



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

June 05, 2014

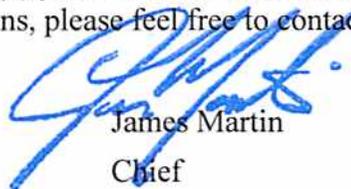
WELL WORK PERMIT
Vertical Well

This permit, API Well Number: 47-5101764, issued to NOBLE ENERGY, INC., is evidence of permission granted to perform the specified well work at the location described on the attached pages and located on the attached plat, subject to the provisions of Chapter 22 of the West Virginia Code of 1931, as amended, and all rules and regulations promulgated thereunder, and to all conditions and provisions outlined in the pages attached hereto. Notification shall be given by the operator to the Oil and Gas Inspector at least 24 hours prior to the construction of roads, locations, and/or pits for any permitted work. In addition, the well operator shall notify the same inspector 24 hours before any actual well work is commenced and prior to running and cementing casing. Spills or emergency discharges must be promptly reported by the operator to 1-800-642-3074 and to the Oil and Gas inspector.

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

In addition to the applicable requirements of this permit, and the statutes and rules governing oil and gas activity in WV, this permit may contain specific conditions which must be followed. Permit conditions are attached to this cover letter.

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



James Martin
Chief

Operator's Well No: MND 99 V
Farm Name: CONSOLIDATION COAL COMPA
API Well Number: 47-5101764
Permit Type: Vertical Well
Date Issued: 06/05/2014

Promoting a healthy environment.

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. If the operator encounters an unanticipated void, or an anticipated void at an unanticipated depth, the operator shall notify the inspector within 24 hours. Modifications to the casing program may be necessary to comply with W. Va. Code §22-6-20, which requires drilling to a minimum depth of thirty feet below the bottom of the void, and installing a minimum of twenty (20) feet of casing. Under no circumstance should the operator drill more than fifty (50) feet below the bottom of the void or install less than twenty (20) feet of casing below the bottom of the void.
2. Pursuant to 35 CSR 4-19.1.a, at the request of the surface owner all water wells or springs within 1000 feet of the proposed well that are actually utilized for human consumption, domestic animals or other general use shall be sampled and analyzed.
3. Pursuant to 35 CSR 4-19.1.c, if the operator is unable to sample and analyze any water well or spring with one thousand (1,000) feet of the permitted well location, the Office of Oil and Gas requires the operator to sample, at a minimum, one water well or spring located between one thousand (1,000) feet and two thousand (2,000) feet of the permitted well location.
4. 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.
5. During the surface casing and cementing process, in the event cement does not return to the surface, or any other casing string that is permitted to circulate cement to the surface and does not return to the surface, the oil and gas inspector shall be notified within twenty-four (24) hours
6. Well work activities shall not constitute a hazard to the safety of persons.

WW - 2B
(Rev. 8/10)

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

1) Well Operator: Noble Energy, Inc. 494501907 Marshall Franklin Powhatan Point
Operator ID County District Quadrangle

2) Operator's Well Number: MND 99 V 3) Elevation: 1192'

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

5) Proposed Target Formation(s): Marcellus, Burkett Proposed Target Depth: Deepest 6237'

6) Proposed Total Depth: 6389' TVD 6825 MD Feet Formation at Proposed Total Depth: Huntermville Chert

7) Approximate fresh water strata depths: 518' and 655'

8) Approximate salt water depths: None noted in offsets

9) Approximate coal seam depths: Sewickley 673', Pittsburgh 763'

10) Approximate void depths, (coal, Karst, other): None Anticipated; Drilling in Pillar-see map attached

11) Does land contain coal seams tributary to active mine? Yes, Ireland Mine

12) Describe proposed well work and fracturing methods in detail (attach additional sheets if needed)

Well is to be drilled at a slight deviation (schematic attached) to the Marcellus between two MND 3 laterals. This well will be used to observe and measure fracturing data from the MND 3 laterals. Additional information is attached describing our proposed well work and data gathering.

13) **CASING AND TUBING PROGRAM**

TYPE	SPECIFICATIONS			FOOTAGE INTERVALS		CEMENT
	Size	Grade	Weight per ft	For Drilling	Left in Well	
Conductor	20"	New	94#	40'	40'	CTS
Fresh Water	13 3/8"	J-55	54.5#	1180'	1180'	CTS
Coal	"	"	"	"	"	"
Intermediate	9 5/8"	J-55	36#	2680'	2680'	CTS (Contingency String for Red Rock)
Production	4 1/2"	HCP-110	11.6#	6825'	6825'	TOC @ 200' above casing shoe plus 30%
Tubing						
Liners						

Packers: Kind: Please see well prognosis and procedure.

Sizes: _____

Depths Set _____

MND 99 V

Observation/Monitoring Well Work Procedure

This well is intended to be slightly deviated to better place the well between laterals.

An injection fall off test will consist of perforating the zones of interest, pump 5-10 bbl of water into the formation above the fracture pressure (~7000psi) at 5bpm and shut the well in measuring the pressure decline over time for analysis. The fall off tests will be conducted in shallow zones; Burkett, Marcellus, and chert (**not more than 99' past the ceiling of the Onondaga**) placing a plug between each and then after tests are completed we will monitor pressures on these open and completed zones.

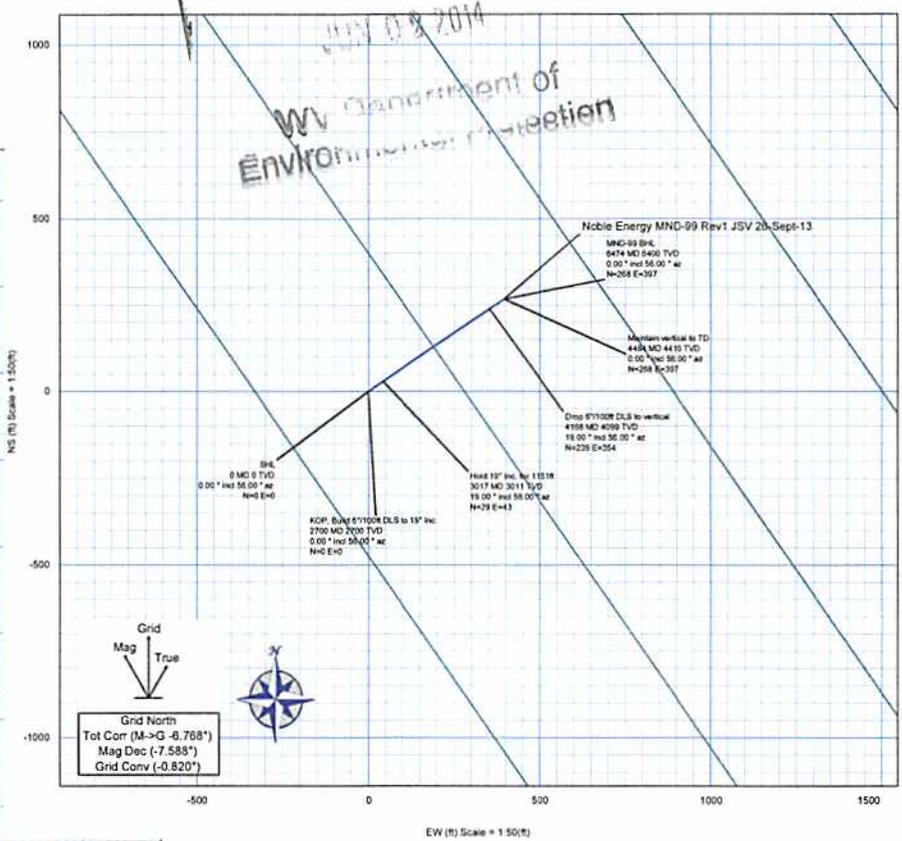
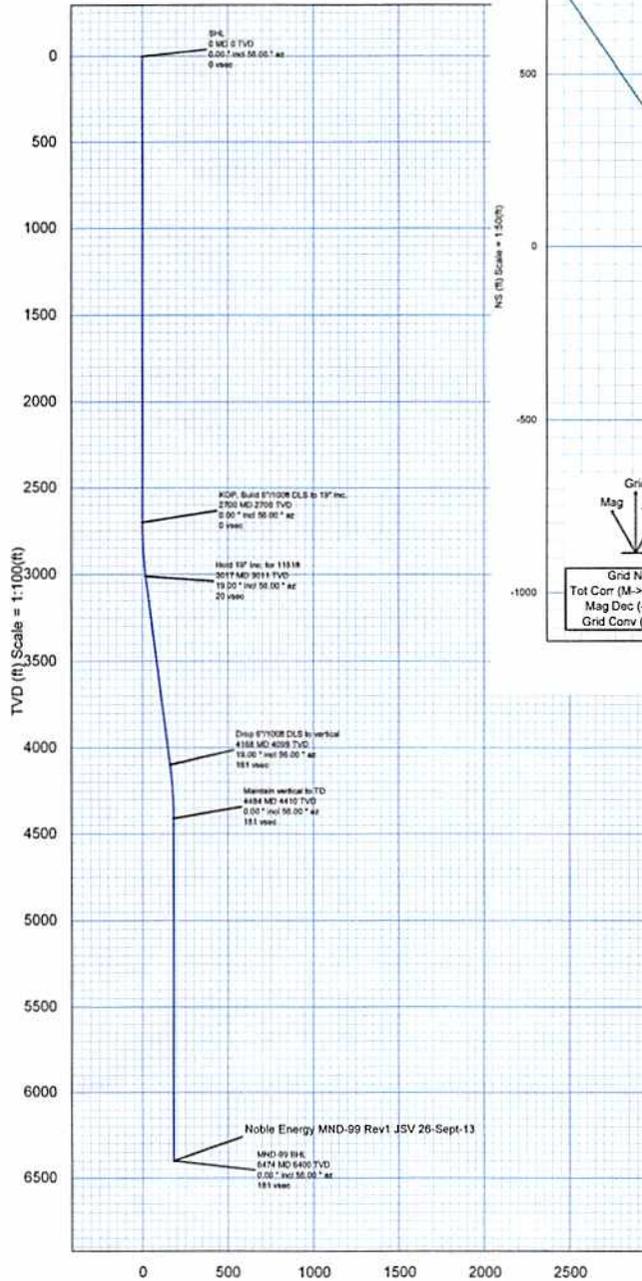
One option is that we will use three gauges behind casing reading real time and leave the two plugs above the Chert and Marcellus so as not to run tubing.

Another option is to have two packers at roughly the same location of the drilled out plugs with two downhole Tubel BHP gauges to measure pressure in all three zones (casing above for Burkett, gauge on tubing between packers to measure both the Chert (tubing) and the Marcellus (annulus)).

