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**west virginia** department of environmental protection

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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 10, 2014

**WELL WORK PERMIT**

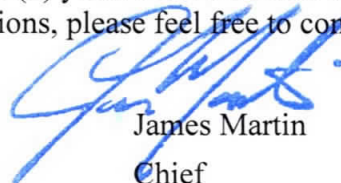
**Horizontal 6A Well**

This permit, API Well Number: 47-5101761, 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 6 EHS  
Farm Name: CONSOLIDATION COAL COMPA  
**API Well Number: 47-5101761**  
**Permit Type: Horizontal 6A Well**  
Date Issued: 06/10/2014

**Promoting a healthy environment.**

**INSPECTORS PERMIT SUMMARY FORM**

**GPS YES [ ] NO [ ]**

DATE STARTED/LOCATION: \_\_\_\_\_ OPERATOR: NOBLE ENERGY, INC.  
 DRILLING COMMENCED: \_\_\_\_\_ FARM: CONSOLIDATION COAL COMPANY  
 TO DATE: \_\_\_\_\_ DEPTHS: \_\_\_\_\_ Well No: MND 6 EHS  
 WATER DEPTHS: \_\_\_\_\_ COAL DEPTHS \_\_\_\_\_

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

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

1. DID OPERATOR GIVE PROPER NOTICE TO INSPECTOR BEFORE THE FOLLOWING:
  - A. CONSTRUCTION YES [ ] NO [ ] (2\_PTS) (4\_PTS) \_\_\_\_\_
  - B. DRILLING YES [ ] NO [ ] (2\_PTS)
2. WAS THE TIMBER CUT, STACKED, AND BRUSH USED FOR SEDIMENT BARRIERS BEFORE DIRT WORK STARTED? YES [ ] NO [ ] (2\_PTS) (4\_PTS) \_\_\_\_\_
3. ARE ALL LOCATION AND/OR ROAD BANKS BEING SLOPED? YES [ ] NO [ ] (4\_PTS) (4\_PTS) \_\_\_\_\_
4. CONSTRUCTIONS:  
WERE THE FOLLOWING SEDIMENT CONTROL STRUCTURES PROPERLY INSTALLED/MAINTAINED?
  - A. ROAD DITCHES (1)\_ (2)\_ (3)\_ (4)\_ (PTS) B. CROSS DRAINS (1)\_ (2)\_ (3)\_ (4)\_ (5)\_ (PTS)
  - C. CULVERTS (1)\_ (2)\_ (3)\_ (4)\_ (5)\_ (PTS) D. CREEK CROSSINGS (1)\_ (2)\_ (3)\_ (PTS)
  - E. DIVERSION DITCHES (1)\_ (2)\_ (3)\_ (PTS) F. BARRIERS (1)\_ (2)\_ (3)\_ (PTS)
  - G. TEMPORARY SEEDING YES [ ] NO [ ] (10\_PTS)

**POINTS AVAILABLE FOR QUESTION 4: (33\_PTS) \_\_\_\_\_**

5. HAS TOP SOIL (IF ANY) BEEN STOCKED PILED? YES [ ] NO [ ] (2\_PTS) (2\_PTS) \_\_\_\_\_
6. IS THE PIT PROPERLY INSTALLED AND MAINTAINED? YES [ ] NO [ ] (9\_PTS) (9\_PTS) \_\_\_\_\_
7. RECLAMATION:
  - A. ROADWAY (1)\_ (2)\_ (3)\_ (PTS) B. LOCATION (1)\_ (2)\_ (3)\_ (PTS)
  - C. PITS (1)\_ (2)\_ (3)\_ (PTS) D. PIPELINES (1)\_ (2)\_ (3)\_ (PTS)
  - E. TANK DIKES (1)\_ (2)\_ (3)\_ (PTS) F. API INSTALLED YES [ ] NO [ ] (3\_PTS)
  - G. ADEQUATE SEEDING MATERIALS (1)\_ (2)\_ (3)\_ (PTS)
  - H. WAS SEED BED ADEQUATE (1)\_ (2)\_ (3)\_ (PTS)

**POINTS AVAILABLE FOR QUESTION 7: (24\_PTS) \_\_\_\_\_**

8. WAS RECLAMATION COMPLETED WITHIN:  
6 MTHS OF TD 6\_PTS ONLY; 4 MTHS OF TD 12\_PTS ONLY; 2 MTHS OF TD 19\_PTS ONLY;

**POINTS AVAILABLE FOR QUESTION 8: (19\_PTS) \_\_\_\_\_**

**TOTAL MAXIMUM POSSIBLE SCORE OF 99.**

**TOTAL RECLAMATION SCORE: \_\_\_\_\_**

\_\_\_\_\_  
DATE RELEASED

\_\_\_\_\_  
INSPECTOR'S SIGNATURE



## PERMIT CONDITIONS

West Virginia Code § 22-6A-8(d) 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

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1. This proposed activity may require permit coverage from the United States Army Corps of Engineers (USACE). Through this permit, you are hereby being advised to consult with USACE regarding this proposed activity.
2. 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 § 22-6A-5a (12), 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.
3. When compacting fills, each lift before compaction shall not be more than 12 inches in height, and the moisture content of the fill material shall be within limits as determined by the Standard Proctor Density test of the actual soils used in specific engineered fill, ASTM D698, Standard Test Method for Laboratory Compaction Characteristics of Soil Using Standard Effort, to achieve 95 % compaction of the optimum density. Each lift shall be tested for compaction, with a minimum of two tests per lift per acre of fill. All test results shall be maintained on site and available for review.
4. Operator shall install signage per § 22-6A-8g (6) (B) at all source water locations included in their approved water management plan within 24 hours of water management plan activation.
5. Oil and gas water supply wells will be registered with the Office of Oil and Gas and all such wells will be constructed and plugged in accordance with the standards of the Bureau for Public Health set forth in its Legislative rule entitled *Water Well Regulations*, 64 C.S.R. 19. Operator is to contact the Bureau of Public Health regarding permit requirements. In lieu of plugging, the operator may transfer the well to the surface owner upon agreement of the parties. All drinking water wells within fifteen hundred feet of the water supply well shall be flow tested by the operator upon request of the drinking well owner prior to operating the water supply well.
6. Pursuant to the requirements pertaining to the sampling of domestic water supply wells/springs the operator shall, no later than thirty (30) days after receipt of analytical data provide a written copy to the Chief and any of the users who may have requested such analyses.
7. If any explosion or other accident causing loss of life or serious personal injury occurs in or about a well or well work on a well, the well operator or its contractor shall give notice, stating the particulars of the explosion or accident, to the oil and gas inspector and the Chief, within 24 hours of said accident.
8. During the casing and cementing process, in the event cement does not return to the surface, the oil and gas inspector shall be notified within 24 hours.
9. Operator shall provide the Office of Oil & Gas notification of the date that drilling commenced on this well. Such notice shall be provided by sending an email to [DEPOOGNotify@wv.gov](mailto:DEPOOGNotify@wv.gov) within 30 days of commencement of drilling.



WW-9  
(9/13)

API Number 47 - 051-01761  
Operator's Well No. MND 6 EHS

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) Fish Creek Undefined (HUC 10) Quadrangle Powhatan Point

Elevation 721' Post Construction County Marshall District Franklin

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: Closed Loop-No pit will be utilized

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 TBD-Next anticipated well )
- Off Site Disposal (Supply form WW-9 for disposal location)
- Other (Explain \_\_\_\_\_)

Will closed loop system be used? If so, describe: Yes

Drilling medium anticipated for this well (vertical and horizontal)? Air, freshwater, oil based, etc. Air thru coal string, then SOBIM

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

Additives to be used in drilling medium? Please see attached

Drill cuttings disposal method? Leave in pit, landfill, removed offsite, etc. Landfills

-If left in pit and plan to solidify what medium will be used? (cement, lime, sawdust) \_\_\_\_\_

-Landfill or offsite name/permit number? Please see attached

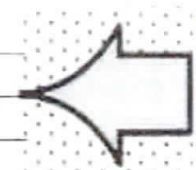
I certify that I understand and agree to the terms and conditions of the GENERAL WATER POLLUTION PERMIT issued on August 1, 2005, by the Office of Oil and Gas of the West Virginia Department of Environmental Protection. I understand that the provisions of the permit are enforceable by law. Violations 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 Adkins

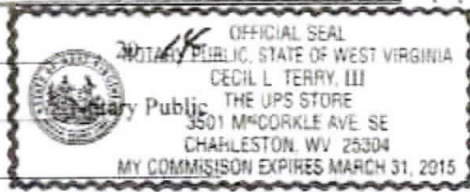
Company Official Title Regulatory Analyst



Subscribed and sworn before me this 25 day of April

[Signature]

My commission expires 9/21/2015



4705101761

Form WW-9

Operator's Well No. MND 6 EHS

Noble Energy, Inc.

Proposed Revegetation Treatment: Acres Disturbed 9.6 acres Prevegetation pH \_\_\_\_\_

Lime 2 to 3 Tons/acre or to correct to pH \_\_\_\_\_

Fertilizer type 10-20-20

Fertilizer amount 500 lbs/acre

Mulch Hay or straw at 2 Tons/acre

Seed Mixtures

**Temporary**

**Permanent**

Seed Type	lbs/acre
Tall Fescue	40
Ladino Clover	5
See site plans for full list	

Seed Type	lbs/acre
Tall Fescue	40
Ladino Clover	5
See site plans for full list	

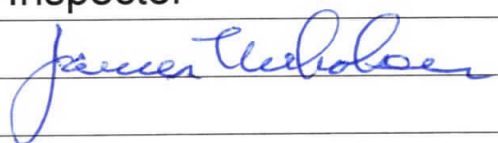
Attach:

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: Jim Nicholson WVOOG State Inspector

Comments: \_\_\_\_\_



Title: Oil & Gas Inspector

Date: 4/29/14

Field Reviewed? (  ) Yes (  ) No

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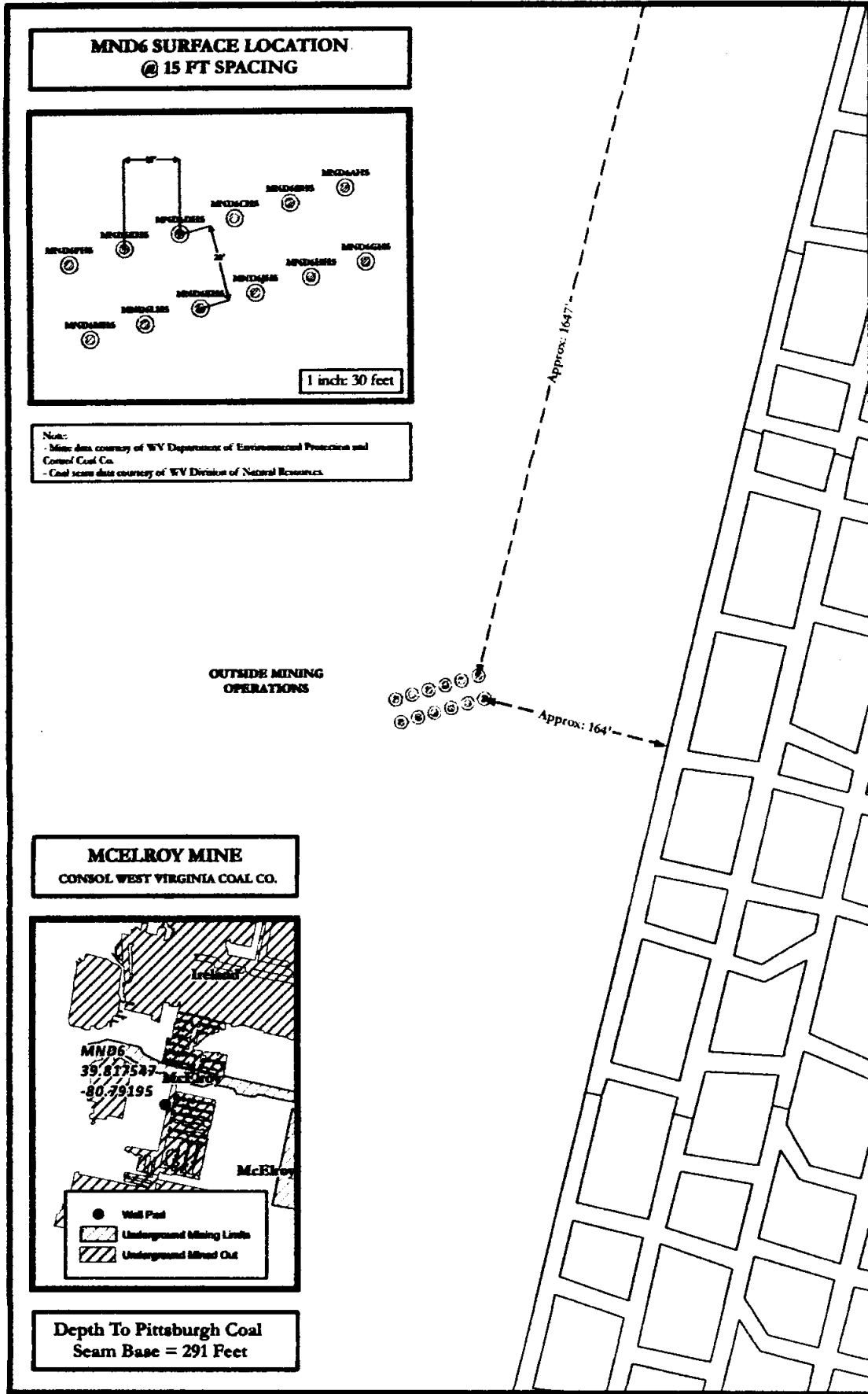
MAY 08 2014

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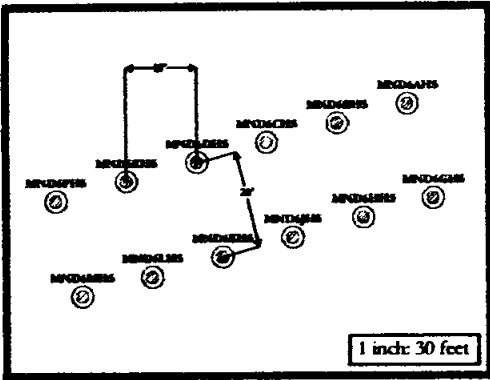


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<p><b>MND6 SITE SAFETY PLAN</b>  <b>- FLOODPLAIN ZONES -</b></p> <p>X Actual Road Extension          — Planned Access Road</p> <p>● Wellhead          ◻ Proposed Well          ◻ Proposed</p>	<p>0 750 1,500 3,000 Feet</p> <p>Scale 1" = 1,500'</p> <p>Projection: NAD83 / UTM Zone 18Q          Datum: North American 1983          Units: Feet U.S.</p>	<p><b>noble energy</b></p> <p>Disclaimer: All data is licensed for use by Noble Energy Inc. use only.</p>	<p>Date: 12/18/2013</p> <p>Author: Christopher Givner</p> <p>2/6</p>
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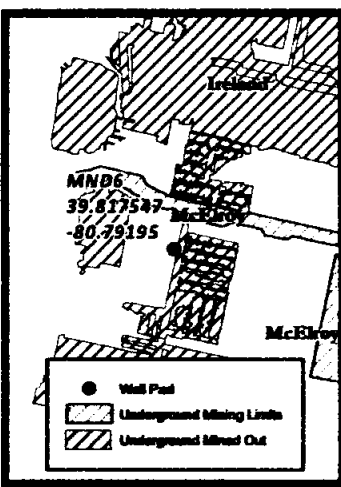


**MND6 SURFACE LOCATION  
@ 15 FT SPACING**



**Note:**  
 - Mine Area courtesy of WV Department of Environmental Protection and  
 Consol Coal Co.  
 - Coal seam data courtesy of WV Division of Natural Resources.

**MCELROY MINE  
CONSOL WEST VIRGINIA COAL CO.**



**Depth To Pittsburgh Coal  
Seam Base = 291 Feet**

<p><b>MND6 SITE SAFETY PLAN</b> - WELLSHEAD TOPSPOLE LOCATION -</p> <p>© 2011 Noble Energy Inc. All Rights Reserved</p>	<p>0 50 100 200 Feet</p> <p>Scale 1" = 100'</p> <p>Project: KAD_197_SitePlan_Elec_Topsole_North_WV_071 (10/11/13)</p>	<p><b>noble energy</b></p> <p>Disclaimer: All data is licensed for use by Noble Energy Inc. use only.</p>	<p>Date: 12/13/2011</p> <p>Author: Cassieperkins</p> <p>5/6</p>
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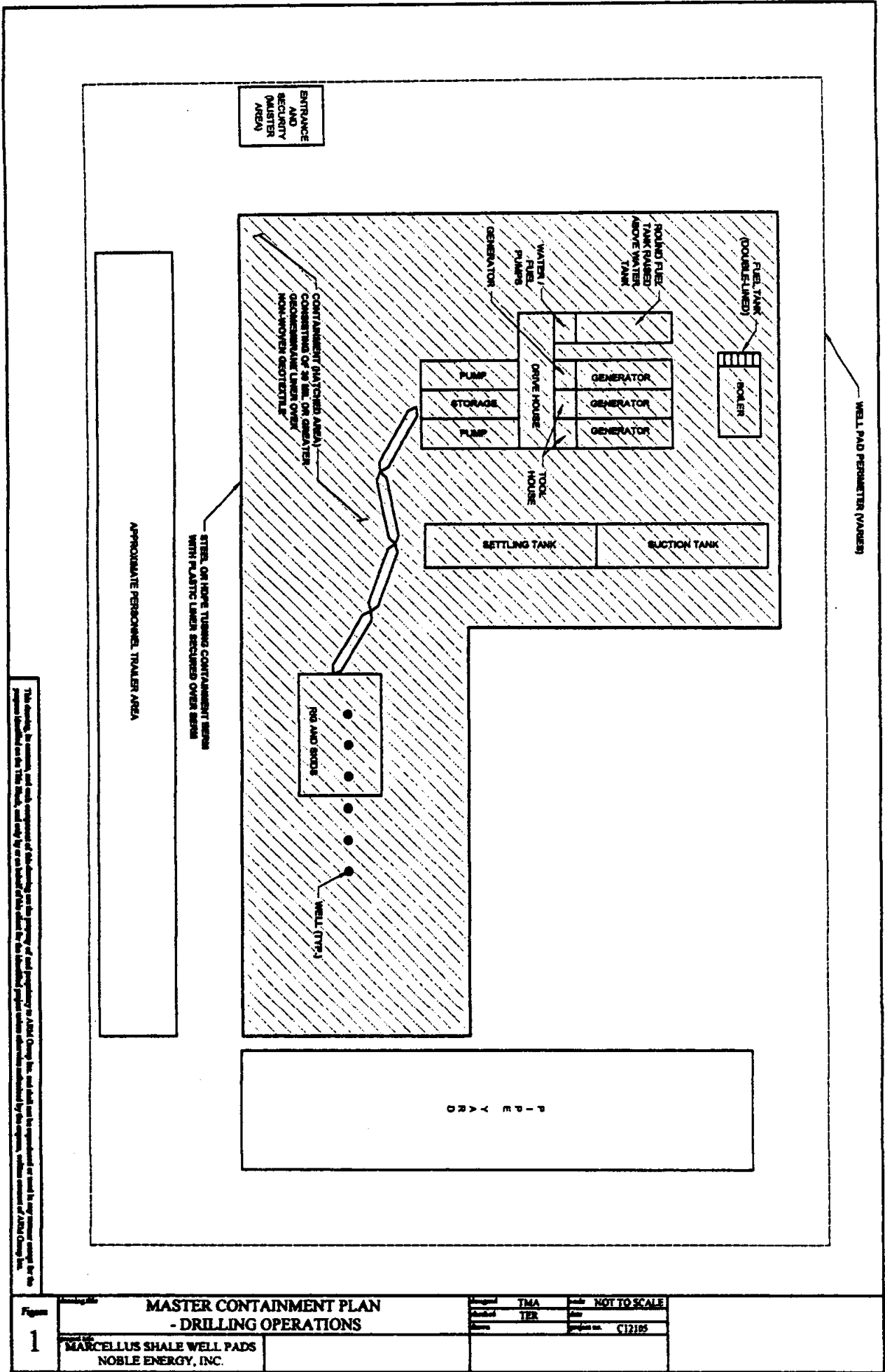
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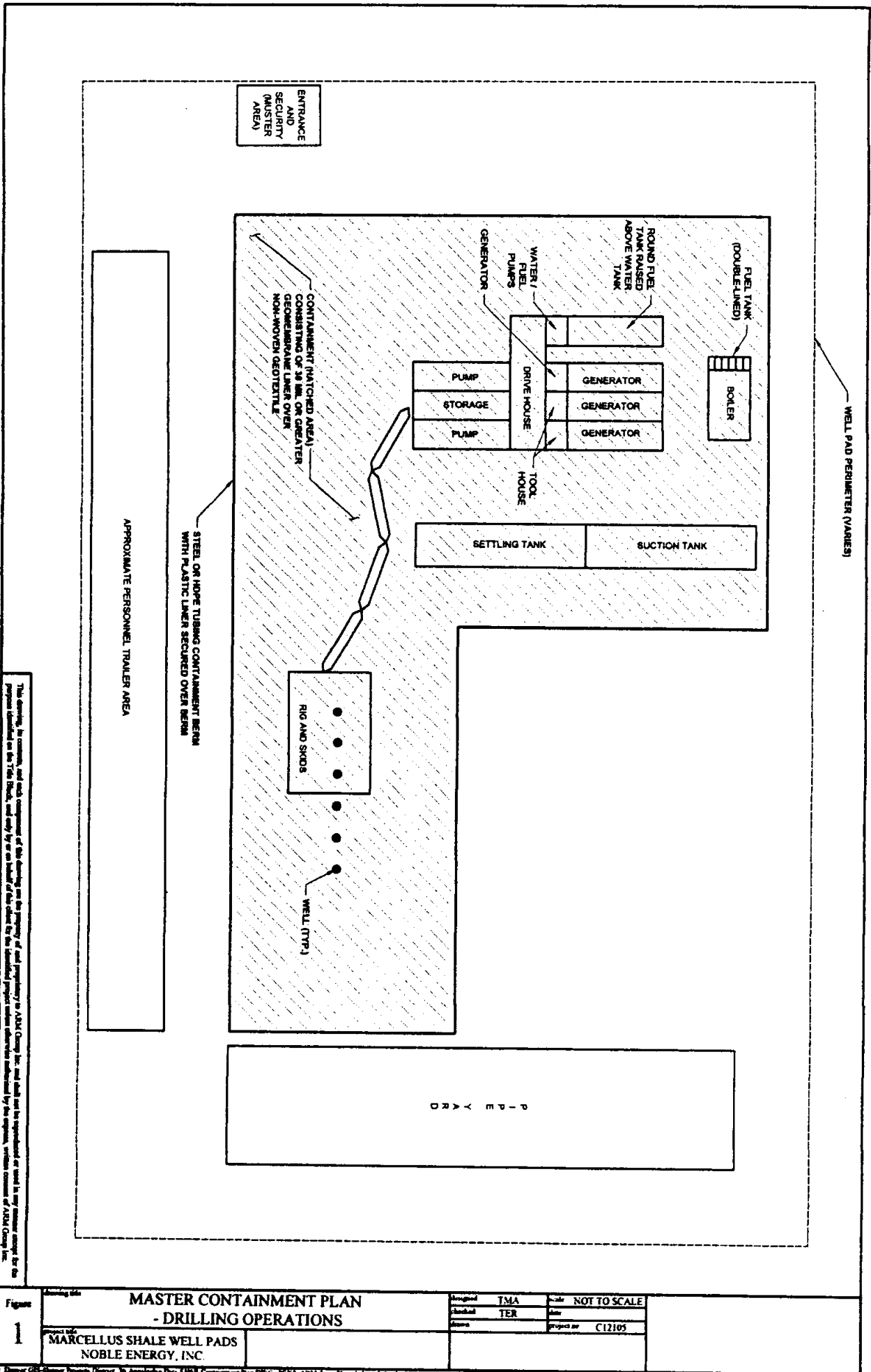
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<ul style="list-style-type: none"> <li>● Well Pad</li> <li>911 Addressing</li> <li>Evacuation Route</li> <li>1 Mile Evacuation Buffer</li> <li>Well Pad Boundary</li> <li>Location</li> <li>State</li> </ul>	<ul style="list-style-type: none"> <li>Cometary (WV)</li> <li>Church (WV)</li> <li>School</li> <li>Spring</li> </ul>	<p><b>Site Evacuation Route Directions - Coal Plant Parking Lot</b></p> <p>Exit the Pad Site heading Southwest via the Access Rd. Turn Right onto Fish Creek heading North/ West toward Woodland and Graysville/ WV-2 N (Roughly 1.7 Miles). Turn right onto WV-2 N. Make almost immediate left into coal plant parking lot (300 Ft.)</p>	<p><b>MND6 SITE SAFETY PLAN</b></p> <p><b>- SITE EVACUATION PLAN -</b></p>	
		<p>0 1,000 2,000 4,000 Feet</p> <p>Scale 1" = 2,000'</p>	<p>Author: Christopher Glaves</p> <p>Date: 12/11/2013</p> <p>Projection: NAD_1983_StatePlane_Virginia_Feet_PFD_1701</p> <p>Units: Feet US</p>	

