



1) Date: August 4, 19 83
 2) Operator's Well No. A-1409 (McMullan)
 3) API Well No. 47 - 083 - 0816
 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 xx / Gas xx /
 B (If "Gas", Production xx / Underground storage xx / Deep xx / Shallow xx /)
- 5) LOCATION: Elevation: 3520' Watershed: Light Run
 District: Middle Fork County: Randolph Quadrangle: Adolph 7.5'
- 6) WELL OPERATOR ALAMCO
 Address P.O. Drawer 1740
Clarksburg, WV 26301
- 7) DESIGNATED AGENT Daniel L. Wheeler
 Address P.O. Drawer 1740
Clarksburg, WV 26301
- 8) OIL & GAS INSPECTOR TO BE NOTIFIED
 Name Robert Stewart
 Address P.O. Box 345
Jane Lew, WV 26378
- 9) DRILLING CONTRACTOR:
 Name Development Drilling
 Address P.O. Drawer 1740
Clarksburg, WV 26301
- 10) PROPOSED WELL WORK: Drill xx / Drill deeper xx / Redrill xx / Stimulate xx /
 Plug off old formation xx / Perforate new formation xx /
 Other physical change in well (specify) _____
- 11) GEOLOGICAL TARGET FORMATION, Elk
- 12) Estimated depth of completed well, 5700 feet
- 13) Approximate strata depths: Fresh, -- feet; salt, 1265 feet.
- 14) Approximate coal seam depths: none Is coal being mined in the area? Yes xx / No xx /
- 15) 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	Left in well		Top	Bottom
Conductor	16"				x	20'	20'	Cement to surface		
Fresh water	8 5/8"									
Coal	8 5/8"		20#	x		700'	700'	Cement to surface		<i>By Rule 15.05</i>
Intermediate										
Production	4 1/2"		10.55#	x		5700'	5700'	Required by Rule 15.01	Depths set	
Tubing										
Liners									Perforations:	

OFFICE USE ONLY
DRILLING PERMIT

Permit number 47-083-0816 Date September 8, 19 83

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 September 8, 1985 unless well work is commenced prior to that date and prosecuted with due diligence.

Bond:	Agent:	Plat:	Casing:	Fee:
BLANKET BOND	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	34412

[Signature]
 Administrator, Office of Oil and Gas



STATE OF WEST VIRGINIA

DEPARTMENT OF MINES AND METALS DIVISION
OFFICE USE ONLY

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

1) WELL LOCATION: B (L) Gas, Production
 2) LOCATION: Division: Middle Fork; County: Randolph; Well No: 3220
 3) WELL OPERATOR: Address: P.O. Drawer 1740, Clarkburg, WV 28301
 4) DESIGNATED AGENT: Name: Daniel J. Wheeler; Address: P.O. Drawer 1740, Clarkburg, WV 28301
 5) DRILLING CONTRACTOR: Name: Development Drilling; Address: P.O. Drawer 1740, Clarkburg, WV 28301
 6) PROPOSED WELL WORK: Drill XX / deeper / Redrill / Stimulate; Plug off old formation / Perform new formation / Other physical change in well (specify):
 7) GEOLOGICAL TARGET FORMATION: 5700
 8) APPROXIMATE COAL BEAM DEPTH: 1200
 9) APPROXIMATE FRESH DEPTH: 1200
 10) ESTIMATED DEPTH OF COMPLETED WELL: 5700
 11) CASING AND TUBING PROGRAM: Casing or tubing type: Cement to surface; Cement to surface; Cement to surface; Production; Lining

Casing or tubing type	Size	Grade	SPECIFICATIONS		FOOTAGE INTERVALS		CENTRAL FILLUP OR PACKER (If not left)	PACKERS
			Weight (lb/ft)	Wall thickness (in)	From (ft in well)	To (ft in well)		
Cement to surface	8 1/2"				20'	20'		
Cement to surface	8 1/2"				700'	700'		
Production	4 1/2"		10.53		5700'	5700'	Required by Dept. reg.	

