TETRA TECH

TECHNICAL MEMORANDUM

To:	Nevada Environmental Response Trust
Cc:	Nevada Division of Environmental Protection
From:	David Bohmann and Bounkheana Chhun
Date:	June 21, 2018
Subject:	AP-5 Operation and Maintenance Summary – May 2018 Nevada Environmental Response Trust Site; Henderson, Nevada

At the direction of the Nevada Environmental Response Trust (NERT or Trust), Tetra Tech, Inc. (Tetra Tech) has prepared this summary of the operation and maintenance (O&M) activities performed during May 2018 for the AP-5 Pond Phase III sediment mixing, Phase IVa solids washing, and decant water transfer. The system was operated and maintained in accordance with the AP-5 Pond Sediment Washing Treatment Process Operations & Maintenance Manual.

SUMMARY OF O&M ACTIVITIES

Tetra Tech continued operation and maintenance activities associated with the AP-5 sediment mixing and washing system in May 2018 to provide mixing of the AP-5 slurry to keep the sediment in suspension and facilitate extraction of ammonium perchlorate. Operation and maintenance activities associated with solids washing and decant transfer operations were also ongoing during May 2018.

SOLIDS WASHING AND DECANT WATER TRANSFER

Throughout May 2018, routine procedures for washing the solids and transferring decant water were followed. A total of approximately 93,908 gallons of AP-5 wash water was decanted from the Process Tanks and transferred to the Day Tank in May 2018. A summary of daily AP-5 wash water volumes that were decanted from the Process Tanks and transferred to the Day Tank in May is provided in the attached Table 1. The cumulative total of AP-5 wash water volumes that were decanted from the Process Tanks and transferred to the Day Tank is presented in Table 2a. The cumulative total of Stabilized Lake Mead Water (SLMW) added to the Process Tanks for sediment washing is presented in Table 2b. Note that the SLMW flowmeter readings presented in the routine inspection forms (Attachment A) include both the volume of SLMW added to the Process Tanks for sediment washing and for dilution of AP-5 wash water during transfer (discussed below) and flushing of the lines following each batch transfer.

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Once the AP-5 wash water has been decanted from the Process Tanks and transferred to the Day Tank, Envirogen Technologies, Inc. (ETI) transfers the water to the Receiving Tank and subsequently blends the AP-5 water with extracted groundwater for treatment by the Fluidized Bed Reactors. ETI controls and operates the transfer of the AP-5 wash water from the Day Tank to the Receiving Tank, which includes an option to dilute the AP-5 wash water with SLMW to achieve a consistent concentration at the Receiving Tank. The dilution setting is adjustable and has a default setting of 3% perchlorate. During the month of May 2018, the average batch concentration was below 3% and ETI completed transfer of AP-5 wash water without further dilution.

Perchlorate Mass Removal Estimates

Prior to the start of solids washing, the Process Tanks were sampled to provide an estimate of the starting mass of perchlorate in the Process Tanks. The average starting perchlorate mass estimate is provided on Tables 3 and 4. Two methods are used to estimate subsequent perchlorate mass removal resulting from the solids washing process. Due to differing constraints associated with each method, the two methods are intended to provide a range of reasonable estimates for perchlorate mass removal. These methods are summarized below.

AP-5 wash water was sampled from each Process Tank on May 22, 2018 and submitted for perchlorate analysis (Method 314.0). Prior to May 2018, the Process Tank samples were used to estimate the mass of perchlorate removed from each Process Tank and the remaining perchlorate mass in each tank (Table 3 and Figure 1). Final AP-5 Pond closure activities began at the end of April 2018, and therefore the individual mass calculations are suspended until closure activities are completed. The single-point monthly tank samples were used to develop an estimate of the perchlorate mass added in May 2018 as part of final closure activities (Table 4). Table 3 and Figure 1 updates will resume following pond closure activities and sampling of the Process Tanks to established new mass estimates.

Due to the limitations of conducting the mass estimates using a single point sample from each individual Process Tank, the total mass removal from the Process Tanks is also estimated using the average concentration of each batch of decant water transferred by ETI from the Day Tank to the Receiving Tank. The average batch concentration is estimated by an in-line mass flow meter that continuously measures fluid density and flow rate. The density is converted to perchlorate concentration based on a density-to-perchlorate concentration curve developed from laboratory analysis. This method for estimating mass removal relies on continuous readings as opposed to a single point sample, but is based on meter readings as opposed to laboratory data. An estimate of the total mass of perchlorate removed from the Process Tanks based on the mass flow meter readings is presented in Table 4. As noted above, Table 4 also includes an estimate of the perchlorate mass added to the Process Tanks as part of closure activities. In addition, an estimate of the total mass of perchlorate added to the Process Tanks from AP-5 Pond closure activities is provided in this table.

The total perchlorate mass removed using both methods described above is presented on Figure 2. As shown on the figure, the method using individual Process Tank samples is shown through April 2018, and is suspended until final AP-5 Pond closure activities are completed. The deviations in the total mass removal using the two methods is believed to be primarily the result of the use of single monthly samples from each Process Tank. The initial, comprehensive perchlorate mass estimate developed for the Process Tanks revealed significant variability in individual perchlorate sample results within each tank. Therefore, the mass estimates calculated from the single-point monthly samples are subject to this variability. The mass removal approach using the mass flow meter also has limitations that likely contribute in part to the observed deviation in mass estimates. The mass flow meter approach relies on a density-to-perchlorate concentration curve previously developed from laboratory analysis, but does not utilize laboratory data each month. This method also does not include the mass in AP-5 wash water in the Day Tank that has been decanted from the Process Tanks but not yet processed through the mass flow meter. Therefore, the perchlorate mass removal using these two approaches, as summarized in Figure 2, is intended to provide a range of reasonable estimates for perchlorate mass removal.

