

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

September 09, 2013

WELL WORK PERMIT

Vertical Well

This permit, API Well Number: 47-1706345, issued to KEY OIL 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 feet free to contact me at (304) 926-0499 ext. 1654.

James Martin

Chief

Operator's Well No: TARGA/MAXWELL #12

Farm Name: MORRIS, I.L.

API Well Number: 47-1706345

Permit Type: Vertical Well Date Issued: 09/09/2013

STATE OF WEST VIRGINIA

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

|) Well Operato | · VEV | | | | | | |
|---|-------------------------------------|------------------------------------|---------------------------|---------------------------------------|----------------------------------|---------------------------------------|----------------|
| | or KEY | OIL COM | IPANY | 3063 | 347 DODI RIDG | | NEW MILTON |
| | - | | | Oper | | | Quadrang |
|) Operator's V | Vell Numb | per: <u>TA</u> | ARGA/MAXWEL | L #12 | | 3) Elevation | : <u>1111'</u> |
|) Well Type: (a | a) Oil <u>X</u> | or G | Gas X | | | | |
| (t |) If Gas: | Produ | ction X / U | nderground St | orage | | |
| | | Deep | | Shallow X | | | |
| i) Proposed To i) Approximate i) Approximate | otal Depth fresh wa salt wate | n: 300 ater strata er depths | | Formation a | t Proposed ⁻ | Total Depth: <u>C</u> | GORDON JU |
|) Approximate | coal sea | m depths | s: <u>NONE RE</u> | PORTED ON | DRILLERS | LOGS | 91 |
| 0) Does land | contain c | oal seam | s tributary to ac | tive mine? _ | NO | | |
| 1) Describe pr | roposed v | well work | in detail | DRILL, STIMU | ILATE, PRO | DUCE | |
| | | | | | | | |
| | | | | | | | |
| | | | CINIC AND TH | | | | |
| | SPECIFIC | | ASING AND TU | | The second of the second | S CEME | NT |
| | SPECIFIC Size | | | BING PROGR FOOTAGE For Drilling | INTERVAL | S CEME | |
| TYPE S | | ATIONS | | FOOTAGE | INTERVAL | | |
| TYPE S Conductor | <u>Size</u> | Grade | Weight per ft | FOOTAGE For Drilling | Left in Well | Fill -up (Cu | . Ft.) |
| TYPE S | <u>Size</u> 11 3/4 | Grade ERW | Weight per ft 42 | FOOTAGE For Drilling 35 | Left in Well | Fill -up (Cu | . Ft.) |
| TYPE S Conductor Fresh Water | <u>Size</u> 11 3/4 | Grade ERW | Weight per ft 42 | FOOTAGE For Drilling 35 | Left in Well | Fill -up (Cu | . Ft.) |
| TYPE S Conductor Fresh Water Coal | <u>Size</u> 11 3/4 9 5/8 | Grade ERW ERW | Weight per ft 42 29 | For Drilling 35 -168 170 | Left in Well 0 -168- 170 | Fill -up (Cu | . Ft.) |
| Conductor Fresh Water Coal Intermediate | <u>Size</u> 11 3/4 9 5/8 | Grade ERW ERW ERW | Weight per ft 42 29 | For Drilling 35 -168 170 | Left in Well 0 -168- 170 1011 | Fill -up (Cu 70 SKS. C 150 SKS. | TS CTS |
| TYPE S Conductor Fresh Water Coal Intermediate Production | <u>Size</u> 11 3/4 9 5/8 | Grade ERW ERW ERW | Weight per ft 42 29 | For Drilling 35 -168 170 | Left in Well 0 -168- 170 1011 | Fill -up (Cu 70 SKS. C 150 SKS. | TS CTS |
| Conductor Fresh Water Coal Intermediate Production Tubing Liners Packers: K | <u>Size</u> 11 3/4 9 5/8 | Grade ERW ERW ERW | Weight per ft 42 29 | For Drilling 35 -168 170 | Left in Well 0 -168- 170 1011 | 70 SKS. C | TS CTS |

^{**} BLUE MONDAY, KEENER, BIG INJUN, WEIR, GANTZ, GORDON

| 1). Date: | July 23 | 3 rd , 2013 | | | |
|---|----------|------------------------|-------|------|---------|
| | 14 - 77 | | TAR | GA/N | IAXWELL |
| 2.) Operate | or's Wel | Number | | #1 | 12 |
| | | State | Count | | Permit |
| 2 \ \ \ D \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ | II No . | 47- | 017 | 2 | |

