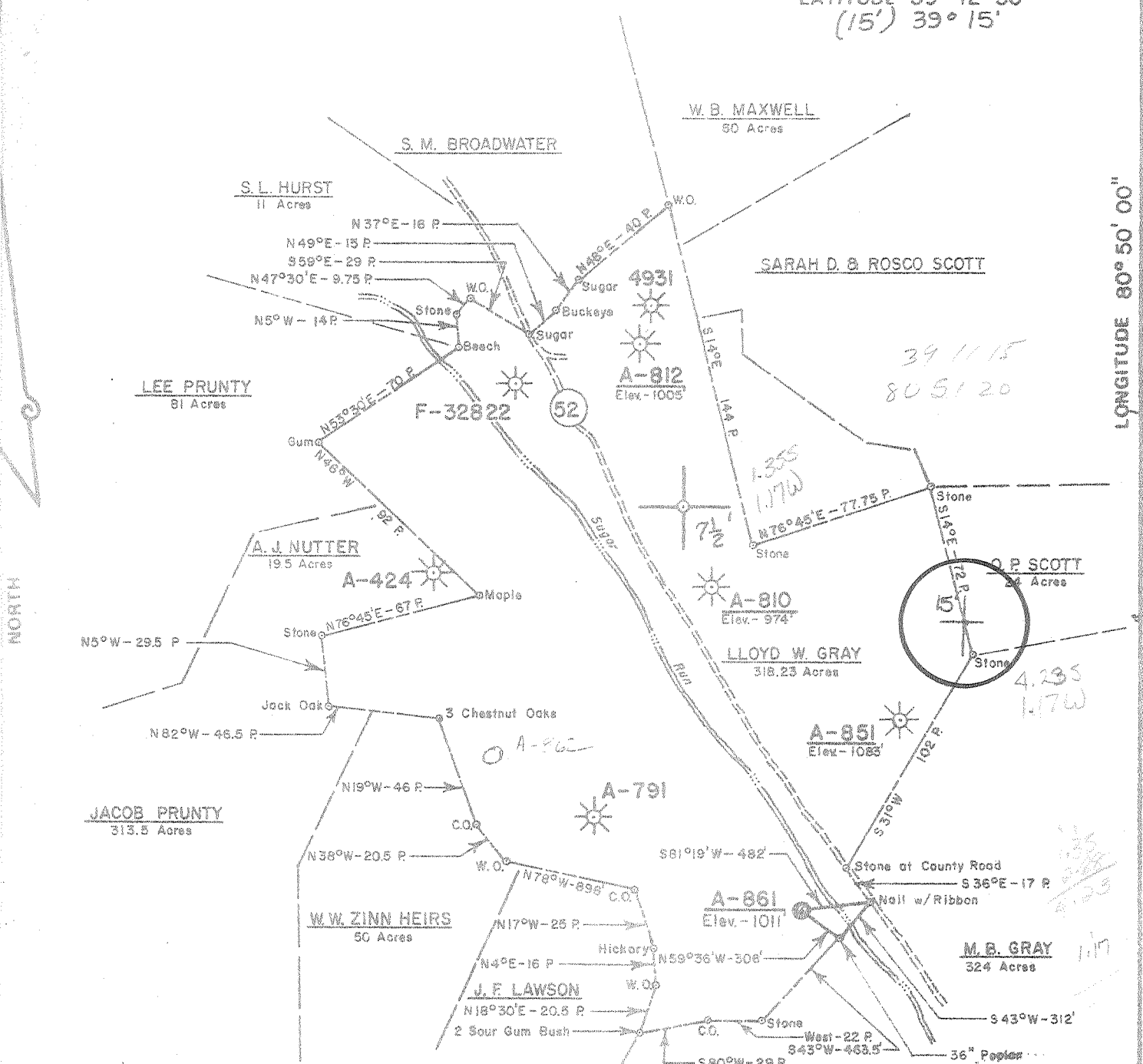


LATITUDE 39° 12' 30"
(15') 39° 15'

