

RECEIVED

NOV 01 1984



1) Date: October 25, 19 84

2) Operator's Well No. N.H. Thompson #11

3) API Well No. 47 - 073 - 1901
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
B (If "Gas", Production / Underground storage _____ / Deep _____ / Shallow)
- 5) LOCATION: Elevation: 643.4 Watershed: Bull Creek
District: Jefferson County: Pleasants Quadrangle: Willow Island
- 6) WELL OPERATOR Cuyahoga Exploration & Dev. (131257) DESIGNATED AGENT Roger Hunter
Address Route #1 Address P. O. Box 1386
Marietta, Ohio 45750 Charleston, WV 25325
- 8) OIL & GAS INSPECTOR TO BE NOTIFIED Name Robert Lowther
Address General Delivery
Middlebourne, WV 26149
- 9) DRILLING CONTRACTOR: Name not yet determined
Address _____
- 10) PROPOSED WELL WORK: Drill / Drill deeper _____ / Redrill _____ / Stimulate
Plug off old formation _____ / Perforate new formation
Other physical change in well (specify) _____
- 11) GEOLOGICAL TARGET FORMATION, Devonian Shale Benson formation
- 12) Estimated depth of completed well, 5,000 feet
- 13) Approximate strata depths: Fresh, 100 feet; salt, 1,500 feet.
- 14) Approximate coal seam depths: not applicable Is coal being mined in the area? Yes _____ / No
- 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	11 3/4		38.0	X		60'	60'		Kinds
Fresh water	9 5/8		36.0	X		200'	200'	100 sacks	
Coal									Sizes
Intermediate	7		20.0	X		2500'	2500'	300 sacks	
Production	4.5		10.5	X		5000'	5000'	300 sacks	Depths set
Tubing									
Liners									Perforations:
									Top Bottom

OFFICE USE ONLY
DRILLING PERMIT

Permit number 47-073-1901

November 13, 19 84
Date

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 13, 1986 unless well work is commenced prior to that date and prosecuted with due diligence.

Bond:	Agent:	Plat:	Casing	Fee
<u>52</u>	<u>MW</u>	<u>MW</u>	<u>MW</u>	<u>1096</u>

Margaret J. Passe
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



RECEIVED
1984

OFFICE USE ONLY

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

1) LOCATION: Elevation: 625.4
 2) WELL OPERATOR: Chesapeake Exploration & Dev. / Chesapeake Energy
 3) PROPOSED WELL WORK: Drilling
 4) APPROXIMATE COST: \$2,500
 5) APPROXIMATE DATE OF COMPLETION: 1984

DEPTH (feet)	FORMATION	REMARKS
0 - 100	CLAY	
100 - 200	SANDSTONE	
200 - 300	SANDSTONE	
300 - 400	SANDSTONE	
400 - 500	SANDSTONE	

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: _____

Board	Agent	Firm	Cost	Fee
RR	M. J.



IV-9
(Rev 8-81)

DATE October 16, 1984
WELL NO. N. Thompson #11
API NO. 47 - 073 - 1901

State of West Virginia
Department of Mines
Oil and Gas Division

CONSTRUCTION AND RECLAMATION PLAN

COMPANY NAME CUYAHOGA EXP. & DEV. CORP. DESIGNATED AGENT ROGER HUNTER
Address ROUTE #1, MARIETTA, OHIO 45750 Address P. O. Box 1386
Telephone 614-374-5414 Telephone Charleston, WV 25325
304-347-1100
LANDOWNER Ira Thompson SOIL CONS. DISTRICT Upper Ohio

Revegetation to be carried out by CUYAHOGA EXPLORATION & DEVELOPMENT CORP. (Agent)

This plan has been reviewed by Upper Ohio SCD. All corrections and additions become a part of this plan: 10-19-84 (Date)

Philip L. Brooks
(SCD Agent)

ACCESS ROAD	LOCATION
Structure <u>Culvert Pipe</u> (A)	Structure <u>Diversion Ditch</u> (1)
Spacing <u>as needed</u>	Material <u>Earthen</u>
Page Ref. Manual <u>2-7, 2-11</u>	Page Ref. Manual <u>2-12, 2-13, 2-14</u>
Structure _____ (B)	Structure <u>Sediment Basin</u> (2)
Spacing _____	Material <u>Earthen & PVC Pipe</u>
Page Ref. Manual _____	Page Ref. Manual <u>2-22, 2-23</u>
Structure _____ (C)	Structure _____ (3)
Spacing _____	Material _____
Page Ref. Manual _____	Page Ref. Manual _____

