

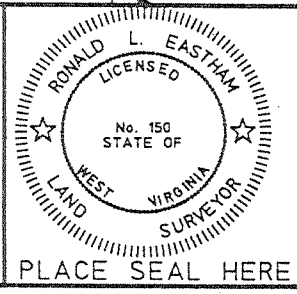
West Virginia State Plane
Coordinates for Loc. No. 1
N 538,229.12 : E 1,794,754.21

NOTES:
All known oil & gas wells
within 2,400' of the proposed
location are shown hereon.
The bearings and distances
shown hereon are based on
the West Virginia State Plane
Coordinate System, South Zone
NAD '27.

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

FILE NO. 4538 WK
DRAWING NO. 1NWB
SCALE 1" = 600'
MINIMUM DEGREE OF
ACCURACY 1 : 82,010
PROVEN SOURCE OF
ELEVATION API Well 47-039-2204
Elev. = 594.45

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 THE LAW AND THE
REGULATIONS ISSUED AND PRESCRIBED BY THE
DEPARTMENT OF ENERGY.
(SIGNED) Ronald L. Eastham
R.P.E. _____ L.L.S. 150



STATE OF WEST VIRGINIA
DIVISION OF ENVIRONMENTAL PROTECTION
OFFICE OF OIL AND GAS
NITRO, WV

DATE July 18 19 98
OPERATOR'S WELL NO. Bailey Unit 1
API WELL NO. 47-039-2204 A
STATE COUNTY PERMIT

WELL TYPE: OIL ___ GAS X LIQUID INJECTION ___ WASTE DISPOSAL ___
(IF "GAS,") PRODUCTION ___ STORAGE ___ DEEP X SHALLOW ___

LOCATION: ELEVATION 594.45 WATER SHED Pocatalico River
DISTRICT Union COUNTY Kanawha
QUADRANGLE Pocatalico

SURFACE OWNER Michael Pinkerton ACREAGE 1 (T.M. 11, Par. 38)
OIL & GAS ROYALTY OWNER H. F. Williams, et al LEASE ACREAGE 57

