

REFERENCES
M.T.S.

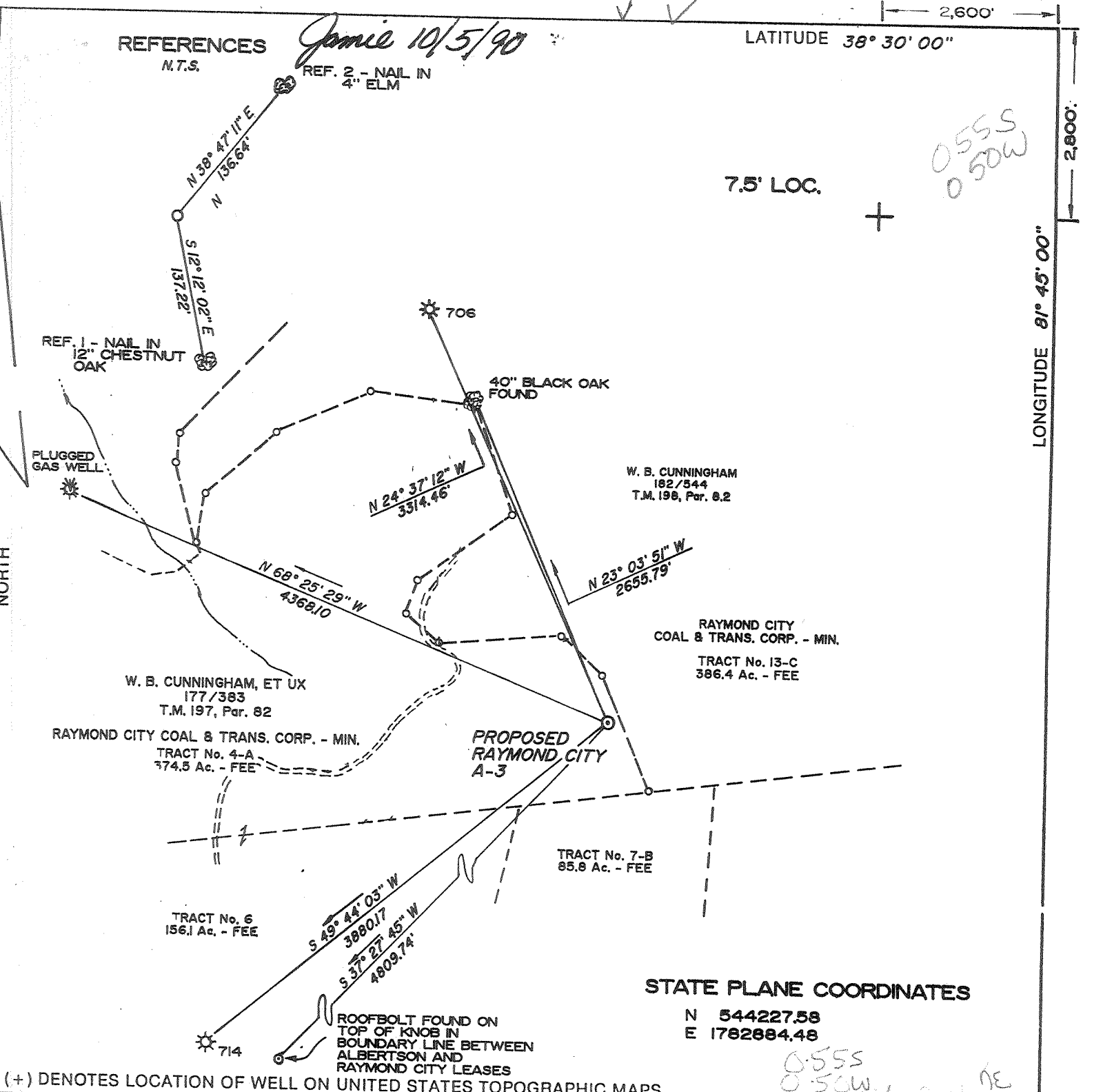
Janie 10/5/90

LATITUDE 38° 30' 00"

*055S
050W*

7.5' LOC.

