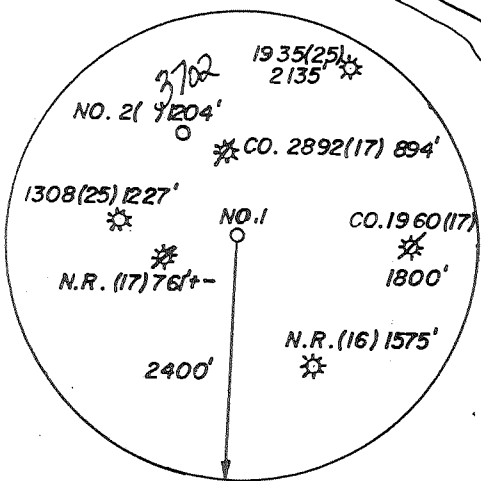
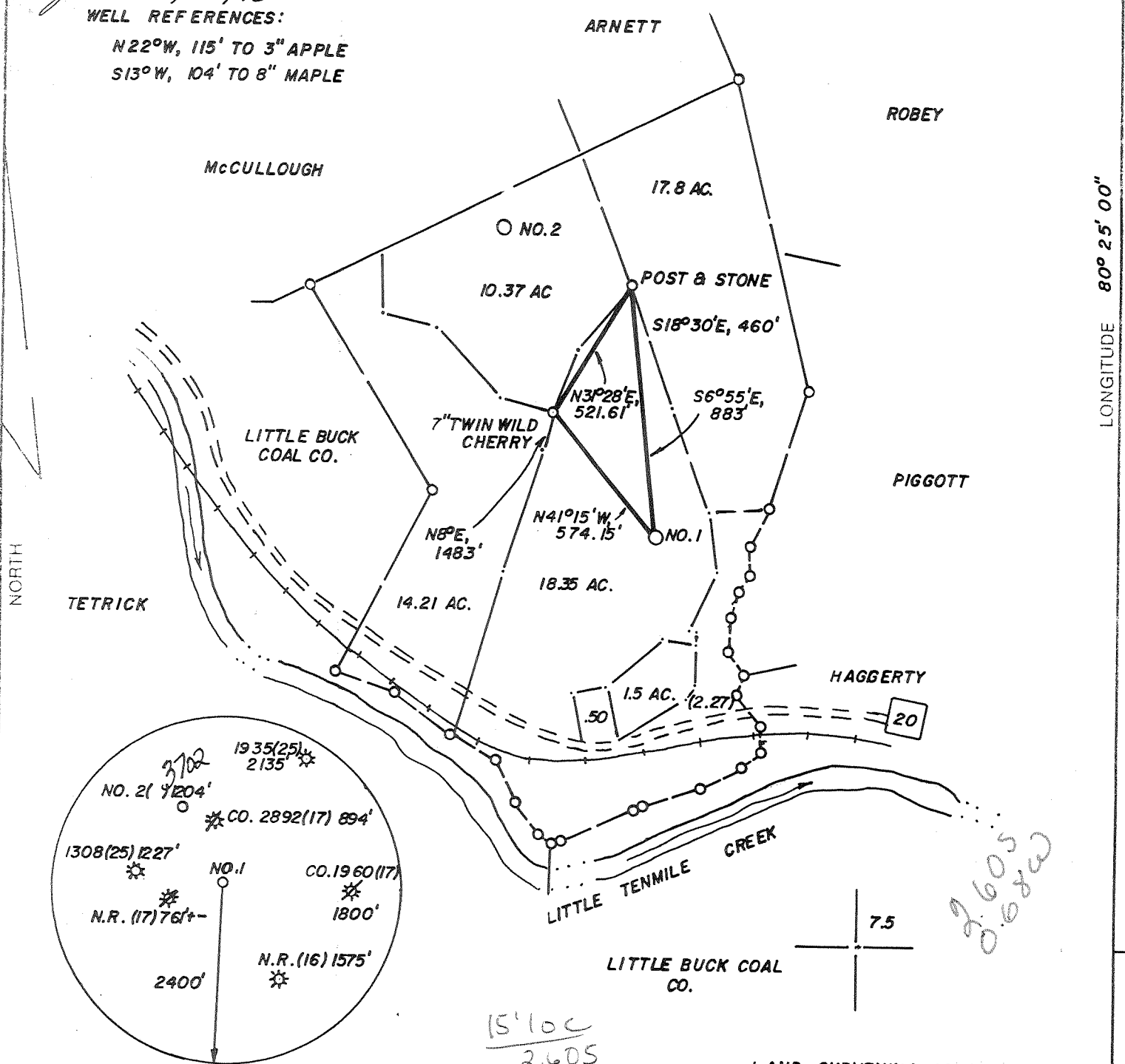


June 5/23/90

WELL REFERENCES:

N22°W, 115' TO 3" APPLE  
S13°W, 104' TO 8" MAPLE



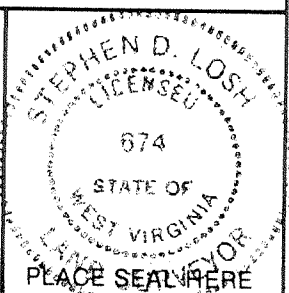
15' loc  
2.605  
0.68W

LAND SURVEYING SERVICES  
21 CEDAR LANE  
BRIDGEPORT, WV 26330  
PHONE: 304-842-2018

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

FILE NO. \_\_\_\_\_  
 DRAWING NO. \_\_\_\_\_  
 SCALE 1" = 500'  
 MINIMUM DEGREE OF ACCURACY 1 IN 2500  
 PROVEN SOURCE OF ELEVATION TOP OF KNOB 1635' NE OF LOC. AT ELEV. 1467'

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 ENERGY.  
 (SIGNED) \_\_\_\_\_  
 R.P.E. \_\_\_\_\_ L.L.S. NO. 674  
**STEPHEN D. LOSH**



STATE OF WEST VIRGINIA  
 DEPARTMENT OF ENERGY  
 OIL AND GAS DIVISION



DATE MARCH 31, 19 90  
 OPERATOR'S WELL NO. RITTENHOUSE I  
 API WELL NO. E-114  
47 - 033 - 3721  
 STATE COUNTY PERMIT

WELL TYPE: OIL \_\_\_ GAS X LIQUID INJECTION \_\_\_ WASTE DISPOSAL \_\_\_  
 (IF "GAS,") PRODUCTION X STORAGE \_\_\_ DEEP \_\_\_ SHALLOW X  
 LOCATION: ELEVATION 1120' WATERSHED LITTLE TENMILE CREEK  
 DISTRICT SARDIS COUNTY HARRISON

QUADRANGLE WALLACE 7.5' Clarksburg Wc  
 SURFACE OWNER JOANNE LEACH ACREAGE 16.  
 OIL & GAS ROYALTY OWNER M. RITTENHOUSE LEASE ACREAGE 65.5

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 BALLTOWN ESTIMATED DEPTH 3800'  
 WELL OPERATOR EXCEL ENERGY, INC. DESIGNATED AGENT HARRY BARNETT  
 ADDRESS P. O. BOX 1020 ADDRESS P. O. BOX 1020  
BRIDGEPORT, WV 26330 BRIDGEPORT, WV 26330

JUN 11 1990

COUNTY NAME PERMIT

FORM WW-6

Well Operator's Report of Well Work

Farm name: LEACH, JO ANNE

Operator Well No.: 1-E-114

LOCATION: Elevation: 1120.00      Quadrangle: WALLACE

District: SARDIS      County: HARRISON  
Latitude: 13750 Feet South of 39 Deg. 25Min. 0 Sec.  
Longitude 3650 Feet West of 80 Deg. 25 Min. 0 Sec.

Company: EXCEL ENERGY, INC  
P. O. BOX 1020  
BRIDGEPORT, WV 26330-1020

Agent: HARRY L. BARNETT

Inspector: STEVE CASEY  
Permit Issued: 05/30/90  
Well work Commenced: 06/09/90  
Well work Completed: 06/15/90  
Verbal Plugging \_\_\_\_\_  
Permission granted on: \_\_\_\_\_  
Rotary X Cable \_\_\_\_\_ Rig  
Total Depth (feet) 3600  
Fresh water depths (ft) 130, 1155

Salt water depths (ft) N/A

Is coal being mined in area (Y/N)? N  
Coal Depths (ft): 125-130, 160-163

Casing & Tubing Size	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
11 3/4"	30'	---	
8 5/8"	1123'	1123'	CTS
4 1/2"	3532'	3532'	560 sks

OPEN FLOW DATA

Producing formation Balltown, Speechley & Elizabeth Pay zone depth (ft) 2822-346  
Gas: Initial open flow Show MCF/d Oil: Initial open flow \_\_\_\_\_ Bbl/d  
Final open flow 582 MCF/d Final open flow Show Bbl/d  
Time of open flow between initial and final tests \_\_\_\_\_ Hours  
Static rock Pressure 160 psig (surface pressure) after 24 Hours  
Big Injun  
Second producing formation & Fifth Sand Pay zone depth (ft) 1575-251  
Gas: Initial open flow Show MCF/d Oil: Initial open flow \_\_\_\_\_ Bbl/d  
Final open flow Comingled MCF/d Final open flow \_\_\_\_\_ Bbl/d  
Time of open flow between initial and final tests \_\_\_\_\_ Hours  
Static rock Pressure Comingled psig (surface pressure) after \_\_\_\_\_ Hours

NOTE: ON BACK OF THIS FORM PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE.