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

PLUG AND ABANDON ___ CLEAN OUT AND REPLUG ___

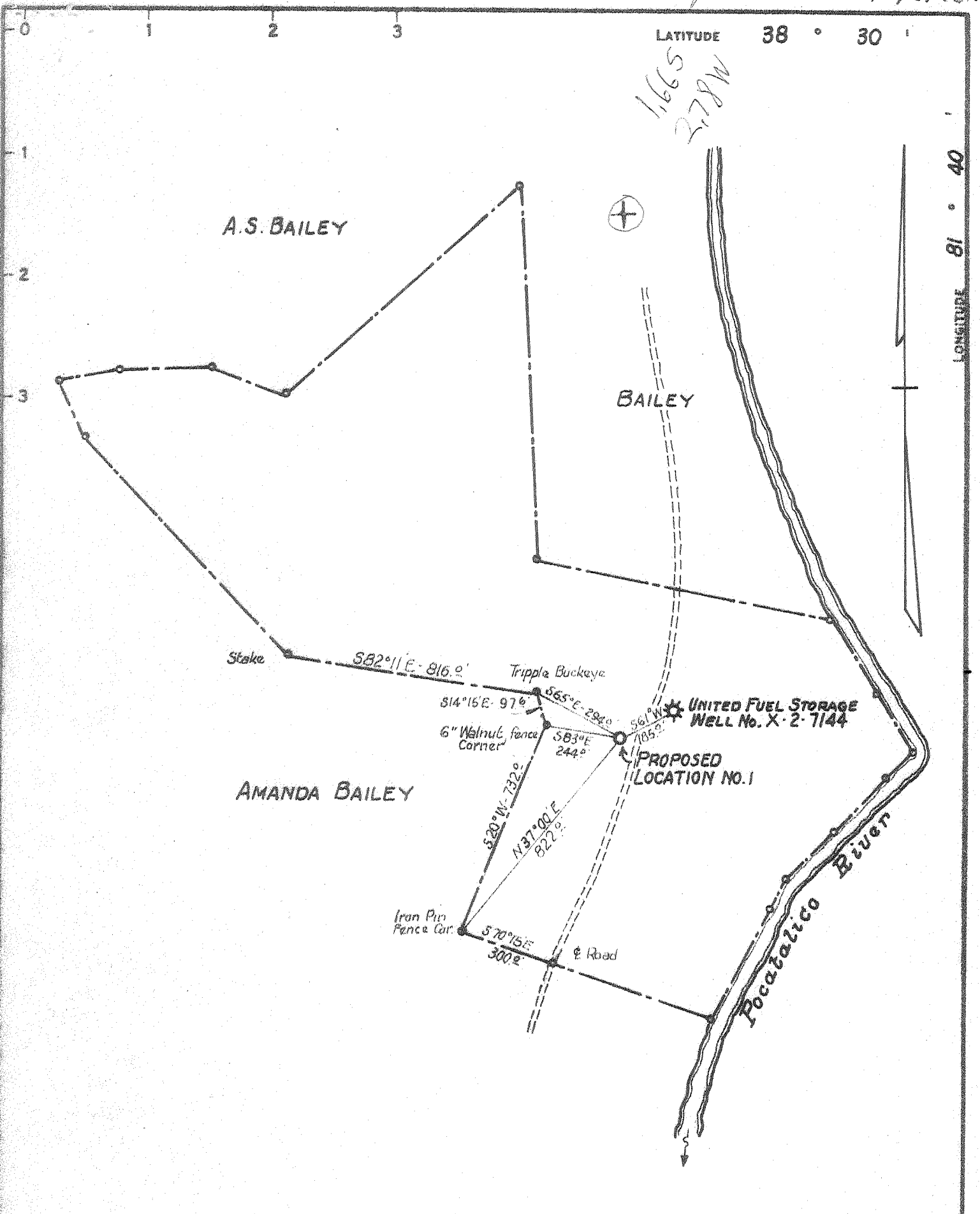
TARGET FORMATION _____ ESTIMATED DEPTH _____

WELL OPERATOR Cabot Oil & Gas Corp. DESIGNATED AGENT John Abshire
ADDRESS P.O. Box 454 ADDRESS P.O. Box 454
Glasgow, WV 25080 Glasgow, WV 25080

FORM WW-6

COUNTY NAME KANAWHA
PERMIT 2204A

DEEP well



CERTIFICATE

"I, the undersigned, hereby certify that this map is correct to the best of my knowledge and belief and shows all the information required by paragraph 6 of the rules and regulations of the oil and gas section of the mining laws of West Virginia."
 Minimum degree of accuracy is one part in 200

Signed T.S. Blumney R.P.E. #262

- NEW LOCATION
- RECONDITION
- DRILL DEEPER
- ABANDONMENT

COMPANY APPALACHIAN EXPLORATION & DEVELOPMENT, ETAL
 ADDRESS P.O. BOX 628, CHARLESTON, W. VA.
 FARM BAILEY UNIT
 MAP _____ ACRES 270.25 LEASE NO. _____
 WELL (FARM) NO. 1 SERIAL NO. 16-1107
 ELEVATION (SPIRIT LEVEL) 594.45
 QUADRANGLE CHARLESTON N.W.
 COUNTY KANAWHA DISTRICT UNION
 POINT OF PROVEN ELEVATION U.S.G.S. DATA - B.M. 616
 FILE NO. _____ DRAWING NO. _____
 DATE DEC. 6, 1967 SCALE 1" = 400'

STATE OF WEST VIRGINIA
 DEPARTMENT OF MINES
 OIL AND GAS DIVISION
 CHARLESTON
WELL LOCATION MAP
 FILE NO. KAN-2204

→ DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS SCALE 1 TO 62 500. LATITUDE AND LONGITUDE LINES BEING REPRESENTED BY BORDER LINES AS SHOWN.
 - DENOTES ONE INCH SPACES ON BORDER LINE OF ORIGINAL TRACING.

