

RECEIVED
FORM 11-2(B)
Obverse
7-88
FILE COPY

DEC 27 1984



1) Date: December 27, 1984
2) Operator's Well No. Lyons F-2
3) API Well No. 47 - 085 - 7274
State County Permit

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

- 4) WELL TYPE: A Oil _____ / Gas X /
B (If "Gas", Production X / Underground storage _____ / Deep _____ / Shallow X /)
- 5) LOCATION: Elevation: 680' Watershed: South Fork of Hughes River
District: Murphy County: Ritchie Quadrangle: McFarlan 7.5'
- 6) WELL OPERATOR Shale Service, Inc.
Address P.O. Box 83 44575
Harrisville, WV 26362
- 7) DESIGNATED AGENT D. L. Stewart
Address P.O. Box 83
Harrisville, WV 26362
- 8) OIL & GAS INSPECTOR TO BE NOTIFIED
Name Samuel Hersman
Address P.O. Box 66
Smithville, WV 26170
- 9) DRILLING CONTRACTOR:
Name Shale Service, Inc.
Address P.O. Box 83
Harrisville, WV 26362
- 10) PROPOSED WELL WORK: Drill X / Drill deeper _____ / Redrill _____ / Stimulate X /
Plug off old formation _____ / Perforate new formation _____
Other physical change in well (specify) _____
- 11) GEOLOGICAL TARGET FORMATION, Alexander Sand
- 12) Estimated depth of completed well, 5200' feet
- 13) Approximate strata depths: Fresh, 145' feet; salt, _____ feet.
- 14) Approximate coal seam depths: n/a Is coal being mined in the area? Yes _____ / No X /

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		
Conductor	113/4				X	40'			Kinds
Fresh water									
Coal									Sizes
Intermediate	8 5/8	CW	23 lb.	X		780'	780'	To Surface	By rule 15.05
Production	4 1/2	ERW	20.5	X			5200'	2000' Fill	Depths set
Tubing								Up	as required
Liners									Perforations
									Top Bottom

OFFICE USE ONLY
DRILLING PERMIT

Permit number 47-085-7274 Date December 27, 1984

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 December 27, 1986 unless well work is commenced prior to that date and prosecuted with due diligence.

Bond:	Agent:	Plat:	Casing	Fee
<u>187</u>	<u>MH</u>	<u>MH</u>	<u>MH</u>	<u>2486</u>

Margaret J. Hesse
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.

File



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OCT 1984

DEPT. OF MINES
OIL & GAS DIVISION

OFFICE USE ONLY

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

WELL LOCATION: ...
WELL OPERATOR: ...
ADDRESS: ...
DATE: ...

FOR PROPOSED WELL WORK ...
DATE: ...

DATE	DESCRIPTION	INITIALS	DATE	DESCRIPTION	INITIALS
12.02	Application received				
	Well work started				
	Completion of the drilling process				
	Well Record received				
	Reclamation completed				

OFFICE USE ONLY

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

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

OTHER INSPECTIONS

Reason: _____
Reason: _____

184
MAY 1984

1) Date: December 27, 1984
2) Operator's Well No. Lyons F-2
3) API Well No. 47-085-7274
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 Box 577
Rupert, WV 25984
(ii) Name _____
Address _____
(iii) Name _____
Address _____

5(i) COAL OPERATOR
Address _____

5(ii) COAL OWNER(S) WITH DECLARATION ON RECORD:
Name _____
Address _____

Name _____
Address _____

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

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 Shale Service, Inc.
By D. L. Stewart
Its President
Address P.O. Box 83
Harrisville, WV 26362
Telephone 643-4711

Lisa D. Gibson
this 27 day of December, 1984.
My commission expires 6/13, 1994.

Lisa D. Gibson
Notary Public, Ritchie County,
State of West Virginia

6) EXTRACTION RIGHTS

Check and provide one of the following:

- Included is 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? Yes 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.

DEPT. OF MINES
OIL & GAS DIVISION

RECEIVED
DEC 27 1984

W. W. Woodlands

FORM IV-2(B)
Reverse

SURFACE OWNER'S COPY



RECEIVED
OIL & GAS DIVISION
DEPT. OF MINES, OIL & GAS
JAN 15 1984

**INSTRUCTIONS TO SURFACE OWNERS
AND
EXPLANATION OF METHODS AND TIME LIMITS TO COMMENT
ON OIL AND GAS WELL WORK PERMIT**

The well operator named in the Notice and this Application and the attached materials is applying for a permit from the State to do oil or gas well drilling or other well work. You are being served with these materials because surface owners have the right to file comments before the permit is issued. (NOTE: If the surface tract is owned by more than three persons, in multiple heirship for example, then these materials were served on you because your name appeared on the Sheriff's tax ticket on the land or because you actually occupy the surface tract. In either case, you may be the only owner who will actually receive these materials.) See Chapter 22, Article 4 of the W. Va. Code. Permits are valid for 24 months.

If you do not own any interest in the surface tract, please forward these materials to the true owner immediately if you know who it is. Also, please notify the well operator named in the materials and the Administrator of the Office of Oil and Gas in the West Virginia Department of Mines immediately.

NOTE: You are not required to file any comment at all.

Where to file comments and obtain additional information:

Administrator of the Office of Oil and Gas
West Virginia Department of Mines
1615 Washington Street East
Charleston, West Virginia 25311
(304) 348-2057

Who may file comments? If you wish to file comments, you must be an owner of record of (1) an interest in the surface tract on which the well already is or is about to be located, or (2) an interest in any other surface tract under the same oil or gas lease which will be utilized for roads or other land disturbances.

Time limits for comments. The law requires these materials to be delivered on or before the date the operator files his Application. You have **FIFTEEN (15) DAYS** after the filing date to file your comments as provided in **Methods for Filing Comments** below. You may call the Administrator's office at the above telephone number to be sure of the date. However, if you have been contacted by the well operator, and if you have signed a "voluntary statement of no objection" to any of the planned work described in these materials, then the permit may be issued at any time.

Comments must be in writing. Your comments must include your name, address and telephone number, the well operator's name and well number, and the approximate location of the proposed well site including district and county from the application. You may add other documents, such as sketches, maps or photographs to support your comments.

Methods for filing comments. Comments must be filed in person or received in the mail at the Administrator's office by the time stated above. Check with your postmaster to ensure adequate delivery time or to arrange special expedited handling.

The Administrator for Oil and Gas has the power to deny or condition a well work permit based on your comments on the following grounds:

- "(1) The proposed well work will constitute a hazard to the safety of persons; or
- "(2) The plan for soil erosion and sediment control is not adequate or effective; or
- "(3) Damage would occur to publicly owned lands or resources; or
- "(4) The proposed well work fails to protect fresh water sources or supplies."

