



Sierrita Operations  
Environment, Land & Water Department  
6200 W Duval Mine Road  
PO Box 527  
Green Valley, AZ 85622-0527

March 6, 2019

**Via Certified Mail # 7015 1520 0002 5365 8659**  
**Return Receipt Requested**

David Lelsz  
Arizona Department of Environmental Quality  
Water Quality Compliance Section  
1110 West Washington Street  
Phoenix, Arizona 85007-2935

**Re: Mitigation Order on Consent Docket No. P-50-06**  
**Reporting Year 2018 Mitigation Facilities Monitoring Report**

Dear Dr. Lelsz:

In accordance with Section 5.1.1 of the Mitigation Plan<sup>1</sup>, Freeport-McMoRan Sierrita Inc. (Sierrita) submits the enclosed *Mitigation Facilities Monitoring Report* for reporting year 2018.

Prior to March 2015, Sierrita has submitted this report annually under the title of *Well Field Operations Monitoring Report*, which Sierrita agreed to submit in the Mitigation Plan approval deferral letter sent to ADEQ on March 18, 2009<sup>2</sup>.

Please do not hesitate to contact me at (520) 393-2014 if you have any questions regarding this submittal.

Sincerely,

William Hart  
Sr. Environmental Scientist

BH/dmc  
Attachment(s)  
20190306\_002

xc: Dave Gosen, Freeport-McMoRan Inc.  
Jim Norris, Clear Creek Associates

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<sup>1</sup> Clear Creek Associates. 2013. Mitigation Plan for Sulfate with Respect to Drinking Water Supplies in the Vicinity of the Freeport-McMoRan Sierrita Inc. Tailing Impoundment, Mitigation Order on Consent Docket No. P-50-06. December 18, 2013.  
<sup>2</sup> Correspondence from Chad D. Fretz, Sierrita, to Cynthia S. Campbell, ADEQ Water Quality Compliance Section, Re: Mitigation Order on Consent Docket No. P-50-06 - Mitigation Plan. March 18, 2010.

**TECHNICAL MEMORANDUM REPORT**



**TO:** Mr. William Hart, R.G.  
Senior Environmental Scientist  
Freeport--McMoRan Sierrita Inc.  
6200 West Duval Mine Road  
Post Office Box 527  
Green Valley, AZ 85622-0527

**FROM:** BasinWells Associates, PLLC

**PREPARED BY:** Buck Schmidt, Principal Hydrologist  
BasinWells Associates, PLLC

**REVIEWED BY:** Martin J. Rex, R.G.,  
BasinWells Associates, PLLC

**DATE:** March 4, 2019

**PROJECT NO.:** 18-015

**SUBJECT:** 2018 Freeport – McMoran-Sierrita Inc. - Mitigation Facilities Monitoring Report.

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**1.0 INTRODUCTION**

This Mitigation Facilities Monitoring Report documents groundwater pumping for the Freeport-McMoRan Sierrita Inc. (Sierrita) Sulfate Mitigation Action Well Field (Well Field) under the *Mitigation Plan for Sulfate with Respect to Drinking Water Supplies in the Vicinity of the Freeport-McMoran Sierrita Inc. Tailing Impoundment, Mitigation Order on Consent, Docket No. P-50-06* (Clear Creek Associates PLC, 2013). This report describes wellfield and conveyance operational conditions for calendar year 2018 and consists of data for pumping system availability, well pumping rates, and total system pumping. The actual system pumping is compared to design specifications to assess the mitigation facilities with respect to their mechanical capacity to pump and convey the required volumes of water.

The Well Field consists of two major parts: the Interceptor Well Field and the Mitigation Well Field. The Interceptor Well Field currently consists of 26 active interceptor wells (IWs). The Mitigation Well Field consists of four plume stabilization (PS) wells, four mass capture (MC) wells, and six focused feasibility study (FFS) wells. The PS, MC, and FFS wells were installed between 2011 and 2013 with full operation occurring in early 2014. The locations of the wells of the Well Field are shown on Figure 1. Table 1



tabulates well information including cadastral legal locations; performance and target yield rates; well construction details; completion date and well age.



Figure 1. Sierrita Sulfate Mitigation Action Well Field

**BasinWells Associates PLLC**

**TABLE 1. SIERRITA SULFATE MITIGATION ACTION WELL FIELD CONSTRUCTION INFORMATION**

Well	Cadastral Location	ADWR Reg. No. (55-)	2014-2020 Performance Goal Pumping Rates (gpm)	Target Pumping Rates (gpm)	Well Depth (ft)	Well Dia. (in.)	Borehole Diameter (in.)	Casing Material	Upper Screen Depth (ft bls)	Lower Screen Depth (ft bls)	Pump Gallery?/Interval (ft bls)	Current Pump Setting (ft bls)	Filter Pack Material	Basinfill Alluvium Base Depth (ft bls)	Drill Year	Well Age
IW-1	D-18-13 29DCD	623129	250	250	855	14		STEEL	234	843	No	480	GRAVEL	760	1978	40.6
IW-2A	D-18-13 28CCC	216464	300	300	1051	14	20	STEEL	350	1031	600-640	620	GRAVEL	1020	2008	11.0
IW-3A	D-18-13 28CBC	201732	500	500	1052	14	20	STEEL	400	1030	No	540	GRAVEL	820	2004	15.1
IW-8	D-18-13 28BCC	508236	350	350	783	14	20	STEEL	382	783	No	540	GRAVEL	759	1984	34.6
IW-9	D-18-13 28BCC	508238	200	200	853	14	20	STEEL	412	853	No	605	GRAVEL	740	1984	34.6
IW-4	D-18-13 28BCB	623132	40	40	946	14		STEEL	312	946	No	600	GRAVEL	490	1978	40.6
IW-24	D-18-13 28BBB	200556	50	50	884	14	20	STEEL	348	860	No	602	GRAVEL	410	2004	15.1
IW-5A	D-18-13 28BBB	219131	40	40	900	14.5	20	STAINLESS STEEL	382	890	620-640	630	TACNA	436	2010	8.8
IW-23	D-18-13 21CCB	200555	120	120	964	14	20	STEEL	375	935	No	550	TACNA	420	2004	15.1
IW-10	D-18-13 21CBC	508237	250	250	831	14	20	STEEL	420	831	No	600	GRAVEL	730	1984	34.5
IW-22	D-18-13 21CBC	200554	300	300	590	14	20	STEEL	359	560	No	550	GRAVEL	550	2004	15.1
IW-11	D-18-13 21CBC	508235	325	325	605	14	20	STEEL	371	605	No	500	GRAVEL	563	1984	34.5
IW-6A	D-18-13 21BCC	545565	80	80	497	12	20	STEEL	356	456	No	460	GRAVEL	456	1994	24.2
IW-12	D-18-13 21BCB	545555	125	125	600	12	20	STEEL	358	560	No	560	GRAVEL	498	1994	24.2
IW-13	D-18-13 21BBC	545556	0	0	497	12	20	STEEL	355	456	No	460	GRAVEL	452	1994	24.2
IW-14	D-18-13 21BBB	545557	60	60	549	12	20	STEEL	357	508	No	520	GRAVEL	509	1994	24.2
IW-15	D-18-13 16CCC	545558	40	40	547	12	20	STEEL	357	506	No	505	GRAVEL	507	1995	24.1
IW-19	D-18-13 16BCC	545562	150	150	540	12	20	STEEL	379	499	No	522	GRAVEL	498	1995	24.1
IW-20	D-18-13 16BCB	545563	0	0	502	12	20	STEEL	380	460	No	460	GRAVEL	470	1995	24.1
IW-21	D-18-13 16BBC	545564	100	100	601	12	20	STEEL	400	560	No	520	GRAVEL	520	1995	24.1
IW-25	D-18-13 28CBD	219596	400	400	782	16	24	STAINLESS STEEL	359	720	No	732	SILICA SAND	475	2010	8.3
IW-26	D-18-13 28BCD	219143	350	350	780	16	24	STAINLESS STEEL	340	720	No	732	SILICA SAND	475	2010	8.3
IW-27	D-18-13 28BBD	219136	100	100	720	14	22	STAINLESS STEEL	380	660	No	672	SILICA SAND	465	2010	8.3
IW-28	D-18-13 21CCA	219137	400	400	760	16	24	STAINLESS STEEL	380	700	No	712	SILICA SAND	680	2010	8.3
IW-29	D-18-13 21CDA	222865	-	-	770	16.62	24	STAINLESS STEEL	440	730	No		SILICA SAND	730	2014	4.9
PS-1	D-18-13 03BBA	220861	700	700	1020	16.62	24	HSLA	560	980	640-680	890	SILICA SAND	914	2011	7.2
PS-2	D-17-13 34CDC	220862	800	800	1130	16.62	24	HSLA	560	1090	640-680	870	SILICA SAND	1090	2012	6.8
PS-3	D-17-13 34CDD	220863	800	800	1200	16.62	24	HSLA	520	1160	600-640		SILICA SAND	1160	2012	6.8
PS-4	D-18-13 03BCA	220864	1000	1000	1060	16.62	24	HSLA	560	1020	640-680	893	SILICA SAND	1020	2012	6.7
MC-1	D-18-13 16DAA	221660	0	900	915	16.62	24	HSLA	479	875	599-639	824	SILICA SAND	875	2013	5.8
MC-2	D-18-13 10CCB	221761	0	700	980	16.62	24	HSLA	479	940	600-640	855	SILICA SAND	940	2013	6.0
MC-3	D-18-13 09AAA	221661	750	600	870	16.62	24	HSLA	530	810	No	830	SILICA SAND	810	2012	6.3
MC-4	D-18-13 04DDC	220842	600	600	830	16.62	24	HSLA	560	770	No	810	SILICA SAND	770	2012	6.6
FFS-1	D-18-13 21ABC	221662	338	800	790	16.62	24	HSLA	448	729	No	753	SILICA SAND	730	2013	5.9
FFS-2	D-18-13 16DCA	221663	300	700	750	16.62	24	HSLA	470	690	No	703	SILICA SAND	680	2013	5.9
FFS-3	D-18-13 16ACD	221664	225	400	800	16.62	24	HSLA	510	740	No	762	SILICA SAND	736	2013	6.1
FFS-4	D-18-13 16ABA	221665	150	200	871	16.62	24	HSLA	540	830	640-680	788	SILICA SAND	830	2012	6.2
FFS-5	D-18-13 09DBA	221666	225	1000	800	16.62	24	HSLA	569	739	No	775	SILICA SAND	740	2012	6.2
FFS-6	D-18-13 09ACA	221667	225	600	830	16.62	24	HSLA	528	769	No	750	SILICA SAND	770	2012	6.3

Notes: ft bls = feet below land surface; in. = inches; HSLA = High Strength Low Alloy Steel

**2.0 WELL FIELD OPERATIONS**

Total groundwater withdrawals in 2018 of the Well Field are tabulated on Table 2. The well field withdrew approximately 14,645 acre-feet (AF) of groundwater in 2018 (average pumping rate of 9,080 gpm).

TABLE 2. 2018 SIERRITA SULFATE MITIGATION ACTION WELL FIELD TOTAL GROUNDWATER WITHDRAWAL	
Total Gallons Pumped:	4,772,332,000
Total Acre-Feet Pumped:	14,645

The Well Field, in total, produced approximately 85.3 percent of the performance goals with respect to potential total groundwater withdrawal considering the 2014-2020 performance goal rates (Table 1) at a 100% duty cycle (total pumping rate of 10,643 gpm or 17,166 AF).

The Well Field, in total, produced approximately 63.4 percent of the target goals with respect to potential total groundwater withdrawal considering the target goal rates (Table 1) at a 100% duty cycle (total pumping rate of 14,330 gpm or 23,113 AF).

Well performance in 2018 on a well by well basis is tabulated in Attachment A. Run time percentages of the Interceptor Well Field wells ranged from 1.3 to 82.1 percent when active. Run time percentages of the Mitigation Well Field wells ranged from 38.2 to 87.7 percent. IW-5A, IW-13 and IW-20 have zero runtime percentages in 2018 due to low flow conditions and considered for inactivation. (See Table 1. Both IW-13 and IW-20 have target and performance goals of 0 gpm.) IW-24, IW-6A, IW-14, IW-23, IW-15, IW-22 and IW-21 have zero to minimum runtime percentages in 2018 due to pump equipment issues.

Shutdown of wells was required due the following:

- As needed well and transmission line maintenance activities,
- Perform non-pumping monitoring activities,
- Pipeline relocations during Sierrita Tailings Impoundment buttress construction,
- Exceedance of storage capacity of the Mill Reservoir.

Well field data plots including a well construction diagram; static and pumping water levels; yield rates; calculated specific capacity; sulfate concentrations; static saturated thickness of basin fill alluvium; and annotated descriptions of maintenance activities from 2009 to 2019 are included in Attachment B.

**3.0 SUMMARY OF WELL MAINTENANCE ACTIVITIES**

Summary of well and pump maintenance activities performed in 2018 are tabulated on Table 3 below. All maintenance activities were performed following collection and evaluation of maintenance monitoring parameters as described in the *Sulfate Mitigation Action Well Field (Well Field) Operation and Maintenance Plan* (BasinWells, 2013).



TABLE 3. 2018 SIERRITA MITIGATION ACTION WELL FIELD SUMMARY OF WELL AND PUMP MAINTENANCE ACTIVITIES		
Well	Approx. Dates Off Line for Maintenance	Maintenance Activities
IW-1	01/2018-07/2018	Pump failure/New pump and column pipe
IW-2A	01/2018-04/2018	Pump failure/New pump and column pipe
IW-3A	05/2018-09/2018	Pump failure/New pump and column pipe
IW-12	03/2018-08/2018	Pump failure/New pump and column pipe
PS-1	01/2018-04/2018	Pump failure/New pump
PS-2	10/2018-12/2018	Pump rehabilitation in progress
FFS-5	03/2018-08/2018	Pump failure/New pump
FFS-6	08/2018-12/2018	Pump rehabilitation in progress

Note: All Mitigation Order Wells from 12/17/18 - 01/31/2018 and all Interceptor Wells from 11/26/2018-12/17/2018 off line due to Tailings Dam Buttress Project

**4.0 FUTURE MAINTENANCE ACTIVITIES**

Future maintenance activities will continue to adhere to activities and frequencies as described in *Sulfate Mitigation Action Well Field (Well Field) Operation and Maintenance Plan* (BasinWells, 2013). All maintenance activities to be performed following collection and evaluation of maintenance monitoring parameters.

Pump equipment in IW-24, IW-6A, IW-14, IW-23, IW-15, IW-22 and IW-21 have downhole pump issues and will be evaluated and likely refurbished in 2019.

**5.0 REFERENCES**

BasinWells Associates, PLLC, *Freeport-McMoran Sierrita Inc., Sulfate Mitigation Action Well Field (Well Field) Operation and Maintenance Plan*, December 31, 2013.

Clear Creek Associates, PLC, *Mitigation Plan for Sulfate With Respect to Drinking Water Supplies in the Vicinity of the Freeport-McMoran Sierrita Inc. Tailing Impoundment, Mitigation Order on Consent, Docket No. P-50-06*, December 18, 2013.



ATTACHMENT A

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**SIERRITA SULFATE MITIGATION ACTION WELL FIELD PERFORMANCE SUMMARY**

**BasinWells Associates PLLC**

**ATTACHMENT A.  
SUMMARY OF 2018 INTERCEPTOR WELL PERFORMANCE  
FREEPORT MCMORAN SIERRITA, INC.**

Well	Month	Gallons Pumped	Estimated Hours	Yield (Acrefeet)	Approx. Yield Rate (gpm)
IW-1	Jan	2,700,000	122	8.3	369
	Feb	0	0	0.0	0
	Mar	0	0	0.0	0
	Apr	0	0	0.0	0
	May	0	0	0.0	0
	Jun	0	0	0.0	0
	Jul	2,677,813	121	8.2	369
	Aug	13,210,000	597	40.5	369
	Sep	10,189,688	460	31.3	369
	Oct	10,956,813	495	33.6	369
	Nov	9,430,688	426	28.9	369
	Dec	6,262,625	283	19.2	369

<b>IW-1 Total Gallons Pumped:</b>	<b>55,427,625</b>
<b>IW-1 Total Acre-Feet Pumped:</b>	<b>170</b>
<b>IW-1 Average Yield Rate (gpm):</b>	<b>369</b>
<b>IW-1 % Run Time:</b>	<b>28.6%</b>

Well	Month	Gallons Pumped	Estimated Hours	Yield (Acrefeet)	Approx. Yield Rate (gpm)
IW-2A	Jan	0	0	0.0	0
	Feb	0	0	0.0	0
	Mar	0	0	0.0	0
	Apr	0	0	0.0	0
	May	4,445,938	267	13.6	278
	Jun	9,787,250	587	30.0	278
	Jul	6,142,375	368	18.8	278
	Aug	9,603,625	576	29.5	278
	Sep	5,852,063	351	18.0	278
	Oct	8,340,625	500	25.6	278
	Nov	6,768,125	406	20.8	278
	Dec	4,853,438	291	14.9	278

<b>IW-2A Total Gallons Pumped:</b>	<b>55,793,438</b>
<b>IW-2A Total Acre-Feet Pumped:</b>	<b>171</b>
<b>IW-2A Average Yield Rate (gpm):</b>	<b>278</b>
<b>IW-2A % Run Time:</b>	<b>38.2%</b>

Well	Month	Gallons Pumped	Estimated Hours	Yield (Acrefeet)	Approx. Yield Rate (gpm)*
IW-3A	Jan	14,234,125	368	43.7	645
	Feb	8,822,875	228	27.1	645
	Mar	18,152,125	469	55.7	645
	Apr	16,382,875	423	50.3	645
	May	0	0	0.0	0
	Jun	0	0	0.0	0
	Jul	0	0	0.0	0
	Aug	0	0	0.0	0
	Sep	9,609,625	248	29.5	645
	Oct	21,512,375	556	66.0	645
	Nov	16,286,000	421	50.0	645
	Dec	11,281,875	292	34.6	645

<b>IW-3A Total Gallons Pumped:</b>	<b>116,281,875</b>
<b>IW-3A Total Acre-Feet Pumped:</b>	<b>357</b>
<b>IW-3A Average Yield Rate (gpm):</b>	<b>645</b>
<b>IW-3A % Run Time:</b>	<b>34.3%</b>

Well	Month	Gallons Pumped	Estimated Hours	Yield (Acrefeet)	Approx. Yield Rate (gpm)
IW-8	Jan	8,403,188	629	25.8	223
	Feb	5,086,813	381	15.6	223
	Mar	9,944,875	744	30.5	223
	Apr	8,681,125	650	26.6	223
	May	7,547,000	565	23.2	223
	Jun	8,938,500	669	27.4	223
	Jul	6,467,250	484	19.8	223
	Aug	8,464,313	633	26.0	223
	Sep	5,934,063	444	18.2	223
	Oct	6,080,750	455	18.7	223
	Nov	4,057,125	304	12.5	223
	Dec	2,302,938	172	7.1	223

<b>IW-8 Total Gallons Pumped:</b>	<b>81,907,938</b>
<b>IW-8 Total Acre-Feet Pumped:</b>	<b>251</b>
<b>IW-8 Average Yield Rate (gpm):</b>	<b>223</b>
<b>IW-8 % Run Time:</b>	<b>70.0%</b>

Well	Month	Gallons Pumped	Estimated Hours	Yield (Acrefeet)	Approx. Yield Rate (gpm)
IW-9	Jan	5,562,594	405	17.1	229
	Feb	3,428,406	250	10.5	229
	Mar	6,745,094	491	20.7	229
	Apr	6,213,906	452	19.1	229
	May	5,902,000	364	15.3	229
	Jun	7,332,344	534	22.5	229
	Jul	5,163,250	376	15.8	229
	Aug	8,016,844	583	24.6	229
	Sep	6,107,906	445	18.7	229
	Oct	7,786,656	567	23.9	229
	Nov	5,822,000	424	17.9	229
	Dec	4,021,031	293	12.3	229

<b>IW-9 Total Gallons Pumped:</b>	<b>71,202,031</b>
<b>IW-9 Total Acre-Feet Pumped:</b>	<b>218</b>
<b>IW-9 Average Yield Rate (gpm):</b>	<b>229</b>
<b>IW-9 % Run Time:</b>	<b>59.2%</b>

Well	Month	Gallons Pumped	Estimated Hours	Yield (Acrefeet)	Approx. Yield Rate (gpm)
IW-4	Jan	2,673,641	362	8.2	123
	Feb	1,970,359	267	6.0	123
	Mar	2,633,938	357	8.1	123
	Apr	1,983,063	269	6.1	123
	May	2,000,000	271	6.1	123
	Jun	2,820,000	382	8.7	123
	Jul	820,000	111	2.5	123
	Aug	1,345,000	182	4.1	123
	Sep	427,000	58	1.3	123
	Oct	3,936,445	533	12.1	123
	Nov	258,555	35	0.8	123
	Dec	0	0	0.0	0

<b>IW-4 Total Gallons Pumped:</b>	<b>20,868,000</b>
<b>IW-4 Total Acre-Feet Pumped:</b>	<b>64</b>
<b>IW-4 Average Yield Rate (gpm):</b>	<b>123</b>
<b>IW-4 % Run Time:</b>	<b>32.3%</b>

Well	Month	Gallons Pumped	Estimated Hours	Yield (Acrefeet)	Approx. Yield Rate (gpm)
IW-24	Jan	0	0	0.0	0
	Feb	0	0	0.0	0
	Mar	0	0	0.0	0
	Apr	0	0	0.0	0
	May	0	0	0.0	0
	Jun	0	0	0.0	0
	Jul	0	0	0.0	0
	Aug	0	0	0.0	0
	Sep	0	0	0.0	0
	Oct	0	0	0.0	0
	Nov	0	0	0.0	0
	Dec	0	0	0.0	0

<b>IW-24 Total Gallons Pumped:</b>	<b>0</b>
<b>IW-24 Total Acre-Feet Pumped:</b>	<b>0</b>
<b>IW-24 Average Yield Rate (gpm):</b>	<b>0</b>
<b>IW-24 % Run Time:</b>	<b>0.0%</b>

Well	Month	Gallons Pumped	Estimated Hours	Yield (Acrefeet)	Approx. Yield Rate (gpm)
IW-5A	Jan	0	0	0.0	0
	Feb	0	0	0.0	0
	Mar	0	0	0.0	0
	Apr	0	0	0.0	0
	May	0	0	0.0	0
	Jun	0	0	0.0	0
	Jul	0	0	0.0	0
	Aug	0	0	0.0	0
	Sep	0	0	0.0	0
	Oct	0	0	0.0	0
	Nov	0	0	0.0	0
	Dec	0	0	0.0	0

<b>IW-5A Total Gallons Pumped:</b>	<b>0</b>
<b>IW-5A Total Acre-Feet Pumped:</b>	<b>0</b>
<b>IW-5A Average Yield Rate (gpm):</b>	<b>0</b>
<b>IW-5A % Run Time:</b>	<b>0.0%</b>





**ATTACHMENT A.  
SUMMARY OF 2018 INTERCEPTOR WELL PERFORMANCE  
FREEPORT MCMORAN SIERRITA, INC.**

Well	Month	Gallons Pumped	Estimated Hours	Yield (Acrefeet)	Approx. Yield Rate (gpm)
IW-23	Jan	0	0	0.0	0
	Feb	0	0	0.0	0
	Mar	0	0	0.0	0
	Apr	0	0	0.0	0
	May	0	0	0.0	0
	Jun	0	0	0.0	0
	Jul	0	0	0.0	0
	Aug	0	0	0.0	0
	Sep	0	0	0.0	0
	Oct	0	0	0.0	0
	Nov	0	0	0.0	0
	Dec	0	0	0.0	0

IW-23 Total Gallons Pumped:	0
IW-23 Total Acre-Feet Pumped:	0
IW-23 Average Yield Rate (gpm):	0
IW-23 % Run Time:	0.0%

Well	Month	Gallons Pumped	Estimated Hours	Yield (Acrefeet)	Approx. Yield Rate (gpm)
IW-10	Jan	1,084,000	62	3.3	290
	Feb	691,000	40	2.1	290
	Mar	3,267,219	188	10.0	290
	Apr	1,568,781	90	4.8	290
	May	202,000	12	0.6	290
	Jun	155,000	9	0.5	290
	Jul	82,000	5	0.3	290
	Aug	117,000	7	0.4	290
	Sep	8,000	0	0.0	290
	Oct	0	0	0.0	0
	Nov	3,000	0	0.0	290
	Dec	3,000	0	0.0	290

IW-10 Total Gallons Pumped:	7,181,000
IW-10 Total Acre-Feet Pumped:	22
IW-10 Average Yield Rate (gpm):	290
IW-10 % Run Time:	4.7%

Well	Month	Gallons Pumped	Estimated Hours	Yield (Acrefeet)	Approx. Yield Rate (gpm)
IW-22	Jan	2,265,000	113	7.0	335
	Feb	0	0	0.0	0
	Mar	1,000	0	0.0	335
	Apr	0	0	0.0	0
	May	0	0	0.0	0
	Jun	0	0	0.0	0
	Jul	0	0	0.0	0
	Aug	0	0	0.0	0
	Sep	0	0	0.0	0
	Oct	0	0	0.0	0
	Nov	0	0	0.0	0
	Dec	0	0	0.0	0

IW-22 Total Gallons Pumped:	2,266,000
IW-22 Total Acre-Feet Pumped:	7
IW-22 Average Yield Rate (gpm):	335
IW-22 % Run Time:	1.3%

Well	Month	Gallons Pumped	Estimated Hours	Yield (Acrefeet)	Approx. Yield Rate (gpm)
IW-11	Jan	6,928,438	382	21.3	302
	Feb	2,801,563	155	8.6	302
	Mar	2,779,188	153	8.5	302
	Apr	5,742,813	317	17.6	302
	May	6,514,000	359	20.0	302
	Jun	9,664,250	533	29.7	302
	Jul	6,991,000	386	21.5	302
	Aug	11,247,500	621	34.5	302
	Sep	3,686,250	203	11.3	302
	Oct	8,679,750	479	26.6	302
	Nov	7,914,250	437	24.3	302
	Dec	0	0	0.0	0

IW-11 Total Gallons Pumped:	72,949,000
IW-11 Total Acre-Feet Pumped:	224
IW-11 Average Yield Rate (gpm):	302
IW-11 % Run Time:	46.0%

Well	Month	Gallons Pumped	Estimated Hours	Yield (Acrefeet)	Approx. Yield Rate (gpm)
IW-6A	Jan	0	0	0.0	0
	Feb	0	0	0.0	0
	Mar	0	0	0.0	0
	Apr	0	0	0.0	0
	May	0	0	0.0	0
	Jun	0	0	0.0	0
	Jul	0	0	0.0	0
	Aug	0	0	0.0	0
	Sep	0	0	0.0	0
	Oct	0	0	0.0	0
	Nov	0	0	0.0	0
	Dec	0	0	0.0	0

IW-6A Total Gallons Pumped:	0
IW-6A Total Acre-Feet Pumped:	0
IW-6A Average Yield Rate (gpm):	0
IW-6A % Run Time:	0.0%

Well	Month	Gallons Pumped*	Estimated Hours	Yield (Acrefeet)	Approx. Yield Rate (gpm)
IW-12	Jan	4,869,000	606	14.9	134
	Feb	2,236,688	278	6.9	134
	Mar	4,174,000	519	12.8	134
	Apr	0	0	0.0	0
	May	0	0	0.0	0
	Jun	0	0	0.0	0
	Jul	0	0	0.0	0
	Aug	0	0	0.0	0
	Sep	0	0	0.0	0
	Oct	0	0	0.0	0
	Nov	1,255,000	156	3.9	134
	Dec	2,641,875	329	8.1	134

IW-12 Total Gallons Pumped:	15,176,563
IW-12 Total Acre-Feet Pumped:	47
IW-12 Average Yield Rate (gpm):	134
IW-12 % Run Time:	21.5%

