

**TABLES**

WINDFALL OIL & GAS - ZELMAN  
INJECTION WELL APPLICATION  
TABLE 1 DOMESTIC WATER WELL

Well #	Name	Surface Elevation Exhibit 1	Total Depth (ft.)	TD from Well Inventory	Depth Water Zones	Elevation Water Zones		
RMS 5-9-19	H. Jenney		34					
RMS 6-9-19	D. Crytser		Unk					
RMS 7-9-19	T. Crytser		120					
RMS 8-9-19	Atkinson		360					
RMS 11-9-19	Edmiston		Unk					
RMS 10-9-14	Zelman		Unk					
RMS 11-9-14	Lockart		spring					
RMS 6-9-13	S. Barr		Unk					
RMS 7-9-13	D. Barr	1610	Unk	190	108 165	1502 1445		
RMS 8-9-13	Frizzell		Unk					
RMS 9-9-13	D. Marsh		100-130					
RMS 10-9-13	Baird		~200					
RMS 11-9-13	V. Marsh		100-125					
RMS 12-9-13	Powers	1584	~90	240?	162 230	1422 1354		
RMS 13-9-13	Greathouse		~300					
RMS 1-9-20	N. Jenney		25					

WINDFALL O and G TABLE 3

Purveyor	pH	Lab pH	Acidity mg/L CaCO3	Alkalinity Mg/L CaCO3	Specific Conduct. umhos/cm	TDS mg/L	TSS mg/L	Nitrate/ Nitrite mg/L as N	Br	Cl	SO4	Al	Ba	Ca	Iron	Mg	Mn	K	Na	Sr	Hardness mg/L CaCO3	Oil & Grease mg/L	Private Supplies
S. Barr	6.17	6.50	-11	33	90	58	<5	1.02	<0.2	2	10	0.1	0.07	8.8	0.11	3.1	<0.01	1.0	2.1	0.10	34.8	<5	6/9/13
D. Barr	7.57	7.90	-161	172	356	182	<5	0.09	<0.2	5	16	<0.1	0.11	47.3	0.39	13.6	0.05	1.8	6.4	3.17	174	<5	7/9/13
R. Frizzell	7.72	7.79	-134	146	413	212	<5	0.08	<0.2	25	19	<0.1	0.18	25.4	<0.05	6.5	<0.01	1.4	54.5	1.40	90.4	<5	8/9/13
D. Marsh	7.95	8.00	-161	173	396	222	<5	0.18	<0.2	3	27	<0.1	0.12	20.8	<0.05	5.4	<0.01	1.3	63.2	1.07	74.1	<5	9/9/13
R. Baird	7.09	7.51	-84	99	260	142	<5	0.06	<0.2	12	12	<0.1	0.23	14.9	0.43	4.7	0.13	1.0	32.0	0.70	56.5	<5	10/9/13
V. Marsh	7.55	7.89	-138	151	344	196	6	<0.05	<0.2	10	10	<0.1	0.15	32.1	0.97	9.2	0.36	1.5	26.1	1.78	118	<5	11/9/13
R. Powers	7.33	7.34	-58	76	165	100	<5	0.33	<0.2	<1	10	<0.1	0.04	18.9	0.06	6.7	<0.01	0.9	4.3	0.25	74.8	<5	12/9/13
R. Greathouse	7.13	7.50	-115	127	382	184	<5	0.06	<0.2	20	11	<0.1	0.39	34.8	0.55	8.1	0.12	1.3	26.1	1.03	120	<5	13/9/13
F. Zelman	6.68	6.71	-19	42	142	92	<5	1.95	<0.2	5	14	<0.1	0.03	11.1	<0.05	5.0	<0.01	1.6	6.3	0.08	48.2	<5	10/9/14
M. Lockart	6.64	6.54	-11	33	152	94	<5	0.99	<0.2	15	13	<0.1	0.01	8.3	<0.05	3.2	<0.01	1.1	13.3	0.04	34.1	<5	11/9/14
H. Jenney	7.57	7.61	-83	99	301	202	<5	0.06	<0.2	35	12	<0.1	0.24	32.0	0.12	9.9	0.11	1.0	16.4	1.02	121	<5	5/9/19
D. Crytser	7.44	7.39	-92	107	357	226	<5	0.05	0.3	39	19	<0.1	0.09	43.0	<0.05	9.0	0.12	1.4	19.0	1.09	145	<5	6/9/19
T. Crytser	7.26	7.29	-65	80	222	156	<5	0.30	<0.2	9	21	<0.1	0.08	24.9	0.43	6.5	0.01	1.2	13.5	1.23	89.2	<5	7/9/19
R. Atkinson	7.69	7.82	-191	200	391	246	<5	0.07	<0.2	5	11	<0.1	0.22	48.2	0.07	16.6	0.05	2.1	23.1	0.89	188	<6	8/9/19
R. Edmiston	7.26	7.53	-70	92	296	204	<5	<0.05	<0.2	36	14	<0.1	0.21	35.4	0.10	9.8	0.33	1.2	12.9	0.92	129	<5	11/9/19
N. Jenney	6.61	6.69	-29	54	409	278	6	0.39	<0.2	91	14	<0.1	0.03	21.0	0.79	7.9	0.01	1.7	55.0	0.12	85.1	<5	1/9/20
C. Kurtz	7.45	7.56	-81	96	231	128	<5	0.37	<0.2	3	16	<0.1	0.09	26.0	<0.05	7.4	<0.01	1.2	6.5	1.18	95.2	<5	1/9/26

Source	pH	Lab pH	Acidity mg/L CaCO3	Alkalinity Mg/L CaCO3	Specific Conduct. umhos/cm	TDS mg/L	TSS mg/L	Nitrate/ Nitrite mg/L as N	Br	Cl	SO4	Al	Ba	Ca	Iron	Mg	Mn	K	Na	Sr	Hardness mg/L CaCO3	Surface Samples
Spring @ Source	5.75	5.90				62																1/9/13
Spring @ Source	5.99	5.95				36																2/9/13
Spring Channel	5.94	6.06				38																3/9/13
Spring @ Source	5.72	6.00				40																5/9/13
Stream	5.40	5.64				42																1/9/14
Stream	6.35	6.61	-1	23	54	46	<5	0.11	<0.2	<1	9	<0.1	0.02	4.2	0.17	2.1	0.01	0.8	1.5	0.03	18.8	2/9/14
Stream	5.78	6.10	4	18	47	44	7	<0.05	<0.2	<1	8	0.4	0.05	3.6	0.43	1.4	0.06	0.8	1.7	0.03	14.7	3/9/14
Stream	6.63	6.90	-7	34	88	72	6	0.19	<0.2	2	13	0.2	0.06	8.7	0.22	2.4	0.02	0.9	2.5	0.06	31.6	4/9/14
Spring @ Source	5.89	5.89				62																5/9/14
Stream	6.43	6.57	-7	31	85	64	5	0.33	<0.2	2	12	0.2	0.12	8.2	0.11	2.3	<0.01	0.9	2.5	0.05	30.1	6/9/14
Spring @ Source	7.17	7.55				108																7/9/14
Spring @ Source	7.48	7.41	-18	44	89	66	6	<0.05	<0.2	<1	11	<0.1	0.02	9.9	<0.05	3.1	<0.01	0.8	1.6	0.05	37.3	8/9/14
Corrugated Pipe	7.01	7.19				90																9/9/14
Spring @ Source	5.82	6.1				68																1/9/19
Spring @ Source	5.94	6.49				68																2/9/19
Spring Channel	6.36	6.74				112																3/9/19
Runoff	8.34	8.05	-45	74	165	120	<5	0.66	<0.2	4	15	<0.1	0.04	22.7	<0.05	4.5	<0.01	1.5	5.8	0.16	74.9	4/9/19
Spring @ Source	6.77	7.02	-38	48	152	130	13	0.33	<0.2	8	9	0.1	0.05	18.9	0.14	5.7	0.02	2.0	4.6	0.11	70.6	9/9/19
Spring Channel	6.68	7.08	-7	34	70	72	<5	0.63	<0.2	1	8	<0.1	0.01	7.4	<0.05	2.7	0.01	1.5	2.2	0.03	29.5	10/9/19
Culvert	6.69	6.74	-24	46	603	496	6	0.27	1.1	155	14	<0.1	0.12	42.3	0.14	9.9	0.06	5.2	64.0	1.19	146	2/9/20
Culvert	7.10	7.37	-41	61	137	90	<5	0.60	<0.2	4	10	<0.1	0.02	18.8	<0.05	4.4	<0.01	1.4	3.8	0.09	64.9	3/9/20
Culvert Channel	8.22	8.12	-136	150	360	210	11	1.22	<0.2	18	17	<0.1	0.03	47.0	<0.05	5.6	<0.01	3.2	31.4	0.42	140	4/9/20

WINDFALL OIL & GAS - ZELMAN  
INJECTION WELL APPLICATION  
TABLE 4 - MONITORING PROGRAM

SAMPLING POINT	TYPE - DIRECTION FROM SITE	FREQUENCY DURING DRILLING	DURING OPERATION
RMS 12-9-13	POWERS WELL - NW	MONTHLY	SEMI-ANNUALLY
RMS 10-9-14	ZELMAN WELL - SW	MONTHLY	SEMI-ANNUALLY
RMS 7-9-13	BARR WELL - SE	MONTHLY	SEMI-ANNUALLY
RMS 4-9-19	STREAM - SW	MONTHLY	SEMI-ANNUALLY
RMS 2-9-20	SEEP - NW	MONTHLY	SEMI-ANNUALLY
RMS 2-9-14	STREAM - SE	MONTHLY	SEMI-ANNUALLY

See Table 3 for proposed analytical parameters minus Oil & Grease

## APPENDICES

**APPENDIX A – GAS WELL LOGS**

COMMONWEALTH OF PENNSYLVANIA  
DEPARTMENT OF ENVIRONMENTAL RESOURCES

DIVISION OF OIL AND GAS  
Room 1205 Kossman Building  
100 Forbes Avenue  
Pittsburgh, Pennsylvania 15222



CERTIFICATE OF PLUGGING WELL TYPE OF WELL Gas

Forney Winner and Mary Winner

Coal Operator or Owner

218 Wheeler St., Lock Haven, PA 17745

Address

Coal Operator or Owner

Address

Coal Operator or Owner

Address

COMPLETE ABOVE SECTION IF APPLICABLE

Mr. John Gerg

DIVISION REPRESENTATIVE SUPERVISING

Felmont Oil Corporation

Name of Well Operator

P.O. Box 590, Olean, N.Y. 14760

Address

August 15,

1979

Date

Brady

Township

Clearfield

County

Farm Josephine Carlson, et al

Well (Farm) No. 1

Serial No. F-128

COAL REPRESENTATIVE OBSERVING

We, the undersigned representatives of the well operator certify that we participated in the plugging of the above well, and that the work was started July 31, 1979, and that the well was plugged as follows:

FILLING MATERIAL AND PLUGS	FROM	TO	Casing and Tubing		
			SIZE	PULLED	LEFT
Cast Iron Bridge Plug @ 7250'	7250'	7249'	13-3/8"	--	228'
20 sks. of 50-50 POZ + 10% salt	7249'	7120'	8-5/8"	--	1312'
Gelled water	7120'	2500'	5-1/2"	2500'	4870'
35 sks. of 50-50 POZ + 10% salt	2500'	2400'			
Gelled water	2400'	1750'			
35 sks. of 50-50 POZ + 10% salt	1750'	1650'			
Gelled water	1650'	1350'	Depth of Coal Seam, If Any		
55 sks. of 50-50 POZ + 10% salt	1350'	1175'	186 - 188'		
Gravel	1175'	1160'	329 - 331'		
Air	1160'	Surface			
			Description of Monument		
*Unable to cut 5-1/2" casing any lower than 2500' because casing was stuck in hole.			2" vent pipe 6' high with 2" tee on top.		

and that the work of plugging and filling said well was completed on the 8th day of August, 1979.

