



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

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

PERMIT MODIFICATION APPROVAL
Horizontal 6A / Horizontal 6A Well - 1

EQT PRODUCTION COMPANY
120 PROFESSIONAL PLACE
BUILDING II
BRIDGEPORT, WV 26330

Re: Permit Modification Approval for 514095
47-017-06507-00-00

Adding Subsurface Agreement

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: 514095
Farm Name: HENDERSON, JUSTIN L.
U.S. WELL NUMBER: 47-017-06507-00-00
Horizontal 6A / Horizontal 6A Well - 1
Date Issued: 1/12/2017

Promoting a healthy environment.

01/20/2017



June 8, 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 47-017-06507

Dear Mr. Smith,

Please accept the attached updates for the above referenced permit. Upon inspection of our as-drilled plat, we noted the curve geometry crossed into an additional tract, for which EQT had acquired a subsurface agreement. Enclosed is an updated WW-6A1, WW-6B, mylar plat and rec plan reflecting corrections to update the permit file to be consistent with the as-drilled well bore.

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

JUN 10 2016

WV Department of
Environmental Protection

STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS
WELL WORK PERMIT APPLICATION

1) Well Operator: EQT Production Company 306686 Doddridge Southwest Oxford
Operator ID County District Quadrangle

2) Operator's Well Number: 514095 Well Pad Name: OXF159

3) Farm Name/Surface Owner: Henderson Public Road Access: CR 13

4) Elevation, current ground: 1252.2 Elevation, proposed post-construction: 1252.2

5) Well Type (a) Gas Oil _____ Underground Storage _____
Other _____
(b) If Gas Shallow Deep _____
Horizontal

6) Existing Pad: Yes or No Yes

7) Proposed Target Formation(s), Depth(s), Anticipated Thickness and Expected Pressure(s):
Marcellus, 6686', 36', 2951 PSI

8) Proposed Total Vertical Depth: 6686

9) Formation at Total Vertical Depth: Marcellus

10) Proposed Total Measured Depth: 20294

11) Proposed Horizontal Leg Length: 11821

12) Approximate Fresh Water Strata Depths: 261, 322, 398

13) Method to Determine Fresh Water Depths: By offset wells

14) Approximate Saltwater Depths: 1309, 1376

15) Approximate Coal Seam Depths: 243, 310, 471, 613, 729, 732

16) Approximate Depth to Possible Void (coal mine, karst, other): none

17) Does Proposed well location contain coal seams directly overlying or adjacent to an active mine? Yes _____

(a) If Yes, provide Mine Info: Name: _____
Depth: _____
Seam: _____
Owner: _____

RECEIVED
Office of Oil and Gas

JUN 10 2016

WV Department of
Environmental Protection

18)

CASING AND TUBING PROGRAM

TYPE	Size (in)	New or Used	Grade	Weight per ft. (lb/ft)	FOOTAGE: For Drilling (ft)	INTERVALS: Left in Well (ft)	CEMENT: Fill-up (Cu. Ft.)/CTS
Conductor	20	New	A-500	78.6	40	40	44.84 ft ³ / CTS
Fresh Water	13 3/8	New	J-55	54.5	1100	1100	1002 ft ³ / CTS
Coal							
Intermediate	9 5/8	New	P-110	40	5286	5286	2175.18 ft ³ / CTS
Production	5 1/2	New	P-110	20	20282	20282	500' above top producing zone
Tubing	2 3/8		J-55	4.7		May not be run, if run set 40' above top perf or 80° inclination.	
Liners							

TYPE	Size (in)	Wellbore Diameter (in)	Wall Thickness (in)	Burst Pressure (psi)	Anticipated Max. Internal Pressure (psi)	Cement Type	Cement Yield (cu. ft./k)
Conductor	20	24	.375	1378	1102	Class A	1.18
Fresh Water	13 3/8	17 1/2	.38	2700	2160	Class A	1.20
Coal							
Intermediate	9 5/8	12 3/8	.395	7900	6320	Class A/A	1.24/1.18
Production	5 1/2	8 1/2	.361	12640	10112	Class A/H	1.26/1.96
Tubing	2 3/8	NA	.19	7700			
Liners							