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	Follow-up inspection(s)
Well work started	"
Completion of the drilling process	"
Well Record received	"
Reclamation completed	"

OTHER INSPECTIONS

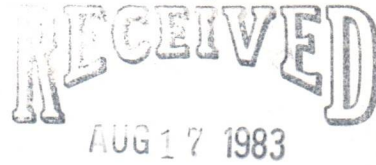
Reason: _____
 Reason: _____

BLANKET BOND
 Agent: _____
 Cause: _____
 Fee: _____



State of West Virginia
Department of Mines
Oil and Gas Division

Date AUGUST 4, 1983
Well No. A1409
API No. 47 - 083 - 0816
State County Permit



CONSTRUCTION AND RECLAMATION PLAN

OIL & GAS DIVISION

DEPT. OF MINES

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

Designated Agent Daniel 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. 8/13/83 (Date) Jean Freeman (SCD Agent)

NOTE: LOCATION ON KNOLL.

ACCESS ROAD

LOCATION

NO DRAINAGE NEEDED.

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

Structure Earth (1)
Material Earth
Page Ref. Manual 2

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

Structure _____ (2)
Material _____
Page Ref. Manual _____

Structure RIPRAP (C)
Spacing 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

TREATMENT AREA II

Lime 3 Tons/acre
or correct to pH 6.5

Lime 3 Tons/acre
or correct to pH 6.5

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

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
BIRDSEED TREFOIL 10 lbs/acre

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Seed* KENTUCKY 31 40 lbs/acre
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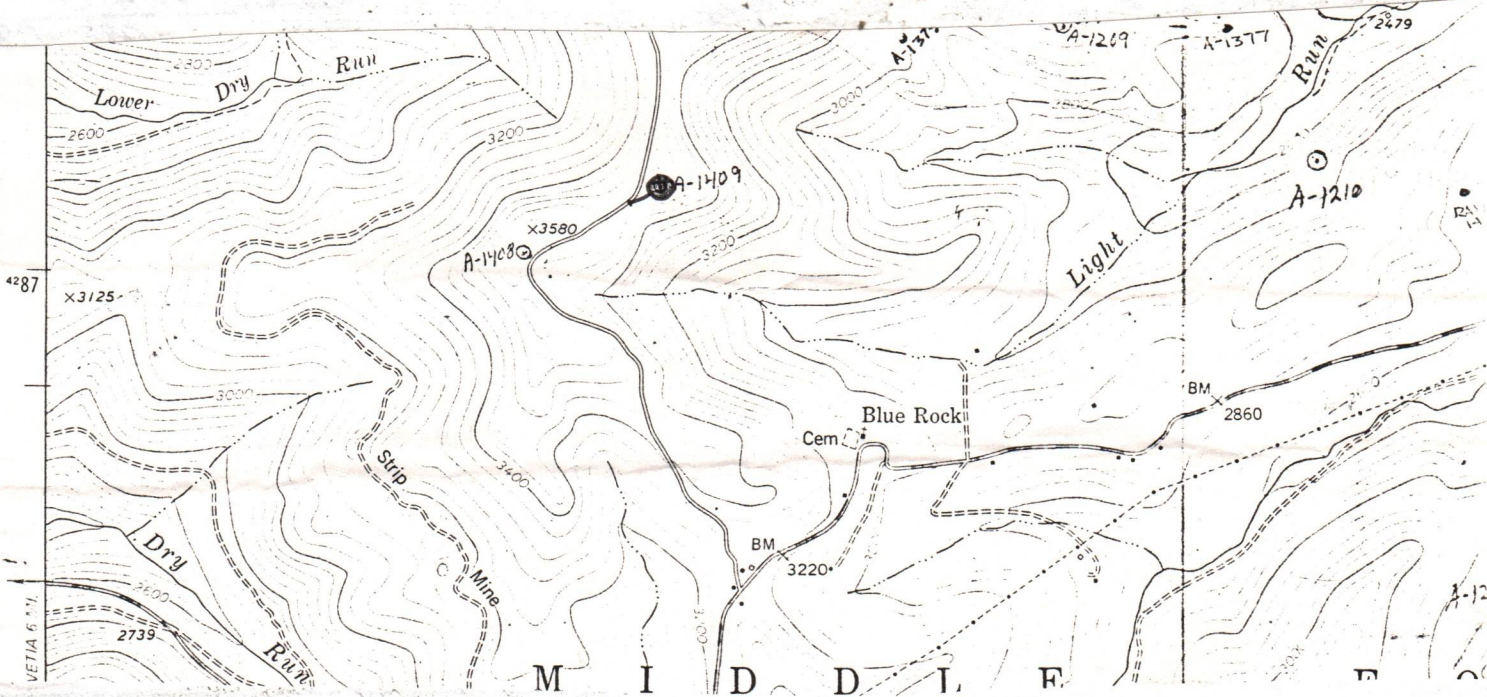
*Inoculate all legumes such as vetch, trefoil and clovers with the proper bacterium. Inoculate with 3X recommended amount.

