

Well Operator's Report of Well Work



Where energy meets innovation.

Well Number: 514564

API: 47 - 103 - 02938

Submission: Initial Amended

Notes: -Revised Plat
-Revised "As Drilled" Coordinates
-with Flowback

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Office of Oil and Gas

JUL 28 2016

WV Department of
Environmental Protection

10/28/2016

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

API 47-103-02938 County WETZEL District GRANT
Quad BIG RUN Pad Name BIG367 Field/Pool Name _____
Farm name DENCIL HENTHORN ET AL Well Number 514564
Operator (as registered with the OOG) EQT Production Company
Address 625 Liberty Ave. EQT Plaza, Suite 1700 City Pittsburgh State PA Zip 15222

As Drilled location NAD 83/UTM Attach an as-drilled plat, profile view, and deviation survey
Top hole Northing 4,378,636.104 Easting 536,088.003
Landing Point of Curve Northing 4,378,587.451 Easting 536,299.299
Bottom Hole Northing 4,376,469.985 Easting 537,034.207

Elevation (ft) 1443 GL Type of Well New Existing Type of Report Interim Final
Permit Type Deviated Horizontal Horizontal 6A Vertical Depth Type Deep Shallow
Type of Operation Convert Deepen Drill Plug Back Redrilling Rework Stimulate
Well Type Brine Disposal CBM Gas Oil Secondary Recovery Solution Mining Storage Other _____
Type of Completion Single Multiple Fluids Produced Brine Gas NGL Oil Other _____
Drilled with Cable Rotary

Drilling Media Surface hole Air Mud Fresh Water Intermediate hole Air Mud Fresh Water Brine
Production hole Air Mud Fresh Water Brine

Mud Type(s) and Additive(s)
SBM 13.2 ppg – powdered hydrocarbon resin, calcium carbonate, ground almond hulls, barium sulfate, calcium chloride, lecithin liquid, organophilic clay,
partially hydrolyzed polyacrylamide/polyacrylate, potassium chloride, sodium carbonate, ground walnut shells, alcohol and modified fatty acid, ferrochrome lignosulfonate, calcium carbonate, fibrous cellulose

Date permit issued 11/12/2013 Date drilling commenced 3/18/2014 Date drilling ceased 10/25/2014
Date completion activities began 2/24/2016 Date completion activities ceased 3/6/2016
Verbal plugging (Y/N) N 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

Freshwater depth(s) ft 708' Open mine(s) (Y/N) depths N
Salt water depth(s) ft 2171' Void(s) encountered (Y/N) depths RECEIVED
Coal depth(s) ft 516', 730', 834', 885', 1022', 1193', 1683' Cavern(s) encountered (Y/N) Office of Oil and Gas
Is coal being mined in area (Y/N) N

APPROVED

NAME: Deek M. Hought
DATE: 9-23-16

JUL 28 2016
Reviewed by: [Signature]
WV Department of Oil and Gas
Environmental 10/28/2016

API 47-103 - 02938 Farm name DENCIL HENTHORN ET AL Well number 514564

CASING STRINGS	Hole Size	Casing Size	Depth	New or Used	Grade wt/ft	Basket Depth(s)	Did cement circulate (Y/N) * Provide details below*
Conductor	28"	26"	40'	NEW	A-500 85.69lb/ft	NONE	Y
Surface	17-1/2"	13-3/8"	960'	NEW	J-55 54.5lb/ft	428'	Y
Coal							
Intermediate 1	12-3/8"	9-5/8"	2,906'	NEW	A-500 40lb/ft	NONE	Y
Intermediate 2							
Intermediate 3							
Production	8-1/2"	5-1/2"	15,345'	NEW	P-110 20lb/ft	NONE	N
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	Class A	49	15.6	1.18	57.8	0	8
Surface	Class A	820	15.6	1.19	976	0	8
Coal							
Intermediate 1	Class A	1075	15.6	1.18	1269	0	8
Intermediate 2							
Intermediate 3	Class A/Class H	580/1010	14.2/15.2	1.26/1.97	2720	3717	72
Production							
Tubing							

Drillers TD (ft) 15,349' Loggers TD (ft) N/A
 Deepest formation penetrated Genesee Plug back to (ft) N/A
 Plug back procedure _____

Kick off depth (ft) 6,240'

