

STATE PLANE CO-ORDINATES
 FOR THIS PLUGGED WELL
 SITE ARE:
 N 860,260.66
 E 1,991,088.61
 GPS DATE 10-09-98

9000'
 LATITUDE 39°22'30"

LONGITUDE 81°00'18"

DAVID & BETTY I. CALVIN
 TIMOTHY W. & TAMARA L. FLOYD 1/2 INTEREST EACH
 DEED BOOK 231, AT PAGE 665
 163.948 ACRES BY SURVEY
 TAX PARCEL 18
 SURVEY PLAT RECORDED IN
 PLAT BOOK 3, AT PAGE 127

BEGINNING AT STONE, BEING
 THE NORTHWEST CORNER OF
 LOT NUMBER ONE

HARVEY L. CUNNINGHAM
 DEED BOOK 144, AT PAGE 302
 200.88 ACRES BY DEED
 174 ACRES TAXED
 TAX PARCEL 33

PROPOSED WELL
 47-073-0816P
 PLUGGED

THOMAS J. & MARTHA J. COX
 DEED BOOK 111, 592
 DEED BOOK 111, AT PAGE 592
 LOT NUMBER TWO
 83.20 ACRES
 TAX PARCEL 35

STEVEN P. & JANET M. CLARK
 DEED BOOK 238, AT PAGE 6
 94.94 ACRES
 TAX MAP 10 - PARCEL 16

TECHNICAL MEASUREMENTS, INC.
 LAND SURVEYORS
 P.O. BOX 891
 CLENDENIN, WEST VIRGINIA 25045
 (304) 548-8161

SURVEY REF: GPS VOL. 7-9-97, PG. 73

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

FILE No _____
 DRAWING No. _____
 SCALE 1" = 1000'
 MINIMUM DEGREE OF
 ACCURACY 1 : 10,000
 PROVEN SOURCE OF
 ELEVATION GPS SURVEY

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 REGU-
 LATIONS ISSUED AND PRESCRIBED BY THE
 DEPARTMENT OF MINES

(SIGNED) Albert J. Miller
 R.P.E. R.P.S. 513

ALBERT J. MILLER
 LICENSED
 No. 513
 STATE OF
 WEST VIRGINIA
 LAND SURVEYOR

PLACE SEAL HERE

STATE OF WEST VIRGINIA
 DIVISION OF ENVIRONMENTAL PROTECTION
 OFFICE OF OIL AND GAS
 NITRO, WV

DATE OCTOBER 10 19 98
 OPERATOR'S WELL No. McCOLLOUGH NO. 1
 API WELL No. 47 073-0814P

WELL TYPE: OIL ___ GAS X LIQUID INJECTION ___ WASTE DISPOSAL ___ STATE COUNTY PERMIT
 (IF "GAS") PRODUCTION X STORAGE ___ DEEP ___ SHALLOW X

LOCATION: ELEVATION 789.56 WATER SHED GRIMES RUN TO McKIM CREEK TO MIDDLE ISLAND TO OHIO RIVER
 DISTRICT LAFAYETTE COUNTY PLEASANTS
 QUADRANGLE ELLENBORO, W. VA.

SURFACE OWNER JAMES W. & SUSAN SHOWMAN ACREAGE 85.39
 OIL & GAS ROYALTY OWNER WAS S. K. McCOLLOUGH LEASE ACREAGE 85.39
 LEASE No. _____

PROPOSED WORK: DRILL X CONVERT ___ DRILL DEEPER ___ REDRILL ___ FRACTURE OR
 STIMULATE X PLUG OFF OLD FORMATION ___ PERFORATE NEW
 FORMATION ___ OTHER PHYSICAL CHANGE IN WELL (SPECIFY) _____

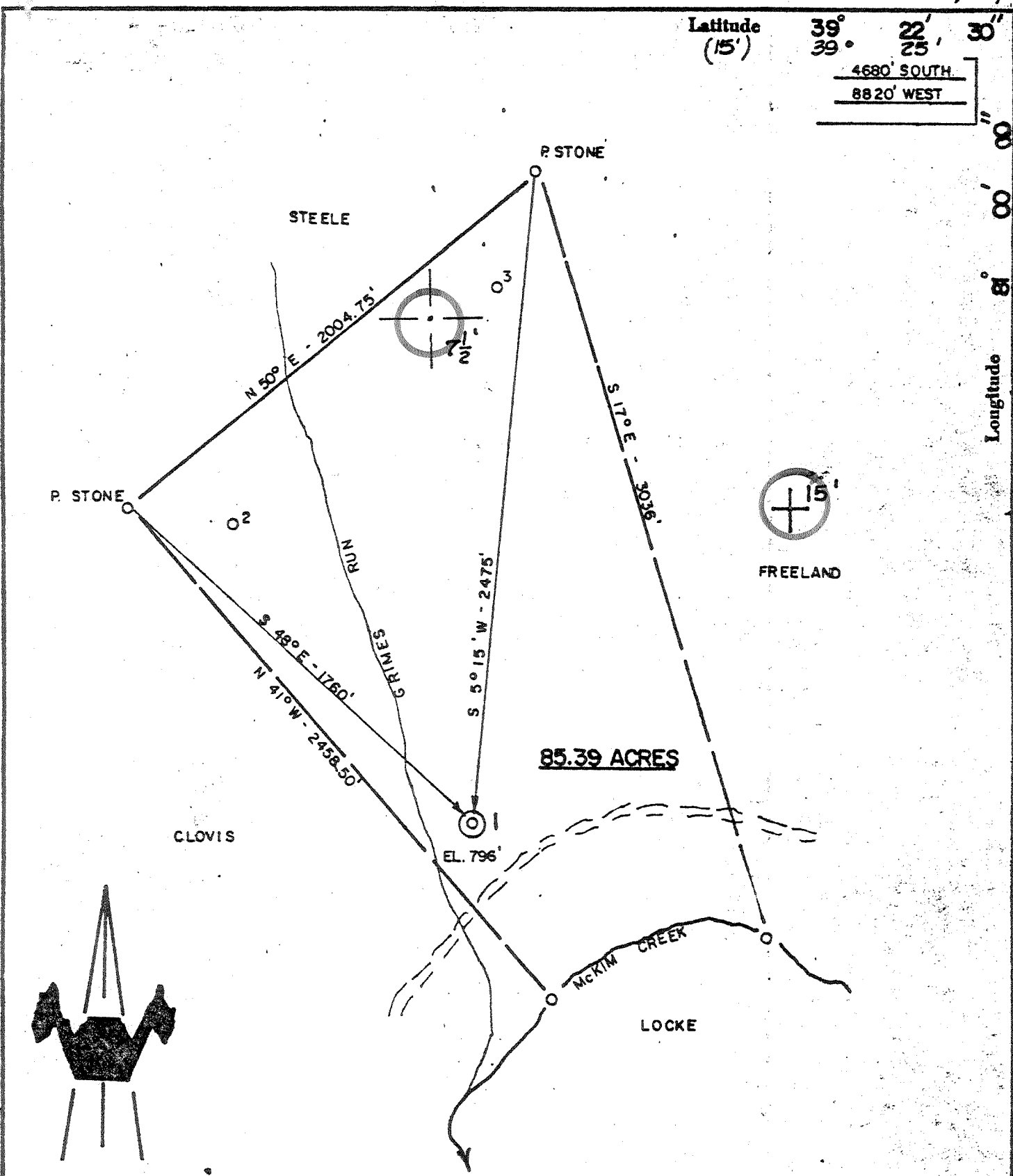
PLUG AND ABANDON ___ CLEAN OUT AND REPLUG
 TARGET FORMATION 5 TH SAND ESTIMATED DEPTH 2950
 WELL OPERATOR PARDEE EXPLORATION DESIGNATED AGENT JEFF BROWN
 ADDRESS 300 CAPITOL STREET ADDRESS 300 CAPITOL STREET
 SUITE 910 CHARLESTON, WV 25301 SUITE 910 CHARLESTON, WV 25301