Well	Month	Gallons Pumped	Estimated Hours	Yield (Acrefeet)	Approx. Yield Rate (gpm)
IW-13	Jan	0	0	0.0	0
	Feb	0	0	0.0	0
	Mar	0	0	0.0	0
	Apr	0	0	0.0	0
	May	0	0	0.0	0
	Jun	0	0	0.0	0
	Jul	0	0	0.0	0
	Aug	0	0	0.0	0
	Sep	0	0	0.0	0
	Oct	0	0	0.0	0
	Nov	0	0	0.0	0
	Dec	0	0	0.0	0

IW-13 Total Gallons Pumped:	0
IW-13 Total Acre-Feet Pumped:	0
IW-13 Average Yield Rate (gpm):	0
IW-13 % Run Time:	0.0%

Well	Month	Gallons Pumped	Estimated Hours	Yield (Acrefeet)	Approx. Yield Rate (gpm)
IW-14	Jan	0	0	0.0	0
	Feb	0	0	0.0	0
	Mar	0	0	0.0	0
	Apr	0	0	0.0	0
	May	0	0	0.0	0
	Jun	0	0	0.0	0
	Jul	0	0	0.0	0
	Aug	0	0	0.0	0
	Sep	0	0	0.0	0
	Oct	0	0	0.0	0
	Nov	0	0	0.0	0
	Dec	0	0	0.0	0

IW-14 Total Gallons Pumped:	0
IW-14 Total Acre-Feet Pumped:	0
IW-14 Average Yield Rate (gpm):	0
IW-14 % Run Time:	0.0%



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Well	Month	Gallons Pumped	Estimated Hours	Yield (Acrefeet)	Approx. Yield Rate (gpm)
IW-15	Jan	844,000	343	2.6	41
	Feb	593,000	241	1.8	41
	Mar	1,126,000	458	3.5	41
	Apr	372,000	151	1.1	41
	May	0	0	0.0	0
	Jun	0	0	0.0	0
	Jul	0	0	0.0	0
	Aug	0	0	0.0	0
	Sep	0	0	0.0	0
	Oct	0	0	0.0	0
	Nov	0	0	0.0	0
	Dec	0	0	0.0	0

<b>IW-15 Total Gallons Pumped:</b>	<b>2,935,000</b>
<b>IW-15 Total Acre-Feet Pumped:</b>	<b>9</b>
<b>IW-15 Average Yield Rate (gpm):</b>	<b>41</b>
<b>IW-15 % Run Time:</b>	<b>13.6%</b>

Well	Month	Gallons Pumped	Estimated Hours	Yield (Acrefeet)	Approx. Yield Rate (gpm)
IW-19	Jan	3,819,984	455	11.7	140
	Feb	2,341,016	279	7.2	140
	Mar	4,438,828	528	13.6	140
	Apr	4,023,172	479	12.3	140
	May	2,872,891	342	8.8	140
	Jun	5,083,406	605	15.6	140
	Jul	3,470,703	413	10.7	140
	Aug	5,055,172	602	15.5	140
	Sep	2,257,500	269	6.9	140
	Oct	4,221,219	503	13.0	140
	Nov	3,927,109	468	12.1	140
	Dec	13,000	2	0.0	140

<b>IW-19 Total Gallons Pumped:</b>	<b>41,524,000</b>
<b>IW-19 Total Acre-Feet Pumped:</b>	<b>127</b>
<b>IW-19 Average Yield Rate (gpm):</b>	<b>140</b>
<b>IW-19 % Run Time:</b>	<b>56.4%</b>

Well	Month	Gallons Pumped	Estimated Hours	Yield (Acrefeet)	Approx. Yield Rate (gpm)
IW-20	Jan	0	0	0.0	0
	Feb	0	0	0.0	0
	Mar	0	0	0.0	0
	Apr	0	0	0.0	0
	May	0	0	0.0	0
	Jun	0	0	0.0	0
	Jul	0	0	0.0	0
	Aug	0	0	0.0	0
	Sep	0	0	0.0	0
	Oct	0	0	0.0	0
	Nov	0	0	0.0	0
	Dec	0	0	0.0	0

<b>IW-20 Total Gallons Pumped:</b>	<b>0</b>
<b>IW-20 Total Acre-Feet Pumped:</b>	<b>0</b>
<b>IW-20 Average Yield Rate (gpm):</b>	<b>0</b>
<b>IW-20 % Run Time:</b>	<b>0.0%</b>

Well	Month	Gallons Pumped	Estimated Hours	Yield (Acrefeet)	Approx. Yield Rate (gpm)
IW-21	Jan	0	0	0.0	0
	Feb	0	0	0.0	0
	Mar	0	0	0.0	0
	Apr	0	0	0.0	0
	May	0	0	0.0	0
	Jun	0	0	0.0	0
	Jul	0	0	0.0	0
	Aug	0	0	0.0	0
	Sep	0	0	0.0	0
	Oct	0	0	0.0	0
	Nov	0	0	0.0	0
	Dec	0	0	0.0	0

<b>IW-21 Total Gallons Pumped:</b>	<b>0</b>
<b>IW-21 Total Acre-Feet Pumped:</b>	<b>0</b>
<b>IW-21 Average Yield Rate (gpm):</b>	<b>0</b>
<b>IW-21 % Run Time:</b>	<b>0.0%</b>

Well	Month	Gallons Pumped	Estimated Hours	Yield (Acrefeet)	Approx. Yield Rate (gpm)
IW-25	Jan	8,619,500	308	26.5	467
	Feb	7,502,500	268	23.0	467
	Mar	14,388,125	513	44.2	467
	Apr	10,839,875	387	33.3	467
	May	12,200,125	435	37.4	467
	Jun	18,490,750	660	56.7	467
	Jul	12,156,125	434	37.3	467
	Aug	18,556,875	662	56.9	467
	Sep	14,309,125	511	43.9	467
	Oct	16,573,375	591	50.9	467
	Nov	16,045,625	573	49.2	467
	Dec	9,129,125	326	28.0	467

<b>IW-25 Total Gallons Pumped:</b>	<b>158,811,125</b>
<b>IW-25 Total Acre-Feet Pumped:</b>	<b>487</b>
<b>IW-25 Average Yield Rate (gpm):</b>	<b>467</b>
<b>IW-25 % Run Time:</b>	<b>64.7%</b>

Well	Month	Gallons Pumped	Estimated Hours	Yield (Acrefeet)	Approx. Yield Rate (gpm)
IW-26	Jan	6,149,438	412	18.9	249
	Feb	3,882,563	260	11.9	249
	Mar	7,489,875	501	23.0	249
	Apr	6,799,125	455	20.9	249
	May	6,123,063	410	18.8	249
	Jun	9,604,688	643	29.5	249
	Jul	5,913,250	396	18.1	249
	Aug	9,537,375	638	29.3	249
	Sep	7,590,875	508	23.3	249
	Oct	8,388,563	561	25.7	249
	Nov	8,129,188	544	24.9	249
	Dec	4,905,313	328	15.1	249

<b>IW-26 Total Gallons Pumped:</b>	<b>84,513,313</b>
<b>IW-26 Total Acre-Feet Pumped:</b>	<b>259</b>
<b>IW-26 Average Yield Rate (gpm):</b>	<b>249</b>
<b>IW-26 % Run Time:</b>	<b>64.6%</b>

Well	Month	Gallons Pumped	Estimated Hours	Yield (Acrefeet)	Approx. Yield Rate (gpm)
IW-27	Jan	6,866,969	456	21.1	251
	Feb	4,281,031	284	13.1	251
	Mar	8,209,469	545	25.2	251
	Apr	7,056,531	469	21.7	251
	May	6,646,219	441	20.4	251
	Jun	10,186,156	676	31.3	251
	Jul	6,194,625	411	19.0	251
	Aug	10,180,313	676	31.2	251
	Sep	7,726,688	513	23.7	251
	Oct	9,323,156	619	28.6	251
	Nov	7,978,844	530	24.5	251
	Dec	5,087,781	338	15.6	251

<b>IW-27 Total Gallons Pumped:</b>	<b>89,737,781</b>
<b>IW-27 Total Acre-Feet Pumped:</b>	<b>275</b>
<b>IW-27 Average Yield Rate (gpm):</b>	<b>251</b>
<b>IW-27 % Run Time:</b>	<b>68.0%</b>

Well	Month	Gallons Pumped	Estimated Hours	Yield (Acrefeet)	Approx. Yield Rate (gpm)
IW-28	Jan	2,369,000	169	7.3	233
	Feb	364,000	26	1.1	233
	Mar	7,525,063	538	23.1	233
	Apr	6,989,938	500	21.4	233
	May	6,156,938	440	18.9	233
	Jun	9,712,875	695	29.8	233
	Jul	6,729,188	481	20.6	233
	Aug	9,740,438	697	29.9	233
	Sep	7,077,063	506	21.7	233
	Oct	7,936,750	568	24.4	233
	Nov	7,230,750	517	22.2	233
	Dec	4,542,125	325	13.9	233

<b>IW-28 Total Gallons Pumped:</b>	<b>76,374,125</b>
<b>IW-28 Total Acre-Feet Pumped:</b>	<b>234</b>
<b>IW-28 Average Yield Rate (gpm):</b>	<b>233</b>
<b>IW-28 % Run Time:</b>	<b>62.4%</b>

**BasinWells Associates PLLC**

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Well	Month	Gallons Pumped	Estimated Hours	Yield (Acrefeet)	Approx. Yield Rate (gpm)
IW-29	Jan	22,152,500	720	68.0	513
	Feb	20,698,813	672	63.5	513
	Mar	22,905,125	744	70.3	513
	Apr	21,245,063	690	65.2	513
	May	16,233,000	527	49.8	513
	Jun	21,334,938	693	65.5	513
	Jul	20,087,438	653	61.6	513
	Aug	20,683,750	672	63.5	513
	Sep	16,697,750	542	51.2	513
	Oct	12,399,625	403	38.1	513
	Nov	17,160,875	558	52.7	513
	Dec	9,676,813	314	29.7	513

<b>IW-29 Total Gallons Pumped:</b>	<b>221,275,688</b>
<b>IW-29 Total Acre-Feet Pumped:</b>	<b>679</b>
<b>IW-29 Average Yield Rate (gpm):</b>	<b>513</b>
<b>IW-29 % Run Time:</b>	<b>82.1%</b>

Well	Month	Gallons Pumped	Estimated Hours	Yield (Acrefeet)	Approx. Yield Rate (gpm)
PS-1	Jan	0	0	0.0	0
	Feb	0	0	0.0	0
	Mar	0	0	0.0	0
	Apr	31,673,125	612	97.2	862
	May	30,326,000	586	93.1	862
	Jun	36,708,000	710	112.6	862
	Jul	34,463,250	666	105.8	862
	Aug	35,544,375	687	109.1	862
	Sep	34,434,000	666	105.7	862
	Oct	35,376,875	684	108.6	862
	Nov	35,704,875	690	109.6	862
	Dec	18,245,500	353	56.0	862

<b>PS-1 Total Gallons Pumped:</b>	<b>292,476,000</b>
<b>PS-1 Total Acre-Feet Pumped:</b>	<b>898</b>
<b>PS-1 Average Yield Rate (gpm):</b>	<b>862</b>
<b>PS-1 % Run Time:</b>	<b>64.6%</b>

Well	Month	Gallons Pumped	Estimated Hours	Yield (Acrefeet)	Approx. Yield Rate (gpm)
PS-2	Jan	37,301,875	744	114.5	835
	Feb	32,656,250	652	100.2	835
	Mar	36,148,125	721	110.9	835
	Apr	34,409,875	687	105.6	835
	May	28,577,500	570	87.7	835
	Jun	34,544,125	689	106.0	835
	Jul	32,400,875	647	99.4	835
	Aug	26,729,750	533	82.0	835
	Sep	27,100,750	541	83.2	835
	Oct	1,986,000	40	6.1	835
	Nov	0	0	0.0	0
	Dec	0	0	0.0	0

<b>PS-2 Total Gallons Pumped:</b>	<b>291,855,125</b>
<b>PS-2 Total Acre-Feet Pumped:</b>	<b>896</b>
<b>PS-2 Average Yield Rate (gpm):</b>	<b>835</b>
<b>PS-2 % Run Time:</b>	<b>66.5%</b>

Well	Month	Gallons Pumped	Estimated Hours	Yield (Acrefeet)	Approx. Yield Rate (gpm)
PS-3	Jan	43,316,000	737	132.9	980
	Feb	38,231,125	650	117.3	980
	Mar	43,442,375	739	133.3	980
	Apr	38,785,000	660	119.0	980
	May	27,158,375	462	83.3	980
	Jun	30,662,375	521	94.1	980
	Jul	16,817,125	286	51.6	980
	Aug	22,364,000	380	68.6	980
	Sep	15,600,000	265	47.9	980
	Oct	38,605,875	657	118.5	980
	Nov	40,420,625	687	124.0	980
	Dec	20,825,500	354	63.9	980

<b>PS-3 Total Gallons Pumped:</b>	<b>376,228,375</b>
<b>PS-3 Total Acre-Feet Pumped:</b>	<b>1155</b>
<b>PS-3 Average Yield Rate (gpm):</b>	<b>980</b>
<b>PS-3 % Run Time:</b>	<b>73.0%</b>

Well	Month	Gallons Pumped	Estimated Hours	Yield (Acrefeet)	Approx. Yield Rate (gpm)
PS-4	Jan	50,550,375	732	155.1	1151
	Feb	45,032,250	652	138.2	1151
	Mar	51,405,000	744	157.7	1151
	Apr	47,916,500	694	147.0	1151
	May	33,918,875	491	104.1	1151
	Jun	47,316,250	685	145.2	1151
	Jul	32,697,875	473	100.3	1151
	Aug	46,905,125	679	143.9	1151
	Sep	45,617,625	661	140.0	1151
	Oct	45,963,375	666	141.0	1151
	Nov	46,694,250	676	143.3	1151
	Dec	23,928,000	346	73.4	1151

<b>PS-4 Total Gallons Pumped:</b>	<b>517,945,500</b>
<b>PS-4 Total Acre-Feet Pumped:</b>	<b>1589</b>
<b>PS-4 Average Yield Rate (gpm):</b>	<b>1151</b>
<b>PS-4 % Run Time:</b>	<b>85.6%</b>

Well	Month	Gallons Pumped	Estimated Hours	Yield (Acrefeet)	Approx. Yield Rate (gpm)
MC-1	Jan	36,664,000	711	112.5	860
	Feb	33,856,875	656	103.9	860
	Mar	37,509,125	727	115.1	860
	Apr	36,316,750	704	111.4	860
	May	27,187,375	527	83.4	860
	Jun	24,088,125	467	73.9	860
	Jul	34,236,500	663	105.1	860
	Aug	34,695,125	672	106.5	860
	Sep	34,509,500	669	105.9	860
	Oct	18,751,500	363	57.5	860
	Nov	35,774,625	693	109.8	860
	Dec	13,626,500	264	41.8	860

<b>MC-1 Total Gallons Pumped:</b>	<b>367,216,000</b>
<b>MC-1 Total Acre-Feet Pumped:</b>	<b>1127</b>
<b>MC-1 Average Yield Rate (gpm):</b>	<b>860</b>
<b>MC-1 % Run Time:</b>	<b>81.2%</b>

Well	Month	Gallons Pumped	Estimated Hours	Yield (Acrefeet)	Approx. Yield Rate (gpm)
MC-2	Jan	26,540,125	744	81.4	594
	Feb	23,377,313	656	71.7	594
	Mar	26,565,750	745	81.5	594
	Apr	21,710,500	609	66.6	594
	May	17,870,125	501	54.8	594
	Jun	25,685,438	720	78.8	594
	Jul	23,683,813	664	72.7	594
	Aug	24,175,000	678	74.2	594
	Sep	23,581,375	661	72.4	594
	Oct	24,093,750	676	73.9	594
	Nov	24,154,375	677	74.1	594
	Dec	12,385,000	347	38.0	594

<b>MC-2 Total Gallons Pumped:</b>	<b>273,822,563</b>
<b>MC-2 Total Acre-Feet Pumped:</b>	<b>840</b>
<b>MC-2 Average Yield Rate (gpm):</b>	<b>594</b>
<b>MC-2 % Run Time:</b>	<b>87.7%</b>



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Well	Month	Gallons Pumped	Estimated Hours	Yield (Acrefeet)	Approx. Yield Rate (gpm)
MC-3	Jan	20,662,000	736	63.4	468
	Feb	18,249,313	650	56.0	468
	Mar	20,887,375	744	64.1	468
	Apr	19,504,688	695	59.9	468
	May	12,523,125	446	38.4	468
	Jun	19,081,063	680	58.6	468
	Jul	18,360,750	654	56.3	468
	Aug	19,091,375	680	58.6	468
	Sep	12,270,750	437	37.7	468
	Oct	15,197,375	541	46.6	468
	Nov	17,384,375	619	53.3	468
	Dec	8,960,500	319	27.5	468

Well	Month	Gallons Pumped	Estimated Hours	Yield (Acrefeet)	Approx. Yield Rate (gpm)
MC-4	Jan	20,784,500	744	63.8	466
	Feb	18,348,500	657	56.3	466
	Mar	20,625,750	738	63.3	466
	Apr	19,257,750	690	59.1	466
	May	15,972,125	572	49.0	466
	Jun	19,222,500	688	59.0	466
	Jul	17,963,750	643	55.1	466
	Aug	16,375,500	586	50.3	466
	Sep	15,647,125	560	48.0	466
	Oct	15,223,375	545	46.7	466
	Nov	16,790,500	601	51.5	466
	Dec	8,614,000	308	26.4	466

<b>MC-3 Total Gallons Pumped:</b>	<b>202,172,688</b>
<b>MC-3 Total Acre-Feet Pumped:</b>	<b>620</b>
<b>MC-3 Average Yield Rate (gpm):</b>	<b>468</b>
<b>MC-3 % Run Time:</b>	<b>82.2%</b>

<b>MC-4 Total Gallons Pumped:</b>	<b>204,825,375</b>
<b>MC-4 Total Acre-Feet Pumped:</b>	<b>629</b>
<b>MC-4 Average Yield Rate (gpm):</b>	<b>466</b>
<b>MC-4 % Run Time:</b>	<b>83.7%</b>

Well	Month	Gallons Pumped	Estimated Hours	Yield (Acrefeet)	Approx. Yield Rate (gpm)
FFS-1	Jan	36,725,375	744	112.7	823
	Feb	26,023,625	527	79.9	823
	Mar	26,667,375	540	81.8	823
	Apr	26,409,750	535	81.0	823
	May	23,999,500	486	73.6	823
	Jun	34,872,375	706	107.0	823
	Jul	27,206,750	551	83.5	823
	Aug	9,326,750	189	28.6	823
	Sep	8,750,250	177	26.9	823
	Oct	33,726,375	683	103.5	823
	Nov	33,164,500	672	101.8	823
	Dec	6,762,875	137	20.8	823

Well	Month	Gallons Pumped	Estimated Hours	Yield (Acrefeet)	Approx. Yield Rate (gpm)
FFS-2	Jan	34,618,750	680	106.2	848
	Feb	24,756,250	487	76.0	848
	Mar	34,232,375	673	105.0	848
	Apr	31,227,625	614	95.8	848
	May	25,647,375	504	78.7	848
	Jun	34,715,250	682	106.5	848
	Jul	9,303,375	183	28.5	848
	Aug	0	0	0.0	0
	Sep	4,502,375	88	13.8	848
	Oct	33,624,500	661	103.2	848
	Nov	32,360,375	636	99.3	848
	Dec	16,955,750	333	52.0	848

<b>FFS-1 Total Gallons Pumped:</b>	<b>293,635,500</b>
<b>FFS-1 Total Acre-Feet Pumped:</b>	<b>901</b>
<b>FFS-1 Average Yield Rate (gpm):</b>	<b>823</b>
<b>FFS-1 % Run Time:</b>	<b>67.9%</b>

<b>FFS-2 Total Gallons Pumped:</b>	<b>281,944,000</b>
<b>FFS-2 Total Acre-Feet Pumped:</b>	<b>865</b>
<b>FFS-2 Average Yield Rate (gpm):</b>	<b>848</b>
<b>FFS-2 % Run Time:</b>	<b>63.3%</b>

Well	Month	Gallons Pumped	Estimated Hours	Yield (Acrefeet)	Approx. Yield Rate (gpm)
FFS-3	Jan	7,664,094	744	23.5	172
	Feb	5,285,406	513	16.2	172
	Mar	7,143,875	693	21.9	172
	Apr	6,585,125	639	20.2	172
	May	5,621,563	546	17.3	172
	Jun	7,434,688	721	22.8	172
	Jul	5,637,938	547	17.3	172
	Aug	6,716,875	652	20.6	172
	Sep	6,102,188	592	18.7	172
	Oct	7,211,250	700	22.1	172
	Nov	6,651,344	645	20.4	172
	Dec	3,475,156	337	10.7	172

Well	Month	Gallons Pumped	Estimated Hours	Yield (Acrefeet)	Approx. Yield Rate (gpm)
FFS-4	Jan	53,000	9	0.2	102
	Feb	2,991,313	489	9.2	102
	Mar	4,554,156	744	14.0	102
	Apr	4,370,719	714	13.4	102
	May	1,752,813	286	5.4	102
	Jun	2,438,313	398	7.5	102
	Jul	2,412,438	394	7.4	102
	Aug	2,703,031	442	8.3	102
	Sep	2,445,875	400	7.5	102
	Oct	2,529,344	413	7.8	102
	Nov	2,336,219	382	7.2	102
	Dec	1,216,781	199	3.7	102

<b>FFS-3 Total Gallons Pumped:</b>	<b>75,529,500</b>
<b>FFS-3 Total Acre-Feet Pumped:</b>	<b>232</b>
<b>FFS-3 Average Yield Rate (gpm):</b>	<b>172</b>
<b>FFS-3 % Run Time:</b>	<b>83.7%</b>

<b>FFS-4 Total Gallons Pumped:</b>	<b>29,804,000</b>
<b>FFS-4 Total Acre-Feet Pumped:</b>	<b>91</b>
<b>FFS-4 Average Yield Rate (gpm):</b>	<b>102</b>
<b>FFS-4 % Run Time:</b>	<b>55.6%</b>

Well	Month	Gallons Pumped	Estimated Hours	Yield (Acrefeet)	Approx. Yield Rate (gpm)
FFS-5	Jan	43,101,625	653	132.3	1100
	Feb	34,108,375	517	104.7	1100
	Mar	17,012,125	258	52.2	1100
	Apr	0	0	0.0	0
	May	0	0	0.0	0
	Jun	0	0	0.0	0
	Jul	0	0	0.0	0
	Aug	4,416,125	67	13.6	1100
	Sep	18,868,000	286	57.9	1100
	Oct	38,681,625	586	118.7	1100
	Nov	41,860,750	634	128.5	1100
	Dec	22,687,500	344	69.6	1100

Well	Month	Gallons Pumped	Estimated Hours	Yield (Acrefeet)	Approx. Yield Rate (gpm)
FFS-6	Jan	26,888,656	709	82.5	632
	Feb	21,314,094	562	65.4	632
	Mar	26,991,125	712	82.8	632
	Apr	26,142,500	689	80.2	632
	May	20,475,438	540	62.8	632
	Jun	25,769,688	680	79.1	632
	Jul	17,261,688	455	53.0	632
	Aug	5,073,563	134	15.6	632
	Sep	0	0	0.0	0
	Oct	0	0	0.0	0
	Nov	0	0	0.0	0
	Dec	0	0	0.0	0

<b>FFS-5 Total Gallons Pumped:</b>	<b>220,736,125</b>
<b>FFS-5 Total Acre-Feet Pumped:</b>	<b>677</b>
<b>FFS-5 Average Yield Rate (gpm):</b>	<b>1100</b>
<b>FFS-5 % Run Time:</b>	<b>38.2%</b>

<b>FFS-6 Total Gallons Pumped:</b>	<b>169,916,750</b>
<b>FFS-6 Total Acre-Feet Pumped:</b>	<b>521</b>
<b>FFS-6 Average Yield Rate (gpm):</b>	<b>632</b>
<b>FFS-6 % Run Time:</b>	<b>51.2%</b>

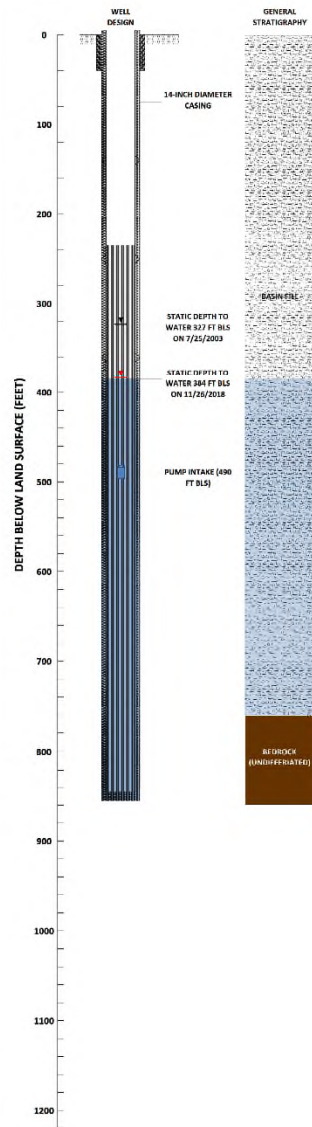
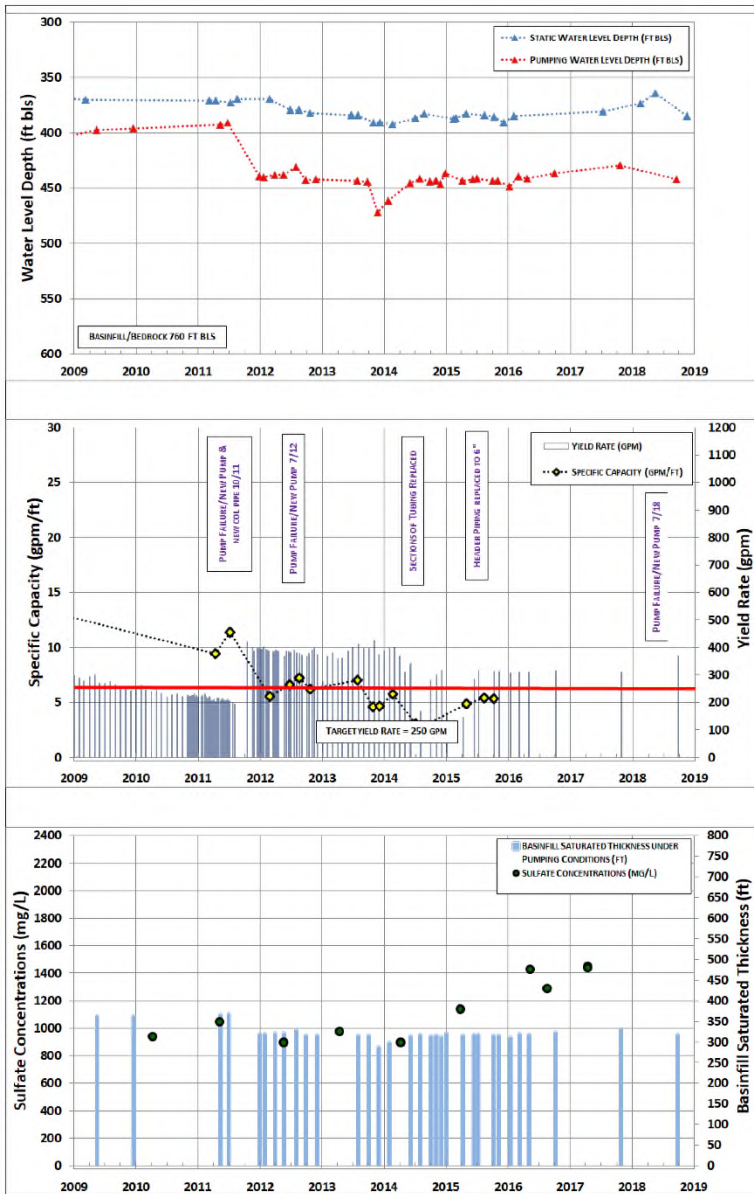
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ATTACHMENT B

