“F”

Water System Permit Amendment Report

Meyers Water Company P21-00091-UP
Planning Commission Hearing – May 4, 2022

WATER SYSTEM PERMIT AMENDMENT

MEYERS WATER COMPANY

MARCH 28, 2022

B&R PROJECT NO. 4078.00

Prepared By:

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APPENDICES

1. INTRODUCTION

Meyers Water Company (CA2800530) seeks to update their existing drinking water permit for the use of a new supply well and manganese removal treatment system, and moving the treatment, storage, and distribution pumping facilities to a new site. No changes are proposed to the distribution system, nor the number or type of service connections. This Technical Report includes updated Source Water Information and Treatment and Design Information sections per the *Domestic Water Supply Permit Applicant Instructions* describing changes to the source and treatment facilities.

2. SOURCE WATER INFORMATION

The new source, Well 003, was drilled on January 7, 2021 and is located at 1794 Milton Road (APN 048-042-028) in Napa, California. The well drilling log, included in Appendix A, indicates there is a sanitary seal to a depth of approximately 195 feet below ground surface (bgs), and the well has two screened sections separated with a bentonite seal. Zone 1 extends from 210 to 230 ft bgs, and Zone 2 is from 265 to 285 ft bgs. A packer is installed in the casing between the zones to allow for water to be drawn from a single zone. The water quality from Zone 2 is better than that from Zone 1 and therefore only water from Zone 2 will be used.

A pump capacity test in accordance with California Code of Regulations (CCR) Title 22, Section 64554(f) was performed in February 2022. The test report is included in Appendix B. The test was conducted with the packer installed and with a pump only drawing water from Zone 2. The well packer has openings for a sounding tube, well discharge piping and wiring which allowed for level measurements to be taken without the influence of the upper zone. The well was pumped continuously at 60 gpm for over 24 hours. Water levels were recorded during the test using a level transmitter installed in the sounding tube. The test log column for calculated "Draw down" indicates the change in water level since the previous reading, rather than the difference from the static water level. This column has been crossed out on the test log to reduce confusion. The total drawdown at the end of the test was approximately 43.14 feet from static. The water level recovered to within 2 feet of the static water level within 9.5 hours.

A Source Water Assessment is provided in Appendix C. The calculated radii for Zones A, B5, and B10 were less than the Table 2 radii so the Table 2 radii were used for the assessment. Two high risk, two medium risk, and two low risk potential contaminating activities are present within the protection zones. The high risk potential contaminating activities include a sewer collection system on both the commercial/industrial checklist and residential checklist.

Raw water quality data from Zone 2 is provided in Appendix D. The source water concentrations of chloride, conductivity, and total dissolved solids are above the recommended secondary maximum contaminant levels (MCLs), but below the upper secondary MCLs. Manganese concentrations are above the secondary MCL. No primary MCLs are exceeded.

3. TREATMENT AND DESIGN INFORMATION

Treatment facilities are proposed to be installed on the same parcel as Well 003 at 1794 Milton Road. Treatment facilities include disinfection, and oxidation and filtration for manganese removal. A system schematic is provided in Appendix E. Cut sheets for system components are included in Appendix F.

Raw water from the well is pumped through a meter to sodium hypochlorite and potassium permanganate injection points, with doses provided in proportion to the metered flow rate. Two hydropneumatic tanks prevent pressure surges from the well pump. The flow is split to two greensand filters in parallel configuration, following which filter effluent is stored in six 5,000 gallon tanks before entering the distribution system. The filters are backwashed using water from the distribution system. Backwash and rinse water are directed to a 2,500 gallon cone-bottom decant tank. A backwash recycle pump recycles supernatant back to the treatment system upstream of chemical injection.

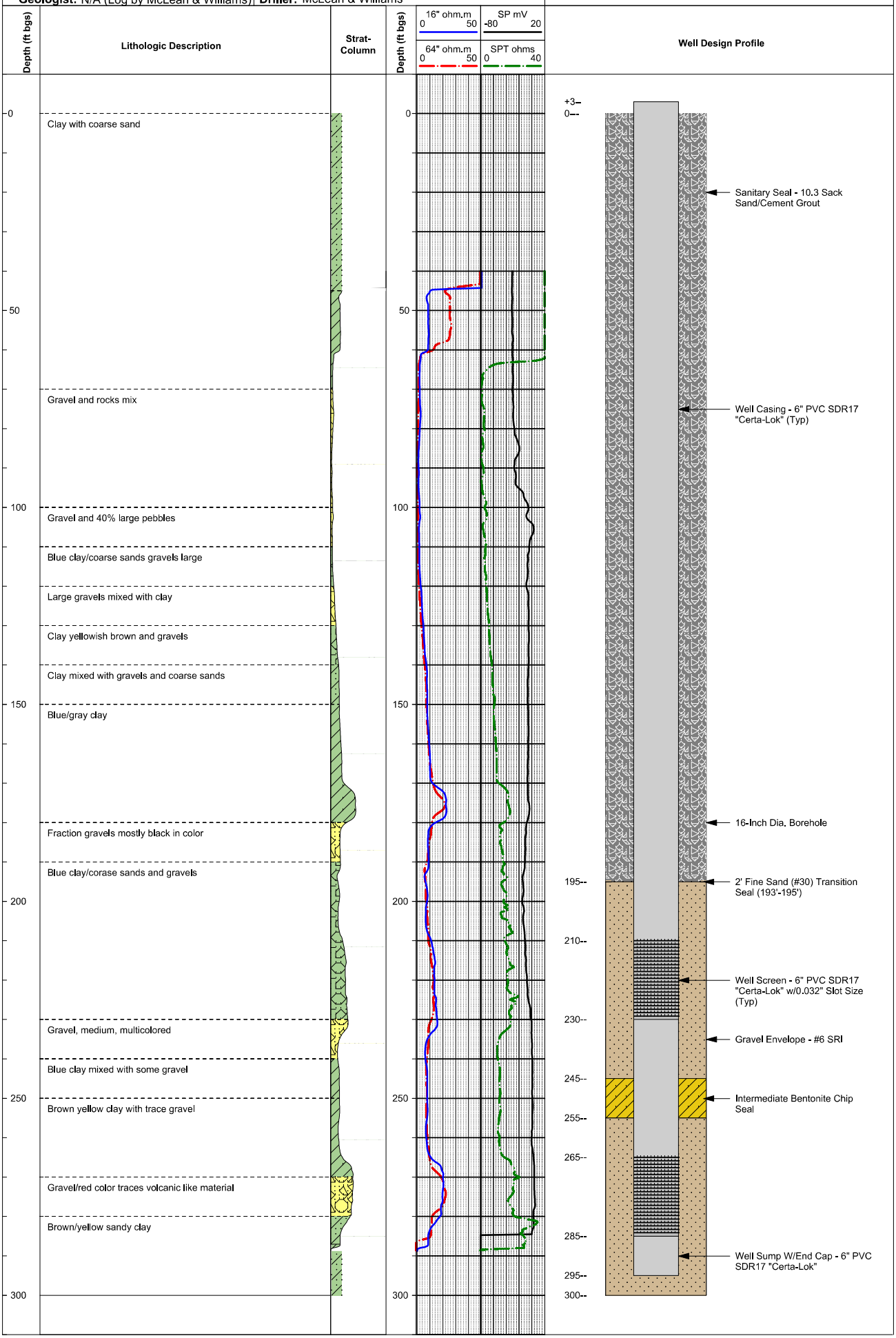
The well pump operates at approximately 30 gpm. Disinfection is achieved by injecting 12.5% sodium hypochlorite to achieve an initial concentration of approximately 1.8 mg/L. Residual chlorine concentration after storage and prior to entering the distribution system is approximately 1.1 mg/L. Potassium permanganate solution is injected to achieve an initial concentration of approximately 1.5 mg/L. Bench testing was performed to identify the appropriate dose of potassium permanganate that will result in no residual following filtration.

The flow rate through each filter is approximately 15 gpm. The filter vessels are 24" diameter by 72" tall and contain GreensandPlus media manufactured by Inversand Company. The service flow rate is approximately 4.8 gpm/SF. The recommended flow rate from the media manufacturer is 2-12 gpm/SF. The recommended backwash flow rate is 12 gpm/SF to achieve 40% bed expansion, however, backwash flow is not metered. The backwash flow rate was calculated to be 10 gpm/SF, resulting in 35% bed expansion, by measuring the change in tank level over a specific backwash duration. To achieve 12 gpm/SF, a backwash supply pump would be needed. The manufacturer's recommendation for backwash frequency is calculated from the contaminant loading and service rate. For this system, the filters should be backwashed every 32 hours of operation. The filters are currently backwashed every 24 hours, regardless of operation time. Therefore, the slightly lower than recommended bed expansion is likely acceptable due to the higher frequency of backwashing.

Supernatant from the backwash decant tank is recycled to the treatment system upstream of chemical injection. The backwash recycle pump is controlled to run whenever the well pump is running. The decant tank is equipped with a floating outlet which allows water to be drawn from approximately 1 foot below the water surface. Backwash return is not metered, but the pump operates at less than 3 gpm ensuring the backwash recycle rate is less than 10% of the total treatment flow.

Appendix A - Well Drilling Log

Client: Meyers Water Company	**Lat/Long:** 38.1996/-122.3151
Project Name: Meyers Water Co. Well 1794	**GSE (ft-msl)** 1 ft +/-
LSCE #: 20-2-134	**Drill Date:** 1/7/2021
Location: 1794 Milton Rd., Napa, CA	**Drilling Method:** Reverse Mud Rotary
Geologist: N/A (Log by McLean & Williams)	**Driller:** McLean & Williams



Appendix B - Well Capacity Test Report

Well Drilling & Pump Service
878 El Centro Ave. Napa Ca, 94558
Office 707-255-6450
Fax 707-255-6489
Licenses #396352

WELL INSPECTION REPORT FOR

Attn: Edgerly Island Living Water **Date of test:** February 10th – 12th, 2022
Upon your request, we have checked the well and/or pressure system at
1794 Milton Rd. Napa, Ca 94558
Our findings are as follows:

WELL INFORMATION

Casing Size: 6" PVC
Static Water Level: 1.48' from top of casing
Well Depth: 295' **draw down during test:** 44.62' from top of casing
Total water draw down in feet from static water level at end of flow test: 43.14'
How tested: Open discharge with existing pumping equipment.
Well yield after test: 60 GPM after 30 hours of continuous pumping
Well Comments: Well was constructed January 2021 and was estimated at 100 GPM plus

WELL EQUIPMENT INFORMATION

Pump Make: Grundfos **HP** 5 **Pump Setting:** 260'
Type: Submersible **Voltage:** 230 **Pipe Size:** 1-1/2" sch.120 PVC
Pump Model: 62S50-12 **Phase:** 3 **Wire Size:** #12-3/wg submersible flat jacket
Pressure tank: None
Comments:

McLEAN & WILLIAMS
SINCE 1949

1794 Milton Rd.

WELL TEST INFORMATION

Well Test Hours	Time	Water level	Draw down	GPM	Comments
0	11:03	1.48’	0	60	Clear watercolor
1/2	11:33	13.60’	12.12’	60	
1	12:03	15.91’	2.31’	60	
1 1/2	12:33	21.28’	5.37’	60	
2	13:03	11.16’	-10.12’		Pump stopped
2 1/2	13:33	21.32’	10.16’	60	Clear watercolor
3	14:03	25.44’	4.12’	60	
3 1/2	14:33	27.86’	2.42’	60	
4	15:03	29.92’	2.06’	60	
4 1/2	15:33	31.67’	1.75’	60	
5	16:03	32.81’	1.14’	60	
5 1/2	16:33	34.12’	1.31’	60	
6	17:03	35.07’	.95’	60	
6 1/2	17:33	36.10’	1.03’	60	
7	18:03	36.79’	.69’	60	
7 1/2	18:33	37.19’	.40’	60	
8	19:03	37.73’	.54’	60	
8 1/2	19:33	38.02’	.29’	60	
9	20:03	38.39’	.37’	60	
9 1/2	20:33	39.03’	.64’	60	
10	21:03	39.26’	.23’	60	
10 1/2	21:33	39.55’	.29’	60	
11	22:03	39.76’	.21’	60	
11 1/2	22:33	40.01’	.25’	60	
12	23:03	40.38’	.37’	60	
12 1/2	23:03	40.48’	.10’	60	
13	23:33	40.65’	.17’	60	
13 1/2	24:03	40.78’	.13’	60	
14	24:33	41.09’	.31’	60	
14 1/2	01:03	40.78’	-.31’	60	
15	01:33	41.42’	.64’	60	
15 1/2	02:03	41.67’	.25’	60	
16	02:33	42.03’	.36’	60	
16 1/2	03:03	42.24’	.21’	60	
17	03:33	42.37’	.13’	60	
17 1/2	04:03	42.66’	.29’	60	
18	04:33	42.84’	.18’	60	

18 1/2	05:03	42.90’	.06’	60	
19	05:33	43.06’	.16’	60	
19 1/2	06:03	43.14’	.08’	60	
20	06:33	43.16’	.02’	60	
21 1/2	07:03	43.14’	-.02	60	
22	07:33	43.16’	.02’	60	
22 1/2	08:03	43.16’	.00	60	
23	08:33	43.35’	.19’	60	
23 1/2	09:03	43.06’	-.29	60	
24	09:33	43.09’	.03’	60	
24 1/2	10:03	42.98’	-.11	60	
25	10:33	43.16’	.18’	60	
25 1/2	11:03	43.19’	.03’	60	
26	11:33	43.06’	-.13’	60	
26 1/2	12:03	43.37’	.31	60	
27	12:33	43.38’	.01’	60	
27 1/2	13:03	43.67’	.29’	60	
28	13:33	43.70’	.03’	60	
28 1/2	14:03	43.94’	.24’	60	
29	14:33	43.17’	-.77’	60	
29 1/2	15:03	44.23’	1.06’	60	
30	15:33	44.62’	.39	60	
RECOVERY	Time	W/Level	Recovery	Flow/Rate	
0	15:33	44.62’	0	0	Start recovery
1/4	15:48	35.25’	9.37’	0	
1/2	16:03	31.84’	3.41’	0	
3/4	16:18	29.21’	2.63’	0	
1	16:33	27.11’	2.10	0	
1 1/4	16:48	25.36’	1.75’	0	
1 1/2	17:03	23.84’	1.52’	0	
1 3/4	17:18	22.54’	1.30’	0	
2	17:33	21.32’	1.22’	0	
2 1/2	17:48	19.25’	2.07’	0	
3	18:03	17.48’	1.77’	0	
3 1/2	18:18	15.99’	1.49’	0	
4	18:33	14.67’	1.32’	0	
4 1/2	18:48	13.58’	1.09’	0	
5	19:03	12.22’	1.36’	0	
5 1/2	19:33	10.74’	1.48’	0	
6	20:03	9.61’	1.13’	0	
6 1/2	20:33	8.49’	1.12’	0	
7	21:03	7.42’	1.07’	0	
7 1/2	21:33	6.48’	.94’	0	

8	22:03	5.51’	.97’	0	
8 1/2	22:33	4.62	.89’	0	
9	24:03	3.84’	.78’	0	
9 1/2	24:33	3.12’	.72’	0	
10	01:03	2.49’	.63’	0	
10 1/2	01:33	2.09’	.40’	0	
11	02:03	1.96’	.13’	0	
11 1/2	02:33	1.89’	.07’	0	
12	03:03	1.81’	.08’	0	
12 1/2	03:33	1.75’	.06’	0	
13	04:03	1.68’	.07’	0	
13 ½	04:33	1.63’	.05	0	
14	05:03	1.59’	.04’	0	
14 ½	05:33	1.56’	.03’	0	
15	06:03	1.55’	.01’	0	
15 ½	06:33	1.54’	.01’	0	
16	07:03	1.53’	.01’	0	
16 ½	07:33	1.53’	.00’	0	
17	08:03	1.52’	.01’	0	
17 1/2	08:33	1.52’	.00’	0	
18	09:03	1.52’	.00’	0	
18 ½	09:33	1.51’	.01’	0	
19	10:03	1.51’	.00’	0	
19 ½	10:33	1.51’	.00’	0	
20	11:03	1.50’	.01’	0	
20 ½	11:33	1.50’	.00’	0	
21	12:03	1.50’	.00’	0	
21 ½	12:33	1.50’	.00’	0	
22	13:03	1.50’	.00’	0	
22 ½	13:33	1.50’	.00’	0	End Recovery

NOTE: Need to meet 95% recovery by hour 8

Summary:

1. Static Water level at beginning of test: 1.48’ from top of well casing.
2. Static Water recovery at end of recovery: 1.50’ from top of well casing
3. Recovery to: _1.50’_, within 22 1/2 hours
   (Recovery time)

Draw-down in feet: 43.14’

4. Well capacity (GPM) _ 60__ GPM
5. Specific Capacity Well Yield GPM/ft of drawdown: _1.39_ GPM/ft

1794 Milton Rd.

WATER SAMPLES

** No water samples drawn at time of testing**

FINAL COMMENTS

Please note that flow test results by McLean and Williams Inc. represents the well water yield and system condition for the time of the test only.

Gonzalo Salinas
Mclean & Williams Inc.
gonzalo@mcleanandwillimas.com

Thank you, *Gonzalo Salinas*

Appendix C - Source Water Assessment

Drinking Water Source Assessment
Well Source

Public water system: Meyers Water Company ID No.: 2800530

Name of source: Well 003 ID No.: _____

Assessment date: 3/25/22 Assessment conducted by Brelje & Race Consulting Engineers

Water System Contact Name: Juell Fullner Phone #: 707-974-3803

Water System Contact Address: 1830 Milton Rd. Napa, CA 94559

The following information should be contained in the drinking water source assessment submittal.

x Delineation of groundwater protection zones

x Well Data Sheet

x Possible Contaminating Activities (PCA) inventory form

x Assessment map with source location and protection zone

n/a Additional maps (optional) (e.g. local maps of zones and PCAs, recharge area maps, or maps indicating direction of ground water flow)

_____ Means of Public Availability of Report (indicate those that will be used)

_____ Notice in the Consumer Confidence Report* (minimum)
_____ Copy in regulatory agency (CDPH or LPA) office (minimum)
_____ Copy in public water system office (recommended)
_____ Copy in public library/libraries
_____ Internet (indicate Internet address: _____)
_____ Other (describe)

*The CCR should indicate where customers can review the assessments.

Delineation of Ground Water Protection Zones

Procedures

Three zones are delineated around a well (see specific guidance for springs and horizontal wells), using the Calculated Fixed Radius method. The default shape of these zones is circular and the radius of the zones is based on the Time of Travel (TOT) of water from a point in the aquifer to the well. The three zones are defined as:

Zone A (2 year TOT)
Zone B5 (5 year TOT)
Zone B10 (10 year TOT)

For porous media aquifers (consisting primarily of rocks, sands, gravels and clays), the radius also considers the pumping rate of the well (Q in gallons per minute), the screened interval of the well (H in feet), and the effective porosity of the aquifer (η - assumed to be 0.2). For fractured rock aquifers, the procedures are the same, but the radius of the zones is increased by 50%.

There are more complicated methods for determining the size, shape and location of zones. Water systems interested in these methods should consult with a hydrogeologist or other knowledgeable professional.

The following table has been developed to assist water systems and regulators in determining the procedures to use in delineating protection zones.

TABLE 1

Aquifer Media	Type of System	Pumping Rate (Q gpm)	Radius Zone A (R_2 feet)	Radius Zone B5 (R_5 feet)	Radius Zone B10 (R_{10} feet)
Porous Media			600'min.	1,000'min.	1,500'min.
	Transient Noncommunity	Any	600'	-----	-----
	Non-Transient Noncommunity	0 to 100 gpm	Calculate or Refer to Table 2		
	Non-Transient Noncommunity	> 100 gpm	Calculate		
	Community	0 to 100 gpm	Calculate or Refer to Table 2		
	Community	> 100 gpm	Calculate		
Fractured Rock			900'min.	1,500'min.	2,250 min.
	Transient Noncommunity	Any	900'	-----	-----
	Non-Transient Noncommunity	0 to 100 gpm	Calculate or Refer to Table 3		
	Non-Transient Noncommunity	> 100 gpm	Calculate		
	Community	0 to 100 gpm	Calculate or Refer to Table 3		
	Community	> 100 gpm	Contact CDPH*		

GROUND WATER ASSESSMENT – WELL SOURCE

Delineation of Ground Water Protection Zones

Public water system: Meyers Water Company ID No.: 2800530

Name of source: Well 003 ID No.:

Delineation date: 6/14/21 Delineation conducted by: Brelje & Race Consulting Engineers

Equation

Porous Media Aquifers

$$R_T = \sqrt{\frac{QT}{\pi\eta H}}$$

Fractured Rock Aquifers

$$R_T = 1.5 \times \sqrt{\frac{QT}{\pi\eta H}}$$

R_T = Radius (in feet) of zone for Time of Travel T
T = Time of Travel (years) (2, 5, or 10 years)
Q = Pumping capacity of well (in ft3/year)
(ft3/year = gpm x 70,267)

π = 3.1416
η = Aquifer effective porosity (default = 0.2)
H = Well screened interval (in feet) (10' min.)

Calculations

Aquifer Material (select one) x Porous Media Fractured Rock

Pumping Rate Q = 26 gpm (if unknown use Table 2 or Table 3)

Screened Interval H = 20 feet (if unknown assume 10%Q or use Table 2 or Table 3)

Porous Media Aquifer

Zone	TOT (years)	Equation	Use one or the other		Minimum	Value (use larger)
			Calculated Radius	Table 2 Radius		
A	**2**	$473\sqrt{Q_{gpm}/H_{ft}}$	**539**	**819**	**600**	**819**
B5	**5**	$748\sqrt{Q_{gpm}/H_{ft}}$	**853**	**1,295**	**1,000**	**1,295**
B10	**10**	$1058\sqrt{Q_{gpm}/H_{ft}}$	**1,206**	**1,832**	**1,500**	**1,832**

Fractured Rock Aquifer (Increase size of zones by 50%)

Zone	TOT (years)	Equation	Use one or the other		Minimum	Value
			Calculated Radius	Table 3 Radius		
A	**2**	$709\sqrt{Q_{gpm}/H_{ft}}$			**900**	
B5	**5**	$1122\sqrt{Q_{gpm}/H_{ft}}$			**1,500**	
B10	**10**	$1586\sqrt{Q_{gpm}/H_{ft}}$			**2,250**	

DEFAULT PROTECTION ZONES

POROUS MEDIA AQUIFERS
TABLE 2

Q	H (feet) (default minimum)	Radius Zone A (feet)	Radius Zone B5 (feet)	Radius Zone B10 (feet)
< 10 gpm	10	600	1,000	1,500
10 to 20 gpm	10	669	1,056	1,500
21 to 30 gpm	10	819	1,295	1,832
31 to 40 gpm	10	946	1,496	2,115
41 to 50 gpm	10	1,058	1,672	2,365
51 to 60 gpm	10	1,158	1,832	2,590
61 to 70 gpm	10	1,251	1,978	2,798
71 to 80 gpm	10	1,338	2,115	2,991
81 to 90 gpm	10	1,419	2,243	3,173
91 to 100 gpm	10	1,496	2,365	3,344

FRACTURED ROCK AQUIFERS
TABLE 3

Q	H (feet) (default minimum)	Radius Zone A (feet)	Radius Zone B5 (feet)	Radius Zone B10 (feet)
< 10 gpm	10	900	1,500	2,250
10 to 20 gpm	10	1,003	1,587	2,250
21 to 30 gpm	10	1,228	1,943	2,747
31 to 40 gpm	10	1,418	2,244	3,172
41 to 50 gpm	10	1,585	2,509	3,546
51 to 60 gpm	10	1,737	2,748	3,885
61 to 70 gpm	10	1,876	2,968	4,196
71 to 80 gpm	10	2,005	3,173	4,486
81 to 90 gpm	10	2,127	3,366	4,758
91 to 100 gpm	10	2,242	3,548	5,015

WELL DATA SHEET Sheet 1 of 3

Complete as much information as possible. Leave blank if information is not available, use N.A. if not applicable. ** Indicates items required for Source Water Assessment* *** Indicates additional items required for assessments and Ground Water Rule*		
	(separate multiple entries in field with semi-colon)	Actual, Estimated or Default?
DATA SHEET GENERAL INFORMATION		
System Name	Meyers Water Company	
System Number	2800530	
Source of Information *(well log, CDPH/County files, system, etc)*	Well log	
Organization Collecting Information *(CDPH, County, System, other)*		
Date Information Collected/Updated		
WELL IDENTIFICATION		
* Well Number or Name	Well 003	
* CDPH Source Identification Number (**FRDS ID No.**)		
DWR Well Log on File? ("YES" or "NO")		
State Well Number (from DWR)		
Well Status (Active, Standby, Inactive)	Active	
WELL LOCATION		
Latitude	38.1996	
Longitude	-122.3151	
Ground Surface Elevation (ft above Mean Sea Level)	1	
Street Address	1794 Milton Road	
Nearest Cross Street	Las Amigas Road	
City	Napa	
County	Napa	
* Neighborhood/Surrounding Area *(see Note 1)*	Re	
Site plan on file? ("YES" or "NO")	NO	
DWR Ground Water Basin	2-002	
DWR Ground Water Sub-basin	2-002.03	
SANITARY CONDITIONS		
** Distance to closest Sewer Line, Sewage Disposal, Septic Tank (ft)	60±	to sewer line
Distance to Active Wells (ft)	xxx± 570±	Unused State-owned MWC standby well
Distance to Abandoned Wells (ft)		
Distance to Surface Water (ft)	110±	
** Size of controlled area around well (square feet)	5.000	
* Type of access control to well site *(fencing, building, etc)*	fencing	
* Surface Seal? (Concrete slab)("YES", "NO" or "UNKNOWN")	YES	
* Dimensions of concrete slab: Length(ft)/ Width(ft)/ Thick(in)	2'x2'	
* Within 100 year flood plain? ("YES", "NO" or "UNKNOWN")	YES	
* Drainage away from well? ("YES" or "NO")	YES	
ENCLOSURE/HOUSING		
Enclosure Type *(building, vault, none, etc.)*	none	
Floor material		
Located in Pit? ("YES" or "NO")	NO	
Pit depth (feet) (if applicable)		

WELL DATA SHEET Sheet 2 of 3

WELL CONSTRUCTION	*(separate multiple entries in field with semi-colon)*	Actual, Estimated or Default?
Date drilled	1/7/2021	
Drilling Method	Reverse Mud Rotary	
Depth of Bore Hole (feet below ground surface)	300	
Casing Beginning Depth/Ending Depth(ft below surface); 2nd Casing Beginning Depth/Ending Depth; 3rd Casing, etc.	Begin 3' above gs End 295' bgs	
Casing Diameter (inches); 2nd Casing Diameter; 3rd Casing, etc.	6	
Casing Material; 2nd Casing Material; 3rd Casing, etc.	PVC SDR 17	
Conductor casing used? ("YES", "NO" or "UNKNOWN") *(See Note 2)*	NO	
Conductor casing removed? ("YES", "NO" or "UNKNOWN")		
* Depth to highest perforations/screens (ft below surface) (or "UNKNOWN")	210	
Screened Interval Beginning Depth/Ending Depth (ft below surface); 2nd Screened Interval Beg. Depth/Ending Depth; 3rd Screened Interval, etc.	Zone 1: 210-230 Zone 2: 265-285	
* Total length of screened interval (ft) *(default = 10% pump capacity in gpm)* (or "UNKNOWN")	20	
* Annular Seal?("YES", "NO" or "UNKNOWN") *(See Note 3)*	YES	
* Depth of Annular Seal (ft)	195	
Material of Annular Seal *(cement grout, bentonite, etc.)*	Cement grout	
Gravel pack, Depth to top (ft below ground surface)	195 -245; 255-300	
Total length of gravel pack (ft)	95	
AQUIFER		
* Aquifer Materials *(list all that apply: sand, silt, clay, gravel, rock, fractured rock)*	Sand, gravel, clay	
* Effective porosity (decimal percent) *(default = 0.2)* (or "UNKNOWN")	0.2	
* Confining layer (Impervious Strata) above aquifer? ("YES", "NO" or "UNKNOWN")	YES	
Thickness of confining layer, if known (ft)	30	
Depth to confining layer, if known (ft below ground)	150	
* Static water level (ft below ground surface)	1.48' from top of casing	Artesian aquifer
Static water level measurement: Date/Method	2/10/22, level transmitter	
Pumping water level (ft below ground surface)	44.62' from top of casing	
Pumping water level measurement: Date/Method	2/11/22, level transmitter	
WELL PRODUCTION		
Well Yield (gpm)	60	
Well Yield Based On (i.e., pump test, etc.)	Pump test	
Date measured	2/11/22	
Is the well metered? ("YES" or "NO")	YES	
Production (gallons per year)	7 Million	
Frequency of Use (hours/year)	4,500	
Typical pumping duration (hours/day)	12	
PUMP		
Make	Grundfos	
Type	62S50-12	
Size (hp)	5 HP	

GROUND WATER ASSESSMENT – WELL SOURCE

WELL DATA SHEET Sheet 3 of 3

PUMP (continued)		
* Capacity (gpm)	30	
Depth to suction intake (ft below ground surface)		
Lubrication Type		
Type of Power: *(i.e., electric, diesel, etc.)*	electric	
Auxiliary power available? ("YES" or "NO")	NO	
Operation controlled by: *(i.e., level in tank, pressure, etc.)*	pressure	
Pump to Waste capability? ("YES" or "NO")	NO	
Discharges to: *(i.e., distribution system, storage, etc.)*	Treatment	

REMARKS AND DEFECTS (use additional sheets as necessary)

NOTES

1. Neighborhood/Surrounding Area (list all that apply): A= Agricultural, Ru = Rural, Re = Residential, Co = Commercial,
   I = Industrial, Mu = Municipal, P = Pristine, O = Other

2. Conductor Casing - Oversized casing used to stabilize bore hole during well construction. Should be removed during installation of annular seal.

3. Annular Seal - Seal of grout in the space between the well casing and the wall of the drilled hole. Sometimes called "sanitary seal".

Please Note:

The information on this Well Data Sheet is considered confidential. To allow the information to be included in the permit report, or made available subject to a public information act request, the waiver clause below has to be signed and dated by the owner (public water system). In lieu of this signature, the WDS has to be retained in a confidential file, or the information shown in the shaded rows has to be "blacked out."