RECEIVED
NOV 0 1984
OIL & GAS DIVISION
DEPT. OF MINES

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

Lime 2 - 3 tons/acre Tons/acre
or correct to pH 6.5

Fertilizer 500 lbs/acre
(10-20-20 or equivalent)

Mulch Hay or Straw 2 Tons/acre

Seed* KY 31 40 lbs/acre

Red clover & Pasture Mix 5 lbs/acre
lbs/acre

Treatment Area II

Lime _____ Tons/acre
or correct to pH _____

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

Mulch _____ Tons/acre

Seed* _____ lbs/acre
_____ lbs/acre
_____ lbs/acre

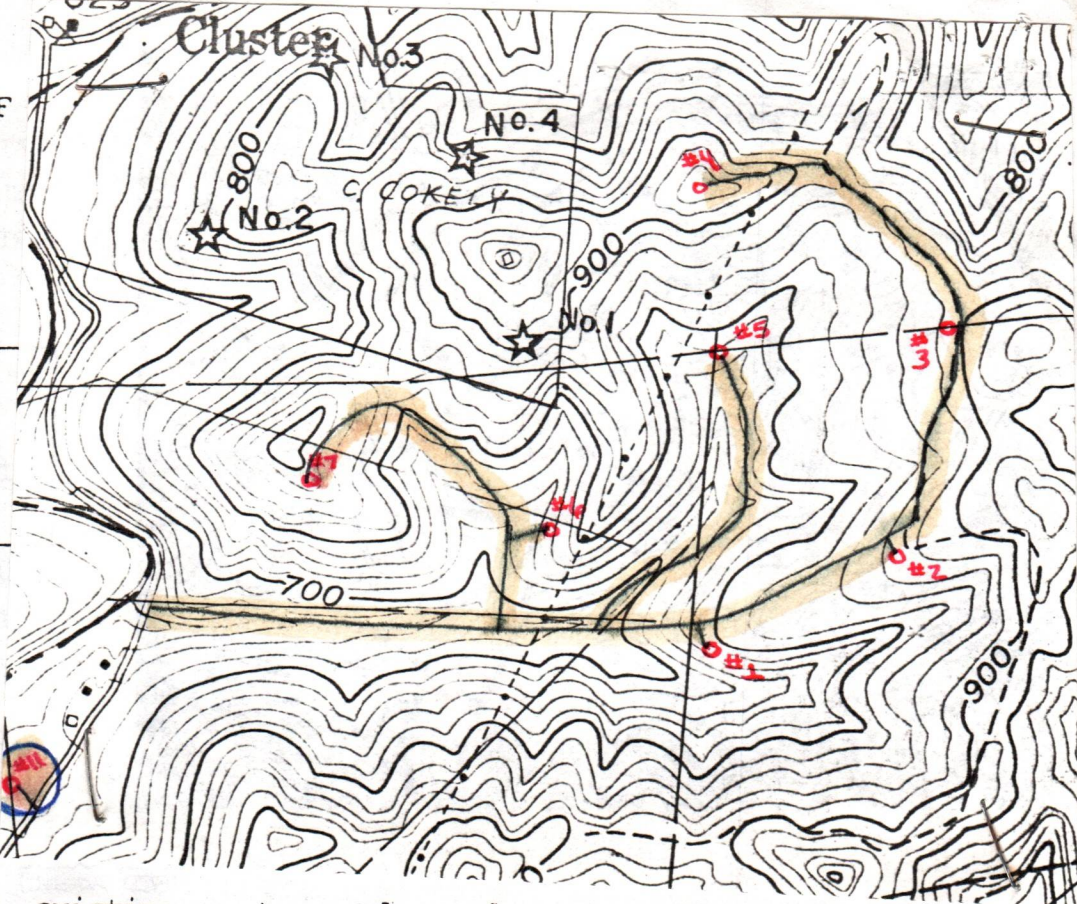
*Inoculate all legumes such as vetch, trefoil and clovers with the proper bacterium. Inoculate with 3X recommended amount.

