



west virginia department of environmental protection

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

Austin Caperton, Cabinet Secretary
www.dep.wv.gov

Friday, September 27, 2019
WELL WORK PERMIT
Horizontal 6A / New Drill

TRIAD HUNTER, LLC
125 PUTNAM ST
MARIETTA, OH 45750

Re: Permit approval for WELLS MECKLEY N 3M
47-095-02634-00-00

This well work permit 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 any additional specific 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 of 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.

Per 35 CSR 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- 0450.


James A. Martin
Chief

Operator's Well Number: WELLS MECKLEY N 3M
Farm Name: VELMA L. WELLS
U.S. WELL NUMBER: 47-095-02634-00-00
Horizontal 6A New Drill
Date Issued: 9/27/2019

Promoting a healthy environment.

PERMIT CONDITIONS

West Virginia Code § 22-6A-8(d) allows the Office of Oil and Gas to place specific conditions upon this permit. Permit conditions have the same effect as law. Failure to adhere to the specified permit conditions may result in enforcement action.

CONDITIONS

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. 24 hours prior to the initiation of the completion process the operator shall notify the Chief or his designee.
8. During the completion process the operator shall monitor annular pressures and report any anomaly noticed to the chief or his designee immediately.
9. 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.
10. 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.

API Number: _____

PERMIT CONDITIONS

11. The operator shall provide to the Office of Oil and Gas the dates of each of the following within 30 days of their occurrence: completion of construction of the well pad, commencement of drilling, cessation of drilling, completion of any other permitted well work, and completion of the well. Such notice shall be provided by sending an email to DEPOOGNotify@wv.gov.

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

1) Well Operator: Triad Hunter, LLC 494494833 Tyler Lincoln Paden City
Operator ID County District Quadrangle

2) Operator's Well Number: 3M Well Pad Name: Wells Meckley

3) Farm Name/Surface Owner: Wells Meckley Public Road Access: State Route 18

4) Elevation, current ground: 958' Elevation, proposed post-construction: 958'

5) Well Type (a) Gas Oil Underground Storage

Other _____

(b) If Gas Shallow Deep _____

Horizontal _____

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6/25/2019

6) Existing Pad: Yes or No Yes

7) Proposed Target Formation(s), Depth(s), Anticipated Thickness and Expected Pressure(s):
Marcellus Shale, 6197'-6256' VD, 50'-55' THICK, 3,000PSI BHP

8) Proposed Total Vertical Depth: 6,260' TVD

9) Formation at Total Vertical Depth: Marcellus Shale

10) Proposed Total Measured Depth: 6,260' MD

11) Proposed Horizontal Leg Length: 0'

12) Approximate Fresh Water Strata Depths: 250'

13) Method to Determine Fresh Water Depths: Examine local water wells

14) Approximate Saltwater Depths: 1100'-2000'

15) Approximate Coal Seam Depths: Multiple, thin, non-commercial seams 1,300' - 1,800'

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

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

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

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18)

CASING AND TUBING PROGRAM

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.)/CTS
Conductor	20"	New	A-53B	90 ppf	100'	100'	Cement to surface
Fresh Water	13 3/8"	New	J-55	54.5 ppf	350'	350'	Cement to Surface
Coal							
Intermediate	9 5/8"	New	J-55	36 ppf	2,850'	2,850'	Cement to Surface
Production	5 1/2"	New	P-110	20 ppf	6,260'	6,260'	Cement to Surface
Tubing							
Liners	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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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"	.375"	1380	0	Standard Class A	1.18 cu.ft./sk
Fresh Water	13 3/8"	17 1/2"	.380"	2730	750	Standard Class A	1.2 cu.ft./sk
Coal							
Intermediate	9 5/8"	12 1/4"	.352"	3520	1750	Light Cement Class A	1.9 cu.ft./sk; 1.7 cu.ft./sk
Production	5 1/2"	8 3/4"	.361"	16,800	9000	50/50 PDZ/ Class H	1.27 cu.ft./sk; 2.58 cu.ft./sk
Tubing							
Liners	N/A	N/A	N/A	N/A	N/A	N/A	N/A

PACKERS

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

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WW-6B
(10/14)

API NO. 47- 95 - _____
OPERATOR WELL NO. 3M _____
Well Pad Name: Wells Meckley

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

SEE ATTACHMENT: I-B

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

SEE ATTACHMENT: II-B

21) Total Area to be disturbed, including roads, stockpile area, pits, etc., (acres): 1 acres

22) Area to be disturbed for well pad only, less access road (acres): 1 acres

23) Describe centralizer placement for each casing string:

SEE ATTACHMENT: III-B

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

SEE ATTACHMENT: IV-B

25) Proposed borehole conditioning procedures:

SEE ATTACHMENT: V-B

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*Note: Attach additional sheets as needed.

(WW-6B)

ATTACHMENT: I-B

#19 Proposed Well Work:

Drill and complete a new vertical Marcellus Shale Well.

1. Auger a 24" conductor hole to 100 feet; run 20" casing to T.D., cement / grout to surface with Class A cement.
2. AIR/SOAP Drill a 17 1/2" intermediate hole to a depth of 350 feet; run 13 3/8" casing to T.D. and cement to surface with Class A cement.
3. Fluid Drill a 12 1/4" intermediate hole to a depth of 2,850 feet; run 9 5/8" casing to T.D. and cement back to surface with Class A cement.
5. Fluid Drill an 8 1/2" production hole to the projected total measured depth @ 6,260 feet.
6. Run quad combo open hole WL logs (Gamma-Ray, Resistivity, Density, Neutron, sonic).
7. Run 5.5" casing to TD and cement same.
8. Pressure test casing and perforate the Marcellus.
9. Perform an injection test on the Marcellus.
10. Record pressure for up to 30 days.
11. Shut well in until clean out and flow back operations are initiated.

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ATTACHMENT: II-B

#20 Fracturing/Stimulation Methods:

Upon the successful cementation of the 5 ½" production casing, completion of the well will be performed as follows:

1. Run a GR/CCL/Bond log from TD to surface.
2. Pressure test casing and perforate the Marcellus.
3. Perform a fracture injection test with a slick water using up to 100 bbls of water. Average treating pressure is expected to range between 6,000psi and 7,000psi and average treating rates are expected to range between 3 bbls and 10 bbls per minute. Upon completion of the stage, pressure will be recorded for up to 30 days.
4. Upon completion, solid bridge plugs are set in the casing, above the Marcellus and just below the well head for safety purposes.
5. Well is shut-in until clean out and flow back operations are initiated.

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ATTACHMENT: III-B

#23 Centralizer Placement:

- (20") Surface Casing – Between two and four run based on setting depth of casing.
 - Estimate - centralizer every 2 joints (estimate 4 centralizers to be ran)

- (13 3/8") 1st Intermediate Casing- Between six and ten run based on setting depth of casing.
 - Estimate - centralizer every 5 joints (estimate 10 centralizers to be ran)

- (9 5/8") 2nd Intermediate Casing – Between ten and twenty run based on setting depth of casing. Run Bow spring centralizers every other joint beginning on first joint for first 1,000', then every second joint to top of cement; then every third joint from there to surface.
 - Estimate - (centralizer 1 per 1 for 1st 1000', then 1 per 2 to surface)

- (5 1/2") Production Casing:
 - Beginning on joint #5 run one Solid Body Composite Spiral centralizer every third joint.

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(WW-6B)

#24 Cement Additives:ATTACHMENT: IV-B
PAGE 1 OF 2A. Surface Cement Job (20" csg.)

1. Surface Cement Job (20" csg.)
 - a) Average weight = 15.4 to 15.6 lbs./gal
 - b) Average yield = 1.19 to 1.24 ft³/5k
2. Common Additives
 - a) ¼ lb./5k Cello Flake (Lost circulation material)
 - b) 2%-3% Calcium Chloride (Accelerator)

*Note: Gel Sweep is usually pumped ahead of the cement.

Gel Spacer consists of 6% gel w/cello Flake.

B. Intermediate Cement Job (13 3/8" csg. & 9 5/8" csg.)

Due to depth, most intermediate casings are cemented in two stages.

1. The upper (lead) stage cement job usually consists of CLASS A CEMENT .

- a) Average weight = 13.1 to 13.5 lbs. /gal.
- b) Average yield = 1.54 to 1.70 ft³/5k.

*Note: Gel Sweep is usually pumped ahead of the cement.

Gel Spacer consists of 6% gel w/cello Flake.

2. The lower (tail) stage usually consists of standard CLASS A CEMENT.

- a) Average weight = 15.4 to 15.6 lbs./gal
- b) Average yield = 1.18 to 1.20 ft³/5k.

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#24 Cement Additives:ATTACHMENT: IV-B
PAGE 2 OF 2C. Longstring Cement Job (5 ½" csg.)

Depending on how far cement is brought back into the intermediate casing, the production casing is usually cemented in two stages and a heavy weighted spacer is pumped ahead of the cement to condition the well bore.

