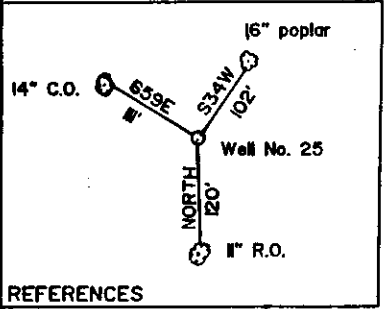
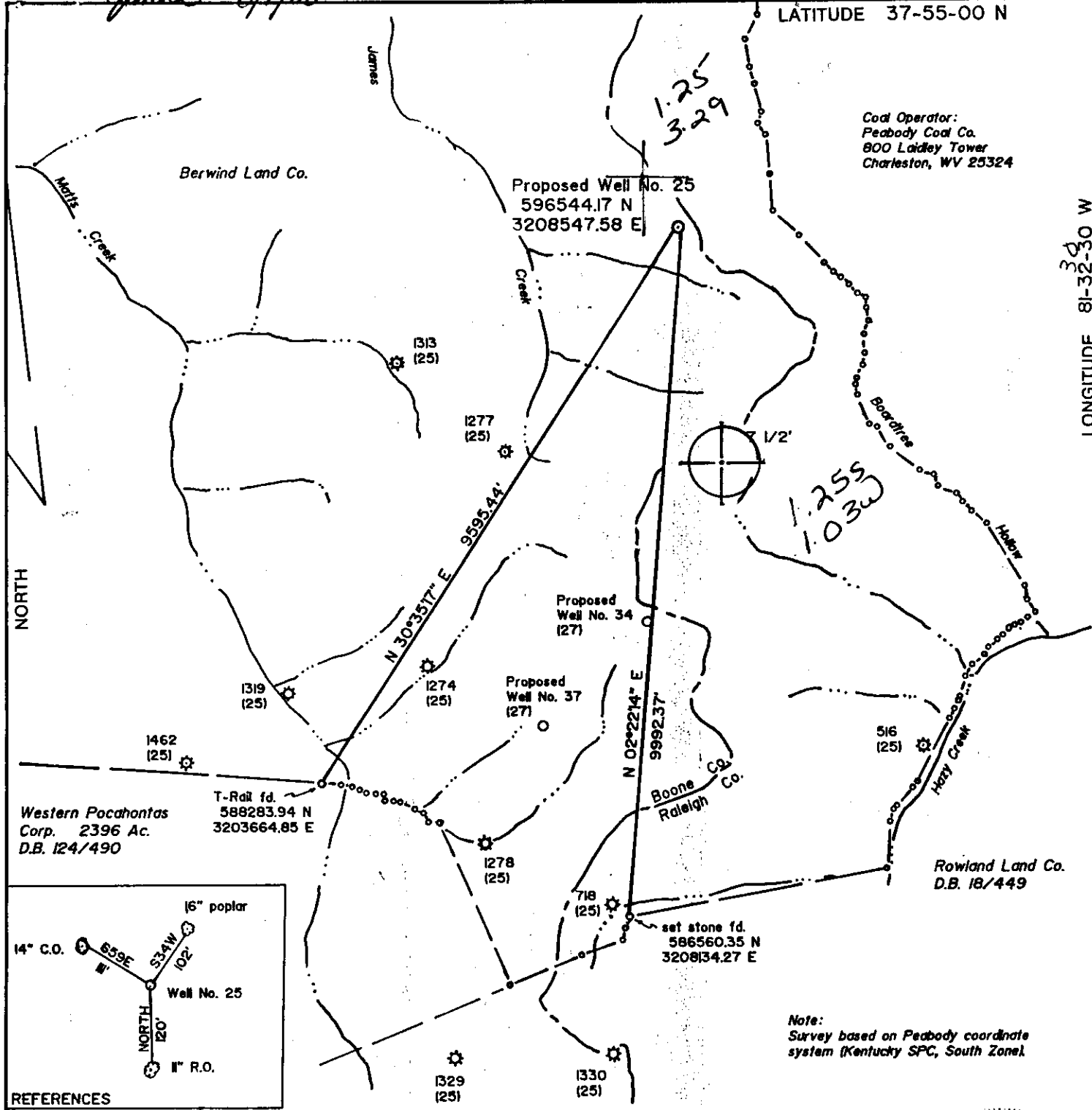


Janie 8/1/88

5490

LATITUDE 37-55-00 N

Coal Operator:
Peabody Coal Co.
800 Laidley Tower
Charleston, WV 25324



Note:
Survey based on Peabody coordinate system (Kentucky SPC, South Zone).

