

CRIM EAST UNIT 12H

BOTTOM HOLE ← 5466' TOP HOLE → 2891'

SCALE: 1" = 2000' LATITUDE: 39°30'00" (TOP HOLE)
 SCALE: 1" = 2000' LATITUDE: 39°27'30" (BOTTOM HOLE)

State Plane Coordinate
 West Virginia North

Top Hole Location	Landing Point Location	Bottom Hole Location
NAD 27 Feet	NAD 27 Feet	NAD 27 Feet
N: 354894.111	N: 355538.190	N: 347776.725
E: 1773568.362	E: 1775070.877	E: 1782697.037
UTM Zone 17 (SPCS83) Meters	UTM Zone 17 (SPCS83) Meters	UTM Zone 17 (SPCS83) Meters
N: 4369356.615	N: 4369560.475	N: 4367111.000
E: 560045.860	E: 560500.360	E: 562863.212
NAD 27	NAD 27	NAD 27
N 39.4716181	N 39.4734230	N 39.4522969
W 80.3021006	W 080.2967987	W 080.2695493

06/07/2019

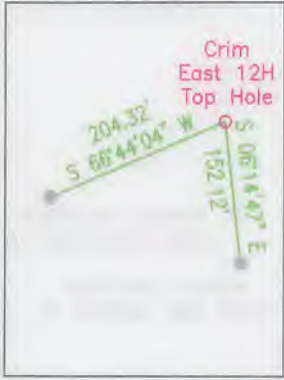
SCALE: 1" = 2400'



2168' ← TOP HOLE
 ← BOTTOM HOLE
 10307'
 SCALE: 1" = 2000' LONGITUDE: 80°17'30" (TOP HOLE)
 SCALE: 1" = 2000' LONGITUDE: 80°15'00" (BOTTOM HOLE)



REFERENCES
 1" = 200'



LINE LEGEND

LEASE BOUNDARY	— — — — —
SURFACE BOUNDARY	- - - - -
CREEK / STREAM	~~~~~
ROADS	— — — — —
PROPOSED LATERAL	—————
APPROXIMATE CURVE	- · - · -
500' LATERAL OFFSET	- · - · -
EXISTING GAS WELL	○

NOTES ON SURVEY

1. NO DWELLINGS WITHIN 625' WERE FOUND.
2. NO WATER WELLS OR DEVELOPED SPRINGS WITHIN 250' WERE FOUND.
3. TIES TO WELLS AND CORNERS ARE BASED ON STATE PLANE GRID NORTH WV NORTH ZONE NAD 83.
4. WELL ELEVATION ESTABLISHED BY RTK GPS NAVD 88.
5. SURFACE OWNER AND ADJOINER INFORMATION TAKEN FROM THE ASSESSOR AND COUNTY CLERK RECORDS OF MARION COUNTY IN OCTOBER 2018 AND FILES PROVIDED BY XTO ENERGY INC.
6. WELLS SHOWN ARE TAKEN FROM RECORDS OF WVDEP AND SURVEYED LOCATIONS OF WELLS WITHIN 500' OF WELL BORE.



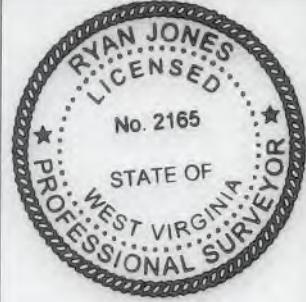
2402 PENNSYLVANIA 66 DELMONT, PA 15626
 (724) 757 - 2417 www.jonesconsultant.com

SHEET 1 OF 2

FILE #: JC2017-113
 DRAWING #: CRIM EAST UNIT 12H WELL
 SCALE: 1" = 2000'
 MINIMUM DEGREE OF ACCURACY: 1:2500
 PROVEN SOURCE OF ELEVATION: RTK GPS

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 RULES ISSUED AND PRESCRIBED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION.

Signed: [Signature]
 R.P.E.: _____ P.S.: 2165



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS
WVDEP
OFFICE OF OIL & GAS
 601 57TH STREET
 CHARLESTON, WV 25304



DATE: 11/12/2018
 OPERATOR'S WELL #: CRIM EAST UNIT 12H
 API WELL #: 47 049 02488
 STATE COUNTY PERMIT

Well Type: Oil Waste Disposal Production Deep
 Gas Liquid Injection Storage Shallow

WATERSHED: LOWER WEST FORK RIVER (0502000206) ELEVATION: 1,221' (EXISTING FINISH GRADE)
 COUNTY/DISTRICT: MARION / LINCOLN QUADRANGLE: SHINNSTON 7.5'
 SURFACE OWNER: ROCHESTER & PITTSBURGH COAL COMPANY ACREAGE: 55±
 OIL & GAS ROYALTY OWNER: LOUIS A. FERRARI, ET UX ACREAGE: 678.4±

