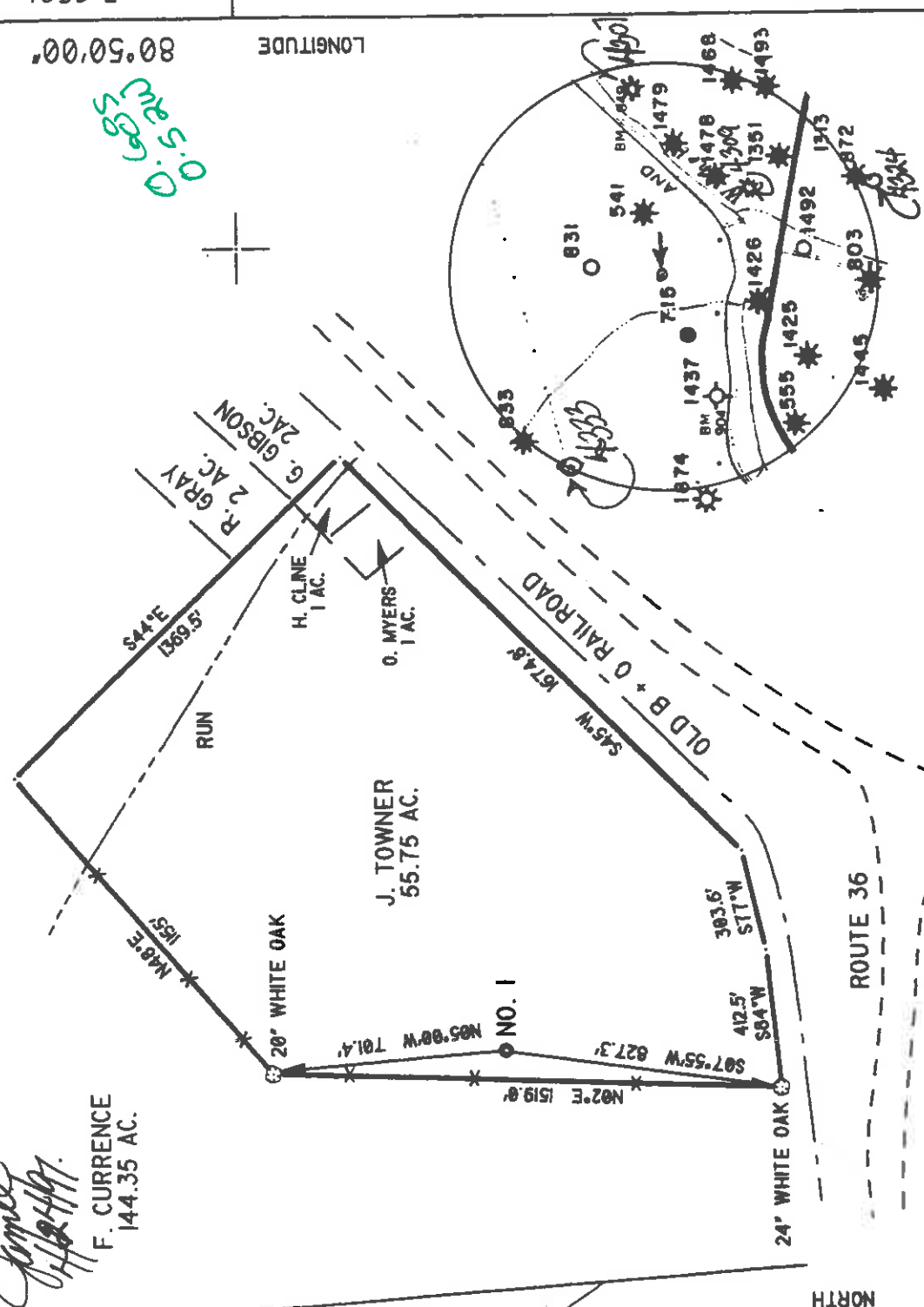
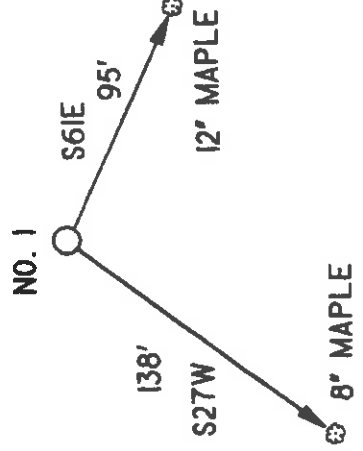


LATITUDE 39°17'30"  
LONGITUDE 80°50'00"  
2.150  
3.650  
0.5 acre 85

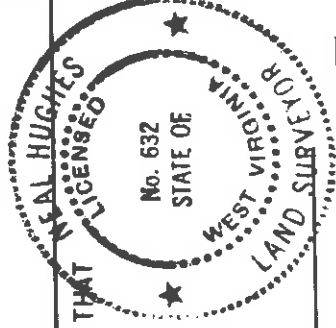
*James H. Hughes*  
F. CURRENCE  
144.35 AC.



