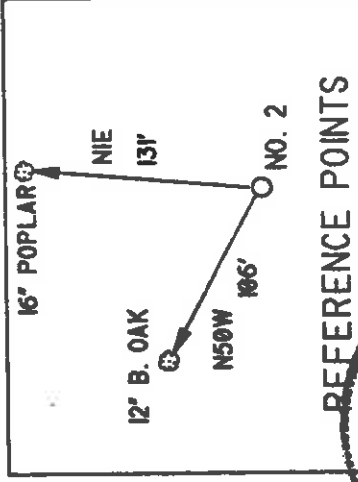
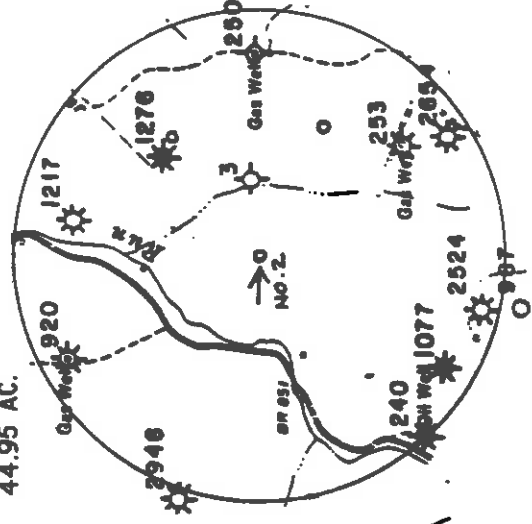
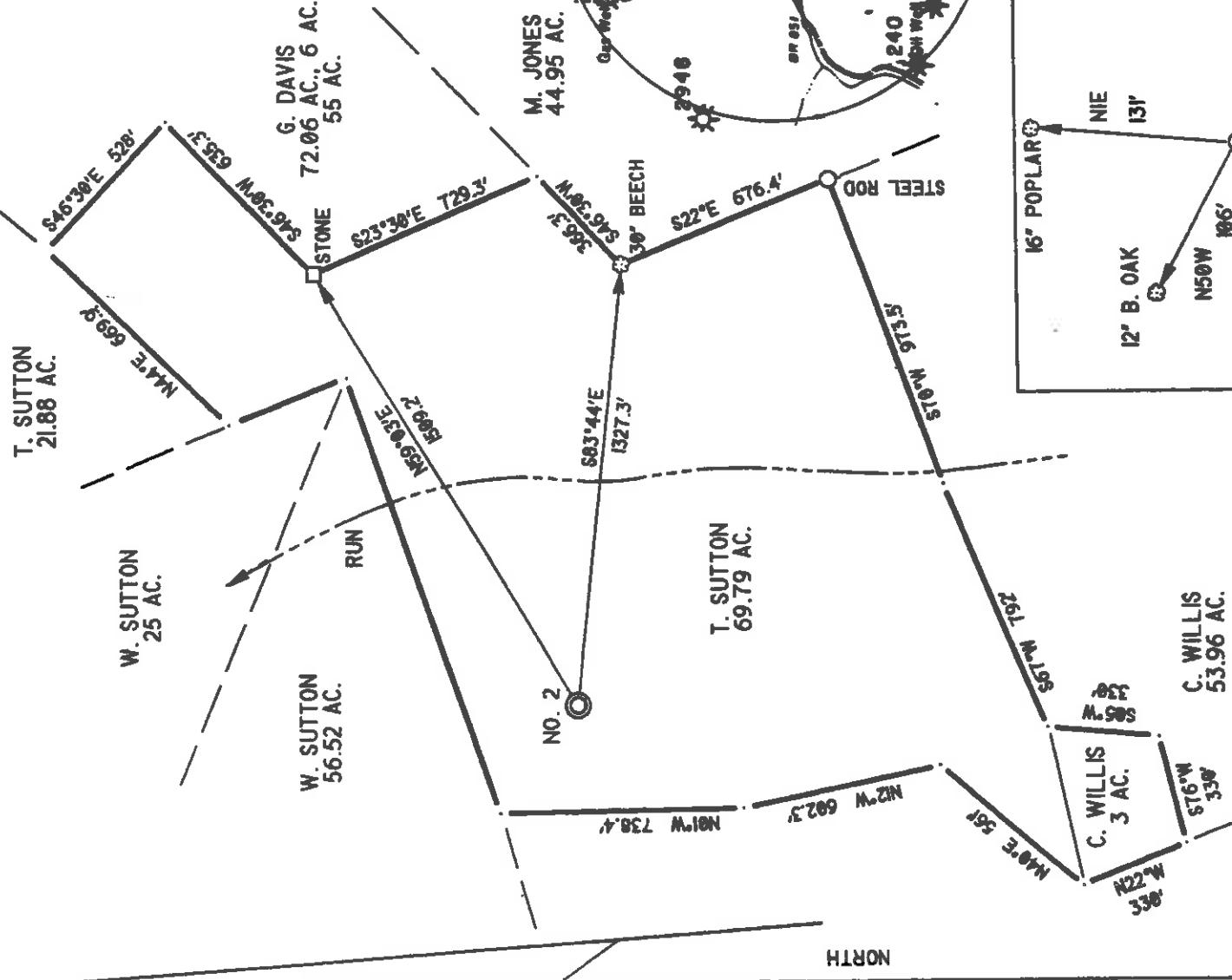


