

Garrett, Betty

From: Linton, Ron
Sent: Thursday, September 23, 2010 11:08 AM
To: Garrett, Betty
Subject: FW: Monitor well 5MW66 and Christensen Ranch
Attachments: FW: Monitor well 5MW66 and Christensen Ranch

040-08502, public. Package with the previous e-mail I sent to you.

Received: from HQCLSTR01.nrc.gov ([148.184.44.76]) by OWMS01.nrc.gov ([148.184.100.43]) with mapi; Thu, 23 Sep 2010 11:07:44 -0400

Content-Type: application/ms-tnef; name="winmail.dat"

Content-Transfer-Encoding: binary

From: "Linton, Ron" <Ron.Linton@nrc.gov>

To: "Garrett, Betty" <Betty.Garrett@nrc.gov>

Date: Thu, 23 Sep 2010 11:07:41 -0400

Subject: FW: Monitor well 5MW66 and Christensen Ranch

Thread-Topic: Monitor well 5MW66 and Christensen Ranch

Thread-Index: ActZzkzKZ/nHeyh0Q/ytsufDH7slwAAAIN/QAFiL8ZA=

Message-ID:

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Accept-Language: en-US

Content-Language: en-US

X-MS-Has-Attach: yes

X-MS-Exchange-Organization-SCL: -1

X-MS-TNEF-Correlator:

<BE1CC4A72435624D84F8699734202B3E243E9558C0@HQCLSTR01.nrc.gov>

MIME-Version: 1.0

Garrett, Betty

From: Jon Winter (USA - Casper) [Jon.Winter@uranium1.com]
Sent: Tuesday, September 21, 2010 4:53 PM
To: Linton, Ron
Subject: 5MW66 email 2 of 2
Attachments: complete copy of 8.13.10 status report to WDEQ-LQD 5MW66.pdf

Jon F. Winter
Manager Environmental & Regulatory Affairs, Wyoming

907 North Poplar
Suite 260
Casper, WY 82601
Phone: 307-234-8235 ext. 331



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Received: from mail1.nrc.gov (148.184.176.41) by OWMS01.nrc.gov
(148.184.100.43) with Microsoft SMTP Server id 8.1.393.1; Tue, 21 Sep 2010
16:56:56 -0400

X-Ironport-ID: mail1

X-SBRS: 2.9

X-MID: 22696277

X-fn: complete copy of 8.13.10 status report to WDEQ-LQD 5MW66.pdf

X-IronPort-AV: E=Sophos;i="4.56,402,1280721600";
d="pdf?jpg'145?scan'145,208,145,217";a="22696277"

Received: from pe1-2.uranium1.com ([69.90.31.228]) by mail1.nrc.gov with
ESMTP; 21 Sep 2010 16:55:57 -0400

Received: from srv-cas-mx-01.cas.u1.internal (10.10.150.10) by
srv-pe1-mx-01.u1.internal (10.10.10.10) with Microsoft SMTP Server (TLS) id
8.2.254.0; Tue, 21 Sep 2010 13:53:47 -0700

Received: from srv-cas-mx-01.cas.u1.internal ([10.10.150.10]) by
srv-cas-mx-01.cas.u1.internal ([10.10.150.10]) with mapi; Tue, 21 Sep 2010
14:53:30 -0600

From: "Jon Winter (USA - Casper)" <Jon.Winter@uranium1.com>

To: "Linton, Ron" <Ron.Linton@nrc.gov>

Date: Tue, 21 Sep 2010 14:53:27 -0600

Subject: 5MW66 email 2 of 2

Thread-Topic: 5MW66 email 2 of 2

Thread-Index: ActZzwpwSF5EONusRrylpSESErK2wg==

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mx-01.cas.u1.internal>

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X-MS-TNEF-Correlator:

acceptlanguage: en-US

Content-Type: multipart/mixed;

boundary="_006_EF2FF00E3AB2A947B8EE03551C596E
F00A19A9EEFDsvrcasmx01cas_"

MIME-Version: 1.0

Return-Path: Jon.Winter@uranium1.com



August 13, 2010

Glenn Mooney
Senior Geologist
Wyoming Department of Environmental Quality
Land Quality Division
2100 West 5th Street
Sheridan, WY 82801

**Re: Mine Unit 5 Response, Irigaray–Christensen Ranch In Situ Operations,
Permit No. 478**

Dear Mr. Mooney:

Uranium One Americas (Uranium One) has prepared this excursion status report for Monitor Well 5MW66 at the Irigaray–Christensen Ranch Project. A corrective action plan was previously submitted to the Wyoming Department of Environmental Quality–Land Quality Division (WDEQ–LQD) that proposed implementation of a phased approach to delineate and to recover (if necessary) the excursion identified at Well 5MW66, located downgradient of Mine Unit 5 (MU5). The initial phase included additional monitoring and investigation into the cause and extent of the excursion. Results and interpretation of the additional monitoring are summarized in this status report. Further corrective actions are also proposed in this report.

Site Conditions

Site conditions were summarized in the April 14, 2010 report to the WDEQ. A summary of key points includes the following:

- ISR mining of uranium was conducted at MU5 from June 1995 through March 2000
- Production in Module 5-5 was within the "K2" and "K3" subunits of the K Sandstone
- Aquifer restoration was initiated in April 2000 and completed in August 2004
- Monitor Well 5MW66 is located downgradient of Module 5-5 of MU5
- Nearest production to Well 5MW66 was in the "K2" and "K3" Sands 200 feet to the southeast, and in the "K3" Sand 300 feet to the northeast.
- Monitor Well 5MW66 is completed across both the "K2" and "K3" sands.

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- Water level data indicate a hydraulic gradient in the vicinity of Well 5MW66 of 0.0065 ft/ft to the northwest
- Based on the potentiometric surface, the most likely source of elevated chloride and uranium observed in well 5MW66 is to the southeast
- Stability monitoring of uranium and chloride from the nearest designated Restoration Wells (5BS120-1, 600 feet to northeast and 5BN94-1, 800 feet to the south) were much lower than what is currently observed at Well 5MW66
- Water quality data from adjacent monitor ring Wells 5MW64 (to the south) and 5MW2 (to the north) were below the UCLs in data through January 2010 indicating that the excursion appears limited to the area around Well 5MW66

Completed Corrective Actions

As proposed in the April 14, 2010 report, Uranium One has implemented the following tasks as part of its corrective action plan:

- Monitor Well 5MW66 has been placed on excursion status and will continue to be on excursion status until it can be demonstrated through water quality and/or groundwater gradient that recovery fluids in the vicinity of 5MW66 are declining.
- Monitor Well 5MW66 has been sampled weekly for excursion parameters (chloride, specific conductance, alkalinity and pH) and uranium since March 2010 and will continue to be sampled at that frequency until the well is taken off excursion status. Results of the weekly sampling have been included in this excursion status report.
- Uranium One has collected a groundwater sample from Well 5MW66 that was analyzed and reported in accordance with Chapter 11, Section 12(d)(i). The results of this analysis are submitted as part of this excursion status report.
- Select production and injection wells within the Well 5MW66 area were sampled for excursion parameters (chloride, conductivity, alkalinity and pH) and uranium to identify the source and delineate the extent of the excursion. Results and interpretation of the additional monitoring are included in this excursion status report.

Monitoring Results and Evaluation

Results of the weekly monitoring of 5MW66 for excursion parameters are included in Table 1. No significant changes or trends are observed in the data during the sampling period (March 24 through August 3 2010). Uranium concentration ranged from 1.8 to 2.7 mg/l during the period.

Baseline water quality for 5MW66 exceeded the Wyoming Class I Standards for TDS (500 mg/l) and sulfate (250 mg/l) and the US Environmental Protection Agency (USEPA) maximum contaminant level (MCL) for uranium of 0.03 mg/l. Results of the recent analysis of the groundwater sample collected from Well 5MW66 indicate that the water quality at 5MW66 still exceeds the Class I standard for TDS and sulfate and the MCL for uranium. The selenium and gross alpha Class I Standards (0.05 mg/l and 15 pCi/l, respectively) are also exceeded. Although the levels of excursion parameters have increased over baseline values, the class of use of the well has not changed. The full analysis for the constituents required under Chapter 11, Section 12(d)(i) is provided in Attachment 1.

In order to better characterize the extent of elevated constituents in the vicinity of Well 5MW66, the following wells were sampled for excursion parameters and uranium:

"K2" completions: 5BO104-1 and 5BO102-2

"K3" completions: 5BM102-1, 5BM103-1, 5BQ117-1

Figure 1 shows the location of those wells. Results of the additional monitoring were received on June 22, 2010 and are included in Table 2. The chloride, conductivity, alkalinity, and uranium data from the wells were plotted and contoured. Data from the January 2010 sampling of monitor ring wells 5MW64 and 5MW2 were also included on the iso-concentration maps for chloride, conductivity and alkalinity. Uranium was not measured in those monitor ring wells in the January sampling round.

It should be noted that the wellfield average for TDS, chloride, sulfate, conductivity, and alkalinity after the 4th quarter stability monitoring round were all below the Target Restoration Values (TRVs) for MU5, as reported in the Wellfield Restoration Report, Christensen Ranch Project, Wyoming (COGEMA Mining, Inc and Petrotek Engineering Corporation, 2007). Water quality at 5MW66 exceeds the TRV for each of these parameters; therefore, the source of the excursion is unclear.

