

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

API: 47-049-02262 County: MARION District: MANNINGTON
 Quad: GLOVER GAP Pad: SHAVER Field/Pool Name: MARCELLUS SHALE
 Farm name: BLACKSHERE WELL NAME : SHAVER 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 AS-BUILT WELL LOCATION MAP ***

Top hole	Northing	<u>4379571</u>	Easting	<u>547016</u>
Landing Point of curve	Northing	<u>4379615</u>	Easting	<u>547581</u>
Bottom hole	Northing	<u>4380950</u>	Easting	<u>547085</u>

Elevation (ft): 1428' 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 - SYNTHETIC 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: 11/14/2013 Date drilling commenced: 7/1/2014 Date drilling ceased: 9/19/2014

Date completion activities began: 11/1/2014 Date completion activities ceased: 12/1/2014

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: 50', 150' Open mine(s) (Y/N) depths: Y, MASON DIXON

Salt water depth(s) ft: 1525' 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

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Reviewed by: JR 8/25

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10/30/2015

API: 47-049-02262 WELL NAME : SHAVER 1H

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>20"</u>	<u>115'</u>	<u>NEW</u>	<u>J-55 / 94</u>	-	-
Surface	<u>17 1/2"</u>	<u>13 3/8"</u>	<u>1020'</u>	<u>NEW</u>	<u>J-55 / 54.5</u>	-	<u>YES</u>
Coal	-	-	-	-	-	-	-
Intermediate 1	<u>12 1/4"</u>	<u>9 5/8"</u>	<u>3,036'</u>	<u>NEW</u>	<u>J-55 / 36</u>	-	<u>YES</u>
Intermediate 2	-	-	-	-	-	-	-
Intermediate 3	-	-	-	-	-	-	-
Production	<u>8 3/4"</u>	<u>5 1/2"</u>	<u>13,086'</u>	<u>NEW</u>	<u>P-110 / 20</u>	-	<u>YES</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>TYPE 1</u>	<u>862</u>	<u>15.6</u>	<u>1.2</u>	<u>1034</u>	<u>SURFACE</u>	<u>11.75</u>
Coal	-	-	-	-	-	-	-
Intermediate 1	<u>TYPE 1</u>	<u>978</u>	<u>15.6</u>	<u>1.2</u>	<u>1174</u>	<u>SURFACE</u>	<u>12.5</u>
Intermediate 2	-	-	-	-	-	-	-
Intermediate 3	-	-	-	-	-	-	-
Production	<u>CLASS H</u>	<u>1375, 1227</u>	<u>13.5, 15.6</u>	<u>1.34, 1.18</u>	<u>1893, 1448</u>	<u>3,000'</u>	<u>7.00</u>
Tubing	-	-	-	-	-	-	-

Drillers TD (ft): 13,131' Loggers TD (ft): 13,107'
 Deepest formation penetrated: MARCELLUS SHALE Plug back to (ft): N/A
 Plug back procedure: N/A

Kick off depth (ft) 3,119'

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 3300' TO 900'
PRODUCTION STRING - 1 CENTRALIZER EVERY 80' FROM TD TO ABOVE ROP (7,000')

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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Environmental Protection

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Drilling Contractor: NABORS DRILLING, USA LP
Address: 515 WEST GREENS ROAD, SUITE 1000 City: HOUSTON State: TX Zip: 77067-4525

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: 8-11-15

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

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Fracture Start Date/Time:	11/10/14 15:22
Fracture End Date/Time:	12/1/14 1:53
State:	West Virginia
County:	Marion
API Number:	47-049-02262-0000
Operator Number:	494481575
Well Name:	Shaver No. 1H
Federal Well:	No
Longitude:	-80.4526
Latitude:	39.5645
Long/Lat Projection:	NAD27
True Vertical Depth (TYD):	7,848'
Total Clean Fluid Volume* (gal):	7,030,800

