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

May 17, 2016

WELL WORK PLUGGING PERMIT

Plugging

This permit, API Well Number: 47-9100734, issued to MOUNTAINEER KEYSTONE, LLC, 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.

Upon completion of the plugging well work, the above named operator will reclaim the site according to the provisions of WV Code 22-6-30. The above named operator will also file, as required in WV Code 22-6-23, an affidavit on form WR-38 by two experienced persons in the operator's employment and the Oil and Gas inspector that the work authorized under this permit was performed and a description given. Failure to abide by all statutory and regulatory provisions governing all duties and operations here under may result in suspensions or revocation of this permit and in addition may result in civil and/or criminal penalities being imposed upon the operator.

This permit will expire in two (2) years from date of issue. If there are any questions, please free to contact me at (304) 926-0499 ext. 1654.

James Martin
Chief

Operator's Well No: COULSON 2
Farm Name: TYGART EAST COMPANY
API Well Number: 47-9100734
Permit Type: Plugging
Date Issued: 05/17/2016

Promoting a healthy environment.

9100734P

PERMIT CONDITIONS

West Virginia Code §22-6-11 allows the Office of Oil and Gas to place specific conditions upon this permit. Permit conditions have the same effect as law. Failure to adhere to the specified permit conditions may result in enforcement action.

CONDITIONS

1. All pits must be lined with a minimum of 20 mil thickness synthetic liner.

2. In the event of an accident or explosion causing loss of life or serious personal injury in or about the well or while working on the well, the well operator or its contractor shall give notice, stating the particulars of the accident or explosion, to the oil and gas inspector and the Chief within twenty-four (24) hours.

3. Well work activities shall not constitute a hazard to the safety of persons.

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WW-4B
Rev. 2/01

1) Date April 7, 2016
2) Operator's
Well No. Coulson #2
3) API Well No. 47- 091 - 0734

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

APPLICATION FOR A PERMIT TO PLUG AND ABANDON

4) Well Type: Oil _____/ Gas X / Liquid injection _____/ Waste disposal _____/
(If "Gas, Production ____ or Underground storage ____) Deep ____/ Shallow____

5) Location: Elevation 1424 Watershed Three Fork Creek
District Knottsville -le County Taylor Quadrangle Thorton 7.5 -638

6) Well Operator Mountaineer Keystone, LLC
Address 6031 Wallace Rd. Ext. Suite 300
Pittsburgh, PA 15090

7) Designated Agent Nathan Skeen
Address 65 Professional Place Suite 200
Bridgeport, WV 26330

8) Oil and Gas Inspector to be notified
Name Kenneth Greynolds
Address 613 Broad Run Rd.
Jane Lew, WV 26378

9) Plugging Contractor
Name Patchwork Oil & Gas, LLC
Address 8165 Elizabeth Pike
Elizabeth, WV 26143

10) Work Order: The work order for the manner of plugging this well is as follows:

Well schematic and work order attached

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Environmental Protection

Notification must be given to the district oil and gas inspector 24 hours before permitted work can commence.

Work order approved by inspector _____ Date _____

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Coulson #2

47-091-00734

PROPOSED PLUGGING PROCEDURE

1. Prepare plugging permit application.

2. Certify to surface and coal owners.

3. Certify to designated State inspector for signature.

4. Once all signatures are obtained, copy for our records and certify to Jeff at the State Office for approval.

5. Receive plugging permit good for 2 years.

6. Notify the designated State inspector 24 hours prior to commencing operations.

7. Take equipment to location and begin prepping for plug.

8. Rig up

9. Verify total depth of 5117'

10. Run tubing to TD. Fill with a splash of gel. Set first plug with 8 sacks of Class A cement with no more than 3% CaCl2 and no other additives from 5072' up to 4969 (Bottom, Perf)

11. Pull tubing back, wait 8 hours

12. Run in and tag plug, add cement if necessary

13. Run 3 sacks of 6% Bentonite gel from 4969' up to 4114'.

14. Pull tubing to 4114'. Set second plug with 8 sacks of Class A cement with no more than 3% CaCl2 and no other additives from 4114' up to 4009'. (Perf)

15. Pull tubing back, wait 8 hours

16. Run in and tag plug, add cement if necessary

17. Run 4 sack of 6% Bentonite gel from 4009' up to 2850'

18. Look for 4 ½ free point, estimating around 2800', cut casing and pull.

19. Run tubing back to 2850'. Set third plug with 19 sacks of Class A cement with no more than 3% CaCl2 and no other additives from 2850' to 2750' (4 ½ Casing cut)

9100734P

20. Pull tubing back, wait 8 hours

21. Run in and tag plug, add cement if necessary

22. Run 22 sack of 6% Bentonite gel from 2750' up to 875'

23. Pull tubing back to 875'. Set fourth plug with 29 sacks of Class A cement with no more than 3% CaCl2 and no other additives from 975' to 875' (Elevation)

24. Run 10 sack of 6% Bentonite gel from 875' up to 100'

25. Pulled tubing back to 100'. Set fifth plug with 29 sacks of Class A cement with no more than 3% CaCl2 and no other additives from 100' to surface. (Surface)

26. Pull tubing out, wait 8 hours

27. Additional cement if necessary

~~31. Solidify pit if necessary with more cement and lime, then bury~~. (We use portable pit)