Ammonia Mass Removal Estimates

The Process Tanks were sampled on November 1, 2017 to provide an estimate of the mass of ammonia in the tanks at that time. Similar to the sampling for the starting perchlorate mass estimate, the starting ammonia mass estimate incorporates data obtained from sampling of the Process Tanks. The average ammonia mass estimate as of November 1, 2017 is provided as the starting mass on Table 5. Estimates of the mass of ammonia removed from each Process Tank and the estimate remaining ammonia mass through April 2018 is presented on Table 5 and shown on Figure 3. As noted above, final AP-5 Pond closure activities began at the end of April 2018, and therefore the individual tank mass calculations are suspended until pond closure activities are completed.

Since the mass flow meter is correlated to perchlorate concentrations, estimates of the mass of ammonia removed from each Process Tank is based only on the method using sample results.

ROUTINE INSPECTIONS

Routine inspections were conducted throughout May 2018. Routine inspections are intended to proactively identify potential issues or concerns with key infrastructure, identify and perform routine maintenance tasks, and confirm process equipment is ready for service. During the inspections, Tetra Tech staff visually inspected the Process Tanks, Day Tank, piping, secondary containment, and the liner system for damage and leaks; confirmed mixer operation; and recorded findings on the inspection forms. Inspections, testing, and maintenance of the dilution lines, transfer lines, and Receiving Tank are under the responsibility of ETI as of July 17, 2017. Copies of routine inspection forms are provided in Attachment A. Summaries of the primary inspection activities are included below.

Process Piping

The piping within the AP-5 Process Area secondary containment area was inspected on a routine basis. AP-5 sediment wash water was decanted from the Process Tanks and transferred to the Day Tank routinely throughout the month of May 2018. The findings of the inspections are provided below:

- No visible damage to, or leaks from, the AP-5 process piping were observed.

Secondary Containment

The AP-5 Process Area secondary containment liner was inspected by 360-degree perimeter inspections on a routine basis. The findings of the inspections are provided below:

- No damage to the secondary containment liner was observed.

Tanks and Equipment

Process Tanks T-201, T-202 and T-203, and Day Tank T-204 were inspected on a routine basis in May 2018. The findings of the inspections are provided below:

- No visible damage to, or leaks from, Process Tanks or the Day Tank were observed.
- Precipitate on the interior sides of the Process Tanks and impeller shafts was routinely washed down in all three tanks.
- A vibration in the electrical motor was initially observed on the T-201 mixer in March. A vibration analysis was completed in March and determined to be within typical limits. The noise from vibrations appeared to increase in April and an additional inspection was completed in April. The gearbox high speed shaft was observed to have excessive play, indicating bearing wear. Beginning on April 23, 2018, the mixer for T-201 was turned off during the day to minimize usage while a bearing replacement plan is developed. Bearing replacement is expected to begin in June.

MONTHLY INSPECTION

The monthly inspection was conducted on May 31, 2018. Monthly inspections are conducted to provide a more thorough investigation of major equipment and parts and to confirm functionality of key control and interlock components. The monthly inspection form is provided in Attachment B. A summary of the findings is provided below:

- Spare parts for operation of the AP-5 slurry treatment system were present and stored on site.
- The permanent air compressor and controls were tested and operational.
- Air operated double diaphragm pumps were tested, and all were found to be in good working order.
- High-high level alarms for the Process Tanks and Day Tank were tested. All of the level sensors were observed to be functional at the time of the testing.

NON-ROUTINE TASKS

As part of final AP-5 Pond closure, the transfer of residual solids from the pond to the Process Tanks began on April 26, 2018 and continued through May 2018. As of the end of May 2018, approximately 75% of the residual solids and 15% of the cemented/calcified material has been removed from the bottom of the pond. The residual solids are screened through dewatering bins for coarse solids capture, with liquids and fine solids transferred to the Process Tanks. Residual solids and cemented/calcified material removal is ongoing and is currently expected to take until the end of June 2018, weather permitting.

As part of the solids removal process, water is transferred between the Process Tanks to achieve an overall water balance for the operation. As a result of this mixing, the perchlorate and ammonia mass estimates can no longer be tracked for individual Process Tanks (Tables 3 and 5 and Figures 1 and 3). Overall combined mass in the three tanks will continue to be tracked. Following completion of transfer of the residual solids to the Process Tanks, the tanks will be resampled to establish new mass estimates and will be presented in subsequent progress reports.

TRUST CERTIFICATION

AP-5 Operation and Maintenance Summary – May 2018

Nevada Environmental Response Trust Site
(Former Tronox LLC Site)
Henderson, Nevada

Nevada Environmental Response Trust (NERT) Representative Certification

I certify that this document and all attachments submitted to the Division were prepared at the request of, or under the direction or supervision of NERT. Based on my own involvement and/or my inquiry of the person or persons who manage the systems(s) or those directly responsible for gathering the information or preparing the document, or the immediate supervisor of such person(s), the information submitted and provided herein is, to the best of my knowledge and belief, true, accurate, and complete in all material respects.