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

PLAN PREPARED BY ALAMCO
Daniel Wheeler
ADDRESS 200 West Main Street
Clarksburg, West Virginia 26301
PHONE NO. (304) 623-6671

LEGEND	
WELL SITE	○
ACCESS ROAD	———

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

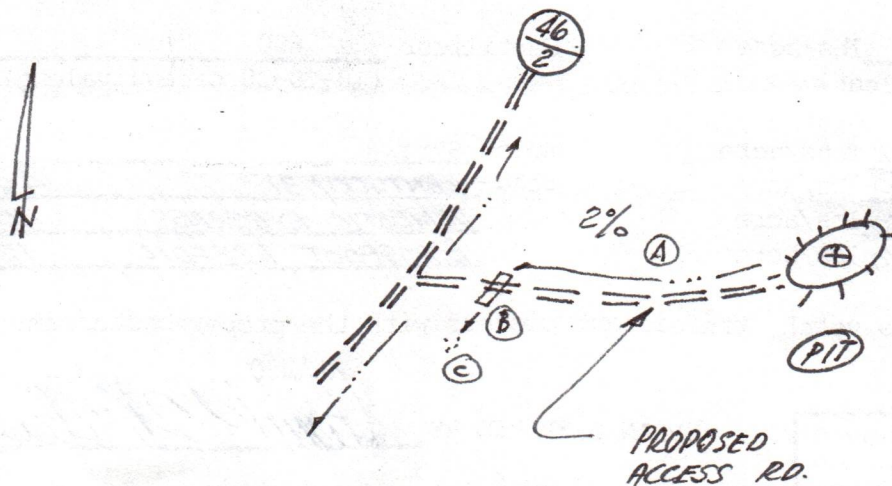


Sketch to include well location, existing access road, roads to be constructed, wellsite, drilling pits and necessary structures numbered or lettered to correspond with the first part of this plan. Include all natural drainage.

LEGEND	
Property boundary	——— ——— ——— ———
Road	=====
Existing fence	—— x —— x ——
Planned fence	—— / —— / ——
Stream	~~~~~
Open ditch	----->
Diversion	///////
Spring	○ →
Wet Spot	♂
Building	■
Drain pipe	○ → ○ →
Waterway	← =====

COMMENTS

Slope of access road 2 % -- 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.



NOTE: LOCATION ON KNOLL
NO DRAINAGE
DITCH NEEDED.

Recommend topsoil to be strip piled

PROPOSED ACCESS RD.

1) Date: August 4, 1983
 2) Operator's Well No. A-1409 (McMullan)
 3) API Well No. 47 083 .0816
 State County Permit

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

4) SURFACE OWNER(S) OF RECORD TO BE SERVED
 (i) Name Westvaco
 Address 203 Randolph Avenue
Elkins, WV 26241
 (ii) Name _____
 Address _____
 (iii) Name _____
 Address _____

5(i) COAL OPERATOR n/a
 Address _____
 5(ii) COAL OWNER(S) WITH DECLARATION ON RECORD:
 Name Harry McMullan
 Address P.O. Box 8
Washington, NC 27889
 Name Henry L. Davis c/o First PA Nat'l Bank
 Address Tower Center Square
Philadelphia, PA 19127
 5(iii) COAL LESSEE WITH DECLARATION ON RECORD:
 Name _____
 Address _____