32. Set 6" x 12.5" steel pipe with concrete with 1/2" API identification.

33. Rig down, and move equipment out.

34. Reclaim location

35. Prepare WR-34 & WR-38 for permit release.

WE HAVE A 100' PLUG ACROSS ELEVATION

RLG 4-20-16

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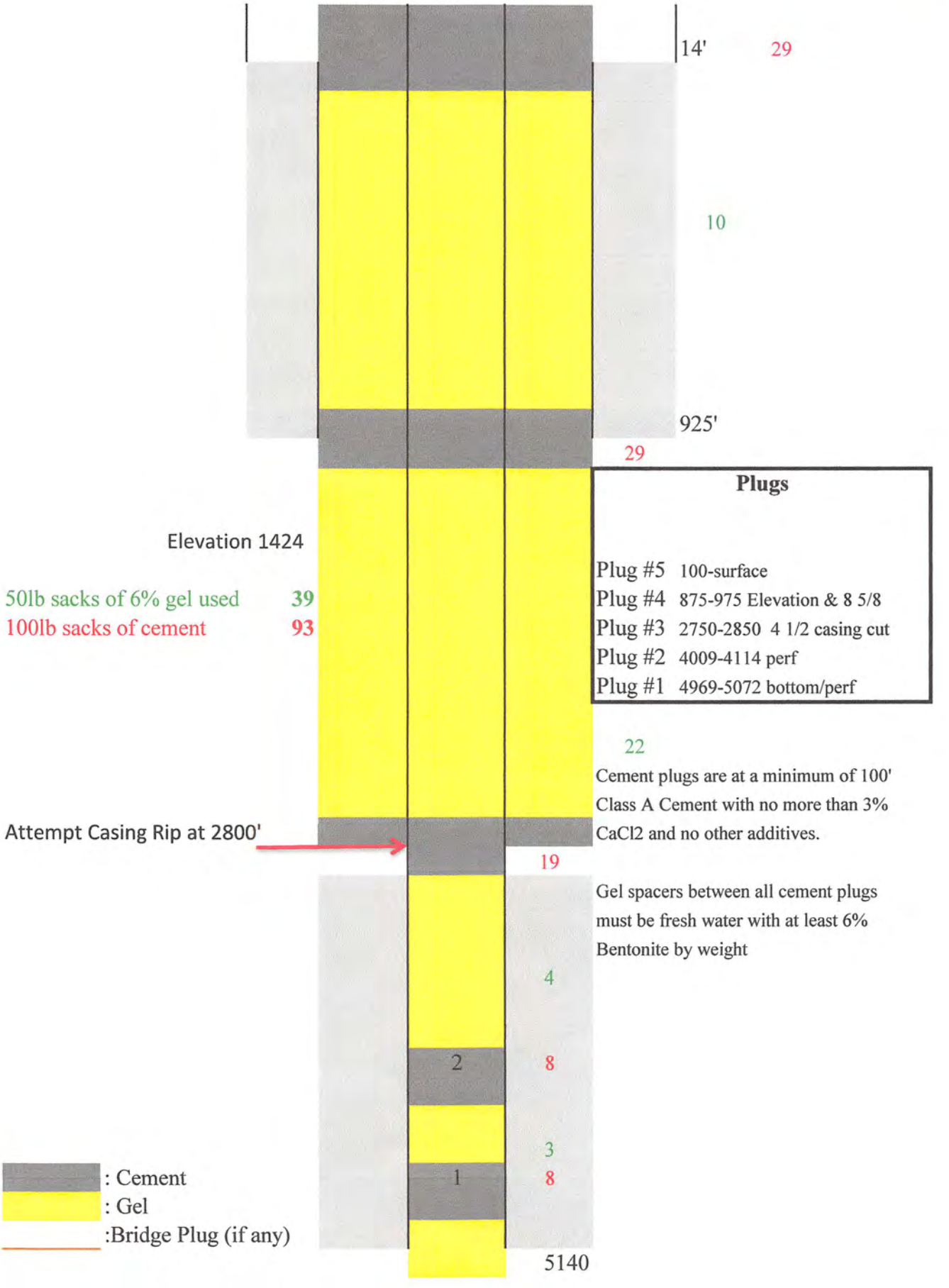
Coulson #2
47-091-00734



Plugs

Plug #5 100-surface
Plug #4 875-975 Elevation & 8 5/8
Plug #3 2750-2850 4 1/2 casing cut
Plug #2 4009-4114 perf
Plug #1 4969-5072 bottom/perf

Cement plugs are at a minimum of 100' Class A Cement with no more than 3% CaCl2 and no other additives.

Gel spacers between all cement plugs must be fresh water with at least 6% Bentonite by weight

WR-35

API # 47- 91-00734

State of West Virgini
DEPARTMENT OF ENERGY
Division of Oil and Gas

9100734P

Well Operator's Report of Well Work

Farm name: TYGART EAST COMPANY Operator Well No.: COULSON #2

LOCATION: Elevation: 1415.00 Plats say 1424 ✓ Quadrangle: THORNTON

District: KNOTTSVILLE County: TAYLOR
Latitude: 1850 Feet South of 39 Deg. 20Min. 0 Sec.
Longitude 4325 Feet West of 79 Deg. 57 Min. 30 Sec.