- | | | |
|---|------------------------|---------------------------|
| 1. Weighted Spacer | Ultra Flush II | 50 bbs. @ 13lbs. /gal |
| a) Barite | @257 lbs. /bbl | (Weighting Material) |
| b) US-40 | 2 gals. /bbl | (Surface tension reducer) |
| c) ss-2 | 13 lbs. /gal | (Suractant) |
| 2. Weighted Spacer | | |
| a) Barite | @257 lbs. /bbl | (Weighting Material) |
| b) SS-2 | 1 lb. /gal | (Surfactant) |
| c) MPA-170 | 1 lb. /bbl | (Fluid loss additive) |
| 3. Lead Slurry | 50:50 POZ/Premium NE-1 | |
| a) Average Weight = 13.50 lbs. /gal | | |
| b) Average yield = 1.44 ft ³ / 5k. | | |
| Common Additives | | |
| a) BA – 90 | 3lbs. /5k | (Bonding Agent) |
| b) R – 3 | .258 bwoc | (Retarder) |
| c) MPA – 170 | 1 lb. / bbl | (Fluid loss additive) |
| 4. Tail Slurry | CLASS H CEMENT | |
| a) Average Weight = 15.2lbs. /gal | | |
| b) Average Yield = 1.64 ft ³ /5k | | |
| Common Additives | | |
| a) R-3 | .2% bwoc | (Retarder) |
| b) CD-32 | .75 % bwoc | (Dispersant) |
| c) ASA – 301 | .35 % bwoc | (Free water removal) |
| d) BA-10A | 1.25% bwoc | (Bonding Agent) |
| e) ASCA | 30lbs. /5k | (Solubility additive) |
| f) Sodium Metasilicate | .58 bwoc | (Extender) |

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(WW-6B)

ATTACHMENT: V-B

#25 Borehole Conditioning Procedures:

17 ½" hole – Generally this section of the well is drilled on air with air compressors and boosters. It's imperative through this section of the well to have sufficient air volume and pressure on the borehole during drilling to ensure hole conditions remain clean and unobstructed. If a significant volume of freshwater is encountered during drilling soap is utilized to assist in lifting drill cuttings and freshwater out of the hole. "Red Rock" is a clay-dominant strata that is sensitive to freshwater in this area. Stiff foam is applied to the borehole when freshwater is encountered to prevent the clays from swelling and sloughing into the borehole.

12 1/4" hole - Generally this section of the well is drilled on air with air compressors and boosters. It's imperative through this section of the well to have sufficient air volume and pressure on the borehole during drilling to ensure hole conditions remain clean and unobstructed. If a significant volume of saltwater is encountered during drilling soap is utilized to assist in lifting drill cuttings and freshwater out of the hole.

8 1/2" hole – Generally, this section of the well is drilled on fluid. In an effort to keep borehole conditions in good working order several mechanisms are used to condition the borehole:

1. **High Viscosity Sweeps:** Sweeps are mixed and pumped after drilling every 3 joints during the drilling process. Sweeps generally run 20 cp over the active mud system viscosity for 20 bbls.
2. **Clean-Up Cycle:** "Clean-Up Cycles" are utilized every 500' in the lateral section of the well. During this routine conditioning procedure drilling is halted for the amount of time it takes to circulate 2 sweeps to surface. Also, during this process the pipe is continuously rotated and reciprocated at this spot to help circulate out any "cutting beds" lying in the wellbore.
3. **Short Trips:** Short trips are utilized to work out tight spots and cutting beds from the borehole which cause increased torque and drag, and pressure. Two short trips are typically run during the drilling of this section of the wellbore.
4. **At TOTAL DEPTH:** A clean-up cycle and short trip is utilized to condition the wellbore when total depth (TD) has been reached in preparation for running production casing.

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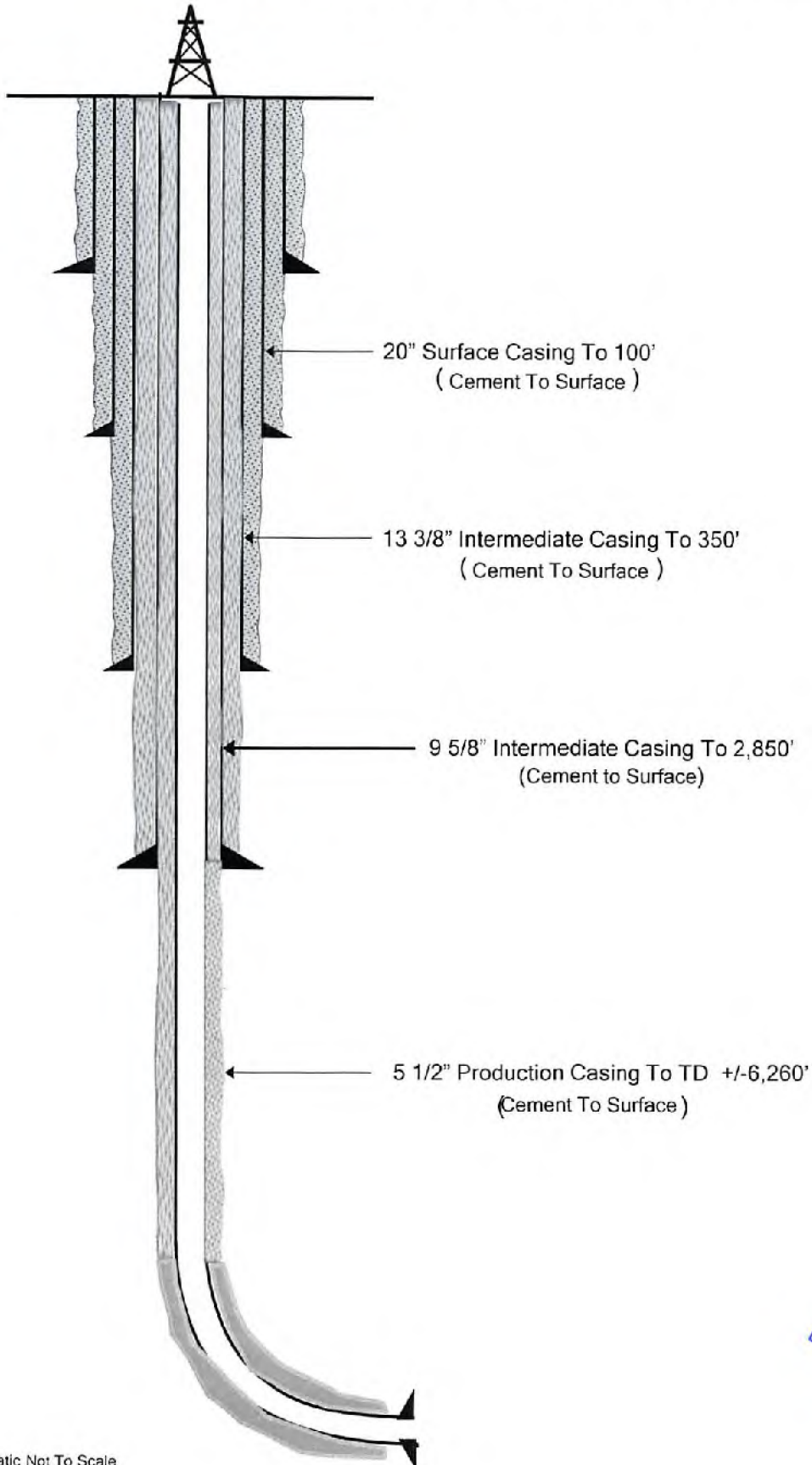
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6/25/2019

Triad Hunter, LLC

Wells Meckley 3M
MARCELLUS SHALE WELLBORE SCHEMATIC*



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* Schematic Not To Scale

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

FLUIDS/ CUTTINGS DISPOSAL & RECLAMATION PLAN

Operator Name Triad Hunter, LLC OP Code 494494833

Watershed (HUC 10) Pursley Creek Quadrangle Paden City

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

Will a pit be used? Yes No

If so, please describe anticipated pit waste: _____

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

Proposed Disposal Method For Treated Pit Wastes:

- Land Application
- Underground Injection (UIC Permit Number 387 Ohio Disposal Well, 34-121-3995)
- Reuse (at API Number _____)
- Off Site Disposal (Supply form WW-9 for disposal location)
- Other (Explain _____)

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Will closed loop system be used? If so, describe: Yes, cuttings fluids+gases are separated through a series of vessels. Cuttings are then solidified in debris boxes and hauled to landfill.

Drilling medium anticipated for this well (vertical and horizontal)? Air, freshwater, oil based, etc. Top Hole-Air Drilled. Lateral-Syn Mud

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

Additives to be used in drilling medium? See Attachment I-A: Drilling Additives List

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? Wetzel County Landfill, SWPU ID 12-10-45

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 *Mike Horan*

Company Official (Typed Name) Mike Horan

Company Official Title Manager Operations Conventional/Infrastructure

Subscribed and sworn before me this 30th day of April

Pamela K Nicholson



Pamela K. Nicholson, Notary Public
in and For The State of Ohio
My Commission Expires 8-9-20

My commission expires 8-9-2020

Triad Hunter, LLC

Proposed Revegetation Treatment: Acres Disturbed 6.6 Prevegetation pH 6-7

Lime 2-5 Tons/acre or to correct to pH 6.0-7.0

Fertilizer type 10-20-20

Fertilizer amount 500 lbs/acre

Mulch 2 Tons/acre

Seed Mixtures

Temporary

Permanent

Seed Type lbs/acre

Seed Type lbs/acre

Common Orchard Grass 30%

Same as temporary

Perennial Rye 35%

Medium Red Clover 25%

Common Timothy 10%

Attach:

Maps(s) of road, location, pit and proposed area for land application (unless engineered plans including this info have been provided). If water from the pit will be land applied, include dimensions (L x W x D) of the pit, and dimensions (L x W), and area in acreage, of the land application area.

