

RE: Windfall Oil & Gas  
PERMIT # : PAS2D020BCLE  
PERMITTED FACILITY: Class 2-D injection well, Zelman #1

RECEIVED  
2014 MAR 14 11:07 AM

ENVIR. APPEALS BOARD

SUBMITTED BY:

Randall R. Baird  
1273 Highland St. EXT  
DuBois, Pa 15801-4543  
PHONE # : 814-583-7180  
EMAIL: fairway08@windstream.net

March 6, 2014

TO:

Clerk of the Board  
U.S. Environmental Protection Agency  
1201 Constitution Avenue, NW  
WJC East, Room3334  
Washington, DC 20004  
PHONE # :202-233-0122

I, Randall R. Baird, am requesting an appeal to deny the permit for a class II-D disposal injection well, PERMIT # :PAS2D020BCLE, Zelman # 1, Windfall Oil & Gas Inc., located at Tower Lane, DuBois, Pa. I commented at the public hearing and also submitted written comment to the EPA. I was once in the employ of Schlumberger Well Svc. and feel I have some insight into the oil and gas industry. I have also maintained word and page limits for this document.

My property is approx. 700ft down hill from the proposed well site. The well site is the recharge area for numerous fresh water wells in our village of Highland St. EXT., as stated in the report conducted by Resource Management Services Inc. for Windfall Oil & Gas. (See attachment A) The stress of the daily threat of being exposed to this toxic stew would be unbearable as you can well imagine. Monitoring plans for a few water wells is not the answer. Others may be contaminated while surveyed wells would test good. The EPA must consider location when reviewing UIC permit applications. Location is a very important factor for the risk of ground water and USDW contamination. Spills and accidents never happen in containment areas.

Second: From the "Response to Comments" Page 10, item # 12) "Abandoned or improperly plugged gas wells may pose a risk to drinking water supplies", the last sentence reads, "In addition, there are no drinking water wells located within the 1/4 mile area of review". This statement is in error as there are 14 documented on the permittee's UIC application Plat Map that are from 659ft to 994ft from the would be well bore and several others that were not documented within the 1/4 mile area of review. (See attachment B)

Third: From the "Response to Comments" Page 5, Item: "Faults Near the Proposed Well". EPA statement reads, "EPA obtained, geologic info indicating the possible presence of several faults within the 1/4 mile review area. Further, the faults "appear" to be localized, "non-transmissive" faults. Since there has been no specific geologic studies of this area, that statement is vague and without merit. EPA goes on to say, "USGS has recorded seismic events in Clearfield County although such events are rare. The County is not located in a seismically active area. Neither was Youngstown, Ohio. My point is, I don't know

what is down there, and obviously, neither does anyone else. Rolling the dice in this community of many people with fresh water wells at stake is a catastrophe waiting to happen and would add yet more negative publicity to an already beleaguered industry. (See attachments "C" and "D", Faults in the area of the proposed well, and attachments "E" & "G" from the publication, "Sub-surface Liquid Waste Disposal and its Feasibility in Pa.") written by the Commonwealth of Pa. Dept. of Environmental Resources bureau of Geologic Survey.

Our properties have already taken a big hit in property value and the well has not yet been drilled. My neighbor tried to sell his home. Had a realtor list it for 6 months. He actually had people place a deposit on his property only to have them renege because of the threat of this disposal well and the threat of not having potable water. This permit should be denied on that bases alone.

Fourth: In the "Response to Comments" page 3 of section 7, "Faults near the Proposed Well", the statement, "These faults "appear" to be localized, non-transmissive faults. There is no geologic evidence that indicates these faults are transmissive to the deep Precambrian basement rock or to the surface." There is also no evidence that indicates that they are not transmissive to the deep Precambrian basement rock or to the surface. Way to vague and to much guess work here. More in depth geologic studies of this area should be performed to prove all the theory and speculation. It's our water and ultimately our lives he is messing with here. Once the water is gone it's gone. There has been way to much complacency and guess work involved in this project so far. Our lives are in the hands of an individual who has never installed or operated an injection well before and who's reputation around DuBois does not give one a warm fuzzy feeling. We are taking this threat to our health, invasion of our rights, and theft of our hard earned property values very seriously.

FIFTH: "Response to Comments" page 5 of section 7, "Faults near Proposed Well" states that "While maps do show some faults in the basement rock beneath Clearfield County, the Precambrian basement rock is located approximately 11,000ft below the proposed injection zone. Yet, the fifth paragraph under "Factors affecting fluid transmission and pore pressure" on page 7 states, "Because of the non-transmissive nature of the faults, (non-transmissive nature? we don't know this for sure), fluid that is injected into the Huntersville Chert/Oriskany formation at the proposed injection well location "should", (another should), be confined within the fault block. What fault block? I see no indication of a fault block on any maps in the UIC or final permit packages. Also, how will the fluid be contained by the faults if the faults are at 18,000+ft? (See attachments "C", "D", and "E" for fault maps of proposed well area)

SIXTH: In the "Response to Comments" page 9, section 9, "No injection wells in Clearfield County". Looking at your numbers for injected fluids into the Chert/Oriskany for one of these wells, 623,405 barrels were injected over a 9 year period. That computes to 5772 bbl per month. The other EXCO well injected 371,481 over a 25 year period which computes to 1206 bbl per month. I don't see any correlation between these wells and the one proposed for my back yard since it will inject 30,000 bbl per month or 360,000 bbl per year. You also did not mention that one of these wells failed and EXCO was fined \$160,000 for the violation. These wells are also located in a very remote setting where well failures, spills and the like would not be detected as easily or possibly harm water supplies for dozens of families. Crazy. (See attachment "F" for the "Village of Highland Street EXT" and the prevailing ground water flow from the direction of the proposed DIW) The Clearfield County Comprehensive Plan for Brady Twp. states that no expansion of the Brady water system is recommended. They can't even supply their fire trucks at the present time so if our water is destroyed, basically, so are those in this neighborhood. Windfall should be required to bond this proposed well for several million dollars. This was an issue that was not addressed in the "Response to Comments" but I feel it should have been.

SEVENTH: Under "Response to Comments" page 12, section 15. The fact that fluids produced from oil and gas production are exempt from hazardous waste regulations is absolutely ludicrous. Everyone knows that just because a peice of paper says these fluids are safe it does not make them safe. (Halliburton Loophole) Many of the known chemicals in this waste are listed on the governments list of hazardous toxic chemicals. It a travesty that the greed of a couple of politicians could perpetrate this crime on the American public and get away with it. I would like to have the EPA explain how this fluid is a "residual waste" rather than a "hazardous waste" that should be injected into a class I injection well. Class I would fix the set backs and this toxic waste that is going to be under my property without my permission would not be happening.

Eighth: Under the "Response to Comments" page 11 section 14, "Why won't the injected fluid come back up once it's injected"? One of the statements reads, "In addition, there are no other artificial penetrations (e.g., abandoned wells) that penetrate the injection zone within the area of review." There may not be any in the area of review but there are several old wells, some plugged, some inactive and some producing that are but feet outside the 1/4 mile review area. They are 156', 161', 427', 1580', and 60' outside the review area. (See attached Plat Map). Your response does not address the fact that this fluid is not going to stop at the edge of the 1/4 mile review area or that it will continue to travel to who knows where or when.

40 C.F.R. §146.22 (a)All new Class II wells shall be sited in such a fashion that they inject into a formation which is seperated from any USDW by a confining zone that is free of known open faults and fractures. We don't know if the confining zone is free of open faults or fractures unless we do a thorough gelologic study.

