



west virginia department of environmental protection

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

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

August 28, 2015

WELL WORK PERMIT

Horizontal 6A Well

This permit, API Well Number: 47-9502280, issued to EQT PRODUCTION COMPANY, 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: 512892
Farm Name: PETER, DONNA J.
API Well Number: 47-9502280
Permit Type: Horizontal 6A Well
Date Issued: 08/28/2015

Promoting a healthy environment.

08/28/2015

PERMIT CONDITIONS 4709502280

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

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 one hundred (100) 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 within 30 days of commencement of drilling.

WW - 6B
(4/15)

4709502280

API NO. 47 (095)
OPERATOR WELL NO. 512892
Well Pad Name: WEU4

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

1) Well Operator: EQT Production Company
Operator ID 306686 County 095 District 1 Quadrangle 671

2) Operator's Well Number: 512892 Well Pad Name WEU4

3) Farm Name/Surface Owner: Donna J. Peter Public Road Access: WV-18

4) Elevation, current ground: 1,098.0 Elevation, proposed post-construction: 1,078.0

5) Well Type: (a) Gas Oil Underground Storage
Other _____

(b) If Gas: Shallow Deep
Horizontal

6) Existing Pad? Yes or No: No

7) Proposed Target Formation(s), Depth(s), Anticipated Thicknesses and Associated Pressure(s):
Target formation is Marcellus at a depth of 6680 with the anticipated thickness to be 54 feet and anticipated target pressure of 2747 PSI

8) Proposed Total Vertical Depth: 6680

9) Formation at Total Vertical Depth: Marcellus

10) Proposed Total Measured Depth: 11068

11) Proposed Horizontal Leg Length: 3,790

12) Approximate Fresh Water Strata Depths: 139, 182, 193, 211

13) Method to Determine Fresh Water Depth: By offset wells

14) Approximate Saltwater Depths: 1135, 1226, 1229

15) Approximate Coal Seam Depths: 239, 292, 707

16) Approximate Depth to Possible Void (coal mine, karst, other): None reported

17) Does proposed well location contain coal seams directly overlying or adjacent to an active mine? Yes _____ No x

(a) If Yes, provide Mine Info: Name: _____

Depth: _____

Seam: _____

Owner: _____

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(4/15)

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API NO. 47 (095)
 OPERATOR WELL NO. 512892
 Well Pad Name: WEU4

CASING AND TUBING PROGRAM

18)

TYPE	Size (in)	New or Used	Grade	Weight per ft. (lb/ft)	FOOTAGE: For Drilling (ft)	INTERVALS: Left in Well (ft)	CEMENT: Fill-up (Cu. Ft.)
Conductor	20	New	MC-50	81	40	40	38 C.T.S.
Fresh Water	13 3/8	New	MC-50	54.5	361	361	336 C.T.S.
Coal	-	-	-	-	-	-	-
Intermediate	9 5/8	New	A-500	40	3,024	3,024	1,202 C.T.S.
Production	5 1/2	New	P-110	20	11,068	11,068	See Note 1
Tubing	2 3/8		J-55	4.6			
Liners							Minimize run in well set 110 lbs/hr 40

MAG
7/28/15

TYPE	Size (in)	Wellbore Diameter (in)	Wall Thickness (in)	Burst Pressure (psi)	Anticipated Max. Internal Pressure (psi)	Cement Type	Cement Yield (cu. ft./k)
Conductor	20	24	0.375	-	18	Construction	1.18
Fresh Water	13 3/8	17 1/2	0.38	2,730	2184	* See Note 2	1.21
Coal							
Intermediate	9 5/8	12 3/8	0.395	3,950	3160	* See Note 2	1.21
Production	5 1/2	8 1/2	0.361	12,640	10112	-	1.27/1.86
Tubing							
Liners							

Packers

Kind:	N/A			
Sizes:	N/A			
Depths Set:	N/A			

Note 1: EQT plans to bring the TOC on the production casing cement job 1,000' above kick off point, which is at least 500' above the shallowest production zone, to avoid communication.

Note 2: Reference Variance 2014-17. (Attached)

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WW - 6B
(10/14)

4709502280

API NO. 47 - 095
OPERATOR WELL NO. 512892
Well Pad Name: WEU4

MDC
7/28/15

19) Describe proposed well work, including the drilling and plugging back of any pilot hole:

Drill and complete a new horizontal well in the Marcellus formation. The vertical drill to go down to an approximate depth of 4895'
Then kick off the horizontal leg into the Marcellus using a slick water frac.

20) Describe fracturing/stimulating methods in detail, including anticipated max pressure and max rate:

Hydraulic fracturing is completed in accordance with state regulations using water recycled from previously fractured wells and obtained from freshwater sources. This water is mixed with sand and a small percentage (less than 0.3%) of chemicals (including 15% Hydrochloric acid, gelling agent, gel breaker, friction reducer, biocide, and scale inhibitor), referred to in the industry as a "slickwater" completion. Maximum anticipated internal casing pressures is expected to average approximately 8500 psi, maximum anticipated treating rates are expected to average approximately 100 bpm. Stage lengths vary from 150 to 300 feet. Average approximately 200,000 barrels of water per stage. Sand sizes vary from 100 mesh to 20/40 mesh. Average approximately 200,000 pounds of sand per stage.

21) Total area to be disturbed, including roads, stockpile area, pits, etc, (acres):

19.18

22) Area to be disturbed for well pad only, less access road (acres):

13.17

23) Describe centralizer placement for each casing string.

- Surface: Bow spring centralizers - One at the shoe and one spaced every 500'.
- Intermediate: Bow spring centralizers - One cent at the shoe and one spaced every 500'.
- Production: One spaced every 1000' from KOP to Int csg shoe

24) Describe all cement additives associated with each cement type.

Surface (Type 1 Cement): 0-3% Calcium Chloride

Used to speed the setting of cement slurries.

0.4% flake. Loss Circulation Material (LCM) is used to combat the loss of the cement slurry to a thief zone.

Intermediate (Type 1 Cement): 0-3% Calcium Chloride. Salt is used in shallow, low temperature formations to speed the setting of cement slurries. 0.4% flake. Loss Circulation Material (LCM) is used to combat the loss of whole drilling fluid or cement slurry (not filtrate) to a thief zone.

Production:

Lead (Type 1 Cement): 0.2-0.7% Lignosulfonate (Retarder). Lengthens thickening time.

0.3% CFR (dispersant). Makes cement easier to mix.

Tail (Type H Cement): 0.25-0.40% Lignosulfonate (Retarder). Lengthens thickening time.

0.2-0.3% CFR (dispersant). This is to make the cement easier to mix.

60 % Calcium Carbonate. Acid solubility.

0.4-0.6% Halad (fluid loss). Reduces amount of water lost to formation.

25) Proposed borehole conditioning procedures. Surface: Circulate hole clean (Approximately 30-45 minutes) rotating & reciprocating

one full joint until cuttings diminish at surface. When cuttings returning to surface diminish, continue to circulate an additional 5

minutes. To ensure that there is no fill, short trip two stands with no circulation. If there is fill, bring compressors back on

and circulate hole clean. A constant rate of higher than expected cuttings volume likely indicates washouts that will not clean up.

Intermediate: Circulate hole clean (Approximately 30-45 minutes) rotating & reciprocating one full joint until cuttings diminish at

surface. When cuttings returning to surface diminish, continue to circulate an additional 5 minutes. If foam drilling, to enhance

hole cleaning use a soap sweep or increase injection rate & foam concentration.

Production: Pump marker sweep with nut plug to determine actual hole washout. Calculate a gauge holes bottoms up volume.

Perform a cleanup cycle by pumping 3-5 bottoms up or until the shakers are clean. Check volume of cuttings coming across
the shakers every 15 minutes.

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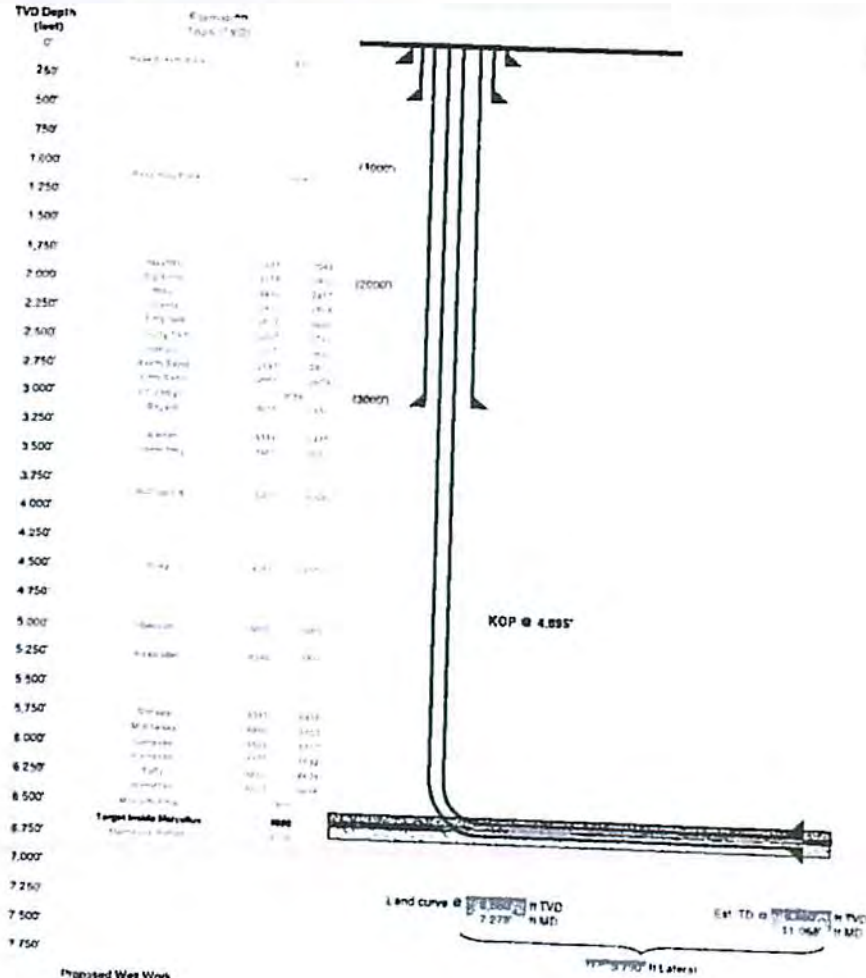
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*Note: Attach additional sheets as needed.

4709502280

Well # 512892 (WEU4H3)
 EOT Production
 West Union
 Tyler West Virginia

Actual Vertical Section 3713



Flow Size	Tube	Casing	Size	WT (ppm/Grade)
				614M T-50
				54 54-255
				40MA 500

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Promised Well Work
 Drill and complete a new horizontal well in the formation.
 The vertical drift to go down to an approximate depth of 4895'.
 Then kick off the horizontal leg into the using a slick water frac.

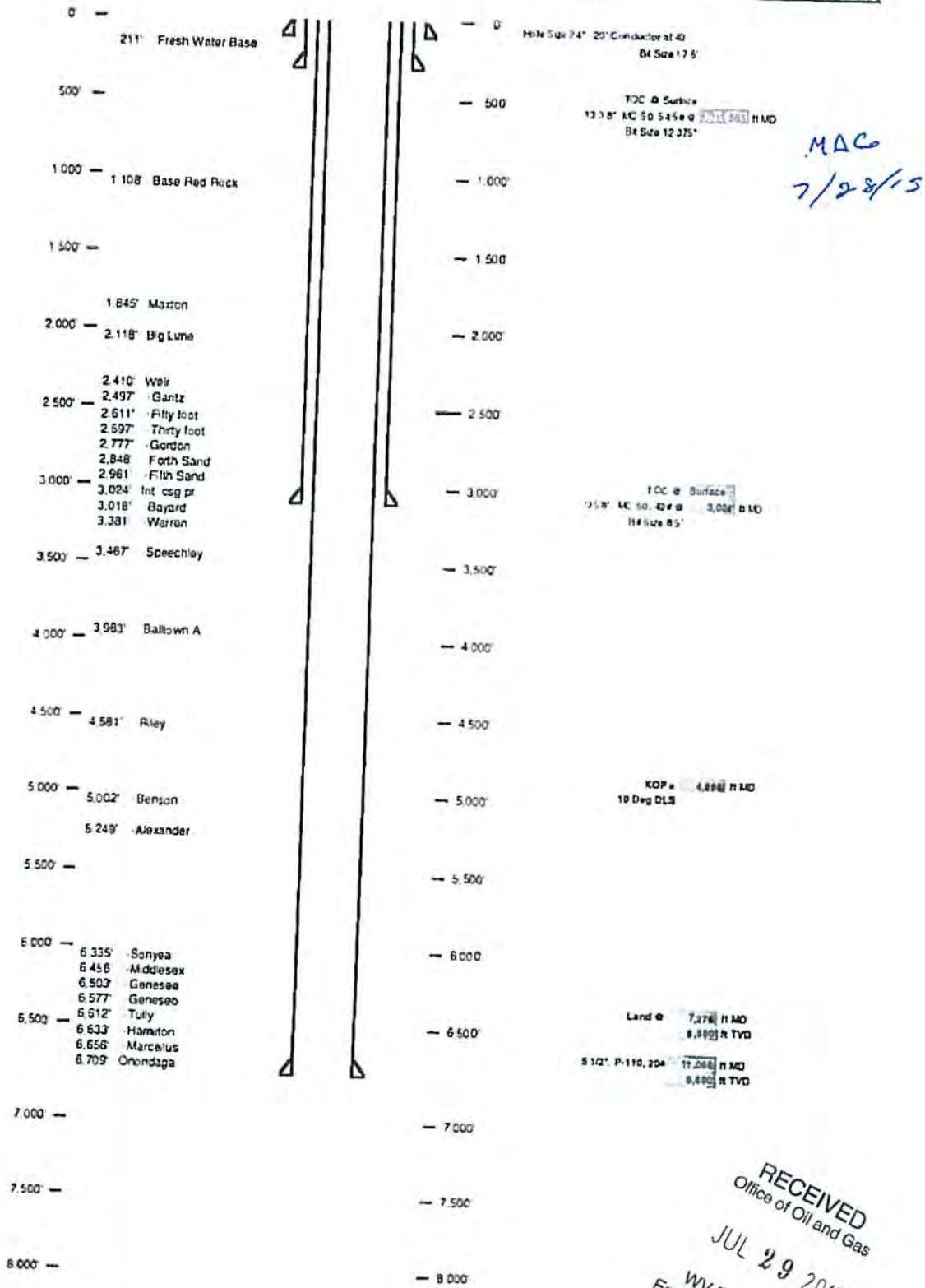
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Well Schematic
EOT Production

Well Name: 512892(WEU4H3)
County: Tyler
State: West Virginia

Elevation KB:
Target:
Prospect:
Azimuth:
Vertical Section:

1000	2
Marcellus	3
335	
3752	



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Earl Ray Tomblin, Governor
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March 18, 2014

Nabors Completion & Production Services Company
1380 Route 286 Hwy E #121
Indiana PA 15701

4709502280

Re: Cement Variance Request

Dear Sir or Madam,

This agency is approving a variance request for the cement blend listed below to be used on surface and coal protection strings for the drilling of oil and gas wells in the state of West Virginia. The variance cannot be used without requesting its use on a permit application and approval by this agency:

- Type 1 (2% Calcium Chloride-Accelerator, 0.25% Super Flake-Lost Circulation, 5.2% Water, 94% Type "1" Cement)

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

Sincerely,

James Peterson
Environmental Resources Specialist / Permitting

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08/28/2015



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Earl Ray Tomblin, Governor
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**BEFORE THE OFFICE OF OIL AND GAS
DEPARTMENT OF ENVIRONMENTAL PROTECTION
STATE OF WEST VIRGINIA**

**IN THE MATTER OF A VARIANCE FROM)
REGULATION 35 CSR § 4-11.4/11.5/14.1)
AND 35 CSR § 8-9.2.h. 4/5/6/8 OF THE)
THE OPERATIONAL)
REGULATIONS OF CEMENTING OIL)
AND GAS WELLS)**

ORDER NO. 2014 - 17

4709502280

REPORT OF THE OFFICE

Nabors Completion & Production Services Co. requests approval of a different cement blend for use in cementing surface and coal protection casing of oil and gas wells.

FINDINGS OF FACT

1.) Nabors Completion & Production Services Co. proposes the following cement blend:

- 2% Calcium Chloride (Accelerator)
- 0.25 % Super Flake (Lost Circulation)
- 94% Type "1" Cement
- 5.20 % Water

2.) Laboratory testing results indicate that the blend listed in Fact No.1 will achieve a 500 psi compressive strength within 6 hours and a 2,435 psi compressive strength within 24 hours.

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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 Nabors Completion & Production Services Co. 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. Nabors Completion & Production Services Co. 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 18th day of March, 2014.

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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08/28/2015



May 12, 2015

Mr. Gene Smith
West Virginia Department of Environmental Protection
Office of Oil and Gas
601 57th Street SE
Charleston, WV 25304

4709502200

Re: Casing change on WEU4 (512890, 512891, 512893, 512894, 512895)

Dear Mr. Smith,

EQT is requesting the 13 3/8" surface casing to be set at 361' KB, 150' below the deepest fresh water. We will set the 9-5/8" intermediate string at 3024' KB, 50' below the base of the Fifth Sand.

If you have any questions, please do not hesitate to contact me at (304) 848-0076.

Sincerely,

Vicki Roark
Permitting Supervisor-WV

Enc.

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WW-9
(2/15)

Page 1 of 2
API No. 47 - 095 - 02280
Operator's Well No. 512892

STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
OFFICE OF OIL AND GAS
Fluids/Cuttings Disposal & Reclamation Plan

Operator Name EQT Production Company OP Code 306686
Watershed (HUC10) Tributary of Camp Mistake Run Quadrangle West Union 7.5'
Do you anticipate using more than 5,000 bbls of water to complete the proposed well work? Yes x No

Will a pit be used? Yes: X No:
If so please describe anticipated pit waste: flowback water & residual solids
Will a synthetic liner be used in the pit? Yes X No If so, what ml.? 60

Proposed Disposal Method For Treated Pit Wastes:
 Land Application
 • Underground Injection (UIC Permit Number 0014, 8462, 4037)
 • Reuse (at API Number Various)
 • Off Site Disposal (Supply form WW-9 for disposal location)
 Other (Explain)

Will closed loop system be used? Yes. The closed loop system will remove drill cuttings from the drilling fluid. The drill cuttings are then prepared for transportation to an off-site disposal facility.

Drilling medium anticipated for this well (vertical and horizontal)? Air, freshwater, oil based, etc.
Air is used to drill the top hole sections of the wellbore (surface, intermediate, and pilot). Water based mud may be necessary depending on hole conditions to stabilize and drill the intermediate sections. The pilot hole, curve, and lateral sections will be drilled with either air, water based mud, or oil based mud.

- If oil based, what type? Synthetic, petroleum, etc Synthetic mud
Additives to be used in drilling medium? Air - biodegradable oil lubricant, detergent, defoaming, water. Water based mud - Barite, viscosifier, alkalinity control, lime, filtration control, defloculates, biodegradable oil lubricant, defoaming, walnut shell, salt, x-cide, carbonates.
Oil based mud - synthetic base oil, emulsifier, salt, lime, viscosifier, alkalinity control, filtration control, defloculates.
biodegradable oil lubricant, defoaming, carbonates.

Drill cuttings disposal method? Leave in pit, landfill, removed offsite, etc. Landfill
- If left in pit and plan to solidify what medium will be used? (Cement, Lime, sawdust) n/a
- Landfill or offsite name/permit number? See Attached List

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

I certify that I understand and agree to the terms and conditions of the GENERAL WATER POLLUTION PERMIT issued on August 1, 2005, by the Office of Oil and Gas of the West Virginia Department of Environmental Protection. I understand that the provisions of the permit are enforceable by law. Violations of any term or condition of the general permit and/or other applicable law or regulation can lead to enforcement action.

