



1) Date: Oct. 24, 19 83
 2) Operator's Well No. A-1447 (McMullan)
 3) API Well No. 47 - 083 - 0838
 State County Permit

STATE OF WEST VIRGINIA
 DEPARTMENT OF MINES, OIL AND GAS DIVISION
 APPLICATION FOR A WELL WORK PERMIT

- 4) WELL TYPE: A Oil / Gas XX /
 B (If "Gas", Production / Underground storage / Deep / Shallow XX /)
- 5) LOCATION: Elevation: 2990' Watershed: Jackson Fork
 District: Middle Fork County: Randolph Quadrangle: Cassity 7.5'
- 6) WELL OPERATOR Alamco, Inc. 7) DESIGNATED AGENT D. L. Wheeler
 Address P. O. Box 1740 Address P. O. Box 1740
Clarksburg, WV 26301 Clarksburg, WV 26301
- 8) OIL & GAS INSPECTOR TO BE NOTIFIED 9) DRILLING CONTRACTOR:
 Name Phil Tracy Name Development Drilling Corporation
 Address General Delivery Address P. O. Box 1740
Ellamore, WV 26267 Clarksburg, WV 26301
- 10) PROPOSED WELL WORK: Drill XX / Drill deeper / Redrill / Stimulate
 Plug off old formation / Perforate new formation
 Other physical change in well (specify)
- 11) GEOLOGICAL TARGET FORMATION, Elk
- 12) Estimated depth of completed well, 5550' feet
- 13) Approximate trata depths: Fresh, 196 feet; salt, feet.
- 14) Approximate coal seam depths: 456 - 459 Is coal being mined in the area? Yes / No XX
- 15) CASING AND TUBING PROGRAM

RECEIVED
 OCT 26 1983
 OIL & GAS DIVISION
 DEPT. OF MINE
 PACKERS

CASING OR TUBING TYPE	SPECIFICATIONS					FOOTAGE INTERVALS		CEMENT FILL-UP OR SACKS (Cubic feet)	PACKERS
	Size	Grade	Weight per ft.	New	Used	For drilling	Left in well		
Conductor	16"				X	20'	20'	Cement to surface	
Fresh water									
Coal	8-5/8"	20#		X		900'	900'	Cement to surface	
Intermediate		J.55							
Production	4-1/2"	10.50#		X		5550'	5550'	Req. by Rule 15.01	
Tubing									
Liners									Perforations: Top <u> </u> Bottom <u> </u>

OFFICE USE ONLY
 DRILLING PERMIT

Permit number 47-083-0838

Date November 14, 1983

This permit covering the well operator and well location shown below is evidence of permission granted to drill in accordance with the pertinent legal requirements subject to the conditions contained herein and on the reverse hereof. **Notification must be given to the District Oil and Gas Inspector, (Refer to No. 8) Prior to the construction of roads, locations and pits for any permitted work.** In addition, the well operator or his contractor shall notify the proper district oil and gas inspector 24 hours before actual permitted work has commenced.)

The permitted work is as described in the Notice and Application, plat, and reclamation plan, subject to any modifications and conditions specified on the reverse hereof.

Permit expires November 14, 1985 unless well work is commenced prior to that date and prosecuted with due diligence.

Bond: BLANKET BOND	Agent: <u>TS</u>	Plat: <u>TS</u>	Casing: <u>TS</u>	Fee: <u>24857</u>
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[Signature]
 Administrator, Office of Oil and Gas

NOTE: Keep one copy of this permit posted at the drilling location.

See the reverse side of the APPLICANT'S COPY for instructions to the well operator.

OFFICE USE ONLY

PERMIT MODIFICATIONS AND CONDITIONS (IF ANY) TO THE PROPOSED WELL WORK

1) Well No. _____ 2) Operator's Well No. _____ 3) All Well No. _____

4) LOCATION: District: _____ Middle Fork _____ County: _____ Waterbed: _____ Elevation: _____

