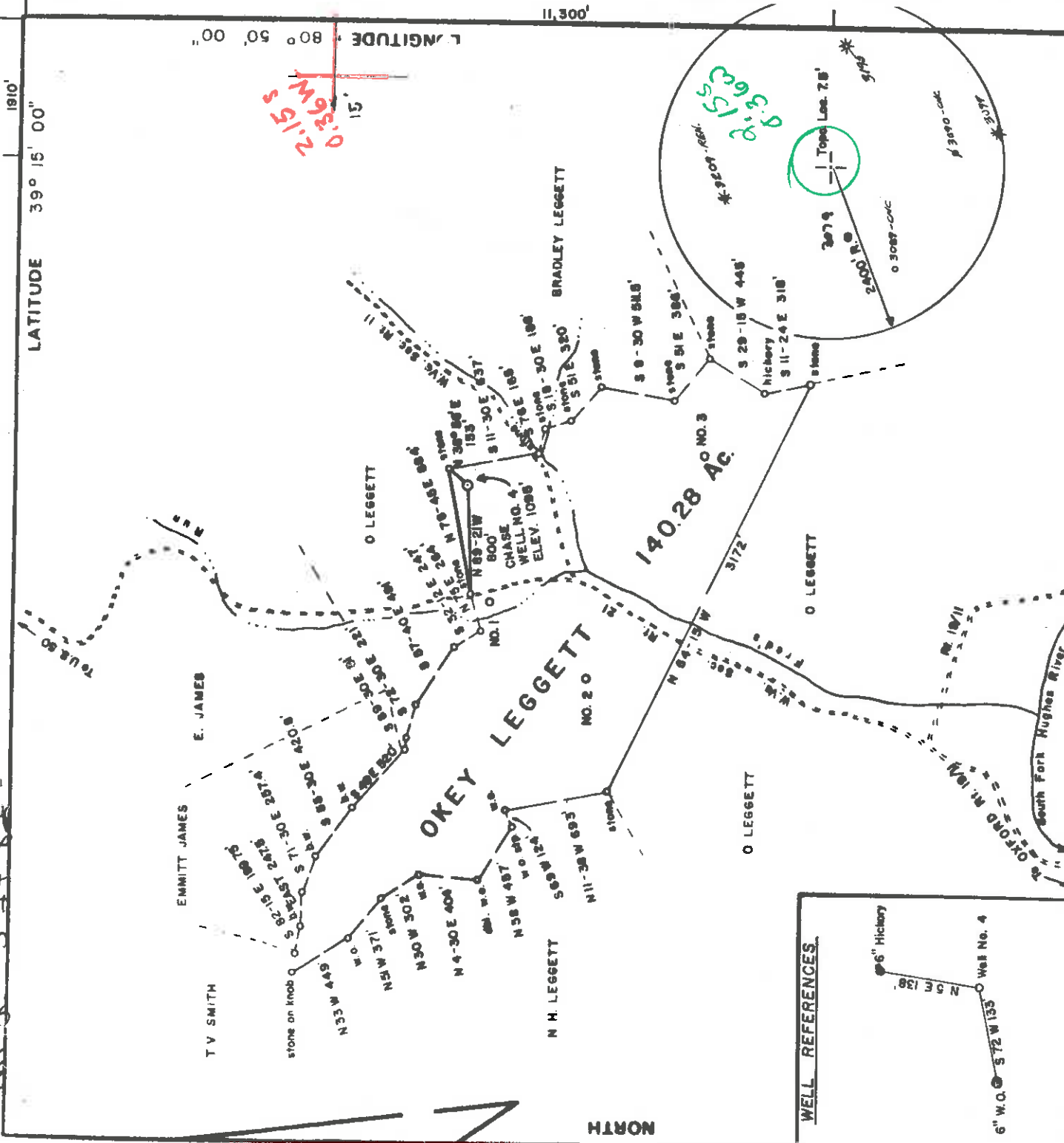
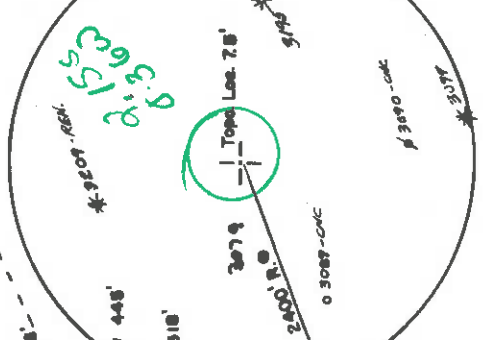


