



west virginia department of environmental protection

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

Earl Ray Tomblin, Governor
Randy C. Huffman, Cabinet Secretary
www.dep.wv.gov

PERMIT MODIFICATION APPROVAL

July 08, 2016

EQT PRODUCTION COMPANY
120 PROFESSIONAL PLACE
BRIDGEPORT, WV 26330

Re: Permit Modification Approval for API Number 8510282, Well #: 515874

Additional Lease Update

Oil and Gas Operator:

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.

Please call James Martin at 304-926-0499, extension 1654 if you have any questions.

Sincerely,

A handwritten signature in black ink, appearing to read 'Gene Smith', with a stylized flourish below it.

Gene Smith
Assistant Chief of Permitting
Office of Oil and Gas

Promoting a healthy environment.

07/08/2016



4708510282 MOD

June 27, 2016

Mr. Gene Smith
West Virginia Department of Environmental Protection
Office of Oil and Gas
601 57th Street SE
Charleston, WV 25304

Re: Modification of 47-08510282

Dear Mr. Smith,

Since applying for this permit, EQT became aware of an additional lease on the lateral. Enclosed is an updated WW-6A1, mylar plat and rec plan reflecting this change.

If you have any questions, please do not hesitate to contact me at (304) 848-0076.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Vicki Roark'.

Vicki Roark
Permitting Supervisor-WV

Enc.

RECEIVED
Office of Oil and Gas
JUL 29 2016
WV Department of
Environmental Protection

PEN54
WV 515874
EQT PRODUCTION COMPANY

LATITUDE 39°17'30"

WELL TIES		
ID	BEARING	DISTANCE
L1	N 22°11' W	1989.19'
L2	N 05°10' E	3814.31'

BUILD OUT DATA		
ID	BEARING	DISTANCE
L3	N 58°20' E	2295.72'

CURVE	ARC LENGTH	RADIUS	CHORD BEARING	CHORD LENGTH
C1	637.85'	573.35'	N 12°53' E	605.46'

LATERAL		
ID	BEARING	DISTANCE
L4	N 18°00' W	3902.77'

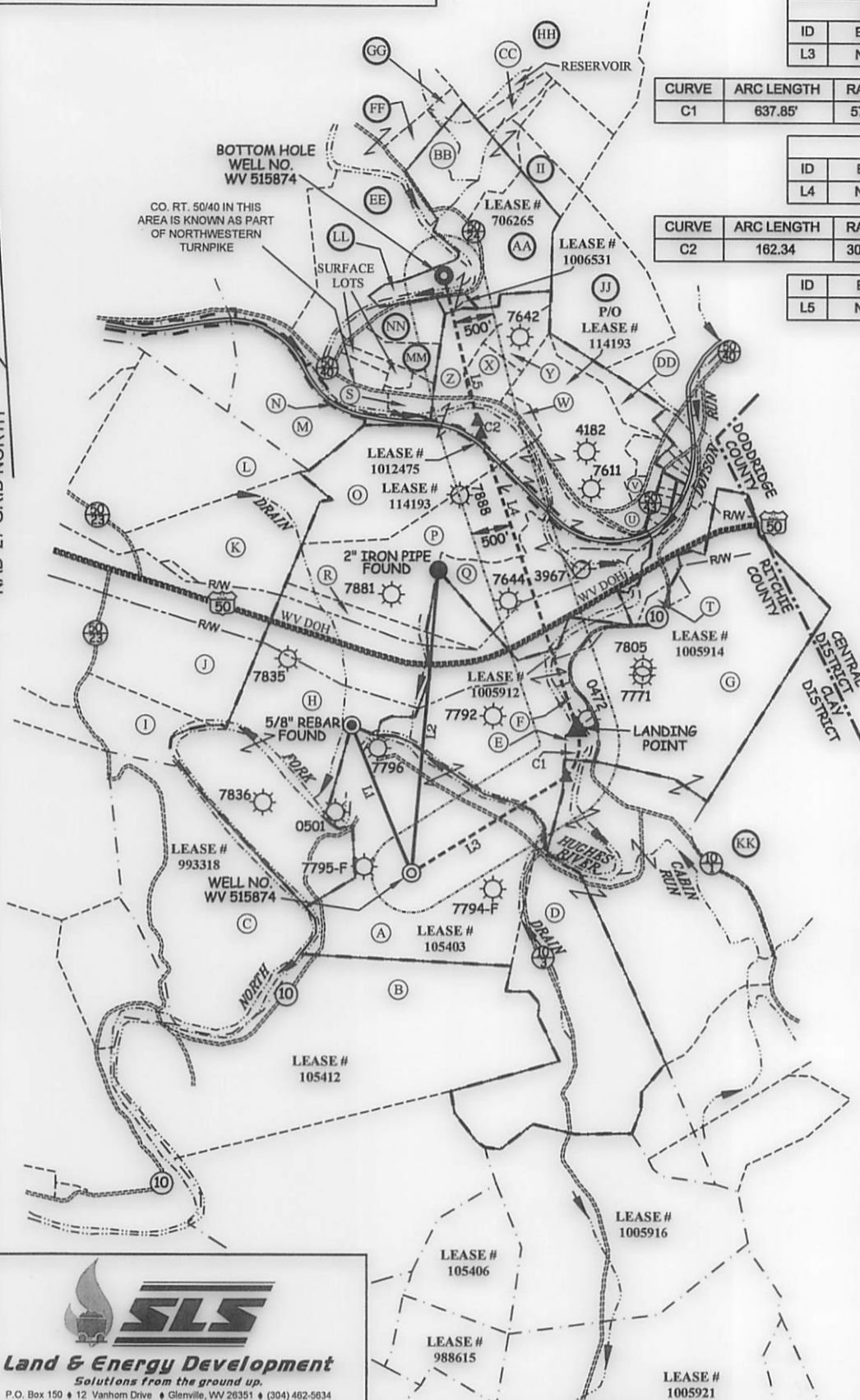
CURVE	ARC LENGTH	RADIUS	CHORD BEARING	CHORD LENGTH
C2	162.34	3086.78'	N 15°34' W	162.32'

ID	BEARING	DISTANCE
L5	N 13°08' W	1874.80'

LONGITUDE 80°55'00"

12,432'