5) WELL OPERATOR: Name: _____ Address: _____

6) DESIGNATED AGENT: Name: _____ Address: _____

7) DRILLING CONTRACTOR: Name: _____ Address: _____

8) OTHER GAS INSPECTOR TO BE NOTIFIED: Name: _____ Address: _____

9) PROPOSED WELL WORK: Plug off old formation _____

10) GEOLOGICAL TARGET FORMATION: _____

11) Estimated depth of completed well: _____ feet

12) Approximate true depth: _____ feet

13) Approximate seal/seam depths: _____ feet

14) CASING AND TUBING PROGRAM: _____

RECEIVED

OFFICE USE ONLY

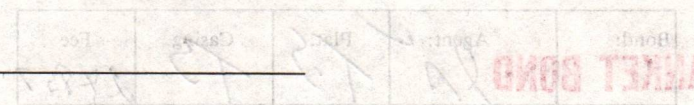
This part of Form IV-2(b) is to record the dates of certain occurrences and any follow-up inspections.

	Date	Date(s)
Application received		
Well work started		
Completion of the drilling process		
Well Record received		
Reclamation completed		

OTHER INSPECTIONS

Reason: _____

Reason: _____



ATTN: LAND DEPT.
 P 406 789 658
 RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED—
 NOT FOR INTERNATIONAL MAIL

A-1447 Permit (See Reverse)

Sent to International Coal 119 Washington Street Lewisburg, West Virginia	
ALAMCO, INC.	
200 W. Main Street Postage	
P. O. Box 1740 Certified Fee	
Clarksburg, W V 26302	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to whom and Date Delivered	
Return Receipt Showing to whom, Date, and Address of Delivery	
TOTAL Postage and Fees	\$
Postmark or Date OCT 25 1983	

PS Form 3800, Feb. 1982

RECEIVED

OCT 26 1983

OIL & GAS DIVISION
 DEPT. OF MINES

NO INSURANCE COVERAGE PROVIDED—
 NOT FOR INTERNATIONAL MAIL

A-1447 Permit (See Reverse)
 Harry McMullan

Sent to Box 8 Washington, North Carolina	
ALAMCO, INC.	
200 W. Main Street Postage	
P. O. Box 1740 Certified Fee	
Clarksburg, W V 26302	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to whom and Date Delivered	
Return Receipt Showing to whom, Date, and Address of Delivery	
TOTAL Postage and Fees	\$
Postmark or Date OCT 25 1983	

PS Form 3800, Feb. 1982

ATTN: LAND DEPT.
 P 406 789 705
 RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED—
 NOT FOR INTERNATIONAL MAIL

A-1447 Permit (See Reverse)

Sent to Westvaco 203 Randolph Avenue Elkins, West Virginia	
ALAMCO, INC.	
200 W. Main Street Postage	
P. O. Box 1740 Certified Fee	
Clarksburg, W V 26302	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to whom and Date Delivered	
Return Receipt Showing to whom, Date, and Address of Delivery	
TOTAL Postage and Fees	\$
Postmark or Date OCT 25 1983	

PS Form 3800, Feb. 1982

26

ATTN: LAND DEPT.
 P 406 789 707
 RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED—
 NOT FOR INTERNATIONAL MAIL

A-1447 Permit (See Reverse)
 Amax Coal Company

Sent to 105 S. Meridan Indianapolis, Indiana 46200	
ALAMCO, INC.	
200 W. Main Street Postage	
P. O. Box 1740 Certified Fee	
Clarksburg, W V 26302	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to whom and Date Delivered	
Return Receipt Showing to whom, Date, and Address of Delivery	
TOTAL Postage and Fees	\$
Postmark or Date OCT 25 1983	

PS Form 3800, Feb. 1982

IV-35
(Rev 8-81)



Date February 3, 1984

Operator's

Well No. A-1447

Farm McMullan

API No. 47 - 083 - 0838

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 / LIQUID INJECTION / WASTE DISPOSAL
(If "Gas", Production / Underground Storage / Deep / Shallow /)

LOCATION: Elevation: 2990' Watershed Jackson Fork
District: Middle Fork County: Randolph Quadrangle: Cassity 7.5'