PLAN PREPARED BY Roger Hunter
Cuyahoga Exploration & Dev. Corp.
ADDRESS Route #1, Marietta, Ohio 45750

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

PHONE NO. 614-374-5414

ATTACH OR PHOTOCOPY SECTION OF INVOLVED TOPOGRAPHIC MAP. QUADRANGLE Willow Island



LEGEND

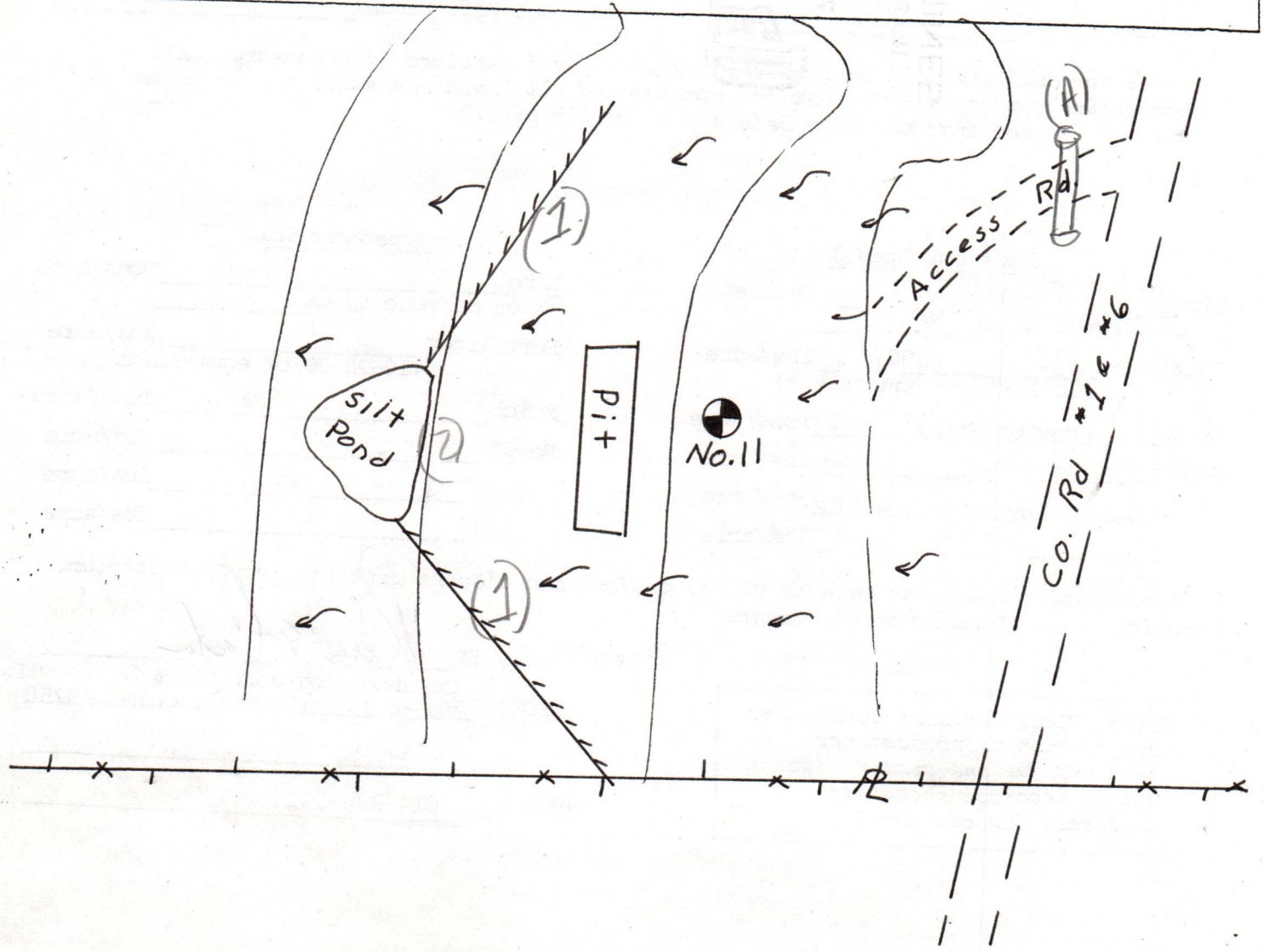
Well Site ⊕

Access Road ———

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

LEGEND

Property boundary ——— ——— ——— ——— ———	Diversion ////////////////
Road = = = = =	Spring ○→
Existing fence — x — x —	Wet spot ☼
Planned fence — / — / —	Building ■
Stream ~~~~~	Drain pipe —○→○→○→
Open ditch ———>———>———>———>	Waterway ⊆ = = = =





REC

Thompson #11

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 Ira Lee Thompson
Address 3915 Ninth St.
Parkersburg, W. Va. 26101
(ii) Name Ruth Ann Thompson
Address 3915 Ninth St.
Parkersburg, W. Va. 26101
(iii) Name Louella Carol Thompson
Address 513 Dean St.
Parkersburg, W. Va. 26101

5(i) COAL OPERATOR N/A
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.