NAD'27 GRID NORTH

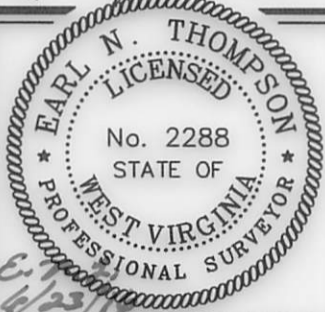


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 www.slsurveys.com

(S.P.C. NORTH ZONE) (UTM(M) ZONE 17 NORTH)
 NAD'27 S.P.C.(FT) N. 279,120.12 E. 1,595,819.44
 NAD'27 GEO. LAT-(N) 39.257534 LONG-(W) 80.927403
 NAD'83 UTM (M) N. 4,345,367.53 E. 506,278.12

LANDING POINT
 NAD'27 S.P.C.(FT) N. 280,915.75 E. 1,597,908.20
 NAD'27 GEO. LAT-(N) 39.262554 LONG-(W) 80.920127
 NAD'83 UTM (M) N. 4,345,925.21 E. 506,905.33

BOTTOM HOLE
 NAD'27 S.P.C.(FT) N. 286,609.67 E. 1,596,232.79
 NAD'27 GEO. LAT-(N) 39.278112 LONG-(W) 80.926363
 NAD'83 UTM (M) N. 4,347,651.32 E. 506,365.96



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS.

LEGEND

LEASE LINE	-----
SURFACE LINE	-----
WELL LATERAL	-----
OFFSET LINE	-----
TIE LINE	-----
CREEK	-----
ROAD	-----
RAIL ROAD	-----
COUNTY ROUTE	-----
STATE ROUTE	-----
PROPOSED WELL	⊙
EXISTING WELL	⊙
PERMITTED WELL	⊙
CLAY DISTRICT	⊙
TAX MAP-PARCEL	⊙

C-00-00

SCALE 1" = 2000'

DATE JUNE 24, 20 15

REVISED 02/08/16, 05/12/16 & 06/23/16

OPERATORS WELL NO. WV 515874

API WELL NO. 47 — 085 — 10282

NO. STATE COUNTY PERMIT

STATE OF WEST VIRGINIA
 DIVISION OF ENVIRONMENTAL PROTECTION
 OFFICE OF OIL AND GAS

DESIGNATED AGENT REX C. RAY
 ADDRESS 115 PROFESSIONAL PLACE P.O. BOX 280 BRIDGEPORT, WV 26330

WELL OPERATOR EQT PRODUCTION COMPANY
 ADDRESS 115 PROFESSIONAL PLACE P.O. BOX 280 BRIDGEPORT, WV 26330

COUNTY NAME PERMIT

07/08/2016

BRIDGEPORT, WV 26330

BRIDGEPORT, WV 26330

ADDRESS 112 PROFESSIONAL PLACE P.O. BOX 380

ADDRESS 112 PROFESSIONAL PLACE P.O. BOX 380

MEET OPERATOR EOT PRODUCTION COMPANY

DESIGNATED AGENT BEX C. RAY

NO. STATE COUNTY PERMIT
 MEET NO. 74 — 282 — 10389
 OPERATORS MEET NO. WV 21874
 REVISED 02/08/16 & 09/23/16
 DATE JULIE 24, 05
 SCALE 1" = 5000'



OFFICE OF OIL AND GAS
 ENVIRONMENTAL PROTECTION
 DIVISION OF
 STATE OF WEST VIRGINIA

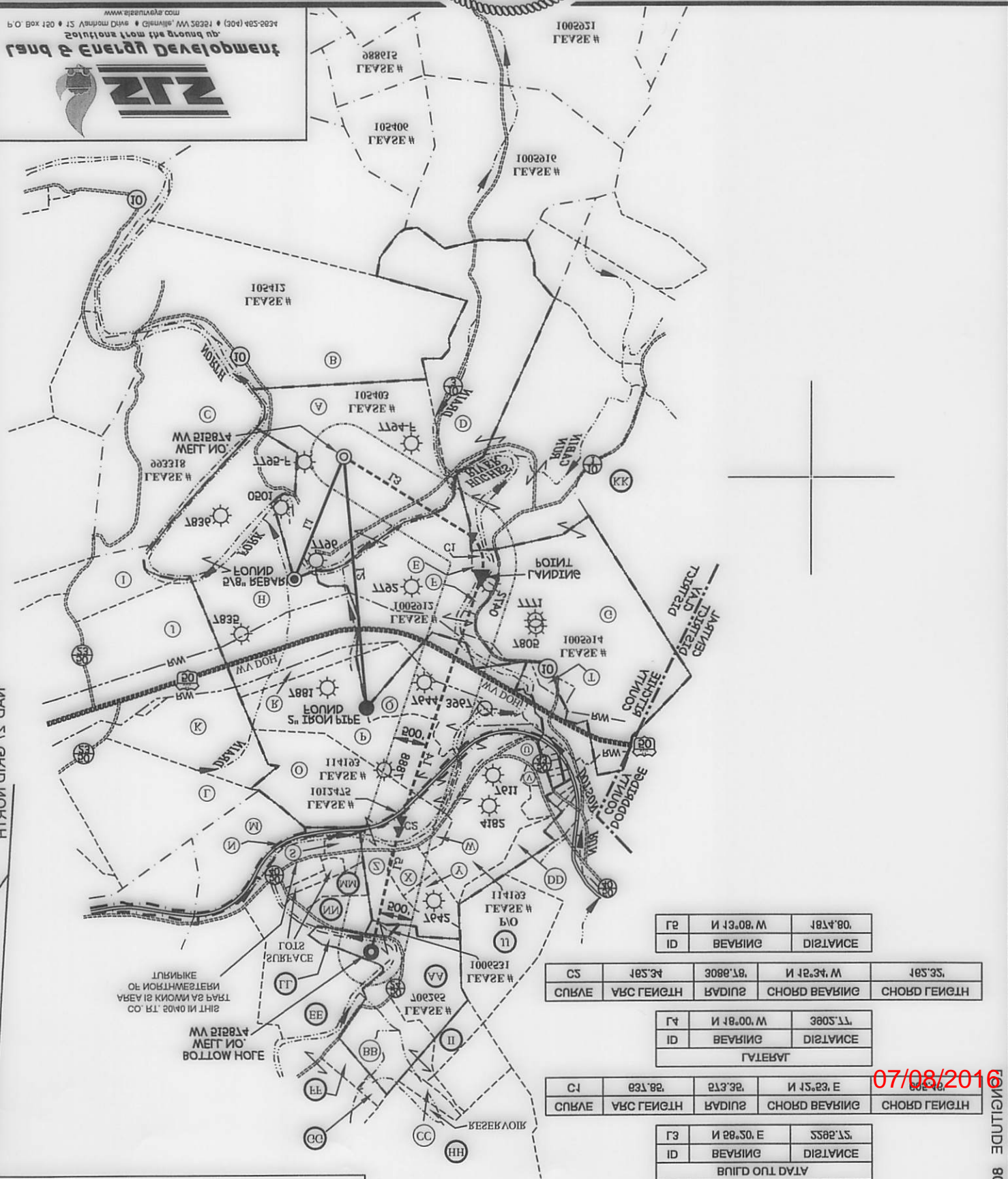
TAX MAP—PARCEL C-00-00
 CLAY DISTRICT
 PERMITTED MEET
 EXISTING MEET
 PROPOSED MEET
 STATE ROUTE
 COUNTY ROUTE
 HIGH ROAD
 ROAD
 CREEK
 LE LINE
 OFFSET LINE
 MEET GATEWAY
 SURFACE LINE
 LEASE LINE

