

State of West Virginia
Department of Environmental Protection - Office of Oil and Gas
Well Operator's Report of Well Work

API: 47-049-02250 County: MARION District: MANNINGTON
Quad: MANNINGTON Pad Name: BEATY Field/Pool Name: MARCELLUS SHALE
Farm name: BEATY WELL NAME: BEATY 1H
Operator (as registered with the OOG): TRANS ENERGY, INC.
Address: P. O. BOX 393 City: ST. MARYS State: WV Zip: 26170

As Drilled Location NAD 83/UTM *** SEE ATTACHED WELL PROFILE AND DEVIATION SURVEY - 7 PAGES ***

Top hole	Northing	<u>4376358</u>	Easting	<u>554624</u>
Landing Point of curve	Northing	<u>4376467</u>	Easting	<u>554600</u>
Bottom hole	Northing	<u>4374944</u>	Easting	<u>555450</u>

Elevation (ft): 1,343' GL Type of Well: NEW Type of Report: FINAL

Permit Type: HORIZONTAL 6A Depth Type: SHALLOW

Type of Operation: DRILL

Well Type: GAS

Type of Completion: SINGLE Fluids Produced: BRINE and GAS

Drilled With: ROTARY

Drilling Media: MUD Intermediate hole: MUD

Production hole: MUD

Mud Type(s) and Additive(s) MUD TYPE - SYNTHETIC BASE DRILLING MUD

ADDITIONS:	Calcium Carbonate	Hydrated Lime	Synvert Synthetic 1-L	Citric Acid	Drispac Low Vis
	Calcium Chloride	Cedar Fiber	Bentonite	Sodium Bicarbonate	L-20C
	Synvert LEM	Rubber Crumb	Soda Ash, dense	Glycerine	Bioclear
	Synvert Synthetic WA-L	Cottonseed Hulls	Lignite	Desco	
	Barite	Synvert Synthetic 11-L	Aluminum Sterate	Caustic Soda Beads	

Date permit issued: 3/20/2013 Date drilling commenced: 7/20/2013 Date drilling ceased: 9/18/2013

Date completion activities began: 11/14/2013 Date completion activities ceased: 11/26/2013

Verbal plugging: N/A Date permission granted: N/A Granted by: N/A

Please note: Operator is required to submit a plugging application within 5 days of verbal permission to plug.

Fresh water depth (s) ft: 50', 150' Open mine(s) (Y/N) depths: N

Salt water depth(s) ft: 1,525' Void(s) encountered (Y/N) depths: N

Coal Depth(s) ft: 900' Cavern(s) encountered (Y/N) depths: N

Is coal being mined in area (Y/N) N

APPROVED
NAME: Sam Ward
DATE: 8/23/2017
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MAR 20 2015

Reviewed by: _____

09/15/2017

API:	<u>47-049-02250</u>	WELL NAME : <u>BEATY 1H</u>
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CASING STINGS	Hole Size	Casing Size	Depth	New or Used	Grade wt/ft	Basket Depth(s)	Did cement circulate (Y/N) Provide details below.
Conductor	<u>26"</u>	<u>20"</u>	<u>100'</u>	<u>NEW</u>	<u>J-55 / 94</u>	-	-
Surface	<u>17 1/2"</u>	<u>13 3/8"</u>	<u>460'</u>	<u>NEW</u>	<u>J-55 / 54.5</u>	-	-
Coal	-	-	-	-	-	-	-
Intermediate 1	<u>12 1/2"</u>	<u>9 5/8"</u>	<u>3103'</u>	<u>NEW</u>	<u>J-55 / 36</u>	-	-
Intermediate 2	-	-	-	-	-	-	-
Intermediate 3	-	-	-	-	-	-	-
Production	<u>8 3/4"</u>	<u>5 1/2"</u>	<u>14700'</u>	<u>NEW</u>	<u>P-110 / 20</u>	-	-
Tubing	-	-	-	-	-	-	-
Packer type and Depth Set							

Comment Details:

CEMENT DATA	Class / type of Cement	Number of Sacks	Slurry wt (ppg)	Yield (ft ³ /sks)	Volume (ft ³)	Cement Top (MD)	WOC (hrs)
Conductor	-	-	-	-	-	-	-
Surface	-	<u>735</u>	<u>15.2</u>	<u>1.226</u>	<u>901</u>	<u>Surface</u>	<u>7.00</u>
Coal	-	-	-	-	-	-	-
Intermediate 1	-	-	-	-	-	<u>Surface</u>	-
Intermediate 2	-	-	-	-	-	-	-
Intermediate 3	-	-	-	-	-	-	-
Production	<u>50/50 POZ / H</u>	<u>1521 / 1745</u>	<u>14 / 15.6</u>	<u>1.32 / 1.18</u>	<u>2008 / 2059</u>	<u>Surface</u>	-
Tubing	-	-	-	-	-	-	-

Drillers TD (ft): 14700' Loggers TD (ft): 14,702'
 Deepest formation penetrated: MARCELLUS SHALE Plug back to (ft): N/A
 Plug back procedure: N/A

Kick off depth (ft) 7,202'

Check all wireline logs run: caliper density deviated/directional induction
 neutron resistivity gamma ray temperature sonic

Well cored? **NO** Were cuttings collected? **NO**

DESCRIBE THE CENTRALIZER PLACEMENT USED FOR EACH CASING STRING

FRESH WATER STRING - 1 CENTRALIZER EVERY 160'

INTERMEDIATE STRING - 1 CENTRALIZER EVERY 100' FROM 3,300' TO 900'

PRODUCTION STRING - 1 CENTRALIZER EVERY 80' FROM TD TO ABOVE ROP 7000'

WAS WELL COMPLETED AS SHOT HOLE? **YES** DETAILS: _____

WAS WELL COMPLETED OPEN HOLE? **NO** DETAILS: _____

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WERE TRACERS USED? **NO** TYPE OF TRACER(S) USED: N/A

API: 47-049-02250 WELL NAME: BEATY 1H

PRODUCING FORMATION(S) MARCELLUS SHALE
 DEPTHS 7735' TVD 8899' MD

GAS TEST: N/A OIL TEST: N/A

SHUT-IN Surface: _____ psi Bottom hole: _____ psi DURATION OF TEST: _____ hrs

OPEN FLOW GAS: _____ mcpd OIL: _____ bpd NGL: _____ bpd WATER: _____ bpd GAS MEASURED BY: ESTIMATED

LITHOLOGY / FORMATION TOP DEPTH IN FT BOTTOM DEPTH IN FT TOP DEPTH IN FT BOTTOM DEPTH IN FT MD DESCRIBE ROCK TYPE AND RECORD QUANTITY AND TYPE OF FLUID (FRESHWATER, BRINE, OIL, GAS, H2S, ETC)

SAND	632'	638'
DUNDARD SAND	710'	759'
1 SALT SAND	1252'	1341'
2ND SALT SAND	1464'	1573'
3RD SALT SAND	1606'	1704'
BIG LIME	1922'	1990'
BIG INJUN	2011'	2101'
BEREA	2218'	2223'
30 FOOT	2554'	2588'
GORDON	2653'	2701'
4TH	2705'	2747'
5TH	2823'	2838'
RILEY	4333'	4365'
BENSON	4721'	4738'
ALEXANDER	4847'	4882'
ELK	5113'	5165'
HAMILTON	6875'	6875'
MIDDLESEX	7295'	7460'
BURKETT	7488'	7516'
TULLY LIMESTONE	7522'	7652'
MARCELLUS	7654'	7714'
ONONDAGA	7753'	7753'

Please insert additional pages as applicable.

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Drilling Contractor: HELMERICH & PAYNE INTERNATIONAL DRILLING COMPANY
Address: 1437 SOUTH BOULDER AVENUE City: TULSA State: OK Zip: 74119

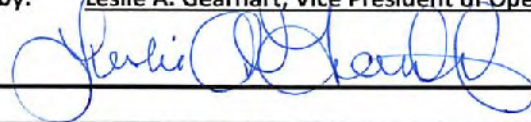
Logging Contractor: HORIZONTAL WIRELINE SERVICES
Address: P. O. BOX 1046 City: WOOSTER State: OH Zip: 44691

Cementing Company: BAKER HUGHES
Address: 17015 ALDINE WESTFIELD ROAD City: HOUSTON State: TX Zip: 77073-5101