COMPANY ALAMCO, INC

ADDRESS 200 West Main Street
Clarksburg, West Virginia 26301

DESIGNATED AGENT ALAMCO, INC

ADDRESS 200 West Main Street
Clarksburg, West Virginia 26301

SURFACE OWNER Westvaco

ADDRESS 203 Randolph Ave., Elkins, WV 26241

MINERAL RIGHTS OWNER Neva McMullan

ADDRESS P.O. Box 8, Washington, NC 27889

OIL AND GAS INSPECTOR FOR THIS WORK Phil

Tracy ADDRESS Gen. Dely., Ellamore, WV 26267

PERMIT ISSUED November 14, 1983

DRILLING COMMENCED December 5, 1983

DRILLING COMPLETED December 12, 1983

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

Casing & Tubing Size	Used in Drilling	Left in Well	Cement fill up Cu. Ft.
20-16 Cond.			
13-10"			
9 5/8"			
8 5/8"	915'	915'	to surface
7"			
5 1/2"			
4 1/2"	5216'	5216'	w/559 sks 1890'
3			
2			
Liners used			

GEOLOGICAL TARGET FORMATION Elk DEPTH 5550 FEET

Depth of completed well 5456 feet Rotary / Cable Tools _____

Water Strata depth: Fresh 61 & 280 feet Salt _____ feet

Coal seam depth: 147-150, 475-478, 651-723' Is coal being mined in this area? No

OPEN FLOW DATA

Producing formation Elk, Benson Pay zone depth See back' feet

Gas: Initial open flow 93 Mcf/d Oil: Initial open flow _____ Bbl/d

Final open flow 1100 Mcf/d Final open flow _____ Bbl/d

Time of open flow between initial and final tests 2 hours

Static rock pressure 1400 psig (surface measurement after 46 hours shut-in

(If applicable due to multiple completion--)

Second producing formation _____ Pay zone dpeth _____ 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.

Well was fractured January 7, 1984
 Perforations: 3916 - 3921
 3948 - 3950 Benson
 5124 - 5127
 5133 - 5139 3rd Elk

WELL LOG

FORMATION COLOR HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS Including indication of all fresh and salt water, coal, oil and gas
Fill	0	5	1/4" stream water @ 61'
Sand & Shale	5	147	1/4" stream water @ 280'
Coal	147	150	Gas check @ 1575' No show
Sand & Shale	150	475	Gas check @ 2016' No show
Coal	475	478	Gas check @ 2344' 131 MCF/D
Sand & Shale	478	651	Gas check @ 2496' 135 MCF/D
Coal	651	723	Gas check @ 2827' 160 MCF/D
Sand & Shale	723	872	Gas check @ 4062' 172 MCF/D
Red Rock	872	907	Gas check @ 4488' 119 MCF/D
Red Rock & Shale	907	949	Gas check @ 4948' 93 MCF/D
Red Rock	949	1087	
Shale	1087	1146	
Red Rock	1146	1195	
Shale	1195	1339	
Little Lime & Shale	1339	1392	
Big Lime	1392	1497	
Big Injun	1497	1641	
Red Rock	1641	1696	
Sand & Shale	1696	1837	
Gordon	1837	1872	
Red Rock	1872	1899	
Sand	1899	1958	
Red Rock	1958	2008	
Sand & Shale	2008	2384	
Speechley	2384	2410	
Sand & Shale	2410	2750	
Balltown	2750	2779	
Shale	2779	3580	
Riley	3580	3608	
Shale	3608	3798	
Benson	3798	3825	
Shale	3825	4950	
Alexander	4950	5000	
Shale	5000	5130	
1st Elk	5130	5456 T.D.	

(Attach separate sheets as necessary)

ALAMCO, INC.

Well Operator

By:

Raymond C. Muzya

Vice President Oil & Gas Operations

Date: February 3, 1984

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."

IV-20
Obverse
1-84



RECEIVED
JUL 17 1984

OIL & GAS DIVISION
DEPT. OF MINES

State of West Virginia
Department of Mines
Oil and Gas Division
Charleston 25305

FINAL INSPECTION REPORT
INSPECTORS COMPLIANCE REPORT
February 15, 1984

COMPANY Alamco, Inc.
200 West Main Street
Clarksburg, West Virginia 26301

PERMIT NO 083-0838 10/83
FARM & WELL NO McMullan A-1447
DIST. & COUNTY Middle Fork/Randolph

