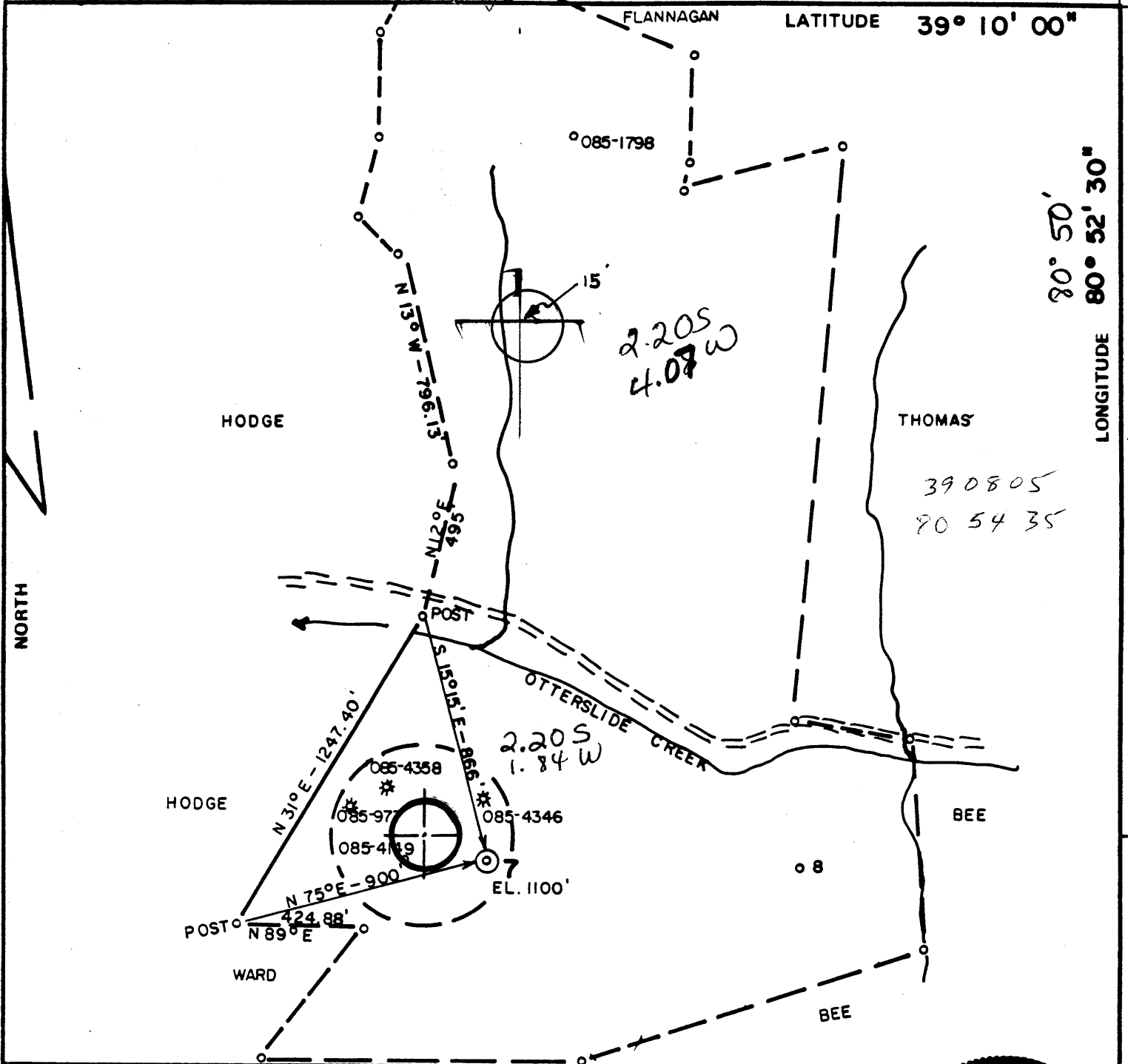


M.L. 8/12/82

Plot ✓ Card ✓ CSD ✓

9700' WEST

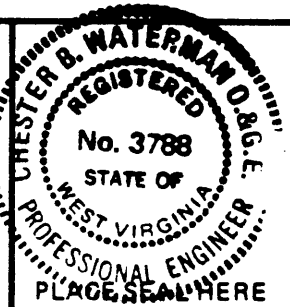


LATITUDE 39° 10' 00"  
LONGITUDE 80° 52' 30"

11,550' SOUTH

FILE NO. 82-293  
 DRAWING NO. \_\_\_\_\_  
 SCALE 1" = 500'  
 MINIMUM DEGREE OF ACCURACY 1/200'  
 PROVEN SOURCE OF ELEVATION OTTERSIDE RD. (796')

