

Janice
10/12/95

LATITUDE 39°15'00"

3,100'

LONGITUDE 80°50'00"

0.575
0.570

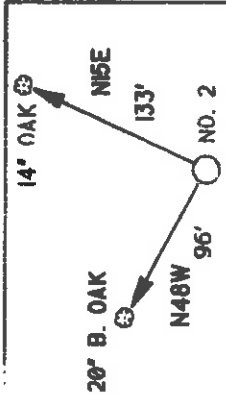
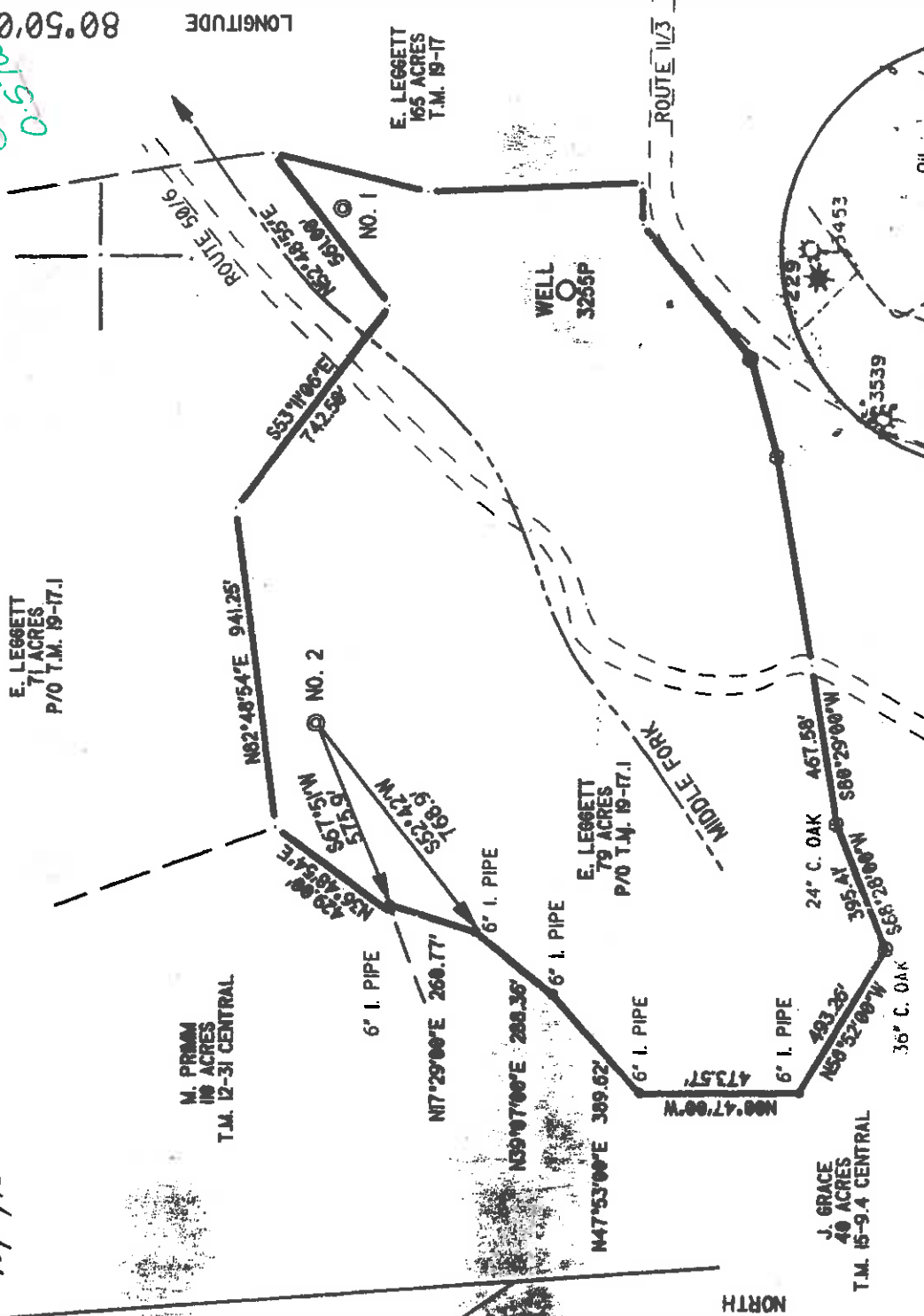
E. LEGGETT
71 ACRES
P/O T.M. 19-17.1