3-24-8 CODE

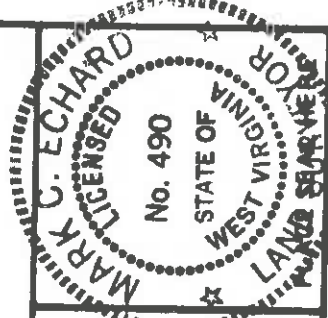


0.36 MW
2.15 S



FILE NO. _____
 DRAWING NO. _____
 SCALE 1 inch = 1000 feet
 MINIMUM DEGREE OF ACCURACY 1/200
 PROVEN SOURCE OF ELEVATION Junction of roads 1000' SW of Location
 SW of Location ELEV. = 899'

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.L.S. 490



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



DATE OCTOBER 11, 1984
 OPERATOR'S WELL NO. FOUR
 API WELL NO. 47-017-3372
 STATE COUNTY PERMIT
 Formerly: DOD-3091

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 1090 WATER SHED FRED'S RUN
 DISTRICT SOUTHWEST COUNTY DODDRIDGE
 QUADRANGLE OXFORD 7.5 5.6 **140.28 AC**
 SURFACE OWNER OKEY LEGGETT HEIRS 0.5K ACRES 140.28
 OIL & GAS ROYALTY OWNER OKEY LEGGETT HEIRS LEASE ACREAGE 140.28

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 MARCELLUS SHALE ESTIMATED DEPTH 5990'
 WELL OPERATOR CHASE PETROLEUM, INC. DESIGNATED AGENT MR. ALTON SKINNER
 ADDRESS P.O. BOX 297 ADDRESS P.O. BOX 369
 GLENVILLE, W.Va. 26351 GLENVILLE, W.Va. 26351

6-6 Straight Fork - Bluestone Creek (138)

TRACOR

NOV 13 1984

DOD-3091

RECEIVED

FEB 27 1985

IV-35
(Rev 8-81)



OIL & GAS DIVISION
DEPT. OF MINES OF West Virginia
Department of Mines
Oil and Gas Division

Date February 25, 1985.
Operator's Well No. Okey Leggett #4
Farm Okey Leggett
API No. 47 -017 -3372

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: 1090 Watershed Fred's Run
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 James E. Leggett

ADDRESS Lexington, KY 40502

MINERAL RIGHTS OWNER James E. Leggett

ADDRESS Lexington, KY 40502

OIL AND GAS INSPECTOR FOR THIS WORK Mike

Underwood ADDRESS Salem, WV 26426

PERMIT ISSUED 11/2/84

DRILLING COMMENCED 11/7/84

DRILLING COMPLETED 11/12/84

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

Casing Tubing Size	Used in Drilling in Well	Left in Well	Cement fill up Cu. ft.
20-16 Cond.			
13-10"		30	0
9 5/8			
8 5/8	1290	1290	338
7			
5 1/2			
4 1/2	5344	5344	850
3			
2			
Liners used			

GEOLOGICAL TARGET FORMATION Alexander (Marcellus Shale) Depth 5990 feet

Depth of completed well 5484 feet Rotary X / Cable Tools none

Water strata depth: Fresh 125 feet; Salt recorded feet

Coal seam depths: None Is coal being mined in the area? No

OPEN FLOW DATA

Producing formation Alexander, Riley, Balltown Benson &

Gas: Initial open flow 147 Mcf/d Oil: Initial open flow 0 Bbl/d

Final open flow 710 Mcf/d Final open flow show Bbl/d

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

Static rock pressure 1820 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

MAR 11 1985

(Continue on reverse side)