LEGEND

STATES TOPOGRAPHIC MAPS
 (+) DENOTES LOCATION OF MEET ON UNITED

MEET NO. STATE COUNTY PERMIT
 MEET NO. 74 — 282 — 10389
 OPERATORS MEET NO. WV 21874
 REVISED 02/08/16 & 09/23/16
 DATE JULIE 24, 05
 SCALE 1" = 5000'

Land & Energy Development



GR	N 13.08. W	1874.80.
ID	BEARING	DISTANCE

CS	187.35	3088.18	N 13.34. W	187.35.
CURVE	ARC LENGTH	RADIUS	CHORD BEARING	CHORD LENGTH

FR	N 18.00. W	3805.11.
ID	BEARING	DISTANCE

CI	897.82.	213.32.	N 15.23. E	897.82.
CURVE	ARC LENGTH	RADIUS	CHORD BEARING	CHORD LENGTH

GR	N 28.50. E	5582.15.
ID	BEARING	DISTANCE

GR	N 02.10. E	3814.31.
GI	N 55.11. W	1888.18.
ID	BEARING	DISTANCE

LATITUDE 39°11'30"

07/08/2016

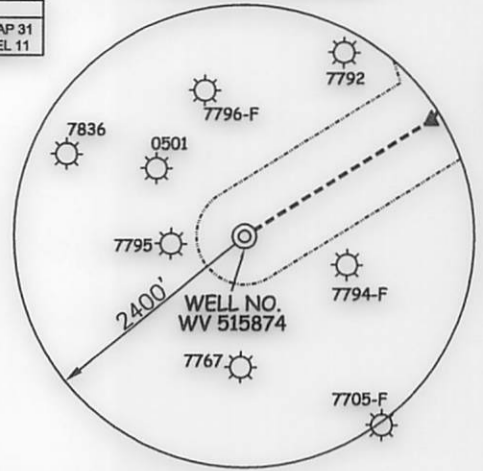
EOT PRODUCTION COMPANY
 WV 21874
 PERMITS

TIMBER
EMAN UTILIOS
15'435'
SINGLIDE 80°22'00"

PEN54
WV 515874
EQT PRODUCTION COMPANY

SUBSURFACE EASEMENT		
HEARTWOOD FORESTLAND FUND IV LP	196.90 AC±	TAX MAP 31 PARCEL 11

LATITUDE 39°17'30"



LONGITUDE 80°55'00"

NOTES ON SURVEY

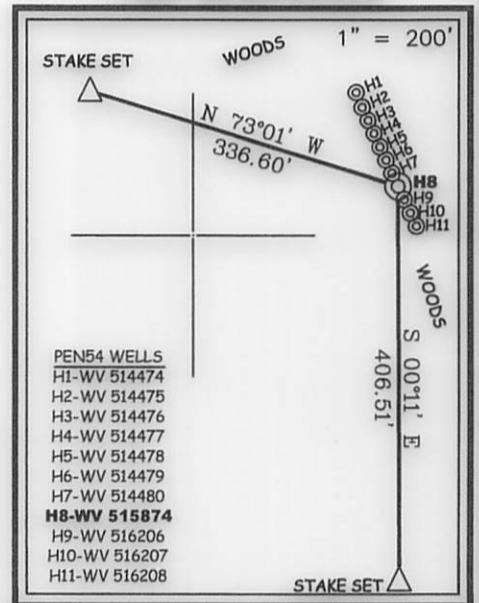
- NO WATER WELLS WERE FOUND WITHIN 250' OF PROPOSED GAS WELL. NO AGRICULTURAL BUILDINGS ≥ 2500 SQ. FT. OR DWELLINGS WERE FOUND WITHIN 625' OF THE CENTER OF PROPOSED WELL PAD.
- WELL SPOT CIRCLE & TOPO MARK SCALE IS 1"=2000'

