TABLE D-1
PRODUCED WATER ANALYTICAL RESULTS SUMMARY

Lease Area: Collection Date: Lab Report ID:	AC-25 6/16/2014 14060753-01	AC-25 6/16/2014 14060753-02	AC-25 6/16/2014 14060753-03	AC-25 6/16/2014 14060753-04	AC-25 6/16/2014 14060753-05	AC-857 9/12/2014 14090523-02	AC-857 9/16/2014 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: Collection Date: Lab Report ID:	AC-857 9/19/2014 14090838-01	AC-857 11/7/2014 14101095-11	AC-857 11/10/2014 14110364-04	BA-105 5/14/2014 14050411-06	BA-105 5/14/2014 14050411-05	BA-105 12/18/2014 14120554-06	BA-133 4/7/2014 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: Collection Date: Lab Report ID:	BA-133 4/7/2014 14040241-02	BA-133 1/13/2015 15010212-03	BA-491 1/26/2015 15010788-01	BA-491 2/8/2015 15020100-04	BA-491 2/8/2015 15020100-05	BA-491 2/8/2015 15020100-06	BS-53 5/14/2014 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: Collection Date: Lab Report ID:	BS-53 5/14/2014 14050411-07	BS-53 5/14/2014 14050411-08	BS-53 5/15/2014 14050675-08	BS-53 5/15/2014 14050675-10	BS-53 9/22/2014 14090959-02	BS-53 9/25/2014 14091155-01	BS-53 9/29/2014 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: Collection Date: Lab Report ID:	BS-53 9/30/2014 14100091-01	BS-53 10/2/2014 14100091-10	EB-159 5/14/2014 14050675-04	EB-159 5/14/2014 14050675-06	EB-160 5/14/2014 14050675-11	EB-160 5/14/2014 14050675-07	EB-165-1 11/10/2014 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: Collection Date: Lab Report ID:	EB-165-1 12/3/2014 14120030-06	EB-602 4/28/2014 14041149-08	EB-602 4/30/2014 14041149-09	EB-643 4/28/2014 14041149-07	EB-643 4/30/2014 14041149-10	EC-14 2/26/2015 15030010-02	EC-14-DUP 2/26/2015 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: Collection Date: Lab Report ID:	EC-33 4/13/2015 15040549-01	EC-46 8/27/2014 14081070-01	EC-160 5/6/2014 14050069-07	EC-261 2/26/2015 15030010-04	EC-321 10/2/2014 14100091-06	EC-334 6/5/2014 14060288-09	EC-346 8/14/2014 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: Collection Date: Lab Report ID:	EC-381 8/14/2014 14080546-03	EI-11 8/28/2014 14080862-07	EI-24 5/13/2014 14050411-04	EI-53 3/3/2014 14030032-07	EI-65 5/13/2014 14050411-03	EI-212 2/27/2014 14030032-06	EI-302 8/14/2014 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: Collection Date: Lab Report ID:	EI-315 3/30/2014 14030994-03	EI-333 3/30/2014 14030994-07	EI-342 3/30/2014 14030994-05	EI-346 3/30/2014 14030994-04	EW-305 8/14/2014 14080162-07	EW-305 8/19/2014 14080572-02	EW-305 8/20/2014 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: Collection Date: Lab Report ID:	EW-826 3/2/2014 14030032-09	EW-873 7/8/2014 14070394-01	EW-873 7/8/2014 14070396-01	EW-873 7/8/2014 14070398-01	EW-873 7/8/2014 14070395-01	EW-910 12/19/2013 1312932-01	GA-310 5/14/2014 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: Collection Date: Lab Report ID:	GA-424 5/16/2014 14050675-14	GA-424 2/10/2015 15020879-01	GA-424 2/11/2015 15020879-02	GA-424 2/12/2015 15020879-03	GA-424 2/13/2015 15020879-04	Galv-209 6/17/2014 14060990-02	Galv-209 6/17/2014 14060990-04	Galv-209 6/17/2014 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: Collection Date: Lab Report ID:	Galv-355 12/17/2013 1312548-03	GB-128 10/24/2014 