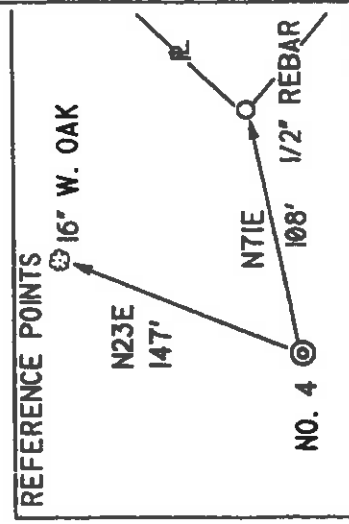
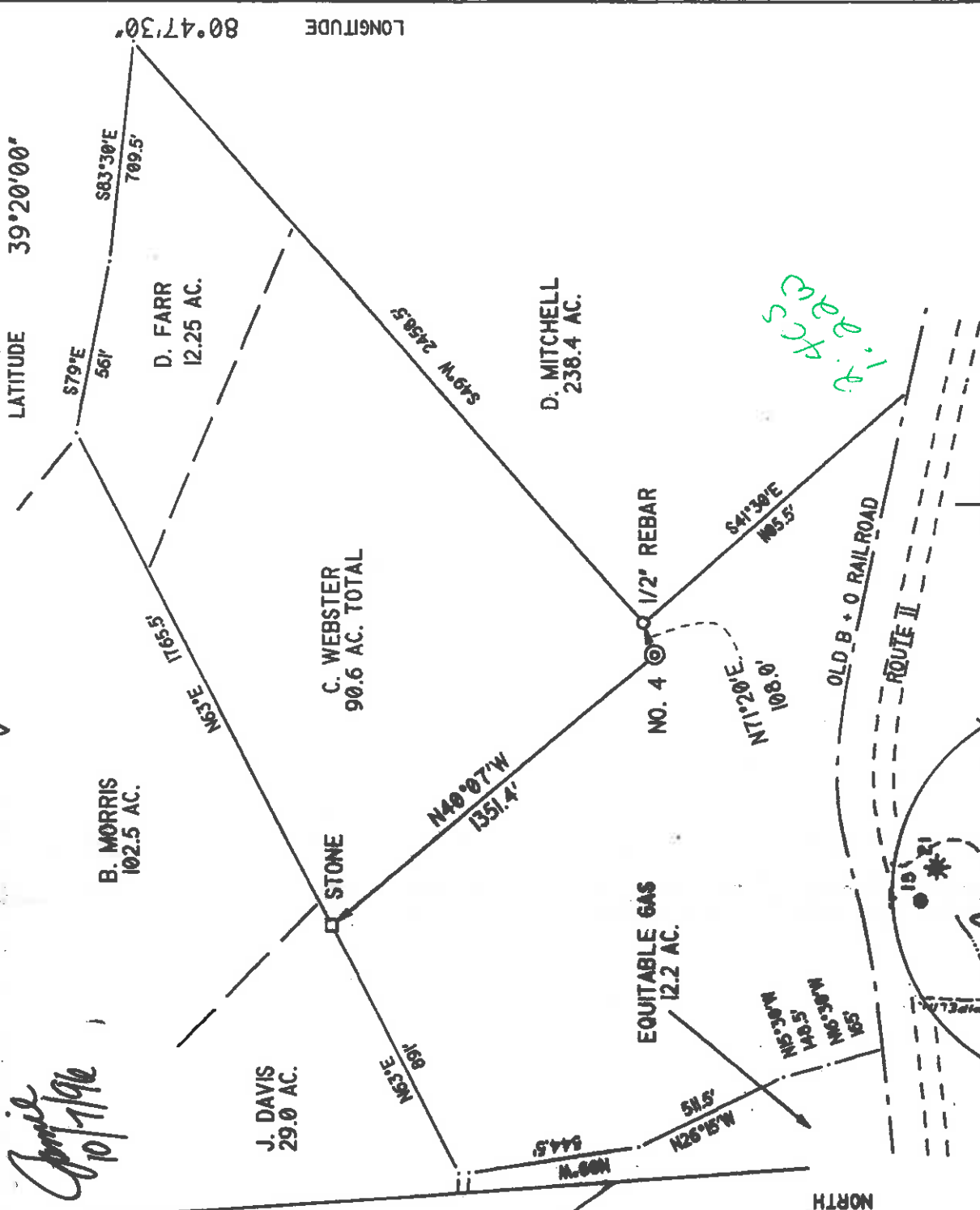


LATITUDE 39°20'00"

6,400'

12,575'

LONGITUDE 80°47'30"



