

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

API: **47-103-02933** County: **WETZEL** District: **GRANT**
 Quad: **FOLSOM** Pad: **ANDERSON** Field/Pool Name: **MARCELLUS SHALE**
 Farm name: ANDERSON WELL NAME : **ANDERSON 8H**
 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 AS-BUILT WELL LOCATION MAP ***

Top hole	Northing	4367614	Easting	533524
Landing Point of curve	Northing	4367495	Easting	532916
Bottom hole	Northing	4366166	Easting	543623

Elevation (ft): **1012'** 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, GAS and NGL**

Drilled With: **ROTARY**

Drilling Media: **MUD** Intermediate hole: **MUD**

Production hole: **MUD**

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

ADDITIVES:	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: **1/24/2014** Date drilling commenced: **5/21/2014** Date drilling ceased: **6/27/2014**

Date completion activities began: **8/1/2014** Date completion activities ceased: **9/3/2014**

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: **60', 150'**

Open mine(s) (Y/N) depths: **N**

Salt water depth(s) ft: **1525'**

Void(s) encountered (Y/N) depths: **N**

Coal Depth(s) ft: **N/A**

Cavern(s) encountered (Y/N) depths: **N**

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

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Reviewed by:
JK 6/25/15
WS 6/25/15

API: 47-103-02933 WELL NAME : ANDERSON 8H

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>88'</u>	<u>NEW</u>	<u>J-55/99</u>	-	<u>Y</u>
Surface	<u>17 1/2"</u>		<u>973'</u>	<u>NEW</u>	<u>J-55/54.5</u>	-	<u>Y</u>
Coal	-	-	-	-	-	-	-
Intermediate 1	<u>12 1/2"</u>	<u>9 5/8"</u>	<u>2949'</u>	<u>NEW</u>	<u>J-55/36</u>	-	<u>Y</u>
Intermediate 2	-	-	-	-	-	-	-
Intermediate 3	-	-	-	-	-	-	-
Production	<u>8 3/4"</u>	<u>5 1/2"</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	<u>TYPE 1</u>	-	-	<u>13</u>	-	<u>SURFACE</u>	-
Surface	<u>TYPE 1</u>	-	-	<u>1.25</u>	-	<u>SURFACE</u>	<u>10.5</u>
Coal	-	-	-	-	-	-	-
Intermediate 1	<u>TYPE 1</u>	<u>980</u>	<u>15.6</u>	<u>1.19</u>	<u>1166</u>	<u>SURFACE</u>	-
Intermediate 2	-	-	-	-	-	-	-
Intermediate 3	-	-	-	-	-	-	-
Production	<u>POS H CLASS H</u>	<u>1450/2108</u>	<u>14/15.6</u>	<u>1.34/1.18</u>	<u>1943/2487</u>	<u>SURFACE</u>	<u>15.00</u>
Tubing	-	-	-	-	-	-	-

Drillers TD (ft): 16,252 Loggers TD (ft): 16,254
 Deepest formation penetrated: MARCELLUS SHALE Plug back to (ft): N/A
 Plug back procedure: N/A

Kick off depth (ft) 3132

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 3,000' TO 900'

PRODUCTION STRING - 1 CENTRALIZER EVERY 80' FROM TD TO ABOVE ROP 7000', EVERY 4TH JUST FROM ROP TO SURFACE

WAS WELL COMPLETED AS SHOT HOLE? YES NO DETAILS: _____

WAS WELL COMPLETED OPEN HOLE? NO DETAILS: _____

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

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***** SEE ATTACHED SURVEY REPORTS - 8 PAGES *****

