



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 16, 2015

WELL WORK PLUGGING PERMIT

Plugging

This permit, API Well Number: 47-3900492, 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.

Upon completion of the plugging well work, the above named operator will reclaim the site according to the provisions of WV Code 22-6-30. The above named operator will also file, as required in WV Code 22-6-23, an affidavit on form WR-38 by two experienced persons in the operator's employment and the Oil and Gas inspector that the work authorized under this permit was performed and a description given. Failure to abide by all statutory and regulatory provisions governing all duties and operations here under may result in suspensions or revocation of this permit and in addition may result in civil and/or criminal penalties being imposed upon the operator.

This permit will expire in two (2) years from date of issue. If there are any questions, please free to contact me at (304) 926-0499 ext. 1654.



James Martin
Chief

Operator's Well No: 281
Farm Name: WILLIAMS COAL CO.
API Well Number: 47-3900492
Permit Type: Plugging
Date Issued: 01/16/2015

PERMIT CONDITIONS

West Virginia Code §22-6-11 allows the Office of Oil and Gas to place specific conditions upon this permit. Permit conditions have the same effect as law. Failure to adhere to the specified permit conditions may result in enforcement action.

CONDITIONS

1. All pits must be lined with a minimum of 20 mil thickness synthetic liner.
2. In the event of an accident or explosion causing loss of life or serious personal injury in or about the well or while working on the well, the well operator or its contractor shall give notice, stating the particulars of the accident or explosion, to the oil and gas inspector and the Chief within twenty-four (24) hours.
3. Well work activities shall not constitute a hazard to the safety of persons.

STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
OFFICE OF OIL AND GAS

APPLICATION FOR A PERMIT TO PLUG AND ABANDON

4) Well Type: Oil ___ / Gas X / Liquid injection ___ / Waste disposal ___ /
(If "Gas, Production X or Underground storage ___) Deep ___ / Shallow X

5) Location: Elevation 1,576.98' Watershed Wet Branch of Gabin Creek
District Cabin Creek County Kanawha Quadrangle Cedar Grove

6) Well Operator Cabot Oil & Gas Corporation 7) Designated Agent Whitney Johnson
Address Five Penn Center West, Ste. 401 Address P.O. Box 450
Pittsburgh, PA 15276 Glasgow, WV 25086

8) Oil and Gas Inspector to be notified 9) Plugging Contractor
Name Terry Urban Name Shreve's Well Service
Address P.O. Box 1207 Address 3473 Triplett Road
Clendenin, WV 25045 Spencer, WV 25275

10) Work Order: The work order for the manner of plugging this well is as follows:
See Attached Sheet

*SEE well config
for Charges*

Notification must be given to the district oil and gas inspector 24 hours before permitted work can commence.

Work order approved by inspector *[Signature]* Date 11-17-14

Williams Coal #281

API # 47 – 039 - 00492

PLUGGING PROCEDURE

Current Configuration

Elev. 1577'

TD @ 3205'

8-1/4" 24# casing @ 1083'

6-5/8" casing @ 2092' pulled while drilling

5-3/16" 17# casing @ 2507'

3" 9.2# liner top @ 2705'

3" 7.7# liner top @ 2905'

Water reported @ 1742' – 1746', 1812' – 1818', 1850' – 1856', & 2368' – 2374'

Coal reported @ 82' – 84', 105' – 108', 306' – 309', 359' – 362', 444' – 449', 500' – 503',
701' – 703', 749' – 751', 901' – 903', & 986' – 990'

Berea @ 3135' – 3175' w/ gas show @ 3156' – 3175'

Weir @ 2845' – 2914' (no show reported)

Maxton @ 2360' – 2399' w/ water @ 2368' – 2374'

PROCEDURE

1. Contact Danville Office a minimum of 48 hours prior to starting work.
2. Contact State Inspector a minimum of 24 hours prior to starting work.
3. Lay 2" line from wellhead to pit/tank and stake down securely.
4. MIRU service rig and blow down well. Have vacuum truck available to catch any fluids circulated from well.
5. Unpack wellhead.
6. Pull 3" 9.2# liner @ 2705'.
7. Pull 3" 7.7# liner @ 2905'.
8. TIH with 2 3/8" work string to 3180'.
9. Pump 20 bbls 6% gel followed by 55 sks of Class A cement for plug 1 from 3180' to 2700'.
10. Displace w/ 10 1/2 bbls of 6% gel.
11. TOOH with work string. Let cement plug set for a minimum of eight hours.
12. Pull 5-3/16" casing. If unable to pull, run freepoint on casing, cut casing above freepoint, and POOH with casing.
13. TIH with 2 3/8" work string to 2550'.
14. Pump 20 bbls 6% gel followed by a minimum of 55 sks of Class A cement for plug 2 from 2550' to 2200'. The amount of cement required must cover the top of 5-3/16" casing cut by 50'.
15. Displace w/ 8 1/2 bbls of 6% gel.
16. Pull work string up to 1900' and pump 90 sks of Class A cement for cement plug 3 from 1900' to 1600'. 1550' gun
17. Displace w/ 6 bbls of 6% gel.
18. TOOH with work string.
19. Pull 8-1/4" casing. If unable to pull, run freepoint on casing, cut casing above freepoint, and POOH with casing. If 8-1/4" casing required cutting it must be perforated across from coal seams.
20. TIH with 2 3/8" work string to 1100'.
21. Pump 20 bbls 6% gel followed by a minimum of 190 sks of Class A cement for plug 4 from 1100' to 680'.
22. Displace w/ 2 1/2 bbl of 6% gel.
23. Pull work string up to 545' and pump 125 sks of Class A cement for cement plug 5 from 545' to 280'.
24. Displace w/ 1 bbl of 6% gel.

25. Pull work string up to 150' and pump 70 sks of Class A cement for cement plug 6 from 150' to surface.
26. TOOH with work string and lay down.
27. RDMO Cementing Company.
28. Place monument as required by law on top of well bore.
29. Reclaim well site.

