

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

RECEIVED  
Office of Oil and Gas  
APR 5 2022  
WV Department of  
Environmental Protection

API 47-051-02086 County Marshall District Washington  
Quad Moundsville Pad Name Hines Field/Pool Name N/A  
Farm name Donald Hines et UX Well Number Hines M19H  
Operator (as registered with the OOG) EQT CHAP LLC  
Address 400 Woodcliff Drive City Canonsburg State PA Zip 15317

As Drilled location NAD 83/UTM Attach an as-drilled plat, profile view, and deviation survey  
Top hole Northing 4,417,391.161 Easting 525,717.177  
Landing Point of Curve Northing \_\_\_\_\_ Easting \_\_\_\_\_  
Bottom Hole Northing 4,417,595.052 Easting 526,489.627

Elevation (ft) 1125' 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 10/05/2018 Date drilling commenced 03/25/2019 Date drilling ceased 06/23/2019  
Date completion activities began \_\_\_\_\_ Date completion activities ceased \_\_\_\_\_  
Verbal plugging (Y/N) N Date permission granted N/A Granted by N/A

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

Freshwater depth(s) ft 365 Open mine(s) (Y/N) depths N  
Salt water depth(s) ft 1039,1595,1632 Void(s) encountered (Y/N) depths N  
Coal depth(s) ft 365,655 Cavern(s) encountered (Y/N) depths N  
Is coal being mined in area (Y/N) Y

Reviewed

Reviewed by:  
MDK 5/11/22  
05/27/2022

API 47-051 - 02086 Farm name Donald Hines et UX Well number Hines M19H

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	30"	20"	28'	NEW	X-52 78.6#	N/A	Y
Surface	17-1/2"	13-3/8"	455'	NEW	J-55 54.5#	N/A	Y
Coal							
Intermediate 1	12-3/8"	9-5/8"	2029'	NEW	L-80 40#	N/A	Y
Intermediate 2							
Intermediate 3							
Production						N/A	N
Tubing							
Packer type and depth set							

Comment Details  
No issues during cement job.

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 (GL)	WOC (hrs)
Conductor	CLASS A	N/A	N/A	N/A	N/A	0	8+
Surface	CLASS A / Grout	448/76	15.6/15.6	1.19/1.19	533/90	0	8
Coal							
Intermediate 1	CLASS A	689	15.6	1.19	820	0	8
Intermediate 2							
Intermediate 3							
Production							
Tubing							

Drillers TD (ft) 5988' Loggers TD (ft) N/A  
 Deepest formation penetrated MARCELLUS Plug back to (ft) N/A  
 Plug back procedure

Kick off depth (ft) 737'

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

CONDUCTOR- NONE

SURFACE- ON SHOE TRACK AND EVERY 500' TO SURFACE

INTERMEDIATE: ON SHOE TRACK AND EVERY 500' FEET TO SURFACE

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- 051 - 02086 Farm name Donald Hines et UX Well number Hines M19H

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# Hines M19H Final Formations API#47-051-02086

Formation Name	Drill Top MD (ftGRD)	Drill Top (TVD) (ftGRD)	Drill Btm MD (ftGRD)	Drill Btm (TVD) (ftGRD)
Sand/Shale	1	1	366	366
Waynesburg Coal	366	366	369	369
Sand/Shale	369	369	656	656
Pittsburgh Coal	656	656	662	662
Sand/Shale	662	662	1,596	1,596
Big Lime	1,596	1,596	1,658	1,658
Sand/Shale	1,658	1,658	1,832	1,832
Burgoon	1,832	1,832	1,985	1,985
Sand/Shale	1,985	1,985	2,199	2,199
Berea	2,199	2,199	2,220	2,220
Sand/Shale	2,220	2,220	2,456	2,453
Gordon	2,456	2,453	2,531	2,526
Sand/Shale	2,531	2,526	4,978	4,164
Elk	4,978	4,164	4,979	4,165
Sand/Shale	4,979	4,165	5,639	4,527
Rhinestreet	5,639	4,527	5,988	4,911

05/27/2022



- NOTES:
1. There are no water wells or developed springs within 250' of proposed well.
  2. Proposed well is greater than 100' from perennial stream, wetland, pond, reservoir or lake.
  3. There are no native trout streams within 300' of proposed well.
  4. Proposed well is greater than 1000' from surface groundwater intake or public water supply.
  5. 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.
  6. There are no existing buildings within 625' of proposed well.

