

Well Operator's Report of Well Work



Well Number:

API: 47 - -

Submission: Initial Amended

Notes:

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

API 47 - _____ - _____ County _____ District _____
Quad _____ Pad Name _____ Field/Pool Name _____
Farm name _____ Well Number _____
Operator (as registered with the OOG) _____
Address _____ City _____ State _____ Zip _____

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

Elevation (ft) _____ 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)

Date permit issued _____ Date drilling commenced _____ Date drilling ceased _____
Date completion activities began _____ Date completion activities ceased _____
Verbal plugging (Y/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 _____ Open mine(s) (Y/N) depths _____
Salt water depth(s) ft _____ Void(s) encountered (Y/N) depths _____
Coal depth(s) ft _____ Cavern(s) encountered (Y/N) depths _____
Is coal being mined in area (Y/N) _____

Reviewed by:
~~11/19/2021~~

API 47- _____ - _____ Farm name _____ Well number _____

CASING STRINGS	Hole Size	Casing Size	Depth (GL)	New or Used	Grade wt/ft	Basket Depth(s) (GL)	Did cement circulate (Y/ N) * Provide details below*
Conductor							
Surface							
Coal							
Intermediate 1							
Intermediate 2							
Intermediate 3							
Production							
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 (GL)	WOC (hrs)
Conductor							
Surface							
Coal							
Intermediate 1							
Intermediate 2							
Intermediate 3							
Production							
Tubing							

Drillers TD (ft) _____ Loggers TD (ft) _____
 Deepest formation penetrated _____ Plug back to (ft) _____
 Plug back procedure _____

Kick off depth (ft) _____

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 _____

WAS WELL COMPLETED AS SHOT HOLE Yes No DETAILS _____

WAS WELL COMPLETED OPEN HOLE? Yes No DETAILS _____

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

API 47- ____ - ____ Farm name _____ Well number _____

PERFORATION RECORD

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

Please insert additional pages as applicable.

STIMULATION INFORMATION PER STAGE

Complete a separate record for each stimulation stage.

Stage No.	Stimulations Date	Ave Pump Rate (BPM)	Ave Treatment Pressure (PSI)	Max Breakdown Pressure (PSI)	ISIP (PSI)	Amount of Proppant (lbs)	Amount of Water (bbls)	Amount of Nitrogen/other (units)

Please insert additional pages as applicable.

11/19/2021

API 47- ___ - ___ Farm name _____ Well number _____

PRODUCING FORMATION(S)

DEPTHS

_____	_____ TVD	_____ MD
_____	_____	_____
_____	_____	_____
_____	_____	_____

Please insert additional pages as applicable.

GAS TEST Build up Drawdown Open Flow OIL TEST Flow Pump

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

OPEN FLOW Gas _____ mcfpd Oil _____ bpd NGL _____ bpd Water _____ bpd
GAS MEASURED BY Estimated Orifice Pilot

LITHOLOGY/ FORMATION	TOP DEPTH IN FT NAME TVD	BOTTOM DEPTH IN FT TVD	TOP DEPTH IN FT MD	BOTTOM DEPTH IN FT MD	DESCRIBE ROCK TYPE AND RECORD QUANTITY AND TYPE OF FLUID (FRESHWATER, BRINE, OIL, GAS, H ₂ S, ETC)
-------------------------	--------------------------------	------------------------------	--------------------------	-----------------------------	--

LITHOLOGY/ FORMATION	TOP DEPTH IN FT NAME TVD	BOTTOM DEPTH IN FT TVD	TOP DEPTH IN FT MD	BOTTOM DEPTH IN FT MD	DESCRIBE ROCK TYPE AND RECORD QUANTITY AND TYPE OF FLUID (FRESHWATER, BRINE, OIL, GAS, H ₂ S, ETC)

Please insert additional pages as applicable.

Drilling Contractor _____
Address _____ City _____ State _____ Zip _____

Logging Company _____
Address _____ City _____ State _____ Zip _____

Cementing Company _____
Address _____ City _____ State _____ Zip _____

Cementing Company _____
Address _____ City _____ State _____ Zip _____

Please insert additional pages as applicable.