PACKERS

Kind:				
Sizes:				
Depths Set:				

RECEIVED
 Office of Oil and Gas
 JUN 10 2016
 WV Department of
 Environmental Protection

19) Describe proposed well work, including the drilling and plugging back of any pilot hole:

Drill and complete a new horizontal well in the Marcellus Formation. Drill the vertical to an approximate depth of 5578'. Kick off and drill curve. Drill the lateral in the Marcellus. Cement casing.

20) Describe fracturing/stimulating methods in detail, including anticipated max pressure and max rate:

Hydraulic fracturing is completed in accordance with state regulations using water recycled from previously fractured wells and obtained from freshwater sources. This water is mixed with sand and a small percentage (less than 0.3%) of chemicals (including 15% Hydrochloric acid, gelling agent, gel breaker, friction reducer, biocide, and scale inhibitor), referred to in the industry as a "slickwater" completion. Maximum anticipated internal casing pressure is expected to be approximately 10000 psi, maximum anticipated treating rates are expected to average approximately 100 bpm. Stage lengths vary from 150 to 300 feet. Average approximately 200,000 barrels of water per stage. Sand sizes vary from 100 mesh to 20/40 mesh. Average approximately 200,000 pounds of sand per stage.

21) Total Area to be disturbed, including roads, stockpile area, pits, etc., (acres): no additional disturbance

22) Area to be disturbed for well pad only, less access road (acres): no additional disturbance

23) Describe centralizer placement for each casing string:

- Surface: Bow spring centralizers – One centralizer at the shoe and one spaced every 500'.
- Intermediate: Bow spring centralizers– One centralizer at the shoe and one spaced every 500'.
- Production: One solid body centralizer spaced every joint from production casing shoe to KOP

24) Describe all cement additives associated with each cement type:

Conductor: Class A no additives
Surface (Class A Cement): 0-3% Calcium Chloride. Used to speed the setting of cement slurries
Intermediate (Class A Cement): 0-3% Calcium Chloride. Used to speed the setting of cement slurries.
Production:
Lead (Class A Cement): 0.2% CD-20 (dispersant makes cement easier to mix). .15% SuperFL-300 (fluid loss/lengthens thickening time) .15% SEC-10 (fluid loss) 50:50 POZ (extender)
Tail (Class H Cement): 0.2% Super CR-1 (Retarder). Lengthens thickening time. .3% Super FL-200 (fluid loss) .2% SEC-10 (Fluid loss). .2% SuperFL-350 (fluid loss) Reduces amount of water lost to formation. 60 % Calcium Carbonate. Acid solubility.

RECEIVED
Office of Oil and Gas

25) Proposed borehole conditioning procedures:

Surface: Circulate hole clean while rotating & reciprocating the drill string until cuttings diminish at surface.
Intermediate: Circulate hole clean while rotating & reciprocating the drill string until cuttings diminish at surface.
Production: Pump marker sweep with nut plug to determine actual hole washout. Calculate a gauge holes bottoms up volume. Perform a cleanup cycle by pumping 3-5 bottoms up or until the shakers are clean. Check volume of cuttings coming across the shakers every 15 minutes.

*Note: Attach additional sheets as needed.

017-06507

WW-6A1
(5/13)

Operator's Well No. 514095

**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 attachment

**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

RECEIVED
Office of Oil and Gas

JUN 10 2016

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.

