

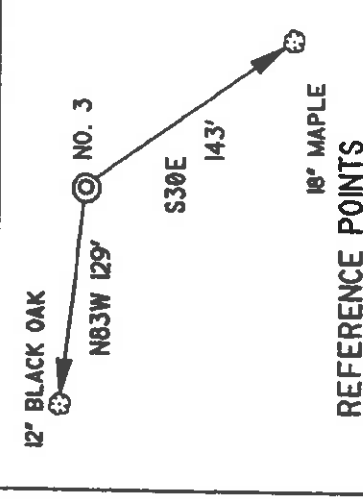
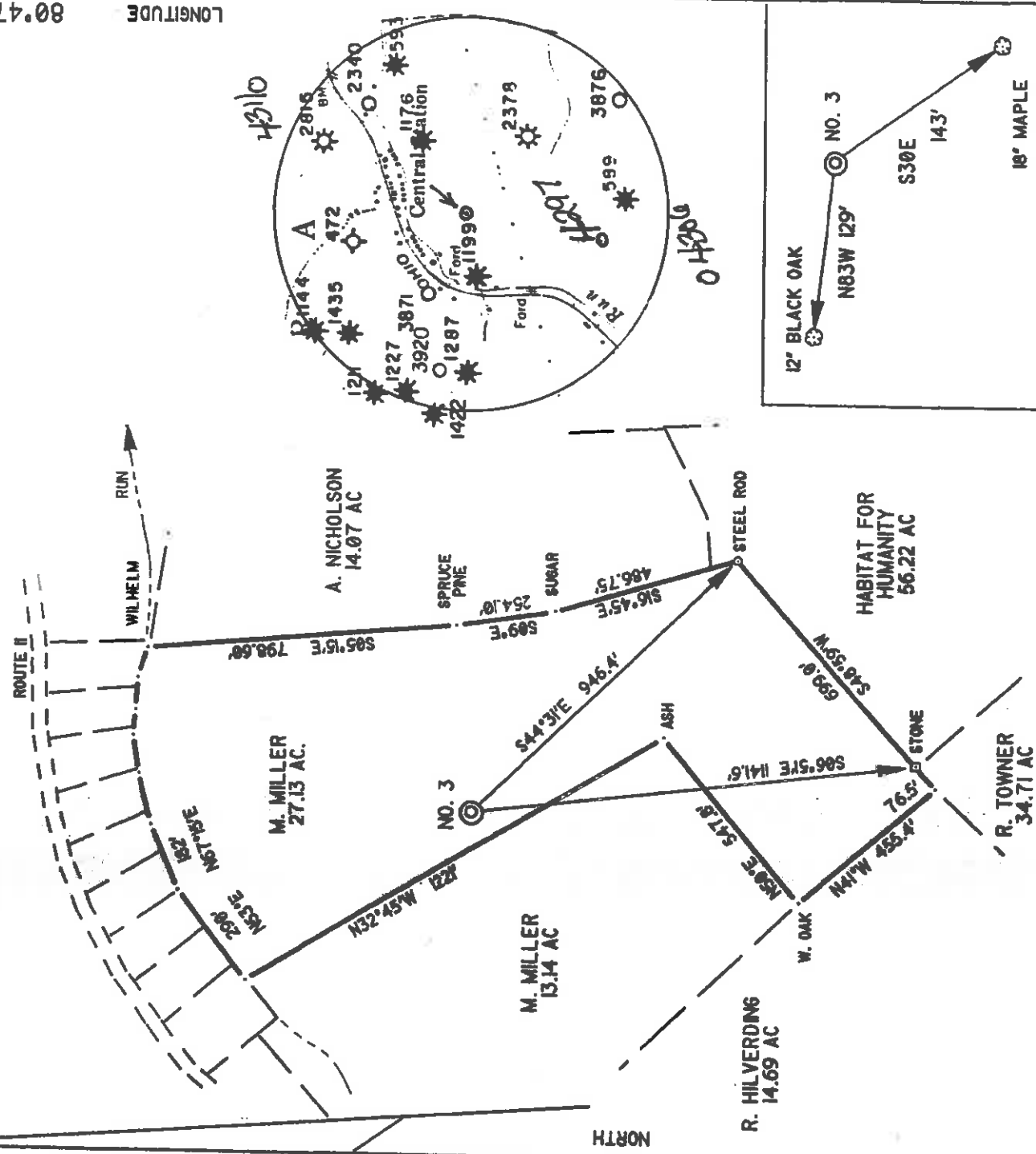
Janice
11/6/96