I/We, *(Name)* Matt Fullner, Edgerly Island Living Water LLC. ***certify that I/We am/are the present owners of the well described on this well data sheet. I/We have reviewed the information presented on this well data sheet and I/We take no exception to having the information included in the Department of Public Health' Engineering Report. I/We understand that by including the well data sheet in the Engineering Report, it will be part of a public document that can be reviewed and copied subject to the public information act request.***

(Signature) 3-28-22 (Date)

Possible Contaminating Activities (PCA) Inventory Form

Ground Water Source

Public water system name: Meyers Water Company ID No. 2800530

Name of drinking water source: Well 003 ID No. _____

Inventory date: 3/25/22 Inventory conducted by: Brelje & Race Consulting Engineers

Indicate PCAs pertinent to the drinking water source protection zones, from the following tables, as applicable:

Commercial/Industrial _____

Residential/Municipal _____

Agricultural/Rural _____

Other (required for all) _____

Proceed to appropriate checklist or checklists. Indicate whether the PCA is located in the zone by placing a Y (yes), N (no), or U (unknown) in the appropriate boxes.
Example:

Zone A	Zone B5	Zone B10
Y	N	N
N	**Y**	**U**
U	N	N

Risk Ranking of PCAs, where VH = Very High Risk, H = High Risk, M = Moderate Risk, L = Low Risk

PCA Checklist COMMERCIAL/INDUSTRIAL

PCA (Risk Ranking)	PCA in Zone A?	PCA in Zone B5?	PCA in Zone B10?	Comments
Automobile- Body shops (H)	N	N	N	
Automobile- Car washes (M)	N	N	N	
Automobile- Gas stations (VH)	N	N	N	
Automobile- Repair shops (H)	N	N	N	
Boat services/repair/ refinishing (H)	N	N	N	
Chemical/petroleum pipelines (H)	N	N	N	
Chemical/petroleum processing/storage (VH)	N	N	N	
Dry cleaners (VH)	N	N	N	
Electrical/electronic manufacturing (H)	N	N	N	
Fleet/truck/bus terminals (H)	N	N	N	
Furniture repair/ manufacturing (H)	N	N	N	
Home manufacturing (H)	N	N	N	
Junk/scrap/salvage yards (H)	N	N	N	
Machine shops (H)	N	N	N	
Metal plating/ finishing/fabricating (VH)	N	N	N	
Photo processing/printing (H)	N	N	N	
Plastics/synthetics producers (VH)	N	N	N	
Research laboratories (H)	N	N	N	
Wood preserving/treating (H)	N	N	N	
Wood/pulp/paper processing and mills (H)	N	N	N	
Lumber processing and manufacturing (H)	N	N	N	
Sewer collection systems (H, if in Zone A, otherwise L)	Y	Y	Y	H
Parking lots/malls (>50 spaces) (M)	N	N	N	
Cement/concrete plants (M)	N	N	N	
Food processing (M)	N	N	N	
Funeral services/graveyards (M)	N	N	N	
Hardware/lumber/parts stores (M)	N	N	N	
Appliance/Electronic Repair (L)	N	N	N	
Office buildings/complexes (L)	N	N	N	
Rental Yards (L)	N	N	N	
RV/mini storage (L)	N	N	N	

PCA Checklist RESIDENTIAL/MUNICIPAL

PCA (Risk Ranking)	PCA in Zone A?	PCA in Zone B5?	PCA in Zone B10?	Comments
Airports - Maintenance/ fueling areas (VH)	N	N	N	
Landfills/dumps (VH)	N	N	N	
Railroad yards/ maintenance/ fueling areas (H)	N	N	N	
Septic systems - high density (>1/acre) (VH if in Zone A, otherwise M)	N	N	N	
Sewer collection systems (H, if in Zone A, otherwise L)	Y	Y	Y	H
Utility stations - maintenance areas (H)	N	N	N	
Wastewater treatment plants (VH in Zone A, otherwise H)	N	N	N	
Drinking water treatment plants (M)	Y	N	N	M
Golf courses (M)	N	N	N	
Housing - high density (>1 house/0.5 acres) (M)	Y	Y	Y	M
Motor pools (M)	N	N	N	
Parks (M)	N	N	N	
Waste transfer/recycling stations (M)	N	N	N	
Apartments and condominiums (L)	N	N	N	
Campgrounds/ Recreational areas (L)	N	N	N	
Fire stations (L)	N	N	N	
RV Parks (L)	N	N	N	
Schools (L)	N	N	N	
Hotels, Motels (L)	N	N	N	

PCA Checklist AGRICULTURAL/RURAL

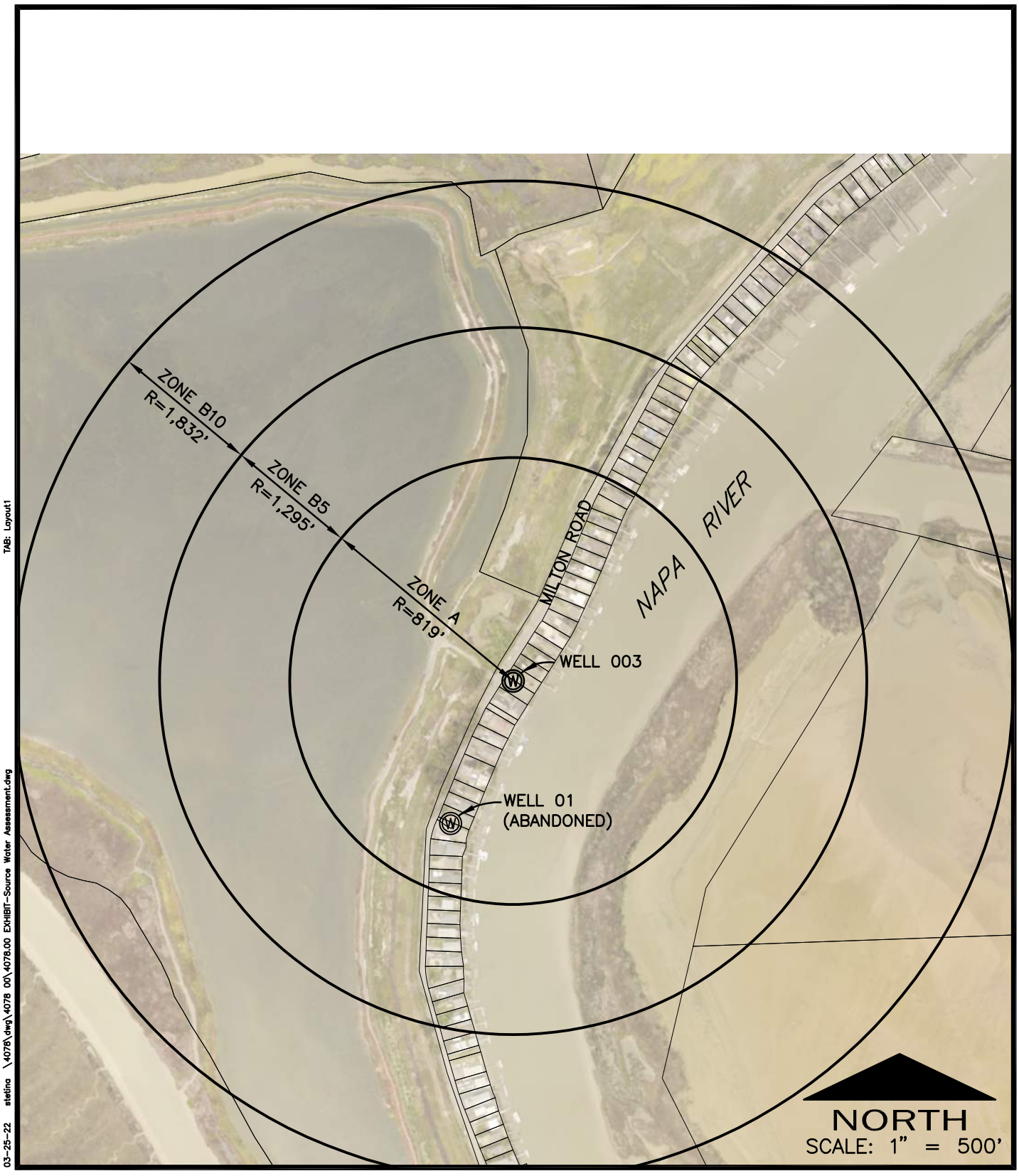
PCA (Risk Ranking)	PCA in Zone A?	PCA in Zone B5?	PCA in Zone B10?	Comments
Grazing (> 5 large animals or equivalent per acre) (H in Zone A, otherwise M)	N	N	N	
Concentrated Animal Feeding Operations (CAFOs) as defined in federal regulation1 (VH in Zone A, otherwise H)	N	N	N	
Animal Feeding Operations as defined in federal regulation2 (VH in Zone A, otherwise H)	N	N	N	
Other Animal operations (H in Zone A, otherwise M)	N	N	N	
Farm chemical distributor/ application service (H)	N	N	N	
Farm machinery repair (H)	N	N	N	
Septic systems - low density (<1/acre) (H in Zone A, otherwise L)	N	N	N	
Lagoons / liquid wastes (H)	N	N	N	
Machine shops (H)	N	N	N	
Pesticide/fertilizer/ petroleum storage & transfer areas (H)	N	N	N	
Agricultural Drainage (H in Zone A, otherwise M)	N	N	N	
Wells - Agricultural/ Irrigation (H)	N	N	N	
Managed Forests (M)	N	N	N	
Crops, irrigated (Berries, hops, mint, orchards, sod, greenhouses, vineyards, nurseries, vegetable) (M)	N	N	N	
Fertilizer, Pesticide/ Herbicide Application (M)	N	N	N	
Sewage sludge/biosolids application (M)	N	N	N	
Crops, nonirrigated (e.g., Christmas trees, grains, grass seeds, hay, pasture) (L) (includes drip-irrigated crops)	N	N	N	

PCA Checklist OTHER ACTIVITIES

PCA (Risk Ranking)	PCA in Zone A?	PCA in Zone B5?	PCA in Zone B10?	Comments
NPDES/WDR permitted discharges (H)	U	U	U	
Underground Injection of Commercial/Industrial Discharges (VH)	N	N	N	
Historic gas stations (VH)	U	U	U	
Historic waste dumps/ landfills (VH)	U	U	U	
Illegal activities/ unauthorized dumping (H)	U	U	U	
Injection wells/ dry wells/ sumps (VH)	U	U	U	
Known Contaminant Plumes (VH)	U	U	U	
Military installations (VH)	U	U	U	
Mining operations - Historic (VH)	U	U	U	
Mining operations - Active (VH)	N	N	N	
Mining - Sand/Gravel (H)	N	N	N	
Wells - Oil, Gas, Geothermal (H)	N	N	N	
Salt Water Intrusion (H)	U	U	U	
Recreational area - surface water source (H)	U	U	U	
Underground storage tanks - Confirmed leaking tanks (VH)	U	U	U	
Underground storage tanks - Decommissioned - inactive tanks (L)	U	U	U	
Underground storage tanks - Non-regulated tanks (tanks smaller than regulatory limit) (H)	U	U	U	
Underground storage tanks - Not yet upgraded or registered tanks (H)	U	U	U	
Underground storage tanks - Upgraded and/or registered - active tanks (L)	U	U	U	
Above ground storage tanks (M)	N	N	N	
Wells - Water supply (M)	N	N	N	
Construction/demolition staging areas (M)	N	N	N	
Contractor or government agency equipment storage yards (M)	N	N	N	
Dredging (M)	U	U	U	
Transportation corridors - Freeways/state highways (M)	N	N	N	
Transportation corridors - Railroads (M)	N	N	N	
Transportation corridors - Historic railroad right-of-ways (M)	U	U	U	
Transportation corridors - Road Right-of-ways (herbicide use areas) (M)	U	U	U	
Transportation corridors - Roads/ Streets (L)	Y	Y	Y	L
Hospitals (M)	N	N	N	
Storm Drain Discharge Points (M)	U	U	U	
Storm Water Detention Facilities (M)	U	U	U	

PCA Checklist OTHER ACTIVITIES (continued)

PCA (Risk Ranking)	PCA in Zone A?	PCA in Zone B5?	PCA in Zone B10?	Comments
Artificial Recharge Projects - Injection wells (potable water) (L)	**N**	**N**	**N**	
Artificial Recharge Projects - Injection wells (non-potable water) (M)	**N**	**N**	**N**	
Artificial Recharge Projects - Spreading Basins (potable water) (L)	**N**	**N**	**N**	
Artificial Recharge Projects - Spreading Basins (non-potable water) (M)	**N**	**N**	**N**	
Medical/dental offices/clinics (L)	**N**	**N**	**N**	
Veterinary offices/clinics (L)	**N**	**N**	**N**	
Surface water - streams/ lakes/rivers (L)	**Y**	**Y**	**Y**	**L**
Wells - monitoring, test holes (L)	**U**	**U**	**U**	



03-25-22 stetina \4078\dwg\4078 00\4078.00 EXHIBIT-Source Water Assessment.dwg TAB: Layout1

MEYERS WATER COMPANY

WELL ASSESSMENT MAP

MARCH 2022

Brelje & Race
CONSULTING ENGINEERS
475 Aviation Blvd. • Suite 120 • Santa Rosa, CA 95403 • 707-576-1322
www.brce.com

Appendix D - Raw Water Quality Data

BSK Associates Sacramento
3140 Gold Camp Drive #160
Rancho Cordova, CA 95670
916.853.9293 (Main)
916.853.9297 (FAX)

SED0057
4/21/2021
Invoice: SE01492

Matthew J. Fullner
Meyers Water Company
1830 Milton Rd
Napa, CA 94559

RE: Report for SED0057 General - non EDT

Dear Matthew J. Fullner,

Thank you for using BSK Associates for your analytical testing needs. In the following pages, you will find the test results for the samples submitted to our laboratory on 4/6/2021. The results have been approved for release by our Laboratory Director as indicated by the authorizing signature below.

The samples were analyzed for the test(s) indicated on the Chain of Custody (see attached) and the results relate only to the samples analyzed. BSK certifies that the testing was performed in accordance with the quality system requirements specified in the 2016 TNI Standard. Any deviations from this standard or from the method requirements for each test procedure performed will be annotated alongside the analytical result or noted in the Case Narrative. Unless otherwise noted, the sample results are reported on an “as received” basis.

If additional clarification of any information is required, please contact your Project Manager, Michelle Croft , at (916) 853-9293.

Thank you again for using BSK Associates. We value your business and appreciate your loyalty.

Sincerely,

Michelle Croft

Michelle Croft, Project Manager

BSK ASSOCIATES

Case Narrative

Project and Report Details		Invoice Details	
Client:	Meyers Water Company	**Invoice To:**	Meyers Water Company
Report To:	Matthew J. Fullner	**Invoice Attn:**	Matthew J. Fullner
Project #:	General - non EDT	**Project PO#:**	-
Received:	4/06/2021 - 15:50		
Report Due:	4/21/2021		

Sample Receipt Conditions

Cooler: Default Cooler
Temperature on Receipt ºC: 3.2

Containers Intact
COC/Labels Agree
Received On Blue Ice
Sample(s) were received in temperature range.
Initial receipt at BSK-SAC

Data Qualifiers

The following qualifiers have been applied to one or more analytical results:

DP1.1 Sample Duplicate RPD exceeded method acceptance criteria.
MS1.0 Matrix spike recoveries exceed control limits.

Report Distribution

Recipient(s)	Report Format	CC:
Matthew J. Fullner	MCL_FINAL.RPT	jay@pjcanvas.com;juellybear@gmail.com

Certificate of Analysis

Sample ID: SED0057-01
Sampled By: Matthew J. Fullner
Sample Description: Well 003 - Zone 2 (Lower Zone)

Sample Date - Time: 04/05/2021 - 19:40
Matrix: Water
Sample Type: Grab

BSK Associates Laboratory Fresno

General Chemistry

Analyte	Method	Result	RL	Units	RL Mult	MCL	Batch	Prepared	Analyzed	Qual
Aggressive Index		**12**	0.0	AGGR	1		AED1146	04/20/21	04/20/21	
Alkalinity as CaCO3	SM 2320B	**190**	3.0	mg/L	1		AED0401	04/07/21	04/07/21	
Bicarbonate as CaCO3	SM 2320B	**190**	3.0	mg/L	1		AED0401	04/07/21	04/07/21	
Carbonate as CaCO3	SM 2320B	ND	3.0	mg/L	1		AED0401	04/07/21	04/07/21	
Hydroxide as CaCO3	SM 2320B	ND	3.0	mg/L	1		AED0401	04/07/21	04/07/21	
Chloride	EPA 300.0	**300**	1.0	mg/L	1		AED0397	04/07/21	04/07/21	
Conductivity @ 25C	SM 2510B	**1300**	1.0	umhos/cm	1		AED0401	04/07/21	04/07/21	
Fluoride	EPA 300.0	**0.11**	0.10	mg/L	1	2	AED0397	04/07/21	04/07/21	
Langelier Index	SM 2330B	**-0.16**					AED1146	04/20/21	04/20/21	
MBAS, Calculated as LAS, mol wt 340	SM 5540C	ND	0.050	mg/L	1		AED0301	04/07/21 19:30	04/07/21	
Nitrate + Nitrite as N	EPA 300.0	ND	0.23	mg/L	1	10	AED0397	04/07/21 19:04	04/07/21	
Nitrate as N	EPA 300.0	ND	0.23	mg/L	1	10	AED0397	04/07/21 19:04	04/07/21	
Nitrite as N	EPA 300.0	ND	0.050	mg/L	1	1	AED0397	04/07/21 19:04	04/07/21	
Perchlorate	EPA 314.0	ND	2.0	ug/L	4	6	AED0434	04/08/21	04/08/21	
Sulfate as SO4	EPA 300.0	**27**	1.0	mg/L	1		AED0397	04/07/21	04/07/21	
Total Dissolved Solids	SM 2540C	**710**	5.0	mg/L	1		AED0430	04/08/21	04/08/21	

Metals

Analyte	Method	Result	RL	Units	RL Mult	MCL	Batch	Prepared	Analyzed	Qual
Aluminum	EPA 200.7	ND	0.050	mg/L	1	1	AED0541	04/12/21	04/15/21	
Antimony	EPA 200.8	ND	2.0	ug/L	1	6	AED0541	04/12/21	04/16/21	
Arsenic	EPA 200.8	ND	2.0	ug/L	1	10	AED0541	04/12/21	04/16/21	
Barium	EPA 200.7	**0.40**	0.050	mg/L	1	1	AED0541	04/12/21	04/15/21	
Beryllium	EPA 200.8	ND	1.0	ug/L	1	4	AED0541	04/12/21	04/16/21	
Cadmium	EPA 200.8	ND	1.0	ug/L	1	5	AED0541	04/12/21	04/16/21	
Calcium	EPA 200.7	**49**	0.10	mg/L	1		AED0541	04/12/21	04/15/21	
Chromium	EPA 200.8	ND	10	ug/L	1	50	AED0541	04/12/21	04/16/21	
Copper	EPA 200.8	ND	5.0	ug/L	1		AED0541	04/12/21	04/16/21	
Iron	EPA 200.7	ND	0.030	mg/L	1		AED0541	04/12/21	04/15/21	
Lead	EPA 200.8	ND	1.0	ug/L	1		AED0541	04/12/21	04/16/21	
Magnesium	EPA 200.7	**43**	0.10	mg/L	1		AED0541	04/12/21	04/15/21	
Manganese	EPA 200.7	**1.2**	0.010	mg/L	1		AED0541	04/12/21	04/15/21	
Mercury	EPA 200.8	ND	0.20	ug/L	1	2	AED0541	04/12/21	04/16/21	
Nickel	EPA 200.8	ND	10	ug/L	1	100	AED0541	04/12/21	04/16/21	
Potassium	EPA 200.7	**6.1**	2.0	mg/L	1		AED0541	04/12/21	04/15/21	
Selenium	EPA 200.8	**6.0**	2.0	ug/L	1	50	AED0541	04/12/21	04/16/21	
Silver	EPA 200.8	ND	10	ug/L	1		AED0541	04/12/21	04/16/21	
Sodium	EPA 200.7	**140**	1.0	mg/L	1		AED0541	04/12/21	04/15/21	
Hardness as CaCO3	CALC	**300**	0.66	mg/L						
Thallium	EPA 200.8	ND	1.0	ug/L	1	2	AED0541	04/12/21	04/16/21	
Zinc	EPA 200.7	ND	0.050	mg/L	1		AED0541	04/12/21	04/15/21	

Certificate of Analysis

Sample ID: SED0057-01
Sampled By: Matthew J. Fullner
Sample Description: Well 003 - Zone 2 (Lower Zone)

Sample Date - Time: 04/05/2021 - 19:40
Matrix: Water
Sample Type: Grab

Organics

Analyte	Method	Result	RL	Units	RL Mult	MCL	Batch	Prepared	Analyzed	Qual
EDB and DBCP by GC-ECD										
Ethylene Dibromide (EDB)	EPA 504.1	ND	0.020	ug/L	1	0.05	AED0501	04/09/21	04/10/21	
Dibromochloropropane (DBCP)	EPA 504.1	ND	0.010	ug/L	1	0.2	AED0501	04/09/21	04/10/21	
Surrogate: 1-Br-2-Nitrobenzene	EPA 504.1	102 %	*Acceptable range: 70-130 %*							
Organohalide Pesticides and PCBs by GC-ECD										
Aldrin	EPA 505	ND	0.075	ug/L	1		AED0501	04/09/21	04/10/21	
Chlordane (Technical)	EPA 505	ND	0.10	ug/L	1	0.1	AED0501	04/09/21	04/10/21	
Dieldrin	EPA 505	ND	0.020	ug/L	1		AED0501	04/09/21	04/10/21	
Endrin	EPA 505	ND	0.10	ug/L	1	2	AED0501	04/09/21	04/10/21	
Heptachlor	EPA 505	ND	0.010	ug/L	1	0.01	AED0501	04/09/21	04/10/21	
Heptachlor Epoxide	EPA 505	ND	0.010	ug/L	1	0.01	AED0501	04/09/21	04/10/21	
Hexachlorobenzene	EPA 505	ND	0.50	ug/L	1	1	AED0501	04/09/21	04/10/21	
Hexachlorocyclopentadiene	EPA 505	ND	1.0	ug/L	1	50	AED0501	04/09/21	04/10/21	
Lindane	EPA 505	ND	0.20	ug/L	1	0.2	AED0501	04/09/21	04/10/21	
Methoxychlor	EPA 505	ND	10	ug/L	1	30	AED0501	04/09/21	04/10/21	
PCB Aroclor Screen	EPA 505	ND	0.50	ug/L	1	0.5	AED0501	04/09/21	04/10/21	
Toxaphene	EPA 505	ND	1.0	ug/L	1	3	AED0501	04/09/21	04/10/21	
Surrogate: 1-Br-2-Nitrobenzene	EPA 505	102 %	*Acceptable range: 70-130 %*							
EPA 505 - Simazine, Atrazine, and Alachlor Only										
Alachlor	EPA 505	ND	1.0	ug/L	1	2	AED0501	04/09/21	04/10/21	
Atrazine	EPA 505	ND	0.50	ug/L	1	1	AED0501	04/09/21	04/10/21	
Simazine	EPA 505	ND	1.0	ug/L	1	4	AED0501	04/09/21	04/10/21	
Surrogate: 1-Br-2-Nitrobenzene	EPA 505	102 %	*Acceptable range: 70-130 %*							
Chlorinated Acid Herbicides by GC-ECD										
2,4,5-T	EPA 515.4	ND	1.0	ug/L	1		AED0757	04/13/21	04/14/21	
2,4,5-TP (Silvex)	EPA 515.4	ND	1.0	ug/L	1	50	AED0757	04/13/21	04/14/21	
2,4-D	EPA 515.4	ND	10	ug/L	1	70	AED0757	04/13/21	04/14/21	
Bentazon	EPA 515.4	ND	2.0	ug/L	1	18	AED0757	04/13/21	04/14/21	
Dalapon	EPA 515.4	ND	10	ug/L	1	200	AED0757	04/13/21	04/14/21	
Dicamba	EPA 515.4	ND	1.5	ug/L	1		AED0757	04/13/21	04/14/21	
Dinoseb	EPA 515.4	ND	2.0	ug/L	1	7	AED0757	04/13/21	04/14/21	
Pentachlorophenol	EPA 515.4	ND	0.20	ug/L	1	1	AED0757	04/13/21	04/14/21	
Picloram	EPA 515.4	ND	1.0	ug/L	1	500	AED0757	04/13/21	04/14/21	
Surrogate: DCPAA	EPA 515.4	93 %	*Acceptable range: 70-130 %*							
Volatile Organics (SDWA Regulated) by GC-MS										
1,1,1-Trichloroethane	EPA 524.2	ND	0.50	ug/L	1	200	AED0360	04/07/21	04/07/21	
1,1,2,2-Tetrachloroethane	EPA 524.2	ND	0.50	ug/L	1	1	AED0360	04/07/21	04/07/21	
1,1,2-Trichloro-1,2,2-trifluoroethane	EPA 524.2	ND	10	ug/L	1	1200	AED0360	04/07/21	04/07/21	
1,1,2-Trichloroethane	EPA 524.2	ND	0.50	ug/L	1	5	AED0360	04/07/21	04/07/21	
1,1-Dichloroethane	EPA 524.2	ND	0.50	ug/L	1	5	AED0360	04/07/21	04/07/21	
1,1-Dichloroethene	EPA 524.2	ND	0.50	ug/L	1	6	AED0360	04/07/21	04/07/21	
1,2,4-Trichlorobenzene	EPA 524.2	ND	0.50	ug/L	1	5	AED0360	04/07/21	04/07/21	

Certificate of Analysis

Sample ID: SED0057-01
Sampled By: Matthew J. Fullner
Sample Description: Well 003 - Zone 2 (Lower Zone)

Sample Date - Time: 04/05/2021 - 19:40
Matrix: Water
Sample Type: Grab

Organics

Analyte	Method	Result	RL	Units	RL Mult	MCL	Batch	Prepared	Analyzed	Qual
Volatile Organics (SDWA Regulated) by GC-MS										
1,2-Dichlorobenzene	EPA 524.2	ND	0.50	ug/L	1	600	AED0360	04/07/21	04/07/21	
1,2-Dichloroethane	EPA 524.2	ND	0.50	ug/L	1	0.5	AED0360	04/07/21	04/07/21	
1,2-Dichloropropane	EPA 524.2	ND	0.50	ug/L	1	5	AED0360	04/07/21	04/07/21	
1,4-Dichlorobenzene	EPA 524.2	ND	0.50	ug/L	1	5	AED0360	04/07/21	04/07/21	
Benzene	EPA 524.2	ND	0.50	ug/L	1	1	AED0360	04/07/21	04/07/21	
Carbon Tetrachloride	EPA 524.2	ND	0.50	ug/L	1	0.5	AED0360	04/07/21	04/07/21	
Chlorobenzene	EPA 524.2	ND	0.50	ug/L	1	70	AED0360	04/07/21	04/07/21	
cis-1,2-Dichloroethene	EPA 524.2	ND	0.50	ug/L	1	6	AED0360	04/07/21	04/07/21	
cis-1,3-Dichloropropene	EPA 524.2	ND	0.50	ug/L	1		AED0360	04/07/21	04/07/21	
Dichloromethane	EPA 524.2	ND	0.50	ug/L	1	5	AED0360	04/07/21	04/07/21	
Ethylbenzene	EPA 524.2	ND	0.50	ug/L	1	300	AED0360	04/07/21	04/07/21	
m,p-Xylenes	EPA 524.2	ND	0.50	ug/L	1		AED0360	04/07/21	04/07/21	
Methyl-t-butyl ether	EPA 524.2	ND	0.50	ug/L	1	13	AED0360	04/07/21	04/07/21	
o-Xylene	EPA 524.2	ND	0.50	ug/L	1		AED0360	04/07/21	04/07/21	
Styrene	EPA 524.2	ND	0.50	ug/L	1	100	AED0360	04/07/21	04/07/21	
Tetrachloroethene (PCE)	EPA 524.2	ND	0.50	ug/L	1	5	AED0360	04/07/21	04/07/21	
Toluene	EPA 524.2	ND	0.50	ug/L	1	150	AED0360	04/07/21	04/07/21	
trans-1,2-Dichloroethene	EPA 524.2	ND	0.50	ug/L	1	10	AED0360	04/07/21	04/07/21	
trans-1,3-Dichloropropene	EPA 524.2	ND	0.50	ug/L	1		AED0360	04/07/21	04/07/21	
Trichloroethene (TCE)	EPA 524.2	ND	0.50	ug/L	1	5	AED0360	04/07/21	04/07/21	
Trichlorofluoromethane	EPA 524.2	ND	5.0	ug/L	1	150	AED0360	04/07/21	04/07/21	
Vinyl Chloride	EPA 524.2	ND	0.50	ug/L	1	0.5	AED0360	04/07/21	04/07/21	
Total 1,3-Dichloropropene	EPA 524.2	ND	0.50	ug/L	1	0.5	AED0360	04/07/21	04/07/21	
Total Xylenes	EPA 524.2	ND	0.50	ug/L	1	1750	AED0360	04/07/21	04/07/21	
Surrogate: 1,2-Dichlorobenzene-d4	EPA 524.2	111 %	*Acceptable range: 70-130 %*							
Surrogate: Bromofluorobenzene	EPA 524.2	107 %	*Acceptable range: 70-130 %*							
Carbamates by HPLC										
3-Hydroxycarbofuran	EPA 531.1	ND	3.0	ug/L	1		AED0552	04/09/21	04/10/21	
Aldicarb	EPA 531.1	ND	3.0	ug/L	1		AED0552	04/09/21	04/10/21	
Aldicarb Sulfone	EPA 531.1	ND	2.0	ug/L	1		AED0552	04/09/21	04/10/21	
Aldicarb Sulfoxide	EPA 531.1	ND	3.0	ug/L	1		AED0552	04/09/21	04/10/21	
Carbaryl	EPA 531.1	ND	5.0	ug/L	1		AED0552	04/09/21	04/10/21	
Carbofuran	EPA 531.1	ND	5.0	ug/L	1	18	AED0552	04/09/21	04/10/21	
Methomyl	EPA 531.1	ND	2.0	ug/L	1		AED0552	04/09/21	04/10/21	
Oxamyl	EPA 531.1	ND	20	ug/L	1	50	AED0552	04/09/21	04/10/21	
Endothall by GC-MS										
Endothall	EPA 548.1	ND	45	ug/L	1	100	AED0411	04/07/21	04/08/21	
Diquat by HPLC										
Diquat	EPA 549.2	ND	4.0	ug/L	1	20	AED0415	04/08/21	04/14/21	
1,2,3-Trichloropropane by GC-MS SIM										
1,2,3-Trichloropropane	SRL 524M-TCP	ND	0.0050	ug/L	1	0.005	AED0399	04/07/21	04/08/21	

Certificate of Analysis

Sample ID: SED0057-01
Sampled By: Matthew J. Fullner
Sample Description: Well 003 - Zone 2 (Lower Zone)

Sample Date - Time: 04/05/2021 - 19:40
Matrix: Water
Sample Type: Grab

BSK Associates Sacramento

General Chemistry

Analyte	Method	Result	RL	Units	RL Mult	MCL	Batch	Prepared	Analyzed	Qual
Color, Apparent	SM 2120B	ND	5.0	CU	1		SED0015	04/07/21 13:32	04/07/21	
Color pH (1)	SM 4500-H+ B	**7.6**		pH Units	1		SED0015	04/07/21	04/07/21	
Threshold Odor	SM 2150B	ND	1.0	T.O.N.	1		SED0011	04/06/21 16:48	04/06/21	
pH (1)	SM 4500-H+ B	**7.6**	0.0	pH Units	1		SED0016	04/07/21 13:32	04/07/21	
pH Temperature in °C		**16.2**								
Turbidity	SM 2130B	**0.20**	0.10	NTU	1		SED0015	04/07/21 13:32	04/07/21	

