



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

October 19, 2015

WELL WORK PLUGGING PERMIT

Plugging

This permit, API Well Number: 47-502118, 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: SHONK 113
Farm Name: SHONK LAND COMPANY
API Well Number: 47-502118
Permit Type: Plugging
Date Issued: 10/19/2015

Promoting a healthy environment.

10/23/2015

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.

502118P

WW-4B
Rev. 2/01

1) Date September 15, 2015
2) Operator's
Well No. Shonk #113
3) API Well No. 47-005 - 02118

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 ___ or Underground storage ___) Deep ___ / Shallow X
- 5) Location: Elevation 2,100.70' Watershed Seng Creek of Big Coal River
District Sherman County Boone Quadrangle Sylvester
- 6) Well Operator Cabot Oil & Gas Corporation 7) Designated Agent Phillip Hill - Cabot Oil & Gas Corporation
Address 2000 Park Lane, Suite 300 Address 900 Lee Street, Suite 1500
Pittsburgh, PA 15275 Charleston, WV 25301
- 8) Oil and Gas Inspector to be notified 9) Plugging Contractor
Name Gary Kennedy Name Contractor Services, Inc.
Address P.O. Box 268 Address 929 Charleston Road
Nimitz, WV 25978 Spencer, WV 25276

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

See attached sheets

RECEIVED
Office of Oil and Gas
SEP 22 2015
WV Department of
Environmental Protection

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

Work order approved by inspector *Gary Kennedy* Date 9/21/15

10/23/2015

**Shonk Land Co. #113
API # 47 – 005 - 02118
PLUGGING PROCEDURE**

Current Configuration

Elevation – 2107" GL

TD @ 5665' MD

TVD @ 3625'

13-3/8" conductor @ 40' KB

9-5/8" – 32# casing @ 891' KB cemented to surface

7" – 23# J-55 casing @ 3048' cemented to surface

4" – 11.6# M-80 casing @ 5642' w/ packer @ 2937' KB & calculated cement top @ 2300'

2-3/8" tubing & rods parted @ 554' due to collapsed casing

Unable to get tools through collapsed casing

No water reported

Coal @ 23' – 27', 540' – 543', & 805' – 809'

Measured depth of Weir @ 3770' KB

Weir frac'd through port collars @ 5611', 5142', 4740', 4293', & 3846'

PROCEDURE

1. Contact Glasgow Office a minimum of 48 hours prior to starting work.
2. Contact State Inspector a minimum of 24 hours prior to starting work.
3. Blow down well.
4. Lay 2" line from wellhead to pit/tank and stake down securely.
5. Have vacuum truck available to catch any fluids circulated from well.
6. Unpack wellhead.
7. MIRU Cement Company and bullhead 80 bbls of neat cement with friction reducer.
8. RDMO Cementing Company.
9. Let cement plug set for a minimum of eight hours.
10. Tag TOC.
11. RIH with work string and top off cement with Class "A" cement to surface.
12. TOH with work string.
13. Place monument as required by law on top of well bore.
14. Reclaim well site.

RECEIVED
Office of Oil and Gas

SEP 22 2015

WV Department of
Environmental Protection

JK

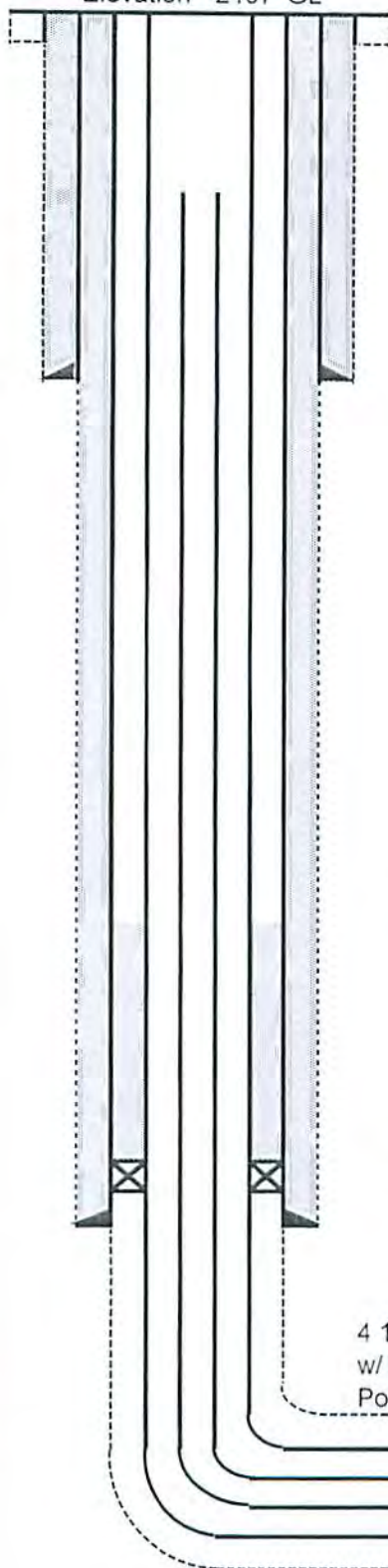
Shonk 113H 47-005-02118

Current Configuration
Elevation - 2107' GL

Coal @ 23' - 27'

Coal @ 540' - 543'

Coal @ 805' - 809'



13-3/8" 37# conductor @ 41' KB

Tbg & rods parted @ 554'

9 5/8" 32# casing @ 891' KB
Cement to surface

Calculated TOC @ 2300'

Pkr @ 2937' KB
7" 23# J-55 casing @ 3048' KB
Cement to surface

4 1/2" 11.6# M-80 casing @ 5642' MD
w/ 5 stage pkr system
Port Collars @ 5611', 5142', 4740', 4293', & 3846'

2 3/8" IJ tbg @ 5592'

DTD @ 5665' MD
TVD @ 3625' MD

Weir @ 3770' KB (MD)
3440' TVD (MD)

RECEIVED
Office of Oil and Gas
SEP 22 2015
WV Department of
Environmental Protection

50218P

RECEIVED
Office of Oil and Gas

SEP 22 2015

WV Department of
Environmental Protection

WR-35

Date July 30, 2008
API # 47- 005 - 02118 H

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

Farm Name: Shonk Land Company Operator Well No.: Shonk #113

LOCATION: Elevation: 2107' Quadrangle: Sylvester
District: Sherman County: Boone
Latitude: 13850' feet South of 38° DEG. 02' MIN. 30" SEC.
Longitude: 4900' feet West of 81° DEG. 30' MIN. 00" SEC.

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

Agent: Thomas S. Liberatore
Inspector: Barry Stollings
Permit Issued: 10/16/2006
Well Work Commenced: April 25, 2007
Well Work Completed: June 15, 2007
Verbal Plugging: _____
Permission granted on: _____
Rotary Cable _____
Total Depth (feet) 5665' MD / 3625' TVD
Fresh Water Depths (ft) 615'
Salt Water Depths (ft) 1730'
Is coal being mined in area (Y / N)? YES
Coal Depths (ft) 23'-27', 540'-543', 805'-809'

Casing & Tubing Size	Used in Drilling	Left In Well	Cement Fill Up Cu. Ft.
13-3/8"	41'	41'	
9-5/8"	891'	891'	421
7"	3055'	3055'	645
4-1/2"		5642'	72
4-1/2" CASING SET ON PACKER SYSTEM			
2-3/8"		3803'	

OPEN FLOW DATA

Producing Formation WEIR Pay Zone _____
Depth (ft) 5611', 5142', 4740', 4293', 3846'
Gas: Initial Open Flow TSTM MCF/d Oil: Initial Open Flow 0 Bbl/d
Final Open Flow 936 MCF/d Final Open Flow 0 Bbl/d
Time of open flow between initial and final tests 24 Hours
Static rock pressure 320 psig surface pressure after 4 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

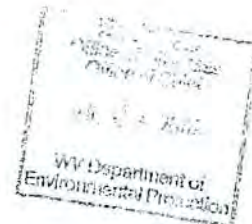
For: CABOT OIL & GAS CORPORATION
By: [Signature] Drilling Superintendent
Date: 7/30/08
WV Department of Environmental Protection

AUG 15 2008

10/23/2015

STAGE	PERFS	ACID		SAND (lbs)	NITROGEN (scf)	BDP	ATP	MTP	ISIP
		15% HCl	FOAM						
1-WEIR	5611'	75Q	92,000	92,000	1,098,000		3848	4211	
2-WEIR	5142'	75Q	90,000	90,000	866,200		3488	4007	
3-WEIR	4740'	75Q	90,000	90,000	769,400		3323	3638	2081
4-WEIR	4293'	75Q	92,500	92,500	831,000		3323	3553	
5-WEIR	3846'	75Q	82200	82200	638,100		3059	3205	