PS Form 3800, Apr. 1976

RECEIPT FOR CERTIFIED MAIL
 NO INSURANCE COVERAGE PROVIDED - NOT FOR INTERNATIONAL MAIL
 (See Reverse)

SENT TO Henry L. Davis c/o First Penn. Nat'l Bank
Tower Center Square
Philadelphia, PA 19127
 POSTAGE \$2.00

CERTIFIED FEE	•
SPECIAL DELIVERY	•
RESTRICTED DELIVERY	•
SHOW TO WHOM AND DATE DELIVERED	•
SHOW TO WHOM AND DATE DELIVERED WITH RESTRICTED DELIVERY	•
SHOW TO WHOM AND DATE AND ADDRESS OF DELIVERY WITH RESTRICTED DELIVERY	•
RETURN RECEIPT SERVICE	•
OPTIONAL SERVICES	•
CONSULT POSTMASTER FOR FEES	•
TOTAL POSTAGE AND FEES	\$ <u>2.00</u>
POSTMARK OR DATE	<u>AUG 16 1983</u>

PS Form 3800, Apr. 1976

RECEIVED
 AUG 17 1983

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? Yes No

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

OIL & GAS DIVISION
 DEPT. OF MINES

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.

The truth of the information on the Notice and Application is verified and sworn to and the Notice is signed on behalf of the Well Operator in my County and State by

WELL OPERATOR ALAMCO
 By Daniel L. Wheeler
 Its Daniel L. Wheeler, Vice-President
 Address P.O. Box 1740
Clarksburg, WV 26301
 Telephone 304 6236671

DANIEL L. WHEELER
 this 4th day of August, 1983.
 My commission expires Feb. 14, 1989.


John D. Cox
 Notary Public, HARRISON County,
 State of WEST VIRGINIA

INSTRUCTIONS TO APPLICANT

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 any interests in common or other interests of this section hold interests in such lease(s) or other continuing right to extract, produce or market coal mine.
- 5(i) "Coal Lease" or other continuing contract(s)
- 5(ii, iii) See Code § 22-4-2, 22-4-2a, and 22-4-2b.
- 6) See Code § 22-4-11(d)
- 7) See Code § 22-4-11(d)

ATTN: LAND DEPT.
P 349 335 503
RECEIPT FOR CERTIFIED MAIL
NO INSURANCE COVERAGE PROVIDED—
NOT FOR INTERNATIONAL MAIL
(See Reverse)

SENT TO		WESTVACO	
STREET AND NO.		203 Randolph Avenue	
PO, STATE AND ZIP CODE		Elkins, West Virginia 26241	
POSTAGE		\$	
CONSULT POSTMASTER FOR FEES	CERTIFIED FEE		e
	SPECIAL DELIVERY		e
	RESTRICTED DELIVERY		e
	SHOW TO WHOM AND DATE DELIVERED		e
	SHOW TO WHOM, DATE, AND ADDRESS OF DELIVERY WITH RESTRICTED DELIVERY		e
ADDITIONAL SERVICES RETURN RECEIPT SERVICE	SHOW TO WHOM AND DATE DELIVERED WITH RESTRICTED DELIVERY		e
	SHOW TO WHOM, DATE AND ADDRESS OF DELIVERY WITH RESTRICTED DELIVERY		e
TOTAL POSTAGE AND FEES		\$	
POSTMARK OR DATE			

hip, partnership association or coal mine.

ing the lease(s) or other continuing information in the space

that the original and required with the Administrator, accompanying 11, (ii) a bond in one of the other security allowed Code § 22-4-12b and Regulation fees required by Code § 22-4-1a(c) required by Code § 22-4-8a from the of the proposed well.

Surface owner(s) and the person(s) 22-4-2, 22-4-2a, and 22-4-2b.

