

Powertech (USA) Inc.

January 2, 2013

Mr. Nolan W. Lloyd Chief Well Inspector Division of Water Resources 1313 Sherman St., Room 818 Denver CO 80203

Dear Mr. Lloyd:

P-2007-015

In November of 2012, Powertech (USA) Inc. plugged and abandoned four 2-inch monitoring wells at our Centennial Uranium Project in Weld County, Colorado. These wells were completed in the Laramie-Fox Hills Aquifer and were no longer of any use to Powertech. Enclosed with this letter are Well Abandonment Reports for Well Permit Nos. 278889, 278890, 278897 and 278898.

Also enclosed is a copy of the Well Plugging Procedures used by Powertech in the abandonment of these four wells. These are the same procedures that you reviewed and found to be acceptable in September 2012. The five photos on the following page are presented as visual documentation of compliance with these procedures.

Please contact me at (505) 821-6007 or <u>jbonner@powertechuranium.com</u> if there are any questions concerning these Well Abandonment Reports.

Sincerely,

James A. Bonner VP Exploration

Cc: Russ Means, DRMS - Grand Junction

Frank Lichnovsky, Chief Geologist - Powertech



Photo 3 (below): 3/8" sodium bentonite chips are gravity fed into the casing, using a 1/4" screen, to minimize fines from entering the casing.





Photo 1 (left): The immediate area, surrounding the monitoring well to be abandoned, is excavated.

Photo 2 (below): 2-inch casing is cut off 24 inches below ground surface.

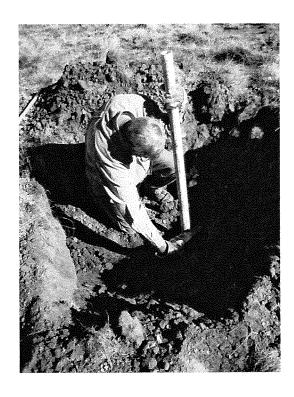


Photo 4 (lower left): Excavated areas surrounding the abandoned wells are backfilled and leveled.

Photo 5 (below): Disturbed areas are re-seeded and covered with a straw mulch.



| Form No. GWS-09 4/2012 | STATE OF COLORADO, OFFICE OF 821 Centennial Bldg., 1313 Sherman St (303) 866-3581 Fax (303) 866-3589 d | t., Denver, CO 80203 | For Office Use Only | | | |
|---|--|---|---------------------------|--|--|--|
| Use to repo computer g reverse sid | WELL ABANDONMEN ort plugging and sealing of permitted wells, monitoring enerated, typed or printed in black or blue ink. Instress of form. | ng and other holes. This form can be | | | | |
| Well Per MH File | rmit Number of the well being plugge Number MH Hole ID #/ | | | | | |
| Individua | l/Company responsible for plugging and s | | | | | |
| Name(s) | Powertech (USA) Inc. | | | | | |
| Mailing Address5575 DTC Parkway, Suite 140 | | | | | | |
| City, St., Z | City, St., Zip Greenwood Village, CO 80111 | | | | | |
| Phone (ar | rea code & no.) <u>(303) 790-7528</u> Email:_ | jbonner@powertechuranium.com | | | | |
| Well (Ho | le) Owner: | | | | | |
| NAME(S) | NAME(S) Powertech (USA) Inc. Phone (include area code) | | | | | |
| Mailing Ad | ddress, City, St., Zip <u>5575 DTC Parkway,</u> | Suite 140, Greenwood Village, CO 80 |)111 | | | |
| ACTUAL WELL LOCATION: County Weld Property Address, City, St, Zip SW 1/4 of the NE 1/4, Sec. 33 , Twp. 10 N. or S., Range 67 E. or W., 6th P.M. Distance from Section Lines 2548 Ft. from N. or S., 1444 Ft. from E. or W. Line. Subdivision Name Lot Block Filing/Unit Optional: GPS well location information in UTM format. You must check GPS unit for required settings as follows: Format must be UTM, zone 12 or zone 13 Units must be meters; Datum must be NAD83; Unit must be set to true north. Easting 509140 Northing 4515555 I (we) report the existing well (hole) was plugged and sealed on the date of 11/07/2012 for the following reason(s): The well was plugged and sealed as required under Well Permit Number The well was not in use and was plugged and sealed. Other (please explain) Other (please explain) Interval | | | | | | |
| N | | | from feet to feet | | | |
| 2 bags | Colorado Silica Sand | Gravity feed from top of casing | from 455 feet to 495 feet | | | |
| 12 bags | Holeplug (3/8" sodium bentonite chips) | Gravity feed from top of casing | from 2 feet to 455 feet | | | |
| Intervals of casing removed/ripped in feet | | | from 0 feet to 2 feet | | | |
| Report <u>must</u> be signed or name entered by person who performed the well plugging work or by the well owner if this person is unknown or not reachable. I (we) have read the statements made herein, know the contents thereof, and that they are true to my (our) knowledge. | | | | | | |
| Sign or er | nter full name If Some | Signing print name & title Vames A. Bonn Vice President-Explore | Date (mm/dd/yyyyy) | | | |

