

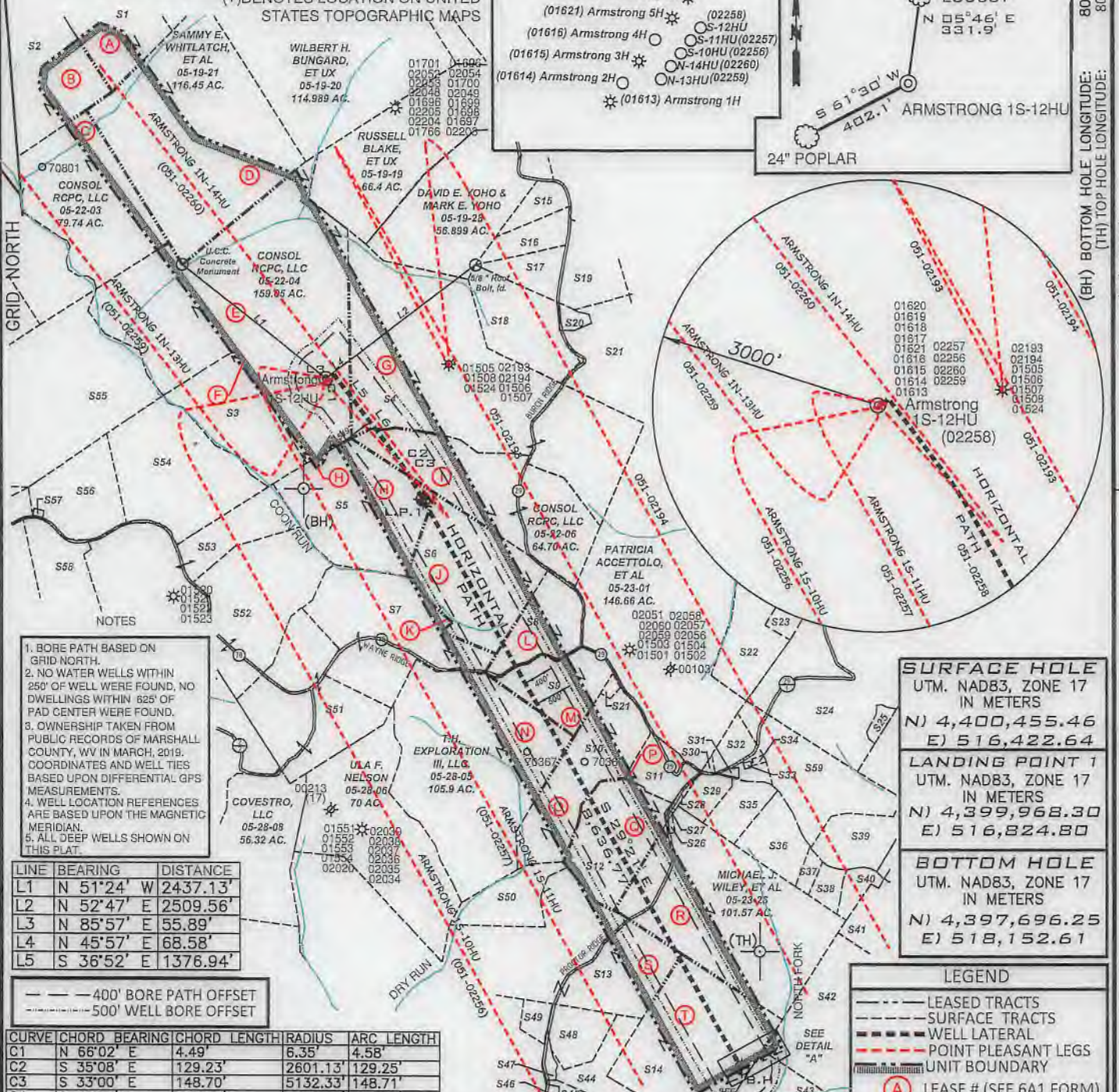
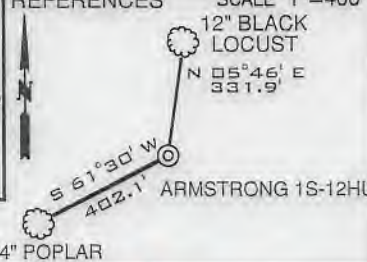
ARMSTRONG LEASE WELL 1S-12HU 551.5786± ACRES