Williams Coal #281
API 47-039-00492
PROPOSED CONFIGURATION

Coal @ 82' - 84', 105' - 108', 306' - 309',
359' - 362', 444' - 449', 500' - 503',
701' - 703', 749' - 751', 901' - 903',
986' - 990'

Salt Sand w/ water @ 1742' - 1746',
1812' - 1818', & 1850' - 1856'

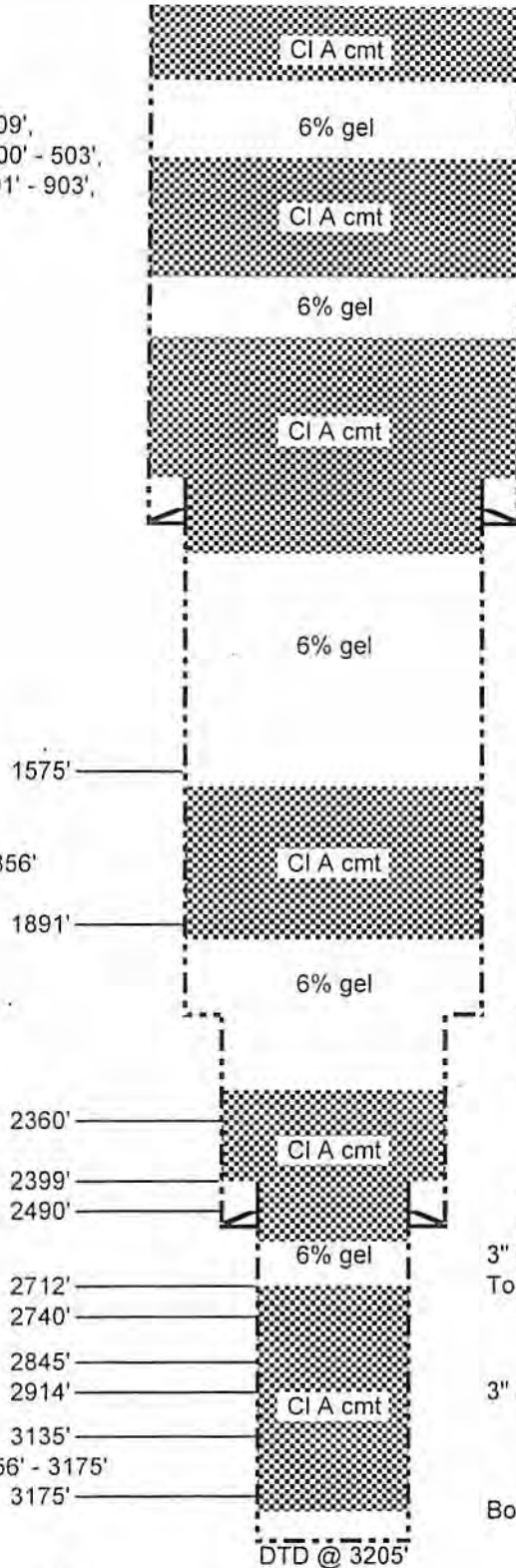
Maxton w/ water @ 2368' - 2374'

Big Lime

Injun

Weir

Berea w/ gas show @ 3156' - 3175'



Bottom of plug 6 @ 150'

Top of plug 5 @ 280'

Bottom of plug 5 @ 545'

Top of plug 4 @ 680'

8-1/4" 24# Casing cut & pulled
Bottom of plug 4 @ 1100'

Top of plug 3 @ 1600'

Bottom of plug 3 @ 1900'

6-5/8" Casing pulled @ 2092'

Top of plug 2 @ 2200'

5-3/16" 17# Casing cut & pulled
Bottom of plug 2 @ 2550'

3" 9.2# liner pulled
Top of plug 1 @ 2700'

3" 7.7# liner pulled

Bottom of plug 1 @ 3180'

Operator will cover All 0.56 bearings Formulas & Salt water

ONE Plug OK TU

Schematic is not to scale

T. On 08/19/14

WW-4A
Revised 6-07

1) Date: November 11, 2014
2) Operator's Well Number
Williams Coal #281
3) API Well No.: 47 - 039 - 00492

STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS
NOTICE OF APPLICATION TO PLUG AND ABANDON A WELL

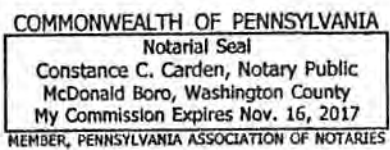
4) Surface Owner(s) to be served:	5) (a) Coal Operator
(a) Name <u>Shonk Land Company</u>	Name <u>Speed Mining, LLC</u>
Address <u>194 Summers Street</u>	Address <u>P.O. Box 99</u>
<u>Charleston, WV 25301</u>	<u>Dawes, WV 25054</u>
(b) Name _____	(b) Coal Owner(s) with Declaration
Address _____	Name <u>Shonk Land Company</u>
	Address <u>194 Summers Street</u>
	<u>Charleston, WV 25301</u>
(c) Name _____	Name _____
Address _____	Address _____
6) Inspector <u>Terry Urban</u>	(c) Coal Lessee with Declaration
Address <u>P.O. Box 1207</u>	Name <u>Robin Land Company</u>
<u>Clendenin, WV 25045</u>	Address <u>106 Lockheed Drive</u>
Telephone <u>(304) 389-7583</u>	<u>Beaver, WV 25813</u>

TO THE PERSONS NAMED ABOVE: You should have received this Form and the following documents:

- (1) The application to Plug and Abandon a Well on Form WW-4B, which sets out the parties involved in the work and describes the well its and the plugging work order; and
- (2) The plat (surveyor's map) showing the well location on Form WW-6.

The reason you received these documents is that you have rights regarding the application which are summarized in the instructions on the reverses side. However, you are not required to take any action at all.

Take notice that under Chapter 22-6 of the West Virginia Code, the undersigned well operator proposes to file or has filed this Notice and Application and accompanying documents for a permit to plug and abandon a well with the Chief of the Office of Oil and Gas, West Virginia Department of Environmental Protection, with respect to the well at the location described on the attached Application and depicted on the attached Form WW-6. Copies of this Notice, the Application, and the plat have been mailed by registered or certified mail or delivered by hand to the person(s) named above (or by publication in certain circumstances) on or before the day of mailing or delivery to the Chief.



Well Operator Cabot Oil & Gas Corporation
 By: *Kenneth J. ...*
 Its: Regulatory Supervisor
 Address Five Penn Center West, Suite 401
Pittsburgh, PA 15276
 Telephone (412) 249-3850

Subscribed and sworn before me this 11th day of November, 2014
Constance C. Carden Notary Public
 My Commission Expires November 16, 2017

RECEIVED
 Office of Oil and Gas
 NOV 13 2014

Oil and Gas Privacy Notice

The Office of Oil and Gas processes your personal information, such as name, address and phone number, as a part of our regulatory duties. Your personal information may be disclosed to other State agencies or third parties in the normal course of business or as needed to comply with statutory or regulatory requirements, including Freedom of Information Act requests. Our office will appropriately secure your personal information. If you have any questions about our use of your personal information, please contact DEP's Chief Privacy Officer at depprivacyofficer@wv.gov.

