



west virginia department of environmental protection

Office of Oil and Gas
601 57th Street, S.E.
Charleston, WV 25304
(304) 926-0450
fax: (304) 926-0452

Harold D. Ward, Cabinet Secretary
www.dep.wv.gov

Monday, January 22, 2024
PERMIT MODIFICATION APPROVAL
Horizontal 6A / New Drill

EQT PRODUCTION COMPANY
400 WOODCLIFF DR.

CANONSBURG, PA 15317

Re: Permit Modification Approval for HALLIBU 8H
47-103-03605-00-00

MODIFIED THE ENTRANCE TO THE ACCESS ROAD

EQT PRODUCTION COMPANY

The Office of Oil and Gas has reviewed the attached permit modification for the above referenced permit. The attached modification has been approved and well work may begin. Please be reminded that the oil and gas inspector is to be notified twenty-four (24) hours before permitted well work is commenced.

If there are any questions, please feel free to contact me at (304) 926- 0450.



James A. Martin
Chief

Operator's Well Number: HALLIBU 8H
Farm Name: KNOB FORK SPORTSMEN CLUB
U.S. WELL NUMBER: 47-103-03605-00-00
Horizontal 6A New Drill
Date Modification Issued: 1/22/2023

Promoting a healthy environment.

01/26/2024

| HALLIBU WELL LOCATIONS | | | | | | | | |
|------------------------|-------------------|-------------------|------------------|-----------------|------------------|-----------------|------------------------------|-----------------------------|
| ASSIGNED WELL ID | LAT (NAD83) | LONG (NAD83) | NORTHING (NAD83) | EASTING (NAD83) | NORTHING (NAD27) | EASTING (NAD27) | NORTHING (NAD 83 UTM METERS) | EASTING (NAD 83 UTM METERS) |
| 2H | 39° 39' 35.10628" | 80° 30' 30.37316" | 424009.2173 | 168458.734 | 423973.301 | 1716036.037 | 4390105.610 | 542167.782 |
| 4H | 39° 39' 35.10281" | 80° 30' 30.18150" | 424008.4967 | 1684613.716 | 423970.580 | 1716025.1059 | 4390109.467 | 542171.830 |
| 6H | 39° 39' 35.09747" | 80° 30' 29.98884" | 424010.7762 | 1684628.699 | 423969.339 | 1716066.009 | 4390108.324 | 542176.419 |
| 8H | 39° 39' 35.09190" | 80° 30' 29.79514" | 424001.0537 | 1684613.692 | 423969.139 | 1716080.185 | 4390109.180 | 542183.989 |
| 10H | 39° 39' 35.08643" | 80° 30' 29.60647" | 424006.3351 | 1684658.665 | 423968.417 | 1716095.967 | 4390109.037 | 542185.536 |
| 12H | 39° 39' 35.08299" | 80° 30' 29.41481" | 424005.6146 | 1684673.647 | 423967.696 | 1716110.949 | 4390108.894 | 542190.124 |

