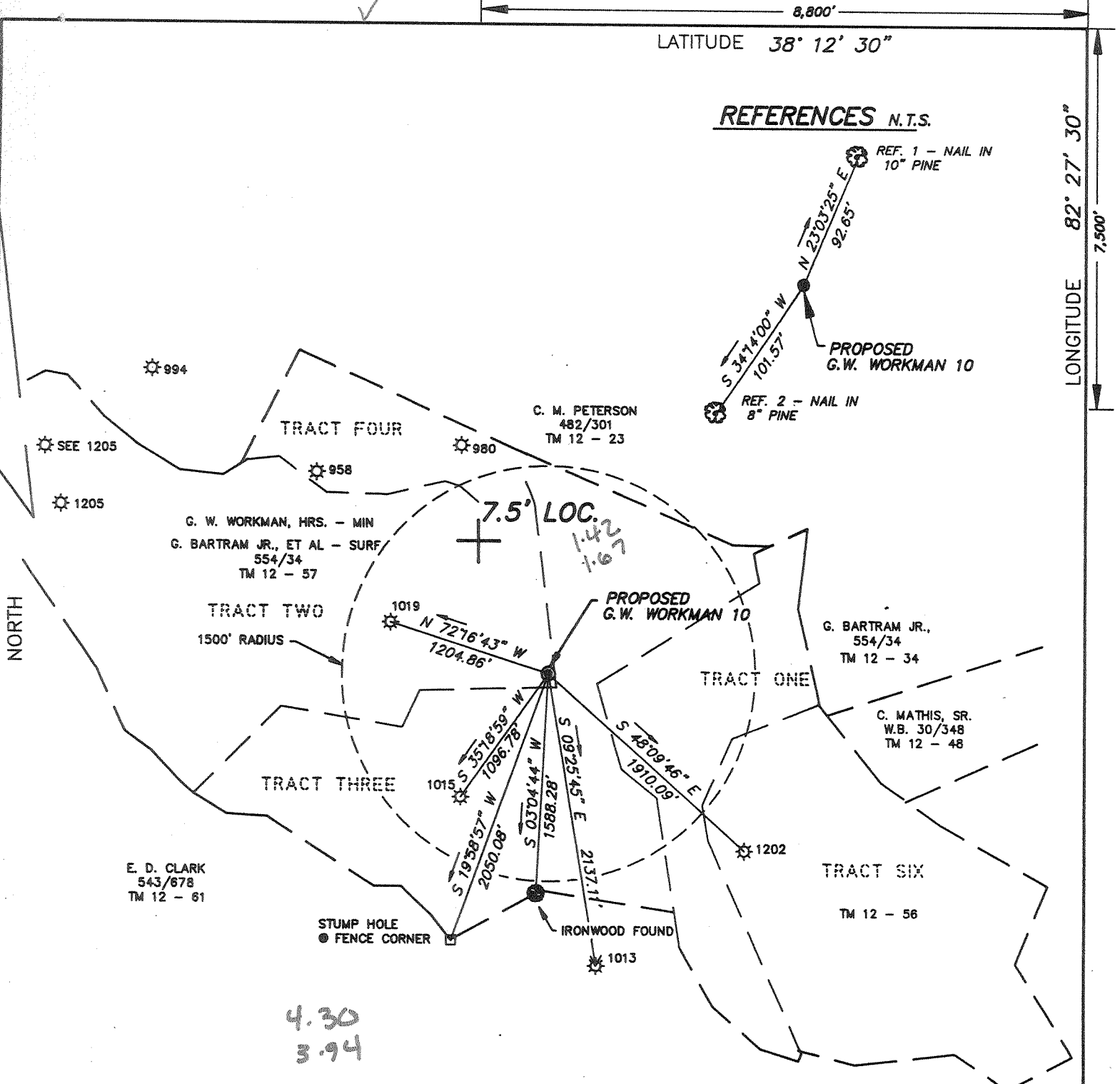
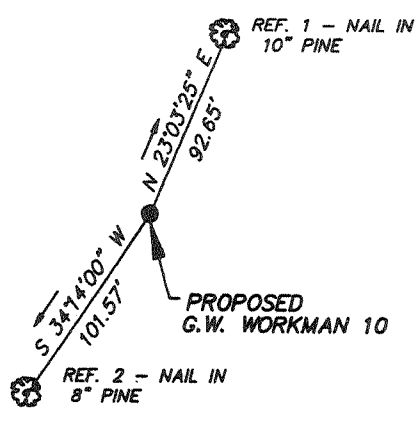


8,800'
LATITUDE 38° 12' 30"

LONGITUDE 82° 27' 30"
7,500'

REFERENCES N.T.S.



