



GARY R. HERBERT  
*Governor*

GREGORY S. BELL  
*Lieutenant Governor*

# State of Utah

## DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER  
*Executive Director*

### Division of Oil, Gas and Mining

JOHN R. BAZA  
*Division Director*

May 21, 2012

Jeff Clyde  
WW Clyde & Company  
PO Box 1955  
Orem, Utah 84059

Subject: Permit to Commence Small Mine Activities, WW Clyde and Company, Western Zirconium Pit, S/057/0009, Weber County, Utah

Dear Mr. Clyde:

The Division of Oil, Gas and Mining finds your Notice of Intention to Commence Small Mining Operations (Notice) complete and approves the reclamation surety for the Western Zirconium Pit mine. You are now permitted to conduct mining activities as outlined in the Notice provided you have approval from all other appropriate agencies. The approval or acceptance of a complete notice of intention does not relieve an operator from his responsibility to comply with the applicable statutes, rules, regulations, and ordinances of all local, state and federal agencies with jurisdiction over any aspect of the operator's mining operations. Enclosed please find a copy of the reclamation contract and stamped approved Notice.

Please keep in mind the following regulatory requirements:

- Stockpiling topsoil material prior to beginning activities will help ensure successful revegetation. Even the first few inches of undeveloped material is worth saving to aid in later revegetation efforts, and future regulatory surety release.
- If you encounter any archaeological or historical items, you are asked to notify this office, and State History of your find.
- Permit fees and annual reports are due by January 31<sup>st</sup>.

Page 2 of 2  
WW Clyde & Company  
S/057/0009  
May 21, 2012

The Division's web page at <http://ogm.utah.gov> under the Mining Program has a link to the rules under which you are expected to operate and to other information to assist you in complying with program requirements. Thank you for your cooperation. In reply, please refer to file number S/057/0009. If you have questions or concerns regarding this letter, please contact Paul Baker at 801-538-5261 or Lynn Kunzler at 801-538-5310. Best wishes mining!

Sincerely,



Dana Dean, P.E.  
Associate Director, Mining

DD: lk: eb

Enclosure: Copy of RC & surety forms

Copy of approved NOI

cc: Weber County Zoning Department, 2380 Washington Boulevard, Ogden, Utah 84401 with attachments  
P:\GROUPS\MINERALS\WP\M057-Weber\S0570009-WesternZirconiumPit\final\apvl-4821-05112012.doc

**APPROVED**  
**MAY 18 2012**  
DIV. OIL GAS & MINING

**STATE OF UTAH**  
**DEPARTMENT OF NATURAL RESOURCES**  
**DIVISION OF OIL, GAS AND MINING**  
1594 West North Temple Suite 1210  
Box 145801  
Salt Lake City, Utah 84114-5801  
Telephone: (801) 538-5291 Fax: (801) 359-3940

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**APR 30 2012**  
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**NOTICE OF INTENTION TO COMMENCE SMALL MINING OPERATIONS**

The information requirements of this form are based on provisions of the Mined Land Reclamation Act, Title 40-8, Utah Code Annotated 1987, and the General Rules as promulgated under the Utah Minerals Regulatory Program (R647). The rules and Act are available online at <http://www.rules.utah.gov/publicat/code/r647/r647.htm> and [http://le.utah.gov/~code/TITLE40/40\\_08.htm](http://le.utah.gov/~code/TITLE40/40_08.htm).

Cultural Resources Survey: To fulfill its obligations under Utah Code Annotated 9-8-404, the Division needs cultural resource (archaeology) information. The amount and type of information required will depend on the mine location, the history of previous disturbance, and other factors. Please contact the Division for further information.

A permit fee of \$150 or \$500 must accompany this application (Utah Code Ann. §40-8-7(1)(i)) and is due annually. The fee is \$150 for a mine with a disturbed area of five acres or less, and the fee is \$500 if the disturbed area is between five and ten acres.

"Small Mining Operations" are operations which have a disturbed area of ten or fewer surface acres at any time in unincorporated areas, or five acres or fewer in incorporated areas.

\*\*\*\*\*

**I. GENERAL INFORMATION** (Rule R647-3-104)

- 1. Name of Mine: Western Zirconium Pit
- 2. Operator Name: W.W. Clyde & Co.

Mailing Address: P.O. Box 1955  
City, State, Zip: Orem, Utah 84059  
Phone: 801-802-6900 Fax: \_\_\_\_\_  
E-mail Address: bsumsion@clydeinc.com

Type of Business: Corporation () , LLC () , Sole Proprietorship (dba) ()  
General Partnership () , Limited Partnership () , Individual () .

**Business Entity (not individuals) must be registered (and maintain registration) with the State of Utah, Division of Corporations (DOC)** If not currently registered, contact [www.commerce.utah.gov](http://www.commerce.utah.gov) to renew or apply. Business Entity #: 570716-0412

Local Business License #: In Process (if required)  
Issued by: County: Weber County or City: \_\_\_\_\_

**3. Contact Person(s):**

Registered Utah Agent (as identified with the Utah DOC) (if individual leave blank):  
Name: Jeff Clyde Title: Vice President  
Address: P.O. Box 1955  
City, State, Zip: Orem, Utah 84059  
Phone: 801-802-6900 Fax: \_\_\_\_\_  
E-mail Address: jclyde@wwclyde.net

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**I.3. Contact Person(s) (continued):**

This person to be notified for: permitting (  ) surety (  ) (check all that apply)  
Name: Brent Sumsion Title: Property & Enviro. Manager  
Address: P.O. Box 1955, 730 N. 1500 W.  
City, State, Zip: Orem, Utah 84059  
Phone: 801-360-1344 Fax: \_\_\_\_\_  
Emergency, Weekend, or Holiday Phone: 801-360-1344  
E-mail Address: bsumsion@clydeinc.com

This person to be notified for: permitting (  ) surety (  ) (check all that apply)  
Name: \_\_\_\_\_ Title: \_\_\_\_\_  
Address: \_\_\_\_\_  
City, State, Zip: \_\_\_\_\_  
Phone: \_\_\_\_\_ Fax: \_\_\_\_\_  
Emergency, Weekend, or Holiday Phone: \_\_\_\_\_  
E-mail Address: \_\_\_\_\_

**4. If Business is a Sole Proprietor (dba) or Individual:**

Name of Owner: \_\_\_\_\_ Title: \_\_\_\_\_  
Business Address: \_\_\_\_\_  
City, State, Zip: \_\_\_\_\_  
Phone: \_\_\_\_\_ Fax: \_\_\_\_\_  
E-mail Address: \_\_\_\_\_

