



PRINT OR TYPE IN BLACK INK

APPLICATION FOR PERMIT TO DRILL, DEEPEN, PLUG BACK OR CONVERT A WELL SUBJECT TO THE OIL, GAS AND SOLUTION MINING LAW

THIS APPLICATION IS A LEGAL DOCUMENT. READ THE APPLICABLE AFFIRMATION AND ACKNOWLEDGMENT CAREFULLY BEFORE SIGNING.
For instructions on completing this form, visit the Division's website at www.dec.ny.gov/energy/205.html or contact your local Regional office.

PLANNED OPERATION: (Check one) <input checked="" type="checkbox"/> Drill <input type="checkbox"/> Deepen <input type="checkbox"/> Plug Back <input type="checkbox"/> Convert <input type="checkbox"/> Sidetrack																																															
TYPE OF WELL: (Check one) <input checked="" type="checkbox"/> New <input type="checkbox"/> Existing		Existing API Well Identification Number 31- - -																																													
TYPE OF WELL BORE: (Check one) <input checked="" type="checkbox"/> Vertical <input type="checkbox"/> Directional <input type="checkbox"/> Horizontal																																															
NAME OF OWNER (Full Name of Organization or Individual as registered with the Division) Tioga Energy Partners, LLC		TELEPHONE NUMBER (include area code) 518 426-4600																																													
ADDRESS (P.O. Box or Street Address, City, State, Zip Code) P.O. Box 22222, Albany, NY 12201																																															
NAME AND TITLE OF LOCAL REPRESENTATIVE WHO CAN BE CONTACTED WHILE OPERATIONS ARE IN PROGRESS Todd Bellar																																															
ADDRESS-Business (P.O. Box or Street Address, City, State, Zip Code) 207 Carlton Road, Eighty Four, PA		TELEPHONE NUMBER (include area code) 724 239-2812																																													
ADDRESS-Night, Weekend and Holiday (P.O. Box or Street Address, City, State, Zip Code)		TELEPHONE NUMBER (include area code) 281 450-6294																																													
WELL LOCATION DATA (attach plat)																																															
COUNTY Tioga	TOWN Barton	FIELD/POOL NAME (or "Wildcat") Not Applicable																																													
WELL NAME Snyder E 1		WELL NUMBER																																													
7½ MINUTE QUAD NAME Spencer	QUAD SECTION H	PROPOSED TARGET FORMATION Utica																																													
LOCATION DESCRIPTION Surface 0' 0' Kickoff Top of Target Interval Bottom of Target Interval Bottom Hole 9530 9530 TVD TMD	Decimal Latitude (NAD83) <table style="width: 100%; text-align: center; border-collapse: collapse;"> <tr> <td style="border: 1px solid black; width: 20px;">4</td> <td style="border: 1px solid black; width: 20px;">2</td> <td style="border: 1px solid black; width: 20px;">.</td> <td style="border: 1px solid black; width: 20px;">1</td> <td style="border: 1px solid black; width: 20px;">4</td> <td style="border: 1px solid black; width: 20px;">4</td> <td style="border: 1px solid black; width: 20px;">8</td> <td style="border: 1px solid black; width: 20px;">7</td> <td style="border: 1px solid black; width: 20px;">9</td> </tr> <tr> <td style="border: 1px solid black;"> </td> <td style="border: 1px solid black;"> </td> <td style="border: 1px solid black;"> </td> <td style="border: 1px solid black;"> </td> <td style="border: 1px solid black;"> </td> <td style="border: 1px solid black;"> </td> <td style="border: 1px solid black;"> </td> <td style="border: 1px solid black;"> </td> <td style="border: 1px solid black;"> </td> </tr> <tr> <td style="border: 1px solid black;"> </td> <td style="border: 1px solid black;"> </td> <td style="border: 1px solid black;"> </td> <td style="border: 1px solid black;"> </td> <td style="border: 1px solid black;"> </td> <td style="border: 1px solid black;"> </td> <td style="border: 1px solid black;"> </td> <td style="border: 1px solid black;"> </td> <td style="border: 1px solid black;"> </td> </tr> <tr> <td style="border: 1px solid black;"> </td> <td style="border: 1px solid black;"> </td> <td style="border: 1px solid black;"> </td> <td style="border: 1px solid black;"> </td> <td style="border: 1px solid black;"> </td> <td style="border: 1px solid black;"> </td> <td style="border: 1px solid black;"> </td> <td style="border: 1px solid black;"> </td> <td style="border: 1px solid black;"> </td> </tr> <tr> <td style="border: 1px solid black;"> </td> <td style="border: 1px solid black;"> </td> <td style="border: 1px solid black;"> </td> <td style="border: 1px solid black;"> </td> <td style="border: 1px solid black;"> </td> <td style="border: 1px solid black;"> </td> <td style="border: 1px solid black;"> </td> <td style="border: 1px solid black;"> </td> <td style="border: 1px solid black;"> </td> </tr> </table>		4	2	.	1	4	4	8	7	9																																				
4	2	.	1	4	4	8	7	9																																							
		Decimal Longitude (NAD83) <table style="width: 100%; text-align: center; border-collapse: collapse;"> <tr> <td style="border: 1px solid black; width: 20px;">7</td> <td style="border: 1px solid black; width: 20px;">6</td> <td style="border: 1px solid black; width: 20px;">.</td> <td style="border: 1px solid black; width: 20px;">4</td> <td style="border: 1px solid black; width: 20px;">5</td> <td style="border: 1px solid black; width: 20px;">4</td> <td style="border: 1px solid black; width: 20px;">1</td> <td style="border: 1px solid black; width: 20px;">0</td> <td style="border: 1px solid black; width: 20px;">2</td> </tr> <tr> <td style="border: 1px solid black;"> </td> <td style="border: 1px solid black;"> </td> <td style="border: 1px solid black;"> </td> <td style="border: 1px solid black;"> </td> <td style="border: 1px solid black;"> </td> <td style="border: 1px solid black;"> </td> <td style="border: 1px solid black;"> </td> <td style="border: 1px solid black;"> </td> <td style="border: 1px solid black;"> </td> </tr> <tr> <td style="border: 1px solid black;"> </td> <td style="border: 1px solid black;"> </td> <td style="border: 1px solid black;"> </td> <td style="border: 1px solid black;"> </td> <td style="border: 1px solid black;"> </td> <td style="border: 1px solid black;"> </td> <td style="border: 1px solid black;"> </td> <td style="border: 1px solid black;"> </td> <td style="border: 1px solid black;"> </td> </tr> <tr> <td style="border: 1px solid black;"> </td> <td style="border: 1px solid black;"> </td> <td style="border: 1px solid black;"> </td> <td style="border: 1px solid black;"> </td> <td style="border: 1px solid black;"> </td> <td style="border: 1px solid black;"> </td> <td style="border: 1px solid black;"> </td> <td style="border: 1px solid black;"> </td> <td style="border: 1px solid black;"> </td> </tr> <tr> <td style="border: 1px solid black;"> </td> <td style="border: 1px solid black;"> </td> <td style="border: 1px solid black;"> </td> <td style="border: 1px solid black;"> </td> <td style="border: 1px solid black;"> </td> <td style="border: 1px solid black;"> </td> <td style="border: 1px solid black;"> </td> <td style="border: 1px solid black;"> </td> <td style="border: 1px solid black;"> </td> </tr> </table>	7	6	.	4	5	4	1	0	2																																				
7	6	.	4	5	4	1	0	2																																							
PROPOSED WELL DATA																																															
WELL TYPE Stratigraphic		PLANNED DATE OF COMMENCEMENT OF OPERATIONS 08/01/2015																																													
SURFACE ELEVATION (check how obtained) 1345 ft. <input checked="" type="checkbox"/> Surveyed <input type="checkbox"/> Topo Map <input type="checkbox"/> Other		TYPE OF TOOLS Fluid Rotary																																													
NAME OF PLANNED DRILLING CONTRACTOR (as registered with the Division) Patterson-Uti Drilling Co. LP, LLP		TELEPHONE NUMBER (include area code) 405 686-0006																																													
PROPOSED SPACING DATA																																															
WELL SPACING TYPE (subject to Article 23, Title 5) <input type="checkbox"/> Title 5 <input type="checkbox"/> Non-Title 5	TYPE OF UNIT (conforms to spacing under either Title 5 or Part 533) <input type="checkbox"/> Conforming <input type="checkbox"/> Non-Conforming	NUMBER OF ACRES IN UNIT																																													
ACREAGE CONTROLLED IN UNIT <input type="checkbox"/> 100% <input type="checkbox"/> ≥ 60% AND <100%	ACREAGE CONTROLLED IN BORE HOLE (throughout entire hole) <input type="checkbox"/> Yes <input type="checkbox"/> No	STATE LANDS (leased or unitized)																																													
DEPARTMENT USE ONLY																																															
APD NUMBER 300	BOND NUMBER	RECEIPT NUMBER 598184																																													
PERMIT FEE \$0.00	API WELL IDENTIFICATION NUMBER 31- 107300000000	DATE ISSUED																																													