PERFORATION RECORD

Stage No.	Perferated from MD ft.	Perferated to MD ft.	Number of Perferations	Formations
1	16,163	16,025	41	MARCELLUS SHALE
2	15,856	15,716	41	MARCELLUS SHALE
3	15,622	15,397	41	MARCELLUS SHALE
4	15,317	15,070	41	MARCELLUS SHALE
5	14,972	14,806	40	MARCELLUS SHALE
6	14,708	14,558	41	MARCELLUS SHALE
7	14,461	14,332	41	MARCELLUS SHALE
8	14,237	14,092	41	MARCELLUS SHALE
9	13,996	13,854	41	MARCELLUS SHALE
10	13,760	13,616	41	MARCELLUS SHALE
11	13,512	13,361	41	MARCELLUS SHALE
12	13,264	13,092	41	MARCELLUS SHALE
13	13,002	12,853	41	MARCELLUS SHALE
14	12,755	12,607	41	MARCELLUS SHALE
15	12,510	12,360	41	MARCELLUS SHALE
16	12,275	12,140	41	MARCELLUS SHALE
17	12,048	11,890	41	MARCELLUS SHALE
18	11798	11,653	41	MARCELLUS SHALE
19	11559	11,410	41	MARCELLUS SHALE
20	11317	11,164	41	MARCELLUS SHALE
21	11071	10,902	41	MARCELLUS SHALE
22	10811	10,660	41	MARCELLUS SHALE
23	10563	10,390	41	MARCELLUS SHALE
24	10291	10,140	41	MARCELLUS SHALE
25	10045	9,890	41	MARCELLUS SHALE
26	9801	9,635	41	MARCELLUS SHALE
27	9541	9,389	41	MARCELLUS SHALE
28	9295	9,157	41	MARCELLUS SHALE
29	9067	8,902	41	MARCELLUS SHALE
30	8811	8,663	41	MARCELLUS SHALE
31	8570	8,429	42	MARCELLUS SHALE
32	8336	8,132	41	MARCELLUS SHALE

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Please insert additional pages as applicable.

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STIMULATION INFORMATION PER STAGE

Complete a separate record for each stimulation stage.

Stage No.	Stimulations Date	Ave Pump Rate (BPM)	Ave Treatment Pressure (PSI)	Max Breakdown Pressure (PSI)	ISIP (PSI)	Amount of Proppant (lbs)	Amount of Water (bbls)	Other Units
1	8/12/2014	57.9	8,283	9,544	4,728	140,242	5,022	
2	8/12/2014	63.3	8,702	9,860	5,115	247,943	9,264	
3	8/13/2014	62.2	9,200	9,901	4,909	168,361	5,560	
4	8/14/2014	60.1	8,701	9,925	4,177	191,077	6,574	
5	8/16/2014	55.3	8,856	10,107	4,743	211,064	6,350	
6	8/18/2014	51.5	9,035	9,963	5,227	74,025	4,077	
7	8/18/2014	54.7	8,793	9,558	5,038	94,504	5,497	
8	8/19/2014	63.4	8,752	9,483	5,134	301,939	9,328	
9	8/20/2014	61.9	8,665	10,270	5,107	189,700	7,800	
10	8/21/2014	72.8	8,864	9,522	5,369	311,365	9,468	
11	8/21/2014	60.0	8,790	9,591	5,488	147,880	6,870	
12	8/22/2014	57.6	8,988	10,024	5,433	141,820	7,977	
13	8/22/2014	63.3	8,938	9,466	5,534	131,913	8,146	
14	8/23/2014	58.4	8,974	9,822	5,471	59,312	5,417	
15	8/23/2014	58.8	8,752	9,472	5,502	74,661	5,483	
16	8/24/2014	66.0	8,768	9,920	5,290	225,167	8,274	
17	8/24/2014	63.0	8,762	9,537	5,527	133,685	8,185	
18	8/25/2014	67.0	8,664	9,779	5,534	312,666	10,331	
19	8/27/2014	63.0	8,735	9,448	5,401	274,847	9,443	
20	8/28/2014	65.7	8,787	9,086	5,416	111,973	6,780	
21	8/28/2014	70.1	8,710	9,269	5,434	305,248	8,765	
22	8/28/2014	69.6	8,754	9,332	5,557	329,413	9,946	
23	8/29/2014	55.8	8,553	9,419	5,262	168,348	7,330	
24	8/29/2014	69.5	8,716	9,021	5,370	299,503	8,302	
25	8/30/2014	62.3	8,798	10,049	5,242	245,630	7,596	
26	8/30/2014	66.8	8,328	9,293	5,264	257,334	7,516	
27	8/31/2014	66.8	8,328	9,293	5,011	260,367	8,831	
28	9/1/2014	62.7	8,471	10,227	N/A	159,110	4,627	
29	9/1/2014	64.3	7,721	8,624	5,252	255,579	7,836	
30	9/2/2014	67.4	7,738	9,022	6,083	250,600	7,345	
31	9/3/2014	65.1	7,247	8,595	5,066	310,992	8,689	
32	9/3/2014	68.4	7,345	8,459	5,133	279,710	7,824	