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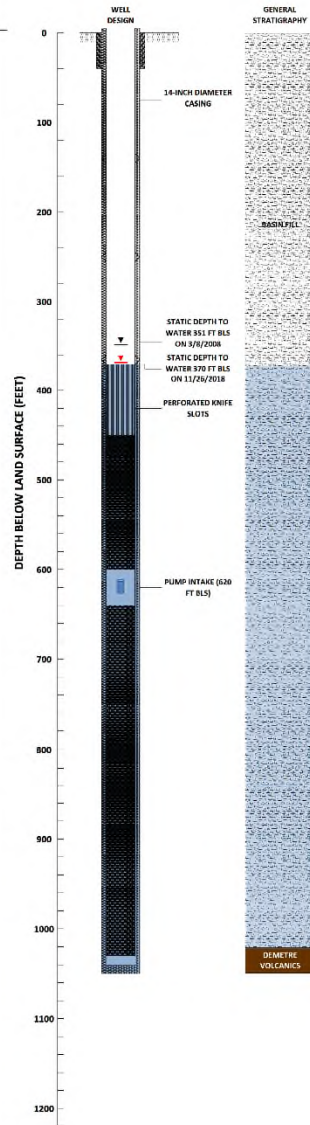
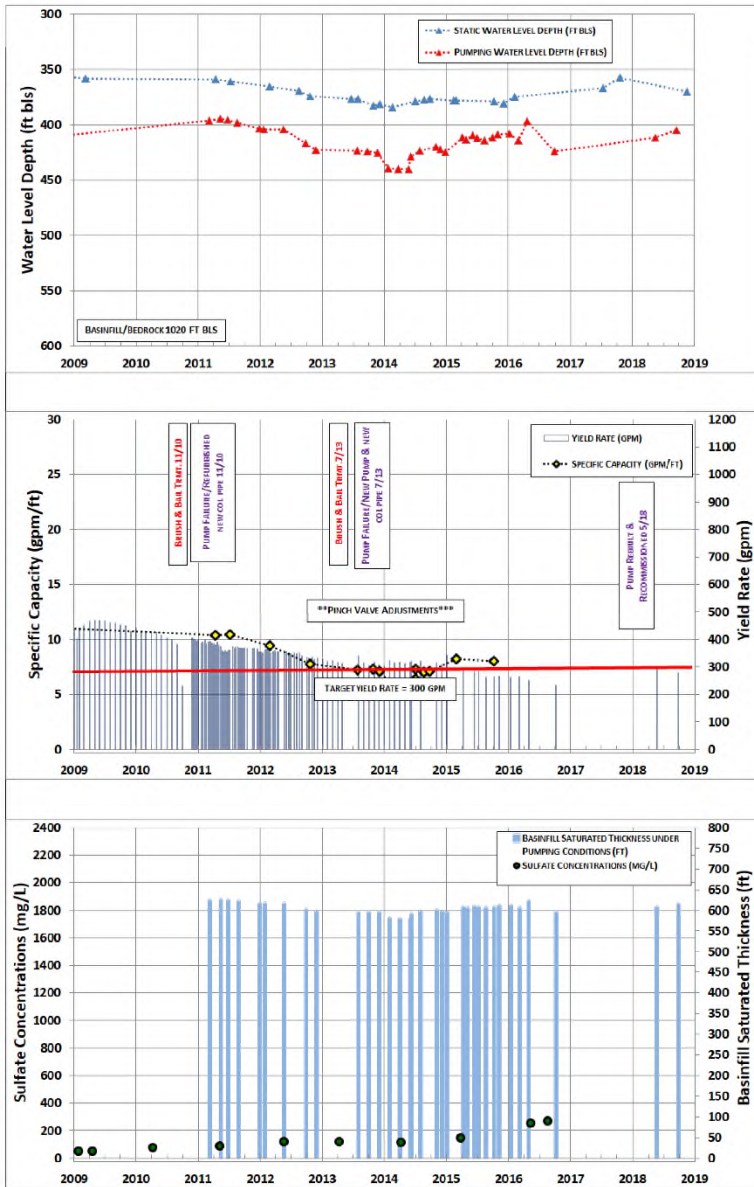
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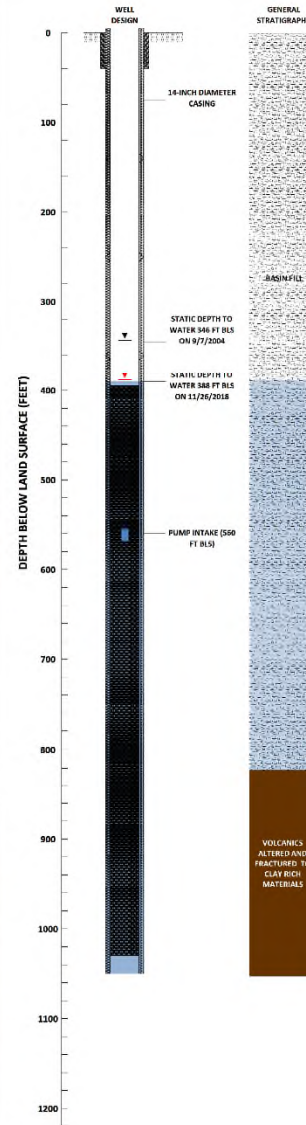
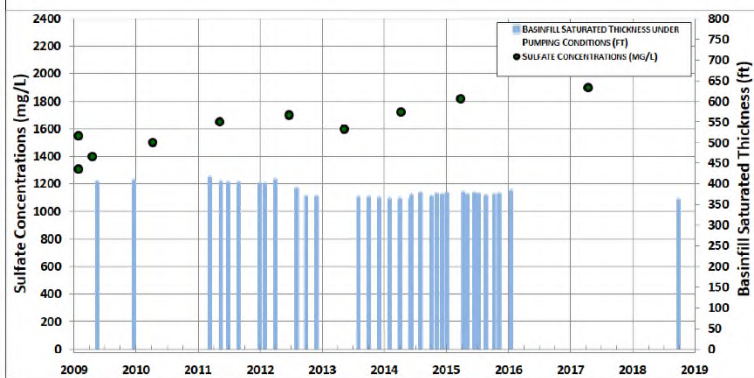
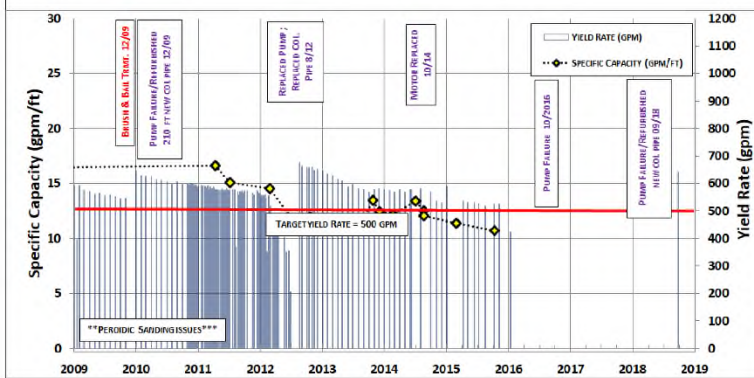
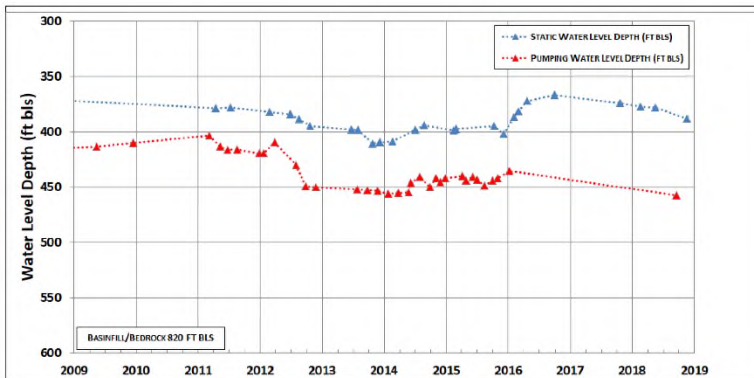
<p><b>BasinWells</b> ASSOCIATES PLLC <small>SPECIALISTS IN GROUNDWATER DEVELOPMENT</small></p>	<p><b>FREEPORT-McMORAN</b> COPPER &amp; GOLD</p>	IW-1: WATER LEVELS, YIELD, SPECIFIC CAPACITY, BASINFILL SAT. THK. AND SULFATE  CADASTRAL: D-18-13 29DCD ADWR REG. NO.: 55-623129 DRILL YEAR: 1978
	<p><b>VERSION DATE:</b> NOVEMBER 26, 2018</p>	

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<p>SPECIALISTS IN GROUNDWATER DEVELOPMENT</p>		IW-2A: WATER LEVELS, YIELD, SPECIFIC CAPACITY, BASINFILL SAT. THK. AND SULFATE
	<p><b>VERSION DATE:</b> NOVEMBER 26, 2018</p>	<p>CADASTRAL: D-18-13 28CCC ADWR REG. NO.: 55-216464 DRILL YEAR: 2008</p>

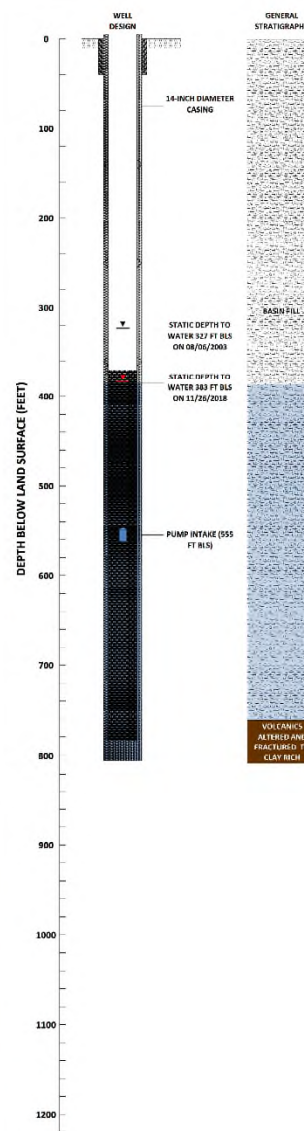
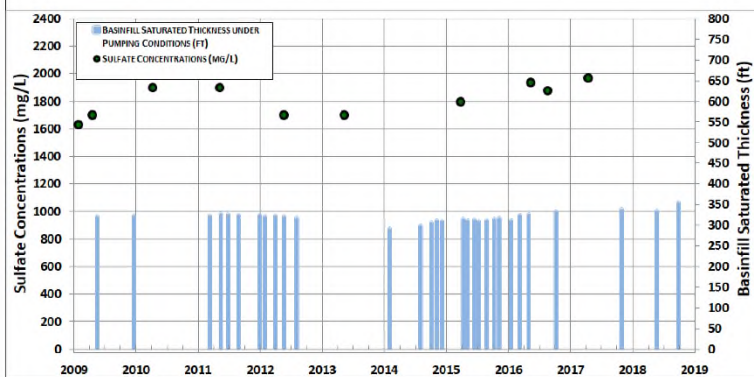
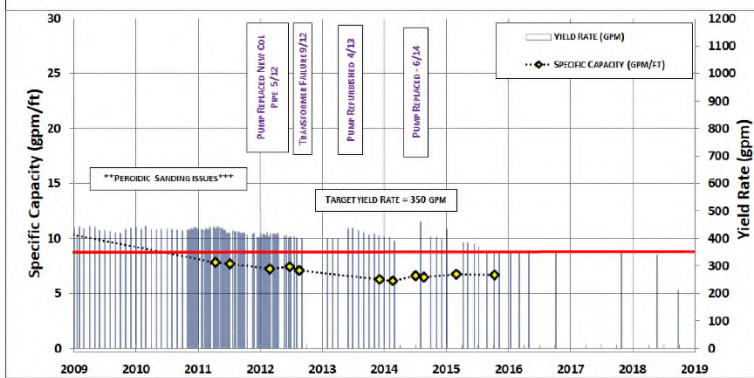
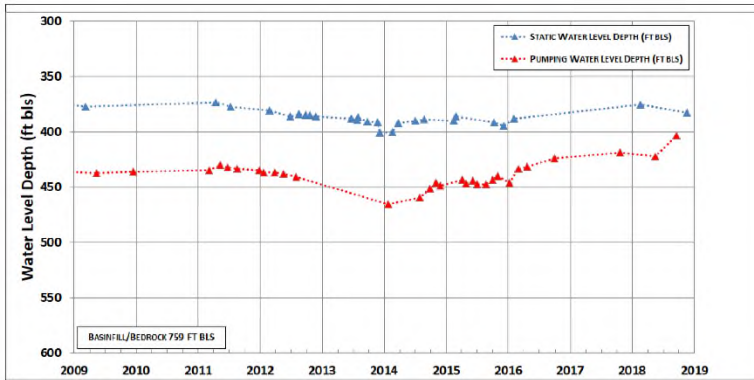
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<p><b>BasinWells</b> ASSOCIATES PLLC <small>SPECIALISTS IN GROUNDWATER DEVELOPMENT</small></p>	<p><b>FREEPORT-McMoRAN</b> COPPER &amp; GOLD</p> <p>VERSION DATE: <b>NOVEMBER 26, 2018</b></p>	<p>IW-3A: WATER LEVELS, YIELD, SPECIFIC CAPACITY, BASINFILL SAT. THK. AND SULFATE</p> <p>CADASTRAL: D-18-13 28CBC ADWR REG. NO.: 55-201732 DRILL YEAR: 2004</p>
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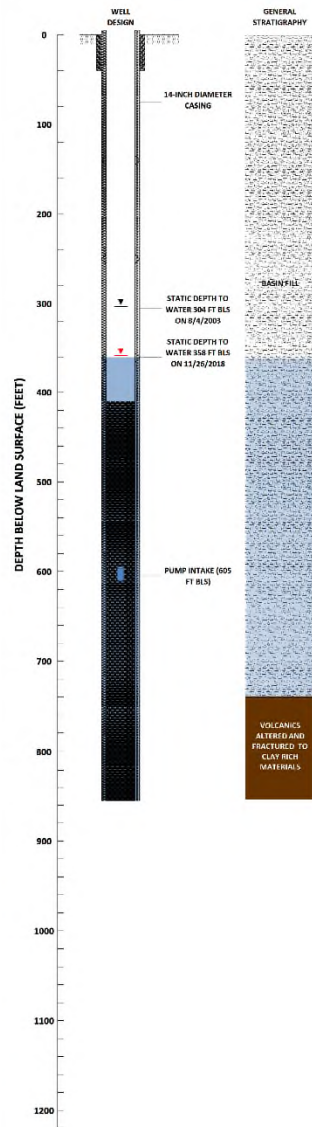
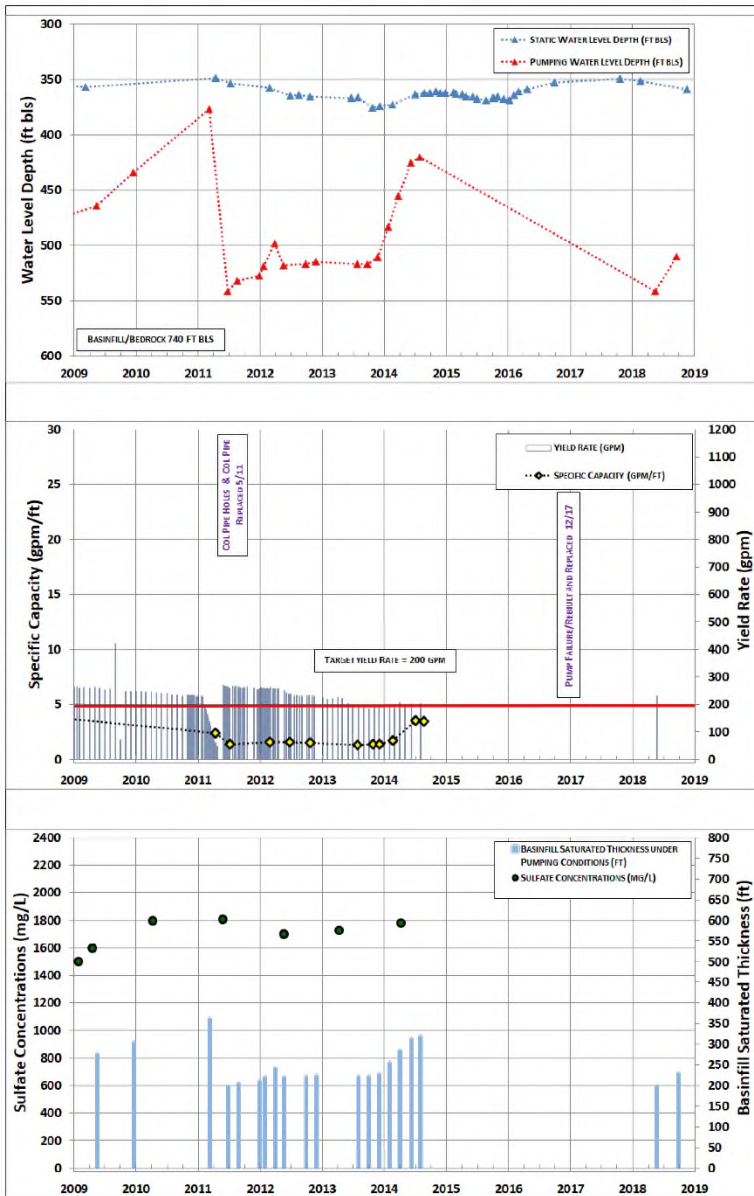
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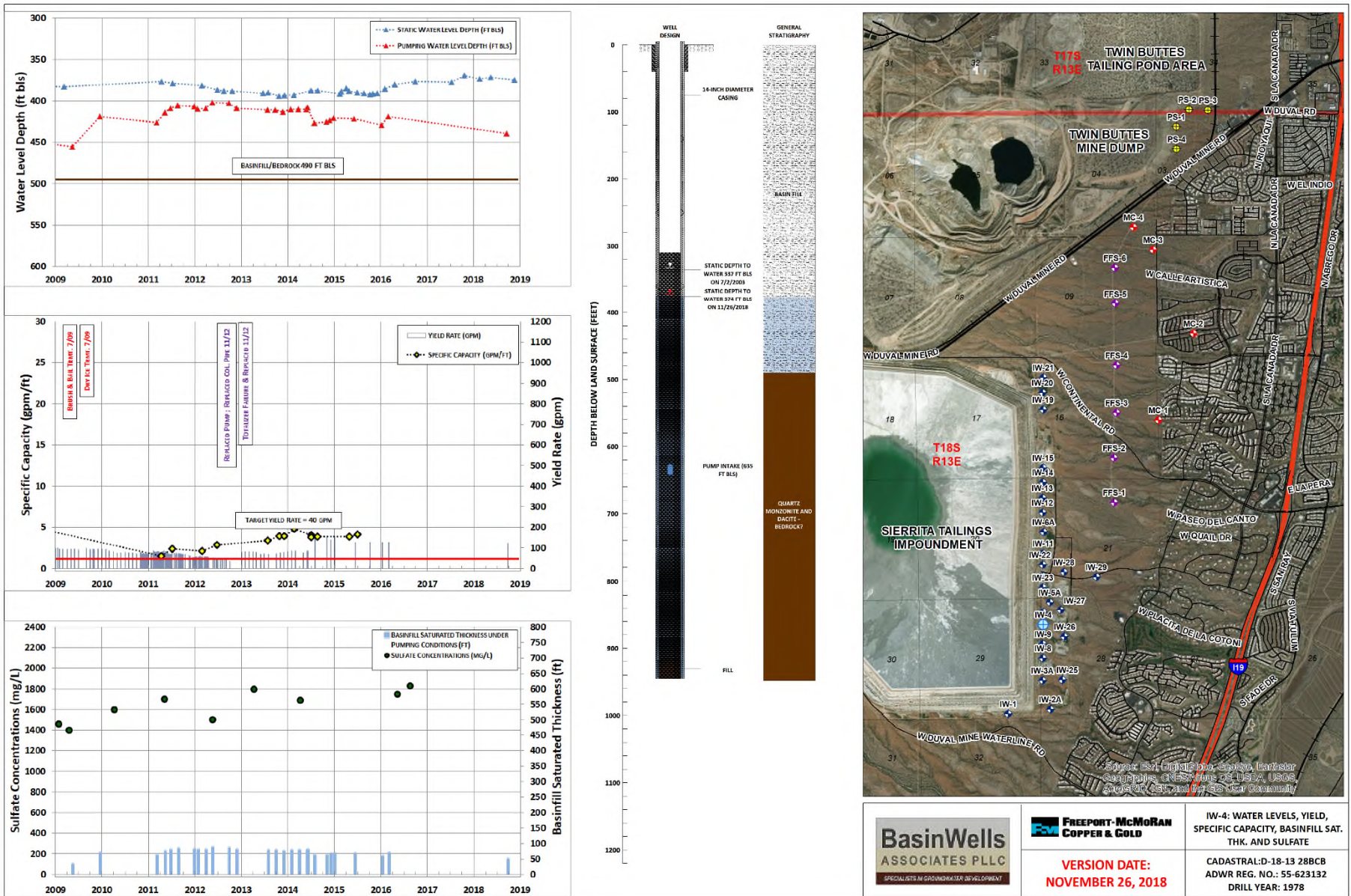
<p>SPECIALISTS IN GROUNDWATER DEVELOPMENT</p>		IW-8: WATER LEVELS, YIELD, SPECIFIC CAPACITY, BASINFILL SAT. THK. AND SULFATE  CADASTRAL: D-18-13 28BCC ADWR REG. NO.: 55-508236 DRILL YEAR: 1984
	<p><b>VERSION DATE:</b> <b>NOVEMBER 26, 2018</b></p>	

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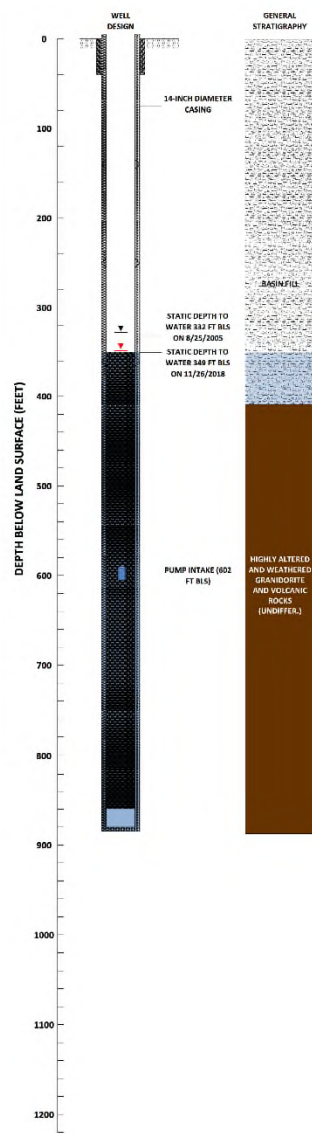
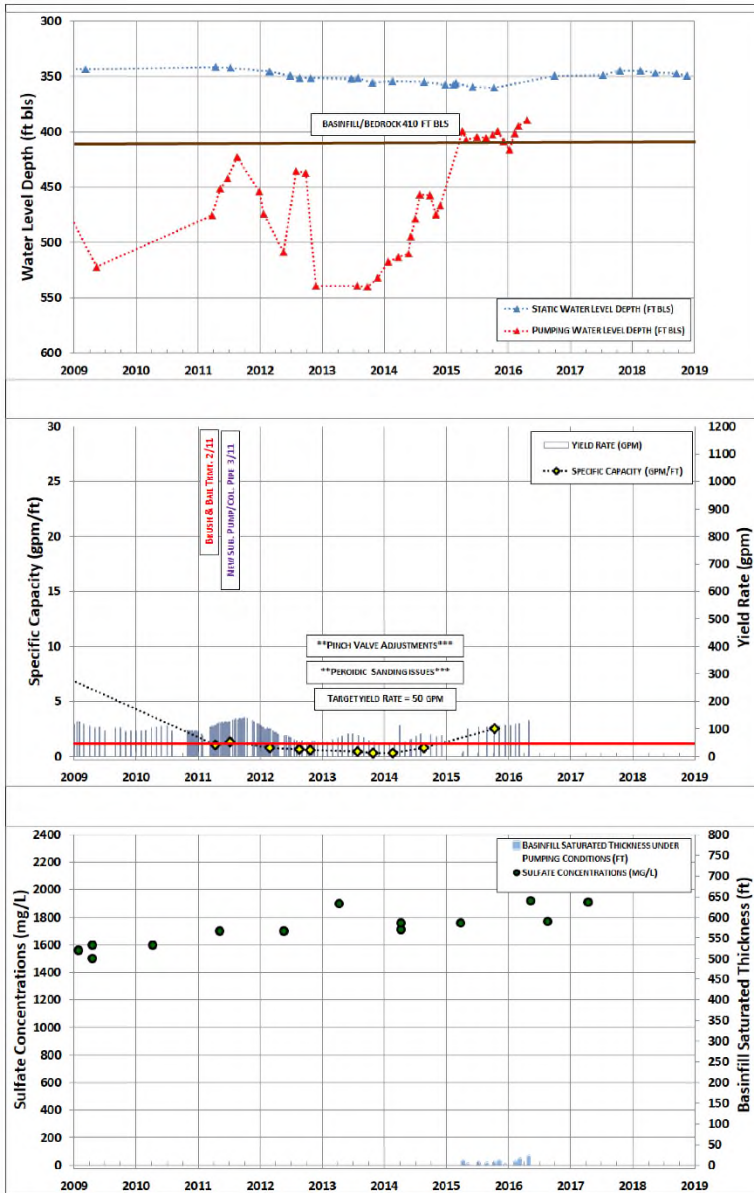


<p><b>BasinWells</b> ASSOCIATES PLLC <small>SPECIALISTS IN GROUNDWATER DEVELOPMENT</small></p>	<p><b>FREEPORT-McMoRan</b> COPPER &amp; GOLD</p>	IW-9: WATER LEVELS, YIELD, SPECIFIC CAPACITY, BASINFILL SAT. THK. AND SULFATE  CADASTRAL: D-18-13 28BCC ADWR REG. NO.: 55-508238 DRILL YEAR: 1984
	<p><b>VERSION DATE:</b> NOVEMBER 26, 2018</p>	