WELL NAME Snyder E 1	WELL NUMBER	NAME OF OWNER Tioga Energy Partners, LLC
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PROPOSED CASING AND CEMENTING DATA

	Feature	Size (in.)	Top (ft.)	Bottom (ft.)	Weight (lbs.)	New Pipe	Comments
CASING	Hole 1	18 7/8	0.0	80.0		<input type="checkbox"/>	
	Conductor	16	0.0	80.0		<input checked="" type="checkbox"/>	
	Hole 2	14 3/4	80.0	700.0		<input type="checkbox"/>	
	Surface Casing	10 3/4	0.0	700.0	40.5	<input checked="" type="checkbox"/>	
DATA	Hole 3	8 3/4	700.0	6850.0		<input type="checkbox"/>	
	Intermediate 1 Casing	7	0.0	6850.0	23.0	<input checked="" type="checkbox"/>	Same string. DV tool at 1,500'
	Intermediate 2 Casing	7	0.0	6850.0	23.0	<input checked="" type="checkbox"/>	Same string. DV tool at 1,500'
	Hole 4	6 1/8	6850.0	9530.0		<input type="checkbox"/>	
						<input type="checkbox"/>	
						<input type="checkbox"/>	
						<input type="checkbox"/>	

	Feature	Top (ft.)	Bottom (ft.)	Volume (ft. ³)	Cement Class * include excess	No. of Sacks*	Weight (PPG)	Yield (ft.3/sx)	Vol ft.3 *	Comments
CEMENT	Conductor	0.0	80.0	58.3	Class A Cement	96	15.6	1.21		
	Surface Casing	0.0	700.0	525.3	Class A Cement	586	15.6	1.21		
	Intermediate 1 Casing	2500.0	6850.0	871.2	Class A Cement	988	15.6	1.19		
	Intermediate 2 Casing	0.0	1500.0	424.7	Class A Cement	482	15.6	1.19		
DATA										

AFFIRMATION AND ACKNOWLEDGMENT

A. For use by individual:

By the act of signing this application:
 (1) I affirm under penalty that the information provided in this application is true to the best of my knowledge and belief; and that I possess the right to access property, and drill and/or extract oil, gas, or salt, by deed or lease, from the lands and site described in the well location data section of this application. I am aware that any false statement made in this application is punishable as a Class A Misdemeanor under Section 210.45 of the Penal Law.
 (2) I acknowledge that if the permit requested to be issued in consideration of the information and affirmations contained in this application is issued, as a condition to the issuance of that permit, I accept full legal responsibility for all damage, direct or indirect, of whatever nature and by whomever suffered, arising out of the activity conducted under authority of that permit; and agree to indemnify and hold harmless the State, its representatives, employees, agents, and assigns for all claims, suits, actions, damages, and costs of every name and description, arising out of or resulting from the permittee's undertaking of activities or operation and maintenance of the facility or facilities authorized by the permit in compliance or non-compliance with the terms and conditions of the permit.