RULE	DESCRIPTION	IN COMPLIANCE	
		YES	NO
23.06	Notification Prior to Starting Work	_____	_____
25.04	Prepared before Drilling to Prevent Waste	_____	_____
25.03	High-Pressure Drilling	_____	_____
16.01	Required Permits at Wellsite	_____	_____
15.03	Adequate Fresh Water Casing	_____	_____
15.02	Adequate Coal Casing	_____	_____
15.01	Adequate Production Casing	_____	_____
15.04	Adequate Cement Strenght	_____	_____
15.05	Cement Type	_____	_____
23.02	Maintained Access Roads	_____	_____
25.01	Necessary Equipment to Prevent Waste	_____	_____
23.04	Reclaimed Drilling Pits	_____	_____
23.05	No Surface or Underground Pollution	_____	_____
23.07	Requirements for Production & Gathering Pipelines	_____	_____
16.01	Well Records on Site	_____	_____
16.02	Well Records Filed	_____	_____
7.05	Identification Markings	_____	_____

I HAVE INSPECTED THE ABOVE CAPTIONED WELL AND RECOMMEND THAT IT BE RELEASED:

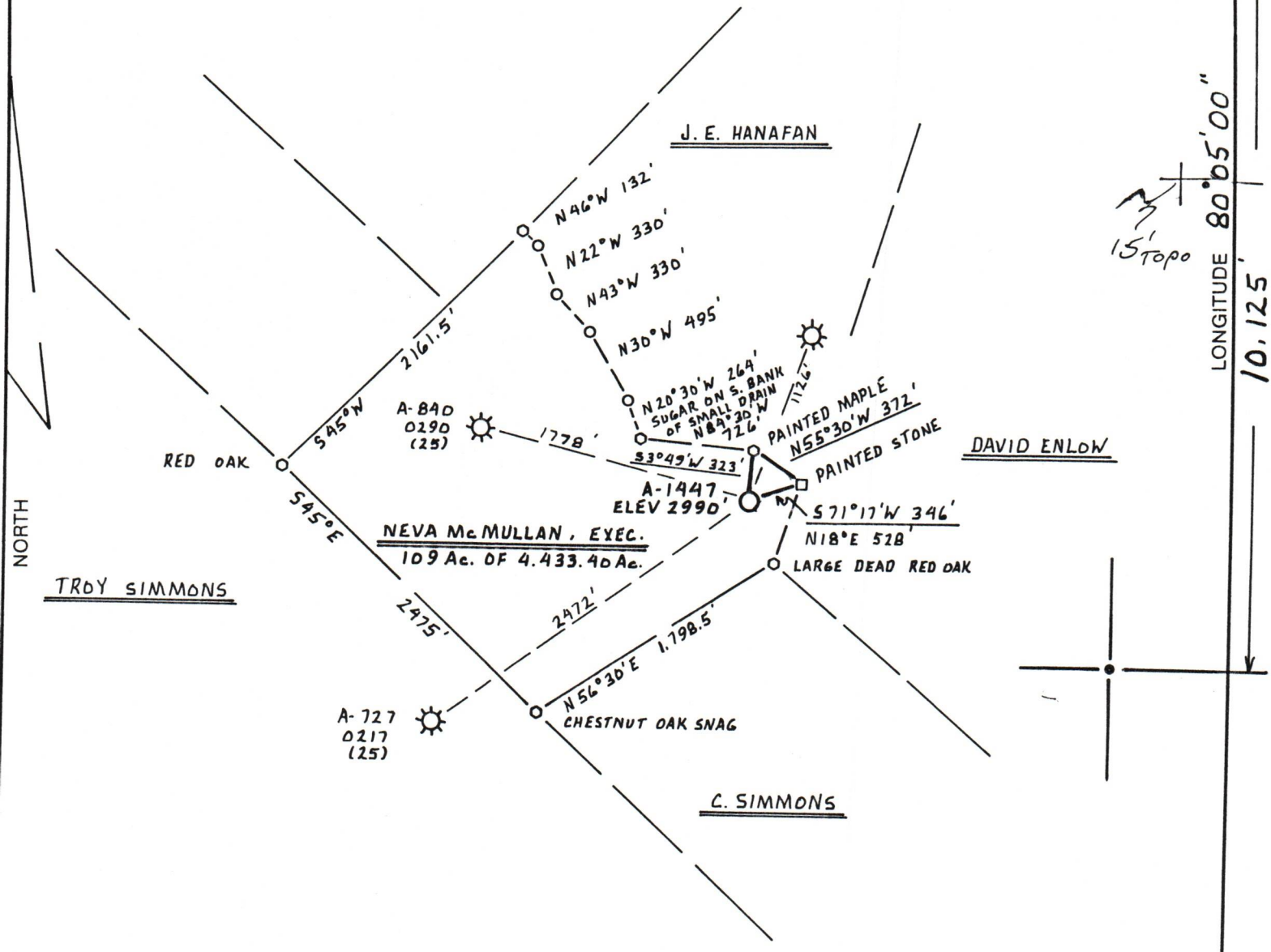
SIGNED Phillip Gray
DATE 7-6-84

Your well record was received and reclamation requirements approved. In accordance with Chapter 22, Article 4, Section 2, the above well will remain under bond coverage for the life of the well.

T. L. ...
Administrator-Oil & Gas Division

July 23, 1984

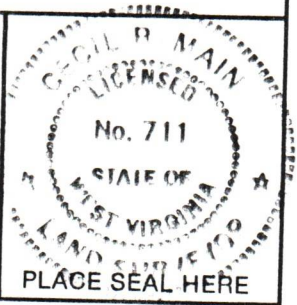
DATE



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

FILE NO. _____
 DRAWING NO. _____
 SCALE 1" = 1000'
 MINIMUM DEGREE OF ACCURACY 1 PART IN 200
 PROVEN SOURCE OF ELEVATION ALAMCO WELL A-727
 API 0217 ELEV. 302B'

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) Cecil R. Main
 R.P.E. _____ L.L.S. 711



STATE OF WEST VIRGINIA
 DEPARTMENT OF MINES
OIL AND GAS DIVISION



DATE OCTOBER 21, 1983
 OPERATOR'S WELL NO. A-1447
 API WELL NO. _____

WELL TYPE: OIL ___ GAS X LIQUID INJECTION ___ WASTE DISPOSAL ___
 (IF "GAS,") PRODUCTION X STORAGE ___ DEEP ___ SHALLOW X