0.02
1.91

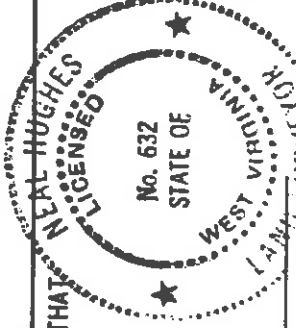
10,150'

LATITUDE 39°17'30"

LONGITUDE 80°47'30"



IDENTOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS



I THE UNDERSIGNED, DO 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.

L.L.S. *Neal Hughes*
632

DATE NOVEMBER 3, 19 96
OPERATORS WELL NO. MILLER 3

API WELL NO. 47 - 017-04318
STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1/200 FILE NO. 96-87...
PROVEN SOURCE OF ELEVATION BM 816 SCALE 1" = 400'
STATE OF WEST VIRGINIA DEPARTMENT OF ENERGY OIL AND GAS DIVISION

WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL 'GAS' PRODUCTION STORAGE DEEP SHALLOW
LOCATION ELEVATION 1075' WATERSHED ARNOLDS CREEK
DISTRICT CENTRAL COUNTY DODDRIDGE QUADRANGLE WEST UNION
SURFACE OWNER MARGARET MILLER ACREAGE 27.13
ROYALTY OWNER MARGARET MILLER LEASE ACREAGE 27.13
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 ESTIMATED DEPTH 5600'

COUNTY NAME PERMIT
WELL OPERATOR KEY OIL COMPANY 475 DESIGNATED AGENT JAN CHAPMAN
ADDRESS 22 GARTON PLAZA NOV 6 1996
WESTON, WV 26452 WESTON, WV 26452

6-6 89

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



Well Operator's Report of Well Work

Farm name: MILLER, MARGARET.

Operator Well No.: MILLER #3A R 2 1997

LOCATION: Elevation: 1,075.00
District: CENTRAL
Latitude: 100 Feet South of 39 Deg. 17 Min. 30 Sec.
Longitude: 10150 Feet West of 80 Deg. 47 Min. 30 Sec.

Quadrangle: WEST UNION
County: DODDRIDGE
Permitting
Office of Oil & Gas

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

Agent: JAN E. CHAPMAN

Inspector: MIKE UNDERWOOD
Permit Issued: 11/07/96
Well Work Commenced: 11/15/96
Well Work Completed: 11/29/96

Verbal Plugging
Permission granted on: _____
Rotary X Cable _____ Rig
Total Depth (feet) 5474'
Fresh water depths (ft) NONE
Salt water depths (ft) 493', 1848'

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

Casing & Tubing Size	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
11 3/4"			
8 5/8"	1073	1073	290 sks To Surface
4 1/2"	5360	5360	440 sks
2 3/8"		5231	

OPEN FLOW DATA

Balltown 3842' - 4534'
Riley 4566' - 4640'
Benson 5020' - 5033'
Producing formation Alexander Pay zone depth (ft) 5268' - 5359'
Gas: Initial open flow 21 MCF / d Oil: Initial open flow 0 Bbl / d
Final open flow 1,540 MCF / d Oil: Final open flow show Bbl / d
Time of open flow between initial and final tests N/A Hours
Static rock pressure 1750 psig (surface pressure) after 96 Hours
Second producing formation Commingled Pay zone depth (ft) _____
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 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.

For: KEY OIL COMPANY

By:

PRESIDENT

Date: 4-22-97

MAY 24 1997

Miller #3 (47-017-04318)
Four Stage Foam Frac - Halliburton

1st Stage: Alexander (10 holes) (5311' - 5344.25') 60 Quality Foam. 500 gal. 15% HCL.
60,000# 20/40 sand, 550,000 SCF N2,
812 bbis foam.

2nd Stage: Benson (10 holes) (5026 - 5028.25') 60 Quality Foam. 750 gal 15% HCL.
40,000# 20/40 sand, 417,000 SCF N2,
617 bbis foam.