FORMATION	TOP SURFACE	BOTTOM	REMARKS
SANDSTONE & SHALE	23	23	From Gamma Log
COAL	27	27	
SANDSTONE & SHALE	27	540	
COAL	540	543	
SANDSTONE & SHALE	543	805	
COAL	805	809	
SANDSTONE & SHALE	809	1635	
SALT SAND	1634	2337	
SILTS AND SHALE	2337	2456	
RAVENCLIFF	2456	2542	
SILTS AND SHALE	2542	2549	
AVIS LIMESTONE	2549	2564	
SILTS AND SHALE	2564	2960 MD/2953 TVD	
MAXTON	2960 MD/2953 TVD	2990 MD/2982 TVD	From Drillers Log
SILTS AND SHALE	2990 MD/2982 TVD	3021 MD/3011 TVD	
LITTLE LIME	3021 MD/3011 TVD	3078 MD/3063 TVD	
BIG LIME	3078 MD/3063 TVD	3462 MD/3339 TVD	
KEENER	3462 MD/3339 TVD	3479 MD/3348 TVD	
INJUN	3479 MD/3348 TVD	3770 MD/3440 TVD	
WEIR	3770 MD/3440 TVD	5665 MD/3625 TVD	TD



Measured	Inclination	Azimuth	TVD (ft)	Measured	Inclination	Azimuth	TVD (ft)
2600	0.23	226.75	2600	3176	35.70	26.00	3146
2684	0.10	188.30	2684	3206	38.50	25.90	3170
2707	0.90	19.70	2707	3236	40.40	27.20	3193
2738	3.10	15.30	2738	3266	43.30	25.90	3216
2770	5.70	12.60	2770	3296	45.70	25.40	3237
2801	8.30	12.00	2801	3325	48.40	24.30	3257
2833	10.90	9.40	2832	3355	50.50	24.80	3276
2863	13.20	9.50	2861	3385	52.40	24.80	3295
2895	15.40	11.70	2892	3418	54.40	25.20	3315
2926	17.10	17.30	2922	3448	56.70	24.60	3332
2958	19.40	21.00	2953	3477	55.80	25.20	3347
2989	21.20	22.70	2982	3506	60.90	25.50	3362
3021	23.80	21.80	3011	3536	63.20	24.60	3376
3057	25.40	20.10	3044	3565	66.10	24.50	3388
3086	27.80	22.80	3070	3595	69.30	26.30	3400
3144	30.40	24.60	3094	3626	72.40	27.20	3410
3145	33.50	24.70	3121	3656	74.80	27.80	3418

RECEIVED
Office of Oil and Gas
SEP 22 2015
WV Department of
Environmental Protection

SKK

Measured	Inclination	Azimuth	TVD (ft)
3686	77.50	27.10	3425
3715	79.20	26.70	3431
3745	80.60	26.80	3437
3775	82.80	27.70	3441
3805	83.20	26.80	3445
3837	84.90	27.00	3450
3867	85.40	26.00	3453
3899	84.70	24.00	3456
3930	84.70	23.70	3459
3930	84.70	24.60	3462
3991	84.70	24.90	3465
4022	84.20	24.70	3468
4055	84.30	24.80	3471
4087	83.90	25.50	3475
4118	84.00	25.80	3478
4148	83.70	25.50	3481
4179	84.80	24.40	3484
4211	84.50	25.20	3487
4240	84.00	24.30	3490
4271	83.90	24.30	3493
4303	83.60	25.50	3497
4335	83.10	24.80	3501
4365	83.20	24.80	3504
4397	83.50	25.50	3508
4428	83.30	25.90	3508
4462	82.60	25.90	3512
4519	84.20	26.00	3519
4549	84.80	25.60	3522
4580	84.60	25.70	3524
4611	84.90	25.00	3527
4643	85.10	24.40	3530
4673	86.30	23.80	3532
4705	85.90	23.50	3534
4736	85.90	23.00	3536
4767	85.50	23.10	3539
4800	85.30	22.50	3541
4831	84.90	22.50	3544
4897	86.30	24.40	3549
4927	86.50	24.40	3551
4958	86.70	24.30	3553
4990	87.70	26.10	3554
5021	88.40	26.10	3555
5056	87.10	25.70	3557
5087	85.10	25.10	3559
5118	84.80	25.70	3561
5182	85.70	25.60	3567
5214	85.40	25.40	3569
5245	85.30	25.90	3572
5278	84.60	26.10	3575
5310	84.50	26.30	3578
5342	84.80	26.30	3581
5374	83.74	26.80	3584
5405	83.50	27.00	3587
5437	83.10	27.10	3591
5469	82.70	27.40	3595

Measured	Inclination	Azimuth	TVD (ft)
5500	82.10	27.30	3599
5532	81.70	27.70	3604
5597	80.80	28.10	3614
5628	80.20	28.90	3619
5665	80.20	28.90	3625

RECEIVED
Office of Oil and Gas
SEP 22 2015
WV Department of
Environmental Protection



AUG 15 2008

500
2118

10/23/2015

5021187

WW-4B
Rev. 2/01

1) Date September 15, 2015
2) Operator's
Well No. Shonk #113
3) API Well No. 47-005 - 02118

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 ____ or Underground storage ____) Deep ____ / Shallow X

5) Location: Elevation 2,100.70' Watershed Seng Creek of Big Coal River
District Sherman County Boone Quadrangle Sylvester

6) Well Operator Cabot Oil & Gas Corporation 7) Designated Agent Phillip Hill - Cabot Oil & Gas Corporation
Address 2000 Park Lane, Suite 300 Address 900 Lee Street, Suite 1500
Pittsburgh, PA 15275 Charleston, WV 25301

8) Oil and Gas Inspector to be notified 9) Plugging Contractor
Name Gary Kennedy Name Contractor Services, Inc.
Address P.O. Box 268 Address 929 Charleston Road
Nimitz, WV 25978 Spencer, WV 25276

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

See attached sheets

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

Work order approved by inspector _____ Date SEP 17 2015

10/23/2015

**Shonk Land Co. #113
API # 47 – 005 - 02118
PLUGGING PROCEDURE**

Current Configuration

Elevation – 2107" GL

TD @ 5665' MD

TVD @ 3625'

13-3/8" conductor @ 40' KB

9-5/8" – 32# casing @ 891' KB cemented to surface

7" – 23# J-55 casing @ 3048' cemented to surface

4" – 11.6# M-80 casing @ 5642' w/ packer @ 2937' KB & calculated cement top @ 2300'

2-3/8" tubing & rods parted @ 554' due to collapsed casing

Unable to get tools through collapsed casing

No water reported

Coal @ 23' – 27', 540' – 543', & 805' – 809'

Measured depth of Weir @ 3770' KB

Weir frac'd through port collars @ 5611', 5142', 4740', 4293', & 3846'

PROCEDURE

1. Contact Glasgow Office a minimum of 48 hours prior to starting work.
2. Contact State Inspector a minimum of 24 hours prior to starting work.
3. Blow down well.
4. Lay 2" line from wellhead to pit/tank and stake down securely.
5. Have vacuum truck available to catch any fluids circulated from well.
6. Unpack wellhead.
7. MIRU Cement Company and bullhead 80 bbls of neat cement with friction reducer.
8. RDMO Cementing Company.
9. Let cement plug set for a minimum of eight hours.
10. Tag TOC.
11. RIH with work string and top off cement with Class "A" cement to surface.
12. TOH with work string.
13. Place monument as required by law on top of well bore.
14. Reclaim well site.

RECEIVED
Glasgow Office and Gas
SEP 17 2015
Department of
Energy and Environment

10/23/2015

Shonk 113H

47-005-02118

Current Configuration

Elevation - 2107' GL

Coal @ 23' - 27'

Coal @ 540' - 543'

Coal @ 805' - 809'

13-3/8" 37# conductor @ 41' KB

Tbg & rods parted @ 554'

9 5/8" 32# casing @ 891' KB
Cement to surface

Calculated TOC @ 2300'

Pkr @ 2937' KB
7" 23# J-55 casing @ 3048' KB
Cement to surface

4 1/2" 11.6# M-80 casing @ 5642' MD
w/ 5 stage pkr system
Port Collars @ 5611', 5142', 4740', 4293', & 3846'

Weir @ 3770' KB (MD)
3440' TVD (MD)

2 3/8" IJ tbg @ 5592'

RECEIVED
WV DEPARTMENT OF
NATURAL RESOURCES
Oil and Gas
SEP 17 2015

WV Department of
Environmental Protection

10/23/2015

5001187

WR-35

Date July 30, 2008
API # 47-005-02118 H

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

Farm Name: Shonk Land Company Operator Well No.: Shonk #113

LOCATION: Elevation: 2107' Quadrangle: Sylvester
District: Sherman County: Boone
Latitude: 13850' feet South of 38° DEG. 02' MIN. 30" SEC.
Longitude: 4900' feet West of 81° DEG. 30' MIN. 00" SEC.