01/16/2015

3900492P

U.S. Postal Service™
CERTIFIED MAIL® RECEIPT
 Domestic Mail Only

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

OFFICIAL USE

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

7014 2120 0003 6926 2988

Sent To Shonk Land Company
Street or PO 194 Summers Street
City, State Charleston, WV 25301

Postmark Here: PITTSBURGH PA 15244 NOV 12 2014 FOUR BRANCH

Williams Coal 281 P&A

PS Form Instructions

U.S. Postal Service™
CERTIFIED MAIL® RECEIPT
 Domestic Mail Only

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

OFFICIAL USE

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

7014 2120 0003 6926 2971

Sent To Speed Mining, LLC
Street or PO P.O. Box 99
City, State Dawes, WV 25054

Postmark Here: PITTSBURGH PA 15244 NOV 12 2014 FOUR BRANCH

Williams Coal 281 P&A

PS Form Instructions

U.S. Postal Service™
CERTIFIED MAIL® RECEIPT
 Domestic Mail Only

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

OFFICIAL USE

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

7014 2120 0003 6926 3008

Sent To Robin Land Company
Street & PO Box 106 Lockheed Drive
City, State Beaver, WV 25813

Postmark Here: PITTSBURGH PA 15244 NOV 12 2014 FOUR BRANCH

Williams Coal 281 P&A

PS Form Instructions

U.S. Postal Service™
CERTIFIED MAIL® RECEIPT
 Domestic Mail Only

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

OFFICIAL USE

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

7014 2120 0003 6926 2995

Sent To Terry Urban
Street & PO Box P.O. Box 1207
City, State Clendenin, WV 25045

Postmark Here: PITTSBURGH PA 15244 NOV 12 2014 FOUR BRANCH

Williams Coal 281 P&A

PS Form Instructions

RECEIVED
 Office of Oil and Gas
 NOV 13 2014
 WV Department of
 Environmental Protection

01/16/2015

STATE OF WEST VIRGINIA
DEPARTMENT 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 Corporation OP Code _____

Watershed Wet Branch of Cabin Creek Quadrangle Cedar Grove

Elevation 1,577' County Kanawha District Cabin Creek

Description of anticipated Pit Waste: None - no cuttings produced during plugging operation

Do you anticipate using more than 5,000 bbls of water to complete the proposed well work? Yes _____ No _____

Will a synthetic liner be used in the pit? N/A If so, what mil.?

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 _____)

ANY WELL EFFLUENT MUST BE CONTAINED IN TANKS AND DISPOSED OF PROPERLY. J.M.M.

Drilling medium anticipated for this well? Air, freshwater, oil based, etc. _____

-If oil based, what type? Synthetic, petroleum, etc. _____

Additives to be used? _____

Drill cuttings disposal method? Leave in pit, landfill, removed offsite, etc. No cuttings produced during plugging operation

-If left in pit and plan to solidify what medium will be used? Cement, lime, sawdust _____

-Landfill or offsite name/permit number? _____

I certify that I understand and agree to the terms and conditions of the GENERAL WATER POLLUTION PERMIT issued on August 1, 2005, 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 *Kenneth L. Marcum*

Company Official (Typed Name) Kenneth L. Marcum

Company Official Title Regulatory Supervisor

Subscribed and sworn before me this 11th day of November, 2014

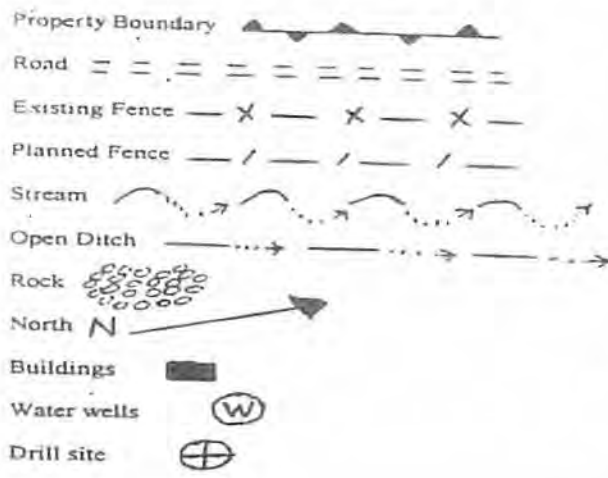
Constance C. Carden

Notary Public

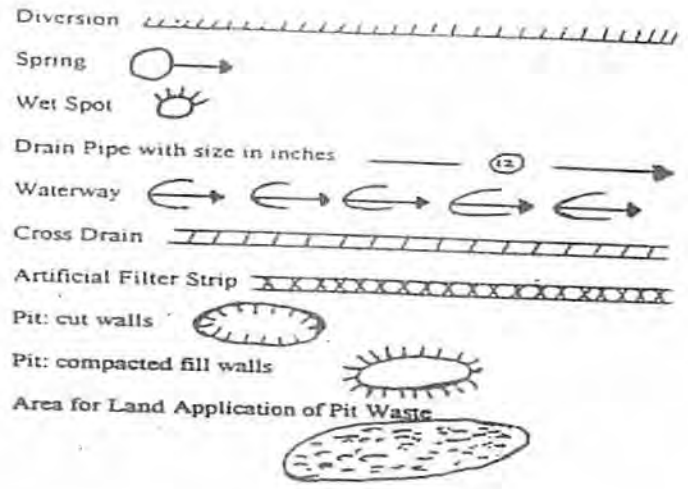
My commission expires November 16, 2017

COMMONWEALTH OF PENNSYLVANIA
Notarial Seal
Constance C. Carden, Notary Public
McDonald Boro, Washington County
My Commission Expires Nov. 16, 2017
MEMBER, PENNSYLVANIA ASSOCIATION OF NOTARIES

01/16/2015



LEGEND



Proposed Revegetation Treatment: Acres Disturbed 3.5 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 Tons/acre

Seed Mixtures

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

Seed Type	Area II lbs/acre
Grain Rye - 100	Red Clover - 5 Fescue - 40
Annual Rye - 20	White Clover - 5
Perennial Rye - 1	Alta Sweet Clover - 5
Yellow Clover - 5	Birdsfoot Trefoil - 10

Attach: Drawing(s) of road, location, pit and proposed area for land application.

Photocopied section of involved 7.5' topographic sheet.

Plan Approved by: [Signature]

Comments: _____

Title: Inspector Delgado Date: 11-17-14

Field Reviewed? Yes No

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.