Document Path: G:\Users\GCS-Danner\Projects\Project2\_2014\Projects\WV\GIS\WV\Projects\MapDocs\MapDocs\030\_P1\_WV\_MND6\_Site\_Evacuation.mxd  
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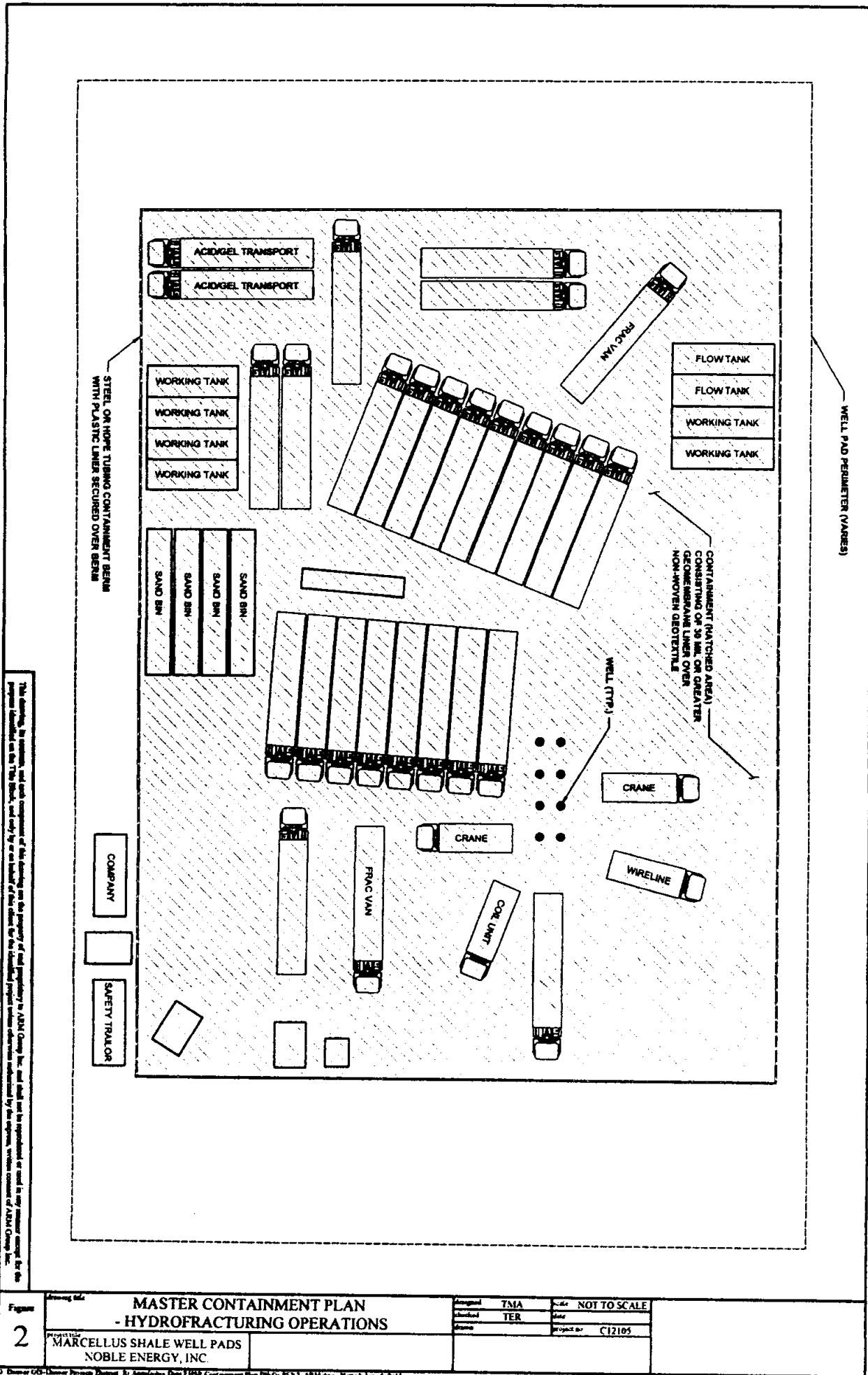


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Figure 1	<b>MASTER CONTAINMENT PLAN - DRILLING OPERATIONS</b>		Designed: TMA Checked: TER Date:	Scale: NOT TO SCALE Project No: C12105
	MARCELLUS SHALE WELL PADS NOBLE ENERGY, INC.			

© December 2013, Marcellus Shale Well Pads, 30 Appalachia Drive, ERIE, Pennsylvania 16501, Project DWG No. PES3\_A001.dwg, Rev. 5, 2013

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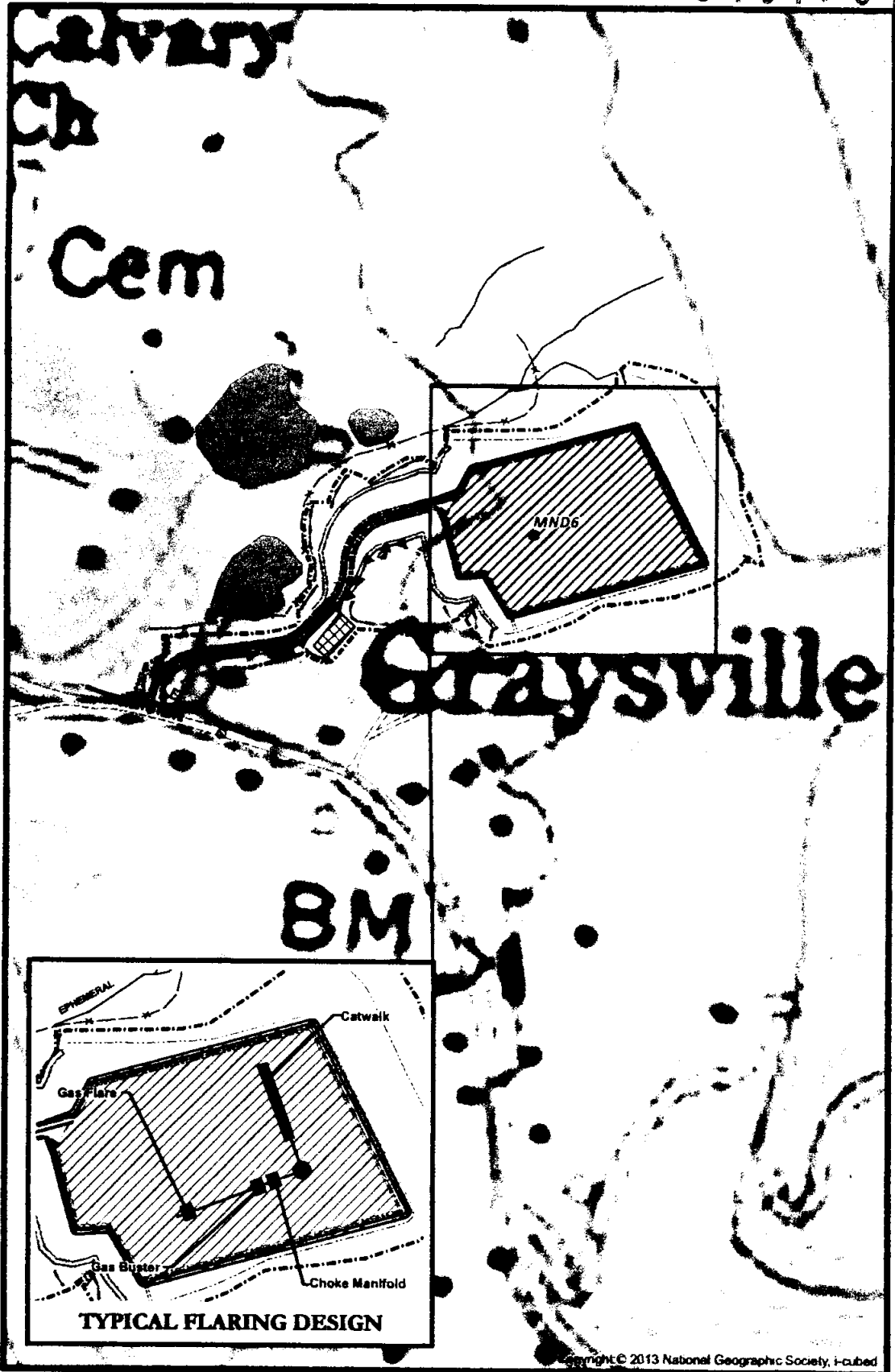
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Figure <b>2</b>	Drawing title <b>MASTER CONTAINMENT PLAN - HYDROFRACTURING OPERATIONS</b>	Approved <b>TMA</b>	Date <b>NOT TO SCALE</b>
		Checked <b>TER</b>	Date
Project title <b>MARCELLUS SHALE WELL PADS NOBLE ENERGY, INC.</b>		Drawn <b>TER</b>	Project no. <b>C12105</b>

© Owner Oil & Gas Leasehold Property Report & Application Form EPHS Containment Plan EPHS Form EPHS-001 Rev. 3/11

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Environmental Protection





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<b>Legend</b> ● Well Pad ○ Well Pad --- Access --- Contour Lines --- Existing Road --- Proposed Road --- Collection Blvd --- Other --- Pipe Direction --- 80 Feet --- 100 Feet --- Underside --- Existing Fence --- Proposed Fence [Hatched Box] Designated Area [Hatched Box] Wellbore [Hatched Box] Typical Structure [Hatched Box] Paved Structure [Hatched Box] Existing Pond [Hatched Box] Well Pad Boundary [Hatched Box] Limits of Disturbance	<b>Prevailing Wind Direction: Marshall County, WV - East</b> "The prevailing wind is from the West (Heading East.) Average windspeed is highest, 9.7 miles per hour, in January through March." ** Information quoted from the "Climate Narrative for Marshall County, West Virginia" prepared by the National Resources Conservation Service National Water and Climate Center, Portland, Oregon.	<b>MND6 SITE SAFETY PLAN</b> - SITE DESIGN/ TYPICAL FLARING - Author: Christopher Glover Date: 12/12/2013 Purpose: NAD, J.P. State Plant, West Virginia, North, 100, 100 Scale: Feet
	0 125 250 500 Feet Scale 1" = 250' 	

Document Path: G:\Driver\GIS-Driver\Projects\District\_30\Aspen\Info\WV024\GIS\Permitting\Hours\wv024\020\_04\_WV\_0006\_Land\_Use\_Site\_Design\_Plans.mxd  
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 Environmental Protection

WELL: MND6 EHS  
 QUAD: POWHATAN POINT, OHIO-W.VA.

4705101761



**GENERAL NOTE:**  
 THE PURPOSE OF THIS PLAT IS FOR THE LOCATION OF PROPOSED GAS WELLS AND DOES NOT REPRESENT A CLOSED BOUNDARY SURVEY. PROPERTY LINES AND OWNERS WERE OBTAINED FROM VARIOUS FIELD EVIDENCE, TAX RECORDS AND AERIAL MAPPING.

**LEGEND**

- PROPOSED GAS WELL
- PROPOSED BOTTOM HOLE
- PROPOSED BORE
- EXTERNAL LEASE LINE

SURFACE LOCATION (SHL)	LANDING POINT (LP)	BOTTOM HOLE LOCATION (BHL)
(NAD 83) N) 482,551.9' E) 1,605,677.3' LAT.) 39°49'03.7" LONG.) 80°47'30.2" DEC. LAT.) 39.817687° DEC. LONG.) 80.791727°	(NAD 83) N) 482,426.9' E) 1,604,427.4' LAT.) 39°49'02.3" LONG.) 80°47'46.2" DEC. LAT.) 39.817299° DEC. LONG.) 80.796170°	(NAD 83) N) 489,937.7' E) 1,630,605.6' LAT.) 39°48'55.0" LONG.) 80°48'55.0" DEC. LAT.) 39.837702° DEC. LONG.) 80.815282°
(NAD 27) N) 482,515.8' E) 1,637,114.6' LAT.) 39°49'03.4" LONG.) 80°47'30.9" DEC. LAT.) 39.817611° DEC. LONG.) 80.791915°	(NAD 27) N) 482,390.8' E) 1,635,864.7' LAT.) 39°49'02.0" LONG.) 80°47'46.9" DEC. LAT.) 39.817219° DEC. LONG.) 80.796357°	(NAD 27) N) 489,901.7' E) 1,630,605.6' LAT.) 39°48'55.0" LONG.) 80°48'55.0" DEC. LAT.) 39.837702° DEC. LONG.) 80.815469°
(UTM NAD 83) N) 4,407,543.37m E) 517,825.32m	(UTM NAD 83) N) 4,407,498.92m E) 517,445.17m	(UTM NAD 83) N) 4,409,760.34m E) 515,804.73m

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Applicant / Well Operator Name <b>NOBLE ENERGY, INC.</b>		Well (Farm) Name <b>MND6</b>		Well # <b>EHS</b>	Serial #
Address <b>333 TECHNOLOGY DRIVE, SUITE 116, CANONSBURG, PA 15317</b>		County - Code <b>MARSHALL - 051</b>	District <b>FRANKLIN</b>		
Surface Landowner / Lessor <b>CONSOLIDATION COAL COMPANY</b>		USGS 712 Quadrangle Map Name <b>POWHATAN POINT, OHIO-W.VA</b>		Scale: <b>1" = 2,000'</b>	

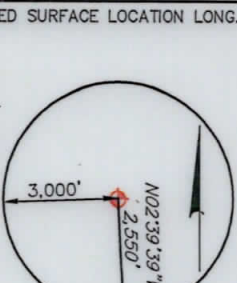
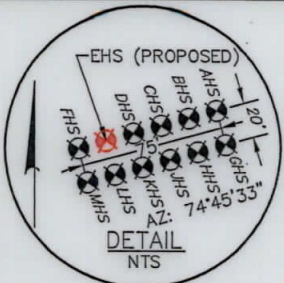


PROPOSED SURFACE LOCATION LONG. W 80°47'30.9" (NAD 27) Latitude: N 39°50'00"

Longitude: W 80°47'30"

5,755

PROPOSED SURFACE LOCATION LAT. N 39°49'03.4" (NAD 27)

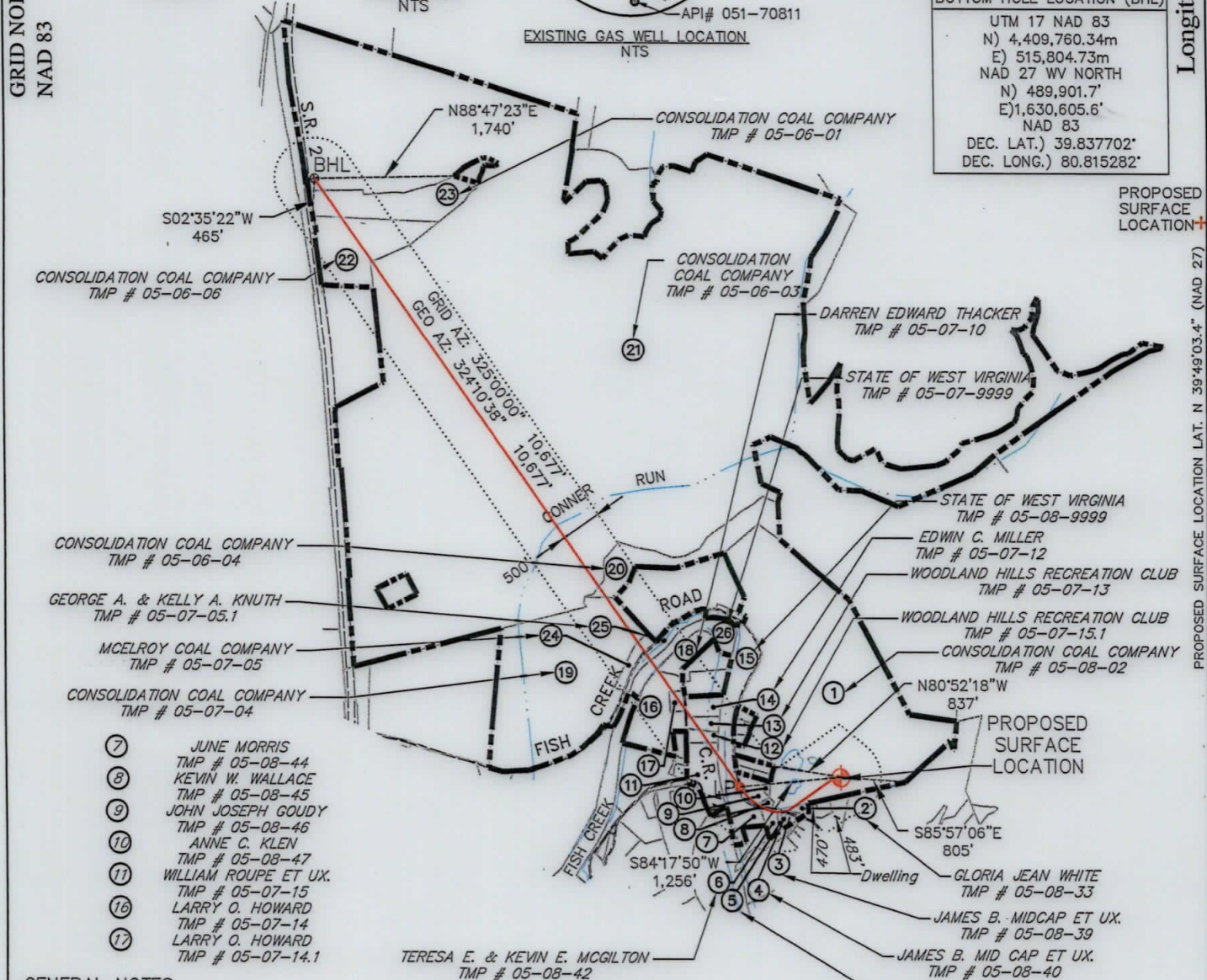


SURFACE LOCATION (SHL)	
UTM 17 NAD 83	
N) 4,407,543.37m	
E) 517,825.32m	
NAD 27 WV NORTH	
N) 482,515.8'	
E) 1,637,114.6'	
NAD 83	
DEC. LAT.) 39.817687°	
DEC. LONG.) 80.791727°	

LANDING POINT (LP)	
UTM 17 NAD 83	
N) 4,407,498.92m	
E) 517,445.17m	
NAD 27 WV NORTH	
N) 482,390.8'	
E) 1,635,864.7'	
NAD 83	
DEC. LAT.) 39.817295°	
DEC. LONG.) 80.796170°	

BOTTOM HOLE LOCATION (BHL)	
UTM 17 NAD 83	
N) 4,409,760.34m	
E) 515,804.73m	
NAD 27 WV NORTH	
N) 489,901.7'	
E) 1,630,605.6'	
NAD 83	
DEC. LAT.) 39.837702°	
DEC. LONG.) 80.815282°	

GRID NORTH  
NAD 83

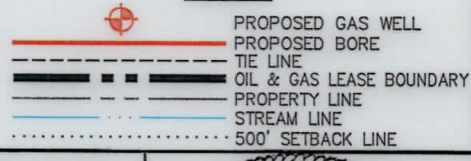


- 7 JUNE MORRIS  
TMP # 05-08-44
- 8 KEVIN W. WALLACE  
TMP # 05-08-45
- 9 JOHN JOSEPH GOUDY  
TMP # 05-08-46
- 10 ANNE C. KLEN  
TMP # 05-08-47
- 11 WILLIAM ROUPE ET UX.  
TMP # 05-07-15
- 16 LARRY O. HOWARD  
TMP # 05-07-14
- 17 LARRY O. HOWARD  
TMP # 05-07-14.1

GENERAL NOTES:

1. THE LOCATION OF BOUNDARY LINES SHOWN HEREON ARE BASED ON RECORD DEED, PLATS, AND TAX MAPS BEST FIT TO FOUND FIELD EVIDENCE AND AERIAL PHOTOS, UNLESS OTHERWISE NOTED.
2. THIS PLAT DOES NOT REPRESENT AN ACTUAL BOUNDARY SURVEY OF THE INDIVIDUAL PARCELS.
3. THERE ARE NO EXISTING WATER WELLS OR DEVELOPED SPRINGS WITHIN 250' OF PROPOSED WELL.
4. PROPOSED WELL IS GREATER THAN 100' FROM PERENNIAL STREAM, WETLAND, POND, RESERVOIR OR LAKE.
5. THERE ARE NO NATIVE TROUT STREAMS WITHIN 300' OF PROPOSED WELL.
6. THERE ARE TWO DWELLINGS LOCATED WITHIN 650' OF PROPOSED WELLBORE.
7. THE SURROUNDING LANDS ARE BEING SERVED BY PUBLIC WATER BY THE GRAND VIEW DOOLIN WATER SYSTEM PROVIDED BY MARSHALL COUNTY PUBLIC HEALTH AND SANITATION DIVISION.

LEGEND



FILE #: 093842010

DRAWING #: 093842010\_SV-Plat

SCALE: PLAT & TICK: 1" = 2,000'

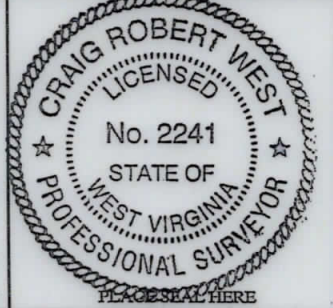
MINIMUM DEGREE OF ACCURACY: 1/200

PROVEN SOURCE OF ELEVATION: NGS (CORS)

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 RULES ISSUED AND PRESCRIBED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION.

SIGNED: Craig R. West

R.P.E.: \_\_\_\_\_ L.L.S.: 2241



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



DATE: FEBRUARY 24, 2014

OPERATOR'S WELL #: MND 6 EHS

API WELL #: 47 051 01761 H6A

STATE COUNTY PERMIT

WELL TYPE:  OIL  GAS  WASTE DISPOSAL  LIQUID INJECTION  PRODUCTION  STORAGE  DEEP  SHALLOW

WATERSHED: FISH CREEK ELEVATION: 722'

COUNTY/DISTRICT: MARSHALL / FRANKLIN QUADRANGLE: POWHATAN POINT, OHIO-W.VA

SURFACE OWNER: CONSOLIDATION COAL COMPANY ACREAGE: 136.587±

OIL & GAS ROYALTY OWNER: CNX GAS COMPANY LLC and NOBLE ENERGY, INC. ACREAGE: \_\_\_\_\_

CONVERT  DRILL DEEPER  REDRILL  FRACTURE OR STIMULATE  PERFORATE NEW FORMATION  PLUG & ABANDON

DRILL  PLUG OFF OLD FORMATION  CLEAN OUT & REPLUG  OTHER CHANGE (SPECIFY): \_\_\_\_\_

TARGET FORMATION: MARCELLUS ESTIMATED DEPTH: TVD: 5,940 ft. TMD: 15,804 ft.

