Henry P. Roybal
Commissioner, District 1

Anna Hansen
Commissioner, District 2

Robert A. Anaya
Commissioner, District 3

Anna T. Hamilton
Commissioner, District 4

Ed Moreno
Commissioner, District 5

Katherine Miller
County Manager

September 17, 2018

SANTA FE COUNTY
RFP NO. 2019-0016-CMO/BT
DESIGN BUILD PROJECT DELIVERY SERVICES
SANTA FE COUNTY WATER RECLAMATION FACILITY (SFCWRF)

ADDENDUM NO. 5

Dear Proponents,

This addendum is issued to reflect the following immediately. It shall be the responsibility of interested Offerors to adhere to any changes or revisions to the RFP as identified in this Addendum No. 5. This documentation shall become permanent and made part of the departmental files.

Pursuant to IV. Evaluation Process, Section B. Phase II Documents, Subsections 1 – 7 of the RFP, please read and understand the following Phase II Submittal requirements:

Section 1:
Design-Build (D-B) Teams will submit two packets. Volume I and Volume II packets. Volume I will be specific to responses to the criteria factors listed in Section B.1 Phase II Evaluation Criteria. Volume II submittal packet is in response to Cost and Schedule criteria factor. Volume II will not count against the Volume page limit.
The scores from the Phase I response to Project Staffing and Past Performance will carry over to Phase II criteria, unless conditions changed. If conditions remain the same, the D-B Team must provide a response stating conditions have remained.
A Transmittal or Submittal letter is not required for Phase II Submittal.
The Campaign Contribution Disclosure form is not required for Phase II Submittal.
Cost proposals will include established wage rates, mark-up for profit, overhead, general conditions, design and related costs regarding the Contractors direct construction costs, including those costs associated with any subcontractor's or supplier's direct labor, equipment, and/or material costs.
All communication during Phase II will remain directed to the County Purchasing Office.
Certificates of Insurance must meet requirements of liability and professional liability (Errors and Omissions) as outlined in the RFP from both the General Contractor and Engineer.

Section 2: Preliminary Engineering Report is the detailed program document being utilized for this procurement.

Section 3: Staging area site map and specific requirements for Contractor's field office, Project Manager's field office and other logistics/staging requirements.

RESPONSE – The Contractor will determine the most suitable location for their field office. There are no restrictions on the use of the existing site. The Contractor will establish the location of their project office based on the proposed Water Reclamation Facility Site Layout, construction material storage areas and required access, access for County Utilities Personnel to the current Wastewater Treatment Facility (i.e. lagoons, irrigation system, tail water intake structure, etc.) means and methods for construction of the new facility.

Section 4: General requirements for the Project including the requirements for working in and around the project, specific requirements for project signage, and specific requirements for interfacing with the County and Using Agency staff.

RESPONSE – The only requirements for working in or around the project are those established by the Department of Corrections. It is my understanding that the work hours are Monday through Friday between 7:00 am and 6:00 pm. Holidays are not included in the work schedule. There are no requirements for project signage other than what is required by the New Mexico Department of Labor regarding posting of information. The Contractor will interface directly with the Designated County Project Manager (or Owners Representative) and that individual will be responsible to the County Project Team for maintaining lines of communication, providing project administration and documenting the project history. In this case the Using Agency Staff would be the County Public Works Department Director and his designated staff.

Section 5: Outline of specifications to help guide the Offeror's with materials selections and setting standards of quality.

RESPONSE – The specifications will have to be developed by the Contractor for approval by the Project Team. The proposed materials will also have to be approved through a material submittal review process. The standards of quality will be established through the Contractors Quality Control Process.

Section 6: The Bid/Proposal Form for Volume II packet submittal is attached. The proposal will include lump sum amount including design and construction, excluding NMGRT. Also included in cost is all percentage of mark-up for profit, overhead, general conditions, design and related costs.
In addition, the proposal shall include the project schedule, including the start and completion dates for all major activities and phased work, to include design, design reviews and approvals, permits and other agency reviews and approvals, construction by major activity, punch list and completion.

Section 7: All Owner provided information has been provided through the Preliminary Engineering Report and documents via flash drive format provided to each D-B Team on 9/12/18.

DESIGN SOLUTION PRESENTATIONS
Thursday, October 18, 2018
Projects Conference Room
901 W. Alameda Suite 20-C, Santa Fe, NM

9:00AM to 10:15AM	RMCI/Molzen Corbin
10:30AM to 11:45AM	Integrated Water/SMA
Lunch	
1:00PM to 2:15PM	HDR
2:30PM– 4:00PM	Committee deliberations and selection

Attachment A:	**Price Proposal/Project Cost Sheet**
Attachment B:	**DBIA Change Order form**
Attachment C:	**Water Reclamation Facility Map of Property Boundaries**
Attachment D:	**Site Visit September 17, 2018 Sign in Sheet**
Attachment E:	**Sample Report**

Question No. 1: We are requesting the bid date be moved 2 weeks. Typically for a treatment plant we get 5 weeks to bid the project and that is with owner supplied bid docs. This project we have to develop plans and specs to a degree that it can be bid. Also, we have not received the Phase II SOW yet.

Answer No. 1: The deadline to submit proposals has been extended. Please refer to Addendum 4.

Question No. 2: Are covers required for the process basins? Airborne debris such as tumbleweeds will get into the basins and clog the membranes. Please clarify

Answer No. 2: Yes, covers will be required.

Question No. 3: Will the future capacity be 1 or 2 MGD? Please clarify.

Answer No. 3: The initial construction is based on 0.5 MGD with the intent of having the capability to be expandable in increments up to 2 MGD, within the limits of the project budget.

Question No. 4: Does the maximum price of $7.75 million include NMGRT? There is contradictory language in phase 1. Please clarify.

Answer No. 4: The project budget is $7.75 million, exclusive of NMGRT.

Question No. 5: Permit limits – Is the County willing to enter discussions with NMED and EPA to try to get the anticipated Tier 2 limits changed from the current anticipated requirements? The conversations would be to identify and understand the statement of basis surrounding the instreams water quality standards, and the assumptions being made that are driving these proposed limits. A limit of 1 mg/l for phosphorus is not unreasonable but to meet a limit of 3 mg/l for total nitrogen seems excessively strict and the plants meeting this limit typically have five stages. In addition, carbon has to be added which can be very expensive and difficult to do. These do not appear in the HDR report or cost breakdown.

Answer No. 5: The existing facility has an established Effluent disposal method with NMED to discharging onto an Irrigation field. With the expected higher quality Effluent discharge this will allow larger volumes of effluent to be disbursed onto the irrigation field, if conditions dictate.

Question No. 6: How closely must the design solution conform to the HDR PER Proposed Project? We have identified potential cost saving measures and alternatives that do not necessarily align all components with the PER.

Answer No. 6: The Engineering Preliminary Engineering Report (PER) are concept recommendations to provide performance standards for the design solution. The County will consider any cost savings design or measures that will meet the performance standards described in the RFP and PER.

Question No. 7: Plant sizing – design and construction of a WWTP capable of expanding from 0.5 MGD to 1.0 MGD is significantly different than expansion from 0.5 MGD to 2.0 MGD as the original plant must be designed to allow the expansion to happen economically. Will the County clarify a final buildout of the plant for 1.0 MGD or 2.0 MGD?

