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

June 12, 2013

WELL WORK PLUGGING PERMIT

Plugging

This permit, API Well Number: 47-1502684, issued to ENERGY CORPORATION OF AMERICA, 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: BUTLER 1
Farm Name: BUTLER, JOHN & RALPH
API Well Number: 47-1502684
Permit Type: Plugging
Date Issued: 06/12/2013

Promoting a healthy environment.

WW-4B
Rev. 2/01

1) Date _____, 20_____
2) Operator's Well No. _____
3) API Well No. 47-_____-_____

1502684P

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 X or Underground storage ____) Deep ____/ Shallow____

5) Location: Elevation 914 Watershed Deerlick Run of Moore Fork
District Otter County Clay Quadrangle Ivydale

6) Well Operator Energy Corporation of America
Address 501 56th Street SE
Charleston WV 25304

7) Designated Agent Rodney A Winters
Address Same

8) Oil and Gas Inspector to be notified
Name Ed Gainer 304-389-7582
Address PO Box 821
Spencer WV 25276

9) Plugging Contractor
Name R & R Well Service
Address _____

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

Revised plugging schedule: MOVE in rig up. Install 3000 psi annular BOP on 13 5/8" casing flange. Drill out surface plug (surface to approximately 215'). Trip in hole and tag existing cement plug at approximately 2415'). Drill out cement plug (approximately 2415' to 2515'). Clean out well bore to 2650' (approximately 208' below 9 5/8"casing shoe). Spot a 250 foot cement plug (95 sacks) from 2650' to 2400' (approximately 208' bellow 9 5/8" casing and 42' inside 9 5/8" casing). Pull out of hole to 275' and spot cement plug from 275' to surface (145 sacks). All plugs will be set using a gas block cement blend!!

ED GAINER MUST BE NOTIFIED 24 HOURS BEFORE WELL WORK @ 304-389-7582 AND IN ADVANCE OF DRILLING OUT THE PLUG AT ≈ 2415'. BOP REQUIRED FOR DRILL OUT.

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

Received
Office of Oil & Gas
JUN 11 2013

Work order approved by inspector ED GAINER Date _____

gwm

FORM WW-4(B)
Observe
File Copy
(Rev. 2/01)

PREVIOUS PLAN

1) Date February 27, 2004
2) Operator's
Well No. Butler #1
3) API Well No. 47-015-02684

1502684P

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 _X__ or Underground storage ____) Deep _X__/ Shallow____

5) Location: Elevation 929' _____ Watershed Deerlick Run of Moore Fork
District Otter _____ County Clay Quadrangle Ivydale

6) Well Operator Eastern American Energy Corp.
Address 501 56th St.
Charleston, WV 25304

7) Designated Agent K. Ralph Ranson II
Address 501 56th St.
Charleston, WV 25304

8) Oil and Gas Inspector to be notified
Name Rick Campbell
Address P.O. Box 22
Duck, WV 25063

9) Plugging Contractor
Name EAEC
Address

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

BUTLER #1
47-015-02684

Top of tools @ 6313'

DAY 1 Move in and rig up. Blow well down. Service company load hole With ~~water~~ Gel and spot 300' H2s resistant cement plug inside 4-1/2" casing from ~~6400'~~ to 6300'. - 6000' Pull 2-3/8" tubing. Shut down for the night.

DAY 2 Fisher Well Servey cut 4-1/2" casing at 5950'. Pull 4-1/2" casing. Shut down for the night.

DAY 3 Fisher run free point & cut 7" casing at 5800'. Pull 7" casing. Shut down for the night.

DAY 4 Run 2-3/8" tubing to 5950'. Service company load hole with 6% gelled water & spot 150' H2s Resistant cement plug from 5950' to 5850'. Spot pug #2 from 2492' to 2392'. Pull tubing to Within 100' of surface and pump 100' cement plug in 13-3/8" casing. Shut down for the night.

DAY 5 Rig down and move off. Cut all casing minimum 3' below grade and back fill.

RECEIVED
Office of Oil & Gas
Office of Chief
MAR 1 2 2004
WV Department of
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 X Richard Campbell Date 3/09/04

1502684 P

rental, $1900 Rig cost, and $770 Dozer. DAILY COST: $6,520 *Bruce Garrett*

04/13/04 Key Energy POOH with 205 jts of tubing. Fisher Well Survey tagged cement plug at 6012'. Shot off 4-1/2" casing at 5903'. Bales and elevators releasing pipe. Sent for correct bales for elevators. Runner unable to get back to rig due to high water. SDFN. DAILY COST: $2,700 *Bruce Garrett*

04/12/04 Key Energy service rig MIRU. Flare well and blow down. MIRU Universal. Pump and circulate gel to kill well. Universal pumped bottom plug from 6300' to 6100'. Stand back tubing. DAILY COST: $7,184 *Bruce Garrett*

04/07/04 Prepare for Plugging – Digging Pit, Move in Tanks, Plumb Wellhead. . DAILY COST: $1670 *Bruce Garrett*

06/27/03 740# SICP 660# SITP Opened well to pit and blew down in 4 minutes. Dropped swab tools without swab cups to 6400'. No obstruction. Shut down, move off location. DAILY COST: rig $2,000; trucking $800; H_2S team $750; supervision $450 *(Eric Abrecht)*

06/26/03 150# SICP 300# SITP Ran in hole to 4205' with swab. Hit tight spot, unable to pass cups through tight spot. Removed cups and attempt to pass jars and stem through. With hard jarring action, made about 5' and stopped. At end of day, 145# CP. Gas volume too small to measure. DAILY COST: rig $2,100; rental $850; H_2S $750; supervision $450 *(Eric Abrecht)*

06/25/03 260# SICP 300# SITP Installed tubing disk on top of jt 178. Ran tubing to 6443' (205 jts). Halliburton circulated with 90-bbl water down backside and up tubing to kill well. Installed tubing tree. SDFN. DAILY COST: $2,600 rig; rental $850; pump truck $2,300; H_2S team $750; Supervision $450 *(Eric Abrecht)* 06/24/03 Installed tubing disk 2500' off of bottom of tubing string. Ran tubing to 4200'. Disk broke and well began flowing uncontrollably through tubing. When well settled, shut in. Halliburton pumped 83-bbl fresh water down the annulus. Reduced tubing pressure to 100# and maintained. Shut well in overnight. DAILY COST: rig $2,500; rental $950; H_2S crew $750; Trucking $150; Supervision $450; pump truck $2300*(Eric Abrecht)*

06/23/03 Tubing delivered to location at 1:00 PM. Ran in hole with 2-3/8" tubing to ~1300'. Acid gas causing well control problems. Able to run tubing to 2200'. SDFN. Left well open to the pit. Ordered tubing disk to control well. DAILY COST: rig $2,100; rental $4,350 (includes tubing), H_2S crew $750; Trucking $450; Dozer $400; Supervision $450 *(Eric Abrecht)*

06/20/03 Pumped 2000 gal 15% OSA (Citric acid & Zylene). Load hole with 30-bbl 2% KCl water. Pumped 22-bbl at 5 bpm. Pressured out at 6000 psi. Acid 4-bbl short of perfs at this point. Try to squeexe fluid into perfs, no go. Make 4 attempts to release pressure and pump back into perfs. No go. Surged well to pit, dropping wellhead pressure to 2000 psi and attempted to pumpe at 5 bpm with pressure up to 6000 psi. repeated 3 times, no go. Released Halliburton and prepare to run tubing and circulate out acid. Shut down for the weekend. DAILY COST: acid $17,295; rig $4500 (3 days standby); Supervision $450; H_2S team $750; rental equipment $850