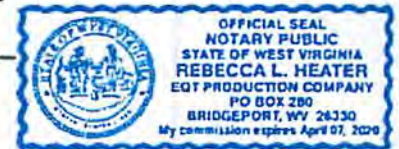
I certify under penalty of law that I have personally examined and am familiar with the information submitted on this application form and all attachments thereto and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment.

Company Official Signature [Signature]
Company Official (Typed Name) Victoria J. Reark
Company Official Title Permitting Supervisor

Subscribed and sworn before me this 29th day of July, 20 15
Rebecca L. Heater Notary Public

My commission expires 4-7-20

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Form WW-9

Operator's Well No. 512892

Proposed Revegetation Treatment: Acres Disturbed 19.18 Prevegetation pH 6.3

Lime 3 Tons/acre or to correct to pH 6.5

Fertilize type Granular 10-20-20

Fertilizer Amount 13 lbs/acre (500 lbs minimum)

Mulch 2 Tons/acre

Seed Mixtures

Temporary		Permanent	
Seed Type	lbs/acre	Seed Type	lbs/acre
KY-31	40	Orchard Grass	15
Alsike Clover	5	Alsike Clover	5
Annual Rye	15		

Attach:

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

Photocopied section of involved 7.5' topographic sheet.

Plan Approved by: Michael Duff

Comments: Re-seed & Mulch any disturbed areas per WV DEP regulations. Maintain & Upgrade FWS as necessary.

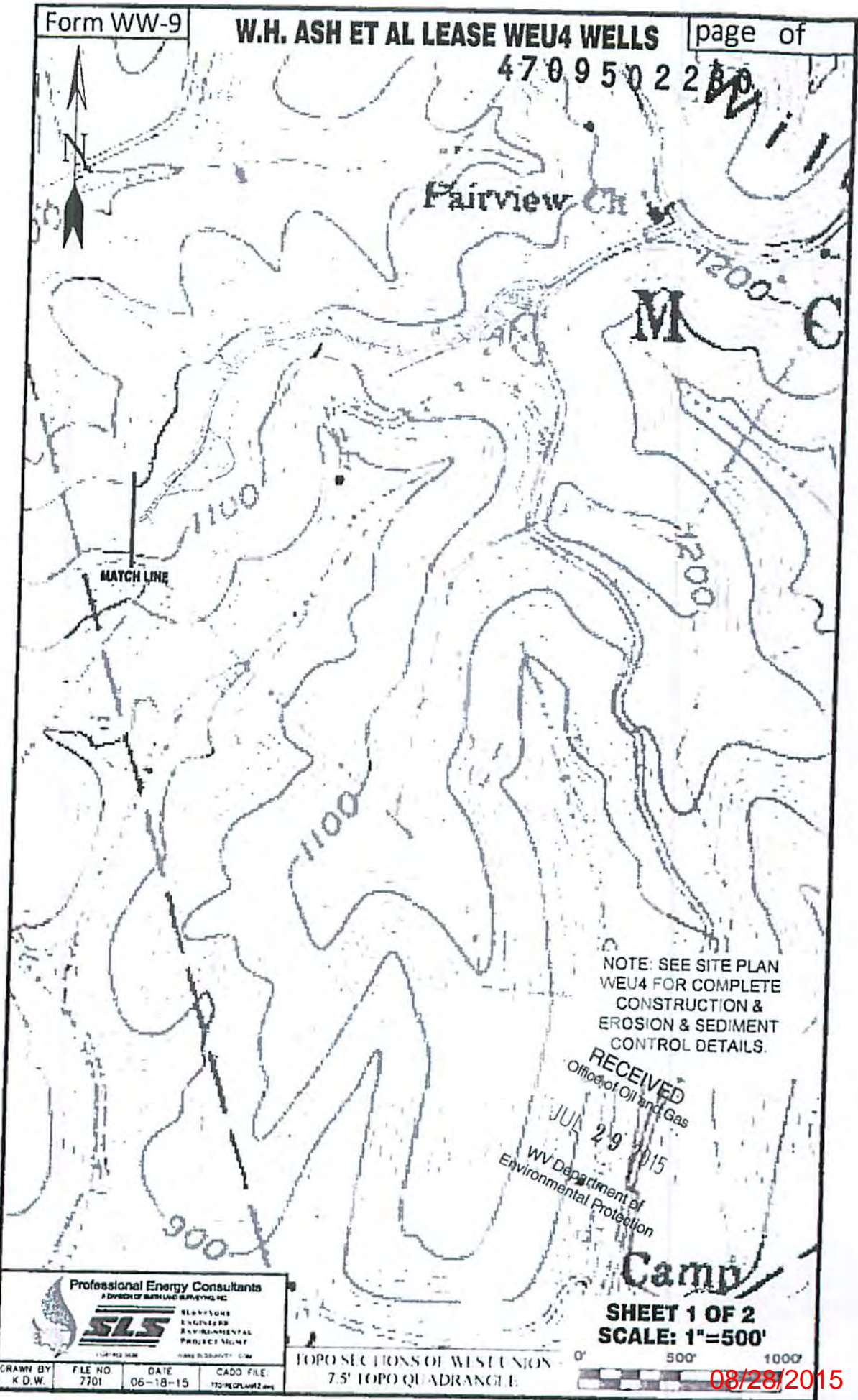
Title: Oil & Gas Inspector Date: 7/28/15

Field Reviewed? () Yes () No

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NOTE: SEE SITE PLAN WEU4 FOR COMPLETE CONSTRUCTION & EROSION & SEDIMENT CONTROL DETAILS.

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Camp

SHEET 1 OF 2
SCALE: 1"=500'



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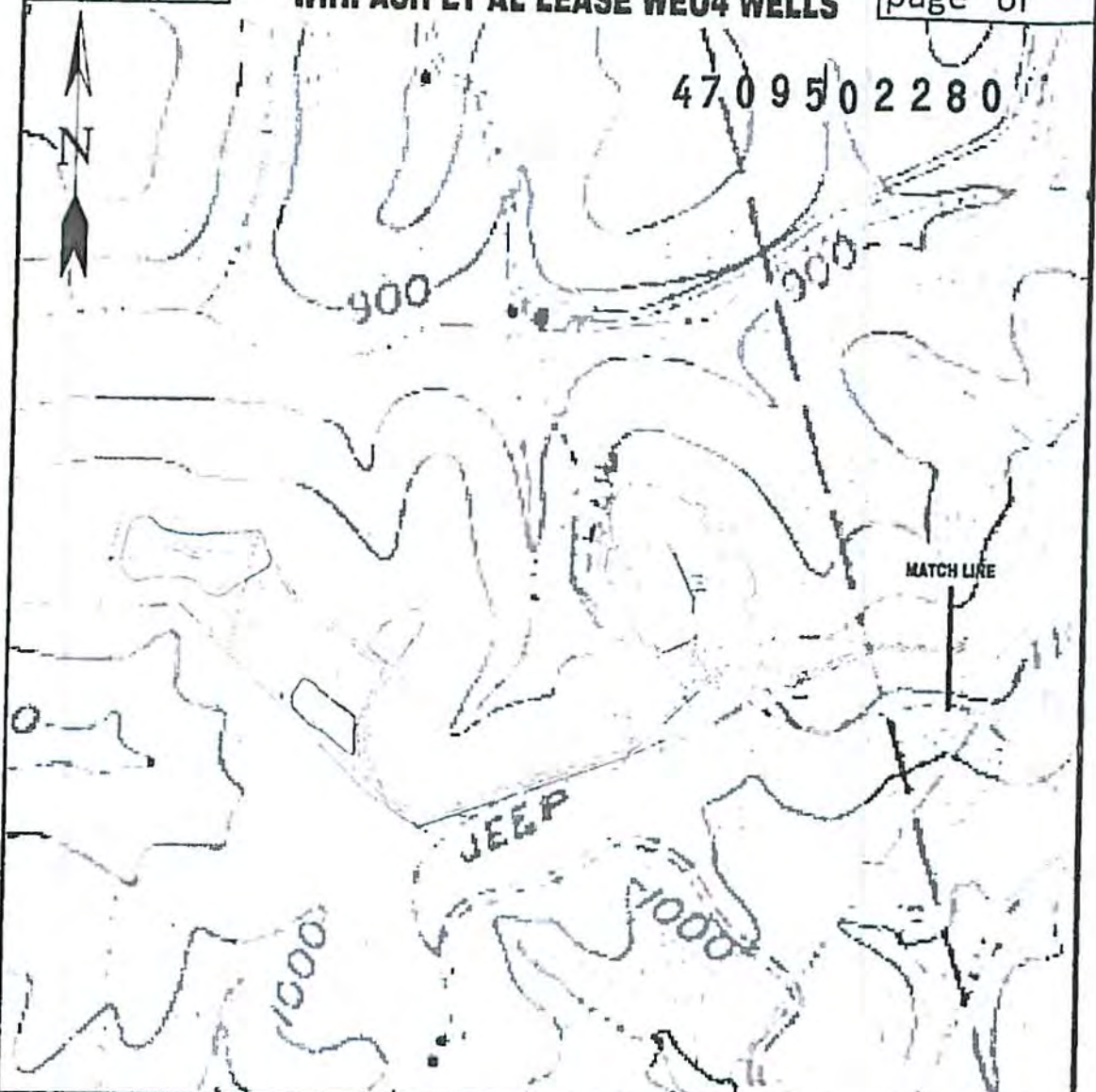
Professional Energy Consultants
A DIVISION OF BATH AND SURVEYING, INC.

SLAYTON ENGINEERS ENVIRONMENTAL PROJECT MGMT

DRAWN BY K.D.W.	FILE NO 7701	DATE 06-18-15	CADD FILE: 155-REG-PLAN-2.dwg
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TOPO SECTIONS OF WEST UNION
7.5' TOPO QUADRANGLE

4709502280



Detail Sketch for Proposed WEU4 Wells



NOTE: SEE SITE PLAN WEU4 FOR COMPLETE CONSTRUCTION & EROSION & SEDIMENT CONTROL DETAILS.

NOTE: SEE SITE PLAN WEU4 FOR COMPLETE CONSTRUCTION & EROSION & SEDIMENT CONTROL DETAILS.

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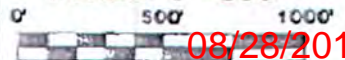
Professional Energy Consultants
A DIVISION OF S&W SURVEYING, INC.

31 W. MAIN ST.
SHERWOOD, WV 26049
TEL: 304-843-1111
FAX: 304-843-1112
WWW.S&WSURV.COM

DRAWN BY K.D.W.	FILE NO 7701	DATE 06-18-15	CADD FILE P12.PLOTAREA.dwg
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TOPO SECTIONS OF WEST UNION
7.5' TOPO QUADRANGLE

SHEET 2 OF 2
SCALE: 1"=500'



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EQT Production Water plan
Offsite disposals for Marcellus wells

CWS TRUCKING INC.

P.O. Box 391
Williamstown, WV 26187
740-516-3586
Noble County/Noble Township
Permit # 3390

LAD LIQUID ASSETS DISPOSAL INC.

226 Rankin Road
Washington, PA 15301
724-350-2760
724-222-6080
724-229-7034 fax
Ohio County/Wheeling
Permit # USEPA WV 0014

TRI COUNTY WASTE WATER MANAGEMENT, INC.

1487 Toms Run Road
Holbrook, PA 15341
724-627-7178 Plant
724-499-5647 Office
Greene County/Waynesburg
Permit # TC-1009

Waste Management - Meadowfill Landfill

Rt. 2, Box 68 Dawson Drive
Bridgeport, WV 26330
304-326-6027
Permit #SWF-1032-98
Approval #100785WV

Waste Management - Northwestern Landfill

512 E. Dry Road
Parkersburg, WV 26104
304-428-0602
Permit #SWF-1025 WV-0109400
Approval #100833WV

BROAD STREET ENERGY LLC

37 West Broad Street
Suite 100
Columbus, Ohio 43215
740-516-5381
Washington County/Belpre Twp.
Permit # 8462

TRIAD ENERGY

P.O. Box 430
Reno, OH 45773
740-516-6021 Well
740-374-2940 Reno Office Jennifer
Nobel County/Jackson Township
Permit # 4037

KING EXCAVATING CO.

Advanced Waste Services
101 River Park Drive
New Castle, Pa. 16101
Facility Permit# PAR000029132

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Where energy meets innovation.™

Site Specific Safety Plan

EQT WEU 4 Pad

Alma
Tyler County, WV

512892

For Wells:

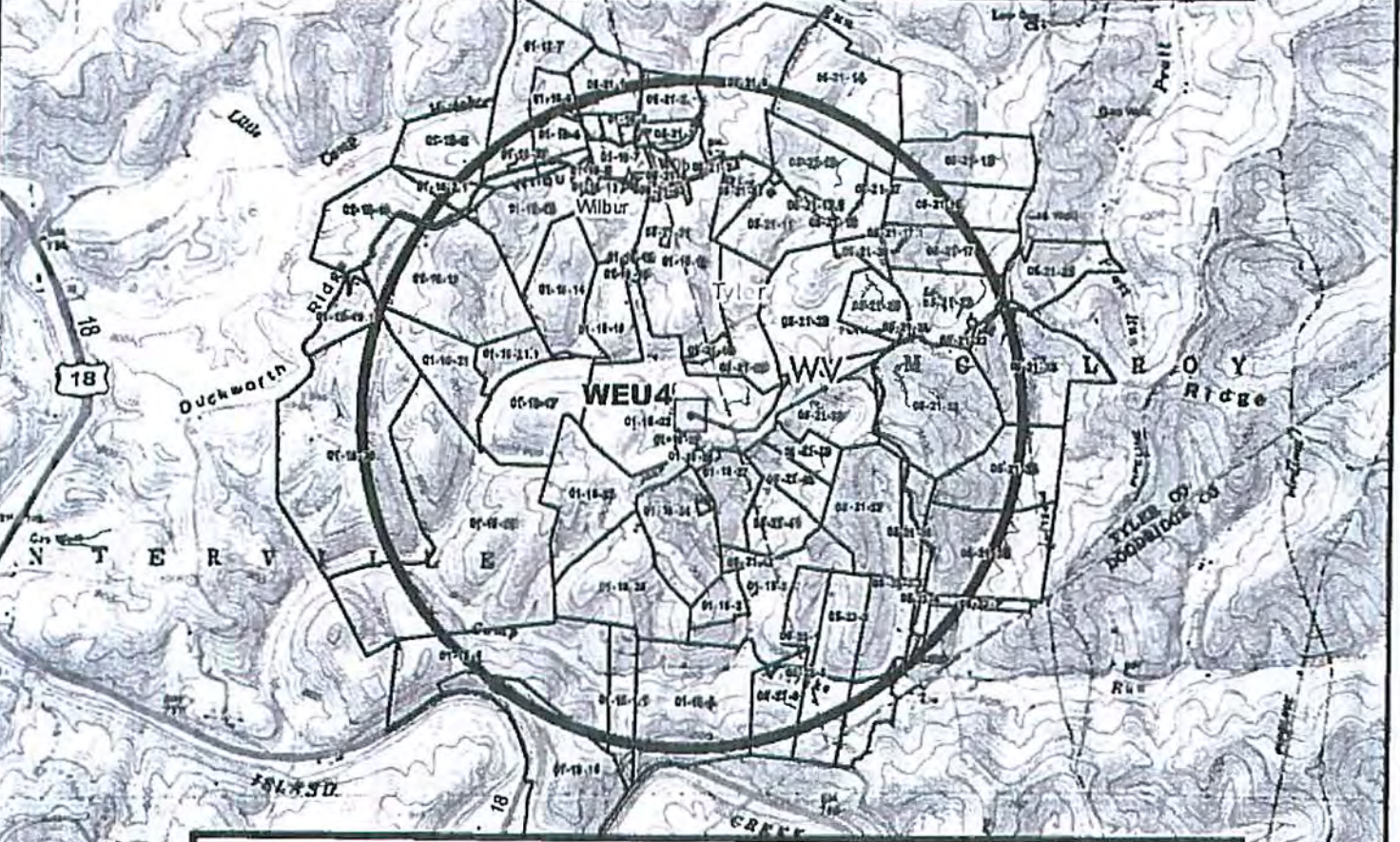
[Signature]
 EQT Production
 Permitting Supervisor
 Title
 Date 6-23-15

Date Prepared:

May 6, 2015

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 Office of Oil and Gas
[Signature]
 WV Oil and Gas Inspector
 WV Department of
 Environmental Protection
 Title
 Date 7/22/15

08/28/2015



Legend

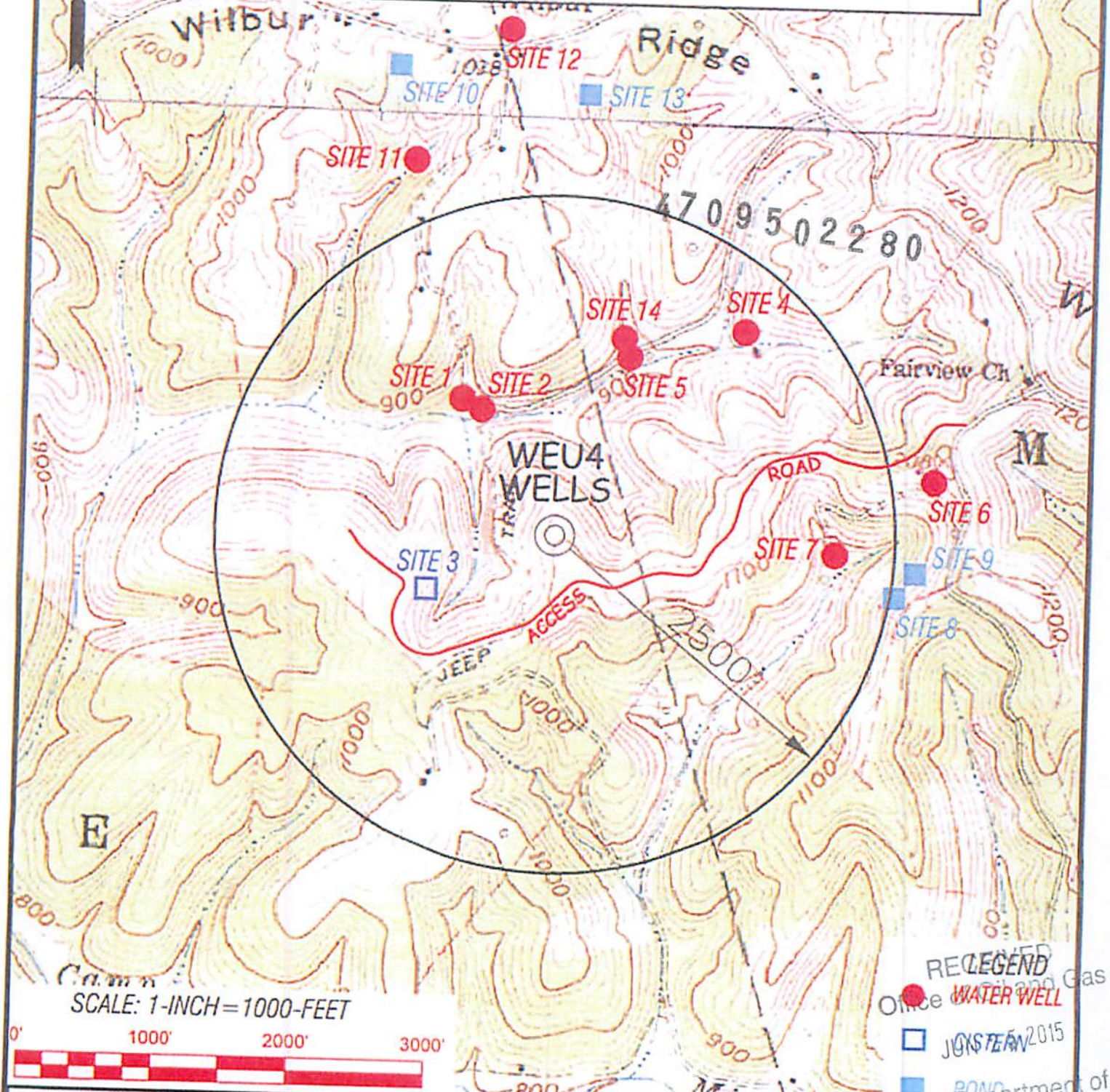
	Horizontal PUD Locations		Access Routes		Railroads		College		Law Enforcement
	Safety Buffer		Highways		Counties		Fire Department		Church
	LANDMARKS		Interstates		Hospital		School		
	Access Route		Major Roads		Streets				

EQT
 Site Safety Plan
 WEU4
 One Mile Safety Buffer
 Tyler County, WV

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WATER SOURCE LOCATIONS FOR W.H. ASH ET AL LEASE WEU4 WELLS



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PROJECT MGMT.

