

4225'

LATITUDE 39° 25' 00"

WELL REFERENCES: *Janie 5/23/90*

S68°W, 105' TO 7" SASSAFRAS
N25°W, 120' TO 24" RED MAPLE

ARNETT

ROBEY

McCULLOUGH

S21°28'E, 466'

NO. 2

S68°08'E, 497.10'

N16°42'W, 657.86'

POST & STONE

17.8 AC.

S31°28'W, 521.61'

LITTLE BUCK COAL CO.

N76°30'W, 197'

7" TWIN WILD CHERRY

18.35 AC.

PIGGOTT

14.21 AC.

HAGGERTY

1.5 AC.

LITTLE TENMILE CREEK

7.5'

LITTLE BUCK COAL CO.

*2405
0.7860*

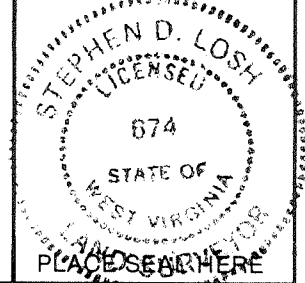
LAND SURVEYING SERVICES
21 CEDAR LANE
BRIDGEPORT, WV 26330
PHONE: 304-842-2018

(+) 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 980' 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) *[Signature]*
R.P.E. _____ L.L.S. NO. 674
STEPHEN D. LOSH



STATE OF WEST VIRGINIA
DEPARTMENT OF ENERGY
OIL AND GAS DIVISION



DATE APRIL 1, 19 90
OPERATOR'S WELL NO. RITTENHOUSE 2
API WELL NO. E-115
47 - 033 - 3722
STATE COUNTY PERMIT

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

LOCATION: ELEVATION 1382' WATER SHED LITTLE TENMILE CREEK
DISTRICT SARDIS 7 COUNTY HARRISON

QUADRANGLE WALLACE 7.5 Clarksburg WC

SURFACE OWNER HELEN C. SOUTHERN ACREAGE 10.37

OIL & GAS ROYALTY OWNER M. RITTENHOUSE LEASE ACREAGE 65.5

LEASE NO. _____

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 BALL TOWN ESTIMATED DEPTH 4000'

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

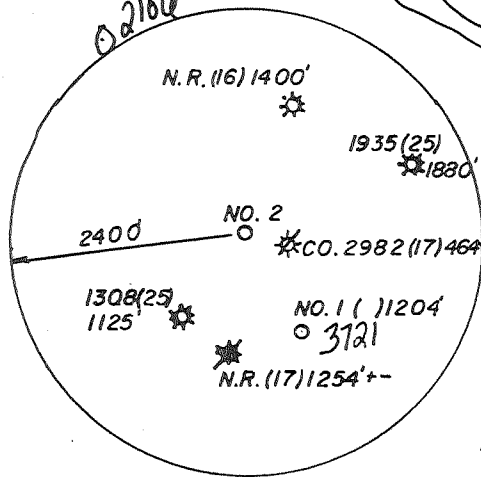
6 Brown-Lumberport (109)

LONGITUDE 80° 25' 00"

12685'

NORTH

TETRICK



FORM WW-6
HALLS, INC. 048805

COUNTY NAME
PERMIT

JUN 11 1990

RECEIVED
Division of Energy

JUL 30 90

State of West Virginia
DEPARTMENT OF ENERGY
Division of Oil and Gas

Permitting
Oil and Gas Section

Well Operator's Report of Well Work

Farm name: LEACH, JO ANNE

Operator Well No.: 2-E-115

LOCATION: Elevation: 1382.00 Quadrangle: WALLACE

District: SARDIS County: HARRISON
Latitude: 12685 Feet South of 39 Deg. 25Min. 0 Sec.
Longitude 4225 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: 07/12/90
Well work Completed: 07/19/90
Verbal Plugging _____
Permission granted on: _____
Rotary X Cable _____ Rig _____
Total Depth (feet) 3977
Fresh water depths (ft) 140, 495, 850
Salt water depths (ft) N/A
Is coal being mined in area (Y/N)? N
Coal Depths (ft): 468-479

Casing & Tubing Size	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
11 3/4"	42	-----	-----
8 5/8"	1408	1408	CTS
4 1/2"	3868	3868	510 sks

OPEN FLOW DATA

Balltown,
Producing formation Speechley, Elizabeth Pay zone depth (ft) 3260-3726
Gas: Initial open flow Show MCF/d Oil: Initial open flow _____ Bbl/d
Final open flow 452 MCF/d Final open flow _____ Bbl/d
Time of open flow between initial and final tests _____ Hours
Static rock Pressure 200 psig (surface pressure) after 24 Hours

Big Injun -
Second producing formation Fifth Sand Pay zone depth (ft) 1902-2834
Gas: Initial open flow _____ MCF/d Oil: Initial open flow _____ Bbl/d
Final open flow Commingled MCF/d Final open flow _____ Bbl/d
Time of open flow between initial and final tests _____ Hours
Static rock Pressure 200 psig (surface pressure) after 24 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.

