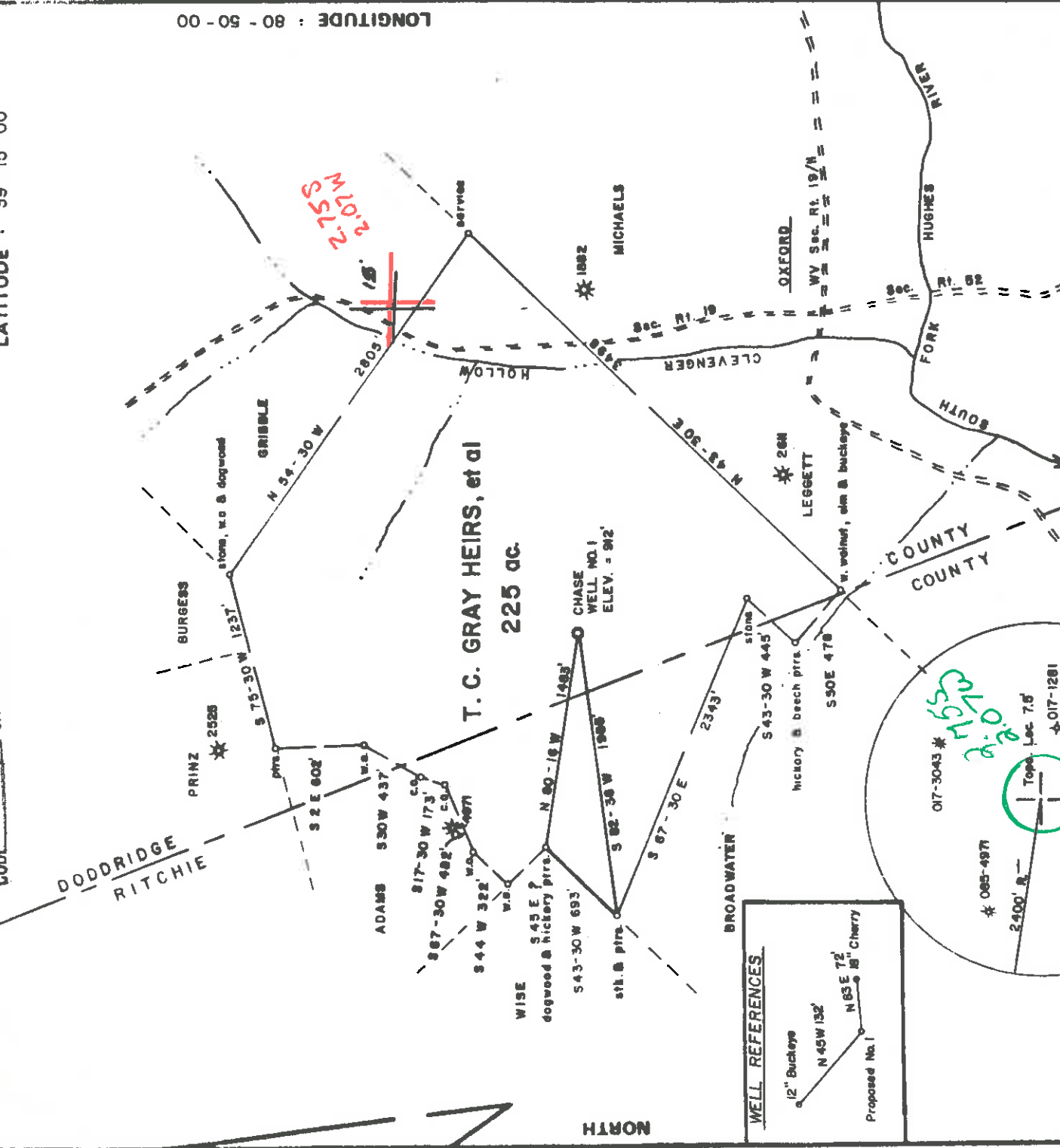


CODE 10950 PLAT 10950

LATITUDE : 39 - 15 - 00

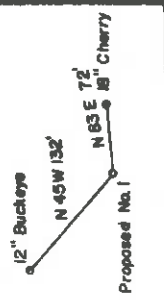
LONGITUDE : 80 - 50 - 00

NORTH



2.07M  
S 15° W

WELL REFERENCES



FILE NO. CHASE I - 14  
 DRAWING NO. \_\_\_\_\_  
 SCALE 1 inch = 1000 feet  
 MINIMUM DEGREE OF ACCURACY 1/200  
 PROVEN SOURCE OF ELEVATION Jct. of roads, NE of \_\_\_\_\_  
 Location ELEV. = 877'

I THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAN 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) Mark C. Echard  
 MARK C. ECHARD  
 R.P.E. \_\_\_\_\_ L.L.S. 490

PLACE SEAL HERE

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



DATE OCTOBER 11, 1984  
 OPERATOR'S WELL NO. ONE  
 API WELL NO. 47-017

STATE COUNTY PERMIT  
 47-017-3373  
 Formerly: DOD-3042

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 912' WATER SHED SOUTH FORK OF HUGHES RIVER  
 DISTRICT SOUTHWEST COUNTY DODDRIDGE  
 QUADRANGLE OXFORD 7.5' Holbrook 15' N 62 ACREAGE 225  
 SURFACE OWNER THOMAS C. GRAY HEIRS, et al  
 OIL & GAS ROYALTY OWNER THOMAS C. GRAY HEIRS, et al LEASE ACREAGE 225

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 DEVONIAN SHALE ESTIMATED DEPTH 5990  
 WELL OPERATOR CHASE PETROLEUM CORP. DESIGNATED AGENT MR. ALTON SKINNER  
 ADDRESS P.O. BOX 297 GLENVILLE, WY 26331  
 GLENVILLE, WY 26331

6-6 Straight Fork-Bivestone Creek (138)

TRASCO

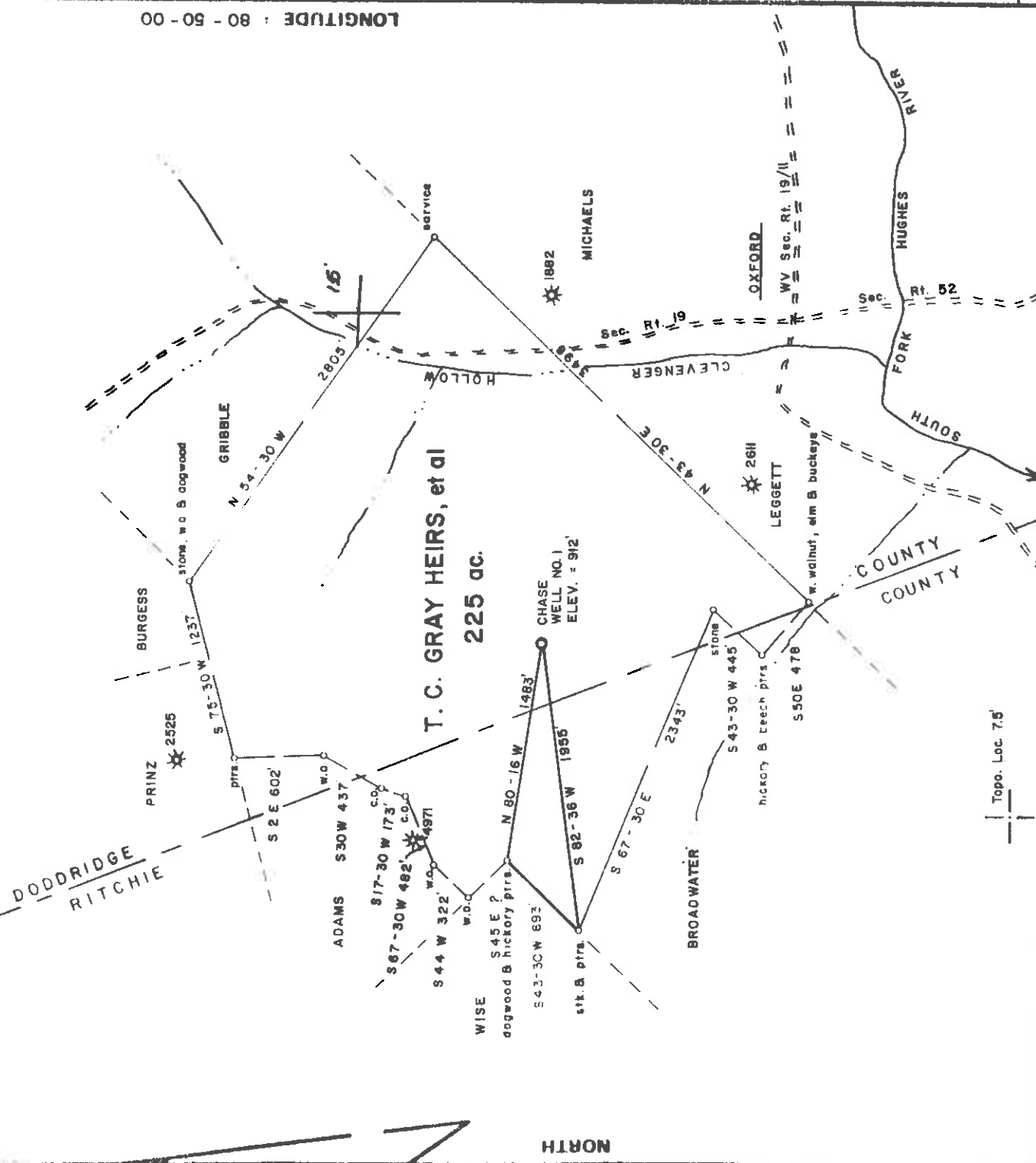
NOV 13 1984

Uodd 3042

14220

NORTH

14520



FILE NO. CHASE 1 - 14  
 DRAWING NO. \_\_\_\_\_  
 SCALE 1 inch = 1000 feet  
 MINIMUM DEGREE OF ACCURACY 1/200  
 PROVEN SOURCE OF ELEVATION Jct of roads NE of Location ELEV = 877

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) *Mark C. Echard*  
 MARK C. ECHARD  
 R.P.E. \_\_\_\_\_ L.L.S. 490

