

BOTTOM HOLE ← 5145' TOP HOLE ← 5980'

ICE WEST UNIT 4H

LATITUDE: 39°27'30" SCALE: 1" = 2000'
(USE FOR BOTH TOP AND BOTTOM HOLES)

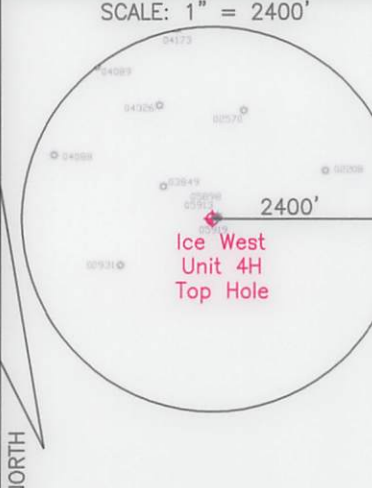
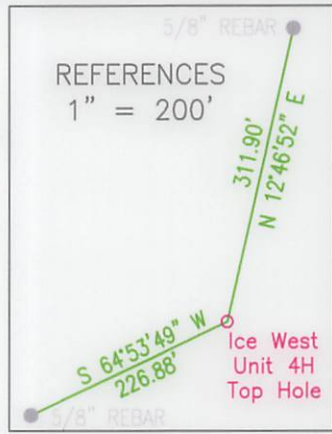
SCALE: 1" = 2400'

NOTES ON SURVEY

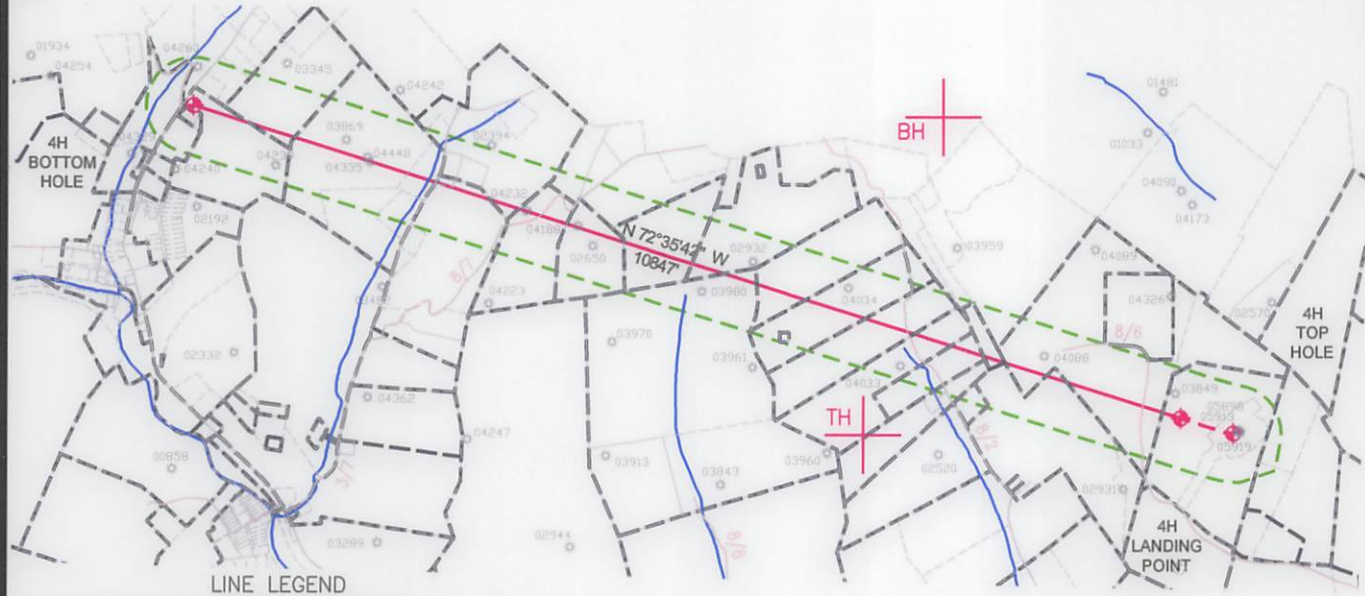
1. NO DWELLINGS WITHIN 625' WERE FOUND.
2. NO WATER WELLS OR DEVELOPED SPRINGS WITHIN 250' WERE FOUND.
3. TIES TO WELLS AND CORNERS ARE BASED ON STATE PLANE GRID NORTH WV NORTH ZONE NAD 83.
4. WELL ELEVATION ESTABLISHED BY RTK GPS NAVD 88.
5. SURFACE OWNER AND ADJOINER INFORMATION TAKEN FROM THE ASSESSOR AND COUNTY CLERK RECORDS OF HARRISON COUNTY IN MARCH 2019 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.

