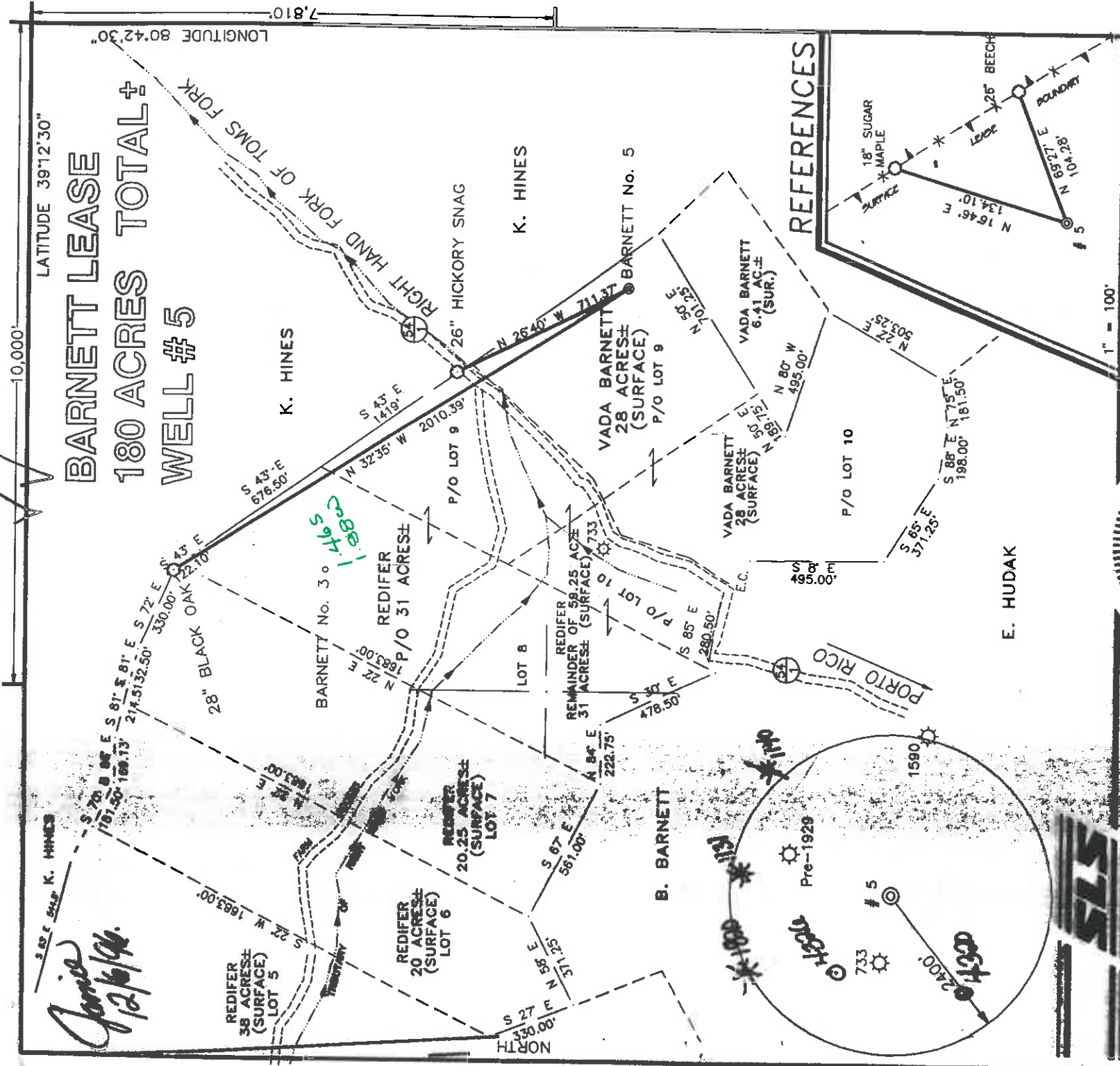
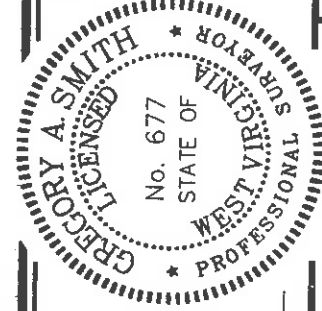


James
12/16/96



I THE UNDERSIGNED, 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.