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

Well cored Yes No Conventional Sidewall Were cuttings collected Yes No

DESCRIBE THE CENTRALIZER PLACEMENT USED FOR EACH CASING STRING _____

Conductor- N/A
 Surface-Bowspring centralizer on shoe track and every 150' to surface
 Intermediate-Bowspring centralizer on shoe track and every 150' to surface
 Production- Composite bodied centralizers on every joint from TD up to 4,000'

WAS WELL COMPLETED AS SHOT HOLE Yes No DETAILS _____

WAS WELL COMPLETED OPEN HOLE? Yes No DETAILS _____

WERE TRACERS USED Yes No TYPE OF TRACER(S) USED _____

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API 47- 103 - 02938

Farm name DENCIL HENTHORN ET AL

Well number 514564

PERFORATION RECORD

Stage No.	Perforation date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formation(s)
Please See Attached					

Please insert additional pages as applicable.

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)	Amount of Nitrogen/other (units)
						Please	See	Attached
						RECEIVED		
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						JUL 28 2016		

Please insert additional pages as applicable.

API 47- 103 - 02938 Farm name DENCIL HENTHORN ET AL Well number 514564

<u>PRODUCING FORMATION(S)</u>	<u>DEPTHS</u>			
<u>GENESEO</u>	<u>7,427</u>	<u>TVD</u>	<u>7,827</u>	<u>MD</u>

Please insert additional pages as applicable.

GAS TEST Build up Drawdown Open Flow OIL TEST Flow Pump

SHUT-IN PRESSURE Surface 1,260 psi Bottom Hole N/A psi DURATION OF TEST 137.00 hrs

OPEN FLOW Gas 12,242 mcfpd Oil N/A bpd NGL 0.0 bpd Water 1,096 bpd GAS MEASURED BY Estimated Orifice Pilot

LITHOLOGY/ FORMATION	TOP DEPTH IN FT NAME TVD	BOTTOM DEPTH IN FT TVD	TOP DEPTH IN FT MD	BOTTOM DEPTH IN FT MD	DESCRIBE ROCK TYPE AND RECORD QUANTITY AND TYPE OF FLUID (FRESHWATER, BRINE, OIL, GAS, H ₂ S, ETC)
	<u>0</u>		<u>0</u>		

Please insert additional pages as applicable.

Drilling Contractor Alpha Hunter 4
Address 28407 State Route 7 City Marietta State OH Zip 45750

Logging Company Hoss Co. Services LLC
Address 614 Trotters Lane City Charleston State WV Zip 25312

Cementing Company Nabors Completion & Production Services Co.
Address PO BOX 975682 City Dallas State TX Zip 75397-5682

Stimulating Company C&J Energy Services
Address 3990 Rogerdale Road City Houston State TX Zip 77060

Please insert additional pages as applicable.

Completed by Jim Helmick Telephone (412) 395-5518
Signature [Signature] Title VP Completions Date 7/26/2016

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Submittal of Hydraulic Fracturing Chemical Disclosure Information Attach copy of FRACFOCUS Registry
WV Department of Environmental Protection
10/28/2016

API 47- 103 - 02938

Drilling Contractor: Savanna Drilling

Address: 2204 Timberloch Place Suite 230

City: Woodlands

State: TX

Zip: 77380

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API 47- 103 - 02938

Formation Name	Final Top MD (ftGL) (ft)	Final Top TVD (ft)	Final Btm MD (ftGL) (ft)	Final Btm TVD (ft)
FRESH WATER ZONE	1	1	708	708
SAND/SHALE	1	1	516	516
COAL	516	516	528	528
SAND/SHALE	528	528	730	730
FAIRVIEW COAL	730	730	734	734
SAND/SHALE	734	734	834	834
WAYNESBURG COAL	834	834	836	836
SAND/SHALE	836	836	885	885
COAL	885	885	896	896
SAND/SHALE	896	896	1,022	1,022
MAPLETOWN COAL	1,022	1,022	1,025	1,025
SAND/SHALE	1,025	1,025	1,193	1,193
PITTSBURGH COAL	1,193	1,193	1,199	1,199
SAND/SHALE	1,199	1,199	1,683	1,683
COAL	1,683	1,683	1,687	1,687
SAND/SHALE	1,687	1,687	2,255	2,255
MAXTON	2,255	2,255	2,410	2,410
BIG LIME	2,410	2,410	2,512	2,512
BIG INJUN	2,512	2,512	2,806	2,806
WEIR	2,806	2,806	2,956	2,956
GANTZ	2,956	2,956	3,006	3,006
50F	3,006	3,006	3,100	3,100
30F	3,100	3,100	3,224	3,224
GORDON	3,224	3,224	3,317	3,317
4TH	3,317	3,317	3,472	3,472
BAYARD	3,472	3,472	3,838	3,838
WARREN	3,838	3,838	4,052	4,052
SPEECHLEY	4,052	4,052	4,402	4,402
BALLTOWN A	4,402	4,402	4,837	4,837
RILEY	4,837	4,837	5,514	5,514
BENSON	5,514	5,514	5,908	5,908
ALEXANDER	5,908	5,908	6,957	6,875
RHINESTREET UPPER	6,957	6,875	7,084	6,981
RHINESTREET	7,084	6,981	7,281	7,142
SONYEA	7,281	7,142	7,502	7,293
MIDDLESEX	7,502	7,293	7,580	7,337
GENESSEE	7,580	7,337	7,827	7,427
GENESE0	7,827	7,427	15,349	7,515