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

Fraced Alexander 5144-5194, 13 holes, 557 Bbls Water, 40,000# 20/40, 10,000# 80/100
 Fraced Benson & Riley ^{Riley}4476-4879, ^{Benson}9 holes, 623 Bbls Water, 40,000# 20/40, 10,000# 80/100
 Fraced Balltown ^{Riley}9688-3742, 14 holes, 544 Bbls Water, 40,000# 20/40, 10,000# 80/100

WELL LOG

FORMATION	COLOR	HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS Including indication of all fres and salt water, coal, oil and ga
Clay			0	3	
Sand, Shale			3	275	1/2" H2O @ 125'
Red Rock, Shale			275	560	
Sand, Shale			560	1525	
Sand			1525	1580	
Sand, Shale			1580	1875	
Little Lime			1875	1885	
Sand, Shale			1885	1930	
Big Lime			1930	1990	
Sand, Shale			1990	1994	
Injun			1994	2030	
Sand, Shale			2030	2050	20/10-2" W/H2O @ 2134'
Squaw			2050	2066	
Sand, Shale			2066	2230	
Weir			2230	2354	
Sand, Shale			2354	2426	
Berea			2426	2428	14/10-2" W/H2O @ 2548'
Sand, Shale			2428	2726	
Fifth Sand			2726	2734	10/10-2" W/H2O @ 3056'
Sand, Shale			2734	3290	
Speechley			3290	3350	10/10-2" W/H2O @ 3530'
Sand, Shale			3350	3688	
Balltown			3688	3742	40/10-2" W/H2O @ 4042'
Sand, Shale			3742	4476	
Riley			4476	4528	22/10-2" W/H2O @ 4555'
Sand, Shale			4528	4875	
Benson			4875	4879	30/10-2" W/H2O @ 5006'
Sand, Shale			4879	5144	
Alexander			5144	5194	
Sand, Shale			5194	5484	TD

(Attach separate sheets as necessary)

Chase Petroleum, Inc.
Well Operator

By: John Kramer
February 25, 1985

Date:

Notes: Regulation 3.03(t) provides as follows:
 "The term 'log' or 'well log' shall mean a systematic
 and logical record of all formations, including
 the drilling of a well."



1) Date: October 16, 19 84
 2) Operator's Well No. Okey Leggett #4
 3) API Well No. 47 - 017-3372
 State County Permit

Renewal (formerly 3091)

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
 5) LOCATION: Elevation: 1090 Watershed: Fred's Run Deep Shallow

6) WELL OPERATOR: Chase Petroleum County: Doddridge Quadrangle: Oxford 7.5
 Address: P.O. Drawer 369 7) DESIGNATED AGENT: Alton Skinner
Glennville, WV 26351 Address: P.O. Drawer 369
Glennville, WV 26351

8) OIL & GAS INSPECTOR TO BE NOTIFIED
 Name: Mike Underwood 9) DRILLING CONTRACTOR:
 Address: Route 2-Box 114 Name: Unknown
Salem, WV 26426 Address: Unknown

10) PROPOSED WELL WORK: Drill deeper Redrill Stimulate
 Plug off old formation Perforate new formation

11) GEOLOGICAL TARGET FORMATION: Marcellus Shale
 12) Estimated depth of completed well, 5990 feet
 13) Approximate irata depths: Fresh, 100 feet; salt, 300 feet.
 14) Approximate coal seam depths: NONE 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	For drilling	Left in well		
Conductor						
Fresh water						
Coal						
Intermediate	8-5/8			400	CTS	
Production	4-1/2	10.5#	5940	725 Sks		
Tubing						
Liners						

OFFICE USE ONLY
 DRILLING PERMIT

Permit number 47-017-3372 Date November 2, 19 84

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>3790</u>

Margaret J. Haer
 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

