

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

API 47-051-01932 County Marshall District Washington WV Department of Environmental Protection  
Quad Moundsville Pad Name Hines Field/Pool Name N/A  
Farm name Donald Hines et UX Well Number Hines M10H  
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 4,417,391.37 Easting 525,708.06  
Landing Point of Curve Northing 4,417,028.64 Easting 525,409.90  
Bottom Hole Northing 4,415,146.45 Easting 526,273.15

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)

Synthetic Oil Based Mud 12.6 ppg barium sulfate, sodium chloride, xanthan gum, polyanionic cellulose, modified starch, sodium hydroxide, phosphonates and alkyl phosphates, glutaraldehyde solution, calcium hydroxide, partially hydrolyzed polyacrylamide/polyacrylate, potassium chloride, sodium carbonate, ground walnut shells, alcohol and modified fatty acid, ferrochrome lignosulfonate, calcium carbonate, fibrous cellulose

Date permit issued 08/15/2017 Date drilling commenced 12/14/2017 Date drilling ceased 06/10/2018  
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 by

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

API 47-051 - 01932

Farm name Donald Hines et UX

Well number Hines M10H

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"	45'	NEW	X-52 218.82#	N/A	Y
Surface	17-1/2"	13-3/8"	405'	NEW	J-55 54.5#	N/A	Y
Coal							
Intermediate 1	12-3/8"	9-5/8"	1987'	NEW	L-80 40#	N/A	Y
Intermediate 2							
Intermediate 3							
Production	8-1/2"	5-1/2"	13,841'	NEW	P-110 20#	N/A	N
Tubing							
Packer type and depth set							

Comment Details Production Cement job has a calculated TOC of 1707' GL, which is greater than 500' TVD above the producing formation. 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	344	15.6	1.20	412	0	8
Coal							
Intermediate 1	CLASS A	627	15.6	1.19	746	0	8
Intermediate 2							
Intermediate 3							
Production	CLASS H/CLASS H	776/1527	14.7/15.2	1.13/1.15	876/1756	1707	8+
Tubing							

Drillers TD (ft) 13,891'

Loggers TD (ft) N/A

Deepest formation penetrated MARCELLUS

Plug back to (ft) N/A

Plug back procedure

Kick off depth (ft) 3958'

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

PRODUCTION: ON SHOE TRACK AND EVERY JOINT TO ABOVE TOC

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 - 01932 Farm name Donald Hines et UX Well number Hines M10H

Drilling Contractor Precision Drilling  
Address 10350 Richmond Ave. Suite 700 City Houston State TX Zip 77042

Logging Company Scientific Drilling International  
Address 124 Vista Drive City Charleroi State PA Zip 15022

Logging Company \_\_\_\_\_  
Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Drilling Contractor \_\_\_\_\_  
Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

## Well# Hines M10H Final Formations API# 47-051-01932

Formation Name	Drill Top MD (ftGRD)	Drill Top (TVD) (ftGRD)	Drill Btm MD (ftGRD)	Drill Btm (TVD) (ftGRD)
Sand/Shale	1	1	365	365
Waynesburg Coal	365	365	368	368
Sand/Shale	368	368	655	655
Pittsburgh Coal	655	655	661	661
Sand/Shale	661	661	1,595	1,595
Big Lime	1,595	1,595	1,657	1,656
Sand/Shale	1,657	1,656	1,831	1,830
Burgoon	1,831	1,830	1,984	1,982
Sand/Shale	1,984	1,982	2,198	2,195
Berea	2,198	2,195	2,219	2,216
Sand/Shale	2,219	2,216	2,455	2,452
Gordon	2,455	2,452	2,530	2,527
Sand/Shale	2,530	2,527	4,977	4,894
Elk	4,977	4,894	4,978	4,895
Sand/Shale	4,978	4,895	5,638	5,433
Rhinestreet	5,638	5,433	6,291	5,952
Sonyea	6,291	5,952	6,412	6,038
Middlesex	6,412	6,038	6,461	6,069
Genesee	6,461	6,069	6,529	6,109
Geneseo	6,529	6,109	6,577	6,135
Tully	6,577	6,135	6,648	6,171
Hamilton	6,648	6,171	6,844	6,246
Marcellus	6,844	6,246	13,891	6,363

05/27/2022

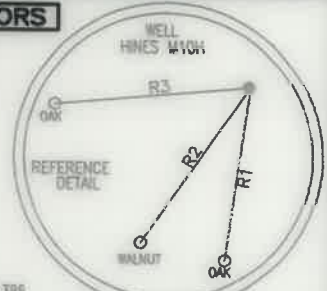


BHL is located on topo map 11,207 feet south of Latitude: 39° 55' 00"  
 SHL is located on topo map 3,833 feet south of Latitude: 39° 55' 00"

SEE PAGE 2 FOR SURFACE OWNERS AND LESSORS

# AS DRILLED PLAT

AS-DRILLED LOCATIONS UTM 17-WAD3(M)
SURFACE HOLE LOCATION (SHL)
N:4417391.37 E:525708.06
APPROX LANDING POINT (LP)
N:4417028.64 E:525409.90
BOTTOM HOLE LOCATION (BHL)
N:4415146.45 E:526273.15