If you want a copy of the permit as it is finally issued, or a copy of the order denying the permit, you should request a copy from the Administrator.

List of Water Testing Laboratories. The Administrator maintains a list of water testing laboratories which you can hire to test your water to establish water quality prior to and after drilling. Contact the Administrator's office or an Oil and Gas Inspector to obtain a copy of the list.

Handwritten signatures and notes at the bottom of the page.

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JUL 16 1985

OIL & GAS DIVISION
DEPT. OF MINES

State of West Virginia
Department of Mines
Oil and Gas Division

Date March 8, 1985
Operator's
Well No. F-2
Farm D. Lyons
API No. 47-085-7274

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: 680' Watershed South Fork Hughes River
District: Murphy County Ritchie Quadrangle McFarlan

COMPANY Shale Service Inc.

ADDRESS Harrisville, WV 26362

DESIGNATED AGENT D.L. Stewart

ADDRESS Harrisville, WV 26362

SURFACE OWNER Westvaco Corporation

ADDRESS Rupert, WV

MINERAL RIGHTS OWNER Alkire Heirs

ADDRESS _____

OIL AND GAS INSPECTOR FOR THIS WORK Samuel N.

Hersman ADDRESS Smithville, WV 26178

PERMIT ISSUED December 27, 1984

DRILLING COMMENCED 1/3/85

DRILLING COMPLETED 1/7/85

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

Casing Tubing	Used in Drilling	Left in Well	Cement fill up Cu. ft.
Size 20-16 Cord.			
13-10"			
9 5/8			
8 5/8	808'	808'	to surf
7			
5 1/2			
4 1/2	2407	2407	2200
3			
2			
Liners used			

GEOLOGICAL TARGET FORMATION Devonian Shale Depth 1500 feet

Depth of completed well 3700 feet Rotary / Cable Tools _____

Water strata depth: Fresh N/A feet; Salt N/A feet

Coal seam depths: None Is coal being mined in the area? NO

OPEN FLOW DATA

Producing formation Warren, Speechley, Balltown, Alexander Pay zone depth 1500 feet

Gas: Initial open flow 200 Mcf/d Oil: Initial open flow Show Bbl/d

Final open flow 200 Mcf/d Final open flow Show Bbl/d

Time of open flow between initial and final tests 4 hours

Static rock pressure 675 psig (surface measurement) after 24 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 Oil: 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)

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

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JAN 4 - 1985

INSPECTOR'S WELL REPORT

OIL & GAS DIVISION
DEPT. OF MINES

Permit No. 85-7274

Oil or Gas Well _____
(KIND)

Company <u>Shale Service Inc.</u>	CASING AND TUBING	USED IN DRILLING	LEFT IN WELL	PACKERS
	Address _____	Size		
Farm <u>Westvaco</u>	16			
Well No. <u>Lyons F-2</u>	13			Size of _____
District <u>Murphy</u> County <u>Ritchie</u>	10			
Drilling commenced _____	8 1/4			Depth set _____
Drilling completed _____ Total depth _____	6 3/8			
Date shot _____ Depth of shot _____	5 3/16			Perf. top _____
Initial open flow _____ /10ths Water in _____ Inch	3			Perf. bottom _____
Open flow after tubing _____ /10ths Merc. in _____ Inch	2			Perf. top _____
Volume _____ Cu. Ft.	Liners Used _____			Perf. bottom _____
Rock pressure _____ lbs. _____ hrs.	CASING CEMENTED _____ SIZE _____ No. FT. _____ Date _____			
Oil _____ bbls., 1st 24 hrs.	NAME OF SERVICE COMPANY _____			
Fresh water _____ feet _____ feet	COAL WAS ENCOUNTERED AT _____ FEET _____ INCHES			
Salt water _____ feet _____ feet	_____ FEET _____ INCHES FEET _____ INCHES			
	_____ FEET _____ INCHES FEET _____ INCHES			

Drillers' Names _____

Remarks: Visit and check location site - Location very small and close to creek
Shale Service will install culvert in creek crossing with rock -
also to install culverts in creek coming up Mc Farlan creek. with
help by D.A.C. and Subsurface Energy -

12-28-84
DATE

Samuel N. Hersman
DISTRICT WELL INSPECTOR

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

INSPECTOR'S WELL REPORT

Permit No. 85-7274

Oil or Gas Well _____
(KIND)

Company <u>Shale Service, Inc.</u>	CASING AND TUBING	USED IN DRILLING	LEFT IN WELL	PACKERS
	Address _____	Size		
Farm <u>Westvaco</u>	16			
Well No. <u>Lyons F-2</u>	13			Size of _____
District <u>Murphy</u> County <u>Putnam</u>	10			
Drilling commenced <u>12-28-84</u>	8 1/4			Depth set _____
Drilling completed _____ Total depth _____	6 5/8			
Date shot _____ Depth of shot _____	5 3/16			Perf. top _____
Initial open flow _____ /10ths Water in _____ Inch	3			Perf. bottom _____
Open flow after tubing _____ /10ths Merc. in _____ Inch	2			Perf. top _____
Volume _____ Cu. Ft.	Liners Used _____			Perf. bottom _____
Rock pressure _____ lbs. _____ hrs.	CASING CEMENTED _____ SIZE _____ No. FT. _____ Date _____			
Oil _____ bbls., 1st 24 hrs.	NAME OF SERVICE COMPANY _____			
Fresh water _____ feet _____ feet	COAL WAS ENCOUNTERED AT _____ FEET _____ INCHES			
Salt water _____ feet _____ feet	_____ FEET _____ INCHES FEET _____ INCHES			
	_____ FEET _____ INCHES FEET _____ INCHES			

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JAN 8 - 1985
OIL & GAS DIVISION
DEPT. OF MINES

Drillers' Names _____

Remarks: Visit - 3453 feet deep.
1845-1895 INJUN SAND
2325-2494 picked up gas show in this area.