Office of the Nevada Environmental Response Trust

Le Petomane XXVII, not individually, but solely in its representative capacity as the Nevada Environmental Response Trust Trustee

not individually, but solely as Trust

Signature: Jay A Steinberg, not individually, but solely in his representative capacity as President of the Nevada Environmental Response Trust Trustee

Name: Jay A. Steinberg, not individually, but solely in his representative capacity as President of the Nevada Environmental Response Trust Trustee

Title: Solely as President and not individually

Company: Le Petomane XXVII, Inc., not individually, but solely in its representative capacity as the Nevada Environmental Response Trust Trustee

Date: 6/20/18

CERTIFIED ENVIRONMENTAL MANAGER CERTIFICATION

I hereby certify that I am responsible for the services described in this document and for the preparation of this document. The services described in this document have been prepared in a manner consistent with the current standards of the profession, and to the best of my knowledge, comply with all applicable federal, state, and local statutes, regulations, and ordinances. I hereby certify that all laboratory analytical data was generated by a laboratory certified by the NDEP for each constituent and media presented herein.

Description of Services Provided: Prepared AP-5 Operation and Maintenance Summary for May 2018.

June 21, 2018

Kyle Hansen, CEM
Field Operations Manager/Geologist
Tetra Tech, Inc.

Date

Nevada CEM Certificate Number: 2167
Nevada CEM Expiration Date: September 18, 2018

Tables

Table 1. Monthly AP-5 Wash Water Decant Records

Date	T-201 (Gallons)	T-202 (Gallons)	T-203 (Gallons)	Daily Total (Gallons)
1-May	-	-	-	-
2-May	-	-	-	-
3-May	-	-	22,579	22,579
4-May	-	-	-	-
5-May	-	-	-	-
6-May	-	-	-	-
7-May	-	-	-	-
8-May	-	-	-	-
9-May	-	-	-	-
10-May	20,329	-	-	20,329
11-May	-	-	-	-
12-May	-	-	-	-
13-May	-	-	-	-
14-May	-	-	-	-
15-May	-	-	-	-
16-May	-	-	-	-
17-May	-	-	-	-
18-May	-	-	-	-
19-May	-	-	-	-
20-May	-	-	-	-
21-May	26,938	-	-	26,938
22-May	-	-	-	-
23-May	-	-	-	-
24-May	-	-	-	-
25-May	-	-	-	-
26-May	-	-	-	-
27-May	-	-	-	-
28-May	-	-	-	-
29-May	24,062	-	-	24,062
30-May	-	-	-	-
31-May	-	-	-	-
Total	**71,329**	**-**	**22,579**	**93,908**

Notes:

1 - Decant volumes presented are based on the starting and ending volumes in the Day Tank during decant operations, plus the volume that was transferred by ETI to the Receiving Tank during the time decant operations were occurring.

Table 2a. Cumulative AP-5 Wash Water Decant and Transfer Records

Month	T-201 (Gallons)	T-202 (Gallons)	T-203 (Gallons)	Monthly Total (Gallons)
July 2017	38,377		20,906	59,283
August 2017	8,868		9,454	18,322
September 2017		22,819		22,819
October 2017		117,200		117,200
November 2017	26,567	65,048	98,171	189,786
December 2017	88,449	43,485	71,600	203,534
January 2018	95,673	81,036	59,577	236,286
February 2018	108,564	55,620	122,012	286,196
March 2018	75,262	76,737	-	151,999
April 2018	44,177	-	27,290	71,467
May 2018	71,329	-	22,579	93,908
Cumulative Total	**557,266**	**461,945**	**431,589**	**1,450,800**

Table 2b. Cumulative Stabilized Lake Mead Water Volume Added for Sediment Washing

Month	T-201 (Gallons)	T-202 (Gallons)	T-203 (Gallons)	Monthly Total (Gallons)[1]
July 2017	22,775		6,150	28,925
August 2017	13,970		7,860	21,830
September 2017		20,010		20,010
October 2017		131,247		131,247
November 2017	27,360	65,435	75,440	168,235
December 2017	43,570	39,585	5,485	88,640
January 2018	24,135	30,685	64,205	119,025
February 2018	92,020	22,475	126,845	241,340
March 2018	81,685	79,270	-	160,955
April 2018	465	-	18,805	19,270
May 2018	825	-	390	1,215
Cumulative Total	**306,805**	**388,707**	**305,180**	**1,000,692**

Notes:

1 - Stabilized Lake Mead Water (SLMW) volume added to tanks does not include the volume used to routinely wash down precipitate on the interior sides and mixer impellar shafts. The volume of wash down water is approximately 2,000 gallons per tank per month.

2 - The volume of SLMW added to the tanks does not include stormwater that accumulates in the lined secondary containment and equipment pads that is pumped to the Process Tanks.