PLACE SEAL HERE

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



DATE AUGUST 5, 1981  
 OPERATOR'S WELL NO. ONE  
 API WELL NO. 47-017-3042  
 STATE COUNTY PERMIT

STATE OF WEST VIRGINIA  
 DEPARTMENT OF MINES  
 OIL AND GAS DIVISION  
**CANCELLED**

SEP 12 1983

WELL TYPE: OIL  GAS  LIQUID INJECTION  WASTE DISPOSAL   
 (IF "GAS") PRODUCTION  STORAGE  DEEP  SHALLOW   
 LOCATION ELEVATION 912' WATER SHED SOUTH FORK OF HUGHES RIVER  
 DISTRICT SOUTHWEST COUNTY DODDRIDGE

QUADRANGLE OXFORD 7.5'  
 SURFACE OWNER THOMAS C. GRAY HEIRS, et al ACREAGE 225  
 OIL & GAS ROYALTY OWNER THOMAS C. GRAY HEIRS, et al LEASE ACREAGE 225

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 DEVONIAN SHALE ESTIMATED DEPTH 5990  
 WELL OPERATOR CHASE PETROLEUM CORP. DESIGNATED AGENT MR. ALTON SKINNER  
 ADDRESS P.O. BOX 297 ADDRESS P.O. BOX 297  
 GLENVILLE, WY 26351 GLENVILLE, WY 26351

TRASCO



NORTH

14520

DODDRIDGE  
RITCHIE

PRINZ \* 2525

BURGESS

GRIBBLE

2.805  
3.105

2805

ADAMS S 30 W 437'  
S 67 - 30 W 173'  
S 44 W 322' w.o.c.  
S 17 - 30 W 173' c.o.  
S 67 - 30 W 482' c.o.  
S 44 W 322' w.o.c. 497'

T. C. GRAY HEIRS, et al  
225 ac.

WISE S 45 E ?  
dogwood & hickory pirs  
S 43 - 30 W 693'

CHASE WELL NO. 1  
ELEV. = 912'

S 67 - 30 W 1985'  
S 67 - 30 E

BROADWATER

stone  
S 43 - 30 W 445'

hickory & beech pirs  
S 50 E 478'

