

*James
4/20/97*

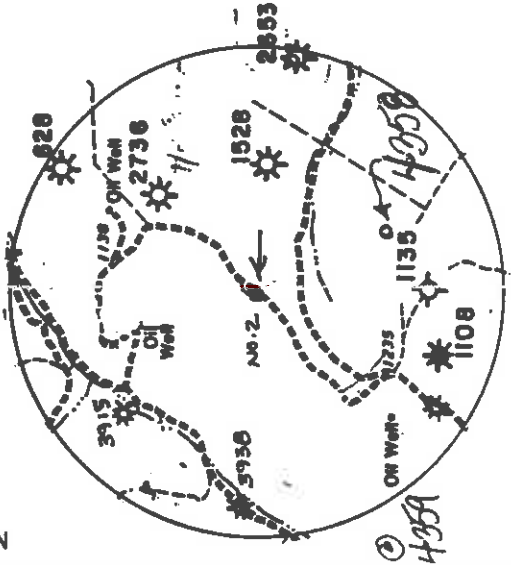
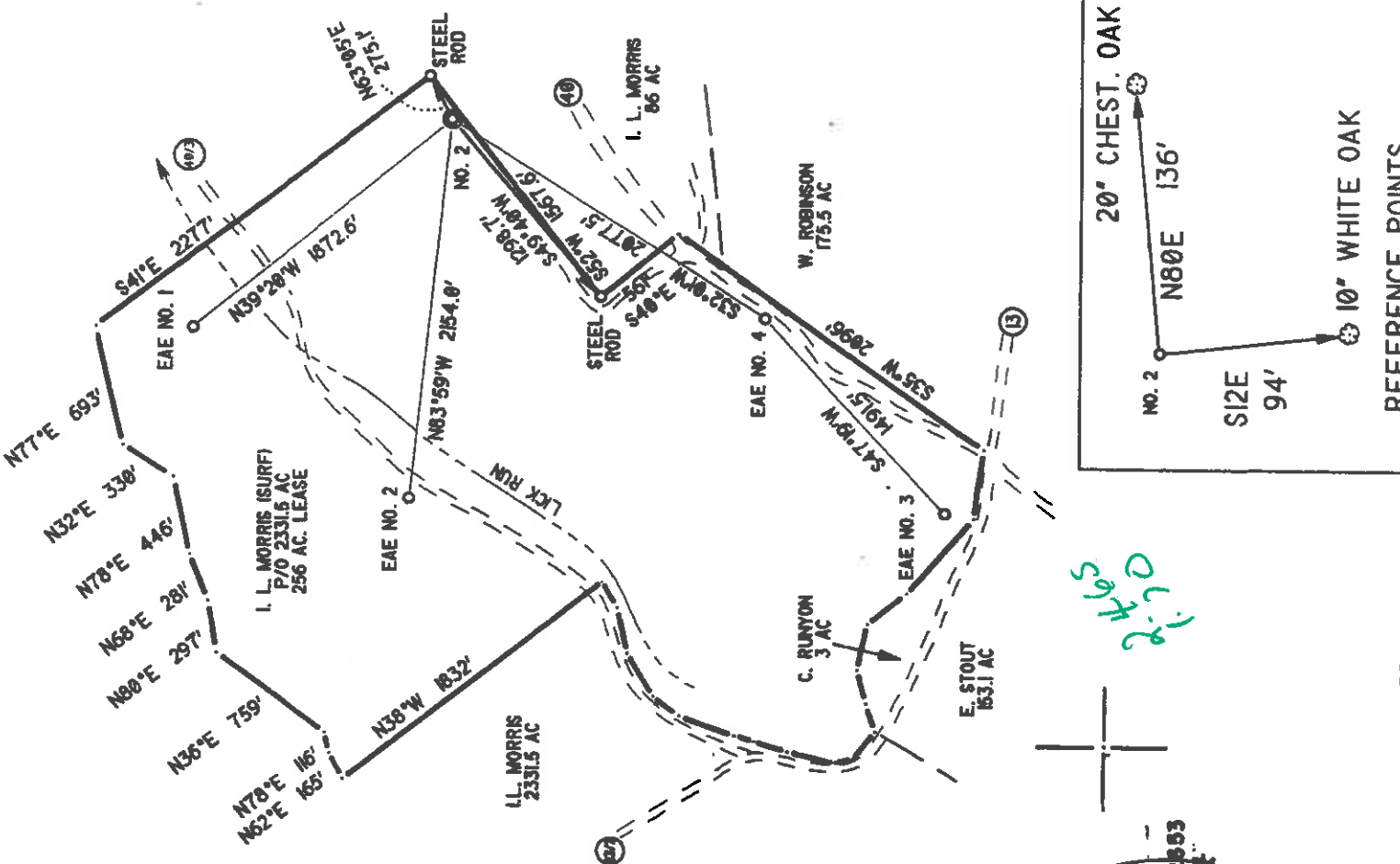
9,000'