REFERENCES

1" = 200'



6656'
9954'
BOTTOM HOLE
TOP HOLE
SCALE: 1" = 2000' LONGITUDE: 80°17'30" (TOP HOLE)
SCALE: 1" = 2000' LONGITUDE: 80°20'00" (BOTTOM HOLE)



LINE LEGEND

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

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: 340098.965	N: 340253.566	N: 343498.266
E: 1770349.206	E: 1769797.017	E: 1759446.416
UTM Zone 17 (SPCS83) Meters	UTM Zone 17 (SPCS83) Meters	UTM Zone 17 (SPCS83) Meters
N: 4364832.717	N: 4364877.015	N: 4365812.991
E: 559140.184	E: 558971.165	E: 555801.215
NAD 27	NAD 27	NAD 27
N 39.4309194	N 39.4313301	N 39.4399746
W 80.3130291	W 80.3149889	W 80.3517399



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

SHEET 1 OF 2

FILE #: JC2018-83
DRAWING #: ICE WEST UNIT 4H
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: 7/22/2019
OPERATOR'S WELL #: ICE WEST UNIT 4H
API WELL #: 47 033 05957 H/A
STATE COUNTY PERMIT

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

WATERSHED: LOWER WEST FORK RIVER (0502000206) ELEVATION: 1,360' (EXISTING FINISH GRADE)
COUNTY/DISTRICT: HARRISON / CLAY QUADRANGLE: SHINNSTON 7.5'
SURFACE OWNER: XTO ENERGY INC ACREAGE: 7.23±
OIL & GAS ROYALTY OWNER: JANICE M. BRENNAN TRUST A, ET AL ACREAGE: 607.1±

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: 7,574' (TVD), 18,749' (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