WELL OPERATOR: NOBLE ENERGY, INC. DESIGNATED AGENT: STEVE 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

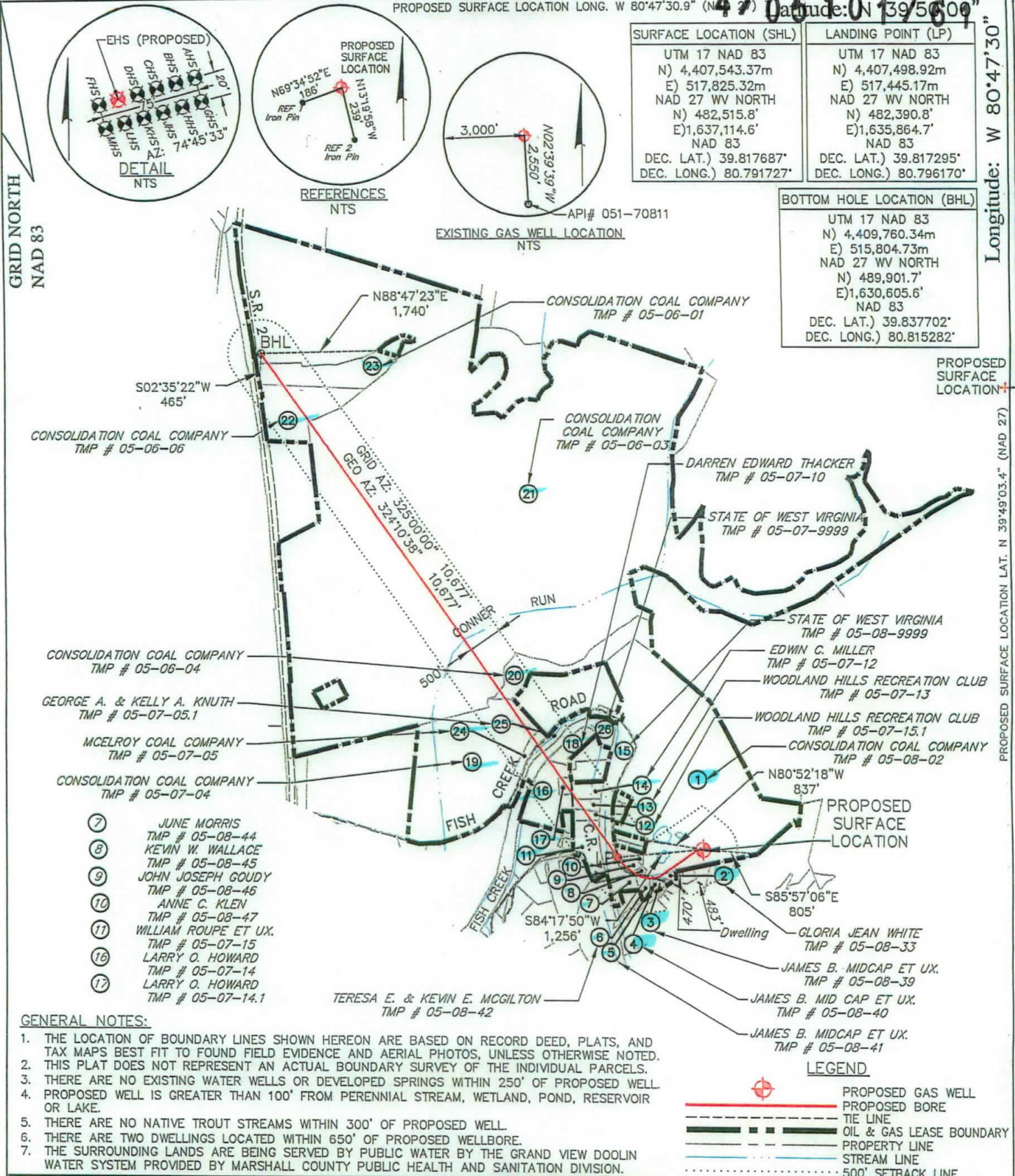


PROPOSED SURFACE LOCATION LONG. W 80°47'30.9" (NAD 83) 47 0 51:01 13975609

Longitude: W 80°47'30"

5,785

PROPOSED SURFACE LOCATION LAT. N 39°49'03.4" (NAD 27)



FILE #: 093842010

DRAWING #: 093842010\_SV-Plat

SCALE: PLAT & TICK: 1" = 2,000'

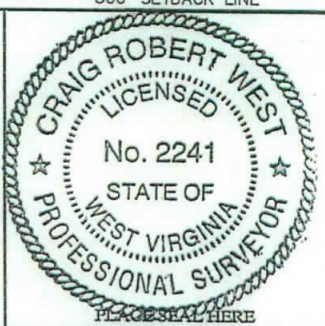
MINIMUM DEGREE OF ACCURACY: 1/200

PROVEN SOURCE OF ELEVATION: NGS (CORS)

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 RULES ISSUED AND PRESCRIBED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION.

SIGNED: *Craig Robert West*

R.P.E.: \_\_\_\_\_ L.L.S.: 2241



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

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

WELL TYPE:  OIL  GAS  WASTE DISPOSAL  LIQUID INJECTION  PRODUCTION  STORAGE  DEEP  SHALLOW

WATERSHED: FISH CREEK

COUNTY/DISTRICT: MARSHALL / FRANKLIN

SURFACE OWNER: CONSOLIDATION COAL COMPANY

OIL & GAS ROYALTY OWNER: CNX GAS COMPANY LLC and NOBLE ENERGY, INC.

CONVERT  DRILL DEEPER  REDRILL  FRACTURE OR STIMULATE  PERFORATE NEW FORMATION  PLUG & ABANDON

DRILL  PLUG OFF OLD FORMATION  CLEAN OUT & REPLUG  OTHER CHANGE (SPECIFY): \_\_\_\_\_

TARGET FORMATION: MARCELLUS

WELL OPERATOR: NOBLE ENERGY, INC.

ADDRESS: 333 TECHNOLOGY DRIVE, SUITE 116

CITY: CANONSBURG STATE: PA ZIP CODE: 15317

DATE: FEBRUARY 24, 2014

OPERATOR'S WELL #: MND 6 EHS

API WELL #: 47 051 01761 H6A

STATE COUNTY PERMIT

ELEVATION: 722'

QUADRANGLE: POWHATAN POINT, OHIO-W.VA

ACREAGE: 136.587±

ACREAGE: \_\_\_\_\_

ESTIMATED DEPTH: TVD: 5,940 ft. TMD: 15,804 ft.

DESIGNATED AGENT: STEVE M. GREEN

ADDRESS: 500 VIRGINIA STREET EAST, UNITED CENTER SUITE 590

CITY: CHARLESTON STATE: WV ZIP CODE: 25301





**INFORMATION SUPPLIED UNDER WEST VIRGINIA CODE**  
**Chapter 22, Article 6A, Section 5(a)(5)**  
**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:

Lease Name or Number	Grantor, Lessor, etc.	Grantee, Lessee, etc.	Royalty	Book/Page
1)	Consolidation Coal Company	CNX Gas Company, LLC	100%/Fee	646/493
	CNX Gas Company, LLC	Noble Energy, Inc.	100%/Fee	752/66
2) Q079184000	Gloria Jean White and Milton Christopher White	Noble Energy, Inc.	Not less than 1/8	808/392
3) Q076644000	James B. Midcap and Diana K. Midcap	Noble Energy, Inc.	Not less than 1/8	803/336
4) Q078626020	Trudy B. Sampson and Danny Sampson	Noble Energy, Inc.	Not less than 1/8	825/260
Q078626015	Deborah D. Mercer and Calvin P. Mercer	Noble Energy, Inc.	Not less than 1/8	821/22

**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 affected activity is initiated.

Well Operator: Noble Energy, Inc.

By: \_\_\_\_\_

Its: \_\_\_\_\_

*[Signature]*  
 Senior Lease Negotiator

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 APR 28 2014  
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 Page 1 of 5



Formation Tops List of anticipated freshwater, saltwater, oil and gas, hydrogen sulfide, thief zones and high pressure and volume zones and their expected depths. MAY 08 2014

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**DRILLING WELL PLAN**  
**MND-6E-HS (Marcellus HZ)**  
**Marcellus Shale Horizontal**  
**Marshall County, WV**

Ground Elevation		722'		MND-6E SHL (Lat/Long)			(482515.8N, 1637114.62E) (NAD27)			
Azm		325°		MND-6E LP (Lat/Long)			(482390.81N, 1635864.69E) (NAD27)			
WELLSBORE DIAGRAM		325°		MND-6E BHL (Lat/Long)			(489901.61N, 1630605.58E) (NAD27)			
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	
17 1/2	13-3/8" 54.5# J-55 BTC	Pittsburgh Coal	284	294	AIR	15.6 ppg Type 1 + 2% CaCl. 0.25# Lost Circ 30% Excess Yield = 1.18	Bow Spring on first 2 joints then every third joint to 100' from surface	Fill with KCl water once drilled to TD. Once casing is at setting depth, circulate a minimum of one hole volume prior to pumping cement.	Intermediate casing = 0.380" wall thickness Burst=2730 psi	
		Surface Casing	894	894						
12 3/8	9-5/8" 38# K-55 BTC	2nd Salt Sand	1377	1413	AIR	15.6ppg Class A +0.4% Ret. 0.15% Disp. 0.2% AntiFom. 0.125#/sk Lost Circ 20% Excess Yield=1.19 To Surface	Bow spring centralizers every third joint to 100' feet from surface.	Fill with KCl water once drilled to TD. Once casing is at setting depth, circulate a minimum of one hole volume prior to pumping cement.	Casing to be ran 250' below the 5th Sand. Intermediate casing = 0.352" wall thickness Burst=3520 psi	
		Big Lime	1468	1604						
		Big Injun	1604	1717						
		Price Formation	1717	2232						
		Int. Casing	2017	2017						
8.75" Vertical	5-1/2" 23# HCP-110 TXP BTC	Speechley	3019	3065	8.0ppg - 8.0ppg SOBM	14.8ppg Class A 25:75:0 System +2.6% Cement extender, 0.7% Fluid Loss additive, 0.45% high temp retarder, 0.2% friction reducer	Rigid Bow Spring every third joint from KOP to TOC	Once at TD, circulate at max allowable pump rate for at least 6x bottoms up. Once on bottom with casing, circulate a minimum of one hole volume prior to pumping cement.	Production casing = 0.361" wall thickness Burst=12640 psi Note: Actual centralizer schedules may be changed due to hole conditions	
		Java	4570	4865						
		Pipe Creek	4665	4752						
		Angola	4752	5334						
		Rheinstreet	5334	5655						
		Cashagua	5655	5727						
		Middlesex	5727	5750						
		West River	5750	5811						
		Burkett	5811	5836						
		Tully Limestone	5836	5860						
8.75" - 8.5" Lateral		Hamilton	5860	5865	12.0ppg-12.5ppg SOBM	10% Excess Yield=1.27 TOC >= 200' above 9.625" shoe	Rigid Bow Spring every joint to KOP			
		Marcellus	5865	5950						
		TD	16904 MD	5948 TVD						
		Onondaga	5950							

LP @ 5840' TVD / 6634' MD

8.75 / 8.5 Hole - Cemented Long String  
 5-1/2" 23# HCP-110 TXP BTC

+/-9170' ft Lateral

TD @ +/-5940' TVD  
 +/-15604' MD

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Please see attached for anticipated Lithography-

There is no known H<sup>2</sup>S gas present. Likewise, we are not aware of any potential thief zones, oil or significant saltwater.

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**Well Prognosis**

Well Name: MND-6 State: West Virginia Ground level: 722  
 API #: County: Marshall KB elevation: 740  
 Proposed Target: Marcellus Field: Moundsville Well Azimuth:  
 Estimated Thickness: 55' Anticipated Inc:  
 Estimated Pressure: 3927 psi

**Proposed Logging information:** SLS x Baker WFT  
 Contact number: Schlumberger call out service, 1-888-564-2583

Quad Combo x PEX/AIT/DSI w/ NGS  
 Imaging  
 Electron Capture  
 NMR

**Mudlogging Company:** Horizon Diversified  
 Contact number:

**Coal information:** Est. depth of Pittsburgh Coal is 284'

**FW shows:** 128,265,  
**SW shows:** "  
**Possible Red Rock:** 230,,

Formations	Top	Base	Comments	
Pittsburgh Coal	284	294		
1st Salt Sand	1311	1358		
2nd Salt Sand	1377	1413		
Big Lime	1488	1604		
Big Injun	1604	1717		
Price Formation	1717	2232		
<del>9 5/8" casing</del>	<del>2017</del>			
50 Foot	2232	2250		
Gordon Stray	2313	2323		
Gordon	2364	2381		
5th Sand	2462	2491		
Warren	3633	3647		
Speechley	3019	3065		
Java	4570	4665		
Pipe Creek	4665	4752		
Angola	4752	5334		
Rheinstreet	5334	5655		
Cashaqua	5655	5727		
Middlesex	5727	5750		
West River	5750	5811		
Burkett	5811	5836		
Tully Limestone	5836	5860		
Hamilton	5860	5895		
Marcellus	5895	5950		
Cherry Valley	5919	5921		
Onondaga	5950			
<b>Proposed Lateral Targets:</b>	Landing	5940	BHL	5940 in TVD
	Landing		BHL	in MD

Proposed Casing Strings	Bit Size	Casing OD	Depth
Conductor Casing:	26	20	40
Fresh Water Casing:	17.5	13.375	694
Intermdiate Casing:	12.25	9.625	2017
Production Casing:	8.75	5.5	0

400' below Pitts. Coal  
 300' below Big Injun

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WV Department of  
 Environmental Protection

Prog Created By: Matt Fry  
 Prog Creation Date: 10/30/2013

Q078626011	Blые Ulbrich Jenschke and Jim Jenschke	Noble Energy, Inc.	Not less than 1/8	819/305
No Lease number assigned at this time	Blasé Joseph Ulcak, Jr.	Noble Energy, Inc.	Not less than 1/8	Unrecorded Lease, see attached
No Lease number assigned at this time	Martha Frances Ulcak	Noble Energy, Inc.	Not less than 1/8	Unrecorded Lease, see attached
Q078626005	Janice R. Crook a/k/a Janice Wingrove Crook and Donald P. Crook	Noble Energy, Inc.	Not less than 1/8	808/305
Q078626003	June Morris	Noble Energy, Inc.	Not less than 1/8	808/301
Q078626004	Nancy L. Snyder a/k/a Nancy Wingrove Snyder	Noble Energy, Inc.	Not less than 1/8	808/309
Q078626002	Kenneth R. Morris and Dawn E. Morris	Noble Energy, Inc.	Not less than 1/8	808/303
Q078626014	Harry Leroy Parriott and Nancy S. Parriott	Noble Energy, Inc.	Not less than 1/8	820/508
Q078626018	Kimberly D. Lake	Noble Energy, Inc.	Not less than 1/8	825/272
No Lease number assigned at this time	James B. Midcap and Diana K. Midcap	Noble Energy, Inc.	Not less than 1/8	Unrecorded Lease, see attached
6) Q078626020	Trudy B. Sampson and Danny Sampson	Noble Energy, Inc.	Not less than 1/8	825/260
Q078626015	Deborah D. Mercer and Calvin P. Mercer	Noble Energy, Inc.	Not less than 1/8	821/22
Q078626016	Brian Edwin Lemasters and Beverly J. Lemasters	Noble Energy, Inc.	Not less than 1/8	821/24
Q078626022	Timothy Scott Lemasters and Amy C. Lemasters	Noble Energy, Inc.	Not less than 1/8	Unrecorded Lease, see attached
Q078626021	Mary L. Parriott	Noble Energy, Inc.	Not less than 1/8	Unrecorded Lease, see attached
No Lease number assigned at this time	Patricia Parriott	Noble Energy, Inc.	Not less than 1/8	Unrecorded Lease, see attached
No Lease number assigned at this time	Betty Jane Parriott	Noble Energy, Inc.	Not less than 1/8	Unrecorded Lease, see attached
Q078626019	Frances O. Hall, a/k/a Ornetta Parriott	Noble Energy, Inc.	Not less than 1/8	825/258
Q078626017	Southeastern Guide Dogs Inc., Titus Herman CEO Guide Dogs	Noble Energy, Inc.	Not less than 1/8	820/516
Q078626024	Shriners Hospitals For Children	Noble Energy, Inc.	Not less than 1/8	Unrecorded Lease, see attached
Q078626025	Courtney D. Hall	Noble Energy, Inc.	Not less than 1/8	Unrecorded Lease, see attached
Q078626001	Lucille E. Wingrove	Noble Energy, Inc.	Not less than 1/8	810/80
Q078626012	Justin Smith A/K/A Justine Smith	Noble Energy, Inc.	Not less than 1/8	819/307
Q078626013	Robert Lee Smith and Betsy K. Smith	Noble Energy, Inc.	Not less than 1/8	819/303
Q078626010	Marilyn Ulbrich Chalmers and Rod N. Chalmers	Noble Energy, Inc.	Not less than 1/8	820/506
Q078626009	H. Jay Ulbrich	Noble Energy, Inc.	Not less than 1/8	819/309
Q078626023	Bryce E. Ulbrich and Edna M. Ulbrich	Noble Energy, Inc.	Not less than 1/8	825/298
Q078626011	Blые Ulbrich Jenschke and Jim Jenschke	Noble Energy, Inc.	Not less than 1/8	819/305
No Lease number assigned at this time	Blasé Joseph Ulcak, Jr.	Noble Energy, Inc.	Not less than 1/8	Unrecorded Lease, see attached
No Lease number assigned at this time	Martha Frances Ulcak	Noble Energy, Inc.	Not less than 1/8	Unrecorded Lease, see attached
Q078626005	Janice R. Crook a/k/a Janice Wingrove Crook and Donald P. Crook	Noble Energy, Inc.	Not less than 1/8	808/305
Q078626003	June Morris	Noble Energy, Inc.	Not less than 1/8	808/301
Q078626004	Nancy L. Snyder a/k/a Nancy Wingrove Snyder	Noble Energy, Inc.	Not less than 1/8	808/309
Q078626002	Kenneth R. Morris and Dawn E. Morris	Noble Energy, Inc.	Not less than 1/8	808/303
Q078626014	Harry Leroy Parriott and Nancy S. Parriott	Noble Energy, Inc.	Not less than 1/8	820/508
Q078626018	Kimberly D. Lake	Noble Energy, Inc.	Not less than 1/8	825/272
7) Q078626020	Trudy B. Sampson and Danny Sampson	Noble Energy, Inc.	Not less than 1/8	825/260
Q078626015	Deborah D. Mercer and Calvin P. Mercer	Noble Energy, Inc.	Not less than 1/8	821/22
Q078626016	Brian Edwin Lemasters and Beverly J. Lemasters	Noble Energy, Inc.	Not less than 1/8	821/24
Q078626022	Timothy Scott Lemasters and Amy C. Lemasters	Noble Energy, Inc.	Not less than 1/8	Unrecorded Lease, see attached
Q078626021	Mary L. Parriott	Noble Energy, Inc.	Not less than 1/8	Unrecorded Lease, see attached
No Lease number assigned at this time	Patricia Parriott	Noble Energy, Inc.	Not less than 1/8	Unrecorded Lease, see attached

No Lease number assigned at this time	Betty Jane Parriott	Noble Energy, Inc.	Not less than 1/8	Unrecorded Lease, see attached
No Lease number assigned at this time	Frances O. Hall, a/k/a Ornetta Parriott	Noble Energy, Inc.	Not less than 1/8	Unrecorded Lease, see attached
No Lease number assigned at this time	Southeastern Guide Dogs Inc., Titus Herman CEO Guide Dogs	Noble Energy, Inc.	Not less than 1/8	Unrecorded Lease, see attached
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Q078626025	Courtney D. Hall	Noble Energy, Inc.	Not less than 1/8	Unrecorded Lease, see attached
No Lease number assigned at this time	Lucille E. Wingrove	Noble Energy, Inc.	Not less than 1/8	Unrecorded Lease, see attached
Q078626012	Justin Smith A/K/A Justine Smith	Noble Energy, Inc.	Not less than 1/8	819/307
Q078626013	Robert Lee Smith and Betsy K. Smith	Noble Energy, Inc.	Not less than 1/8	819/303
Q078626010	Marilyn Ulbrich Chalmers and Rod N. Chalmers	Noble Energy, Inc.	Not less than 1/8	820/506
Q078626009	H. Jay Ulbrich	Noble Energy, Inc.	Not less than 1/8	819/309
Q078626023	Bryce E. Ulbrich and Edna M. Ulbrich	Noble Energy, Inc.	Not less than 1/8	825/298
Q078626011	Blye Ulbrich Jenschke and Jim Jenschke	Noble Energy, Inc.	Not less than 1/8	819/305
No Lease number assigned at this time	Blasé Joseph Ulcak, Jr.	Noble Energy, Inc.	Not less than 1/8	Unrecorded Lease, see attached
No Lease number assigned at this time	Martha Frances Ulcak	Noble Energy, Inc.	Not less than 1/8	Unrecorded Lease, see attached
No Lease number assigned at this time	Janice R. Crook a/k/a Janice Wingrove Crook and Donald P. Crook	Noble Energy, Inc.	Not less than 1/8	Unrecorded Lease, see attached
Q076469000	June Morris	Noble Energy, Inc.	Not less than 1/8	802/275
No Lease number assigned at this time	Nancy L. Snyder a/k/a Nancy Wingrove Snyder	Noble Energy, Inc.	Not less than 1/8	Unrecorded Lease, see attached
No Lease number assigned at this time	Kenneth R. Morris and Dawn E. Morris	Noble Energy, Inc.	Not less than 1/8	Unrecorded Lease, see attached
Q078626014	Harry Leroy Parriott and Nancy S. Parriott	Noble Energy, Inc.	Not less than 1/8	820/508
Q078626018	Kimberly D. Lake	Noble Energy, Inc.	Not less than 1/8	825/272
8)	Kevin W. Wallace	TriEnergy Holdings, LLC	Not less than 1/8	715/193
	TriEnergy Holdings, LLC	NPAR, LLC	N/A	24/430
	NPAR, LLC	Chevron U.S.A. Inc.	N/A	756/332
	TriEnergy Holdings, LLC	Chevron U.S.A. Inc.	N/A	28/356
	Chevron U.S.A. Inc.	Noble Energy, Inc.	N/A	31/59
9) Q076643000	John Joseph Goudy	Noble Energy, Inc.	N/A	803/341
10)	Anne C. Klem	TriEnergy Holdings, LLC	Not less than 1/8	719/352
	TriEnergy Holdings, LLC	NPAR, LLC	N/A	25/463
	NPAR, LLC	Chevron U.S.A. Inc.	N/A	756/307
	TriEnergy Holdings, LLC	Chevron U.S.A. Inc.	N/A	28/356
	Chevron U.S.A. Inc.	Noble Energy, Inc.	N/A	31/59
11)	Consolidation Coal Company	CNX Gas Company LLC	100%/Fee	646/493
	CNX Gas Company LLC	Noble Energy, Inc.	100%/Fee	752/66
12)	Consolidation Coal Company	CNX Gas Company LLC	100%/Fee	646/493
	CNX Gas Company LLC	Noble Energy, Inc.	100%/Fee	752/66
13)	Consolidation Coal Company	CNX Gas Company LLC	100%/Fee	646/493
	CNX Gas Company LLC	Noble Energy, Inc.	100%/Fee	752/66
14) Q075462000	Edwin C. Miller and Kimberly Ann Miller	Noble Energy, Inc.	Not less than 1/8	797/646
15)	State of WV	Noble Energy, Inc.	N/A	Unrecorded Agreement, see attached
16)	Consolidation Coal Company	CNX Gas Company LLC	100%/Fee	646/493
	CNX Gas Company LLC	Noble Energy, Inc.	100%/Fee	752/66
17)	Consolidation Coal Company	CNX Gas Company LLC	100%/Fee	646/493

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	CNX Gas Company LLC	Noble Energy, Inc.	100%/Fee	752/66
18)	Consolidation Coal Company	CNX Gas Company LLC	100%/Fee	646/493
	CNX Gas Company LLC	Noble Energy, Inc.	100%/Fee	752/66
19)	Consolidation Coal Company	CNX Gas Company LLC	100%/Fee	646/493
	CNX Gas Company LLC	Noble Energy, Inc.	100%/Fee	752/66
20)	Consolidation Coal Company	CNX Gas Company LLC	100%/Fee	646/493
	CNX Gas Company LLC	Noble Energy, Inc.	100%/Fee	752/66
21) Q074011007	Susan Witten Neal Meyers AKA Susan Neal Iffeld Meyeres, individually, and as Susan N. Meyers, Trustee of the Susan N. Meyers Revocable Trust	Noble Energy, Inc.	Not less than 1/8	789/538
Q074011001	Mary Witten Neal Wiseman FKA Mary Witten Neal	Noble Energy, Inc.	Not less than 1/8	789/564
Q074011009	Mary Witten Hart Ehlers	Noble Energy, Inc.	Not less than 1/8	789/552
Q074011004	Margery J. Witten	Noble Energy, Inc.	Not less than 1/8	789/543
Q074011003	Joseph Moore Neal	Noble Energy, Inc.	Not less than 1/8	789/545
Q074011008	Jane Witten Voth	Noble Energy, Inc.	Not less than 1/8	789/559
Q074011006	Frances Gale Neal	Noble Energy, Inc.	Not less than 1/8	789/536
Q074011002	Dorothy Ann Neal by her POA Jerry L. Berthold	Noble Energy, Inc.	Not less than 1/8	789/547
Q074011011	Donald R. Hart Jr.	Noble Energy, Inc.	Not less than 1/8	789/554
Q074011010	Cathy Hart Price	Noble Energy, Inc.	Not less than 1/8	789/534
Q074011005	Ann Alexander	Noble Energy, Inc.	Not less than 1/8	789/541
#239882-001	Jane R. Peterseim AKA Jane Peterseim	CNX Gas Company, LLC	Not less than 1/8	781/37
	Consolidation Coal Company	CNX Gas Company LLC	100%/Fee	646/493
	CNX Gas Company LLC	Noble Energy, Inc.	100%/Fee	752/66
22)	Consolidation Coal Company	CNX Gas Company LLC	100%/Fee	646/493
	CNX Gas Company LLC	Noble Energy, Inc.	100%/Fee	752/66
23)	Consolidation Coal Company	CNX Gas Company LLC	100%/Fee	646/493
	CNX Gas Company LLC	Noble Energy, Inc.	100%/Fee	752/66
24)	Consolidation Coal Company	CNX Gas Company LLC	100%/Fee	646/493
	CNX Gas Company LLC	Noble Energy, Inc.	100%/Fee	752/66
25) Q076636001	George A. Knuth and Kelly A. Knuth	Noble Energy, Inc.	Not less than 1/8	803/608
Q076636002	Bruce Scott Schmitt and Jerri Marie Blaney	Noble Energy, Inc.	Not less than 1/8	806/335
Q076636003	Alan Gregory Schmitt and Linda Lee Schmitt	Noble Energy, Inc.	Not less than 1/8	808/315
Q076636004	Cynthia Jean Ward and Dale P. Ward	Noble Energy, Inc.	Not less than 1/8	816/261
Q076636005	Samuel O. Coen, Jr.	Noble Energy, Inc.	Not less than 1/8	813/255
Q076636006	Mark Alan Delbrugge and Patricia A. Delbrugge	Noble Energy, Inc.	Not less than 1/8	820/512
Q076636007	Walter L. Delbrugge, Jr. and Nora L. Delbrugge	Noble Energy, Inc.	Not less than 1/8	820/510
Q076636008	William D. Martin and Andrea R. Martin	Noble Energy, Inc.	Not less than 1/8	819/298
Q076636009	Kimberly Ann DeCrease and Vincent J. DeCrease	Noble Energy, Inc.	Not less than 1/8	825/349
Q076636010	Suzanne Q. Pavlic	Noble Energy, Inc.	Not less than 1/8	825/262
Q076636011	Jane Lou Williams and Laurence P. Williams	Noble Energy, Inc.	Not less than 1/8	825/289
Q076636012	Margaret Lynn Watson and James W. Watson	Noble Energy, Inc.	Not less than 1/8	825/264
No Lease number assigned at this time	Beatrice J. Schmitt	Noble Energy, Inc.	Not less than 1/8	Unrecorded Lease, see attached.
26)	State of WV	Noble Energy, Inc.	N/A	Unrecorded Agreement, see attached.