**If Business is a Corporation:**

Name of Officers: Wilford Clyde Title: President  
Name: Jeff Clyde Title: Vice-President  
Name: Scott Okleberry Title: Vice-President  
Name: \_\_\_\_\_ Title: \_\_\_\_\_

Headquarters Address: P.O. Box 1955, 730 N. 1500 W.  
City, State, Zip: Orem, Utah 84059  
Phone: 801-802-6900 Fax: 801-802-6830  
E-mail Address: www.wwclyde.net

**If Business is a Limited Liability Company: Member Managed (  ) Manager Managed (  )**

Name of 1<sup>st</sup> Member/Manager: \_\_\_\_\_ Title: \_\_\_\_\_  
Business Address: \_\_\_\_\_  
City, State, Zip: \_\_\_\_\_  
Phone: \_\_\_\_\_ Fax: \_\_\_\_\_  
E-mail Address: \_\_\_\_\_

Name of 2<sup>nd</sup> Member/Manager: \_\_\_\_\_ Title: \_\_\_\_\_  
Business Address: \_\_\_\_\_  
City, State, Zip: \_\_\_\_\_  
Phone: \_\_\_\_\_ Fax: \_\_\_\_\_  
E-mail Address: \_\_\_\_\_

**If Business is a Partnership:**

Names of Partners: \_\_\_\_\_  
Business Address: \_\_\_\_\_  
City, State, Zip: \_\_\_\_\_  
Phone: \_\_\_\_\_ Fax: \_\_\_\_\_  
E-mail Address: \_\_\_\_\_



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5. Ownership of Land Surface:

Private (Fee) (X) BLM ( ) US Forest Service ( )
State Trust Land/School Sections ( ) State Sovereign Lands ( )

Other (please describe):
Name Western Zirconium Address 10000 W. 900 S. , Ogden, Utah 84404
Name Address
Name Address
Name Address

6. Ownership of Minerals:

Private (Fee) ( ) BLM ( ) US Forest Service ( )
State Trust Land/School Sections ( ) State Sovereign Lands ( )

Other (please describe):
Name Western Zirconium Address 10000 W. 900 S. , Ogden, Utah 84404
Name Address
Name Address
Name Address

BLM Claim Number(s):
Utah State Lease Number(s):
BLM/USFS Lease or Project File Number(s):

Name of Lessee(s):

7. Have the above surface and mineral owners been notified in writing? Yes X No
If no, why not?

8. Does the Entity have legal right to enter and conduct mining operations on the land covered by this notice? Yes X No

Please be advised that if State Trust Lands are involved, notification to the Division of Oil, Gas and Mining alone does not satisfy the notification requirements of Mineral Leases upon State Trust Lands. Exploration or mining activity on State Trust Lands requires a minimum of 60 days notice to the Trust Lands Administration prior to commencing any activities. Please contact the School Institutional Trust Lands Administration (SITLA) at (801) 538-5508 for notification requirements.

II. PROJECT LOCATION & MAP (Rule R647-3-105)

1. Project Location & Map (legal description):

County(ies):
1/4, of NE 1/4, of SW 1/4, Section: 18 Township: 6 N. Range: 3 W.
1/4, of 1/4, of 1/4, Section: Township: Range:
1/4, of 1/4, of 1/4, Section: Township: Range:
UTM East: (if known) UTM North: (if known)
Name of Quad Map for Location:

2. Is the project within an incorporated area? ( ) Yes ( X ) No
If yes, what is the town or city?

- 3. **Location and Operations maps** must be plotted at a scale to accurately identify locational landmarks and operations details. All maps must include a north arrow, scale, appropriate labels, and title box including the mine name, township, range and section.
  - a. The **general location map** must be the scale of a USGS 7.5 minute series map or equivalent (1"=2000') and identify new or existing access roads.
  - b. The **operations map** (1"=200' or other scale as determined necessary by the Division) must be labeled and identify:
    - i. The area to be disturbed;
    - ii. The location of any existing or proposed operations including access roads, drill holes, trenches, pits, shafts, cuts, or other planned activities; and
    - iii. Any adjacent previous disturbance for which the operator is not responsible.
 (Contact the Division for a list of consultants and land surveyors for mapping assistance.)
- 4. The proposed (5 acre or less) disturbed area (including access/haul roads) should be marked ON THE GROUND with metal T-Posts (or with some other marker of equal effectiveness). Markers should be appropriately spaced so that the next marker in either direction is clearly visible with the naked eye.

III. **OPERATION PLAN** (Rule R647-3-106)

- 1. **Type of mining:** Surface () Underground ()
- 2. **Mineral(s) to be mined:** Construction Aggregates.
- 3. **Amount of material** to be extracted, moved, or proposed to be moved: \_\_\_\_\_  
About 370,000 cubic yards.
- 4. Will any **water, liquid chemicals, reagents, or other solutions** be used, produced or discharged as part of the mining or milling process? Yes () No () If yes, please describe (add extra pages if needed): Water will be imported and used for dust control.
- 5. Provide a brief **description of the proposed mining operation**, and onsite processing facilities (add extra pages if necessary). \_\_\_\_\_  
Aggregate will be ripped and dozed from its current position and loaded into a jaw crusher and then screened and reduced in size to 3" with a cone crusher. It will be temporarily stockpiled on site until needed for pond embankment.
- 6. (N/A) **New Road(s):** Length \_\_\_\_\_(ft), Width \_\_\_\_\_(ft)
- 7. (N/A) **Improved Road(s):** Describe improvements that need to be made to existing roads to access the site, including the Length \_\_\_\_\_ (ft) and Width \_\_\_\_\_ (ft) of **new disturbances.**
- 8. Total project surface **acreage to be disturbed:** 10 Acres (acres) PLEASE SPECIFY EXACT ACREAGE (this will be used to determine surety bond amount – see #VI).
- 9. Proposed **startup date** (month, year): June 1, 2012
- 10. Proposed **completion**, if known (month, year): Dec. 30, 2012

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**IV. OPERATION AND RECLAMATION PRACTICES** (Rule R647-3-107, 108 & 109)

The reclamation and operation obligation is to keep the area clean and safe, minimize hazards to public safety, return the land to a useful condition, and reestablish at least 70 percent of the premining vegetative ground cover or within practical limits. To accomplish this, the Permittee / Operator will need to perform reclamation concurrently, or at the completion (within one (1) year) of mining. Please refer to The Practical Guide to Reclamation in Utah, available at:

[https://fs.ogm.utah.gov/pub/MINES/Coal\\_Related/RecMan/Reclamation\\_Manual.pdf](https://fs.ogm.utah.gov/pub/MINES/Coal_Related/RecMan/Reclamation_Manual.pdf).