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MAY 08 2014
WV Department of
Environmental Protection

Borehole: Original Borehole	Well: MND-99	Field: WV Marshall County (NAD 27)	Structure: TBD
Gravity & Magnetic Parameters Model: HDGM 2013 MagDec: -7.588°	Dip: 67.377° FS: 52874.851at	Date: 9/26/2013 Gravity FS: 999.442mgals	Surface Location: NAD27 West Virginia State Plane, Northern Zone, US East Lat: N 39 50 34.77 Lon: W 89 47 10.66 Northing: 491736.733US Easting: 1638825.08US Grid Cont: 3.82 Scale Fact: 1
Station: MND-99 Elev: Noble Energy MND-99 Rev1 JSV 26-Sept-13		Structure: TBD KID1130N above MSL	

- Noble Energy MND-99 Rev1 JSV 26-Sept-13



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JULY 18 2014
WV Department of Environmental Protection

Point	Depth	Azimuth
0 SHL	2700.00	0.00
0 MD 0 TVD	2700.00	0.00
2300 MD 2700 TVD	2700.00	0.00
3017 MD 3018 TVD	3017.00	19.00
4188 MD 4029 TVD	4188.00	19.00
4484 MD 4410 TVD	4484.00	19.00
6474 MD 6400 TVD	6474.00	19.00

Point	Depth	Azimuth	Remarks
0 SHL	2700.00	0.00	0.00° incl 50.00° az
0 MD 0 TVD	2700.00	0.00	0.00° incl 50.00° az
2300 MD 2700 TVD	2300.00	19.00	0.00° incl 50.00° az
3017 MD 3018 TVD	3017.00	19.00	0.00° incl 50.00° az
4188 MD 4029 TVD	4188.00	19.00	0.00° incl 50.00° az
4484 MD 4410 TVD	4484.00	19.00	0.00° incl 50.00° az
6474 MD 6400 TVD	6474.00	19.00	0.00° incl 50.00° az

Curve Point	MD	INCL	AZIM	TVD	YDEC	NOISE	SPDMM	DLB
SHL	0.00	0.00	00.00	0.00	0.00	0.00	0.00	0.00
0 MD 0 TVD	2700.00	0.00	00.00	2700.00	3.00	0.00	0.00	0.00
2300 MD 2700 TVD	2300.00	19.00	00.00	2700.00	3.00	0.00	0.00	0.00
3017 MD 3018 TVD	3017.00	19.00	00.00	3017.00	3.00	0.00	0.00	0.00
4188 MD 4029 TVD	4188.00	19.00	00.00	4188.00	3.00	0.00	0.00	0.00
4484 MD 4410 TVD	4484.00	19.00	00.00	4484.00	3.00	0.00	0.00	0.00
6474 MD 6400 TVD	6474.00	19.00	00.00	6474.00	3.00	0.00	0.00	0.00

Surface Location	
Northing: 491736.73	Easting: 1638825.08
Latitude: N 39 50 34.77	Longitude: W 89 47 10.66
UTM Zone: 18N	UTM Datum: NAD 83

Vertical Section (ft) Azim = 123.8° Scale = 1:100(ft) Origin = 0N/-S, 0E/-W



DRILLING WELL PLAN
MND-99V
Marcellus Observation Well
Marshall County, WV

Ground Elevation		1192'		MND-99V SHL (Lat/Long)				(491736.73N, 1638825.5E) (NAD27)			
Azm		56°		MND-99V BHL (Lat/Long)				(492004.45N, 1639222.41E) (NAD27)			
WELLBORE DIAGRAM		HOLE	CASING	GEOLOGY	Top	Base	MUD	CEMENT	CENTRALIZERS	CONDITIONING	COMMENTS
		26	20" 94#	Conductor	40	40	AIR	To Surface	N/A	Ensure the hole is clean at TD.	Stabilize surface fill/soil. Conductor casing = 0.438" wall thickness
		12-3/8"	9-5/8" 36# HCK-55 BTC	Pittsburgh Coal	843	848	AIR	15.6 ppg Class A to surface plus 50% Excess Yield = 1.2	Bow Spring on first 2 joints then every third joint to 100' from surface	Fill with fresh water (<3%KCL) gel mud once drilled to TD. Once casing is at setting depth, circulate a minimum of one hole volume prior to pumping cement.	Surface/Coal casing = 0.352" wall thickness Burst=3520psi
				Surface/Coal Casing	1180	1180					
		8-3/4"	7" 26# P110 TXP BTC	Price Formation	2270	2270	AIR	15.6 ppg Class A to surface plus 50% Excess Yield = 1.2	Bow spring centralizers every third joint to 100' feet from surface.	Fill with gel mud once drilled to TD. Once casing is at setting depth, circulate a minimum of one hole volume prior to pumping cement.	CONTINGENCY STRING (IF HOLE PROBLEMS ARE ENCOUNTERED) Intermediate casing = 0.362" wall thickness Burst=9960 psi
				Weir Sand	2430	2430					
				Contingency Int. Casing	2680	2680					
		8-3/4" or 7 7/8" Vertical/ Deviation	4-1/2" 11.6# P-110 BTC	KOP	2700 MD	2700 TVD	AIR	14.8 ppg Class A TOC >= 200' above 9 625' shoe plus 30% Excess	Rigid Bow Spring centralizers every joint to TOC	Fill with gel mud once drilled to TD. Once casing is at setting depth, circulate a minimum of two hole volumes prior to pumping cement.	6DLS build, Tangent @ 19°, 6DLS drop back to vertical Production casing = 0.25" wall thickness Burst=10690 psi
				Speechley		3586					
				Drop to Vertical	4170 MD	4100 TVD					
				Angola	5094	5716					
				Rheinstreet	5716	5987					
				Sonyea	5987	5917					
				Cashaqua	5917	6068					
Middlesex	6068			6091							
Burkett	6158			6176							
Tully Limestone	6176			6202							
Hamilton	6202	6237									
Marcellus	6237	6290									
Onondaga	6290	6296									
TD		6389 TVD									

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 WV Department of Environmental Protection
 MAY 08 2014

4705101764

WW-2A
(Rev. 6-07)

1.) Date: _____
2.) Operator's Well Number MND 99 V
State _____ County _____ Permit _____
3.) API Well No.: 47- _____ - _____

STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS
NOTICE AND APPLICATION FOR A WELL WORK PERMIT

4) Surface Owner(s) to be served:
(a) Name Consolidation Coal Company-Jason Witt
Address 46226 National Rd. ✓
Saint Clairsville, OH 43950
(b) Name _____
Address _____
(c) Name _____
Address _____
6) Inspector Jim Nicholson WVOOG State Inspector
Address PO Box 44
Moundsville, WV 26041-1534
Telephone 304-552-3874

5) (a) Coal Operator
Name Consolidation Coal Company-Jason Witt
Address 46226 National Road ✓
Saint Clairsville, OH 43950
(b) Coal Owner(s) with Declaration
Name Consolidation Coal Company-Jason Witt ✓
Address 46226 National Road
Saint Clairsville, OH 43950
Name Consol Energy, Inc.-Don Puglio ✓
Address 1000 Consol Energy Drive
Canonsburg, PA 15317
(c) Coal Lessee with Declaration ✓
Name Consolidation Coal Company-Jason Witt
Address 46226 National Road
Saint Clairsville, OH 43950

TO THE PERSONS NAMED ABOVE TAKE NOTICE THAT:

Included is the lease or leases or other continuing contract or contracts by which I hold the right to extract oil and gas
OR

Included is the information required by Chapter 22, Article 6, Section 8(d) of the Code of West Virginia (see page 2)

I certify that as required under Chapter 22-6 of the West Virginia Code I have served copies of this notice and application, a location plat, and accompanying documents pages 1 through _____ on the above named parties by:

- Personal Service (Affidavit attached)
- Certified Mail (Postmarked postal receipt attached)
- Publication (Notice of Publication attached)

I have read and understand Chapter 22-6 and 35 CSR 4, and I agree to the terms and conditions of any permit issued under this application.

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this application form and all attachments, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate and complete.

I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Well Operator Noble Energy, Inc. *Laura L. Adkins*
By: Laura L. Adkins
Its: Regulatory Analyst
Address 333 Technology Drive Suite 116
Canonsburg, PA 15317
Telephone 412-841-9567

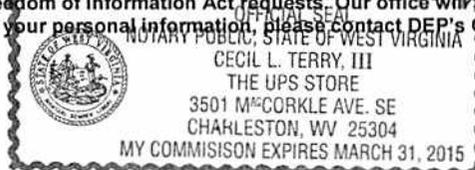
Subscribed and sworn before me this 7 day of MAY, 2014

[Signature] Notary Public
My Commission Expires 3/31/2015

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Office of Oil and Gas
MAY 08 2014
Department of Environmental Protection

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



4705101764
MND 99 V

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(Domestic Mail Only; No Insurance Coverage Provided)
For delivery information visit our website at www.usps.com

7012 2920 0000 6498 3533

SAINT CLAIRSVILLE, OH 43950

Postage	\$	\$3.04
Certified Fee		\$3.30
Return Receipt Fee (Endorsement Required)		\$2.70
Restricted Delivery Fee (Endorsement Required)		\$0.00

Consolidation Coal Company
Jason Witt
46226 National Road
Saint Clairsville, OH 43950

Postmark Here
MAY 08 2014
SISSONVILLE BRANCH
05/08/2014

See Reverse for Instructions

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7012 2920 0000 6498 3526

CANONSBURG, PA 15317

Postage	\$	\$2.86
Certified Fee		\$3.30
Return Receipt Fee (Endorsement Required)		\$2.70
Restricted Delivery Fee (Endorsement Required)		\$0.00

Consol Energy, Inc.
Attn: Don Puglio
1000 Consol Energy Dr.
Canonsburg, PA 15317

Postmark Here
MAY 08 2014
SISSONVILLE BRANCH
05/08/2014

See Reverse for Instructions

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Office of Oil and Gas
MAY 08 2014
WV Department of
Environmental Protection

WW-2A1
(Rev. 1/11)

Operator's Well Number MND 99 V

**INFORMATION SUPPLIED UNDER WEST VIRGINIA CODE
Chapter 22, Article 6, Section 8(d)
IN LIEU OF FILING LEASE(S) AND OTHER CONTINUING CONTRACT(S)**

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

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

Grantor, Lessor, etc.	Grantee, Lessee, etc.	Royalty	Book/Page
Consolidation Coal Company	CNX Gas Company, LLC	100%/Fee	646/493
CNX Gas Company, LLC	Noble Energy, Inc.	100%/Fee	752/66

**Acknowledgement of Possible Permitting/Approval
In Addition to the Office of Oil and Gas**

The permit applicant for the proposed well work addressed in this application hereby acknowledges the possibility of the need for permits and/or approvals from local, state, or federal entities in addition to the DEP, Office of Oil and Gas, including but not limited to the following:

- WV Division of Water and Waste Management
- WV Division of Natural Resources
- WV Division of Highways
- U.S. Army Corps of Engineers
- U.S. Fish and Wildlife Service
- County Floodplain Coordinator

The applicant further acknowledges that any Office of Oil and Gas permit in no way overrides, replaces, or nullifies the need for other permits/approvals that may be necessary and further affirms that all needed permits/approvals should be acquired from the appropriate authority before the proposed activity is initiated.

