



west virginia department of environmental protection

Office of Oil and Gas
601 57th Street SE
Charleston, WV 25304
(304) 926-0450
(304) 926-0452 fax

Earl Ray Tomblin, Governor
Randy C. Huffman, Cabinet Secretary
www.dep.wv.gov

January 10, 2011

FINAL INSPECTION REPORT

WELL PERMIT RELEASED

CABOT OIL & GAS CORPORATION,

The FINAL INSPECTION REPORT for the permit, API Well Number: 47-7901452, issued to CABOT OIL & GAS CORPORATION, and listed below has been received in this office, and reclamation requirements approved. The well designated by the permit number below has been released under reclamation and will remain under your bond.

James Martin
Chief

Operator: CABOT OIL & GAS CORPORATION
Operator's Well No: CABOT 100
Farm Name: AMHERST INDUSTRIES, INC.
API Well Number: 47-7901452
Date Issued: 10/24/2007
Date Released: 01/10/2011

Promoting a healthy environment.

INSPECTORS PERMIT SUMMARY FORM

GPS YES [] NO []

DATE STARTED/LOCATION: 10/30/2007

OPERATOR: Capot Oil & Gas

DRILLING COMMENCED: _____

FARM: Amhurst Industries

TO DATE: _____ DEPTHS: _____

Well No: Capot 100

WATER DEPTHS: _____

COAL DEPTHS _____

QUESTIONS FOR THIS REPORT ARE IN ACCORDANCE OF WV CODE 22-6-30 AND REGULATIONS 35CSR 4-12.1 AND 35CSR 4-16 AND THE GENERAL WATER POLLUTION CONTROL PERMIT.

POINTS ARE TO BE GIVEN UP TO MAXIMUM AS SHOWN BASED ON PERFORMANCE.

1. DID OPERATOR GIVE PROPER NOTICE TO INSPECTOR BEFORE THE FOLLOWING:

A. CONSTRUCTION YES [☒] NO [] (2_PTS) (4_PTS) 4

B. DRILLING YES [☒] NO [] (2_PTS)

2. WAS THE TIMBER CUT, STACKED, AND BRUSH USED FOR SEDIMENT BARRIERS BEFORE DIRT WORK STARTED? YES [☒] NO [] (2_PTS) (4_PTS) 4

3. ARE ALL LOCATION AND/OR ROAD BANKS BEING SLOPED? YES [☒] NO [] (4_PTS) (4_PTS) 4

4. CONSTRUCTIONS:

WERE THE FOLLOWING SEDIMENT CONTROL STRUCTURES PROPERLY INSTALLED/MAINTAINED?

A. ROAD DITCHES (1)_(2)_(3)_(4)_(PTS) B. CROSS DRAINS (1)_(2)_(3)_(4)_(5)_(PTS)

C. CULVERTS (1)_(2)_(3)_(4)_(5)_(PTS) D. CREEK CROSSINGS (1)_(2)_(3)_(PTS)

E. DIVERSION DITCHES (1)_(2)_(3)_(PTS) F. BARRIERS (1)_(2)_(3)_(PTS)

G. TEMPORARY SEEDING YES [] NO [] (10_PTS)

POINTS AVAILABLE FOR QUESTION 4: (33_PTS) 28

5. HAS TOP SOIL (IF ANY) BEEN STOCKED PILED? YES [☒] NO [] (2_PTS) (2_PTS) 2

6. IS THE PIT PROPERLY INSTALLED AND MAINTAINED? YES [☒] NO [] (9_PTS) (9_PTS) 9

7. RECLAMATION:

A. ROADWAY (1)_(2)_(3)_(PTS) B. LOCATION (1)_(2)_(3)_(PTS)

C. PITS (1)_(2)_(3)_(PTS) D. PIPELINES (1)_(2)_(3)_(PTS)

E. TANK DIKES (1)_(2)_(3)_(PTS) F. API INSTALLED YES [☒] NO [] (3_PTS)

G. ADEQUATE SEEDING MATERIALS (1)_(2)_(3)_(PTS)

H. WAS SEED BED ADEQUATE (1)_(2)_(3)_(PTS)

POINTS AVAILABLE FOR QUESTION 7: (24_PTS) 22

8. WAS RECLAMATION COMPLETED WITHIN:

6 MTHS OF TD 6_PTS ONLY; 4 MTHS OF TD 12_PTS ONLY; 2 MTHS OF TD 19_PTS ONLY;

POINTS AVAILABLE FOR QUESTION 8: (19_PTS) 6

TOTAL MAXIMUM POSSIBLE SCORE OF 99.

TOTAL RECLAMATION SCORE: 19/10

11/15/2007
DATE RELEASED

Jemie Stearns
INSPECTOR'S SIGNATURE

State of West Virginia
Division of Environmental Protection
Section of Oil and Gas
Discharge Monitoring Report
Oil and Gas General Permit

Date Report Completed

05 / 12 / 08

Company Name: **CABOT CORPORATION**

API **47-79-1452**

County: **PUTNAM**

District: **POCATALICO**

Farm Name: **AMHERST INDUSTRIES**

Well No. **CABOT 100**

Discharge Date/s From: (MMDDYY) **04 / 23 / 08**

To: (MMDDYY) **04 / 23 / 08**

Discharge Times: **9:00 AM**

To: **7:00 PM**

Disposal Option Utilized: UIC (2): Permit No.

Centralized Facility (5): Permit No.

Reuse (4): Alternate Permit No.

Offsite Disposal (3) Site Location:

Land Application (1) ☒ (Include a topographical map of the Area.)

Other Method (6) (Include an explanation)

WIT DISCHARGED BY
J.W. PIT WELL SERVICING, INC

Conrad M. Burdette
SIGNATURE

Follow Instructions below to determine your treatment category.

Optional Pretreatment test: **5,000** Cl-mg/l **6** DO Mg/l

1. Do you have permission to use expedited treatment from the Director or his representative? (Y/N)
If yes who? _____ and place a four (4) on line 7. If not go to line 2.
2. Was Frac Fluid or Flowback put into the pit? (Y/N) **Y** If yes go to line 5 if not go to line 3.
3. Do you have a chloride value pretreatment (see above)? (Y/N) **Y** If yes go to line 4 if not go to line 5.
4. Is that chloride level less than 5000 mg/l? (Y/N) **Y** If yes then enter a one (1) on line 7.
5. Do you have a pretreatment value for DO? (see above) (Y/N) **Y** If yes then go to line 6 if not enter a three (3) on line 7.
6. Is that DO greater than 2.5 mg/l? (Y/N) **Y** If yes then enter a two (2) on line 7 if not enter a three (3) on line 7.
7. **2** is the category of your pit. Use the Appropriate section.

Name of Principle Exec. Officer

Title of Officer

Date Completed:

W. Lee Hornby

Dr. Supp.
5/19/08



I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the 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.