14101095-02	GB-128 11/4/2014 14101095-09	GB-189 5/14/2014 14050675-05	GB-189 5/14/2014 14050675-12	GB-260 7/15/2014 14070778-01	GB-260 7/17/2014 14070778-02	GB-426 10/30/2014 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: Collection Date: Lab Report ID:	GB-426 12/2/2014 14120030-08	GB-668 4/23/2014 14041149-04	GB-668 4/23/2014 14041149-05	GC-158 8/29/2014 14081070-03	GC-205 6/2/2014 14060037-06	GC-237 8/11/2014 14080162-02	GC-338 7/16/2014 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: Collection Date: Lab Report ID:	GC-608 5/6/2014 14050069-06	GC-613 4/3/2014 14040241-01	GC-641 6/5/2014 14060288-08	GC-680 4/22/2014 14041149-01	GC-787 5/26/2014 14050881-03	GI-33 4/16/2014 14040241-16	GI-33 4/16/2014 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: Collection Date: Lab Report ID:	GI-37 6/5/2014 14060288-04	GI-43 2/8/2014 1402267-10	GI-47 2/17/2014 1402748-04	GI-73 2/17/2014 1402748-06	GI-78 4/21/2014 14041149-02	GI-90 2/18/2014 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: Collection Date: Lab Report ID:	GI-93 2/18/2014 1402748-14	GI-116 3/24/2014 14030994-01	HI-22 10/2/2014 14100091-04	HI-110 10/2/2014 14100091-05	HI-376 3/15/2015 15030617-01	HI-379 10/2/2014 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: Collection Date: Lab Report ID:	MC-807 12/2/2014 14120030-07	MC-941 4/25/2014 14041149-06	MI-519 12/8/2014 14120388-02	MI-519 12/9/2014 14120388-05	MI-622 12/3/2014 14120030-04	MI-622 1/28/2015 15010788-02	MI-623 12/3/2014 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: Collection Date: Lab Report ID:	MI-623 1/28/2015 15010788-03	MI-623 1/28/2015 15010788-04	MI-654 9/29/2014 14091155-07	MI-654 9/30/2014 14091155-05	MI-654 10/1/2014 14100091-02	MI-669 4/22/2014 14041149-03	MP-30 5/28/2014 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: Collection Date: Lab Report ID:	MP-61 6/5/2014 14060288-06	MP-73 6/5/2014 14060288-07	MP-153 2/5/2014 1402267-04	MP-259 2/5/2014 1402267-08	MP-265 9/29/2014 14091155-02	MP-298 1/13/2014 1401539-02	MP-299 7/29/2014 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: Collection Date: Lab Report ID:	MP-300 6/17/2014 14060990-01	MP-313 5/27/2014 14050881-06	PL-5 8/15/2014 14080602-02	PL-6 11/19/2014 14110364-08	PL-10 2/18/2014 1402748-08	PL-11 2/18/2014 1402748-10	PL-13 1/6/2014 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: Collection Date: Lab Report ID:	PL-18 4/16/2014 14040241-07	PL-18 4/16/2014 14040241-08	PL-22 8/14/2014 14080162-04	PL-22-DUP 8/14/2014 14080162-05	PL-23 8/14/2014 14080162-06	PL-25 4/30/2014 14050069-02	PL-25-DUP 4/30/2014 14050069-03	PN-891 5/20/2014 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: Collection Date: Lab Report ID:	PN-891 6/2/2014 14060037-05	PN-891 6/4/2014 14060288-03	PN-891 7/9/2014 14070468-01	PN-891 8/26/2014 14080862-06	PN-891 9/11/2014 14090459-01	PN-891 9/17/2014 14090702-01	PN-891 9/22/2014 14090959-01	PN-891 10/15/2014 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: Collection Date: Lab Report ID:	PN-891 10/28/2014 14101095-03	PN-891 11/10/2014 14110364-03	SA-10 10/20/2014 14100478-06	SA-10 10/21/2014 14100478-07	SA-10 10/22/2014 14100478-08	SA-10 10/23/2014 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: Collection Date: Lab Report ID:	SA-10 10/24/2014 14101095-01	SA-13 5/7/2014 14050069-08	SA-13 5/8/2014 14050411-01	SA-13 5/12/2014 14050411-02	SA-13 5/15/2014 14050675-09	SA-13 5/19/2014 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: Collection Date: Lab Report ID:	SM-39 11/25/2014 14120030-02	SM-128 3/29/2014 14030994-02	SM-128 3/30/2014 14030994-06	SM-130 8/14/2014 14080546-02	SM-132 12/10/2014 14120388-04	SM-141 4/7/2014 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: Collection Date: Lab Report ID:	SM-149 10/16/2014 14100478-04	SM-149-DUP 10/16/2014 14100478-05	SM-217 2/2/2015 15020100-01	SM-239 2/3/2015 15020100-02	SM-268 3/31/2014 14030994-08	SM-288 5/13/2014 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: Collection Date: Lab Report ID:	SP-49 6/5/2014 14060288-05	SP-60 10/29/2014 14101095-05	SP-60 1/7/2015 15010212-01	SP-62 1/14/2014 1401539-04	SP-65 1/27/2014 14011066-04	SP-70 2/5/2014 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: Collection Date: Lab Report ID:	SP-75 1/27/2014 14011066-02	SP-83 5/5/2014 14050069-04	SP-87 2/5/2014 1402267-06	SP-89 11/6/2014 14101095-10	SS-72 10/7/2014 14100091-12	SS-111 1/26/2015 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: Collection Date: Lab Report ID:	SS-181 5/19/2014 14050881-02	SS-198 5/5/2014 14050069-05	SS-207 3/31/2014 14040241-06	SS-224 8/14/2014 14080546-06	SS-229 1/7/2014 1401280-02	SS-253 10/28/2014 14101095-04	SS-266 8/25/2014 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: Collection Date: Lab Report ID:	SS-300 10/9/2014 14100478-01	ST-30 8/15/2014 14080602-03	ST-37 5/28/2014 14060037-02	ST-52 5/28/2014 14060037-03	ST-100 8/15/2014 14080602-01	ST-148 8/22/2014 14080862-01	ST-148-DUP 8/22/2014 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: Collection Date: Lab Report ID:	ST-151 5/28/2014 14060037-01	ST-156 1/8/2014 1401280-04	ST-229 12/18/2014 14120554-05	ST-295 3/4/2015 15030010-10	ST-300 8/29/2014 14081070-02	VK-786 6/3/2014 14060288-01	VK-823 9/30/2014 14091155-06	VK-823 9/30/2014 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: Collection Date: Lab Report ID:	VK-826 8/5/2014 14080162-01	VK-900 5/27/2014 14050881-04	VK-915 6/18/2014 14060990-05	VK-915 6/18/2014 14060990-06	VK-956 11/3/2014 14101095-07	VK-956 11/4/2014 14101095-08	VK-989 8/15/2014 14080602-04	VR-38 2/7/2015 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: Collection Date: Lab Report ID:	VR-170 8/28/2014 14080862-08	VR-214 5/13/2014 14050675-13	VR-256 8/15/2014 14080572-01	VR-265 1/13/2015 15010212-02	VR-279 10/6/2014 14100091-11	VR-326 4/17/2014 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: Collection Date: Lab Report ID:	VR-326-DUP 4/17/2014 14040241-13	VR-331 8/14/2014 14080546-04	VR-371 12/10/2014 14120388-03	VR-380 4/17/2014 14040241-09	WC-33 2/26/2015 15030010-01	WC-65 2/26/2015 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: Collection Date: Lab Report ID:	WC-66 2/26/2015 14030032-04	WC-66 1/26/2015 15010788-07	WC-96 4/28/2014 14050069-01	WC-100 12/16/2014 14120554-03	WC-100 12/17/2014 14120554-04	WC-173 10/2/2014 14100091-07	WC-173-DUP 10/2/2014 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: Collection Date: Lab Report ID:	