WV Department of
Environmental Protection

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

Lease No.	Grantor, Lessor, etc.	Grantee, Lessee, etc.	Royalty	Book/Page
<u>706764</u>	<u>Leeman Maxwell Heirs (current royalty owner)</u>		***	
	Leeman Maxwell, et ux (original lessor)	John A. Connolly		LB 14/327
	John A. Connolly AKA Connolly Oil Company	Eastern Oil Company		LB 18/499
	Eastern Oil Company & Connolly Oil Company	Carnegie Natural Gas Company		LB 92/240
	Carnegie Natural Gas Company	Carnegie Production Company		LB 186/61
	Carnegie Production Company (USX)	Equitable Production Company		Purchase & Sale Agreement
	Equitable Production Company	EQT Production Company - Merger Name Change		DB 281/346
6-7-1	I.L. Morris	EQT Production Company	n/a	348/531 Subsurface

*** 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 10 2016

WV Department of
Environmental Protection



017-06507

EQT Production Company
2400 Zenith Ridge Rd.
Suite 200
Canonsburg, PA 15317
www.eqt.com

Todd Klaner
Manager, Permitting
tklaner@eqt.com

Via E-Mail

June 1, 2016

WV DEP Reviewer

**RE: EQT Production Company
PAD ID – OXF159
Well# - 514095
Doddridge County**

Dear Reviewer,

This well indicated by this permit application contains a Subsurface Easement Agreement for non-productive portions of the well bore. Attached is a Memorandum of Subsurface Use Agreement which gives EQT the right to drill below the surface of the tracts 7-1 shown on the well plat.

EQT Production understands that the WVDEP will issue the permit in the normal process subject to the completeness of the requirements of the Office of Oil and Gas and does not take a position with regards to the property rights under this agreement.

EQT Production agrees that the WVDEP's issuance of the permit is in no way an affirmation or validation of EQT Production's claimed rights.

Regards,

Todd Klaner
Manager, Permitting
EQT Production Company

RECEIVED
Office of Oil and Gas
JUN 10 2016

WV Department of
Environmental Protection

01/20/2017



June 1, 2016

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

Re: OXF159, 514095, 47-017-06507

Dear Mr. Martin,

EQT Production Company is submitting an application for a new well work permit for the above well number. Upon information and belief, Operator's lease and/ or other real property rights permit it to conduct drilling operations for the subject well in the location shown on the plat, including under any public roads that the well lateral crosses.

Sincerely,

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

Vicki Roark
Permitting Supervisor-WV

MEMORANDUM OF AGREEMENT

1. GRANTOR:

I.L. Morris
PO Box 397
Glennville, WV 26351

2. GRANTEE:

EQT Production Company
625 Liberty Avenue
Suite 1700
Pittsburgh, PA 15222

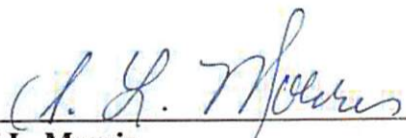
ROW REFERENCE: A Sub - Surface Easement(s) and Right of Way(s) Agreement dated the 1974 day of February, 2015, was entered into for good and valuable consideration by and between I.L. Morris ("Grantor", whether one or more) and EQT Production Company ("Grantee").

3. DESCRIPTION OF THE PREMISES: That certain tract or parcel of land containing 2331.51 acres, more or less, located on in New Milton District Doddridge County, West Virginia, and being more particularly described in a deed book 230 page 307 in the Office of the Clerk of the County Commission of Doddridge County, West Virginia ("the Property"). Map 07 Parcel 01

4. TERM: The Sub-Surface Right of Way shall run with the land and shall remain in force and effect until released and relinquished by the Grantee back to the Grantor, in writing.

IN WITNESS WHEREOF, the parties have signed their names hereto as of the date of the Option referenced in Section 3 above.