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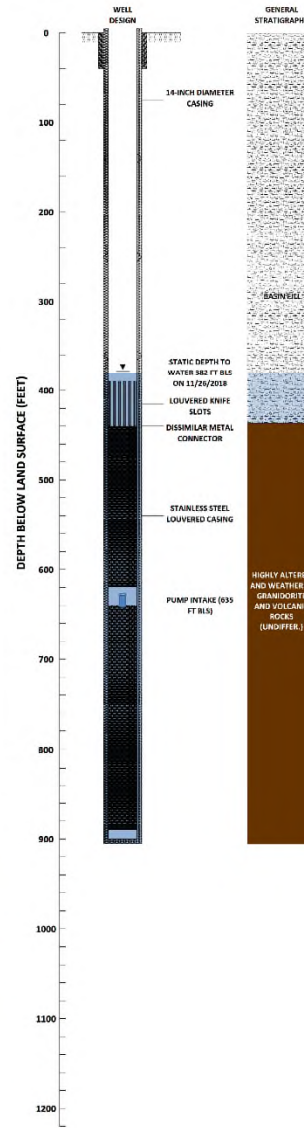
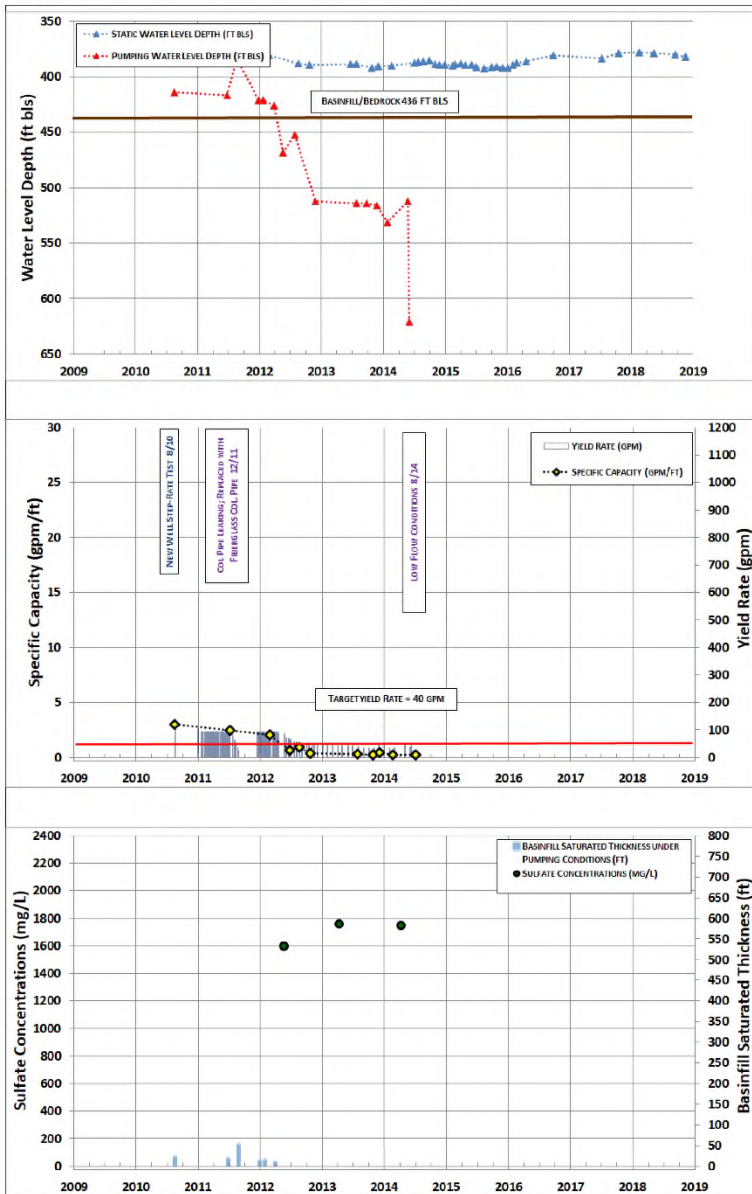


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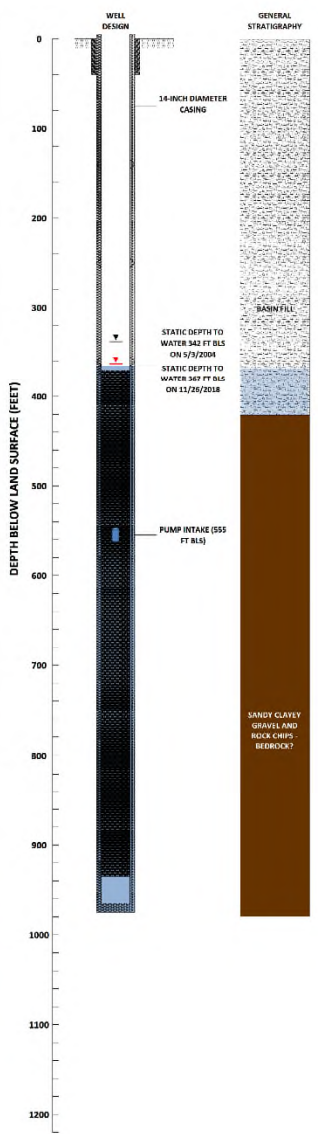
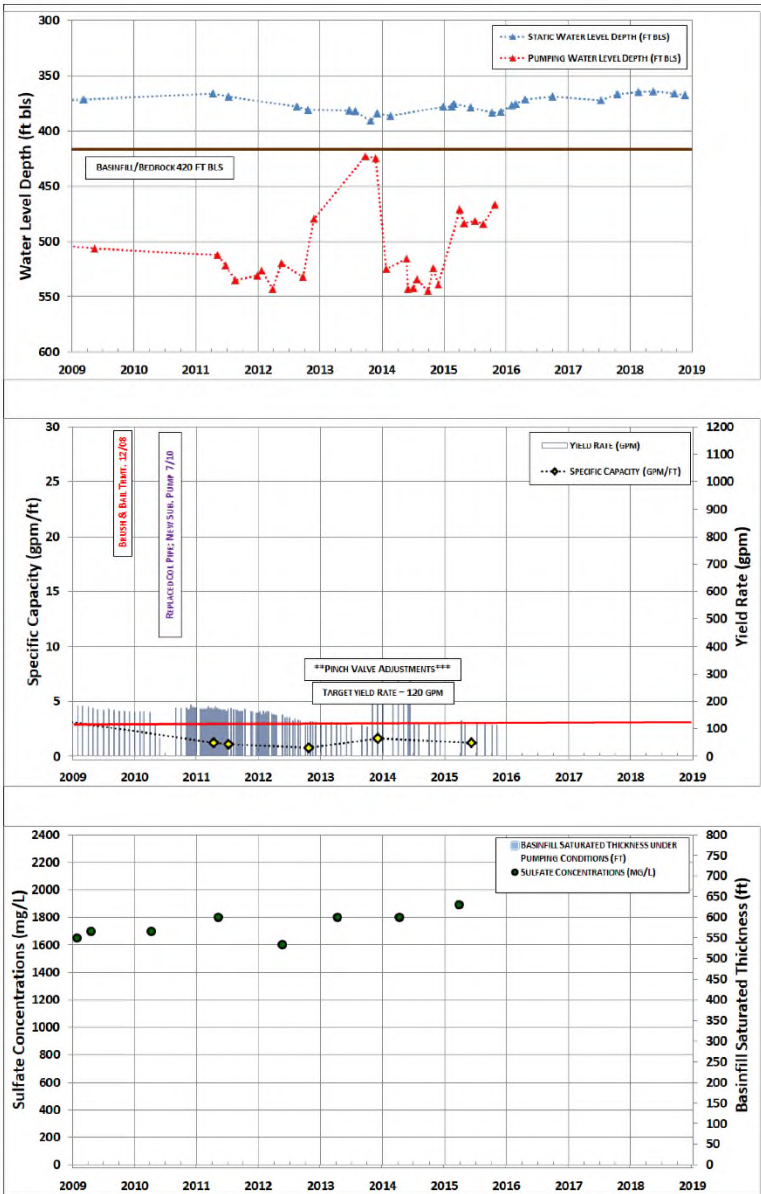
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	<p><b>VERSION DATE:</b> NOVEMBER 26, 2018</p>	<p>CADASTRAL: D-18-13 28888 ADWR REG. NO.: 55-200556 DRILL YEAR: 2004</p>

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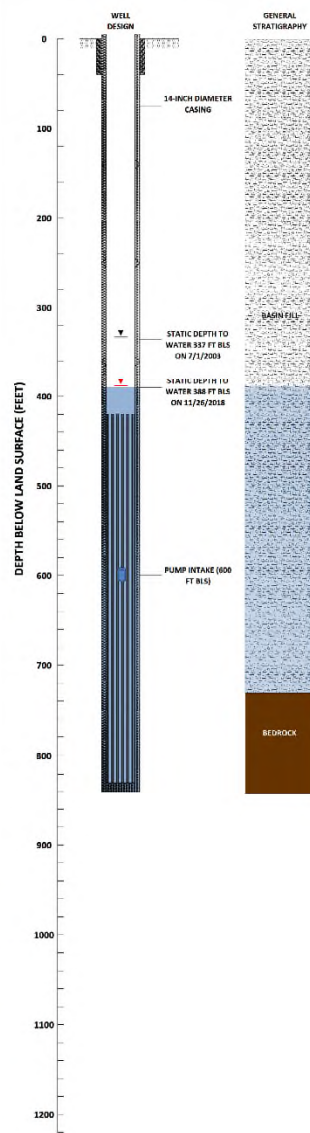
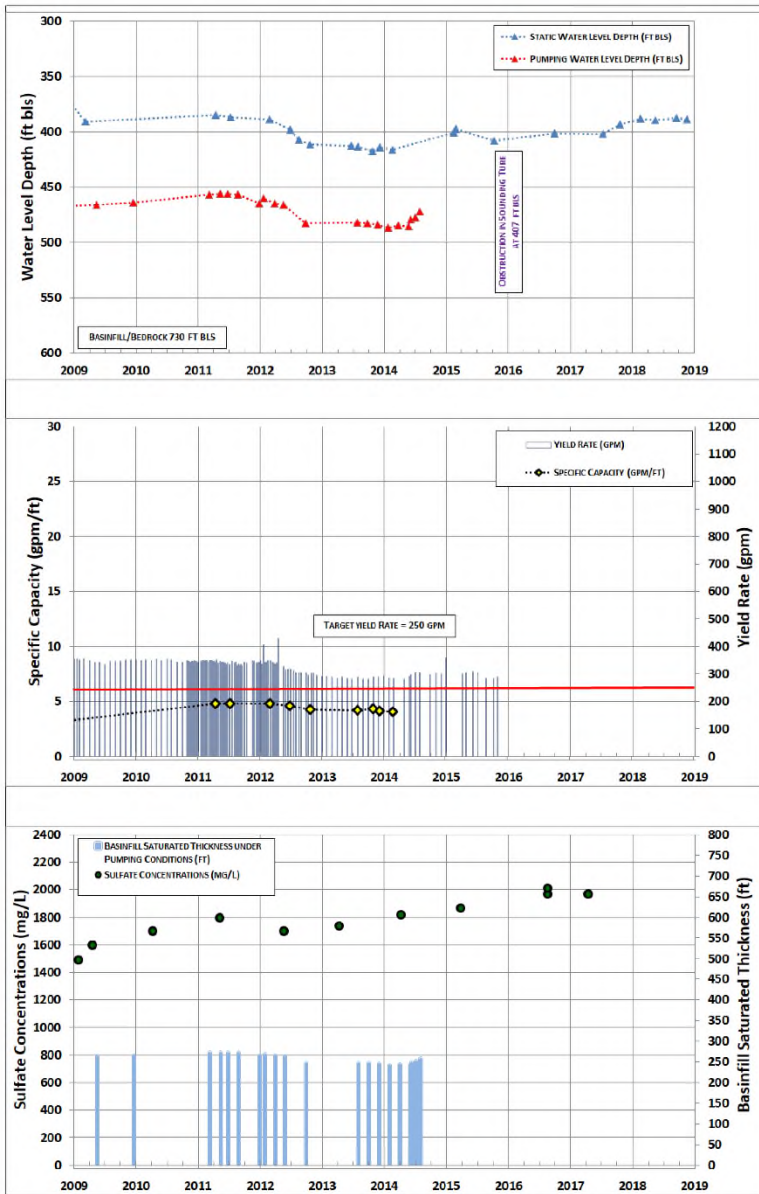


<p><b>BasinWells</b> ASSOCIATES PLLC <small>SPECIALISTS IN GROUNDWATER DEVELOPMENT</small></p>	<p><b>FREEPORT-McMoRAN</b> COPPER &amp; GOLD</p>	<p>IW-5A: WATER LEVELS, YIELD, SPECIFIC CAPACITY, BASINFILL SAT. THK. AND SULFATE</p>
	<p><b>VERSION DATE:</b> NOVEMBER 26, 2018</p>	<p>CADASTRAL:D-18-13 28888 ADWR REG. NO.: 55-219131 DRILL YEAR: 2010</p>

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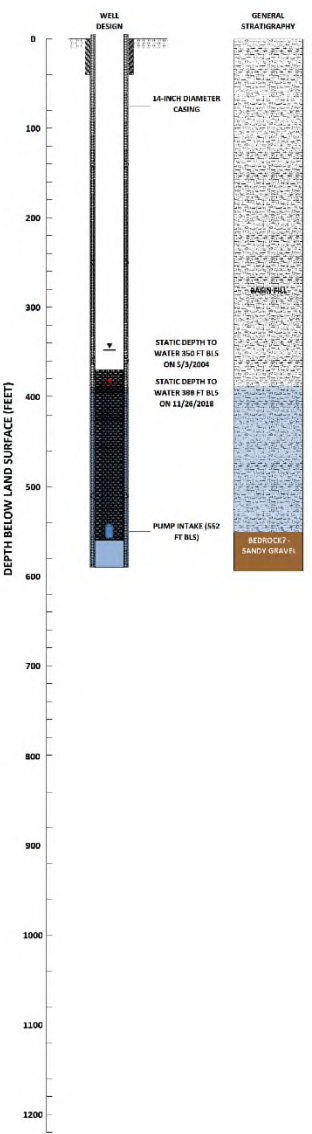
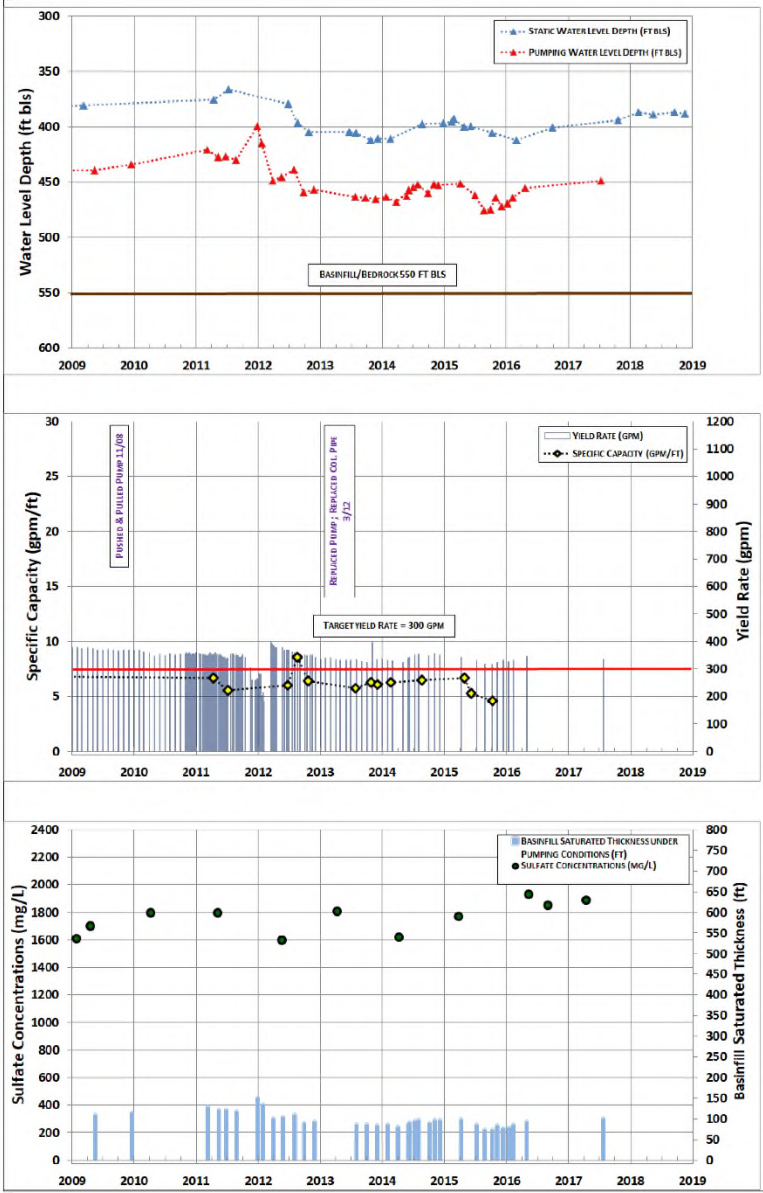


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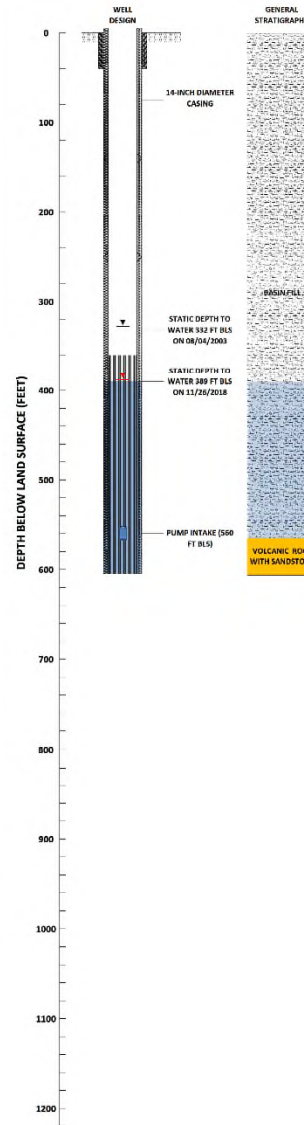
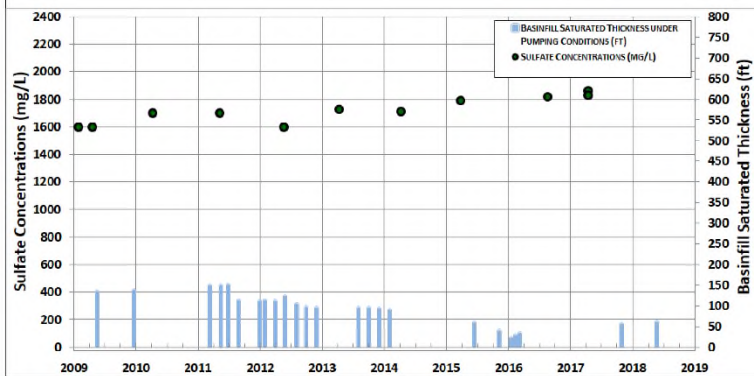
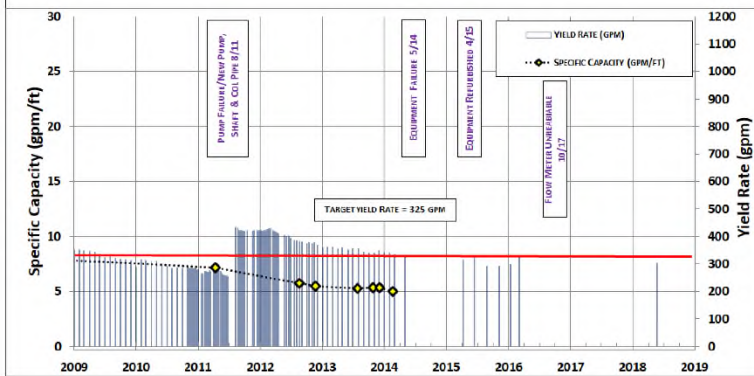
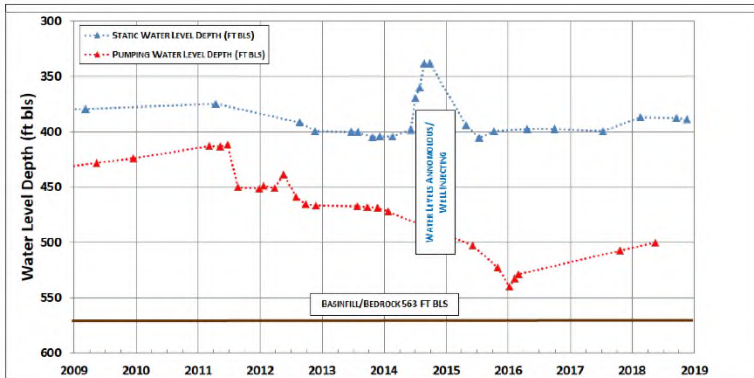
		IW-10: WATER LEVELS, YIELD, SPECIFIC CAPACITY, BASINFILL SAT. THK. AND SULFATE
	<b>VERSION DATE:</b> NOVEMBER 26, 2018	CADASTRAL: D-18-13 21CBC ADWR REG. NO.: 55-508237 DRILL YEAR: 1984

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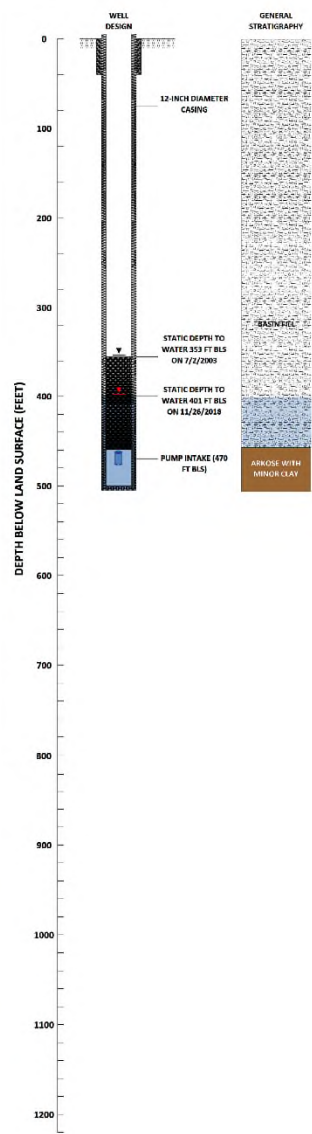
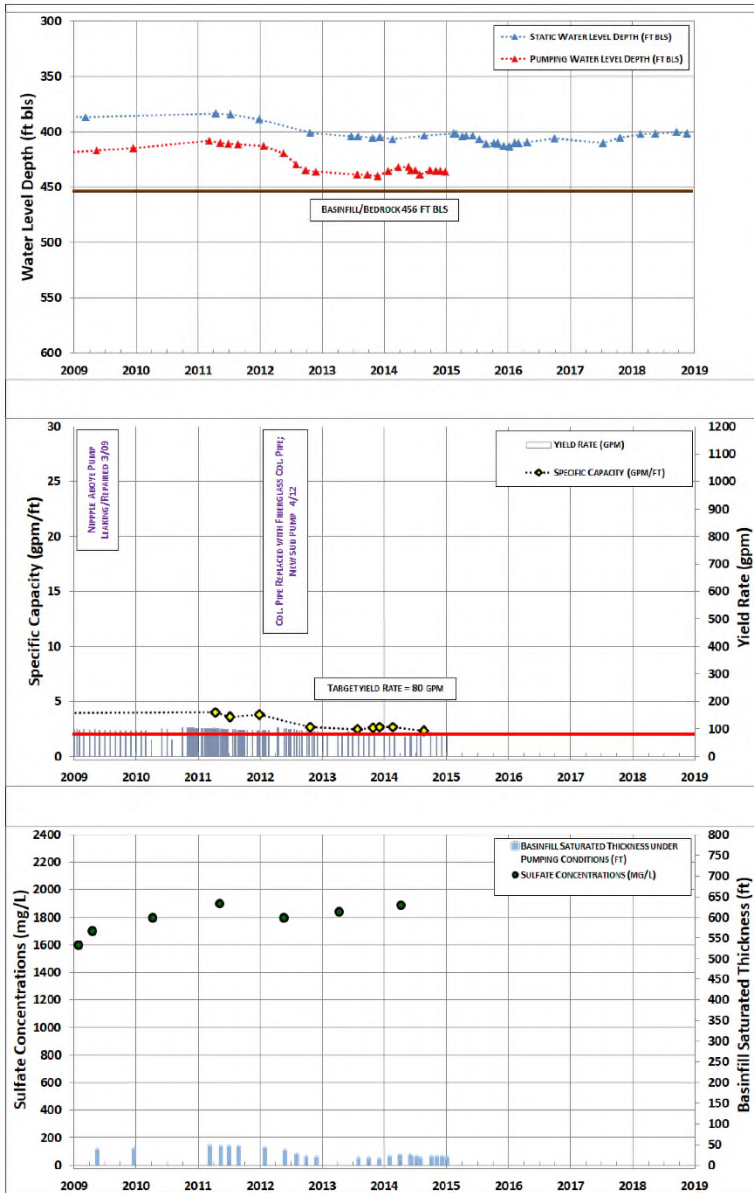


<p>BasinWells ASSOCIATES PLLC SPECIALISTS IN GROUNDWATER DEVELOPMENT</p>	<p>FREEPORT-McMORAN COPPER &amp; GOLD  VERSION DATE: NOVEMBER 26, 2018</p>	<p>IW-22: WATER LEVELS, YIELD, SPECIFIC CAPACITY, BASINFILL SAT. THK. AND SULFATE  CADASTRAL: D-18-13 21C8C ADWR REG. NO.: 55-200554 DRILL YEAR: 2004</p>
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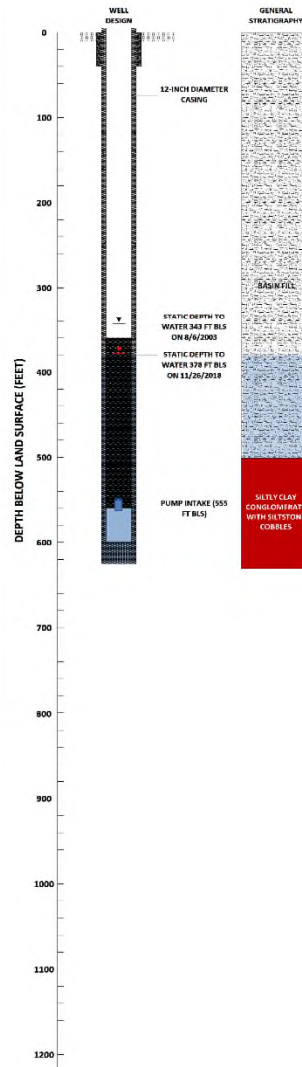
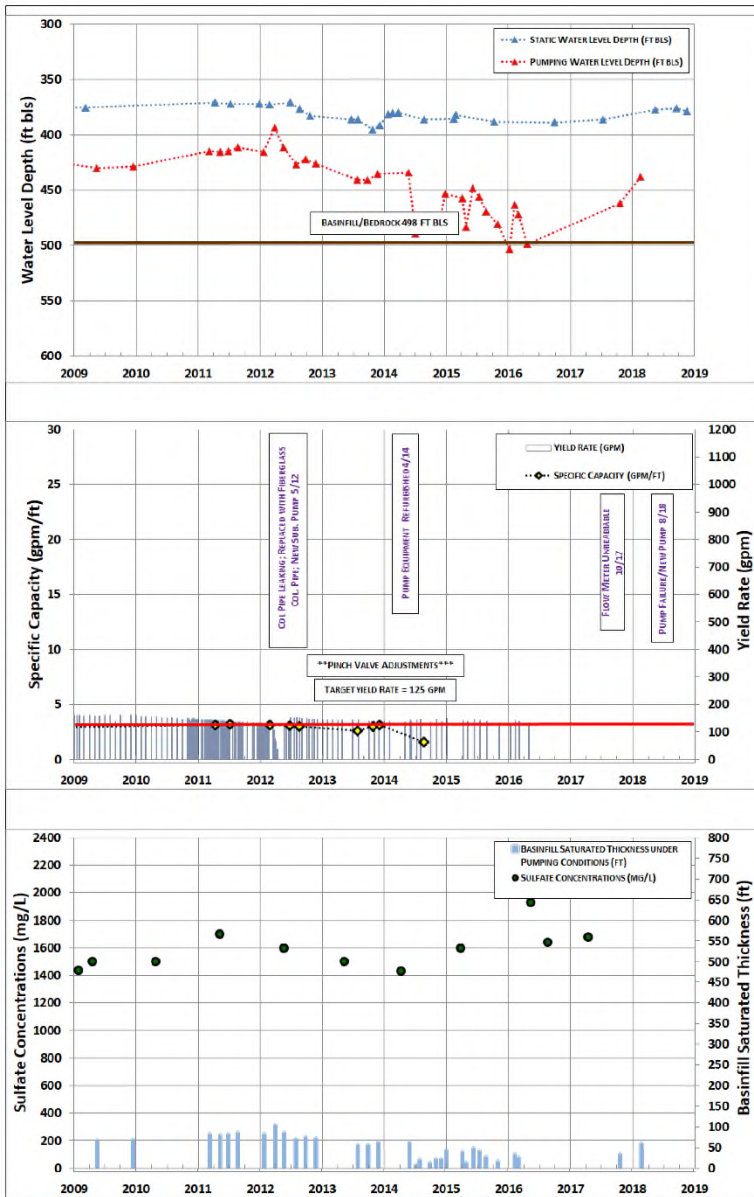


