TECHNICAL MEMORANDUM

San Antonio Creek Valley Groundwater Basin Quarterly Groundwater Level Monitoring – Third Quarter 2022

To: Ms. Stephanie Bertoux, Executive Director, San Antonio Basin Groundwater Sustainability Agency

From: Lee Knudtson, GSI Water Solutions, Inc.
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Attachments: Tables:
Table 1. Third Quarter 2022 Groundwater Level Measurements – Depth to Water
Table 2. Third Quarter 2022 Groundwater Level Measurements – Groundwater Elevation

Figures:
Figure 1. Wells Located in The Western Portion of the San Antonio Creek Valley Groundwater Basin
Figure 2. Wells Located in The Central Portion of the San Antonio Creek Valley Groundwater Basin
Figure 3. Wells Located in The Eastern Portion of the San Antonio Creek Valley Groundwater Basin

Date: September 29, 2022

Introduction

On behalf of the San Antonio Basin Groundwater Sustainability Agency (SABGSA), GSI Water Solutions, Inc. (GSI) completed the third quarter 2022 (3Q2022) San Antonio Creek Valley Groundwater Basin (Basin) groundwater level monitoring event on September 15th and 16th, 2022. Prior to each quarterly monitoring event, GSI contacts well owners to coordinate access to the wells and request that well owners shut off the well for at least 8 hours before the monitoring event so that a static measurement can be obtained. Notifications were delivered to well owners on September 2nd, 2022, by GSI via email. The attached tables provide the status of current well access agreements and the attached figures show the well locations. The following paragraphs and attached tables summarize the results for this quarter.

Water Level Monitoring Data

The attached tables summarize the results of the 3Q2022 Basin water level monitoring event for the wells in the Basin's groundwater level monitoring network. The tables include the status of current well access agreements, depth to water measurements, and calculated groundwater elevations for all wells that were able to be accessed during the monitoring event. Wells identified as Representative Monitoring Sites (RMS) in the Basin's Groundwater Sustainability Plan (GSP) are identified in Table 2 and denoted with the respective RMS's sustainable management criteria (i.e., minimum threshold and measurable objective). The following list summarizes observations from the 3Q2022 monitoring event:

- The Minimum Threshold was exceeded in well SACC1 during the second consecutive 3Q monitoring event.
- Besides well 2M1 and 17Q1, a groundwater level measurement was collected from all wells with active well access agreements.
- Well 2M1 was not monitored due to the risk of the sounder becoming stuck in the well. Groundwater level monitoring at well 2M1 is planned to resume pending the installation of a sounding tube.
- Well 17Q1 was inaccessible due to poison oak overgrowth.
- There was a substantial amount of rusty material in well 2N1 and the Mesa Vineyard well.
- The access trails to wells in the Barka Slough are overgrown. The vegetation along the trails needs to be trimmed to retain access to all the Barka Slough wells in the Basin's groundwater level monitoring program. At the direction of the SABGSA Executive Director, GSI is developing a proposal for this scope of work.

Recommendations

- Install a sounding tube in well 2M1.
- Continue public outreach to Basin stakeholders to discuss participation in the Basin's groundwater level monitoring network.
- Perform ongoing maintenance of the well access trails within Barka Slough.
- Consider the purchase and installation of continuous data recording pressure transducers in, at a minimum, all RMS wells.