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

| Surface Ow | ner(s) to be served: | 0.1 | 5) (a) Coal Operato | or . |
|------------------------------|--|-------------------------|--------------------------|---|
| (a) Name | I. L. MORRIS | W | Name N | ONE |
| Address | P O BOX 397 | | Address | |
| | GLENVILLE, WV 2 | 26351 | | |
| (b) Name | | | (b) Coal Owner | r(s) with Declaration |
| Address | | | Name | |
| | | | Address | |
| | | | -1 | |
| (c) Name | | | Name | |
| Address | | | Address | |
| | | | | |
| 6) Inspector | DOUGLAS NEW | LON | (c) Coal Lessee | e with Declaration |
| Address | 4060 DUTCHMA | | Name | |
| | MACFARLAN, W | | Address | |
| Telephone | 304-932-8049 | | - 1 | |
| | The state of the s | PERSONS N. | AMED ABOVE TAK | E NOTICE THAT: |
| Included is th | | | | by which I hold the right to extract oil and gas |
| OR | ic leader of leader of or | nor continuing | contract of contracto s | y milen i mela are right to extract on and gae |
| | ne information required | by Chapter 22 | , Article 6, Section 8(d |) of the Code of West Virginia (see page 2) |
| | | | | Code I have served copies of this notice a |
| | | | | on the above named parties by: |
| | Personal Service | (Affidavit attac | ched) | |
| | X Certified Mail (Po | stmarked post | al receipt attached) | |
| 4 - 1 | Publication (Notice | | | |
| | | apter 22-6 an | d 35 CSR 4, and I a | agree to the terms and conditions of any peri |
| issued under this | | | | |
| | | | | m familiar with the information submitted on the |
| | | | | individuals immediately responsible for obtaini |
| | believe that the inform | | | information, including the possibility of fine a |
| imprisonment. | are that there are sign | ilicant penaltie | s for submitting raise | information, including the possibility of fine a |
| imprisoriment. | OFFICIAL SEAL | Vell Operator | KEY OIL COMPANY | |
| No. | 0111001100110 | By: | Jal Kan | 27 |
| ENDALE | NAME AND DESIGNATION OF THE PERSON OF THE PE | ts: | PRESIDENT | |
| | P.O Box 97 Smithburg, WV 26436 | Address | 22 GARTON PLAZA | ha |
| | y Commission Expres Nov 16, 2022 | | WESTON, WV 2645 | 12 |
| | | elephone | 304-269-7102 | *O.17 |
| Subscribed and s | sworn before me this _ | 23 rd day of | JULY | , 2013 |
| | Uh . U | 1. | | La Company |
| | There | pscoule | | Notary Public |
| My Commission | Expires November | 16, 2022 | | All and Cal |
| Oil and Gas Privacy | Notice | | | and abone number as a part of our routice of oil annenian |
| The Office of Oil and | Con processor vous | anal information | such as name, address as | ad abone number as a part of our recolled the |

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

09/13/2013

WW-2A Surface Waiver

SURFACE OWNER WAIVER

| County | DODDRIDGE | Operator Operator well number | KEY OIL COMPANY TARGA/MAXWELL #12 |
|---|--|--|--|
| | | Operator well number | TARGANNAXVVELL#12 |
| | INSTRUCTIONS TO | SURFACE OWNERS NAMED ON | PAGE WW2-A |
| the surface is appeared on the only own valid for 24 r | tract is owned by more than three the Sheriff's tax ticket on the land of er who will actually receive these m months. If you do not own any inte f you know who it is. Also, please n NOTE: YOU ARE | e persons, then these materials was because you actually occupy the aterials.) See Chapter 22 of the Werest in the surface tract, please f | OMMENT. |
| Chief Office | of Oil and Gas | | |
| | of Environmental Protection | | |
| 601 57th St. S | SE | | |
| Charleston, V (304) 926-04 | | | |
| operator files filed in person of the date. have been conducted in the comperator's nathe application The (1) | his Application. You have FIFTEE or received in the mail by the Chie Check with your postmaster to ensontacted by the well operator and you have materials, then the permit may ments must be in writing. Your of me and well number and the approximation. You may add other documents, so their has the power to deny or condition the proposed well work will constitut the soil erosion and sediment control amage would occur to publicly own the proposed well work fails to prote the applicant has committed a substitute of the rules promulgated under Chap a want a copy of the permit as it is the Chief. of Water Testing Laboratories. Ter to establish water quality prior to a VOLUNTAI | N (15) DAYS after the filing date to fs office by the time stated above, ure adequate delivery time or to all ou have signed a "voluntary stater or be issued at any time. On ments must include your name, oximate location of the proposed where the same of the proposed where the same of the proposed where the same of the proposed where | omments on the following grounds: it or a substantial violation of one or more eek review of the violation". lenying the permit, you should request testing laboratories which you can hire to to obtain a copy. |
| | or a Well Work Permit on Form W | | |
| order on Forn | | | vell work on my surface land as described |
| therein. | per state that I have no objection to | the planned work described in the | se materials, and I have no objection to a |
| | ssued on those materials. | are planned work described in the | se materials, and I have no objection to a |
| FOR EXECU | TION BY A NATURAL PERSON | Company EXECU | JTION BY A CORPORATION, ETC. |
| (1.1) | Signature Date | By only | |
| | 0/ | Its 9 this | Date |
| 4.4. | Nois | MIG -NG COS | ection. |
| F | rint Name | of Oil all onmontal | |
| | | Office of Git end Case Production of Case Productio | Date |
| | | My Dev | 00/40/0040 |