Stimulating Company: GO FRAC
Address: 7000 CALMONT AVENUE, SUITE 310 City: FORT WORTH State: TX Zip: 76116

Completed by: Leslie A. Gearhart, Vice President of Operations

Telephone: 304/684-7053

Signature: 

DATE: 3-17-15

**** SEE ATTACHMENT ENTITLED "HYDRAULIC FRACTURING FLUID PRODUCT COMPONENT INFORMATION DISCLOSURE" ****

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TRANS ENERGY, INC. - HYDRAULIC FRACTURING FLUID PRODUCT COMPONENT INFORMATION DISCLOSURE

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 Office of Oil & Gas
 MAR 20 2015

Fracture Start Date:	11/13/2013
Fracture End Date:	
State:	WEST VIRGINIA
County:	MARION
API Number:	47-049-02250
Operator Name:	Trans Energy, Inc.
Well Name:	BEATY 1H
Federal Well:	No
Longitude:	80.364339
Latitude:	39.535105
Long/Lat Projection:	NAD27
True Vertical Depth (TVD):	7,735'
Total Clean Fluid Volume* (gal):	9,462,390

Ingredients Section:

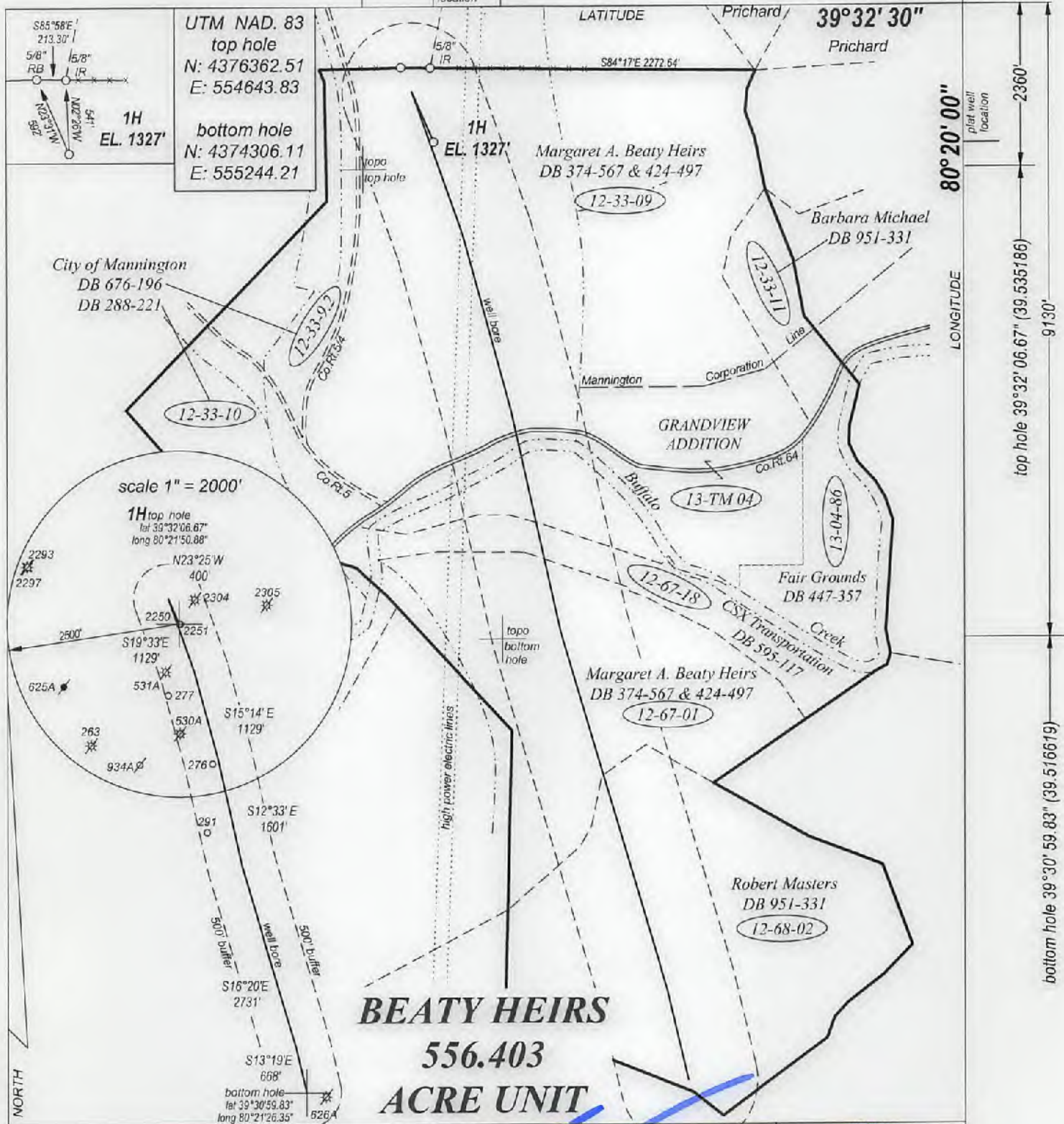
Trade Name	Supplier	Purpose	Ingredients	Chemical Abstract Service Number (CAS #)	Maximum Ingredient Concentration in Additive (% by mass)**	Maximum Ingredient Concentration in HF Fluid (% by mass)**	Comments
Freshwater	Republic Energy	Frac Base	Water	7732-18-5	100.00%	90.99702%	None
100 Mesh	US Silica	Proppant	Sand	14808-60-7	100.00%	1.99967%	None
40/70 White Sand	US Silica	Proppant	Sand	14808-60-7	100.00%	3.80059%	None
30/50 White Sand	US Silica	Proppant	Sand	14808-60-7	100.00%	2.81133%	None
HCl Acid 10-15%	GoFrac	Acid	Hydrochloric Acid	7647-01-0	15.00%	0.03856%	None
