



# United States Department of the Interior

BUREAU OF INDIAN AFFAIRS  
Great Plains Regional Office  
115 Fourth Avenue S.E.  
Aberdeen, South Dakota 57401



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FEB 17 2011

## MEMORANDUM

TO: Superintendent, Fort Berthold Agency

FROM: <sup>Acting</sup> Regional Director, Great Plains Region

SUBJECT: Environmental Assessment Addendum and Finding of No Significant Impact

In compliance with the regulations of the National Environmental Policy Act (NEPA) of 1969, as amended, to authorize land use by Enerplus for the construction and installation associated with the expansion of the previously authorized Soward 1-05H, Levings Estate 1-08H, and J.M. Hall 1-19H well pads, to include one additional well, drilled to the Three Forks Formation on each pad, an Environmental Assessment (EA) Addendum has been completed and a Finding of No Significant Impact (FONSI) has been issued.

All the necessary requirements of the National Environmental Policy Act have been completed. Attached for your files is a copy of the EA, FONSI and Notice of Availability. The Council on Environmental Quality (CEQ) regulations require that there be a public notice of availability of the FONSI (1506.6(b)). Please post the attached notice of availability at the Agency and Tribal buildings for 30 days.

If you have any questions, please call Marilyn Bercier, Regional Environmental Scientist, Division of Environment, Safety and Cultural Resources Management, at (605) 226-7656.

Attachment

cc: Tex Hall, Chairman, Three Affiliated Tribes (with attachment)  
Elgin Crows Breast, THPO (with attachment)  
Derek Enderud, BLM, Dickenson, ND (with attachment)  
John Shelman, US Army Corps of Engineers  
Jeffrey Hunt, Virtual One Stop Shop



## Finding of No Significant Impact

### Enerplus Resources (USA) Corporation

#### Addendum to Environmental Assessment to Authorize Land Use for Expansion of the Soward 1-05H, Levings Estate 1-08H, and J.M. Hall 1-19H Well Pads to Accommodate the Pluto 149-93-05C-2H TF, Mars 149-93-08D-2H TF, and Jupiter 148-93-19B-2H TF Wells

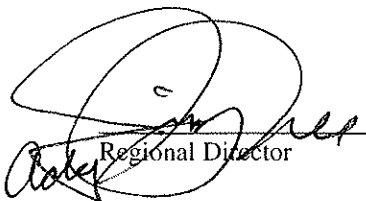
#### Fort Berthold Indian Reservation Dunn County, North Dakota

The U.S. Bureau of Indian Affairs (BIA) has received a proposal to authorize land use by Enerplus for the construction and installation associated with the expansion of the previously authorized Soward 1-05H, Levings Estate 1-08H, and J.M. Hall 1-19H well pads, to include one additional well, drilled to the Three Forks Formation, on each pad. Associated federal actions by BIA include determinations of effect regarding cultural resources, approvals of leases, rights-of-way and easements, and a positive recommendation to the Bureau of Land Management regarding the Applications for Permit to Drill.

Potential of the proposed actions to impact the human environment is analyzed in the attached addendum to an existing Environmental Assessment (EA), as required by the National Environmental Policy Act. Based on the recently completed addendum to the EA, I have determined that the proposed project will not significantly affect the quality of the human environment. No Environmental Impact Statement is required for any portion of the proposed activities.

This determination is based on the following factors:

1. Agency and public involvement was solicited and environmental issues related to the proposal were identified.
2. Protective and prudent measures were designed to minimize impacts to air, water, soil, vegetation, wetlands, wildlife, public safety, water resources, and cultural resources. The remaining potential for impacts was disclosed for both the proposed action and the No Action alternative.
3. Guidance from the U.S. Fish and Wildlife Service has been fully considered regarding wildlife impacts, particularly in regard to threatened or endangered species. This guidance includes the Migratory Bird Treaty Act (16 U.S.C. 703 et seq.) (MBTA), the National Environmental Policy Act of 1969, as amended (42 U.S.C. 4321 et seq.) (NEPA), the Bald and Golden Eagle Protection Act (16 U.S.C. 668-668d, 54 Stat. 250) (BGEPA), Executive Order 13186 "Responsibilities of Federal Agencies to Protect Migratory Birds", and the Endangered Species Act (16 U.S.C. 1531 et seq.) (ESA).
4. The proposed actions are designed to avoid adverse effects to historic, archaeological, cultural and traditional properties, sites and practices. Compliance with the procedures of the National Historic Preservation Act is complete.
5. Environmental justice was fully considered.
6. Cumulative effects to the environment are either mitigated or minimal.
7. No regulatory requirements have been waived or require compensatory mitigation measures.
8. The proposed projects will improve the socio-economic condition of the affected Indian community.

  
\_\_\_\_\_  
Regional Director

2/17/11  
\_\_\_\_\_  
Date



**ENVIRONMENTAL ASSESSMENT  
Addendum**

**United States Bureau of Indian Affairs**

**Great Plains Regional Office  
Aberdeen, South Dakota**



**Enerplus Resources (USA) Corp.**

**Addendum to Environmental Assessment to Authorize Land Use for Expansion of the Soward 1-05H, Levings Estate 1-08H, and J.M. Hall 1-19H Well Pads to Accommodate the Pluto 149-93-05C-2H TF, Mars 149-93-08D-2H TF, and Jupiter 148-93-19B-2H TF Wells**

**Fort Berthold Indian Reservation**

**February 2011**

For information contact:  
Bureau of Indian Affairs, Great Plains Regional Office  
Division of Environment, Safety and Cultural Resources Management  
115 4th Avenue SE, Aberdeen, South Dakota 57401  
(605) 226-7656

**TABLE OF CONTENTS**

	<b><u>Page</u></b>
1. Purpose and Need for the Proposed Action .....	1
2. Authorities .....	1
3. Legal Land Description for Proposed Action .....	1
4. Scope of Work for Proposed Action.....	1
5. Surveys for Proposed Action .....	2
6. Potential Effects.....	3
7. Applicable NEPA Document(s).....	3
8. NEPA Adequacy Criteria.....	3

<b><u>Figure</u></b>	<b><u>Page</u></b>
1 Location of expansion of the Soward 1-05H well pad. ....	5
2 Location of expansion of the Levings Estate 1-08H well pad.....	6
3 Location of expansion of the J.M. Hall 1-19H well pad. ....	7

<b><u>Table</u></b>	<b><u>Page</u></b>
1 Additional Disturbance to Previously Approved Well Pad Locations. ....	1

**Appendix**

A Plats and Schematics for Well Pad Expansions	
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## **1. Purpose and Need for the Proposed Action**

Enerplus Resources (USA) Corp. (Enerplus) is drilling exploratory oil and gas wells on three well pads on the Fort Berthold Indian Reservation to evaluate and possibly develop the commercial potential of natural resources. Developments have been proposed on land held in trust by the United States in Dunn County, North Dakota. The Bureau of Indian Affairs (BIA) is the surface management agency for potentially affected tribal lands and individual allotments. The BIA also holds title to subsurface mineral rights. The economic development of available resources and associated BIA actions are consistent with BIA's general mission. Leasing and development of mineral resources offers substantial economic benefits to the Three Affiliated Tribes of the Mandan, Hidatsa, and Arikara Nations and to individual tribal members.

The purpose of the proposed action is to authorize land use by Enerplus for the construction and installation associated with the expansion of the previously authorized Soward 1-05H, Levings Estate 1-08H, and J.M. Hall 1-19H well pads, to include one additional well, drilled to the Three Forks Formation, on each pad.

## **2. Authorities**

Oil and gas exploration and development activities are conducted under authority of the Indian Mineral Leasing Act of 1938 (25 United States Code [USC] 396a, et seq.), the Indian Mineral Development Act of 1982 (25 USC 2101, et seq.), and the Energy Policy Act of 2005 (42 USC 15801, et seq.).

## **3. Legal Land Description for Proposed Action**

The existing well pads are located in the SE $\frac{1}{4}$  SW $\frac{1}{4}$  of Section 5, Township (T) 149 North (N), Range (R) 93 West (W); SE $\frac{1}{4}$  SE $\frac{1}{4}$  of Section 8, T149N, R93W; and NW $\frac{1}{4}$  NW $\frac{1}{4}$  of Section 19, T148N, R93W in Dunn County, North Dakota (Figure 1).

## **4. Scope of Work for Proposed Action**

Enerplus proposes to increase the sizes of all three well pads to accommodate one additional oil well at each location. Table 1 summarizes the additional disturbance expected at each location. Appendix A provides detailed schematics of the proposed well pad expansions.

**Table 1. Additional Disturbance to Previously Approved Well Pad Locations.**

<b>Existing Well</b>	<b>Proposed Additional Well</b>	<b>Location (QtrQtr/Section/ Township/Range)</b>	<b>Additional Disturbance (acres)</b>
Soward 1-05H	Pluto 149-93-05C-2H TF	SESW/5/149N/93W	0.24
Levings Estate 1-08H	Mars 149-93-08D-2H TF	SESE/8/149N/93W	0.67
J.M. Hall 1-19H	Jupiter 148-93-19B-2H TF	NWNW/19/148N/93W	0.15

Construction of the proposed wells would disturb 1.06 additional acres, which would result in a 9% increase in the original disturbance estimate of 11.5 acres. All three wells would be drilled to the Three Forks Formation and according to the Mandaree Field spacing order of 320 acres. The bottom hole location for the Pluto 149-93-05C-2H TF would land approximately 4,717 feet north and 261 feet west of the surface location, in the NE¼ NW¼ of Section 5, T149N, R93W; the bottom hole location for the Mars 149-93-08D-2H TF would land approximately 4,674 feet north and 4,108 feet west of the surface location, in the NW¼ NW¼ of Section 8, T149N, R93W; and the bottom hole location for the Jupiter 149-93-19B-2H TF would land approximately 4,817 feet south and 356 feet west of the surface location, in the SW¼ SW¼ of Section 19, T148N, R93W. Technical drilling specifications would be similar to those of the three original Bakken wells on the pads, covered in a previous Environmental Assessment.

## **5. Surveys for Proposed Action**

SWCA Environmental Consultants (SWCA) conducted natural resource surveys for threatened and endangered species, migratory birds, bald and golden eagles, and wetlands at all three locations on October 20, 2008. A second site visit was conducted on August 13, 2009, to reroute the access road to the J.M. Hall 1-19H location to avoid an ephemeral drainage. No primary or secondary indications of protected species occurrences were observed during the field surveys.

On September 22 and 29, 2008, SWCA personnel conducted a cultural resource inventory using an intensive pedestrian methodology; a second survey for the rerouted access road was conducted on August 13, 2009. Approximately 65 acres were inventoried. No cultural resources were identified at the Soward 1-05H or the Levings Estate 1-08H locations; mitigation measures including fencing and monitoring were put in place at the site identified on the J.M. Hall 1-19H location, allowing for a determination of *No Historic Properties Affected* (Ferris 2008a<sup>1</sup>, 2008b<sup>2</sup>; Cooper 2009<sup>3</sup>).

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<sup>1</sup> Ferris, Kade

2008a A Class I and Class III Cultural Resource Inventory of the Lonestar/Simray Soward 1-05H Well Pad and Access Road, Fort Berthold Indian Reservation, Dunn County, North Dakota. Prepared by SWCA Environmental Consultants for Lonestar/Simray Production Company, LLC, Richardson, TX.

<sup>2</sup> Ferris, Kade

2008b A Class I and Class III Cultural Resource Inventory of the Lonestar/Simray Levings Estate 1-08H Well Pad and Access Road, Fort Berthold Indian Reservation, Dunn County, North Dakota. Prepared by SWCA Environmental Consultants for Lonestar/Simray Production Company, LLC, Richardson, TX.

<sup>3</sup> Cooper, Judith

2009 A Class I and Class III Cultural Resource Inventory of the Simray J.M. Hall 1-19H Well Pad and Access Road, Fort Berthold Indian Reservation, Dunn County, North Dakota. Prepared by SWCA Environmental Consultants for Simray Production Company, LLC, Richardson, TX.



An additional onsite was conducted on February 8, 2011 by the BIA, SWCA, and Enerplus representatives to inspect the expansion plans. The expanded pads will not extend beyond the area surveyed for cultural resources. Jeff Desjarlais approved the plans at that time.

## **6. Potential Effects**

Potential impacts to cultural resource sites would occur as a result of direct disturbance and/or the loss of sites eligible for the National Register of Historic Places. Potential impacts to natural resources may include the loss of native vegetation and wildlife habitats; soil removal and mixing; and erosion during construction. However, potential impacts as a result of the proposed action were mitigated via field survey and subsequent avoidance of any eligible cultural resource sites within the proposed right-of-way, stockpiling and re-using topsoil for reclamation, and completing interim reclamation immediately following construction.

Potential indirect impacts include noise and other disturbances to wildlife during construction and the introduction of noxious weeds. Impacts would be mitigated through avoidance of any federally listed threatened or endangered species or wetlands, avoidance of nesting migratory birds, implementing best management practices to control the introduction of noxious weeds, and minimizing the length of time between construction and reclamation. These mitigation measures are consistent with the approved National Environmental Policy Act (NEPA) document, which received a finding of no significant impact (FONSI) (October 2009).

Based the resource surveys, evaluation of potential effects and mitigation measures, and consistency with the applicable NEPA document, no new, significant direct, indirect, or cumulative impacts to natural and cultural resources are anticipated as a result of the changes proposed in this addendum.

## **7. Applicable NEPA Document(s)**

*Environmental Assessment: Simray Three Bakken Formation Exploratory Wells at Three Locations: Soward 1-05H, Levings Estate 1-08H, J.M. Hall 1-19H* (October 2009).

## **8. NEPA Adequacy Criteria**

This document has identified one previously prepared NEPA document, *Environmental Assessment: Simray Three Bakken Formation Exploratory Wells at Three Locations: Soward 1-05H, Levings Estate 1-08H, J.M. Hall 1-19H* (October 2009), which adequately describes the environmental consequences of the newly proposed action described herein, and meets the following NEPA Adequacy Criteria.

1. The proposed action is substantially the same action and at the site specifically analyzed in the existing NEPA document.
2. The range of alternatives is reasonable with respect to the current proposed action in the existing NEPA document, which appropriately considers and analyzes current environmental concerns, interests, and resource values.

*Addendum to Environmental Assessment to Authorize Land Use for Expansion of the Soward 1-05H, Levings Estate 1-08H, and J.M. Hall 1-19H Well Pads to Accommodate the Pluto 149-93-05C-2H TF, Mars 149-93-08D-2H TF, and Jupiter 148-93-19B-2H TF Wells  
(February 2011)*

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3. The existing analysis and conclusions are adequate in the existing NEPA document. The analysis is still valid in light of new studies or resource assessment information.
4. The methodology and analytical approach used in the existing NEPA document continues to be appropriate for the proposed action.
5. The direct and indirect impacts of the proposed action are unchanged from those identified in the existing NEPA document.
6. The cumulative impacts that would result from implementation of the proposed action are unchanged from those analyzed in the existing NEPA document.
7. A 30-day comment period involving public input and interagency review was used in the development of the existing NEPA document.

Addendum to Environmental Assessment to Authorize Land Use for Expansion of the Soward 1-05H, Levings Estate 1-08H, and J.M. Hall 1-19H Well Pads to Accommodate the Pluto 149-93-05C-2H TF, Mars 149-93-08D-2H TF, and Jupiter 148-93-19B-2H TF Wells  
(February 2011)

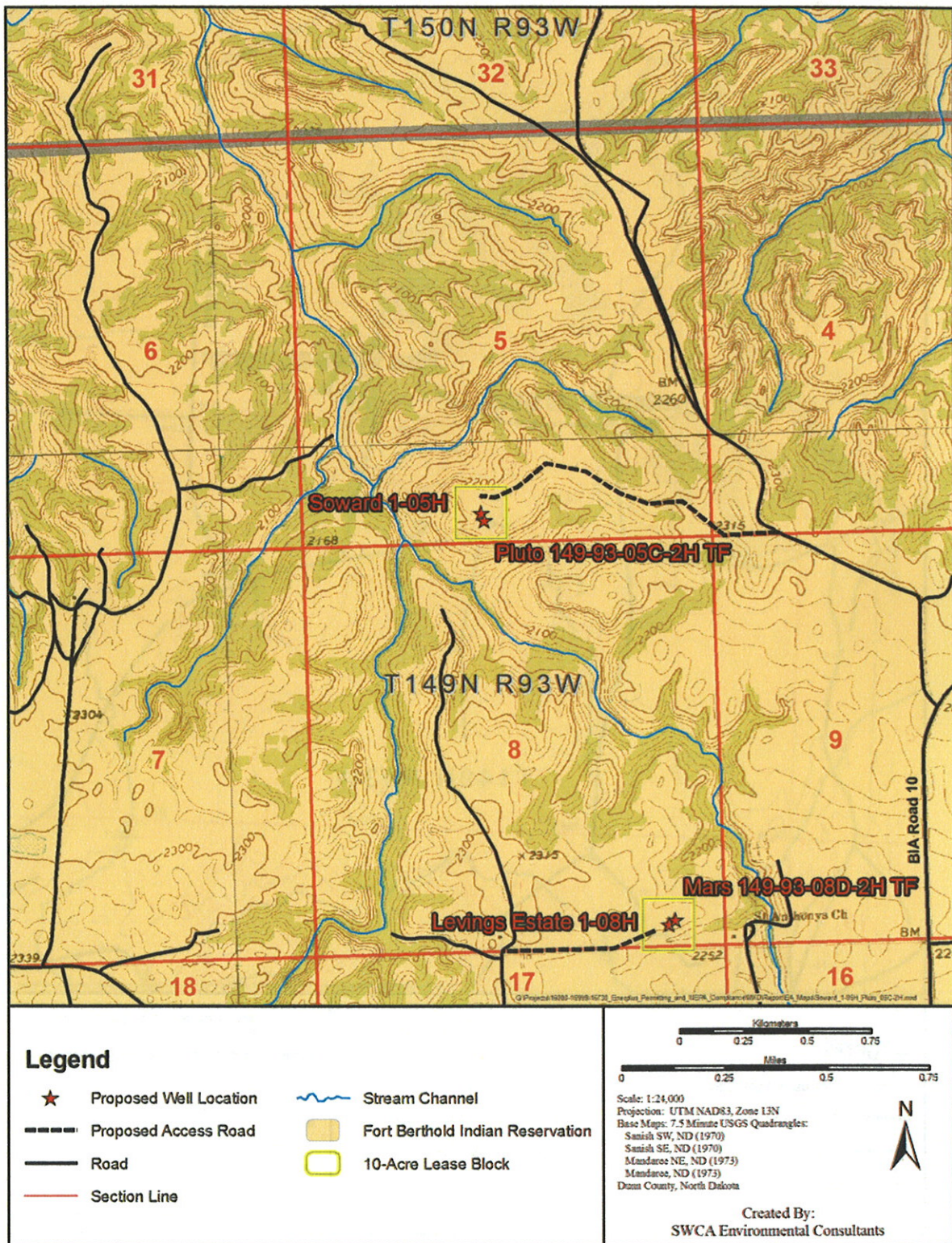
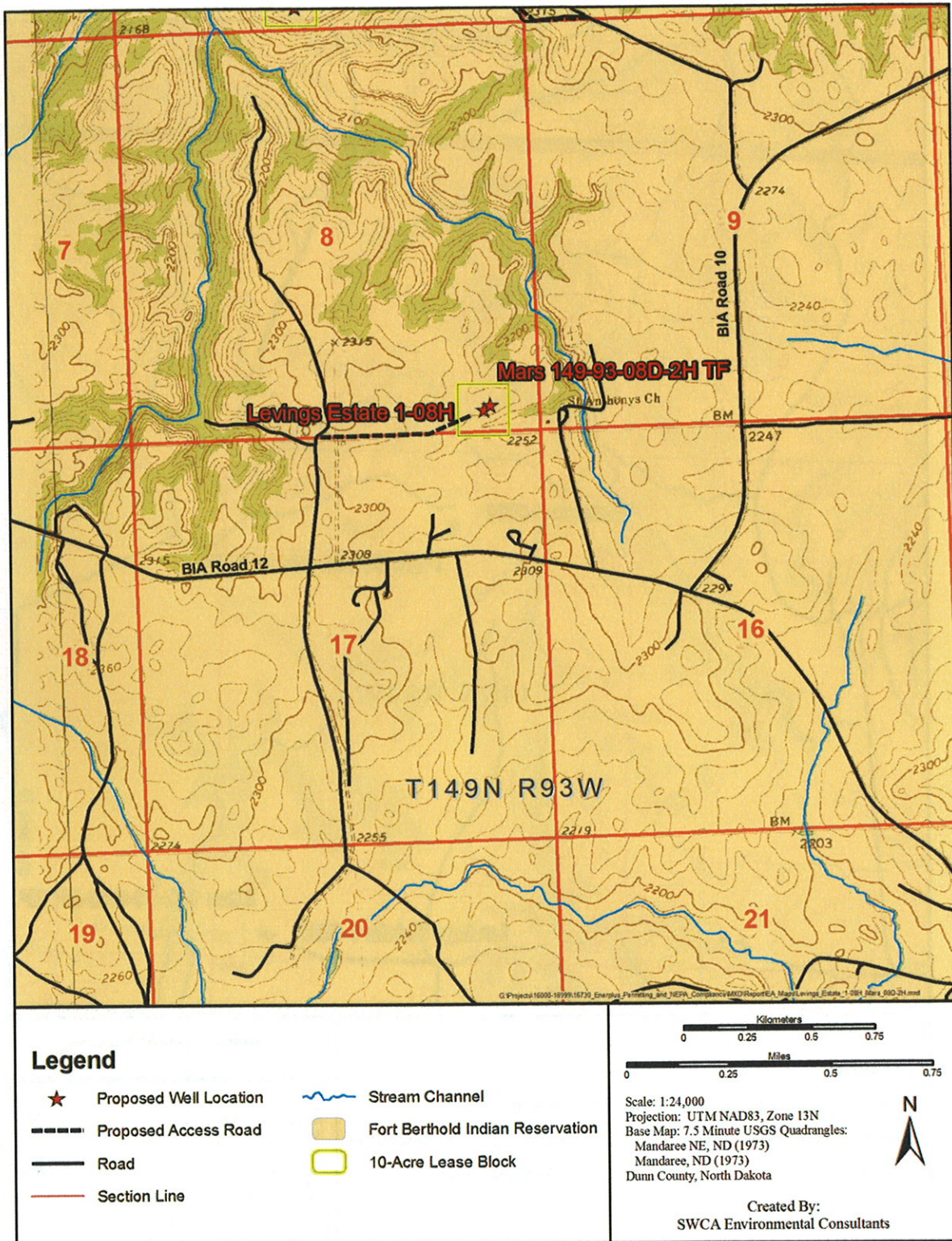


Figure 1. Location of expansion of the Soward 1-05H well pad.



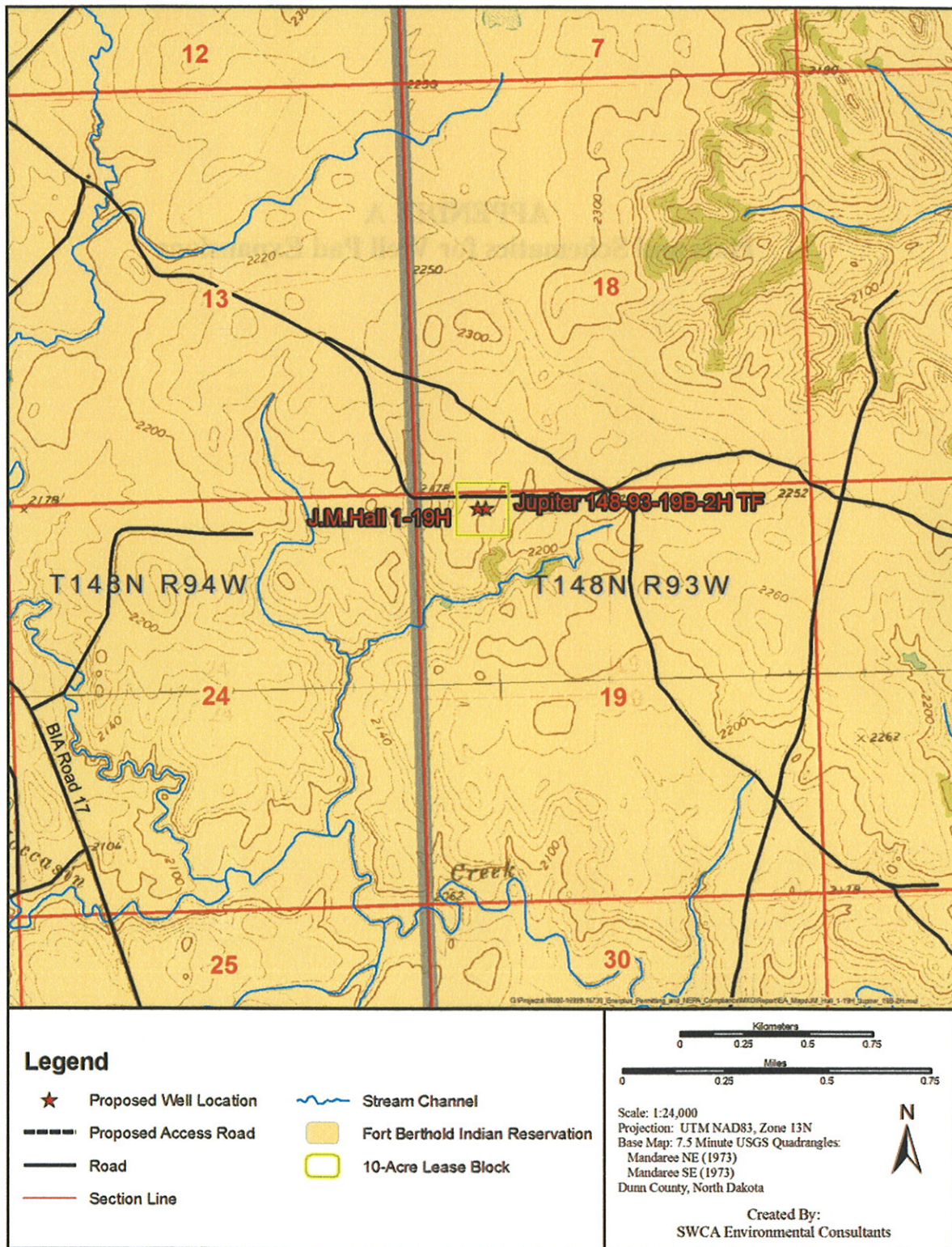
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(February 2011)*



**Figure 2. Location of expansion of the Levings Estate 1-08H well pad.**



*Addendum to Environmental Assessment to Authorize Land Use for Expansion of the Soward 1-05H,  
Levings Estate 1-08H, and J.M. Hall 1-19H Well Pads to Accommodate the Pluto 149-93-05C-2H TF,  
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(February 2011)*



**Figure 3. Location of expansion of the J.M. Hall 1-19H well pad.**

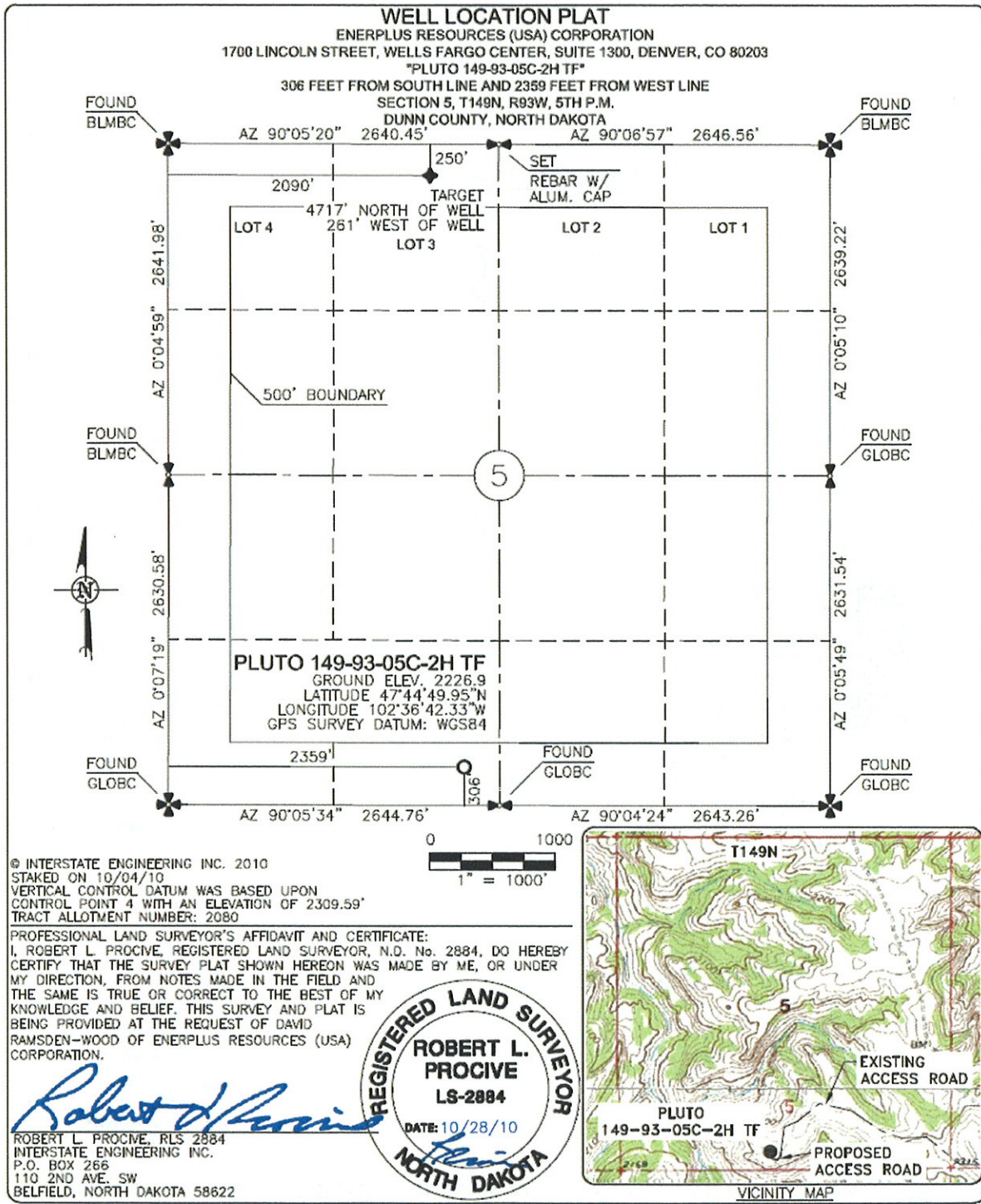
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(February 2011)*

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**APPENDIX A**  
**Plats and Schematics for Well Pad Expansions**

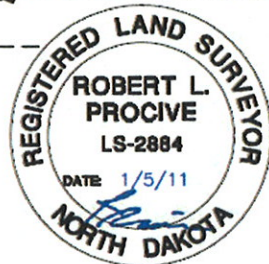
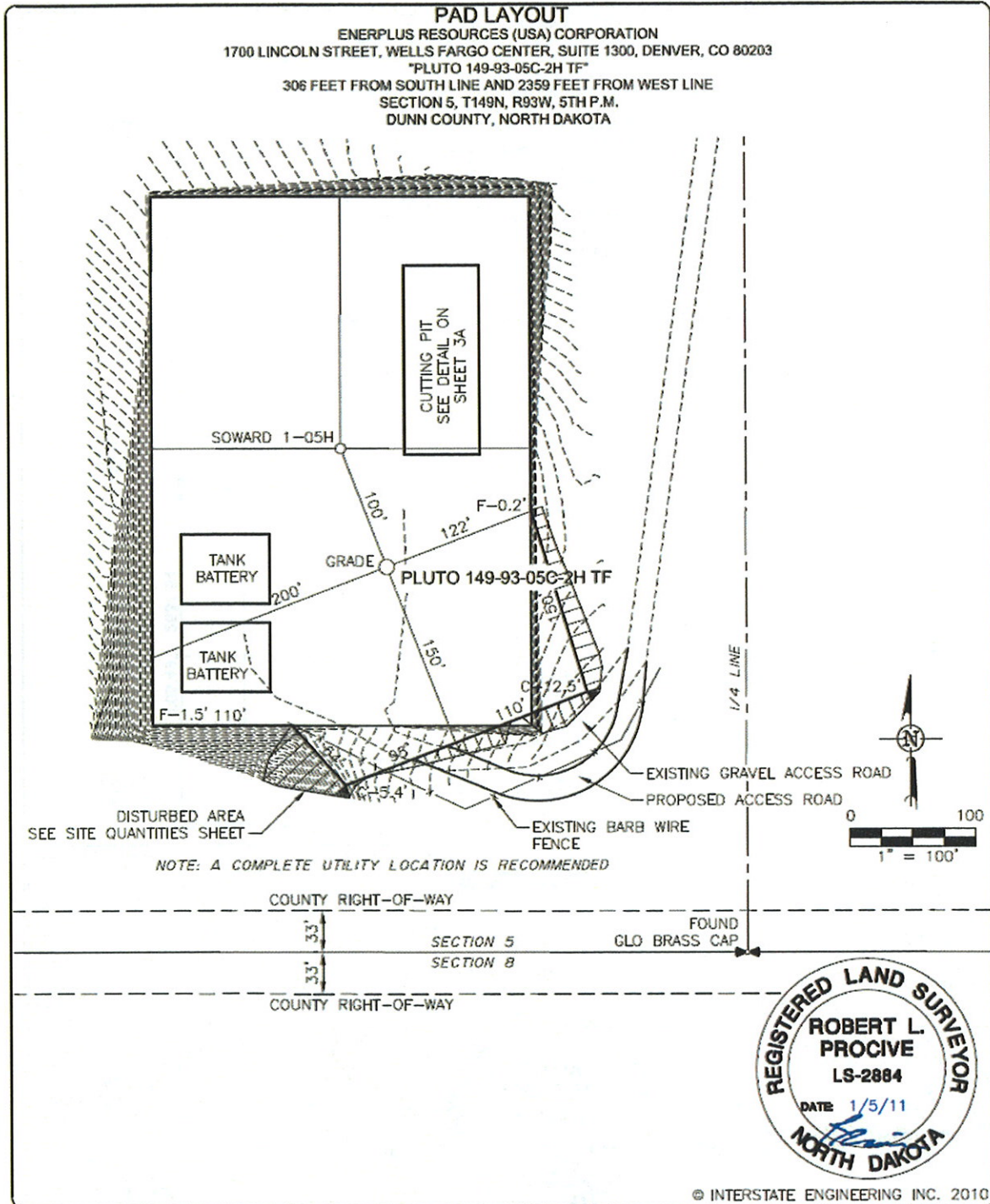


Addendum to Environmental Assessment to Authorize Land Use for Expansion of the Soward 1-05H,  
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(February 2011)



1 of 6 SHEET NO.	<b>interstate engineering, inc.</b> Engineering - Surveying - Planning P.O. Box 266 Belfield, North Dakota 701-575-2247	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td colspan="4">ENERPLUS RESOURCES (USA) CORP</td> </tr> <tr> <td colspan="4">SEC. 5, T149N, R93W, 5TH P.M.</td> </tr> <tr> <td colspan="4">DUNN COUNTY, NORTH DAKOTA</td> </tr> <tr> <td>Drawn By</td> <td>A.R.B.</td> <td>Project No.</td> <td>BOB-S-060</td> </tr> <tr> <td>Checked By</td> <td>R.L.P.</td> <td>Date</td> <td>OCT. 2010</td> </tr> </table>	ENERPLUS RESOURCES (USA) CORP				SEC. 5, T149N, R93W, 5TH P.M.				DUNN COUNTY, NORTH DAKOTA				Drawn By	A.R.B.	Project No.	BOB-S-060	Checked By	R.L.P.	Date	OCT. 2010
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(February 2011)*



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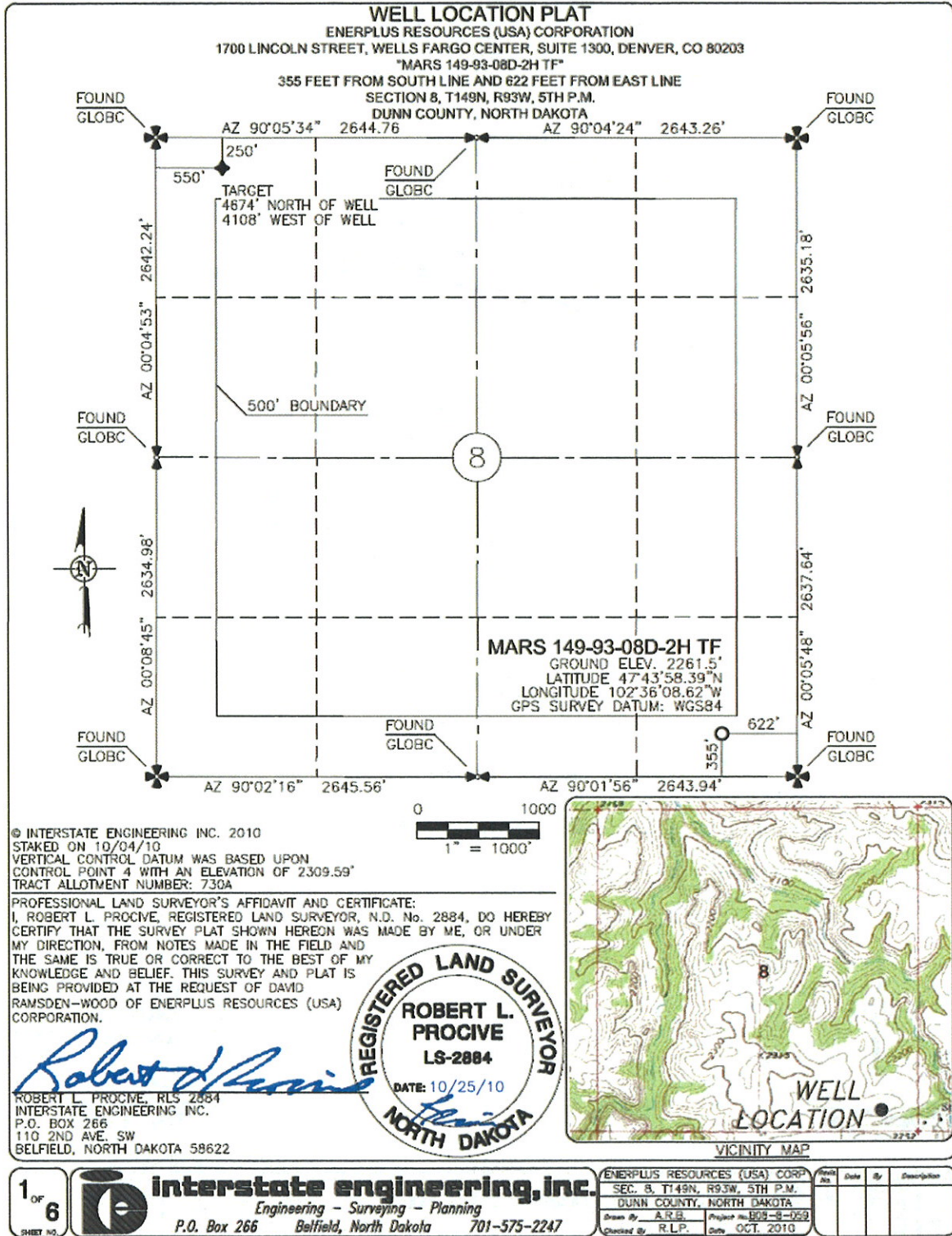


**interstate engineering, inc.**  
 Engineering - Surveying - Planning  
 P.O. Box 266    Belfield, North Dakota    701-575-2247

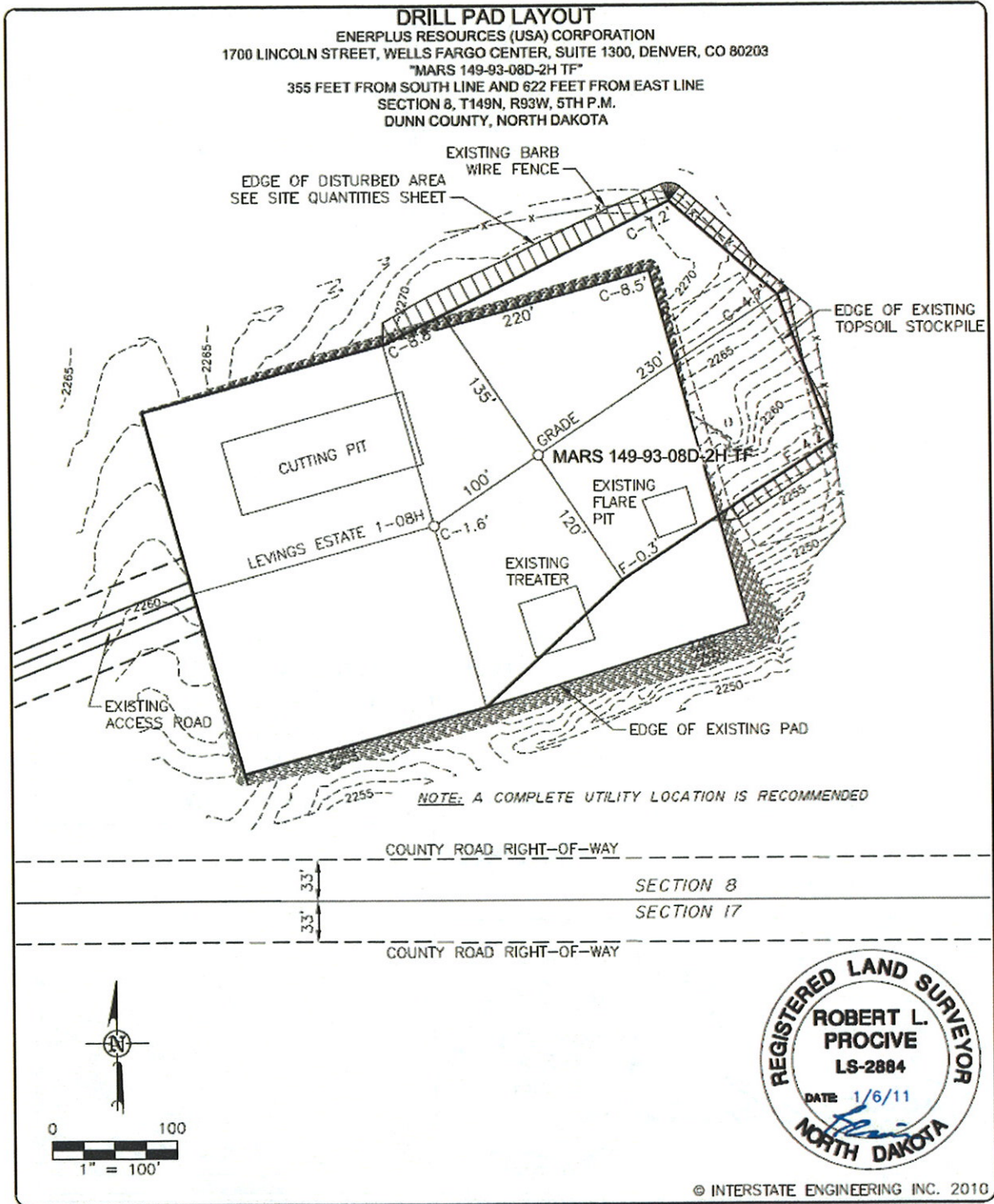
ENERPLUS RESOURCES (USA) CORP		Scale	Date	By	Description
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DUNN COUNTY, NORTH DAKOTA					
Drawn By	A.R.B.	Project No.	808-B-080		
Checked By	R.L.P.	Date	OCT. 2010		



Addendum to Environmental Assessment to Authorize Land Use for Expansion of the Soward 1-05H,  
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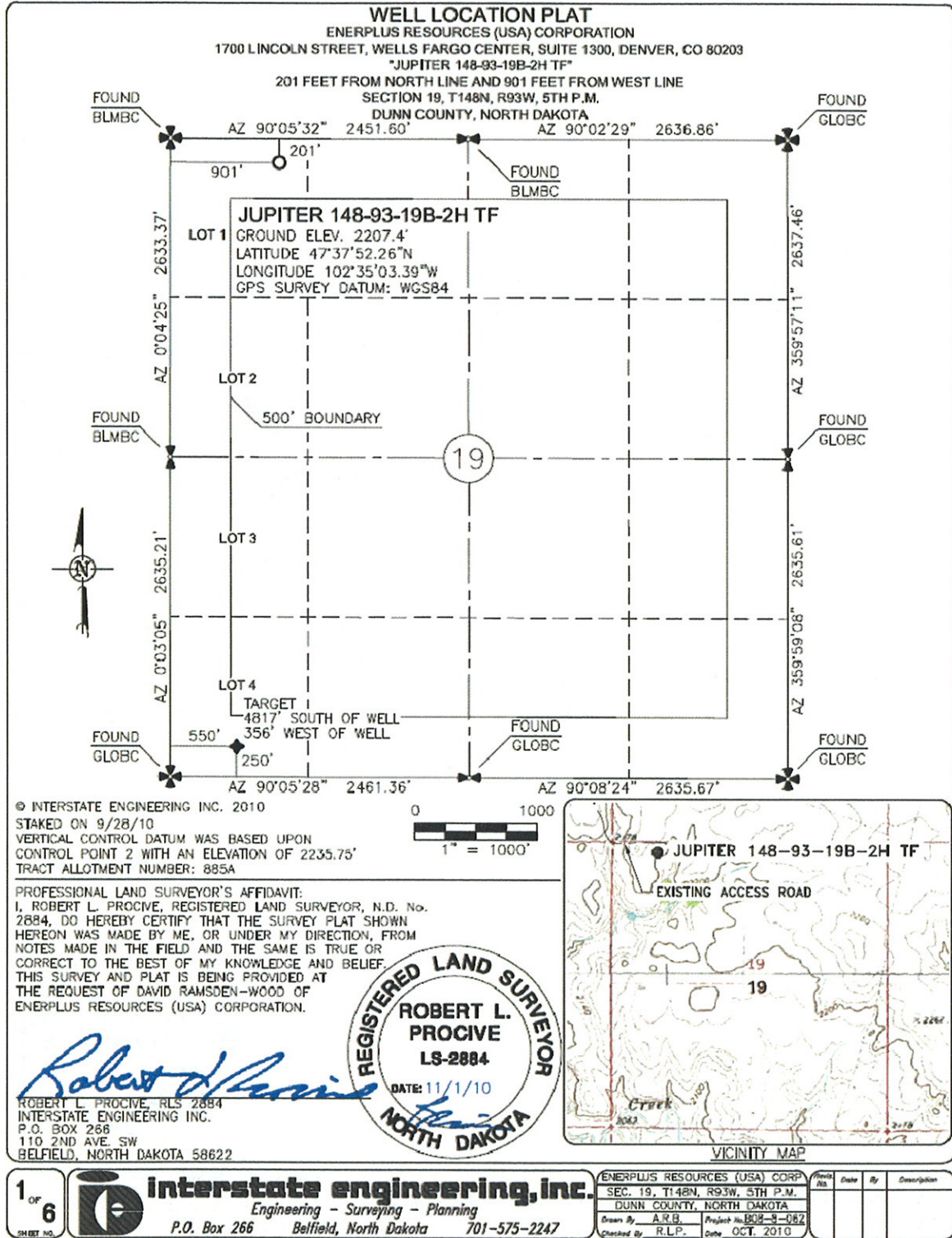
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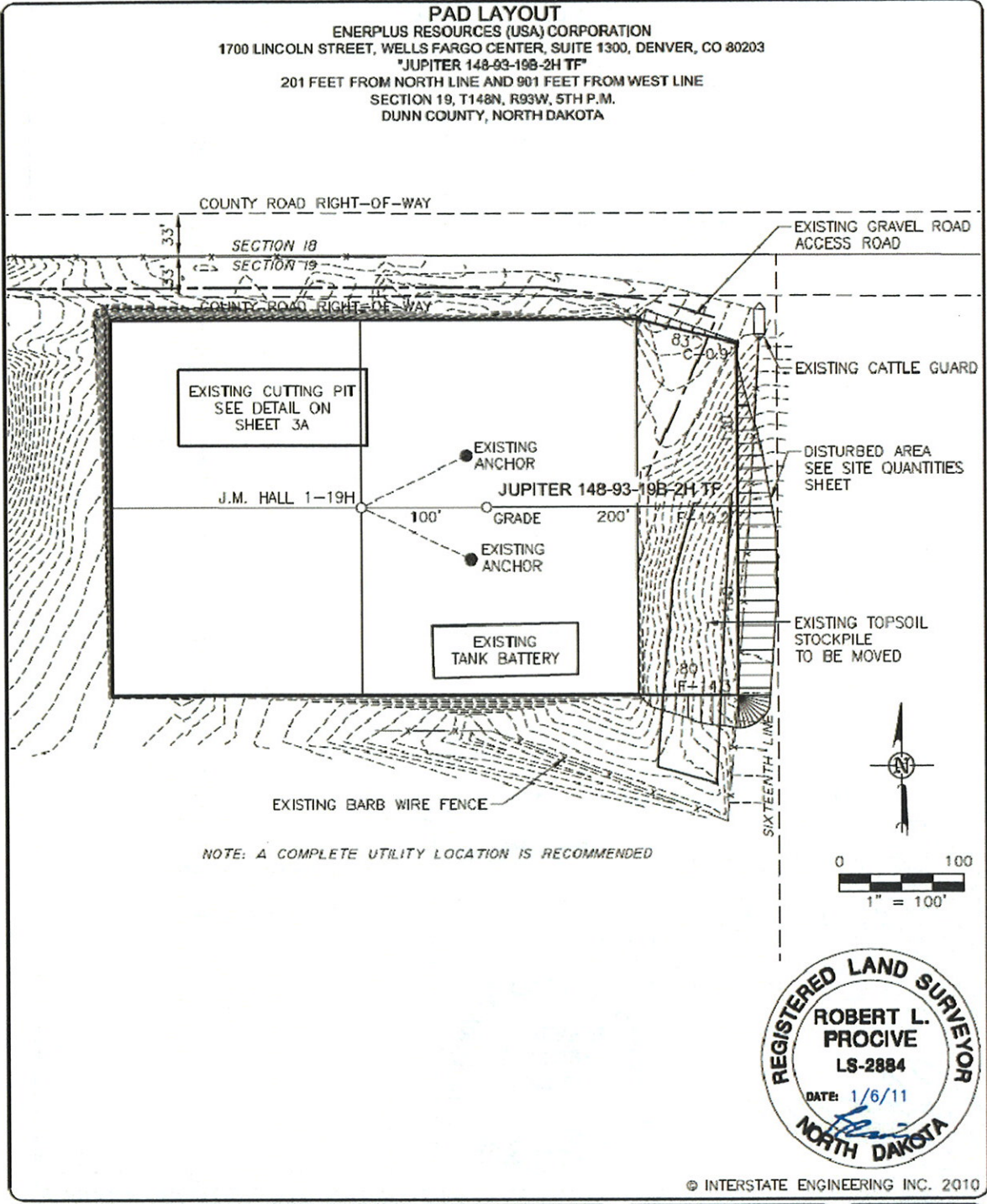
SHEET 3 OF 6		<b>interstate engineering, inc.</b> Engineering - Surveying - Planning P.O. Box 266 Belfield, North Dakota 701-575-2247	ENERPLUS RESOURCES (USA) CORP. SEC. 8, T149N, R93W, 5TH P.M. DUNN COUNTY, NORTH DAKOTA		Rev.	Date	By	Description
			Drawn By: A.R.B. Checked By: R.L.P.	Project No: E08-8-058 Date: OCT. 2010	1	1/6/11		ADD/CHG/REV/STAMP/REVISIONS



Addendum to Environmental Assessment to Authorize Land Use for Expansion of the Soward 1-05H,  
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(February 2011)*



**REGISTERED LAND SURVEYOR**  
**ROBERT L. PROCIVE**  
 LS-2884  
 DATE: 1/6/11  
 NORTH DAKOTA

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SHEET <b>3</b> OF <b>6</b>		<b>Interstate engineering, Inc.</b> Engineering - Surveying - Planning P.O. Box 266 Belfield, North Dakota 701-575-2247	ENERPLUS RESOURCES (USA) CORP. SEC. 19, T148N, R93W, 5TH P.M. DUNN COUNTY, NORTH DAKOTA		Project No. 808-8-082
			Drawn By: A.R.B.	Checked By: R.L.P.	Date: OCT. 2010

# **Notice of Availability and Appeal Rights**

**Enerplus: Addendum to Environmental Assessment to Authorize Land Use for Expansion of the Soward 1-05H, Levings Estate 1-08H, and J.M. Hall 1-19H Well Pads to Accommodate the Pluto 149-93-05C-2H TF, Mars 149-93-08D-2H TF, and Jupiter 148-93-19B-2H TF Wells**

**The Bureau of Indian Affairs (BIA) is planning to issue administrative approvals related to an Addendum to Environmental Assessment to Authorize Land Use for Expansion of the Soward 1-05H, Levings Estate 1-08H, and J.M. Hall 1-19H Well Pads to Accommodate the Pluto 149-93-05C-2H TF, Mars 149-93-08D-2H TF, and Jupiter 148-93-19B-2H TF Wells as shown on the attached map. Construction by Enerplus is expected to begin in 2011.**

**An environmental assessment (EA) determined that proposed activities will not cause significant impacts to the human environment. An environmental impact statement is not required. Contact Howard Bemer, Superintendent at 701-627-4707 for more information and/or copies of the EA and the Finding of No Significant Impact (FONSI).**

**The FONSI is only a finding on environmental impacts – it is not a decision to proceed with an action and *cannot* be appealed. BIA's decision to proceed with administrative actions *can* be appealed until March 17, 2011, by contacting:**

**United States Department of the Interior  
Office of Hearings and Appeals  
Interior Board of Indian Appeals  
801 N. Quincy Street, Suite 300, Arlington, Va 22203.**

**Procedural details are available from the BIA Fort Berthold Agency at 701-627-4707.**





**Project locations.**

