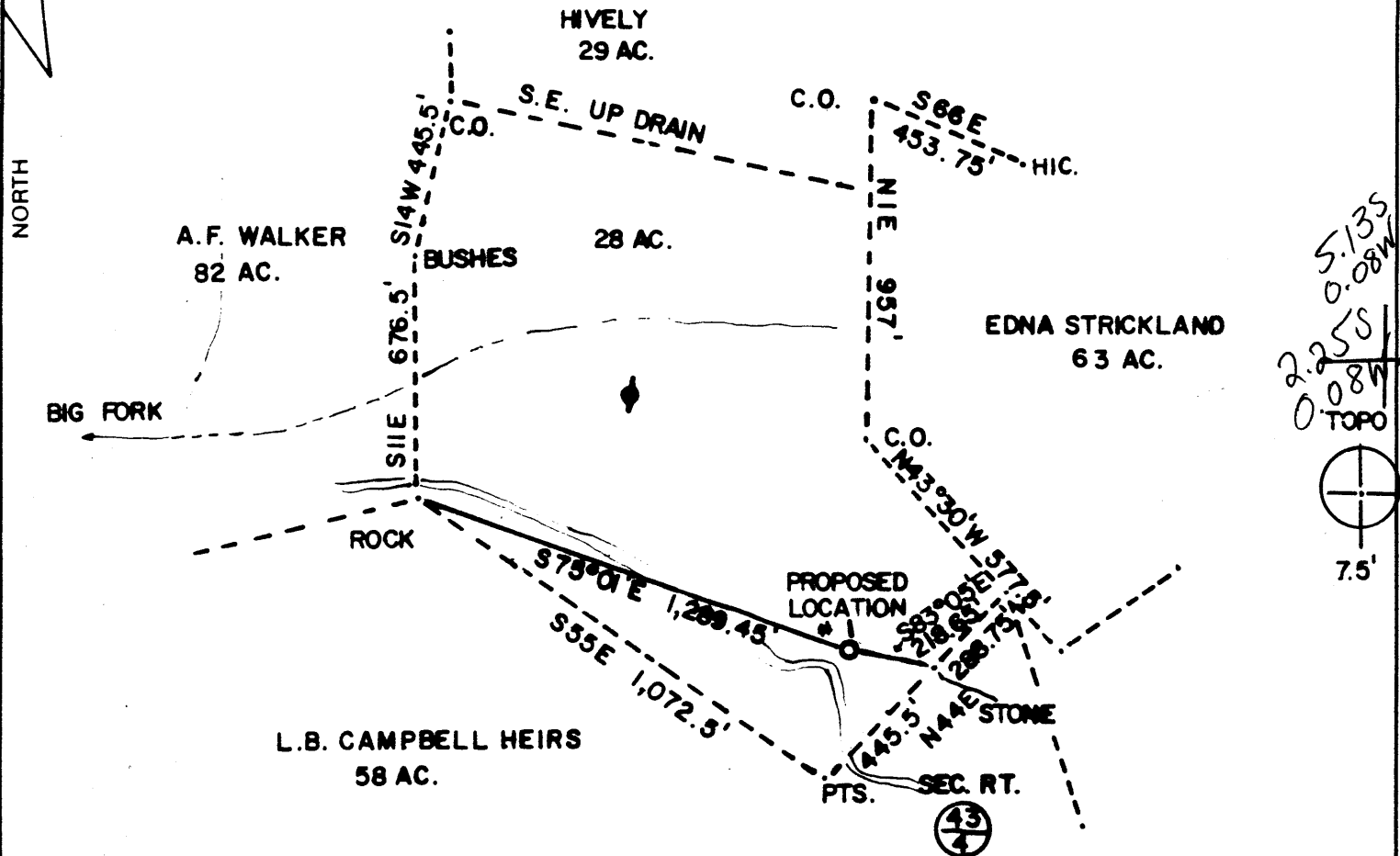
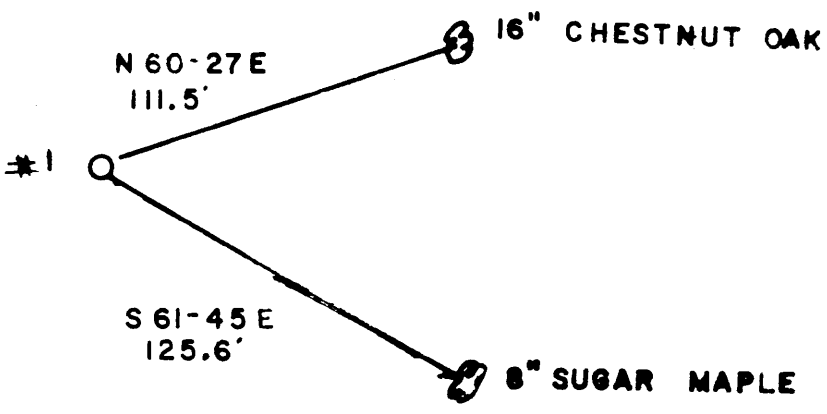