 LOCATION: ELEVATION 2990' WATERSHED JACKSON FORK
 DISTRICT MIDDLE FORK COUNTY RANDOLPH
 QUADRANGLE CASSITY 7.5'

SURFACE OWNER WESTVACO & NEVA McMULLAN, EXEC. ACREAGE 109 Ac.
 OIL & GAS ROYALTY OWNER NEVA McMULLAN, EXEC. LEASE ACREAGE 4,433.40 Ac.
 LEASE NO. 1755-3473B

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 ELK ESTIMATED DEPTH 5550'
 WELL OPERATOR ALAMCO DESIGNATED AGENT DANIEL L. WHEELER
 ADDRESS P.O. Box 1740 ADDRESS P.O. Box 1740
CLARKSBURG, WEST VIRGINIA 26302-1740 CLARKSBURG, WEST VIRGINIA 26302-1740

COUNTY NAME
 PERMIT

2) Operator's Well No. A-1447 (McMullan)
3) API Well No. 47 . 083 . 083
State County Perm

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES, OFFICE OF OIL & GAS
NOTICE OF APPLICATION FOR A WELL WORK PERMIT

OWNER(S) OF RECORD TO BE SERVED

Westvaco
203 Randolph Avenue
Elkins, WV 26241

5(i) COAL OPERATOR
Address _____

5(ii) COAL OWNER(S) WITH DECLARATION ON RECORD
Name Harry McMullan
Address P. O. Box 8
Washington, NC 27889
Name Amax Coal International Co.
Address 105 S. 119 Washington St
Meridan Lewisburg, WV 249

5(iii) COAL LESSEE WITH DECLARATION ON RECORD
Name Ind.
Address _____

TO THE PERSON(S) NAMED ABOVE: You should have received this Form and the following documents:

- (1) The Application for a Well Work Permit on Form IV-2(B) (or Form IV-4 if the well is to be plugged, which sets out the parties involved in the drilling or other work, and describes the well and its location and, if applicable, the proposed casing and cementing program;
- (2) The plat (surveyor's map) showing the well location on Form IV-6; and
- (3) The Construction and Reclamation Plan on Form IV-9 (unless the well work is only to plug a well), which sets out the plan for erosion and sediment control and for reclamation for the site and access road.