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Drilling Contractor: NOMAC DRILLING
Address: 3400 SOUTH RADIO ROAD City: EL RENO State: OK Zip: 73036

Logging Contractor: BAKER HUGHES
Address: 17015 ALDINE WESTFIELD ROAD City: WOOSTER State: OH Zip: 44691

Cementing Company: BAKER HUGHES
Address: 17015 ALDINE WESTFIELD ROAD City: WOOSTER State: OH Zip: 44691

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: 6-8-15

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

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Fracture Start Date/Time:	8/12/14 13:21
Fracture End Date/Time:	9/3/14 23:59
State:	West Virginia
County:	Wezel
API Number:	47103-02933-0000
Operator Number:	494481575
Well Name:	Anderson No. 8H
Federal Well:	No
Longitude:	-80.6103
Latitude:	39.4574
Long/Lat Projection:	NAD27
True Vertical Depth (TVD):	7,083'
Total Clean Fluid Volume* (gal):	9,958,830



Additive	Specific Gravity	Additive Quantity	Mass (lbs)
Freshwater	1.00	9,958,830	83,106,436
100 Mesh	2.65	2,343,807	2,343,807
40/70 White Sand	2.65	3,101,806	3,101,806
20/40 White Sand	2.65	1,239,205	1,239,205
Plexibk 256	0.86	69	495
HCl Acid 10-15%	1.07	34,500	308,056
Ferriplex 66	1.15	69	662
Greenflush	0.81	851	5,752
Sodium Persulfate	2.60	1,709	1,709
SOS 1545	1.05	4,406	38,600
Plexibreak 145	0.95	69	547
Plexislick 953	1.06	7,488	66,237
Total Slurry Mass (Lbs)			90,213,319