06/16/03 430# SICP MI tubing and fishing tools and prepare to fish (swab mandrel, jars, 2 stems and ~500' of line). Well producing 36% H_2S (>2000 ppm). Call out Halliburton to kill well. Management cancelled operations. WOO. Shut well in. DAILY COST: Rig $2,000; H_sS crew $750; Rental equipment $650; Trucking $980; Halliburton $2,500; Supervision $450 *(Eric Abrecht)*

06/16/03 430# SICP 36% H_2S (>2000 ppm), to kill well. *(Eric Abrecht)*

06/13/03 Key Energy pulled 430' of line out of well. (Left ~500' of line and 40' of tools (swab mandrel, jars and 2 stems) in well). Prepared and inspected wireline for fishing operations scheduled to begin Monday, 06/16. DAILY COST: $1,500 rig; $450 supervision. *(Eric Abrecht)*

06/13/03 400 ppm H_2S. This morning, wireline on rig is without tension. Tools at unknown depth. *(Eric Abrecht)*

06/12/03 MIRU Fisher Well Survey and Halliburton. Key Energy ran in hole with swab tools. Unable to get past 1300'. Pull out, cups covered with casing gunk. Dumped ~2-bbl water, and was able to run swab to 1500'. Still pulling gunk. Dumped ~2-bbl water, ran

1502684P

ENERGY CORPORATION OF AMERICA

WELL NAME: BUTLER #1 20030011 **COUNTY/STATE:** Clay County, WV
API 47-015-02684

DATE: 03/01/04 **WELL DATA:**

DEPTH: 7415' DTD

CASING:
1 jt (34') 20", 52#/ft
11 jts (460.39') 13-3/8", 37#/ft T.O.C. at 5990'
53 jts (2406') 9-5/8", 36#/ft
166 jts (6541.28') 7", 23#/ft
174 jts (7399') of 4-1/2", 13.5#/ft

06/27/03 740 psi SICP 660 SITP

06/20/03 Pumped 2000 gal 15% OSA (Citric acid & Zylene). Load hole with 30-bbl 2% KCl water. Pumped 22-bbl at 5 bpm. Pressured out at 6000 psi. Acid 4-bbl short of perfs at this point. Try to squeexe fluid into perfs, no go. Make 4 attempts to release pressure and pump back into perfs. No go. Surged well to pit, dropping wellhead pressure to 2000 psi and attempted to pump at 5 bpm with pressure up to 6000 psi. repeated 3 times, no go. Released Halliburton and prepare to run tubing and circulate out acid. Shut down for the weekend.

06/12/03 MIRU Fisher Well Survey and Halliburton. Key Energy ran in hole with swab tools. Unable to get past 1300'. Pull out, cups covered with casing gunk. Dumped ~2-bbl water, and was able to run swab to 1500'. Still pulling gunk. Dumped ~2-bbl water, ran to 2200', recovering casing gunk. Dumped another ~2-bbl water and swabbed down to 4000', again pulling casing gunk. Dumped ~2-bbl water and swabbed to 5200', again pulling casing gunk. Able to swab to bottom. Halliburton dumped 250-gal 28% HCl.Swabbed out of well. Tools and cups coming out clean. Dumped additional 250-gal 28% HCl and 20-bbl freshwater. Ran gauge ring to bottom. Fisher Well Survey perforated with 5 shots, one each at 6987', 6989', 6995', 6999', and 7002'. Set CIBP at 7156'.

06/11/03 189# SICP

05/27/03 MIRU Halliburton. Spot 2000 gal OSA acid and displaced with 62-bbl 2% KCl water. Break formation at 4514 psi. ISIP = 3453 psi; 5 minutes = 2788 psi; 10 minutes = 2647 psi. ATP = 5500 psi; ATR = 5 bpm. Flowed well to pit, recovering ~30-bbl in 3 hours. Swabbed to 3600'. Total fluid recover of ~85-bbl. Little gas to surface, too small to measure.

05/14/03 Move in Fisher Well Survey wireline unit. Perforate with 2 spf from 7216' to 7220 and from 7184' to 7188'.

Rev (5-01)
WR-38
DATE:

API # 47-015-02684

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

RECEIVED
Office of Oil & Gas
AUG 17 2004
W.V. Department of Environmental Protection

AFFIDAVIT OF PLUGGING AND FILLING WELL

AFFIDAVIT SHOULD BE IN TRIPLICATE, one copy mailed to the Department, one copy to be retained by the Well Operator and the third copy (and extra copies if required) should be mailed to each coal operator at their respective addresses.

Farm name: John & Ralph Butler Operator Well No.: #1

LOCATION: Elevation: 929 Quadrangle: Ivydale 7.5'
District: Otter County: Clay
Latitude: _____ Feet South of ____ Deg. 38 Min. 37 Sec. 30
Longitude: _____ Feet West of ____ Deg. 81 Min. 00 Sec. 32.6

Well Type: OIL ____ GAS X

Company: Eastern American Energy
502 56th Street
Charleston, WV 25304

Coal Operator or Owner: John Butler

Coal Operator or Owner: Ralph Butler

Agent: K. Ralph Ranson

Permit Issued Date: _____

AFFIDAVIT

STATE OF WEST VIRGINIA,
County of _____ ss:

Bruce Garrett and Mike Marsh being first duly sworn according to law depose and say that they are experienced in the work of plugging and filling oil and gas wells and were employed by the above named well operator, and participated in the work of plugging and filling the above well, and Richard Campbell Oil and Gas Inspector representing the Secretary, say that said work was commenced on the 12th day of April, 2004, and that the well was plugged and filled in the following manner:

TYPE	FROM	TO	PIPE REMOVED	LEFT
CIBP	7150	7150	0	460' of 13-3/8"
Gel	7150	6300	180' of 9-5/8	2262' of 9-5/8"
50/50 poz w/Latex	6300	6012	5780' of 7"	752' of 7"
Gel	6012	5833	5903' of 4-1/2"	1469' of 4-1/2"
50/50 poz w/Latex	5833	5683		
Gel	5683	2515		
Class "A"	2515	2415		
Gel	2415	215		
Class "A"	215	Surface		

Description of monument: 6" Steel with API. No. and that the work of plugging and filling said well was completed on the 22nd day of April, 2004.

And further deponents saith not. Bruce L. Garrett
Michael Marsh

Sworn and subscribe before me this 29 day of June, 2004
My commission expires: November 9, 2010
Leisa G. Somerville
Notary Public

OFFICIAL SEAL
NOTARY PUBLIC
STATE OF WEST VIRGINIA
LEISA G. SOMERVILLE
RT. 1, BOX 100
COXS MILLS, WV 26342
My Commission Expires November 9, 2010

Oil and Gas Inspector: Richard Campbell

WW-4B
Rev. 2/01

1) Date June 6, 2013
2) Operator's Well No. Butler #1
3) API Well No. 47- 015 - 2684

1018

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 X or Underground storage ____) Deep ____/ Shallow ____

5) Location: Elevation 914 Watershed Deerlick Run of Moore Fork
District Otter County Clay Quadrangle Ivydale

6) Well Operator Energy Corporation of America
Address 501 56th St SE
Charleston WV 25304

7) Designated Agent Rodney A Winters
Address same

8) Oil and Gas Inspector to be notified
Name Ed Gainer
Address PO Box 821
Spencer WV 25276

9) Plugging Contractor
Name R&R Well Service
Address

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

Drill out 160' cement in 13 3/8" casing. Drill out remaining cement in 9 5/8" casing to existing plug at approximately 2400'.