1. *Keep the mining operation in a safe, clean, and environmentally stable condition.*
2. *Permanently seal all shafts and tunnels to prevent unauthorized or accidental entry.*
3. *Plug drill holes with a five foot cement surface plug. Holes that encounter fluids are to be plugged in the subsurface to prevent aquifer contamination.*
4. *Construct berms, fences, or barriers, when needed, above highwalls and excavations.*
5. *Remove, isolate, or neutralize all toxic materials in a manner compatible with federal and state regulations.*
6. *Remove all waste or debris from stream channels.*
7. *Dispose of any trash, scrap metal, wood, machinery, and buildings.*
8. *Conduct mining activities so as to minimize erosion and control sediment.*
9. *Reclaim all roads that are not part of a permanent transportation system.*
10. *Stockpile topsoil and suitable overburden prior to mining.*
11. *Stabilize highwalls by backfilling or rounding to 45 degrees or less, where feasible; reshape the land to near its original contour, and redistribute the topsoil and suitable overburden.*
12. *Properly prepare seedbed to a depth of six inches by pocking, ripping, discing, or harrowing. Leave the surface rough.*
13. *Reseed disturbed areas with adaptable species. (The Division recommends a mixture of species of grass, forb, and browse seed, and will provide a specific species list if requested.)*
14. *Plant the seed with a rangeland or farm drill, or broadcast the seed. Fall is the preferred time to seed.*

V. **VARIANCE REQUEST** (Rule R647-3-110)

**Any variance must be approved writing in advance by the Division**

Any planned deviations from Rules R647-3-107, Operation Practices, R647-3-108, Hole Plugging Requirements, or R647-3-109, Reclamation Practices, as summarized above (see IV. Operation and Reclamation Practices Item # 1-14), should be identified below listing applicable rule number. Give justification for the variance(s) and alternate methods or measures to be utilized to meet the intent of the rule. Written approval from the Division will be given, if the proposed alternative methods to be used are consistent with the Act.

Are variances being requested? Yes (  ) No (  )

Variance Requested

Item #                      Applicable Rule

Justification: \_\_\_\_\_

\_\_\_\_\_

Alternate methods or measure to be utilized: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Attach additional page(s) if more variances are requested.

VI. **SURETY** (Utah Code Ann. §40-8-7(1)[c])

**A reclamation contract and surety must be provided to and approved by the Division prior to commencement of operations. No surface disturbance is authorized until the surety is posted and approved in writing.** The surety may be provided in the form of a certificate of deposit, a letter of credit, a surety bond, or cash. Please contact the Division for further information about submitting the surety. All mining operations are required to furnish and maintain reclamation surety to guarantee that the land affected is reclaimed (Utah Code Ann. §40-8-7(1)[c]).

The reclamation surety amount is based on the nature, extent and duration of operations. The amounts are based on data from current large mine surety and are used as a general guide, along with actual site conditions. Reclamation surety for small mines is reviewed every three (3) or five (5) years and adjusted as necessary for inflation/deflation based upon acceptable Costs Index. **Contact the Division for the dollar amount required for a three (3) or five (5) year period for this project.**

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**VII. SIGNATURE REQUIREMENT**