ROAD GRADE (%)	DISTANCE (FT)
1	400
2	250
5	135
10	80
15	60
20	45

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

DRIVING DIRECTIONS FOR WILLIAMS COAL 281

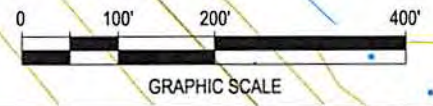
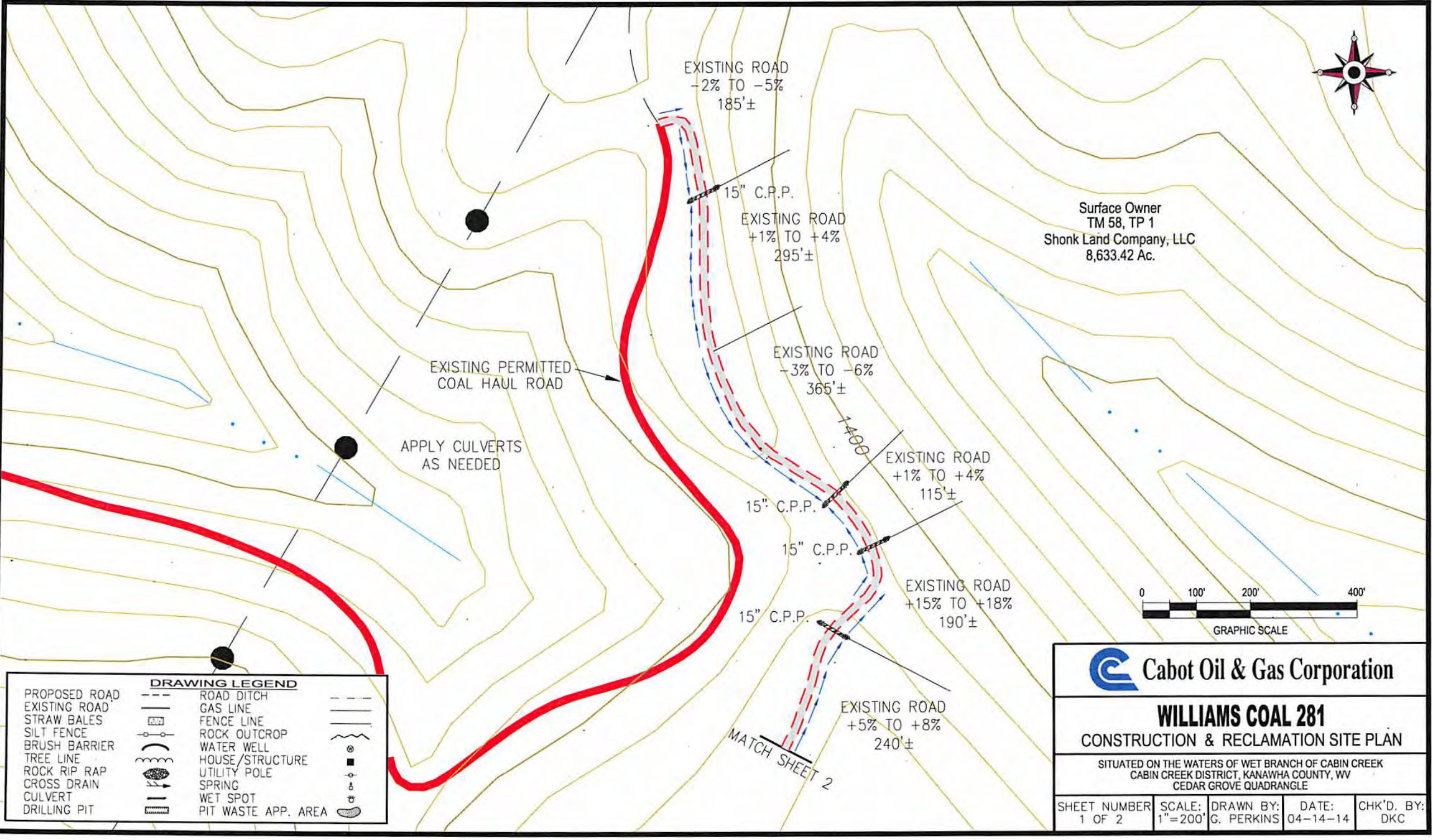
- 1.) FROM CHARLESTON, WV, GO EAST ON INTERSTATE 77 FOR APPROXIMATELY 164± MILES TO EXIT 85 AND EXIT THE HIGHWAY.
- 2.) TURN LEFT AND GO APPROXIMATELY 0.2± MILE TO STATE ROUTE 61.
- 3.) TURN RIGHT ONTO STATE ROUTE 61 AND GO APPROXIMATELY 1.0± MILE TO SECONDARY ROUTE 79/3 (CABIN CREEK ROAD).
- 4.) TURN RIGHT ONTO SECONDARY ROUTE 79/3 AND GO APPROXIMATELY 2.3± MILES TO SECONDARY ROUTE 79/2 (WET BRANCH ROAD).
- 5.) TURN RIGHT ONTO SECONDARY ROUTE 79/2 AND GO APPROXIMATELY 0.1± MILE TO THE BEGINNING OF AN EXISTING PERMITTED COAL HAUL ROAD.
- 6.) CONTINUE OF THE COAL HAUL ROAD FOR APPROXIMATELY 3.0± MILES THE BEGINNING OF THE EXISTING ACCESS ROAD LOCATED ON THE RIGHT-HAND SIDE OF THE ROAD.
- 7.) FROM THE AFOREMENTIONED SITE, FOLLOW THE EXISTING ROAD FOR APPROXIMATELY 0.8± MILE TO THE EXISTING WELL SITE IN THE FIELD AS SHOWN ON THE "CONSTRUCTION AND RECLAMATION PLAN".

01/16/2015

3900492P



Surface Owner
TM 58, TP 1
Shonk Land Company, LLC
8,633.42 Ac.



DRAWING LEGEND		
PROPOSED ROAD	ROAD DITCH	WET SPOT
EXISTING ROAD	GAS LINE	PIT WASTE APP. AREA
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**