Cement Plug #1 will be set on top of existing plug. Plug to be 36 sacks of gas block cement on top of existing. (appx 100')

Cement plug #2 to be from 275' to surface 100' inside 9 5/8' casing (cut at 175") to surface inside 13 3/8". Plug to be 145 sacks gas block cement.

BOP Required for drill out!

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

Work order approved by inspector [signature] Date 6/5/13

8

RECE... Office of Oil & ... JAN 28 2005 WV Department of Environmental Protec...

API NO.: 47- 75 - 026845

WELL PLUGGING INSPECTION & RELEASE FORM

...NG COMMENCED 4/12/04 OPERATOR: Eastern America
...NG COMPLETED FARM:
...AL PERMISSION ON WELL NO: Butler #1

IS COAL BEING MINED IN THE AREA? YES NO

WERE CEMENT AND GEL MIXED AND USED IN ACCORDANCE WITH ACCEPTED INDUSTRY STANDARDS?

A. BOTTOM HOLE PLUGGED YES NO
B. 100' PLUGS YES NO
C. LATEX PLUGS USED FOR H_2S GAS YES NO
D. PROPER PLUGS THROUGH COAL SEAMS YES NO
E. PROPER PLUGS SET TO PROTECT FRESHWATER YES NO
F. PROPER AMOUNT OF GEL USED TO DISPLACE PLUGS YES NO

CIBP TYPE	7150 FROM	7150 TO	PIPE REMOVED
Gel Well	6400	0	
Latex Cont	6400	6100	5996' of 4½
Latex Cement	5933	5673'	5750' of 7"
Gel	5673	2515'	197' of 9⅝
Cement	2515	2415'	
Gel	2415	215'	
Cement	215'	0'	

WERE ALL CHANGES APPROVED BY INSPECTOR? YES NO

WAS THE EQUIPMENT USED FOR PULLING CASING PROPERLY SIZED AND RIGGED TO PULL 150% OF THE HEAVIEST STRING OF PIPE EXPECTED TO BE PULLED? YES NO

DID THE OPERATOR GIVE THE INSPECTOR PROPER NOTICE? YES NO

WERE ACCURATE PLUGGING RECORDS KEPT BY THE OPERATOR? YES NO

WAS A PROPER MONUMENT SET WITH API NUMBER ATTACHED? YES NO

DID WELL SITE AND ACCESS ROAD MEET THE FOLLOWING RECLAMATION REQUIREMENTS?

A. RECLAIMED YES NO
B. FENCES REPLACED YES NO
C. MULCHED YES NO
D. PROPER DRAINAGE YES NO
E. SEEDED YES NO
F. ALL EQUIPMENT REMOVED YES NO

1/13/05
DATE RELEASED

Richard Campbell
INSPECTOR'S SIGNATURE

15-02684

Form: WW - 2B

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

1) Well Operator Eastern American Energy Corporation

014980	Clay	Otter (3)	Ivydale 7.5' (409)
Operator ID	County	District	Quadrangle

2) Operator's Well Number: Butler No. 1 3) Elevation: 929'

4) Well Type: (a) Oil____ or Gas X
(b) If Gas: Production X / Underground Storage____
Deep X / Shallow ____

5) Proposed Target Formation(s): Knox

6) Proposed Total Depth: 12,000 Feet
7) Approximate fresh water strata depths: 50'
8) Approximate salt water depths: 1050'

9) Approximate coal seam depths: N/A

10) Does land contain coal seams tributary to active mine? No

11) Describe proposed well work Drill and complete new well

RECEIVED
Office of Oil & Gas
Permitting
JAN 06 2003
WV Department of
Environmental Protection

01-07-03 P03:00 IN

12) CASING AND TUBING PROGRAM

TYPE	SPECIFICATIONS Size	Grade	Weight per ft	FOOTAGE INTERVALS For Drilling	Left in Well	CEMENT Fill -up (Cu. Ft.)
Conductor	20"	LS	52.78#	40'	40'	Sand In
Fresh Water	13 3/8"	LS	37#	400'	400'	Cement to Surface 278 F^3
Intermediate #1	9 5/8	D-55	36#	1790	1790 through Berea	Cement to Surface 561 F^3
Intermediate #2	7"	P-110	26#	9964	9964	Cement top @ 6000'
Production	4 ½"	L-80	11.6#	12000	12000	To be determined based on logs
Tubing						
Liners						

Packers: Kind
Sizes
Depths Set

$450.
CK.# 200534

LLP 1-15-03

1/15/03 1-15-03

1/15/03

Rev (5-01)
WR-38
DATE:

API # 47-015-02684

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

AFFIDAVIT OF PLUGGING AND FILLING WELL

PRIOR PLUG PLAN!

AFFIDAVIT SHOULD BE IN TRIPLICATE, one copy mailed to the Department, one copy to be retained by the Well Operator and the third copy (and extra copies if required) should be mailed to each coal operator at their respective addresses.

Farm name: John & Ralph Butler Operator Well No.: #1

LOCATION: Elevation: 929 Quadrangle: Ivydale 7.5'
District: Otter County: Clay
Latitude: _____ Feet South of _____ Deg. 38 Min. 37 Sec. 30
Longitude: _____ Feet West of _____ Deg. 81 Min. 00 Sec. 32.6

Well Type: OIL _____ GAS X

Company: Eastern American Energy
502 56th Street
Charleston, WV 25304

Coal Operator or Owner: John Butler

Coal Operator or Owner: Ralph Butler

Agent: K. Ralph Ranson

Permit Issued Date: _____

AFFIDAVIT

STATE OF WEST VIRGINIA,
County of _____ ss:

Bruce Garrett and Mike Marsh being first duly sworn according to law depose and say that they are experienced in the work of plugging and filling oil and gas wells and were employed by the above named well operator, and participated in the work of plugging and filling the above well, and Richard Campbell Oil and Gas Inspector representing the Secretary, say that said work was commenced on the 12th day of April, 2004, and that the well was plugged and filled in the following manner:

TYPE	FROM	TO	PIPE REMOVED	LEFT
CIBP	7150	7150	0	460' of 13-3/8"
Gel	7150	6300	180' of 9-5/8	2262' of 9-5/8"
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Gel	6012	5833	5903' of 4-1/2"	1469' of 4-1/2"
50/50 poz w/water	5833	5683		
Gel	5683	2515		
Class "A"	2515	2415		
Gel	2415	215		
Class "A"	215	Surface		

Description of monument: 6" Steel with API. No. _____ and that the work of plugging and filling said well was completed on the 22nd day of April, 2004.

