



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

March 30, 2012

Via Certified Mail # 7011 1150 0000 0283 6962
Return Receipt Requested

Ms. Mindy Cross
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
January 1st through March 31st 2012 Status Report**

Dear Ms. Cross:

In accordance with Section V.A. of the Mitigation Order on Consent, Docket No. P-50-06, Freeport-McMoRan Sierrita Inc. (Sierrita) submits the Status Report covering the period from January 1 through March 31, 2011.

Since the last Status Report was submitted, the following measures have been taken under Section III of the Mitigation Order:

- Completed the 1st quarter 2012 groundwater monitoring activities.
- Held the first CAG meeting of the year on March 29, 2012.
- Continued work towards acquisition of State Trust land. Land sale was approved by the ASLD Board of Appeals in February 8, 2012. Next step is commencement of public notice period.
- Continued work on obtaining the easements and/or rights-of-way on public or private land where new wells and associated infrastructure will be placed.
- Continue to work with developer to secure access via easement and/or purchase of land for MC-2 and MC-3 wells locations.
- Completed construction of the water conveyance system and associated infrastructure for the four new interceptor wells (IW-25 through IW-28). Wells are now in operation.
- Continue drilling of the new four Plume Stabilization (PS) wells. Construction was temporarily halted due to unforeseen issues with drilling company. A new driller has been contracted and work has resumed.
- Continued work on the feasibility study for the new tailings impoundment.

During the next quarter, the following activities will be conducted:

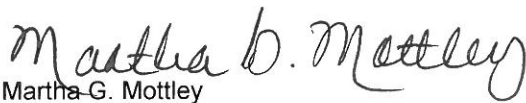
- Continue drilling of PS wells.
- Begin construction of booster station for the entire conveyance system.
- Continue work to obtain the easements and/or right-of-ways on public or private lands where new wells that are not dependent on the purchase of State Land will be placed.
- Continue work towards acquiring State Trust land.
- Continue working on the feasibility study for the new tailings impoundment.

- Conduct quarterly groundwater monitoring according to the revised groundwater monitoring schedule.

Also, please find attached the 2011 Interceptor Well Field Operation Monitoring report, which Sierrita agreed to submit in the Mitigation Plan approval deferral letter sent to ADEQ on March 18, 2009.

Please do not hesitate to contact Mr. Stuart Brown at (602) 448-0972 or Mrs. Martha Mottley at (520) 393-2696 if you have any question regarding this submittal.

Sincerely,

A handwritten signature in cursive script that reads "Martha G. Mottley". The signature is written in dark ink and is positioned above the printed name and title.

Martha G. Mottley
Chief Environmental Engineer
Freeport-McMoRan Sierrita Inc.

MGM/ms
20120330_001

xc: David Haag, Arizona Department of Environmental Quality
John Broderick, Sierrita
Lana Fretz, Sierrita
Ned Hall, Freeport-McMoRan Copper & Gold
Stuart Brown, Freeport-McMoRan Copper & Gold
Jim Norris, Clear Creek Associates

TECHNICAL MEMORANDUM REPORT



TO: Ms. Martha Mottley
Chief Environmental Engineer
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: Michael W. Bostic, R.G., Principal Hydrogeologist
BasinWells Associates, PLLC

DATE: March 28, 2012

PROJECT NO.: 11-003

SUBJECT: 2011 Freeport -- McMoran Sierrita Inc. Interceptor Well Field
Operations Performance Technical Memorandum Report.

1.0 INTRODUCTION

This operations performance technical memorandum presents operational information for calendar year 2011 for the Freeport-McMoRan Sierrita Inc. (Sierrita) Interceptor Well Field. The Sierrita Interceptor Well Field is comprised of 23 active interceptor wells, with four new interceptor wells, IW-25, IW-26 IW-27 and IW-28 installed in late 2010 with plans for activation in 2012. The locations of the interceptor wells are shown on Figure 1. Table 1 tabulates well information including cadastral legal locations, target yield rates, well construction details, completion date and well age. Target yield rates were developed by groundwater modeling and capture zone analyses (HydroGeoChem & Clear Creek Associates PLC, 2010). Additional mass capture, focused feasibility, and plume stabilization wells are planned in the future for an area to the east of the existing Interceptor wells.

Well field performance goals established by Sierrita to meet the goal of operation include:

- Operate all interceptor wells on a continual duty cycle run time, as close to 100 percent as practical. Acceptable duty cycle run time is identified within the range of 90 to 95% considering required maintenance and monitoring activities.
- Operate each interceptor well at or above target yield rates developed for each well.

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Groundwater from the interceptor wells is collected through a transmission pipeline running along the east and south flank of the tailings impoundment (Figure 1). Groundwater is conveyed through this transmission pipeline to the Sierrita Interceptor Tank, and then boosted to the Reclaim Tank. At the Reclaim Tank, the groundwater developed by the Interceptor Well Field is combined with reclaim water from the tailings impoundment dewatering for pumping to the mill site. The Reclaim water system provides a portion of the process water supply for mine operations.



Figure 1. Sierrita Interceptor Well Field

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TABLE 1. 2011 SIERRITA INTERCEPTOR WELL FIELD INFORMATION

Well	Cadastral Location	ADWR Reg. No.	Target Yield Rate (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	Basin Fill Base Depth (ft bls)	Completion Date	Well Age
IW-1	D-18-13 29DCD	55-623129	250	855	14		LCS	234	843	No	480	GRAVEL	760	7/31/1978	33.6
IW-2A	D-18-13 28CCC	55-216464	425	1051	14	20	HSLA	350	1031	600-640	620	GRAVEL	1020	3/11/2008	4.0
IW-3A	D-18-13 28CBC	55-201732	500	1052	14	20	LCS	400	1030	No	540	GRAVEL	820	1/1/2004	8.2
IW-8	D-18-13 28BCC	55-508236	425	783	14	20	LCS	382	783	No	540	GRAVEL	759	7/26/1984	27.6
IW-9	D-18-13 28BCC	55-508238	250	853	14	20	LCS	412	853	No	605	GRAVEL	740	8/6/1984	27.6
IW-4	D-18-13 28BCB	55-623132	80	946	14		LCS	312	946	No	600	GRAVEL	490	7/23/1978	33.6
IW-24	D-18-13 28BBB	55-200556	100	884	14	20	LCS	348	860	No	602	GRAVEL	410	1/1/2004	8.2
IW-5A	D-18-13 28BBB	55-219131	100	900	14	20	SS	382	890	620-640	630	TACNA GRAVEL	436	5/1/2010	1.8
IW-23	D-18-13 21CCB	55-200555	150	964	14	20	LCS	375	935	No	550	TACNA GRAVEL	420	1/1/2004	8.2
IW-10	D-18-13 21CBC	55-508237	325	831	14	20	LCS	420	831	No	600	GRAVEL	730	8/15/1984	27.6
IW-22	D-18-13 21CBC	55-200554	325	590	14	20	LCS	359	560	No	550	GRAVEL	550	1/1/2004	8.2
IW-11	D-18-13 21CBC	55-508235	325	605	14	20	LCS	371	605	No	500	GRAVEL	563	8/24/1984	27.5
IW-6A	D-18-13 21BCC	55-545565	90	497	12	20	LCS	356	456	No	460	GRAVEL	456	11/29/1994	17.3
IW-12	D-18-13 21BCB	55-545555	150	600	12	20	LCS	358	560	No	560	GRAVEL	498	12/6/1994	17.3
IW-13	D-18-13 21BBC	55-545556	0	497	12	20	LCS	355	456	No	460	GRAVEL	452	12/1/1994	17.3
IW-14	D-18-13 21BBB	55-545557	75	549	12	20	LCS	357	508	No	520	GRAVEL	509	12/20/1994	17.2
IW-15	D-18-13 16CCC	55-545558	50	547	12	20	LCS	357	506	No	505	GRAVEL	507	1/8/1995	17.2
IW-16	D-18-13 16CCB	55-545559	0	469	12	20	LCS	357	427	No	427	GRAVEL	430	1/16/1995	17.1
IW-17	D-18-13 16CBC	55-545560	0	499	12	20	LCS	357	457	No	460	GRAVEL	455	1/20/1995	17.1
IW-18	D-18-13 16CBB	55-545561	0	503	12	20	LCS	381	461	No	461	GRAVEL	460	1/30/1995	17.1
IW-19	D-18-13 16BCC	55-545562	200	540	12	20	LCS	379	499	No	522	GRAVEL	498	1/30/1995	17.1
IW-20	D-18-13 16BCB	55-545563	0	502	12	20	LCS	380	460	No	460	GRAVEL	470	2/6/1995	17.1
IW-21	D-18-13 16BBC	55-545564	150	601	12	20	LCS	400	560	No	520	GRAVEL	520	2/1/1995	17.1
IW-25	D-18-13 28CBD	55-219596	-	782	16	24	SS	359	720	No		SILICA SAND	475	11/1/2010	1.3
IW-26	D-18-13 28BCD	55-219143	-	780	16	24	SS	340	720	No		SILICA SAND	475	11/1/2010	1.3
IW-27	D-18-13 28BBD	55-219136	-	720	14	22	SS	380	660	No		SILICA SAND	465	11/1/2010	1.3
IW-28	D-18-13 21CCA	55-219137	-	760	16	24	SS	380	700	No		SILICA SAND	680	11/1/2010	1.3

Note:

LCS = low-carbon steel

HSLA = High-Strength Low Alloy Steel

SS = Stainless Steel

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2.0 INTERCEPTOR WELL FIELD OPERATIONS

Total groundwater withdrawals in 2011 of the Sierrita Interceptor Well Field are tabulated on Table 2. The well field withdrew almost 6,000 acre-feet of groundwater in 2011. The Sierrita Interceptor Well Field, in total, produced 93.3 percent of the performance goals with respect to potential total groundwater withdrawal considering the target rates.

Well performance in 2011 on a well by well basis are tabulated in Attachment A. Run time percentages ranged from 73.3 to 97.1 percent with the exception of IW-16, IW-17 and IW-18 which were taken off line in early 2011 due to low yield conditions. As needed well and transmission line maintenance activities, and shut down of wells to monitoring activities resulted in performance of most interceptor wells within 90 to 95 percent duty cycle run times considered acceptable.

Interceptor 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 2003 to 2011 are included in Attachment B.

TABLE 2. 2011 INTERCEPTOR WELL FIELD TOTAL GROUNDWATER WITHDRAWAL

Total Gallons Pumped:	1,946,196,600
Total Acre-Feet Pumped:	5,972

3.0 SUMMARY OF WELL MAINTENANCE ACTIVITIES

Summary of well and pump maintenance activities performed in 2011 are tabulated on Table 3 below. All maintenance activities were performed following collection and evaluation of maintenance monitoring parameters as described in the *Operations and Maintenance Manual for the Interceptor Well Field* (BasinWells, 2011).

