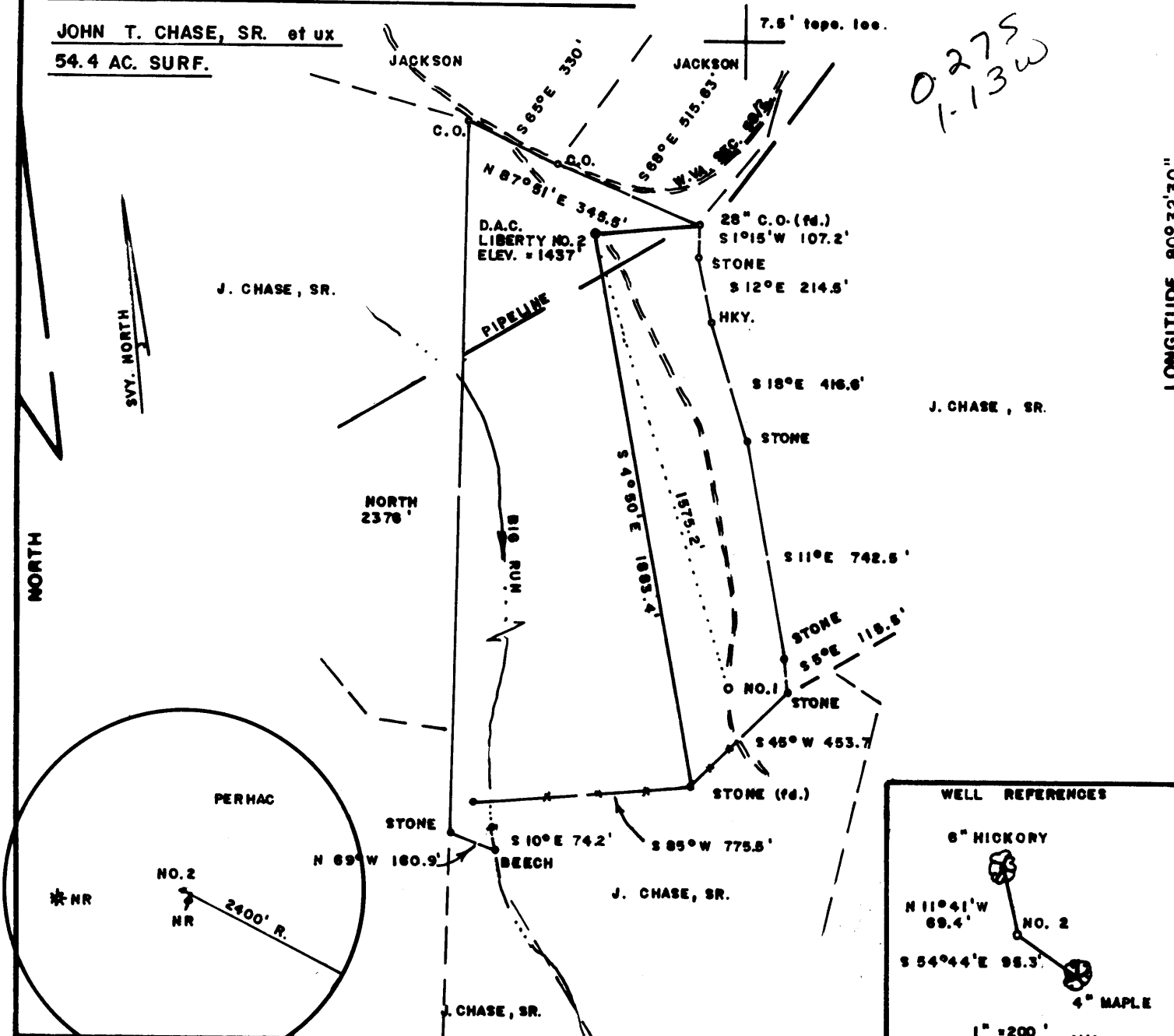


LIBERTY LEASE 54.4 AC.

JOHN T. CHASE, SR. et ux
54.4 AC. SURF.

