



west virginia department of environmental protection

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

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

August 04, 2014

WELL WORK PLUGGING PERMIT

Plugging

This permit, API Well Number: 47-9300095, issued to GASTAR EXPLORATION INC., 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 penalties 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: SMITH A-1
Farm Name: SMITH, FRED & GLORIA
API Well Number: 47-9300095
Permit Type: Plugging
Date Issued: 08/04/2014

Promoting a healthy environment.

08/08/2014

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.
4. This well is under a consent order and must be plugged within two years of the date of issuance of this permit.

9300095P

WW-4B
Rev. 2/01

1) Date June 4, 2014
2) Operator's
Well No. Smith A-1
3) API Well No. 47-093 - 00095

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 2404' Watershed Lynn Run of Horseshoe Run
District Saint George County Tucker Quadrangle Lead Mine 7.5'

6) Well Operator Gastar Exploration Inc. 7) Designated Agent Michael McCown
Address 229 West Main Street, Suite 301 Address 229 West Main Street, Suite 301
Clarksburg, WV 26301 Clarksburg, WV 26301

8) Oil and Gas Inspector to be notified 9) Plugging Contractor
Name Kenneth Greynolds Name Meadows Well Service, LLC
Address 613 Broad Run Road Address 45 Meadows Drive
Jane Lew, WV 26378 Ravenswood, WV 26164

10) Work Order: The work order for the manner of plugging this well is as follows:
SEE ATTACHED SHEET FOR SMITH A-1 PLUGGING PROCEDURE

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

Work order approved by inspector *Kenneth Greynolds* Date 7-2-14

08/08/2014

Smith A1 Plugging Procedure

1. Load hole with brine to control well
2. Pull all 2 3/8" tubing
3. Verify TD with wireline (7348') (7550')
4. Set 7" cement retainer at 5680'
5. Trip in hole sting into retainer and establish injection
6. Pump cement plug from 7348' to 5680' (500 sks with LCM) 500 + SKS
7550'
7. Trip out of hole
8. Cut 7" casing at 5570'
9. Pull all casing
10. Trip in hole
11. Spot cement plug at 5470' to 5590'
12. 6% Gel Spacer from 5470' to 4000'
13. Free point and cut 9 5/8" casing at 4000'
14. Pull all casing
15. Set cement plug at 4020' to 3900' & 4626' to 4500' (ONONDAGA TUP) 1/2 GEL SPACER
16. 6% Gel Spacer from 3900' to 2425'
17. Cement plug from 2300' to 2400' ELEVATION
18. 6% Gel Spacer from 2300' to 120' 1282' CEMENT PLUG FROM 1282' - 1182' GEL 1182' - 163'
19. Cement plug from 0' to 120' 163'
20. Install 7" x 4' monument with API number 47-093-0095

MLG 7-2-14

CEMENT PLUGS - MINIMUM OF 100' CLASS A CEMENT WITH NO MORE THAN 3% CaCl₂ AND NO OTHER ADDITIVES.

ORIGINAL VERTICAL TD WAS 7550'.

JMM

- | | | |
|--------|----------------|---------------------------------------------|
| PLUG 1 | 7550' - 5680' | BOTTOM HOLE PLUG |
| | GEL SPACER | |
| PLUG 2 | 5590' - 5470' | (7" CASING CUT) |
| | GEL SPACER | |
| PLUG 3 | 4626' - 4500' | (ONONDAGA) DEEP WELL / SHALLOW WELL HORIZON |
| | GEL SPACER | |
| PLUG 4 | 4020' - 3900' | (9 5/8" CASING CUT) |
| | GEL SPACER | |
| PLUG 5 | 2400' - 2300' | (ELEVATION PLUG) |
| | GEL SPACER | |
| PLUG 6 | 1282' - 1182' | (BOTTOM 13 3/8" CASING) |
| | GEL SPACER | |
| PLUG 7 | 163' - SURFACE | |

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

Well Operator's Report of Well Work

Farm name: Leslie N. & Gloria J. Smith Operator Well No.: Smith A-1/A-2

LOCATION: Elevation: 2404' Quadrangle: Leadmine 7.5'

District: Saint George County: Tucker

Latitude: 13400 Feet South of 39 Deg. 15 Min. 0 Sec.

Longitude 1600 Feet West of -79 Deg. 35 Min. 0 Sec.