TABLE 3. 2011 INTERCEPTOR WELL FIELD SUMMARY OF WELL AND PUMP MAINTENANCE ACTIVITIES

Well	Approx. Dates Off Line for Maintenance	Maintenance Activities
IW-1	8/8/2011-9/30/211	Brushed & bailed; new pump bowls, column pipe, & shaft 10/3/2011 - Totalizer meter replaced
IW-2A	-	2/25/2011 - Leaking valve repaired
IW-3A	-	-
IW-8	-	-
IW-9	4/29/2011-5/24/2011	New pump bowls, column pipe & shaft
IW-4	-	-
IW-24	2/14/2011-3/11/2011	Brushed & bailed; new sub. pump & column pipe 3/23/2011- Hour meter replaced
IW-5A	8/-/2011-11/23/2011	New fiberglass column pipe
IW-23	-	-

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TABLE 3. 2011 INTERCEPTOR WELL FIELD SUMMARY OF WELL AND PUMP MAINTENANCE ACTIVITIES

Well	Approx. Dates Off Line for Maintenance	Maintenance Activities
IW-10	-	-
IW-22	-	2/14/2011 - Hour meter replaced
IW-11	7/5/2011-8/5/2011	New pump bowls, column pipe & shaft
IW-6A	-	-
IW-12	-	11/21/2011 - Totalizer meter replaced
IW-13	-	3/24/2011 - Hour meter replaced
IW-14	-	-
IW-15	12/15/2011-12/31/2011	New sub. pump & fiberglass column pipe 6/1/2011 - Hour meter replaced
IW-16	1/20/2011-12/31/2011	Out of Service - Low yield conditions
IW-17	1/20/2011-12/31/2011	Out of Service - Low yield conditions
IW-18	1/20/2011-12/31/2011	Out of Service - Low yield conditions
IW-19	-	3/24/2011 - Hour meter replaced 5/23/2011 - Old totalizer panel installed
IW-20	-	11/18/2011 - Hour meter replaced
IW-21	-	-

4.0 FUTURE MAINTENANCE ACTIVITIES

Future maintenance activities will continue to adhere to activities and frequencies as described in *Operations and Maintenance Manual for the Interceptor Well Field* (BasinWells, 2011). All maintenance activities to be performed following collection and evaluation of maintenance monitoring parameters.

Specific activities identified include the installation of a new interceptor well approximately 1,200 feet east of IW-11 and IW-6A (BasinWells, 2012). Operationally, IW-11 and IW-6A could continue to operate in conjunction with the new well. Once it is determined that life cycle of IW-11 or IW-6A have been exceeded, the new well should be able to maintain effective groundwater capture in the area. The original well(s) will either be abandoned or utilized for future groundwater monitoring. Construction of the new well is scheduled for 2013.

5.0 REFERENCES

BasinWells Associates, PLLC, *Freeport-McMoran Sierrita Inc., Operations and Maintenance Manual for the Interceptor Well Field*, June 30, 2011.

BasinWells Associates, PLLC, *Freeport-McMoran Sierrita Inc., Optimally Site and Design a Replacement Interceptor Well at the Freeport-McMoran Sierrita Inc.*, February 6, 2012.

HydroGeoChem, Inc. and Clear Creek Associates, P.L.C., *Freeport-McMoran Sierrita Inc., Final Wellfield Conceptual Design*, January 29, 2010.

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ATTACHMENT A

SIERRITA INTERCEPTOR WELL FIELD PERFORMANCE SUMMARY

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**ATTACHMENT A.
SUMMARY OF 2011 INTERCEPTOR WELL PERFORMANCE
FREEPORT MCMORAN SIERRITA, INC.**

Well	Month	Gallons Pumped	Hours	Yield (Acrefeet)	Ave. Yield Rate (gpm)
IW-1	Jan	10,009,000	763	30.7	219
	Feb	8,153,000	618	25.0	220
	Mar	8,843,000	694	27.1	212
	Apr	7,800,000	618	23.9	210
	May	9,691,000	765	29.7	211
	Jun	8,878,000	720	27.2	206
	Jul	8,351,000	686	25.6	203
	Aug	1,830,000	152	5.6	201
	Sep	383,000	-	1.2	-
	Oct	14,930,000	612	45.8	407
	Nov	16,544,000	691	50.8	399
	Dec	16,389,000	694	50.3	394

IW-1 Total Gallons Pumped:	111,801,000
IW-1 Total Acre-Feet Pumped:	343
IW-1 Average Yield Rate (gpm):	262
IW-1 % Run Time:	80.1%

Well	Month	Gallons Pumped	Hours	Yield (Acrefeet)	Ave. Yield Rate (gpm)
IW-2A	Jan	17,892,000	762	54.9	391
	Feb	14,179,000	605	43.5	391
	Mar	16,660,000	714	51.1	389
	Apr	14,192,000	617	43.6	383
	May	16,856,000	765	51.7	367
	Jun	15,395,000	720	47.2	356
	Jul	15,198,000	687	46.6	369
	Aug	16,383,000	735	50.3	371
	Sep	15,166,000	684	46.5	370
	Oct	16,396,000	742	50.3	368
	Nov	15,117,000	691	46.4	365
	Dec	14,964,000	694	45.9	359

IW-2A Total Gallons Pumped:	188,398,000
IW-2A Total Acre-Feet Pumped:	578
IW-2A Average Yield Rate (gpm):	373
IW-2A % Run Time:	96.1%

Well	Month	Gallons Pumped	Hours	Yield (Acrefeet)	Ave. Yield Rate (gpm)
IW-3A	Jan	27,002,000	762	82.9	591
	Feb	23,470,000	665	72.0	588
	Mar	25,853,000	739	79.3	583
	Apr	21,513,000	617	66.0	581
	May	26,494,000	765	81.3	577
	Jun	24,927,000	720	76.5	577
	Jul	23,701,000	687	72.7	575
	Aug	25,148,000	734	77.2	571
	Sep	23,400,000	685	71.8	569
	Oct	25,369,000	742	77.8	570
	Nov	23,427,000	691	71.9	565
	Dec	23,517,000	694	72.2	565

IW-3A Total Gallons Pumped:	293,821,000
IW-3A Total Acre-Feet Pumped:	902
IW-3A Average Yield Rate (gpm):	576
IW-3A % Run Time:	97.0%

Well	Month	Gallons Pumped	Hours	Yield (Acrefeet)	Ave. Yield Rate (gpm)
IW-8	Jan	20,143,200	763	61.8	440
	Feb	17,556,000	665	53.9	440
	Mar	18,666,000	706	57.3	441
	Apr	16,383,000	618	50.3	442
	May	20,065,000	763	61.6	438
	Jun	18,320,000	721	56.2	423
	Jul	17,511,000	685	53.7	426
	Aug	18,680,000	735	57.3	424
	Sep	17,273,000	684	53.0	421
	Oct	18,633,000	743	57.2	418
	Nov	17,170,000	691	52.7	414
	Dec	16,991,000	694	52.1	408

IW-8 Total Gallons Pumped:	217,391,200
IW-8 Total Acre-Feet Pumped:	667
IW-8 Average Yield Rate (gpm):	428
IW-8 % Run Time:	96.7%

Well	Month	Gallons Pumped	Hours	Yield (Acrefeet)	Ave. Yield Rate (gpm)
IW-9	Jan	10,402,000	763	31.9	227
	Feb	7,427,000	672	22.8	184
	Mar	4,943,000	702	15.2	117
	Apr	1,703,000	461	5.2	62
	May	2,769,000	168	8.5	275
	Jun	11,414,000	720	35.0	264
	Jul	10,891,000	686	33.4	265
	Aug	11,610,000	735	35.6	263
	Sep	10,666,000	681	32.7	261
	Oct	11,616,000	742	35.6	261
	Nov	10,741,000	688	33.0	260
	Dec	10,699,000	695	32.8	257

IW-9 Total Gallons Pumped:	104,881,000
IW-9 Total Acre-Feet Pumped:	322
IW-9 Average Yield Rate (gpm):	227
IW-9 % Run Time:	88.0%

Well	Month	Gallons Pumped	Hours	Yield (Acrefeet)	Ave. Yield Rate (gpm)
IW-4	Jan	3,507,000	763	10.8	77
	Feb	3,269,000	674	10.0	81
	Mar	3,539,000	734	10.9	80
	Apr	2,950,000	619	9.1	79
	May	3,755,000	764	11.5	82
	Jun	3,071,000	720	9.4	71
	Jul	3,035,000	686	9.3	74
	Aug	3,244,000	734	10.0	74
	Sep	2,918,000	685	9.0	71
	Oct	2,941,000	742	9.0	66
	Nov	2,596,000	691	8.0	63
	Dec	2,363,000	695	7.3	57

IW-4 Total Gallons Pumped:	37,188,000
IW-4 Total Acre-Feet Pumped:	114
IW-4 Average Yield Rate (gpm):	73
IW-4 % Run Time:	97.1%

Well	Month	Gallons Pumped	Hours	Yield (Acrefeet)	Ave. Yield Rate (gpm)
IW-24	Jan	3,341,000	677	10.3	82
	Feb	46,000	8	0.1	96
	Mar	3,148,000	473	9.7	111
	Apr	4,242,000	614	13.0	115
	May	5,620,000	763	17.2	123
	Jun	5,392,000	721	16.5	125
	Jul	4,973,000	628	15.3	132
	Aug	5,985,000	734	18.4	136
	Sep	5,691,000	681	17.5	139
	Oct	6,199,000	742	19.0	139
	Nov	5,512,000	691	16.9	133
	Dec	4,872,000	675	15.0	120

IW-24 Total Gallons Pumped:	55,021,000
IW-24 Total Acre-Feet Pumped:	169
IW-24 Average Yield Rate (gpm):	124
IW-24 % Run Time:	84.6%

Well	Month	Gallons Pumped	Hours	Yield (Acrefeet)	Ave. Yield Rate (gpm)
IW-5A	Jan	4,322,000	761	13.3	95
	Feb	3,782,000	676	11.6	93
	Mar	3,688,000	660	11.3	93
	Apr	3,551,000	637	10.9	93
	May	4,255,000	763	13.1	93
	Jun	3,949,000	721	12.1	91
	Jul	3,401,000	683	10.4	83
	Aug	1,674,000	632	5.1	44
	Sep	25,000	19	0.1	22
	Oct	10,000	8	0.0	21
	Nov	879,000	167	2.7	88
	Dec	3,778,000	695	11.6	91

IW-5A Total Gallons Pumped:	33,314,000
IW-5A Total Acre-Feet Pumped:	102
IW-5A Average Yield Rate (gpm):	86
IW-5A % Run Time:	73.3%

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**ATTACHMENT A.
SUMMARY OF 2011 INTERCEPTOR WELL PERFORMANCE
FREEPORT MCMORAN SIERRITA, INC.**