A	JERRY MORTON ET AL	243.50 ACRES±	TM C-31-05
B	HEARTWOOD FORESTLAND FUND IV LP	185.3 ACRES±	TM C-31-14
C	DONALD & BARBARA DEEM	133.07 ACRES±	TM C-31-10
D	HEARTWOOD FORESTLAND FUND IV LP	196.90 ACRES±	TM C-31-11
E	ROGER SATTERFIELD	3 ACRES±	TM C-31-5.2
F	JOSEPH FLANAGAN ET AL	2.5 ACRES±	TM C-31-5.3
G	ANTERO TREATMENT LLC	175.85 ACRES±	TM C-31-6
H	JUDITH & JO ANN ROBINSON	106.265 ACRES±	TM C-31-22
I	VIRGINIA COTTRILL	25.5 ACRES±	TM C-31-04
J	VIRGINIA COTTRILL	55.73 ACRES±	TM C-26-56.2
K	VIRGINIA COTTRILL	57.63 ACRES±	TM C-26-56.1
L	VIRGINIA COTTRILL	84.35 ACRES±	TM C-26-56
M	WV RAILROAD MAINTENANCE AUTHORITY	48.14 ACRES±	TM C-26-19
N	WV RAILROAD MAINTENANCE AUTHORITY	P/O 1141.03 ACRES±	TM C-26-X
O	ROY & LINDA HAMMOND	77.088 ACRES±	TM C-26-57
P	JANICE WILLIAMS	111.876 ACRES±	TM C-26-58.9
Q	EQT PRODUCTION COMPANY	46.63 ACRES±	TM C-26-58
R	JANICE WILLIAMS	1.715 ACRES±	TM C-26-58.2
S	EUSTACE LAMM ET AL	2.28 ACRES±	TM C-26-20.1
T	EARL DAUGHERTY	1.80 ACRES±	TM C-26-52.1
U	JEAN & KRISTINE KNUITSEN	5.34 ACRES±	TM C-26-58.3
V	KATRINA DOTSON	1.01 ACRES±	TM C-26-58.4
W	KEVIN & MICHELE ESTEP	2.912 ACRES±	TM C-26-57.1
X	BRIAN & JULIE RICHEY	7.69 ACRES±	TM C-26-58.8
Y	FERYL & MAHLON HARRIS	8.38 ACRES±	TM C-26-58.1
Z	FERYL & MAHLON HARRIS	16.62 ACRES±	TM C-26-58.6
AA	WILLIAM & JANET BROADWATER	37.565 ACRES±	TM C-26-12
BB	CITY OF PENNSBORO	25.246 ACRES±	TM C-26-12.1
CC	CITY OF PENNSBORO	4.778 ACRES±	TM C-26-5.1
DD	MOUNTVIEW CONFERENCE CHURCH	10.41 ACRES±	TM C-26-58.5
EE	TODD G. GILLENWATER	65 ACRES±	TM C-26-11
FF	TERRY & JANET HALL	5.71 ACRES±	TM C-26-4.4
GG	CITY OF PENNSBORO	2.625 ACRES±	TM C-26-4.3
HH	P.M. MANAGEMENT COMPANY	83.022 ACRES±	TM C-26-05
II	WILLIAM & JANET BROADWATER	8.203 ACRES±	TM C-26-4.1
JJ	WILLIAM & JANET BROADWATER	50 ACRES±	TM C-26-4.2
KK	CAROL COGAR ET AL	172.44 ACRES±	TM C-32-01
LL	TODD G. GILLENWATER	10.18 ACRES±	TM C-26-11.1
MM	CARLA POLING ET AL	5.4 ACRES±	TM C-26-23
NN	CARLA POLING ET AL	11.43 ACRES±	TM C-26-22

(S.P.C. NORTH ZONE) (UTM(M) ZONE 17 NORTH)

NAD'27 S.P.C.(FT)	N. 279,120.12	E. 1,595,819.44
NAD'27 GEO.	LAT-(N) 39.257534	LONG-(W) 80.927403
NAD'83 UTM (M)	N. 4,345,367.53	E. 506,278.12
LANDING POINT		
NAD'27 S.P.C.(FT)	N. 280,915.75	E. 1,597,908.20
NAD'27 GEO.	LAT-(N) 39.262554	LONG-(W) 80.920127
NAD'83 UTM (M)	N. 4,345,925.21	E. 506,905.33
BOTTOM HOLE		
NAD'27 S.P.C.(FT)	N. 286,609.67	E. 1,596,232.79
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NAD'83 UTM (M)	N. 4,347,651.32	E. 506,365.96

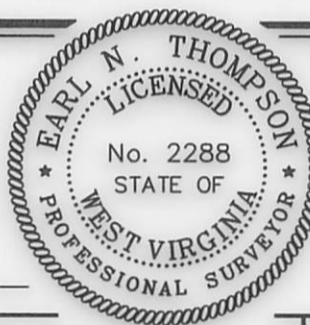
REFERENCES



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 www.slsurveys.com

ROYALTY OWNERS		
GUY FLANAGAN ET AL	128 AC±	LEASE NO. 1005912
MARY LEE AZELVANDRE ET AL	500 AC±	LEASE NO. 114193
WEST VIRGINIA RAIL AUTHORITY	24.30 AC±	LEASE NO. 1012475
CAROL A. MARSH	72 AC±	LEASE NO. 706265
KIEDAISCH & SUMMERS ENTERPRISES LLC	2.75 AC±	LEASE NO. 1006531

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 DIVISION OF ENVIRONMENTAL PROTECTION.



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS.
 DATE JUNE 24, 20 15
 REVISED 02/08/16, 05/12/16 & 06/23/16
 OPERATORS WELL NO. WV 515874
 API WELL NO. 47-085-10282
 STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1 / 2500 FILE NO. 8083P515874R3.dwg
 HORIZONTAL & VERTICAL CONTROL DETERMINED BY DGPS (SURVEY GRADE TIE TO CORS NETWORK) SCALE SEE NOTE 2

STATE OF WEST VIRGINIA
 DIVISION OF ENVIRONMENTAL PROTECTION
 OFFICE OF OIL AND GAS

WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL IF "GAS" PRODUCTION STORAGE DEEP SHALLOW

LOCATION:
 PAD ELEVATION 1,016' WATERSHED NORTH FORK HUGHES RIVER
 DISTRICT CLAY COUNTY RITCHIE QUADRANGLE PENNSBORO 7.5'

SURFACE OWNER JERRY MORTON ET AL ACREAGE 243.50±
 ROYALTY OWNER ELLEN S. FRANCAVIGLIA ET AL ACREAGE 268±

PROPOSED WORK:
 DRILL CONVERT DRILL DEEPER REDRILL FRACTURE OR STIMULATE PLUG OFF OLD FORMATION PERFORATE NEW FORMATION PLUG AND ABANDON CLEAN OUT AND REPLUG OTHER

PHYSICAL CHANGE IN WELL (SPECIFY) _____ TARGET FORMATION MARCELLUS
 ESTIMATED DEPTH 6,275'

WELL OPERATOR EQT PRODUCTION COMPANY DESIGNATED AGENT REX C. RAY
 ADDRESS 115 PROFESSIONAL PLACE P.O. BOX 280 BRIDGEPORT, WV 26330 ADDRESS 115 PROFESSIONAL PLACE P.O. BOX 280 BRIDGEPORT, WV 26330

