

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 47-051-01930 County Marshall District Washington
Quad Moundsville Pad Name Hines Field/Pool Name N/A
Farm name Donald Hines et UX Well Number Hines M08H
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 4,417,382.49 Easting 525,707.83
Landing Point of Curve Northing 4,417,189.43 Easting 525,910.03
Bottom Hole Northing 4,414,748.94 Easting 526,993.32

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 12/13/2017 Date drilling ceased 06/03/2018
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:
MAK 5/1/20
05/27/2022

API 47-051 - 01930

Farm name Donald Hines et UX

Well number Hines M08H

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"	395'	NEW	J-55 54.5#	N/A	Y
Coal							
Intermediate 1	12-3/8"	9-5/8"	1983'	NEW	L-80 40#	N/A	Y
Intermediate 2							
Intermediate 3							
Production	8-1/2"	5-1/2"	15,586'	NEW	P-110 20#	N/A	N
Tubing							
Packer type and depth set							

Comment Details Production Cement job has a calculated TOC of 1639' 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	344	15.6	1.20	412	0	8
Coal							
Intermediate 1	CLASS A	685	15.6	1.19	815	0	8
Intermediate 2							
Intermediate 3							
Production	CLASS H/CLASS H	776/1865	14.7/15.2	1.13/1.15	876/2144	1639	8+
Tubing							

Drillers TD (ft) 15,630' Loggers TD (ft) N/A

Deepest formation penetrated MARCELLUS Plug back to (ft) N/A

Plug back procedure

Kick off depth (ft) 4524'

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 - 01930 Farm name Donald Hines et UX Well number Hines M08H

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 M08H Final Formations API# 47-051-01930

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	1,594
Big Lime	1,595	1,594	1,657	1,656
Sand/Shale	1,657	1,656	1,831	1,830
Burgoon	1,831	1,830	1,984	1,983
Sand/Shale	1,984	1,983	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	4,970
Elk	4,977	4,970	4,978	4,971
Sand/Shale	4,978	4,971	5,638	5,611
Rhinestreet	5,638	5,611	6,022	5,957
Sonyea	6,022	5,957	6,137	6,042
Middlesex	6,137	6,042	6,186	6,074
Genesee	6,186	6,074	6,252	6,114
Geneseo	6,252	6,114	6,295	6,140
Tully	6,295	6,140	6,354	6,174
Hamilton	6,354	6,174	6,536	6,254
Marcellus	6,536	6,254	15,630	6,384

05/27/2022

BHL is located on topo map 12,521 feet south of Latitude: 39° 55' 00"
 SHL is located on topo map 3,861 feet south of Latitude: 39° 55' 00"

AS DRILLED PLAT

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

BHL is located on topo map 5,014 feet west of Longitude: 80° 40' 00"
 SHL is located on topo map 9,201 feet west of Longitude: 80° 40' 00"

AS-DRILLED LOCATIONS
 UTM 17-NAD83(M)