PLE 0814P

Latitude (15') 39° 22' 30" 39° 25' 30" 4680' SOUTH 8820' WEST

Longitude 81° 00' 00"



ACCURACY: 1" / 200'

New Location

Drill Deeper

Abandonment

Fracture

Redrill

Other

Formation 5 TH SAND Oil

Est. Depth 2950' Gas

Other

Source of Elevation B.M. - HEBRON - (758')

I, the undersigned, hereby certify that this map is correct to the best of my knowledge and belief and shows all the information required by paragraph 6 of the rules and regulations of the oil and gas section of the mining laws of West Virginia.

Chet Waterman

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

Company KEY OIL COMPANY
227 WASHINGTON AVE CLARKSBURG WY 26301

Address WEST UNION, WV

Surface Owner S. K. McCOLLOUGH

Mineral Owner " "

Well No. 1 Acres 85.39

Elevation 796'

Quadrangle ST. MARIES ELLENBORO Series 7.5

County PLEASANTS District LAFAYETTE

Date 11/2/79 Scale 1" = 500'

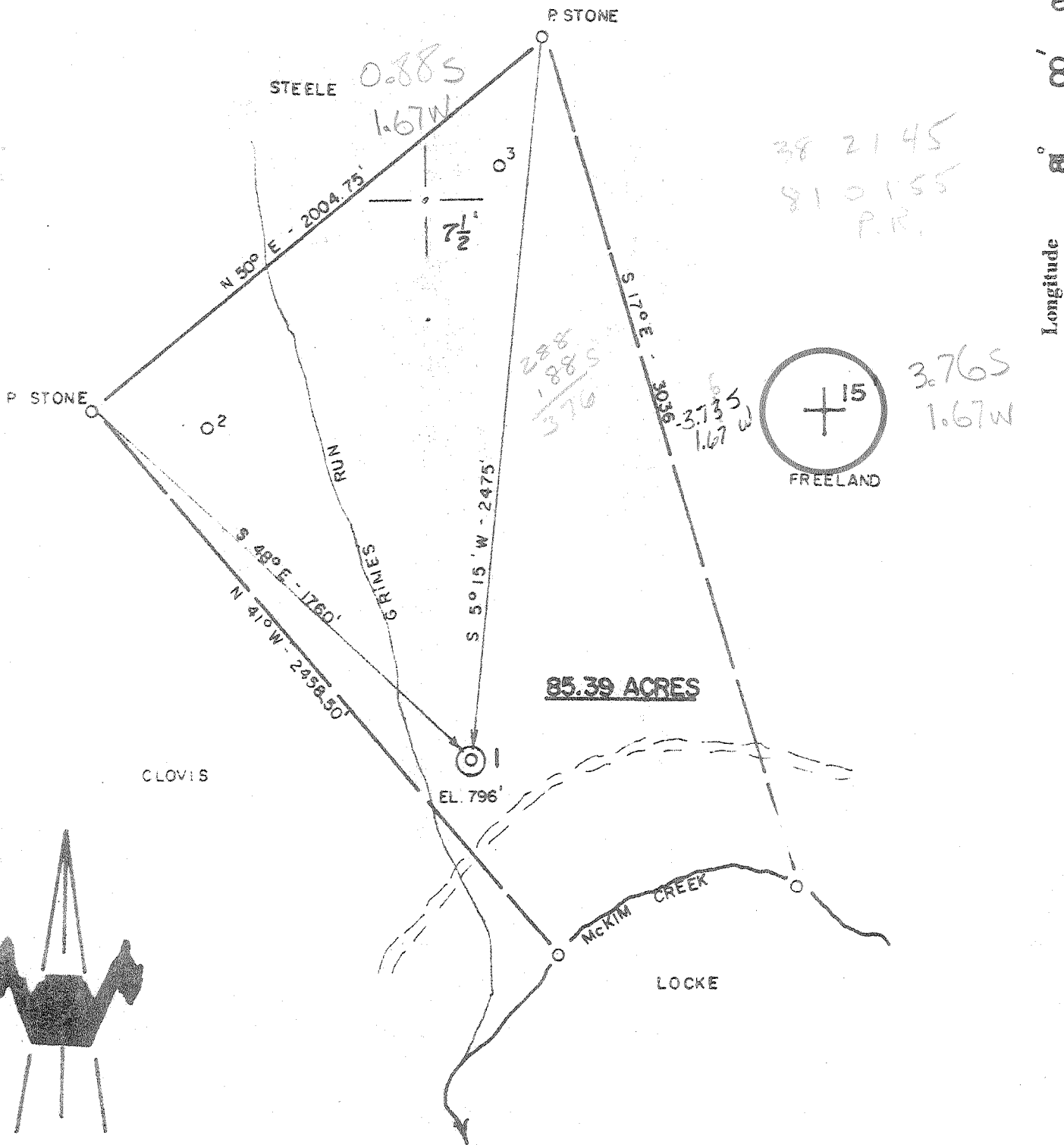
WELL LOCATION MAP
47 - 073 - 0814-F
STATE COUNTY PERMIT