Well	Month	Gallons Pumped	Hours	Yield (Acrefeet)	Ave. Yield Rate (gpm)
IW-23	Jan	7,925,281	761	24.3	174
	Feb	6,981,003	674	21.4	173
	Mar	6,926,537	656	21.3	176
	Apr	6,504,000	615	20.0	176
	May	7,903,000	764	24.3	172
	Jun	7,017,000	695	21.5	168
	Jul	7,151,000	686	21.9	174
	Aug	6,596,000	734	20.2	150
	Sep	7,658,000	681	23.5	187
	Oct	5,482,000	549	16.8	166
	Nov	6,764,000	691	20.8	163
	Dec	6,530,000	695	20.0	157

IW-23 Total Gallons Pumped:	83,437,821
IW-23 Total Acre-Feet Pumped:	256
IW-23 Average Yield Rate (gpm):	170
IW-23 % Run Time:	93.6%

Well	Month	Gallons Pumped	Hours	Yield (Acrefeet)	Ave. Yield Rate (gpm)
IW-10	Jan	15,737,000	761	48.3	345
	Feb	13,608,000	657	41.8	345
	Mar	14,643,000	702	44.9	348
	Apr	12,671,000	611	38.9	346
	May	15,758,000	764	48.4	344
	Jun	14,619,000	720	44.9	338
	Jul	14,017,000	685	43.0	341
	Aug	14,859,000	735	45.6	337
	Sep	13,619,000	680	41.8	334
	Oct	15,197,000	741	46.6	342
	Nov	14,272,000	691	43.8	344
	Dec	14,250,000	695	43.7	342

IW-10 Total Gallons Pumped:	173,250,000
IW-10 Total Acre-Feet Pumped:	532
IW-10 Average Yield Rate (gpm):	342
IW-10 % Run Time:	96.4%

Well	Month	Gallons Pumped	Hours	Yield (Acrefeet)	Ave. Yield Rate (gpm)
IW-22	Jan	16,116,000	761	49.5	353
	Feb	14,200,000	682	43.6	347
	Mar	14,033,000	663	43.1	353
	Apr	13,017,000	612	39.9	354
	May	16,077,000	764	49.3	351
	Jun	14,808,000	720	45.4	343
	Jul	14,355,000	685	44.1	349
	Aug	15,440,000	735	47.4	350
	Sep	14,130,000	681	43.4	346
	Oct	15,317,000	742	47.0	344
	Nov	12,377,000	692	38.0	298
	Dec	10,421,000	695	32.0	250

IW-22 Total Gallons Pumped:	170,291,000
IW-22 Total Acre-Feet Pumped:	523
IW-22 Average Yield Rate (gpm):	337
IW-22 % Run Time:	96.3%

Well	Month	Gallons Pumped	Hours	Yield (Acrefeet)	Ave. Yield Rate (gpm)
IW-11	Jan	2,422,996	761	7.4	53
	Feb	10,643,400	657	32.7	270
	Mar	6,187,500	375	19.0	275
	Apr	10,065,000	610	30.9	275
	May	12,283,000	764	37.7	268
	Jun	11,071,000	720	34.0	256
	Jul	1,769,000	117	5.4	252
	Aug	17,024,000	665	52.2	427
	Sep	17,151,000	681	52.6	420
	Oct	18,673,000	743	57.3	419
	Nov	17,384,000	691	53.3	419
	Dec	17,532,000	695	53.8	420

IW-11 Total Gallons Pumped:	142,205,896
IW-11 Total Acre-Feet Pumped:	436
IW-11 Average Yield Rate (gpm):	317
IW-11 % Run Time:	85.4%

Well	Month	Gallons Pumped	Hours	Yield (Acrefeet)	Ave. Yield Rate (gpm)
IW-6A	Jan	4,598,900	761	14.1	101
	Feb	3,774,300	627	11.6	100
	Mar	3,686,700	613	11.3	100
	Apr	3,523,000	588	10.8	100
	May	4,479,000	750	13.7	100
	Jun	4,263,000	720	13.1	99
	Jul	3,596,000	610	11.0	98
	Aug	4,162,000	715	12.8	97
	Sep	4,050,000	701	12.4	96
	Oct	4,138,000	718	12.7	96
	Nov	2,314,000	403	7.1	96
	Dec	3,692,000	650	11.3	95

IW-6A Total Gallons Pumped:	46,276,900
IW-6A Total Acre-Feet Pumped:	142
IW-6A Average Yield Rate (gpm):	98
IW-6A % Run Time:	89.7%

Well	Month	Gallons Pumped	Hours	Yield (Acrefeet)	Ave. Yield Rate (gpm)
IW-12	Jan	6,640,810	762	20.4	145
	Feb	5,838,750	674	17.9	144
	Mar	5,678,750	653	17.4	145
	Apr	5,245,990	613	16.1	143
	May	6,482,880	764	19.9	141
	Jun	6,017,190	720	18.5	139
	Jul	5,666,620	685	17.4	138
	Aug	5,799,840	710	17.8	136
	Sep	4,117,380	511	12.6	134
	Oct	5,041,610	627	15.5	134
	Nov	3,750,300	463	11.5	135
	Dec	4,507,000	568	13.8	132

IW-12 Total Gallons Pumped:	64,787,120
IW-12 Total Acre-Feet Pumped:	199
IW-12 Average Yield Rate (gpm):	139
IW-12 % Run Time:	88.5%

Well	Month	Gallons Pumped	Hours	Yield (Acrefeet)	Ave. Yield Rate (gpm)
IW-13	Jan	1,152,000	761	3.5	25
	Feb	1,025,000	674	3.1	25
	Mar	1,006,000	658	3.1	25
	Apr	924,000	613	2.8	25
	May	1,152,000	764	3.5	25
	Jun	1,063,000	720	3.3	25
	Jul	993,000	683	3.0	24
	Aug	1,037,000	716	3.2	24
	Sep	819,000	569	2.5	24
	Oct	1,061,000	743	3.3	24
	Nov	746,000	522	2.3	24
	Dec	982,000	696	3.0	24

IW-13 Total Gallons Pumped:	11,960,000
IW-13 Total Acre-Feet Pumped:	37
IW-13 Average Yield Rate (gpm):	25
IW-13 % Run Time:	92.7%

Well	Month	Gallons Pumped	Hours	Yield (Acrefeet)	Ave. Yield Rate (gpm)
IW-14	Jan	2,808,000	761	8.6	61
	Feb	2,404,000	675	7.4	59
	Mar	1,309,000	550	4.0	40
	Apr	2,093,000	611	6.4	57
	May	2,585,000	764	7.9	56
	Jun	2,399,000	722	7.4	55
	Jul	2,281,000	682	7.0	56
	Aug	2,348,000	715	7.2	55
	Sep	2,288,000	702	7.0	54
	Oct	2,417,000	742	7.4	54
	Nov	2,235,000	691	6.9	54
	Dec	1,914,000	696	5.9	46

IW-14 Total Gallons Pumped:	27,081,000
IW-14 Total Acre-Feet Pumped:	83
IW-14 Average Yield Rate (gpm):	54
IW-14 % Run Time:	94.9%

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**ATTACHMENT A.
SUMMARY OF 2011 INTERCEPTOR WELL PERFORMANCE
FREEPORT MCMORAN SIERRITA, INC.**