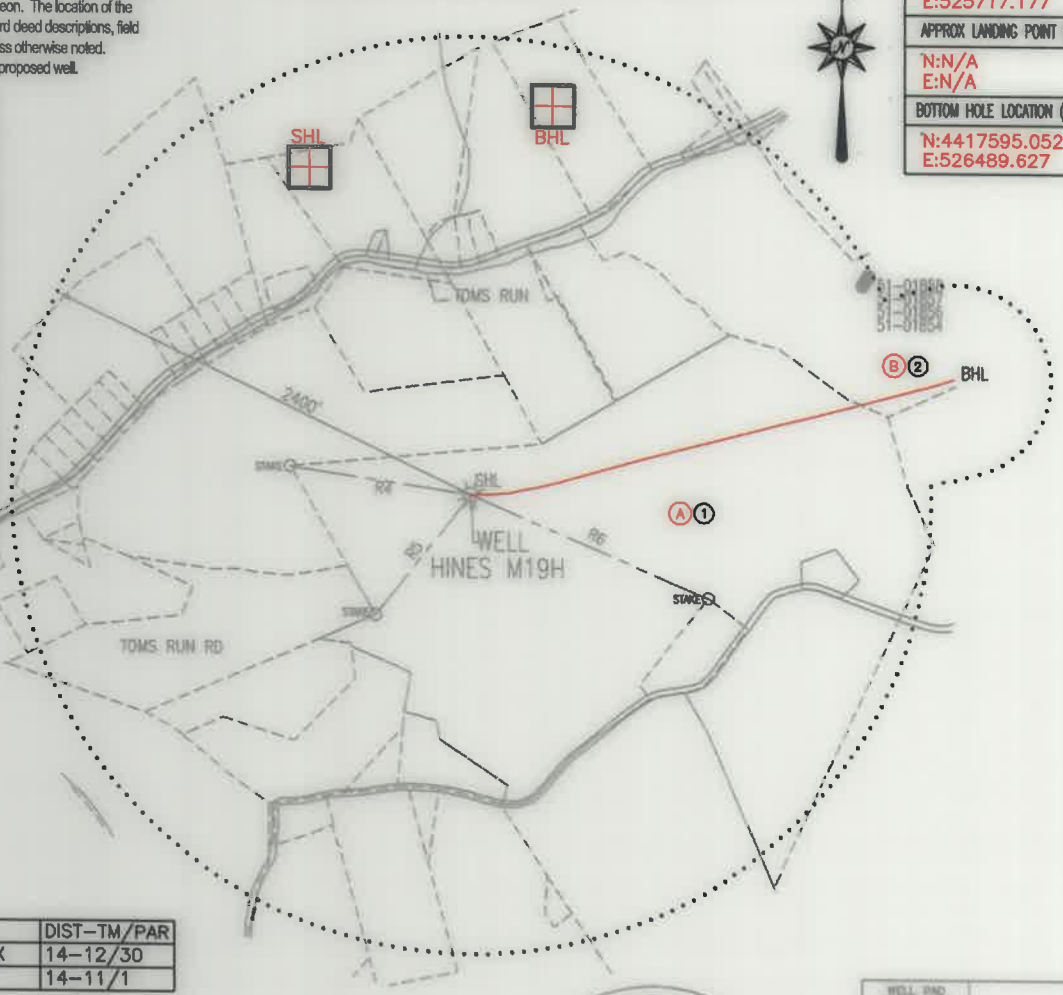
BHL is located on topo map 3,173 feet south of Latitude: 39° 55' 00"  
 SHL is located on topo map 3,834 feet south of Latitude: 39° 55' 00"