Ferriplex 66	Chemplex	Iron Control	Acetic Acid	64-19-7	50.00%	0.00031%	None
			Citric Acid	77-92-9	30.00%	0.00019%	None
			Water	7732-18-5	35.00%	0.00022%	None
Greenflush	Chemplex	Cleaner	Alcohol Ethoxylate Surfactants	Proprietary	10.00%	0.00087%	None
Plexbreak 145	Chemplex	Non-Emulsifier	Cocamide Diethanolamine Salt	68603-42-9	10.00%	0.00005%	None
			Diethanolamine	111-42-2	5.00%	0.00003%	None
			Ethylene Glycol Monobutyl Ether	111-76-2	15.00%	0.00008%	None
			Methyl Alcohol	67-56-1	15.00%	0.00008%	None
			Water	7732-18-5	66.00%	0.00034%	None
Plexhib 256	Chemplex	Corrosion Inhibitor	Alcohol Ethoxylate Surfactants	Proprietary	30.00%	0.00014%	None
			Methyl Alcohol	67-56-1	70.00%	0.00032%	None
			n-olefins	Proprietary	10.00%	0.00005%	None
			Propargyl Alcohol	107-19-7	8.00%	0.00004%	None
			Thiourea-formaldehyde copolymer	68527-49-1	30.00%	0.00014%	None
Sodium Persulfate	Chemplex	Active Breaker	Sodium Persulfate	7775-27-1	100.00%	0.00128%	None
Plexslic 953	Chemplex	Friction Reducer	Alcohol Ethoxylate Surfactants	Proprietary	8.00%	0.00552%	None
			Hydrotreated Petroleum Distillate	64742-47-8	30.00%	0.02070%	None
			Polyacrylamide-co-acrylic acid	Proprietary	32.00%	0.02208%	None
			Water	7732-18-5	35.00%	0.02415%	None
Beta M-4.0	PFP	Guar Gel	Guar Gum	9000-30-0	50.00%	0.02685%	None
			Petroleum Distillate	64742-47-8	55.00%	0.02953%	None
			Clay	Proprietary	5.00%	0.00268%	None

top hole 80°21' 50.88" (80.364325)

8720'

bottom hole 80°21' 26.35" (80.357319)

6720'



80°20'00"

top hole 39°32'06.67" (39.535186)

9130'

bottom hole 39°30'59.83" (39.516619)