Table 3. Estimate of Perchlorate Mass in Process Tanks Based on Tank Samples

		Mass in T-201 (lbs)	Mass in T-202 (lbs)	Mass in T-203 (lbs)	Total Monthly Mass Removed (lbs)	Total Perchlorate Mass In Process Tanks (lbs)
Initial Perchlorate Mass[1]		**168,055**	**247,579**	**185,745**		**601,380**
Approx.Mass Removed	*July 2017*[2]	*17,828*	*-*	*9,189*	*27,017*	**574,363**
	August 2017	*4,120*	*-*	*4,155*	*8,275*	**566,088**
	September 2017	*-*	*12,547*	*-*	*12,547*	**553,540**
	October 2017	*-*	*59,663*	*-*	*59,663*	**493,878**
	November 2017	*10,605*	*32,571*	*40,418*	*83,594*	**410,284**
	December 2017	*41,090*	*16,693*	*28,582*	*86,365*	**323,919**
	January 2018	*36,195*	*25,360*	*19,639*	*81,195*	**242,724**
	February 2018	*26,727*	*13,925*	*29,020*	*69,672*	**173,051**
	March 2018	*12,248*	*12,168*	*-*	*24,415*	**148,636**
	April 2018	*6,083*	*-*	*4,441*	*10,524*	**138,112**
	May 2018[3]	*INDIVIDUAL PROCESS TANK MASS CALCULATIONS ARE SUSPENDED UNTIL POND CLOSURE ACTIVITIES ARE COMPLETED.*				
Ending Perchlorate Mass						

Notes:

1 - The initial perchlorate mass estimate presented is based on an average of laboratory results. The 95% confidence interval for starting perchlorate mass in all three Process Tanks is 422,491 to 776,030 pounds.

2 - The approximate mass removed for July 2017 is based on the starting concentrations in the Process Tanks. Subsequent mass removal calculations are based on both the starting (prior month) and ending (current month) perchlorate concentrations resulting from single point samples from each tank.

3 - Individual tank mass calculations are suspended until pond closure activities are completed. Following pond closure, a more comprehensive sampling of the Process Tanks will be completed to establish new mass estimates.

Table 4. Estimate of Perchlorate Mass in Process Tanks Based on Batch Transfers

		Estimated Monthly Mass Added (lbs) [3]	Total Monthly Mass Removed (lbs)	Total Perchlorate Mass In Process Tanks (lbs)
Initial Perchlorate Mass[1]				**601,380**
Approx.Mass Removed	*July 2017* [2]		*13,520*	**587,860**
	August 2017 [2]		*6,000*	**581,860**
	September 2017		*10,706*	**571,154**
	October 2017		*49,990*	**521,163**
	November 2017		*74,231*	**446,933**
	December 2017		*73,066*	**373,867**
	January 2018		*69,363*	**304,504**
	February 2018		*73,247*	**231,257**
	March 2018		*25,321*	**205,935**
	April 2018		*7,030*	**198,905**
	May 2018 [4]	*151,078*	*11,126*	**338,857**
Ending Perchlorate Mass				**338,857**

Notes:

1 - The initial perchlorate mass estimate presented is based on an average of laboratory results as summarized in the August 11, 2017 technical memo *AP-5 Tank Sampling Activities and Mass Estimate Summary* . The 95% confidence interval for starting perchlorate mass in all three Process Tanks is 422,491 to 776,030 pounds.

2 - Individual batch data not available from ETI for July and August 2017. Values presented for these months are based on ETI's estimates. Subsequent monthly estimates are based on ETI records for batch volumes and average batch concentrations transferred from the Day Tank T-204 to the Receiving Tank T-205.

3 - Beginning in May 2018, estimates of the perchlorate mass added as part of final AP-5 pond closure activities were developed based on single point samples from each Process Tank. Following pond closure, a more comprehensive sampling of the Process Tanks will be completed to establish new mass estimates.

4 - The May 2018 estimate of mass added from AP-5 Pond closure activities represents the period from April 26, 2018 through May 31, 2018, and are estimated using a single point sample from each Process Tank.

Table 5. Estimate of Ammonia Mass in Process Tanks

		Mass in T-201 (lbs)	Mass in T-202 (lbs)	Mass in T-203 (lbs)	Total Monthly Mass Removed (lbs)	Total Ammonia Mass In Process Tanks (lbs)
Initial Ammonia Mass[1]		**18,217**	**22,343**	**20,277**		**60,837**
Approx. Mass Removed	*November 2017*	*1,323*	*3,979*	*4,490*	*9,792*	**51,045**
	December 2017	*3,974*	*1,778*	*2,659*	*8,411*	**42,634**
	January 2018	*3,353*	*3,009*	*2,163*	*8,526*	**34,108**
	February 2018	*2,945*	*1,509*	*3,564*	*8,017*	**26,091**
	March 2018	*1,445*	*1,441*	-	*2,886*	**23,206**
	April 2018	*682*	-	*490*	*1,172*	**22,034**
	May 2018 [2]	*INDIVIDUAL PROCESS TANK MASS CALCULATIONS ARE SUSPENDED UNTIL POND CLOSURE ACTIVITIES ARE COMPLETED.*				
Ending Ammonia Mass						

Notes:

1 - The initial ammonia mass estimate presented is based on an average of laboratory results for slurry and accumulated solids samples collected on November 1, 2017. Ammonia mass estimates are not available prior to this date.

2 - Individual tank mass calculations are suspended until pond closure activities are completed. Following pond closure, a more comprehensive sampling of the Process Tanks will be completed to establish new mass estimates.

