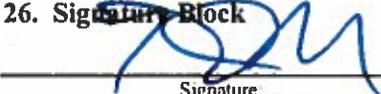




**U.S. DEPT. OF THE INTERIOR  
OFFICE OF SURFACE MINING  
Mine Site Evaluation  
State Program**



<b>1. Permittee/Person</b> ANDALEX RESOURCES INC		<b>9. Permit Number</b> C0070019	<b>10. Permit Type</b> PP
<b>2. Address</b> 46226 NATIONAL ROAD		<b>11. Field Visit Date</b> 1/25/2018	<b>12. Purpose</b> OP
<b>3. City</b> ST. CLAIRSVILLE		<b>13. SRA Present</b> Y	
<b>4. State</b> OH		<b>14. Permit Status</b> IN	<b>15. Site Status</b> TC
<b>5. Zip Code</b> 43950	<b>6. Phone Number</b> (740) 338-3100	<b>16. Facility Type</b> B	<b>17. OSM Office #</b> 140
<b>7. Operator Name, if Different than Permittee</b>		<b>18. CCID #</b>	<b>19. Land Code</b> SF
<b>8. Mine Name</b> CENTENNIAL MINE		<b>20. M.S.H.A. ID #</b> 42-01474	<b>21. State Abbrev.</b> UT
		<b>22. County/Burrough</b> CARBON	<b>23. AVS Permittee Entity ID Number</b> 112234
		<b>24. State Office</b>	

<b>25. Hours</b>	<b>26. Signature Block</b>	<b>27. Reviewing Official:</b>
		
	Signature: <b>Thomas Medlin, ID#562</b>	Signature:
	Printed Name: Date: 2/1/2018	Review Date: 2/2/2018 mm - dd - yyyy
		Is Supplemental MSE Page Used Y/N <input checked="" type="checkbox"/> Y

Permit Type - Item 10 IP = Interim Program PP = Permanent Program NP = No Permit

Purpose Type Codes - Item 12  
Oxx...Oversight Rfx...Reclamation Fees CCR...Citizen Complaint Referral (non-site visit)  
Axx...Assistance Fxx...Federal Actions CC...Citizen Complaint (initial site visit)  
CCF...Assistance

Joint Inspection - Item 13 A joint inspection is when a state inspector accompanies an OSM inspector at any time during the review of the mine site

Permit Status - Item 14

<p><b>A</b> Active: Coal mining activities occurring or permitted but not yet disturbed.</p> <p><b>IN</b> Inactive (Permanent Program Permit): Phase II completed or Temporary Cessation of Operations. (Interim Program Permit): Coal mining completed and reclamation activities initiated.</p> <p><b>BR</b> Bond Release: Reclamation completed and State Regulatory Authority(RA) has released all of the bond (Phase III Release).</p>	<p><b>AB</b> Abandoned: All surface and underground coal mining activities have ceased and operator has left the site without completing reclamation as defined in 30 CFR 840.11(g).</p> <p><b>AB1</b> Bond Forfeiture: Bond forfeiture officially in process or completed and reclamation in progress or not yet commenced.</p> <p><b>AB2</b> Partially Reclaimed Forfeiture: Forfeited site where all bonds have been used to reclaim site, but site not reclaimed to Program standards.</p> <p><b>AB3</b> Reclaimed Forfeiture: Forfeited site that has been reclaimed to Program standards.</p> <p><b>NA</b> Not Applicable: When site is unpermitted.</p>
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Site Status - Item 15

