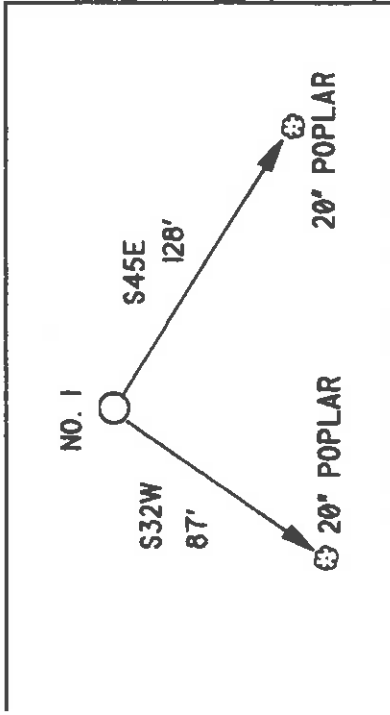
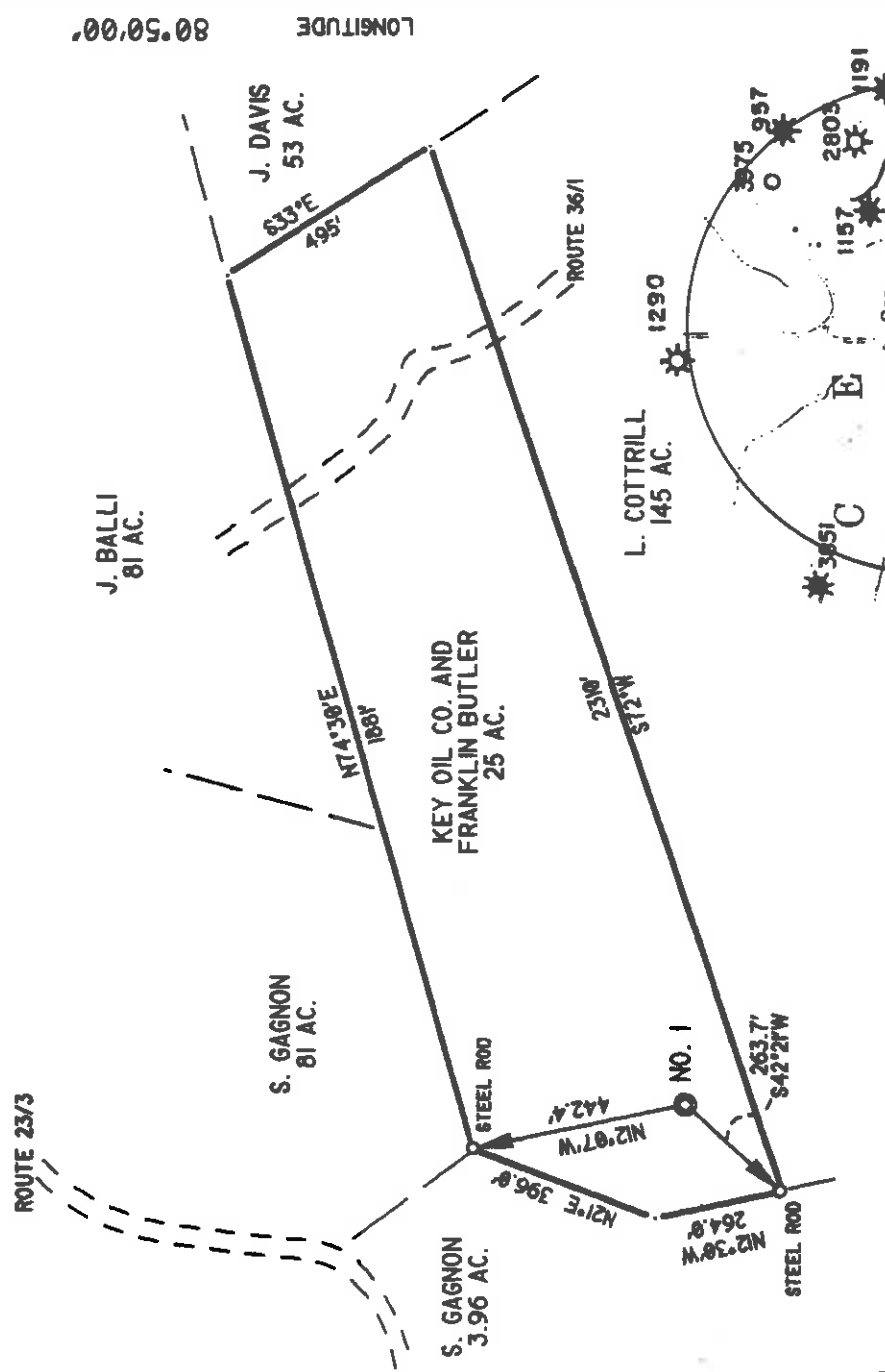