REFERENCE POINTS



I THE UNDERSIGNED, DO 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 ENERGY.



L.L.S. *Neal Hughes*  
632

DATE FEBRUARY 7, 19 97  
OPERATORS WELL NO. BENNINGER 1  
API WELL NO. 47 - 017-04350

WEST VIRGINIA  
DIVISION OF ENVIRONMENTAL PROTECTION  
OFFICE OF OIL AND GAS  
#10 McJUNKIN ROAD  
NITRO, WEST VIRGINIA 25143-25061

MINIMUM DEGREE OF ACCURACY 1/200  
PROVEN SOURCE OF ELEVATION RT. 36 + RR INTER 928'  
FILE NO. 97-08  
SCALE 1" = 500'

WELL TYPE: OIL  GAS  LIQUID INJECTION  WASTE DISPOSAL  "GAS" PRODUCTION  STORAGE  DEEP  SHALLOW   
LOCATION: ELEVATION 1025' WATERSHED WILHELM RUN

DISTRICT CENTRAL COUNTY DODDRIDGE  
SURFACE OWNER JOHN D. + TINA M. TOWNER  
ROYALTY OWNER JOSEPHINE BENNINGER HEIRS, ET AL

PROPOSED WORK:  
DRILL  CONVERT  DRILL DEEPER  REDRILL  FRACTURE OR STIMULATE  PLUG OFF OLD FORMATION  PERFORATE NEW FORMATION  PLUG AND ABANDON  CLEAN OUT AND REPLUG  OTHER  
PHYSICAL CHANGE IN WELL (SPECIFY) \_\_\_\_\_ TARGET FORMATION ALEXANDER

WELL OPERATOR KEY OIL COMPANY 22 GARTON PLAZA WESTON, WV 26452  
DESIGNATED AGENT JAN CHAPMAN 22 GARTON PLAZA WESTON, WV 26452

COUNTY NAME PERMIT

WEST VIRGINIA  
APR 28 1997  
5600' 6-6-89



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

OCT 11 1997

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

Farm name: TOWNER, JOHN D. Operator Well No. : BENNINGER #1

LOCATION: Elevation: 1,025.00 Quadrangle: WEST UNION  
District: CENTRAL County: DODDRIDGE  
Latitude: 3650 Feet South of 39 Deg. 17 Min. 30 Sec.  
Longitude: 2750 Feet West of 80 Deg. 50 Min. 0 Sec.

Company: KEY OIL COMPANY  
22 Gaston Plaza  
WESTON, WV 26452-0000

Agent: JAN E. CHAPMAN

Inspector: MIKE UNDERWOOD  
Permit Issued: 04/15/97  
Well Work Commenced: 04/22/97

Well Work Completed: 05/06/97  
Verbal Plugging

Permission granted on: \_\_\_\_\_  
Rotary X Cable \_\_\_\_\_ Rig  
Total Depth ( feet ) 5440'  
Fresh water depths ( ft ) None  
Salt water depths ( ft ) 680, 1515

Is coal being mined in area ( Y / N ) ? N  
Coal Depths ( ft ) : None Reported

OPEN FLOW DATA

Balltown  
Rileys  
Benson

Producing formation Alexander  
Gas: Initial open flow 60 MCF / d Pay zone depth ( ft ) 3780' - 4470'  
Final open flow 1,594 MCF / d Oil: Initial open flow 0 Bbl / d 4501' - 4899'  
Time of open flow between initial and final tests N/A Oil: Final open flow show Bbl / d 4940' - 4952'  
Static rock pressure 1850 psig ( surface pressure ) after 96 Hours 5186' - 5262'

Second producing formation Commingled  
Gas: Initial open flow \_\_\_\_\_ MCF / d Pay zone depth ( ft ) \_\_\_\_\_ Bbl / d  
Final open flow \_\_\_\_\_ MCF / d Oil: Initial open flow \_\_\_\_\_ Bbl / d  
Time of open flow between initial and final tests \_\_\_\_\_ Hours  
Static rock pressure \_\_\_\_\_ psig ( surface pressure ) after \_\_\_\_\_ Hours  
Oil: Final open flow \_\_\_\_\_ Bbl / d  
Oil: Final open flow \_\_\_\_\_ Bbl / d  
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: KEY OIL COMPANY

By:

10/17/1997  
PRESIDENT

Date: OCTOBER 13, 1997

Casing & Tubing Size	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
11 3/4"			
8 5/8"	1020.5	1020.5	275 sks To Surface
4 1/2"	5328	5328	350 sks
2 3/8"		5211	