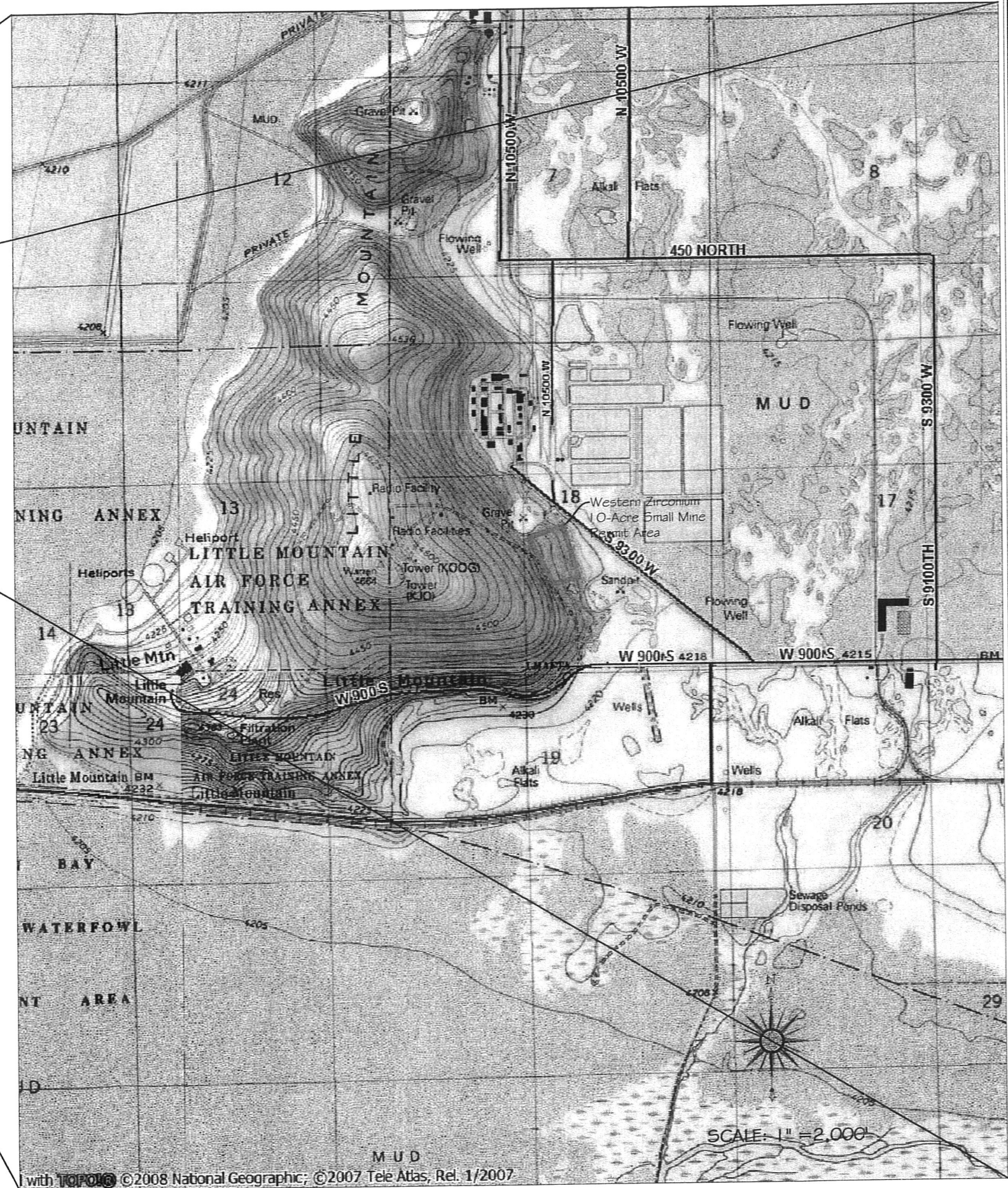
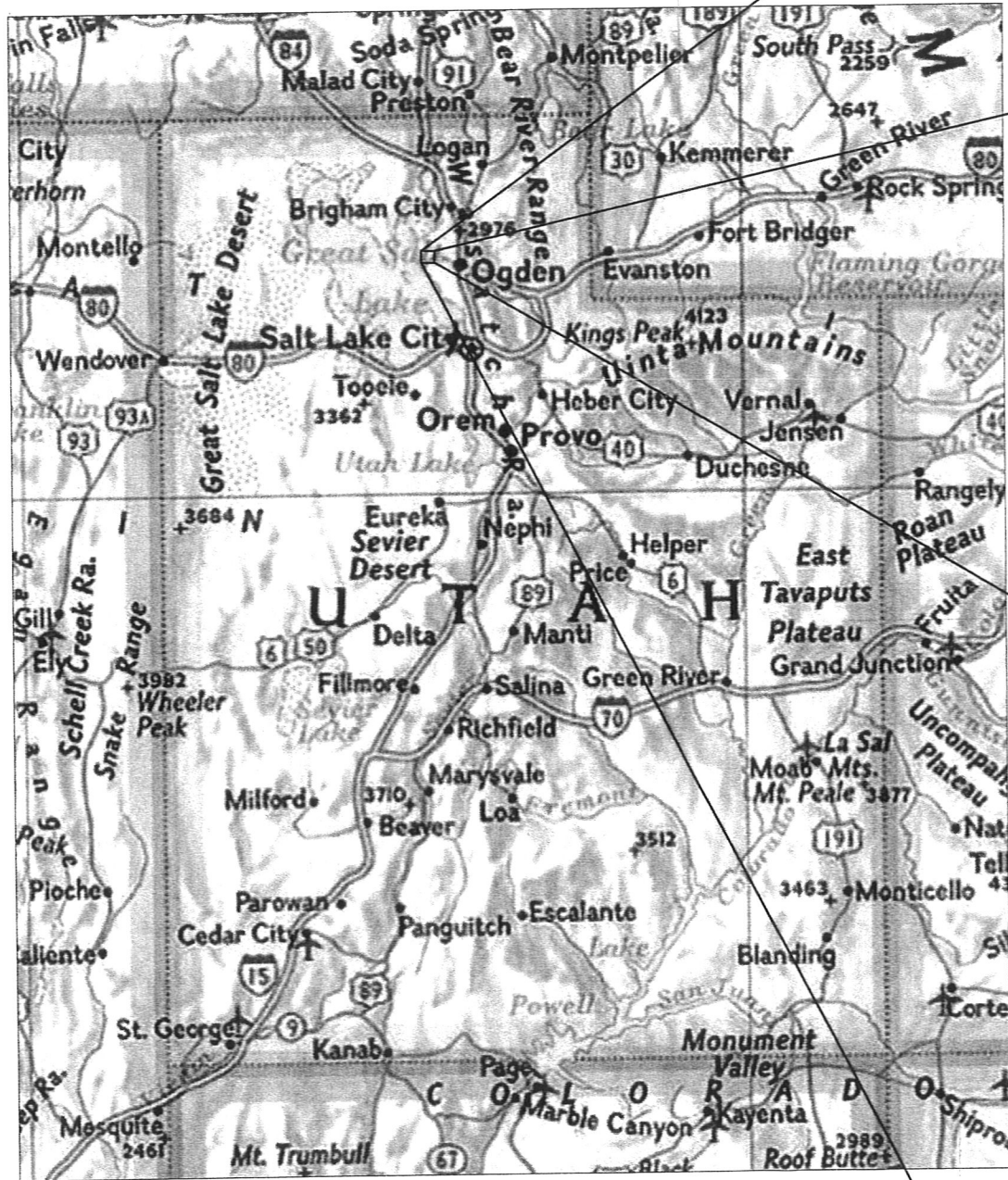
**CERTIFICATION**

I state under penalty of perjury under the laws of the state of Utah and the United States of America that:

- a. I have read this form and declare the information, statements and/or documentation are true, correct and complete to the best of my knowledge and belief; AND
- b. I commit to the reclamation of the aforementioned small mining project as required by the Utah Mined Land Reclamation Act (40-8) and the rules as specified by the Board of Oil, Gas and Mining.
- c. **This certification must be signed by:** (1.) an executive officer if the applicant is a corporation; (2.) a partner if applicant is a partnership (general or limited); (3.) the owner if applicant is a sole proprietorship; or (4.) the member or manager if applicant is a limited liability company.

Signature:  Date: April 30, 2012  
Name (typed or printed): Scott Okleberry  
Title/Position (if applicable): Vice President





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with TOPOLIC ©2008 National Geographic; ©2007 Tele Atlas, Rel. 1/2007

W.W. Clyde & Co.  
P.O. Box 1955  
Orem, Utah 84059  
801-802-6900



Western Zirconium Pit Small Mine  
NOI  
S. 18, T. 6 N., R. 3W., SLB#M

NO.	DATE	DESCRIPTION	BY

Drawn: B SIMSON	Checked: BS/OL	Approved: 4/27/12	Eng. No.
TITLE: Western Zirconium Aggregate Source Base Map		ISSUED FOR INTERNAL REVIEW	
Engineer:		Revision: 00	



