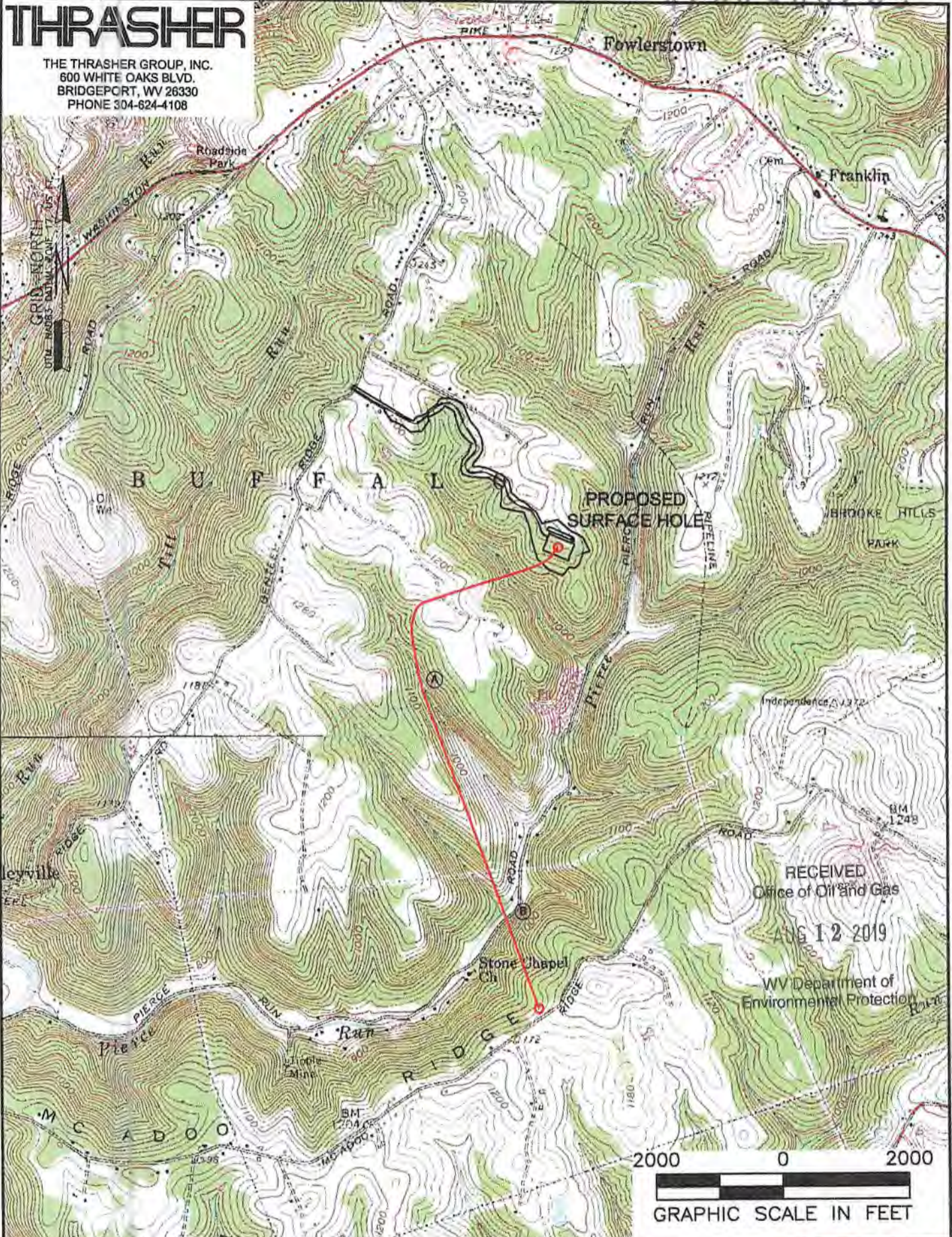












4700900285

THRASHER

THE THRASHER GROUP, INC.
600 WHITE OAKS BLVD.
BRIDGEPORT, WV 26330
PHONE 304-624-4108



RECEIVED
Office of Oil and Gas
AUG 12 2019
WV Department of
Environmental Protection

