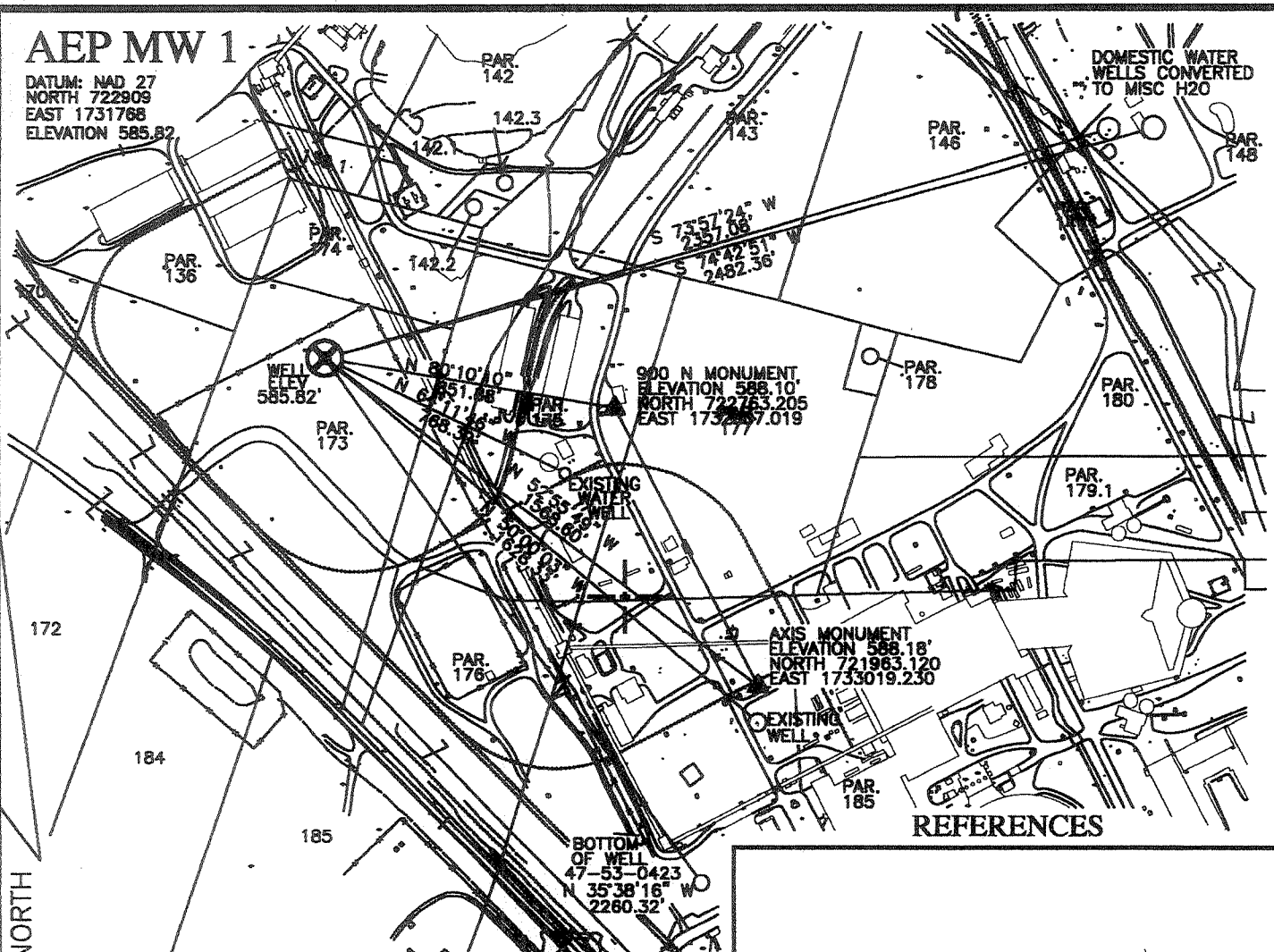


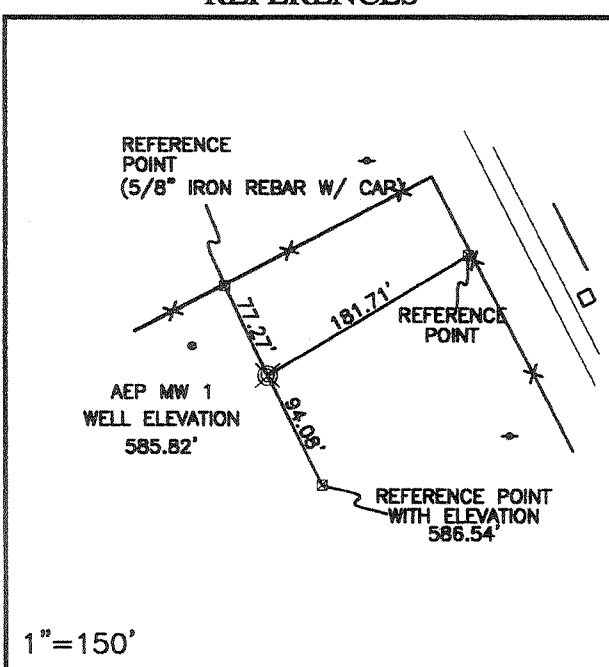
AEP MW 1

DATUM: NAD 27
 NORTH 722909
 EAST 1731768
 ELEVATION 585.82



LONGITUDE W 81°55'00" 6750'

PAR.	OWNER	D.B.	PG.	PAR.	OWNER	D.B.	PG.
136	APP. POWER CO.	235	323	173	APP. POWER CO.	237	263
138	APP. POWER CO.	234	265	174	APP. POWER CO.	237	263
138.1	APP. POWER CO.	234	208	175	APP. POWER CO.	237	263
142	APP. POWER CO.	237	263	176	APP. POWER CO.	237	263
142.1	APP. POWER CO.	234	173	177	APP. POWER CO.	234	217
142.2	APP. POWER CO.	237	263	178	APP. POWER CO.	237	263
142.3	APP. POWER CO.	237	263	179.1	APP. POWER CO.	237	263
143	APP. POWER CO.	237	263	184	APP. POWER CO.	237	263
146	APP. POWER CO.	237	263	185	APP. POWER CO.	237	263
147	APP. POWER CO.	237	263	204	STATE RD. COMM.	206	270
172	APP. POWER CO.	237	263				



Point Surveying Mapping

PO BOX 28
 MILLWOOD, WV 25262
 (304) 273-2915 Phone
 (304) 273-2916 Fax
 Professional Land, Site,
 Construction Industrial Surveying

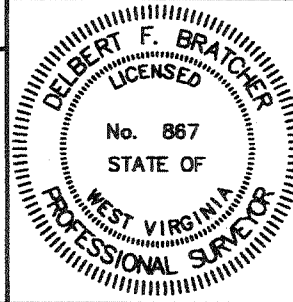
1"=150'

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS

FILE No _____
 SCALE 1" = 500'
 MINIMUM DEGREE OF ACCURACY 1:2500
 PROVEN SOURCE OF ELEVATION NOTED ON PLAT
 DATE 05-21-2008
 DRAWN BY J. SWISHER

I THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAT IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AND SHOWS ALL THE INFORMATION REQUIRED BY LAW AND THE REGULATIONS ISSUED AND PRESCRIBED BY THE DIVISION OF ENVIRONMENTAL PROTECTION.

(SIGNED) [Signature]
 R.P.E. _____ R.P.S. _____



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



DATE 20
 OPERATOR'S WELL No. AEP MW 1
 API WELL No. 47 053 - 00489
 STATE COUNTY PERMIT

WELL TYPE: OIL ___ GAS ___ LIQUID INJECTION ___ WASTE DISPOSAL ___ IF "GAS" PRODUCTION ___ STORAGE ___ DEEP ___ SHALLOW ___ OTHER
 LOCATION: ELEVATION 585.82' WATER SHED MIDDLE OHIO
 DISTRICT GRAHAM COUNTY MASON
 QUADRANGLE NEW HAVEN
 SURFACE OWNER APPALACHIAN POWER CO ACREAGE 2460
 OIL & GAS ROYALTY OWNER APPALACHIAN POWER CO LEASE ACREAGE N/A
 LEASE No. N/A

PROPOSED WORK: DRILL CONVERT ___ DRILL DEEPER ___ REDRILL ___ FRACTURE OR STIMULATE ___ PLUG OFF OLD FORMATION ___ PERFORATE NEW FORMATION ___ OTHER PHYSICAL CHANGE IN WELL (SPECIFY) _____

PLUG AND ABANDON ___ CLEAN OUT AND REPLUG
 TARGET FORMATION ROSE RUN-COPPER RIDGE ESTIMATED DEPTH 8400 FT
 WELL OPERATOR APPALACHIAN POWER CO DESIGNATED AGENT RICHARD D. THOMPSON
 ADDRESS US RT. 33 MOUNTAINEER PLANT ADDRESS US RT. 33 MOUNTAINEER PLANT
 NEW HAVEN, WV 25265-0419 NEW HAVEN, WV 25265-0419