LEGGETT \* 2611

w. walnut, elm & buckeye

OXFORD

WV Sec. Rt. 19/11

MICHAELS \* 1882

HUGHES RIVER

SOUTH FORK

Topo  
Loc. 7.5

FILE NO. CHASE 1 - 14  
DRAWING NO. \_\_\_\_\_  
SCALE 1 inch = 1000 feet  
MINIMUM DEGREE OF \_\_\_\_\_  
ACCURACY 1/200  
PROVEN SOURCE OF \_\_\_\_\_  
ELEVATION Jct. of roads NE of \_\_\_\_\_  
Location ELEV = 877'

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. *Mark C. Echard*  
(SIGNED) MARK C. ECHARD  
R.P.E. L.S. 490

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS  
FORM IV-6 (8.78)



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 912' WATER SHED SOUTH FORK OF HUGHES RIVER  
DISTRICT SOUTHWEST COUNTY DODDRIDGE  
QUADRANGLE OXFORD 7.5 *Holbrook 15 N*  
SURFACE OWNER THOMAS C. GRAY HEIRS, et al ACREAGE 225  
OIL & GAS ROYALTY OWNER THOMAS C. GRAY HEIRS, et al LEASE ACREAGE 225

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 DEVONIAN SHALE ESTIMATED DEPTH 5290  
WELL OPERATOR CHASE PETROLEUM CORP. DESIGNATED AGENT MR ALTON SKINNER  
ADDRESS P.O. BOX 297 ADDRESS P.O. BOX 297  
GEN. E. WV 2635 GEN. E. WV 2635

SEP 22 1981

DATE AUGUST 5, 1981  
OPERATOR'S WELL NO. ONE  
API WELL NO. 47-017-3042  
STATE COUNTY PERMIT

PLACE SEAL HERE



RECEIVED

MAR 20 1985

IV-35  
(REV 8-81)

OIL & GAS DIVISION

DEPT. OF MINES OF West Virginia

Department of Mines

Oil and Gas Division

Date March 25, 1985

Operator's

Well No. Gray #1

Farm T.C. Gray Heirs

API No. 47 - 017 - 3373

Was 3042

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 X /)

LOCATION: Elevation: 912 Watershed South Fork Hughes River  
District: Southwest County Doddridge Quadrangle Oxford 7.5

COMPANY Chase Petroleum, Inc.

ADDRESS P.O. Drawer 369, Glenville, WV 26351

DESIGNATED AGENT Alton Skinner

ADDRESS P.O. Drawer 369, Glenville, WV 26351

SURFACE OWNER Dorothy Powell, et al

ADDRESS Lexington Park, Md 20653

MINERAL RIGHTS OWNER Dorothy Powell, et al

ADDRESS Lexington Park, Md 20653

OIL AND GAS INSPECTOR FOR THIS WORK Mike

Underwood ADDRESS Salem, WV 26426

PERMIT ISSUED 11/2/84

DRILLING COMMENCED 2/4/85

DRILLING COMPLETED 2/9/85

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

Casing Tubing Size	Used in Drilling	Left in Well	Cement fill up Cu. ft.
20-16 Cond.			
13-10"	31	0	-
9 5/8			
8 5/8	1140	1140	300
7			
5 1/2			
4 1/2	4967	4967	750
3			
2			
Liners used			

GEOLOGICAL TARGET FORMATION Alexander (Devonian Shale) Depth 5990 feet

Depth of completed well 5000 feet Rotary X / Cable Tools

Water strata depth: Fresh 40 feet; Salt none recorded feet

Coal seam depths: none recorded Is coal being mined in the area? no  
4736-4802  
4192-4419

OPEN FLOW DATA

Producing formation Benson, Riley, Balltown

Gas: Initial open flow 16 Mcf/d Oil: Initial open flow 0 Bbl/d

Final open flow 485 Mcf/d Final open flow Trace Bbl/d

Pay zone depth 3691-3740 feet

Time of open flow between initial and final tests n/a hours

Static rock pressure 1645 psig (surface measurement) after 4 hours shut in

(If applicable due to multiple completion--)

Second producing formation

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)

D O D D

3 3 7 3

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

Fraced Benson 4736-4802, 9 holes, 531 Bbls Water, 10,000# 80/100, 40,000# 20/40  
 Fraced Riley 4192-4419, 8 holes, 556 Bbls Water, 10,000# 80/100, 40,000# 20/40  
 Fraced Balltown 3691-3740, 10 holes, 575 Bbls Water, 10,000# 80/100, 40,000# 20/40

