

*Janice*  
 S. SPIKER  
 872 AC.

LATITUDE 39°15'00"

5,950'

LONGITUDE 80°42'30"

*0.132*

Office of Oil & Gas

G. ADRIAN  
 113 AC.

G. MAXWELL  
 106 AC.

R. MAXWELL  
 82 AC. + 103 AC.

A. WILLIS  
 31 AC.

L. WILLIS  
 30 AC.

W. SUTTON  
 38 AC.

I. L. MORRIS  
 1690 AC.

G. ADRIAN  
 290 AC.

BLACK OAK

NO. 7

20'

N46°12'E

267.6'

2431.3' S65.50W

N57°E

276.4'

N27°30'W

569.3'

N20°W

144.4'

N42°W

297.0'

N60°E

33.6'

N32°30'W

222.8'

N82°30'W

668.8'

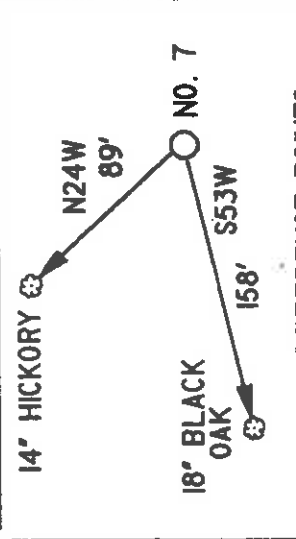
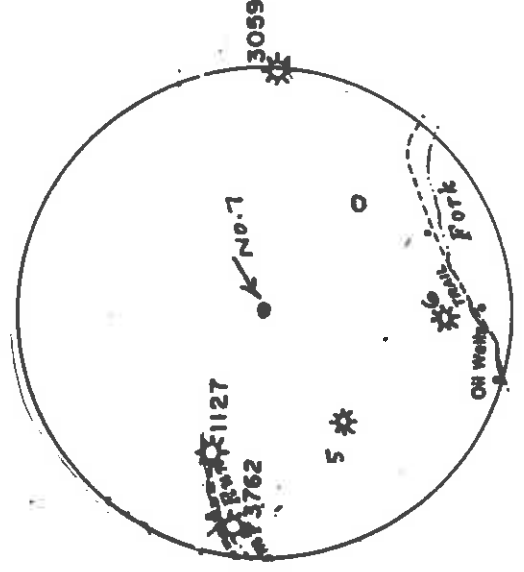
N83°E

1336.5'

GATE POST

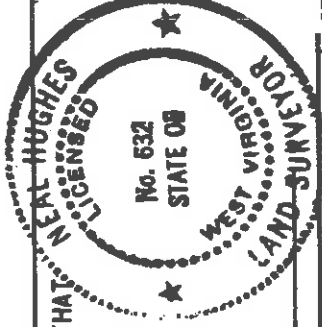
RIGHT HAND LICK RUN

NORTH



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



(\*) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS  
 DATE FEBRUARY 15, 19 97  
 OPERATORS WELL NO. MAXWELL HEIRS 7  
 API WELL NO. 47 - 017-04375  
 STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1/200  
 FILE NO. 94-66  
 SCALE 1" = 1000'  
 PROVEN SOURCE OF ELEVATION KNOB 1319

WELL TYPE: OIL  GAS  LIQUID INJECTION  WASTE DISPOSAL  IF "GAS" PRODUCTION  STORAGE  DEEP  SHALLOW   
 LOCATION: ELEVATION 1114' WATERSHED RIGHT HAND FORK LICK RUN

DISTRICT NEW MILTON COUNTY DODDRIDGE QUADRANGLE NEW MILTON ACREAGE 82  
 SURFACE OWNER ROBERT MAXWELL LEASE ACREAGE 400 OF 1100  
 ROYALTY OWNER LEWIS MAXWELL HEIRS

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'

WELL OPERATOR KEY OIL COMPANY DESIGNATED AGENT  
 22 GARTON PLAZA JAN 16 1997  
 WESTON WV 26452 ADDRESS

COUNTY NAME PERMIT  
 WEST VIRGINIA  
 DIVISION OF ENVIRONMENTAL PROTECTION  
 OFFICE OF OIL AND GAS  
 #10 McJUNKIN ROAD  
 NITRO, WEST VIRGINIA 25143-2506

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

*Stamp: RECEIVED  
Division of Oil & Gas  
OCT 20 1997*

Well Operator's Report of Well Work

Farm name: MAXWELL, ROBERT G.

Operator Well No. : MAXWELL HRS. #

LOCATION: Elevation: 1,140.00

Quadrangle: NEW MILTON

District: NEW MILTON

County: DODDRIDGE

Latitude: 625 Feet South of 39 Deg. 15 Min. 0 Sec.  
Longitude: 5950 Feet West of 80 Deg. 42 Min. 30 Sec.

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: 08/11/97  
Well Work Completed: 08/20/97

Verbal Plugging  
Permission granted on: \_\_\_\_\_  
Rotary X Cable \_\_\_\_\_ Rig  
Total Depth ( feet ) 5337'  
Fresh water depths ( ft ) NONE  
Salt water depths ( ft ) 406'

Is coal being mined in area ( Y / N ) ? N  
Coal Depths ( ft ) : 855' (7)

OPEN FLOW DATA

Warren  
Speechley  
Balltown  
Riley  
Benson  
Elk

Producing formation Alexander  
Gas: Initial open flow 5 MCF / d  
Final open flow 1,524 MCF / d  
Time of open flow between initial and final tests N/A  
Static rock pressure 1350 psig ( surface pressure ) after 96 Hours  
Pay zone depth ( ft )  
Oil: Initial open flow 0 Bbl / d  
Oil: Final open flow show Bbl / d

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

PRESIDENT

Date: October 14, 1997

OCT 24 1997

Casing & Tubing Size	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
11 3/4"			
8 5/8"	1108.45	1108.45	300 sks To Surface
4 1/2"	5207	5207	490 sks
2 3/8"		5040	

Maxwell #7 (47-017-04375)  
Four Stage Foam Frac - Halliburton

1st Stage: Alexander ( 14 holes ) ( 5089.25' to 5144.25' ) 60 Quality Foam. 500 gal. 15% HCL.  
 Elk ( 2 holes ) ( 4960.25' to 4960.5' ) 60,000# 20/40 sand, 550,000 SCF N2,  
 810 bbis foam.