DRAWN BY: K.D.W.
FILE NO.: 7701
DATE: 05/27/15
CADD FILE: 7701WMEU4.dwg

TOPO SECTION OF:
WEST UNION, WV 7.5' QUAD

DISTRICT	COUNTY	TAX MAP-PARCEL NO.
CENTERVILLE	TYLER	16-22

OPERATOR:
EQT PRODUCTION COMPANY
115 PROFESSIONAL PLACE
P.O. BOX 280
BRIDGEPORT, WV 26032

08/28/2015

NOTES ON SURVEY

1. NO WATER WELLS WERE FOUND WITHIN 250' OF PROPOSED GAS WELL. NO AGRICULTURAL BUILDINGS ≥ 2500 SQ. FT. OR DWELLINGS WERE FOUND WITHIN 625' OF THE CENTER OF PROPOSED WELL PAD.

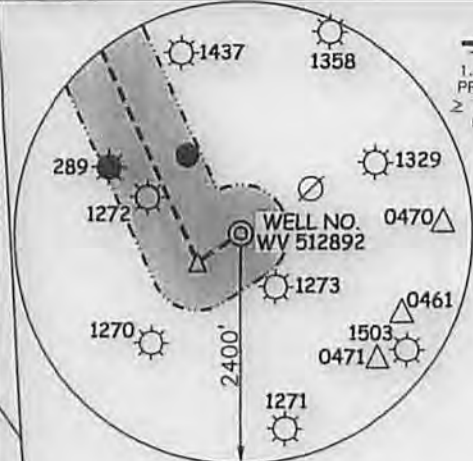
**EQT PRODUCTION COMPANY
W.H. ASH ET AL LEASE
152 ACRES±
WELL NO. WV 512892**

(S.P.C. NORTH ZONE) (UTM(M) ZONE 17 NORTH)
 NAD'27 S.P.C.(FT) N. 318,336.31 E. 1,626,585.85
 NAD'27 GEO. LAT.-(N) 39.366485 LONG.-(W) 80.820801
 NAD'83 UTM (M) N. 4,357,471.45 E. 515,451.62

LANDING POINT
 NAD'27 S.P.C.(FT) N. 318,046.31 E. 1,626,140.19
 NAD'27 GEO. LAT.-(N) 39.365671 LONG.-(W) 80.822361
 NAD'83 UTM (M) N. 4,357,380.83 E. 515,317.39

BOTTOM HOLE
 NAD'27 S.P.C.(FT) N. 321,480.77 E. 1,624,538.68
 NAD'27 GEO. LAT.-(N) 39.375034 LONG.-(W) 80.828205
 NAD'83 UTM (M) N. 4,358,419.00 E. 514,812.03

NAD'27 GRID NORTH



LEGEND

LEASE LINE	---
SURFACE LINE	----
WELL LATERAL	- - - -
OFFSET LINE	----
TIE LINE	----
CREEK	~~~~~
ROAD	====
FENCE LINE	----
COUNTY ROUTE	----
PROPOSED WELL	⊙
EXISTING WELL	⊙
PERMITTED WELL	⊙
ABANDONED WELL	⊙
PLUGGED WELL	⊙
STORAGE WELL	⊙
CENTERVILLE DISTRICT TAX MAP-PARCEL	C-00-00
McELROY DISTRICT TAX MAP-PARCEL	M-00-00

CORNER TIES BEARING & DISTANCE

11	N 66°30' E	1378.26'
12	S 34°20' E	646.40'

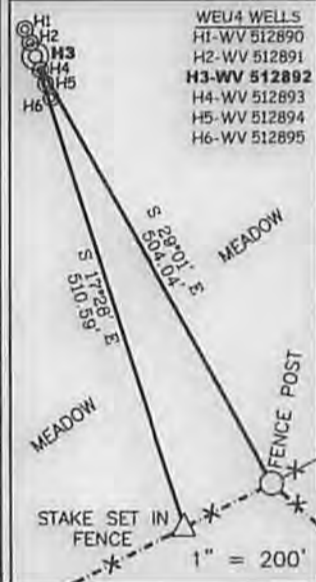
LATERAL PATH BEARING & DISTANCE

13	S 56°56' W	531.54'
14	N 25°00' W	3789.50'

A	BRADLEY D. DAVIS	2.73 AC ±
B	WILLIAM DOLL ET AL	0.50 AC ±
C	WILLIAM DOLL ET AL	0.49 AC ±
D	WILLIAM DOLL	1 AC ±
E	FRIEDERIKE DOHRMANN	7.087 AC ±
F	WILBUR COMMUNITY CLUB	0.95 AC ±
G	JOHN STARKEY	7.888 AC ±
H	CHRIS A. BAUM ET AL	0.84 AC ±
I	TERREY G. WEEKLEY	1.182 AC ±
J	RUTH G. & OLINT. DOLL	1 AC ±
K	GARY PROSSER	0.50 AC ±
L	GARY & BARBARA PROSSER	2.50 AC ±
M	HOWARD SHRIVER ET AL	24.84 AC ±
N	CONRAD COSTILOW	46.17 AC ±
O	RICHARD & YVONNE METCALF	0.61 AC ±
P	JOHN & SANDRA ANDERS	0.09 AC ±
Q	ELIZABETH ABRUZZINO	109.94 AC ±
R	L.B. & SANDRA STONEKING	42.86 AC ±
S	PERRY J. HAUGHT	16.21 AC ±
T	BILLY J. DOLL	0.58 AC ±
U	KATHEEEN WINKELMANN	0.88 AC ±
V	CHRIS A. BAUM	13 AC ±
W	CHRIS A. BAUM	14 AC ±
X	WILBUR CEMETERY	2 AC ±
Y	WILBUR CHAPEL	0.84 AC ±
Z	WILBUR CEMETERY COMMUNITY INC.	0.197 AC ±

ROYALTY OWNERS

FANCY M. MERCER ET AL	25 AC ±	LEASE NO. 126143
ROSA B. CRESS ET AL	47 AC ±	LEASE NO. 126144



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(904) 481-9434 WWW.SLSURV.COM



I THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAT IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AND SHOWS ALL THE INFORMATION REQUIRED BY LAW AND THE REGULATIONS ISSUED AND PRESCRIBED BY THE DIVISION OF ENVIRONMENTAL PROTECTION.

P.S. *C. Victor Moyers*
849

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS.
 DATE SEPTEMBER 03, 20 14
 REVISED 06/04/15 & 06/18/15
 OPERATORS WELL NO. WV 512892
 API WELL NO. 47 - 095 - 02280 H6A
 STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1 / 2500 FILE NO. 7701P512892R2
 HORIZONTAL & VERTICAL CONTROL DETERMINED BY DGPS (SURVEY GRADE TIE TO CORS NETWORK) SCALE 1" = 2000'

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

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

LOCATION:
 ELEVATION 1,098'(GROUND)1,078'(PROPOSED) WATERSHED TRIBUTARY OF CAMP MISTAKE RUN
 DISTRICT CENTERVILLE COUNTY TYLER QUADRANGLE WEST UNION 7.5'
 SURFACE OWNER DONNA J. PETER ACREAGE 113.40±
 ROYALTY OWNER WACO OIL & GAS CO. INC. ET AL ACREAGE 152±
 PROPOSED WORK:
 DRILL CONVERT DRILL DEEPER REDRILL FRACTURE OR STIMULATE PLUG OFF OLD FORMATION
 PERFORATE NEW FORMATION PLUG AND ABANDON CLEAN OUT AND REPLUG OTHER
 PHYSICAL CHANGE IN WELL (SPECIFY) _____ TARGET FORMATION MARCELLUS
 ESTIMATED DEPTH TVD 6,696'

WELL OPERATOR EQT PRODUCTION COMPANY DESIGNATED AGENT REX C. RAY
 ADDRESS 115 PROFESSIONAL PLACE P.O. BOX 280 BRIDGEPORT, WV 26330 ADDRESS 115 PROFESSIONAL PLACE P.O. BOX 280 BRIDGEPORT, WV 26330

08/28/2015

COUNTY NAME PERMIT

**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
<u>128129</u>			Min 1/8 pd	
	William A. Ash, et al	Equitable Gas Company		DB191/321
	Equitable Gas Company	Equitrans, Inc.		DB274/471
	Equitrans, Inc.	Equitable Production Company		DB396/640
	Equitable Production Company	EQT Production Company		DB281/346 Doddridge Co.
<u>128143</u>			Min 1/8 pd	
	Fanny Davis, et al	Equitable Gas Company		DB191/519
	Equitable Gas Company	Equitrans, Inc.		DB274/471
	Equitrans, Inc.	Equitable Production Company		DB396/640
	Equitable Production Company	EQT Production Company		DB281/346 Doddridge Co.
<u>128144</u>			Min 1/8 pd	
	Fanny Davis, et al	EQT Production Company		DB191/511
	Equitable Gas Company	Equitrans, Inc.		DB274/471
	Equitrans, Inc.	Equitable Production Company		DB396/640
	Equitable Production Company	EQT Production Company		DB281/346 Doddridge Co.

Upon information and belief, Operator's lease and/or other real property rights permit it to conduct drilling operations for the subject well in the location shown on the plat, including under any public roads that the well lateral crosses.

**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.

appropriate authority before the affected activity is initiated.

Well Operator: EQT Production Company
By: [Signature]
Its: Permitting Supervisor

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

Date of Notice Certification: _____

API No. 47 - 096 - 0
Operator's Well No. 512892
Well Pad Name: WEU4

4709512892

Notice has been given:

Pursuant to the provisions in West Virginia Code § 22-6A, the Operator has provided the required parties with the Notice Forms listed below for the tract of land as follows:

State: WV	UTM NAD 83 Easting: 515,451.62
County: Tyler	UTM NAD 83 Northing: 4,357,471.45
District: Centerville	Public Road Access: WV-18
Quadrangle: West Union 7.5'	Generally used farm name: Donna J. Peter
Watershed: Tributary of Camp Mistake Run	

Pursuant to West Virginia Code § 22-6A-7(b), every permit application filed under this section shall be on a form as may be prescribed by the secretary, shall be verified and shall contain the following information: (14) A certification from the operator that (i) it has provided the owners of the surface described in subdivisions (1), (2) and (4), subsection (b), section ten of this article, the information required by subsections (b) and (c), section sixteen of this article; (ii) that the requirement was deemed satisfied as a result of giving the surface owner notice of entry to survey pursuant to subsection (a), section ten of this article six-a; or (iii) the notice requirements of subsection (b), section sixteen of this article were waived in writing by the surface owner; and Pursuant to West Virginia Code § 22-6A-11(b), the applicant shall tender proof of and certify to the secretary that the notice requirements of section ten of this article have been completed by the applicant.

<p>Pursuant to West Virginia Code § 22-6A, the Operator has attached proof to this Notice Certification that the Operator has properly served the required parties with the following:</p> <p>*PLEASE CHECK ALL THAT APPLY</p> <p><input type="checkbox"/> NOTICE OF SEISMIC ACTIVITY or <input checked="" type="checkbox"/> NOTICE NOT REQUIRED BECAUSE NO SEISMIC ACTIVITY WAS CONDUCTED</p> <p><input checked="" type="checkbox"/> NOTICE OF ENTRY FOR PLAT SURVEY or <input type="checkbox"/> NO PLAT SURVEY WAS CONDUCTED</p> <p><input type="checkbox"/> NOTICE OF INTENT TO DRILL or <input checked="" type="checkbox"/> NOTICE NOT REQUIRED BECAUSE NOTICE OF ENTRY FOR PLAT SURVEY WAS CONDUCTED OR</p> <p><input type="checkbox"/> WRITTEN WAIVER BY SURFACE OWNER (PLEASE ATTACH)</p> <p><input checked="" type="checkbox"/> NOTICE OF PLANNED OPERATION</p> <p><input checked="" type="checkbox"/> PUBLIC NOTICE</p> <p><input checked="" type="checkbox"/> NOTICE OF APPLICATION</p>	<p align="center">OOG OFFICE USE ONLY</p> <p><input type="checkbox"/> RECEIVED/NOT REQUIRED</p> <p><input type="checkbox"/> RECEIVED</p> <p><input type="checkbox"/> RECEIVED/NOT REQUIRED</p> <p><input type="checkbox"/> RECEIVED</p> <p><input type="checkbox"/> RECEIVED</p> <p><input type="checkbox"/> RECEIVED</p>
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Required Attachments:

The Operator shall attach to this Notice Certification Form all Notice Forms and Certifications of Notice that have been provided to the required parties and/or any associated written waivers. For the Public Notice, the operator shall attach a copy of the Class II Legal Advertisement with publication date verification or the associated Affidavit of Publication. The attached Notice Forms and Certifications of Notice shall serve as proof that the required parties have been noticed as required under West Virginia Code § 22-6A. Pursuant to West Virginia Code § 22-6A-11(b), the Certification of Notice to the person may be made by affidavit of personal service, the return receipt card or other postal receipt for certified mailing.

08/28/2015

Certification of Notice is hereby given:

THEREFORE, I *[Signature]*, have read and understand the notice requirements within West Virginia Code § 22-6A. I certify that as required under West Virginia Code § 22-6A, I have served the attached copies of the Notice Forms, identified above, to the required parties through personal service, by registered mail or by any method of delivery that requires a receipt or signature confirmation. I certify under penalty of law that I have personally examined and am familiar with the information submitted in this Notice Certification and all attachments, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

304-848-280

Well Operator: EQT Production Company
By: Victoria J. Roark
Its: Permitting Supervisor
Telephone: 304-848-0076

Address: P.O. Box 280
Bridgeport, WV 26330
Facsimile: 304-848-0040
Email: vroark@eqt.com



Subscribed and sworn before me this 24 day of June, 2015

Ramecia L Heater Notary Public

My Commission Expires 4-7-20

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.

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SMITH LAND SURVEYING, INC.

P.O. BOX 150, GLENVILLE, WV 26351

(304) 462-6634 • FAX 462-6650

WELL INFORMATION AND POTENTIAL WATER WELL SAMPLE DATA SHEET

OPERATOR: EQT Production Company

LEASE NAME AND NUMBER: WEU-4

COMMENTS

The initial field and/or mapping review of the area surrounding the proposed well site revealed the below listed surface owner(s) that were potentially utilizing groundwater (potable) for Human Consumption or other purposes within 2500' of the proposed well site. (For location of each site see attached area map.)

INDIVIDUAL CONTACTED OR NOTIFIED

Site: 1 Spacing 1220' Owner/Occupant: Donna Peter
 Address: 733 ridge rd. Wilbur, WV 26320 Ph: (304)-758-4495
 Field Contact Date: 04/23/2015 Located: Yes Date Located: 04/23/2015 Source: Water Well
 If No, declined by who _____ Letter/Notice Date: 1st 04/09/2015 2nd 04/23/2015 Certified (3rd) 04/17/2015
 Comments: Lat : 39.369336
Long : 80.823230
Tax Map 16, Parcel 22

Site: 2 Spacing 1075' Owner/Occupant: Donna Peter
 Address: 733 ridge rd. Wilbur, WV 26320 Ph: (304)-758-4495
 Field Contact Date: 04/23/2015 Located: Yes Date Located: 04/23/2015 Source: Water Well
 If No, declined by who _____ Letter/Notice Date: 1st 04/09/2015 2nd 04/23/2015 Certified (3rd) 04/17/2015
 Comments: Lat : 39.369112
Long : 80.822699
Tax Map 16, Parcel 22

Site: 3 Spacing 1030' Owner/Occupant: Donna Peter
 Address: 733 ridge rd. Wilbur, WV 26320 Ph: (304)-758-4495
 Field Contact Date: 04/23/2015 Located: Yes Date Located: 04/23/2015 Source: Spring
 If No, declined by who _____ Letter/Notice Date: 1st 04/09/2015 2nd 04/23/2015 Certified (3rd) 04/17/2015
 Comments: Lat : 39.365439
Long : 80.823990
Tax Map 16, Parcel 22

Site: 4 Spacing 2050' Owner/Occupant: Bruce Stoncking
 Address: RR.1 Box 304 BB Elkins, WV 26241 Ph: _____
 Field Contact Date: 04/23/2015 Located: Yes Date Located: 04/23/2015 Source: Water Well
 If No, declined by who _____ Letter/Notice Date: 1st 04/09/2015 2nd 04/23/2015 Certified (3rd) 04/17/2015
 Comments: Lat : 39.370837
Long : 80.815910
Tax Map 21, Parcels 28 and 29

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Site: 5 Spacing 1425' Owner/Occupant Bruce Stomcking
 Address: RR.1 Box 304 BB Elkins, WV 26241 Ph: _____
 Field Contact Date: 04/23/2015 Located: Yes Date Located 04/23/2015 Source Water Well
 If No, declined by who _____ Letter/Notice Date 1st 04/09/2015 2nd 04/23/2015 Certified (3rd) 04/17/2015
 Comments: Lat : 39.370270
Long : 80.818867
Tax Map 21, Parcels 28 and 29

Site 6 Spacing 2830' Owner/Occupant Edward and Carolyn White
 Address: 4316 Teen Barnes Rd. Jefferson, MD 21755 Ph: (301)-371-8521
 Field Contact Date: 05/20/2015 Located: Yes Date Located 05/20/2015 Source: Water Well
 If No, declined by who _____ Letter/Notice Date 1st 04/09/2015 2nd 04/23/2015 Certified (3rd) 04/17/2015
 Comments Lat : 39.368035
Long : 80.810833
Tax Map 21, Parcel 38

Site 7 Spacing 2070' Owner/Occupant Edward and Carolyn White
 Address: 4316 Teen Barnes Rd. Jefferson, MD 21755 Ph: (301)-371-8521
 Field Contact Date: 05/20/2015 Located: Yes Date Located 05/20/2015 Source: Water Well
 If No, declined by who _____ Letter/Notice Date 1st 04/09/2015 2nd 04/23/2015 Certified (3rd) 04/17/2015
 Comments: Lat : 39.366470
Long : 80.813358
Tax Map 21, Parcel 38

Site: 8 Spacing 2540' Owner/Occupant Edward and Carolyn White
 Address: 4316 Teen Barnes Rd. Jefferson, MD 21755 Ph: (301)-371-8521
 Field Contact Date: 05/20/2015 Located: Yes Date Located 05/20/2015 Source: Pond
 If No, declined by who _____ Letter/Notice Date 1st 04/09/2015 2nd 04/23/2015 Certified (3rd) 04/17/2015
 Comments: Lat : 39.365666
Long : 80.811781
Tax Map 21, Parcel 38