LATITUDE 39°15'00"

LONGITUDE 80°42'30"

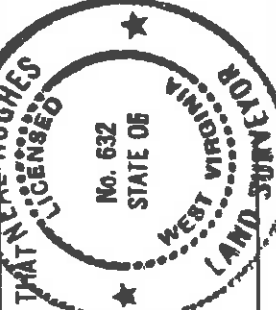
6,500'

0.54 MC  
1.24 STAC



REFERENCE POINTS

I THE UNDERSIGNED, DO HEREBY CERTIFY THAT THIS PLAN 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 FEBRUARY 10 19 97  
OPERATORS WELL NO. SUTTON 2

API WELL NO. 47-017-04370  
STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1/200  
PROVEN SOURCE OF ELEVATION KNOB 1246'  
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 1146' WATERSHED LICK RUN

DISTRICT NEW MILTON COUNTY DODDRIDGE QUADRANGLE NEW MILTON

SURFACE OWNER THOMAS W. AND BEVERLY SUTTON ACREAGE 69.79

ROYALTY OWNER THOMAS W. AND BEVERLY SUTTON LEASE ACREAGE 69.79

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 5600'

COUNTY NAME \_\_\_\_\_ PERMIT \_\_\_\_\_

WELL OPERATOR KEY OIL COMPANY  
22 GARTON PLAZA  
WESTON, WV 26452

DESIGNATED AGENT ADDRESS  
6-699 WESTON, WV 26452

JAN CHAPMAN  
22 GARTON PLAZA  
WESTON, WV 26452

PERMIT

RECEIVED  
By the Director of  
Environmental Regulation  
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 #2

LOCATION: Elevation: 1,146.00

Quadrangle: NEW MILTON

District: NEW MILTON

County: DODDRIDGE

Latitude: 6500 Feet South of 39 Deg. 15 Min. 0 Sec.  
Longitude: 2800 Feet West of 80 Deg. 42 Min. 30 Sec.

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

Agent: JANE E. CHAPMAN

Inspector: MIKE UNDERWOOD  
Permit Issued: 05/27/97  
Well Work Commenced: 07/31/97  
Well Work Completed: 08/13/97

Verbal Plugging  
Permission granted on: \_\_\_\_\_  
Rotary X Cable \_\_\_\_\_ Rig  
Total Depth ( feet ) 5493'  
Fresh water depths ( ft ) NONE  
Salt water depths ( ft ) 218'

Is coal being mined in area ( Y / N ) ? N  
Coal Depths ( ft ) : 1120' (.6')

OPEN FLOW DATA

Warren 3294' - 3338'  
Speechley 3352' - 3570'  
Balltown 3676' - 4394'  
Rileys 4460' - 4892'  
Benson 4956' - 4964'  
Elk 5072' - 5108'

Producing formation Alexander  
Gas: Initial open flow 60 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: 

MAK v 6 1998

PRESIDENT

Date: February 10, 1998

Casing & Tubing Size	Used in Drilling	Left In Well	Cement Fill Up Cu. Ft.
11 3/4"			
8 5/8"	1142	1142	310 sks To Surface
4 1/2"	5403	5403	500 sks
2 3/8"		5179	

Sutton # 2 (47-017-04370)

Five Stage Foam Frac - Halliburton

1st Stage: Alexander ( 12 holes ) ( 5214.25' to 5306.25' ) 60 Quality Foam. 500 gal. 15% HCL.  
 ELK ( 3 holes ) ( 5199.75' to 5200.25' ) 60,000# 20/40 sand, 550,000 SCF N2,  
 812 bbls foam.

2nd Stage: Benson ( 6 holes ) ( 4961.5' to 4962.75' ) 60 Quality Foam. 750 gal 15% HCL.  
 Third Riley ( 6 holes ) ( 4862.5' to 4874.75' ) 40,000# 20/40 sand, 417,000 SCF N2,  
 617 bbls foam.

3rd Stage: Riley ( 11 holes ) ( 4344.50 to 4361.75 ) 60 Quality Foam. 750 gal 15% HCL.  
 Second Riley ( 4 holes ) ( 4470.5' to 4508.5' ) 5,000# 80/100 sand, 45,000# 20/40 sand,  
 502,000 SCF N2, 725 bbls foam.