0275
1-13W

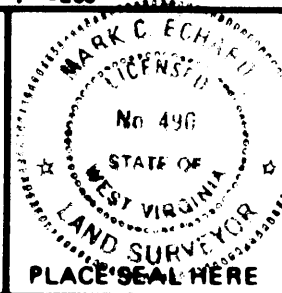


LONGITUDE 80°32'30"

FILE NO. _____
 DRAWING NO. _____
 SCALE 1" = 500'
 MINIMUM DEGREE OF ACCURACY 1/200
 PROVEN SOURCE OF ELEVATION TOP OF KNOB
 SW OF LEASE ELEV. = 1454'

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



WEST VIRGINIA
 DIVISION OF ENVIRONMENTAL PROTECTION
 OFFICE OF OIL AND GAS
 #10 McJUNKIN ROAD
 NITRO, WEST VIRGINIA 25143-2506



DATE JUNE 5, 1997
 OPERATOR'S WELL NO. LIBERTY NO. 2
 API WELL NO. _____
47 - 103 - 01737
 STATE COUNTY PERMIT

WELL TYPE: OIL ___ GAS LIQUID INJECTION ___ WASTE DISPOSAL ___
 (IF "GAS,") PRODUCTION STORAGE ___ DEEP ___ SHALLOW
 LOCATION: ELEVATION 1437' WATER SHED BIG RUN
 DISTRICT CENTER COUNTY WETZEL
 QUADRANGLE BIG RUN 7.5'
 SURFACE OWNER JOHN CHASE, SR., et ux ACREAGE 54.4
 OIL & GAS ROYALTY OWNER LIBERTY HOLDING CO., INC. LEASE ACREAGE 54.4
 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) New drill
 PLUG AND ABANDON ___ CLEAN OUT AND REPLUG ___
 TARGET FORMATION BIG INJUN, SPEECHY ESTIMATED DEPTH 3300'
 WELL OPERATOR D.A.C. DESIGNATED AGENT KENNETH MASON JUN 16 1997
 ADDRESS P.O. BOX 99 ADDRESS P.O. BOX 99
ALMA, WV 26320 ALMA, WV 26320

BIAS BLUEPRINT Huntington, W.V. 578536

RECEIVED
WV Division of
Environmental Protection

SEP 11 1997

State of West Virginia
Division of Environmental Protection
Section of Oil and Gas

Permitting
Office of Oil & Gas Well Operator's Report of Well Work

Farm Name: Chase, John Sr. et ux
Location: Elevation: 1437'
District: Center
Latitude: 1420 Feet South of
Longitude: 5960 Feet West of

Operators Well No.: Liberty #2
Quadrangle: Big Run
County: Wetzell
39 Deg. 37min. 30sec.
80 Deg. 32 min. 30sec.

Company: Drilling Appalachian Corp
P. O. Box 99
Alma, WV 26320

Agent: Kenneth Mason

Inspector: Mike Underwood
Permit Issued: 05/22/97
Well Work Commenced: 06/18/97
Well Work Completed: 06/25/97
Rotary X Cable _____ Rig
Total Depth (feet) 3600'
Fresh Water Depths (ft) 50'
Salt Water Depths (ft) 2085
Is coal being mined in area (Y/N) N
Coal Depths (ft): 1062-1071

casing tubing	used in drilling	left in well	cement fill up sks
11 3/4	165	131	70
8 5/8	1710	1675	425
4 1/2	3600	3519	230

OPEN FLOW DATA

Producing formation Bayard-5th Pay zone depth (ft) 3292-3445
Gas: Initial open flow 637 MCF/D Oil: Initial open flow 0 BBL/D
Final open flow 237 MCF/D Final open flow show BBL/D
Static Rock Pressure 178 psig (surface pressure) after 48 Hours

Second producing formation Big Injun Pay zone depth (ft) 2428-2506
Gas: Initial open flow * MCF/D Oil: Initial open flow 0 BBL/D
Final open flow * MCF/D Final open flow 0 BBL/D
static rock pressure * psig (surface pressure) after * Hours

* commingled with Bayard, 5th sd.

For: Drilling Appalachian Corp.