GRANTOR:


I.L. Morris

GRANTEE:

EQT PRODUCTION COMPANY


John Damato

RECEIVED
Office of Oil and Gas

JUN 10 2016

By: John Damato
WV Department of

Its: Attorney-In-Fact Environmental Protection

01706507

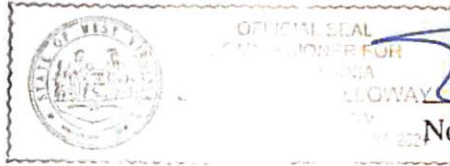
STATE/ OF West Virginia ;

COUNTY OF Gilmer:

Before me, Stephen E. Holloway, a Notary Public, on this day personally appeared I.L. Morris, known to me and acknowledged to me that he/she executed the instrument for the purposes and consideration therein expressed as his/her free act and deed. Given under my hand and seal of office this 19th day of February, 2015.

My Commission expires: 27 April 2021.

[SEAL]



Stephen E. Holloway
Notary Public

STATE OF West Virginia ;

COUNTY OF Harrison :

Before me, Tina Maxwell, a Notary Public, on this day personally appeared, known to me to be the John W. Damato of **EQT PRODUCTION COMPANY**, subscribed to the foregoing instrument, and acknowledged to me that he/she executed the instrument for the purposes and consideration therein expressed as his/her free act and deed. Given under my hand and seal of office this 23rd day of February, 2015.

My Commission expires: August 29, 2019.

[SEAL]