Company: PETROLEUM DEVELOPMENT COR
P. O. BOX 26
BRIDGEPORT, WV 26330-0026

Agent: ERIC R. STEARNS

Inspector: PHILLIP TRACY
Permit Issued: 06/05/91
Well work Commenced: 06/19/91
Well work Completed: 06/25/91
Verbal Plugging
Permission granted on: _____
Rotary x Cable _____ Rig
Total Depth (feet) 5140'
Fresh water depths (ft) _____
35; 780
Salt water depths (ft) _____

Is coal being mined in area (Y/N)? N
Coal Depths (ft): 200-208; 506-509; 521-524; 473-577

Casing & Tubing	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
Size			
11 3/4"	14'	✓ 14'	
8 5/8"	925'	✓ 925'	CTS 235 sks
4 1/2"	5117'	✓ 5117'	385 sks

↳ Behind cemented casing

OPEN FLOW DATA

Producing formation Elk Pay zone depth (ft) 5019-22
Gas: Initial open flow _____ MCF/d Oil: Initial open flow _____ Bbl/d
Final open flow 133 MCF/d Final open flow _____ Bbl/d
Time of open flow between initial and final tests _____ Hours
Static rock Pressure 1200 psig (surface pressure) after 72 Hours

Second producing formation Riley Pay zone depth (ft) 4059-64
Gas: Initial open flow _____ MCF/d Oil: Initial open flow _____ Bbl/d
Final open flow comingled MCF/d Final open flow _____ Bbl/d
Time of open flow between initial and final tests _____ Hours
Static rock Pressure _____ psig (surface pressure) after _____ Hours

NOTE: ON BACK OF THIS FORM PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE

For: PETROLEUM DEVELOPMENT CORP

By: Eric R. Stearns

Date: 8-6-91

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APR 27 2016
WV Department of
Environmental Protection

DATE: 11/30/17

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WELL NAME COULSON #2
API NUMBER 47-091-0734
AFE # 91076

WELL BORE CONDITIONS

TUBING 1 1/2 " at 4995 FT.

PACKER at _____ FT.

CEMENT TOP at 2824 FT.

PLUG at _____ FT.

PERFORATIONS:

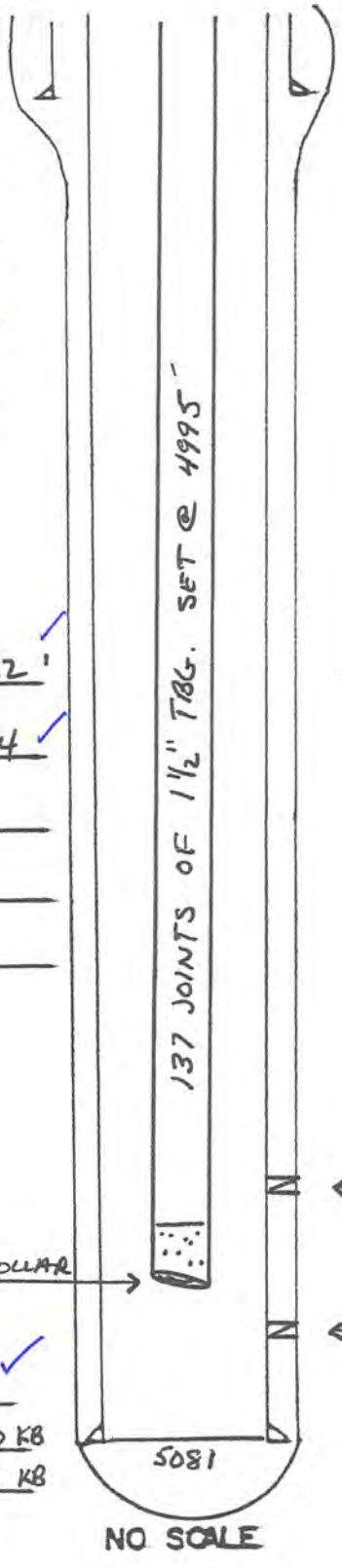
13 HOLES FROM 5019 ' TO 5022 '