How can your response be that "The absence of any other artificial penetration into the injection zone within the area of review will prevent injection fluid from migrating out of the injection zone. The 5 old wells into the same formation as the target zone would cast a seed of doubt on that statement. These wells were fractured. (See attached well logs) Those fractures can extend out to 2000' according to a DOE test well in Pa. That would put fractures inside the 1/4 mile review area and into the Huntersville/Chert and Oriskany which are the target zones for the proposed DIW. Fracturing may have also compromised the confining layers themselves. (See

Two of these old wells are listed as plugged. One of them, the Carlson well, # 20341 is very suspect because it emits gaseous orders that neighbors have complained about. This well is also in a direct path with the projected fluid migration from the DIW. It is 427' outside the 1/4 mile review area. Another of the wells, Ginter # 20333, which has been inactive for approx. 1 1/2 years is also troublesome. At 7344', it to is into the confining zone and is but 161' outside the area of review. When maintenance was performed on this well, two neighbors who are in close proximity to it, 300' or so, complain about tainted water. The casing and/or cementing are very suspect at this well which was also drilled in 1960.

Based on the previous stated issues I believe the EAB should review the submitted documentation, which I feel was not satisfied by the "Response to Comments" and deny this permit for an injection well in the Community of Highland Street Ext. Thank you for your consideration on this most serious of issues.

NAME:

*James L. P. P. P.*

DATE:

*3/10/14*

EXAMPLES FOLLOW:



4

Attachment "A"

CONCLUSIONS

This report describes the hydrogeologic investigation conducted by Resource Management Services, Inc. in order to address Attachments B, D and P for Windfall Oil & Gas Corporation's Underground Injection Control Permit Application for an injection well on the Zelman Property in Brady Township, Clearfield County, Pennsylvania.

The investigation indicates that the proposed injection well is located on a near hilltop ledge, upslope and up-dip from several water supplies, primarily to the west of the site. Near surface flow from the site radiates to the east, west and south with the prevailing groundwater flow direction to the West-Northwest.

A review of water supply information indicates that total well depths are less than 400 feet with most in the 100-150 foot range within the Conemaugh or upper Allegheny groups of bedrock formations. There are no existing domestic water wells with total depths below an elevation of approximately 1200 feet MSL.

A review of published information and gas well logs indicate that "fresh water" would not be encountered below an elevation of 900 feet MSL.

As a result of these findings, there are several thousand feet of separation between usable groundwater aquifers and the target injection zone, the Oriskany Sandstone.

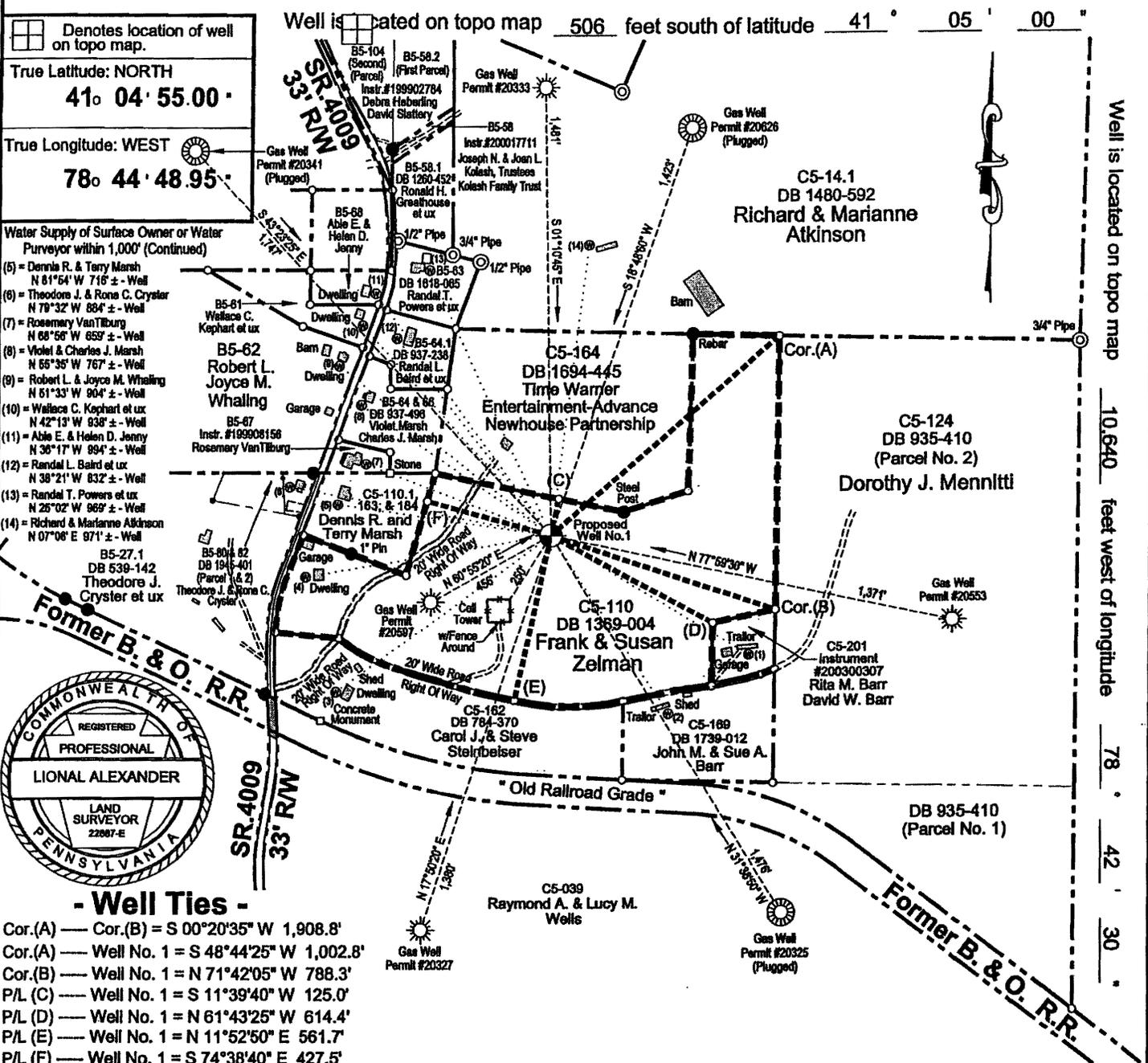
However, the injection well site is located within the recharge area of several domestic water supplies and proper construction and cementing techniques used when installing the injection well casing(s) will be imperative so that there are no impacts to these supplies. The background sampling event indicated that the water quality of these supplies is generally very good. As a result, a sampling plan has been proposed in this report to test selected water supplies and surface water points to monitor for potential influences during the initial drilling and operational periods of the proposed injection well.



**COMMONWEALTH OF PENNSYLVANIA**  
**DEPARTMENT OF ENVIRONMENTAL PROTECTION**  
**Oil and Gas Management Program**  
**WELL LOCATION PLAT**

DEP Application Tracking #	G:
Permit #	C:
Project #	

*Attachment B*



Denotes location of well on topo map.

True Latitude: NORTH  
**41° 04' 55.00"**

True Longitude: WEST  
**78° 44' 48.95"**

- Water Supply of Surface Owner or Water Purveyor within 1,000' (Continued)
- (5) = Dennis R. & Terry Marsh  
 N 81°54' W 716' ± - Well
  - (6) = Theodora J. & Rone C. Cryster  
 N 78°32' W 884' ± - Well
  - (7) = Rosemary VanTilburg  
 N 68°56' W 659' ± - Well
  - (8) = Violet & Charles J. Marsh  
 N 55°35' W 767' ± - Well
  - (9) = Robert L. & Joyce M. Whaling  
 N 51°33' W 904' ± - Well
  - (10) = Wallace C. Kephart et ux  
 N 42°13' W 938' ± - Well
  - (11) = Able E. & Helen D. Jenny  
 N 38°17' W 894' ± - Well
  - (12) = Randal L. Baird et ux  
 N 38°21' W 832' ± - Well
  - (13) = Randal T. Powers et ux  
 N 25°02' W 969' ± - Well
  - (14) = Richard & Marianne Atkinson  
 N 07°08' E 971' ± - Well