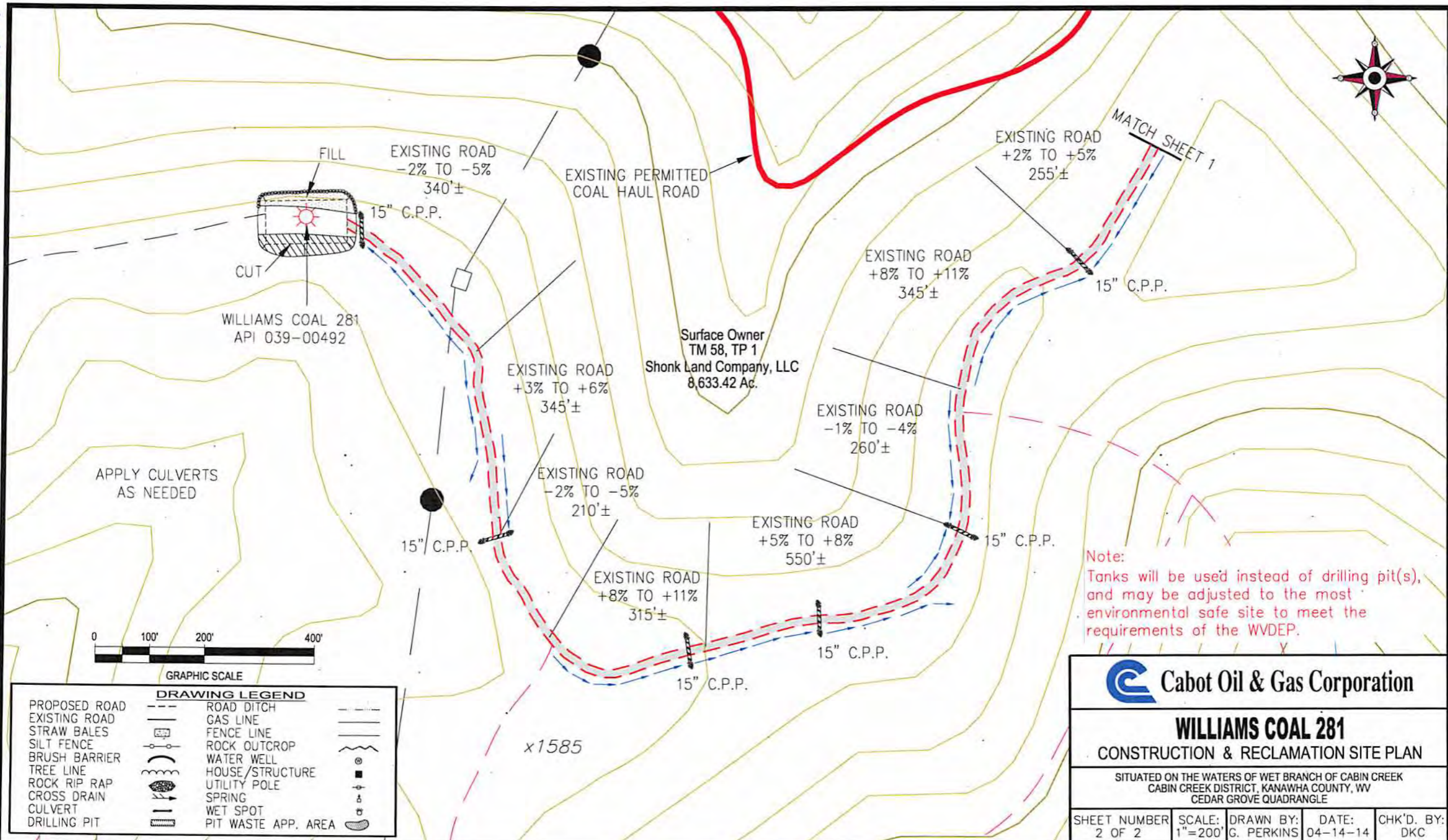
WILLIAMS COAL 281
CONSTRUCTION & RECLAMATION SITE PLAN

SITUATED ON THE WATERS OF WET BRANCH OF CABIN CREEK
CABIN CREEK DISTRICT, KANAWHA COUNTY, WV
CEDAR GROVE QUADRANGLE

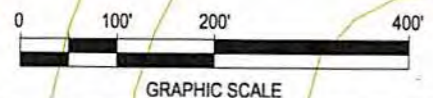
SHEET NUMBER 1 OF 2	SCALE: 1"=200'	DRAWN BY: G. PERKINS	DATE: 04-14-14	CHK'D. BY: DKC
------------------------	-------------------	-------------------------	-------------------	-------------------

MATCH SHEET 2

3900492 P



Note:
Tanks will be used instead of drilling pit(s),
and may be adjusted to the most
environmental safe site to meet the
requirements of the WVDEP.