It is the responsibility of the well owner to have the well/hole properly plugged and sealed. The Well Construction Contractor is responsible for notifying the owner of this requirement.

| Form No. GWS-09 4/2012 STATE OF COLORADO, OFFICE OF THE STATE ENGINE 821 Centennial Bldg., 1313 Sherman St., Denver, CO 80203 dwrpermitsonline@stat | | | | | |
|--|---------------------------------------|--|--|--|--|
| WELL ABANDONMENT REPORT Use to report plugging and sealing of permitted wells, monitoring and other holes. This for computer generated, typed or printed in black or blue ink. Instructions and plugging standar reverse side of form. | m can be ards are on | | | | |
| Well Permit Number of the well being plugged No. 278890 MH File Number MH- Hole ID #/Name | or | | | | |
| Individual/Company responsible for plugging and sealing the well: | | | | | |
| Name(s) Powertech (USA) Inc. | | | | | |
| Mailing Address5575 DTC Parkway, Suite 140 | | | | | |
| City, St., Zip Greenwood Village, CO 80111 | | | | | |
| Phone (area code & no.) (303) 790-7528 Email: jbonner@powertechur | ranium.com_ | | | | |
| Well (Hole) Owner: | | | | | |
| NAME(S) Powertech (USA) Inc. Phone (include area code) | | | | | |
| Mailing Address, City, St., Zip <u>5575 DTC Parkway, Suite 140, Greenwood</u> | Village, CO 80111 | | | | |
| ACTUAL WELL LOCATION: County Weld Property Address, City, St, Zip | | | | | |
| <u>SW</u> 1/4 of the <u>NE</u> 1/4, Sec. <u>33</u> , Twp. <u>10</u> 区 N. or □ S., Range | 67 □ E. or ⊠ W., 6th P.M. | | | | |
| Distance from Section Lines 2538 Ft. from X N. or S., 1454 F | t. from 区E. or U. Line. | | | | |
| Subdivision Name Lot, Block, Filing/Unit Optional: GPS well location information in UTM format. You must check GPS unit for required settings as follows: Format must be UTM, zone 12 or zone 13 ; Units must be meters; Datum must be NAD83; Unit must be set to true north. Easting 509137 Northing 4515558 | | | | | |
| I (we) report the existing well (hole) was plugged and sealed on the date of | 06/2012 for the following reason(s): | | | | |
| ☐ The well was plugged and sealed as required under Well Permit Number | | | | | |
| The well was not in use and was plugged and sealed. | | | | | |
| Other (please explain) | | | | | |
| The well was plugged with the following materials placed at the indicated interval Amount and Type of Material Method of Place | ement Interval | | | | |
| | from feet to feet | | | | |
| 2 bags Colorado Silica Sand Gravity feed from top | o of casing from 455 feet to 495 feet | | | | |
| 12 bags Holeplug (3/8" sodium bentonite chips) Gravity feed from to | p of casing from 2 feet to 455 feet | | | | |
| Intervals of casing removed/ripped in feet | from 0 feet to 2 feet | | | | |
| Report <u>must</u> be signed or name entered by person who performed the well plugging work or by the well owner if this person is unknown or not reachable. I (we) have read the statements made herein, know the contents thereof, and that they are true to my (our) knowledge. | | | | | |
| Sign or enter full name If signing print name & titl | | | | | |
| James / Vice Preside | A. Bonner t-Exploration 12/31/2012 | | | | |