BSK Associates Laboratory Fresno

General Chemistry Quality Control Report

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Date Analyzed	Qual
EPA 300.0 - Quality Control											
Batch: AED0397										Prepared: 4/7/2021	
Prep Method: Method Specific Preparation										Analyst: BCB	
Blank (AED0397-BLK1)											
Fluoride	ND	0.10	mg/L							04/07/21	
Nitrate as N	ND	0.23	mg/L							04/07/21	
Chloride	ND	1.0	mg/L							04/07/21	
Nitrite as N	ND	0.050	mg/L							04/07/21	
Nitrate + Nitrite as N	ND	0.23	mg/L							04/07/21	
Sulfate as SO4	ND	1.0	mg/L							04/07/21	
Blank Spike (AED0397-BS1)											
Fluoride	0.99	0.10	mg/L	1.0	ND	99	90-110			04/07/21	
Nitrate as N	22	0.23	mg/L	23	ND	97	90-110			04/07/21	
Chloride	98	1.0	mg/L	100	ND	98	90-110			04/07/21	
Nitrite as N	1.1	0.050	mg/L	1.0	ND	106	90-110			04/07/21	
Sulfate as SO4	97	1.0	mg/L	100	ND	97	90-110			04/07/21	
Matrix Spike (AED0397-MS1), Source: SED0068-01											
Fluoride	0.61	0.10	mg/L	0.50	ND	102	80-120			04/08/21	
Nitrate as N	12	0.23	mg/L	11	0.75	99	80-120			04/08/21	
Chloride	58	1.0	mg/L	50	7.6	100	80-120			04/08/21	
Nitrite as N	0.45	0.050	mg/L	0.50	ND	91	75-125			04/08/21	
Sulfate as SO4	52	1.0	mg/L	50	2.3	99	80-120			04/08/21	
Matrix Spike (AED0397-MS2), Source: AED0493-01											
Fluoride	0.55	0.10	mg/L	0.50	ND	111	80-120			04/08/21	
Nitrate as N	11	0.23	mg/L	11	ND	101	80-120			04/08/21	
Chloride	52	1.0	mg/L	50	1.1	102	80-120			04/08/21	
Nitrite as N	0.47	0.050	mg/L	0.50	ND	93	75-125			04/08/21	
Sulfate as SO4	52	1.0	mg/L	50	2.0	101	80-120			04/08/21	
Matrix Spike Dup (AED0397-MSD1), Source: SED0068-01											
Fluoride	0.62	0.10	mg/L	0.50	ND	104	80-120	2	10	04/08/21	
Nitrate as N	12	0.23	mg/L	11	0.75	101	80-120	2	20	04/08/21	
Chloride	58	1.0	mg/L	50	7.6	102	80-120	1	20	04/08/21	
Nitrite as N	0.46	0.050	mg/L	0.50	ND	93	75-125	2	20	04/08/21	
Sulfate as SO4	52	1.0	mg/L	50	2.3	100	80-120	1	20	04/08/21	
Matrix Spike Dup (AED0397-MSD2), Source: AED0493-01											
Fluoride	0.55	0.10	mg/L	0.50	ND	111	80-120	0	10	04/08/21	
Nitrate as N	11	0.23	mg/L	11	ND	101	80-120	1	20	04/08/21	
Chloride	52	1.0	mg/L	50	1.1	101	80-120	1	20	04/08/21	
Nitrite as N	0.47	0.050	mg/L	0.50	ND	93	75-125	0	20	04/08/21	
Sulfate as SO4	52	1.0	mg/L	50	2.0	100	80-120	1	20	04/08/21	
EPA 314.0 - Quality Control											
Batch: AED0434										Prepared: 4/8/2021	
Prep Method: Method Specific Preparation										Analyst: CTD	

BSK Associates Laboratory Fresno

General Chemistry Quality Control Report

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Date Analyzed	Qual
EPA 314.0 - Quality Control											
Batch: AED0434										Prepared: 4/8/2021	
Prep Method: Method Specific Preparation										Analyst: CTD	
Blank (AED0434-BLK1)											
Perchlorate	ND	2.0	ug/L							04/08/21	
Blank Spike (AED0434-BS1)											
Perchlorate	14	2.0	ug/L	15	ND	94	85-115			04/08/21	
Matrix Spike (AED0434-MS1), Source: AED0124-01											
Perchlorate	18	2.0	ug/L	20	ND	92	80-120			04/08/21	
Matrix Spike Dup (AED0434-MSD1), Source: AED0124-01											
Perchlorate	17	2.0	ug/L	20	ND	87	80-120	5	15	04/08/21	
SM 2320B - Quality Control											
Batch: AED0401										Prepared: 4/7/2021	
Prep Method: Method Specific Preparation										Analyst: CEG	
Blank (AED0401-BLK1)											
Alkalinity as CaCO3	ND	3.0	mg/L							04/07/21	
Bicarbonate as CaCO3	ND	3.0	mg/L							04/07/21	
Carbonate as CaCO3	ND	3.0	mg/L							04/07/21	
Hydroxide as CaCO3	ND	3.0	mg/L							04/07/21	
Blank Spike (AED0401-BS1)											
Alkalinity as CaCO3	98	3.0	mg/L	100	ND	98	80-120			04/07/21	
Blank Spike Dup (AED0401-BSD1)											
Alkalinity as CaCO3	99	3.0	mg/L	100	ND	99	80-120	1	20	04/07/21	
Duplicate (AED0401-DUP1), Source: AED0619-01											
Alkalinity as CaCO3	95	3.0	mg/L		95			1	10	04/08/21	
Bicarbonate as CaCO3	76	3.0	mg/L		77			1	10	04/08/21	
Carbonate as CaCO3	19	3.0	mg/L		18			6	10	04/08/21	
Hydroxide as CaCO3	ND	3.0	mg/L		ND				10	04/08/21	
SM 2510B - Quality Control											
Batch: AED0401										Prepared: 4/7/2021	
Prep Method: Method Specific Preparation										Analyst: CEG	
Blank Spike (AED0401-BS1)											
Conductivity @ 25C	1300	1.0	umhos/cm	1400	ND	94	90-110			04/07/21	
Blank Spike Dup (AED0401-BSD1)											
Conductivity @ 25C	1400	1.0	umhos/cm	1400	ND	96	90-110	2	5	04/07/21	
Duplicate (AED0401-DUP1), Source: AED0619-01											
Conductivity @ 25C	410	1.0	umhos/cm		410			1	5	04/08/21	

BSK Associates Laboratory Fresno

General Chemistry Quality Control Report

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Date Analyzed	Qual
SM 2540C - Quality Control											
Batch: AED0430										Prepared: 4/8/2021	
Prep Method: Method Specific Preparation										Analyst: SYY	
Blank (AED0430-BLK1)											
Total Dissolved Solids	ND	5.0	mg/L							04/08/21	
Blank Spike (AED0430-BS1)											
Total Dissolved Solids	1000		mg/L	1000		100	70-130			04/08/21	
Duplicate (AED0430-DUP1), Source: AED0488-02											
Total Dissolved Solids	500	5.0	mg/L		560			12	10	04/08/21	DP1.1
Duplicate (AED0430-DUP2), Source: AED0434-01											
Total Dissolved Solids	750	5.0	mg/L		770			1	10	04/08/21	
SM 5540C - Quality Control											
Batch: AED0301										Prepared: 4/6/2021	
Prep Method: Method Specific Preparation										Analyst: SYY	
Blank (AED0301-BLK1)											
MBAS, Calculated as LAS, mol wt 340	ND	0.050	mg/L							04/07/21	
Blank Spike (AED0301-BS1)											
MBAS, Calculated as LAS, mol wt 340	0.98	0.050	mg/L	1.0	ND	98	82-112			04/07/21	
Blank Spike Dup (AED0301-BSD1)											
MBAS, Calculated as LAS, mol wt 340	0.99	0.050	mg/L	1.0	ND	99	82-112	0	20	04/07/21	
Matrix Spike (AED0301-MS1), Source: AED0262-01											
MBAS, Calculated as LAS, mol wt 340	0.98	0.050	mg/L	1.0	ND	98	80-112			04/07/21	
Matrix Spike Dup (AED0301-MSD1), Source: AED0262-01											
MBAS, Calculated as LAS, mol wt 340	0.98	0.050	mg/L	1.0	ND	98	80-112	0	20	04/07/21	

BSK Associates Laboratory Fresno

Metals Quality Control Report

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Date Analyzed	Qual
EPA 200.7 - Quality Control											
Batch: AED0541										Prepared: 4/12/2021	
Prep Method: EPA 200.2										Analyst: MDS	
Blank (AED0541-BLK2)											
Aluminum	ND	0.050	mg/L							04/15/21	
Barium	ND	0.050	mg/L							04/15/21	
Calcium	ND	0.10	mg/L							04/15/21	
Iron	ND	0.030	mg/L							04/15/21	
Potassium	ND	2.0	mg/L							04/15/21	
Magnesium	ND	0.10	mg/L							04/15/21	
Manganese	ND	0.010	mg/L							04/15/21	
Sodium	ND	1.0	mg/L							04/15/21	
Zinc	ND	0.050	mg/L							04/15/21	
Blank Spike (AED0541-BS2)											
Aluminum	0.18	0.050	mg/L	0.20	ND	89	85-115			04/15/21	
Barium	0.19	0.050	mg/L	0.20	ND	96	85-115			04/15/21	
Calcium	3.8	0.10	mg/L	4.0	ND	95	85-115			04/15/21	
Iron	0.20	0.030	mg/L	0.20	ND	98	85-115			04/15/21	
Potassium	4.2	2.0	mg/L	4.0	ND	104	85-115			04/15/21	
Magnesium	3.9	0.10	mg/L	4.0	ND	97	85-115			04/15/21	
Manganese	0.19	0.010	mg/L	0.20	ND	93	85-115			04/15/21	
Sodium	4.2	1.0	mg/L	4.0	ND	104	85-115			04/15/21	
Zinc	0.20	0.050	mg/L	0.20	ND	99	85-115			04/15/21	
Blank Spike Dup (AED0541-BSD2)											
Aluminum	0.19	0.050	mg/L	0.20	ND	93	85-115	4	20	04/15/21	
Barium	0.19	0.050	mg/L	0.20	ND	96	85-115	1	20	04/15/21	
Calcium	3.8	0.10	mg/L	4.0	ND	95	85-115	0	20	04/15/21	
Iron	0.20	0.030	mg/L	0.20	ND	99	85-115	2	20	04/15/21	
Potassium	4.1	2.0	mg/L	4.0	ND	101	85-115	3	20	04/15/21	
Magnesium	3.9	0.10	mg/L	4.0	ND	98	85-115	2	20	04/15/21	
Manganese	0.19	0.010	mg/L	0.20	ND	94	85-115	1	20	04/15/21	
Sodium	4.1	1.0	mg/L	4.0	ND	103	85-115	1	20	04/15/21	
Zinc	0.20	0.050	mg/L	0.20	ND	99	85-115	1	20	04/15/21	
Matrix Spike (AED0541-MS3), Source: SED0085-01											
Aluminum	0.17	0.050	mg/L	0.20	ND	84	70-130			04/15/21	
Barium	0.21	0.050	mg/L	0.20	ND	106	70-130			04/15/21	
Calcium	17	0.10	mg/L	4.0	14	94	70-130			04/15/21	
Iron	0.21	0.030	mg/L	0.20	ND	106	70-130			04/15/21	
Potassium	5.5	2.0	mg/L	4.0	ND	94	70-130			04/15/21	
Magnesium	12	0.10	mg/L	4.0	7.5	101	70-130			04/15/21	
Manganese	0.19	0.010	mg/L	0.20	ND	94	70-130			04/15/21	
Sodium	30	1.0	mg/L	4.0	26	96	70-130			04/15/21	
Zinc	0.21	0.050	mg/L	0.20	ND	103	70-130			04/15/21	
Matrix Spike (AED0541-MS4), Source: SED0085-02											
Aluminum	0.18	0.050	mg/L	0.20	ND	91	70-130			04/15/21	
Barium	0.21	0.050	mg/L	0.20	ND	106	70-130			04/15/21	

BSK Associates Laboratory Fresno

Metals Quality Control Report

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Date Analyzed	Qual
EPA 200.7 - Quality Control											
Batch: AED0541										Prepared: 4/12/2021	
Prep Method: EPA 200.2										Analyst: MDS	
Matrix Spike (AED0541-MS4), Source: SED0085-02											
Calcium	18	0.10	mg/L	4.0	14	110	70-130			04/15/21	
Iron	0.21	0.030	mg/L	0.20	ND	104	70-130			04/15/21	
Potassium	5.7	2.0	mg/L	4.0	ND	99	70-130			04/15/21	
Magnesium	12	0.10	mg/L	4.0	7.5	107	70-130			04/15/21	
Manganese	0.19	0.010	mg/L	0.20	ND	95	70-130			04/15/21	
Sodium	30	1.0	mg/L	4.0	25	129	70-130			04/15/21	
Zinc	0.20	0.050	mg/L	0.20	ND	100	70-130			04/15/21	
Matrix Spike Dup (AED0541-MSD3), Source: SED0085-01											
Aluminum	0.18	0.050	mg/L	0.20	ND	89	70-130	6	20	04/15/21	
Barium	0.21	0.050	mg/L	0.20	ND	107	70-130	1	20	04/15/21	
Calcium	18	0.10	mg/L	4.0	14	102	70-130	2	20	04/15/21	
Iron	0.21	0.030	mg/L	0.20	ND	107	70-130	0	20	04/15/21	
Potassium	5.7	2.0	mg/L	4.0	ND	99	70-130	4	20	04/15/21	
Magnesium	12	0.10	mg/L	4.0	7.5	103	70-130	1	20	04/15/21	
Manganese	0.19	0.010	mg/L	0.20	ND	95	70-130	1	20	04/15/21	
Sodium	30	1.0	mg/L	4.0	26	107	70-130	1	20	04/15/21	
Zinc	0.21	0.050	mg/L	0.20	ND	103	70-130	0	20	04/15/21	
Matrix Spike Dup (AED0541-MSD4), Source: SED0085-02											
Aluminum	0.19	0.050	mg/L	0.20	ND	97	70-130	6	20	04/15/21	
Barium	0.21	0.050	mg/L	0.20	ND	106	70-130	0	20	04/15/21	
Calcium	18	0.10	mg/L	4.0	14	97	70-130	3	20	04/15/21	
Iron	0.21	0.030	mg/L	0.20	ND	106	70-130	2	20	04/15/21	
Potassium	5.5	2.0	mg/L	4.0	ND	95	70-130	3	20	04/15/21	
Magnesium	12	0.10	mg/L	4.0	7.5	103	70-130	1	20	04/15/21	
Manganese	0.19	0.010	mg/L	0.20	ND	96	70-130	1	20	04/15/21	
Sodium	29	1.0	mg/L	4.0	25	106	70-130	3	20	04/15/21	
Zinc	0.21	0.050	mg/L	0.20	ND	103	70-130	3	20	04/15/21	
EPA 200.8 - Quality Control											
Batch: AED0541										Prepared: 4/12/2021	
Prep Method: EPA 200.2										Analyst: PSK	
Blank (AED0541-BLK1)											
Beryllium	ND	1.0	ug/L							04/16/21	
Chromium	ND	10	ug/L							04/16/21	
Nickel	ND	10	ug/L							04/16/21	
Copper	ND	5.0	ug/L							04/16/21	
Arsenic	ND	2.0	ug/L							04/16/21	
Selenium	ND	2.0	ug/L							04/16/21	
Silver	ND	10	ug/L							04/16/21	
Cadmium	ND	1.0	ug/L							04/16/21	
Antimony	ND	2.0	ug/L							04/16/21	
Thallium	ND	1.0	ug/L							04/16/21	
Lead	ND	1.0	ug/L							04/16/21	

BSK Associates Laboratory Fresno

Metals Quality Control Report

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Date Analyzed	Qual
EPA 200.8 - Quality Control											
Batch: AED0541										Prepared: 4/12/2021	
Prep Method: EPA 200.2										Analyst: PSK	
Blank (AED0541-BLK1)											
Mercury	ND	0.20	ug/L							04/16/21	
Blank Spike (AED0541-BS1)											
Beryllium	210	1.0	ug/L	200	ND	106	85-115			04/16/21	
Chromium	200	10	ug/L	200	ND	98	85-115			04/16/21	
Nickel	190	10	ug/L	200	ND	94	85-115			04/16/21	
Copper	180	5.0	ug/L	200	ND	92	85-115			04/16/21	
Arsenic	190	2.0	ug/L	200	ND	96	85-115			04/16/21	
Selenium	190	2.0	ug/L	200	ND	93	85-115			04/16/21	
Silver	96	10	ug/L	100	ND	96	75-125			04/16/21	
Cadmium	190	1.0	ug/L	200	ND	97	85-115			04/16/21	
Antimony	200	2.0	ug/L	200	ND	100	85-115			04/16/21	
Thallium	200	1.0	ug/L	200	ND	100	85-115			04/16/21	
Lead	210	1.0	ug/L	200	ND	103	85-115			04/16/21	
Mercury	4.9	0.20	ug/L	5.0	ND	97	85-115			04/16/21	
Blank Spike Dup (AED0541-BSD1)											
Beryllium	200	1.0	ug/L	200	ND	102	85-115	4	20	04/16/21	
Chromium	190	10	ug/L	200	ND	97	85-115	1	20	04/16/21	
Nickel	190	10	ug/L	200	ND	94	85-115	0	20	04/16/21	
Copper	190	5.0	ug/L	200	ND	93	85-115	1	20	04/16/21	
Arsenic	190	2.0	ug/L	200	ND	95	85-115	1	20	04/16/21	
Selenium	180	2.0	ug/L	200	ND	90	85-115	2	20	04/16/21	
Silver	96	10	ug/L	100	ND	96	75-125	0	20	04/16/21	
Cadmium	190	1.0	ug/L	200	ND	97	85-115	0	20	04/16/21	
Antimony	200	2.0	ug/L	200	ND	101	85-115	1	20	04/16/21	
Thallium	200	1.0	ug/L	200	ND	100	85-115	0	20	04/16/21	
Lead	200	1.0	ug/L	200	ND	102	85-115	1	20	04/16/21	
Mercury	4.9	0.20	ug/L	5.0	ND	99	85-115	2	20	04/16/21	
Matrix Spike (AED0541-MS1), Source: SED0085-01											
Beryllium	220	1.0	ug/L	200	ND	110	70-130			04/16/21	
Chromium	200	10	ug/L	200	ND	99	70-130			04/16/21	
Nickel	190	10	ug/L	200	ND	94	70-130			04/16/21	
Copper	180	5.0	ug/L	200	ND	91	70-130			04/16/21	
Arsenic	190	2.0	ug/L	200	ND	96	70-130			04/16/21	
Selenium	180	2.0	ug/L	200	ND	91	70-130			04/16/21	
Silver	92	10	ug/L	100	ND	92	70-130			04/16/21	
Cadmium	190	1.0	ug/L	200	ND	96	70-130			04/16/21	
Antimony	200	2.0	ug/L	200	ND	102	70-130			04/16/21	
Thallium	200	1.0	ug/L	200	ND	99	70-130			04/16/21	
Lead	200	1.0	ug/L	200	ND	101	70-130			04/16/21	
Mercury	4.8	0.20	ug/L	5.0	ND	96	70-130			04/16/21	
Matrix Spike Dup (AED0541-MSD1), Source: SED0085-01											
Beryllium	230	1.0	ug/L	200	ND	113	70-130	3	20	04/16/21	

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Metals Quality Control Report

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Date Analyzed	Qual
EPA 200.8 - Quality Control											
Batch: AED0541										Prepared: 4/12/2021	
Prep Method: EPA 200.2										Analyst: PSK	
Matrix Spike Dup (AED0541-MSD1), Source: SED0085-01											
Chromium	200	10	ug/L	200	ND	102	70-130	4	20	04/16/21	
Nickel	190	10	ug/L	200	ND	95	70-130	1	20	04/16/21	
Copper	180	5.0	ug/L	200	ND	92	70-130	1	20	04/16/21	
Arsenic	200	2.0	ug/L	200	ND	98	70-130	2	20	04/16/21	
Selenium	180	2.0	ug/L	200	ND	91	70-130	0	20	04/16/21	
Silver	95	10	ug/L	100	ND	95	70-130	3	20	04/16/21	
Cadmium	200	1.0	ug/L	200	ND	98	70-130	2	20	04/16/21	
Antimony	210	2.0	ug/L	200	ND	104	70-130	2	20	04/16/21	
Thallium	200	1.0	ug/L	200	ND	100	70-130	1	20	04/16/21	
Lead	200	1.0	ug/L	200	ND	102	70-130	2	20	04/16/21	
Mercury	5.0	0.20	ug/L	5.0	ND	100	70-130	4	20	04/16/21	

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Organics Quality Control Report

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Date Analyzed	Qual
EPA 504.1 - Quality Control											
Batch: AED0501										Prepared: 4/9/2021	
Prep Method: EPA 504/505										Analyst: JKH	
Blank (AED0501-BLK1)											
Ethylene Dibromide (EDB)	ND	0.020	ug/L							04/09/21	
Dibromochloropropane (DBCP)	ND	0.010	ug/L							04/09/21	
Surrogate: 1-Br-2-Nitrobenzene	*0.49*			*0.46*		*107*	*70-130*			04/09/21	
Blank Spike (AED0501-BS1)											
Ethylene Dibromide (EDB)	0.11	0.020	ug/L	0.10	ND	108	70-130			04/09/21	
Dibromochloropropane (DBCP)	0.11	0.010	ug/L	0.10	ND	106	70-130			04/09/21	
Surrogate: 1-Br-2-Nitrobenzene	*0.48*			*0.46*		*106*	*70-130*			04/09/21	
Blank Spike Dup (AED0501-BSD1)											
Ethylene Dibromide (EDB)	0.11	0.020	ug/L	0.10	ND	106	70-130	2	20	04/10/21	
Dibromochloropropane (DBCP)	0.10	0.010	ug/L	0.10	ND	103	70-130	3	20	04/10/21	
Surrogate: 1-Br-2-Nitrobenzene	*0.47*			*0.46*		*104*	*70-130*			04/10/21	
Matrix Spike (AED0501-MS1), Source: AED0248-02											
Ethylene Dibromide (EDB)	0.11	0.020	ug/L	0.10	ND	107	65-135			04/09/21	
Dibromochloropropane (DBCP)	0.11	0.010	ug/L	0.10	ND	106	65-135			04/09/21	
Surrogate: 1-Br-2-Nitrobenzene	*0.49*			*0.46*		*106*	*70-130*			04/09/21	
Matrix Spike Dup (AED0501-MSD1), Source: AED0248-02											
Ethylene Dibromide (EDB)	0.11	0.020	ug/L	0.10	ND	107	65-135	1	20	04/09/21	
Dibromochloropropane (DBCP)	0.10	0.010	ug/L	0.10	ND	105	65-135	1	20	04/09/21	
Surrogate: 1-Br-2-Nitrobenzene	*0.47*			*0.46*		*103*	*70-130*			04/09/21	
EPA 505 - Quality Control											
Batch: AED0501										Prepared: 4/9/2021	
Prep Method: EPA 504/505										Analyst: JKH	
Blank (AED0501-BLK1)											
Alachlor	ND	1.0	ug/L							04/09/21	
Aldrin	ND	0.075	ug/L							04/09/21	
Atrazine	ND	0.50	ug/L							04/09/21	
Chlordane (Technical)	ND	0.10	ug/L							04/09/21	
Dieldrin	ND	0.020	ug/L							04/09/21	
Endrin	ND	0.10	ug/L							04/09/21	
Heptachlor	ND	0.010	ug/L							04/09/21	
Heptachlor Epoxide	ND	0.010	ug/L							04/09/21	
Hexachlorobenzene	ND	0.50	ug/L							04/09/21	
Hexachlorocyclopentadiene	ND	1.0	ug/L							04/09/21	
Lindane	ND	0.20	ug/L							04/09/21	
Methoxychlor	ND	10	ug/L							04/09/21	
PCB Aroclor Screen	ND	0.50	ug/L							04/09/21	
Simazine	ND	1.0	ug/L							04/09/21	
Toxaphene	ND	1.0	ug/L							04/09/21	
Surrogate: 1-Br-2-Nitrobenzene	*0.49*			*0.46*		*107*	*70-130*			04/09/21	

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Organics Quality Control Report

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Date Analyzed	Qual
EPA 505 - Quality Control											
Batch: AED0501										Prepared: 4/9/2021	
Prep Method: EPA 504/505										Analyst: JKH	
Blank Spike (AED0501-BS1)											
Alachlor	4.1	1.0	ug/L	4.0	ND	102	70-130			04/09/21	
Aldrin	0.75	0.075	ug/L	0.74	ND	102	70-130			04/09/21	
Atrazine	5.4	0.50	ug/L	5.0	ND	107	70-130			04/09/21	
Dieldrin	0.20	0.020	ug/L	0.20	ND	100	70-130			04/09/21	
Endrin	0.096	0.10	ug/L	0.10	ND	96	70-130			04/09/21	
Heptachlor	0.10	0.010	ug/L	0.10	ND	100	70-130			04/09/21	
Heptachlor Epoxide	0.10	0.010	ug/L	0.10	ND	100	70-130			04/09/21	
Hexachlorobenzene	1.0	0.50	ug/L	1.0	ND	104	70-130			04/09/21	
Hexachlorocyclopentadiene	1.0	1.0	ug/L	1.0	ND	102	70-130			04/09/21	
Lindane	0.20	0.20	ug/L	0.20	ND	100	70-130			04/09/21	
Methoxychlor	0.98	10	ug/L	1.0	ND	98	70-130			04/09/21	
Simazine	11	1.0	ug/L	10	ND	110	70-130			04/09/21	
Surrogate: 1-Br-2-Nitrobenzene	*0.48*			*0.46*		*106*	*70-130*			04/09/21	
Blank Spike Dup (AED0501-BSD1)											
Alachlor	4.1	1.0	ug/L	4.0	ND	102	70-130	1	20	04/10/21	
Aldrin	0.75	0.075	ug/L	0.74	ND	101	70-130	1	20	04/10/21	
Atrazine	5.3	0.50	ug/L	5.0	ND	106	70-130	1	20	04/10/21	
Dieldrin	0.20	0.020	ug/L	0.20	ND	98	70-130	2	20	04/10/21	
Endrin	0.087	0.10	ug/L	0.10	ND	87	70-130	9	20	04/10/21	
Heptachlor	0.095	0.010	ug/L	0.10	ND	95	70-130	6	20	04/10/21	
Heptachlor Epoxide	0.099	0.010	ug/L	0.10	ND	99	70-130	2	20	04/10/21	
Hexachlorobenzene	1.0	0.50	ug/L	1.0	ND	101	70-130	3	20	04/10/21	
Hexachlorocyclopentadiene	1.0	1.0	ug/L	1.0	ND	100	70-130	2	20	04/10/21	
Lindane	0.20	0.20	ug/L	0.20	ND	99	70-130	1	20	04/10/21	
Methoxychlor	0.93	10	ug/L	1.0	ND	93	70-130	6	20	04/10/21	
Simazine	11	1.0	ug/L	10	ND	106	70-130	3	20	04/10/21	
Surrogate: 1-Br-2-Nitrobenzene	*0.47*			*0.46*		*104*	*70-130*			04/10/21	
Matrix Spike (AED0501-MS1), Source: AED0248-02											
Alachlor	4.1	1.0	ug/L	4.0	ND	103	65-135			04/09/21	
Aldrin	0.72	0.075	ug/L	0.74	ND	97	65-135			04/09/21	
Atrazine	5.2	0.50	ug/L	5.0	ND	104	65-135			04/09/21	
Dieldrin	0.20	0.020	ug/L	0.20	ND	99	65-135			04/09/21	
Endrin	0.092	0.10	ug/L	0.10	ND	92	65-135			04/09/21	
Heptachlor	0.096	0.010	ug/L	0.10	ND	96	65-135			04/09/21	
Heptachlor Epoxide	0.10	0.010	ug/L	0.10	ND	101	65-135			04/09/21	
Hexachlorobenzene	1.0	0.50	ug/L	1.0	ND	102	65-135			04/09/21	
Hexachlorocyclopentadiene	1.0	1.0	ug/L	1.0	ND	103	65-135			04/09/21	
Lindane	0.20	0.20	ug/L	0.20	ND	100	65-135			04/09/21	
Methoxychlor	0.97	10	ug/L	1.0	ND	97	65-135			04/09/21	
Simazine	10	1.0	ug/L	10	ND	100	65-135			04/09/21	
Surrogate: 1-Br-2-Nitrobenzene	*0.49*			*0.46*		*106*	*70-130*			04/09/21	
Matrix Spike Dup (AED0501-MSD1), Source: AED0248-02											
Alachlor	4.0	1.0	ug/L	4.0	ND	100	65-135	3	20	04/09/21	

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Organics Quality Control Report

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Date Analyzed	Qual
EPA 505 - Quality Control											
Batch: AED0501										Prepared: 4/9/2021	
Prep Method: EPA 504/505										Analyst: JKH	
Matrix Spike Dup (AED0501-MSD1), Source: AED0248-02											
Aldrin	0.73	0.075	ug/L	0.74	ND	98	65-135	1	20	04/09/21	
Atrazine	4.7	0.50	ug/L	5.0	ND	95	65-135	9	20	04/09/21	
Dieldrin	0.19	0.020	ug/L	0.20	ND	97	65-135	2	20	04/09/21	
Endrin	0.093	0.10	ug/L	0.10	ND	93	65-135	1	20	04/09/21	
Heptachlor	0.095	0.010	ug/L	0.10	ND	95	65-135	1	20	04/09/21	
Heptachlor Epoxide	0.096	0.010	ug/L	0.10	ND	96	65-135	5	20	04/09/21	
Hexachlorobenzene	1.0	0.50	ug/L	1.0	ND	103	65-135	0	20	04/09/21	
Hexachlorocyclopentadiene	1.0	1.0	ug/L	1.0	ND	104	65-135	1	20	04/09/21	
Lindane	0.20	0.20	ug/L	0.20	ND	98	65-135	3	20	04/09/21	
Methoxychlor	0.98	10	ug/L	1.0	ND	99	65-135	2	20	04/09/21	
Simazine	8.8	1.0	ug/L	10	ND	88	65-135	14	20	04/09/21	
Surrogate: 1-Br-2-Nitrobenzene	*0.47*			*0.46*		*103*	*70-130*			04/09/21	
EPA 515.4 - Quality Control											
Batch: AED0757										Prepared: 4/13/2021	
Prep Method: EPA 515.4										Analyst: PNN	
Blank (AED0757-BLK1)											
2,4,5-T	ND	1.0	ug/L							04/14/21	
2,4,5-TP (Silvex)	ND	1.0	ug/L							04/14/21	
2,4-D	ND	10	ug/L							04/14/21	
Bentazon	ND	2.0	ug/L							04/14/21	
Dalapon	ND	10	ug/L							04/14/21	
Dicamba	ND	1.5	ug/L							04/14/21	
Dinoseb	ND	2.0	ug/L							04/14/21	
Pentachlorophenol	ND	0.20	ug/L							04/14/21	
Picloram	ND	1.0	ug/L							04/14/21	
Surrogate: DCPAA	*36*			*36*		*101*	*70-130*			04/14/21	
Blank Spike (AED0757-BS1)											
2,4,5-T	1.7	1.0	ug/L	1.6	ND	106	70-130			04/14/21	
2,4,5-TP (Silvex)	0.83	1.0	ug/L	0.80	ND	104	70-130			04/14/21	
2,4-D	0.41	10	ug/L	0.40	ND	103	70-130			04/14/21	
Bentazon	2.1	2.0	ug/L	2.0	ND	103	70-130			04/14/21	
Dalapon	4.2	10	ug/L	4.0	ND	104	70-130			04/14/21	
Dicamba	0.82	1.5	ug/L	0.80	ND	103	70-130			04/14/21	
Dinoseb	0.85	2.0	ug/L	0.80	ND	107	70-130			04/14/21	
Pentachlorophenol	0.17	0.20	ug/L	0.16	ND	108	70-130			04/14/21	
Picloram	0.42	1.0	ug/L	0.40	ND	106	70-130			04/14/21	
Surrogate: DCPAA	*34*			*36*		*95*	*70-130*			04/14/21	
Blank Spike Dup (AED0757-BSD1)											
2,4,5-T	1.6	1.0	ug/L	1.6	ND	102	70-130	4	20	04/15/21	
2,4,5-TP (Silvex)	0.82	1.0	ug/L	0.80	ND	102	70-130	2	20	04/15/21	
2,4-D	0.40	10	ug/L	0.40	ND	100	70-130	3	20	04/15/21	
Bentazon	1.7	2.0	ug/L	2.0	ND	87	70-130	17	20	04/15/21	

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Organics Quality Control Report