LATITUDE 39°20'00"

LONGITUDE 80°50'00"

14,050'

3,150'

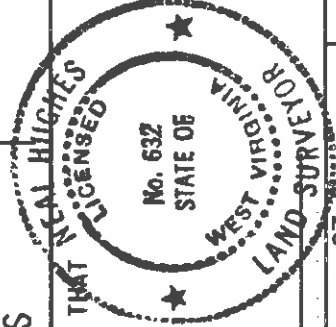


(*) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS

DATE APRIL 1 19 97

OPERATORS WELL NO. KILKENNY 1

API WELL NO. 47-017-04362



L.S. Neal Hughes
632

MINIMUM DEGREE OF ACCURACY 1/200 FILE NO. 97-21

PROVEN SOURCE OF ELEVATION KNOB 1283' SCALE 1" = 400'

STATE OF WEST VIRGINIA
DEPARTMENT OF ENERGY
OIL AND GAS DIVISION

WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL IF 'GAS' PRODUCTION STORAGE DEEP SHALLOW

LOCATION: ELEVATION 1168' WATERSHED WILHELM RUN

DISTRICT CENTRAL COUNTY DODDRIDGE QUADRANGLE WEST UNION

SURFACE OWNER KEY OIL COMPANY + FRANKLIN L. BUTLER ACREAGE 25

ROYALTY OWNER KEY OIL COMPANY + FRANKLIN L. BUTLER LEASE ACREAGE 25

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 DESIGNATED AGENT JAN CHAPMAN

ADDRESS 22 GARTON PLAZA WESTON, WV 26452

22 GARTON PLAZA WESTON, WV 26452

6-6-89 MAY 8 - 1997

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

0011 1997

Permitting

Office of Oil & Gas

Well Operator's Report of Well Work

Farm name: KEY OIL COMPANY

Operator Well No. : KILKENNEY #1

LOCATION: Elevation: 1,168.00

Quadrangle: WEST UNION

District: CENTRAL
Latitude: 14050 Feet South of 39 Deg. 20 Min. 0 Sec.
Longitude: 3150 Feet West of 80 Deg. 50 Min. 0 Sec.

County: DODDRIDGE

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

Agent: JAN E. CHAPMAN

Inspector: MIKE UNDERWOOD
Permit Issued: 05/05/97
Well Work Commenced: 05/13/97
Well Work Completed: 05/28/97

Verbal Plugging
Permission granted on: _____
Rotary X Cable _____ Rig
Total Depth (feet) 5583'
Fresh water depths (ft) None
Salt water depths (ft) 124', 734'

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"	126.5	126.5	70 sks To Surface
8 5/8"	1707.15	1707.15	310 sks To Surface
4 1/2"	5457	5457	300 sks
2 3/8"		5287	

OPEN FLOW DATA

Producing formation _____
 Gas: Initial open flow 0 MCF / d Pay zone depth (ft) 3828' - 4454'
 Final open flow 1,205 MCF / d Oil: Initial open flow 0 Bbl / d 4940' - 4995'
 Time of open flow between initial and final tests N/A Oil: Final open flow show Bbl / d 5036' - 5050'
 Static rock pressure 1780 psig (surface pressure) after 96 Hours 5286' - 5370'

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

PRESIDENT

Date: OCTOBER 13, 1997

OCT 17 1997

Kilkenney #1 (47-017-04362)
 Three Stage Foam Frac - Halliburton

1st Stage: Alexander (13 holes) (5307.25' - 5360')
 60 Quality Foam. 500 gal. 15% HCL.
 60,000# 20/40 sand, 550,000 SCF N2,
 813 bbis foam.