- 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.

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
Donald M. Schutzer
this 30 day of October, 1984.
My commission expires 4-18, 1989.

Cynthia S. Beckford
Notary Public, Washington County,
State of Ohio

WELL
OPERATOR Cuyahoga Exploration & Dev.
By [Signature]
Its Vice President
Address Route #1
Marietta, OH 45750
Telephone (614) 374-5414

CYNTHIA S. BECKFORD
Notary Public, State of Ohio
My Commission Expires April 18 1989

RECEIVED
NOV 3 1984
OIL & GAS DIVISION
DEPT. OF MINES
RECEIVED
NOV 3 1984
OIL & GAS DIVISION
DEPT. OF MINES

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>
Cuyahoga Land		87.5	
Ira Lee Thompson (husband)		12.5	196-316
Ruth Ann Thompson(wife)			196-316
Louella Carol Thompson		12.5	196-316



AFFIDAVIT OF PERSONAL SERVICE ON SURFACE OWNER

STATE OF Ohio,
COUNTY OF Washington:

The undersigned, being first duly sworn, says that the undersigned served a true and complete copy of all sides of--

- (1) Notice on Form IV-2(A) / Form IV-3(A) / Form IV-4(A) /
- (2) Application on Form IV-2(B) / Form IV-3(B) / Form IV-4(B) /
- (3) Plat showing the well location on Form IV-6, and
- (4) Construction and Reclamation Plan on Form IV-9 (unless the application is to plug a well)

--all with respect to operator's Well No. N.H. Thompson #11 located in Jefferson District, Pleasants County, West Virginia, upon the person or organization named--

N. H. Thompson

--by delivering the same in Pleasants County, State of Ohio on the 29 day of October, 1989 in the manner specified below.

[COMPLETE THE APPROPRIATE SECTION]

For an individual:

[] Handing it to him X / her / or, because he / she / refused to take it when I offered it; by leaving it in his / her / presence.

[] Handing it to a member of his or her family above the age of 16 years named _____ who resides at the usual place of abode of the person to be served, and asking the family member to give it to the person to be served as soon as possible.

For a partnership:

[] Handing it to _____, a partner of the partnership or, because the partner refused to take it when I handed it over, by leaving it in the presence of the partner.

For a limited partnership:

[] Handing it to the general partner, named _____, or, because the general partner refused to take it when I tried to hand it over, by leaving it in the presence of the general partner.

For a corporation:

[] Handing it to the corporation's employee / officer / director / attorney in fact / named _____.

Samuel Elliott
(Signature of person executing service)

Taken, subscribed and sworn before me this 29 day of October, 1989.
My commission expires _____

CYNTHIA S. BECKFORD
Notary Public, State of Ohio
My Commission Expires April 18, 1989

Cynthia S. Beckford
Notary Public

(AFFIX SEAL IF NOTARIZED IF OUTSIDE THE STATE)



1) Date: October 25, 19 84
 2) Operator's Well No. W.H. Thompson #11
 3) API Well No. 47 State 073 County Permit