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Date Analyzed	Qual
EPA 515.4 - Quality Control											
Batch: AED0757										Prepared: 4/13/2021	
Prep Method: EPA 515.4										Analyst: PNN	
Blank Spike Dup (AED0757-BSD1)											
Dalapon	4.2	10	ug/L	4.0	ND	106	70-130	2	20	04/15/21	
Dicamba	0.82	1.5	ug/L	0.80	ND	102	70-130	1	20	04/15/21	
Dinoseb	0.88	2.0	ug/L	0.80	ND	110	70-130	3	20	04/15/21	
Pentachlorophenol	0.17	0.20	ug/L	0.16	ND	104	70-130	4	20	04/15/21	
Picloram	0.40	1.0	ug/L	0.40	ND	100	70-130	6	20	04/15/21	
Surrogate: DCPAA	*33*			*36*		*90*	*70-130*			04/15/21	
Matrix Spike (AED0757-MS1), Source: AED0661-01											
2,4,5-T	1.7	1.0	ug/L	1.6	ND	108	70-130			04/14/21	
2,4,5-TP (Silvex)	0.85	1.0	ug/L	0.80	ND	106	70-130			04/14/21	
2,4-D	0.41	10	ug/L	0.40	ND	102	70-130			04/14/21	
Bentazon	1.9	2.0	ug/L	2.0	ND	93	70-130			04/14/21	
Dalapon	4.1	10	ug/L	4.0	ND	103	70-130			04/14/21	
Dicamba	0.82	1.5	ug/L	0.80	ND	102	70-130			04/14/21	
Dinoseb	0.88	2.0	ug/L	0.80	ND	111	70-130			04/14/21	
Pentachlorophenol	0.18	0.20	ug/L	0.16	ND	110	70-130			04/14/21	
Picloram	0.40	1.0	ug/L	0.40	ND	100	70-130			04/14/21	
Surrogate: DCPAA	*33*			*36*		*93*	*70-130*			04/14/21	
Matrix Spike Dup (AED0757-MSD1), Source: AED0661-01											
2,4,5-T	1.6	1.0	ug/L	1.6	ND	103	70-130	5	30	04/14/21	
2,4,5-TP (Silvex)	0.83	1.0	ug/L	0.80	ND	104	70-130	2	30	04/14/21	
2,4-D	0.40	10	ug/L	0.40	ND	99	70-130	3	30	04/14/21	
Bentazon	1.9	2.0	ug/L	2.0	ND	96	70-130	3	30	04/14/21	
Dalapon	4.0	10	ug/L	4.0	ND	101	70-130	2	30	04/14/21	
Dicamba	0.79	1.5	ug/L	0.80	ND	98	70-130	4	30	04/14/21	
Dinoseb	0.88	2.0	ug/L	0.80	ND	110	70-130	1	30	04/14/21	
Pentachlorophenol	0.17	0.20	ug/L	0.16	ND	109	70-130	1	30	04/14/21	
Picloram	0.38	1.0	ug/L	0.40	ND	95	70-130	6	30	04/14/21	
Surrogate: DCPAA	*33*			*36*		*92*	*70-130*			04/14/21	
EPA 524.2 - Quality Control											
Batch: AED0360										Prepared: 4/7/2021	
Prep Method: EPA 524.2										Analyst: ANM	
Blank (AED0360-BLK1)											
1,1,1-Trichloroethane	ND	0.50	ug/L							04/07/21	
1,1,2,2-Tetrachloroethane	ND	0.50	ug/L							04/07/21	
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	10	ug/L							04/07/21	
1,1,2-Trichloroethane	ND	0.50	ug/L							04/07/21	
1,1-Dichloroethane	ND	0.50	ug/L							04/07/21	
1,1-Dichloroethene	ND	0.50	ug/L							04/07/21	
1,2,4-Trichlorobenzene	ND	0.50	ug/L							04/07/21	
1,2-Dichlorobenzene	ND	0.50	ug/L							04/07/21	
1,2-Dichloroethane	ND	0.50	ug/L							04/07/21	
1,2-Dichloropropane	ND	0.50	ug/L							04/07/21	

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Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Date Analyzed	Qual
EPA 524.2 - Quality Control											
Batch: AED0360										Prepared: 4/7/2021	
Prep Method: EPA 524.2										Analyst: ANM	
Blank (AED0360-BLK1)											
1,4-Dichlorobenzene	ND	0.50	ug/L							04/07/21	
Benzene	ND	0.50	ug/L							04/07/21	
Carbon Tetrachloride	ND	0.50	ug/L							04/07/21	
Chlorobenzene	ND	0.50	ug/L							04/07/21	
cis-1,2-Dichloroethene	ND	0.50	ug/L							04/07/21	
cis-1,3-Dichloropropene	ND	0.50	ug/L							04/07/21	
Dichloromethane	ND	0.50	ug/L							04/07/21	
Ethylbenzene	ND	0.50	ug/L							04/07/21	
m,p-Xylenes	ND	0.50	ug/L							04/07/21	
Methyl-t-butyl ether	ND	0.50	ug/L							04/07/21	
o-Xylene	ND	0.50	ug/L							04/07/21	
Styrene	ND	0.50	ug/L							04/07/21	
Tetrachloroethene (PCE)	ND	0.50	ug/L							04/07/21	
Toluene	ND	0.50	ug/L							04/07/21	
trans-1,2-Dichloroethene	ND	0.50	ug/L							04/07/21	
trans-1,3-Dichloropropene	ND	0.50	ug/L							04/07/21	
Trichloroethene (TCE)	ND	0.50	ug/L							04/07/21	
Trichlorofluoromethane	ND	5.0	ug/L							04/07/21	
Vinyl Chloride	ND	0.50	ug/L							04/07/21	
Total 1,3-Dichloropropene	ND	0.50	ug/L							04/07/21	
Total Xylenes	ND	0.50	ug/L							04/07/21	
Surrogate: 1,2-Dichlorobenzene-d4	*58*			*50*		*117*	*70-130*			04/07/21	
Surrogate: Bromofluorobenzene	*56*			*50*		*112*	*70-130*			04/07/21	
Blank Spike (AED0360-BS1)											
1,1,1-Trichloroethane	11	0.50	ug/L	10	ND	112	70-130			04/07/21	
1,1,2,2-Tetrachloroethane	11	0.50	ug/L	10	ND	112	70-130			04/07/21	
1,1,2-Trichloro-1,2,2-trifluoroethane	11	10	ug/L	10	ND	112	70-130			04/07/21	
1,1,2-Trichloroethane	10	0.50	ug/L	10	ND	104	70-130			04/07/21	
1,1-Dichloroethane	11	0.50	ug/L	10	ND	108	70-130			04/07/21	
1,1-Dichloroethene	11	0.50	ug/L	10	ND	110	70-130			04/07/21	
1,2,4-Trichlorobenzene	10	0.50	ug/L	10	ND	100	70-130			04/07/21	
1,2-Dichlorobenzene	11	0.50	ug/L	10	ND	114	70-130			04/07/21	
1,2-Dichloroethane	11	0.50	ug/L	10	ND	106	70-130			04/07/21	
1,2-Dichloropropane	10	0.50	ug/L	10	ND	105	70-130			04/07/21	
1,4-Dichlorobenzene	11	0.50	ug/L	10	ND	110	70-130			04/07/21	
Benzene	11	0.50	ug/L	10	ND	106	70-130			04/07/21	
Carbon Tetrachloride	10	0.50	ug/L	10	ND	105	70-130			04/07/21	
Chlorobenzene	10	0.50	ug/L	10	ND	104	70-130			04/07/21	
cis-1,2-Dichloroethene	11	0.50	ug/L	10	ND	109	70-130			04/07/21	
cis-1,3-Dichloropropene	10	0.50	ug/L	10	ND	104	70-130			04/07/21	
Dichloromethane	11	0.50	ug/L	10	ND	110	70-130			04/07/21	
Ethylbenzene	10	0.50	ug/L	10	ND	101	70-130			04/07/21	
m,p-Xylenes	22	0.50	ug/L	20	ND	110	70-130			04/07/21	
Methyl-t-butyl ether	20	0.50	ug/L	20	ND	100	70-130			04/07/21	
o-Xylene	10	0.50	ug/L	10	ND	104	70-130			04/07/21	

BSK Associates Laboratory Fresno

Organics Quality Control Report

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Date Analyzed	Qual
EPA 524.2 - Quality Control											
Batch: AED0360										Prepared: 4/7/2021	
Prep Method: EPA 524.2										Analyst: ANM	
Blank Spike (AED0360-BS1)											
Styrene	11	0.50	ug/L	10	ND	109	70-130			04/07/21	
Tetrachloroethene (PCE)	11	0.50	ug/L	10	ND	108	70-130			04/07/21	
Toluene	11	0.50	ug/L	10	ND	105	70-130			04/07/21	
trans-1,2-Dichloroethene	11	0.50	ug/L	10	ND	108	70-130			04/07/21	
trans-1,3-Dichloropropene	11	0.50	ug/L	10	ND	105	70-130			04/07/21	
Trichloroethene (TCE)	11	0.50	ug/L	10	ND	108	70-130			04/07/21	
Trichlorofluoromethane	11	5.0	ug/L	10	ND	110	70-130			04/07/21	
Vinyl Chloride	11	0.50	ug/L	10	ND	112	70-130			04/07/21	
Surrogate: 1,2-Dichlorobenzene-d4	*55*			*50*		*110*	*70-130*			04/07/21	
Surrogate: Bromofluorobenzene	*53*			*50*		*105*	*70-130*			04/07/21	
Blank Spike Dup (AED0360-BSD1)											
1,1,1-Trichloroethane	10	0.50	ug/L	10	ND	102	70-130	9	30	04/07/21	
1,1,2,2-Tetrachloroethane	11	0.50	ug/L	10	ND	107	70-130	5	30	04/07/21	
1,1,2-Trichloro-1,2,2-trifluoroethane	10	10	ug/L	10	ND	104	70-130	8	30	04/07/21	
1,1,2-Trichloroethane	10	0.50	ug/L	10	ND	102	70-130	2	30	04/07/21	
1,1-Dichloroethane	10	0.50	ug/L	10	ND	101	70-130	6	30	04/07/21	
1,1-Dichloroethene	10	0.50	ug/L	10	ND	101	70-130	8	30	04/07/21	
1,2,4-Trichlorobenzene	9.7	0.50	ug/L	10	ND	97	70-130	4	30	04/07/21	
1,2-Dichlorobenzene	11	0.50	ug/L	10	ND	109	70-130	4	30	04/07/21	
1,2-Dichloroethane	10	0.50	ug/L	10	ND	102	70-130	4	30	04/07/21	
1,2-Dichloropropane	10	0.50	ug/L	10	ND	100	70-130	5	30	04/07/21	
1,4-Dichlorobenzene	10	0.50	ug/L	10	ND	105	70-130	5	30	04/07/21	
Benzene	10	0.50	ug/L	10	ND	101	70-130	6	30	04/07/21	
Carbon Tetrachloride	9.6	0.50	ug/L	10	ND	96	70-130	9	30	04/07/21	
Chlorobenzene	9.9	0.50	ug/L	10	ND	99	70-130	5	30	04/07/21	
cis-1,2-Dichloroethene	10	0.50	ug/L	10	ND	100	70-130	8	30	04/07/21	
cis-1,3-Dichloropropene	10	0.50	ug/L	10	ND	102	70-130	2	30	04/07/21	
Dichloromethane	10	0.50	ug/L	10	ND	104	70-130	5	30	04/07/21	
Ethylbenzene	9.6	0.50	ug/L	10	ND	96	70-130	5	30	04/07/21	
m,p-Xylenes	21	0.50	ug/L	20	ND	104	70-130	5	30	04/07/21	
Methyl-t-butyl ether	20	0.50	ug/L	20	ND	98	70-130	3	30	04/07/21	
o-Xylene	9.9	0.50	ug/L	10	ND	99	70-130	5	30	04/07/21	
Styrene	10	0.50	ug/L	10	ND	104	70-130	4	30	04/07/21	
Tetrachloroethene (PCE)	9.9	0.50	ug/L	10	ND	99	70-130	9	30	04/07/21	
Toluene	9.9	0.50	ug/L	10	ND	99	70-130	7	30	04/07/21	
trans-1,2-Dichloroethene	10	0.50	ug/L	10	ND	101	70-130	7	30	04/07/21	
trans-1,3-Dichloropropene	10	0.50	ug/L	10	ND	102	70-130	3	30	04/07/21	
Trichloroethene (TCE)	10	0.50	ug/L	10	ND	100	70-130	7	30	04/07/21	
Trichlorofluoromethane	10	5.0	ug/L	10	ND	102	70-130	8	30	04/07/21	
Vinyl Chloride	10	0.50	ug/L	10	ND	102	70-130	9	30	04/07/21	
Surrogate: 1,2-Dichlorobenzene-d4	*54*			*50*		*109*	*70-130*			04/07/21	
Surrogate: Bromofluorobenzene	*52*			*50*		*104*	*70-130*			04/07/21	

BSK Associates Laboratory Fresno

Organics Quality Control Report

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Date Analyzed	Qual
EPA 531.1 - Quality Control											
Batch: AED0552										Prepared: 4/9/2021	
Prep Method: EPA 531.1										Analyst: JNG	
Blank (AED0552-BLK1)											
3-Hydroxycarbofuran	ND	1.0	ug/L							04/10/21	
Aldicarb	ND	0.50	ug/L							04/10/21	
Aldicarb Sulfone	ND	0.80	ug/L							04/10/21	
Aldicarb Sulfoxide	ND	0.50	ug/L							04/10/21	
Carbaryl	ND	1.0	ug/L							04/10/21	
Carbofuran	ND	0.90	ug/L							04/10/21	
Methomyl	ND	1.0	ug/L							04/10/21	
Oxamyl	ND	1.0	ug/L							04/10/21	
Blank Spike (AED0552-BS1)											
3-Hydroxycarbofuran	3.9	1.0	ug/L	4.0	ND	97	80-120			04/10/21	
Aldicarb	1.9	0.50	ug/L	2.0	ND	96	80-120			04/10/21	
Aldicarb Sulfone	3.2	0.80	ug/L	3.2	ND	98	80-120			04/10/21	
Aldicarb Sulfoxide	2.0	0.50	ug/L	2.0	ND	98	80-120			04/10/21	
Carbaryl	4.0	1.0	ug/L	4.0	ND	99	80-120			04/10/21	
Carbofuran	3.6	0.90	ug/L	3.6	ND	99	80-120			04/10/21	
Methomyl	4.0	1.0	ug/L	4.0	ND	101	80-120			04/10/21	
Oxamyl	3.9	1.0	ug/L	4.0	ND	97	80-120			04/10/21	
Blank Spike Dup (AED0552-BSD1)											
3-Hydroxycarbofuran	3.9	1.0	ug/L	4.0	ND	98	80-120	1	20	04/10/21	
Aldicarb	1.9	0.50	ug/L	2.0	ND	94	80-120	2	20	04/10/21	
Aldicarb Sulfone	3.2	0.80	ug/L	3.2	ND	99	80-120	0	20	04/10/21	
Aldicarb Sulfoxide	2.0	0.50	ug/L	2.0	ND	99	80-120	1	20	04/10/21	
Carbaryl	4.0	1.0	ug/L	4.0	ND	100	80-120	1	20	04/10/21	
Carbofuran	3.5	0.90	ug/L	3.6	ND	97	80-120	2	20	04/10/21	
Methomyl	4.0	1.0	ug/L	4.0	ND	99	80-120	2	20	04/10/21	
Oxamyl	3.9	1.0	ug/L	4.0	ND	98	80-120	2	20	04/10/21	
Matrix Spike (AED0552-MS1), Source: SEC0514-02											
3-Hydroxycarbofuran	4.0	1.0	ug/L	4.0	ND	99	65-135			04/10/21	
Aldicarb	2.0	0.50	ug/L	2.0	ND	99	65-135			04/10/21	
Aldicarb Sulfone	3.2	0.80	ug/L	3.2	ND	100	65-135			04/10/21	
Aldicarb Sulfoxide	2.0	0.50	ug/L	2.0	ND	99	65-135			04/10/21	
Carbaryl	4.0	1.0	ug/L	4.0	ND	99	65-135			04/10/21	
Carbofuran	3.6	0.90	ug/L	3.6	ND	99	65-135			04/10/21	
Methomyl	4.1	1.0	ug/L	4.0	ND	102	65-135			04/10/21	
Oxamyl	3.9	1.0	ug/L	4.0	ND	98	65-135			04/10/21	
EPA 548.1 - Quality Control											
Batch: AED0411										Prepared: 4/7/2021	
Prep Method: EPA 548.1										Analyst: JKH	
Blank (AED0411-BLK1)											
Endothall	ND	45	ug/L							04/08/21	

BSK Associates Laboratory Fresno

Organics Quality Control Report

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Date Analyzed	Qual
EPA 548.1 - Quality Control											
Batch: AED0411										Prepared: 4/7/2021	
Prep Method: EPA 548.1										Analyst: JKH	
Blank Spike (AED0411-BS1)											
Endothall	20	45	ug/L	20	ND	102	39-122			04/08/21	
Blank Spike Dup (AED0411-BSD1)											
Endothall	22	45	ug/L	20	ND	109	39-122	7	30	04/08/21	
Matrix Spike (AED0411-MS1), Source: AED0676-01											
Endothall	8.2	45	ug/L	20	ND	41	39-122			04/08/21	
Matrix Spike (AED0411-MS2), Source: SED0058-01											
Endothall	ND	45	ug/L	20	ND	0	39-122			04/08/21	MS1.0 ***Low***
EPA 549.2 - Quality Control											
Batch: AED0415										Prepared: 4/8/2021	
Prep Method: EPA 549.2										Analyst: ZZZ	
Blank (AED0415-BLK1)											
Diquat	ND	4.0	ug/L							04/14/21	
Blank Spike (AED0415-BS1)											
Diquat	3.6	4.0	ug/L	4.0	ND	89	70-130			04/14/21	
Blank Spike Dup (AED0415-BSD1)											
Diquat	3.4	4.0	ug/L	4.0	ND	85	70-130	5	30	04/14/21	
Matrix Spike (AED0415-MS1), Source: AED0661-01											
Diquat	3.3	4.0	ug/L	4.0	ND	83	70-130			04/14/21	
Matrix Spike (AED0415-MS2), Source: AED0661-02											
Diquat	3.6	4.0	ug/L	4.0	ND	90	70-130			04/14/21	
SRL 524M-TCP - Quality Control											
Batch: AED0399										Prepared: 4/7/2021	
Prep Method: no prep-volatiles										Analyst: JNG	
Blank (AED0399-BLK1)											
1,2,3-Trichloropropane	ND	0.0050	ug/L							04/08/21	
Blank Spike (AED0399-BS1)											
1,2,3-Trichloropropane	0.0047	0.0050	ug/L	0.0050	ND	94	80-120			04/08/21	
Blank Spike Dup (AED0399-BSD1)											
1,2,3-Trichloropropane	0.0045	0.0050	ug/L	0.0050	ND	91	80-120	3	30	04/08/21	
Duplicate (AED0399-DUP1), Source: AED0650-01											
1,2,3-Trichloropropane	ND	0.0050	ug/L		ND				20	04/08/21	

BSK Associates Sacramento

General Chemistry Quality Control Report

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Date Analyzed	Qual
SM 2120B - Quality Control											
Batch: SED0015										Prepared: 4/7/2021	
Prep Method: Method Specific Preparation										Analyst: KEF	
Blank (SED0015-BLK1)											
Color, Apparent	ND	5.0	CU							04/07/21	
Duplicate (SED0015-DUP1), Source: SED0040-01											
Color, Apparent	ND	5.0	CU		ND				20	04/07/21	
Duplicate (SED0015-DUP2), Source: SED0040-11											
Color, Apparent	ND	5.0	CU		ND				20	04/07/21	
SM 2130B - Quality Control											
Batch: SED0015										Prepared: 4/7/2021	
Prep Method: Method Specific Preparation										Analyst: KEF	
Blank (SED0015-BLK1)											
Turbidity	ND	0.10	NTU							04/07/21	
Duplicate (SED0015-DUP1), Source: SED0040-01											
Turbidity	ND	0.10	NTU		ND				20	04/07/21	
SM 2150B - Quality Control											
Batch: SED0011										Prepared: 4/6/2021	
Prep Method: Method Specific Preparation										Analyst: KEF	
Blank (SED0011-BLK1)											
Threshold Odor	ND	1.0	T.O.N.							04/06/21	
Blank (SED0011-BLK2)											
Threshold Odor	ND	1.0	T.O.N.							04/06/21	
SM 4500-H+ B - Quality Control											
Batch: SED0016										Prepared: 4/7/2021	
Prep Method: Method Specific Preparation										Analyst: KEF	
Duplicate (SED0016-DUP1), Source: SED0045-01											
pH (1)	7.6	0.0	pH Units		7.6			0	20	04/07/21	
pH Temperature in °C	16.9	0.0	pH Units		17.4			3		04/07/21	

Certificate of Analysis

Notes:

- The Chain of Custody document and Sample Integrity Sheet are part of the analytical report.
- Any remaining sample(s) for testing will be disposed of according to BSK's sample retention policy unless other arrangements are made in advance.
- All positive results for EPA Methods 504.1 and 524.2 require the analysis of a Field Reagent Blank (FRB) to confirm that the results are not a contamination error from field sampling steps. If Field Reagent Blanks were not submitted with the samples, this method requirement has not been performed.
- Samples collected by BSK Analytical Laboratories were collected in accordance with the BSK Sampling and Collection Standard Operating Procedures.
- J-value is equivalent to DNQ (Detected, not quantified) which is a trace value. A trace value is an analyte detected between the MDL and the laboratory reporting limit. This result is of an unknown data quality and is only qualitative (estimated). Baseline noise, calibration curve extrapolation below the lowest calibrator, method blank detections, and integration artifacts can all produce apparent DNQ values, which contribute to the un-reliability of these values.
- (1) - Residual chlorine and pH analysis have a 15 minute holding time for both drinking and waste water samples as defined by the EPA and 40 CFR 136. Waste water and ground water (monitoring well) samples must be field filtered to meet the 15 minute holding time for dissolved metals.
- Field tests are outside the scope of laboratory accreditation and there is no certification available for field testing.
- Summations of analytes (i.e. Total Trihalomethanes) may appear to add individual amounts incorrectly, due to rounding of analyte values occurring before or after the total value is calculated, as well as rounding of the total value.
- RL Multiplier is the factor used to adjust the reporting limit (RL) due to variations in sample preparation procedures and dilutions required for matrix interferences.
- Due to the subjective nature of the Threshold Odor Method, all characterizations of the detected odor are the opinion of the panel of analysts. The characterizations can be found in Standard Methods 2170B Figure 2170:1.
- The MCLs provided in this report (if applicable) represent the primary MCLs for that analyte.
- (2) - Formerly known as Bis(2-Chloroisopropyl) ether.

Definitions

mg/L:	Milligrams/Liter (ppm)	MDL:	Method Detection Limit	MDA95:	Min. Detected Activity
mg/Kg:	Milligrams/Kilogram (ppm)	RL:	Reporting Limit: DL x Dilution	MPN:	Most Probable Number
µg/L:	Micrograms/Liter (ppb)	ND:	None Detected below MRL/MDL	CFU:	Colony Forming Unit
µg/Kg:	Micrograms/Kilogram (ppb)	pCi/L:	PicoCuries per Liter	Absent:	Less than 1 CFU/100mLs
%:	Percent	RL Mult:	RL Multiplier	Present:	1 or more CFU/100mLs
NR:	Non-Reportable	MCL:	Maximum Contaminant Limit	U:	The analyte was not detected at or above the reported sample quantitation limit.

Please see the individual Subcontract Lab's report for applicable certifications.

Aggressive Index	Langelier Index	Color, Apparent
pH (1)	pH Temperature in °C	Turbidity
1,2,3-Trichloropropane		

Certificate of Analysis

Certifications: **Please refer to our website for a copy of our Accredited Fields of Testing under each certification.**

Fresno

State of California - ELAP	1180	State of Hawaii	4021
Los Angeles CSD	9254479	NELAP certified	4021-017
State of Nevada	CA000792020-2	State of Oregon - NELAP	4021-017
EPA - UCMR4	CA00079	State of Washington	C997-21

Sacramento

State of California - ELAP	2435

San Bernardino

State of California - ELAP	2993	Los Angeles CSD	9254478
NELAP certified	4119-005	State of Oregon - NELAP	4119-005

Vancouver

NELAP certified	WA100008-013	State of Oregon - NELAP	WA100008-013
State of Washington	C824-20		

BSK ASSOCIATES

1414 Stanislaus St., Fresno, CA 93706
(559) 497-2888 · Fax (559) 497-2893
www.bskassociates.com

Turnaround Time Request
☒ Standard - 10 business days
☐ Rush (Surcharge may apply)
Date needed:

SED0057Meyer8967 04/06/2021

*Required Fields

Temp: 3.2°C / ice

Company/Client Name*:	Report Attention*:	Invoice To*:	Phone*:	Fax:
Meyers Water Company	Matthew J. Fullner Additional cc's: Jay Gardner	Meyers Water Company PO#:	707-320-8967	
Address*:	**City*:**	**State*:**	**Zip*:**	**E-mail*:** mattfullner@gmail.com; jay@pjcanvas.com
1830 Milton Road	Napa	CA	94559	

Project: General - non EDT

Project #:

How would you like to receive your completed results?* ☒ E-Mail ☐ Fax ☐ Mail

Reporting Options: ☐ Trace (J-Flag) ☐ Swamp ☐ EDD Type: ____

Sampler Name (Printed/Signature)*: MATT Fullner 4/6/21 Signed For Matt

Regulatory Carbon Copies: ☐ SWRCB (Drinking Water) ☐ Merced Co ☐ Fresno Co ☐ Madera Co ☐ Tulare Co ☐ Other: ____

Regulatory Compliance: ☐ EDT to California SWRCB (Drinking Water) System Number*: ____ ☐ Geotracker #: ____

Matrix Types: SW=Surface Water BW=Bottled Water GW=Ground Water WW=Waste Water STW=Storm Water DW=Drinking Water SO=Solid

#	Sample Description*	Sampled* Date	Sampled* Time	Matrix*	Comments / Station Code / WTRAX	Title 22 GM/IO/GP	Perchlorate	EPA 524 - Regulated	TCP	EPA 515, EPA 504, EPA 531, EPA 548, EPA 549	EPA 505 - Simazine, Atrazine, Alachlor	EPA 505	EXT - Asbestos	EXT- Gross Alpha
	Well 003 - Zone 2 (Lower Zone)	4.5.21	7:40 pm			X	X	X	X	X	X	X	X	X
	TB504 - 0221040													
	TBG24 - 0321004													
	TBTCP - 0321020													

Relinquished by: (Signature and Printed Name)	Company	Date	Time	Received by: (Signature and Printed Name)	Company
Matt Fullner	MWC	4.6.21	8:30	Jay Gardner JAY GARDNER	MWC
JAY GARDNER	MWC	4/6/21	1230	Raya Monahan	BSK-SAC
Received for Lab by: (Signature and Printed Name) Relinquished: Raya Monahan	BSK-SAC	4/6/21	1550	Payment Received at Delivery: Date:	Check / Cash

Shipping Method: ONTRAC UPS GSO WALK-IN FED EX Courier BSK — Amount: PIA#: Init.

Cooling Method: Wet Ice None — Custody Seal: Y / N — Chilling Process Begun: Y / N

Payment for services rendered as noted herein are due in full within 30 days from the date invoiced. If not so paid, account balances are deemed delinquent. Delinquent balances are subject to monthly service charges and interest specified in BSK's current Standard Terms and Conditions for Laboratory Services. The person signing for the Client/Company acknowledges that they are either the Client or an authorized agent to the Client, that the Client agrees to be responsible for payment for the services on this Chain of Custody, and agrees to BSK's terms and conditions for laboratory services unless contractually bound otherwise. BSK's current terms and conditions can be found at www.bskassociates.com/BSKLabTermsConditions.pdf

SR-FL-0012-07

SED0057Meyer8967 04/06/2021

10

Sample Integrity

BSK Bottles: Yes No Page 1 of 1

COC Info

Was temperature within range? Chemistry ≤ 6°C Micro < 8°C	Yes No NA	Were correct containers and preservatives received for the tests requested?	Yes No NA
If samples were taken today, is there evidence that chilling has begun?	Yes No NA	Bubbles Present VOAs (524.2/TTHM)? TB Received? (Check Method Below)	Yes No NA Yes No NA
Did all bottles arrive unbroken and intact?	Yes No	Was a sufficient amount of sample received?	Yes No
Did all bottle labels agree with COC?	Yes No	Do samples have a hold time <72 hours?	Yes No
Was sodium thiosulfate added to CN sample(s) until chlorine was no longer present?	Yes No NA	Was PM notified of discrepancies? PM: By/Time:	Yes No NA

Bottles Received — "_" means preservation/chlorine checks are either N/A or are performed in the lab

250ml(A) 500ml(B) 1Liter(C) 40mlVOA(V) 125ml(D)	Checks*	Passed?	#1	#2	#3	#4	
Bacti $Na_2S_2O_3$	—	—					
None (P) White Cap	—	—	1A, 3C				
Cr6 (P) Lt. Green Label/Blue Cap $NH_4OH(NH_4)_2SO_4$ **DW**	Cl, pH > 8	P F					
Cr6 (P) Pink Label/Blue Cap $NH_4OH(NH_4)_2SO_4$ **WW**	pH 9.3-9.7	P F					
Cr6 (P) Black Label/Blue Cap $NH_4OH(NH_4)_2SO_4$ **7199** ***24 HOUR HOLD TIME***	pH 9.0-9.5	P F					
HNO_3 (P) Red Cap or HCl (P) Purple Cap/Lt. Blue Label	—	—	1B, 3C				
H_2SO_4 (P) or (AG) Yellow Cap/Label	pH < 2	P F					
NaOH (P) Green Cap	Cl, pH >10	P F					
NaOH + ZnAc (P)	pH > 9	P F					
Dissolved Oxygen 300ml (g)	—	—					
None (AG) 608/8081/8082, 625, 632/8321, 8151, 8270	—	—	1B				
HCl (AG) Lt. Blue Label O&G, Diesel, TCP	—	—	3V			2VTB	
Ascorbic, EDTA, KH_2Ct (AG) Pink Label 525	—	—					
Na_2SO_3 250mL (AG) Neon Green Label 515	—	—	1A				
$Na_2S_2O_3$ 1 Liter (Brown P) 549	—	— 2nd 4hr 1A	1C				
$Na_2S_2O_3$ (AG) Blue Label 548, THM, 524	—	—					
$Na_2S_2O_3$ (CG) Blue Label 504, 505, 547	—	— 1A, 2nd 4hr 3V	6V	2VTB			
$Na_2S_2O_3$ + MCAA (CG) Orange Label 531	pH < 3	P F	1V				
NH_4Cl (AG) Purple Label 552	—	—					
EDA (P) or (AG) Brown Label DBPs	—	—					
HCL (CG) 524.2,BTEX,Gas, MTBE, 8260/624	—	—	3V		2VTB		
Buffer pH 4 (CG)	—	—					
H_3PO_4 (CG) Salmon Label	—	—					
Trizma – EPA 537.1 - **Field Blank Required**							
Other:							
Asbestos 1L (P) w/ Foil / LL Metals Bottle	—	—	1C				
Bottled Water	—	—					
Clear Glass 125mL / 250mL / 500mL / 1 Liter	—	—					
Solids: Brass / Steel / Plastic Bag	—	—					

Split

	Container	Preservative	Date/Time/Initials		Container	Preservative	Date/Time/Initials
S P				S P			
S P				S P			

Comments

*Preservation check completed by lab performing analysis.