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

FILE No 8723-280
DRAWING No. G. W. WORKMAN 10
SCALE 1" = 1000'
MINIMUM DEGREE OF ACCURACY 1 : 2500
PROVEN SOURCE OF ELEVATION USGS MON. N 146
ELEV. 617

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
(SIGNED) William J. Whitman
R.P.E. _____ R.P.S. 646



**STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION**



DATE JUNE 26 19 93
OPERATOR'S WELL No. G. W. WORKMAN
API WELL No. 10

WELL TYPE: OIL ___ GAS X LIQUID INJECTION ___ WASTE DISPOSAL ___ STATE 47 COUNTY 099 PERMIT 1875
(IF "GAS") PRODUCTION X STORAGE ___ DEEP ___ SHALLOW ___

LOCATION: ELEVATION 1003.08 WATER SHED WEST FORK OF TWELVEPOLE CREEK
DISTRICT BUTLER COUNTY WAYNE
QUADRANGLE WAYNE, W. VA. NW

SURFACE OWNER G. BARTRAM, JR., ET AL ACREAGE 1003.08
OIL & GAS ROYALTY OWNER G. W. WORKMAN HRS. LEASE ACREAGE _____
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) SEP 3 1993

PLUG AND ABANDON ___ CLEAN OUT AND REPLUG ___
TARGET FORMATION Big Six ESTIMATED DEPTH 4200'
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.

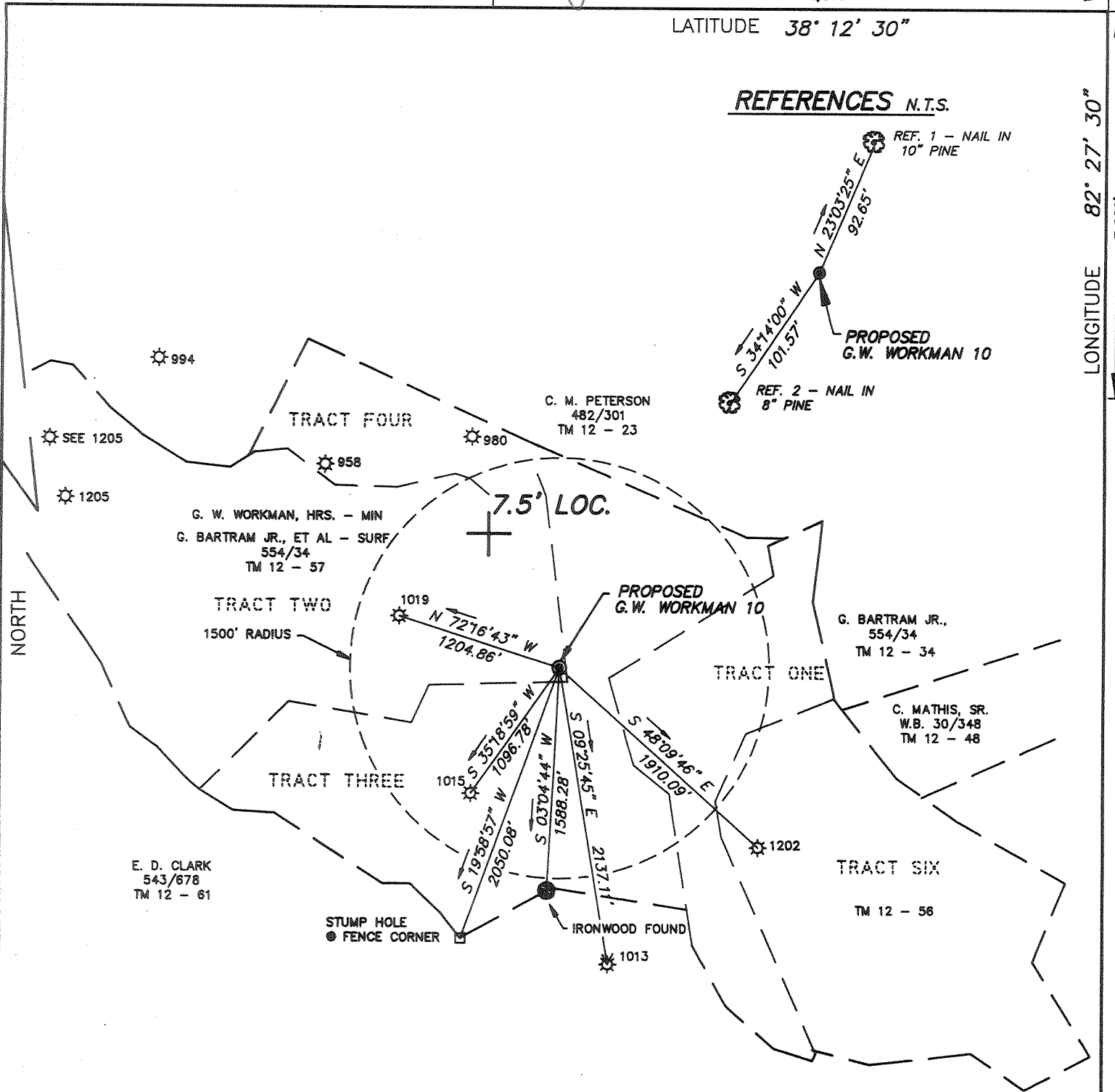
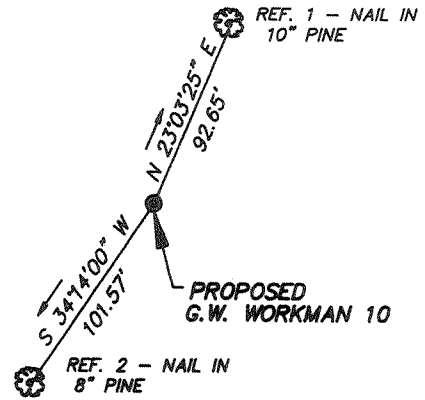
DEEP WELL