Figure 2 shows the distribution of chloride in the vicinity of Well 5MW66. Well 5MW66 has the highest concentration among the sampled wells (at 36.2 mg/l), although wells 5BM103-1, 5BM102-1 and 5BQ117-1, located along the western edge of the MU5 wellfields, and completed across the "K3" Sand, also had relatively elevated chloride levels (from 15.2 to 21.9 mg/l). No wells have been identified within the wellfields northeast and southeast of Well 5MW66 that have values of 36 mg/l or greater. A similar distribution is exhibited for conductivity (Figure 3) and alkalinity (Figure 4) with the highest values at 5MW66, and elevated values also present along the west edge of the wellfields in the "K3" well completions. The distribution of chloride, conductivity and alkalinity suggest that the extent of the excursion is generally focused in the area around Well 5MW66.

The distribution of uranium shows a slightly different pattern with the "K3" production/injection wells (5BM102-1, 5BM103-1 and 5BQ117-1) having values as high, or higher, than Well 5MW66 (Figure 5). The interior production wells (completed in the "K2" Sand) have lower uranium values. From the uranium distribution map, it appears that the area of elevated uranium may extend from along the western edge of the Module 5-5 wellfields out to Monitor Well 5MW66 and that the "K3" Sand is the most likely source.

The results of the June 2010 sampling effort did not clearly delineate the source of the excursion as being from either the wellfield to the northeast or southeast of 5MW66. As previously stated, the average wellfield values for each of the excursion parameter were below the TRVs but the 5MW66 water quality values are greater than the TRVs. Additional monitoring is proposed to further delineate the source and extent of the excursion. Table 3 identifies several wells in the area that could be potential sample locations.

Additional Corrective Actions

The additional monitoring conducted under the initial phase of the corrective action plan indicates the potential source area for the Well 5MW66 excursion could be from either the wellfields to the southeast or to the northeast, or from both areas, but is most likely from the "K3" Sand. Uranium One has developed a corrective action plan to better characterize the excursion at Well 5MW66.

Although it is apparent that Well 5MW66 has been affected by ISR activities, it is important to note that the Class of Use of this well has not been changed. Additional monitoring is proposed to delineate the full extent and source of potential impacts to



groundwater in the vicinity. A recent survey of available wells indicated that there are several other wells that could be sampled in the area upgradient of Well 5MW66. Up to ten wells will be selected for sampling of excursion parameters and uranium (Table 3). Additionally, monitor ring wells 5MW64 and 5MW2 will be sampled for uranium to delineate the downgradient extent of elevated uranium. Water levels will be measured in each of the newly sampled wells and the wells that were sampled in June 2010. Results of the water level measurements will be used to prepare a detailed potentiometric surface map. Results of the water quality sampling will be used to revise the iso-concentration maps presented in this status report. The potentiometric surface map and the iso-concentration maps will be utilized to develop a final corrective action.

Because the nature and extent of the excursion are not adequately characterized, despite additional monitoring efforts by Uranium One, excursion recovery is not proposed at this time. An improperly designed extraction system could result in moving impacted groundwater into areas that are not currently impacted or mobilizing constituents that are currently stabilized. This might result in the degradation of other wells to water quality that does not meet current class of use. The wellfield has already been restored and should not be an ongoing source of excursion. Uranium One proposes to collect additional water quality and water level data, update the interpretation of groundwater conditions, and then submit a corrective action.



Uranium One would like to meet with WDEQ-LQD District III staff after the proposed sampling is completed and the data has been evaluated and presented to WDEQ-LQD to discuss corrective action options. Uranium One will begin the selection and sampling of additional wells as discussed above as soon as possible. If you have any questions please do not hesitate to contact me at 307-234-8235 ext. 331 or via email at jon.winter@uranium1.com.

Sincerely,

A handwritten signature in black ink that reads "Jon Winter".

Jon Winter

Manager – Wyoming Environmental and Regulatory Affairs

Enclosures: 5MW66 Excursion Status Report – Tables
5MW66 Excursion Status Report – Figures
Attachment A – Analytical Summary Report Well 5MW66

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www.uranium1.com

5MW66 Excursion Status Report-August 2010

Tables

Table 1. Analytical Results, Excursion Monitoring 5MW66, Corrective Action Plan

Date	Chloride	Conductivity	Alkalinity	pH	Water Level Elevation	Uranium
	(mg/l)	(umhos)	(mg/l)	s.u.	(ft amsl)	(mg/l)
3/24/2010	37.0	1407	259.1	7.50	4635.00	2.60
*3/31/2010	NS	NS	NS	NS	NS	NS
4/6/2010	38.2	1405	319.0	7.40	4635.20	2.70
* 4/14/2010	NS	NS	NS	NS	NS	NS
4/21/2010	36.2	1400	297.8	7.40	4635.70	2.26
4/27/2010	38.3	1386	306.4	7.50	4635.20	2.20
* 5/5/2010	NS	NS	NS	NS	NS	NS
5/11/2010	37.2	1392	335.2	7.20	4635.00	2.20
*5/18/20/0	NS	NS	NS	NS	NS	NS
5/25/2010	40.0	1394	352.8	7.10	4634.00	2.30
6/3/2010	42.0	1383	360.2	7.20	4634.50	2.20
6/9/2010	35.2	1380	328.2	7.30	4634.00	2.10
6/15/2010	36.2	1371	314.2	7.00	4632.60	2.00
6/21/2010	43.8	1378	318.8	6.90	4634.10	2.10
6/29/2010	35.8	1412	327.4	6.80	4635.30	2.50
7/7/2010	36.2	1397	313.8	7.20	4633.30	2.20
7/12/2010	36.6	1385	324.4	7.10	4633.50	2.20
7/20/2010	31.6	1386	309.2	7.20	4631.90	2.10
7/27/2010	38.0	1395	322.4	7.30	4631.40	1.80
8/3/2010	34.8	1384	346.0	7.40	4631.90	2.10

NS - Not sampled

* Field conditions unsafe for sampling activities

Table 2. Water Quality Analytical Results, Additional Monitoring, 5MW66 Corrective Action Plan

Well	Easting (ft)	Northing (ft)	Completion Interval	Sample Date	Chloride (mg/l)	Conductivity umhos/cm	Alkalinity (mg/l)	pH s.u.	Uranium (mg/l)
5MW66	851360	1139890	K2 & K3	Jun-10	36.2	1371	314.2	7.00	2.00
5BM103-1	851241	1139558	K3	Jun-10	21.9	940	196.6	7.10	2.00
5BM102-1	851281	1139515	K3	Jun-10	17.1	941	205.3	7.30	2.90
5BO104-1	851417	1139599	K2	Jun-10	5.4	500	120.2	7.20	0.50
5BO102-2	851413	1139512	K2	Jun-10	6.9	632	188.5	7.20	0.70
5BQ117-1	851580	1140151	K3	Jun-10	15.2	969	290.2	6.90	2.30
5MW2	851199	1140256	K2 & K3	Jan-10	11.6	855	96.8	7.90	NS
5MW64	851139	1139732	K2 & K3	Jan-10	9.1	733	114.8	8.10	NS

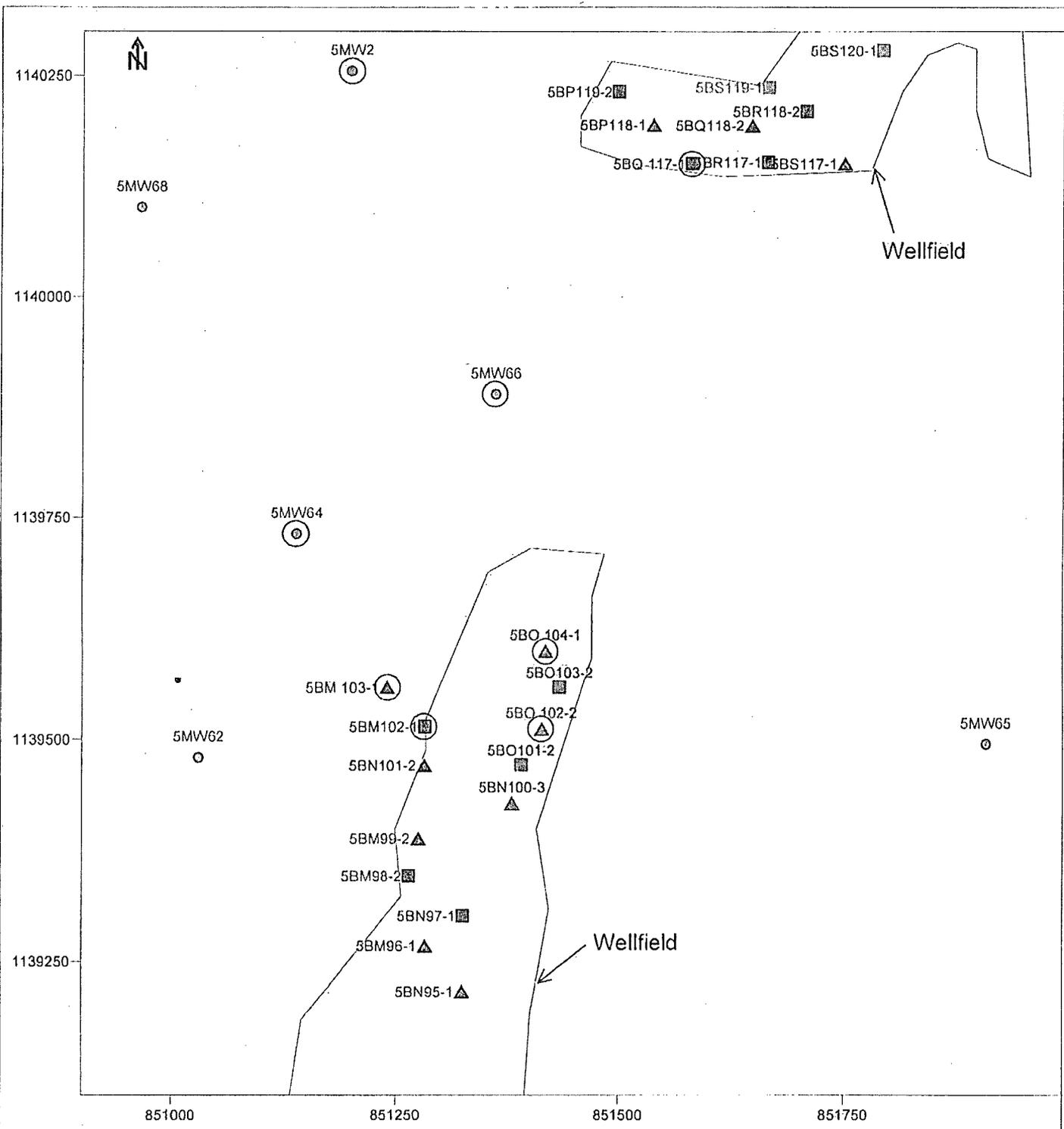
Table 3. Additional Sample Locations, Mine Unit 5-5MW66 Corrective Action Plan