Photocopied section of involved 7.5' topographic sheet.

Plan Approved by: [Signature]

Comments: _____

Title: Oil & Gas Inspector

Date: 6/25/2019

Field Reviewed? () Yes () No

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TRIAD HUNTER LLC. Subsidiary Of Montage Resources

125 Putnam Street
Marietta, Ohio 45750

SITE & SAFETY PLAN

Wells Meckley
Tyler County
West Virginia

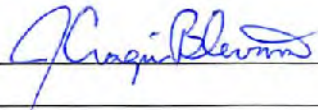
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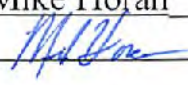
Approved:

West Virginia DEP



Date: 6/25/2019

Triad Hunter LLC

Mike Horan


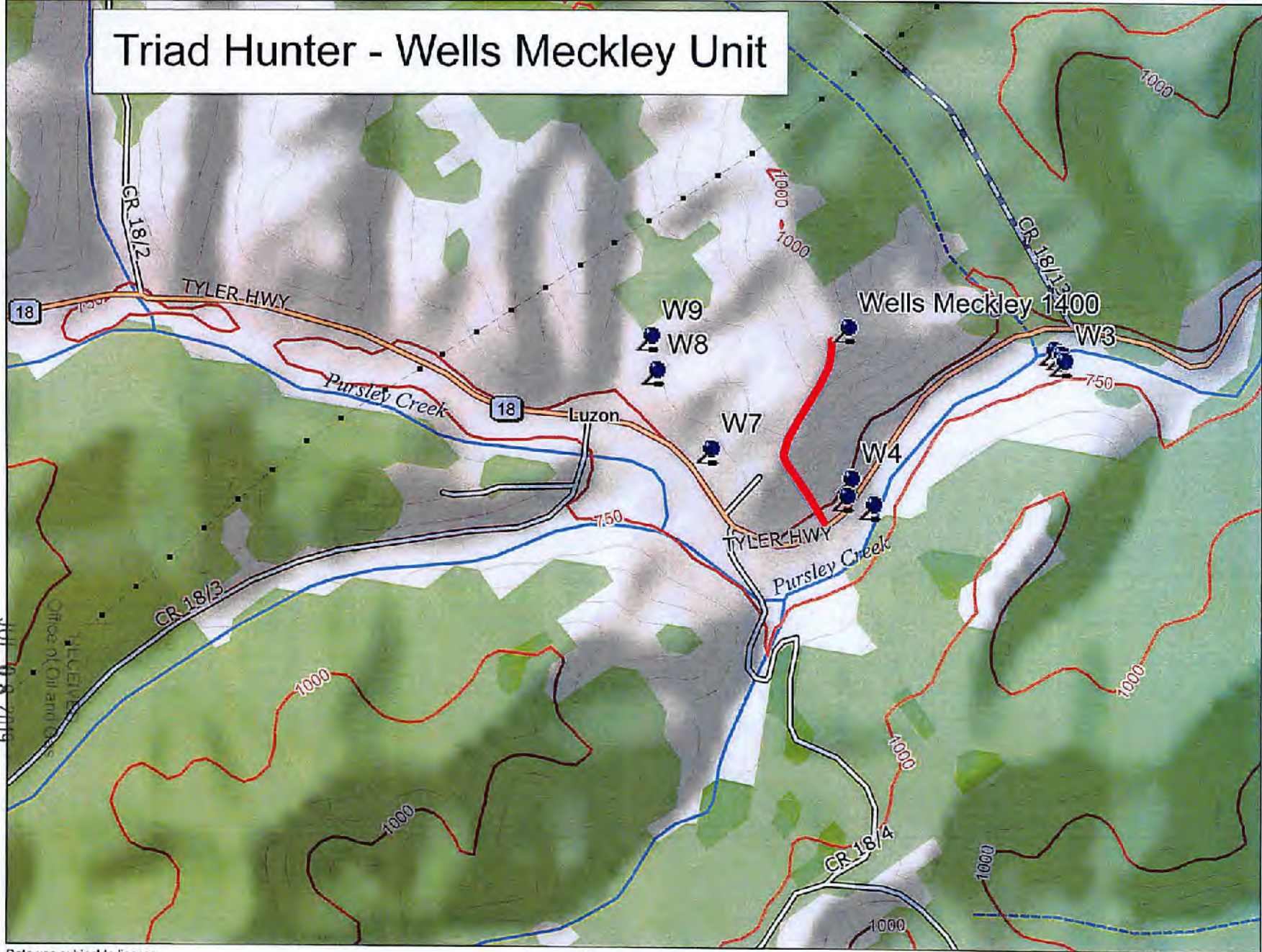
Date: 4/30/19

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Triad Hunter - Wells Meckley Unit



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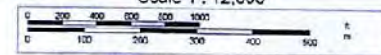
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Scale 1 : 12,800



1" = 1,066.7 ft

Data Zoom 13-2

47 09 5 02 6 3 4



August 28, 2019

Mr. Wade Stansberry
WVDEP
Office of Oil and Gas
601 57th Street, SE
Charleston, WV 25304

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WV Department of
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RE: Triad Hunter – Wells Meckley 3M application comments July 16, 2019

Dear Mr. Stansberry,

Please see the enclosed revised plat.

Should you have any questions please call me at 740-760-0558, or email at wharless@mresources.com

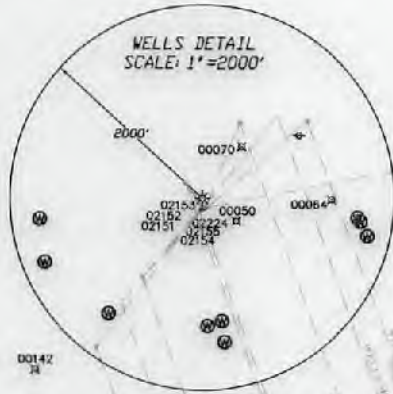
Sincerely,

Will Harless

Will Harless
Supervisor Regulatory Operations

WELLS MECKLEY N 3M

TOP HOLE
N 3M



LEGEND	
+	TOP MAP POINT
⊗	EXISTING WELLS
⊙	PRE-29 WELLS
- - -	PARCEL LINES
⊛	PROPOSED WELL
⊙	WATER WELL
—	ROAD
~	STREAM

SURFACE LOC.	
UTM 17-NAD 83 METERS	
N:	4376214.50'
E:	506632.31'
NAD 83	
LAT:	39.53556691
LOX:	80.92282193

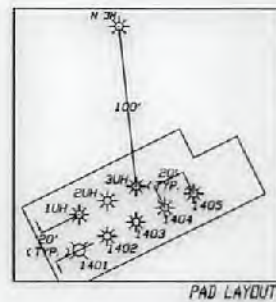
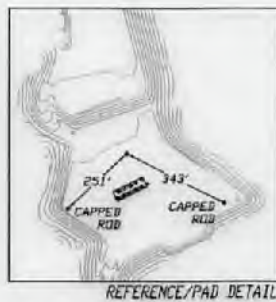
SURVEY NOTES:

1. THERE ARE NINE WATER WELLS LOCATED WITHIN 2000' OF THE WELL PAD.
2. THERE ARE NO WATER WELLS OR DEVELOPED SPRINGS WITHIN 250' OF PROPOSED WELL.
3. THERE ARE NO EXISTING BUILDINGS WITHIN 625' OF PROPOSED WELL.
4. PROPOSED WELL IS GREATER THAN 100' FROM PERENNIAL STREAM, WETLAND, POND, RESERVOIR, OR LAKE.
5. THERE ARE NO NATIVE TROUT STREAMS WITHIN 300' OF PROPOSED WELL.
6. PROPOSED WELL IS GREATER THAN 1000' FROM SURFACE/GROUNDWATER INTAKE OR PUBLIC WATER SUPPLY.
7. IT IS NOT THE INTENTION OF THIS PLAT TO REPRESENT SURVEYED LOCATIONS OF THE SURFACE OR MINERAL PARCELS DEPICTED HEREOF. THE LOCATION OF THE BOUNDARY LINES, AS SHOWN, ARE BASED ON RECORD DEED DESCRIPTIONS, FIELD EVIDENCE FOUND, AND/OR TAX MAP POSITION, UNLESS OTHERWISE NOTED.