CODE \_\_\_\_\_ CARD \_\_\_\_\_ PLOT ✓

LATITUDE 38°32'30"  
3500

LONGITUDE 81°25'00"  
11861.11

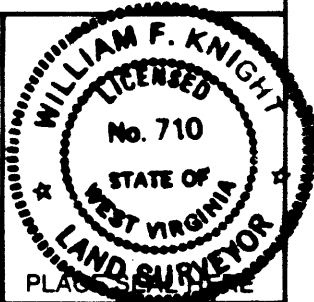


5.135  
0.08W  
2.25S  
0.08W  
TOPO  
7.5'

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

FILE NO. \_\_\_\_\_  
DRAWING NO. \_\_\_\_\_  
SCALE 1" = 500'  
MINIMUM DEGREE OF ACCURACY 1: 250  
PROVEN SOURCE OF ELEVATION U.S.G.S. B.M.  
ELEV. = 865

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) William F. Knight  
R.P.E. \_\_\_\_\_ L.L.S. 710



STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES  
OIL AND GAS DIVISION



DATE JUNE 25, 19 85  
OPERATOR'S WELL NO. HIVELY #1  
API WELL NO.

47 - 039 - 4202  
STATE COUNTY PERMIT

WELL TYPE: OIL  GAS \_\_\_\_\_ LIQUID INJECTION \_\_\_\_\_ WASTE DISPOSAL \_\_\_\_\_  
(IF "GAS,") PRODUCTION \_\_\_\_\_ STORAGE \_\_\_\_\_ DEEP \_\_\_\_\_ SHALLOW \_\_\_\_\_

LOCATION: ELEVATION 1,063' WATER SHED BIG FORK OF LITTLE SANDY CREEK

DISTRICT BIG SANDY 1 COUNTY KANAWHA

QUADRANGLE KETTLE 7.5' 418 Walter 125 SW 7

SURFACE OWNER ROY & HAZEL HIVELY ACREAGE 28 AC.

OIL & GAS ROYALTY OWNER ROY & HAZEL HIVELY LEASE ACREAGE 28 AC.

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 BEREA ESTIMATED DEPTH 2,400'

WELL OPERATOR KEY OIL COMPANY 475 DESIGNATED AGENT BARRY K. LAY JUL 15 1985

ADDRESS P.O. BOX 709, 139 MAIN ST., SPENCER, W.V. ADDRESS P.O. BOX 709, 139 MAIN ST., SPENCER, W.V.

6-6 25276 Blue Creek (Fallin Rk) (217) 25276

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

COUNTY NAME PERMIT

IV-35  
(Rev 8-81)

RECEIVED  
AUG 7 - 1985



DIVISION OF OIL & GAS  
DEPARTMENT OF ENERGY

State of West Virginia  
Department of Mines  
Oil and Gas Division

Date August 2, 1985  
Operator's  
Well No. Hively #1  
Farm Roy Hively  
API No. 47 - 039 - 4202

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: 1,063 Watershed Big Fork of Little Sandy Creek  
District: Big Sandy County Kanawha Quadrangle Kettle 7.5

COMPANY Key Oil Company  
ADDRESS P. O. Box 729, Spencer, WV 25276  
DESIGNATED AGENT Barry K. Lay  
ADDRESS P.O. Box 729, Spencer, WV 25276  
SURFACE OWNER Roy Hively  
ADDRESS 866 Wills Creek Rd., Elkview, WV 25071  
MINERAL RIGHTS OWNER Roy Hively  
ADDRESS 866 Wills Creek Rd., Elkview, WV 25071  
OIL AND GAS INSPECTOR FOR THIS WORK      
Carlos Hively ADDRESS 223 Pinch Ridge Rd, Elkview  
PERMIT ISSUED July 3, 1985  
DRILLING COMMENCED July 12, 1985  
DRILLING COMPLETED July 16, 1985  
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	469	469	119 sks
7			
5 1/2			
4 1/2	2125	2125	212 sks
3			
2		2080	
Liners used			

GEOLOGICAL TARGET FORMATION Big Injun Depth 2050 feet  
Depth of completed well 2160 feet Rotary x / Cable Tools      
Water strata depth: Fresh 40 feet; Salt 850 feet  
Coal seam depths: N/A Is coal being mined in the area? no