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

Casing & Tubing Size	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
13-3/8"	41'	41'	
9-5/8"	891'	891'	421
7"	3055'	3055'	645
4-1/2"		5642'	72
4-1/2" CASING SET ON PACKER SYSTEM			
2-3/8"		3803'	

Agent: Thomas S. Liberatore
Inspector: Barry Stollings
Permit Issued: 10/16/2006
Well Work Commenced: April 25, 2007
Well Work Completed: June 15, 2007
Verbal Plugging: _____
Permission granted on:
Rotary Cable _____
Total Depth (feet) 5665' MD / 3625' TVD
Fresh Water Depths (ft) 615'
Salt Water Depths (ft) 1730'
Is coal being mined in area (Y/N)? YES
Coal Depths (ft) 23'-27', 540'-543', 805'-809'

OPEN FLOW DATA

Producing Formation WEIR Pay Zone _____
Depth (ft) 5611', 5142', 4740', 4293', 3846'
Gas: Initial Open Flow TSTM MCF/d Oil: Initial Open Flow 0 Bbl/d
Final Open Flow 936 MCF/d Final Open Flow 0 Bbl/d
Time of open flow between initial and final tests 24 Hours
Static rock pressure 320 psig surface pressure after 4 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
Date: 7/30/08
WV Department of Environmental Protection

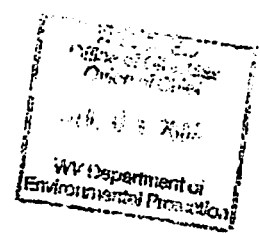
[Signature]
Drilling Superintendent

RECEIVED
Section of Oil and Gas
SEP 17 2008

AUG 25 2008
10/23/2015

STAGE	PERFS	ACID 15% HCl	FOAM	SAND (lbs)	NITROGEN (scf)	BDP	ATP	MTP	ISIP
1-WEIR	5611'	75Q	92,000	1,098,000		3848	4211		
2-WEIR	5142'	75Q	90,000	866,200		3488	4007		
3-WEIR	4740'	75Q	90,000	769,400		3323	3638	2081	
4-WEIR	4293'	75Q	92,500	831,000		3323	3553		
5-WEIR	3846'	75Q	82200	638,100		3059	3205		

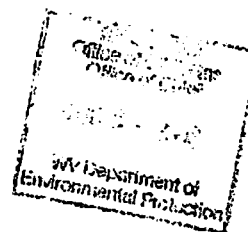
FORMATION	TOP	BOTTOM	REMARKS	
SANDSTONE & SHALE	SURFACE	23	From Gamma Log	
COAL	23	27		
SANDSTONE & SHALE	27	540		
COAL	540	543		
SANDSTONE & SHALE	543	805		
COAL	805	809		
SANDSTONE & SHALE	809	1635		
SALT SAND	1634	2337		
SILTS AND SHALE	2337	2456		
RAVENCLIFF	2456	2542		
SILTS AND SHALE	2542	2549		
AVIS LIMESTONE	2549	2564		
SILTS AND SHALE	2584	2960 MD/2953 TVD	From Drillers Log	
MAXTON	2960 MD/2953 TVD	2990 MD/2982 TVD		
SILTS AND SHALE	2990 MD/2982 TVD	3021 MD/3011 TVD		
LITTLE LIME	3021 MD/3011 TVD	3078 MD/3063 TVD		
BIG LIME	3078 MD/3063 TVD	3462 MD/3339 TVD		
KEENER	3462 MD/3339 TVD	3479 MD/3348 TVD		
INJUN	3479 MD/3348 TVD	3770 MD/3440 TVD		
WEIR	3770 MD/3440 TVD	5865 MD/3625 TVD		
				TD



Measured	Inclination	Azimuth	TVD (ft)	Measured	Inclination	Azimuth	TVD (ft)
2600	0.23	226.75	2600	3176	35.70	26.00	3146
2684	0.10	188.30	2684	3206	38.50	25.90	3170
2707	0.90	19.70	2707	3236	40.40	27.20	3193
2738	3.10	15.30	2738	3266	43.30	25.90	3216
2770	5.70	12.60	2770	3296	45.70	25.40	3237
2801	8.30	12.00	2801	3325	48.40	24.30	3257
2833	10.90	9.40	2832	3355	50.50	24.80	3276
2863	13.20	9.50	2861	3385	52.40	24.80	3295
2895	15.40	11.70	2892	3418	54.40	25.20	3315
2926	17.10	17.30	2922	3448	56.70	24.60	3332
2958	19.40	21.00	2953	3477	55.80	25.20	3347
2989	21.20	22.70	2982	3506	60.90	25.50	3362
3021	23.60	21.80	3011	3536	63.20	24.60	3376
3057	25.40	20.10	3044	3565	66.10	24.50	3388
3086	27.80	22.80	3070	3595	69.30	26.30	3400
3144	30.40	24.60	3094	3626	72.40	27.20	3410
3145	33.50	24.70	3121	3656	74.80	27.80	3418

RECEIVED
Office of Oil and Gas
SEP 17 2015
WV Department of
Environmental Protection
10/23/2015

Measured	Inclination	Azimuth	TVD (ft)	Measured	Inclination	Azimuth	TVD (ft)
3686	77.50	27.10	3425	5500	82.10	27.30	3599
3715	79.20	26.70	3431	5532	81.70	27.70	3604
3745	80.60	26.80	3437	5597	80.80	28.10	3614
3775	82.80	27.70	3441	5628	80.20	28.90	3619
3805	83.20	26.80	3445	5665	80.20	28.90	3625
3837	84.90	27.00	3450				
3867	85.40	26.00	3453				
3899	84.70	24.00	3456				
3930	84.70	23.70	3459				
3930	84.70	24.60	3462				
3991	84.70	24.90	3465				
4022	84.20	24.70	3468				
4055	84.30	24.80	3471				
4087	83.90	25.50	3475				
4118	84.00	25.80	3478				
4148	83.70	25.50	3481				
4179	84.80	24.40	3484				
4211	84.50	25.20	3487				
4240	84.00	24.30	3490				
4271	83.90	24.30	3493				
4303	83.60	26.50	3497				
4335	83.10	24.80	3501				
4365	83.20	24.80	3504				
4397	83.50	25.50	3508				
4428	83.30	25.90	3508				
4462	82.60	25.90	3512				
4519	84.20	26.00	3519				
4549	84.80	25.60	3522				
4580	84.60	25.70	3524				
4611	84.90	25.00	3527				
4643	86.10	24.40	3530				
4673	86.30	23.80	3532				
4705	85.90	23.50	3534				
4736	85.90	23.00	3536				
4767	85.50	23.10	3539				
4800	85.30	22.50	3541				
4831	84.90	22.50	3544				
4897	86.30	24.40	3549				
4927	86.50	24.40	3551				
4958	86.70	24.30	3553				
4990	87.70	26.10	3554				
5021	88.40	26.10	3555				
5058	87.10	25.70	3557				
5087	85.10	25.10	3559				
5118	84.80	26.70	3561				
5182	85.70	25.60	3567				
5214	85.40	25.40	3569				
5245	85.30	25.90	3572				
5278	84.60	26.10	3575				
5310	84.50	26.30	3576				
5342	84.80	26.30	3581				
5374	83.74	26.80	3584				
5405	83.50	27.00	3587				
5437	83.10	27.10	3591				
5489	82.70	27.40	3595				



AUG 15 2008

800 211871

10/23/2015

SURFACE OWNER WAIVER

Operator's Well
Number

Shonk #113

INSTRUCTIONS TO SURFACE OWNERS NAMED ON PAGE WW4-A

The well operator named on page WW-4A is applying for a permit from the State to plug and abandon a well. (Note: If the surface tract is owned by more than three persons, then these materials were served on you because your name appeared on the Sheriff's tax ticket on the land or because you actually occupy the surface tract. In either case, you may be the only owner who will actually receive these materials.) See Chapter 22 of the West Virginia Code. Well work permits are valid for 24 months. If you do not own any interest in the surface tract, please forward these materials to the true owner immediately if you know who it is. Also, please notify the well operator and the Office of Oil and Gas.

**NOTE: YOU ARE NOT REQUIRED TO FILE ANY COMMENT.
WHERE TO FILE COMMENTS AND OBTAIN ADDITIONAL INFORMATION:**

Chief, Office of Oil and Gas
Department of Environmental Protection
601 57th St. SE
Charleston, WV 25304
(304) 926-0450

Time Limits and methods for filing comments. The law requires these materials to be served on or before the date the operator files his Application. You have **FIVE (5) DAYS** after the filing date to file your comments. Comments must be filed in person or received in the mail by the Chief's office by the time stated above. You may call the Chief's office to be sure of the date. Check with your postmaster to ensure adequate delivery time or to arrange special expedited handling. If you have been contacted by the well operator and you have signed a "voluntary statement of no objection" to the planned work described in these materials, then the permit may be issued at any time.

Comments must be in writing. Your comments must include your name, address and telephone number, the well operator's name and well number and the approximate location of the proposed well site including district and county from the application. You may add other documents, such as sketches, maps or photographs to support your comments.

The Chief has the power to deny or condition a well work permit based on comments on the following grounds:

- 1) The proposed well work will constitute a hazard to the safety of persons.
- 2) The soil erosion and sediment control plan is not adequate or effective;
- 3) Damage would occur to publicly owned lands or resources;
- 4) The proposed well work fails to protect fresh water sources or supplies;
- 5) The applicant has committed a substantial violation of a previous permit or a substantial violation of one or more of the rules promulgated under Chapter 22, and has failed to abate or seek review of the violation..."