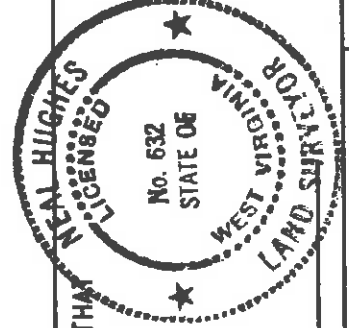
I DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS

DATE SEPTEMBER 16, 19 96

OPERATORS WELL NO. HUDSON 4

API WELL NO. 47-017-04310

STATE COUNTY PERMIT



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

MINIMUM DEGREE OF ACCURACY 1/200

FILE NO. 96-58

PROVEN SOURCE OF ELEVATION BM 816

SCALE 1" = 500'

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 1042' WATERSHED ARNOLDS CREEK

DISTRICT CENTRAL COUNTY DODDRIDGE QUADRANGLE WEST UNION

SURFACE OWNER CARSON WEBSTER ACREAGE 18

ROYALTY OWNER C.P. HUDSON HEIRS LEASE ACREAGE 246

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'

WELL OPERATOR KEY OIL COMPANY DESIGNATED AGENT

22 GARTON PLAZA ADDRESS

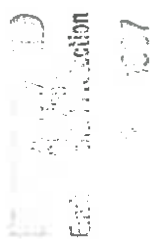
WESTON, WV 26452

JAN CHAPMAN DESIGNATED AGENT

22 GARTON PLAZA ADDRESS

WESTON, WV 26452

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



Well Operator's Report of Well Work

Farm name: WEBSTER, CARSON, MRS.

Operator Well No.: HUDSON #4

LOCATION: Elevation: 1,042.00

Quadrangle: WEST UNION

District: CENTRAL
Latitude: 12575 Feet South of 39 Deg. 20 Min. 0 Sec.
Longitude: 6400 Feet West of 80 Deg. 47 Min. 30 Sec.

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: 10/07/96
Well Work Commenced: 11/08/96
Well Work Completed: 11/19/96

Verbal Plugging
Permission granted on: _____
Rotary X Cable _____ Rig
Total Depth (feet) _____ 5455'
Fresh water depths (ft) _____ NONE
Salt water depths (ft) _____ 640', 1787'

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

OPEN FLOW DATA

Warren
Speechley
Balltown
Riley
Benson

3348' - 3412'
3422' - 3535'
3750 - 4416'
4509' - 4583'
4965' - 4976'
5208' - 5296'

Producing formation _____ Alexander
Gas: Initial open flow _____ 158 MCF / d
Final open flow _____ 1,571 MCF / d
Time of open flow between initial and final tests _____ N/A _____ Hours
Static rock pressure _____ 1650 _____ psig (surface pressure) after _____ 96 _____ Hours

Pay zone depth (ft) _____
Oil: Initial open flow _____ 0 _____ Bbl / d
Oil: Final open flow _____ show _____ Bbl / d
Hours _____

Second producing formation _____ Commingled _____
Gas: Initial open flow _____ MCF / d
Final open flow _____ MCF / d
Time of open flow between initial and final tests _____ _____ Hours
Static rock pressure _____ _____ psig (surface pressure) after _____ _____ Hours

Pay zone depth (ft) _____
Oil: Initial 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:
Date: 4-22-97

PRESIDENT

APR 23 1997

Hudson #4 (47-017-04310)
Four Stage Foam Frac - Halliburton

1st Stage: Alexander (10 holes) (5251.5' - 5287.5') 60 Quality Foam, 500 gal, 15% HCL,
60,000# 20/40 sand, 550,000 SCF N2,
811 bbis foam.

2nd Stage: Benson (10 holes) (4969.5' - 4971.75) 60 Quality Foam, 750 gal 15% HCL,
40,000# 20/40 sand, 417,000 SCF N2,
617 bbis foam.

3rd Stage: Riley (10 holes) (4533.5' - 4551.5') 60 Quality Foam, 750 gal 15% HCL,
10,000# 80/100 sand, 35,000# 20/40 sand,
438,000 SCF N2, 647 bbis foam.

4th Stage: Balltown (4 holes) (3750' - 4416') 60 Quality Foam, 1,000 gal 15% HCL,
Speechley (5 holes) (3523.5' - 3524.5') 5,000# 80/100 sand, 35,000# 20/40 sand,
Warren (3 holes) (3389.25' - 3389.75') 390,000 SCF N2, 589 bbis foam.