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

FILE NO. _____
DRAWING NO. 1
SCALE 1" = 2000'
MINIMUM DEGREE OF ACCURACY 1 in 5000
PROVEN SOURCE OF ELEVATION Peabody Sta. M-63
6250' NW of Location: elev. 2208.89

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) David L. Jackson
R.P.E. _____ L.L.S. 708

PLACE SEAL HERE

STATE OF WEST VIRGINIA
DEPARTMENT OF ENERGY
OIL AND GAS DIVISION



DATE July 12, 19 88
OPERATOR'S WELL NO. 25
API WELL NO. _____

WELL TYPE: OIL _____ GAS X LIQUID INJECTION _____ WASTE DISPOSAL _____
(IF "GAS,") PRODUCTION X STORAGE _____ DEEP _____ SHALLOW X
LOCATION: ELEVATION 2309 WATER SHED James Creek
DISTRICT Crook 1 COUNTY Boone
QUADRANGLE Whitesville 2 1/2' 677 006 6 Bald Knob EC
SURFACE OWNER Berwind Land Company ACREAGE 8044
OIL & GAS ROYALTY OWNER Berwind Land Company LEASE ACREAGE 8044
LEASE NO. 8391

PROPOSED WORK: DRILL X 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 Berea ESTIMATED DEPTH 4345
WELL OPERATOR Natural Resource Management Corp. DESIGNATED AGENT Dave Cash, Natural Resource Management Corp.
ADDRESS 681 Andersen Drive, Foster Plaza VI ADDRESS 312 Sixth Ave.
Pittsburgh, PA 15220 1049 Charleston, WV 25303

AUG 5 - 1988

6-6 unnamed (0)

H.T. HALL 98673 FORM WW-6

COUNTY NAME PERMIT



State of West Virginia
DEPARTMENT OF ENERGY
Division of Oil and Gas

Well Operator's Report of Well Work

Farm name: BERWIND LAND CO. Operator Well No.: BERWIND LAND#25

LOCATION: Elevation: 2309.00 Quadrangle: WHITESVILLE

District: CROOK County: BOONE
Latitude: 6690 Feet South of 37 Des. 55Min. 0 Sec.
Longitude 5490 Feet West of 81 Des. 32 Min. 30 Sec.

Company: NATURAL RESOURCE MANAGEME
681 ANDERSON DR. FOSTER PLAZA
PITTSBURGH, PA

Agent: DAVE CASH

Inspector: JERRY HOLCOMB
Permit Issued: 08/03/88
Well work Commenced: 08/07/88
Well work Completed: 08/13/88

Verbal Pluggings
Permission granted on: _____
Rotary Cable _____ Ris _____
Total Depth (feet) 4342 DTD
Fresh water depths (ft) 270
Salt water depths (ft) _____
None Reported
Is coal being mined in area (Y/N)? Y
Coal Depths (ft): 110, 310, 443, 520, 541, 256,
1060, 1241.

Size	Used in	Left	Cement
	&		Fill Up
	Tubing	Drilling	in Well
			Cu. Ft.
13-3/8"	30'	-	-
9-5/8"	1290'	1290'	425
			SX
4-1/2"	4208'	4208'	75
			SX

OPEN FLOW DATA

Producing formation WEIR Pay zone depth (ft) 3990
Gas: Initial open flow 1000 MCF/d Oil: Initial open flow _____ Bbl/d
Final open flow 1200 MCF/d Final open flow _____ Bbl/d
Time of open flow between initial and final tests _____ Hours
Static rock Pressure 670 psig (surface pressure) after 72 Hours

Second producing formation _____ Pay zone depth (ft) _____
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

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.

Paul J. Shuleski
For: NATURAL RESOURCE MANAGEMENT CORP.

By: Paul J. Shuleski, Regional Geology Manager
Date: 10/21/88

DETAILS OF PERFORATED INTERVALS, FRACTURING, PHYSICAL CHANGES

Spotted 500 gal. 15% HCL and 500 gal. MEOH. Perforated 3985'-3994' with 12 holes. Pumped 345 bbls. water, 24,000# 20/40 sand and 250 SCFN₂/bbl. BDP = 2900 psi, AIR = 11 BPM, AIP = 1245 psi. Spotted 500 gal. 15% HCL and 500 gal. MEOH. Perforated 3811'-3855' with 20 holes. Pumped 391 bbls. water, 40,000# 20/40 sand and 250 SCFN₂/bbl. BDP = 660 psi, AIR = 21.2 BPM, AIP = 1375 psi.