# EROSION & SEDIMENT CONTROL PLAN

## FOR

# MND 6 WELL PAD

## FRANKLIN DISTRICT, MARSHALL COUNTY, WV

**APPROVED**  
**WVDEP OOG**  
*SKY* 4/2/2014

**GENERAL NOTES**

1. THE TOPOGRAPHIC SURVEY UTILIZED FOR THIS SHEET MAPPING WAS PERFORMED BY RETTEW ASSOCIATES, INC. IN SEPTEMBER 2013.
2. PROPERTY BOUNDARIES, LANDOWNER INFORMATION AND ROAD NETWORKS SHOWN ON THIS PLAN ARE BASED ON AVAILABLE COUNTY OF MARSHALL DATA.
3. EXISTING AERIAL PHOTOGRAPHS, PHOTO AND ROADSIDE SURVEY DATA LOCATED FOR AVAILABLE DATA ARE SHOWN FOR REFERENCE ONLY.
4. THE HORIZONTAL DATUM IS WEST VIRGINIA STATE PLANE, NORTH AMERICAN DATUM 1983 (NAD 83) NORTH ZONE.
5. THE VERTICAL DATUM IS WEST VIRGINIA STATE PLANE, NORTH AMERICAN VERTICAL DATUM (NAVD 83).
6. THE UTILITIES 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 WEST VIRGINIA AT 1-800-245-4848.
7. A WEST VIRGINIA PRELIMINARY SURVEY WAS PERFORMED BY RETTEW ASSOCIATES IN MAY 2013.
8. THE CUT & FILL SUMMARY CALCULATIONS PRESENTED ON THIS PLAN ARE FOR PRELIMINARY AND INFORMATIONAL PURPOSES ONLY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE EXACT LOCATION PRIOR TO ANY EXCAVATION BY NOTIFYING WEST VIRGINIA AT 1-800-245-4848.
9. ALL EXISTING UTILITIES HAVE BEEN SHOWN IN ACCORDANCE WITH THE BEST AVAILABLE INFORMATION.
10. 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 MAINTAIN UNINTERRUPTED SERVICE AND ANY DAMAGE TO THE UTILITIES SHALL BE REPAIRED IMMEDIATELY AND AT THE CONTRACTOR'S EXPENSE.
11. THE CONTRACTOR SHALL USE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND MAINTAIN UNINTERRUPTED SERVICE AND ANY DAMAGE TO THE UTILITIES SHALL BE REPAIRED IMMEDIATELY AND AT THE CONTRACTOR'S EXPENSE.
12. CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAIRMENT OF DAMAGED OR DESTROYED LANDSCAPE AND LAWNS.
13. CONTRACTOR SHALL VERIFY ALL DIMENSIONS ON THE PROJECT SITE PRIOR TO THE START OF CONSTRUCTION.
14. CONTRACTOR TO RELOCATE UTILITIES AS REQUIRED.
15. CONTRACTOR MAY WEDGE ACCESS ROAD ONE TO STEEP SLOPES IF REQUIRED NECESSARY AND PER APPROVAL BY THE OWNER AND ENGINEER.
16. PROPOSED ROAD CONSTRUCTION ENTRANCE TO BE BUILT SUCH THAT REMOVE FROM PROPOSED ROADWAY TO MAINTAIN UNINTERRUPTED SERVICE AND ANY DAMAGE TO THE ROADWAY SHALL BE REPAIRED IMMEDIATELY AND AT THE CONTRACTOR'S EXPENSE.
17. SEED AND MULCH ALL DISTURBED AREAS PER DETAILS IN THIS PLAN.
18. ALL CLEARED TREE REMAINS SHALL BE PLACED ON UPHELD SIDE OF COMPOST FILTER SOCKS AND NOT STOCKPILED ON-SITE.
19. CONTRACTOR SHALL STOP WORK IMMEDIATELY AND CONTACT MODEL ENGINEER AND SUPERVISOR IMMEDIATELY IN THE EVENT OF ANY UNUSUAL CONDITIONS (E.G. GULCH, POT-HOLE, ETC.) BE ENCOUNTERED DURING CONSTRUCTION.
20. NO WORK SHALL BE DONE OUTSIDE THE LIMITS OF DISTURBANCE OR IN PROTECTED AREAS.

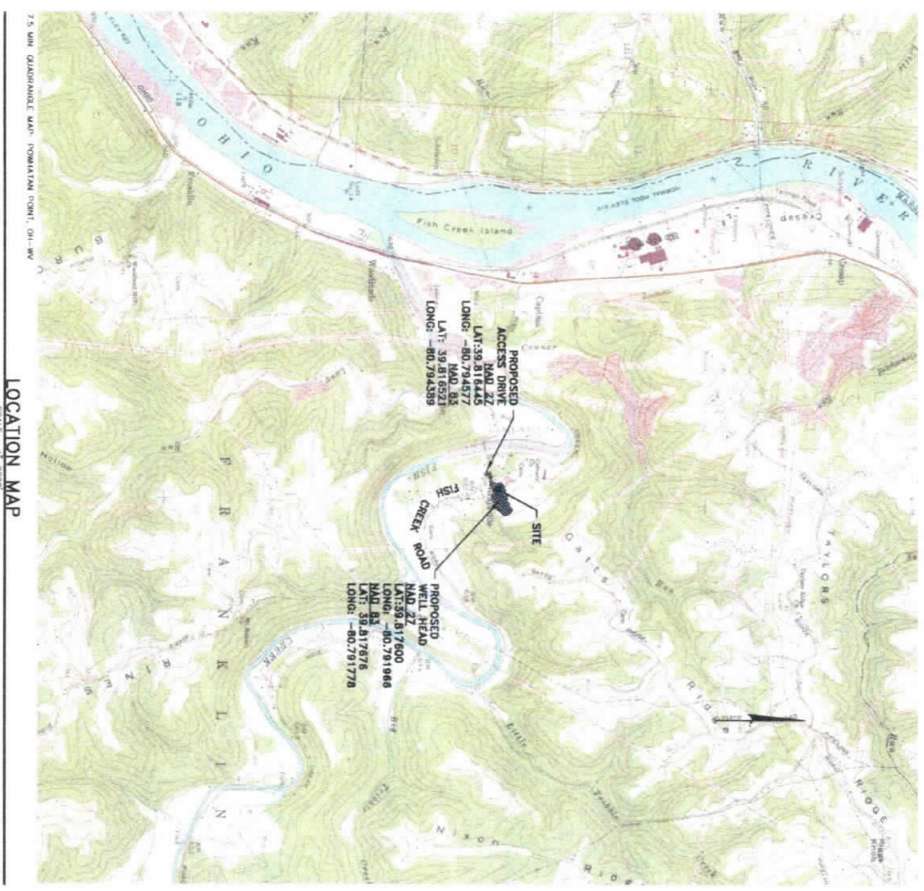
**DIRECTIONS TO THE SITE**

FROM BRIDGE ON TAKE OUT - SOUTH LAKE  
 TAKE RIGHT ON TAKE OUT - SOUTH LAKE  
 MAKE CHANGES TO HWY-27 TURN LEFT ON ROAD  
 CHECK SITE WILL BE ON LEFT IN 17 MILES.

**CUT & FILL**

MATERIAL	AMOUNT	SOILS	SOILS
CUT	+57,253 C.Y.	+4,824 M3	
FILL	-37,990 C.Y.	-4,824 M3	
NET COMPLETION	-19,737 C.Y.	-2,448 M3	
NET COMPLETION	-19,737 C.Y.	-2,448 M3	
NET COMPLETION	-19,737 C.Y.	-2,448 M3	
NET COMPLETION	-19,737 C.Y.	-2,448 M3	

- NOTES:
1. THE ASSIGNED PERSON RESPONSIBLE FOR THE CONSTRUCTION OF THIS PLAN ARE FOR INFORMATIONAL PURPOSES ONLY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY EXISTING CONDITIONS AND VERIFY EARTHWORK VOLUMES PRIOR TO COMMENCEMENT OF WORK.
  2. THE ASSIGNED PERSON RESPONSIBLE FOR THE CONSTRUCTION OF THIS PLAN ARE FOR INFORMATIONAL PURPOSES ONLY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY EXISTING CONDITIONS AND VERIFY EARTHWORK VOLUMES PRIOR TO COMMENCEMENT OF WORK.



Electronic Version of These Plans May Be Viewed at: [OIL.GASISAY.FILES.REVIEWS](http://OIL.GASISAY.FILES.REVIEWS)

**WEST VIRGINIA 811**  
**CALL BEFORE YOU DIG!**  
 Dial 811 or 800.245.4848  
 West Virginia Division of Energy

AT LEAST 48 HOURS, BUT NOT MORE THAN 10 WORKING DAYS (EXCLUDING HOLIDAYS AND HOLIDAY WEEKS) PRIOR TO DO STARTING ANY EARTH DISTURBANCE WORK, NOTIFY WEST VIRGINIA AT 811 OR 1-800-245-4848. (SEE WEST VIRGINIA CODE § 20-2-2 (b) FOR DETAILS.)

**SOILS CLASSIFICATION**

SEE DISTURBANCE SUMMARY FOR DETAILS.

**LIST OF DRAWINGS**

- 1 OF 10 COVER SHEET
- 2 OF 10 ENVIRONMENTAL RECORDS BUFFER PLAN
- 3 OF 10 EROSION & SEDIMENT CONTROL PLAN
- 4 OF 10 ACCESS DRIVE, PROTECTIVE
- 5 OF 10 ACCESS DRIVE, PROTECTIVE
- 6 OF 10 CROSS SECTIONS
- 7 OF 10 WELL PAD RECALCULATION PLAN
- 8 OF 10 WELL PAD RECALCULATION PLAN
- 9 OF 10 DETAILS
- 10 OF 10 DETAILS

**DISTURBANCE SUMMARY**

TOTAL LIMITS OF DISTURBANCE: 4.84 ACRES  
 DISTURBANCE REQUIRED: 4.84 ACRES  
 PAD DISTURBANCE: 4.84 ACRES

COVER SHEET FOR <b>MND 6 WELL PAD</b>	FRANKLIN DISTRICT MARSHALL COUNTY, WV	<p>RETTEW Associates, Inc.                  242 Towne, 4255 Steadman Rd. Ste 305, Pittsburgh, PA 15206                  Phone (412) 446-1726 • Fax (412) 446-1753                  Email: rettew@rettew.com                  Website: www.rettew.com</p>	CLIENT NOBLE ENERGY 333 TECHNOLOGY DRIVE, SUITE 116 CANONSBURG, PA 15317-3077 BEN DEREUME, PE (724) 820-3000 	MANAGER: MICHAEL R. OGDEN DESIGN BY: ASL DRAWN BY: ASL SURV. CHECK: FIELDBOOK NO. DATA COLLECTOR	FOR RETTEW ASSOCIATES BY: 3-25-14 	SCALE AS SHOWN NO. DATE REVISION
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# EROSION & SEDIMENT CONTROL PLAN

## FOR

# MND 6 WELL PAD

## FRANKLIN DISTRICT, MARSHALL COUNTY, WV

**GENERAL NOTES**

1. THE EROSION CONTROL PLAN FOR THIS WELL PAD AND SURROUNDING AREA IS ASSUMED TO BE IN ACCORDANCE WITH THE FOLLOWING:
2. FEDERAL REGULATIONS, LANDOWNER AGREEMENT AND LOCAL ORDINANCES CONCERNING EROSION CONTROL, SEDIMENTATION, TREE TRIMMING AND OTHERS THAT ARE LOCATED IN THE AREA OF THE WELL PAD.
3. THE EROSION CONTROL PLAN IS BASED ON THE INFORMATION PROVIDED BY THE CLIENT AND THE DESIGNER HAS NOT CONDUCTED A VISUAL INSPECTION OF THE WELL PAD.
4. THE EROSION CONTROL PLAN IS BASED ON THE INFORMATION PROVIDED BY THE CLIENT AND THE DESIGNER HAS NOT CONDUCTED A VISUAL INSPECTION OF THE WELL PAD.
5. THE EROSION CONTROL PLAN IS BASED ON THE INFORMATION PROVIDED BY THE CLIENT AND THE DESIGNER HAS NOT CONDUCTED A VISUAL INSPECTION OF THE WELL PAD.
6. THE EROSION CONTROL PLAN IS BASED ON THE INFORMATION PROVIDED BY THE CLIENT AND THE DESIGNER HAS NOT CONDUCTED A VISUAL INSPECTION OF THE WELL PAD.
7. THE EROSION CONTROL PLAN IS BASED ON THE INFORMATION PROVIDED BY THE CLIENT AND THE DESIGNER HAS NOT CONDUCTED A VISUAL INSPECTION OF THE WELL PAD.
8. THE EROSION CONTROL PLAN IS BASED ON THE INFORMATION PROVIDED BY THE CLIENT AND THE DESIGNER HAS NOT CONDUCTED A VISUAL INSPECTION OF THE WELL PAD.
9. ALL EROSION CONTROL MEASURES SHALL BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH THE BEST MANAGEMENT PRACTICES (BMP) FOR THE WELL PAD.
10. THE EROSION CONTROL PLAN IS BASED ON THE INFORMATION PROVIDED BY THE CLIENT AND THE DESIGNER HAS NOT CONDUCTED A VISUAL INSPECTION OF THE WELL PAD.
11. THE EROSION CONTROL PLAN IS BASED ON THE INFORMATION PROVIDED BY THE CLIENT AND THE DESIGNER HAS NOT CONDUCTED A VISUAL INSPECTION OF THE WELL PAD.
12. THE EROSION CONTROL PLAN IS BASED ON THE INFORMATION PROVIDED BY THE CLIENT AND THE DESIGNER HAS NOT CONDUCTED A VISUAL INSPECTION OF THE WELL PAD.
13. CONSTRUCTION SHALL VERIFY ALL DIMENSIONS FOR THE PROJECT SET POINTS TO THE STATE OF WEST VIRGINIA.
14. CONSTRUCTION TO BE COMPLETED BY THE DATE SPECIFIED IN THE CONTRACT.
15. THE EROSION CONTROL PLAN IS BASED ON THE INFORMATION PROVIDED BY THE CLIENT AND THE DESIGNER HAS NOT CONDUCTED A VISUAL INSPECTION OF THE WELL PAD.
16. THE EROSION CONTROL PLAN IS BASED ON THE INFORMATION PROVIDED BY THE CLIENT AND THE DESIGNER HAS NOT CONDUCTED A VISUAL INSPECTION OF THE WELL PAD.
17. THE EROSION CONTROL PLAN IS BASED ON THE INFORMATION PROVIDED BY THE CLIENT AND THE DESIGNER HAS NOT CONDUCTED A VISUAL INSPECTION OF THE WELL PAD.
18. THE EROSION CONTROL PLAN IS BASED ON THE INFORMATION PROVIDED BY THE CLIENT AND THE DESIGNER HAS NOT CONDUCTED A VISUAL INSPECTION OF THE WELL PAD.
19. THE EROSION CONTROL PLAN IS BASED ON THE INFORMATION PROVIDED BY THE CLIENT AND THE DESIGNER HAS NOT CONDUCTED A VISUAL INSPECTION OF THE WELL PAD.
20. THE EROSION CONTROL PLAN IS BASED ON THE INFORMATION PROVIDED BY THE CLIENT AND THE DESIGNER HAS NOT CONDUCTED A VISUAL INSPECTION OF THE WELL PAD.

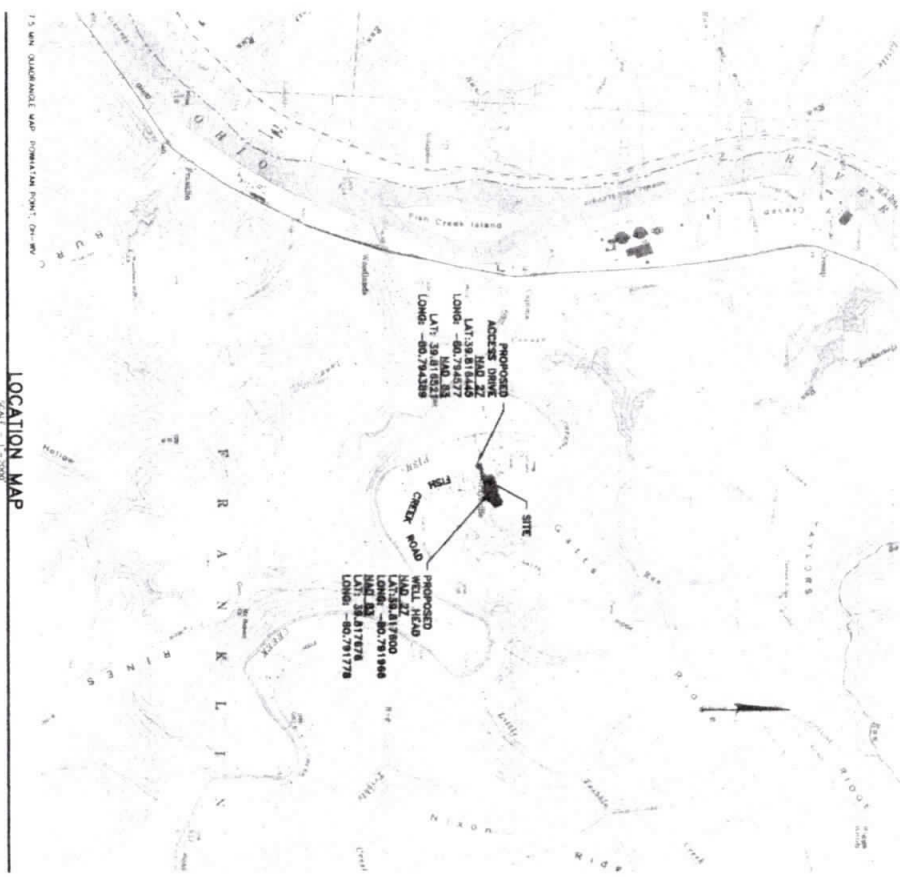
**DIRECTIONS TO THE SITE**

FROM MARSHALL COUNTY ROAD 107 SOUTH EAST CORNER TO MND 6 WELL PAD THE DRIVE WILL BE ON LEFT IN 1.7 MILES.

**CUT & FILL**

ITEM	QUANTITY	UNIT
CUT	1,500	CY
FILL	1,500	CY
TOTAL	3,000	CY

NOTES: ASSUMED 10% SLOPE, 5' OF CUT & FILL. ALL DIMENSIONS ARE TO FACE UNLESS OTHERWISE NOTED. THE CUT & FILL SHALL BE CALCULATED AND SET OUT BY THE CONTRACTOR. ALL DIMENSIONS ARE TO BE BROUGHT TO THE CONTRACTOR'S ATTENTION PRIOR TO COMMENCEMENT OF WORK.