Printed or Typed Name of Individual

Signature of Individual

Date

B. For use by organizations other than an individual:

By the act of signing this application:
 (1) I affirm under penalty of perjury that I am _____ (title) of _____ (organization); that I am authorized by that organization to make this application; that this application was prepared by me or under my supervision and direction, is true to the best of my knowledge and belief; and that the aforementioned organization possesses the right to access property, and drill and/or extract oil, gas, or salt by deed or lease, from the lands and site described in the well location data section of this application. I am aware that any false statement made in this application is punishable as a Class A Misdemeanor under Section 210.45 of the Penal Law.
 (2) _____ (organization); acknowledges that if the permit requested to be issued in consideration of the information and affirmations contained in this application is issued, as a condition to the issuance of that permit, it accepts full legal responsibility for all damage, direct or indirect, of whatever nature and by whomever suffered, arising out of the activity conducted under authority of that permit; and agrees to indemnify and hold harmless the State, its representatives, employees, agents, and assigns for all claims, from suits, actions, damages, and costs of every name and description, arising out of or resulting from the permittee's undertaking of activities or operation and maintenance of the facility or facilities authorized by the permit in compliance or non-compliance with the terms and conditions of the permit.

Printed or Typed Name of Authorized Representative

Signature of Authorized Representative

Date

SNYDER E 1

400 - STIMULATION DATA

(NOTE: There is no Stimulation Data for the Snyder E 1 well as it is a stratigraphic test well only)

Premier Directional Drilling

Planning Report - Geographic

Database:	EDM 5000 Server	Local Co-ordinate Reference:	Well Synder E1
Company:	TIOGA ENERGY PARTNERS, LLC	TVD Reference:	0 @ 1345.00usft
Project:	Tioga County, NY (NAD83)	MD Reference:	0 @ 1345.00usft
Site:	Snyder E1	North Reference:	True
Well:	Snyder E1	Survey Calculation Method:	Minimum Curvature
Wellbore:	Pilot Hole		
Design:	Plan #5		

Project	Tioga County, NY (NAD83)		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New York Central Zone		

Site	Snyder E1, SL change 6/5/15				
Site Position:		Northing:	781,473.02 usft	Latitude:	42° 8' 41.565 N
From:	Lat/Long	Easting:	855,253.97 usft	Longitude:	76° 27' 14.767 W
Position Uncertainty:	0.00 usft	Slot Radius:	13.200 in	Grid Convergence:	0.09 °

Well	Snyder E1					
Well Position	+N/-S	0.00 usft	Northing:	781,473.06 usft	Latitude:	42° 8' 41.565 N
	+E/-W	0.00 usft	Easting:	855,253.97 usft	Longitude:	76° 27' 14.767 W
Position Uncertainty		0.00 usft	Wellhead Elevation:		Ground Level:	1,345.00 usft

Wellbore	Pilot Hole				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	12/31/2009	-12.09	68.79	53,636

Design	Plan #5			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.00	0.00	0.00	0.00

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
9,530.00	0.00	0.00	9,530.00	0.00	0.00	0.00	0.00	0.00	0.00	