Figures

Figure 1. Estimate of Perchlorate Mass Remaining in Process Tanks

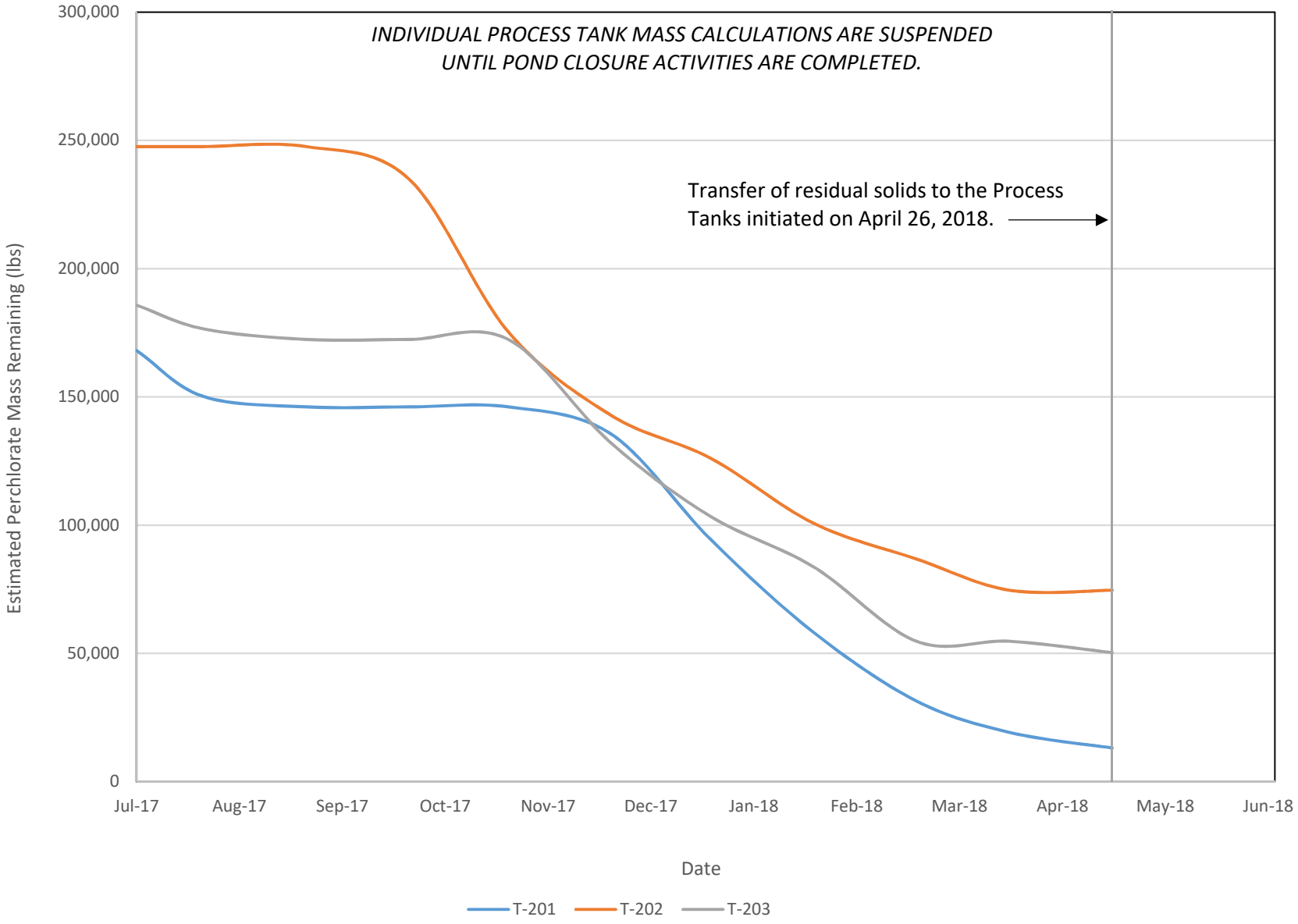