Well ID	Easting	Northing	Elevation	Type	Completion Interval
SOUTHEAST AREA					
	(ft)	(ft)	(ft amsl)		
Recently Sampled Location					
5BO 104-1	851418	1139599	4,745.0	INJ	K2
5BO 102-2	851413	1139512	4,747.3	INJ	K2
5BM 103-1	851240	1139559	4,744.7	INJ	K3
5BM102-1	851282	1139515	4,745.6	REC	K3
Potential Sample Location					
5BO103-2	851434	1139559	4,746.4	REC	K2
5BO101-2	851391	1139472	4,747.4	REC	K2
5BN101-2	851282	1139471	4,745.7	INJ	K3
5BM99-2	851275	1139388	4,746.0	INJ	K3
5BM98-2	851264	1139346	4,746.5	REC	K3
5BN100-3	851380	1139428	4,747.2	INJ	K2
5BN97-1	851325	1139301	4,747.6	REC	K3
5BM96-1	851282	1139268	4,747.2	INJ	K3
5BN95-1	851324	1139217	4,748.0	INJ	K3
NORTHEAST AREA					
Recently Sampled Location					
5BQ 117-1	851581	1140151	4,758.5	REC	K3
Potential Sample Location					
5BP118-1	851538	1140195	4,758.6	INJ	K3
5BP119-2	851499	1140232	4,758.2	REC	K3
5BR117-1	851665	1140153	4,761.1	REC	K3
5BQ118-2	851647	1140194	4,761.9	INJ	K3
5BS119-1	851665	1140237	4,763.2	INJ	K2 & K3
5BR118-2	851707	1140210	4,763.5	REC	K3
5BS117-1	851750	1140151	4,762.8	INJ	K3
5BS120-1	851792	1140279	4,767.5	REC	K2 & K3

INJ -Injection Well
 REC -Recovery Well

5MW66 Excursion Status Report-August 2010

Figures



- ▲ K2 Injection Well
- K2 Recovery Well
- ▲ K3 Injection Well
- K3 Recovery Well
- K2 /K3 Recovery/Injection Well
- Monitor Ring Wells

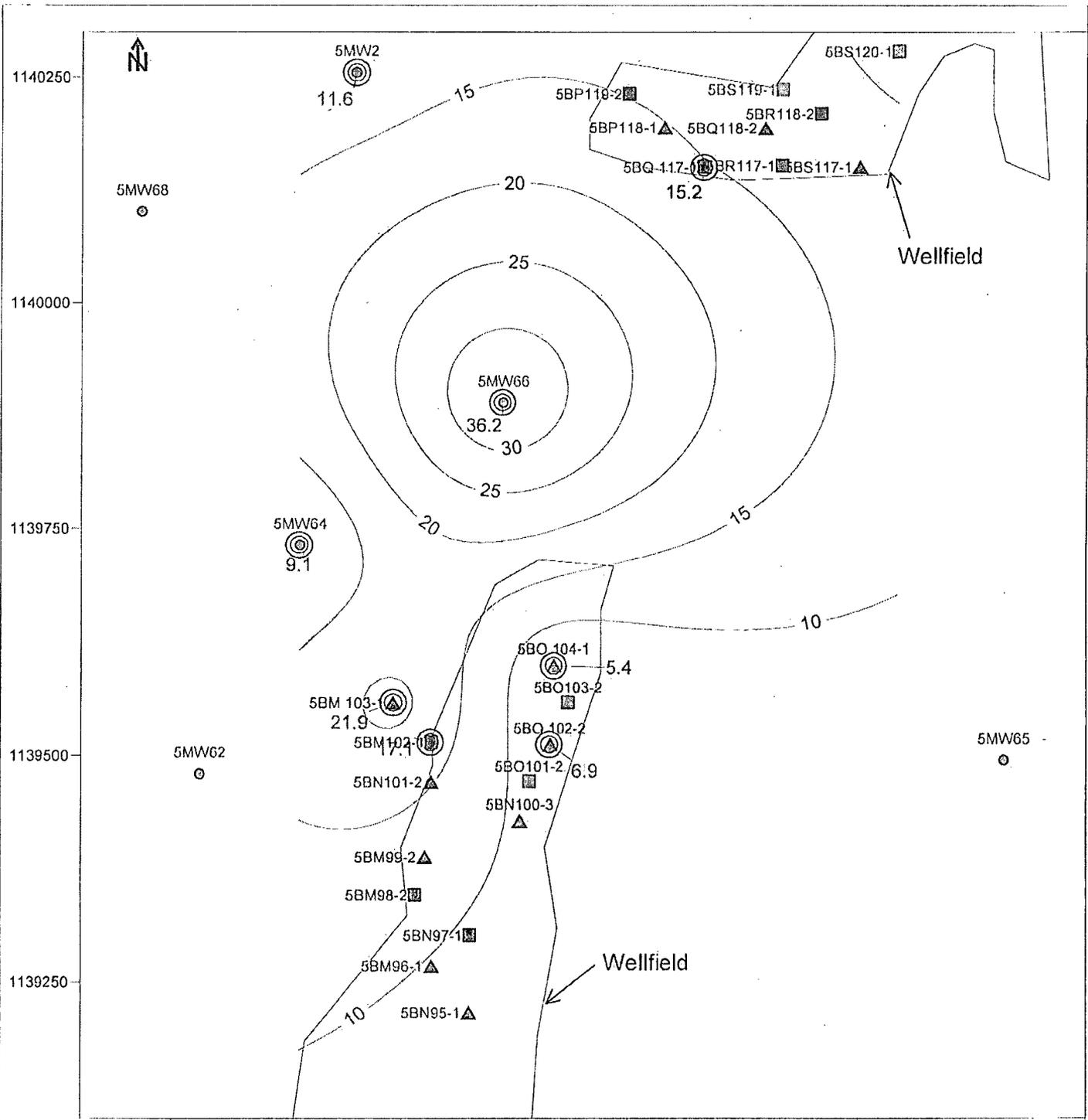
○ Sampled June 2010

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Littleton, CO 80127-4239

URANIUM ONE

**Figure 1. 5MW66 Area, June 2010 Sample Locations
Mine Unit 5
Christensen Ranch, Wyoming**

By: EPL Checked: HD File: figMU5RExc.srf Date: 7/1/10



- ▲ K2 Injection Well
- K2 Recovery Well
- ▲ K3 Injection Well
- K3 Recovery Well
- K2 /K3 Recovery/Injection Well
- Monitor Ring Wells

9.1 2010 Chloride Level (mg/l)