4th Stage: Balltown ( 10 holes ) ( 3699.5' to 3798.5' ) 60 Quality Foam. 750 gal 15% HCL.  
 5,000# 80/100 sand, 45,000# 20/40 sand,  
 502,000 SCF N2, 731 bbls foam.

5th Stage: Speechley ( 13 holes ) ( 3355.50' to 3437.75' ) 60 Quality Foam, 750 gal 15% HCL.  
 Warren ( 2 holes ) ( 3321.00' to 3321.25' ) 5,000# 80/100 sand, 45,000# 20/40 sand,  
 502,000 SCF N2, 684 bbls foam.

WELL LOG

Fill	0	4	1/4" H <sup>2</sup> O @ 218'
Red Rock & Sand & Shale	4	218	
Sand	218	250	
Sand & Shale & Red Rock	250	486	
Lime & Sand	486	500	
Lime & Sand & Shale & RR	500	622	
Sand & Shale & Red Rock	622	1017	
Lime	1017	1024	
Sand & Shale & Red Rock	1024	1120	
Coal	1120	1126	
Sand & Shale & Lime	1126	1884	
Little Lime	1884	1904	
Big Lime	1904	2018	
Big Injun	2018	2088	
Shale	2088	2236	
Weir	2236	2346	1851' NO SHOW
Shale	2346	2436	2222' NO SHOW
Berea	2436	2452	3001' 2/10 <sup>ths</sup> 1/2" w/water
Sand & Shale	2452	2652	3497' 8/10 <sup>ths</sup> 1/2" w/water
Gordon	2652	2674	4206' 4/10 <sup>ths</sup> 2" w/water
Sand & shale	2674	3294	4730' 10/10 <sup>ths</sup> 2" w/water
Warren	3294	3338	5101' 8/10 <sup>ths</sup> 2" w/water
Shale	3338	3352	5460' 4/10 <sup>ths</sup> 2" w/water
Speechley	3352	3570	Collars 2/10ths 2" w/H <sup>2</sup> O
Shale	3570	3676	
Balltown	3676	4394	
Shale & Sand	4394	4460	
Riley	4460	4541	
Shale	4541	4716	
Second Riley	4716	4792	
Sand & Shale	4792	4854	
Third Riley	4854	4892	
Shale	4892	4956	
Benson	4956	4964	
Sand & Shale	4964	5072	
Elk	5072	5108	
Shale	5108	5208	
Alexander	5208	5313	
Sand & Shale	5313	5493	
T.D.	5493		

017 4370  
 5/11

1) Well Operator: KEY OIL COMPANY 28655 6 Elevation: 1146'  
 Operator's Well Number: SUTTON #2  
 Well type: (a) Oil X / or Gas X /  
 (b) If Gas: Production X / Underground Storage X /  
 Deep     / Shallow X /

**RECEIVED**  
 WV Division of  
 Environmental Protection  
 MAY 21 1997  
 Permitted  
 Dept of Oil & Gas

Proposed Target Formation(s): ALEXANDER 437 feet  
 Proposed Total Depth: 5600 feet  
 Approximate fresh water strata depths: 100'  
 Approximate salt water depths: -0-  
 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)

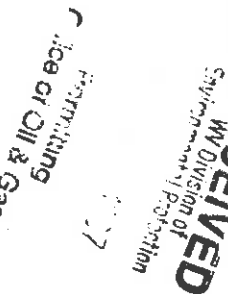
**CASING AND TUBING PROGRAM**

TYPE	SIZE	GRADE	WEIGHT PER FT. DRILLING	FOOTAGE INTERVALS	CEMENT
Conductor	11 3/4	ERW	42	30	0
Fresh Water	8 5/8	ERW	23	1146	1146
Coal					
Intermediate					
Production	4 1/2	J-55	10.5	5500	5500 SKS.
Tubing	1.5				
Liners					

Fill-up (cu. ft.)  
0.12 Meters  
310 SKS TO SURFACE

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 #2  
3) API Well No: 47 - 017 - 4370  
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: \_\_\_\_\_  
 (a) Name THOMAS W. SUTTON Name NONE  
 Address RT. 1 BOX 33 Address \_\_\_\_\_  
NEW MILTON, WV 26411  
 (b) Name \_\_\_\_\_ (b) Coal Owner(s) with Declaration  
 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 WEX OIL COMPANY  
 BY [Signature]  
 ITS: PRESIDENT  
 Address 22 GARTON PLAZA  
WESTON, WV 26452

Telephone 304-269-7102  
 Subscribed and sworn before me this 5TH day of MAY, 1997  
Karen Cook  
 My commission expires MARCH 24, 2003