Signature of a Principle Exe. Officer or Authorized agent

W. Lee Hornby
Signature

Parameter	Predischarge Limit Reported	Discharge Limits Reported	Units
pH 6-10	6-10		S.U.
Settling Time 5	N/A	N/A	Days
Fe 6	6		mg/l
D.O. 2.5	2.5		mg/l
Settleable Sol. .5	.5		mg/l
Cl 5000	5000		mg/l
Oil Trace	Trace		Obs.
TOC	Monitor		mg/l
Oil and Grease	Monitor		mg/l
Al***	Monitor		mg/l
TSS	Monitor		mg/l
Mn Monitor	Monitor		mg/l
Volume	Monitor		Gals
Flow	Monitor		Gals
Disposal Area	Monitor		Acres

***Al is only reported if the pH is above 9.0

Category 2
Sampling Results
API NO 47-79-1452

Parameter	Predischarge Limit Reported	Discharge Limits Reported	Units
pH 6-10	<u>7</u>	6-10 <u>7</u>	S.U.
Settling Time 10	<u>10</u>	N/A N/A	Days
Fe 6	<u>2.0</u>	6 <u>2.08</u>	mg/l
D.O. 2.5	<u>6</u>	2.5 <u>6</u>	mg/l
Settleable Sol. .5	<u>N/A</u>	.5 <u>N/A</u>	mg/l
Cl* 12,500	<u>5,000</u>	12,500 <u>467</u>	mg/l
Oil Trace	<u>N/A</u>	Trace <u>N/A</u>	Obs.
TOC**		Monitor <u>N/A</u>	mg/l
Oil and Grease		Monitor <u>3.7</u>	mg/l
Al***		Monitor <u>N/A</u>	mg/l
TSS		Monitor <u>0.3</u>	mg/l
Mn Monitor	<u>1.0</u>	Monitor <u>0.045</u>	mg/l
Volume		Monitor <u>120,000</u>	Gals
Flow		Monitor <u>200</u>	Gals/min.
Disposal Area		Monitor <u>2.5</u>	Acres

*Can Be 25,000 with inspectors approval,

**Include a description of your aeration technique. =CODE 3

***Al is only reported if the pH is above 9.0

Date: _____

State of West Virginia
Division of Environmental Protection
Section of Oil and Gas
Discharge Monitoring Report
Oil and Gas General Permit

Date Report Completed

02 / 15 / 08

Company Name: **CABOT CORPORATION**

API **47-079-01452**

County: **PUTNAM**

District: **POCOTALICO**

Farm Name: **AMHURST INDUSTRIES INC.**

Well No. **CABOT #100**

Discharge Date/s From: (MMDDYY) **01 / 25 / 08**

To: (MMDDYY) **01 / 25 / 08**

Discharge Times: **10:00 AM**

To: **8:00 PM**

Disposal Option Utilized: UIC (2): Permit No.

Centralized Facility (5): Permit No.

Reuse (4): Alternate Permit No.

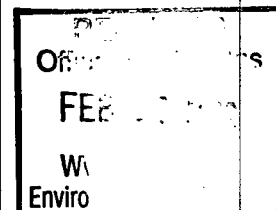
Offsite Disposal (3) Site Location:

Land Application (1) ☒ (Include a topographical map of the Area.)

Other Method (6) (Include an explanation)

PIT DISCHARGED BY
J.W. PIT WELL SERVICING, INC

William M. Buehler
SIGNATURE



Follow Instructions below to determine your treatment category.

Optional Pretreatment test: **5,000** Cl-mg/l **6** DO Mg/l

1. Do you have permission to use expedited treatment from the Director or his representative? (Y/N)
If yes who? _____, and place a four (4) on line 7. If not go to line 2.
2. Was Frac Fluid or Flowback put into the pit? (Y/N) **Y** If yes go to line 5 if not go to line 3.
3. Do you have a chloride value pretreatment (see above)? (Y/N) **Y** If yes go to line 4 if not go to line 5.
4. Is that chloride level less than 5000 mg/l? (Y/N) **Y** If yes then enter a one (1) on line 7.
5. Do you have a pretreatment value for DO? (see above) (Y/N) **Y** If yes then go to line 6 if not enter a three (3) on line 7.
6. Is that DO greater than 2.5 mg/l? (Y/N) **Y** If yes then enter a two (2) on line 7 if not enter a three (3) on line 7.
7. **2** is the category of your pit. Use the Appropriate section.

Name of Principle Exec. Officer

W. Lee Hornsby

Title of Officer

Dry Sup.

Date Completed:

2/26/08

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the 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.

Signature of a Principle Exe. Officer or Authorized agent

W. Lee Hornsby

Signature

Parameter		Predischarge Limit Reported	Discharge Limits Reported	Units
pH	6-10	6-10		S.U.
Settling Time	5	N/A	N/A	Days
Fe	6	6		mg/l
D.O.	2.5	2.5		mg/l
Settleable Sol.	.5	.5		mg/l
Cl	5000	5000		mg/l
Oil	Trace	Trace		Obs.
TOC		Monitor		mg/l
Oil and Grease		Monitor		mg/l
Al***		Monitor		mg/l
TSS		Monitor		mg/l
Mn	Monitor	Monitor		mg/l
Volume		Monitor		Gals
Flow		Monitor		Gals
Disposal Area		Monitor		Acres

***Al is only reported if the pH is above 9.0

Category 2
Sampling Results
API NO **47-79-01452**

Parameter		Predischarge Limit Reported	Discharge Limits Reported	Units
pH	6-10	<u>6</u>	6-10 <u>6</u>	S.U.
Settling Time	10	<u>10</u>	N/A N/A	Days
Fe	6	<u>1.0</u>	6 <u>0.992</u>	mg/l
D.O.	2.5	<u>6</u>	2.5 <u>6</u>	mg/l
Settleable Sol.	.5	<u>N/A</u>	.5 <u>N/A</u>	mg/l
Cl*	12,500	<u>5,000</u>	12,500 <u>957</u>	mg/l
Oil	Trace	<u>N/A</u>	Trace <u>N/A</u>	Obs.
TOC**			Monitor <u>N/A</u>	mg/l
Oil and Grease			Monitor <u>1.9</u>	mg/l
Al***			Monitor <u>N/A</u>	mg/l
TSS			Monitor <u>N/D</u>	mg/l
Mn	Monitor	<u>1.0</u>	Monitor <u>0.026</u>	mg/l
Volume			Monitor <u>72,000</u>	Gals
Flow			Monitor <u>120</u>	Gals/min.
Disposal Area			Monitor <u>2.5</u>	Acres

*Can Be 25,000 with inspectors approval,

**Include a description of your aeration technique. =CODE 3

***Al is only reported if the pH is above 9.0

Date: _____

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

Farm Name: Amherst Industries, Inc. Operator Well No.: Cabot #100

LOCATION: Elevation: 642' Quadrangle: Bancroft
District: Pocatalico County: Putnam
Latitude: 4567' feet South of 38° DEG. 32' MIN. 30" SEC.
Longitude: 1429' feet West of 81° DEG. 50' MIN. 00" SEC.

Company: Cabot Oil & Gas Corporation
900 Lee Street East, Suite 500
Charleston, WV 25301

Agent: Thomas S. Liberatore

Inspector: Jamie Stevens

Permit Issued: 10/24/2007

Well Work Commenced: December 5, 2007

Well Work Completed: February 28, 2008

Verbal Plugging: _____

Permission granted on: _____

Rotary ☒ Cable _____

Total Depth (feet) 1940

Fresh Water Depths (ft) NA

Salt Water Depths (ft) NA

Is coal being mined in area (Y / N) ? N

Coal Depths (ft) NONE REPORTED

Casing & Tubing Size	Used in Drilling	Left In Well	Cement Fill Up Cu. Ft.
13 3/8	44	44	NA
9 5/8	230	230	164
7	1912	1912	378
4 1/2		1646	NA
4 1/2" casing set on Baker AL-2 LocSet Packer			

OPEN FLOW DATA

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

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 SYSTEMATIC DETAILED GEOLOGICAL RECORD OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE

For: CABOT OIL & GAS CORPORATION

By: _____

Phillip L. Stalnaker
VP - Regional Mgr.