Tables

State Well Number	Site Name	Well Type	Water Level Measurement Frequency/Type	Area	Total Depth (feet bgs)	Aquifer of Completion	DTW on 2/25/2020	DTW on 6/16/2020	DTW on 9/16/2020 and 9/17/2020	DTW on 12/1/2020 and 12/2/2020	DTW on 2/25/2021 and 2/26/2021	DTW on 6/22/2021 and 6/23/2021	DTW on 9/14/2021 and 9/15/2021	DTW on 12/8/2021 and 12/9/2021	DTW on 3/10/2022 and 3/11/2022	DTW on 6/21/2022 and 6/22/2022	DTW on 9/15/2022 and 9/16/2022	Notes on 9/15/2022 and 9/16/2022
009N034W34N002S	SAHC	Monitoring	Continuous/Transducer	West San Antonio Basin	90	Careaga Sand	73.14	73.13	73.19	73.25	73.25	73.40	73.55	73.68	73.79	73.93	74.07	
008N034W21A002S	SASA	Monitoring	Continuous/Transducer	West San Antonio Basin	65	Careaga Sand	42.96	43.35	44.08	44.63	44.33	44.75	45.37	45.69	45.85	46.19	46.98	
008N034W14L002S	SAGR	Monitoring	Continuous/Transducer	West San Antonio Basin	90	Paso Robles Formation	61.12	61.41	62.69	61.75	60.91	62.06	63.68	63.25	62.89	64.50	66.88	
008N034W23H001S	SAHG	Monitoring	Continuous/Transducer	West San Antonio Basin	75	Paso Robles Formation	42.46	41.80	41.20	41.21	42.35	43.41	42.85	42.72	43.12	41.42	41.71	
008N033W22G001S	SALS	Monitoring	Continuous/Transducer	Central San Antonio Basin	70	Paso Robles Formation	36.28	36.22	37.10	37.83	38.15	39.04	38.73	39.73	39.50	39.44	39.34	Irrigation occuring nearby
008N032W29L004S	SALA	Monitoring	Continuous/Transducer	Central San Antonio Basin	90	Paso Robles Formation	45.35	43.83	45.33	46.42	46.78	47.54	48.13	48.79	48.95	49.25	49.85	
008N033W19K002S	SACR 1	Monitoring	Continuous/Transducer	West San Antonio Basin	690	Careaga Sand	42.04	46.11	48.20	43.42	42.29	47.81	49.61	46.27	46.25	51.05	54.90	
008N033W19K002S	SACR 2	Monitoring	Quarterly/Discrete	West San Antonio Basin	540	Paso Robles Formation	73.39	70.23	71.76	76.17	77.28	81.41	76.58	75.51	78.76	81.30	83.33	
008N033W19K004S	SACR 3	Monitoring	Quarterly/Discrete	West San Antonio Basin	350	Paso Robles Formation	107.16	115.11	111.44	102.42	95.73	119.19	113.90	99.00	102.25	119.95	122.83	
008N033W19K005S	SACR 4	Monitoring	Quarterly/Discrete	West San Antonio Basin	220	Paso Robles Formation	93.06	94.04	95.28	94.67	94.61	96.07	95.93	94.72	94.07	95.70	97.73	
008N033W19K002S	SACR 5	Monitoring	Quarterly/Discrete	West San Antonio Basin	110	Paso Robles Formation	97.59	97.78	99.70	99.83	99.30	99.75	100.49	100.30	99.68	99.98	100.47	
008N032W19M001S	SACC 1	Monitoring	Continuous/Transducer	Central San Antonio Basin	980	Paso Robles Formation	214.46	216.41	216.55	221.92	212.43	227.45	237.35	229.72	235.35	236.20	241.70	
008N032W19M002S	SACC 2	Monitoring	Quarterly/Discrete	Central San Antonio Basin	720	Paso Robles Formation	205.32	208.95	213.00	211.83	206.63	217.18	219.00	215.05	217.05	217.45	222.83	
008N032W19M003S	SACC 3	Monitoring	Quarterly/Discrete	Central San Antonio Basin	530	Paso Robles Formation	204.18	213.22	214.83	217.00	206.74	220.53	224.73	220.42	219.40	220.10	223.35	
008N032W19M004S	SACC 4	Monitoring	Quarterly/Discrete	Central San Antonio Basin	325	Paso Robles Formation	161.92	164.47	168.09	167.67	167.45	171.01	173.62	172.79	173.70	175.70	177.90	
008N032W19M001S	SACC 5	Monitoring	Quarterly/Discrete	Central San Antonio Basin	120	Paso Robles Formation	107.22	107.08	107.17	107.08	107.18	107.25	107.20	107.13	107.10	107.05	107.30	
008N034W02M001S	2M1	Irrigation	Quarterly/Discrete	West San Antonio Basin	750	Paso Robles Formation	--	150.10	152.38	151.00	150.10	152.50	154.13	152.60	154.55	--	--	Temporarly discontinued due to risk of sounder loss
--	White Hawk 1	Irrigation	Quarterly/Discrete	Central San Antonio Basin	560	Careaga Sand	--	119.83	120.85	120.33	118.50	123.12	124.03	124.03	112.73	125.50	126.50	
008N32W17N001S	White Hawk 4	Irrigation	Quarterly/Discrete	Central San Antonio Basin	820	Careaga Sand	93.20	94.91	95.27	95.58	92.70	98.80	99.24	98.85	97.90	100.55	101.20	
--	Mesa Vineyard	Irrigation	Quarterly/Discrete	Central San Antonio Basin	--	Careaga Sand	257.70	216.42	216.75	215.42	214.30	216.50	217.10	218.08	218.80	219.50	220.50	Rusty material in well
008N033W02N001S	2N1	Irrigation	Quarterly/Discrete	Central San Antonio Basin	980	Careaga Sand	--	--	--	221.75	209.20	226.50	--	224.65	227.10	226.20	228.00	Rusty material in well
008N033W02R001S	2R1	Irrigation	Quarterly/Discrete	Central San Antonio Basin	370	Careaga Sand	--	119.50	118.60	118.92	120.89	192.82	185.22	119.42	118.75	173.55	120.50	
008N033W10	4-Deer Field	Irrigation	Quarterly/Discrete	Central San Antonio Basin	490	Careaga Sand	24.44	23.73	24.88	24.00	24.20	25.15	27.82	27.67	27.09	65.90	68.00	Pump on