Architects • Engineers • Surveyors

11283 EMERSON AVENUE, PARKERSBURG, WV 26104
(304) 464-5305 PICKERING USA.COM



FILE#: 2176021
DRAWING#: TRH-WELLS MECKLEY
SCALE: 1"=2000'
ACCURACY: 1/2500
ELEVATION: OPUS SOLUTION
DATE: 8/28/2019

I, THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAT IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AND SHOWS ALL THE INFORMATION REQUIRED BY LAW AND THE RULES ISSUED AND PRESCRIBED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION.
SIGNED: [Signature] PS# 2141



WELL TYPE: OIL WASTE DISPOSAL PRODUCTION DEEP OPERATOR'S WELL #: **WELLS MECKLEY N 3M**
 GAS LIQUID INJECTION STORAGE SHALLOW API WELL#: 47 095 02434
WATERSHED: PURSLEY CREEK STATE COUNTY PERMIT
COUNTY/DISTRICT: TYLER/LINCOLN QUADRANGLE: PADEN CITY
SURFACE OWNER: VELMA L. WELLS ACREAGE: 225.28 AC
ROYALTY OWNERS: SEE ROYALTY OWNERS DETAIL ACREAGE: SEE ROYALTY OWNERS DETAIL

DRILL CONVERT DRILL DEEPER REDRILL FRACTURE OR STIMULATE
PLUG OFF OLD FORMATION PERFORATE NEW FORMATION PLUG & ABANDON
PAD ELEVATION 903' CLEAN OUT & REPLUG OTHER CHANGE (SPECIFY):
TARGET FORMATION MARCELLUS ESTIMATED DEPTH TVD. 6,260' ± MD. 6,260' ±

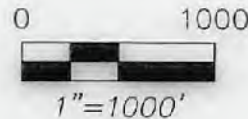
WELL OPERATOR TRIAD HUNTER, LLC
(SUBSIDIARY OF MONTAGE RESOURCES)
ADDRESS 125 PUTNAM ST.
CITY MARIETTA STATE OH ZIP CODE 45750
DESIGNATED AGENT MIKE HORAN
ADDRESS 3420 WEST 2ND AVE
CITY BELLE STATE WV ZIP CODE 25015



WELLS MECKLEY N 3M

LEGEND

-  TOP MAP POINT
-  EXISTING WELLS
-  PRE-29 WELLS
-  PARCEL LINES
-  PROPOSED WELL
-  WATER WELL
-  ROAD
-  STREAM



WELLS MECKLEY MINERAL ROYALTY OWNERS DETAIL

TAXMAP/PARCEL	MINERAL OWNER	ACRES TN UNIT
13/5	TERESA STARCHER BURGEY ET. AL.	2.43 ACRES
13/5	DENVER R. STARCHER, II	2.43 ACRES
13/5	DAVID STARCHER	2.43 ACRES
13/5	VELMA LUELLA WELLS	7.30 ACRES
13/6	VELMA LUELLA WELLS	5.41 ACRES



Architects • Engineers • Surveyors

11283 EMERSON AVENUE, PARKERSBURG, WV 26104
(304) 464-5305 PICKERING USA.COM

- SURVEY NOTES:**
1. THIS IS A VOLUNTARILY POOLED UNIT
 2. THERE ARE NO WATER WELLS OR DEVELOPED SPRINGS WITHIN 250' OF PROPOSED WELL.
 3. THERE ARE NO EXISTING BUILDINGS WITHIN 625' OF PROPOSED WELL.
 4. PROPOSED WELL IS GREATER THAN 100' FROM PERENNIAL STREAM, WETLAND, POND, RESERVOIR, OR LAKE.
 5. THERE ARE NO NATIVE TROUT STREAMS WITHIN 300' OF PROPOSED WELL.
 6. PROPOSED WELL IS GREATER THAN 1000' FROM SURFACE/GROUNDWATER INTAKE OR PUBLIC WATER SUPPLY
 7. IT IS NOT THE INTENTION OF THIS PLAN TO REPRESENT SURVEYED LOCATIONS OF THE SURFACE OR MINERAL PARCELS DEPICTED HEREON. THE LOCATION OF THE BOUNDARY LINES, AS SHOWN, ARE BASED ON RECORD DEED DESCRIPTIONS, FIELD EVIDENCE FOUND, AND/OR TAX MAP POSITION, UNLESS OTHERWISE NOTED.

API WELL#: 47-095-02634
STATE COUNTY PERMIT

OPERATOR'S WELL #: WELLS MECKLEY N 3M

WELL OPERATOR TRIAD HUNTER, LLC (SUBSIDIARY OF MONTAGE RESOURCES) ADDRESS 125 PUTNAM ST. MARIETTA OH 45750
DESIGNATED AGENT MIKE HORAN ADDRESS 3420 WEST 2ND AVE BELLE, WV 25015 DATE: 8/28/2019

WW-6A1
(5/13)

Operator's Well No. 3M

**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
----------------------	-----------------------	-----------------------	---------	-----------


Please see attached sheets

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

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

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

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

Well Operator: Triad Hunter, LLC 

By: Mike Horan

Manager Operations Conventional/Infrastructure

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Office of Oil and Gas

03 2019

WV Department of
Environmental Protection

Exhibit "A"
MECKLEY - WELLS UNIT
OWNERSHIP TABULATION
664.15 ACRES

WV Department of
Environmental Protection

	B	C	D	E	F	G	H	I	J	K	L	M	N
	RECEIVED Office of Oil and Gas Lease Number	Lessor	Lessor's Address	Surface owner	Surface Owner's Address	Lessee/Assignee	Lease Date	Lease Recording Data	Map/Parcel Number of Parcel(s) in Unit	Gross Acres in Lease/Parcel	Acres Included in Unit	Percent of Unit	Royalty Interest
JUL 08 2019	2	TERESA STARCHER BURGEY Gwendolyn L. Starcher	85 Hickman Road Sistersville WV 26175	MECKLEY GERALD W & MECKLEY REBECCA L	1701 TYLER HWY, SISTERSVILLE, WV 26175	Triad Hunter, LLC	6/14/2011	Book 383 Page 103	4-13-5	195.98	5.250000	2.00015239%	14.000%
	3	Denver R. Starcher, II	7601 Mistywood Rd. Knoxville, TN 37938	MECKLEY GERALD W & MECKLEY REBECCA L	1701 TYLER HWY, SISTERSVILLE, WV 26175	Triad Hunter, LLC	6/14/2011	Book 383 Page 55	4-13-5	195.98	5.250000	2.00015239%	14.000%
	4	David Starcher	37 Hickman Road Sistersville WV 26175	MECKLEY GERALD W & MECKLEY REBECCA L	1701 TYLER HWY, SISTERSVILLE, WV 26175	Triad Hunter, LLC	6/14/2011	Book 383 Page 92	4-13-5	195.98	5.250000	2.00015239%	14.000%
	5	Velma Luella Wells	1901 Tyler Highway Sistersville WV 26175	MECKLEY GERALD W & MECKLEY REBECCA L	1701 TYLER HWY, SISTERSVILLE, WV 26175	Triad Hunter, LLC	11/7/2011	Book 392 Page 459	4-13-5	256.8	15.750000	6.00045718%	17.000%
	6	TERESA STARCHER BURGEY Gwendolyn L. Starcher	85 Hickman Road Sistersville WV 26175	MECKLEY GERALD W & MECKLEY REBECCA L	1701 TYLER HWY, SISTERSVILLE, WV 26175	Triad Hunter, LLC	6/14/2011	Book 383 Page 103	4-13-9.6	195.98	0.950000	0.36193234%	14.000%
	7	Denver R. Starcher, II	7601 Mistywood Rd. Knoxville, TN 37938	MECKLEY GERALD W & MECKLEY REBECCA L	1701 TYLER HWY, SISTERSVILLE, WV 26175	Triad Hunter, LLC	6/14/2011	Book 383 Page 55	4-13-9.6	195.98	0.950000	0.36193234%	14.000%
	8	David Starcher	37 Hickman Road Sistersville WV 26175	MECKLEY GERALD W & MECKLEY REBECCA L	1701 TYLER HWY, SISTERSVILLE, WV 26175	Triad Hunter, LLC	6/14/2011	Book 383 Page 92	4-13-9.6	195.98	0.950000	0.36193234%	14.000%
	9	Velma Luella Wells	1901 Tyler Highway Sistersville WV 26175	Velma Luella Wells	1901 Tyler Highway Sistersville WV 26175	Triad Hunter, LLC	11/7/2011	Book 392 Page 459	4-13-6	256.8	225.280000	85.82749162%	17.000%
	10	Gerald W. & Rebecca L. Meckley	4625 TYLER HWY , SISTERSVILLE, WV 26175	Gerald W. & Rebecca L. Meckley	1701 TYLER HWY, SISTERSVILLE, WV 26175	Triad Hunter, LLC	12/17/2012	Book 409 Page 514	4-13-9.6	195.98	2.850000	1.08579701%	18.000%
	11	Royalty TOTALS									262.480000	1.0000000000	

4709502634



June 13, 2019

WVDEP
Office of Oil and Gas
601 57th Street, SE
Charleston, WV 25304

RE: Wells Meckley

To whom it may concern,

This letter serves you and the Office of Oil and Gas that Triad Hunter, LLC has the minerals leased for the development of the Marcellus Shale on the Wells-Meckley acreage located in the Lincoln District, Tyler County. Wells Meckley will have portions of the horizontal laterals crossing State Route 18 and County Road 18/4. Triad Hunter, LLC also has the mineral rights and the rights to extract all minerals under this Subject State Route 18 and County Road 18/4.

Should you have any questions please call me at my office 740-868-1324.

Sincerely,

A handwritten signature in blue ink, appearing to read "Mike Horan".

Mike Horan
Manager Operations Conventional/Infrastructure

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Office of Oil and Gas

JUL 08 2019

WV Department of
Environmental Protection

RECEIVED
Office of Oil and Gas

08 2019

909 Lake Carolyn Pkwy • Suite 600 • Irving, TX 77039
Office (469) 444-1647 • Fax (469) 444-1649

WV Department of
Environmental Protection

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

Date of Notice Certification: 04/30/2019

API No. 47- 95 -
Operator's Well No. 3M
Well Pad Name: Wells Meckley

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:	<u>West Virginia</u>	UTM NAD 83 Easting:	<u>506632.31</u>
County:	<u>Tyler</u>	UTM NAD 83 Northing:	<u>4376214.80</u>
District:	<u>Lincoln</u>	Public Road Access:	<u>State Route 16</u>
Quadrangle:	<u>Paden City</u>	Generally used farm name:	<u>Wells Meckley</u>
Watershed:	<u>Pursley Creek</u>		

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: (i) 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.