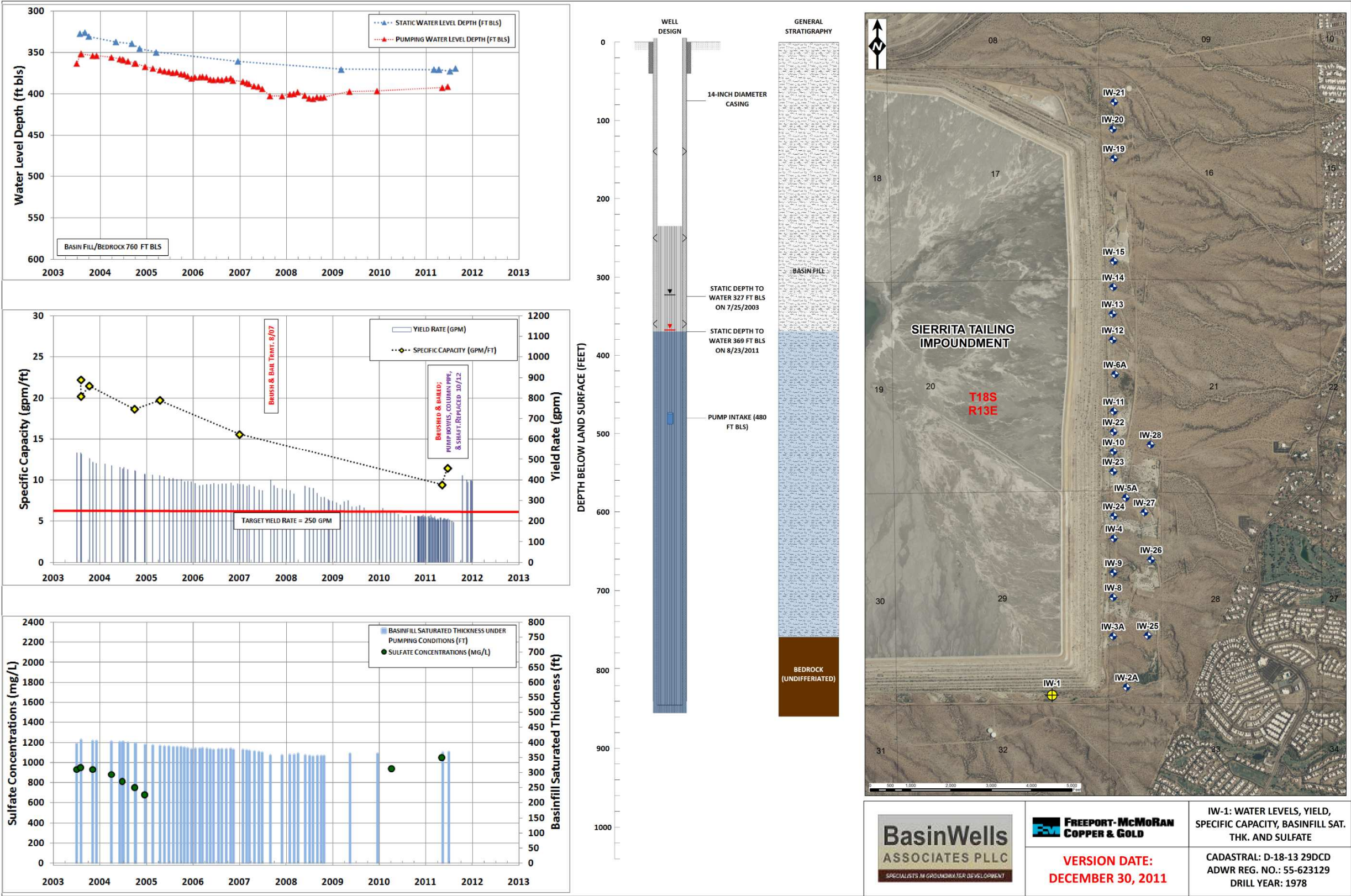
Well	Month	Gallons Pumped	Hours	Yield (Acrefeet)	Ave. Yield Rate (gpm)
IW-15	Jan	2,141,000	762	6.6	47
	Feb	1,901,300	674	5.8	47
	Mar	1,851,700	658	5.7	47
	Apr	1,722,400	610	5.3	47
	May	2,139,500	764	6.6	47
	Jun	1,926,500	699	5.9	46
	Jul	1,896,100	683	5.8	46
	Aug	1,998,100	715	6.1	47
	Sep	1,961,800	702	6.0	47
	Oct	2,071,800	742	6.4	47
	Nov	900	2	0.0	8
	Dec	62,000	21	0.2	49
IW-15 Total Gallons Pumped:					19,673,100
IW-15 Total Acre-Feet Pumped:					60
IW-15 Average Yield Rate (gpm):					47
IW-15 % Run Time:					80.3%
Well	Month	Gallons Pumped	Hours	Yield (Acrefeet)	Ave. Yield Rate (gpm)
IW-16	Jan	249,500	498	0.8	8
	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-16 Total Gallons Pumped:					249,500
IW-16 Total Acre-Feet Pumped:					0.8
IW-16 Average Yield Rate (gpm):					8
IW-16 % Run Time:					5.7%
Well	Month	Gallons Pumped	Hours	Yield (Acrefeet)	Ave. Yield Rate (gpm)
IW-17	Jan	29,700	227	0.1	2
	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-17 Total Gallons Pumped:					29,700
IW-17 Total Acre-Feet Pumped:					0.1
IW-17 Average Yield Rate (gpm):					2
IW-17 % Run Time:					2.6%
Well	Month	Gallons Pumped	Hours	Yield (Acrefeet)	Ave. Yield Rate (gpm)
IW-18	Jan	144,000	0	0.4	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-18 Total Gallons Pumped:					144,000
IW-18 Total Acre-Feet Pumped:					0.4
IW-18 Average Yield Rate (gpm):					0
IW-18 % Run Time:					0.0%
Well	Month	Gallons Pumped	Hours	Yield (Acrefeet)	Ave. Yield Rate (gpm)
IW-19	Jan	8,111,980	760	24.9	178
	Feb	7,138,620	674	21.9	177
	Mar	6,824,440	657	20.9	173
	Apr	6,294,140	611	19.3	172
	May	7,838,640	764	24.1	171
	Jun	6,931,800	692	21.3	167
	Jul	6,613,220	665	20.3	166
	Aug	6,968,190	715	21.4	162
	Sep	6,727,710	701	20.6	160
	Oct	7,110,970	743	21.8	160
	Nov	6,601,730	692	20.3	159
	Dec	6,543,830	696	20.1	157
IW-19 Total Gallons Pumped:					83,705,270
IW-19 Total Acre-Feet Pumped:					257
IW-19 Average Yield Rate (gpm):					167
IW-19 % Run Time:					95.5%
Well	Month	Gallons Pumped	Hours	Yield (Acrefeet)	Ave. Yield Rate (gpm)
IW-20	Jan	1,384,700	761	4.2	30
	Feb	1,210,000	674	3.7	30
	Mar	1,214,200	655	3.7	31
	Apr	1,159,200	609	3.6	32
	May	1,597,100	764	4.9	35
	Jun	1,502,900	720	4.6	35
	Jul	1,441,500	683	4.4	35
	Aug	1,491,200	716	4.6	35
	Sep	1,448,700	701	4.4	34
	Oct	1,434,700	495	4.4	48
	Nov	1,379,600	676	4.2	34
	Dec	1,378,000	696	4.2	33
IW-20 Total Gallons Pumped:					16,641,800
IW-20 Total Acre-Feet Pumped:					51
IW-20 Average Yield Rate (gpm):					34
IW-20 % Run Time:					93.0%
Well	Month	Gallons Pumped	Hours	Yield (Acrefeet)	Ave. Yield Rate (gpm)
IW-21	Jan	6,716,370	761	20.6	147
	Feb	5,863,030	673	18.0	145
	Mar	5,588,730	680	17.2	137
	Apr	5,033,160	599	15.4	140
	May	5,972,360	764	18.3	130
	Jun	5,059,070	715	15.5	118
	Jul	5,222,430	695	16.0	125
	Aug	5,331,790	716	16.4	124
	Sep	5,183,630	701	15.9	123
	Oct	5,413,860	743	16.6	121
	Nov	4,729,300	692	14.5	114
	Dec	4,534,560	696	13.9	109
IW-21 Total Gallons Pumped:					64,648,290
IW-21 Total Acre-Feet Pumped:					198
IW-21 Average Yield Rate (gpm):					128
IW-21 % Run Time:					96.3%