Premier Directional Drilling

Planning Report - Geographic

Database:	EDM 5000 Server	Local Co-ordinate Reference:	Well Synder E1
Company:	TIOGA ENERGY PARTNERS, LLC	TVD Reference:	0 @ 1345.00usft
Project:	Tioga County, NY (NAD83)	MD Reference:	0 @ 1345.00usft
Site:	Snyder E1	North Reference:	True
Well:	Snyder E1	Survey Calculation Method:	Minimum Curvature
Wellbore:	Pilot Hole		
Design:	Plan #5		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude	
0.00	0.00	0.00	0.00	0.00	0.00	781,473.06	855,253.97	42° 8' 41.565 N	76° 27' 14.767 W	
100.00	0.00	0.00	100.00	0.00	0.00	781,473.06	855,253.97	42° 8' 41.565 N	76° 27' 14.767 W	
200.00	0.00	0.00	200.00	0.00	0.00	781,473.06	855,253.97	42° 8' 41.565 N	76° 27' 14.767 W	
300.00	0.00	0.00	300.00	0.00	0.00	781,473.06	855,253.97	42° 8' 41.565 N	76° 27' 14.767 W	
400.00	0.00	0.00	400.00	0.00	0.00	781,473.06	855,253.97	42° 8' 41.565 N	76° 27' 14.767 W	
500.00	0.00	0.00	500.00	0.00	0.00	781,473.06	855,253.97	42° 8' 41.565 N	76° 27' 14.767 W	
600.00	0.00	0.00	600.00	0.00	0.00	781,473.06	855,253.97	42° 8' 41.565 N	76° 27' 14.767 W	
700.00	0.00	0.00	700.00	0.00	0.00	781,473.06	855,253.97	42° 8' 41.565 N	76° 27' 14.767 W	
800.00	0.00	0.00	800.00	0.00	0.00	781,473.06	855,253.97	42° 8' 41.565 N	76° 27' 14.767 W	
900.00	0.00	0.00	900.00	0.00	0.00	781,473.06	855,253.97	42° 8' 41.565 N	76° 27' 14.767 W	
1,000.00	0.00	0.00	1,000.00	0.00	0.00	781,473.06	855,253.97	42° 8' 41.565 N	76° 27' 14.767 W	
1,100.00	0.00	0.00	1,100.00	0.00	0.00	781,473.06	855,253.97	42° 8' 41.565 N	76° 27' 14.767 W	
1,200.00	0.00	0.00	1,200.00	0.00	0.00	781,473.06	855,253.97	42° 8' 41.565 N	76° 27' 14.767 W	
1,300.00	0.00	0.00	1,300.00	0.00	0.00	781,473.06	855,253.97	42° 8' 41.565 N	76° 27' 14.767 W	
1,400.00	0.00	0.00	1,400.00	0.00	0.00	781,473.06	855,253.97	42° 8' 41.565 N	76° 27' 14.767 W	
1,500.00	0.00	0.00	1,500.00	0.00	0.00	781,473.06	855,253.97	42° 8' 41.565 N	76° 27' 14.767 W	
1,600.00	0.00	0.00	1,600.00	0.00	0.00	781,473.06	855,253.97	42° 8' 41.565 N	76° 27' 14.767 W	
1,700.00	0.00	0.00	1,700.00	0.00	0.00	781,473.06	855,253.97	42° 8' 41.565 N	76° 27' 14.767 W	
1,800.00	0.00	0.00	1,800.00	0.00	0.00	781,473.06	855,253.97	42° 8' 41.565 N	76° 27' 14.767 W	
1,900.00	0.00	0.00	1,900.00	0.00	0.00	781,473.06	855,253.97	42° 8' 41.565 N	76° 27' 14.767 W	
2,000.00	0.00	0.00	2,000.00	0.00	0.00	781,473.06	855,253.97	42° 8' 41.565 N	76° 27' 14.767 W	
2,100.00	0.00	0.00	2,100.00	0.00	0.00	781,473.06	855,253.97	42° 8' 41.565 N	76° 27' 14.767 W	
2,200.00	0.00	0.00	2,200.00	0.00	0.00	781,473.06	855,253.97	42° 8' 41.565 N	76° 27' 14.767 W	
2,300.00	0.00	0.00	2,300.00	0.00	0.00	781,473.06	855,253.97	42° 8' 41.565 N	76° 27' 14.767 W	
2,400.00	0.00	0.00	2,400.00	0.00	0.00	781,473.06	855,253.97	42° 8' 41.565 N	76° 27' 14.767 W	
2,500.00	0.00	0.00	2,500.00	0.00	0.00	781,473.06	855,253.97	42° 8' 41.565 N	76° 27' 14.767 W	
2,600.00	0.00	0.00	2,600.00	0.00	0.00	781,473.06	855,253.97	42° 8' 41.565 N	76° 27' 14.767 W	
2,700.00	0.00	0.00	2,700.00	0.00	0.00	781,473.06	855,253.97	42° 8' 41.565 N	76° 27' 14.767 W	
2,800.00	0.00	0.00	2,800.00	0.00	0.00	781,473.06	855,253.97	42° 8' 41.565 N	76° 27' 14.767 W	
2,900.00	0.00	0.00	2,900.00	0.00	0.00	781,473.06	855,253.97	42° 8' 41.565 N	76° 27' 14.767 W	
3,000.00	0.00	0.00	3,000.00	0.00	0.00	781,473.06	855,253.97	42° 8' 41.565 N	76° 27' 14.767 W	
3,100.00	0.00	0.00	3,100.00	0.00	0.00	781,473.06	855,253.97	42° 8' 41.565 N	76° 27' 14.767 W	
3,200.00	0.00	0.00	3,200.00	0.00	0.00	781,473.06	855,253.97	42° 8' 41.565 N	76° 27' 14.767 W	
3,300.00	0.00	0.00	3,300.00	0.00	0.00	781,473.06	855,253.97	42° 8' 41.565 N	76° 27' 14.767 W	
3,400.00	0.00	0.00	3,400.00	0.00	0.00	781,473.06	855,253.97	42° 8' 41.565 N	76° 27' 14.767 W	
3,500.00	0.00	0.00	3,500.00	0.00	0.00	781,473.06	855,253.97	42° 8' 41.565 N	76° 27' 14.767 W	
3,600.00	0.00	0.00	3,600.00	0.00	0.00	781,473.06	855,253.97	42° 8' 41.565 N	76° 27' 14.767 W	
3,700.00	0.00	0.00	3,700.00	0.00	0.00	781,473.06	855,253.97	42° 8' 41.565 N	76° 27' 14.767 W	
3,800.00	0.00	0.00	3,800.00	0.00	0.00	781,473.06	855,253.97	42° 8' 41.565 N	76° 27' 14.767 W	
3,900.00	0.00	0.00	3,900.00	0.00	0.00	781,473.06	855,253.97	42° 8' 41.565 N	76° 27' 14.767 W	
4,000.00	0.00	0.00	4,000.00	0.00	0.00	781,473.06	855,253.97	42° 8' 41.565 N	76° 27' 14.767 W	
4,100.00	0.00	0.00	4,100.00	0.00	0.00	781,473.06	855,253.97	42° 8' 41.565 N	76° 27' 14.767 W	
4,200.00	0.00	0.00	4,200.00	0.00	0.00	781,473.06	855,253.97	42° 8' 41.565 N	76° 27' 14.767 W	
4,300.00	0.00	0.00	4,300.00	0.00	0.00	781,473.06	855,253.97	42° 8' 41.565 N	76° 27' 14.767 W	
4,400.00	0.00	0.00	4,400.00	0.00	0.00	781,473.06	855,253.97	42° 8' 41.565 N	76° 27' 14.767 W	
4,500.00	0.00	0.00	4,500.00	0.00	0.00	781,473.06	855,253.97	42° 8' 41.565 N	76° 27' 14.767 W	
4,600.00	0.00	0.00	4,600.00	0.00	0.00	781,473.06	855,253.97	42° 8' 41.565 N	76° 27' 14.767 W	
4,700.00	0.00	0.00	4,700.00	0.00	0.00	781,473.06	855,253.97	42° 8' 41.565 N	76° 27' 14.767 W	
4,800.00	0.00	0.00	4,800.00	0.00	0.00	781,473.06	855,253.97	42° 8' 41.565 N	76° 27' 14.767 W	
4,900.00	0.00	0.00	4,900.00	0.00	0.00	781,473.06	855,253.97	42° 8' 41.565 N	76° 27' 14.767 W	
5,000.00	0.00	0.00	5,000.00	0.00	0.00	781,473.06	855,253.97	42° 8' 41.565 N	76° 27' 14.767 W	
5,100.00	0.00	0.00	5,100.00	0.00	0.00	781,473.06	855,253.97	42° 8' 41.565 N	76° 27' 14.767 W	
5,200.00	0.00	0.00	5,200.00	0.00	0.00	781,473.06	855,253.97	42° 8' 41.565 N	76° 27' 14.767 W	
5,300.00	0.00	0.00	5,300.00	0.00	0.00	781,473.06	855,253.97	42° 8' 41.565 N	76° 27' 14.767 W	
5,400.00	0.00	0.00	5,400.00	0.00	0.00	781,473.06	855,253.97	42° 8' 41.565 N	76° 27' 14.767 W	