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: *PLEASE CHECK ALL THAT APPLY		OOG OFFICE USE ONLY
<input type="checkbox"/> 1. NOTICE OF SEISMIC ACTIVITY or <input checked="" type="checkbox"/> NOTICE NOT REQUIRED BECAUSE NO SEISMIC ACTIVITY WAS CONDUCTED		<input type="checkbox"/> RECEIVED/ NOT REQUIRED
<input type="checkbox"/> 2. NOTICE OF ENTRY FOR PLAT SURVEY or <input checked="" type="checkbox"/> NO PLAT SURVEY WAS CONDUCTED		<input type="checkbox"/> RECEIVED
<input checked="" type="checkbox"/> 3. NOTICE OF INTENT TO DRILL or <input type="checkbox"/> NOTICE NOT REQUIRED BECAUSE NOTICE OF ENTRY FOR PLAT SURVEY WAS CONDUCTED or <input type="checkbox"/> WRITTEN WAIVER BY SURFACE OWNER (PLEASE ATTACH)		<input type="checkbox"/> RECEIVED/ NOT REQUIRED
<input checked="" type="checkbox"/> 4. NOTICE OF PLANNED OPERATION		<input type="checkbox"/> RECEIVED
<input checked="" type="checkbox"/> 5. PUBLIC NOTICE		<input type="checkbox"/> RECEIVED
<input checked="" type="checkbox"/> 6. NOTICE OF APPLICATION		<input type="checkbox"/> RECEIVED

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 Personal Service. The attached Notice Forms and Certifications of Notice shall serve as proof that the required parties have been notified 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.

JUL 08 2019

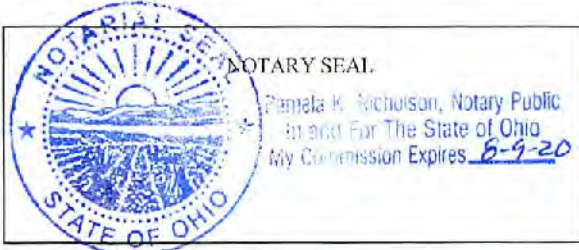
47 09 * 02 63 4

Certification of Notice is hereby given:

THEREFORE, I Mike Horan, 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.

Well Operator: Triad Hunter, LLC
By: Mike Horan
Its: Manager - Operations Conventional/Infrastructure
Telephone: 740-868-1324

Address: 125 Putnam Street
Marietta, OH 45750
Facsimile: 740-374-5270
Email: mhoran@brmresources.com



Subscribed and sworn before me this 30th day of April 2019.
Pamela K. Nicholson Notary Public
My Commission Expires 8-9-2020

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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Office of Oil and Gas

JUL 08 2019

WV Department of
Environmental Protection

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

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

Date of Notice: 04/30/19 Date Permit Application Filed: _____

Notice of:

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

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

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

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

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

SURFACE OWNER(s)

Name: Velma Luella Wells
Address: 1901 Tyler Highway
Sistersville, WV 26175

Name: Gerald & Rebecca Meckley
Address: 1701 Tyler Highway
Sistersville, WV 26175

SURFACE OWNER(s) (Road and/or Other Disturbance)

Name: _____
Address: _____

Name: _____
Address: _____

SURFACE OWNER(s) (Impoundments or Pits)

Name: _____
Address: _____

COAL OWNER OR LESSEE

Name: _____
Address: _____

COAL OPERATOR

Name: _____
Address: _____

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

Name: Velma Luella Wells
Address: 1901 Tyler Highway
Sistersville, WV 26175

OPERATOR OF ANY NATURAL GAS STORAGE FIELD

Name: _____
Address: _____

RECEIVED
Office of Oil and Gas

*Please attach additional forms if necessary

JUL 08 2019

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

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

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Office of Oil and Gas

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.**

WV Department of
Environmental Protection

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
JUL 08 2019
WV Department of
Environmental Protection

WW-6A
(8-13)

API NO. 47-95
OPERATOR WELL NO. 4709502634
Well Pad Name: Wells Meckley

Notice is hereby given by:

Well Operator: Triad Hunter, LLC
Telephone: 740-868-1324
Email: mhcron@bmrresources.com

Address: 125 Putnam Street
Marietta, OH 45750
Facsimile: 740-374-5270

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.



Subscribed and sworn before me this 30th day of April 2019.
Pamela K. Nicholson Notary Public
My Commission Expires 8-9-2020

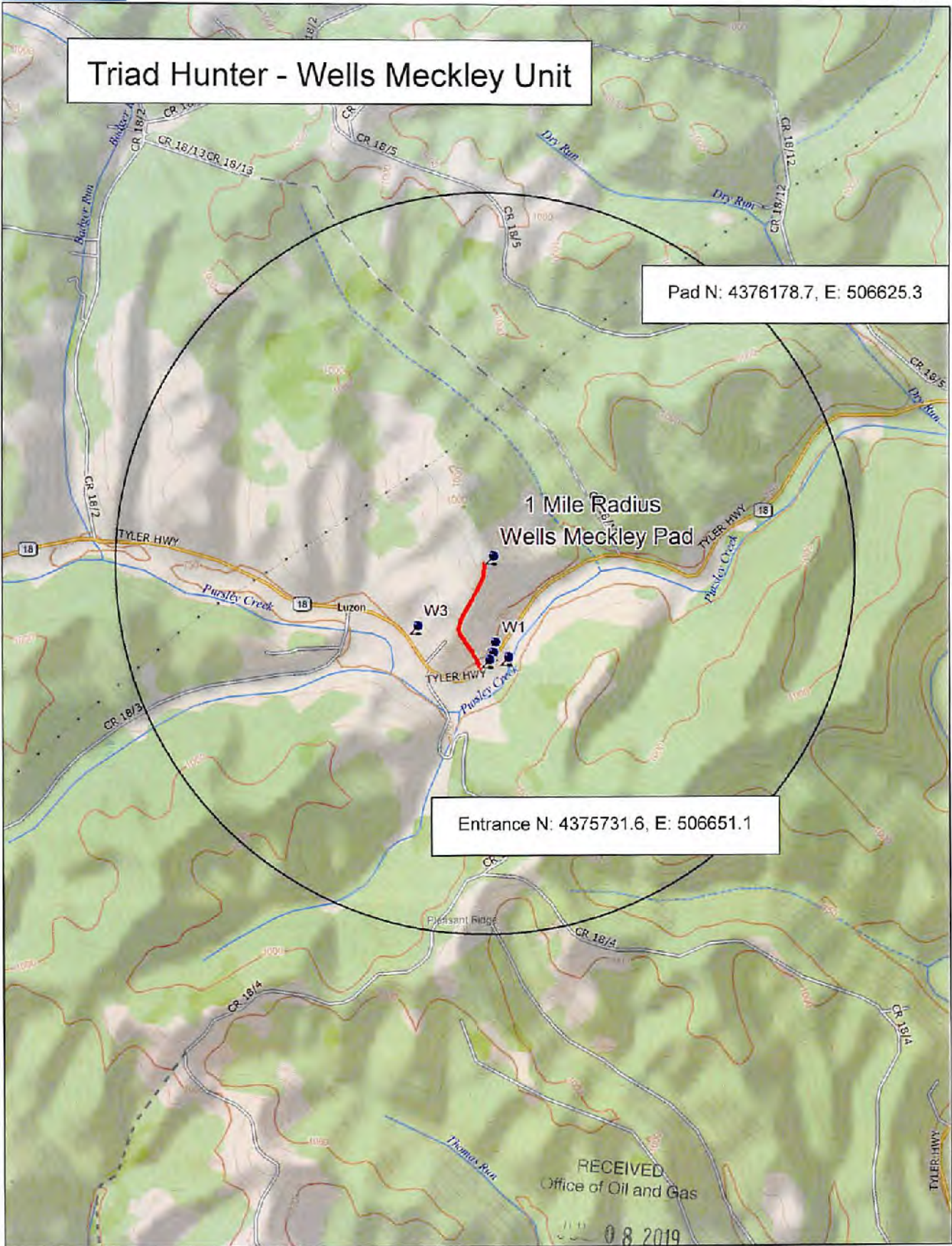
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Office of Oil and Gas
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WV Department of
Environmental Protection

Triad Hunter - Wells Meckley Unit

Pad N: 4376178.7, E: 506625.3

1 Mile Radius
Wells Meckley Pad

Entrance N: 4375731.6, E: 506651.1



47 09 5 02 6 3 4

STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS
NOTICE OF INTENT TO DRILL

Pursuant to W. Va. Code § 22-6A-16(b), the Notice of Intent to Drill is only required if the notice requirements of W. Va. Code § 22-6A-10(a) have NOT been met or if the Notice of Intent to Drill requirement has NOT been waived in writing by the surface owner.

Notice Time Requirement: Notice shall be provided at least **TEN (10)** days prior to filing a permit application.