EROSION & SEDIMENT CONTROL PLAN & SITE RESTORATION PLAN

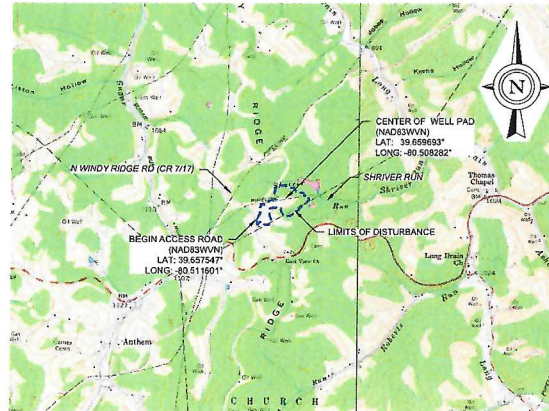
HALLIBU WELL SITE

WETZEL COUNTY, WEST VIRGINIA

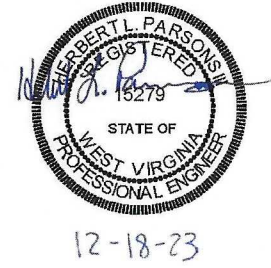
FOR

EQT PRODUCTION COMPANY

| LANDOWNER DISTURBANCE BREAKDOWN | | | | |
|---|--------------------------------------|-----------------------------------|------------------------------------|---------------|
| LANDOWNER | DISTURBANCE FROM ACCESS ROAD (ACRES) | DISTURBANCE FROM WELL PAD (ACRES) | DISTURBANCE FROM STOCKPILE (ACRES) | TOTAL (ACRES) |
| EQT PRODUCTION CO 52-02-0010-0002-0000-0000 | 0.59 | 0.00 | 0.00 | 0.59 |
| EQT PRODUCTION CO (TRACT 3) 52-02-0006-0021-0000-0000 | 0.43 | 0.00 | 0.00 | 0.43 |
| EQT PRODUCTION CO (TRACT 2) 52-02-0006-0021-0000-0000 | 4.46 | 4.64 | 6.82 | 15.92 |
| EQT PRODUCTION CO (TRACT 1) 52-02-0006-0021-0000-0000 | 0.00 | 6.28 | 0.13 | 6.41 |
| SPANGLER PATRICIA C 52-02-0010-0009-0000-0000 | 0.01 | 0.00 | 0.00 | 0.01 |
| TOTAL | 5.49 | 10.92 | 6.95 | 23.36 |



REFERENCES: UNITED STATES GEOLOGICAL SURVEY - LITTLETON & HUNDRED QUADRANGLES, WV, 7.5 MINUTE SERIES



PROJECT NO. 21070-008
JANUARY 2023

DIEFFENBAUCH & HRITZ, LLC

| INDEX | |
|-------------|------------------------------------|
| DRAWING NO. | TITLE |
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| 2 | GENERAL NOTES |
| 3 | OVERALL EXISTING SITE PLAN |
| 4 | OVERALL E&S SITE PLAN |
| 5-8 | PROPOSED E&S SITE PLAN |
| 7 | OVERALL E&S REVEGETATION SITE PLAN |
| 8 | OVERALL SITE RESTORATION PLAN |
| 9 | SOILS MAP |
| 10 | ACCESS ROAD PROFILE |
| 11 - 14 | ACCESS ROAD TYPICAL SECTIONS |
| 15 - 18 | E&S TYPICAL SECTIONS |
| 19 - 23 | E&S DETAILS |

SCALE: N/A, PLOTTED: 12/18/2023 4:04 PM, FILE: X:\DL AND G:\E\2023\21070-008 HALLIBU\DWG (K DRIVE) - WWW.PLANSD&DOT.TITLE SHEET.DWG



REVISION: 1
 DATE: 1/22/2023
 DESCRIPTION: ENTRANCE MODIFICATION
 PWH: PWH
 CHECKED: BLB
 APPROVED: HLP
 DATE: JAN 2023
 PROJECT NO: 21070-008
 CLIENT: EQT PRODUCTION COMPANY
 PROJECT: HALLIBU WELL SITE, WETZEL COUNTY, WV
 TITLE: TITLE SHEET
 DRAWING NO: 1

| EARTHWORK QUANTITIES (CY) | | | |
|-----------------------------|--------|--------|--------|
| TOPSOIL STOCKPILE | CUT | FILL | |
| WELL PAD | 63,132 | 52,347 | |
| WELL PAD ACCESS ROAD | 9,947 | 23,842 | |
| OVERALL CUT/FILL BALANCE | 93,079 | 76,189 | 16,890 |
| SOIL STOCKPILE ¹ | | | 16,890 |
| GRAVEL | | | 5,382 |

1. EXCESS MATERIAL STOCKPILES DESIGNED ASSUMING AT LEAST A 20% SWELL FACTOR IN ADDITION TO THE QUANTITIES LISTED ABOVE
2. ESTIMATED TOPSOIL DEPTH = 12"
3. EARTHWORK QUANTITIES REFLECT SUBGRADE ELEVATIONS IN AREAS PLANNED TO BE STONED

APPROVED
WVDEP OOG
 Modification
 1/22/2024

| | |
|-------------|---|
| DATE | 1/22/2024 |
| BY | 1/22/2024 |
| DESCRIPTION | DEP COMMENT RESPONSE ENTRANCE MODIFICATION |
| BY | |
| DATE | |
| DESCRIPTION | |
| BY | |
| DATE | |
| DESCRIPTION | |