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514564 47-103-029380000 - Perforations

Stage Number	Perforation Date	Top Perf Depth (ftKB)	Bottom Perf Depth (ftKB)	Number of Shots	Formation
Initiation Sleeve	2/24/2016	15,343.00	15,345.00	10	GENESEO
1	2/24/2016	15,199.00	15,291.00	32	GENESEO
1.1	2/24/2016	15,155.00	15,217.00	24	GENESEO
2	2/25/2016	15,004.00	15,126.00	40	GENESEO
3	2/25/2016	14,854.00	14,976.00	40	GENESEO
4	2/25/2016	14,704.00	14,826.00	40	GENESEO
5	2/25/2016	14,554.00	14,676.00	40	GENESEO
6	2/26/2016	14,404.00	14,526.00	40	GENESEO
7	2/26/2016	14,254.00	14,376.00	40	GENESEO
8	2/26/2016	14,104.00	14,224.00	40	GENESEO
9	2/26/2016	13,954.00	14,076.00	40	GENESEO
10	2/27/2016	13,804.00	13,926.00	40	GENESEO
11	2/27/2016	13,654.00	13,776.00	40	GENESEO
12	2/27/2016	13,504.00	13,626.00	40	GENESEO
13	2/27/2016	13,354.00	13,476.00	40	GENESEO
14	2/27/2016	13,204.00	13,326.00	40	GENESEO
15	2/28/2016	13,058.00	13,176.00	40	GENESEO
16	2/28/2016	12,904.00	13,026.00	40	GENESEO
17	2/29/2016	12,754.00	12,876.00	40	GENESEO
18	2/29/2016	12,604.00	12,726.00	40	GENESEO
19	2/29/2016	12,454.00	12,572.00	40	GENESEO
20	2/29/2016	12,304.00	12,426.00	40	GENESEO
21	2/29/2016	12,154.00	12,276.00	40	GENESEO
22	2/29/2016	12,002.00	12,126.00	40	GENESEO
24	3/1/2016	11,704.00	11,825.00	40	GENESEO
23	3/1/2016	11,854.00	11,976.00	40	GENESEO
25	3/1/2016	11,554.00	11,676.00	40	GENESEO
26	3/1/2016	11,404.00	11,522.00	40	GENESEO
27	3/2/2016	11,254.00	11,376.00	40	GENESEO
28	3/2/2016	11,104.00	11,226.00	40	GENESEO
29	3/3/2016	10,956.00	11,076.00	40	GENESEO
30	3/3/2016	10,804.00	10,926.00	40	GENESEO
31	3/3/2016	10,654.00	10,776.00	40	GENESEO
32	3/3/2016	10,504.00	10,626.00	40	GENESEO
33	3/3/2016	10,354.00	10,476.00	40	GENESEO
34	3/3/2016	10,204.00	10,326.00	40	GENESEO
35	3/4/2016	10,054.00	10,176.00	40	GENESEO
36	3/4/2016	9,904.00	10,026.00	40	GENESEO
37	3/4/2016	9,754.00	9,876.00	40	GENESEO
38	3/4/2016	9,604.00	9,722.00	40	GENESEO
39	3/4/2016	9,454.00	9,576.00	40	GENESEO
40	3/4/2016	9,304.00	9,426.00	40	GENESEO
41	3/5/2016	9,154.00	9,274.00	40	GENESEO
42	3/5/2016	9,004.00	9,126.00	40	GENESEO
43	3/5/2016	8,854.00	8,976.00	40	GENESEO
44	3/5/2016	8,704.00	8,826.00	40	GENESEO
45	3/5/2016	8,554.00	8,676.00	40	GENESEO
46	3/5/2016	8,402.00	8,526.00	40	GENESEO
47	3/6/2016	8,254.00	8,376.00	40	GENESEO
48	3/6/2016	8,104.00	8,226.00	40	GENESEO
49	3/6/2016	7,954.00	8,076.00	40	GENESEO
50	3/6/2016	7,804.00	7,926.00	40	GENESEO