It is the responsibility of the well owner to have the well/hole properly plugged and sealed. The Well Construction Contractor is responsible for notifying the owner of this requirement.

| Form No. GWS-09 4/2012 STATE OF COLORADO, OFFICE OF THE STATE ENGINEER 821 Centennial Bldg., 1313 Sherman St., Denver, CO 80203 (303) 866-3581 Fax (303) 866-3589 dwrpermitsonline@state.co.u | |
|--|---|
| WELL ABANDONMENT REPORT Use to report plugging and sealing of permitted wells, monitoring and other holes. This form can be computer generated, typed or printed in black or blue ink. Instructions and plugging standards are reverse side of form. | be e on |
| Well Permit Number of the well being pluggedNo. 278897 MH File Number MH Hole ID #/Name | or - |
| Individual/Company responsible for plugging and sealing the well: | |
| Name(s) Powertech (USA) Inc. | |
| Mailing Address 5575 DTC Parkway, Suite 140 | |
| City, St., Zip Greenwood Village, CO 80111 | |
| Phone (area code & no.) (303) 790-7528 Email: jbonner@powertechuraniun | n.com_ |
| Well (Hole) Owner: | • |
| NAME(S) Powertech (USA) Inc Pho | one (include area code) |
| Mailing Address, City, St., Zip 5575 DTC Parkway, Suite 140, Greenwood Village | ge, CO 80111 |
| ACTUAL WELL LOCATION: County Weld | |
| Property Address, City, St, Zip | |
| NE 1/4 of the SE 1/4, Sec. 9 , Twp. 9 ■ N. or ■ S., Range 67 | |
| Distance from Section Lines 2214 Ft. from N. or S., 560 Ft. from | n ⊠E. or □ W. Line. |
| Subdivision Name Lot, Block _ | |
| Optional: GPS well location information in UTM format. You must check GPS unit for reformat must be UTM, zone 12 or zone 13 ; Units must be meters; Datum | |
| Easting 509389 Northing 4512215 | |
| I (we) report the existing well (hole) was plugged and sealed on the date of | for the following reason(s): |
| ☐ The well was plugged and sealed as required under Well Permit Number | |
| ■ The well was not in use and was plugged and sealed. | |
| Other (please explain) | |
| The well was plugged with the following materials placed at the indicated intervals: | |
| Amount and Type of Material Method of Placemen | |
| | from feet to feet |
| 2 bags Colorado Silica Sand Gravity feed from top of ca | |
| 12 bags Holeplug (3/8" sodium bentonite chips) Gravity feed from top of ca | asing from 2 feet to 457 feet |
| Intervals of casing removed/ripped in feet | from 0 feet to 2 feet |
| Report <u>must</u> be signed or name entered by person who performed the well plugging w not reachable. I (we) have read the statements made herein, know the contents there | ork or by the well owner if this person is unknown or of, and that they are true to my (our) knowledge. |
| Sign or enter full name If signing print name & title | Date (mm/dd/yyyyy) |
| James A. 1 | Sonner |
| Jane Wice President | Jonner 12/31/2012 |
| It is the responsibility of the well owner to have the well/hole properly plugged is responsible for notifying the owner of this requirement. | and sealed. The Well Construction Contractor |