LONGITUDE 81° 45' 00"



STATE PLANE COORDINATES

N 544227.58
E 1782884.48

*055S
050W
St. Albans*

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

FILE NO. 8723-117
DRAWING NO. RAYMOND CITY A-3
SCALE 1" = 1000'
MINIMUM DEGREE OF ACCURACY 1:2500
PROVEN SOURCE OF ELEVATION U.S. C.G.S. BM J5
EL 604.39

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 MINES.

[Signature]

R.P.E. _____ R.P.S. 827



STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION



DATE SEPTEMBER 12, 19 90
OPERATOR'S WELL NO. RAYMOND CITY A-3
API WELL NO. _____

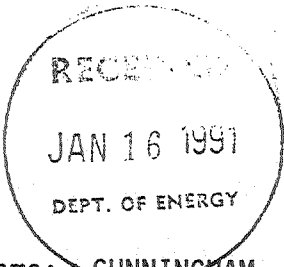
WELL TYPE: OIL ___ GAS X LIQUID INJECTION ___ WASTE DISPOSAL ___
(IF "GAS,") PRODUCTION X STORAGE ___ DEEP ___ SHALLOW ___
LOCATION: ELEVATION 1043.90 WATER SHED POCOTALICO RIVER
DISTRICT POCATALICO 3 COUNTY PUTNAM
QUADRANGLE SAINT ALBANS, W. VA.

SURFACE OWNER W. B. CUNNINGHAM, ET UX ACREAGE 1307.12
OIL & GAS ROYALTY OWNER RAYMOND CITY COAL & TRANS. CO. LEASE ACREAGE 2107.74 AC.
LEASE NO. 47-0755

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 TUSCARORA ESTIMATED DEPTH 6700'
WELL OPERATOR CABOT OIL & GAS CORP. DESIGNATED AGENT DAVID G. McCLUSKEY
ADDRESS P.O. BOX 1473 ADDRESS P.O. BOX 1473
CHARLESTON, W. VA. CHARLESTON, W. VA.

DEEP WELL 6-6 Elk-Pocai (Sissonville) (192)



State of West Virginia
DEPARTMENT OF ENERGY
Division of Oil and Gas
Well Operator's Report of Well Work

Farm name: CUNNINGHAM, W. B.

Operator Well No.: RAYMOND CITY A3

Location: Elevation: 1043.90

Quadrangle: SAINT ALBANS

District: POCTALICO County: PUTNAM
Latitude: 2800 Feet South of 38 Deg. 30 Min. 0 Sec.
Longitude: 2600 Feet West of 81 Deg. 45 Min. 0 Sec.

Company: CABOT OIL & GAS CORPORATION
P. O. Box 1473
Charleston, WV 25325

Agent: DAVID G. MCCLUSKEY

Inspector: GLEN P. ROBINSON

Permit Issued: 10/10/90
Well Work Commenced: 11/09/90
Well Work Completed: 11/17/90
Verbal Plugging
Permission granted on:
Rotary X Cable _____ Rig _____
Total Depth (feet) 5890
Fresh water depths (ft) 1100

Casing &	Used in	Left	Cement
	Drilling	in Well	Fill Up
			Cu. Ft.
16	44.80	44.80	
11-3/4	405.55	405.55	195 sks CL-A
8-5/8	2246	2246	555 sks CL-A
4-1/2	4899	4899	285 sks CL-A w/2% gel
1-1/2		4243.75	

Salt water depths (ft) 1500, 1715

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

OPEN FLOW DATA

Producing formation Shale Pay zone depth (ft) 3738-4268
Gas: Initial open flow 84 MCF/d Oil: Initial open flow 0 Bbl/d
Final open flow 122 MCF/d Final open flow 0 Bbl/d
Time of open flow between initial and final tests 4 Hours
Static rock Pressure 745 psig (surface pressure) after 648 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.

