

**TABLE D-1
PRODUCED WATER ANALYTICAL RESULTS SUMMARY**

Lease Area:	AC-25	AC-25	AC-25	AC-25	AC-25	AC-857	AC-857
Collection Date:	6/16/2014	6/16/2014	6/16/2014	6/16/2014	6/16/2014	9/12/2014	9/16/2014
Lab Report ID:	14060753-01	14060753-02	14060753-03	14060753-04	14060753-05	14090523-02	14090523-03
Arsenic	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U
Cadmium	0.0400 U	0.0400 U	0.0400 U	0.0400 U	0.0400 U	0.0400 U	0.0400 U
Copper	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U
Cyanide	0.0200 U	0.0200 U	0.0200 U	0.0200 U	0.0200 U	R	0.0200 U
Hexavalent Chromium	R	0.000300 U	0.000300 U	0.000300 U	0.000300 U	R	0.000300 U
Lead	0.0350 U	0.0350 U	0.0350 U	0.0350 U	0.0350 U	0.0350 U	0.0350 U
Mercury	0.0000420 U	0.0000420 U	0.0000420 U	0.0000420 U	0.0000420 U	0.0000550 J	0.0000420 U
Nickel	0.256	0.0500 U	0.315	0.350	0.374	0.0500 U	0.0500 U
Selenium	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U
Silver	0.0400 U	0.0400 U	0.0400 U	0.0400 U	0.0400 U	0.0400 U	0.0400 U
Zinc	0.296	0.147 J	0.147 J	0.129 J	0.168 J	0.125 U	0.125 U

Lease Area:	AC-857	AC-857	AC-857	BA-105	BA-105	BA-105	BA-133
Collection Date:	9/19/2014	11/7/2014	11/10/2014	5/14/2014	5/14/2014	12/18/2014	4/7/2014
Lab Report ID:	14090838-01	14101095-11	14110364-04	14050411-06	14050411-05	14120554-06	14040241-03
Arsenic	0.0500 U	0.0500 U	0.0500 U	0.00523 J	0.00500 U	0.0500 U	0.0200 U
Cadmium	0.0400 U	0.0400 U	0.0400 U	0.00400 U	0.00400 U	0.0400 U	0.0160 U
Copper	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0200 U
Cyanide	0.0200 U	0.0200 U	0.0200 U	0.0200 U	0.0200 U	0.0200 U	0.0200 U
Hexavalent Chromium	R	0.000300 U	0.000300 U	0.000300 U	0.000300 U	0.000300 U	0.000200 U
Lead	0.0350 U	0.0350 U	0.0350 U	0.00350 U	0.00350 U	0.0350 U	0.0140 U
Mercury	0.0000420 U	0.0000420 UJ	0.0000420 U	0.0000480 J	0.0000450 J	0.0000420 U	NA
Nickel	0.0500 U	0.0500 U	0.0500 U	0.00500 U	0.00500 U	0.0500 U	0.0200 U
Selenium	0.0500 U	0.0500 U	0.0500 U	0.00500 U	0.00500 U	0.0500 U	0.0200 U
Silver	0.0400 U	0.0400 U	0.0400 U	0.00400 U	0.00400 U	0.0400 U	0.0160 U
Zinc	0.125 U	0.125 U	0.125 U	0.125 U	0.125 U	0.125 U	0.203

**TABLE D-1
PRODUCED WATER ANALYTICAL RESULTS SUMMARY**

Lease Area:	BA-133	BA-133	BA-491	BA-491	BA-491	BA-491	BS-53
Collection Date:	4/7/2014	1/13/2015	1/26/2015	2/8/2015	2/8/2015	2/8/2015	5/14/2014
Lab Report ID:	14040241-02	15010212-03	15010788-01	15020100-04	15020100-05	15020100-06	14050411-09
Arsenic	0.0200 U	0.0100 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.00537 J
Cadmium	0.0160 U	0.00800 U	0.0400 U	0.0400 U	0.0400 U	0.0400 U	0.00400 U
Copper	0.0200 U	0.0100 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U
Cyanide	0.0200 U	0.0200 U	0.0200 U	0.0200 U	0.0200 U	0.0200 U	0.0200 U
Hexavalent Chromium	0.000200 U	0.000300 U	0.000300 U	0.000300 U	0.000300 U	0.000300 U	0.000300 U
Lead	0.0140 U	0.00700 U	0.0350 U	0.0350 U	0.0350 U	0.0350 U	0.00350 U
Mercury	NA	0.000122 J	0.0000420 U	0.0000420 U	0.0000420 U	0.0000420 U	0.000123 J
Nickel	0.0200 U	0.0100 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.00500 U
Selenium	0.0200 U	0.0100 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.00500 U
Silver	0.0160 U	0.00800 U	0.0400 U	0.0400 U	0.0400 U	0.0400 U	0.00400 U
Zinc	0.194	0.139	0.125 U	0.125 U	0.125 U	0.125 U	0.125 U

Lease Area:	BS-53	BS-53	BS-53	BS-53	BS-53	BS-53	BS-53
Collection Date:	5/14/2014	5/14/2014	5/15/2014	5/15/2014	9/22/2014	9/25/2014	9/29/2014
Lab Report ID:	14050411-07	14050411-08	14050675-08	14050675-10	14090959-02	14091155-01	14091155-03
Arsenic	0.00609 J	0.00644 J	0.0500 U	0.0500 U	0.0500 U	0.0250 U	0.0250 U
Cadmium	0.00400 U	0.00400 U	0.0400 U	0.0400 U	0.0400 U	0.0200 U	0.0200 U
Copper	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0250 U	0.0250 U
Cyanide	0.0200 U	0.0200 U	0.0200 U	0.0200 U	0.0200 U	0.0200 U	0.0200 U
Hexavalent Chromium	0.000300 U	R	R	0.000300 U	0.000300 U	R	0.000300 U
Lead	0.00350 U	0.00350 U	0.0350 U	0.0350 U	0.0350 U	0.0175 U	0.0175 U
Mercury	0.0000790 J	0.0000640 J	0.000128 J	0.000115 J	0.0000530 J	0.0000420 U	0.0000420 U
Nickel	0.00500 U	0.00500 U	0.0500 U	0.0500 U	0.0500 U	0.0250 U	0.0250 U
Selenium	0.00500 U	0.00500 U	0.0500 U	0.0500 U	0.0500 U	0.0250 U	0.0250 U
Silver	0.00400 U	0.00400 U	0.0400 U	0.0400 U	0.0400 U	0.0200 U	0.0200 U
Zinc	0.125 U	0.125 U	0.255 J	0.125 U	0.125 U	0.0625 U	0.0625 U

**TABLE D-1
PRODUCED WATER ANALYTICAL RESULTS SUMMARY**

Lease Area:	BS-53	BS-53	EB-159	EB-159	EB-160	EB-160	EB-165-1
Collection Date:	9/30/2014	10/2/2014	5/14/2014	5/14/2014	5/14/2014	5/14/2014	11/10/2014
Lab Report ID:	14100091-01	14100091-10	14050675-04	14050675-06	14050675-11	14050675-07	14110364-01
Arsenic	0.0500 U	0.0500 U	0.0842 J	0.0742 J	0.0500 U	0.0500 U	0.0500 U
Cadmium	0.0400 U	0.0400 U	0.0400 U	0.0400 U	0.0400 U	0.0400 U	0.0400 U
Copper	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U
Cyanide	0.0200 U	0.0200 U	0.0200 U	0.0200 U	0.0200 U	0.0200 U	0.0200 U
Hexavalent Chromium	0.000300 U	R	0.000300 U	0.000300 U	0.000300 U	0.000300 U	0.000300 U
Lead	0.0350 U	0.0350 U	0.0350 U	0.0350 U	0.0350 U	0.0350 U	0.0350 U
Mercury	0.0000420 U	0.0000420 U	0.0000420 U	0.0000420 U	0.0000420 U	0.0000420 U	0.0000420 U
Nickel	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U
Selenium	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U
Silver	0.0400 U	0.0400 U	0.0400 U	0.0400 U	0.0400 U	0.0400 U	0.0400 U
Zinc	0.125 U	0.125 U	0.125 U	0.125 U	0.125 U	0.125 U	0.908

Lease Area:	EB-165-1	EB-602	EB-602	EB-643	EB-643	EC-14	EC-14-DUP
Collection Date:	12/3/2014	4/28/2014	4/30/2014	4/28/2014	4/30/2014	2/26/2015	2/26/2015
Lab Report ID:	14120030-06	14041149-08	14041149-09	14041149-07	14041149-10	15030010-02	15030010-03
Arsenic	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U
Cadmium	0.0400 U	0.0400 U	0.0400 U	0.0400 U	0.0400 U	0.0400 U	0.0400 U
Copper	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U
Cyanide	0.0200 U	0.0200 U	0.0200 U	0.0200 U	0.0200 U	0.0200 U	0.0200 U
Hexavalent Chromium	0.000300 U	0.000300 U	0.000300 U	0.000300 U	0.000300 U	0.0219	0.0000200 U
Lead	0.0350 U	0.0350 U	0.0350 U	0.0350 U	0.0350 U	0.0350 U	0.0350 U
Mercury	0.0000960 J	0.0000420 U	0.0000420 U	0.0000420 U	0.0000420 U	0.0000420 U	0.0000420 U
Nickel	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U
Selenium	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U
Silver	0.0400 U	0.0400 U	0.0400 U	0.0400 U	0.0400 U	0.0400 U	0.0400 U
Zinc	0.313	0.188 J	0.162 J	0.175 J	0.150 J	0.125 U	0.125 U

**TABLE D-1
PRODUCED WATER ANALYTICAL RESULTS SUMMARY**

Lease Area:	EC-33	EC-46	EC-160	EC-261	EC-321	EC-334	EC-346
Collection Date:	4/13/2015	8/27/2014	5/6/2014	2/26/2015	10/2/2014	6/5/2014	8/14/2014
Lab Report ID:	15040549-01	14081070-01	14050069-07	15030010-04	14100091-06	14060288-09	14080546-05
Arsenic	R	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U
Cadmium	R	0.0400 U	0.0400 U	0.0400 U	0.0400 U	0.0400 U	0.0400 U
Copper	0.109 J	0.0500 UJ	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U
Cyanide	R	R	0.0200 U	0.0200 U	0.0200 U	0.0200 U	0.0255
Hexavalent Chromium	R	R	0.000300 U	0.0000200 U	0.000300 U	0.000300 U	0.000300 U
Lead	R	0.0350 U	0.0350 U	0.0350 U	0.0350 U	0.458	0.0350 U
Mercury	R	0.0000610 J	0.0000420 U	0.0000420 U	0.0000420 U	0.0000420 U	0.0000760 J
Nickel	R	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U
Selenium	R	0.0500 UJ	0.101 J	0.0500 U	0.0500 U	0.0500 U	0.0500 U
Silver	R	0.0400 U	0.0400 U	0.0400 U	0.0400 U	0.0400 U	0.0400 U
Zinc	0.267 J	0.125 UJ	0.140 J	0.125 U	0.125 U	15.6	4.75

