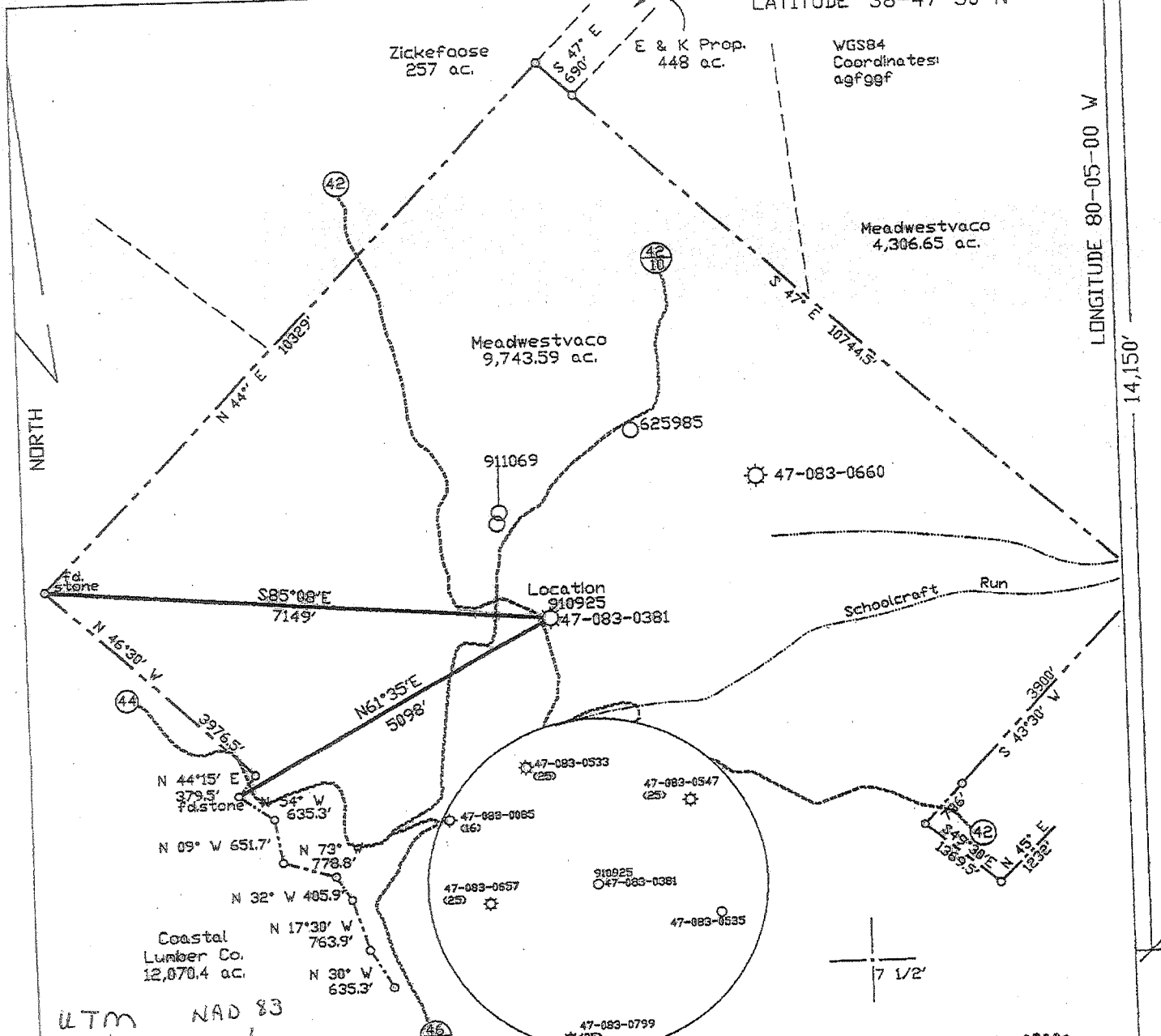


LATITUDE 38-47-30 N  
LONGITUDE 80-05-00 W

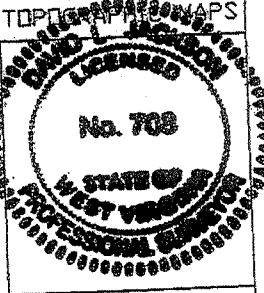


UTM NAD 83  
N - 4289712.1  
E - 578558.9

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

FILE NO. \_\_\_\_\_  
DRAWING NO. 1  
SCALE 1" = 2000'  
MINIMUM DEGREE OF ACCURACY 1 in 200  
PROVEN SOURCE OF ELEVATION GPS  
Submeter unit

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 DEPARTMENT OF ENERGY.  
(SIGNED) David Jackson  
R.P.E. \_\_\_\_\_ L.L.S. 708



STATE OF WEST VIRGINIA  
Division of Environmental Protection  
OFFICE OF OIL AND GAS

DATE June 11, 2007  
OPERATOR'S WELL NO. 910925  
API WELL NO. \_\_\_\_\_  
STATE 47 COUNTY 083 PERMIT 00381P

WELL TYPE: OIL  GAS  LIQUID INJECTION  WASTE DISPOSAL \_\_\_\_\_  
(IF 'GAS') PRODUCTION  STORAGE  DEEP  SHALLOW

LOCATION: ELEVATION 3,117' WATER SHED Schoolcraft Run  
DISTRICT Middle Fork COUNTY Randolph  
QUADRANGLE Cassity 7 1/2'