COUNTY NAME PERMIT

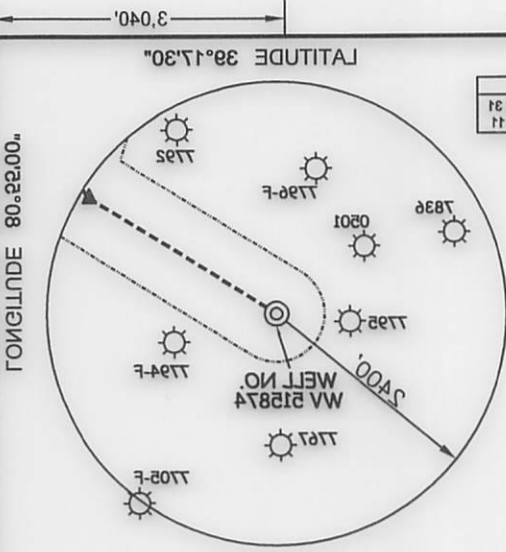
EQT PRODUCTION COMPANY WV 515874 PEN54

NOTES ON SURVEY

1. NO WATER WELLS WERE FOUND WITHIN 250' OF PROPOSED GAS WELL. NO AGRICULTURAL BUILDINGS > 2500 SQ. FT. OR DWELLINGS WERE FOUND WITHIN 625' OF THE CENTER OF PROPOSED WELL PAD.
2. WELL SPOT CIRCLE & TOPO MARK SCALE IS 1"=2000'.

A	JERRY MORTON ET AL	243.20 ACRES±	TM C-31-02
B	HEARWOOD FORESTLAND FUND IV LP	182.3 ACRES±	TM C-31-14
C	DONALD & BARBARA DEEM	133.07 ACRES±	TM C-31-10
D	HEARWOOD FORESTLAND FUND IV LP	196.90 ACRES±	TM C-31-11
E	ROGER SATTERFIELD	3 ACRES±	TM C-31-22
F	JOSEPH FLANAGAN ET AL	2.2 ACRES±	TM C-31-23
G	ANTERO TREATMENT LLC	172.82 ACRES±	TM C-31-9
H	JUDITH & JO ANN ROBINSON	106.262 ACRES±	TM C-31-22
I	VIRGINIA COTTRELL	22.2 ACRES±	TM C-31-04
J	VIRGINIA COTTRELL	22.23 ACRES±	TM C-26-26
K	VIRGINIA COTTRELL	27.63 ACRES±	TM C-26-26
L	VIRGINIA COTTRELL	84.23 ACRES±	TM C-26-26
M	WV RAILROAD MAINTENANCE AUTHORITY	48.14 ACRES±	TM C-26-19
N	WV RAILROAD MAINTENANCE AUTHORITY	P/O	TM C-26-X
O	ROY & LINDA HAMMOND	77.088 ACRES±	TM C-26-27
P	JANICE WILLIAMS	111.876 ACRES±	TM C-26-28
Q	EQT PRODUCTION COMPANY	46.63 ACRES±	TM C-26-28
R	JANICE WILLIAMS	1.712 ACRES±	TM C-26-28
S	EUSTACE J. MMM ET AL	2.28 ACRES±	TM C-26-20
T	EARL DAUGHERTY	1.80 ACRES±	TM C-26-22
U	JEAN & KRISTINE KNUTSEN	2.24 ACRES±	TM C-26-28
V	KATRINA DOTSON	1.01 ACRES±	TM C-26-28
W	KEVIN & MICHELLE ESTEP	2.912 ACRES±	TM C-26-27
X	BRIAN & JULIE RICHEY	7.69 ACRES±	TM C-26-28
Y	FERYL & MAHLON HARRIS	8.38 ACRES±	TM C-26-28
Z	FERYL & MAHLON HARRIS	16.62 ACRES±	TM C-26-28
AA	WILLIAM & JANET BROADWATER	37.262 ACRES±	TM C-26-12
BB	CITY OF PENNSBORO	22.246 ACRES±	TM C-26-12
CC	CITY OF PENNSBORO	4.778 ACRES±	TM C-26-21
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EE	TODD G. GILLENWATER	62 ACRES±	TM C-26-11
FF	TERRY & JANET HALL	2.21 ACRES±	TM C-26-44
GG	CITY OF PENNSBORO	2.622 ACRES±	TM C-26-43
HH	P.M. MANAGEMENT COMPANY	83.022 ACRES±	TM C-26-02
II	WILLIAM & JANET BROADWATER	8.203 ACRES±	TM C-26-41
JJ	WILLIAM & JANET BROADWATER	20 ACRES±	TM C-26-42
KK	CAROL COGAR ET AL	127.44 ACRES±	TM C-32-01
LL	TODD G. GILLENWATER	10.18 ACRES±	TM C-26-11
MM	CARLA POLING ET AL	2.4 ACRES±	TM C-26-23
NN	CARLA POLING ET AL	11.43 ACRES±	TM C-26-22

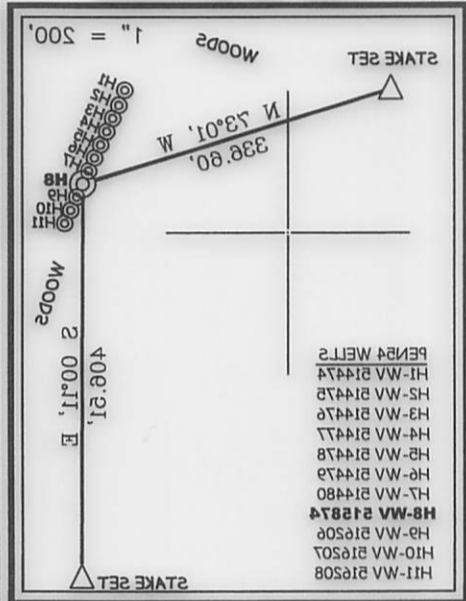
SUBSURFACE EASEMENT	
HEARWOOD FORESTLAND FUND IV LP	196.90 AC ±
TAX MAP 31	PARCEL 11



(2) P.C. NORTH ZONE (UTM) (ZONE 17 NORTH)