Date: 4/25/10

Form:	Perfs:	Acid:	Frac:	Sand:	BD	ATP	MTP	ISIP
Injun sand	1715-1745	500 gals	TW	36,523#	2947	2447	2670	1746

FORMATION	TOP	BOTTOM	REMARKS
Sand & Shale	0'	1485'	
Little Lime	1485'	1529'	
Big Lime	1529'	1711'	
Injun	1711'	1754'	
Shale	1754'	1906'	
Bordon	1906'		



west virginia department of environmental protection

Office of Oil and Gas
601 57th Street SE
Charleston, WV 25304
(304) 926-0450
(304) 926-0452 fax

Joe Manchin III, Governor
Stephanie R. Timmermeyer, Cabinet Secretary
www.wvdep.org

October 24, 2007

WELL WORK PERMIT

New Well

This permit, API Well Number: 47-7901452, issued to CABOT OIL & GAS CORPORATION, is evidence of permission granted to perform the specified well work at the location described on the attached pages and located on the attached plat, subject to the provisions of Chapter 22 of the West Virginia Code of 1931, as amended, and all rules and regulations promulgated thereunder, and to all conditions and provisions outlined in the pages attached hereto. Notification shall be given by the operator to the Oil and Gas Inspector at least 24 hours prior to the construction of roads, locations, and/or pits for any permitted work. In addition, the well operator shall notify the same inspector 24 hours before any actual well work is commenced and prior to running and cementing casing. Spills or emergency discharges must be promptly reported by the operator to 1-800-642-3074 and to the Oil and Gas inspector.

Please be advised that form WR-35, well operators report of well work, is to be submitted to this office within 90 days of completion of drilling, as should form WR-34 Discharge Monitoring Report within 30 days of discharge of pits, if applicable. Failure to abide by all statutory and regulatory provisions governing all duties and operations hereunder may result in suspension or revocation of this permit and, in addition, may result in civil and/or criminal penalties being imposed upon the operators.

Per 35CSR-4-5.2.g this permit will expire in two (2) years from the issue date unless permitted well work is commenced. If there are any questions, please feel free to contact me at (304) 926-0499 ext. 1654.

James Martin
Chief

Operator's Well No: CABOT 100
Farm Name: AMHERST INDUSTRIES, INC.
API Well Number: 47-7901452
Permit Type: New Well
Date Issued: 10/24/2007

Promoting a healthy environment.

Form: WW - 2B

79.01452

STATE OF WEST VIRGINIA
DIVISION OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS
WELL WORK PERMIT APPLICATION

1) Well Operator <u>Cabot Oil & Gas Corporation</u>	08145	079	Pocatalico	Bancroft
	Operator ID	County	District	Quadrangle

2) Operators Well Number: CABOT 100

3) Elevation: 641.52

4) Well Type: (a) Oil _____ Or Gas X
 (b) If Gas: Production X / Underground Storage _____
 Deep _____ / Shallow X

5) Proposed Target Formation(s): INJUN

6) Proposed Total Depth: 3000 Feet

7) Approximate fresh water strata depths: 86'

8) Approximate salt water depths: 1202'

9) Approximate coal seam depths: NONE REPORTED IN OFFSETS

10) Does land contain coal seams tributary to active mine? NO

11 Describe proposed well work DRILL AND COMPLETE AN INJUN GAS WELL.

12) Based upon COGC Geology, and COGC/Coal Company maps.

CASING AND TUBING PROGRAM

TYPE	SPECIFICATIONS			FOOTAGE INTERVALS		CEMENT
	<u>Size</u>	<u>Grade</u>	<u>Weight per ft</u>	<u>For Drilling</u>	<u>Left in Well</u>	<u>Fill -up (Cu. Ft.)</u>
Fresh Water	13-3/8"	LS	37	40'	40'	GFS
Coal	9-5/8"	LS	26	190'	190'	112 ft ³ (CTS)
Intermediate	7"	LS	19	1860'	1860'	391 ft ³
Production	4-1/2"	M-60	10.5		2007 2950'	SET ON PACKER
Tubing						
Liners						

Cement volumes are: 9-5/8" = 1.4 ft³, 7" = 2.24 ft³ Lead and 1.21 ft³ Tail (615')

NOTE: Cement on the 9-5/8" casing is BJ Service's Surflite

1) Date: September 25, 2007
2) Operator's Well Number
Cabot #100
3) API Well No.: 47- 079 - 079-01452
State County Permit

STATE OF WEST VIRGINIA - BUREAU OF ENVIRONMENT
DIVISION OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL & GAS
NOTICE AND APPLICATION FOR A WELL WORK PERMIT

4) Surface Owner(s) to be served:
(a) Name Drema Woods
Address Amherst Industries, Inc.
2 Port Amherst Drive
Charleston, WV 25306
(b) Name _____
Address _____
(c) Name _____
Address _____
6) Inspector Jamie Stevens
Address 1524 Valley Drive
So. Charleston, WV 25303
Telephone (304) 206-7776
5) (a) Coal Owner with Declaration:
Name Drema Woods
Address Amherst Industries, Inc.
2 Port Amherst Drive
Charleston, WV 25306
(b) Coal Operator(s):
Name Not Operated
Address _____
(c) Coal Lessee with Declaration
Name _____
Address _____

TO THE PERSONS NAMED ABOVE TAKE NOTE 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 22, Article 6, Section 8(d) of the Code of West Virginia (see page 2)

I certify that as required under Chapter 22-6 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 22-6 and 35 CSR 4, 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.

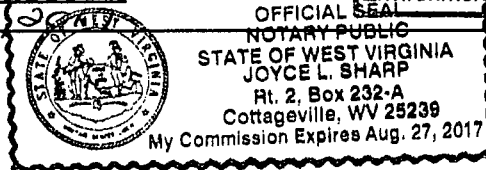
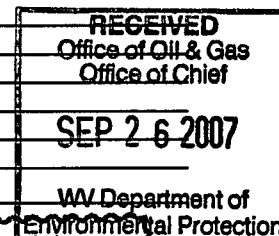
Well Operator:
By:
Its:
Address:
Telephone:

Cabot Oil & Gas Corporation
Thomas S. Liberatore
Designated Agent
900 Lee Street East, Suite 500
Charleston, WV 25301
(304) 347-1600

day of September, 2007

Subscribed and sworn before me this 25th

My Commission Expires: August 27, 2017



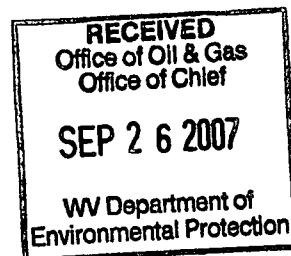
INFORMATION SUPPLIED UNDER WEST VIRGINIA CODE 079-01452
CHAPTER 22, ARTICLE 6, SECTION 8(d)
IN LIEU OF FILING LEASE(S) AND OTHER CONTINUING CONTRACT(S)

Under the oath required to make the verification on page 1 of this Notice and Application, I depose and say that I am the person who signed the Notice and Application for the Applicant, and that -

- (1) the tract of land is the same tract described in this Application, partly or wholly depicted in the accompanying plat, and described in the Construction and Reclamation Plan;
- (2) the parties and recordation data (if recorded) for lease(s) or other continuing contract(s) by which the Applicant claims the right to extract, produce, or market the oil and gas as follows:

Grantor, lessor, etc.	Grantee, lessee, etc.	Royalty	Book/Page
Cabot Oil & Gas Corp.	Cabot Oil & Gas Corp.	1/8	143/612

WELL OPERATOR: Cabot Oil & Gas Corporation
By: Thomas S. Liberatore
Its: Regional Manager/Designated Agent



079-01458

STATE OF WEST VIRGINIA
DIVISION OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS
CONSTRUCTION AND RECLAMATION PLAN AND SITE REGISTRATION APPLICATION FORM
GENERAL PERMIT FOR OIL AND GAS PIT WASTE DISCHARGE

Operator Name Cabot Oil & Gas Corp. OP Code _____

Watershed Guano Creek of Kanawha River Quadrangle Bancroft

Elevation 641' ± County Putnam District Pocatalico

Description of anticipated Pit Waste: Fluids produced by drilling & completion activities

Will a synthetic liner be used in the pit? Yes

Proposed Disposal Method For Treated Pit Wastes:

- ☒ Land Application
☐ Underground Injection (UIC Permit Number _____)
☐ Reuse (at API Number _____)
☐ Off Site Disposal (Supply form WW-9 for disposal location)
☐ Other (Explain _____)

Proposed Work For Which Pit Will Be Used:

- ☒ Drilling ☐ Swabbing
☐ Workover ☐ Plugging
☐ Other (Explain _____)

I certify that I understand and agree to the terms and conditions of the GENERAL WATER POLLUTION PERMIT issued on December 31, 1999, by the Office of Oil and Gas of the West Virginia Department of Environmental Protection. I understand that the provisions of the permit are enforceable by law. Violations of any term or condition of the general permit and/or other applicable law or regulation can lead to enforcement action.

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 thereto 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 or imprisonment.

Company Official Signature 

Company Official (Typed Name) Thomas S. Liberatore

Company Official Title Vice President

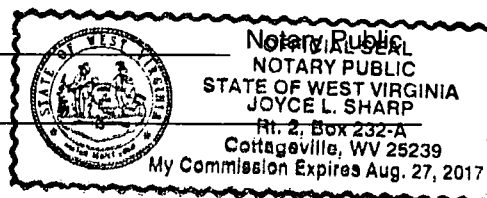
RECEIVED
Office of Oil & Gas
Office of Chief

SEP 26 2007

WV Department of
Environmental Protection

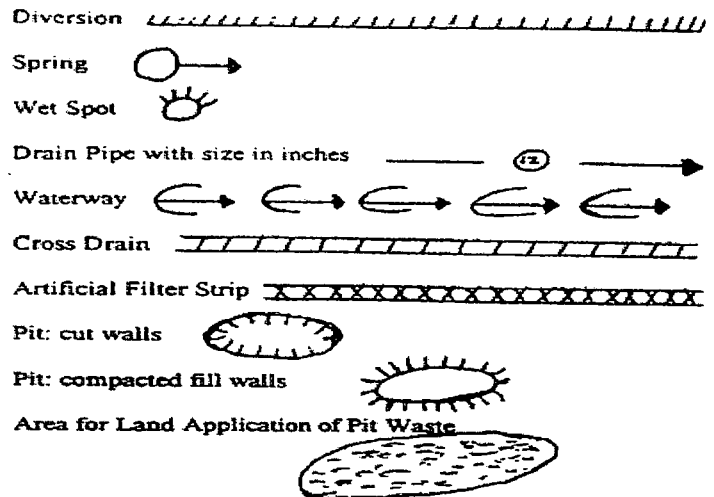
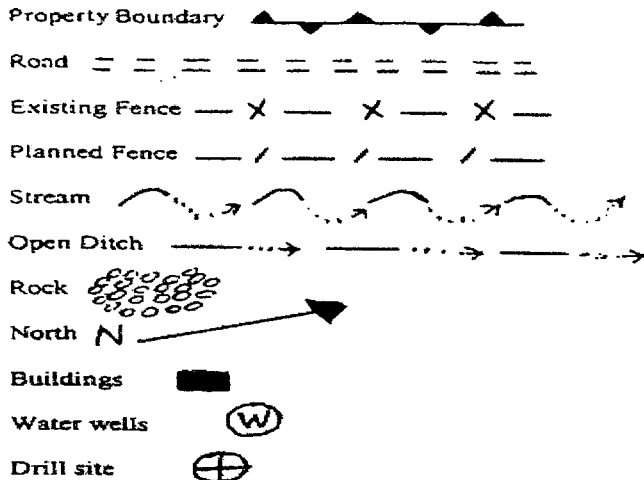
Subscribed and sworn before me this 25th day of September, 2007

My commission expires August 27, 2017



079-01452

LEGEND



Proposed Revegetation Treatment: Acres Disturbed 5 Prevegetation pH 6.5
 Lime 2 Tons/acre or to correct to pH 6.5
 Fertilizer (10-20-20 or equivalent) 500 lbs/acre (500 lbs minimum)
 Mulch Pulp Fiber at 1000 to 1500 lbs/acre
 Hydroseeding Paper Mulch 1000 lbs/acre

Seed Mixtures

Seed Type	Area I (location)	lbs/acre
Grain Rye		100
Annual Rye		20
Perennial Rye		10
Yellow Clover		5
Red Clover		5
White Clover		5
Alta Sweet Clover		5
Birdsfoot Trefoil		10
Fescue		40

Seed Type	Area II (Access Road)	lbs/acre
Grain Rye		100
Annual Rye		20
Perennial Rye		10
Yellow Clover		5
Red Clover		5
White Clover		5
Alta Sweet Clover		5
Birdsfoot Trefoil		10
Fescue		40

Temporary Seeding Note:

Temporary seeding and mulching will be utilized to provide a vegetative cover on all disturbed areas, i.e. roadways, location, road/location slopes and any other areas that are disturbed by construction activities. All disturbed areas will be temporarily seeded immediately upon construction in accordance with the application rates and dates as set forth in Table IV-1 of the West Virginia Erosion and Sediment Control Field Manual.

Attach:

Drawing(s) of road, location, pit and proposed area for land application.
 Photocopied section of involved 7.5' topographic sheet