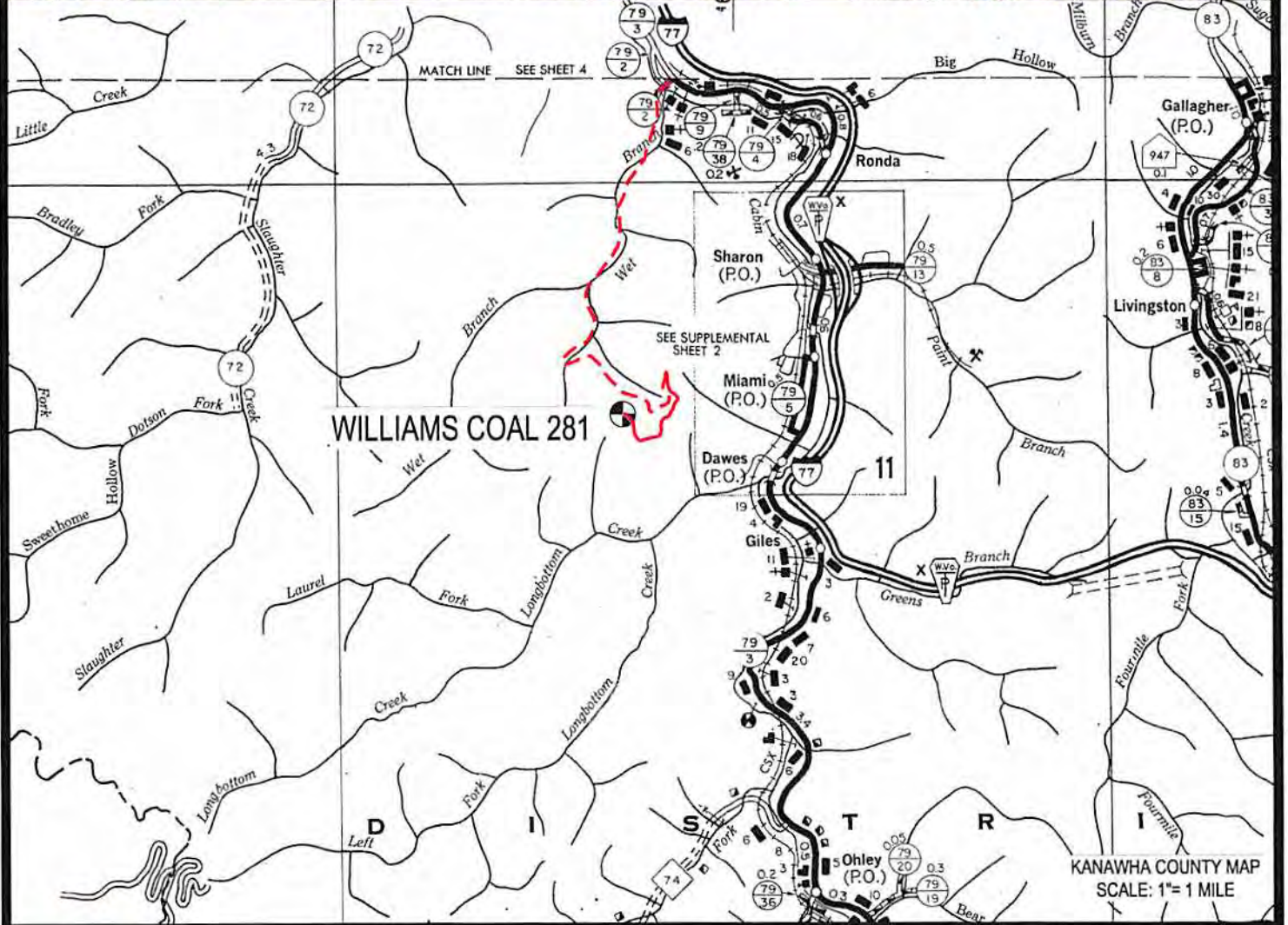
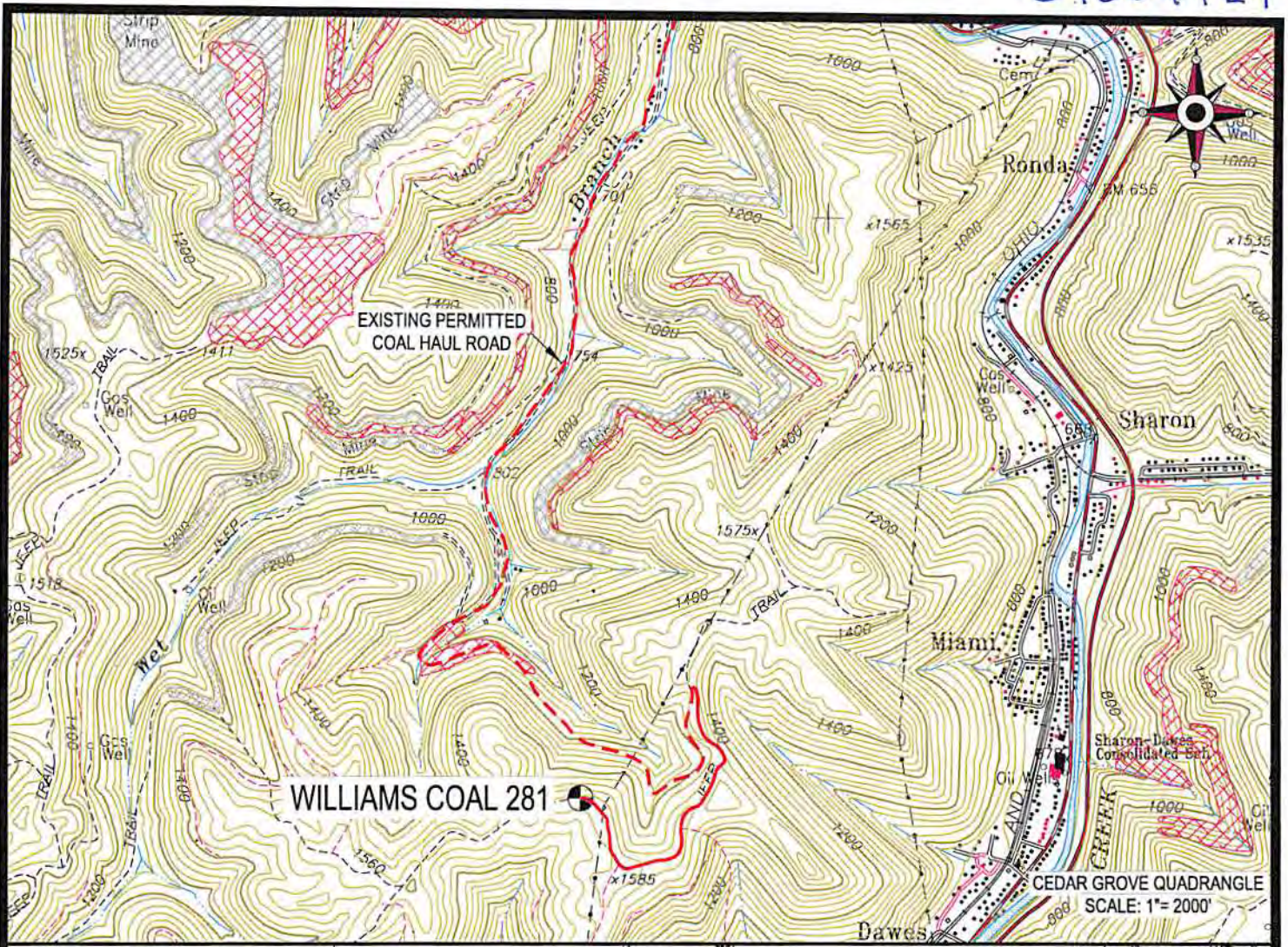
DRAWING LEGEND		
PROPOSED ROAD	ROAD DITCH	
EXISTING ROAD	GAS LINE	
STRAW BALES	FENCE LINE	
SILT FENCE	ROCK OUTCROP	
BRUSH BARRIER	WATER WELL	
TREE LINE	HOUSE/STRUCTURE	
ROCK RIP RAP	UTILITY POLE	
CROSS DRAIN	SPRING	
CULVERT	WET SPOT	
DRILLING PIT	PIT WASTE APP. AREA	

Cabot Oil & Gas Corporation

WILLIAMS COAL 281
CONSTRUCTION & RECLAMATION SITE PLAN

SITUATED ON THE WATERS OF WET BRANCH OF CABIN CREEK
CABIN CREEK DISTRICT, KANAWHA COUNTY, WV
CEDAR GROVE QUADRANGLE

SHEET NUMBER 2 OF 2	SCALE: 1"=200'	DRAWN BY: G. PERKINS	DATE: 04-14-14	CHK'D. BY: DKC
------------------------	-------------------	-------------------------	-------------------	-------------------