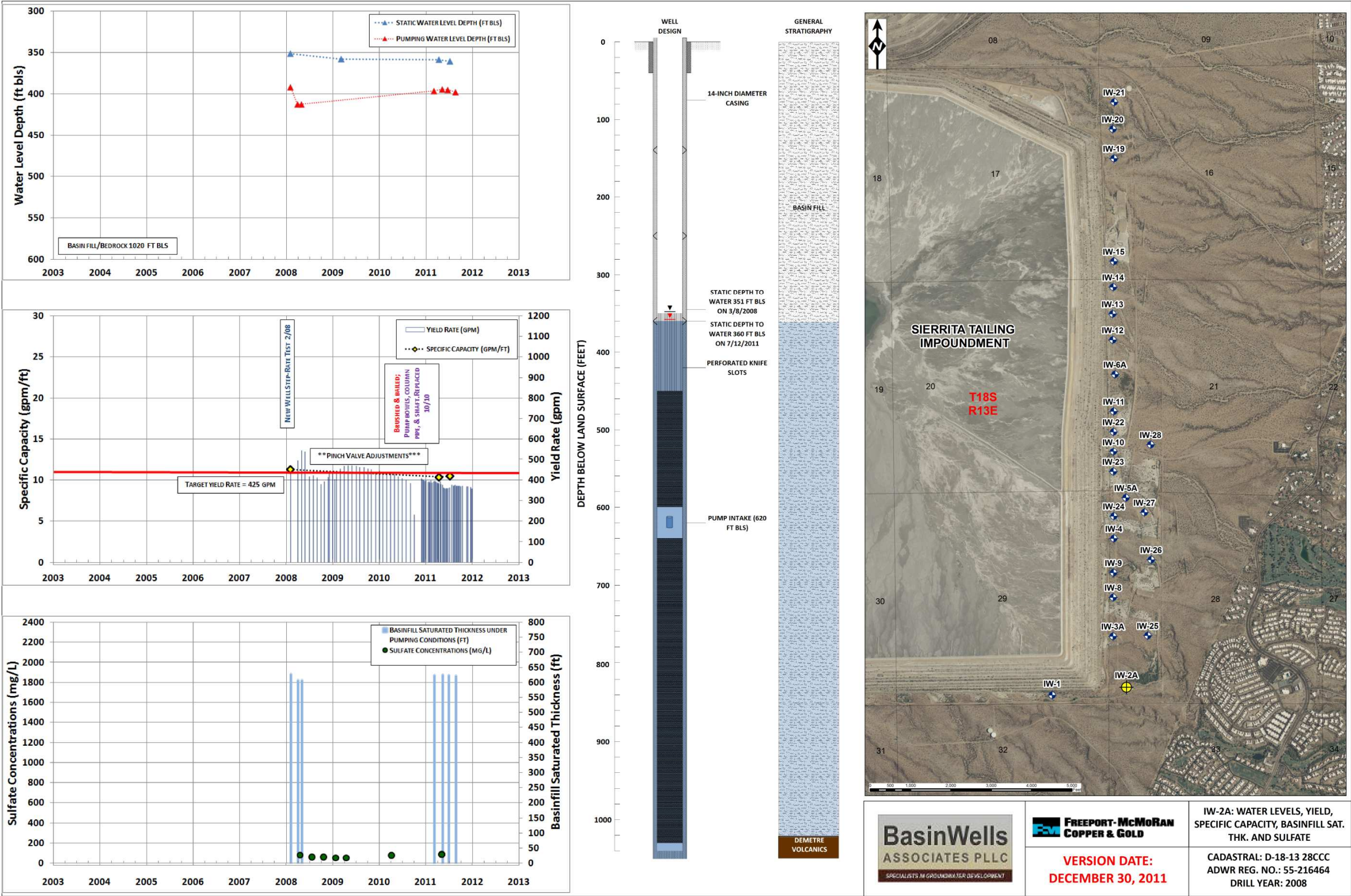
BasinWells Associates PLLC

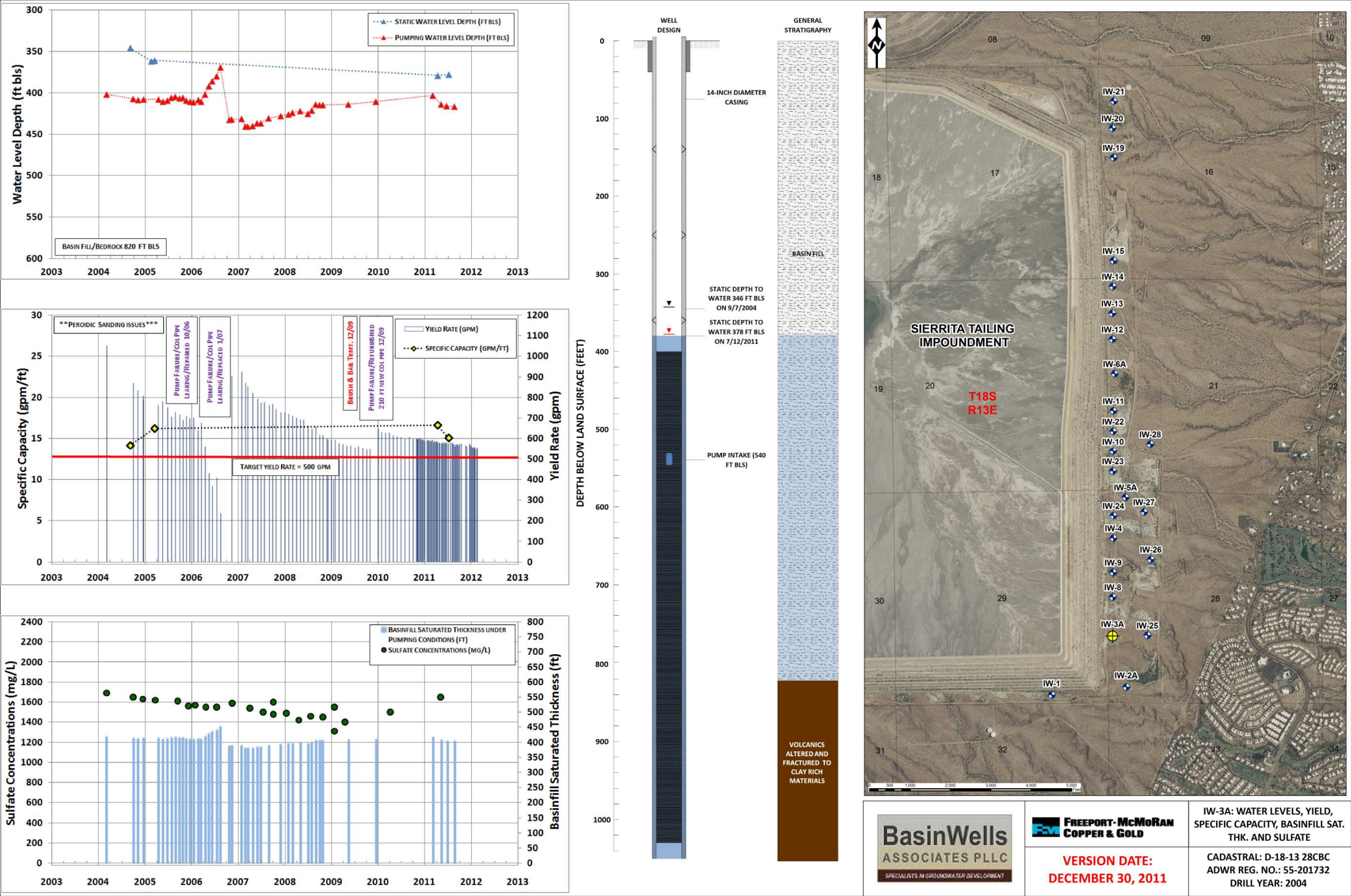
ATTACHMENT B

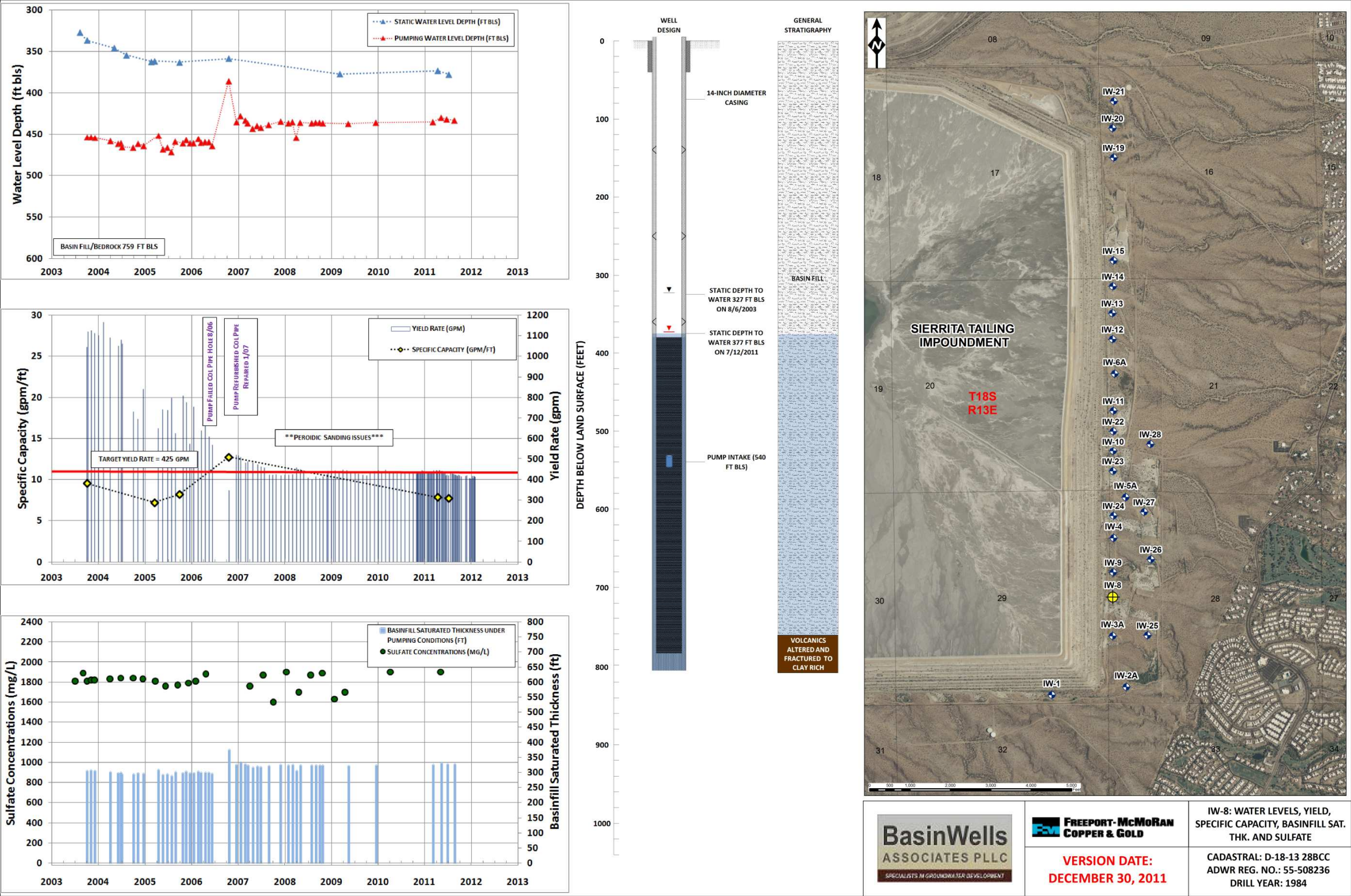
SIERRITA INTERCEPTOR WELL FIELD DATA PLOTS