LONGITUDE 80° 50' 00"



FILE NO. 317
 DRAWING NO. _____
 SCALE 1" = 1,000'
 MINIMUM DEGREE OF ACCURACY 1 Part in 200
 PROVEN SOURCE OF ELEVATION A.L. & M. Co. Gas Well #A-810 Elev. 974'

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 B. Woodson
 R.P.E. _____ L.L.S. 530

PLACE SEAL HERE

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



DATE December 3, 19 79
 OPERATOR'S WELL NO. A-861
 API WELL NO. _____
47 - 017 - 2549
 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 ___ SHALLOW X
 LOCATION: ELEVATION 1011' NE WATERSHED Sugar Run
 DISTRICT Southwest COUNTY Doddridge
 QUADRANGLE Oxford 75', Halbrook 15' NE
 SURFACE OWNER Richard C. Crafford ACREAGE 94
 OIL & GAS ROYALTY OWNER Hayward Gray LEASE ACREAGE 318.23
 LEASE NO. 26
 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 Weir ESTIMATED DEPTH 2,400'
 WELL OPERATOR Allegheny Land & Mineral Co. DESIGNATED AGENT Allegheny Land & Mineral Co.
 ADDRESS P.O. Box 1740 ADDRESS P.O. Box 1740
Clarksburg, W.Va. 26301 Clarksburg, W.Va. 26301

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

Date February 7, 1980

FORM IV-35
(Obverse)

Operator's
Well No. A-861

WELL OPERATOR'S REPORT 14

API Well No. 017-2549
State County Permit

[08-78]

DRILLING, FRACTURING AND/OR STIMULATING, OR PHYSICAL CHANGE

WELL TYPE: Oil / Gas / Liquid Injection / Waste Disposal
(If "Gas", Production / Underground storage / Deep / Shallow

LOCATION: Elevation: 1011' Watershed: Sugar Run
District: Southwest County: Doddridge Quadrangle: Oxford 7.5'

WELL OPERATOR ALLEGHENY LAND & MINERAL CO. DESIGNATED AGENT 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 / Convert / Drill deeper / Re-drill / Fracture or stimulate
Plug off old formation / Perforate new formation
Other physical change in well (specify) _____

PERMIT ISSUED ON December 7, 1979 OIL & GAS INSPECTOR FOR THIS WORK:

(IF APPLICABLE: PLUGGING OF DRY HOLE ON CONTINUOUS PROGRESSION FROM DRILLING OR REWORKING. VERBAL PERMISSION OBTAINED _____, 19____)
Name Paul Garrett
Address 321 Beech Street
Clarksburg, WV 26301

GEOLOGICAL TARGET FORMATION: Weir Depth 2400 feet

Depth of completed well, 2500 feet Rotary / Cable Tools _____

Water strata depth: Fresh, _____ feet; salt, _____ feet.

Coal seam depths: _____ Is coal being mined in the area? _____

Work was commenced December 31, 1979, and completed January 8, 1980

CASING AND TUBING PROGRAM

CASING OR TUBING TYPE	SPECIFICATIONS					FOOTAGE INTERVALS		CEMENT PULL-UP OR SACKS (Cubic feet)	PACKERS
	Size	Grade	Weight per ft	New	Used	For drilling	Left in well		
Conductor									Kinds
Fresh water	<u>8-5/8"</u>			<input checked="" type="checkbox"/>		<u>409'</u>	<u>409'</u>	<u>Cemented to</u>	<u>surface</u>
Coal									String
Intermediate									
Production	<u>4 1/2"</u>			<input checked="" type="checkbox"/>		<u>2340'</u>	<u>2340'</u>	" "	<u>2-1600'</u>
Tubing	<u>1 1/2"</u>					<u>2126'</u>	<u>2126'</u>		
Liners									Bottom