✓ Indicates Blanks Received

504 __ 524.2 __ TTHM __ 537.1 __ 8260/624 __

✓ MS/MSD Received Method: _____

Scanned: _____

SAMPLE TRANSIT ORDER

SED0057

Michelle Croft

Receipt temp @ FAL: 0.0,17.4 Thermometer/ IR Gun ID: #67

SENDING LABORATORY:

BSK Associates Sacramento
3140 Gold Camp Drive #160
Rancho Cordova, CA 95670
916.853.9293 (Main)
916.853.9297 (FAX)

Project Manager: Michelle Croft
E-mail: mcroft@bskassociates.com

RECEIVING LABORATORY:

BSK Associates Laboratory Fresno
1414 Stanislaus St
Fresno, CA 93706
559-497-2888 (Main)
559-485-6935 (FAX)

Turnaround (Days): Standard
QC Deliverables: I Std III IV

Client: Meyers Water Company

Sample ID	Samp Desc		Sample Date
SED0057-01	**Well 003 - Zone 2 (Lower Zone)**	**Client Matrix** Water	**04/05/2021 19:40**

Lab Matrix: Water

Analysis:

Aggressive Index
Alkalinity as CaCO3
Aluminum, CA DW ICP
Antimony, CA DW ICPMS
Arsenic, CA DW ICPMS
Barium, CA DW ICP
Beryllium, CA DW ICPMS
Cadmium, CA DW ICPMS
Calcium, CA DW ICP
Chloride
Chromium, CA DW ICPMS
Copper, CA DW ICPMS
Cyanide, Total
EC, Conductivity
EPA 504.1 - (EDB/DBCP)
EPA 505 - Organohalide Pesticide & PCBs
EPA 515.4 - Caltox
EPA 524.2 - Regulated Compounds - Subtest
EPA 531.1 - Caltox
EPA 548.1 - Caltox
EPA 549.2 - Caltox
Fluoride, Drinking Water
Iron, CA DW ICP
Langelier Index
Lead, CA DW ICPMS
Magnesium, CA DW ICP
Manganese, CA DW ICP
MBAS
Mercury, CA DW ICPMS
Nickel, CA DW ICPMS
Nitrate + Nitrite as N, IC
Nitrate-N
Nitrite
Perchlorate
Potassium, CA DW ICP

Sample ID	Samp Desc		Sample Date
	Selenium, CA DW ICPMS		
	Silver, CA DW ICPMS		
	Sodium, CA DW ICP		
	Sulfate		
	TCP by Purge & Trap GC/MS		
	TDS, Total Dissolved Solids		
	Thallium, CA DW ICPMS		
	Total 1,3-Dichloropropene		
	Total Xylenes, EPA 524.2		
	Zinc, CA DW ICP		
	EPA 505 - Simazine, Atrazine, and Alachlor Only	Simazine and Atrazine Only	
SED0057-02	**TB 504- 0221048**	**Client Matrix** Water	**04/05/2021 00:00**
Lab Matrix:	Water		
	Analysis:		
	EPA 504.1 - Caltox		
SED0057-03	**TB 524- 0321004**	**Client Matrix** Water	**04/05/2021 00:00**
Lab Matrix:	Water		
	Analysis:		
	EPA 524.2 - Regulated Compounds - Subtest		
	Total 1,3-Dichloropropene		
	Total Xylenes, EPA 524.2		
SED0057-04	**TB TCP- 0321020**	**Client Matrix** Water	**04/05/2021 00:00**
Lab Matrix:	Water		
	Analysis:		
	TCP by Purge & Trap GC/MS		

Containers Included

SED0057-01	C	500mL P / HNO3
SED0057-01	D	1L P / None
SED0057-01	G	1L P / None
SED0057-01	H	1L P / None
SED0057-01	I	250mL AG / Na2SO3
SED0057-01	J	250mL AG / Na2S2O3
SED0057-01	K	40mL AG VOA / HCL
SED0057-01	L	40mL AG VOA / HCL
SED0057-01	M	40mL AG VOA / HCL
SED0057-01	N	40mL VOA / HCL
SED0057-01	O	40mL VOA / HCL
SED0057-01	P	40mL VOA / HCL
SED0057-01	Q	40mL VOA / Na2S203
SED0057-01	R	40mL VOA / Na2S203
SED0057-01	S	40mL VOA / Na2S203
SED0057-01	T	40mL VOA / MCAA + Na2S2O3
SED0057-01	V	40mL VOA / Na2S203
SED0057-01	W	40mL VOA / Na2S203
SED0057-01	X	40mL VOA / Na2S203
SED0057-01	Y	DO NOT PRINT
SED0057-01	Z	1L AP / Na2S2O3
SED0057-02	A	40mL VOA / Na2S203
SED0057-02	B	40mL VOA / Na2S203
SED0057-03	A	40mL VOA / HCL
SED0057-03	B	40mL VOA / HCL
SED0057-04	A	40mL AG VOA / HCL
SED0057-04	B	40mL AG VOA / HCL

Released By	Date	Received By	Date
04072021		
Released By	Date	Received By	Date
EZ BSZ...	4.7.21 @ 1345		4/7/21
	BSK	1345

SAMPLE TRANSIT INTEGRITY

PM: Michelle Croft

SED0057
04/06/2021
Meyer8967
10

BSK Bottles: (Yes) No Page 1 of 1

COC Info

Was temperature within range? Chemistry ≤ 6°C Micro< 8°C	(Yes) No NA	Were correct containers and preservatives received for the tests requested?	(Yes) No NA
Did all bottles arrive unbroken and intact?	(Yes) No	Bubbles Present VOAs (524.2/TCP/TTHM)?	Yes (No) NA
Was a sufficient amount of sample received?	(Yes) No	TB Received? (Check Method Below)	(Yes) No NA
Do samples have a hold time <72 hours?	(Yes) No	Was PM notified of discrepancies?	Yes No (NA)
Was sodium thiosulfate added to CN sample(s) until chlorine was no longer present?	Yes No (NA)	PM: By/Time:	

Bottles Received

"---" means preservation/chlorine checks are either N/A or are performed in the lab

250ml(A) 500ml(B) 1Liter(C) 40ml VOA(V)	Checks	Passed?	1	2	3	4		
Bacti $Na_2S_2O_3$	---	---						
None (P) White Cap	---	---	3C/1A					
Cr6 (P) Lt. Green Label/Blue Cap $NH_4OH(NH_4)SO_4$ **DW**	Cl, pH> 8	P F						
Cr6 (P) Pink Label/Blue Cap $NH_4OH(NH_4)SO_4$ **WW**	pH 9.3 - 9.7	P F						
Cr6 (P) Black Label/Blue Cap $NH_4OH(NH_4)SO_4$ **7199** ***24 HOUR HOLD TIME***	pH 9.0 - 9.5	P F						
HNO_3 (P) Red Cap or HCl (P) Purple Cap/Lt. Blue Label	---	---	1B					
H_2SO_4 (P) or (AG) Yellow Cap/Label	pH < 2	P F						
NaOH (P) Green Cap	Cl, pH> 10	P F						
NaOH + ZnAc (P)	pH > 9	P F						
Dissolved Oxygen 300ml (g)	---	---						E
None (AG) 608/8081/8082, 625, 632/8321, 8151, 8270	---	---						
HCl (AG) Lt. Blue Label O&G, Diesel, **TCP**	---	---	3V			2V		4-7-21
Ascorbic, EDTA, KH_2Ct (AG) Pink Label 525	---	---						
Na_2SO_3 250ml (AG) Neon Green Label 515	---	---	1A					
$Na_2S_2O_3$ 1 Liter (Brown P) 549	---	---	1C					
$Na_2S_2O_3$ (AG) Blue Label 548, THM, 524	---	---	1A, ~~3C~~					
$Na_2S_2O_3$ (CG) Blue Label 504, 505, 547	---	---	C 3V	6V	2V			
$Na_2S_2O_3$ + MCAA (CG) Orange Label 531	pH < 3	(P) F	1V					
NH_4Cl (AG) Purple Label 552	---	---						
EDA (AG) Brown Label DBPs	---	---						
HCL (CG) 524.2, BTEX, Gas, MTBE, 8260/624	---	---	3V		2V			
Buffer pH 4 (CG)	---	---						
H_3PO_4 (CG) Salmon Label	---	---						
250mL P / Trizma 531.1	---	---						
Other:								
Asbestos 1L (P) w/Foil / LL Metals Bottle	---	---						
Bottled Water	---	---						
Clear Glass 250ml / 500ml / 1 Liter	---	---						
Solids: Brass / Steel / Plastic Bag	---	---						

Split

	Container	Preservative	Date/Time/Initials		Container	Preservative	Date/Time/Initials
S P				S P			
S P				S P			

Comments

✓ Indicates Blanks Received

504 ✓ 524.2 ✓ TCP ✓

TTHM ____ 537 ____ 8260/624 ____

Labels Checked by: E @ 1400 Scanned by: E @ RUSH Paged by: ____ @ ____

April 16, 2021

BSK Associates Engineers & Laboratories
1414 Stanislaus St.
Fresno, CA 93706

Lab ID : SP 2104723
Customer : 2-22939

Laboratory Report

Introduction: This report package contains total of 3 pages divided into 3 sections:

Case Narrative	(1 pages)	: An overview of the work performed at FGL.
Sample Results	(1 page)	: Results for each sample submitted.
Quality Control	(1 page)	: Supporting Quality Control (QC) results.

Case Narrative

This Case Narrative pertains to the following samples:

Sample Description	Date Sampled	Date Received	FGL Lab ID #	Matrix
Well 003-Zone 2 (Lower Zone)	04/05/2021	04/08/2021	SP 2104723-001	W

Sampling and Receipt Information: All samples were received in acceptable condition and within temperature requirements, unless noted on the Condition Upon Receipt (CUR) form. All samples arrived at room temperature. All samples were prepared and analyzed within the method specified hold time. All samples were checked for pH if acid or base preservation is required (except for VOAs). For details of sample receipt information, please see the attached Chain of Custody and Condition Upon Receipt Form.

Quality Control: All samples were prepared and analyzed according to the following tables:

Radio QC

900.0	04/14/2021:205463 All analysis quality controls are within established criteria
	04/09/2021:203813 All preparation quality controls are within established criteria (performed at FGL-SP ELAP# 1573)

Certification:: I certify that this data package is in compliance with ELAP standards, both technically and for completeness, except for any conditions listed above. Release of the data contained in this data package is authorized by the Laboratory Director or his designee, as verified by the following electronic signature.

KD:MKH

Reviewed and Approved By **Kelly A. Dunnahoo, B.S.** Digitally signed by Kelly A. Dunnahoo, B.S. Title: Laboratory Director Date: 2021-04-16

Corporate Offices & Laboratory
853 Corporation Street
Santa Paula, CA 93060
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CA ELAP Certification No. 1573

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2500 Stagecoach Road
Stockton, CA 95215
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FAX: (209)942-0423
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San Luis Obispo, CA 93401
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FAX: (805)783-2912
CA ELAP Certification No. 2775

Office & Laboratory
9415 W. Goshen Avenue
Visalia, CA 93291
TEL: (559)734-9473
FAX:
CA ELAP Certification No. 2810

April 16, 2021

BSK Associates Engineers & Laboratories
1414 Stanislaus St.
Fresno, CA 93706

Lab ID : SP 2104723-001
Customer ID : 2-22939

Sampled On : April 5, 2021-19:40
Sampled By : Not Available
Received On : April 8, 2021-09:00
Matrix : Water

Description : Well 003-Zone 2 (Lower Zone)
Project : SED0057

Sample Result - Radio

Constituent	Result ± Error	MDA	Units	MCL/AL	Sample Preparation		Sample Analysis	
					Method	Date/ID	Method	Date/ID
Radio Chemistry								
Gross Alpha	3.32 ± 1.54	1.82	pCi/L	15/5	900.0	04/09/21-08:20 2P2103813	900.0	04/14/21-14:15 2A2105463

ND=Non-Detected. PQL=Practical Quantitation Limit. * PQL adjusted for dilution.

MDA = Minimum Detectable Activity (Calculated at the 95% confidence level) = Data utilized by DHS to determine matrix interference.
MCL / AL = Maximum Contamination Level / Action Level. Alpha's Action Level of 5 pCi/L is based on the Assigned Value (AV).
AV = Assigned Value(Gross Alpha Result + (0.84 x Error)). CCR Section 64442: Drinking Water Compliance Note: Do the following
If Gross Alpha's (AV) exceeds 5 pCi/L run Uranium. If Gross Alpha's (AV) minus Uranium exceeds 5 pCi/L run Radium 226.

Drinking Water Compliance:
Gross Alpha (AV) minus Uranium is less than or equal to 15 pCi/L
Uranium is less than or equal to 20 pCi/L
Radium 226 + Radium 228 is less than or equal to 5 pCi/L

Note: Samples are held for 3-6 months prior to disposal.

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April 16, 2021 Lab ID : SP 2104723
BSK Associates Engineers & Laboratories Customer : 2-22939

Quality Control - Radio

Constituent	Method	Date/ID	Type	Units	Conc.	QC Data	DQO	Note
Radio								
Alpha	900.0	04/14/21:205463JCA	CCV	cpm	7778	40.7 %	35-47	
			CCB	cpm		0.0800	0.17	
Gross Alpha	900.0	04/09/21:203813jca	Blank	pCi/L		0.34	3	
			LCS	pCi/L	201.1	87.1 %	75-125	
			MS	pCi/L	201.1	112 %	60-140	
		(CH 2172275-001)	MSD	pCi/L	201.1	112 %	60-140	
			MSRPD	pCi/L	201.1	0.3%	≤30	

Definition

CCV	: Continuing Calibration Verification - Analyzed to verify the instrument calibration is within criteria.
CCB	: Continuing Calibration Blank - Analyzed to verify the instrument baseline is within criteria.
Blank	: Method Blank - Prepared to verify that the preparation process is not contributing contamination to the samples.
LCS	: Laboratory Control Standard/Sample - Prepared to verify that the preparation process is not affecting analyte recovery.
MS	: Matrix Spikes - A random sample is spiked with a known amount of analyte. The recoveries are an indication of how that sample matrix affects analyte recovery.
MSD	: Matrix Spike Duplicate of MS/MSD pair - A random sample duplicate is spiked with a known amount of analyte. The recoveries are an indication of how that sample matrix affects analyte recovery.
MSRPD	: MS/MSD Relative Percent Difference (RPD) - The MS relative percent difference is an indication of precision for the preparation and analysis.
DQO	: Data Quality Objective - This is the criteria against which the quality control data is compared.

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9415 W. Goshen Avenue
Visalia, CA 93291
TEL: (559)734-9473
FAX
CA ELAP Certification No. 2810

BSK ASSOCIATES

SUBCONTRACT ORDER

SED0057

21473

SENDING LABORATORY:

BSK Associates Sacramento
3140 Gold Camp Drive #160
Rancho Cordova, CA 95670
Phone: 916-853-9293
Fax: 916.853.9297
Project Manager: Michelle Croft
E-mail: mcroft@bskassociates.com

RECEIVING LABORATORY:

FGL Environmental
P.O. Box 272 / 853 Corporation
Santa Paula, CA 93060
Phone :(805) 392-2000
Fax: (805) 525-4172
Turnaround (Days): Standard
QC Deliverables: I Std III IV

Sample ID	Samp Desc	Comments	Sample Date
SED0057-01	**Well 003 - Zone 2 (Lower Zone)**	**Client Matrix** Water	**04/05/2021 19:40**
Lab Matrix:	Water		
	Analysis:		
	EXT-Gross Alpha	Shipped by BSK- Sac, 4/6/2021	

RUSH

RUSH

RUSH

Released By	Date	Received By	Date
[signature]	4/7/2021	[signature]	4/8/21 9:45
[signature]	4/8/21 9:00	[signature]	4/8/21 9:00

Subject: RE: SED0057
From: Michelle Croft <mcroft@bskassociates.com>
Date: 4/8/2021, 3:22 PM
To: Inez Covarrubias <inezc@fglinc.com>

Good evening Inez,

This site does not have a current PS Code, EDT is not requested at this time

Thank you!

Michelle (Kawaguchi) Croft

BSK Fresno Analytical Project Manager

(559)-497-2888 ext. 138

From: Inez Covarrubias <inezc@fglinc.com>
Sent: Thursday, April 8, 2021 11:01 AM
To: Michelle Croft <mcroft@bskassociates.com>
Subject: SED0057

Good Morning Michelle,

Does this project need state EDT reporting? If so please provide system #.

Thank you ,

Inez Covarrubias

Condition Upon Receipt (Attach to COC)

Sample Receipt at SP:

1. Number of ice chests/packages received: **1**
2. Shipper tracking numbers **552878845**
3. Were samples received in a chilled condition?
   Temps: **RRT** / _____ / _____ / _____ / _____ / _____ / _____
4. Surface water (SWTR) bact samples: A sample that has a temperature upon receipt of >10C, whether iced or not, should be flagged unless the time since sample collection has been less than two hours.
5. Do the number of bottles received agree with the COC? **Yes** No N/A
6. Verify sample date, time, sampler **Yes** No N/A
7. Were the samples received intact? (i.e. no broken bottles, leaks, etc.) **Yes** No
8. Were sample custody seals intact? Yes No **N/A**

Sample Verification, Labeling and Distribution:

1. Were all requested analyses understood and acceptable? **Yes** No
2. Did bottle labels correspond with the client's ID's? **Yes** No
3. Were all bottles requiring sample preservation properly preserved? Yes No **N/A** **FGL**
   [Exception: Oil & Grease, VOA and CrVI verified in lab]
4. VOAs checked for Headspace? Yes No **N/A**
5. Were all analyses within holding times at time of receipt? **Yes** No
6. Have rush or project due dates been checked and accepted? **Yes** No N/A

Include a copy of the COC for lab delivery. (Bacti. Inorganics and Radio)

Sample Receipt, Login and Verification completed by: Reviewed and Approved By **Inez Covarrubias** Digitally signed by Inez Covarrubias Title: Sample Receiving Date: 04/09/2021-08:24:46

Discrepancy Documentation:

Any items above which are "No" or do not meet specifications (i.e. temps) must be resolved.

1. Person Contacted: _____ Phone Number: _____
   Initiated By: _____ Date: _____
   Problem:

   Resolution:

2. Person Contacted: _____ Phone Number: _____
   Initiated By: _____ Date: _____
   Problem:

   Resolution:

(2022939)
BSK Associates
SP 2104723
IV-04/09/2021-08:24:46

LA Testing
520 Mission Street South Pasadena, CA 91030
Phone/Fax: (323) 254-9960 / (323) 254-9982
http://www.LATesting.com / pasadenalab@latesting.com

LA Testing Order ID: 322106539
Customer ID: 32BSK50
Customer PO:
Project ID:

Attn: Michelle Croft
BSK Analytical Laboratories
1414 Stanislaus Street
Fresno, CA 93706

Phone: (559) 497-2888
Fax:
Received: 04/07/2021
Analyzed: 04/12/2021

Proj: SED0057

Test Report: Determination of Asbestos Structures >10µm in Drinking Water Performed by the 100.2 Method (EPA 600/R-94/134)

Sample ID Client / EMSL	Sample Filtration Date/Time	Original Sample Vol. Filtered (ml)	Effective Filter Area (mm²)	Area Analyzed (mm²)	ASBESTOS Asbestos Types	Fibers Detected	Analytical Sensitivity	Concentration	Confidence Limits
							MFL (million fibers per liter)		
SED0057-01 322106539-0001	4/7/2021 10:25 AM	100	1288	0.0640	None Detected	ND	0.20	<0.20	0.00 - 0.74

Collection Date/Time: 04/05/2021 19:40 PM

Analyst(s)
Kyeong Corbin (1)

Jerry Drapala Ph.D, Laboratory Manager
or Other Approved Signatory

Any questions please contact Jerry Drapala.

Initial report from: 04/16/2021 07:35:06

Samples analyzed by LA Testing South Pasadena, CA CA ELAP 2283

OrderID: 322106539

BSK ASSOCIATES

SUBCONTRACT ORDER

SED0057 **#322106539**

SENDING LABORATORY:

BSK Associates Sacramento
3140 Gold Camp Drive #160
Rancho Cordova, CA 95670
Phone: 916-853-9293
Fax: 916.853.9297
Project Manager: Michelle Croft
E-mail: mcroft@bskassociates.com

RECEIVING LABORATORY:

L A Testing
520 Mission St.
South Pasadena, CA 91030
Phone :(800) 303-0047
Fax: (323) 254-9982
Turnaround (Days): Standard
QC Deliverables: I Std III IV

Sample ID	Samp Desc	Comments	Sample Date
SED0057-01	**Well 003 - Zone 2 (Lower Zone)**	**Client Matrix** Water	**04/05/2021 19:40**
Lab Matrix:	Water		
	Analysis:		
	EXT-Asbestos, Drinking Water by EPA 100.2	Shipped by BSK- Sac, 4/6/2021	

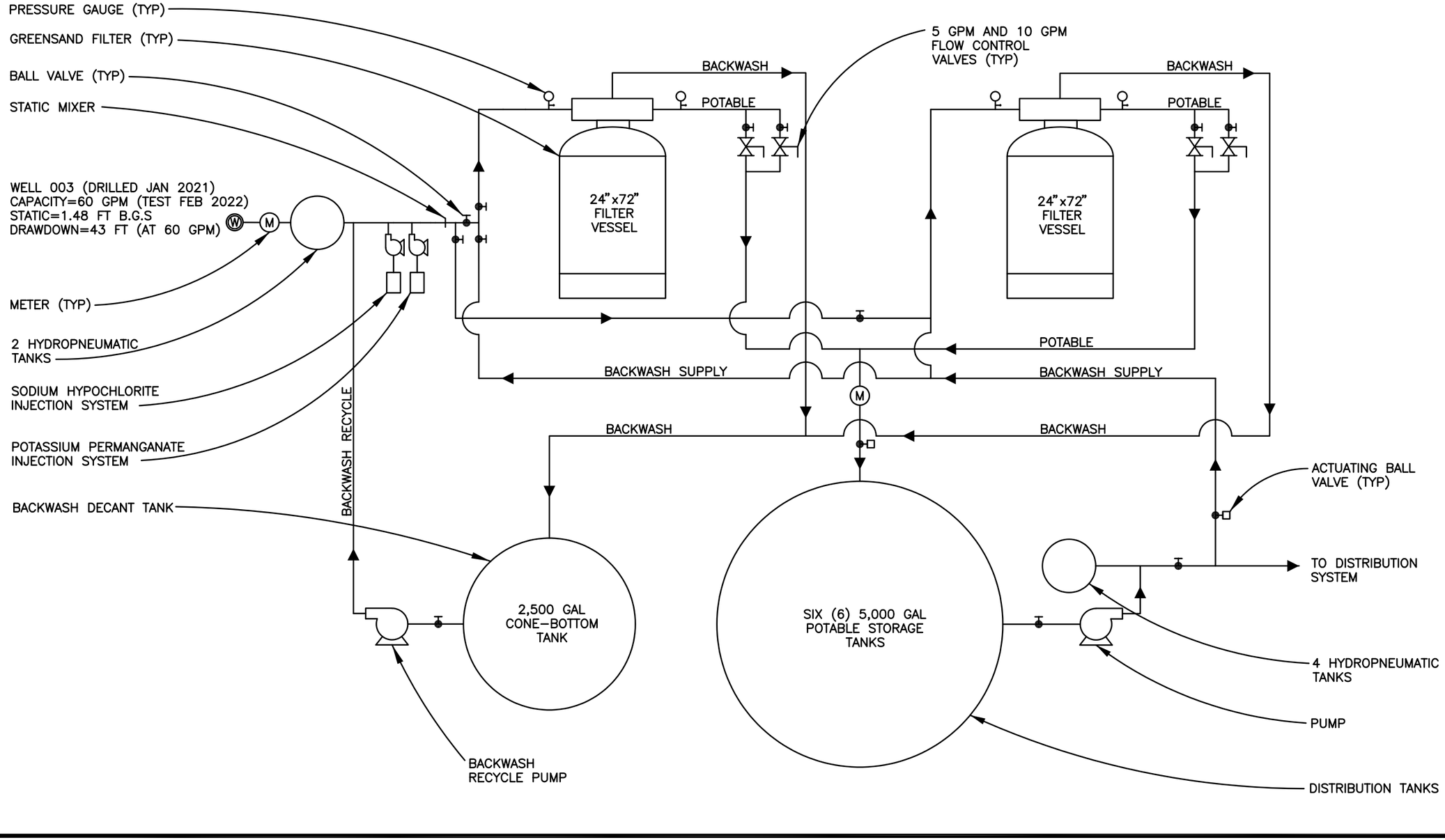
0.5°C

Rasen Nonaka 4/6/21 — Released By — Date

RP(C) 4/7/21 9:10am — Received By — Date

Released By — Date — Received By — Date

Appendix E - Treatment System Schematic



TAB: Model

03-21-22 Cody-Prentice \4078\dwg\4078 00\4078.00 Treatment Train-DETAIL.dwg

MEYERS WATER COMPANY

SYSTEM SCHEMATIC

MARCH 2022

Brelje & Race
CONSULTING ENGINEERS
475 Aviation Blvd. - Suite 120 - Santa Rosa, CA 95403 - 707-576-1322
www.brce.com

Appendix F - Treatment System Component Cut Sheets

SP

Submersible pumps, motors, and accessories
North America, 60 Hz

be
think
innovate

GRUNDFOS

Sectional drawing, SP pump 4" smooth shaft (SP 35S - 77S)

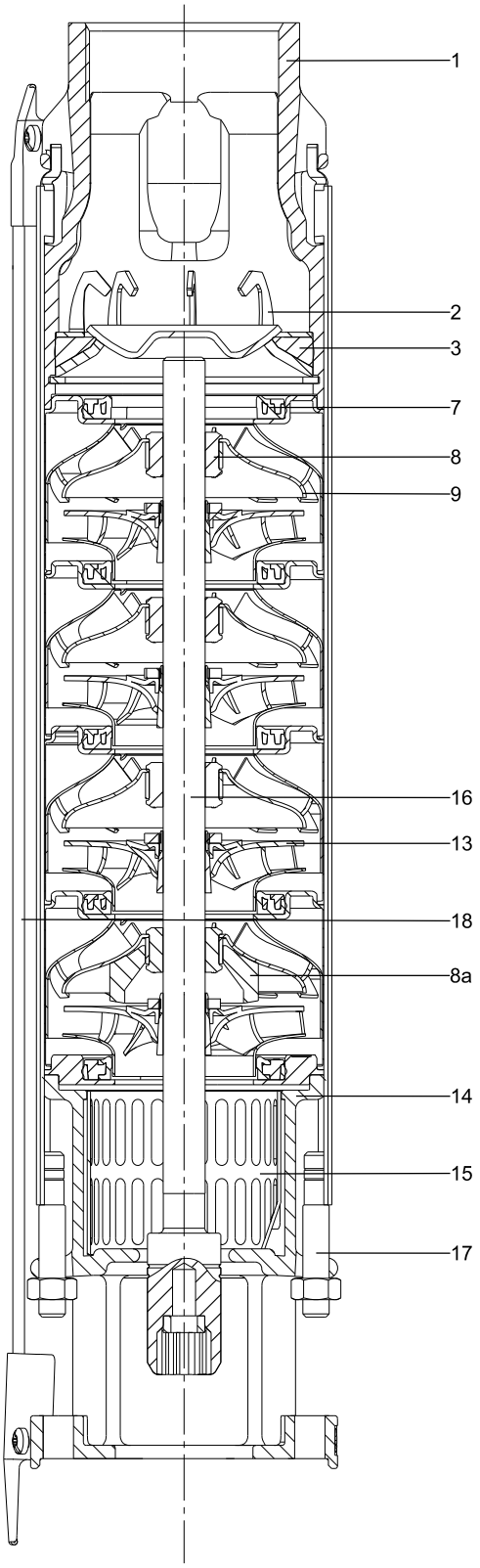


Fig. 13 SP pump, 4" smooth shaft (SP 35S - 77S)

Material specification

Pos.	Component	Material	Standard	N-version	R-version
			[AISI (EN)]		
1	Valve casing	Cast stainless steel	304 (1.4308)	316 (1.4408)	904L (1.4517)
2	Valve cup	Cast stainless steel	304 (1.4301)	316 (1.4401)	904L (1.4539)
3	Valve seat	NBR-FKM	NBR-FKM	NBR-FKM	NBR-FKM
7	Neck ring	TPU/PPS-FKM	TPU/ PPS-FKM	TPU/ PPS-FKM	TPU/ PPS-FKM
8	Bearing	LSR-FKM	LSR/FKM	LSR/FKM	LSR/FKM
8a	Washer for stop ring	Carbon/graphite	HY22 in PTFE mass	HY22 in PTFE mass	HY22 in PTFE mass
9	Chamber	Stainless steel	304 (1.4301)	316 (1.4401)	904L (1.4539)
13	Impeller	Stainless steel	304 (1.4301)	316 (1.4401)	904L (1.4539)
14	Suction interconnector	Cast stainless steel	304 (1.4308)	316 (1.4408)	904L (1.4517)
15	Strainer	Stainless steel	304 (1.4301)	316 (1.4401)	904L (1.4539)
16	Shaft complete	Stainless steel	1.4057	1.4460	1.4462
17	Strap	Stainless steel	304 (1.4301)	316 (1.4401)	904L (1.4539)
18	Cable guard	Stainless steel	304 (1.4301)	316 (1.4401)	904L (1.4539)

