

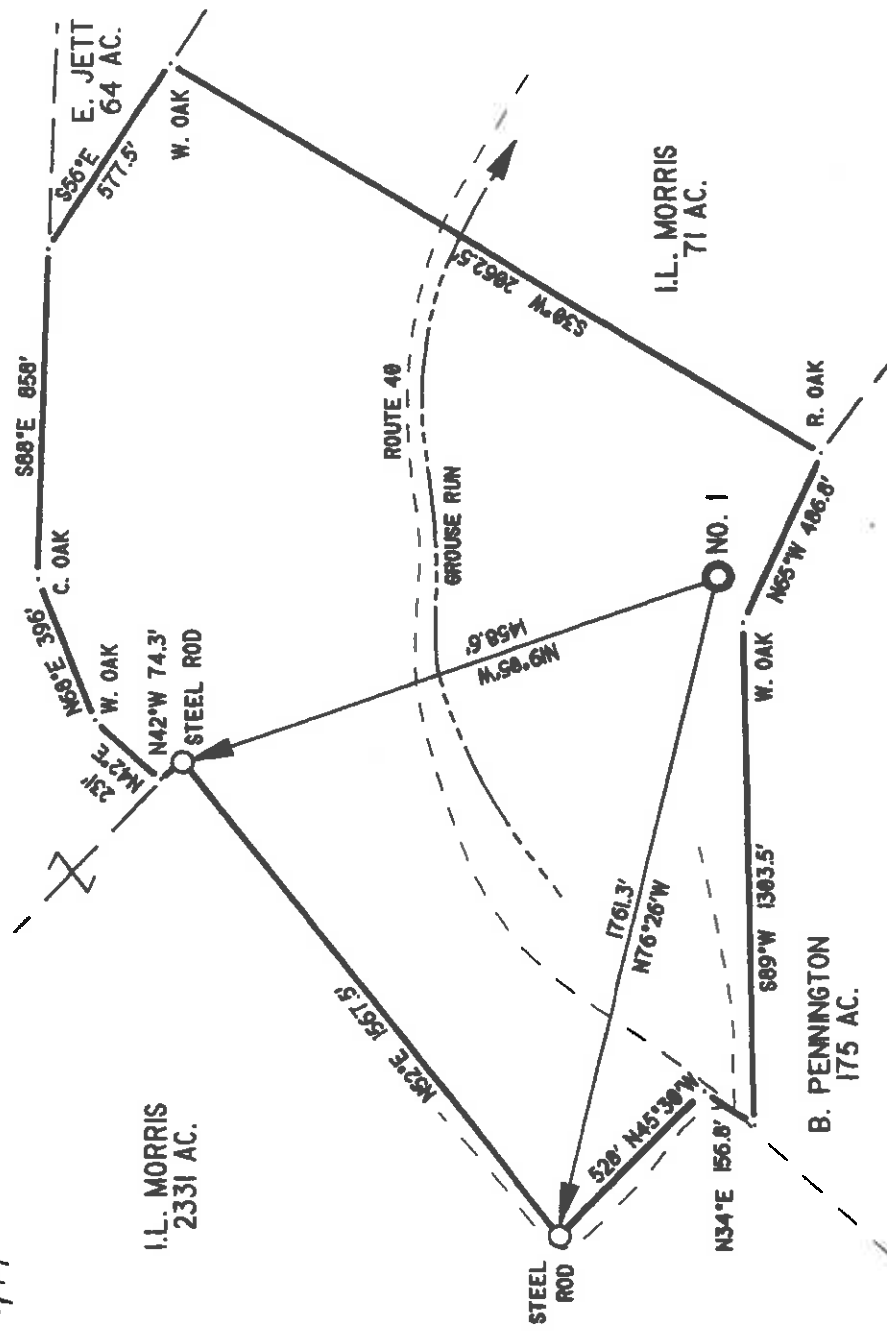
*James Maxwell*  
4/20/97

LATITUDE 39°15'00"

8,350'

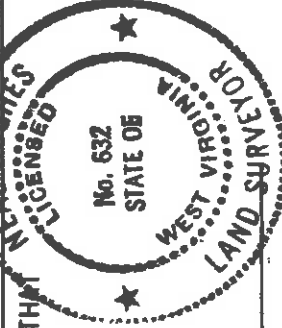
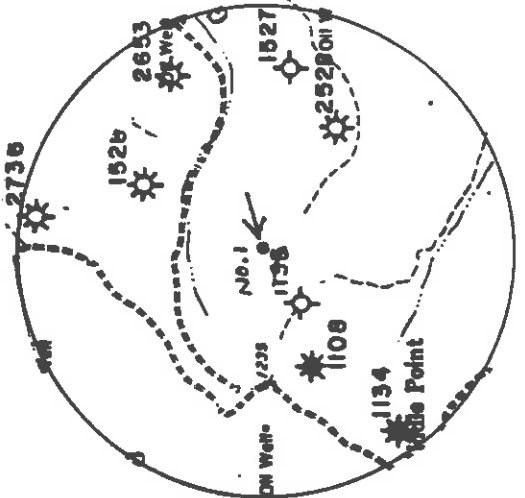
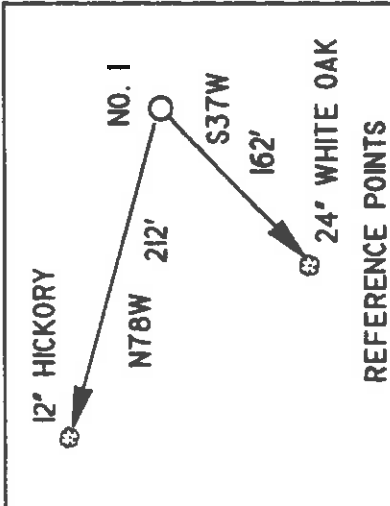
LONGITUDE 80°42'30"

