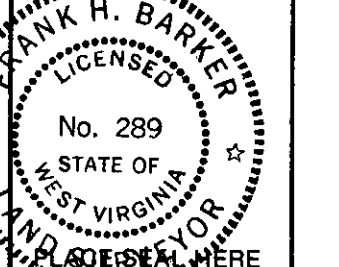


LOCATION REFERENCE
 (+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS

FILE NO. _____
 DRAWING NO. _____
 SCALE 1" = 2000
 MINIMUM DEGREE OF ACCURACY 1:10000
 PROVEN SOURCE OF ELEVATION WELL RAL 818
PKE # 15ADS EL. 2520

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.
 (SIGNED) Frank H. Barker
 R.P.E. _____ L.L.S. 289



STATE OF WEST VIRGINIA
 DEPARTMENT OF ENERGY
 OIL AND GAS DIVISION



DATE JULY 15 19 93
 OPERATOR'S WELL NO. 28-BDS
 API WELL NO. 47-081-0961
 STATE COUNTY PERMIT

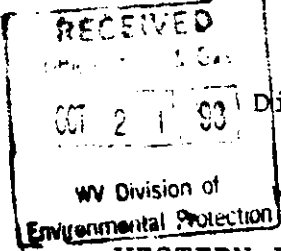
WELL TYPE: OIL ___ GAS X LIQUID INJECTION ___ WASTE DISPOSAL ___
 (IF "GAS,") PRODUCTION ___ STORAGE ___ DEEP ___ SHALLOW X
 LOCATION: ELEVATION 2294 WATER SHED BEETREE BR.
 DISTRICT MARSH FORK 2 COUNTY RALEIGH
 QUADRANGLE DOROTHY ECCLES NW

SURFACE OWNER WESTERN POCAHONTAS PROPERTIES LTD. ACREAGE 8218.47
 OIL & GAS ROYALTY OWNER TOTAL MINATOME LEASE ACREAGE 8218.47
 LEASE NO. _____

PROPOSED WORK: DRILL X CONVERT ___ DRILL DEEPER ___ REDRILL ___ FRACTURE OR STIMULATE ___ PLUG OFF OLD FORMATION ___ PERFORATE NEW FORMATION ___ OTHER PHYSICAL CHANGE IN WELL (SPECIFY) _____
AUG 13 1993

PLUG AND ABANDON ___ CLEAN OUT AND REPLUG ___
 TARGET FORMATION DEVONIAN SHALE ESTIMATED DEPTH 5950 FT.
 WELL OPERATOR PEAKE OPERATING COMPANY DESIGNATED AGENT TDM LIBERATORE
 ADDRESS P.O. BOX 8 669 ADDRESS P.O. BOX 8
RAVENSWOOD, WV. 26164 RAVENSWOOD, WV. 26164

COUNTY NAME
 PERMIT



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

Well Operator's Report of Well Work

Farm name: WESTERN POCAHONTAS PROP. Operator Well No.: 28-BDS

LOCATION: Elevation: 2,294.00 Quadrangle: DOROTHY

District: MARSH FORK County: RALEIGH
Latitude: 12800 Feet South of 37 Deg. 57Min. 30 Sec.
Longitude 3300 Feet West of 81 Deg. 27 Min. 30 Sec.

Company: PEAKE OPERATING COMPANY
P.O. BOX 8
RAVENSWOOD, WV 26164-0008

Agent: THOMAS S. LIBERATORE

Inspector: RODNEY DILLON
Permit Issued: 08/11/93
Well work Commenced: 08/19/93
Well work Completed: 08/28/93
Verbal Plugging
Permission granted on:
Rotary X Cable _____ Rig _____
Total Depth (feet) 5989'
Fresh water depths (ft) 128', 530'

Salt water depths (ft) 2036'

Is coal being mined in area (Y/N)? N
Coal Depths (ft): 150'

Casing & Tubing Size	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
13 3/8"	30'	30'	
9 5/8"	759'	759'	265 sks Class A
7"	2457'	2457'	370 sks Class A
4 1/2"	5925'	5925'	200 sks Pozmix
2 3/8"	5775'	5775'	

OPEN FLOW DATA

Producing formation Gordon Siltstone Pay zone depth (ft) 4203-15
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

Second producing formation Dev. Brown Shal Pay zone depth (ft) 5070-5805
Gas: Initial open flow - MCF/d Oil: Initial open flow 0 Bbl/d
Final open flow 984 MCF/d Final open flow 0 Bbl/d
Time of open flow between initial and final tests 4 Hours
Static rock Pressure 890 psig (surface pressure) after 72 Hours

* Rock pressures and open-flows are combined.

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.

Thomas S. Liberatore

For: PEAKE OPERATING COMPANY

By: Thomas S. Liberatore

Date: 10/19/93

OCT 27 1993

Reviewed TMB
Permitted

FORM WR-35
(Reverse)

PERMIT #: 47-081-00961
CO. WELL #: #28-BDS
ELEVATION: 2294 GL 2304 KB

DETAILS OF PERFORATIONS, FRACTURING, OR PHYSICAL CHANGE, ETC.

09/13/93: PERFORATED THE SHALE FROM 5070-5805 USING 50 HOLES.
09/14/93: NITROGEN-FRAC'D THE SHALE USING 2.5 MMSCF OF NITROGEN,
AT AN AVG. INJECTION RATE OF 90,000 SCF/MIN.
09/20/93: PERFORATED THE GORDON FROM 4203-4215 USING 35 HOLES.
FOAM-FRAC'D THE GORDON USING 46,000 LBS. OF SAND,
521,000 SCF OF NITROGEN AND 240 BBL WATER.