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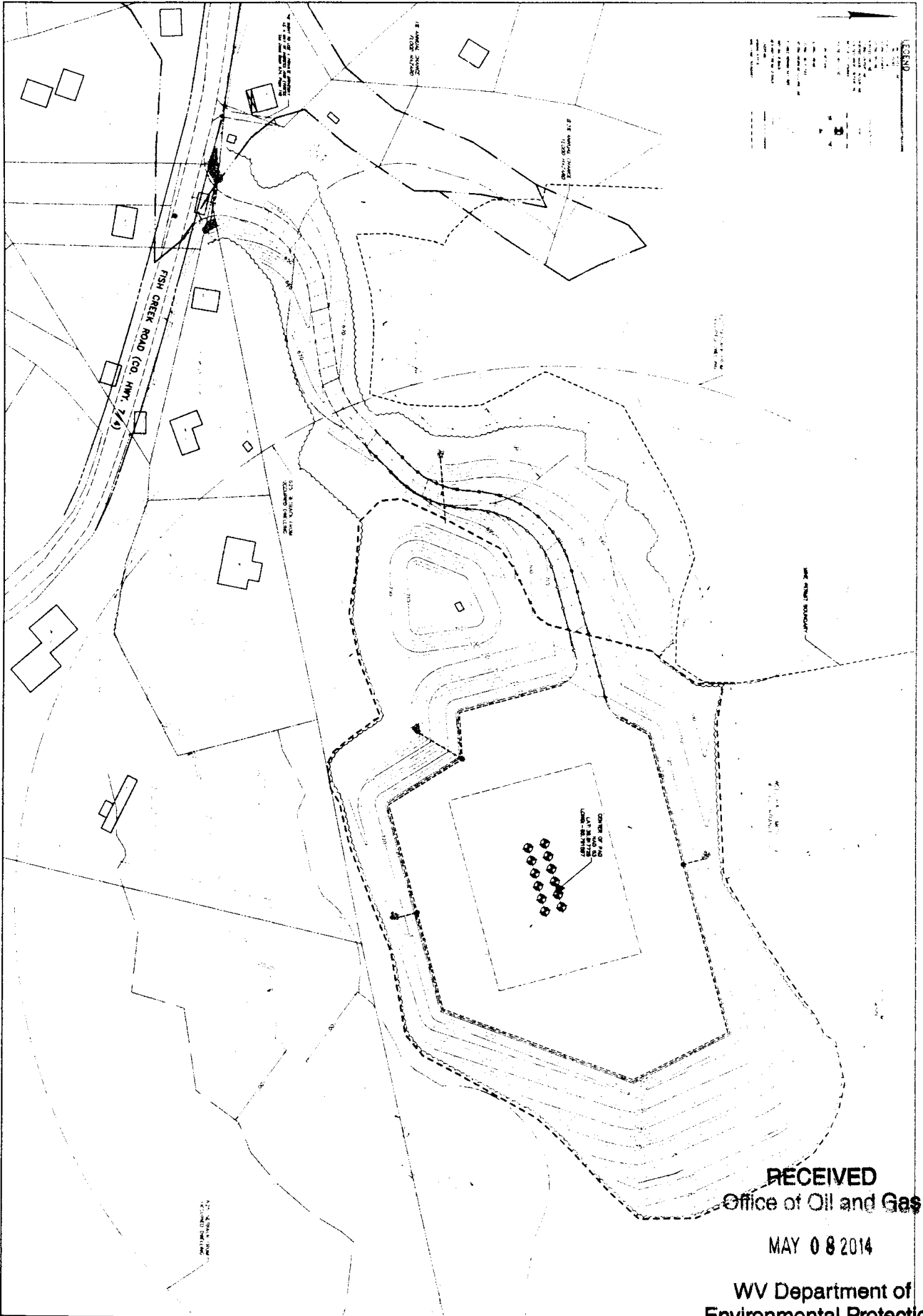
**SOILS CLASSIFICATION**  
SEE REPORT FOR SOIL TEST RESULTS  
SOIL TYPE: CLAY  
SOIL CLASSIFICATION: CLAY

**LIST OF DRAWINGS**

NO.	DESCRIPTION
1	PROPOSED ACCESS DRIVE
2	PROPOSED WELL HEAD
3	PROPOSED EROSION CONTROL MEASURES
4	PROPOSED SEDIMENTATION BASIN
5	PROPOSED TREE TRIMMING PLAN
6	PROPOSED EROSION CONTROL PLAN
7	PROPOSED SEDIMENTATION BASIN PLAN
8	PROPOSED TREE TRIMMING PLAN
9	PROPOSED EROSION CONTROL PLAN
10	PROPOSED SEDIMENTATION BASIN PLAN
11	PROPOSED TREE TRIMMING PLAN

**DISTURBANCE SUMMARY**  
TOTAL DISTURBED AREA: 1.5 ACRES  
TOTAL RESTORED AREA: 1.5 ACRES  
TOTAL NET GAIN: 0 ACRES

<p>COVER SHEET FOR <b>MND 6 WELL PAD</b></p>	<p><b>RETTEW</b> RETTEW Associates, Inc. Ten Towns, 4855 Shaverdale Pk., Ste 300, Pittsburgh, PA 15200 Phone: (412) 446-1728 Fax: (412) 446-1733 Email: rettew@rettew.com Website: www.rettew.com</p>	<p>CLIENT <b>NOBLE ENERGY</b> 333 TECHNOLOGY DRIVE, SUITE 116 CANONSBURG, PA 15317-3077 BEN DEREUME, PE (724) 820-3000</p> <p><b>noble energy</b></p>	<p>MANAGER: MICHAEL R. OGDEN DESIGN BY: ASN DRAWN BY: ASN SURVEY CHECK: [ ] FIELDBOOK NO: [ ] JOB COLLECTOR: [ ]</p>	<p>FOR RETTEW: [ ] DATE: 3/9/2014 SHEET NO: 1 OF 10 DWG NO: 09-384-2010</p>
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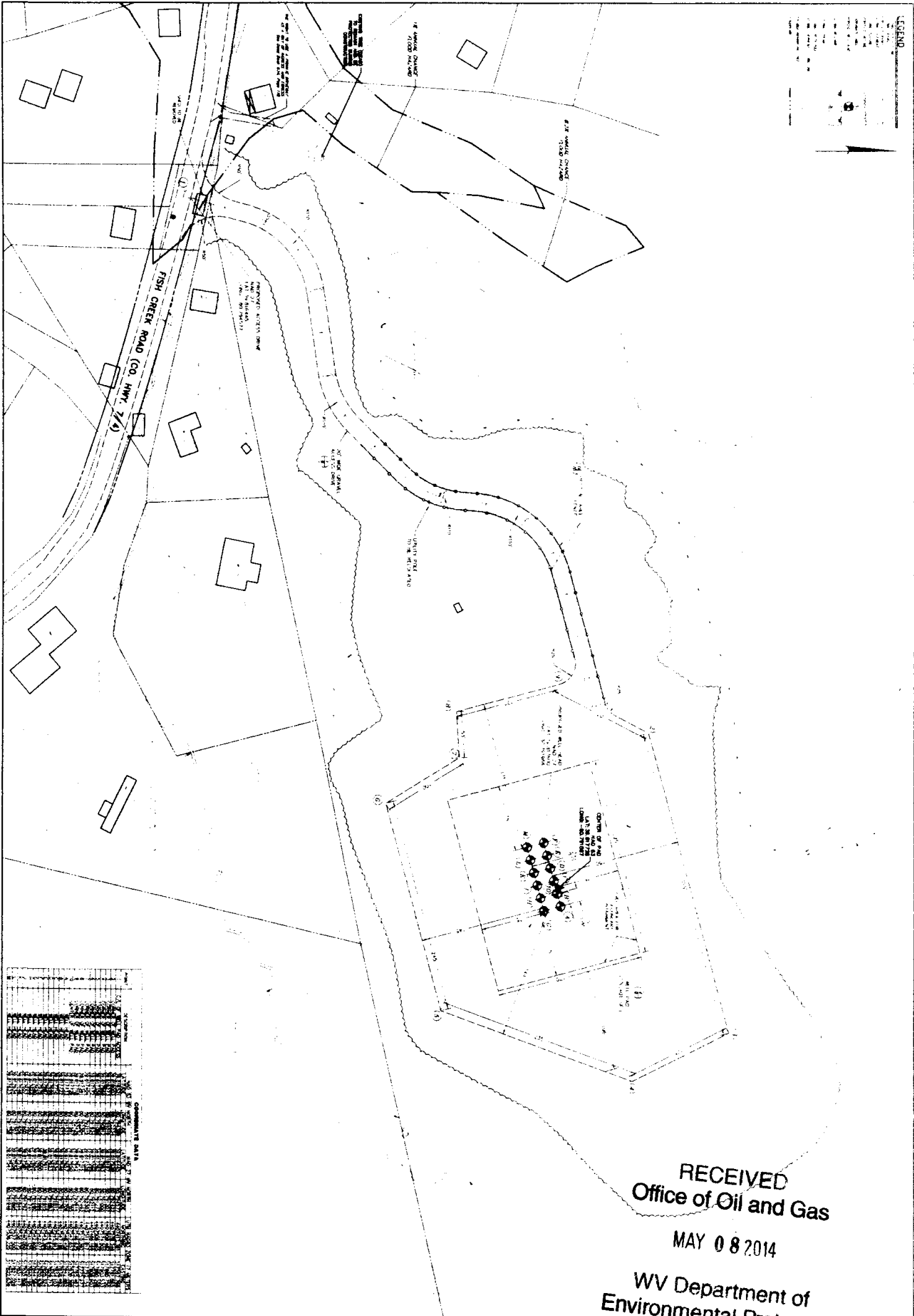


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<p>ENVIRONMENTAL RESOURCES BUFFER PLAN FOR <b>MND 6 WELL PAD</b></p> <p>FRANKLIN DISTRICT      MARSHALL COUNTY, WV</p>	<p><b>RETTEW</b> RETTEW Associates, Inc. 701 Terrace, #600 Stateville Pl. Ste 300, Pittsburgh, PA 15205 Phone (412) 446-1728 • Fax (412) 446-1733 Email: rrt@a-rettew.com Website: www.rettew.com</p>	<p>CLIENT <b>NOBLE ENERGY</b> 333 TECHNOLOGY DRIVE, SUITE 115 CANONSBURG, PA 15307-3377 BEN DERELME, PE (724) 820-3000</p> <p><b>noble energy</b></p>	<p>MANAGER: MICHAEL W. OSSEN DESIGN BY: ASN DRAWN BY: ASN CHECKED BY: ASN DATE: 04/15/14</p>	<p>FOR RETTEW ASSOCIATES BY: [Signature]</p> <p>WV DEPARTMENT OF ENVIRONMENTAL PROTECTION</p>	<p>Scale: 1" = 100'</p>
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SOILS DATA

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
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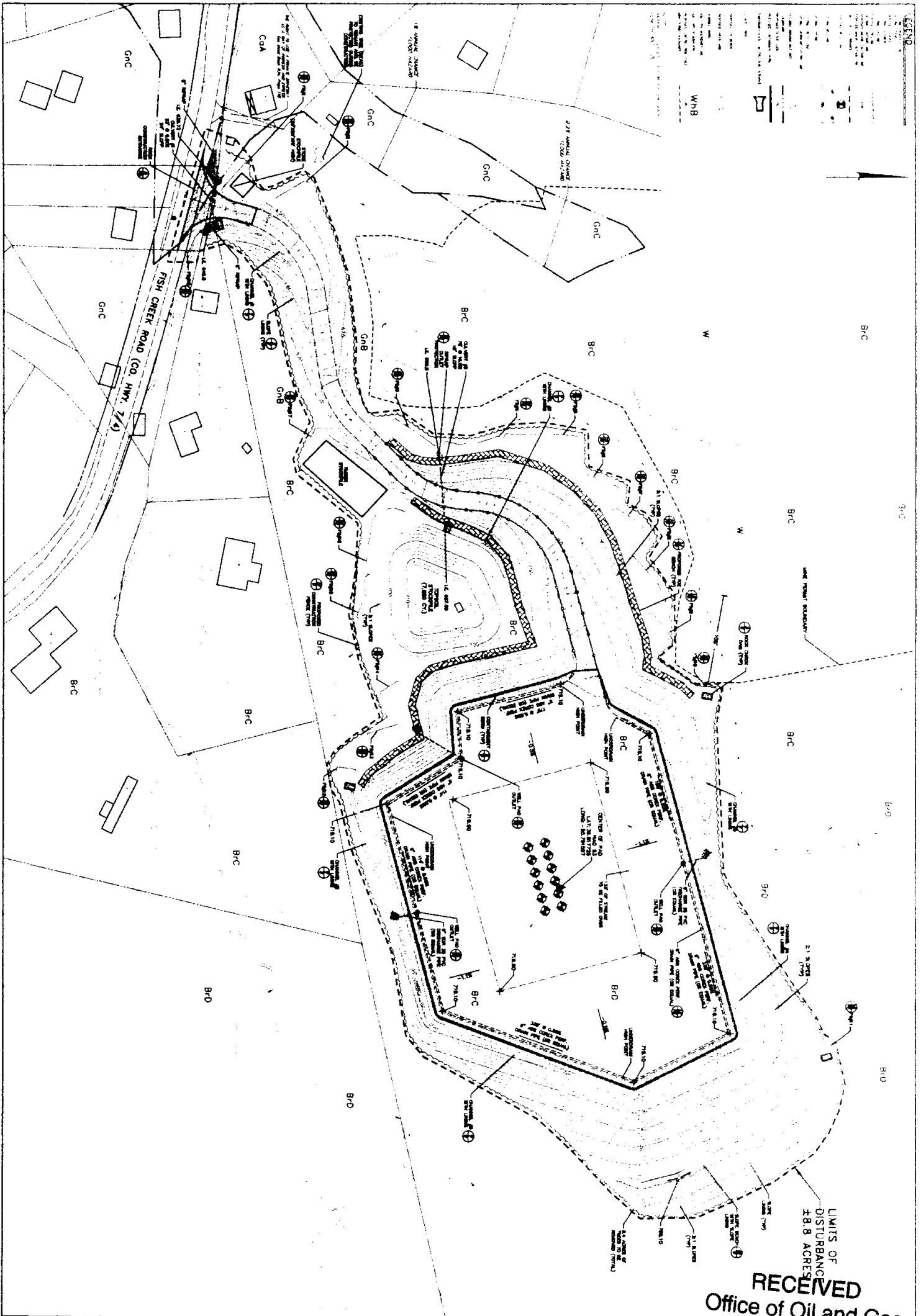
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<p>DATE: 3/27/14 DRAWN BY: [Signature]</p>	<p>LAYOUT PLAN FOR MND 6 WELL PAD FRANKLIN DISTRICT MARSHAL COUNTY, WV</p>	<p><b>RETTEW</b> RETTEW Associates, Inc. 700 South 9500 Stearnsville Rd. Ste 300, Pittsburgh, PA 15206 Phone: (412) 446-1728 Fax: (412) 446-1733 Email: rette@rette.com Website: www.rette.com</p>	<p>CLIENT NOBLE ENERGY 333 TECHNOLOGY DRIVE, SUITE 116 CANGSBURG, PA 15317 3077 BEN DEREUME, PE (724) 820-3000</p> <p><b>noble energy</b></p>	<p>MANAGER: MICHAEL R. GUDEN DESIGN BY: ASN CHECKED BY: ASN SURV. CHECK: [Signature]</p>	<p>FOR RETTEW APPROVAL BY: [Signature]</p>	<p>SCALE: 1" = 50'</p>
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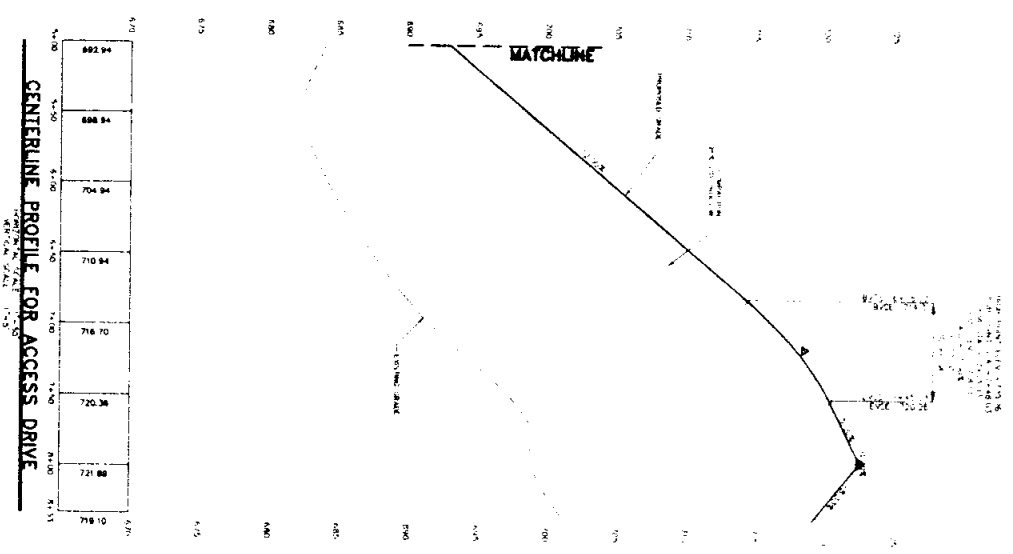
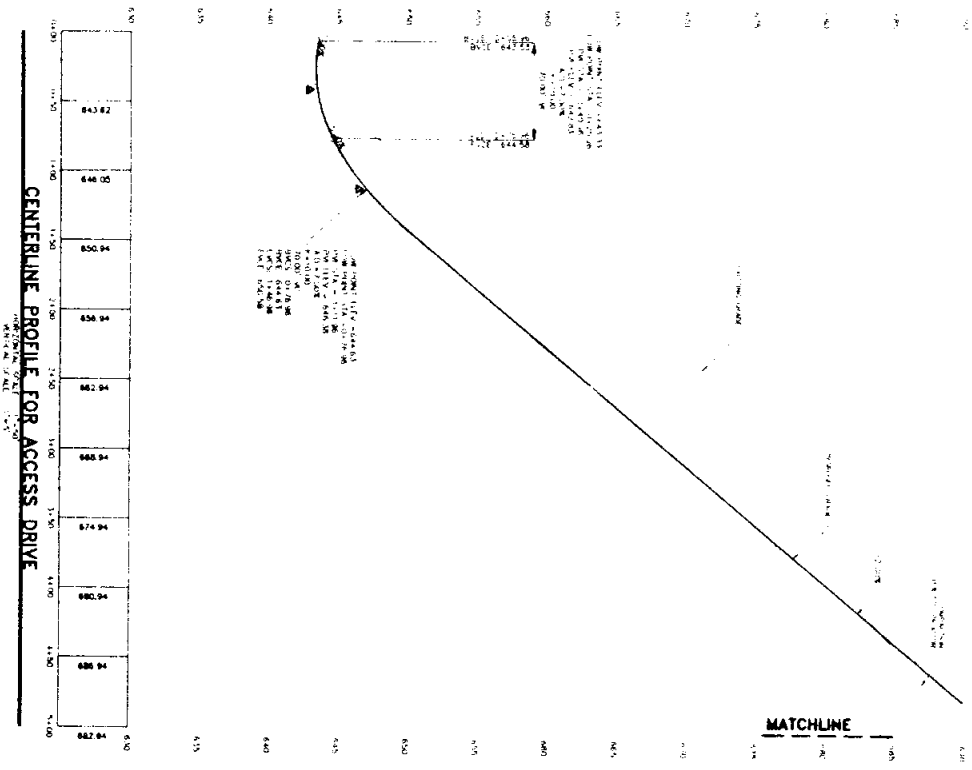
EROSION & SEDIMENT CONTROL PLAN  
FOR  
**MND 6 WELL PAD**  
FRANKLIN DISTRICT MARSHALL COUNTY, WV

**RETTEW**  
RETTEW Associates, Inc.  
1000 University Dr., Ste 305, Pittsburgh, PA 15226  
Phone: (412) 446-1728 Fax: (412) 446-1133  
Email: retrew@retrew.com  
Website: www.retrew.com

CLIENT  
**NOBLE ENERGY**  
333 TECHNOLOGY DRIVE, SUITE 1118  
CANONSBURG, PA 15317-3077  
BEN DERGUME, PE  
(724) 820-3000  
**noble energy**

MANAGER  
MICHAEL W. OSSEN  
DESIGN BY: ASD BY: ASD  
CHECK BY: ASD BY: ASD  
SCALE: 1"=40' (SEE DRAWING)





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Environmental Protection

ACCESS DRIVE PROFILES  
FOR  
MND 6 WELL PAD

**RETTEW**

RETTEW Associates, Inc.  
Two Towers, 4600 Steingrube Pl., Ste 300, Pittsburgh, PA 15220  
Phone (412) 446-1728 • Fax (412) 446-1733  
E-mail: rettew@rettew.com  
Website: www.rettew.com

CLIENT  
**NOBLE ENERGY**  
333 TECHNOLOGY DRIVE, SUITE 116  
DANONSBURG, PA 15011-3077  
BEN DEREUME, PE  
(724) 820-3000

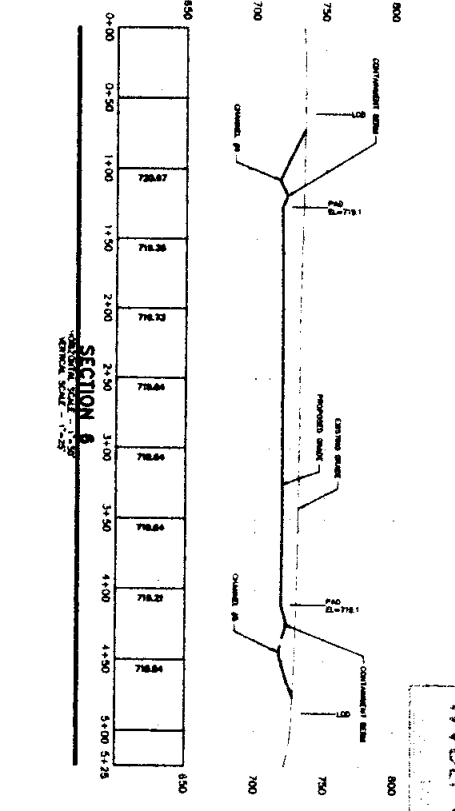
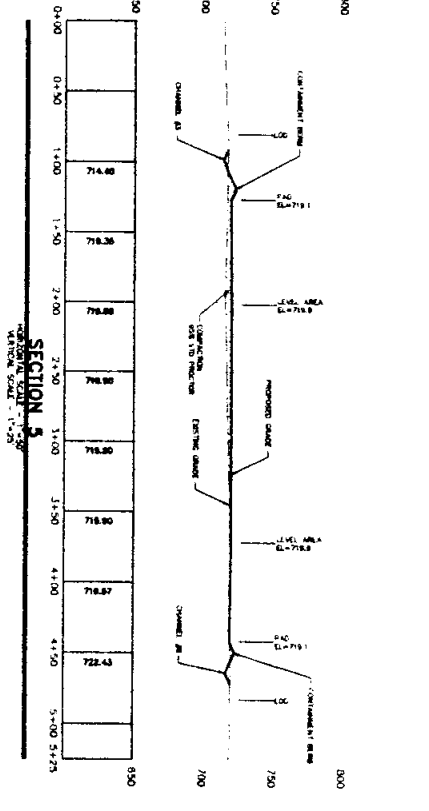
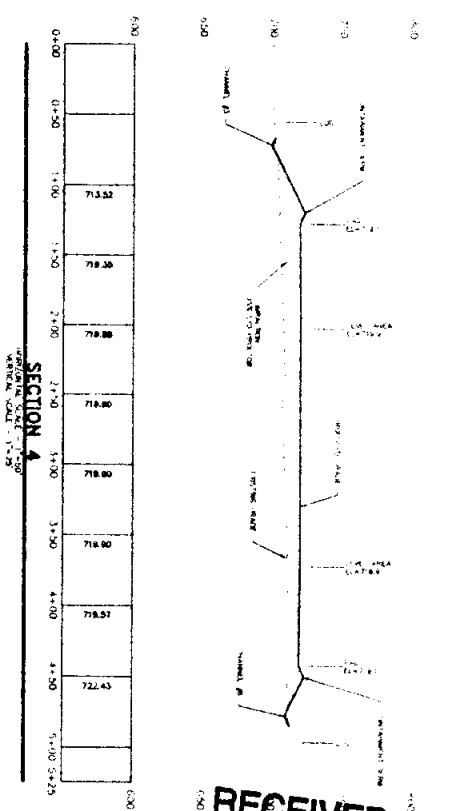
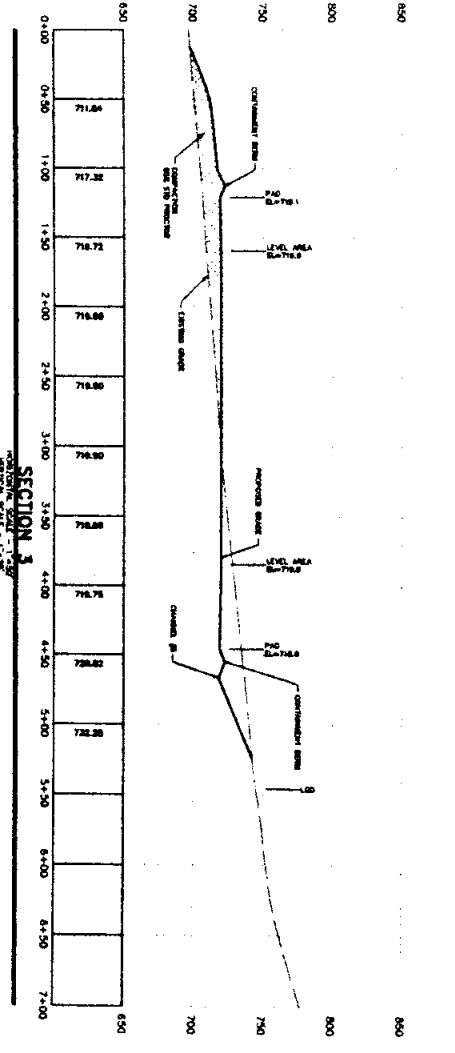
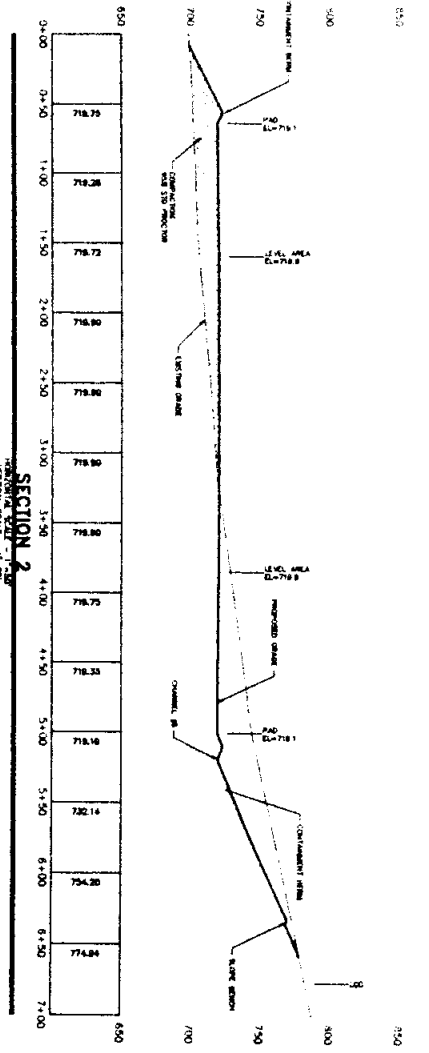
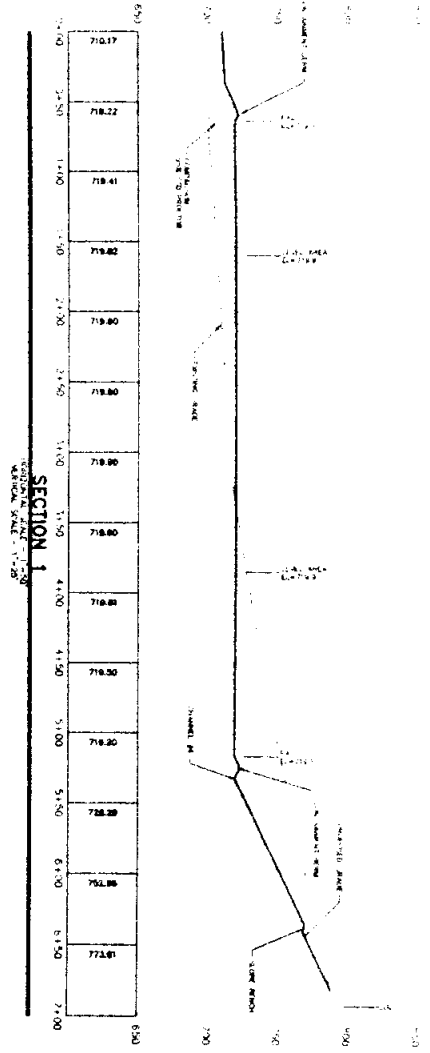
MANAGER  
MICHAEL - JOGLEN  
DESIGN BY: ASN  
CHECKED BY: ASN  
DATE: 05/07/14