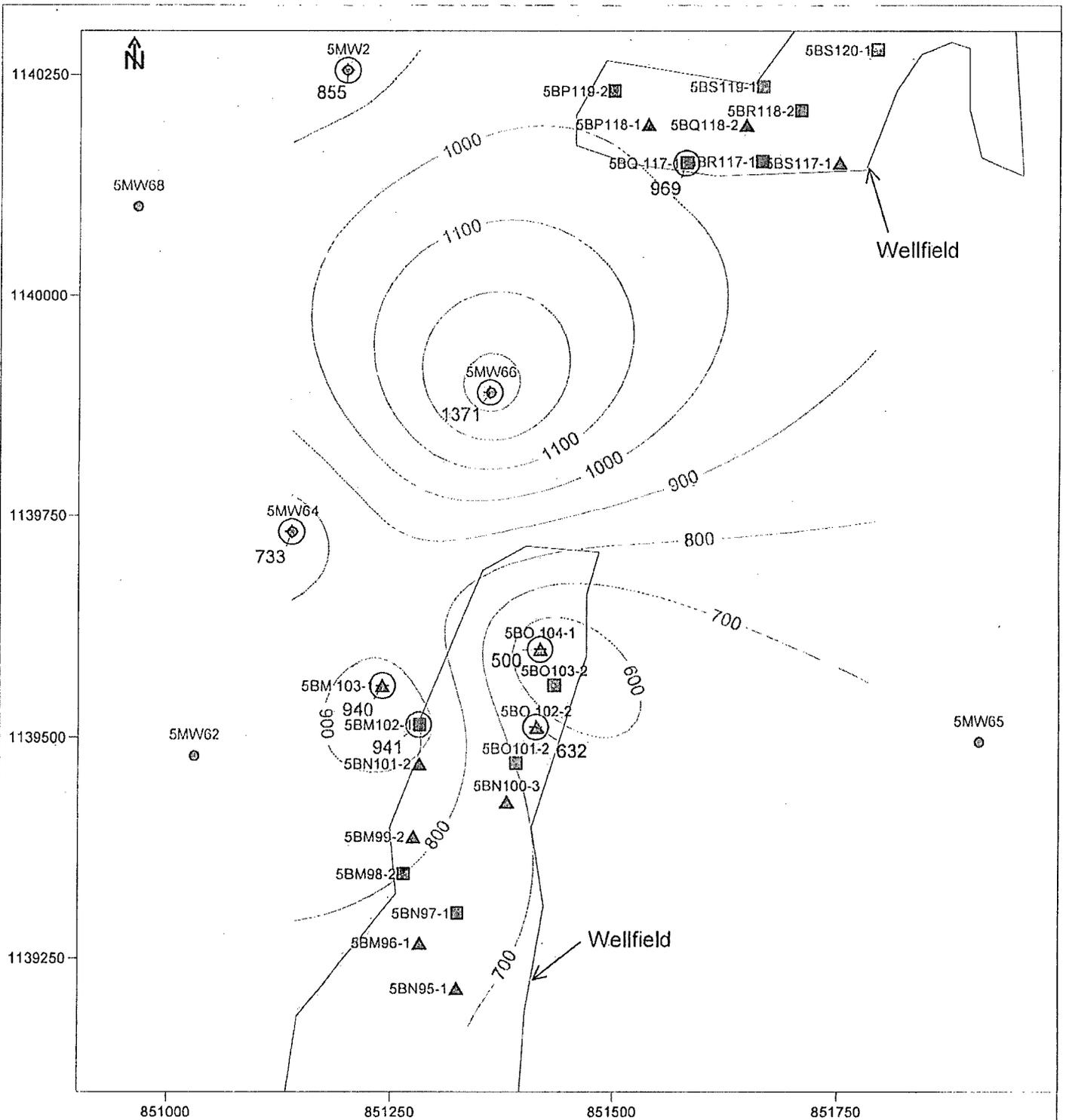
Chloride Isoconcentration Contour, Cl =5 mg/l

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Figure 2. 5MW66 Area, 2010 Chloride Distribution
Mine Unit 5
Christensen Ranch, Wyoming

By: EPL Checked: HD File ID: figMU5RExc.srf Date: 7/1/10



- ▲ K2 Injection Well
- ◻ K2 Recovery Well
- ▲ K3 Injection Well
- ◻ K3 Recovery Well
- ◻ K2 /K3 Recovery/Injection Well
- Monitor Ring Wells

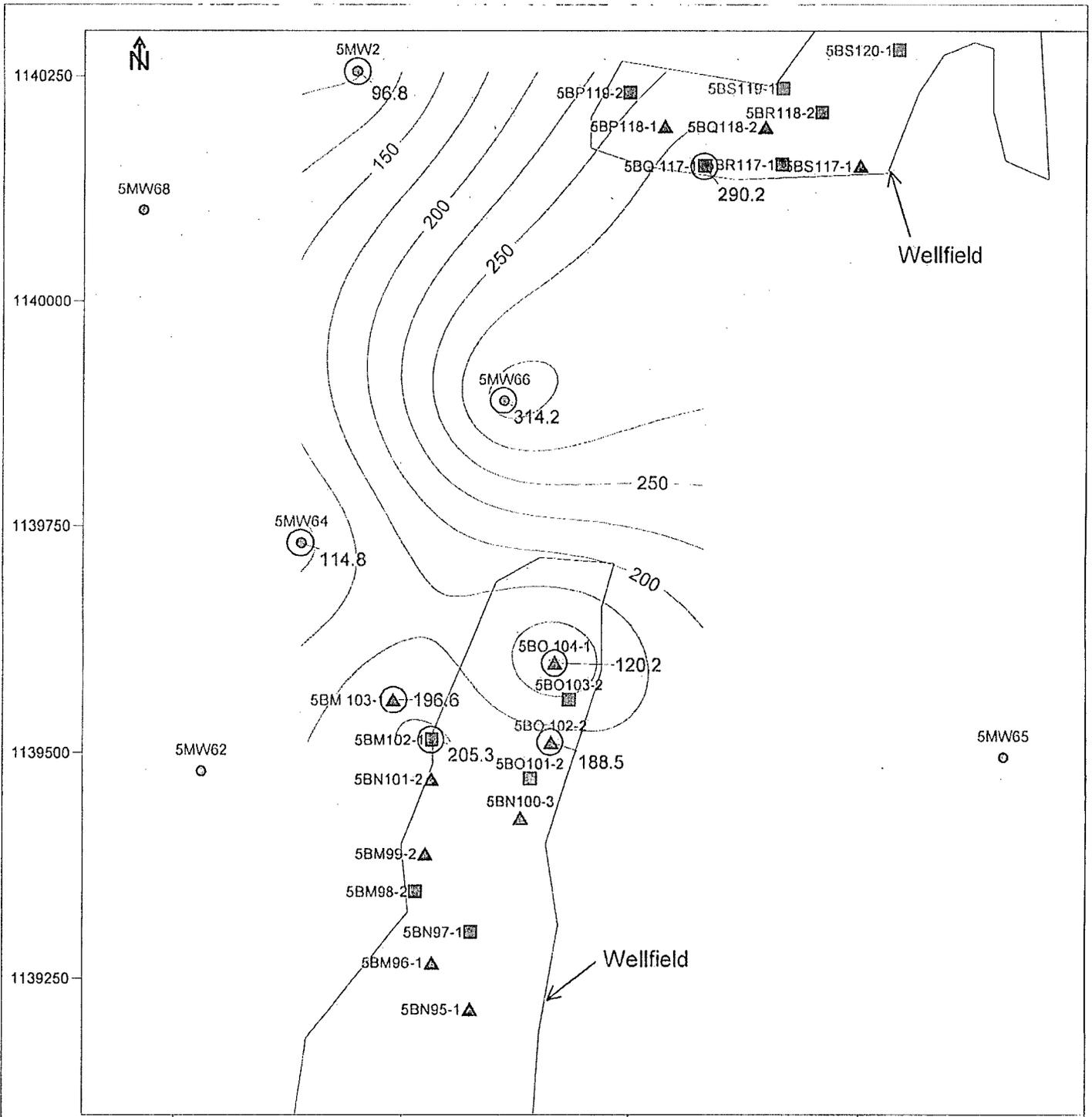
733
 2010 Conductivity Level (umhos/cm)
 Conductivity Isocontour, CI = 100 umhos/cm

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**Figure 3. 5MW66 Area, 2010 Conductivity Distribution
 Mine Unit 5
 Christensen Ranch, Wyoming**

By: EPL Checked: HD File ID: figMU5RExc.srf Date: 7/11/10



- ▲ K2 Injection Well
- K2 Recovery Well
- ▲ K3 Injection Well
- K3 Recovery Well
- K2 /K3 Recovery/Injection Well
- Monitor Ring Wells

