



1) Date: December 21, 1982
 2) Operator's Well No. HOLDREN #5
 3) API Well No. 47 073 1577
 State County Permit

DRILLING CONTRACTOR:

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

OIL AND GAS WELL PERMIT APPLICATION

- 4) WELL TYPE: A Oil xx / Gas xx /
 B (If "Gas", Production _____ / Underground storage _____ / Deep _____ / Shallow xx /)
- 5) LOCATION: Elevation: 965 Watershed: Jimmy Run of Ohio River
 District: Union County: Pleasants Quadrangle: Ravenrock, Ohio-WV
- 6) WELL OPERATOR L & B Oil Company, Inc. 11) DESIGNATED AGENT Loren E. Bagley
 Address P.O. Box C Address P.O. Box C
St. Marys, WV 26170 St. Marys, WV 26170
- 7) OIL & GAS ROYALTY OWNER Robert E. Adkins 12) COAL OPERATOR none
 Address Rt 2 North Address _____
St. Marys, WV 26170
- 8) SURFACE OWNER Robert E. Adkins 13) COAL OWNER(S) WITH DECLARATION ON RECORD:
 Address Rt. 2 North Name none
St. Marys, WV 26170 Address _____
- 9) FIELD SALE (IF MADE) TO:
 Address _____ Name _____
 Address _____
- 10) OIL & GAS INSPECTOR TO BE NOTIFIED
 Name Robert Lowther Address _____
 Address 3rd Street
Middlebourne, WV 26149
- 15) PROPOSED WORK: Drill xx / Drill deeper _____ / Redrill _____ / Fracture or stimulate _____
 Plug off old formation _____ / Perforate new formation _____
 Other physical change in well (specify) _____
- 16) GEOLOGICAL TARGET FORMATION, Marcellus Shale
- 17) Estimated depth of completed well, 5,000 feet
- 18) Approximate water strata depths: Fresh, 80 feet; salt, none feet.
- 19) Approximate coal seam depths: none Is coal being mined in the area? Yes _____ / No xx /

20) 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	10"	RL	40.5	x		250	250	To surface	Kinds
Fresh water									
Coal									Sizes
Intermediate	8 5/8	RL	23	x		1200	1200	To surface	
Production	4"	RL	10.5	x		5000	5000	B- rule 1501	Depths set
Tubing									
Liners									Perforations:
									Top Bottom

21) 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.)

22) ROYALTY PROVISIONS

Is the right to extract, produce or market the oil or gas based upon a lease or other continuing 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.

23) Required Copies (See reverse side.)

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

Notary: Betty Shingleton
 My Commission Expires August 4, 1992

Signed: Carl W Nolan
 Its: Secretary/Treasurer

OFFICE USE ONLY

DRILLING PERMIT

Permit number 47-073-1577 Date December 27 19 82

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. 10) 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.)

Permit expires August 27, 1983 unless drilling is commenced prior to that date and prosecuted with due diligence.

Bond: <u>Blanket</u>	Agent: <u>OK</u>	Plat: <u>MJ</u>	Casing: <u>MJ</u>	Fee: <u>005183</u>
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Fred Buehler
 Administrator, Office of Oil and Gas

Line Item Explanation

- 1) Date of Application
- 2) Your well name and number
- 3) To be filled out by office of oil & gas
- 4A) "Oil" means natural crude oil or petroleum and other hydrocarbons, regardless of gravity, which are produced at the well in liquid form by ordinary production methods and which are not the result of condensation of gas after it leaves underground reservoirs: "Gas" means all natural gas and all other fluid hydrocarbons not defined as oil.
- 4B) "Shallow well" means any well drilled and completed in a formation above the top of the uppermost member of the "Onondaga Group" or a depth less than six thousand feet, whichever is shallower.
 "Deep well" means any well drilled and completed in a formation at or below the top of the uppermost member of the "Onondaga Group" or at a depth less than six thousand feet, whatever is shallower.
- 5) Where well is located
- 6) Before a permit can be issued in a corporation, company partnership, or fictitious name, the name must be registered with the Secretary of State Office
- 7) Use separate sheet if necessary
- 8) Present surface owner at time application is filed.
- 9) Optional
- 11) See Reg. 7.01 relating to code §22-4-1k
- 12) "Coal Operator" means any persons, firm, partnership, partnership association or corporation that proposes to or does operate a coal mine. See Note 24
- 13 & 14) As per §22-4-20; See Note 24
- 15) Work that will be attempted—A separate Form IV-2 shall not be required for fracturing or stimulating a well where fracturing or stimulating is to be part of the work for which a permit is sought and is noted as such on the Form IV-2 filed in connection therewith.
- 16) Anticipated formation for which well will be completed
- 17) Self explanatory
- 18) Depth to deepest freshwater, and shallowest salt water, taken from nearby wells corrected for differences in elevation
- 19) All coal seam depths
- 20) Proposed casing program and cementing refer to Code 22-4-5, 22-4-6, 22-4-7, 22-4-8, 22-4-8a Reg 9.01, 15.01, 15.02, 15.03, 15.04, 25.01, 25.02, 25.03, 25.04
- 21) Code 22-4-11(c) - In lieu of filing the lease or leases or other continuing contract or contracts, the applicant for a permit described herein may file the following:
 - (1) A brief description of the tract of land including the district and county wherein the tract is located;
 - (2) The identification of all parties to all leases or other continuing contractual agreements by which the right to extract, produce or market the oil or gas is claimed;
 - (3) The book and page number wherein each such lease or contract by which the right to extract, produce or market the oil or gas is recorded;
 - (4) A brief description of the royalty provisions of each such lease or contract.
- 22) Code 22-4-11(d) and 22-4-11(e).
- 23) Regulation 7.02 of the Department of Mines provides that the original and four copies of Form IV-2 must be filed with the Department, accompanied by (i) a plat in the form prescribed by Regulation 11, (ii) a bond in one of the forms prescribed by Regulation 12, or in lieu thereof the other security allowed by Code §22-4-2, (iii) Form IV-9, "Reclamation Plan", applicable to the reclamation required by Code §22-4-12b and Regulation 23, (iv) unless previously paid on the same well, the fee required by Code §22-4-12a, and (v) if applicable, the consent required by Code §22-4-8a from the owner of any water well or dwelling within 200 feet of the proposed well.
- 24) **The above named coal operator, coal owner(s), and coal lessee are hereby notified that any objection they wish to make or are required to make by Code §22-4-3 must be filed with the Department of Mines within fifteen (15) days after the receipt of this Application by the Department.**