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WV Department of
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514564 47-103-029380000 - Stimulated Stages

Stage Number	Stimulation Date	Ave Pump Rate (BPM)	Ave Treatment Pressure (PSI)	Max Breakdown Pressure (PSI)	ISIP (PSI)	Amount of Proppant (lbs)	Amount of Water (bbls)	Amount of Nitrogen/other (units)
Initiation Sleeve	2/24/2016	12.10	7,725.00	8,816.00	6,219.00	0	800	0
1	2/24/2016	60.50	8,092.00	9,318.00	4,621.00	74,600	5930	0
1.1	2/24/2016	0.00	0.00	0.00	0.00	0	470	0
2	2/25/2016	95.90	8,468.00	8,750.00	4,487.00	327,800	9641	0
3	2/25/2016	89.80	8,268.00	8,547.00	4,489.00	201,100	5888	0
4	2/25/2016	94.20	8,679.00	8,809.00	4,875.00	200,600	5703	0
5	2/25/2016	90.00	8,622.00	8,824.00	4,689.00	201,200	5546	0
6	2/26/2016	80.30	8,499.00	8,683.00	4,833.00	201,100	6241	0
7	2/26/2016	82.00	8,584.00	8,783.00	4,808.00	201,000	5312	0
8	2/26/2016	91.70	8,677.00	8,826.00	4,962.00	200,700	5305	0
9	2/27/2016	90.90	8,620.00	8,757.00	4,997.00	199,500	5248	0
10	2/27/2016	91.20	8,587.00	8,735.00	4,945.00	200,900	5556	0
11	2/27/2016	86.80	8,666.00	8,817.00	4,899.00	200,800	5131	0
12	2/27/2016	94.20	8,694.00	8,830.00	5,062.00	202,700	5333	0
13	2/27/2016	91.20	8,685.00	8,881.00	4,969.00	200,400	5333	0
14	2/28/2016	95.50	8,665.00	8,852.00	5,064.00	200,700	5376	0
15	2/28/2016	94.00	8,706.00	8,895.00	5,009.00	199,300	5407	0
16	2/28/2016	93.70	8,596.00	8,780.00	4,992.00	201,400	5168	0
17	2/29/2016	89.50	8,628.00	8,808.00	5,007.00	200,500	5337	0
18	2/29/2016	92.70	8,583.00	8,899.00	5,121.00	199,900	5,108	0
19	2/29/2016	91.80	8,642.00	8,880.00	5,331.00	201,600	5,361	0
20	2/29/2016	94.16	8,638.00	8,853.00	5,074.00	200,500	5,287	0
21	2/29/2016	96.80	8,601.00	8,758.00	4,864.00	198,100	5,195	0
22	3/1/2016	94.30	8,648.00	8,884.00	5,142.00	197,600	5,347	0
23	3/1/2016	93.30	8,635.00	8,821.00	5,032.00	201,400	5,200	0
24	3/1/2016	93.00	8,630.00	8,803.00	5,011.00	199,200	5289	0
25	3/1/2016	99.00	8,610.00	8,899.00	5,086.00	201,700	5278	0
26	3/2/2016	97.80	8,637.00	8,904.00	5,295.00	200,600	7527	0
27	3/2/2016	99.90	8,196.00	8,482.00	5,108.00	199,900	5371	0
28	3/2/2016	99.40	8,329.00	8,809.00	5,179.00	200,900	5253	0
29	3/3/2016	93.60	8,540.00	8,834.00	5,259.00	200,700	5098	0
30	3/3/2016	100.10	8,450.00	8,782.00	5,089.00	203,100	4914	0
31	3/3/2016	100.20	8,361.00	8,887.00	5,340.00	200,300	4846	0
32	3/3/2016	99.40	8,469.00	8,783.00	4,984.00	200,300	4755	0
33	3/3/2016	98.70	8,458.00	8,895.00	5,143.00	203,500	4935	0
34	3/3/2016	100.30	8,481.00	8,826.00	4,893.00	202,200	5293	0
35	3/4/2016	94.90	8,439.00	8,913.00	5,080.00	199,300	5131	0
36	3/4/2016	94.70	8,609.00	8,858.00	5,222.00	201,000	4887	0
37	3/4/2016	82.00	8,018.00	9,103.00	5,108.00	200,000	7533	0
38	3/4/2016	93.70	8,480.00	8,876.00	5,014.00	201,800	4785	0
39	3/4/2016	83.30	8,569.00	8,849.00	4,923.00	199,000	4791	0
40	3/5/2016	92.90	8,394.00	8,851.00	4,977.00	200,300	4730	0
41	3/5/2016	96.50	8,449.00	8,818.00	4,974.00	200,200	4782	0
42	3/5/2016	97.33	8,428.00	8,935.00	5,081.00	200,200	4791	0
43	3/5/2016	100.30	8,289.00	8,622.00	5,019.00	200,600	4647	0
44	3/5/2016	94.60	8,282.00	8,642.00	4,969.00	200,500	4751	0
45	3/5/2016	100.20	8,257.00	8,628.00	5,010.00	199,500	4785	0
46	3/5/2016	101.40	8,252.00	8,642.00	4,852.00	201,100	4613	0
47	3/6/2016	100.20	8,396.00	8,861.00	4,787.00	201,600	4692	0
48	3/6/2016	100.00	8,290.00	8,843.00	4,889.00	202,100	4719	0
49	3/6/2016	97.50	8,324.00	8,902.00	4,789.00	203,800	4527	0
50	3/6/2016	96.90	8,194.00	8,613.00	4,856.00	202,000	4724	0