96.8

2010 Alkalinity Concentration (mg/l)

Alkalinity Isoconcentration Contour, CI =25 mg/l

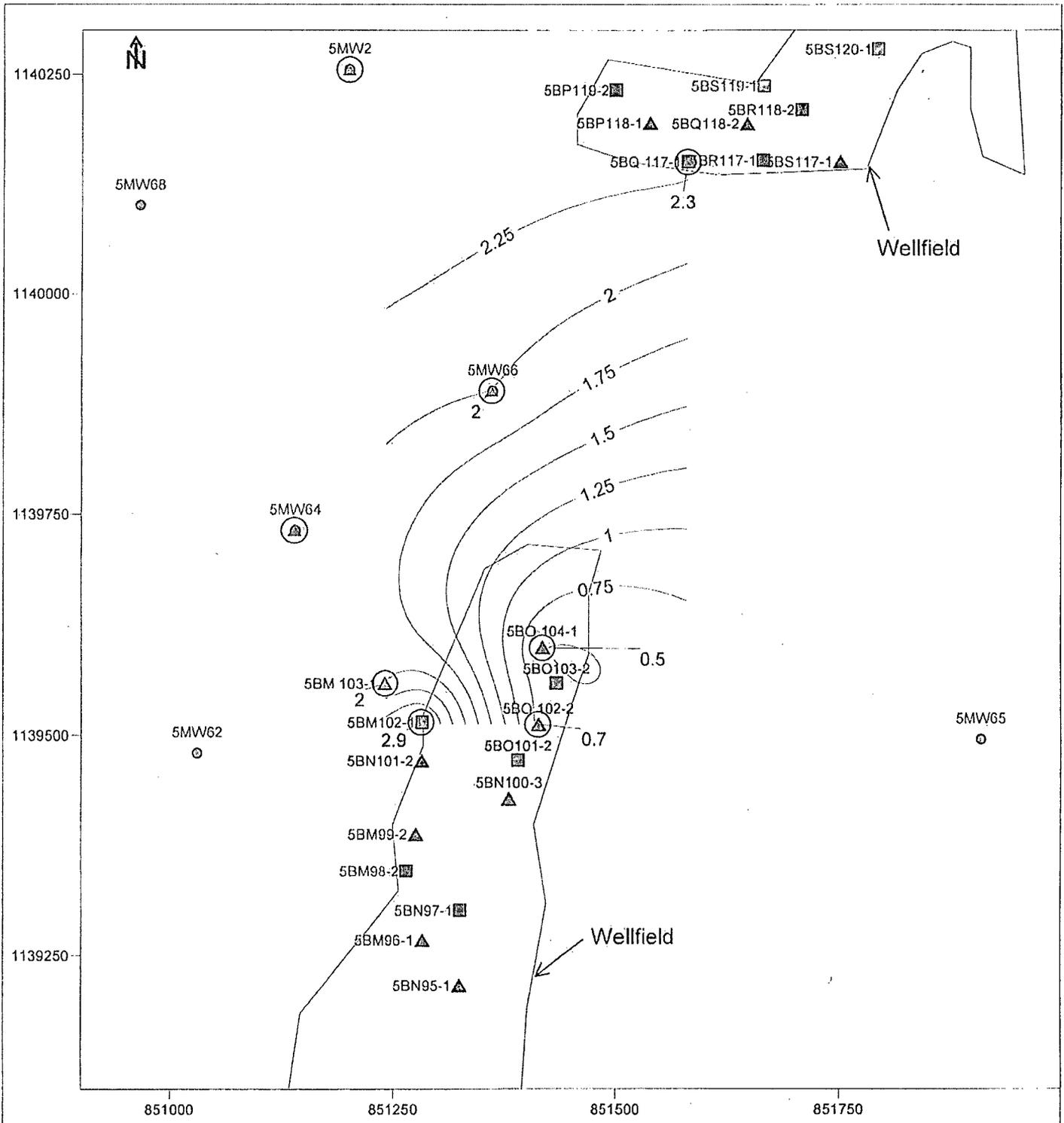
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**Figure 4. 5MW66 Area, 2010 Alkalinity Distribution
Mine Unit 5
Christensen Ranch, Wyoming**

By: EPL Checked: HD File ID: figMU5RExc.srf Date: 7/1/10



- ▲ K2 Injection Well
- K2 Recovery Well
- ▲ K3 Injection Well
- K3 Recovery Well
- K2 /K3 Recovery/Injection Well
- Monitor Ring Wells

2.9 ○ 2010 Uranium concentration (mg/l)

— Uranium Isoconcentration Contour, CI = 0.25 mg/l

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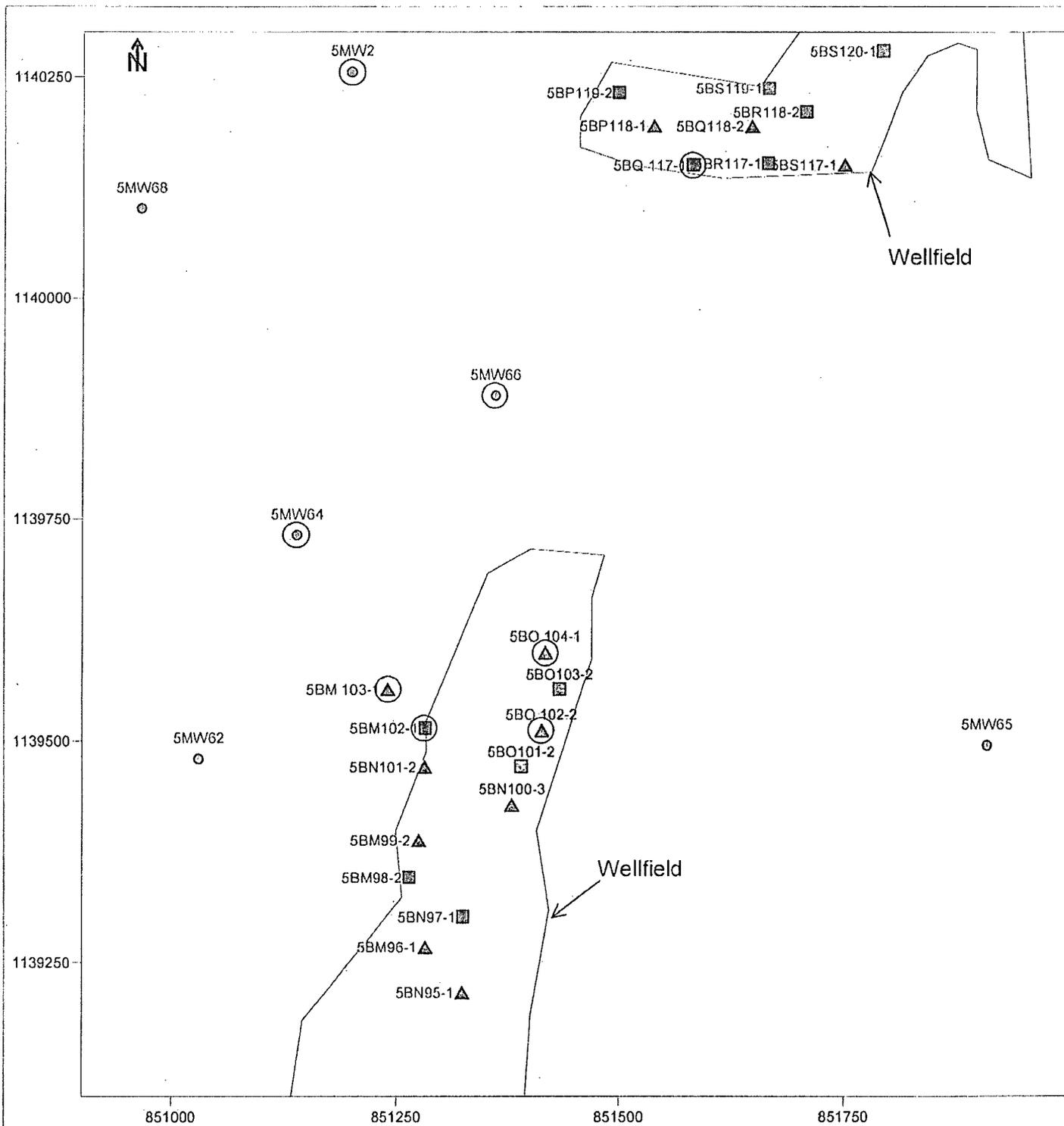
**Figure 5. 5MW66 Area, 2010 Uranium Distribution
Mine Unit 5
Christensen Ranch, Wyoming**

By: EPL Checked: HD File ID: figMU5RExc.srf Date: 7/1/10

Attachment A

Analytical Summary Report

Well 5MW66



- ▲ K2 Injection Well ○ Sampled June 2010
- K2 Recovery Well
- ▲ K3 Injection Well
- K3 Recovery Well
- K2 /K3 Recovery/Injection Well
- Monitor Ring Wells

<i>Petrotek</i>	10288 W. Chalfield Ave, Ste 201 Littleton, CO 80127-4239
URANIUM ONE	
Figure 6. 5MW66 Area, Potential Additional Sample Locations, Mine Unit 5 Christensen Ranch, Wyoming	
By: EPL Checked: HD File ID: figMU5RExc.srf Date: 7/1/10	



ANALYTICAL SUMMARY REPORT

April 15, 2010

Uranium One USA Inc
907 N Poplar St Ste 260
Casper, WY 82601

Workorder No.: C10030820

Project Name: CR

Energy Laboratories, Inc. received the following 1 sample for Uranium One USA Inc on 3/25/2010 for analysis.

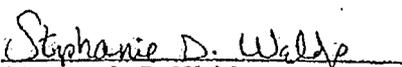
Sample ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
C10030820-001	5MW66	03/24/10 09:06	03/25/10	Aqueous	Metals by ICP/ICPMS, Dissolved Alkalinity QA Calculations Conductivity Mercury, Dissolved Mercury Analysis Prep Sample Filtering Fluoride E300.0 Anions Nitrogen, Ammonia Nitrogen, Nitrate + Nitrite pH Gross Alpha, Gross Beta Radium 226, Dissolved Radium 228, Dissolved Solids, Total Dissolved

Any exceptions or problems with the analyses are noted in the Laboratory Analytical Report, the QA/QC Summary Report, or the Case Narrative.

The results as reported relate only to the item(s) submitted for testing.

If you have any questions regarding these test results, please call.