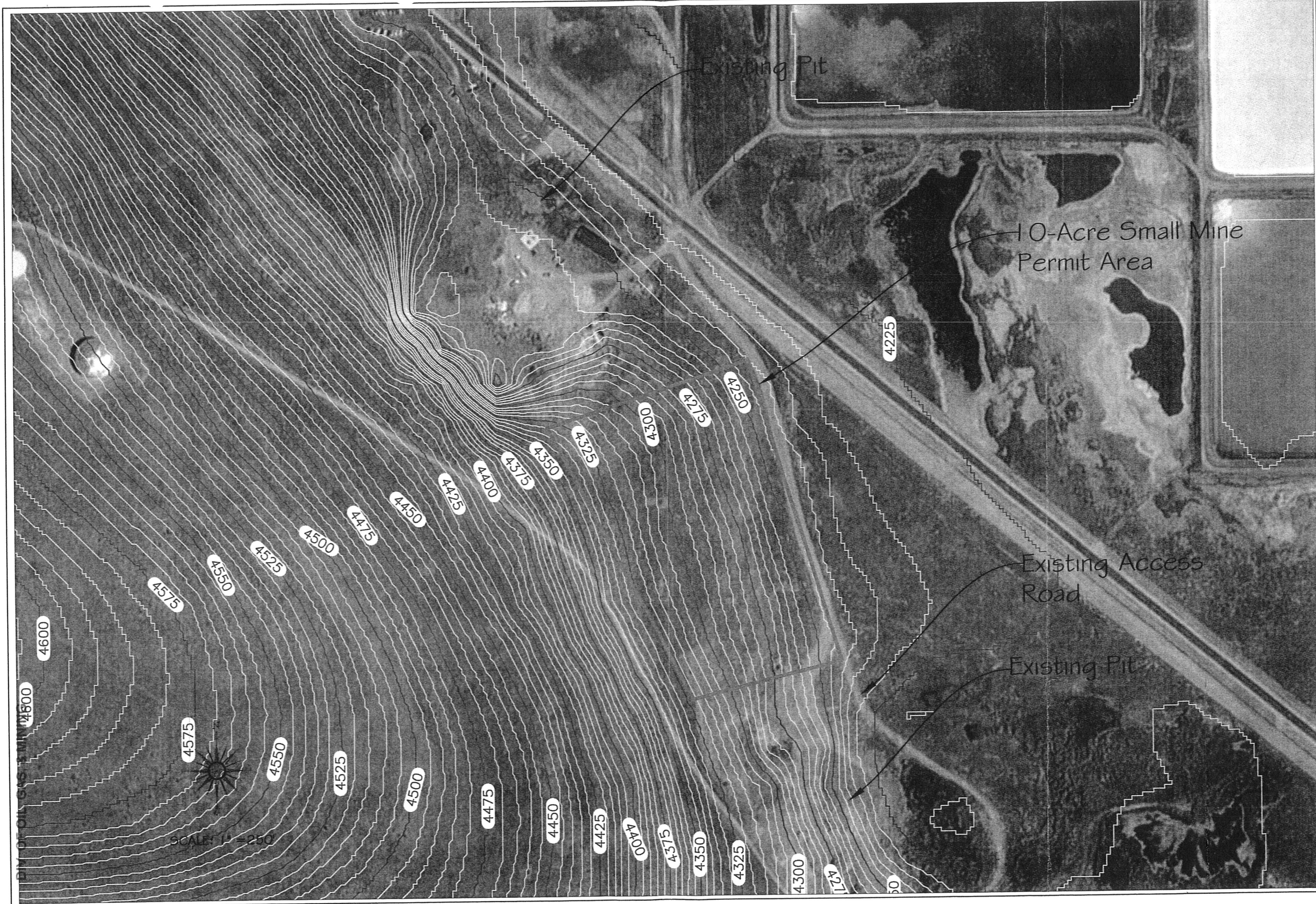
APPROVED

MAY 18 2012

THE OIL GAS & MINING

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Drawn: B SUMSON	Engineer:				
Checked: BS/QL					
Approved:					
Date: 4/27/12	NO. DATE:				
Drwg. No.	DESCRIPTION:				
	BY:				

TITLE: Existing Contours  
 ISSUED FOR INTERNAL REVIEW  
 Revision: 00

Western Zirconium Granular Borrow Pit  
 S. 18, T. 6 N., R. 3W., SLB#M



W.W. Clyde & Co.  
 P.O. Box 1955  
 Orem, Utah 84059  
 801-802-6900



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SCALE: 1" = 250'

Drawn: B SUMSON	TITLE: Final Buildout Contours	Engineer:	
Checked: BS/OL	ISSUED FOR INTERNAL REVIEW	No.:	
Approved:	Revision: 00	DATE:	
Date: 4/27/12		DESCRIPTION:	
Dwg. No.:		BY:	

W.W. Clyde & Co.  
P.O. Box 1955  
Orem, Utah 84059  
801-802-6900



Western Zirconium Granular Borrow Pit  
S.18, T.6 N., R.3W., SLB&M



FORM MR-RC (SMO)  
Revised August 9, 2006  
RECLAMATION CONTRACT

Mine Name: Western Zirconium Pit

Other Agency File Number:

**STATE OF UTAH**  
**DEPARTMENT OF NATURAL RESOURCES**  
**DIVISION of OIL, GAS and MINING**  
1594 West North Temple, Suite 1210  
Box 145801  
Salt Lake City, Utah 84114-5801  
(801) 538-5291  
Fax: (801) 359-3940

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DIV. OF OIL, GAS & MINING

**SMALL MINE RECLAMATION CONTRACT**

This Reclamation Contract (hereinafter referred to as "Contract") is entered into between W.W. Clyde & Co. the "Operator" and the Utah State Division of Oil, Gas and Mining ("Division").

WHEREAS, Operator desires to conduct mining operations under Notice of Intention (NOI) File No. 90570009 which the Operator has filed with the Division and has been determined by the Division to be complete (Complete NOI) as required by the Utah Mined Land Reclamation Act, Sections 40-8-1 et seq., Utah Code Annotated, (2005, as amended) (hereinafter referred to as "Act") and the regulations adopted pursuant to the Act; and

WHEREAS, Operator is obligated to reclaim the lands affected by the mining operations in accordance with the Act and the regulations, and is obligated to provide a surety in a form and amount approved by the Division or the Board of Oil, Gas and Mining (Board) to assure reclamation of the lands affected by the mining operations.