BEE 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) Chester B. Waterman  
 R.P.E. 3788 L.L.S. \_\_\_\_\_



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



DATE 7/30, 19 82  
 OPERATOR'S WELL NO. P-7  
 API WELL NO. 47-085-5795  
 STATE COUNTY PERMIT

STATE OF WEST VIRGINIA  
 DEPARTMENT OF MINES  
 OIL AND GAS DIVISION

WELL TYPE: OIL \_\_\_ GAS X LIQUID INJECTION \_\_\_ WASTE DISPOSAL \_\_\_  
 (IF "GAS,") PRODUCTION X STORAGE \_\_\_ DEEP \_\_\_ SHALLOW \_\_\_  
 LOCATION: ELEVATION 1100 WATER SHED OTTERSIDE CREEK  
 DISTRICT UNION COUNTY RITCHIE  
 QUADRANGLE PULLMAN 7.5 Holbrook 151 C  
 SURFACE OWNER ARDEN HODGE ACREAGE 140  
 OIL & GAS ROYALTY OWNER ARDEN HODGE LEASE ACREAGE 140  
 LEASE NO. 238  
 PROPOSED WORK: DRILL X 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 DEVONIAN SHALE ESTIMATED DEPTH 5500'  
 WELL OPERATOR PRENCO DESIGNATED AGENT DENZIL PRATHER  
 ADDRESS P. O. BOX 91 ADDRESS SAME  
MINERAL WELLS, WV 26150

AUG 9 1982

RECEIVED



NOV 22 1982

IV-35 (Rev 8-81)

OIL AND GAS DIVISION WV DEPARTMENT OF MINES

Date Nov. 19, 1982 Operator's Well No. P-7 Farm Arden Hodge API No. 47 - 085 - 5795

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 / Gas X / Liquid Injection / Waste Disposal / (If "Gas," Production X / Underground Storage / Deep / Shallow Y /)

LOCATION: Elevation: 1100' Watershed Otterslide Creek District: Union County Ritchie Quadrangle Pullman 7 1/2'

COMPANY PRENCO ADDRESS P.O.Box 91, Mineral Wells, WV DESIGNATED AGENT Denzil L. Prather ADDRESS Same SURFACE OWNER Arden Hodge ADDRESS Berea, WV MINERAL RIGHTS OWNER Same ADDRESS OIL AND GAS INSPECTOR FOR THIS WORK Sam Hersman ADDRESS Smithville, WV PERMIT ISSUED 8/2/82 DRILLING COMMENCED 8/11/82 DRILLING COMPLETED 8/17/82

Table with 4 columns: Casing & Tubing Size, Used in Drilling, Left in Well, Cement fill up Cu. ft. Rows include sizes 20-16 Cond., 13-10", 9 5/8, 8 5/8, 7, 5 1/2, 4 1/2, 3, 2, and Liners used.

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

GEOLOGICAL TARGET FORMATION Devonian shale (Alexander) Depth 5500 feet Depth of completed well 5192 feet Rotary X / Cable Tools Water strata depth: Fresh 200 feet; Salt Coal seam depths: None Is coal being mined in the area? No

OPEN FLOW DATA Alexander, Bradford & Speechley Pay zone depth 5140, 4400 & 3350 feet Gas: Initial open flow Mcf/d Oil: Initial open flow Bbl/d Final open flow 400 Mcf/d Oil: Final open flow Bbl/d Time of open flow between initial and final tests hours Static rock pressure 670 psig (surface measurement) after 12 hours shut in (If applicable due to multiple completion--)

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

~~Alexander:~~ perforated 5124' - 5144' with 40 holes;  
fractured with 540 MSCF N<sub>2</sub>.

~~Bradford:~~ perforated 4470' - 4480' with 20 holes  
fractured with 540 MSCF N<sub>2</sub>.

~~Speechley:~~ perforated 3230' - 3396' with 19 holes;  
fractured with 540 MSCF N<sub>2</sub>.

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	12				
Sand			12	230				
Sand & shale			230	649				
Shale			649	657				
Sand & shale			657	755				
Sand			755	790				
Sand & shale			790	1073				
Sand			1073	1178				
Sand & shale			1178	1337				
Sand			1337	1360				
Sand & shale			1360	1462				
Sand			1462	1550				
Sand & shale			1550	1704				
Sand			1704	1766				
Shale			1766	1860				
Sand			1860	1882				
Silt			1882	1976				
Big Lime			1976	2080				
Big Injun			2080	2092				
Shaly silt			2092	2276				
Weir			2276	2403				
Shaly silt			2403	2437				
Silty shale			2437	2448				
Berea			2448	2449				
Shaly silt			2449	2562				
2nd Berea			2562	2572				
Shaly silt			2572	2644	5254	5124	4470	3230
Gordon			2644	2653	2449	2449	2449	2449
Shaly silt			2653	2828	2805	2675	2021	781
Fifth			2828	2834		Rhinest.	Huron	Op. Dev. undiff.
Shaly silt & silty shale			2834	5254	I.D. Rhinestreet			

(Attach separate sheets as necessary)

PRENCO

Well Operator

By: David W. Batten Geologist

Date: Nov. 19, 1982

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 ..., encountered in the drilling of a well."