Date of Notice: 04/30/2019 **Date Permit Application Filed:** _____

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

- HAND DELIVERY
- CERTIFIED MAIL RETURN RECEIPT REQUESTED

Pursuant to W. Va. Code § 22-6A-16(b), at least ten days prior to filing a permit application, an operator shall, by certified mail return receipt requested or hand delivery, give the surface owner notice of its intent to enter upon the surface owner's land for the purpose of drilling a horizontal well: *Provided*, That notice given pursuant to subsection (a), section ten of this article satisfies the requirements of this subsection as of the date the notice was provided to the surface owner: *Provided, however*, That the notice requirements of this subsection may be waived in writing by the surface owner. The notice, if required, shall include the name, address, telephone number, and if available, facsimile number and electronic mail address of the operator and the operator's authorized representative.

Notice is hereby provided to the SURFACE OWNER(s):

Name: Valma Luella Walls
Address: 1901 Tyler Highway
Sistersville, WV 26175

Name: Gerald & Rebecca Meckley
Address: 1701 Tyler Highway
Sistersville, WV 26175

Notice is hereby given:

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

State: <u>West Virginia</u>	UTM NAD 83	Easting: <u>506632.31</u>
County: <u>Tyler</u>		Northing: <u>4376214.60</u>
District: <u>Lincoln</u>	Public Road Access: <u>State Route 18</u>	
Quadrangle: <u>Paden City</u>	Generally used farm name: <u>Wells Meckley</u>	
Watershed: <u>Pursley Creek</u>		

This Notice Shall Include:

Pursuant to West Virginia Code § 22-6A-16(b), this notice shall include the name, address, telephone number, and if available, facsimile number and electronic mail address of the operator and the operator's authorized representative. 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.

Notice is hereby given by:

Well Operator: Triad Hunter, LLC
Address: 125 Putnam Street
Marietta, OH 45750
Telephone: (740) 760-0558
Email: wharless@mresources.com
Facsimile: _____

Authorized Representative: Mike Horan 
Address: 125 Putnam Street
Marietta, OH 45750
Telephone: 740-868-1324
Email: mhoran@mresources.com
Facsimile: _____

Oil and Gas Privacy Notice:

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

**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: 04/30/2019 **Date Permit Application Filed:** _____

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

- CERTIFIED MAIL** **HAND**
RETURN RECEIPT REQUESTED **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: Velma Luella Wells
Address: 1901 Tyler Highway
Sistersville, WV 26175

Name: Gerald & Rebecca Meckley
Address: 1701 Tyler Highway
Sistersville, WV 26175


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:	<u>West Virginia</u>	UTM NAD 83	Easting:	<u>506632.31</u>
County:	<u>Tyler</u>		Northing:	<u>4376214.60</u>
District:	<u>Lincoln</u>	Public Road Access:	<u>State Route 18</u>	
Quadrangle:	<u>Paden City</u>	Generally used farm name:	<u>Wells Meckley</u>	
Watershed:	<u>Persley Creek</u>			

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: Triad Hunter, LLC 
Telephone: 740-374-2940
Email: wharless@triadhunter.com

Address: 125 Putnam Street
Marietta, OH 45750
Facsimile: 740-374-5270

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 of your personal information, please contact DEP's Chief Privacy Officer at depprivacyofficer@wv.gov.

REC'D
Office of Oil and Gas

08 2019

WV Department of
Environmental Protection



WEST VIRGINIA DEPARTMENT OF TRANSPORTATION
Division of Highways

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

Byrd E. White, III
Secretary of Transportation

June 25, 2019

Jimmy Wriston, P. E.
Deputy Secretary/
Acting Commissioner

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 Wells/Meckley Pad, Tyler County
Wells/Meckley 3M Well site

Dear Mr. Martin,

This well site will be accessed from a DOH permit #06-2013-0563 issued to Triad Hunter, LLC for access to the State Road for a well site located off WV 18 in Tyler County.

This operator is in compliance with §22-6A-20 of the WV Code. Operator has signed a STATEWIDE OIL AND GAS ROAD MAINTENANCE BONDING AGREEMENT and provided the required Bond. This operator is currently in compliance with the DOH OIL AND GAS POLICY dated October 1, 2018.

Very Truly Yours,

Gary K. Clayton, P.E.
Regional Maintenance Engineer
Central Office O&G Coordinator

Cc: Will Harless
Triad Hunter, LLC
CH, OM, D-6
File

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Office of Oil and Gas

JUL 08 2019

WV Department of
Environmental Protection

CAS Numbers for frac additives:

1. Friction reducers, (PSC) AS-9810
 - a. Acrylamide, CAS #26100-47-0 34-40%
2. Scale inhibitor, (PSC) AS-9220
 - a. Organic phosphate, CAS #11024-99-2 10-25%
3. Flowback surfactant + iron stabilizer, (PSC) AS-9899
 - a. Ethoxylated alcohol, CAS #65439-46-3 10-15%
 - b. Stannous chloride, CAS #7772-99-8 5-10%
 - c. Sulfamic acid, CAS #5329-14-6, 5-8%
 - d. Monoethylamine CAS #141-43-5 2-6%
4. Microbiocide, One AquaSource MB-7530 (see attached MSDS, page 1)

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Office of Oil and Gas

JUL 08 2019

WV Department of
Environmental Protection

WELLS MECKLEY PAD EXPANSION 6A HORIZONTAL WELL PERMIT MODIFICATION

TRIAD HUNTER, LLC.

LINCOLN DISTRICT, TYLER COUNTY, WEST VIRGINIA
LITTLE MUSKINGUM-MIDDLE ISLAND WATERSHED

APPROVED
MODIFICATION
WVDEP 00G
WDS 7/30/2019



PROJECT LOCATION MAP
AERIAL PHOTO FROM GEORGE M. JOHNSON, JR. PHOTOGRAPHY, INC. PROVIDING THE PHOTO. DATED 1980. PHOTO ENLARGED 45% AND 50% AND CORRECTED FOR SCALE.



PROJECT AERIAL MAP
AERIAL PHOTO WITH THE APPROPRIATE FACILITY OF THE PROJECT PROVIDED BY CIVIL & ENVIRONMENTAL CONSULTANTS, INC. UNDER THE PERMITTING OFFICE OF THE PROJECT. NOT FORWARDED FROM GEORGE M. JOHNSON, JR. PHOTOGRAPHY, INC. COPYRIGHT 2017. MODIFIED CONSULTANT.

PROJECT DATA

EMERGENCY CONTACT INFORMATION
TRIAD HUNTER, LLC
BRUCE CARPENTER, ENVIRONMENTAL, HEALTH, SAFETY,
AND REGULATORY MANAGER 740-453-4103 (OFFICE)
740-228-8915 (CELL)

EMERGENCY RESPONDERS
TYLER COUNTY FIRE DEPARTMENT EMS 304-758-4344 OR 911
TYLER COUNTY EMERGENCY MEDICAL SERVICES 304-758-2255
TYLER COUNTY SHERIFF 304-758-4551
TYLER COUNTY OFFICE OF EMERGENCY MANAGEMENT 304-758-5125

911 ADDRESS
4883 TYLER HIGHWAY, NW SERIAL, WEST VIRGINIA, 26175

ON-PAD SPILL
WVDEP POLLUTION AND EMERGENCY SPILLS 1-800-642-3074

OFF-PAD IMPACTS
WVDEP OFFICE OF OIL AND GAS 304-928-8159

STATE NUMBER: 1915452420



CIVIL ENGINEER
CIVIL & ENVIRONMENTAL CONSULTANTS, INC.
433 BALDWIN ROAD
PITTSBURGH, PA 15205
PH: 412-429-2324
CONTACT: BRIAN C. LANZ, P.E.

APPLICANT
TRIAD HUNTER, LLC
125 PUTNAM STREET
MARIETTA, VA 40136-6700
PH: 1-800-276-2845
CONTACT: STEVE J. LYNCH, P.E.

DWG NO.	TITLE
1	COVER SHEET
2	GENERAL NOTES
3-6	EXISTING CONDITIONS PLAN
6-8	PROPOSED CONDITIONS PLAN
9	CUT/FILL PLAN
12	CROSS SECTIONS AND PROFILES
11-16	DETAILS
17	EXISTING ACCESS ROAD PROFILE

PROJECT AREA	DISTURBED ACREAGE (AC)	LANDOWNER	DISTURBED ACREAGE (AC)
WELL PAD	11.2	GERALD W. MECKLEY ET AL.	0.8
ACCESS ROAD	8.5	VELMA L. WELLS	13.9
TOTAL	19.7	TOTAL	19.7