Premier Directional Drilling

Planning Report - Geographic

Database:	EDM 5000 Server	Local Co-ordinate Reference:	Well Synder E1
Company:	TIOGA ENERGY PARTNERS, LLC	TVD Reference:	0 @ 1345.00usft
Project:	Tioga County, NY (NAD83)	MD Reference:	0 @ 1345.00usft
Site:	Snyder E1	North Reference:	True
Well:	Snyder E1	Survey Calculation Method:	Minimum Curvature
Wellbore:	Pilot Hole		
Design:	Plan #5		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude	
5,500.00	0.00	0.00	5,500.00	0.00	0.00	781,473.06	855,253.97	42° 8' 41.565 N	76° 27' 14.767 W	
5,600.00	0.00	0.00	5,600.00	0.00	0.00	781,473.06	855,253.97	42° 8' 41.565 N	76° 27' 14.767 W	
5,700.00	0.00	0.00	5,700.00	0.00	0.00	781,473.06	855,253.97	42° 8' 41.565 N	76° 27' 14.767 W	
5,800.00	0.00	0.00	5,800.00	0.00	0.00	781,473.06	855,253.97	42° 8' 41.565 N	76° 27' 14.767 W	
5,900.00	0.00	0.00	5,900.00	0.00	0.00	781,473.06	855,253.97	42° 8' 41.565 N	76° 27' 14.767 W	
6,000.00	0.00	0.00	6,000.00	0.00	0.00	781,473.06	855,253.97	42° 8' 41.565 N	76° 27' 14.767 W	
6,100.00	0.00	0.00	6,100.00	0.00	0.00	781,473.06	855,253.97	42° 8' 41.565 N	76° 27' 14.767 W	
6,200.00	0.00	0.00	6,200.00	0.00	0.00	781,473.06	855,253.97	42° 8' 41.565 N	76° 27' 14.767 W	
6,300.00	0.00	0.00	6,300.00	0.00	0.00	781,473.06	855,253.97	42° 8' 41.565 N	76° 27' 14.767 W	
6,400.00	0.00	0.00	6,400.00	0.00	0.00	781,473.06	855,253.97	42° 8' 41.565 N	76° 27' 14.767 W	
6,500.00	0.00	0.00	6,500.00	0.00	0.00	781,473.06	855,253.97	42° 8' 41.565 N	76° 27' 14.767 W	
6,600.00	0.00	0.00	6,600.00	0.00	0.00	781,473.06	855,253.97	42° 8' 41.565 N	76° 27' 14.767 W	
6,700.00	0.00	0.00	6,700.00	0.00	0.00	781,473.06	855,253.97	42° 8' 41.565 N	76° 27' 14.767 W	
6,800.00	0.00	0.00	6,800.00	0.00	0.00	781,473.06	855,253.97	42° 8' 41.565 N	76° 27' 14.767 W	
6,900.00	0.00	0.00	6,900.00	0.00	0.00	781,473.06	855,253.97	42° 8' 41.565 N	76° 27' 14.767 W	
7,000.00	0.00	0.00	7,000.00	0.00	0.00	781,473.06	855,253.97	42° 8' 41.565 N	76° 27' 14.767 W	
7,100.00	0.00	0.00	7,100.00	0.00	0.00	781,473.06	855,253.97	42° 8' 41.565 N	76° 27' 14.767 W	
7,200.00	0.00	0.00	7,200.00	0.00	0.00	781,473.06	855,253.97	42° 8' 41.565 N	76° 27' 14.767 W	
7,300.00	0.00	0.00	7,300.00	0.00	0.00	781,473.06	855,253.97	42° 8' 41.565 N	76° 27' 14.767 W	
7,400.00	0.00	0.00	7,400.00	0.00	0.00	781,473.06	855,253.97	42° 8' 41.565 N	76° 27' 14.767 W	
7,500.00	0.00	0.00	7,500.00	0.00	0.00	781,473.06	855,253.97	42° 8' 41.565 N	76° 27' 14.767 W	
7,600.00	0.00	0.00	7,600.00	0.00	0.00	781,473.06	855,253.97	42° 8' 41.565 N	76° 27' 14.767 W	
7,700.00	0.00	0.00	7,700.00	0.00	0.00	781,473.06	855,253.97	42° 8' 41.565 N	76° 27' 14.767 W	
7,800.00	0.00	0.00	7,800.00	0.00	0.00	781,473.06	855,253.97	42° 8' 41.565 N	76° 27' 14.767 W	
7,900.00	0.00	0.00	7,900.00	0.00	0.00	781,473.06	855,253.97	42° 8' 41.565 N	76° 27' 14.767 W	
8,000.00	0.00	0.00	8,000.00	0.00	0.00	781,473.06	855,253.97	42° 8' 41.565 N	76° 27' 14.767 W	
8,100.00	0.00	0.00	8,100.00	0.00	0.00	781,473.06	855,253.97	42° 8' 41.565 N	76° 27' 14.767 W	
8,200.00	0.00	0.00	8,200.00	0.00	0.00	781,473.06	855,253.97	42° 8' 41.565 N	76° 27' 14.767 W	
8,300.00	0.00	0.00	8,300.00	0.00	0.00	781,473.06	855,253.97	42° 8' 41.565 N	76° 27' 14.767 W	
8,400.00	0.00	0.00	8,400.00	0.00	0.00	781,473.06	855,253.97	42° 8' 41.565 N	76° 27' 14.767 W	
8,500.00	0.00	0.00	8,500.00	0.00	0.00	781,473.06	855,253.97	42° 8' 41.565 N	76° 27' 14.767 W	
8,600.00	0.00	0.00	8,600.00	0.00	0.00	781,473.06	855,253.97	42° 8' 41.565 N	76° 27' 14.767 W	
8,700.00	0.00	0.00	8,700.00	0.00	0.00	781,473.06	855,253.97	42° 8' 41.565 N	76° 27' 14.767 W	
8,800.00	0.00	0.00	8,800.00	0.00	0.00	781,473.06	855,253.97	42° 8' 41.565 N	76° 27' 14.767 W	
8,900.00	0.00	0.00	8,900.00	0.00	0.00	781,473.06	855,253.97	42° 8' 41.565 N	76° 27' 14.767 W	
9,000.00	0.00	0.00	9,000.00	0.00	0.00	781,473.06	855,253.97	42° 8' 41.565 N	76° 27' 14.767 W	
9,100.00	0.00	0.00	9,100.00	0.00	0.00	781,473.06	855,253.97	42° 8' 41.565 N	76° 27' 14.767 W	
9,200.00	0.00	0.00	9,200.00	0.00	0.00	781,473.06	855,253.97	42° 8' 41.565 N	76° 27' 14.767 W	
9,300.00	0.00	0.00	9,300.00	0.00	0.00	781,473.06	855,253.97	42° 8' 41.565 N	76° 27' 14.767 W	
9,400.00	0.00	0.00	9,400.00	0.00	0.00	781,473.06	855,253.97	42° 8' 41.565 N	76° 27' 14.767 W	
9,500.00	0.00	0.00	9,500.00	0.00	0.00	781,473.06	855,253.97	42° 8' 41.565 N	76° 27' 14.767 W	
9,530.00	0.00	0.00	9,530.00	0.00	0.00	781,473.06	855,253.97	42° 8' 41.565 N	76° 27' 14.767 W	