M. PRIMA
118 ACRES
T.M. 12-31 CENTRAL

E. LEGGETT
165 ACRES
T.M. 19-17

E. LEGGETT
79 ACRES
P/O T.M. 19-17.1

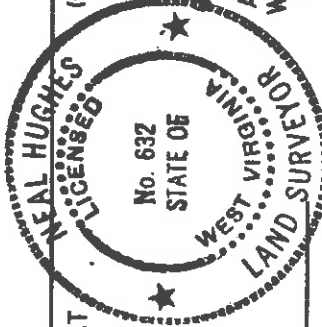
J. GRACE
40 ACRES
T.M. 15-9.4 CENTRAL



REFERENCE POINTS

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



(*) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS
DATE JULY 28 19 95
OPERATORS WELL NO. LEGGETT 2

API WELL NO. 47 - 017 - 04220
STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1/200 FILE NO. 95-74
 STATE OF WEST VIRGINIA DEPARTMENT OF ENERGY OIL AND GAS DIVISION
 PROVEN SOURCE OF ELEVATION WELL 3255P - 1118' SCALE 1" = 500'
 SURFACE ELEVATION 1175'

WELL TYPE: OIL GAS LIQUID WASTE DISPOSAL 'GAS' PRODUCTION STORAGE DEEP SHALLOW
 LOCATION: ELEVATION 1175' WATERSHED MIDDLE RUN
 DISTRICT WEST UNION MAG. COUNTY DODDRIDGE QUADRANGLE OXFORD
 SURFACE OWNER ERNEST ELWIN LEGGETT ACREAGE 79
 ROYALTY OWNER HAYDEN HEIRS LEASE ACREAGE 79
 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 5400'

WELL OPERATOR KEY OIL CO. DESIGNATED AGENT JAN CHAPMAN
 ADDRESS 22 GARTON PLAZA WESTON, WV 26452
 ADDRESS 22 GARTON PLAZA WESTON, WV 26452
 COUNTY NAME DODDRIDGE PERMIT 47 - 017 - 04220

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

DEC 08 1995

Permitting
Office of Oil & Gas
Farm name: LEGGETT, ELWIN E. Well Operator's Report of Well Work
Operator Well No.: LEGGETT #2

LOCATION: Elevation: 1,175.00 Quadrangle: OXFORD

District: WEST UNION County: DODDRIDGE
Latitude: 3000 Feet South of 39 Deg. 15Min. 0 Sec.
Longitude 3100 Feet West of 80 Deg. 50 Min. 0 Sec.

Company: KEY OIL COMPANY
22 GARTON PLAZA
WESTON, WV 26452-0000

Agent: JAN E. CHAPMAN

Inspector: MIKE UNDERWOOD
Permit Issued: 10/02/95
Well work Commenced: 10-14-95
Well work Completed: 10-22-95
Verbal Plugging
Permission granted on: _____ Rig
Rotary X Cable
Total Depth (feet) 5660'
Fresh water depths (ft) -0-

Salt water depths (ft) 1473', 2046'

Is coal being mined in area (Y/N)? N
Coal Depths (ft): 380'-382'

OPEN FLOW DATA

Balltown Sands
Riley
Third Riley
Benson

Producing formation Alexander
Gas: Initial open flow 133 MCF/d Oil: Initial open flow 0 Bbl/d
Final open flow 1.391 MCF/d Final open flow Show Bbl/d
Time of open flow between initial and final tests N/A Hours
Static rock Pressure 1600 psig (surface pressure) after 96 Hours

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

Casing & Tubing Size	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
11 3/4	132'	132'	70 sks. to surface
8 5/8	1738'	1738'	465 sks. to surface
4 1/2		5586'	500 sks.
1.5		5377'	

3962-4631
4682-4730
4926-4950
5106-5116

Pay zone depth (ft) 5352-5438
0 Bbl/d
Show Bbl/d

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: November 30, 1995

Leggett #2 (47-017-4220)
Four Stage Foam Frac - Halliburton

1st Stage: Alexander (13 holes) 60 Quality Foam, 750 gal. 15% HCl, 60,000 lbs. 20-40 sand, 490,000 SCF N₂, 812 bbls. foamed fluid.

2nd Stage: Benson (7 holes) 75 Quality Foam, 750 gal. 15% HCl, (5110.25' - 5111.75') 40,000 lbs. 20-40 sand, 419,000 Third Riley (3 holes) SCF N₂, 618 bbls. foamed fluid. (4930' - 4930.50')

3rd Stage: Riley & Lower Balltown 60 Quality Foam, 750 gal. 15% HCl (9 holes) 10,000 lbs. 80-100 sand, 30,000 lbs. (4494.75' - 4709.25') 20-40 sand, 508,000 SCF N₂, 613 bbls. foamed fluid.