008N033W03L001S	4-Deer Highway	Irrigation	Quarterly/Discrete	Central San Antonio Basin	349	Careaga Sand	93.47	92.05	93.60	92.17	93.85	97.71	94.80	95.05	96.10	96.59	98.10	
--	Schaff Well	Monitoring	Quarterly/Discrete	Central San Antonio Basin	669	Careaga Sand	213.62	213.95	214.59	214.25	215.12	215.82	216.28	216.65	216.76	217.24	217.90	Irrigation occuring nearby
008N034W14L001S	14L1	Monitoring	Quarterly/Discrete	West San Antonio Basin	593	Careaga Sand	63.68	66.80	90.80	66.42	66.18	70.93	70.82	68.99	68.12	71.18	73.70	
009N034W34P001S	34P1	Monitoring	Quarterly/Discrete	West San Antonio Basin	223	Careaga Sand	--	74.92	70.70	70.75	69.50	68.86	68.60	68.55	72.66	71.85	70.80	
008N034W17Q001S	17Q1	Monitoring	Quarterly/Discrete	West San Antonio Basin	48	Careaga Sand	--	--	--	12.75	13.40	13.85	--	14.78	14.80	15.40	--	Trail to well overgrown with poison oak
008N034W21A001S	21A1	Monitoring	Quarterly/Discrete	West San Antonio Basin	271	Careaga Sand	--	--	34.85	35.58	35.25	35.64	36.22	36.79	36.93	37.80	38.75	Trail to well overgrown with vegetation
008N034W17K002S	17K2	Monitoring	Quarterly/Discrete	West San Antonio Basin	60	Careaga Sand	--	--	--	--	--	--	--	6.98	6.98	7.13	7.30	Trail to well overgrown with vegetation
008N034W17E001S	17E1	Monitoring	Quarterly/Discrete	West San Antonio Basin	89	Careaga Sand	--	--	21.28	21.42	20.98	21.40	21.76	22.03	22.20	22.28	22.35	Trail to well overgrown with vegetation
008N034W16C002S	16C2	Monitoring	Continuous/Transducer	West San Antonio Basin	169	Careaga Sand	--	--	74.60	79.58	75.47	75.36	76.15	86.75	87.76	74.72	94.03	Nearby Pump on
008N034W16C004S	16C4	Monitoring	Continuous/Transducer	West San Antonio Basin	560	Careaga Sand	--	--	66.45	69.08	66.81	67.24	67.80	73.94	74.66	87.21	79.63	Nearby Pump on
008N034W17H001S	17H1	Monitoring	Quarterly/Discrete	West San Antonio Basin	61	Careaga Sand	--	--	15.54	16.29	15.64	15.68	16.54	17.20	16.97	17.81	18.81	Trail to well overgrown with vegetation
008N034W16F001S	16F1	Monitoring	Quarterly/Discrete	West San Antonio Basin	58	Careaga Sand	--	--	29.35	35.25	31.02	30.33	30.92	38.50	40.34	43.83	46.30	Trail to well overgrown with vegetation
008N034W16G003S	16G3	Monitoring	Quarterly/Discrete	West San Antonio Basin	56	Careaga Sand	--	--	47.78	48.08	48.66	48.84	49.00	49.31	49.86	50.52	51.17	
008N033W13C001S	13C1	Irrigation	Quarterly/Discrete	Central San Antonio Basin	1,070	Careaga Sand	--	--	187.60	191.50	--	195.00	--	188.10	188.90	190.20	188.00	Irrigation occuring nearby
008N033W07	Stephen's Well	Irrigation	Quarterly/Discrete	West San Antonio Basin	590	Careaga Sand	356.00	335.22	559.33	585.90	--	--	335.26	341.00	343.30	342.15	345.61	
008N033W13Q001S	13Q1	Irrigation	--	Central San Antonio Basin	295	Paso Robles Formation	--	--	--	--	--	--	--	--	--	--	--	
008N032W30D001S	30D1	Monitoring	--	Central San Antonio Basin	895	Paso Robles Formation	--	--	--	--	--	--	--	--	--	--	--	
008N032W25D001S	25D1	Irrigation	--	East San Antonio Basin	700	Careaga Sand	--	--	--	--	--	--	--	--	--	--	--	
008N033W22K003S	22K3	Irrigation	--	Central San Antonio Basin	250	Paso Robles Formation	--	--	--	--	--	--	--	--	--	--	--	
008N031W22J001S	22J1	Unknown	--	East San Antonio Basin	--	Careaga Sand	--	--	--	--	--	--	--	--	--	--	--	
008N031W22N001S	22N1	Unknown	--	East San Antonio Basin	175	Paso Robles Formation	--	--	--	--	--	--	--	--	--	--	--	
008N031W22M001S	22M1	Unknown	--	East San Antonio Basin	--	Careaga Sand	--	--	--	--	--	--	--	--	--	--	--	
008N034W24E001S	24 E1	Monitoring	--	West San Antonio Basin	580	Careaga Sand	--	--	--	--	--	--	--	--	--	--	--	
008N033W20Q002S	20Q2	Irrigation	--	West San Antonio Basin	--	Paso Robles Formation	--	--	--	--	--	--	--	--	--	--	--	
009N034W27L001S	27L1	Unknown	--	West San Antonio Basin	405	Careaga Sand	--	--	--	--	--	--	--	--	--	--	--	Well Destroyed March 2021
--	VERNAS 1	Unknown	--	Central San Antonio Basin	--	--	--	--	--	--	--	--	--	--	--	--	--	
--	VERNAS 2	Unknown	--	Central San Antonio Basin	--	--	--	--	--	--	--	--	--	--	--	--	--	
--	HWY 101 CATTLE	Unknown	--	East San Antonio Basin	--	--	--	--	--	--	--	--	--	--	--	--	--	
008N032W27P003S	GUZMAN 2	Unknown	--	East San Antonio Basin	--	--	--	--	--	--	--	--	--	--	--	--	--	
008N032W30E005S	30E5	Unknown	--	Central San Antonio Basin	1,001	Paso Robles Formation	--	--	--	--	--	--	--	--	--	--	--	
008N033W25B005S	25B5	Unknown	--	Central San Antonio Basin	100	Paso Robles Formation	--	--	--	--	--	--	--	--	--	--	--	
008N032W28P004S	28P4	Unknown	--	East San Antonio Basin	524	Paso Robles Formation	--	--	--	--	--	--	--	--	--	--	--	
008N034W36R	Careaga Lease	Unknown	--	West San Antonio Basin	284	Careaga Sand	--	--	--	--	--	--	--	--	--	--	--	