+ Denotes location of well on United States Topographic Maps.
Engineer CHET WATERMAN
Engineer's Registration No. 3788 File No. 79-806

Latitude 39° 22' 30"
(15')

39° 25' 30"

4680' SOUTH
8820' WEST



85.39 ACRES

Formation 5 TH SAND

Est. Depth 2950'

Oil
Gas
Other

Source of Elevation B.M. - HEBRON - (758')

I, the undersigned, hereby certify that this map is correct to the best of my knowledge and belief and shows all the information required by paragraph 6 of the rules and regulations of the oil and gas section of the mining laws of West Virginia.

Chet Waterman

Company KEY OIL COMPANY
227 WASHINGTON AVE CLARKSBURG WY 26301
Address WEST UNION, WV
Surface Owner S. K. McCOLLOUGH
Mineral Owner " "

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

WELL LOCATION MAP
47 - **073** - **0814**
STATE COUNTY PERMIT

Well No. 1 Acres 85.39
Elevation 796'
Quadrangle ST MARYS ELLENBORO Series 7.3'
County PLEASANTS District LAFAYETTE
Date 11/2/79 Scale 1" = 500'

+ Denotes location of well on United States Topographic Maps.
Engineer CHET WATERMAN DEC 6 1979
Engineer's Registration No. 3788 File No. 79-806



STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
Oil and Gas Division

JAN - 4 1980

WELL RECORD

OIL & GAS DIVISION
DEPT. OF MINES
Recycling _____ Comb. _____
Water Flood _____ Storage _____
Disposal _____ (Kind) _____

Quadrangle _____
Permit No. 47-073-0814

Company Key Oil Company
Address Clarksburg, WV
Farm S. K. McCullough Acres 85.39
Location (waters) McKim Creek
Well No. 1 Elev. 796'
District Lafayette County Pleasants
The surface of tract is owned in fee by S. K. McCullough
Address Hebron, WV
Mineral rights are owned by S. K. McCullough
Address Hebron, WV
Drilling Commenced 11-26-79
Drilling Completed 12-1-79
Initial open flow N/A cu. ft. _____ bbls.
Final production 250,000 cu. ft. per day _____ bbls.
Well open 24 hrs. before test 650 RP.

Casing and Tubing	Used in Drilling	Left in Well	Cement fill up Cu. ft. (Sks.)
Size			
20-16			
Cond.			
13-10"			
9 5/8			
8 5/8	840'		
7			
5 1/2			
4 1/2	2710'		
3			
2			
Liners Used			

Well treatment details: Attach copy of cementing record.
1130 bbls 300 sks 80/100 550 sks 20/40 2635-2650

Coal was encountered at _____ Feet _____ Inches
Fresh water 100' Feet _____ Salt Water _____ Feet _____
Producing Sand Fifth Sand Depth 2754'

Formation	Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water	* Remarks
Big Injun			1710	1860		
Gantz			2150	2176		
Gordon			2460	2480		
<u>Fifth</u>			2635	2650		
					2650 2480 <hr/> 170	

(over)

* Indicates Electric Log tops in the remarks section.



STATE OF WEST VIRGINIA
DEPARTMENT OF MINES

RECEIVED
NOV 15 1979

Oil and Gas Division

OIL & GAS DIVISION
DEPT. OF MINES

OIL AND GAS WELL PERMIT APPLICATION

TO THE DEPARTMENT OF MINES,
Charleston, W. Va.

DATE November 14, 1979

Surface Owner S. K. McCullough
Address Hebron, WV
Mineral Owner S. K. McCullough
Address Hebron, WV
Coal Owner _____
Address _____
Coal Operator _____
Address _____

Company Key Oil Company
Address 227 Washington Ave, Clarksburg, WV
Farm S. K. McCullough Acres 85.39
Location (waters) McKin Creek
Well No. 1 Elevation 796'
District Lafayette County Pleasants
Quadrangle Ellenboro

THIS PERMIT MUST BE POSTED AT THE WELL SITE

All provisions being in accordance with Chapter 22,
of the W. Va. Code, the location is hereby approved
for drilling. This permit shall expire if
operations have not commenced by 7-15-80.

INSPECTOR
TO BE NOTIFIED Phillip Lee Tracy
ADDRESS P.O. Box 173, Middlebourn, WV 26149
PHONE 758-4573

Robert L. [Signature]
Deputy Director - Oil & Gas Division

GENTLEMEN:

The undersigned well operator is entitled to drill upon the above named farm or tract of land for oil and gas, having fee title thereto, (or as the case may be) under grant or lease dated August 11, 1979 by S. K. McCullough made to Key Oil Company and recorded on the 6th day of September 19 79 in Pleasants County, Book 153 Page 383

NEW WELL _____ DRILL DEEPER _____ REDRILL _____ FRACTURE OR STIMULATE
_____ OIL AND GAS WELL ORIGINALLY DRILLED BEFORE JUNE 5, 1969.