NOW, THEREFORE, the Division and the Operator agree as follows:

1. Operator agrees to promptly reclaim in accordance with the requirements of the Act and applicable regulations, as they may be amended, all of the lands affected by the mining operations conducted or to be conducted pursuant to a Complete Notice of Intention.
2. The Lands Affected by the mining operations and subject to the requirements of the Act and this Contract include:
  - A. All surface and subsurface areas affected or to be affected by the mining operations including but not limited to private on-site ways, roads, railroads; land excavations; drill sites and workings; refuse banks or spoil piles; evaporation or settling

ponds; stockpiles; leaching dumps; placer areas; tailings ponds or dumps; work, parking, storage, and waste discharge areas, structures, and facilities; and

- B. All mining disturbances regardless of discrepancies in the map and legal description, unless explicitly and clearly identified as EXCLUDED on maps, and legal descriptions included in the Complete NOI; provided lands may be excluded only if: (1) they were disturbed by mining operations that ceased prior to July 1, 1977; (2) the lands would be included but have been reclaimed in accordance with a complete notice or reclamation plan; or (3) the lands were disturbed by a prior operation for which there is no surety, no legally responsible entity or person, and which lands are not necessarily or incidentally intended to be affected by the mining operations as described in the Complete NOI.
3. The Operator shall be responsible for reclamation of all such Lands Affected regardless of errors or discrepancies in the maps or legal descriptions provided with the NOI which are intended to assist in determining the location of the mining operations, to describe the areas of disturbance, and to assist estimating the amount of surety required.
  4. The Operator prior to commencement of any mining operations and as a precondition to the rights under the Notice of Intention shall provide a surety in a form permitted by the Act and in an amount sufficient to assure that reclamation of the Lands Affected will be completed as required by the Act. The Surety shall remain in full force and effect according to its terms unless modified by the Division in writing. A copy of the agreement providing for the Surety for the reclamation obligations herein is included as **ATTACHMENT A** to this Contract.
  5. If the Surety expressly provides for cancellation or termination for non-renewal:
    - A. The Operator shall within 60 days following the Division's receipt of notice that the Surety will be terminated or cancelled, provide a replacement Surety sufficient in a form and amount, as required by the Act, to replace the cancelled surety; or
    - B. If the Operator fails to provide an acceptable replacement Surety within 60 days of notice of cancellation or termination, the Division may order the Operator to cease further mining activities, and without further notice proceed to draw upon letters of credit, to withdraw any amounts in certificates of deposit or cash and/or any other forms of surety, and to otherwise take such action as may be necessary to secure the rights of the Division to perfect its claim on the existing surety for the purpose of fully satisfying all of the reclamation

obligations incurred by the Operator prior to the date of termination, and the Division may thereafter require the Operator to begin immediate reclamation of the Lands Affected by the mining operations, and may, if necessary, proceed to take such further actions as may be required for the Division to forfeit the surety for the purpose of reclaiming the Lands Affected.

6. The Operator's liability under this Contract shall continue in full force and effect until the Division finds that the Operator has reclaimed the Lands Affected by mining operations in accordance with the Act and regulations, as amended. If the mining operations are modified or for any other reason vary from those described in the Complete Notice of Intention, the Operator shall immediately advise the Division, and the Notice of Intention shall be revised and the Surety amount shall be adjusted as necessary.
7. If reclamation of a substantial phase or segment of the Lands Affected by the mining operations is completed to the satisfaction of the Division, and the Division finds that such substantial phases or segments are severable from the remainder of the mining area, Operator may request the Division to find that Operator has reclaimed such area. If the Division makes such finding, Operator may make request to the Division for a reduction in the aggregate face amount of the Surety, and the Division may reduce the surety to an amount necessary to complete reclamation of the remaining mining operations as anticipated by the Complete Notice of Intention in accordance with the requirements of the Act and regulations, as amended.
8. Operator may, at any time, submit a request to the Division to substitute surety. The Division may approve such substitution if the substitute surety meets the requirements of the Act and the applicable rules.
9. Operator agrees to pay all legally determined public liability and property damage claims resulting from mining operations, to pay all permit fees, to maintain suitable records, to file all required reports, to permit reasonable inspections, and to fulfill all sundry reporting requirements applicable to the mine as required by the Act and implementing rules.
10. Operator agrees to indemnify and hold harmless the State, Board, and the Division from any claim, demand, liability, cost, charge, suit, or obligation of whatsoever nature arising from the failure of Operator or Operator's agents and employees, or contractors to comply with this Contract.
11. If Operator shall default in the performance of its obligations hereunder, Operator shall be liable for all damages resulting from the breach hereof including all costs, expenses, and reasonable attorney's fees incurred by the Division and/or the Board in the enforcement of this Contract.

12. Any breach of a material provision of this Contract by Operator may, at the discretion of the Division, in addition to other remedies available to it, result in an order by the Division requiring the Operator to cease mining operations, and may thereafter result in an Order, subject to an opportunity for notice and hearing before the Board, withdrawing and revoking the Notice of Intention, and requiring immediate reclamation by the Operator of the Lands Affected or forfeiture of the Surety.
13. In the event of forfeiture of the Surety, Operator shall be liable for any additional costs in excess of the surety amount that is required to comply with this Contract. Upon completion of the reclamation of all of the Lands Affected, any excess monies resulting from forfeiture of the Surety shall be returned to the rightful claimant.
14. The Operator shall notify the Division immediately of any changes in the Operator's registered agent, the Operator's address, form of business, name of business, significant changes in ownership, and other pertinent changes in the information required as part of the Notice of Intention. Notwithstanding this requirement, any changes to the Notice of Intention, and any errors, omissions, or failures to fully or accurately complete or update the information on the Notice of Intention, or the attached maps, shall not affect the validity of this Contract and the rights of the Division to enforce its terms.
15. If requested by the Division, the Operator shall execute addendums to this Contract to add or substitute parties, or to reflect changes in the Operator, Surety, and otherwise modify the Contract to reflect changes in the mining operations as requested by the Division. All modifications must be in writing and signed by the parties, and no verbal agreements, or modifications in any of the terms or conditions shall be enforceable.
16. This Contract shall be governed and construed in accordance with the laws of the State of Utah.

The signatory below represents that the Operator, if not a natural person, is a properly organized entity in good standing under the laws of Utah and the United States, is registered as an entity authorized to do business in the State of Utah, and that he/she is authorized to execute this Contract on behalf of the entity as Operator.

OPERATOR:

W.W. Clyde & Co.

Operator Name

By SCOTT R. OKELBERRY

Authorized Officer (Typed or Printed)

VICE PRESIDENT

Authorized Officer - Position

Scott R Okelberry 5/1/12  
Officer's Signature Date

STATE OF Utah )

) ss:

COUNTY OF Utah )

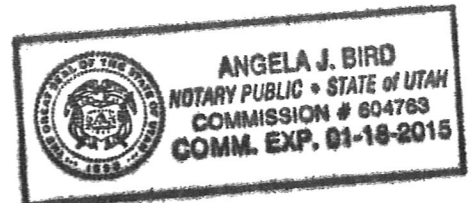
On the 1 day of May, 2012, Scott R. Okelberry personally appeared before me, who being by me duly sworn did say that he/she is an Vice President (owner, officer, director, partner, agent or other (specify)) of the Operator W.W. Clyde & Co. and duly acknowledged that said instrument was signed on behalf of said Operator by authority of its bylaws, a resolution of its board of directors or as may otherwise be required to execute the same with full authority and to be bound hereby.