 Cabot Oil & Gas Corporation

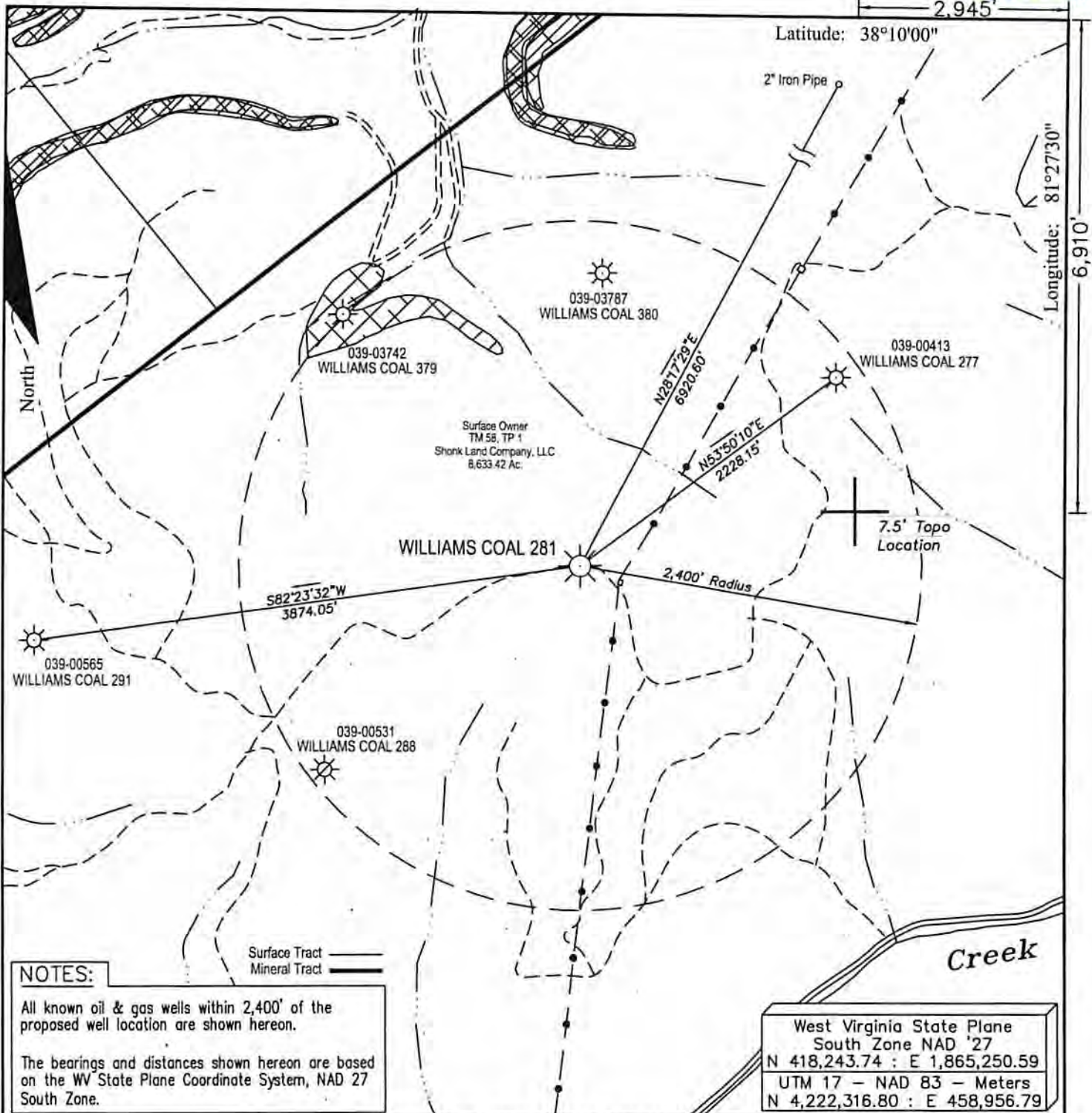
WILLIAMS COAL 281
LOCATION MAP 01/16/2015

 **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 WATERSHED OF WET BRANCH OF CABIN CREEK OF Oil and Gas
CABIN CREEK DISTRICT, KANAWHA COUNTY, WV
CEDAR GROVE QUADRANGLE 3 2014

PROJECT NO. CABOT	DWG. NO. WILLIAMS COAL 281 LOC
DATE: 04-14-14	SCALE: AS NOTED
DRAWN BY: G. PERKINS	

3900492P



NOTES:

All known oil & gas wells within 2,400' of the proposed well location are shown hereon.

The bearings and distances shown hereon are based on the WV State Plane Coordinate System, NAD 27 South Zone.

West Virginia State Plane
 South Zone NAD '27
 N 418,243.74 : E 1,865,250.59
 UTM 17 - NAD 83 - Meters
 N 4,222,316.80 : E 458,956.79

FILE #:
 DRAWING #: Williams Coal 281 ww6
 SCALE: 1" = 1000'
 MINIMUM DEGREE OF ACCURACY: 1 : 12,729
 PROVEN SOURCE OF ELEVATION: Global Positioning System (GPS)

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 ENVIROMENTAL PROTECTION.