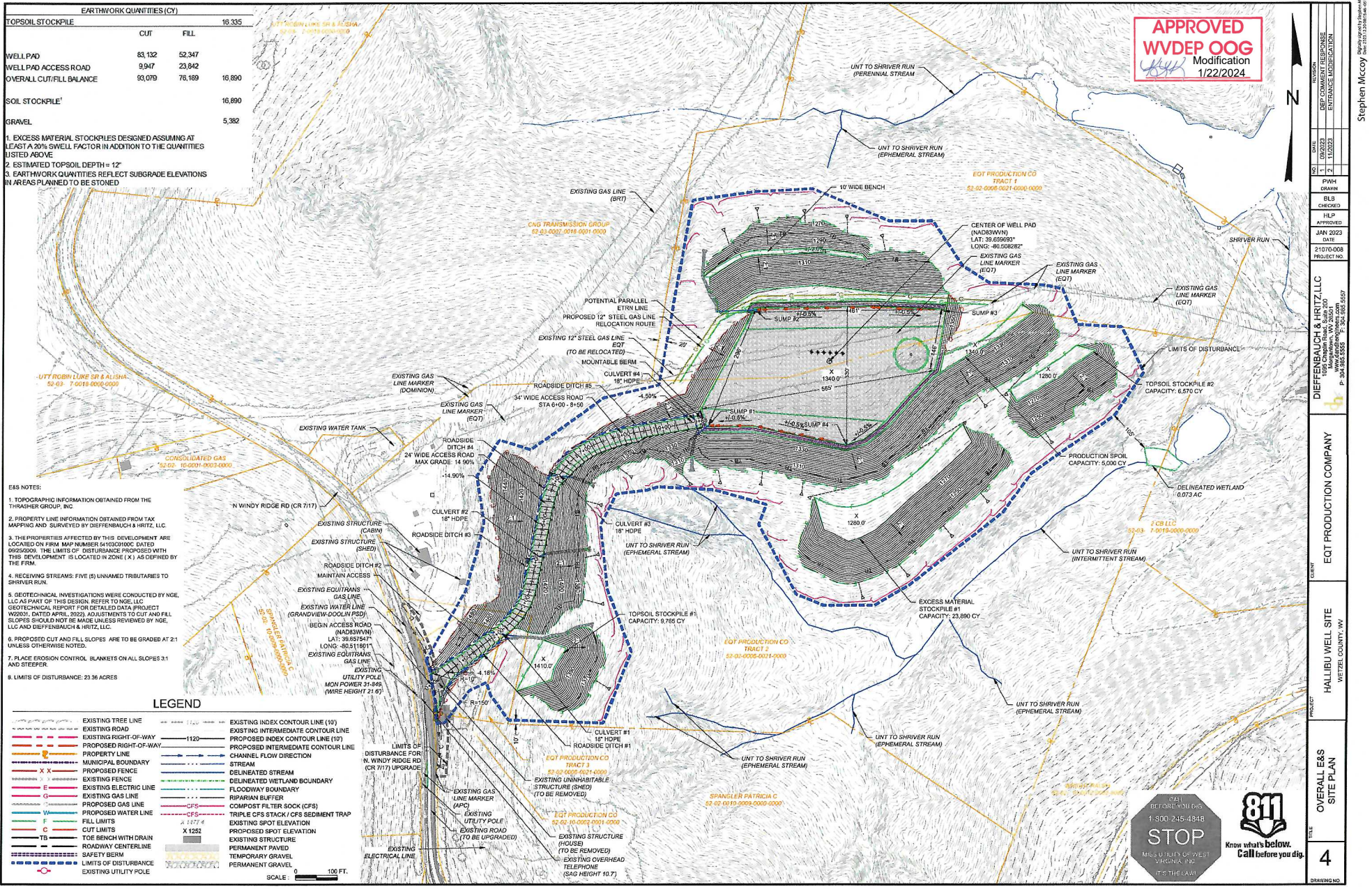
DATE: 1/22/2024
 TIME: 11:00 AM
 PROJECT NO: 21070-008
 PROJECT NO: 21070-008