DRILL CONVERT DRILL DEEPER REDRILL FRACTURE OR STIMULATE
 PLUG OFF OLD FORMATION PERFORATE NEW FORMATION PLUG & ABANDON
 CLEAN OUT & REPLUG OTHER CHANGE (SPECIFY): _____

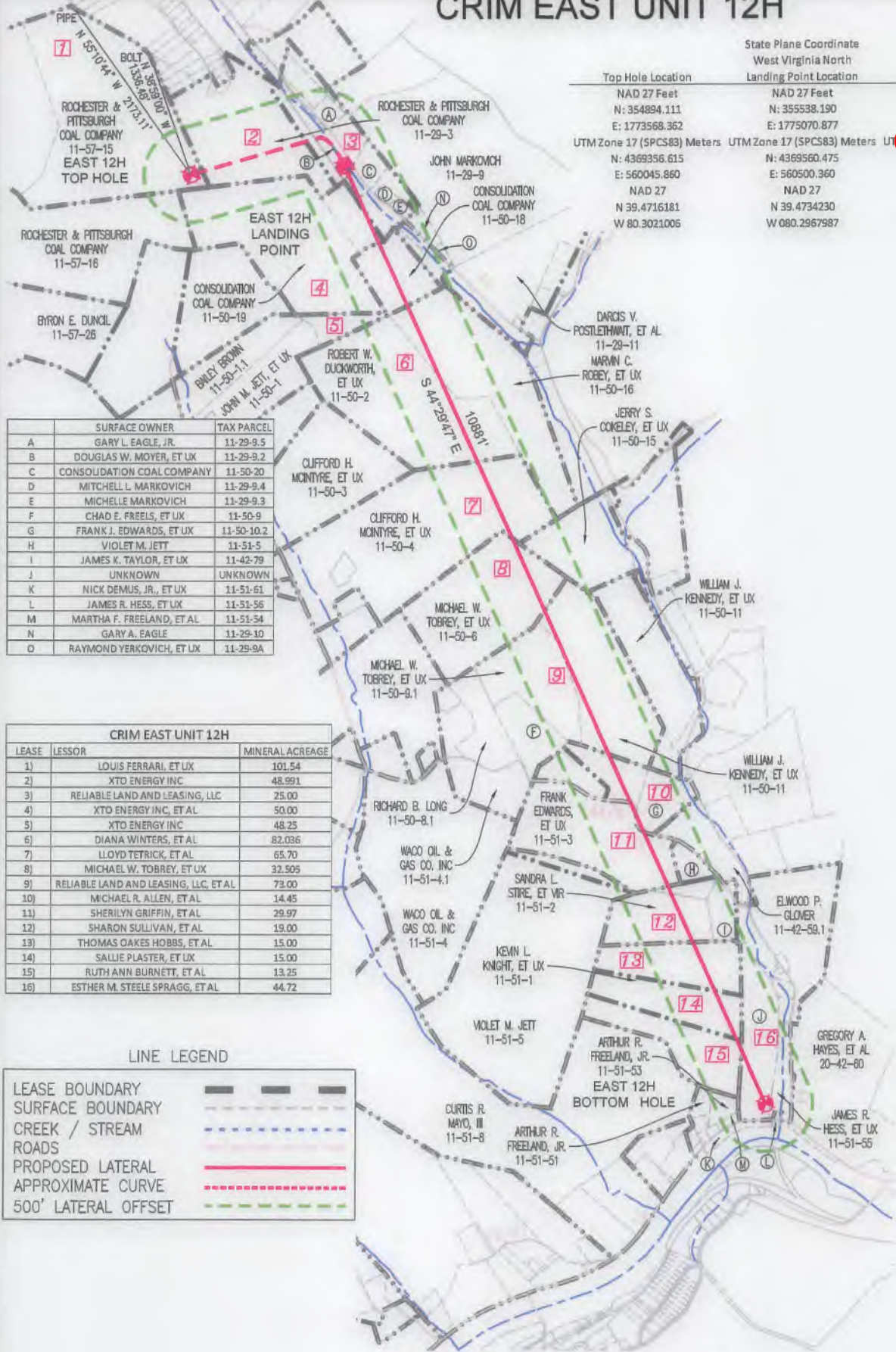
TARGET FORMATION: MARCELLUS ESTIMATED DEPTH: 7,563' (TVD), 18,814' (TMD)
 WELL OPERATOR: XTO ENERGY INC. DESIGNATED AGENT: GARY BEALL
 Address: 190 THORN HILL ROAD Address: P.O. BOX 1008
 City: WARRENDALE State: PA Zip Code: 15086 City: JANE LEW State: WV Zip Code: 26378