Notes:

Green highlighted cells indicate well access agreement has been acquired
Yellow highlighted cells indicate well access agreement is pending
Red highlighted cells indicate well access denied
bgs = below ground surface
DTW = Depth to Water (feet below reference point elevation)
-- = unknown or not applicable

State Well Number	Site Name	Well Type	Water Level Measurement Frequency/Type	Area	Total Depth (feet NAVD88)	Aquifer of Completion	MT Elevation (feet NAVD88)	MO Elevation (feet NAVD88)	GWE on 2/25/2021	GWE on 6/16/2021	GWE on 9/16/2020 and 9/17/2020	GWE on 12/1/2020 and 12/2/2020	GWE on 2/25/2021 and 2/26/2021	GWE on 6/22/2021 and 6/23/2021	GWE on 9/14/2021 and 9/15/2021	GWE on 12/8/2021 and 12/9/2021	GWE on 3/10/2022 and 3/11/2022	GWE on 6/21/2022 and 6/22/2022	GWE on 9/15/2022 and 9/16/2022	Notes on 9/15/2022 and 9/16/2022
009N034W34N002S	SAHC	Monitoring	Continuous/Transducer	West San Antonio Basin	363	Careaga Sand	358	--	382.20	382.21	382.15	382.09	382.09	381.94	381.79	381.66	381.55	381.41	381.27	
008N034W21A002S	SASA	Monitoring	Continuous/Transducer	West San Antonio Basin	245	Careaga Sand	--	--	268.85	268.46	267.73	267.19	267.48	267.06	266.44	266.12	265.96	265.62	264.83	
008N034W14L002S	SAGR	Monitoring	Continuous/Transducer	West San Antonio Basin	240	Paso Robles Formation	--	--	268.43	268.14	266.86	267.80	268.64	267.49	265.87	266.30	266.66	265.05	262.67	
008N034W23H001S	SAHG	Monitoring	Continuous/Transducer	West San Antonio Basin	246	Paso Robles Formation	--	--	281.15	281.81	282.41	282.40	281.26	280.20	280.76	280.89	280.49	282.19	281.90	
008N033W22G001S	SALS	Monitoring	Continuous/Transducer	Central San Antonio Basin	390	Paso Robles Formation	397	--	422.98	423.04	422.16	421.43	421.11	420.22	420.53	419.53	419.76	419.82	419.92	Irrigation occuring nearby
008N032W29L004S	SALA	Monitoring	Continuous/Transducer	Central San Antonio Basin	506	Paso Robles Formation	--	--	551.02	552.54	551.04	549.95	549.59	548.83	548.24	547.58	547.42	547.12	546.52	
008N033W19K002S	SACR 1	Monitoring	Continuous/Transducer	West San Antonio Basin	-327	Careaga Sand	291	--	319.78	315.71	313.62	318.40	319.53	314.01	312.21	315.55	315.57	310.77	306.92	
008N033W19K002S	SACR 2	Monitoring	Quarterly/Discrete	West San Antonio Basin	-177	Paso Robles Formation		--	288.43	291.59	290.06	285.65	284.54	280.41	285.24	286.31	283.06	280.52	278.49	
008N033W19K004S	SACR 3	Monitoring	Quarterly/Discrete	West San Antonio Basin	13	Paso Robles Formation	233	--	254.65	246.70	250.37	259.39	266.08	242.62	247.91	262.81	259.56	241.86	238.98	
008N033W19K005S	SACR 4	Monitoring	Quarterly/Discrete	West San Antonio Basin	143	Paso Robles Formation	--	--	268.76	267.78	266.54	267.15	267.21	265.75	265.89	267.10	267.75	266.12	264.09	
008N033W19K002S	SACR 5	Monitoring	Quarterly/Discrete	West San Antonio Basin	252	Paso Robles Formation	--	--	267.65	267.46	265.54	265.41	265.94	265.49	264.75	264.94	265.56	265.26	264.77	
008N032W19M001S	SACC 1	Monitoring	Continuous/Transducer	Central San Antonio Basin	-394	Paso Robles Formation	348	--	370.58	368.63	368.49	363.12	372.61	357.59	**347.69**	355.32	349.69	348.84	**343.34**	
008N032W19M002S	SACC 2	Monitoring	Quarterly/Discrete	Central San Antonio Basin	-134	Paso Robles Formation	--	--	379.69	376.06	372.01	373.18	378.38	367.83	366.01	369.96	367.96	367.56	362.18	
008N032W19M003S	SACC 3	Monitoring	Quarterly/Discrete	Central San Antonio Basin	56	Paso Robles Formation	--	--	380.87	371.83	370.22	368.05	378.31	364.52	360.32	364.63	365.65	364.95	361.70	
008N032W19M004S	SACC 4	Monitoring	Quarterly/Discrete	Central San Antonio Basin	261	Paso Robles Formation	--	--	423.07	420.52	416.90	417.32	417.54	413.98	411.37	412.20	411.29	409.29	407.09	
008N032W19M001S	SACC 5	Monitoring	Quarterly/Discrete	Central San Antonio Basin	466	Paso Robles Formation	--	--	478.86	479.00	478.91	479.00	478.90	478.83	478.88	478.95	478.98	479.03	478.78	
008N034W02M001S	2M1	Irrigation	Quarterly/Discrete	West San Antonio Basin	-331	Paso Robles Formation	244	286	--	269.91	267.63	269.01	269.91	267.51	265.88	267.41	265.46	--	--	Temporarily discontinued due to risk of sounder loss
--	White Hawk 1	Irrigation	Quarterly/Discrete	Central San Antonio Basin	241	Careaga Sand	--	--	--	682.53	681.51	682.03	683.86	679.24	678.33	678.33	689.63	676.86	675.86	
008N32W17N001S	White Hawk 4	Irrigation	Quarterly/Discrete	Central San Antonio Basin	-39	Careaga Sand	--	--	688.47	686.76	686.40	686.09	688.97	682.87	682.43	682.82	683.77	681.12	680.47	
--	Mesa Vineyard	Irrigation	Quarterly/Discrete	Central San Antonio Basin	--	Careaga Sand	--	--	549.09	590.37	590.04	591.37	592.49	590.29	589.69	588.71	587.99	587.29	586.29	Rusty material in well
008N033W02N001S	2N1	Irrigation	Quarterly/Discrete	Central San Antonio Basin	-153	Careaga Sand	--	--	--	--	--	605.50	618.05	600.75	--	602.60	600.15	601.05	599.25	Rusty material in well
008N033W02R001S	2R1	Irrigation	Quarterly/Discrete	Central San Antonio Basin	406	Careaga Sand	--	--	--	657.90	658.80	658.48	656.51	584.58	592.18	657.98	658.65	603.85	656.90	