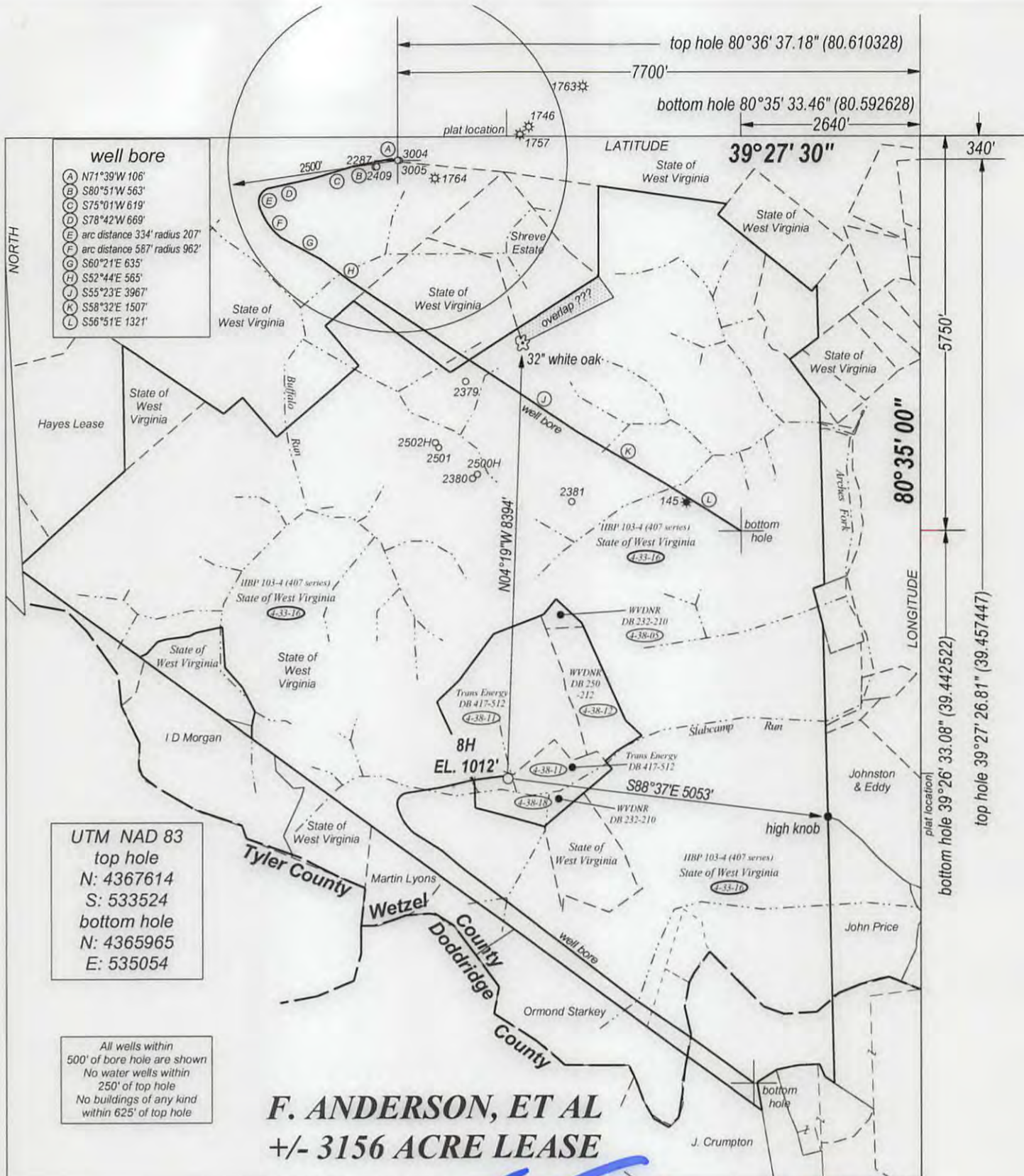
Ingredients Section:

Trade Name	Supplier	Purpose	Ingredients	Chemical Abstract Service Number (CAS#)	Maximum Ingredient Concentration in Additive (% by mass)**	Mass per Component (LBS)	Maximum Ingredient Concentration in HF Field (% by mass)**	Comments
Freshwater	Republic Energy	Fract Base	Water	7732-18-5	100.00%	83,106,436	92.12214%	
100 Mesh	US Silica	Proppant	Sand	14808-60-7	100.00%	2,343,807	2.59807%	
40/70 White Sand	US Silica	Proppant	Sand	14808-60-7	100.00%	3,101,806	3.43830%	
20/40 White Sand	US Silica	Proppant	Sand	14808-60-7	100.00%	1,239,205	1.37364%	
HCl Acid 10-15%	Gofrac	Acid	Hydrochloric Acid	7647-01-0	15.00%	46,208	0.05122%	
Ferriplex 66	Chemplex	Iron Control	Acetic Acid	64-19-7	50.00%	331	0.00037%	
			Citric Acid	77-02-9	30.00%	199	0.00022%	
			Water	7732-18-5	35.00%	232	0.00026%	
Greenflush	Chemplex	Cleaner	Alcohol Ethoxyolate Surfactants	Proprietary	10.00%	575	0.00064%	
Plexibreak 145	Chemplex	Non-Ernsulfifer	Cocamide Diethanolamine Salt	68803-42-9	10.00%	55	0.00006%	
			Diethanolamine	111-42-2	5.00%	27	0.00003%	
			Ethylene Glycol Monobutyl Ether	111-76-2	15.00%	82	0.00009%	
			Methyl Alcohol	67-56-1	15.00%	82	0.00009%	
			Water	7732-18-5	66.00%	361	0.00040%	
Plexhib 256	Chemplex	Corrosion Inhibitor	Alcohol Ethoxyolate Surfactants	Proprietary	30.00%	149	0.00016%	
			Methyl Alcohol	67-56-1	70.00%	347	0.00038%	
			n-octyls	Proprietary	10.00%	50	0.00005%	
			Propargyl Alcohol	107-19-7	8.00%	40	0.00004%	
			Thiourea-formaldehyde copolymer	68527-49-1	30.00%	149	0.00016%	
			Sodium Persulfate	7775-27-1	100.00%	1,709	0.00189%	
Sodium Persulfate	Chemplex	Active Breaker	Alcohol Ethoxyolate Surfactants	Proprietary	8.00%	5,299	0.00587%	
Plexislick 953	Chemplex	Friction Reducer	Hydrocracked Petroleum Distillate	64742-47-8	30.00%	19,871	0.02203%	
			Polyacrylamide-co-acrylic acid	Proprietary	32.00%	21,196	0.02350%	
			Water	7732-18-5	35.00%	23,183	0.02570%	
SOS 1545	Ultrade	Guar Gel	Guar Gum	9000-30-0	50.00%	19,303	0.02140%	
			Petroleum Distillate	64742-47-8	55.00%	21,234	0.02354%	
			Clay	Proprietary	5.00%	1,930	0.00214%	