3rd Stage: Riley (10 holes) (4614' - 4635.25') 60 Quality Foam. 750 gal 15% HCL.
10,000# 80/100 sand, 35,000# 20/40 sand,
438,000 SCF N2, 648 bbis foam.

4th Stage: Balltown (11 holes) (3999.75' - 4063.5') 60 Quality Foam, 750 gal 15% HCL.
5,000# 80/100 sand, 35,000# 20/40 sand,
390,000 SCF N2, 589 bbis foam.

WELL LOG

Clay	0	15	
Sand & Shale	15	35	
Sand & Shale & Red Rock	35	630	1/2" H ² O @ 493'
Sand	630	649	
Shale & Red Rock	649	772	
Sand & Shale	772	1909	
Shale	1909	2012	
Little Lime	2012	2037	Damp @ 1848'
Shale	2037	2045	
Big Lime	2045	2111	
Big Injun	2111	2164	
Pocono	2164	2204	
Shale	2204	2344	
Weir	2344	2464	
Shale	2464	2544	
Berea	2544	2549	
Sand & Shale	2549	3418	
Warren	3418	3484	
Shale	3484	3492	
Speechley	3492	3610	
Shale	3610	3842	
Balltown	3842	4534	
Shale	4534	4566	
Riley	4566	4640	
Shale	4640	4808	
2 nd Riley	4808	4882	
Shale	4882	5020	
Benson	5020	5033	
Sand & Shale	5033	5268	
Alexander	5268	5359	
Sand & Shale	5359	5474	
T.D.	5474		

Gas Checks

2549' No Show
3014' No Show
3512' No Show
3855' No Show
4402' No Show
4800' No Show
5000' 2/10^{ths} 2" w/ H²O
TD 4/10^{ths} 1" w/ H²O
Collars 4/10^{ths} 1" w/ H²O

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

1) Well Operator: 475 KEY OIL COMPANY 28655 ① 671

2) Operator's Well Number: MILLER #3 3) Elevation: 1075'

Well type: (a) Oil X / or Gas X / Issued 11/07/96
 (b) If Gas: Production X / Underground X / Approved 11/07/98
 Deep 439 / Shallow X

Proposed Target Formation(s): ALEXANDER

Proposed Total Depth: 5600 feet

Approximate fresh water strata depths: 80'

8) Approximate salt water depths: -0-

9) Approximate coal seam depths: N/A

10) Does land contain coal seams tributary to active mine? Yes / No X /

11) Proposed Well Work: DRILL, STIMULATE, PRODUCE

12)

RECEIVED
 Division of
 Environmental Protection

NOV 06 1996
 Permitting
 Office of Oil & Gas

CASING AND TUBING PROGRAM

TYPE	SIZE	GRADE	WEIGHT PER FT.	FOOTAGE	INTERVALS	CEMENT
Conductor	11 3/4	ERW	42			30CSR18/13
Fresh Water	8 5/8	ERW	23	1075		290 SKS. TO SURFACE
Coal						30CSR18/1.22
Intermediate						
Production	4 1/2	J-55	10.5	5450		450 SKS.
Tubing	1.5					30CSR18 11.1
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 Agent

RECEIVED
WV Division of
Environmental Protection

NOV 06 1996

1) Date: NOVEMBER 1, 1996
2) Operator's well number MILLER #3
3) API Well No: 47 - 017 - 4318
State County Permit

47 7703
(810)

Permitting
STATE OF VIRGINIA - BUREAU OF ENVIRONMENTAL PROTECTION
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 MARGARET MILLER Name NONE
Address P. O. BOX 1027 Address _____
OZONA, TX 76943

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

(c) Name _____ Name _____
Address _____ Address _____

6) Inspector MIKE UNDERWOOD (c) Coal Lessee with Declaration
Address RT. 2 BOX 135 Name _____
SALEM, WV 26426 Address _____
Telephone (304)-782-1043

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]
Title: PRESIDENT
Address 22 GARTON PLAZA
WESTON, WV 26452

Telephone 304-269-7102
Subscribed and sworn before me this 1ST day of NOVEMBER, 1996

My commission expires March 24, 2003
[Signature] Public