Sectional drawing, MS motors

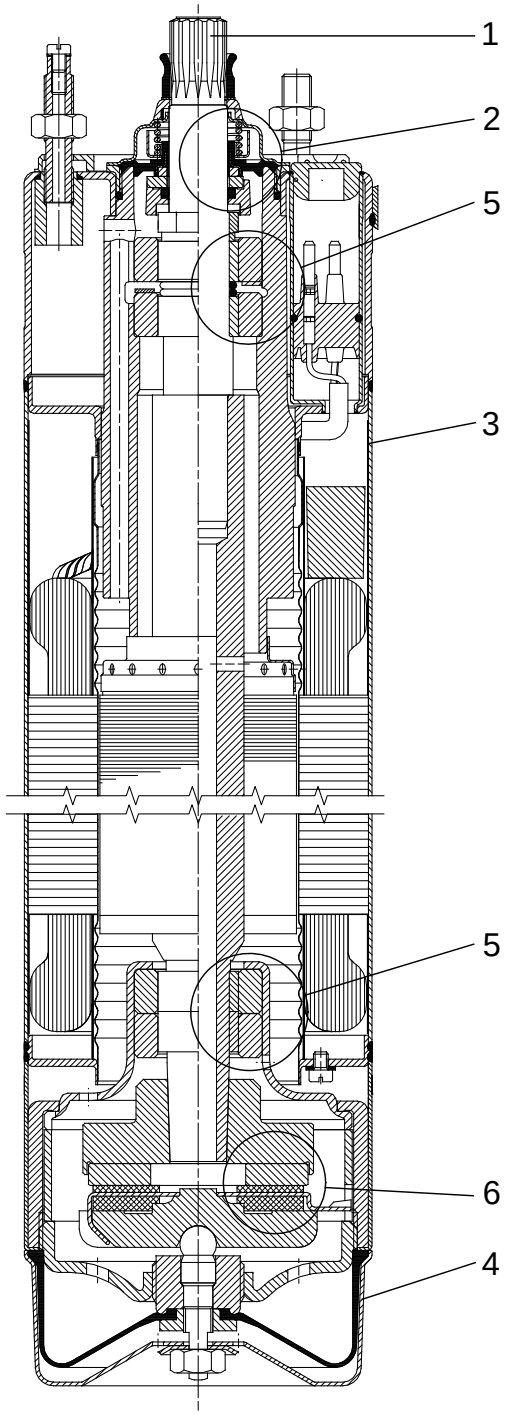


Fig. 17 MS 4000 motor

Material specification, MS 402, MS 4000, and MS 6000C motors

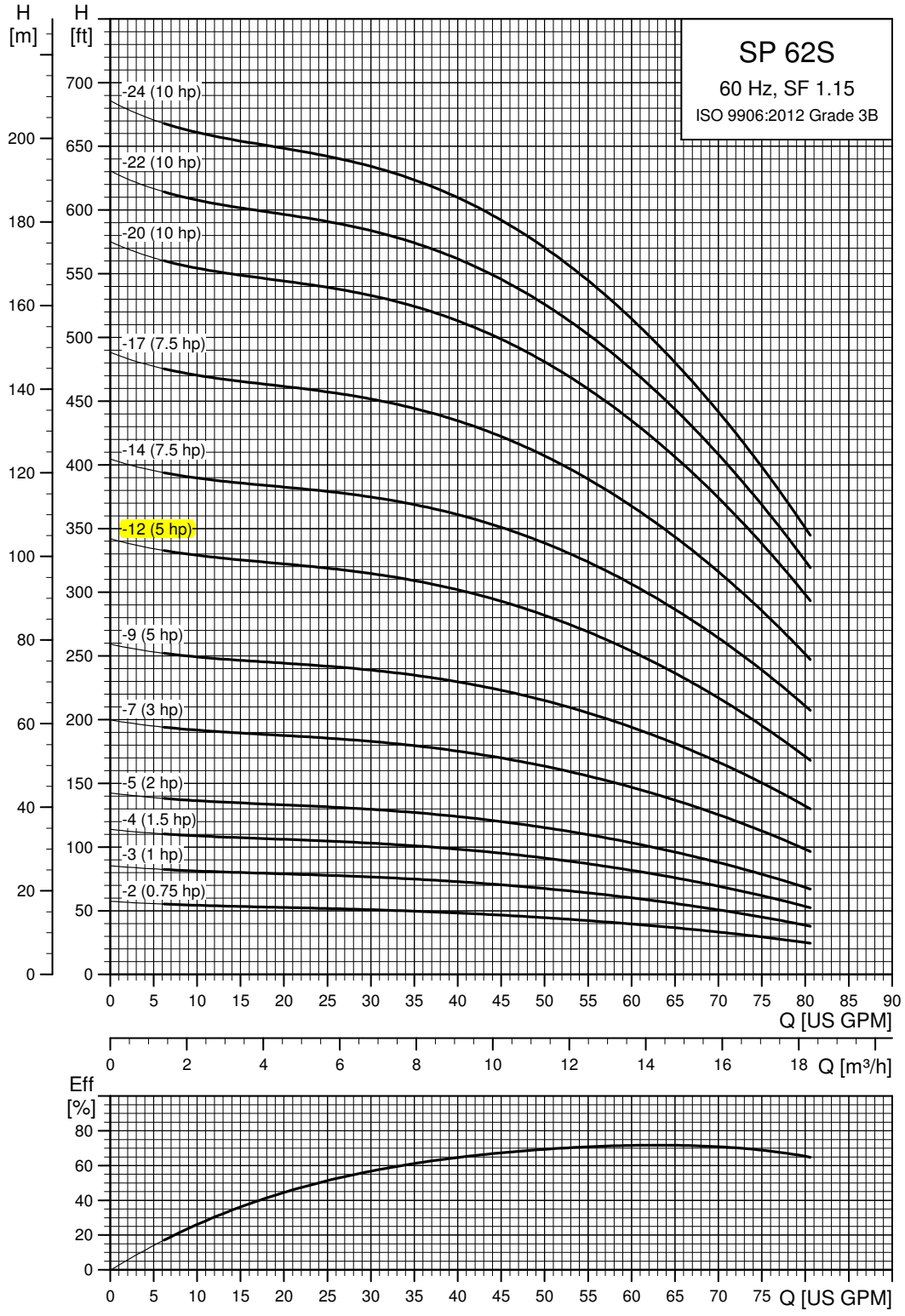
Pos.	Part	MS 402	MS 4000 MS 6000C
		[AISI (EN)]	
1	Shaft	431	431
2	Shaft seal	NBR	NBR/SiC/SiC
3	Motor sleeve	304 (1.4301)	304 (1.4301)
4	Motor end shield	304 (1.4301)	304 (1.4301)
5	Radial bearing	Ceramic	Ceramic/ tungsten carbide
6	Axial bearing	Ceramic/carbon	Ceramic/carbon
	Rubber parts	NBR	NBR

R-version motor

Pos.	Part	MS 4000 MS 6000C
1	Shaft	318 LN
2	Shaft seal	SiC/SiC
3	Motor sleeve	904L (1.4539)
4	Motor end shield	904L (1.4539)
5	Radial bearing	Ceramic/tungsten carbide
6	Thrust bearing	Ceramic/carbon
	Rubber parts	NBR

4" and larger wells - continued

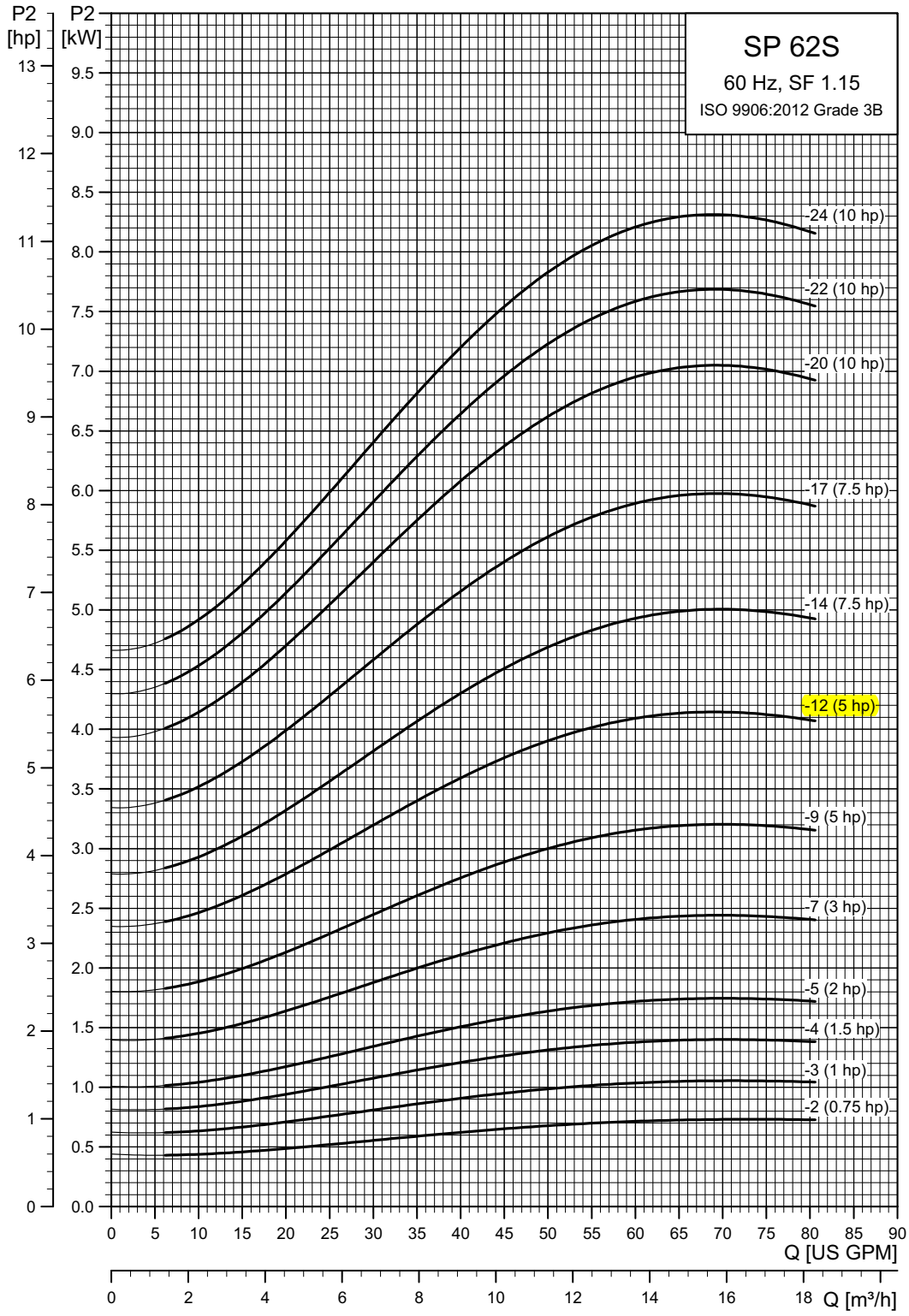
SP 62S (62 gpm)



TM06 4618 3215

4" and larger wells - continued

SP 62S (62 gpm) pump power requirement (P2)

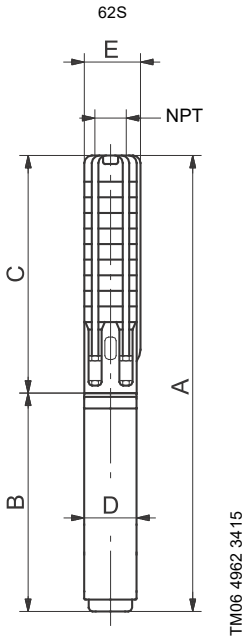


TM06 4619 3215

4" and larger wells - continued

SP 62S (62 gpm) pump with 4" motor

Pump model	Nom. head [ft]	Motor					Dimensions [in (mm)]					Net weight (complete) [lb]
		Ph	Volts [V]	[Hp]		[rpm]	A	B	C	D	E	
62S - Motor diameter 4-inch, 3-wire motor, 60 Hz, rated flow rate 62 gpm (2" NPT)												
62S07-2	40	1	230	.75	■	3407	28.35 (720)	13.08 (332)	15.28 (388)	3.75 (95)	3.98 (101)	29.7
	40	3	230	.75	■	3423	26.97 (685)	11.70 (297)	15.28 (388)	3.75 (95)	3.98 (101)	26.7
	40	3	460	.75	■	3423	26.97 (685)	11.70 (297)	15.28 (388)	3.75 (95)	3.98 (101)	26.7
	40	3	575	.75	■	3414	26.97 (685)	11.70 (297)	15.28 (388)	3.75 (95)	3.98 (101)	26.7
62S10-3	57	1	230	1	■	3381	31.89 (810)	13.67 (347)	18.23 (463)	3.75 (95)	3.98 (101)	33.0
	58	3	230	1	■	3407	30.71 (780)	12.49 (317)	18.23 (463)	3.75 (95)	3.98 (101)	30.4
	58	3	460	1	■	3407	30.71 (780)	12.49 (317)	18.23 (463)	3.75 (95)	3.98 (101)	30.2
	57	3	575	1	■	3398	30.71 (780)	12.49 (317)	18.23 (463)	3.75 (95)	3.98 (101)	30.2
62S15-4	78	1	230	1.5	■	3427	36.42 (925)	15.24 (387)	21.19 (538)	3.75 (95)	3.98 (101)	38.5
	79	3	230	1.5	■	3439	34.85 (885)	13.67 (347)	21.19 (538)	3.75 (95)	3.98 (101)	35.0
	79	3	460	1.5	■	3439	34.85 (885)	13.67 (347)	21.19 (538)	3.75 (95)	3.98 (101)	35.0
	78	3	575	1.5	■	3415	34.85 (885)	13.67 (347)	21.19 (538)	3.75 (95)	3.98 (101)	34.8
62S20-5	98	1	230	2	•	3433	43.71 (1110)	19.57 (497)	24.14 (613)	3.75 (95)	3.98 (101)	56.0
	98	3	230	2	■	3431	39.38 (1000)	15.24 (387)	24.14 (613)	3.75 (95)	3.98 (101)	40.5
	98	3	460	2	■	3431	39.38 (1000)	15.24 (387)	24.14 (613)	3.75 (95)	3.98 (101)	40.7
	98	3	575	2	■	3430	39.38 (1000)	15.24 (387)	24.14 (613)	3.75 (95)	3.98 (101)	40.5
62S30-7	136	1	230	3	•	3427	52.76 (1340)	22.72 (577)	30.04 (763)	3.75 (95)	3.98 (101)	68.3
	138	3	208	3	•	3437	48.04 (1220)	18.00 (457)	30.04 (763)	3.75 (95)	3.98 (101)	55.1
	138	3	230	3	•	3437	48.04 (1220)	18.00 (457)	30.04 (763)	3.75 (95)	3.98 (101)	55.1
	141	3	460	3	•	3466	48.04 (1220)	18.00 (457)	30.04 (763)	3.75 (95)	3.98 (101)	55.1
	141	3	575	3	•	3470	48.04 (1220)	18.00 (457)	30.04 (763)	3.75 (95)	3.98 (101)	54.9
62S50-9	184	1	230	5	•	3490	62.60 (1590)	26.66 (677)	35.95 (913)	3.75 (95)	3.98 (101)	82.8
	186	3	208	5	•	3507	58.67 (1490)	22.72 (577)	35.95 (913)	3.75 (95)	3.98 (101)	71.8
	186	3	230	5	•	3507	58.67 (1490)	22.72 (577)	35.95 (913)	3.75 (95)	3.98 (101)	71.8
	186	3	460	5	•	3506	58.67 (1490)	22.72 (577)	35.95 (913)	3.75 (95)	3.98 (101)	71.8
	182	3	575	5	•	3470	58.67 (1490)	22.72 (577)	35.95 (913)	3.75 (95)	3.98 (101)	71.6
62S50-12	237	1	230	5	•	3446	71.46 (1815)	26.66 (677)	44.81 (1138)	3.75 (95)	3.98 (101)	88.1
	242	3	208	5	•	3473	67.52 (1715)	22.72 (577)	44.81 (1138)	3.75 (95)	3.98 (101)	77.1
	242	3	230	5	•	3473	67.52 (1715)	22.72 (577)	44.81 (1138)	3.75 (95)	3.98 (101)	77.1
	242	3	460	5	•	3471	67.52 (1715)	22.72 (577)	44.81 (1138)	3.75 (95)	3.98 (101)	77.1
	244	3	575	5	•	3470	67.52 (1715)	22.72 (577)	44.81 (1138)	3.75 (95)	3.98 (101)	76.9
62S75-14	287	3	208	7.5	•	3494	77.37 (1965)	26.66 (677)	50.71 (1288)	3.75 (95)	3.98 (101)	91.6
	287	3	230	7.5	•	3494	77.37 (1965)	26.66 (677)	50.71 (1288)	3.75 (95)	3.98 (101)	91.6
	287	3	460	7.5	•	3494	77.37 (1965)	26.66 (677)	50.71 (1288)	3.75 (95)	3.98 (101)	91.6
	287	3	575	7.5	•	3494	77.37 (1965)	26.66 (677)	50.71 (1288)	3.75 (95)	3.98 (101)	91.6
62S75-17	342	3	208	7.5	•	3469	86.23 (2190)	26.66 (677)	59.57 (1513)	3.75 (95)	3.98 (101)	96.9
	342	3	230	7.5	•	3469	86.23 (2190)	26.66 (677)	59.57 (1513)	3.75 (95)	3.98 (101)	96.9
	342	3	460	7.5	•	3469	86.23 (2190)	26.66 (677)	59.57 (1513)	3.75 (95)	3.98 (101)	96.9
	342	3	575	7.5	•	3469	86.23 (2190)	26.66 (677)	59.57 (1513)	3.75 (95)	3.98 (101)	96.9
62S100-20	407	3	460	10	•	3485	99.02 (2515)	30.60 (777)	68.43 (1738)	3.75 (95)	3.98 (101)	111.0
	407	3	575	10	•	3485	99.02 (2515)	30.60 (777)	68.43 (1738)	3.75 (95)	3.98 (101)	111.0
62S100-22	445	3	460	10	•	3472	104.93 (2665)	30.60 (777)	74.34 (1888)	3.75 (95)	3.98 (101)	114.5
	445	3	575	10	•	3472	104.93 (2665)	30.60 (777)	74.34 (1888)	3.75 (95)	3.98 (101)	114.5
62S100-24	478	3	460	10	•	3460	110.83 (2815)	30.60 (777)	80.24 (2038)	3.75 (95)	3.98 (101)	118.0
	478	3	575	10	•	3460	110.83 (2815)	30.60 (777)	80.24 (2038)	3.75 (95)	3.98 (101)	118.0



E = Maximum diameter of pump including cable guard and motor.

Notes:
Control box is required for 3-wire, single-phase applications. Data does not include control box.
Performance conforms to ISO 9906. 1999 (E) Annex A. Minimum submergence is 5 ft (1.5 m).

- ■ MS 402 motor.
- • MS 4000 motor.

Submittal Data

Challenger "I" Series

Water System Tanks

Job Name: _____ Schedule #: _____

Location: _____ Model #: _____

Engineer: _____ Representative: _____

Contractor: _____

Description

Challenger "I" series tanks are diaphragm type, pre-charged hydro-pneumatic tanks designed for residential and commercial water well, pressure booster, and irrigation systems.

Materials of Construction

Shell: Drawn steel w/ epoxy finish

Diaphragm: Butyl rubber w/ copolymer polypropylene lower water chamber

Connection: Stainless steel FPT

Ratings

Max. Working Pressure:	125 PSI
Max. Working Temp:	140 F
Pre-Charge (adjustable):	38 PSI

NSF/ANSI 61
NSF/ANSI 372

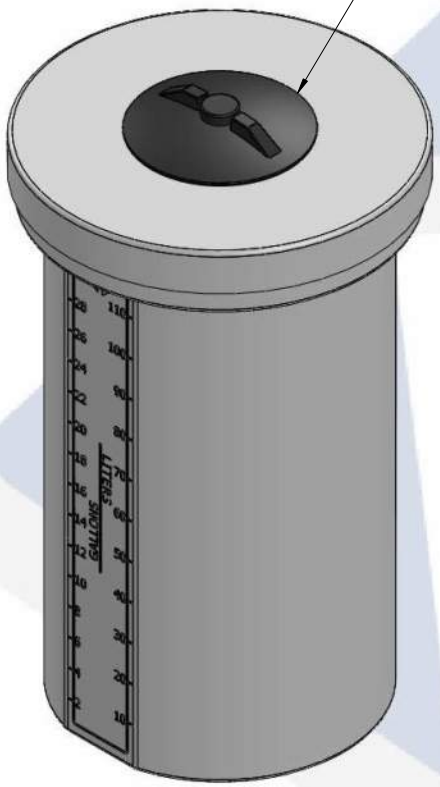
Tank Specifications

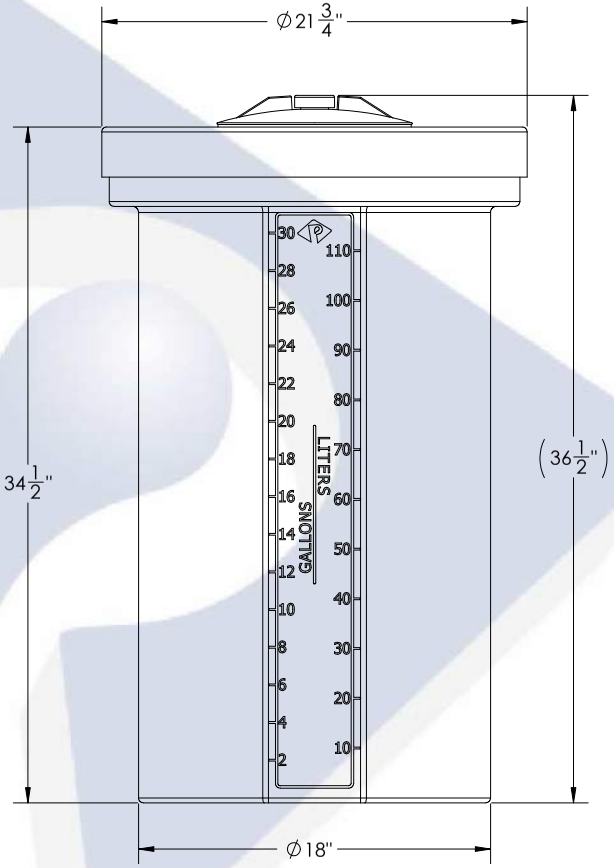
Model	Diameter (inches)	Height (inches)	System Connection (inches)	Volume (gallons)	Drawdown (gallons)			Weight (lbs)
					20/40	30/50	40/60	
I 15-PC 44	16	22	1	14	5.6	4.8	4.1	28
I 20-PC 66	16	29	1	20	8.1	6.8	5.9	36
I 25-PC 88	16	34.5	1	26	10.5	8.9	7.7	41
I 30-PC 111	21	27.75	1 ¼	32	12.9	10.9	9.4	54
I 35-PC 122	16	42.75	1	33.4	13.3	11.3	9.7	49
I 45-PC 144	21	36.25	1 ¼	44	17.7	15.0	13.0	67
I 60-PC 211	21	48	1 ¼	62	25.0	21.1	18.3	82
I 80-PC 244	21	62	1 ¼	81	32.6	27.6	23.9	99
I 85-PC 266	26	44.5	1 ¼	85	34.3	29.0	25.1	121
I 120-PC 366	26	59.75	1 ¼	119	48.0	40.6	35.1	153

FLEXCON INDUSTRIES
A Swan Group Company

300 Pond St ● Randolph, MA 02368 ● 800-527-0030 ● 781-986-2029 FAX ● www.flexconind.com

KMnO4 Solution Tank





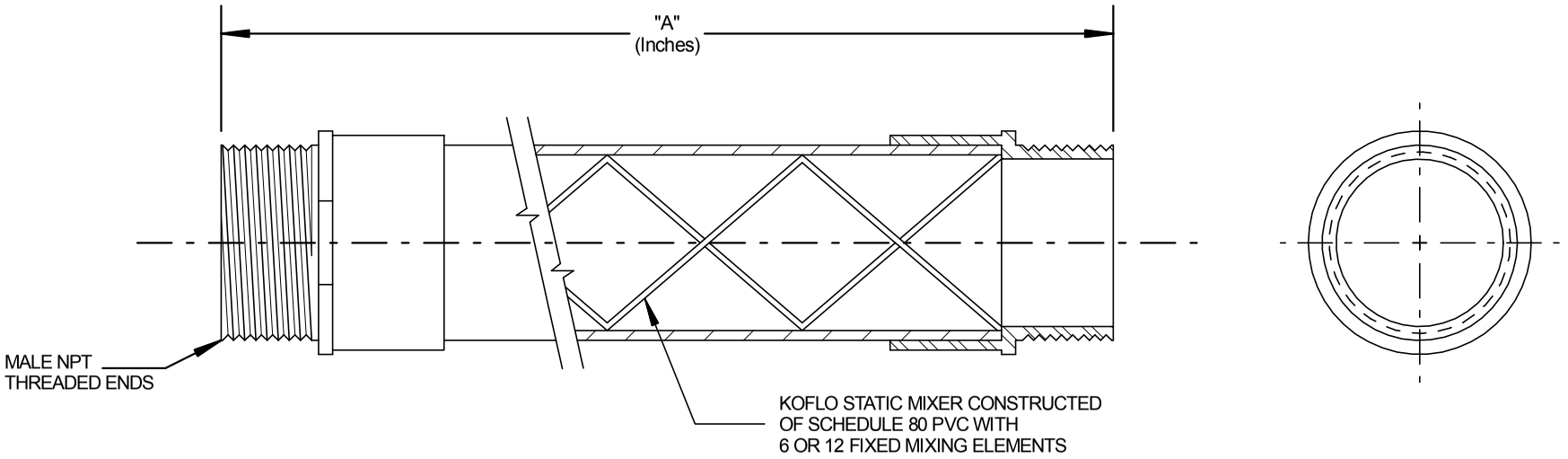
NOTES:
1. CAPACITY: 30 GAL. NOMINAL
2. APPROXIMATE WEIGHT: 23.25 LBS
3. TANK MATERIAL: HDLPE W/ UV INHIBITOR
4. SERVICE PRESSURE: ATMOSPHERIC

UNLESS OTHERWISE SPECIFIED:		NAME	DATE
DIMENSIONS ARE IN INCHES TOLERANCES: ±1/4" ANGULAR: ± .5° ONE PLACE DECIMAL: ± .25 TWO PLACE DECIMAL: ± .125 THREE PLACE DECIMAL: ± .063	DRAWN	MSM	4/23/14
	CHECKED		
	ENG APPR.		
	MFG APPR.		
	Q.A.		
TANK MATERIAL: HDPE			
INNER TANK S/N:			
OUTER TANK S/N:			
CUSTOMER PO#			
DO NOT SCALE DRAWING			

ALTERNATIVE VERSIONS
MATERIALS: XLPE, PPL, PVDF
COLORS: NATURAL, BLUE OR BLACK
AVAILABLE WITH FRP WRAP

PEABODY ENGINEERING

PROJECT:	30 GALLON CLOSED TOP TANK ASSEMBLY
CUSTOMER:	PEABODY STANDARD
SITE/LOCATION:	-
DRAWING#:	01-30356 (NATURAL)
SIZE: B	DESC.: PEABODY 30 GALLON CLOSED TOP
REV.: A	
SCALE: 1:6	SHEET 1 OF 1



Size	6 Element Model Number	"A" 6 Element	12 Element Model Number	"A" 12 Element
1/2"	1/2-80-4-6-2	7"	1/2-80-4-12-2	11"
3/4"	3/4-80-4-6-2	8"	3/4-80-4-12-2	14"
1"	1-80-4-6-2	10"	1-80-4-12-2	19"
1-1/4"	1.25-80-4-6-2	14"	1.25-80-4-12-2	25"
1-1/2"	1.5-80-4-6-2	15"	1.5-80-4-12-2	26"
2"	2-80-4-6-2	18"	2-80-4-12-2	33"

*CPVC available upon request

Koflo Corporation
309 CARY POINT DR.
CARY, IL 60013

SCALE: NONE	APPROVED BY JJT	DRAWN BY NJF
DATE: 10/15/01		REVISED 6/12/09
CUSTOMER:		REVISED 7/15/10
		REVISED 8/1/14
MODEL NO: STOCK SCHEDULE 80 THREADED PVC MIXER		DRAWING NUMBER: KD-1025

KMnO4 Dosing Pump

DDC – SMART Digital Series Pumps (0.0015 to 4.00 gph)

The DDC SMART Digital dosing series represents the latest generation in Digital Dosing pumps from Grundfos. Available in three sizes and two control options, the DDC range brings continuity for the well known DME and DDI digital dosing lines.

With its 1000:1 turn down ratio, removable mounting bracket and flexible control panel installation, the DDC product range brings simplicity and flexibility to adapt your pump and cover a great variety of metering applications.

Smooth and Continuous Dosing

The DDC stepper motor technology ensures an optimum mixing ratio at the injection point without the need for additional accessories such as static mixers. It also provides a significant reduction of pressure peaks, preventing mechanical stress on wearing parts such as diaphragm, tubing, and connections, resulting in less maintenance required.

Full Stroke Length at All Times

The pump always operates at full stroke length, irrespective of the capacity set; this ensures maximum volume displacement per stroke, optimum accuracy, easy priming and improved suction.

1000:1 Turndown Ratio

The Digital Dosing range is designed to give you superior flexibility and accuracy even when dosing very small volumes.

Maximum Capacity Setting

With the DDC series you decide what the maximum capacity should be. You can select any value within the performance range of each model and the pump will redefine the injection speed and adjust the operation scale within that range. So you only need a few models to cover multiple applications.

Anti-Cavitation / SlowMode

The variable speed of DDC pumps facilitates a unique anti-cavitation function for high viscosity liquids. This function gives you slower suction speed (50 or 25% of the maximum speed), ensuring optimal priming and pumping of even the most difficult liquids.

Calibration

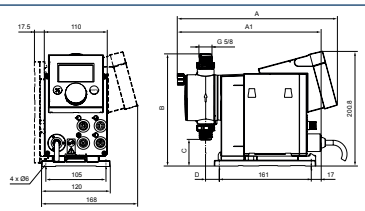
With Digital Dosing, calibration is easier and faster than ever. Simply place a graduated glass under the pump and activate the calibration program. The pump will perform 100 strokes and indicate how much it thinks it has pumped. Adjust the figure by entering the correct numbers if necessary. After this, the dosage can be adjusted without recalibrating the pump.

Different Control Options and Materials

Available in two different control options: A /AR. The DDC series has the right pump for each application.

Dimensions [inches (mm)]

	DDC 6	DDC 9	DDC 15
A	11 (280)		11 (280)
B	7.72 (196)		7.89 (200.5)
C	1.83 (46.5)		1.55 (39.5)
D	0.94 (24)		0.94 (24)



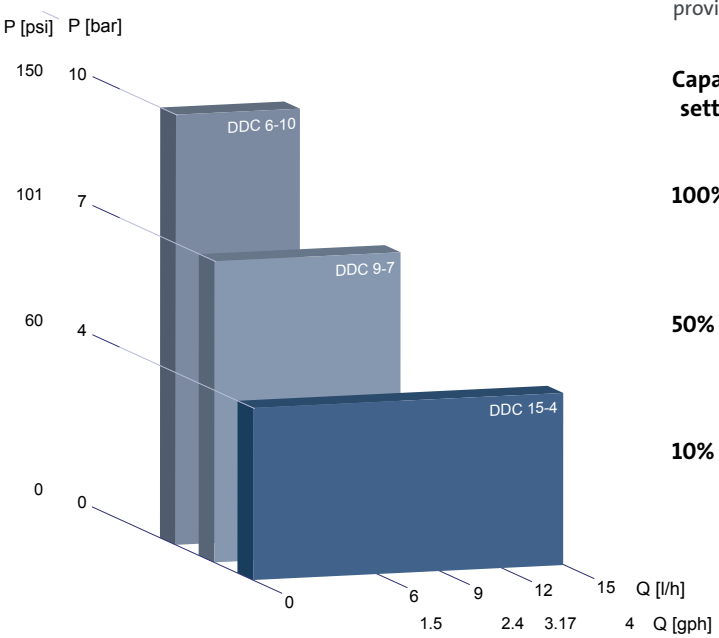
Product Range and Performance Data

Pump type	Capacity	DDC 6-10	DDC 9-7	DDC 15-4
Capacity at Max. Pressure	g/h (l/h)	1.5 (6)	2.4 (9)	4.0 (15)
max. pressure	psi (bar)	150 (10)	100 (7)	60 (4)
Setting range		1000:1	1000:1	1000:1

Stroke frequency	spm	140	200	180
Suction lift: primed/dry	ft (m)	19.6 (6)/6.5 (2)	19.6 (6)/6.5 (2)	19.6 (6)/9.8 (3)
Viscosity*	cps	2500/50	2000/50	2000/300
Power supply	V, Hz	100-240 V 50/60 Hz	100-240 V 50/60 Hz	100-240 V 50/60 Hz
Accuracy	%	+/-1	+ / -1	+ / -1

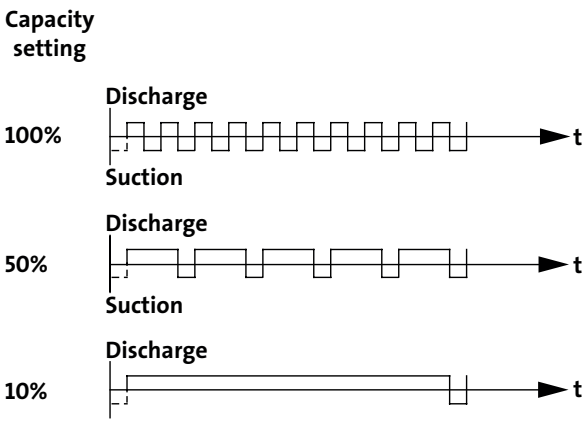
** With Spring-Loaded valves*

Performance Range



Functional Description

DDC's electronically controlled variable-speed (stepper) motor provides optimum control of the stroke speed.



Relation between stroke-frequency adjustment and capacity

Summary | Accessories | More Like This | Just For You

Part#: 62800

Weight: 0.3 lbs

Brand: Parker Hannifin (https://www.usabluebook.com/m-1768-parker-hannifin.aspx)

Teflon® PFA Female Adapter, 1/4" Tube x 1/2" NPT

- Ideal for corrosive environments
- Leak-tight connection; no tools required
- Rated to 125 psi

Price:

$60.29 USD/Each

Need Help? Call 800-548-1234

PFA fittings are ideal for use in severely corrosive environments - they stand up to harsh chemical applications. These easy-to-use fittings provide a leak-tight connection without requiring any tools. Just insert your tubing into the fitting assembly and tighten the nut.