10/28/2016

Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date	2/24/2016
Job End Date	3/6/2016
State	West Virginia
County	Wayne
API Number	47-103-02938-00-00
Operator Name	EQT Production
Well Name and Number	514564
Longitude	-80.58264190
Latitude	39.55667810
Datum	NAD83
Federal/Tribal Well	NO
True Vertical Depth	7,515
Total Base Water Volume (gal)	11,242,140
Total Base Non Water Volume	0



Hydraulic Fracturing Fluid Composition:

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
Water	C and J (Nabors)	Carrier/Base Fluid	Water	7732-18-5	100.00000	89.90365	None
Sand (Proppant)	C and J (Nabors)	Proppant	Silica Substrate	14808-60-7	100.00000	9.62019	None
MIX 5-3586	MultiChem Group	Specialty Brine	Calcium nitrate	13477-34-4	100.00000	0.11083	None
FR-18	C and J (Nabors)	Anionic Friction Reducer	Hydrotreated light petroleum distillate	64742-47-8	45.00000	0.03856	None
Hydrochloric Acid (15%)	C and J (Nabors)	Acidizing	Ethylene glycol	107-21-1	10.00000	0.00857	None
MIX 8-2544	MultiChem Group	Live Culture - Nitrate Reducing Bacteria	Hydrochloric Acid	7647-01-0	15.00000	0.03658	None
SI-6	C and J (Nabors)	Scale Inhibitor	Sodium chloride	7647-14-5	100.00000	0.00982	None
			Sodium nitrate	7631-99-4	5.00000	0.00049	None
			Proprietary		7.00000	0.00175	None
			Ammonium chloride	12125-02-9	2.00000	0.00050	None