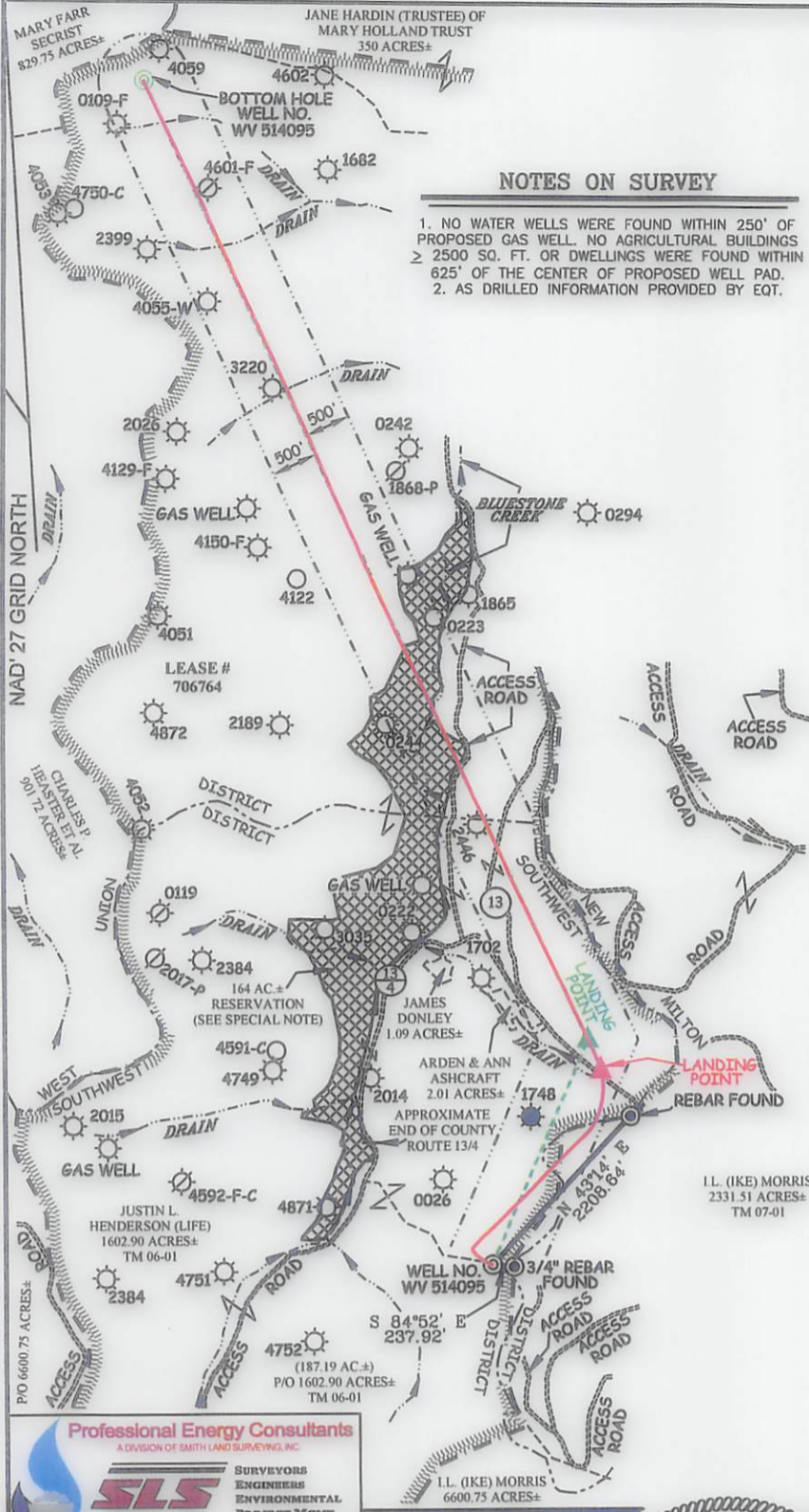
Tina Maxwell
Notary Public

Prepared by: EQT Production Company, 625 Liberty Avenue, Suite 1700, Pittsburgh, PA 15222

RECEIVED
Office of Oil and Gas
Beth A Rogers
JODDRIDGE County 01:06:30 PM
Instrument No 222192
Date Recorded 02/24/2015
Document Type NE/P/W
Pages Recorded 2
Book-Page 348-531
Recording Fee \$5.00
Additional \$6.00

01/20/2017

EQT PRODUCTION (KIM SKINNER)
115 PROFESSIONAL PLACE
BRIDGEPORT, WV 26330-4509



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. AS DRILLED INFORMATION PROVIDED BY EQT.

**EQT PRODUCTION COMPANY
LEEMAN MAXWELL LEASE
2,164 ACRES±
WELL NO. WV 514095
(OXF159 H6)
AS DRILLED COORDINATES**
(S.P.C. NORTH ZONE) (UTM(M) ZONE 17 NORTH)

NAD'27 S.P.C.(FT)	N. 260,320.2	E. 1,642,371.6
NAD'27 GEO.	LAT-(N) 39.207835	LONG-(W) 80.762089
NAD'83 UTM (M)	N. 4,339,877.2	E. 520,555.7

LANDING POINT

NAD'27 S.P.C.(FT)	N. 262,410.6	E. 1,643,572.5
NAD'27 GEO.	LAT-(N) 39.213620	LONG-(W) 80.757955
NAD'83 UTM (M)	N. 4,340,520.1	E. 520,910.9

BOTTOM HOLE

NAD'27 S.P.C.(FT)	N. 273,120.7	E. 1,638,582.9
NAD'27 GEO.	LAT-(N) 39.242830	LONG-(W) 80.776100
NAD'83 UTM (M)	N. 4,343,757.5	E. 519,336.4