1-2-85
DATE

Samuel N. Hersman
DISTRICT WELL INSPECTOR

✓
1R-26
Obverse

INSPECTOR'S PERMIT SUMMARY FORM

WELL TYPE _____
ELEVATION 680
DISTRICT MURPHY
QUADRANGLE MCFARLAN 7.5
COUNTY RITCHIE

API# 47-085-7274 (12-27-84)
OPERATOR SHALE SERVICE, INC
TELEPHONE _____
FARM WV PULP + PAPER CO
WELL # LYONS F. 2

SURFACE OWNER _____ COMMENTS _____ TELEPHONE _____

TARGET FORMATION _____ DATE APPLICATION RECEIVED _____

DATE STARTED _____

LOCATION 12-28-84 NOTIFIED 12-28-84 DRILLING COMMENCED 12-28-84

WATER DEPTHS 12', _____, _____, _____

COAL DEPTHS _____, _____, _____, _____

CASING

Ran 802' feet of 8 5/8" "pipe on 12-30-84 with 210 SACKS fill up
Ran _____ feet of _____ "pipe on _____ with _____ fill up
Ran _____ feet of _____ "pipe on _____ with _____ fill up
Ran _____ feet of _____ "pipe on _____ with _____ fill up

DEPARTMENT OF OIL AND GAS

TD _____ feet on _____

PLUGGING

MAY 6 1986

Type	From	To	Pipe Removed

Pit Discharge date: _____ Type _____

Field analysis ph _____ fe _____ cl _____

Well Record received _____

Date Released 4-30-86

Samuel N. Heroman
Inspector's signature

API# 47 085 - 7274

LIST ALL VISITS FOR THIS PERMIT

	DATE	TIME	PURPOSE	COMMENTS
1	12-28-84		Check out site	Prior to dirt work (Permit delivied traffic)
2	12-31-84		Visit - Pick up casing report	
3	1-2-84		Visit - 3453 foot deep	
4	3-5-85		Write violation on	Code 22-4-12B (22B-1-30)
5	11-18-85		Write abatement on	Code 22B-1-30
6	4-30-86		Make Final inspection	
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				

Notes

RECEIVED

MAR 12 1985



IV-27
9-83

OIL & GAS DIVISION
DEPT. OF MINES

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES

44575

Date: 3-5-85
Well No: LYONS F-2
API NO: 47-085-7274
State County Permit

922

Oil and Gas Division
NOTICE OF VIOLATION

WELL TYPE: Oil ___ / Gas X Liquid Injection ___ / Waste Disposal ___ /
Of "Gas" - Production X / Storage ___ / Deep ___ / Shallow X /
LOCATION: Elevation: 680 Watershed: SOUTH FORK OF HUGHES RIVER
District: MURPHY County: RITCHIE Quadrangle: McFARLAN 7
WELL OPERATOR SHALE SERVICE, INC DESIGNATED AGENT D.L. STEWART
Address P.O. BOX 83 Address P.O. BOX 83
HARRISVILLE, WV 26362 HARRISVILLE, WV 26362

The above well is being posted this 5 day of MARCH, 1985, for a violation of Code 22-4-12B and/or Regulation _____, set forth in detail as follows:
(USE REVERSE SIDE OF THIS NOTICE IF NECESSARY)

ON 12-28-84 SHALE SERVICE, INC. (A.D. STEED) BY VERBEL ORDER WAS INSTRUCTED TO PLACE CULVERTS IN TWO (2) CREEK CROSSINGS GOING TO ABOVE LOCATION SITE, USED FOR ACCESS ROAD.
ORDER WAS BY GREG HENGER (DNR) AND SAMUEL N. HERSMAN (DISTRICT INSPECTOR)
(OPERATOR HAS NOT COMPLIED WITH THIS.)
OPERATOR IS NOW ORDERED TO COMPLY WITH THIS AND PLACE CULVERTS IN CREEK CROSSINGS.

A copy of this notice has been posted at the well site and sent by certified or registered mail to the indicated well operator or his designated agent.
You are hereby granted until MARCH 12, 1985, to abate this violation.
Failure to abate the violation may result in action by the Department under Code 22-4-17 or Code 22-4-18.

Samuel N. Hersman
Oil and Gas Inspector
Address P.O. BOX 66
SMITHVILLE WV 26178
Telephone: 477-3597

RECEIVED

MAR 13 1985

IV-27
9-83

OIL & GAS DIVISION
DEPT. OF MINES



STATE OF WEST VIRGINIA
DEPARTMENT OF MINES

Date: _____
Well No: _____
API No: _____
State County Permit _____

Oil and Gas Division NOTICE OF VIOLATION

WELL TYPE: Oil Gas Liquid Injection Waste Disposal
OF "GAS": Production Storage Deep Shallow
LOCATION: Location: _____
District: _____
County: _____
Quadrangle: _____
WELL OPERATOR: _____
Address: _____
DESIGNATED AGENT: _____
Address: _____

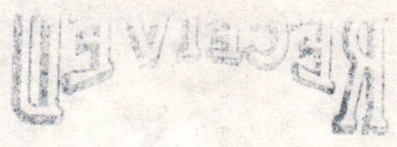
The above well is being posted this _____ day of _____, 19____, for a violation of Code 22-4-10 and/or Regulation _____, set forth in detail as follows:
(USE REVERSE SIDE OF THIS NOTICE IF NECESSARY)

A copy of this notice has been posted at the well site and sent by certified registered mail to the indicated well operator or his designated agent. You are hereby granted until _____, 19____, to abate this violation. Failure to abate the violation may result in action by the Department under Code 22-4-10 or Code 22-4-15.

Oil and Gas Inspector

Address _____

Telephone: _____



DIVISION OF OIL & GAS
DEPARTMENT OF ENERGY

STATE OF WEST VIRGINIA

DEPARTMENT OF MINES, OIL AND GAS DIVISION

NOTICE OF ABATEMENT

11-18-82

Date: 11-18-82
Operator: LVOHS F-2
Well Number: 7274
API Well No.: 088
State: PAINT
County: PAINT

WELL TYPE: Oil Gas Liquid Injection Waste disposal
LOCATION: Elevation: 580
District: MURPHY
County: RITCHIE
Watershed: SOUTH FORK OF HUGHES RIVER
Well Operator: SHALE SERVICE, INC.
Address: P.O. Box 83
HARRISVILLE, WV 26332
Designated Agent: D.L. STEWART
Address: P.O. Box 83
HARRISVILLE, WV 26332

Notice is hereby given that the undersigned authorized oil and gas inspector made a special inspection of the above named well on 11-18-82. The violation of Code 22-4-12b inspectors found to exist on MARCH 22, 1982 by Form IV-27, Notice of Violation, Form IV-28, "Imminent Danger Order", of that date has been totally abated. If the abated violation was found by an Imminent Danger Order resulting operations to occur, such requirements hereby rescinded, and the well operators hereby notified that he may resume operations.

COMMENTS

A copy of this notice has been posted at the well site and sent by certified or registered mail to the indicated well operator or his designated agent.