WELL LOG

FORMATION COLOR HARD/SOFT : TOP FEET : BOTTOM FEET : REMARKS

DRILLER'S LOG:					
Sand and shale	0	2035	2035	GC @ 3757' - NS	
Shale	2035	2070	2070	GC @ 3974' - 103M	
Salt Sand	2070	2360	2360	GC @ 4032' - 440M	
Sand and shale	2360	2840	2840	GC @ TD - 1000M	
Maxton Sand	2840	3275	3275		
Lime	3275	3720	3720		
Sand and Shale	3720	4000	4000		
Shale	4000	4342	4342		
DTD	4342				
LTD	4338				
CDL:					
Princeton SS:	2538	2618	2549		
Ravencleft SS:	2618	2776	2676		
Avia LS:	2776	2929	2811		
Maxton SS:	2929	3310	3025		
Little Lime:	3310	3378	3367		
Big Lime	3378	3811	3726		
Upper Weir SS:	3811	3932	3867		
Lower Weir SS:	3932	4181	3993		
Sunbury Sh:	4181	4193	4193		
Berea SS:	4193		4204		

005-1488
 Drilled 8/3/88 Spun 8/3/90

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

34550, 1, C76

- 1) Well Operator: Natural Resource Management Corporation
- 2) Operator's Well Number: Berwind Land #25 3) Elevation: 2309'
- 4) Well type: (a) Oil / or Gas X/
 (b) If Gas: Production X/ Underground Storage /
 Deep / Shallow X/
- 5) Proposed Target Formation(s): BEREA
- 6) Proposed Total Depth: 4345 feet
- 7) Approximate fresh water strata depths: 290', 545'
- 8) Approximate salt water depths: None reported
- 9) Approximate coal seam depths: 61', 113', 300', 433', 510', 530', 746', 1057', 1238'
- 10) Does land contain coal seams tributary to active mine? Yes X/ No /
- 11) Proposed Well Work: DRILL & Stimulate New Well
- 12)

CASING AND TUBING PROGRAM

TYPE	SPECIFICATIONS			FOOTAGE INTERVALS		CEMENT
	Size	Grade	Weight per ft.	For drilling	Left in well	
Conductor	13-3/8"		48	30'	30'	
Fresh Water						38CSR10-11.3 38CSR10-11.2.2
Coal	9-5/8"		32.3	1293'	1293'	CTS
Intermediate	7"		20	2525'	2525'	100 SKS
Production	4-1/2"		10.5	4345'	4345'	38CSR10-11.1 As required
Tubing						
Liners						

RECEIVED
 JUL 28 1988

PACKERS : Kind _____
 Sizes _____
 Depths set _____
 DIVISION OF OIL & GAS
 DEPARTMENT OF ENERGY

For Division of Oil and Gas Use Only
 Fee(s) paid: Well Work Permit Reclamation Fund WPCP
 Plat WW-9 WW-2B Bond 50 Blanket Agent

RECEIVED
JUL 28 1988

DIVISION OF OIL & GAS ³⁾
DEPARTMENT OF ENERGY

Date: July 11, 1988
Operator's well number
BERWIND LAND #25
API Well No: 47 - 005 - 1488
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 Berwind Land Company
Address 1050 One Valley Square
Charleston, WV 25301
(b) Name Attn: Raymond C. Brainard
Address _____
(c) Name _____
Address _____
6) Inspector Jerry Holcomb
Address Rt 2, Box 159, Hwy #34
Hamlin, WV 25523
Telephone (304)-824-5963

5) (a) Coal Operator:
Name Peabody Coal Company
Address P. O. Box 1233
Charleston, WV 25324 Attn: John Eagan
(b) Coal Owner(s) with Declaration
Name Berwind Land Company
Address 1050 One Valley Square
Charleston, WV 25301
Name Attn: Raymond C. Brainard
Address _____
(c) Coal Lessee with Declaration
Name Peabody Coal Company
Address P. O. Box 1233
Charleston, WV 25324 Attn: John Eagan

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 10 on the above named parties, by:

- X 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 Natural Resource Management Corporation
By: Robert T. Golier Robert T. Golier
Its: Vice President and Eastern Region Manager
Address 681 Andersen Drive, Foster Plaza VI
Pittsburgh, PA 15220
Telephone 412-921-3700

Subscribed and sworn before me this 11th day of July, 1988

Edward F. Valentas Notary Public

My commission expires _____

EDWARD F. VALENTAS, NOTARY PUBLIC
GREEN TREE BORO, ALLEGHENY COUNTY
MY COMMISSION EXPIRES APRIL 3, 1989
Member, Pennsylvania Association of Notaries