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

WAIVER

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

Date: _____, 19_____

By _____

Its _____



IV-9
(Rev 8-81)

DATE 12-17-82
WELL NO. HOLLIREN #5
API NO. 47-000-
073 1577

State of West Virginia
Department of Mines
Oil and Gas Division

CONSTRUCTION AND RECLAMATION PLAN

COMPANY NAME L+B OIL CO INC
Address 210 2ND ST, ST MARYS, WVA
Telephone 684 9399

DESIGNATED AGENT LOREN E BAGLEY
Address 210 2ND ST, ST MARYS WVA
Telephone 684-9399

LANDOWNER ROBERT F ADKINS
Revegetation to be carried out by LOREN E BAGLEY

SOIL CONS. DISTRICT UPPER OHIO (Agent)

This plan has been reviewed by Upper Ohio SCD. All corrections and additions become a part of this plan: 12/20/82 (Date)
Kenneth R Masm (SCD Agent)

ACCESS ROAD

LOCATION

Structure WATER BARS (A)
Spacing 200'
Page Ref. Manual _____

Structure CUT (1)
Material _____
Page Ref. Manual _____

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

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

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

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

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 _____ 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 FESCUE 30 lbs/acre
BIRDSFOOT TREFOIL 10 lbs/acre
_____ lbs/acre

Lime _____ Tons/acre
or correct to pH 6.5
Fertilizer 500 lbs/acre
(10-20-20 or equivalent)
Mulch HAY OR STRAW Tons/acre
Seed* KY 31 FESCUE 30 lbs/acre
BIRDSFOOT TREFOIL 10 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 CARL W NOLAN

ADDRESS 210 2ND ST, ST MARYS WVA

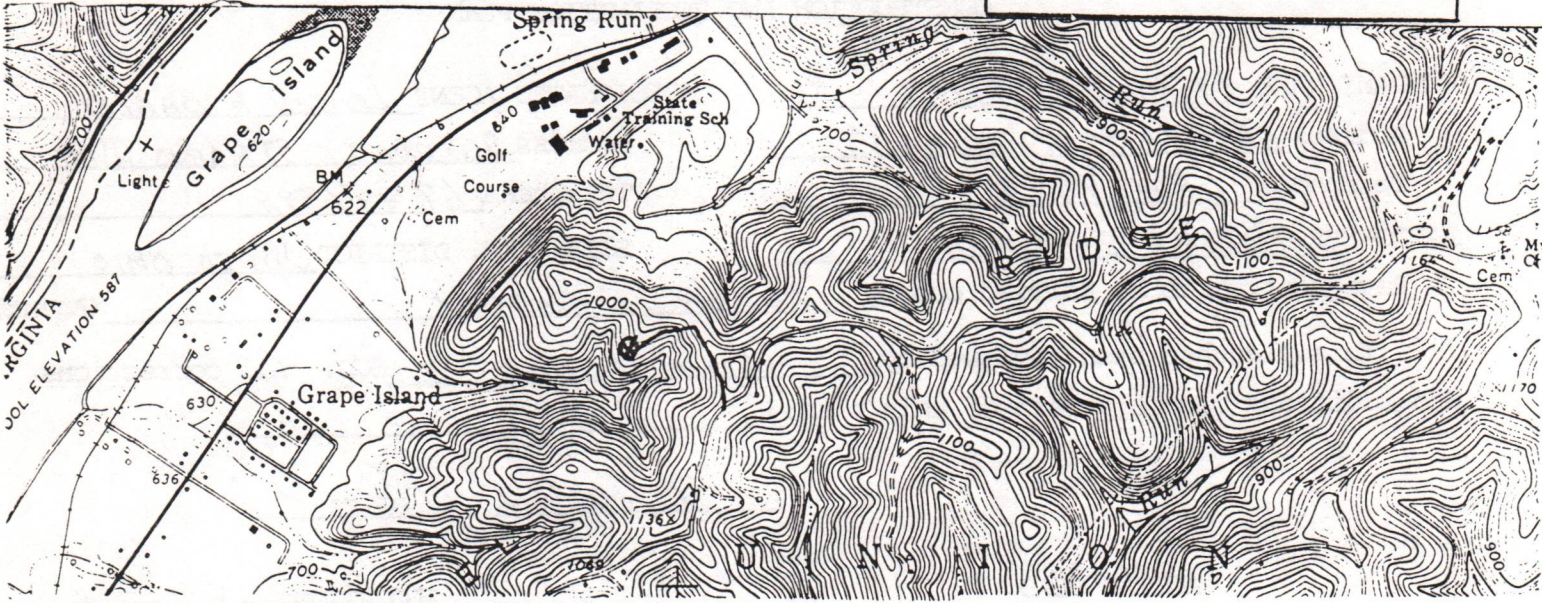
PHONE NO. 684 9399

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

IV-9 REVERSE
(REV 8-81)