Design Targets										
Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude	
Snyder E1 SL - plan hits target center - Point	0.00	0.00	0.00	0.00	0.00	781,473.06	855,253.97	42° 8' 41.565 N	76° 27' 14.767 W	

Premier Directional Drilling

Planning Report - Geographic

Database:	EDM 5000 Server	Local Co-ordinate Reference:	Well Snyder E1
Company:	TIOGA ENERGY PARTNERS, LLC	TVD Reference:	0 @ 1345.00usft
Project:	Tioga County, NY (NAD83)	MD Reference:	0 @ 1345.00usft
Site:	Snyder E1	North Reference:	True
Well:	Snyder E1	Survey Calculation Method:	Minimum Curvature
Wellbore:	Pilot Hole		
Design:	Plan #5		

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF MINERAL RESOURCES**ENVIRONMENTAL ASSESSMENT FORM**

Attachment to Drilling Permit Application

WELL NAME AND NUMBER
SNYDER E 1NAME OF APPLICANT
Tioga Energy Partners, LLCBUSINESS TELEPHONE NUMBER
(518) 426-4600ADDRESS OF APPLICANT
P.O. Box 22222CITY/P.O.
Albany,STATE
NYZIP CODE
12201

DESCRIPTION OF PROJECT (Briefly describe type of project or action)

Drill and complete a stratigraphic test well. Utilize existing farm/landowner road with improvements.

Well Pad and Well Top Hole location:

233 Hamilton Valley Rd, Town of Barton, Tioga County, NY; TM#102.00-1-24; Owner: Ernest J. Snyder
Access Rd.: Hamilton Valley Rd, Town of Barton, Tioga County, NY; TM#102.00-1-22 & 2-16.1; Owner: Howard & Beryl ChrisfieldPROJECT SITE IS THE WELL SITE AND SURROUNDING AREA WHICH WILL BE DISTURBED DURING CONSTRUCTION OF SITE,
ACCESS ROAD, and PIT AND ACTIVITIES DURING DRILLING AND COMPLETION AT WELLHEAD.
(PLEASE COMPLETE EACH QUESTION--Indicate N.A. if not applicable)

LAND USE AND PROJECT SITE

1. Project Dimensions. Total Area of Project Site 401993 sq. ft.
Approximate square footage for items below:

	During Construction (sq. ft.)	After Construction (sq. ft.)
a. Access Road (length x width)	<u>249097</u>	<u>58747</u>
b. Well Site (length x width)	<u>152896</u>	<u>28350</u>