P.S. *Gregory A. Smith*
677



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS.

DATE NOVEMBER 11, 19 96
OPERATORS WELL NO. BARNETT # 5
API WELL NO. 47-017-04328
STATE 47 COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1 / 200 FILE NO. 3350P5 (58-64)
PROVEN SOURCE OF ELEVATION JUNCTION OF ROADS ELEVATION 1003' SCALE 1" = 500'

WELL TYPE : OIL GAS INJECTION WASTE DISPOSAL "GAS" PRODUCTION STORAGE DEEP SHALLOW
LOCATION : ELEVATION 1156' WATERSHED RIGHT HAND FORK OF LITTLE TOMS FORK

DISTRICT NEW MILTON COUNTY DODDRIDGE QUADRANGLE NEW MILTON 7.5'
SURFACE OWNER VADA BARNETT ACREAGE 28 OF 59.25
ROYALTY OWNER VADA BARNETT ET AL. LEASE ACREAGE 59.25 OF 180

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) ALEXANDER TARGET FORMATION 5600' ESTIMATED DEPTH 5600'

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



STATE OF WEST VIRGINIA
DEPARTMENT OF ENERGY
OIL AND GAS DIVISION

PERMIT 47-017-04328

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



Well Operator's Report of Well Work

Farm name: BARNETT, VADA

Operator Well No. : BARNETT #5

1997

LOCATION: Elevation: 1,158.00

Quadrangle: NEW MILTON

Permitting
Office of Oil & Gas

District: NEW MILTON
Latitude: 7810 Feet South of 39 Deg. 12 Min. 30 Sec.
Longitude: 10000 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: 12/13/96
Well Work Commenced: 1/2/97
Well Work Completed: 1/16/97

Verbal Plugging
Permission granted on: _____
Rotary X Cable Rig
Total Depth (feet) 5500'
Fresh water depths (ft) None
Salt water depths (ft) 557'

Casing & Tubing Size	Used in Drilling	Left In Well	Cement Fill Up Cu. Ft.
11 3/4"	129	129	70 sks To Surface
8 5/8"	2034.5	2034.5	595 sks To Surface
4 1/2"	5475	5475	460 sks
2 3/8"		5273	

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

OPEN FLOW DATA
Warren
Speechley
Balltown
Rileys
Benson

3366' - 3423'
3434' - 3656'
3682' - 4451'
4543' - 4954'
5022' - 5036'

Producing formation Alexander
Gas: Initial open flow 21 MCF / d
Final open flow 1,492 MCF / d
Time of open flow between initial and final tests N/A
Static rock pressure 1550 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: 4-22-97

47-17-04328-001

Barnett #5 (47-017-04328)
Four Stage Foam Frac - Halliburton

1st Stage:	Alexander (12 holes) (5293.75' - 5378.25')	60 Quality Foam. 500 gal. 15% HCL. 40,000# 20/40 sand, 421,000 SCF N2. 623 bbis foam.
2nd Stage:	Benson (5 holes) (5027' - 5028') Third Riley (7 holes) (4925' - 4938.25')	60 Quality Foam. 750 gal 15% HCL. 40,000# 20/40 sand, 417,000 SCF N2. 618 bbis foam.
3rd Stage:	Riley (6 holes) (4577.75' - 4587.25') Balltown (6 holes) (4142' - 4163')	60 Quality Foam. 1000 gal 15% HCL. 5,000# 80/100 sand, 35,000# 20/40 sand, 438,000 SCF N2, 647 bbis foam.
4th Stage:	Speachley (11 holes) (3439.75' - 3552') Warren (4 holes) (3402.75' - 3411.5')	60 Quality Foam, 1,000 gal 15% HCL. 5,000# 80/100 sand, 55,000# 20/40 sand, 522,000 SCF N2, 779 bbis foam.