Report Approved By:


Stephanie D. Waldrop
Reporting Supervisor



LABORATORY ANALYTICAL REPORT

Client: Uranium One USA Inc
 Project: CR
 Lab ID: C10030820-001
 Client Sample ID: 5MW66

Report Date: 04/15/10
 Collection Date: 03/24/10 09:06
 Date Received: 03/25/10
 Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
MAJOR IONS							
Carbonate as CO ₃	ND	mg/L		5		A2320 B	03/26/10 15:34 / dvg
Bicarbonate as HCO ₃	474	mg/L		5		A2320 B	03/26/10 15:34 / dvg
Calcium	43	mg/L		1		E200.7	03/29/10 14:25 / cp
Chloride	33	mg/L		1		E300.0	03/27/10 10:35 / ljl
Fluoride	ND	mg/L		0.1		A4500-F C	04/01/10 12:38 / dvg
Magnesium	8	mg/L		1		E200.7	03/29/10 14:25 / cp
Nitrogen, Ammonia as N	ND	mg/L		0.05		A4500-NH3 G	04/05/10 20:46 / ljl
Nitrogen, Nitrate+Nitrite as N	0.2	mg/L		0.1		E353.2	04/03/10 21:21 / ljl
Potassium	4	mg/L		1		E200.7	03/29/10 14:25 / cp
Sodium	282	mg/L		1		E200.7	03/29/10 14:25 / cp
Sulfate	297	mg/L		1		E300.0	03/27/10 10:35 / ljl
PHYSICAL PROPERTIES							
Conductivity @ 25 C	1390	umhos/cm		1		A2510 B	03/26/10 10:15 / lr
pH	7.68	s.u.		0.01		A4500-H B	03/26/10 10:15 / lr
Solids, Total Dissolved TDS @ 180 C	917	mg/L		10		A2540 C	03/26/10 14:37 / lr
METALS - DISSOLVED							
Antimony	ND	mg/L		0.05		E200.7	03/29/10 14:25 / cp
Arsenic	ND	mg/L		0.001		E200.8	03/30/10 20:01 / ts
Barium	ND	mg/L		0.1		E200.7	03/29/10 14:25 / cp
Beryllium	ND	mg/L		0.01		E200.7	03/29/10 14:25 / cp
Boron	ND	mg/L		0.1		E200.7	03/29/10 14:25 / cp
Cadmium	ND	mg/L		0.01		E200.7	03/29/10 14:25 / cp
Chromium	ND	mg/L		0.05		E200.7	03/29/10 14:25 / cp
Copper	ND	mg/L		0.01		E200.7	03/29/10 14:25 / cp
Iron	ND	mg/L		0.03		E200.7	03/29/10 14:25 / cp
Lead	ND	mg/L		0.05		E200.7	03/29/10 14:25 / cp
Manganese	0.03	mg/L		0.01		E200.7	03/29/10 14:25 / cp
Mercury	ND	mg/L		0.001		E245.1	03/26/10 11:25 / jp
Molybdenum	ND	mg/L		0.1		E200.7	03/29/10 14:25 / cp
Selenium	0.127	mg/L		0.001		E200.8	03/30/10 20:01 / ts
Thallium	ND	mg/L		0.1		E200.7	03/29/10 14:25 / cp
Uranium	2.13	mg/L		0.0003		E200.8	03/30/10 20:01 / ts
Vanadium	ND	mg/L		0.1		E200.7	03/29/10 14:25 / cp
Zinc	0.01	mg/L		0.01		E200.7	03/29/10 14:25 / cp
RADIONUCLIDES - DISSOLVED							
Gross Alpha	2600	pCi/L				E900.0	04/09/10 02:22 / cgr
Gross Alpha precision (±)	34.6	pCi/L				E900.0	04/09/10 02:22 / cgr
Gross Alpha MDC	4.2	pCi/L				E900.0	04/09/10 02:22 / cgr

Report Definitions: RL - Analyte reporting limit.
 QCL - Quality control limit.
 MDC - Minimum detectable concentration

MCL - Maximum contaminant level.
 ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Uranium One USA Inc
Project: CR
Lab ID: C10030820-001
Client Sample ID: 5MW66

Report Date: 04/15/10
Collection Date: 03/24/10 09:06
Date Received: 03/25/10
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
RADIONUCLIDES - DISSOLVED							
Gross Beta	255	pCi/L				E900.0	04/09/10 02:22 / cgr
Gross Beta precision (±)	5.8	pCi/L				E900.0	04/09/10 02:22 / cgr
Gross Beta MDC	4.4	pCi/L				E900.0	04/09/10 02:22 / cgr
Radium 226	2.6	pCi/L				E903.0	04/06/10 11:20 / trs
Radium 226 precision (±)	0.33	pCi/L				E903.0	04/06/10 11:20 / trs
Radium 226 MDC	0.17	pCi/L				E903.0	04/06/10 11:20 / trs
Radium 228	0.6	pCi/L	U			RA-05	04/01/10 11:09 / plj
Radium 228 precision (±)	0.8	pCi/L				RA-05	04/01/10 11:09 / plj
Radium 228 MDC	1.3	pCi/L				RA-05	04/01/10 11:09 / plj
DATA QUALITY							
A/C Balance (± 5)	1.01	%				Calculation	04/01/10 11:17 / kbh
Anions	14.9	meq/L				Calculation	04/01/10 11:17 / kbh
Cations	15.2	meq/L				Calculation	04/01/10 11:17 / kbh
Solids, Total Dissolved Calculated	916	mg/L				Calculation	04/01/10 11:17 / kbh
TDS Balance (0.80 - 1.20)	1.00					Calculation	04/01/10 11:17 / kbh

Report Definitions: RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
U - Not detected at minimum detectable concentration



QA/QC Summary Report

Client: Uranium One USA Inc
Project: CR

Report Date: 04/15/10
Work Order: C10030820

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2320 B										Batch: R131095
Sample ID: MBLK	3	Method Blank								Run: MANTECH_100326A 03/26/10 13:28
Alkalinity, Total as CaCO3		4	mg/L		1					
Carbonate as CO3		ND	mg/L		1					
Bicarbonate as HCO3		5	mg/L		1					
Sample ID: LCS1		Laboratory Control Sample								Run: MANTECH_100326A 03/26/10 13:45
Alkalinity, Total as CaCO3		197	mg/L	5.0	97	90	110			
Sample ID: LCS		Laboratory Control Sample								Run: MANTECH_100326A 03/26/10 13:54
Alkalinity, Total as CaCO3		55.3	mg/L	5.0	103	90	110			
Sample ID: C10030799-004AMS		Sample Matrix Spike								Run: MANTECH_100326A 03/26/10 14:30
Alkalinity, Total as CaCO3		447	mg/L	5.0	103	80	120			
Sample ID: C10030799-004AMSD		Sample Matrix Spike Duplicate								Run: MANTECH_100326A 03/26/10 14:39
Alkalinity, Total as CaCO3		441	mg/L	5.0	99	80	120	1.2	20	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

MDC - Minimum detectable concentration



QA/QC Summary Report

Client: Uranium One USA Inc
Project: CR

Report Date: 04/15/10
Work Order: C10030820

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2510 B		Analytical Run: ORION555A-2_100326A								
Sample ID: ICV2_100326_1	Initial Calibration Verification Standard									
Conductivity @ 25 C		1380	umhos/cm	1.0	98	90	110			03/26/10 10:11
Method: A2510 B		Batch: 100326_1_PH-W_555A-2								
Sample ID: MBLK1_100326_1	Method Blank									
Conductivity @ 25 C		0.6	umhos/cm	0.2						Run: ORION555A-2_100326A 03/26/10 10:06
Sample ID: C10030840-005ADUP	Sample Duplicate									
Conductivity @ 25 C		3.60	umhos/cm	1.0				0	10	Run: ORION555A-2_100326A 03/26/10 10:31

Qualifiers:

RL - Analyte reporting limit.

MDC - Minimum detectable concentration

ND - Not detected at the reporting limit.



QA/QC Summary Report

Client: Uranium One USA Inc
Project: CR

Report Date: 04/16/10
Work Order: C10030820

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2540 C										Batch: 100326_1_SLDS-TDS-W
Sample ID: MBLK1_100326	Method Blank						Run: BAL-1_100326B		03/26/10 14:36	
Solids, Total Dissolved TDS @ 180 C		ND	mg/L	10						
Sample ID: LCS1_100326	Laboratory Control Sample						Run: BAL-1_100326B		03/26/10 14:37	
Solids, Total Dissolved TDS @ 180 C		995	mg/L	10	99	90	110			
Sample ID: C10030855-005BMS	Sample Matrix Spike						Run: BAL-1_100326B		03/26/10 14:39	
Solids, Total Dissolved TDS @ 180 C		2450	mg/L	10	105	90	110			
Sample ID: C10030855-005BMSD	Sample Matrix Spike Duplicate						Run: BAL-1_100326B		03/26/10 14:39	
Solids, Total Dissolved TDS @ 180 C		2440	mg/L	10	105	90	110	0.1	10	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

MDC - Minimum detectable concentration



QA/QC Summary Report

Client: Uranium One USA Inc
Project: CR

Report Date: 04/15/10
Work Order: C10030820

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A4500-F C										Batch: R131218
Sample ID: LCS		Laboratory Control Sample								04/01/10 10:13
Fluoride		1.04	mg/L	0.10	104	90	110			
Sample ID: MBLK		Method Blank								04/01/10 10:27
Fluoride		ND	mg/L	0.05						
Sample ID: C10030855-001AMS		Sample Matrix Spike								04/01/10 12:46
Fluoride		1.19	mg/L	0.10	105	80	120			
Sample ID: C10030855-001AMSD		Sample Matrix Spike Duplicate								04/01/10 12:49
Fluoride		1.21	mg/L	0.10	107	80	120	1.7	10	

Qualifiers:

RL - Analyte reporting limit.

MDC - Minimum detectable concentration

ND - Not detected at the reporting limit.



QA/QC Summary Report

Client: Uranium One USA Inc
Project: CR

Report Date: 04/15/10
Work Order: C10030820

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A4500-H B		Analytical Run: ORION555A-2_100326A								
Sample ID: ICV1_100326_1		Initial Calibration Verification Standard								
pH		6.86	s.u.	0.010	100	98	102			03/26/10 10:08
Method: A4500-H B		Batch: 100326_1_PH-W_555A-2								
Sample ID: C10030840-015ADUP		Sample Duplicate								
pH		7.57	s.u.	0.010				0.1	10	Run: ORION555A-2_100326A 03/26/10 10:54

Qualifiers:

RL - Analyte reporting limit.