Answer No. 7: The initial build out for this system is 0.5 MGD, with the capability of expansion up to 2.0 MGD. The Design-Build Team is to propose a design solution that will maximize expansion capabilities of the plant.

Question No. 8: Budget – the MACC does not align with the cost of the proposed project in the PER. Additionally, we don't agree with the design completeness and estimated costs of the proposed project budget in the PER for the scope of the project described in the RFQ. Will the County consider or be identifying additional funding for the project if the complete scope of work cannot be provided for the MACC?

Answer No. 8: The budget for this project is $7.7M. The County expects design solutions that meet that project budget. It is the discretion of each Offeror to determine whether or not to submit a design solution for the designated budget.

Question No. 9: Is the County willing to extend the proposal submittal deadline? We are concerned that there is information missing from the PER and RFQ that is required to formulate a complete design and offer a competitive price.

Answer No. 9: Please refer to Addendum No. 4 the deadline has been extended.

Question No. 10: What is the page limit for the submittal? Will the County be expecting submittal of design drawings that correlate to the cost proposal within that page limit?

Answer No. 10: The page limit is 25 pages and pertains specifically to the responses to the criteria factors. The design drawings associated with the design solution being proposed should also be included in the Cost Proposal and Schedule volume, as well as part of the response to Criteria Factor No. 3, "Quality of Design Solution, including technical submittals". Cost and schedule submittals will not count against the page limit.

Question No. 11: What utilities currently exist at the facility? Can you provide a map with electric, gas, potable water and data/communications infrastructure?

Answer No. 11: All Site Drawings have been provided. The awarded D-B Team will be responsible to locate, identify, eliminate, and remove all utilities, process piping, and structures that are within the project site location hindering the completion of this project.

Question No. 12: Are there any requirements and/or limits for the amount of work subcontracted for the contract? Please define how much the General Contractor must self-perform for the contract, and what self-performing consists of for this project.

Answer No. 12: The project does not specify limits on the amount of work performed by subcontracts. That is determined by the GC.

Question No. 13: Is a bidder allowed to change the project team for the Phase 2 submittal, i.e. replace or add members of the proposed team? If we have new/additional information regarding Project Staffing and Past Record of Performance to submit for the Phase 2 proposal, will the page limit be inclusive of the new information?

Answer No. 13: Yes, and yes.

Question No. 14: Can the County provide any geotechnical information for the site from past projects, e.g. construction of the corrections facility or the existing wastewater treatment lagoon or headworks?

Answer No. 14: The County has provided all information available.

Question No. 15: Please clarify the points described to be awarded during/after the Interviews: will these be in addition to, or in place of, the points awarded for the Phase 2 proposal evaluation categories?

Answer No. 15: As stated in the RFP, only the points earned in Phase I evaluation for Project Staffing and Past Record of Performance will carry over to Phase II, unless conditions changed for these two factors and are modified.

Question No. 16: a. Please clarify how Cost will be scored and when it will be taken into consideration if Schedule is to be addressed during the Interviews but Cost will not be part of the presentation?
b. Additionally, how will the completeness of scope of work be scored
c. We anticipate that the proposals will be similar in price but the scope of work will vary based on what contractors will be able to deliver within the MACC.

Answer No. 16: a. The lowest cost will receive a total of 300 points. The next lowest cost will receive a percentage of the 300 points using the formula as described: Lowest Cost/next higher price = %...300 pts X % = pts for next higher cost.
b. The committee will evaluate the completeness of the scope together with the design solution.
c. The committee will obviously take this into account, but the formula above with be used for assigning the points. This is a qualification-based selection for best value. The County will evaluate the proposals based on the best value that can be obtained within the available funding and most reasonable schedule.

Question No. 17: a. Will life cycle cost or O&M costs be part of any scoring criteria?
b. What warranty period does the County want incorporated into the project for equipment and facilities?

Answer No. 17: a. The cost will be scored as described above and in the RFP.
b. The Design-Build should provide a warranty period in their proposal. Basic performance standards should be met.

Question No. 18: Please provide a summary of the sample analysis of plant influent. We would like to see BOD, COD, TSS, VSS, pH, ammonia-N, TKN, total P, ortho P, and a complete water chemistry with TDS, calcium carbonate, sulfates, chlorides, sodium, etc. We have concerns about the brewery and need the water quality to properly design the process, as well as membrane flux, basin sizing, etc.

Answer No. 18: Please refer to Addendum No. 4 regarding the sample reports.

Question No. 19: Please clarify how the effluent will be discharged and to which receiving stream, so that we may incorporate design of an outfall: we have not been able to identify a receiving stream for the effluent.

Answer No. 19: Currently all effluent is being discharged onto the irrigation field. The desired point of compliance would be where the effluent enters the storage ponds. Giving the current conditions, no other compliance points have been identified.

Question No. 20: The RFP requires studies and reports as part of project commissioning. Has an Environmental Assessment been completed for the site for the project and for the future NPDES permit? If any environmental reports have been completed, will the County provide them for our use?

Answer No. 20: N/A

Question No. 21: Please advise if the contract for the project will be Lump Sum, Cost Plus, GMP with a fixed fee, or other. The DBIA contract in the RFP does not state.

Answer No. 21: The cost proposal for this project should be submitted as a lump sum. Please refer to the Price Proposal/Project Cost Sheet Attachment A attached hereto.

Question No. 22: The current structure of the project in which the contractor is to provide a price for engineering and construction of a wwtp in Phase 2 of the proposal does not allow for a collaborative approach to the project in which feedback from various stakeholders (NMED or Santa Fe County, etc) is taken into account during the engineering phase of the project to enhance the project. Would the County be willing to consider a progressive design/build approach with 30%, 60%, 90% milestones with a GMP developed after 60% to 90% design development?

Answer No. 22: That is exactly what the County has stated in the RFP. After award, the County will work with the selected D-B Team through 10%, 60% and 90%.

Question No. 23: Is there a self-performance requirement in which the contractor selected must perform a percentage of the construction of the project?

Answer No. 23: There is not a self-performance requirement for this project; however, this is NOT a solicitation for a CM at Risk.

Question No. 24: Is it acceptable for the contractor selected to subcontract the majority of the project construction?

Answer No. 24: Please refer to Question No. 23. The Design-Build Team may provide a proposal that is most achieves the intent of the contract.

Question No. 25: Does the County have a technical specification for the plant?

Answer No. 25: No, specification is based on water quality. No. Only what is referenced in the PER and RFP documents.

Question No. 26: Does HDR have any advantages over other contractors since they were selected to provide the PER?

Answer No. 26: It is the determination of the County Procurement Manager that all information from the PER be distributed to all interested Offerors to the RFP. For this reason, HDR does not have an unfair advantage over other Offerors.

Question No. 26: How will the County handle changes to the plant or contract cost due to changes in the basis of design or other changes if they arise during the engineering phase due to new information coming to light or unforeseen NMED requirements?

Answer No. 26: Any change orders will be addressed using the DBIA Contract Change Order Form.

Question No. 27: Are there additional contract documents that the County intends to use with the project such as special conditions or other County contract documents?

Answer No. 27: The County will be using all DBIA contract forms as provided in the RFP.