If you want a copy of the permit as it is issued or a copy of the order denying the permit, you should request a copy from the Chief.

VOLUNTARY STATEMENT OF NO OBJECTION

I hereby state that I have read the instructions to surface owners and that I have received copies of a Notice and Application For A Permit To Plug And Abandon on Forms WW-4A and WW-4B, and a survey plat.

I further state that I have no objection to the planned work described in these materials, and I have no objection to a permit being issued on those materials.

FOR EXECUTION BY A NATURAL PERSON
ETC.

FOR EXECUTION BY A CORPORATION,

_____	_____	_____	_____
Signature	Date	Name	_____
		By	_____
		Its	_____

RECEIVED
Office of Oil and Gas
SEP 17 2015
Date

Signature _____
Date **10/23/2015**
ENVIRONMENTAL PROTECTION

WW-4B

API No.	<u>47-005-02118</u>
Farm Name	<u>Shonk Land Company</u>
Well No.	<u>Shonk #113</u>

**INSTRUCTIONS TO COAL OPERATORS
OWNERS AND LESSEE**

The well operator named on the obverse side of WW-4 (B) is about to abandon the well described in the enclosed materials and will commence the work of plugging and abandoning said well on the date the inspector is notified. Which date shall not be less than five days after the day on which this notice and application so mailed is received, or in due course should be received by the Department of Environmental Protection Office of Oil & Gas.

This notice and application is given to you in order that your respective representatives may be present at the plugging and filling of said well. You are further notified that whether you are represented or not the operator will proceed to plug and fill said well in the manner required by Section 24, Article 6, Chapter 22 of the Code and given in detail on obverse side of this application.

NOTE: If you wish this well to be plugged according to 22-6-24(d) then as per Regulation 35CSR4-13.9 you must complete and return to this office on form OB-16 "Request by Coal Operator, Owner, or Lessee for plugging" prior to the issuance of this plugging permit.

WAIVER

The undersigned coal operator ____/ owner ____/ lessee ____/ of the coal under this well location has examined this proposed plugging work order. The undersigned has no objection to the work proposed to be done at this location, provided, the well operator has complied with all applicable requirements of the West Virginia Code and the governing regulations.

Date: _____

By: _____

Its _____

RECEIVED
Office of Oil and Gas
SEP 17 2015

VIRGINIA DEPARTMENT OF
Environmental Protection
10/23/2015

WW-4A
Revised 6-07

1) Date: September 15, 2015
2) Operator's Well Number
Shonk #113
3) API Well No.: 47 - 005 - 02118

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, LLC</u> ✓	Name <u>See Exhibit "A" attached</u>
Address <u>194 Summers Street</u> ✓	Address _____
<u>Charleston, WV 25301</u>	_____
(b) Name <u>See Exhibit "A" attached</u>	(b) Coal Owner(s) with Declaration
Address _____	Name <u>Shonk Land Company, LLC</u> ✓
_____	Address <u>194 Summers Street</u> ✓
(c) Name _____	<u>Charleston, WV 25301</u>
Address _____	Name _____
_____	Address _____
6) Inspector <u>Gary Kennedy</u>	(c) Coal Lessee with Declaration
Address <u>P.O. Box 268</u>	Name <u>Robin Land Company, LLC</u> ✓
<u>Nimitz, WV 25978</u>	Address <u>63 Corporate Dr., Suite 429</u> ✓
Telephone <u>304-382-8402</u>	<u>Scott Depot, WV 25560</u>

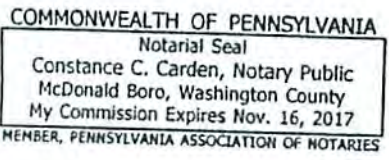
TO THE PERSONS NAMED ABOVE: You should have received this Form and the following documents:

- (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.

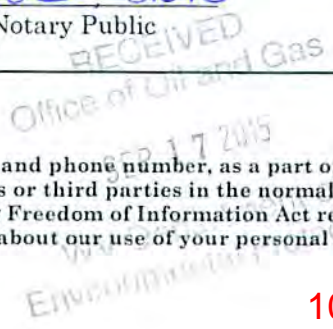
The reason you received these documents is that you have rights regarding the application which are summarized in the instructions on the reverse side. However, you are not required to take any action at all.

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 L. Marcum *[Signature]*
 Its: Regulatory Supervisor
 Address 2000 Park Lane, Suite 300
Pittsburgh, PA 15275
 Telephone 412-249-3850



Subscribed and sworn before me this 15th day of September, 2015
Constance C. Carden Notary Public
 My Commission Expires November 16, 2017



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.

Exhibit "A"
Surface Owners
Shonk #113
47-005-02118

PRC Holdings LLC
c/o Gaddy Engineering Company ✓
303 Washington Street West
Charleston, Wv 25302

Board of Trustees of Prichard School, a Corporation ✓
c/o Gaddy Engineering Co.
303 Washington Street West
Charleston, WV 25302

Riverside Park, Inc. ✓
c/o Gaddy Engineering Co.
303 Washington Street West
Charleston, WV 25302

City National Bank of West Virginia, ✓
As Trustee under a Trust Agreement
For A.M. Prichard, III, Lewis Prichard
and Sarah Ann Prichard, and their spouses
c/o Gaddy Engineering Co.
303 Washington Street West
Charleston, WV 25302

LML Properties, LLC ✓
c/o Gaddy Engineering Company
303 Washington Street West
Charleston, WV 25302

Coal Operators

Elk Run Coal Co., Inc. ✓
P.O Box 457
Sylvester, WV 25193

WWMV, LLC ✓
315 70th Street
Charleston, WV 25304

Marfork Coal Company, Inc. ✓
P.O. Box 457
Whitesville, WV 25209

Remington, LLC ✓
63 Corporate Center Dr.
Scott Depot, WV 25560

Coyote Coal Company, LLC
63 Corporate Center Dr., Suite 408
Scott Depot, WV 25560

RECEIVED
Office of Oil and Gas
SEP 17 2015
WV Department of
Environmental Protection

10/23/2015

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

FLUIDS/ CUTTINGS DISPOSAL & RECLAMATION PLAN

Operator Name Cabot Oil & Gas Corporation OP Code 08145

Watershed (HUC 10) Seng Creek of Big Coal River Quadrangle Sylvester

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

Will a pit be used? Yes No

If so, please describe anticipated pit waste: _____

Will a synthetic liner be used in the pit? Yes No If so, what ml.? _____

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) *HLK*
- Other (Explain No treated pit wastes will be produced Task)

Will closed loop system be used? If so, describe: N/A

Drilling medium anticipated for this well (vertical and horizontal)? Air, freshwater, oil based, etc. no drilling proposed

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

Additives to be used in drilling medium? N/A

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? _____

Permittee shall provide written notice to the Office of Oil and Gas of any load of drill cuttings or associated waste rejected at any West Virginia solid waste facility. The notice shall be provided within 24 hours of rejection and the permittee shall also disclose where it was properly disposed.

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

RECEIVED
Office of Oil and Gas

SEP 22 2015

WV Department of
Environmental Protection

Subscribed and sworn before me this 15th day of September, 20 15

Constance C. Carden

My commission expires 11/16/2017

Notary Public
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

10/23/2015

Cabot Oil & Gas Corporation

Proposed Revegetation Treatment: Acres Disturbed 1.0 Prevegetation pH 6.5

Lime 2 Tons/acre or to correct to pH 6.5

Fertilizer type 10-20/20 or equivalent

Fertilizer amount 500 lbs/acre

Mulch Pulp Fiber at 1000 to 1500 lbs. Tons/acre

Seed Mixtures

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

Attach:

Drawing(s) of road, location, pit and proposed area for land application (unless engineered plans including this info have been provided)

Photocopied section of involved 7.5' topographic sheet.

Plan Approved by: *Henry Kennedy*

Comments: _____

RECEIVED
Office of Oil and Gas

SEP 22 2015

WV Department of
Environmental Protection

Title: *Inspector*

Date: *9/21/15*

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 SHONK 113H

- 1.) FROM THE INTERSECTION OF INTERSTATE 64 WITH INTERSTATE 77 IN CHARLESTON, DRIVE EASTERLY ON INTERSTATE 77 FOR 11.1 MILES± TO EXIT 89 AND EXIT THE HIGHWAY TO STATE ROUTE 94.
- 2.) TURN RIGHT ONTO STATE ROUTE 94 AND GO SOUTHERLY FOR 9.8 MILES± TO STATE ROUTE 3, IN RACINE, WV.
- 3.) TURN LEFT ONTO STATE ROUTE 3 AND GO SOUTHERLY FOR 11.4 MILES± TO SECONDARY ROUTE 14.
- 4.) TURN LEFT ONTO SECONDARY ROUTE 14 AND GO EASTERLY FOR 0.2 MILES± TO THE BEGINNING OF THE EXISTING ACCESS ROAD LOCATED ON THE RIGHT-HAND SIDE OF THE ROAD.
- 5.) FROM THE AFOREMENTIONED SITE, FOLLOW THE EXISTING ROAD FOR APPROXIMATELY 7.5 MILES± TO THE EXISTING WELL SITE AS SHOWN ON THE "CONSTRUCTION AND RECLAMATION PLAN".