The enclosed plat was prepared by a registered engineer or licensed land surveyor and all coal owners and/or operators have been notified as of the above date.

The above named coal owners and/or operator are hereby notified that any objection they wish to make, or are required to make by Section 3 of the Code, must be received by, or filed with the Department of Mines within ten (10) days. *

Copies of this notice and the enclosed plat were mailed by registered mail, or delivered to the above named coal operators or coal owners at their above shown respective address _____ day _____ before, or on the same day with the mailing or delivery of this copy to the Department of Mines at Charleston, West Virginia.

Very truly yours,

(Sign Name) _____

PLEASE SUBMIT COPIES OF ALL
GEOPHYSICAL LOGS DIRECTLY TO:

WEST VIRGINIA GEOLOGICAL AND
ECONOMIC SURVEY
P. O. BOX 879
MORGANTOWN, WEST VIRGINIA 26505
AC-304 - 292-6331

Address
of
Well Operator

Well Operator
227 Washington Ave., Suite 3F
Street
Clarksburg
City or Town
West Virginia 26301
State

*SECTION 3 If no objections are filed or found by the Department of mines, within said period of ten days from the receipt of notice and plat by the department of mines, to said proposed location, the department shall forthwith issue to the well operator a permit reciting the filing of such plat, that no objections have been made by the coal operators or found thereto by the department and that the same is approved and the well operator authorized to proceed.

BLANKET BOND

47-073-0814

PERMIT NUMBER

THIS IS AN ESTIMATE ONLY
ACTUAL INFORMATION WILL BE SUBMITTED ON OG-10 UPON COMPLETION

PROPOSED WORK ORDER TO X DRILL _____ DEEPEN _____ FRACTURE-STIMULATE _____
 DRILLING CONTRACTOR: (If Known) RESPONSIBLE AGENT:
 NAME Not known at this time NAME Joe McLaughlin
 ADDRESS _____ ADDRESS 227 Washington Ave. Clarksburg WV
 TELEPHONE _____ TELEPHONE 623-3783
 ESTIMATED DEPTH OF COMPLETED WELL: 2950' ROTARY X CABLE TOOLS _____
 PROPOSED GEOLOGICAL FORMATION: 5th Sand
 TYPE OF WELL: OIL _____ GAS _____ COMB. X STORAGE _____ DISPOSAL _____
 RECYCLING _____ WATER FLOOD _____ OTHER _____

TENTATIVE CASING PROGRAM:

CASING AND TUBING SIZE	USED FOR DRILLING	LEFT IN WELL	CEMENT FILL UP OR SACKS - CUBIC FT.
20 - 16			
13 - 10			
9 - 5/8			
8 - 5/8	<u>796'</u>		<u>Cement to surface</u>
7			
5 1/2			
4 1/2	<u>2950'</u>		<u>Cement 300' above producing formation</u>
3			Perf. Top
2			Perf. Bottom
Liners			Perf. Top
			Perf. Bottom

APPROXIMATE FRESH WATER DEPTHS 125' FEET _____ SALT WATER _____ FEET _____
 APPROXIMATE COAL DEPTHS None
 IS COAL BEING MINED IN THE AREA? No BY WHOM? _____

TO DRILL:

SUBMIT FIVE (5) COPIES OF OG - 1, \$100.00 PERMIT FEE, PERFORMANCE BOND AND PERMANENT COPY OF PLAT.

TO DRILL DEEPER OR REDRILL:

SUBMIT FIVE (5) COPIES OF OG - 1, SHOWING ORIGINAL PERMIT NUMBER AND PERFORMANCE BOND. ON WELLS DRILLED PRIOR TO 1929, A PERMANENT COPY OF THE PLAT AND THE ORIGINAL WELL RECORD MUST ALSO BE SUBMITTED.

TO FRACTURE - STIMULATE:

OIL AND/OR GAS WELL ORIGINALLY DRILLED BEFORE JUNE 5, 1929, FIVE (5) COPIES OG - 1, PERFORMANCE BOND, PERMANENT PLAT AND ORIGINAL WELL RECORD.

OIL AND/OR GAS WELL ORIGINALLY DRILLED ON AND/OR AFTER JUNE 5, 1929, FIVE COPIES OG - 1, SHOWING ORIGINAL PERMIT NUMBER, AND PERFORMANCE BOND.

Required forms must be filed within ninety (90) days of completion for bond release. Inspector to be notified twenty-four (24) hours in advance.

The following waiver must be completed by the coal operator if the permit is to be issued within ten days of receipt thereof.

WAIVER: I the undersigned, Agent for _____ Coal Company, Owner or Operator of the coal under this lease have examined and place on our mine maps this proposed well location.

We the _____ Coal Company have no objections to said well being drilled at this location, providing operator has complied with all rules and regulations in Articles 4, 5, and 7, Chapter 22 of the West Virginia Code.

 For Coal Company

 Official Title



STATE OF WEST VIRGINIA
DEPARTMENT OF MINES

RECEIVED

JUN - 4 1982

OIL AND GAS DIVISION
WV DEPARTMENT OF MINES

Oil and Gas Division

OIL AND GAS WELL PERMIT APPLICATION

TO THE DEPARTMENT OF MINES,
Charleston, W. Va.