APPROVED: [Signature]
 DATE: JAN 2023
 DATE: 1/22/2024
 PROJECT NO: 21070-008

DIFFENBAUGH & HIRTZ, LLC
 11800
 Macmillan, VA 20651
 P: 304.858.5555 F: 304.858.6527

CLIENT: EOT PRODUCTION COMPANY
 PROJECT: HALLIBU WELL SITE
 WETZEL COUNTY, WV

FILE: OVERALL E&S SITE PLAN
 SHEET NO: 4



- E&S NOTES:
1. TOPOGRAPHIC INFORMATION OBTAINED FROM THE THRAINGER GROUP, INC
 2. PROPERTY LINE INFORMATION OBTAINED FROM TAC MAPPING AND SURVEYED BY DIFFENBAUGH & HIRTZ, LLC
 3. THE PROPERTIES AFFECTED BY THIS DEVELOPMENT ARE LOCATED ON FIRM MAP NUMBER 54103091000 DATED 02/05/2009. THE LIMITS OF DISTURBANCE PROPOSED WITH THIS DEVELOPMENT IS LOCATED IN ZONE (X) AS DEFINED BY THE FIRM.
 4. RECEIVING STREAMS: FIVE (5) UNNAMED TRIBUTARIES TO SHRIVER RUN
 5. GEOTECHNICAL INVESTIGATIONS WERE CONDUCTED BY NGE, LLC AS PART OF THIS DESIGN. REFER TO NGE, LLC GEOTECHNICAL REPORT FOR DETAILED DATA PROJECT W220201, DATED APRIL 2020. ADJUSTMENTS TO CUT AND FILL SLOPES SHOULD NOT BE MADE UNLESS REVIEWED BY NGE, LLC AND DIFFENBAUGH & HIRTZ, LLC.
 6. PROPOSED CUT AND FILL SLOPES ARE TO BE GRADED AT 2:1 UNLESS OTHERWISE NOTED.
 7. PLACE EROSION CONTROL BLANKETS ON ALL SLOPES 3:1 AND STEEPER.
 8. LIMITS OF DISTURBANCE: 21.36 ACRES

LEGEND

| | |
|------------------------|--------------------------------------|
| EXISTING TREE LINE | EXISTING INDEX CONTOUR LINE (10') |
| EXISTING ROAD | EXISTING INTERMEDIATE CONTOUR LINE |
| EXISTING FRIGHT-OF-WAY | PROPOSED INDEX CONTOUR LINE (10') |
| PROPOSED RIGHT-OF-WAY | PROPOSED INTERMEDIATE CONTOUR LINE |
| PROPERTY LINE | CHANNEL FLOW DIRECTION |
| MUNICIPAL BOUNDARY | DELINEATED WETLAND BOUNDARY |
| PROPOSED BOUNDARY | FLOODWAY BOUNDARY |
| EXISTING FENCE | RIPIARIAN BUFFER |
| EXISTING ELECTRIC LINE | COMPOST FILTER SOCK (CFS) |
| EXISTING GAS LINE | TRIPLE CFS STACK / CFS SEDIMENT TRAP |
| PROPOSED GAS LINE | EXISTING SPOT ELEVATION |
| PROPOSED WATER LINE | EXISTING STRUCTURE |
| FILL LIMITS | PERMANENT PAVED |
| CUT LIMITS | TEMPORARY GRAVEL |
| TOE BENCH WITH DRAIN | EXISTING UTILITY POLE |
| ROADWAY CENTERLINE | EXISTING ROAD (TO BE UPGRADED) |
| SAFETY BERM | EXISTING OVERHEAD TELEPHONE |
| LIMITS OF DISTURBANCE | (24G HEIGHT 10.7') |
| EXISTING UTILITY POLE | |

SCALE: 1:200 PLOTTED: 1/19/2023 10:44 AM FILE: \\SERVER\BING\CONTRACTOR AND GAS\107002121070-008 HALLIBU\CAD (K BRIVE) - \\WV\ANS\ES\ESD\CD_OVERALL SITE PLAN.DWG

Stephen McCoy

811
 STOP
 Know what's below.
 Call before you dig.