| Form No. GWS-09 4/2012 STATE OF COLORADO, OFFICE OF THE STATE ENGINEER 821 Centennial Bldg., 1313 Sherman St., Denver, CO 80203 dwrpermitsonline@state.co.us | For Office Use Only | | | | |
|---|--|--|--|--|--|
| WELL ABANDONMENT REPORT Use to report plugging and sealing of permitted wells, monitoring and other holes. This form can be computer generated, typed or printed in black or blue ink. Instructions and plugging standards are on reverse side of form. | | | | | |
| Well Permit Number of the well being plugged No. 278898 or MH File Number MH- Hole ID #/Name | | | | | |
| Individual/Company responsible for plugging and sealing the well: | | | | | |
| Name(s) Powertech (USA) Inc. | | | | | |
| Mailing Address 5575 DTC Parkway, Suite 140 | | | | | |
| City, St., Zip Greenwood Village, CO 80111 | | | | | |
| Phone (area code & no.) (303) 790-7528 Email: jbonner@powertechuranium.com | | | | | |
| Well (Hole) Owner: | | | | | |
| NAME(S) Powertech (USA) Inc. Phone (include | area code) | | | | |
| Mailing Address, City, St., Zip5575 DTC Parkway, Suite 140, Greenwood Village, CO_86 | 0111 | | | | |
| ACTUAL WELL LOCATION: County Weld Property Address, City, St, Zip NE 1/4 of the SE 1/4, Sec. 9, Twp. 9 N. or S., Range 67 E. or W., 6th P.M. Distance from Section Lines 2197 Ft. from N. or S., 547 Ft. from E. or W. Line. Subdivision Name Lot Block Filing/Unit Optional: GPS well location information in UTM format. You must check GPS unit for required settings as follows: Format must be UTM, zone 12 or zone 13 T; Units must be meters; Datum must be NAD83; Unit must be set to true north. Easting 509393 Northing 4512210 I (we) report the existing well (hole) was plugged and sealed on the date of 11/07/2012 for the following reason(s): The well was plugged and sealed as required under Well Permit Number The well was plugged with the following materials placed at the indicated intervals: Amount and Type of Material Method of Placement Interval | | | | | |
| 2 hage Coloredo Siliga Sand Crouity food from top of agging | from feet to feet from437feet to477 feet | | | | |
| 2 bags Colorado Silica Sand Gravity feed from top of casing 11 bags Holeplug (3/8" sodium bentonite chips) Gravity feed from top of casing | 407 | | | | |
| | | | | | |
| Intervals of casing removed/ripped in feet | from 0 feet to 2 feet | | | | |
| Report <u>must</u> be signed or name entered by person who performed the well plugging work or by the well owner if this person is unknown or not reachable. I (we) have read the statements made herein, know the contents thereof, and that they are true to my (our) knowledge. | | | | | |
| Sign or enter full name If signing print name & title | Date (mm/dd/yyyyy) | | | | |
| Vice President - Expl | vation 12/31/2012 | | | | |

It is the responsibility of the well owner to have the well/hole properly plugged and sealed. The Well Construction Contractor is/responsible for notifying the owner of this requirement.

WELL PLUGGING PROCEDURE CENTENNIAL PROJECT WELD COUNTY, COLORADO

Powertech (USA) Inc. (Powertech) has drilled and completed 34 water wells for the purpose of monitoring groundwater within its Centennial Project in Weld County, Colorado. These water wells range in depth from 120 feet below ground surface (bgs) to 640 feet bgs. All wells are completed within the Laramie – Fox Hills Aquifer.

This detailed Proposed Plugging Procedure is based on the Colorado Division of Water Resources, Rule 16 - Standards for Plugging, Sealing, and Abandoning Wells and Boreholes. All Powertech wells have PVC casing installed, with the annular space of each well (outside of the casing) filled with cement grout from the screened interval to the surface. All wells are currently permitted with State of Colorado, Office of the State Engineer. All actions taken in the field associated with this Proposed Well Plugging Procedure will be documented and recorded on the Well Abandonment Report (attached to this procedure) and submitted to the State of Colorado, Office of the State Engineer.

<u>Step 1</u> Before initiating any work on a well, a well probe will be used to confirm and establish the depth of the well. This actual depth will be recorded on the **Well Abandonment Report**.