14,300'



NORTH

*1.5866*  
*2.745*



(\*) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS  
 DATE FEBRUARY 10, 19 97  
 OPERATORS WELL NO. J. MAXWELL I

L.L.S. *Maxwell*  
632

API WELL NO. 47-017-04358  
 STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY	1/200	FILE NO.	90-33	STATE OF WEST VIRGINIA
PROVEN SOURCE OF ELEVATION	KNOB 1298'	SCALE	1" = 500'	DEPARTMENT OF ENERGY
WELL TYPE: OIL <input checked="" type="checkbox"/> GAS <input type="checkbox"/> LIQUID INJECTION <input type="checkbox"/> WASTE DISPOSAL <input type="checkbox"/>				OIL AND GAS DIVISION
LOCATION: ELEVATION 1249'				
DISTRICT NEW MILTON	COUNTY DODDRIDGE	QUADRANGLE	NEW MILTON	COUNTY NAME
SURFACE OWNER I. L. MORRIS		ACREAGE	86	
ROYALTY OWNER CHARLES E. MAXWELL		LEASE ACREAGE	86	
PROPOSED WORK:				
DRILL <input checked="" type="checkbox"/> CONVERT <input type="checkbox"/> DRILL DEEPER <input type="checkbox"/> REDRILL <input type="checkbox"/>				
FORMATION <input type="checkbox"/> PERFORATE NEW FORMATION <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> PLUG AND REFRIG <input type="checkbox"/> PLUG OFF OLD FORMATION <input type="checkbox"/>				
PHYSICAL CHANGE IN WELL (SPECIFY)		TARGET FORMATION	ALEXANDER	
		ESTIMATED DEPTH	5600'	PERMIT
			APR 20 1997	

WELL OPERATOR KEY OIL COMPANY DESIGNATED AGENT JAN CHAPMAN  
 ADDRESS 22 GARTON PLAZA ADDRESS 22 GARTON PLAZA  
 WESTON, WV 26452 WESTON, WV 26452  
 ADDRESS 6-6 134

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: MORRIS, I.L.

Operator Well No. : JOHN MAXWELL #1

LOCATION: Elevation: 1,249.00

Quadrangle: NEW MILTON

District: NEW MILTON

County: DODDRIDGE

Latitude: 14300 Feet South of 39 Deg. 15 Min. 0 Sec.

Longitude: 8350 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: 04/15/97  
Well Work Commenced: 07/07/97  
Well Work Completed: 07/16/97

Verbal Plugging  
Permission granted on: \_\_\_\_\_  
Rotary X Cable \_\_\_\_\_ Rig \_\_\_\_\_  
Total Depth ( feet ) \_\_\_\_\_ 5730'  
Fresh water depths ( ft ) NONE  
Salt water depths ( ft ) 420

Is coal being mined in area ( Y / N ) ? N  
Coal Depths ( ft ) : 1385 (5'), 1490 (4')


OPEN FLOW DATA

Warren  
Speechley  
Balltown  
Rileys  
Benson  
Alexander  
3384' - 3428'  
3440' - 3660'  
3892' - 4290'  
4544' - 4814'  
5030' - 5042'  
5276' - 5385'

Producing formation \_\_\_\_\_  
Gas: Initial open flow \_\_\_\_\_ MCF / d  
Final open flow 1,841 MCF / d  
Time of open flow between initial and final tests \_\_\_\_\_  
Static rock pressure 1450 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 \_\_\_\_\_  
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 11, 1998

Form v 6 1998

Form v 6 1998

Casing & Tubing Size	Used in Drilling	Left In Well	Cement Fill Up Cu. Ft.
11 3/4"	120'	120'	70 sks To Surface
8 5/8"	1684'	1684'	495 sks To Surface
4 1/2"	5483'	5483'	490 sks
2 3/8"		5297'	