2nd Stage: Benson ( 12 holes ) ( 4678' to 4680.25' ) 60 Quality Foam. 750 gal 15% HCL.  
 40,000# 20/40 sand, 417,000 SCF N2,  
 614 bbis foam.

3rd Stage: Riley ( 8 holes ) ( 4351' to 4356.25' ) 60 Quality Foam. 1000 gal 15% HCL.  
 Balktown ( 3 holes ) ( 4095.25' to 4095.75' ) 5,000# 80/100 sand, 35,000# 20/40 sand,  
 438,000 SCF N2, 645 bbis foam.

4th Stage: Speechley ( 12 holes ) ( 3205.25' to 3267.25' ) 60 Quality Foam, 750 gal 15% HCL.  
 Warren ( 3 holes ) ( 3168' to 3168.5' ) 5,000# 80/100 sand, 45,000# 20/40 sand,  
 502,000 SCF N2, 684 bbis foam.

WELL LOG

Fill	0	4	
Sand & Shale	4	29	
Red Rock & Sand & Shale	29	284	
Sand	284	314	
Sand & Shale & Red Rock	314	764	
Lime	764	772	
Sand & Shale	772	855	
Coal	855	862	
Sand & Shale & Red Rock	862	1168	
Sand & shale	1168	1266	
White Sand	1266	1356	
Sand & Shale	1356	1749	
Little Lime	1749	1773	
Sand & Shale	1773	1799	
Big Lime	1799	1872	
Big Injun	1872	1927	
Shale	1927	2071	
Weir	2071	2168	
Shale	2168	2464	
Gordon	2464	2524	
Sand & Shale	2524	3140	
Warren	3140	3188	
Shale	3188	3200	
Speechley	3200	3286	
Shale	3286	3886	
Balktown	3886	4250	
Shale & Sand	4250	4304	
Riley	4304	4388	
Shale	4388	4796	
Benson	4796	4810	
Sand & Shale	4810	4939	
Elk	4939	4970	
Shale	4970	5044	
Alexander	5044	5150	
Sand & Shale	5150	5337	
T.D.	5337		

Gas Checks

1696' 8/10ths ½" w/H<sup>2</sup>O  
 2036' 8/10ths ½" w/H<sup>2</sup>O  
 2526' 8/10ths ½" w/H<sup>2</sup>O  
 3028' 4/10ths 2" w/H<sup>2</sup>O  
 4201' 4/10ths 1" w/H<sup>2</sup>O  
 4606' 4/10ths 1" w/H<sup>2</sup>O  
 5004' 4/10ths 1" w/H<sup>2</sup>O  
 5300' 2/10ths 1" w/H<sup>2</sup>O  
 Collars 2/10ths ½" w/H<sup>2</sup>O

WELL WORK PERMIT APPLICATION

017 4375  
(6)

- 1) Well Operator: KEY OIL COMPANY 25655 511
- 2) Operator's Well Number: MAXWELL HEIRS #7 3) Elevation: 1114'
- Well type: (a) Oil X / or Gas X / Issued 06/09/97  
(b) If Gas: Production X / Underground Storage / Expired 06/09/99  
Deep    / Shallow X /

Proposed Target Formation(s): ALEXANDER  
 Proposed Total Depth: 5600 feet  
 Approximate fresh water strata depths: 100'  
 Approximate salt water depths: -0-  
 Approximate coal seam depths: N/A  
 Does land contain coal seams tributary to active mine? Yes    / No X /

Proposed Well Work: DRILL, STIMULATE, PRODUCE

CASING AND TUBING PROGRAM

TYPE	SIZE	GRADE	WEIGHT PER FT.	FOOTAGE	INTERVALS	CEMENT
Conductor	11 3/4	ERW	42	30	0	Fill-up (cu. ft.) 70.15 Mcb
Fresh Water	8 5/8	ERW	23	1114	1114	300 SKS. TO SURFACE
Coal						300 SKS TO SURFACE
Intermediate						
Production	4 1/2	J-55	10.5		5500	500 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: MAY 5, 1997  
2) Operator's well number  
MAXWELL HEIRS #7  
3) API Well No: 47 - 017 - 4375  
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 ROBERT G. MAXWELL Name NONE  
 Address P. O. BOX 2078 Address \_\_\_\_\_  
CLARKSBURG, WV 26302-2078  
 (b) Name \_\_\_\_\_ (b) Coal Owner(s) with Declaration  
 Address \_\_\_\_\_ Name \_\_\_\_\_  
 Address \_\_\_\_\_  
 (c) Name \_\_\_\_\_ Name \_\_\_\_\_  
 Address \_\_\_\_\_ Address \_\_\_\_\_  
Office of Oil & Gas

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

Subscribed and sworn before me this 5TH day of MAY 1997  
 Telephone 304-269-7102

My commission expires MARCH 24, 2003