RECEIVED
Office of Oil and Gas
Environmental Protection

Noble Energy, Inc.
Well Operator: Jack D. [Signature]
By: Its: Senior Operations [Signature]

WW-2B1
(5-12)

Well No. MND 99 V

West Virginia Department of Environmental Protection
Office of Oil and Gas

NOTICE TO SURFACE OWNERS

The well operator named below is preparing to file for a permit from the state to drill a new well. Before a well work permit can be filed with the Chief of the Office of Oil and Gas, the well operator is required to have given notice of the right to request water well or spring analytical testing. This notice shall be given to the owners or occupants of land which have a water well or spring being utilized for human consumption, domestic animals, or other general use and which is located within 1000 feet of the proposed well site.

With this form, the operator is giving you notice of your right to request analytical testing. The operator is required to sample and analyze the water wells or springs of all owners or occupants who request it. Therefore, if you wish to have your water well or spring tested, contact the operator named below.

All sampling shall be completed prior to drilling. Within thirty (30) days of the receipt of such sample analyses the operator shall submit the results to the Chief of the Office of Oil and Gas and to the owners or occupants who may have requested them.

Be advised, you have the right to sample and analyze any water supply at your own expense.

Listed below is the laboratory chosen by operator to perform analysis, and contactor chosen to collect sample.

Certified Laboratory Name
Sampling Contractor

ALS Labs
Moody Environmental

Well Operator Noble Energy, Inc.

Address 333 Technology Drive Suite 116
Canonsburg, PA 15317

Telephone 724-820-3118

FOR OPERATOR'S USE ONLY: Below, or on an attached page, list those persons which were given this notice. Place an asterisk beside the one(s) that contacted you and requested sampling and analyses. If there were no requests made, indicate by underling which one you have selected to sample and analyze. If there are no water wells or springs within 1000 feet of the proposed site, the Chief may require the operator to test wells up to 2000 feet from the proposed site.

There are no water wells or springs within 1000'. Please see map attached.

RECEIVED
MAY 08 2014
Office of Oil and Gas
Environmental Protection
Department of

April 14, 2014

NOBLE ENERGY, INC.
333 TECHNOLOGY DRIVE
SUITE 116
CANNONSBURG, PA 15317

WATER WELL REPORT

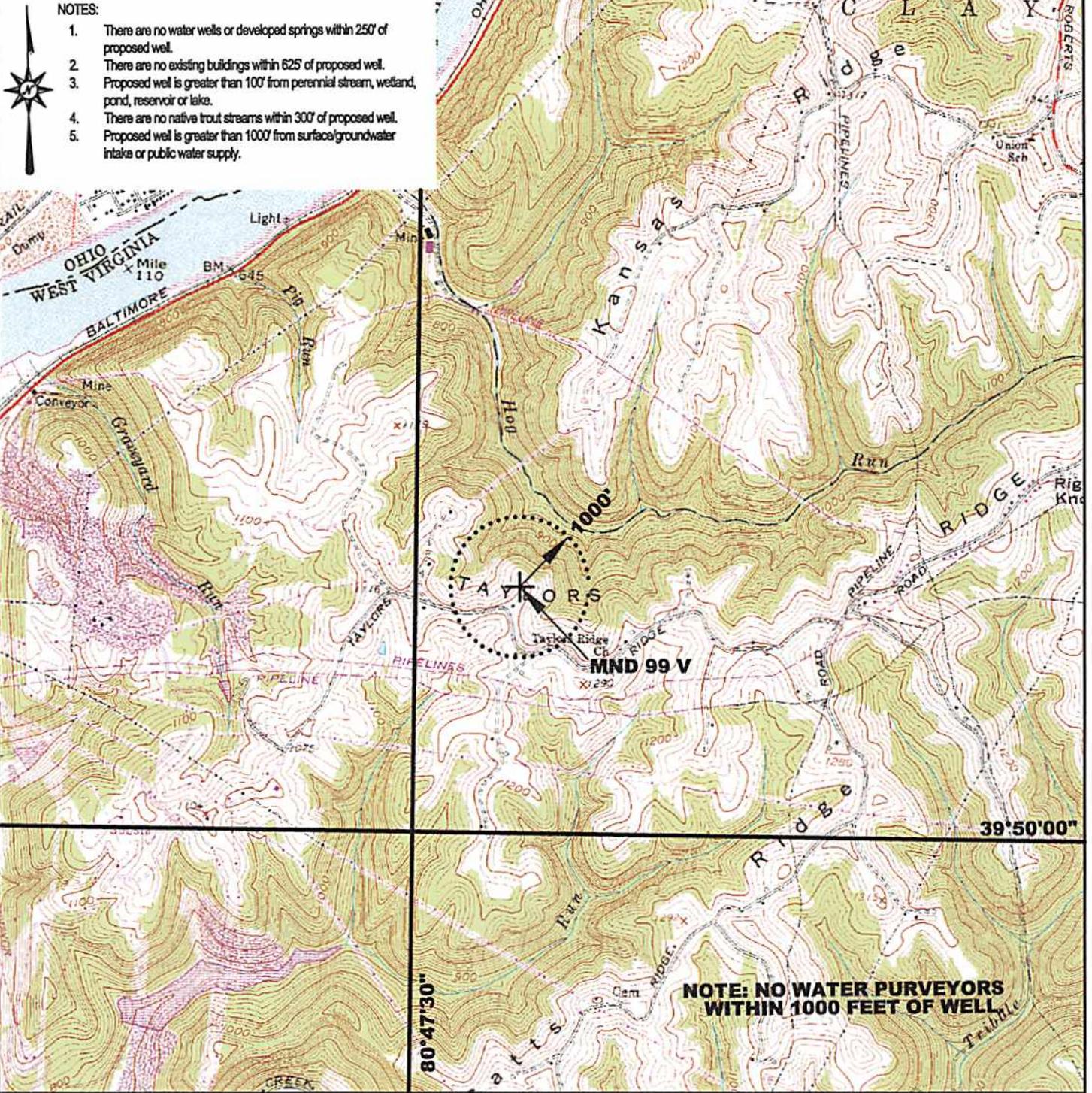
Well No.: MND 99 V
District: Franklin
County: Marshall
State: West Virginia

Potable water sources within 2,000' feet of the above referenced well location.

<u>NAME / ADDRESS</u>	<u>WATER SOURCE DISTANCE TO WELL</u>
ROBERT WILLIAM GRAY - LIFE 10 SUGAR LN WHEELING, WV 26003	1757'
THOMAS K. BARNHART 3008 TAYLORS RIDGE RD PROCTOR, WV 26055	1709'
	1566'

NOTES:

1. There are no water wells or developed springs within 250' of proposed well.
2. There are no existing buildings within 625' of proposed well.
3. Proposed well is greater than 100' from perennial stream, wetland, pond, reservoir or lake.
4. There are no native trout streams within 300' of proposed well.
5. Proposed well is greater than 1000' from surface/groundwater intake or public water supply.



80°47'30"

39°50'00"

NOTE: NO WATER PURVEYORS WITHIN 1000 FEET OF WELL

Blue Mountain Inc.
 11023 MASON DIXON HIGHWAY
 BURTON, WV 26562
 PHONE: (304) 662-6486

PREPARED FOR:
NOBLE ENERGY, INC.
 333 TECHNOLOGY DRIVE
 SUITE 116
 CANNONSBURG, PA 15317

LEGEND
 (W) - WATER PURVEYOR
 + - EXISTING WELLS

MND 99 V
LOCATION MAP
MARSHALL COUNTY
FRANKLIN DISTRICT
WEST VIRGINIA
 TOPO QUAD: POWHATAN POINT, OHIO-WV
 SCALE: 1" = 2000'
 DATE: December 18, 2013

WW-9
(5/13)

Page _____ of _____
API Number 47 - _____ - _____
Operator's Well No. MND 99 V

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

FLUIDS/ CUTTINGS DISPOSAL & RECLAMATION PLAN

Operator Name Noble Energy, Inc. OP Code 494501907

Watershed (HUC 10) Short Creek Quadrangle Powhatan Point

Elevation 1192' County Marshall District Franklin

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

Will a pit be used for drill cuttings? Yes _____ No X

If so, please describe anticipated pit waste: no pit-closed loop

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 _____)

Will closed loop system be used? Yes

Drilling medium anticipated for this well? Air, freshwater, oil based, etc. Air thru coal string, then SOBM

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

Additives to be used in drilling medium? See attached

Drill cuttings disposal method? Leave in pit, landfill, removed offsite, etc. Offsite, list attached

-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 Laura L. Adkins

Company Official (Typed Name) Laura L. Adkins

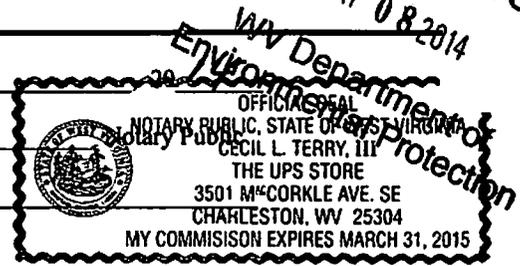
Company Official Title Regulatory Analyst

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Office of Oil and Gas
MAY 08 2014

Subscribed and sworn before me this 7 day of MAY

[Signature]
3/31/2015

My commission expires _____



51-1764

Form WW-9

Operator's Well No. MND 99 V

Proposed Revegetation Treatment: Acres Disturbed _____ Prevegetation pH _____

Lime 2 to 3 Tons/acre or to correct to pH _____

Fertilizer (10-20-20 or equivalent) 10-20-20 at 500 lbs/acre (500 lbs minimum)

Mulch Hay or Straw at 2 Tons/acre

Seed Mixtures

Seed Type	Area I	lbs/acre
Tall Fescue		40
Ladino Clover		5
See Site Plans for Complete List		

Seed Type	Area II	lbs/acre
Tall Fescue		
Ladino Clover		
See Site Plans for Complete List		