THE REASON YOU RECEIVED THESE DOCUMENTS IS THAT YOU HAVE RIGHTS REGARDING THE APPLICATION WHICH ARE SUMMARIZED IN THE "INSTRUCTIONS" ON THE REVERSE SIDE OF THE COPY OF THE APPLICATION (FORM IV-2(B) OR FORM 4, DESIGNATED FOR YOU. HOWEVER, YOU ARE NOT REQUIRED TO TAKE ANY ACTION AT ALL.

Take notice that under Chapter 22 of the West Virginia Code, the undersigned well operator proposes to file or has filed this Notice and Application and accompanying documents for a Well Work Permit with the Administrator of the Office of Oil and Gas, West Virginia Department of Mines, with respect to a well at the location described on attached Application and depicted on attached Form IV-6. Copies of this Notice, the Application, the plat, and the Construction and Reclamation Plan have been mailed by registered or certified mail or delivered by hand to the person(s) named above (or by publication in certain circumstances) on or before the day of mailing or delivery to the Administrator.

RECEIVED
OCT 26 1983
OIL & GAS DIVISION
DEPT. OF MINES

6) EXTRACTION RIGHTS

Check and provide one of the following:

- Included in the lease or leases or other continuing contract or contracts by which I hold the right to extract oil or gas.
- The requirement of Code 22-4-1-(c) (1) through (4). (See reverse side for specifics.)

7) ROYALTY PROVISIONS

Is the right to extract, produce or market the oil or gas based upon a lease or leases or other contract or contracts providing for flat well royalty or any similar provision for compensation to the owner of the oil or gas in place which is not inherently related to the volume of oil or gas so extracted, produced or marketed? ~~XXX~~ No

If the answer above is No, nothing additional is needed. If the answer is Yes, you may use Affidavit Form IV-60.

See the reverse side for line item instructions, and for instructions concerning the required copies of the Notice and Application, plat, and Construction and Reclamation Plan.

of the information on the Application is verified to and the Notice is on behalf of the Well Operator by _____ and State by _____

L. Wheeler,
of October, 1983.
Mission expires 2/14, 1989.

Public, Harrison County,
of West Virginia

WELL

OPERATOR ALAMCO, INC.

By Daniel L. Wheeler
Its (Vice President)

Address P. O. Drawer 1740
Clarksburg, WV 26301
Telephone 304-623-6671

I N S T R U C T I O N S T O A P P L I C A N T

CONCERNING THE LINE ITEMS:

- 1) Date of Notice.
- 2) Your well name and number.
- 3) To be filled out by the Office of Oil & Gas.
- 4) & 5) Use separate sheet if necessary.
- 4) Surface owner(s) of record to be served with Notice and Application. However, see also Code § 22-4-1b(b) if "more than three tenants in common or other co-owners of interest described in subsection (a) of this section hold interests in such lands".
- 5(i) "Coal Operator" means any person, firm, partnership, partnership association or corporation that proposes to or does operate a coal mine.
- 5(ii, iii) See Code § 22-4-20.
- 6) See Code § 22-4-11(c). However, in lieu of filing the lease(s) or other continuing contract(s), the Applicant may fill out the information in the space provided below.
- 7) See Code § § 22-4-11(d, e).

CONCERNING THE REQUIRED COPIES FOR FILING AND SERVICE:

Filing. Code § 22-4-1k and Regulation 7.02 provide that the original and required copies of the Notice and Application must be filed with the Administrator, 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 § 22-4-1k(d) and the reclamation required by Code § 22-4-12b and Regulation 23, (iv) unless previously paid on the same well, the fees required by Code § 22-4-1a(c) and 22-3-12a, and (v) if applicable, the consent required by Code § 22-4-8a from the owner of any water well on dwelling within 200 feet of the proposed well.

Service. In addition, service must be made on the surface owner(s) and the person(s) with an interest in the coal. See Code § § 22-4-1m, 22-4-2, 22-4-2a, and 22-4-2b.