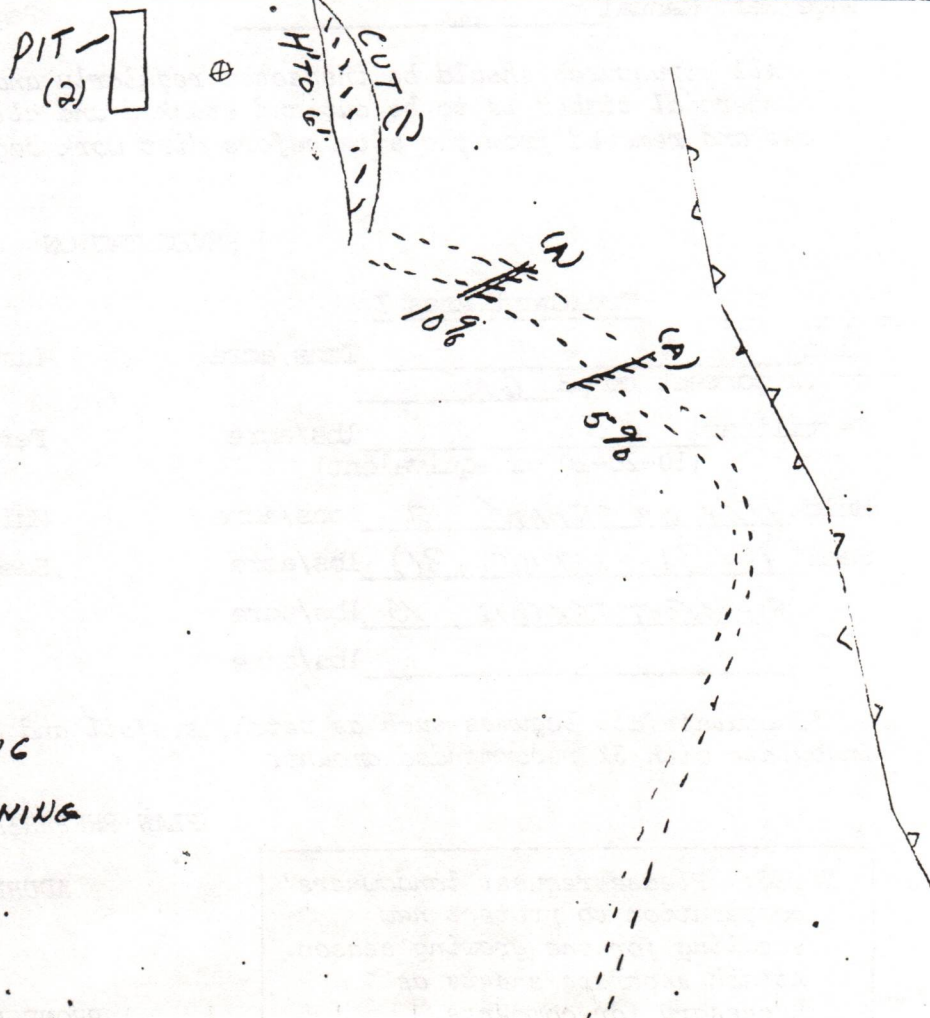
ATTACH OR PHOTOCOPY SECTION OF
INVOLVED TOPOGRAPHIC MAP.
QUADRANGLE Raven Rock

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	—▲—▲—▲—▲—▲—▲—
Road	== == == == ==
Existing fence	—x—x—x—x—
Planned fence	—/—/—/—/—/—/—
Stream	~ ~ ~ ~ ~
Open ditch	—>—>—>—>—>—>—>—>—>—>—
Diversion	//////
Spring	⊙→
Wet spot	⊕
Building	■
Drain pipe	—○→○→○→○→
Waterway	⇄⇄⇄⇄⇄



ACCESS ROAD IS AN EXISTING
FARM ROAD THAT NEEDS WIDENING
LOCATION IS IN CUTOVER
TIMBERLAND

THIS ASSIGNMENT, Made this 29th day of August, 1980, by and between MABEL V. KIESTER and ARTHUR M. KIESTER, her husband, WILLIAM N. CORBITT and RUTH W. CORBITT, his wife, JOSEPH E. CORBITT and MARY V. CORBITT, his wife, PAUL C. CORBITT and A. MARIE CORBITT, his wife, parties of the first part, hereinafter referred to as Assignors, and L & B OIL CORPORATION, INC., a corporation, party of the second part and hereinafter referred to as Assignee.

WITNESSETH: That in and for consideration of the sum of One Thousand Five Hundred Dollars (\$1,500.00), and other good and valuable considerations, the receipt of which is hereby acknowledged, the Assignors do hereby sell, assign, transfer, grant and convey unto the Assignee, its successors and assigns, subject to the terms, conditions and reservations herein contained all that certain oil and gas lease and leasehold estate and other property situate in the District of Union, County of Pleasants and State of West Virginia, and described as follows:

That certain oil and gas lease dated July 16, 1903, and of record in the Office of the Clerk of the County Commission of Pleasants County, West Virginia, in Deed Book No. 43, at page 457, from W. E. and Edward Holdren, her husband, to the Wild Cat Oil Company, a corporation, situate in Union District, Pleasants County, West Virginia, bounded and described as follows:

Bounded on the north by lands of R. N. Browse,
Bounded on the east by lands of D. Wallace,
Bounded on the south by lands of P. Snare and Kate Girder,
Bounded on the west by lands of Ohio River,
Containing 200 acres, more or less.

It is expressly understood and agreed that the landowners of the above described premises shall be entitled to free gas for two residences up to 200,000 feet should a well be found producing oil and/or gas in sufficient quantities as long as the landowners lay their own lines and at their own risks and upon condition that the landowners shall use said gas with economy, and in safe and proper pipes and appliances.