NAME AND DISTANCE TO THE NEAREST STREAM: AN UN-NAMED TRIBUTARY TO PIERCE RUN IS LOCATED ±0.16 MILES SOUTHWEST OF THE CENTER OF THE DRILL PAD.		STREAM CROSSING COORDINATES (NAD 83): A) LAT: 40.242426408° LONG: -80.559811152° B) LAT: 40.252629687° LONG: -80.564480881°		COMPANY:  	
WELL RESTRICTIONS: WELL PAD, LOD, & E & S CONTROL FEATURES TO PERENNIAL STREAM, LAKE, POND, RESERVOIR OR WETLAND: >100 FEET WELL PAD, LOD, & E & S CONTROL FEATURES TO NATURALLY PRODUCING TROUT STREAM: >300 FEET WELL PAD, LOD, & E & S CONTROL FEATURES TO GROUNDWATER INTAKE OR PUBLIC WATER SUPPLY: >1000 FEET WELL SHL TO EXISTING WATER WELL OR DEVELOPED SPRING: >250 FEET CENTER OF PAD TO OCCUPIED DWELLING STRUCTURE: >625 FEET CENTER OF PAD TO AGRICULTURAL BUILDINGS LARGER THAN 2500 SQ FT: >625 FEET		OPERATOR'S RUSSELL HERVEY BRK WELL #: 406H		LOCATION: BUFFALO DISTRICT, BROOKE COUNTY, WEST VIRGINIA	
FEMA FLOOD INFORMATION: NO FLOOD ZONES.		SURFACE HOLE LOCATION: GEOGRAPHIC (NAD83): LATITUDE: 40.258070269° LONGITUDE: -80.556536652°		BOTTOM HOLE LOCATION: GEOGRAPHIC (NAD83): LATITUDE: 40.238342443° LONGITUDE: -80.557876273°	
LEGEND:  PROPOSED SURFACE HOLE / BOTTOM HOLE  EXISTING / PRODUCING WELLHEAD LPL* LANDING POINT LOCATION  FLOOD PLAN  ACCESS ROAD  PUBLIC ROAD  ACCESS ROAD TO PREV. SITE  LEASE BOUNDARY  PROPOSED PATH		REVISIONS: UPDATED SURFACE OWNER NAMES		DATE: 07-12-2019	
				DRAWN BY: R. DOERR SCALE: 1" = 2000' DRAWING NO: 050-5495 TOPOGRAPHIC MAP	

(STUEBENVILLE EAST) Latitude: 40°17'30" SURFACE HOLE 4,232'

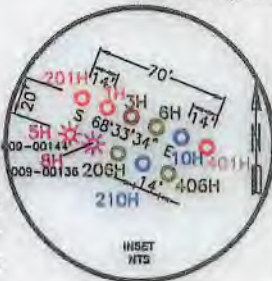
(BETHANY) Latitude: 40°15'00" BOTTOM HOLE 4,596'

THRASHER

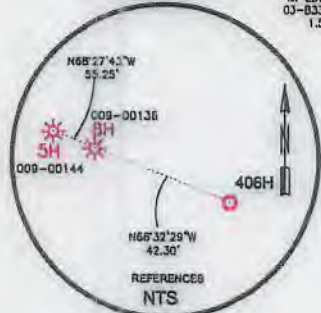
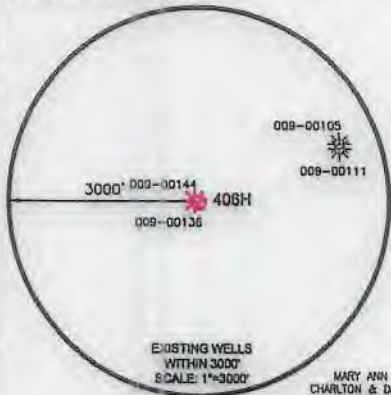
THE THRASHER GROUP, INC.
600 WHITE OAKS BLVD.
BRIDGEPORT, WV 26330
PHONE 304-824-4108