Completed by _____ Telephone _____
Signature *Paul R. J...* 11/3/2021 Title _____ Date _____

API 47- ___ - _____ Farm name _____ Well number _____

Drilling Contractor _____
Address _____ City _____ State _____ Zip _____

Logging Company _____
Address _____ City _____ State _____ Zip _____

Logging Company _____
Address _____ City _____ State _____ Zip _____

Drilling Contractor _____
Address _____ City _____ State _____ Zip _____

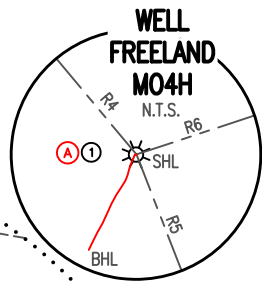
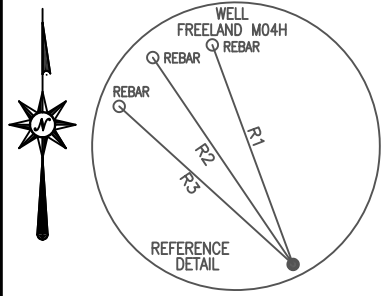
Well # Freeland M04H Final Formations API# 47-051-02146				
Formation Name	Drill Top MD (ftGRD)	Drill Top (TVD) (ftGRD)	Drill Btm MD (ftGRD)	Drill Btm (TVD) (ftGRD)
Sand/Shale	1	265	1	265
Washington A Coal	265	267	265	267
Sand/Shale	267	353	267	353
Waynesburg A Coal	353	534	353	534
Sand/Shale	354	360	354	360
Waynesburg Coal	360	361	360	361
Sand/Shale	361	575	361	575
Sewickley Coal	575	579	575	579
Sand/Shale	579	634	579	634
Redstone Coal	634	636	634	636
Sand/Shale	636	798	636	798
Pittsburgh Coal	798	804	798	804
Sand/Shale	804	1,283	804	1,283
Allegheny	1,283	1,541	1,283	1,541
Sand/Shale	1,541	1,811	1,541	1,811
Big Injun	1,811	1,861	1,811	1,861
Sand/Shale	1,861	2,120	1,861	2,120
Wier	2,120	2,232	2,120	2,232

BHL is located on topo map 2,800 feet south of Latitude: 39° 52' 30"
 SHL is located on topo map 2,715 feet south of Latitude: 39° 52' 30"

LINE	BEARING	DISTANCE
R1	N 21°12'19" W	217.46'
R2	N 35°06'01" W	233.31'
R3	N 48°40'19" W	220.33'
R4	N 39°53'00" W	1648.55'
R5	S 21°14'13" E	1810.80'
R6	N 71°44'06" E	1188.72'

	SURFACE OWNER	DIST-TM/PAR
1	JOSEPH L. FREELAND ET UX	4-7/21
	LESSOR	DIST-TM/PAR
A	JOSEPH FREELAND ET UX	4-7/21

BHL is located on topo map 3,234 feet west of Longitude: 80° 45' 00"
 SHL is located on topo map 3,192 feet west of Longitude: 80° 45' 00"