(+) DENOTES LOCATION ON UNITED STATES TOPOGRAPHIC MAPS

DETAIL (01620) Armstrong 9H
 SKETCH "A" (01619) Armstrong 8H
 SCALE 1"=200' Armstrong 7H (01618)
 (01617) Armstrong 6H
 (01621) Armstrong 5H (02258)
 (01616) Armstrong 4H (02257)
 (01615) Armstrong 3H (02256)
 (01614) Armstrong 2H (02255)
 (01613) Armstrong 1H

TOP HOLE LATITUDE: 39°47'30"
BOTTOM HOLE LATITUDE: 39°45'00"

REFERENCES SCALE 1"=400'



- NOTES
1. BORE PATH BASED ON GRID NORTH.
 2. NO WATER WELLS WITHIN 250' OF WELL WERE FOUND, NO DWELLINGS WITHIN 825' OF PAD CENTER WERE FOUND.
 3. OWNERSHIP TAKEN FROM PUBLIC RECORDS OF MARSHALL COUNTY, WV IN MARCH, 2019. COORDINATES AND WELL TIES BASED UPON DIFFERENTIAL GPS MEASUREMENTS.
 4. WELL LOCATION REFERENCES ARE BASED UPON THE MAGNETIC MERIDIAN.
 5. ALL DEEP WELLS SHOWN ON THIS PLAT.

LINE	BEARING	DISTANCE
L1	N 51°24' W	2437.13'
L2	N 52°47' E	2509.56'
L3	N 85°57' E	55.89'
L4	N 45°57' E	68.58'
L5	S 36°52' E	1376.94'

--- 400' BORE PATH OFFSET
 - - - 500' WELL BORE OFFSET

CURVE	CHORD	BEARING	CHORD LENGTH	RADIUS	ARC LENGTH
C1	N 66°02' E	4.49'	6.35'	4.58'	
C2	S 35°08' E	129.23'	2601.13'	129.25'	
C3	S 33°00' E	148.70'	5132.33'	148.71'	
C4	S 30°37' E	397.46'	8077.77'	397.50'	

SURFACE HOLE
 UTM, NAD83, ZONE 17
 IN METERS
 N) 4,400,455.46
 E) 516,422.64

LANDING POINT 1
 UTM, NAD83, ZONE 17
 IN METERS
 N) 4,399,968.30
 E) 516,824.80

BOTTOM HOLE
 UTM, NAD83, ZONE 17
 IN METERS
 N) 4,397,696.25
 E) 518,152.61

LEGEND

- LEASE TRACTS
- - - SURFACE TRACTS
- - - WELL LATERAL
- - - POINT PLEASANT LEGS
- - - UNIT BOUNDARY
- (A) LEASE # (SEE 6A1 FORM)

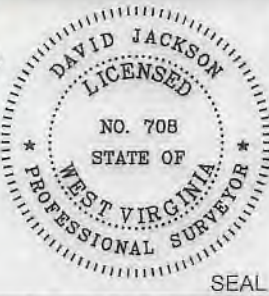
FILE NUMBER _____
 DRAWING NUMBER: ARMSTRONG_1S-12HU_REV2
 SCALE: 1" = 2000'
 MINIMUM DEGREE OF ACCURACY: 1/200
 PROVEN SOURCE OF ELEVATION: SUBMETER MAPPING
GRADE GPS