§ 22-4-11(d)
CONTINUING CONTRACT(S)
on the obverse side of this Notice, Notice for the Applicant, and that—the Application to which this Notice any plat, and described in the

or lease(s) or other continuing right to extract, produce or market

CONCERNING THE

Filing. (copies of accompanied by the forms by Code § 23, (iv) and 22-3-owner of

Service. with an

Und I depose

- (1) the appl Cons
- (2) the cont the

Grantor, lessor, etc. Grantee, lessee, etc. Royalty Book Page

Lease dated May 1, 1973
Harry McMullan etal unto Columbia Gas

1/8 B-283 P-408

Columbia Gas assigned to ALAMCO

(not recorded)



September 9, 1983

State of West Virginia
Department of Mines
Oil and Gas Division
1613 Washington Street, East
Charleston, West Virginia 25311

ATTN: Mr. Steve White

RE: API No. 47-083-0816 (A-1409)

Dear Mr. White:

Pursuant to your telephone conversation of September 8, 1983, I have corrected our permit number for Alamco Well No. A-1409 to reflect an API of 47-083-0816 instead of 47-083-0815.

Please file this letter along with your records to evidence the change has been made.

Sincerely yours,

Elsie Cox
Elsie Cox
Coordinator
Land Department

EAC/0909831-8

Producing formation 1st Elk, Alexander, Benson

Gas: Initial open flow 26 Mcf/d Oil: Initial open flow _____ Bbl/d
 Final open flow 2700 Mcf/d Final open flow _____ Bbl/d

Time of open flow between initial and final tests 4 hours

Static rock pressure 1275 psig (surface measurement after 84 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.

Well was fractured November 14, 1984
 Perforations: 4144 - 4149 Benson 5402 - 5404
 4529 - 4533 5411 - 5414
 4740 - 4743 5419 - 5420
 4833 - 4837 5422 - 5424 1st Elk
 4874 - 4877
 5025 - 5028 Alexander

WELL LOG

FORMATION COLOR HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS Including indication of all fresh and salt water, coal, oil and gas
Rock	0	14	1" stream water @ 40'
Sand & Shale	14	1267	Gas check @ 1190' No show
Lime	1267	1337	Gas check @ 2071' No show
Sand & Shale	1337	1689	Gas check @ 2386' No show
Little Lime	1689	1729	Gas check @ 2733' No show
Shale	1729	1733	Gas check @ 3428' No show
Big Lime	1733	1887	Gas check @ 4022' No show
Injun	1887	2008	Gas check @ 4178' No show
Sand & Shale	2008	5722 T.D.	Gas check @ 4492' No show Gas check @ 5722' 26 MCF/D


GAMMA RAY LOG TOPS

Gantz 1998'
 Gordon Stray 2232'
 Gordon 2393'
 4th Sand 2434'
 4th A Sand 2532'
 5th Sand 2582'
 Bayard 2620'
 Speechley 2722'
 Riley 3868'
 Benson 4142'
 Alexander 4515'
 1st Elk 5400
 2nd Elk 5461'
 3rd Elk 5593'

(Attach separate sheets as necessary)

ALAMCO, INC.

Well Operator

By: Bruce A. Prather 

Date: December 18, 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."



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

FINAL INSPECTION REPORT
INSPECTORS COMPLIANCE REPORT
January 4, 1985

RECEIVED

JUN 24 1985

OIL & GAS DIVISION
DEPT. OF MINES

COMPANY Alamco, Inc.
P. O. Box 1740
Clarksburg, West Virginia 26301

PERMIT NO 083-0816 (9-08-83)
FARM & WELL NO Westvaco #A-1409
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 Tracy*
DATE 6-17-85

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.