008N033W10	4-Deer Field	Irrigation	Quarterly/Discrete	Central San Antonio Basin	149	Careaga Sand	--	--	614.92	615.63	614.48	615.36	615.16	614.21	611.54	611.69	612.27	573.46	571.36	Pump on
008N033W03L001S	4-Deer Highway	Irrigation	Quarterly/Discrete	Central San Antonio Basin	340	Careaga Sand	--	--	596.21	597.63	596.08	597.51	595.83	591.97	594.88	594.63	593.58	593.09	591.58	
--	Schaff Well	Monitoring	Quarterly/Discrete	Central San Antonio Basin	-71	Careaga Sand	--	--	385.88	385.55	384.91	385.25	384.38	383.68	383.22	382.85	382.74	382.26	381.60	Irrigation occuring nearby
008N034W14L001S	14L1	Monitoring	Quarterly/Discrete	West San Antonio Basin	-264	Careaga Sand	--	--	266.74	263.62	239.62	264.00	264.24	259.49	259.60	261.43	262.30	259.24	256.72	
009N034W34P001S	34P1	Monitoring	Quarterly/Discrete	West San Antonio Basin	230	Careaga Sand	361	386	--	380.04	384.26	384.21	385.46	386.10	386.36	386.41	382.30	383.11	384.16	
008N034W17Q001S	17Q1	Monitoring	Quarterly/Discrete	West San Antonio Basin	222	Careaga Sand	--	--	--	--	--	262.25	261.60	261.15	--	260.22	260.20	259.60	--	Trail to well overgrown with poison oak
008N034W21A001S	21A1	Monitoring	Quarterly/Discrete	West San Antonio Basin	30	Careaga Sand	--	--	--	--	268.92	268.19	268.52	268.13	267.55	266.98	266.84	265.97	265.02	Trail to well overgrown with vegetation
008N034W17K002S	17K2	Monitoring	Quarterly/Discrete	West San Antonio Basin	200	Careaga Sand	--	--	--	--	--	--	--	--	--	257.32	257.32	257.17	257.00	Trail to well overgrown with vegetation
008N034W17E001S	17E1	Monitoring	Quarterly/Discrete	West San Antonio Basin	154	Careaga Sand	--	--	--	--	225.82	225.68	226.12	225.70	225.34	225.07	224.90	224.82	224.75	Trail to well overgrown with vegetation
008N034W16C002S	16C2	Monitoring	Continuous/Transducer	West San Antonio Basin	160	Careaga Sand	--	--	--	--	255.56	250.58	254.69	254.80	254.01	243.41	242.40	255.44	236.13	Nearby Pump on
008N034W16C004S	16C4	Monitoring	Continuous/Transducer	West San Antonio Basin	-231	Careaga Sand	--	--	--	--	263.54	260.91	263.18	262.75	262.19	256.05	255.33	242.78	250.36	Nearby Pump on
008N034W17H001S	17H1	Monitoring	Quarterly/Discrete	West San Antonio Basin	199	Careaga Sand	--	--	--	--	249.06	248.31	248.96	248.92	248.06	247.40	247.63	246.79	245.79	Trail to well overgrown with vegetation
008N034W16F001S	16F1	Monitoring	Quarterly/Discrete	West San Antonio Basin	219	Careaga Sand	--	--	--	--	251.12	245.22	249.45	250.14	249.55	241.97	240.13	236.64	234.17	Trail to well overgrown with vegetation
008N034W16G003S	16G3	Monitoring	Quarterly/Discrete	West San Antonio Basin	239	Careaga Sand	226	244	--	--	249.70	249.40	248.82	248.64	248.48	248.17	247.62	246.96	246.31	
008N033W13C001S	13C1	Irrigation	Quarterly/Discrete	Central San Antonio Basin	-293	Careaga Sand	565	597	--	--	590.15	586.25	--	582.75	--	589.65	588.85	587.55	589.75	Irrigation occuring nearby
008N033W07	Stephen's Well	Irrigation	Quarterly/Discrete	West San Antonio Basin	83	Careaga Sand	--	--	318.01	338.79	313.34	339.91	--	--	338.75	333.01	330.71	331.86	328.40	
008N033W13Q001S	13Q1	Irrigation	--	Central San Antonio Basin	367	Paso Robles Formation	--	--	--	--	--	--	--	--	--	--	--	--	--	
008N032W30D001S	30D1	Monitoring	--	Central San Antonio Basin	-355	Paso Robles Formation	345	388	--	--	--	--	--	--	--	--	--	--	--	
008N032W25D001S	25D1	Irrigation	--	East San Antonio Basin	65	Careaga Sand	634	661	--	--	--	--	--	--	--	--	--	--	--	
008N033W22K003S	22K3	Irrigation	--	Central San Antonio Basin	203	Paso Robles Formation	344	370	--	--	--	--	--	--	--	--	--	--	--	
008N031W22J001S	22J1	Unknown	--	East San Antonio Basin	--	Careaga Sand	--	--	--	--	--	--	--	--	--	--	--	--	--	
008N031W22N001S	22N1	Unknown	--	East San Antonio Basin	1,026	Paso Robles Formation	--	--	--	--	--	--	--	--	--	--	--	--	--	
008N031W22M001S	22M1	Unknown	--	East San Antonio Basin	--	Careaga Sand	--	--	--	--	--	--	--	--	--	--	--	--	--	
008N034W24E001S	24 E1	Monitoring	--	West San Antonio Basin	-230	Careaga Sand	220	257	--	--	--	--	--	--	--	--	--	--	--	
008N033W20Q002S	20Q2	Irrigation	--	West San Antonio Basin	--	Paso Robles Formation	298	335	--	--	--	--	--	--	--	--	--	--	--	
009N034W27L001S	27L1	Unknown	--	West San Antonio Basin	110	Careaga Sand	--	--	--	--	--	--	--	--	--	--	--	--	--	Well Destroyed March 2021
--	VERNAS 1	Unknown	--	Central San Antonio Basin	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
--	VERNAS 2	Unknown	--	Central San Antonio Basin	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
--	HWY 101 CATTLE	Unknown	--	East San Antonio Basin	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
008N032W27P003S	GUZMAN 2	Unknown	--	East San Antonio Basin	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
008N032W30E005S	30E5	Unknown	--	Central San Antonio Basin	-458	Paso Robles Formation	--	--	--	--	--	--	--	--	--	--	--	--	--	
008N033W25B005S	25B5	Unknown	--	Central San Antonio Basin	426	Paso Robles Formation	--	--	--	--	--	--	--	--	--	--	--	--	--	
008N032W28P004S	28P4	Unknown	--	East San Antonio Basin	99	Paso Robles Formation	--	--	--	--	--	--	--	--	--	--	--	--	--	
008N034W36R	Careaga Lease	Unknown	--	West San Antonio Basin	344	Careaga Sand	--	--	--	--	--	--	--	--	--	--	--	--	--	

