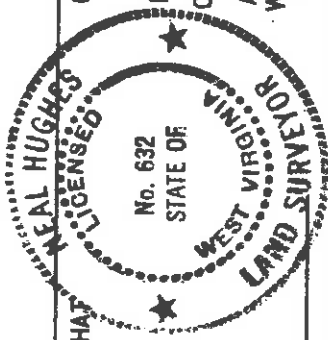
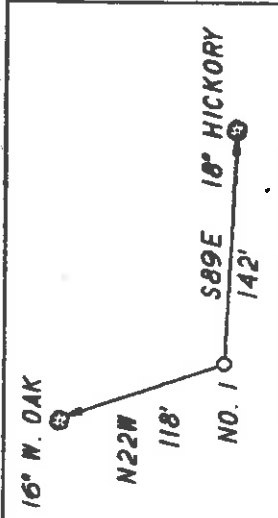
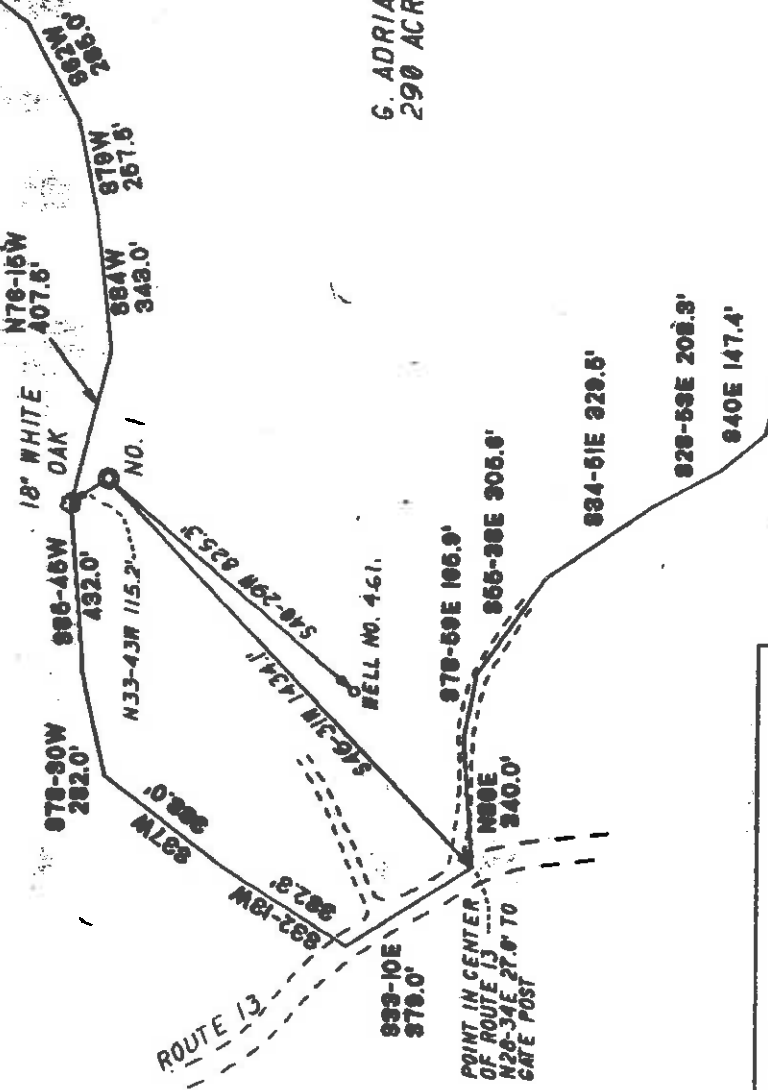
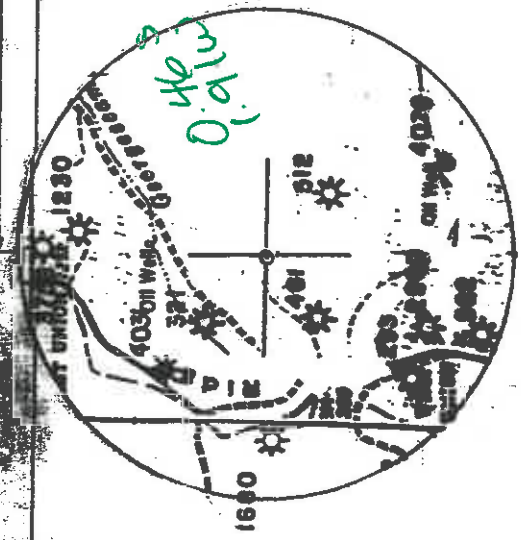