Site: 9 Spacing 2665' Owner/Occupant Edward and Carolyn White
 Address 4316 Teen Barnes Rd. Jefferson, MD 21755 Ph: (301)-371-8521
 Field Contact Date: 05/20/2015 Located: Yes Date Located 05/20/2015 Source: Pond
 If No, declined by who _____ Letter/Notice Date 1st 04/09/2015 2nd 04/23/2015 Certified (3rd) 04/17/2015
 Comments: Lat : 39.366163
Long : 80.811260
Tax Map 21, Parcel 38

Site: 10 Spacing 3655' Owner/Occupant Frank and Elizabeth Abruzzino
 Address 91 Springhill Chapel Rd, Clarksburg, WV 26301 Ph: (304)-669-3892
 Field Contact Date: 05/20/2015 Located: Yes Date Located 05/20/2015 Source: Pond
 If No, declined by who _____ Letter/Notice Date 1st 04/09/2015 2nd 04/23/2015 Certified (3rd) 04/17/2015
 Comments. Lat : 39.376041
Long : 80.825199
Tax Map 16, Parcel 10

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Site: 11 Spacing 2950' Owner/Occupant: Frank and Elizabeth Abruzzino
 Address: 91 Springhill Chapel Rd, Clarksburg, WV 26301 Ph: (304)-669-3892
 Field Contact Date: 05/20/2015 Located: Yes Date Located: 05/20/2015 Source: Water Well
 If No, declined by who _____ Letter/Notice Date: 1st 04/09/2015 2nd 04/23/2015 Certified (3rd) 04/17/2015
 Comments: Lat : 39.374129
Long : 80.824661
Tax Map 16, Parcel 10

Site: 12 Spacing 3750' Owner/Occupant: Frank and Elizabeth Abruzzino
 Address: 91 Springhill Chapel Rd, Clarksburg, WV 26301 Ph: (304)-669-3892
 Field Contact Date: 05/20/2015 Located: Yes Date Located: 05/20/2015 Source: Water Well
 If No, declined by who _____ Letter/Notice Date: 1st 04/09/2015 2nd 04/23/2015 Certified (3rd) 04/17/2015
 Comments: Lat : 39.376858
Long : 80.822312
Tax Map 16, Parcel 10

Site: 13 Spacing 3260' Owner/Occupant: Frank and Elizabeth Abruzzino
 Address: 91 Springhill Chapel Rd, Clarksburg, WV 26301 Ph: (304)-669-3892
 Field Contact Date: 05/20/2015 Located: Yes Date Located: 05/20/2015 Source: Pond
 If No, declined by who _____ Letter/Notice Date: 1st 04/09/2015 2nd 04/23/2015 Certified (3rd) 04/17/2015
 Comments: Lat : 39.375580
Long : 80.820202
Tax Map 16, Parcel 10

Site: 14 Spacing 1535' Owner/Occupant: Frank and Elizabeth Abruzzino
 Address: 91 Springhill Chapel Rd, Clarksburg, WV 26301 Ph: (304)-669-3892
 Field Contact Date: 05/20/2015 Located: Yes Date Located: 05/20/2015 Source: Water Well
 If No, declined by who _____ Letter/Notice Date: 1st 04/09/2015 2nd 04/23/2015 Certified (3rd) 04/17/2015
 Comments: Lat : 39.370659
Long : 80.819027
Tax Map 16, Parcel 10

Site: 15 Spacing _____ Owner/Occupant: Conrad Costilow
 Address: 13310 Middle island Rd, West Union, WV 26456 Ph: _____
 Field Contact Date: N/A Located: No Date Located: N/A Source: Unknown
 If No, declined by who _____ Letter/Notice Date: 1st 04/09/2015 2nd 04/23/2015 Certified (3rd) 04/17/2015
 Comments: No Response To Certified Letter As Of 05/29/2015
Tax Map 16, Parcel 14

Site: 16 Spacing _____ Owner/Occupant: John McDonald Jr.
 Address: HC 74 Box 34C Alma, WV 26320 Ph: _____
 Field Contact Date: N/A Located: No Date Located: N/A Source: Unknown
 If No, declined by who _____ Letter/Notice Date: 1st 04/09/2015 2nd 04/23/2015 Certified (3rd) 04/17/2015
 Comments: No Response To Certified Letter As Of 05/29/2015
Tax Map 21, Parcel 41

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Site: 17 Spacing _____ Owner/Occupant: Paul Weekley (life)
 Address: 4500 Mcclroy creek Rd. Alma, WV 26320 Ph: _____
 Field Contact Date: N/A Located: No Date Located: N/A Source: Unknown
 If No, declined by who _____ Letter/Notice Date: 1st 04/09/2015 2nd 04/23/2015 Certified (3rd) 04/17/2015
 Comments: No Response To Certified Letter As Of 05/29/2015
Tax Map 16, Parcel 28

Site: 18 Spacing _____ Owner/Occupant: Chris and Herstine Baum
 Address: 7214 Ridgeview Dr. SE Waynesburg, OH 44688 Ph: _____
 Field Contact Date: N/A Located: No Date Located: N/A Source: Unknown
 If No, declined by who _____ Letter/Notice Date: 1st 04/09/2015 2nd 04/23/2015 Certified (3rd) 04/17/2015
 Comments: No Response To Certified Letter As Of 05/29/2015
Tax Map 16, Parcel 23

Site: 19 Spacing _____ Owner/Occupant: Leona Lorkovich
 Address: 1719 Jackson St. Aliquippa, PA 15001 Ph: _____
 Field Contact Date: N/A Located: No Date Located: N/A Source: Unknown
 If No, declined by who _____ Letter/Notice Date: 1st 04/09/2015 2nd 04/23/2015 Certified (3rd) 04/17/2015
 Comments: No Response To Certified Letter As Of 05/29/2015
Tax Map 16, Parcel 24

Site: 20 Spacing _____ Owner/Occupant: Stonewall Gas Company
 Address: 501 Martindale St. Ste. 500 Pittsburg, PA 15212 Ph: _____
 Field Contact Date: N/A Located: No Date Located: N/A Source: Unknown
 If No, declined by who _____ Letter/Notice Date: 1st 04/09/2015 2nd 04/23/2015 Certified (3rd) 04/17/2015
 Comments: No Response To Certified Letter As Of 05/29/2015
Tax Map 16, Parcel 24.2

Site: 21 Spacing _____ Owner/Occupant: Richard Metcalf
 Address: 128 Village Dr. Bridgeport, WV 26330 Ph: _____
 Field Contact Date: N/A Located: No Date Located: N/A Source: Unknown
 If No, declined by who _____ Letter/Notice Date: 1st 04/09/2015 2nd 04/23/2015 Certified (3rd) 04/17/2015
 Comments: No Response To Certified Letter As Of 05/29/2015
Tax Map 16, Parcels 14.1 and 17

Site: 22 Spacing _____ Owner/Occupant: John Anders
 Address: 804 Peters Run Rd. Wheeling, WV 26003 Ph: _____
 Field Contact Date: N/A Located: No Date Located: N/A Source: Unknown
 If No, declined by who _____ Letter/Notice Date: 1st 04/09/2015 2nd 04/23/2015 Certified (3rd) 04/17/2015
 Comments: No Response To Certified Letter As Of 05/29/2015
Tax Map 16, Parcel 14.2

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 Office of Oil & Gas
 JUL 06 2015

Site 23 Spacing _____ Owner/Occupant: Gary Prosser
Address: HCR 74 Box 21 Wilbur, WY 26320 Ph: _____
Field Contact Date: N/A Located: No Date Located N/A Source: Unknown
If No, declined by who _____ Letter/Notice Date: 1st 04/09/2015 2nd 04/23/2015 Certified (3rd) 04/17/2015
Comments: No Response To Certified Letter As Of 05/29/2015
Tax Map 16, Parcel 15

Site 24 Spacing _____ Owner/Occupant: Howard and Shannon Shriver
Address: HCR 74 Box 22A Alma, WY 26320 Ph: _____
Field Contact Date: N/A Located: No Date Located N/A Source: Unknown
If No, declined by who _____ Letter/Notice Date: 1st 04/09/2015 2nd 04/23/2015 Certified (3rd) 04/17/2015
Comments: No Response To Certified Letter As Of 05/29/2015
Tax Map 16, Parcel 16

Site _____ Spacing _____ Owner/Occupant: _____
Address: _____ Ph: _____
Field Contact Date: _____ Located: _____ Date Located: _____ Source: _____
If No, declined by who _____ Letter/Notice Date: 1st _____ 2nd _____ Certified (3rd) _____
Comments: _____

Site _____ Spacing _____ Owner/Occupant: _____
Address: _____ Ph: _____
Field Contact Date: _____ Located: _____ Date Located: _____ Source: _____
If No, declined by who _____ Letter/Notice Date: 1st _____ 2nd _____ Certified (3rd) _____
Comments: _____

Site _____ Spacing _____ Owner/Occupant: _____
Address: _____ Ph: _____
Field Contact Date: _____ Located: _____ Date Located: _____ Source: _____
If No, declined by who _____ Letter/Notice Date: 1st _____ 2nd _____ Certified (3rd) _____
Comments: _____

Site _____ Spacing _____ Owner/Occupant: _____
Address: _____ Ph: _____
Field Contact Date: _____ Located: _____ Date Located: _____ Source: _____
If No, declined by who _____ Letter/Notice Date: 1st _____ 2nd _____ Certified (3rd) _____
Comments: _____

Received
Office of Oil & Gas
JUL 06 2015

WW-6A
(9-13)

API NO. 47 - 095 - 0
OPERATOR WELL NO. 512892
Well Pad Name: WEU4

**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: JUN 24 2015 Date Permit Application Filed: JUN 24 2015

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

4709502280

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 the construction of an impoundment or pit as required by this article shall deliver, by personal service or by registered mail or by any requires a receipt or signature confirmation, copies of the application, the erosion and sediment control plan required by section seven of 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; 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 disturbance as described in the erosion and sediment control plan submitted pursuant to subsection (c), section seven of this article; (3) 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 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 construction, enlargement, alteration, repair, removal or abandonment of any impoundment or pit as described in section nine of this water purveyor who is known to the applicant to have a water well, spring or water supply source located within one thousand five which is used to provide water for consumption by humans or domestic animals; and (6) The operator of any natural gas storage field 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 in the lands, the applicant may serve the documents required upon the person described in the records of the sheriff required to be 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 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 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: Donna J Peter
Address: 733 Ridge Rd
Wilbur WV 26320

Name: _____
Address: _____

SURFACE OWNERS(S) (Road and/or Other Disturbance)

Name: Donna J Peter
Address: 733 Ridge Rd
Wilbur WV 26320

Name: L. Bruce and Sandra Jean Stoneking
Address: R.D. 1 Box BB
Elkins WV 26241

See attached for additional surface (road/ disturbance)

SURFACE OWNER(S) (Impoundments/Pits)

Name: Donna J Peter
Address: 733 Ridge Rd
Wilbur WV 26320

COAL OWNER OR LESSEE

Name: Nancy M. Ash or Heirs Assigns
Address: 101 Lake Village Road
Slidell LA 70461

See attached for additional coal owners.

COAL OPERATOR

Name: _____
Address: _____

SURFACE OWNER OF WATER WELL AND/OR WATER PURVEYOR(S)

Name: Donna J Peter
Address: 733 Ridge Rd
Wilbur WV 26320

See Attached for additional water.

OPERATOR OF ANY NATURAL GAS STORAGE FIELD

Name: _____
Address: _____

*Please attach additional forms if necessary

RECEIVED
Office of Oil and Gas

JUN 25 2015

WV Department of

08/28/2015

WW-6A
(8-13)

API NO. 47 - 095 - 0
OPERATOR WELL NO. 512892
Well Pad Name: WEU4

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 57th Street, SE, Charleston, WV 25304 (304-926-0450) or by visiting 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

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WV Department of
08/28/2015

WW-6A
(8-13)

API NO. 47 - 095 - 0
OPERATOR WELL NO. 512892
Well Pad Name: WEU4

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 57th 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.

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Office of Oil and Gas

JUN 25 2015

WV Department of
Environmental Protection
08/28/2015

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.

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Office of Oil and Gas
JUN 25 2015
WV Department of
08/28/2015

Notice is hereby given by:

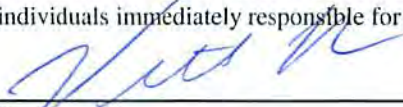
Well Operator: EQT Production Company
Telephone: 304-848-0082
Email: Vroark@eqt.com

Address: 115 Professional Place P.O. Box 280
Bridgeport, WV 26330
Facsimile: 304-848-0041

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.

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



By: Victoria Roark

Its: Permitting Supervisor

Subscribed and sworn before on 24 day of June, 2015
Rebecca L. Heater Notary Public
My Commission Expires 4-7-20



4709502280

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Office of Oil and Gas

JUN 25 2015

Department of
Environmental Regulation

08/28/2015

4709502280

**WW6-A
Additional Coal Owners**

Rosemary Brandon
3013 Delaware Avenue
Kenner, LA 70065

Oletha G. Moore or Heirs and Assigns
2428 Dewey Ave
Munhall PA 15120

Surface Owners(road or other disturbance):

James B. and Brenda J. Stoneking
2 Deerhaven Drive
Wheeling WV 26241

Diane L. Morgan and Glenn W. Morgan
590 Isner Creek Road
Elkins WV 26241

Richard and Yvonne Metcalf
128 Village Drive
Bridgeport WV 26330

Surface Owners(Pits or impoundments):

Richard and Yvonne Metcalf
128 Village Drive
Bridgeport WV 26330

Additional Water Purveyors

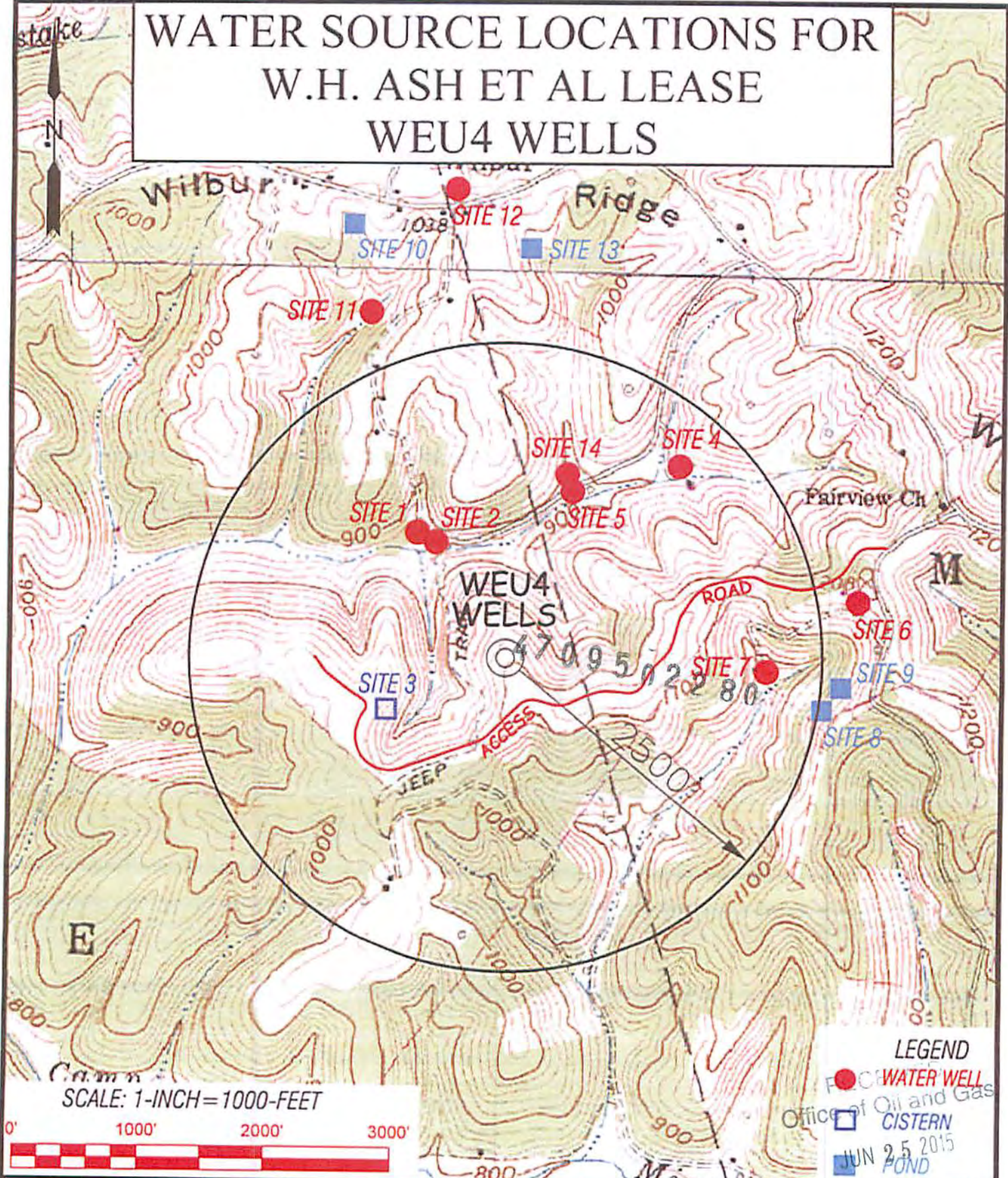
Bruce Stoneking
R.D. 1 Box BB
Elkins WV 26241

Frank and Elizabeth Abruzzino
91 Springhill Chapel Road
Clarksburg, WV 26301

**Received
Office of Oil & Gas
JUL 06 2015**

08/28/2015

WATER SOURCE LOCATIONS FOR W.H. ASH ET AL LEASE WEU4 WELLS



SCALE: 1-INCH=1000-FEET



LEGEND

- WATER WELL
- CISTERN
- POND

Office of Oil and Gas
JUN 25 2015

Professional Energy Consultants
A DIVISION OF SMITH LINE SURVEYING, INC.

SLS
SURVEYORS
ENGINEERS
ENVIRONMENTAL
PROJECT MGMT.

DRAWN BY: K.O.W.
FILE NO.: 7701
DATE: 05/27/15
CADD FILE: 7701WSMU4.dwg

TOPO SECTION OF:
WEST UNION, WV 7.5' QUAD

DISTRICT	COUNTY	TAX MAP-PARCEL NO.
CENTERVILLE	TYLER	16-22

OPERATOR:
EQT PRODUCTION COMPANY
115 PROFESSIONAL PLACE
P.O. BOX 280
BRIDGEPORT, WV 26330

WV Department of Environmental Protection

08/28/2015

WW6-A

Additional Coal Owners

Rosemary Brandon ✓
3013 Delaware Avenue
Kenner, LA 70065

Oletha G. Moore or Heirs and Assigns ✓
2428 Dewey Ave
Munhall PA 15120

Surface Owners(road or other disturbance):

James B. and Brenda J. Stoneking ✓
2 Deerhaven Drive
Wheeling WV 26241

Diane L. Morgan and Glenn W. Morgan ✓
590 Isner Creek Road
Elkins WV 26241

Richard and Yvonne Metcalf ✓
128 Village Drive
Bridgeport WV 26330

Surface Owners(Pits or impoundments):

Richard and Yvonne Metcalf ✓
128 Village Drive
Bridgeport WV 26330

Additional Water Purveyors

Bruce Stoneking ✓
R.D. 1 Box BB
Elkins WV 26241

Fred and Elizabeth Abruzzino ✓
RT1 Box 360
Clarksburg, WV 26301



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Office of Oil and Gas
JUN 25 2015
WV Department of
Fr 08/28/2015 Protection

STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS
NOTICE OF ENTRY FOR PLAT SURVEY

Notice Time Requirement: Notice shall be provided at least **SEVEN (7)** days but no more than **FORTY-FIVE (45)** days prior to entry.