WC-265 11/13/2014 14110364-06	WC-485 11/10/2014 14110364-05	WC-661 11/13/2014 14110364-07	WD-29 1/28/2015 15010788-05	WD-30 8/21/2014 14080862-04	WD-65 9/30/2014 14091155-04	WD-72 9/30/2014 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: Collection Date: Lab Report ID:	WD-73 8/21/2014 14080862-03	WD-79 11/26/2014 14120030-01	WD-105 12/11/2013 1312548-01	WD-109 5/27/2014 14050881-05	WD-117 10/15/2014 14100478-02	WD-122 2/17/2014 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: Collection Date: Lab Report ID:	WR-249 12/3/2014 14120030-03	WR-249 12/5/2014 14120279-01	WR-249 12/9/2014 14120388-01	WR-249 12/12/2014 14120554-01	WR-249 12/15/2014 14120554-02	WR-249 3/2/2015 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	0.0000200 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: Collection Date: Lab Report ID:	WR-249 3/2/2015 15030010-06	WR-249 3/2/2015 15030010-07	WR-249 3/2/2015 15030010-08	WR-249 3/2/2015 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: Collection Date: Lab Report ID:	EB-645 9/2/2013 1309050-01	EW-910 1/9/2015 15010052-06	GB-959 2/9/2015 15020593-02	GC-40 3/26/2014 14030977-03	GC-245 9/26/2013 13091230-01	GC-248 10/26/2013 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: Collection Date: Lab Report ID:	GC-643 12/13/2014 14120680-02	GC-727 10/30/2013 13101305-02	GC-782 11/8/2013 1311612-01	GC-859 3/12/2015 15030361-04	HI-547 3/18/2015 15030361-06	KC-163 9/16/2013 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: Collection Date: Lab Report ID:	MC-21 9/8/2014 14090321-01	MC-934 9/13/2013 1309670-02	SM-277 11/1/2013 1311151-01	SS-255 12/23/2013 13121096-01	SS-349 6/16/2014 14060751-02	VR-245 11/29/2014 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: Collection Date: Lab Report ID:	VR-284 11/19/2013 1311863-03	VR-342 9/10/2014 14090321-03	VR-379 8/18/2014 14080703-01	WR-469 12/3/2014 14120316-04	WR-508 11/12/2013 1311612-02	WR-584 7/13/2014 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: Collection Date: Lab Report ID:	AT-618 7/31/2014 14071101-06	AV-362 5/24/2014 14060166-02	EI-227 7/27/2014 14071101-05	EI-302 4/23/2014 14040799-02	EI-338 7/19/2014 14071101-01	EI-360 2/21/2014 1402964-02	EI-360 3/25/2014 14030977-01	EI-360-DUP 3/25/2014 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: Collection Date: Lab Report ID:	EW-910 1/9/2015 15010052-05	GB-602 3/27/2015 15030975-03	GB-959 2/8/2015 15020593-01	GC-40 3/26/2014 14030977-03	GC-64 1/12/2015 15010385-01	GC-610 11/20/2014 14110868-01	GC-643 12/13/2014 14120680-01	GC-653 5/26/2014 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: Collection Date: Lab Report ID:	GC-683 4/28/2014 14041277-01	GC-859 10/24/2014 14101167-01	GC-859 3/12/2015 15030361-03	GC-903 7/14/2014 14070668-01	GC-903 12/11/2014 14120316-09	GI-82 9/4/2014 14090213-01	HI-131 8/26/2014 14080703-02	HI-547 3/18/2015 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: Collection Date: Lab Report ID:	HI-469 4/10/2014 14040799-01	KC-10 6/1/2014 14060166-01	KC-147 11/6/2014 14101167-08	KC-147-DUP 11/6/2014 14101167-09	KC-874 5/6/2014 14050285-01	MC-21 9/8/2014 14090321-01	MC-21 10/25/2014 14101167-02	MC-21-DUP 10/25/2014 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.