Lease Area:	EC-381	EI-11	EI-24	EI-53	EI-65	EI-212	EI-302
Collection Date:	8/14/2014	8/28/2014	5/13/2014	3/3/2014	5/13/2014	2/27/2014	8/14/2014
Lab Report ID:	14080546-03	14080862-07	14050411-04	14030032-07	14050411-03	14030032-06	14080546-01
Arsenic	0.0500 U	0.00100 U	0.0200 U	0.0500 U	0.00686 J	0.0500 U	0.0100 U
Cadmium	0.0400 U	0.000800 U	0.0160 U	0.0400 U	0.00400 U	0.0400 U	0.00800 U
Copper	0.0500 U	0.00100 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0100 U
Cyanide	0.0200 U	0.0200 U	0.0200 U	0.0200 U	0.0200 U	0.0200 U	0.0200 U
Hexavalent Chromium	0.000300 U	0.000300 U	0.000300 U	0.000200 U	0.000300 U	0.000200 U	0.000300 U
Lead	0.0350 U	0.000700 U	0.0140 U	0.0350 U	0.00350 U	0.0350 U	0.00700 U
Mercury	0.0000420 U	0.0000440 J	0.0000420 U	0.0000420 U	0.0000840 J	0.0000420 U	0.0000420 U
Nickel	0.0500 U	0.00194 J	0.0200 U	0.0500 U	0.00500 U	0.0500 U	0.0100 U
Selenium	0.0500 U	0.00100 U	0.0200 U	0.0500 U	0.00500 U	0.0500 U	0.0100 U
Silver	0.0400 U	0.000800 U	0.0160 U	0.0400 U	0.00400 U	0.0400 U	0.00800 U
Zinc	2.70	0.0210	0.125 U	0.355	0.224 J	0.232 J	21.2

**TABLE D-1
PRODUCED WATER ANALYTICAL RESULTS SUMMARY**

Lease Area:	EI-315	EI-333	EI-342	EI-346	EW-305	EW-305	EW-305
Collection Date:	3/30/2014	3/30/2014	3/30/2014	3/30/2014	8/14/2014	8/19/2014	8/20/2014
Lab Report ID:	14030994-03	14030994-07	14030994-05	14030994-04	14080162-07	14080572-02	14080602-05
Arsenic	0.0648 J	0.0500 U	0.0814 J	0.0500 U	0.0500 U	0.0500 U	0.0500 U
Cadmium	0.0400 U	0.0400 U	0.0400 U	0.0400 U	0.0400 U	0.0400 U	0.0400 U
Copper	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U
Cyanide	0.0200 U	0.0200 U	0.0200 U	0.0200 U	0.0200 U	0.0200 U	0.0200 U
Hexavalent Chromium	0.000200 U	R	0.000200 U	0.000200 U	0.000300 U	0.000300 U	0.000300 U
Lead	0.0350 U	0.0350 U	0.0350 U	0.0350 U	0.0350 U	0.0350 U	0.0350 U
Mercury	0.0000420 U	0.0000420 U	0.0000420 U	0.0000420 U	0.0000420 U	0.0000420 U	0.0000420 U
Nickel	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U
Selenium	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U
Silver	0.0400 U	0.0400 U	0.0400 U	0.0400 U	0.0400 U	0.0400 U	0.0400 U
Zinc	0.125 U	1.43	0.125 U	2.59	0.151 J	0.125 U	0.125 U

Lease Area:	EW-826	EW-873	EW-873	EW-873	EW-873	EW-910	GA-310
Collection Date:	3/2/2014	7/8/2014	7/8/2014	7/8/2014	7/8/2014	12/19/2013	5/14/2014
Lab Report ID:	14030032-09	14070394-01	14070396-01	14070398-01	14070395-01	1312932-01	14050675-02
Arsenic	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0200 U	0.0215 J	0.0500 U
Cadmium	0.0400 U	0.0400 U	0.0400 U	0.0400 U	0.0160 U	0.00400 U	0.0400 U
Copper	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0200 U	0.0100 U	0.0500 U
Cyanide	0.0200 U	0.0200 U	0.0200 U	0.0200 U	0.0200 U	0.0200 U	0.0200 U
Hexavalent Chromium	R	0.000300 U	0.000300 U	0.000300 U	0.000300 U	0.00100 U	0.000300 U
Lead	0.0350 U	0.0350 U	0.0350 U	0.0350 U	0.0140 U	0.00700 U	0.0350 U
Mercury	0.0000420 U	0.0000420 U	0.0000420 U	0.0000420 U	0.0000420 U	0.000127 J	0.0000420 U
Nickel	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0200 U	0.0100 U	0.0500 U
Selenium	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0200 U	0.0100 U	0.0500 U
Silver	0.0400 U	0.0400 U	0.0400 U	0.0400 U	0.0160 U	0.00400 U	0.0400 U
Zinc	14.8	0.144 J	0.125 U	0.125 U	0.208 J	1.51	0.125 U

**TABLE D-1
PRODUCED WATER ANALYTICAL RESULTS SUMMARY**

Lease Area:	GA-424	GA-424	GA-424	GA-424	GA-424	Galv-209	Galv-209	Galv-209
Collection Date:	5/16/2014	2/10/2015	2/11/2015	2/12/2015	2/13/2015	6/17/2014	6/17/2014	6/17/2014
Lab Report ID:	14050675-14	15020879-01	15020879-02	15020879-03	15020879-04	14060990-02	14060990-04	14060990-03
Arsenic	0.0500 U	R	R	R	R	0.0500 U	0.0500 U	0.0500 U
Cadmium	0.0400 U	0.0400 U	0.0400 U	0.0400 U	0.0400 U	0.0400 U	0.0400 U	0.0400 U
Copper	0.0500 U	R	R	R	R	0.0500 U	0.0500 U	0.0500 U
Cyanide	0.0200 U	0.0200 U	0.0200 U	0.0200 U	0.0200 U	0.0200 U	0.0200 U	0.0200 U
Hexavalent Chromium	0.000300 U	0.0000200 U	0.0000200 U	0.0000200 U	0.0000200 U	0.000300 U	0.000300 U	0.000300 U
Lead	0.0350 U	0.0350 U	0.0350 U	0.0350 U	0.0350 U	0.0350 U	0.0350 U	0.0350 U
Mercury	0.0000790 J	0.0000420 U	0.0000420 U	0.0000420 U	0.0000420 U	0.0000420 U	0.0000420 U	0.0000420 U
Nickel	0.103 J	R	R	R	R	0.0500 U	0.0500 U	0.0500 U
Selenium	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U
Silver	0.0400 U	0.0400 U	0.0400 U	0.0400 U	0.0400 U	0.0400 U	0.0400 U	0.0400 U
Zinc	7.58	2.03	1.93	1.91	1.96	0.125 U	0.125 U	0.125 U

Lease Area:	Galv-355	GB-128	GB-128	GB-189	GB-189	GB-260	GB-260	GB-426
Collection Date:	12/17/2013	10/24/2014	11/4/2014	5/14/2014	5/14/2014	7/15/2014	7/17/2014	10/30/2014
Lab Report ID:	1312548-03	14101095-02	14101095-09	14050675-05	14050675-12	14070778-01	14070778-02	14101095-06
Arsenic	0.102	0.0769 J	0.0768 J	0.278	0.280	0.0500 U	0.0500 U	0.0500 U
Cadmium	0.00400 U	0.0400 U	0.0400 U	0.0400 U	0.0400 U	0.0400 U	0.0400 U	0.0400 U
Copper	0.00500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U
Cyanide	0.0404 J	0.0200 U	0.0200 U	0.0220	0.0200 U	0.0200 U	0.0200 U	0.0200 U
Hexavalent Chromium	0.00100 U	0.000300 U	0.000300 U	0.000300 U	0.000300 U	0.000300 U	0.000300 U	0.000300 U
Lead	0.00350 U	0.0350 U	0.0369 J	0.0350 U	0.0350 U	0.0350 U	0.0350 U	0.0350 U
Mercury	0.0000420 U	0.0000420 UJ	0.0000420 UJ	0.0000420 U	0.0000420 U	0.0000420 U	0.0000420 U	0.0000420 UJ
Nickel	0.00500 U	0.0500 U	0.0500 U	0.0500 U	0.0715 J	0.0500 U	0.0500 U	0.0868 J
Selenium	0.00500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U
Silver	0.00400 U	0.0400 U	0.0400 U	0.0400 U	0.0400 U	0.0400 U	0.0400 U	0.0400 U
Zinc	0.0220 J	8.27	8.05	0.125 U	0.125 U	1.07	1.02	0.125 U

**TABLE D-1
PRODUCED WATER ANALYTICAL RESULTS SUMMARY**

Lease Area:	GB-426	GB-668	GB-668	GC-158	GC-205	GC-237	GC-338
Collection Date:	12/2/2014	4/23/2014	4/23/2014	8/29/2014	6/2/2014	8/11/2014	7/16/2014
Lab Report ID:	14120030-08	14041149-04	14041149-05	14081070-03	14060037-06	14080162-02	14070778-03
Arsenic	0.0500 U	0.0500 U	0.271	0.0500 U	0.0500 U	0.0500 U	0.0500 U
Cadmium	0.0400 U	0.0400 U	0.0400 U	0.0400 U	0.0400 U	0.0400 U	0.0400 U
Copper	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U
Cyanide	0.0200 U	0.0200 U	0.0200 U	0.0200 U	0.0200 U	0.0200 U	0.0200 U
Hexavalent Chromium	0.000300 U	0.000300 U	0.000300 U	0.000300 U	0.000300 U	0.000300 U	0.000300 U
Lead	0.0350 U	0.0350 U	0.0350 U	0.0350 U	0.0350 U	0.0350 U	0.0350 U
Mercury	0.0000420 U	0.0000550 J	0.0000500 J	0.0000420 U	0.0000420 U	0.0000420 U	0.0000420 U
Nickel	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U
Selenium	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U
Silver	0.0400 U	0.0400 U	0.0400 U	0.0400 U	0.0400 U	0.0400 U	0.0400 U
Zinc	0.125 U	0.421	0.463	1.42	0.125 U	0.125 U	0.149 J

Lease Area:	GC-608	GC-613	GC-641	GC-680	GC-787	GI-33	GI-33
Collection Date:	5/6/2014	4/3/2014	6/5/2014	4/22/2014	5/26/2014	4/16/2014	4/16/2014
Lab Report ID:	14050069-06	14040241-01	14060288-08	14041149-01	14050881-03	14040241-16	14040241-15
Arsenic	0.0100 U	0.0200 U	0.0500 U	0.0500 U	0.0500 U	0.0200 U	0.0200 U
Cadmium	0.00800 U	0.0160 U	0.0400 U	0.0400 U	0.0400 U	0.0160 U	0.0160 U
Copper	0.0100 U	0.0200 U	0.0500 U	0.0500 U	0.0500 U	0.0200 U	0.0269 J
Cyanide	0.0200 U	0.0200 U	0.0200 U	0.0200 U	0.0200 U	0.0200 UJ	0.0200 U
Hexavalent Chromium	0.000300 U	0.000200 U	0.000300 U	0.000300 U	R	0.000300 U	0.000300 U
Lead	0.00700 U	0.0140 U	0.0350 U	0.0350 U	0.0350 U	0.0140 U	0.0140 U
Mercury	0.000571	NA	0.0000640 J	0.0000420 U	0.0000900 J	0.0000420 U	0.0000420 U
Nickel	0.0100 U	0.0200 U	0.0500 U	0.0500 U	0.0500 U	0.0200 U	0.0200 U
Selenium	0.0231 J	0.0200 U	0.0500 U	0.0500 U	0.0500 U	0.0200 U	0.0200 U
Silver	0.00800 U	0.0160 U	0.0400 U	0.0400 U	0.0400 U	0.0160 U	0.0160 U
Zinc	0.0250 U	0.0500 U	6.72	4.84	0.125 U	0.0500 U	0.0500 U