<p><b>ND</b> No Disturbance: No coal mining and reclamation operations have been started.</p> <p><b>EX</b> Coal Exploration: Coal exploration operations have started and where coal mining operations have not begun.</p> <p><b>AP</b> Active Coal Producing: Coal surface mining activities are occurring.</p> <p><b>AN</b> Active Non-Producing: Active non-producing facility such as tipple or preparation plant.</p> <p><b>NM</b> No Mining: The Permit Status is active, site is not in Temporary Cessation, no surface coal mining activity, and site not regraded.</p>	<p><b>MC</b> Mining Complete: No mining activity on site, site regraded and awaiting bond release.</p> <p><b>TC</b> Temporary Cessation: The RA has granted cessation of mining pursuant to 30 CFR 816/817.13(b).</p> <p><b>P1</b> Phase I Release: At least Phase I bond release granted for entire permitted area. For interim permits, partial bond release.</p> <p><b>P2</b> Phase II Release: At least Phase II bond release for the entire permitted area.</p> <p><b>P3</b> Phase III Release: Reclamation completed and the RA has released all bond.</p>	<p><b>NS</b> Non-Site Visit: Status of site not determined.</p> <p><b>FP</b> Forfeiture Pending: The RA is pursuing actions to revoke the permit, collect the performance bond(s), and/or reclamation of forfeited site is in progress.</p> <p><b>FR</b> Forfeited and Reclaimed: Forfeiture reclamation completed.</p> <p><b>FO</b> Abandoned Site: Abandoned site that is permitted but there is no bond.</p> <p><b>WC</b> Wildcat: Coal mining and reclamation operations have or are taking place and the activity is not covered by the required permits from the RA.</p>
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Facility Type Codes - Item 16

<p><b>A</b>...Surface</p> <p><b>B</b>...Underground</p> <p><b>C</b>...Preparation Plant</p>	<p><b>D</b>...Ancillary (Haulroad, Conveyor, and/or Rails</p> <p><b>E</b>...Refuse and/or Impoundment</p> <p><b>F</b>...Loading Facility and/or Tipple</p> <p><b>G</b>...Stockpiles</p>	<p><b>H</b>...Exploration Permits</p> <p><b>I</b>...Notice of Intent to Explore</p> <p><b>J</b>...Exempt 16 and 2/3</p>
<p><b>K</b>...Government Financed Construction Exemption</p> <p><b>L</b>...Remining site permitted under 30 CFR 785 25</p>		

**Small Business Regulatory Enforcement Fairness Act (SBREFA)**  
Your Comments are Important

The Small Business and Agriculture Regulatory Enforcement Ombudsman and 10 Regional Fairness Boards were established to receive comments from small businesses about Federal agency enforcement actions. The Ombudsman will annually evaluate the enforcement activities and rate each agency's responsiveness to small business. If you are a small business (a business with 500 or fewer employees including those of affiliates) and wish to comment on the enforcement or compliance activities of OSM, call 1-888-REG-FAIR (1-888-734-3247).

U.S. DEPT. OF THE INTERIOR  
OFFICE OF SURFACE MINING  
Mine Site Evaluation

Permittee/ Person <b>ANDALEX RESOURCES INC</b>	Permit Number <b>C0070019</b>	Field Visit Date <b>1/25/2018</b>	State Program Continuation Page
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## 28. Performance Standard Categories

Codes: 1=Compliance, 2=Noncompliance, 3=Not Planned, 4=Not Started, 5=Noncompliance Identified Elsewhere, 6=Previously Cited, 7=Permit Defect