For: EXCEL ENERGY, INC

AUG 6 1990

By: [Signature]
Date: July 27, 1990

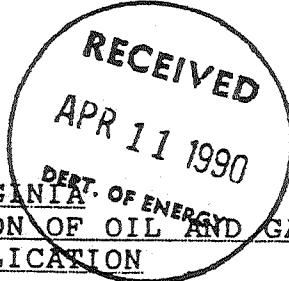
DETAILS OF PERFORMED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC.

- STAGE I (3723-3776) ^{Ball} 13 holes, 350 sks Sand, 500 gal 15% HCL, 475 bbl 75 Q Foam.
- STAGE II (3263-3454) ^{2 1/2" Spch} 12 holes, 250 sks Sand, 500 gal 15% HCL, 400 bbl 75 A Foam.
- STAGE III (2421-2834) ^{50' 5th} 16 holes, 300 sks sand, 750 gal 15% HCL, 10 perf balls, 600 bbl 75 Q Foam.
- STAGE IV (1906-1996) ^{BT} 13 holes, 300 sks sand, 500 gal 15% HCL, 400 bbl 75 Q Foam.

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	
Shale			10	20	
Sand			20	60	
Sand & Shale			60	468	1/2" H ₂ O @ 140
Coal & Shale			468	479	1 1/2" @ 495
Sand & Shale			479	701	
Red Rock			701	1119	1 1/2" @ 850 (slight increase)
Sand & Shale			1119	1160	
Sand			1160	1235	
Shale			1235	1820	
Big Lime			1820	1900	
Big Injun			1900	1950	
Sand & Shale			1950	2003	
Shale			2003	2420	
Sand			2420	2700	
Shale			2700	3750	
Balltown			3750	3780	Gas Show 6/10 2" H ₂ O
Shale			3780	3977	DTD

57501



033-3722
 Issued 05/30/90
 Expires 05/30/90
 Page ___ of ___

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

- 1) Well Operator: Excel Energy, Inc. 14570 (7) 654
- 2) Operator's Well Number: E-115 3) Elevation: 138
- 4) Well type: (a) Oil ___ / or Gas X /
 (b) If Gas: Production X / Underground Storage ___ /
 Deep ___ / Shallow X /
- 5) Proposed Target Formation(s): Balltown 433
- 6) Proposed Total Depth: 4000 feet
- 7) Approximate fresh water strata depths: N/A @ 502'
- 8) Approximate salt water depths: N/A @ 1452'
- 9) Approximate coal seam depths: 416' @ 469'-477'
- 10) Does land contain coal seams tributary to active mine? Yes ___ / No X
- 11) Proposed Well Work: Drill and stimulate a new well.
- 12)

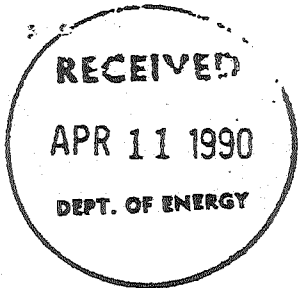
CASING AND TUBING PROGRAM

TYPE	SPECIFICATIONS			FOOTAGE INTERVALS		CEMENT
	Size	Grade	Weight per ft.	For drilling	Left in well	Fill-up (cu. ft.)
Conductor	11 3/4"		42#	30'	---	---
Fresh Water						
Coal						
Intermediate	8 5/8"		23#	1440'	1440'	345 sks
Production	4 1/2"	J-55	10.50#	3810'	3810'	400 sks
Tubing						
Liners			50#			

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 Blanket one Agen



1) Date: April 10, 1990
2) Operator's well number
Rittenhouse E-115
3) API Well No: 47 - 033 - 3722
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 _____
Name _____
Address _____

6) Inspector Stephen Casey
Address Rt. 2, Box 232-D
Jane Lew, WV 26378
Telephone (304)- 745-4888

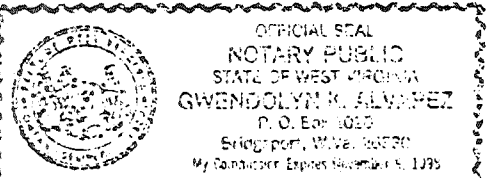
(c) Coal Lessee with Declaration
Name _____
Address _____

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
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