| JFOF GALV | iy/inlometer } = = | On Ouvebble C A | alwww.uspoca US | n d |
|-----------------------------|----------------------------|-------------------|--------------------|------|
| | Postage \$ | 2,52 | STON WUZ | 1.3 |
| C | ertified Fee | 3,10/ | Postmar | 120 |
| Return F (Endorsemen | Receipt Fee t Required) | 2,53 | JIII 2 6 Hero | |
| Restricted D (Endorsemen | elivery Fee t Required) | / | | 11 |
| Total Posta | ge & Fees \$ | 7 | (ISPS | 1 |
| Sent To- | 1 Moss | < 22 | L GARTEN | P.a. |

| COMPLETE THIS SECTION ON DELIVERY |
|---|
| A. Signature X Agent Addressee B. Received by (Printed Name) C. Date of Delivery D. Is delivery address different from item 1? Yes If YES, enter delivery address below: |
| 3. Service Type AC Cortifled Mall Registered Return Receipt for Merchandise Insured Mall C.O.D. |
| 4. Restricted Delivery? (Extra Fee) ☐ Yes |
| 0 0002 7770 8355 |
| |

RECEIVE HEREOFINED

AUGUS 222013

AUGUS 2220

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

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

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

| Grantor, lessor, etc. | Grantee, lessee, etc. | Royalty | Book/Page |
|-------------------------|-----------------------|---------|-----------|
| PORTER MAXWELL | MICHAEL MURPHY | 1/8 | 14/236 |
| TARGA DEVELOPMENT, INC. | KEY OIL COMPANY | 1/8 | 309/626 |

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:

KEY OIL COMPANY

By:Its:

PRESIDENT

Office of Oil and Gas
Office of Oil and Oil and

WW-2B1

Well No. TARGA/MAXWELL NO. 12

West Virginia Department of Environmental Protection Office of Oil and Gas

NOTICE TO SURFACE OWNERS

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

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

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

If no water well or spring is located within 1000 feet, the Chief may require the operator to sample and analyze water from a water well or spring within 2000 feet of the proposed well site.

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

The laboratory used by the operator to analyze the samples will be approved by the Chief. The operator named below has decided to use the following laboratory to analyze the water samples:

| x Contractor Name | Reliance Laboratories, Inc. | |
|-----------------------------------|-----------------------------|--|
| Well operator's private laborator | y | |
| Well Operator | Key Oil Company | |
| Address | 22 Garton Plaza | |
| | Weston, WV 26452 | |
| Telephone | (304) 269-7102 | |