Felmont Oil Corporation  
(Well Operator)

Michael R. Walls  
(Qualified Participant)

PERMIT NO. 033-20341-P  
033-341-P

Michael R. Walls  
(Qualified Participant)

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

(Qualified Participant)

One copy of this certificate to be mailed to each coal operator or owner, if any, and one to the Division, by registered mail, upon completion of plugging.

199

**WELL RECORD**

Directional Survey

010

29650' FN  
550' AE

Name Lorraine Carlson Co. Clearfield Trap. Brady No. 3330  
 Owner Felton Oil Corp F-128 Contr. No. 104

Date Oct 28 1960 Elev. 1633.8 Product Oil Drill 033-20341-P  
 Obtained by 164 Authority Quad. Do Bois F Locate by Sketch

Geol. Name	Thick. base	From	To	Geol. Name	Thick. net	From	To
Nov 18		6712					
	Tully	7281					
	Oryzoidae	7296					
	cheerty	7351					
Nov 25			7365				
	Oriskany						
	T.D						
	4150 Mcf gas BF						
	R.P 2859 # 30 hrs						
Dec 2							
	15,000 Mcf gas						
	R.P 2810 # 72 hrs						
	Completed 11-26-60						
	Faced 7200-7365						



Du Bois F 23

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

14,500'S 41° 07' 30"  
550' W 78° 45' 00"

(3)

033-20341-P  
Coal seams un-workable  
~~C&E-34-P~~

PERMIT NO. No permit needed

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

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

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

WELL RECORD

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 ACRES 48</u>	8 5/8"	1312.00'	1312.00'	
WELL FARM NO. <u>1</u> CO. SERIAL NO. <u>F-128</u> Sylvania #6972	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> DRILLING COMPLETED: <u>11/26/60</u>				
PRODUCTION: <u>4,150,000 cu. ft.</u>				PERFORATIONS AT:
ROCK PRESSURE: <u>2839</u> pslg. <u>20</u> hrs.				
WELL TREATMENT: (Shooting, Acidizing, Fracturing Etc.) <u>11/25/60 - Halliburton hydrafrac from 7299' - to 7365' with 11,900 gal. frac fluid; propping agent 9,000# 20-40 sand, 3,500# 10-30 sand; 1,000 gal. MGA acid; 500# WG-4 gel agent; 200# CW-1 breaker agent; 30 gals. Flowco suds; 3,500# sand; Max. pressure: 4500#.</u>				
CEMENTING DATA: (Size Pipe, Depth, No. Bags, Date)				
<u>11/6 - Set 13 3/8" drive pipe @ 230' with 175 sacks of Regular cement.</u>				
<u>11/9 - Set 8 5/8" casing @ 1320' with 375 sacks of Regular cement.</u>				
<u>11/18 - Set 5 1/2" casing @ 7299' with 125 sacks of Regular cement and 40 sacks of Aquagel.</u>				
RESULTS AFTER TREATMENT: <u>15,000,000 cu. ft.</u>				
ROCK PRESSURE AFTER TREATMENT: <u>2810# - 72 hrs.</u>				

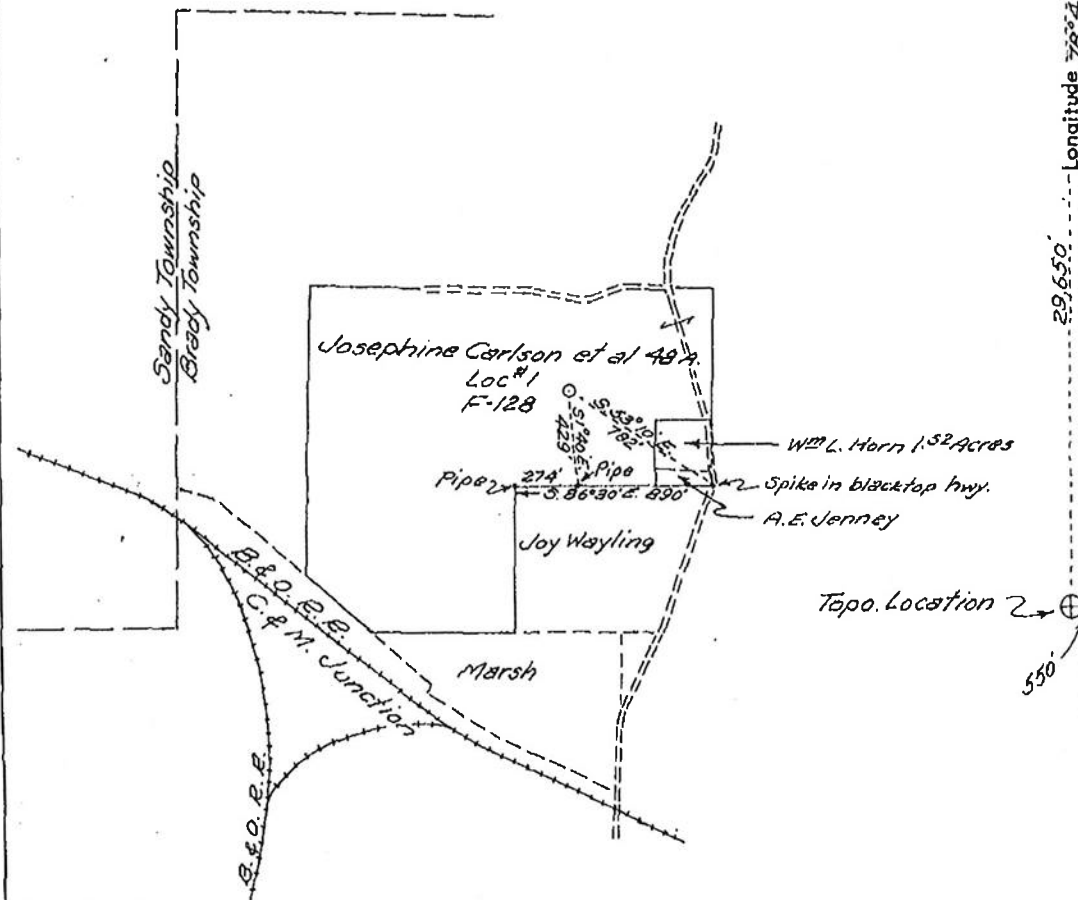
REMARKS: Gas Tested At:  
7355' - 2,500,000 cu. ft.  
7360' - 3,200,000 cu. ft.  
7365' - 4,150,000 cu. ft.

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				

023-20341-P

FORMATION	TOP	BOTTOM	GAS AT	OIL AT	WATER AT (Fresh or Salt Water)	REMARKS
Shale	331	417				
(	417	419				
Sand	419	423				
Sand & Shale	423	471				
Shale	471	485				
Sand & Shale	485	505				
Shale	505	515				
Sand	515	520				
Sand & Shale	520	524				
Sand	524	554				
Sand & Shale	554	561				
Sand	561	630				
Sand & Shale	630	675				
Sand	675	735				
Sandy Shale	735	760				
Sand	760	804				
Little Red	804	810				
Sandy Shale	810	890				
Sand & Shale	890	945				
Shale	945	965				
Sand w/little shale	965	1020				
Sandy Shale	1020	1025				
Sand	1025	1050				
Sand streak red rock	1050	1055				
Sand	1055	1060				
Sandy shale	1060	1075				
Sand	1075	1090				
Shale	1090	1100				
Sand	1100	1125				
Shale	1125	1130				
Sandy Shale	1130	1150				
Shale	1150	1155				
Sandy shale	1155	1165				
Sand	1165	1180				
Sandy Shale	1180	1225				
Sand	1225	1260				
Sand & Shale	1260	1280				
Sand	1280	1290				
Shale	1290	1300				
Sandy Shale	1300	1320				Set 8 5/8" @ 1320'
Sandy Shale	1320	1710				
Shale	1710	1780				
Red rock & Shale	1780	1790				
Sandy Shale	1790	1830				
Sandy red rock	1830	1835				
Sandy Shale	1835	1848				
Red rock	1848	1854				
Sandy shale	1854	2550				
Sand	2550	2640				
Sandy Shale	2640	2710				
Sand	2710	2820				
Sandy Shale	2820	2900				
Shale	2900	3040				

Date January 12, 19 61APPROVED FELMONT OIL CORPORATION, OwnerBy W. H. Young  
(Title) Vice President



- New Location
- Drill Deeper
- Abandonment  PARTIAL PLD 6 7-20-79
- Re-drill

Company Felmont Oil Corporation  
 Address P.O. Box 354 Bradford, Penna.  
 Farm Josephine Carlson et al  
 Tract \_\_\_\_\_ Acres 48 Lease No. \_\_\_\_\_  
 Well(Farm) No. 1 Co. Serial No. F-128  
 Angle of Deviation, if any None  
 Elevation 1633 (Ground) Quadrangle Dubois  
 County Clearfield Township Brady  
 Engineer Wm. H. Young  
 Engineer's Registration No. N.Y. 21406  
 File No. \_\_\_\_\_ Drawing No. \_\_\_\_\_  
 Date October 26, 1960 Scale 1" = 660'

COMMONWEALTH OF PENNSYLVANIA  
 DEPARTMENT OF MINES  
 Oil and Gas Division  
 HARRISBURG  
 WELL LOCATION MAP  
 Dept. File No. ~~011-947~~  
033-20341 - P  
 ⊕ Denotes Values of Well on United States Topographic Maps.  
 Scale 15'  7 1/2'   
 WORKABLE COAL SEAMS TO BE PENETRATED  
 Name of Seam      Owner of Seam  
All lower productive Forney D. Winner  
& Mary E. Winner, wife  
218 Wheeler St.  
Lock Haven, Penna.