Notes:

Green highlighted cells indicate well access agreement has been acquired
Yellow highlighted cells indicate well access agreement is pending
Red highlighted cells indicate well access denied
Bold Minimum Threshold (MT) exceeded
MO = Measurable Objective
NAVD88 = North American Vertical Datum of 1988
GWE = Groundwater Elevation (feet NAVD88)
-- = unknown or not applicable

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Figures

State Well #	Site Name	Access Agreement
009N034W34N002S	SAHC	Existing Access Agreement
008N034W21A002S	SASA	Existing Access Agreement
008N034W14L002S	SAGR	Existing Access Agreement
008N034W23H001S	SAHG	Existing Access Agreement
008N033W19K002S	SACR 1	Existing Access Agreement
008N033W19K002S	SACR 2	Existing Access Agreement
008N033W19K004S	SACR 3	Existing Access Agreement
008N033W19K005S	SACR 4	Existing Access Agreement
008N033W19K002S	SACR 5	Existing Access Agreement
008N034W02M001S	2M1	Existing Access Agreement
008N034W14L001S	14L1	Existing Access Agreement
009N034W34P001S	34P1	Existing Access Agreement
008N034W17Q001S	17Q1	Existing Access Agreement
008N034W21A001S	21A1	Existing Access Agreement
008N034W17K002S	17K2	Existing Access Agreement
008N034W17E001S	17E1	Existing Access Agreement
008N034W16C002S	16C2	Existing Access Agreement
008N034W16C004S	16C4	Existing Access Agreement
008N034W17H001S	17H1	Existing Access Agreement
008N034W16F001S	16F1	Existing Access Agreement
008N034W16G003S	16G3	Existing Access Agreement
008N033W07	Stephen's Well	Existing Access Agreement
008N034W24E001S	24 E1	Access Agreement Pending
008N033W20Q002S	20Q2	Access Agreement Pending
009N034W27L001S	27L1	Access Agreement Pending
008N034W36R	Careaga Lease	Declined Access Agreement

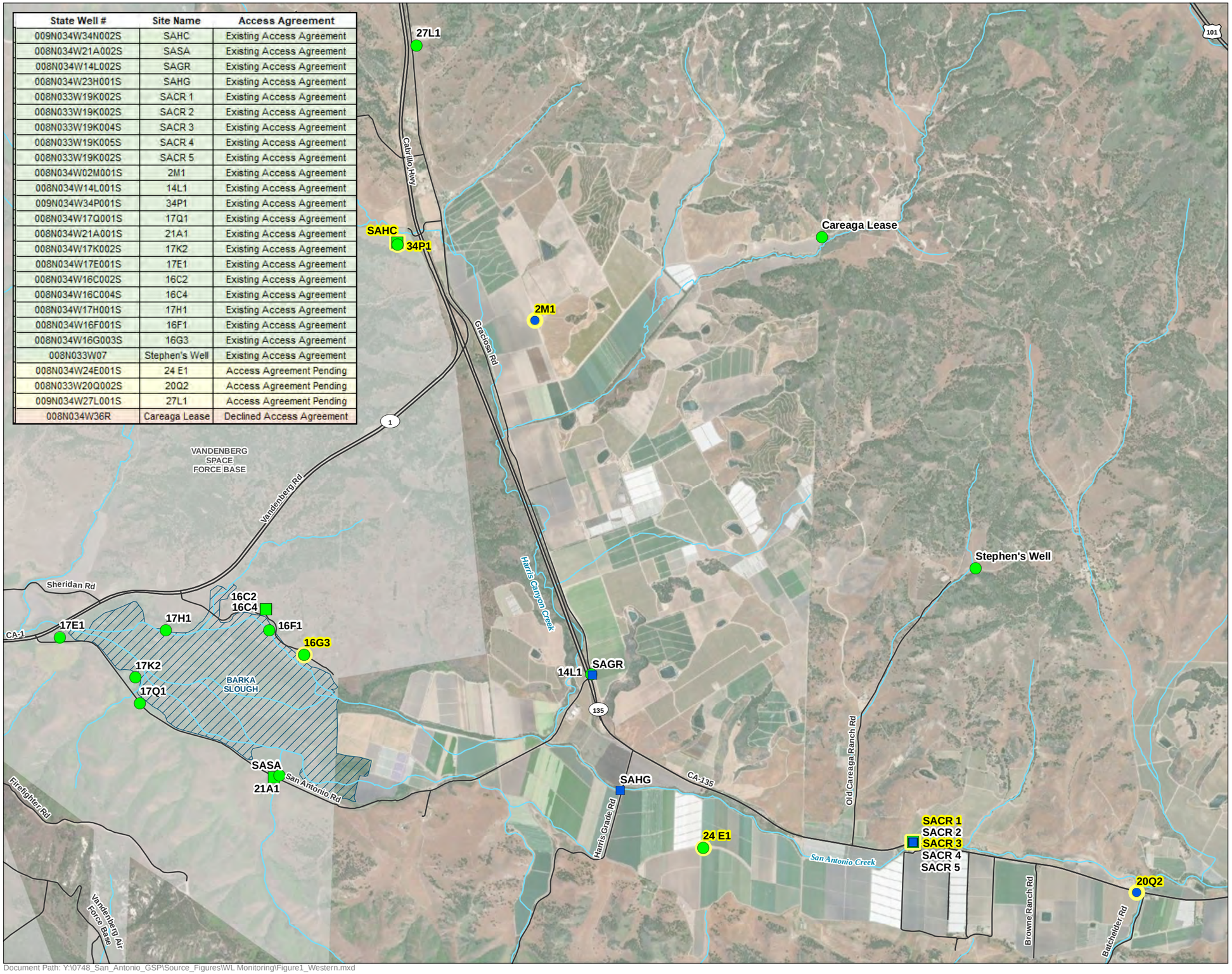


FIGURE 1

Wells Located in the Western Portion of the San Antonio Creek Valley Groundwater Basin

San Antonio Creek Valley Groundwater Basin
Third Quarter 2022 Report

LEGEND

Sample Method

- Transducer Well
- Manually Measured Well

Aquifer of Completion

- Careaga Sand Well
- Paso Robles Formation Well

Representative Monitoring Site

- Representative Monitoring Site

All Other Features

- Barka Slough
- Vandenberg Space Force Base
- Major Road
- Watercourse

NOTES:

1. SACR 1 is screened in the Careaga Sand.
2. SACR 2, SACR 3, SACR 4, and SACR 5 depth to water measurements are collected manually on a quarterly basis.