LINE LEGEND

LEASE BOUNDARY	
SURFACE BOUNDARY	
CREEK / STREAM	
ROADS	
PROPOSED LATERAL	
APPROXIMATE CURVE	
500' LATERAL OFFSET	

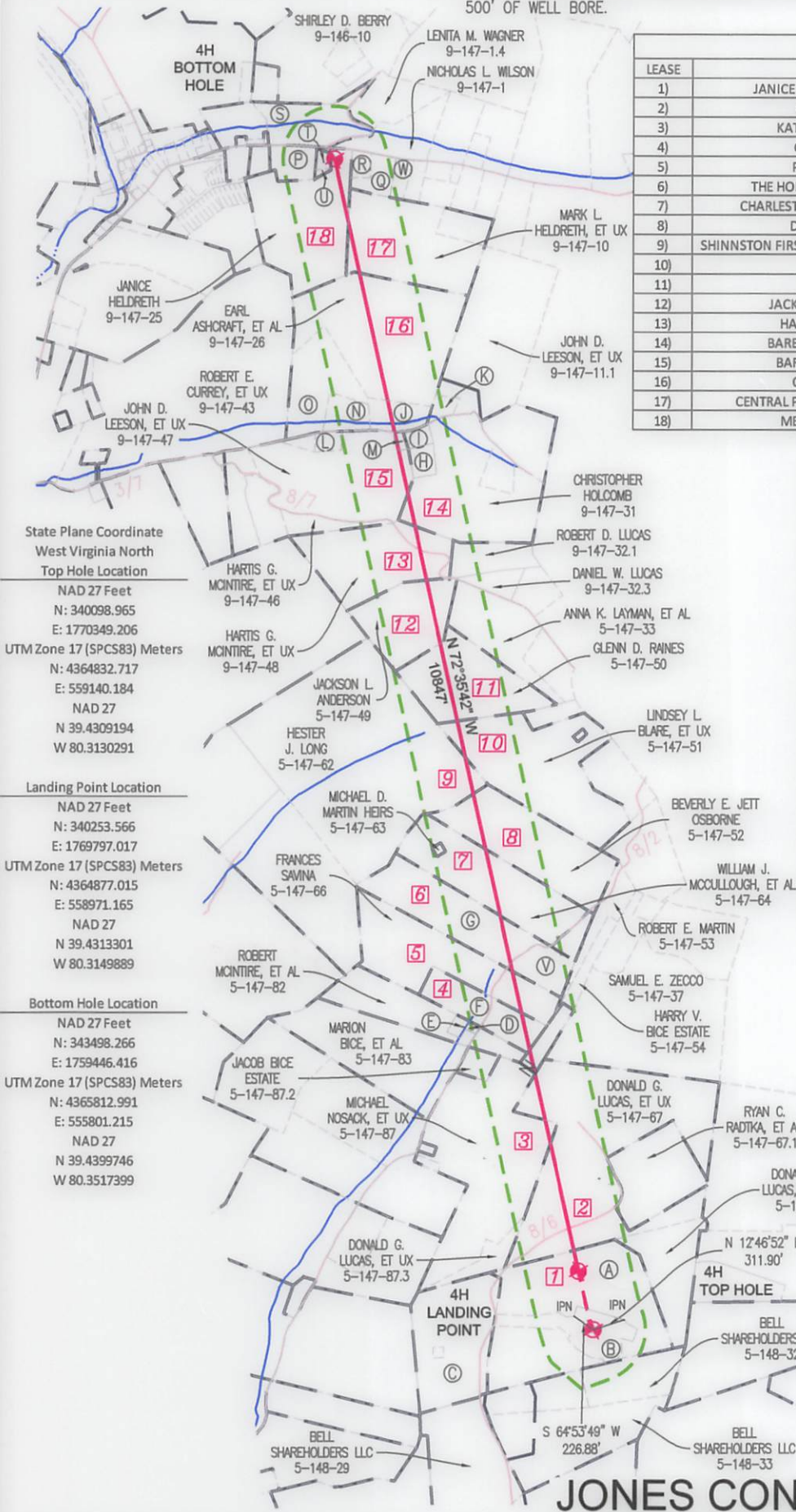
ICE WEST UNIT 4H

NOTES ON SURVEY

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ICE WEST UNIT 4H		
LEASE	LESSOR	MINERAL ACREAGE
1)	JANICE M. BRENNAN TRUST A, ET AL	39.50
2)	GARRETT BARD, ET AL	61.08
3)	KATHRYN P. FORTNEY, ET AL	42.117
4)	GENE D. VANCE, ET AL	8.75
5)	PAUL C. SAVINA, ET UX	21.50
6)	THE HORNOR HARDWARE COMPANY	22.25
7)	CHARLESTON NATIONAL BANK, TRUSTEE	21.77043159
8)	DAVID S. JOSEPH, ET AL	20.25
9)	SHINNSTON FIRST UNITED METHODIST CHURCH, ET AL	109.00
10)	ROSE M. SCOTT	27.31
11)	GLENN D. RAINES	17.625
12)	JACKSON L. ANDERSON, ET UX	13.00
13)	HARTIS G. MCINTIRE, ET AL	20.00
14)	BARBARA J. ANDERSON, ET VIR	38.00
15)	BARON W. CLAYPOOL, ET AL	32.39
16)	CARRIE M. KING, ET AL	60.00
17)	CENTRAL PITTSBURGH COAL CORPRATION	23.56
18)	MERLE E. HELDRETH, ET UX	28.98