WELL LOG

FORMATION	COLOR	HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS
Clay, Red Rock			0	10	
Sand, Shale, Red Rock			10	630	1/2" stream H2O @ 40'
Sand, Shale			630	1900	
Big Lime Sand			1900	1980	
Injun Sand, Shale			1980	1982	
Weir Sand, Shale			1982	2010	
Berea Sand, Shale			2010	2190	
Gordon Sand, Shale			2190	2320	
Fifth Sand			2320	2380	
Speechley Sand, Shale			2380	2384	
Balltown Sand, Shale			2384	2600	
Balltown Sand, Shale			2600	2612	
1st Riley Sand, Shale			2612	2778	
2nd Riley Sand, Shale			2778	2782	
3rd Riley Sand, Shale			2782	3250	12/10 - F.M. W/H2O @ 2809'
Benson Sand, Shale			3250	3314	12/10 - F.M. W/H2O @ 3289'
			3314	3691	
			3691	3740	
			3740	4192	2/10 - F.M. W/H2O @ 3794'
			4192	4210	
			4210	4330	4/10 - F.M. W/H2O @ 4302'
			4330	4340	
			4340	4430	
			4430	4419	
			4419	4736	4/10 - F.M. W/H2O @ 4750'
			4736	4802	
			4802	5000	
			4802		TD

(Attach separate sheets as necessary)

Chase Petroleum, Inc.

Well Operator

By: Allen Spencer

Date: March 25, 1985

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



1) Date: October 16, 19 84  
 2) Operator's Well No. Gray #1  
 3) API Well No. 47 - 017 - 3373 State West Virginia County Putnam Permit Renewal (formerly 3042)

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

4) WELL TYPE: A Oil  Gas   
 B (If "Gas", Production  Underground storage  Deep  Shallow   
 5) LOCATION: Elevation: 912 Watershed: South Fork of Hughes River  
 District: Southwest County: Doddridge Quadrangle: Oxford 7.5  
 6) WELL OPERATOR: Chase Petroleum 7) DESIGNATED AGENT: Alton Skinner  
 Address: P.O. Drawer 369 Address: P.O. Drawer 369  
Glennville, WV 26351 Glennville, WV 26351  
 8) OIL & GAS INSPECTOR TO BE NOTIFIED: Name Unknown  
 Address: Mike Underwood Address Unknown  
Route 2-Box 114  
Salem, WV 26426

10) PROPOSED WELL WORK: Drill  deeper  Redrill  Stimulate   
 Plug off old formation  Perforate new formation   
 Other physical change in well (specify) \_\_\_\_\_  
 11) GEOLOGICAL TARGET FORMATION, Alexander (Devonian Shale)  
 12) Estimated depth of completed well, 5990 feet  
 13) Approximate true depths: Fresh, 30 feet; salt, 1300 feet.  
 14) Approximate coal seam depths: None Is coal being mined in the area? DEPT No. X  
 15) CASING AND TUBING PROGRAM

CASING OR TUBING TYPE	SPECIFICATIONS		FOOTAGE INTERVALS		CEMENT FILL-UP OR SACKS (Cubic feet)	PACKERS						
	Size	Grade	Weight per ft.	New			Used	For drilling	Left in well	Kinds	Sizes	Depths set
Conductor												
Fresh water												
Coal												
Intermediate	8-5/8		20#	X		400	400	CTS				
Production	4-1/2		10.5#	X		5940	5940	725 Sks				
Tubing												
Liners												

Permit number 47-017-3373 **OFFICE USE ONLY**  
**DRILLING PERMIT**  
 Permit expires November 2, 19 84 Date

This permit covering the well operator and well location shown below is evidence of permission granted to drill in accordance with the pertinent legal requirements subject to the conditions contained herein and on the reverse hereof. Notification must be given to the District Oil and Gas Inspector. (Refer to No. 8) Prior to the construction of roads, locations and pits for any permitted work. In addition, the well operator or his contractor shall notify the proper district oil and gas inspector 24 hours before actual permitted work has commenced.)