WELL LOG

Clay	0	12	
Sand & Shale	12	76	
Red Rock	76	79	
Lime & Sand & Shale	79	378	
Red Rock & Sand & Shale	378	1213	Damp @ 557'
Sand & Shale	1213	1298	
White Sand	1298	1376	
Sand & Shale	1376	1847	
Sand	1847	1885	
Sand & Shale	1885	2007	
Little Lime	2007	2018	
Sand & Shale	2018	2059	
Big Lime	2059	2134	
Big Injun	2134	2188	
Shale	2188	2317	
Weir	2317	2422	
Shale	2422	2520	
Berea	2520	2532	
Sand & Shale	2532	2730	
Gordon	2730	2758	
Shale	2758	3366	
Warren	3366	3423	
Shale	3423	3434	
Speachley	3434	3656	
Shale	3656	3682	
Balltown	3682	4451	
Shale & Sand	4451	4543	
Riley	4543	4614	
Shale	4614	4908	
3rd Riley	4908	4954	
Shale	4954	5022	
Benson	5022	5036	
Sand & Shale	5036	5147	
Elk	5147	5176	
Sand & Shale	5176	5268	
Alexander	5268	5380	
Shale	5380	5500	
T.D.	5500		

Gas Checks

2529	NO SHOW
3022	4/10ths ½" w/H ² O
3702	14/10ths ½" w/H ² O
4539	18/10ths ½" w/H ² O
4847	12/10ths ½" w/H ² O
5126	6/10ths 1" w/H ² O
5500	4/10ths 1" w/H ² O
	Collars 4/10ths 1" w/H ² O

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

1) Well Operator: KEY OIL COMPANY 25658 (D) S11
 Operator's Well Number: BARNETT #5 3) Elevation: 1158'

Well type: (a) Oil X / or Gas X / Drilled 12/13/96
 (b) If Gas: Production X / Underground Storage / Explos 12/13/98
Deep / Shallow X /

Proposed Target Formation(s): ALEXANDER ⁴³⁹

Proposed Total Depth: 5600 feet

7) Approximate fresh water strata depths: 100'

8) Approximate salt water depths: 1491'

9) 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 New Well

12)

CASING AND TUBING PROGRAM

TYPE	SIZE	GRADE	WEIGHT PER FT. DRILLING	FOOTAGE INTERVALS	CEMENT
Conductor					
Fresh Water	11 3/4	ERW	42	132	70 SKS. TO SURFACE
Coal					
Intermediate	8 5/8	ERW	23	1660	450 SKS. TO SURFACE
Production	4 1/2	J-55	10.5	5500	450 SKS.
Tubing	1.5				
Liners					

PACKERS : Kind _____ Sizes _____ Depths set _____
 I/EC 0 2 1996

For Office of Oil and Gas Use Only
 Fee(s) paid: Well Work Permit Reclamation Fund WPCP
 Plat WW-9 Bond Agent
 (Type)

RECEIVED
 WV Division of Environmental Protection

1) Date: NOVEMBER 27, 1996
2) Operator's well number BARNETT #5
3) API Well No: 47-017-4328
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
 (a) Name VADA BARNETT Name NONE
 Address 301 BAKER LANE, APT. 3102 Address _____
CHARLESTON, WV 25302
 (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.

RECEIVED
 WV Division of
 Environmental Protection

Well Operator KEY OIL COMPANY
 By: [Signature]
 Its: PRESIDENT
 Address 22 GARTON PLAZA JFC 0-2-1996
WESTON, WV 26452

Subscribed and sworn before me this 27TH day of NOVEMBER, 1996 Permitting
Office of Oil & Gas

My commission expires MARCH 24, 2003