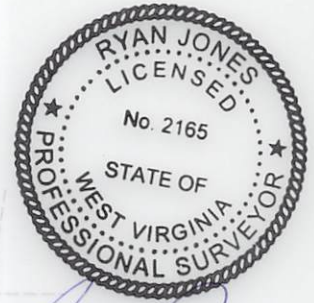
	SURFACE OWNER	TAX PARCEL
A	XTO ENERGY INC	5-148-27
B	XTO ENERGY INC	5-148-27.1
C	JOHN E. NAY JR., ET UX	5-148-28
D	HAROLD E. MCINTIRE, ET AL	5-147-82.1
E	HAROLD E. MCINTIRE, ET AL	5-147-81
F	MICHAEL SHANHOLTZ	5-147-80
G	WILLIAM J. MCCULLOUGH, ET AL	5-147-65
H	TILLIE M. DIPERNA	9-147-31.4
I	NAJ LLC	9-147-31.3
J	JOHN D. LEESON	9-147-29
K	JOHN D. LEESON	9-147-11
L	LISA A. MACKAY	9-147-47.2
M	CODY D. ROUZEE	9-147-30
N	EARL ASHCRAFT, ET AL	9-147-28
O	EARL ASHCRAFT, ET AL	9-147-27
P	MICHAEL R. UNDERWOOD, SR.	9-147-24
Q	JAMES HELDRETH, ET UX	9-147-8
R	JAMES HELDRETH, ET UX	9-147-9
S	CONSOLIDATION COAL COMPANY	9-147-1.2
T	MICHAEL D. HELDRETH	9-147-25.1
U	MICHAEL D. HELDRETH	9-147-25.2
V	CHARLES E. SMITH	5-147-101
W	DANNY R. ODELL, ET UX	9-147-8.2



State Plane Coordinate
West Virginia North
Top Hole Location
NAD 27 Feet
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E: 1770349.206
UTM Zone 17 (SPCS83) Meters
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E: 559140.184
NAD 27
N 39.4309194
W 80.3130291

Landing Point Location
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N: 340253.566
E: 1769797.017
UTM Zone 17 (SPCS83) Meters
N: 4364877.015
E: 558971.165
NAD 27
N 39.4313301
W 80.3149889

Bottom Hole Location
NAD 27 Feet
N: 343498.266
E: 1759446.416
UTM Zone 17 (SPCS83) Meters
N: 4365812.991
E: 555801.215
NAD 27
N 39.4399746
W 80.3517399



[Handwritten Signature]

JONES CONSULTANTS, LLC

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190 THORN HILL ROAD
WARRENDALE, PA 15086

0' 1200'






