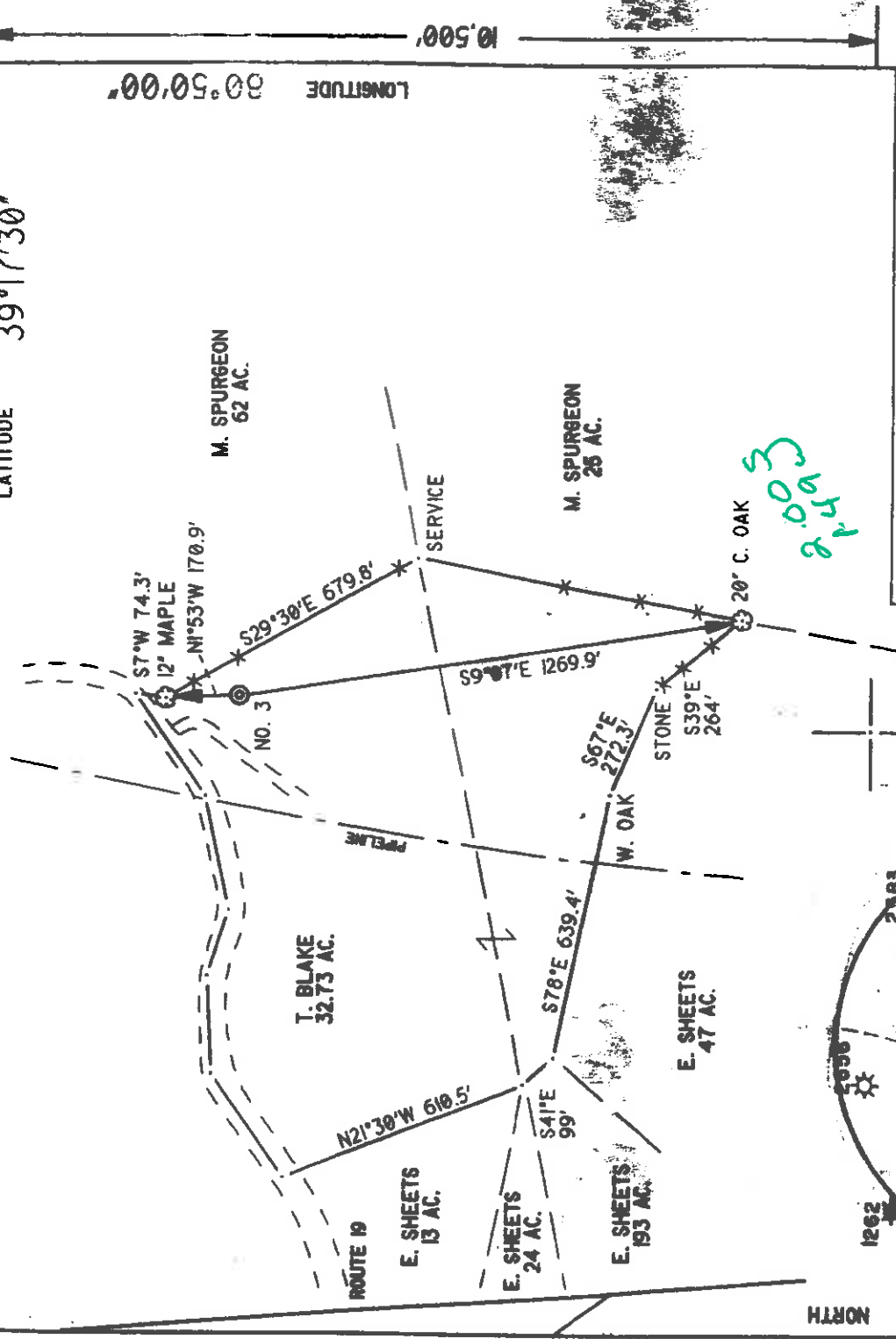


LATITUDE 39°17'30"