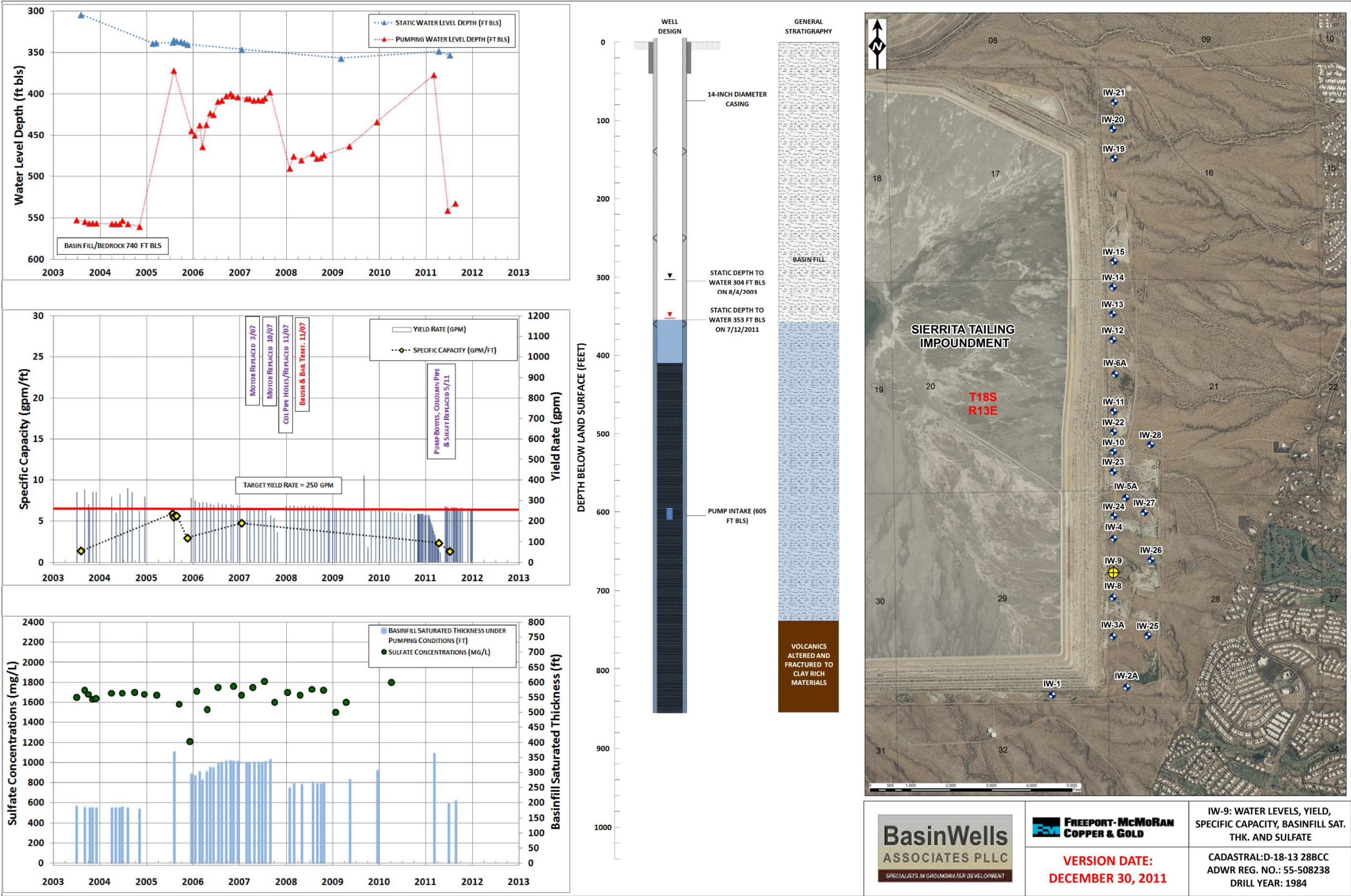
BasinWells Associates PLLC

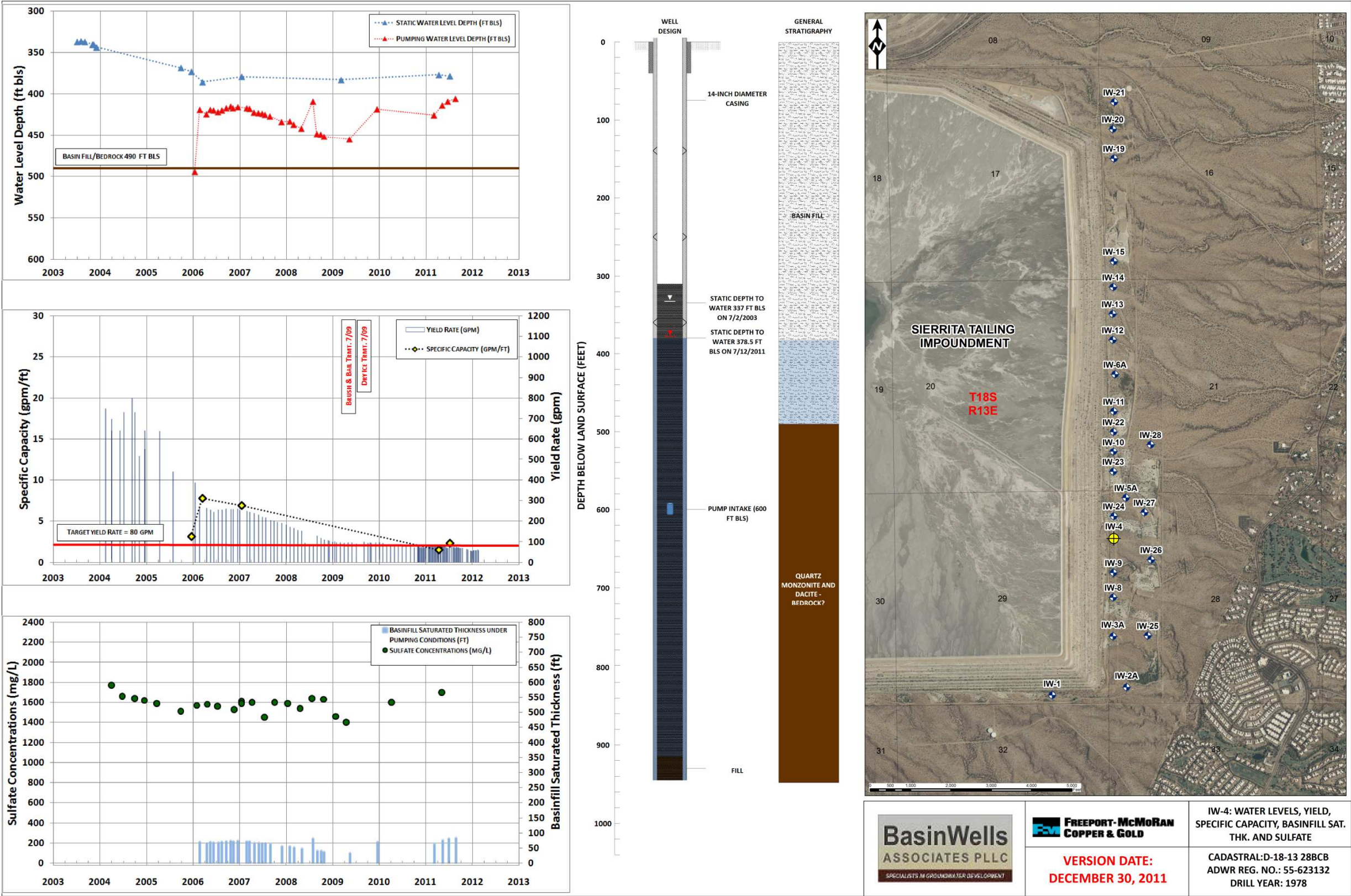


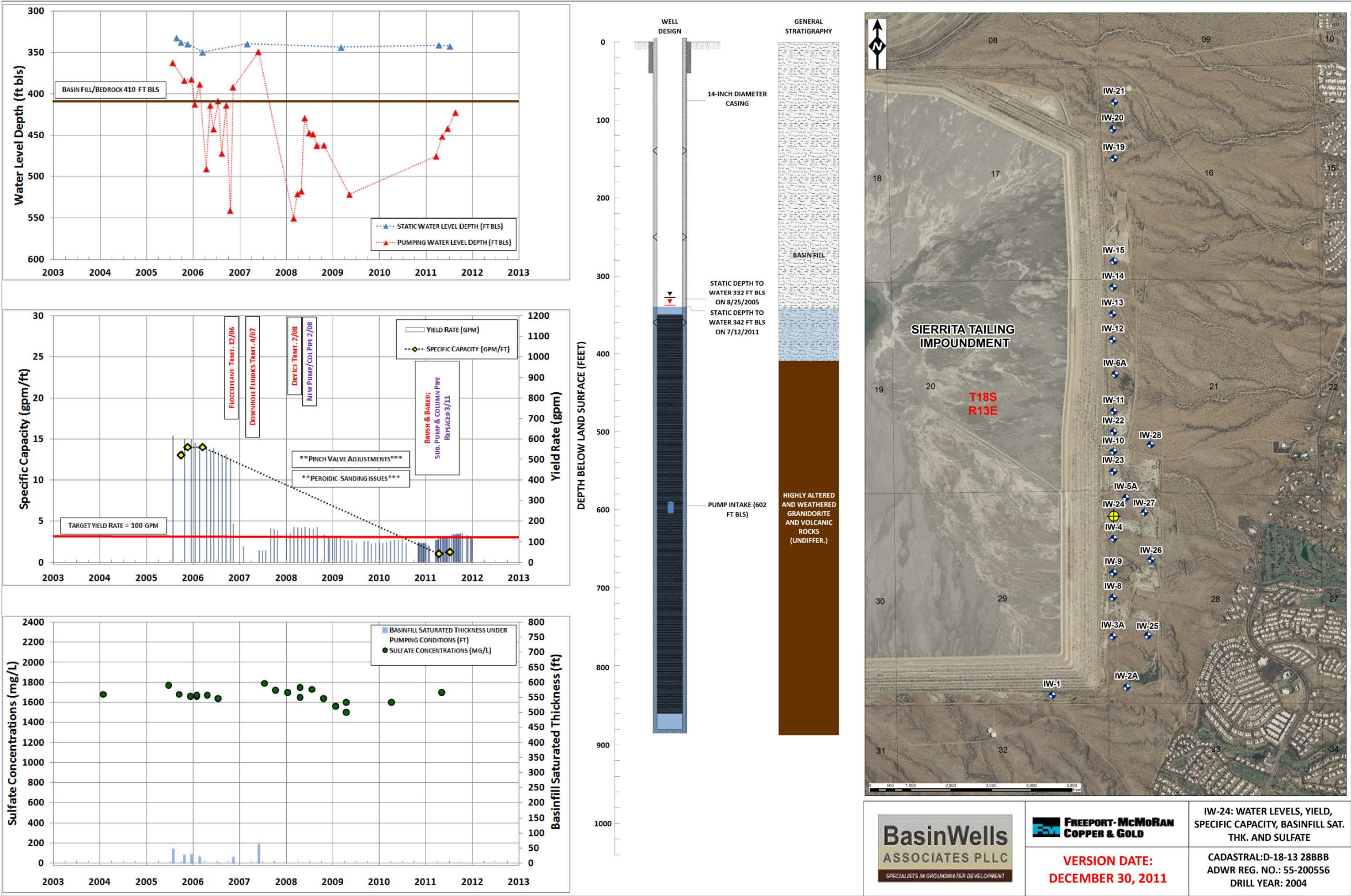


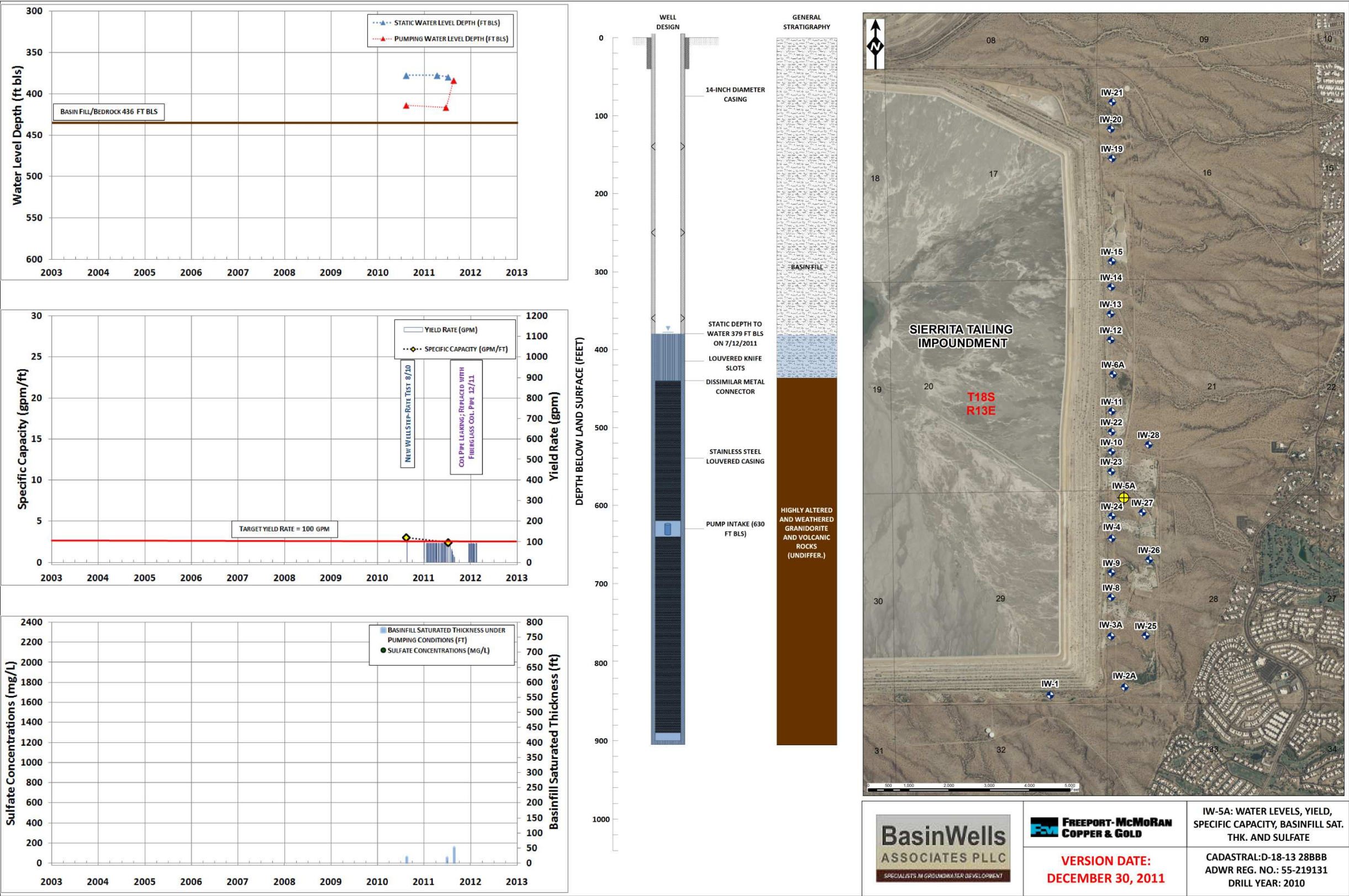