RELATED SEARCHES

Male Adapter (/P-395219-Hydrant-Buddy-Adapter-34-Female-To-1-Male.Aspx)

RELATED CATEGORY

Female Adapters (/C-1394.Aspx) Pvc Female Adapters (/C-793.Aspx)

Clamp Adapter (/Theme/Clamp-Adapter)

Spears 1-1/2 Inch Adapter (/Theme/Spears-1-Sp-45-Sp-1-Sp-47-Sp-2-Inch-Adapter)

RELATED PRODUCTS

(/p-274371-female-x-male-hex-adapter-1npt-x-1-12nst.aspx)

(/p-274371-female-x-male-hex-adapter-1npt-x-1-12nst.aspx)

Female x Male Hex Adapter 1"NPT x 1 (/p-274371-female-x-male-hex-adapter-1npt-x-1-12nst.aspx)

More Details (/p-274371-female-x-male-hex-adapter-1npt-x-1-12nst.aspx)

(/p-283381-ss-reinforced-adapter-sch-80-cpvc-1-14-socket-x-nptf.aspx)

(/p-283381-ss-reinforced-adapter-sch-80-cpvc-1-14-socket-x-nptf.aspx)

SS-Reinforced Adapter, Sch. 80 CPVC, 1-1/4" Socket x (/p-283381-ss-reinforced-adapter-sch-80-cpvc-1-14-socket-x-nptf.aspx)

More Details (/p-283381-ss-reinforced-adapter-sch-80-cpvc-1-14-socket-x-nptf.aspx)

(/p-283385-ss-reinforced-adapter-sch-80-cpvc-34-socket-x-nptf-pack-of-4.aspx)

(/p-283385-ss-reinforced-adapter-sch-80-cpvc-34-socket-x-nptf-pack-of-4.aspx)

SS-Reinforced Adapter, Sch. 80 CPVC, 3/4" Socket x (/p-283385-ss-reinforced-adapter-sch-80-cpvc-34-socket-x-nptf-pack-of-4.aspx)

More Details (/p-283385-ss-reinforced-adapter-sch-80-cpvc-34-socket-x-nptf-pack-of-4.aspx)

Summary | More Like This | Just For You

Part#: 61166

Weight: 0.5 lbs

Brand: Neptune Chemical Pump Company (https://www.usabluebook.com/m-1377-neptune-chemical-pump-company.aspx)

Injection Quill (PVC & Ceramic 1/2" MNPT x 1/2" MNPT

- Built-in check valve prevents backflow
- Pressure ratings to 150 or 3,000 psi

Price:

$135.20 USD/Each

Need Help? Call 800-548-1234

Neptune chemical injection quills feature a built-in spring-loaded check valve that prevents backflow. Choose from a wide range of sizes and materials to best suit your application—even if you're working with corrosive materials. Quills are 2-5/8" long. Longer lengths are available as special order; contact USABlueBook for more information.

Tech Specs

- Size: 1/2" x 1/2" NPT(M)
- Body Material: PVC
- Ball Material: Ceramic

- PSI: 150
- Quill Length: 2-5/8"

RELATED SEARCHES

Injection Quill (/P-266751-Neptune-Injection-Quillsbquo-12quot-Nptmsbquo-500fsbquo-1000-Psisbquo-Qc-316-50.Aspx)

RELATED CATEGORY

1/2 Inch Injection Quill (/Theme/1-Sp-47-Sp-2-Inch-Injection-Quill)

RELATED PRODUCTS

(/p-266751-neptune-injection-quillsbquo-12quot-nptmsbquo-500fsbquo-1000-psisbquo-qc-316-50.aspx)

(/p-266751-neptune-injection-quillsbquo-12quot-nptmsbquo-500fsbquo-1000-psisbquo-qc-316-50.aspx)

Neptune Injection Quill, 1/2" NPT(M), 500F, 1000 PSI, (/p-266751-neptune-injection-quillsbquo-12quot-nptmsbquo-500fsbquo-1000-psisbquo-qc-316-50.aspx)

More Details (/p-266751-neptune-injection-quillsbquo-12quot-nptmsbquo-500fsbquo-1000-psisbquo-qc-316-50.aspx)

(/p-266760-injection-quill-pvcceramic-34-nptm-x-34-nptm.aspx)

(/p-266760-injection-quill-pvcceramic-34-nptm-x-34-nptm.aspx)

Injection Quill (PVC/Ceramic) 3/4' NPTM x 3/4' NPTM (/p-266760-injection-quill-pvcceramic-34-nptm-x-34-nptm.aspx)

More Details (/p-266760-injection-quill-pvcceramic-34-nptm-x-34-nptm.aspx)

(/p-266761-injection-quill-kynar-ceram-12-nptm-x-12-nptm.aspx)

(/p-266761-injection-quill-kynar-ceram-12-nptm-x-12-nptm.aspx)

Injection Quill (Kynar & Ceram 1/2" NPT(M) x (/p-266761-injection-quill-kynar-ceram-12-nptm-x-12-nptm.aspx)

More Details (/p-266761-injection-quill-kynar-ceram-12-nptm-x-12-nptm.aspx)

Summary | More Like This | Just For You

Part#: 206776

Weight: 0.4 lbs

Brand: Spears (https://www.usabluebook.com/m-1211-spears.aspx)

2" x 1/2" PVC Reducing Tee SOC x FPT Sch80, 802-247

Price:

$18.29 USD/Each

Need Help? Call 800-548-1234

RELATED PRODUCTS

(/p-360684-1-14quot-sch40-pvc-fpt-teesbquo-405-012.aspx)

(/p-360684-1-14quot-sch40-pvc-fpt-teesbquo-405-012.aspx)

1-1/4" Sch 40 PVC FPT Tee, 405-012, Pk/25 (/p-360684-1-14quot-sch40-pvc-fpt-teesbquo-405-012.aspx)

More Details (/p-360684-1-14quot-sch40-pvc-fpt-teesbquo-405-012.aspx)

(/p-361132-5quot-sch40-pvc-socket-teesbquo-401-050.aspx)

(/p-361132-5quot-sch40-pvc-socket-teesbquo-401-050.aspx)

5" Sch 40 PVC Socket Tee, 401-050, Pk/5 (/p-361132-5quot-sch40-pvc-socket-teesbquo-401-050.aspx)

More Details (/p-361132-5quot-sch40-pvc-socket-teesbquo-401-050.aspx)

(/p-361149-1quot-sch40-pvc-fpt-teesbquo-405-010.aspx)

(/p-361149-1quot-sch40-pvc-fpt-teesbquo-405-010.aspx)

1" Sch 40 PVC FPT Tee, 405-010, Pk/50 (/p-361149-1quot-sch40-pvc-fpt-teesbquo-405-010.aspx)

More Details (/p-361149-1quot-sch40-pvc-fpt-teesbquo-405-010.aspx)

PENTAIR

STRUCTURAL TANKS

COMPOSITE PRESSURE VESSELS

DESIGNED FOR COMMERCIAL SOFTENING AND FILTRATION APPLICATIONS

Pentair Structural§ Composite Pressure Vessels offer reinforced fiberglass construction for outstanding performance and durability. Available in capacities up to 1,600 gallons, composite vessels are available with a variety of different configurations. ASME code available.

FEATURES/BENEFITS

For commercial and industrial water treatment and storage

100% composite fiberglass construction

Outstanding performance and durability in harsh chemical environments

Absolutely will not – and cannot – rust

Requires little or no maintenance

Capacities up to 1,600 gallons

Factory-backed five-year warranty

Commercial softening and filtration

MATERIAL OF CONSTRUCTION

Polyethylene inner shell

INSTALLATION TIPS

Bolt base to floor

Calculate height for valve and base combined

COLOR OPTIONS

AL – Almond
BL – Blue
BK – Black
GR – Gray
NA – Natural

OPERATING PARAMETERS

Maximum operating pressure – 150 psi

Maximum operating temperature – 120° F (threaded); 150°F (flanged)

PENTAIR DESIGN PARAMETERS

Safety factor: 4:1

Minimum burst at 600 psi

Tested to 250,000 cycles without leakage

NSF DESIGN PARAMETERS

Safety factor: 4:1

Minimum burst at 600 psi

Tested to 100,000 cycles without leakage

ASME DESIGN PARAMETERS

Top/Bottom Flange
- Safety factor – 5:1
- Minimum burst at 750 psi
- Tested to 33,000 cycles without leakage

Side Flange
- Safety factor – 6:1
- Minimum burst at 900 psi
- Tested to 100,000 cycles without leakage

NSF COMPONENT

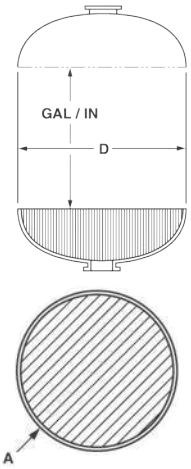
Vessels Tested and Certified by NSF International to NSF/ANSI Standard 61 for material and structural integrity requirements.

SPECIFICATIONS

VESSEL	DESCRIPTION	HEIGHT W/BASE INCHES / MM	HEIGHT W/O BASE INCHES / MM	CAPACITY GALLONS / LITERS	CUBIC FEET	BASE	SHIP WEIGHT LBS.
18" DIA.	18X65 COMP 4"T	67 / 1702	65.7 / 1669	64 / 242	8.56	SMC	67
	18X65 COMP 4"T 4"B	73.13 / 1858	65.6 / 1666	64 / 242	8.56	SMC EXT	74
	18X65 COMP 6"TF 6"BF	84.12 / 2137	70.5 / 1791	62 / 235	8.29	TRIPOD	92
21" DIA.	21X36 COMP 4"T	41.7 / 1059	38.2 / 970	46 / 174	6.15	SMC	49
	21X36 COMP 4"T 4"B	47.5 / 1207	38.2 / 970	45 / 170	6.02	SMC EXT	53
	21X62 COMP 4"T	67 / 1702	63.4 / 1610	84 / 318	11.23	SMC	95
	21X62 COMP 4"T 4"B	72.8 / 1849	63.5 / 1613	84 / 318	11.23	SMC EXT	102
24" DIA.	24X38 COMP 4"T	42.6 / 1082	38.5 / 978	61 / 231	8.15	SMC	65
	24X50 COMP 4"T	55.6 / 1412	51.5 / 1308	84 / 318	11.23	SMC	90
	24X50 COMP 4"T 4"B	63 / 1600	52.9 / 1344	84 / 318	11.23	SMC EXT	97
	24X65 COMP 4"T	65.2 / 1656	61.1 / 1552	100 / 379	13.37	SMC	109
	24X65 COMP 4"T 4"B	70.1 / 1781	60 / 1524	100 / 379	13.37	SMC EXT	115
	24X65 COMP 6"TF	65 / 1651	61.2 / 1554	100 / 379	13.37	SMC	114
	24X65 COMP 6"TF 6"BF	79 / 2007	65 / 1651	100 / 379	13.37	TRIPOD	124
	24X72 COMP 4"T	74.19 / 1884	70.12 / 1781	118 / 447	15.77	SMC	109
	24X72 COMP 4"T 4"B	80.4 / 2042	70.3 / 1786	119 / 450	15.91	SMC EXT	124
	24X72 COMP 6"TF	77 / 1956	73.4 / 1864	119 / 450	15.91	SMC	137
	24X72 COMP 6"TF 6"BF	88.5 / 2248	74.5 / 1892	119 / 450	15.91	TRIPOD	147
30" DIA.	30X60 COMP 6"TF	71.6 / 1819	64.3 / 1633	151 / 572	20.19	SMC EXT	195
	30X60 COMP 6"TF 6"BF	82.5 / 2096	68.5 / 1740	151 / 572	20.19	TRIPOD	205
	30X72 COMP 4"T	78.9 / 2004	69.8 / 1773	187 / 708	25.00	SMC EXT	198
	30X72 COMP 4"T 4"B	77.2 / 1961	69.8 / 1773	187 / 708	25.00	SMC EXT	205
	30X72 COMP 6"TF	79.73 / 2025	70 / 1778	187 / 708	25.00	SMC EXT	195
	30X72 COMP 6"TF 6"BF	88.24 / 2241	74.67 / 1897	187 / 708	25.00	TRIPOD	211
36" DIA.	36X36 COMP 6"TF 6"BF	55.3 / 1405	41 / 1041	118 / 447	15.77	TRIPOD	148
	36X57 COMP 6"TF	68 / 1727	59.3 / 1506	205 / 776	27.40	SMC EXT	195
	36X57 COMP 6"TF 6"BF	77.3 / 1963	63 / 1600	205 / 776	27.40	TRIPOD	225
	36X72 COMP 4"T	80.4 / 2042	71.8 / 1824	264 / 999	35.29	SMC EXT	264
	36X72 COMP 4"T 4"B	80.4 / 2042	70.5 / 1791	264 / 999	35.29	SMC EXT	285
	36X72 COMP 6"TF	82.29 / 2090	73.54 / 1868	264 / 999	35.29	SMC EXT	295
	36X72 COMP 6"TF 6"BF	90.1 / 2289	76.2 / 1935	264 / 999	35.29	TRIPOD	305
	36X72 COMP 6"TF 6"BF 4"TBSF	89.6 / 2276	75.3 / 1913	264 / 999	35.29	TRIPOD	315
42" DIA.	42X72 COMP 6"TF	72.5 / 1842	71.1 / 1806	345 / 1306	46.12	SMC SHORT	370
	42X72 COMP 6"TF 6"BF	90.1 / 2289	73 / 1854	345 / 1306	46.12	TRIPOD	400
	42X72 COMP 6"TF 6"BF 4"TBSF	94.6 / 2403	77.5 / 1969	345 / 1306	46.12	TRIPOD	415
48" DIA	48X72 COMP 6"TF	81.5 / 2070	75.2 / 1910	463 /1753	61.89	SMC SHORT	494
	48X72 COMP 6"TF 6"BF	91.91 / 2335	76 / 1930	463 /1753	61.89	TRIPOD	500
	48X72 COMP 6"TF 6"BF 4"TBSF	96.75 / 2457	80.75 / 2051	463 /1753	61.89	TRIPOD	504
63" DIA.	63X67 COMP 6"TF 6"BF	81.5 / 2070	67.1 / 1704	600 / 2271	80.21	TRIPOD	680
	63X86 COMP 6"TF 6"BF	98.88 / 2512	84.5 / 2146	900 / 3407	120.31	TRIPOD	950
	63X86 COMP 16"TMWY 6"BF	99 / 2515	84.5 / 2146	900 / 3407	120.31	TRIPOD	950
	63X86 COMP 16"TMWY 6"BF 4"TBSF	99 / 2515	85 / 2159	900 / 3407	120.31	TRIPOD	960
	63X116 16"TMWY 6" BF 4" TBSF	130 / 3302	116 / 2946	1250 / 4732	167.10	TRIPOD	1190
	63X144 16"TMWY 6" BF 4" TBSF	158 / 4013	144 / 3658	1600 / 6057	213.89	TRIPOD	1398

*Measurements are subject to change without notice and are for reference only.
NOTE: Flexible connections must be installed between hard piping and tank openings. Failure to install flex connection properly with the vessel will void the warranty.
NOTE: Different base options can be selected on different tank diameters. The bases selected above illustrate most common base selection.

DOME VOLUME (GALLONS) AND STRAIGHT WALL GALLON PER INCH

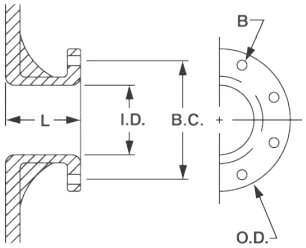


NOMINAL DIAMETER			
D (INCHES)	GALLONS* (ONE DOME)	GALLON/ INCH (APPROX.)	A (SQ. FEET)
12	1.0	0.5	0.7
13	1.4	0.5	0.9
14	1.7	0.6	1.1
16	2.7	0.8	1.3
18	3.7	1.0	1.8
21	6.2	1.4	2.4
24	9.3	1.9	3.0
30	18	2.9	4.6
36	33	4.2	6.7
42	52	5.7	9.0
48	74	7.5	12.0
63	168	13.0	20.0

*Cubic Ft. = 0.1337 x Gallons

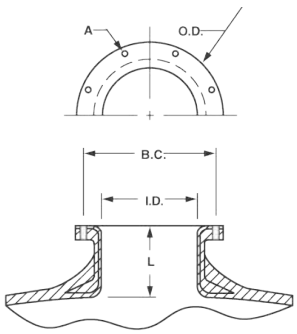
SIDE FLANGE

DIMENSIONS							
SIZE	L	I.D.	B.C.	O.D.	A BOLT DIA.	NUMBER OF HOLES	WEIGHT (LBS.)
4" ANSI	4.1"	4.0"	7.5"	9.0"	0.63"	8	6.4

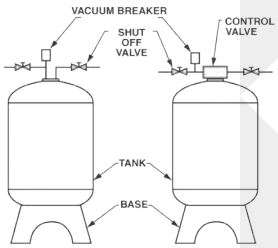


TOP AND BOTTOM OPENING FLANGES/MANWAY

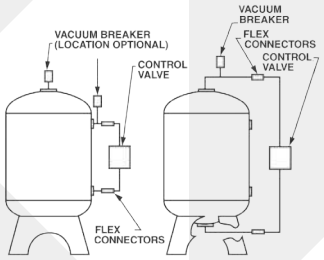
DIMENSIONS							
SIZE	L	I.D.	B.C.	O.D.	A BOLT DIA.	NUMBER OF HOLES	WEIGHT (LBS.)
6" SNA	3.6"	5.9"	8.5"	9.4"	0.31"	12	5.8
10" ANSI	3.7"	10.0"	14.3"	16.0"	0.88"	12	17.8
16" Manway SNA	4.3"	16.0"	20.4"	21.3"	0.50"	24	34.0



VACUUM BREAKER INSTALLATION



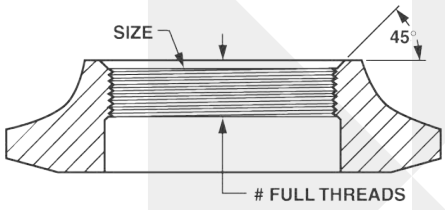
FLEX CONNECTORS INSTALLATION



NOTE: Flexible connectors must be installed between hard piping and tank openings. These pressure vessels are treated for an internal negative pressure of 5y HG (17 Pa) vacuum below atmospheric. If negative pressure could ever exceed 5y Hg (17 Pa), an adequate vacuum breaker must also be properly installed. Failure to install flex connection properly, or improper installation of a vacuum breaker when required, may void the warranty.

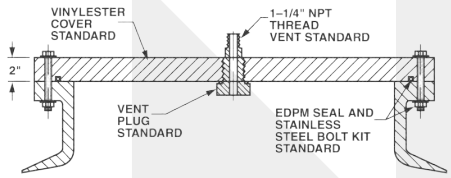
TOP AND BOTTOM OPENING THREADS

SPECIFICATIONS			
SIZE	COMPOSITE/ POLY GLASS	NUMBER OF FULL THREADS	COMPOSITE
2.5" - 8" NPSM	6	3 min	6
4" - 8" UN	7	3 min	7
4.5" - 8" Buttress	7	3 min	7



MANWAY COVER

SPECIFICATIONS		
MATERIAL	PRESSURE RATING	TAPPING
CPVC	100 psi	As requested
VE	150 psi	As shown only



ADDER DIMENSIONS

*Measurements are subject to change without notice and are for reference only.

DIMENSIONS		
FLECK VALVE	TANK DIA. (INCHES/MM)	ADDER HT. (X) (INCHES/MM)
2750	18/475	6.5/165
2850	21/533	6.5/165
2900	24, 30/610, 762	12/305
3150	42/1067	10/254
3900	48-63/1219-1600	15/381

13845 BISHOPS DR., SUITE 200, BROOKFIELD, WI 53005 USA
P: 262.238.4400 | WATERPURIFICATION.PENTAIR.COM | CUSTOMER CARE: 800.279.9404 | tech-support@pentair.com

40846 Rev G AP18

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Phone 856-881-2345 Fax 856-881-6859
Email: info@inversand.com • www.inversand.com

GREENSANDplus™

Performance Media for Water Filtration

Removes iron, manganese, hydrogen sulfide, arsenic and radium.

GreensandPlus™ is a black filter media used for removing soluble iron, manganese, hydrogen sulfide, arsenic and radium from groundwater supplies.

The manganese dioxide coated surface of GreensandPlus acts as a catalyst in the oxidation reduction reaction of iron and manganese.

The silica sand core of GreensandPlus allows it to withstand waters that are low in silica, TDS and hardness without breakdown.

GreensandPlus is effective at higher operating temperatures and higher differential pressures than standard manganese greensand. Tolerance to higher differential pressure can provide for longer run times between backwashes and a greater margin of safety.

Systems may be designed using either vertical or horizontal pressure filters, as well as gravity filters.

GreensandPlus is a proven technology for iron, manganese, hydrogen sulfide, arsenic and radium removal. Unlike other media, there is no need for extensive preconditioning of filter media or lengthy startup periods during which required water quality may not be met.

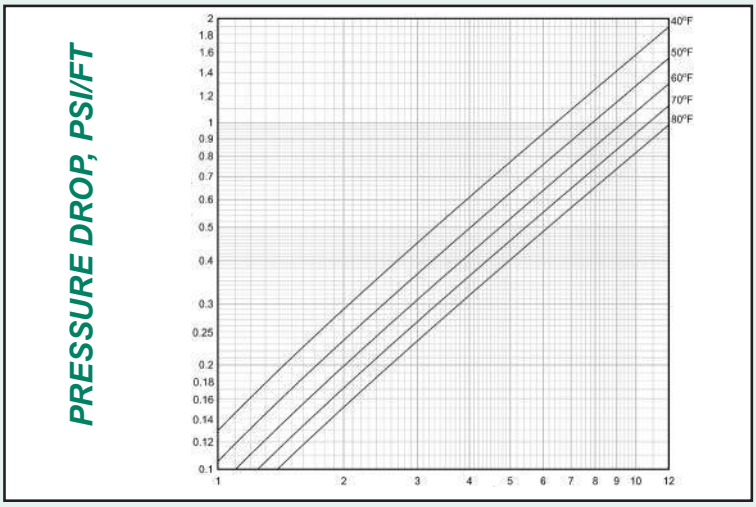
GreensandPlus is an exact replacement for manganese greensand. It can be used in CO or IR applications and requires no changes in backwash rate or times or chemical feeds.

GreensandPlus has the WQA Gold Seal Certification for compliance with NSF/ANSI 61.

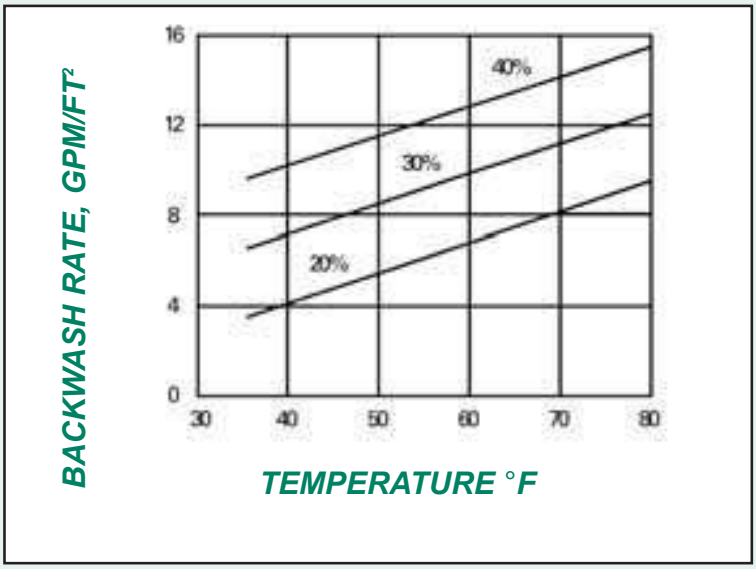
REACH Registration 01-2119452801-43-0020 for import to the EU.

Packaging is available in 1/2 cubic foot bags or 1 metric ton (2,205 lbs) bulk sacks.

GREENSANDPLUS PRESSURE DROP (CLEAN BED)



BED EXPANSION DURING BACKWASHING



PHYSICAL CHARACTERISTICS

Physical Form
Black, nodular granules shipped in a dry form

Apparent Density
88 pounds per cubic foot net (1410.26 kg/m3)

Shipping Weight
90 pounds per cubic foot gross (1442.31 kg/m3)

Specific Gravity
Approximately 2.4

Porosity
Approximately 0.45

Screen Grading (dry)
18 X 60 mesh

Effective Size
0.30 to 0.35 mm

Uniformity Coefficient
Less than 1.60

pH Range
6.2-8.5 (see General Notes)

MaximumT emperature
No limit

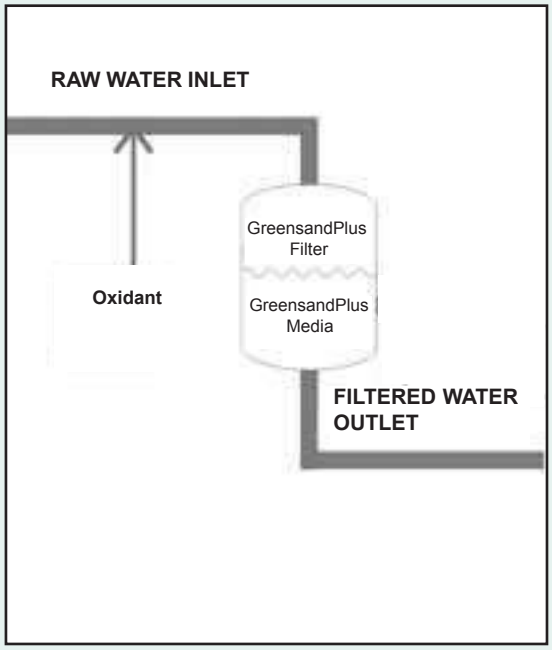
Backwash Rate
Minimum 12 gpm/sq. ft. at 55°F (29.4 m/hr @ 12.78°C) (see expansion chart)

Service Flow Rate
2 -12 gpm/sq. ft (4.9m/hr - 29.4 m/hr)

Minimum Bed Depth
15 inches (381 mm) of each media for dual media beds or 30 inches minimum (762 mm) of GreensandPlus alone.

METHOD OF OPERATION CO

GreensandPlus: Catalytic Oxidation (CO)



Catalytic Oxidation (CO) operation is recommended in applications where iron removal is the main objective in well waters with or without the presence of manganese. This method involves the feeding of a predetermined amount of chlorine (Cl_2) or other strong oxidant directly to the raw water before the GreensandPlus Filter.

Chlorine should be fed at least 10-20 seconds upstream of the filter, or as far upstream of the filter as possible to insure adequate contact time. A free chlorine residual carried through the filter will maintain GreensandPlus in a continuously regenerated condition.

For operation using chlorine, the demand can be estimated as follows:

mg/L Cl_2 = (1 x mg/L Fe) + (3 x mg/L Mn) + (6x mg/L H_2S) + (8 x mg/L NH_3)

SUGGESTED OPERATING CONDITIONS

Bed Type

Dual media: anthracite 15-18 in. (381 mm - 457 mm) and GreensandPlus 15-24 in. (381 mm - 610 mm)

Capacity

700-1200 grains of oxidized iron and manganese/sq.ft. of bed area based on oxidant demand and operation to iron break through or dp limitations.

Backwash

Sufficient rate using treated water to produce 40% bed expansion until waste water is clear, or for 10 minutes, whichever occurs first.

Air/Water Scour

Optional using 0.8-2.0 cfm/sq. ft. (15 m/hr - 7 m/hr) with a simultaneous treated water backwash at 4.0-4.5 gpm/sq. ft. (9.8 m/hr - 11.03 m/hr).

Raw Water Rinse

At normal service flow rate for 3 minutes or until effluent is acceptable.

Flow Rate

Recommended flow rates with CO operation are 2-12 gpm/sq. ft. (4.9 m/hr - 29.4 m/hr). High concentrations of iron and manganese usually require lower flow rates for equivalent run lengths. Higher flow rates can be considered with very low concentrations of iron and manganese. For optimizing design parameters, pilot plant testing is recommended.The run length between backwashes can be estimated as follows:

What is the run length for a water containing 1.7 mg/L iron and 0.3 mg/L manganese at a 4 gpm/sq. ft. service rate:

Contaminant loading

= (1 x mg/L Fe) + (2 x mg/L Mn)
= (1 x 1.7) + (2 x 0.3)
= (2.3 mg/L or 2.3/17.1 = 0.13 grains/gal. (gpg)

At 1,200 grains / sq. ft. loading ÷ 0.13 gpg = 9,230 gal./sq. ft.

At 4 gpm / sq. ft. service rate 9,230/4 = 2,307 min.

The backwash frequency is approximately every 32-38 hours of actual operation.

The Intermittent regeneration (IR) operation is available for certain applications. Contact your Inversand representative for additional information.

GENERAL NOTES

pH

Raw waters having natural pH of 6.2 or above can be filtered through GreensandPlus without pH correction. Raw waters with a pH lower than 6.2 should be pH-corrected to 6.5-6.8 before filtration. Additional alkali should be added following the filters if a pH higher than 6.5-6.8 is desired in the treated water. This prevents the possible adverse reaction and formation of a colloidal precipitate that sometimes occurs with iron and alkali at a pH above 6.8.

Initial Conditioning of GreensandPlus

GreensandPlus media must be backwashed prior to adding the anthracite cap. The GreensandPlus backwash rate must be a minimum of 12 gpm/sq. ft. @ 55°F.

After backwashing is complete, the GreensandPlus must be conditioned. Mix 0.5 gal. (1.9 L) of 6% household bleach or 0.2 gal (0.75 L) of 12% sodium hypochlorite for

Initial Conditioning of GreensandPlus

every 1 cu. ft. (28.3 L cu. m) of GreensandPlus into 6.5 gallons (25 L) of water.

Drain the filter enough to add the diluted chlorine mix. Apply the diluted chlorine to the filter being sure to allow the solution to contact the GreensandPlus media. Let soak for a minimum of 4 hours, then rinse to waste until the “free” chlorine residual is less than 0.2 mg/L. The GreensandPlus is now ready for service.

Radium and Arsenic Removal Using GreensandPlus

The GreensandPlus CO process has been found to be successful in removing radium and arsenic from well water. This occurs via adsorption onto the manganese and/or iron precipitates that are formed. For radium removal, soluble manganese must be present in or added to the raw water for removal to occur. Arsenic removal requires iron to be present in or added to the raw water to accomplish removal. Pilot plant testing is recommended in either case.

REFERENCES

USA

American Water Company, CA
San Jacinto, CA
City of Tallahassee, FL
Adedge Technologies, Inc., Buford, GA
City of Mason City, IL
City of Goshen, IN
City of Hutchinson, KS
City of Burlington, MA
Dedham Water Co., MA
Raynham Center, MA
Northbrook Farms, MD
Sykesville, MD
Tonka Equipment Company, Plymouth, MN
City of New Bern, NC
Onslow County, NC
Hungerford & Terry, Inc., Clayton, NJ
Fort Dix, NJ
Jackson Twsp. MUA, NJ

USA

Churchill County, NV
Suffolk County Water Authority, NY
City of Urbana, OH
Roberts Filter Group, Darby, PA

International

Watergroup, Saskatoon, SK Canada
BI Pure Water, Surrey, BC Canada
Sydney, Nova Scotia, Canada
PT Beta Pramesta, Jakarta, Indonesia
PT Besflo Prima, Jakarta, Indonesia
Eurotrol, Milanese, Italy
Gargon Industrial, Mexico City, Mexico
River Sands Pty. Ltd., Queensland, Australia
Filtration Tech, Auckland, New Zealand
Alamo Water Poland, Izabeln, Poland
Aquatrol Company, Moscow, Russia
Impulse Group, St. Petersburg, Russia
Brenntag Nordic, Taby, Sweden
EcoFilter Technology, Liechtenstein



The manufacturing of GreensandPlus is an ongoing, 24/7 process to ensure the highest quality water treatment media.