And further deponents saith not. Bruce L. Garrett
Michael Marsh

Sworn and subscribe before me this 29 day of June, 2004
My commission expires: November 9, 2010
Leisa G. Somerville
Notary Public

Oil and Gas Inspector: Richard Campbell

OFFICIAL SEAL
NOTARY PUBLIC
STATE OF WEST VIRGINIA
LEISA G. SOMERVILLE
RT. 1, BOX 100
COXS MILLS, WV 26342
My Commission Expires November 9, 2010

8

RECEIVED
Office of Oil & Gas
JAN 28 2005
WV Department of Environmental Protection

API NO.: 47- 13 - 026845

WELL PLUGGING INSPECTION & RELEASE FORM

NG COMMENCED 4/12/04 OPERATOR: Eastern America
NG COMPLETED FARM:
AL PERMISSION ON WELL NO: Butler #1

IS COAL BEING MINED IN THE AREA? YES NO

WERE CEMENT AND GEL MIXED AND USED IN ACCORDANCE WITH ACCEPTED INDUSTRY STANDARDS?

A. BOTTOM HOLE PLUGGED YES NO
B. 100' PLUGS YES NO
C. LATEX PLUGS USED FOR H_2S GAS YES NO
D. PROPER PLUGS THROUGH COAL SEAMS YES NO
E. PROPER PLUGS SET TO PROTECT FRESHWATER YES NO
F. PROPER AMOUNT OF GEL USED TO DISPLACE PLUGS YES NO

CIBP TYPE	7150 FROM	7150 TO	PIPE REMOVED
Gel Well	6400	0	
Latex Cont	6400	6100	5996' of 4½
Latex Cement	5933	5673'	5750' of 7"
Gel	5673	2515'	197' of 9⅝
Cement	2515	2415'	
Gel	2415	215'	
Cement	215'	0'	

WERE ALL CHANGES APPROVED BY INSPECTOR? YES NO

WAS THE EQUIPMENT USED FOR PULLING CASING PROPERLY SIZED AND RIGGED TO PULL 150% OF THE HEAVIEST STRING OF PIPE EXPECTED TO BE PULLED? YES NO

DID THE OPERATOR GIVE THE INSPECTOR PROPER NOTICE? YES NO

WERE ACCURATE PLUGGING RECORDS KEPT BY THE OPERATOR? YES NO

WAS A PROPER MONUMENT SET WITH API NUMBER ATTACHED? YES NO

DID WELL SITE AND ACCESS ROAD MEET THE FOLLOWING RECLAMATION REQUIREMENTS?

A. RECLAIMED YES NO
B. FENCES REPLACED YES NO
C. MULCHED YES NO
D. PROPER DRAINAGE YES NO
E. SEEDED YES NO
F. ALL EQUIPMENT REMOVED YES NO

1/13/05
DATE RELEASED

Richard Campbell
INSPECTOR'S SIGNATURE

WR-35
Rev (5-01)

DATE:
API # : 47-015-02684

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas

Well Operator's Report of Well Work

Farm name: BUTLER #1 Operator Well No: #1

LOCATION: Elevation: 929 Quadrangle: IVYDALE

District: OTTER County: CLAY
Latitude: Feet South of 38 Deg. 35 Min. 96 Sec.
Longitude Feet West of 81 Deg. 00 Min. 32 Sec.

Company: ECA

	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
Address: 501 56th Street				
Charleston, WV 25304	CSG	20"	34'	TO SURF
Agent: K. Ralph Ranson, II				79 F^3
Inspector: Rick Campbell	CSG	13 3/8"	460'	TO SURF
Date Permit Issued: 1/22/03				455 F^3
Date Well Work Commenced:	CSG	9 5/8"	2442'	TO SURF
Date Well Work Completed:				902 F^3
Verbal Plugging:	CSG	7"	6512'	ETOC 6032
Date Permission granted on:				83 F^3
Rotary X Cable Rig	CSG	4 ½"	7372'	5780' TOP
Total Depth (feet): 7444 Loggers				141 F^3
Fresh Water Depth (ft.): 300				
Salt Water Depth (ft.): 1700				
Is coal being mined in area (N/Y)? N				
Coal Depths (ft.):				

OPEN FLOW DATA

Producing formation NEWBURG Pay zone depth (ft) 7184-7216
Gas: Initial open flow 0 MCF/d Oil: Initial open flow 0 Bbl/d
Final open flow 0 MCF/d Final open flow 0 Bbl/d
Time of open flow between initial and final tests 0 Hours
Static rock Pressure 189 psig (surface pressure) after 240 Hours

Second producing formation SALINA Pay zone depth (ft) 6987-7002
Gas: Initial open flow 0 MCF/d Oil: Initial open flow 0 Bbl/d
Final open flow 0 MCF/d Final open flow 0 Bbl/d
Time of open flow between initial and final tests 0 Hours
Static rock Pressure 740 psig (surface pressure) after 168 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.

Signed: K. R. Ranson - V.P.
By: K. R. RANSON, II
Date: 02-MAR-04

RECEIVED
Office of Oil & Gas
Office of Chief
MAR 04 2004
WV Department of Environmental Protection

1502684P

WW-4A
Revised 6-07

1) Date: 6/6/2013
2) Operator's Well Number
Butler #1

3) API Well No.: 47 - 015 - 2684

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: John W Butler
Address: 1863 Gun Barrel Road
White Post Va 22663
(b) Name: Ralph C Butler
Address: 214 Viking Road
Charleston WV 25302
(c) Name:
Address:

5) (a) Coal Operator
Name:
Address:

(b) Coal Owner(s) with Declaration
Name: John W Butler
Address: 1863 Gun Barrel Road
White Post Va 22663
Name: Ralph C Butler
Address: 214 Viking Road
Charleston WV 25302

(c) Coal Lessee with Declaration
Name:
Address:

6) Inspector: Ed Gainer
Address: PO Box 821
Spencer WV 25276
Telephone: 304-389-7582

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.

Well Operator: Energy Corporation of America
By: Rodney A Winters
Its: VP of Land
Address: 501 56th St SE
Charleston WV 25304
Telephone: 304-925-6100

OFFICIAL SEAL
Notary Public, State of West Virginia
ANTOINETTE RUTLEDGE
5119 Washington Avenue SE
Charleston, WV 25304
My commission expires March 11, 2022

Subscribed and sworn before me this 6TH day of JUNE, 2013
Antoinette Rutledge Notary Public
My Commission Expires March 11, 2022

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.

1502684P

WW-9
Rev. 5/08

Page _____ of _____
API Number 47 - 015 - 2684
Operator's Well No. Butler #1

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

Operator Name Energy Corporation of America OP Code 014980

Watershed Deerlick Run of Moore Fork Quadrangle Ivydale

Elevation 914 County Clay District Otter

Description of anticipated Pit Waste: Fresh Water and Gel

Will a synthetic liner be used in the pit? Yes.