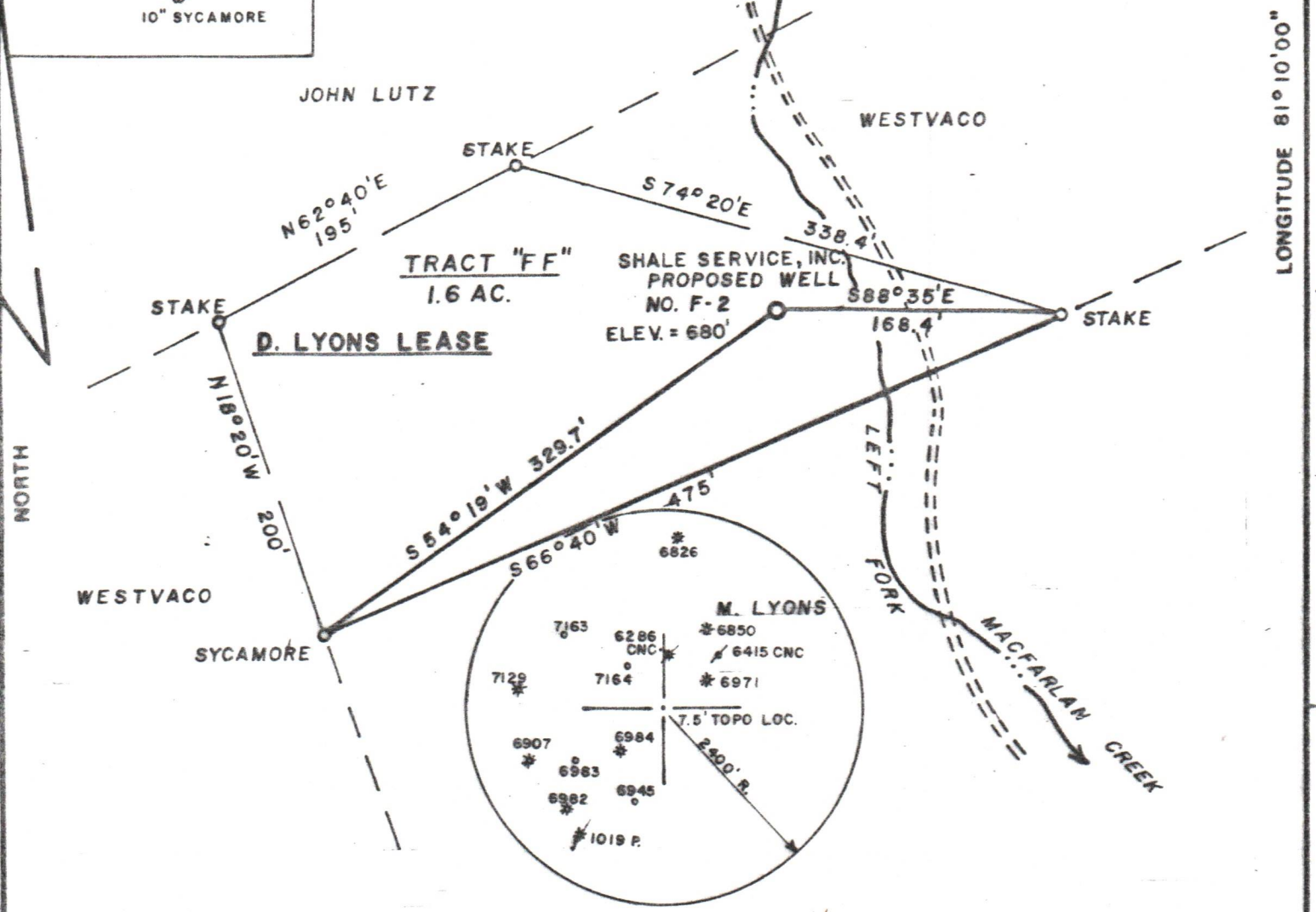
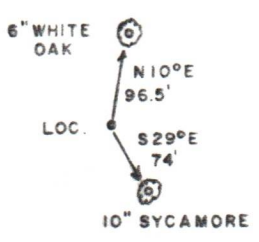
Signature: *James M. Hammer*
Title: Oil and Gas Inspector
Address: P.O. Box 55
SMITHVILLE, WV 26178
Telephone: 477-3227

58245 1774 12/27/14

7775'

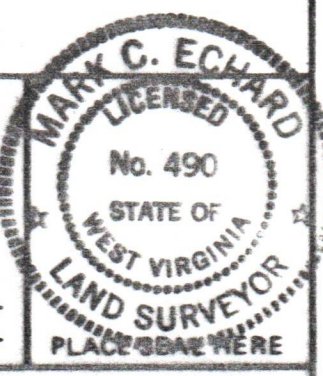
LATITUDE 39°07'30"

WELL REFERENCES



FILE NO. _____
DRAWING NO. _____
SCALE 1" = 100'
MINIMUM DEGREE OF ACCURACY 1/200
PROVEN SOURCE OF ELEVATION TOP OF KNOB 2250' ± NW OF LOCATION, ELEV. = 1014'

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.
Mark C. Echard
(SIGNED) MARK C. ECHARD
R.P.E. _____ L.L.S. 490