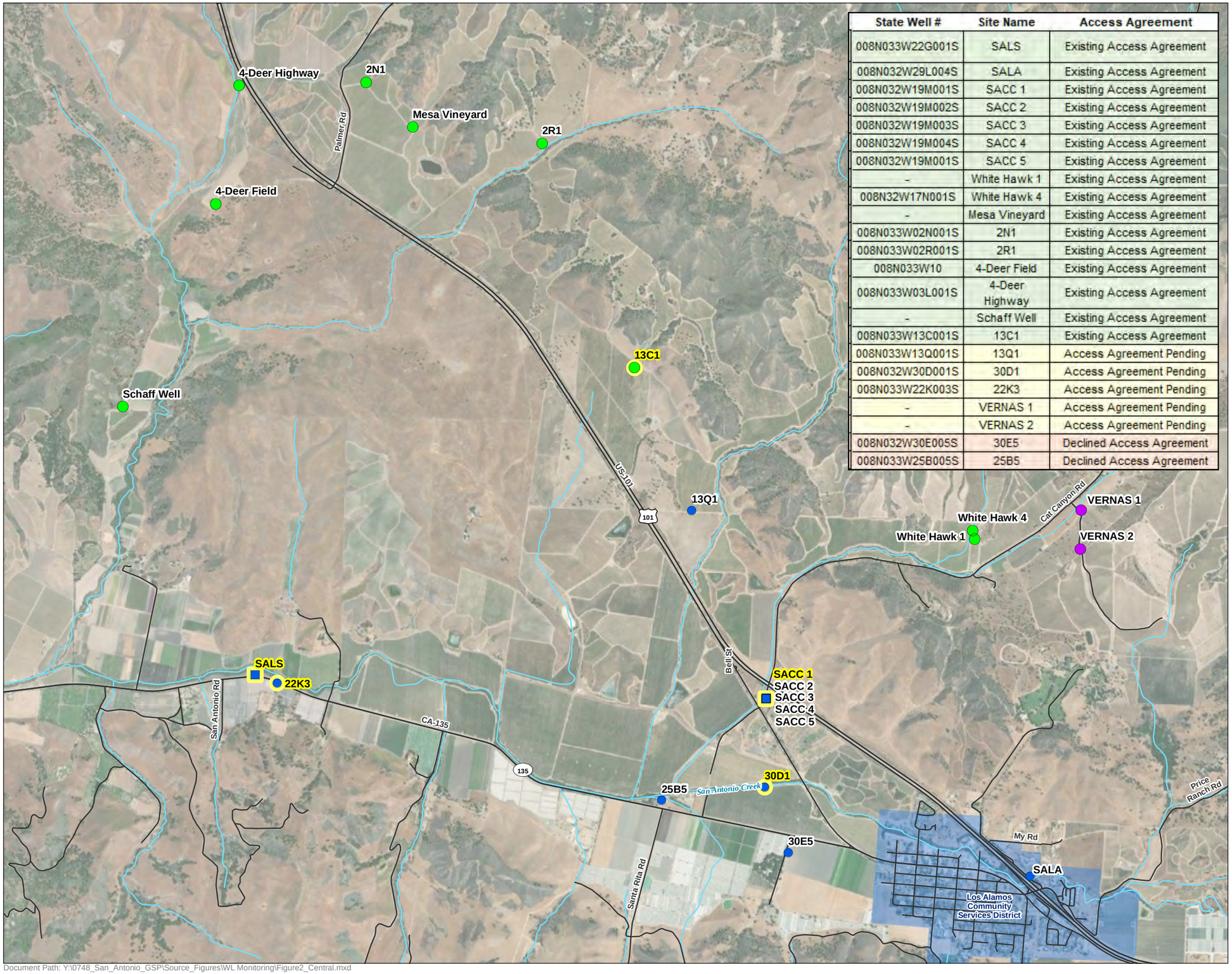
N

0 1,000 2,000 3,000
Feet

Date: March 23, 2022
Data Sources:

GSI Water Solutions, Inc.

Document Path: Y:\0748_San_Antonio_GSP\Source_Figures\WL Monitoring\Figure1_Western.mxd



State Well #	Site Name	Access Agreement
008N033W22G001S	SALS	Existing Access Agreement
008N032W29L004S	SALA	Existing Access Agreement
008N032W19M001S	SACC 1	Existing Access Agreement
008N032W19M002S	SACC 2	Existing Access Agreement
008N032W19M003S	SACC 3	Existing Access Agreement
008N032W19M004S	SACC 4	Existing Access Agreement
008N032W19M001S	SACC 5	Existing Access Agreement
-	White Hawk 1	Existing Access Agreement
008N32W17N001S	White Hawk 4	Existing Access Agreement
-	Mesa Vineyard	Existing Access Agreement
008N033W02N001S	2N1	Existing Access Agreement
008N033W02R001S	2R1	Existing Access Agreement
008N033W10	4-Deer Field	Existing Access Agreement
008N033W03L001S	4-Deer Highway	Existing Access Agreement
-	Schaff Well	Existing Access Agreement
008N033W13C001S	13C1	Existing Access Agreement
008N033W13Q001S	13Q1	Access Agreement Pending
008N032W30D001S	30D1	Access Agreement Pending
008N033W22K003S	22K3	Access Agreement Pending
-	VERNAS 1	Access Agreement Pending
-	VERNAS 2	Access Agreement Pending
008N032W30E005S	30E5	Declined Access Agreement
008N033W25B005S	25B5	Declined Access Agreement