Proposed Disposal Method For Treated Pit Wastes:

- X Land Application
- _____ Underground Injection (UIC Permit Number_____)
- _____ Reuse (at API Number_____)
- _____ Off Site Dispposal (Supply form WW-9 for disposal location)
- _____ Other (Explain_____

Proposed Work For Which Pit Will Be Used:

- _____ Drilling
- _____ Workover
- _____ Other (Explain_____
- _____ Swabbing
- X Plugging

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) Rodney A Winters

Company Official Title Vice President of Land

Subscribed and sworn before me this 6TH day of JUNE, 20 13

Antoinette Rutledge Notory Public

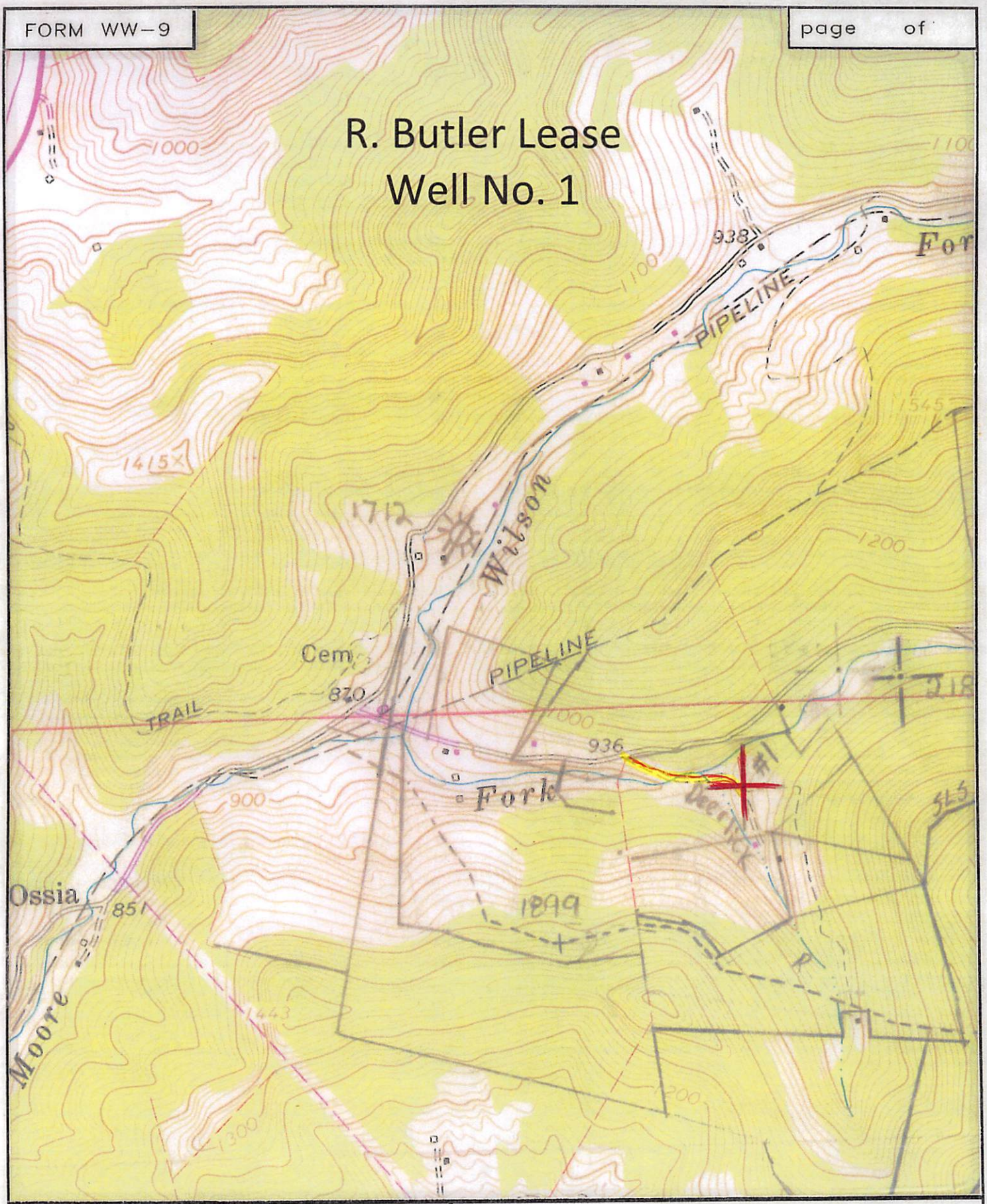
My commission expires March 11, 2022

OFFICIAL SEAL
Notary Public, State of West Virginia
ANTOINETTE RUTLEDGE
5119 Washington Avenue SE
Charleston, WV 25304
My commission expires March 11, 2022

1502684P

FORM WW-9

page of



SLS

SMITH LAND SURVEYING
P.O.BOX 150 GLENVILLE, WV. 26351

TOPO SECTION OF IVYDALE 7.5'

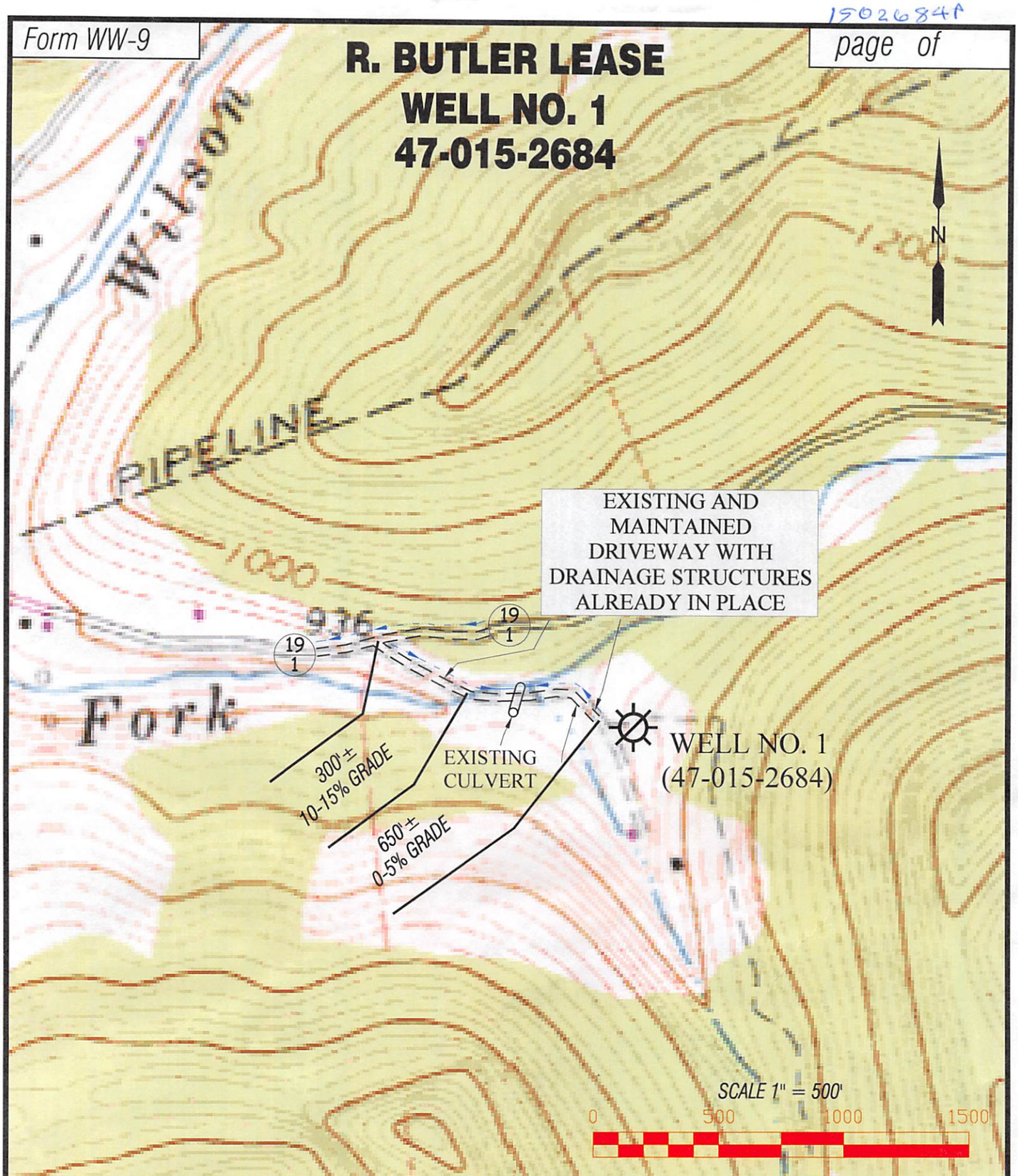
FILE NO. 8056 DATE 5/29/13 SCALE 1"=1,000'