Gas
of
ection

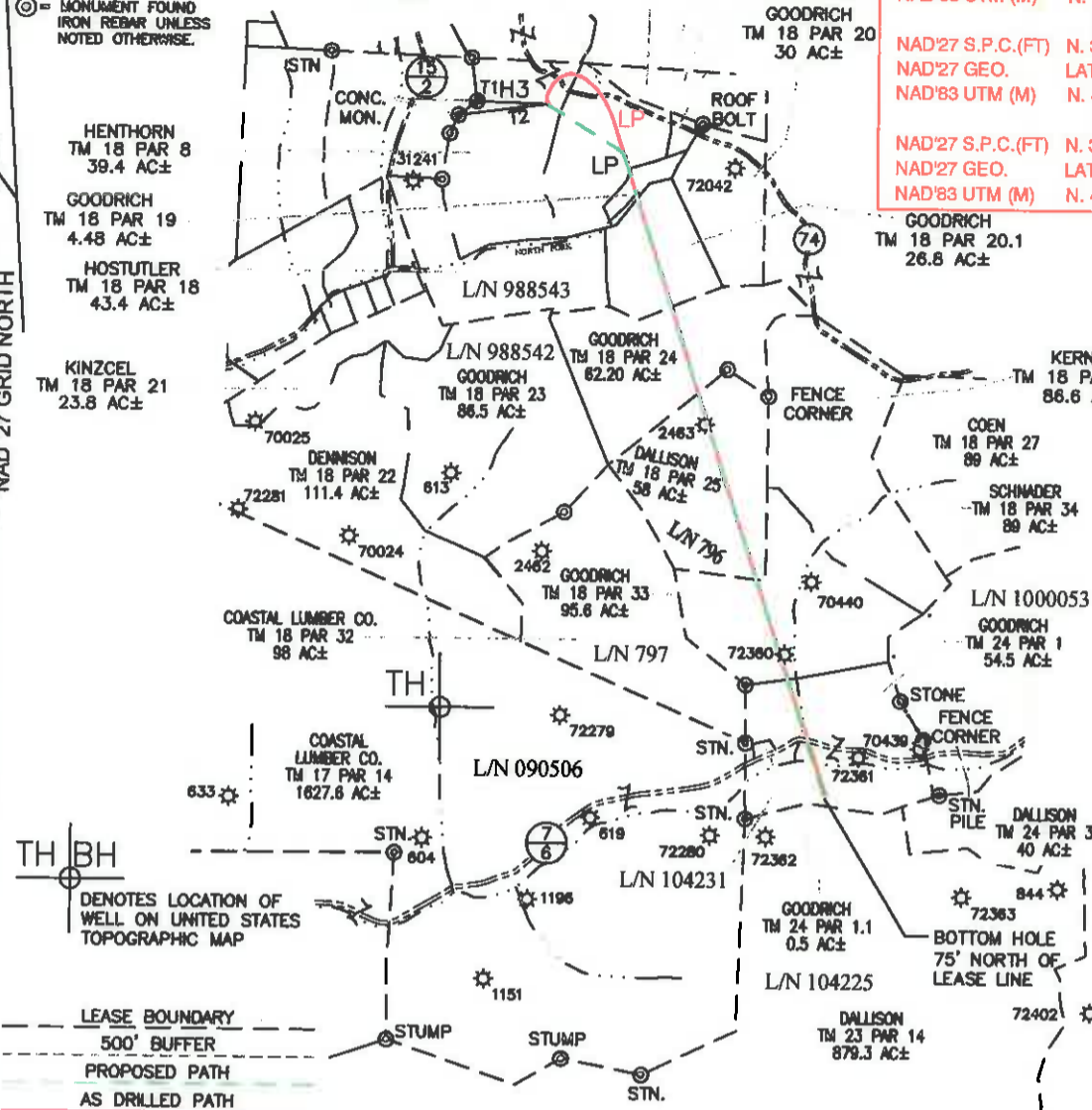
EQT WELL NO. 514564

LATITUDE 39°35'00"

NOTES:

- PLAT ORIENTATION, CORNERS, AND WELL REFERENCES ARE BASED UPON THE GRID NORTH MERIDIAN FOR THE WV STATE PLANE COORDINATE SYSTEM, NORTH ZONE NAD 27. WELL LOCATION REFERENCE TIES ARE BASED UPON THE MAGNETIC MERIDIAN.
- THERE ARE NO (0) WATER WELL(S) LOCATED WITHIN 250' OF WELL H1.
- THERE ARE NO (0) STRUCTURE(S) LOCATED WITHIN 625' OF WELL H1.

⊙ = MONUMENT FOUND IRON REBAR UNLESS NOTED OTHERWISE.