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



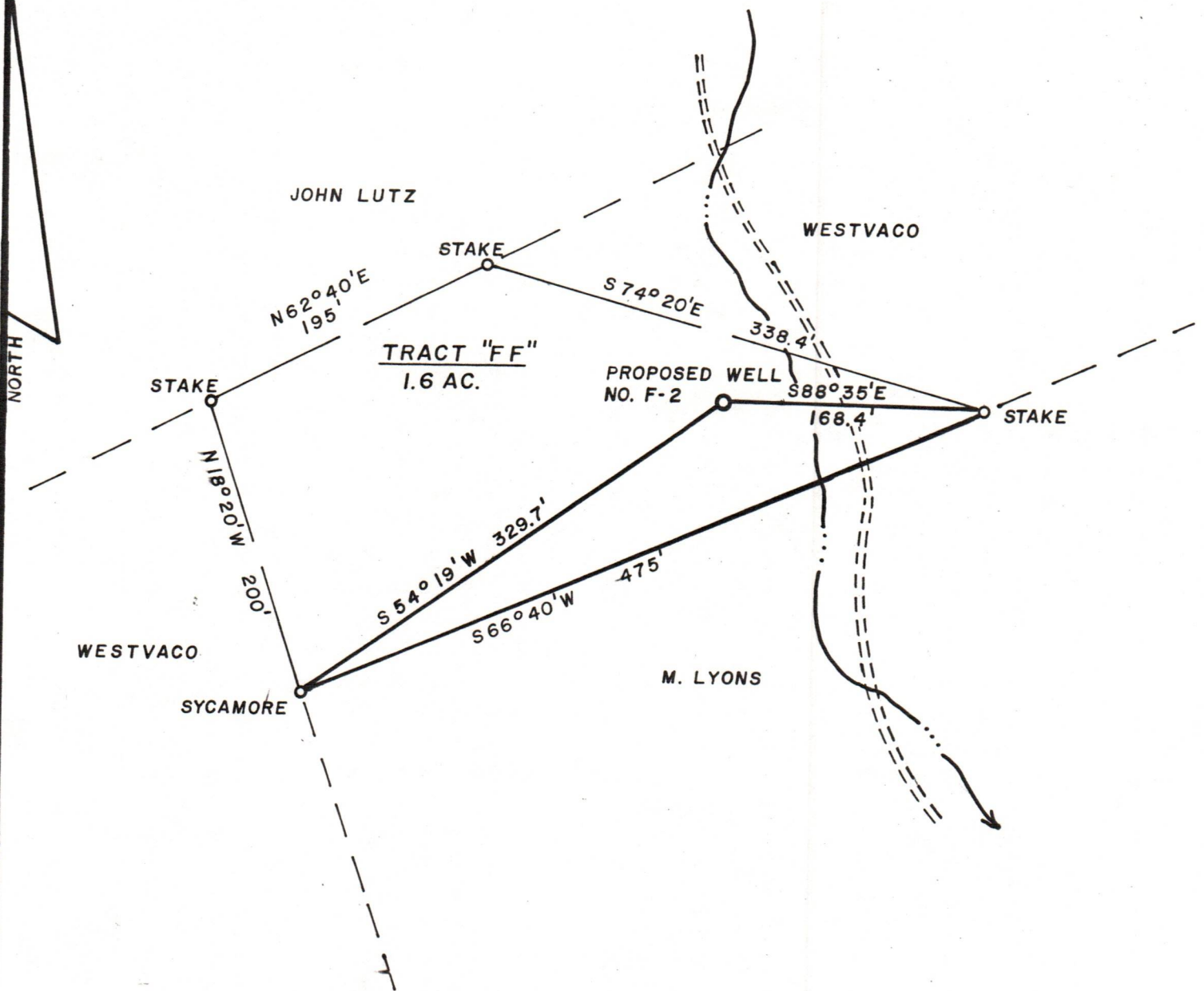
DATE DECEMBER 26, 1984
OPERATOR'S WELL NO. F-2
API WELL NO. 47-085-7274
STATE COUNTY PERMIT

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 680' WATER SHED LEFT FORK MACFARLAN CREEK
DISTRICT MURPHY COUNTY RITCHIE
QUADRANGLE MACFARLAN 7.5'
SURFACE OWNER W.VA. PULP & PAPER CO. ACREAGE 1.6 OF 96
OIL & GAS ROYALTY OWNER ALKIRE HEIRS LEASE ACREAGE 1.6 OF 96
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 ALEXANDER ESTIMATED DEPTH 5700'
WELL OPERATOR SHALE SERVICE, INC. DESIGNATED AGENT D.L. STEWART
ADDRESS P.O. BOX 83 HARRISVILLE, WV 26362 ADDRESS P.O. BOX 83 HARRISVILLE, WV 26362

PLAT OF TRACT "FF"
 DELIA LYONS LEASE
 1.6 ACRES OF 96 ACRES
 MURPHY DISTRICT - RITCHIE COUNTY,
 WEST VIRGINIA

SURFACE: W. VA. PULP & PAPER CO.
 SCALE: 1" = 100'



DECEMBER 26, 1984

PLOTTED BY: *Mark C. Echard*

MARK C. ECHARD, L.L.S. No. 490
 STAR ROUTE 71 - BOX 6
 GLENVILLE, W. VA. 26351

IV-9
(Rev 8-81) DEC 27 1984

RECEIVED



DATE December 26, 1984
WELL NO. Lyons F-2
API NO. 47 - 085 - 7274

State of West Virginia
Department of Mines
Oil and Gas Division

OIL & GAS DIVISION
DEPT. OF MINES

CONSTRUCTION AND RECLAMATION PLAN

COMPANY NAME SHALE SERVICE, INC.
Address P.O. Box 83
HARRISVILLE, W.VA. 26362
Telephone 643-4711

DESIGNATED AGENT D.L. STEWART
Address P.O. Box 83
HARRISVILLE, W.VA. 26362
Telephone 643-4711

LANDOWNER WESTVALO CORP

SOIL CONS. DISTRICT Little Kanawha

Revegetation to be carried out by UNKNOWN AT THIS TIME (Agent)

This plan has been reviewed by Little Kanawha SCD. All corrections and additions become a part of this plan: 12/26/84 (Date)

Russell L. Atkinson
(SCD Agent)

ACCESS. ROAD

LOCATION

Structure DRAINAGE DITCH (A)
Spacing EARTHEN
Page Ref. Manual 2-12

Structure DIVERSION DITCH (1)
Material EARTHEN
Page Ref. Manual (2-12)

Structure CROSS DRAINS (B)
2% every 250'
Spacing 15% every 60'
Page Ref. Manual (2-1)(2-4)

Structure ROCK-RIP-RAP (2)
Material ROCK
Page Ref. Manual (2-16)(C-4)

Structure _____ (C)
Spacing _____
Page Ref. Manual _____

Structure Pit (3)
Material EARTHEN
Page Ref. Manual N/A

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

REVEGETATION

Treatment Area I

Treatment Area II

Lime 2 Tons/acre
or correct to pH 6.5
Fertilizer 600 lbs/acre
(10-20-20 or equivalent)
Mulch (HAY) 2 Tons/acre
Seed* LADINO CLOVER 3 lbs/acre
Ky 31 40 lbs/acre
_____ lbs/acre

Lime 2 Tons/acre
or correct to pH 6.5
Fertilizer 600 lbs/acre
(10-20-20 or equivalent)
Mulch (HAY) 2 Tons/acre
Seed* LADINO CLOVER 3 lbs/acre
Ky 31 40 lbs/acre
_____ lbs/acre

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

PLAN PREPARED BY MARK C. ECHARD, LLS

ADDRESS STAR RTE 71, Box 6
Glennville, W.VA. 26351

PHONE NO. 462-5565

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

12-31-84
DATE

Samuel M. Hersman
DISTRICT WELL INSPECTOR

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JUL 16 1985

OIL & GAS DIVISION
DEPT. OF MINES



State of West Virginia
Department of Mines
Oil and Gas Division

Date March 8, 1985
Operator's
Well No. F-2
Farm D Lyons
API No. 47-085-7274

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: 680' Watershed South Fork Hughes River
District: Murphy County Ritchie Quadrangle McFarlan