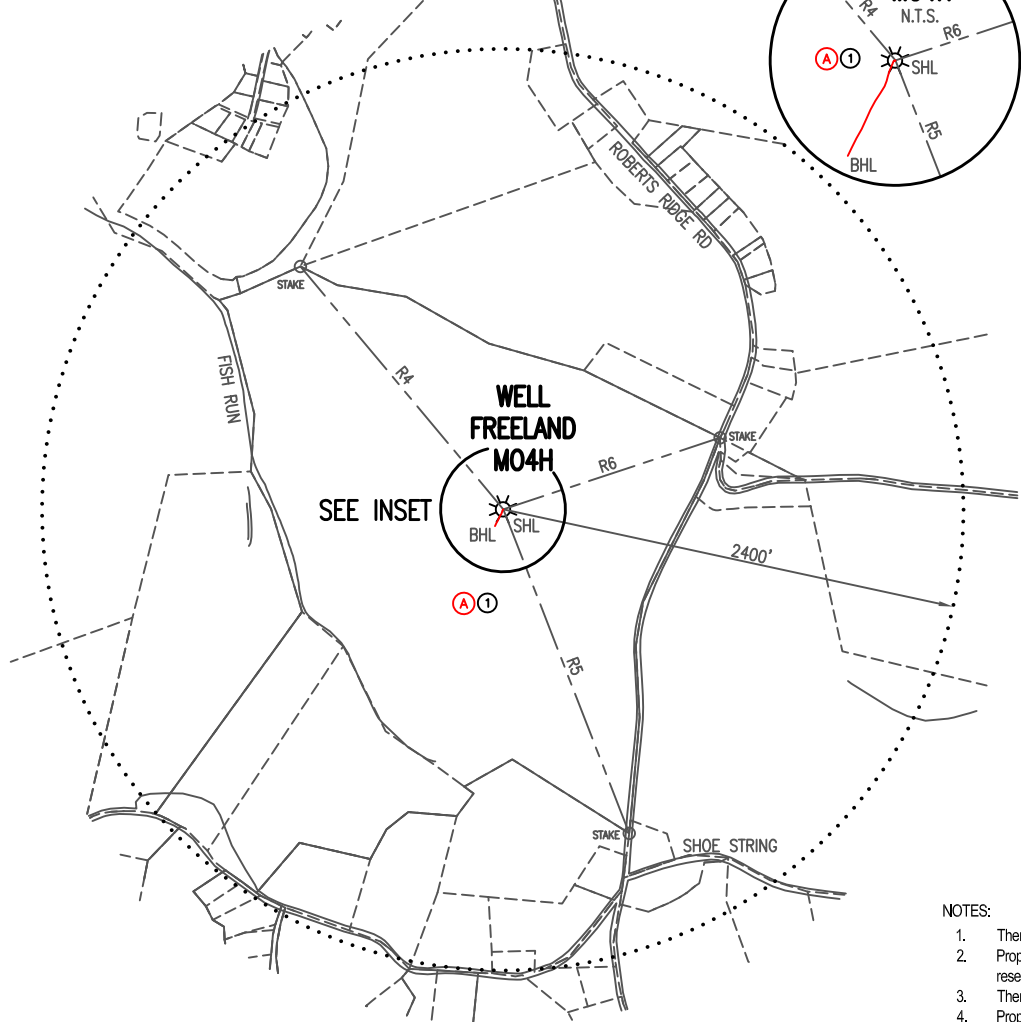
LEGEND

- TOPO MAP POINT
- WELL
- ALL ARE POINTS UNLESS OTHERWISE NOTED.
- MINERAL TRACT BOUNDARY
- PARCEL LINES
- WELL REFERENCE
- ROAD
- STREAM CENTER LINE
- (A) - LESSORS
- (1) - SURFACE OWNERS
- AS-DRILLED

GAS WELLS

- EXISTING WELLS
- PLUGGED WELLS

AS-DRILLED LOCATIONS UTM 17-NAD83(M)	
SURFACE HOLE LOCATION (SHL)	
N:4412873.37	E:520412.21
APPROX LANDING POINT (LP)	
N:N/A	E:N/A
BOTTOM HOLE LOCATION (BHL)	
N:4412846.42	E:520399.34



NOTES:

- There are no water wells or developed springs within 250' of proposed well.
- Proposed well is greater than 100' from perennial stream, wetland, pond, reservoir or lake.
- There are no native trout streams within 300' of proposed well.
- Proposed well is greater than 1000' from surface groundwater intake or public water supply.
- It is not the purpose or intention of this plat to represent surveyed locations of the surface or mineral parcels depicted hereon. The location of the boundary lines, as shown, are based on record deed descriptions, field evidence found and/or tax map position, unless otherwise noted.
- There are no existing buildings within 625' of proposed well.

THRASHER

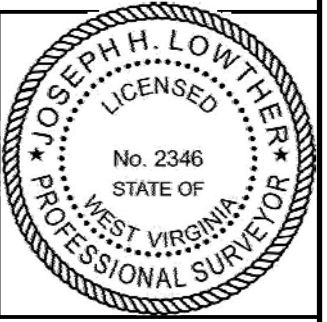
THE THRASHER GROUP, INC.
 600 WHITE OAKS BLVD.
 BRIDGEPORT, WV 26330
 PHONE 304-624-4108

**AS-DRILLED
 PLAT**

FILE #: FREELAND M04H - AS-DRILLED
 DRAWING #: FREELAND M04H - AS-DRILLED
 SCALE: 1" = 1000'
 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: *Joseph H. Lowther*
 R.P.E.: _____ L.L.S.: P.S. No. 2346



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



DATE: SEPTEMBER 15, 2021
 OPERATOR'S WELL #: FREELAND M04H - AS-DRILLED
 API WELL #: 47 51 2146
 STATE COUNTY PERMIT

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

WATERSHED: SHORT CREEK-OHIO RIVER ELEVATION: 1274.00'

COUNTY/DISTRICT: MARSHALL / CLAY QUADRANGLE: POWHATAN POINT, WV 7.5'

SURFACE OWNER: JOSEPH L. FREELAND ET UX ACREAGE: 104.22±

OIL & GAS ROYALTY OWNER: JOSEPH FREELAND ET UX ACREAGE: 104.22± **11/19/2021**

DRILL CONVERT DRILL DEEPER REDRILL FRACTURE OR STIMULATE PLUG OFF OLD FORMATION
 PERFORATE NEW FORMATION PLUG & ABANDON CLEAN OUT & REPLUG OTHER CHANGE