LONGITUDE 80°50'00"

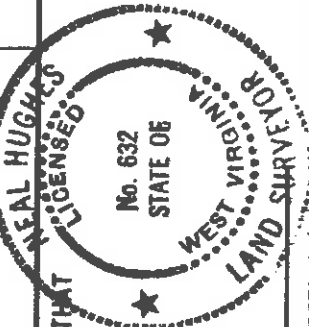
7,850'



NORTH

2.0003

*4508
149*



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

REFERENCE POINTS

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

DATE DECEMBER 13, 19 95
OPERATORS WELL NO. SHEETS 3

API WELL NO. 47 -- 017 -- 04239
STATE COUNTY PERMIT

STATE OF WEST VIRGINIA
DEPARTMENT OF ENERGY
OIL AND GAS DIVISION

MINIMUM DEGREE OF ACCURACY 1/200
FILE NO. 95-118
PROVEN SOURCE OF ELEVATION KNOB 1332'
SCALE 1" = 400'

WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL 'GAS' PRODUCTION STORAGE DEEP SHALLOW
LOCATION ELEVATION 1,125' WATERSHED CLAYLICK RUN

DISTRICT CENTRAL COUNTY DODDRIDGE QUADRANGLE WEST UNION
SURFACE OWNER TIM BLAKE ACREAGE 32.7 *SC*
ROYALTY OWNER ERIE D. SHEETS, ET AL LEASE ACREAGE 32.7

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 ADDRESS 22 GARTON PLAZA
WESTON, WV 26452 WESTON, WV 26452

6-689

MAR 11 1996

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

Permitting

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

Farm name: BLAKE, TIM

Operator Well No.: Sheets #3

LOCATION: Elevation: 1,125.00 Quadrangle: WEST UNION

District: CENTRAL County: DODDRIDGE
Latitude: 10500 Feet South of 39 Deg. 17Min. 30 Sec.
Longitude 7850 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: 12/29/95
Well work Commenced: 1-11-96
Well work Completed: 1-18-96
Verbal Plugging
Permission granted on: Rig
Rotary X Cable 5510'
Total Depth (feet) 5510'
Fresh water depths (ft) 729'

Salt water depths (ft) -0-

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

OPEN FLOW DATA

UPPER BALLTOWN
LOWER BALLTOWN & RILEY SANDS
BENSON

Producing formation ALEXANDER Pay zone depth (ft) 5324-5410
Gas: Initial open flow 26 MCF/d Oil: Initial open flow 0 Bbl/d
Final open flow 1,905 MCF/d 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 Pay zone depth (ft)

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

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: *Jan Chapman*

PRESIDENT

Date: MARCH 6, 1996

MAR 11 1996

Casing & Tubing Size	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
11 3/4	131	131	70 SKS. TO SURFACE
8 5/8	1852	1852	490 SKS. TO SURFACE
4 1/2		5460	360 SKS.
1.5		5357	

3932-4174
4496-4722
5089-5100

Sheets #3 (47-017-4239)
Four Stage Foam Frac - Halliburton

1st Stage: Alexander (12 holes) 60 Quality Foam, 500 gal. 15% HCl, 60,000 lbs. 20-40 sand, 490,000 SCF N₂, 811 bbls. foamed water.

2nd Stage: Benson (10 holes) 75 Quality Foam, 750 gal. 15% HCl, 30,000 lbs. 20-40 sand, 423,000 SCF N₂, 616 bbls. foamed water.

3rd Stage: Riley (9 holes) 60 Quality Foam, 750 gal. 15% HCl, (4677.75'-4716') 15,000 lbs. 80-100 sand, 40,000 lbs. Lower Balltown (3 holes) 20-40 sand, 659,000 SCF N₂, (4499.75'-4500.25') 813 bbls. foamed water.