COMPANY Shale Service Inc
ADDRESS Harrisville, WV 26362
DESIGNATED AGENT D.L. Stewart
ADDRESS Harrisville, WV 26362
SURFACE OWNER Westvaco Corporation
ADDRESS Rupert, WV
MINERAL RIGHTS OWNER Alkire Heirs
ADDRESS _____
OIL AND GAS INSPECTOR FOR THIS WORK Samuel N. Hersman ADDRESS Smithville, WV 26178
PERMIT ISSUED December 27, 1984
DRILLING COMMENCED 1/3/85
DRILLING COMPLETED 1/7/85
IF APPLICABLE: PLUGGING OF DRY HOLE ON CONTINUOUS PROGRESSION FROM DRILLING OR REWORKING. VERBAL PERMISSION OBTAINED ON _____

Casing Tubing	Used in Drilling	Left in Well	Cement fill up Cu. ft.
Size 20-16 Cord.			
13-10"			
9 5/8			
8 5/8	808'	808'	to surf
7			
5 1/2			
4 1/2	2407	2407	2200
3			
2			
Liners used			

GEOLOGICAL TARGET FORMATION Devonian Shale Depth 1500 feet
Depth of completed well 3700 feet Rotary / Cable Tools _____
Water strata depth: Fresh N/A feet; Salt N/A feet
Coal seam depths: None Is coal being mined in the area? NO

OPEN FLOW DATA

Producing formation Warren, Speechley, Balltown, Alexander Pay zone depth 1500 feet
Gas: Initial open flow 200 Mcf/d Oil: Initial open flow Show Bbl/d
Final open flow 200 Mcf/d Final open flow Show Bbl/d

Time of open flow between initial and final tests 4 hours

Static rock pressure 675 psig (surface measurement) after 24 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 Oil: 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)

RIT
7274

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

One Stage frac. Plug set at 2530'

10 holes from 2479 - 2484

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	
R.R.			10	325	
Sand			325	344	
R.R.			344	715	
Sand			715	804	
Shale			804	990	
Sand			990	1020	
R.R.			1020	1100	
Sand			1100	1180	
Slate			1180	1240	
Sand			1240	1305	
Shale			1305	1400	
Lime			1400	1494	
Injun			1494	1520	
Shale			1520	2200	
Sand			2200	2220	
Shale			2220	2250	
Sand			2250	2465	
Gordon Stray			2465	2484	
Gordon			2484	2494	
Sand			2494	2548	
Shale			2548	2766	
1st Warren			2766	2800	
Shale			2800	2824	
2nd Warren			2824	2852	
Shale			2852	2920	
Sand			2920	2956	
Speechley			2956	3050	
Shale			3050	3102	
Balltown			3102	3184	
Sand			3184	3330	
Shale			3330	3510	
Alexander			3510	3605	
Shale			3605	3700	

(Attach separate sheets as necessary)

Shale Service, Inc.

Well Operator

By:

D. J. Stewart

Designated Agent

Date:

March 8, 1985

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."



1) Date: December 27, 1984
 2) Operator's Well No. Lyons F-2
 3) API Well No. 47 - 085 -
 State _____ County _____ Permit _____

RECEIVED
DEC 27 1984

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

- OIL & GAS DIVISION
DEPT. OF MINES**
- 4) WELL TYPE: A Oil X Gas _____
B (If Gas, Production _____ / Underground storage _____ / Deep _____ / Shallow X /)
- 5) LOCATION: Elevation: 680' Watershed: South Fork of Hughes River
 District: Murphy County: Ritchie Quadrangle: McFarlan 7.5'
- 6) WELL OPERATOR Shale Service, Inc. 7) DESIGNATED AGENT D. L. Stewart
 Address P.O. Box 83 Address P.O. Box 83
Harrisville, WV 26362 Harrisville, WV 26362
- 8) OIL & GAS INSPECTOR TO BE NOTIFIED 9) DRILLING CONTRACTOR:
 Name Samuel Hersman Name Shale Service, Inc.
 Address P.O. Box 66 Address P.O. Box 83
Smithville, WV 26170 Harrisville, WV 26362
- 10) PROPOSED WELL WORK: Drill X / Drill deeper _____ / Redrill _____ / Stimulate _____
 Plug off old formation _____ / Perforate new formation _____
 Other physical change in well (specify) _____
- 11) GEOLOGICAL TARGET FORMATION, Alexander Sand
- 12) Estimated depth of completed well, 5200' feet
- 13) Approximate trata depths: Fresh, 145' feet; salt, _____ feet.
- 14) Approximate coal seam depths: n/a Is coal being mined in the area? Yes _____ / No X /
- 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			
Conductor	<u>1 3/4</u>				<u>X</u>	<u>40'</u>				Kinds
Fresh water										
Coal										Sizes
Intermediate	<u>8 5/8</u>	<u>CW</u>	<u>23 lb.</u>	<u>X</u>		<u>780'</u>	<u>780'</u>	<u>To Surface</u>		
Production	<u>4 1/2</u>	<u>ERW</u>	<u>20.5</u>	<u>X</u>			<u>5200'</u>	<u>2000' Fill</u>		Depths set
Tubing								<u>Up</u>		
Liners										Perforations:
										Top Bottom

The law requires a comment period for surface owners. However, the permit can be issued in less than 15 days from the filing of the Application if the surface owner(s) of record sign(s) the following "Voluntary Statement of No Objection" on a facsimile of this surface owner's copy of the Application.

VOLUNTARY STATEMENT OF NO OBJECTION

I hereby state that I have read the instructions to surface owners on the reverse side of this Application for a Well Work Permit, and that I have received copies of (1) a Notice of Application for a Well Work Permit on Form IV-2(A), (2) an Application for a Well Work Permit on Form IV-2(B), (3) a survey plat on Form IV-6, and (4) a Construction and Reclamation Plan on Form IV-9, all for proposed well work on my surface land as described therein.

I further state that I have no objection to the planned work described in these materials, and I have no objection to a permit being issued based on those materials.

(For execution by corporation, partnership, etc.)

(For execution by natural persons)

NAME: Westaco Corporation _____ Date: _____
 By: K.P. Jueddelich _____ (Signature)
 Its: Morgan, W. Va Woodlans Date: 12/27/84 _____ (Signature)

**INSTRUCTIONS TO SURFACE OWNERS
AND
EXPLANATION OF METHODS AND TIME LIMITS TO COMMENT
ON OIL AND GAS WELL WORK PERMIT**

The well operator named in the Notice and this Application and the attached materials is applying for a permit from the State to do oil or gas well drilling or other well work. You are being served with these materials because surface owners have the right to file comments before the permit is issued. (NOTE: If the surface tract is owned by more than three persons, in multiple heirship for example, then these materials were served on you because your name appeared on the Sheriff's tax ticket on the land or because you actually occupy the surface tract. In either case, you may be the only owner who will actually receive these materials.) See Chapter 22, Article 4 of the W. Va. Code. Permits are valid for 24 months.