SPECIAL NOTE

THERE IS NO SURVEY OR LEGAL DESCRIPTION DEFINING THE ACTUAL LOCATION OF THE 164 ACRE MEADOWLAND RESERVATION. DUE TO THE PASSAGE OF TIME SINCE THE RESERVATION WAS CREATED IT APPEARS THERE IS NO LIVING PERSON(S) WITH KNOWLEDGE OF ITS TRUE LOCATION. LOCATION OF RESERVATION SHOWN HEREON COMPILED FROM: "A" A MAP TITLED "CARNAGIE NATURAL GAS CO. LEEMAN MAXWELL LEASES, DODDRIDGE COUNTY, WEST VA" "B" PERIMETER OF RESERVATION AS SHOWN BY GLENN TRADER "CARETAKER OF HENDERSONS' PORTION OF MAXWELL LANDS" WHICH WAS LOCATED USING A MAPPING GRADE GPS RECEIVER "C" DETAILS SHOWN ON 1939 USDA AERIAL PHOTOGRAPHY OBTAINED FROM THE WV GEOLOGICAL SURVEY. SLS RECOMMENDS THAT PROPER LEGAL STEPS BE TAKEN TO CONFIRM CONCURRENCE OF ALL APPROPRIATE PARTIES RELATIVE TO THE RESERVATION AS SHOWN HEREON. THIS PLAT IS SUBJECT TO ANY ADDITIONAL INFORMATION (UNDISCOVERED TO DATE) WHICH MAY CHANGE THE LOCATION AND/OR CONFIGURATION OF THE RESERVATION AS SHOWN HEREON.

LEGEND

AS DRILLED ———
PROPOSED - - - - -

SUBSURFACE AGREEMENT		
I.L. (IKE) MORRIS	2331.51 AC±	TM 7-1

Professional Energy Consultants
A DIVISION OF SMITH LAND SURVEYING, INC.
SLS
SURVEYORS
ENGINEERS
ENVIRONMENTAL
PROJECT MGMT.
(304) 482-5834 WWW.SLSURVEYS.COM

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.



P.S. 2288 *Earl N. Thompson*

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS.
DATE JANUARY 06, 20 14
REVISED 03/24/14, 04/01/15, 05/26/16 & 06/03/16
OPERATORS WELL NO. WV 514095
API WELL NO. 47 - 017 - 06507
STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1 / 200 FILE NO. 7889AD514095R2
HORIZONTAL & VERTICAL CONTROL DETERMINED BY DGPS (SURVEY GRADE TIE TO CORS NETWORK) SCALE 1" = 2000'

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

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

LOCATION:
PAD ELEVATION 1,252.2' WATERSHED BLUESTONE CREEK
DISTRICT SOUTHWEST COUNTY DODDRIDGE QUADRANGLE OXFORD 7.5'

SURFACE OWNER JUSTIN L. HENDERSON (LIFE) ACREAGE 187.19 OF 1,602.90±
ROYALTY OWNER LEEMAN MAXWELL HRS ACREAGE 2,164± LEASE NO. 706764

PROPOSED WORK:
DRILL X CONVERT ___ DRILL DEEPER ___ REDRILL ___ FRACTURE OR STIMULATE X 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 6,663'