OPEN FLOW DATA  
Producing formation Big Injun Pay zone depth 2022-2061 feet  
Gas: Initial open flow 0 Mcf/d Oil: Initial open flow 0 Bbl/d  
Final open flow 30 Mcf/d Final open flow 24 Bbl/d  
Time of open flow between initial and final tests 24 hours  
Static rock pressure 325 psig (surface measurement) after 48 hours shut in  
(If applicable due to multiple completion--)  
Second producing formation     Pay zone depth     feet  
Gas: Initial open flow     Mcf/d Oil: Initial open flow     Bbl/d  
Final open flow     Mcf/d Oil: Final open flow     Bbl/d  
Time of open flow between initial and final tests     hours  
Static rock pressure     psig (surface measurement) after     hours shut in

(Continue on reverse side)

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

Perforated from 2026 to 2061 with 30 - 0.49" holes

Stimulated with 250 gal. 15% HCl Acid

396 bbls. water with 16,000 lb. 10/20 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
Soil			0	14	
Shale			14	116	Fresh water 40'
Sandstone			116	140	
Shale and sandstone stringers			140	602	
Sandstone			602	742	
Shale			742	856	
Sandstone			856	968	Show salt water
Shale and sandstone stringers			968	1350	
1st salt sand			1350	1490	
Shale			1490	1538	
2nd salt sand			1538	1706	
Shale			1706	1740	
3rd salt sand			1740	1830	
Shale			1830	1880	
Big Lime			1880	2022	Show oil - 1910
<u>Big Injun</u> GER			2022	2074	Show oil - 2022--2045
Shale			2074	TD	
				TD 2160	

(Attach separate sheets as necessary)

KEY OIL COMPANY

Well Operator

By: Barry Lay Barry K. Lay

Date: August 2, 1985

Note: Regulation 2.02(i) provides as follows:  
"The term 'log' or 'well log' shall mean a systematic detailed geological record of all formations, including coal, encountered in the drilling of a well."



1) Date: July 1, 19 85  
 2) Operator's Well No. HIVELY #1  
 3) API Well No. 47 -039-4202  
 State County Permit

**RECEIVED**

JUL 3 1985

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

Oil & Gas Division

- 4) WELL TYPE DEPT. OF MINES  
 B (If "Gas", Production  / Underground storage  Deep  Shallow )  
 5) LOCATION: Elevation: 1,063 Watershed: Big Fork of Little Sandy Creek  
 District: Big Sandy County: Kanawha Quadrangle: Kettle 7.5  
 6) WELL OPERATOR Key Oil Company (475) 7) DESIGNATED AGENT Barry Lay  
 Address P.O. Box 729 Address P.O. Box 729  
Spencer, WV 25276 Spencer, WV 25276  
 8) OIL & GAS INSPECTOR TO BE NOTIFIED 9) DRILLING CONTRACTOR:  
 Name Rodney Dillon Name Unknown  
 Address P.O. Box 7 Address \_\_\_\_\_  
Williamstown, WV 26187  
 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, Berea (395)  
 12) Estimated depth of completed well, 2,400 feet  
 13) Approximate strata depths: Fresh, 60 feet; salt, 600 feet.  
 14) Approximate coal seam depths: NA 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	11.75	H	38		X	30	0	none	Kinds	
Fresh water	8 5/8	H	23	X		475'	475'	135 sks.	<i>CTS by rule 5105</i>	
Coal									Sizes	
Intermediate										
Production	4.5	J	9.5	X		2400'	2400'	250 sks.	Depths set	
Tubing										
Liners									Perforations:	
									Top Bottom	

OFFICE USE ONLY  
 DRILLING PERMIT

Permit number 47-039-4202 Date July 3 19 85

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 July 3, 1987 unless well work is commenced prior to that date and prosecuted with due diligence.

Bond: <input checked="" type="checkbox"/>	Agent: <input checked="" type="checkbox"/> <u>ALB</u>	Plat: <u>MLL</u>	Casing: <u>MLL</u>	Fee: <u>3244</u>
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Margaret J. Hesse  
 Administrator, Office of Oil and Gas

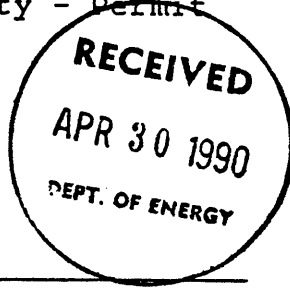
NOTE: Keep one copy of this permit posted at the drilling location.

See the reverse side of the APPLICANT'S COPY for instructions to the well operator.