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

P.S. 708
David L Jackson



JACKSON SURVEYING INC.
 P.O. Box 1460
 Clarksburg, WV 26302
 304-623-5851



WVDEP
 OFFICE OF OIL & GAS
 601 57TH STREET, SE
 CHARLESTON, WV 25304

DATE: JULY 22, 2019
 REVISED: NOVEMBER 05, 2019
 OPERATORS WELL NO. Armstrong 1S-12HU

WELL TYPE: OIL ___ GAS X LIQUID INJECTION ___ WASTE DISPOSAL ___
 (IF "GAS") PRODUCTION X STORAGE ___ DEEP X SHALLOW ___
 LOCATION ELEVATION 1279.12' WATERSHED (HUC 10) FRENCH CREEK - OHIO RIVER
 DISTRICT FRANKLIN COUNTY MARSHALL
 QUADRANGLE POWHATAN POINT 7.5' LEASE NUMBER SEE WW-6A1 Form

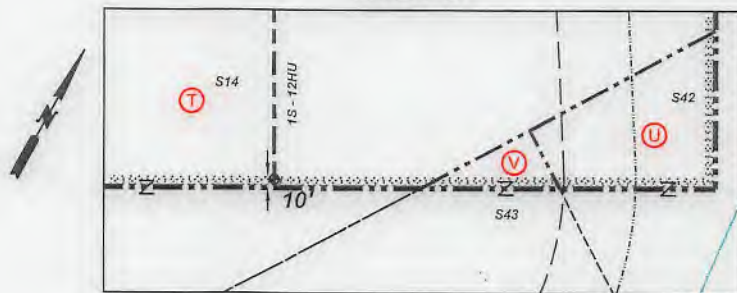
SURFACE OWNER CONSOL RCPC, LLC. ACREAGE 159.05
 OIL & GAS ROYALTY OWNER CONSOL RCPC, LLC. LEASE ACREAGE 159.05
 PROPOSED WORK: DRILL X CONVERT ___ DRILL DEEPER ___ REDRILL ___ FRACTURE OR STIMULATE X PLUG OFF OLD FORMATION ___
 PERFORATE NEW FORMATION ___ OTHER PHYSICAL CHANGE (SPECIFY) _____
 PLUG & ABANDON ___ CLEAN OUT & REPLUG ___
 TARGET FORMATION POINT PLEASANT ESTIMATED DEPTH TVD: 11,417' TMD: 20,559'
 WELL OPERATOR TUG HILL OPERATING, LLC DESIGNATED AGENT DIANNA STAMPER
1320 SOUTH UNIVERSITY DRIVE, SUITE 500 ADDRESS 5400 D BIG TYLER ROAD
FORT WORTH, TX 76107 ADDRESS CHARLESTON, WV 25313

COUNTY NAME
 PERMIT

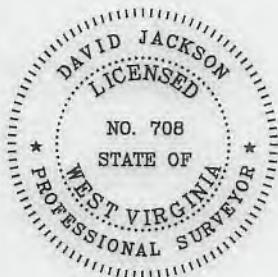
**ARMSTRONG LEASE
WELL 1S-12HU
551.5786± ACRES**