Question No. 28: Please confirm that it is the intent of the County for Contractors to provide a total cost for the wwtp in the phase 2 submittal prior to completion of significant engineering and design tasks.

Answer No. 28: The County has provided sufficient information for Contractors to propose a design solution to include cost, for this phase of the design-build project delivery method of procurement.

Question No. 29: What is the page limit for the Phase II proposal?

Answer No. 29: Please refer to Question and Answer No. 10.

Question No. 30: Are any pages not included in the page count?

Answer No. 30: Please refer to the RFP. The page count only pertains to the responses to the Phase II criteria factors, with the exception of the cost and schedule submittal.

Please add this Addendum No. 5 to the original proposal documents and refer to proposal documents, hereto as such. This and all subsequent addenda will become part of any resulting contract documents and have effects as if original issued. All other unaffected sections will have their original interpretation and remain in full force and effect. Responders are reminded that any

questions or need for clarification must be addressed to Bill Taylor, Procurement Manager at wtaylor@santafecountynm.gov.

PRICE PROPOSAL AND SECURITY FORM

Project Cost / Product Description
Design-Build Proposal

Scope of Work for the Project:

Utilizing a Design-Build project delivery method, the County is authorized to plan, design, and construct the new Santa Fe County Water Reclamation facility.

The project consists of the design and construction of a new 0.50 MGD Wastewater Treatment Facility to replace the existing QWWTP facility. The existing QWWTF will remain in operation during construction and commissioning of the new facility. The proposed project contemplates the construction of one Membrane Bioreactor (MBR) train with a process capacity up to 0.50 MGD with a modular design for expansion to either 1.0 MGD or 2.0 MGD ultimate capacity in the future.

1.01 ***To:***
Santa Fe County

1.02 For:

- Project Name: Santa Fe County Water Reclamation Facility Project
- Project Number: RFP No. 2019-0016-CMO/BT
- Location: Hwy 14, State Penitentiary in Santa Fe, New Mexico
-

1.03 Date:

1.04 **Submitted By:** [Offeror's Full Name and address]

1.05 Offer:

The Design-Build Team of _____ is pleased to submit a Design Build proposal for the necessary design and construction required to complete the Santa Fe County Water Reclamation Facility Project, RFP No. 2019-0016-CMO/BT as offered by Santa Fe County.

The undersigned herby offer to enter into a Contract to perform the Work for the Sum of:
_____(written word)$_____,
exclusive of NMGRT

Note: Contingency, if applicable: _____% or Amount$_____

Note: Alternate Pricing:

ALTERNATES:		**Amount**	**Accepted**
1. Alternate 50 KW Solar Array	ADD	_____	_____
2. Alternate electrical feed to new facility	ADD	_____	_____

Total with Accepted Alternates: _____

1.06 Acceptance:

A. This offer shall be open to acceptance and is irrevocable for sixty (60) days from the bid closing date.

1.07 Contract Time:

If this Offer is accepted, we will complete the Work in ____ calendar days from Notice to Proceed and receipt of Executed Contract.

1.08 Addenda

A. The following Addenda have been received. The modifications to the Bid Documents noted below have been considered and all costs are included in the Bid Sum.

1. Addendum No. _____ Dated _____
2. Addendum No. _____ Dated _____
3. Addendum No. _____ Dated _____
4. Addendum No. _____ Dated _____
5. Addendum No. _____ Dated _____
6. Addendum No. _____ Dated _____

1.09 Bid Form Supplements:

The following Supplements are attached to this Bid Form and are considered an integral part of this Bid Proposal:

1. The Design-Build Team of _____RFP Responses including Phase II and proposed cost and schedule consisting of Volume 1 & 2.

General Conditions

The project includes all utility and infrastructure requirements including but not limited to electrical, gas, telecommunications, SCADA, sanitary sewer, potable water, permitting, and fire protection/suppression.

Specialty elements and considerations for the project shall include but are not limited to the following:

- Membrane Bioreactor (MBR) Basin and Equipment.
- Future modular expandability in 0.50 MGD increments.

- New Wastewater Lift Station.
- New Fine Screen and Grit Building.
- New Operations Building with blowers, RAS pumps, Sodium Hypochlorite/Citric Acid Equipment, and Disinfection.
- Biological Basins and Aeration Equipment.
- Aerobic Digesters.
- Reuse storage and pumping.
- Concrete sludge drying beds.
- Maintain existing QWWTF operations during construction and commissioning.
- Decommissioning of existing facility.
- Meet all applicable NPDES Tier 2 permit requirements, including:
    - Effluent quality less than 3.0 mg N/L total nitrogen.
    - Effluent quality less than 1.0 mg P/L total phosphorus.
- Discharge from the WWTF by effluent reuse shall meet GWQB and NMED Class 1A permit requirements.

1. Including supervision, quality control, temporary facilities, temporary utilities, temporary protection, construction equipment, safety, SWPPP, daily cleanup and final clean, dumpsters, surveying, building lay-out, start up and close out costs, CID permit and plan check fees, site and building testing, general liability and builder's risk insurance, performance and payment bond
2. Engineering design fees

The Offeror understands that the contract will be awarded in accordance with the provisions of the RFP and that the Owner reserves the right to reject any or all proposals and to waive any formalities in the proposals.

The Offeror agrees that this price will be good and may not be withdrawn for a period of sixty (60) calendar days after the scheduled closing time for receiving proposals.

Upon receipt of written notice of acceptance of this Price, Offeror will execute the final contract within seven calendar days.

Respectfully Submitted,

By: Date:

(Authorized Signature)

By:

(Same Name, Printed or Typed)

Title:

Company:

Address: Phone:

Zip:

Fax: Email:

(Affix Corporate Seal if proposal by Corporation):

:

Design-Build Change Order Form

For Use with DBIA Document No. 525, *Standard Form of Agreement Between Owner and Design-Builder – Lump Sum* (2010 Edition) and DBIA Document No. 530, *Standard Form of Agreement Between Owner and Design-Builder – Cost Plus Fee with an Option for A Guaranteed Maximum Price* (2010 Edition)

Change Order Number:	Change Order Effective Date: (date when executed by both parties)
Project:	Design-Builder's Project No:
	Date of Agreement:
Owner:	Design-Builder:

Scope of the Change:

Original Contract Price: $ _____

Net Change by Previous Change Order No(s): to: $ _____

This Change Order Increase/Decrease (attach breakdown): $ _____

New Contract Price: $ _____

Original Contract Completion Date: _____ 20____

Adjustments by Change Order No(s) to: _____ (calendar days)

This Change Order Contract Time Increase/Decrease: _____ (calendar days)

Revised Substantial Completion Date: _____ 20____

By executing this Change Order, Owner and Design-Builder agree to modify the Agreement's Scope of Work, Contract Price and Contract Time as stated above. Upon execution, this Change Order becomes a Contract Document issued in accordance with DBIA Document No. 535, *Standard Form of General Conditions of Contract Between Owner and Design-Builder*, (2010 Edition).