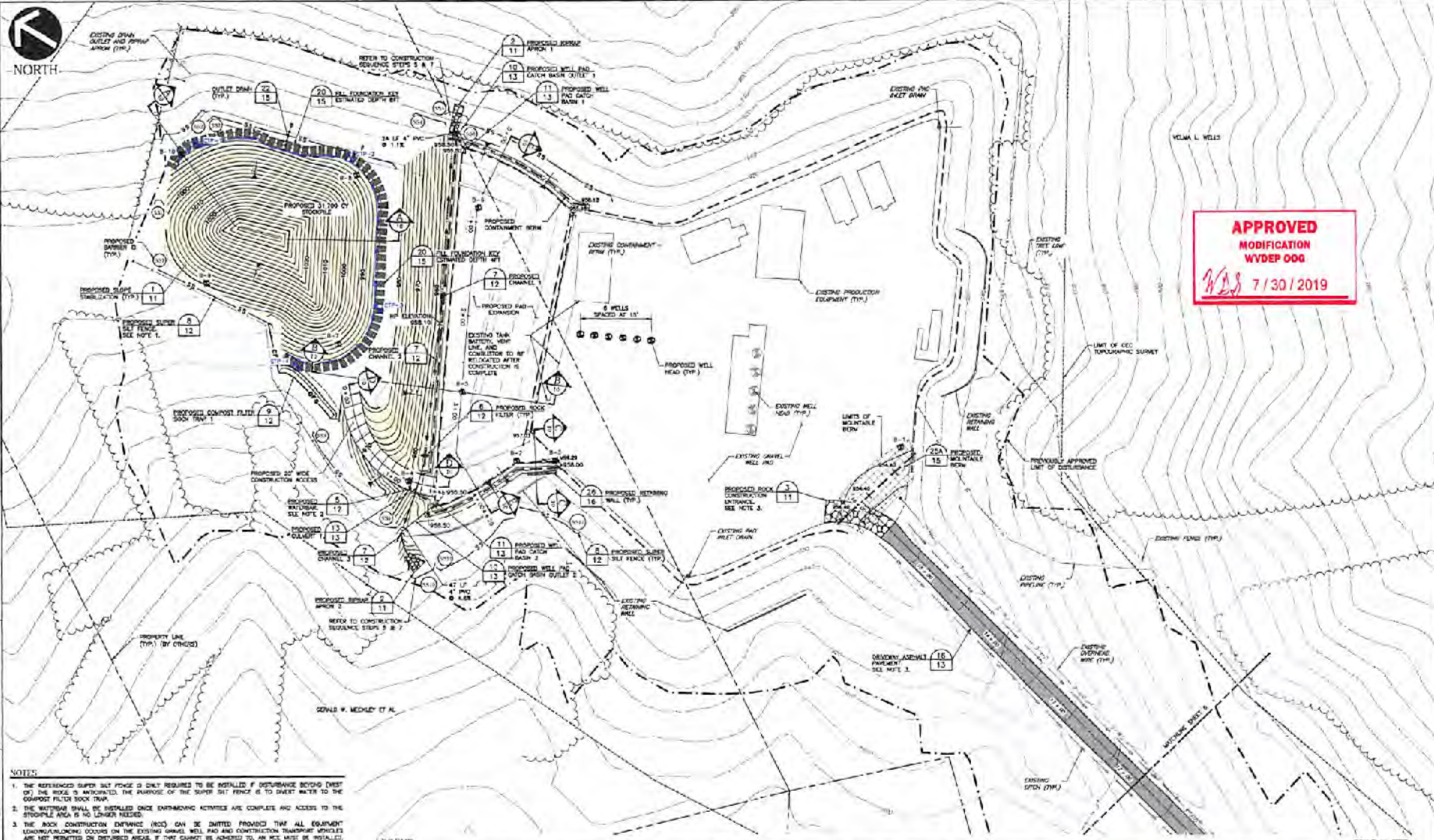
NO.	DATE	DESCRIPTION	BY	CHKD

CEE
Civil & Environmental Consultants, Inc.
1333 Baldwin Road - Pittsburgh, PA 15205
1-800-276-2845
www.ceecorp.com



TRIAD HUNTER, LLC
WELLS MECKLEY PAD EXPANSION
TYLER COUNTY, WEST VIRGINIA

COVER SHEET
DATE: 7/30/2019
DRAWN BY: B. HARRIS
CHECKED BY: J. LYNCH
SCALE: AS SHOWN



APPROVED
MODIFICATION
WVDEP 006
WJL 7/30/2019

- NOTES**
1. THE REFERENCED SUPER SIFT FENCE IS ONLY REQUIRED TO BE INSTALLED IF DISTURBANCE BEYOND WEST OF THE ROAD IS ANTICIPATED. THE PURPOSE OF THE SUPER SIFT FENCE IS TO DIVERT WATER TO THE COMPOST FILTER SOIL TRAP.
 2. THE MATERIAL SHALL BE INSTALLED ONCE EXPANSION ACTIVITIES ARE COMPLETE AND ACCESS TO THE STROUBLE AND 16 NO. LINDER TRAILS.
 3. THE ROCK CONSTRUCTION ENTRANCE (ROCK) CAN BE LIMITED PROVIDED THAT ALL EQUIPMENT MAINTAINING CONTACT ON THE EXISTING CHANNEL WELL PAD AND CONSTRUCTION TRANSPORT VEHICLES ARE NOT PERMITTED ON THE REFERENCED AREAS. IF THIS CANNOT BE ACHIEVED, AN AISC SHALL BE INSTALLED. THE AISC SHALL BE INSTALLED AT THE LOCATION SHOWN IF THE ASPHALT PAVEMENT IS INSTALLED PRIOR TO INSTALLING CONSTRUCTION EQUIPMENT. IF EQUIPMENT MOBILIZATION OCCURS BEFORE THE ASPHALT PAVEMENT IS INSTALLED, THE AISC SHALL BE INSTALLED AT THE BEGINNING OF THE ACCESS ROAD.

LEGEND

	EXISTING ROCK CONTOUR		EXISTING OVERHEAD ELECTRIC		PROPOSED WELL HEAD
	EXISTING INTERMEDIATE CONTOUR		EXISTING RETAINING WALL		PROPOSED ASPHALT PAVEMENT
	LIMIT OF OLD TOPOGRAPHIC SURVEY		EXISTING FENCE		LIMIT OF DISTURBANCE
	EXISTING CREEK OF STREAM		EXISTING UTILITY POLE		PROPOSED CHANNEL/SLOT
	EXISTING PAVED ROAD		EXISTING BONAPAP		PROPOSED SUPER SILT FENCE
	EXISTING SPOT		PROPOSED ROCK CONTOUR		PROPOSED COMPOST FILTER SOIL SEDIMENT TRAP
	EXISTING BRIDGE		PROPOSED INTERMEDIATE CONTOUR		PROPOSED STORM PIPE
	EXISTING FREE LINE		PROPOSED SPOT ELEVATION		PROPOSED WATERBAR
	EXISTING STORM PIPE		PROPOSED GRAVEL PAD		PROPOSED CATCH BASIN
	EXISTING OVERHEAD ELECTRIC		PROPOSED GOVERNMENT BERM		PROPOSED RIPRAP APRON
	EXISTING RETAINING WALL		PROPOSED ACCESS ROAD		PROPOSED ROCK FILTER
	EXISTING ROCK CONTOUR		PROPOSED ROCK CONSTRUCTION ENTRANCE		PROPOSED SLOPE STABILIZATION
	EXISTING INTERMEDIATE CONTOUR		PROPOSED ROCK CONSTRUCTION ENTRANCE		PROPOSED ROCK CONSTRUCTION ENTRANCE
	LIMIT OF OLD TOPOGRAPHIC SURVEY		PROPOSED ROCK CONSTRUCTION ENTRANCE		PROPOSED ROCK CONSTRUCTION ENTRANCE
	EXISTING CREEK OF STREAM		PROPOSED ROCK CONSTRUCTION ENTRANCE		PROPOSED ROCK CONSTRUCTION ENTRANCE
	EXISTING PAVED ROAD		PROPOSED ROCK CONSTRUCTION ENTRANCE		PROPOSED ROCK CONSTRUCTION ENTRANCE
	EXISTING SPOT		PROPOSED ROCK CONSTRUCTION ENTRANCE		PROPOSED ROCK CONSTRUCTION ENTRANCE
	EXISTING BRIDGE		PROPOSED ROCK CONSTRUCTION ENTRANCE		PROPOSED ROCK CONSTRUCTION ENTRANCE
	EXISTING FREE LINE		PROPOSED ROCK CONSTRUCTION ENTRANCE		PROPOSED ROCK CONSTRUCTION ENTRANCE
	EXISTING STORM PIPE		PROPOSED ROCK CONSTRUCTION ENTRANCE		PROPOSED ROCK CONSTRUCTION ENTRANCE
	EXISTING OVERHEAD ELECTRIC		PROPOSED ROCK CONSTRUCTION ENTRANCE		PROPOSED ROCK CONSTRUCTION ENTRANCE
	EXISTING RETAINING WALL		PROPOSED ROCK CONSTRUCTION ENTRANCE		PROPOSED ROCK CONSTRUCTION ENTRANCE

- REFERENCE**
1. EXISTING CONTOURS AND SET FEATURES (CHANNELS, PIPES, ETC.) WITHIN THE IMMEDIATE VICINITY OF THE PROJECT DERIVED FROM A 2008A ELEVATION MODEL CONSTRUCTED FROM UNMANNED AERIAL VEHICLE (UAV) REGIONAL ELEVATION POINTS. TOPOGRAPHIC CONTOURS SHOWN AT AN INTERVAL OF 1 FOOT. BE RECORDED BY GSD ON MARCH 5, 2018. EXISTING CONTOURS OUTSIDE LAW CONFORMS SHOWN FROM LIGHT DETECTION AND RANGING DATA OBTAINED FROM THE WEST VIRGINIA CLEANING HOUSE, ACQUIRED ON 01/28/2018.
 2. AERIAL MAPPING WITH THE IMMEDIATE VICINITY OF THE PROJECT RECORDED BY ONE OF ENVIRONMENTAL CONSULTANTS, INC. MARCH 2018. AERIAL MAPPING OUTSIDE OF THE PROJECT LIMITS OBTAINED FROM LEGOS (LARGE-SCALE ORTHORECTIFIED) AIR PHOTOGRAPHY BY MICRODOT CORPORATION.
 3. PROPERTY LINES, LIMIT OF DISTURBANCE, AND LANDOWNER DISTURBANCE AGREEMENT TAKEN FROM 152 WELLS-MECKLEY MIDDLE AS-BUILT-MAPPING, DATED 1-29-18 AND DRAWING SET OUTLIER WELLS-MECKLEY LOCATION PROVIDED BY TRIAD HUNTER, LLC. DATED 6/17/2018, PROVIDED TO GCD BY TRIAD HUNTER, LLC.