(SPECIFY): _____

TARGET FORMATION: MARCELLUS ESTIMATED DEPTH: TVD: 2,183± TMD: 2,187'±

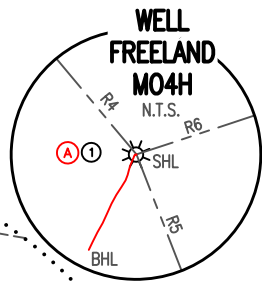
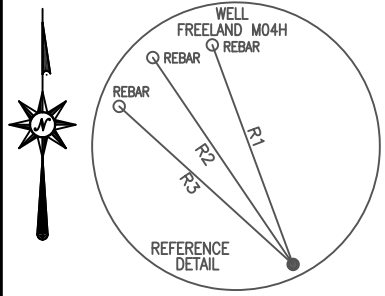
WELL OPERATOR CHEVRON APPALACHIA, LLC DESIGNATED AGENT JOSEPH C. MALLOW

Address 700 CHERRINGTON PARKWAY Address 115 PROFESSIONAL PLACE, PO BOX 280
 City CORAOPOLIS State PA Zip Code 15108 City BRIDGEPORT State WV Zip Code 26330

BHL is located on topo map 2,800 feet south of Latitude: 39° 52' 30"
 SHL is located on topo map 2,715 feet south of Latitude: 39° 52' 30"

LINE	BEARING	DISTANCE
R1	N 21°12'19" W	217.46'
R2	N 35°06'01" W	233.31'
R3	N 48°40'19" W	220.33'
R4	N 39°53'00" W	1648.55'
R5	S 21°14'13" E	1810.80'
R6	N 71°44'06" E	1188.72'