<p><b>A. Administrative</b></p> <ol style="list-style-type: none"> <li>1. <input type="checkbox"/> Mining within Valid Permit</li> <li>2. <input type="checkbox"/> Mining within Bonded Area</li> <li>3. <input type="checkbox"/> Terms &amp; Conditions of Permit</li> <li>4. <input type="checkbox"/> Liability Insurance</li> <li>5. <input type="checkbox"/> Ownership and Control</li> <li>6. <input checked="" type="checkbox"/> Temporary Cessation</li> <li>7. <input type="checkbox"/> AML Rec. Fees - Non-Respondent</li> <li>8. <input type="checkbox"/> AML Rec. Fees - Failure to Pay</li> </ol> <p><b>B. Hydrologic Balance</b></p> <ol style="list-style-type: none"> <li>1. <input checked="" type="checkbox"/> Drainage Control</li> <li>2. <input type="checkbox"/> Inspections &amp; Certifications</li> <li>3. <input checked="" type="checkbox"/> Siltation Structures</li> <li>4. <input checked="" type="checkbox"/> Discharge Structures</li> <li>5. <input type="checkbox"/> Diversions</li> <li>6. <input type="checkbox"/> Effluent Limits</li> <li>7. <input type="checkbox"/> Ground Water Monitoring</li> <li>8. <input type="checkbox"/> Surface Water Monitoring</li> <li>9. <input type="checkbox"/> Drainage - Acid-Toxic Materials</li> <li>10. <input type="checkbox"/> Impoundments</li> <li>11. <input type="checkbox"/> Stream Buffer Zones</li> </ol> <p><b>C. Topsoil &amp; Subsoil</b></p> <ol style="list-style-type: none"> <li>1. <input checked="" type="checkbox"/> Removal</li> <li>2. <input type="checkbox"/> Substitute Materials</li> <li>3. <input checked="" type="checkbox"/> Storage and Protection</li> <li>4. <input type="checkbox"/> Redistribution</li> </ol>	<p><b>D. Backfilling &amp; Grading</b></p> <ol style="list-style-type: none"> <li>1. <input type="checkbox"/> Exposed Openings</li> <li>2. <input type="checkbox"/> Contemporaneous Reclamation</li> <li>3. <input type="checkbox"/> Approximate Original Contour</li> <li>4. <input type="checkbox"/> Highwall Elimination</li> <li>5. <input type="checkbox"/> Steep Slopes (includes downslope)</li> <li>6. <input type="checkbox"/> Handling of Acid and Toxic Materials</li> <li>7. <input type="checkbox"/> Stabilization (rills and gullies)</li> </ol> <p><b>E. Excess Spoil Disposal</b></p> <ol style="list-style-type: none"> <li>1. <input type="checkbox"/> Placement</li> <li>2. <input type="checkbox"/> Drainage Control</li> <li>3. <input type="checkbox"/> Surface Stabilization</li> <li>4. <input type="checkbox"/> Inspections &amp; Certifications</li> </ol> <p><b>F. Coal Mine Waste (Refuse Piles/Impoundments)</b></p> <ol style="list-style-type: none"> <li>1. <input type="checkbox"/> Drainage Control</li> <li>2. <input type="checkbox"/> Surface Stabilization</li> <li>3. <input type="checkbox"/> Placement</li> <li>4. <input type="checkbox"/> Inspections &amp; Certifications</li> <li>5. <input type="checkbox"/> Impounding Structures</li> </ol> <p><b>G. Use of Explosives</b></p> <ol style="list-style-type: none"> <li>1. <input type="checkbox"/> Blaster Certification</li> <li>2. <input type="checkbox"/> Distance Prohibitions</li> <li>3. <input type="checkbox"/> Blast Survey/Schedule</li> <li>4. <input type="checkbox"/> Warnings &amp; Records</li> <li>5. <input type="checkbox"/> Control of Adverse Effects</li> </ol>	<p><b>H. Subsidence Control Plan</b></p> <p><b>I. Roads</b></p> <ol style="list-style-type: none"> <li>1. <input checked="" type="checkbox"/> Road Construction</li> <li>2. <input type="checkbox"/> Certification</li> <li>3. <input checked="" type="checkbox"/> Drainage</li> <li>4. <input checked="" type="checkbox"/> Surfacing and Maintenance</li> <li>5. <input type="checkbox"/> Reclamation</li> </ol> <p><b>J. Signs &amp; Markers</b></p> <ol style="list-style-type: none"> <li>1. <input checked="" type="checkbox"/> Signs</li> <li>2. <input checked="" type="checkbox"/> Markers</li> </ol> <p><b>K. Distance Prohibitions</b></p> <p><b>L. Revegetation</b></p> <ol style="list-style-type: none"> <li>1. <input type="checkbox"/> Vegetative Cover</li> <li>2. <input type="checkbox"/> Timing</li> </ol> <p><b>M. Postmining Land Use</b></p> <p><b>N. Other</b></p> <p>General Performance Category</p> <p>_____</p> <p>_____</p> <p>_____</p>
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### Performance Standard Categories 30 CFR Counterparts