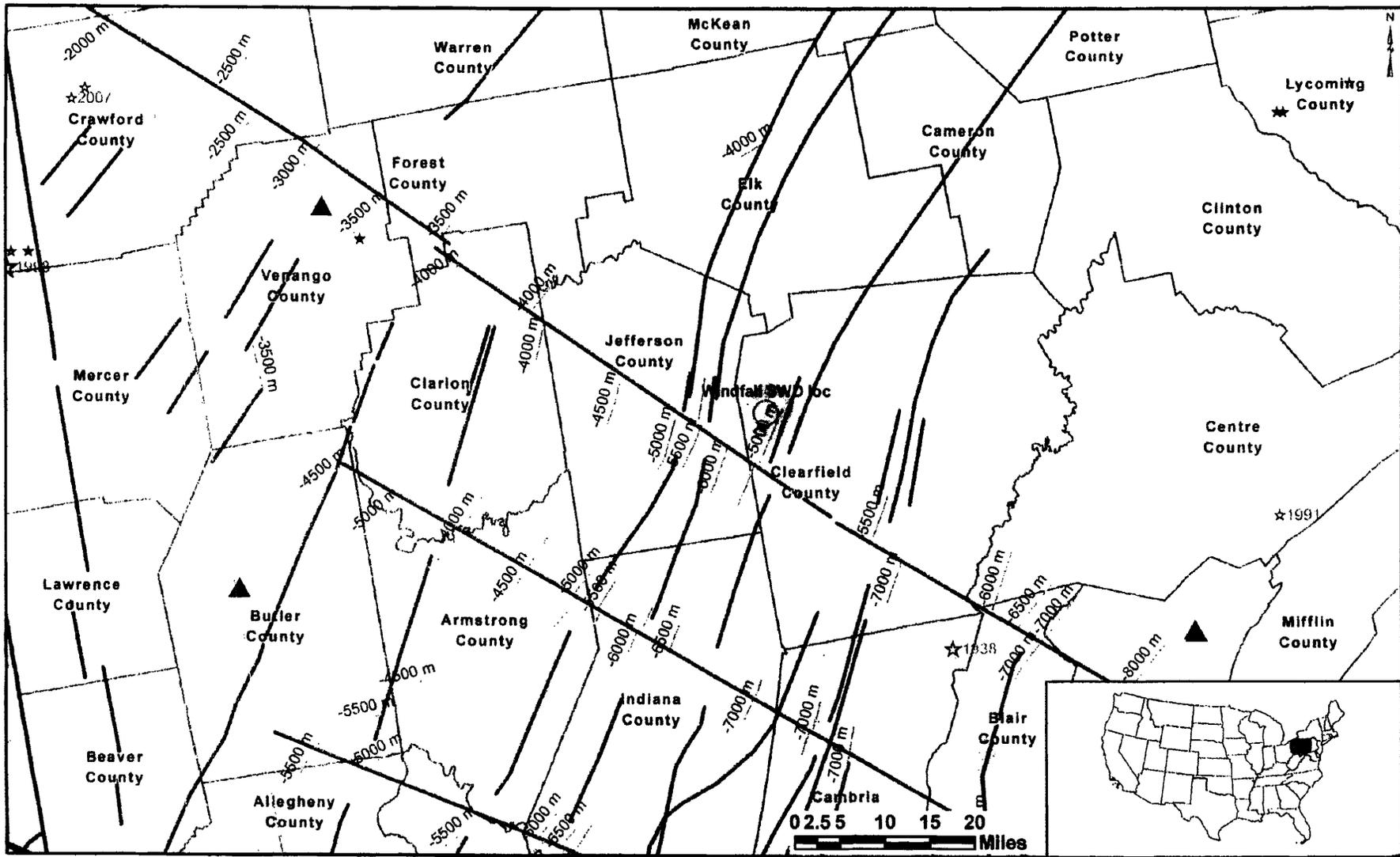


**- Well Ties -**

- Cor.(A) — Cor.(B) = S 00°20'35" W 1,908.8'
- Cor.(A) — Well No. 1 = S 48°44'25" W 1,002.8'
- Cor.(B) — Well No. 1 = N 71°42'05" W 788.3'
- P/L (C) — Well No. 1 = S 11°39'40" W 125.0'
- P/L (D) — Well No. 1 = N 61°43'25" W 614.4'
- P/L (E) — Well No. 1 = N 11°52'50" E 561.7'
- P/L (F) — Well No. 1 = S 74°38'40" E 427.5'

Surveyor or Engineer: **Lional Alexander** Phone #: (814) 371-5578 Dwg. #: **JN336411 Well 1 Plat** Date: **August 02, 2011** Scale: **1" = 500'** Tract Acreage: **23.8 Acres**

Lat. & Long Metadata		Elevation Metadata		Survey Date	
Method	Accuracy	Method	Accuracy	10' ±	ft. Datum
GPS		Topo			NVD 88
Applicant / Well Operator Name			Well (Farm) Name		Well #
Windfall Oil & Gas			Frank & Susan Zelman		1
Address			County - Code	Municipality	Well Type
63 Hill Street, Falls Creek, Pa.			Clearfield - 17	Brady Township	Gas
Surface Landowner / Lessor			USGS 71/2 Quadrangle Map Name	Map Section	Surface Elevation
Frank & Susan Zelman			Luthersburg	4	1687 ft.
Target Formation(s)			Angle & Course of Deviation (Drilling)	Anticipated Total Depth	
Chert / Oriskany			Vertical	TVD	TMD
				7,500'	7,500'
Additional Courses and Distances of Ties to Surrounding Wells					
(1) = Rita M. & David W. Barr	S 58°54' E 772' ± - Well				
(2) = John M. & Sue A. Barr	S 33°39' E 715' ± - Well				
(3) = Carol J. & Steve Steinfelsner	S 53°38' W 881' ± - Well				
(4) = Frank & Susan Zelman	S 80°21' W 828' ± - Well				



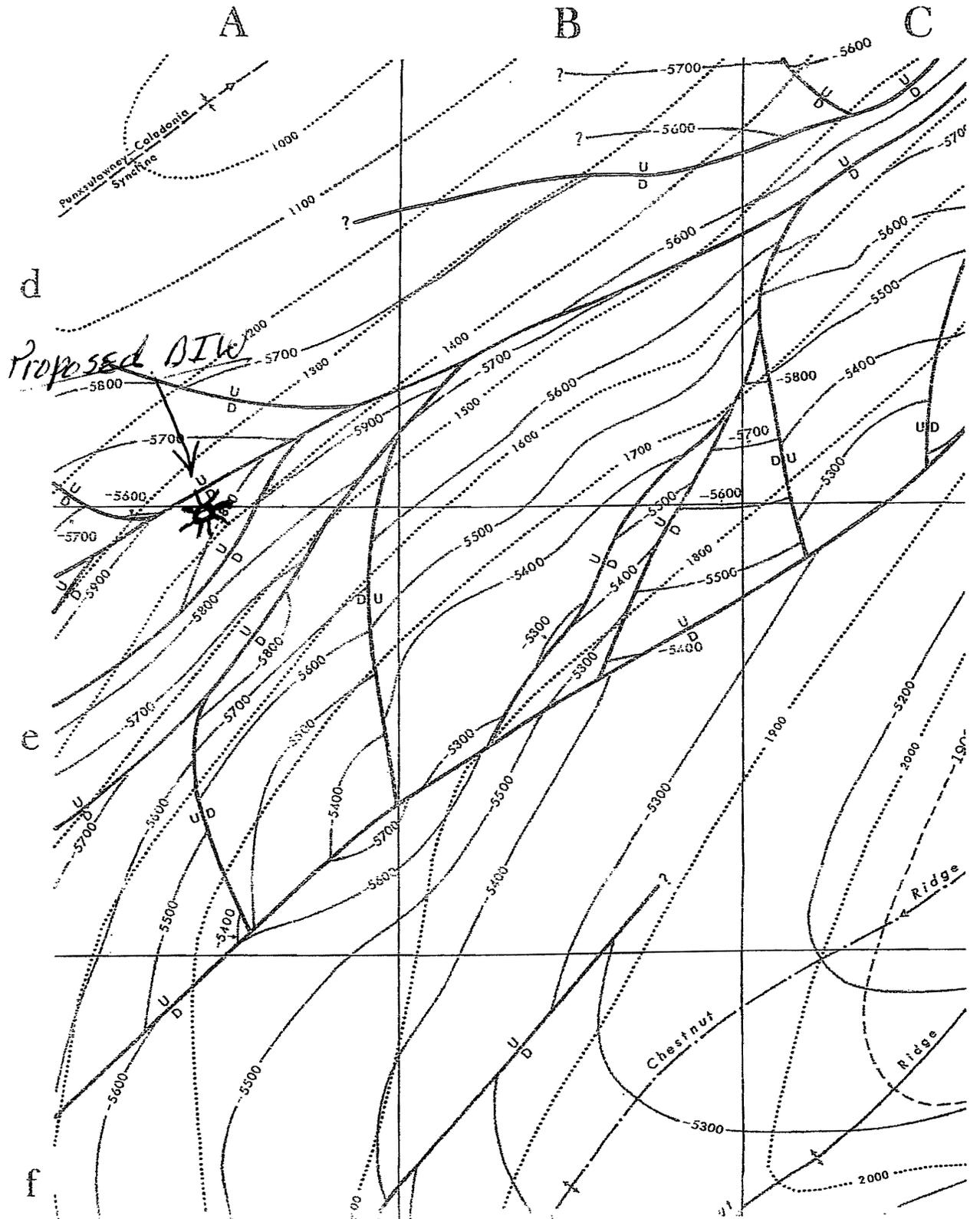
Attachment "C"