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

01/20/2017

COUNTY NAME PERMIT

AS DRILLED COORDINATES
WELL NO. WV 514095
2.164 ACRES ±
LEEMAN MAXWELL LEASE
EQT PRODUCTION COMPANY

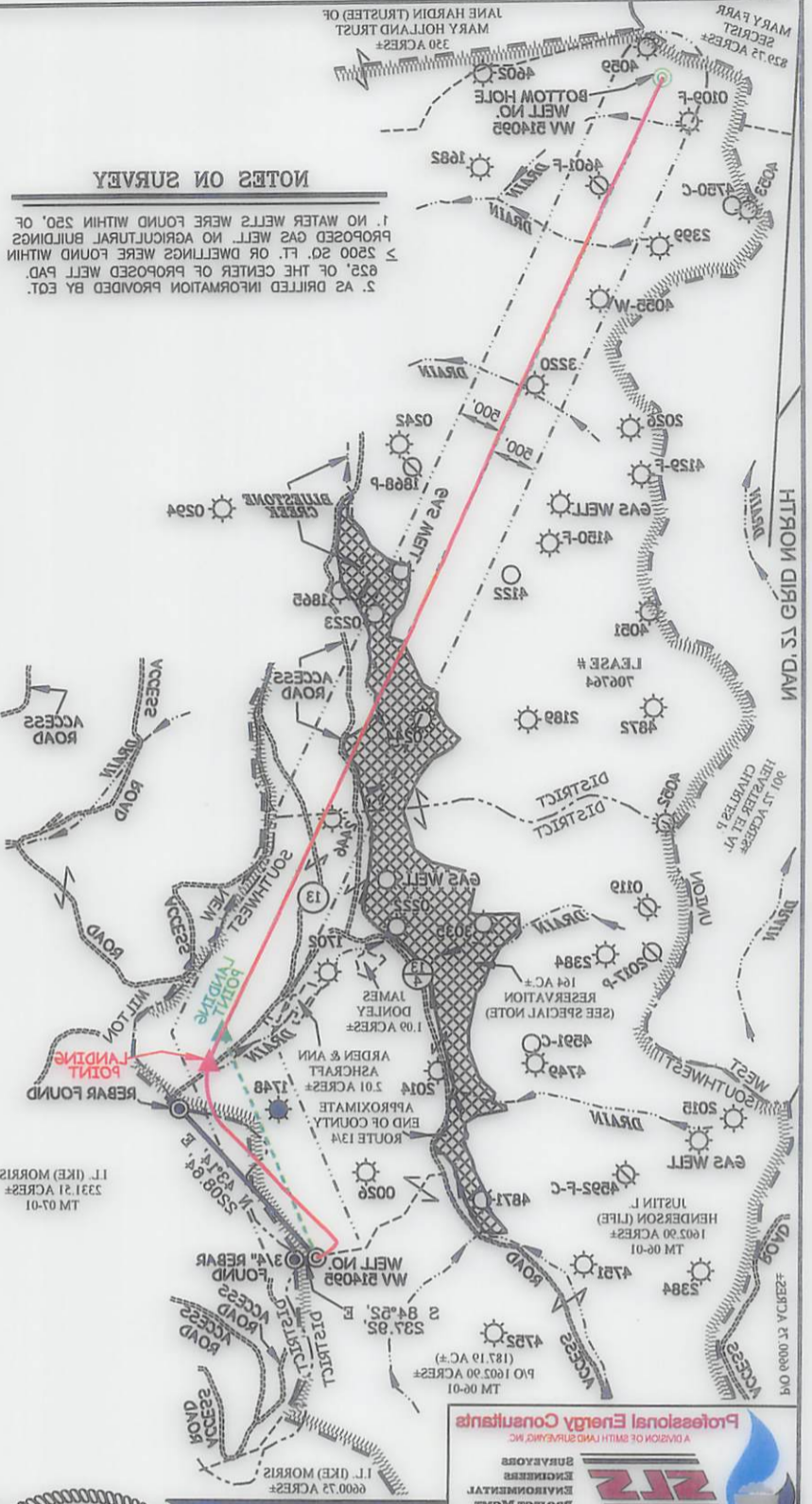
(OXF159 H6)
 2.164 ACRES ±
 LEEMAN MAXWELL LEASE
 EQT PRODUCTION COMPANY

(S.P.C. NORTH ZONE) (UTM) ZONE 17 NORTH
 NAD83 UTM (M) N. 4343,752.5 E. 219,338.4
 NAD27 GEO. LAT. (N) 38.242830 LONG. (W) 80.778100
 NAD27 S.P.C. (FT) N. 273,150.7 E. 1,638,885.9
BOTTOM HOLE
 NAD83 UTM (M) N. 4340,250.1 E. 250,910.9
 NAD27 GEO. LAT. (N) 38.213650 LONG. (W) 80.752855
 NAD27 S.P.C. (FT) N. 285,410.8 E. 1,643,275.5
LANDING POINT
 NAD83 UTM (M) N. 4338,877.2 E. 250,222.7
 NAD27 GEO. LAT. (N) 38.207835 LONG. (W) 80.752089
 NAD27 S.P.C. (FT) N. 280,320.2 E. 1,642,371.8

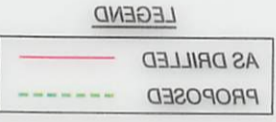
MODIFICATION
 3,426'

LATITUDE 38°12'30"
 LONGITUDE 80°12'00"
 181'

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. AS DRILLED INFORMATION PROVIDED BY EQT.