**TABLE D-1
PRODUCED WATER ANALYTICAL RESULTS SUMMARY**

Lease Area:	GI-37	GI-43	GI-47	GI-73	GI-78	GI-90
Collection Date:	6/5/2014	2/8/2014	2/17/2014	2/17/2014	4/21/2014	2/18/2014
Lab Report ID:	14060288-04	1402267-10	1402748-04	1402748-06	14041149-02	1402748-12
Arsenic	0.0500 U	0.0200 U	0.0200 U	0.0200 U	0.0500 U	0.00500 U
Cadmium	0.0400 U	0.0160 U	0.0160 U	0.0160 U	0.0400 U	0.00400 U
Copper	0.0500 U	0.0200 U	0.0200 U	0.0200 U	0.0500 U	0.00500 U
Cyanide	0.0200 U	0.0200 U	0.0200 U	0.0200 U	0.0200 U	0.0200 U
Hexavalent Chromium	0.000300 U	0.000200 U	0.000200 U	0.000200 U	0.000300 U	0.000200 U
Lead	0.0350 U	0.0140 U	0.0140 U	0.0140 U	0.0350 U	0.00350 U
Mercury	0.0000420 U	0.0000420 U	0.0000420 U	0.0000420 U	0.0000420 U	0.0000420 U
Nickel	0.0500 U	0.0200 U	0.0200 U	0.0200 U	0.0500 U	0.00500 U
Selenium	0.0500 U	0.0200 U	0.0200 U	0.0200 U	0.0500 U	0.00500 U
Silver	0.0400 U	0.0160 U	0.0160 U	0.0160 U	0.0400 U	0.00400 U
Zinc	0.125 U	0.0500 U	0.0729 J	0.0500 U	0.125 U	0.0510

Lease Area:	GI-93	GI-116	HI-22	HI-110	HI-376	HI-379
Collection Date:	2/18/2014	3/24/2014	10/2/2014	10/2/2014	3/15/2015	10/2/2014
Lab Report ID:	1402748-14	14030994-01	14100091-04	14100091-05	15030617-01	14100091-09
Arsenic	0.00500 U	0.0205 J	0.0500 U	0.0500 U	0.0500 U	0.0500 U
Cadmium	0.00400 U	0.0160 U	0.0400 U	0.0400 U	0.0400 U	0.0400 U
Copper	0.00500 U	0.0200 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U
Cyanide	0.0200 U	0.0200 U	0.0200 U	0.0200 U	0.0200 U	0.0200 U
Hexavalent Chromium	0.000200 U	R	0.000300 U	0.000300 U	0.000800 UJ	0.000300 U
Lead	0.00350 U	0.0140 U	0.0350 U	0.0350 U	0.0925 J	0.0350 U
Mercury	0.0000420 U	0.0000420 U	0.0000420 U	0.0000420 U	0.0000420 U	0.0000420 U
Nickel	0.00500 U	0.0200 U	0.0555 J	0.0500 U	0.0500 U	0.0500 U
Selenium	0.00500 U	0.0233 J	0.0500 U	0.0500 U	0.0500 U	0.0500 U
Silver	0.00400 U	0.0160 U	0.0400 U	0.0400 U	0.0400 U	0.0400 U
Zinc	0.0235 J	0.986	0.125 U	0.125 U	0.125 U	0.125 U

**TABLE D-1
PRODUCED WATER ANALYTICAL RESULTS SUMMARY**

Lease Area:	HI-446	HI-474	HI-531	HI-557	HI-573	HI-582	MC-21
Collection Date:	11/10/2014	9/24/2014	9/24/2014	8/25/2014	12/16/2013	5/14/2014	1/7/2014
Lab Report ID:	14110364-02	14090959-03	14090959-04	14080862-05	1312548-02	14050675-03	1401280-03
Arsenic	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.00500 U	0.0500 U	0.0100 U
Cadmium	0.0400 U	0.0400 U	0.0400 U	0.0400 U	0.00400 U	0.0400 U	0.00800 U
Copper	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.00500 U	0.0500 U	0.0100 U
Cyanide	0.0200 U	0.0200 U	0.0200 U	0.0200 U	0.0200 UJ	0.0200 U	0.0200 U
Hexavalent Chromium	0.000300 U	R	0.000300 U	0.000300 U	0.00100 U	0.000300 U	0.000200 U
Lead	0.0350 U	0.0350 U	0.0350 U	0.0350 U	0.00350 U	0.0350 U	0.00700 U
Mercury	0.0000420 U	0.0000420 U	0.0000420 U	0.0000420 U	0.000114 J	0.0000420 U	0.0000420 U
Nickel	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.00500 U	0.0500 U	0.0100 U
Selenium	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.00500 U	0.0500 U	0.0100 U
Silver	0.0400 U	0.0400 U	0.0400 U	0.0400 U	0.00400 U	0.0400 U	0.00800 U
Zinc	0.125 U	0.515	1.96	0.206 J	0.0179 J	0.125 U	5.44

Lease Area:	MC-109	MC-127	MC-194	MC-243	MC-582	MC-650	MC-736
Collection Date:	8/12/2014	6/10/2014	9/12/2014	10/1/2014	7/17/2014	6/4/2014	7/17/2014
Lab Report ID:	14080162-03	14060288-10	14090523-01	14100091-03	14070778-05	14060288-02	14070778-04
Arsenic	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U
Cadmium	0.0400 U	0.0400 U	0.0400 U	0.0400 U	0.0400 U	0.0400 U	0.0400 U
Copper	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U
Cyanide	0.0200 U	0.0200 U	0.0200 U	0.0200 U	0.0200 U	0.0200 U	0.0200 U
Hexavalent Chromium	0.000300 U	R	0.000300 U	0.000300 U	0.000300 U	0.000300 U	R
Lead	0.0350 U	0.0350 U	0.0350 U	0.0350 U	0.0350 U	0.0350 U	0.0350 U
Mercury	0.0000420 U	0.0000420 U	0.0000790 J	0.0000420 U	0.0000420 U	0.0000420 U	0.0000420 U
Nickel	0.0500 U	0.0525 J	0.0500 U	0.0632 J	0.0500 U	0.0500 U	0.0500 U
Selenium	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U
Silver	0.0400 U	0.0400 U	0.0400 U	0.0400 U	0.0400 U	0.0400 U	0.0400 U
Zinc	0.125 U	0.125 U	0.125 U	0.125 U	0.170 J	0.125 U	0.125 U

**TABLE D-1
PRODUCED WATER ANALYTICAL RESULTS SUMMARY**

Lease Area:	MC-807	MC-941	MI-519	MI-519	MI-622	MI-622	MI-623
Collection Date:	12/2/2014	4/25/2014	12/8/2014	12/9/2014	12/3/2014	1/28/2015	12/3/2014
Lab Report ID:	14120030-07	14041149-06	14120388-02	14120388-05	14120030-04	15010788-02	14120030-05
Arsenic	0.0500 U	0.0500 U	0.00698	0.00690	0.288	0.324	0.190 J
Cadmium	0.0400 U	0.0400 U	0.000800 U	0.000800 U	0.0400 U	0.0400 U	0.0400 U
Copper	0.0500 U	0.0500 UJ	0.00178 J	0.00189 J	0.0500 U	0.0500 U	0.0500 U
Cyanide	0.0200 U	0.0200 UJ	0.0200 U	0.0200 U	0.0200 U	0.0200 U	0.0200 U
Hexavalent Chromium	0.000300 U	0.000300 U	0.000300 U	0.000300 U	0.000300 U	0.000300 U	0.000300 U
Lead	0.0350 U	0.0350 U	0.00175 J	0.00188 J	0.0350 U	0.0350 U	0.0350 U
Mercury	0.0000420 U	0.0000420 UJ	0.0000510 J	0.0000420 U	0.0000420 U	0.0000420 U	0.0000420 U
Nickel	0.0500 U	0.0500 U	0.0105	0.00956	0.0500 U	0.0500 U	0.0500 U
Selenium	0.0500 U	0.0500 U	0.00280 J	0.00100 U	0.0500 U	0.0500 U	0.0500 U
Silver	0.0400 U	0.0400 U	0.000800 U	0.000800 U	0.0400 U	0.0400 U	0.0400 U
Zinc	0.125 U	0.125 U	0.145	0.104	1.58	1.90	2.00

Lease Area:	MI-623	MI-623	MI-654	MI-654	MI-654	MI-669	MP-30
Collection Date:	1/28/2015	1/28/2015	9/29/2014	9/30/2014	10/1/2014	4/22/2014	5/28/2014
Lab Report ID:	15010788-03	15010788-04	14091155-07	14091155-05	14100091-02	14041149-03	14060037-04
Arsenic	0.171 J	0.170 J	0.0250 U	0.0250 U	0.0500 U	0.594	0.0500 U
Cadmium	0.0400 U	0.0400 U	0.0200 U	0.0200 U	0.0400 U	0.0160 U	0.0400 U
Copper	0.0500 U	0.0500 U	0.0250 U	0.0250 U	0.0500 U	0.0200 U	0.0200 U
Cyanide	0.0200 U	0.0200 U	0.0200 U	0.0200 U	0.0200 U	0.0200 U	0.0200 U
Hexavalent Chromium	0.000300 U	0.000300 U	0.000300 U	0.000300 U	0.000300 U	0.000300 UJ	0.000300 U
Lead	0.0350 U	0.0350 U	0.0175 U	0.0175 U	0.0350 U	0.0140 U	0.0350 U
Mercury	0.0000420 U	0.0000420 U	0.0000420 U	0.0000420 U	0.0000420 U	0.0000420 U	0.0000420 U
Nickel	0.0500 U	0.0500 U	0.0250 U	0.0250 U	0.0500 U	0.0200 U	0.0500 U
Selenium	0.0500 U	0.0500 U	0.0250 U	0.0250 U	0.0500 U	0.0200 U	0.0500 U
Silver	0.0400 U	0.0400 U	0.0200 U	0.0200 U	0.0400 U	0.0160 U	0.0400 U
Zinc	1.24	1.23	0.0625 U	0.0625 U	0.125 U	0.0500 U	0.125 U