Figure 2. Estimate of Total Perchlorate Mass Remaining in Process Tanks

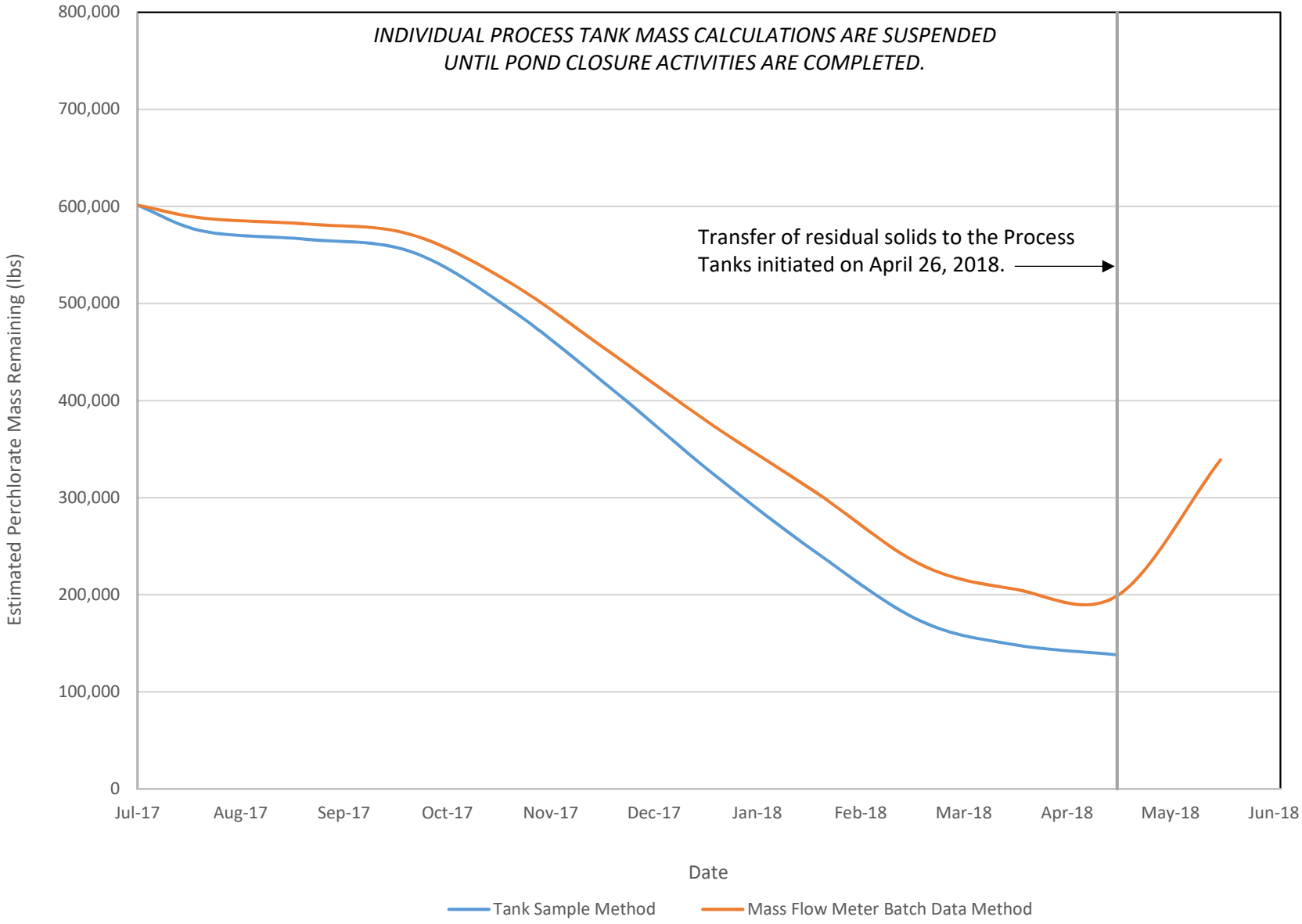
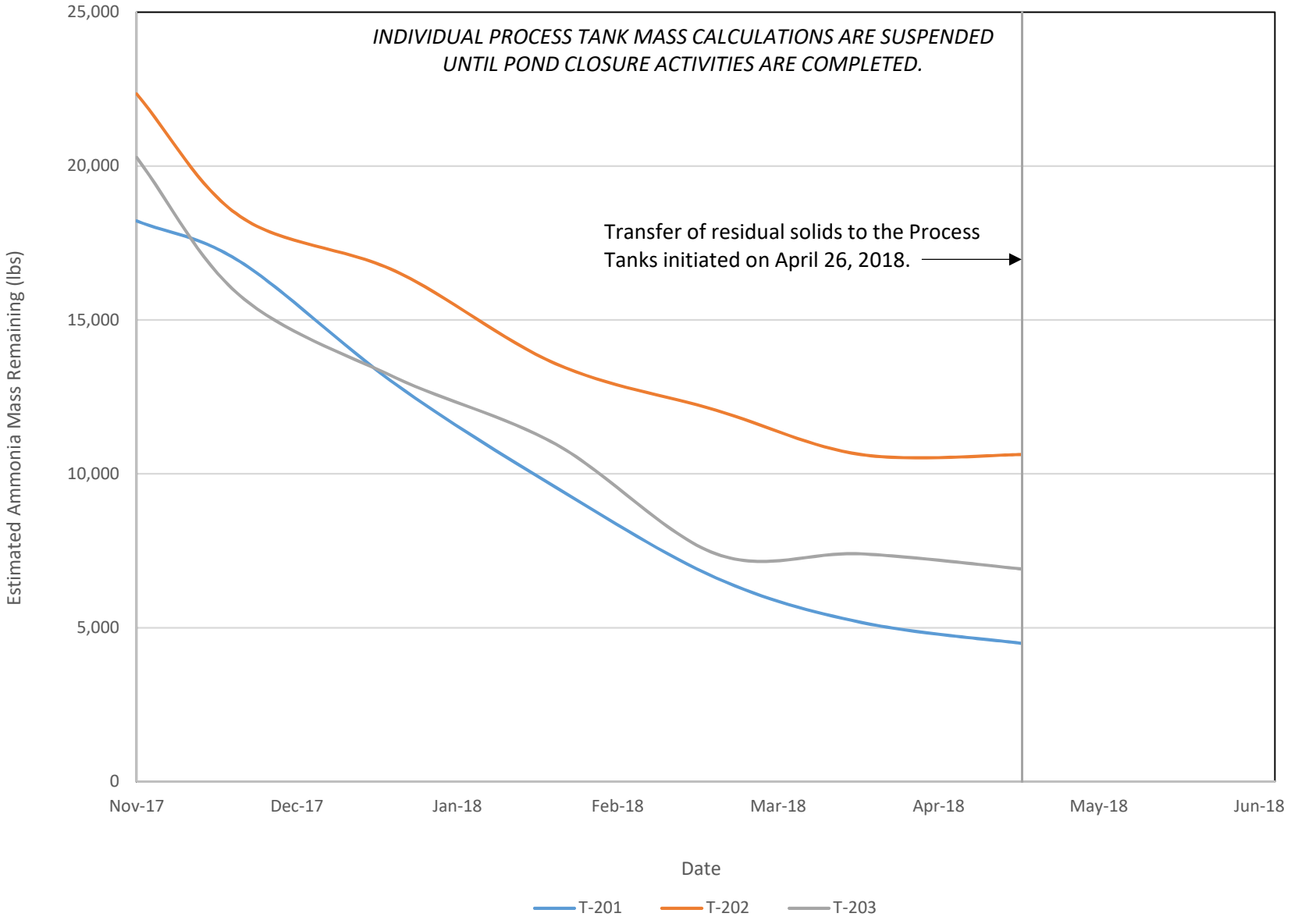