31 " " 4059 " 4064

_____ " " _____ " _____

_____ " " _____ " _____

_____ " " _____ " _____



SURFACE CASING
8 5/8 " at 935 KB FT
235 SKS

ZONES STIMULATED
2 STAGE
3RD ELK
RILEY

POTENTIAL-ZONES
BALLTOWN

CASED HOLE TD 5081
LOGGERS TD 5140 KB
DRILLERS TD 5145 KB

NO SCALE

PRODUCTION CASING
10.5 4 1/2 " at 5127 KB FT.
385 SKS: 115 BBLS

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PETROLEUM DEVELOPMENT CORPORATION
WELL HISTORY

Nathan Coulson #2
Taylor County, WV
Permit #0734
AFE# 91076
Ls# 438400

06/19/91	UDI rig #6 – spud well at 2 PM.
06/20/91	UDI rig #6 – at 428' and foaming. Drilling 11" hole at 2 minutes/foot. Ran 1 joint of 11 3/4" conductor to 14'. Set at 24'. 1/2" stream fresh water at 35'.
06/21/91	UDI rig #6 – TD 11" hole at 953'. Ran 21 joints of 8 5/8" casing (925'; set at 935'). Nowsco cement with 235 sks. Plug down at 8:00 AM
06/22/91	UDI rig #6 – at 1338' and dusting. Drilling 7 7/8" hole at 2 minutes/foot.
06/23/91	UDI rig #6 – at 2490' and dusting. Drilling 7 7/8" hole at 20 minutes/kelly. Gas check at 2354' – no show.
06/24/91	UDI rig #6 – at 4002' and dusting. Drilling 7 7/8" hole at 20 minutes/kelly. Gas check at 3657' – odor.
06/25/91	UDI rig #6 – TD 7 7/8" hole at 5145'. Gas checks: at 4156' – 4/10 thru 1" with H2O = 21 Mcf; at 4312' – 2/10 thru 1" with H2O = 15 Mcf; at 4343' – 2/10 thru 1" with H2O = 15 Mcf; at 4968' – 26/10 thru 1" with H2O = 54 Mcf; at 5030' – 8/10 thru 1" with H2O = 30 Mcf. Schlumberger found a TD of 5140'. Stephens Tongs ran 126 joints and 3 pups of 10.5#/ft, 8 rd, J-55, 4 1/2" casing to 5117'. Casing string set at 5127'. Latch down at 5087'; 3 5/16" baffle at 3337'; pup joints at 4881' (5'), 3903' (10') and 2959' (15'). Nowsco pumped 175 bbl fresh water and mixed 115 bbl of cement slurry (385 sks of Thixotropic with 8# gilsonite/sk). Released plug and displaced with 12 bbl 15% HCl acid and 68.9 bbl treated water. Plug landed with 1000 psig, bumped to 2000 psig. Released OK at 3:46 PM. Estimated cement top at 2544'. Gas check after setting casing string = odor.
07/03/91	Hitwell Surveys ran a correlation and cement top log finding a TD of 5081' and a cement top of 2824'. The Elk formation was perforated with 13, .39 diameter holes from 5019' to 5022'. Nowsco established a breakdown with 2600 psig. ATP – 3339 psig; AIR – 23 bpm, 531 bbl of sand laden fluid; 100 sks – 80/100: 425 sks – 20/40; 500 gallons of acid; 59025 scf of N2; 20# gel system; ISIP – 3000 psig; flushed with 65 bbl fresh water. Formation sanded off with 15 bbl of flush to go. Flowed well back thru 4" turn tube to remove sand from casing. Spotted acid over the Riley formation and perforated with 15, .39 diameter holes from 4059' to 4064'. Nowsco attempted to breakdown formation with 4400 psig. After several attempts to break the formation, the well was flowed back, acid respotted and the Riley was reperforated. The Riley would not breakdown so the job was stopped, the well was opened thru a 4" turn tube.
07/08/91	Service rig #85 – drill out baffle at 3336'. Swabbed 4 1/2" casing. Try to kick off well, unsuccessful. Shut in.
07/09/91	Service rig #85 – 520 psig on 4 1/2". Try to blow back frac ball, unsuccessful.
07/10/91	Service rig #85 – check pressure – 520 psig on 4 1/2" casing. Drilled out baffle ring at 4114' and check TD. Found top of sand at 5003'. Sand pumped to 5035'. Swabbed 4 1/2" casing off and cleaned hole up.
07/12/91	Service rig #85 – 540# on 4 1/2", 440# on 1 1/2". Flowed well, brought a load and flowed tubing; cleaned tubing. Shut in. Rigged down and moved off.

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Coulson #2

STAGE	FORMATION	PERFS	80/100 SKS	20/40 SKS	ACID GAL	N2 (MCF)
1st	Elk	13(5019-5022)	100	425	500	59
2nd	Riley	15(4059-4064)	100	450	750	76

W E L L L O G

FORMATION	TOP FEET	BOTTOM FEET	REMARKS: FRESH & SALT WATER, COAL, OIL & GAS
KB - GL	0	10	
sand, shale, RR	10	1251	1/2" stream H2O @ 35'
Little Lime	1251	1275	3/4" stream H2O @ 780' } Behind cemented casing
sand, shale	1275	1299	Coal 200-208; 506-509 }
Big Lime	1299	1385	Coal 521-524; 573-577 }
Big Injun	1385	1493	
sand, shale	1493	1601	gas chk @ 1548' No Show
Weir	1601	1648	
sand, shale	1648	1755	
Gantz	1755	1805	
sand, shale	1805	1836	gas chk @ 1828' No Show
50 ft	1836	1891	
sand, shale	1891	1925	
30 ft	1925	1989	gas chk @ 1952' No Show
sand, shale	1989	2062	
Gordon	2062	2098	gas chk @ 2077' No Show
sand, shale	2098	2151	
3rd	2151	2183	
sand, shale	2183	2288	
4th	2288	2364	gas chk @ 2354' No Show
sand, shale	2364	2385	
5th	2385	2449	
sand, shale	2449	2844	gas chk @ 2570' No Show
Speechly	2844	3167	gas chk @ 3008' No Show
sand, shale	3167	3231	
Balltown	3231	3510	gas chk @ 3407' Odor
sand, shale	3510	3560	gas chk @ 3657' Odor
Bradford	3560	3654	gas chk @ 4156' 4/10-1"H2O
sand, shale	3654	3952	gas chk @ 4212' 2/10-1"H2O
Riley	3952	4070	gas chk @ 4344' 26/10-1"H2O
sand, shale	4070	4280	gas chk @ 4968' 26/10-1"H2O
Benson	4280	4342	gas chk @ 5030' 8/10-1"H2O
sand, shale	4342	5145	gas chk @ 5124' Odor
		5145	Drillers TD 2/10-1"H2O
		5140	Logger TD