RECEIVED
Office of Oil and Gas

JUN 02 2014

W40 Department of
Environmental Protection

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: OOG State Inspector

Date: 5/12/14

Field Reviewed? Yes No

4705101764

EROSION & SEDIMENT CONTROL PLAN

FOR

MND 99V WELL PAD

FRANKLIN DISTRICT, MARSHALL COUNTY, WV

GENERAL NOTES

1. THE TOPOGRAPHIC SURVEY USED FOR THIS BAY MAPPING WAS PERFORMED BY BETTEN ASSOCIATES, INC. IN DECEMBER 2011.
2. PROPERTY BOUNDARIES, LANDOWNER INFORMATION AND ROAD NETWORKS SHOWN ON THIS PLAN ARE BASED ON AVAILABLE COUNTY GIS PARCEL DATA.
3. EXISTING STRUCTURES, TREE LINES AND ROADWAYS HAVE BEEN LOCATED FOR AVAILABLE AERIAL PHOTOGRAPHY.
4. THE HORIZONTAL DATUM IS WEST VIRGINIA STATE PLANE, NORTH AMERICAN DATUM 1983 (NAD 83) WITH ZONE 18.
5. THE VERTICAL DATUM IS WEST VIRGINIA STATE PLANE, NORTH AMERICAN DATUM 1983 (NAD 83).
6. THE UTILITY SHOWN ON THIS PLAN ARE FOR REFERENCE PURPOSES ONLY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE EXACT LOCATION PRIOR TO ANY EXCAVATION BY NOTIFYING THE UTILITY OF WEST VIRGINIA AT 1-800-245-4248.
7. A RETAINED PRESENCE/ABSENCE SURVEY WAS PERFORMED BY BETTEN ASSOCIATES, INC. IN NOVEMBER 2011.
8. CONTRACTOR TO PRETECT ALL RETAINED AND RETAINED IMPACTS ARE PROPOSED IN THIS PLAN.
9. THE CUT & FILL SUMMARY CALCULATIONS PRESENTED ON THIS PLAN ARE FOR PERMITTING AND INFORMATIONAL PURPOSES ONLY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY EXISTING GRADES AND TO VERIFY EARTHWORK VOLUMES, METHODS AND PROCEDURES. ANY ISSUES ARE TO BE BROUGHT TO THE ENGINEER'S AND OWNER'S ATTENTION PRIOR TO COMMENCEMENT OF WORK.
10. ALL EXISTING UTILITIES HAVE BEEN SHOWN IN ACCORDANCE WITH THE BEST AVAILABLE INFORMATION.
11. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL ABOVE AND BELOW GROUND UTILITIES AND STRUCTURES AND WILL BE RESPONSIBLE FOR THE PROTECTION OF THESE UTILITIES AND STRUCTURES AT ALL TIMES.
12. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND MAINTAIN UNINTERRUPTED SERVICE AND ANY DAMAGE DUE TO THE CONTRACTOR'S NEGLIGENCE SHALL BE REPAIRED IMMEDIATELY AND COMPLETELY AT HIS EXPENSE.
13. CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPLACEMENT OF DAMAGED OR DESTROYED LANDSCAPE AND LAWN.
14. CONTRACTOR SHALL VERIFY ALL DIMENSIONS ON THE PROJECT SITE PRIOR TO THE START OF CONSTRUCTION.
15. CONTRACTOR TO RELOCATE UTILITIES AS REQUIRED.
16. CONTRACTOR MAY NEED ACCESS ROAD ONE TO STEEP SLOPES IF DEEMED NECESSARY AND FOR APPROVAL BY THE OWNER AND ENGINEER.
17. PROPOSED ROCK CONSTRUCTION ENTRANCE TO BE BUILT SUCH THAT RUNOFF FROM PROPOSED ACCESS WILL NOT SHEET FLOW ON TO PUBLIC ROAD.
18. SEEDS AND MULCH ALL DISTURBED AREAS PER DETAILS IN THIS PLAN.
19. ALL CLEARED TREE BRANCHED SHALL BE PLACED ON UPHILL SIDE OF CONFLICT (TIE) SOCKS AND NOT STOCKPILED ON-SITE.
20. CONTRACTOR SHALL STOP WORK IMMEDIATELY AND CONTACT SUABLE ENERGY AND APPROPRIATE RESPONSIBLE AUTHORITY SHOULD ANY POTENTIAL IMPACTS (E.G. BONES, POTTERY, ETC.) BE ENCOUNTERED DURING CONSTRUCTION.
21. NO WORK SHALL BE DONE OUTSIDE THE LIMITS OF DISTURBANCE OR IN PROTECTED AREAS.

DIRECTIONS TO THE SITE

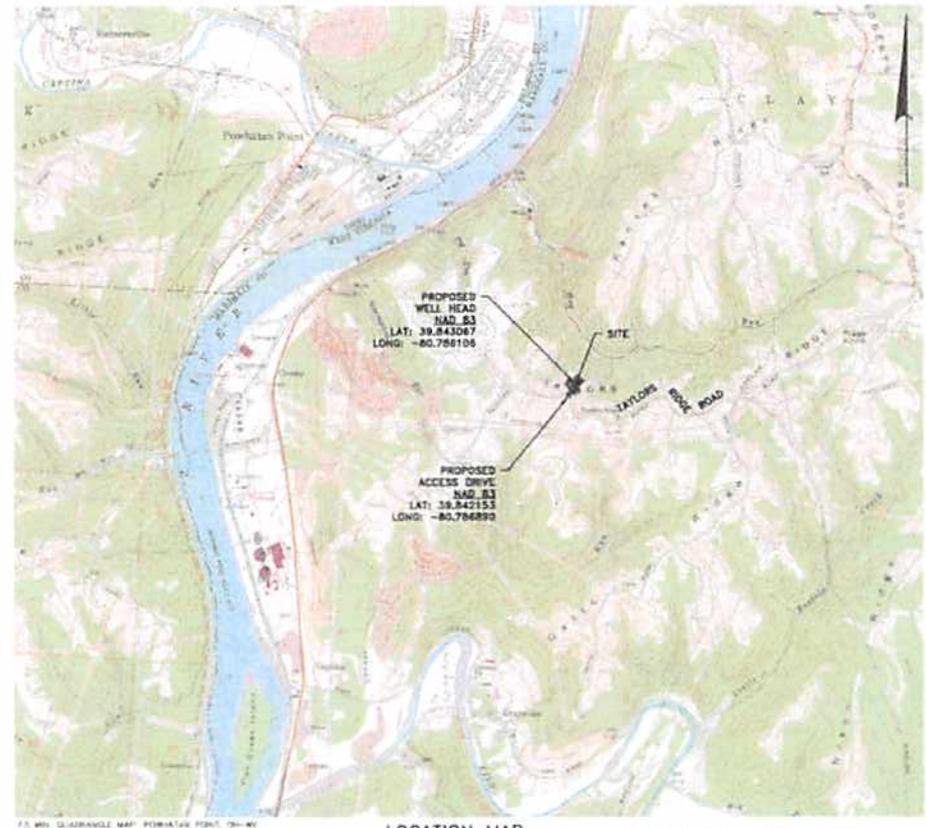
FROM MEETING TIME US-580 S/WV-2 S FOR 0.2 MILES. KEEP RIGHT ON WV-2 S AND FOLLOW FOR 1.8 MILES. TURN LEFT ON 10 FISH CREEK ROAD (CR-114) AND FOLLOW FOR 1.53 FEET. TURN LEFT ON TAYLOR RIDGE ROAD (CR-217) AND FOLLOW FOR 1.1 MILES. SITE WILL BE ON LEFT.

CUT & FILL

WELL PAD	ACCESS ROAD	TOTAL SUB
CUT	+12,232 C.Y.	+10,947 C.Y.
STONE	+1,234 C.Y.	+1,462 C.Y.
FILL	-11,268 C.Y.	-12,884 C.Y.
W/COMPACTON	-1,234 C.Y.	-1,260 C.Y.
TOTAL	-2,232 C.Y.	-3,332 C.Y.
NET	-1,000 C.Y.	-1,000 C.Y.

NOTES

1. THE ASSIGNED SLOPE (SEEP) IS 4%.
2. THE CUT & FILL SUMMARY CALCULATIONS PRESENTED ON THIS PLAN ARE FOR INFORMATIONAL PURPOSES ONLY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY EXISTING GRADES AND VERIFY EARTHWORK VOLUMES, METHODS AND PROCEDURES. ANY ISSUES ARE TO BE BROUGHT TO THE ENGINEER'S AND OWNER'S ATTENTION PRIOR TO COMMENCEMENT OF WORK.



1:1 WITH QUADRANGLE MAP PERMITTING POINT ON-WV LOCATION MAP SCALE = 1"=200'

WEST VIRG

CALL BEFORE YOU DIG!

AT LEAST 48 HOURS, BUT NOT MORE THAN 14 DAYS, BEFORE ANY EXCAVATION, WORKING IN WEST VIRGINIA AT 811 OR WEST 811 (800) 245-4248.

SOILS CLASSIFICATION

- 100 - CLAYEY SANDWICH COMPLEX, ST
- 102 - CLAYEY SANDWICH COMPLEX, ST
- 104 - SANDWICH-COMPLEX, ST

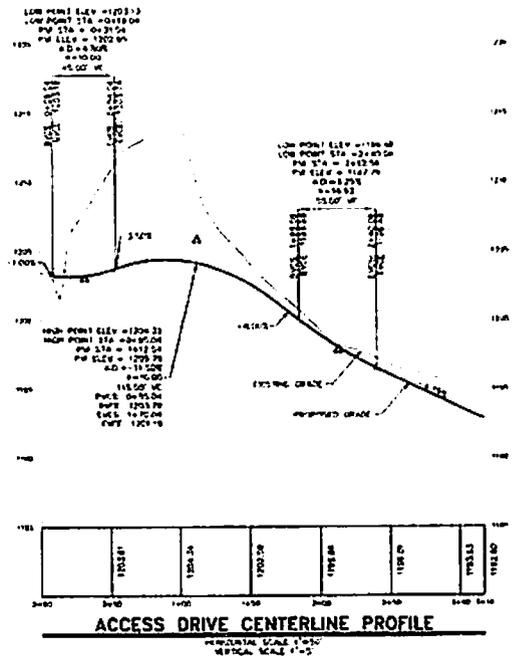
LIST OF DRAWINGS

- 1 OF 10 - COVER SHEET
- 2 OF 10 - EROSION/SEDIMENT PLAN
- 3 OF 10 - LAYOUT PLAN
- 4 OF 10 - EROSION & SEDIMENT CONTROL PLAN
- 5 OF 10 - ACCESS DRIVE
- 6 OF 10 - UTILITY SECTION
- 7 OF 10 - CROSS SECTION
- 8 OF 10 - WELL PAD ROCS
- 9 OF 10 - NOTES & DATA SHEETS