1502684P

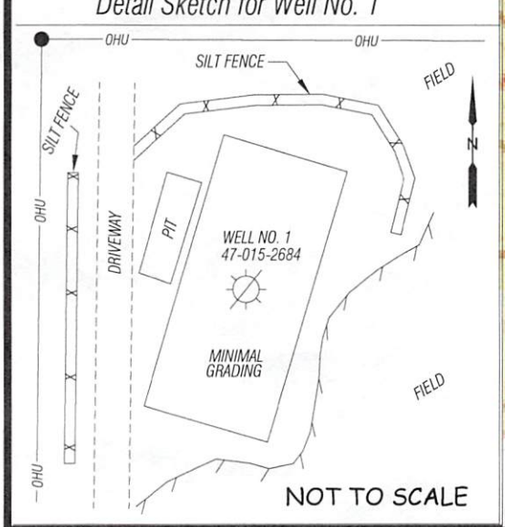
Form WW-9

page of

R. BUTLER LEASE
WELL NO. 1
47-015-2684



Detail Sketch for Well No. 1



ALL ROADS SHOWN HEREON ARE EXISTING UNLESS OTHERWISE NOTED AND SHALL BE MAINTAINED IN ACCORDANCE WITH WV D.E.P. OIL AND GAS BMP MANUAL ENTRANCES AT COUNTY/STATE ROADS SHALL BE MAINTAINED IN ACCORDANCE WITH WV D.O.T. REGULATION. SEPARATE PERMITS MAY BE REQUIRED BY THE D.O.T.

SEDIMENT BASINS (TRAPS) AND APPROPRIATE EROSION CONTROL BARRIERS ARE TO BE CONSTRUCTED AT ALL CULVERT AND CROSS DRAIN INLETS AND OUTLETS AS REQUIRED IN THE WV D.E.P. OIL AND GAS BMP MANUAL. FIELD CONDITIONS (ROCK OUTCROPS AND BEDROCK) MAY PROHIBIT INLET TRAPS BEING INSTALLED. WHEN THESE CONDITIONS EXIST ADDITIONAL EROSION CONTROL MEASURES SHALL BE EVALUATED AND UTILIZED AS NEEDED.

EARTHWORK CONTRACTORS ARE RESPONSIBLE FOR NOTIFICATION TO THE OPERATOR AND INSPECTOR PRIOR TO ANY DEVIATION FROM THIS PLAN.

TEMPORARY SEED & MULCH ALL SLOPES AFTER CONSTRUCTION OF LOCATION.

CUT & STACK ALL MARKETABLE TIMBER.

STACKED BRUSH MAY BE USED FOR SEDIMENT CONTROL.

APPLICATIONS FOR SEPARATE PLC PERMITS ON THE ACCESS ROAD STREAM CROSSINGS HAVE BEEN PREPARED (IF APPLIES).

= EXISTING CULVERT

Ⓒ = PROPOSED CULVERT 12" MIN. UNLESS OTHERWISE NOTED

Ⓧ = PROPOSED STREAM CROSSING

= APPROXIMATE LIMITS OF DISTURBANCE

Professional Energy Consultants
A DIVISION OF SMITH LAND SURVEYING
SURVEYORS PROJECT MGMT. SLS ENGINEERS ENVIRONMENTAL
226 West Main St. P.O. Box 150 Glenville, WV 26351 (304) 462-5634
56065 Dilles Bottom Road Shadyside, OH 43947 (740) 671-9911
HONESTY, INTEGRITY, QUALITY

DRAWN BY	FILE NO.	DATE	CADD FILE:
K.D.W.	8056	05-23-13	8056REC1.DWG

TOPO SECTION OF USGS IVYDALE 7.5' QUADRANGLE

1502684P

WW-7
8-30-06

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

API: 47-015-2684 WELL NO.: 1

FARM NAME: Ralph Butler

RESPONSIBLE PARTY NAME: Energy Corporation of America

COUNTY: Clay **DISTRICT:** Otter

QUADRANGLE: Ivydale 7.5'

SURFACE OWNER: Ralph C. Butler et al

ROYALTY OWNER: Ralph C. Butler et al

UTM GPS NORTHING: 4,271,397

UTM GPS EASTING: 499,226 **GPS ELEVATION:** 914'

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 ____ Post Processed Differential ____
Real-Time Differential ____

Mapping Grade GPS X Post Processed Differential X
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.