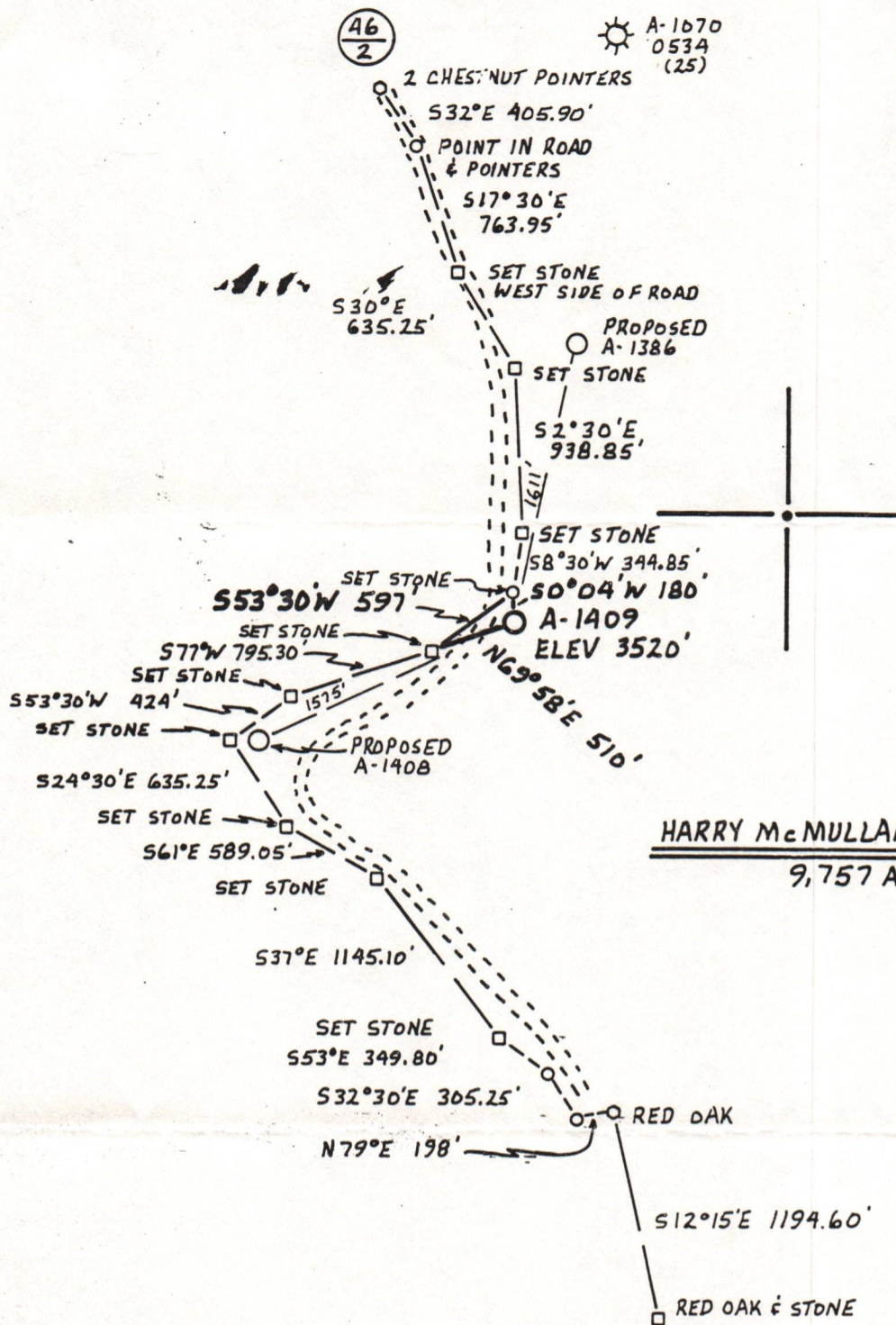
T. H. ...
Administrator-Oil & Gas Division

July 1, 1985
DATE

5.450
LATITUDE 38°45'00"

LONGITUDE 80°50'00"

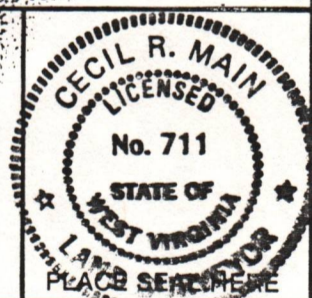
NORTH



(+) 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 BM 1,000 ± SW OF CEMETARY AT BLUE ROCK ELEV. 3220'

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 AUGUST 2, 1983
 OPERATOR'S WELL NO. A-1409
 API WELL NO. _____

WELL TYPE: OIL ___ GAS X LIQUID INJECTION ___ WASTE DISPOSAL ___
 (IF "GAS,") PRODUCTION X STORAGE ___ DEEP ___ SHALLOW X
 LOCATION: ELEVATION 3520 WATER SHED LIGHT RUN
 DISTRICT MIDDLE FORK COUNTY RANDOLPH
 QUADRANGLE ADOLPH 7.5'