DATE June 1, 1982

Surface Owner S. K. McCullough
Address Hebron, W.V.
Mineral Owner S. K. McCullough
Address Hebron, W. V.
Coal Owner _____
Address _____
Coal Operator _____
Address _____

Company Key Oil Company
Address 220 W. Central Ave., Titusville, Pa.
Farm S. K. McCullough Acres 85.39
Location (waters) McKim Creek
Well No. 1 Elevation 796'
District Lafayette County Pleasants
Quadrangle Ellenboro

ALL PROVISIONS HEREIN SHALL BE CONSIDERED AS AMENDED BY CHAPTER 22, ARTICLE 4 OF THE W. VA. CODE, THE REVISION IS HEREBY APPROVED FOR FRACTURE THIS PERMIT SHALL EXPIRE IF OPERATIONS ARE NOT COMMENCED BY 5-23-83

INSPECTOR
TO BE NOTIFIED Phillip Lee Tracy
ADDRESS P.O. Box 173, Middlebourn, WV 26149
PHONE 758-4573

GENTLEMEN:

The undersigned well operator is entitled to drill upon the above named farm or tract of land for oil and gas, having fee title thereto, (or as the case may be) under grant or lease dated August 11 1979 by S.K. McCullough made to Key Oil Company and recorded on the 6th day of Sept. 1979, in Pleasants County, Book 153 Page 383

NEW WELL DRILL DEEPER REDRILL X FRACTURE OR STIMULATE
OIL AND GAS WELL ORIGINALLY DRILLED BEFORE JUNE 5, 1969.

The enclosed plat was prepared by a registered engineer or licensed land surveyor and all coal owners and/or operators have been notified as of the above date.

The above named coal owners and/or operator are hereby notified that any objection they wish to make, or are required to make by Section 3 of the Code, must be received by, or filed with the Department of Mines within ten (10) days.

Copies of this notice and the enclosed plat were mailed by registered mail, or delivered to the above named coal operators or coal owners at their above shown respective address _____ day _____ before, or on the same day with the mailing or delivery of this copy to the Department of Mines at Charleston, West Virginia.

Very truly yours, Joseph A. Amos
(Sign Name) Atty-in-Fact
Well Operator

PLEASE SUBMIT COPIES OF ALL
GEOPHYSICAL LOGS DIRECTLY TO:

WEST VIRGINIA GEOLOGICAL AND
ECONOMIC SURVEY
P. O. BOX 879
MORGANTOWN, WEST VIRGINIA 26505
AC-304 - 292-6331

Address
of
Well Operator

220 West Central Avenue
Street
Titusville
City or Town
Pennsylvania 16354
State

*SECTION 3... If no objections are filed or found by the Department of mines, within said period of ten days from the receipt of notice and plat by the department of mines, to said proposed location, the department shall forthwith issue to the well operator a permit reciting the filing of such plat, that no objections have been made by the coal operators or found thereto by the department and that the same is approved and the well operator authorized to proceed.

B L A N K E T B O N D

47-73-0814 REFRAC PERMIT NUMBER

"I have read and understand the reclamation requirements as set forth in Chapter 22, Article 4, Section 12-b and will carry out the specified requirements."

Signed by _____

THIS IS AN ESTIMATE ONLY
ACTUAL INFORMATION WILL BE SUBMITTED ON OG-10 UPON COMPLETION

PROPOSED WORK ORDER TO _____ DRILL _____ DEEPEN FRACTURE-STIMULATE
 DRILLING CONTRACTOR: (If Known) _____ RESPONSIBLE AGENT: _____
 NAME Not known at this time _____ NAME Joe McLaughlin _____
 ADDRESS _____ ADDRESS 220 W. Central Ave., Titusville, _____
 TELEPHONE _____ TELEPHONE (814) 827-1820 _____ PA _____
 ESTIMATED DEPTH OF COMPLETED WELL: 2500' _____ ROTARY _____ CABLE TOOLS _____
 PROPOSED GEOLOGICAL FORMATION: BIG INJUN _____
 TYPE OF WELL: OIL _____ GAS _____ COMB. STORAGE _____ DISPOSAL _____
 RECYCLING _____ WATER FLOOD _____ OTHER _____

TENTATIVE CASING PROGRAM:

CASING AND TUBING SIZE	USED FOR DRILLING	LEFT IN WELL	CEMENT III UP OR SACKS - CUBIC FT.
20 - 16			
13 - 10			
9 - 5/8			
8 - 5/8	880'	880'	(in well)
7			
5 1/2			
4 1/2	2500'	2500'	200 sks or as req. Rule 15.010
3			Perf. Top
2			Perf. Bottom
Liners			Perf. Top
			Perf. Bottom

APPROXIMATE FRESH WATER DEPTHS N/A FEET _____ SALT WATER _____ FEET _____
 APPROXIMATE COAL DEPTHS N/A _____
 IS COAL BEING MINED IN THE AREA? N/A BY WHOM? _____

TO DRILL:

SUBMIT FIVE (5) COPIES OF OG - 1, \$100.00 PERMIT FEE, PERFORMANCE BOND AND PERMANENT COPY OF PLAT.

TO DRILL DEEPER OR REDRILL:

SUBMIT FIVE (5) COPIES OF OG - 1, SHOWING ORIGINAL PERMIT NUMBER AND PERFORMANCE BOND. ON WELLS DRILLED PRIOR TO 1929, A PERMANENT COPY OF THE PLAT AND THE ORIGINAL WELL RECORD MUST ALSO BE SUBMITTED.

TO FRACTURE - STIMULATE:

OIL AND/OR GAS WELL ORIGINALLY DRILLED BEFORE JUNE 5, 1929, FIVE (5) COPIES OG - 1, PERFORMANCE BOND, PERMANENT PLAT AND ORIGINAL WELL RECORD.

OIL AND/OR GAS WELL ORIGINALLY DRILLED ON AND/OR AFTER JUNE 5, 1929, FIVE COPIES OG - 1, SHOWING ORIGINAL PERMIT NUMBER, AND PERFORMANCE BOND.

Required forms must be filed within ninety (90) days of completion for bond release. Inspector to be notified twenty-four (24) hours in advance.