FEB 18 1980

OPEN FLOW DATA

OIL & GAS DIVISION
DEPT. OF MINES
Pay zone depth 2144-2261

Producing formation Weir

Gas: Initial open flow, _____ Mcf/d Oil: Initial open flow, _____ gal/d

Final open flow, 231 Mcf/d Final open flow, _____ gal/d

Time of open flow between initial and final tests, _____ hours

Static rock pressure, 13250 psig (surface measurement) after 36 hours shut in

[If applicable due to multiple completion--] seems high for this depth - from base kls 4/21/85

Second producing formation _____ Pay zone depth _____ feet

Gas: Initial open flow, _____ Mcf/d Oil: Initial open flow, _____ gal/d

Final open flow, _____ Mcf/d Final open flow, _____ gal/d

Time of open flow between initial and final tests, _____ hours

Static rock pressure, _____ psig (surface measurement) after _____ hours shut in

5 1980

[08-78]

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

Well was fractured January 16, 1980 by Dowell.

- Perforations: 2144 - 2154 - 7 holes
 2162 - 2168' - 5 "
 2200 - 2204' - 4 "
 2228 - 2234' - 4 "

WELL LOG

FORMATION	Color	Hard or Soft	Top Feet	Bottom Feet	Remarks Including indication of all fresh and salt water, coal, oil and gas
Soil			0	10	
Sand & Shale			10	409	
Shale			409	1155	
Salt Sand			1155	1212	
Sand & Shale			1212	1334	
Sand			1334	1361	
Sand & Shale			1361	1820	
Big Lime			1820	1900	
Injun Sand			1900	1949	
Sand & Shale			1949	2144	
<u>Weir Sand</u>			2144	2261	
Shale			2261	2500	
			Total depth	2500	(Driller)

(Attach separate sheets to complete as necessary.)

Allegheny Land & Mineral Company
 Well Operator
 By Claron Dawson
 Its Supt.

NOTE: Regulation 2.02(d) 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."

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 8-17-80

Date: December 7, 19 79
Operator's Well No. A-861
API Well No. 47 -017 - 2549
State Co. Permit

[Signature]
Deputy Director - Oil & Gas Division

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

RECEIVED
DEC 13 1979

OIL AND GAS WELL PERMIT APPLICATION

WELL TYPE: Oil / Gas XX /
(If "Gas", Production / underground storage / Deep / Shallow XX /

LOCATION: Elevation: 1011' Watershed: Sugar Run
District: Southwest County: Doddridge Quadrangle: Oxford 7.5'

WELL OPERATOR ALLEGHENY LAND & MINERAL CO. Designated Agent ALLEGHENY LAND & MINERAL CO.
Address P.O. Box 1740 Address: P.O. BOX 1740
CLARKSBURG, WV 26301 CLARKSBURG, WV 26301

OIL & GAS
ROYALTY OWNER Hayward Gray
Address Box 252
Ellenboro, WV 26364
Acreage 318.23
SURFACE OWNER Richard Crofford
Address Route 1, Box 93
West Union, WV 26456
Acreage 94 out of 318.23
FIELD SALE (IF MADE) TO:
Name Consolidated Gas Supply Corp.
Address 445 West Main Street
Clarksburg, WV 26301

COAL OPERATOR
address
Coal Owner(s) With Declaration On Record:
NAME Hayward Gray
Address Box 252
Ellenboro, WV 26364
NAME
Address

OIL & GAS INSPECTOR TO BE NOTIFIED
Name Paul Garrett
Address 321 Beech Street
Clarksburg, WV 26301

COAL LESSEE WITH DECLARATION ON RECORD:
NAME
Address

The undersigned well operator is entitled to operate for oil or gas purposes at the above location under a deed / lease XX / other contract / dated August 1, 19 07, to the undersigned well operator from D.W. & M. E. Gray unto Hope Natural Gas Company, subsequently unto A. L. & M. by assignment dated November 15, 1971. Rec. B-60, P-84
Lease recorded on January 26, 1912, in the office of the Clerk of the County Commission of Doddridge County, West Virginia, in Lease book 30 at page 148. A permit is requested as follows:

PROPOSED WORK: Drill XX / DRILL DEEPER / REDRILL / FRACTURE OR STIMULATE / PLUG OFF OLD FORMATION / Perforate new formation / other physical change in well (specify)

--planned as shown on the work order on the reverse side hereof.