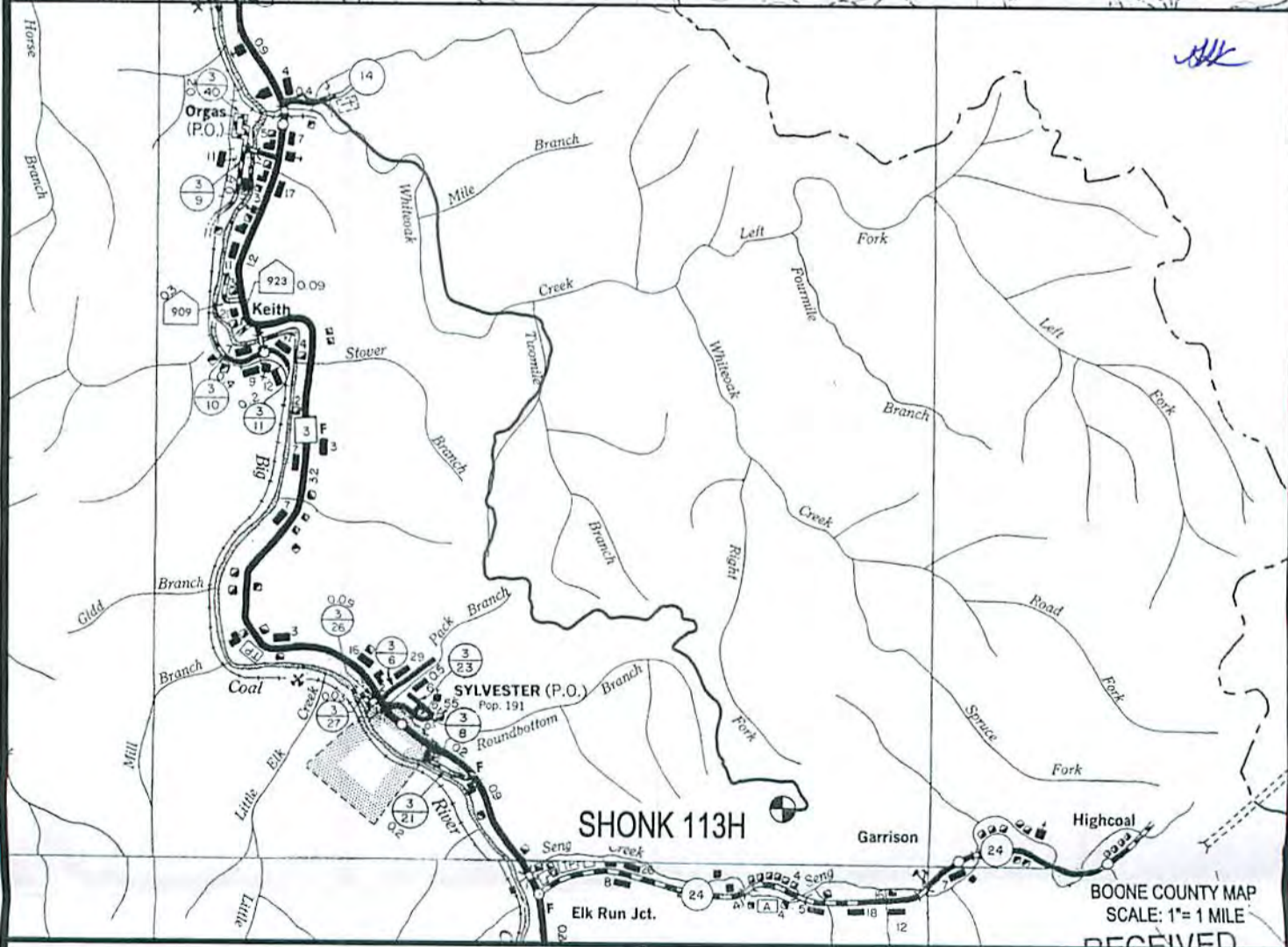
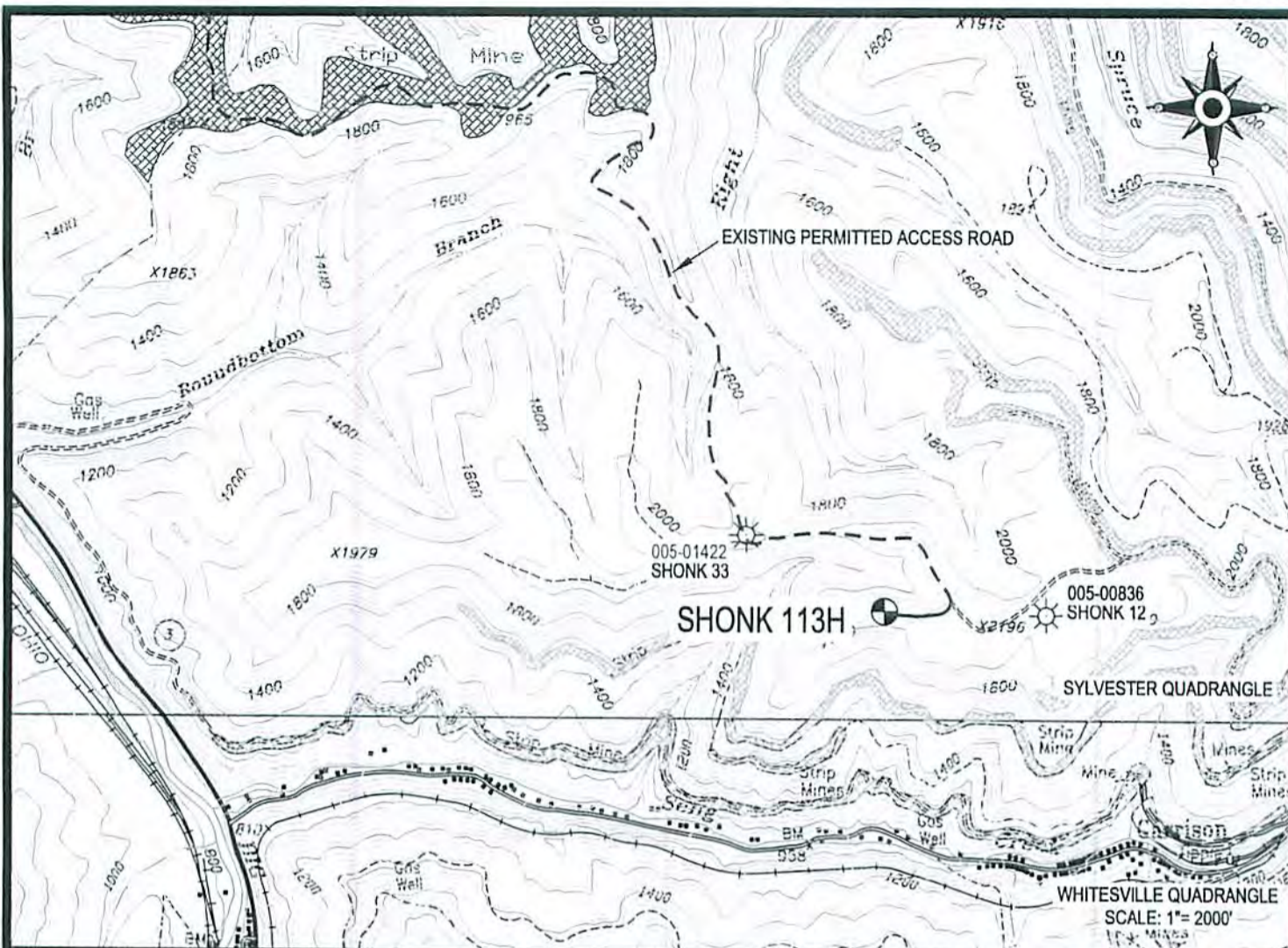
RECEIVED 10/23/2015
Office of Oil and Gas

SEP 22 2015

WV Department of Environmental Protection




SHONK 113H
SHERMAN DISTRICT, BOONE COUNTY, WV
SYLVESTER 7.5' QUADRANGLE



 Cabot Oil & Gas Corporation

SHONK 113H Office of Oil and Gas
 LOCATION MAP **10/23/2015**
 RECEIVED
 SEP 22 2015

 **CUNNINGHAM**
 LAND SURVEYING & MAPPING SERVICES, LLC
 • 5213 STEPHEN WAY •
 • CROSS LANES, WEST VIRGINIA 25913 •
 • VOICE (304) 561-4129 • FAX (304) 776-0703 •
 • E-MAIL ADDRESS • DKCUNNINGHAM@SUDDENLINK.NET •

LOCATED ON THE WATERS OF SENG CREEK
 OF BIG COAL RIVER
 SHERMAN DISTRICT, BOONE COUNTY, WV
 Environmental Protection
 SYLVESTER QUADRANGLE

PROJECT NO. CABOT	DWG. NO. SHONK 113 LOC.DWG
DATE: 07-26-15	SCALE: AS NOTED
CHK'D BY: D.K.C.	
DRAWN BY: G. PERKINS FILE: C:\PROJECT FOLDER\CABOT	

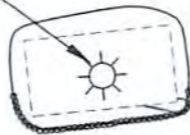
5021188P

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.