SURFACE OWNER Meadwestvaco Corporation ACREAGE 9,743.59 ac.  
OIL & GAS ROYALTY OWNER Harry McMullan, Jr. Estate LEASE ACREAGE 9,757 ac.  
LEASE NO. 3170352

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 Marcellus ESTIMATED DEPTH 8,160'  
WELL OPERATOR Chesapeake Appalachia, L.L.C. DESIGNATED AGENT Michael John  
ADDRESS P.O. Box 6070, Charleston, WV 25362-0070 ADDRESS P.O. Box 6070, Charleston, WV 25362-0070

83.00381P

Page Of  
Well: 910925  
Quad: Cassity 7 1/2'



Copyright (C) 1998, Maptech, Inc.

05/04/2012

222 7/12/84

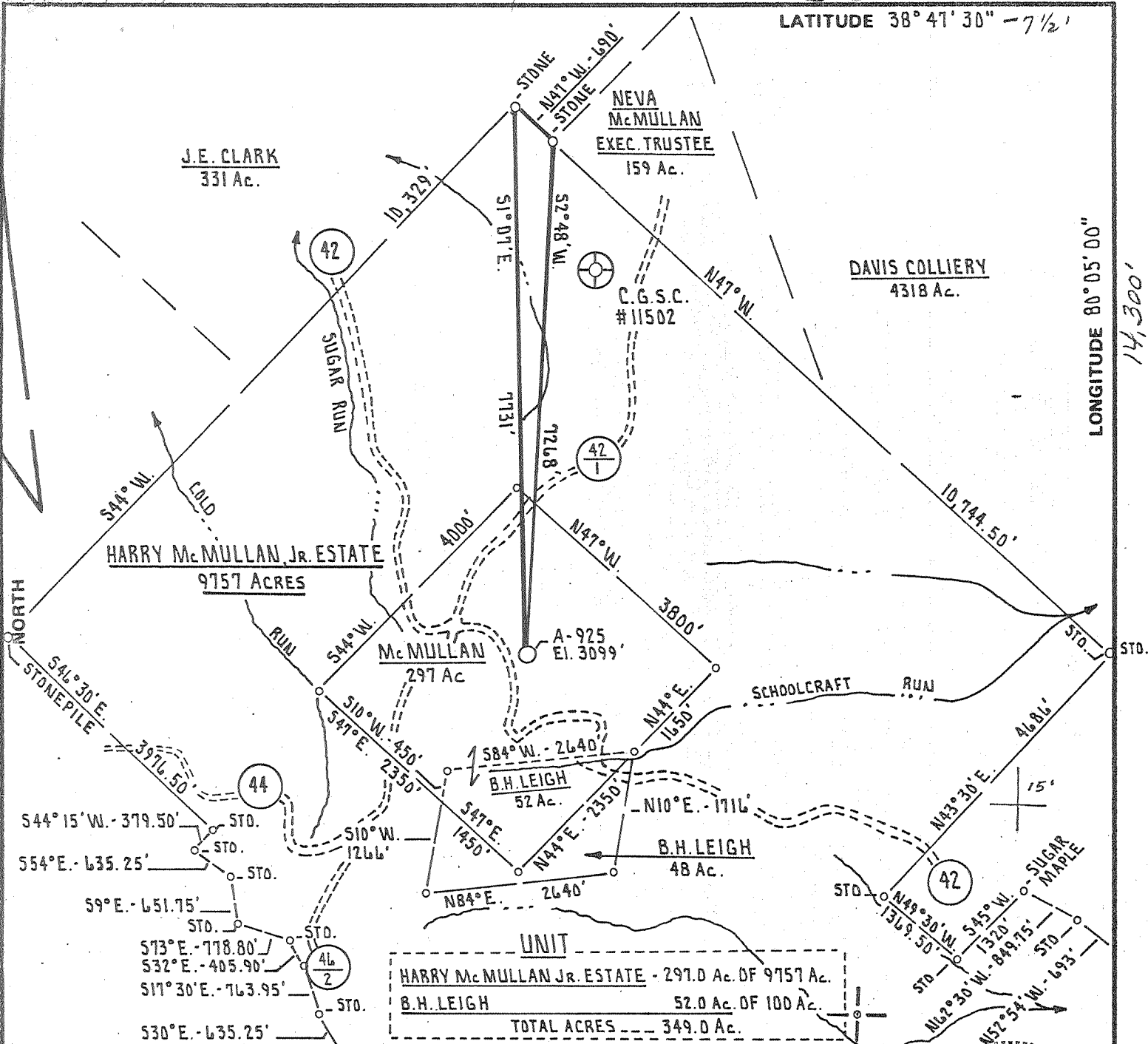
cl 11/10/80

3600' 38° 50'

LATITUDE 38° 47' 30" - 7 1/2'

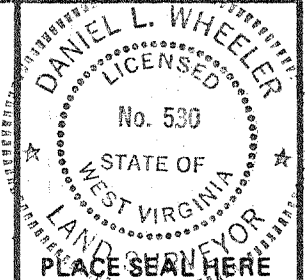
LONGITUDE 80° 05' 00"

14,300'