2. Characterize Project Site Vegetation and Estimate Percentage of Each Type Before Construction:

91 % Agricultural (cropland, hayland, pasture, vineyard, etc.) 3 % Forested 0 % Wetlands
0 % Meadow or Brushland (non agricultural) 6 % Non vegetated (rock, soil, fill)

3. Present Land Use(s) Within ¼ Mile of Project (Check all that apply)

Rural Suburban Forest Urban Agricultural Commercial Park/Recreation
 Industrial Other _____

4. How close is the nearest residence, building, or outdoor facility of any type routinely occupied by people at least part of the day? 2800 ft.Describe NEAREST RESIDENCE IS 2800 FEET FROM WELL SITE AND >250 FEET FROM ACCESS ROAD.
ENTRANCE ON HAMILTON VALLEY ROAD

ENVIRONMENTAL RESOURCES ON/NEAR PROJECT SITE

5. The presence of certain environmental resources on or near the project site may require additional permits, approvals or mitigation measures--Is any part of the well site or access road located:

- a. Over a primary or principal aquifer? Yes No Not Known
- b. Within 2,640 feet of a public water supply well? Yes No Not Known
- c. Within 150 feet of a surface municipal water supply? Yes No Not Known
- d. Within 150 feet of a lake, stream, or other public surface water body? Yes No Not Known
- e. Within an Agricultural District? (0.7 acres) Yes No Not Known
- f. Within a land parcel having a Soil and Water Conservation Plan? Yes No Not Known
- g. In a 100 year flood plain? Yes No Not Known
- h. In a regulated wetland or its 100 foot buffer zone? Yes No Not Known
- i. In a coastal zone management area? Yes No Not Known
- j. In a Critical Environmental Area? Yes No Not Known
- k. Does the project site contain any species of animal life that are listed as threatened or endangered? Yes No Not Known
- If yes, identify the species and source of information _____
- l. Will proposed project significantly impact visual resources of statewide significance? Yes No Not Known
- If yes, identify the visual resource and source of information _____

CULTURAL RESOURCES

6. Are there any known archeological and/or historical resources which will be affected by drilling operations? Yes No Not Known
7. Has the land within the project area been previously disturbed or altered (excavated, landscaped, filled, utilities installed)? Yes No Not Known

If answer to Number 6 or 7 is yes, briefly describe Farming

EROSION AND RECLAMATION PLANS

8. Indicate percentage of project site within: 0-10% slope 73 % 10-15% slope 10 % greater than 15% slope 17 %
9. Are erosion control measures needed during construction of the access road and well site? Yes No Not Known

If yes, describe and/or sketch on attached photocopy of plat Consistent with NYSDEC SPDES GP-0-15-002 and required Storm Water Pollution Prevention Plan (SWPPP)
(e.g. check dams, sediment traps, control blankets, etc.)

10. Will the topsoil which is disturbed be stockpiled for reclamation use? Yes No
11. Does the reclamation plan include revegetation? Yes No
If yes, what plant materials will be used? GRASS MIX.
12. Does the reclamation plan include restoration or installation of surface or subsurface drainage features to prevent erosion or conform to a Soil and Water Conservation Plan? Yes No
If yes, describe Grassed diversion swales.

ACCESS ROAD SITING AND CONSTRUCTION

13. Are you going to use existing or common corridors when building the access road? Yes No
Locate access road on attached photocopy of plat.

DRILLING

14. Anticipated length of drilling operations? 17 days.

WASTE STORAGE AND DISPOSAL

15. How will drilling fluids and stimulation fluids:
- a. Be contained? DRILLING WILL BE CLOSED LOOP USING STEEL TANKS
- b. Be disposed of? TAKEN TO CHEMUNG COUNTY LANDFILL, LOWMAN, NEW YORK
16. Will production brine be stored on site? Yes No
If yes:
How will it be stored? _____
How will it be disposed of? _____

17. Will the drill cuttings and pit liner be disposed of on site? Yes No
If yes, expected burial depth? _____ feet

ADDITIONAL PERMITS

18. Are any additional State, Local or Federal permits or approvals required for this project? Yes No
- | | Date Application Submitted | Date Application Received |
|---|----------------------------|---------------------------|
| Stream Disturbance Permit (DEC) | | |
| Wetlands Permit (DEC or Local) | | |
| Floodplain Permit (DEC or Local) | | |
| Other <u>NYSDEC SPDES GP-0-15-002 (STORMWATER)</u>
<u>(will be submitted prior to any site construction)</u> | | |
| | | |
| | | |

PREPARE'S SIGNATURE Clay Smith

DATE 7/6/15

NAME/TITLE (Please print)
Clay Smith

REPRESENTING
Tioga Energy Partners, LLC

SNYDER E 1

SUPPLEMENTAL INFORMATION

SNYDER E 1

SUPPLEMENTAL INFORMATION

Well Schematic (with Casing and Cementing):

See attached.

Cement Bond Logs:

Cement Bond Logs will be run on each casing string.

Rock Cores:

Conventional whole coring tools will be used to take cores at approximately 9408'-9530' TVD.