<p>SPECIALISTS IN GROUNDWATER DEVELOPMENT</p>		IW-11: WATER LEVELS, YIELD, SPECIFIC CAPACITY, BASINFILL SAT. THK. AND SULFATE  CADASTRAL: D-18-13 21C8C ADWR REG. NO.: 55-508235 DRILL YEAR: 1984
	<b>VERSION DATE: NOVEMBER 26, 2018</b>	



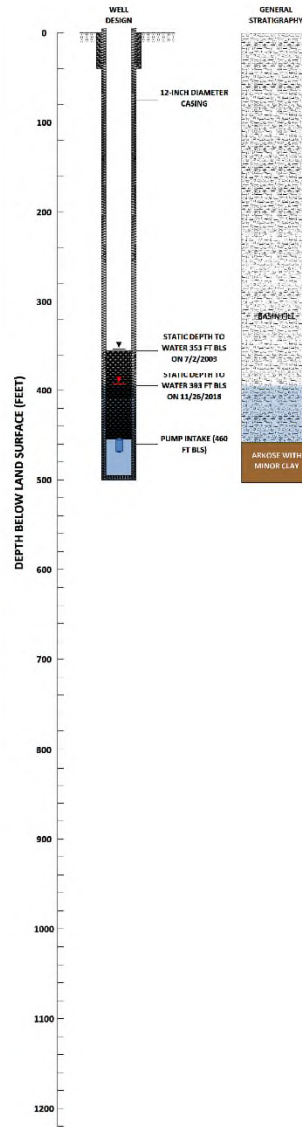
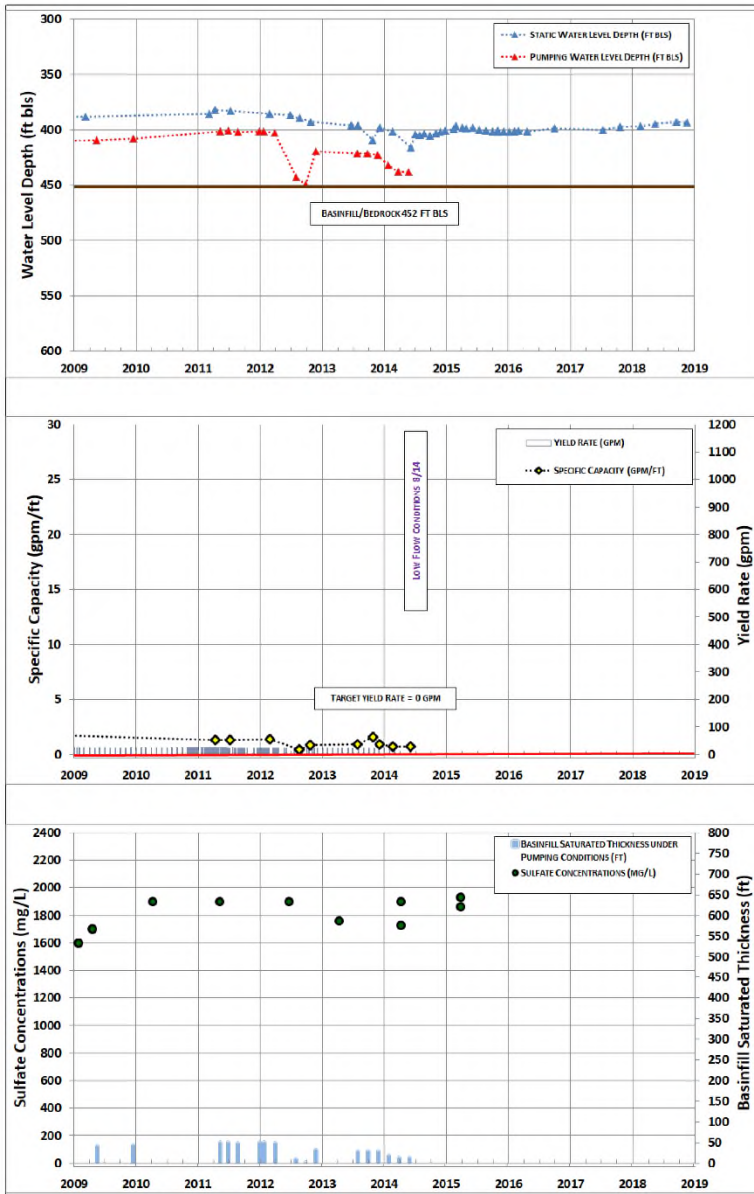
<p><b>BasinWells</b> ASSOCIATES PLLC <small>SPECIALISTS IN GROUNDWATER DEVELOPMENT</small></p>	<p><b>FREEPORT-McMoRAN</b> COPPER &amp; GOLD</p>	IW-6A: WATER LEVELS, YIELD, SPECIFIC CAPACITY, BASINFILL SAT. THK. AND SULFATE  CADASTRAL: D-18-13 21BCC ADWR REG. NO.: 55-545565 DRILL YEAR: 1994
	<p><b>VERSION DATE:</b> NOVEMBER 26, 2018</p>	

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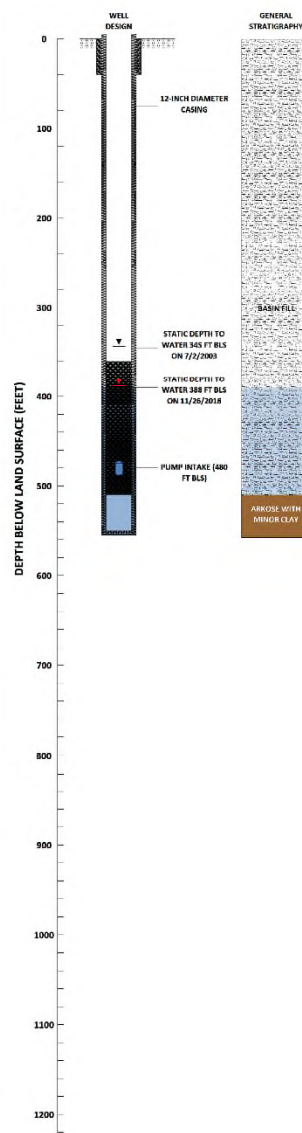
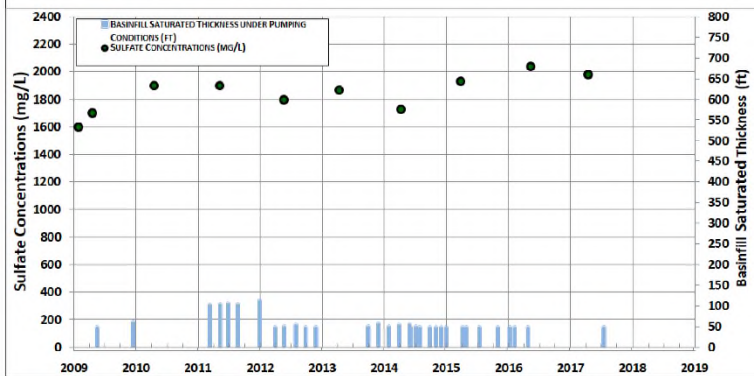
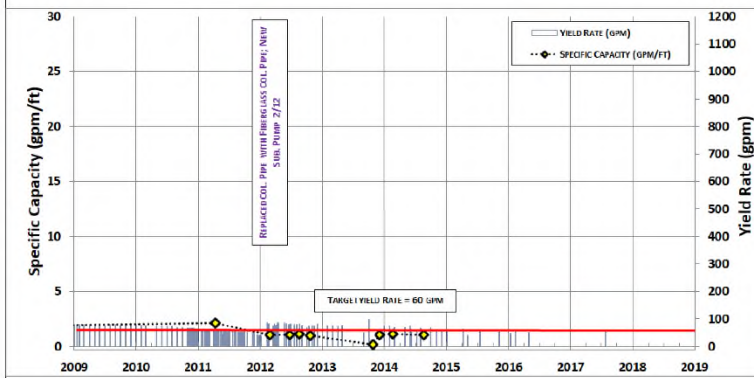
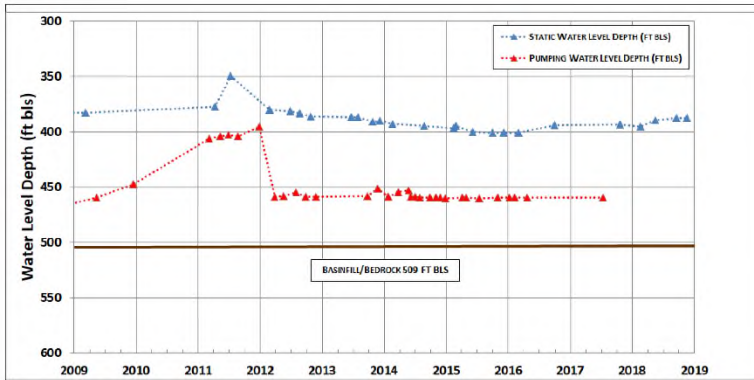
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	<p><b>VERSION DATE:</b> NOVEMBER 26, 2018</p>	<p>CADASTRAL: D-18-13 21BCB ADWR REG. NO.: 55-545555 DRILL YEAR: 1994</p>

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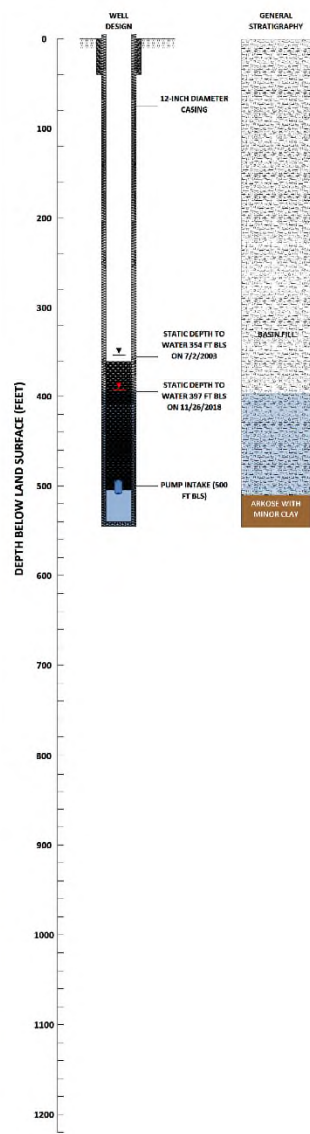
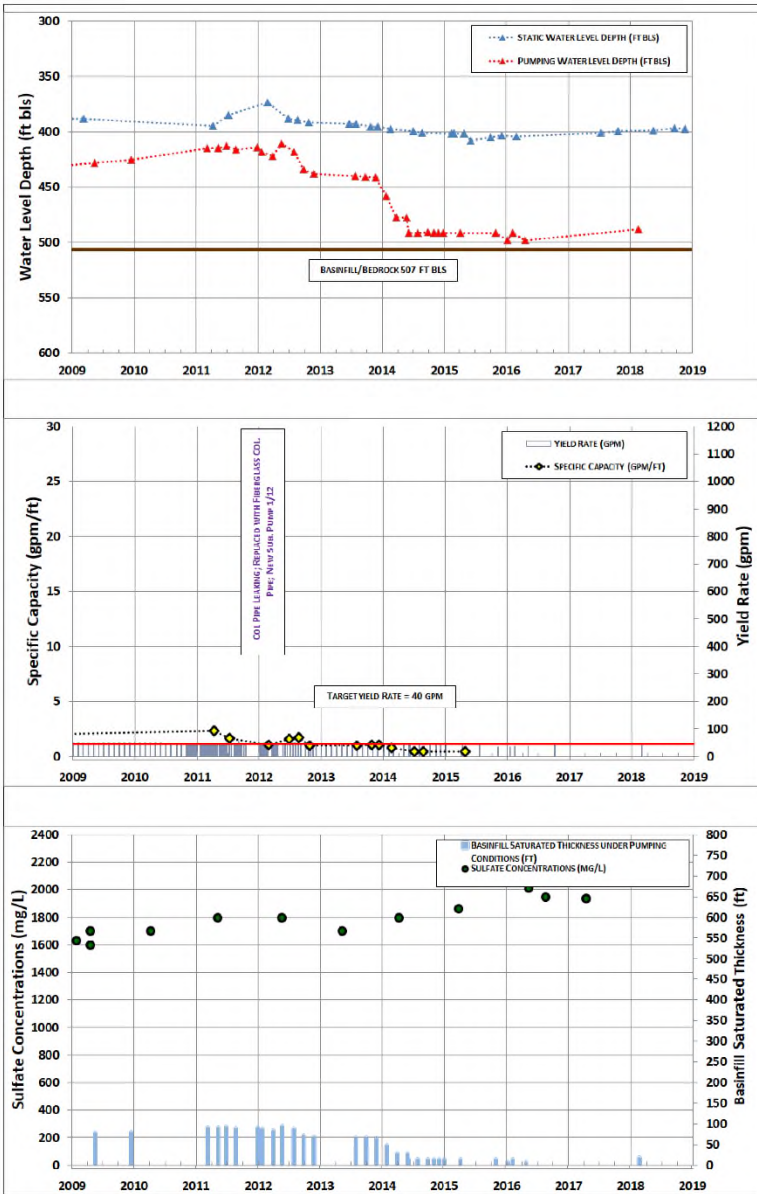
<p><b>BasinWells</b> ASSOCIATES PLLC SPECIALISTS IN GROUNDWATER DEVELOPMENT</p>	<p><b>FREEPORT-McMoRAN</b> COPPER &amp; GOLD</p>	IW-13: WATER LEVELS, YIELD, SPECIFIC CAPACITY, BASINFILL SAT. THK. AND SULFATE
	<p><b>VERSION DATE:</b> NOVEMBER 26, 2018</p>	CADASTRAL: D-18-13 21BBC ADWR REG. NO.: 55-545556 DRILL YEAR: 1994

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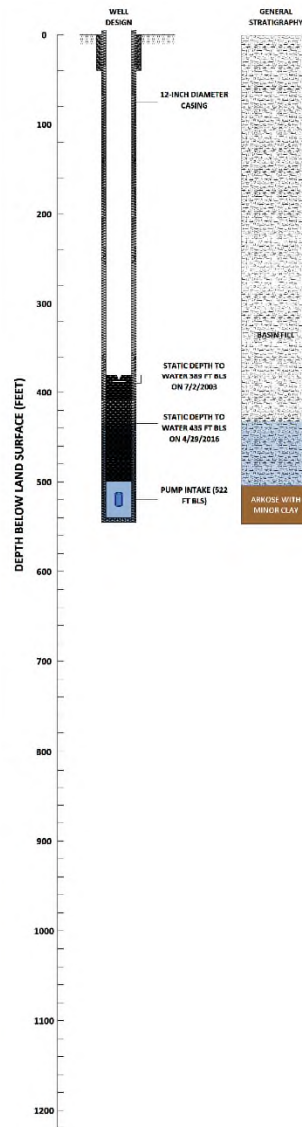
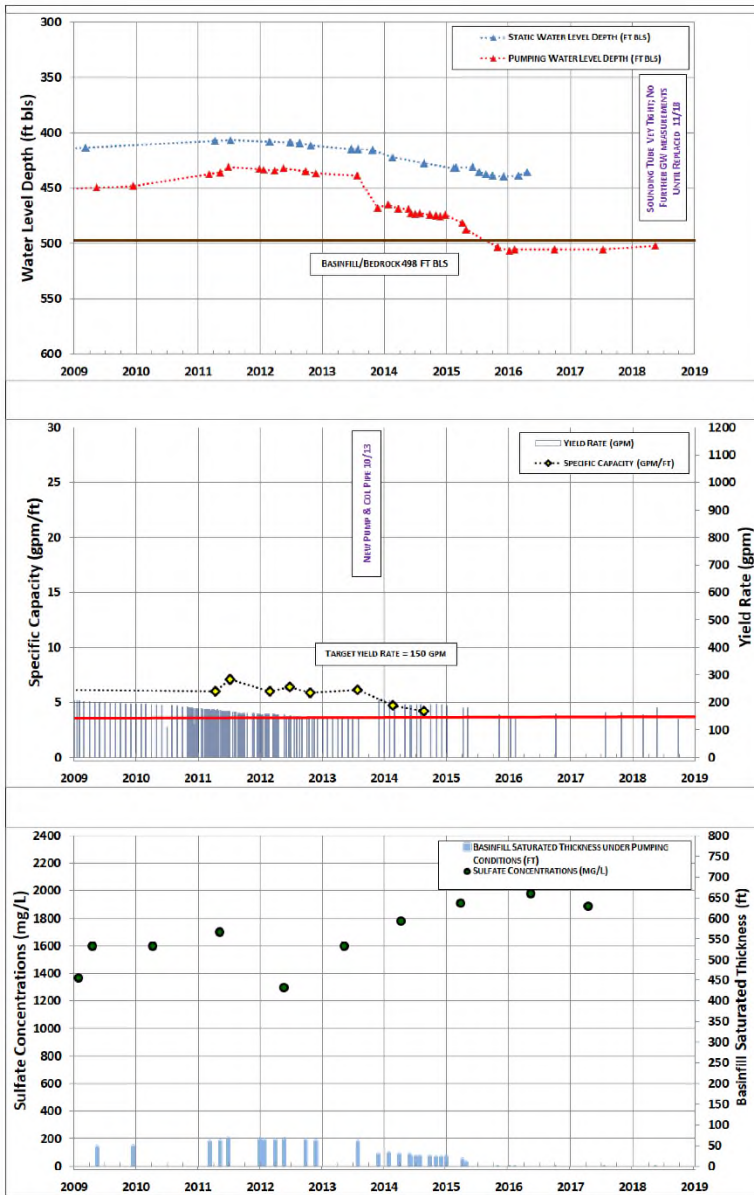


<p><b>BasinWells</b> ASSOCIATES PLLC <small>SPECIALISTS IN GROUNDWATER DEVELOPMENT</small></p>	<p><b>FREEPORT-McMoRAN</b> COPPER &amp; GOLD</p>	<p>IW-14: WATER LEVELS, YIELD, SPECIFIC CAPACITY, BASINFILL SAT. THK. AND SULFATE</p>
	<p><b>VERSION DATE:</b> NOVEMBER 26, 2018</p>	<p>CADASTRAL: D-18-13 218BB ADWR REG. NO.: 55-545557 DRILL YEAR: 1994</p>

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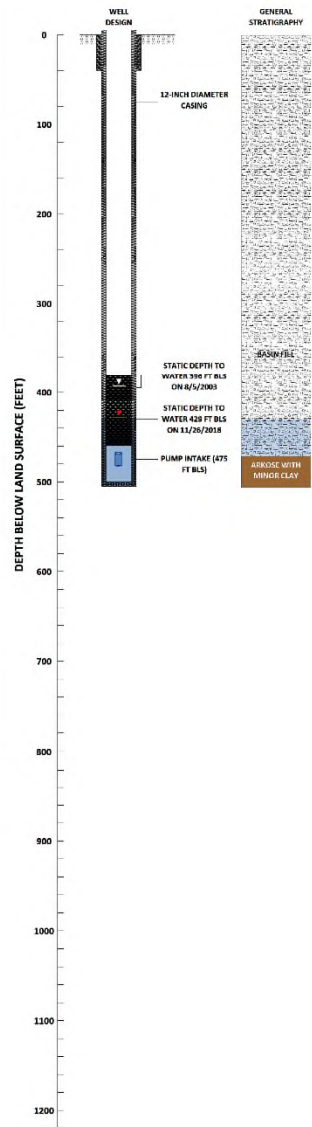
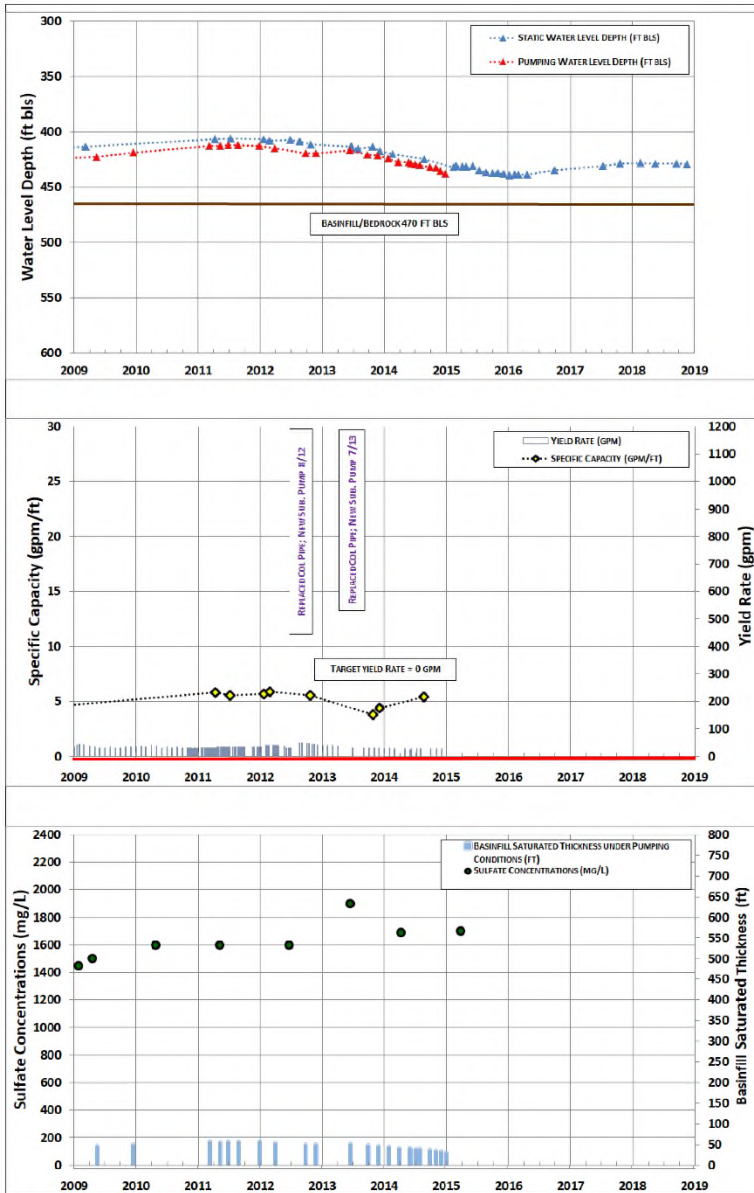


 SPECIALISTS IN GROUNDWATER DEVELOPMENT	 FREEPORT-McMORAN COPPER & GOLD	IW-15: WATER LEVELS, YIELD, SPECIFIC CAPACITY, BASINFLL SAT. THK. AND SULFATE
	VERSION DATE: NOVEMBER 26, 2018	CADASTRAL: D-18-13 16CCC ADWR REG. NO.: 55-545558 DRILL YEAR: 1995



<p><b>BasinWells</b> ASSOCIATES PLLC <small>SPECIALISTS IN GROUNDWATER DEVELOPMENT</small></p>	<p><b>FREEPORT-McMoRAN</b> COPPER &amp; GOLD</p>	<p>IW-19: WATER LEVELS, YIELD, SPECIFIC CAPACITY, BASINFILL SAT. THK. AND SULFATE</p>
	<p><b>VERSION DATE:</b> NOVEMBER 26, 2018</p>	<p>CADASTRAL: D-18-13 16BCC ADWR REG. NO.: 55-545562 DRILL YEAR: 1995</p>

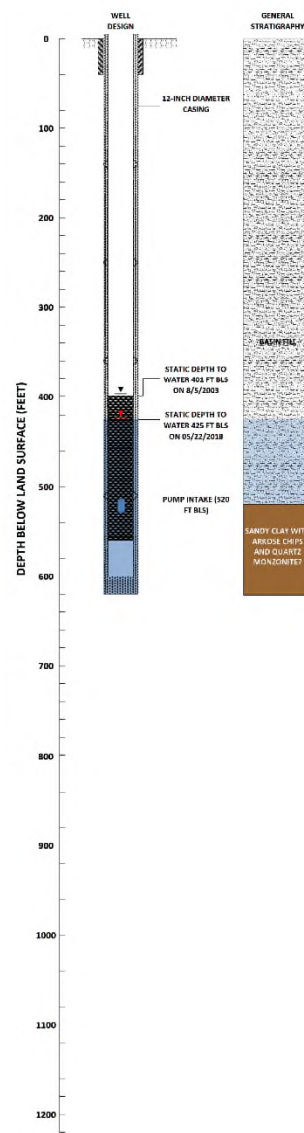
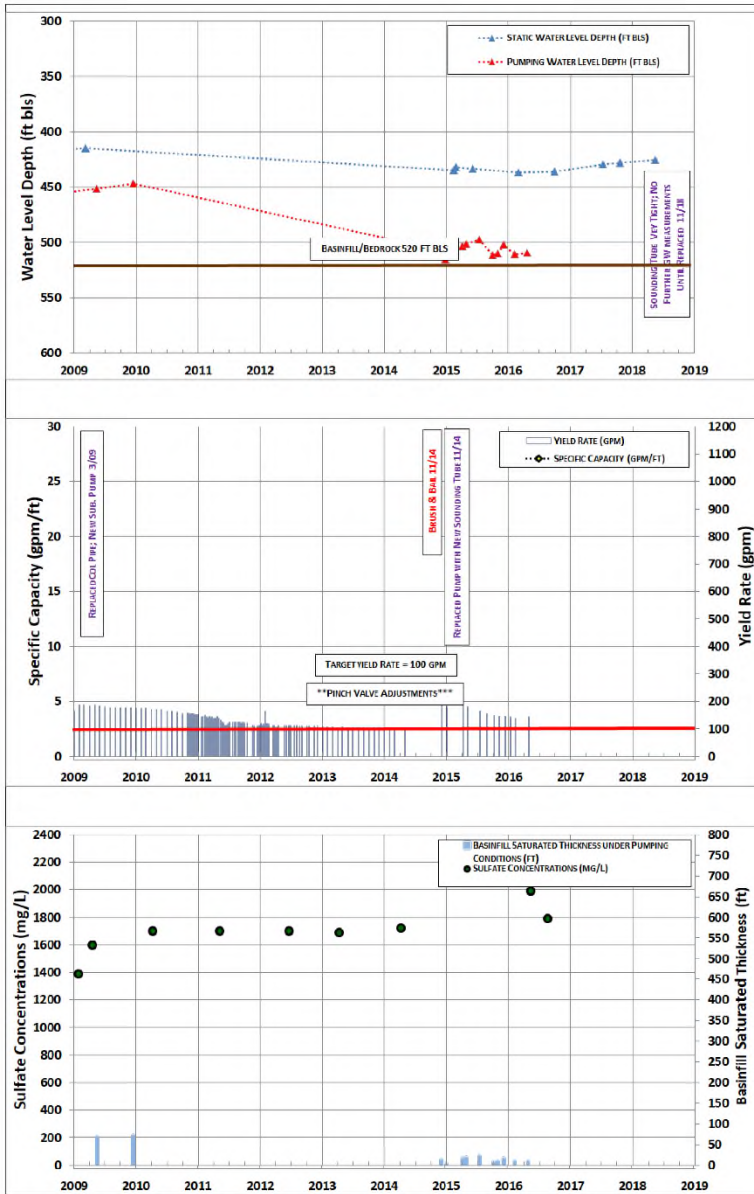
**BasinWells Associates PLLC**



<p><b>BasinWells</b> ASSOCIATES PLLC <small>SPECIALISTS IN GROUNDWATER DEVELOPMENT</small></p>	<p><b>FREEPORT-McMoRAN</b> COPPER &amp; GOLD</p>	<p>IW-20: WATER LEVELS, YIELD, SPECIFIC CAPACITY, BASINFILL SAT. THK. AND SULFATE</p>
	<p><b>VERSION DATE:</b> NOVEMBER 26, 2018</p>	<p>CADASTRAL: D-18-13 16BCB ADWR REG. NO.: 55-545563 DRILL YEAR: 1995</p>