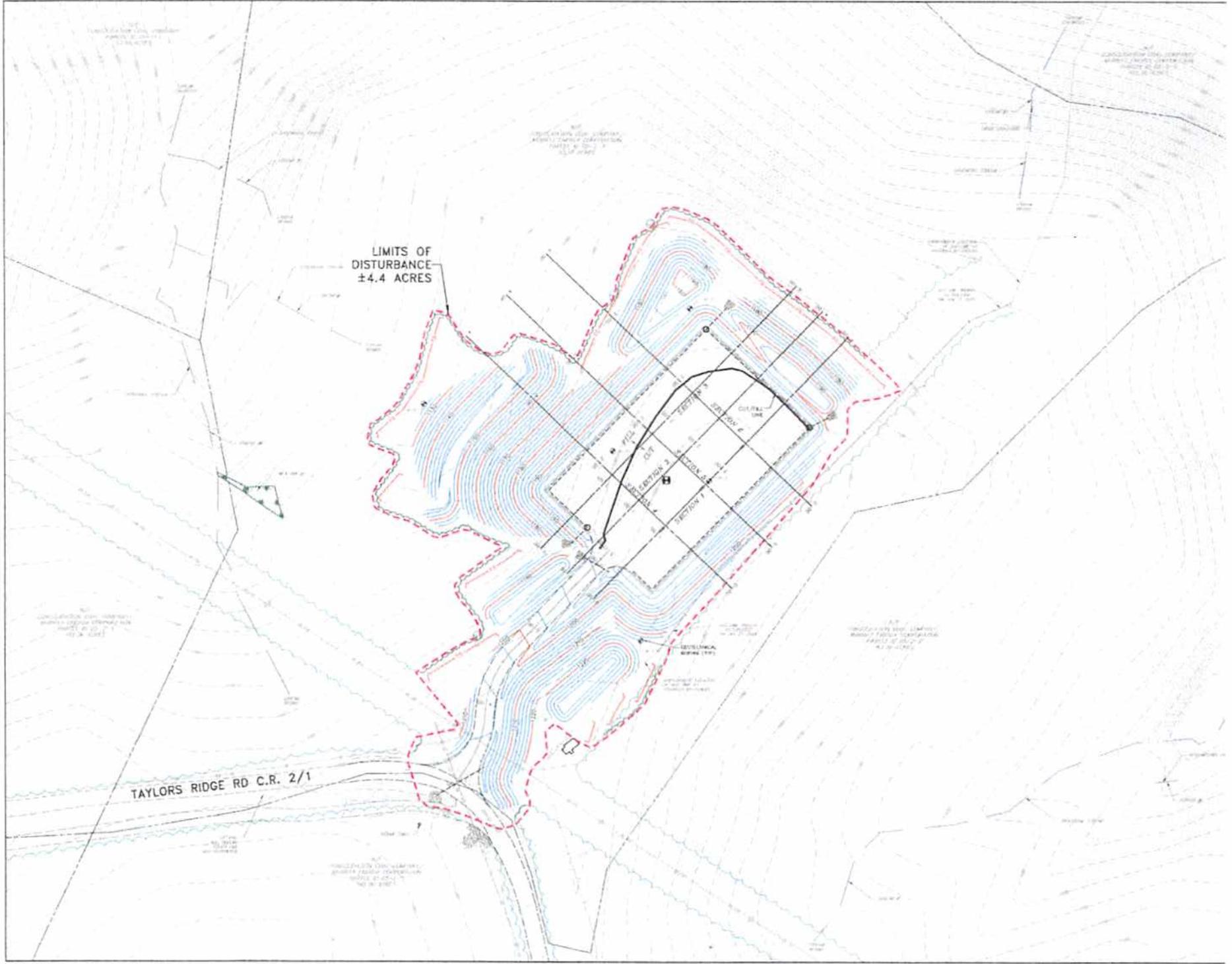
DISTURBANCE SUMMARY

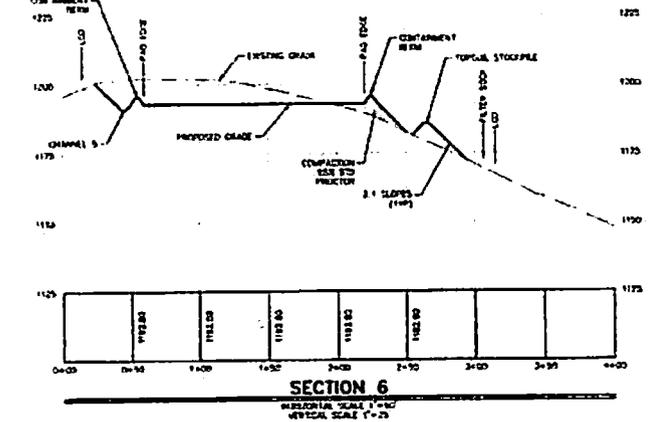
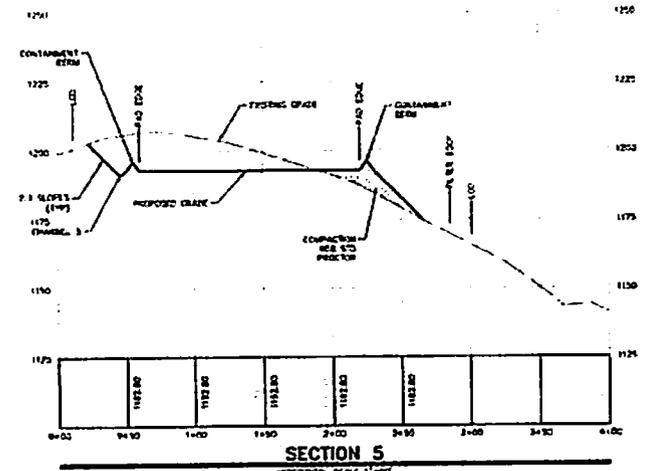
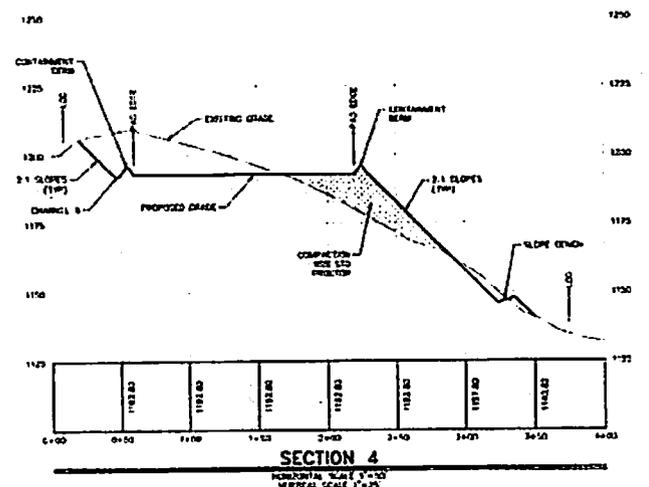
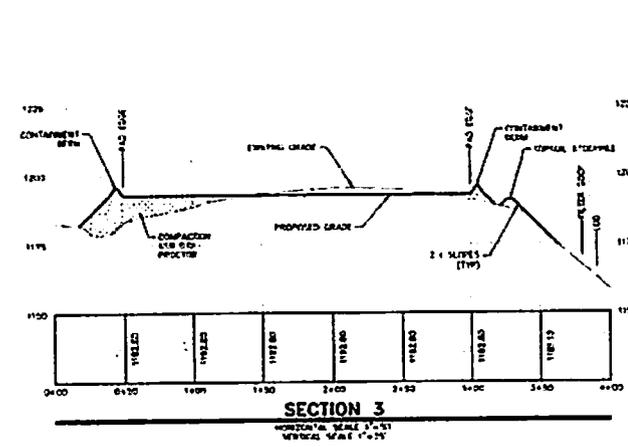
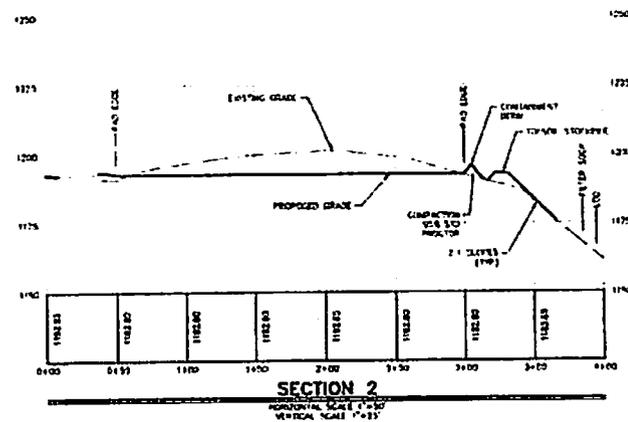
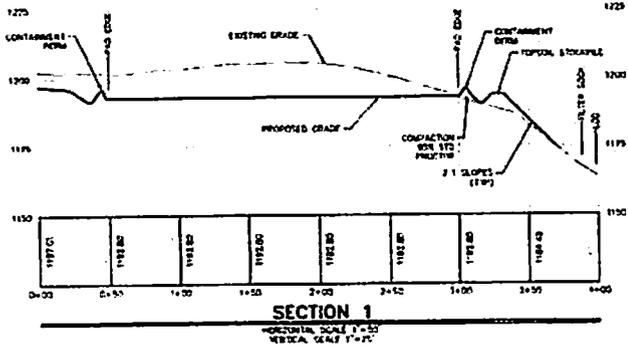
TOTAL LIMITS OF DISTURBANCE	= 4.4
CLEARING REQUIRED	= 4.4
PRE-DEVELOPMENT	= 0.0

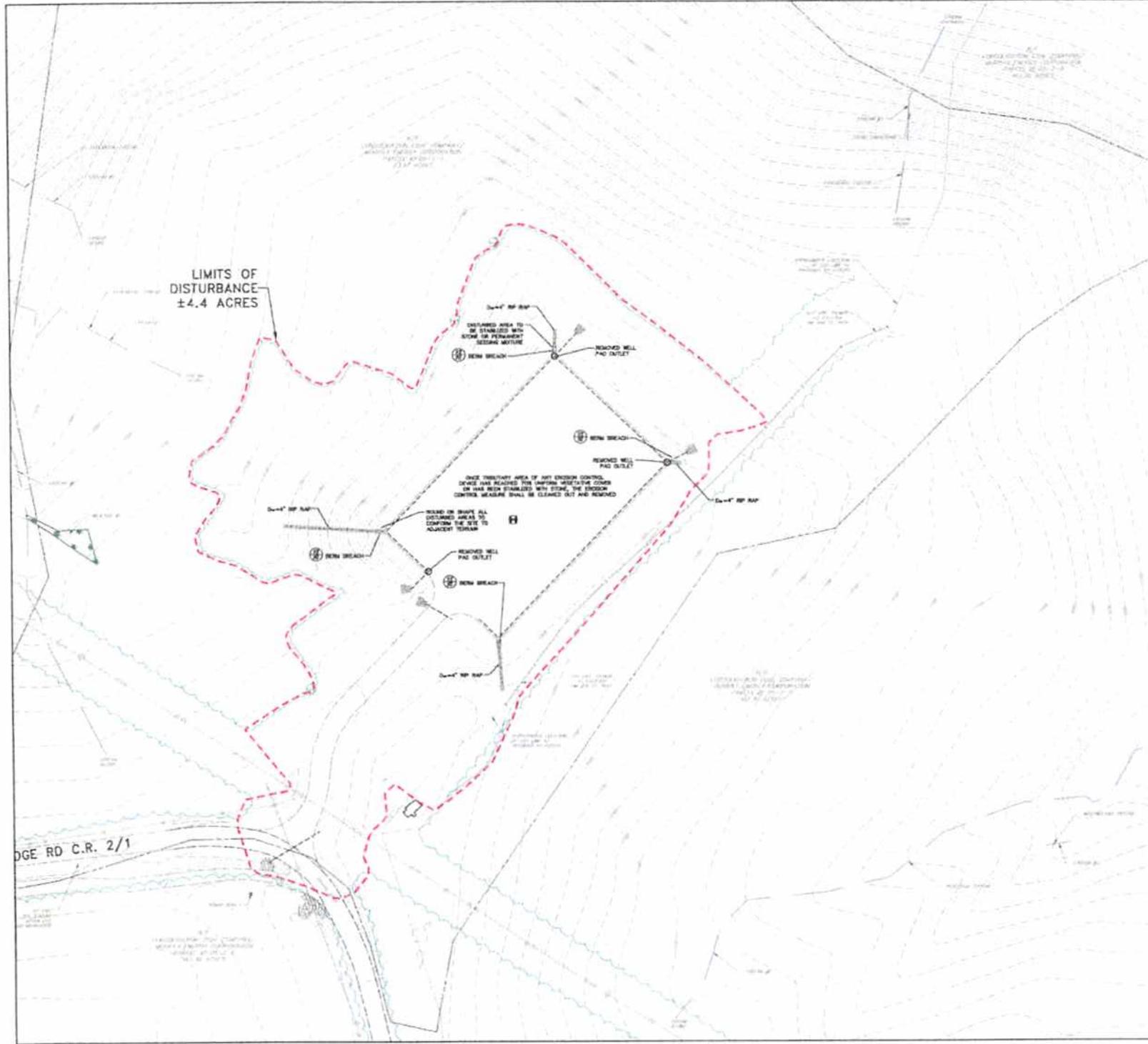
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4705101764