FILE NO. 384  
 DRAWING NO. \_\_\_\_\_  
 SCALE 1" = 2000'  
 MINIMUM DEGREE OF ACCURACY 1 PART IN 200  
 PROVEN SOURCE OF ELEVATION ROAD INTERSECTION  
 (42) and (44) ELEVATION 3252'

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 DEPARTMENT OF MINES.  
 (SIGNED) Daniel L. Wheeler  
 R.P.E. \_\_\_\_\_ L.L.S. 530



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS  
 FORM IV-6 (8-78)



DATE OCTOBER 15<sup>TH</sup>, 19 80  
 OPERATOR'S WELL NO. A-925  
 API WELL NO. \_\_\_\_\_  
47 - D83 - 0381-PP  
 STATE COUNTY PERMIT

STATE OF WEST VIRGINIA  
 DEPARTMENT OF MINES  
 OIL AND GAS DIVISION

Partial Plug  
CANCELLED

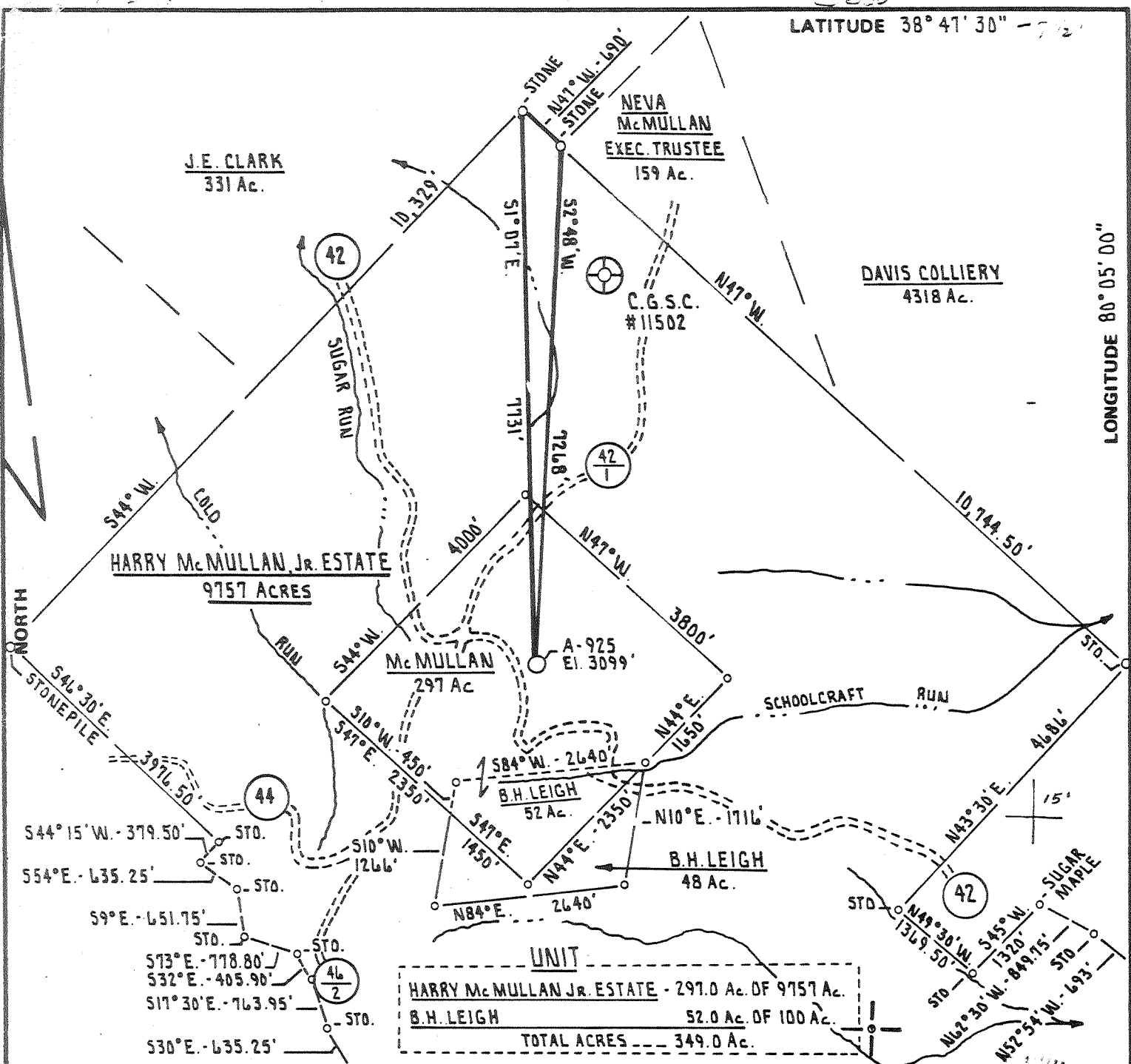
WELL TYPE: OIL \_\_\_ GAS X LIQUID INJECTION \_\_\_ WASTE DISPOSAL \_\_\_  
 (IF "GAS,") PRODUCTION X STORAGE \_\_\_ DEEP X SHALLOW \_\_\_  
 LOCATION: ELEVATION 3099' WATER SHED SCHOOLCRAFT RUN  
 DISTRICT MIDDLE FORK COUNTY RANDOLPH  
 QUADRANGLE CASSITY 7.5'  
 SURFACE OWNER WESTVACO ACREAGE 9757 Ac.  
 OIL & GAS ROYALTY OWNER HARRY McMULLAN, JR. ESTATE LEASE ACREAGE 297 Ac. OF 9757 Ac.  
B.H. LEIGH 52 Ac. OF 100 Ac.  
 LEASE NO. \_\_\_\_\_  
 PROPOSED WORK: DRILL \_\_\_ CONVERT \_\_\_ DRILL DEEPER \_\_\_ REDRILL \_\_\_ FRACTURE OR STIMULATE \_\_\_ PLUG OFF OLD FORMATION X PERFORATE NEW FORMATION \_\_\_ OTHER PHYSICAL CHANGE IN WELL (SPECIFY) \_\_\_\_\_