Step 2 There is a rectangular cement pad (approximately 24-inches by 24-inches) on the surface, surrounding each water well. This pad is a minimum of 6 inches thick and embedded in the pad is a 2-3-foot tall, locking metal cover to protect the well casing. The cement pad will be broken, excavated and hauled to a regulated disposal facility. The metal protective cover will removed and stored by Powertech for future use.

<u>Step 3</u> Once the pad has been removed, the top of the casing for each well will be cut off twenty-four (24) inches bgs so that it will not interfere with the anticipated use of the land. A small area will have to be excavated in order to expose the casing to a depth of twenty-four (24) inches. Soil from each excavation will be placed in two stockpiles – one for top soil and one for overburden.

<u>Step 4</u> The bottom portion of the well casing, to include the screened interval, will be filled with 20-40 Silica Sand. This Silica Sand will be poured in from the top of the casing. There are no obstructions within the well and due to the smooth surface of the PVC casing, the sand, through the forces of gravity, will easily flow to the bottom of the well. Depending on the length of the screened interval, the thickness of the column of 20-40 Silica Sand to be emplaced in the bottom of the wells will vary from 40 to 60 feet.

Based on the inner diameter (ID) of the well casing, the volume of 20-40 Silica Sand emplaced in the casing of each well will be calculated and recorded on the Well

Abandonment Report. The use of 20-40 Silica Sand for this purpose is consistent with the standards for plugging materials as described in Rule 16.2. A product description and an MSDS Sheet for 20-40 Silica Sand is attached to this proposed Plugging Procedure.

Step 5 The remainder of the casing, above the sand-filled portion, will be filled to the top with HOLEPLUG, a size-graded, sodium-bentonite clay plugging material, distributed by Baroid. These bentonite chips will be poured in from the top of the casing. As described above, the lack of obstructions and the smooth wall of the casing will allow for gravity feed of this material to the bottom of the hole. HOLEPLUG will fall through a standing column of water in the casing and reach the bottom with delayed hydration. The bulk density of these bentonite chips ranges from 68.8-71.8 lbs/ft³, compared to a bulk density of 62.4 lbs/ft³ for water. Once hydration occurs, the swelling capability of sodium-bentonite forms a permanent, flexible down-hole seal to prevent migration of fluids within the casing.

The HOLEPLUG is available in 3/8-inch and 3/4-inch sizes. The 3/4-inch material will be emplaced in casing with diameters of 5-inches or greater. 3/8-inch HOLEPLUG will be emplaced in casing with diameters of less than 5-inches. Even though these bentonite chips are size-graded, due to shipping and handling, a small amount of fine bentonite particles may be present. For this reason, the bentonite chips will be poured over a screen with ½-inch (6.4 mm) openings to "sift out" any smaller particles to prevent possible "bridging". In addition to the use of a screen, to ensure free flow of bentonite chips to the bottom of the casing, the bentonite chips will be poured into casing at a slow rate of two minutes per 50-lb (22.7 kg) bag.

Based on the inner diameter (ID) of the well casing, the volume of HOLEPLUG emplaced in the casing of each well will be calculated and recorded on the **Well Abandonment Report**. The use of HOLEPLUG for this purpose is consistent with the standards for plugging materials as described in Rule 16.2. A product description and an MSDS Sheet for HOLEPLUG are attached to this proposed Plugging Procedure.

- <u>Step 6</u> A PVC Cap will be glued to the top of casing. This cap, in addition to the sodium-bentonite chips, will act as a permanent watertight cover to prevent surface water from entering the casing, consistent with Rule 16.2.
- <u>Step 7</u> The excavated area surrounding the cut-off casing will be backfilled from the soil stockpiles overburden first and top soil last. During this process, a metal plate with the well number and the State Engineer's permit number will be placed on top of the PVC cap. This will enable the abandoned well to be located at any time in the future.
- <u>Step 8</u> Once the backfilling process is completed, the excavation area will be contoured and re-seeded, using the seed mixture and methodology described in the Notice of Intent to Conduct Prospecting