Magnitude	Earthquake Year	Seismometers
• No Magnitude	2012 2009	△ <all other values>
★ 0-3	2011	△ Ended
★ 3.1-5	2010	▲ Operating
★ 5.1-6		

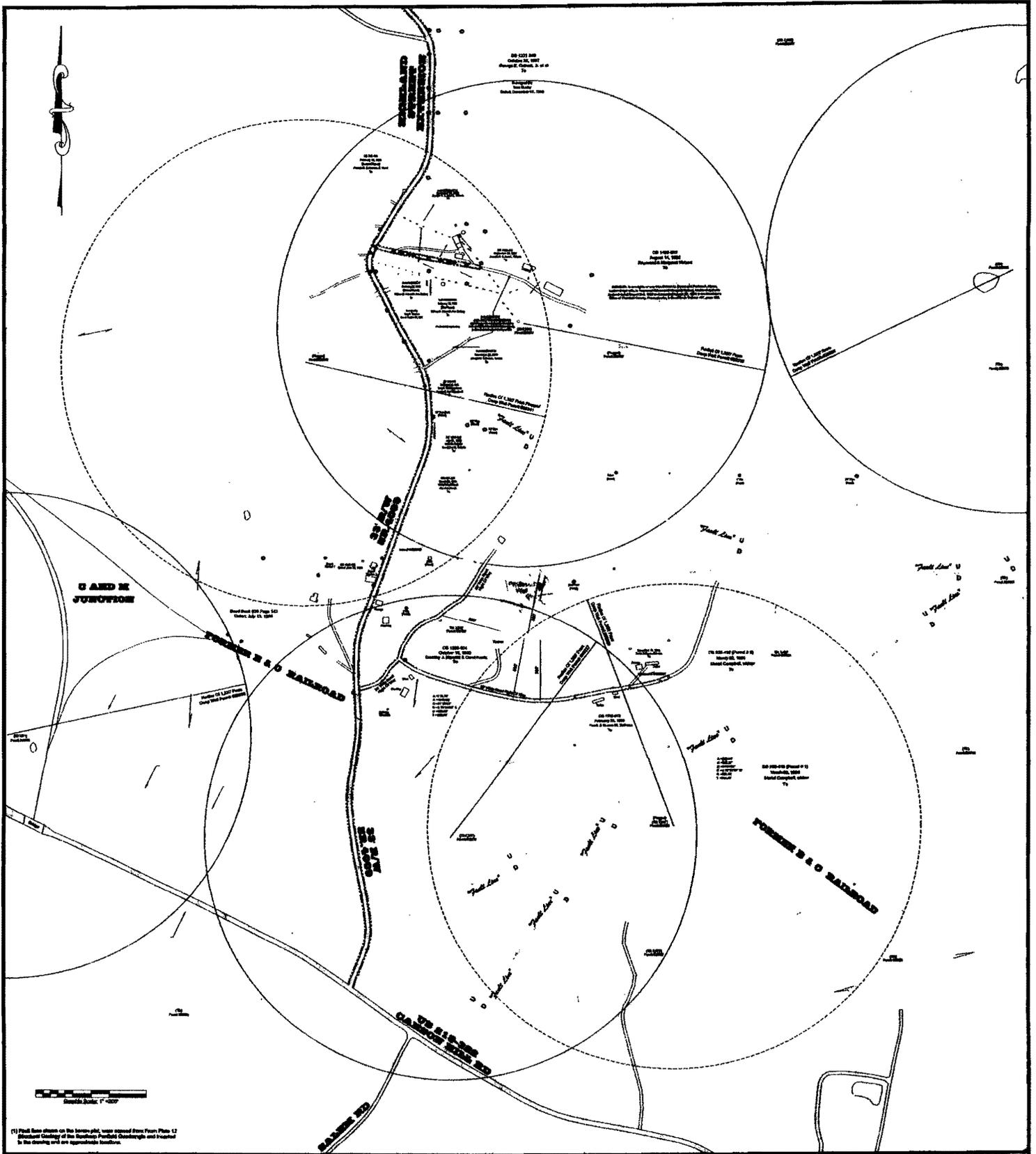
Attachment "D"

FAULTS IN AREA OF WELL

PENNSYLVANIA GEOLOGICAL SURVEY



# Attachment "E"



DATE: June 15, 2011	PROJECT: July 23, 2010	JOB NO: 07000011	SHEET NO: 1 OF 2	PROJECT NO: 10700001	DESIGNED BY: [Name]	SCALE: 1" = 20'
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**PROPOSED RESPONSE / IMPROVEMENT WORK**