FOR RETTEW ASSOCIATES BY:  
DATE: 05/07/14

DATE: 3/5/2014  
SHEET NO: 5 OF 10  
DWG NO: 0382421010

FRANKLIN DISTRICT MARSHALL COUNTY, WV





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FOR REVIEW ASSIGNED BY: S. R. OGDEN  
 DEPARTMENT OF Environmental Protection

APPROVED  
WVDEP OOG

CROSS SECTIONS FOR <b>MND 6 WELL PAD</b> FRANKLIN DISTRICT MARSHALL COUNTY, WV	<b>RETTEW</b> RETTEW Associates, Inc. 200 South 800th Street, P.O. Box 100, Pittsburg, PA 15250 Phone: (412) 448-7788 Fax: (412) 448-1753 Email: rettew@rettew.com Website: www.rettew.com	CLIENT <b>NOBLE ENERGY</b> 333 TECHNOLOGY DRIVE, SUITE 116 CANONSBURG, PA 15317-3077 BEN DEREUME, PE (724) 820-3000	PREPARED BY: MICHAEL R. OGDEN DESIGN BY: ASN DRAWN BY: ASN CHECKED BY: BARRY OGDEN	CADD BY: ASN TEL: (724) 820-3000 FAX: (724) 820-3000
			DATE: 3/3/2014 SHEET NO. 7 OF 10 PROJ. NO. 083833010	

RECLAMATION NOISES:

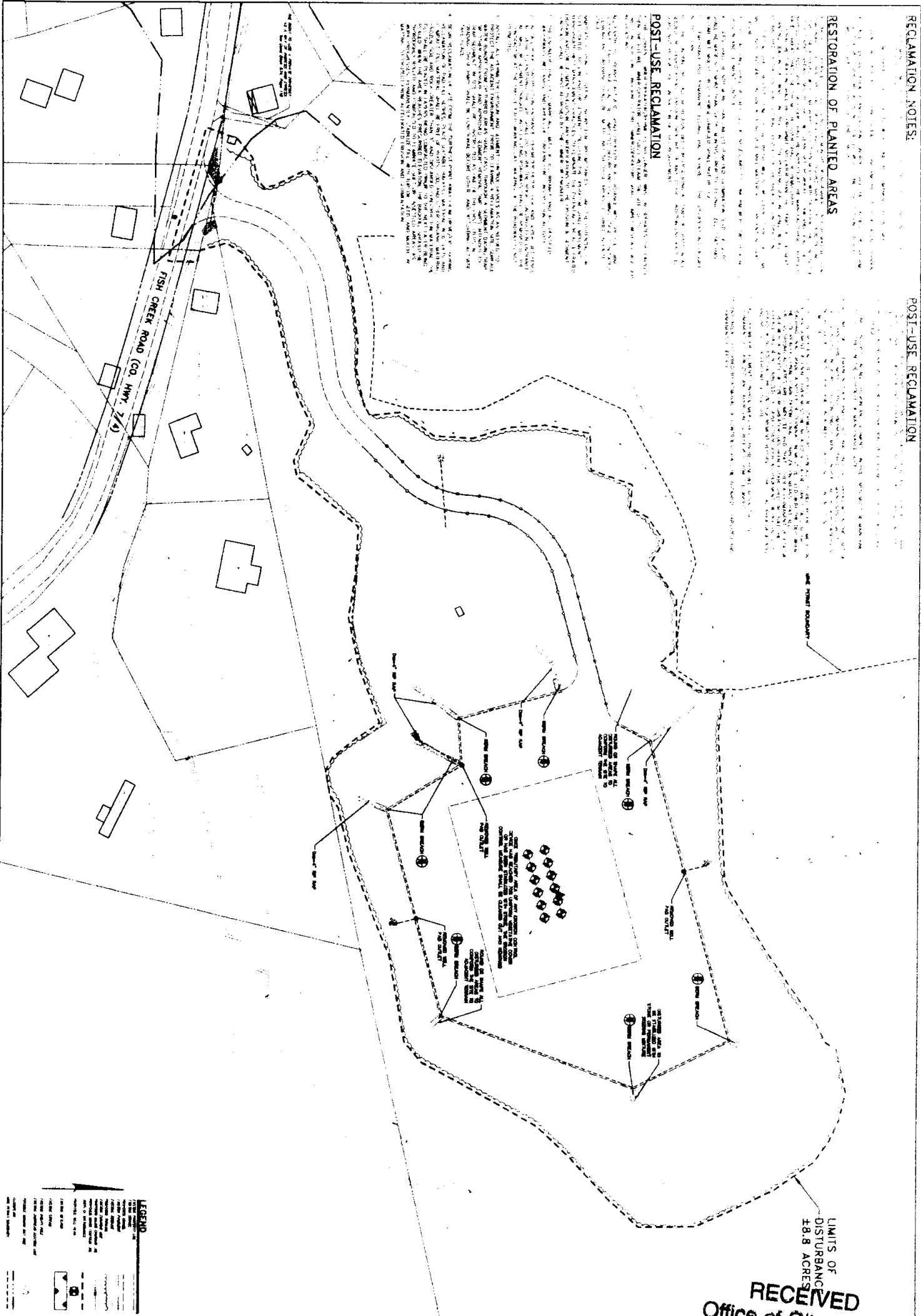
RESTORATION OF PLANTED AREAS

POST-USE RECLAMATION

POST-USE RECLAMATION: The purpose of this section is to describe the measures to be taken to restore the site to its original condition or better. This includes the removal of all structures, equipment, and materials, and the regrading and revegetation of the site. The site shall be restored to a condition that is suitable for the original use of the land, or for a higher and better use. The site shall be restored to a condition that is suitable for the original use of the land, or for a higher and better use. The site shall be restored to a condition that is suitable for the original use of the land, or for a higher and better use.

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LIMITS OF DISTURBANCE 18.8 ACRES

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MAY 08 2014



WV Department of Environmental Protection

LEGEND

---	Proposed Well Pad
---	Proposed Access Road
---	Proposed Pipeline
---	Proposed Fencing
---	Proposed Erosion Control
---	Proposed Planting
---	Proposed Structure
---	Proposed Equipment
---	Proposed Material
---	Proposed Utility
---	Proposed Other

WELL PAD RECLAMATION PLAN  
FOR  
MND 6 WELL PAD

DATE: 1/2/2014  
SHEET NO. 9 OF 10  
DWG NO. 03/24/2013

FRANKLIN DISTRICT MARSHALL COUNTY, WV

**RETTEW**

RETTEW Associates, Inc.  
1401 South 4003 Steadway Pl. Ste 202, Prichard, PA 15205  
Phone: (412) 446-1728 Fax: (412) 446-1733  
Email: rettew@rettew.com  
Website: www.retiew.com

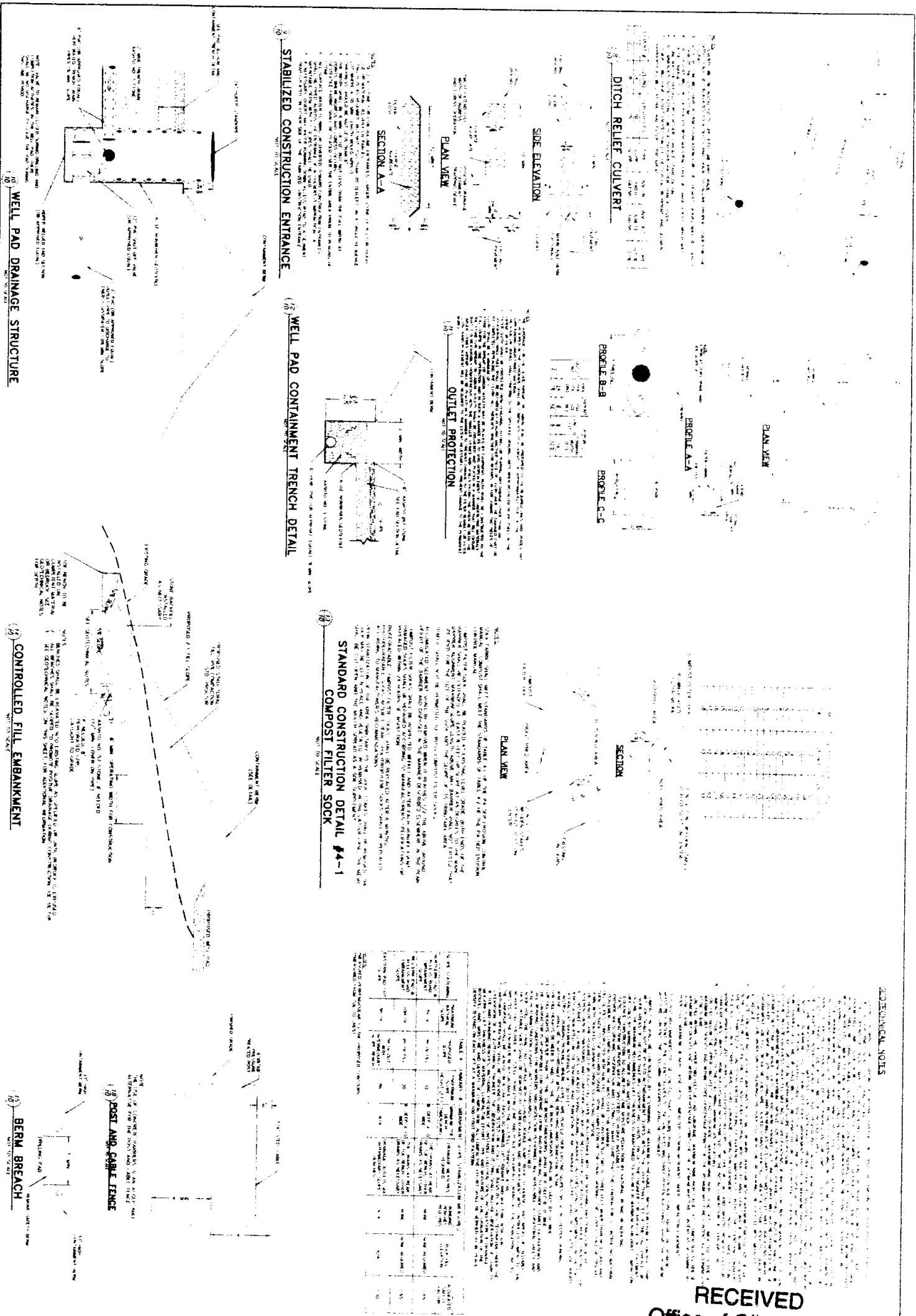
CLIENT

NOBLE ENERGY  
333 TECHNOLOGY DRIVE, SUITE 116  
CANONSBURG, PA 15317-3077  
BEN DEREUME, PE  
(724) 820-3000

**noble energy**

MANAGER: MICHAEL W. GODDEN  
DESIGN BY: ASD  
DRAWN BY: ASD  
CHECKED BY: ASD  
SURVEY SHEET: FIELDBOOK NO. 3414 COLLECTOR





NO.	DESCRIPTION	QUANTITY	UNIT	PRICE	TOTAL
1	Excavation	100	cu yd	10.00	1000.00
2	Backfill	100	cu yd	10.00	1000.00
3	Concrete	100	cu yd	100.00	10000.00
4	Rebar	100	lb	1.00	100.00
5	Gravel	100	cu yd	10.00	1000.00
6	Asphalt	100	cu yd	10.00	1000.00
7	Drainage Pipe	100	lin ft	10.00	1000.00
8	Manhole	1	unit	1000.00	1000.00
9	Well Pad	1	unit	1000.00	1000.00
10	Post and Cable Fence	100	lin ft	10.00	1000.00
11	Berm Breach	1	unit	1000.00	1000.00
12	Controlled Fill Embankment	100	cu yd	10.00	1000.00
13	Standard Construction Detail #4-1	1	unit	1000.00	1000.00
14	Well Pad Drainage Structure	1	unit	1000.00	1000.00
15	Well Pad Containment Trench	1	unit	1000.00	1000.00
16	Ditch Relief Culvert	1	unit	1000.00	1000.00
17	Stabilized Construction Entrance	1	unit	1000.00	1000.00
18	Outlet Protection	1	unit	1000.00	1000.00
19	Profile A-A	1	unit	1000.00	1000.00
20	Profile B-B	1	unit	1000.00	1000.00
21	Profile C-C	1	unit	1000.00	1000.00
22	Section	1	unit	1000.00	1000.00
23	Plan View	1	unit	1000.00	1000.00
24	Side Elevation	1	unit	1000.00	1000.00
25	Section A-A	1	unit	1000.00	1000.00
26	Plan View	1	unit	1000.00	1000.00
27	Section	1	unit	1000.00	1000.00
28	Plan View	1	unit	1000.00	1000.00
29	Section	1	unit	1000.00	1000.00
30	Plan View	1	unit	1000.00	1000.00
31	Section	1	unit	1000.00	1000.00
32	Plan View	1	unit	1000.00	1000.00
33	Section	1	unit	1000.00	1000.00
34	Plan View	1	unit	1000.00	1000.00
35	Section	1	unit	1000.00	1000.00
36	Plan View	1	unit	1000.00	1000.00
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42	Plan View	1	unit	1000.00	1000.00
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44	Plan View	1	unit	1000.00	1000.00
45	Section	1	unit	1000.00	1000.00
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97	Section	1	unit	1000.00	1000.00
98	Plan View	1	unit	1000.00	1000.00
99	Section	1	unit	1000.00	1000.00
100	Plan View	1	unit	1000.00	1000.00

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WV Department of  
Environmental Protection

**RETTEW**  
RETTEW Associates, Inc.  
1000 S. 10th Street, Suite 100  
Martinsburg, WV 26151  
Phone: (412) 846-1728 Fax: (412) 446-1733  
Email: rette@rette.com Website: www.rette.com

CLIENT  
**noble energy**  
NOBLE ENERGY  
533 TECHNOLOGY DRIVE, SUITE 116  
CANONSBURG, PA 15317-3077  
BEN DEREGUE, PE  
(724) 820-3000

MANAGER: MICHAEL P. JOHNSON  
DESIGNER: ASH  
DRAWN BY: ASH  
CHECKED BY: ASH  
SURVEY: SHAW TELECOM INC. DATE COLLECTED:

DETAILS FOR MND 6 WELL PAD  
DATE: 3/4/2014  
SHEET NO: 10 OF 10  
DWG NO: 090342010  
FRANKLIN DISTRICT MARSHALL COUNTY, WV




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west virginia department of environmental protection

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

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

October 31, 2013

Schlumberger  
Attn: Daniel L. Sikorski  
4600 J Barry Court  
Suite 200  
Canonsburg, PA 15317

RE: Cement Variance Request

Dear Sir:

This agency has approved a variance request for the cement blend listed below to be used on surface and coal protection casing only. The variance cannot be used without an oil and gas operator requesting its use on a permit application and approved by this agency:

- 2% Accelerator (S001)
- 0.2% Antifoam (D046)
- 0.125 lb/sk Polyester Flake (D0130)

If you have any questions regarding this matter feel free to contact me at 304-926-0499, ext. 1653.

Sincerely,

James Peterson  
Environmental Resources Analyst

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Oil and Gas

ADA 2 8 2014

West Virginia Department of Environmental Protection





## CONCLUSIONS OF LAW

Pursuant to Articles 6 and 6A, Chapter 22 of the Code of West Virginia, the Office of Oil and Gas has jurisdiction over the subject matter embraced in said notice, and the persons interested therein, and jurisdiction to promulgate the hereinafter prescribed Order.

Pursuant to 35 CSR § 4-11.5 and 35 CSR § 8-9.2.h.8 the Chief of the Office of Oil and Gas may approve different cement blends upon the well operator providing satisfactory proof that different cement types are adequate.

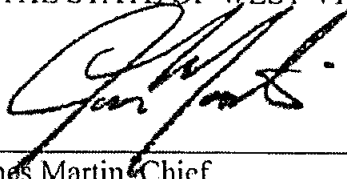
## ORDER

It is ordered that Schlumberger may use the cement blend listed in Findings of Fact No. 1 for the cementing of surface and coal protection casing of oil and gas wells in the State as may be requested by oil and gas operators. The waiting time on the cement blend shall be 8 hours. The cement blend shall be mixed in strict accordance with the specifications for each blend and weight measurements made on-site to assure the cement slurries meet the minimum weight specifications. A sample shall be collected and, if after 8 hours the cement is not set up, additional time will be required. Schlumberger shall keep a record of cement blend jobs in which the cement blend approved under this order is to be used and made available to the Office of Oil and Gas upon request.

Dated this, the 31rth day of October, 2013.

IN THE NAME OF THE STATE OF WEST VIRGINIA

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




---

James Martin, Chief  
Office of Oil and Gas

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OFFICE OF OIL AND GAS

APR 08 2014

E.L. ... CO



East Division Technology Center

**Laboratory Cement Test Report- 15.6 PPG SURFACE**  
**Weston District Laboratory**

Fluid No : WES13-364P3	Client : NOBLE	Location / Rig : N/A	Signatures
Date : Oct-06-2013	Well Name : WEST VIRGINIA	Field : N/A	McLaughlin

Job Type	SURFACE	Depth	700.0 ft	TVD	700.0 ft
BHST	63 degF	BHCT	78 degF	BHP	494 psi
Starting Temp.	80 degF	Time to Temp.	00:09 hr:mn	Heating Rate	-0.22 degF/min
Starting Pressure	179 psi	Time to Pressure	00:09 hr:mn	Schedule	9.2-1

**Composition**

Slurry Density	16.60 lb/gal	Yield	1.20 ft <sup>3</sup> /sk	Mix Fluid	5.252 gal/sk
Solid Vol. Fraction	41.4 %	Porosity	58.6 %	Slurry type	Conventional

Code	Concentration	Sack Reference	Component	Blend Density	Lot Number
D801 - API A		94 lb of BLEND	Blend	197.27 lb/ft <sup>3</sup>	08-13-13/6-20
Fresh water	5.252 gal/sk		Base Fluid		

S001	2.000 %BWOC	Accelerator	364AJ1632
D048	0.200 %BWOC	Antifoam	TU3G0700A0
D130	0.125 lb/sk	Lost circ	BULK

**Rheology**

Geometry: R1B1F1.0

S/N 10-1287-003

Temperature	78 degF		
(rpm)	Up (deg)	Down (deg)	Average (deg)
300	63.0	63.0	63.0
200	56.0	57.0	56.5
100	46.0	49.0	47.5
80	41.0	46.0	43.5
30	33.0	43.0	38.0
6	20.6	27.7	24.2
3	16.6	20.6	18.5
10 sec Gel	23 deg - 24.55 lb/100ft <sup>2</sup>		
10 min Gel	63 deg - 66.57 lb/100ft <sup>2</sup>		
Rheo. computed	Viscosity: 25.792 cP Yield Point: 36.21 lb/100ft <sup>2</sup>		

**UCA Compressive Strength**

S/N 501R

Time	CS
05:22 hr:mn	500 psi
10:29 hr:mn	1200 psi

**Free Fluid**

1.0 mL/250mL in 2 hrs
At 78 degF and 0 deg Incl
Sedimentation: None

**Comments**

General Comment :  
 Note: This is a pilot test. Field may differ after testing. Please read field report carefully and compare to pilot report and load out. Contact the laboratory with any questions or concerns.