By: Kenneth R Mason

Date: 07-10-97

OCT 1 1997

OCT 1 1997

Stage	Formation	Perfs	Sand	N2
06-30-97	Liberty # 2			
1	Bayard 5th, 4th	3279-3431 16	250 sks	290,000 scf
2	Big Injun	2406-95 16	240 sks	288,000 scf

ISIP = 2993#
5 min = 2292#

Drillers Log

Formation	Top	Bottom
fill	0	5
Sd	5	30
Sd/Sh	30	218
Sh	218	228
Sd	228	260
Sd/Sh	260	760
Sd	760	865
Sd/Sh	865	1062
Coal	1062	1071
Sd/Sh	1071	1890
Sd	1890	2000
Sd/Sh	2000	2275
Lime	2275	2292
Sd/S	2292	2330
Lime	2330	2430
Sd	2430	2478
Sd/Sh	2478	3222
Sd	3222	3235
Sh	3235	3325
Sd/Sh	3325	3600

hole damp @ 50

1 1/2" strm water at 2085

gas ck @ 2510 = 2/10 in 2" w/w
gas ck @ 3259 = 2/10 in 2" w/w
gas ck @ 3354 = 2/10 in 2" w/w

Electric Log Tops

Formation	Depth top
Big Lime	2357
Big Injun	2422
Berea	2754
Gordon	3194
5th Sd	3440

103-1737

STATE OF WEST VIRGINIA
DIVISION OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS
WELL WORK PERMIT APPLICATION

Issued 06/13/97
Expires 06/13/99

23812

- 1) Well Operator: DRILLING APPALACHIAN CORPORATION
- 2) Operator's Well Number: LIBERTY #2 3) Elevation: 1437'
- 4) Well type: (a) Oil X / or Gas X /
(b) If Gas: Production X / Deep 432 / Underground Storage / Shallow /
- 5) Proposed Target Formation(s): Gordon, Speechley
- 6) Proposed Total Depth: 3600 feet
- 7) Approximate fresh water strata depths: _____
- 8) Approximate salt water depths: _____
- 9) Approximate coal seam depths: 1095'
- 10) Does land contain coal seams tributary to active mine? Yes / No X /
- 11) Proposed Well Work: Drill, perforate, stimulate new formation

CASING AND TUBING PROGRAM

TYPE SPECIFICATIONS FOOTAGE INTERVALS CEMENT

	Size	Grade	Weight per Foot	For drilling	Left in Well	Fill-up (Cu. ft.)
Conductor	11-3/4"	H-44		120'	120'	55 scks class A
Fresh Water						38CS18-11.3
Coal						
Intermediate	8-5/8"	J-55	23#	1600'	1600'	38CS18-11.2.2
Production	4-1/2"	J-55	10.5#	3600'	3600'	38CS18-11.22-11.1
Tubing						
Liners						

PACKERS: Kind _____
Sizes _____
Depths set _____

For Office of Oil and Gas Use Only

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

OFFICE OF OIL AND GAS

JUN 12 1997

C:\Kenny\Forms\wkperm2.fm

Environmental Protection

1483/18

1) Date: June 9, 1997
2) Operator's Well Number
LIBERTY #2
3) API Well No: 47 - 103 - 1737
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 John T. Chase Sr. & Marsha Chase
Address HC 62, Box 131
Burton, WV 26562
- (b) Name _____
Address _____
- (c) Name _____
Address _____
- 5) (a) Coal Operator:
Name _____
Address _____
- (b) Coal Owner(s) with Declaration
Address _____
Name _____
Address _____
- (6) Inspector Randal Mick
Address 111 Blackshere Drive
Mannington, WV 26582
Telephone (304) - 986-3324
- (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**

Included is the information required by Chapter 22B, Article 1, Section 8(d) of the Code of West Virginia (see page 2)

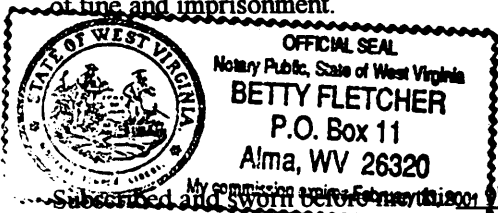
I certify that as required under Chapter 22B of the West Virginia Code I have served copies of this notice and application, a location plat, and accompanying documents pages 1 through _____ on the above named parties, by:

- _____ Personal Service (Affidavit attached)
_____ 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 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 DRILLING APPALACHIAN CORPORATION
By: Kenneth R. Plasman
Its: PRESIDENT
Address P.O. BOX 99
ALMA WV 26320
Telephone 304-758-4638

Subscribed and sworn to before me this _____ day of June, 19 97

Betty Fletcher

Notary Public

My commission expires February 13, 2001