AS DRILLED COORDINATES FOR WELL NO. WV 514564
 (S.P.C. NORTH ZONE) (UTM(M) ZONE 17 NORTH)

NAD'27 S.P.C.(FT) N. 386,655.689 E. 1,695,460.699
 NAD'27 GEO. LAT.(N) 39.556852 LONG.(W) 80.579929
 NAD'83 UTM (M) N. 4,378,636.104 E. 536,088.003

LANDING POINT

NAD'27 S.P.C.(FT) N. 386,484.448 E. 1,696,151.384
 NAD'27 GEO. LAT.(N) 39.556122 LONG.(W) 80.577658
 NAD'83 UTM (M) N. 4,378,587.451 E. 536,299.299

BOTTOM HOLE

NAD'27 S.P.C.(FT) N. 379,495.855 E. 1,698,447.216
 NAD'27 GEO. LAT.(N) 39.537011 LONG.(W) 80.569221
 NAD'83 UTM (M) N. 4,376,469.985 E. 537,034.207

WELL 514564 TOP HOLE STATE PLANE COORDINATES (NAD 27 NORTH ZONE)
 N:386655.689 E:1695460.699
 LAT:39.556852 LON:80.579929

UTM COORDINATES (NAD 83-METER)
 N:4378636.104 E:536088.003

WELL 514564 LAUNCH POINT STATE PLANE COORDINATES (NAD 27 NORTH ZONE)
 N:386172.881 E:1698253.061
 LAT:39.555353 LON:80.577099

UTM COORDINATES (NAD 83-METER)
 N:4378493.046 E:536331.857

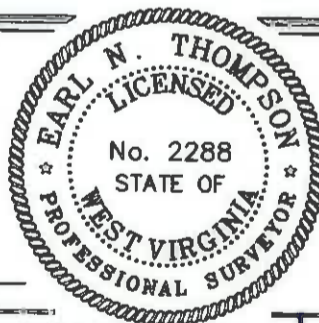
WELL 514564 BOTTOM HOLE STATE PLANE COORDINATES (NAD 27 NORTH ZONE)
 N:379487.216 E:1698425.600
 LAT:39°32'13.453" LON:80°34'08.805"

UTM COORDINATES (NAD 83-METER)
 N:4376467.243 E:537027.666

LINE	BEARING	DIST.
T1	S88°09'40"E	738.44'
T2	N82°34'53"E	901.51'

SPECIAL NOTES
 -LEASE AND SURFACE INFO SHOWN HEREON WAS TAKEN FROM PERMIT PLAT DATED JANUARY 03, 2014 FOR AP# 47-103-02938H.
 -AS DRILLED INFORMATION PROVIDED BY EQT.

Professional Energy Consultants
 A DIVISION OF SOUTH LAND SERVICES, INC.
 SURVEYORS ENGINEERS ENVIRONMENTAL PROJECT MGMT.
 (304) 462-6634 WWW.SLSURVEYS.COM



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 DIVISION OF ENVIRONMENTAL PROTECTION.

P.S. 2288 *Earl N. Thompson*

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS.
 DATE JANUARY 3, 20 14
 REVISED JUNE 02, 20 16
 OPERATORS WELL NO. WV 514564
 API WELL NO. 47 - 103 - 02938H
 STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1 / 2500 FILE NO. 8471BIG 367 WELLS-R
 HORIZONTAL & VERTICAL CONTROL DETERMINED BY OPUS (SURVEY GRADE GPS) SCALE 1" = 2000'

STATE OF WEST VIRGINIA
 DIVISION OF ENVIRONMENTAL PROTECTION
 OFFICE OF OIL AND GAS

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

LOCATION: ELEVATION PROP: 1,442.9' WATERSHED NORTH FORK OF FISHING CREEK
 DISTRICT GRANT COUNTY WETZEL QUADRANGLE BIG RUN 7.5'

SURFACE OWNER DENCIL HENTHORN ET AL ACREAGE 39.4±
 ROYALTY OWNER SHIBEN ESTATE, INC., CNX GAS CO., LLC ACREAGE 379.5±
 PROPOSED WORK: LEASE NO. 988543/888542 796/104231

DRILL CONVERT DRILL DEEPER REDRILL FRACTURE OR STIMULATE PLUG OFF OLD FORMATION PERFORATE NEW FORMATION PLUG AND ABANDON CLEAN OUT AND REPLUG OTHER

PHYSICAL CHANGE IN WELL (SPECIFY) _____ TARGET FORMATION GENESECO
 ESTIMATED DEPTH TVD/MD

WELL OPERATOR EQT PRODUCTION COMPANY DESIGNATED AGENT REX C. RAY
 ADDRESS 115 PROFESSIONAL PLACE P.O. BOX 280 BRIDGEPORT, WV 26330 ADDRESS 115 PROFESSIONAL PLACE P.O. BOX 280 BRIDGEPORT, WV 26330

LONGITUDE 80°32'30" 9,784' TOP HOLE COUNTY NAME PERMIT