If you do not own any interest in the surface tract, please forward these materials to the true owner immediately if you know who it is. Also, please notify the well operator named in the materials and the Administrator of the Office of Oil and Gas in the West Virginia Department of Mines immediately.

NOTE: You are not required to file any comment at all.

Where to file comments and obtain additional information:

Administrator of the Office of Oil and Gas
West Virginia Department of Mines
1615 Washington Street East
Charleston, West Virginia 25311
(304) 348-2057

Who may file comments? If you wish to file comments, you must be an owner of record of (1) an interest in the surface tract on which the well already is or is about to be located, or (2) an interest in any other surface tract under the same oil or gas lease which will be utilized for roads or other land disturbances.

Time limits for comments. The law requires these materials to be delivered on or before the date the operator files his Application. You have **FIFTEEN (15) DAYS** after the filing date to file your comments as provided in **Methods for Filing Comments** below. You may call the Administrator's office at the above telephone number to be sure of the date. However, if you have been contacted by the well operator, and if you have signed a "voluntary statement of no objection" to any of the planned work described in these materials, then the permit may be issued at any time.

Comments must be in writing. Your comments must include your name, address and telephone number, the well operator's name and well number, and the approximate location of the proposed well site including district and county from the application. You may add other documents, such as sketches, maps or photographs to support your comments.

Methods for filing comments. Comments must be filed in person or received in the mail at the Administrator's office by the time stated above. Check with your postmaster to ensure adequate delivery time or to arrange special expedited handling.

The Administrator for Oil and Gas has the power to deny or condition a well work permit based on your comments on the following grounds:

- “(1) The proposed well work will constitute a hazard to the safety of persons; or
- “(2) The plan for soil erosion and sediment control is not adequate or effective; or
- “(3) Damage would occur to publicly owned lands or resources; or
- “(4) The proposed well work fails to protect fresh water sources or supplies.”

If you want a copy of the permit as it is finally issued, or a copy of the order denying the permit, you should request a copy from the Administrator.

List of Water Testing Laboratories. The Administrator maintains a list of water testing laboratories which you can hire to test your water to establish water quality prior to and after drilling. Contact the Administrator's office or an Oil and Gas Inspector to obtain a copy of the list.

1) Date: December 27, 1984
2) Operator's Well No. Lyons F-2
3) API Well No. 47-085-7274
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 Box 577
Rupert, WV 25984
(ii) Name _____
Address _____
(iii) Name _____
Address _____

5(i) COAL OPERATOR
Address _____

5(ii) COAL OWNER(S) WITH DECLARATION ON RECORD:
Name _____
Address _____

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

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 Shale Service, Inc.
By D. L. Stewart
Its President
Address P.O. Box 83
Harrisville, WV 26362
Telephone 643-4711

Lisa Gibson
this 27 day of December, 1984.
My commission expires 6/13, 1994.
Lisa D. Gibson
Notary Public, Ritchie County,
State of West Virginia

6) EXTRACTION RIGHTS

Check and provide one of the following:

- Included is 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? Yes 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.

DEPT. OF MINES
OIL & GAS DIVISION

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DEC 27 1984

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 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:

Grantor, lessor, etc.	Grantee, lessee, etc.	Royalty	Book	Page
Robert MacGregor	W. C. Alkire		168	868
Elizabeth Sandy	W. C. Alkire		169	180
Rose Alkire	W. C. Alkire		169	183
Isabelle Rasel	W. C. Alkire		169	186
Virginia MacGregor	W. C. Alkire		169	189
Linda MacGregor	W. C. Alkire		168	871
W. C. Alkire	Shale Service		169	192

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IV-9
(Rev 8-81) DEC 27 1984



DATE December 26, 1984
WELL NO. LYONS F-2
API NO. 47 - 085 - 7274

State of West Virginia
Department of Mines
Oil and Gas Division

OIL & GAS DIVISION
DEPT. OF MINES

CONSTRUCTION AND RECLAMATION PLAN

COMPANY NAME SHALE SERVICE, INC.
Address P.O. Box 83
HARRISVILLE, W.VA. 26362
Telephone 643-4711

DESIGNATED AGENT D.L. STEWART
Address P.O. Box 83
HARRISVILLE, W.VA. 26362
Telephone 643-4711

LANDOWNER WESTVALD CORP

SOIL CONS. DISTRICT Little Kanawha

Revegetation to be carried out by UNKNOWN AT THIS TIME (Agent)

This plan has been reviewed by Little Kanawha SCD. All corrections and additions become a part of this plan: 12/26/84 (Date)

Ranshall L. Atkinson
(SCD Agent)

ACCESS ROAD

LOCATION

Structure DRAINAGE DITCH (A)
Spacing EARTHEN
Page Ref. Manual 2-12

Structure DIVERSION DITCH (1)
Material EARTHEN
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Structure CROSS DRAINS (B)
2% every 250'
Spacing 15% every 60'
Page Ref. Manual (2-1)(2-4)

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Material ROCK
Page Ref. Manual (2-16)(C-4)

Structure _____ (C)
Spacing _____
Page Ref. Manual _____

Structure Pit (3)
Material EARTHEN
Page Ref. Manual N/A

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Treatment Area II

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or correct to pH 6.5
Fertilizer 600 lbs/acre
(10-20-20 or equivalent)
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PLAN PREPARED BY MARK C. ECHARD, LLS

ADDRESS STAR RTE 71, Box 6
Glennville, W.VA. 26351

PHONE NO. 462-5565

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

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API NO. 47-085-7274

State of West Virginia
Department of Mines
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OIL & GAS DIVISION
DEPT. OF MINES

CONSTRUCTION AND RECLAMATION PLAN

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SOIL CONS. DISTRICT Little Kanawha

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Ranshall L. Atkinson
(SCD Agent)

ACCESS. ROAD	
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Spacing <u>EARTHEN</u>	
Page Ref. Manual <u>2-12</u>	
Structure <u>CROSS DRAINS</u>	(B)
Spacing <u>2% every 250'</u>	
Spacing <u>15% every 60'</u>	
Page Ref. Manual <u>(2-1)(2-4)</u>	
Structure _____	(C)
Spacing _____	
Page Ref. Manual _____	