CRIM EAST UNIT 12H

State Plane Coordinate
West Virginia North

Top Hole Location	Landing Point Location	Bottom Hole Location
NAD 27 Feet N: 354894.111 E: 1773568.362	NAD 27 Feet N: 355538.190 E: 1775070.877	NAD 27 Feet N: 347776.725 E: 1782697.037
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06/07/2019



	SURFACE OWNER	TAX PARCEL
A	GARY L. EAGLE, JR.	11-29-9.5
B	DOUGLAS W. MOYER, ET UX	11-29-9.2
C	CONSOLIDATION COAL COMPANY	11-50-20
D	MITCHELL L. MARKOVICH	11-29-9.4
E	MICHELLE MARKOVICH	11-29-9.3
F	CHAD E. FREELS, ET UX	11-50-9
G	FRANK J. EDWARDS, ET UX	11-50-10.2
H	VIOLET M. JETT	11-51-5
I	JAMES K. TAYLOR, ET UX	11-42-79
J	UNKNOWN	UNKNOWN
K	NICK DEMUS, JR., ET UX	11-51-61
L	JAMES R. HESS, ET UX	11-51-56
M	MARTHA F. FREELAND, ET AL	11-51-54
N	GARY A. EAGLE	11-29-10
O	RAYMOND YERKOVICH, ET UX	11-29-9A

CRIM EAST UNIT 12H		
LEASE	LESSOR	MINERAL ACREAGE
1)	LOUIS FERRARI, ET UX	101.54
2)	XTO ENERGY INC	48.991
3)	RELIABLE LAND AND LEASING, LLC	25.00
4)	XTO ENERGY INC, ET AL	50.00
5)	XTO ENERGY INC	48.25
6)	DIANA WINTERS, ET AL	82.036
7)	LLOYD TETRICK, ET AL	65.70
8)	MICHAEL W. TOBREY, ET UX	32.505
9)	RELIABLE LAND AND LEASING, LLC, ET AL	73.00
10)	MICHAEL R. ALLEN, ET AL	14.45
11)	SHERILYN GRIFFIN, ET AL	29.97
12)	SHARON SULLIVAN, ET AL	19.00
13)	THOMAS OAKES HOBBS, ET AL	15.00
14)	SALLIE PLASTER, ET UX	15.00
15)	RUTH ANN BURNETT, ET AL	13.25
16)	ESTHER M. STEELE SPRAGG, ET AL	44.72

LINE LEGEND

LEASE BOUNDARY	---
SURFACE BOUNDARY	- - - -
CREEK / STREAM	~ ~ ~ ~
ROADS	— — — —
PROPOSED LATERAL	— — — —
APPROXIMATE CURVE	- · - · -
500' LATERAL OFFSET	- · - · -

NOTES ON SURVEY

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JONES CONSULTANTS, LLC

SURVEYING • MAPPING • LAND • GAS WELL • PIPELINE
2402 PENNSYLVANIA 66 DELMONT, PA 15626
(724) 757 - 2417 www.jonesconsultant.com



SUPPLEMENTAL SURFACE AND LESSOR EXHIBIT

CRIM EAST UNIT 12H

Drawn By: JRV	Date: 11/12/18	LINCOLN DISTRICT MARION COUNTY, WEST VIRGINIA
Scale: 1" = 1500'	Sheet: SHEET 2 OF 2	File No.: JC2017-113
AFE # 1106194		

