.83  
LAT:39.873800  
LON:-80.712031

MARCH 13, 2018