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

***THERE APPEARS TO BE NO KNOWN WATER WELLS OR SPRINGS WITHIN 1000 FEET
OF THE PROPOSED WELL LOCATION**

Of 9/13/2013

WW-9 Rev. 5/10

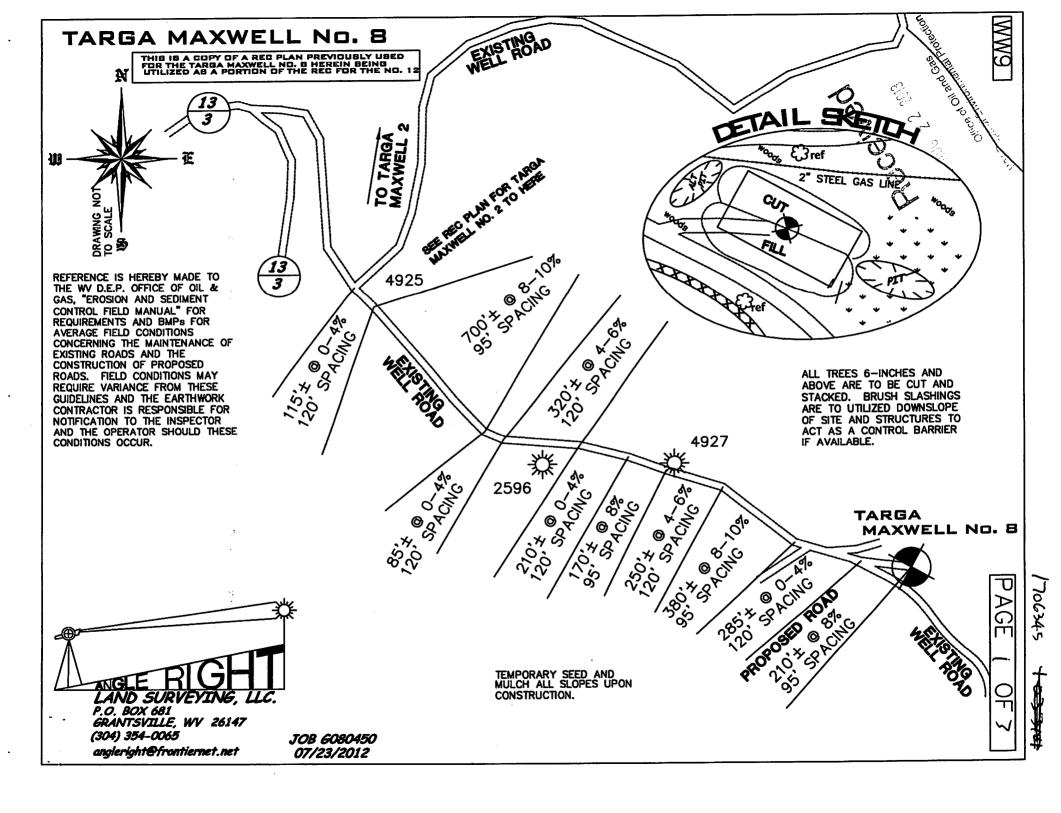
| P | age | | of | |
|---------------------|-----|-------------------|------|------------|
| API Number 47 - | 017 | | | |
| Operator's Well No. | TAR | $\overline{G}A/M$ | AXWI | ELL NO. 12 |

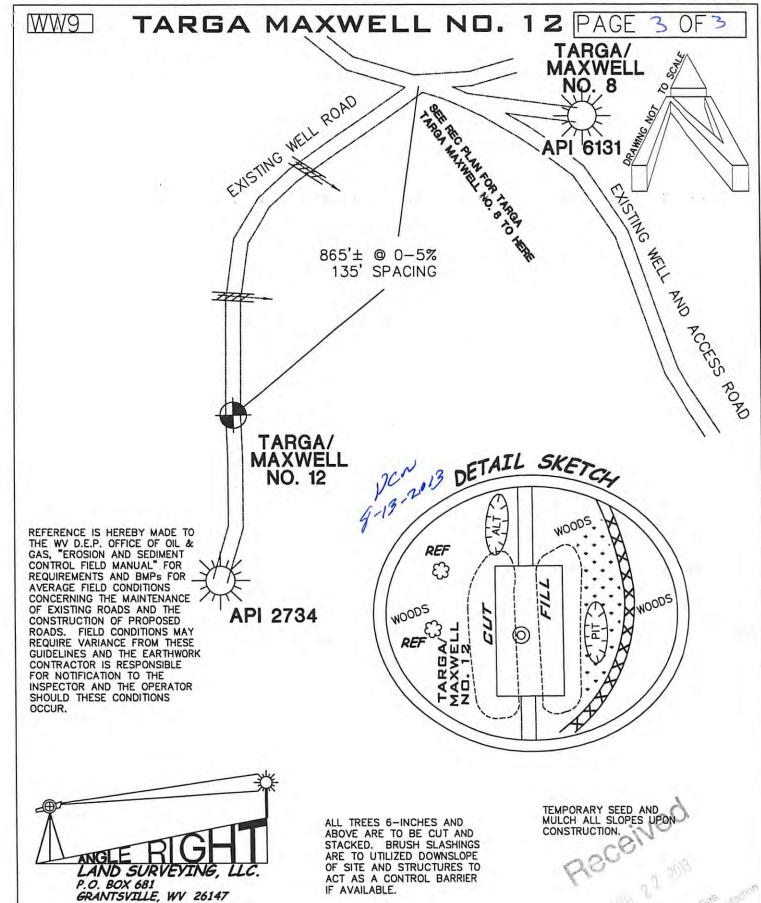
STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION OFFICE OF OIL AND GAS