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

- 4) WELL TYPE: A Oil X / Gas X
 B (If "Gas", Production X / Underground storage / Deep / Shallow X)
- 5) LOCATION: Elevation: 643.4 Watershed: Bull Creek
 District: Jefferson County: Pleasants Quadrangle: Willow Island
- 6) WELL OPERATOR Cuyahoga Exploration & Dev. 7) DESIGNATED AGENT Roger Hunter
 Address Route #1 Address P. O. Box 1386
Marietta, Ohio 45750 Charleston, WV 25325
- 8) OIL & GAS INSPECTOR TO BE NOTIFIED 9) DRILLING CONTRACTOR:
 Name Robert Lowther Name not yet determined
 Address General Delivery Address
Middlebourne, WV 26149
- 10) PROPOSED WELL WORK: Drill X / Drill deeper / Redrill / Stimulate X /
 Plug off old formation / Perforate new formation X /
 Other physical change in well (specify)
- 11) GEOLOGICAL TARGET FORMATION, Devonian Shale Benson formation
- 12) Estimated depth of completed well, 5,000 feet
 13) Approximate strata depths: Fresh, 100 feet; salt, 1,500 feet.
 14) Approximate coal seam depths: not applicable 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		Kinds	
Conductor	11 3/4		38.0	X		60'	60'			Kinds
Fresh water	9 5/8		36.0	X		200'	200'			Sizes
Coal										
Intermediate	7		20.0	X		2500'	2500'			Depths set
Production	4.5		10.5	X		5000'	5000'			
Tubing										Perforations:
Liners										Top Bottom

DEPT. OF MINES
 OIL & GAS DIVISION
 NOV 1984
 RECEIVED

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.)

NAME: Cuyahoga Exploration & Dev. Corp.
 By: [Signature]
 Its Vice President Date: 10/30/84

(For execution by natural persons)

Laurel Carol Thompson Date: 10/29/84
 (Signature)
Joe J. Thompson Date: 10/29/84
 (Signature)
Ruth Ann Thompson Date: 10/29/84

**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.



WP-35
(Rev 8-84)

RECEIVED
DEC 16 1985

DIVISION OF OIL & GAS
DEPT. OF ENERGY

State of West Virginia

Department of ~~Minerals~~ **Energy**
Oil and Gas Division

Date 12/13/85
Operator's
Well No. #11
Farm Thompson
API No. 47 - 073 - 1901

WELL OPERATOR'S REPORT
OF

DRILLING, FRACTURING AND/OR STIMULATING, OR PHYSICAL CHANGE

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

LOCATION: Elevation: 643.4 Watershed Bull Creek
District: Jefferson County Pleasants Quadrangle Willow Island

COMPANY Cuyahoga Exp. & Dev. Corp.
ADDRESS Route #1, Marietta, Ohio 45750
DESIGNATED AGENT Roger Hunter
ADDRESS P.O. Box 1386, Charleston, WV 25325
SURFACE OWNER Ira Lee Thompson et al
ADDRESS 3915 Ninth Street, Parkersburg, WV 26101
MINERAL RIGHTS OWNER Ira Lee Thompson et al
ADDRESS 3915 Ninth Street, Parkersburg, WV 26101
OIL AND GAS INSPECTOR FOR THIS WORK Robert Lowther
General Delivery
ADDRESS Middlebourne, WV 26149

PERMIT ISSUED 11/13/84
DRILLING COMMENCED 1/30/85
DRILLING COMPLETED 2/4/85

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

Casing & Tubing	Used in Drilling	Left in Well	Cement fill up Cu. ft.
Size 20-16 Cond.			
13-10"			
9 5/8	205'	205'	205'
8 5/8			
7	1879'	1879'	1000'
5 1/2			
4 1/2		3790'	1911'
3			
2			
Liners used			

GEOLOGICAL TARGET FORMATION Devonian Shale Depth 3857' feet
Depth of completed well 3857' feet Rotary x / Cable Tools
Water strata depth: Fresh N/A feet; Salt 1605' feet
Coal seam depths: N/A Is coal being mined in the area? No

OPEN FLOW DATA

Producing formation Berea Pay zone depth 2010-2020 feet
Gas: Initial open flow 55.5 Mcf/d Oil: Initial open flow .5 Bbl/d
Final open flow 55.5 Mcf/d Final open flow .1 Bbl/d
Time of open flow between initial and final tests hours
Static rock pressure 300 psig (surface measurement) after 24 hours shut in
(If applicable due to multiple completion--)
Second producing formation N/A Pay zone depth N/A feet
Gas: Initial open flow N/A Mcf/d Oil: Initial open flow N/A Bbl/d
Final open flow N/A Mcf/d Oil: Final open flow N/A Bbl/d
Time of open flow between initial and final tests N/A hours
Static rock pressure N/A psig (surface measurement) after N/A hours shut in

(Continue on reverse side)

FILED
1901

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

Perforation: From 2005.5 to 2015.5 10' 8 holes, .39 HSC Goex.