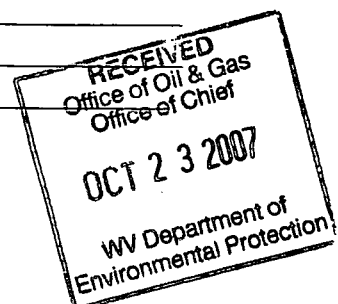
Plan Approved by: Janice Statens

Comments: _____

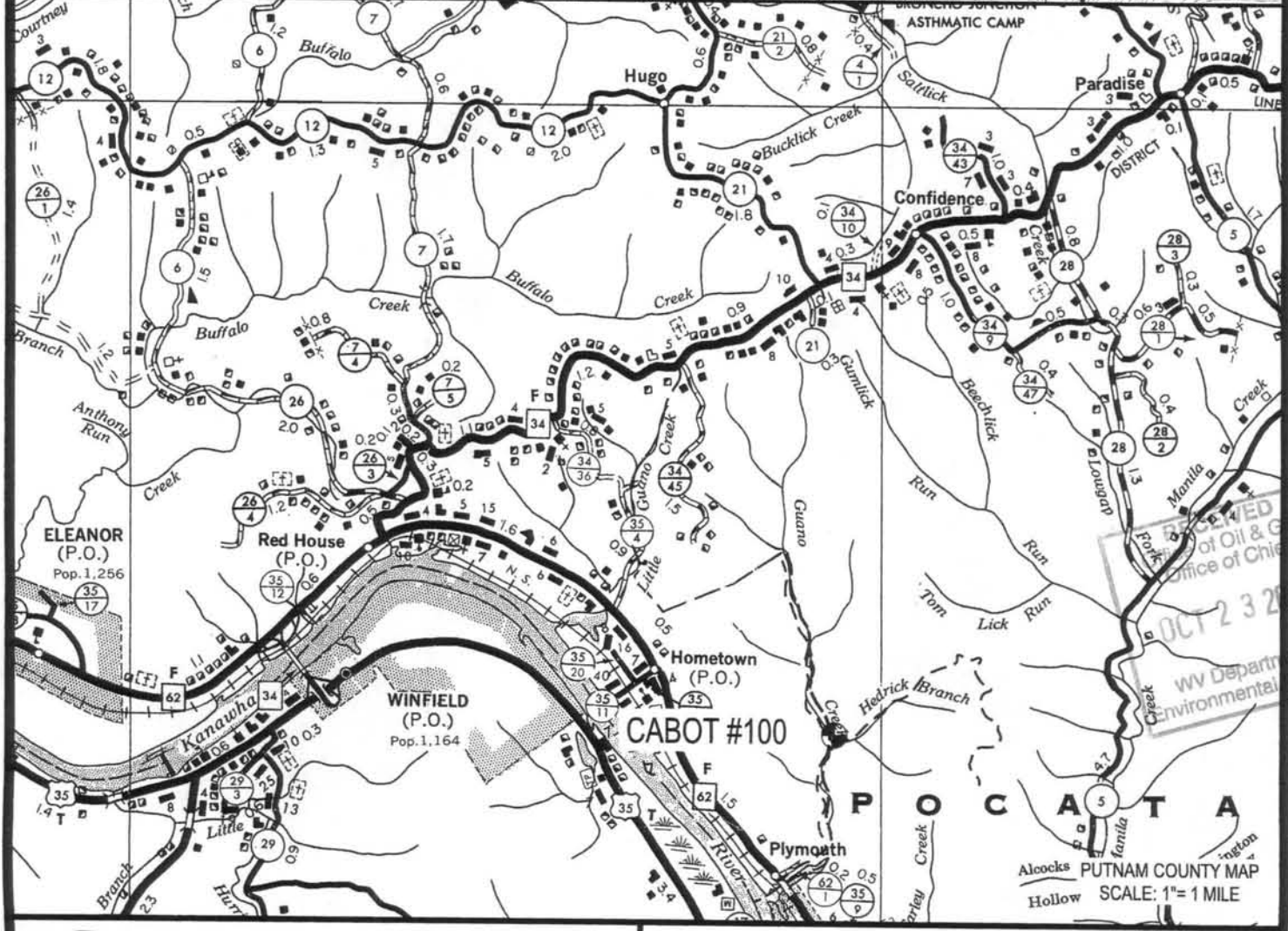
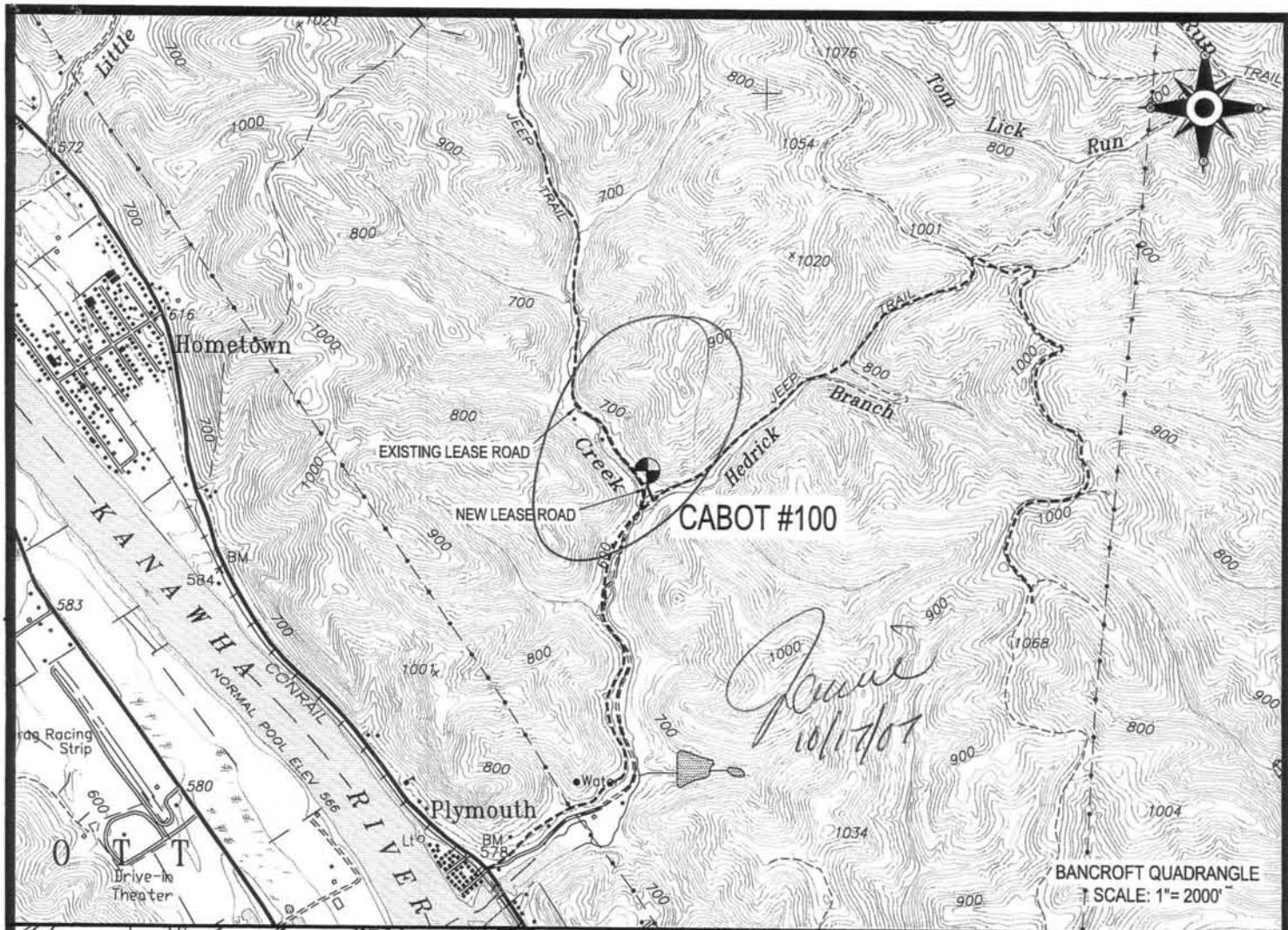
Title: _____

Field Reviewed? ☒ Yes ☐ NoDate: 10/19/07

later to be an injection well




079-01453



 Cabot Oil & Gas Corporation

CABOT #100
LOCATION MAP

 **CUNNINGHAM**
LAND SURVEYING & MAPPING SERVICES, LLC
• 5213 STEPHEN WAY •
• CROSS LANES, WEST VIRGINIA 25313 •
• VOICE (304) 561-4129 • FAX (304) 776-0703 •
• E-MAIL ADDRESS • DKCUNNINGHAM@SUDDENLINK.NET •

LOCATED ON THE WATERS OF GUANO CREEK
OF KANAWHA RIVER
POCATALICO DISTRICT, PUTNAM COUNTY, W.VA
BANCROFT QUADRANGLE

PROJECT NO. CABOT	DWG. NO. CABOT 100 LOC.DWG
DATE: 09-08-07	SCALE: AS NOTED
CHK'D BY: D.K.C.	DRAWN BY: G. PERKINS
FILE: C:\PROJECT FOLDER\CABOT	

GENERAL NOTES:

THIS DRAWING REPRESENTS A SCHEMATIC REPRESENTATION OF THE PROPOSED WELL SITE AND ACCESS ROAD. PROPOSED STRUCTURES SUCH AS THE DRILLING PIT, ROADWAY, CULVERTS, SEDIMENT BARRIERS, ETC. ARE SHOWN IN THEIR APPROXIMATE PREPLANNING CONFIGURATION. GIVEN UNFORESEEN CIRCUMSTANCES, THE AS-BUILT LOCATION OF THESE STRUCTURES MAY VARY SLIGHTLY FROM THE LOCATION SHOWN ON THE ATTACHED DRAWINGS.