SK

Surface Owner
TM 41, TP 1
Shonk Land Co., LLC

SHONK 113H
API 005-02118



15" C.P.P.

EXISTING ROAD
+7% TO +10%
175'±

EXISTING ROAD
-3% TO -6%
400'±

EXISTING ROAD
-4% TO -7%
235'±

EXISTING PERMITTED ACCESS ROAD

X2196

APPLY CULVERTS
AS NEEDED

2000



GRAPHIC SCALE

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	

RECEIVED
Office of Oil and Gas

SEP 22 2015



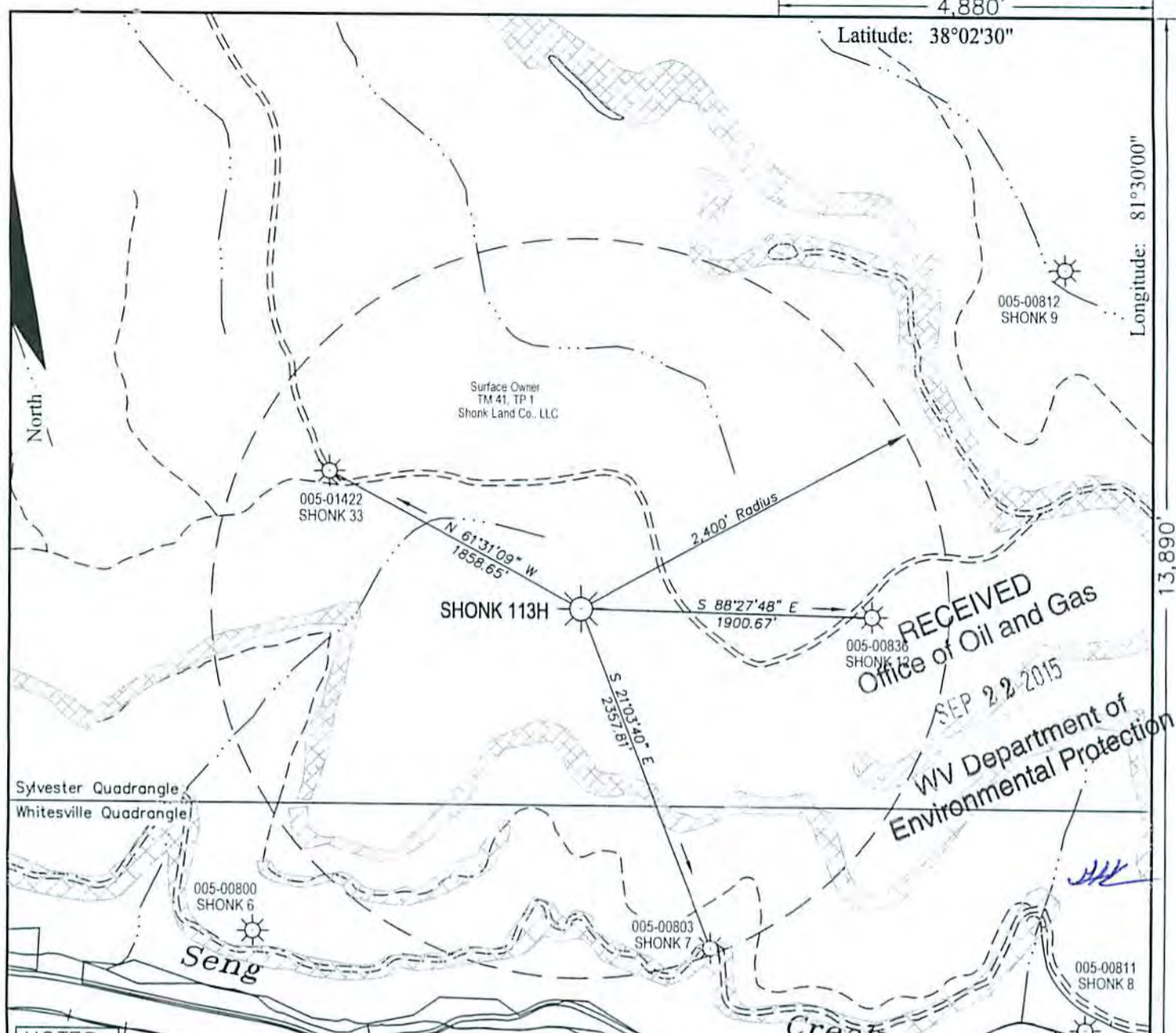
Cabot Oil & Gas Corporation

SHONK 113H

CONSTRUCTION & RECLAMATION SITE PLAN

SITUATED ON THE WATERS OF SENG CREEK OF BIG COAL RIVER
SHERMAN DISTRICT, BOONE COUNTY, WV
SYLVESTER QUADRANGLE

SHEET NUMBER 1 OF 1	SCALE: 1"=200'	DRAWN BY: G. PERKINS	DATE: 07-27-15	CHK'D. BY: DKC
------------------------	-------------------	-------------------------	-------------------	-------------------

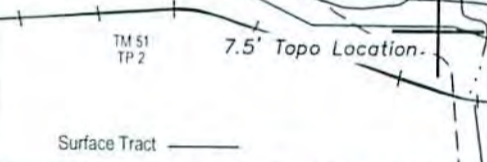


RECEIVED
Office of Oil and Gas
SEP 22 2015
WV Department of
Environmental Protection

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.

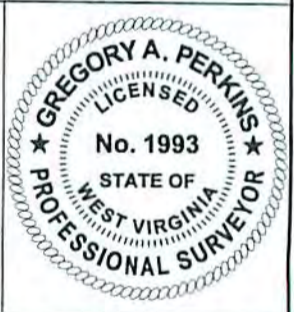


West Virginia State Plane
South Zone NAD '27
N 365,820.87 : E 1,851,054.03
UTM 17 - NAD 83 - Meters
N 4,206,343.00 : E 454,631.57

FILE #:
DRAWING #: Shonk 113 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 ENVIRONMENTAL PROTECTION.

Signed: _____
R.P.E.: _____ L.L.S.: 1993



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



DATE: July 26, 2015
OPERATOR'S WELL #: Shonk 113H
API WELL #: 47 005 02118P
STATE COUNTY PERMIT

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

WATERSHED: Seng Creek of Big Coal River ELEVATION: 2,100.70'

COUNTY/DISTRICT: Boone / Sherman QUADRANGLE: Sylvester

SURFACE OWNER: Shonk Land Co., LLC ACREAGE: 11,215.57

OIL & GAS ROYALTY OWNER: Shonk Land Co., LLC ACREAGE: 11,215.57

LEASE #: 47-0641 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 Phillip Hill
Address 2000 Park Lane, Suite 300 Address 900 Lee Street, Suite 1500
City Pittsburgh State PA Zip Code 15275 City Charleston State WV Zip Code 25301

10/23/2015

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

FLUIDS/ CUTTINGS DISPOSAL & RECLAMATION PLAN

Operator Name Cabot Oil & Gas Corporation OP Code 08145

Watershed (HUC 10) Seng Creek of Big Coal River Quadrangle Sylvester

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

Will a pit be used? Yes No

If so, please describe anticipated pit waste: _____

Will a synthetic liner be used in the pit? Yes No If so, what ml.? _____

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 No treated pit wastes will be produced)

Will closed loop system be used? If so, describe: N/A

Drilling medium anticipated for this well (vertical and horizontal)? Air, freshwater, oil based, etc. no drilling proposed

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

Additives to be used in drilling medium? N/A

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? _____

Permittee shall provide written notice to the Office of Oil and Gas of any load of drill cuttings or associated waste rejected at any West Virginia solid waste facility. The notice shall be provided within 24 hours of rejection and the permittee shall also disclose where it was properly disposed.

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 15th day of September, 20 15

Constance C. Carden

My commission expires 11/16/2017

RECEIVED
Office of Oil and Gas
SEP 17 2015

Notary **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

10/23/2015

Cabot Oil & Gas Corporation

Proposed Revegetation Treatment: Acres Disturbed 1.0 Prevegetation pH 6.5

Lime 2 Tons/acre or to correct to pH 6.5

Fertilizer type 10-20/20 or equivalent

Fertilizer amount 500 lbs/acre

Mulch Pulp Fiber at 1000 to 1500 lbs. Tons/acre

Seed Mixtures

Temporary

Permanent

Seed Type	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	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)	

Attach:

Drawing(s) of road, location, pit and proposed area for land application (unless engineered plans including this info have been provided)

Photocopied section of involved 7.5' topographic sheet.