Signed: Don K. Cunningham
 R.P.E.: _____ L.L.S.: 701

PLACE SEAL HERE

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS WVDEP
 OFFICE OF OIL & GAS
 601 57TH STREET
 CHARLESTON, WV 25304



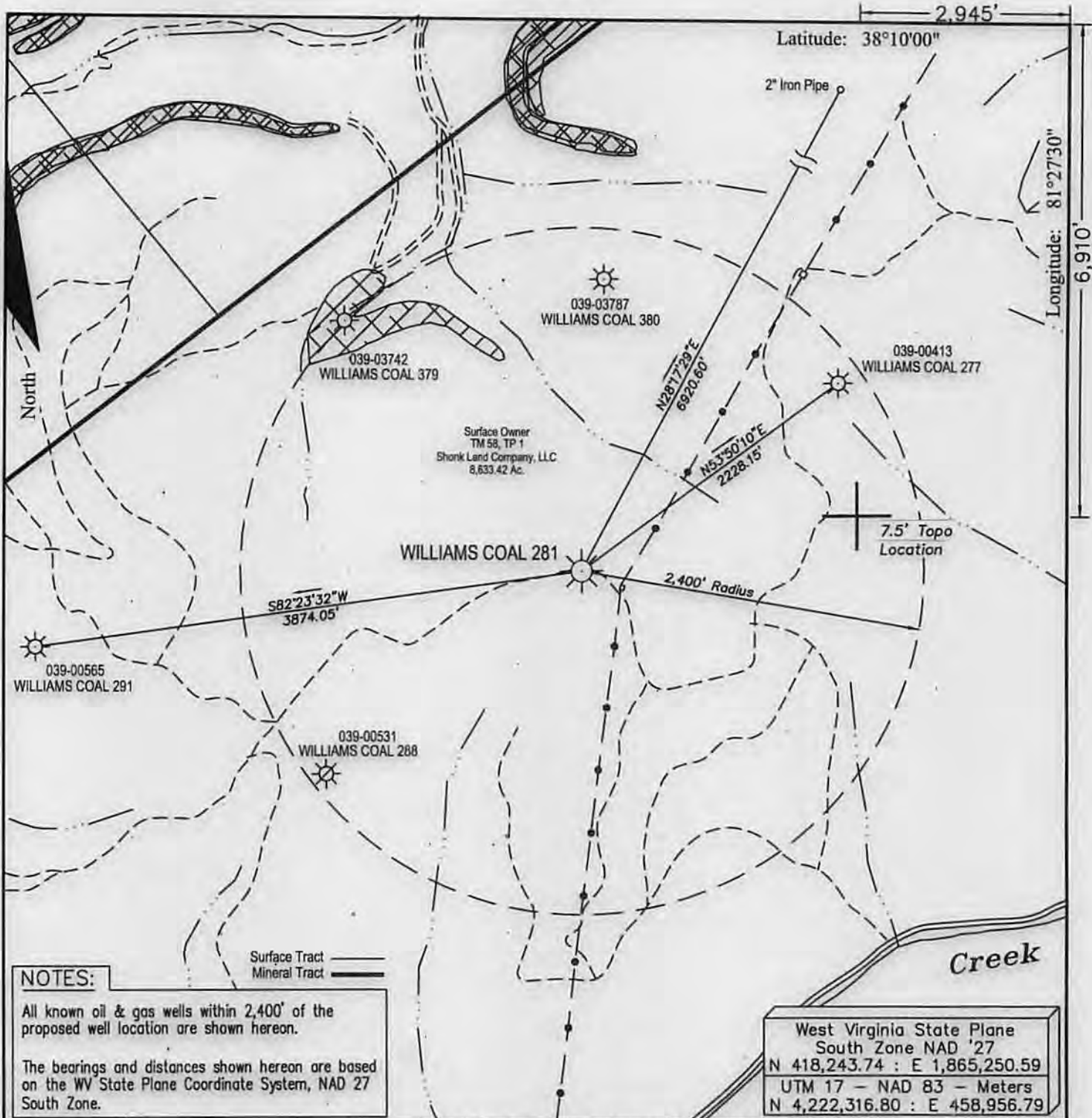
DATE: April 10, 2014
 OPERATOR'S WELL #: Williams Coal 281
 API WELL #: 47 039 00492 P
 STATE COUNTY PERMIT

Well Type: Oil Waste Disposal Production Deep
 Gas Liquid Injection Storage Shallow

WATERSHED: Wet Branch of Cabin Creek ELEVATION: 1,576.97'
 COUNTY/DISTRICT: Kanawha / Cabin Creek QUADRANGLE: Cedar Grove
 SURFACE OWNER: Shonk Land Co., LLC ACREAGE: 8,633.42
 OIL & GAS ROYALTY OWNER: Shonk Land Co., LP ACREAGE: 11,067
 LEASE #: 47-9703 DRILL CONVERT DRILL DEEPER REDRILL FRACTURE OR STIMULATE
 PLUG OFF OLD FORMATION PERFORATE NEW FORMATION PLUG & ABANDON
 CLEAN OUT & REPLUG OTHER CHANGE (SPECIFY): _____

TARGET FORMATION: _____ ESTIMATED DEPTH: _____
 WELL OPERATOR Cabot Oil & Gas Corp. DESIGNATED AGENT Whitney Johnson
 Address Five Penn Center West, Suite 401 Address P.O. Box 450
 City Pittsburgh State PA Zip Code 15276 City Glasgow State WV Zip Code 25086

01/16/2015



NOTES:

All known oil & gas wells within 2,400' of the proposed well location are shown hereon.

The bearings and distances shown hereon are based on the WV State Plane Coordinate System, NAD 27 South Zone.

West Virginia State Plane
South Zone NAD '27
N 418,243.74 : E 1,865,250.59
UTM 17 - NAD 83 - Meters
N 4,222,316.80 : E 458,956.79

FILE #:
DRAWING #: Williams Coal 281 ww6
SCALE: 1" = 1000'
MINIMUM DEGREE OF ACCURACY: 1 : 12,729
PROVEN SOURCE OF ELEVATION: Global Positioning System (GPS)

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 ENVIROMENTAL PROTECTION.

Signed: Don K Cunningham
R.P.E.: _____ L.L.S.: 701



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS WVDEP
OFFICE OF OIL & GAS
601 57TH STREET
CHARLESTON, WV 25304



DATE: April 10, 2014
OPERATOR'S WELL #: Williams Coal 281
API WELL #: 47 039 00492 P
STATE COUNTY PERMIT

Well Type: Oil Waste Disposal Production Deep
 Gas Liquid Injection Storage Shallow

WATERSHED: Wet Branch of Cabin Creek ELEVATION: 1,576.97'
COUNTY/DISTRICT: Kanawha / Cabin Creek QUADRANGLE: Cedar Grove
SURFACE OWNER: Shonk Land Co., LLC ACREAGE: 8,633.42
OIL & GAS ROYALTY OWNER: Shonk Land Co., LP ACREAGE: 11,067 01/16/2015
LEASE #: 47-9703 DRILL CONVERT DRILL DEEPER REDRILL FRACTURE OR STIMULATE
PLUG OFF OLD FORMATION PERFORATE NEW FORMATION PLUG & ABANDON
CLEAN OUT & REPLUG OTHER CHANGE (SPECIFY): _____
TARGET FORMATION: _____ ESTIMATED DEPTH: _____
WELL OPERATOR Cabot Oil & Gas Corp. DESIGNATED AGENT Whitney Johnson
Address Five Penn Center West, Suite 401 Address P.O. Box 450
City Pittsburgh State PA Zip Code 15276 City Glasgow State WV Zip Code 25086



North Region
November 11, 2014

Chief
West Virginia Division of Environmental Protection
Office of Oil & Gas
601 57th Street
Charleston, WV 25304

RE: Williams Coal #281
Cabin Creek District, Kanawha County, WV
API # 47-039-00492
Written Application to plug and abandon wellbore

Dear Chief:

In accordance with Article 22-6-23 of the Code of State Regulations regarding oil and gas operations, please find attached a formal application for the plug and abandonment of the subject well.

Notices of our intention to plug this wellbore have been sent to surface owner, coal owner, and coal operators associated with this well. Copies of the certified mail receipts are attached for your records.

If you have any questions or need additional information, I can be reached at 412-249-3850.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Kenneth L. Marcum'.

Kenneth L. Marcum
Regulatory Supervisor

RECEIVED
Office of Oil and Gas
NOV 13 2014
WV Department of
Environmental Protection