The following waiver must be completed by the coal operator if the permit is to be issued within ten days of receipt thereof.

WAIVER: I the undersigned, Agent for _____ Coal Company, Owner or Operator of the coal under this lease have examined and place on our mine maps this proposed well location.

We the _____ Coal Company have no objections to said well being drilled at this location, providing operator has complied with all rules and regulations in Articles 4, 5, and 7, Chapter 22 of the West Virginia Code.

For Coal Company

Official Title



STATE OF WEST VIRGINIA
DEPARTMENT OF MINES

Oil and Gas Division

OIL AND GAS WELL PERMIT APPLICATION

RECEIVED

SEP 25 1981

OIL AND GAS DIVISION
WV DEPARTMENT OF MINES

TO THE DEPARTMENT OF MINES,
Charleston, W. Va.

DATE September 23, 1981

Surface Owner S. K. McCullough

Company Key Oil Company

Address Hebron, WV

Address 220 W. Central Ave., Titusville, PA

Mineral Owner S. K. McCullough

Farm S. K. McCullough Acres 85.39

Address Hebron, WV

Location (waters) McKim Creek

Coal Owner _____

Well No. 1 Elevation 796'

Address _____

District Lafayette County Pleasants

Coal Operator _____

Quadrangle Ellenboro

Address _____

THIS PERMIT MUST BE POSTED AT THE WELL SITE

All provisions being in accordance with Chapter 22, of the W. Va. Code, the location is hereby approved for fracturing. This permit shall expire if operations have not commenced by 5-28-82.

INSPECTOR

TO BE NOTIFIED Phillip Lee Tracy

ADDRESS P. O. Box 173, Middlebourn, WV 26149

PHONE 758-4573

J. E. Huzzey
Deputy Director - Oil & Gas Division

GENTLEMEN:

The undersigned well operator is entitled to drill upon the above named farm or tract of land for oil and gas, having fee title thereto, (or as the case may be) under grant or lease dated August 11, 19 79 by S. K. McCullough made to Key Oil Company and recorded on the 6th day of Sept. 19 79 in Pleasants County, Book 153 Page 383

NEW WELL DRILL DEEPER REDRILL FRACTURE OR STIMULATE
OIL AND GAS WELL ORIGINALLY DRILLED BEFORE JUNE 5, 1969.

The enclosed plat was prepared by a registered engineer or licensed land surveyor and all coal owners and/or operators have been notified as of the above date.

The above named coal owners and/or operator are hereby notified that any objection they wish to make, or are required to make by Section 3 of the Code, must be received by, or filed with the Department of Mines within ten (10) days. *

Copies of this notice and the enclosed plat were mailed by registered mail, or delivered to the above named coal operators or coal owners at their above shown respective address _____ day _____ before, or on the same day with the mailing or delivery of this copy to the Department of Mines at Charleston, West Virginia.

PLEASE SUBMIT COPIES OF ALL GEOPHYSICAL LOGS DIRECTLY TO:

WEST VIRGINIA GEOLOGICAL AND ECONOMIC SURVEY
P. O. BOX 879
MORGANTOWN, WEST VIRGINIA 26505
AC-304 - 292-6331

Address of Well Operator

Very truly yours,

(Sign Name)

Joe M. Loughlin, Pres.
Well Operator

220 West Central Avenue

Street

Titusville

City or Town

Pennsylvania 16354

State

*SECTION 3 If no objections are filed or found by the Department of mines, within said period of ten days from the receipt of notice and plat by the department of mines, to said proposed location, the department shall forthwith issue to the well operator a permit reciting the filing of such plat, that no objections have been made by the coal operators or found thereto by the department and that the same is approved and the well operator authorized to proceed.

BLANKET BOND

47-73-0814 FRAC PERMIT NUMBER

"I have read and understand the reclamation requirements as set forth in Chapter 22, Article 4, Section 12-b and will carry out the specified requirements."

Signed by _____

J. E. Huzzey

THIS IS AN ESTIMATE ONLY
ACTUAL INFORMATION WILL BE SUBMITTED ON OG-10 UPON COMPLETION

PROPOSED WORK ORDER TO _____ DRILL _____ DEEPEN FRACTURE-STIMULATE
 DRILLING CONTRACTOR: (If Known) _____ RESPONSIBLE AGENT:
 NAME Not known at this time NAME Joe McLaughlin
 ADDRESS _____ ADDRESS 220 W. Central Ave., Titusville, PA
 TELEPHONE _____ TELEPHONE (814) 827-1820
 ESTIMATED DEPTH OF COMPLETED WELL: 2500' ROTARY _____ CABLE TOOLS
 PROPOSED GEOLOGICAL FORMATION: ~~Sandstone~~ Big Injun
 TYPE OF WELL: OIL _____ GAS _____ COMB. STORAGE _____ DISPOSAL _____
 RECYCLING _____ WATER FLOOD _____ OTHER _____

TENTATIVE CASING PROGRAM:

CASING AND TUBING SIZE	USED FOR DRILLING	LEFT IN WELL	CEMENT FILL UP OR SACKS - CUBIC FT.
20 - 16			
13 - 10			
9 - 5/8			
8 - 5/8			
7			
5 1/2			
4 1/2			
3			Perf. Top
2			Perf. Bottom
Liners			Perf. Top
			Perf. Bottom

APPROXIMATE FRESH WATER DEPTHS N/A FEET _____ SALT WATER _____ FEET _____
 APPROXIMATE COAL DEPTHS N/A _____
 IS COAL BEING MINED IN THE AREA? N/A BY WHOM? _____

TO DRILL:

SUBMIT FIVE (5) COPIES OF OG - 1, \$100.00 PERMIT FEE, PERFORMANCE BOND AND PERMANENT COPY OF PLAT.

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OIL AND/OR GAS WELL ORIGINALLY DRILLED ON AND/OR AFTER JUNE 5, 1929, FIVE COPIES OG - 1, SHOWING ORIGINAL PERMIT NUMBER, AND PERFORMANCE BOND.