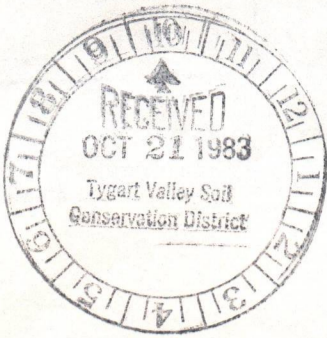
INFORMATION SUPPLIED UNDER CODE § 22-4-11(d)

IN LIEU OF FILING LEASE(S) AND OTHER CONTINUING CONTRACT(S)

Under the oath required to make the verification on the obverse side of this Notice, I depose and say that I am the person who signed the Notice for the Applicant, and that--

- (1) the tract of land is the same tract described in the Application to which this Notice applies, partly or wholly depicted in the accompanying plat, and described in the Construction and Reclamation Plan;
- (2) the parties and recordation data (if recorded) for lease(s) or other continuing contract(s) by which the Applicant claims the right to extract, produce or market the oil or gas are as follows:

<u>Grantor, lessor, etc.</u>	<u>Grantee, lessee, etc.</u>	<u>Royalty</u>	<u>Book Page</u>
Connecticut General	Manufacturers Light & Heat		272 433
Manufacturers Light and Heat	Columbia Gas Trans. Corpn.		- -
Columbia Gas Trans. Corpn.	Alamco, Inc.	1/8	No Recorded



State of West Virginia
Department of Mines
Oil and Gas Division

Date OCT. 20, 1983
Well No. A1447
API No. 47 - 083 - 0838
State County Permit

CONSTRUCTION AND RECLAMATION PLAN

Company Name ALAMCO
Address P. O. Box 1740
Clarksburg, West Virginia
Telephone 623-6671
Landowner WESTVACO

Designated Agent Daniel L. Wheeler
Address P. O. Box 1740
Clarksburg, West Virginia
Telephone 623-6671
Soil Cons. District TYGART VALLEY

Revegetation to be carried out by ALAMCO (Agent)

This plan has been reviewed by Tygart Valley SCD. All corrections
and additions become a part of this plan. 10/23/83 (Date) Jean Freeman (SCD Agent)

ACCESS ROAD

Structure Drainage Ditch (A)
Spacing Earthen
Page Ref. Manual 2:12

Structure CULVERTS (B)
Spacing 16" I.D. (WHERE NEEDED)
Page Ref. Manual 2:5

Structure RIPRAP (C)
Spacing ROCK
Page Ref. Manual N/A

Structure DRAINAGE Ditch OCT 2-6 1983 (1)
Material Earthen
Page Ref. Manual 2:12

Structure RIPRAP
Material ROCK
Page Ref. Manual N/A

Structure _____ (3)
Material _____
Page Ref. Manual _____

All structures should be inspected regularly and repaired if necessary. All commercial timber to be cut and stacked. All brush and small timber to be cut and removed from site before dirt work begins.

REVEGETATION

TREATMENT AREA I

Lime 3 Tons/acre
or correct to pH 6.5

Fertilizer 600 lbs/acre
(10-20-20 or equivalent)

Mulch Straw 2 Tons/acre
Seed* KENTUCKY 31 40 lbs/acre
DOMESTIC RYEGRASS 10 lbs/acre
BIRDFOOT TREFOIL 10 lbs/acre

TREATMENT AREA II

Lime 3 Tons/acre
or correct to pH 6.5

Fertilizer 600 lbs/acre
(10-20-20 or equivalent)

Mulch Straw 2 Tons/acre
Seed* Kentucky 31 40 lbs/acre
Domestic Ryegrass 10 lbs/acre
BIRDFOOT TREFOIL 10 lbs/acre

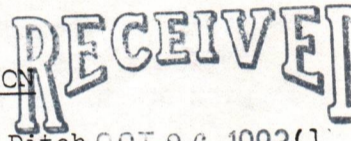
*Inoculate all legumes such as vetch, trefoil and clovers with the proper bacterium. Inoculate with 3X recommended amount.

NOTES: Please request landowners' cooperation to protect new seedling for one growing season. Attach separate sheets as necessary for comments.