**TABLE D-1
PRODUCED WATER ANALYTICAL RESULTS SUMMARY**

Lease Area:	MP-61	MP-73	MP-153	MP-259	MP-265	MP-298	MP-299
Collection Date:	6/5/2014	6/5/2014	2/5/2014	2/5/2014	9/29/2014	1/13/2014	7/29/2014
Lab Report ID:	14060288-06	14060288-07	1402267-04	1402267-08	14091155-02	1401539-02	14071192-01
Arsenic	0.0500 U	0.0500 U	0.00290 J	0.00753	0.0250 U	0.0200 U	0.0500 U
Cadmium	0.0400 U	0.0400 U	0.00800 U	0.00800 U	0.0200 U	0.0160 U	0.0400 U
Copper	0.0500 U	0.0500 U	0.0100 U	0.0100 U	0.0250 U	0.0200 U	0.0500 U
Cyanide	0.0200 U	0.0200 U	0.0200 U	0.0200 U	0.0200 U	0.0200 U	0.0415
Hexavalent Chromium	0.000300 U	0.000300 U	0.000200 U	0.000200 U	R	0.000200 UJ	0.000300 U
Lead	0.0350 U	0.0350 U	0.00700 U	0.00700 U	0.0175 U	0.0140 U	0.0350 U
Mercury	0.0000420 U	0.0000420 U	0.0000420 U	0.0000420 U	0.000126 J	0.0000420 U	0.0000420 U
Nickel	0.0500 U	0.0500 U	0.0100 U	0.0100 U	0.0250 U	0.0200 U	0.0500 U
Selenium	0.0500 U	0.0500 U	0.00311 J	0.00177 J	0.0250 U	0.0218 J	0.0500 U
Silver	0.0400 U	0.0400 U	0.00800 U	0.00800 U	0.0200 U	0.0160 U	0.0400 U
Zinc	0.125 U	0.125 U	0.0106	0.0147	0.0625 U	0.0500 U	0.125 U

Lease Area:	MP-300	MP-313	PL-5	PL-6	PL-10	PL-11	PL-13
Collection Date:	6/17/2014	5/27/2014	8/15/2014	11/19/2014	2/18/2014	2/18/2014	1/6/2014
Lab Report ID:	14060990-01	14050881-06	14080602-02	14110364-08	1402748-08	1402748-10	1401280-01
Arsenic	0.0500 U	0.0500 U	0.0500 UJ	0.0500 U	0.0200 U	0.0200 U	0.0183 J
Cadmium	0.0400 U	0.0400 U	0.0400 UJ	0.0400 U	0.0160 U	0.0160 U	0.00800 U
Copper	0.0500 U	0.0500 U	0.0500 UJ	0.0500 U	0.0200 U	0.0200 U	0.0100 U
Cyanide	0.0200 U	0.0200 U	R	0.0200 U	0.0200 U	0.0200 U	0.0200 U
Hexavalent Chromium	0.000300 U	0.000300 U	0.000300 U	0.000300 U	0.000200 U	0.000200 U	0.000200 U
Lead	0.0350 U	0.0350 U	0.0350 UJ	0.0350 U	0.0140 U	0.0140 U	0.0132 J
Mercury	0.0000420 U	0.0000420 U	0.0000420 U	0.0000420 U	0.0000420 U	0.0000420 U	0.0000420 U
Nickel	0.0500 U	0.0500 U	0.0500 UJ	0.0500 U	0.0200 U	0.0200 U	0.0100 U
Selenium	0.0500 U	0.0500 U	0.0500 UJ	0.0500 U	0.0200 U	0.0222 J	0.0100 U
Silver	0.0400 U	0.0400 U	0.0400 UJ	0.0400 U	0.0160 U	0.0160 U	0.00800 U
Zinc	0.347	0.125 U	3.04 J	104	0.273	0.0671 J	2.68

**TABLE D-1
PRODUCED WATER ANALYTICAL RESULTS SUMMARY**

Lease Area:	PL-18	PL-18	PL-22	PL-22-DUP	PL-23	PL-25	PL-25-DUP	PN-891
Collection Date:	4/16/2014	4/16/2014	8/14/2014	8/14/2014	8/14/2014	4/30/2014	4/30/2014	5/20/2014
Lab Report ID:	14040241-07	14040241-08	14080162-04	14080162-05	14080162-06	14050069-02	14050069-03	14050881-01
Arsenic	0.00100 U	0.00100 U	0.0500 U	0.0500 U	0.0500 U	0.0633 J	0.0753 J	0.0500 U
Cadmium	0.000800 U	0.000800 U	0.0400 U	0.0400 U	0.0400 U	0.0400 U	0.0400 U	0.0400 U
Copper	0.00605	0.00286 J	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U
Cyanide	0.0200 U	0.0200 U	0.0200 U	0.0200 U	0.0200 U	R	0.0200 U	0.0200 U
Hexavalent Chromium	0.000300 U	0.000300 U	R	0.000300 U	0.000300 U	0.000300 U	R	0.000300 U
Lead	0.000700 U	0.000700 U	0.0350 U	0.0350 U	0.0350 U	0.0350 U	0.0350 U	0.0350 U
Mercury	0.000578	0.000597	0.0000420 U	0.0000420 U	0.0000950 J	0.0000420 U	0.0000420 U	0.0000440 J
Nickel	0.0290	0.0282	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U
Selenium	0.00375 J	0.00406 J	0.0500 U	0.0500 U	0.0500 U	0.190 J	0.257	0.0500 U
Silver	0.000800 U	0.000800 U	0.0400 U	0.0400 U	0.0400 U	0.0400 U	0.0400 U	0.0400 U
Zinc	0.155	0.150	0.125 U	0.125 U	0.515	12.1	13.4	0.125 U

Lease Area:	PN-891	PN-891	PN-891	PN-891	PN-891	PN-891	PN-891	PN-891
Collection Date:	6/2/2014	6/4/2014	7/9/2014	8/26/2014	9/11/2014	9/17/2014	9/22/2014	10/15/2014
Lab Report ID:	14060037-05	14060288-03	14070468-01	14080862-06	14090459-01	14090702-01	14090959-01	14100478-03
Arsenic	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.00500 U	0.0500 U	0.0500 U	0.0500 U
Cadmium	0.0400 U	0.0400 U	0.0400 U	0.0400 U	0.00400 U	0.0400 U	0.0400 U	0.0400 U
Copper	0.0200 U	0.0500 U	0.0500 U	0.134 J	0.00500 U	0.0500 U	0.0500 U	0.0500 U
Cyanide	0.0200 U	0.0200 U	R	0.0200 U	0.0200 U	0.0200 U	R	0.0200 U
Hexavalent Chromium	0.000300 U	0.000300 U	R	0.000300 U	0.000300 U	0.000300 U	0.000300 U	0.000300 U
Lead	0.0350 U	0.0350 U	0.0350 U	0.0350 U	0.00350 U	0.0350 U	0.0350 U	0.0350 U
Mercury	0.0000420 U	0.0000420 U	0.0000420 U	0.0000420 U	0.0000420 U	0.0000420 U	0.0000420 U	0.0000420 U
Nickel	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.00500 U	0.0500 U	0.0500 U	0.0500 U
Selenium	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.00500 U	0.0500 U	0.0500 U	0.0500 U
Silver	0.0400 U	0.0400 U	0.0400 U	0.0400 U	0.00400 U	0.0400 U	0.0400 U	0.0400 U
Zinc	0.125 U	0.125 U	0.125 U	0.125 U	0.0125 U	0.125 U	0.125 U	0.125 U

**TABLE D-1
PRODUCED WATER ANALYTICAL RESULTS SUMMARY**

Lease Area:	PN-891	PN-891	SA-10	SA-10	SA-10	SA-10
Collection Date:	10/28/2014	11/10/2014	10/20/2014	10/21/2014	10/22/2014	10/23/2014
Lab Report ID:	14101095-03	14110364-03	14100478-06	14100478-07	14100478-08	14100478-09
Arsenic	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U
Cadmium	0.0400 U	0.0400 U	0.0400 U	0.0400 U	0.0400 U	0.0400 U
Copper	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.332	0.284
Cyanide	0.0200 U	0.0200 U	0.0200 U	0.0200 U	0.0200 U	R
Hexavalent Chromium	0.000300 U	0.000300 U	0.000300 U	0.000300 U	0.000300 U	0.000300 U
Lead	0.0350 U	0.0350 U	0.0350 U	0.0350 U	0.0350 U	0.0350 U
Mercury	0.0000420 UJ	0.0000420 U	0.0000420 U	0.0000420 U	0.0000420 U	0.0000420 U
Nickel	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U
Selenium	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U
Silver	0.0400 U	0.0400 U	0.0400 U	0.0400 U	0.0400 U	0.0400 U
Zinc	0.125 U	0.125 U	0.125 U	0.125 U	0.125 U	0.125 U

Lease Area:	SA-10	SA-13	SA-13	SA-13	SA-13	SA-13
Collection Date:	10/24/2014	5/7/2014	5/8/2014	5/12/2014	5/15/2014	5/19/2014
Lab Report ID:	14101095-01	14050069-08	14050411-01	14050411-02	14050675-09	14050675-15
Arsenic	0.0500 U	0.0500 U	0.00500 U	0.00500 U	0.0500 U	0.0500 U
Cadmium	0.0400 U	0.0400 U	0.00400 U	0.00400 U	0.0400 U	0.0400 U
Copper	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.312	0.0500 U
Cyanide	0.0200 U	0.0200 U	0.0200 U	0.0200 U	0.0200 U	0.0200 U
Hexavalent Chromium	0.000300 U	0.000300 U	0.000300 U	0.000300 U	0.000300 U	R
Lead	0.0350 U	0.0350 U	0.00350 U	0.00350 U	0.0350 U	0.0350 U
Mercury	0.0000420 UJ	0.0000420 U	0.0000420 U	0.0000420 U	0.0000420 U	0.0000420 U
Nickel	0.0500 U	0.0500 U	0.00500 U	0.00500 U	0.0500 U	0.0900 J
Selenium	0.0500 U	0.123 J	0.00500 U	0.00500 U	0.0500 U	0.0500 U
Silver	0.0400 U	0.0400 U	0.00400 U	0.00400 U	0.0400 U	0.0400 U
Zinc	0.125 U	0.125 U	0.125 U	0.125 U	0.125 U	0.125 U

**TABLE D-1
PRODUCED WATER ANALYTICAL RESULTS SUMMARY**

Lease Area:	SM-39	SM-128	SM-128	SM-130	SM-132	SM-141
Collection Date:	11/25/2014	3/29/2014	3/30/2014	8/14/2014	12/10/2014	4/7/2014
Lab Report ID:	14120030-02	14030994-02	14030994-06	14080546-02	14120388-04	14040241-05
Arsenic	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0200 U
Cadmium	0.0400 U	0.0400 U	0.0400 U	0.0400 U	0.0400 U	0.0160 U
Copper	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0200 U
Cyanide	0.0200 U	0.0200 U	0.0200 U	0.0200 U	0.0200 U	0.0200 UJ
Hexavalent Chromium	0.000300 U	0.000200 U	0.000200 U	R	0.000300 U	R
Lead	0.0350 U	0.0350 U	0.0350 U	0.0350 U	0.0350 U	0.0140 U
Mercury	0.0000420 U	0.0000420 U	0.0000420 U	0.0000420 U	0.0000420 U	NA
Nickel	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0200 U
Selenium	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0200 U
Silver	0.0400 U	0.0400 U	0.0400 U	0.0400 U	0.0400 U	0.0160 U
Zinc	0.125 U	0.234 J	0.168 J	0.125 U	0.125 U	0.0500 U