JUN 27 2008

FORM IV-6 (8-78)

MAS 0489

WR-35
Rev (5-01)

DATE: 6/5/09
API #: 47-5300489

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas

Well Operator's Report of Well Work

CO2 Seg. monitoring well

Farm name: Appalachian Power Co. Operator Well No.: MW-1

LOCATION: Elevation: 585.8 ft. Quadrangle: New Haven

District: Graham County: Mason
Latitude: 6,641 Feet South of 39 Deg. 00 Min. 00 Sec.
Longitude 7,655 Feet West of 81 Deg. 55 Min. 00 Sec.

Company: Appalachian Power Co. DBA AEP

	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
Address: U.S.Rt. 62, Mountaineer Plant New Haven, WV 25265-0419	16"	279'	279'	219 cf
	10-3/4"	1800'	1800'	1000 cf
Agent: Richard D. Thompson	7"	6400'	6400'	400 cf
Inspector: Jamie Stevens	4-1/2"	8335'	8335'	240 cf
Date Permit Issued: 08/29/2008	2-3/8"	7617'	7617'	-
Date Well Work Commenced: 11/01/2008				
Date Well Work Completed: 05/18/09				
Verbal Plugging:				
Date Permission granted on:				
Rotary <input checked="" type="checkbox"/> Cable <input type="checkbox"/> Rig: UDI 51				
Total Depth (feet): 8,335'				
Fresh Water Depth (ft.): 250'				
Salt Water Depth (ft.): 1,232'				
Is coal being mined in area (N/Y)? Yes				
Coal Depths (ft.): 417'-1073' layered				

RECEIVED
OFFICE OF OIL & GAS
JUL 22 2009
WV Department
Environmental Protection

OPEN FLOW DATA

Formation of interest: Rose Run Pay zone depth (ft): 7695'
Gas: Initial open flow: 0 MCF/d Oil: Initial open flow: 0 Bbl/d
Final open flow: 0 MCF/d Final open flow: 0 Bbl/d
Time of open flow between initial and final tests: n/a Hours
Static rock Pressure 0 psig (surface pressure) after 24 Hours

Formation of interest: Copper Ridge Pay zone depth (ft): 7806'
Gas: Initial open flow: 0 MCF/d Oil: Initial open flow: 0 Bbl/d
Final open flow: 0 MCF/d Final open flow: 0 Bbl/d
Time of open flow between initial and final tests: n/a Hours
Static rock Pressure n/a psig (surface pressure) after _____ Hours

NOTE: ON BACK OF THIS FORM PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE.

Signed: Richard D. Thompson
By: Richard D. Thompson
Date: 7/9/09

JUL 24 2009

MASON 00489

AEP Mountaineer Plant, MW-1 Perforations

Run	Perforated Zone	Lithology
1	7,695 - 7,718	Rose Run sandstone
2	7,747 - 7,762	Rose Run sandstone
3	7,766 - 7,780	Rose Run sandstone
4	7,780 - 7,800	Rose Run sandstone
Shot Density = 2 shots per foot 400 gallons 15% HCl spotted prior to perforating, swabbed back		

AEP Mountaineer Plant, MW-1 Well Log Summary

Lithology or Formation	Formation Top (measured depth)
Ground Surface/Alluvium/ Undiff. Pennsylvania Bedrock	0-1,156*
Sharon Sandstone	1,120
Maxville Limestone	1,218
Cuyahoga Shale	1,238
Sunbury (Coffee) shale	1,700
Berea sandstone	1,710
Chagrin shale	1,730
Lower Huron shale	2,788
Java shale	3,146
Pipe Creek shale	3,246
Angola shale	3,264
Rhinestreet shale	3,402
Hamilton shale	3,508
Marcellus shale	3,553
Onondaga limestone	3,558
Salina dolomite	3,758
Lockport dolomite	4,323
Niagaran/Rose Hill shale	4,538
Brassfield/Packer Shell limestone	4,810
Tuscarora/Clinton sandstone	4,842
Medina sandstone	4,980
Queenston shale	4,984
Utica Shale	5,650
Point Pleasant Shale	6,234
Trenton limestone	6,311
Black River limestone	6,430
Gull River limestone	6,924
Lower Chazy limestone	6,980
Glenwood/Wells Creek shale	7,038
St. Peter sandstone	7,116
Beekmantown dolomite	7,147
Rose Run sandstone	7,695
Copper Ridge dolomite	7,806

*Coal found between 417'-1073'