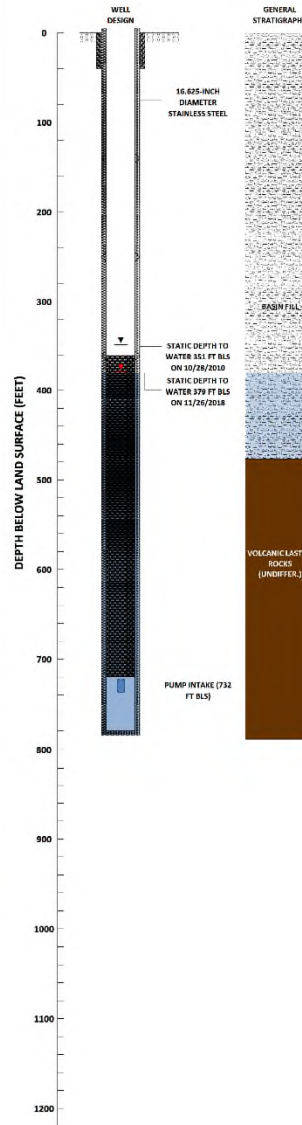
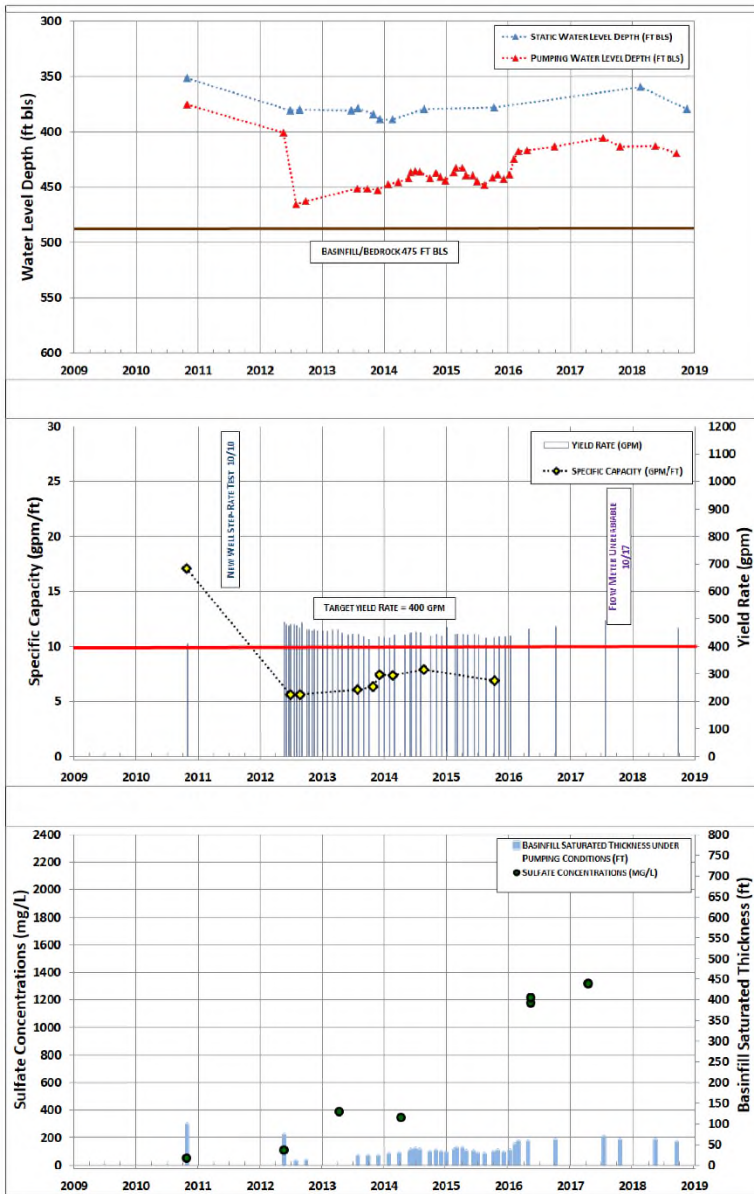
**BasinWells Associates PLLC**





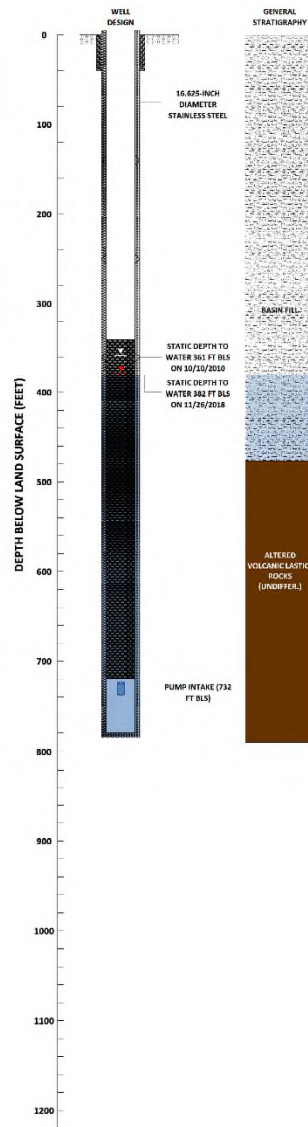
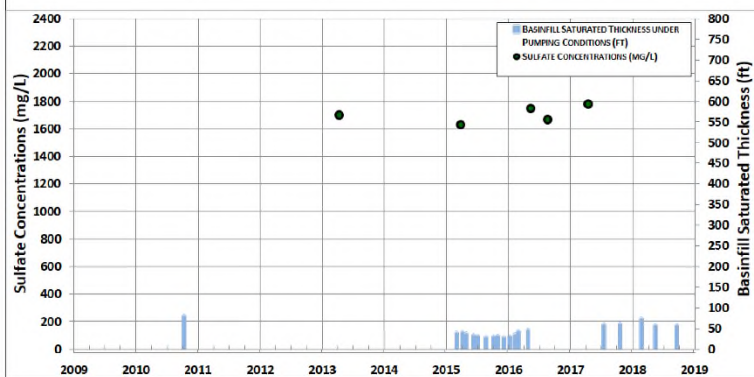
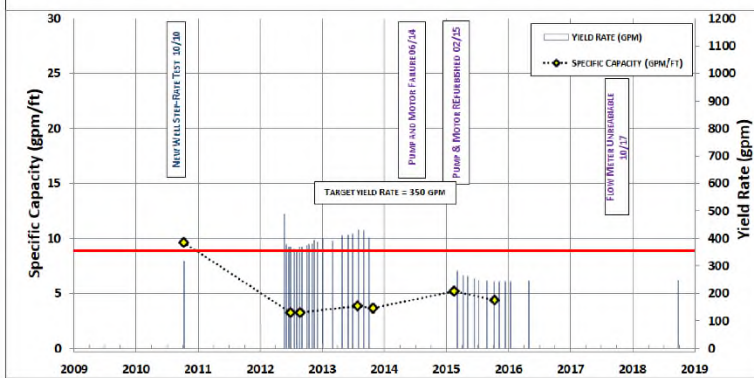
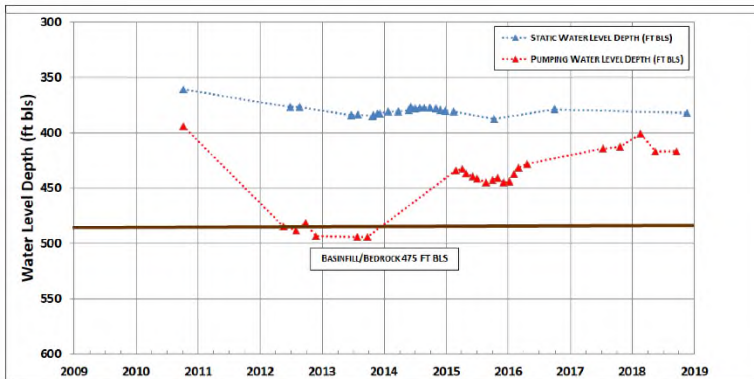
<p>BasinWells ASSOCIATES PLLC SPECIALISTS IN GROUNDWATER DEVELOPMENT</p>	<p>FREEPORT-McMoRAN COPPER &amp; GOLD</p>	<p>IW-21: WATER LEVELS, YIELD, SPECIFIC CAPACITY, BASINFILL SAT. THK. AND SULFATE</p>
	<p>VERSION DATE: <b>NOVEMBER 26, 2018</b></p>	<p>CADASTRAL: D-18-13 16BBC ADWR REG. NO.: 55-545564 DRILL YEAR: 1995</p>

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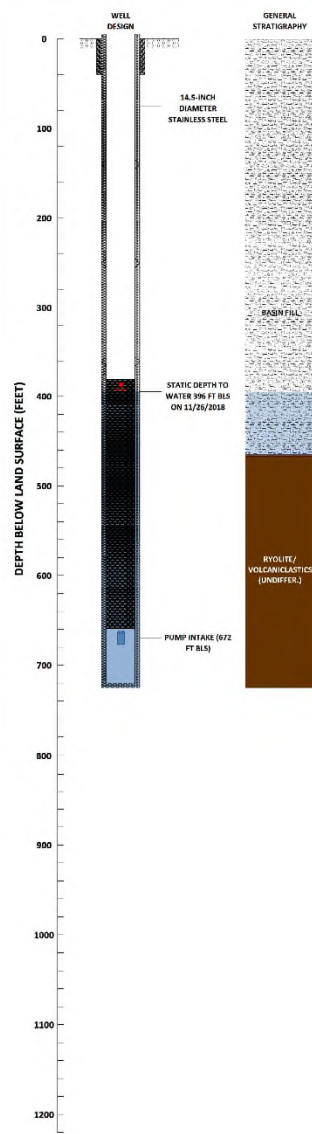
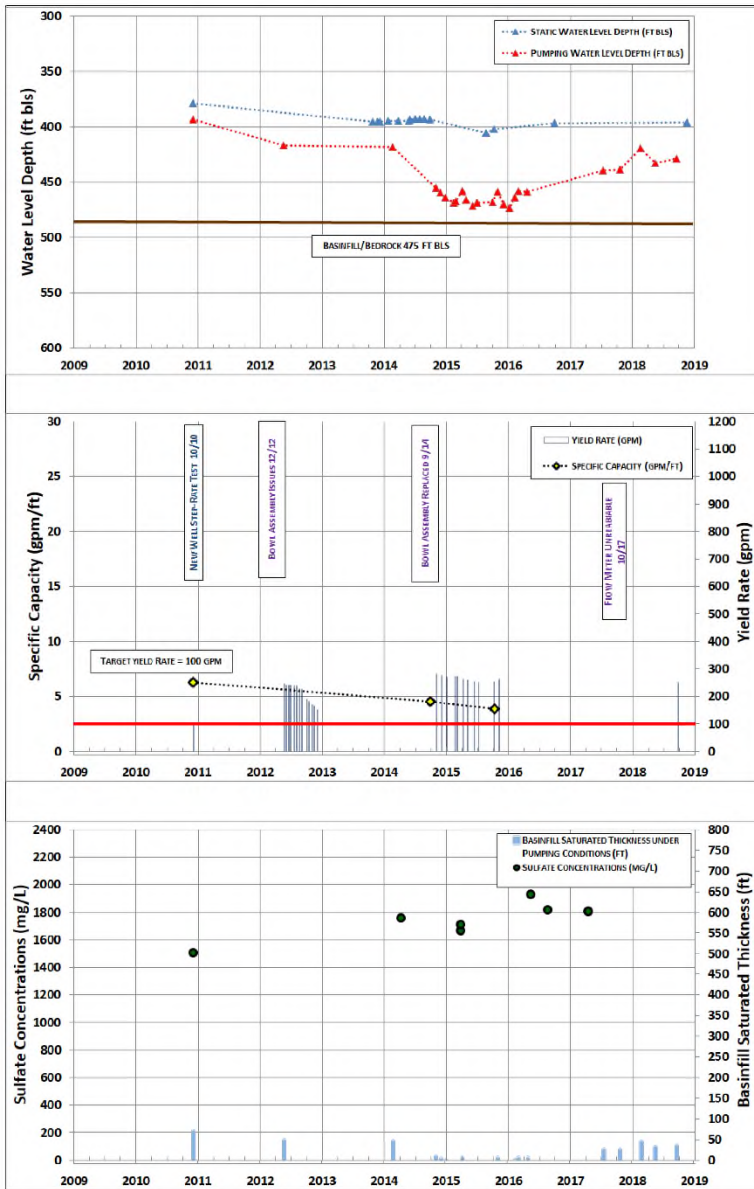
<p><b>BasinWells</b> ASSOCIATES PLLC <small>SPECIALISTS IN GROUNDWATER DEVELOPMENT</small></p>	<p><b>FREEPORT-McMoRAN</b> COPPER &amp; GOLD</p>	<p>IW-25: WATER LEVELS, YIELD, SPECIFIC CAPACITY, BASINFILL SAT. THK. AND SULFATE</p>
	<p><b>VERSION DATE:</b> NOVEMBER 26, 2018</p>	<p>CADASTRAL: D-18-13 28CB D ADWR REG. NO.: 55-219596 DRILL YEAR: 2010</p>

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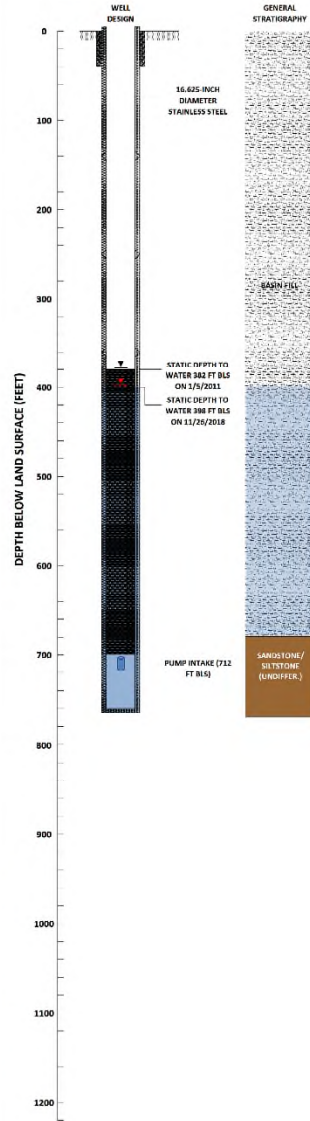
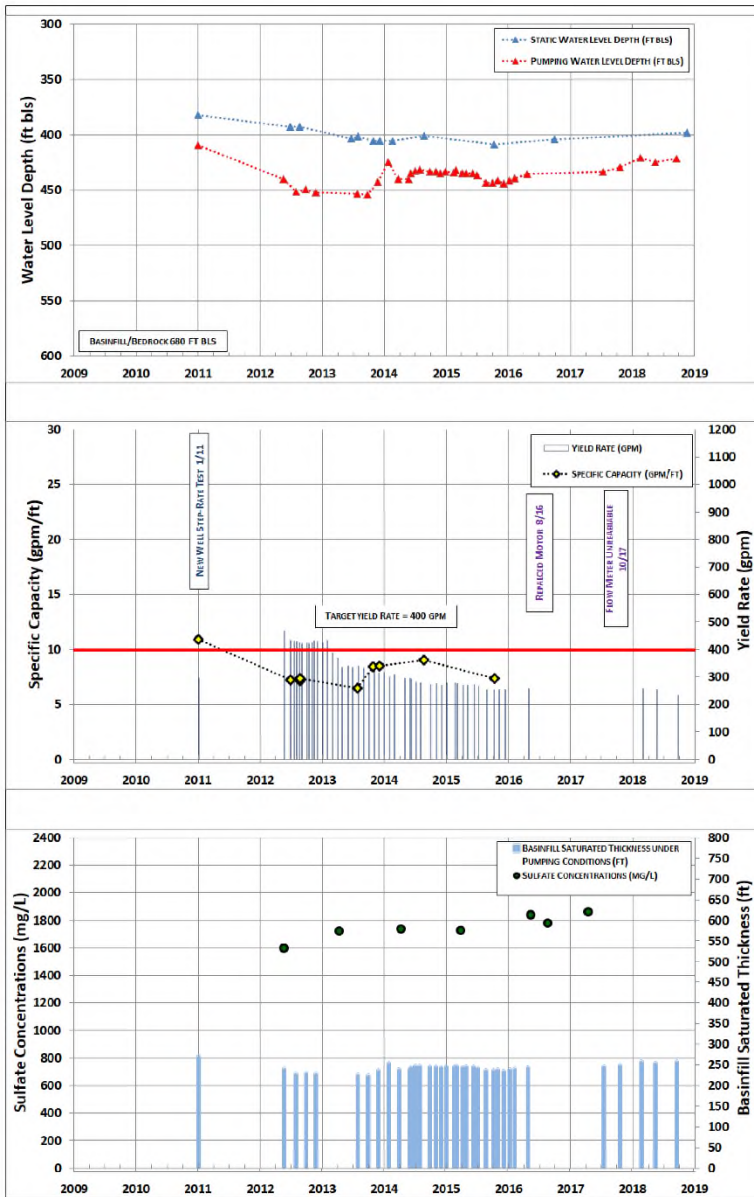
<p>SPECIALISTS IN GROUNDWATER DEVELOPMENT</p>		IW-26: WATER LEVELS, YIELD, SPECIFIC CAPACITY, BASINFILL SAT. THK. AND SULFATE CADASTRAL: D-18-13 28BCD ADWR REG. NO.: 55-219143 DRILL YEAR: 2010
	VERSION DATE: <b>NOVEMBER 26, 2018</b>	

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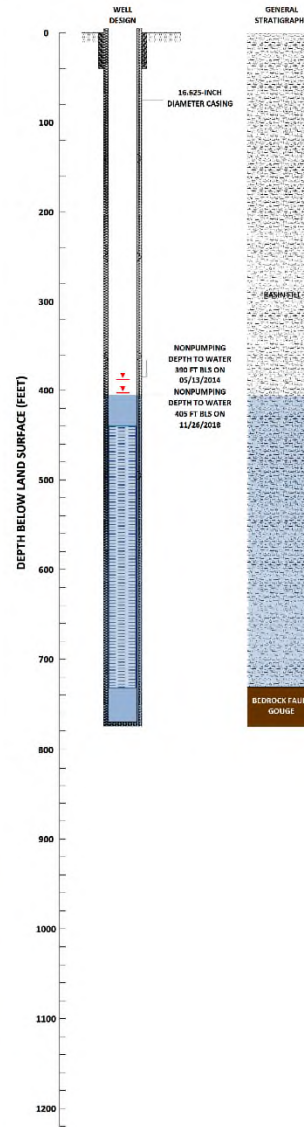
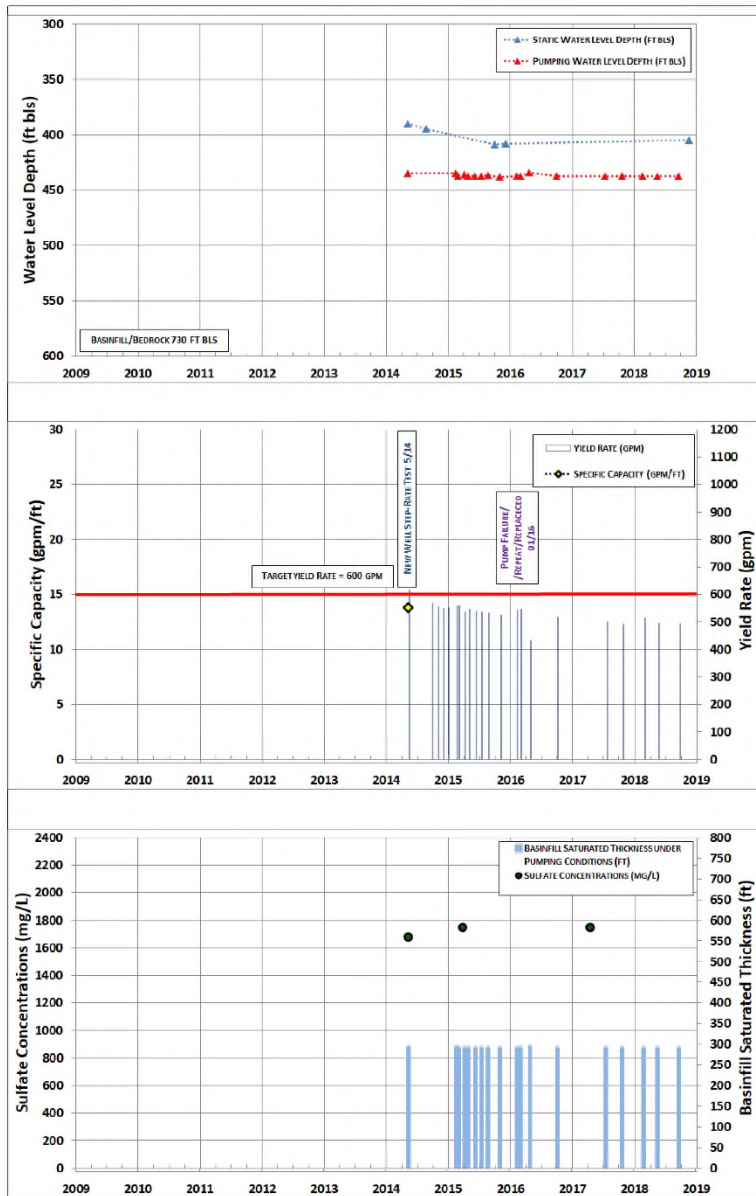
<p><b>BasinWells</b> ASSOCIATES PLLC <small>SPECIALISTS IN GROUNDWATER DEVELOPMENT</small></p>	<p><b>FREEPORT-McMoRan</b> COPPER &amp; GOLD</p>	IW-27: WATER LEVELS, YIELD, SPECIFIC CAPACITY, BASINFILL SAT. THK. AND SULFATE  CADASTRAL: D-18-13 288BD ADWR REG. NO.: 55-219136 DRILL YEAR: 2010
	<p><b>VERSION DATE:</b> NOVEMBER 26, 2018</p>	

**BasinWells Associates PLLC**



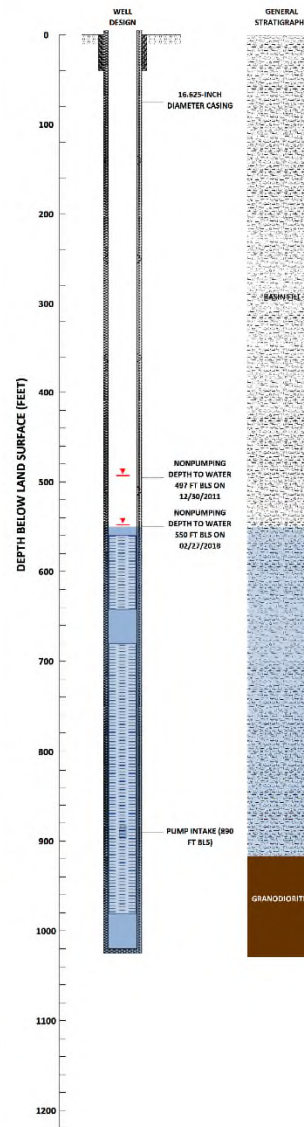
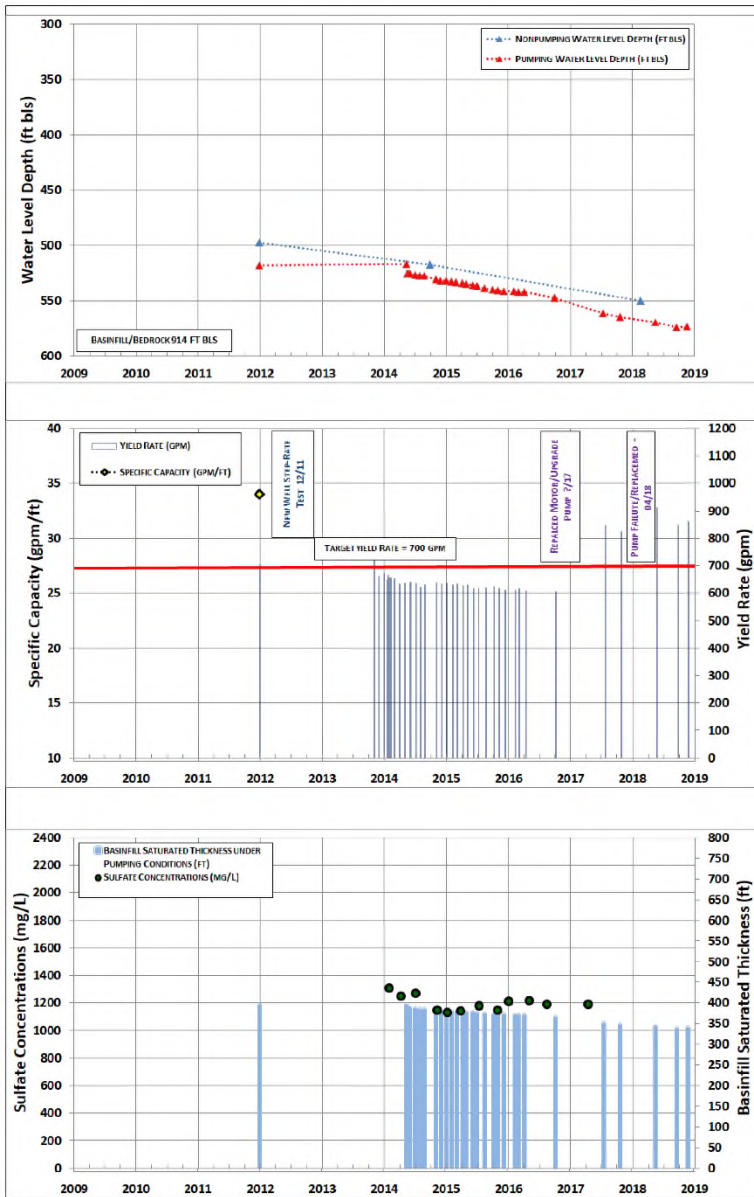
<b>BasinWells ASSOCIATES PLLC</b> <small>SPECIALISTS IN GROUNDWATER DEVELOPMENT</small>	<b>Freeport-McMoRan COPPER &amp; GOLD</b>	<b>IW-28: WATER LEVELS, YIELD, SPECIFIC CAPACITY, BASINFILL SAT. THK. AND SULFATE</b>
	<b>VERSION DATE: NOVEMBER 26, 2018</b>	CADASTRAL: D-18-13 21CCA ADWR REG. NO.: 55-219137 DRILL YEAR: 2010

