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 State of West Virginia
 Division of Environmental Protection
 FEB 2 1998

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: SUTTON, THOMAS W.

Operator Well No.: SUTTON #1

LOCATION: Elevation: 994.00

Quadrangle: NEW MILTON

District: NEW MILTON
 Latitude: 5650 Feet South of 39 Deg. 15 Min. 0 Sec.
 Longitude: 1600 Feet West of 80 Deg. 42 Min. 30 Sec.

County: DODDRIDGE

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

Agent: JAN E. CHAPMAN

Inspector: MIKE UNDERWOOD
 Permit Issued: 06/09/97
 Well Work Commenced: 07/27/97
 Well Work Completed: 08/6/97

Verbal Plugging
 Permission granted on: _____
 Rotary X Cable _____ Rig
 Total Depth (feet) 5285'
 Fresh water depths (ft) 66'
 Salt water depths (ft) NONE

Is coal being mined in area (Y / N) ? N
 Coal Depths (ft): 968' (8')

OPEN FLOW DATA
 Warren
 Speechley
 Balltown
 Rileys
 Benson
 Elk

3162' - 3192'
 3206' - 3420'
 3525' - 4120'
 4305' - 4755'
 4822' - 4834'
 4954' - 4972'
 5068' - 5178'

Producing formation Alexander
 Gas: Initial open flow 5 MCF / d
 Final open flow 1,704 MCF / d
 Time of open flow between initial and final tests N/A
 Static rock pressure 1500 psig (surface pressure) after 96 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

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: February 10, 1998

MAR 06 1998

Casing & Tubing Size	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
11 3/4"			
8 5/8"	1019	1019	270 sks To Surface
4 1/2"	5233.7	5233.7	500 sks
2 3/8"		5094	

Sutton # 1 (47-017-04374)
Five Stage Foam Frac - Halliburton

1st Stage:	Alexander (13 holes) (5114.5' to 5173') Elk (2 holes) (4964 to 4865.75)	60 Quality Foam. 500 gal. 15% HCL. 60,000# 20/40 sand, 550,000 SCF N2, 810 bbis foam.
2nd Stage:	Benson (8 holes) (4829' to 4830.75') Third Riley (2 holes) (4721.50' to 4721.75')	60 Quality Foam. 750 gal 15% HCL. 40,000# 20/40 sand, 417,000 SCF N2, 615 bbis foam.
3rd Stage:	Riley (11 holes) (4344.50 to 4361.75)	60 Quality Foam. 750 gal 15% HCL. 5,000# 80/100 sand, 35,000# 20/40 sand, 438,000 SCF N2, 644 bbis foam.
4th Stage:	Balltown (11 holes) (3550.25' to 3921.25)	60 Quality Foam. 1000 gal 15% HCL. 5,000# 80/100 sand, 35,000# 20/40 sand, 438,000 SCF N2, 638 bbis foam.
5th Stage:	Speechley (9 holes) (3222.75' to 3269.25') Warren (4 holes) (3175.25' to 3183.5')	60 Quality Foam, 750 gal 15% HCL. 5,000# 80/100 sand, 45,000# 20/40 sand, 502,000 SCF N2, 722 bbis foam.

WELL LOG

Fill	0	10	
Sand & Shale	10	32	
Red Rock & Sand & Shale	32	370	
Sand	370	412	½" H ₂ O @ 66'
Sand & Shale & Red Rock	412	638	
Lime & Sand	638	775	
Sand & Shale & Red Rock	775	968	
Coal	968	976	
Lime	976	1182	
Sand & Shale & Red Rock	1182	1280	
Sand & Shale & Lime	1280	1758	
Little Lime	1758	1798	
Big Lime	1798	1872	
Big Injun	1872	1946	
Shale	1946	2084	
Weir	2084	2200	
Shale	2200	2298	
Berea	2298	2316	
Sand & Shale	2316	2516	
Gordon	2516	2527	
Sand & shale	2527	3162	
Warren	3162	3192	
Shale	3192	3206	
Speechley	3206	3420	
Shale	3420	3525	
Balltown	3525	4120	
Shale & Sand	4120	4305	
Riley	4305	4406	
Shale	4406	4716	
Third Riley	4716	4755	
Shale	4755	4822	
Benson	4822	4834	
Sand & Shale	4834	4954	
Elk	4954	4972	
Shale	4972	5068	
Alexander	5068	5178	
Sand & Shale	5178	5285	
T.D.	5285		

Gas Checks
 1796' NO SHOW
 2036' NO SHOW
 2527' NO SHOW
 3521' 2/10ths ½" w/water
 4011' 2/10ths 1" w/water
 4317' 2/10ths 1" w/water
 4932' 2/10ths 1" w/water
 5233' 2/10ths 1" w/water
 Collars 2/10ths ½" w/H₂O

WELL WORK PERMIT APPLICATION

017 4374

1) Well Operator: KEY OIL COMPANY 25455 511 (6)

Operator's Well Number: SUTTON #1 3) Elevation: 994'

Well type: (a) Oil X / or Gas X /
(b) If Gas: Production X / Undergroud Storage /
Deep / Shallow X /
Expired 06/09/97
Expires 06/09/99

Proposed Target Formation(s): ALEXANDER

Proposed Total Depth: 5600 feet

7) Approximate fresh water strata depths: 85'

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) *[Signature]*

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	11 3/4	ERW	42	30	0	385 SPA. 3
Fresh Water	8 5/8	ERW	23	994	994	270 SKS. TO SURFACE
Coal						385 SPA. 2.2
Intermediate						
Production	4 1/2	J-55	10.5		5450	500 SKS.
Tubing	1.5					385 SPA. 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 _____ (Type)

1) Date: MAY 5, 1997
2) Operator's well number
SUTTON #1
3) API Well No: 47-017 - 4374
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

RECEIVED
ENVIRONMENTAL PROTECTION
MAY 19 1997

4) Surface Owner(s) to be served: 5) (a) Coal Operator:

(a) Name THOMAS W. SUTTON Name NONE
Address RT. 1 BOX 33 Address
NEW MILLTON, WV 26411

(b) Name (b) Coal Owner(s) with Declaration
Address Name Office of Oil and Gas
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

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.

Well Operator KEY OIL COMPANY
By:
Its PRESIDENT
Address 22 GARTON PLAZA
WESTON, WV 26452
Telephone 304-269-7102

Subscribed and sworn before me this 5TH day of MAY, 1997
My commission expires MARCH 24, 2003