Date of Notice: 3/26/2013

Date of Planned Entry: 4/2/2013

Delivery method pursuant to West Virginia Code § 22-6A-10(a):

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

Pursuant to West Virginia Code § 22-6A-10(a), prior to filing a permit application, the operator shall provide notice of planned entry on to the surface tract to conduct any plat surveys required pursuant to this article. Such notice shall be provided at least seven days but no more than forty-five days prior to such entry to: (1) The surface owner of such tract; (2) to any owner or lessee of coal seams beneath such tract that has filed a declaration pursuant to section thirty-six, article six, chapter twenty-two of this code; and (3) any owner of minerals underlying such tract in the county tax records. The notice shall include a statement that copies of the state Erosion and Sediment Control Manual and the statutes and rules related to oil and gas exploration and production may be obtained from the Secretary, which statement shall include contact information, including the address for a web page on the Secretary's web site, to enable the surface owner to obtain copies from the secretary.

Notice is hereby provided to:

SURFACE OWNER(S)

Name: Norman E & Donna J. Peter
Address: HC74 Box 31
Wilbur, WV 26320

Name: _____
Address: _____
Name: _____
Address: _____

COAL OWNER OR LESSEE

Coal Declaration pursuant to §22-6A-10 and §22-6-36
Name: Not of Record
Address: _____

MINERAL OWNER(S)

Name: C. Phillip Fluharty, Donald G. Fluharty and
Caroline Fluharty Genewick
Address: PO Box 524
Santee, SC 29142
Name: Trio Petroleum and Waco Oil & Gas
Address: PO Box 880
Glennville, WV 26351

*Please attach additional forms if necessary

Notice is hereby given:

Pursuant to West Virginia Code § 22-6A-10(a), notice is hereby given that the undersigned well operator is planning entry to conduct a plat survey on the tract of land as follows:

State: West Virginia Approx. Latitude & Longitude: 39.36664 / -80.82072
County: Tyler Public Road Access: CR58
District: Centerville / Map16 / Parcel 22 Watershed: Middle Island Creek
Quadrangle: West Union Generally Used Farm Name: Ash

Copies of the state Erosion and Sediment Control Manual and the statues and rules related to oil and gas exploration and production may be obtained from the Secretary, at the WV Department of Environmental Protection headquarters, located at 601 57th Street, SE, Charleston, WV 25304 (304-926-0450). Copies of such documents or additional information related to horizontal drilling may be obtained from the Secretary by visiting www.dep.wv.gov/oil-and-gas/pages/default.aspx.

Notice is hereby given by:

Well Operator: EQT Production Company
Telephone: 304-848-0099
Facsimile: 304-848-0040
Email: EQTLandEntryNotice@eqt.com

Address: 115 Professional Place, Bridgeport, WV 26330
EQT Representative: Kathy Kugel

Signature: Kathy Kugel
Office of Oil and Gas
REC'D
JUN 05 2015
WV Department of Environmental Protection

Oil and Gas Privacy Notice:

The Office of Oil and Gas processes your personal information, such a name, address and telephone number, as part of 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

08/28/2015

WW-6A5
(1/12)

Operator Well No. 512892

STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS
NOTICE OF PLANNED OPERATION

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

Date of Notice: JUN 24 2015 Date Permit Application Filed: JUN 24 2015

Delivery method pursuant to West Virginia Code § 22-6A-16(c)

CERTIFIED MAIL RETURN RECEIPT REQUESTED HAND DELIVERY

Pursuant to W. Va. Code § 22-6A-16(c), no later than the date for filing the permit application, an operator shall, by certified mail return receipt requested or hand delivery, give the surface owner whose land will be used for the drilling of a horizontal well notice of the planned operation. The notice required by this subsection shall include: (1) A copy of this code section; (2) The information required to be provided by subsection (b), section ten of this article to a surface owner whose land will be used in conjunction with the drilling of a horizontal well; and (3) A proposed surface use and compensation agreement containing an offer of compensation for damages to the surface affected by oil and gas operations to the extent the damages are compensable under article six-b of this chapter. (d) The notices required by this section shall be given to the surface owner at the address listed in the records of the sheriff at the time of notice.

Notice is hereby provided to the SURFACE OWNER(s)

(at the address listed in the records of the sheriff at the time of notice):

Name: Donna J Peter
Address: 733 Ridge Rd
Wilbur WV 26320

Name: L. Bruce and Sandra Jean Stoneking
Address: 4709502280 R.D. 1 Box BB
Elkins WV 26241

Notice is hereby given:

Pursuant to West Virginia Code § 22-6A-16(c), notice is hereby given that the undersigned well operator has developed a planned operation on the surface owner's land for the purpose of drilling a horizontal well on the tract of land as follows:

State: WV UTM NAD 83 Easting: 515,451.620000
County: Tyler Northing: 4,357,471.450000
District: Centerville Public Road Access: WV-18
Quadrangle: West Union 7.5' Generally used farm name: Donna J. Peter
Watershed: Tributary of Camp Mistake Run

This Notice Shall Include:

Pursuant to West Virginia Code § 22-6A-16(c), this notice shall include: (1) A copy of this code section; (2) The information required to be provided by W. Va. Code § 22-6A-10(b) to a surface owner whose land will be used in conjunction with the drilling of a horizontal well; and (3) A proposed surface use and compensation agreement containing an offer of compensation for damages to the surface affected by oil and gas operations to the extent the damages are compensable under article six-b of this chapter. Additional information related to horizontal drilling may be obtained from the Secretary, at the WV Department of Environmental Protection headquarters, located at 601 57th Street, SE, Charleston, WV 25304 (304-926-0450) or by visiting www.dep.wv.gov/oil-and-gas/pages/default.aspx.

Well Operator: EQT Production Company
Telephone: 304-848-0082
Email: vroark@eqt.com

Address: 115 Professional Place, P.O. Box 280
Bridgeport, WV 26330
Facsimile: 304-848-0040

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.

RECEIVED
Office of Oil and Gas
JUN 25 2015
WV Department of
Protection

08/28/2015

WW-6A5
(1/12)

Operator Well No. 512892

STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS
NOTICE OF PLANNED OPERATION

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

Date of Notice: JUN 24 2015 Date Permit Application Filed: JUN 24 2015

Delivery method pursuant to West Virginia Code § 22-6A-16(c)

CERTIFIED MAIL RETURN RECEIPT REQUESTED HAND DELIVERY

Pursuant to W. Va. Code § 22-6A-16(c), no later than the date for filing the permit application, an operator shall, by certified mail return receipt requested or hand delivery, give the surface owner whose land will be used for the drilling of a horizontal well notice of the planned operation. The notice required by this subsection shall include: (1) A copy of this code section; (2) The information required to be provided by subsection (b), section ten of this article to a surface owner whose land will be used in conjunction with the drilling of a horizontal well; and (3) A proposed surface use and compensation agreement containing an offer of compensation for damages to the surface affected by oil and gas operations to the extent the damages are compensable under article six-b of this chapter. (d) The notices required by this section shall be given to the surface owner at the address listed in the records of the sheriff at the time of notice.

Notice is hereby provided to the SURFACE OWNER(s)

(at the address listed in the records of the sheriff at the time of notice):

Name: James B and Brenda J Stoneking
Address: 2 Deerhaven Drive
Wheeling WV 26241

Name: Diane L Morgan and Glenn W Morgan
Address: 590 Isner Creek Rd
Elkins WV 26241

Notice is hereby given:

Pursuant to West Virginia Code § 22-6A-16(c), notice is hereby given that the undersigned well operator has developed a planned operation on the surface owner's land for the purpose of drilling a horizontal well on the tract of land as follows:

State: WV UTM NAD 83 Easting: 515,451.620000
County: Tyler Northing: 4,357,471.450000
District: Centerville Public Road Access: WV-18
Quadrangle: West Union 7.5' Generally used farm name: Donna J. Peter
Watershed: Tributary of Camp Mistake Run

This Notice Shall Include:

Pursuant to West Virginia Code § 22-6A-16(c), this notice shall include: (1) A copy of this code section; (2) The information required to be provided by **W. Va. Code § 22-6A-10(b)** to a surface owner whose land will be used in conjunction with the drilling of a horizontal well; and (3) A proposed surface use and compensation agreement containing an offer of compensation for damages to the surface affected by oil and gas operations to the extent the damages are compensable under article six-b of this chapter. Additional information related to horizontal drilling may be obtained from the Secretary, at the WV Department of Environmental Protection headquarters, located at 601 57th Street, SE, Charleston, WV 25304 (304-926-0450) or by visiting www.dep.wv.gov/oil-and-gas/pages/default.aspx.

Well Operator: EQT Production Company
Telephone: 304-848-0082
Email: vroark@eqt.com

Address: 115 Professional Place, P.O. Box 280
Bridgeport, WV 26330
Facsimile: 304-848-0040

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Office of Oil and Gas
JUN 25 2015
Department of

08/28/2015

WW-6A5
(1/12)

Operator Well No. 512892

STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS
NOTICE OF PLANNED OPERATION

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

Date of Notice: JUN 24 2015 Date Permit Application Filed: JUN 24 2015

Delivery method pursuant to West Virginia Code § 22-6A-16(c)

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Notice is hereby provided to the SURFACE OWNER(s)

(at the address listed in the records of the sheriff at the time of notice):

Name: Richard and Yvonne Metcalf
Address: 128 Village Dr
Bridgeport WV 26330

Name: _____
Address: _____

Notice is hereby given:

Pursuant to West Virginia Code § 22-6A-16(c), notice is hereby given that the undersigned well operator has developed a planned operation on the surface owner's land for the purpose of drilling a horizontal well on the tract of land as follows:

State: WV UTM NAD 83 Easting: 515,458,620,000
County: Tyler Northing: 4,357,471,450,000
District: Centerville Public Road Access: WV-18
Quadrangle: West Union 7.5' Generally used farm name: Donna J. Peter
Watershed: Tributary of Camp Mistake Run

This Notice Shall Include:

Pursuant to West Virginia Code § 22-6A-16(c), this notice shall include: (1) A copy of this code section; (2) The information required to be provided by W. Va. Code § 22-6A-10(b) to a surface owner whose land will be used in conjunction with the drilling of a horizontal well; and (3) A proposed surface use and compensation agreement containing an offer of compensation for damages to the surface affected by oil and gas operations to the extent the damages are compensable under article six-b of this chapter. Additional information related to horizontal drilling may be obtained from the Secretary, at the WV Department of Environmental Protection headquarters, located at 601 57th Street, SE, Charleston, WV 25304 (304-926-0450) or by visiting www.dep.wv.gov/oil-and-gas/pages/default.aspx.

Well Operator: EQT Production Company
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Office of Oil and Gas
JUN 25 2015
Department of

08/28/2015



WEST VIRGINIA DEPARTMENT OF TRANSPORTATION
Division of Highways

1900 Kanawha Boulevard East • Building Five • Room 110
Charleston, West Virginia 25305-0430 • (304) 558-3505

Earl Ray Tomblin
Governor

Paul A. Mattox, Jr., P. E.
Secretary of Transportation/
Commissioner of Highways

June 23, 2015

James A. Martin, Chief
Office of Oil and Gas
Department of Environmental Protection
601 57th Street, SE
Charleston, WV 25304

Subject: DOH Permit for the WEU 4 Well Pad, Tyler County

512890 WEU4H1	512891 WEU4H2	512892 WEU4H3
512893 WEU4H4	512894 WEU4H5	512895 WEU4H6
514052 WEU4H7	514053 WEU4H8	514054 WEU4H9
514055 WEU4H10		

Dear Mr. Martin,

This well site will be accessed from DOH Permit #06-2015-0241 issued to EQT Production Company for access to the State Road for a well site located off of Tyler County Route 58 SLS.

The operator has signed a STATEWIDE OIL AND GAS ⁴⁷⁰⁹⁵⁰²²⁸⁰ BONDING AGREEMENT and provided the required Bond. This operator is currently in compliance with the DOH OIL AND GAS POLICY dated January 3, 2012.

Very Truly Yours,

Gary K. Clayton P.E.
Regional Maintenance Engineer
Central Office Oil & Gas Coordinator

Cc: Nick Bumgardner
EQT Production Company
CH, OM, D-6
File

RECEIVED
Office of Oil and Gas
JUN 25 2015
WV Department of
Environmental Protection

Anticipated Frac Additives
Chemical Names and CAS numbers

<u>Material</u>	<u>Ingredient</u>	<u>CAS Number</u>
Water		
Sand	Hydrotreated light petroleum distillate	14808-60-7
Friction Reducer	Tributyl tetradecyl phosphonium chloride	64742-47-8
Biocide	Ammonium chloride	81741-28-8
Scale Inhibitor	Hydrochloric Acid	12125-02-9
15% Hydrochloric Acid	Propargyl Alcohol	7647-01-0
Corrosion Inhibitor	Methanol	107-19-7
Corrosion Inhibitor	Guar Gum	67-56-1
Gelling Agent	Sodium Persulfate	9000-30-0
Oxidizing Breaker	Potassium Carbonate	7775-27-1
Buffering Agent		584-08-7

4709502280

RECEIVED
Office of Oil and Gas
JUN 2 2015
WV Department of
Environmental Protection

08/28/2015

PROJECT INFORMATION

PROJECT NAME: WEU4
TAX PARCEL: MCELROY AND CENTERVILLE DISTRICTS, TYLER COUNTY, WV, TAX MAP 16 PARCEL 22
SURFACE OWNER: DONNA J. PETER, TOTAL PROPERTY AREA: 113.41 ACRES, TAX MAP 16 PARCEL 22; L.B. & SANDRA STONEKING, TOTAL PROPERTY AREA: 49.441 ACRES, TAX MAP 21 PARCEL 09; RICHARD & YVONNE MITCALF, TOTAL PROPERTY AREA: 81.071 ACRES, TM 16-17
OIL AND GAS ROYALTY OWNER: WACO OIL & GAS CO. INC. ET AL, WEST UNION DISTRICT, BOONVILLE COUNTY, WV, TOTAL PROPERTY AREA: 152 ACRES
SITE LOCATION: THE WEU4 WELL SITE IS SITUATE ON THE WATERS OF CAMP MISTAKE RUN APPROXIMATELY 2.58 MILES WEST OF COUNTY ROUTE 58. THE ENTRANCE IS LOCATED APPROXIMATELY 0.30 MILES SOUTHWEST FROM THE INTERSECTION OF COUNTY ROUTE 52 AND COUNTY ROUTE 58.

LOCATION COORDINATES

WEU4 SITE ENTRANCE: LATITUDE: 38.964229 LONGITUDE: -80.810071 (NAD 83 NORTH)
WEU4 RIG FOOTPRINT: LATITUDE: 38.968719 LONGITUDE: -80.820708 (NAD 83 NORTH)
WEU4 PUMP PAD: LATITUDE: 39.265480 LONGITUDE: -80.820809 (NAD 83 NORTH)
WEU4 FLOWBACK PIT: LATITUDE: 39.385318 LONGITUDE: -80.821118 (NAD 83 NORTH)
WEU4 TRUCK PAD: LATITUDE: 39.364462 LONGITUDE: -80.821587 (NAD 83 NORTH)
WEU4 COMPLETION PIT MANIFOLD PAD: LATITUDE: 39.366408 LONGITUDE: -80.824840 (NAD 83 NORTH)
WEU4 COMPLETION PIT: LATITUDE: 39.366484 LONGITUDE: -80.825816 (NAD 83 NORTH)

SITE DISTURBANCE COMPUTATIONS

ACCESS ROAD NO. 1 & NO. 2 = 8.014 ACRES
STOCKPILE SITES 1-6 = 4.284 ACRES
RIG FOOTPRINT = 3.10 ACRES
MANIFOLD PAD & FLOWBACK PIT = 2.314 ACRES
COMPLETION PIT = 2.334 ACRES
TOTAL SITE DISTURBANCE = 19.184 ACRES

ENTRANCE PERMIT

EQT PRODUCTION COMPANY WILL OBTAIN AN ENTRANCE PERMIT (FORM WV-108) FROM THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS, PRIOR TO COMMENCEMENT OF CONSTRUCTION ACTIVITIES.

MISS UTILITY STATEMENT

MISS UTILITY OF WEST VIRGINIA WAS NOTIFIED FOR THE LOCATING OF UTILITIES PRIOR TO THIS PROJECT DESIGN. TICKET #130870282 IN ADDITION, MISS UTILITY WILL BE CONTACTED PRIOR TO START OF THE PROJECT.

FLOODPLAIN NOTE

THE PROPOSED LIMITS OF DISTURBANCE FOR THIS PROJECT IS LOCATED IN FEMA FLOOD ZONE X PER THE FLOOD INSURANCE RATE MAP (FIRM) NUMBER 84095C0200C, DATED MAY 3, 2010.

ENVIRONMENTAL NOTES

A WETLAND DELINEATION WAS PERFORMED ON APRIL 25-26, 2013 BY POTESTA AND ASSOCIATES, INC. TO REVIEW THE SITE FOR WATERS AND WETLANDS THAT ARE MOST LIKELY WITHIN THE REGULATORY JURISDICTION OF THE U.S. ARMY CORPS OF ENGINEERS (USACE) AND/OR THE WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION (WVDEP). THE MAY 20, 2013 REPORT PROJECT # 015-11-147-18701 WAS PREPARED BY POTESTA AND ASSOCIATES, INC. SUMMARIZES THE RESULTS OF THE FIELD DELINEATION. THIS REPORT DOES NOT, IN ANY WAY, REPRESENT A JURISDICTIONAL DETERMINATION OF THE LANDWARD LIMITS OF WATERS AND WETLANDS WHICH MAY BE REGULATED BY THE USACE OR THE WVDEP. IT IS STRONGLY RECOMMENDED THAT THE AFORESAIDED AGENCIES BE CONSULTED IN AN EFFORT TO OBTAIN WRITTEN CONFIRMATION OF THE DELINEATION DESCRIBED BY THIS REPORT PRIOR TO ENGAGING CONSTRUCTION ON THE PROPERTY DESCRIBED HEREIN. THE DEVELOPER SHALL OBTAIN THE APPROPRIATE PERMITS FROM THE FEDERAL AND/OR STATE REGULATORY AGENCIES PRIOR TO ANY PROPOSED IMPACTS TO WATERS OF THE U.S., INCLUDING WETLAND FILLS AND STREAM CROSSINGS.

HORIZONTAL & VERTICAL CONTROL

COORDINATES AND ELEVATIONS USED FOR ALL LOCATIONS AND DESIGNS WERE BASED UPON MAPPING FURNISHED BY SMITH LAND SURVEYING.

MISS Utility of West Virginia
 1-800-245-4848
 West Virginia State Law
 (Section XIV, Chapter 24-C)
 Requires that you call two
 business days before you dig in
 the state of West Virginia.
IT'S THE LAW!!