REACH Registration
01-2119452801-43-0020
for import to the EU.

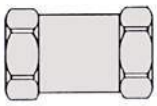
Distributed by:

Inversand Company
SINCE 1925
226 Atlantic Avenue • P.O. Box 650
Clayton, NJ 08312 USA
T: 856-881-2345 • F: 856-881-6859
E:info@inversand.com •**www.inversand.com**

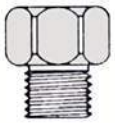
Dole Flow Control Valve Features:

- Prevents over-pumping of low yield wells.
- Installs in the discharge line between check valve and pressure tank.
- Do not use to suspend pipe.
- Self cleaning, designed to deliver constant volume of water over wide pressure drop range.
- Flow rated maintained within +/- 15% up to a pressure drop of 125 psi.
- Maximum system pressure 200 psi.
- Lead Free.

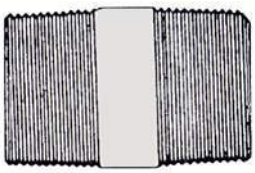
* NO LEAD < 0.25% Pb by weighted avg. Third Party Certified to NSF / ANSI 372



GA, GB, GC, GX Series *
3/8" - 1"fipt
Brass Housing/
Nickle Plated

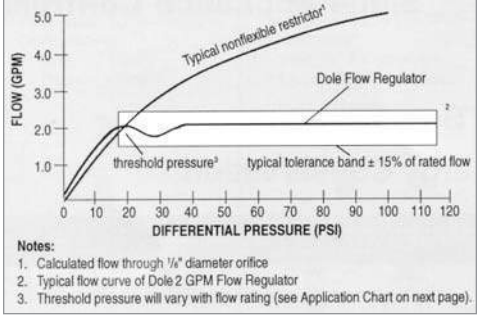


GY Series
3/4 mipt" x 3/4"fipt
Brass Housing/
Nickle Plated



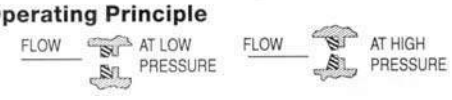
GP GT, GF, GH, GK
Series
1 1/4" - 3" mipt
Steel Housing/
Zinc Plated

Flow Characteristics



Notes:
1. Calculated flow through 1/4" diameter orifice
2. Typical flow curve of Dole 2 GPM Flow Regulator
3. Threshold pressure will vary with flow rating (see Application Chart on next page).

Operating Principle



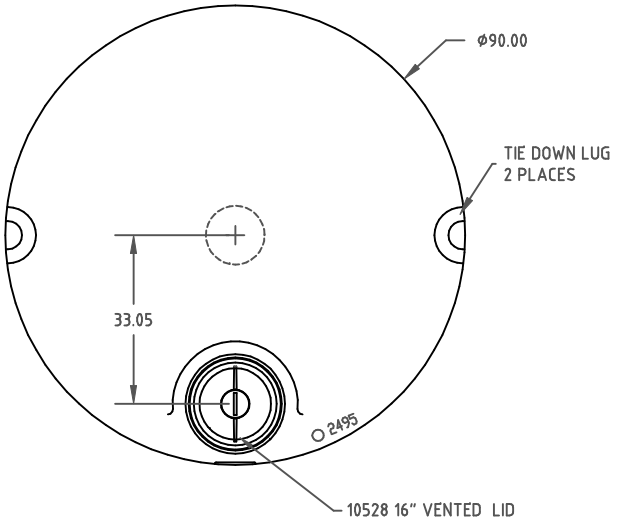
	NEW Part Number	OLD	Flow (GPM)	Inlet/ Outlet	List Price
	Brass Housing/Nickel Plated				
*	GA.06		0.06	3/8" FIPT	$ 30.28
	GA.13	DV.13	0.13	3/8" fipt	30.28
	GA.19	DV.19	0.19	3/8" fipt	30.28
	GA.25	DV2.5	0.25	3/8" fipt	30.28
	GA.35		0.35	3/8" fipt	30.28
	GA.50	DV5	0.50	3/8" fipt	30.28
	GA.75	DV75	0.75	3/8" fipt	30.28
	GA1.0	DV10	1.0	3/8" fipt	30.28
*	GB1.0	DV10-1/2	1.0	1/2" fipt	35.21
	GB1.5	DV15	1.5	1/2" fipt	35.21
	GB2.0	DV20	2.0	1/2" fipt	35.21
	GB2.5	DV25	2.5	1/2" fipt	35.21
	GB3.0	DV30	3.0	1/2" fipt	35.21
	GB3.5	DV35	3.5	1/2" fipt	35.21
	GB4.0	DV40	4.0	1/2" fipt	35.21
	GB5.0	DV50-1/2	5.0	1/2" fipt	35.21
	GB6.0	DV60-1/2	6.0	1/2" fipt	35.21
*	GC1	DV1.0	1.0	3/4" fipt	46.59
	GC1.5		1.5	3/4" fipt	46.59
	GC2.0	DV2.0	2.0	3/4" fipt	46.59
	GC2.5	DV2.5-3/4	2.5	3/4" fipt	46.59
	GC3.0	DV30-3/4	3.0	3/4" fipt	46.59
	GC3.5	DV3.5-3/4	3.5	3/4" fipt	46.59
	GC4.0	DV40-3/4	4.0	3/4" fipt	46.59
	GC5.0	DV50	5.0	3/4" fipt	46.59
	GC6.0	DV60	6.0	3/4" fipt	46.59
	GC7.0	DV70	7.0	3/4" fipt	46.59
	GC8.0	DV80	8.0	3/4" fipt	46.59
	GC9.0	DV90	9.0	3/4" fipt	46.59
	GC10	DV100	10.0	3/4" fipt	46.59
	GC11.5	DV115	11.5	3/4" fipt	46.59
*	GY1.0	DV1-3/4MXF	1.0	3/4"mipt x fipt	63.63
	GY1.5	DV1.5-3/4MXF	1.5	3/4"mipt x fipt	63.63
	GY2.0	DV2-3/4MXF	2.0	3/4"mipt x fipt	63.63
	GY2.5	DV2.5-3/4MXF	2.5	3/4"mipt x fipt	63.63
	GY3.0	DV3-3/4MXF	3.0	3/4"mipt x fipt	63.63
	GY3.5	DV3.5-3/4MXF	3.5	3/4"mipt x fipt	63.63
	GY4.0	DV4-3/4MXF	4.0	3/4"mipt x fipt	63.63
	GY5.0	DV5-3/4MXF	5.0	3/4"mipt x fipt	63.63
	GY6.0	DV6-3/4MXF	6.0	3/4"mipt x fipt	63.63
	GY7.0	DV7-3/4MXF	7.0	3/4"mipt x fipt	63.63

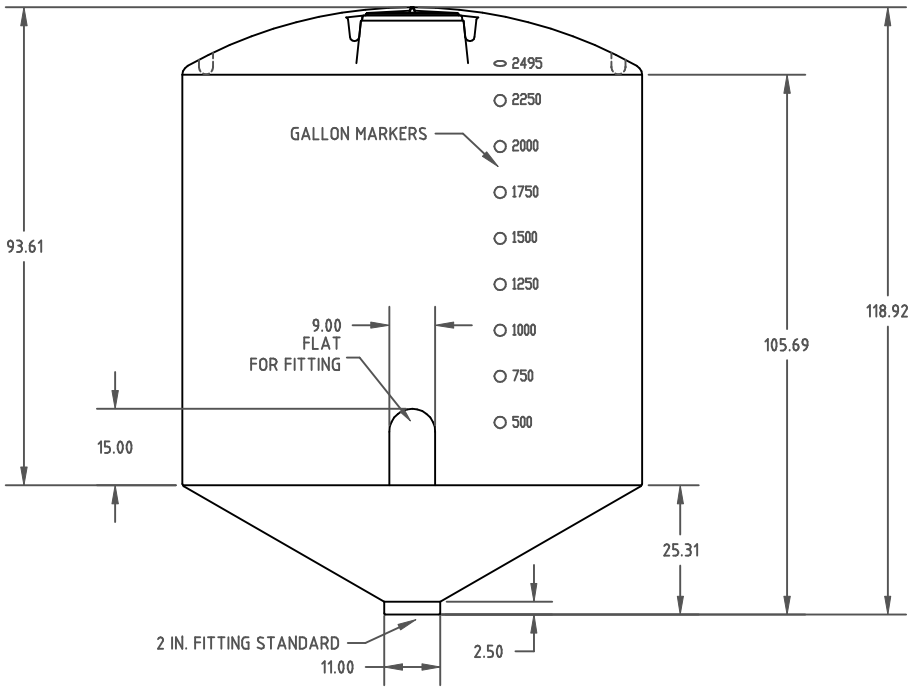
Flow Control Valves - Dole

	NEW Part Number	OLD	Flow (GPM)	Inlet/ Outlet	List Price
	GY8.0	DV8-3/4MXF	8.0	3/4"mipt x fipt	$ 63.63
	GY9.0	DV9-3/4MXF	9.0	3/4"mipt x fipt	63.63
	GY10	DV10-3/4MXF	10.0	3/4"mipt x fipt	63.63
	GY11.5		11.5	3/4"mipt x fipt	63.63
*	GX1.0	DV10-1	1.0	1" fipt	74.85
	GX1.5	DV15-1	1.5	1" fipt	74.85
	GX2.0	DV20-1	2.0	1" fipt	74.85
	GX2.5	DV25-1	2.5	1" fipt	74.85
	GX3.0	DV30-1	3.0	1" fipt	74.85
	GX3.5	DV35-1	3.5	1" fipt	74.85
	GX4.0	DV40-1	4.0	1" fipt	74.85
	GX5.0	DV50-1	5.0	1" fipt	74.85
	GX6.0	DV60-1	6.0	1" fipt	74.85
	GX7.0	DV70-1	7.0	1" fpt	74.85
	GX8.0	DV80-1	8.0	1" fpt	74.85
	GX9.0	DV90-1	9.0	1" fpt	74.85
	GX10	DV100-1	10.0	1" fipt	74.85
	GX12	DV120	12.0	1" fipt	74.85
	GX13.5	DV135-1	13.5	1" fipt	74.85
	GX15	DV150	15.0	1" fipt	74.85
	GX20	DV200	20.0	1" fipt	74.85
	GX25	DV250	25.0	1" fipt	74.85
	GX30	DV300	30.0	1" fipt	74.85
	Steel Housing/Zinc Plated				
	GP1.0	DV1.0-11/4	1.0	1 1/4" mipt	135.47
	GP1.5		1.5	1 1/4" mipt	135.47
	GP2.0		2.0	1 1/4" mipt	135.47
	GP2.5		2.5	1 1/4" mipt	135.47
	GP3.0		3.0	1 1/4" mipt	135.47
	GP3.5		3.5	1 1/4" mipt	135.47
	GP4.0		4.0	1 1/4" mipt	135.47
	GP5.0		5.0	1 1/4" mipt	135.47
	GP6.0		6.0	1 1/4" mipt	135.47
	GP7.0	DV75-11/4	7.0	1 1/4" mipt	135.47
	GP8.0		8.0	1 1/4" mipt	135.47
	GP9.0		9.0	1 1/4" mipt	135.47
	GP10	DV10-11/4	10.0	1 1/4" mipt	135.47
	GP12	DV12-11/4	12.0	1 1/4" mipt	135.47
	GP13.5		13.5	1 1/4" mipt	135.47
	GP15	DV15-11/4	15.0	1 1/4" mipt	135.47
	GP20	DV20-11/4	20.0	1 1/4" mipt	135.47
	GP25	DV25-11/4	25.0	1 1/4" mipt	135.47
	GP30	DV30-11/4	30.0	1 1/4" mipt	135.47
	GT1.0		1.0	1 1/2" mipt	150.05
	GT1.5		1.5	1 1/2" mipt	150.05
	GT2.0	DV2-11/2	2.0	1 1/2" mipt	150.05
	GT2.5		2.5	1 1/2" mipt	150.05
	GT3.0		3.0	1 1/2" mipt	150.05
	GT3.5		3.5	1 1/2" mipt	150.05
	GT4.0		4.0	1 1/2" mipt	150.05
	GT5.0	DV5-11/2	5.0	1 1/2" mipt	150.05

NEW Part Number	OLD	Flow (GPM)	Inlet/ Outlet	List Price
Steel Housing/Zinc Plated				
GT6.0		6.0	1 1/2" mipt	$ 150.05
GT7.0	DV7-11/2	7.0	1 1/2" mipt	150.05
GT8.0		8.0	1 1/2" mipt	150.05
GT9.0	DV9-11/2	9.0	1 1/2" mipt	150.05
GT10	DV10-11/2	10.0	1 1/2" mipt	150.05
GT12		12.0	1 1/2" mipt	150.05
GT13.5		13.5	1 1/2" mipt	150.05
GT15	DV15-11/2	15.0	1 1/2" mipt	150.05
GT20	DV20-11/2	20.0	1 1/2" mipt	150.05
GT25	DV25-11/2	25.0	1 1/2" mipt	150.05
GT30	DV30-11/2	30.0	1 1/2" mipt	150.05
GF10	DV10-2	10.0	2" mipt	255.85
GF11.5		11.5	2" mipt	255.85
GF12	DV12-2	12.0	2" mipt	255.85
GF13.5	DV135-2	13.5	2" mipt	255.85
GF15		15.0	2" mipt	255.85
GF20	DV20-2	20.0	2" mipt	255.85
GF25		25.0	2" mipt	255.85
GF30	DV30-2	30.0	2" mipt	255.85
GH30		30.0	2-1/2" mipt	566.99
GH35	DV350	35.0	2-1/2" mipt	566.99
GH40	DV400	40.0	2-1/2" mipt	566.99
GH45	DV450	45.0	2-1/2" mipt	566.99
GH50	DV500	50.0	2-1/2" mipt	566.99
GH55	DV550	55.0	2 1/2" mipt	566.99
GH60	DV600	60.0	2-1/2" mipt	566.99
GH65	DV650	65.0	2-1/2" mipt	566.99
GH70	DV700	70.0	2-1/2" mipt	566.99
GH75	DV750	75.0	2-1/2" mipt	566.99
GH80	DV800	80.0	2-1/2" mipt	566.99
GH85		85.0	2-1/2" mipt	566.99
GH90	DV900	90.0	2 1/2" mipt	566.99
GK30		30.0	3" mipt	589.49
GK35	DV3500	35.0	3" mipt	589.49
GK40	DV4000	40.0	3" mipt	589.49
GK45	DV4500	45.0	3" mipt	589.49
GK50		50.0	3" mipt	589.49
GK55	DV5500	55.0	3" mipt	589.49
GK60		60.0	3" mipt	589.49
GK65	DV6500	65.0	3" mipt	589.49
GK70		70.0	3" mipt	589.49
GK75		75.0	3" mipt	589.49
GK80		80.0	3" mipt	589.49
GK85	DV8500	85.0	3" mipt	589.49
GK90		90.0	3" mipt	589.49
GK95		95.0	3" mipt	589.49
GK100	DV1000	100.0	3" mipt	589.49
GK105		105.0	3" mipt	589.49
GK110		110.0	3" mipt	589.49
GK115		115.0	3" mipt	589.49
GK120	DV1200	120.0	3" mipt	589.49

CB2495-90





REV	DESCRIPTION	BY / DATE	CCN

ALL DIMENSIONS ARE IN DECIMAL INCHES
TOLERANCES UNLESS OTHERWISE SPECIFIED

POLYETHYLENE	METAL
±1% @ 68° F	DECIMAL ± .125" FRACTION ± 1/4" ANGLE ± 1°

THIRD ANGLE PROJECTION
ANSI 14.5M

DRAWN / DATE: DHJ 3/25/11

APPRD. / DATE: REH 5/10/11

SHOT WEIGHT: 485 LBS.

SHIPPING WEIGHT: 487 LBS.

FINISH:

MATERIAL: 10420

NOTES:
1. .390 THICKNESS AT BOTTOM SIDE WALL

Den Hartog
INDUSTRIES, INC.
Ace Roto-Mold Injection Molding Blow Molding Sowjoy
4010 HOSPERS DRIVE S. BOX 425, HOSPERS, IOWA 51238-0425

DESCRIPTION: 2495 GALLON X 30 ° CONE BOTTOM TANK

SCALE: N.S.

PART NO.: CB2495-90

CR, CRI, CRN

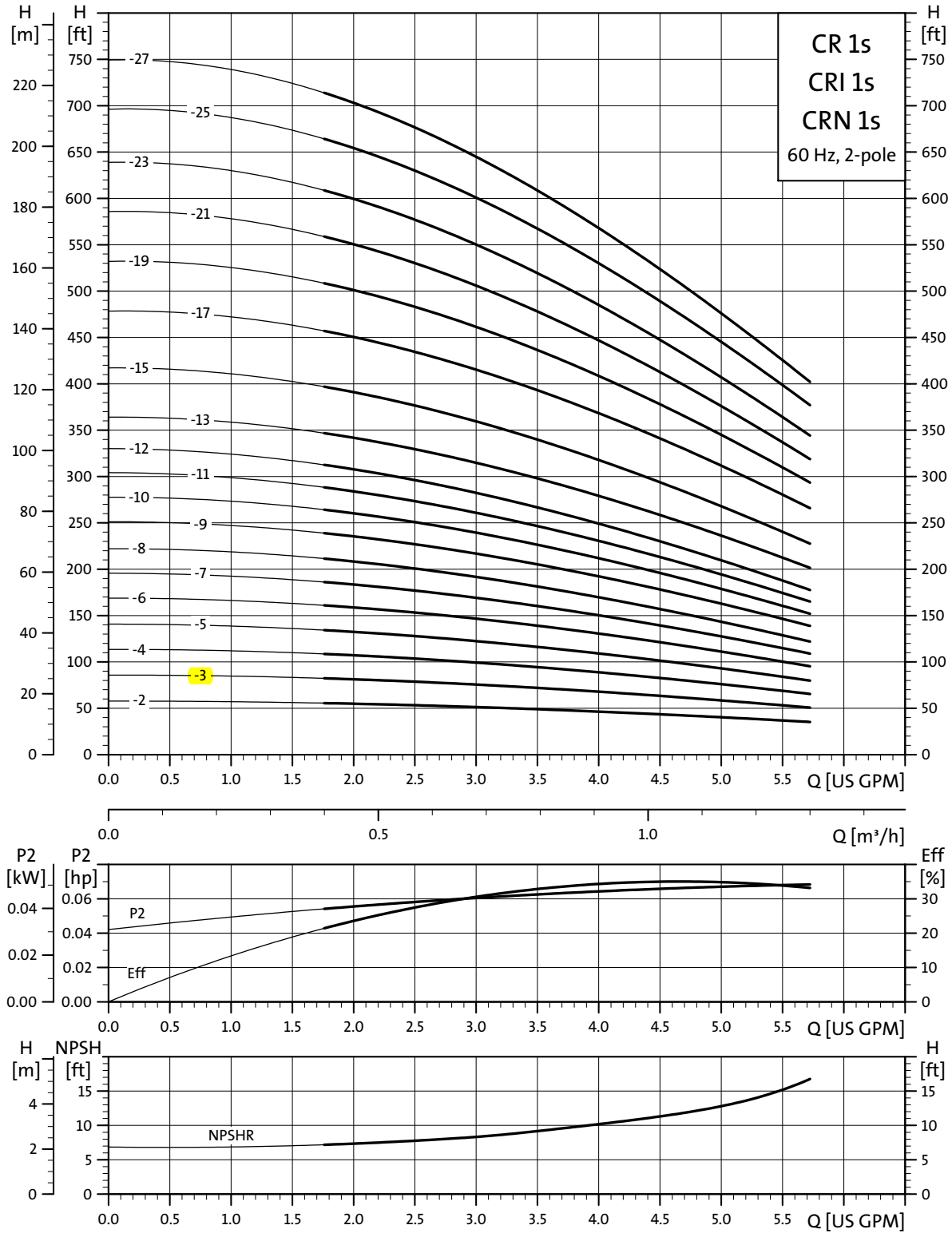
Vertical multistage centrifugal pumps
60 Hz

be
think
innovate

GRUNDFOS

9. Performance curves

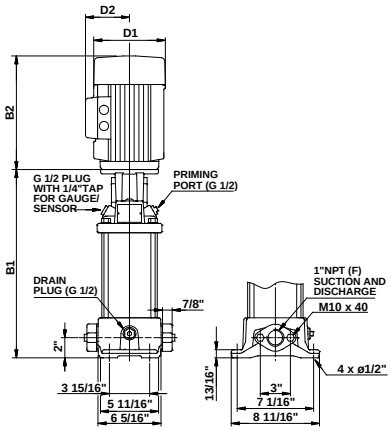
CR, CRI, CRN 1s



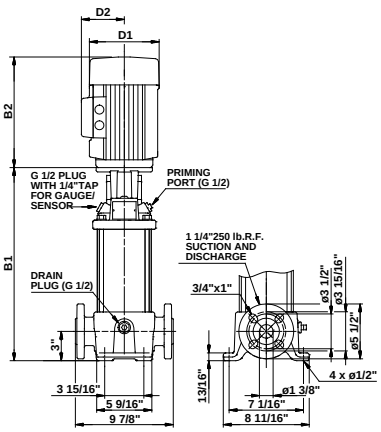
TM02 5741 4719

10. Technical data

CR 1s



TM03 1450 2205



TM03 1451 2205

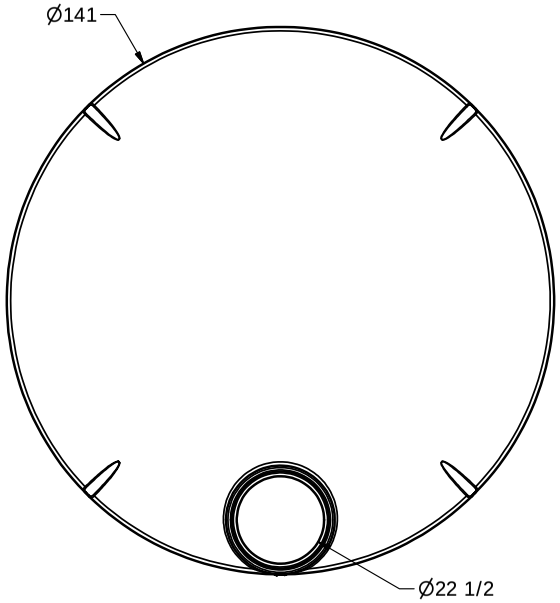
Pump type	P2 [HP]	Ph.	Oval*	ANSI dimensions [inch (mm)]				Net wt. [lb (kg)]
				B1	TEFC			
					D1	D2	B1+B2	
CR 1s-2	1/3	1	•	11.97 (304)	6.64 (169)	5.52 (140)	21.01 (534)	58.20 (26)
		3	•	11.97 (304)	6.69 (170)	5.52 (140)	20.23 (514)	54.45 (25)
CR 1s-3	1/3	1	•	11.97 (304)	6.64 (169)	5.52 (140)	21.01 (534)	58.64 (27)
		3	•	11.97 (304)	6.69 (170)	5.52 (140)	20.23 (514)	54.90 (25)
CR 1s-4	1/3	1	•	12.68 (322)	6.64 (169)	5.52 (140)	21.72 (552)	59.52 (27)
		3	•	12.68 (322)	6.69 (170)	5.52 (140)	20.93 (532)	55.78 (25)
CR 1s-5	1/3	1	•	13.39 (340)	6.64 (169)	5.52 (140)	22.43 (570)	60.41 (27)
		3	•	13.39 (340)	6.69 (170)	5.52 (140)	21.64 (550)	56.66 (26)
CR 1s-6	1/2	1	•	14.09 (358)	6.64 (169)	5.52 (140)	23.53 (598)	63.05 (29)
		3	•	14.09 (358)	6.69 (170)	5.52 (140)	22.75 (578)	59.97 (27)
CR 1s-7	1/2	1	•	14.80 (376)	6.64 (169)	5.52 (140)	24.24 (616)	63.93 (29)
		3	•	14.80 (376)	6.69 (170)	5.52 (140)	23.45 (596)	60.85 (28)
CR 1s-8	1/2	1	•	15.51 (394)	6.64 (169)	5.52 (140)	24.95 (634)	64.82 (29)
		3	•	15.51 (394)	6.69 (170)	5.52 (140)	24.16 (614)	61.73 (28)
CR 1s-9	3/4	1	•	16.22 (412)	7.64 (194)	5.88 (149)	27.50 (699)	71.87 (33)
		3	•	16.22 (412)	6.69 (170)	5.52 (140)	24.87 (632)	63.71 (29)
CR 1s-10	3/4	1	•	16.93 (430)	7.64 (194)	5.88 (149)	28.21 (717)	72.75 (33)
		3	•	16.93 (430)	6.69 (170)	5.52 (140)	25.58 (650)	64.60 (29)
CR 1s-11	3/4	1	•	17.64 (448)	7.64 (194)	5.88 (149)	28.92 (735)	73.41 (33)
		3	•	17.64 (448)	6.69 (170)	5.52 (140)	26.29 (668)	65.26 (30)
CR 1s-12	3/4	1	•	18.35 (466)	7.64 (194)	5.88 (149)	29.63 (753)	74.30 (34)
		3	•	18.35 (466)	6.69 (170)	5.52 (140)	27.00 (686)	66.14 (30)
CR 1s-13	1	1	•	19.06 (484)	7.64 (194)	5.88 (149)	30.73 (781)	77.38 (35)
		3	•	19.06 (484)	6.69 (170)	5.52 (140)	28.10 (714)	70.33 (32)
CR 1s-15	1	1	•	20.47 (520)	7.64 (194)	5.88 (149)	32.15 (817)	78.93 (36)
		3	•	20.47 (520)	6.69 (170)	5.52 (140)	29.52 (750)	71.87 (33)
CR 1s-17	1 1/2	1	•	21.89 (556)	7.64 (194)	5.88 (149)	34.35 (873)	84.22 (38)
		3	•	21.89 (556)	7.64 (194)	5.88 (149)	33.57 (853)	86.42 (39)
CR 1s-19	1 1/2	1	-	23.31 (592)	7.64 (194)	5.88 (149)	35.77 (909)	85.98 (39)
		3	-	23.31 (592)	7.64 (194)	5.88 (149)	34.98 (889)	88.18 (40)
CR 1s-21	1 1/2	1	-	24.72 (628)	7.64 (194)	5.88 (149)	37.19 (945)	87.74 (40)
		3	-	24.72 (628)	7.64 (194)	5.88 (149)	36.40 (925)	89.95 (41)
CR 1s-23	1 1/2	1	-	26.14 (664)	7.64 (194)	5.88 (149)	38.60 (981)	89.51 (41)
		3	-	26.14 (664)	7.64 (194)	5.88 (149)	37.82 (961)	91.71 (42)
CR 1s-25	2	1	-	27.56 (700)	7.64 (194)	5.88 (149)	40.42 (1027)	94.58 (43)
		3	-	27.56 (700)	7.64 (194)	5.88 (149)	40.02 (1017)	100.0 (45)
CR 1s-27	2	1	-	28.98 (736)	7.64 (194)	5.88 (149)	41.83 (1063)	96.34 (44)
		3	-	28.98 (736)	7.64 (194)	5.88 (149)	41.44 (1053)	101.8 (46)

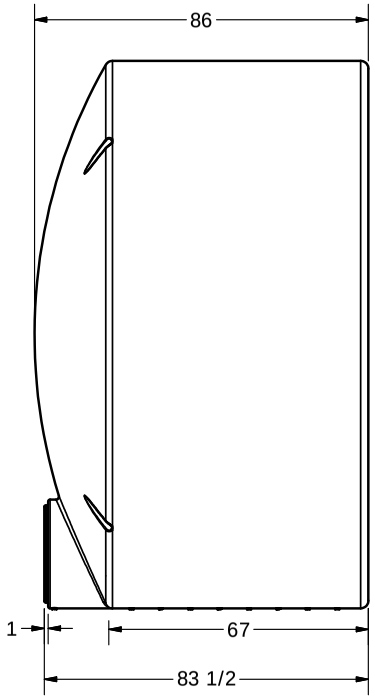
All dimensions in inches unless otherwise noted.

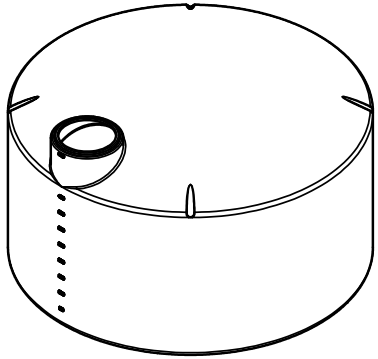
* Oval flanged pump B1 and B1+B2 dimensions are one inch less than ANSI flanged pump and the weight is approximately 9 lb less.

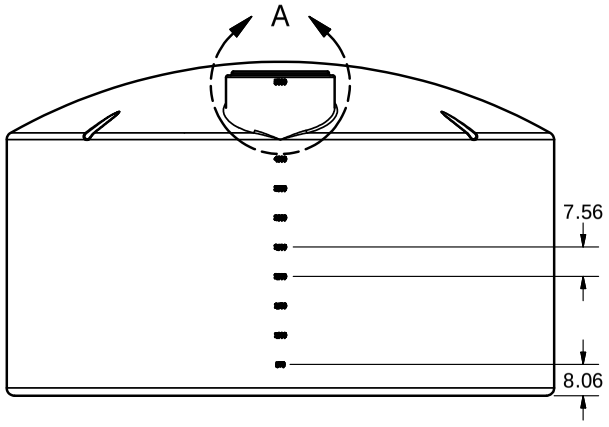
• Available.

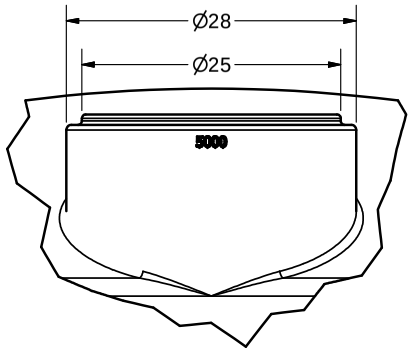
REVISION HISTORY			
REV	DESCRIPTION	DATE	AUTHOR
A	REVISED MANWAY FOR 22 LID	8/10/2009	Jerry Paulson











DETAIL A
SCALE 1/12

DRAWN	Jerry Paulson	8/10/2009
CHECKED		
QA		
MFG		
APPROVED		

NORWESCO, INC., ST. BONIFACIUS, MN

TITLE

5000 GALLON X 141 DIAMETER VERTICAL WATER TANK, 22 INCH LID (TUNA CAN)

SIZE	DWG NO	REV
B		A

SCALE: 1/16 SHEET 1 OF 1

Product Overview

Description:

5000 Gallon Vertical Plastic Storage Tank

Norwesco Industries is a leading North American manufacturer of proprietary rotationally molded polyethylene tanks for above ground water & liquid storage applications.

Vertical Tank Specifications:	
Lid Size:	16" Manway (63485)
Inlet:	N/A
Outlet:	3" polypropylene threaded bulkhead fitting (62299) with 2" reducer (60330) siphon tube (60327)
Specific Gravity:	1.5 (12.50 lbs. per gallon)
FDA Approved:	Yes
Gallon Markers:	Yes
UV Inhibitors	Yes
Colors:	Natural White, Black
Tie Down Lugs:	No
Translucent:	Yes (White Only)
ANSI / NSF 61 Approved Resin:	Yes
NSF Sticker Available:	California (Must Be Requested)
Additional Fittings:	Available By Request
Usage:	Liquids, Potable Water

Vertical Plastic Storage Tanks are for storage and are not designed to be pressurized.