PENFIELD D 272

DM-OG-4-56

*File under:  
DuBois Nat'l Bank*

COMMONWEALTH OF PENNSYLVANIA  
DEPARTMENT OF MINES

Oil and Gas Division  
HARRISBURG

083-20333

QUADRANGLE:

*W. Massey  
Penfield*

7 1/2'  15'

PERMIT NO. CLE-999

MAP REFERENCE:

9S 17W S63 W117 & 118

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

WELL RECORD

COMPANY:	New York State Natural Gas Corporation	Size of Casing and Tubing	Used in Drilling	Left in Well	Packers: Type, Size and Depth
ADDRESS:	2 Gateway Center, Pgh. 22, Penna.	13 3/8"	96'	96'	
FARM:	* H. E. Ginter Est. ACRES 172	9 5/8"	1285'	1285'	BHS @ 1287
WELL(FARM)NO.:	1 CO. SERIAL NO. N-796	7"	7335'	7335'	BHS @ 7267
ELEVATION:	1642.34 LEASE: 60986				
TOWNSHIP:	Brady COUNTY: Clearfield				
DRILLING COMMENCED:	12-1-60 DRILLING COMPLETED: 12-23-60				
PRODUCTION:	10,504,000 cubic feet				PERFORATIONS AT:
ROCK PRESSURE:	2340 psig 70 hrs.				
WELL TREATMENT:	(Shooting, Acidizing, Fracturing Etc.)				
12-22-60-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 lbs. Or normal open flow of 48,000 cubic ft. in chert at 325,000 cubic ft. in Oriskany increased to 10,405,000 cubic ft. A/F. R.P. b/f 2450 lbs 24 1/2 hrs. dead weight.		CEMENTING DATA: (Size Pipe, Depth, No. Bags, Date)			
RESULTS AFTER TREATMENT:		12-3-60 - 13 3/8" cem. w/90 sax			
ROCK PRESSURE AFTER TREATMENT:		12-7-60 - 9 5/8" cem. @ 1287 w/50 sax cem & 20 sax aquagel			
		12-16-60 - 7" cem @ 7267 w/125 sax			

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				
Shale & Sand	474	532				
Sand & Shale	532	735				
Sand	735	785				
Sand & Shale	785	1720				
Shale & Sand	1770	2165				
Sand & Shale	2165	4310				
Sand & Shale	4310	5170				
Sand & Shale	5170	5405				

(Over)

FORMATION	TOP	BOTTOM	GAS AT	OIL AT	WATER AT (Fresh or Salt Water)	REMARKS
Shale & Shells	5405	6150				
Sand & Shale	6150	6425				
Shale & Shells	6425	6686				
Lime	6686	6784				
Shale & Shells	6784	7248				
Lime	7248	7266				
Chert	7266	7314	7267 & 7300			
Sand	7314	7343	7316-25			
Lime	7343					
Total Depth		7344				
<u>Sample Study</u>						
Tully	6686					
Onondaga	7248					
Chert	7266					
Oriskany	7314	7343				

DATE January 24, 1961

APPROVED New York State Natural Gas Corporation, OWNER

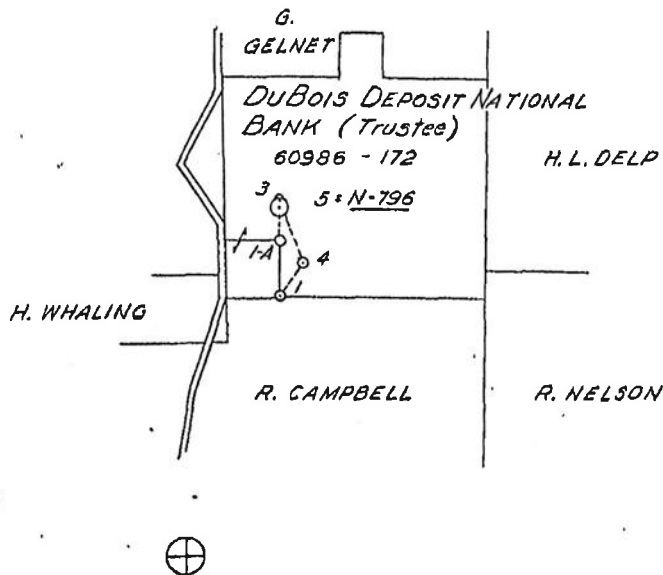
BY H. R. Bayard  
TITLE  
Superintendent Operations



District Central Map 9S 17W N S 63 E W 117 & 118  
 Loc. Made 10/24/60 Bk. 1916 Pg. 30 El. Bk. 1916 Pg. 31  
 Approved J. W. Sandrickson Date October 25, 1960

Latitude 41°10'

Longitude 70°40'



STA.	BRG.	DIST.
1-1A	N 7° 00' E	500'
1-3	N 7° 00' E	848'
3-4	S 13° 49' E	591'
4-1	S 42° 06' W	365'
3-5	S 7° 00' W	75'

- New Location
- Drill Deeper
- Abandonment
- Re-drill

Company NEW YORK STATE NATURAL GAS CORPORATION  
 Address #2 Gateway Center, Pittsburgh 22, Pa.  
 Farm H. L. Ginter  
 DuBois Deposit National Bank Trustee et al  
 Tract \_\_\_\_\_ Acres 172 Lease No. 60986  
 Well (Farm) No. #1 Co. Serial No. N-796  
 Angle of Deviation, if any \_\_\_\_\_  
 Elevation 1642.34 Quadrangle Penfield  
 County Gleairfield Township Brady  
 Engineer R. A. Doman  
 Engineer's Registration No. 14076  
 File No. \_\_\_\_\_ Drawing No. \_\_\_\_\_  
 Date 10/25/60 Scale 1"-1320'

COMMONWEALTH OF PENNSYLVANIA  
 DEPARTMENT OF MINES

Oil and Gas Division  
 HARRISBURG

WELL LOCATION MAP  
 Dept. File No. 673-2033

⊕ Denotes Values of Well on United States Topographic Maps.

Scale 15'  7 1/2'

WORKABLE COAL SEAMS TO BE PENETRATED

Name of Seam      Owner of Seam

Lower Kittanning	DuBois Dep. Nat. Bank Trustee, The Union Banking and Trust Co. of DuBois Penna.

COMMONWEALTH OF PENNSYLVANIA  
 DEPARTMENT OF ENVIRONMENTAL RESOURCES  
 BUREAU OF OIL AND GAS REGULATION

DER Office Use Only

Code
Oil & Gas Inspector
Date Approved

DER-TCS  
 CERTIFICATE OF PLUGGING WELL

*20626-1*

DuBois Deposit Nat. Bank, Tr. for Henry Gintz Type of Well Gas - P. & A. *20626-1*

Coal Operator  Owner  Lessee

DuBois, PA 15801 Address Name of Well Operator Consolidated Gas Transmission

Coal Operator  Owner  Lessee

443 W. Main St., Clarksburg, WV 26302-2490 Address

September 12 19 85 Date

Coal Operator  Owner  Lessee

Brady Political Subdivision, Borough, City or Township

Clearfield County

Farm DuBois Deposit National Bank

Well (Farm) No. 4 Serial No. WN-1573

COMPLETE ABOVE SECTION IF APPLICABLE

We, the undersigned representatives of the Well Operator certify that we participated in the plugging of the above well, and that the work was started August 21, 19 85, and that the well was plugged as follows:

FILLING MATERIAL AND PLUGS	FROM	TO	Casing and Tubing		
			SIZE	PULLED	LEFT
125 sacks Cement	3302	2215	11 3/4"	0	253
Gal	2215	1350	8 5/8"	0	1198
140 sacks Cement	1550	1085	4 1/2"	1561	1975
100' cement up inside 8 5/8" casing					
Depth of Coal Seam, if Any					
285-294, 323-330					
Description of Monument					
Standard 6' monument to be set					

I certify that the work of plugging and filling said well was completed on the 22nd day of August, 19 85, and that the above information is true and accurate.

Consolidated Gas Transmission Corporation (Well Operator)

PERMIT/REGISTRATION NO. GR-20626

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

*John M. Love* (Qualified Participant)

*John G. Smith* (Qualified Participant)

*John G. Smith* (Qualified Participant)

One copy of this certificate to be mailed to each coal operator, lessee, or owner, if any, and one to the Bureau of Oil and Gas Management, upon completion of plugging.

*246 10-2-85*

RECEIVED  
 OCT 18 1985  
 PA GEOLOGICAL SURVEY  
 (Oil & Gas Geology Division)



①

Salem Pool

WELL RECORD

PERMIT NO. CLE-20626 - P

Devel

PROJECT NO.

14315 91°01'30"  
 10 250 W 78°40'30"  
 LUSHILL (11)

TYPE OF WELL Gas Production

WELL OPERATOR Consolidated Gas Supply Corp.  
 ADDRESS 445 West Main St., Clarksburg, WV. ZIP 26301  
 FARM NAME DuBois Deposit National Bank FARM NO 4 SERIAL NO WN-1573 ACRES 172  
 TOWNSHIP: Brady COUNTY: Clearfield  
 DRILLING COMMENCED 4-28-77 DRILLING COMPLETED 5-2-77  
 ELEVATION 1661' QUADRANGLE PENFIELD Luthersburg  7  1

Casing and Tubing Record

Pipe Size	Amt In Well	Material Behind Pipe		Packer			Date
		Cement (Sks.)	Gal (Sks.)	Type	Size	Depth	
11 3/4	253	150 sax.	to surface	Guide	11 3/4	251 G.L.	4-29-77
8 5/8	1198	180 sax.	to surface	Guide	8 5/8	1191 G.L.	4-30-77
4 1/2	3536	330 sax.		Float	4 1/2	3507 K.B.	5-3-77
		TD	01			lease	
		3547	3400	D	✓	1	
K.B. measurement 10		above G.L.					

Perforation Record

Stimulation Record

Date	Interval Perforated		Date	Interval Treated	Amt Fluid	Amt. Sand	Injection Rate
	From	To					
5-18-77	2682	2694	5-18-77	2682-94	500 bbl.	25,000#	
"	2825	2831	"	2825-31	500 bbl.	25,000#	
"	2934	2940	"	2934-40	500 bbl.	25,000#	
"	3092	3260	"	3092-3240	500 bbl.	25,000#	
"	3391	(3400)	"	3391-3400	600 bbl.	30,000#	

Natural Open Flow 75,308 cu. ft. Natural Rock Pressure N.T. days  
 After Treatment Open Flow 888,000 cu. ft. After Treatment Rock Pressure 1050# 16 days

REMARKS

RECEIVED

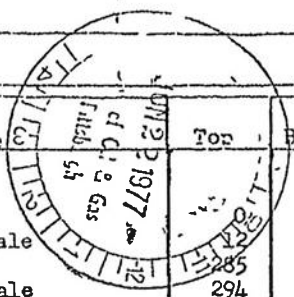
JUL 5 1977

PA GEOLOGIC SURVEY  
 Oil & Gas Division

①  
 X H A 6-23-77

Formation on Reverse Side

Zone Ripped



EXPLANATIONS

Name	Top	Bottom	Gas At	Oil At	Water At (Fresh or Salt Water)	Source of Data
Clay		12				
Sand & Shale		285				
Coal	285	294				
Sand & Shale	294	323				
Coal	323	330			FW-330	2" stream
Sand & Shale	330	1500				
Red Rock	1500	1550				
Shale	1550	1620				
Red Rock	1620	1825				
Sand & Shale	1825	3390				
Sand	3390	3410	3395 (show)			
Shale	3410	3550				
Total Depth	3550 K.B.					
<u>Gamma Ray Log Tops</u>						
Speechley Stray	2537	2576				
Speechley	2599	2676				
Tiona	2680	2710				
Balltown	2747	2823				
Sheffield	2897	2941				
st. Brad.	3049	3137				
2nd. Brad.	3149	3221				
3rd. Brad.	3245	3262				
Kane	3390	3442				
T. D. Log	3547					



Date June 20, 1977

Approved Consolidated Gas Supply Corp. Operator

By J. E. Payne, Mgr. of Production  
 Title Mgr. of Production

10,250'

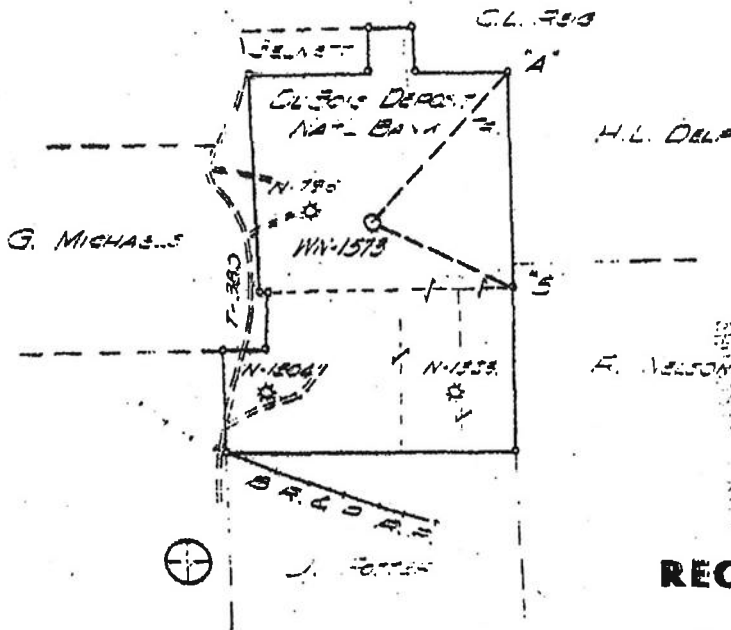
Latitude 41°-07'-30"