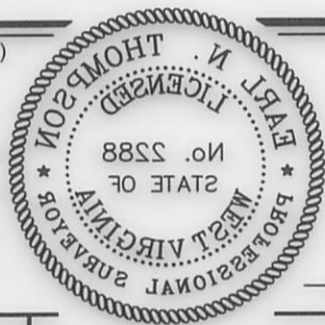
NAD83 UTM (M)	N. 278,120.12	E. 1,266,818.44
NAD83 UTM (M)	N. 278,120.12	E. 1,266,818.44
LANDING POINT		
NAD83 UTM (M)	N. 280,912.78	E. 1,267,908.50
NAD83 UTM (M)	N. 280,912.78	E. 1,267,908.50
BOTTOM HOLE		
NAD83 UTM (M)	N. 286,809.67	E. 1,268,282.76
NAD83 UTM (M)	N. 286,809.67	E. 1,268,282.76
NAD83 UTM (M)		
NAD83 UTM (M)	N. 274,782.35	E. 208,362.96
NAD83 UTM (M)	N. 274,782.35	E. 208,362.96
NAD83 UTM (M)		
NAD83 UTM (M)	N. 274,782.35	E. 208,362.96
NAD83 UTM (M)	N. 274,782.35	E. 208,362.96

REFERENCES



ROYALTY OWNERS	
GUY FLANAGAN ET AL	128 AC ±
MARY LEE AZELVANDRE ET AL	600 AC ±
WEST VIRGINIA RAIL AUTHORITY	24.30 AC ±
CAROL A. MARSH	72 AC ±
KENDRICH & HUMMERS ENTERPRISES LLC	2.25 AC ±

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www.landenergy.com



BY THE DIVISION OF ENVIRONMENTAL PROTECTION THE REGULATIONS ISSUED AND PRESCRIBED THE INFORMATION REQUIRED BY LAW AND KNOWLEDGE AND BELIEF AND SHOWS ALL THIS PLAN IS CORRECT TO THE BEST OF MY I THE UNDERSIGNED, HEREBY CERTIFY THAT

DATE JUNE 24, 2015
 REVISED 02/08/16, 08/12/16 & 08/23/16
 OPERATORS WELL NO. WV 515874
 API WELL NO. 47-082-10982
 STATE WEST VIRGINIA COUNTY CLAY PERMIT

OFFICE OF OIL AND GAS
 DIVISION OF ENVIRONMENTAL PROTECTION
 STATE OF WEST VIRGINIA

MINIMUM DEGREE OF ACCURACY 1" = 2500' FILE NO. 8083P515874R3.dwg
 HORIZONTAL & VERTICAL SCALE SEE NOTE 2
 CONTROL DETERMINED BY DGPS (SURVEY GRADE TIE TO CORS NETWORK)

WELL TYPE: OIL GAS LIQUID WASTE DISPOSAL "GAS" PRODUCTION STORAGE DEEP SHALLOW IF

LOCATION: PAD ELEVATION 1,016' WATERSHED NORTH FORK HUGHES RIVER
 SURFACE OWNER JERRY MORTON ET AL DISTRICT CLAY COUNTY RITCHIE QUADRANGLE PENNSBORO 7.5
 PROPOSED WORK: DRILL CONVERT DRILL DEEPER REDRILL FRACTURE OR STIMULATE PLUG OFF OLD

PHYSICAL CHANGE IN WELL (SPECIFY) MARCELLUS TARGET FORMATION MARCELLUS ESTIMATED DEPTH 6,275'
 DESIGNATED AGENT REX C. RAY

WELL OPERATOR EQT PRODUCTION COMPANY ADDRESS 115 PROFESSIONAL PLACE P.O. BOX 280 BRIDGEPORT, WV 26330
 DESIGNATED AGENT REX C. RAY ADDRESS 115 PROFESSIONAL PLACE P.O. BOX 280 BRIDGEPORT, WV 26330

07/08/2016

WW-6A1
(5/13)

Operator's Well No. 515874

**INFORMATION SUPPLIED UNDER WEST VIRGINIA CODE
Chapter 22, Article 6A, Section 5(a)(5)
IN LIEU OF FILING LEASE(S) AND OTHER CONTINUING CONTRACT(S)**

Under the oath required to make the verification on page 1 of this Notice and Application, I depose and say that I am the person who signed the Notice and Application for the Applicant, and that –

- (1) the tract of land is the same tract described in this Application, partly or wholly depicted in the accompanying plat, and described in the Construction and Reclamation Plan;
- (2) the parties and recordation data (if recorded) for lease(s) or other continuing contract(s) by which the Applicant claims the right to extract, produce or market the oil or gas are as follows:

Lease Name or Number	Grantor, Lessor, etc.	Grantee, Lessee, etc.	Royalty	Book/Page
----------------------	-----------------------	-----------------------	---------	-----------

See Attached

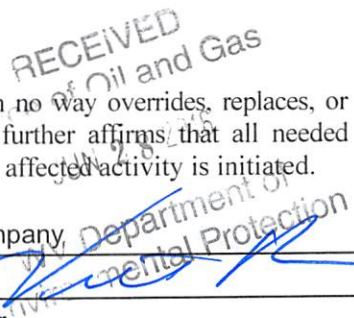
**Acknowledgement of Possible Permitting/Approval
In Addition to the Office of Oil and Gas**

The permit applicant for the proposed well work addressed in this application hereby acknowledges the possibility of the need for permits and/or approvals from local, state, or federal entities in addition to the DEP, Office of Oil and Gas, including but not limited to the following:

- WV Division of Water and Waste Management
- WV Division of Natural Resources WV Division of Highways
- U.S. Army Corps of Engineers
- U.S. Fish and Wildlife Service
- County Floodplain Coordinator

The applicant further acknowledges that any Office of Oil and Gas permit in no way overrides, replaces, or nullifies the need for other permits/approvals that may be necessary and further affirms that all needed permits/approvals should be acquired from the appropriate authority before the affected activity is initiated.

Well Operator: EQT Production Company
 By: Victoria Roark
 Its: Permitting Supervisor