For: CABOT OIL & GAS CORPORATION JAN 18 1991

By: David McCluskey

Date: 1/15/90

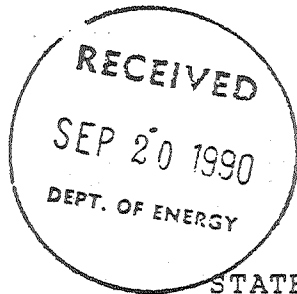
DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC.

Plugback 5890'-5600' w/ 90 sks CL-A w/ 3% CC, 5600'-5200' 24 bbls 6% gel, 5200'-4900' 95 sks CL-A w/ 3% CC. Perforate Shale 4079'-4268' 1 SPF (25 holes). Break down Stage 1 w/ 1000 gal 7.5% HCl & displ w/ 100,000 scf N2 @ 30,500 scfm. BDP 1911 psi. Surf ISIP 1550 psi. Treat w/99,820 lbs 20/40 sand & 495,800 scf N2 in 75Q foam. Displ w/ 214 bbls H2O. ATP 2663psi; ATP 2880 psi; ISIP 1416 psi. R/U Atlas. Set large mouth Alpha plug @ 3960'. Perforate Stage 2 Shale 3738'-3790' 1 SPF (12 holes). R/U Halliburton. Break down Stage 2 w/ 1000 gal 7.5% HCl & displ w/ 135,000 scf N2 @ 16,700 scfm. BDP 2427 psi. Surf ISIP 2100 psi. Treat w/ 39,000 lbs 20/40 sand & 275,600 scf N2 in 75Q foam.

FORMATION	TOP	BOTTOM
Shaley Sand	0	410
Sandy Shale	410	675
Sandstone	675	810
Shale	810	860
Sandstone	860	875
Shale	875	895
Sandstone	895	915
Sandy Shale	915	1000
Sand	1000	1085
Sandy Shale	1085	1520
Salt Sand	1520	1880
Big Lime	1880	2000
Big Injun	2000	2115
Shaley Sand	2115	2280
Shale	2280	2520
Sunbury Shale	2520	2540
Berea Sand	2540	2555
Shale	2555	3750
Brown Shale	3750	4700
Marcellus Shale	4700?	4920
Onondaga LS	4920	5015
Oriskany Sand	5015	5030
Helderberg LS	5030	5185
Salina	5185	5380
Lockport Dolomite	5380	5728
Newberg Sandstone	5728	5752
McKenzie	5752	TD 5890

UD 2555
LH 3750
J 4250

112-93



1) Date: September 18, 1990
2) Operator's well number RAYMOND CITY A-3
3) API Well No: 47 - 079 - 1155
State - County - Permit

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

NOTICE AND APPLICATION FOR A WELL WORK PERMIT

<p>4) Surface Owner(s) to be served:</p> <p>(a) Name <u>W. B. Cunningham</u> Address <u>#2 Morris Street</u> <u>Charleston, WV 25301</u></p> <p>(b) Name _____ Address _____</p> <p>(c) Name _____ Address _____</p>	<p>5) (a) Coal Operator:</p> <p>Name <u>NOT OPERATED</u> Address _____</p> <p>(b) Coal Owner(s) with Declaration</p> <p>Name <u>W. B. Cunningham</u> Address <u>#2 Morris Street</u> <u>Charleston, WV 25301</u></p> <p>Name _____ Address _____</p> <p>(c) Coal Lessee with Declaration</p> <p>Name _____ Address _____</p>
<p>6) Inspector <u>Jerry Tephabock</u> Address <u>Rt. 1 Box 101A</u> <u>Ripley, WV 25271</u> Telephone (304)- _____</p>	

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 CABOT OIL & GAS CORPORATION
By: David M. Clunk
Its: Drilling Superintendent
Address P. O. Box 1473
Charleston, WV 25325
Telephone (304) 347-1600

Subscribed and sworn before me this 18th day of September, 1990

Thomas L. Pruitt Notary Public
My commission expires May 31, 1999