RECLAMATION NOTES

1. CONTAMINANT BERMES AROUND PADS TO PREVENT EROSION.
2. DISTURBED AREA TO BE STABILIZED WITH SOIL OR PERMANENT VEGETATIVE MATURE.
3. ONCE TEMPORARY AREA OF ANY EROSION CONTROL DEVICE HAS REACHED THE EROSION CONTROL POINT OR HAS BEEN STABILIZED WITH SOIL, THE EROSION CONTROL MEASURE SHALL BE CLEARED OUT AND REMOVED.

RESTORATION OF PL

1. IF LARGE DISTURBANCE OCCURS DURING RECLAMATION, TEMPORARY VEGETATION SHALL BE APPLIED TO DISTURBED AREAS. VEGETATION SHALL BE APPLIED TO AREAS THAT USE THE MULCH CONTROL METHOD. AREAS THAT USE THE MULCH CONTROL METHOD SHALL BE REVEGETATED WITH PLANTING STOCK FOLLOWING CONSTRUCTION ESTABLISHED BY THE U.S. AGRICULTURAL SERVICE.
2. TOPSOIL SHALL BE FREE FROM STONES AND DEBRIS, BUT MAY CONTAIN DEBRIS TOPSOIL.
3. PRECAUTIONS SHALL BE EXERCISED TO AVOID EROSION AND SEDIMENT CONTROL.
4. SEED SHALL BE NOT MORE THAN ONE YEAR OLD AND NOT MORE THAN 10% (BY WEIGHT) WEED, MOIST, OR OTHERWISE DAMAGED.
5. TEMPORARY AND PERMANENT SEEDING SHALL BE DONE AS SHOWN IN THIS PLAN.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF EXISTING UTILITIES AND SHALL NOT BE RESPONSIBLE FOR THE PROTECTION OF EXISTING UTILITIES.

POST-USE RECLAMA

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF EXISTING UTILITIES AND SHALL NOT BE RESPONSIBLE FOR THE PROTECTION OF EXISTING UTILITIES.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF EXISTING UTILITIES AND SHALL NOT BE RESPONSIBLE FOR THE PROTECTION OF EXISTING UTILITIES.

POST-USE RECLAMA

1. THE ENGINEER SHALL FIELD MARK ALL WATERWAYS, WEIRWAYS, AND AREAS TO BE RECLAIMED.
2. INSTALL ROCK CONSTRUCTION OR OTHER APPROPRIATE EROSION CONTROL MEASURES TO PROTECT EXISTING WATERWAYS AND AREAS TO BE RECLAIMED.
3. INSTALL ALL PERMANENT EROSION CONTROL MEASURES TO PROTECT EXISTING WATERWAYS AND AREAS TO BE RECLAIMED.
4. BEGIN RECLAMATION OF SITE FROM THE RECLAMATION OF PAD FILL SLOPES. RECLAMATION SHALL BE DONE IN STAGES. RECLAMATION SHALL BE DONE IN STAGES. RECLAMATION SHALL BE DONE IN STAGES.

POST-USE RECLAMA

1. BRING THE SITE BACK TO PRE-CONSTRUCTION CONDITION.
2. THE DUFF LAYER, SOIL, TOPSOIL, AND SEEDING SHALL BE DONE AS SHOWN IN THIS PLAN.
3. DURING CONSTRUCTION ALL EROSION CONTROL MEASURES SHALL BE MAINTAINED.
4. ALL EROSION CONTROL MEASURES SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION.
5. THE CONSTRUCTION SITE SHALL BE REVEGETATED WITH PLANTING STOCK FOLLOWING CONSTRUCTION ESTABLISHED BY THE U.S. AGRICULTURAL SERVICE.
6. ALL PERMANENT EROSION CONTROL MEASURES SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION.
7. ANY AREAS DISTURBED BY EROSION SHALL BE REVEGETATED WITH PLANTING STOCK FOLLOWING CONSTRUCTION ESTABLISHED BY THE U.S. AGRICULTURAL SERVICE.

FROSON AND SEDIMENTATION CONTROL MEASURES

1. FROSON AND SEDIMENTATION CONTROL MEASURES SHALL BE IMPLEMENTED DURING THE CONSTRUCTION AND POST CONSTRUCTION PERIOD TO PREVENT THE FROSON, SEDIMENTATION AND OTHER POLLUTANTS FROM ENTERING STREAMS, INCLUDING NEARBY BAYS, LACS, WETLANDS AND OTHER RECEIVING BODIES OF WATER. SPECIAL MEASURES SHALL BE TAKEN TO PREVENT THE FROSON FROM ENTERING THE CHANNELS AND OTHER RECEIVING BODIES OF WATER.

TEMPORARY SPECIAL CONTROL MEASURES

1. TEMPORARY SPECIAL CONTROL MEASURES SHALL BE ESTABLISHED ON ALL SLOPES, ON DISTURBED AREAS, AND ON ALL EXPOSED AREAS LEFT UNPROTECTED BY VEGETATION FOR A PERIOD OF SIX MONTHS AFTER THE COMPLETION OF CONSTRUCTION.
2. SPECIAL CONTROL MEASURES SHALL BE ESTABLISHED ON ALL SLOPES AND EXPOSED AREAS LEFT UNPROTECTED BY VEGETATION FOR A PERIOD OF SIX MONTHS AFTER THE COMPLETION OF CONSTRUCTION.
3. ALL EXPOSED AREAS SHALL BE COVERED WITH A TEMPORARY SPECIAL CONTROL MEASURE.
4. ALL EXPOSED AREAS SHALL BE COVERED WITH A TEMPORARY SPECIAL CONTROL MEASURE.
5. SPECIAL CONTROL MEASURES SHALL BE ESTABLISHED ON ALL SLOPES AND EXPOSED AREAS LEFT UNPROTECTED BY VEGETATION FOR A PERIOD OF SIX MONTHS AFTER THE COMPLETION OF CONSTRUCTION.
6. SPECIAL CONTROL MEASURES SHALL BE ESTABLISHED ON ALL SLOPES AND EXPOSED AREAS LEFT UNPROTECTED BY VEGETATION FOR A PERIOD OF SIX MONTHS AFTER THE COMPLETION OF CONSTRUCTION.
7. SPECIAL CONTROL MEASURES SHALL BE ESTABLISHED ON ALL SLOPES AND EXPOSED AREAS LEFT UNPROTECTED BY VEGETATION FOR A PERIOD OF SIX MONTHS AFTER THE COMPLETION OF CONSTRUCTION.
8. SPECIAL CONTROL MEASURES SHALL BE ESTABLISHED ON ALL SLOPES AND EXPOSED AREAS LEFT UNPROTECTED BY VEGETATION FOR A PERIOD OF SIX MONTHS AFTER THE COMPLETION OF CONSTRUCTION.
9. SPECIAL CONTROL MEASURES SHALL BE ESTABLISHED ON ALL SLOPES AND EXPOSED AREAS LEFT UNPROTECTED BY VEGETATION FOR A PERIOD OF SIX MONTHS AFTER THE COMPLETION OF CONSTRUCTION.
10. SPECIAL CONTROL MEASURES SHALL BE ESTABLISHED ON ALL SLOPES AND EXPOSED AREAS LEFT UNPROTECTED BY VEGETATION FOR A PERIOD OF SIX MONTHS AFTER THE COMPLETION OF CONSTRUCTION.

CONSTRUCTION SEQUENCE

1. THE CONSTRUCTION SEQUENCE SHALL BE ESTABLISHED AND APPROVED BY THE DISTRICT ENGINEER BEFORE CONSTRUCTION BEGINS.
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SCHEDULE OF MAINTENANCE OF FROSON & SEDIMENTATION CONTROL MEASURES

1. THE DISTRICT ENGINEER SHALL BE NOTIFIED OF ANY DAMAGE TO OR OBSTRUCTION OF ANY FROSON OR SEDIMENTATION CONTROL MEASURE WITHIN 24 HOURS OF THE DATE OF DISCOVERY.

4.04 CONSTRUCTION SEQUENCE

1. THE DISTRICT ENGINEER SHALL BE NOTIFIED OF ANY DAMAGE TO OR OBSTRUCTION OF ANY FROSON OR SEDIMENTATION CONTROL MEASURE WITHIN 24 HOURS OF THE DATE OF DISCOVERY.
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9. THE DISTRICT ENGINEER SHALL BE NOTIFIED OF ANY DAMAGE TO OR OBSTRUCTION OF ANY FROSON OR SEDIMENTATION CONTROL MEASURE WITHIN 24 HOURS OF THE DATE OF DISCOVERY.
10. THE DISTRICT ENGINEER SHALL BE NOTIFIED OF ANY DAMAGE TO OR OBSTRUCTION OF ANY FROSON OR SEDIMENTATION CONTROL MEASURE WITHIN 24 HOURS OF THE DATE OF DISCOVERY.

5.00 WEEDS

1. WEEDS SHALL BE CONTROLLED THROUGHOUT THE CONSTRUCTION AND POST CONSTRUCTION PERIODS.
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5.01 WEEDS

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5.03 WEEDS

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5.04 WEEDS

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10. WEEDS SHALL BE CONTROLLED THROUGHOUT THE CONSTRUCTION AND POST CONSTRUCTION PERIODS.