J. Maxwell #1 (47-017-04358)  
 Four Stage Foam Frac - Halliburton

1st Stage:	Alexander ( 10 holes ) ( 5317.75' to 5376.50' )	60 Quality Foam. 500 gal 15% HCL. 60,000# 20/40 sand, 550,000 SCF N2, 813 bbls foam.
2nd Stage:	Benson ( 7 holes ) ( 5034.25' to 5035.75' ) Third Riley ( 3 holes ) (4797.25' to 4797.75' )	60 Quality Foam. 750 gal 15% HCL. 40,000# 20/40 sand, 417,000 SCF N2, 618 bbls foam.
3rd Stage:	Riley ( 6 holes ) ( 4544' to 4621' ) Balltown ( 4 holes ) ( 4160' to 4160.75' )	60 Quality Foam. 1000 gal 15% HCL. 5,000# 80/100 sand, 35,000# 20/40 sand, 438,000 SCF N2, 648 bbls foam.
4th Stage:	Speechley ( 3 holes ) ( 3526.5' to 3527' ) Warren ( 5 holes ) ( 3387.5' to 3388' )	60 Quality Foam. 750 gal 15% HCL. 5,000# 80/100 sand, 45,000# 20/40 sand, 502,000 SCF N2, 684 bbls foam.

WELL LOG

Fill	0	5	
Sand & Shale	5	288	
Sand & Shale & Red Rock	288	701	
Lime & Sand	701	715	
Red Rock & Sand & Shale	715	1047	
Sand & Shale	1047	1385	
Coal	1385	1390	
Sand & Shale	1390	1490	
Coal	1490	1494	
Sand & Shale	1494	1937	
Lime	1937	1940	
Sand & Shale	1940	2009	
Little Lime	2009	2024	
Sand	2024	2052	
Big Lime	2052	2167	
Big Injun	2167	2188	
Shale	2188	2326	
Weir	2326	2423	
Sand & Shale	2423	2528	
Berea	2528	2543	
Sand & Shale	2543	2742	
Gordon	2742	2764	
Sand & Shale	2764	3384	
Warren	3384	3428	
Shale	3428	3440	
Speechley	3440	3660	
Shale	3660	3892	
Balltown	3892	4290	
Shale & Sand	4290	4544	
Riley	4544	4621	
Shale	4621	4764	
Second Riley	4764	4814	
Sand & Shale	4814	4919	
Third Riley	4919	5002	
Shale	5002	5030	
Benson	5030	5042	
Sand & Shale	5042	5276	
Alexander	5276	5385	
Sand & Shale	5385	5730	
T.D.	5730		

Gas Checks

2007'	NO SHOW
2501'	Odor
3024'	6/10 <sup>th</sup> ½" w/water
3706'	8/10 <sup>th</sup> ½" w/water
4419'	8/10 <sup>th</sup> ½" w/water
4818'	8/10 <sup>th</sup> ½" w/water
5127'	12/10 <sup>th</sup> ½" w/water
5404'	16/10 <sup>th</sup> ½" w/water
5700'	6/10 <sup>th</sup> ½" w/water

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

1) Well Operator: KEY OIL COMPANY 3565 (6) 511  
 2) Operator's well Number: JOHN MAXWELL #1 3) Elevation: 1249'  
 4) Well type: (a) Oil X / or Gas X / Issued 04/15/97  
 (b) If Gas: Production X / Undergound Storage    Expires 04/15/99  
 Deep    / Shallow X /

Proposed Target Formation(s): ALEXANDER  
 Proposed Total Depth: 5600 feet  
 Approximate fresh water strata depths: 110'  
 Approximate salt water depths: -0- Permitting  
 Office of Oil & Gas  
 Approximate coal seam depths: NONE REPORTED

10) Does land contain coal seams tributary to active mine? Yes    / No X /  
 11) Proposed Well Work: DRILL. STIMULATE. PRODUCE *New Well.*  
 12)

CASING AND TUBING PROGRAM

TYPE	SPECIFICATIONS			FOOTAGE INTERVALS		CEMENT
	Size	Grade	Weight per ft.	For drilling	Left in well	
Conductor	11 3/4	ERW	42	40	0	3858/11.3
Fresh Water	8 5/8	ERW	23	1249	1249	340 SKS. TO SURFAC
Coal						3858/11.2.2
Intermediate						
Production	4 1/2	J-55	10.5		5500	460 SKS.
Tubing	1.5					3858/11.1
Liners						

PACKERS : Kind \_\_\_\_\_  
 Sizes \_\_\_\_\_  
 Depths set \_\_\_\_\_

For Office of Oil and Gas Use Only  
 Fee(s) paid:  Well Work Permit  Reclamation Fund  WPC2  
 Plat  WW-9  WW-2B  Bond \_\_\_\_\_ (Type)  
 43/0

1) Date: APRIL 5, 1997  
2) Operator's well number  
3) JOHN MAXWELL #1  
API Well No: 47 - 017 - 4358  
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 T L MORRIS Name NONE  
Address P O BOX 397 Address  
GLENVILLE, WV 26351

(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 7TH day of APRIL 19 97

My commission expires *[Signature]* MARCH 24, 2003