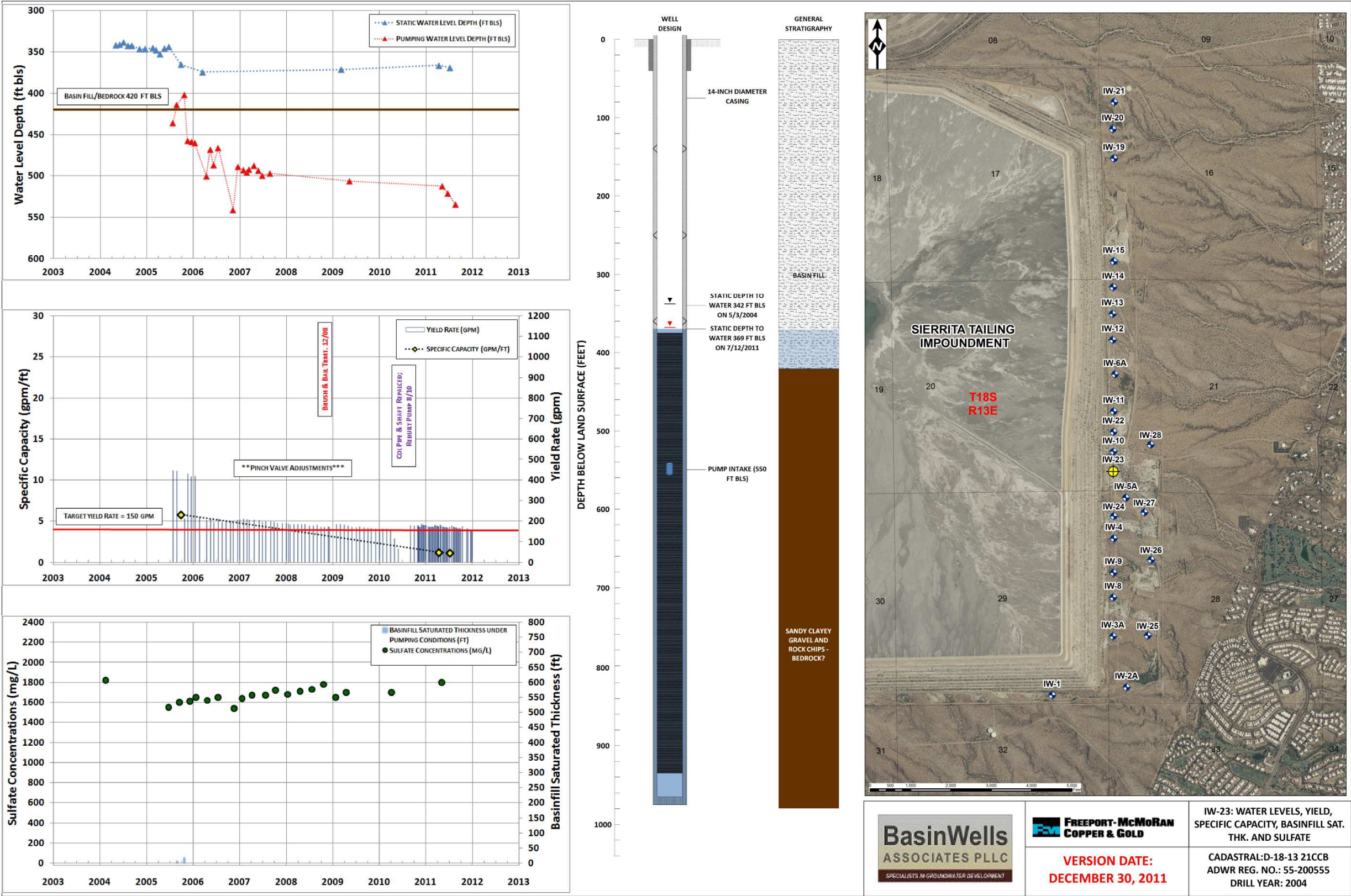


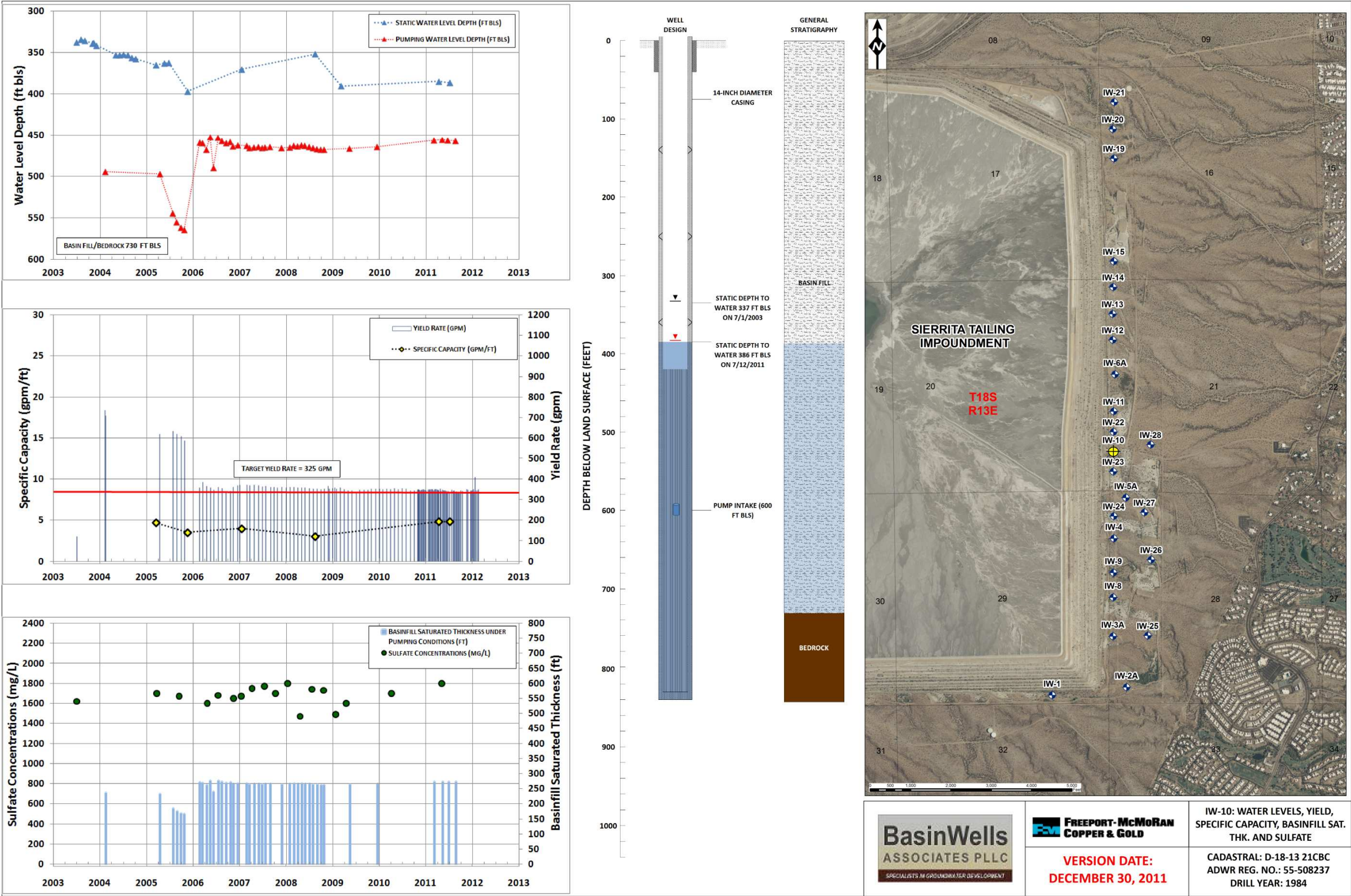


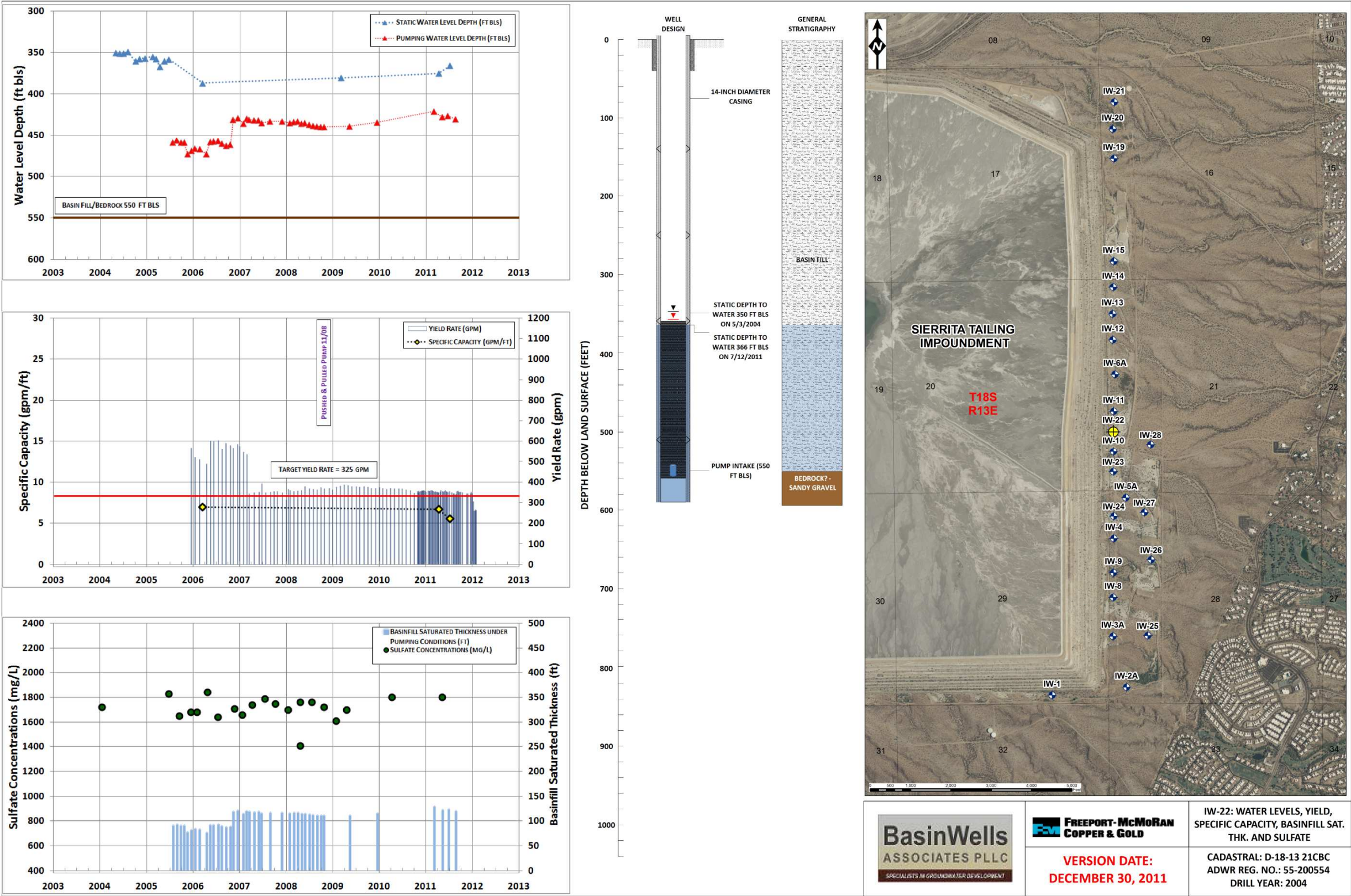


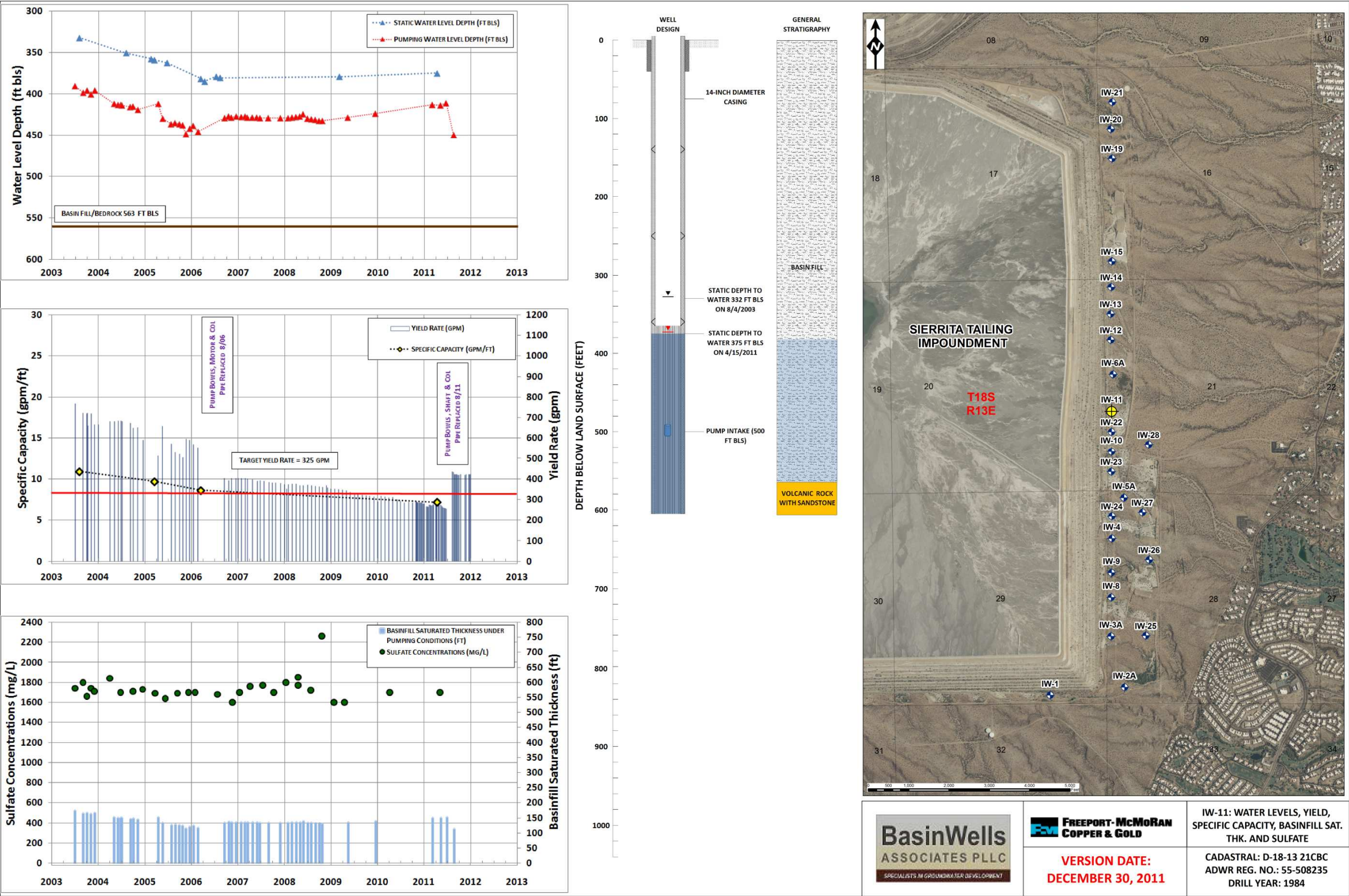