4th Stage: Balltown (12 holes) 60 Quality Foam, 750 gal. 15% HCl, (3966.50'-4140.50') 10,000 lbs. 80-100 sand, 50,000 lbs. 20-40 sand, 629,000 SCF N₂, 841 bbls. foamed water.

Well Log

Formation	Top Feet	Bottom Feet	Remarks
Fill	0	14	
Red Rock & Shale	14	150	1/2" stream water at 729'
Sand & Shale	150	241	
Sand	241	253	
Sand & Shale	253	698	
Sand	698	900	
Sand & Shale	900	1167	Gas Checks:
Sand	1167	1600	2036 N/S
Sand & Shale	1600	2110	2224 N/S
Little Lime	2110	2138	2501 2/10 thru 1" w/water
Pencil Cave	2138	2152	3000 2/10 thru 1" w/water
Big Lime	2152	2240	3619 2/10 thru 1" w/water
Big Injun	2240	2280	4025 2/10 thru 1" w/water
Shale	2280	2448	4824 2/10 thru 1" w/water
Weir	2448	2500	5199 4/10 thru 1" w/water
Sand & Shale	2500	3510	5510 T.D. 6/10 thru 1" w/water
Warren/Speechley	3510	3710	
Sand & Shale	3710	3992	
Balltown Sands	3992	4620	
Sand & Shale	4620	4654	
Riley	4654	4722	
Sand & Shale	4722	5089	
Benson	5089	5100	
Sand & Shale	5100	5324	
Alexander	5324	5410	
Shale	5410	5510	
T. D.	5510		

Office of Oil & Gas

1) Well Operator: KEY OIL COMPANY ⁴⁹⁵ 25655 ① 671

2) Operator's Well Number: SHEETS #3 3) Elevation: 1125'

4) Well type: (a) Oil X / or Gas X /

Issued 12/29/95
Expires 12/29/97

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

Proposed Target Formation(s): ALEXANDER

439

Proposed Total Depth: 5550 feet

Approximate fresh water strata depths: -0-

Approximate salt water depths: -0-

Approximate coal seam depths: NONE

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

11) Proposed Well Work: DRILL, STIMULATE, PRODUCE

12)

CASING AND TUBING PROGRAM

TYPE SPECIFICATIONS FOOTAGE INTERVALS CEMENT

TYPE	Size	Grade	Weight per ft.	For drilling	Left in well	Fill-up (cu. ft.)
Conductor						
Fresh Water	11 3/4	ERW	42	132	132	70 SKS. TO SURFACE
Coal						
Intermediate	8 5/8	ERW	23	1845	1845	495 SKS. TO SURFACE
Production	4 1/2	J-55	10.50	5450	5450	360 SKS.
Tubing	1.5					
Liners						

PACKERS : Kind
Sizes
Depths set

003009
49

For Office of Oil and Gas Use Only

Fee(s) paid: Well Work Permit Reclamation Fund WPCP

Plat WW-9 WW-2B Bond (Type)

RECEIVED
WV Division of
Environmental Protection

DEC 18 1995

1) Date: DECEMBER 15, 1995
2) Operator's well number: SHEETS #3
3) API Well No: 47 - 017 - 4239
State County Permit

Office of Oil & Gas
**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:

(a) Name TIM BLAKE
Address RT. 1 BOX 39
GREENWOOD, WV 26360

(b) Name _____
Address _____

(c) Name _____
Address _____

5) (a) Coal Operator:
Name NONE
Address _____

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

(c) Coal Lessee with Declaration
Name _____
Address _____

6) Inspector MIKE UNDERWOOD
Address RT. 2 BOX 135
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

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
BY: [Signature] KEY OIL COMPANY
It is: [Signature] PRESIDENT
Address 22 GARTON PLAZA
WESTON, WV 26452

Telephone 304-269-7102
Subscribed and sworn before me this 15TH day of DECEMBER, 1995

My Commission Expires MARCH 24, 2003 [Signature] Notary Public