<p><b>A. Administrative</b> ..... 773.11</p> <ol style="list-style-type: none"> <li>1. Valid Permit ..... 773.11</li> <li>2. Mining within Bonded Area ..... 773.11</li> <li>3. Terms &amp; Conditions of Permit ..... 773.17</li> <li>4. Liability Insurance ..... 800.60</li> <li>5. Ownership and Control ..... 778.13</li> <li>6. Temporary Cessation ..... 842.11(e) &amp; 816/817.131</li> <li>7. AML Rec. Fees - Non-Respondent ..... 870.13(b)</li> <li>8. AML Rec. Fees - Failure to Pay ..... 870.15(a)</li> </ol> <p><b>B. Hydrologic Balance</b> ..... (816/817.41-57)</p> <ol style="list-style-type: none"> <li>1. Drainage Control ..... 45</li> <li>2. Inspections &amp; Certifications ..... 49(a)(10)</li> <li>3. Siltation Structures ..... 46</li> <li>4. Discharge Structures ..... 47</li> <li>5. Diversions ..... 43</li> <li>6. Effluent Limits ..... 42</li> <li>7. Ground Water Monitoring ..... 41(c)</li> <li>8. Surface Water Monitoring ..... 41(e)</li> <li>9. Drainage - Acid - Toxic Materials ..... 41(f)</li> <li>10. Impoundments ..... 49</li> <li>11. Stream Buffer Zones ..... 57</li> </ol> <p><b>C. Topsoil &amp; Subsoil</b> ..... (816/817.22)</p> <ol style="list-style-type: none"> <li>1. Removal ..... 22(a)</li> <li>2. Substitute Materials ..... 22(c)</li> <li>3. Storage and Protection ..... 22(c)</li> <li>4. Redistribution ..... 22(d)</li> </ol> <p><b>D. Backfilling &amp; Grading</b> ..... 816/817.95-107</p> <ol style="list-style-type: none"> <li>1. Exposed Openings ..... 816/817.13, 14, 15, &amp; 823.11 &amp; 21</li> <li>2. Contemporaneous Reclamation ..... 100</li> <li>3. Approximate Original Contour ..... 102(a)(1)</li> <li>4. Highwall Elimination ..... 102(a)(2)</li> <li>5. Steep Slopes (includes downslope) ..... 107</li> <li>6. Handling of Acid &amp; Toxic Materials ..... 102(c)</li> <li>7. Stabilization (rills and gullies) ..... 95(b)</li> </ol>	<p><b>E. Excess Spoil Disposal</b> ..... (816/817.71-74)</p> <ol style="list-style-type: none"> <li>1. Placement ..... 71(c)</li> <li>2. Drainage Control ..... 71(f)</li> <li>3. Surface Stabilization ..... 71(g)</li> <li>4. Inspections &amp; Certifications ..... 71(h)</li> </ol> <p><b>F. Coal Mine Waste (Refuse Piles/Impoundments)</b> ..... 816/817.81-84</p> <ol style="list-style-type: none"> <li>1. Drainage Control ..... 83(a)</li> <li>2. Surface Stabilization ..... 83(b)</li> <li>3. Placement ..... 83(c)</li> <li>4. Inspections and Certifications ..... 83(d)</li> <li>5. Impounding Structures ..... 84</li> </ol> <p><b>G. Use of Explosives</b> ..... (816/817.61-68)</p> <ol style="list-style-type: none"> <li>1. Blaster Certification ..... 61(c)</li> <li>2. Distance Prohibitions ..... 61(d)</li> <li>3. Blast Survey/Schedule ..... 62-64</li> <li>4. Warnings &amp; Records ..... 66 &amp; 68</li> <li>5. Control of Adverse Effects ..... 67</li> </ol> <p><b>H. Subsidence Control Plan</b> ..... (817.121-122)</p> <p><b>I. Roads</b> ..... (816/817.150-151)</p> <ol style="list-style-type: none"> <li>1. Road Construction ..... 150(c)</li> <li>2. Certification ..... 151(a)</li> <li>3. Drainage ..... 150(b), 151(d)</li> <li>4. Surfacing and Maintenance ..... 150(e), 151(d)</li> <li>5. Reclamation ..... 150(f)</li> </ol> <p><b>J. Signs &amp; Markers</b> ..... 816/817.111</p> <ol style="list-style-type: none"> <li>1. Signs ..... 11(a), (b), &amp; (c)</li> <li>2. Markers ..... 11(a), (b), (d), (e), &amp; (f)</li> </ol> <p><b>K. Distance Prohibitions</b> ..... (761.11)</p> <p><b>L. Revegetation</b> ..... (816/817.111-116)</p> <ol style="list-style-type: none"> <li>1. Vegetative Cover ..... 111 &amp; 116</li> <li>2. Timing ..... 113</li> </ol> <p><b>M. Postmining Land Use</b> ..... (816/817.133)</p>
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**Denver Field Branch  
Mine Site Evaluation Narrative**