NOTES ON SURVEY

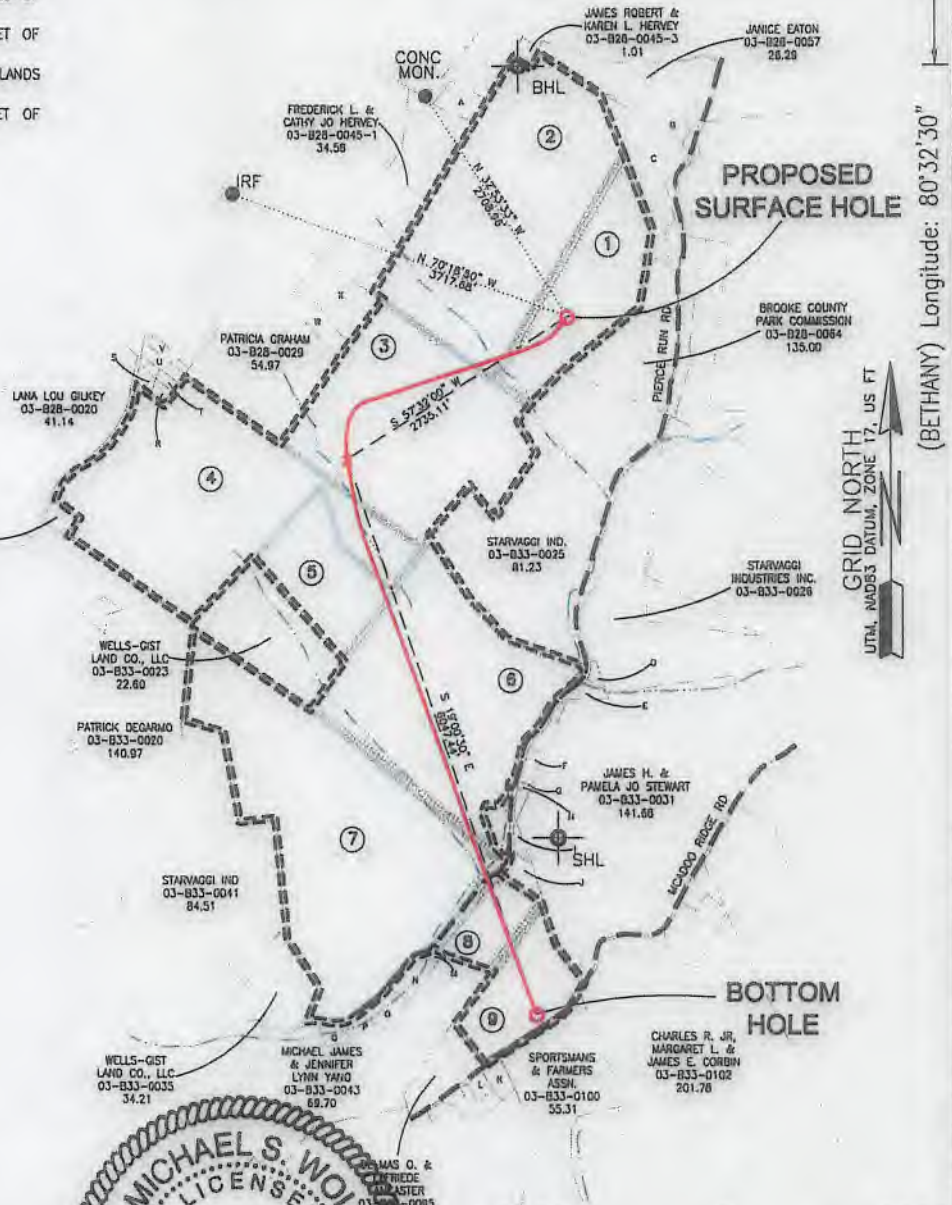
- COORDINATES SYSTEM IS UTM, NAD 83 DATUM, ZONE 17, U.S. FOOT AND WELL COORDINATES ESTABLISHED USING SURVEY GRADE GPS.
- SURFACE AND ROYALTY OWNER INFORMATION AND THEIR BOUNDARIES SHOWN HEREON WERE PLOTTED FROM DEEDS AND/OR TAX PARCEL MAPS PROVIDED BY CLIENT AND FIELD LOCATIONS.
- THIS PLAT DOES NOT REPRESENT A BOUNDARY SURVEY OF THE PARCELS SHOWN HEREON.
- NO DWELLINGS AND BUILDINGS WITHIN 625 FEET OF PROPOSED OF CENTER OF PAD.
- NO WATER WELLS OR DEVELOPED SPRINGS WITHIN 250 FEET OF PROPOSED WELL.
- NO PERENNIAL STREAMS, LAKES, PONDS, RESERVOIRS OR WETLANDS WITHIN 100 FEET OF THE LIMITS OF DISTURBANCE.
- NO NATURALLY PRODUCING TROUT STREAM WITHIN 300 FEET OF LIMITS OF DISTURBANCE.