PLUG AND ABANDON \_\_\_ CLEAN OUT AND REPLUG \_\_\_  
 TARGET FORMATION DRISKANY ESTIMATED DEPTH 8000'  
 WELL OPERATOR ALLEGHENY LAND AND MINERAL Co. DESIGNATED AGENT ALLEGHENY LAND AND MINERAL Co.  
 ADDRESS P.O. BOX 1740 ADDRESS P.O. BOX 1740  
CLARKSBURG, WEST VIRGINIA 26301 CLARKSBURG, WEST VIRGINIA 26301

MAR 03 1987

8000 DRISKANY

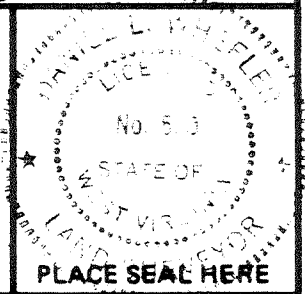
Ran. 0381-PP



UNIT	
HARRY McMULLAN JR. ESTATE - 297.0 Ac. OF 9757 Ac.	
B.H. LEIGH 52.0 Ac. OF 100 Ac.	
TOTAL ACRES --- 349.0 Ac.	

FILE NO. 384  
 DRAWING NO. \_\_\_\_\_  
 SCALE 1" = 2000'  
 MINIMUM DEGREE OF ACCURACY 1 PART IN 200  
 PROVEN SOURCE OF ELEVATION ROAD INTERSECTION  
 (42) and (44) ELEVATION 3252'

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 DEPARTMENT OF MINES.  
 (SIGNED) Amiel S. Wheeler  
 R.P.E. \_\_\_\_\_ L.L.S. 530



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS  
 FORM IV-6 (8-78)

DATE OCTOBER 15<sup>TH</sup>, 19 80  
 OPERATOR'S WELL NO. A-925  
 API WELL NO. \_\_\_\_\_  
47 - 083 - 0381-PP  
 STATE COUNTY PERMIT

**STATE OF WEST VIRGINIA**  
 DEPARTMENT OF MINES  
 OIL AND GAS DIVISION

WELL TYPE: OIL \_\_\_ GAS \_\_\_ LIQUID INJECTION \_\_\_ WASTE DISPOSAL \_\_\_  
 (IF "GAS,") PRODUCTION \_\_\_ STORAGE \_\_\_ DEEP \_\_\_ SHALLOW \_\_\_  
 LOCATION: ELEVATION 3099' WATER SHED SCHOOLCRAFT RUN  
 DISTRICT MIDDLE FORK COUNTY RANDDLPH  
 QUADRANGLE CASSITY 7.5'

SURFACE OWNER WESTVACO ACREAGE 9757 Ac.  
 OIL & GAS ROYALTY OWNER HARRY McMULLAN, JR. ESTATE LEASE ACREAGE 297 Ac. OF 9757 Ac.  
B.H. LEIGH 52 Ac. OF 100 Ac.