WELL LOG

Clay-	0	15	
Sand & Shale	15	587	
Sand	587	650	
Sand & Shale	650	937	1/2" H ₂ O @ 640'
Sand	937	943	
Shale & Red Rock	943	1246	
Sand	1246	1397	
Shale	1397	1450	
Sand & Shale	1450	1745	
Sand	1745	1802	
Shale	1802	1936	
Little Lime	1936	1956	
Sand & Shale	1956	1962	
Big Lime	1962	2042	
Big Injun	2042	2143	
Shale	2143	2277	
Weir	2277	2391	
Shale	2391	2478	
Berea	2478	2486	
Sand & Shale	2486	2678	
Gordon	2678	2702	
Shale	2702	3348	
Warren	3348	3412	
Shale	3412	3422	
Speechley	3422	3535	
Shale	3535	3750	
Balltown	3750	4416	
Shale & Sand	4416	4509	
Riley	4509	4583	
Shale	4583	4849	
3rd Riley	4849	4920	
Shale	4920	4965	
Benson	4965	4976	
Sand & Shale	4976	5208	
Alexander	5208	5296	
Sand & Shale	5296	5455	
T.D.	5455		

Damp @ 1787'

Gas Checks

1925' No Show
2212' 2/10^{ths} 2" w/ H₂O
2533' 2/10^{ths} 2" w/ H₂O
2813' 14/10^{ths} 2" w/ H₂O
3015' 14/10^{ths} 2" w/ H₂O
3729' 14/10^{ths} 2" w/ H₂O
4255' 14/10^{ths} 2" w/ H₂O
4722' 14/10^{ths} 2" w/ H₂O
5218' 14/10^{ths} 2" w/ H₂O
TD 14/10^{ths} 2" w/ H₂O

Collars 14/10^{ths} 2" w/ H₂O

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

Well Operator: KEY OIL COMPANY 475 25655 (C 671

Operator's Well Number: HUDSON #4 3) Elevation: 1042'

Well type: (a) Oil X / or Gas X / Issued 10/07/96

(b) If Gas: Production X / Underground Storage / Expires 10/07/98
 Deep / Shallow X /

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 WV Division of Environmental Protection
 SEP 24 1996

- 5) Proposed Target Formation(s): ALEXANDER 439
- 6) Proposed Total Depth: 5600' feet
- 7) Approximate fresh water strata depths: 100'
- 8) Approximate salt water depths: -0- feet
- 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 [Signature]

Permitting
 Office of Oil & Gas

12) CASING AND TUBING PROGRAM

TYPE	SIZE	GRADE	WEIGHT PER FT.	FOOTAGE FOR DRILLING	LEFT IN WELL	FILL-UP (cu. ft.)	CEMENT
Conductor	11 3/4	ERW	42	40	0	<u>[Signature]</u>	
Fresh Water	8 5/8	ERW	23	1042	1042	285 SKS. TO SURFACE	
Coal						<u>[Signature]</u>	
Intermediate							
Production	4 1/2	J-55	10.5	5450	5450	450 SKS.	
Tubing	1.5					<u>[Signature]</u>	
Liners							

PACKERS : Kind _____
 Sizes _____
 Depths set _____

For Office of Oil and Gas Use Only
 Fee(s) paid: [Signature] Well Work Permit [Signature] Reclamation Fund [Signature] WPCP
 Plat [Signature] WW-9 [Signature] Bond [Signature] (Type)
 WW-2B [Signature] Agent

RECEIVED
WV Division of
Environmental Protection
SEP 24 1996

1) Date: SEPTEMBER 20, 1996
2) Operator's well number HUDSON #4
3) API Well No: 47 - 017 - 4310
State County Permit

Permitting
Office of Oil & Gas
STATE OF WEST 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:

(a) Name MRS. CARSON WEBSTER 5) (a) Coal Operator: Name NONE
 Address 703 REX LAKE ROAD Address _____
AKRON, OHIO 44319

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

(c) Name _____ Name _____
 Address _____ Address _____

6) Inspector MIKE UNDERWOOD (c) Coal Lessee with Declaration Name _____
 Address RT. 2 BOX 135 Address _____
SALEM, WV 26426 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 X 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: X Personal Service (Affidavit attached)

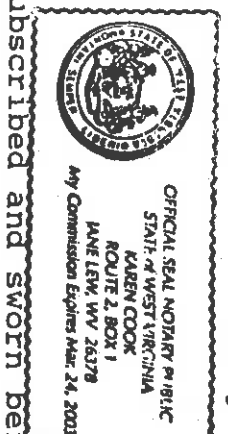
Certified Mail (Postmarked postal receipt attached)

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.



Weld Operator KAY OIL COMPANY
By: [Signature]
Its: PRESIDENT
Address 22 GARTON PLAZA
WESTON, WV 26452
Telephone 304-269-7102

Subscribed and sworn before me this 20TH day of SEPTEMBER, 1996
My commission expires MARCH 24, 2003
Karen Cook Notary Public