ALL ROADS SHOWN THEREON ARE EXISTING UNLESS OTHERWISE NOTED AND SHALL BE MAINTAINED IN ACCORDANCE WITH GUIDELINES AND REQUIREMENTS OF WEST VIRGINIA DEPARTMENT OF OIL AND GAS EROSION AND SEDIMENT CONTROL MANUAL.

ALL CULVERTS SHOWN ON THIS DRAWING ARE PROPOSED AND WILL BE A MINIMUM OF 15" IN DIAMETER UNLESS OTHERWISE NOTED.

DITCH LINES AND CULVERTS WILL BE INSTALLED WHENEVER PRACTICAL. HOWEVER PORTIONS OF THE EXISTING/ PROPOSED ROADS WHICH ARE LOCATED IN SOLID ROCK SHALL NOT REQUIRE DITCHES OR CROSS DRAINS, UNLESS OTHERWISE WARRANTED BY FIELD CIRCUMSTANCES.

SUPPLEMENTAL DRAINAGE AND/OR SEDIMENT CONTROL STRUCTURES MEASURES IN ADDITION TO THOSE SHOWN ON THE ATTACHED DRAWINGS WILL BE INSTALLED WHEN AND WHERE DEEMED NECESSARY. SUCH ADDITIONAL MEASURES MAY CONSIST OF EITHER STRAW BALES, SILT FENCES OR OTHER MEASURES OUTLINED IN THE WEST VIRGINIA DEPARTMENT OF OIL AND GAS EROSION AND SEDIMENT CONTROL FIELD MANUAL.

SEDIMENT BASINS (TRAPS) WILL BE CONSTRUCTED AT ALL CULVERTS AND CROSS DRAINS INLETS AS REQUIRED IN THE WEST VIRGINIA DEPARTMENT OF OIL AND GAS EROSION AND SEDIMENT CONTROL MANUAL. FIELD CONDITIONS SUCH AS ROCK OUTCROPS AND BEDROCK MAY PROHIBIT INLET TRAPS BEING INSTALLED WHEN THESE CONDITIONS EXIST. ADDITIONAL EROSION CONTROL MEASURES SHALL BE EVALUATED AND UTILIZED AS NEEDED.

A SEDIMENT BARRIERS OF EITHER BRUSH, STRAW BALES, FILTER FENCE, ETC. WILL BE INSTALLED AND MAINTAINED BELOW THE OUT FALL OF ALL PROPOSED CULVERTS AND AT ALL OTHER STORM WATER DRAINAGE POINTS FROM EITHER THE ROADWAY OR THE LOCATION.

ALL NECESSARY TIMBER OR BRUSH WILL BE REMOVED FROM ROUTE OF THE ROADWAY AND LOCATION BY CLEANING AND GRUBBING ACTIVITIES. ANY SALVAGEABLE TIMBER WILL BE CUT AND STACKED TO THE SIDE OF THE ROADWAY OR REMOVED TO A STOCKPILE AREA. THE REMAINING TIMBER OR BRUSH WILL BE CUTUP AND WIND ROWED BELOW THE OUTSLOPE OF THE CONSTRUCTION AREAS TO BE UTILIZED AS A SEDIMENT BARRIER.

SEPARATE PERMITS WILL BE OBTAINED FROM THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION FOR ALL POINTS OF INGRESS AND EGRESS FROM COUNTY AND STATE ROADS. THESE INGRESS AND EGRESS POINTS WILL BE MAINTAINED IN ACCORDANCE WITH CURRENT WEST VIRGINIA DEPARTMENT OF TRANSPORTATION REGULATIONS. A STABILIZED CONSTRUCTION ENTRANCE CONSISTING OF 8" OF CRUSHED STONE WILL BE CONSTRUCTED FOR A MINIMUM DISTANCE OF 50' FROM THE INGRESS AND EGRESS POINTS OF ALL PUBLIC ROADWAYS IN ACCORDANCE WITH CURRENT WEST VIRGINIA DEPARTMENT OF TRANSPORTATION REGULATIONS.

ALL CULVERTS SHOWN ON THE ATTACHED DRAWINGS ARE TO BE CONSIDERED PERMANENT AND WILL REMAIN IN PLACE AFTER COMPLETION OF CONSTRUCTION ACTIVITIES UNLESS NOTED OTHERWISE. A STABILIZED OUTLET CONTROL DEVICE SUCH AS RIP RAP, NATURAL STONE, BRUSH, ETC. WILL BE INSTALLED BELOW THE OUT FALL OF ANY ROADWAY CULVERT(S) WHICH ARE NOT LOCATED IN A STREAM OR CREEK.

PERMANENT CROSS DRAINS OR WATER BARS WILL BE INSTALLED AS AN INTEGRAL PART OF THE RECLAMATION PROCESS AND SHALL BE SPACED IN ACCORDANCE WITH AS-BUILT ROADWAY SLOPES AND TABLE 11-4 OF THE WEST VIRGINIA DEPARTMENT OF OIL AND GAS EROSION AND SEDIMENT CONTROL FIELD MANUAL.

TEMPORARY SEEDING AND MULCHING WILL BE UTILIZED TO PROVIDE A VEGETATIVE COVER ON ALL DISTURBED AREAS I.E. ROADWAYS, LOCATION, ROAD/LOCATION SLOPES AND ANY OTHER AREAS THAT ARE DISTURBED BY CONSTRUCTION ACTIVITIES.

THE LOCATION OF DRILLING PIT(S) MAY BE ADJUSTED TO THE MOST ENVIRONMENTAL SAFE SITE TO MEET THE REQUIREMENTS OF THE WVDEP.

CONTRACTORS NOTE:

IT IS THE RESPONSIBILITY OF THE CONSTRUCTION CONTRACTOR TO FIELD VERIFY THE EXACT LOCATION AND CONDITION OF ALL UNDERGROUND UTILITIES, SANITARY SEWERS, STORM SEWERS, ETC. PRIOR TO THE COMMENCEMENT OF ANY/OR CONSTRUCTION ACTIVITIES. DIG WITH C.A.R.E. CALL MISS UTILITY 1-800-245-4848.