LEASE NO. \_\_\_\_\_

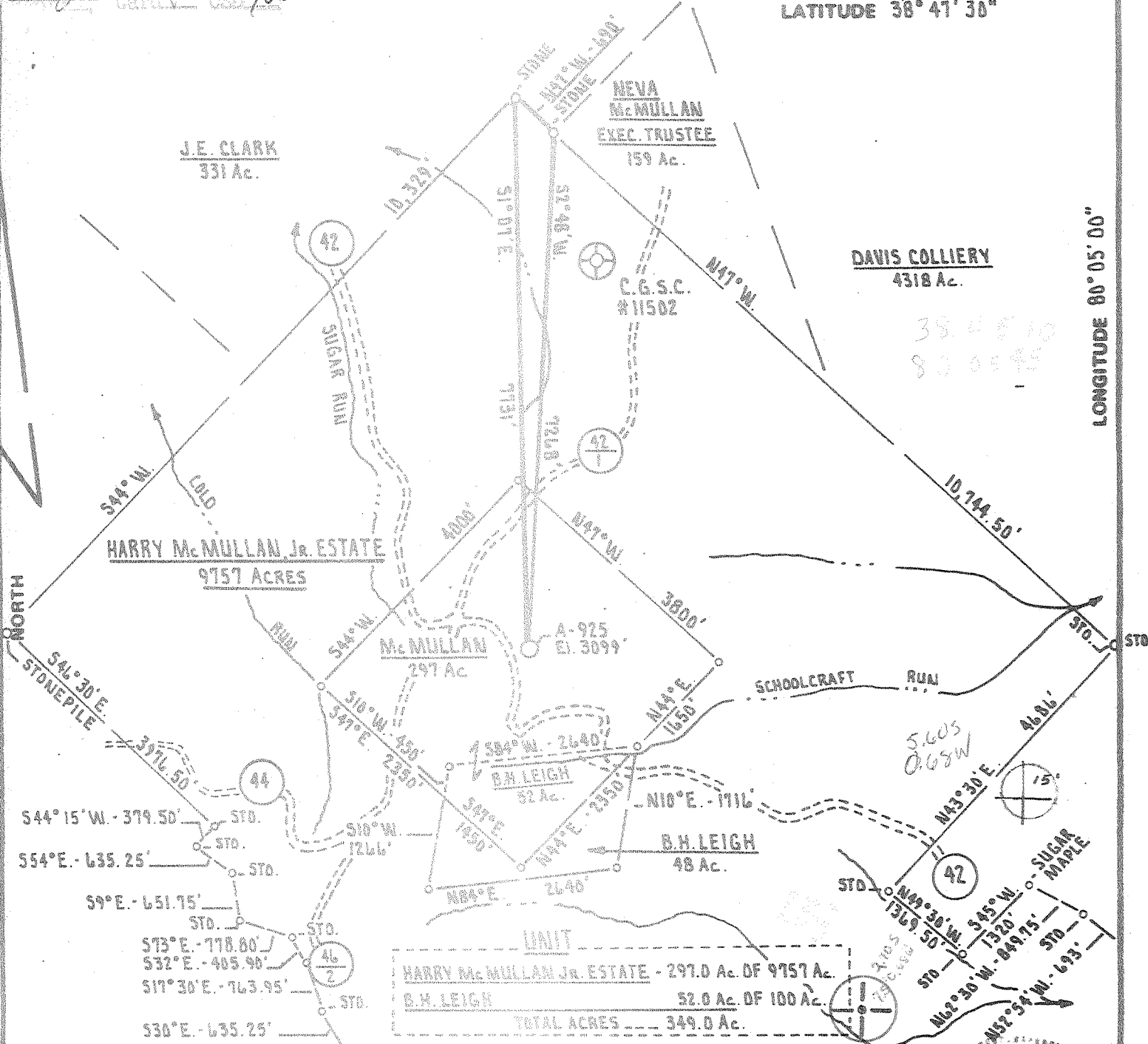
PROPOSED WORK: DRILL \_\_\_ CONVERT \_\_\_ DRILL DEEPER \_\_\_ REDRILL \_\_\_ FRACTURE OR STIMULATE \_\_\_ PLUG OFF OLD FORMATION \_\_\_ PERFORATE NEW FORMATION \_\_\_ OTHER PHYSICAL CHANGE IN WELL (SPECIFY) \_\_\_\_\_

PLUG AND ABANDON \_\_\_ CLEAN OUT AND REPLUG \_\_\_  
 TARGET FORMATION DRISKANY ESTIMATED DEPTH 8000'  
 WELL OPERATOR ALLEGHENY LAND AND MINERAL CO. DESIGNATED AGENT ALLEGHENY LAND AND MINERAL CO.  
 ADDRESS P.O. BOX 1740 ADDRESS P.O. BOX 1740  
CLARKSBURG, WEST VIRGINIA 26301 CLARKSBURG, WEST VIRGINIA 26301

OCT 30 1984

LATITUDE 38° 41' 30"

LONGITUDE 80° 05' 00"



UNIT  
 HARRY McMULLAN Jr. ESTATE - 297.0 Ac. OF 9757 Ac.  
 B.H. LEIGH 52.0 Ac. OF 100 Ac.  
 TOTAL ACRES 349.0 Ac.

FILE NO. 384  
 DRAWING NO. \_\_\_\_\_  
 SCALE 1" = 2000'  
 MINIMUM DEGREE OF ACCURACY 1 PART IN 200  
 PROVEN SOURCE OF ELEVATION ROAD INTERSECTION  
 (42) and (44) ELEVATION 3252'

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 DEPARTMENT OF MINES.  
 (SIGNED) Amiel S. Woodley  
 R.P.E. \_\_\_\_\_ L.L.S. 530

PLACE SEAL HERE

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS  
 FORM IV-8 (8-78)



DATE OCTOBER 15<sup>TH</sup>, 19 80  
 OPERATOR'S WELL NO. A-925  
 API WELL NO. \_\_\_\_\_  
47 - 083 - 0381  
 STATE COUNTY PERMIT

STATE OF WEST VIRGINIA  
 DEPARTMENT OF MINES  
 OIL AND GAS DIVISION

WELL TYPE: OIL \_\_\_ GAS X LIQUID INJECTION \_\_\_ WASTE DISPOSAL \_\_\_  
 (IF "GAS,") PRODUCTION X STORAGE \_\_\_ DEEP X SHALLOW \_\_\_  
 LOCATION: ELEVATION 3099' WATER SHED SCHOOLCRAFT RUN  
 DISTRICT MIDDLE FORK COUNTY RANDOLPH  
QUADRANGLE CASSITY T.5 S460 15 30  
 SURFACE OWNER WESTVACO ACREAGE 9757 Ac.  
 OIL & GAS ROYALTY OWNER HARRY McMULLAN, JR. ESTATE LEASE ACREAGE 297 Ac. OF 9757 Ac.  
B.H. LEIGH 52 Ac. OF 100 Ac.  
 LEASE NO. \_\_\_\_\_  
 PROPOSED WORK: DRILL X 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 DRISKANY ESTIMATED DEPTH 8000'  
 WELL OPERATOR ALLEGHENY LAND AND MINERAL CO. DESIGNATED AGENT ALLEGHENY LAND AND MINERAL CO.  
 ADDRESS PO BOX 1740 ADDRESS PO BOX 1740  
CLARKSBURG WEST VIRGINIA 26301 CLARKSBURG WEST VIRGINIA 26301

Deep Well DRISKANY 2-2 cassity DEC 19 1980 295



STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES

Oil and Gas Division

RECEIVED  
NOV - 6 1980

OIL AND GAS WELL PERMIT APPLICATION

OIL AND GAS DIVISION  
DEPT. OF MINES

TO THE DEPARTMENT OF MINES,  
Charleston, W. Va.