Office of Oil and Gas

APR 29 2014

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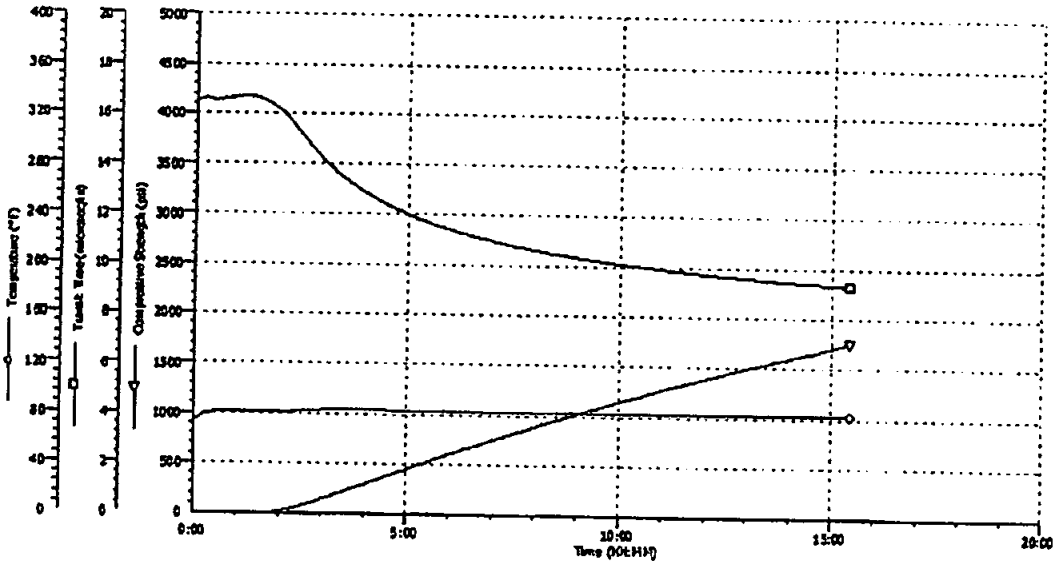
Schlumberger

UCA Graph

Well: 13-36 6P3-1 Noble West Virginia Surface  
10/12/13 4:38:52 PM  
10/12/13 8:24:31 AM  
18.6 ppg  
Compressive strength type B (no more than 14 lbs/gal)

NOBLE WV  
Customer: NOBLE  
D991 A P/A  
2% GCO1 + 0.2% CM 8-0 125 pps D130  
Surfact  
P1 RUCM201A

SHOCK? F  
D96723 F  
60 psi @ 5:23:00  
520 psi @ 5:23:00  
Current CR: 1743 psi



Schlumberger  
Noble, WV Surface Laboratory

Test File Name: Well13-36 6P3-1 Noble West Virginia Surface  
Printed: 10/12/13 12:33:32 PM

Page 1

APR 23 2014

APR 23 2014

APR 23 2014

4705101761



**DRILLING WELL PLAN**  
**MND-6E-HS (Marcellus HZ)**  
**Marcellus Shale Horizontal**  
**Marshall County, WV**

Ground Elevation			MND-6E SHL (Lat/Long)				(482515.8N, 1637114.62E) (NAD27)				
Azm			MND-6E LP (Lat/Long)				(482390.81N, 1635864.69E) (NAD27)				
WELLBORE DIAGRAM			MND-6E BHL (Lat/Long)				(489901.61N, 1630605.58E) (NAD27)				
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		
17 1/2	13-3/8" 54.5# J-55 BTC	Pittsburgh Coal	284	294	AIR	15.6 ppg Type 1 + 2% CaCl. 0.25# Lost Circ 30% Excess Yield = 1.18	Bow Spring on first 2 joints then every third joint to 100' form surface	Fill with KCl water once drilled to TD. Once casing is at setting depth, circulate a minimum of one hole volume prior to pumping cement.	Intermediate casing = 0.380" wall thickness Burst=2730 psi		
		Surface Casing	684	694							
12 3/8	9-5/8" 38# K-55 BTC	2nd Salt Sand	1377	1413	AIR	15.6ppg Class A +0.4% Ret. 0.15% Disp. 0.2% AntiFoam, 0.125#/sk Lost Circ 20% Excess Yield=1.19 To Surface	Bow spring centralizers every third joint to 100' feet from surface.	Fill with KCl water once drilled to TD. Once casing is at setting depth, circulate a minimum of one hole volume prior to pumping cement.	Casing to be ran 250' below the 5th Sand. Intermediate casing = 0.352" wall thickness Burst=3520 psi		
		Big Lime	1488	1604							
		Big Injun	1604	1717							
		Price Formation	1717	2232							
8.75" Vertical	5-1/2" 23# HCP-110 TXP BTC	Int. Casing	2017	2017	8.0ppg - 9.0ppg SOBM	14.8ppg Class A 25:75:0 System	Rigid Bow Spring every third joint from KOP to TOC	Once at TD, circulate at max allowable pump rate for at least 6x bottoms up. Once on bottom with casing, circulate a minimum of one hole volume prior to pumping cement.	Production casing = 0.381" wall thickness Burst=12640 psi Note: Actual centralizer schedules may be changed due to hole conditions		
		Speechley	3019	3065							
		Java	4570	4665							
		Pipe Creek	4665	4752							
		Angola	4752	5334							
		Rheinstreet	5334	5655							
		Cashaqua	5655	5727							
		Middlesex	5727	5750							
		West River	5750	5811							
		Burkett	5811	5836							
8.75" - 8.5" Lateral		Tully Limestone	5836	5860	12.0ppg-12.5ppg SOBM	10% Excess Yield=1.27 TOC >= 200' above 9.825" shoe	Rigid Bow Spring every joint to KOP				
		Hamilton	5860	5895							
		Marcellus	5895	5950							
		TD	15804 MD	5940 TVD							
		Onondaga	5950								

LP @ 5940' TVD / 8634' MD

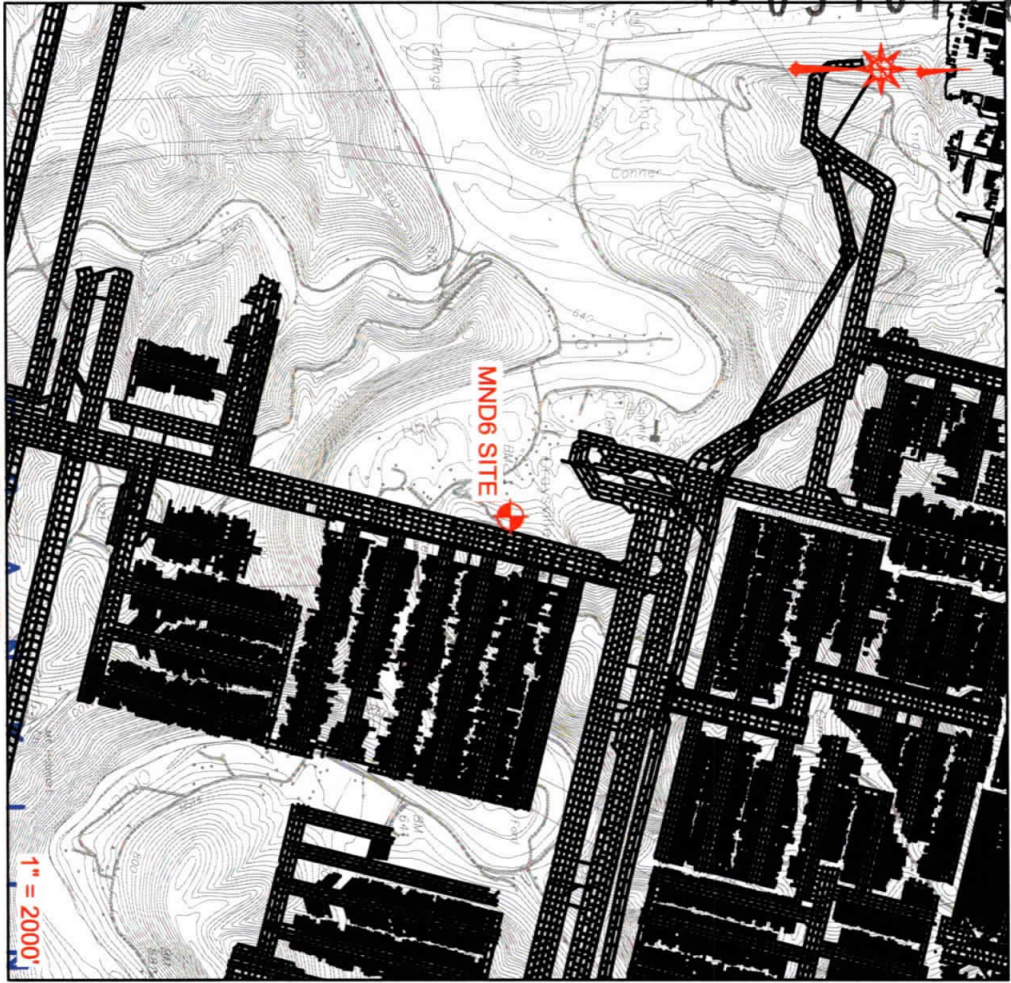
8.75 / 8.5 Hole - Cemented Long String  
 5-1/2" 20# HCP-110 TXP BTC

+/-9170' ft Lateral

TD @ +/-5940' TVD +/-15804' MD

APR 11 2014

4705101761

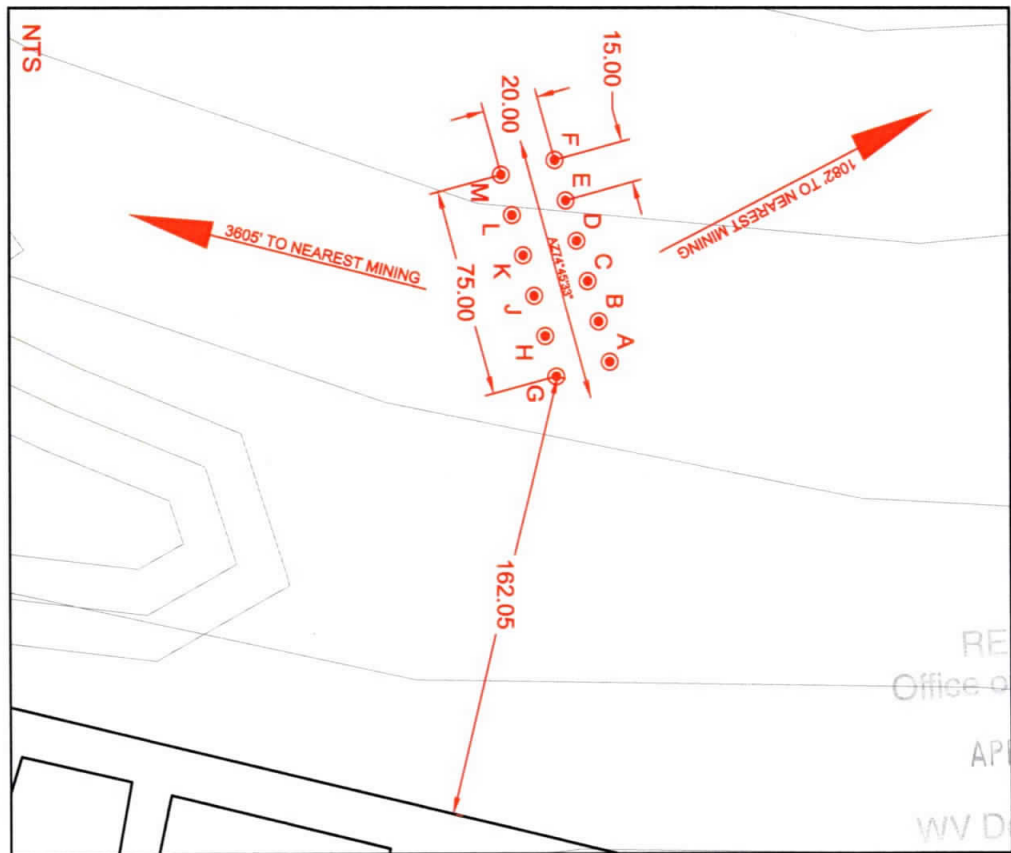


CLIENT  
NOBLE ENERGY

PROJECT  
MND6 SITE

DATE  
2-1-13

ALL DIMENSIONS RELATED TO COAL LOCATION (EXISTING AND/OR PROPOSED) ARE BASED ON INFO PROVIDED BY CONSOLIDATION COAL COMPANY. THIS INFO MAY NOT BE CURRENT WITH MINING PLANS. ANY QUESTIONS OR CONCERNS PERTAINING TO THE LOCATION OF COAL SHOULD BE DIRECTED TO CONSOLIDATION COAL COMPANY.



BLUE MOUNTAIN ENGINEERING

DATE  
10-14-13

REVISION  
5

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Office of Oil and Gas  
APR 29 2014  
WV Department of  
Environmental Protection



**BLUE MOUNTAIN ENGINEERING**

MND6AHS COUNTY: MARSHALL DISTRICT: FRANKLIN NAD 83 - WV NORTH N:482567.683 E:1605735.166 LAT:39.817733 LON:-80.791522 NAD 27 - WV NORTH N:482531.550 E:1637172.518 LAT:39.817657 LON:-80.791709 MCELROY N:-75782.470 E:31686.365 UTM NAD83 ZONE 17 M N:4407548.459 E:517842.882	MND6BHS COUNTY: MARSHALL DISTRICT: FRANKLIN NAD 83 - WV NORTH N:482563.747 E:1605720.692 LAT:39.817722 LON:-80.791573 NAD 27 - WV NORTH N:482527.613 E:1637158.044 LAT:39.817646 LON:-80.791761 MCELROY N:-75786.603 E:31681.946 UTM NAD83 ZONE 17 M N:4407547.186 E:517838.492	MND6CHS COUNTY: MARSHALL DISTRICT: FRANKLIN NAD 83 - WV NORTH N:482559.809 E:1605706.219 LAT:39.817710 LON:-80.791624 NAD 27 - WV NORTH N:482523.676 E:1637143.571 LAT:39.817634 LON:-80.791812 MCELROY N:-75790.736 E:31667.528 UTM NAD83 ZONE 17 M N:4407545.913 E:517834.103	MND6DHS COUNTY: MARSHALL DISTRICT: FRANKLIN NAD 83 - WV NORTH N:482555.872 E:1605691.744 LAT:39.817699 LON:-80.791676 NAD 27 - WV NORTH N:482519.739 E:1637129.097 LAT:39.817623 LON:-80.791863 MCELROY N:-75794.869 E:31653.108 UTM NAD83 ZONE 17 M N:4407544.639 E:517829.713	MND6EHS COUNTY: MARSHALL DISTRICT: FRANKLIN NAD 83 - WV NORTH N:482551.934 E:1605677.270 LAT:39.817687 LON:-80.791727 NAD 27 - WV NORTH N:482515.802 E:1637114.623 LAT:39.817611 LON:-80.791915 MCELROY N:-75799.002 E:31638.689 UTM NAD83 ZONE 17 M N:4407543.366 E:517825.323	MND6FHS COUNTY: MARSHALL DISTRICT: FRANKLIN NAD 83 - WV NORTH N:482547.944 E:1605662.811 LAT:39.817676 LON:-80.791778 NAD 27 - WV NORTH N:482511.812 E:1637100.164 LAT:39.817600 LON:-80.791966 MCELROY N:-75803.188 E:31624.286 UTM NAD83 ZONE 17 M N:4407542.077 E:517820.939	MND6GHS COUNTY: MARSHALL DISTRICT: FRANKLIN NAD 83 - WV NORTH N:482548.364 E:1605740.430 LAT:39.817680 LON:-80.791502 NAD 27 - WV NORTH N:482512.230 E:1637177.782 LAT:39.817604 LON:-80.791690 MCELROY N:-75801.717 E:31701.891 UTM NAD83 ZONE 17 M N:4407542.600 E:517844.584	MND6HHS COUNTY: MARSHALL DISTRICT: FRANKLIN NAD 83 - WV NORTH N:482544.420 E:1605725.958 LAT:39.817669 LON:-80.791553 NAD 27 - WV NORTH N:482508.287 E:1637163.310 LAT:39.817593 LON:-80.791741 MCELROY N:-75805.856 E:31687.474 UTM NAD83 ZONE 17 M N:4407541.325 E:517840.195	MND6JHS COUNTY: MARSHALL DISTRICT: FRANKLIN NAD 83 - WV NORTH N:482540.477 E:1605711.485 LAT:39.817657 LON:-80.791605 NAD 27 - WV NORTH N:482504.344 E:1637148.838 LAT:39.817581 LON:-80.791792 MCELROY N:-75809.995 E:31673.056 UTM NAD83 ZONE 17 M N:4407540.050 E:517835.806	MND6KHS COUNTY: MARSHALL DISTRICT: FRANKLIN NAD 83 - WV NORTH N:482536.533 E:1605697.013 LAT:39.817646 LON:-80.791656 NAD 27 - WV NORTH N:482500.401 E:1637134.366 LAT:39.817570 LON:-80.791844 MCELROY N:-75814.134 E:31658.639 UTM NAD83 ZONE 17 M N:4407538.775 E:517831.417	MND6LHS COUNTY: MARSHALL DISTRICT: FRANKLIN NAD 83 - WV NORTH N:482532.591 E:1605682.541 LAT:39.817634 LON:-80.791707 NAD 27 - WV NORTH N:482496.458 E:1637119.894 LAT:39.817559 LON:-80.791895 MCELROY N:-75818.273 E:31644.222 UTM NAD83 ZONE 17 M N:4407537.500 E:517827.028	MND6MHS COUNTY: MARSHALL DISTRICT: FRANKLIN NAD 83 - WV NORTH N:482528.647 E:1605668.068 LAT:39.817623 LON:-80.791758 NAD 27 - WV NORTH N:482492.515 E:1637105.422 LAT:39.817547 LON:-80.791946 MCELROY N:-75822.412 E:31629.805 UTM NAD83 ZONE 17 M N:4407536.225 E:517822.639
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Office of Oil and Gas  
APR 20 2014  
WV Department of  
Environmental Protection

STATE OF WEST VIRGINIA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS  
**VOLUNTARY STATEMENT OF NO OBJECTION**

**Instructions to Persons Named on Page WW-6A**

The well operator named on page WW-6A is applying for a permit from the State of West Virginia to conduct oil or gas well work. Well work permits are valid for twenty-four (24) months. Please contact the listed well operator and the Office of Oil and Gas if you do not own any interest in the listed surface tract.

**Comment and Waiver Provisions**

Pursuant to West Virginia Code § 22-6A-11(a), all persons described in subsection (b), section ten of this article may file written comments with the secretary as to the location or construction of the applicant's proposed well work within thirty days after the application is filed with the secretary.

Pursuant to West Virginia Code § 22-6A-8(b) No permit may be issued less than thirty days after the filing date of the application for any well work except plugging or replugging; and no permit for plugging or replugging may be issued less than five days after the filing date of the application except a permit for plugging or replugging a dry hole: *Provided*, That if the applicant certifies that all persons entitled to notice of the application under the provisions of subsection (b), section ten of this article have been served in person or by certified mail, return receipt requested, with a copy of the well work application, including the erosion and sediment control plan, if required, and the well plat, and further files written statements of no objection by all such persons, the secretary may issue the well work permit at any time.

**VOLUNTARY STATEMENT OF NO OBJECTION**

I, Ryan Arp, hereby state that I have read the Instructions to Persons Named on Page WW-6A and the associated provisions listed above, and that I have received copies of a Notice of Application, an Application for a Well Work Permit on Form WW-6A and attachments consisting of pages one (1) through \_\_\_\_\_, including the erosion and sediment control plan, if required, and the well plat, all for proposed well work on the tract of land as follows:

State:	<u>West Virginia</u>	WVSPN NAD 27	Easting:	<u>1,637,114.623</u>
County:	<u>Marshall</u>		Northing:	<u>482,515.802</u>
District:	<u>Franklin</u>	Public Road Access:		<u>Fish Creek</u>
Quadrangle:	<u>BUSINESSBURG</u>	Generally used farm name:		
Watershed:	<u>Fish Creek</u>			

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, **provided that NOBLE ENERGY, INC. drills the well on WV North NAD27 coordinates of North 482,515.802, East 1,637,114.623 in accordance with the Agreement between Consolidation Coal Company, Murray American Energy, Inc., and NOBLE ENERGY, INC. dated February 20, 2014.**

- \*Please check the box that applies
- SURFACE OWNER
  - SURFACE OWNER (Road and/or Other Disturbance)
  - SURFACE OWNER (Impoundments/Pits)
  - COAL OWNER OR LESSEE
  - COAL OPERATOR
  - WATER PURVEYOR
  - OPERATOR OF ANY NATURAL GAS STORAGE FIELD

**FOR EXECUTION BY A NATURAL PERSON**

Signature: \_\_\_\_\_  
 Print Name: \_\_\_\_\_  
 Date: \_\_\_\_\_

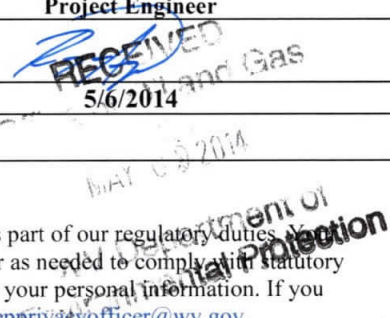
**FOR EXECUTION BY A CORPORATION, ETC.**

Company: CONSOL Mining Company LLC  
 By: Ryan Arp  
 Its: Project Engineer

Signature: \_\_\_\_\_  
 Date: 5/6/2014

**Oil and Gas Privacy Notice:**

The Office of Oil and Gas processes your personal information, such as name, address and telephone number, as 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 or your personal information, please contact DEP's Chief Privacy Officer at [depprivacyofficer@wv.gov](mailto:depprivacyofficer@wv.gov).





4705101761



**CONSOL Energy Inc.**

CNX Center  
1000 Consol Energy Drive  
Canonsburg, PA 15317

**phone:** 724.485.4483

**fax:** 724.485.4841

**e-mail:** RyanArp@consolenergy.com

**web:** www.consolenergy.com

**RYAN ARP**

*Project Engineer*

May 6, 2014

Dee Swiger  
Regulatory Analyst  
NOBLE ENERGY, INC.  
333 Technology Drive, Suite 116  
Canonsburg, PA 15317

RE: NOBLE ENERGY, INC. Proposed MND6DHS, MND6EHS, MND6FHS Wells

1762 1761 1763

Dear Ms. Swiger,

CONSOL Mining Company LLC does not object to the well drilling applications for the above referenced proposed wells. Attached are the voluntary statements of no objection forms WW-6AW. If you have any questions or require additional information, please contact me at 724-485-4483.

CONSOL Mining Company LLC also requests that NOBLE ENERGY, INC. conduct a well deviation survey from the surface through the Pittsburgh Coal Seam and promptly provide the results to CONSOL Mining Company LLC so the well location can be plotted. Please provide a notice of completion after the well is drilled.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Ryan Arp'.

Ryan Arp  
Project Engineer

WW-6AW  
(1-12)

API NO. \_\_\_\_\_  
 OPERATOR WELL NO. MND6EHS  
 Well Pad Name: MND6

**STATE OF WEST VIRGINIA**  
**DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS**  
**VOLUNTARY STATEMENT OF NO OBJECTION**

**Instructions to Persons Named on Page WW-6A**

The well operator named on page WW-6A is applying for a permit from the State of West Virginia to conduct oil or gas well work. Well work permits are valid for twenty-four (24) months. Please contact the listed well operator and the Office of Oil and Gas if you do not own any interest in the listed surface tract.

**Comment and Waiver Provisions**

Pursuant to West Virginia Code § 22-6A-11(a), all persons described in subsection (b), section ten of this article may file written comments with the secretary as to the location or construction of the applicant's proposed well work within thirty days after the application is filed with the secretary.

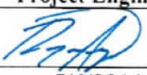
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County:	<u>Marshall</u>		Northing:	<u>482,515.802</u>
District:	<u>Franklin</u>	Public Road Access:		<u>Fish Creek</u>
Quadrangle:	<u>BUSINESSBURG</u>	Generally used farm name:		_____
Watershed:	<u>Fish Creek</u>			

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, **provided that NOBLE ENERGY, INC. drills the well on WV North NAD27 coordinates of North 482,515.802, East 1,637,114.623 in accordance with the Agreement between Consolidation Coal Company, Murray American Energy, Inc., and NOBLE ENERGY, INC. dated February 20, 2014.**

<p>*Please check the box that applies</p> <p><input type="checkbox"/> SURFACE OWNER</p> <p><input type="checkbox"/> SURFACE OWNER (Road and/or Other Disturbance)</p> <p><input type="checkbox"/> SURFACE OWNER (Impoundments/Pits)</p> <p><input checked="" type="checkbox"/> COAL OWNER OR LESSEE</p> <p><input checked="" type="checkbox"/> COAL OPERATOR</p> <p><input type="checkbox"/> WATER PURVEYOR</p> <p><input type="checkbox"/> OPERATOR OF ANY NATURAL GAS STORAGE FIELD</p>	<p><b>FOR EXECUTION BY A NATURAL PERSON</b></p> <p>Signature: _____</p> <p>Print Name: _____</p> <p>Date: _____</p>
	<p><b>FOR EXECUTION BY A CORPORATION, ETC.</b></p> <p>Company: <u>CONSOL Mining Company LLC</u></p> <p>By: <u>Ryan Arp</u></p> <p>Its: <u>Project Engineer</u></p>
	<p>Signature: </p> <p>Date: <u>5/6/2014</u></p>

**Oil and Gas Privacy Notice:**

The Office of Oil and Gas processes your personal information, such as name, address and telephone number, as 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 or your personal information, please contact DEP's Chief Privacy Officer at [depprivacyofficer@wv.gov](mailto:depprivacyofficer@wv.gov).

**Horizontal Natural Gas Well Work Permit  
Application Notice By Publication**

**Notice is hereby given:**

Pursuant to West Virginia Code § 22-6A-10(e), prior to filing an application for a permit for a horizontal well the applicant shall publish in the county in which the well is located or is proposed to be located a Class II legal advertisement.

**Paper: Moundsville Daily Echo**  
713 Lafayette Ave  
Moundsville, WV 26041-2143

**Public Notice Date: April 18, 2014 & April 25, 2014**

The following applicant intends to apply for a horizontal natural gas well work permit which disturbs three acres or more of surface excluding pipelines, gathering lines and roads or utilizes more than two hundred ten thousand gallons of water in any thirty day period.

**Applicant: Noble Energy, Inc.**  
**Address: 333 Technology Drive**  
**Canonsburg, PA 15317**

**Well Number and Location in UTM NAD83:** MND6 DHS N) 4407544.639 E) 517829.713/ MND6 EHS N) 4407543.366 E) 517825.323/ MND6 FHS N) 4407542.077 E) 517820.939

**Business Conducted:** Natural gas production.

**Location:**

State: West Virginia  
County: Marshall  
District: Franklin  
Quadrangle: Powhatan Point 7.5  
Watershed: Fish Creek HUC 10

Office of Oil and Gas

APR 29 2014

West Virginia Department of

Any interested person may submit written comments or request a copy of the proposed permit application by emailing [dep.oogcomments@wv.gov](mailto:dep.oogcomments@wv.gov), sending a letter to Permit Review, Office of Oil and Gas, 601 57<sup>th</sup> Street, SE, Charleston, WV 25304, or calling 304-926-0450. Emailed or written comments must reference the county, well number, and operator received by May 18<sup>th</sup>, 2014

Copies of the proposed permit application may be reviewed at the WV Department of Environmental Protection headquarters, located at 601 57<sup>th</sup> Street, SE, Charleston, WV 25304 (304-926-0450). Full copies or scans of the proposed permit application will cost \$15.00, whether mailed or obtained at DEP headquarters.