correlation log log states 5081'
: cement top

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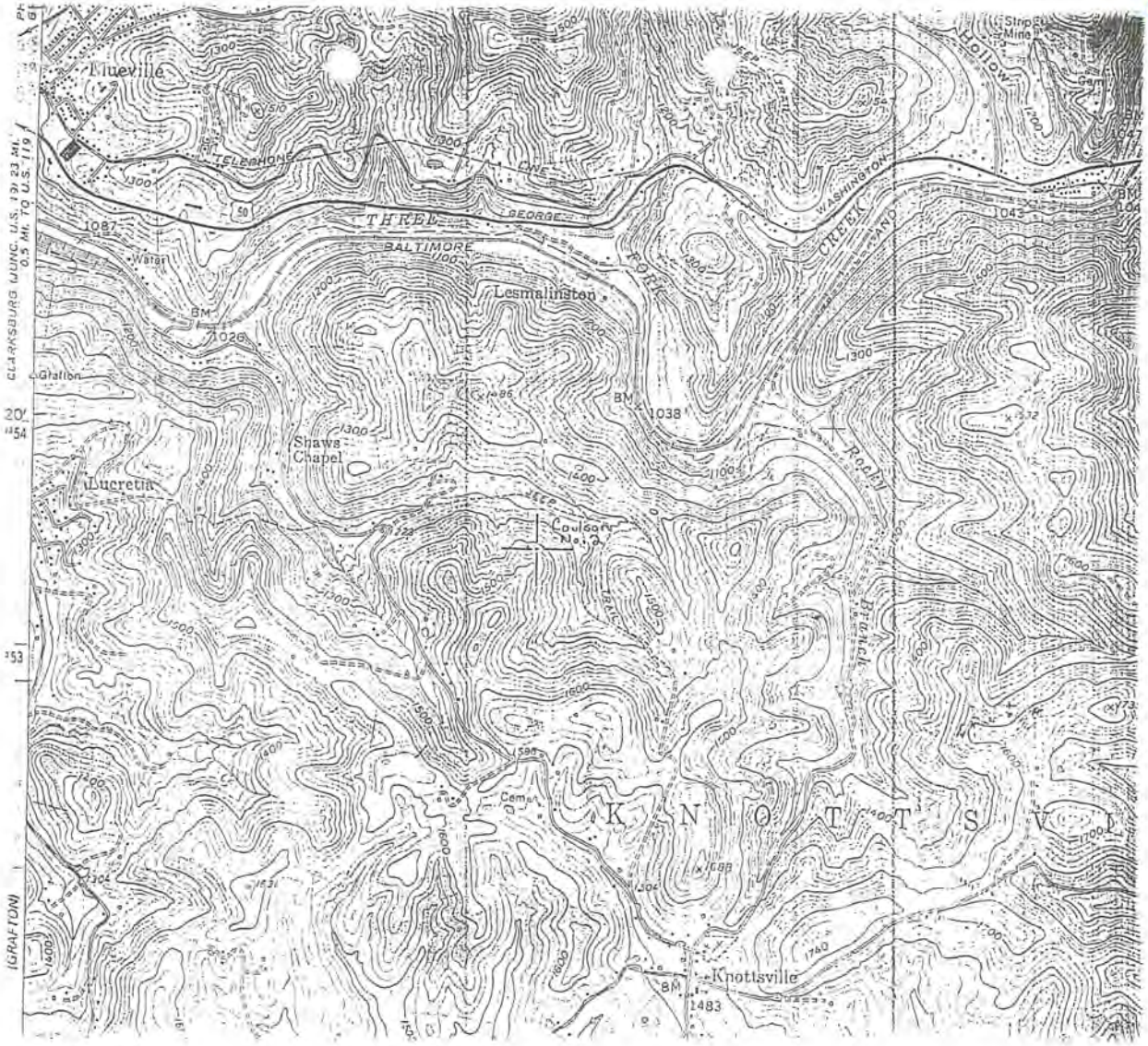

Latitude: 39-19-42 N
Longitude: 79-58-25 W
Nearest Town: 4,000' North to Lesmalinston
Nearest Watercourse: 550' NE to unnamed branch of Three Fork Creek

FILE NO. _____
DRAWING NO. 2
SCALE 1" = 500'
MINIMUM DEGREE OF ACCURACY 1 in 200
PROVEN SOURCE OF ELEVATION Spot elev. 2350' North of Location: Elevation 1486

I THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAT IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AND SHOWS ALL THE INFORMATION REQUIRED BY LAW AND THE REGULATIONS ISSUED AND PRESCRIBED BY THE DEPARTMENT OF ENERGY.
(SIGNED) David L. Jackson
R.P.E. _____ L.L.S. 708

PLACE SEAL HERE

STATE OF WEST VIRGINIA
DEPARTMENT OF ENERGY
DIVISION OF OIL AND GAS

DATE June 4, 19 91
OPERATOR'S WELL NO. Coulson No. 2
API WELL NO.
47 - 091 - 00734
STATE COUNTY PERMIT

WELL TYPE: OIL ___ GAS X LIQUID INJECTION ___ WASTE DISPOSAL ___
(IF "GAS,") PRODUCTION X STORAGE ___ DEEP ___ SHALLOW X
LOCATION: ELEVATION 1424 WATER SHED Three Fork Creek
DISTRICT Knottsville COUNTY Taylor
QUADRANGLE Thornton 7 1/2'
SURFACE OWNER Tygart East Company ACREAGE 140
OIL & GAS ROYALTY OWNER Nathan Coulson et ux LEASE ACREAGE 140.6
LEASE NO. 438400
PROPOSED WORK: DRILL X CONVERT ___ DRILL DEEPER ___ REDRILL ___ FRACTURE OR STIMULATE ___ PLUG OFF OLD FORMATION ___ PERFORATE NEW FORMATION ___ OTHER PHYSICAL CHANGE IN WELL (SPECIFY) _____
PLUG AND ABANDON ___ CLEAN OUT AND REPLUG ___
TARGET FORMATION Benson ESTIMATED DEPTH 5000
WELL OPERATOR Petroleum Development Corp. DESIGNATED AGENT Eric R. Stearns
ADDRESS P.O. Box 26, Bridgeport, WV 26330 ADDRESS P.O. Box 26, Bridgeport, WV 26330