Surface Owner Westvaco  
Address 203 Randolph Avenue  
Elkins, West Virginia 26241  
Mineral Owner Neva McMullan, Exec., Trustee  
Address P. O. Box 8  
Washington, North Carolina 27889  
Coal Owner Neva McMullan, Exec., Trustee, etal  
Address P. O. Box 8  
Washington, North Carolina 27889  
Coal Operator AMAX Coal Company  
Address 105 South Meridan Street  
Indianapolis, Indiana 46225

DATE November 6, 1980  
Company ALLEGHENY LAND AND MINERAL COMPANY  
P. O. Drawer 1740  
Address Clarksburg, West Virginia 26301  
Farm McMullan Acres 349 (Unit)  
Location (waters) Schoolcraft Run  
Well No. A-925 Elevation 3099'  
District Middle Fork County Randolph  
Quadrangle Cassity 7.5'

International Coal Company  
Greenbrier Valley Building  
119 Washington Street, East  
Lewisburg, West Virginia 24901

THIS PERMIT MUST BE POSTED AT THE WELL SITE

All provisions being in accordance with Chapter 22,  
of the W. Va. Code, the location is hereby approved  
for drilling. This permit shall expire if  
operations have not commenced by 7-21-81.

INSPECTOR  
TO BE NOTIFIED Robert S. Stewart  
P. O. Box 345  
ADDRESS Jane Lew, West Virginia 26378  
PHONE 884-7782

J. J. [Signature]  
Deputy Director - Oil & Gas Division

GENTLEMEN:

The undersigned well operator is entitled to drill upon the above named farm or tract of land for oil and gas, having fee title thereto, (or as the case may be) under grant or lease dated May 1, 1973 by Estate of Harry McMullan, Jr. made to Columbia Gas Transmission Corp. and recorded on the 16th day of August 19 73 in Randolph County, Book 283 Page 408

XXX NEW WELL \_\_\_\_\_ DRILL DEEPER \_\_\_\_\_ REDRILL \_\_\_\_\_ FRACTURE OR STIMULATE  
\_\_\_\_\_ OIL AND GAS WELL ORIGINALLY DRILLED BEFORE JUNE 5, 1969.

The enclosed plat was prepared by a registered engineer or licensed land surveyor and all coal owners and/or operators have been notified as of the above date. XX

The above named coal owners and/or operator are hereby notified that any objection they wish to make, or are required to make by Section 3 of the Code, must be received by, or filed with the Department of Mines within ten (10) days. \*

Copies of this notice and the enclosed plat were mailed by registered mail, or delivered to the above named coal operators or coal owners at their above shown respective address \_\_\_\_\_ day \_\_\_\_\_ before, or on the same day with the mailing or delivery of this copy to the Department of Mines at Charleston, West Virginia.

Very truly yours,

(Sign Name) ALLEGHENY LAND AND MINERAL COMPANY

PLEASE SUBMIT COPIES OF ALL  
GEOPHYSICAL LOGS DIRECTLY TO:

OFFICE OF OIL AND GAS  
1615 Washington Street, East  
Charleston, West Virginia  
Area Code 304 -348-3092 348-3096

Address  
of  
Well Operator

BY: [Signature]  
Daniel L. Wheeler, Vice President  
P. O. Drawer 1740  
Clarksburg, West Virginia 26301

BLANKET BOND

\*SECTION 3 . . . . If no objections are filed or found by the Department of mines, within said period of ten days from the receipt of notice and plat by the department of mines, to said proposed location, the department shall forthwith issue to the well operator a permit reciting the filing of such plat, that no objections have been made by the coal operators or found thereto by the department and that the same is approved and the well operator authorized to proceed.

47 - 083 - 0381 PERMIT NUMBER

"I have read and understand the reclamation requirements as set forth in Chapter 22, Article 4, Section 12-b and will carry out the specified requirements."

Signed by [Signature]

[Signature]

THIS IS AN ESTIMATE ONLY  
ACTUAL INFORMATION WILL BE SUBMITTED ON OG-10 UPON COMPLETION

PROPOSED WORK ORDER TO XXX DRILL \_\_\_\_\_ DEEPEN \_\_\_\_\_ FRACTURE STIMULATE \_\_\_\_\_  
 DRILLING CONTRACTOR: (If Known) RESPONSIBLE AGENT:  
 NAME Union Drilling Company NAME Allegheny Land and Mineral Company  
 ADDRESS P. O. Drawer 40 ADDRESS P. O. Drawer 1740  
 Buckhannon, West Virginia 26201 Clarksburg, West Virginia 26301  
 TELEPHONE 472-4610 TELEPHONE 304-623-6671  
 ESTIMATED DEPTH OF COMPLETED WELL: 8000' ROTARY XXX CABLE TOOLS \_\_\_\_\_  
 PROPOSED GEOLOGICAL FORMATION: Oriskany  
 TYPE OF WELL: OIL \_\_\_\_\_ GAS XXX COMB. \_\_\_\_\_ STORAGE \_\_\_\_\_ DISPOSAL \_\_\_\_\_  
 RECYCLING \_\_\_\_\_ WATER FLOOD \_\_\_\_\_ OTHER \_\_\_\_\_