*Total Water Volume sources may include fresh water, produced water, and/or recycled water
 ** Information is based on the maximum potential for concentration and thus the total may be over 100%

All component information listed was obtained from the supplier's Material Safety Data Sheets (MSDS). As such, the Operator is not responsible for inaccurate and/or incomplete information. Any questions regarding the content of the MSDS should be directed to the supplier who provided it. The Occupational Safety and Health Administration's (OSHA) regulations govern the criteria for the disclosure of this information. Please note that Federal Law protects "proprietary", "trade secret", and "confidential business information" and the criteria for how this information is reported on an MSDS is subject to 29 CFR 1910.1200(O) and Appendix D.





- well bore**
- A N71°39'W 106'
 - B S80°51'W 563'
 - C S75°01'W 619'
 - D S78°42'W 669'
 - E arc distance 334' radius 207'
 - F arc distance 567' radius 962'
 - G S60°21'E 635'
 - H S52°44'E 565'
 - I S55°23'E 3967'
 - J S58°32'E 1507'
 - L S56°51'E 1321'

UTM NAD 83
 top hole
 N: 4367614
 S: 533524
 bottom hole
 N: 4365965
 E: 535054

All wells within
 500' of bore hole are shown
 No water wells within
 250' of top hole
 No buildings of any kind
 within 625' of top hole

**F. ANDERSON, ET AL
 +/- 3156 ACRE LEASE**

FILE NO. _____
 DRAWING NO. _____
 SCALE 1" = 2500'
 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 MAY 20TH, 2015
 OPERATORS WELL NO. ANDERSON 8H
 AS DRILLED