District CENTRAL Map 3217N 5563 W117  
Loc. Made 1-28-77 No. 2874 Pg. 15-17 Bl. 1574 Pg. 15

Approved \_\_\_\_\_ Date \_\_\_\_\_

"A" = NE Cor. CL 3015 DEPOSIT NAT. BANK  
"B" = SE Cor. 1075 TR.  
A-B SOUTH 1251'  
4 - NW 1573 SURFACE - 553'  
5 - NW 1573 SURFACE - 1421'

NOTE: A - SEAM (SEE APPROPRIATE PROPERTY DESCRIPTION)



Longitude 78°-41'-30"

14,375'

RECEIVED

OCT 12 1985

PA GEOLOGICAL SURVEY  
(Oil & Gas Geology Division)

- New Location
- Drill Dumper
- Abandonment
- Repairs

Company CONSOLIDATED BA. SUGAR CORP.  
 Address 445 W. MAIN ST. CLARKSBURG, W. VA.  
 Farm CLARKSBURG NATIONAL BANK  
 Tract \_\_\_\_\_ Acres 175<sup>±</sup> Range No. 5563  
 Well (Farm) No. \_\_\_\_\_ Co. Serial No. W1-573  
 Angle of Deviation, if any \_\_\_\_\_  
 Elevation 1561' Quadrangle 3217N-5563W-117  
 County JEFFERSON Township BRADY  
 Engineer Paul H. ...  
 Engineer's Registration No. 010261-E  
 Mile No. \_\_\_\_\_ Drawing No. K5ETTAN6  
 Date JAN 27, 1977 Scale 1" = 1320'

COMMONWEALTH OF PENNSYLVANIA  
DEPARTMENT OF MINES

Oil and Gas Division  
HARRISBURG

WELL LOCATION MAP

Dept. File No. CL-32076  
37-03320026-0

⊕ Denotes Values of Well on United States Topographic Maps.

Scale 15'  71'

WORKABLE COAL SEAMS TO BE PENETRATED

Name of Seam \_\_\_\_\_ Owner of Seam \_\_\_\_\_

ALL SEAMS:	_____
<u>MR</u>	<u>9-5-85</u>

7350



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

Office Use Only

*C*

*Salem Prod*

WELL RECORD

PERMIT NO. CLE-20553

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

TYPE OF WELL Gas Production

*ME*

*Dot*  
900 S. 41° 05'  
20,850 W 78° 40'  
7450' W 78° 40' 1800'  
TOWNSHIP (4)

(G) *66*

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 1/2'  15'

Casing and Tubing Record

Pipe Size	Amt. In Well	Material Behind Pipe		Packer Type	Size	Depth	Date Run
		Cement (Sks.)	Gel (Sks.)				
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
		3432	<del>3307</del>	D	X	X	X

Perforation Record

Stimulation Record

Date	Interval Perforated From	To	Date	Interval Treated	Amt. Fluid	Amt. Sand	Injection Rate
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. Rock Pressure 1242 14 days

REMARKS: No show of gas was recorded on drillers log during rotary drilling. A. show of gas was evident afte: 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.

*\**

*Zone B prod*  
*Checked 7/20/75*  
*Charles H. ...*

Formation on Reverse Side

66

FORMATIONS

Name	Top	Bottom	Gas At	Oil At	WATER AT (Fresh or Salt Water)	Source of Data
Clay	0	20	*			
Shale	20	105			FW-30	
Sand	105	175			FW-120	1" Stream
Sandy Shale	175	185				
Shale	185	189				
Coal	189	192				
Shale	192	270				
Coal	270	273				
Shale & Sand	273	400				
Sand	400	480			FW-410	1" Stream
Shale	280	530	530-620			
Sand	530	620	620 (Show)		FW-540	1" Stream
Shale	620	670				
Red Rock	670	680				
Sandy Shale	680	740				
Red Rock	740	755				
Sandy Shale	755	840				
Shale	840	860				
Red Rock	860	875				
Shale	875	1049				
Sandy Shale	1049	1410				
Red Rock	1410	1430				
Sandy Shale	1430	1510				
Red Rock	1510	1550				
Sandy Shale	1550	1950				
Red Rock	1950	2030				
Shale	2030	2400				
Sandy Shale	2400	2460				
Shale	2460	2700				
Sandy Shale	2700	2940	2952-			
Sand	2940	3040	2962			
Sandy Shale	3040	3150	2992-			
Sand	3150	3160	3001			
Shale	3160	3280	3282-			
Limy Sand	3280	3330	3307			
Shale	3330	3425				
Total Depth	3425					
<u>Gamma Ray Log Tops</u>						
Speechley Stray	2425	2476				
Speechley	2480	2584				
Sheffield	2794	2877				
1st. Bradford	2943	3037				
2nd. Bradford	3050	3119				
3rd. Bradford	3144	3159				
Kane	3281	3345				
T.D. (Log)	3432					

RECEIVED  
 JAN 21 11 27 AM '75  
 DIV. OF OIL & GAS  
 DEPT. OF REVENUE  
 PITTSBURGH, PA. 15222

\* Gas at (3400/3410) No show of gas was recorded on drillers log during rotary drilling. A show of gas was evident after landing 4 1/2" casing- 84,000 cu. ft. Log evaluation indicated potential production in the intervals shown under "Stimulation" record casing was perforated and these zones were fractured.

Date July 10, 19 74

Approved Consolidated Gas Supply Corp. Operator

By [Signature]  
 Title Manager of Production

DM-CR-2-56

9,400'

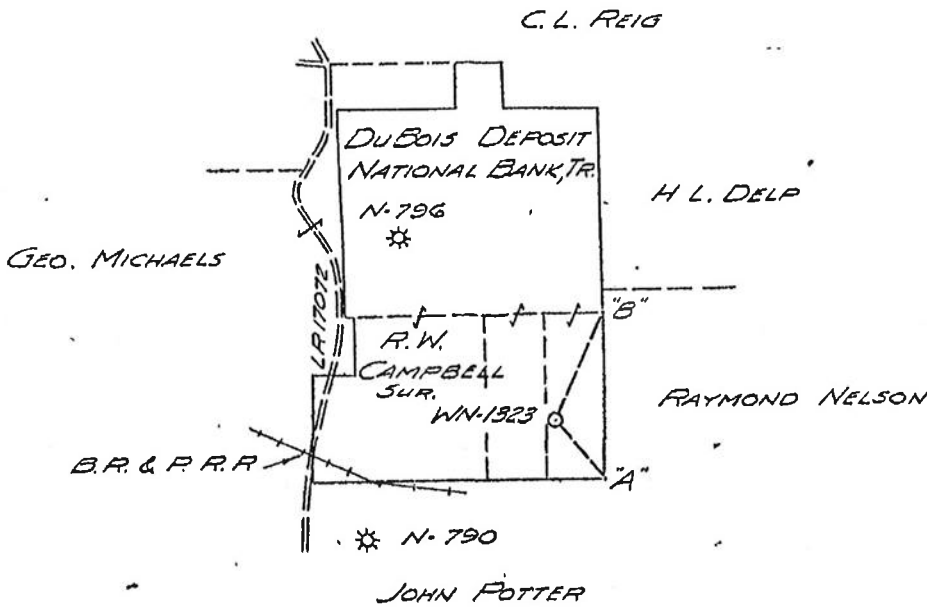
District CENTRAL Map 9517W-N563-EW117  
 Loc. Made 4/22/74 Bk. 3085 Pg. 5-9 E.L. Bk. 2225 Pg. 6  
 Approved \_\_\_\_\_ Date \_\_\_\_\_

Latitude 41°-05'-00"

Longitude 78°-42'-30"  
1,100'

"A" = SE COR R.W. CAMPBELL  
 "B" = NE COR R.W. CAMPBELL  
 A-B NORTH 1466'  
 A-WN1323 N39°55'W-676'  
 B-WN1323 S24°36'W-1043'

NOTE: ALL BEARINGS CORRECTED TO PROPERTY DESCRIPTION



- New Location
- Drill Deeper
- Abandonment
- Repairs

Company CONSOLIDATED GAS SUPPLY CORP.  
 Address 445 W. MAIN ST. CLARKSBURG, W.VA.  
 Farm DUBOIS DEPOSIT NATIONAL BANK  
 Tract \_\_\_\_\_ Acres 172<sup>±</sup> Lease No. 60986  
 Well (Farm) No. \_\_\_\_\_ Co. Serial No. WN-1323  
 Angle of Deviation, if any 4  
 Elevation 1572' Quadrangle LUTHERSBURG  
 County CLEARFIELD Township BRADY  
 Engineer Conrad C. Lippula  
 Engineer's Registration No. 010961-E  
 File No. \_\_\_\_\_ Drawing No. KC-74AWIG  
 Date APRIL 17 1974 Scale 1" = 1320'

COMMONWEALTH OF PENNSYLVANIA  
DEPARTMENT OF MINES

Oil and Gas Division  
HARRISBURG

WELL LOCATION MAP  
Dept. File No. CLE-20553

⊕ Denotes Values of Well on United States Topographic Maps.

Scale 15'  7 1/2'

WORKABLE COAL SEAMS TO BE PENETRATED

Name of Seam Owner of Seam

ALL SEAMS JACKSONMANNA COAL CO.

866 05-1374

6628

COMMONWEALTH OF PENNSYLVANIA  
DEPARTMENT OF MINES  
OIL AND GAS DIVISION

CERTIFICATE OF PLUGGING WELL THROUGH WORKABLE COAL SEAMS

John R. Potter  
Coal Operator or Owner

New York State Natural Gas Corporation  
Well Operator

D. #1

#2 Gateway Center, Room 1032

Lucas, Pennsylvania  
Address

Pittsburgh 22, Pa.  
Address

Coal Operator or Owner

August 24, 19 60  
Date

Brady  
Township

Address

Clearfield  
County

Coal Operator or Owner

John R. Potter  
Farm

Address

Well (Farm) No. #1 Serial No. N-782

W.J. Burns, Jr.  
Division Representative Supervising

John R. Potter  
Coal Representative Observing

We, the undersigned representatives of the well operator certify that we participated in the plugging of the above well, and that the work was started Oct. 4, 19 60, and that the well was plugged as follows:

Filling Material and Plug	From	To	Casing and Tubing		
			Size	Pulled	Left
Total Depth		7637'			
Cavings	7637	7562'	13 3/8"	none	60'2"
10 sacks of cement	7562	7536'	9 5/8"	861'9"	294'15"
50 sacks of cement	3358'	3154'	2" vent	none	273'10"
50 sacks of cement	1365'	1129'			
Cut 9 5/8" csg at 864' & pulled 861.77'					
Cavings	864'	853'			Depth of Coal Seams
380 sacks of cement	853'	300'	Coal or Shale	255-265	
Stone	300'	275'	Coal	409-415	
Ran 273.81' Vent pipe	275	0	Sample study indicates no		
Gravel	275'	270'	true coal found.		
45 sacks of cement	270'	220'	Description of Monument		
Aquagel	220'	30	2" vent pipe above ground		
Stone	30'	25'			
Cement	25'	0'			

and that the work of plugging and filling said well was completed on the 10 th day of October, 19 60.