Lease Area:	SM-149	SM-149-DUP	SM-217	SM-239	SM-268	SM-288
Collection Date:	10/16/2014	10/16/2014	2/2/2015	2/3/2015	3/31/2014	5/13/2014
Lab Report ID:	14100478-04	14100478-05	15020100-01	15020100-02	14030994-08	14050675-01
Arsenic	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U
Cadmium	0.0400 U	0.0400 U	0.0400 U	0.0400 U	0.0400 U	0.102
Copper	0.0500 U	0.0500 U	0.0500 UJ	0.0500 U	0.0500 U	0.0500 U
Cyanide	0.0200 U	0.0200 U	R	0.0200 U	0.0200 U	0.0200 U
Hexavalent Chromium	0.000300 U	0.000300 U	R	0.000300 U	NA	0.000300 U
Lead	0.0350 U	0.0350 U	0.0350 U	0.0350 U	0.0350 U	3.27
Mercury	0.0000420 U	0.0000420 U	0.0000420 U	0.0000420 U	0.0000420 U	0.0000420 U
Nickel	0.0620 J	0.0712 J	R	0.0500 U	0.0500 U	0.0500 U
Selenium	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U
Silver	0.0400 U	0.0400 U	0.0400 U	0.0400 U	0.0400 U	0.0400 U
Zinc	3.25	2.96	0.125 U	0.125 U	2.62	32.2

**TABLE D-1
PRODUCED WATER ANALYTICAL RESULTS SUMMARY**

Lease Area:	SP-49	SP-60	SP-60	SP-62	SP-65	SP-70
Collection Date:	6/5/2014	10/29/2014	1/7/2015	1/14/2014	1/27/2014	2/5/2014
Lab Report ID:	14060288-05	14101095-05	15010212-01	1401539-04	14011066-04	1402267-02
Arsenic	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0100 U	0.00256 J
Cadmium	0.0400 U	0.0400 U	0.0400 U	0.0400 U	0.00800 U	0.00800 U
Copper	0.0500 U	0.0500 U	0.0500 UJ	0.0500 U	0.0100 U	0.0100 U
Cyanide	0.0200 U	0.0200 U	0.0200 U	0.0200 U	0.0200 U	0.0200 U
Hexavalent Chromium	0.000300 U	0.000300 U	0.000300 U	0.000200 UJ	0.000200 U	0.000200 U
Lead	0.0350 U	0.0350 U	0.0350 U	0.0350 U	0.00700 U	0.00700 U
Mercury	0.0000670 J	0.0000420 UJ	0.0000420 U	0.0000420 U	0.0000420 U	0.0000420 U
Nickel	0.0500 U	0.113 J	R	0.0500 U	0.0100 U	0.0100 U
Selenium	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0139 J	0.00230 J
Silver	0.0400 U	0.0400 U	0.0400 U	0.0400 U	0.00800 U	0.00800 U
Zinc	0.125 U	0.125 U	R	0.120 U	0.0478 J	0.0152

Lease Area:	SP-75	SP-83	SP-87	SP-89	SS-72	SS-111
Collection Date:	1/27/2014	5/5/2014	2/5/2014	11/6/2014	10/7/2014	1/26/2015
Lab Report ID:	14011066-02	14050069-04	1402267-06	14101095-10	14100091-12	15010788-06
Arsenic	0.0100 U	0.0500 U	0.0100 U	0.100 U	0.0500 U	0.0500 U
Cadmium	0.00800 U	0.0400 U	0.0285 J	0.0800 U	0.0400 U	0.0400 U
Copper	0.0100 U	0.0500 U	0.0200 U	0.100 U	0.0500 U	0.0500 U
Cyanide	0.0200 U	0.0200 U	0.0200 U	0.0200 U	0.0200 U	0.0200 U
Hexavalent Chromium	0.000200 U	R	0.000200 U	0.000300 U	0.000300 U	0.000300 U
Lead	0.00700 U	0.0350 U	1.67	0.0700 U	0.0350 U	0.0350 U
Mercury	0.0000420 U	0.0000480 J	0.0000420 U	0.0000420 UJ	0.0000420 U	0.0000420 U
Nickel	0.0100 U	0.0500 U	0.0200 U	0.100 U	0.0500 U	0.0500 U
Selenium	0.0176 J	0.0788 J	0.0100 U	0.100 U	0.0500 U	0.0500 U
Silver	0.00800 U	0.0400 U	0.0160 U	0.0800 U	0.0400 U	0.0400 U
Zinc	0.0337 J	0.185 J	11.9	0.250 U	0.125 U	7.66

**TABLE D-1
PRODUCED WATER ANALYTICAL RESULTS SUMMARY**

Lease Area:	SS-181	SS-198	SS-207	SS-224	SS-229	SS-253	SS-266
Collection Date:	5/19/2014	5/5/2014	3/31/2014	8/14/2014	1/7/2014	10/28/2014	8/25/2014
Lab Report ID:	14050881-02	14050069-05	14040241-06	14080546-06	1401280-02	14101095-04	14081070-04
Arsenic	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0100 U	0.100 U	0.0500 U
Cadmium	0.0400 U	0.0400 U	0.0400 U	0.0400 U	0.00800 U	0.0800 U	0.0400 U
Copper	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0100 U	0.100 U	0.0500 U
Cyanide	0.0200 U	0.0200 U	0.0200 U	0.0200 U	0.0200 U	0.0200 U	0.0200 U
Hexavalent Chromium	0.000300 U	0.000300 U	0.000300 U	0.000300 U	0.000200 U	0.000300 U	0.000300 U
Lead	0.0350 U	0.0350 U	0.0350 U	0.0350 U	0.00700 U	0.0700 U	0.0350 U
Mercury	0.0000740 J	0.0000420 U	NA	0.0000420 U	0.0000420 U	0.0000420 UJ	0.0000420 U
Nickel	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0100 U	0.163 J	0.0500 U
Selenium	0.0500 U	0.0930 J	0.0500 U	0.0500 U	0.0100 U	0.100 U	0.0500 U
Silver	0.0400 U	0.0400 U	0.0400 U	0.0400 U	0.00800 U	0.0800 U	0.0400 U
Zinc	0.160 J	0.214 J	2.76	0.125 U	0.0938	1.06	0.374

Lease Area:	SS-300	ST-30	ST-37	ST-52	ST-100	ST-148	ST-148-DUP
Collection Date:	10/9/2014	8/15/2014	5/28/2014	5/28/2014	8/15/2014	8/22/2014	8/22/2014
Lab Report ID:	14100478-01	14080602-03	14060037-02	14060037-03	14080602-01	14080862-01	14080862-02
Arsenic	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U
Cadmium	0.0400 U	0.0400 U	0.0400 U	0.0400 U	0.0400 U	0.0400 U	0.0400 U
Copper	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U
Cyanide	0.0200 U	0.0200 U	0.0200 U	0.0200 U	0.0200 U	0.0200 U	0.0200 U
Hexavalent Chromium	0.000300 U	0.000300 U	0.000300 U	0.000300 U	0.000300 U	0.000300 U	0.000300 U
Lead	0.0350 U	0.0350 U	0.0350 U	0.0350 U	0.0350 U	0.454	0.426
Mercury	0.0000420 U	0.0000420 U	0.0000420 U	0.0000420 U	0.0000420 U	0.0000420 U	0.0000420 U
Nickel	0.0617 J	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U
Selenium	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U
Silver	0.0400 U	0.0400 U	0.0400 U	0.0400 U	0.0400 U	0.0400 U	0.0400 U
Zinc	0.512	0.732	0.125 U	0.286	0.125 U	33.7	34.0

**TABLE D-1
PRODUCED WATER ANALYTICAL RESULTS SUMMARY**

Lease Area:	ST-151	ST-156	ST-229	ST-295	ST-300	VK-786	VK-823	VK-823
Collection Date:	5/28/2014	1/8/2014	12/18/2014	3/4/2015	8/29/2014	6/3/2014	9/30/2014	9/30/2014
Lab Report ID:	14060037-01	1401280-04	14120554-05	15030010-10	14081070-02	14060288-01	14091155-06	14091155-09
Arsenic	0.0500 U	0.0100 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0250 U	0.0250 U
Cadmium	0.0400 U	0.0197 J	0.0400 U	0.0400 U	0.0400 U	0.0400 U	0.0200 U	0.0200 U
Copper	0.0500 U	0.0123 J	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0250 U	0.0250 U
Cyanide	0.0200 U	0.0200 UJ	0.0200 U	0.0200 U	0.0200 U	0.0200 U	0.0200 U	0.0200 U
Hexavalent Chromium	R	NA	0.000300 U	0.0000200 UJ	0.000300 U	R	0.000300 U	0.000300 U
Lead	0.172 J	0.431	0.0350 U	0.0350 U	0.0350 U	0.0350 U	0.0175 U	0.0175 U
Mercury	0.0000420 U	0.0000420 U	0.0000430 J	0.0000420 U	0.0000420 U	0.0000420 U	0.0000420 U	0.0000420 U
Nickel	0.0500 U	0.0100 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0250 U	0.0250 U
Selenium	0.0500 U	0.0100 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0250 U	0.0250 U
Silver	0.0400 U	0.0160 U	0.0400 U	0.0400 U	0.0400 U	0.0400 U	0.0200 U	0.0200 U
Zinc	10.4	83.4	0.125 U	0.645	0.125 U	0.125 U	0.0625 U	0.0625 U

Lease Area:	VK-826	VK-900	VK-915	VK-915	VK-956	VK-956	VK-989	VR-38
Collection Date:	8/5/2014	5/27/2014	6/18/2014	6/18/2014	11/3/2014	11/4/2014	8/15/2014	2/7/2015
Lab Report ID:	14080162-01	14050881-04	14060990-05	14060990-06	14101095-07	14101095-08	14080602-04	15020100-03
Arsenic	5.00 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U
Cadmium	2.50 U	0.0400 U	0.0400 U	0.0400 U	0.0400 U	0.0400 U	0.0400 U	0.0400 U
Copper	5.00 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U
Cyanide	0.0200 U	0.0200 U	0.0200 U	0.0200 U	0.0200 U	0.0200 U	0.0200 U	0.0200 U
Hexavalent Chromium	R	0.000300 U	0.000300 U	R	0.000300 U	0.000300 U	0.000300 U	R
Lead	2.50 U	0.0350 U	0.0350 U	0.0350 U	0.0350 U	0.0350 U	0.0350 U	0.0350 U
Mercury	0.0000420 U	0.0000420 U	0.0000420 U	0.0000420 U	0.0000420 UJ	0.0000420 UJ	0.0000420 U	0.0000420 U
Nickel	4.50 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U
Selenium	9.00 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U
Silver	4.00 U	0.0400 U	0.0400 U	0.0400 U	0.0400 U	0.0400 U	0.0400 U	0.0400 U
Zinc	12.5 U	0.519	0.125 U	0.125 U	0.125 U	0.125 U	0.125 U	0.125 U