RECEIVED
DEC 22 1982
OIL & GAS DIVISION
DEPT. OF MINES

The Assignee covenants that its acceptance of the delivery of this Assignment acts as its agreement to abide and comply with the terms and conditions of this Assignment, and the parties covenant and agree that the terms and conditions contained herein shall also be binding upon the representatives, heirs, successors and assigns of the parties.

Assignors covenant with Assignee, its successors and assigns, that said oil and gas lease is a valid and subsisting oil and gas lease and that all rentals necessary to keep the same in full force and effect have been duly paid. Assignors further covenant with Assignee, its successors and assigns, that they will warrant and defend against all claiming through or by Assignors, but against no others.

IN TESTIMONY WHEREOF, Witness the execution hereof by Assignors this 3rd day of Sept, 1980.

Mabel V. Kiester (SEAL)
Mabel V. Kiester

Arthur M. Kiester (SEAL)
Arthur M. Kiester

William N. Corbitt (SEAL)
William N. Corbitt

Ruth W. Corbitt (SEAL)
Ruth W. Corbitt

Joseph E. Corbitt (SEAL)
Joseph E. Corbitt

Mary V. Corbitt (SEAL)
Mary V. Corbitt

Paul C. Corbitt (SEAL)
Paul C. Corbitt

A. Marie Corbitt (SEAL)
A. Marie Corbitt

-- WEST VIRGINIA,
COUNTY OF PLEASANTS, TO-WIT:

The foregoing instrument was executed before me in my
said County and State this 3rd day of Sept., 1980,
by Mabel V. Kiester and Arthur M. Kiester, her husband.

My commission expires: August 14 1990.

John P. L. L.
Notary Public

STATE OF WEST VIRGINIA,
COUNTY OF PLEASANTS, TO-WIT:

The foregoing instrument was executed before me in my
said County and State this 3rd day of Sept., 1980,
by William N. Corbitt and Ruth W. Corbitt, husband and wife.

My commission expires: August 14 1990.

John P. L. L.
Notary Public

STATE OF West Virginia,
COUNTY OF Pleasants, TO-WIT:

The foregoing instrument was executed before me in my
said County and State, this 3rd day of Sept, 1980,
by Joseph E. Corbitt and Mary V. Corbitt, husband and wife.

My commission expires: August 14 1990.

John P. L. L.
Notary Public

STATE OF West Virginia,
COUNTY OF Pleasants, TO-WIT:

The foregoing instrument was executed before me in my
said County and State, this 3rd day of Sept, 1980,
by Paul C. Corbitt and A. Marie Corbitt, husband and wife.

My commission expires: 14 August 90.

J. P. [Signature]
Notary Public

This instrument was prepared by Carl P. Bryant,
Bryant & White, Attorneys at Law, St. Marys, WV.

STATE OF WEST VIRGINIA, COUNTY OF PLEASANTS, TO-WIT:
OFFICE OF THE CLERK OF THE COUNTY COURT OF PLEASANTS COUNTY.

The foregoing paper writing was this day 9/8/80, at 10:20 AM
presented for record in my office, and thereupon, together with the certificate thereto an-
nexed, is admitted to record.

Teste: Juda W. Hammett Clerk,
County Court of Pleasants County

IV-35
(Rev 8-81)



Date April 15, 1983
Operator's
Well No. Holdren #5
Farm Robert E. Adkins
API No. 47 - 073 - 1577

State of West Virginia

Department of Mines
Oil and Gas Division

WELL OPERATOR'S REPORT
OF
DRILLING, FRACTURING AND/OR STIMULATING, OR PHYSICAL CHANGE

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

LOCATION: Elevation: 965' Watershed Jimmy Run
District: Union County Pleasants Quadrangle Raven Rock

COMPANY L & B Oil Company, Inc.
ADDRESS P.O. Box C, St. Marys, WV 26170
DESIGNATED AGENT Bernard Tice
ADDRESS P.O. Box C, St. Marys, WV 26170
SURFACE OWNER Robert E. Adkins
ADDRESS Rt. 2, N. St. Marys, WV 26170
MINERAL RIGHTS OWNER Robert E. Adkins
ADDRESS Rt. 2, N. St. Marys, WV 26170
OIL AND GAS INSPECTOR FOR THIS WORK Robert Lowther
ADDRESS Middlebourne, WV 26149
PERMIT ISSUED Dec. 22, 1982
DRILLING COMMENCED Jan. 4, 1983
DRILLING COMPLETED Jan. 9, 1983
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 Cond.			
13-10"			
9 5/8			
8 5/8	1100'	1100'	300 sks
7			
5 1/2			
4 1/2	4511'		425 sks
3			
2			
Liners used			

GEOLOGICAL TARGET FORMATION Devonian Shale (Benson) Depth 4600 feet
Depth of completed well 4618 feet Rotary XX / Cable Tools
Water strata depth: Fresh 90 feet; Salt N/A feet
Coal seam depths: N/A Is coal being mined in the area? No

OPEN FLOW DATA

Producing formation Benson Pay zone depth 4460 feet
Gas: Initial open flow 240 Mcf/d Oil: Initial open flow 15 Bbl/d
Final open flow 140 Mcf/d Final open flow 20 Bbl/d
Time of open flow between initial and final tests 48 hours
Static rock pressure 900 psig (surface measurement) after 48 hours shut in
(If applicable due to multiple completion--)
Second producing formation Devonian Shale Pay zone depth 3700 feet
Gas: Initial open flow 240 Mcf/d Oil: Initial open flow 15 Bbl/d
Final open flow 140 Mcf/d Oil: Final open flow 20 Bbl/d
Time of open flow between initial and final tests 48 hours
Static rock pressure 900 psig (surface measurement) after 48 hours shut in