Permittee: Andalex Resources, Inc.  
Operator: Andalex Resources, Inc.  
Site: Centennial Mine  
Permit No: C/007/0019  
Date of Inspection: January 25, 2018  
Inspection Type: Oversight partial  
Weather: Overcast and cold with soft ground conditions  
Operator Representative(s): Karin Odendahl-Madsen  
State Official(s): Priscilla Burton, Division of Oil, Gas and Mining  
OSMRE Official(s): Tom Medlin #562

**Background**

This was an oversight partial inspection at the inactive Centennial Mine complex in Carbon County, Utah. The permitted surface area disturbed by mining activities is 47.19 acres. Prior to and following this inspection, I performed an administrative review of pertinent documentation including the 2016 Annual Report, water quality memorandum WQ 17-2, various maps and drawings, and recent DOGM inspection reports.

**Mine and Permit Identification Signs R645-301-521.241**

The mine and permit identification sign was stationed at the appropriate point of public access and contained the required information. See Figure 1.

**Management of Mine Openings R645-301-529.210**

The lower Pinnacle Mine portal was barricaded, fenced, and posted with a warning sign, as required. See Figure 2.

**Hydrology R645-301-731**

The fuel storage area featured secondary containment as required. No issues were noted. See Figure 3.

**Noncoal Mine Waste R645-301-528.330**

The site was tidy and free of uncontrolled noncoal mine waste.

**Sedimentation Ponds R645-301-742.220 et seq, and Drainage Control R645-301-742.423 et seq**

Sediment Ponds “B,” “C,” and “E” and associated culverts and spillways were inspected to ensure their proper function in directing and treating disturbed area runoff. All of the ponds were dry at the time of this inspection. Ponds “C” and “E” exhibited ample sediment storage capacity and stable embankments. All spillways and culverts were open and would function as designed. See Figures 4 and 5.

The four-celled Sediment Pond “B” exhibited stable exterior embankments and ample sediment storage capacity. However, the interior dams/embankments between cells had been breached by

a large volume hydrologic event. These breaches undermine the structural integrity of the interior embankments and potentially decrease the total detention time of disturbed area runoff. See Figures 6-9.

#### **Roads R645-301-534.150**

Primary roads throughout the site were in good repair, exhibiting positive drainage and stable construction. The primary road toward the mouth of the canyon was surfaced with asphalt and transitioned to compacted earth construction further up-canyon. See Figure 10.

#### **Topsoil Storage R645-301-234.230**

Topsoil Stockpiles “A,” “C,” “F,” and “G” were inspected to ensure protection of the resource from wind and water erosion. All stockpiles were stable, vegetated, and bermed; no issues were noted. See Figure 11.

#### **Maintenance Items**

The operator representative agreed to ensure Sediment Pond “B” is repaired and returned to its design-build as soon as possible.

#### **Enforcement Actions**

No enforcement actions were taken as a result of this inspection, nor are any pending.

#### **Photos:**



Figure 1. Mine and permit identification sign.



Figure 2. Lower Pinnacle Mine portal.



Figure 3. Fuel storage area featuring secondary containment.



Figure 4. Sediment Pond “E.”



Figure 5. Sediment Pond "C."



Figure 6. Overview of Sediment Pond "B."



Figure 7. Sediment Pond “B” showing breached interior embankments between cells 1 and 2 (foreground) and cells 2 and 3 (midground). The eroded/deposited embankment material is circled in red. The sources of the material are circled in green.



Figure 8. Sediment Pond “B” showing breached interior embankments between cells 3 and 4. The eroded/deposited embankment material is circled in red. The source of the material is circled in green.



Figure 9. Alternate vantage, breached interior embankment at Sediment Pond "B."



Figure 10. Primary road.



Figure 11. Topsoil Stockpile “A.”