

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 47-051-01933 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 M11H  
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 4,417,395.91 Easting 525,708.14  
Landing Point of Curve Northing 4,418,196.39 Easting 526,589.23  
Bottom Hole Northing 4,420,353.27 Easting 524,779.60

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 06/24/2018  
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

Reviewed by:  
MJK 5/4/22  
05/27/2022

API 47-051 - 01933 Farm name Donald Hines et UX Well number Hines M11H

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"	397'	NEW	J-55 54.5#	N/A	Y
Coal							
Intermediate 1	12-3/8"	9-5/8"	1988'	NEW	L-80 40#	N/A	Y
Intermediate 2							
Intermediate 3							
Production	8-1/2"	5-1/2"	17,834'	NEW	P-110 20#	N/A	N
Tubing							
Packer type and depth set							

Comment Details Production Cement job has a calculated TOC of 1644' 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	776/2306	14.7/15.2	1.13/1.15	876/2651	1644	8+
Tubing							

Drillers TD (ft) 17,875 Loggers TD (ft) N/A  
 Deepest formation penetrated MARCELLUS Plug back to (ft) N/A  
 Plug back procedure

Kick off depth (ft) 2071'

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 - 01933 Farm name Donald Hines et UX Well number Hines M11H

<u>PRODUCING FORMATION(S)</u>	<u>DEPTHS</u>	
	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 <sub>2</sub> S, ETC)
	0		0		

Please insert additional pages as applicable.

Drilling Contractor Highlands Drilling LLC  
Address 900 Virginia Street East City Charleston State WV Zip 25301

Logging Company Baker Hughes  
Address 400 Technology Dr Suite 100 City Canonsburg State PA Zip 15317

Cementing Company BJ Services  
Address 1036 East Main Street City Bridgeport State WV Zip 26330

Cementing Company \_\_\_\_\_  
Address \_\_\_\_\_ City + State \_\_\_\_\_ Zip \_\_\_\_\_

Please insert additional pages as applicable.

Completed by John Zavatchan Telephone 724-746-9073  
Signature  Title Project Specialist - Permitting Date 4/1/2022

Submittal of Hydraulic Fracturing Chemical Disclosure Information Attach copy of FRACFOCUS Registry

05/27/2022

API 47- 051 - 01933 Farm name Donald Hines et UX Well number Hines M11H

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 M11H Final Formations API# 47-051-01933

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	1,657
Sand/Shale	1,657	1,657	1,831	1,831
Burgoon	1,831	1,831	1,984	1,984
Sand/Shale	1,984	1,984	2,198	2,198
Berea	2,198	2,198	2,219	2,219
Sand/Shale	2,219	2,219	2,455	2,453
Gordon	2,455	2,453	2,530	2,526
Sand/Shale	2,530	2,526	4,977	4,320
Elk	4,977	4,320	4,978	4,321
Sand/Shale	4,978	4,321	5,638	4,737
Rhinestreet	5,638	4,737	7,583	5,954
Sonyea	7,583	5,954	7,758	6,040
Middlesex	7,758	6,040	7,833	6,072
Genesee	7,833	6,072	7,929	6,111
Geneseo	7,929	6,111	7,991	6,137
Tully	7,991	6,137	8,073	6,171
Hamilton	8,073	6,171	8,293	6,247
Marcellus	8,293	6,247	17,875	6,287