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

- Stage #1 - 30 perforations between 4205 to 4470, 400,000 SCF of N² and 756,000 SCF of Co² and 2000 lbs. of 20/40 sand
- Stage #2 30 perforations between 3313 to 3735, 400,000 SCF of N² and 756,000 SCF of Co² and 2000 lbs. of 20/40 sand
- Stage #3 30 perforations between 2281 to 2671, 400,000 SCF of N² and 756,000 SCF of Co² and 2000 lbs. of 20/40 sand

WELL LOG

FORMATION	COLOR	HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS
					Including indication of all fresh and salt water, coal, oil and gas
Shale			0	190	
Red Shale			190	350	
Shale and Sand			350	2170	
Berea			2170	2174	
Gantz			2284	2292	
Thirty Foot			2450	2468	
Gordon			2564	2582	
Shale			2582	3580	
Speechley			3580	3594	
Shale			3594	4368	
Benson			4368	4402	
Shale			4402	4600	

(Attach separate sheets as necessary)

L & B Oil Company, Inc.
Well Operator

By: 

Date: April 15, 1983

Note: Regulation 2.02(i) provides as follows:

"The term 'log' or 'well log' shall mean a systematic

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

INSPECTOR'S WELL REPORT

Permit No. 073-1577

Oil or Gas Well _____
(KIND)

Company L & B oil Co
 Address St Marys w. Va.
 Farm Robert Atkins
 Well No. 5
 District Union County Pleasant
 Drilling commenced 1-4-83
 Drilling completed _____ Total depth 2724
 Date shot _____ Depth of shot _____
 Initial open flow _____ /10ths Water in _____ Inch
 Open flow after tubing _____ /10ths Merc. in _____ Inch
 Volume _____ Cu. Ft.
 Rock pressure _____ lbs. _____ hrs.
 Oil _____ bbls., 1st 24 hrs.
 Fresh water _____ feet _____ feet
 Salt water _____ feet _____ feet

CASING AND TUBING	USED IN DRILLING	LEFT IN WELL	PACKERS
Size			
16			Kind of Packer _____
13			
10			Size of _____
8 1/4	1136	1136	
6 3/4			Depth set _____
5 3/16			
3			Perf. top _____
2			Perf. bottom _____
Liners Used			Perf. top _____
			Perf. bottom _____

CASING CEMENTED 85/8 SIZE 1136 No. FT. 1-5-83 Date
 NAME OF SERVICE COMPANY Dowell
 COAL WAS ENCOUNTERED AT _____ FEET _____ INCHES
 _____ FEET _____ INCHES FEET _____ INCHES
 _____ FEET _____ INCHES FEET _____ INCHES

RECEIVED

JAN 11 1983

OIL AND GAS DIVISION
WV DEPARTMENT OF MINES

Drillers' Names _____

Remarks: Cemented with 300 SKS neat cement 3% Cl₂ oil 1340

1-7-83

DATE

R.A. Louther

DISTRICT WELL INSPECTOR

Form 26
2/16/82

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS WELLS DIVISION
INSPECTOR'S PLUGGING REPORT

Permit No. _____ Well No. 552

COMPANY _____ ADDRESS _____

FARM _____ DISTRICT _____ COUNTY Putnam

Filling Material Used _____

Liner _____ Location _____ Amount _____ Packer _____ Location _____

PLUGS USED AND DEPTH PLACED			BRIDGES	CASING AND TUBING		
CEMENT-THICKNESS	WOOD-SIZE	LEAD	CONSTRUCTION-LOCATION	RECOVERED	SIZE	LOST

Drillers' Names _____

Remarks: _____

_____ I hereby certify I visited the above well on this date.

DATE

DISTRICT WELL INSPECTOR



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

RECEIVED
DEC 4 - 1984
OIL & GAS DIVISION
DEPT. OF MINES

FINAL INSPECTION REPORT
INSPECTORS COMPLIANCE REPORT

Kodiak Petroleum Co. DBA
COMPANY L & B Oil Company, Inc.
~~P. O. Box C~~ 210 Second ST.
St. Marys, West Virginia 26170

PERMIT NO 073-1577
FARM & WELL NO Robert Adkins
Holdren #5
DIST. & COUNTY Union/Pleasants