**WATERWAY CONSTRUCTION**

**ALAN J. [Name], P.E.**

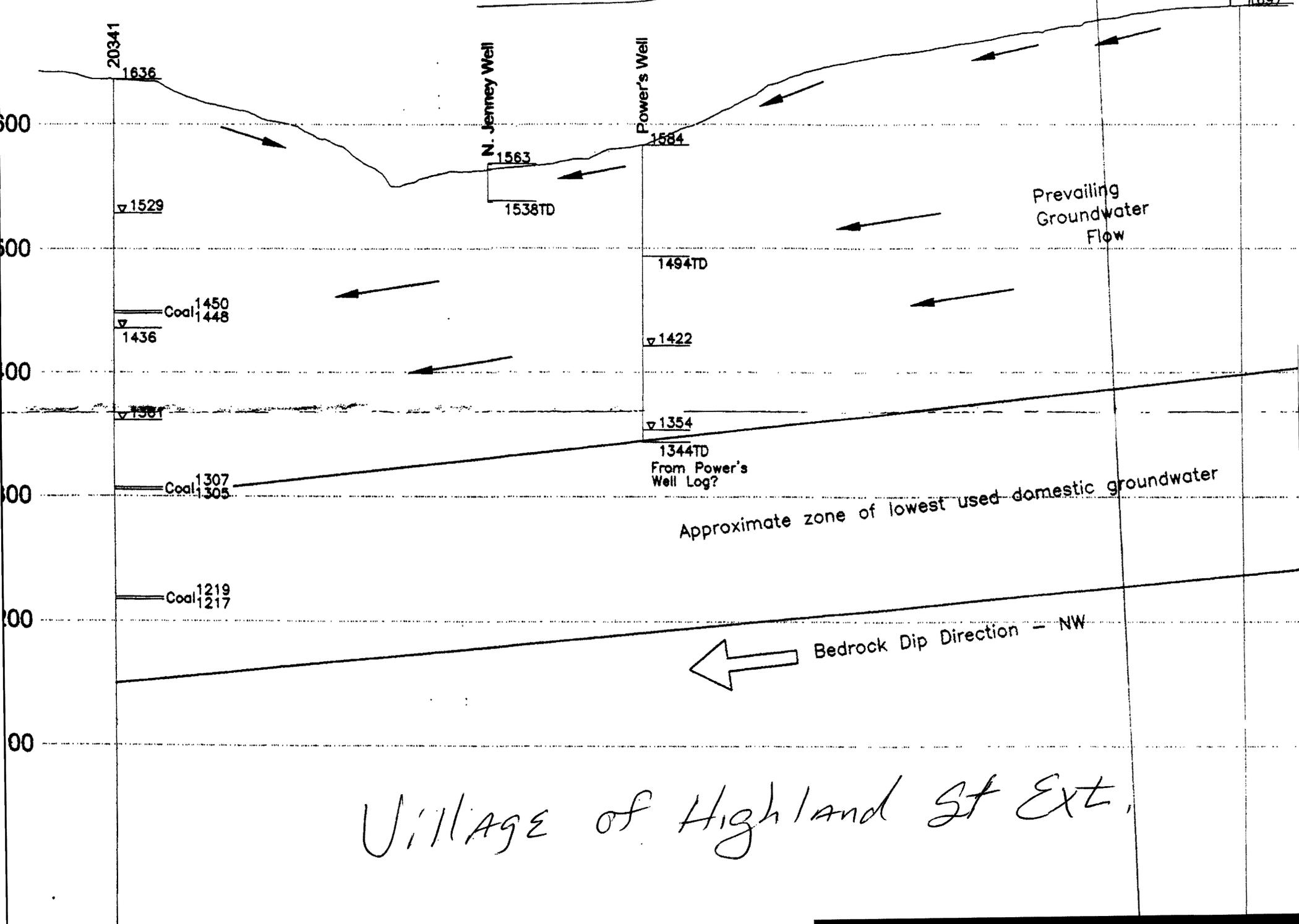
A

Attachment "F"

DLW Well  
head

Propos

1697



Village of Highland St Ext.



COMMONWEALTH OF PENNSYLVANIA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
Oil and Gas Management Program  
WELL LOCATION PLAT

DEP USE ONLY	DEP Application Tracking #	G:
	Permit #	C:
	Project #	

Denotes location of well on topo map.  
True Latitude: NORTH  
**41° 04' 55.00"**  
True Longitude: WEST  
**78° 44' 48.95"**

Well is located on topo map **506** feet south of latitude **41° 05' 00"**

Well is located on topo map **10,640** feet west of longitude **78° 42' 30"**

- Water Supply of Surface Owner or Water Purveyor within 1,000' (Continued)
- (5) = Dennis R. & Terry Marsh N 81°54' W 716' ± - Well
  - (6) = Theodore J. & Rona C. Cryster N 79°32' W 884' ± - Well
  - (7) = Rosemary Vanitburg N 68°56' W 659' ± - Well
  - (8) = Emily A. Hubert N 55°35' W 767' ± - Well
  - (9) = Monica A. Lockhart N 51°33' W 904' ± - Well
  - (10) = Robert L. Edmiston et al N 42°13' W 838' ± - Well
  - (11) = Able E. & Helen D. Jenny N 36°17' W 994' ± - Well
  - (12) = Randal L. Baird et ux N 38°21' W 832' ± - Well
  - (13) = Randal T. Powers et ux N 25°02' W 969' ± - Well
  - (14) = Richard & Marianne Atkinson N 07°06' E 971' ± - Well

*Well Permit # 20336*  
*Chapman Auto Deep Parts & Sales Inc. well approx 1580' outside 1/4 mile Review AREA.*

- Well Ties -**
- Cor.(A) — Cor.(B) = S 00°20'35" W 1,908.8'
  - Cor.(A) — Well No. 1 = S 48°44'25" W 1,002.8'
  - Cor.(B) — Well No. 1 = N 71°42'05" W 788.3'
  - P/L (C) — Well No. 1 = S 11°39'40" W 125.0'
  - P/L (D) — Well No. 1 = N 61°43'25" W 614.4'
  - P/L (E) — Well No. 1 = N 11°52'50" E 561.7'
  - P/L (F) — Well No. 1 = S 74°38'40" E 427.5'

Surveyor or Engineer **Lionel Alexander** Phone # (814) 371-5578



Dwg. # **JN336411 Well 1 Plat** Date **November 17, 2011** Scale **1" = 500'** Tract Acreage **23.8 Acres**

Lat. & Long Metadata Method <b>GPS</b> Accuracy <b>Submeter</b> ft. Datum <b>NAD 83</b>		Elevation Metadata Method <b>Topo</b> Accuracy <b>10' ±</b> ft. Datum <b>NGVD 88</b>		Survey Date <b>June 15, 2011</b>	
Applicant / Well Operator Name <b>Windfall Oil &amp; Gas</b>		DEP ID# <b>244615</b>		Well(Farm) Name <b>Frank &amp; Susan Zelman</b>	
Address <b>63 Hill Street, Falls Creek, Pa. 15840</b>		County - Code <b>Clearfield - 17</b>		Municipality <b>Brady Township</b>	
Surface Landowner / Lessor <b>Frank &amp; Susan Zelman</b>		USGS 712 Quadrangle Map Name <b>Luthersburg</b>		Map Section <b>4</b>	
Target Formation(s) <b>Chert / Oriskany</b>		Angle & Course of Deviation (Drilling) <b>Vertical</b>		Anticipated Total Depth TVD <b>7,500'</b> TMD <b>7,500'</b>	
Surface Owner or Water Purveyor with a Water Supply within 1,000 ft.		Approximate Course and Distance to Water Supply		Owner, Lessee, or Operator of Workable Coal Seam	
(1) = Rita M. & David W. Barr		S 58°54' E 772' ± - Well		Name of Coal Seam Owned, Leased, or Operated	
(2) = John M. & Sue A. Barr		S 33°39' E 715' ± - Well			
(3) = Carol J. Kurtz		S 53°38' W 881' ± - Well			
(4) = Frank & Susan Zelman		S 80°21' W 826' ± - Well			

# Attachment "G"

1

## SUBSURFACE LIQUID WASTE DISPOSAL

These sequences may appear orderly (Fig. 1A) but they seldom are. Variations of rock types in changing depositional environments, are often depicted on a smaller scale within the large rock mass (Fig. 1B). A local interruption in the supply of coarse sediment or the diversion of a glacially derived meltwater into a depression of a thin layer of clay. A cyclic burial and build-up in sandstone, or a split or fold. The growth of a fault, or a zone of solution, or a zone of folding on one side while excluding it on the other.