Number	TAX MAP-PARCEL	SURFACE OWNER	ACRES
S1	A 05-19-3	Milton R. & Linda L. Neal	72.01
S2	B 05-19-22	George A. Knuth & Kelly A. Knuth	71.0
S3	F 05-22-17	Consol RCPC, LLC	37.5
S4	G 05-22-5	Consol RCPC, LLC	134.425
S5	H 05-22-10	T.H. Exploration III, LLC.	58.40
S6	J 05-22-8	T.H. Exploration III, LLC.	48.44
S7	K 05-22-9	T.H. Exploration III, LLC.	63.44
S8	L 05-22-7.1	XcL Midstream Operating, LLC. & Atinum Marcellus I, LLC.	20.68
S9	M 05-22-7	Patricia Accettolo, et al	25.02
S10	O 05-23-28	Gregg D. Minor	39.43
S11	P 05-23-28.2	Tammac Holdings Corp.	10.8
S12	Q 05-23-27	Michael J. Wiley, et al	33.140
S13	S 05-26-2	Edwin Booth Anderson & Mark W. Booth	67.5
S14	T 05-26-5	Michael J. Wiley, et al	65.0
S15	05-19-27	David E. Yoho & Mark E. Yoho	7.041
S16	05-19-26	Roger J. & Beth E. James	9.977
S17	05-19-25	David E. Yoho & Mark E. Yoho	9.976
S18	05-19-18.2	Paul V. & Carol Neely	32.672
S19	05-19-24	Mark E. Yoho	15.436
S20	05-19-18.1	Mark E. Yoho, et ux	2.57
S21	05-19-18	Mark E. Yoho, et ux	55.948
S22	05-23-2	Daniel J. & Danielle D. Lilley	70.0
S23	05-23-2.2	Jessica N. & Andrew L. Jones	7.636
S24	05-23-4	Abe J. Hochstetler	100.7
S25	05-23-4.1	XcL Midstream Operating, LLC	2.16
S26	05-23-25	Arthur A. Wiley	0.43
S27	05-23-24	Michael J. Wiley, et al	0.25
S28	05-23-23	Michael J. Wiley, et al	1.0
S29	05-23-22	Daniel D. Rhyand & Laurel R. Greene	6.25
S30	05-23-29	James Wiley	0.25
S31	05-23-21	Mark A. Yoho & Mark E. Yoho	0.588
S32	05-23-18.1	Mark A. Yoho	7.8
S33	05-23-20	Christian Church	0.19
S34	05-23-19	Doty Cemetery	1.0
S35	05-23-17.1	Curtis E. Hall et ux	10.051
S36	05-23-17.2	Dick Rowan, Jr & Carol J. Rowan	14.920
S37	05-23-17.4	Tammy D. Meadows	2.605
S38	05-23-17	Tammy & Thomas E. Brown	4.62
S39	05-23-16	Roy Friend Yoho, Sr.	18.03
S40	05-23-17.3	William & Katherine Flewelling	5.018
S41	05-23-14	Dominion Transmission Inc.	59.5
S42	U 05-26-7	Dominion Transmission Inc.	71.0
S43	V 05-26-6	Heartwood Forestland Fund VII LP	36.17
S44	05-26-4.4	Otis F. & Glenda M. Rush	39.436
S45	05-26-4.1	Otis S. Rush, et ux	12.188
S46	05-26-4.3	Crystal & Randolph F. Matask	2.253
S47	05-26-4.2	Otis S. Rush, et ux	1.58
S48	05-26-4.6	Otis F. Rush, Jr.	12.268
S49	05-26-4	James R. & Melody Anderson	3.887
S50	05-26-1	Edwin Booth Anderson & Mark W. Booth	12.94
S51	05-28-4	T.H. Exploration III, LLC.	48.44
S52	05-22-11	T.H. Exploration III, LLC.	55.65
S53	05-22-12	T.H. Exploration III, LLC.	61.49
S54	05-22-16	Edward R. Yoho, Jr.	57
S55	05-22-18	Edward R. Yoho, Jr.	77.13
S56	05-22-15	Edward R. Yoho, Jr.	25.5
S57	05-22-14	Consol RCPC, LLC	0.3
S58	05-22-13	John M. Moore, Teresa R. Moore & Andrea S. Moore	40.57
S59	05-23-18	Abe J. Hochstetler	35.38

DETAIL "A"



47-051-02258 mob



P.S. 708 *David L Jackson*



**TUG HILL
OPERATING**

OPERATOR'S
WELL #: Armstrong 1S-12HU
DISTRICT: Franklin
COUNTY: Marshall
STATE: WV
API: 47-051-02258

WELL PLAT
PAGE 2 OF 4
DATE: 07/22/2019
REVISED: 11/05/2019