WEU4 SITE PLAN

EQT PRODUCTION COMPANY

SITUATE ON THE WATERS OF CAMP MISTAKE RUN IN
 MCELROY AND CENTERVILLE DISTRICTS,
 TYLER COUNTY, WEST VIRGINIA

END NORTH AND ELEVATIONS
 GIVEN HEREON WERE
 OBTAINED BY
 SMITH LAND SURVEYING
 DATE 05/13/13



WEU4 MANIFOLD WELL LOCATIONS						
WELL	BY	WELL STATUS	API	LAT	LONG	DEPTH
W1	5/29/10	PROPOSED	47.045-02274	39.366461	80.821648	5,819.62
W2	5/29/10	PROPOSED	47.045-02274	39.366826	80.820648	6,045.63
W3	5/29/10	PROPOSED	47.045-02281	39.366484	80.820809	3,937.62
W4	5/29/10	PROPOSED	47.045-02281	39.366798	80.820809	10,057.42
W5	5/29/10	PROPOSED	49.366480	80.821587	39.366480	6,055.27
W6	5/29/10	PROPOSED	49.366480	80.821587	39.366480	6,055.27
W7	5/29/10	PROPOSED	49.366480	80.821587	39.366480	6,055.27
W8	5/29/10	PROPOSED	49.366480	80.821587	39.366480	6,055.27
W9	5/29/10	PROPOSED	49.366480	80.821587	39.366480	6,055.27
W10	5/29/10	PROPOSED	49.366480	80.821587	39.366480	6,055.27
W11	5/29/10	PROPOSED	49.366480	80.821587	39.366480	6,055.27
W12	5/29/10	PROPOSED	49.366480	80.821587	39.366480	6,055.27
W13	5/29/10	PROPOSED	49.366480	80.821587	39.366480	6,055.27
W14	5/29/10	PROPOSED	49.366480	80.821587	39.366480	6,055.27
W15	5/29/10	PROPOSED	49.366480	80.821587	39.366480	6,055.27

LIST OF DRAWINGS

- 1 - COVER SHEET
- 2 - NOTES
- 3 - OVERALL SHEET INDEX & VOLUMES
- 4 - EXISTING UTILITY PLAN
- 5-7 - ACCESS ROAD PLAN
- 8 - RIG FOOTPRINT DET
- 10-11 - FLOWBACK PIT NO. 1 SECTIONS
- 12-13 - FLOWBACK PIT NO. 2 SECTIONS
- 14 - TYPICAL SECTIONS
- 15 - ACCESS ROAD NO. 1 PROFILE
- 18-20 - ACCESS ROAD NO. 1 SECTIONS
- 21 - ACCESS ROAD NO. 1 SECTIONS & ACCESS ROAD NO. 2 PROFILE & SECTIONS
- 22 - ACCESS ROAD COORDINATE LAYOUT
- 23 - 24 TOPSOIL STORAGE AREAS PROFILES & SECTIONS
- 25 - SPILL STORAGE AREA PROFILE & SECTIONS
- 26 - 29 - WEU4 RECLAMATION PLANS
- 30 - 33 - CONSTRUCTION DETAILS

APPROVED
WVDEP OOG
 8/28/2015

DISTURBED AREA BY PROPERTY OWNER	
PROPERTY OWNER	DISTURBED AREA
L.B. & SANDRA STONEKING	0.42 AC.
RICHARD & YVONNE MITCALF	2.25 AC.
DONNA J. PETER	25.08 AC.
TOTAL	22.75 AC.

OPERATOR

EQT PRODUCTION COMPANY
 OPERATOR ID: 30888
 115 PROFESSIONAL PLACE
 P.O. BOX 200
 BRIDGEPORT, WV 26330
 PHONE: (304) 348-3970

ENGINEER

BRK&K ENGINEERS
 242 NORTH TURNADO WAY
 SUITE 1
 REEFER, WV 28708
 PHONE: (304) 788-3370

SURVEYOR

SMITH LAND SURVEYING, INC.
 12 VANHOOK DRIVE
 P.O. BOX 150
 GLENVILLE, WV 26031
 PHONE: (304) 482-5634

BRUCE KLESSEL, P.E., L.P.
 2400 WEST TURNADO WAY, SUITE 1
 REEFER, WEST VIRGINIA 28708
 T-304.788.3370 F-304.788.3371
 WWW.BRKK.COM

Professional Energy Consultants
 1000 WEST VIRGINIA AVENUE, SUITE 100
 MARTINSBURG, WV 26151
 WWW.PEC-CONSULTING.COM

THIS DOCUMENT WAS
 PREPARED BY
 BRK&K ENGINEERS
 FOR EQT PRODUCTION
 COMPANY

COVER SHEET
 WEU4
 MCELROY DISTRICT
 CENTERVILLE DISTRICT
 TYLER COUNTY, WV

DATE: 04/30/2015
 SCALE: 1" = 2,000'
 DESIGNED BY: HWB
 FILE NO.: JCB
 SHEET 1 OF 33
 REV: 08/25/2015

RIG FOOTPRINT & FLOWBACK PIT NO. 1 LAYOUT

WEU4PROPOSED WELLS

H1-WV 512890, H2-WV 512891, H3-WV 512892, H4-WV 512893, H5-WV 512894, H6-WV 512895

NOTE:
1. ALL PROPOSED DRAINAGE CULVERTS AND DRAIN PIPES SHALL HAVE ADEQUATE OUTLET PROTECTION (RIP-RAP) AS SHOWN ON THESE PLANS.

2. ALL FILL AREAS SHALL BE "KEYED IN" AND COMPACTED IN 12" LIFTS (9" RECOMMENDED) WITH A VIBRATING SHEEPSFOOT ROLLER TO 95% COMPACTION PER STANDARD PROCTER. MAXIMUM LIFTS FOR ROCK FILLS EQUAL 36".

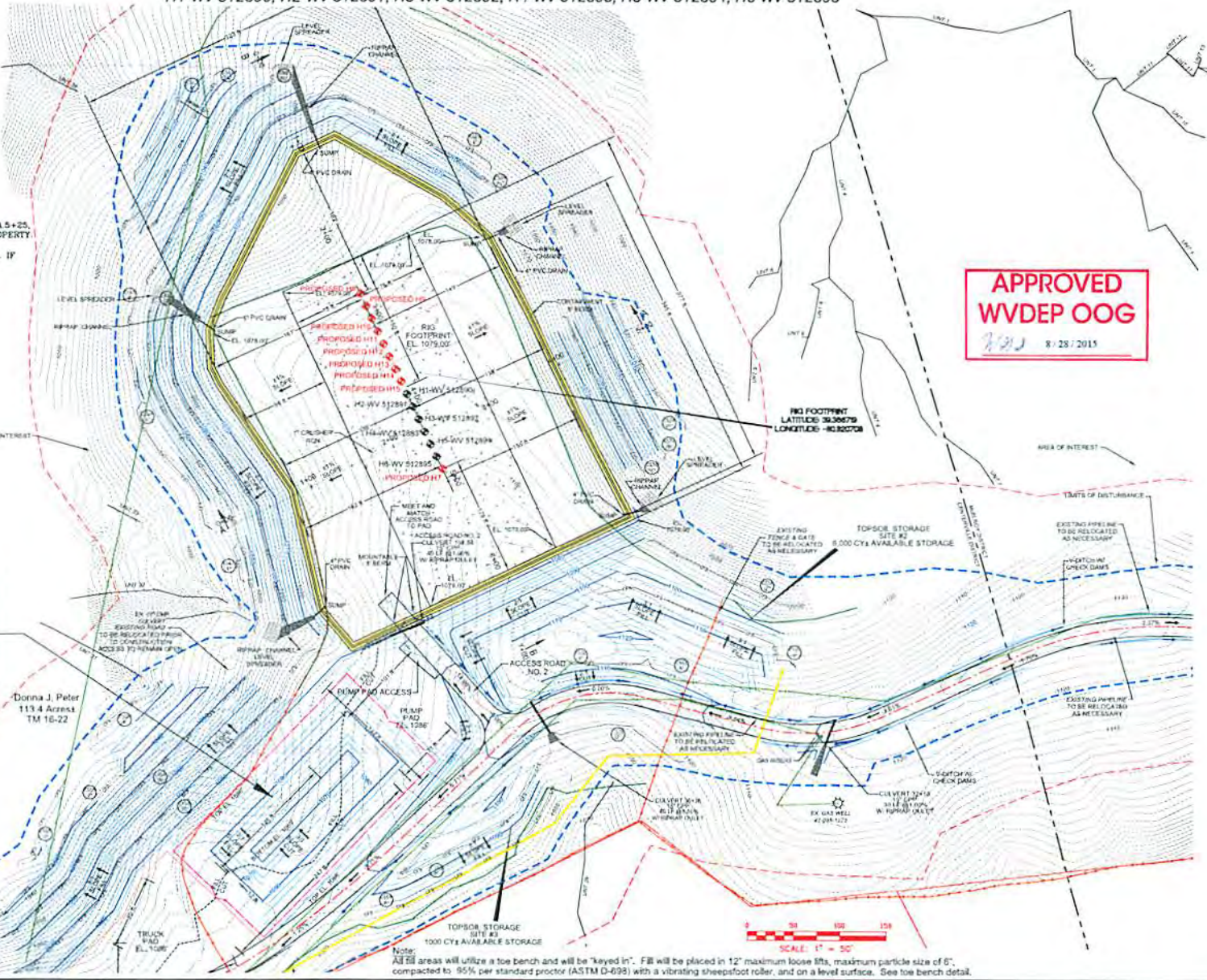
3. ACCESS ROAD SURFACES TO BE PAVED WITH TWO 4" LIFTS OF #3-#8 Limestone BENEATH 2" OF CRUSHER RUN LIMESTONE.

4. IN AREA OF ACCESS ROAD NO.1 STAT 2+00 THRU STA 5+25, ROAD CUT IS STEEPER THAN 2:1 TO AVOID ADJACENT PROPERTY. A GEOLOGIST SHALL FIELD INVESTIGATE THE SITE TO DETERMINE IF SLOPE AS SHOWN 1.75:1 WILL BE STABLE. IF NOT, ROAD WILL REQUIRE RE-DESIGNED OR ADDITIONAL STABILIZATION METHODS UTILIZED.

5. RIG FOOTPRINT AND MANIFOLD PADS TO BE PAVED WITH TWO 4" LIFTS OF #3-#8 Limestone BENEATH 2" OF CRUSHER RUN LIMESTONE.

APPROVED WVDEP OOG
8-28-2015

FLOWBACK PIT	
LINER SYSTEM	- 60 MIL TEXTURED PRIMARY LINER - 10 OZ. FLEX LINER
TOTAL VOLUME	= 5,135 AC FT 1.67 MILLION GALLONS
STORAGE VOLUME	= 3,911 AC FT 1.27 MILLION GALLONS
WATER SURFACE ELEVATION	= 1084 DEPTH 15.0 FT
TOP OF BERM ELEVATION	= 1096 DEPTH 17.0 FT



Note:
All fill areas will utilize a toe bench and will be "keyed in". Fill will be placed in 12" maximum loose lifts, maximum particle size of 6", compacted to 95% per standard proctor (ASTM D-695) with a vibrating sheepsfoot roller, and on a level surface. See toe bench detail.

BRUCE KEEFER, P.E., L.P.
REGISTERED PROFESSIONAL ENGINEER
DESIGNER TEST TECHNICIAN #278
T-36338 (SINCE 10/24/2011)
www.rk&k.com

Professional Energy Consultants
AN ASSOCIATE OF SLS
SLS
CONSULTING ENGINEERS, INC.
1000 EAST MAIN STREET
PROJECT MOUNTAIN
DUNCAN, WV 26040
www.slsinc.com

THIS DOCUMENT WAS
PREPARED BY
SEAR ENGINEERS
FOR PRODUCTION
CONTRACT

RIG FOOTPRINT &
FLOWBACK PIT NO. 1
WEU4
MELBOY DISTRICT
GENEVILLE DISTRICT
TYLER COUNTY, WV

DATE: 04/29/2015
SCALE: 1" = 50'
DESIGNED BY: NWH
FILE NO: 208
SHEET 9 OF 33
REV: 06/25/2015

4709502280

PROJECT INFORMATION

PROJECT NAME: WEU4
OWNER: WEU4 SITE PLAN
DESIGNER: RPK ENGINEERS
DATE: 7/28/15

WEU4 SITE PLAN
EQT PRODUCTION COMPANY

SITUATE ON THE WATERS OF CAMP MISTAKE RUN IN
MCELROY AND CENTERVILLE DISTRICTS,
TYLER COUNTY, WEST VIRGINIA

LOCATION COORDINATES

NE 1/4 Sec 24, T12N, R10E, S12E
NE 1/4 Sec 25, T12N, R10E, S12E
NE 1/4 Sec 26, T12N, R10E, S12E

DEED REFERENCE INFORMATION

DEED REFERENCE INFORMATION
DEED NO. 123456789
DATE: 12/31/2014

ENTRANCE PERMIT

ENTRANCE PERMIT
This permit is required for the proposed project to be located on the property of the applicant.

WATER UTILITY AGREEMENT

WATER UTILITY AGREEMENT
This agreement is required for the proposed project to be located on the property of the applicant.

FLOODPLAIN NOTE

FLOODPLAIN NOTE
The proposed project is located in a floodplain area. The applicant is responsible for obtaining the necessary permits.

ENVIRONMENTAL NOTES

ENVIRONMENTAL NOTES
The proposed project is located in an environmentally sensitive area. The applicant is responsible for obtaining the necessary permits.

HORIZONTAL & VERTICAL CONTROL

HORIZONTAL & VERTICAL CONTROL
The proposed project is located in an area with horizontal and vertical control. The applicant is responsible for obtaining the necessary permits.



LIST OF DRAWINGS

- 1. COVER SHEET
- 2. NOTES
- 3. GRADE SHEET
- 4. EROSION CONTROL PLAN
- 5. SITE PLAN
- 6. UTILITIES PLAN
- 7. FLOODPLAIN MAP
- 8. ENVIRONMENTAL REPORT
- 9. WATER UTILITY AGREEMENT
- 10. ENTRANCE PERMIT
- 11. FLOODPLAIN PERMIT
- 12. FLOODPLAIN MAP
- 13. FLOODPLAIN MAP
- 14. FLOODPLAIN MAP
- 15. FLOODPLAIN MAP
- 16. FLOODPLAIN MAP
- 17. FLOODPLAIN MAP
- 18. FLOODPLAIN MAP
- 19. FLOODPLAIN MAP
- 20. FLOODPLAIN MAP



COVER SHEET
WEU4
MCELROY DISTRICT
CENTERVILLE DISTRICT
TYLER COUNTY, WV

Michael Stoff
7/28/15

RECEIVED
Office of Oil and Gas
WV Department of
Environmental Protection
JUL 29 2015

DATE: 7/28/15
SCALE: 1" = 400'
DRAWN BY: JRM
CHECKED BY: JRM
DATE: 7/28/15
PROJECT: WEU4
SHEET: 1 OF 10

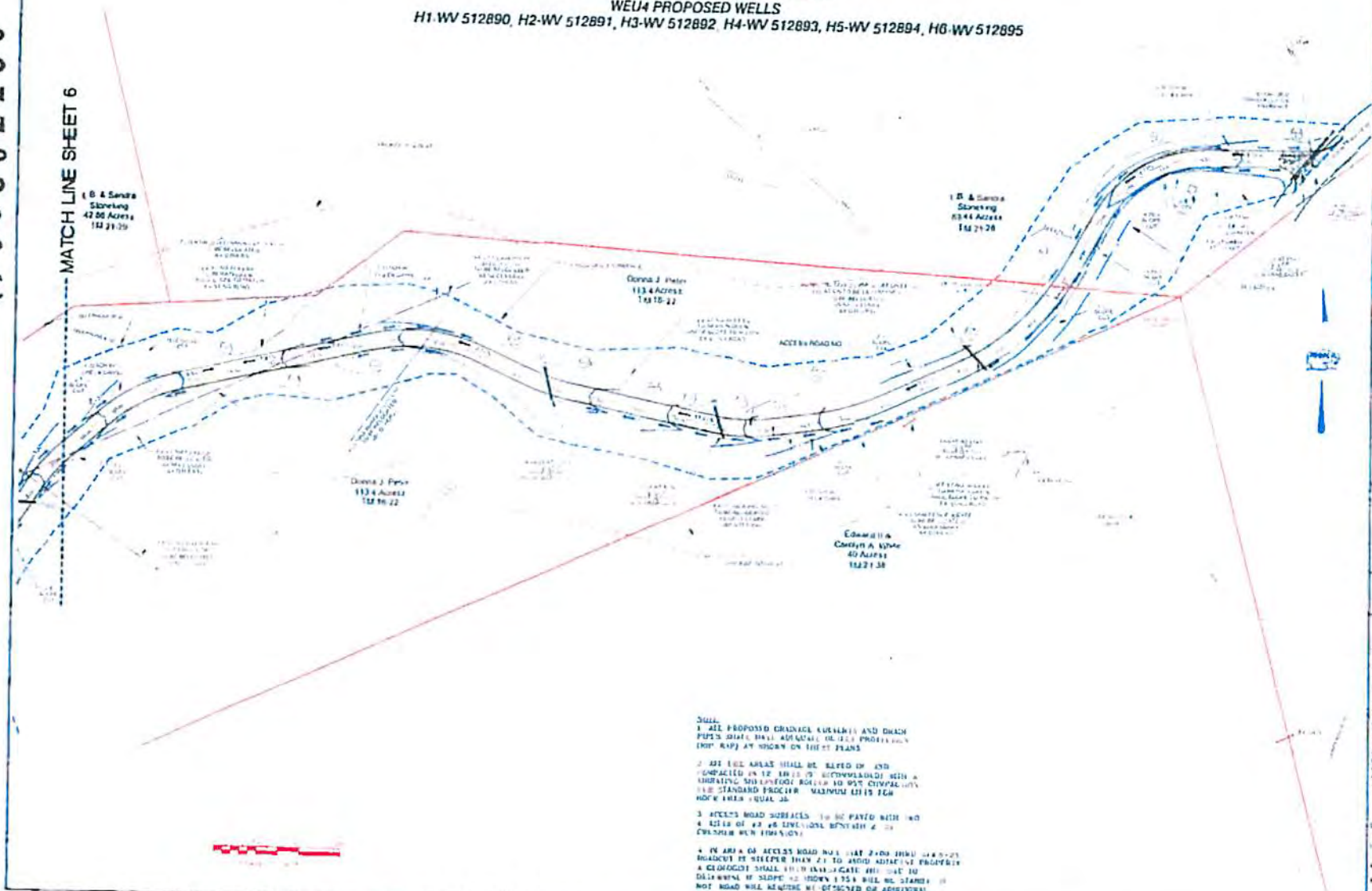
WV Dept of State
1000 245 4040
West Virginia State Law
Chapter 20, Article 2-1
Requires that you call 24 hours
business days before you dig in
the state of West Virginia
115 116 116

4709502280

ACCESS ROAD NO. 1 PLAN

WEU4 PROPOSED WELLS

H1-WV 512890, H2-WV 512891, H3-WV 512892, H4-WV 512893, H5-WV 512894, H6-WV 512895



- Notes:**
1. ALL PROPOSED CHANNELS, CULVERTS AND DRAIN PIPES SHALL BE IN ACCORDANCE WITH THE PROVISIONS OF THE STATE OF WEST VIRGINIA.
 2. ALL EASE AREAS SHALL BE REPEATED AND COMPACTED IN 12 INCHES OF RICHWOODS WITH A MINIMUM OF 10% MOISTURE TO MEET STANDARD PROCTOR MAXIMUM DRY TGA MORE THAN EQUAL TO.
 3. ACCESS ROAD SURFACES TO BE PAVED WITH 10% 4 INCHES OF 4 1/2 INCHES OF 10% MOISTURE TO MEET STANDARD PROCTOR MAXIMUM DRY TGA MORE THAN EQUAL TO.
 4. IN AREA OF ACCESS ROAD NO. 1 THAT SHOWS SIGNIFICANT EROSION OR SOIL LOSS, THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY. THE DETERMINATION OF WHETHER A 15% WILL BE STAMPS ON ROAD WILL BE MADE BY THE ENGINEER OR ADDITIONAL STABILIZATION METHODS MAY BE REQUIRED.