SURFACE HOLE LOCATION (SHL)
 N:4417382.49
 E:525707.83

APPROX LANDING POINT (LP)
 N:4417189.43
 E:525910.03

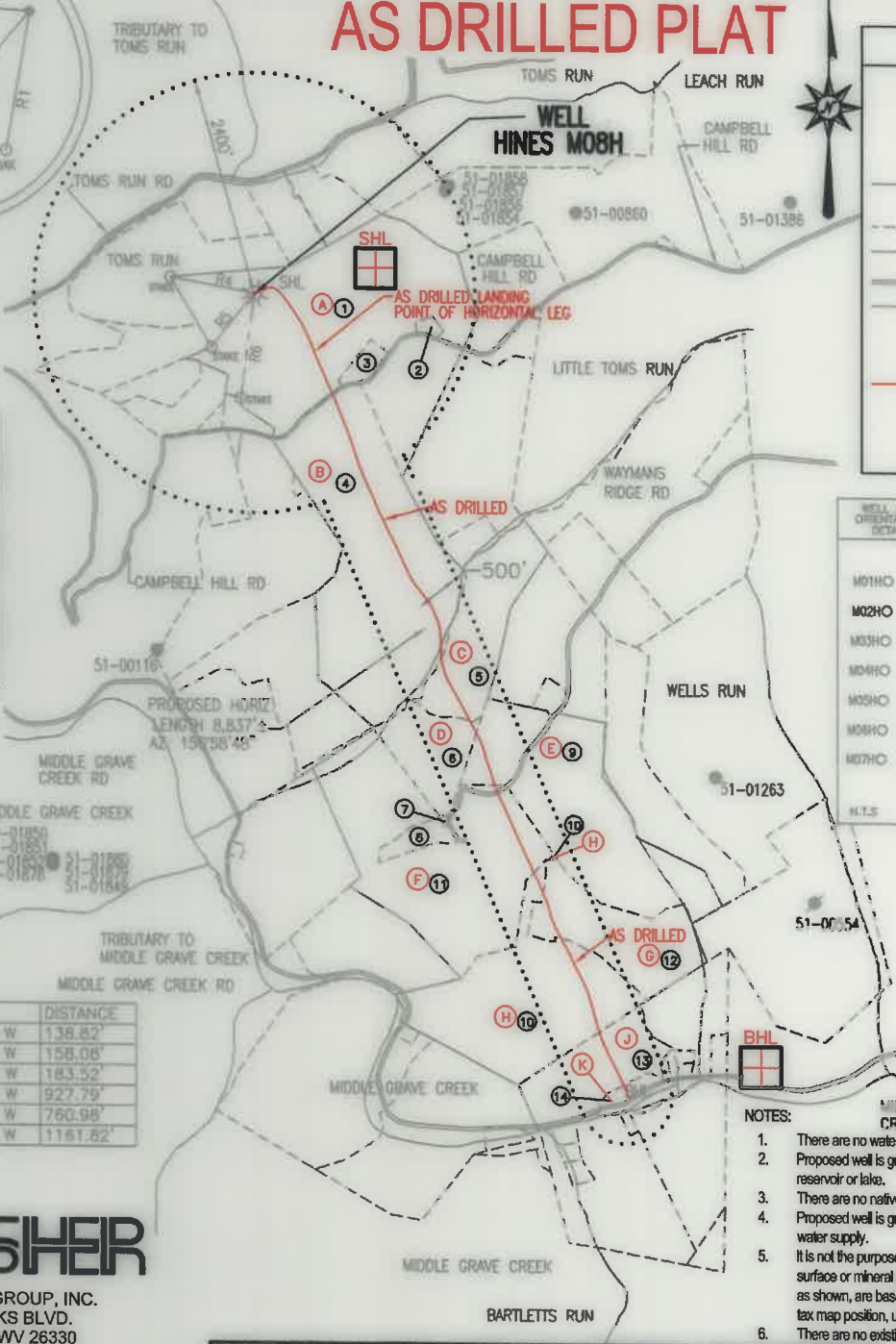
BOTTOM HOLE LOCATION (BHL)
 N:4414748.94
 E:526993.32

WELL PAD ORIENTATION DETAIL

M01HO	M14HO	U15HO	U28HO	
M02HO	M13HO	U16HO	U27HO	U29HO
M03HO	M12HO	U17HO	U26HO	U30HO
M04HO	M11HO	M18HO	U25HO	U31HO
M05HO	M10HO	M19HO	U24HO	U32HO
M06HO	M09HO	M20HO	U23HO	U33HO
M07HO	M08HO	M21HO	U22HO	U34HO

N.T.S.

LINE	BEARING	DISTANCE
R1	S 09°37'05" W	138.82
R2	S 40°33'04" W	158.08
R3	N 88°03'16" W	183.52
R4	N 79°25'12" W	927.79
R5	S 37°49'01" W	760.98
R6	S 07°21'34" W	1161.62



- 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

SEE PAGE 2 FOR SURFACE OWNERS AND LESSORS

FILE #: HINES M08H - AS DRILLED
 DRAWING #: HINES M08H - 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 M08H - AS DRILLED
 API WELL #: 47 51 01930
 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: 517.972± **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: 6,409'± TMD:15,655'±

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 M08H PAGE 2 OF 2 AS DRILLED

	LESSOR	DIST-TM/PAR
A	DONALD HINES ET UX	14-12/30
B	DOUGLAS EDWARD GOULDSBERRY ET UX	14-12/32
C	PATRICIA S. HOSKINS	14-13/4
D	TODD R. KETTLER ET UX	14-13/3
E	TIMOTHY GEHO	14-13/6
F	TODD R. KETTLER ET UX	14-13/2
G	RICHARD F. VARGO ET UX	14-13/21
H	RICHARD F. VARGO ET UX	14-13/21.1
J	ROBERT W. COFFIELD ET UX	14-13/18
K	RM COFFLIED FAMILY TRUST ET AL	14-13/18.1

	SURFACE OWNER	DIST-TM/PAR
1	DONALD HINES ET UX	14-12/30
2	TERRY L. DERROW ET UX	14-12/30.3
3	LANCE J. GOSSETT ET UX	14-12/30.2
4	DOUGLAS EDWARD GOULDSBERRY ET UX	14-12/32
5	PATRICIA SUE HOSKINS	14-13/4
6	TODD R. & DAWN R. KETTLER	14-13/3
7	TODD R. & DAWN R. KETTLER	14-13/3.1
8	TODD R. & DAWN R. KETTLER	14-13/2.1
9	TIMOTHY G. GEHO ET UX	14-13/6
10	RICHARD E. & JADE L. VARGO	14-13/21.1
11	TODD & DAWN R. KETTLER	14-13/2
12	RICHARD E. & JADE L. VARGO	14-13/21
13	R. M. COFFIELD FAMILY TRUST	14-13/18
14	STATE ROAD COMMISSION	14-13/18.1

AS-DRILLED LOCATIONS UTM 17-NAD83(M)
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DECEMBER 13, 2021