LOCATION	
Structure <u>DIVERSION DITCH</u>	(1)
Material <u>EARTHEN</u>	
Page Ref. Manual <u>(2-12)</u>	
Structure <u>ROCK-RIP-RAP</u>	(2)
Material <u>ROCK</u>	
Page Ref. Manual <u>(2-16)(C-4)</u>	
Structure <u>Pit</u>	(3)
Material <u>EARTHEN</u>	
Page Ref. Manual <u>N/A</u>	

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ADDRESS STAR RTE 71, Box 6
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PHONE NO. 462-5565

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

INSPECTOR'S WELL REPORT

Permit No. 85-7274

Oil or Gas Well _____
(KIND)

Company <u>Shab Service, Inc.</u>	CASING AND TUBING	USED IN DRILLING	LEFT IN WELL	PACKERS
Address _____	Size			
Farm <u>Westvaco</u>	16			Kind of Packer _____
Well No. <u>Lyons F-2</u>	13			
District <u>Murphy</u> County <u>Pitkin</u>	10			Size of _____
Drilling commenced <u>12-28-84</u>	8 1/8 <u>8 5/8"</u>	<u>802</u>	<u>802</u>	Depth set _____
Drilling completed _____ Total depth _____	6 5/8			
Date shot _____ Depth of shot _____	5 3/16			Perf. top _____
Initial open flow _____ /10ths Water in _____ Inch	3			Perf. bottom _____
Open flow after tubing _____ /10ths Merc. in _____ Inch	2			Perf. top _____
Volume _____ Cu. Ft.	Liners Used _____			Perf. bottom _____
Rock pressure _____ lbs. _____ hrs.				
Oil _____ bbls., 1st 24 hrs.	CASING CEMENTED _____	SIZE _____	Feet _____	Date _____
Fresh water <u>12'</u> _____ feet _____ feet	NAME OF SERVICE COMPANY _____			
Salt water _____ feet _____ feet	COAL WAS ENCOUNTERED AT _____ FEET _____ INCHES			
	_____ FEET _____ INCHES _____ FEET _____ INCHES			
	_____ FEET _____ INCHES _____ FEET _____ INCHES			

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JAN 8 - 1985
OIL & GAS DIVISION
DEPT. OF MINES

Drillers' Names R. Skidmore / C. Nicholas / E. Bailey

Rig # 4 Gene Stalnaker Tool Pusher Doug Jenkins

Remarks: on 12-30-84 ran 802 feet of 8 5/8" casing - Dowell ran 210 sacks cement - standard with 370cc and Cellafloke Braking loose on 8" at time of visit

12-31-84
DATE

Samuel M. Hersman
DISTRICT WELL INSPECTOR

IV-9
(Rev 8-81)

RECEIVED

DEC 27 1984



DATE December 26, 1984

WELL NO. LYONS F-2

API NO. 47 - 085 - 7274

State of West Virginia

Department of Mines
Oil and Gas Division

OIL & GAS DIVISION
DEPT. OF MINES

CONSTRUCTION AND RECLAMATION PLAN

COMPANY NAME SHALE SERVICE, INC.
Address P.O. Box 83
HARRISVILLE, W.VA. 26362
Telephone 643-4711

DESIGNATED AGENT D.L. STEWART
Address P.O. Box 83
HARRISVILLE, W.VA. 26362
Telephone 643-4711

LANDOWNER WESTVALO CORP

SOIL CONS. DISTRICT Little Kanawha

Revegetation to be carried out by UNKNOWN AT THIS TIME (Agent)

This plan has been reviewed by Little Kanawha SCD. All corrections and additions become a part of this plan: 12/26/84 (Date)

Ranshall L. Atkinson
(SCD Agent)

ACCESS. ROAD

LOCATION

Structure DRAINAGE DITCH (A)

Structure DIVERSION DITCH (1)

Spacing EARTHEN

Material EARTHEN

Page Ref. Manual 2-12

Page Ref. Manual (2-12)

Structure CROSS DRAINS (B)

Structure ROCK-RIP-RAP (2)

Spacing 2% every 250'
15% every 60'

Material ROCK

Page Ref. Manual (2-1)(2-4)

Page Ref. Manual (2-16)(C-4)

Structure _____ (C)

Structure Pit (3)

Spacing _____

Material EARTHEN

Page Ref. Manual _____

Page Ref. Manual N/A

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

REVEGETATION

Treatment Area I

Treatment Area II

Lime 2 Tons/acre
or correct to pH 6.5

Lime 2 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 (HAY) 2 Tons/acre

Mulch (HAY) 2 Tons/acre

Seed* LADINO CLOVER 3 lbs/acre

Seed* LADINO CLOVER 3 lbs/acre

Ky 31 40 lbs/acre

Ky 31 40 lbs/acre

_____ lbs/acre

_____ lbs/acre

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

PLAN PREPARED BY MARK C. ECHARD, LLS

ADDRESS STAR RTE 71, Box 6

Glenville, W.VA. 26351

PHONE NO. 462-5565

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

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

INSPECTOR'S WELL REPORT

Permit No. 85-7274

Oil or Gas Well _____
(KIND)

Company <u>Shab Service, Inc.</u>	CASING AND TUBING	USED IN DRILLING	LEFT IN WELL	PACKERS
Address _____	Size			
Farm <u>Westvaco</u>	16			Kind of Packer _____
Well No. <u>Lyons F-2</u>	13			
District <u>Murphy</u> County <u>Pitkin</u>	10			Size of _____
Drilling commenced <u>12-28-84</u>	8 1/8 <u>8 5/8"</u>	<u>802</u>	<u>802</u>	Depth set _____
Drilling completed _____ Total depth _____	6 5/8			
Date shot _____ Depth of shot _____	5 3/16			Perf. top _____
Initial open flow _____ /10ths Water in _____ Inch	3			Perf. bottom _____
Open flow after tubing _____ /10ths Merc. in _____ Inch	2			Perf. top _____
Volume _____ Cu. Ft.	Liners Used			Perf. bottom _____
Rock pressure _____ lbs. _____ hrs.				
Oil _____ bbls., 1st 24 hrs.	CASING CEMENTED _____ SIZE _____ No. _____ FT. _____ Date _____			
Fresh water <u>12'</u> _____ feet _____ feet	NAME OF SERVICE COMPANY _____			
Salt water _____ feet _____ feet	COAL WAS ENCOUNTERED AT _____ FEET _____ INCHES			
	_____ FEET _____ INCHES _____ FEET _____ INCHES			
	_____ FEET _____ INCHES _____ FEET _____ INCHES			

RECEIVED
JAN 8 - 1985

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