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 OFFICE OF ENVIRONMENTAL PROTECTION
 JUL 23
 WV Department of Environmental Protection

RKX ENGINEERS
 LANCE C. RYAN, P.E.
 1000 W. MAIN ST. SUITE 100
 CHARLOTTE, NC 28202
 PHONE: 704.375.1111

Professional Energy Consultants
SLS
 SLS CONSULTANTS, INC.
 1000 W. MAIN ST. SUITE 100
 CHARLOTTE, NC 28202
 PHONE: 704.375.1111

ACCESS ROAD NO. 1 PLAN
 WEU4
 HALE, BOYD DISTRICT
 CENTERVILLE, OHIO, OH
 TYLER COUNTY, WV

DATE: 7/23/15
 SCALE: 1" = 40'
 DRAWN BY: [unclear]
 CHECKED BY: [unclear]
 100% 3 OF 10
 15% 1 OF 10

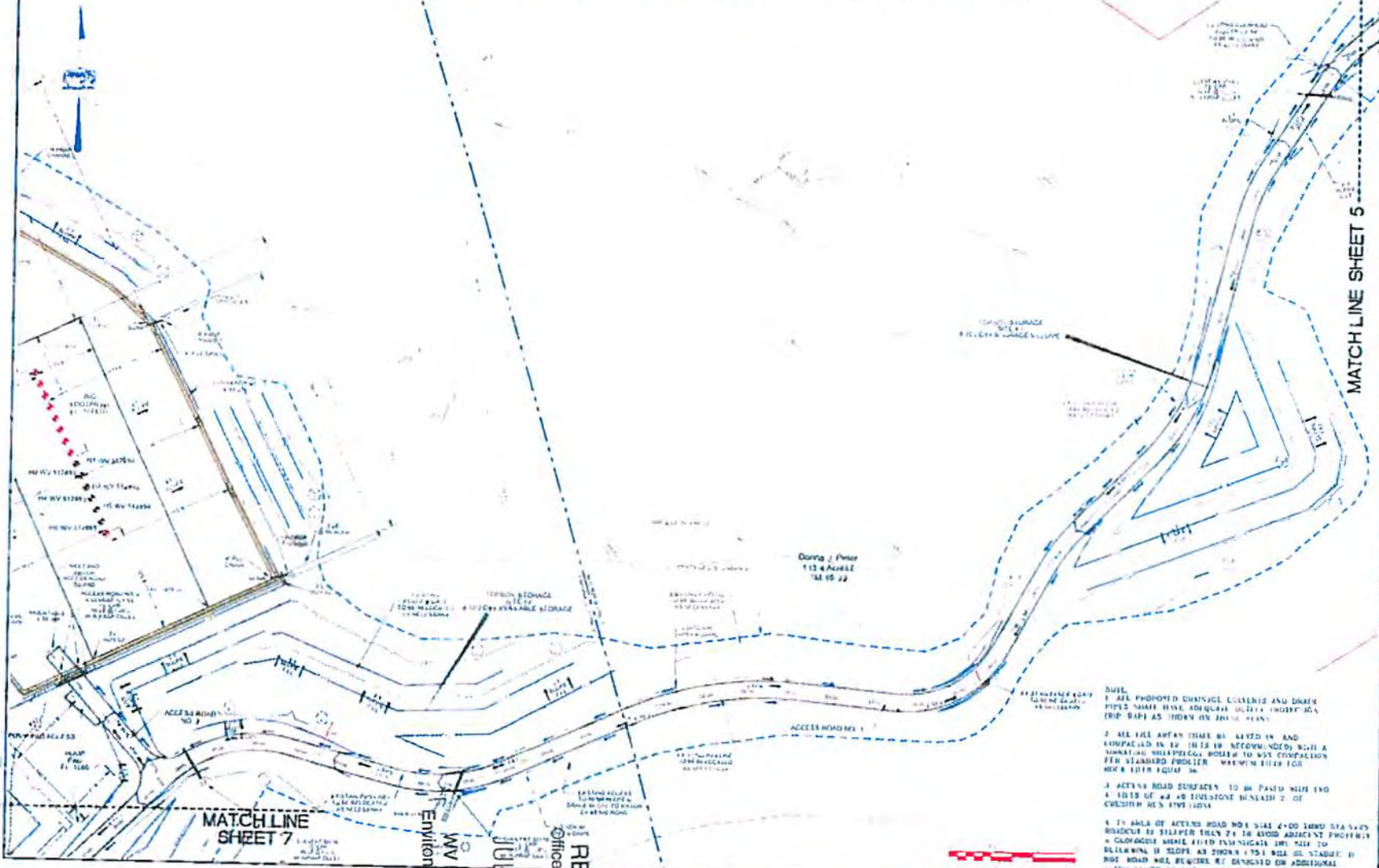
11/2/15

4709502280

ACCESS ROAD NO. 1 PLAN

WEU4 PROPOSED WELLS

H1-WV 512890, H2-WV 512891, H3-WV 512892, H4-WV 512893, H5-WV 512894, H6-WV 512895



MATCH LINE SHEET 5

MATCH LINE SHEET 7



- NOTE:**
1. ALL PROPOSED OUTSIDE CULVERTS AND DRAIN PIPES SHALL HAVE AN adequate UNDERPASS (RIP RAPE AS SHOWN ON THIS PLAN).
 2. ALL THE ABOVE SHALL BE KEPT IN AND MAINTAINED IN THE BEST REPAIR AND CONDITION AT ALL TIMES TO BE COMPATIBLE WITH THE STANDARDS FOR THE STATE OF WEST VIRGINIA.
 3. ACCESS ROAD SURFACES TO BE PAVED WITH TWO (2) INCHES OF ASPHALT OVER A 4 INCH DUST OR EQUIVALENT BASE COURSE.
 4. 20' WIDE OF ACCESS ROAD SHALL BE 2'-00" THICK GRAVEL ROADWAY TO BE KEPT IN THE BEST REPAIR AND CONDITION AT ALL TIMES TO BE COMPATIBLE WITH THE STANDARDS FOR THE STATE OF WEST VIRGINIA.

STATE OF WEST VIRGINIA
 REGISTERED PROFESSIONAL ENGINEER
 LICENSE NO. 12478
RK K
ENGINEERS

Professional Energy Consultants
SLS
 CONSULTANTS

ACCESS ROAD NO. 1 PLAN
 WEU4
 MINE AND RECLAMATION DISTRICT
 CENTERVILLE DISTRICT
 TYLER COUNTY, WV

DATE: 06/15/15
 SCALE: AS SHOWN
 DRAWN BY: JMM
 CHECKED BY: JMM
 DATE: 06/15/15
 PROJECT NO.: 15-001

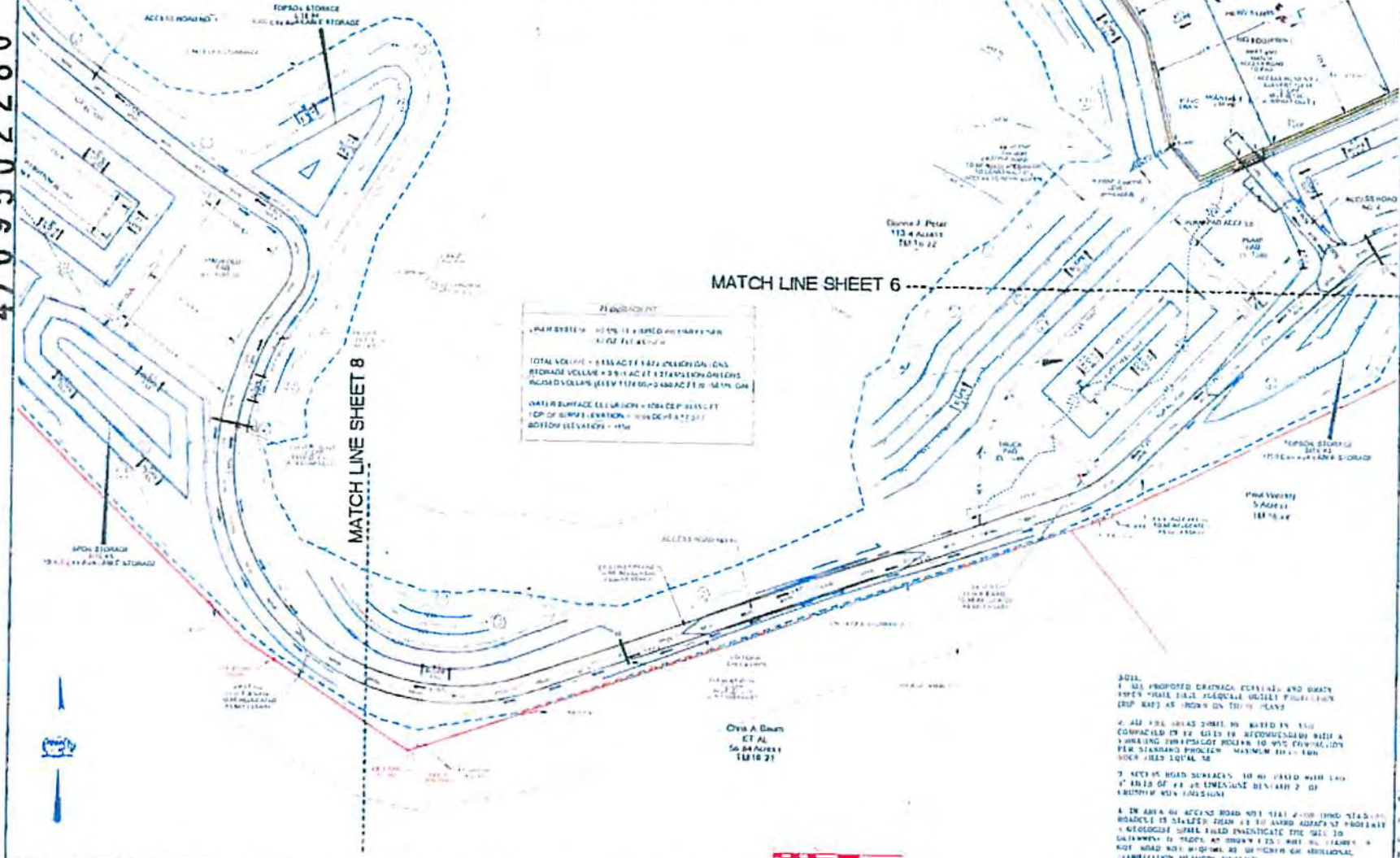
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 WV Department of
 Environmental Protection
 JUL 29 2015

4709502280

ACCESS ROAD NO. 1 CONCEPTUAL LAYOUT

WEL4 PROPOSED WELLS

H1-WV 512890, H2-WV 512891, H3-WV 512892, H4-WV 512893, H5-WV 512894, H6-WV 512895



REMARKS

1. ALL PROPOSED DRAINAGE, FENCE, AND GRATE
 2. ALL PROPOSED DRAINAGE, FENCE, AND GRATE
 3. ALL PROPOSED DRAINAGE, FENCE, AND GRATE
 4. ALL PROPOSED DRAINAGE, FENCE, AND GRATE

**TOTAL VOLUME = 6155 AC FT 142 INCHES ON DNS
 STORAGE VOLUME = 2911 AC FT 12 INCHES ON DNS
 ACROSS VOLUME = 1111 AC FT 2 INCHES ON DNS**

**DATE SURFACE ELEVATION = 104.00 FT
 TOP OF SURFACE ELEVATION = 104.00 FT
 BOTTOM ELEVATION = 104.00 FT**

MATCH LINE SHEET 6

MATCH LINE SHEET 8

Chris A. Blum
ET AL
56.84 Acres
12/18/21

SOIL

1. ALL PROPOSED DRAINAGE, FENCE, AND GRATE
 2. ALL PROPOSED DRAINAGE, FENCE, AND GRATE
 3. ALL PROPOSED DRAINAGE, FENCE, AND GRATE
 4. ALL PROPOSED DRAINAGE, FENCE, AND GRATE

1. ALL PROPOSED DRAINAGE, FENCE, AND GRATE
 2. ALL PROPOSED DRAINAGE, FENCE, AND GRATE
 3. ALL PROPOSED DRAINAGE, FENCE, AND GRATE
 4. ALL PROPOSED DRAINAGE, FENCE, AND GRATE



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 CHARLOTTE, NC 28202
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ACCESS ROAD NO. 1 PLAN
WEL4
 ALEJOY DISTRICT
 CENTERVILLE DISTRICT
 TYLER COUNTY WV

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 JUL 29 2015
 WV Department of
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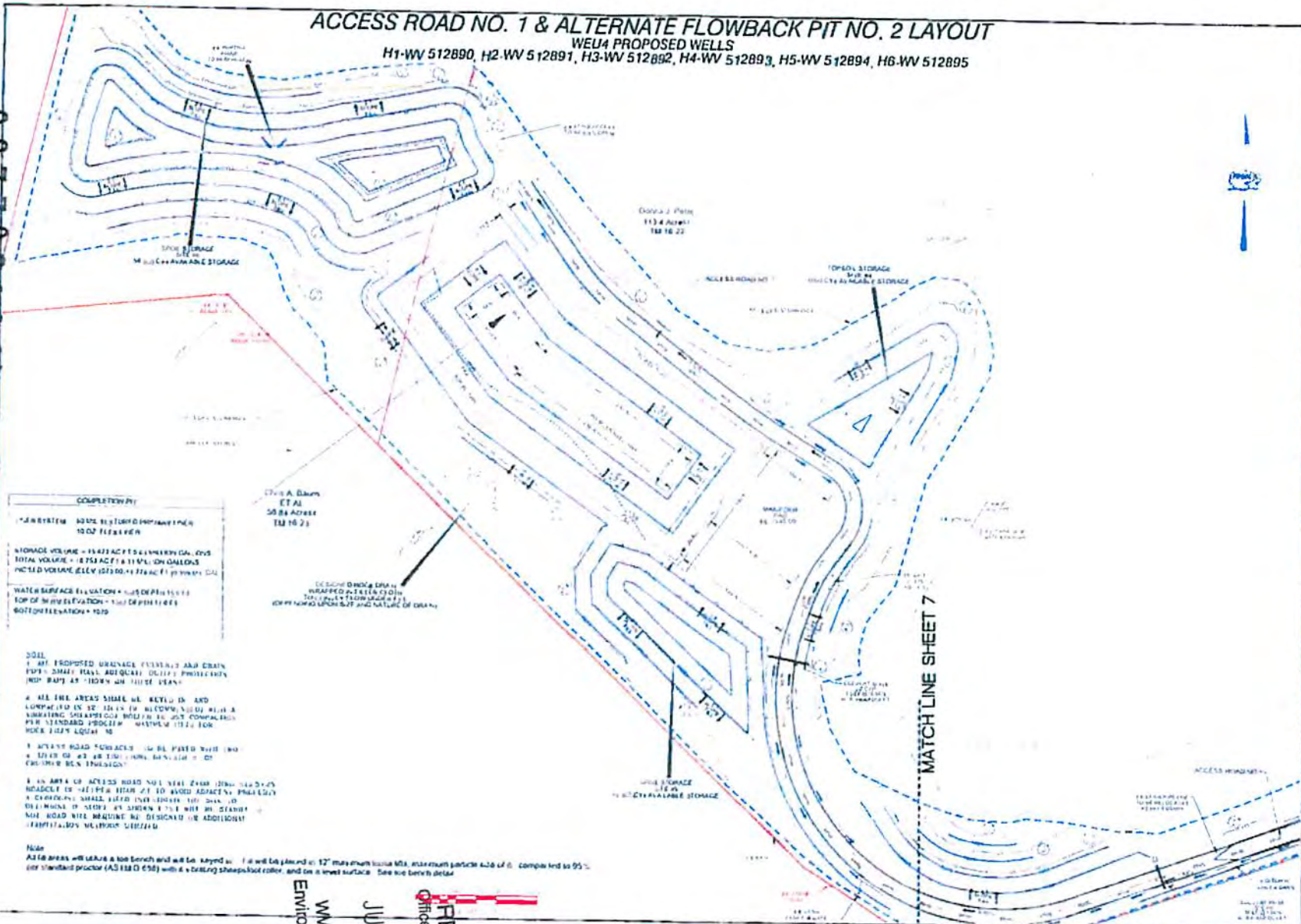
WAC
7/29/15

ACCESS ROAD NO. 1 & ALTERNATE FLOWBACK PIT NO. 2 LAYOUT

WEU4 PROPOSED WELLS

H1-WV 512890, H2-WV 512891, H3-WV 512892, H4-WV 512893, H5-WV 512894, H6-WV 512895

4709502280



COMPLETION BY:
 *NEW SYSTEM 100% RESTORED/IMPROVED
 100% RESTORED

STORAGE VOLUME = 15,422 AC FT OF OVERBERN DA, OVER
 TOTAL VOLUME = 18,753 AC FT & 111 M³ OF OILS/SLURRIES
 PICTED VOLUME 816,102 (100% 111 M³ OF OILS/SLURRIES)

WATER SURFACE ELEVATION = 102 DEPTH (15 FT)
 TOP OF 100% RESTORATION = 102 DEPTH (15 FT)
 BOTTOM ELEVATION = 102

Chris A. Baum
 ET AS
 58 BA ACCESS
 (1116 22)

DESIGN DRAIN & DRAIN
 UNWRAPPED AT ALL POINTS
 TO PREVENT FLOWBACK FROM
 OCCURRING UPON SURF AND NATURE OF DRAIN

MATCH LINE SHEET 7

- SOIL**
- 1. ALL PROPOSED URINEAGE (1116 22) AND DRAIN
 WITH DRAIN, TRAIL, AND QUARRY (1116 22) PROVISIONS
 AND BAPT AS 1116 22 IN THESE SEASONS
 - 2. ALL THE AREAS SHALL BE REVEGETATED AND
 COMPACTED TO 100% OF ORIGINAL (1116 22) WITH A
 LUMPING SUBSTRATE (1116 22) AS 100% COMPACTED
 PER STANDARD PROCEEDING (1116 22) FOR
 ROAD (1116 22) AS 100%
 - 3. ALL ACCESS ROAD SURFACES TO BE PAVED WITH (1116 22)
 AS 100% OF (1116 22) AS 100% OF (1116 22) AS 100%
 - 4. ALL AREA OF ACCESS ROAD NO. 1 SHALL BE (1116 22)
 ROAD SURF TO 1116 22 TO AVOID ADVERSE (1116 22)
 A (1116 22) SHALL BE (1116 22) (1116 22) (1116 22)
 THE (1116 22) OF (1116 22) SHALL BE (1116 22)
 THE ROAD SURF (1116 22) SHALL BE (1116 22) (1116 22)
 (1116 22) (1116 22) (1116 22)

Note
 All the areas will leave a top bench and will be keyed as 1" it will be placed in 12" maximum loose fill, maximum particle size of 0.5" compacted to 95%
 per standard practice (AS 1116 22) with a vibrating sheepfoot roller, and on a wet surface. See site bench detail.