	SURFACE OWNER	DIST-TM/PAR
1	JOSEPH L. FREELAND ET UX	4-7/21
	LESSOR	DIST-TM/PAR
A	JOSEPH FREELAND ET UX	4-7/21



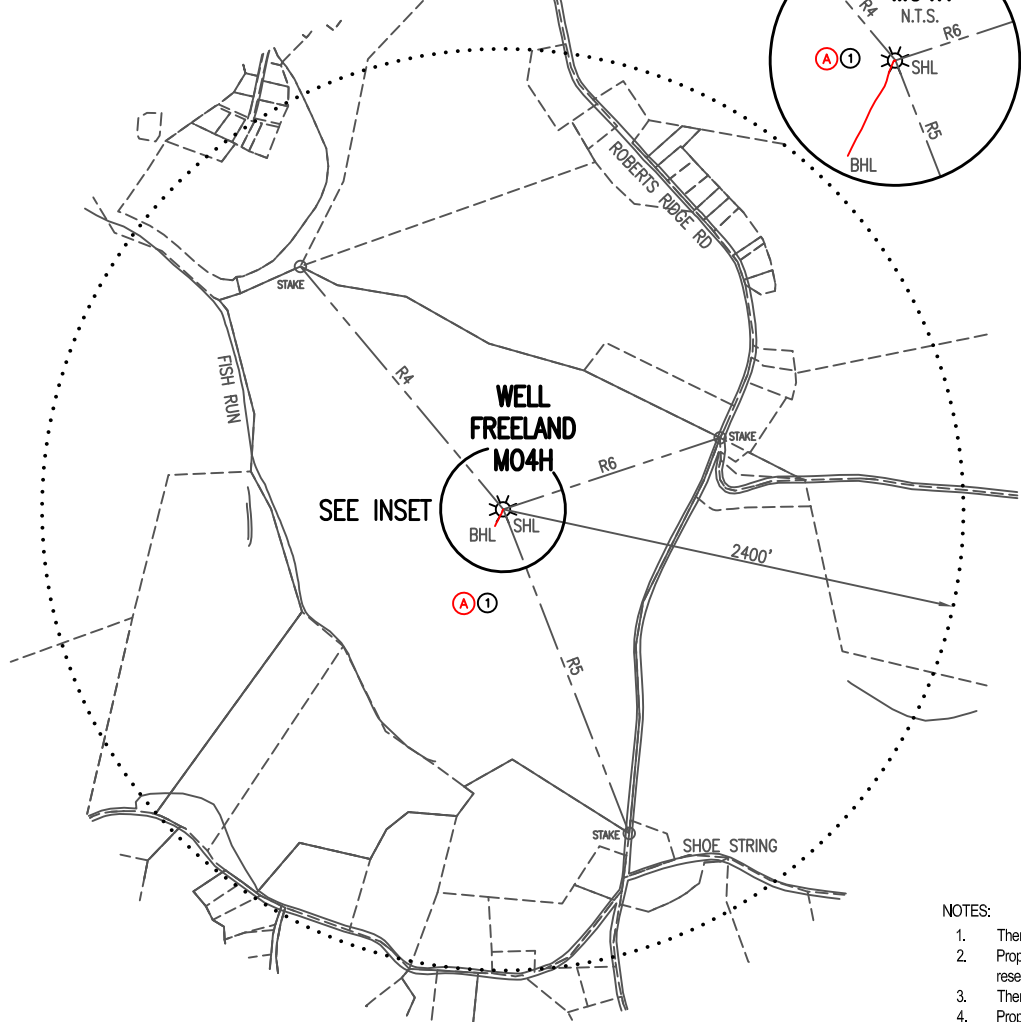
LEGEND

- TOPO MAP POINT
- WELL
- ALL ARE POINTS UNLESS OTHERWISE NOTED.
- MINERAL TRACT BOUNDARY
- PARCEL LINES
- WELL REFERENCE
- ROAD
- STREAM CENTER LINE
- (A) - LESSORS
- (1) - SURFACE OWNERS
- AS-DRILLED

GAS WELLS

- EXISTING WELLS
- PLUGGED WELLS

AS-DRILLED LOCATIONS UTM 17-NAD83(M)	
SURFACE HOLE LOCATION (SHL)	
N:4412873.37	E:520412.21
APPROX LANDING POINT (LP)	
N:N/A	E:N/A
BOTTOM HOLE LOCATION (BHL)	
N:4412846.42	E:520399.34



BHL is located on topo map 3,234 feet west of Longitude: 80° 45' 00"
 SHL is located on topo map 3,192 feet west of Longitude: 80° 45' 00"

NOTES:

- There are no water wells or developed springs within 250' of proposed well.
- Proposed well is greater than 100' from perennial stream, wetland, pond, reservoir or lake.
- There are no native trout streams within 300' of proposed well.
- Proposed well is greater than 1000' from surface groundwater intake or public water supply.
- It is not the purpose or intention of this plat to represent surveyed locations of the surface or mineral parcels depicted hereon. The location of the boundary lines, as shown, are based on record deed descriptions, field evidence found and/or tax map position, unless otherwise noted.
- There are no existing buildings within 625' of proposed well.

THRASHER

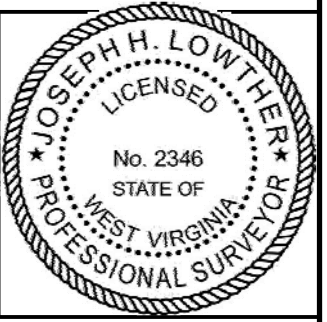
THE THRASHER GROUP, INC.
 600 WHITE OAKS BLVD.
 BRIDGEPORT, WV 26330
 PHONE 304-624-4108

**AS-DRILLED
 PLAT**

FILE #: FREELAND M04H - AS-DRILLED
 DRAWING #: FREELAND M04H - AS-DRILLED
 SCALE: 1" = 1000'
 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:
 R.P.E.: _____ L.L.S.: P.S. No. 2346



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



DATE: SEPTEMBER 15, 2021
 OPERATOR'S WELL #: FREELAND M04H - AS-DRILLED
 API WELL #: 47 51 2146
 STATE COUNTY PERMIT

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

WATERSHED: SHORT CREEK-OHIO RIVER ELEVATION: 1274.00'

COUNTY/DISTRICT: MARSHALL / CLAY QUADRANGLE: POWHATAN POINT, WV 7.5'

SURFACE OWNER: JOSEPH L. FREELAND ET UX ACREAGE: 104.22±

OIL & GAS ROYALTY OWNER: JOSEPH FREELAND ET UX ACREAGE: 104.22± **11/19/2021**

DRILL CONVERT DRILL DEEPER REDRILL FRACTURE OR STIMULATE PLUG OFF OLD FORMATION
 PERFORATE NEW FORMATION PLUG & ABANDON CLEAN OUT & REPLUG OTHER CHANGE

(SPECIFY): _____

TARGET FORMATION: MARCELLUS ESTIMATED DEPTH: TVD: 2,183± TMD: 2,187'±

WELL OPERATOR CHEVRON APPALACHIA, LLC DESIGNATED AGENT JOSEPH C. MALLOW

Address 700 CHERRINGTON PARKWAY Address 115 PROFESSIONAL PLACE, PO BOX 280
 City CORAOPOLIS State PA Zip Code 15108 City BRIDGEPORT State WV Zip Code 26330