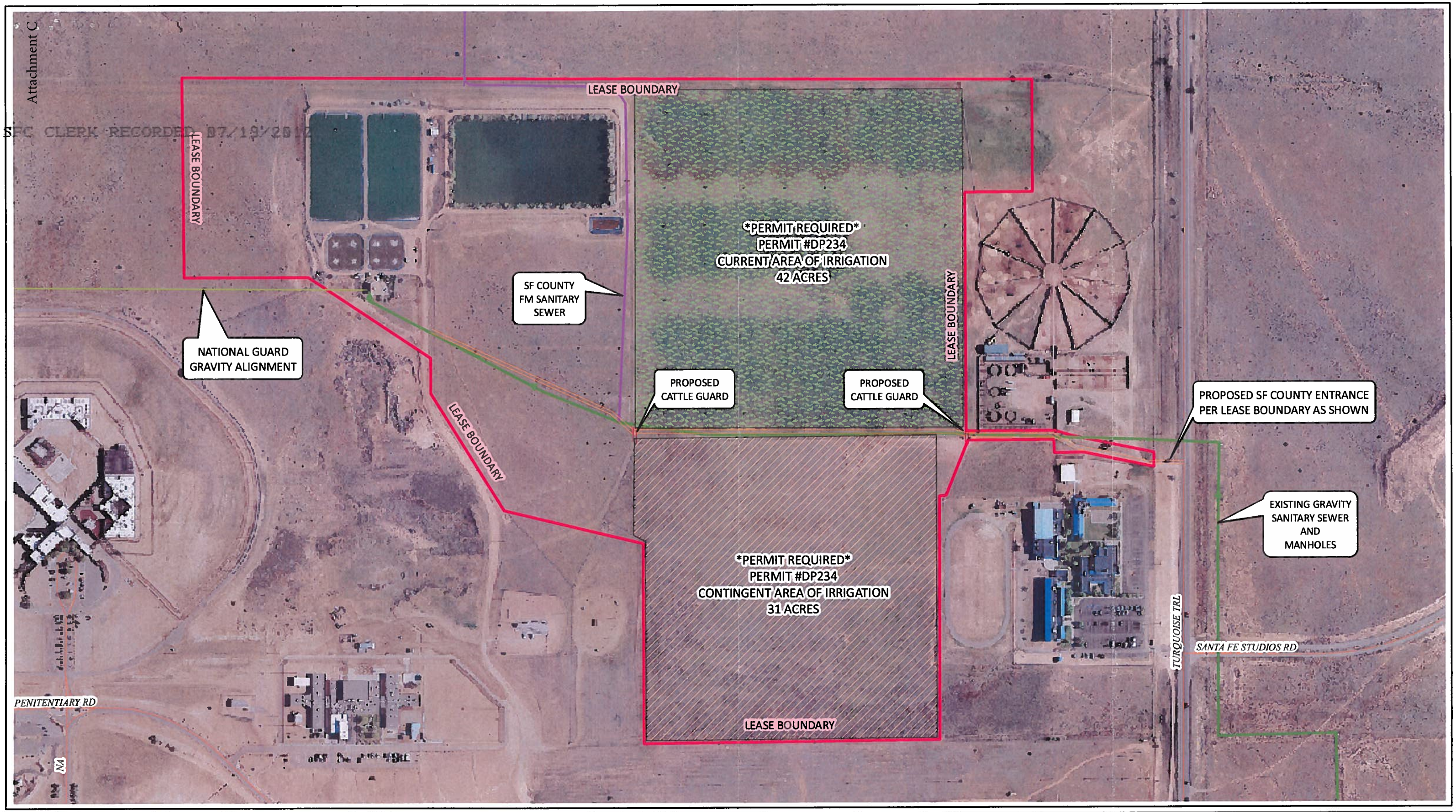
OWNER:		DESIGN-BUILDER:	
By:	_____	By:	_____
Printed Name:	_____	Printed Name:	_____
Title:	_____	Title:	_____
Date:	_____	Date:	_____

© 2001 Design-Build Institute of America

SAMPLE

Attachment C

SFC CLERK RECORDED 07/19/2012



Legend

- Quill Lease Boundary
- FM
- GPS Roads All
- SF County Sewer/Irrigation
- Gravity
- Effluent

0 350 700 1,400 Feet

1 inch = 350 feet

This information is for reference only. Santa Fe County assumes no liability for errors associated with the use of these data. Users are solely responsible for confirming data accuracy. Aerial Photography from 2008

NM State Penitentiary
WW System Premises SF County
Leased Property

Santa Fe County
Utilities Department

PC
06-26-12

Sheet No. 1 of 1

PHASE II SITE VISIT
SANTA FE COUNTY WATER RECLAMATION FACILITY (SFCWRF)
RFP No. 2019-0016-PW/BT
September 17, 2018
10:00 AM

NAME	BUSINESS	TELEPHONE	E-MAIL ADDRESS
ED DUBOIS	HDR	5053508926	ed.dubois@hdrinc.com
CHRIS RODRIGUEZ	HDR	505-830-5400	chris.rodriguez@hdrinc.com
JORDAN BATESON	RMCI	505.345.0008	jbateson@rmciinc.com
Brent Bower	RMCI	345-0004	bbower@rmciinc.com
Dave McDuff	Santa Fe County	505-986-6237	dmcduff@santafecountynm.gov
Royce Beaudry	SMA	707-303-8161	royce.beaudry@soudermiller.com
Paul Kennedy	SMA / IWS	505-473-9211	paul.kennedy@soudermiller.com
Derek Belka	Molzen Corbin	505 242 5700	dbelka@molzencorbin.com
Jeremy Alford	Molzen Corbin	505-242-5700	jalford@molzencorbin.com
LEROY ALVARADO	SFCU	490-0038	lalvarado@SANTAFECOUNTYNM.GOV
Maricela Martinez	SFC Purchasing	9929264	MCMartinez@santafecountynm.gov
BILL TAYLOR	SFC PURCHASING	505 986-6373	WTAYLOR@SANTAFECOUNTYNM.GOV

Attachment D

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

September 14, 2018

Leroy Alvarado
Santa Fe County
424 NM Highway 599
Santa Fe, NM 87507
TEL: (505) 490-0038
FAX (505) 992-3028

RE: Santa Fe County WRF Sampling OrderNo.: 1808B81

Dear Leroy Alvarado:

Hall Environmental Analysis Laboratory received 2 sample(s) on 8/20/2018 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **1808B81**
Date Reported: **9/14/2018**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Santa Fe County
Client Sample ID: PNM Quill Influent
Project: Santa Fe County WRF Sampling
Collection Date: 8/20/2018 9:40:00 AM
Lab ID: 1808B81-001
Matrix: AQUEOUS
Received Date: 8/20/2018 11:16:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: **MRA**
Fluoride	ND	0.50		mg/L	5	8/21/2018 1:24:40 AM
Nitrogen, Nitrate (As N)	ND	0.50		mg/L	5	8/21/2018 1:24:40 AM
Sulfate	60	2.5		mg/L	5	8/21/2018 1:24:40 AM
EPA METHOD 200.7: METALS						Analyst: **pmf**
Aluminum	0.22	0.020	*	mg/L	1	8/28/2018 5:12:34 PM
Barium	0.083	0.0020		mg/L	1	8/28/2018 5:12:34 PM
Cadmium	ND	0.0020		mg/L	1	8/28/2018 5:12:34 PM
Chromium	ND	0.0060		mg/L	1	8/28/2018 5:12:34 PM
Cobalt	ND	0.0060		mg/L	1	8/28/2018 5:12:34 PM
Iron	0.38	0.020	*	mg/L	1	8/28/2018 5:12:34 PM
Manganese	0.020	0.0020		mg/L	1	8/28/2018 5:12:34 PM
Molybdenum	ND	0.0080		mg/L	1	8/28/2018 5:12:34 PM
Nickel	ND	0.010		mg/L	1	8/28/2018 5:12:34 PM
Silver	ND	0.0050		mg/L	1	8/28/2018 5:12:34 PM
Zinc	0.11	0.010		mg/L	1	8/28/2018 5:12:34 PM
EPA 200.8: METALS						Analyst: **ELS**
Arsenic	ND	0.0010		mg/L	1	8/24/2018 7:56:05 AM
Copper	0.028	0.0010		mg/L	1	8/24/2018 7:56:05 AM
Lead	0.00063	0.00050		mg/L	1	8/24/2018 7:56:05 AM
Selenium	ND	0.0010		mg/L	1	8/24/2018 7:56:05 AM
Uranium	0.0011	0.00050		mg/L	1	8/28/2018 8:29:41 AM
EPA METHOD 245.1: MERCURY						Analyst: **rde**
Mercury	ND	0.00020		mg/L	1	9/5/2018 5:30:37 PM
SM5210B: BOD						Analyst: **SMS**
Biochemical Oxygen Demand	180	2.0		mg/L	1	8/27/2018 1:48:00 PM
SM 4500 NORG C: TKN						Analyst: **CJS**
Nitrogen, Kjeldahl, Total	39	2.0	D	mg/L	1	8/24/2018 2:16:00 PM
SM 2540D: TSS						Analyst: **KS**
Suspended Solids	150	8.0	D	mg/L	1	8/22/2018 1:08:00 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Analytical Report
Lab Order **1808B81**
Date Reported: **9/14/2018**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Santa Fe County
Client Sample ID: Thornberg Lift Station
Project: Santa Fe County WRF Sampling
Collection Date: 8/20/2018 9:00:00 AM
Lab ID: 1808B81-002
Matrix: AQUEOUS
Received Date: 8/20/2018 11:16:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: **MRA**
Fluoride	ND	0.50		mg/L	5	8/21/2018 1:49:30 AM
Nitrogen, Nitrate (As N)	ND	0.50		mg/L	5	8/21/2018 1:49:30 AM
Sulfate	70	2.5		mg/L	5	8/21/2018 1:49:30 AM
EPA METHOD 200.7: METALS						Analyst: **pmf**
Aluminum	0.30	0.020	*	mg/L	1	8/28/2018 5:14:51 PM
Barium	0.065	0.0020		mg/L	1	8/28/2018 5:14:51 PM
Cadmium	ND	0.0020		mg/L	1	8/28/2018 5:14:51 PM
Chromium	ND	0.0060		mg/L	1	8/28/2018 5:14:51 PM
Cobalt	ND	0.0060		mg/L	1	8/28/2018 5:14:51 PM
Iron	0.20	0.020		mg/L	1	8/28/2018 5:14:51 PM
Manganese	0.043	0.0020		mg/L	1	8/28/2018 5:14:51 PM
Molybdenum	ND	0.0080		mg/L	1	8/28/2018 5:14:51 PM
Nickel	ND	0.010		mg/L	1	8/28/2018 5:14:51 PM
Silver	ND	0.0050		mg/L	1	8/28/2018 5:14:51 PM
Zinc	0.13	0.010		mg/L	1	8/28/2018 5:14:51 PM
EPA 200.8: METALS						Analyst: **ELS**
Arsenic	ND	0.0050		mg/L	5	8/24/2018 7:58:25 AM
Copper	0.034	0.0050		mg/L	5	8/24/2018 7:58:25 AM
Lead	ND	0.0025		mg/L	5	8/24/2018 7:58:25 AM
Selenium	ND	0.0050		mg/L	5	8/24/2018 7:58:25 AM
Uranium	ND	0.0025		mg/L	5	8/28/2018 8:32:02 AM
EPA METHOD 245.1: MERCURY						Analyst: **rde**
Mercury	ND	0.00020		mg/L	1	9/5/2018 5:32:52 PM
SM5210B: BOD						Analyst: **SMS**
Biochemical Oxygen Demand	1100	2.0		mg/L	1	8/27/2018 1:48:00 PM
SM 4500 NORG C: TKN						Analyst: **CJS**
Nitrogen, Kjeldahl, Total	90	2.0	D	mg/L	1	8/24/2018 2:16:00 PM
SM 2540D: TSS						Analyst: **KS**
Suspended Solids	540	8.0	D	mg/L	1	8/22/2018 1:08:00 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Anatek Labs, Inc.

1282 Alturas Drive • Moscow, ID 83843 • (208) 883-2839 • Fax (208) 882-9246 • email moscow@anateklabs.com
504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client:	HALL ENVIRONMENTAL ANALYSIS LAB	**Batch #:**	180822034
Address:	4901 HAWKINS NE SUITE D ALBUQUERQUE, NM 87109	**Project Name:**	1808B81
Attn:	ANDY FREEMAN		

Analytical Results Report

Sample Number 180822034-001 **Sampling Date** 8/20/2018 **Date/Time Received** 8/21/2018 11:47 AM
Client Sample ID 1808B81-001D / PNM QUILL INFLUENT **Sampling Time** 9:40 AM
Matrix Water
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/L	0.01	8/23/2018 10:45:00 AM	RPU	EPA 335.4	

Sample Number 180822034-002 **Sampling Date** 8/20/2018 **Date/Time Received** 8/21/2018 11:47 AM
Client Sample ID 1808B81-002D / THORNBERG LIFT STATION **Sampling Time** 9:00 AM
Matrix Water
Comments

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/L	0.01	8/23/2018 10:45:00 AM	RPU	EPA 335.4	

Authorized Signature

Todd Taruscio, Lab Manager

MCL EPA's Maximum Contaminant Level
ND Not Detected
PQL Practical Quantitation Limit

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The results reported relate only to the samples indicated.
Soil/solid results are reported on a dry-weight basis unless otherwise noted.

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013;NV:ID00013; OR:ID200001-002; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

Anatek Labs, Inc.