49.02262

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 Fluid (% by mass)**	Comments
Freshwater	Republic Energy	Frac Base	Water	7732-18-5	100.00%	7,030,800	58.672,026	
100 Mesh	US Silica	Proppant	Sand	14808-60-7	100.00%	2,129,240	3,304,45%	
40/70 White Sand	US Silica	Proppant	Sand	14808-60-7	100.00%	2,186,275	3,392,96%	
20/40 White Sand	US Silica	Proppant	Sand	14808-60-7	100.00%	1,198,454	1,859,92%	
HCl Acid 10-15%	GoFrac	Acid	Hydrochloric Acid	7647-01-0	15.00%	29,466	0,045,73%	
Ferrislick 66	Chemplex	Iron Control	Acetic Acid	64-19-7	50.00%	211	0,000,33%	
			Citric Acid	77-92-9	30.00%	127	0,000,20%	
			Water	7732-18-5	35.00%	148	0,000,23%	
Greenflush	Chemplex	Cleaner	Alcohol Ethoxylate Surfactants	Proprietary	10.00%	331	0,000,51%	
Plexbreak 145	Chemplex	Non-Emulsifier	Cocamide Diethanolamine Salt	68603-42-9	10.00%	35	0,000,05%	
			Diethanolamine	111-42-2	5.00%	17	0,000,03%	
			Ethylene Glycol Monobutyl Ether	111-76-2	15.00%	52	0,000,08%	
			Methyl Alcohol	67-56-1	15.00%	52	0,000,08%	
			Water	7732-18-5	66.00%	230	0,000,36%	
Plexhib 256	Chemplex	Corrosion Inhibitor	Alcohol Ethoxylate Surfactants	Proprietary	30.00%	95	0,000,15%	
			Methyl Alcohol	67-56-1	70.00%	221	0,000,34%	
			n-olefins	Proprietary	10.00%	32	0,000,05%	
			Propargyl Alcohol	107-19-7	8.00%	25	0,000,04%	
			Thiourea-formaldehyde copolymer	68527-49-1	30.00%	95	0,000,15%	
Sodium Persulfate	Chemplex	Active Breaker	Sodium Persulfate	7775-27-1	100.00%	97	0,000,15%	
Plexslic 953	Chemplex	Friction Reducer	Alcohol Ethoxylate Surfactants	Proprietary	8.00%	3,453	0,005,36%	
			Hydroretreated Petroleum Distillate	64742-47-8	30.00%	12,950	0,020,10%	
			Polyacrylamide-co-acrylic acid	Proprietary	32.00%	13,813	0,021,44%	
			Water	7732-18-5	35.00%	15,108	0,023,45%	
Beta M-4.0	PIP	Guar Gel	Guar Gum	Proprietary	50.00%	2,760	0,004,28%	
			Petroleum Distillate	64742-47-8	55.00%	3,036	0,004,71%	
			Clay	Proprietary	5.00%	276	0,000,43%	
Total Slurry Mass (Lbs)							64,433,620	