TABLE 11-4 SPACING OF CROSS DRAINS	
ROAD GRADE (%)	DISTANCE (FT)
1	400
2	250
5	135
10	80
15	60
20	45

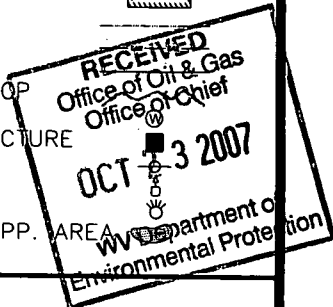
TABLE 11-7 SPACING OF CULVERTS	
ROAD GRADE (%)	DISTANCE (FT)
2-5	500-300
6-10	300-200
11-15	200-100
16-20	100



1-800-245-4848

DRAWING LEGEND

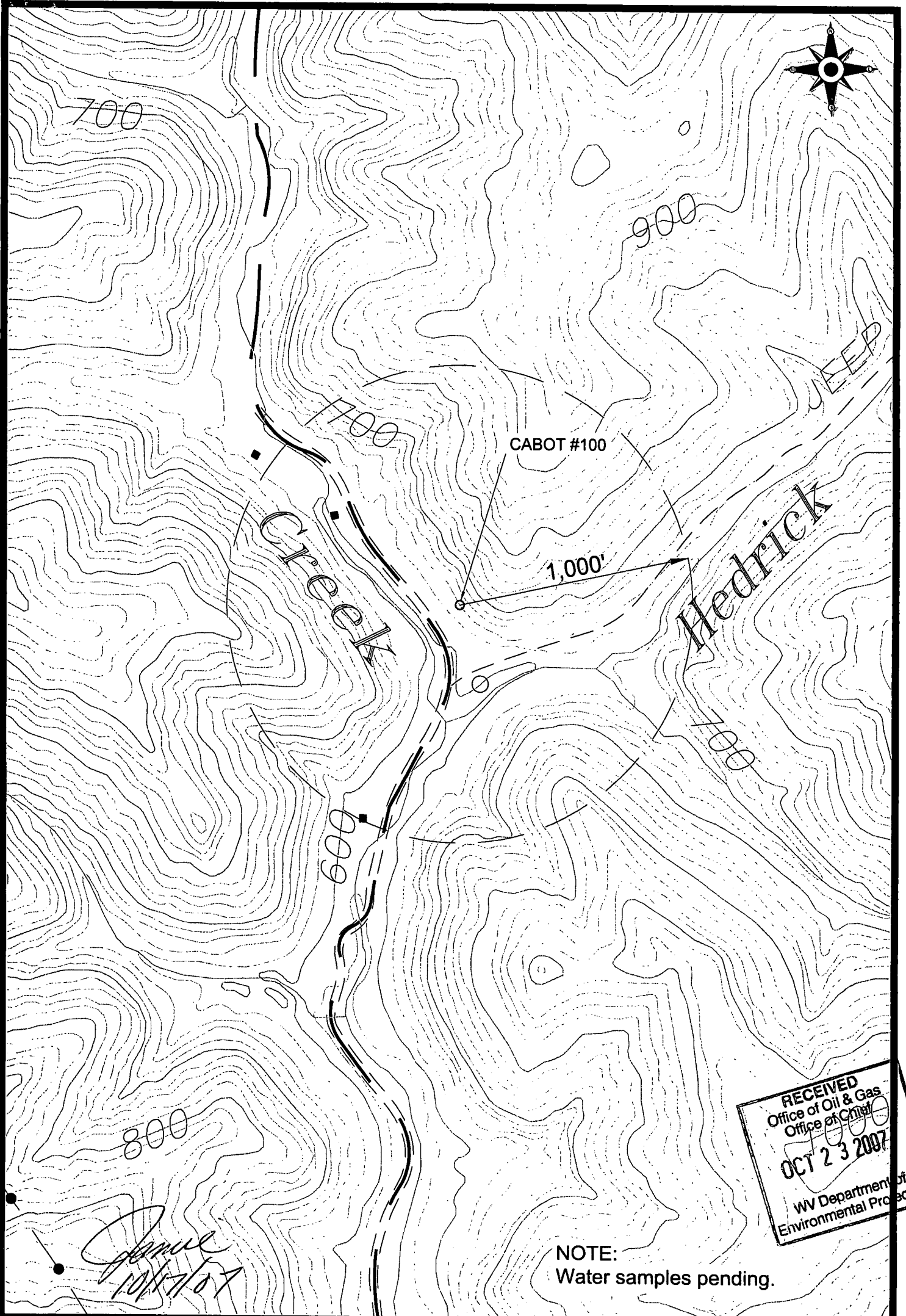
- PROPOSED ROAD
- EXISTING ROAD
- STRAW BALES
- SILT FENCE
- BRUSH BARRIER
- TREE LINE
- ROCK RIP RAP
- CROSS DRAIN
- CULVERT
- DRILLING PIT
- ROAD DITCH
- GAS LINE
- FENCE LINE
- ROCK OUTCROP
- WATER WELL
- HOUSE/STRUCTURE
- UTILITY POLE
- SPRING
- WET SPOT
- PIT WASTE APP. AREA



DRIVING DIRECTIONS FOR CABOT #100

- 1.) FROM CHARLESTON, W.VA DRIVE WEST ON INTERSTATE 64 FOR 14 MILES± TO THE NITRO, W.VA INTERCHANGE AND EXIT THE HIGHWAY.
- 2.) AT THE BOTTOM OF THE EXIT RAMP, BEAR TO THE RIGHT AND CONTINUE NORTH ON STATE ROUTE 25 FOR 0.8 MILES± TO THE INTERSECTION OF STATE ROUTE 25 AND 62 NEAR THE HARDEE'S RESTAURANT AT ROCKY FORK.
- 3.) BEAR LEFT AT THE INTERSECTION AND CONTINUE IN A NORTHERLY DIRECTION ON STATE ROUTE 62 FOR 5.4 MILES± TO THE INTERSECTION OF SECONDARY ROUTE 62/1 AT THE ENTRANCE TO THE AMHERST PUBLIC HUNTING AND FISHING AREA WHICH IS LOCATED JUST NORTH OF BANCROFT, W.VA. ON THE RIGHT-HAND SIDE OF THE ROAD.
- 4.) TURN RIGHT ONTO SECONDARY ROUTE 62/1, PASSING THROUGH THE STEEL GATE AND THE UPPER ROAD AND CONTINUE UP THE HOLLOW WITH THE EXISTING LEASE ROAD FOR 1.0 MILES± TO A FORK IN THE ROAD NEAR AN OLD PLUGGED WELL.
- 5.) BEAR RIGHT AT THE FORK IN THE ROAD AND UP HEDRICK BRANCH WITH THE EXISTING LEASE ROAD FOR APPROXIMATELY 200 FEET± TO THE BEGINNING OF THE PROPOSED ACCESS ROAD LOCATED ON THE LEFT-HAND SIDE OF THE ROAD.
- 6.) FROM THE AFOREMENTIONED SITE, FOLLOW THE FLAGGING ACROSS THE BOTTOM FOR APPROXIMATELY 350 FEET± TO THE PROPOSED WELL SITE FLAGGED IN THE FIELD AS SHOWN ON THE "CONSTRUCTION AND RECLAMATION PLAN".