Figure 3. Estimate of Ammonia Mass Remaining in Process Tanks



Attachment A
Phase III O&M Routine Inspection Forms

K05 PHASE III O&M ROUTINE INSPECTION FORM

Date: 5/1/18 Time: 1700 Inspector Initials: KSH

PROCESS PIPING INSPECTION

1. Observe piping between Process Tank secondary containment and FBR secondary containment.
   Any leaks, punctures, damage, bulges visible? Yes* (No)
2. Observe piping in Process Tank secondary containment area.
   Any leaks, punctures, damage, bulges visible? Yes* (No)
3. Record reading on Stabilized Lake Mead Water (SLMW) flowmeter east of Process Tanks.
   Flowmeter: 1,989,510 (gallons)

SECONDARY CONTAINMENT INSPECTION

4. Perform 360 perimeter walk to observe liner system for potential wear and tear.
   Any leaks, punctures, or other damage visible? Yes (No)
5. Is there storm water accumulation greater than 1 foot? Yes (No)
   If Yes, pump storm water into one of the Process Tanks.
6. Is there storm water accumulation in equipment pad sumps?: Yes (No)
   If Yes, pump storm water into one of the process tanks.

PROCESS TANKS AND DAY TANK INSPECTION

7. Perform 360 degree walk around of each tank to inspect for damage or leaks and lock out of valves:

	T-201		T-202		T-203		T-204	
Visible damage or leaks/stains? (inspect all welds and nozzles/valves)	Yes*	(No)	Yes*	(No)	Yes*	(No)	Yes*	(No)
All decant valves and transfer valves locked out?**	(Yes)	No*	(Yes)	No*	(Yes)	No*	NA	NA
Are transfer pumps ready for service?	(Yes)	No*	(Yes)	No*	(Yes)	No*	NA	NA

8. Visual inspection from top of each Process Tank:

	T-201		T-202		T-203	
Visible oil leaks from gear box?	Yes*	(No)	Yes*	(No)	Yes*	(No)
Has routine wash down of precipitate/crystals on tank sides and mixer impeller been completed?	(Yes)	No	(Yes)	No	(Yes)	No
Mixer off as part of sediment washing process? If Yes, draw an "X" through answers to next question.	(Yes)	No	Yes	(No)	Yes	(No)
Mixer running and turbulence/vortex observed?**	Yes	(No*)	Yes	No*	Yes	No*
Are used oil containers labelled and stored appropriately, in accordance with the Site Waste Management Plan?	(Yes)	No*	(Yes)	No*	(Yes)	No*
Ambient air temperature 60 Oil temperature	62 °F		81 °F		64 °F	

K05 PHASE III O&M ROUTINE INSPECTION FORM

Date: 5/1/18 Time: _____ Inspector Initials: KH

NOTES:

* - Notify Site Implementation Manager immediately if any of these conditions are observed and thoroughly document on this form and through photographs.

** - Active sediment washing requires occasional shutdown of mixers and opening of decant valves. Notify Site Implementation Manager immediately if this condition is observed and active washing is not occurring.

Initiate procedures to mobilize and connect portable generators to power the mixers in the event of a power loss greater than six hours to prevent solids from consolidating in the bottom of the Process Tanks.

COMMENTS:

(Describe all "yes" answers, any observed damage, any areas that could not be inspected and the reason, etc.)

