

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 47-051-01931 County Marshall District Washington
Quad Moundsville Pad Name Hines Field/Pool Name N/A
Farm name Donald Hines et UX Well Number Hines M09H
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 4,417,386.81 Easting 525,707.91
Landing Point of Curve Northing 4,417,479.64 Easting 526,880.30
Bottom Hole Northing 4,415,027.95 Easting 528,079.33

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

Reviewed by:
Max Stuber
05/27/2022

API 47-051 - 01931 Farm name Donald Hines et UX Well number Hines M09H

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"	1987'	NEW	L-80 40#	N/A	Y
Intermediate 2							
Intermediate 3							
Production	8-1/2"	5-1/2"	17,361'	NEW	P-110 20#	N/A	N
Tubing							
Packer type and depth set							

Comment Details Production Cement job has a calculated TOC of 1686' 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 ³ /sks)	Volume (ft ³)	Cement Top (GL)	WOC (hrs)
Conductor	CLASS A	N/A	N/A	N/A	N/A	0	8+
Surface	CLASS A / Grout CLASS A	344/267	15.6/15.6	1.20/1.20	412/320	0	8
Coal							
Intermediate 1	CLASS A	627	15.6	1.19	746	0	8
Intermediate 2							
Intermediate 3							
Production	CLASS H/CLASS H	776/2221	14.7/15.2	1.13/1.15	876/2554	1686	8+
Tubing							

Drillers TD (ft) 17,419' Loggers TD (ft) N/A
 Deepest formation penetrated MARCELLUS Plug back to (ft) N/A
 Plug back procedure

Kick off depth (ft) 2824'

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 - 01931 Farm name Donald Hines et UX Well number Hines M09H

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 M09H Final Formations API# 47-051-01931				
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	2,197
Berea	2,198	2,197	2,219	2,218
Sand/Shale	2,219	2,218	2,455	2,454
Gordon	2,455	2,454	2,530	2,529
Sand/Shale	2,530	2,529	4,977	4,420
Elk	4,977	4,420	4,978	4,421
Sand/Shale	4,978	4,421	5,638	4,857
Rhinestreet	5,638	4,857	7,485	5,975
Sonyea	7,485	5,975	7,628	6,061
Middlesex	7,628	6,061	7,686	6,092
Genesee	7,686	6,092	7,766	6,132
Geneseo	7,766	6,132	7,818	6,158
Tully	7,818	6,158	7,890	6,192
Hamilton	7,890	6,192	8,127	6,276
Marcellus	8,127	6,276	17,419	6,427

BHL is located on topo map 11,618 feet south of Latitude: 39° 55' 00"
 SHL is located on topo map 3,848 feet south of Latitude: 39° 55' 00"

SEE PAGE 2 FOR SURFACE OWNERS AND LESSORS

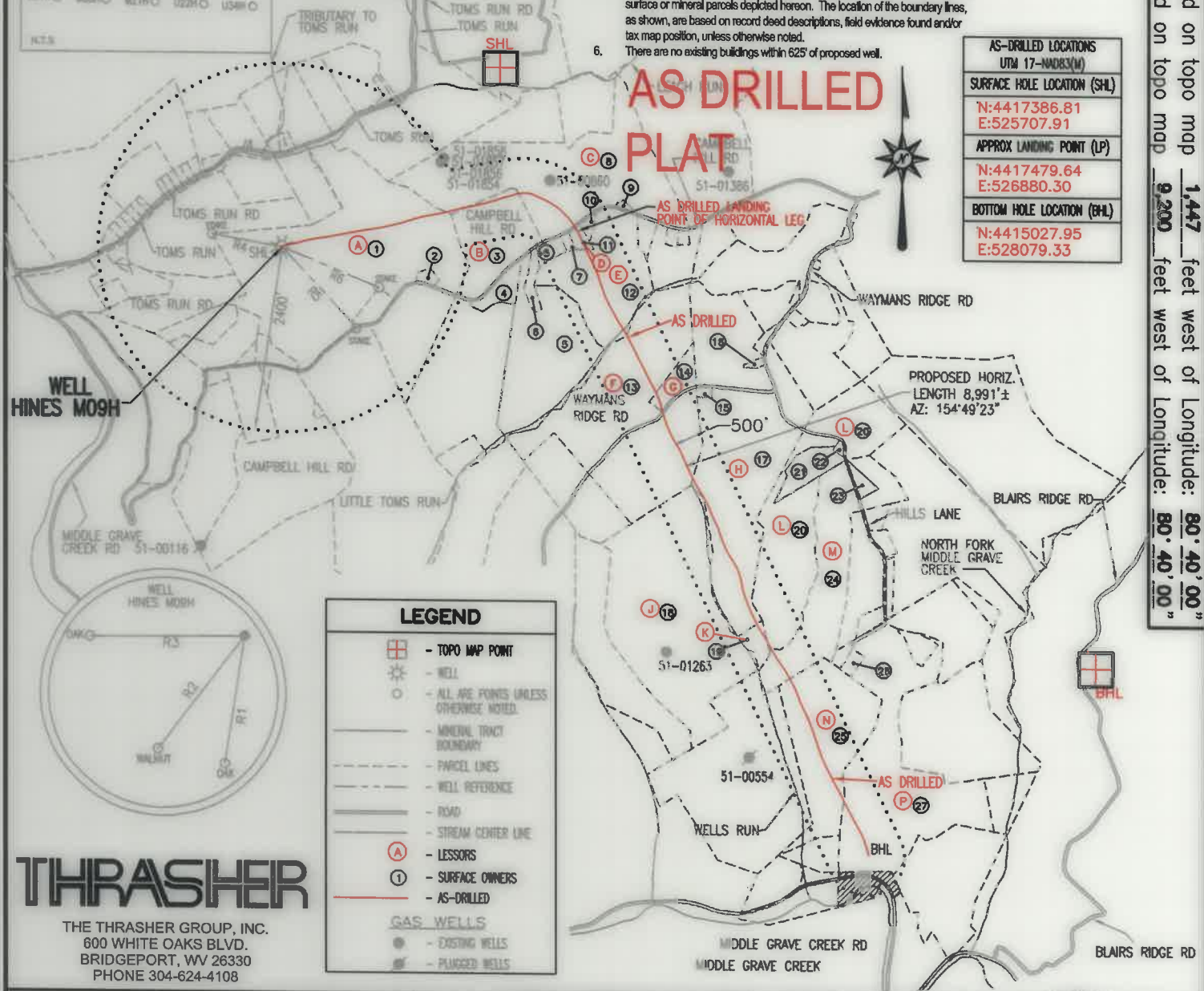
NOTES:

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.

AS-DRILLED LOCATIONS UTM 17-NAD83(W)	
SURFACE HOLE LOCATION (SHL)	
N:4417386.81	E:525707.91
APPROX LANDING POINT (LP)	
N:4417479.64	E:526880.30
BOTTOM HOLE LOCATION (BHL)	
N:4415027.95	E:528079.33

LINE	BEARING	DISTANCE
R1	S 08°54'09" W	152.92'
R2	S 37°32'49" W	169.41'
R3	S 89°30'26" W	183.56'
R4	N 80°17'22" W	925.75'
R5	S 43°17'56" E	1331.24'
R6	S 67°58'26" E	1368.23'

W03HO	W14HO	U15HO	U26HO
W04HO	W15HO	U16HO	U27HO
W05HO	W16HO	U17HO	U28HO
W06HO	W17HO	U18HO	U29HO
W07HO	W18HO	U19HO	U30HO
W08HO	W19HO	U20HO	U31HO
W09HO	W20HO	U21HO	U32HO
W10HO	W21HO	U22HO	U33HO
W11HO	W22HO	U23HO	U34HO
W12HO	W23HO	U24HO	U35HO



BHL is located on topo map 1,447 feet west of Longitude: 80° 40' 00"
 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

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

FILE #: HINES M09H - AS DRILLED
 DRAWING #: HINES M09H - 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:

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 M09H AS DRILLED
 API WELL #: 47 51 01931
 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: 768.473± **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: 6,452± TMD: 17,444±

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 M09H PAGE 2 OF 2 AS DRILLED

	LESSOR	DIST-TM/PAR
A	DONALD HINES ET UX	14-12/30
B	PATRICIA S. HOSKINS	14-12/31
C	OKEY L. RINE JR.	14-11/1
D	CARL A. COCHRAN ET UX	14-11/16.1
E	FRANCIS TURNER ET UX	14-11/2
F	PATRICIA C. LINDGREN	14-11/14
G	PATRICIA C. LINDGREN	14-11/14.1
H	ELLEN I. HEATH	14-11/13
	COLLEEN MCLAIN MOORE	
J	JAMES J. CAVENEY ET UX	14-13/8
K	ELLEN I. HEATH ET AL	14-11/12
L	ELLEN I. HEATH	14-11/11
	COLLEEN MCLAIN MOORE	
M	DENNIS W. CROW ET UX	14-11/11.3
N	DENNIS W. CROW ET UX	14-13/11
P	BARBARA BEVERIDGE	14-13/13
	DAVID L. BEVERIDGE ET UX	

	SURFACE OWNER	DIST-TM/PAR
1	DONALD HINES ET UX	14-12/30
2	TERRY L. DERROW ET UX	14-12/30.3
3	PATRICIA SUE HOSKINS	14-12/31
4	EARNEST L. ROBERTS ET UX	14-12/31.1
5	PAUL E. & BRENT L. SHIPLEY	14-11/16
6	BRENT L. & LORI L. SHIPLEY	14-11/16.3
7	JODY L. & ERIC M. WADE	14-11/16.2
8	OKEY L. RINE JR.	14-11/1
9	STEVEN M. LAVENSKI	14-11/1.1
10	FRANCIS D. TURNER ET UX	14-11/2.1
11	CARL A. COCHRAN ET UX	14-11/16.1
12	D. FRANCIS TURNER ET UX	14-11/2
13	COUNTRY ROADS PROPERTIES LLC	14-11/14
14	DONALD A. & PATTIANNE PARSONS	14-11/14.1
15	QUAY A. HORNER, ET UX	14-11/13.1
16	COLLEEN MCCLAIN	14-11/13.2
17	JOHN D. & WM K. HEATH ESTS	14-11/13
18	JAMES J. CAVENEY ET UX	14-13/8
19	WM K. & JOHN D. HEATH ESTS	14-11/12
20	JOHN D. & WM K. HEATH ESTS	14-11/11
21	CHAD E. FRANCIS	14-11/11.2
22	KATHLEEN I. FRANCIS	14-11/11.1
23	DARYL A. CROW	14-11/11.4
24	DENNIS W. & DONNA CROW	14-11/11.3
25	DENNIS W. CROW ET UX	14-13/11
26	DAVID LEE BEVERIDGE ET UX	14-13/13.1
27	DAVID LEE BEVERIDGE	14-13/13

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DECEMBER 13, 2021