LATITUDE

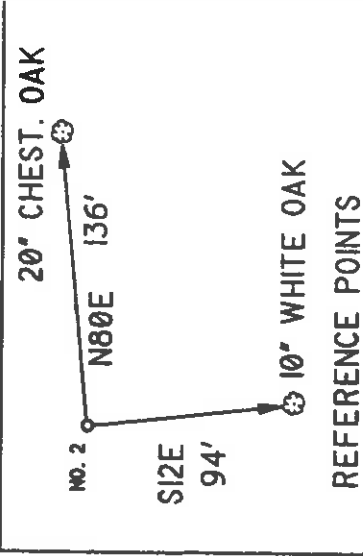
39°15'00"

LONGITUDE 80°42'30"

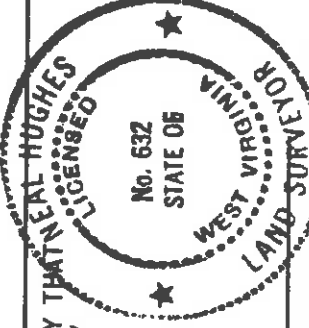
12,950'



NORTH



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.



DATE FEBRUARY 13, 19 97
 OPERATORS WELL NO. P. MAXWELL 2
 API WELL NO. 47 - 017-04360

L.L.S. Neal Hughes
 632

MINIMUM DEGREE OF ACCURACY 1/200
 FILE NO. 90-33
 PROVEN SOURCE OF ELEVATION KNOB 1298'
 SCALE 1" = 1000'

WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL IF 'GAS' PRODUCTION STORAGE DEEP SHALLOW
 LOCATION: ELEVATION 1209'
 WATERSHED LICK RUN

DISTRICT NEW MILTON COUNTY DODDRIDGE
 SURFACE OWNER I. L. MORRIS
 ROYALTY OWNER PORTER MAXWELL HEIRS
 LEASE ACREAGE 256
 QUADRANGLE NEW MILTON
 ACREAGE 2331.5

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

WEST VIRGINIA DIVISION OF ENVIRONMENTAL PROTECTION OFFICE OF OIL AND GAS #10 MCGUNKIN ROAD NITRO, WEST VIRGINIA 25143-2506

COUNTY NAME PERMIT

WELL OPERATOR KEY OIL COMPANY
 ADDRESS 22 GARTON PLAZA WESTON WV 26452
 DESIGNATED AGENT JAN CHAPMAN
 ADDRESS 22 GARTON PLAZA WESTON WV 26452
 ESTIMATED DEPTH 5600'
 APR 23 1997
 60-6-134

RECEIVED
My Division of
Environmental Protection

FEB 27 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: MORRIS, I.L.

Operator Well No. : P. MAXWELL #2

LOCATION: Elevation: 1,209.00

Quadrangle: NEW MILTON

District: NEW MILTON
Latitude: 12950 Feet South of 39 Deg. 15 Min. 0 Sec.
Longitude: 9000 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: 04/15/97
Well Work Commenced: 07/20/97
Well Work Completed: 07/30/97

Verbal Plugging
Permission granted on:
Rotary X Cable _____ Rig _____
Total Depth (feet) 5590'
Fresh water depths (ft) NONE
Salt water depths (ft) 314'

Is coal being mined in area (Y / N) ? N
Coal Depths (ft) : 1309 (4'), 1407 (6')

OPEN FLOW DATA

Warren
Speechley
Balttown
Rileys
Benson

Producing formation: Alexander
Gas: Initial open flow 33 MCF / d
Final open flow 1,602 MCF / d
Time of open flow between initial and final tests: N/A
Static rock pressure 1880 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 11, 1998

MAR 06 1998

Casing & Tubing Size	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
11 3/4"	127.2'	127.2'	70 sks To Surface
8 5/8"	1685.05'	1685.05'	480 sks To Surface
4 1/2"	5385"	5385'	480 sks
2 3/8"		5213'	