File

1) Date: April 26, 1990  
2) Operator's well number  
PRICHARD & ROBSON NO. 50  
3) API Well No: 47 - 039 - 4204 - FRAC  
State - County - Permit

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



4) Surface Owner(s) to be served:  
(a) Name Eastern Associated Coal  
Address P.O. Box 70  
Beckley, W. Va. 25801  
(b) Name \_\_\_\_\_  
Address \_\_\_\_\_  
(c) Name \_\_\_\_\_  
Address \_\_\_\_\_  
6) Inspector Carlos Hively  
Address 223 Pinch Ridge Rd.  
Elkview, WV 25071  
Telephone (304)- 965-6069

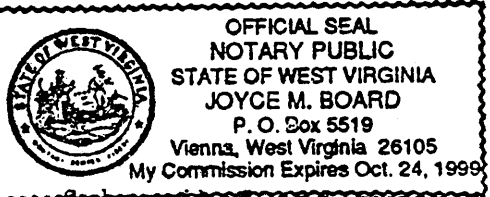
5) (a) Coal Operator:  
Name \_\_\_\_\_  
Address \_\_\_\_\_  
(b) Coal Owner(s) with Declaration  
Name H. A. Robson, Trust  
Address c/o O. Jennings Rife et.al.  
P.O. Box 542, Huntington, WV 25710  
Name Frank Gaddy, Agt.  
Address 945 - 4th Avenue, Suite 300  
Huntington, WV 25701  
(c) Coal Lessee with Declaration  
Name \_\_\_\_\_  
Address \_\_\_\_\_

TO THE PERSON(S) NAMED ABOVE TAKE NOTICE THAT:

\_\_\_\_\_ Included is the lease or leases or other continuing contract or contracts by which I hold the right to extract oil and gas OR  
 Included is the information required by Chapter 22B, Article 1, Section 8(d) of the Code of West Virginia (see page 2)  
I certify that as required under Chapter 22B of the West Virginia Code I have served copies of this notice and application, a location plat, and accompanying documents pages 1 through 4 on the above named parties, by:  
 Personal Service (Affidavit attached)  
 Certified Mail (Postmarked postal receipt attached)  
 Publication (Notice of Publication attached)

I have read and understand Chapter 22B and 38 CSR 11-18, and I agree to the terms and conditions of any permit issued under this application.  
I certify under penalty of law that I have personally examined and am familiar with the information submitted on this application form and all attachments, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete.  
I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Well Operator Pennzoil Products Company  
By: Curtis A. Lucas Curtis A. Lucas  
Its: Advanced Engineering Tech.  
Address P.O. Box 5519  
Vienna, W. Va. 26105-5519  
Telephone 304-422-6565



Subscribed and sworn before me this 26th day of April, 19 90  
Joyce M. Board Notary Public  
My Commission expires October 24, 1999

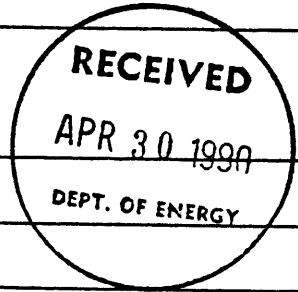
16

039-4204-F  
issued 6/1/90

STATE OF WEST VIRGINIA  
DEPARTMENT OF ENERGY, DIVISION OF OIL AND GAS  
WELL WORK PERMIT APPLICATION

Expires 6/1/92

- 1) Well Operator: 673 Pennzoil Products Company 37450 (2) 284
- 2) Operator's Well Number: PRICHARD-ROBSON NO. 50 3) Elevation: 1722'
- 4) Well type: (a) Oil X / or Gas    /  
(b) If Gas: Production    / Underground Storage    /  
Deep    / Shallow    /
- 5) Proposed Target Formation(s): Weir 387
- 6) Proposed Total Depth: (5245) feet
- 7) Approximate fresh water strata depths: N/A
- 8) Approximate salt water depths: N/A
- 9) Approximate coal seam depths: N/A
- 10) Does land contain coal seams tributary to active mine? Yes    / No X /
- 11) Proposed Well Work: Fracture Weir
- 12)



CASING AND TUBING PROGRAM

*Fracture Weir Well*

TYPE	SPECIFICATIONS			FOOTAGE INTERVALS		CEMENT
	Size	Grade	Weight per ft.	For drilling	Left in well	Fill-up (cu. ft.)
Conductor						
Fresh Water	9-5/8"			1472	1472	450 Skts. Existing
Coal						
Intermediate	7"			2800	2800	175 Skts. Existing
Production	4-1/2"			5200	5200	250 Skts. Existing
Tubing						
Liners						

PACKERS : Kind     
 Sizes     
 Depths set   

For Division of Oil and Gas Use Only

Fee(s) paid:  Well Work Permit  Reclamation Fund  WPCP  
 Plat  WW-9  WW-2B  Bond    Agent   

9779