The permitted work is as described in the Notice and Application, plat, and reclamation plan, subject to any modifications and conditions specified on the reverse hereof.  
 Permit expires November 2, 1986 unless well work is commenced prior to that date and prosecuted with due diligence.

Bond:	Agent:	Plat:	Casing	Fee
<u>35</u>	<u>TS</u>	<u>TS</u>	<u>TS</u>	<u>3792</u>

NOTE: Keep one copy of this permit posted at the drilling location.  
Margaret Sloan  
 Administrator, Office of Oil and Gas

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







Well No. Gray #1  
Farm T. C. Gray Heirs, et al  
API # 47 - 017 - 3042  
Date August 31, 1981

STATE OF WEST VIRGINIA  
OFFICE OF OIL AND GAS - DEPARTMENT OF MINES

OIL AND GAS WELL PERMIT APPLICATION

WELL TYPE: Oil / Gas X /

(If "Gas", Production X / Underground storage    / Deep    / Shallow X /

LOCATION: Elevation: 912 Watershed: South Fork of Hughes River  
District: Southwest County: Doddridge Quadrangle: Oxford 7.5

WELL OPERATOR CHASE PETROLEUM  
Address P. O. Drawer 369

DESIGNATED AGENT Alton Skinner  
Address P. O. Drawer 369

OIL AND GAS Glenville, WV 26351

Glenville, WV 26351

ROYALTY OWNER T. C. Gray Heirs, et al  
Address   

COAL OPERATOR none  
Address   

Acreage 225

SURFACE OWNER T. C. Gray Heirs, et al  
Address   

COAL OWNER(S) WITH DECLARATION ON RECORD:  
NAME Lessors (if any)  
Address   

Acreage 225

NAME     
Address   

FIELD SALE (IF MADE) TO:  
NAME Uncommitted  
Address   

COAL LESSEE WITH DECLARATION ON RECORD:  
NAME none  
Address   

OIL AND GAS INSPECTOR TO BE NOTIFIED:

NAME Stephen Casey  
Address Route 2 Box 232-D  
Jane Lew, WV 26378  
Telephone 884-7470

**RECEIVED**

SFP 4 - 1981

OIL AND GAS DIVISION  
WV DEPARTMENT OF MINES

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 19, 1981, to the undersigned well operator from T. Edward Harrison, et al.

(If said deed, lease, or other contract has been recorded:)

Recorded on July 10, 1981, in the office of the Clerk of County Commission of

Ritchie County, West Virginia, in Lease 121 Book at page 119. A permit is requested as follows:

PROPOSED WORK: Drill X / Drill Deeper    / Redrill    / Fracture or stimulate X /  
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 receipt of this Application by the Dept. 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 lessees on or before the day of the mailing or delivery of this 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  
1613 WASHINGTON ST., E.  
CHARLESTON, WV 25311  
Telephone - 304/348-3092

CHASE PETROLEUM  
Well Operator

By: Alton Skinner

**BLANKET BOND**

Its:    Agent

PROPOSED WORK ORDER

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

DRILLING CONTRACTOR (IF KNOWN) Unknown

Address \_\_\_\_\_

GEOLOGICAL TARGET FORMATION Devonian Shale

Estimated depth of completed well 5990 feet. Rotary  / Cable tools  /  
Approximate water strata depths: Fresh, 30 feet; salt, 0 feet.  
Approximate coal seam depths: none / No  /  
Is coal being mined in this area: Yes  No

CASING OR TUBING TYPE	SPECIFICATIONS	FOOTAGE INTERVALS		CEMENT FILL- For Drill- ing	UP OR SACKS	PACKERS	
		Weight per ft	New				Used
Conductor	11 3/4"			X	30	-0-	Kinds
Fresh water							Sizes
Coal							
Intermed.	8 5/8"		X		1800	1800	CTS
Production	4 1/2"		X		5940	5940	725 sks
Tubing							Depths set
Liners							Perforations: Top Bottom

NOTE: Regulation 7.03 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 drilling 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, of the W. Va. Code, the location is hereby approved for drilling. This permit shall expire if operations have not commenced by 5-11-81.

*[Signature]*  
Deputy Director - Oil & Gas Division

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:

W A I V E R

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: \_\_\_\_\_

\_\_\_\_\_  
Title: