

87 9/14/87

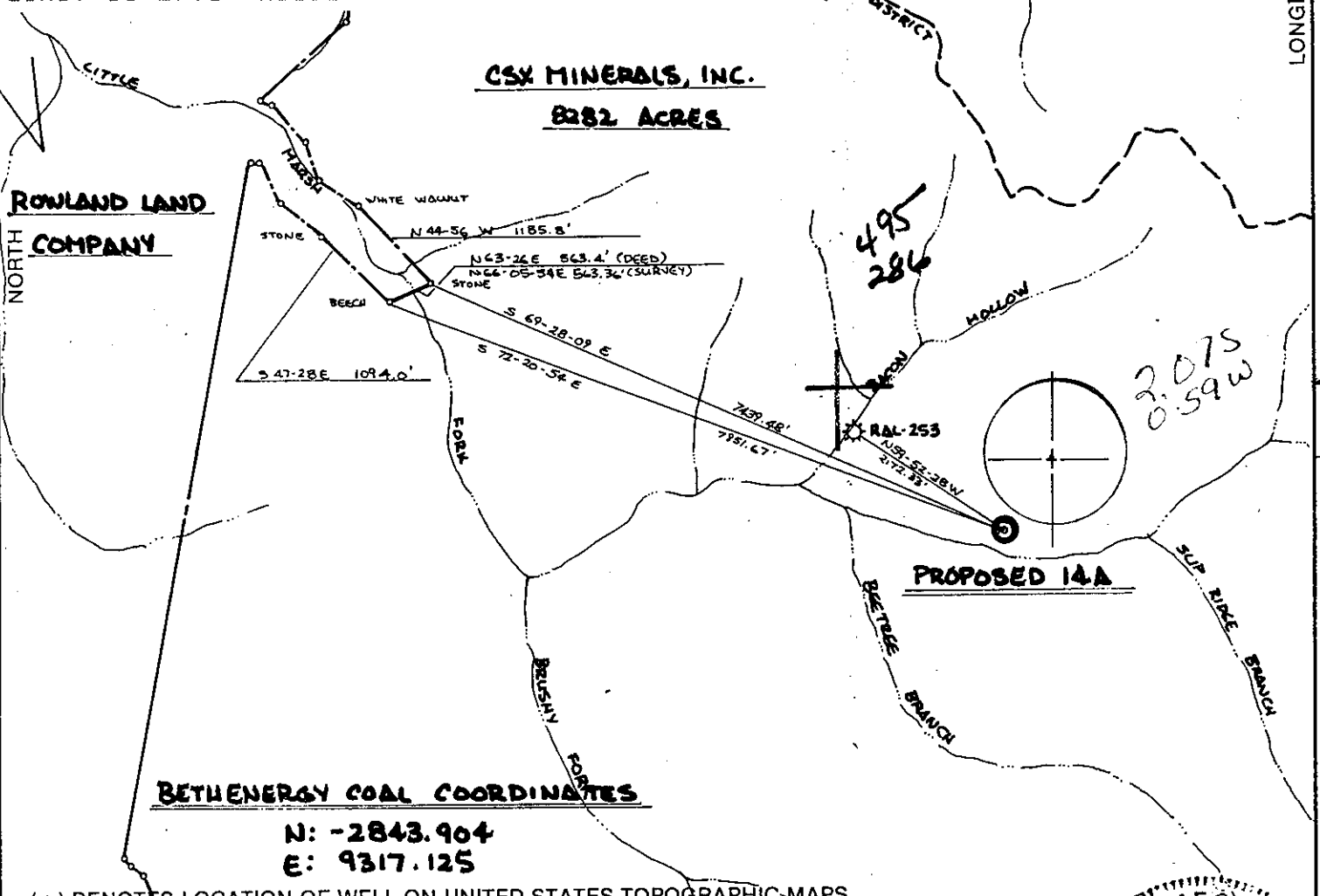
38 3130'
30

LATITUDE 37° 57' 30"

LONGITUDE 81° 27' 30"

REFERENCES
1" = 50'

CO: 081 FMT: 800
Loc Disitized from OGIS 7.5' Mylar
QUAD: 325 DATE: 9-FEB-90
LAT: 37 57.5 Miles South: 2.05
LONG: 81 27.5 Miles West : 0.62

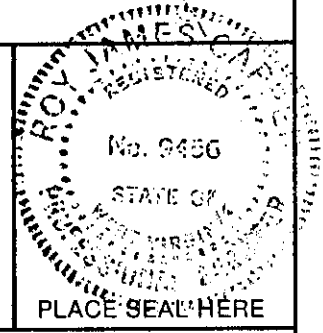


BETHENERGY COAL COORDINATES
N: -2843.904
E: 9317.125

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

FILE NO. POC 081-DS14
 DRAWING NO. _____
 SCALE 1" = 2000'
 MINIMUM DEGREE OF ACCURACY 1 IN 10000
 PROVEN SOURCE OF ELEVATION EXISTING WELL
RAL-253 (1608.01')

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) Ray James Capper
 R.P.E. 8456 L.L.S. _____



STATE OF WEST VIRGINIA
 DEPARTMENT OF ENERGY
 OIL AND GAS DIVISION



DATE 1 SEPTEMBER, 19 87
 OPERATOR'S WELL NO. DOROTHY #14A
 API WELL NO. _____
47 081 0800
 STATE COUNTY PERMIT

WELL TYPE: OIL ___ GAS LIQUID INJECTION ___ WASTE DISPOSAL ___
 (IF "GAS,") PRODUCTION STORAGE ___ DEEP ___ SHALLOW
 LOCATION: ELEVATION 1680.13 WATER SHED LITTLE MARSH FORK
 DISTRICT MARSH FORK COUNTY RALEIGH
 QUADRANGLE DOROTHY 7.5' 325 036 1 9 celes nw
 SURFACE OWNER CSX MINERALS, INC. ACREAGE 8282
 OIL & GAS ROYALTY OWNER CSX MINERALS, INC. LEASE ACREAGE 8282
 LEASE NO. _____
 PROPOSED WORK: DRILL CONVERT ___ DRILL DEEPER ___ REDRILL ___ FRACTURE OR
 STIMULATE PLUG OFF OLD FORMATION ___ PERFORATE NEW
 FORMATION ___ OTHER PHYSICAL CHANGE IN WELL (SPECIFY) _____

PLUG AND ABANDON ___ CLEAN OUT AND REPLUG ___
 TARGET FORMATION _____ ESTIMATED DEPTH _____
 WELL OPERATOR PEAKE OPERATING CO. DESIGNATED AGENT TIMOTHY K. WILCOX
 ADDRESS 423 CNB PLAZA ADDRESS 423 CNB PLAZA
CHARLESTON, WV 25301 669 CHARLESTON, WV 25301

OCT 5 1987

COUNTY NAME
PERMIT

W-35



RECEIVED
NOV 17 1987

DIVISION OF OIL & GAS
DEPARTMENT OF ENERGY

State of West Virginia
DEPARTMENT OF ENERGY
Oil and Gas Division

Date 11/9/87
Operator's
Well No. #14-ADS
Farm Dorothy-Sarita
API No. 47 - 081 - 800

WELL OPERATOR'S REPORT
OF

DRILLING, FRACTURING AND/OR STIMULATING, OR PHYSICAL CHANGE

WELL TYPE: Oil / Gas X / Liquid Injection / Waste Disposal /
(If "Gas," Production X / Underground Storage / Deep / Shallow X /)

LOCATION: Elevation: 1680' Watershed Little Marsh Fork
District: Marsh Fork County Raleigh Quadrangle Dorothy 7-1/2

COMPANY Peake Operating Company
ADDRESS 423 Charleston National Plaza
Charleston, WV 25301
DESIGNATED AGENT Timothy K. Wilcox
ADDRESS Same
SURFACE OWNER CSX Minerals Inc.
ADDRESS Huntington, WV
MINERAL RIGHTS OWNER Same
ADDRESS
OIL AND GAS INSPECTOR FOR THIS WORK
Rodney Dillon ADDRESS Sophia, WV
PERMIT ISSUED 9/28/87
DRILLING COMMENCED 10/13/87
DRILLING COMPLETED 10/21/87

Casing & Tubing	Used in Drilling	Left in Well	Cement fill up Cu. ft.
Size 20-16 Cord.	20	20	CTS
13-10"			
9 5/8	461	461	175 sks.
8 5/8			
7	1591	1591	200 sks.
5 1/2			
4 1/2	5298	5298	115 sks.
3			(foam cat)
2			
Liners used			

IF APPLICABLE: PLUGGING OF DRY HOLE ON CONTINUOUS PROGRESSION FROM DRILLING OR REWORKING. VERBAL PERMISSION OBTAINED ON

GEOLOGICAL TARGET FORMATION Lower Huron Depth 4920-5197 feet
Depth of completed well 5342 feet Rotary X / Cable Tools
Water strata depth: Fresh 50 feet; Salt 1340 feet
Coal seam depths: 89' Is coal being mined in the area? No

OPEN FLOW DATA
Producing formation Devonian Shale (L. Huron) Pay zone depth 4532-5175 feet
Gas: Initial open flow 7 (net) Mcf/d Oil: Initial open flow Bbl/d
Final open flow 793 comingled Mcf/d Final open flow Bbl/d
Time of open flow between initial and final tests 4 hours
Static rock pressure psig (surface measurement) after hours shut in
(If applicable due to multiple completion--)
Second producing formation Gordon Pay zone depth 3576-3594 feet
Gas: Initial open flow Mcf/d Oil: Initial open flow Bbl/d
Final open flow 793 comingled Mcf/d Oil: Final open flow Bbl/d
Time of open flow between initial and final tests 4 hours
Static rock pressure 640# psig (surface measurement) after 24 hours shut in

(Continue on reverse side)

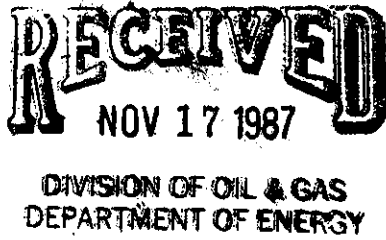
NOV 23 1987

DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC.

Perforated Devonian Shale with 30 holes from ^{Huron} 4532-5175.
 Nitrogen Frac: 1000 gal. 15% HCL, 1.8 MM SCFN₂, 10 perf balls.
 No clean break; ATP 2750#, ISIP 2200#, 15 min. SIP 1800#.

Perforated Gordon 16 holes, 3579 to 3589.
 75 Q Foam frac with 500 gal. 15% HCL; 60,000# of 20/50 sand; 450 MCFN₂; 263 total fluid (including acid). BDP 1600#, ATP 1640#, ISIP 925#, 15 min. SIP 700#.

WELL LOG

FORMATION	COLOR	HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS Including indication of all fresh and salt water, coal, oil and gas
Sandstone			0	390	
Sand & Shale			390	890	
Sandstone			890	1498	
Sand & Shale			1498	1688	
Sandstone			1688	1748	
Shale			1748	1870	
Limestone			1870	1903	
Sand & Shale			1903	2351	
Sandstone			2351	2439	
Pencil Cave			2439	2450	
Big Lime			2450	2840	
MacCraday			2840	2927	
Sandy Shale			2927	3094	
Weir			3094	3148	
Sandy Shale			3148	3356	
Sunbury Shale			3356	3372	
Berea			3372	3403	
Sandy Shale			3403	3576	
Gordon			3576	3594	
Devonian Shale			3594	4532	
Lower Huron			4532	5197	
Devonian Shale			5197	5342	
TD		arg. @TD.	5342		