LATITUDE 38° 12' 30"

8,800'

LONGITUDE 82° 27' 30"

REFERENCES N.T.S.



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STATE OF WEST VIRGINIA
 DEPARTMENT OF MINES
 OIL AND GAS DIVISION



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 QUADRANGLE WAYNE, W. VA.

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 TARGET FORMATION Big Six ESTIMATED DEPTH 4200'
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 ADDRESS P.O. BOX 1473 ADDRESS P.O. BOX 1473
CHARLESTON, W. VA. CHARLESTON, W. VA.

MAY 1875

FORM IV-6 (8-78)

5-0 393

MAR 03 1995

Permitting
Office of Oil & Gas

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

Farm name: BARTRAM, GOLDIE, JR. ET AL Operator Well No.: G.W. WORKMAN #10

Location: Elevation: 1,003.08 Quadrangle: WAYNE

District: BUTLER County: WAYNE
Latitude: 7500 Feet South of 38 Deg. 12 Min. 30 Sec.
Longitude: 8800 Feet West of 82 Deg. 27 Min. 30 Sec.

Company: CABOT OIL & GAS CORPORATION
400 FAIRWAY DRIVE, SUITE 400
CORAOPOLIS, PA 15108

Agent: DAVID G. MCCLUSKEY

Inspector: OFIE HELMICK
Permit Issued: 09/03/93
Well Work Commenced: 10/23/93
Well Work Completed: 11/01/93
Verbal Plugging
Permission granted on: _____
Rotary X Cable _____ Rig _____
Total Depth (feet) 4243'
Fresh water depths (ft) 296'

Salt water depths (ft) 1070, 1260

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

Casing & Tubing	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
16"	43'	43'	N/A
9-5/8"	832'	832'	295 sks Class A
7"	2383'	2383'	100 sks 50/50 Poz
4-1/2"	4073'	1649'	76 sks Class A 85 sks
PLUGGED & ABANDONED			Latex

OPEN FLOW DATA

Producing formation BIG SIX Pay zone depth (ft) 3980-3994
Gas: Initial open flow odor MCF/d Oil: Initial open flow n/a Bbl/d
Final open flow 0 MCF/d Final open flow n/a Bbl/d
Time of open flow between initial and final tests 4 Hours
Static rock Pressure 50 psig (surface pressure) after 18 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

By: Donald R. Gayle

Date: 3/2/95

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

Big Six perfs from 3,980' to 3,994'. Brk dwn stg 1 w/ 500 gals of 15% hcl., displ w/ 42,000 SCF N₂; Brk dwn press 3,460/4,070 psi.; Surface ISIP 3,500 psi. Pump 5 bbl cem't plug from 2,424' to 2,324'. Pull 54 jts of 4-1/2" csg and spot cem't plug from 100' to surface.