Lease No.	Grantor, Lessor, etc.	Grantee, Lessee, etc.	Royalty	Book/Page
<u>105403</u>	<u>Ellen S. Francaviglia, et al (current royalty owner)</u> W.A. Flanagan, et al (original lessor) The Philadelphia Company of West Virginia Pittsburgh and West Virginia Gas Company Equitable Gas Company Equitrans, Inc. Equitrans, LP Equitable Production/Eastern States, Inc. Equitable Production Company	The Philadelphia Company of West Virginia Pittsburgh and West Virginia Gas Company Equitable Gas Company Equitrans, Inc. Equitrans, LP. Equitable Production/Eastern States, Inc. Equitable Production Company EQT Production Company	***	LB63/295 DB55/362 DB 126/473 LB 201/253 AB269/182 DB234/830 CB557/56 DB 281/346 Doddridge
<u>3-31-11</u>	The Heartwood Forestland Fund IV, L.P.	EQT Production Company		342/294 Subsurface
Marcellus Rights				
<u>1005912</u>	<u>Guy M. Flanagan, et al (current royalty owner)</u> Gregory L. Flanagan (original lessor) Energy Corporation of America Antero Resources Corporation	Energy Corporation of America Antero Resources Corporation EQT Production Company	min pd 1/8th	LB201/110 257/377 DB277/1037
<u>114193</u>	<u>Mary Lee Azelevandra, et al (current royalty owner)</u> Harry L. Broadwater and Sadie E. Broadwater, etal W.J. Rowland The Philadelphia Company of West Virginia Pittsburgh and West Virginia Gas Company Equitable Gas Company Equitrans, Inc. Equitrans, LP Equitable Production/Eastern States, Inc. Equitable Production/Eastern States, Inc.	W.J. Rowland The Philadelphia Company of West Virginia Pittsburgh and West Virginia Gas Company Equitable Gas Company Equitrans, Inc. Equitrans, LP. Equitable Production/Eastern States, Inc. EQT Production Company EQT Production Company	***	LB33/533 DB126/418 LB55/362 DB126/473 LB201/253 AB269/182 DB234/830 CB557/56 DB281/346 Doddridge
<u>1012475</u>	<u>West Virginia State Rail Authority (current royalty owner)</u> West Virginia State Rail Authority (original lessor)	EQT Production Company	min pd 1/8th	LB295/860
<u>706265</u>	<u>Carol A Marsh (current royalty owner)</u> Sherman Marsh, et ux (original lessor) Carnegie Natural Gas Company Carnegie Production Company Equitable Production-Eastern States, Inc. Equitable Production Company	Carnegie Natural Gas Company Carnegie Production Company Equitable Production-Eastern States, Inc. Equitable Production Company EQT Production Company	***	LB32/55 LB 228/859 see attached see attached CB6/443
<u>1006531</u>	<u>Kiedaisch and Summers Enterprises LLC (current royalty owner)</u> Kiedaisch and Summers Enterprises LLC (original lessor)	EQT Production Company		LB281/1048

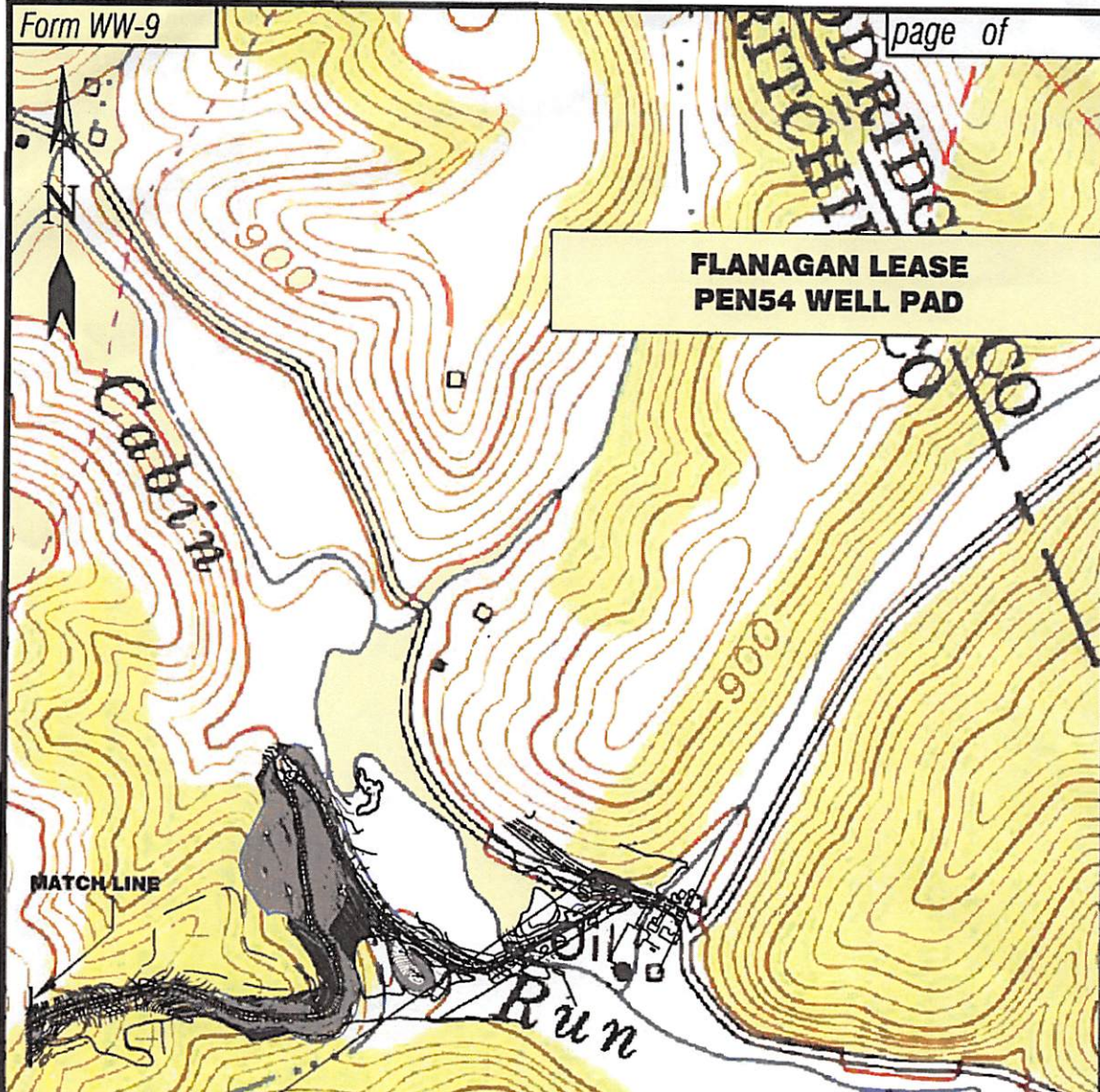
*** We will pay one-eighth of the total amount paid to or received by or allowed to the owner of the working interest at the wellhead for the oil or gas so extracted, produced, or marketed before deducting the amount to be paid to or set aside for the owner of the oil or gas in place, on all such oil or gas to be extracted, produced, or marketed from the well.