Gas checks:
 2460 - No show
 2675 - No show
 2856 - 65/10 W 1" = 85 MCFD
 3626 - 16/10 W 1" = 42 MCFD
 4604 - 6/10 W 1" = 26 MCFD
 5030 - 10/10 W 1" = 33 MCFD
 TD - 10/10 W 1" = 33 MCFD

(Attach separate sheets as necessary)

PEAKE OPERATING COMPANY

Well Operator

By:

Date:

J. J. Seebler
 11-16-87

Note: Regulation 2.02(i) provides as follows:
 "The term 'log' or 'well log' shall mean a systematic detailed geological record of all formations, including coal, encountered in the drilling of a well."



1) Date: 10 SEPT 19 87
2) Operator's Well No. DOROTHY SARITA # 14-ADS
3) API Well No. 47 081 0800
State County Permit

RECEIVED SEP 11 1987

DIVISION OF OIL & GAS DEPARTMENT OF ENERGY

STATE OF WEST VIRGINIA DEPARTMENT OF ENERGY, OIL AND GAS DIVISION APPLICATION FOR A WELL WORK PERMIT

- 4) WELL TYPE: A Oil / Gas X
B (If "Gas", Production X / Underground storage / Deep / Shallow X)
5) LOCATION: Elevation: 1680 Watershed: LITTLE MARSH FORK
District: MARSH FORK 2 County: RALEIGH 081 Quadrange: DOROTHY 7 1/2' 325
6) WELL OPERATOR PEAKE OPERATING CODE: 37100 7) DESIGNATED AGENT T K WILCOX
Address 423 CHARLESTON NATL PLAZA Address SAME
CHARLESTON WV 25301
8) OIL & GAS INSPECTOR TO BE NOTIFIED Name RODNEY DILLON Address BOX 1526 SOPHIA WV 25921
9) DRILLING CONTRACTOR: Name UNKNOWN Address
10) PROPOSED WELL WORK: Drill X / Drill deeper / Redrill / Stimulate X
Plug off old formation / Perforate new formation
Other physical change in well (specify)
11) GEOLOGICAL TARGET FORMATION, DEVONIAN SHALE 401
12) Estimated depth of completed well, 5310 feet
13) Approximate trata depths: Fresh, 430 feet; salt, 750 feet.
14) Approximate coal seam depths: 160, 205 Is coal being mined in the area? Yes / No X

15) CASING AND TUBING PROGRAM

Table with columns: CASING OR TUBING TYPE, SPECIFICATIONS (Size, Grade, Weight per ft., New, Used), FOOTAGE INTERVALS (For drilling, Left in well), CEMENT FILL-UP OR SACKS (Cubic feet), PACKERS. Includes handwritten entries for Conductor, Fresh water, Coal, Intermediate, Production, Tubing, and Liners.

OFFICE USE ONLY DRILLING PERMIT

Permit number 47-081-0800 Date September 28, 19 87

This permit covering the well operator and well location shown below is evidence of permission granted to drill in accordance with the pertinent legal requirements subject to the conditions contained herein and on the reverse hereof. Notification must be given to the District Oil and Gas Inspector, (Refer to No. 8) Prior to the construction of roads, locations and pits for any permitted work. In addition, the well operator or his contractor shall notify the proper district oil and gas inspector 24 hours before actual permitted work has commenced.)

The permitted work is as described in the Notice and Application, plat, and reclamation plan, subject to any modifications and conditions specified on the reverse hereof. Permit expires September 28, 1989 unless well work is commenced prior to that date and prosecuted with due diligence.

Table with columns: Bond, Agent, Fee (230), WECT, Other. Includes handwritten signatures and initials.

NOTE: Keep one copy of this permit posted at the drilling location. Director, Division of Oil and Gas File

See the reverse side of the APPLICANT'S COPY for instructions to the well operator.