COUNTY NAME
PERMIT

FORM WW-6

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WV Department of Environmental Protection

068277

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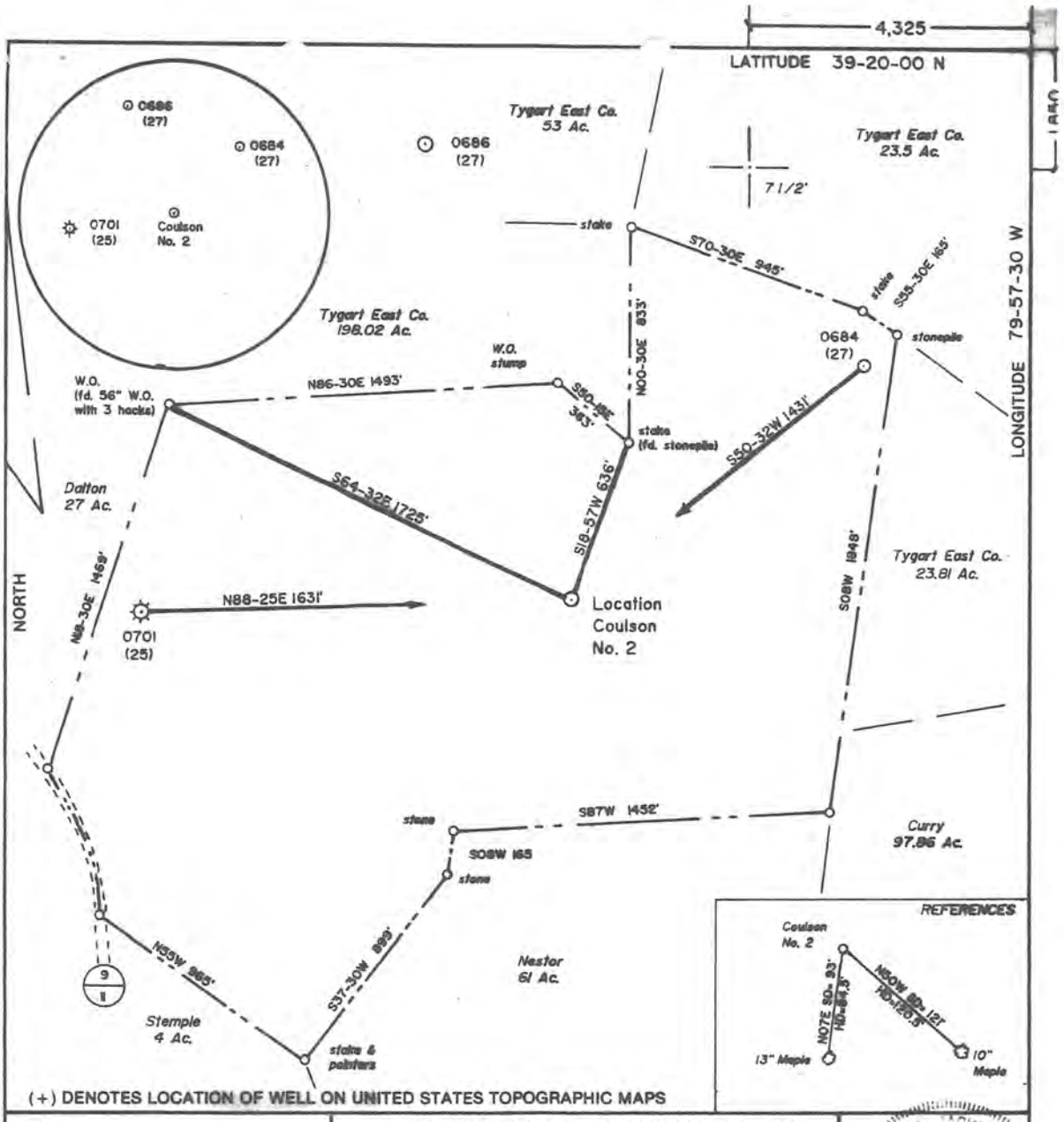

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MINIMUM DEGREE OF ACCURACY 1 in 200
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(SIGNED) David L. Jackson
R.P.E. _____ L.L.S. 708

DAVID L. JACKSON LAND SURVEYOR

PLACE SEAL HERE

STATE OF WEST VIRGINIA
DEPARTMENT OF ENERGY
DIVISION OF OIL AND GAS

DATE June 4, 19 91
OPERATOR'S WELL NO. Coulson No. 2
API WELL NO. 47 _ 091 _ 00734P
STATE COUNTY PERMIT

WELL TYPE: OIL ___ GAS X LIQUID INJECTION ___ WASTE DISPOSAL ___
(IF "GAS,") PRODUCTION X STORAGE ___ DEEP ___ SHALLOW X
LOCATION: ELEVATION 1424 WATER SHED Three Fork Creek
DISTRICT Knottsville COUNTY Taylor
QUADRANGLE Thornton 7 1/2'
SURFACE OWNER Tygart East Company ACREAGE 140
OIL & GAS ROYALTY OWNER Nathan Coulson et ux LEASE ACREAGE 140.6
LEASE NO. 438400
PROPOSED WORK: DRILL X CONVERT ___ DRILL DEEPER ___ REDRILL ___ FRACTURE OR STIMULATE ___ PLUG OFF OLD FORMATION ___ PERFORATE NEW FORMATION ___ OTHER PHYSICAL CHANGE IN WELL (SPECIFY) _____
PLUG AND ABANDON ___ CLEAN OUT AND REPLUG ___
TARGET FORMATION Benson ESTIMATED DEPTH 5000
WELL OPERATOR Petroleum Development Corp. DESIGNATED AGENT Eric R. Stearns
ADDRESS P.O. Box 26, Bridgeport, WV 26330 ADDRESS P.O. Box 26, Bridgeport, WV 26330