**TABLE D-1
PRODUCED WATER ANALYTICAL RESULTS SUMMARY**

Lease Area:	VR-170	VR-214	VR-256	VR-265	VR-279	VR-326
Collection Date:	8/28/2014	5/13/2014	8/15/2014	1/13/2015	10/6/2014	4/17/2014
Lab Report ID:	14080862-08	14050675-13	14080572-01	15010212-02	14100091-11	14040241-11
Arsenic	0.00200 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U
Cadmium	0.00160 U	0.0400 U	0.0400 U	0.0400 U	0.0400 U	0.0400 U
Copper	0.00200 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U
Cyanide	0.0200 U	0.0200 U	0.0200 U	0.0200 U	0.0200 U	0.0200 U
Hexavalent Chromium	0.000300 U	0.000300 U	0.000300 U	0.000300 U	0.000300 U	R
Lead	0.00140 U	0.0350 U	0.0350 U	0.0350 U	0.0350 U	0.0350 U
Mercury	0.0000420 U	0.0000420 U	0.0000420 U	0.0000420 U	0.0000420 U	0.0000420 U
Nickel	0.0121	0.0659 J	0.0500 U	0.0500 U	0.0683 J	0.0500 U
Selenium	0.00200 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U
Silver	0.00160 U	0.0400 U	0.0400 U	0.0400 U	0.0400 U	0.0400 U
Zinc	0.0254	0.125 U	3.53	0.125 U	51.5	0.128 J

Lease Area:	VR-326-DUP	VR-331	VR-371	VR-380	WC-33	WC-65
Collection Date:	4/17/2014	8/14/2014	12/10/2014	4/17/2014	2/26/2015	2/26/2015
Lab Report ID:	14040241-13	14080546-04	14120388-03	14040241-09	15030010-01	14030032-02
Arsenic	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0200 U
Cadmium	0.0400 U	0.0400 U	0.0400 U	0.0400 U	0.0400 U	0.0160 U
Copper	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0200 U
Cyanide	0.0200 U	0.0200 U	0.0200 U	0.0200 U	0.0200 U	0.0200 U
Hexavalent Chromium	0.000300 U	0.000300 U	0.000300 U	0.000300 U	0.0000200 U	0.000200 U
Lead	0.0350 U	0.0350 U	0.0350 U	0.0350 U	0.0350 U	0.0140 U
Mercury	0.0000420 U	0.0000420 U	0.000314	0.0000420 U	0.0000420 U	0.0000420 U
Nickel	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0200 U
Selenium	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0200 U
Silver	0.0400 U	0.0400 U	0.0400 U	0.0400 U	0.0400 U	0.0160 U
Zinc	0.130 J	0.125 U	0.125 U	0.125 U	0.125 U	0.122

**TABLE D-1
PRODUCED WATER ANALYTICAL RESULTS SUMMARY**

Lease Area:	WC-66	WC-66	WC-96	WC-100	WC-100	WC-173	WC-173-DUP
Collection Date:	2/26/2015	1/26/2015	4/28/2014	12/16/2014	12/17/2014	10/2/2014	10/2/2014
Lab Report ID:	14030032-04	15010788-07	14050069-01	14120554-03	14120554-04	14100091-07	14100091-08
Arsenic	0.0500 U	0.0500 U	0.00224 J	0.0500 U	0.0500 U	0.0500 U	0.0500 U
Cadmium	0.0400 U	0.0400 U	0.000800 U	0.0400 U	0.0400 U	0.0400 U	0.0400 U
Copper	0.0500 U	0.0500 U	0.00403 J	0.0500 U	0.0500 U	0.0500 U	0.0500 U
Cyanide	0.0200 U	0.0200 U	0.0200 U	0.0200 U	0.0200 U	0.0200 U	0.0200 U
Hexavalent Chromium	0.000200 U	0.000300 U	0.000300 U	0.000300 U	0.000300 U	0.000300 U	0.000300 U
Lead	0.0350 U	0.0350 U	0.000700 U	0.0350 U	0.0350 U	0.0350 U	0.0350 U
Mercury	0.0000420 U	0.0000420 U	0.000120 J	0.0000420 U	0.0000470 J	0.0000420 U	0.0000420 U
Nickel	0.0500 U	0.0500 U	0.0199	0.0500 U	0.0500 U	0.0500 U	0.0500 U
Selenium	0.0500 U	0.0500 U	0.00360 J	0.0615 J	0.0500 U	0.0500 U	0.0500 U
Silver	0.0400 U	0.0400 U	0.000800 U	0.0400 U	0.0400 U	0.0400 U	0.0400 U
Zinc	0.120 U	0.125 U	0.0283	0.125 U	0.125 U	0.125 U	0.125 U

Lease Area:	WC-265	WC-485	WC-661	WD-29	WD-30	WD-65	WD-72
Collection Date:	11/13/2014	11/10/2014	11/13/2014	1/28/2015	8/21/2014	9/30/2014	9/30/2014
Lab Report ID:	14110364-06	14110364-05	14110364-07	15010788-05	14080862-04	14091155-04	14091155-08
Arsenic	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0250 U	0.0250 U
Cadmium	0.0400 U	0.0400 U	0.0400 U	0.0400 U	0.0400 U	0.0200 U	0.0200 U
Copper	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0250 U	0.0250 U
Cyanide	0.0200 U	0.0200 UJ	0.0200 U	0.0200 U	0.0200 U	0.0200 U	0.0200 U
Hexavalent Chromium	0.000300 U	0.000300 U	0.000300 U	0.000300 U	0.000300 U	0.000300 U	0.000300 U
Lead	0.0350 U	0.0350 U	0.0350 U	0.0350 U	0.0350 U	0.0175 U	0.0175 U
Mercury	0.0000420 U	0.0000420 U	0.0000420 U	0.0000420 U	0.0000420 U	0.0000420 U	0.0000420 U
Nickel	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0250 U	0.0250 U
Selenium	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0250 U	0.0250 U
Silver	0.0400 U	0.0400 U	0.0400 U	0.0400 U	0.0400 U	0.0200 U	0.0200 U
Zinc	0.125 U	6.44	0.125 U	4.12	0.125 U	0.0625 U	0.0625 U

**TABLE D-1
PRODUCED WATER ANALYTICAL RESULTS SUMMARY**

Lease Area:	WD-73	WD-79	WD-105	WD-109	WD-117	WD-122
Collection Date:	8/21/2014	11/26/2014	12/11/2013	5/27/2014	10/15/2014	2/17/2014
Lab Report ID:	14080862-03	14120030-01	1312548-01	14050881-05	14100478-02	1402748-02
Arsenic	0.0500 U	0.0500 U	0.0200 U	0.0500 U	0.0500 U	0.0200 U
Cadmium	0.0400 U	0.0400 U	0.0160 U	0.0400 U	0.0400 U	0.0160 U
Copper	0.0500 U	0.0500 U	0.0200 U	0.0500 U	0.0500 U	0.0200 U
Cyanide	0.0200 U	0.0200 UJ	0.0200 UJ	0.0200 U	0.0200 U	0.0200 U
Hexavalent Chromium	0.000300 U	0.000300 U	0.000200 U	0.000300 U	0.000300 U	0.000200 U
Lead	0.0350 U	0.0350 U	0.0949 J	0.0350 U	0.0350 U	0.0140 U
Mercury	0.0000420 U	0.0000420 U	0.0000420 U	0.0000420 U	0.0000420 U	0.0000420 U
Nickel	0.0500 U	0.0500 U	0.0200 U	0.0500 U	0.0588 J	0.0200 U
Selenium	0.0500 U	0.0500 U	0.0200 U	0.0500 U	0.0500 U	0.0200 U
Silver	0.0400 U	0.0400 U	0.0160 U	0.0400 U	0.0400 U	0.0160 U
Zinc	0.208 J	0.125 U	0.222	0.142 J	0.125 U	0.529

Lease Area:	WR-249	WR-249	WR-249	WR-249	WR-249	WR-249
Collection Date:	12/3/2014	12/5/2014	12/9/2014	12/12/2014	12/15/2014	3/2/2015
Lab Report ID:	14120030-03	14120279-01	14120388-01	14120554-01	14120554-02	15030010-05
Arsenic	0.0100 U	0.0100 U	0.0100 U	0.0500 U	0.0500 U	0.0200 U
Cadmium	0.00800 U	0.00800 U	0.00800 U	0.0400 U	0.0400 U	0.0160 U
Copper	0.0100 U	0.0100 U	0.0100 U	0.0500 U	0.0500 U	0.0200 U
Cyanide	0.0200 U	0.0200 U	0.0200 U	0.0200 U	0.0200 U	0.0200 U
Hexavalent Chromium	0.000300 U	0.000300 U	0.000300 U	R	0.000300 U	0.000200 U
Lead	0.00700 U	0.00700 U	0.0129 J	0.0350 U	0.0350 U	0.0140 U
Mercury	0.0000420 U	0.0000420 U	0.0000420 U	0.0000420 U	0.0000420 U	0.0000420 U
Nickel	0.0100 U	0.0100 U	0.0100 U	0.0500 U	0.0500 U	0.0200 U
Selenium	0.0100 U	0.0100 U	0.0100 U	0.0500 U	0.0527 J	0.0200 U
Silver	0.00800 U	0.00800 U	0.00800 U	0.0400 U	0.0400 U	0.0160 U
Zinc	0.314	2.10	0.703	0.125 U	0.849	0.113

**TABLE D-1
PRODUCED WATER ANALYTICAL RESULTS SUMMARY**

Lease Area:	WR-249	WR-249	WR-249	WR-249
Collection Date:	3/2/2015	3/2/2015	3/2/2015	3/2/2015
Lab Report ID:	15030010-06	15030010-07	15030010-08	15030010-09
Arsenic	0.0200 U	0.0200 U	0.0200 U	0.0200 U
Cadmium	0.0160 U	0.0160 U	0.0160 U	0.0160 U
Copper	0.0200 U	0.0200 U	0.0200 U	0.0200 U
Cyanide	0.0200 U	0.0200 U	0.0200 U	0.0200 U
Hexavalent Chromium	0.0000200 U	0.0000200 U	0.0000200 U	0.0000200 U
Lead	0.0140 U	0.0140 U	0.0140 U	0.0140 U
Mercury	0.0000420 U	0.0000420 U	0.0000420 U	0.0000420 U
Nickel	0.0200 U	0.0200 U	0.0200 U	0.0200 U
Selenium	0.0200 U	0.0200 U	0.0200 U	0.0200 U
Silver	0.0160 U	0.0160 U	0.0160 U	0.0160 U
Zinc	0.0500 U	0.0500 U	0.0500 U	0.303

Notes: Results are reported in milligrams per liter (mg/L).

- J The analyte was positively identified; the associated value is an estimated concentration of the analyte in the sample; or the result was between the method detection limit and the quantitation limit.
- NA Not analyzed
- R The sample result is rejected as unusable due to serious deficiencies in one or more quality control criteria. The analyte may or may not be present in the sample.
- U The analyte was analyzed for, but was not detected at or above the associated value.
- UJ The analyte was analyzed for, but was not detected at or above the associated value, which is considered approximate due to deficiencies in one or more quality control criteria.