079-01452



Cabot Oil & Gas Corporation

CABOT #100

WATER SAMPLE LOCATION MAP

LOCATED ON THE WATERS OF GUANO CREEK
OF KANAWHA RIVER
POCATALICO DISTRICT, PUTNAM COUNTY, W.VA
BANCROFT QUADRANGLE



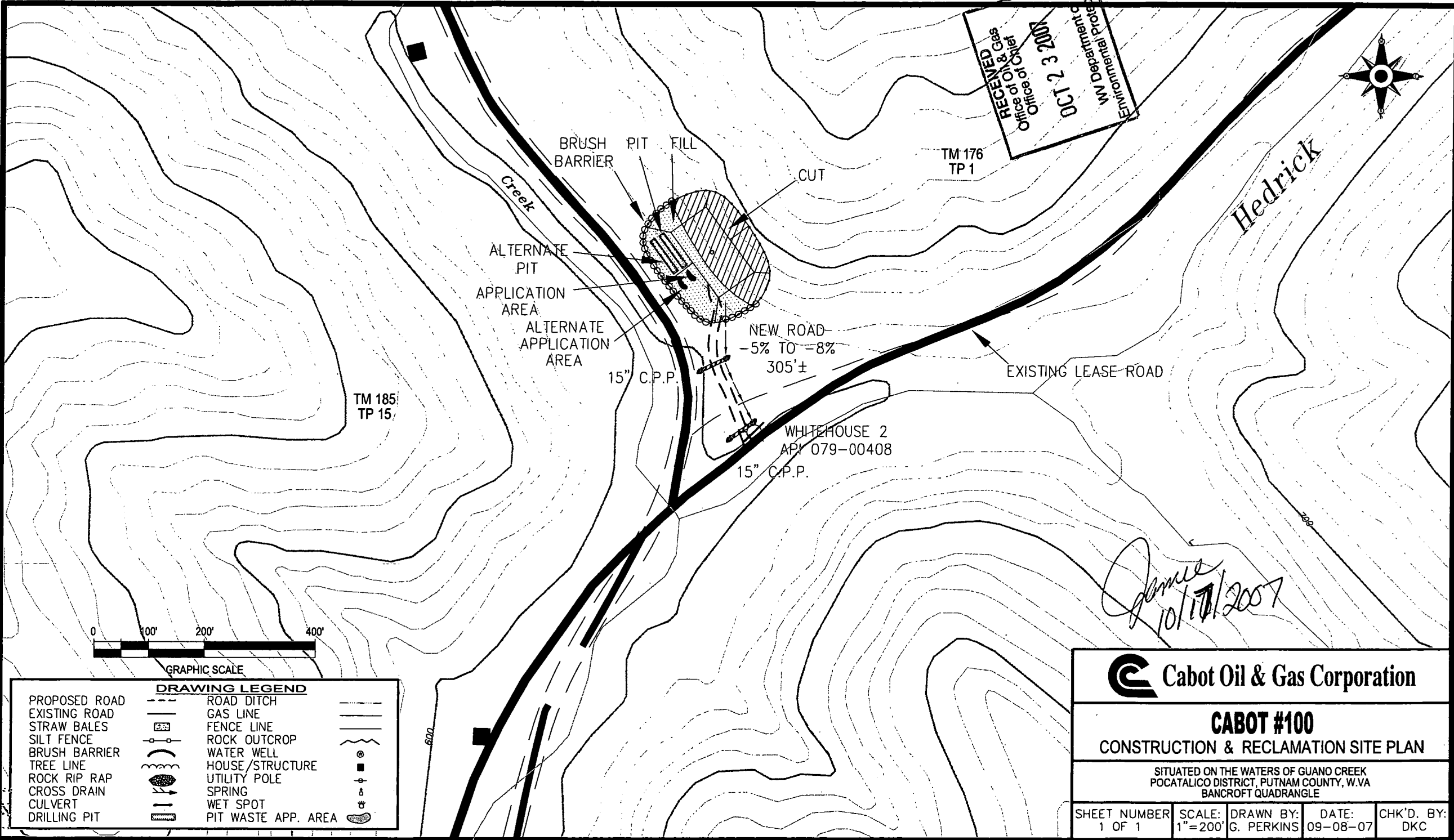
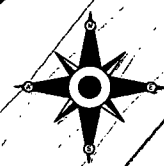
CUNNINGHAM
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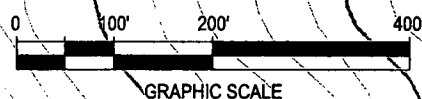
PROJECT NO. CABOT	DWG. FILE: CABOT 100 WS.DWG	
DATE: 09-08-07	SCALE: 1" = 500'	CHK'D BY: D.K.C.
DRAWN BY: G. PERKINS FILE: C:\PROJECT FOLDER\CABOT		

079-01452


RECEIVED
Office of Oil & Gas
Office of Chief
CCT 2 3 2007
Environmental Protection
Department



James
10/17/2007



DRAWING LEGEND		
PROPOSED ROAD	ROAD DITCH	
EXISTING ROAD	GAS LINE	
STRAW BALES	FENCE LINE	
SILT FENCE	ROCK OUTCROP	
BRUSH BARRIER	WATER WELL	
TREE LINE	HOUSE/STRUCTURE	
ROCK RIP RAP	UTILITY POLE	
CROSS DRAIN	SPRING	
CULVERT	WET SPOT	
DRILLING PIT	PIT WASTE APP. AREA	

 Cabot Oil & Gas Corporation

CABOT #100
CONSTRUCTION & RECLAMATION SITE PLAN

SITUATED ON THE WATERS OF GUANO CREEK
POCATALICO DISTRICT, PUTNAM COUNTY, W.VA
BANCROFT QUADRANGLE

SHEET NUMBER 1 OF 1	SCALE: 1"=200'	DRAWN BY: G. PERKINS	DATE: 09-08-07	CHK'D. BY: DKC
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U.S. Postal Service™
CERTIFIED MAIL™ RECEIPT
(Domestic Mail Only; No Insurance Coverage Provided)

For delivery information visit our website at www.usps.com®

OFFICIAL USE

Postage	\$ 1.31
Certified Fee	2.65
Return Receipt Fee (Endorsement Required)	2.15
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$ 6.11

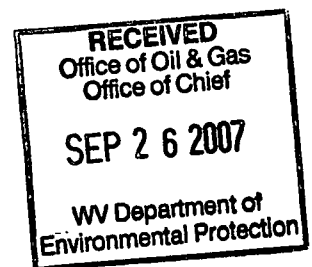


7007 0220 0000 3126 3881

Sen	Drema Woods
Str	Amherst Industries, Inc.
or F	2 Port Amherst Drive
City	Charleston, WV 25306
PS	9125107 Cabot 100

Instructions

079-01452



~~Patricia Bancroft~~ ✓

Operator: CABOT OIL & GAS CORPORATION
API: 7901452
WELL No: CABOT 100
Reviewed by: Chris J Date: 10/3/07
Due Date: 10/12/07

CHECKLIST FOR FILING A PERMIT

New Well

- ☒ WW-2B
- * ☒ Inspector signature on WW-2B
- ☒ WW-2A (Notarized)
- ☒ Certified Mail Receipts, Waivers, or Affidavits of Personal Service
- ☐ Surface Owner Waiver
- ☐ Coal Owner / Lessee / Operator Waiver
- ☒ WW-2A-1 Showing Book/Page Number and Royalty Percentage
- ☒ WW-2B-1 (Names, addresses, and spot on topographical map listed as water testing)
- ☒ WW-9 (Page 1 & 2) (Notarized)
- * ☒ Inspector Signature on WW-9
- ☒ Reclamation plan
- ☒ Topographic Map of location of well
- ☒ Mylar Plat (Surface owner on plat matches WW-2A)
- ☒ Bond
- ☒ Company is Registered with the SOS
- ☒ Worker's Compensation / Unemployment Insurance account is OK
- ☒ \$650.00 check (\$550.00 if no pit)