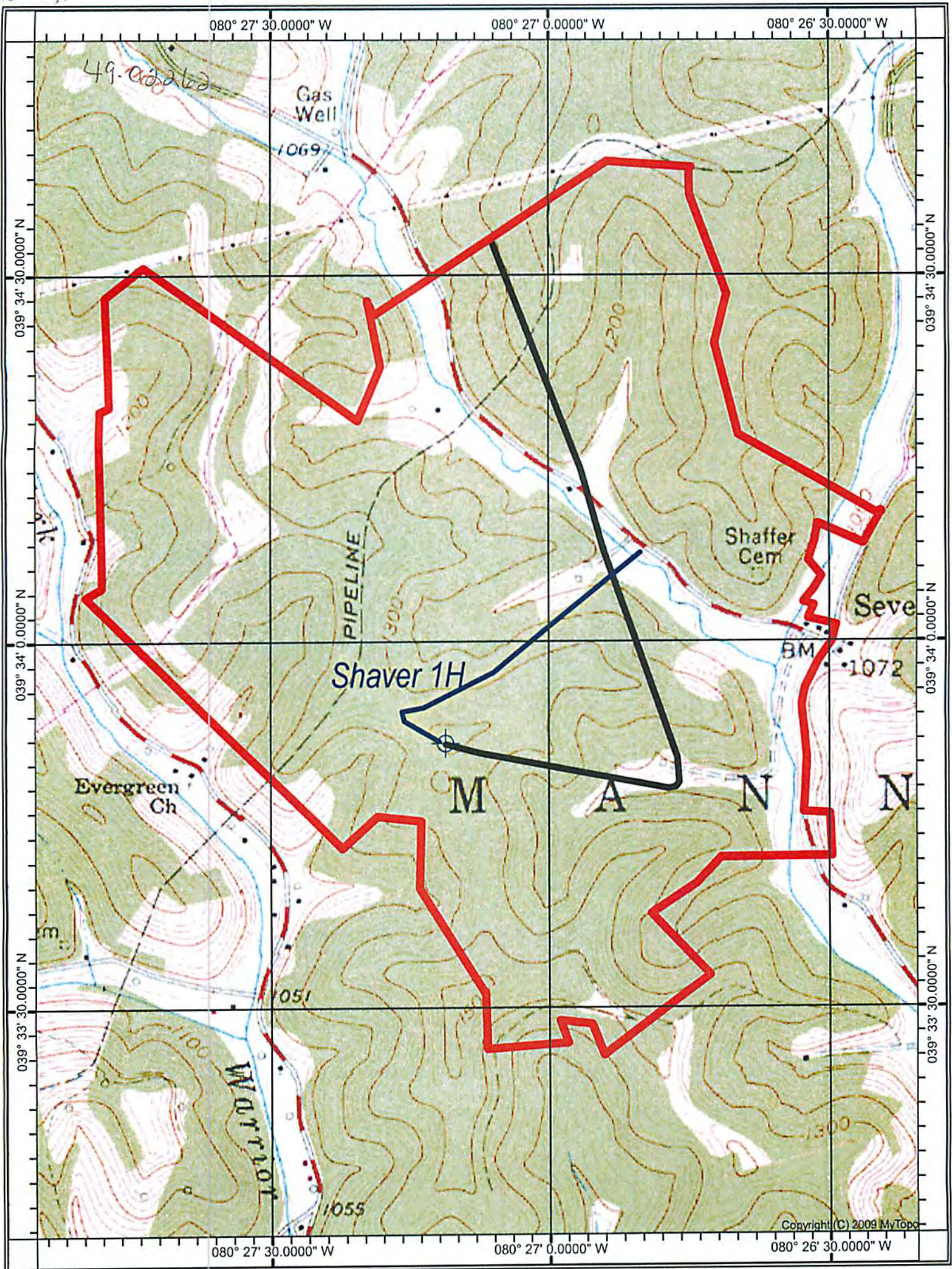
* Total Water Volume sources may include fresh water, produced water, and/or recycled water
 ** Information is based on the maximum potential for concentration and thus the total may be over 100%

All component information listed was obtained from the supplier's Material Safety Data Sheets (MSDS). As such, the Operator is not responsible for accurate 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) Hazard Communication 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. Environmental Protection Agency Index D.

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GLOVER GAP QUADRANGLE

SCALE 1" = 1000'

TRANS ENERGY, INC.