RECEIVED
Office of Oil and Gas
JUN 28 2016
WV Department of
Environmental Protection

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**FLANAGAN LEASE
PEN54 WELL PAD**



NOTE: SEE SITE PLAN
PEN54 FOR COMPLETE
CONSTRUCTION &
EROSION & SEDIMENT
CONTROL DETAILS.

RECEIVED
Office of Oil and Gas
JUN 26 2016
Pennsylvania Department of
Environmental Protection

**SHEET 1 OF 2
SCALE: 1"=500'**



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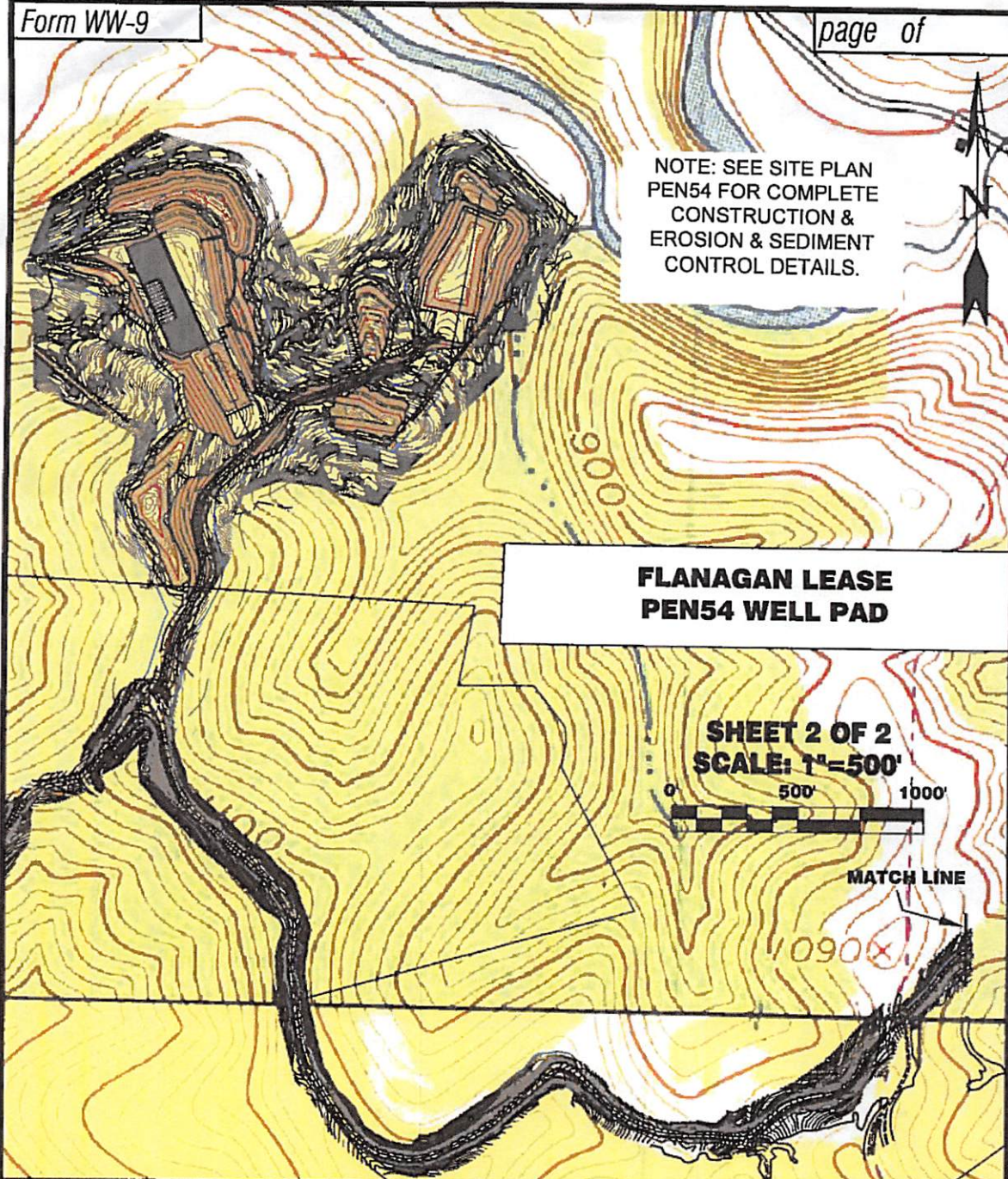
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TOPO SECTIONS OF PENNSBORO 7.5'
TOPO QUADRANGLE

07/08/2016

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NOTE: SEE SITE PLAN PEN54 FOR COMPLETE CONSTRUCTION & EROSION & SEDIMENT CONTROL DETAILS.



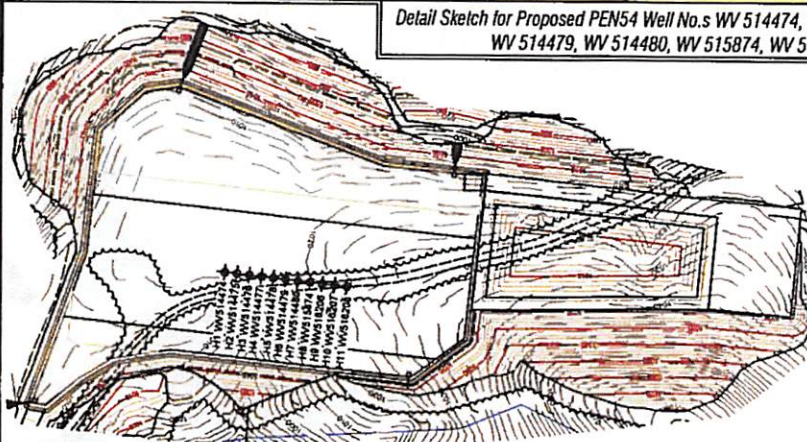
**FLANAGAN LEASE
PEN54 WELL PAD**

**SHEET 2 OF 2
SCALE: 1"=500'**



MATCH LINE

Detail Sketch for Proposed PEN54 Well No.s WV 514474, WV 514475, WV 514476, WV 514477, WV 514478, WV 514479, WV 514480, WV 515874, WV 516206, WV 516207 & WV 516208



NOTE: SEE SITE PLAN PEN54 FOR COMPLETE CONSTRUCTION & EROSION & SEDIMENT CONTROL DETAILS.

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TOPO SECTIONS OF PENNSBORO 7.5' TOPO QUADRANGLE

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