

west virginia department of environmental protection

Oil and Gas Conservation Commission
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Joe Manchin III, Governor
www.wvdep.org

BEFORE THE OIL AND GAS CONSERVATION COMMISSION
OF THE STATE OF WEST VIRGINIA

IN THE MATTER OF THE REQUEST BY
TRIAD RESOURCES, INC. TO OBTAIN
APPROVAL FROM THE COMMISSION FOR
EXCEPTION LOCATIONS FOR A FIVE WELL
DRILLING PROGRAM IN LINCOLN AND
UNION DISTRICTS, TYLER COUNTY, WEST
VIRGINIA.

DOCKET NO. 178-163

ORDER NO. 1

REPORT OF THE COMMISSION

Triad Resources, Inc. (Triad) has requested the Commission review and approve exception locations for five wells to be drilled in Tyler County, West Virginia. The proposed wells are to be completed in shallow zones; however, Triad proposes to drill 100' into the Onondaga formation to allow for logging and completion operations. By definition, WV Code 22C-9-2 states that drilling into the Onondaga formation constitutes a deep well. The proposed locations do not meet the spacing requirement imposed on deep wells; therefore Triad has requested approval from the Commission for exceptions to Rule 39-1-4.2.

FINDINGS OF FACT

1. The applicant is an operator within the meaning of paragraph (4) subsection (a) of the West Virginia Code 22C-9-2.
2. Triad wishes to drill the Smith #701, White #702, Shreves #703, Howard #705 and the Bowen #704. Each well is designed to reach the bottom of the Marcellus formation. The Marcellus shale formation lies directly above the Onondaga limestone formation. Triad intends to drill 100' into the Onondaga formation for rat hole purposes. Applicant's witness testified that 100' of rat hole is necessary to fully log the Marcellus formation. The 100' of rat hole will allow the applicant to get logging tools, casing, tubing and perforating tools to sufficient depth below the pay zone.
3. Applicant's witness stated that the Onondaga limestone will not be completed or perforated in any of the five wells.
4. The locations of the proposed wells were chosen due to the topography and the geology of the potential producing formations.

Promoting a healthy environment.

5. The proposed location of the Smith #701 is 130' from the lease line, White #702 is 340' from the lease line, Shreves #703 is 290' from the lease line and the Howard #705 is 305' from the lease line. An exception to Rule 39-1.4.2 is needed for these four locations.
6. The location of the proposed Bowen #704 is 615' from the lease line; therefore no exception is requested.
7. Applicant's witness testified that there are no existing deep wells within 3,000' of the proposed well locations, but added that the distance between the proposed Smith #701 and the proposed White #702 is 2300'.

CONCLUSIONS OF LAW

1. That due notice of the time, place and purposed of the hearing has been given in all respects as required by law.
2. Definitions found in §22C-9-2 (11-12) state that shallow well means any well drilled and completed in a formation above the top of the uppermost member of the "Onondaga Group", provided, that in drilling a shallow well the operator may penetrate into the "Onondaga Group" to a reasonable depth, not in excess of twenty feet, in order to allow for logging and completion operations, but in no event may the "Onondaga Group" formation be otherwise produced, perforated or stimulated in any manner; and, deep well means any well, other than a shallow well, drilled and completed in a formation at or below the top of the uppermost member of the "Onondaga Group".
3. That Operational Rule 39-1-4.2 requires that all deep wells drilled shall be not less than 3,000' from a permitted deep well location or from a deep well drilling to or capable of producing hydrocarbons from the objective pool of the deep well and no deep well shall be less than 400' from the lease or unit boundary. Operational Rule 39-1-4.3 allows for an exception to Operational Rule 39-1.4.2.
4. That pursuant to Chapter 22C, Article 9, Code of West Virginia of 1931, as amended, the Commission has jurisdiction over the subject matter embraced in said notice, and the persons interested therein, and jurisdiction to promulgate the hereinafter prescribed Order.

ORDER

Now therefore, based on the Findings of Fact and Conclusions of Law, the West Virginia Oil and Gas Conservation Commission grants an exception to rule 39-1-4.2 to Triad Resources, Inc. for the drilling of the proposed Smith #701, White #702, Shreves #703 and the Howard #704 wells. Furthermore, Triad Resources, Inc. will furnish to the Commission a copy of the bond log and perforating log within thirty days of the completion of the abovementioned wells. In addition, Triad Resources, Inc. shall submit to the Commission an affidavit signed by a principal of the company stating that the well was not and will not at any time in the future be produced, perforated or stimulated in any manner in a formation below the top of the Onondaga formation.

OIL AND GAS CONSERVATION COMMISSION OF THE STATE OF WEST VIRGINIA

By: Barry K. Lay
Barry K. Lay, Commissioner

Dated this 18th day of May, 2007, at Charleston, West Virginia.

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BEFORE THE OIL AND GAS CONSERVATION COMMISSION
OF THE STATE OF WEST VIRGINIA

DOCKET NO. 178
CAUSE NO. 163

ORIGINAL

IN THE MATTER OF THE REQUEST BY TRIAD RESOURCES,
INC., TO OBTAIN APPROVAL FROM THE COMMISSION FOR
EXCEPTION LOCATIONS FOR A FIVE WELL DRILLING
PROGRAM IN LINCOLN AND UNION DISTRICTS, TYLER
COUNTY, WEST VIRGINIA

On the 4th day of April, 2007, beginning at
10:15 a.m., at the offices of the West Virginia
Department of Environmental Protection, 601 57th
Street, SE, Charleston, Kanawha County, West
Virginia, before James D. Nielsen, Court Reporter
and a Notary Public in and for the State of West
Virginia, a hearing was taken in the above-named
action pursuant to notice of the Oil and Gas
Conservation Commission of the State of West
Virginia.

ACCURATE REPORTING SERVICE, INC., &
VIDEO-CONFERENCING CENTER
526 SEVENTH STREET
HUNTINGTON, WEST VIRGINIA 25701

(304) 345-9891 * (304) 522-9637 * (606) 329-2154

1 APPEARANCES:

2 On Behalf of the Oil and Gas Conservation
3 Commission of the State of West Virginia:

4 Barry Lay: Commissioner

5 James Martin

6 Bob Radabugh

7 Tony Gum

8 Cindy Raines

9 Christie Utt, Deputy Attorney General

10

11 On Behalf of Triad Resources, Inc.:

12 Rocky Roberts

13 Kean Weaver

14

15 ALSO PRESENT:

16 Carl Clark

17 Sue Clark

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EXAMINATION:

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1 PROCEEDING

2 MR. LAY: Before the Oil and Gas
3 Conservation Commission of the State of West
4 Virginia in the matter of the request by Triad
5 Resources, Inc., to obtain approval from the
6 Commission for the exception locations for a five
7 well drilling program in Lincoln and Union
8 Districts, Tyler County, West Virginia. This is
9 Docket No. 178, Cause No. 163.

10 Let the record show that present are members
11 of the Commission, Bob Radabugh, Tony Gum, Barry
12 Lay, James Martin. Also represented are Christie
13 Utt, counsel for the Commission and Cindy Raines
14 from staff.

15 I would like to place of record as Exhibit A
16 a copy of the Notice of Hearing with return
17 receipt card. Exhibit B is a copy of the legal
18 advertisement affidavit. And Exhibit C is a copy
19 of the Letter of Request dated March the 7th,
20 2007, signed by Rocky Roberts, along with a map.

21 (Exhibits A, B and C marked for identification.)

22 MR. ROBERTS: I will have additional
23 exhibits with another map and a plat to go in
24 there, so -- to keep in line on what we've got

1 exhibit-wise.

2 MR. LAY: At this time the Commission
3 will take appearances.

4 MR. ROBERTS: Rocky Roberts, Vice
5 President of Explorations, Triad Resources.

6 MR. WEAVER: Kean Weaver, President and
7 CEO, Triad Resources.

8 MR. CLARK: Carl Clark, landowner.

9 MRS. CLARK: Same thing, landowner, Sue
10 Clark.

11 MR. LAY: Will the court reporter please
12 swear the witnesses.

13 (Said witnesses duly sworn.)

14 MR. LAY: Do you want to go ahead and
15 proceed.

16 MR. ROBERTS: Triad is requesting
17 approval from the Oil and Gas Conservation
18 Commission for the exception locations of a five
19 well drilling program in the Lincoln and Union
20 Districts of Tyler County under Docket 178, Cause
21 No. 163.

22 The five wells are to be completed in the
23 shallow Marcellus shale formation and are to be
24 drilled 150 feet into the Onondaga formation to

1 allow for logging and completion operations.
2 Four of the five wells do not meet the spacing
3 requirements imposed on deep wells, therefore
4 Triad is requesting approval from the Commission
5 for the exception to the Rule 39-1.4.2 for the
6 following wells.

7 In that letter there you can see that the
8 wells are the Smith 701, White 702, Shreves 703,
9 and the Howard 705. Let me start with the Smith
10 701.

11 The Smith 701 does not meet the 400 feet
12 spacing from a lease or a unit boundary as shown
13 on the survey or plat attached to the letter; nor
14 does it meet the 3,000 foot spacing from the
15 proposed deep well of the White 702, which you
16 already, Barry, have submitted for the court here
17 this map which has the deep wells that we have
18 gotten exceptions for, plus the proposed well.

19 So you can see on the map the Smith 701 and
20 the White 702 are less than 3,000 feet apart from
21 one another. So therefore I'm going to need an
22 exception for the 3,000 foot rule for both the
23 White 702 and the Smith 701. Also, jumping down
24 the White, it also does not meet the 400 feet

1 spacing of a lease line or a unit boundary.

2 MR. LAY: I'm trying to find on here --
3 I'm sorry, go ahead, I didn't mean to interrupt
4 you.

5 MR. ROBERTS: The Shreves 703, the only
6 exception I'm going to need there is the 400 foot
7 spacing from a unit boundary. It basically kind
8 of stands out by itself out there. There are no
9 wells within 3,000 feet. Granted now, the map I
10 have here, those are 3,000 foot circles drawn
11 around the wells.

12 The Bowen 704, it is more than 400 feet
13 off the unit boundary and greater than 3,000 feet
14 from the existing or proposed deep well. So
15 going into this, I will not need an exception for
16 that unless the Commission deems that I do.

17 The Howard 705, I'm asking for an
18 exception on the 400 foot spacing from the lease
19 or unit boundary, because once again, there are
20 no deep wells within 3,000 feet of that, or
21 proposed.

22 So if I have a need to go through these
23 surveyor plats here -- I have to admit as
24 exhibit -- what you have in front of you, Barry,

1 I don't know how you want it, if you want each of
2 these surveyor plats as an exhibit or if you just
3 want...

4 MR. LAY: I think collectively why don't
5 we put it as Exhibit D to the record. We noticed
6 these as a five well drilling program, so I
7 believe we can do it collectively as one exhibit
8 would be fine.

9 MR. ROBERTS: Okay. When I put this
10 originally together with Cindy, the Bowen, we
11 didn't know exactly how far we were from the
12 lease boundary. I knew I was going to be pretty
13 close, but it happened to fall greater than the
14 400 foot distance there.

15 I shall admit into evidence Exhibit D.

16 MR. LAY: Yeah, we'll accept it as
17 Exhibit D, collectively.

18 (Exhibit D marked for identification.)

19 MR. ROBERTS: If we want to go through
20 each individual -- these plats here, and kind of
21 get a better understanding.

22 MR. LAY: I'm certain we have some other
23 questions. Is there anything else that you want
24 to present?

1 MR. ROBERTS: That is all I have to
2 present. You know, I've gone through this
3 Commission hearing. This is my third time going
4 through this asking for exceptions to these
5 particular type wells that we are drilling, so
6 I'll be happy to answer any of the questions the
7 Commission has before us here concerning...

8 MR. LAY: Yes, we certainly will.

9 Do you have any questions, Mr. --

10 MR. CLARK: Yeah, I don't understand why
11 the Commission would grant a exception like this
12 when they already set a law at how far things had
13 to be. The Triad Corporation, they come on the
14 landowner's property, they have no respect for
15 the landowner. I've got pictures here and a
16 signed contract of what they was supposed to do,
17 and they haven't lived up to their end of the
18 bargain. So I don't understand why the
19 Commission would want to even entertain something
20 like this.

21 Actually, to me, that's breaking the law
22 when you've got a law that says you've got to be
23 3,000 feet, you've got to be 3,000 feet. If
24 anybody wants to look at the contracts or the

1 pictures I've taken here of what my property
2 looks like after a year drilling wells when they
3 come in and didn't even tell me they was coming
4 on my property. The first time I knew it they
5 took me in and told me -- took me out there and
6 said, Here's a flag, that's where we're going to
7 drill, so somebody has been there ahead of us.

8 MR. LAY: Are any of these five wells on
9 your property?

10 MR. CLARK: I don't know where these
11 five wells are, I've never seen a plat.

12 MR. ROBERTS: No, they're not.

13 MR. LAY: They are not on your
14 property.

15 MR. CLARK: I didn't know that, see,
16 that's another thing I wanted to come down and
17 see if they was.

18 MR. LAY: I suspect that your issues
19 probably are not for the Commission, they're more
20 for the Office of Oil and Gas than this
21 Commission.

22 MR. CLARK: I didn't know where to
23 start. It was just a place to start. I've never
24 been to anything like this before.

1 MR. MARTIN: Can we go off the record?

2 MR. LAY: Certainly.

3 (Discussion was held off the record.)

4 MR. LAY: Let's go back on the record.

5 Questions from members of the Commission?

6 MR. GUM: One of the things that I'd
7 like for you to explain, you're allowed 20 feet
8 into the Onondaga but you're asking for 150,
9 would you explain why?

10 MR. ROBERTS: We like to use that for --
11 one is for the logging purposes, so we can log
12 the complete Marcellus section. The Marcellus
13 shale sits right on top of the Onondaga
14 formation, so we are looking to get a complete
15 logging suite across the Marcellus.

16 Also, it allows us to run four and a
17 half below the Marcellus and allows us to
18 effectively complete the entire Marcellus
19 interval. When we put our frack jobs on there,
20 there's extensive cleanup time, fluid to be
21 pumped off of this, so that extra rat hole gives
22 us the ability to effectively produce the well in
23 there. Our intention is not to complete the
24 Onondaga formation.

1 MR. GUM: I understand that.

2 MR. ROBERTS: The intention is just to
3 be able to produce this well the most efficient
4 way possible.

5 MR. GUM: Why the 150? Why didn't you
6 do 100?

7 MR. ROBERTS: Well, the first time --
8 you know, I stated it the last time, the first
9 time I came out here I asked for 100 feet, you're
10 not always going to be able to get exactly your 4
11 1/2 inch casing directly on the bottom, you're
12 usually about 20 feet off of bottom, how your
13 casing tally works out with what your hole is.
14 And, you know, just the first time I asked for
15 100 and --

16 MR. WEAVER: This comes -- 100 foot rat
17 hole.

18 MR. ROBERTS: 100 foot rat hole, but
19 somebody said, Why don't you ask for 150. So the
20 second time I came out and asked for 150.

21 MR. GUM: Now you answered my question.
22 Why not, huh?

23 MR. ROBERTS: Why not.

24 MR. WEAVER: A rat hole is a good thing

1 to have when you have hole problems or lose
2 something in the hole.

3 MR. RADABUGH: Could you get by with 120
4 feet?

5 MR. WEAVER: We are at the mercy of the
6 Commission.

7 MR. ROBERTS: Yeah, I can get by with
8 120 feet. Usually from the top of the Onondaga
9 down to the very top of the Oriskany is about a
10 200 foot interval in there. So I know I'm well
11 shy of the top of the Oriskany, so I'm not
12 infringing upon another deep zone there.

13 So 150 feet, you know, in a lot of these
14 wells, yeah, I have stopped short of 150 feet
15 drilling-wise, you know, it might have been 135
16 feet, just wherever kelly down was. Instead of
17 drilling a half of a kelly, just say, Okay, guys,
18 that's TD. So the 150, you know -- 120, 150,
19 it's not going to make that big of a difference.

20 MR. RADABUGH: My question was just,
21 would you have enough rat hole and everything
22 with 120 feet, say, versus 150, to be able to do
23 what you're wanting to do and log?

24 MR. ROBERTS: Yes.

1 MR. WEAVER: It's kind of fitting the
2 string of pipe in the hole issue, is what it is.
3 If you look at our prior wells we haven't gone
4 exactly 150 in every well.

5 MR. MARTIN: How long are the tools that
6 are giving you a problem?

7 MR. ROBERTS: It depends on what logging
8 company you use. If you use somebody like
9 Schlumberger, typically their logging tool suite
10 is going to be in that 65 to 75 foot range; and
11 with the density, typically about -- about, in
12 the upper part of the tool string there. So if
13 you only had 20 feet of rat hole, so to speak,
14 below the Onondaga, or into the Onondaga, your
15 density may not even start picking up until
16 about -- oh, 15 feet or so into the -- 15, 20
17 feet into the -- from the bottom of the Marcellus
18 there.

19 Weatherford, you know, they have those slim
20 line tools now, the smaller tools. The tool
21 length on that is about 33, 34 feet. So it
22 depends upon who you use for your logging
23 company.

24 MR. LAY: But you still could break

1 those tools up and run individually.

2 MR. ROBERTS: You can, but it's also a
3 function of the time you have in your logging on
4 these. You know, we're all operators here, it
5 also starts eating into break time too.

6 MR. WEAVER: I think the other
7 consideration you have to look at too is after
8 the well is in production, that rat hole provides
9 a place if you lose something in a hole you're
10 not fishing in 6,000 feet. There's a cost
11 consideration there. So I guess the reality of
12 it is, is a rat hole is a good thing when you're
13 having hole problems. I guess if we're not
14 infringing on anything else that's deeper, the
15 more rat hole you have the better.

16 MR. MARTIN: My question is, what I was
17 trying to find out, how long is the entire
18 length -- I mean, you're going in there with one
19 run, that's the problem, right?

20 MR. ROBERTS: Yes. We're going in one
21 run, yes.

22 MR. MARTIN: And that whole tool length
23 is 70 feet, give or take?

24 MR. ROBERTS: Yes. On something like

1 the Schlumberger -- the Weatherford tool length
2 is a lot shorter, they have smaller slim-line
3 tools.

4 MR. MARTIN: How thick is the Onondaga
5 here?

6 MR. ROBERTS: From the Onondaga to the
7 top of the Oriskany?

8 MR. MARTIN: No, how thick is the
9 Onondaga itself?

10 MR. ROBERTS: Oh, jeez, if you want to
11 look at the Onondaga down to the Helderberg or
12 whatever, your Onondaga thickness -- from the top
13 of the Onondaga to the top of the Oriskany is 200
14 feet. You know, if you want to look at all the
15 way down to the top of your Salina, you're
16 pushing about 600 feet from the top of the
17 Onondaga to the Salina there.

18 MR. LAY: No, I think his question is,
19 is that all Onondaga or is there Huntersville in
20 there?

21 MR. ROBERTS: There is no Huntersville
22 in there.

23 MR. LAY: This is all Onondaga?

24 MR. ROBERTS: It's all Onondaga.

1 MR. LAY: No chert?

2 MR. ROBERTS: Well, you see chert
3 nodules and stuff like that within there, I mean,
4 but, you know, when you're looking at samples
5 you're seeing some chert nodules.

6 MR. MARTIN: I'm still not clear. How
7 thick is the Onondaga?

8 MR. ROBERTS: I'm going to say it's 200
9 feet thick. There is no Huntersville Chert, is
10 what you're saying, no, there is no Huntersville
11 Chert.

12 MR. MARTIN: You need 70 feet of hole
13 for your tools and you want some rat hole,
14 right?

15 MR. WEAVER: What you need for pick up,
16 before you start seeing data on your logging.

17 MR. ROBERTS: Your gamma ray or your
18 density is going to be at about the middle,
19 you're looking 35 feet, like on a Schlumberger
20 tool, you're looking --

21 MR. WEAVER: You're at 105 feet before
22 you pick up data.

23 MR. LAY: The only problem is you're
24 picking up Onondaga data --

1 MR. ROBERTS: Onondaga data.

2 MR. LAY: -- it's not going to do you
3 any good. Your pick up, you're only looking at
4 five feet and you start seeing readings. If your
5 tool is 70 feet long and you have an 80 foot rat
6 hole you can see all the Marcellus.

7 MR. ROBERTS: Yes.

8 MR. MARTIN: I guess what I'm struggling
9 with is figuring how we go from 70 feet and some
10 rat hole on top of that to 150. You made the
11 comment, the more the better, you know, my
12 question would be if the thickness of the
13 Onondaga wasn't an issue, I mean, you could ask
14 for 500 feet, right?

15 MR. ROBERTS: But that would take us
16 into the --

17 MR. MARTIN: But I'm saying if the
18 Onondaga thickness wasn't an issue, if you had
19 500 feet of Onondaga would you ask for 300
20 foot --

21 MR. ROBERTS: For the completion of the
22 Marcellus?

23 MR. MARTIN: Yes.

24 MR. ROBERTS: No, no.

1 MR. MARTIN: I'm just having a bit of
2 confusion about why we have to go to 150 -- I
3 haven't heard why we have to go to 150 feet
4 versus 80 feet or 90 feet or maybe 100 feet,
5 that's what I'm not hearing.

6 MR. LAY: Let me explain this. The
7 Commission is wrestling with this because we've
8 had operations come in and say, We can get by
9 with 75 feet. We've had operations come in and
10 say, We need 150 feet. And we've not settled on
11 a norm. We've granted 75 without too much
12 question. We've had operators ask for 100, we've
13 granted that. We've had operators ask for 150
14 and we've granted 120. I don't think we've
15 granted 150.

16 MR. MARTIN: No, and we've had operators
17 that say they can get by on 75 and ask for 100.

18 MR. WEAVER: We got 150 last year.

19 MR. ROBERTS: We got 150 last year.

20 MR. MARTIN: And that's what I don't
21 understand.

22 MR. WEAVER: You know what, that's going
23 to lead to a new conversation I'd like to have on
24 the record at the end here. Because I think we

1 have a little different perspective about this
2 whole Onondaga top thing, because I think there's
3 a natural resource base here that's being
4 overlooked. We can talk about that when we're
5 done.

6 MR. ROBERTS: We were granted 150 feet
7 last year, so just the natural proceeding we
8 asked for the same thing that we asked for last
9 year.

10 MR. LAY: I didn't realize we granted
11 150.

12 MS. RAINES: I didn't either.

13 MR. RADABUGH: I can remember when Rocky
14 was talking about that somebody said back in the
15 beginning, Well, why didn't you ask for 150, I
16 can remember that happening back --

17 MR. WEAVER: There was some trepidation
18 at the beginning to come before the Commission
19 and ask for the variance, okay, because we were
20 aware we were going to have to get into the
21 Onondaga some depth at that depth in order to be
22 able to work. So all we're trying to do is
23 create space to work here, is all we're trying to
24 do.

1 MR. LAY: I think all the Commission is
2 concerned with is, you know, once we set a
3 precedence on how much we give in other areas --

4 MR. ROBERTS: Yeah.

5 MR. LAY: -- and I'm not so concerned
6 about this area, because -- I mean that because
7 we're looking at a zone that is not productive in
8 the area, but there are areas that if we granted
9 150 feet they would be drilling through the
10 Oriskany.

11 MR. ROBERTS: Yes.

12 MR. LAY: So that's our concern.

13 MR. ROBERTS: Yes. My intentions are
14 not, you know, to use these exceptions to go down
15 and take a look at the Oriskany by no means. My
16 asking for these exceptions is just to give me an
17 adequate rat hole so I can work in this well.

18 MR. WEAVER: We're not trying to fit
19 pipe in a hole and all that kind of stuff.

20 MR. LAY: Again, like I say, those
21 things can be done by adjusting your logging
22 tool, you can run pup joints rather than run a
23 full joint in your string, you can make things
24 work.

1 MR. ROBERTS: Uh-huh.

2 MR. LAY: I guess where we're getting to
3 is we need to determine what the Commission feels
4 is acceptable norm for what we're going to grant.

5 MR. ROBERTS: Yes, it's become more of a
6 statewide issue, I understand, and yeah, there
7 has got to be some type of cutoff here upon what
8 you're going to allow in certain areas.

9 MR. RADABUGH: I think we have to look
10 at it from area to area or region to region.

11 MR. ROBERTS: Yes.

12 MR. LAY: To some extent. Like I say,
13 because there are places that 80 or 90 feet put
14 you into the Oriskany.

15 MR. ROBERTS: You get down around Logan
16 and stuff like that, you know, it's a lot
17 shallower, everything is thinning up in that
18 area, absolutely.

19 MR. LAY: So that's our concern. I'll
20 pass that along.

21 MR. MARTIN: I did have another
22 question, Barry, different than that. Maybe I
23 didn't understand the testimony.

24 The Shreves 703 and the Bowen 704,

1 there's no spacing issue there?

2 MR. ROBERTS: The only spacing on the
3 Shreves is the 400 foot spacing from the unit
4 line or a lease line. There are no deep wells or
5 proposed deep wells that meet the 3,000 feet.
6 The circles that you see around those wells, that
7 is a 3,000 foot circle.

8 MR. MARTIN: Right, and you've got two
9 permits, the Shreves 703 and the Bowen 704 --

10 MR. ROBERTS: Yes.

11 MR. MARTIN: -- would be within 3,000
12 feet of each other.

13 MR. ROBERTS: No. Well --

14 MR. LAY: Those are 6,000.

15 MR. ROBERTS: Those are 6,000 feet,
16 yes.

17 MR. MARTIN: I'm sorry.

18 MR. ROBERTS: Yeah, that's a 3,000 foot
19 radius around the well.

20 MR. MARTIN: I got you. My mistake.

21 MR. ROBERTS: That's why I wanted to --
22 that kind of looks confusing because you've got
23 circles overlapping one another there. The only
24 two that meet that are the Smith 701 and the

1 White 702, and those wells are roughly about
2 twenty-two, 2,300 feet apart from one another.
3 So they fall within that 3,000 foot spacing.

4 MR. LAY: Any more questions, Marty?

5 MR. MARTIN: No.

6 MR. LAY: So based upon what you're
7 saying, the 704 well does not require any action
8 from the Commission because you meet the 3,000
9 foot spacing requirement and you meet the 400
10 foot?

11 MR. ROBERTS: Exactly. We're 615 feet
12 off of the nearest line.

13 MR. LAY: So that's going to require
14 no action?

15 MR. ROBERTS: That's going to require no
16 action, that's correct.

17 MR. LAY: I will ask the question,
18 you've asked for 150 feet, what we work out
19 remains to be seen yet, but to your knowledge are
20 there any wells that are producing within the
21 area of these wells from the Onondaga?

22 MR. ROBERTS: No, sir, none are
23 producing. The wells that you see in black there
24 that have API numbers, those are some of the

1 wells that were granted exception to last year,
2 and we did not encounter any shows in the
3 Onondaga, and they all are producing out of the
4 Marcellus, so...

5 MR. LAY: And you've testified that the
6 Oriskany is approximately 200 --

7 MR. ROBERTS: 200 feet from the top of
8 the Onondaga.

9 MR. LAY: -- feet from the top of the
10 Onondaga?

11 MR. ROBERTS: Yes.

12 MR. LAY: With regard to the wells that
13 you're requesting 400 feet spacing from the unit
14 boundaries, are there reasons that you cannot
15 drill 400 foot from the unit boundaries?

16 MR. ROBERTS: Terrain issues. There is
17 some terrain, and also spacing upon -- I'm trying
18 to optimize how many wells I can get within, you
19 know, an area there, and also have some future
20 drilling in there.

21 MR. WEAVER: Also, there's a completion
22 issue, we're fracking these wells with 20,000
23 barrels of water, 10,000 barrels at a time. So
24 our location sizes are bigger than what's normal

1 in order to get 10,000 barrels of water on site.
2 That dictates geographically where we go.

3 MR. ROBERTS: Looking for flat areas.

4 MR. LAY: Let's just address them as we
5 go. The Smith, you're 130 feet; is that correct,
6 the lease boundary?

7 MR. ROBERTS: Yes.

8 MR. LAY: Now, the adjacent lease, do
9 you have control of it?

10 MR. ROBERTS: No, I do not. No, I do
11 not.

12 MR. LAY: So you're 130 feet.

13 Okay, the 702 Well, the White, if I read
14 this correctly are you 340 feet?

15 MR. ROBERTS: Yes.

16 MR. LAY: There again, that issue would
17 be because of?

18 MR. WEAVER: Terrain.

19 MR. ROBERTS: Terrain, yeah.

20 MR. LAY: The next one is the Shreves
21 703, and 290 feet; is that correct?

22 MR. ROBERTS: That's correct.

23 MR. LAY: Again, the reason for that
24 one?

1 MR. WEAVER: The terrain.

2 MR. ROBERTS: It's the terrain. There
3 was a point behind the gentleman's house, he did
4 not like to have the well drilled there. He also
5 is a surface and mineral rights owner, he
6 preferred not to have a location there behind the
7 house. And then he has farmland down below, and
8 access to that is very difficult down to the
9 farmland, and he just wanted me to stay out of
10 his crop land. So this was kind of a meeting of
11 the landowner and Triad and a happy medium spot
12 here.

13 MR. LAY: And the Bowen doesn't require
14 anything?

15 MR. ROBERTS: Yeah.

16 MR. LAY: The Howard 705, we're --

17 MR. ROBERTS: 305 feet. Once again, the
18 farmer wanted me to stay out of his farmland
19 area, and asked if we could just move this
20 location down at the end of the point there to
21 stay out of his area that he farms.

22 MR. LAY: I understand your issues
23 concerning the logging tools. I understand that
24 it is more convenient to run a stack -- string of

1 tools, I understand the issues with having enough
2 rat hole to be able to produce the well.

3 I'm going to ask, what is the absolute
4 positively minimum amount of rat hole that you
5 require in order to produce this well?

6 MR. WEAVER: Can I ask a question?

7 MR. LAY: Sure.

8 MR. WEAVER: Why does this seem to be --
9 I sense a concern by the Commission that somebody
10 is going to do something illegal. I guess my
11 concern is why the rat hole is 150 feet or 100
12 feet, at 5,500 to 6,000 feet let's say, seems to
13 be a concern?

14 MR. LAY: That's not it at all, sir.

15 MR. WEAVER: Okay.

16 MR. LAY: I'm asking what you actually
17 have to have?

18 MR. WEAVER: We would like to have 150
19 feet.

20 MR. LAY: That was not my question. I
21 asked you how much you actually had to have, not
22 how much you're asking for. How much do you
23 actually have to have?

24 MR. WEAVER: I will answer that

1 question, but this is a topic I wanted to talk
2 about at the end when we were done here, but I
3 believe that any geologic data that can be
4 derived from well logs and provided to the State
5 can potentially provide an opportunity for
6 somebody in the future to develop -- potentially
7 come in and get deep well permits to develop
8 something that may be deeper than we may provide
9 to the State on our well logs.

10 If you were asking me, I would say that
11 every well up there should be allowed to
12 penetrate the Oriskany for data purposes only. I
13 think there's a natural resource base here that
14 exists in that part of the state. And we proved
15 it in Tyler County on our OSI 601, we permitted a
16 deep well, for no other reason than we could meet
17 the spacing requirements. We went in there and
18 serendipitously found a commercial Oriskany
19 well.

20 And so my opinion is, I view this -- I
21 realize you have legislative issues and
22 legislative reasons that ties this Commission's
23 hands as to why you can't say to us, Just drill
24 through the Oriskany, log the data, run a casing

1 through it, but don't touch the Oriskany, I
2 understand why you can't do that. And I'd like
3 to talk about that. I think there's reasons to
4 talk about this when we're done here.

5 But I think any one foot of log data --
6 as much log data as we can get out of those holes
7 is provided as a future resource base in the
8 state. So I'm not trying to fight you except to
9 say that I think any Huntersville Chert data that
10 we can provide through our well logs if we drill
11 that hole might provide an opportunity for
12 somebody else down the road. And that's why I
13 say 150 is what we'd like.

14 The answer, 100 feet. But I think the
15 more data we can get the more it benefits this
16 industry. And I think data in this part of the
17 world is important. But to answer your question,
18 100 feet.

19 MR. LAY: I have no further questions.

20 MR. GUM: Nothing for me.

21 MR. RADABUGH: I don't have any
22 questions at this point.

23 MR. LAY: Christie?

24 MS. UTT: No.

1 MR. LAY: Okay. We'll go off the
2 record.

3 (Break.)

4 MR. LAY: Do we have a motion?

5 MR. RADABUGH: I'll make a motion that
6 in regards to the request made by Triad for
7 exception locations, my motion is as follows:
8 For the Smith 701, White 702, Shreves 703, Howard
9 705, they be allowed to drill a maximum of 100
10 feet into the Onondaga, which is 80 feet beyond
11 the allowed 20 foot penetration.

12 No. 2, allow exception location boundary
13 line spacing for all four of the above-named
14 wells.

15 No. 3, allow the exception to the 3,000
16 foot spacing to the Smith 701 and White 702.
17 Triad is to provide a copy of the well logs and
18 perf logs and an affidavit signed by a company
19 officer that states that they did not perforate
20 and are not producing from the Onondaga
21 formation.

22 If in the future you decide you want to
23 perf and produce from the Onondaga you must
24 reappear before the Commission and ask for that

1 request at that time.

2 MR. GUM: I second that motion.

3 MR. LAY: It's been properly moved and
4 seconded. Any further discussion?

5 All those in favor of the motion, aye.

6 THE COMMISSION: Aye.

7 MR. LAY: Opposed, nay.

8 The motion carries. Anything further
9 for the record?

10 MR. WEAVER: Yes, real quick, something
11 to think about, from our activities in the
12 Marcellus we believe that the Marcellus in
13 western, northwestern West Virginia is going to
14 prove to be a significant natural gas resource
15 base in this state. That comes from our science
16 and our geology and our production and just
17 starting to understand the differences in the
18 Marcellus formation in different parts of the
19 state.

20 With that I think there are other operators
21 that are clearly realizing the same. I think
22 that going forward, this hearing process is going
23 to become onerous to all of you because of the
24 manner and where this formation lies in light of

1 where the deep well statutes currently exist in
2 this state.

3 Having said that, we also believe that for
4 somebody to be drilling and spending the kind of
5 money they're spending to drill, say, 5,000,
6 6,000 feet in the ground, and not being able to
7 drill the Oriskany or through the Devonian
8 section and provide the data and get the data, I
9 think is foolhardy on everybodys' behalf, because
10 I think the Oriskany is potentially another
11 resource base in that part of West Virginia, but
12 I think the data has to be gathered and supplied
13 to the state through the well records as we're
14 required to provide.

15 I would go so far as to state that perhaps a
16 solution to all of this would be to designate
17 specific counties where a deep well is to the
18 bottom of the Devonian. I know that requires
19 legislation in the state, but I will give it to
20 you in simple terms.

21 The Department of Natural Resources does a
22 very good job of putting out a color coordinated
23 turkey hunting map every year, it tells you what
24 counties you can hunt in and when and why and

1 how. I don't think it's out of the question that
2 there couldn't be legislation introduced that
3 would allow a deep well to be defined as any
4 drilled to the bottom of the Devonian or to the
5 top of the Silurian as we discussed, in certain
6 counties, or maybe certain districts, that would
7 allow this hearing process to become simplified
8 for everybody involved.

9 I realize there is geologic reasons for
10 certain parts of the state for storage or higher
11 pressures as you get east and things like that in
12 the Oriskany, but I think in some of these
13 western, northwestern counties it would provide
14 the ability to potentially develop another
15 resource base or potentially storage space in the
16 Oriskany.

17 I only bring this up because I think the
18 laws, when they were written, with the deep well
19 being defined as the top of the Onondaga, were
20 probably well founded at the time; but I think as
21 the production starts moving deeper and this
22 Marcellus play starts to expand, I think those
23 laws need to be looked at, because I'm not sure
24 the top of the Onondaga would be something that

1 has application across the state and something
2 needs to be considered. Because I think this
3 Commission is going to see a lot more of these
4 hearings next year in light of this Marcellus.
5 And maybe you don't mind coming to all
6 these hearings.

7 I know what you're wrestling with, you're
8 wrestling with how do you decide if it's 50 foot,
9 150 feet, or what it is. But I will also say I
10 think the Oriskany is a resource base.
11 Everywhere we drill, if we were allowed, we would
12 penetrate the Oriskany, get the well log data and
13 case it off, even if it was a deep well. If
14 you'd allow us to drill through the Oriskany and
15 allowed your inspector to be there when we
16 perforate to show that we're not perforating the
17 Oriskany, every single Marcellus Well we drilled
18 we would drill through the Oriskany, log it,
19 provide the data to the state and go out and
20 complete the Marcellus.

21 I think that's something that needs to be
22 considered. Because again, I think there is two
23 things going on. No. 1, we need to develop more
24 natural gas in the state, and No. 2, there is a

1 shortage of storage space in this country and
2 it's going to get worse. This state has been a
3 significant player in the natural gas storage
4 business in the eastern United States, and that's
5 all I have to say.

6 MR. RADABUGH: I think one way to
7 eliminate it, just start getting deep well
8 permits for all your stuff and drill.

9 MR. LAY: You can drill wherever you
10 want to.

11 MR. WEAVER: Well, the issue you run
12 into is the 3,000 foot spacing --

13 MR. LAY: That's the reason for the
14 legislation.

15 MR. WEAVER: Right. I guess the issue
16 I'm saying is I think there's a huge difference
17 between acquiring the data and producing the
18 well. And my point is --

19 MR. LAY: I think you've made your
20 request known and I think that's beyond the scope
21 of this Board.

22 MR. WEAVER: My request is just food for
23 thought. I've taken the same up with Charlie
24 Bird. And I just think it's something as play

1 develops it's going to be something that needs to
2 be considered.

3 MR. LAY: Is there anything else germane
4 to the Board?

5 MR. GUM: Nothing for me.

6 MR. LAY: Go off the record.

7 (This hearing concluded at 11:25 a.m.)
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24

1 STATE OF WEST VIRGINIA,
2 COUNTY OF KANAWHA, to-wit:
3

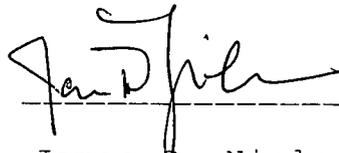
4 I, James D. Nielsen, Court Reporter and a
5 notary public within and for the county and state
6 aforesaid, duly commissioned and qualified, do
7 hereby certify that the foregoing hearing before
8 the Oil and Gas Conservation Commission of the
9 State of West Virginia was duly taken by and
10 before me at the time and place specified in the
11 caption hereof.

12 I do further certify that the said hearing
13 was correctly taken by me in stenotype notes,
14 that the same were accurately written out in full
15 and reduced to typewriting; and that said
16 deposition is a true record of the hearing.

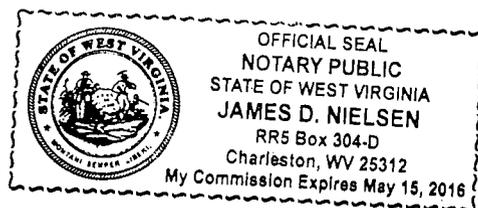
17 I do further certify that I am neither
18 attorney or counsel for, not related to or
19 employed by, any of the parties to the action in
20 which this hearing is taken, and further that I
21 am not a relative or employee of any attorney or
22 counsel employed by the parties hereto or
23 financially interested in this action.

24 My commission expires May 15, 2016.

Given under my hand this 4th day of May,
2007.



James D. Nielsen
Court Reporter/Notary Public



SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.



Triad Resources, Inc.
 P O Box 430
 Reno, OH 45773

COMPLETE THIS SECTION ON DELIVERY

A. Signature

Kathy Tucker Agent
 Addressee

B. Received by (Printed Name)

Kathy Tucker

C. Date of Delivery

3/19/07

Is different from item 1? Yes

Delivery address below: No

3. Service Type

- Certified Mail Express Mail
- Registered Return Receipt for Merchandise
- Insured Mail C.O.D.

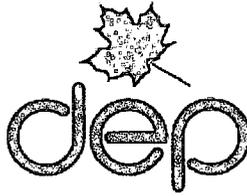
4. Restricted Delivery? (Extra Fee)

Yes

2. Article Number

(Transfer from service label)

7099 3400 0018 2239 8399



west virginia department of environmental protection

Oil and Gas Conservation Commission
601 57th Street, SE
Charleston, West Virginia 25301

Joe Manchin III, Governor
www.wvdep.org

BEFORE THE OIL AND GAS CONSERVATION COMMISSION
OF THE STATE OF WEST VIRGINIA

IN THE MATTER OF THE REQUEST BY
TRIAD RESOURCES, INC. TO OBTAIN
APPROVAL FROM THE COMMISSION FOR
EXCEPTION LOCATIONS FOR A FIVE WELL
DRILLING PROGRAM IN LINCOLN AND
UNION DISTRICTS, TYLER COUNTY, WEST
VIRGINIA.

DOCKET NO. 178

CAUSE NO. 163

NOTICE OF HEARING

Triad Resources, Inc. (Triad) has requested the Commission review and approve a five well drilling program in Tyler County. The proposed wells are to be completed in the shallow Marcellus Shale formation; however, Triad proposes to drill 150' into the Onondaga formation to allow for logging and completion operations. By definition, WV Code 22C-9-2 states that drilling into the Onondaga formation constitutes a deep well. The proposed wells *do not* meet the spacing requirement imposed on deep wells; therefore Triad has requested approval from the Commission for exception to Rule 39-1.4.2. The matter is scheduled for hearing as stated:

DATE: April 4, 2007

TIME: 10:00 a.m.

PLACE: Department of Environmental Protection
Oil and Gas Conservation Commission
601 57th Street, SE
Charleston, WV 25304

OIL AND GAS CONSERVATION COMMISSION
OF THE STATE OF WEST VIRGINIA

By: Barry K. Lay
Barry K. Lay, Commissioner

Dated this 14th day of March, 2007, at Charleston, West Virginia.

Promoting a healthy environment.





west virginia department of environmental protection

Oil and Gas Conservation Commission
601 57th Street, Charleston, WV 25304

Joe Manchin III, Governor
Stephanie R. Timmermeyer, Cabinet Secretary
www.wvdep.org

March 15, 2007

Tyler Star News
Attention: Legal Ad
P O Box 403
Middlebourne, WV 26175

RE: Legal advertisement

Dear Sir:

Please publish the enclosed "Notice of Hearing" as a legal advertisement on Wednesday, March 21, and again on Wednesday, March 28, 2007. Please send invoice and certification to:

Oil and Gas Conservation Commission
Attention: Cindy Raines
601 57th Street, SE
Charleston, WV 25304

If you have any questions, please call me at 304.926.0499, ext 1656.

Sincerely,

Cindy Raines
Adm. Secretary

encl:

Promoting a healthy environment.



TRIAD

P.O. Box 430 • Reno, Ohio 45773-0430 • (740) 374-2940 • FAX (740) 374-5270

Cindy Raines
Conservation Commission
WVDEP Office of Oil and Gas
601 57th Street, SE
Charleston, WV a. 25304-2345

March 7, 2007

RE: Request approval from Commission for exception to rule 39-1-4.2

Dear Cindy,

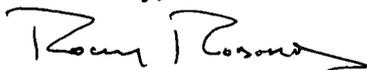
Triad Resources, Inc. recently requested a hearing with the Commission for the establishment of special field rules for the purpose of drilling wells into the Onondaga Formation in order to complete the Marcellus Shale in Pleasants and Tyler Counties. Triad Resources, Inc. is notifying the Commission to pull the request for this hearing. Triad wishes to take a different request to the Commission to drill these wells.

Therefore, Triad Resources, Inc. is requesting the Commission review and approve a five well drilling program in Tyler County. The proposed wells are to be completed in the shallow Marcellus Shale formation. Triad proposes to drill 150 feet into the Onondaga formation to allow for logging and completion operations. By definitions, WV Code 22C-9-2 states that drilling into the Onondaga formation constitutes a deep well. The proposed locations do not meet the spacing requirements imposed on deep wells; therefore Triad is requesting approval from the Commission for exception to rule 39-1-4.2.

The request for exception is to drill 150 feet into the Onondaga formation, the 400 feet from a lease line and the 3000 feet spacing between deep wells. The five proposed wells will require an exception to some of these rules under rule 39-1-4.2. Triad has provide a map showing the proposed locations of the five wells and the location of any deep well presently producing or capable of producing as a deep well. Tim Roush is currently surveying the five drill sites. Triad will provide the Commission with copies of these plats at the hearing.

Please inform me of the date for the hearing. Should you need any additional data feel free to call me at 740-374-2940 ext. 13.

Sincerely,



Rocky Roberts
Triad Resources, Inc.
Vice President Exploration and Development



TRIAD

P.O. Box 430 • Reno, Ohio 45773-0430 • (740) 374-2940 • FAX (740) 374-5270

WVDEP
Oil and Gas Conservation Commission
601 57th Street, SE
Charleston, WV 25304

April 4, 2007

RE: Docket No. 178 Cause No. 163

Triad Resources, Inc. is requesting approval from the Oil and Gas Conservation Commission for exception locations for a five well drilling program in Lincoln and Union Districts, Tyler County, West Virginia under Docket No. 178 Cause No. 163. The five wells are to be completed in the shallow Marcellus shale formation and are to be drilled 150 feet into the Onondaga formation to allow logging and completion operations. The four of the five wells do not meet the spacing requirements imposed on deep wells.

Therefore Triad Resources, Inc. is requesting approval from the Commission for exception to Rule 39-1.4.2 for the following wells:

Wells and Exceptions Requested

Smith #701

1. 400 foot spacing from lease/unit boundary
2. 3000 feet spacing from proposed deep well White #702

White #702

1. 400 foot spacing from lease/unit boundary
2. 3000 feet spacing from proposed deep well Smith #701

Shreves #703

1. 400 foot spacing from lease/unit boundary

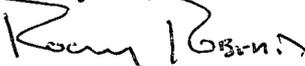
Bowen #704

No exception required well is more than 400 feet from lease/unit boundary and greater than 3000 feet from any deep well.

Howard #705

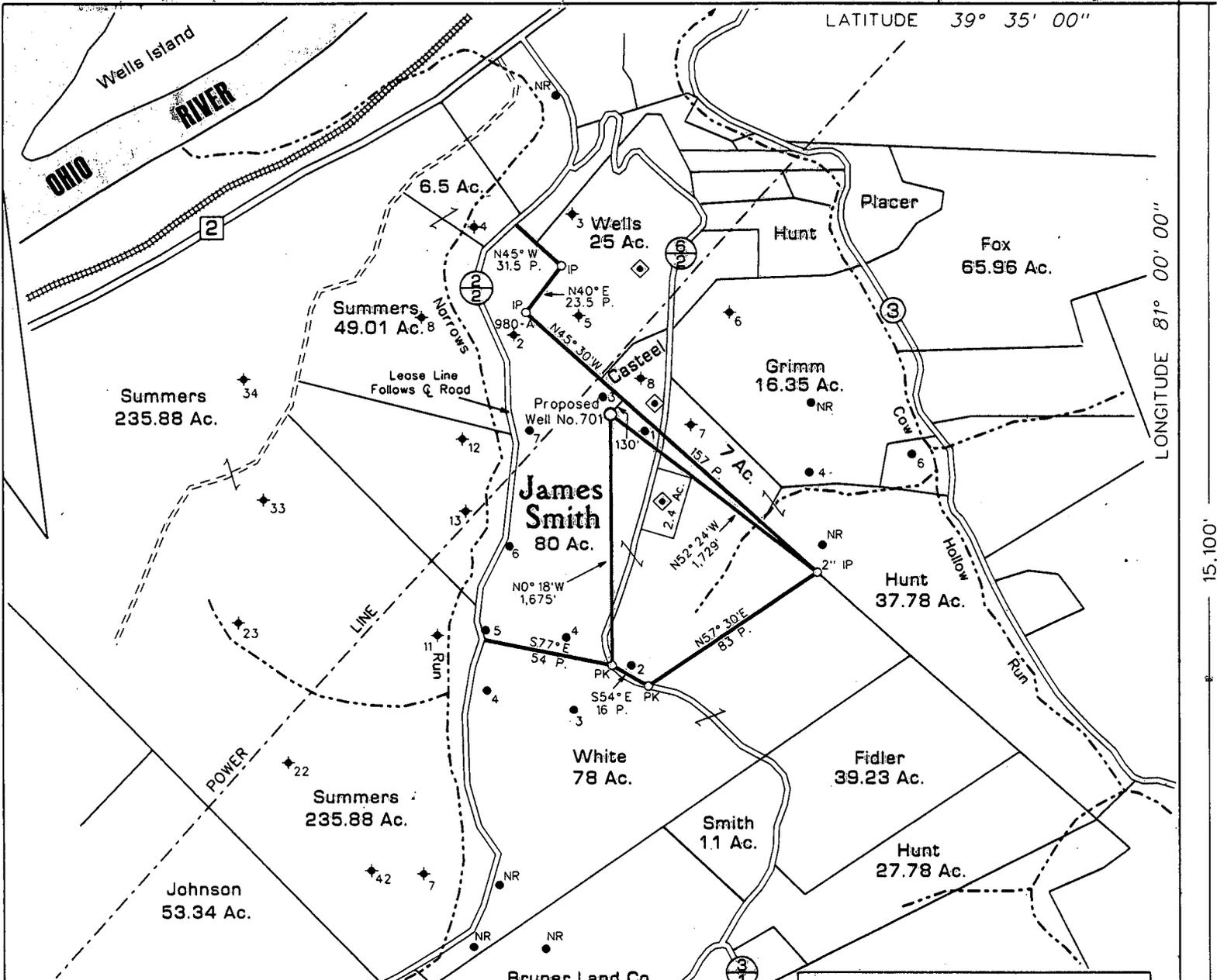
1. 400 foot spacing from lease/unit boundary.

Rocky Roberts



Vice President Exploration and Development
Triad Resources, Inc.





LONGITUDE 81° 00' 00"

15,100'

Latitude - 39° 32' 30.7"

LOCATION REFERENCES
(Magnetic Bearing - Slope Distance)

N34° E 103' 5" Elm
N12° W 110" 6" Elm

DEEP WELL NOTES

1. NORTH LEASE BOUNDARY IS LOCATED LESS THAN 400' FROM PROPOSED WELL.
2. THERE ARE NO PRODUCING DEEP WELLS LOCATED LESS THAN 3000' FROM PROPOSED WELL.

NOTES

- TIE LINES SHOWN ARE REFERENCED TO STATE PLANE GRID NORTH (WV NORTH ZONE, NAD 27).
- SURFACE OWNER INFORMATION FROM THE RECORDS OF THE TYLER COUNTY ASSESSOR'S OFFICE.
- LAT./LONG. AND TIE LINES ESTABLISHED BY DGPS (SUB-METER MAPPING GRADE.)
- PROPERTY DESCRIPTION FROM DEED IN DB 253 PG 408.

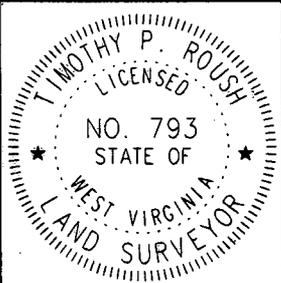
◆ - DENOTES A POSSIBLE WATER SUPPLY SOURCE.
(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS

7.5' Topo

FILE NO. 113-67
DRAWING NO. 1
SCALE 1" = 1000'
MINIMUM DEGREE OF ACCURACY Sub-Meter
PROVEN SOURCE OF ELEVATION DGPS Survey

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 MINES.

(SIGNED) *Timothy P. Roush*
TIMOTHY P. ROUSH PS 793



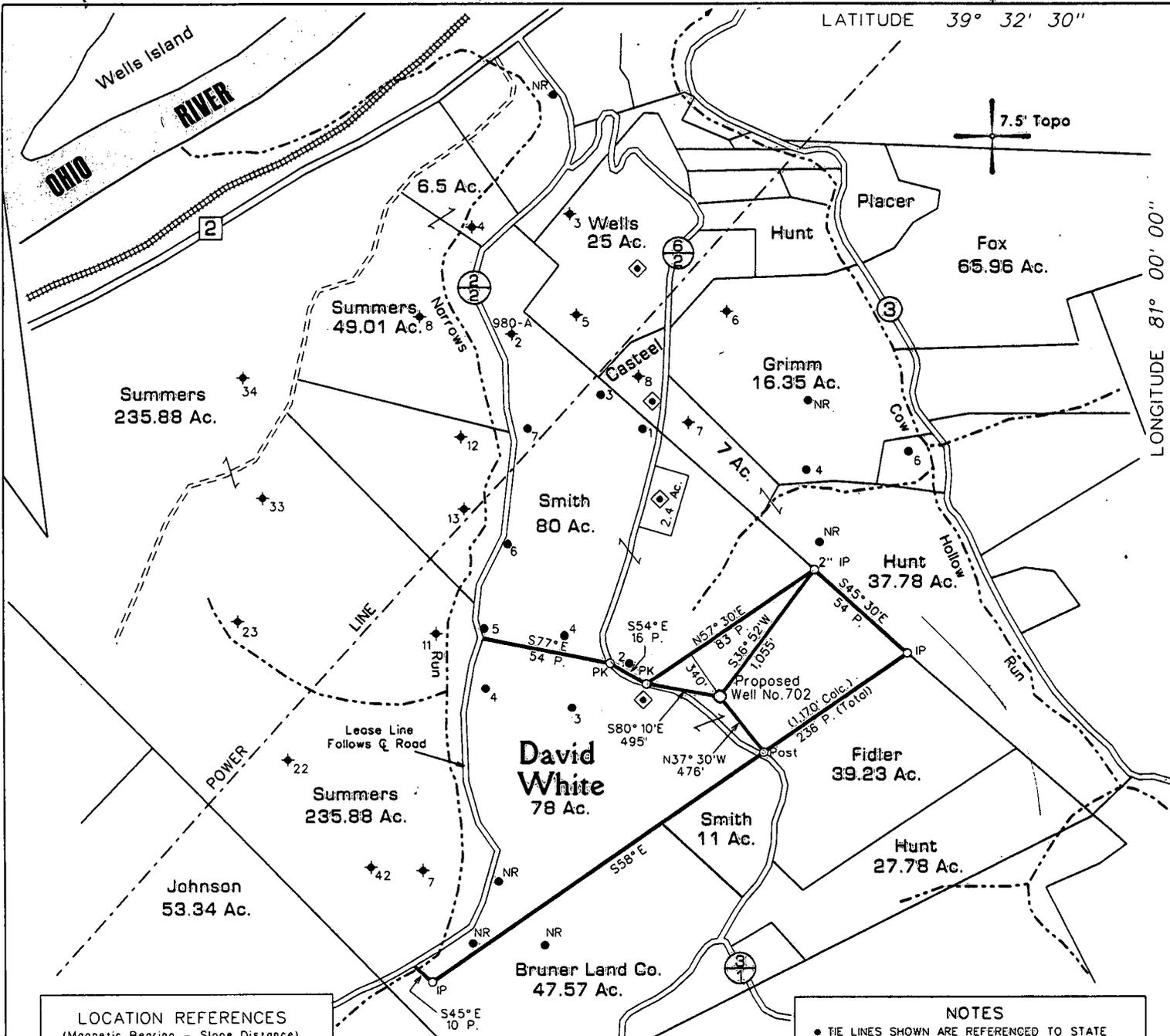
WEST VIRGINIA
Division of Environmental Protection
Office of Oil and Gas
601 57th Street
Charleston, West Virginia 25304



DATE March 12, 2007
FARM Smith NO. 701
API WELL NO. 47-095

WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL
(IF "GAS") PRODUCTION STORAGE DEEP SHALLOW
LOCATION: ELEVATION 983' WATERSHED Narrows Run
DISTRICT Lincoln COUNTY Tyler
QUADRANGLE New Matamoras 7.5'
SURFACE OWNER James & Judy Smith ACREAGE 80 Ac. (Total)
OIL & GAS ROYALTY OWNER James & Judy Smith LEASE ACREAGE 80 Ac.
LEASE NO. _____
PROPOSED WORK: DRILL 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 Marcellus Shale ESTIMATED DEPTH 6,200'
WELL OPERATOR Triad Resources, Inc. DESIGNATED AGENT Kimberly Arnold
ADDRESS P.O. Box 430 ADDRESS P.O. Box 154
Reno, Ohio 45773 Waverly, WV 26184

FORM IV-6



LOCATION REFERENCES
(Magnetic Bearing - Slope Distance)

S4° W 142' Post
S32° W 100' 36" White Oak

DEEP WELL NOTES

- 1. NORTH LEASE BOUNDARY IS LOCATED LESS THAN 400' FROM PROPOSED WELL.
- 2. THERE ARE NO PRODUCING DEEP WELLS LOCATED LESS THAN 3000' FROM PROPOSED WELL.

NOTES

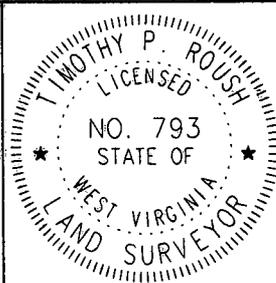
- TIE LINES SHOWN ARE REFERENCED TO STATE PLANE GRID NORTH (WV NORTH ZONE, NAD 27).
- SURFACE OWNER INFORMATION FROM THE RECORDS OF THE TYLER COUNTY ASSESSOR'S OFFICE.
- LAT./LONG. AND TIE LINES ESTABLISHED BY DGPS (SUB-METER MAPPING GRADE.)
- PROPERTY DESCRIPTION FROM DEED IN DB 336 PG 94.

◆ - DENOTES A POSSIBLE WATER SUPPLY SOURCE.
(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS

FILE NO. 113-67
 DRAWING NO. 1
 SCALE 1" = 1000'
 MINIMUM DEGREE OF ACCURACY Sub-Meter
 PROVEN SOURCE OF ELEVATION DGPS Survey

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 MINES.

(SIGNED) *Timothy P. Roush*
 TIMOTHY P. ROUSH PS 793



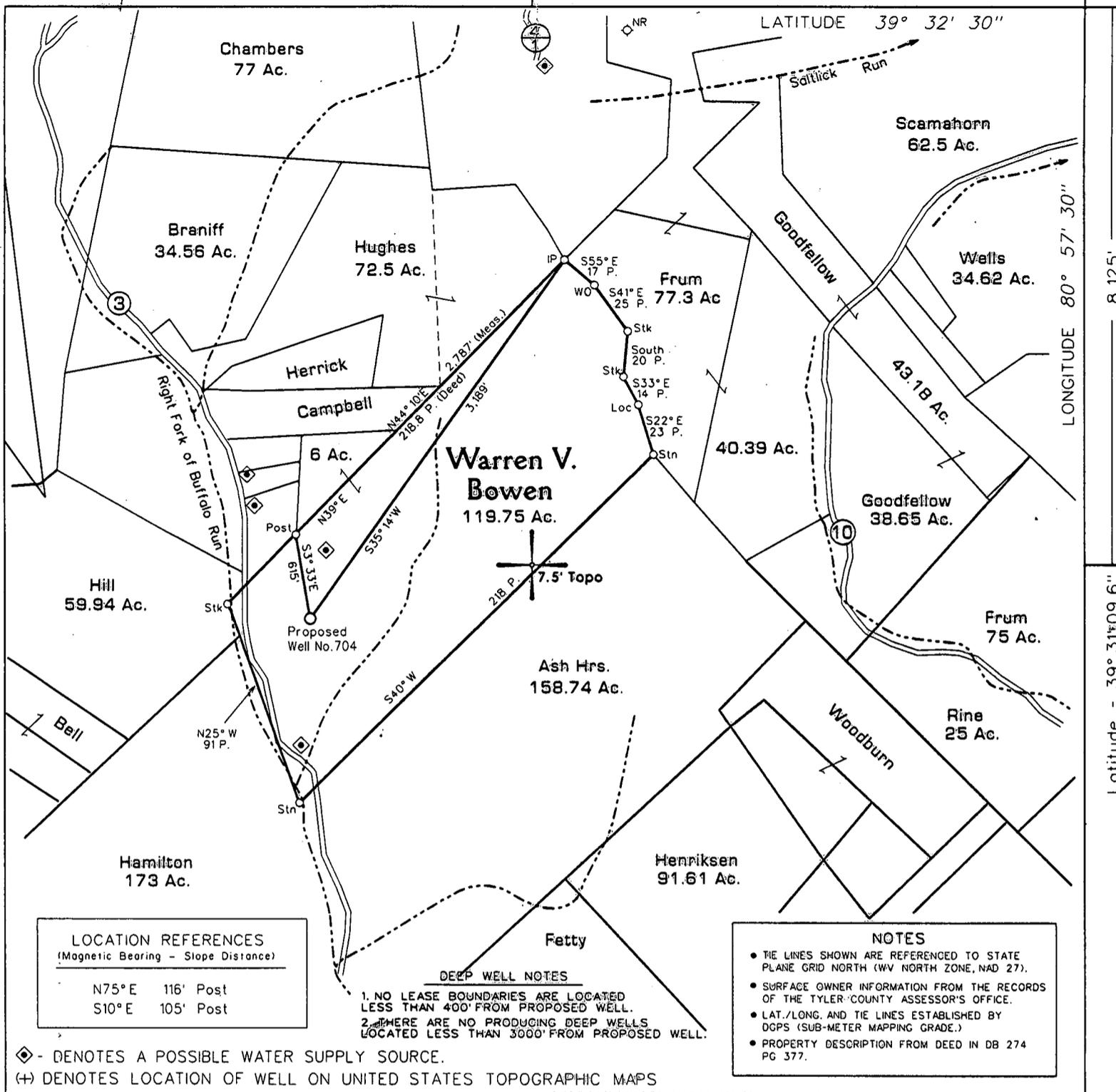
WEST VIRGINIA
 Division of Environmental Protection
 Office of Oil and Gas
 601 57th Street
 Charleston, West Virginia 25304



DATE March 12, 2007
 FARM White NO. 702
 API WELL NO. 47-095

WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL
 (IF "GAS") PRODUCTION STORAGE DEEP SHALLOW
 LOCATION: ELEVATION 1,066' WATERSHED Cow Hollow Run
 DISTRICT Lincoln COUNTY Tyler
 QUADRANGLE New Matamoras 7.5'
 SURFACE OWNER David & Michelle White ACREAGE 78 Ac.
 OIL & GAS ROYALTY OWNER David & Michelle White LEASE ACREAGE 78 Ac.
 LEASE NO. _____
 PROPOSED WORK: DRILL 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 Marcellus Shale ESTIMATED DEPTH 6,200'
 WELL OPERATOR Triad Resources, Inc. DESIGNATED AGENT Kimberly Arnold
 ADDRESS P.O. Box 430 ADDRESS P.O. Box 154
Reno, Ohio 45773 Waverly, WV 26184



Longitude 80° 57' 30" Longitude 80° 57' 30" Latitude 39° 31' 09.6" Latitude 39° 32' 30"

LOCATION REFERENCES
(Magnetic Bearing - Slope Distance)

N75° E 116' Post
S10° E 105' Post

DEEP WELL NOTES

1. NO LEASE BOUNDARIES ARE LOCATED LESS THAN 400' FROM PROPOSED WELL.
2. THERE ARE NO PRODUCING DEEP WELLS LOCATED LESS THAN 3000' FROM PROPOSED WELL.

NOTES

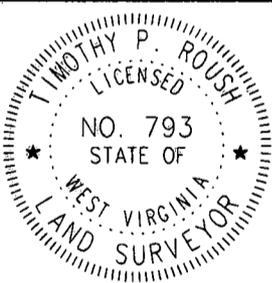
- THE LINES SHOWN ARE REFERENCED TO STATE PLANE GRID NORTH (WV NORTH ZONE, NAD 27).
- SURFACE OWNER INFORMATION FROM THE RECORDS OF THE TYLER COUNTY ASSESSOR'S OFFICE.
- LAT./LONG. AND TIE LINES ESTABLISHED BY DGPS (SUB-METER MAPPING GRADE.)
- PROPERTY DESCRIPTION FROM DEED IN DB 274 PG 377.

◆ - DENOTES A POSSIBLE WATER SUPPLY SOURCE.
⊕ - DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS

FILE NO. 113-67
DRAWING NO. 1
SCALE 1" = 1000'
MINIMUM DEGREE OF ACCURACY Sub-Meter
PROVEN SOURCE OF ELEVATION DGPS Survey

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 MINES.

(SIGNED) *Timothy P. Roush*
TIMOTHY P. ROUSH PS 793



WEST VIRGINIA
Division of Environmental Protection
Office of Oil and Gas
601 57th Street
Charleston, West Virginia 25304



DATE March 15, 2007
FARM Bowen NO. 704
API WELL NO. 47-095

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

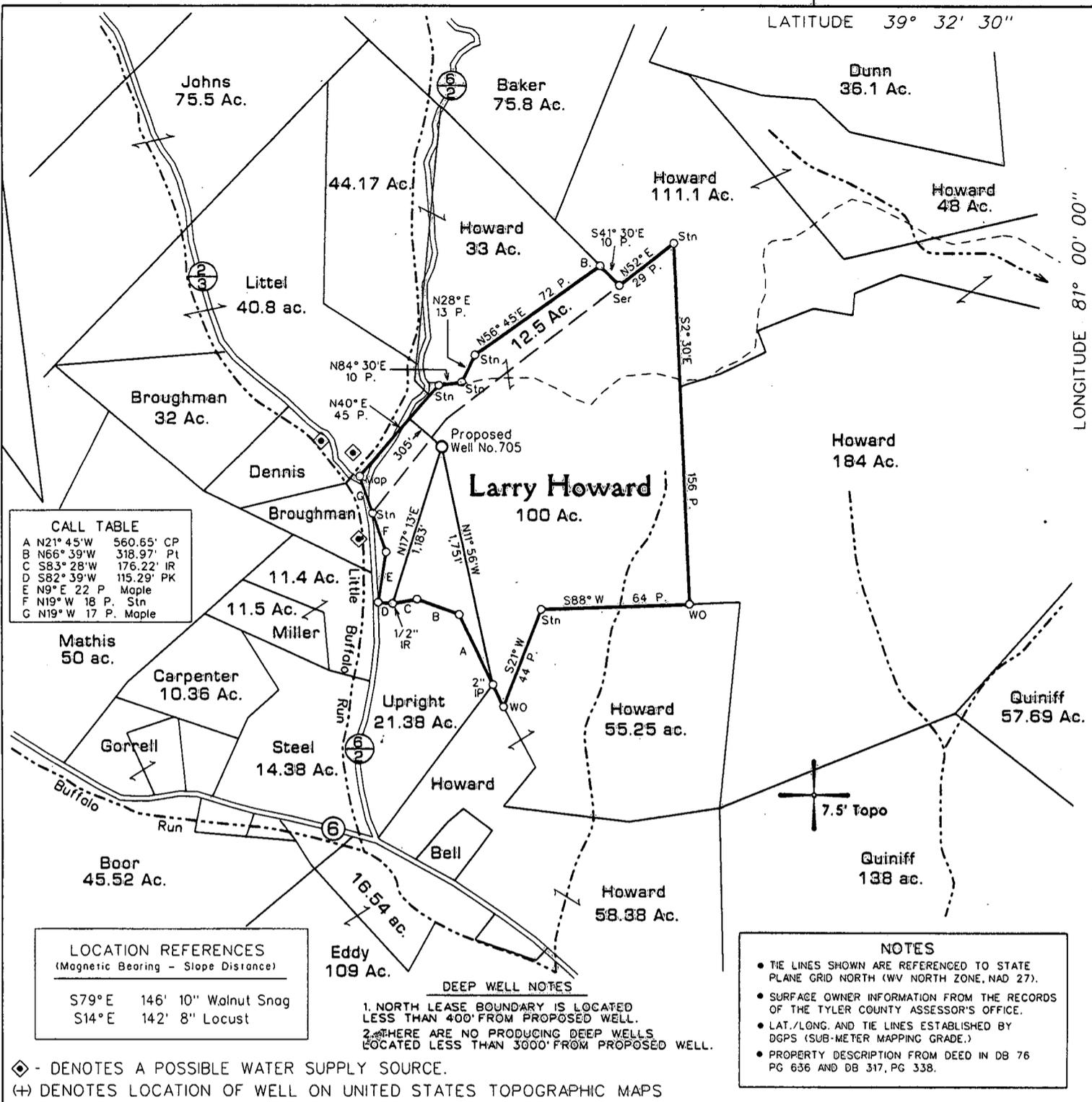
LOCATION: ELEVATION 889' WATERSHED Right Fork of Buffalo Run
DISTRICT Lincoln COUNTY Tyler
QUADRANGLE Paden City 7.5'

SURFACE OWNER Warren V. Bowen ACREAGE 119.75 Ac.
OIL & GAS ROYALTY OWNER Warren V. Bowen LEASE ACREAGE 119.75 Ac.
LEASE NO. _____

PROPOSED WORK: DRILL 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 Marcellus Shale ESTIMATED DEPTH 6,200'
WELL OPERATOR Triad Resources, Inc. DESIGNATED AGENT Kimberly Arnold
ADDRESS P.O. Box 430 ADDRESS P.O. Box 154
Reno, Ohio 45773 Waverly, WV 26184

FORM IV-6



CALL TABLE

A	N21° 45' W	560.65' CP
B	N66° 39' W	318.97' Pt
C	S83° 28' W	176.22' IR
D	S82° 39' W	115.29' PK
E	N9° E	22' P. Maple
F	N19° W	18' P. Stn
G	N19° W	17' P. Maple

LOCATION REFERENCES
(Magnetic Bearing - Slope Distance)

S79° E	146' 10"	Walnut Snag
S14° E	142' 8"	Locust

DEEP WELL NOTES

1. NORTH LEASE BOUNDARY IS LOCATED LESS THAN 400' FROM PROPOSED WELL.
2. THERE ARE NO PRODUCING DEEP WELLS LOCATED LESS THAN 3000' FROM PROPOSED WELL.

NOTES

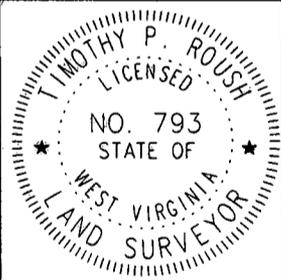
- THE LINES SHOWN ARE REFERENCED TO STATE PLANE GRID NORTH (WV NORTH ZONE, NAD 27).
- SURFACE OWNER INFORMATION FROM THE RECORDS OF THE TYLER COUNTY ASSESSOR'S OFFICE.
- LAT./LONG. AND TIE LINES ESTABLISHED BY DGPS (SUB-METER MAPPING GRADE.)
- PROPERTY DESCRIPTION FROM DEED IN DB 76 PG 636 AND DB 317, PG 338.

◆ - DENOTES A POSSIBLE WATER SUPPLY SOURCE.
 (+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS

FILE NO. 113-67
 DRAWING NO. 1
 SCALE 1" = 1000'
 MINIMUM DEGREE OF ACCURACY Sub-Meter
 PROVEN SOURCE OF ELEVATION DGPS Survey

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 MINES.

(SIGNED) [Signature]
 TIMOTHY P. ROUSH PS 793



WEST VIRGINIA
 Division of Environmental Protection
 Office of Oil and Gas
 601 57th Street
 Charleston, West Virginia 25304

DATE March 18, 2007
 FARM Howard NO. 705
 API WELL NO. 47-095

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

LOCATION: ELEVATION 876' WATERSHED Little Buffalo Run
 DISTRICT Union COUNTY Tyler
 QUADRANGLE New Matamoras 7.5'

SURFACE OWNER Larry Howard ACREAGE 100 Ac.
 OIL & GAS ROYALTY OWNER Larry Howard et al. LEASE ACREAGE 590 Ac.
 LEASE NO. _____

PROPOSED WORK: DRILL 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 Marcellus Shale ESTIMATED DEPTH 6,200'
 WELL OPERATOR Triad Resources, Inc. DESIGNATED AGENT Kimberly Arnold
 ADDRESS P.O. Box 430 ADDRESS P.O. Box 154
Reno, Ohio 45773 Waverly, WV 26184