TENTATIVE CASING PROGRAM:

CASING AND TUBING SIZE	USED FOR DRILLING	LIFT IN WELL	CEMENT LIFT UP OR SACKS - CUBIC FT.
20 - 16	20'	20'	cement to surface
13 - 10			
9 - 5/8			
8 - 5/8	900'	900'	cement to surface
7			
5 1/2			
4 1/2	8000'	8000'	cement to 300' above producing horizon
3			Perf. Top
2			Perf. Bottom
Liners			Perf. Top
			Perf. Bottom

APPROXIMATE FRESH WATER DEPTHS 109 FEET SALT WATER \_\_\_\_\_ FEET  
 APPROXIMATE COAL DEPTHS 19-22 304-310  
 IS COAL BEING MINED IN THE AREA? NO BY WHOM? \_\_\_\_\_

TO DRILL:

SUBMIT FIVE (5) COPIES OF OG - 1, \$100.00 PERMIT FEE, PERFORMANCE BOND AND PERMANENT COPY OF PLAT.

TO DRILL DEEPER OR REDRILL:

SUBMIT FIVE (5) COPIES OF OG - 1, SHOWING ORIGINAL PERMIT NUMBER AND PERFORMANCE BOND. ON WELLS DRILLED PRIOR TO 1929, A PERMANENT COPY OF THE PLAT AND THE ORIGINAL WELL RECORD MUST ALSO BE SUBMITTED.

TO FRACTURE - STIMULATE:

OIL AND/OR GAS WELL ORIGINALLY DRILLED BEFORE JUNE 5, 1929, FIVE (5) COPIES OG - 1, PERFORMANCE BOND, PERMANENT PLAT AND ORIGINAL WELL RECORD.

OIL AND/OR GAS WELL ORIGINALLY DRILLED ON AND/OR AFTER JUNE 5, 1929, FIVE COPIES OG - 1, SHOWING ORIGINAL PERMIT NUMBER AND PERFORMANCE BOND.

Required forms must be filed within ninety (90) days of completion for bond release. Inspector to be notified twenty-four (24) hours in advance.

The following waiver must be completed by the coal operator if the permit is to be issued within ten days of receipt thereof.

WAIVER: I the undersigned, Agent for \_\_\_\_\_ Coal Company, Owner or Operator of the coal under this lease have examined and place on our mine maps this proposed well location.

We the \_\_\_\_\_ Coal Company have no objections to said well being drilled at this location, providing operator has complied with all rules and regulations in Articles 4, 5, and 7, Chapter 22 of the West Virginia Code.

\_\_\_\_\_  
For Coal Company  
\_\_\_\_\_  
Official Title

STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES, OIL AND GAS DIVISION

WELL OPERATOR'S REPORT  
OF  
DRILLING, FRACTURING AND/OR STIMULATING, OR PHYSICAL CHANGE

WELL TYPE: Oil \_\_\_ / Gas X / Liquid Injection \_\_\_ / Waste Disposal \_\_\_  
(If "Gas", Production \_\_\_ / Underground storage \_\_\_ / Deep \_\_\_ / Shallow X /)  
LOCATION: Elevation: 3099' Watershed: Schoolcraft Run  
District: Middle Fork County: Randolph Quadrangle: Cassity 7.5'  
WELL OPERATOR ALLEGHENY LAND & MINERAL CO. DESIGNATED AGENCY ALLEGHENY LAND & MINERAL CO.  
Address P. O. BOX 1740 Address P. O. BOX 1740  
CLARKSBURG, W. VA. 26301 CLARKSBURG, W. VA. 26301

PERMITTED WORK: Drill X / Convert \_\_\_ / Drill deeper \_\_\_ / Redrill \_\_\_ / Fracture or stimulate \_\_\_ /  
Plug off old formation \_\_\_ / Perforate new formation \_\_\_ /  
Other physical change in well (specify) \_\_\_\_\_

PERMIT ISSUED ON November 6, 1980

OIL & GAS INSPECTOR FOR THIS WORK:

(IF APPLICABLE: PLUGGING OF DRY HOLE ON CONTINUOUS PROGRESSION FROM DRILLING OR REWORKING. VERBAL PERMISSION OBTAINED

Name Robert S. Stewart  
Address P. O. Box 345  
Jane Lew, WV 26378

GEOLOGICAL TARGET FORMATION: Oriskany Sand Depth 8000 feet  
Depth of completed well, 7877 feet Rotary X / Cable Tools \_\_\_  
Water strata depth: Fresh, 18 feet; salt, \_\_\_ feet.  
Coal seam depths: 125-128' Is coal being mined in the area? \_\_\_  
Work was commenced November 23, 1980, and completed December 12, 1980