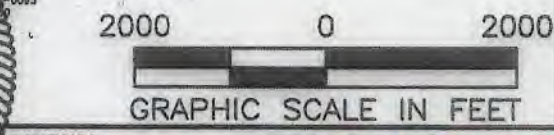
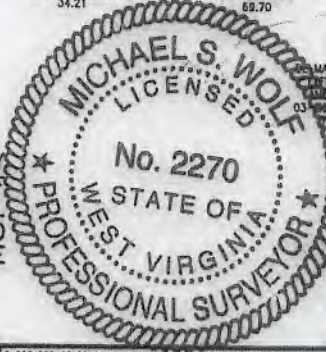
WELL BORE TABLE FOR SURFACE / ROYALTY OWNERS			
TRACT	ROYALTY OWNER	TAX PARCEL	ACRES
1	RUSSELL D. & LISA K. HERVEY	03-828-0045	37.84
TRACT	SURFACE OWNER	TAX PARCEL	ACRES
1	RUSSELL D. HERVEY	03-828-0045	37.84
2	WILLIAM JUDSON HERVEY III	03-828-0045-2	111.50
3	PATRICIA GRAHAM	03-828-0043	87.05
4	DONNA M. SULLIVAN	03-833-0022	110.55
5	WELLS-GIST LAND CO., INC.	03-833-0024	26.41
6	WELLS-GIST LAND CO., INC.	03-833-0029	93.50
7	WELLS-GIST LAND CO., INC.	03-833-0040	112.00
8	WELLS-GIST LAND CO., INC.	03-833-0035	34.21
9	MELVIN & DORIS CULBERTSON	03-833-0096	24.28
10	WEST VIRGINIA DEPARTMENT OF TRANSPORTATION, DIVISION OF HIGHWAYS	COUNTY ROAD 20 PIERCE RUN ROAD	23.46



SURFACE HOLE LOCATION (SHL):
UTM (NAD83, ZONE 17, METERS):
NORTHING: 4,456,495.45
EASTING: 537,711.07
LANDING POINT LOCATION (LPL):
UTM (NAD83, ZONE 17, METERS):
NORTHING: 4,456,047.93
EASTING: 537,007.71
BOTTOM HOLE LOCATION (BHL):
UTM (NAD83, ZONE 17, METERS):
NORTHING: 4,454,305.18
EASTING: 537,608.07



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 REGULATIONS ISSUED AND PRESCRIBED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION.



P.S. 2270 *[Signature]* 7/12/19

COMPANY: **SWN** Production Company, LLC

(4) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS
 WVDEP
 OFFICE OF OIL & GAS
 601 57TH STREET
 CHARLESTON, WV 25034

MINIMUM DEGREE OF ACCURACY: 1/200
 PROVEN SURVEY SOURCE OF GRADE GPS ELEVATION: (NAVD 88, US FT)

RUSSELL HERVEY BRK
 OPERATOR'S WELL #: 406H
 API WELL #: 47 STATE COUNTY PERMIT

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

WATERSHED: BUFFALO CREEK
 DISTRICT: BUFFALO COUNTY: BROOKE
 SURFACE OWNER: RUSSELL D. HERVEY
 OIL & GAS ROYALTY OWNER: RUSSELL D. HERVEY & LISA K. HERVEY
 DRILL DRILL DEEPER REDRILL FRACTURE OR STIMULATE PLUG OFF OLD FORMATION PERFORATE NEW FORMATION
 CONVERT PLUG & ABANDON CLEAN OUT & REPLUG OTHER CHANGE (SPECIFY)
 TARGET FORMATION: MARCELLUS ESTIMATED DEPTH: 5,968' TVD 12,951' TMD