W110H	W140H	U150H	U280H	
M020H	M130H	U160H	U270H	U290H
M030H	M120H	U170H	U310H	U300H
M040H	M110H	M180H	U250H	U310H
M050H	M100H	M190H	U240H	U320H
M060H	M090H	M200H	U230H	U330H
M070H	M080H	M210H	U220H	U340H

**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

LINE	BEARING	DISTANCE
R1	S 08°22'13" W	167.79'
R2	S 34°52'17" W	181.81'
R3	S 84°53'03" W	185.06'
R4	N 79°04'19" E	2247.40'
R5	N 64°41'00" E	1811.48'
R6	N 81°12'34" W	924.10'

- 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

BHL is located on topo map 7,373 feet west of Longitude: 80° 40' 00"  
 SHL is located on topo map 9,200 feet west of Longitude: 80° 40' 00"

FILE #: HINES M10H - AS DRILLED  
 DRAWING #: HINES M10H - 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: 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 M10H - AS DRILLED  
 API WELL #: 47 51 01932  
 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: MOUNDSVILLE, WV 7.5'

SURFACE OWNER: DONALD HINES ET UX ACREAGE: 114.934±

OIL & GAS ROYALTY OWNER: DONALD HINES ET UX ACREAGE: 419.163± 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 PLAT

TARGET FORMATION: MARCELLUS ESTIMATED DEPTH: TVD: 6,388'± TMD: 13,916'±

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

# HINES M10H PAGE 2 OF 2 AS DRILLED

	LESSOR	DIST-TM/PAR
A	DONALD HINES ET UX	14-12/30
B	WILLIAM F. RULONG	14-12/25
	CHARLES BURTON RULONG	
	HAROLD DEAN FURBEE	
	DALE FRANCIS FURBEE	
	ROBERT L. RULONG	
	DRU ELLA FOX	
	JOHN T. MORRIS	
	LYNN ELLEN COOK	
	ETHEL M. RULONG	
	TERRY LEE RULONG	
	RICHARD J. RULONG	
	TRACEY LYNN RULONG	
	GARY MORRISON	
	ELIZABETH Y. MORRISON	
	ROGER GLEN RULONG	
TRUSTEES LIMESTONE PRESBYTERIAN CHURCH		
CLYDE DOWLER ET UX		
LAURA J. REYES		
C	ARNIE N. GOODNIGHT ET UX	14-12/66
D	MORGAN T. LACEFIELD	14-12/30.5
E	MORGAN T. LACEFIELD	14-12/30.1
F	DONALD M. BOSTON ET AL	14-12/33.2
G	ELIHU B. SERDA ET UX	14-12/45.1
H	SHANNETTE OMEAR	14-12/45
	SANDRA K. FULLER	
	DOUGLAS L. PARSONS	
	DONALD M. BOSTON ET UX	
	DAVID D. PARSONS ET UX	
	JAMES CRAIG PARSONS	
	ROBERT B. FULLER TEST TRUSTEE	
	GRACE I. SCARBOROUGH	
J	SHANNETTE OMEAR	14-12/33
	SANDRA K. FULLER	
	DOUGLAS L. PARSONS	
	DONALD M. BOSTON ET UX	
	DAVID D. PARSONS ET UX	
	JAMES CRAIG PARSONS	
	ROBERT B. FULLER TEST TRUSTEE	
GRACE I. SCARBOROUGH		
K	SHANNETTE OMEAR	14-12/34
	SANDRA K. FULLER	
	DOUGLAS L. PARSONS	
	DONALD M. BOSTON ET UX	
	DAVID D. PARSONS ET UX	
	JAMES CRAIG PARSONS	
ROBERT B. FULLER TEST TRUSTEE		
GRACE I. SCARBOROUGH		
L	RICHARD C. YOHO ET UX	14-13/41
M	TODD R. KETTLER ET UX	14-13/2
N	THOMAS AND EVELYN JOHNSON	14-13/22

	SURFACE OWNER	DIST-TM/PAR
1	DONALD HINES ET UX	14-12/30
2	TERRY L. DERROW ET UX	14-12/30.3
3	IRENE D. MILLER	14-12/25
4	ARNIE N. GOODNIGHT ET UX	14-12/66
5	MORGAN T. LACEFIELD	14-12/30.5
6	MORGAN LACEFIELD	14-12/30.1
7	DONALD M. BOSTON ET UX -- LIFE	14-12/33.2
8	ELIHU B. & MAILA L. SERDA	14-12/45.1
9	HENRY T. PARSONS EST ET AL	14-12/45
10	HENRY T. PARSONS EST ET AL	14-12/33
11	HENRY T. PARSONS EST ET AL	14-12/34
12	RICHARD C. & CARLA V. YOHO	14-13/41
13	TODD & DAWN R. KETTLER	14-13/2
14	EVELYN RUTH JOHNSON	14-13/22

AS-DRILLED LOCATIONS UTM 17-NAD83(M)
SURFACE HOLE LOCATION (SHL)
N:4417391.37 E:525708.06
APPROX LANDING POINT (LP)
N:4417028.64 E:525409.90
BOTTOM HOLE LOCATION (BHL)
N:4415146.45 E:526273.15

05/27/2022

## THRASHER

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

DECEMBER 13, 2021