CASING AND TUBING PROGRAM

CASING OR TUBING TYPE	SPECIFICATIONS				FOOTAGE INTERVALS		CEMENT FILL-UP OR SACKS (Cubic feet)	PACKERS
	Size	Grade	Weight per ft	New	Used	For drilling		
Conductor	11-3/4"			X		89'	89'	Cemented to surface
Fresh water	8-5/8"							
Coal	8-5/8"			X		1164'	1164'	" " Sizes "
Intermediate								
Production	4 1/2"			X		7866'	7866'	" " 6627' Depths set
Tubing								
Liners								Perforations: Top Bottom

RECEIVED  
FEB 13 1981

OPEN FLOW DATA

Producing formation HRV Chert Sand Pay zone depth 7788-7848 feet  
Gas: Initial open flow, \_\_\_ Mcf/d Oil: Initial open flow, \_\_\_ Bbl/d  
Final open flow, 9,100 Mcf/d Final open flow, \_\_\_ Bbl/d  
Time of open flow between initial and final tests, \_\_\_ hours  
Static rock pressure, 2550# psig (surface measurement) after 48 hours shut in  
[If applicable due to multiple completion--]  
Second producing formation \_\_\_ Pay zone depth \_\_\_ feet  
Gas: Initial open flow, \_\_\_ Mcf/d Oil: Initial open flow, \_\_\_ Bbl/d  
Final open flow, \_\_\_ Mcf/d Final open flow, \_\_\_ Bbl/d  
Time of open flow between initial and final tests, \_\_\_ hours  
Static rock pressure, \_\_\_ psig (surface measurement) after \_\_\_ hours shut in

(Continue on reverse side)



DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC.

Perforations - 7843 - 7857' - 28 shots

Well not fractured.

WELL LOG

FORMATION	Color	Hard or Soft	Top Feet	Bottom Feet	Remarks Including indication of all fresh and salt water, coal, oil and gas
Shale			0	20	Water - ½" Stream @ 18'
Sand			20	125	
COAL *****			125	128	Coal *****
Sand & Shale			128	1350	
Big Lime			1350	1546	
Injun Sand			1546	1600	
Sand & Shale			1600	2790	
Bradford Sand			2790	2820	
Sand & Shale			2820	4030	
Benson Sand			4030	4090	
Sand & Shale			4090	5150	
Elk Sand			5150	5210	
Sand & Shale			5210	7514	
Tully Limestone			7514	7542	
Shale			7542	7746	
Onondago Sand			7746	7788	
Chert Sand			7788	7848	
Shale			7848	7877	
		total depth	HRVL <sup>2</sup>	7877	(Driller)

(Attach separate sheets to complete as necessary)

Allegheny Land & Mineral Company

Well Operator

By Claron Dawson

Its Supt.

NOTE: Regulation 2.02(i) provides as follows:

"The term 'log' or 'well log' shall mean a systematic, detailed geological record of all formations, including coal, encountered in the drilling of a well."

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

AFFIDAVIT OF PLUGGING AND FILLING WELL

AFFIDAVIT SHOULD BE IN TRIPPLICATE, one copy mailed to the Department, one copy to be retained by the Well Operator and the third copy (and extra copies if required) should be mailed to each coal operator at their respective addresses.

Farm Name: Pena Virginia Operating Co. LLC Operator Well No.: 910925

Location: Elevation: 3099 Quadrangle Cassidy 7.5 282  
District: Middle Fork S County Randolph  
Latitude \_\_\_\_\_ Feet South of \_\_\_\_\_ Deg. \_\_\_\_\_ Min. \_\_\_\_\_ Sec.  
Longitude \_\_\_\_\_ Feet West of \_\_\_\_\_ Deg. \_\_\_\_\_ Min. \_\_\_\_\_ Sec.

Well Type: Oil \_\_\_\_\_ Gas X

Company: Chesapeake Appalachia, LLC Coal Operator or Arch Coal Company  
P O Box 1300 Owner: 2708 Casberry Square  
Jane Lew, WV 26378 Morgantown, WV 26505

Agent: Eric B. Gillespie Coal Operator or \_\_\_\_\_  
Owner: \_\_\_\_\_

Permit Issued Date: 5-2-2012

AFFIDAVIT

State of West Virginia, County of Randolph ss:

Richard Stelmack and LARRY BOWERS being first duly sworn according to law plugging and filling oil and gas wells and were employed by the above named well operator, and participated in the work of plugging and filling the above well say that said work was commenced on the 30<sup>th</sup> day of November 2012 and the well was plugged and filled in the following manner:

TYPE	FROM	TO	PIPE REMOVED	LEFT
cement	7800	7700	7785' of 2 3/4 tub	60' of 2 3/4 Hsg
cement	2197	2010	4000' of 4 1/2 csg	3866' of 4 1/2 csg
cement	1192	1050		
cement	150	surface		
			4 1/2 cut attempts	
			@ 4994, 3987	

Description of monument: 4 1/2 csg with 3' above + 3' below surface and that the work of plugging and filling said well was completed on the 10<sup>th</sup> day of December 2012.

And further deponents saith not. Richard Stelmack  
Jerry Brown

Sworn and subscribe before me this 13<sup>th</sup> day of December 2012  
My commission expires: 3-20-2016

Notary Public: Joyce Haugherty

Affidavit reviewed by the Office of Oil and Gas: Bill Hatfield

Title: oil & gas inspector

OFFICE OF OIL AND GAS  
WV Department of Environmental Protection