For information related to horizontal drilling, and all horizontal well applications filed in this state, visit:  
[www.dep.wv.gov/oil-and-gas/pages/default.aspx](http://www.dep.wv.gov/oil-and-gas/pages/default.aspx)



**LEGAL ADVERTISEMENT**

**Horizontal Natural Gas Well Work Permit**

Application Notice By Publication  
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Address: 333 Technology Drive,  
Canonsburg, PA 15317

Well Number and Location in UTM  
NAD83: MND 6 DHS N) 4407544.639  
E) 517829.713 / MND 6 EHS N)  
4407543.366 E) 517825.323 / MND 6  
FHS N) 4407542.077 E) 517820.939

Business Conducted:  
Natural Gas Production.

Location:

State: West Virginia

County: Marshall

District: Franklin

Quadrangle: Powhatan Point 7.5

Watershed: Fish Creek HUC 10

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PUBLISH: April 18, 25, 2014.

PERMIT  
Office of Oil and Gas

APR 29 2014

WV Department of  
Environmental Protection





**STATE OF WEST VIRGINIA**  
**DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS**  
**NOTICE OF APPLICATION**

**Notice Time Requirement:** notice shall be provided no later than the **filing date of permit application.**

**Date of Notice:** 4/28/14 **Date Permit Application Filed:** 4/29/14

**Notice of:**

- PERMIT FOR ANY WELL WORK
- CERTIFICATE OF APPROVAL FOR THE CONSTRUCTION OF AN IMPOUNDMENT OR PIT

**Delivery method pursuant to West Virginia Code § 22-6A-10(b)**

- PERSONAL SERVICE
- REGISTERED MAIL
- METHOD OF DELIVERY THAT REQUIRES A RECEIPT OR SIGNATURE CONFIRMATION

Pursuant to W. Va. Code § 22-6A-10(b) no later than the filing date of the application, the applicant for a permit for any well work or for a certificate of approval for the construction of an impoundment or pit as required by this article shall deliver, by personal service or by registered mail or by any method of delivery that requires a receipt or signature confirmation, copies of the application, the erosion and sediment control plan required by section seven of this article, and the well plat to each of the following persons: (1) The owners of record of the surface of the tract on which the well is or is proposed to be located; (2) The owners of record of the surface tract or tracts overlying the oil and gas leasehold being developed by the proposed well work, if the surface tract is to be used for roads or other land disturbance as described in the erosion and sediment control plan submitted pursuant to subsection (c), section seven of this article; (3) The coal owner, operator or lessee, in the event the tract of land on which the well proposed to be drilled is located [sic] is known to be underlain by one or more coal seams; (4) The owners of record of the surface tract or tracts overlying the oil and gas leasehold being developed by the proposed well work, if the surface tract is to be used for the placement, construction, enlargement, alteration, repair, removal or abandonment of any impoundment or pit as described in section nine of this article; (5) Any surface owner or water purveyor who is known to the applicant to have a water well, spring or water supply source located within one thousand five hundred feet of the center of the well pad which is used to provide water for consumption by humans or domestic animals; and (6) The operator of any natural gas storage field within which the proposed well work activity is to take place. (c)(1) If more than three tenants in common or other co-owners of interests described in subsection (b) of this section hold interests in the lands, the applicant may serve the documents required upon the person described in the records of the sheriff required to be maintained pursuant to section eight, article one, chapter eleven-a of this code. (2) Notwithstanding any provision of this article to the contrary, notice to a lien holder is not notice to a landowner, unless the lien holder is the landowner. W. Va. Code R. § 35-8-5.7.a requires, in part, that the operator shall also provide the Well Site Safety Plan ("WSSP") to the surface owner and any water purveyor or surface owner subject to notice and water testing as provided in section 15 of this rule.

Application Notice  WSSP Notice  E&S Plan Notice  Well Plat Notice is hereby provided to:

- SURFACE OWNER(s)
  - Name: Consolidation Coal Company ✓
  - Address: Jason Witt 46226 National Road
  - Saint Clairsville, OH 43950
  - Name: Kevin E. and Teresa McGilton ✓
  - Address: 1704 2nd Street
  - Moundsville, WV 26041-1534
- SURFACE OWNER(s) (Road and/or Other Disturbance)
  - Name: See attached list
  - Address: \_\_\_\_\_
  - Name: \_\_\_\_\_
  - Address: \_\_\_\_\_
- SURFACE OWNER(s) (Impoundments or Pits)
  - Name: \_\_\_\_\_
  - Address: \_\_\_\_\_

- COAL OWNER OR LESSEE
  - Name: Murray American Energy, Inc. Jason Witt ✓
  - Address: 46226 National Road
  - Saint Clairsville, OH 43950
- COAL OPERATOR
  - Name: Murray American Energy, Inc. Jason Witt ✓
  - Address: 46226 National Road
  - Saint Clairsville, OH 43950
- SURFACE OWNER OF WATER WELL AND/OR WATER PURVEYOR(s)
  - Name: See attached list
  - Address: \_\_\_\_\_
- OPERATOR OF ANY NATURAL GAS STORAGE FIELD
  - Name: Columbia Gas Transmission
  - Address: 1700 MacCorkle Ave, SE ✓
  - Charleston, WV 25314

\*Please attach additional forms if necessary

WEST VIRGINIA  
Department of Environmental Protection  
Office of Oil and Gas  
APR 29 2014

**Notice is hereby given:**

Pursuant to West Virginia Code § 22-6A-10(b), notice is hereby given that the undersigned well operator has applied for a permit for well work or for a certificate of approval for the construction of an impoundment or pit.

**This Notice Shall Include:**

Pursuant to W. Va. Code § 22-6A-10(b), this notice shall include: (1) copies of the application; (2) the erosion and sediment control plan required by section seven of this article; and (3) the well plat.

Pursuant to W. Va. Code § 22-6A-10(f), this notice shall include: (1) a statement of the time limits for filing written comments; (2) who may file written comments; (3) the name and address of the secretary for the purpose of filing the comments and obtaining additional information; and (4) a statement that the persons may request, at the time of submitting written comments, notice of the permit decision and a list of persons qualified to test water.

Pursuant to W. Va. Code R. § 35-8-5.7.a, the operator shall provide the Well Site Safety Plan to the surface owner and any water purveyor or surface owner subject to notice and water testing as provided in section 15 of this rule.

Pursuant to W. Va. Code R. § 35-8-15.2.c, this notice shall: (1) contain a statement of the surface owner's and water purveyor's right to request sampling and analysis; (2) advise the surface owner and water purveyor of the rebuttable presumption for contamination or deprivation of a fresh water source or supply; advise the surface owner and water purveyor that refusal to allow the operator to conduct a pre-drilling water well test constitutes a method to rebut the presumption of liability; (3) advise the surface owner and water purveyor of his or her independent right to sample and analyze any water supply at his or her own expense; advise the surface owner and water purveyor whether or not the operator will utilize an independent laboratory to analyze any sample; and (4) advise the surface owner and or water purveyor that he or she can obtain from the Chief a list of water testing laboratories in the subject area capable of and qualified to test water supplies in accordance with standard acceptable methods.

Additional information related to horizontal drilling may be obtained from the Secretary, at the WV Department of Environmental Protection headquarters, located at 601 57<sup>th</sup> Street, SE, Charleston, WV 25304 (304-926-0450) or by visiting [www.dep.wv.gov/oil-and-gas/pages/default.aspx](http://www.dep.wv.gov/oil-and-gas/pages/default.aspx).

**Well Location Restrictions**

Pursuant to W. Va. Code § 22-6A-12, Wells may not be drilled within two hundred fifty feet measured horizontally from any existing water well or developed spring used for human or domestic animal consumption. The center of well pads may not be located within six hundred twenty-five feet of an occupied dwelling structure, or a building two thousand five hundred square feet or larger used to house or shelter dairy cattle or poultry husbandry. This limitation is applicable to those wells, developed springs, dwellings or agricultural buildings that existed on the date a notice to the surface owner of planned entry for surveying or staking as provided in section ten of this article or a notice of intent to drill a horizontal well as provided in subsection (b), section sixteen of this article was provided, whichever occurs first, and to any dwelling under construction prior to that date. This limitation may be waived by written consent of the surface owner transmitted to the department and recorded in the real property records maintained by the clerk of the county commission for the county in which such property is located. Furthermore, the well operator may be granted a variance by the secretary from these distance restrictions upon submission of a plan which identifies the sufficient measures, facilities or practices to be employed during well site construction, drilling and operations. The variance, if granted, shall include terms and conditions the department requires to ensure the safety and protection of affected persons and property. The terms and conditions may include insurance, bonding and indemnification, as well as technical requirements. (b) No well pad may be prepared or well drilled within one hundred feet measured horizontally from any perennial stream, natural or artificial lake, pond or reservoir, or a wetland, or within three hundred feet of a naturally reproducing trout stream. No well pad may be located within one thousand feet of a surface or ground water intake of a public water supply. The distance from the public water supply as identified by the department shall be measured as follows: (1) For a surface water intake on a lake or reservoir, the distance shall be measured from the boundary of the lake or reservoir. (2) For a surface water intake on a flowing stream, the distance shall be measured from a semicircular radius extending upstream of the surface water intake. (3) For a groundwater source, the distance shall be measured from the wellhead or spring. The department may, in its discretion, waive these distance restrictions upon submission of a plan identifying sufficient measures, facilities or practices to be employed during well site construction, drilling and operations to protect the waters of the state. A waiver, if granted, shall impose any permit conditions as the secretary considers necessary. (c) Notwithstanding the foregoing provisions of this section, nothing contained in this section prevents an operator from conducting the activities permitted or authorized by a Clean Water Act Section 404 permit or other approval from the United States Army Corps of Engineers within any waters of the state or within the restricted areas referenced in this section. (d) The well location restrictions set forth in this section shall not apply to any well on a multiple well pad if at least one of the wells was permitted prior to the effective date of this article. (e) The secretary shall, by December 31, 2012, report to the Legislature on the noise, light, dust and volatile organic compounds generated by the drilling of horizontal wells as they relate to the well location restrictions regarding occupied dwelling structures pursuant to this section. Upon a finding, if any, by the secretary that the well location restrictions regarding occupied dwelling structures are inadequate or otherwise require alteration to address the items



examined in the study required by this subsection, the secretary shall have the authority to propose for promulgation legislative rules establishing guidelines and procedures regarding reasonable levels of noise, light, dust and volatile organic compounds relating to drilling horizontal wells, including reasonable means of mitigating such factors, if necessary.

**Water Well Testing:**

Pursuant to West Virginia Code § 22-6A-10(d), notification shall be made, with respect to surface landowners identified in subsection (b) or water purveyors identified in subdivision (5), subsection (b) of this section, of the opportunity for testing their water well. The operator shall provide an analysis to such surface landowner or water purveyor at their request.

**Water Testing Laboratories:**

Pursuant to West Virginia Code § 22-6A-10(i), persons entitled to notice pursuant to subsection (b) of this section may contact the department to ascertain the names and locations of water testing laboratories in the subject area capable and qualified to test water supplies in accordance with standard accepted methods. In compiling that list of names the department shall consult with the state Bureau for Public Health and local health departments. A surface owner and water purveyor has an independent right to sample and analyze any water supply at his or her own expense. The laboratory utilized by the operator shall be approved by the agency as being certified and capable of performing sample analyses in accordance with this section.

**Rebuttable Presumption for Contamination or Deprivation of a Fresh Water Source or Supply:**

W. Va. Code § 22-6A-18 requires that (b) unless rebutted by one of the defenses established in subsection (c) of this section, in any action for contamination or deprivation of a fresh water source or supply within one thousand five hundred feet of the center of the well pad for horizontal well, there is a rebuttable presumption that the drilling and the oil or gas well or either was the proximate cause of the contamination or deprivation of the fresh water source or supply. (c) In order to rebut the presumption of liability established in subsection (b) of this section, the operator must prove by a preponderance of the evidence one of the following defenses: (1) The pollution existed prior to the drilling or alteration activity as determined by a predrilling or prealteration water well test. (2) The landowner or water purveyor refused to allow the operator access to the property to conduct a predrilling or prealteration water well test. (3) The water supply is not within one thousand five hundred feet of the well. (4) The pollution occurred more than six months after completion of drilling or alteration activities. (5) The pollution occurred as the result of some cause other than the drilling or alteration activity. (d) Any operator electing to preserve its defenses under subdivision (1), subsection (c) of this section shall retain the services of an independent certified laboratory to conduct the predrilling or prealteration water well test. A copy of the results of the test shall be submitted to the department and the surface owner or water purveyor in a manner prescribed by the secretary. (e) Any operator shall replace the water supply of an owner of interest in real property who obtains all or part of that owner's supply of water for domestic, agricultural, industrial or other legitimate use from an underground or surface source with a comparable water supply where the secretary determines that the water supply has been affected by contamination, diminution or interruption proximately caused by the oil or gas operation, unless waived in writing by that owner. (f) The secretary may order the operator conducting the oil or gas operation to: (1) Provide an emergency drinking water supply within twenty-four hours; (2) Provide temporary water supply within seventy-two hours; (3) Within thirty days begin activities to establish a permanent water supply or submit a proposal to the secretary outlining the measures and timetables to be used in establishing a permanent supply. The total time in providing a permanent water supply may not exceed two years. If the operator demonstrates that providing a permanent replacement water supply cannot be completed within two years, the secretary may extend the time frame on case-by-case basis; and (4) Pay all reasonable costs incurred by the real property owner in securing a water supply. (g) A person as described in subsection (b) of this section aggrieved under the provisions of subsections (b), (e) or (f) of this section may seek relief in court... (i) Notwithstanding the denial of the operator of responsibility for the damage to the real property owner's water supply or the status of any appeal on determination of liability for the damage to the real property owner's water supply, the operator may not discontinue providing the required water service until authorized to do so by the secretary or a court of competent jurisdiction.

**Written Comment:**

Pursuant to West Virginia Code § 22-6A-11(a), all persons described in subsection (b), section ten of this article may file written comments with the secretary as to the location or construction of the applicant's proposed well work within thirty days after the application is filed with the secretary. All persons described in West Virginia Code § 22-6A-10(b) may file written comments as to the location or construction of the applicant's proposed well work to the Secretary at:

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

Such persons may request, at the time of submitting written comments, notice of the permit decision and a list of persons qualified to test water. **NOTE: YOU ARE NOT REQUIRED TO FILE ANY COMMENT.**

Oil and Gas  
2014  
Division

**Time Limits and Methods for Filing Comments.**

The law requires these materials to be served on or before the date the operator files its Application. You have **THIRTY (30) 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.

Pursuant to West Virginia Code § 22-6A-11(c)(2), Any objections of the affected coal operators and coal seam owners and lessees shall be addressed through the processes and procedures that exist under sections fifteen, seventeen and forty, article six of this chapter, as applicable and as incorporated into this article by section five of this article. The written comments filed by the parties entitled to notice under subdivisions (1), (2), (4), (5) and (6), subsection (b), section ten of this article shall be considered by the secretary in the permit issuance process, but the parties are not entitled to participate in the processes and proceedings that exist under sections fifteen, seventeen or forty, article six of this chapter, as applicable and as incorporated into this article by section five of this article.

**Comment Requirements**

Your comments must be in writing and 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.

Disclaimer: All comments received will be placed on our web site <http://www.dep.wv.gov/oil-and-gas/Horizontal-Permits/Pages/default.aspx> and the applicant will automatically be forwarded an email notice that such comments have been submitted. The applicant will be expected to provide a response to comments submitted by any surface owner, water purveyor or natural gas storage operator noticed within the application.

**Permit Denial or Condition**

The Chief has the power to deny or condition a well work permit. Pursuant to West Virginia Code § 22-6A-8(d), the permit may not be issued or be conditioned, including conditions with respect to the location of the well and access roads prior to issuance if the director determines that:

- (1) The proposed well work will constitute a hazard to the safety of persons;
- (2) The plan for soil erosion and sediment control is not adequate or effective;
- (3) Damage would occur to publicly owned lands or resources; or
- (4) The proposed well work fails to protect fresh water sources or supplies.

A permit may also be denied under West Virginia Code § 22-6A-7(k), the secretary shall deny the issuance of a permit if the secretary determines that the applicant has committed a substantial violation of a previously issued permit for a horizontal well, including the applicable erosion and sediment control plan associated with the previously issued permit, or a substantial violation of one or more of the rules promulgated under this article, and in each instance has failed to abate or seek review of the violation within the time prescribed by the secretary pursuant to the provisions of subdivisions (1) and (2), subsection (a), section five of this article and the rules promulgated hereunder, which time may not be unreasonable.

Pursuant to West Virginia Code § 22-6A-10(g), any person entitled to submit written comments to the secretary pursuant to subsection (a), section eleven of this article, shall also be entitled to receive from the secretary a copy of the permit as issued or a copy of the order modifying or denying the permit if the person requests receipt of them as a part of the written comments submitted concerning the permit application. Such persons may request, at the time of submitting written comments, notice of the permit decision and a list of persons qualified to test water.

Oil and Gas  
MND 6  
MND 6

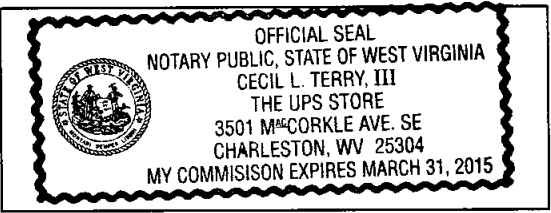
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(8-13)

API NO. 47- \_\_\_\_\_ - \_\_\_\_\_  
OPERATOR WELL NO. MND 6 EHS  
Well Pad Name: MND 6  
**4705101761**

Notice is hereby given by: Laura Adkins  
Well Operator: Noble Energy, Inc.  
Telephone: 412-841-9567  
Email: ladkins@nobleenergyinc.com

Address: 333 Technology Drive Suite 116  
Canonsburg, PA 15317  
Facsimile: 724-820-3098

**Oil and Gas Privacy Notice:**  
The Office of Oil and Gas processes your personal information, such as name, address and telephone number, as 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 or your personal information, please contact DEP's Chief Privacy Officer at [deprivacyofficer@wv.gov](mailto:deprivacyofficer@wv.gov).



Subscribed and sworn before me this 25 day of April 2014.  
[Signature] Notary Public  
My Commission Expires 3/31/2015

Office of  
Oil and Gas  
700 Capitol Building  
Martinsburg, WV 26150  
Phone: 304-251-3000  
Fax: 304-251-3001  
www.wv.gov

MND 6 HS Pad

Additional Surface Owners

Gloria Jean White ✓  
PO Box 162  
Proctor, WV 26055

Noble Energy, Inc.  
333 Technology Dr. Suite 110  
Canonsburg, PA 15317

James B. Midcap ✓  
1701 Fish Creek Rd.  
Proctor, WV 26055

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West Virginia Department of  
Environmental Protection

4705101761

MND 6 HHS Pad Water Well and Spring Owners within 1500'.

John David Fromhart  
1619 Fish Creek Rd. ✓  
Proctor, WV 26055

James B. Midcap, Et Ux  
1701 Fish Creek Rd. ✓  
Proctor, WV 26055

Gloria Jean White  
P.O. Box 162 ✓  
Proctor, WV 26055

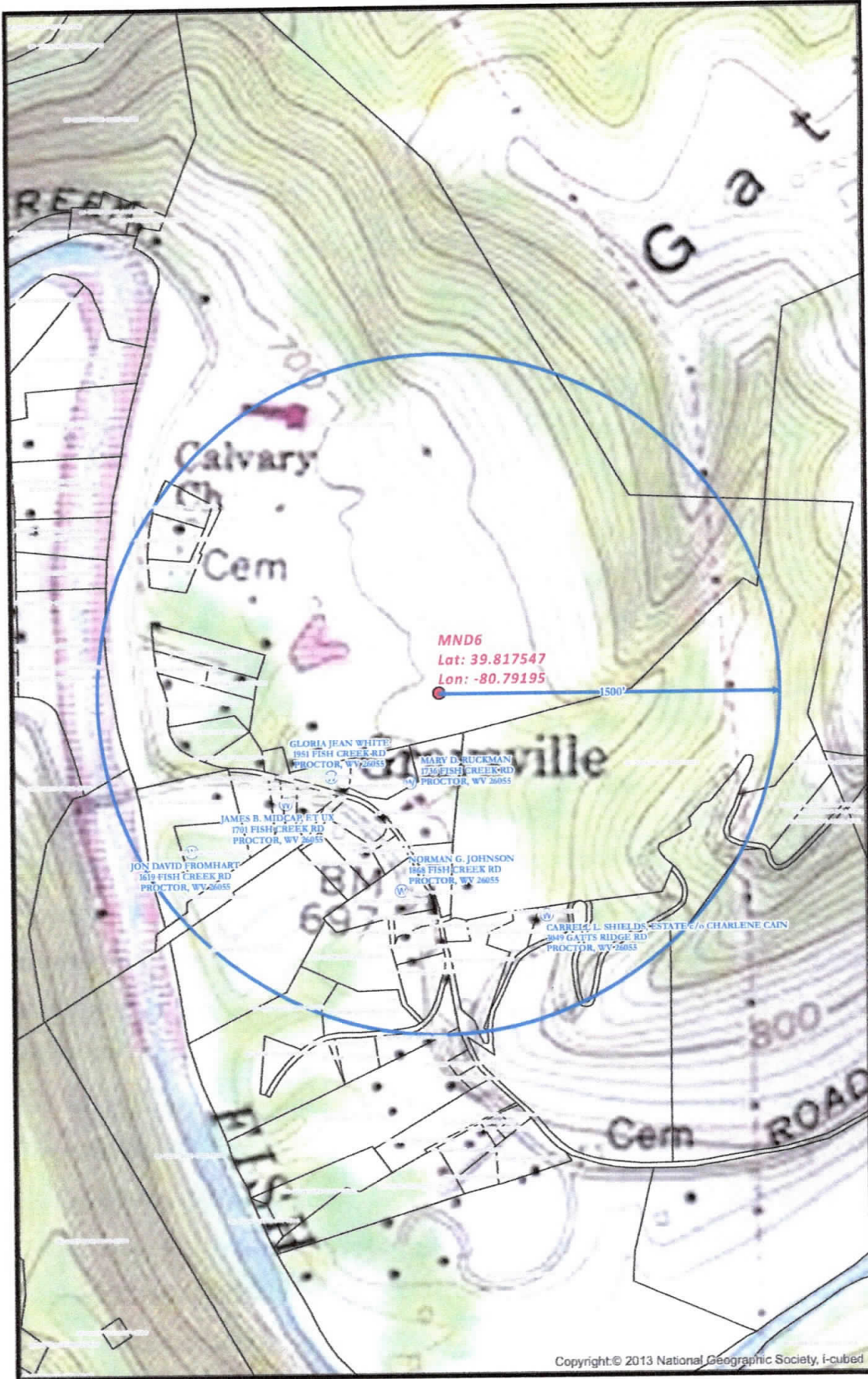
Mary D. Ruckman  
1736 Fish Creek Rd. ✓  
Proctor, WV 26055

Carrell L. Sheilds, Estate  
c/o Charlene Cain ✓  
3049 Gatts Ridge Rd.  
Proctor, WV 26055

Norman G. Johnson ✓  
1868 Fish Creek Rd.  
Proctor, WV 26055

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<p><b>MND6 SITE SAFETY PLAN</b> - WATER WELLS PROXIMITY -</p> <p>  Well Plot   Water Well Proximity   Water Well Buffer         </p>	<p>0 250 500 1,000 Feet</p> <p>Scale 1" = 500'</p> <p>Projection: NAD 1983 StatePlane West Virginia North FIPS 4761 Units: Feet US</p>	<p> noble energy</p> <p>Disclaimer: All data is licensed for use by Noble Energy Inc. use only.</p>	<p>Date: 12/13/2011</p> <p>Author: Christopher Glover</p> <p> 6</p>
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