CONSTRUCTION AND RECLAMATION PLAN AND SITE REGISTRATION APPLICATION FORM GENERAL PERMIT FOR OIL AND GAS PIT WASTE DISCHARGE

| perator Nar | ne Key Oil Com | pany | OP Code | | | |
|--|--|---|---|-----------------|--|--|
| Vatershed Lick Run | | | Quadrangle | | | |
| levation _ | 1,111' | County | Doddridge | District | New Milton | |
| Description (| of anticipated Pit Was | ite: Drill Water, I | rac Blow Back | & Various | Formation Cutting | |
| o you antic | ipate using more than | 5,000 bbls of water to | complete the proposed v | vell work? Yes | No XX | |
| Will a synthe | etic liner be used in th | e pit?yes | If so, what ml.? | 6 mil. 20m | ik. | |
| roposed Di | Underg Reuse Off Sit | round Injection (UIC | Permit Number n WW-9 for disposal loc | | % | |
| -If | oil based, what type? | Synthetic, petroleum, | etc. | | | |
| -La I co | ertify that I understar , 2005, by the Office of the permit are enfo | ad and agree to the term of Oil and Gas of the Vorceable by law. Violat | s and conditions of the C | GENERAL WAT | TER POLLUTION PERMIT tal Protection. I understand neral permit and/or other ap | |
| I capplication obtaining the penalties for | form and all attach he information, I be r submitting false inf | of law that I have per ments thereto and that lieve that the information, including the | based on my inquiry on is true, accurate, an possibility of fine or imp | d complete. I a | the information submitted iduals immediately respons am aware that there are sig | |
| | | Jon Ag | | | | |
| Company C | Official (Typed Nam | Jan Chapma | an | | | |
| Company (| Official Title | President | | | 1 | |
| Subscribed | and sworn before m | this 23rd de | ay of July | , 20 | Public Public | |
| My comm | ission expires | novembre | 16,2022 | ************* | | |

| Property Boundary Road = = = = = = = = = = = = = = = = = = = | ===== ×-×- ·/-/- | Diversion Spring Wet Spot Drain Pipe with size in inches Waterway Cross Drain Artificial Filter Strip Pit: cut walls Pit: compacted fill walls Area for Land Application of Pit Wa | - ® |
|--|--|---|----------|
| | nt: Acres Disturbed Tons/acre or to correct to | 1.6± Prevegetation pH | 5.5 |
| Fertilizer (10-20-20 or | equivalent) 1/3 TON | lbs/acre (500 lbs minimum) | |
| Mulch HAY | 2Tor | ns/acre | |
| | S | Seed Mixtures | |
| Area Seed Type | I Ibs/acre | Area II Seed Type | lbs/acre |
| KY-31 | 40 | KY-31 | 40 |
| ALSIKE CLOVER | 5 | ALSIKE CLOVER | 5 |
| ALDINE OLOVEIN | | ANNUAL RYE | 15 |
| ALSIKE CLOVER | | · | |
| ANNUAL RYE Attach: Drawing(s) of road, location,pi Photocopied section of involve | | | |





(304) 354-0065

06/26/13

angleright@frontiernet.net

080450

09/13/2013

PAGE OF WW9 TARGA/MAXWELL WELL NO. 12 Gas Well Right Wells Well SOIL Well 0 Oil Well 200 TOPO SECTION ELL NAME **OPERATOR** ANGLE RIGHT LAND SURVEYING, LLC TARGA/MAXWELL NO.12 NEW MILTON 7.5' PO BOX 681 GRANTSVILLE, WV 26147 (304) 354-0065 KEY OIL COMPANY 06/26/2013 nd Gas 22 GARTON PLAZA SCALE WESTON, WV 26452 1"=1000" 080450

DCN 8-13-2019