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

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


SIGNED R. H. Lowther
DATE Nov-29, 1984

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

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

January 9, 1985

DATE

1.0 API well number: (If not assigned, leave blank. 14 digits.)	- 47 - 073 - 1577										
2.0 Type of determination being sought: (Use the codes found on the front of this form.)	107 23 Section of NGPA Category Code										
3.0 Depth of the deepest completion location: (Only needed if sections 103 or 107 in 2.0 above.)	4470 feet										
4.0 Name, address and code number of applicant: (35 letters per line maximum. If code number not available, leave blank.)	L & B Oil Company, Inc. Seller Code Name P.O. Box C Street St. Marys, WV 26170 City State Zip Code										
5.0 Location of this well: (Complete (a) or (b).) (a) For onshore wells (35 letters maximum for field name.)	St. Marys Field Name Pleasants WV County State										
(b) For OCS wells:	N/A Area Name Block Number Date of Lease: _____ Mo. Day Yr. OCS Lease Number										
(c) Name and identification number of this well: (35 letters and digits maximum.)	Holdren #5										
(d) If code 4 or 5 in 2.0 above, name of the reservoir: (35 letters maximum.)	_____										
6.0 (a) Name and code number of the purchaser: (35 letters and digits maximum. If code number not available, leave blank.)	_____ Buyer Code Name										
(b) Date of the contract:	_____ Mo. Day Yr.										
(c) Estimated total annual production from the well:	20 Million Cubic Feet										
7.0 Contract price: (As of filing date. Complete to 3 decimal places.)	<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="width:15%;"></th> <th style="width:20%;">(a) Base Price</th> <th style="width:20%;">(b) Tax</th> <th style="width:20%;">(c) All Other Prices [Indicate (+) or (-).]</th> <th style="width:25%;">(d) Total of (a), (b) and (c)</th> </tr> </thead> <tbody> <tr> <td>S/MMBTU</td> <td>Deregulated</td> <td>_____</td> <td>_____</td> <td>_____</td> </tr> </tbody> </table>		(a) Base Price	(b) Tax	(c) All Other Prices [Indicate (+) or (-).]	(d) Total of (a), (b) and (c)	S/MMBTU	Deregulated	_____	_____	_____
	(a) Base Price	(b) Tax	(c) All Other Prices [Indicate (+) or (-).]	(d) Total of (a), (b) and (c)							
S/MMBTU	Deregulated	_____	_____	_____							
8.0 Maximum lawful rate: (As of filing date. Complete to 3 decimal places.)	<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="width:15%;"></th> <th style="width:20%;">(a) Base Price</th> <th style="width:20%;">(b) Tax</th> <th style="width:20%;">(c) All Other Prices [Indicate (+) or (-).]</th> <th style="width:25%;">(d) Total of (a), (b) and (c)</th> </tr> </thead> <tbody> <tr> <td>S/MMBTU</td> <td>Deregulated</td> <td>_____</td> <td>_____</td> <td>_____</td> </tr> </tbody> </table>		(a) Base Price	(b) Tax	(c) All Other Prices [Indicate (+) or (-).]	(d) Total of (a), (b) and (c)	S/MMBTU	Deregulated	_____	_____	_____
	(a) Base Price	(b) Tax	(c) All Other Prices [Indicate (+) or (-).]	(d) Total of (a), (b) and (c)							
S/MMBTU	Deregulated	_____	_____	_____							
9.0 Person responsible for this application:	Bernard Tice President Name Title  Signature 4-15-83 304-684-9399 Date Application is Completed Phone Number										

APR 20 1983

OIL & GAS DIVISION
DEPT. OF MINES

Agency Use Only
Date Received by Juris. Agency
APR 20 1983

Date Received by FERC

PARTICIPANTS:

DATE: SEP 19 1983

BUYER-SELLER CODE

WELL OPERATOR: L + B Oil Company, Inc

FIRST PURCHASER: NA

OTHER: _____

Devonian Shale

W. Va. Department of Mines, Oil & Gas Division
 WELL DETERMINATION FILE NUMBER
830420-107-073-1577
 Use Above File Number on all Communications
 Relating to Determination of this Well

QUALIFIED

CHECK EACH ITEM AS COMPLETE OR NOTE WHAT IS MISSING

ITEM NO.

1. FERC -121 Items not completed - Line No. 6.0cb, 7.0 + 8.0 deregulated
2. IV-1 Agent Bernard Tice
3. IV-2 Well Permit _____
4. IV-6 Well Plat
5. IV-35 Well Record Drilling Deepening _____
6. IV-36 Gas-Oil Test: Gas Only _____ Was Oil Produced? _____ Ratio _____
7. IV-39 Annual Production _____ years
8. IV-40 90 day Production _____ Days off line: _____
9. IV-48 Application for certification. Complete?
- 10-17. IV Form 51 - 52 - 53 - 54 - 55 - 56 - 57 - 58 Complete? Affidavit Signed
- 18-28. Other: Survey _____ Logs _____ Geological Charts _____
 Structure Map _____ 1: 4000 Map _____ Well Tabulations _____
 Gas Analyses _____
- (5) Date commenced: 1-4-83 Date completed 1-9-83 Deepened _____
- (5) Production Depth: 4460 3700
- (5) Production Formation: Benson, Devonian Shale
- (5) Final Open Flow: 140MCF
- (5) After Frac. R. P. 900# 48hrs.
- (6) Other Gas Test: _____
- (7) Avg. Daily Gas from Annual Production: _____
- (8) Avg. Daily Gas from 90-day ending w/1-120 days _____
- (8) Line Pressure: _____ PSIG from Daily Report
- (5) Oil Production: _____ From Completion Report _____
- 10-17. Does lease inventory indicate enhanced recovery being done NO
- 10-17. Is affidavit signed? Notarized?
- Does official well record with the Department confirm the submitted information? YES
- Additional information _____ Does computer program confirm? _____
- Was Determination Objected to _____ By Whom? _____

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

Date April 15, 1983, 19

Operator's Well No. Holdren #5

API Well No. 47 - 073 - 1577
State County Permit

Previous File No. _____
(If Applicable)

STATE APPLICATION FOR WELL CLASSIFICATION

WELL OPERATOR L & B Oil Company, Inc.

ADDRESS P.O. Box C
St. Marys, WV 26170

DESIGNATED AGENT Bernard Tice

ADDRESS P.O. Box C
St. Marys, WV 26170

Gas Purchase Contract No. _____ and Date _____
(Month, day and year)

Meter Chart Code _____

Name of First Purchaser _____

(Street or P. O. Box)
(City) (State) (Zip Code)

FERC Seller Code _____ FERC Buyer Code _____

TYPE OF DETERMINATION BEING SOUGHT:

- (1) Initial determination (See FERC Form 121.) 107 Section of NGPA
- (2) Determination that increased production is the result of enhanced recovery technology.
- (3) Determination of a seasonally affected well.

3
Category Code

Bernard Tice President
Name (Print) Title

Bernard Tice
Signature

P.O. Box C
Street or P. O. Box
St. Marys, WV 26170
City State (Zip Code)

604 684-9399
Area Code Phone Number

(Certificate of Proof of Service to Purchaser)

(All of the above to be completed by the Operator/Applicant)

(To be completed by Jurisdictional Agency. Executed copy to be returned to Operator/Applicant and purchaser, if known).