SCALE IN FEET
 0 30 60 90 120



REVISION RECORD

NO.	DATE	DESCRIPTION

CEC
 CONSULTING ENGINEERS
 113 Ashburn Road - Ashburn, VA 20148
 414-774-2141 www.cecva.com

TRIO
 TRIO PARTNER

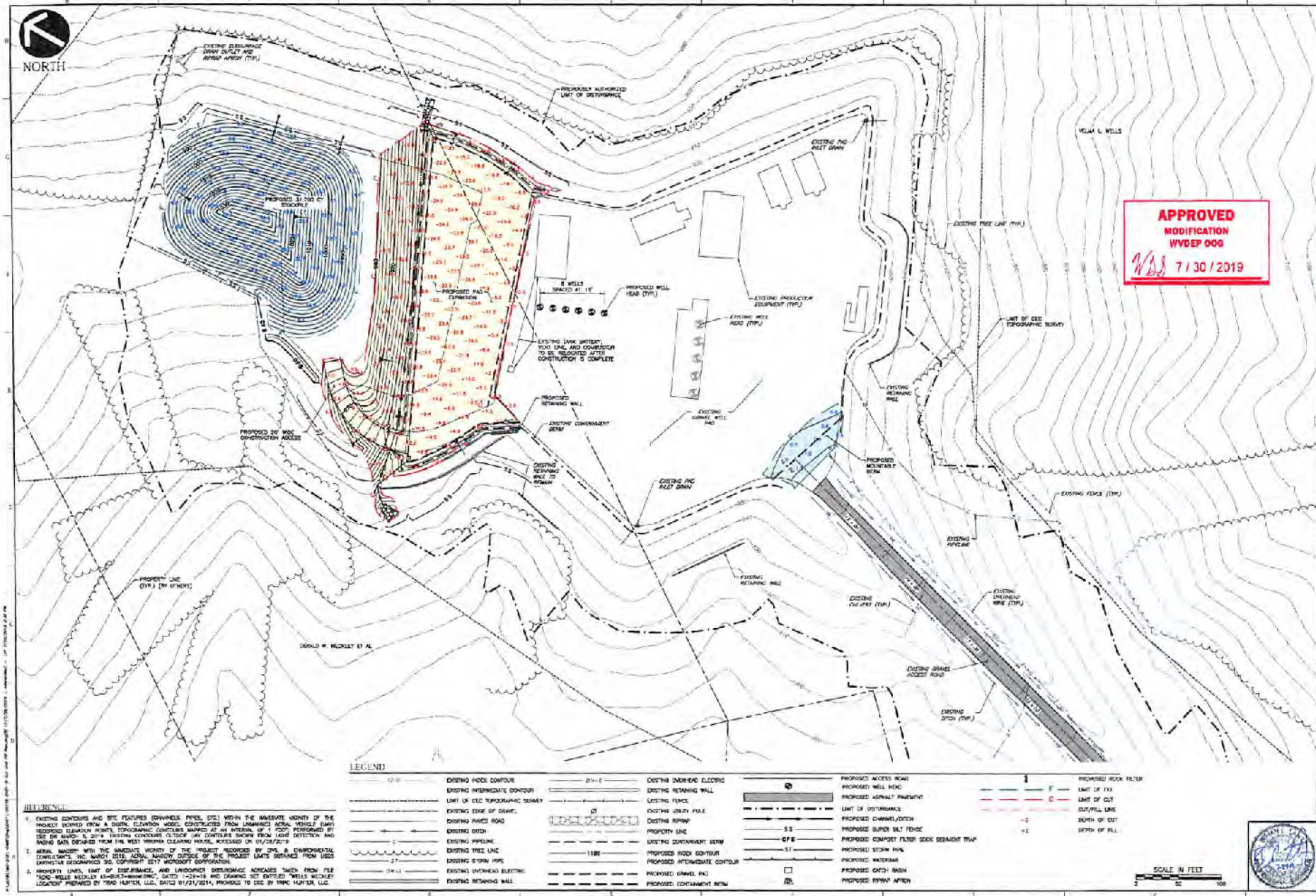
PROPOSED CONDUITORS PLAN

DATE	DATE	DATE

PROJECT: WELLS-MECKLEY MIDDLE AS-BUILT-MAPPING, DATED 1-29-18 AND DRAWING SET OUTLIER WELLS-MECKLEY LOCATION PROVIDED BY TRIAD HUNTER, LLC. DATED 6/17/2018, PROVIDED TO GCD BY TRIAD HUNTER, LLC.

7

TRIA HUNTER, LLC
 WELLS-MECKLEY PAD EXPANSION
 TYLER COUNTY, WEST VIRGINIA



APPROVED
MODIFICATION
WVDEP 008
[Signature] 7/30/2019

LEGEND

	EXISTING FENCE CONTOUR		EXISTING INTERMEDIATE CONTOUR		EXISTING DRAINAGE ELECTRIC		PROPOSED ACCESS ROAD		PROPOSED ROCK FILTER
	EXISTING INTERMEDIATE CONTOUR		LIMIT OF CEC TOPOGRAPHIC SURVEY		EXISTING FENCE		PROPOSED WELL HEAD		LIMIT OF FILL
	EXISTING EDGE OF DRAIN		EXISTING PAVED ROAD		EXISTING UTILITY POLE		PROPOSED ASPHALT PAVEMENT		LIMIT OF CUT
	EXISTING DITCH		EXISTING RIPRAP		PROPERTY LINE		LIMIT OF DISTURBANCE		CUT/FILL LINE
	EXISTING PIPELINE		EXISTING CONTAINMENT BERM		PROPOSED RIPRAP APRON		PROPOSED CHANNEL/DITCH		DEPTH OF CUT
	EXISTING TREE LINE		EXISTING RETAINING WALL		PROPOSED COMPOSITE FILTER SOCK SEDIMENT TRAP		PROPOSED SUPER SILT FENCE		DEPTH OF FILL
	EXISTING STORM PIPE		EXISTING OVERHEAD ELECTRIC		PROPOSED STORM TANK		PROPOSED WATERBAR		
	EXISTING OVERHEAD ELECTRIC		PROPOSED ROCK CONTOUR		PROPOSED DITCH WASH		PROPOSED BERM APRON		
	EXISTING RETAINING WALL		PROPOSED INTERMEDIATE CONTOUR		PROPOSED GRAVEL PAD				
			PROPOSED CONTAINMENT BERM						

- RETURNING:**
- EXISTING CONTOURS AND SITE FEATURES (CONCRETE PIPES, ETC.) WITHIN THE MAKEUP VIGNETTE OF THE PROJECT DERIVED FROM A DIGITAL ELEVATION MODEL CONSTRUCTED FROM UNMANNED AERIAL VEHICLE (UAV) ACQUIRED ELEVATION POINTS. TOPOGRAPHIC CONTOURS SHOWN AT AN INTERVAL OF 1 FOOT PERFORMED BY SEE ON MARCH 15, 2019. EXISTING CONTOURS OUTSIDE THE LIMITS DERIVED FROM UAS DATA DETECTION AND BOUND DATA DERIVED FROM THE WEST VIRGINIA CLEARING HOUSE, ACCESSIBLE ON 01/23/2019.
 - AERIAL MAKEUP WITH THE MAKEUP VIGNETTE OF THE PROJECT ACQUIRED BY ONE A ENVIRONMENTAL TECHNOLOGIES, INC. MARCH 2012. AERIAL MAKEUP OUTSIDE OF THE PROJECT LIMITS DERIVED FROM UAS DATA (KAPRISTAR GEOGRAPHICS 3D COPYRIGHT 2017) WORKSHEET CORPORATION.
 - PROPERTY LINES, LIMIT OF DISTURBANCE, AND UNIMPROVED DISTURBANCE AREAS SHOWN FROM THE "MCC-MILLS MECKLEY AS-BUILT-MANAGEMENT" GATED 1-29-18 AND DRAWING SET ENTITLED "MILLS MECKLEY LOCATION" PREPARED BY TRIAD HUNTER, LLC, DATED 01/23/2018, PROVIDED TO DEC BY TRIAD HUNTER, LLC.

SCALE IN FEET
0 20 40 60 80 100



REVISION RECORD

NO.	DATE	DESCRIPTION

CEC
COLUMBIAN ENGINEERING CORPORATION
1000 Market Street, Suite 200, Charleston, WV 25301
TEL: 304.263.1234 FAX: 304.263.1234

TRIAD HUNTER, LLC
WELLS MECKLEY PAD EXPANSION
TYLER COUNTY, WEST VIRGINIA

CUT/FILL PLAN

DATE	07/30/2019
PROJECT	WELLS MECKLEY PAD EXPANSION
CLIENT	WELLS MECKLEY
LOCATION	TYLER COUNTY, WEST VIRGINIA
SCALE	AS SHOWN
DATE	07/30/2019