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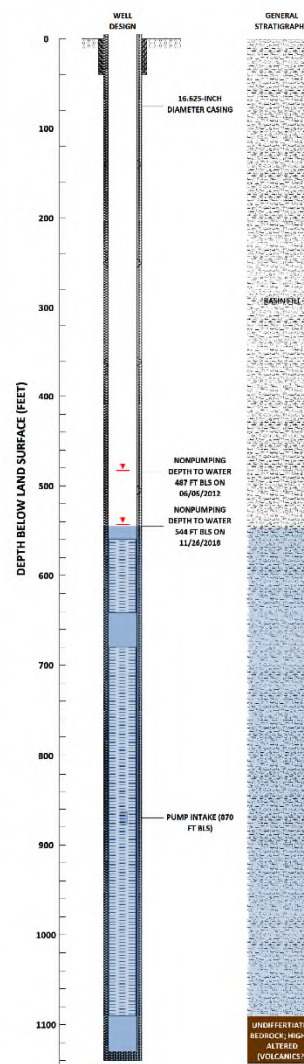
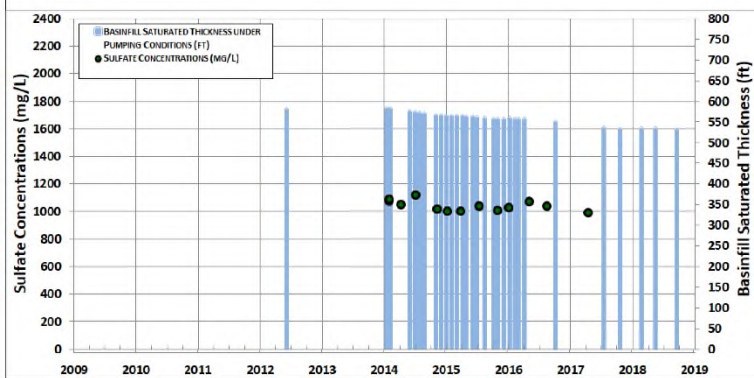
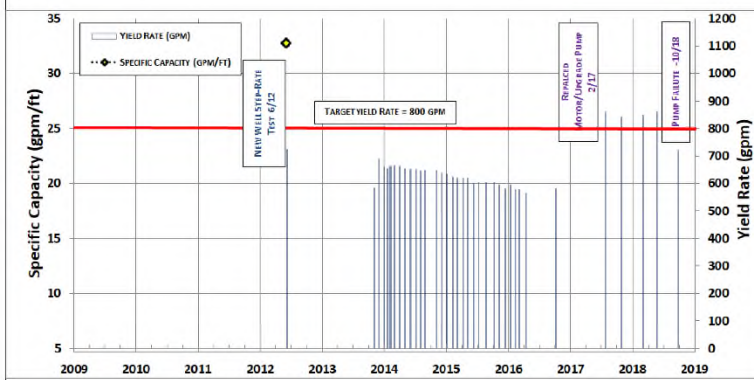
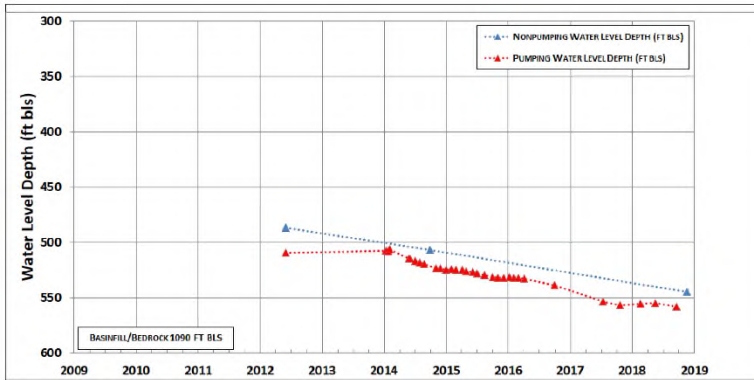
		IW-29: WATER LEVELS, YIELD, SPECIFIC CAPACITY, BASINFILL SAT. THK. AND SULFATE
	VERSION DATE: <b>NOVEMBER 26, 2018</b>	CADASTRAL: D-18-13 21CDA ADWR REG. NO.: 55-222865 DRILL YEAR: 2014

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<p><b>BasinWells</b> ASSOCIATES PLLC <small>SPECIALISTS IN GROUNDWATER DEVELOPMENT</small></p>	<p><b>FREEPORT-McMoRAN</b> COPPER &amp; GOLD</p>	<p>PS-1: WATER LEVELS, YIELD, SPECIFIC CAPACITY, BASINFILL SAT. THK. AND SULFATE</p>
	<p><b>VERSION DATE:</b> NOVEMBER 26, 2018</p>	<p>CADASTRAL: D-18-13 03BBA ADWR REG. NO.: 55-220861 DRILL YEAR: 2011</p>

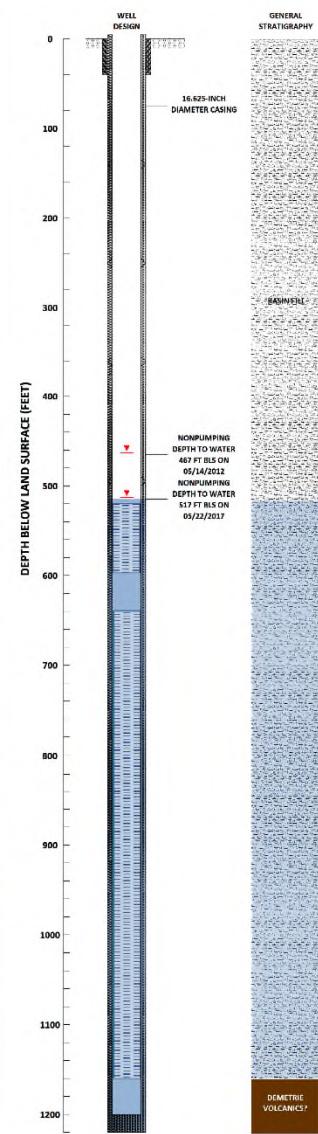
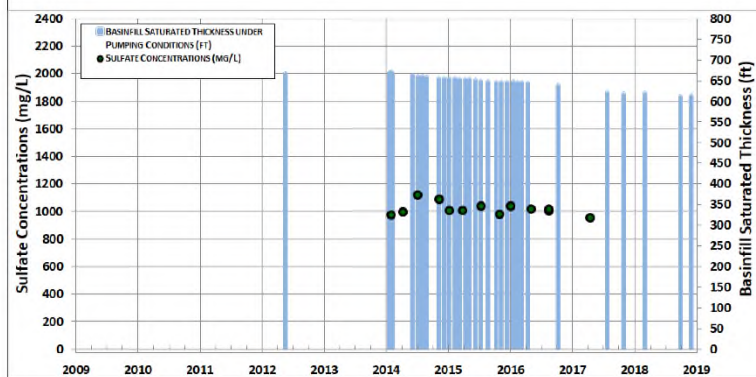
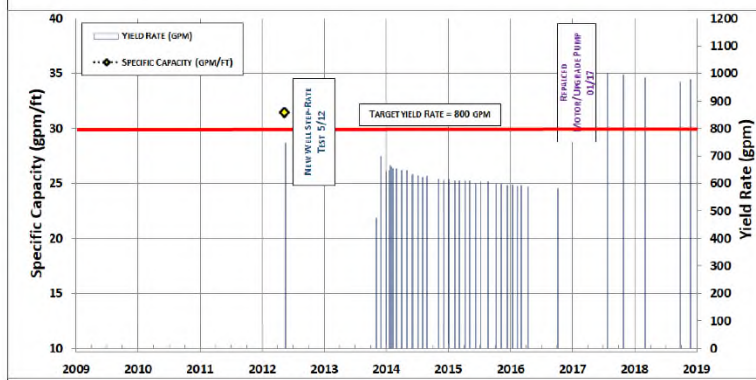
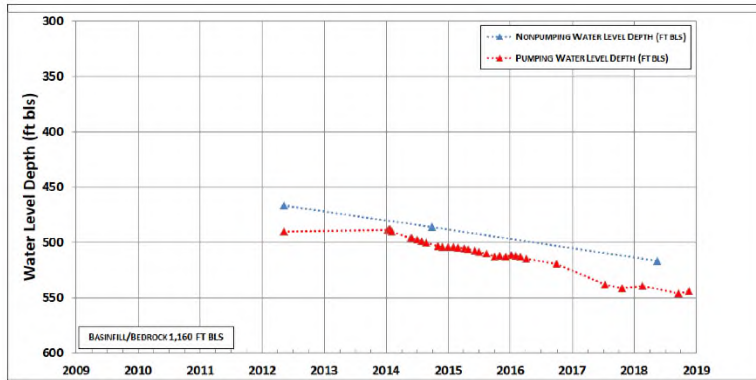
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<p><b>BasinWells</b> ASSOCIATES PLLC <small>SPECIALISTS IN GROUNDWATER DEVELOPMENT</small></p>	<p><b>FREEPORT-McMoRAN</b> COPPER &amp; GOLD</p>	<p>PS-2: WATER LEVELS, YIELD, SPECIFIC CAPACITY, BASINFILL SAT. THK. AND SULFATE</p>
	<p><b>VERSION DATE:</b> NOVEMBER 26, 2018</p>	<p>CADASTRAL: D-17-13 34CDC ADWR REG. NO.: 55-220862 DRILL YEAR: 2012</p>

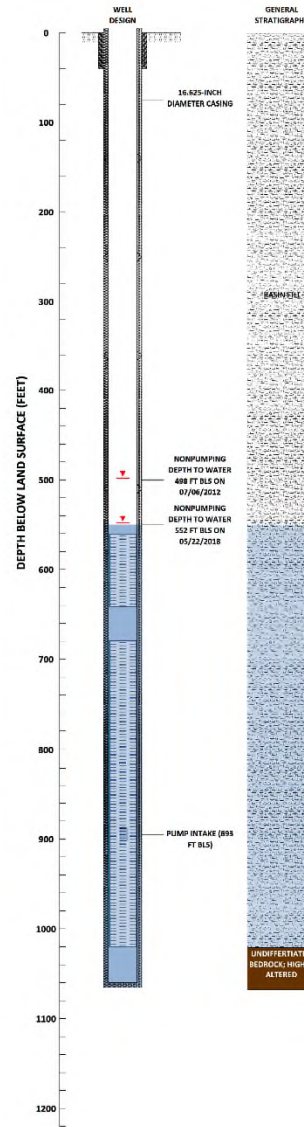
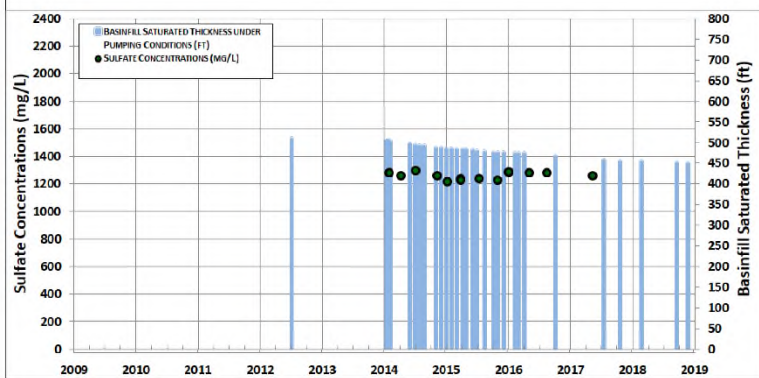
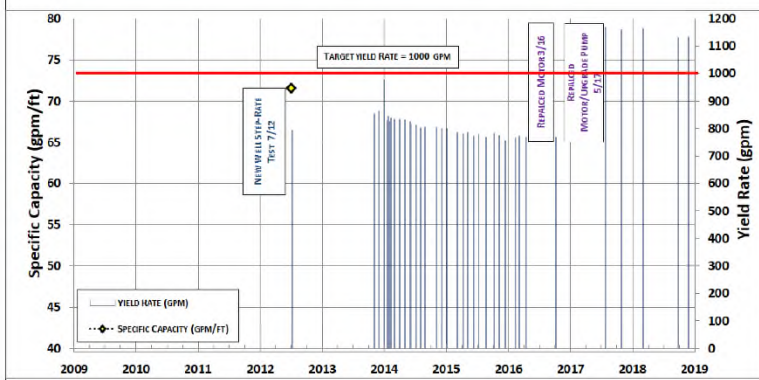
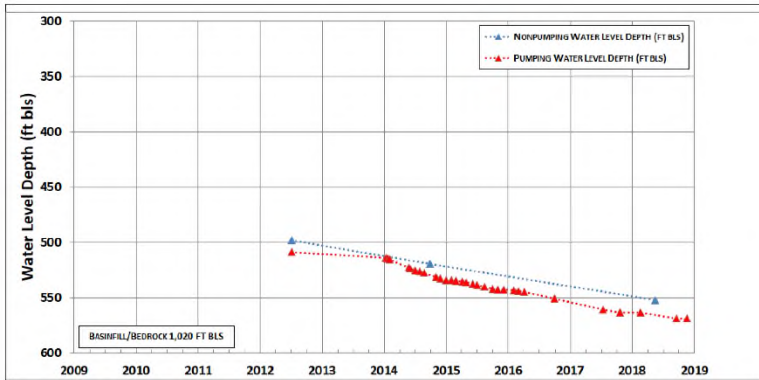
**BasinWells Associates PLLC**





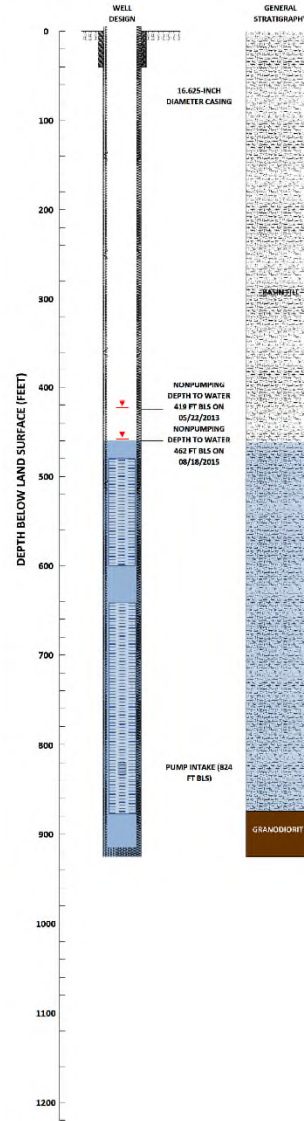
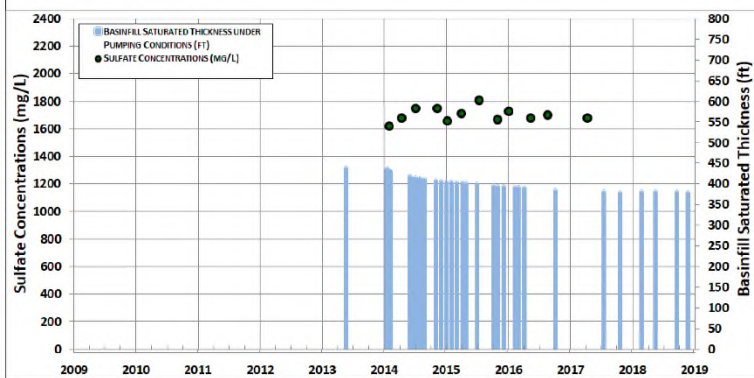
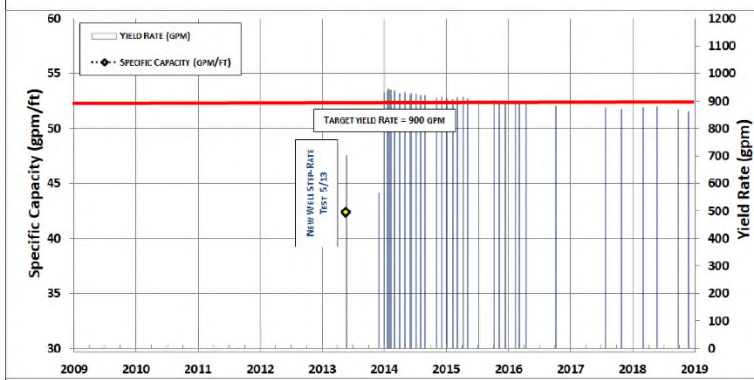
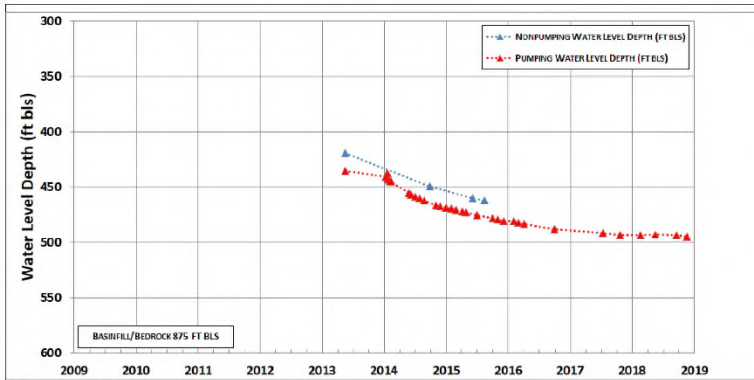
<p>SPECIALISTS IN GROUNDWATER DEVELOPMENT</p>		PS-3: WATER LEVELS, YIELD, SPECIFIC CAPACITY, BASINFILL SAT. THK. AND SULFATE
	VERSION DATE: <b>NOVEMBER 26, 2018</b>	CADASTRAL: D-17-13 34CDD ADWR REG. NO.: 55-220863 DRILL YEAR: 2012

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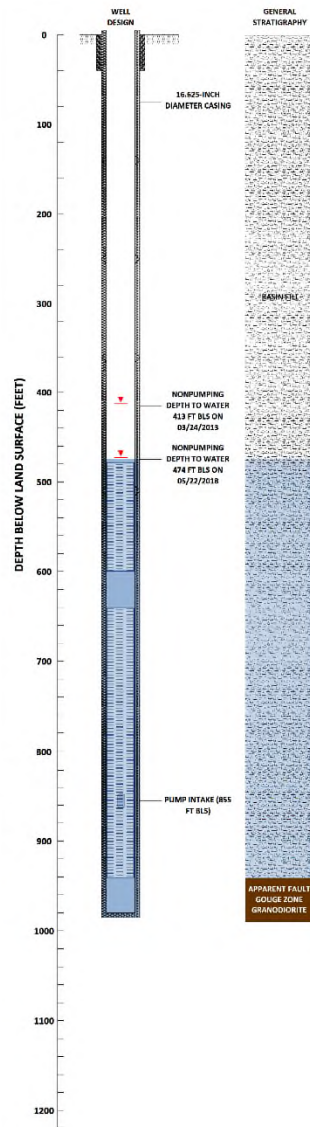
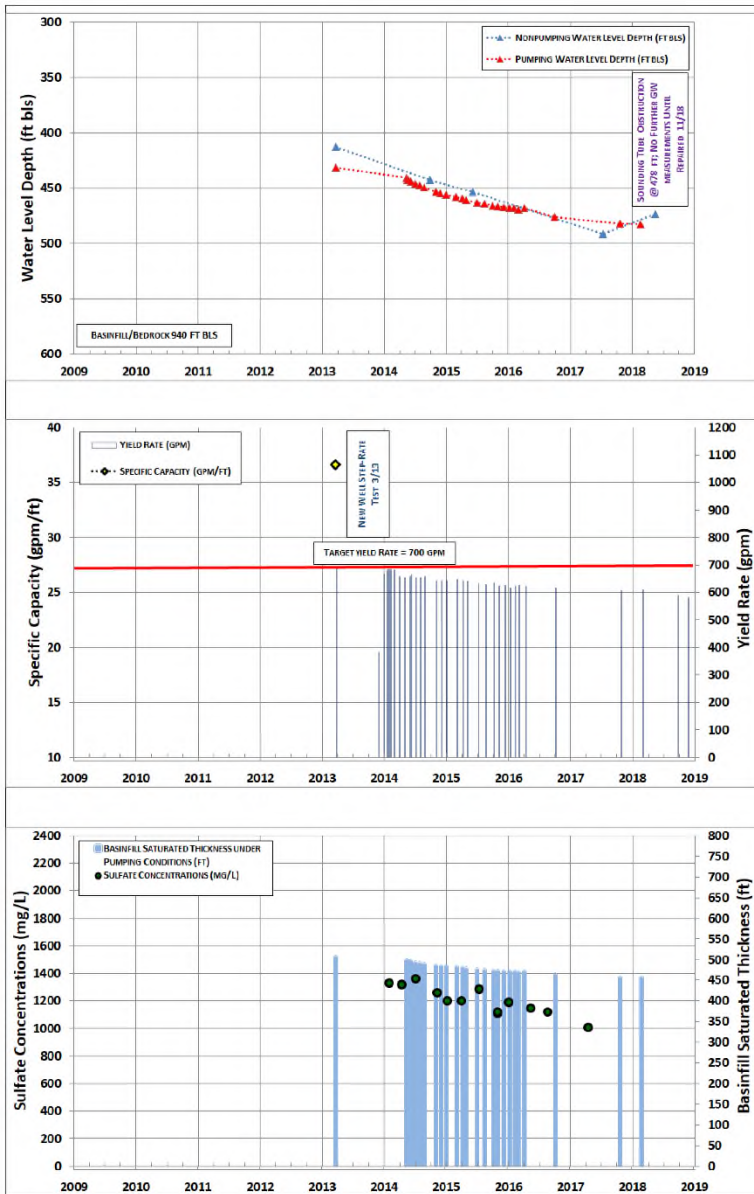
<p>SPECIALISTS IN GROUNDWATER DEVELOPMENT</p>		<p>PS-4: WATER LEVELS, YIELD, SPECIFIC CAPACITY, BASINFILL SAT. THK. AND SULFATE</p>
	<p>VERSION DATE: <b>NOVEMBER 26, 2018</b></p>	<p>CADASTRAL: D-18-13 03BCA ADWR REG. NO.: 55-220864 DRILL YEAR: 2012</p>

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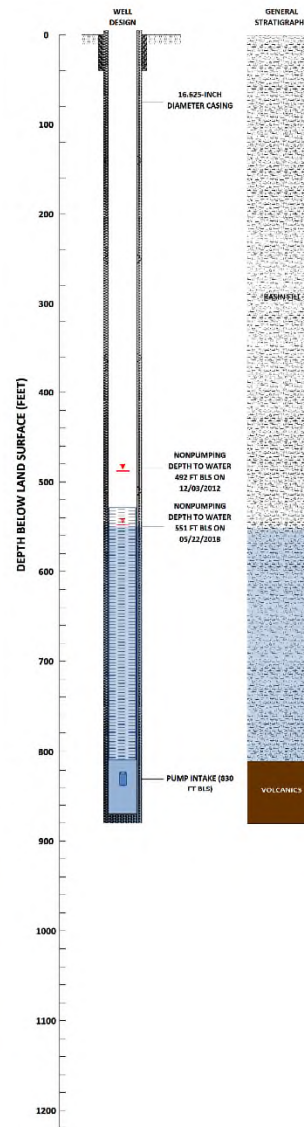
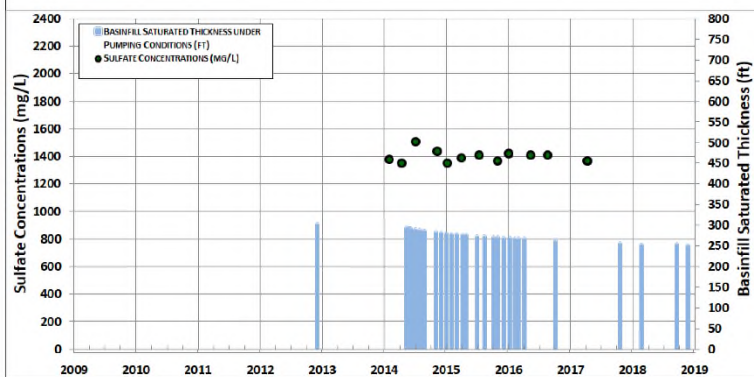
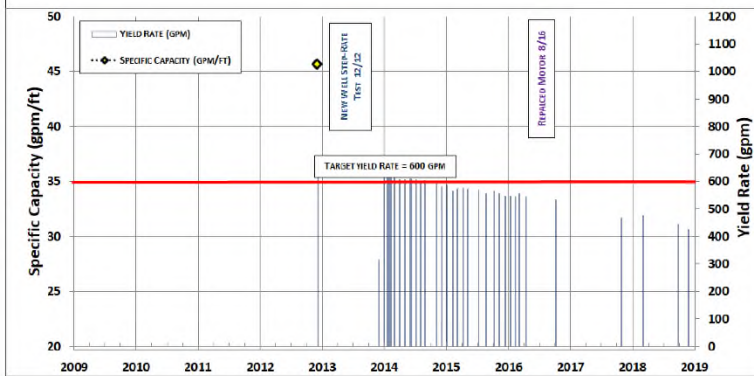
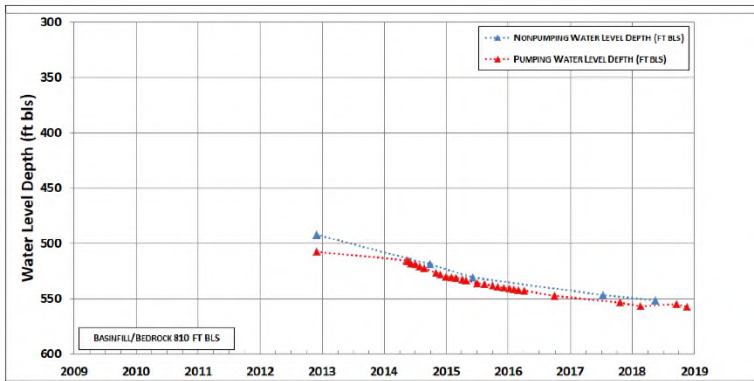
<p>SPECIALISTS IN GROUNDWATER DEVELOPMENT</p>		MC-1: WATER LEVELS, YIELD, SPECIFIC CAPACITY, BASINFILL SAT. THK. AND SULFATE
	<p><b>VERSION DATE:</b> NOVEMBER 26, 2018</p>	CADASTRAL: D-18-13 16DAA ADWR REG. NO.: 55-221660 DRILL YEAR: 2013

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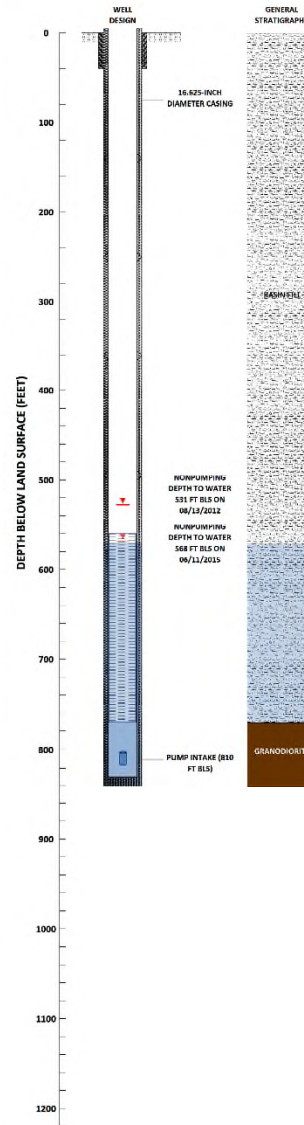
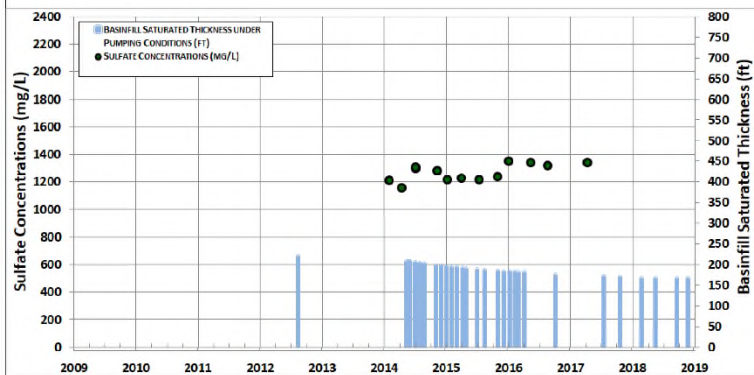
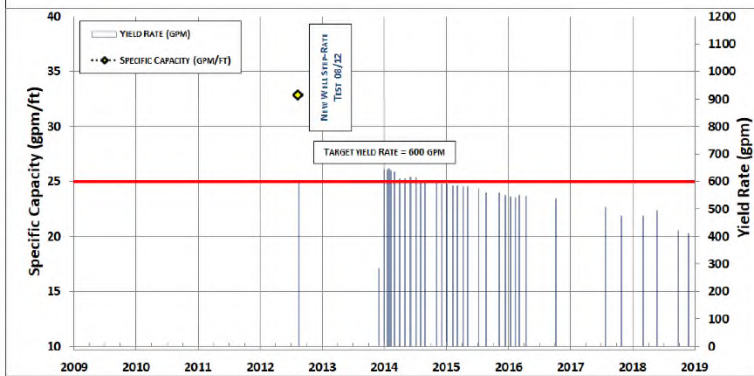
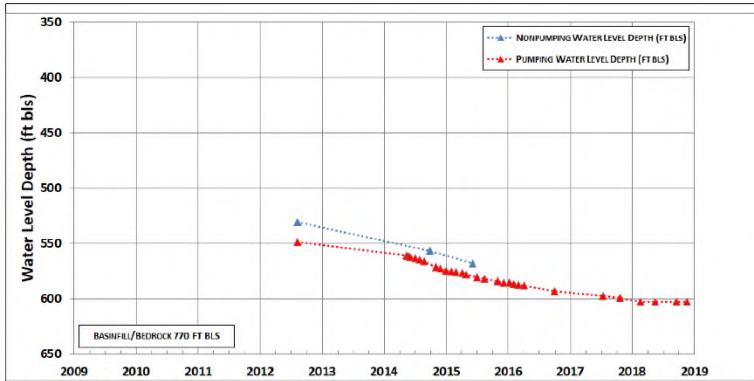
<p><b>BasinWells</b> ASSOCIATES PLLC <small>SPECIALISTS IN GROUNDWATER DEVELOPMENT</small></p>	<p><b>FREEPORT-McMoRAN</b> COPPER &amp; GOLD</p>	<p>MC-2: WATER LEVELS, YIELD, SPECIFIC CAPACITY, BASINFILL SAT. THK. AND SULFATE</p>
	<p><b>VERSION DATE:</b> NOVEMBER 26, 2018</p>	<p>CADASTRAL: D-18-13 10CCB ADWR REG. NO.: 55-221761 DRILL YEAR: 2013</p>