FILE NO. _____
 DRAWING NO. _____
 SCALE 1" = 1000'
 MINIMUM DEGREE OF ACCURACY 1:200
 PROVEN SOURCE OF ELEVATION GPS
 OBSERVATION

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 DEPARTMENT OF ENERGY

(SIGNED) _____
 PROFESSIONAL SURVEYOR: 551



STATE OF WEST VIRGINIA
 DEPARTMENT OF ENERGY
 DIVISION OF OIL AND GAS

DATE MARCH 3RD, 2015
 OPERATORS WELL NO. BEATY 1H
 AS DRILLED

WELL TYPE: OIL GAS LIQUID INJECTION _____ WASTE DISPOSAL _____
 (IF GAS) PRODUCTION STORAGE _____ DEEP _____ SHALLOW

API 47 - 049 - 02250
 STATE COUNTY PERMIT

LOCATION: ELEVATION 1327' WATER SHED BUFFALO CREEK
 DISTRICT MANNINGTON COUNTY MARION QUADRANGLE MANNINGTON

SURFACE OWNER MARGARET A. BEATY HEIRS ACREAGE 226.53
 OIL & GAS ROYALTY BEATY HEIRS, ET AL LEASE AC 556.403

PROPOSED WORK: DRILL CONVERT _____ DRILL DEEPER _____ REDRILL _____
 FRACTURE OR STIMULATE _____ PLUG OFF OLD FORMATION _____
 PERFORATE NEW FORMATION _____
 OTHER PHYSICAL CHANGE IN WELL _____
 PLUG AND ABANDON _____ CLEAN OUT AND REPLUG _____

TARGET FORMATION MARCELLUS SHALE ESTIMATED DEPTH 7200'

WELL OPERATOR TRANS ENERGY, INC. DESIGNATED AGENT LOREN BAGLEY
 ADDRESS P. O. BOX 393 ADDRESS P. O. BOX 393
 ST. MARYS, WV 26170 ST. MARYS, WV 26170