FRAC: Breakdown at 1550

down 4 1/2 casing
1 pump truck

Acid 15% 500 gal

KCL 4500 lbs.

NDL-100 30 gal

Dura Surf 30 gal

Unislik 40 gal

Pensurf 25 gal

Cla Chek 35 gal

Pump 45,720 gal KCL.

WELL LOG

REMARKS	TOP FEET	BOTTOM FEET
---------	----------	-------------

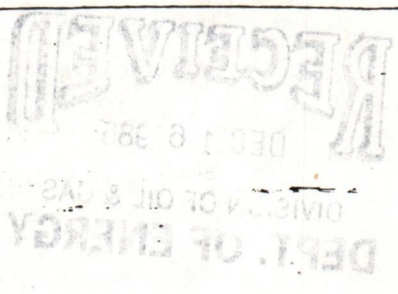
FORMATION COLOR HARD OR SOFT	TOP FEET	BOTTOM FEET
Clay and Red Rock	0'	750'
Cow Run Sand	755'	775'
First Salt Sand	810'	1260'
Second Salt Sand	1019'	1370'
Third Salt Sand	1340'	1460'
Maxton	1400'	1490'
Big Injun-Squaw	1490'	1720'
Welsh Stray	1944'	1946'
Berea	2012'	2016'
Gantz	2126'	2132'
Thirty-foot	2245'	2268'
Gordon	2385'	2416'
Devonian Shale	2016'	3857'

(Attach separate sheets as necessary)

Cuyahoga Exploration and Development Corporation
Well Operator

By: *Kimberly Anderson*
Field Co-ordinator

Date:



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 well, encountered in the drilling of a well."

INSPECTOR'S PERMIT SUMMARY FORM

(11-13-84)

WELL TYPE _____
ELEVATION _____
DISTRICT Jefferson
QUADRANGLE _____
COUNTY Pleasants

API# 47-073 - 1901
OPERATOR Cuyahoga Exp & Dev
TELEPHONE _____
FARM Thompson
WELL # 11

SURFACE OWNER _____ COMMENTS _____ TELEPHONE _____
TARGET FORMATION _____ DATE APPLICATION RECEIVED _____
DATE STARTED _____
LOCATION _____ NOTIFIED _____ DRILLING COMMENCED _____

WATER DEPTHS _____, _____, _____, _____
COAL DEPTHS _____, _____, _____, _____

CASING

Ran _____ feet of _____ "pipe on _____ with _____ 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
TD _____ feet on _____

PLUGGING

Type	From	To	Pipe Removed

DEPARTMENT OF ENERGY
OIL AND GAS

Pit Discharge date: _____ Type _____
Field analysis ph _____ fe _____ cl _____
Well Record received _____
MAY 9 1986

Date Released May 7, 1986

Robert A. Lowther
Inspector's signature

Violation No. V 86-2076

VI-27



Date: Apr 3 1986

Well No: 11

API NO: 47 - 073 - 1901
State County Permit

APR 7 1986

STATE OF WEST VIRGINIA
DEPARTMENT OF ENERGY
DIVISION OF OIL AND GAS
NOTICE OF VIOLATION

Well TYPE: Oil / Gas Liquid Injection / Waste Disposal
Of "Gas" - Production / Storage Deep / Shallow

LOCATION: Elevation: _____ Watershed: Bull Creek
District: Jefferson County: Pleasants Quadrangle: Willow Island

WELL OPERATOR Cyrus Roga Expt Per DESIGNATED AGENT Roger Hunter
Address Rt 1 Address P.O. Box 1386
Martinsburg Charleston W. Va.

The above well is being posted this 3 day of Apr, 1986, for a violation of Code 22B-1-30 and/or Regulation _____, set forth in detail as follows:

(USE REVERSE SIDE OF THIS NOTICE IF NECESSARY)

Failure to Reclaim well site within 6 months after completion of Drilling in compliance with Reclamation Plan, well site needs Lime & Fertilizer

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 Apr 10, 1986, to abate this violation. Failure to abate the violation may result in action by the Department under Code 22B, Article 1.

Robert A. Lowther
Oil and Gas Inspector

Address Middlebourne
W. Va.