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<p>SPECIALISTS IN GROUNDWATER DEVELOPMENT</p>		MC-3: WATER LEVELS, YIELD, SPECIFIC CAPACITY, BASINFILL SAT. THK. AND SULFATE
	<p><b>VERSION DATE:</b> NOVEMBER 26, 2018</p>	CADASTRAL: D-18-13 09AAA ADWR REG. NO.: 55-221661 DRILL YEAR: 2012

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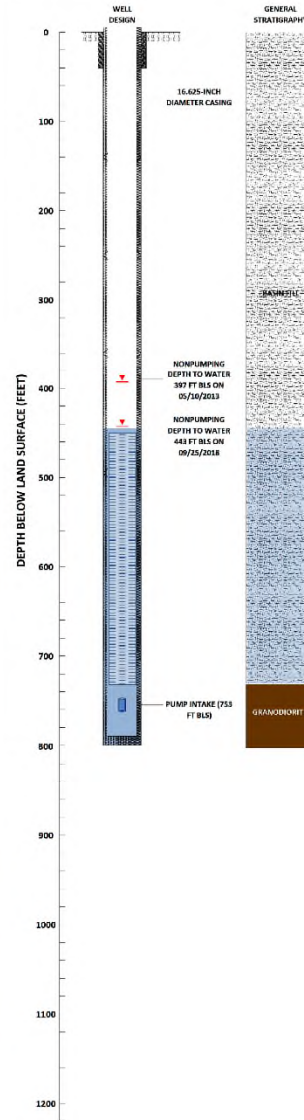
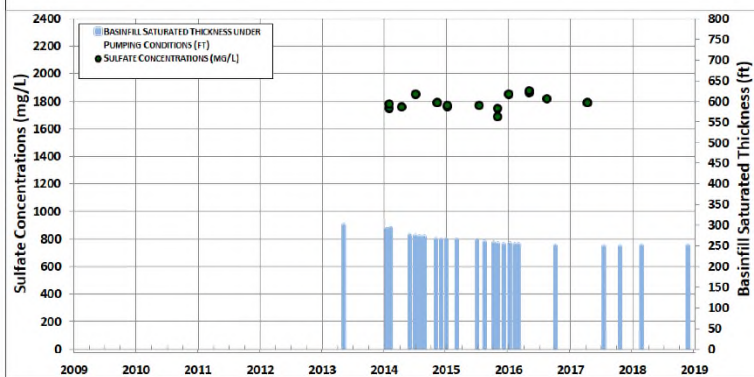
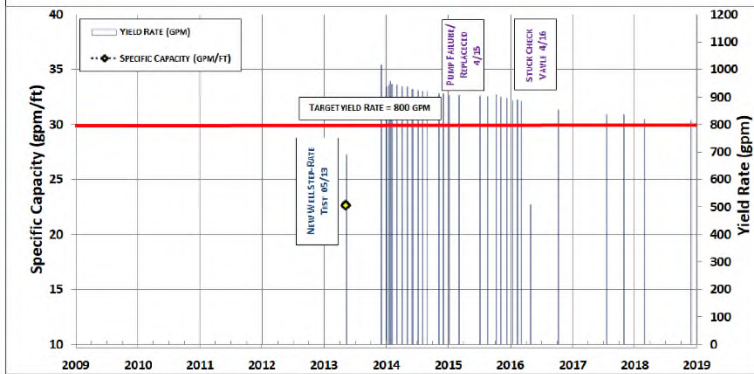
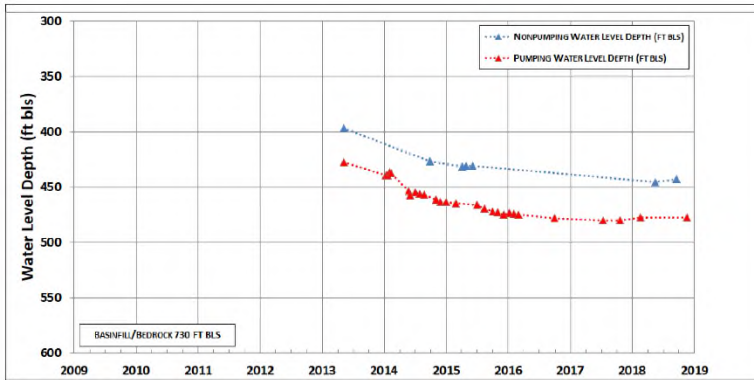


**BasinWells**  
ASSOCIATES PLLC  
SPECIALISTS IN GROUNDWATER DEVELOPMENT

**FREEPORT-McMORAN**  
COPPER & GOLD  
  
**VERSION DATE:**  
**NOVEMBER 26, 2018**

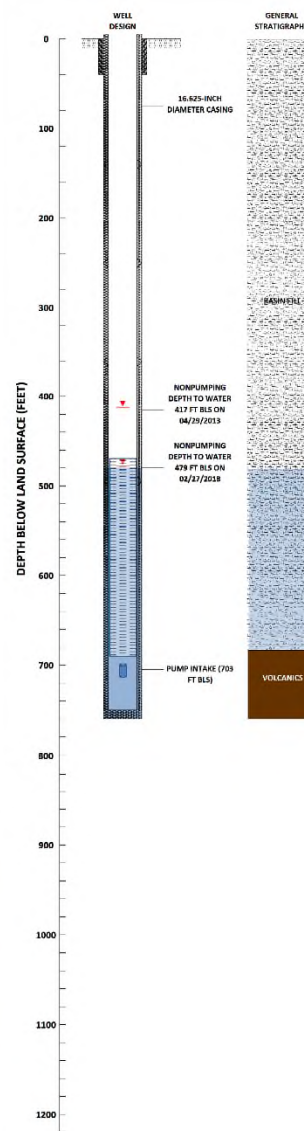
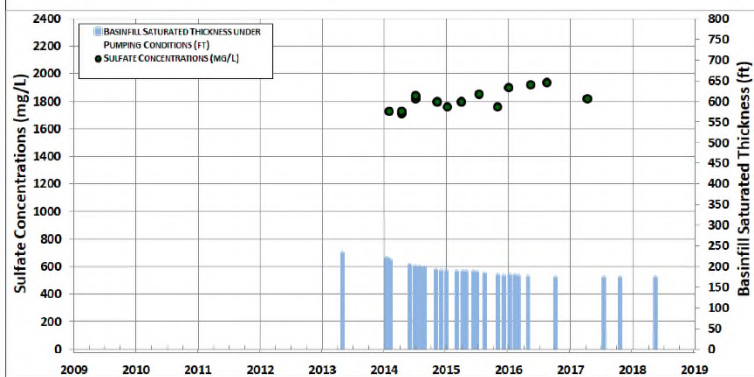
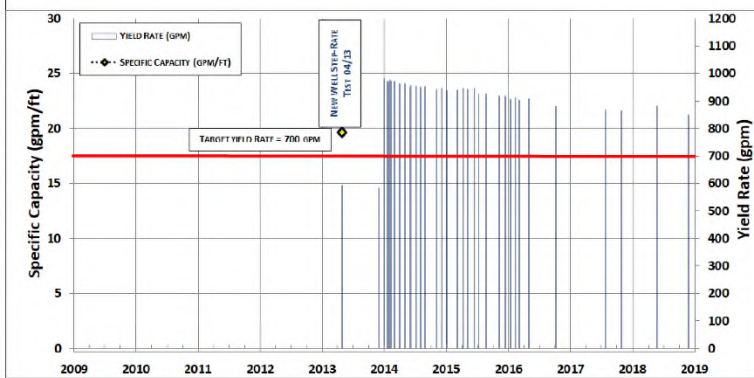
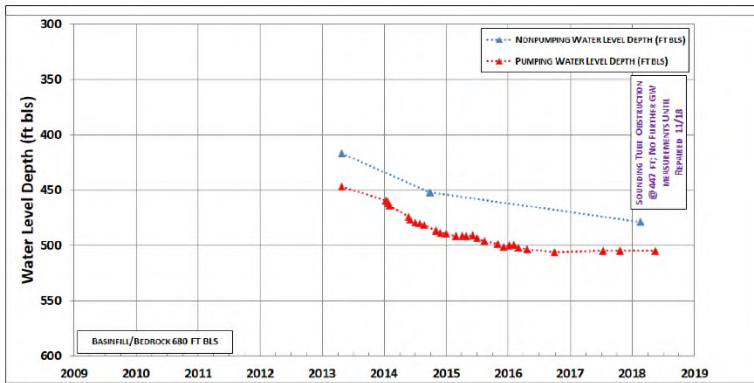
MC-4: WATER LEVELS, YIELD,  
SPECIFIC CAPACITY, BASINFILL SAT.  
THK. AND SULFATE  
  
CADASTRAL: D-18-13 04DDC  
ADWR REG. NO.: 55-220842  
DRILL YEAR: 2012

**BasinWells Associates PLLC**



<p>SPECIALISTS IN GROUNDWATER DEVELOPMENT</p>		FFS-1: WATER LEVELS, YIELD, SPECIFIC CAPACITY, BASINFILL SAT. THK. AND SULFATE
	<p><b>VERSION DATE:</b> <b>NOVEMBER 26, 2018</b></p>	CADASTRAL: D-18-13 21ABC ADWR REG. NO.: 55-221662 DRILL YEAR: 2013

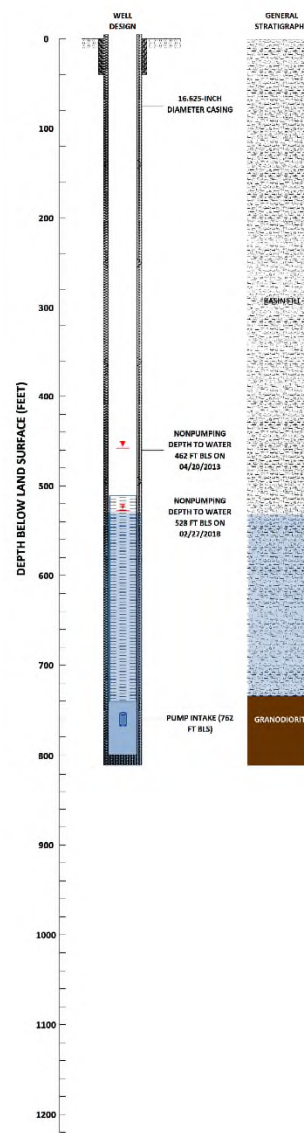
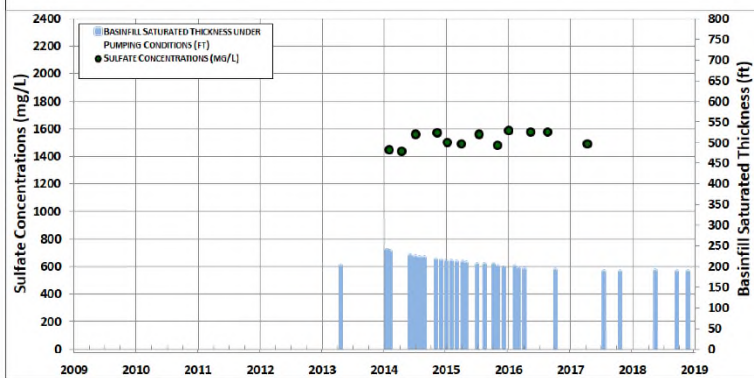
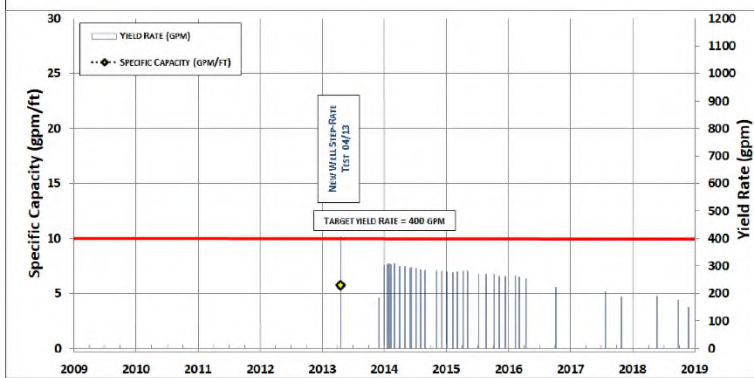
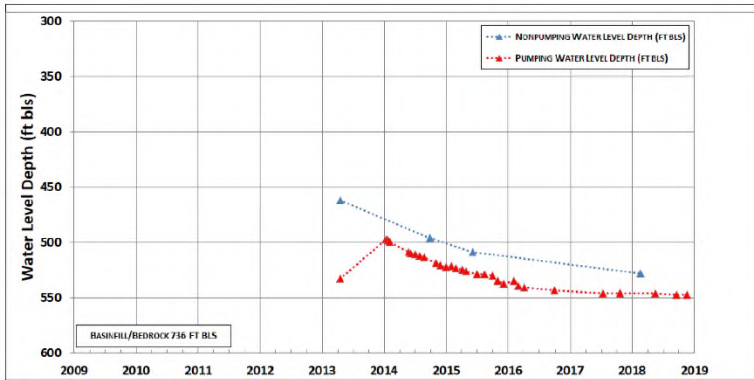
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<p>SPECIALISTS IN GROUNDWATER DEVELOPMENT</p>		FFS-2: WATER LEVELS, YIELD, SPECIFIC CAPACITY, BASINFILL SAT. THK. AND SULFATE
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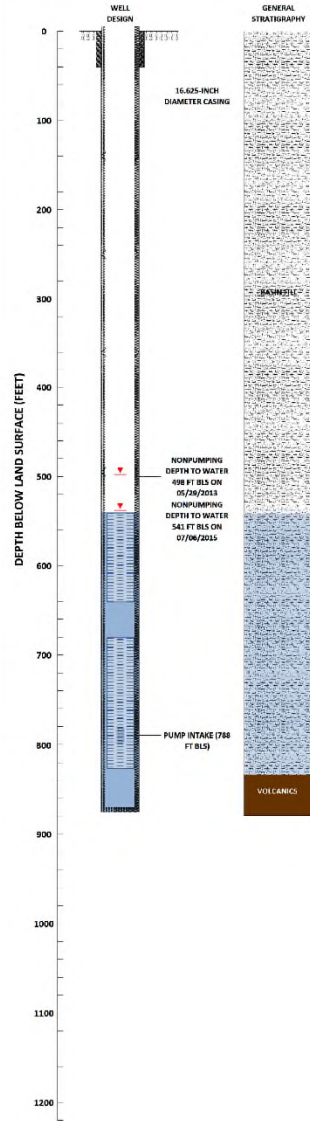
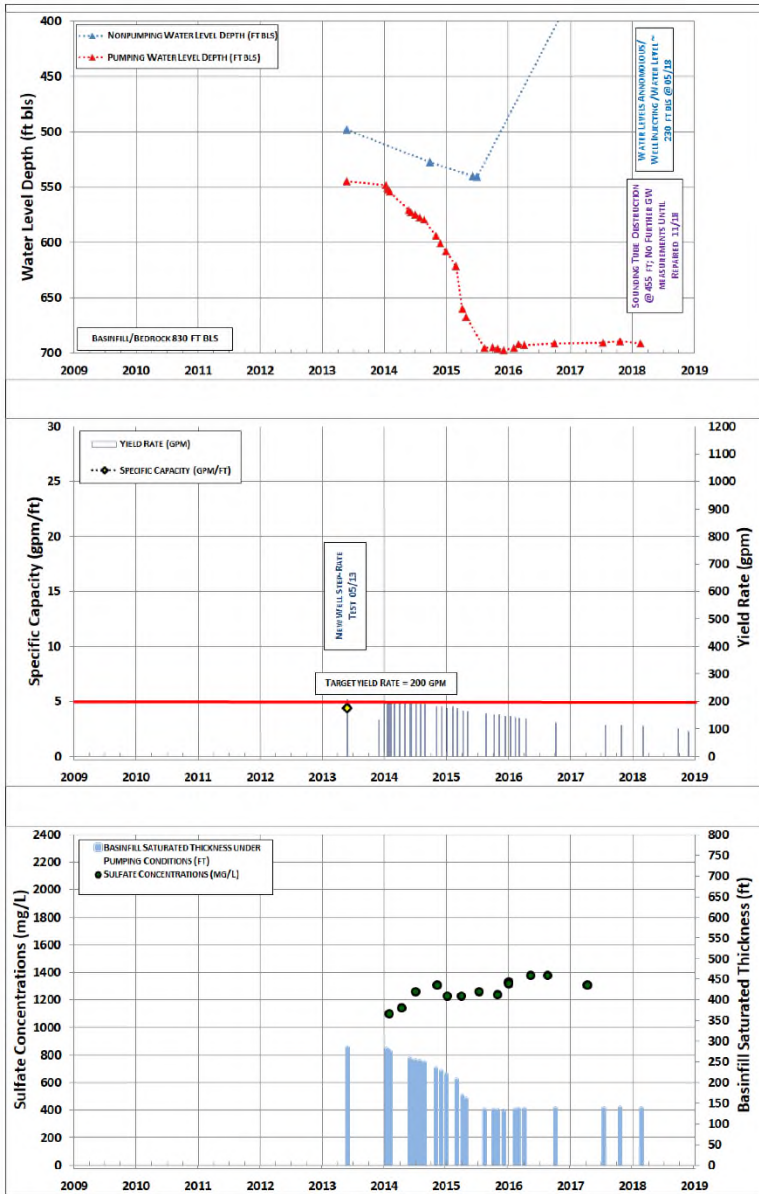
**BasinWells Associates PLLC**





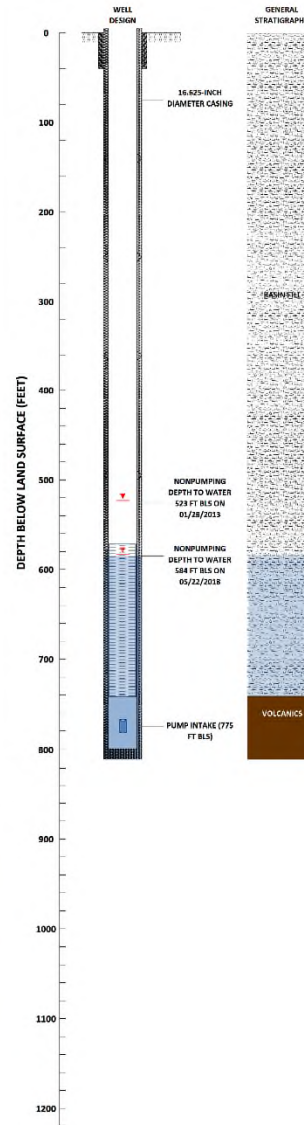
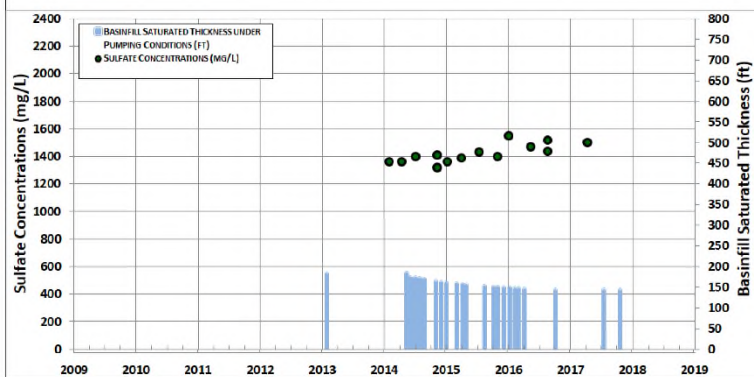
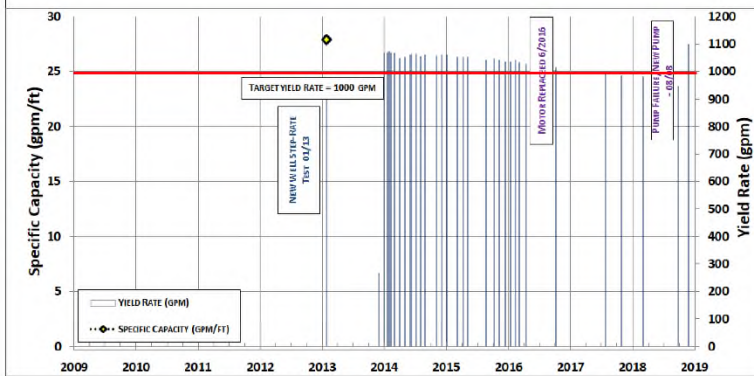
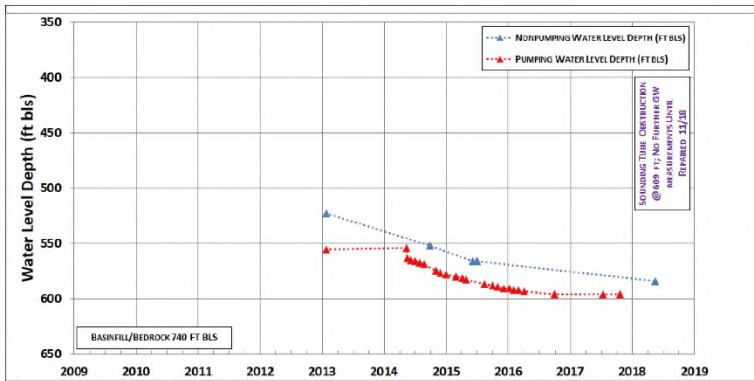
<p>SPECIALISTS IN GROUNDWATER DEVELOPMENT</p>		FFS-3: WATER LEVELS, YIELD, SPECIFIC CAPACITY, BASINFILL SAT. THK. AND SULFATE
	VERSION DATE: <b>NOVEMBER 26, 2018</b>	CADASTRAL: D-18-13 16ACD ADWR REG. NO.: 55-221664 DRILL YEAR: 2013

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<p>SPECIALISTS IN GROUNDWATER DEVELOPMENT</p>		FFS-4: WATER LEVELS, YIELD, SPECIFIC CAPACITY, BASINFILL SAT. THK. AND SULFATE  CADASTRAL: D-18-13 16ABA ADWR REG. NO.: 55-221665 DRILL YEAR: 2012
	VERSION DATE: <b>NOVEMBER 26, 2018</b>	

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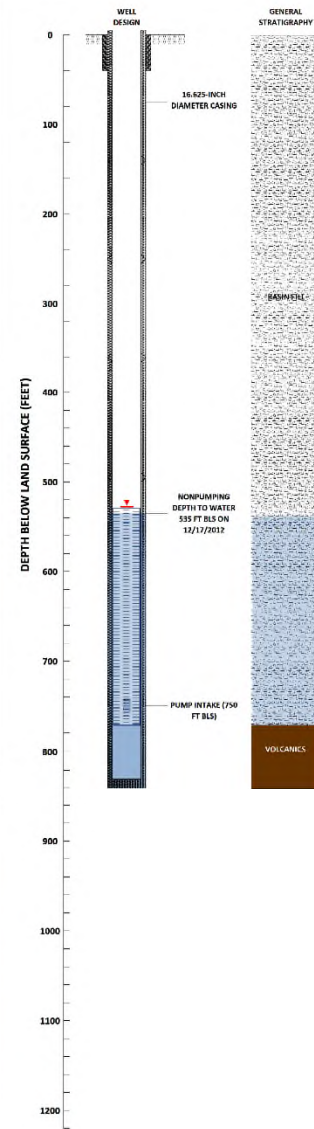
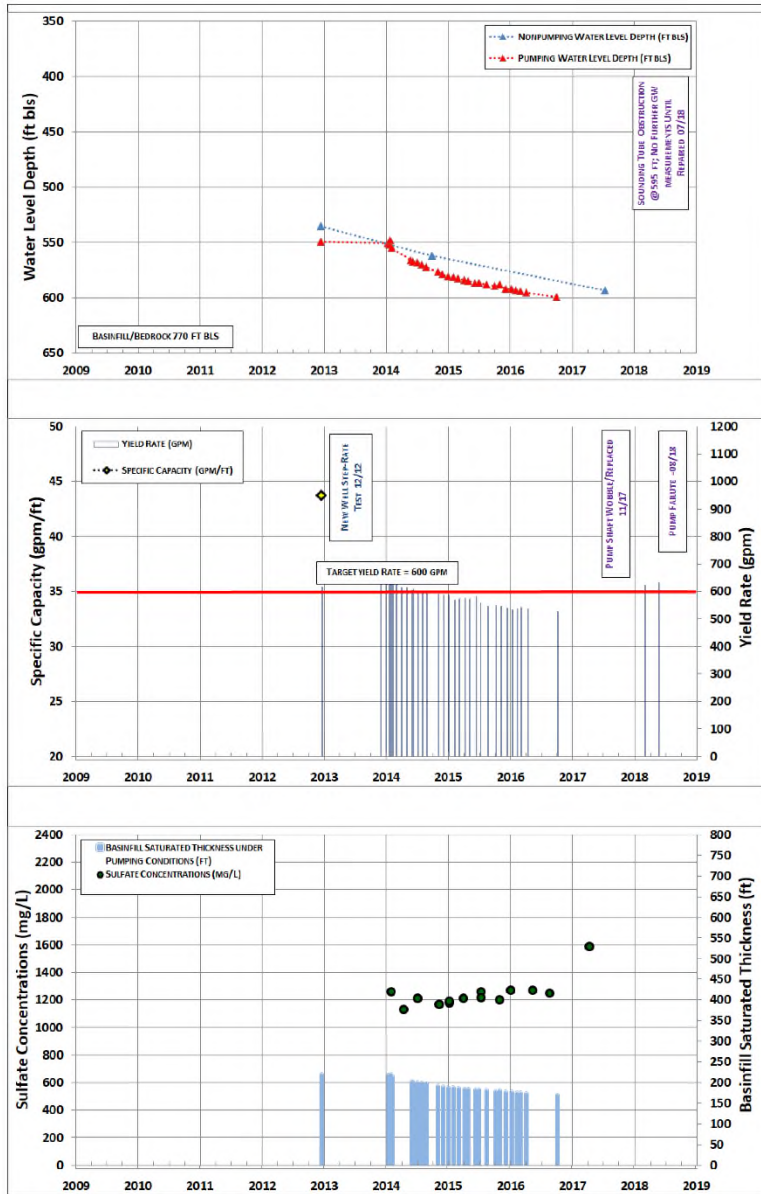


**BasinWells**  
ASSOCIATES PLLC  
SPECIALISTS IN GROUNDWATER DEVELOPMENT

**FREEPORT-McMORAN**  
COPPER & GOLD  
  
**VERSION DATE:**  
**NOVEMBER 26, 2018**

FFS-5: WATER LEVELS, YIELD,  
SPECIFIC CAPACITY, BASINFLL SAT.  
THK. AND SULFATE  
  
CADASTRAL: D-18-13 09DBA  
ADWR REG. NO.: 55-221666  
DRILL YEAR: 2012

**BasinWells Associates PLLC**



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	<p>VERSION DATE: <b>NOVEMBER 26, 2018</b></p>	CADASTRAL: D-18-13 09ACA ADWR REG. NO.: 55-221667 DRILL YEAR: 2012

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