The Department of Mines has received a request, for certification of the above described well as meeting the requirements of Section _____ under the Natural Gas Policy Act of 1976, (NGPA); or for determination that increased production is the result of enhanced recovery technology under Section 108 of (NGPA); or for determination of a seasonally affected well under Section 108 of (NGPA).

All interested parties are hereby notified that on the _____ day of _____, 19____, at the office of the Oil and Gas Division in Charleston, West Virginia, or as soon thereafter as it may be heard, there will be a public hearing, if requested, or if objection is filed.

This Application is assigned File No. _____

Initial review of information submitted indicates the well is, is not entitled to certification as claimed under the Natural Gas Policy Act (NGPA). A review of this evidence and any additional evidence will be made at the time appointed for a public hearing or as soon thereafter as the matter may be heard.

Unless objections are timely filed or a request for a hearing is made within fifteen (15) days, a hearing will not be held except on ex parte motion of the department and the matter will go to determination.

WEST VIRGINIA DEPARTMENT OF MINES

APR 20 1983

Date received by _____
Jurisdictional Agency

By [Signature]
Title _____

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

Date April 15, 1983

Operator's Well No Holdren #5

API Well No 47 - 073 - 1577
State West Virginia Permit

WELL CLASSIFICATION FORM
HIGH COST GAS WELL - DEVONIAN SHALE

NGPA Section 107

DESIGNATED AGENT Bernard Tice

ADDRESS P.O. Box C
St. Marys, WV 26170

WELL OPERATOR L & B Oil Company, Inc.

LOCATION: Elevation 965'

ADDRESS P.O. Box C

Watershed Jimmy Run

St. Marys, WV 26170

Dist. Union County Pleasants Quad Raven Rock

GAS PURCHASER _____

Gas Purchase Contract No _____

ADDRESS _____

Meter Chart Code _____

Date of Contract _____

* * * * *

Date surface drilling began: Jan. 4, 1983

Indicate the bottom hole pressure of the well and explain how this was calculated.

$$BHP = P_1 + P_1 (e^{GL/53.34T} - 1)$$

$$P^1 = 900 + 14.73 = 914.73$$

$$T = 80$$

$$G = .70$$

$$L = 4460$$

$$BHP = 1019.46$$

AFFIDAVIT

I, Bernard Tice, having been first sworn according to law, state that, I have calculated the percentage of footage of the producing interval which is not Devonian shale as indicated by a Gamma Ray index of less than 0.7 if a Gamma Ray log described subparagraph (3)(i) or (3)(ii)(A) has been filed, or as indicated by the report described in subparagraph (3)(ii)(B); I have demonstrated that the percentage of potentially disqualifying non-shale footage is equal to or less than five (5) percent of the gross Devonian age interval; and I have no knowledge of any information not described in the application which is inconsistent with a conclusion that the well qualifies as a high cost natural gas well.

Bernard Tice

STATE OF WEST VIRGINIA,
COUNTY OF PLEASANTS, TO WIT.

I, Betty Shingleton, a Notary Public in and for the state and county aforesaid, do certify that Bernard Tice, whose name is signed to the writing above, bearing date the 15th day of April, 19 83, has acknowledged the same before me, in my county aforesaid.

Given under my hand and official seal this 15th day of April, 19 83.

My term of office expires on the 4th day of August, 1992.

[NOTARIAL SEAL]

Betty Shingleton
Notary Public

APPLICATION FOR DETERMINATION OF THE MAXIMUM GAS
PRICE UNDER THE NATURAL GAS POLICY ACT

Operator: L & B Oil Company, Inc. Agent: Bernard Tice

Type Determination being sought - 107 (Devonian Shale)

API Well No.: 47-073-1577 Well Name: Holdren #5

West Virginia Office of Oil and Gas References: County Pleasants

SJA File No.: _____

Volume _____ Page _____ Line _____

I. NOTE: A Gamma Ray Log has been marked with the (a) Shale Base Line, (b) a line representing 0.7 x (Shale Base Line), (c) intervals with Gamma Ray units less than 0.7 x (Shale Base Line) and that log is included with this analysis.

II. Gamma Ray evaluation indices:

A. Shale Base Line (API Units)

1. GR Value at Base Line = 140 * API Units
2. Remarks:

140 units picked as an average shale base line through entire portion of Devonian Shale penetrated.

B. Gamma Ray Log Value at 0.7 x Value at Base Line

1. GR Value = 140 * API Units
2. Calculation: $\frac{0.7 \text{ (GR Value at Base Line)}}{0.7 \text{ (} \underline{140} \text{ *)}} = \underline{98} API Units$

III. Intervals with GR index less than 0.7 x (Value at Base Line):

Interval		Thickness of Interval Feet	Feet of less than* 0.7 (Shale Base Line) Feet
From**	To***		
2170	- 4600	2430	8'
Base of	-		
Berea	- TD		
-	-		
-	-		
-	-		
-	-		
-	-		
-	-		
-	-		
-	-		

Total Devonian Interval 2430

Total Less Than 0.7 (Shale Base) 8'

% Less Than 0.7 (Shale Base Line) = 8 x 100 = .3%

* Marked on log included with analysis.
 ** Top of Devonian Section Recorded as First Interval in the Column.
 *** Lesser of TD or Bottom of Devonian Shale Section Recorded as last interval in this Column.