10.000' LATITUDE 39°15'00" LONGITUDE 80°42'30"

S. SPIKER 872 ACRES

G. ADRIAN 290 ACRES

B. SWARTZMAN 1690 ACRES



0.46
4.14

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 SEPT. 16 19 94
OPERATORS WELL NO. MAXWELL HRS. 1

L.L.S. *Neal Hughes*
632

API WELL NO. 47 - STATE 017 - COUNTY 4163 PERMIT

STATE OF WEST VIRGINIA
DEPARTMENT OF ENERGY
OIL AND GAS DIVISION

MINIMUM DEGREE OF ACCURACY 1/200 FILE NO. 94-66
PROVEN SOURCE OF ELEVATION KNOB 1358' SCALE 1"=500'

WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL IF "GAS" PRODUCTION STORAGE DEEP SHALLOW

LOCATION ELEVATION 1215' WATERSHED LICK RUN

DISTRICT NEW MILTON COUNTY DODDRIDGE QUADRANGLE NEW MILTON
SURFACE OWNER GEORGE ADRIAN, ET AL ACREAGE 290 *Vady's MW*
ROYALTY OWNER GEORGE PIERCE, JR., ET AL LEASE ACREAGE 200

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. 475 DESIGNATED AGENT JAN CHAPMAN
ADDRESS 22 GARTON PLAZA WESTON, WV 26452

DODDRIDGE

PERMIT

6-6-94

AUG 24 1995

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

17-Oct-94
 API # 47- 17-04163

Permitting
 Office of Oil & Gas

Well Operator's Report of Well Work

Farm name: ADRIAN, GEORGE ETAL. Operator Well No.: MAXWELL HLRIRS#1

LOCATION: Elevation: 1,215.00 Quadrangle: NEW MILTON

District: NEW MILTON County: DODDRIDGE
 Latitude: 2400 Feet South of 39 Deg. 15Min. 0 Sec.
 Longitude 10000 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: 10/12/94
 Well work Commenced: 7-21-95
 Well work Completed: 7-26-95
 Verbal Plugging
 Permission granted on: _____ Rig
 Rotary X Cable _____
 Total Depth (feet) 5362
 Fresh water depths (ft) -0-

Salt water depths (ft) -0-

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

OPEN FLOW DATA

Warren/Speechly
 Balltown
 Riley Sands
 Producing formation Benson
 Gas: Initial open flow 103 MCF/d Oil: Initial open flow 0 Bbl/d
 Final open flow 1,391 MCF/d Final open flow Show Bbl/d
 Time of open flow between initial and final tests N/A Hours
 Static rock Pressure 1475 psig (surface pressure) after 96 Hours

Second producing formation
 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

Casing & Tubing Size	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
11 3/4"	44'	0	
8 5/8"	1236'	1236'	330 sks. to surface
4 1/2"		4980'	500 sks.
2 3/8"		4865'	

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: *J. E. Chapman* President
 Date: August 23, 1995

AUG 24 1995

Maxwell Heirs #1 (47-017-4163)
4 Stage Foam Frac - Halliburton

1st Stage: Benson (10 holes)	(4885.50'-4887.75')	75 Quality Foam, 500 Gal. 15% HCl, 40,000 lbs. 20-40 sand, 487,000 SCF N ₂ 614 bbls. Foam
2nd Stage: Riley Sands (12 holes)	(4438.75'-4788')	60 Quality Foam, 750 gal. 15% HCl, 10,000 lbs. 80-100 sand, 30,000 lbs. 20-40 sand, 508,000 SCF N ₂ , 614 bbls. Foam
3rd Stage: Balltown (10 holes)	(4015.50'-4017.75')	60 Quality Foam, 750 gal. 15% HCl, 10,000 lbs. 80-100 sand, 30,000 lbs. 20-40 sand, 508,000 SCF N ₂ , 603 bbls. Foam
4th Stage: Warren/ Speechly (12 holes)	(3259.75'-3355.50')	60 Quality Foam, 750 gal. 15% HCl, 10,000 lbs. 80-100 sand, 40,000 lbs. 20-40 sand, 558,000 SCF N ₂ , 735 bbls. Foam