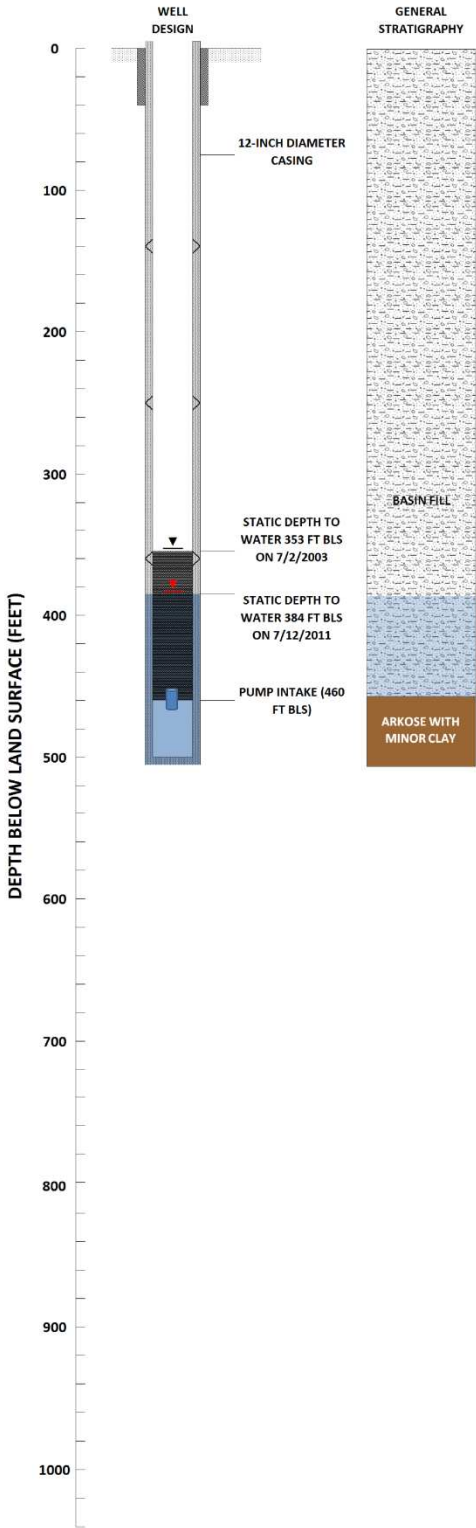
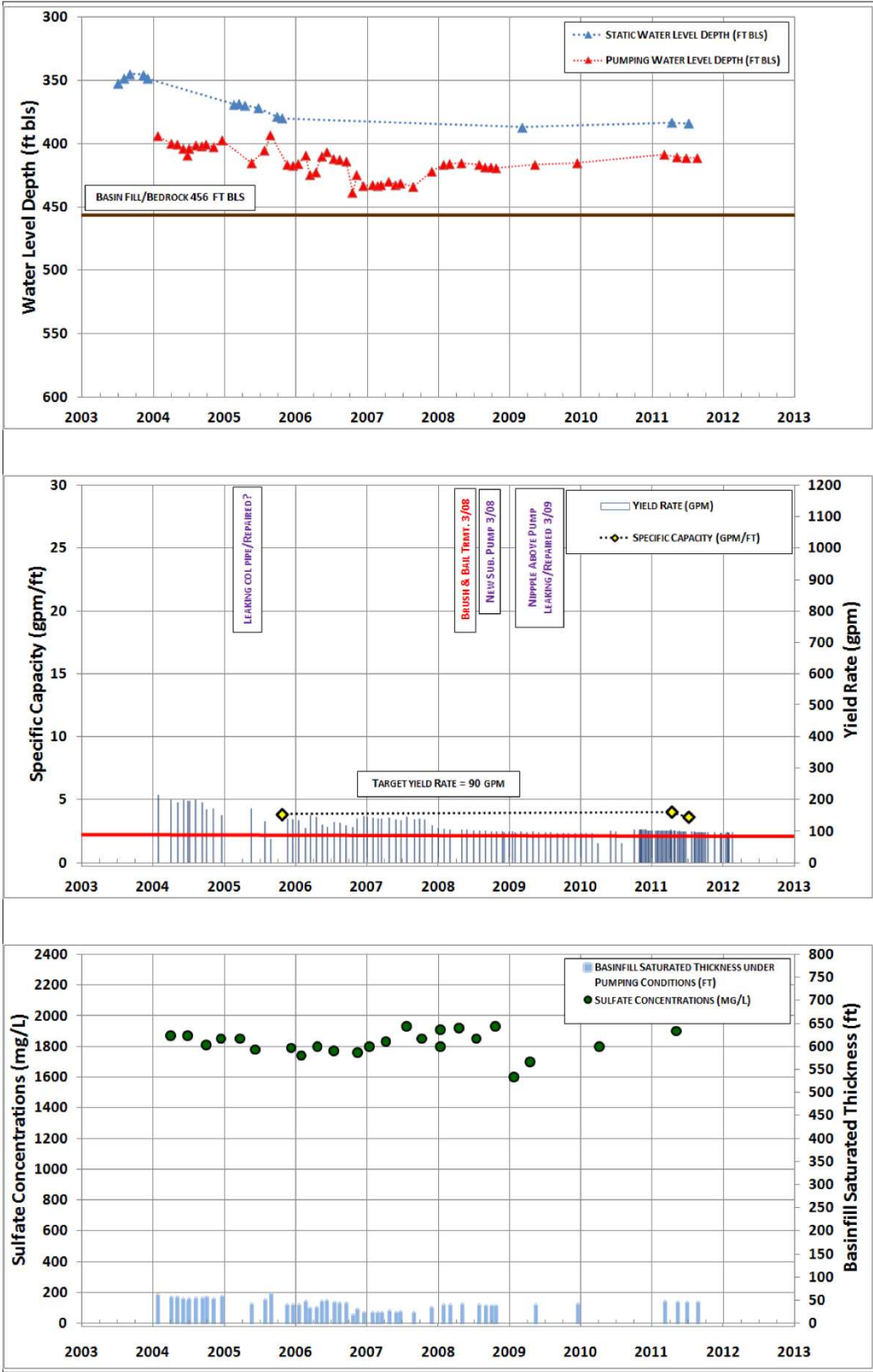












FREEPORT-McMORAN
COPPER & GOLD

VERSION DATE:
DECEMBER 30, 2011

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