2nd Stage: Benson (7 holes) (5042.5' - 5044')
 Third Riley (4 holes) (4961.5' - 4971')
 60 Quality Foam. 750 gal 15% HCL.
 40,000# 20/40 sand, 417,000 SCF N2,
 618 bbis foam.

3rd Stage: Riley (8 holes) (4636.75' - 4660.25')
 Balttown (3 holes) (4447.75' - 4448.25')
 60 Quality Foam. 1000 gal 15% HCL.
 5,000# 80/100 sand, 35,000# 20/40 sand,
 438,000 SCF N2, 650 bbis foam.

WELL LOG

Fill & clay	0	16	
Shale & Red Rock	16	135	1/2" H ₂ O @ 124'
Sand	135	270	
Red Rock & Shale	270	673	
Shale & Sand	673	1485	1/2" H ₂ O @ 734'
Sand	1485	1490	
Sand & Shale	1490	1630	
Sand	1630	1713	
Sand & Shale	1713	2048	
Little Lime	2048	2076	
Shale	2076	2084	
Big Lime	2084	2142	
Big Injun	2142	2250	<u>Gas Checks</u>
Shale	2250	2378	2005' No Show
Weir	2378	2500	2505' No Show
Sand & Shale	2500	3446	3005' No Show
Warren	3446	3517	3718' No Show
Shale	3517	3828	4309' No Show
Balttown	3828	4454	4803' No Show
Shale & Sand	4454	4598	5209' No Show
Riley	4598	4664	
Shale	4664	4940	
3 rd Riley	4940	4995	
Shale	4995	5040	
Benson	5040	5050	
Sand & Shale	5050	5285	
Alexander	5285	5371	
Sand & Shale	5371	5583	
T.D.	5583		

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

- 1) Well Operator: KEY OIL COMPANY 25655 (1) 671
- 2) Operator's Well Number: KILKENNEY #1 3) Elevation: 1168'
- 4) Well type: (a) Oil X / or Gas X / Issued 05/05/97
 (b) If Gas: Production X / Underground Storage /
 Deep / Shallow X / Expires 05/05/99
- 5) Proposed Target Formation(s): ALEXANDER
- 6) Proposed Total Depth: 5600 feet
- 7) Approximate fresh water strata depths: 100'
- 8) Approximate salt water depths: -0-
- 9) Approximate coal seam depths: N/A Permitting Office of Oil & Gas
- 10) Does land contain coal seams tributary to active mine? Yes / No X /
- 11) Proposed Well Work: DRILL, STIMULATE, PRODUCE
- 12)

23489

CASING AND TUBING PROGRAM

TYPE	SIZE	GRADE	WEIGHT PER FT.	FOOTAGE	INTERVALS	CEMENT
Conductor						
Fresh Water	8 5/8	ERW	23	1168'	1168'	315 SKS TO SURFACE
Coal						
Intermediate						
Production	4 1/2	J-55	10.5	5500'	5500'	460 SKS.
Tubing	1.5					
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)

1) Date: 4-21-97
2) Operator's well number
KILKENNEY #1
3) API Well No: 47 - 017 - 4362
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: KEY OIL COMPANY, etal None Oil & Gas
 (a) Name KEY OIL COMPANY, etal Name NONE
 Address 22 GARTON PLAZA Address _____
WESTON, WV 26452
 (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

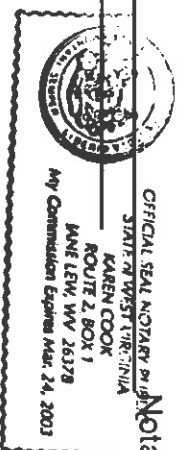
TO THE PERSON(S) NAMED ABOVE TAKE NOTICE THAT:

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]
 Its: PRESIDENT
 Address 22 GARTON PLAZA
WESTON, WV 26452
 Telephone 304-269-7102

Subscribed and sworn before me this 21ST day of APRIL, 1997
 My commission expires MARCH 24, 2003



Notary Public