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WAIVER: I the undersigned, Agent for _____ Coal Company, Owner or Operator of the coal under this lease have examined and place on our mine maps this proposed well location.

We the _____ Coal Company have no objections to said well being drilled at this location, providing operator has complied with all rules and regulations in Articles 4, 5, and 7, Chapter 22 of the West Virginia Code.

 For Coal Company

 Official Title



STATE OF WEST VIRGINIA
DEPARTMENT OF MINES

Oil and Gas Division

RECEIVED
OCT 16 1980
D. W. ...

OIL AND GAS WELL PERMIT APPLICATION

TO THE DEPARTMENT OF MINES,
Charleston, W. Va.

DATE October 14, 1980

Surface Owner S. K. McCullough

Company Key Oil Company

Address Hebron, W.V.

Address 220 W. Central Ave., Titusville, Pa.

Mineral Owner S. K. McCullough

Farm S. K. McCullough Acres 85.39

Address Hebron, W. V.

Location (waters) McKim Creek

Coal Owner _____

Well No. 1 Elevation 796'

Address _____

District Lafayette County Pleasants

Coal Operator _____

Quadrangle Ellenboro

Address _____

THIS PERMIT MUST BE POSTED AT THE WELL SITE

conditions being in accordance with Chapter 22,
the W. Va. Code, the location is hereby approved

INSPECTOR

TO BE NOTIFIED Phillip Lee Tracy

Fracturing _____. This permit shall expire if
operations have not commenced by 7-25-81.

ADDRESS P.O.Box 173, Middlebourn, WV 26149

[Signature]
Deputy Director - Oil & Gas Division

PHONE 758-4573

GENTLEMEN:

The undersigned well operator is entitled to drill upon the above named farm or tract of land for oil and gas, having fee title thereto, (or as the case may be) under grant or lease dated August 11 1979 by S.K. McCullough made to Key Oil Company and recorded on the 6th day of Sept. 1979, in Pleasants County, Book 153 Page 383

_____NEW WELL _____DRILL DEEPER _____REDRILL X _____FRACTURE OR STIMULATE
_____OIL AND GAS WELL ORIGINALLY DRILLED BEFORE JUNE 5, 1969.

The enclosed plat was prepared by a registered engineer or licensed land surveyor and all coal owners and/or operators have been notified as of the above date.

The above named coal owners and/or operator are hereby notified that any objection they wish to make, or are required to make by Section 3 of the Code, must be received by, or filed with the Department of Mines within ten (10) days. *

Copies of this notice and the enclosed plat were mailed by registered mail, or delivered to the above named coal operators or coal owners at their above shown respective address _____ day _____ before, or on the same day with the mailing or delivery of this copy to the Department of Mines at Charleston, West Virginia.

PLEASE SUBMIT COPIES OF ALL
GEOPHYSICAL LOGS DIRECTLY TO:

Very truly yours,

(Sign Name) *[Signature]*
Well Operator

WEST VIRGINIA GEOLOGICAL AND
ECONOMIC SURVEY
P. O. BOX 879
MORGANTOWN, WEST VIRGINIA 26505
AC-304 - 292-6331

Address
of
Well Operator

220 West Central Avenue
Street

Titusville
City or Town

Pennsylvania 16354
State

*SECTION 3 If no objections are filed or found by the Department of mines, within said period of ten days from the receipt of notice and plat by the department of mines, to said proposed location, the department shall forthwith issue to the well operator a permit reciting the filing of such plat, that no objections have been made by the coal operators or found thereto by the department and that the same is approved and the well operator authorized to proceed.

BLANKET BOARD

47-073-0814-FRAC PERMIT NUMBER

"I have read and understand the reclamation requirements as set forth in Chapter 22, Article 4, Section 12-b and will carry out the specified requirements."

47-73-0814

Signed by _____

THIS IS AN ESTIMATE ONLY
ACTUAL INFORMATION WILL BE SUBMITTED ON OG-10 UPON COMPLETION

PROPOSED WORK ORDER TO _____ DRILL _____ DEEPEN X FRACTURE-STIMULATE
 DRILLING CONTRACTOR: (If Known) _____ RESPONSIBLE AGENT: _____
 NAME Not known at this time _____ NAME Joe McLaughlin _____
 ADDRESS _____ ADDRESS 220 W. Central Ave., Titusville, Pa _____
 TELEPHONE _____ TELEPHONE (814) 827-1820 _____
 ESTIMATED DEPTH OF COMPLETED WELL: 2500' _____ ROTARY _____ CABLE TOOLS X _____
 PROPOSED GEOLOGICAL FORMATION: Gordon & Big Injun _____
 TYPE OF WELL: OIL _____ GAS _____ COMB. X STORAGE _____ DISPOSAL _____
 RECYCLING _____ WATER FLOOD _____ OTHER _____

TENTATIVE CASING PROGRAM:

CASING AND TUBING SIZE	USED FOR DRILLING	LEFT IN WELL	CEMENT PUT UP OR SACKS - CUBIC FT.
20 - 16			
13 - 10			
9 - 5/8			
8 - 5/8			
7			
5 1/2			
4 1/2			
3			Perf. Top
2			Perf. Bottom
Liners			Perf. Top
			Perf. Bottom

APPROXIMATE FRESH WATER DEPTHS N/A FEET _____ SALT WATER _____ FEET _____
 APPROXIMATE COAL DEPTHS N/A _____
 IS COAL BEING MINED IN THE AREA? N/A _____ BY WHOM? _____

TO DRILL:

SUBMIT FIVE (5) COPIES OF OG - 1, \$100.00 PERMIT FEE, PERFORMANCE BOND AND PERMANENT COPY OF PLAT.