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PKK ENGINEERS

Professional Energy Consultants

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 FAX: 704.375.1235
 WWW.PKKENGINEERS.COM

ACCESS ROAD NO. 1
 A-T-F FLOWBACK PIT NO. 2
 WEU4
 WELLS
 CENTERVILLE DISTRICT
 TYLER COUNTY, WV

DATE PREPARED
 07/29/15

DATE 07/29/15

FILE NO. 0000

SCALE 1" = 50'

DRAWN BY JMB

CHECKED BY JMB

DATE 07/29/15

BY JMB

MAC
 7/29/15

070502280

RIG FOOTPRINT & FLOWBACK PIT NO. 1 LAYOUT

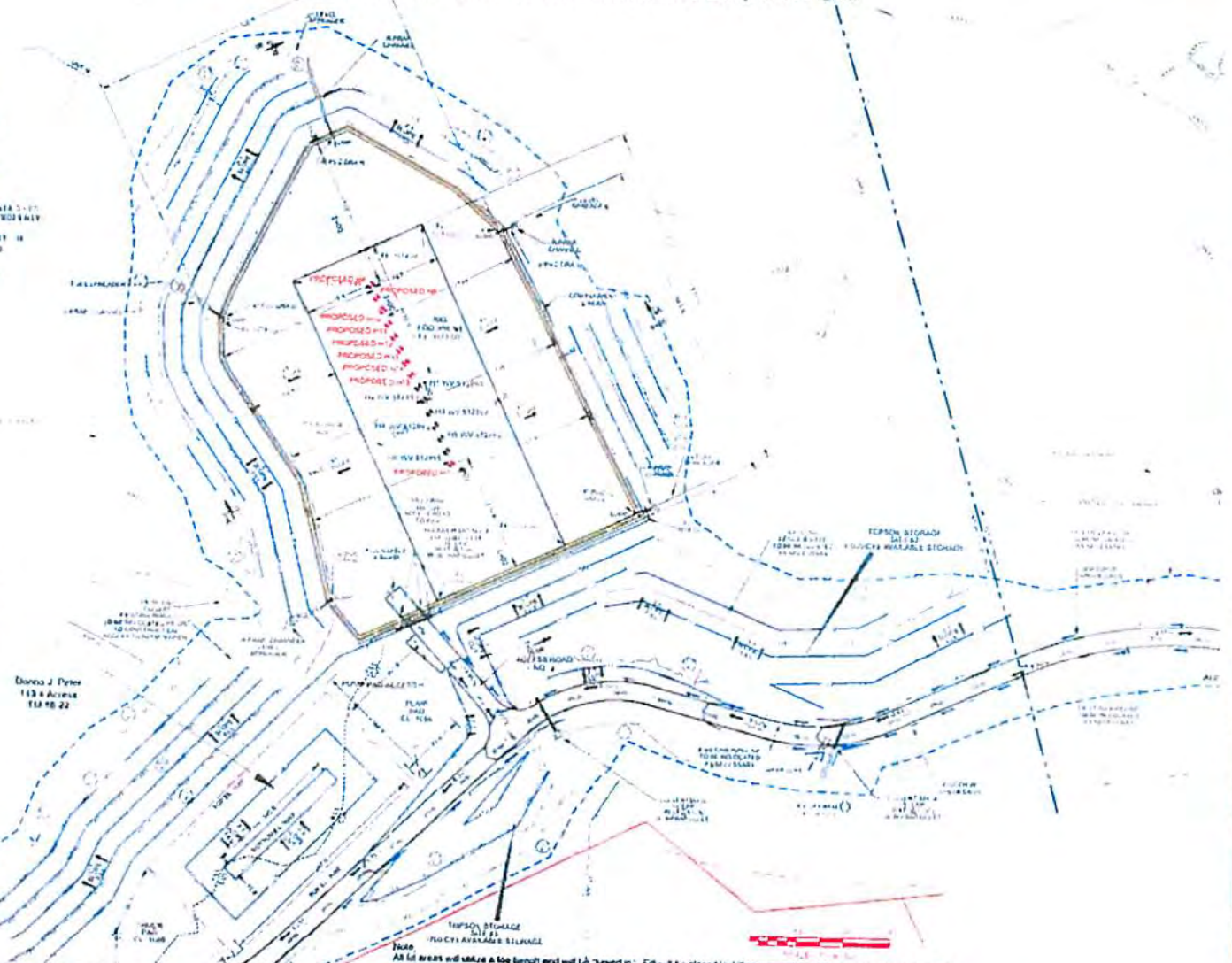
WELLS PROPOSED WELLS

H1-WV 512890, H2-WV 512891, H3-WV 512892, H4-WV 512893, H5-WV 512894, H6-WV 512895

1. ALL PROPOSED DRAINAGE CHANNELS AND DRAIN PIPES SHALL HAVE ADEQUATE GRILL PROTECTION AND RAMP UP AS SHOWN ON THE PLAN.
2. ALL FILL AREAS SHALL BE BUILT IN AND COMPACTED IN 12 INCH (3) REWORKED WITH A VIBRATOR, SHELFPROOF RIDGES TO 8% COMPACTED PER STANDARD PROCEDURE. MAXIMUM FILL FOR ROCK IS 10% TOTAL.
3. ACCESS ROAD SURFACE TO BE PAVED WITH 10% FILL OF 2" OR LARGER DENTALS OF CRUSHED AND LIMESTONE.
4. IN AREA OF ACCESS ROAD NO. 1 AND 2 (SEE AREA 5-17) SUBJECT OF PERMIT FROM 8-1-2008. GEOTECHNICAL PROGRAM A GEOTECHNICAL SHALL FIELD INVESTIGATE THE SOIL TO DETERMINE IF THERE IS ANY SIGN OF CLAY OR SILT IN THE SOIL. IF CLAY OR SILT IS FOUND, THE SOIL SHALL BE CLASSIFIED AS CLAY OR SILT AND AN ADDITIONAL INVESTIGATION WILL BE REQUIRED.
5. SOIL EROSION AND WEARERS TO BE PAVED WITH 10% FILL OF 2" OR LARGER DENTALS OF CRUSHED AND LIMESTONE.

FLOWBACK PITS

PERMITTED TO BE USED FOR FLOWBACK PITS
 TOTAL VOLUME = 5,875 AC FT (1.22 MILLION GALLONS)
 STORAGE VOLUME = 2,811 AC FT (1.22 MILLION GALLONS)
 WATER SURFACE ELEVATION = 1084.16 FT (118 FT)
 TOP OF BENCH ELEVATION = 1084.16 FT (118 FT)



Note:
 All fill areas will be a 10% bench and will be "loose fill". Fill will be placed in 12" maximum loose lifts, maximum particle size of 6", compacted to 85% per standard practice (ASTM D 1586) with a vibrating sheepsfoot roller, and on a level surface. See the bench draw.

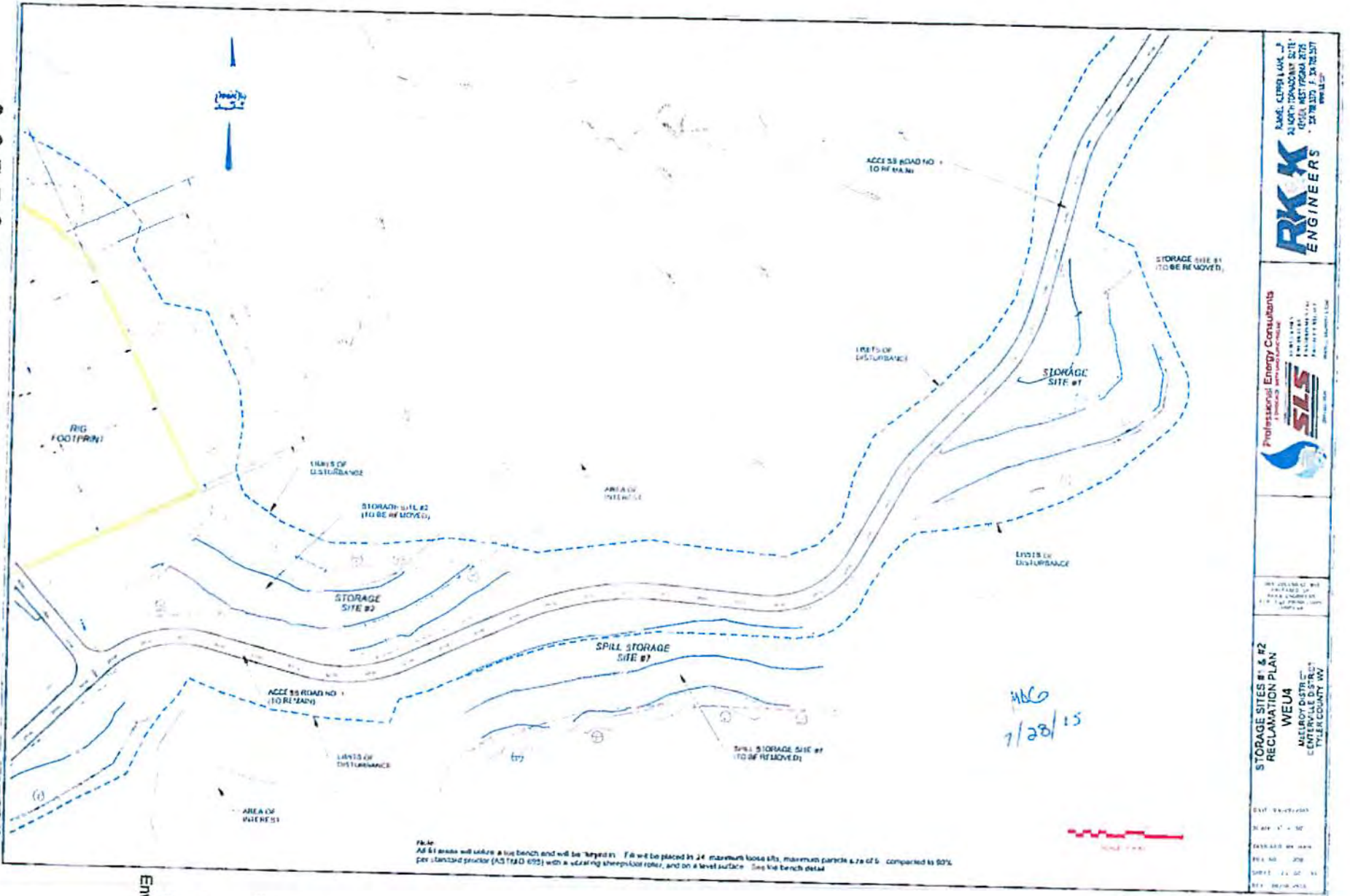
PKK ENGINEERS
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 KATONAH, MISSISSIPPI 39074
 PHONE: 601.875.1234
 FAX: 601.875.1234

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 A DIVISION OF SLS CONSULTANTS, INC.
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 DENVER, CO 80202
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 FAX: 303.733.1101

RIG FOOTPRINT &
 FLOWBACK PIT NO. 1
 WELLS
 ANSEL DISTRICT
 CENTREVILLE DISTRICT
 TYLER COUNTY, WV

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4709502280



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 OVEY, MISSISSIPPI 39208
 601-937-1370 / 601-937-5371
 www.rkx.com

RKX ENGINEERS

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 www.slsinc.com

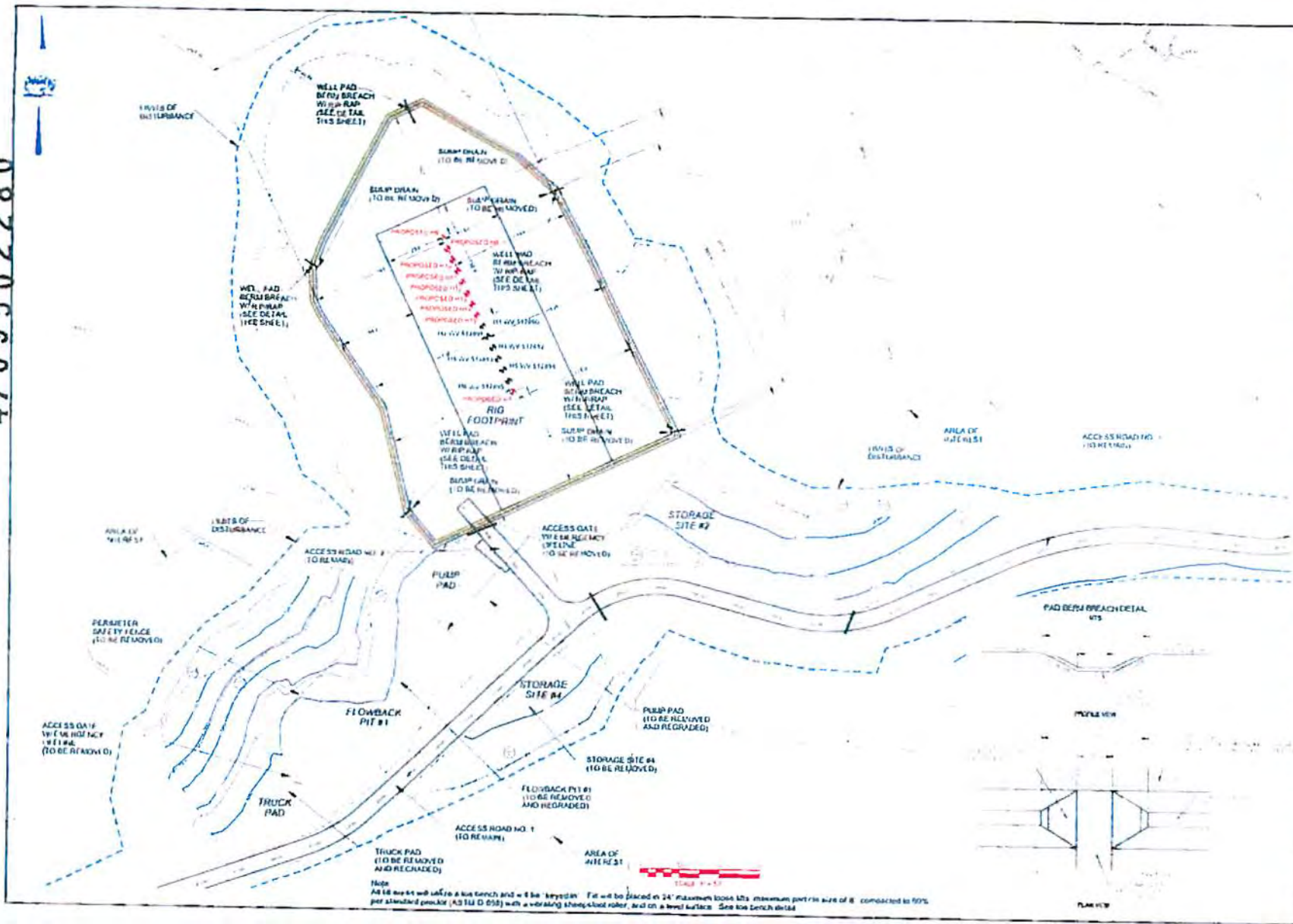
THIS DOCUMENT HAS
 BEEN PREPARED BY
 SLS CONSULTANTS
 1111 S. W. 10th Street
 Tulsa, OK 74117

**STORAGE SITES #1 & #2
 RECLAMATION PLAN**
 WEUA
 MURPHY DISTRICT
 CENTERVILLE DISTRICT
 TYLER COUNTY, WV

DATE: 06/22/2015
 DRAWN: J. W. WOOD
 CHECKED: J. W. WOOD
 PLOT NO: 2015
 SHEET: 11 OF 11
 TOTAL SHEETS: 11

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Note: All 18 inch well shafts to be trench and 4 inch keyhole. Fit will be placed in 24" maximum block size, minimum joint size of 8" connected to 50% per standard practice (AS 114 D 058) with a working shoe-rod roller, and on a level surface. See key trench detail.

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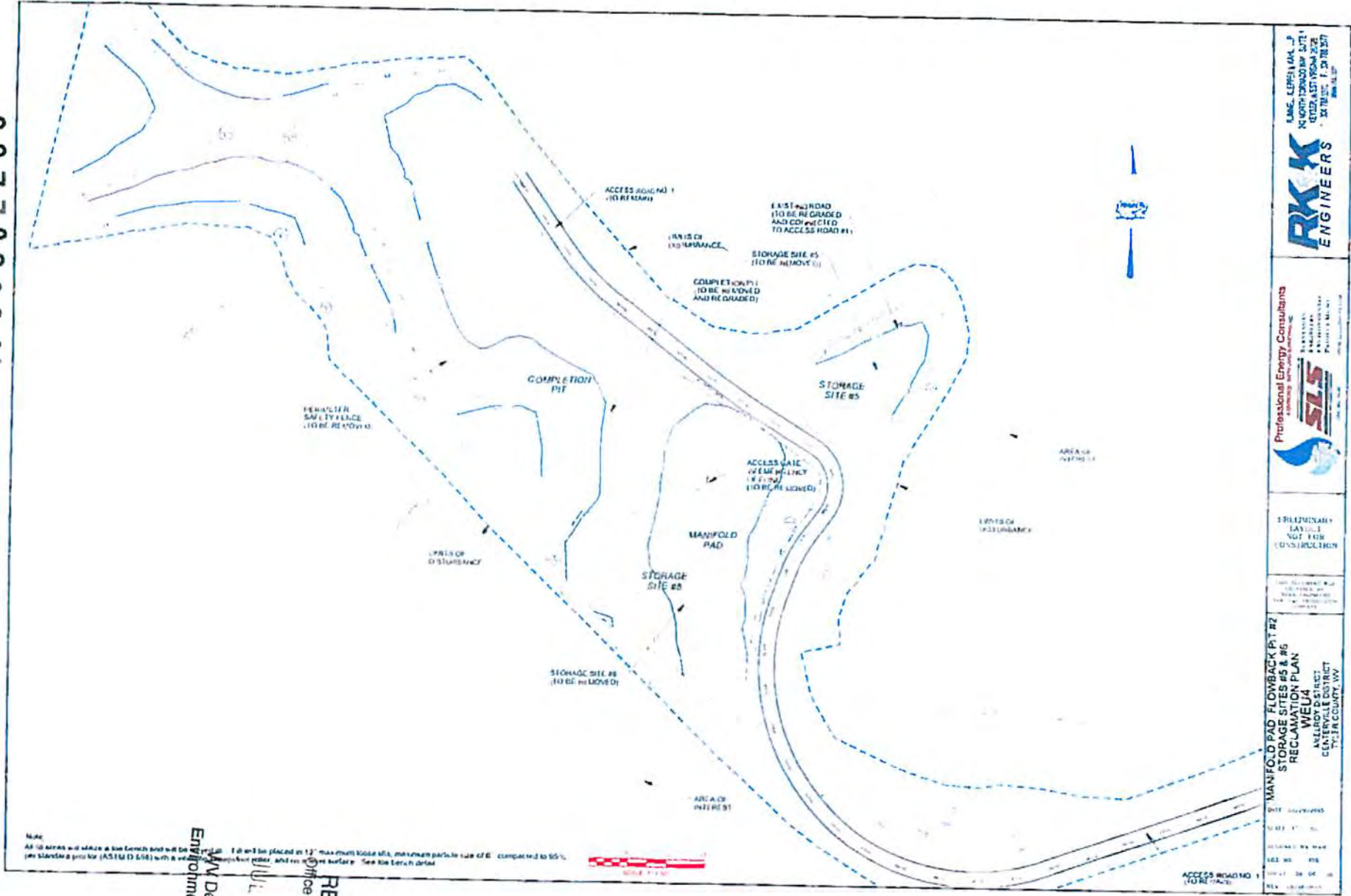
TRUCK PAD, PUMP PAD, FLOWBACK PIT #1, R.O. FOOTPRINT STORAGE SITES #2 & #4 RECLAMATION PLAN
 WEU4
 AGENCY DISTRICT: CENTERVILLE DISTRICT
 TELEPHONE: 704.375.1100

DATE: 04/24/2015
 DRAWN BY: [Name]
 CHECKED BY: [Name]
 APPROVED BY: [Name]

Handwritten note: 4/29/15

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 Environmental Protection

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NOTE:
 All 10 areas will adhere to the bench and will be placed on 1" maximum loose fill, maximum particle size of 6" compacted to 95% per standard proctor (ASTM D 1557) with a minimum 18" depth. See the bench data.



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 W.M. Department of
 Environmental Protection

MANIFOLD PAD FLOWBACK PIT #2
 STORAGE SITES #5 & #6
 REGULATION PLAN
 WELLS
 ANKENY DISTRICT
 CENTERVILLE DISTRICT
 TYLER COUNTY, WV

DATE: 04/29/2015
 SCALE: 1" = 50'
 DRAWN BY: WJK
 CHECKED BY: JRS
 PROJECT NO: 15-04-0001
 REV: 04/29/2015

Professional Energy Consultants
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 A COMPANY WITH AN EXCELLENCE
 IN THE ENERGY INDUSTRY
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RKX ENGINEERS
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3/14/15
 2/2/15