MDC - Minimum detectable concentration

ND - Not detected at the reporting limit.



QA/QC Summary Report

Client: Uranium One USA Inc
Project: CR

Report Date: 04/15/10
Work Order: C10030820

Analyte	Count	Result	Units	RL	%REG	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A4500-NH3 G										Batch: R131297
Sample ID: MBLK-1		Method Blank								Run: TECHNICON_100405A 04/05/10 20:06
Nitrogen, Ammonia as N		ND	mg/L	0.02						
Sample ID: LCS-2		Laboratory Control Sample								Run: TECHNICON_100405A 04/05/10 20:08
Nitrogen, Ammonia as N		20.8	mg/L	0.20	104	80	120			
Sample ID: C10030867-001GMS		Sample Matrix Spike								Run: TECHNICON_100405A 04/05/10 20:50
Nitrogen, Ammonia as N		2.06	mg/L	0.050	103	80	120			
Sample ID: C10030867-001GMSD		Sample Matrix Spike Duplicate								Run: TECHNICON_100405A 04/05/10 20:52
Nitrogen, Ammonia as N		2.17	mg/L	0.050	108	80	120	5.2	20	

Qualifiers:

RL - Analyte reporting limit.

MDC - Minimum detectable concentration

ND - Not detected at the reporting limit.



QA/QC Summary Report

Client: Uranium One USA Inc
Project: CR

Report Date: 04/15/10
Work Order: C10030820

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E300.0										Batch: R131034
Sample ID: LCS	2	Laboratory Control Sample					Run: IC2-C_100326A			03/26/10 17:54
Chloride		9.67	mg/L	1.0	97	90	110			
Sulfate		38.4	mg/L	1.0	96	90	110			
Sample ID: MBLK	2	Method Blank					Run: IC2-C_100326A			03/26/10 18:10
Chloride		ND	mg/L	0.04						
Sulfate		ND	mg/L	0.1						
Sample ID: C10030855-003AMS	2	Sample Matrix Spike					Run: IC2-C_100326A			03/27/10 11:57
Chloride		84.7	mg/L	1.0	98	80	120			
Sulfate		738	mg/L	1.0	88	80	120			
Sample ID: C10030855-003AMSD	2	Sample Matrix Spike Duplicate					Run: IC2-C_100326A			03/27/10 12:14
Chloride		84.6	mg/L	1.0	98	80	120	0.1	20	
Sulfate		735	mg/L	1.0	87	80	120	0.3	20	

Qualifiers:

RL - Analyte reporting limit.

MDC - Minimum detectable concentration

ND - Not detected at the reporting limit.



QA/QC Summary Report

Client: Uranium One USA Inc
Project: CR

Report Date: 04/15/10
Work Order: C10030820

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E353.2										Batch: R131252
Sample ID: MBLK-1		Method Blank								Run: TECHNICON_100403A 04/03/10 19:44
Nitrogen, Nitrate+Nitrite as N		0.06	mg/L	0.03						
Sample ID: LCS-2		Laboratory Control Sample								Run: TECHNICON_100403A 04/03/10 19:46
Nitrogen, Nitrate+Nitrite as N		2.50	mg/L	0.10	98	90	110			
Sample ID: C10030820-001DMS		Sample Matrix Spike								Run: TECHNICON_100403A 04/03/10 21:24
Nitrogen, Nitrate+Nitrite as N		2.20	mg/L	0.10	98	90	110			
Sample ID: C10030820-001DMSD		Sample Matrix Spike Duplicate								Run: TECHNICON_100403A 04/03/10 21:26
Nitrogen, Nitrate+Nitrite as N		2.28	mg/L	0.10	101	90	110	3.6	10	

Qualifiers:

RL - Analyte reporting limit.

MDC - Minimum detectable concentration

ND - Not detected at the reporting limit.



QA/QC Summary Report

Client: Uranium One USA Inc
 Project: CR

Report Date: 04/09/10
 Work Order: C10030820

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7										Batch: R131084
Sample ID: MB-100329A	18 Method Blank			Run: ICP2-C_100329A				03/29/10 11:05		
Antimony		ND	mg/L	0.01						
Barium		ND	mg/L	0.0005						
Beryllium		ND	mg/L	0.0002						
Boron		0.01	mg/L	0.009						
Cadmium		ND	mg/L	0.001						
Calcium		ND	mg/L	0.2						
Chromium		ND	mg/L	0.002						
Copper		ND	mg/L	0.001						
Iron		ND	mg/L	0.002						
Lead		ND	mg/L	0.005						
Magnesium		ND	mg/L	0.05						
Manganese		ND	mg/L	0.0004						
Molybdenum		ND	mg/L	0.005						
Potassium		ND	mg/L	0.02						
Sodium		ND	mg/L	0.3						
Thallium		ND	mg/L	0.02						
Vanadium		ND	mg/L	0.03						
Zinc		ND	mg/L	0.001						
Sample ID: LFB-100329A	18 Laboratory Fortified Blank			Run: ICP2-C_100329A				03/29/10 11:09		
Antimony		1.03	mg/L	0.10	103	85	115			
Barium		1.00	mg/L	0.10	100	85	115			
Beryllium		0.983	mg/L	0.010	98	85	115			
Boron		1.01	mg/L	0.10	100	85	115			
Cadmium		0.987	mg/L	0.010	99	85	115			
Calcium		49.9	mg/L	0.50	100	85	115			
Chromium		0.981	mg/L	0.050	98	85	115			
Copper		0.986	mg/L	0.010	99	85	115			
Iron		0.998	mg/L	0.030	100	85	115			
Lead		0.999	mg/L	0.050	100	85	115			
Magnesium		49.1	mg/L	0.50	98	85	115			
Manganese		0.965	mg/L	0.010	96	85	115			
Molybdenum		1.000	mg/L	0.10	100	85	115			
Potassium		46.6	mg/L	0.50	93	85	115			
Sodium		48.8	mg/L	0.50	98	85	115			
Thallium		1.01	mg/L	0.10	101	85	115			
Vanadium		1.02	mg/L	0.10	102	85	115			
Zinc		0.987	mg/L	0.010	99	85	115			
Sample ID: C10030837-001BMS2	18 Sample Matrix Spike			Run: ICP2-C_100329A				03/29/10 14:37		
Antimony		4.85	mg/L	0.075	95	70	130			
Barium		5.96	mg/L	0.10	97	70	130			
Beryllium		4.89	mg/L	0.010	96	70	130			
Boron		6.49	mg/L	0.10	96	70	130			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

MDC - Minimum detectable concentration



QA/QC Summary Report

Client: Uranium One USA Inc
 Project: CR

Report Date: 04/09/10
 Work Order: C10030820

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual	
Method: E200.7										Batch: R131084	
Sample ID: C10030837-001BMS2		18 Sample Matrix Spike			Run: ICP2-C_100329A				03/29/10 14:37		
Cadmium		4.94	mg/L	0.010	97	70	130				
Calcium		258	mg/L	1.1	97	70	130				
Chromium		4.76	mg/L	0.050	93	70	130				
Copper		4.86	mg/L	0.010	95	70	130				
Iron		4.86	mg/L	0.030	95	70	130				
Lead		4.84	mg/L	0.050	95	70	130				
Magnesium		245	mg/L	1.0	94	70	130				
Manganese		4.74	mg/L	0.010	93	70	130				
Molybdenum		4.80	mg/L	0.10	94	70	130				
Potassium		258	mg/L	1.0	95	70	130				
Sodium		1310	mg/L	1.4		70	130			A	
Thallium		4.72	mg/L	0.10	93	70	130				
Vanadium		4.94	mg/L	0.15	97	70	130				
Zinc		4.90	mg/L	0.010	95	70	130				
Sample ID: C10030837-001BMSD		18 Sample Matrix Spike Duplicate			Run: ICP2-C_100329A				03/29/10 14:41		
Antimony		4.90	mg/L	0.075	96	70	130	1	20		
Barium		5.97	mg/L	0.10	97	70	130	0.2	20		
Beryllium		4.89	mg/L	0.010	96	70	130	0.1	20		
Boron		6.51	mg/L	0.10	97	70	130	0.3	20		
Cadmium		4.92	mg/L	0.010	96	70	130	0.4	20		
Calcium		260	mg/L	1.1	97	70	130	0.6	20		
Chromium		4.79	mg/L	0.050	94	70	130	0.6	20		
Copper		4.95	mg/L	0.010	97	70	130	1.9	20		
Iron		5.00	mg/L	0.030	97	70	130	3	20		
Lead		4.82	mg/L	0.050	95	70	130	0.4	20		
Magnesium		251	mg/L	1.0	96	70	130	2.2	20		
Manganese		4.78	mg/L	0.010	94	70	130	0.9	20		
Molybdenum		4.88	mg/L	0.10	96	70	130	1.6	20		
Potassium		266	mg/L	1.0	98	70	130	2.9	20		
Sodium		1330	mg/L	1.4		70	130	1.5	20	A	
Thallium		4.80	mg/L	0.10	94	70	130	1.7	20		
Vanadium		4.92	mg/L	0.15	96	70	130	0.4	20		
Zinc		4.88	mg/L	0.010	95	70	130	0.3	20		

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

A - The analyte level was greater than four times the spike level. In accordance with the method % recovery is not calculated.