SURFACE OWNER WESTVACO ACREAGE 9,757 Ac.
 OIL & GAS ROYALTY OWNER HARRY McMULLAN, Jr. ESTATE LEASE ACREAGE 9,757 Ac.
 LEASE NO. 2126

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 5,700'
 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

FORM IV-6 (8-78) H.T. HALL

COUNTY NAME PERMIT



Date December 18, 1984
 Operator's _____
 Well No. A-1409
 Farm McMullan
 API No. 47 - 083 - 0816

RECEIVED

DEC 21 1984

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES

OIL & GAS DIVISION OIL and GAS DIVISION
DEPT. OF MINES 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 XX /)

LOCATION: Elevation: 3520' Watershed Light Run
 District: Middle Fork County: Randolph Quadrangle: Adolph 7.5'

COMPANY ALAMCO, INC
200 West Main Street
 ADDRESS Clarksburg, West Virginia 26301

DESIGNATED AGENT ALAMCO, INC
200 West Main Street
 ADDRESS Clarksburg, West Virginia 26301

SURFACE OWNER Westvaco
 ADDRESS 203 Randolph, Elkins, WV 26241

MINERAL RIGHTS OWNER Harry McMullan III
 ADDRESS P.O. Box 8, Washington, NC 27889

OIL AND GAS INSPECTOR FOR THIS WORK Robert Stewart
 ADDRESS P.O. Box 345, Jane Lew, WV

PERMIT ISSUED September 8, 1983

DRILLING COMMENCED October 27, 1984

DRILLING COMPLETED November 3, 1984

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

Casing & Tubing Size Cond.	Used in Drilling	Left in Well	Cement fill up Cu. Ft.
11-3/4"	23'	Pulled	
9 5/8"			
8 5/8"	995'	995'	to surface
7"			
5 1/2"			
4 1/2"	5532'	5532'	w/300 sks 3700'
3			
2			
Liners used			

GEOLOGICAL TARGET FORMATION Elk DEPTH 5700 FEET

Depth of completed well 5722 feet Rotary x / Cable Tools _____
 Water Strata depth: Fresh 40 feet Salt _____ feet
 Coal seam depth: None listed Is coal being mined in this area? No

OPEN FLOW DATA

Producing formation 1st Elk, Alexander, Benson Pay zone depth See Back feet
 Gas: Initial open flow 26 Mcf/d Oil: Initial open flow _____ Bbl/d
 Final open flow 2700 Mcf/d Final open flow _____ Bbl/d
 Time of open flow between initial and final tests 4 hours
 Static rock pressure 1275 psig (surface measurement after 84 hours shut-in
 (If applicable due to multiple completion--))
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 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)

RHNW - 0816

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

Well was fractured November 14, 1984
 Perforations: 4144 - 4149 Benson 5402 - 5404
 4529 - 4533 5411 - 5414
 4740 - 4743 5419 - 5420
 4833 - 4837 5422 - 5424 1st Elk
 4874 - 4877
 5025 - 5028 Alexander

WELL LOG

FORMATION COLOR HARD OR SOFT	TOP FEET	BOTIOM FEET	REMARKS
			Including indication of all fresh and salt water, coal, oil and gas
Rock	0	14	1" stream water @ 40'
Sand & Shale	14	1267	Gas check @ 1190' No show
Lime	1267	1337	Gas check @ 2071' No show
Sand & Shale	1337	1689	Gas check @ 2386' No show
Little Lime	1689	1729	Gas check @ 2733' No show
Shale	1729	1733	Gas check @ 3428' No show
Big Lime	1733	1887	Gas check @ 4022' No show
Injun	1887	2008	Gas check @ 4178' No show
Sand & Shale	2008	5722 T.D.	Gas check @ 4492' No show Gas check @ 5722' 26 MCF/D

GAMMA RAY LOG TOPS

Gantz 1998'
 Gordon Stray 2232'
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 4th Sand 2434'
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 Alexander 4515'
 1st Elk 5400
 2nd Elk 5461'
 3rd Elk 5593'

(Attach separate sheets as necessary)

ALAMCO, INC.

Well Operator

By:

Bruce A. Prather



Date: December 18, 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."