FORM WW-6
COUNTY NAME
PERMIT
068277

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WV Department of Environmental Protection

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WW-4A
Revised 6-07

1) Date: April 7th, 2016
2) Operator's Well Number
Coulson #2

3) API Well No.: 47 - 091 - 0734

STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS
NOTICE 0F APPLICATION TO PLUG AND ABANDON A WELL

4) Surface Owner(s) to be served:
(a) Name: Tygart East Company
Address: 724 James St.
Bridgeport, WV 26330

(b) Name:
Address:

(c) Name:
Address:

6) Inspector: Kenneth Greynolds
Address: 613 Broad Run Rd.
Jane Lew, WV 26378
Telephone: 304-206-6613

5) (a) Coal Operator
Name:
Address:

(b) Coal Owner(s) with Declaration
Name: Hillman Coal Company
Address: 724 James St.
Bridgeport, WV 26330

Name:
Address:

(c) Coal Lessee with Declaration
Name:
Address:

TO THE PERSONS NAMED ABOVE: You should have received this Form and the following documents:

(1) The application to Plug and Abandon a Well on Form WW-4B, which sets out the parties involved in the work and describes the well its and the plugging work order; and
(2) The plat (surveyor's map) showing the well location on Form WW-6.

The reason you received these documents is that you have rights regarding the application which are summarized in the instructions on the reverses side. However, you are not required to take any action at all.

Take notice that under Chapter 22-6 of the West Virginia Code, the undersigned well operator proposes to file or has filed this Notice and Application and accompanying documents for a permit to plug and abandon a well with the Chief of the Office of Oil and Gas, West Virginia Department of Environmental Protection, with respect to the well at the location described on the attached Application and depicted on the attached Form WW-6. Copies of this Notice, the Application, and the plat have been mailed by registered or certified mail or delivered by hand to the person(s) named above (or by publication in certain circumstances) on or before the day of mailing or delivery to the Chief.

OFFICIAL SEAL
STATE OF WEST VIRGINIA
NOTARY PUBLIC
STEVEN P. JOHNSON
594 WYMER RUN RD.
JANE LEW, WV 26378
My Commission Expires June 24, 2020

Well Operator: Mountaineer Keystone, LLC
By:
Its: Designated Agent
Address: 65 Professional Place Suite 200
Bridgeport, WV 26330
Telephone:

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Office of Oil and Gas
APR 27 2016
WV Department of
Environmental Protection

Subscribed and sworn before me this 11th day of April 2016
Steven P. Johnson Notary Public
My Commission Expires June 24, 2020

Oil and Gas Privacy Notice

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

9100734P

WW-9
(2/15)

API Number 47 - 091 - 00734
Operator's Well No. Coulson #2

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

FLUIDS/ CUTTINGS DISPOSAL & RECLAMATION PLAN

Operator Name _____ OP Code 494501227

Watershed (HUC 10) Three Fork Creek Quadrangle Thornton 7.5

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 ☑

ANY WELL EFFLUENT MUST BE DISPOSED OF PROPERLY.

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 _____)
_____ Reuse (at API Number _____)
_____ Off Site Disposal (Supply form WW-9 for disposal location)
_____ Other (Explain NO land pit, portable pit is used.

Will closed loop system be used? If so, describe: NO

Drilling medium anticipated for this well (vertical and horizontal)? Air, freshwater, oil based, etc. _____

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

Additives to be used in drilling medium? _____

Drill cuttings disposal method? Leave in pit, landfill, removed offsite, etc. Portable pit is used for any plugging fluids

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

-Landfill or offsite name/permit number? _____

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 _____

Company Official (Typed Name) Nathan Skeen

Company Official Title Designated Agent

OFFICIAL SEAL
STATE OF WEST VIRGINIA
NOTARY PUBLIC
STEVEN P. JOHNSON
594 WYMER RUN RD.
JANE LEW, WV 26378
My Commission Expires June 24, 2020

Subscribed and sworn before me this 11th day of April, 2016

Steven P. Johnson Notary Public

My commission expires June 24, 2020

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Form WW-9

Operator's Well No. Coulson #2

Proposed Revegetation Treatment: Acres Disturbed 1 Prevegetation pH 6.5

Lime 3 Tons/acre or to correct to pH 6.5

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

Mulch 2 Tons/acre

Seed Mixtures

Area I Seed Type	lbs/acre	Area II Seed Type	lbs/acre
Fescue	40		
Ladino Clover	5		
Rye Grass	16		

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

Photocopied section of involved 7.5' topographic sheet.