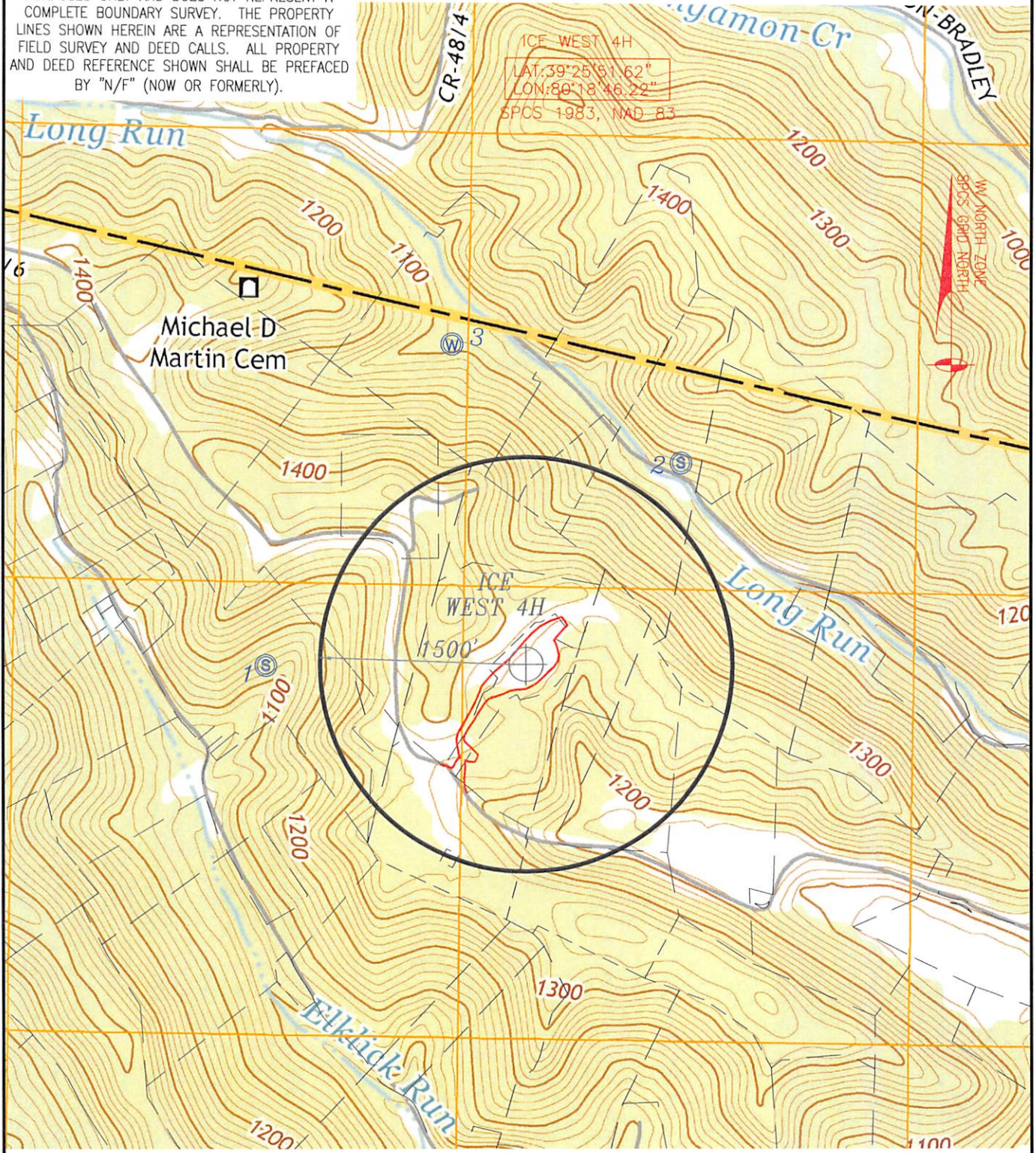
SUPPLEMENTAL SURFACE AND LESSOR EXHIBIT		
ICE WEST UNIT 4H		
Drawn By: JRV	Date: 7/22/19	CLAY DISTRICT HARRISON COUNTY, WEST VIRGINIA
Scale: 1" = 1500'	Sheet: SHEET 2 OF 2	File No.: JC2018-83
AFE # DD.2017.02323		

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



POINT	NAME	ADDRESS	CITY	STATE	ZIP CODE	DISTANCE	BEARING	PARCEL I.D.
1	Michael & Cynthia Nosack	712 Bices Run Road	Shinnston	WV	26431	1893'	S 89°47'21" W	Tax Map 5-147, Parcel 87
2	Faris W. & Margaret J. Coffindafer	24 Glenview Drive	Bridgeport	WV	26330	1846'	N 37°36'17" E	Tax Map 5-148, Parcel 4
3	Tina M. Veltri	48 White Oak Drive	Bridgeport	WV	26330	2382'	N 13°07'06" W	Tax Map 11-58, Parcel 37

RECEIVED
Office of Oil and Gas
JUL 08 2019
WV Department of
Environmental Protection

ICE WEST UNIT 4H WATER OVERALL

CLAY DISTRICT, HARRISON COUNTY, WEST VIRGINIA | 2/27/2019 | JC2018-83 | SHEET 1 OF 2



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Shinnston Quad (2014)
Marion County, WV
Scale: 1" = 1000'



190 THORN HILL ROAD
WARRENDALE, PA 15086