SPECIAL NOTE
 THERE IS NO SURVEY OR LEGAL DESCRIPTION DEFINING THE ACTUAL LOCATION OF THE 1.64 ACRE MEADOW AND RESERVATION. DUE TO THE PASSAGE OF TIME SINCE THE RESERVATION WAS CREATED IT APPEARS THERE IS NO LIVING PERSON(S) WITH KNOWLEDGE OF ITS TRUE LOCATION. LOCATION OF RESERVATION SHOWN HEREON COMPILED FROM: A MAP TITLED "CARNEGIE NATURAL GAS CO. LEEMAN MAXWELL LEASE, DODDRIE COUNTY, WEST VA." B. FROM THE WV GEOLOGICAL SURVEY. SLS ON 1/30 USDA AERIAL PHOTOGRAPHY OBTAINED FROM THE WV GEOLOGICAL SURVEY. SLS MAPPING GRADE GPS RECEIVER "C" DETAILS SHOWN A MAXWELL LANDS, WHICH WAS LOCATED USING A TRADER "CARNEGIE NATURAL GAS CO. LEEMAN MAXWELL LEASE, DODDRIE COUNTY, WEST VA." B. PERIMETER OF RESERVATION AS SHOWN BY GREEN MAP TITLED "CARNEGIE NATURAL GAS CO. LEEMAN MAXWELL LEASE, DODDRIE COUNTY, WEST VA." B. FROM THE WV GEOLOGICAL SURVEY. SLS RECOMMENDS THAT PROPER LEGAL STEPS BE TAKEN TO CONFIRM CONCURRENCE OF ALL APPROPRIATE PARTIES RELATIVE TO THE RESERVATION AS SHOWN HEREON. THIS PLAN IS SUBJECT TO ANY ADDITIONAL INFORMATION (UNDISCOVERED TO DATE) WHICH MAY CHANGE THE LOCATION AND/OR CONFIGURATION OF THE RESERVATION AS SHOWN HEREON.



L.I. (IKE) MORRIS	2321 S1 ACRES ±	TM 7-1
SUBSURFACE AGREEMENT		

Professional Energy Consultants
 A DIVISION OF SMITH LAND SURVEYING, INC.
 SURVEYORS
 ENGINEERS
 ENVIRONMENTAL
 PROJECT MGMT.
 WWW.ELLSURVEYING.COM
 (304) 462-0834

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS.
 DATE JANUARY 08, 2014
 REVISED 03/24/14, 04/01/15, 05/26/16 & 08/03/16
 OPERATORS WELL NO. WV 514095
 STATE 47
 COUNTY OXFORD
 PERMIT 06507



I THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAN IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AND SHOWS ALL INFORMATION RECORDED BY LAW AND THE REGULATIONS ISSUED AND PRESCRIBED BY THE DIVISION OF ENVIRONMENTAL PROTECTION.
 P. S. 2288
Earl N. Thompson

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

CONTROL DETERMINED BY HORIZONTAL & VERTICAL SCALE 1" = 2000'.
 MINIMUM DEGREE OF ACCURACY 1/200
 FILE NO. 7889AD514095RS

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 6893'

LOCATION:
 PAD ELEVATION 1,282.2'
 WATERSHED BLUESTONE CREEK
 DISTRICT SOUTHWEST
 COUNTY DODDRIE
 QUADRANGLE OXFORD 7.5
 SURFACE OWNER JUSTIN L. HENDERSON (LIFE)
 LEEMAN MAXWELL HRS
 ACRES 2.164 ±
 LEASE NO. 706764

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

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

01/20/2017