Qualified Participants

033-20325-P

Permit No. Cle 325

- 2 - W.R.C.
- 1 - J.R.P.
- 1 - C.E.A.
- 2 - File

New York State Natural Gas Corporation  
Well Operator

By *H.B. Bauger*  
Title Superintendent Operations

One copy of this certificate to be mailed to each coal operator or owner, and one to the Division, by registered mail, upon completion of plugging.



PENFIELD G 206

DM-CG-4-56

COMMONWEALTH OF PENNSYLVANIA  
DEPARTMENT OF MINES

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

LUTHERSBURG

Oil and Gas Division  
HARRISBURG

033-20325-P

QUADRANGLE: Penfield

7 1/2'  15'

PERMIT NO. CH-325-P

MAP REFERENCE: 10S 17W S64 W117

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

WELL RECORD

COMPANY:	Size of Casing and Tubing	Used in Drilling	Left in Well	Packers: Type, Size and Depth
New York State Natural Gas Corporation	13-3/8"	60'	60'	
ADDRESS: #2 Gateway Center, Pittsburgh 22, Pa.	9-5/8"	1156'	294'	BHS @ 1152
FARM John R. Potter ACRES 68	Vent 2"		274'	
WELL(FARM)NO. #1 CO. SERIAL NO. N-782				
ELEVATION: 1627.80 LEASE: 58357				
TOWNSHIP: Brady COUNTY: Clearfield				
DRILLING COMMENCED: 8/7/60 DRILLING COMPLETED: 10/13/60				
PRODUCTION: Dry Hole - Plug and Abandon				PERFORATIONS AT:
ROCK PRESSURE: _____ psig _____ hrs.				
WELL TREATMENT: (Shooting, Acidizing, Fracturing Etc.)				
CEMENTING DATA: (Size Pipe, Depth, No. Bags, Date)				
8/8/60 - 13-3/8" cem. w/50 sacks				
8/11/60 - 9-5/8" cem. @ 1152' w/50 sacks cem. and 15 sacks aquagel				
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				
and & shale	5255	5555				
shale & sand	5555	5907				

(Over)



FORMATION	TOP	BOTTOM	GAS AT	OIL AT	WATER AT (Fresh or Salt Water)	REMARKS
Shale & shells	5907	6075				
Sand & shale	6075	6175				
Shale & shell	6175	6637				
Tully lime	6637	6754				
Shale & shells	6754	7617				
Onondaga	7617	7635				
Chert	7635					
Total depth		7637 (In. Chert)				
<u>Sample Study</u>						
Tully	6638					
Onondaga	7616					
Chert	7635					

DATE November 15, 19 60

APPROVED New York State Natural Gas Corporation OWNER

BY H. L. Berglund TITLE  
Superintendent Operations

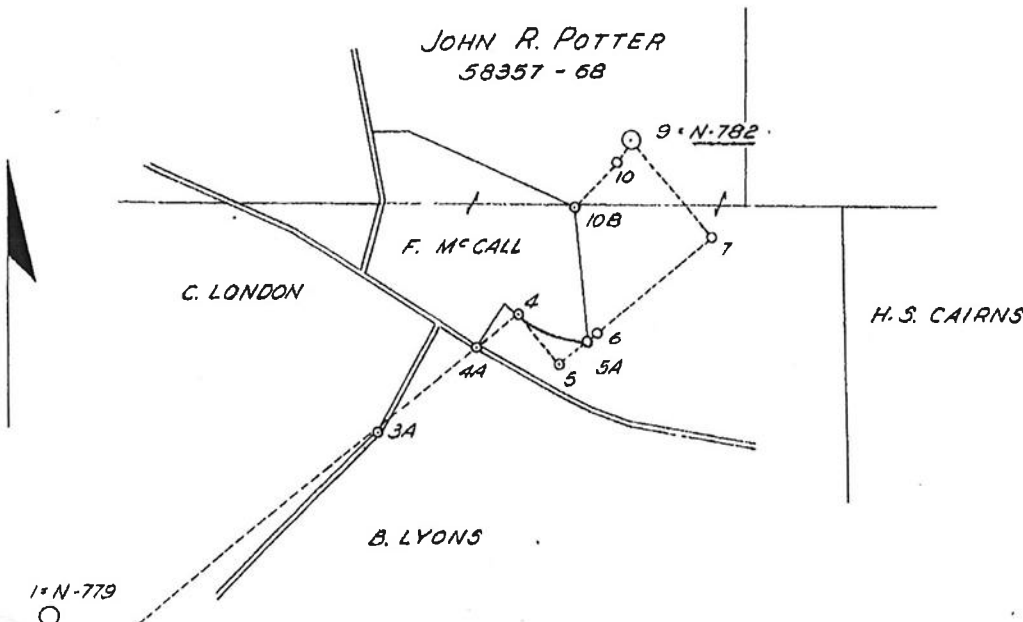


District Central Map 108 17W 64 117  
 Loc. Made July 27, 1916 Pg. 15 El. Bk. 1916 Pg. 16  
 Approved [Signature] Date August 1, 1960

Latitude 41° 05'

21900

Longitude 76° 40'



STA	BRG.	DIST.	STA	BRG.	DIST.
1-3	S32° 00'E	282'	6-7	N58° 00'E	676'
3-3A	N58° 41'E	1676'	7-9	N32° 00'W	575'
3-4	N58° 00'E	2489'	9-10	S47° 34'W	123'
4-4A	S58° 54'W	234'	10-10B	S57° 27'W	291'
4-5	S32° 00'E	293'			
5-5A	N58° 00'E	165'			
5-6	" "	235'			

- New Location
- Drill Deeper
- Abandonment
- Re-drill

Company NEW YORK STATE NATURAL GAS CORPORATION  
 Address Gateway Center #2, Pittsburgh 22, Pa.  
 Farm John R. Potter  
 Tract \_\_\_\_\_ Acres 68 Lease No. 58357  
 Well(Farm)No. 1 Co. Serial No. N-782  
 Angle of Deviation, if any \_\_\_\_\_  
 Elevation 1627.80 Quadrangle Ponfield  
 County Clearfield Township Brady  
 Engineer R. A. Doman  
 Engineer's Registration No. 14016  
 File No. \_\_\_\_\_ Drawing No. \_\_\_\_\_  
 Date 8/1/60 Scale 1"=660'

COMMONWEALTH OF PENNSYLVANIA  
 DEPARTMENT OF MINES  
 Oil and Gas Division  
 HARRISBURG  
 WELL LOCATION MAP  
 Dept. File No. 033-20325-P  
 ⊕ Denotes Values of Well on United States Topographic Maps.  
 Scale 15'  7 1/2'   
 WORKABLE COAL SEAMS TO BE PENETRATED  

Name of Seam	Owner of Seam
<u>John Potter</u>	<u>Lower Kittanning</u>

DM-OG-4-56

Pennsylvania - Driftwood Field  
Helvetia Pool

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

QUADRANGLE: Luthersburg  
~~Penfield~~

7 1/2'  15'

PERMIT NO. ~~GLE 327~~

MAP REFERENCE: 9S 17W S63 W117

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

WELL RECORD

COMPANY:	Size of Casing and Tubing	Used in Drilling	Left in Well	Packers: Type, Size and Depth
New York State Natural Gas Corporation	13-3/8"	59'	59'	
ADDRESS: #2 Gateway Center, Pittsburgh 22, Pa.	9-5/8"	1251'	1251'	BHS @ 1248'
FARM: John R. Potter ACRES 68	7"	7305'	7305'	BHS @ 7234'
WELL(FARM)NO. 2 CO. SERIAL NO. N-790				
ELEVATION: 1640.60 LEASE: 58357				
TOWNSHIP: Brady COUNTY: Clearfield				
DRILLING COMMENCED: 8/31/60 DRILLING COMPLETED: 9/29/60				
PRODUCTION: 30,370,000 cubic feet				PERFORATIONS AT:
ROCK PRESSURE: 3293 psig 4 days. <del>xxxx</del>				
WELL TREATMENT: (Shooting, Acidizing, Fracturing Etc.)				
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 sure 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				
CEMENTING DATA: (Size Pipe, Depth, No. Bags, Date)				
	8/31/60 - 13-3/8" cem. @ 70' w/50 sacks			
	9/4/60 - 9-5/8" cem @ 1248' w/50 sacks cem., 15 sacks aquagel, & 25 sacks quadroflos			
RESULTS AFTER TREATMENT:				
ROCK PRESSURE AFTER TREATMENT:	9/13/60 - 7" cem. @ 7234' w/125 sacks.			
REMARKS:				

FORMATION	TOP	BOTTOM	GAS AT	OIL AT	WATER AT (Fresh or Salt Water)	REMARKS
Surface	0	15			FW 75	
Sand & shale	15	143				
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				
red shale	692	733				
	733	735				

(Over)

Well N 790

FORMATION	TOP	BOTTOM	GAS AT	OIL AT	WATER AT (Fresh or Salt Water)	REMARKS
& shale	735	1010				
Black shale	1010	1020				
Sand & shale	1020	2293				
Shale	2293	2295				
Shale & sand	2295	2601				
Sand & shale	2601	3415				
Shale & sand	3415	4015				
Sand & shale	4015	5025				
Shale & sand	5025	5475				
Sand & shale	5475	5680				
Shale & sand	5680	5857				
Sand & shale	5857	6030				
Lime & shale	6030	6137				
Lime	6137	6195				
Shale & shells	6195	6642				
Lime	6642	6750				
Shale & shells	6750	7219				
Onondaga lime	7219	7233				
Chert	7233	7288				
Sand	7288	7317	7291-7303			
Lime	7317					
<b>Total Depth</b>		<b>7318</b>				
<u>Sample Study</u>						
Tully	6642					
Onondaga	7219	5586				
Chert	7233	5400				
Oriskany	7288	7317	7291-7303			

RECEIVED  
DEPT. OF MINES  
& MINERAL IND.

NOV 29 AM 8:44

DATE October 28, 19 60

APPROVED New York State Natural Gas Corporation OWNER

BY

D. B. Bangler

TITLE

Superintendent of Operations

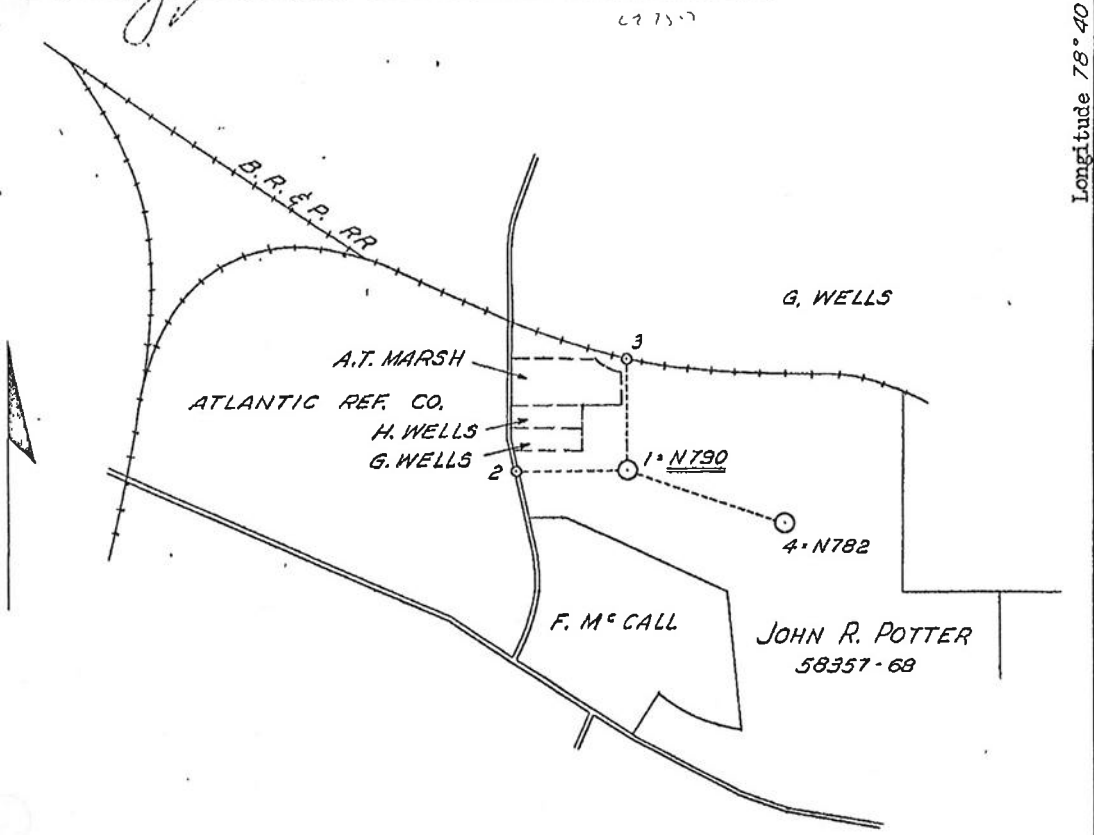


13000  
4.37

1-109/2

District Central Map 98-17W NS 63 E W17  
 Loc. Made 8/24/60 Bk. 1916 Pg. 19 El. Bk. 1916 Pg. 19  
 Approved [Signature] Date August 25, 1960