WELL: SHAVER 1H API 47-049-02262
 SHAVER, ET AL 428.77 ACRE UNIT

MANNINGTON DISTRICT MARION COUNTY WEST VIRGINIA

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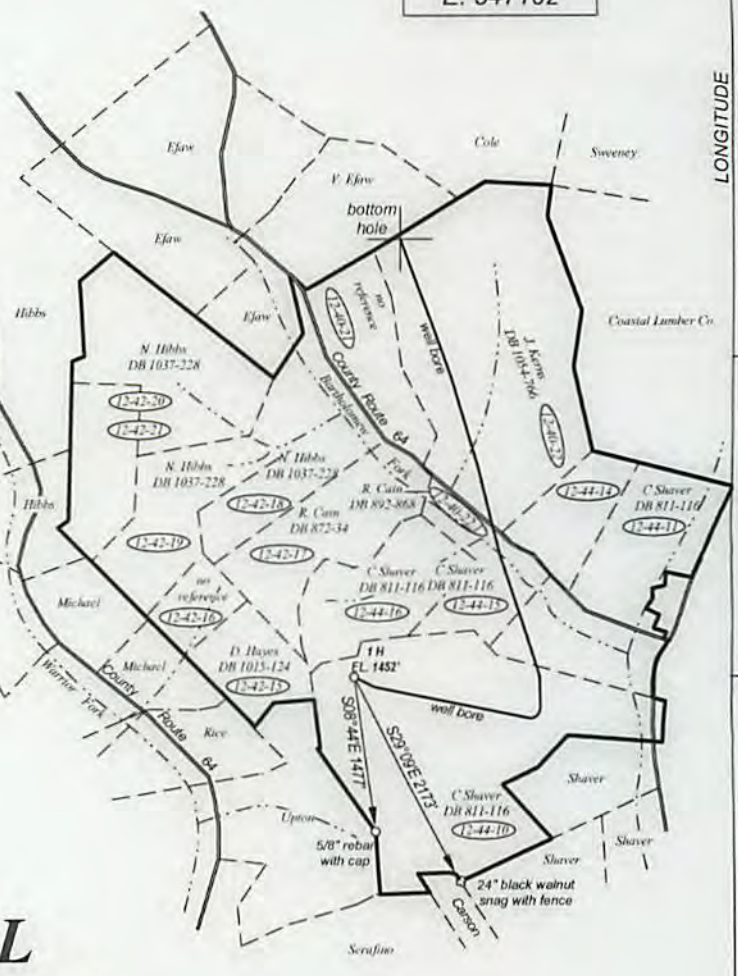
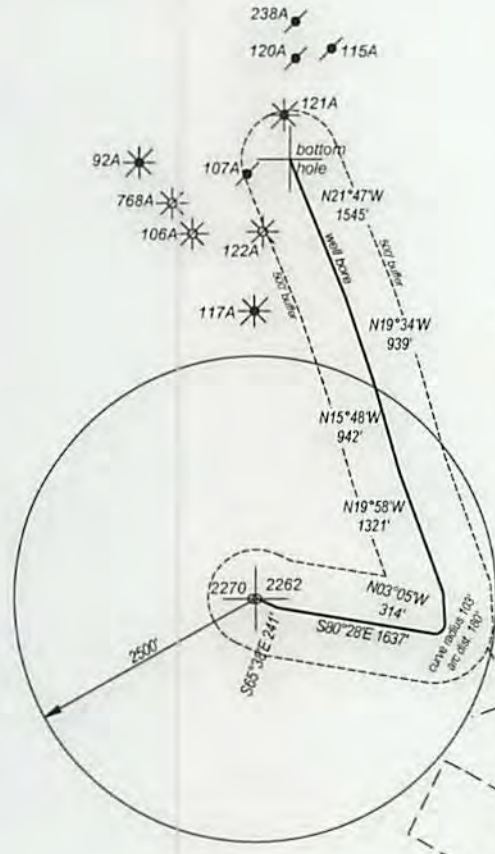
top hole 80°27' 09.60" (80.452667) 10070'
 bottom hole 80°27' 05.61" (80.451559) 9840'
 plat well location

LATITUDE 39°35' 00"

LONGITUDE 80°25' 00"

2350'
 6790'
 bottom hole 39°34' 37.42" (39.577061)
 top hole 39°33' 52.40" (39.564555)

UTM NAD 83
 top hole
 N: 4379572
 E: 547016
 bottom hole
 N: 4380960
 E: 547102



SHAVER, ET AL
428.77 ACRE LEASE

(D-M-P) = District-Map-Parcel

FILE NO. _____
 DRAWING NO. _____
 SCALE 1" = 2000'
 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) *[Signature]*
 PROFESSIONAL SURVEYOR: 551



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

DATE JULY 25TH, 2015
 OPERATORS WELL NO. SHAVER 1H AS DRILLED

API 47 - 049 -02262
 STATE COUNTY PERMIT

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

LOCATION: ELEVATION 1452' WATER SHED BARTHOLOMEW FORK
 DISTRICT MANNINGTON COUNTY MARION QUADRANGLE GLOVER GAP

SURFACE OWNER CHARLES D. & JUNE SHAVER ACREAGE 128.75
 OIL & GAS ROYALTY SHAVER, ET AL LEASE AC. 428.77

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

10/30/2015