Angela J Bird  
Notary Public

Residing at Springville Ut.

1-18-2015

My Commission Expires:







**FACT SHEET**

Commodity: Construction Aggregate

Mine Name: Western Zirconium Pit

Permit Number: 5/057/0009

County: Weber County

Disturbed Acres: 10-Acres

Operator Name: W.W. Clyde & Co.

Operator address: P.O. Box 1955, 730 N. 1500 W., Orem, Utah 84059

Operator telephone: 801-802-6900

Operator fax: 801-434-3017

Operator email: bsumsion@clydeinc.com

Contact: Brent R. Sumsion

Surety Type: Bond

Held by (Bank/BLM): Travelers Insurance

Surety Amount: \$50,000

Surety Account Number: 31194 NAIC# Bond# 105746560

Escalation Year: 2014

Tax ID or Social Security (for cash only): \_\_\_\_\_

Surface owner: Western Zirconium

Mineral owner: Western Zirconium

UTU and/or ML number: \_\_\_\_\_

\*\*\*DOGM Contact: Penny Berry, State of Utah, Division of Oil Gas and Mining, 801 538 5291 or bondcoordinator@utah.gov

Bond Number 105746560  
Surety NAIC No. 31194  
Permit Number \_\_\_\_\_  
Mine Name Western Zirconium Pit

**ATTACHMENT A**  
To  
**RECLAMATION CONTRACT**  
BETWEEN PRINCIPAL AND DIVISION

**STATE OF UTAH**  
DEPARTMENT OF NATURAL RESOURCES  
**Division of Oil, Gas and Mining**  
1594 West North Temple Suite 1210  
Box 145801  
Salt Lake City, Utah 84114-5801  
Telephone: (801) 538-5291  
Fax: (801) 359-3940

**RECEIVED**  
**MAY 03 2012**  
DIV. OF OIL, GAS & MINING

**THE UTAH MINED LAND RECLAMATION ACT**

**SURETY BOND**

\*\*\*\*\*

The undersigned W. W. Clyde & Co, as Principal,  
a Corporation organized under the laws of the State of Utah and  
Travelers Casualty & Surety Company of America, as Surety, a Corporation  
organized under the laws of the State of Connecticut, hereby jointly and severally bind ourselves,  
our heirs, administrators, executors, successors, and assigns, jointly and severally, unto the State of  
Utah, Division of Oil, Gas and Mining ("Division") and \_\_\_\_\_  
(other agency, if any) in the penal sum of Fifty Thousand and no/100 - - - - -  
dollars (\$ 50,000.00).

This Surety Bond is provided to secure the obligations of the Principal, as set forth by the terms  
and conditions of the Reclamation Contract, and any addendums thereto, to reclaim lands that will be  
affected by mining operations as identified in the Notice of Intention received, or approved if  
applicable, by the Division on the 2nd day of May, 20 12.

The lands that are covered by this Surety Bond are the Lands Affected by mining  
operations as defined and described in the above Notice, and the Mining and  
Reclamation Plan if required, subject to terms and conditions of the Reclamation  
Contract.

The condition of this obligation is that if the Division determines that Principal has  
satisfactorily reclaimed the disturbed lands in accordance with the Mining and Reclamation Plan or  
Notice and has faithfully performed all requirements of the Mined Land Reclamation Act, and

complied with the Rules and Regulations adopted in accordance therewith, then this obligation shall be void; otherwise it shall remain in full force and effect. Failure of the Principal to fulfill the obligations specified by the Mined Land Reclamation Act and the Rules adopted there under, and in accordance with the specification of the Principal's Mining and Reclamation Plan or Notice, may result in forfeiture of this bond in accordance with the applicable statutes and regulations.

If the Mining and Reclamation Plan or Notice provides for periodic partial reclamation of the lands affected, and if the lands are reclaimed in accordance with such Plan or Notice, Act and regulations, then Principal may apply for a reduction in the amount of this Surety Bond. In the converse, if the Mining and Reclamation Plan or Notice provides for a gradual increase in the lands affected or the extent of disturbance, then, the Division may require that the amount of this Surety Bond be increased, with the written approval of the Surety. The amount of reclamation surety may also be adjusted as a result of a periodic review by the Division, which shall take into account inflation/deflation based upon an acceptable Costs Index, or at the request of the operator.

This bond may be canceled by Surety after ninety (90) days following receipt by the Division and Principal of written notice of such cancellation. Written notice to the Division and Principal as required by this paragraph shall be provided by certified mail or by a courier service that provides proof of delivery by signature of the recipient. Surety's liability shall then, at the expiration of said ninety (90) days, cease and terminate except that Surety will remain fully liable for all reclamation obligations of the Principal incurred prior to the date of termination.

Principal and Surety and their successors and assigns agree to guarantee said obligation and to indemnify, defend, and hold harmless the Division from any and all expenses (including attorney fees) which the Division may sustain in the collection of sums due hereunder.

Surety will give prompt notice to Principal and to the Division of the filing of any petition or the commencement of any proceeding relating to the bankruptcy, insolvency, reorganization, or adjustment of the debts of Surety, or alleging any violation or regulatory requirements which could result in suspension or revocation of the Surety's license to do business.

Surety is licensed to do business in Utah and is rated by A. M. Best as A- or better or rated as having Financial Performance Rating (FPR) of 8 or better, and is listed in the U. S. Department of Treasury's Circular "570." Upon incapacity of the Surety by reason of bankruptcy, insolvency, or suspension or revocation of its license, or upon failure to maintain the A. M. Best or FPR rating and listing on Circular "570", Principal shall be without adequate bond coverage as required by the Division and shall have 120 days after notice to replace the bond with other bonds acceptable to the Division. If the Principal does not replace this surety bond as required, the Division may order cessation of mining operations and commence actions to enforce its rights against the Surety. The Surety's liability shall continue and the Surety will remain fully liable for all reclamation obligations of the Principal incurred until this surety bond is forfeited, or the conditions of this obligation have been satisfied.