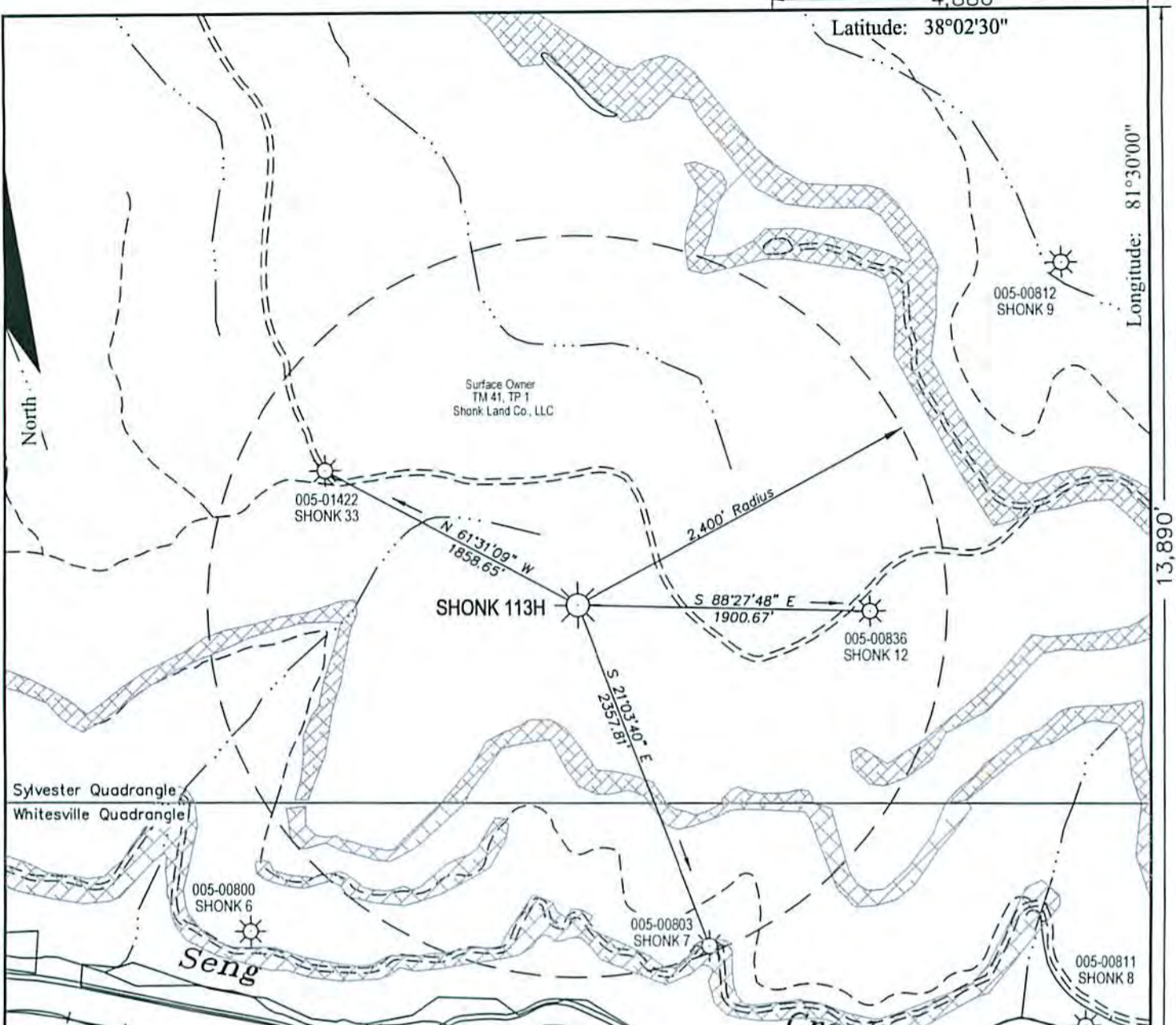
Plan Approved by: _____

Comments: _____

Title: _____ Date: _____

Field Reviewed? () Yes () No

522187



Latitude: 38°02'30"

Longitude: 81°30'00"

13,890'

NOTES:

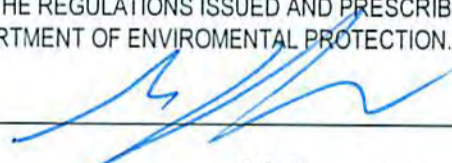
All known oil & gas wells within 2,400' of the proposed well location are shown hereon.

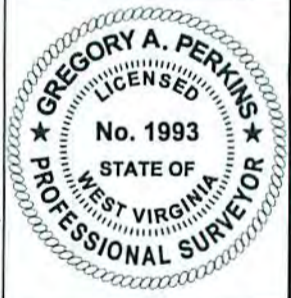
The bearings and distances shown hereon are based on the WV State Plane Coordinate System, NAD 27 South Zone.

West Virginia State Plane
South Zone NAD '27
N 365,820.87 : E 1,851,054.03
UTM 17 - NAD 83 - Meters
N 4,206,343.00 : E 454,631.57

FILE #:
DRAWING #: Shonk 113 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: 
R.P.E.: _____ L.L.S.: 1993



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

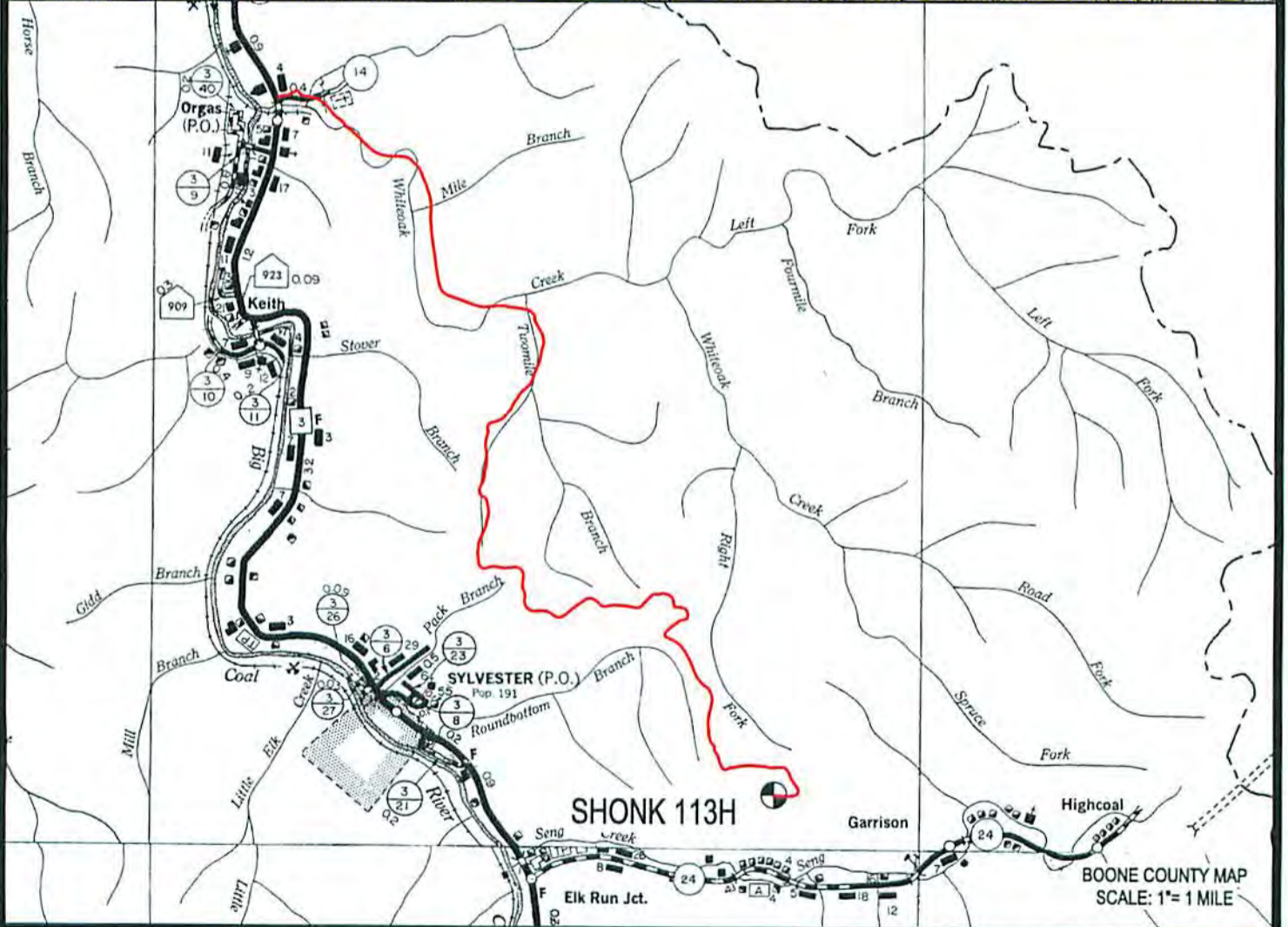


DATE: July 26, 2015
OPERATOR'S WELL #: Shonk 113H
API WELL #: 47 005 021187
STATE COUNTY PERMIT

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

WATERSHED: Seng Creek of Big Coal River ELEVATION: 2,100.70'
COUNTY/DISTRICT: Boone / Sherman QUADRANGLE: Sylvester
SURFACE OWNER: Shonk Land Co., LLC ACREAGE: 11,215.57
OIL & GAS ROYALTY OWNER: Shonk Land Co., LLC ACREAGE: 11,215.57
LEASE #: 47-0641 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 Phillip Hill
Address 2000 Park Lane, Suite 300 Address 900 Lee Street, Suite 1500
City Pittsburgh State PA Zip Code 15275 City Charleston State WV Zip Code 25301

10/23/2015



 Cabot Oil & Gas Corporation

SHONK 113H
LOCATION MAP 10/23/2015



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 WATERS OF SENG CREEK
OF BIG COAL RIVER
SHERMAN DISTRICT, BOONE COUNTY, WV
SYLVESTER QUADRANGLE

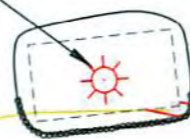
PROJECT NO. CABOT	DWG. NO. SHONK 113 LOC.DWG
DATE: 07-26-15	SCALE: AS NOTED
DRAWN BY: G. PERKINS	CHK'D BY: D.K.C.
FILE: C:\PROJECT FOLDER\CABOT	

502 113P

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.