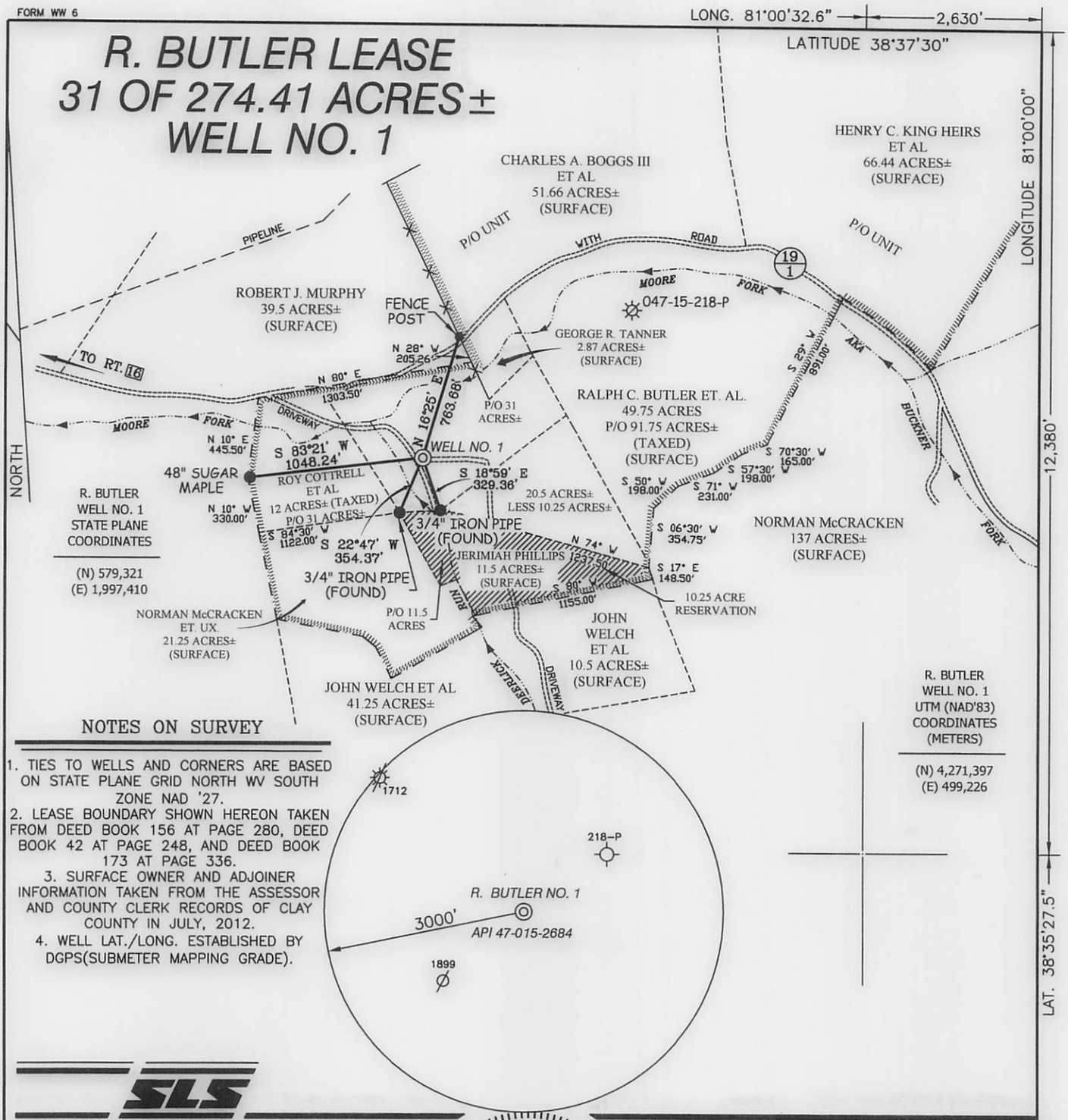
Gregory A. Smith

Gregory A. Smith, P. S. 677 - Smith Land Surveying, Inc.

May 29, 2013
Date

FORM WW 6

R. BUTLER LEASE
31 OF 274.41 ACRES±
WELL NO. 1



NOTES ON SURVEY

1. TIES TO WELLS AND CORNERS ARE BASED ON STATE PLANE GRID NORTH WV SOUTH ZONE NAD '27.
2. LEASE BOUNDARY SHOWN HEREON TAKEN FROM DEED BOOK 156 AT PAGE 280, DEED BOOK 42 AT PAGE 248, AND DEED BOOK 173 AT PAGE 336.
3. SURFACE OWNER AND ADJOINER INFORMATION TAKEN FROM THE ASSESSOR AND COUNTY CLERK RECORDS OF CLAY COUNTY IN JULY, 2012.
4. WELL LAT./LONG. ESTABLISHED BY DGPS(SUBMETER MAPPING GRADE).

SLS

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

P.S. 677 Gregory A. Smith

GREGORY A. SMITH LICENSED No. 677 STATE OF WEST VIRGINIA PROFESSIONAL SURVEYOR

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

DATE MAY 23, 20 13

OPERATORS WELL NO. R. BUTLER NO. 1

API WELL NO. 47 — 015 — 02684P
STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1 / 200 FILE NO. 8056P1M(143-2)

SCALE 1"=800'

PROVEN SOURCE OF ELEVATION DGPS (SUBMETER MAPPING GRADE)

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

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

LOCATION :

ELEVATION 914' WATERSHED DEERLICK RUN OF MOORE FORK

DISTRICT OTTER COUNTY CLAY QUADRANGLE IVYDALE 7.5'

SURFACE OWNER RALPH C. BUTLER ET AL (TAXED P/O 91.75 AC.) ACREAGE RESIDUE OF 31±

ROYALTY OWNER RALPH C. BUTLER ET AL LEASE ACREAGE 31 OF 274.41±

PROPOSED WORK : LEASE NO. ___

DRILL ___ CONVERT ___ DRILL DEEPER ___ REDRILL ___ FRACTURE OR STIMULATE ___ PLUG OFF OLD FORMATION ___ PERFORATE NEW FORMATION ___ PLUG AND ABANDON X CLEAN OUT AND REPLUG ___ OTHER ___

PHYSICAL CHANGE IN WELL (SPECIFY) ___ TARGET FORMATION KNOX

ESTIMATED DEPTH 12,000

COUNTY NAME

PERMIT

WELL OPERATOR ENERGY CORPORATION OF AMERICA DESIGNATED AGENT RODNEY A. WINTERS

ADDRESS 501 56TH STREET S.E. ADDRESS 501 56th STREET S.E.

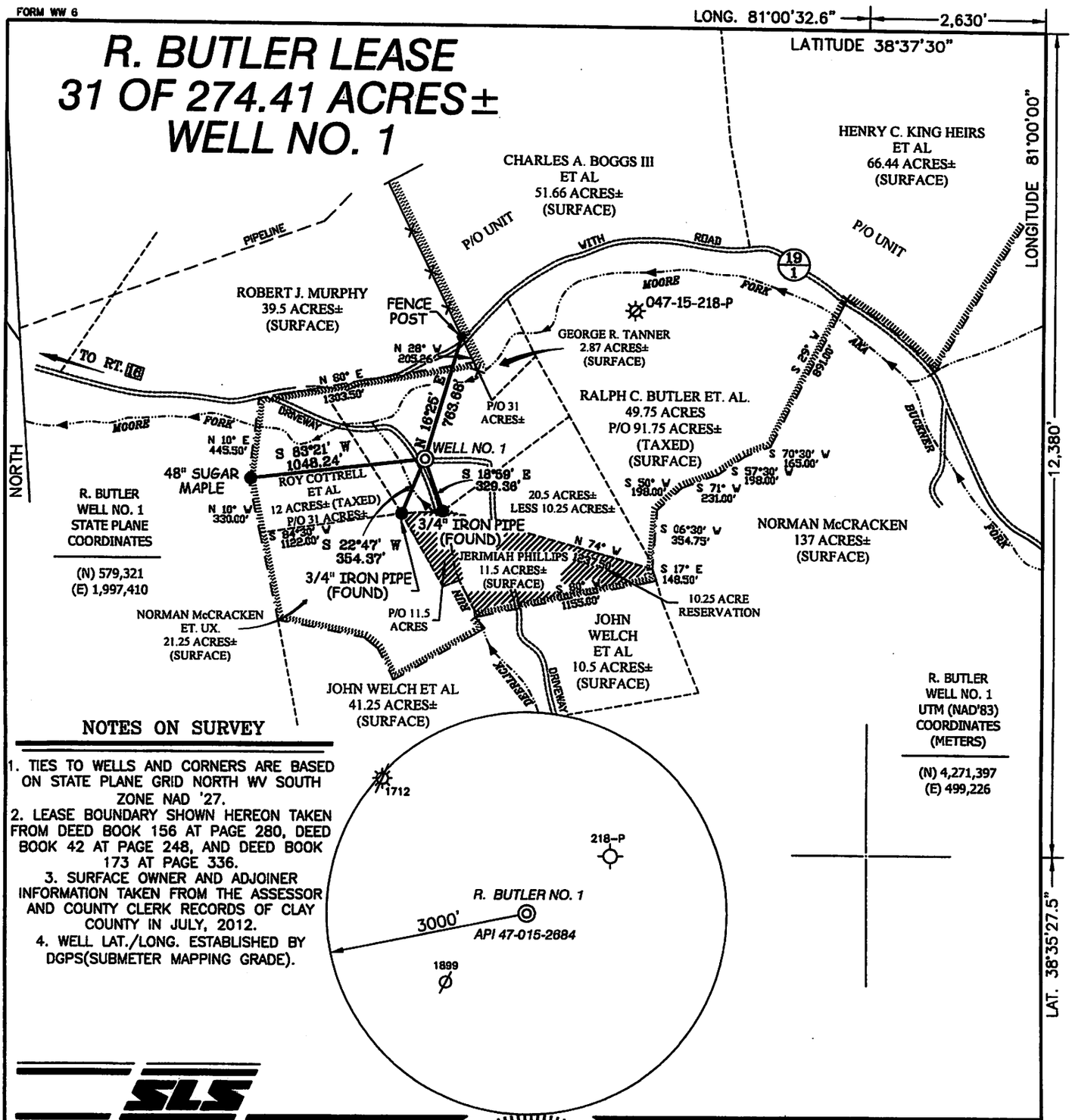
CHARLESTON, WV 25304 CHARLESTON, WV 25304