WELL LOG

FORMATION	TOP FEET	BOTTOM FEET	REMARKS
Fill	0	10	
Sand and Shale	20	80	
Sand	80	89	
Shale	89	202	
Sand	202	217	
Shale and Red Rock	217	925	1784' N/S
Sand and Shale	925	1793	1905' Gas odor
Little Lime	1793	1806	2122' Gas odor
Sand and Shale	1806	1845	2503' N/S
Big Lime	1845	1962	3028' 6/10 thru 2" w/water
Big Injun	1962	2010	3496' 6/10 thru 2" w/water
Sand and Shale	2010	2160	4021' 4/10 thru 2" w/water
Weir	2160	2254	4517' 6/10 thru 2" w/water
Sand and Shale	2254	2578	5019' 6/10 thru 2" w/water
Gordon	2578	2608	5362' 6/10 thru 2" w/water
Sand and Shale	2608	3246	
Warren	3246	3332	
Shale	3332	3352	
Speechley	3352	3364	
Sand and Shale	3364	3990	
Balltown	3990	4020	
Sand and Shale	4020	4436	
Riley	4436	4464	
Sand and Shale	4464	4638	
2nd Riley	4638	4662	
Sand and Shale	4662	4784	
3rd Riley	4784	4814	
Sand and Shale	4814	4883	
Benson	4883	4891	
Sand and Shale	4891	5130	
Alexander	5130	5215	
Shale	5215	5362 T.D.	

017-4163

Issued Page of
10/12/94

STATE OF WEST VIRGINIA
DEPARTMENT OF ENERGY, DIVISION OF OIL AND GAS
WELL WORK PERMIT APPLICATION Expires 10/12/96

1) Well Operator: Key Oil Company 25658 (C) 511
Operator's Well Number: Maxwell Heirs #1 1215
Elevation: 3

Well type: (a) Oil or Gas

(b) If Gas: Production Underground Storage
Deep Shallow

Proposed Target Formation(s): Alexander 439
Proposed Total Depth: 5400 feet
Approximate fresh water strata depths: 70'
Approximate salt water depths: -0-
Approximate coal seam depths: None

10) Does land contain coal seams tributary to active **RECEIVED** N.
11) Proposed Well Work: Drill, Stimulate, Produce WV Division of Environmental Protection
12) Maxwell Heirs OCT 11 1994

CASING AND TUBING PROGRAM

TYPE	SPECIFICATIONS			FOURGE INTERVALS		CE
	size	Grade	Weight per ft.	For drilling	Left in well	
Conductor	11 3/4"	Used	42	30	0	Fill - (cbl. 0.4 W. 385 sks. to surf)
Fresh Water	8 5/8"	ERW	23	1215	1215	
Coal						
Intermediate						
Production	4 1/2"	J-55	10.50		5300	260 sks.
Tubing	1.5"					
Liners						

PACKERS : Kind _____ Sizes _____ Depths set _____

00197
Fees Paid: For Well Work Permit For Reclamation Fund
WV-2B 3000

FOR Division of Oil and Gas Use Only
Signature: [Signature]

1) Date: September 19, 1994
2) Operator's well number Maxwell Heirs #1
3) API Well No: 47 - 017 - 4163
State - County - Permit

STATE OF WEST VIRGINIA
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 George Adrian, et al 5) (a) Coal Operator: _____
 Address Rt. 1, Box 95A Address _____
New Milton, WV 26411

(b) Name _____ (b) Coal Owner(s) with Declaration
 Address _____ Name _____
 Address _____ **RECEIVED**
 Environmental Protection

(c) Name _____ Name _____
 Address _____ Address OCT 11 1994

6) Inspector Mike Underwood (c) Coal Lessee with ~~Permit~~ Declaration
 Address Rt. 2 Box 135 Name _____
Sallem, WV 26426 Address Office of Oil & Gas
 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 22B, Article 1, Section 8(d) of the Code of West Virginia (see page 2)

I certify that as required under Chapter 22B 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 22B 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] President
 Its: [Signature] President
 Address 22 Garton Plaza
Weston, WV 26452
 Telephone 304-269-7102

Subscribed and sworn before me this 19th day of September, 1994

My commission expires March 24, 2003 Karen Cook Notary Public