Plan Approved by: [signature]

Comments: RECLAIM + RESEED ASAP

Title: OIL + GAS INSPECTOR Date: 4-20-16

Field Reviewed? ( ) Yes (✓) No

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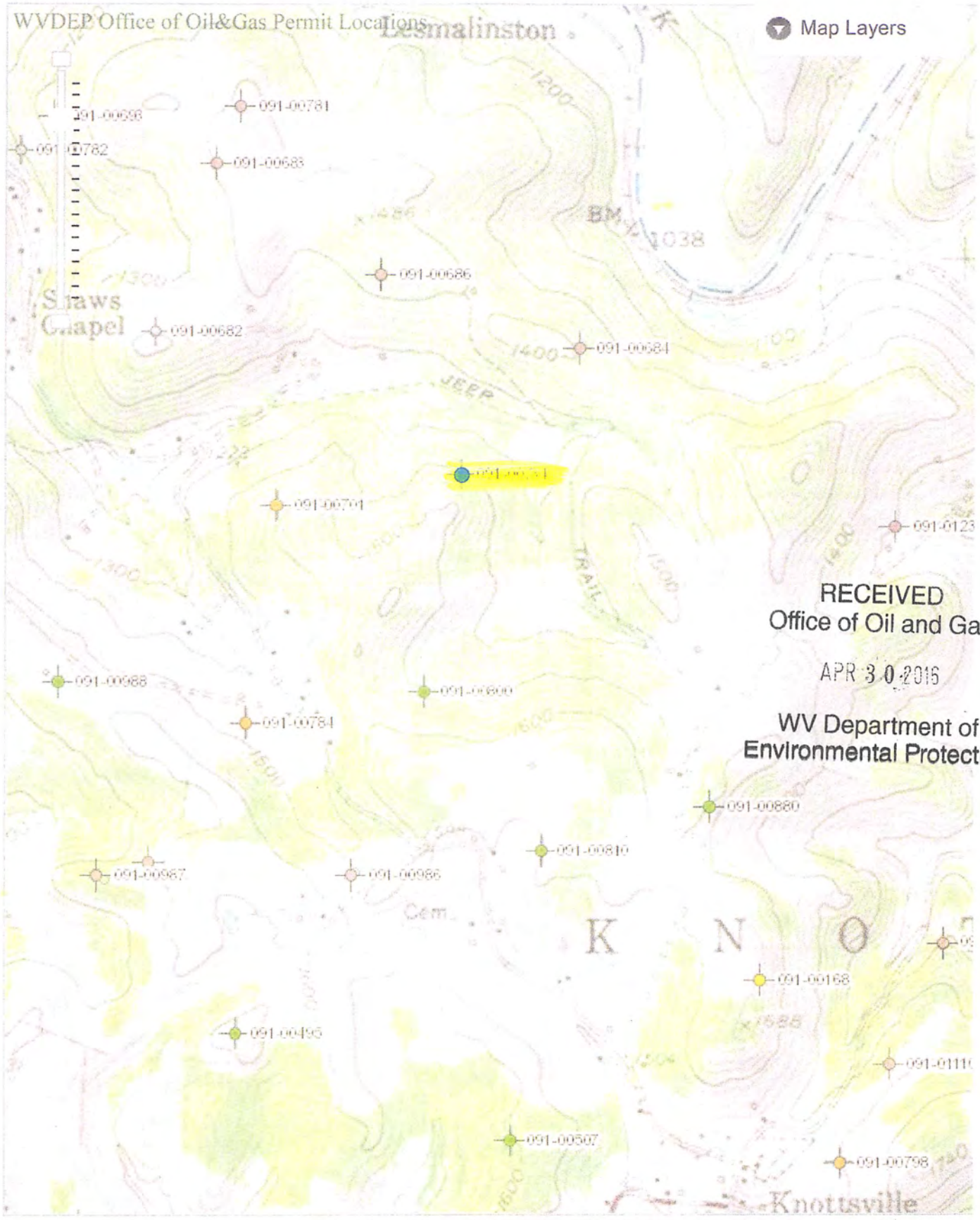

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WW-7
8-30-06

West Virginia Department of Environmental Protection
Office of Oil and Gas
WELL LOCATION FORM: GPS

API: 47-091-00734 WELL NO.: #2

FARM NAME: COULSON

RESPONSIBLE PARTY NAME: MOUNTAINEER KEYSTONE

COUNTY: TAYLOR DISTRICT: KNOTTSVILLE

QUADRANGLE: THORNTON 7.5

SURFACE OWNER: TYGART EAST COMPANY

ROYALTY OWNER: TYGART EAST COMPANY

UTM GPS NORTHING: 588480.2

UTM GPS EASTING: 4353717.4 GPS ELEVATION: 1424'

The Responsible Party named above has chosen to submit GPS coordinates in lieu of preparing a new well location plat for a plugging permit or assigned API number on the above well. The Office of Oil and Gas will not accept GPS coordinates that do not meet the following requirements:

1. Datum: NAD 1983, Zone: 17 North, Coordinate Units: meters, Altitude: height above mean sea level (MSL) – meters.
2. Accuracy to Datum – 3.05 meters
3. Data Collection Method:

Survey grade GPS X: Post Processed Differential _____

Real-Time Differential _____

Mapping Grade GPS ____: Post Processed Differential _____

Real-Time Differential _____

4. **Letter size copy of the topography map showing the well location.**

I the undersigned, hereby certify this data is correct to the best of my knowledge and belief and shows all the information required by law and the regulations issued and prescribed by the Office of Oil and Gas.

Signature Office manager Title 4-29-16 Date

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Environmental Protection