WELL LOG (all depths taken from KB)

ROCK TYPE OR FORMATION	TOP	BOTTOM	REMARKS
SAND & SHALE	0	103	
SAND	103	149	WTR.@ 128'
COAL	149	151	
SAND	151	402	
SHALE & SAND	402	600	
SAND	600	710	
SHALE	710	930	
SAND	930	970	
SAND & SHALE	970	1398	
SAND	1398	1513	
SHALE	1513	1642	
SALT SANDS	1642	2074	WTR.@ 2036'
SHALE	2074	2452	
AVIS LIME	2452	2485	
SHALE	2485	2950	
LOWER MAXTON SAND	2950	3034	
LITTLE LIME (REYNOLDS)	3034	3123	
BIG LIME (GREENBRIER)	3123	3443	S/GAS: 3240'
SHALE	3443	3543	
WEIR SAND	3543	3724	S/GAS: 3650'
SHALE	3724	3920	
COFFEE SHALE (SUNBURY)	3920	3936	
BEREA HORIZON	3936	3944	
SHALE	3944	4202	
GORDON	4202	4221	
SHALE	4221	5083	
BROWN SHALE (LOWER HURON)	5083	5814	S/GAS: 5112'
SHALE (JAVA)	5814	5989	
TOTAL DEPTH (LOGGERS)	5989		

DF-822

DFT-813

60441

17709

RECEIVED
FORM WW-28
Division of
Mental Protection

JUL 26 1993

Permitting
Office of Oil & Gas

081-0961
Issued 8/11/93
Page 3 of 7
Expires 8/11/95

STATE OF WEST VIRGINIA
DEPARTMENT OF ENERGY, DIVISION OF OIL AND GAS

WELL WORK PERMIT APPLICATION

- 1) Well Operator: ⁶⁶⁹ Peake Operating Co. (37100) (2) 325
- 2) Operator's Well Number: #28-BDS 3) Elevation: 2294
- 4) Well type: (a) Oil ___ / or Gas X /
(b) If Gas: Production X / Underground Storage ___ /
Deep ___ / Shallow X /
- 5) Proposed Target Formation(s): ⁴⁴¹ Gordon & Devonian Shale
- 6) Proposed Total Depth: 5950 feet
- 7) Approximate fresh water strata depths: 600' (+)
- 8) Approximate salt water depths: 1700'
- 9) Approximate coal seam depths: well on old Dorothy seam Strip Bench
Winifred @ 35'; Lo. Hernshaw @ 240'
- 10) Does land contain coal seams tributary to active mine? Yes ___ / No X /
- 11) Proposed Well Work: to drill a new well; stimulate by fracturing
- 12)

CASING AND TUBING PROGRAM

TYPE	SPECIFICATIONS			FOOTAGE INTERVALS		CEMENT
	Size	Grade	Weight per ft.	For drilling	Left in well	Fill-up (cu. ft.)
Conductor	12 3/4"	H-40	42#	30'	30'	
Fresh Water	9 5/8"	H-40	32#	750'	750'	C.T.S.
Coal						38CSR18-11.3 38CSR18-11.2-2
Intermediate	7"	J-55	17#	2350'	2350'	C.T.S.
Production	4 1/2"	J-55	10.5#	5950'	5950'	200 sx +
Tubing						38CSR18-11.1
Liners						

PACKERS : Kind _____
Sizes _____
Depths set _____

For Division of Oil and Gas Use Only

328586
14

Fee(s) paid: Well Work Permit Reclamation Fund WPCP
 Plat WW-9 WW-2B Bond Surety Blanket Agent
(Type)

NO 2 5 83
Permitting
Office of Oil & Gas

- 1) Date: July 20, 1993
- 2) Operator's well number
28-BDS
- 3) API Well No: 47 - 081 - 0961
State - County - Permit

STATE OF WEST VIRGINIA
DEPARTMENT OF ENERGY, DIVISION OF OIL AND GAS

NOTICE AND APPLICATION FOR A WELL WORK PERMIT

- 4) Surface Owner(s) to be served:
 - (a) Name Western Pocahontas Prop.
Address P.O. Box 2827
Huntington, WV 25727
 - (b) Name _____
Address _____
 - (c) Name _____
Address _____
- 5) (a) Coal Operator:
 - Name Elk Run Coal Co. ATT:Gary Stover
Address P.O. Box 497
Sylvester, WV
 - (b) Coal Owner(s) with Declaration
Name Western Pocahontas Properties
Address P.O. Box 2827
Huntington, WV 25727
 - Name _____
Address _____
 - (c) Coal Lessee with Declaration
Name Black King Mine Development
Address P.O. Box 750
Dunbar, WV 25064
ATT: T.E. Comer
- 6) Inspector Rodney Dillon
Address P.O. Box 131
Bradley, WV 25818
Telephone (304)- 877-2912

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
X 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)
X 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 Pease Operating Company
By: Thomas J. Sheraton
Its: General Manager
Address P.O. Box 8
Ravenswood, WV 26164
Telephone (304) 273-5371

Subscribed and sworn before me this 20 day of July, 1993

Stephen W Kelly Notary Public
My commission expires October 28, 1993