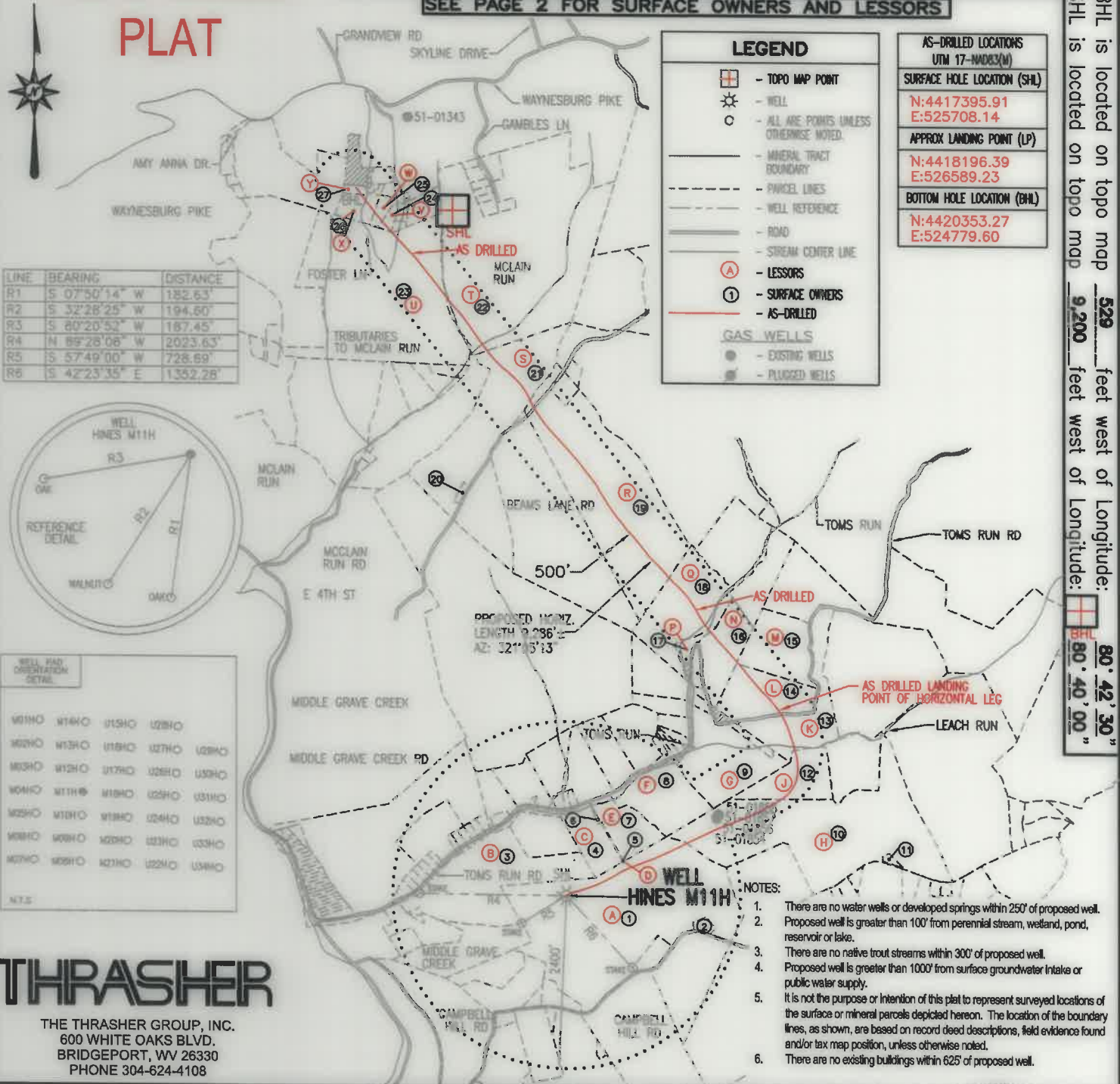
05/27/2022

# AS DRILLED PLAT

BHL is located on topo map 9,285 feet south of Latitude: 39° 57' 30"  
 SHL is located on topo map 3,818 feet south of Latitude: 39° 55' 00"

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

BHL is located on topo map 529 feet west of Longitude: 80° 42' 30"  
 SHL is located on topo map 9,200 feet west of Longitude: 80° 40' 00"



## THRASHER

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

FILE #: HINES M11H - AS DRILLED  
 DRAWING #: HINES M11H - 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 M11H - AS DRILLED  
 API WELL #: 47 51 01933  
 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: 736.97± **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: 6,223'± TMD: 17,900'±

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 M11H PAGE 2 OF 2 AS DRILLED