4th Stage: Balltown (12 holes) 60 Quality Foam, 750 gal. 15% HCl (3972.75' - 4308.25') 10,000 lbs. 80-100 sand, 50,000 lbs. 20-40 sand, 629,000 SCF N₂, 853 bbls. foamed fluid.

Well Log			
Formation	Top Feet	Bottom Feet	Remarks
F111	0	10	
Shale & Red Rock Sand	10	62	Hole Damp at 1473'
Red Rock and Shale Sand & Shale	62	144	1/2" stream water at 2046'
Coal	144	270	
Sand & Shale	270	380	
Shale	380	382	
Sand & Shale	382	1782	
Shale	1782	2001	
Sand & Shale	2001	2063	1908' N/S
Shale	2063	2106	2156' N/S
Little Lime	2106	2140	2494' N/S
Pencil Cave	2140	2156	3026' Odor
Big Lime	2156	2182	3399' Odor
Big Injun	2182	2284	3925' Odor
Sand & Shale	2284	2450	4421' Odor
Weir	2450	2574	10/10 thru 2" w/water
Sand & Shale	2574	3510	6/10 thru 2" w/water
Warren	3510	3600	5193' T.D. 6/10 thru 2" w/water
Sand & Shale	3600	3682	
Speechley	3682	3692	
Sand & Shale	3692	3962	
Balltown Sands	3962	4631	
Sand & Shale	4631	4682	
Riley	4682	4730	
Sand & Shale	4730	4926	
Third Riley	4926	4950	
Sand & Shale	4950	5106	
Benson	5106	5116	
Sand & Shale	5116	5352	
Alexander	5352	5438	
Shale	5438	5660	
T.D.	5660		

RECEIVED
WV Division of
Environmental Protection

FORM W-2B

OCT 02 1995

017-4220

page of

STATE OF WEST VIRGINIA

DEPARTMENT OF ENERGY, DIVISION OF OIL AND GAS

Drilled 10/02/95
Expires 10/02/97

Office of Oil & Gas WELL WORK PERMIT APPLICATION

Well Operator: Key Oil Company 25655 (8) 526

21133

Operator's Well Number: Leggett #2 3) Elevation: 1175'

Well type: (a) OIL X / or Gas X /

(b) If Gas: Production X / Underground Storage Shallow X /
Deep 439

- 2) Proposed Target Formation(s): Alexander
- 5) Proposed Total Depth: 5500 feet
- 7) Approximate fresh water strata depths: 100'
- 3) Approximate salt water depths: -0-
- 3) Approximate coal seam depths: None
- 10) Does land contain coal seams tributary to active mine? Yes / No X
- 11) Proposed Well Work: Drill; Stimulate, Produce
- 12) See Wells

CASING AND TUBING PROGRAM

TYPE	SIZE	GRADE	WEIGHT PER FT.	FOOTAGE INTERVALS	LEFT IN WELL	FILL-UP (CU. FT.)
Conductor	16"	USED		20'	-0-	<u>none</u>
Fresh Water	11 3/4"	ERW	32	132'	132'	<u>20 SKS TO SURFACE</u>
Coal				<u>305 RB 1 N 3</u>		
Intermediate	8 5/8"	ERW	23	1715'	<u>305 RB 1 N 2</u> 1715'	465 SKS. to surface
Production	4 1/2"	J-55	10.50		<u>5465'</u>	400 SKS.
Tubing	1.5"					
Liners				<u>305 RB 1 N 1</u>		

PACKERS: Kind _____

Sizes _____

Depths sec _____

FOR DIVISION OF OIL AND GAS USE ONLY

Fees Paid: _____

Well Work Permit # _____

Reclamation Fund _____

14000
10/20/95

[Signature]

[Signature]

[Signature]

RECEIVED
WV Division of
Environmental Protection
OCT 02 1995

1) Date: August 14, 1995
2) Operator's well number Leggett #2
3) API Well No: 47 - 017 - 4220
State - County - Permit

Permitting
Office of Oil & Gas
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 Elwin E. Leggett 5) (a) Coal Operator:
Address Rt. 1 Box 227 Name NONE
West Union, WV 26456 Address _____

(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 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 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: _____
Its: President
Address 22 Garton Plaza
Weston, WV 26452

Telephone 304-269-7102, 19 95

Subscribed and sworn before me this 14th day of _____, _____

Karen Cook
My commission expires March 24, 2003



OFFICIAL SEAL, NOTARY PUBLIC
STATE OF WEST VIRGINIA
KAREN COOK
ROOM 2, BOX 1
JANE LEW, WV 26278
My Commission Expires Mar. 24, 2003