FORM WW - 6

COUNTY NAME
PREMIT

09/15/2017

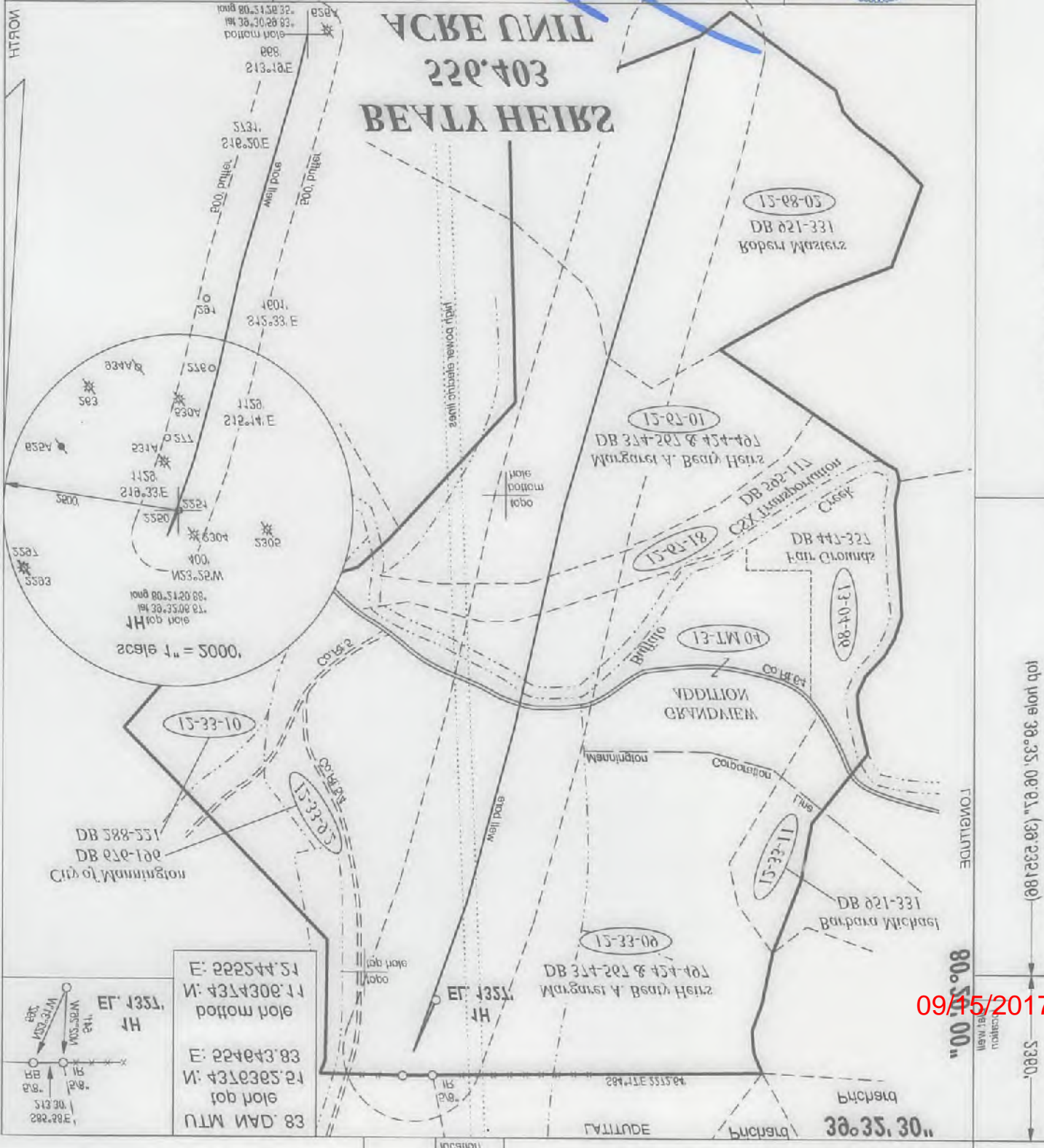
ADDRESS 21' MARYS' NW 3810 ADDRESS 21' MARYS' NW 3810
 WELL OPERATOR TRANS ENERGY INC DESIGNATED AGENT LOREN BAGLEY
 TARGET FORMATION MARCELLUS SHALE ESTIMATED DEPTH 1500
 PLUG AND ABANDON CLEAN OUT AND REGRUE
 OTHER PHYSICAL CHANGE IN WELL
 REFORATE NEW FORMATION
 FRACTURE OR STIMULATE PLUG OFF OLD FORMATION
 PROPOSED WORK: DRILL XX CONVERT DRILL DEEPER REDRILL
 OIL & GAS FLOWLTY BEATY HEIRS, ET AL LEASE AC 220.403
 SURFACE OWNER MARGARET A BEATY HEIRS ACREAGE 550.23
 DISTRICT MANNINGTON COUNTY MARIION QUADRANGLE MANNINGTON
 LOCATION: ELEVATION 1357 WATER SHED BUEFAVO CREEK
 (IF GAS) PRODUCTION XX STORAGE DEEP SHALLOW XX AP1 41 - 040 - 05520
 WELL TYPE: OIL XX GAS XX LIQUID INJECTION WASTE DISPOSAL

DIVISION OF OIL AND GAS
 DEPARTMENT OF ENERGY
 STATE OF WEST VIRGINIA

AS DRILLED
 OPERATORS WELL NO BEATY 41
 DATE MARCH 3RD 2012

OBSERVATION
 OF ELEVATION GS2
 PROVEN SOURCE
 OF ACCURACY 1:500
 MINIMUM DEGREE
 SCALE 1" = 1000
 DRAWING NO
 SHEET NO

PROFESSIONAL SURVEYOR: 221
 (SIGNED)
 AND PRESCRIBED BY THE DEPARTMENT OF ENERGY
 REQUIRED BY LAW AND THE REGULATIONS ISSUED
 AND BELIEF AND SHOWS ALL THE INFORMATION
 THAT IS CORRECT TO THE BEST OF MY KNOWLEDGE
 IN THE UNDERSIGNED HEREBY CERTIFY THAT THIS



09/15/2017

top hole 80.51, 20.88, (80.324352)

bottom hole 80.51, 20.32, (80.321310)

bottom hole 38.30, 09.83, (38.210910)

top hole 38.35, 09.81, (38.232180)