**TABLE IV-1
TEMPORARY SEEDING
FOR CRITICAL AREAS**

SEED	RATES IN LB PER ACRE	ESTIMATED DATE
ANNUAL SEEDINGS	40	MAR 1 TO JUNE 15 APR 15 TO SEPT 15
SPRING DATE	50	MAR 1 TO JUNE 15
FALL DATE	100	AUG 15 TO OCT 15
ANNUAL SEEDINGS	20	MAR 1 TO JUNE 15
SPRING DATE	44	MAR 1 TO JUNE 15

**TABLE IV-2
PERMANENT SEEDING
FOR ALL DISTURBED AREAS**

SEED	RATES IN LB PER ACRE
WIRE GRASS	15
RED TOP	5
GROUND GRASS	15

SEEDING SHALL BE COMPLETED DURING THE MONTH OF MARCH TO MARCH 15. THE SEEDING SHALL BE COMPLETED DURING THE MONTH OF MARCH TO MARCH 15. THE SEEDING SHALL BE COMPLETED DURING THE MONTH OF MARCH TO MARCH 15.

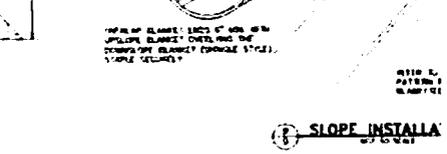
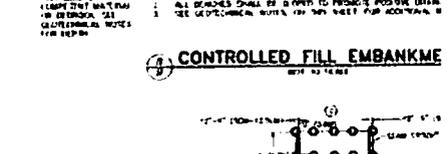
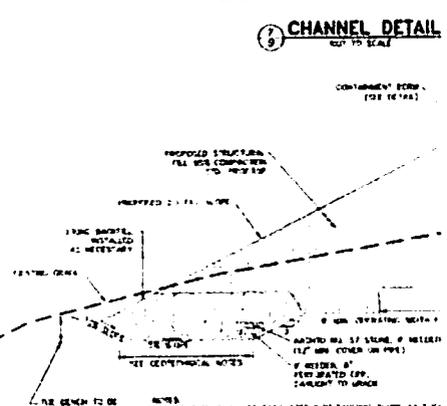
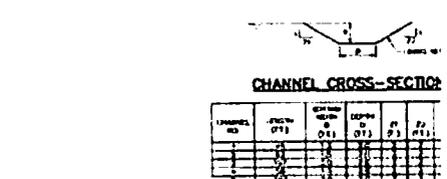
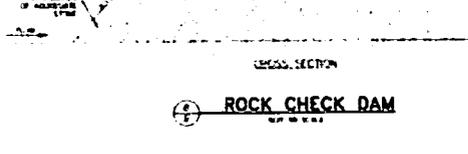
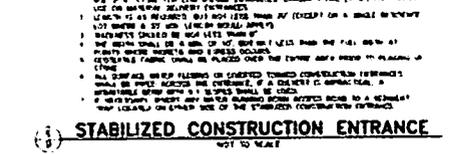
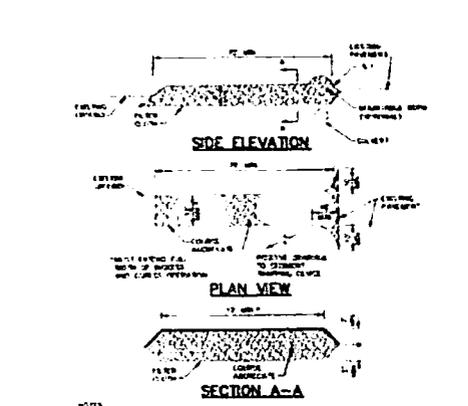
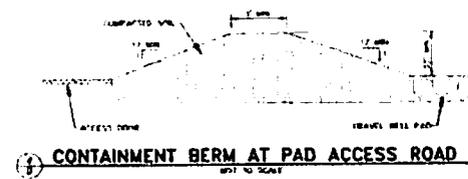
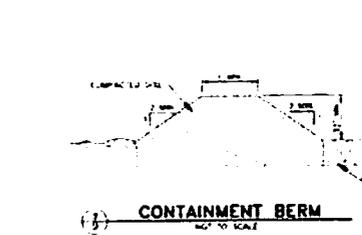
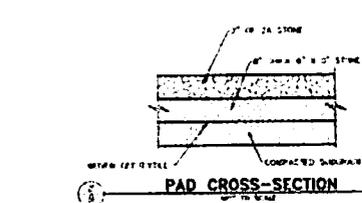
**TABLE IV-3
LIME AND FERTILIZER
APPLICATION TABLE**

SOIL TYPE	LIME IN TONS PER ACRE	FERTILIZER IN LB PER ACRE
ABOVE 5.0	0	100
5.0 TO 6.0	0	100
BELOW 5.0	0	100

THE SOIL CAN BE DETERMINED BY A PORTABLE TESTING KIT OR BY ANALYZING THE SOIL SAMPLES BY A SOIL TESTING LABORATORY.

**TABLE IV-4
MULCH MATERIALS RATES AND USES**

MATERIAL	APPROXIMATE RATES PER ACRE	CONCENTRATION	REMARKS
STRAW OR STUBS	2 TO 3 TONS 10 TO 15 TONS	CLAY TO 50 PER CENT AVAILABLE	SUBJECT TO SOIL TESTING OR ANALYSIS UNLESS TESTED
WOOD CHIP PAVING WOOD-CHIPS RECYCLED PAPER	10 TO 15 TONS	OTHER ALL DISTURBED AREAS	FOR WEED CONTROL



ACCESS DRIVE SECTION NOT TO SCALE

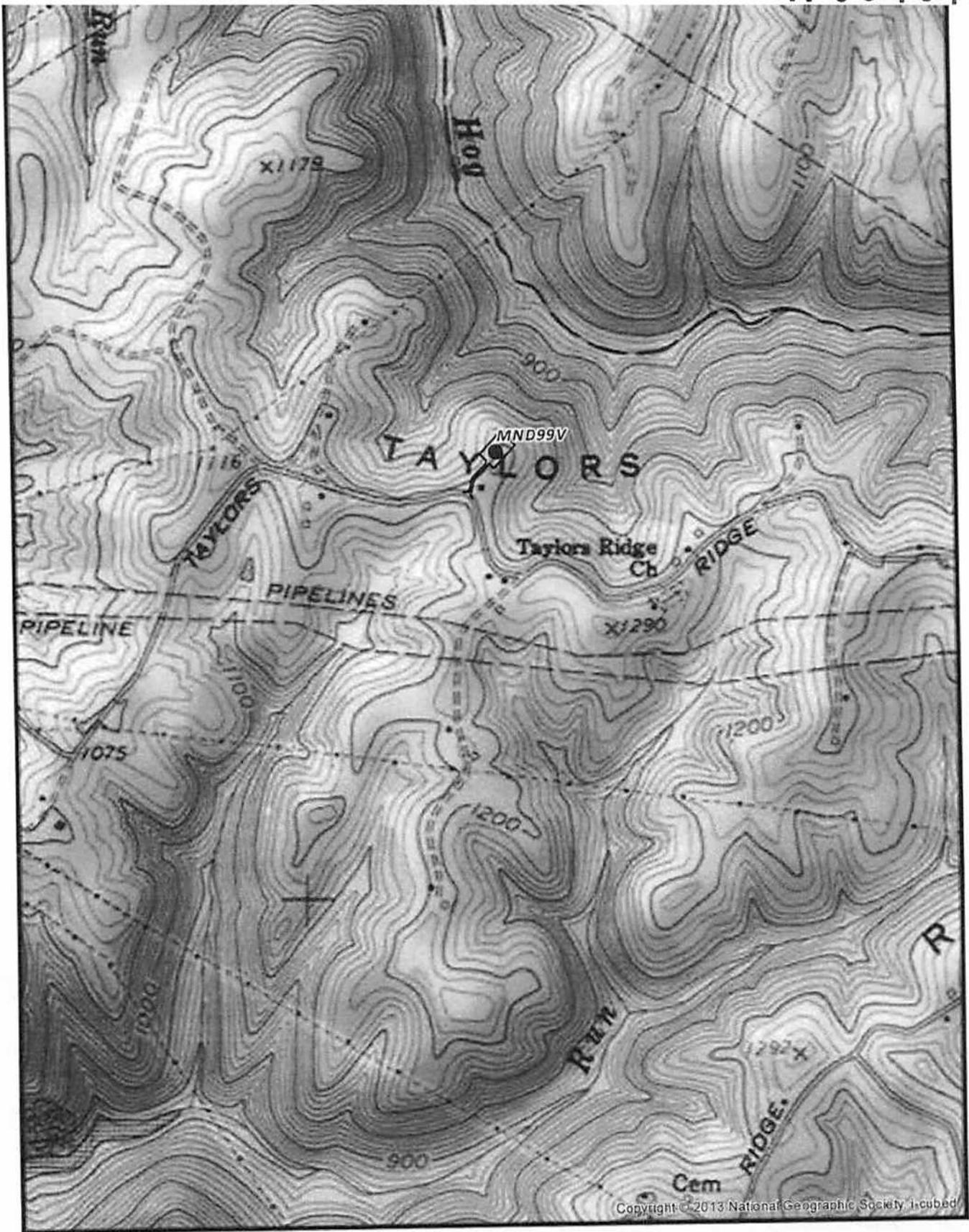
CONTAINMENT BERM NOT TO SCALE

ROCK CHECK DAM NOT TO SCALE

CONTROLLED FILL EMBANKMENT NOT TO SCALE

STAPLE PATTERN GUIDE NOT TO SCALE

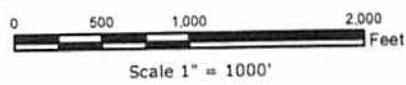
SLOPE INSTALL NOT TO SCALE



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MND 99 V Location Map
 Marshall County, Franklin District
 West Virginia

● Well Pad — Access Road



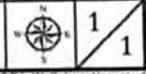
Projection: NAD_1927_StatePlane_West_Virginia_North_FIPS_4701
 Units: Feet US



Disclaimer: All data is licensed for use by Noble Energy Inc. use only.