Company: MegaEnergy Operating, Inc.

	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
Address: <u>9085 E. Mineral Cir, Ste 270</u>	<u>26" csg</u>	<u>22'</u>	<u>22'</u>	<u>10 sxs</u>
<u>Englewood, CO 80112</u>	<u>20" H40 csg</u>	<u>163'</u>	<u>163'</u>	<u>80 sxs</u>
Agent: <u>Paul Smith</u>	<u>13-3/8" J55</u>	<u>1232'</u>	<u>1232'</u>	<u>935 sxs</u>
Inspector: <u>Craig Duckworth</u>	<u>9-5/8 J55 &</u>	<u>5794'</u>	<u>5794'</u>	<u>405 sxs</u>
Date Permit Issued: <u>5-31-2005</u>	<u>N80</u>			
Date Well Work Commenced: <u>5-18-2005</u>	<u>7" P-110</u>	<u>7550'</u>	<u>7550'</u>	<u>290 sxs</u>
Date Well Work Completed: <u>6-9-2005</u>	<u>4-1/2" L80</u>	<u>Liner</u>	<u>1823'</u>	<u>105 sxs</u>
Verbal Plugging: <u>N/A</u>	<u>(A-2 lat)</u>			
Date Permission granted on: <u>N/A</u>	<u>2-3/8" L80</u>	<u>Tubing</u>	<u>7304'</u>	
Rig: <u>Key Energy service unit</u>				
Total Depth (feet): <u>A-1: 7550 / A-2: 7750</u>				
Fresh Water Depth (ft.): <u>277</u>				
Salt Water Depth (ft.): <u>N/A</u>				
Is coal being mined in area (N/Y)? <u>N</u>				
Coal Depths (ft.):				

OPEN FLOW DATA

Producing formation Tuscarora Pay zone depth (ft) 7325-7352' (A-1)

Gas: Initial open flow 3,000 MCF/d Oil: Initial open flow _____ Bbl/d

Final open flow no flow MCF/d Final open flow _____ Bbl/d

Time of open flow between initial and final tests N/A Hours

Static rock Pressure 100 psig (surface pressure) after N/A Hours

Second producing formation Tuscarora Pay zone depth (ft) 7684-7750' (A-2)

Gas: Initial open flow 10,000 MCF/d Oil: Initial open flow _____ Bbl/d

Final open flow 1,300 MCF/d Final open flow _____ Bbl/d

Time of open flow between initial and final tests N/A Hours

Static rock Pressure 2,250 psig (surface pressure) after _____ Hours

Received

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.

JUN 16 2014

Signed:

By: J. Scott Hornafius

Date: September 27, 2005

Office of Oil and Gas
WV Dept. of Environmental Protection

08/08/2014

Smith A-1 & A-2: 47-093-0095

Location:
 Township: Saint George
 County: Tucker
 Quadrangle: Leadmine

Elevation GL: 2404'
 KB: 2419'

Spud date: 7-9-2003
 Drilling complete: 8-25-2003

A-1 Straight Hole Formation Tops:

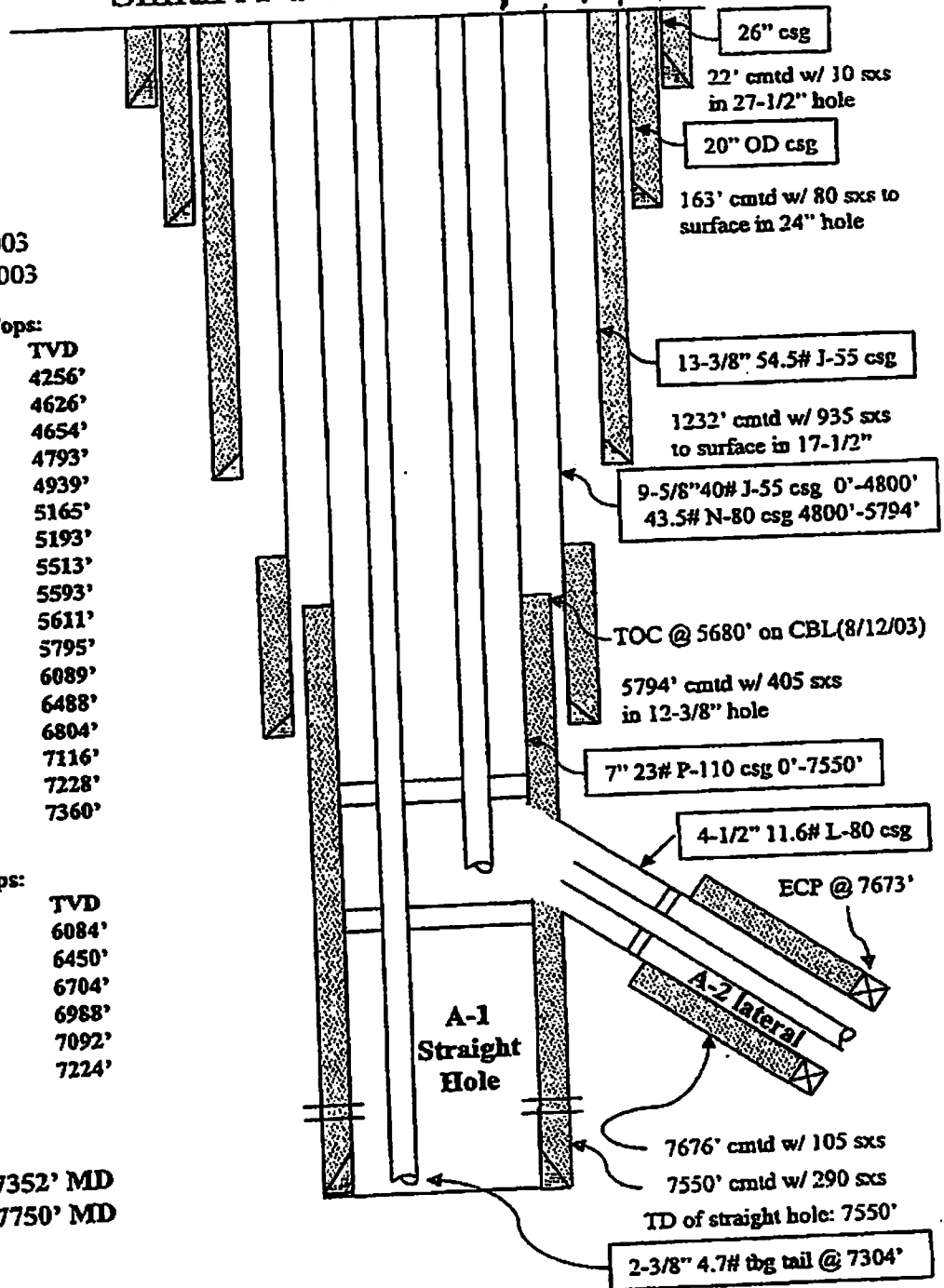
	MD	TVD
T/Tully:	4266'	4256'
T/Onondaga:	4636'	4626'
T/Huntersville:	4664'	4654'
T/Oriskany:	4804'	4793'
T/Helderberg:	4950'	4939'
T/Mandata:	5176'	5165'
T/Corriganville:	5204'	5193'
T/Tonoloway:	5524'	5513'
T/Salt:	5604'	5593'
B/Salt:	5622'	5611'
T/Wills Creek:	5806'	5795'
T/Lockport:	6100'	6089'
T/Williamsport:	6500'	6488'
T/Rose Hill:	6816'	6804'
T/Clinton:	7128'	7116'
T/Medinia:	7240'	7228'
T/Tuscarora:	7372'	7360'

A-2 Sidetrack Formation Tops:

	MD	TVD
T/Lockport:	6100'	6084'
T/Williamsport:	6582'	6450'
T/Rose Hill:	6944'	6704'
T/Clinton:	7350'	6988'
T/Medinia:	7500'	7092'
T/Tuscarora:	7680'	7224'

Completions

A-1: Perforated 7325-7352' MD
 A-2: Open-Hole 7684-7750' MD



RECEIVED
 Office of Oil & Gas
 MAY 26 2005

WV Department of
 Environmental Protection

WW-4A
Revised 6-07

1) Date: June 4, 2014
2) Operator's Well Number Smith A-1
3) API Well No.: 47 - 093 - 00095

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

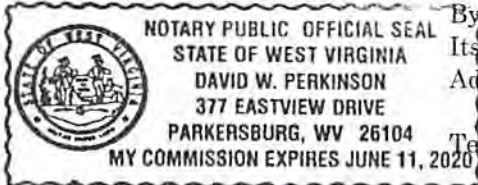
4) Surface Owner(s) to be served:	5) (a) Coal Operator
(a) Name <u>Leslie N. & Gloria J. Smith</u>	Name <u>n/a</u>
Address <u>385 G Swauger Road</u> ✓	Address _____
<u>Oakland, MD 21550</u>	_____
(b) Name _____	(b) Coal Owner(s) with Declaration
Address _____	Name <u>n/a</u>
_____	Address _____
(c) Name _____	Name _____
Address _____	Address _____
_____	_____
6) Inspector <u>Kenneth Greynolds</u>	(c) Coal Lessee with Declaration
Address <u>613 Broad Run Road</u>	Name <u>n/a</u>
<u>Jane Lew, WV 26378</u>	Address _____
Telephone <u>304-206-6613</u>	_____

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	<u>Gastar Exploration Inc.</u>
	By:	<u>Michael McCown</u> <i>Michael McCown</i>
	Its:	<u>Senior VP & COO</u>
	Address	<u>229 West Main Street, Suite 301</u> <u>Clarksburg, WV 26301</u>
	Telephone	<u>304-622-4796</u>

Received

JUN 16 2014

Subscribed and sworn before me this 4th day of June, 2014
David W. Perkinson
Notary Public
My Commission Expires June 11, 2020

Office of Oil and Gas
WV Dept. of Environmental Protection

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 depprivacyofficer@wv.gov.

08/08/2014

9300095P

7013 2250 0001 9016 9235

Received

JUN 16 2014

Office of Oil and Gas
WV Dept. of Environmental Protection

08/08/2014

**U.S. Postal Service™
CERTIFIED MAIL™ RECEIPT**
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For delivery information visit our website at www.usps.com

Official Use

Postage	\$	31.40
Certified Fee		33.30
Return Receipt Fee (Endorsement Required)		32.70
Restricted Delivery Fee (Endorsement Required)		50.00
Total Postage & Fees	\$	57.40

03301
06
Postmark Here
06/15/2014

Sent To
Street, Apt. No.,
or PO Box No. 385 G Shays Rd
City, State, ZIP+4 Oakley, MD 21550
PS Form 3800, August 2006 See Reverse for Instructions

9300095F

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 Gastar Exploration Inc. OP Code 494487685

Watershed Lynn Run of Horseshoe Run Quadrangle Lead Mine 7.5'

Elevation 2404' County Tucker District Saint George

Description of anticipated Pit Waste: Fluids encountered in plugging subject well

Will a synthetic liner be used in the pit? yes - 20 mil.

Proposed Disposal Method For Treated Pit Wastes:

- Land Application
- Underground Injection (UIC Permit Number 2D0930081)
- Reuse (at API Number _____)
- Off Site Disposal (Supply form WW-9 for disposal location)
- Other (Explain _____)

Proposed Work For Which Pit Will Be Used:

- Drilling
- Workover
- Other (Explain _____)
- Swabbing
- 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 *Michael McCown*
Company Official (Typed Name) Michael McCown
Company Official Title Senior VP & COO

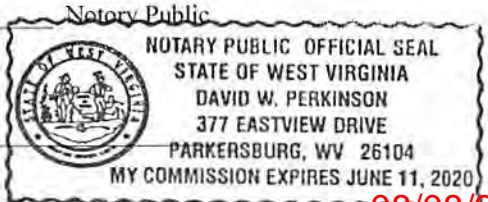
Received

JUN 16 2014

Subscribed and sworn before me this 4th day of June, 2014 Office of Oil and Gas
WV Dept. of Environmental Protection

David W. Perkinson

My commission expires June 11, 2020



08/08/2014

LEGEND

- Property Boundary
- Road
- Existing Fence
- Planned Fence
- Stream
- Open Ditch
- Rock
- North
- Buildings
- Water wells
- Drill site

- 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 Waste

Proposed Revegetation Treatment: Acres Disturbed _____ Prevegetation pH _____

Lime 3 Tons/acre or to correct to pH 6.5

Fertilizer (10-20-20 or equivalent) 1/3 lbs/acre (500 lbs minimum)

Mulch Hay 2 Tons/acre

Seed Mixtures

Seed Type	Area I lbs/acre	Seed Type	Area II lbs/acre
KY-31	40	Orchard Grass	15
Alsike Clover	5	Alsike Clover	5
Annual Rye	15		

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

Photocopied section of involved 7.5' topographic sheet.

Plan Approved by: [Signature]

Comments: RECLAIM AND SEED ASAP

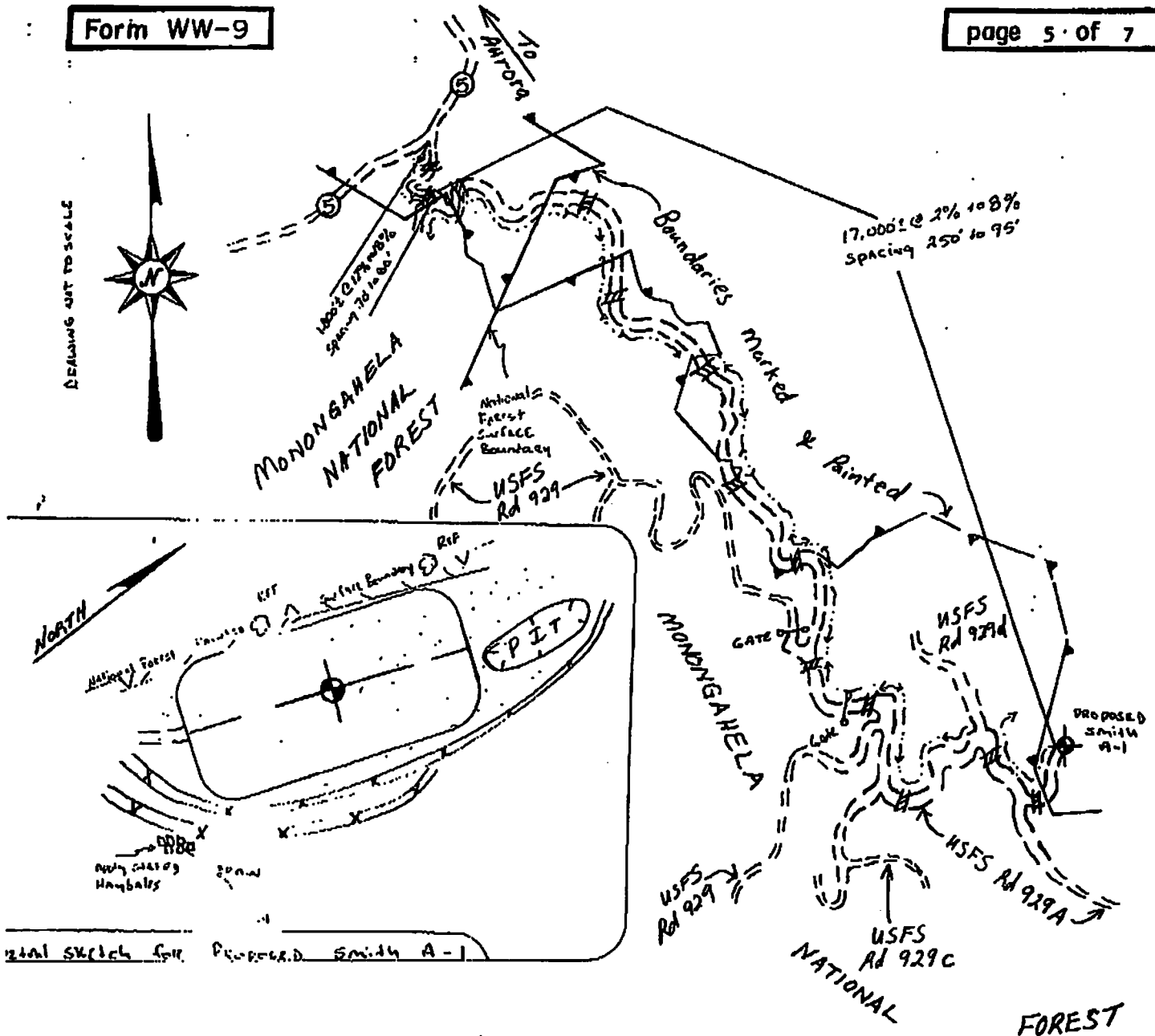
KY

Title: OPG INSPECTOR Date: 7-2-14

Field Reviewed? () Yes () No

Form WW-9

page 5 of 7



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. REGULATIONS. 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 TIMBER 6" AND ABOVE.

STACK BRUSH BELOW LOCATION FOR SEDIMENT CONTROL.

Craig Duckworth 4-8-03

SMITH RECEIVED
WELL NO. A-1

JUN 16 2014

Office of Oil and Gas
WV Dept. of Environmental Protection

	Phone (304) 462-5656 or 462-5634
	DRAWN BY <i>BG</i> DATE 3-21-03 FILE NO. 5169

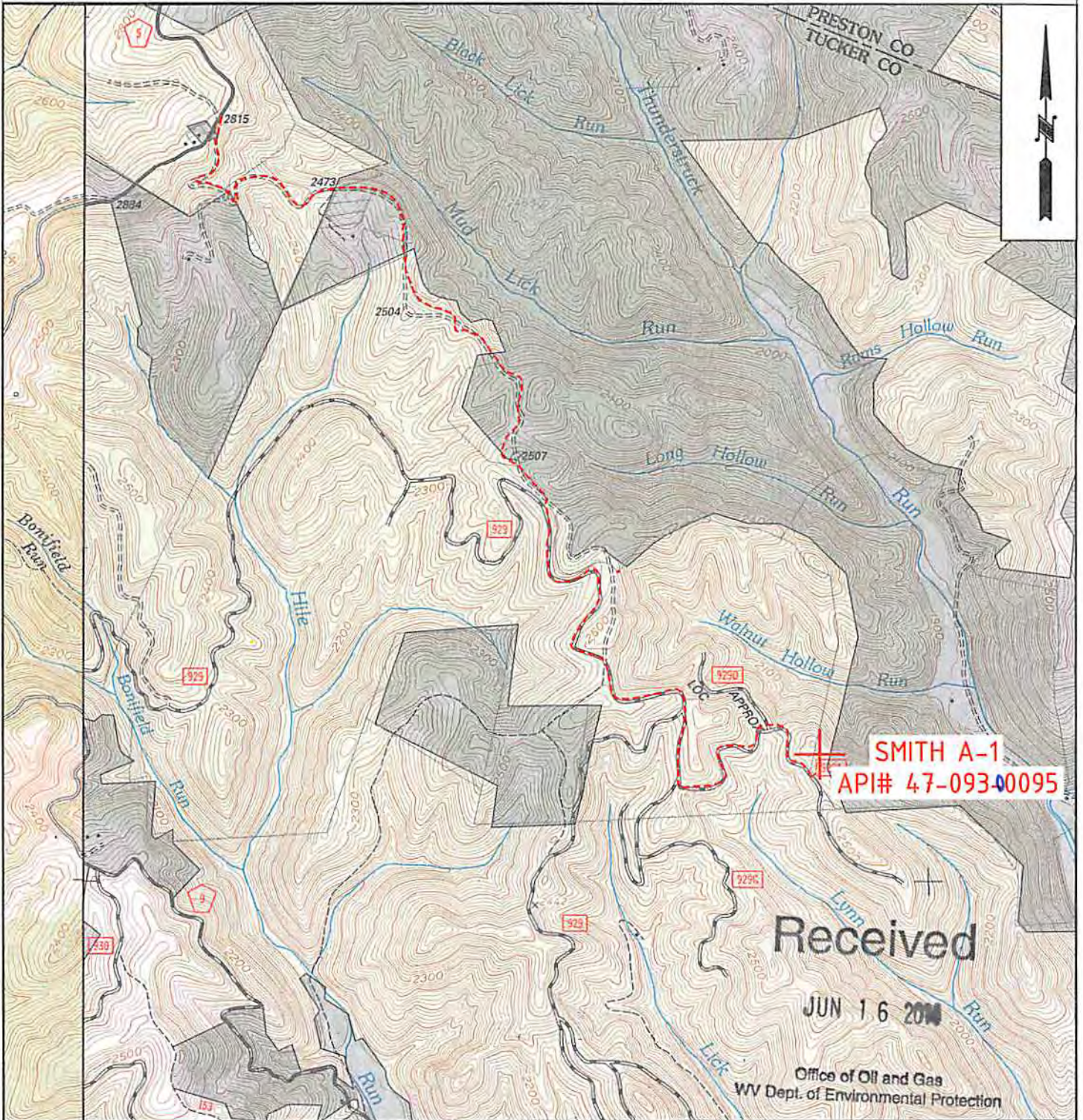
P.O. BOX 150, GLENVILLE, WV 26351

930095T

WW-9

SMITH A-1 API# 47-093-0095

SUPPLEMENT PG 1



	OPERATOR	TOPO SECTION	LEASE NAME
	GASTAR EXPLORATION INC. 229 W Main Street, Suite 301 Clarksburg, WV 26301	LEAD MINE 7.5'	SMITH
		SCALE:	DATE:
		1"=2000'	DATE: 05/05/14

W0120323

08/08/2014

93 00095P

WW-7
8-30-06



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

API: 47-0930095 WELL NO.: Smith A-1

FARM NAME: Fred and Gloria Smith

RESPONSIBLE PARTY NAME: Gastar Exploration USA Inc.

COUNTY: Tucker DISTRICT: Saint George

QUADRANGLE: Lead Mine 7.5'

SURFACE OWNER: Leslie N. and Gloria J. Smith

ROYALTY OWNER: Fred Smith

UTM GPS NORTHING: 4341392.3 M

UTM GPS EASTING: 621851.2 M GPS ELEVATION: 726.7 M

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 : 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]
Signature

[Signature]
Title

6-4-14
Date

SMITH LEASE 308 ACRES ±

WELL NO. SMITH A-1

LINE	BEARING	DISTANCE
L1	S 07°30' W	171.37
L2	S 29°00' W	208.58
L3	S 00°30' E	192.93
L4	S 17°00' E	210.78
L5	S 02°30' E	252.25
L6	S 18°00' E	271.66
L7	S 53°30' E	315.15
L8	S 07°00' W	115.25
L9	S 07°00' W	362.34
L10	S 10°00' E	717.78
L11	S 31°00' E	217.78
L12	S 06°30' W	670.38
L13	N 01°11' W	172.28
L14	N 05°31' E	20.42
L15	N 13°04' W	229.02
L16	N 05°01' W	230.14
L17	N 21°45' W	215.82
L18	N 36°03' W	127.28
L19	N 30°21' W	309.54
L20	N 30°11' W	101.24
L21	N 20°23' W	85.18
L22	N 48°21' W	258.74
L23	N 53°28' W	124.74
L24	N 58°41' W	62.30
L25	N 65°01' W	102.26

SMITH A-1
STATE PLANE
COORDINATES

(N) 289,757
(E) 1,974,839

KAREN J. HOCKMAN
KATHY L. ARNOLD
81 ACRES ±
(SURFACE)

JOHN HARTLEY
8 ACRES ±
(SURFACE)

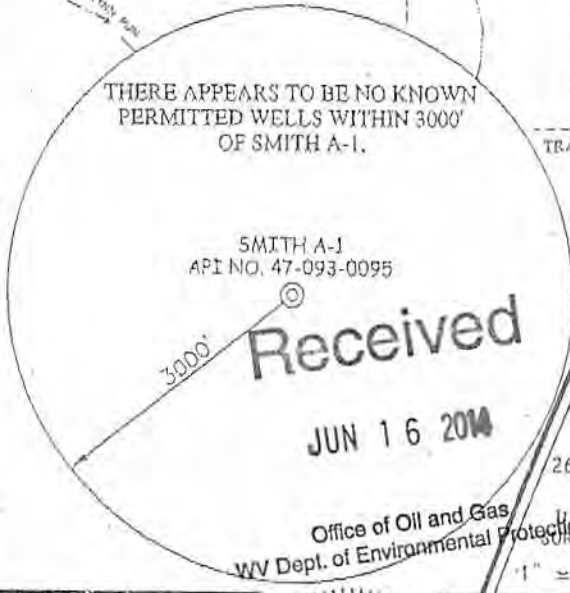
SMITH A-1
AS DRILLED BOTTOM
HOLE STATE PLANE
COORDINATES

(N) 260,821
(E) 1,973,823

LESLIE & GLORIA SMITH
55.51 ACRES ±
(SURFACE)

REFERENCES

TRACT NO. 87c
U.S.A.



THERE APPEARS TO BE NO KNOWN
PERMITTED WELLS WITHIN 3000'
OF SMITH A-1.

SMITH A-1
API NO. 47-093-0095

Received
JUN 16 2014

Office of Oil and Gas
WV Dept. of Environmental Protection

NOTES ON SURVEY

1. TIES TO CORNERS ARE BASED ON STATE PLANE GRID NORTH W/ NORTH ZONE NAD '27.
2. TIES TO REFERENCES ARE BASED ON MAGNETIC NORTH 3-11-03.
3. LEASE BOUNDARY SHOWN HEREON TAKEN FROM A DEED DATED THE 3TH DAY OF JULY, 1956 AS RECORDED IN DEED BOOK 67 ON PAGE 464.
4. SURFACE OWNER AND ADJOINER INFORMATION TAKEN FROM THE ASSESSOR AND COUNTY CLERK RECORDS OF TUCKER COUNTY IN JANUARY, 2003.
5. WELL LAT/LONG ESTABLISHED BY DGPS (SUBMETER MAPPING GRADE).
6. PLAT WAS UPDATED JUNE 20, 2003 TO SHOW THE PROPOSED LOCATION AND COORDINATES OF THE SMITH A-1 BOTTOM OF HOLE. INFORMATION PROVIDED BY MegaEnergy (N40W 1000').
7. PLAT UPDATED FEBRUARY 11, 2004 TO SHOW NEW BOTTOM HOLE COORDINATES. INFORMATION TO CALCULATE "AS DRILLED" BOTTOM HOLE COORDINATES WAS PROVIDED BY MegaEnergy AND CALCULATED RELATIVE TO THE PROPOSED TOP HOLE COORDINATES SHOWN HEREON.
8. PLAT UPDATED MAY 4, 2005 TO SHOW API NO. AND ESTIMATED DEPTH FOR FRACTURE AT VERTICAL AND HORIZONTAL DEPTHS.



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



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS.
DATE MARCH 21, 20 03
UPDATED 06/20/03, 02/11/04, AND 05/04/05

OPERATORS WELL NO. SMITH A-1
API WELL NO. 47-093-00095
STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1/200 FILE NO. 5109P1R3 (144-9 & 14)
PROVEN SOURCE OF ELEVATION TOP OF KNOB ELEVATION = 2507' SCALE 1" = 1000'

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



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

LOCATION: ELEVATION 2404' WATERSHED LYNN RUN OF HORSESHOE RUN
DISTRICT SAINT GEORGE COUNTY TUCKER QUADRANGLE LEAD MINE 7.5'

SURFACE OWNER LESLIE N. AND GLORIA J. SMITH ACREAGE 308±
ROYALTY OWNER FRED SMITH LEASE ACREAGE 308± OF 640± UNIT

PROPOSED WORK: LEASE NO. 08/08/2014
DRILL CONVERT DRILL DEEPER REDRILL FRACTURE OR STIMULATE PLUG OFF OLD
FORMATION PERFORATE NEW FORMATION PLUG AND ABANDON CLEAN OUT AND REPLUG OTHER

PHYSICAL CHANGE IN WELL (SPECIFY) _____ TARGET FORMATION ORISKANY-TUSCARORA
ESTIMATED DEPTH VERT. - 7,550' & HOR. - 7,750'

WELL OPERATOR MegaEnergy OPERATING, INC. DESIGNATED AGENT PAUL SMITH
ADDRESS 8501 E. DRY CREEK PLACE ADDRESS P.O. BOX 884
ENGLEWOOD, CO 80112 BRIDGEPORT, WV 26330

LONGITUDE 79°35'00" COUNTY NAME PERMIT

930095 P



CK ✓ 1014
10000

June 13, 2014

WVDEP-Office of Oil & Gas
Attn: Justin Nottingham
601 57th Street SE
Charleston, WV 25304

VIA: USPS

Re: Smith A-1 Plugging Permit Application (API # 093-00095)

Dear Justin:

Enclosed herein for your review and further handling, please find the above referenced Plugging Permit Application and a check in the amount of \$100.00 to cover the permit fees.

If you have any questions or need additional information, please feel free to contact me at 304/966-0362.

Sincerely,

A handwritten signature in blue ink that reads "Dave Perkinson".

DAVE PERKINSON
Landman

Received

JUN 16 2014

Office of Oil and Gas
WV Dept. of Environmental Protection

Gastar Exploration LTD.
229 West Main Street, Suite 301 · Clarksburg, WV 26301
Phone: (304) 622-4796 · Fax: (304) 622-4824

08/08/2014