**RECEIVED**

Division of Energy

JUL 09 90

Permitting  
Oil and Gas Section

For: EXCEL ENERGY, INC

By: H. Barnett  
Date: July 6, 1990

JUL 16 1990

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

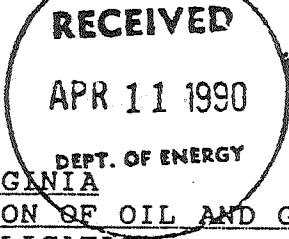
- STAGE I (2822'-3460') 20 holes, 450 sks sand, 650 bbl 75Q foam, 750 gal 15% HCL, 10 perf balls.
- STAGE II (2297'-2503') 21 holes, 300 sks sand, 600 bbl 75Q foam, 750 gal 15% HCL, 10 perf balls.
- STAGE III (2094'-2231') 14 holes, 250 sks sand, 450 bbl 75Q foam, 500 gal 15% HCL.
- STAGE IV (1578'-1655') 14 holes, 300 sks sand, 400 bbl 75Q foam, 500 gal 15% HCL.

WELL LOG

FORMATION	COLOR	HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS Including indication of all fresh and salt water, coal, oil and gas
Fill			0	10	
Sand & Shale			10	125	
Coal			125	130	1/2" stream water @ 130'
Sand & Shale			130	160	
Coal			160	163	
Sand & Shale			163	300	
Red Rock & Shale			300	415	
Sand & Shale			415	1447	1/2" stream water @ 1155'
Little Lime			1447	1454	
Shale			1454	1483	
Big Lime			1483	1550	
Big Injun			1550	1610	
Shale			1610	2108	
Sand			2108	2194	
Shale & Sand			2194	2301	
Sand			2301	2430	
Shale			2430	3085	
Speechley			3085	3118	
Shale			3118	3424	
Balltown			3424	3460	
Shale			3460	3600	DTD

29701

277A



033-3721  
Issued 05/30/92  
Page \_\_\_ of \_\_\_  
Expires 05/30/92

FORM WW-2B

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

- 1) Well Operator: Excel Energy, Inc. <sup>1078</sup> 16570 (7) 654
- 2) Operator's Well Number: E-114 3) Elevation: 1120
- 4) Well type: (a) Oil \_\_\_ / or Gas X /  
(b) If Gas: Production X / Underground Storage \_\_\_ /  
Deep \_\_\_ / Shallow X /
- 5) Proposed Target Formation(s): Balltown <sup>433</sup>
- 6) Proposed Total Depth: 3800 feet
- 7) Approximate fresh water strata depths: 150' <sup>@ 240'</sup>
- 8) Approximate salt water depths: N/A <sup>@ 1190'</sup>
- 9) Approximate coal seam depths: 380' <sup>@ 207' - 215'</sup>
- 10) Does land contain coal seams tributary to active mine? Yes \_\_\_ / No X /
- 11) Proposed Well Work: Drill and stimulate a new well.
- 12)

CASING AND TUBING PROGRAM

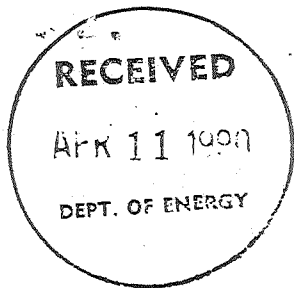
TYPE	SPECIFICATIONS			FOOTAGE INTERVALS		CEMENT Fill-up (cu. ft.)
	Size	Grade	Weight per ft.	For drilling	Left in well	
Conductor	11 3/4"		42#	30'	---	---
Fresh Water						
Coal						
Intermediate	8 5/8"		23#	1200'	1200'	277 sks
Production	4 1/2"	J-55	10.50#	3600'	3600'	400 sks
Tubing						
Liners			or slc			

PACKERS : Kind \_\_\_\_\_  
Sizes \_\_\_\_\_  
Depths set \_\_\_\_\_

For Division of Oil and Gas Use Only

1146

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



1) Date: April 10, 1990  
2) Operator's well number Rittenhouse E-114  
3) API Well No: 47 - 033 - 3721  
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 Jo Anne Leach  
Address Rt. 1, Box 320  
Lumberport, WV 26386
  - (b) Name \_\_\_\_\_  
Address \_\_\_\_\_
  - (c) Name \_\_\_\_\_  
Address \_\_\_\_\_
- 5) (a) Coal Operator:  
Name \_\_\_\_\_  
Address \_\_\_\_\_
- (b) Coal Owner(s) with Declaration  
Name N/A  
Address \_\_\_\_\_
- (c) Coal Lessee with Declaration  
Name \_\_\_\_\_  
Address \_\_\_\_\_
- 6) Inspector Stephen Casey  
Address Rt. 2, Box 232-D  
Jane Lew, WV 26378  
Telephone (304)- 745-4888

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  
X 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 \_\_\_\_\_ on the above named parties, by:  
\_\_\_\_\_ Personal Service (Affidavit attached)  
X 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 Excel Energy, Inc.  
By: H.L. Barnett  
Its: President  
Address P.O. Box 1020  
Bridgeport, WV 26330  
Telephone (304) 842-6927

Subscribed and sworn before me this 10th day of April, 1990

Gwendolyn K. Alvarez Notary Public  
My commission expires November 9, 1998