Holdren #5

BHP Calculation

$$P_1 = 900 + 14.73 = 914.73$$

$$L = 4460$$

$$G = .70$$

$$T = 80^\circ$$

$$1) G \times L = .70 \times 4460 = 3122$$

$$2) \begin{array}{r} \frac{GL}{3000} \\ 3122 \\ \hline 3200 \end{array} \qquad \begin{array}{r} \frac{80^\circ F}{1.1098} \\ ? \\ \hline 1.1175 \\ \hline .0077 \end{array}$$

$$\begin{aligned} .0077 \div 200 &= .0000385 \\ .0000385 \times 122 &= .004697 \end{aligned}$$

$$3) 3122 = 1.1098 + .004697 = 1.114497$$

$$4) \begin{aligned} \text{BHP} &= 914.73 + 914.73 \quad (1.114497 - 1) \\ &= 914.73 + 104.73 \\ &= 1019.46 \text{ BHP} \end{aligned}$$

M.S. 12/27/81

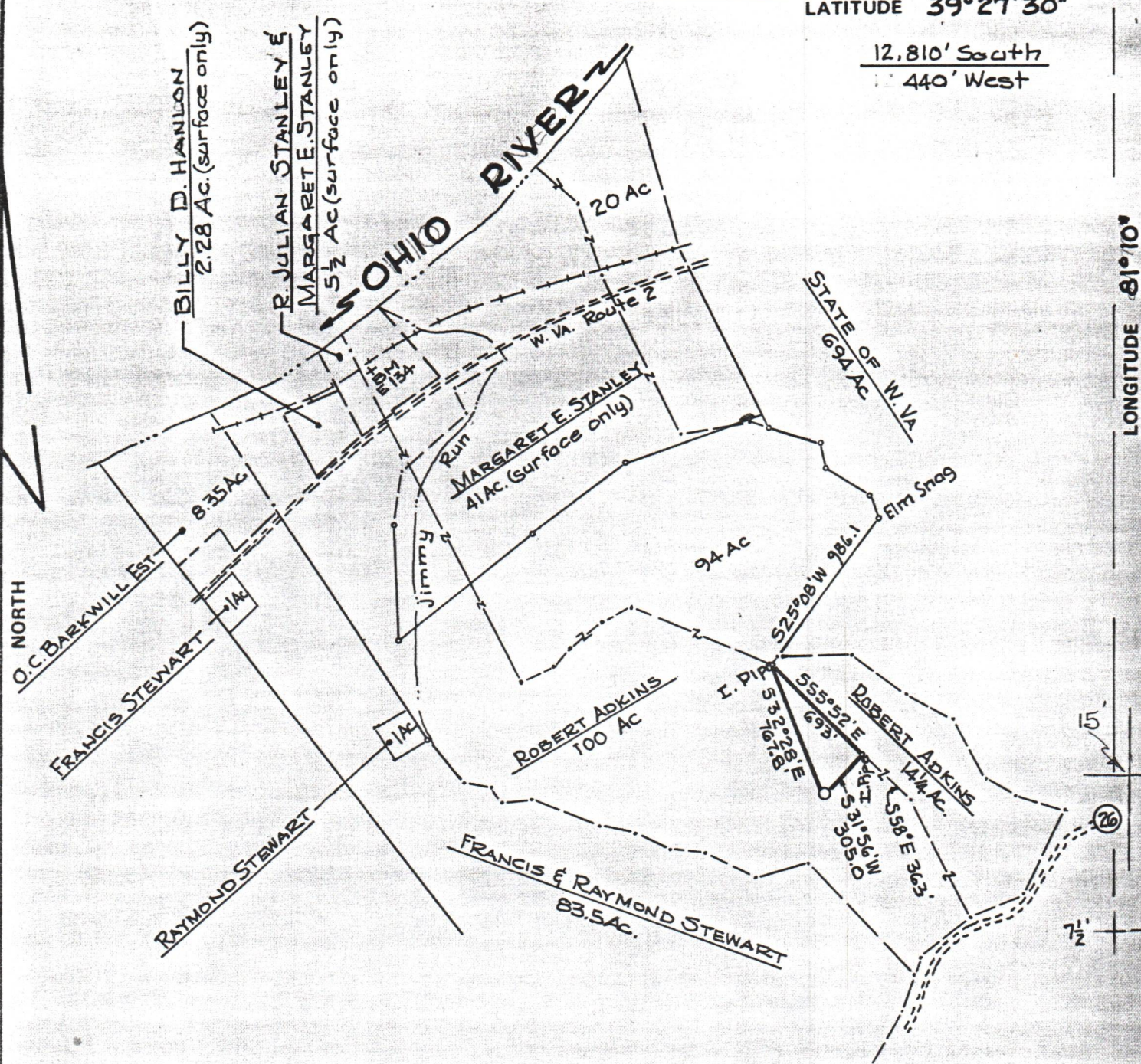
440'

LATITUDE 39°27'30"

12,810' South
440' West

LONGITUDE 81°18'

12,810'



FILE NO. _____
 DRAWING NO. _____
 SCALE 1" = 800'
 MINIMUM DEGREE OF ACCURACY 1:2000
 PROVEN SOURCE OF ELEVATION 4.5 G.S. BM E134
 Elev 622

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) Kenneth D. Welch
 R.P.E. _____ L.L.S. 369

PLACE SEAL HERE

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



DATE April 18, 19 81
 OPERATOR'S WELL NO. HOLDREN # 5
 API WELL NO. 47-073-1577
 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 965 WATER SHED Jimmy Run of Ohio River
 DISTRICT Union COUNTY Pleasants
 QUADRANGLE Ravenrock, Ohio - W. Va
 SURFACE OWNER Robert E Adkins ACREAGE 179 1/2
 OIL & GAS ROYALTY OWNER Robert E. Adkins LEASE ACREAGE 214
 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 Ohio State MARCELS ESTIMATED DEPTH 5000'
 WELL OPERATOR LEB Oil Co DESIGNATED AGENT Loren Bagley
 ADDRESS 109 Washington St ADDRESS 109 Washington St
St. Marys, W. Va St. Marys, W. Va.

PLEASANTS - 1577