P. Maxwell #2 (47-017-04360)
 Four Stage Foam Frac - Halliburton

1st Stage:	Alexander (12 holes) (5314.5' to 5253.75')	60 Quality Foam. 500 gal. 15% HCL. 60,000# 20/40 sand, 550,000 SCF N2, 812 bbls foam.
2nd Stage:	Benson (8 holes) (4968' to 4969.75') Third Riley (4 holes) (4878' to 4878.75')	60 Quality Foam. 750 gal 15% HCL. 40,000# 20/40 sand, 417,000 SCF N2, 617 bbls foam.
3rd Stage:	Riley (9 holes) (4523.25' to 4532') Balltown (3 holes) (4245.25' to 4245.75')	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 (9 holes) (3382.75' to 3491') Warren (3 holes) (3340.5' to 3341')	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	4
Clay & Shell	4	28
Sand & Shale & Red Rock	28	304
Sand & Shale & Lime	304	381
Sand & Shale & Red Rock	381	625
Sand & Shale & Lime & RR	625	1309
Coal	1309	1313
Sand & Shale	1313	1407
Coal	1407	1413
Sand & Shale	1413	1922
Little Lime	1922	1935
Sand & Shale	1935	1972
Big Lime	1972	2020
Big Injun	2020	2111
Shale	2111	2251
Weir	2251	2352
Sand & Shale	2352	2458
Berea	2458	2472
Sand & Shale	2472	2670
Gordon	2670	2696
Sand & Shale	2696	3310
Warren	3310	3360
Shale	3360	3370
Speechley	3370	3596
Shale	3596	3830
Balltown	3830	4394
Shale & Sand	4394	4478
Riley	4478	4544
Shale	4544	4725
Second Riley	4725	4794
Shale	4794	4865
Third Riley	4865	4900
Sand & shale	4900	4964
Benson	4964	4977
Sand & Shale	4977	5211
Alexander	5211	5328
Sand & Shale	5328	5590
T.D.	5590	

Hole Damp @ 314'

Gas Checks

2045'	NO SHOW
2502'	22/10 ^{ths} 1/2" w/water
3021'	12/10 ^{ths} 1/2" w/water
3705'	16/10 ^{ths} 1" w/water
4414'	8/10 ^{ths} 1" w/water
4815'	8/10 ^{ths} 1" w/water
5123'	14/10 ^{ths} 1" w/water
5535'	16/10 ^{ths} 1" w/water
Collars	10/10 ^{ths} 1" w/water

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

017 4360

- 1) Well Operator: KEY OIL COMPANY 25651 (6) 511
- 2) Operator's Well Number: PORTER MAXWELL #2 3) Elevation: 1209'
- 4) Well type: (a) Oil X / or Gas X /
 (b) If Gas: Production X / Underground Storage /
 Deep / / Shallow X /
- Proposed Target Formation(s): ALEXANDER **RECEIVED**
 Proposed Total Depth: 5600 feet
- Approximate fresh water strata depths: 110' 037
- 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 / Produced
- 12)

CASING AND TUBING PROGRAM

TYPE	SPECIFICATIONS	FOOTAGE INTERVALS	CEMENT		
	Size	Grade	Weight per ft. drilling	Left in well	Fill-up (cu. ft.)
Conductor	11 3/4	ERW	42	40	0
Fresh Water	8 5/8	ERW	23	1209	325 SKS. TO SURFACE
Coal					325 SKS. TO SURFACE
Intermediate					
Production	4 1/2	J-55	10.5	5500	460 SKS.
Tubing	1.5				
Liners					

PACKERS : Kind _____
 Sizes _____
 Depths set _____

04/15/99
 For Office of Oil and Gas Use Only
 Fee(s) paid: Well Work Permit Reclamation Fund WPC2
 Plat WW-9 WW-2B Bond _____ (Type)

1) Date: APRIL 5, 1997
2) Operator's well number
PORTER MAXWELL #2
3) API Well No: 47 - 017 - 4360
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: Name NONE Address _____
- (a) Name I. L. MORRIS Address P. O. BOX 397
GLENNVILLE, WV 26351
- (b) Name _____ (b) Coal Owner(s) with Declaration Name _____ Address _____
- (c) Name _____ Name _____ Address _____
Address _____
- 6) Inspector MIKE UNDERWOOD (c) Coal Lessee with Declaration Name _____
Address RT. 2 BOX 135 Address _____
SALEM, WV 26426
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 1997

My commission expires MARCH 24, 2003