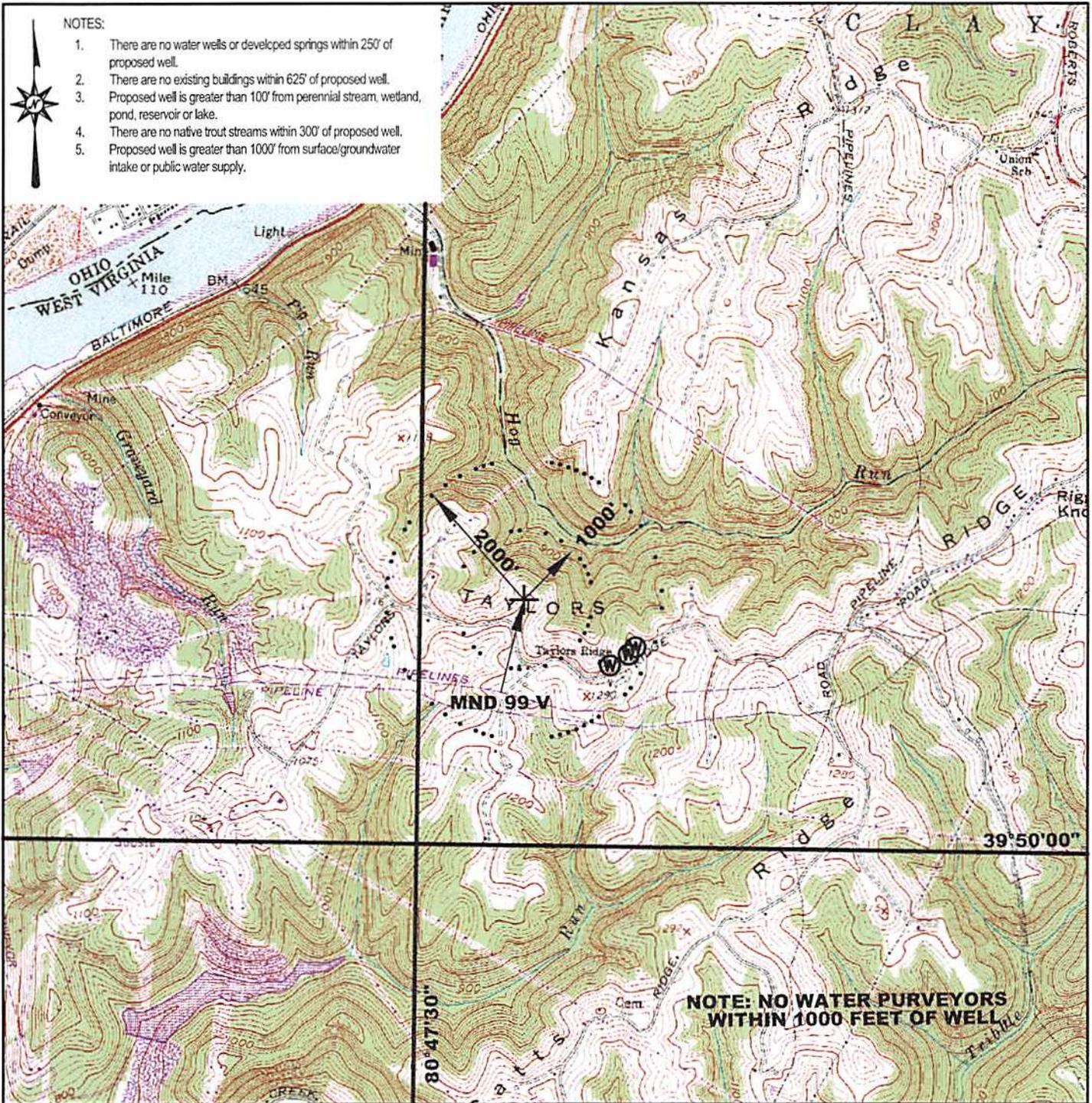
Date: 5/8/2014

Author: Tim Husson



NOTES:

1. There are no water wells or developed springs within 250' of proposed well.
2. There are no existing buildings within 625' of proposed well.
3. Proposed well is greater than 100' from perennial stream, wetland, pond, reservoir or lake.
4. There are no native trout streams within 300' of proposed well.
5. Proposed well is greater than 1000' from surface/groundwater intake or public water supply.



Blue Mountain Inc.
 11023 MASON DIXON HIGHWAY
 BURTON, WV 26562
 PHONE: (304) 662-6486

PREPARED FOR:

NOBLE ENERGY, INC.
 333 TECHNOLOGY DRIVE
 SUITE 116
 CANNONSBURG, PA 15317

LEGEND

- ⊙ - WATER PURVEYOR
- + - EXISTING WELLS

MND 99 V
LOCATION MAP
MARSHALL COUNTY
FRANKLIN DISTRICT
WEST VIRGINIA

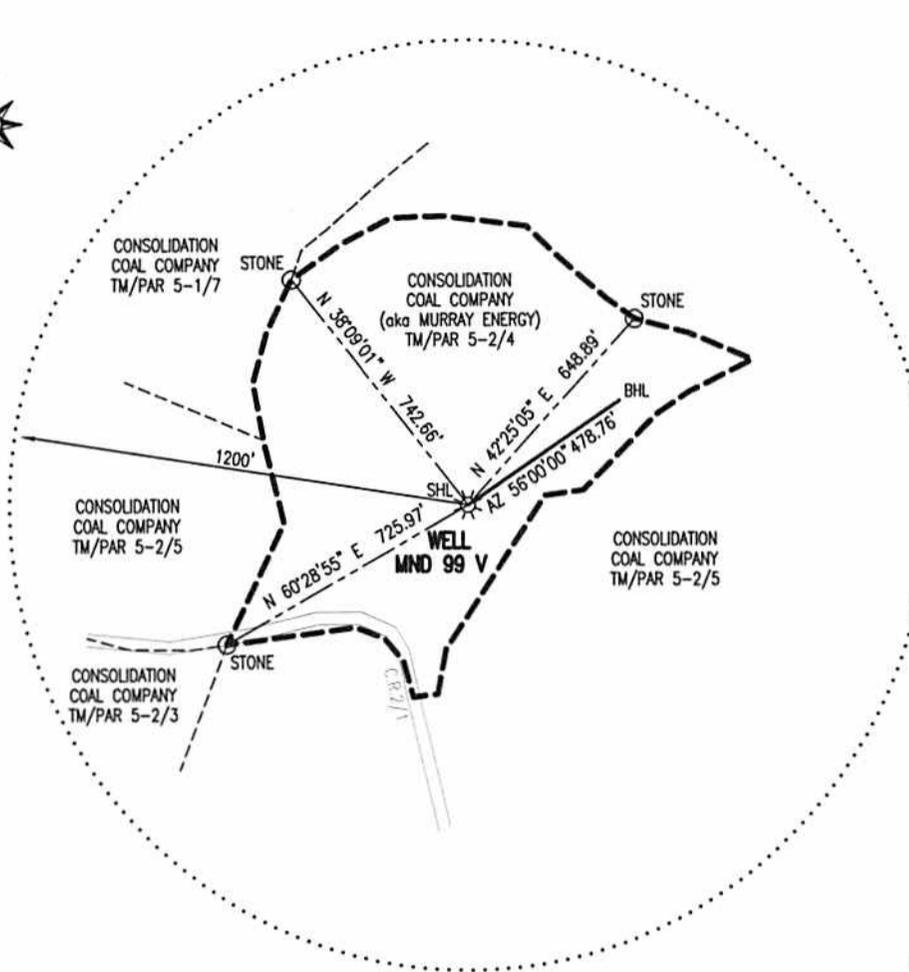
TOPO QUAD: POWHATTAN POINT, OHIO-WV

SCALE: 1" = 2000'

DATE: APRIL 14, 2014

Well is located on topo map 11,670 feet south of Latitude: 39° 52' 30"

Well is located on topo map 10,202 feet west of Longitude: 80° 45' 00"



LEGEND

- TOPO MAP POINT
- WELL
- ALL ARE POINTS UNLESS OTHERWISE NOTED.
- WATER SOURCE
- MINERAL TRACT BOUNDARY
- PARCEL LINES
- WELL REFERENCE
- WELL BORE PATH
- ROAD
- STREAM CENTER LINE

WELLS WITHIN 1200'

- EXISTING WELLS
- PLUGGED WELLS

NOTES:

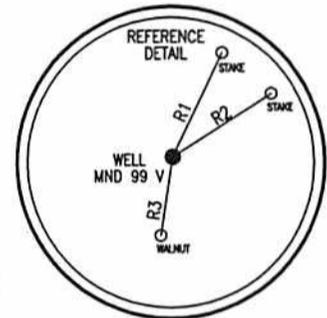
1. There are no water wells or developed springs within 200' of proposed well.
2. There are no existing buildings within 200' of proposed well.
3. It is not the purpose or intention of this plat to represent surveyed locations of the surface or mineral parcels depicted hereon. The location of the boundary lines, as shown, are based on record deed descriptions, field evidence found and/or tax map position, unless otherwise noted.



Blue Mountain Inc.
 11023 MASON DIXON HIGHWAY
 BURTON, WV 26562
 PHONE: (304) 662-6486

SURFACE HOLE LOCATION (SHL)
UTM 17-NAD83
 N:4410361.28
 E:518299.66
 NAD27, WV NORTH
 N:491736.73
 E:1638825.50
 LAT/LON DATUM-NAD83
 LAT:39.843066692
 LON:80.786106007

BOTTOM HOLE LOCATION (BHL)
UTM 17-NAD83
 N:4410444.86
 E:518419.22
 NAD27, WV NORTH
 N:492004.45
 E:1639222.41
 LAT/LON DATUM-NAD83
 LAT:39.843817
 LON:-80.784706



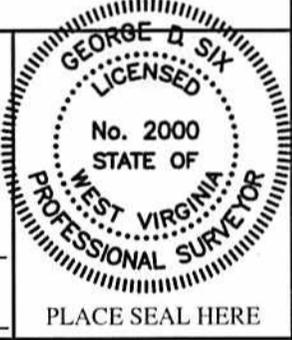
LINE	BEARING	DISTANCE
R1	N 25°44'15" E	198.6194'
R2	N 57°38'02" E	203.2679'
R3	S 08°48'50" W	137.7892'

FILE #: MND 99 V
 DRAWING #: MND 99 V
 SCALE: 1" = 500'
 MINIMUM DEGREE OF ACCURACY: 1/2500
 PROVEN SOURCE OF ELEVATION: U.S.G.S. MONUMENT THOMAS 1498.81'

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.: P.S. No. 2000



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

OFFICE OF OIL & GAS
 601 57TH STREET
 CHARLESTON, WV 25304

DATE: MAY 29, 2014

OPERATOR'S WELL #: MND 99 V

API WELL #: 47 51 01764
 STATE COUNTY PERMIT

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

WATERSHED: SHORT CREEK - OHIO RIVER ELEVATION: 1192.00'

COUNTY/DISTRICT: MARSHALL / FRANKLIN QUADRANGLE: POWHATAN POINT, OH-WV 7.5'

SURFACE OWNER: CONSOLIDATION COAL COMPANY ACREAGE: 20.85±

OIL & GAS ROYALTY OWNER: CONSOLIDATION COAL COMPANY ACREAGE: 20.85±

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: MARCELLUS ESTIMATED DEPTH: TVD: 6,389± TMD: 6,825±

WELL OPERATOR NOBLE ENERGY, INC. DESIGNATED AGENT STEVEN M. GREEN
 Address 333 TECHNOLOGY DRIVE, SUITE 116 Address 500 VIRGINIA STREET EAST, UNITED CENTER SUITE 590
 City CANONSBURG State PA Zip Code 15317 City CHARLESTON State WV Zip Code 25301