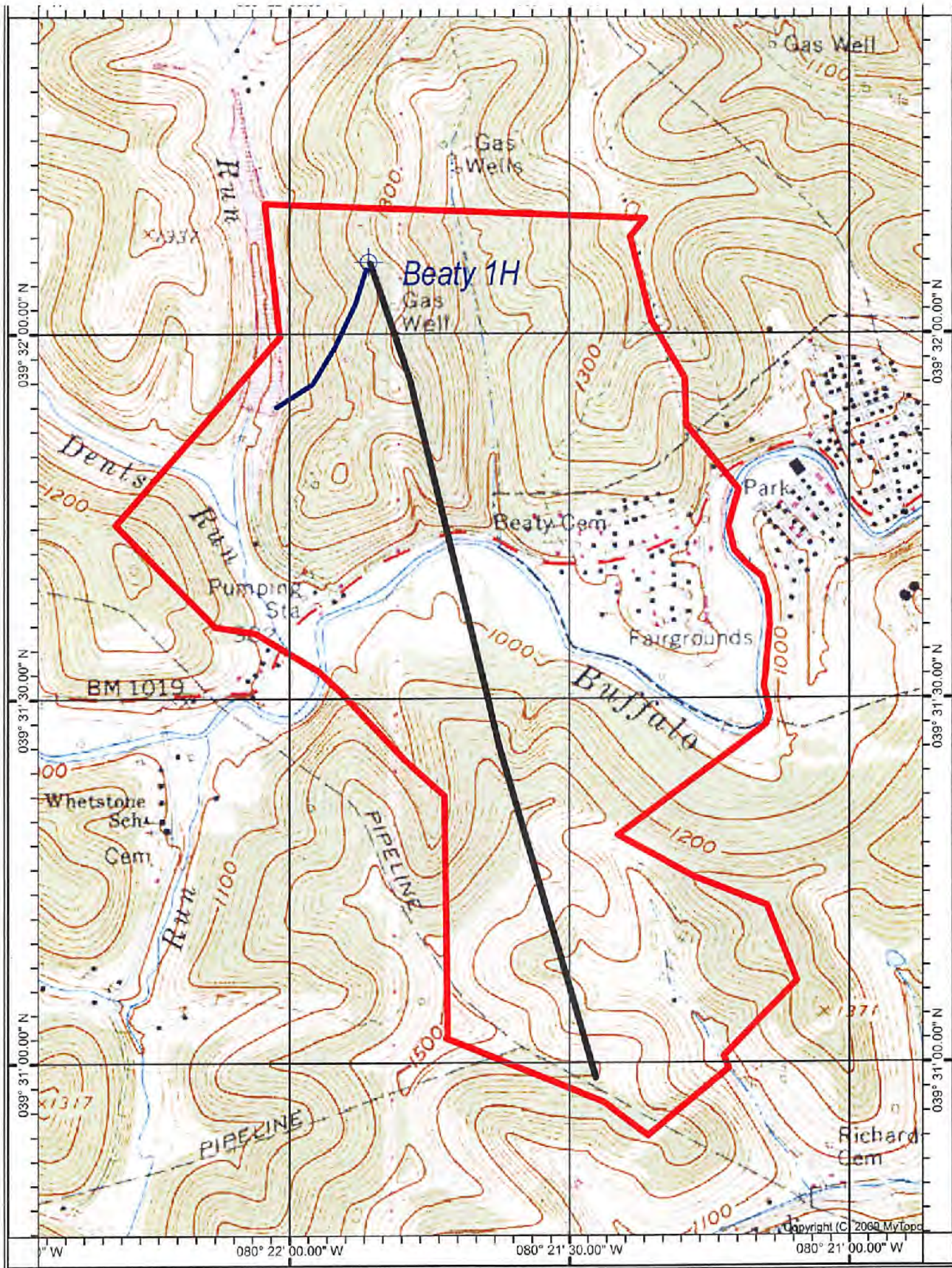
0130

5390

80.5100"

FORM MW-8

PLANNED
COMPLETED



MANNINGTON QUADRANGLE

SCALE 1" = 1000'

TRANS ENERGY, INC.