**Benninger #1 (47-017-04350)  
Four Stage Foam Frac - Halliburton**

<b>1st Stage:</b>	<b>Alexander ( 10 holes ) ( 5231.75' to 5250.5' )</b>	<b>60 Quality Foam. 500 gal. 15% HCL. 60,000# 20/40 sand, 550,000 SCF N2, 811 bbls foam.</b>
<b>2nd Stage:</b>	<b>Benson ( 5 holes ) ( 4945.75' to 4946.75' ) Third Riley ( 7 holes ) ( 4867.25' to 4887.75' )</b>	<b>60 Quality Foam. 750 gal 15% HCL. 40,000# 20/40 sand, 417,000 SCF N2, 616 bbls foam.</b>
<b>3rd Stage:</b>	<b>Riley ( 10 holes ) ( 4523.25' to 4541.25' )</b>	<b>60 Quality Foam. 500 gal 15% HCL. 5,000# 80/100 sand, 35,000# 20/40 sand, 438,000 SCF N2, 647 bbls foam.</b>
<b>4th Stage:</b>	<b>Balltown ( 11 holes ) ( 3964.75' to 4326' )</b>	<b>60 Quality Foam, 1,000 gal 15% HCL. 5,000# 80/100 sand, 35,000# 20/40 sand, 390,000 SCF N2, 644 bbls foam.</b>

**WELL LOG**

Fill & clay	0	14	
Red Rock & Shale	14	30	
Sand & Shale	30	175	
Red Rock & Sand & Shale	175	470	
Shale	470	742	
Sand & Shale	742	857	
Red Rock & Shale	857	1094	
Shale	1094	1498	
Sand	1498	1522	
Sand & Shale	1522	1968	
Little Lime	1968	2000	
Big Lime	2000	2056	
Big Injun	2056	2136	
Shale	2136	2288	
Weir	2288	2412	
Sand & Shale	2412	3348	
Warren	3348	3420	
Shale	3420	3780	
Balltown	3780	4477	
Shale & Sand	4477	4500	
Riley	4500	4574	
Shale	4574	4820	
3 <sup>rd</sup> Riley	4820	4899	
Shale	4899	4940	
Benson	4940	4950	
Sand & Shale	4950	5186	
Alexander	5186	5272	
Sand & Shale	5272	5440	
T.D.	5440		

½" H<sub>2</sub>O & 680'

Damp @ 1515'

Gas Checks

- 2514' Odor
- 3000' 2/10ths 2" w/H<sub>2</sub>O
- 3602' 2/10ths 2" w/H<sub>2</sub>O
- 4006' 2/10ths 2" w/H<sub>2</sub>O
- 5115' 2/10ths 2" w/H<sub>2</sub>O

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

1) Well Operator: 475 KEY OIL COMPANY 20655 1 671  
 2) Operator's Well Number: BENNINGER #1 3) Elevation: 1025'  
 Well type: (a) Oil X / or Gas X / Issued 04/15/97  
 (b) If Gas: Production X / Underground Storage X /  
 Deep    / Shallow X / Expires 04/15/99

Proposed Target Formation(s): ALEXANDER  
 Proposed Total Depth: 5600 feet  
 Approximate fresh water strata depths: 100'  
 Approximate salt water depths: 640'  
 Approximate coal seam depths: NONE REPORTED ON OFFSET DRILLER'S LOGS.  
 Does land contain coal seams tributary to active mine? Yes    / No X /  
 Proposed Well Work: DRILL, STIMULATE, PRODUCE

12) CASING AND TUBING PROGRAM

TYPE	SIZE	GRADE	WEIGHT PER FT.	FOR DRILLING	LEFT IN WELL	FILL-UP (cu. ft.)
Conductor	11 3/4	ERW	42	42'	0	3000
Fresh Water	8 5/8	ERW	23	1025'	1025'	280 SKS. TO SURFACE
Coal						3000
Intermediate						
Production	4 1/2	J-55	10.5	5400'	5400'	460 SKS.
Tubing	1.5					3000
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 Bond Blanket Agent Blanket (Type)

1) Date: APRIL 4, 1997  
2) Operator's well number  
BENNINGER #1  
3) API Well No: 47 - 017 - 4350  
State County Permit

STATE OF WEST VIRGINIA - BUREAU OF ENVIRONMENT  
DIVISION OF ENVIRONMENTAL PROTECTION  
OFFICE OF OIL AND GAS

NOTICE AND APPLICATION FOR A WELL WORK PERMIT

4) Surface Owner(s) to be served: 5) (a) Coal Operator:

(a) Name JOHN D. TOWNER  
Address RT. 1 BOX 31-A  
GREENWOOD, WV 26350  
Name NONE  
Address

(b) Name  
Address  
(b) Coal Owner(s) with Declaration  
Name  
Address

(c) Name  
Address  
Name  
Address

6) Inspector MIKE UNDERWOOD  
Address RT. 2 BOX 135  
SALEM, WV 26426  
Telephone (304) - 782-1043

(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 22, Article 6, Section 8(d) of the Code of West Virginia (see page 2)

I certify that as required under Chapter 22 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 22-6 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 KEY OIL COMPANY  
By: *[Signature]* JAN CHAPMAN  
Title: PRESIDENT  
Address 22 GARTON PLAZA  
WESTON, WV 26452

Subscribed and sworn before me this 4TH day of

My commission expires MARCH 24, 2003 *Karen Cook*