Date: August 2, 19 82

Operator's Well No. Hodge P-7

API Well No. 47 085 5795

State County Permit

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

WELL TYPE: Oil X / Gas X /  
(If "Gas", Production X / Underground storage \_\_\_\_\_ / Deep \_\_\_\_\_ / Shallow X /)

LOCATION: Elevation: 1100' Watershed: Otterslide Creek

District: Union County: Ritchie Quadrangle: Pullman 7.5'

WELL OPERATOR PRENCO  
Address P. O. Box 91  
Mineral Wells, WV 26150

DESIGNATED AGENT Denzil L. Prather  
Address P. O. Box 91  
Mineral Wells, WV 26150

OIL & GAS ROYALTY OWNER Arden Hodge  
Address Berea, W. Va.

COAL OPERATOR None  
Address \_\_\_\_\_

Acreage 140

COAL OWNER(S) WITH DECLARATION ON RECORD:

SURFACE OWNER Arden Hodge  
Address Berea, W. Va.

Name None  
Address \_\_\_\_\_

Acreage 140

Name \_\_\_\_\_  
Address \_\_\_\_\_

FIELD SALE (IF MADE) TO:  
Address \_\_\_\_\_

COAL LESSEE WITH DECLARATION ON RECORD:

OIL & GAS INSPECTOR TO BE NOTIFIED  
Name Sam Hersman  
Address P. O. Box 56  
Smithville, W. Va.

Name None  
Address \_\_\_\_\_

The undersigned well operator is entitled to operate for oil or gas purposes at the above location under a deed \_\_\_\_\_ / lease X other contract \_\_\_\_\_ / dated March 1, 19 82, to the undersigned well operator from \_\_\_\_\_

(IF said deed, lease, or other contract has been recorded):  
Recorded on March 15, 19 82, in the office of the Clerk of the County Commission of Ritchie County, West Va., in Lease Book 142 at page 158. A permit is requested as follows:

PROPOSED WORK: Drill X / Drill deeper \_\_\_\_\_ / Redrill \_\_\_\_\_ / Fracture or stimulate \_\_\_\_\_ /  
Plug off old formation \_\_\_\_\_ / Perforate new formation \_\_\_\_\_ /  
Other physical change in well (specify) \_\_\_\_\_

—planned as shown on the work order on the reverse side hereof.

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.

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.

PLEASE SUBMIT COPIES OF ALL GEOPHYSICAL LOGS DIRECTLY TO:  
WEST VIRGINIA OIL AND GAS CONSERVATION COMMISSION  
1615 WASHINGTON STREET EAST CHARLESTON, WV 25311  
TELEPHONE: (304) 348-3092

RECEIVED  
AUG 02 1982

OIL & GAS DIVISION  
DEPT. OF MINES  
BLANKET BOND

PRENCO  
Well Operator  
By Denzil L. Prather  
Its Designated Agent

**PROPOSED WORK ORDER**

(12-81)

THIS IS AN ESTIMATE ONLY:  
ACTUAL INFORMATION MUST BE SUBMITTED ON FORM IV-35 UPON COMPLETION

DRILLING CONTRACTOR (IF KNOWN) Clint Hurt  
Address Clendenin, W. Va.

GEOLOGICAL TARGET FORMATION, Devonian Shale (Alexander)

Estimated depth of completed well, 5000 feet Rotary X / Cable tools      /

Approximate water strata depths: Fresh,      feet; salt,      feet.

Approximate coal seam depths:      Is coal being mined in the area? Yes      / No X /

**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					300	300	Cement to surface	Kinds	
Fresh Water										
Coal									Sizes	
Intermediate	7					2610	2610	Cement to surface		
Production	4 1/2					5000	5000	Cement to surface	Depths set	
Tubing										
Liners									Perforations:	
									Top	Bottom

NOTE: 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.

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.

THIS PERMIT MUST BE POSTED AT THE WELL SITE.  
ALL PROVISIONS BEING IN ACCORDANCE WITH CHAPTER 22,  
ARTICLE 4 OF THE W. VA. CODE, THE LOCATION IS HEREBY  
APPROVED FOR drilling. THIS PERMIT SHALL EXPIRE  
IF OPERATIONS HAVE NOT COMMENCED BY 4-3-83.  
BY [Signature]

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