WELL: BEATY 1H
 BEATY HEIRS, ET AL 556.403 ACRE UNIT

MANNINGTON DISTRICT UNION COUNTY WEST VIRGINIA

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 Office of Oil & Gas

MAR 20 2015

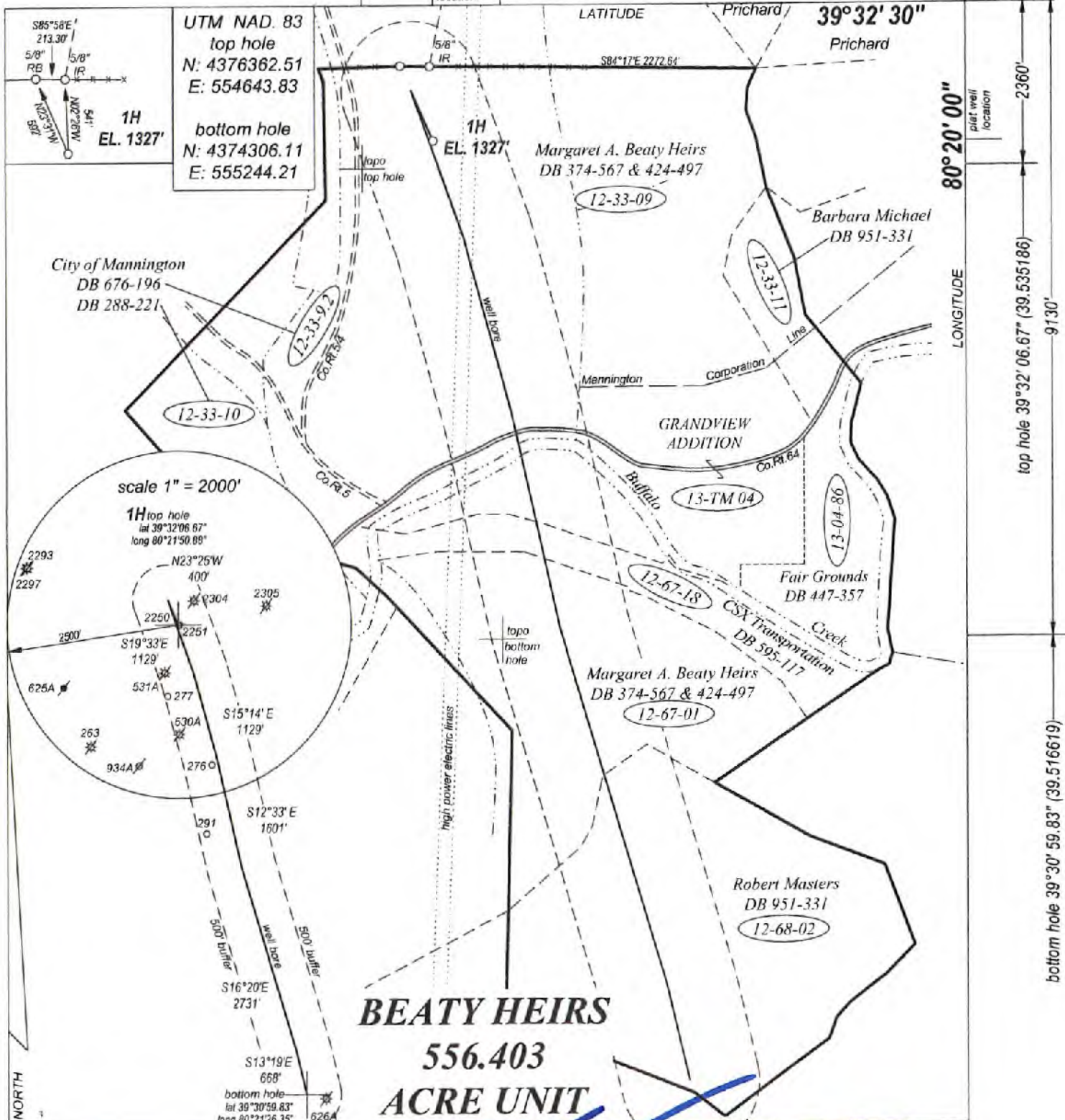
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(SIGNATURE)
 PROFESSIONAL SURVEYOR: 551



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SCALE 1" = 1000'

MANNINGTON QUADRANGLE