TO DRILL DEEPER OR REDRILL:

SUBMIT FIVE (5) COPIES OF OG - 1, SHOWING ORIGINAL PERMIT NUMBER AND PERFORMANCE BOND. ON WELLS DRILLED PRIOR TO 1929, A PERMANENT COPY OF THE PLAT AND THE ORIGINAL WELL RECORD MUST ALSO BE SUBMITTED.

TO FRACTURE - STIMULATE:

OIL AND/OR GAS WELL ORIGINALLY DRILLED BEFORE JUNE 5, 1929, FIVE (5) COPIES OG - 1, PERFORMANCE BOND, PERMANENT PLAT AND ORIGINAL WELL RECORD.
 OIL AND/OR GAS WELL ORIGINALLY DRILLED ON AND/OR AFTER JUNE 5, 1929, FIVE COPIES OG - 1, SHOWING ORIGINAL PERMIT NUMBER, AND PERFORMANCE BOND.

Required forms must be filed within ninety (90) days of completion for bond release. Inspector to be notified twenty-four (24) hours in advance.

The following waiver must be completed by the coal operator if the permit is to be issued within ten days of receipt thereof.

WAIVER: I the undersigned, Agent for _____ Coal Company, Owner or Operator of the coal under this lease have examined and place on our mine maps this proposed well location.

We the _____ Coal Company have no objections to said well being drilled at this location, providing operator has complied with all rules and regulations in Articles 4, 5, and 7, Chapter 22 of the West Virginia Code.

For Coal Company

Official Title



STATE OF WEST VIRGINIA
DEPARTMENT OF MINES

Oil and Gas Division

WELL RECORD

Rotary Oil _____
 Cable _____ Gas _____
 Recycling _____ Comb. _____
 Water Flood _____ Storage _____
 Disposal _____ (Kind)

Quadrangle _____

Permit No. 47-073-0814

Company Key Oil Company
 Address Clarksburg, WV
 Farm S. K. McCullough Acres 85.39
 Location (waters) McKim Creek
 Well No. 1 Elev. 796'
 District Lafayette County Pleasants
 The surface of tract is owned in fee by
S. K. McCullough
 Address Hebron, WV
 Mineral rights are owned by S. K. McCullough
 Address Hebron, WV
 Drilling Commenced 11-26-79
 Drilling Completed 12-1-79
 Initial open flow N/A cu. ft. _____ bbls.
 Final production 490,000 cu. ft. per day _____ bbls.
 Well open 24 hrs. before test 650 RP.

Casing and Tubing	Used in Drilling	Left in Well	Cement fill up Cu. ft. (Sks.)
Size			
20-16			
Cond.			
13-10"			
9 5/8			
8 5/8	840'		
7			
5 1/2			
4 1/2	2710'		
3			
2			
Liners Used			

Well treatment details:

Attach copy of cementing record.

1130 bbls 300 sks 80/100 550 sks 20/40 2635-2650

Coal was encountered at _____ Feet _____ Inches
 Fresh water 100' Feet _____ Salt Water _____ Feet _____
 Producing Sand Fifth Sand Depth 2754'

Formation	Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water	* Remarks
Big Injun			1710	1860		
Gantz			2150	2176		
Gordon			2460	2480		
Fifth			2635	2650		

JUL 20 1980

(over)

* Indicates Electric Log tops in the remarks section.

WR-38
26-Oct-98

API # 47- 73-00814-P

STATE OF WEST VIRGINIA
DIVISION OF ENVIRONMENTAL PROTECTION
SECTION OF OIL AND GAS

AFFIDAVIT OF PLUGGING AND FILLING WELL

AFFIDAVIT SHOULD BE IN TRIPLICATE, one copy mailed to the Division, one copy to be retained by the Well Operator and the third copy (and extra copies if required) should be mailed to each coal operator at their respective addresses.

Farm name: SHOWMAN, BILL Operator Well No.: SK McCULLOUGH 1

LOCATION: Elevation: 796.00 Quadrangle: ELLENBORO
District: LAFAYETTE County: PLEASANTS
Latitude: 8600 Feet South of 39 Deg. 22 Min. 30 Sec.
Longitude 9000 Feet West of 81 Deg. 0 Min. 0 Sec.

Well Type: OIL _____ GAS _____

Company: Pardee Exploration Company Coal Operator NA
KVB - Suite 910, 300 Capitol St. or Owner
Charleston, WV 25301

Agent: Jeffrey Brown Coal Operator NA
or Owner

Permit Issued: 10/26/98

RECEIVED
Office of Oil & Gas
Permitting

AFFIDAVIT

STATE OF WEST VIRGINIA,
County of Upshur ss:

JAN 11 1999

WV Division of
Environmental Protection

Robert L. Wharton and Don Elmer being first duly sworn according to law depose and say that they are experienced in the work of plugging and filling oil and gas wells and were employed by the above named well operator, and participated in the work of plugging and filling the above well, and Samuel Hersman Oil and Gas Inspector representing the Director, say that said work was commenced on the 30th day of September, 1998, and that the well was plugged and filled in the following manner:

TYPE	FROM	TO	PIPE REMOVED	LEFT
Cement	2522 - TD	2369		
Gel	2369	1900	1100' of 4 1/2"	1610'
Cement	1900	1700		
Gel	1700	1100	8 5/8"	840
Cement	1100	1000		
Gel	1000	600		
Cement	600	500		
Gel	500	50		
Cement	50	0		

Description of monument: 6" Pipe 48" above ground

and that the work of plugging and filling said well was completed on the 5th day of October, 1998.

And further deponents saith not.

Sworn and subscribe before me this 2nd day of November, 1998
My commission expires: 11-03-03

Robert L. Wharton
Don Elmer
Gene Murray
Notary Public

NOTE, INSPECTOR WAS ON SITE DURING SETTING OF BOTTOM HOLE PLUG ONLY.

Oil and Gas Inspector: Samuel Hersman 11-5-98

JAN 19 1999

PLE 0814-P