Latitude 41° 05'



STA.	BRG.	DIST.
1-2	N83°00'W	500'
1-3	N7°00'E	500'
1-4	S64°06'E	745'

- New Location
- Drill Deeper
- Abandonment
- Re-drill

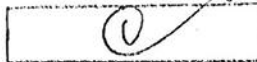
Company NEW YORK STATE NATURAL GAS CORPORATION  
 Address #2 Gateway Center, Pittsburgh 22, Pa.  
 Farm John R. Potter  
 Tract \_\_\_\_\_ Acres 68 Lease No. 58357  
 Well(Farm)No. 2 Co. Serial No. N-790  
 Angle of Deviation, if any \_\_\_\_\_  
 Elevation 1640.60 Quadrangle Wheatsburg, Bedford  
 County Clearfield Township Brady  
 Engineer R. A. Doman  
 Engineer's Registration No. 14016  
 File No. \_\_\_\_\_ Drawing No. \_\_\_\_\_  
 Date 8/25/60 Scale 1"=660'

COMMONWEALTH OF PENNSYLVANIA  
 DEPARTMENT OF MINES  
 Oil and Gas Division  
 HARRISBURG  
 WELL LOCATION MAP  
 Dept. File No. 61E-327  
037-26727  
 ⊕ Denotes Values of Well on United States Topographic Maps.  
 Scale 15'  7 1/2'   
 WORKABLE COAL SEAMS TO BE PENETRATED  
 Name of Seam      Owner of Seam  

John Potter	Lower Kittanning

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

OFFICE USE ONLY



750'S 41° 05' W  
11000' W 78° 45' E  
LUTHERSBURG (4)

*Salem Pool* WELL RECORD

650

PERMIT NO. CLG-20597

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

TYPE OF WELL (Gas Production)

81

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

CASING AND TUBING RECORD

Pipe Size	Amount In Well	Material Behind Pipe Cement (Sks.)	Pipe Gel (Sks.)	Packer Type	Size	Depth	Date Run								
11 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"> <tr> <td>3576</td> <td>3412</td> <td>D</td> <td>X</td> <td>/</td> <td>/</td> <td>Lease</td> <td></td> </tr> </table>								3576	3412	D	X	/	/	Lease	
3576	3412	D	X	/	/	Lease									

K. measurement 11' above G.L.

Perforation Record

Stimulation Record

Date	Interval Perforated From	To	Date	Interval Treated	Amount Fluid	Amount Sand	Injection Rate
7-9-76	2587	2595	7-9-76	2587-95	400 bbl.	20,000#	
7-9-76	2812	2817	7-9-76	2812-17	400 bbl.	20,000#	
7-9-76	2943	2993	7-9-76	2943-93	400 bbl.	20,000#	
7-9-76	3402	3412	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~~ <sup>mcf</sup> AFTER TREATMENT ROCK PRESSURE 1180# , 16 days

REMARKS:

RECEIVED

AUG 3 1 1976

PA. GEOLOGIC SURVEY  
Oil & Gas Division

*Handwritten initials and signature*

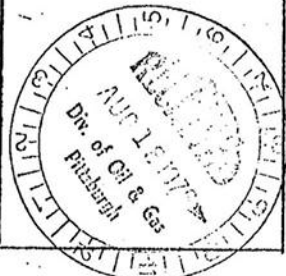
*Zone Perforated*

FORMATION ON REVERSE SIDE



FORMATIONS

NAME	TOP	BOTTOM	GAS AT	OIL AT	WATER AT (Fresh or Salt Water)	SOURCE OF DATA
Sand & Shale	0	420				
Sand & Shale	420	655			FW-100	1" Stream
Sand & Shale	655	825			FW-420	1" Stream
Red Rock	825	850			FW-750	1" Stream
Sand & Shale	850	1370				
Red Rock	1370	1410				
Sandy Shale	1410	1800				
Red Rock	1800	1850				
Shale	1850	1870				
Red Rock	1870	1890				
Sandy Shale	1890	2400				
Red Rock	2400	2460				
Sand & Shale	2460	3565	2870 (Show)			
<b>Total Depth</b>	<b>3565</b>					
<b>Gamma Ray Log Tops</b>						
Speechley Stray	2547	2599				
Speechley	2605	2672				
Tiona	2683	2724				
Balltown	2755	2864				
Sheffield	2864	2998				
1st. Brad.	3060	3154				
2nd. Brad.	3166	3234				
3rd. Brad.	3257	3276				
me.	3400	3465				
<b>T.D. Log</b>	<b>3576</b>					



Date August 16, 1976

APPROVED Consolidated Gas Supply Corp.

By J. E. Payne  
 Title Manager of Production

OM-07-2-56

11,000

81

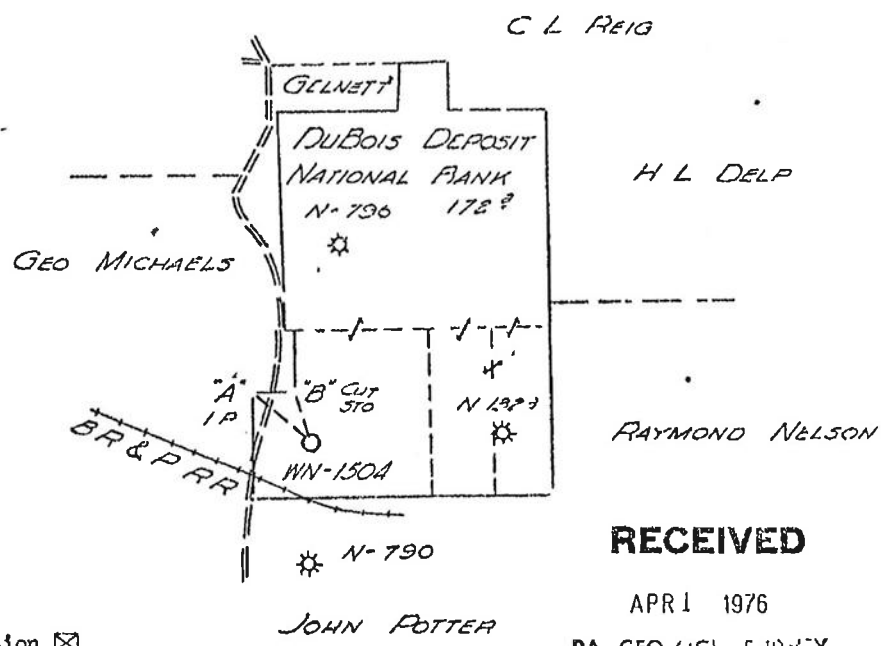
Abstract 1-24 Map 2-1-1 N 50' E W 1/4 Pg. 22 W. Hk. 5 Pg. 30  
 Loc. M. do 2 3 3 Approved \_\_\_\_\_ Date \_\_\_\_\_

Latitude 41 10 00

Longitude 75 49 00

A - B EAST 360'  
 A - WN 1504 519° 21' E - 669'  
 B - WN 1504 518° 38' E - 460'

NOTE ALL BEARINGS CORRECTED TO PROPERTY DESCRIPTION



RECEIVED

APR 1 1976

PA GEO OIL & GAS SURVEY  
Oil & Gas Division

3600

- New Location
- Drill Deeper
- Abandonment
- Repairs

Company CONSOLIDATED GAS SUPPLY CORP  
 Address 415 W MAIN ST - CLARKSBURG, W VA  
 Farm DuBois DEPOSIT NAT'L BANK  
 Tract \_\_\_\_\_ Acres 1-23 Lease No. 60986  
 Well (Farm) No. 3 Co. Serial No. WN-1504  
 Angle of Deviation, if any \_\_\_\_\_  
 Elevation 1672' Quadrangle LITLESVILLE  
 County CARFIELD Township BRADY  
 Engineer [Signature]  
 Engineer's Registration No. 010961-E  
 File No. \_\_\_\_\_ Drawing No. KE 2119  
 Date APR 23 1976 Scale 1" = 300'

COMMONWEALTH OF PENNSYLVANIA  
 DEPARTMENT OF MINES  
 3-22-76  
 Oil and Gas Division  
 HARRISBURG  
 WELL LOCATION MAP  
 Dept. File No. CLF-20597  
 ⊕ Denotes Values of Well on United States Topographic Maps.  
 Scale 15'  7 1/2'   
 WORKABLE COAL SEAMS TO BE PENETRATED  
 Name of Seam \_\_\_\_\_ Owner of Seam \_\_\_\_\_

**APPENDIX B – LABORATORY ANALYTICAL DATA**



# GEOCHEMICAL TESTING

Environmental and Energy Analysis

2005 N. Center Ave.  
Somerset, PA 15501

814/443-1671  
814/445-6666  
FAX: 814/445-6729

Wednesday, October 05, 2011

RICK BONAZZA  
RESOURCE MANAGEMENT SERVICES  
65 FENTON ROAD  
INDIANA, PA 15701

RE: BS-P

Order No.: G1109987

Dear RICK BONAZZA:

Geochemical Testing received 1 sample(s) on 9/27/2011 for the analyses presented in the following report.

There were no problems with the analyses and all QC data met NELAC, EPA, and laboratory specifications except where noted in the Case Narrative or Laboratory Results.

If you have any questions regarding these tests results, please feel free to call.

Sincerely,

Timothy W. Bergstresser  
Director of Technical Services

## Geochemical Testing

Date: 05-Oct-11

CLIENT: RESOURCE MANAGEMENT SERVICES  
Project: BS-P  
Lab Order: G1109987

## CASE NARRATIVE

No problems were encountered during analysis of this workorder, except if noted in this report.