Drilling Duration:

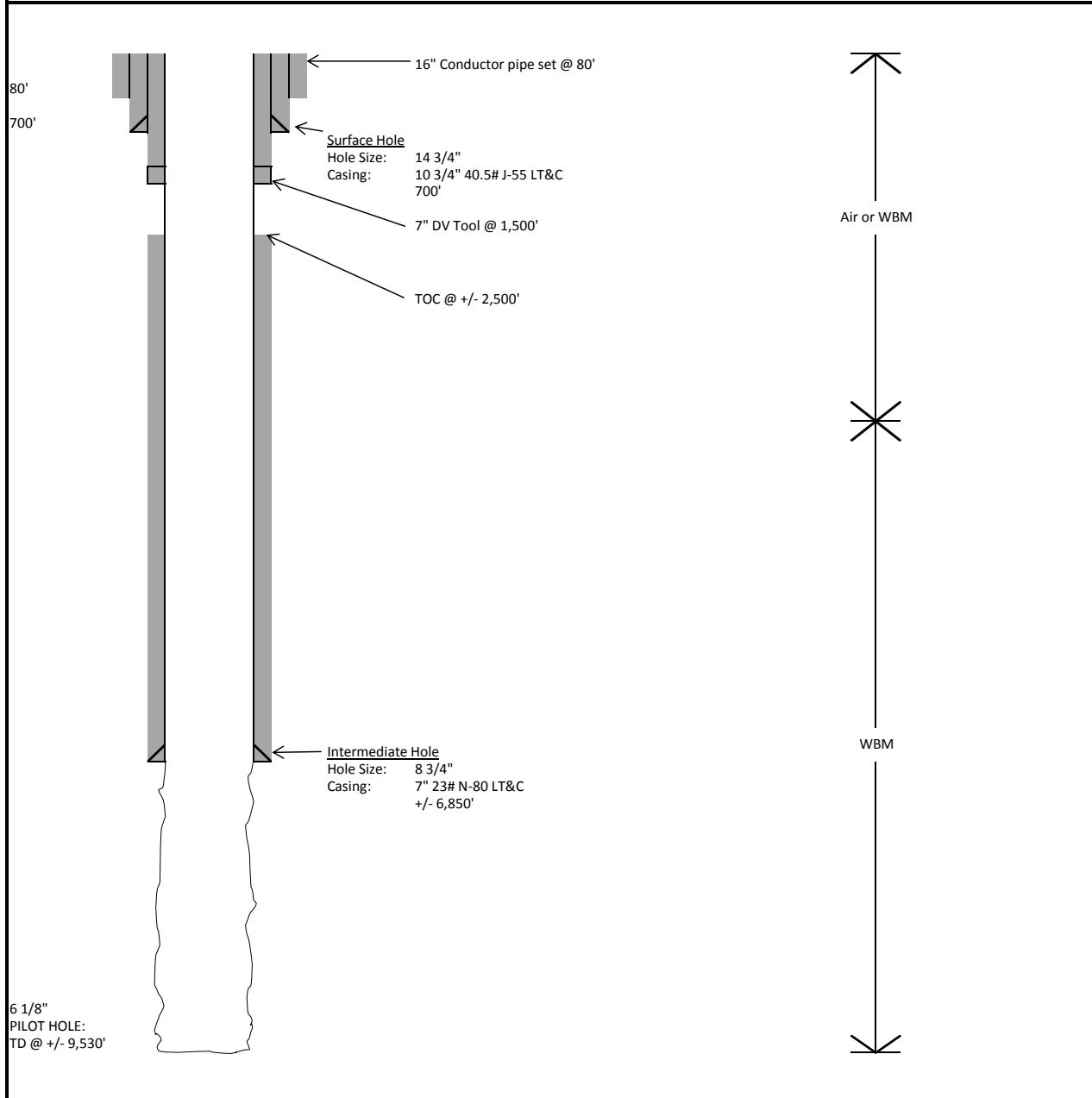
Drilling is anticipated to be completed 17 days after commencement. The drilling operation is continuous.

Blow Out Prevention Equipment (BOP):

The BOP equipment will comply with NYSDEC's Wildcat Supplementary Permit Conditions and have a pressure rating of 5,000 psi.

Snyder E 1 -- Proposed Well Schematic

THIS IS A PROPOSED SCHEMATIC AND REPRESENTATION OF THE PLANNED WELL



Notes:

Summary: Drill 6 1/8" pilot hole to 100' below base of Utica

- 1 Whole core lower Marcellus & Utica sections
- 2 Run openhole logs across Marcellus & Utica sections

Snyder E1 -- Detailed Casing and Cementing Plan																			
Casing Design/Program										Cementing Program									
Type	Hole Size (inches)	OD Size (inches)	Length (ft)	Bottom of String (TVD/TMD in feet)	Grade	Weight (ppf)	Wall Thickness (inches)	Burst Pressure Rating (psi)	Centralizer Placement	Type	Additives	Weight (PPG)	Top of Cement Stage (ft)	Estimated Volume (cu. ft)	Amount of Excess Cement (%)	Vol w/ excess (cu ft)	Yield (ft.3/sx)	No. of Sacks	WOC Time (hrs)
Conductor	18.875	16	80	80'/80'	n/a	75	0.423	2630	none	Class A	2% CaCl2, 0.25 lb/sk Cello-Flake, 0.4% C-41P	15.6	0	58.3	100	117	1.21	96	8
Surface	14.75	10.75	700	700'/700'	J-55	40.5	0.35	3130	1-6" above float shoe 1-at float collar 1-every 2nd joint to surface	Class A	1% CaCl2, 0.25 lb/sk Cello-Flake, 0.7 lb/sk C-47, 0.1 lb/sk C-41P	15.6	0	525	35	709	1.21	586	8
Intermediate Stage #1	8.75	7	6850	6850'/6850'	N-80	23	0.317	6340	1-6" above float shoe 1-at float collar 1-every 3rd joint to surface	Class A	0.7 lb/sk C-47, 0.1 lb/sk C-41P, 0.1% C-20	15.6	2500	871	35	1176	1.19	988	8
Intermediate Stage #2	8.75	7	6850	6850'/6850'	N-80	23	0.317	6340	1-6" above float shoe 1-at float collar 1-every 3rd joint to surface	Class A	0.7 lb/sk C-47, 0.1 lb/sk C-41P, 0.1% C-20	15.6	0	425	35	573	1.19	482	8