The above named coal operator, coal owner(s), and coal lessee are hereby notified that any objection they wish to make or are required to make by Code S 22-4-3 must be filed with the Department of Mines within fifteen (15) days after the receipt of this Application by the Department.

Copies of this Permit Application and the enclosed plat and reclamation plan have been mailed by registered mail or delivered by hand to the above named coal operator, coal owner(s), and Coal lessee on or before the day of the mailing or delivery of this Permit Application to the Department of Mines at Charleston, West Virginia.

PLEASE SUBMIT COPIES OF ALL GEOPHYSICAL LOGS DIRECTLY TO:
WEST VIRGINIA OIL AND GAS CONSERVATION COMMISSION
1615 WASHINGTON STREET EAST
CHARLESTON, WV 25311
TELEPHONE: (304) 348-3092

ALLEGHENY LAND & MINERAL COMPANY
Well Operator
By [Signature]
Glen E. Watkins, Manager
Land, Lease & Right of Way

BLANKET BOND

PROPOSED WORK ORDER

THIS IS AN ESTIMATE ONLY:

ACTUAL INFORMATION MUST BE SUBMITTED ON FORM IV-35 UPON COMPLETION

DRILLING CONTRACTOR (IF KNOWN) UNION DRILLING COMPANY
 Address P.O. BOX 40
BUCKHANNON, WEST VIRGINIA 26201

GEOLOGICAL TARGET FORMATION, Weir

Estimated depth of completed well, 2400 feet Rotary XX / Cable tools /
 Approximate water strata depths: Fresh, 77 feet; salt, feet.
 Approximate coal seam depths: None is coal being mined in the area?
 Yes / No XX /

CASING AND TUBING PROGRAM

CASING OR TUBING TYPE	SIZE	SPECIFICATIONS				FOOTAGE INTERVALS		CEMENT FILL UP OR SACKS	
		GRADE	Weight Per ft.	New	Used	For drilling	left in well	(cubic ft.)	Packers
Conductor	16"				X	20'	20'	cement to surface	kinds
Fresh Water	8-5/8"								
Coal	8-5/8"		20#	X		350'	350'	cement to surface	sizes
Intermediate									
Production	4 1/2"		J 55 10.50#	X		2400'	2400'	cement to 300' above producing horizon	depths set
Tubing									
Liners									perfor- ations: Top bottom

NOTE: Regulation 7.02 of the Department of Mines provides that the original and four copies of Form IV-2 must be filed with the Department, accompanied by (i) a plat in the form prescribed by Regulation 11, (ii) a bond in one of the forms prescribed by Regulation 12, or in lieu thereof the other security allowed by Code S 22-4-2, (iii) Form IV-9, " Reclamation Plan", applicable to the reclamation required by Code S 22-4-12b and Regulation 23, (iv) unless previously paid on the same well, the fee required by Code S 22-4-12a, and (v) if applicable, the consent required by Code S 22-4-8a from the owner of any water well or dwelling within 200 feet of the proposed well.

A separate Form IV-2 shall not be required for fracturing or stimulating a well where fracturing or stimulating is to be part of the work for which a permit is sought and is noted as such on the Form IV-2 filed in connection therewith.

 The Following waiver must be completed by the coal operator and by any coal owner or coal lessee who has recorded a declaration under Code S 22-4-20, if the permit is to be issued within fifteen (15) days of receipt thereof:

W A I V E R

The undersigned coal operator / owner / lessee / of the coal under this well location has examined this proposed well location. If a mine map exists which covers the area of the well location, the well location has been added to the mine map. The undersigned has no objection to the work proposed to be done at this location, provided, the well operator has complied with all applicable requirements of the West Virginia Code and the governing regulations.

Date: 19