**Legend:** ND - Not Detected at the Quantitation Limit  
J - Indicates an estimated value.  
U - The analyte was not detected at or above the listed concentration, which is below the laboratory quantitation limit.  
B - Analyte detected in the associated Method Blank  
Q - Qualifier    QL -Quantitation Limit    DF - Dilution Factor

S - Spike Recovery outside accepted recovery limits  
R - RPD outside accepted recovery limits  
E - Value above quantitation range  
\*\* - Value exceeds Action Limit  
H - Method Hold Time Exceeded  
MCL - Contaminant Limit



# Laboratory Results

## Geochemical Testing

Date: 05-Oct-11

<b>CLIENT:</b>	RESOURCE MANAGEMENT SERVICES	<b>Client Sample ID:</b>	1/9/26
<b>Lab Order:</b>	G1109987	<b>Sampled By:</b>	Client
<b>Project:</b>	BS-P	<b>Collection Date:</b>	9/26/2011 5:20:00 PM
<b>Lab ID:</b>	G1109987-001	<b>Received Date:</b>	9/27/2011 8:34:00 PM
<b>Matrix:</b>	AQUEOUS		

Analyses	Result	QL	Q	Units	DF	Date Analyzed
<b>INORGANIC NON-METALS</b>						
Acidity to pH 8.2	-81	0		mg/L CaCO <sub>3</sub>	1	10/3/2011 4:49:00 PM
<b>PHYSICAL TESTS</b>						
Specific Conductance	231	1		µmhos/cm	1	10/3/2011 2:00:00 PM
<b>PH BY SM 4500 H+B</b>						
Lab pH	7.56	0	H	su	1	10/3/2011 2:00:00 PM
<b>INORGANIC NON-METALS</b>						
Total dissolved solids	128	20		mg/L	1	9/28/2011 11:27:00 AM
<b>PHYSICAL TESTS</b>						
Total suspended solids	< 5	5		mg/L	1	9/28/2011 8:25:36 AM
<b>INORGANIC NON-METALS</b>						
Alkalinity to pH 4.5	96	5		mg/L CaCO <sub>3</sub>	1	10/3/2011 2:00:00 PM
<b>INORGANIC NON-METALS</b>						
Nitrate - Nitrite	0.37	0.05		mg/L as N	1	9/28/2011 11:56:00 AM
<b>INORGANIC NON-METALS</b>						
Bromide	< 0.2	0.2		mg/L	1	9/28/2011 11:56:00 AM
Chloride	3	1		mg/L	1	9/28/2011 11:56:00 AM
Sulfate	16	2		mg/L	1	9/28/2011 11:56:00 AM
<b>INORGANIC METALS</b>						
Aluminum	< 0.1	0.1		mg/L	1	9/30/2011 5:01:00 AM
Barium	0.09	0.01		mg/L	1	9/30/2011 5:01:00 AM
Calcium	26.0	0.1		mg/L	1	9/30/2011 5:01:00 AM
Iron	< 0.05	0.05		mg/L	1	9/30/2011 5:01:00 AM
Magnesium	7.4	0.1		mg/L	1	9/30/2011 5:01:00 AM
Manganese	< 0.01	0.01		mg/L	1	9/30/2011 5:01:00 AM
Potassium	1.2	0.5		mg/L	1	9/30/2011 5:01:00 AM
Sodium	6.5	0.2		mg/L	1	9/30/2011 5:01:00 AM
Strontium	1.18	0.01		mg/L	1	9/30/2011 5:01:00 AM
Hardness (SM 2340B)	95.2	1.0		mg/L CaCO <sub>3</sub>	1	9/30/2011 5:01:00 AM
<b>INDICATOR ORGANIC PARAMETERS</b>						
Oil & Grease	< 5	5		mg/L	1	9/30/2011 7:28:00 AM



I.D. 56-00306 PA DEP

Shuttle/Cooler ID#: \_\_\_\_\_

# CHAIN OF CUSTODY

Geochemical Testing

Form F-5002, 01/04

Geochemical Testing • 2005 North Center Avenue • Somerset PA 15501 • (814) 443-1671 • Fax (814) 445-6729

Billing Client: AMS Contact (Company): AMS Phone: ( )  
 Address: AMS e-mail: AMS Fax: ( )  
 City: AMS State: PA Zip: 15501 Project: AMS Preservatives by AMS  
 WO#: (LAB USE ONLY) 6109987 Project: AMS PO/Quote#: \_\_\_\_\_

Sample Matrix:	GW Ground Water	SW Surface Water	PW Potable Water	MW Wastewater	SO Soil	SL Sludge	nHZ Not Hazardous / HZ Hazardous	PCBs
Sample Type:	G Grab	C Composite	D Distribution/DW	R Raw/DW	S Special/DW	O Other	Containers Supplied by:	GT Lab

Sample Location/Description	Lab Number (LAB USE ONLY)	Sample Matrix	Date	Time (Military)	Sample Type	**Analyses Requested	Remarks/Preservatives, etc	Number of Containers
AMS 1/9/26	G21	PW	9/26/11	1720	G	BS-P + O + G + A + K	Field Filtered: <input checked="" type="checkbox"/> Y / N	4
		nHZ / HZ					Field Filtered: Y / N	
		nHZ / HZ					Field Filtered: Y / N	
		nHZ / HZ					Field Filtered: Y / N	
		nHZ / HZ					Field Filtered: Y / N	
		nHZ / HZ					Field Filtered: Y / N	
		nHZ / HZ					Field Filtered: Y / N	

Waiver of Responsibility: Although samples were delivered without ice and at a temperature greater than 6° C, the samples are to be analyzed.

Name: \_\_\_\_\_ Date: \_\_\_\_\_

Relinquished by (Company & Signature)	Date	Time (Military)	Received by (Company & Signature)	Date	Time (Military)
<u>AMS</u>	9/26/11	1800	<u>AMS</u>	9/27/11	1535
<u>AMS</u>	9-27-11	1235	<u>AMS</u>	9/27/11	20:34

e present on receipt:  Yes or  No Cooler Temp (°C) on receipt 3



# GEOCHEMICAL TESTING

Environmental and Energy Analysis

2005 N. Center Ave.  
Somerset, PA 15501

814/443-1671  
814/445-6666  
FAX: 814/445-6729

Thursday, September 29, 2011

RICK BONAZZA  
RESOURCE MANAGEMENT SERVICES  
65 FENTON ROAD  
INDIANA, PA 15701

RE: BS-P

Order No.: G1109782

Dear RICK BONAZZA:

Geochemical Testing received 5 sample(s) on 9/21/2011 for the analyses presented in the following report.

There were no problems with the analyses and all QC data met NELAC, EPA, and laboratory specifications except where noted in the Case Narrative or Laboratory Results.

If you have any questions regarding these tests results, please feel free to call.

Sincerely,

Timothy W. Bergstresser  
Director of Technical Services



## Geochemical Testing

Date: 29-Sep-11

**CLIENT:** RESOURCE MANAGEMENT SERVICES  
**Project:** BS-P  
**Lab Order:** G1109782

## CASE NARRATIVE

No problems were encountered during analysis of this workorder, except if noted in this report.

**Legend:**

ND - Not Detected at the Quantitation Limit

J - Indicates an estimated value.

U - The analyte was not detected at or above the listed concentration, which is below the laboratory quantitation limit.

B - Analyte detected in the associated Method Blank

Q - Qualifier      QL -Quantitation Limit      DF - Dilution Factor

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

\*\* - Value exceeds Action Limit

H - Method Hold Time Exceeded

MCL - Contaminant Limit



# Laboratory Results

## Geochemical Testing

Date: 29-Sep-11

<b>CLIENT:</b>	RESOURCE MANAGEMENT SERVICES	<b>Client Sample ID:</b>	RMS 1/9/20
<b>Lab Order:</b>	G1109782	<b>Sampled By:</b>	Client
<b>Project:</b>	BS-P	<b>Collection Date:</b>	9/20/2011 10:30:00 AM
<b>Lab ID:</b>	G1109782-001	<b>Received Date:</b>	9/21/2011 6:13:57 PM
<b>Matrix:</b>	AQUEOUS		

Analyses	Result	QL	Q	Units	DF	Date Analyzed
<b>INORGANIC NON-METALS</b>						
Acidity to pH 8.2	-29	0		mg/L CaCO3	1	9/27/2011 4:22:00 PM
<b>PHYSICAL TESTS</b>						
Specific Conductance	409	1		µmhos/cm	1	9/27/2011 1:18:00 PM
<b>PH BY SM 4500 H+B</b>						
Lab pH	6.69	0	H	su	1	9/27/2011 1:18:00 PM
<b>INORGANIC NON-METALS</b>						
Total dissolved solids	278	20		mg/L	1	9/22/2011 10:55:00 AM
<b>PHYSICAL TESTS</b>						
Total suspended solids	6	5		mg/L	1	9/22/2011 8:51:25 AM
<b>INORGANIC NON-METALS</b>						
Alkalinity to pH 4.5	54	5		mg/L CaCO3	1	9/27/2011 1:18:00 PM
<b>INORGANIC NON-METALS</b>						
Nitrate - Nitrite	0.39	0.05		mg/L as N	1	9/21/2011 7:42:00 PM
<b>INORGANIC NON-METALS</b>						
Bromide	< 0.2	0.2		mg/L	1	9/21/2011 7:42:00 PM
Chloride	91	1		mg/L	1	9/21/2011 7:42:00 PM
Sulfate	14	2		mg/L	1	9/21/2011 7:42:00 PM
<b>INORGANIC METALS</b>						
Aluminum	< 0.1	0.1		mg/L	1	9/27/2011 12:50:00 AM
Barium	0.03	0.01		mg/L	1	9/27/2011 12:50:00 AM
Calcium	21.0	0.1		mg/L	1	9/27/2011 12:50:00 AM
Iron	0.79	0.05		mg/L	1	9/27/2011 12:50:00 AM
Magnesium	7.9	0.1		mg/L	1	9/27/2011 12:50:00 AM
Manganese	0.01	0.01		mg/L	1	9/27/2011 12:50:00 AM
Potassium	1.7	0.5		mg/L	1	9/27/2011 12:50:00 AM
Sodium	55.0	0.2		mg/L	1	9/27/2011 12:50:00 AM
Strontium	0.12	0.01		mg/L	1	9/27/2011 12:50:00 AM
Hardness (SM 2340B)	85.1	1.0		mg/L CaCO3	1	9/27/2011 12:50:00 AM
<b>INDICATOR ORGANIC PARAMETERS</b>						
Oil & Grease	< 5	5		mg/L	1.01	9/26/2011 1:55:00 PM



# Laboratory Results

## Geochemical Testing

Date: 29-Sep-11

<b>CLIENT:</b>	RESOURCE MANAGEMENT SERVICES	<b>Client Sample ID:</b>	RMS 2/9/20
<b>Lab Order:</b>	G1109782	<b>Sampled By:</b>	Client
<b>Project:</b>	BS-P	<b>Collection Date:</b>	9/20/2011 11:00:00 AM
<b>Lab ID:</b>	G1109782-002	<b>Received Date:</b>	9/21/2011 6:13:57 PM
<b>Matrix:</b>	AQUEOUS		