Telephone: 758-4764

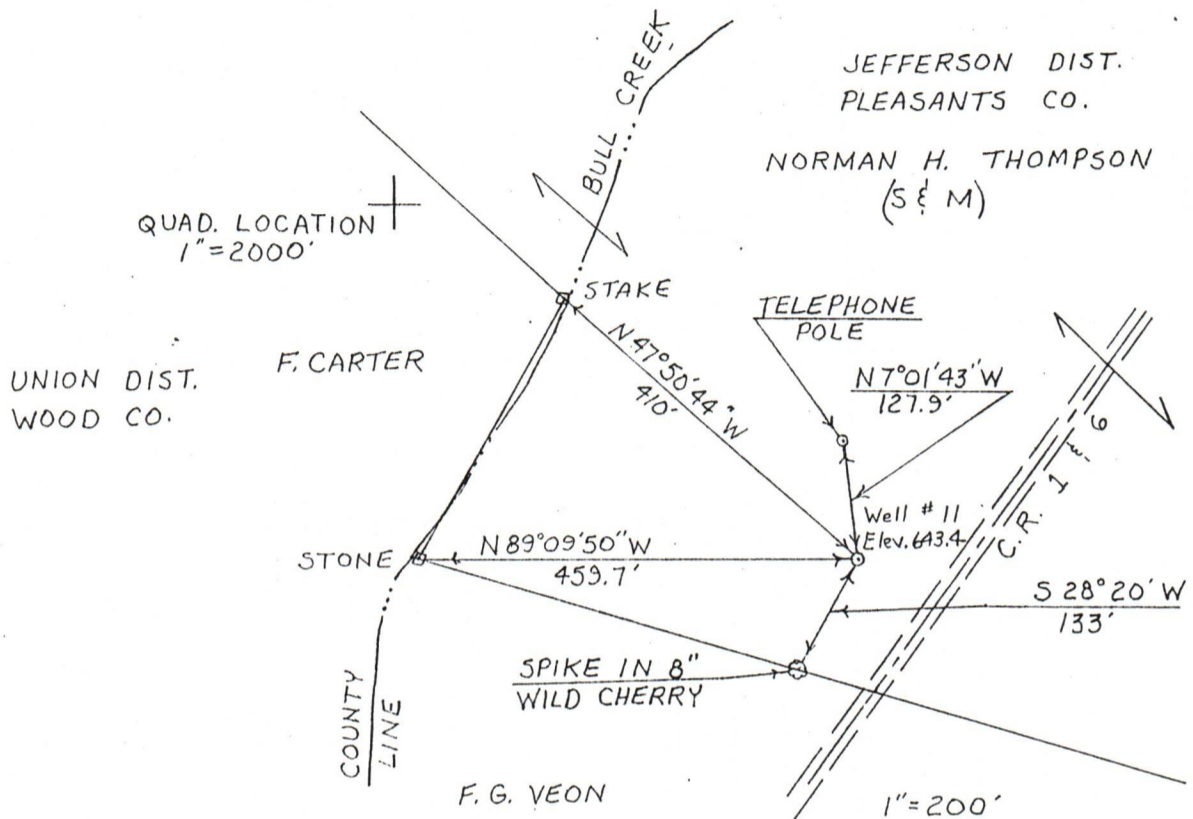
9800'

LATITUDE 39° 20'

TO THE BEST OF MY KNOWLEDGE
THERE ARE NO WELLS WITHIN
1200' OF THIS LOCATION.

LONGITUDE 81° 17' 30"

NORTH



FILE NO. _____
 DRAWING NO. _____
 SCALE 1" = 200'
 MINIMUM DEGREE OF ACCURACY 1:200
 PROVEN SOURCE OF ELEVATION U.S.G.S. BM
 80 WSM 1956 790

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) George W. Stewart
 R.P.E. _____ L.L.S. 696



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



DATE October 9, 1984
 OPERATOR'S WELL NO. II
 API WELL NO. 47 - 073 - 1901
 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 643.4 WATER SHED Bull Creek
 DISTRICT Jefferson COUNTY Pleasants
 QUADRANGLE Willow Island
 SURFACE OWNER Norman H. Thompson ACREAGE 393
 OIL & GAS ROYALTY OWNER same LEASE ACREAGE 393
 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 Shale ESTIMATED DEPTH 5000'
 WELL OPERATOR Cuyahoga Explorati DESIGNATED AGENT Roger Hunter
 ADDRESS Route 1 ADDRESS P.O. Box 1386
Marietta, Ohio 45750 Charleston, WV 25325

PLEAS 1901