WELL OPERATOR: SWN PRODUCTION COMPANY, LLC
 ADDRESS: 1300 FORT PIERPONT DRIVE SUITE 201
 CITY: MORGANTOWN STATE: WV ZIP CODE: 26508
 DESIGNATED AGENT: BRITTANY WOODY
 ADDRESS: 1300 FORT PIERPONT DRIVE SUITE 201
 CITY: MORGANTOWN STATE: WV ZIP CODE: 26508

LEGEND:	REVISIONS: UPDATED SURFACE OWNER NAMES	DATE: 07-12-2019
○ PROPOSED SURFACE HOLE / BOTTOM HOLE	— SURVEYED BOUNDARY	
⊙ EXISTING / PRODUCING WELLHEAD	— DRILLING UNIT	
LPL * LANDING POINT LOCATION	== LEASE BOUNDARY	
⊙ EXISTING WATER WELL	— PROPOSED PATH	
⊙ EXISTING SPRING		
	DRAWN BY: R. DOERR	
	SCALE: 1" = 2000'	
	DRAWING NO: 050-5495	
	WELL LOCATION PLAT	

THRASHER

THE THRASHER GROUP, INC.
600 WHITE OAKS BLVD.
BRIDGEPORT, WV 26330
PHONE 304-624-4108

ADJOINING OWNERS TABLE			
TRACT	SURFACE OWNER	TAX PARCEL	ACRES
A	CHARLIE D. & BRITNEY L. FARRIS	03-B28-0045-4	3.26
B	BERNARD J. III & NICOLE C. KNORR	03-B28-0057-2	3.65
C	BERNARD J. III & NICOLE C. KNORR	03-B28-0059	17.39
D	STELLA MERWICK	03-B33-0027	0.50
E	THEODORE EDWIN & MELISSA ANN EATON	03-B33-0028	1.75
F	SHARON A. CUNNINGHAM	03-B33-0032	1.06
G	SHARON A. CUNNINGHAM	03-B33-0033-1	0.05
H	JANICE F. EATON	03-B33-033	0.21
I	SHARON CUNNINGHAM	03-B33-0030	4.24
J	WELLS-GIST LAND CO., LLC	03-B33-0034	2.07
K	SCOTT L. EDGELL	03-B33-0099	1.73
L	BRIAN T. & JACINDA D. LONG	03-B33-0098	1.00
M	STONE CHAPEL CHURCH	03-B33-0036	0.30
N	JON T. & MARLENA L. SMITH	03-B33-0037	2.00
O	FLOYD HENNIS, LEONA LAROCHE & TANA DISHER	03-B33-0038	2.18
P	FLOYD HENNIS, LEONA LAROCHE & TANA DISHER	03-B33-0039	1.10
Q	CHARLES S. JR. & ETHEL F. RUSSELL	03-B33-0042	1.00
R	ALEXANDER L. SR. & DONNA J. DIGHT	03-B28-0022	0.67
S	ALEXANDER L. SR. & DONNA J. DIGHT	03-B28-0021	0.74
T	ALEXANDER L. & DONNA J. DIGHT	03-B28-0023	0.66
U	RYAN S. & CAROLYN A. BOOK	03-B28-0025	1.60
V	DONALD & SHERRI YOHO	03-B28-0026	1.00
W	RANDY & PATRICIA GRAHAM	03-B28-0029-1	3.39
X	RANDY R. & PATRICIA J. GRAHAM	03-B28-0042	4.59

COMPANY:

SWN

SWN ^{R⁺}/_A ^{V⁺}

Production Company, LLC Production Company™

REVISIONS: UPDATED SURFACE OWNER NAMES	DATE: 07-12-2019
	SHEET 2 OF 2
	DRAWN BY: R. DOERR
	SCALE: NOT TO SCALE
	DRAWING NO: 050-5495
	WELL LOCATION PLAT