Analyses	Result	QL	Q	Units	DF	Date Analyzed
<b>INORGANIC NON-METALS</b>						
Acidity to pH 8.2	-24	0		mg/L CaCO <sub>3</sub>	1	9/27/2011 4:35:00 PM
<b>PHYSICAL TESTS</b>						
Specific Conductance	603	1		µmhos/cm	1	9/27/2011 1:29:00 PM
<b>PH BY SM 4500 H+B</b>						
Lab pH	6.74	0	H	su	1	9/27/2011 1:29:00 PM
<b>INORGANIC NON-METALS</b>						
Total dissolved solids	496	20		mg/L	1	9/22/2011 10:56:00 AM
<b>PHYSICAL TESTS</b>						
Total suspended solids	6	5		mg/L	1	9/22/2011 8:53:31 AM
<b>INORGANIC NON-METALS</b>						
Alkalinity to pH 4.5	46	5		mg/L CaCO <sub>3</sub>	1	9/27/2011 1:29:00 PM
<b>INORGANIC NON-METALS</b>						
Nitrate - Nitrite	0.27	0.05		mg/L as N	1	9/21/2011 7:59:00 PM
<b>INORGANIC NON-METALS</b>						
Bromide	1.1	0.2		mg/L	1	9/21/2011 7:59:00 PM
Chloride	155	1		mg/L	1	9/21/2011 7:59:00 PM
Sulfate	14	2		mg/L	1	9/21/2011 7:59:00 PM
<b>INORGANIC METALS</b>						
Aluminum	< 0.1	0.1		mg/L	1	9/27/2011 1:07:00 AM
Barium	0.12	0.01		mg/L	1	9/27/2011 1:07:00 AM
Calcium	42.3	0.1		mg/L	1	9/27/2011 1:07:00 AM
Iron	0.14	0.05		mg/L	1	9/27/2011 1:07:00 AM
Magnesium	9.9	0.1		mg/L	1	9/27/2011 1:07:00 AM
Manganese	0.06	0.01		mg/L	1	9/27/2011 1:07:00 AM
Potassium	5.2	0.5		mg/L	1	9/27/2011 1:07:00 AM
Sodium	64.0	0.2		mg/L	1	9/27/2011 1:07:00 AM
Strontium	1.19	0.01		mg/L	1	9/27/2011 1:07:00 AM
Hardness (SM 2340B)	146	1.0		mg/L CaCO <sub>3</sub>	1	9/27/2011 1:07:00 AM

# Laboratory Results

## Geochemical Testing

Date: 29-Sep-11

<b>CLIENT:</b>	RESOURCE MANAGEMENT SERVICES	<b>Client Sample ID:</b>	RMS 3/9/20
<b>Lab Order:</b>	G1109782	<b>Sampled By:</b>	Client
<b>Project:</b>	BS-P	<b>Collection Date:</b>	9/20/2011 11:20:00 AM
<b>Lab ID:</b>	G1109782-003	<b>Received Date:</b>	9/21/2011 6:13:57 PM
<b>Matrix:</b>	AQUEOUS		

Analyses	Result	QL	Q	Units	DF	Date Analyzed
<b>INORGANIC NON-METALS</b>						
Acidity to pH 8.2	-41	0		mg/L CaCO <sub>3</sub>	1	9/27/2011 4:34:00 PM
<b>PHYSICAL TESTS</b>						
Specific Conductance	137	1		µmhos/cm	1	9/27/2011 1:26:00 PM
<b>PH BY SM 4500 H+B</b>						
Lab pH	7.37	0	H	su	1	9/27/2011 1:26:00 PM
<b>INORGANIC NON-METALS</b>						
Total dissolved solids	90	20		mg/L	1	9/22/2011 10:56:00 AM
<b>PHYSICAL TESTS</b>						
Total suspended solids	< 5	5		mg/L	1	9/22/2011 8:53:39 AM
<b>INORGANIC NON-METALS</b>						
Alkalinity to pH 4.5	61	5		mg/L CaCO <sub>3</sub>	1	9/27/2011 1:26:00 PM
<b>INORGANIC NON-METALS</b>						
Nitrate - Nitrite	0.60	0.05		mg/L as N	1	9/21/2011 8:16:00 PM
<b>INORGANIC NON-METALS</b>						
Bromide	< 0.2	0.2		mg/L	1	9/21/2011 8:16:00 PM
Chloride	4	1		mg/L	1	9/21/2011 8:16:00 PM
Sulfate	10	2		mg/L	1	9/21/2011 8:16:00 PM
<b>INORGANIC METALS</b>						
Aluminum	< 0.1	0.1		mg/L	1	9/27/2011 1:44:00 AM
Barium	0.02	0.01		mg/L	1	9/27/2011 1:44:00 AM
Calcium	18.8	0.1		mg/L	1	9/27/2011 1:44:00 AM
Iron	< 0.05	0.05		mg/L	1	9/27/2011 1:44:00 AM
Magnesium	4.4	0.1		mg/L	1	9/27/2011 1:44:00 AM
Manganese	< 0.01	0.01		mg/L	1	9/27/2011 1:44:00 AM
Potassium	1.4	0.5		mg/L	1	9/27/2011 1:44:00 AM
Sodium	3.8	0.2		mg/L	1	9/27/2011 1:44:00 AM
Strontium	0.09	0.01		mg/L	1	9/27/2011 1:44:00 AM
Hardness (SM 2340B)	64.9	1.0		mg/L CaCO <sub>3</sub>	1	9/27/2011 1:44:00 AM

# Laboratory Results

## Geochemical Testing

Date: 29-Sep-11

<b>CLIENT:</b>	RESOURCE MANAGEMENT SERVICES	<b>Client Sample ID:</b>	RMS 4/9/20
<b>Lab Order:</b>	G1109782	<b>Sampled By:</b>	Client
<b>Project:</b>	BS-P	<b>Collection Date:</b>	9/20/2011 11:35:00 AM
<b>Lab ID:</b>	G1109782-004	<b>Received Date:</b>	9/21/2011 6:13:57 PM
<b>Matrix:</b>	AQUEOUS		

Analyses	Result	QL	Q	Units	DF	Date Analyzed
<b>INORGANIC NON-METALS</b>						
Acidity to pH 8.2	-136					
		0		mg/L CaCO <sub>3</sub>	1	9/27/2011 4:39:00 PM
						Analyst: LNW
<b>PHYSICAL TESTS</b>						
Specific Conductance	360					
		1		µmhos/cm	1	9/27/2011 1:36:00 PM
						Analyst: LNW
<b>PH BY SM 4500 H+B</b>						
Lab pH	8.12					
		0	H	su	1	9/27/2011 1:36:00 PM
						Analyst: LNW
<b>INORGANIC NON-METALS</b>						
Total dissolved solids	210					
		20		mg/L	1	9/22/2011 10:56:00 AM
						Analyst: KLS
<b>PHYSICAL TESTS</b>						
Total suspended solids	11					
		5		mg/L	1	9/22/2011 8:53:42 AM
						Analyst: KLS
<b>INORGANIC NON-METALS</b>						
Alkalinity to pH 4.5	150					
		5		mg/L CaCO <sub>3</sub>	1	9/27/2011 1:36:00 PM
						Analyst: LNW
<b>INORGANIC NON-METALS</b>						
Nitrate - Nitrite	1.22					
		0.05		mg/L as N	1	9/21/2011 8:33:00 PM
						Analyst: CAS
<b>INORGANIC NON-METALS</b>						
Bromide	< 0.2					
		0.2		mg/L	1	9/21/2011 8:33:00 PM
Chloride	18					
		1		mg/L	1	9/21/2011 8:33:00 PM
Sulfate	17					
		2		mg/L	1	9/21/2011 8:33:00 PM
<b>INORGANIC METALS</b>						
Aluminum	< 0.1					
		0.1		mg/L	1	9/27/2011 1:51:00 AM
Barium	0.03					
		0.01		mg/L	1	9/27/2011 1:51:00 AM
Calcium	47.0					
		0.1		mg/L	1	9/27/2011 1:51:00 AM
Iron	< 0.05					
		0.05		mg/L	1	9/27/2011 1:51:00 AM
Magnesium	5.6					
		0.1		mg/L	1	9/27/2011 1:51:00 AM
Manganese	< 0.01					
		0.01		mg/L	1	9/27/2011 1:51:00 AM
Potassium	3.2					
		0.5		mg/L	1	9/27/2011 1:51:00 AM
Sodium	31.4					
		0.2		mg/L	1	9/27/2011 1:51:00 AM
Strontium	0.42					
		0.01		mg/L	1	9/27/2011 1:51:00 AM
Hardness (SM 2340B)	140					
		1.0		mg/L CaCO <sub>3</sub>	1	9/27/2011 1:51:00 AM



I.D. 56-00306 PA DEP

# CHAIN OF CUSTODY

## Geochemical Testing

Form F-5002, 01/04

**Shuttle/Cooler ID#:** \_\_\_\_\_

**Geochemical Testing • 2005 North Center Avenue • Somerset PA 15501 • (814) 443-1671 • Fax (814) 445-6729**

**Billing Client:** RMS **Contact (Company):** RMS **Phone:** ( ) \_\_\_\_\_

**Address:** \_\_\_\_\_ **e-mail:** \_\_\_\_\_ **Fax:** ( ) \_\_\_\_\_

**City:** \_\_\_\_\_ **State:** \_\_\_\_\_ **Zip:** \_\_\_\_\_

**WO#:** (LAB USE ONLY) C1165782 **Sampled by:** \_\_\_\_\_ **Preservatives by:** Sampler  **Sampler**  **GT**

**PO/Quote#:** \_\_\_\_\_ **Project:** \_\_\_\_\_

<b>Sample Matrix:</b> <u>RMS</u>	<b>GW</b> Ground Water	<b>SW</b> Surface Water	<b>PW</b> Potable Water	<b>WW</b> Wastewater	<b>SO</b> Soil	<b>nHZ</b> Not Hazardous / <b>HZ</b> Hazardous	<b>PCBs</b>
<b>Sample Type:</b> <u>G</u>	<b>G</b> Grab	<b>C</b> Composite	<b>D</b> Distribution/DW	<b>R</b> Raw/DW	<b>S</b> Special/DW	<b>O</b> Other	<b>Client</b> <input type="checkbox"/> <b>GT Lab</b> <input checked="" type="checkbox"/>

Sample Location/Description	Lab Number (LAB USE ONLY)	Sample Matrix	Date	Time (Military)	Sample Type	**Analyses Requested	Remarks/Preservatives, etc	Number of Containers
<u>RMS 1/9/2011</u>	<u>001</u>	<u>nHZ / HW</u>	<u>9-20-11</u>	<u>Various 10:30</u>	<u>G</u>	<u>BS-P + O + G + A1 + K</u>	<u>Field Filtered: Y / X</u>	<u>4</u>
<u>RMS 2/9/2011</u>	<u>002</u>	<u>nHZ / HW</u>		<u>11:00</u>		<u>BS-P + A1 + K</u>	<u>Field Filtered: Y / X</u>	<u>3</u>
<u>RMS 3/9/2011</u>	<u>003</u>	<u>nHZ / HW</u>		<u>11:20</u>		<u>"</u>	<u>Field Filtered: Y / X</u>	<u>3</u>
<u>RMS 4/9/2011</u>	<u>004</u>	<u>nHZ / HW</u>		<u>11:35</u>		<u>"</u>	<u>Field Filtered: Y / X</u>	<u>3</u>
<u>RMS 6/9/2011</u>	<u>005</u>	<u>nHZ / HW</u>	<u>↓</u>	<u>1845</u>	<u>✓</u>	<u>BS-P Group</u>	<u>Field Filtered: Y / X</u>	<u>3</u>
		<u>nHZ / HW</u>					<u>Field Filtered: Y / N</u>	
		<u>nHZ / HW</u>					<u>Field Filtered: Y / N</u>	

**Waiver of Responsibility:** Although samples were delivered without ice and at a temperature greater than 6° C, the samples are to be analyzed.

**Name:** \_\_\_\_\_ **Date:** \_\_\_\_\_

Relinquished by (Company & Signature)	Date	Time (Military)	Received by (Company & Signature)	Date	Time (Military)
<u>[Signature]</u>	<u>9-21-11</u>	<u>1005</u>	<u>[Signature]</u>	<u>9-21-11</u>	<u>1430</u>
<u>[Signature]</u>	<u>9-21-11</u>	<u>1700</u>	<u>[Signature]</u>	<u>9-21-11</u>	<u>1818</u>