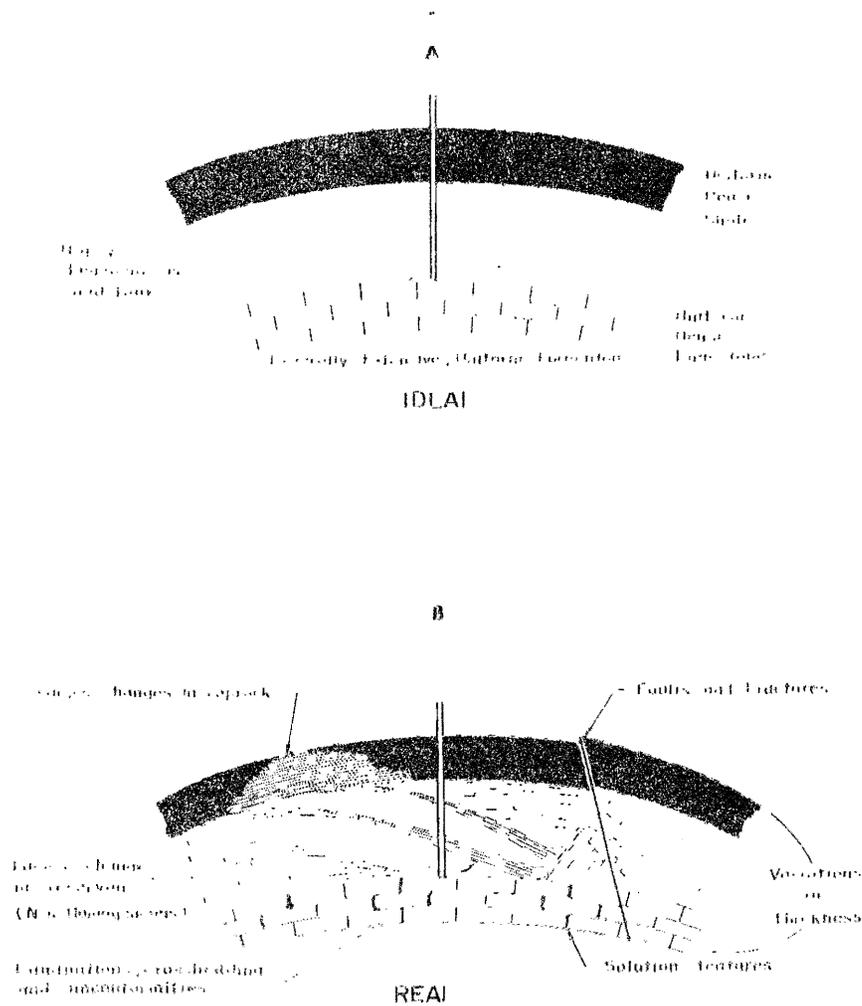


Figure 1 Ideal vs. real subsurface conditions.

7199'

COMMONWEALTH OF PENNSYLVANIA  
DEPARTMENT OF MINES AND MINERAL INDUSTRIES  
OIL AND GAS DIVISION

2/21/61  
J

1,300'S 41'05"00"  
2,000'W 78'45"00" (F)

033-20336

QUADRANGLE: DuBois "N"  7 1/2'  15'

PERMIT NO. 033-336

MAP REFERENCE: 1350 NL 2100 EL

KIND OF WELL: Gas  
(Oil, Gas, Other)

WELL RECORD:

COMPANY: <u>Lee E. Minter</u>	Size of Casing and Tubing	Used in Drilling	Left in Well	Packers: Type, Size and Depth
ADDRESS: <u>9 Florence St. Bradford, Pa.</u>	20"	19.60'	19.60'	
FARM: <u>T W Chapman (Little Times Square) 4000'S Pool</u>	13 3/8"	218.08'	218.08'	
WELL (FARM) NO. <u>1</u> CO. SERIAL NO.	9 5/8"	1190.03'	1190.03'	
ELEVATION: <u>1544</u> LEASE:	5 1/2"	7199'	7199'	
TOWNSHIP: <u>Brady</u> COUNTY: <u>Clearfield</u>				
DRILLING COMMENCED: <u>12/20/60</u> COMPLETED: <u>1/13/61</u>				
PRODUCTION: <u>1,200 MCF</u>				PERFORATIONS AT:
ROCK PRESSURE: <u>2229</u> psi @ <u>27 1/2</u> hrs				
WELL TREATMENT: (Shooting, Acidizing, Fracturing Etc.) <u>Hydrofrac 2/2/61</u>				
CEMENTING DATA (Size Pipe, Depth, No. Bags, Date)				
	20"	19.60'	15 sacks	12/20/60
	13 3/8"	218'	215 sacks	12/21/60
RESULTS AFTER TREATMENT: <u>5,876 MCF</u>	9 5/8"	1190'	50 Sacks	12/24/60
ROCK PRESSURE AFTER TREATMENT: <u>2,069# 66Hrs</u>	5 1/2"	7199'	150 sacks	1/10/61

REMARKS:

FORMATION	TOP	BOTTOM	GAS AT	OIL AT	WATER AT (Fresh or Salt Water)	REMARKS
Sand	0	22				
Sand & shale	22	143			82' fresh	
White sand	143	173				
Coal	173	176				
Sand	176	180				
Sand & shale	180	197				
Coal	197	203				
Sand	203	211				
Sand & shale	211	360				
Coal or black shale	360	380				
Sand	380	395				
Coal or black shale	395	410			405' fresh	
Sand	410	470				
Sand & shale	470	595				
Sand	595	820				
Red Rock	820	842				

(over)

COMMONWEALTH OF PENNSYLVANIA  
DEPARTMENT OF MINES AND MINERAL INDUSTRIES  
OIL AND GAS DIVISION

14,500'S 41° 07' 30"  
550'W 78° 48' 00"

(3)

7370

033-20341-P  
Coal seams un-workable  
~~CCE-34-P~~  
PERMIT NO. ~~No permit needed~~

LOCAL ANGLE: DuBois  7 1/2'  15'  
Sec. "F"

MAP REFERENCE: 29, 650' S/NL  
550' W/EL

WELL RECORD

KIND OF WELL: Gas  
(Oil, Gas, Other)

COMPANY: <u>Felmont Oil Corporation</u>	Size of Casing and Tubing	Used in Drilling	Left in Well	Packers: Type, Size and Depth
ADDRESS: <u>P. O. Box 354, Bradford, Penna.</u>	13 3/8"	228.22'	228.22'	
FARM <u>Josephine Carlson, et al</u> ACRES <u>48</u>	8 5/8"	1312.00'	1312.00'	
WELL FARM NO. <u>1</u> CO. SERIAL NO. <u>F-128</u> <u>Sylvania #6972</u>	5 1/2"	7370.22'	7370.22'	
ELEVATION: <u>1644' RT</u> LEASE: <u>FPaL-9673</u>				
TOWNSHIP: <u>Brady</u> COUNTY: <u>Clearfield</u>				
DRILLING COMMENCED: <u>11/1/60</u> COMPLETED: <u>11/26/60</u>				
PRODUCTION: <u>4,150,000 cu. ft.</u>				PERFORATIONS AT:
ROCK PRESSURE: <u>2839</u> psig. <u>20</u> hrs.				
WELL TREATMENT: (Shooting, Acidizing, Fracturing Etc.)				
<u>1/25/60 - Halliburton hydrafrac from 7299' -</u> <u>to 7365' with 11,900 gal. frac fluid; propping</u> <u>agent 9,000# 20-40 sand, 3,500# 10-30 sand;</u> <u>1,000 gal. MCA acid; 500# WG-4 gel agent;</u> <u>1,000# CW-1 breaker agent; 30 gals. Flowco</u> <u>fluids; 3,500# sand; Max. pressure: 4500#.</u>				
RESULTS AFTER TREATMENT: <u>15,000,000 cu. ft.</u>				
ROCK PRESSURE AFTER TREATMENT: <u>2810# - 72 hrs.</u>				

CEMENTING DATA: (Size Pipe, Depth, No. Bags, Date)

11/6 - Set 13 3/8" drive pipe @ 230' with 175 sacks of Regular cement.
11/9 - Set 8 5/8" casing @ 1320' with 375 sacks of Regular cement.
11/18 - Set 5 1/2" casing @ 7299' with 125 sacks of Regular cement and 40 sacks of Aquagel.

REMARKS: Gas Tested At:  
7355' - 2,500,000 cu. ft.  
7360' - 3,200,000 cu. ft.  
7365' - 4,150,000 cu. ft.