FIGURE 2

Wells Located in the Central Portion of the San Antonio Creek Valley Groundwater Basin

San Antonio Creek Valley
Groundwater Basin
Third Quarter 2022 Report

LEGEND

Sample Method

- Transducer Well
- Manually Measured Well

Aquifer of Completion

- Careaga Sand Well
- Paso Robles Formation Well
- Unassigned Aquifer Well

Representative Monitoring Site

- Representative Monitoring Site

All Other Features

- Los Alamos Community Services District
- Major Road
- Watercourse

NOTES:

1. SACC 2, SACC 3, SACC 4, and SACC 5 depth to water measurements are collected manually on a quarterly basis.

N

0 1,000 2,000 3,000
Feet

Date: March 23, 2022
Data Sources:

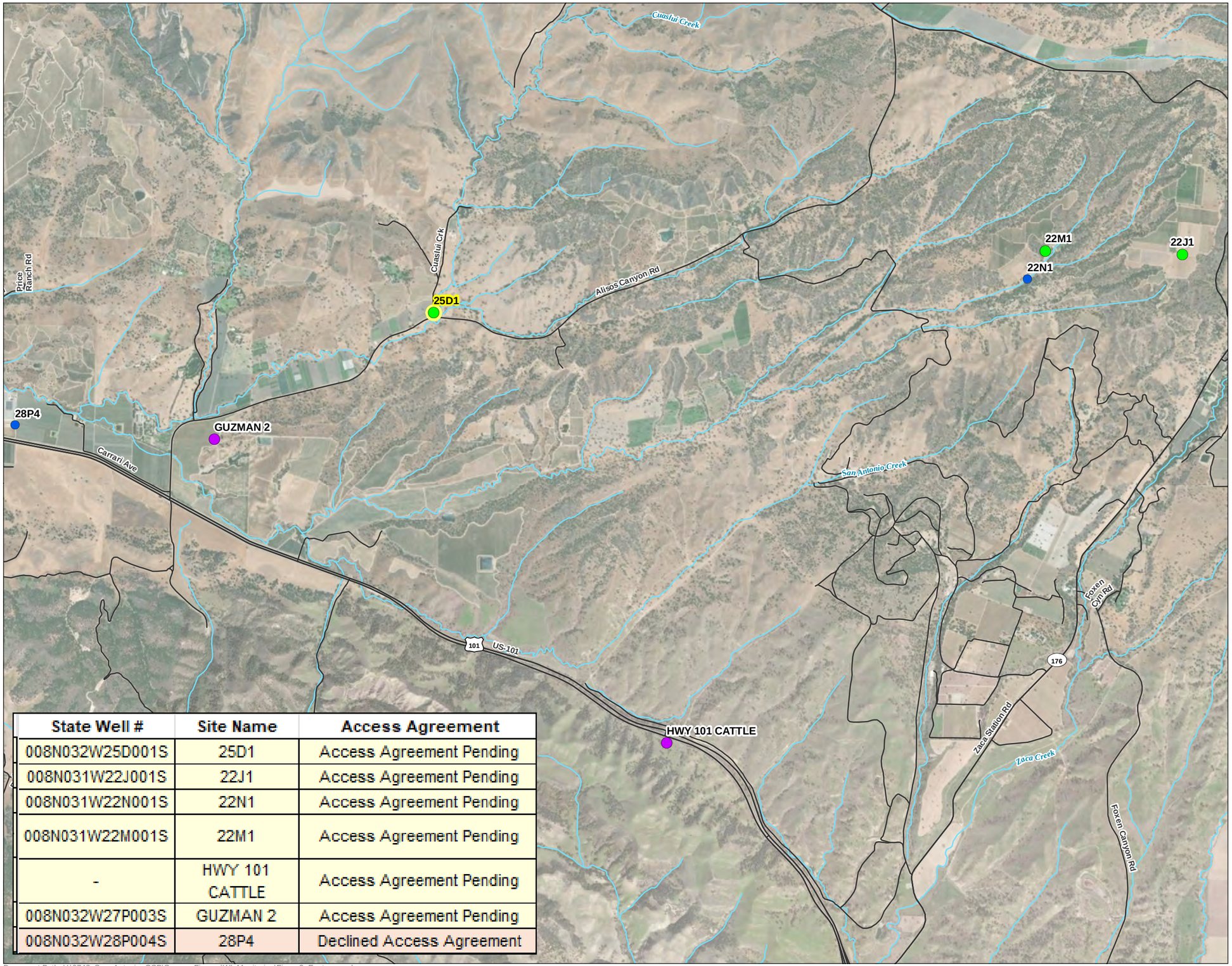
GSI Water Solutions, Inc.

Document Path: Y:\0748_San_Antonio_GSP\Source_Figures\WL Monitoring\Figure2_Central.mxd

FIGURE 3

Wells Located in the Eastern Portion of the San Antonio Creek Valley Groundwater Basin

San Antonio Creek Valley Groundwater Basin
Third Quarter 2022 Report



State Well #	Site Name	Access Agreement
008N032W25D001S	25D1	Access Agreement Pending
008N031W22J001S	22J1	Access Agreement Pending
008N031W22N001S	22N1	Access Agreement Pending
008N031W22M001S	22M1	Access Agreement Pending
-	HWY 101 CATTLE	Access Agreement Pending
008N032W27P003S	GUZMAN 2	Access Agreement Pending
008N032W28P004S	28P4	Declined Access Agreement

LEGEND

Sample Method

- Transducer Well
- Manually Measured Well

Aquifer of Completion

- Careaga Sand Well
- Paso Robles Formation Well
- Unassigned Aquifer Well

Representative Monitoring Site

- Representative Monitoring Site

All Other Features

- Major Road
- Watercourse

N

0 1,000 2,000 3,000
Feet

Date: March 23, 2022
Data Sources:

GSI Water Solutions, Inc.

Document Path: Y:\0748_San_Antonio_GSP\Source_Figures\WL Monitoring\Figure3_Eastern.mxd

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