1282 Alturas Drive • Moscow, ID 83843 • (208) 883-2839 • Fax (208) 882-9246 • email moscow@anateklabs.com
504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client:	HALL ENVIRONMENTAL ANALYSIS LAB	**Batch #:**	180822034
Address:	4901 HAWKINS NE SUITE D ALBUQUERQUE, NM 87109	**Project Name:**	1808B81
Attn:	ANDY FREEMAN		

Analytical Results Report

Quality Control Data

Lab Control Sample

Parameter	LCS Result	Units	LCS Spike	%Rec	AR %Rec	Prep Date	Analysis Date
Cyanide	0.491	mg/L	0.5	98.2	90-110	8/23/2018	8/24/2018
Cyanide	0.516	mg/L	0.5	103.2	90-110	8/22/2018	8/23/2018

Matrix Spike

Sample Number	Parameter	Sample Result	MS Result	Units	MS Spike	%Rec	AR %Rec	Prep Date	Analysis Date
180822032-001	Cyanide	ND	0.514	mg/L	0.5	102.8	80-120	8/22/2018	8/23/2018
180821051-002	Cyanide	ND	0.474	mg/L	0.5	94.8	80-120	8/23/2018	8/24/2018

Matrix Spike Duplicate

Parameter	MSD Result	Units	MSD Spike	%Rec	%RPD	AR %RPD	Prep Date	Analysis Date
Cyanide	0.471	mg/L	0.5	94.2	8.7	0-20	8/22/2018	8/23/2018
Cyanide	0.475	mg/L	0.5	95.0	0.2	0-20	8/23/2018	8/24/2018

Method Blank

Parameter	Result	Units	PQL	Prep Date	Analysis Date
Cyanide	ND	mg/L	0.01	8/23/2018	8/24/2018
Cyanide	ND	mg/L	0.01	8/22/2018	8/23/2018

AR	Acceptable Range
ND	Not Detected
PQL	Practical Quantitation Limit
RPD	Relative Percentage Difference

Comments:

Certifications held by Anatek Labs ID: EPA:ID00013; AZ:0701; FL(NELAP):E87893; ID:ID00013; MT:CERT0028; NM: ID00013;NV:ID00013; OR:ID200001-032; WA:C595
Certifications held by Anatek Labs WA: EPA:WA00169; ID:WA00169; WA:C585; MT:Cert0095; FL(NELAP): E871099

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: 1808B81
Pace Project No.: 30263136

Sample: 1808B81-001E PNM Quill Influen **Lab ID: 30263136001** Collected: 08/20/18 09:40 Received: 08/23/18 10:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 903.1	**-0.156 ± 0.531 (1.17) C:NA T:64%**	pCi/L	09/05/18 20:33	13982-63-3	
Radium-228	EPA 904.0	**1.17 ± 0.840 (1.63) C:69% T:84%**	pCi/L	09/13/18 11:32	15262-20-1	

Sample: 1808B81-002E Thornberg Lift St **Lab ID: 30263136002** Collected: 08/20/18 09:00 Received: 08/23/18 10:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 903.1	**-0.506 ± 0.610 (1.66) C:NA T:38%**	pCi/L	09/05/18 20:33	13982-63-3	
Radium-228	EPA 904.0	**1.26 ± 1.13 (2.29) C:79% T:25%**	pCi/L	09/05/18 15:34	15262-20-1	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL - RADIOCHEMISTRY

Project: 1808B81
Pace Project No.: 30263136

QC Batch: 312137
QC Batch Method: EPA 904.0
Analysis Method: EPA 904.0
Analysis Description: 904.0 Radium 228
Associated Lab Samples: 30263136001

METHOD BLANK: 1524112
Matrix: Water
Associated Lab Samples: 30263136001

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	-0.0956 ± 0.411 (0.974) C:70% T:75%	pCi/L	09/13/18 11:12	

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QUALITY CONTROL - RADIOCHEMISTRY

Project: 1808881
Pace Project No.: 30263136

QC Batch: 310843 | Analysis Method: EPA 903.1
QC Batch Method: EPA 903.1 | Analysis Description: 903.1 Radium-226
Associated Lab Samples: 30263136001, 30263136002

METHOD BLANK: 1518545 | Matrix: Water
Associated Lab Samples: 30263136001, 30263136002

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.223 ± 0.256 (0.151) C:NA T:89%	pCi/L	09/05/18 20:01	

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QUALITY CONTROL - RADIOCHEMISTRY

Project: 1808B81
Pace Project No.: 30263136

QC Batch: 310844
QC Batch Method: EPA 904.0
Analysis Method: EPA 904.0
Analysis Description: 904.0 Radium 228
Associated Lab Samples: 30263136002

METHOD BLANK: 1518546
Matrix: Water
Associated Lab Samples: 30263136002

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.156 ± 0.327 (0.724) C:77% T:87%	pCi/L	09/05/18 12:04	

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QUALIFIERS

Project: 1808B81
Pace Project No.: 30263136

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Act - Activity

Unc - Uncertainty: SDWA = 1.96 sigma count uncertainty, all other matrices = Expanded Uncertainty (95% confidence interval). Gamma Spec = Expanded Uncertainty (95.4% Confidence Interval)

(MDC) - Minimum Detectable Concentration

Trac - Tracer Recovery (%)

Carr - Carrier Recovery (%)

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

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QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1808B81**
14-Sep-18

Client: Santa Fe County
Project: Santa Fe County WRF Sampling

Sample ID **MB-39911** SampType: **MBLK** TestCode: **EPA Method 200.7: Metals**
Client ID: **PBW** Batch ID: **39911** RunNo: **53753**
Prep Date: **8/21/2018** Analysis Date: **8/28/2018** SeqNo: **1774143** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Aluminum	ND	0.020								
Barium	ND	0.0020								
Cadmium	ND	0.0020								
Chromium	ND	0.0060								
Cobalt	ND	0.0060								
Iron	ND	0.020								
Manganese	ND	0.0020								
Molybdenum	ND	0.0080								
Nickel	ND	0.010								
Silver	ND	0.0050								
Zinc	ND	0.010								

Sample ID **LLLCS-39911** SampType: **LCSLL** TestCode: **EPA Method 200.7: Metals**
Client ID: **BatchQC** Batch ID: **39911** RunNo: **53753**
Prep Date: **8/21/2018** Analysis Date: **8/28/2018** SeqNo: **1774144** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Aluminum	ND	0.020	0.01000	0	108	50	150			
Barium	ND	0.0020	0.002000	0	88.0	50	150			
Cadmium	0.0021	0.0020	0.002000	0	106	50	150			
Chromium	0.0063	0.0060	0.006000	0	106	50	150			
Cobalt	0.0062	0.0060	0.006000	0	103	50	150			
Iron	ND	0.020	0.02000	0	79.9	50	150			
Manganese	0.0020	0.0020	0.002000	0	101	50	150			
Molybdenum	0.0087	0.0080	0.008000	0	109	50	150			
Nickel	ND	0.010	0.005000	0	52.6	50	150			
Silver	ND	0.0050	0.005000	0	94.0	50	150			
Zinc	ND	0.010	0.005000	0	128	50	150			

Sample ID **LCS-39911** SampType: **LCS** TestCode: **EPA Method 200.7: Metals**
Client ID: **LCSW** Batch ID: **39911** RunNo: **53753**
Prep Date: **8/21/2018** Analysis Date: **8/28/2018** SeqNo: **1774145** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Aluminum	0.52	0.020	0.5000	0	103	85	115			
Barium	0.49	0.0020	0.5000	0	98.0	85	115			
Cadmium	0.50	0.0020	0.5000	0	99.4	85	115			
Chromium	0.49	0.0060	0.5000	0	97.3	85	115			
Cobalt	0.48	0.0060	0.5000	0	96.2	85	115			
Iron	0.51	0.020	0.5000	0	103	85	115			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1808B81**
14-Sep-18