MDC - Minimum detectable concentration



QA/QC Summary Report

Client: Uranium One USA Inc
Project: CR

Report Date: 04/09/10
Work Order: C10030820

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8										Batch: R131124
Sample ID: LRB	3	Method Blank								Run: ICPMS2-C_100330A 03/30/10 13:21
Arsenic		ND	mg/L	0.0003						
Selenium		ND	mg/L	0.001						
Uranium		1E-05	mg/L	8E-06						
Sample ID: LFB	3	Laboratory Fortified Blank								Run: ICPMS2-C_100330A 03/30/10 13:28
Arsenic		0.0540	mg/L	0.0010	108	85	115			
Selenium		0.0542	mg/L	0.0014	108	85	115			
Uranium		0.0524	mg/L	0.00030	105	85	115			
Sample ID: C10030895-007CMS4	3	Sample Matrix Spike								Run: ICPMS2-C_100330A 03/30/10 21:36
Arsenic		0.0538	mg/L	0.0010	104	70	130			
Selenium		0.0628	mg/L	0.0010	102	70	130			
Uranium		0.0863	mg/L	0.00030	108	70	130			
Sample ID: C10030895-007CMSD	3	Sample Matrix Spike Duplicate								Run: ICPMS2-C_100330A 03/30/10 21:43
Arsenic		0.0540	mg/L	0.0010	105	70	130	0.4	20	
Selenium		0.0626	mg/L	0.0010	101	70	130	0.3	20	
Uranium		0.0868	mg/L	0.00030	109	70	130	0.6	20	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

MDC - Minimum detectable concentration



QA/QC Summary Report

Client: Uranium One USA Inc
Project: CR

Report Date: 04/09/10
Work Order: C10030820

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E245.1										Batch: 25646
Sample ID: MB-25646		Method Blank								Run: CVAA_C203_100326A 03/26/10 11:21
Mercury		ND	mg/L	3E-05						
Sample ID: LCS-25646		Laboratory Control Sample								Run: CVAA_C203_100326A 03/26/10 11:23
Mercury		0.00548	mg/L	0.00010	110	90	110			
Sample ID: C10030820-001BMS		Sample Matrix Spike								Run: CVAA_C203_100326A 03/26/10 11:27
Mercury		0.00556	mg/L	0.0010	111	85	115			
Sample ID: C10030820-001BMSD		Sample Matrix Spike Duplicate								Run: CVAA_C203_100326A 03/26/10 11:29
Mercury		0.00551	mg/L	0.0010	110	85	115	0.9	10	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

MDC - Minimum detectable concentration



QA/QC Summary Report

Client: Uranium One USA Inc
 Project: CR

Report Date: 04/15/10
 Work Order: C10030820

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E900.0								Batch: GrAB-0878		
Sample ID: MB-GrAB-0878	6	Method Blank		Run: TENNELEC-3_100406A			04/09/10 02:22			
Gross Alpha		2	pCi/L							
Gross Alpha precision (±)		0.7	pCi/L							
Gross Alpha MDC		0.6	pCi/L							
Gross Beta		2	pCi/L							
Gross Beta precision (±)		1	pCi/L							
Gross Beta MDC		1	pCi/L							
Sample ID: Th230-GrAB-0878		Laboratory Control Sample		Run: TENNELEC-3_100406A			04/09/10 02:22			
Gross Alpha		100	pCi/L	96		70	130			
Sample ID: Cs137-GrAB-0878		Laboratory Control Sample		Run: TENNELEC-3_100406A			04/09/10 02:22			
Gross Beta		75	pCi/L	80		70	130			
Sample ID: C10030786-001DDUP	6	Sample Duplicate		Run: TENNELEC-3_100406A			04/09/10 02:22			
Gross Alpha		34.2	pCi/L					8.4	27.2	
Gross Alpha precision (±)		3.01	pCi/L							
Gross Alpha MDC		2.06	pCi/L							
Gross Beta		12.7	pCi/L					25	38	
Gross Beta precision (±)		1.62	pCi/L							
Gross Beta MDC		2.33	pCi/L							
Sample ID: C10030972-011DMS		Sample Matrix Spike		Run: TENNELEC-3_100406A			04/10/10 01:39			
Gross Alpha		91.2	pCi/L	87		70	130			
Sample ID: C10030972-011DMSD		Sample Matrix Spike Duplicate		Run: TENNELEC-3_100406A			04/10/10 01:39			
Gross Alpha		99.6	pCi/L	95		70	130	8.8	16.4	
Sample ID: C10030972-011DMS		Sample Matrix Spike		Run: TENNELEC-3_100406A			04/10/10 01:39			
Gross Beta		74.7	pCi/L	84		70	130			
Sample ID: C10030972-011DMSD		Sample Matrix Spike Duplicate		Run: TENNELEC-3_100406A			04/10/10 01:39			
Gross Beta		78.1	pCi/L	87		70	130	4.5	16.1	

Qualifiers:

RL - Analyte reporting limit.

MDC - Minimum detectable concentration

ND - Not detected at the reporting limit.



QA/QC Summary Report

Client: Uranium One USA Inc
Project: CR

Report Date: 04/15/10
Work Order: C10030820

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E903.0										Batch: RA226-4437
Sample ID: C10030813-001AMS		Sample Matrix Spike					Run: BERTHOLD 770-1_100329A			04/06/10 11:20
Radium 226		16	pCi/L	93		70	130			
Sample ID: C10030813-001AMSD		Sample Matrix Spike Duplicate					Run: BERTHOLD 770-1_100329A			04/06/10 11:20
Radium 226		17	pCi/L	99		70	130	5.4	23.5	
Sample ID: MB-RA226-4437	3	Method Blank					Run: BERTHOLD 770-1_100329A			04/06/10 13:00
Radium 226		-0.1	pCi/L							U
Radium 226 precision (±)		0.07	pCi/L							
Radium 226 MDC		0.2	pCi/L							
Sample ID: LCS-RA226-4437		Laboratory Control Sample					Run: BERTHOLD 770-1_100329A			04/06/10 13:00
Radium 226		7.9	pCi/L	102		70	130			

Qualifiers:

RL - Analyte reporting limit.

MDC - Minimum detectable concentration

ND - Not detected at the reporting limit.

U - Not detected at minimum detectable concentration



QA/QC Summary Report

Client: Uranium One USA Inc
Project: CR

Report Date: 04/15/10
Work Order: C10030820

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: RA-05										Batch: RA228-3135
Sample ID: LCS-228-RA226-4437		Laboratory Control Sample				Run: TENNELEC-3_100329A				04/01/10 11:09
Radium 228		9.54	pCi/L	118		70	130			
Sample ID: MB-RA226-4437	3	Method Blank				Run: TENNELEC-3_100329A				04/01/10 11:09
Radium 228		0.3	pCi/L							U
Radium 228 precision (±)		0.8	pCi/L							
Radium 228 MDC		1	pCi/L							
Sample ID: C10030813-002AMS		Sample Matrix Spike				Run: TENNELEC-3_100329A				04/01/10 11:09
Radium 228		19.4	pCi/L	109		70	130			
Sample ID: C10030813-002AMSD		Sample Matrix Spike Duplicate				Run: TENNELEC-3_100329A				04/01/10 11:09
Radium 228		20.9	pCi/L	118		70	130	7.2	31.6	

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration

ND - Not detected at the reporting limit.
U - Not detected at minimum detectable concentration

Energy Laboratories Inc Workorder Receipt Checklist



C10030820

Uranium One USA Inc

Login completed by: Halley Ackerman

Date Received: 3/25/2010

Reviewed by:

Received by: al

Reviewed Date:

Carrier name: Hand Del

Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on shipping container/cooler?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on sample bottles?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Samples in proper container/bottle?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Container/Temp Blank temperature:	6°C		
Water - VOA vials have zero headspace?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	No VOA vials submitted <input checked="" type="checkbox"/>
Water - pH acceptable upon receipt?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Applicable <input type="checkbox"/>

Contact and Corrective Action Comments:

None

SAMPLE SUBMITTAL AND CHAIN OF CUSTODY FORM

Uranium One 907 North Poplar ST Suite 260 Casper WY 82601
 Phone 464-1427 (Christensen Mine) or 234-8235(Casper Office)

6° no ice
 Hand

Samples shipped to Energy Lab; Casper, WY

800

Submitted by *Don* Date 3-24-10 Received by *Andrew* Date 3-25-10

Sample Description: Groundwater
 Project: CR

Analysis Requested: Ammonia; Antimony; Arsenic; Barium; Beryllium; Bicarbonate; Boron; Cadmium; Calcium; Carbonate; Chloride; Chromium; Conductivity; Copper; Fluoride; Gross Alpha; Gross Beta; Iron; Lead; Magnesium; Manganese; Mercury; Molybdenum; Nitrate+Nitrite; pH; Potassium; Selenium; Sodium; Sulfate; Radium-226 and Radium-228; Thallium; Total Dissolved Solids; Uranium; Vanadium; and Zinc

Send Analysis Results to: Larry Arbogast
 [larry.arbogast@uranium1.com]

#	Identification Name	Sample Date	Sample Volume	Water Sample Preservation (X)				Comments
				Filtered	Not Filt.	HNO3	H2SO4	
1	5MW66	3-24-10	2 GAL.		X			SAMPLE TIME 9:00 AM

L Drive\ exqagc.xlsx

C10030820