Surface Owner
TM 41, TP 1
Shonk Land Co., LLC

SHONK 113H
API 005-02118



15" C.P.P.

EXISTING ROAD
+7% TO +10%
175'±

EXISTING ROAD
-3% TO -6%
400'±

EXISTING ROAD
-4% TO -7%
235'±

EXISTING PERMITTED ACCESS ROAD

X2196

APPLY CULVERTS
AS NEEDED



GRAPHIC SCALE

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	

RECEIVED
Office of Oil and Gas
SEP 17 2015
WV Department of
Environmental Protection



Cabot Oil & Gas Corporation

SHONK 113H
CONSTRUCTION & RECLAMATION SITE PLAN

SITUATED ON THE WATERS OF SENG CREEK OF BIG COAL RIVER
SHERMAN DISTRICT, BOONE COUNTY, WV
SYLVESTER QUADRANGLE

SHEET NUMBER 1 OF 1	SCALE: 1"=200'	DRAWN BY: G. PERKINS	DATE: 07-27-15	CHK'D. BY: DKC
------------------------	-------------------	-------------------------	-------------------	-------------------

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

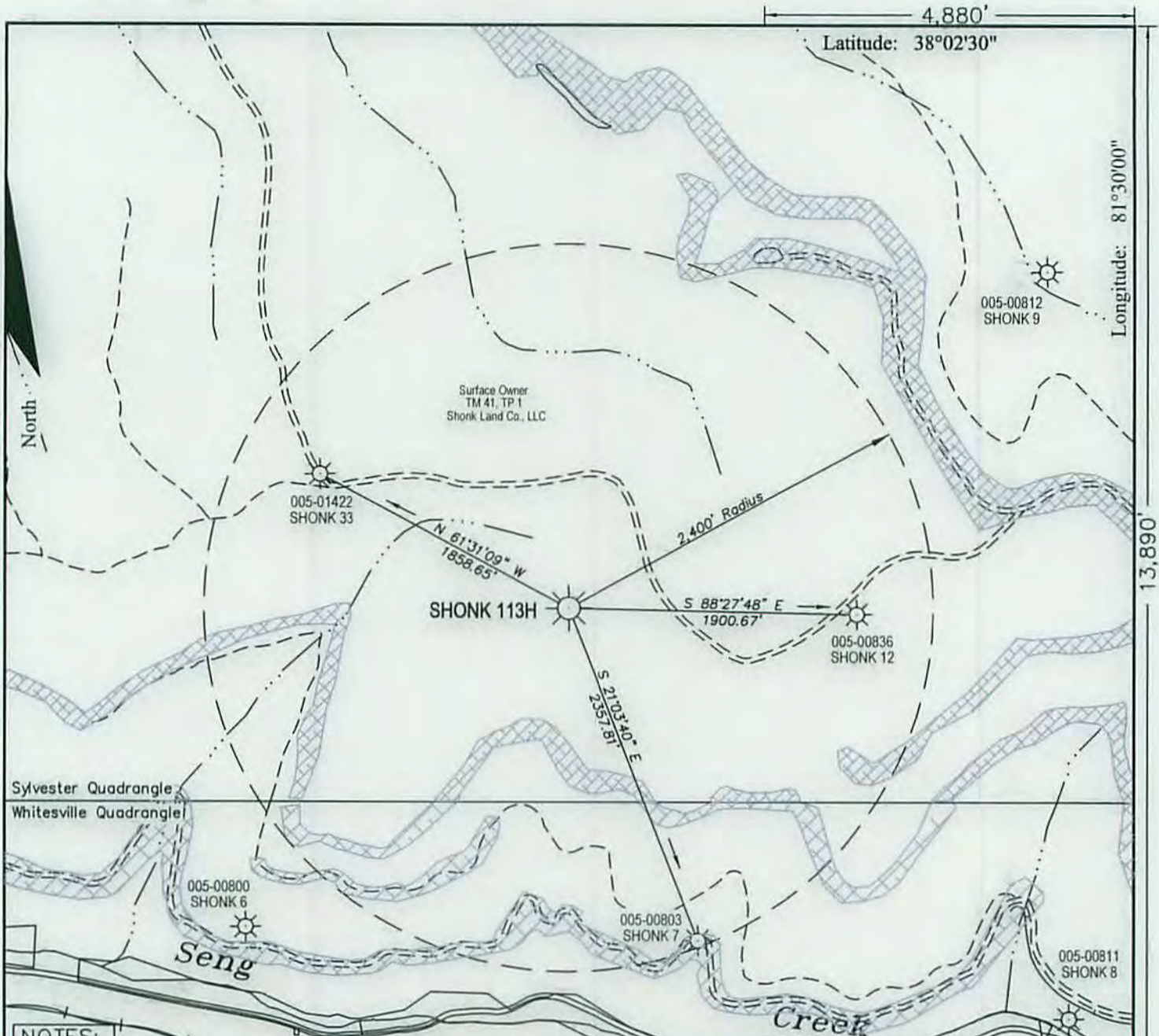
DRAWING LEGEND

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]

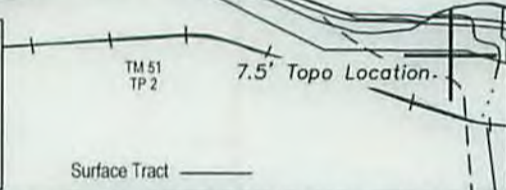
DRIVING DIRECTIONS FOR SHONK 113H

- 1.) FROM THE INTERSECTION OF INTERSTATE 64 WITH INTERSTATE 77 IN CHARLESTON, DRIVE EASTERLY ON INTERSTATE 77 FOR 11.1 MILES± TO EXIT 89 AND EXIT THE HIGHWAY TO STATE ROUTE 94.
- 2.) TURN RIGHT ONTO STATE ROUTE 94 AND GO SOUTHERLY FOR 9.8 MILES± TO STATE ROUTE 3, IN RACINE, WV.
- 3.) TURN LEFT ONTO STATE ROUTE 3 AND GO SOUTHERLY FOR 11.4 MILES± TO SECONDARY ROUTE 14.
- 4.) TURN LEFT ONTO SECONDARY ROUTE 14 AND GO EASTERLY FOR 0.2 MILES± TO THE BEGINNING OF THE EXISTING ACCESS ROAD LOCATED ON THE RIGHT-HAND SIDE OF THE ROAD.
- 5.) FROM THE AFOREMENTIONED SITE, FOLLOW THE EXISTING ROAD FOR APPROXIMATELY 7.5 MILES± TO THE EXISTING WELL SITE AS SHOWN ON THE "CONSTRUCTION AND RECLAMATION PLAN".

10/23/2015



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 365,820.87 : E 1,851,054.03
 UTM 17 - NAD 83 - Meters
 N 4,206,343.00 : E 454,631.57

FILE #: _____
 DRAWING #: Shonk 113 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 ENVIRONMENTAL PROTECTION.
 Signed: [Signature]
 R.P.E.: _____ L.L.S.: 1993



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



DATE: July 26, 2015
 OPERATOR'S WELL #: Shonk 113H
 API WELL #: 47 005 02118
 STATE COUNTY PERMIT

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

WATERSHED: Seng Creek of Big Coal River ELEVATION: 2,100.70'
 COUNTY/DISTRICT: Boone / Sherman QUADRANGLE: Sylvester
 SURFACE OWNER: Shonk Land Co., LLC ACREAGE: 11,215.57
 OIL & GAS ROYALTY OWNER: Shonk Land Co., LLC ACREAGE: 11,215.57
 LEASE #: 47-0641 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 Phillip Hill
 Address 2000 Park Lane, Suite 300 Address 900 Lee Street, Suite 1500
 City Pittsburgh State PA Zip Code 15275 City Charleston State WV Zip Code 25301

10/23/2015