Client: Santa Fe County
Project: Santa Fe County WRF Sampling

Sample ID	**LCS-39911**	SampType:	**LCS**	TestCode:	**EPA Method 200.7: Metals**
Client ID:	**LCSW**	Batch ID:	**39911**	RunNo:	**53753**
Prep Date:	**8/21/2018**	Analysis Date:	**8/28/2018**	SeqNo:	**1774145** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Manganese	0.49	0.0020	0.5000	0	97.4	85	115			
Molybdenum	0.49	0.0080	0.5000	0	98.2	85	115			
Nickel	0.49	0.010	0.5000	0	97.3	85	115			
Silver	0.096	0.0050	0.1000	0	96.1	85	115			
Zinc	0.49	0.010	0.5000	0	98.4	85	115			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1808B81**
14-Sep-18

Client: Santa Fe County
Project: Santa Fe County WRF Sampling

Sample ID **MB-39911** SampType: **MBLK** TestCode: **EPA 200.8: Metals**
Client ID: **PBW** Batch ID: **39911** RunNo: **53684**
Prep Date: **8/21/2018** Analysis Date: **8/24/2018** SeqNo: **1770803** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Copper	ND	0.0010								
Lead	ND	0.00050								
Selenium	ND	0.0010								
Uranium	ND	0.00050								

Sample ID **MSLLLCS-39911** SampType: **LCSLL** TestCode: **EPA 200.8: Metals**
Client ID: **BatchQC** Batch ID: **39911** RunNo: **53684**
Prep Date: **8/21/2018** Analysis Date: **8/24/2018** SeqNo: **1770804** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.0010	0.0010	0.001000	0	100	50	150			
Copper	0.0011	0.0010	0.001000	0	106	50	150			
Lead	0.00050	0.00050	0.0005000	0	101	50	150			
Selenium	ND	0.0010	0.001000	0	93.7	50	150			
Uranium	ND	0.00050	0.0005000	0	98.2	50	150			

Sample ID **MSLCS-39911** SampType: **LCS** TestCode: **EPA 200.8: Metals**
Client ID: **LCSW** Batch ID: **39911** RunNo: **53684**
Prep Date: **8/21/2018** Analysis Date: **8/24/2018** SeqNo: **1770805** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.025	0.0010	0.02500	0	99.4	85	115			
Copper	0.026	0.0010	0.02500	0	103	85	115			
Lead	0.012	0.00050	0.01250	0	99.8	85	115			
Selenium	0.025	0.0010	0.02500	0	98.7	85	115			
Uranium	0.012	0.00050	0.01250	0	99.6	85	115			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1808B81**
14-Sep-18

Client: Santa Fe County
Project: Santa Fe County WRF Sampling

Sample ID	**MB-40151**	SampType:	**MBLK**	TestCode:	**EPA Method 245.1: Mercury**
Client ID:	**PBW**	Batch ID:	**40151**	RunNo:	**53933**
Prep Date:	**9/5/2018**	Analysis Date:	**9/5/2018**	SeqNo:	**1780043** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.00020								

Sample ID	**LCS-40151**	SampType:	**LCS**	TestCode:	**EPA Method 245.1: Mercury**
Client ID:	**LCSW**	Batch ID:	**40151**	RunNo:	**53933**
Prep Date:	**9/5/2018**	Analysis Date:	**9/5/2018**	SeqNo:	**1780044** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0048	0.00020	0.005000	0	96.9	80	120			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1808B81**
14-Sep-18

Client: Santa Fe County
Project: Santa Fe County WRF Sampling

Sample ID **MB**	SampType: **mblk**	TestCode: **EPA Method 300.0: Anions**		
Client ID: **PBW**	Batch ID: **R53555**	RunNo: **53555**		
Prep Date:	Analysis Date: **8/20/2018**	SeqNo: **1766371**	Units: **mg/L**	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	ND	0.10								
Nitrogen, Nitrate (As N)	ND	0.10								
Sulfate	ND	0.50								

Sample ID **LCS**	SampType: **lcs**	TestCode: **EPA Method 300.0: Anions**		
Client ID: **LCSW**	Batch ID: **R53555**	RunNo: **53555**		
Prep Date:	Analysis Date: **8/20/2018**	SeqNo: **1766372**	Units: **mg/L**	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	0.47	0.10	0.5000	0	94.3	90	110			
Nitrogen, Nitrate (As N)	2.4	0.10	2.500	0	96.4	90	110			
Sulfate	9.2	0.50	10.00	0	92.0	90	110			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1808B81**
14-Sep-18

Client: Santa Fe County
Project: Santa Fe County WRF Sampling

Sample ID **MB-39923** SampType: **MBLK** TestCode: **SM5210B: BOD**
Client ID: **PBW** Batch ID: **39923** RunNo: **53738**
Prep Date: **8/22/2018** Analysis Date: **8/27/2018** SeqNo: **1772892** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Biochemical Oxygen Demand	ND	2.0								

Sample ID **MB--39923** SampType: **MBLK** TestCode: **SM5210B: BOD**
Client ID: **PBW** Batch ID: **39923** RunNo: **53738**
Prep Date: **8/22/2018** Analysis Date: **8/27/2018** SeqNo: **1772893** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Biochemical Oxygen Demand	ND	2.0								

Sample ID **LCS-39923** SampType: **LCS** TestCode: **SM5210B: BOD**
Client ID: **LCSW** Batch ID: **39923** RunNo: **53738**
Prep Date: **8/22/2018** Analysis Date: **8/27/2018** SeqNo: **1772894** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Biochemical Oxygen Demand	150	2.0	198.0	0	76.0	84.6	115.4			S

Sample ID **1808B81-001ADUP** SampType: **DUP** TestCode: **SM5210B: BOD**
Client ID: **PNM Quill Influent** Batch ID: **39923** RunNo: **53738**
Prep Date: **8/22/2018** Analysis Date: **8/27/2018** SeqNo: **1772896** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Biochemical Oxygen Demand	140	2.0						25.5	20	R

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1808B81**
14-Sep-18

Client: Santa Fe County
Project: Santa Fe County WRF Sampling

Sample ID	**MB-39953**	SampType:	**MBLK**		TestCode:	**SM 4500 Norg C: TKN**					
Client ID:	**PBW**	Batch ID:	**39953**		RunNo:	**53698**					
Prep Date:	**8/23/2018**	Analysis Date:	**8/24/2018**		SeqNo:	**1771280**	Units:	**mg/L**			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrogen, Kjeldahl, Total		ND	1.0								

Sample ID	**LCS-39953**	SampType:	**LCS**		TestCode:	**SM 4500 Norg C: TKN**					
Client ID:	**LCSW**	Batch ID:	**39953**		RunNo:	**53698**					
Prep Date:	**8/23/2018**	Analysis Date:	**8/24/2018**		SeqNo:	**1771281**	Units:	**mg/L**			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrogen, Kjeldahl, Total		10	1.0	10.00	0	102	80	120			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1808B81**
14-Sep-18

Client: Santa Fe County
Project: Santa Fe County WRF Sampling

Sample ID	**MB-39906**	SampType:	**MBLK**		TestCode:	**SM 2540D: TSS**					
Client ID:	**PBW**	Batch ID:	**39906**		RunNo:	**53621**					
Prep Date:	**8/21/2018**	Analysis Date:	**8/22/2018**		SeqNo:	**1768607**	Units:	**mg/L**			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Suspended Solids		ND	4.0								