JAN 2 1968

6-6-3/2

Deep Well (Newberg)

WR-35

Date: 10-Feb-99
API # 47-039-02204 A

State of West Virginia
Division of Environmental Protection
Section of Oil and Gas
Well Operator's Report of Well Work

Farm name: Pinkerton, Michael & Sharon Operator Well No.: A. Bailey #1

LOCATION: Elevation: 594.45' Quadrangle: Pocatalico
District: Union County: Kanawha
Latitude: 8,760 feet South of 38 DEG. 30 MIN. 0 SEC.
Longitude: 2,465 feet West of 81 DEG. 42 MIN. 30 SEC.

Company: Cabot Oil & Gas Corporation
400 Fairway Drive: Suite 400
Coraopolis, PA 15108-4308

Casing & Tubing Size	Used in Drilling	Left in Well	Cement Fill up Cu. Ft.
13-3/8"	97'	97'	83 sks
9-5/8"	1755'	1755'	650 sks
5-1/2"	5322'	5322'	190 sks

Agent: John Abshire
Inspector: Carlos Hively
Permit Issued: 9/4/98
Well Work Commenced: 10/1/98
Well Work Completed: 10/21/98
Verbal Plugging Permission granted on: _____
Rotary Cable _____
Total Depth (feet) 5394'
Fresh Water Depths (ft) _____
Salt Water Depths (ft) _____

Is coal being mined in area (Y / N)? _____
Coal Depths (ft) _____

RECEIVED
Office of Oil & Gas
Permitting
FEB 16 1999
WV Division of Environmental Protection

OPEN FLOW DATA

Producing formation Newburg (completed 1968) Pay zone depth (ft) 5365' - 5377'
Gas: Initial open flow 500 MCF/d Oil: Initial open flow N/A Bbl/d
Final open flow 15,600 MCF/d Final open flow N/A Bbl/d
Time of open flow between initial and final tests _____ Hours
Static rock pressure 1754 psig (surface pressure after 48 Hours)

Second producing formation Oriskany Pay zone depth (ft) 4622' - 4638'
Gas: Initial open flow 442 MCF/d Oil: Initial open flow N/A Bbl/d
Final open flow TSTM MCF/d Final open flow N/A Bbl/d
Time of open flow between initial and final tests 4 Hours
Static rock pressure 22 psig (surface pressure after 48 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: CABOT OIL & GAS CORPORATION
By: Ray Prudnick Jr.
Date: 2/10/99

FEB 22 1999

KAN 2204 A

OPEN FLOW DATA

Newburg treated in 1968 @ 5365'-5377' with 414 bbls of water and 24,200# sand.

Perf'd Oriskany from 4622'-4638'. Broke down with 250 gals acid. Displaced with 6 bbls of treated H₂O @ 9 bpm. ATP: 4600 psi. BDP: 4500 psi. ISIP: 2400 psi. Frac'd with 362 bbls of 25# x-link gel and 20,000# sand. ATP: 4480 psi. MTP: 5414 psi. ATR: 8 bpm. ISIP: 5240 psi.

FORMATION	TOP	BOTTOM	REMARKS
Soil	0	15	
Shale/Sand	15	115	
Sand/Shale Sand	115	410	
Sand	410	595	
Shaley Sand	595	845	
Sand	845	1422	
Big Lime	1422	1590	
Injun	1590	1758	
Shale	1758	2063	
Berea	2063	2072	
Shale	2072	3280	
Lower Huron	3280	3822	
Shale	3822	4472	
Marcellus	4472	4524	
Onondaga	4524	4618	
Oriskany	4618	4645	
Helderberg	4645	4841	
Dolomite/Anhydrite	4841	5365	
Newburg	5365	5377	
Dolomite/Anhydrite	5377	5394 - TD	