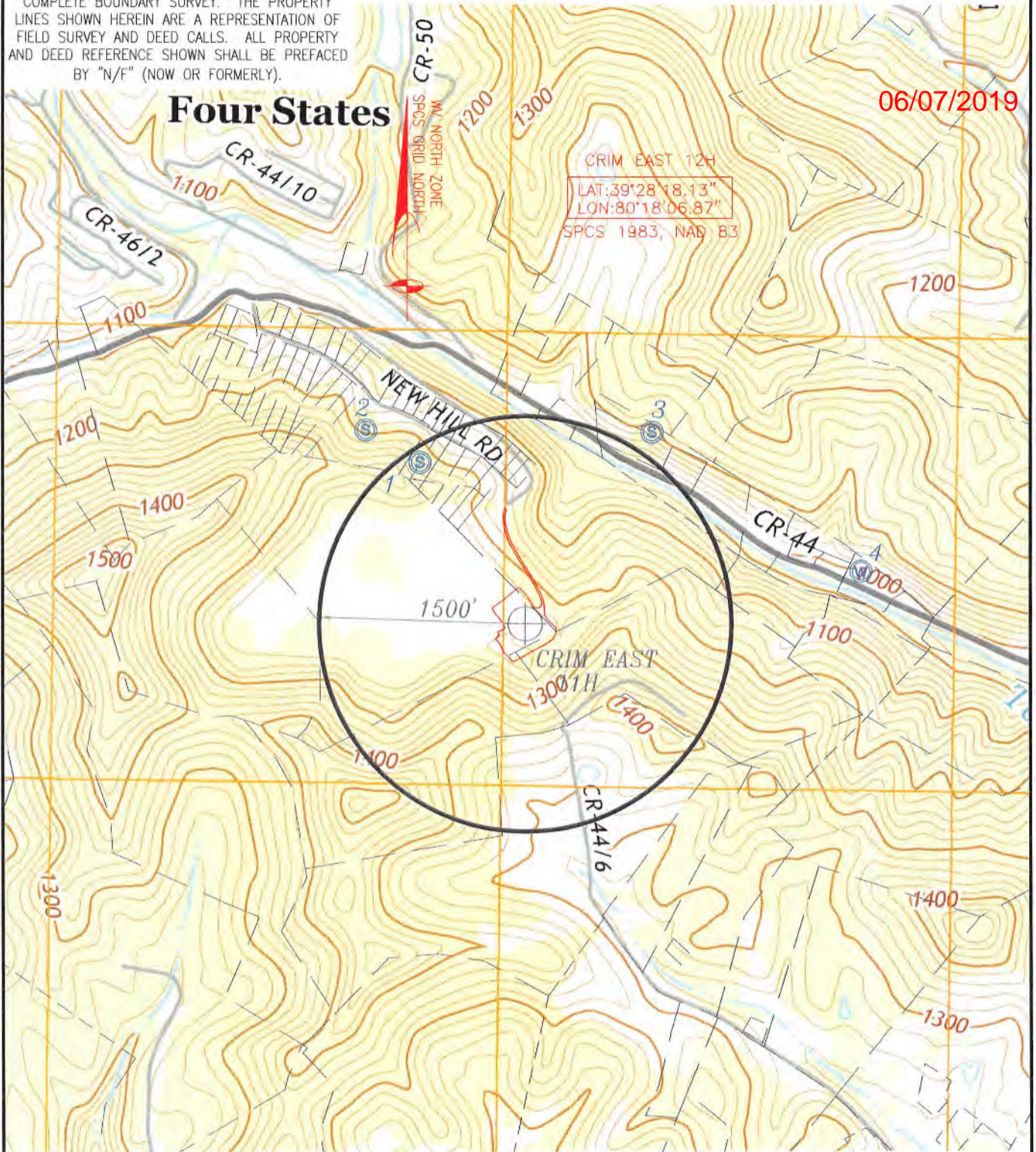
FORM W-9

NOTE: THIS PLAT IS FOR WELL LOCATION PURPOSES ONLY AND DOES NOT REPRESENT A COMPLETE BOUNDARY SURVEY. THE PROPERTY LINES SHOWN HEREIN ARE A REPRESENTATION OF FIELD SURVEY AND DEED CALLS. ALL PROPERTY AND DEED REFERENCE SHOWN SHALL BE PREFACED BY "N/F" (NOW OR FORMERLY).

LEGEND

- ⊙ WATER WELL
- ⊕ SPRING/POND/STREAM
- SURFACE BOUNDARY

06/07/2019



POINT	NAME	ADDRESS	CITY	STATE	ZIP CODE	DISTANCE	BEARING	PARCEL I.D.
1	Perry E. Hefflin	P.O. Box 155	Four States	WV	26572	1395'	N 33°08'42" W	Tax Map 11-54, Parcel 29
2	Jimmie & Betty Garrett	P.O. Box 54	Four States	WV	26572	1817'	N 39°33'45" W	Tax Map 11-54, Parcel 30
3	Douglas Moyer	78 Dora Lane	Worthington	WV	26591	1667'	N 33°36'59" E	Tax Map 11-29, Parcel 9.2
4	Gary A. Eagle	868 Four States Road	Worthington	WV	26591	2471'	N 81°09'17" E	Tax Map 11-29, Parcel 10

RECEIVED
Office of Oil and Gas

NOV 19 2018

WV Department of
Environmental Protection

CRIM EAST UNIT 12H WATER OVERALL

LINCOLN DISTRICT, MARION COUNTY, WEST VIRGINIA | 10/15/2018 | JC2017-113 | SHEET 1 OF 2



2402 PENNSYLVANIA 66
DELMONT, PA 15626
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Shinnston Quad (2014)
Marion County, WV
Scale: 1" = 1000'



190 THORN HILL ROAD
WARRENDALE, PA 15086