FORMATION	TOP	BOTTOM	GAS AT	OIL AT	WATER AT (Fresh or Salt Water)	REMARKS
Clay	0	40				
Shale	40	107			107' (fresh)	
Sandy Shale	107	186				
Coal	186	188				
Shale	188	243			200' (fresh)	Set 13 3/8" @ 230'
Sand - Water Sand	243	248				
Sand & Shale	248	268				
Sand	268	280			275' (fresh)	
Shale	280	304				
Sand	304	308				
Shale	308	329				
Coal	329	331				

PENFIELD D 272

7335'

I-OG-4-56

File under:  
DuBois Nat'l Bank

COMMONWEALTH OF PENNSYLVANIA  
DEPARTMENT OF MINES

Oil and Gas Division  
HARRISBURG

083-20333

QUADRANGLE: Wheatsburg Penfield  7 1/2'  15' PERMIT NO. CLE-999

AP REFERENCE: 9S 17W S63 W117 & 118 KIND OF WELL: GAS  
(Oil, Gas, Other)

WELL RECORD

COMPANY: <u>New York State Natural Gas Corporation</u>	Size of Casing and Tubing	Used in Drilling	Left in Well	Packers: Type, Size and Depth
ADDRESS: <u>2 Gateway Center, Pgh. 22, Penna.</u>	<u>13 3/8"</u>	<u>96'</u>	<u>96'</u>	
ARM: <u>H. E. Ginter Est.</u> ACRES <u>172</u>	<u>9 5/8"</u>	<u>1285'</u>	<u>1285'</u>	<u>BHS @ 1287</u>
WELL (FARM) NO. <u>1</u> CO. SERIAL NO. <u>N-796</u>	<u>7"</u>	<u>7335'</u>	<u>7335'</u>	<u>BHS @ 7267</u>
ELEVATION: <u>1642.34</u> LEASE: <u>60986</u>				
OWNERSHIP: <u>Brady</u> COUNTY: <u>Clearfield</u>				
DRILLING COMMENCED: <u>12-1-60</u> COMPLETED: <u>12-23-60</u>				
PRODUCTION: <u>10,504,000</u> cubic feet				PERFORATIONS AT:
ROCK PRESSURE: <u>2340</u> psig <u>70</u> hrs.				
WELL TREATMENT: (Shooting, Acidizing, Fracturing Etc.) <u>2-22-60-Fractured w/20,000 gals. water, 200 lb. gel, 1,000 gal acid and 20,000 lb sand. Break-down pressure 3000 lbs; maximum pressure 3750 lb</u>				
<u>Initial open flow of 48,000 cubic ft. in chert and 325,000 cubic ft. in Oriskany increased to 1,405,000 cubic ft. A/F. R.P. b/f 2450 lbs and 4 1/2 hrs. dead weight.</u>	CEMENTING DATA: (Size Pipe, Depth, No. Bags, Date)			
	<u>12-3-60 - 13 3/8" cem. w/90 sax</u>			
	<u>12-7-60 - 9 5/8" cem. @ 1287 w/50 sax cem &amp; 20 sax aquagel</u>			
RESULTS AFTER TREATMENT:	<u>12-16-60 - 7" cem @ 7267 w/125 sax</u>			

REMARKS: \* Well Permit Request and all initial Records Referred to this Well as "DuBois Deposit National Bank Trustee Etal". They are in fact Successor Trustee Under the Henry E. Ginter Deed of Trust. In the Interest of Brevity, We have Established and are Using the Farm Name as Recorded Above.

FORMATION	TOP	BOTTOM	GAS AT	OIL AT	WATER AT (Fresh or Salt Water)	REMARKS
Surface	0	5				
Sand & shale	5	105				
Shale & Sand	105	150				
Sand & Shale	150	340				
Coal	340	345				
Sand & Shale	345	375				
Shale & Sand	375	468				
Coal	468	474			458	
Shale & Sand	474	532				
Sand & Shale	532	735				
Sand	735	785				
Sand & Shale	785	1720				
Shale & Sand	1770	2165				
Sand & Shale	2165	4310	3385-92 (Show)			
Sand & Shale	4310	5170				
Sand & Shale	5170	5405				

(Over)

COMMONWEALTH OF PENNSYLVANIA  
DEPARTMENT OF MINES

1,990' S 41°05'00"  
10,200' W 78°42'30" (4)

Oil and Gas Division  
HARRISBURG

033-20325-P

QUADRANGLE: Penfield

7 1/2'  15'

PERMIT NO. CHE-325-P

MAP REFERENCE: 10S 17W S64 W117

KIND OF WELL: Gas Dry  
(Oil, Gas, Other)

**WELL RECORD**

COMPANY: <u>New York State Natural Gas Corporation</u>	Size of Casing and Tubing	Used in Drilling	Left in Well	Packers: Type, Size and Depth
ADDRESS: <u>#2 Gateway Center, Pittsburgh 22, Pa.</u>	<u>13-3/8"</u>	<u>60'</u>	<u>60'</u>	
FARM <u>John R. Potter</u> ACRES <u>68</u>	<u>9-5/8"</u>	<u>1156'</u>	<u>294'</u>	<u>BHS @ 1152</u>
WELL(FARM)NO. <u>#1</u> CO. SERIAL NO. <u>N-782</u>	<u>Vent 2"</u>		<u>274'</u>	
ELEVATION: <u>1627.80</u> LEASE: <u>58357</u>				
TOWNSHIP: <u>Brady</u> COUNTY: <u>Clearfield</u>				
DRILLING COMMENCED: <u>8/7/60</u> DRILLING COMPLETED: <u>10/13/60</u>				
PRODUCTION: <u>Dry Hole - Plug and Abandon</u>				PERFORATIONS AT:
ROCK PRESSURE: _____ psig _____ hrs.				
WELL TREATMENT: (Shooting, Acidizing, Fracturing Etc.)				
CEMENTING DATA: (Size Pipe, Depth, No. Bags, Date)				
<u>8/8/60 - 13-3/8" cem. w/50 sacks</u>				
<u>8/11/60 - 9-5/8" cem. @ 1152' w/50 sacks cem. and 15 sacks aquagel</u>				
RESULTS AFTER TREATMENT:				
ROCK PRESSURE AFTER TREATMENT:				

REMARKS:

FORMATION	TOP	BOTTOM	GAS AT	OIL AT	WATER AT (Fresh or Salt Water)	REMARKS
Cellar	0	18				
Sand & shale	18	210			FW 50	
Lime & shale	210	220				
Sand & shale	220	255				
Coal or shale	255	265				
Sand	265	319				
Sand & shale	319	409				
Coal	409	415				
Sand & shale	415	2885				
Shale & sand	2885	3295				
Sand & shale	3295	4130	3324(show)			
Shale & sand shells	4130	4515				
Sand & shale	4515	4922				
Shale & sand	5060	5255				
Sand & shale	5255	5555				
Sand & shale	5555	5907				

(Over)

PENFIELD G 206

4637'

DM-OG-4-56

Punxsutawney - Driftwood Field  
Helvetia Pool

12/12/62

COMMONWEALTH OF PENNSYLVANIA  
DEPARTMENT OF MINES

1,850' S 41° 05' 00"  
11,050' W 78° 42' 30" (4)

Oil and Gas Division  
HARRISBURG

033-20327

LUTHERSBURG  
QUADRANGLE: Panfield

7 1/2'  15'

PERMIT NO. 618-727

MAP REFERENCE: 9S 17W S63 W117

KIND OF WELL: Gas  
(Oil, Gas, Other)