API 47 - 103 .02933
 STATE COUNTY PERMIT
02933

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

LOATION: ELEVATION 1012' WATER SHED SLABCAMP RUN
 DISTRICT GRANT COUNTY WETZEL QUADRANGLE FOLSOM

SURFACE OWNER TRANS ENERGY, INC. ACREAGE +/- 166
 OIL & GAS ROYALTY F. ANDERSON, ET AL LEASE AC. +/- 3156

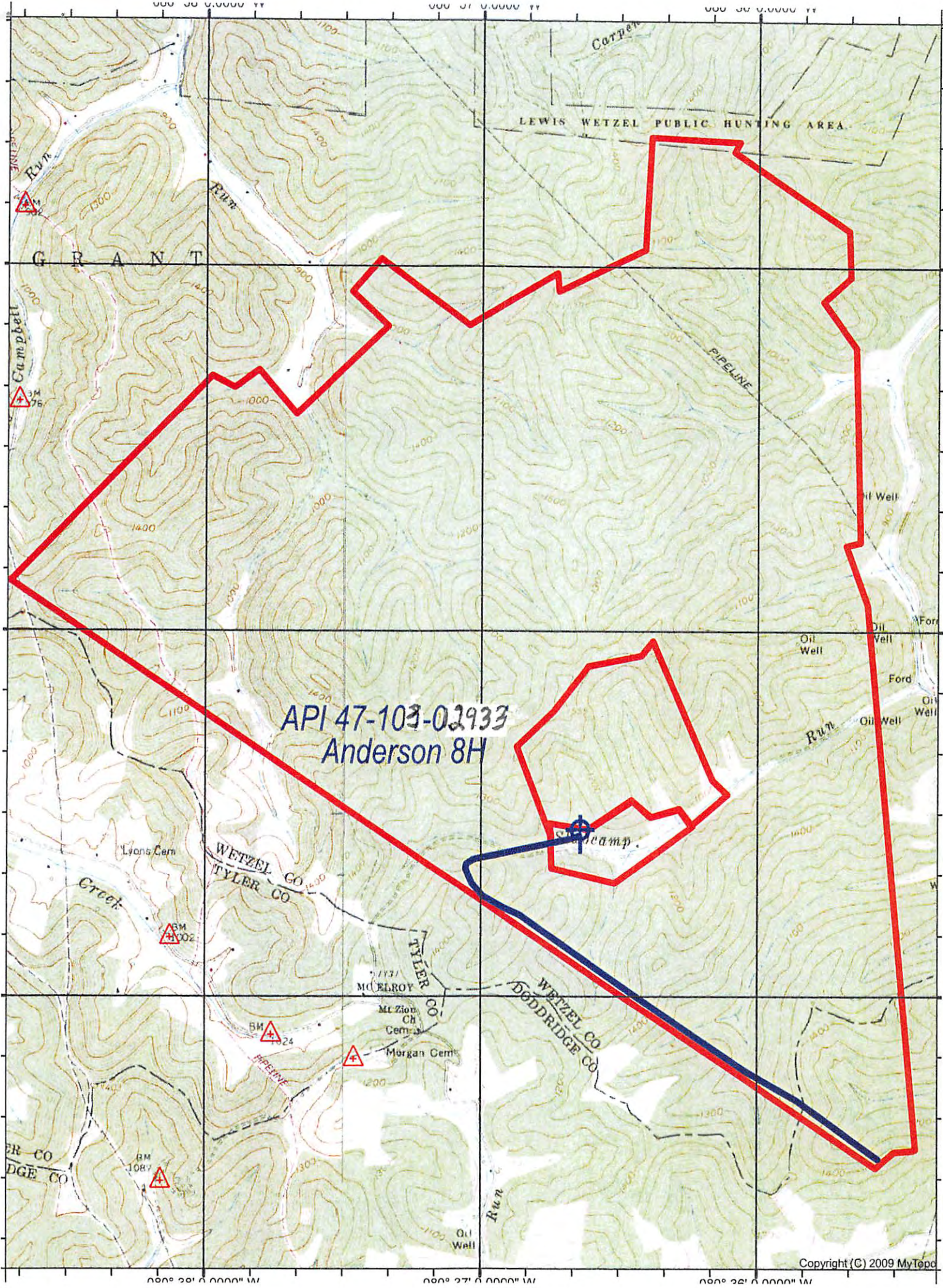
PROPOSED WORK: DRILL XX CONVERT _____ DRILL DEEPER _____ REDRILL _____
 FRACTURE OR STIMULATE _____ PLUG OFF OLD FORMATION _____
 PERFORATE NEW FORMATION _____
 OTHER PHYSICAL CHANGE IN WELL _____ DRILL HORIZONTAL _____
 PLUG AND ABANDON _____ CLEAN OUT AND REPLUG _____

TARGET FORMATION MARCELLUS SHALE ESTIMATED DEPTH 7500'

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
 PERMIT



API 47-103-02933
Anderson 8H

FOLSOM QUADRANGLE

SCALE 1" = 2000'

TRANS ENERGY, INC.

WELL: ANDERSON 8H API 47-103-02933
F. ANDERSON, ET AL 3156 ACRE UNIT

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GRANT DISTRICT WETZEL COUNTY WEST VIRGINIA

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