Sample ID	**LCS-39906**	SampType:	**LCS**		TestCode:	**SM 2540D: TSS**					
Client ID:	**LCSW**	Batch ID:	**39906**		RunNo:	**53621**					
Prep Date:	**8/21/2018**	Analysis Date:	**8/22/2018**		SeqNo:	**1768608**	Units:	**mg/L**			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Suspended Solids		110	4.0	95.10	0	114	81.07	115.67			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: SANTA FE COUNTY Work Order Number: 1808B81 RcptNo: 1

Received By: **Ashley Gallegos** 8/20/2018 11:16:00 AM

Completed By: **Ashley Gallegos** 8/20/2018 11:48:47 AM

Reviewed By: JO 8/20/18 @ 1440

Labeled by: JAB 08/20/18

Chain of Custody

1. Is Chain of Custody complete? Yes ☑ No ☐ Not Present ☐
2. How was the sample delivered? Client

Log In

3. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C Yes ☑ No ☐ NA ☐
5. Sample(s) in proper container(s)? Yes ☑ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
8. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
9. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☑
10. Were any sample containers received broken? Yes ☐ No ☑
11. Does paperwork match bottle labels? Yes ☑ No ☐
    (Note discrepancies on chain of custody)
12. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
13. Is it clear what analyses were requested? Yes ☑ No ☐
14. Were all holding times able to be met? Yes ☑ No ☐
    (If no, notify customer for authorization.)

# of preserved bottles checked for pH: 4, 1 (<2 or >12 unless noted)
Adjusted? No
Checked by: JAB 08/20/18

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: Date
By Whom: Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding:
Client Instructions:

16. Additional remarks:

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	5.8	Good	Not Present			

Chain-of-Custody Record

Client: Santa Fe County Utilities

Mailing Address: 424 NM 599 Frontage Rd.
Santa Fe NM, 87507

Phone #: (505) 490-0038

email or Fax#: Lalvarado@santafecountynm.gov

QA/QC Package:
☐ Standard ☐ Level 4 (Full Validation)

Accreditation
☐ NELAP ☐ Other _____

☐ EDD (Type) _____

Turn-Around Time:
☑ Standard ☐ Rush _____

Project Name: Santa Fe County WRF Sampling

Project #: IO 8/20/1

Project Manager: Leroy Alvarado

PO 190766

Sampler:

On Ice: ☑ Yes ☐ No

Sample Temperature: 5.8

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1808B81	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA) See Attached				Air Bubbles (Y or N)
8/20/18	9:40AM	AQ	PNM Quill Influent			-001															
8/20/18	9:00AM	AQ	Thornberg Lift Station			-002															

Date	Time	Relinquished by:	Received by:	Date	Time
8/20/18	11:16AM	[signature]	T. Ch client	08/20/18	11:16AM
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks: See attatched docs.

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Influent Sampling

- Quarterly sampling from the influent channel outside the Quill main building for analysis of nitrate, BOD5, TSS, and TKN.
- Annual sampling from the influent channel for laboratory analysis of Al, As, Ba, Cd, Cr, Co, Cu, CN, F, Fe, Pb, Mn, Mo, Hg, Ni, Ra226/228, Se, Ag, SO4, U, and Zn. ~~pH will be measured instantaneously on-site during sampling as required by DP-234~~.

Influent samples will be collected using a sample dipper to be provided by DBS&A. DBS&A will coordinate with SFCU to set a consistent sample time (typically 8 a.m. to 10 a.m. Monday through Friday). Samples will be preserved and transported to the laboratory for analysis, with proper chain-of-custody, preservation, and transportation techniques in compliance with approved methodologies.

We understand that the County prefers that quarterly sampling occurs in January, April, July, and October, but that any time within the quarter is acceptable, as long as permit requirements are met. Effluent samples will be collected from the sample tap located on the irrigation pump discharge piping. Influent samples will be collected from the influent channel outside the Quill main building. Samples will be preserved and transported to the laboratory for analysis. Sample chain-of-custody, preservation, and transportation techniques will follow approved methodologies.

Fee

DBS&A proposes to provide the above services on a lump sum basis, for the fees not to exceed the amounts shown below. The cost proposal is an estimated budget based on present knowledge of the assignment that is believed sufficient to cover the services described, but no guarantee is made or implied.

Task No.	Task Description	Cost per Event	# of Events	Ext Cost
1	Quarterly Sampling (Influent and Effluent)	$1,450	4	$5,800.00
2	Monthly Sampling (Influent and Effluent)	$1,100	6	$6,600.00
	SUBTOTAL		**10**	**$12,400.00**
	NMGRT (7.5%)			*$930.00*
	TOTAL			**$13,330.00**

Schedule

This project spans Fiscal Year 2018 (July 1, 2017 through June 30, 2018). This proposal assumes the first sampling event occurs in September 2017. The fees presented assume four quarterly sampling events and six monthly sampling events. This assumes quarterly and monthly samples

PURCHASE ORDER

SANTA FE COUNTY
SANTA FE, NEW MEXICO

IMPORTANT
THIS PURCHASE ORDER NUMBER MUST APPEAR ON ALL INVOICES AND SHIPPING CONTAINERS. INVOICES ARE TO BE IN DUPLICATE.

PAGE: 1
P.O. NO.: 190766
DATE: 07/26/18

About $670
PH - ~~Amount~~ $20

TO: HALL ENVIRONMENTAL
4901 HAWKINS NE, STE A
ALBUQUERQUE, NM 87109

SHIP TO/ INVOICE TO: Santa Fe County
UTILITIES DIVISION/PWD
424 NM 599
PO BOX 276 87504
SANTA FE, NM 87507

VENDOR NO.
10150

NOTES
1 Federal Tax I.D. Number is required for payment.
2 If unable to fill at prices shown, or meet delivery day, please advise immediately.
3 All items subject to terms and conditions on reverse.

DELIVER BY	SHIP VIA	F.O.B.	TERMS
06/30/19			NET

CONFIRM BY	CONFIRM TO	REQUISITIONED BY
HALLENBECK, SCOTT	ROMERO, TRINIRAE	LSANCHEZ

FREIGHT	CONTRACT NO.	ACCOUNT NO.	PROJECT	REQ. NO.	REQ. DATE
		50514204455090		190860	07/13/1

LINE NO.	QUANTITY	UOM	ITEM NO. AND DESCRIPTION	UNIT COST	EXTENDED COST
1	2000.00	EA	LUCAS HERRERA IS REQUESTING AN ENCUMBRANCE FOR ANALYTICAL WORK ON SLUDGE AND SOIL. FOR SAMPLES ON AN AS NEEDED BASIS. 1 @ $2,000.00	1.0000	2000.00
2	140.00	EA	TAX RATE @ 7.000% = $140.00	1.0000	140.00
				SUB-TOTAL	2140.00
				TOTAL	2140.00

REMARKS:
7/26/2018: Pursuant to NMSA 1978 Sec 13-1-125, "Small Purchase" shall not exceed $5,000 without obraining 3 written quotes or a contract, TVR.

NOT VALID UNLESS SIGNED BY THE COUNTY FINANCE DIRECTOR OR THE COUNTY PURCHASING AGENT.

Trinirae Romero

AUTHORIZED SIGNATURE & TITLE

White - Vendor's Copy
Yellow - Purchasing Agent Copy
Pink - Department Head Copy
Blue - File Copy