SIS

121568

FORM WW 6

R. BUTLER LEASE
31 OF 274.41 ACRES±
WELL NO. 1



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

DATE MAY 23, 20 13

OPERATORS WELL NO. R. BUTLER NO. 1

API WELL NO. 47 — 015 — 2684
STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1 / 200 FILE NO. 8056P1M(143-2)

SCALE 1"=800'

PROVEN SOURCE OF ELEVATION DGPS (SUBMETER MAPPING GRADE)

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

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

LOCATION :

ELEVATION 914' WATERSHED DEERLICK RUN OF MOORE FORK

DISTRICT OTTER COUNTY CLAY QUADRANGLE IVYDALE 7.5'

SURFACE OWNER RALPH C. BUTLER ET AL (TAXED P/O 91.75 AC.) ACREAGE RESIDUE OF 31±

ROYALTY OWNER RALPH C. BUTLER ET AL LEASE ACREAGE 31 OF 274.41±

PROPOSED WORK : LEASE NO. ___

DRILL ___ CONVERT ___ DRILL DEEPER ___ REDRILL ___ FRACTURE OR STIMULATE ___ PLUG OFF OLD FORMATION ___ PERFORATE NEW FORMATION ___ PLUG AND ABANDON X CLEAN OUT AND REPLUG ___ OTHER ___

PHYSICAL CHANGE IN WELL (SPECIFY) ___ TARGET FORMATION KNOX

ESTIMATED DEPTH 12,000

COUNTY NAME

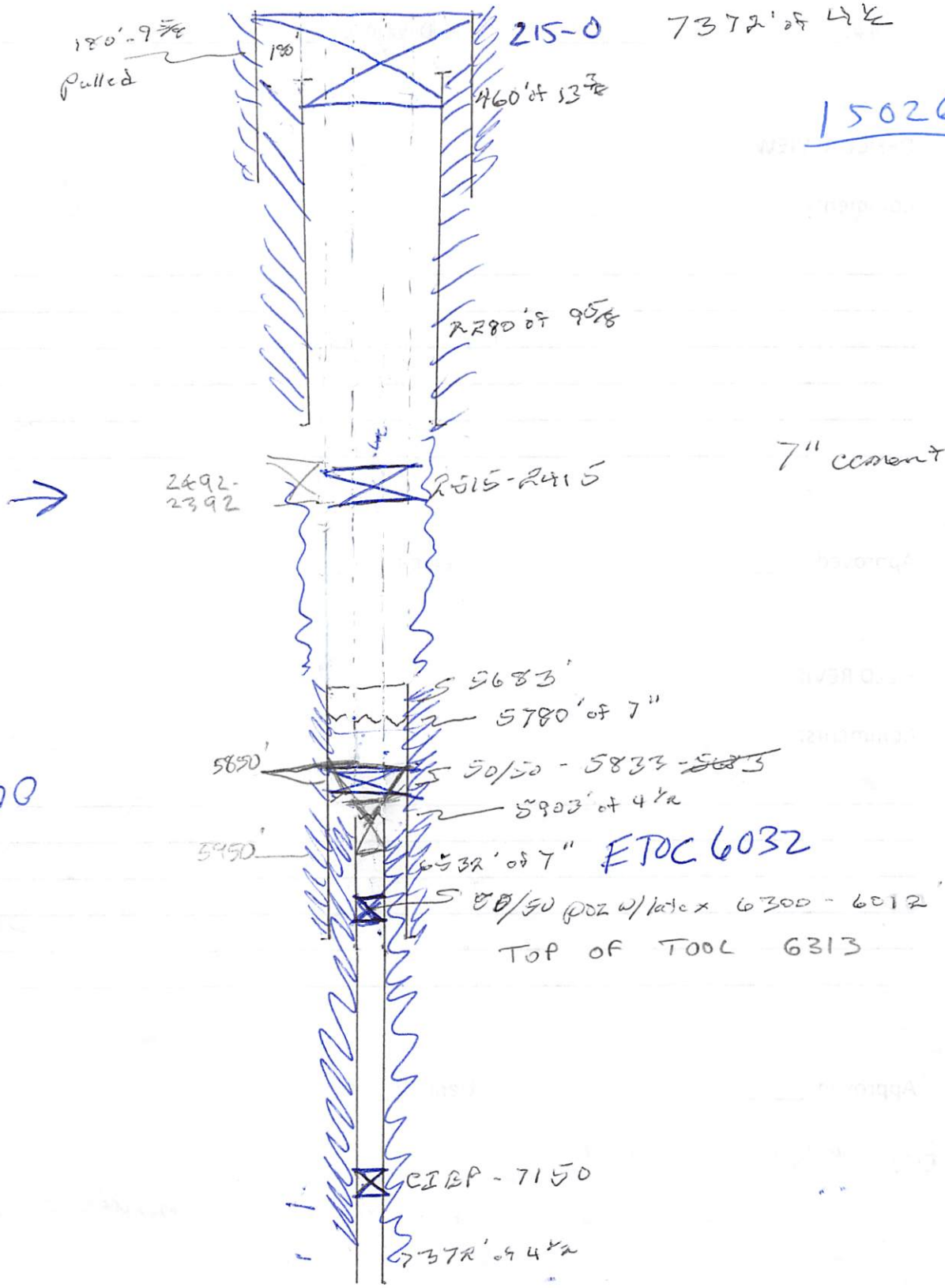
PERMIT

WELL OPERATOR ENERGY CORPORATION OF AMERICA DESIGNATED AGENT RODNEY A. WINTERS

ADDRESS 501 56TH STREET S.E. CHARLESTON, WV 25304 ADDRESS 501 56th STREET S.E. CHARLESTON, WV 25304

460' of 13 3/8"
2280' of 9 5/8"
6572' of 7"
7372' of 4 1/2"

1502684P



7" cement Top?

Fish is 500' of line, 40 foot of tools, (swab, mandrel, jars & stem)