Page 3  
MR-SUR  
Attachment A  
(revised May 24, 2006)

Bond Number 105746560  
Surety NAIC No. 31194  
Permit Number \_\_\_\_\_  
Mine Name Western Zirconium Pit

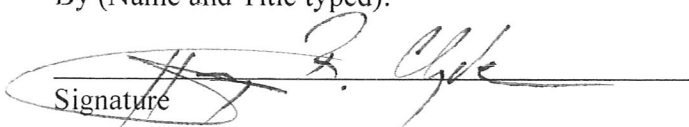
IN WITNESS WHEREOF, the Principal and Surety hereunto set their signatures and seals as of the dates set forth below.

W. W. CLYDE & CO.

Principal (Permittee)

Jeffery R. Clyde, President

By (Name and Title typed):

  
Signature

May 2, 2012

Date

**Surety Company**

TRAVELERS CASUALTY & SURETY COMPANY OF AMERICA


Surety Company Name

W. Douglas Snow

Surety Company Officer

Attorney-In-Fact

Title/Position

  
Signature

One Tower Square

Street Address

Hartford, Connecticut 06183

City, State, Zip

860-277-0111

Phone Number

May 2, 2012


Date

Page 4  
MR-SUR  
Attachment A  
(revised May 24, 2006)

Bond Number 105746560  
Surety NAIC No. 31194  
Permit Number \_\_\_\_\_  
Mine Name Western Zirconium Pit

SO AGREED this 11<sup>th</sup> day of May, 20 12.

AND APPROVED AS TO FORM AND AMOUNT OF SURETY:

  
\_\_\_\_\_  
John R. Baza, Director  
Utah State Division of Oil, Gas and Mining

\*NOTE: Where one signs by virtue of Power of Attorney for a Surety, such Power of Attorney must be filed with this bond. If the Operator is a corporation, the bond shall be executed by its duly authorized officer.

**AFFIDAVIT OF QUALIFICATION**

On the 2nd day of May, 20 12, W. Douglas Snow  
personally appeared before me, who being by me duly sworn did say that he/~~she~~, the said  
W. Douglas Snow is the Attorney-In-Fact of

Travelers Casualty & Surety Company of America and duly acknowledged that said instrument was signed on behalf  
of said company by authority of its bylaws or a resolution of its board of directors and said  
W. Douglas Snow duly acknowledged to me that said company executed the same, and that  
he/she is duly authorized to execute and deliver the foregoing obligations; that said Surety is authorized  
to execute the same and has complied in all respects with the laws of Utah in reference to becoming  
sole surety upon bonds, undertaking and obligations.

Signed: [Signature]  
Surety Officer

Title: A Attorney-In-Fact

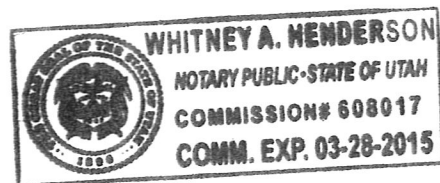
STATE OF Utah )  
 ) ss:  
COUNTY OF Salt Lake )

Subscribed and sworn to before me this 2nd day of May, 2012.

[Signature]  
Notary Public  
Residing at: Utah County

My Commission Expires:

March 28, 2012.





POWER OF ATTORNEY

Farmington Casualty Company
Fidelity and Guaranty Insurance Company
Fidelity and Guaranty Insurance Underwriters, Inc.
St. Paul Fire and Marine Insurance Company
St. Paul Guardian Insurance Company

St. Paul Mercury Insurance Company
Travelers Casualty and Surety Company
Travelers Casualty and Surety Company of America
United States Fidelity and Guaranty Company

Attorney-In Fact No. 223367

Certificate No. 004787286

KNOW ALL MEN BY THESE PRESENTS: That St. Paul Fire and Marine Insurance Company, St. Paul Guardian Insurance Company and St. Paul Mercury Insurance Company are corporations duly organized under the laws of the State of Minnesota, that Farmington Casualty Company, Travelers Casualty and Surety Company, and Travelers Casualty and Surety Company of America are corporations duly organized under the laws of the State of Connecticut, that United States Fidelity and Guaranty Company is a corporation duly organized under the laws of the State of Maryland, that Fidelity and Guaranty Insurance Company is a corporation duly organized under the laws of the State of Iowa, and that Fidelity and Guaranty Insurance Underwriters, Inc., is a corporation duly organized under the laws of the State of Wisconsin (herein collectively called the "Companies"), and that the Companies do hereby make, constitute and appoint

W. Douglas Snow, D. Cory Payne, James H. Dickson, Randall J. Austin, Aaron Griffith, Mark J. Austin, Susan R. Smith, Jace Pearson, and Vicki Sorensen

of the City of Murray, State of Utah, their true and lawful Attorney(s)-in-Fact, each in their separate capacity if more than one is named above, to sign, execute, seal and acknowledge any and all bonds, recognizances, conditional undertakings and other writings obligatory in the nature thereof on behalf of the Companies in their business of guaranteeing the fidelity of persons, guaranteeing the performance of contracts and executing or guaranteeing bonds and undertakings required or permitted in any actions or proceedings allowed by law.

IN WITNESS WHEREOF, the Companies have caused this instrument to be signed and their corporate seals to be hereto affixed, this 27th day of March, 2012.

Farmington Casualty Company
Fidelity and Guaranty Insurance Company
Fidelity and Guaranty Insurance Underwriters, Inc.
St. Paul Fire and Marine Insurance Company
St. Paul Guardian Insurance Company

St. Paul Mercury Insurance Company
Travelers Casualty and Surety Company
Travelers Casualty and Surety Company of America
United States Fidelity and Guaranty Company



State of Connecticut
City of Hartford ss.

By: [Signature]
George W. Thompson, Senior Vice President

On this the 27th day of March, 2012, before me personally appeared George W. Thompson, who acknowledged himself to be the Senior Vice President of Farmington Casualty Company, Fidelity and Guaranty Insurance Company, Fidelity and Guaranty Insurance Underwriters, Inc., St. Paul Fire and Marine Insurance Company, St. Paul Guardian Insurance Company, St. Paul Mercury Insurance Company, Travelers Casualty and Surety Company, Travelers Casualty and Surety Company of America, and United States Fidelity and Guaranty Company, and that he, as such, being authorized so to do, executed the foregoing instrument for the purposes therein contained by signing on behalf of the corporations by himself as a duly authorized officer.

In Witness Whereof, I hereunto set my hand and official seal.
My Commission expires the 30th day of June, 2016.



[Signature]
Marie C. Tetreault, Notary Public