PLAN PREPARED BY Daniel L. Wheeler

ADDRESS THIS INSTRUMENT PREPARED BY:
ALAMCO, INC.
P. O. Box 1740, Clarksburg, WV 26301

PHONE NO. 623-6671



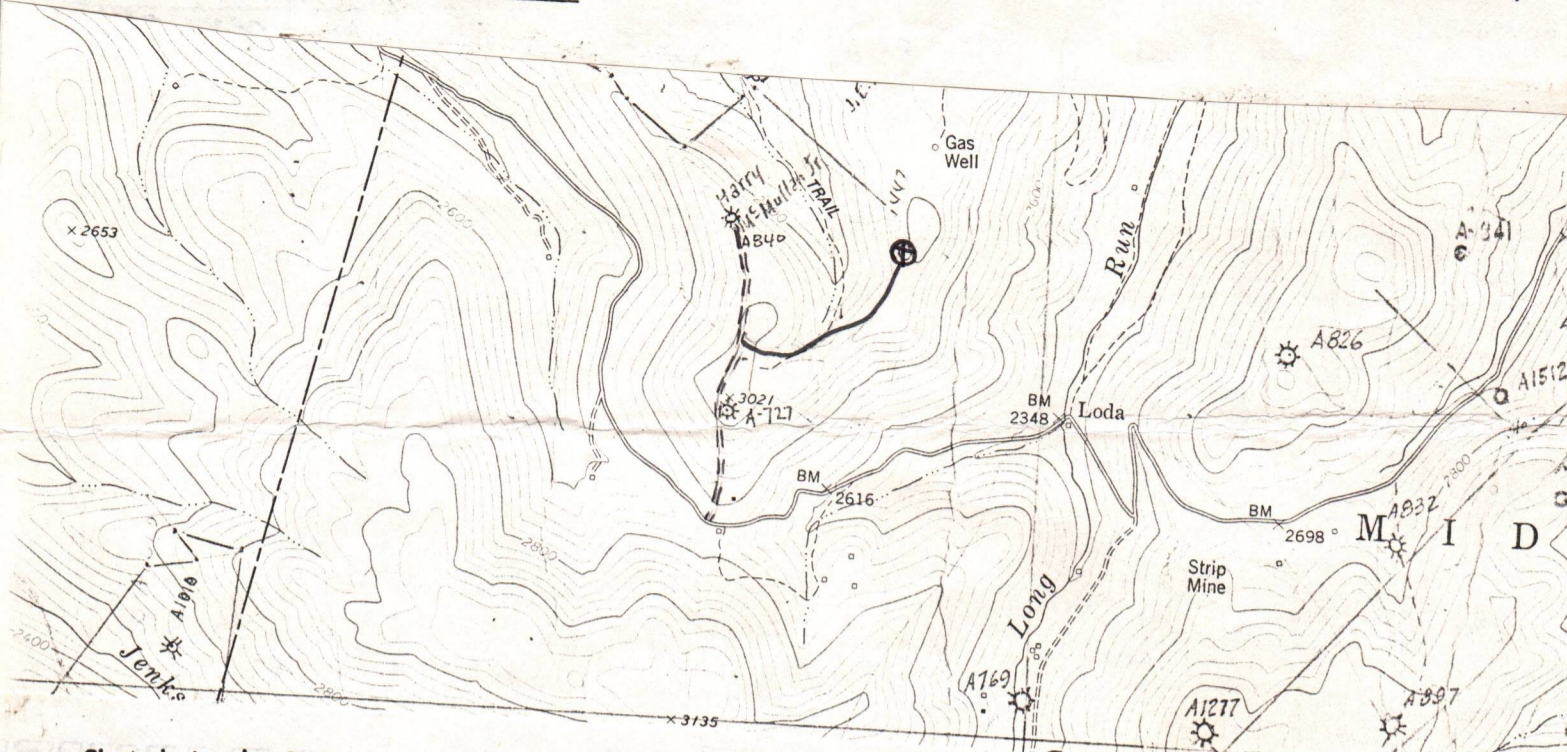
LOCATION

OIL & GAS DIVISION
DEPT. OF MINE

IV-9 Reverse
(REV 8-81)

Attach or photocopy section of
involved topographic map
Quadrangle CASSITY 7.5'

LEGEND
WELL SITE
ACCESS ROAD



Sketch to include well location, existing access road, roads to be constructed, wellsite, drilling pits and necessary structures numbered or lettered to correspond with the first part of this plan. Include all natural drainage.

LEGEND	
Property boundary	
Road	
Existing fence	
Planned fence	
Stream	
Open ditch	
Diversion	
Spring	
Wet Spot	
Building	
Drain pipe	
Waterway	

COMMENTS

Slope of access road 8 % -- Cuts to be on a 2:1 slope or less. Access road subject to change by company or landowner. All ditches and culverts will be maintained after construction is completed. If revision is made, revised plan will be submitted.