	SURFACE OWNER	DIST-TM/PAR
1	DONALD HINES ET UX.	14-12/30
2	TERRY L. DERROW ET UX.	14-12/30.3
3	ARNIE N. GOODNIGHT ET UX.	14-12/25
4	*EDWARD DAVID KNUTH ET UX.	14-12/27
5	*EDWARD DAVID & KATHY JO KNUTH	14-12/28.1
6	FNMA	14-12/27.1
7	*FNMA	14-12/28
8	*JODI LYNN & TERRY A. HARDING	14-12/29
9	ROGER A. BRADY	14-9/36
10	OKEY L. RINE, JR.	14-11/1
11	STEVEN M. LAVENSKI	14-11/1.1
12	ROGER A. BRADY	14-9/35
13	JAMES M. HOOKER	14-9/33
14	JAMES M. HOOKER	14-9/32
15	*JAMES M. HOOKER	14-9/32.1
16	KEVIN DREW & RAYETTA RINE	14-9/31
17	KEVIN DREW RINE ET UX.	14-9/31.4
18	TERRY A., SR. & GLORIA G. WOOD	14-9/29
19	RAY WILLIAM NEEHOUSE ET UX.	14-9/21
20	RICHARD N. & SHARON L. SWISHER	14-9/20.1
21	ALAN NEIL & BRENDA CROW	14-9/20
22	G. ROBERT SCANLON ET UX.	14-7/47
23	DAVID LEE WHITE ET UX.	14-8/39
24	CURTIS W. WEST JR. ET UX.	14-8/37
25	BERRY A. WHITE	14-8/36.1
26	CHARLES LAWRENCE MARTIN	14-8/38
27	PATRICIA METZ ET AL-LIFE	14-8A1/5

	LESSOR	DIST-TM/PAR
A	DONALD HINES ET UX	14-12/30
B	WILLIAM F. RULONG	14-12/25
	CHARLES BURTON RULONG	
	ROGER GLEN RULONG	
	TRUSTEES LIMESTONE PRESBYTERIAN CHURCH	
	CLYDE DOWLER ET UX	
	GARY MORRISON	
	ELIZABETH Y. MORRISON	
	LAURA J. REYES	
	ROBERT L. RULONG	
	DALE FRANCIS FURBEE	
	HAROLD DEAN FURBEE	
	JOHN T. MORRIS	
	DRU ELLA FOX	
	LYNN ELLEN COOK	
	ETHEL M. RULONG	
	TERRY LEE RULONG	
	RICHARD J. RULONG	
	TRACEY LYNN RULONG	
C	*EULALIA MAE SIMMONS	14-12/27
D	*EULALIA MAE SIMMONS	14-12/28.1
E	*EULALIA MAE SIMMONS	14-12/28
F	*JODI LYNN HARDING ET VIR	14-12/29
G	ROGER AND LINDA BRADY	14-9/36
H	OKEY L. RINE JR.	14-11/1
J	ROGER AND LINDA BRADY	14-9/35
K	SHERI L. EVRAETS TRST DATED 12/29/2010	14-9/33
	BOUNTY MINERALS II ACQUISITIONS LLC	
L	SHERI L. EVRAETS TRST DATED 12/29/2010	14-9/32
	BOUNTY MINERALS II ACQUISITIONS LLC	
M	*SHERI L. EVRAETS TRST DATED 12/29/2010	14-9/32.1
	*BOUNTY MINERALS II ACQUISITIONS LLC	
N	KEVIN RINE ET UX	14-9/31
P	KEVIN RINE ET UX	14-9/31.4
Q	TERRY WOOD ET UX	14-9/29
R	RAY AND MARY NEEHOUSE	14-9/21
S	ALAN AND BRENDA CROW	14-9/20
T	ROBERT SCANLON ET UX	14-7/47
U	DAVID AND GENELDA WHITE	14-8/39
V	CURTIS W. WEST ET UX	14-8/37
W	BERRY WHITE	14-8/36.1
X	CHARLES LAWRENCE MARTIN ET UX	14-8/38
Y	PATRICIA L. METZ	14-8A1/5

AS-DRILLED LOCATIONS	
UTM 17-WAD83(N)	
SURFACE HOLE LOCATION (SHL)	
N:4417395.91	
E:525708.14	
APPROX LANDING POINT (LP)	
N:4418196.39	
E:526589.23	
BOTTOM HOLE LOCATION (BHL)	
N:4420353.27	
E:524779.60	

\* - DENOTES PARCEL WITHIN 30 FEET OF PLANNED WELL BORE

05/27/2022

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DECEMBER 13, 2021