WELL RECORD

COMPANY: <u>New York State Natural Gas Corporation</u>	Size of Casing and Tubing	Used in Drilling	Left in Well	Packers: Type, Size and Depth
ADDRESS: <u>#2 Gateway Center, Pittsburgh 22, Pa.</u>	<u>13-3/8"</u>	<u>59'</u>	<u>59'</u>	
FARM <u>John R. Potter</u> ACRES <u>68</u>	<u>9-5/8"</u>	<u>1251'</u>	<u>1251'</u>	<u>BHS @ 1248'</u>
WELL (FARM) NO. <u>2</u> CO. SERIAL NO. <u>N-790</u>	<u>7"</u>	<u>7305'</u>	<u>7305'</u>	<u>BHS @ 7234'</u>
ELEVATION: <u>1640.60</u> LEASE: <u>58357</u>				
TOWNSHIP: <u>Brady</u> COUNTY: <u>Clearfield</u>				
DRILLING COMMENCED: <u>8/31/60</u> COMPLETED: <u>9/29/60</u>				
PRODUCTION: <u>30,370,000</u> cubic feet				PERFORATIONS AT:
ROCK PRESSURE: <u>3293</u> psig <u>4</u> days <u>xxxx</u>				
WELL TREATMENT: (Shooting, Acidizing, Fracturing Etc.)				
<u>9/27/60 - Fractured w/20,500 gals. water, 1,000 gal. MCA, 150 lbs. gel and 20,000 lbs. sand. Breakdown pressure 2400 lbs.; maximum pressure 3800 lbs.; minimum pressure, 2350 lbs.; final pressure 3800 lbs. Original open flow of 7,312,000 cubic feet increased to 30,370,000 cu. ft. a/f Rock pressure b/f 3318 lbs. in 11 days.</u>				
	CEMENTING DATA: (Size Pipe, Depth, No. Bags, Date)			
	<u>8/31/60 - 13-3/8" cem. @ 70' w/50 sacks</u>			
	<u>9/4/60 - 9-5/8" cem @ 1248' w/50 sacks cem., 15 sacks aquagel, &amp; 25 sacks quadroflos</u>			
RESULTS AFTER TREATMENT:				
ROCK PRESSURE AFTER TREATMENT:	<u>9/13/60 - 7" cem. @ 7234' w/125 sacks.</u>			

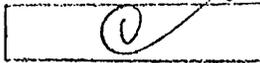
REMARKS:

FORMATION	TOP	BOTTOM	GAS AT	OIL AT	WATER AT (Fresh or Salt Water)	REMARKS
Surface	0	15				
Sand & shale	15	143			FW 75	
Red shale	143	146				
Sand & shale	146	205				
Coal	205	209				
Sand & shale	209	217				
Shale & sand	217	303				
Coal or black shale	303	306				
Shale & sand	306	320				
Shale	320	340				
Sand	340	550				
Shale & sand	550	580				
Sand	580	650				
Shale & sand	650	692				
	692	733				
Red shale	733	735				

(Over)

COMMONWEALTH OF PENNSYLVANIA  
DEPARTMENT OF ENVIRONMENTAL RESOURCES  
DIVISION OF OIL AND GAS  
PITTSBURGH, PENNSYLVANIA 15222

Office use only



*Inside  
AREA  
of  
REVIEW*

750'S 41°05'00"  
11000'W 78°40'30"  
LUTHERSBURG (41)

*me* *Salem Pool* **WELL RECORD** *3576*

PERMIT NO. CLE-20597  
PROJECT NO. \_\_\_\_\_  
TYPE OF WELL Gas Production  
*81*

WELL OPERATOR Consolidated Gas Supply Corp. TELEPHONE NO. 304-623-3611  
ADDRESS 445 West Main St., Clarksburg, WV. ZIP 26301  
FARM NAME DuBois Deposit National Bank FARM NO. 3 SERIAL NO. WN-1504 ACRES 172  
TOWNSHIP Brady COUNTY Clearfield  
DRILLING COMMENCED 6-18-76 DRILLING COMPLETED 6-24-76  
ELEVATION 1672' QUADRANGLE PENFIELD Luthersburg  7 1/2'  15'

CASING AND TUBING RECORD

Pipe Size	Amount In Well	Material Behind Pipe Cement (Sks.)	Pipe Gel (Sks.)	Packer		Depth	Date Run						
				Type	Size								
1 3/4	309	185 to surface		Guide	11 3/4	307 G.L.	6-19-76						
8 5/8	1207	290 to surface		Guide	8 5/8	1200 G.L.	6-22-76						
4 1/2	3547	275		Float	4 1/2	3526 K.B.	6-25-76						
<table border="1" style="width:100%"> <tr> <td>3576</td> <td>3412</td> <td>D</td> <td>X</td> <td>G</td> <td>Lease</td> </tr> </table>								3576	3412	D	X	G	Lease
3576	3412	D	X	G	Lease								
K measurement: 11' above G.L.													

Perforation Record

Stimulation Record *(Fracking)*

Date	Interval Perforated		Date	Interval Treated	Amount Fluid	Amount Sand	Injection Rate
	From	To					
7-9-76	2587	2595 8	7-9-76	2587-95	400 bbl.	20,000#	
7-9-76	2812	2817 5	7-9-76	2812-17	400 bbl.	20,000#	
7-9-76	2943	2993 50	7-9-76	2943-93	400 bbl.	20,000#	
7-9-76	3402	3412 10	7-9-76	3402-12	400 bbl.	20,000#	

NATURAL OPEN FLOW N.T. NATURAL ROCK PRESSURE N.T. , hrs. days  
AFTER TREATMENT OPEN FLOW 581 ~~200~~ MCF AFTER TREATMENT ROCK PRESSURE 1180# , 16 days

REMARKS:

**RECEIVED**

AUG 31 1976

PA. GEOLOGIC SURVEY  
Oil & Gas Division

*Zoe R. [unclear]*

FORMATION ON REVERSE SIDE

COMMONWEALTH OF PENNSYLVANIA  
DEPARTMENT OF ENVIRONMENTAL RESOURCES  
DIVISION OF OIL AND GAS  
PITTSBURGH, PENNSYLVANIA 15222

Office Use Only

*e*

*Dorth*

*3432*  
*Salem Pool*

PERMIT NO. CLE-20553

PROJECT NO. \_\_\_\_\_

TYPE OF WELL Gas Production

*(G) 66*

*900 S. 41°05'*  
*20.850 W 78°40'*  
*9150' W 78°42'30"*  
*14780' (4)*

WELL OPERATOR Consolidated Gas Supply Corp.

ADDRESS 445 West Main St., Clarksburg, WV. ZIP 26301

FARM NAME: DuBois Deposit National Bank Trustee FARM NO. #2 SERIAL NO. WN-1323 ACRES 172

TOWNSHIP: Brady COUNTY: Clearfield

DRILLING COMMENCED 5-24-74 DRILLING COMPLETED 6-6-74

ELEVATION 1572' QUADRANGLE Penfield  7  15

Casing and Tubing Record

Pipe Size	Amt. In Well	Material Behind Pipe		Packer			Date Run
		Cement (Sks.)	Gel (Sks.)	Type	Size	Depth	
16	13						5-24-74
11 3/4	187	100		Guide	11 3/4	187	5-24-74
8 5/8	1043	50	5	Guide	8 5/8	1038	5-26-74
4 1/2	3388	275		Float	4 1/2	3388	5-30-74
		T.D.	D.D.				Lease
		<i>3432</i>	<i>3307</i>	<i>D</i>	<i>X</i>	<i>X</i>	<i>/</i>

Perforation Record

Stimulation Record

Date	Interval Perforated		Date	Interval Treated	Amt. Fluid	Amt. Sand	Injection Rate
	From	To					
6-5-74	2955	3001	6-5-74	2955-3001	600 bbl	30,000#	32.8 bpm.
"	3282	3307	"	3282-3307	571 bbl	30,000#	35.1 bpm.

RECEIVED

FEB 5 1975

PA. GEOLOGIC SURVEY  
Oil & Gas Division

Natural Open Flow: 84,000 cu. ft. Natural Rock Pressure: N.T. hrs. days  
After Treatment Open Flow: 1,592,000 cu. ft. After Treatment Rock Pressure: 1242 hrs. days

REMARKS: No show of gas was recorded on drillers log during rotary drilling. A. show of gas was evident after landing 4 1/2" casing - test 84,000 cu. ft. Log evaluation indicated potential production in the intervals shown under " stimulation record" casing was perforated and these zones were fractured.

Formation on Reverse Side

*Eric B. Prod*  
*Checked*  
*1/20/75*  
*Charles H. Shand*

*012375* *82*