# AS DRILLED PLAT

AS-DRILLED LOCATIONS UTM 17-MAD83(N)	
SURFACE HOLE LOCATION (SHL)	
N:4417391.161	E:525717.177
APPROX LANDING POINT (LP)	
N:N/A	E:N/A
BOTTOM HOLE LOCATION (BHL)	
N:4417595.052	E:526489.627

BHL is located on topo map 6,632 feet west of Longitude: 80° 40' 00"  
 SHL is located on topo map 9,170 feet west of Longitude: 80° 40' 00"

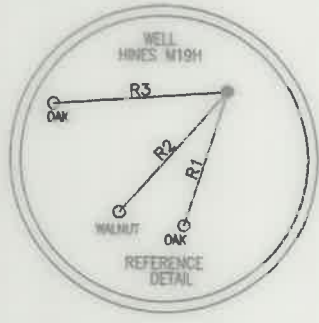
LEGEND	
	- TOPO MAP POINT
	- WELL
	- ALL ARE POINTS UNLESS OTHERWISE NOTED
	- MINERAL TRACT BOUNDARY
	- PARCEL LINES
	- WELL REFERENCE
	- ROAD
	- STREAM CENTER LINE
	- LESSORS
	- SURFACE OWNERS
	- AS-DRILLED
GAS WELLS	
	- EXISTING WELLS
	- PLUGGED WELLS



SURFACE OWNER	DIST-TM/PAR
1 DONALD HINES ET UX	14-12/30
2 OKEY L. RINE JR.	14-11/1

LESSOR	DIST-TM/PAR
A DONALD HINES ET UX	14-12/30
B OKEY L. RINE JR.	14-11/1

LINE	BEARING	DISTANCE
R1	S 18°15'03" W	173.58'
R2	S 42°07'40" W	199.67'
R3	S 85°54'10" W	214.80'
R4	N 81°23'41" W	953.94'
R5	S 38°28'34" W	802.60'
R6	S 66°58'21" E	1346.69'



WELL BND ORIENTATION DETAIL			
M01HO	M14HO	U15HO	U28HO
M02HO	M13HO	U16HO	U27HO
M03HO	M12HO	U17HO	U26HO
M04HO	M11HO	U18HO	U25HO
M05HO	M10HO	U19HO	U24HO
M06HO	M09HO	U20HO	U23HO
M07HO	M08HO	U21HO	U22HO
M08HO	M07HO	U22HO	U23HO
M09HO	M06HO	U23HO	U24HO
M10HO	M05HO	U24HO	U25HO
M11HO	M04HO	U25HO	U26HO
M12HO	M03HO	U26HO	U27HO
M13HO	M02HO	U27HO	U28HO
M14HO	M01HO	U28HO	U29HO

N.T.S.

## THRASHER

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

FILE #: HINES M19H - AS DRILLED

DRAWING #: HINES M19H - 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: DECEMBER 13, 2021

OPERATOR'S WELL #: HINES M19H - AS DRILLED

API WELL #: 47 51 2086

STATE COUNTY PERMIT

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

WATERSHED: MIDDLE GRAVE CREEK-GRAVE CREEK ELEVATION: 1125.45'

COUNTY/DISTRICT: MARSHALL / WASHINGTON QUADRANGLE: MOUNDVILLE, WV 7.5'

SURFACE OWNER: DONALD HINES ET UX ACREAGE: 114.934±

OIL & GAS ROYALTY OWNER: DONALD HINES ET UX ACREAGE: 202.50± 05/27/2022

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: 4,936'± TMD: 6,013'±

WELL OPERATOR EQT CHAP, LLC DESIGNATED AGENT JOSEPH C. MALLOW

Address 400 WOODCLIFF DRIVE Address 427 MIDSTATE DRIVE

City CANONSBURG State PA Zip Code 15317 City CLARKSBURG State WV Zip Code 26301