TABLE D-2
WATER BASED MUD ANALYTICAL RESULTS - AQUEOUS

Lease Area:	EB-645	EW-910	GB-959	GC-40	GC-245	GC-248
Collection Date:	9/2/2013	1/9/2015	2/9/2015	3/26/2014	9/26/2013	10/26/2013
Lab Report ID:	1309050-01	15010052-06	15020593-02	14030977-03	13091230-01	13101305-01
Arsenic	0.828	0.0138 J	0.149 J	0.200 U	0.0254 J	0.215 J
Cadmium	0.272	0.00400 U	0.0804 J	0.160 U	0.0160 U	0.282
Copper	2.22	0.00500 U	0.218 J	2.50	0.274	0.552
Lead	33.4	0.00350 U	2.94 J	18.6	0.186	1.91
Nickel	0.461	0.00500 U	0.203 J	0.200 U	0.0200 U	0.100 U
Selenium	0.0500 U	0.0333	0.0500 U	0.200 U	0.0596 J	0.100 U
Silver	0.133 J	0.00400 U	0.0400 U	0.160 U	0.0160 U	0.0800 U
Zinc	40.3	0.0125 U	1.46 J	5.16	0.0500 U	1.35
Hexavalent Chromium	0.200 U	0.00600 J	0.00400 U	0.00400 U	0.00400 UJ	0.00800 J
Mercury	0.0255	0.0000420 U	0.000042 U	0.00512	0.00156	0.000851
Cyanide	0.200 U	0.0200 U	0.0580	0.0200 U	0.0552 J	0.0200 U

Lease Area:	GC-643	GC-727	GC-782	GC-859	HI-547	KC-163
Collection Date:	12/13/2014	10/30/2013	11/8/2013	3/12/2015	3/18/2015	9/16/2013
Lab Report ID:	14120680-02	13101305-02	1311612-01	15030361-04	15030361-06	1309670-01
Arsenic	0.635	0.578	0.0894	0.0500 U	0.0212 J	0.0629
Cadmium	0.0400 U	0.0160 U	0.0276	0.0545 J	0.00800 U	0.0399
Copper	R	0.856	0.122	0.0500 U	0.0100 U	0.274
Lead	0.0350 U	0.168	0.910	0.676	0.109	1.21
Nickel	0.0500 UJ	0.0200 U	0.0625	0.0500 U	0.0271 J	0.0501
Selenium	0.0500 UJ	0.0200 U	0.00200 U	0.0500 U	0.0147 J	0.0335 J
Silver	0.0400 U	0.0160 U	0.0160 U	0.0400 U	0.00800 U	0.0393 J
Zinc	R	0.0650 J	0.991	0.125 U	0.0500	0.518
Hexavalent Chromium	0.0110	0.00400 UJ	0.00400	0.0190 J	0.00400 U	0.00800 U
Mercury	0.0000720 J	0.000793	0.00540	0.00318	NA	0.00201
Cyanide	0.0200 U	0.499	0.0200 U	0.0200 U	NA	0.200 U

TABLE D-2
WATER BASED MUD ANALYTICAL RESULTS - AQUEOUS

Lease Area:	MC-21	MC-934	SM-277	SS-255	SS-349	VR-245
Collection Date:	9/8/2014	9/13/2013	11/1/2013	12/23/2013	6/16/2014	11/29/2014
Lab Report ID:	14090321-01	1309670-02	1311151-01	13121096-01	14060751-02	14110868-04
Arsenic	0.0137 J	0.421	0.0436 J	0.00320 J	0.00100 U	0.118
Cadmium	0.00400 U	0.0400 U	0.00800 U	0.000929 J	0.000800 U	0.00800 U
Copper	0.00500 U	1.12	0.0541	0.00486 J	0.00100 U	0.0100 U
Lead	0.00350 U	15.9	0.0640	0.000700 U	0.000700 U	0.00700 U
Nickel	0.00930 J	0.234	0.0315 J	0.00500 U	0.00700	0.0296 J
Selenium	0.00500 U	0.0402 J	0.0100 U	0.00100 U	0.00100 U	0.0100 U
Silver	0.00400 U	0.00800 U	0.00800 U	0.000800 U	0.000800 U	0.00800 U
Zinc	0.0125 U	30.2	0.165	0.0144	0.00250 U	0.0250 U
Hexavalent Chromium	0.00400 U	0.100 U	0.0400 U	0.00500 J	0.00400 U	0.00900 J
Mercury	0.0000420 U	0.00820	0.0116	0.0000420 U	0.0000420 U	0.000238
Cyanide	NA	1.00 U	0.200 U	0.0200 U	0.0200 U	0.0200 UJ

Lease Area:	VR-284	VR-342	VR-379	WR-469	WR-508	WR-584
Collection Date:	11/19/2013	9/10/2014	8/18/2014	12/3/2014	11/12/2013	7/13/2014
Lab Report ID:	1311863-03	14090321-03	14080703-01	14120316-04	1311612-02	14070668-02
Arsenic	0.0392	0.0124 J	0.0105 J	0.0205 J	0.0913	0.116
Cadmium	0.00800 U	0.00400 U	0.00400 U	0.00800 U	0.00800 U	0.00456
Copper	0.00100 U	0.00744 J	0.00500 U	0.144	0.0364	0.00309 J
Lead	0.00700 U	0.00350 U	0.00350 U	0.0474 J	0.00700 U	0.0721
Nickel	0.0262	0.00500 U	0.00500 U	0.0100 U	0.0245	0.0391
Selenium	0.00717	0.00500 U	0.0103 J	0.0128 J	0.0436	0.00100 U
Silver	0.00800 U	0.00400 U	0.00400 U	0.00800 U	0.000800 U	0.000800 U
Zinc	0.0100	0.0125 U	0.0125 U	0.0250 U	0.00599	0.109
Hexavalent Chromium	0.00400 U	0.00400 U	0.00400 J	0.00400 U	0.00400 U	0.00400 U
Mercury	0.0000420 U	0.0000420 U	0.0000420 U	0.000142 J	0.00444	0.000235
Cyanide	0.0200 UJ	0.0200 U	NA	0.0200 U	0.0200 U	0.0200 U

Notes: Results are reported in milligrams per liter (mg/L).

J The analyte was positively identified; the associated value is an estimated concentration of the analyte in the sample; or the result was between the method detection limit and the quantitation limit.

NA Not analyzed

R The sample result is rejected as unusable due to serious deficiencies in one or more quality control criteria. The analyte may or may not be present in the sample.

U The analyte was analyzed for, but was not detected at or above the associated value.

UJ The analyte was analyzed for, but was not detected at or above the associated value, which is considered approximate due to deficiencies in one or more quality control criteria.

**TABLE D-3
WATER BASED MUD ANALYTICAL RESULTS - SOLID**

Lease Area:	AT-618	AV-362	EI-227	EI-302	EI-338	EI-360	EI-360	EI-360-DUP
Collection Date:	7/31/2014	5/24/2014	7/27/2014	4/23/2014	7/19/2014	2/21/2014	3/25/2014	3/25/2014
Lab Report ID:	14071101-06	14060166-02	14071101-05	14040799-02	14071101-01	1402964-02	14030977-01	14030977-02
Arsenic	20.7	5.18	4.91	225	21.9	2.08	4.87	6.53
Cadmium	0.479	0.479	0.177 J	0.527	0.931	0.0495 U	0.114 J	0.122 J
Copper	37.3	11.7	18.9	33.5	47.7	5.49	12.6	11.5
Lead	117	51.1	37.0	121	184	8.33	37.1	45.2
Nickel	6.53	5.90	3.21	7.80	12.5	3.92	4.38	4.91
Selenium	0.503	0.601	0.297 J	0.551	0.503	0.206 J	0.174 U	0.170 U
Silver	0.0743 U	0.106 J	0.0723 U	0.326 J	0.243 J	0.0792 U	0.0771 U	0.111 J
Zinc	145	60.3	53.6	63.4	218	15.2	28.0	32.2
Chromium, Hexavalent	1.56 U	0.684 U	1.76 U	2.00	3.54 J	0.700 U	0.692 U	0.676 U
Mercury	0.236	0.165	0.0752	0.170	0.275	0.00890	0.0312	0.0273
Cyanide	0.547 U	0.824 J	0.579 U	0.571 UJ	0.0222 U	0.580 U	0.583 U	0.550 U

Lease Area:	EW-910	GB-602	GB-959	GC-40	GC-64	GC-610	GC-643	GC-653
Collection Date:	1/9/2015	3/27/2015	2/8/2015	3/26/2014	1/12/2015	11/20/2014	12/13/2014	5/26/2014
Lab Report ID:	15010052-05	15030975-03	15020593-01	14030977-03	15010385-01	14110868-01	14120680-01	14050885-03
Arsenic	2.97	11.3	88.8	15.7	8.87	15.6	29.8	22.1
Cadmium	0.0841 J	0.570	0.537	0.111 J	0.241 J	0.293 J	0.598	0.0617 J
Copper	10.6	33.1	54.9	29.0	25.8	22.1	49.3	39.2
Lead	17.6	157	258	67.8	76.5	122	108	121
Nickel	3.44	4.31	7.42	5.08	6.04	3.09	4.89	2.08
Selenium	0.387 J	0.756	0.415 J	0.172 U	0.180 U	0.261 J	0.894	0.158 U
Silver	0.0730 U	0.326 J	0.408 J	0.0765 U	0.191 J	0.180 J	0.274 J	0.103 J
Zinc	19.8	51.6	185	35.3	60.9	76.0	68.9	24.5
Chromium, Hexavalent	0.759 J	11.4 J	0.863 J	0.673 U	R	0.701 U	2.89	0.707 U
Mercury	0.0283	0.268	0.460	0.164	0.0947	0.196	0.289	0.326
Cyanide	0.602 U	0.586 U	0.599 U	0.929 J	0.595 U	0.574 J	0.574 U	0.575 U

**TABLE D-3
WATER BASED MUD ANALYTICAL RESULTS - SOLID**

Lease Area:	GC-683	GC-859	GC-859	GC-903	GC-903	GI-82	HI-131	HI-547
Collection Date:	4/28/2014	10/24/2014	3/12/2015	7/14/2014	12/11/2014	9/4/2014	8/26/2014	3/18/2015
Lab Report ID:	14041277-01	14101167-01	15030361-03	14070668-01	14120316-09	14090213-01	14080703-02	15030361-05
Arsenic	4.15	7.37	32.8	35.8	30.3	8.39	18.9	20.1 J
Cadmium	0.0632 J	0.527 U	0.415 J	0.412 J	0.555	0.333 J	0.343 J	0.198 J
Copper	9.38	12.9	72.6	79.5	63.9	17.2	53.1	54.6
Lead	23.9	59.9	227	193	255	51.2	339	133
Nickel	1.18	0.948 U	4.38	8.33	6.18	8.20	5.35	10.2
Selenium	0.178 U	1.90 U	0.317 J	0.182 U	0.362 J	0.698	0.714	0.166 U
Silver	0.0789 U	0.843 U	0.693	0.198 J	0.184 J	0.159 J	0.360 J	0.200 J
Zinc	22.1	57.4	90.3	149	177	46.3	87.2	72.9
Chromium, Hexavalent	0.941 U	0.711 U	0.703 UJ	0.705 U	1.37 J	0.678 UJ	1.32 J	0.874 J
Mercury	0.110	0.261	0.328	0.251	0.394	0.0768	0.241	0.0849
Cyanide	0.593 UJ	0.559 U	0.564 U	0.595 U	0.592 U	0.586 U	0.556 U	0.591 U