FORMATION	TOP	BOTTOM
SAND/SHALE	0	1080
SALT SAND	1080	1390
SHALE	1390	1405
LITTLE LIME	1405	1440
BIG LIME	1440	1600
MACCRADY	1600	1700
BIG INJUN	1700	1740
SHALE	1740	2180
SUNBURY SHALE	2180	2220
BEREA	2220	2350
SHALE	2350	3290
CORNIFEROUS LIME	3290	3960
BIG SIX	3960	4000
KEEFER	4000	4040
ROCHESTER SHALE	4040	4242
TD		4242

099-1875
Issued 09/03/93
Page of
Expires 09/03/95

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

17801

- 1) Well Operator: Cabot Oil & Gas Corporation 8145 ① 659
- 2) Operator's Well Number: G.W. Workman #10 3) Elevation: 1003.08
- 4) Well type: (a) Oil / or Gas X /
(b) If Gas: Production X / Underground Storage /
Deep X / Shallow /
- 5) Proposed Target Formation(s): Big Six ~~333~~
- 6) Proposed Total Depth: 4200 feet
- 7) Approximate fresh water strata depths: 420, 500, 730
- 8) Approximate salt water depths: 1050
- 9) Approximate coal seam depths: 510, 622
- 10) Does land contain coal seams tributary to active mine? Yes / No X /
- 11) Proposed Well Work: Drill and complete a gas well
- 12) Based on Wayne 1015, 1016, 1019, 1202

RECEIVED
WV Division of
Environmental Protection
AUG 16 93
Permitting
Office of Oil & Gas

CASING AND TUBING PROGRAM

TYPE	SPECIFICATIONS		FOOTAGE INTERVALS			CEMENT
	Size	Grade	Weight per ft.	For drilling	Left in well	Fill-up (cu. ft.)
Conductor	16"	L.S.	65	30	30	10 sks GFS
Fresh Water						38CSA18-11.3 38CSA18-11.2
Coal	9-5/8"	L.S.	32.2	800	800	
Intermediate	7"	L.S.	20	1800	1800	260 sks CTS
Production	4-1/2"	J-55	10.5	4150	4150	280 sks CTS
Tubing						180 sks (1.7 yld)
Liners						38CSA18-11.1

PACKERS : Kind _____
Sizes _____
Depths set _____

For Division of Oil and Gas Use Only

10947/16

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

RECEIVED
WV Division of
Environmental Protection

AUG 16 93

Permitting
Office of Oil & Gas

1) Date: 7/09/93
2) Operator's well number
G.W. Workman #10
3) API Well No: 47 - 099 - 1875
State - County - Permit

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

NOTICE AND APPLICATION FOR A WELL WORK PERMIT

4) Surface Owner(s) to be served:
(a) Name Golden Bartram Jr. & Henry
Address Maynard
Rt. 1, Box 337, Genoa, WV 25517
(b) Name _____
Address _____
(c) Name _____
Address _____
6) Inspector Ofie Helmick
Address P.O. Box 218
Fanrock, WV 24834
Telephone (304)- 732-9135

5) (a) Coal Operator:
Name Not Operated
Address _____
(b) Coal Owner(s) with Declaration
Name Golden Bartram Jr. & Henry Maynard
Address Rt. 1, Box 337, Genoa, WV 25517
Name _____
Address _____
(c) Coal Lessee with Declaration
Name _____
Address _____

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: Donald R. Taylor
Its: Manager of Drilling
Address Three Gateway Center, Suite 2000
Pittsburgh, PA 15222
Telephone (412) 594-7000

Subscribed and sworn before me this 19th day of July, 1993

Cynthia M. Bowles

Notary Public

My commission expires 6-17-96