Lease Area:	HI-469	KC-10	KC-147	KC-147-DUP	KC-874	MC-21	MC-21	MC-21-DUP
Collection Date:	4/10/2014	6/1/2014	11/6/2014	11/6/2014	5/6/2014	9/8/2014	10/25/2014	10/25/2014
Lab Report ID:	14040799-01	14060166-01	14101167-08	14101167-09	14050285-01	14090321-01	14101167-02	14101167-03
Arsenic	13.0	0.0954 U	5.61	5.94	10.3	1.28	1.70 J	1.81 J
Cadmium	0.389 J	0.0477 U	0.553 U	0.507 U	0.576	0.0593 J	0.547 U	0.525 U
Copper	32.2	0.0954 U	8.22	7.89	28.9	4.05	3.46 J	3.65 J
Lead	72.7	2.28	21.9	23.6	109	2.96	2.92 J	2.85 J
Nickel	6.81	0.0859 U	1.32 J	1.54 J	6.23	4.06	3.39 J	3.48 J
Selenium	0.556	0.172 U	1.99 U	1.83 U	0.577	0.184 U	1.97 U	1.89 U
Silver	0.204 J	0.0763 U	0.885 U	0.811 U	0.274 J	0.0816 U	0.875 U	0.841 U
Zinc	42.8	1.56	20.6	19.7	59.3	12.3 J	12.9	13.0
Chromium, Hexavalent	0.697 U	0.744 J	0.702 U	0.695 U	3.88 J	0.703 UJ	0.685 U	0.692 U
Mercury	0.0919	0.343	0.0590	0.0541	0.117	0.00281 J	0.00776	0.00883
Cyanide	0.599 U	1.03 J	0.600 UJ	0.574 U	0.588 U	0.592 U	0.567 U	0.589 U

**TABLE D-3
WATER BASED MUD ANALYTICAL RESULTS - SOLID**

Lease Area:	MC-479	MC-525	MC-538	MC-608	MC-687	MC-697	MC-776	MC-782
Collection Date:	11/3/2014	2/3/2014	9/30/2014	6/16/2014	10/26/2014	11/10/2014	6/29/2014	5/20/2014
Lab Report ID:	14101167-06	1402264-01	14091237-02	14060751-01	14101167-04	14110374-01	14070030-01	14050885-01
Arsenic	3.02 J	33.4	9.78	17.6	21.1	26.9	7.72	52.5
Cadmium	0.553 U	0.287 J	0.381 J	0.218 J	0.778 J	0.289 J	0.866	0.165 J
Copper	5.09 J	58.1	18.3	24.9	39.5	32.7	18.7	97.0
Lead	30.0	158	59.0	87.4	150	187	40.0	252
Nickel	0.996 U	5.54	3.37	1.88	4.47 J	2.60	11.7	5.50
Selenium	1.99 U	0.176 U	0.431 J	0.319 J	1.88 U	0.172 U	1.74	0.166 U
Silver	0.885 U	0.129 J	0.160 U	0.0967 J	0.837 U	0.117 J	0.290 J	0.109 J
Zinc	25.0	75.1	56.4	108	171	72.9	117	71.6
Chromium, Hexavalent	0.702 U	0.700 U	0.680 U	0.700 U	0.695 U	0.874 J	0.678 U	0.675 U
Mercury	0.208	0.154	0.123	0.173	0.298	0.345	0.265	0.624
Cyanide	0.580 U	0.540 U	0.575 U	0.549 U	0.571 U	0.583 U	0.622 U	0.584 U

Lease Area:	MC-809	MC-812	MC-85	MC-935	MC-943	MC-948	MI-654	MP-153
Collection Date:	1/26/2015	5/7/2014	12/3/2014	6/9/2014	8/30/2014	3/3/2015	9/9/2014	5/21/2014
Lab Report ID:	15010860-01	14050285-02	14120316-01	14060166-04	14080703-03	15030361-01	14090321-02	14050885-02
Arsenic	9.89	22.2	25.5	12.0	8.32	17.9 J	21.8	8.67
Cadmium	0.473 J	0.793	0.459 J	0.0599 J	0.222 J	0.277 J	0.443 J	0.0566 J
Copper	38.3	30.8	40.1	22.8	6.17	29.9 J	49.7	7.97
Lead	93.8	351	69.0	55.9	12.0	126	326	7.71
Nickel	4.05	6.60	5.94	1.69	3.86	3.14	7.76	5.94
Selenium	0.740	0.977	0.632	0.162 U	0.239 J	0.167 U	0.609	0.179 U
Silver	0.235 J	0.376 J	0.340 J	0.0720 U	0.0736 U	0.174 J	0.602	0.0795 U
Zinc	51.3	78.6	94.5	20.3	31.2	56.6	92.5	33.9
Chromium, Hexavalent	0.698 UJ	1.39 U	R	0.675 U	0.693 U	0.700 U	0.719 U	1.27 U
Mercury	0.246	0.0832	0.180	0.308	0.100	0.301	0.219	0.0189
Cyanide	0.591 U	0.596 U	0.590 U	0.511 U	0.590 U	0.589 J	0.585 U	0.600 U

**TABLE D-3
WATER BASED MUD ANALYTICAL RESULTS - SOLID**

Lease Area:	MP-302	SM-130	SM-130	SM-196	SM-217	SM-48	SS-193
Collection Date:	3/29/2014	1/23/2014	1/29/2014	12/4/2014	7/22/2014	1/15/2015	4/24/2014
Lab Report ID:	14030977-04	1401981-01	14011193-01	14120316-05	14071101-03	15010385-03	14040799-03
Arsenic	26.0	18.8	9.14	17.3	3.16	0.295 J	9.48
Cadmium	0.227 J	0.206 J	0.142 J	0.410 J	0.0980 J	0.0457 U	0.0697 J
Copper	23.0	39.4	20.7	43.7	10.2	0.557	19.8
Lead	28.5	124	58.5	224	29.2	2.94	55.9
Nickel	6.11	6.66	5.51	3.94	1.90	0.202 J	5.64
Selenium	0.236 J	0.387 J	0.174 U	0.303 J	0.250 J	0.164 U	0.236 J
Silver	0.0797 U	0.374 J	0.185 J	0.261 J	0.0825 U	NA	0.236 J
Zinc	34.0	44.6	32.7	94.9	19.5	5.31	24.9
Chromium, Hexavalent	0.703 U	0.670 U	0.690 U	2.21	1.70 U	0.701 UJ	0.700 U
Mercury	0.0668	0.0170	0.0371	0.254	0.00722	0.000473 U	0.0542
Cyanide	0.600 U	0.600 UJ	0.490 U	0.559 U	0.0235 U	0.592 U	0.588 U

Lease Area:	SS-193-DUP	SS-274	SS-349	ST-152	VK-913	VR-245	VR-245
Collection Date:	4/24/2014	11/20/2014	6/16/2014	11/3/2014	12/4/2014	6/3/2014	9/17/2014
Lab Report ID:	14040799-04	14110374-04	14060751-02	14101167-05	14110868-05	14060166-03	14090795-01
Arsenic	9.73	10.3	1.60	2.08 J	2.44	8.42	5.30
Cadmium	0.0484 U	0.239 J	0.0452 U	0.520 U	0.0456 U	0.0992 J	0.0906 J
Copper	22.1	24.0	4.54	4.35 J	6.08	21.9	18.5
Lead	59.1	136	2.70	4.15 J	12.1	63.3	55.2
Nickel	6.51	6.26	5.40	4.16 J	0.993	6.04	5.59
Selenium	0.174 U	0.723	0.198 J	1.87 U	0.164 U	0.162 U	0.371 U
Silver	3.00	0.259 J	0.0724 U	0.832 U	0.0730 U	0.139 J	0.0825 U
Zinc	23.4	51.2	21.6	16.1	13.6	29.5	32.0
Chromium, Hexavalent	0.686 U	2.97	0.700 U	0.698 U	0.917 J	2.42	0.681 UJ
Mercury	0.0365	0.266	0.00861	0.00706	0.0154	0.101	0.0631
Cyanide	0.599 U	0.599 U	0.587 U	0.592 U	0.558 U	0.593 U	0.600 U

**TABLE D-3
WATER BASED MUD ANALYTICAL RESULTS - SOLID**

Lease Area:	VR-245	VR-245	VR-284	VR-284	VR-342	VR-342	VR-379	VR-379
Collection Date:	11/29/2014	12/5/2014	1/5/2015	2/24/2015	9/10/2014	11/10/2014	7/27/2014	8/18/2014
Lab Report ID:	14110868-03	14120316-07	15010052-03	15020954-01	14090321-03	14110374-03	14071101-04	14080703-01
Arsenic	2.54	0.910	12.1	3.49	1.81	26.4	0.791	1.03
Cadmium	0.0885 J	0.0478 U	0.228 J	0.0813 J	0.0636 J	0.462	0.0503 U	0.0456 U
Copper	10.3	2.73	27.9	11.7	2.95	61.7	2.90	3.94
Lead	14.6	5.06	140	20.5	5.22	490	2.79	2.75
Nickel	4.25	2.26	6.81	6.40	2.38	8.56	2.52	2.46
Selenium	0.554	0.172 U	0.603	0.356 J	0.660	0.572	0.181 U	0.471
Silver	0.0833 U	0.0766 U	0.269 J	0.0717 U	0.0762 U	0.447 J	0.0805 U	0.0730 U
Zinc	18.9	10.3	59.2	26.3	13.1	101	11.9	14.0
Chromium, Hexavalent	0.706 UJ	0.697 UJ	R	R	0.703 U	1.48 J	1.73 U	R
Mercury	0.0409	0.0102	0.111	0.0214	0.00693	0.257	0.000895 J	0.00354
Cyanide	0.577 U	0.596 U	0.592 U	0.600 U	NA	0.589 U	0.595 U	0.571 U

Lease Area:	WR-469	WR-508	WR-508	WR-508	WR-578	WR-584	WR-634
Collection Date:	12/3/2014	2/18/2014	7/30/2014	3/23/2015	9/29/2014	7/13/2014	1/3/2015
Lab Report ID:	14120316-03	1402964-01	14080204-01	15030975-01	14091237-01	14070668-02	15010052-01
Arsenic	36.9	29.4	24.0	19.0	19.1	88.2	13.0
Cadmium	0.404 J	0.342 J	0.442 J	0.228 U	1.13	0.887	0.395 J
Copper	44.6	49.6	43.3	32.5	55.2	97.1	30.2
Lead	235	171	137	99.1	155	327	79.1
Nickel	4.12	4.48	5.63	2.68	7.09	8.23	3.46
Selenium	0.347 J	0.220 J	0.169 U	0.821 U	1.25	0.680	0.554
Silver	0.171 J	0.654	0.0749 U	0.365 U	0.342 J	0.676	0.148 J
Zinc	122	77.4	124	40.0	127	166	47.5
Chromium, Hexavalent	2.22	0.700 U	0.691 U	0.714 J	0.696 U	0.694 U	0.698 U
Mercury	0.298	0.159	0.196	0.149	0.503 J	0.419	0.136
Cyanide	0.562 UJ	0.600 U	0.599 U	1.14 J	0.604 U	0.573 U	0.579 J

Notes: Results are reported in milligrams per kilogram (mg/kg).

- DUP Field duplicate
- J The analyte was positively identified; the associated value is an estimated concentration of the analyte in the sample; or the result was between the method detection limit and the quantitation limit.
- NA Not analyzed
- R The sample result is rejected as unusable due to serious deficiencies in one or more quality control criteria. The analyte may or may not be present in the sample.
- U The analyte was analyzed for, but was not detected at or above the associated value.
- UJ The analyte was analyzed for, but was not detected at or above the associated value, which is considered approximate due to deficiencies in one or more quality control criteria.