T-201 off due to gear box vibrations

Operator Signature: Kyle L. Hansen

EMERGENCY CONTACTS:

Title	Name	Phone #	Comments
Site Implementation Manager	Brad Maynard	(907) 723-2646	
Field Operations Manager	Kyle Hansen	(801) 949-6663	
Project Manager	David Bohmann	(303) 704-9527	
Program Manager	Dan Pastor	(303) 588-0901	
Site Health & Safety	Karen Luna	(702) 217-8173	
Corporate Health & Safety	Michelle Gillie	(610) 348-7197	
Process Engineer	Courtney Flores	(770) 845-6281	
Emergency Generator (United Rentals)	Heath Barnard	(702) 538 2292	Reference Quote # 142770051 Reference Customer # 1439334

K05 PHASE III O&M ROUTINE INSPECTION FORM

Date: 5/2/16 Time: 1640 Inspector Initials: KGH

PROCESS PIPING INSPECTION

1. Observe piping between Process Tank secondary containment and FBR secondary containment.
   Any leaks, punctures, damage, bulges visible? Yes* (No)
2. Observe piping in Process Tank secondary containment area.
   Any leaks, punctures, damage, bulges visible? Yes* (No)
3. Record reading on Stabilized Lake Mead Water (SLMW) flowmeter east of Process Tanks.
   Flowmeter: 1,990,810 (gallons)

SECONDARY CONTAINMENT INSPECTION

4. Perform 360 perimeter walk to observe liner system for potential wear and tear.
   Any leaks, punctures, or other damage visible? Yes (No)
5. Is there storm water accumulation greater than 1 foot? Yes (No)
   If Yes, pump storm water into one of the Process Tanks.
6. Is there storm water accumulation in equipment pad sumps?: Yes (No)
   If Yes, pump storm water into one of the process tanks.

PROCESS TANKS AND DAY TANK INSPECTION

7. Perform 360 degree walk around of each tank to inspect for damage or leaks and lock out of valves:

	T-201		T-202		T-203		T-204	
Visible damage or leaks/stains? (inspect all welds and nozzles/valves)	Yes*	(No)	Yes*	(No)	Yes*	(No)	Yes*	(No)
All decant valves and transfer valves locked out?**	Yes	(No*)	(Yes)	No*	Yes	(No*)	NA	NA
Are transfer pumps ready for service?	(Yes)	No*	(Yes)	No*	(Yes)	No*	NA	NA

8. Visual inspection from top of each Process Tank:

	T-201		T-202		T-203	
Visible oil leaks from gear box?	Yes*	(No)	Yes*	(No)	Yes*	(No)
Has routine wash down of precipitate/crystals on tank sides and mixer impeller been completed?	(Yes)	No	(Yes)	No	(Yes)	No
Mixer off as part of sediment washing process? If Yes, draw an "X" through answers to next question.	(Yes)	No	(Yes)	No	(Yes)	No
Mixer running and turbulence/vortex observed?**	Yes	(No*)	(Yes)	No*	(Yes)	No*
Are used oil containers labelled and stored appropriately, in accordance with the Site Waste Management Plan?	(Yes)	No*	(Yes)	No*	(Yes)	No*
Ambient air temperature 70 Oil temperature	72 °F		76 °F		75 °F	

K05 PHASE III O&M ROUTINE INSPECTION FORM

Date: 5/2/18 Time: _____ Inspector Initials: KSH

NOTES:

* - Notify Site Implementation Manager immediately if any of these conditions are observed and thoroughly document on this form and through photographs.

** - Active sediment washing requires occasional shutdown of mixers and opening of decant valves. Notify Site Implementation Manager immediately if this condition is observed and active washing is not occurring.

Initiate procedures to mobilize and connect portable generators to power the mixers in the event of a power loss greater than six hours to prevent solids from consolidating in the bottom of the Process Tanks.

COMMENTS:

(Describe all "yes" answers, any observed damage, any areas that could not be inspected and the reason, etc.)

T-201 - off during decant
T-203 off during decant

Operator Signature: Kyle S. Hansen

EMERGENCY CONTACTS:

Title	Name	Phone #	Comments
Site Implementation Manager	Brad Maynard	(907) 723-2646	
Field Operations Manager	Kyle Hansen	(801) 949-6663	
Project Manager	David Bohmann	(303) 704-9527	
Program Manager	Dan Pastor	(303) 588-0901	
Site Health & Safety	Karen Luna	(702) 217-8173	
Corporate Health & Safety	Michelle Gillie	(610) 348-7197	
Process Engineer	Courtney Flores	(770) 845-6281	
Emergency Generator (United Rentals)	Heath Barnard	(702) 538 2292	Reference Quote # 142770051 Reference Customer # 1439334

K05 PHASE III O&M ROUTINE INSPECTION FORM

Date: 5/3/18 Time: 1015 Inspector Initials: KSH

PROCESS PIPING INSPECTION

1. Observe piping between Process Tank secondary containment and FBR secondary containment.
   Any leaks, punctures, damage, bulges visible? Yes* (No)
2. Observe piping in Process Tank secondary containment area.
   Any leaks, punctures, damage, bulges visible? Yes* (No)
3. Record reading on Stabilized Lake Mead Water (SLMW) flowmeter east of Process Tanks.
   Flowmeter: 1,995,600 (gallons)

SECONDARY CONTAINMENT INSPECTION

4. Perform 360 perimeter walk to observe liner system for potential wear and tear.
   Any leaks, punctures, or other damage visible? Yes (No)
5. Is there storm water accumulation greater than 1 foot? Yes (No)
   If Yes, pump storm water into one of the Process Tanks.
6. Is there storm water accumulation in equipment pad sumps?: Yes (No)
   If Yes, pump storm water into one of the process tanks.

PROCESS TANKS AND DAY TANK INSPECTION

7. Perform 360 degree walk around of each tank to inspect for damage or leaks and lock out of valves:

	T-201		T-202		T-203		T-204	
Visible damage or leaks/stains? (inspect all welds and nozzles/valves)	Yes*	(No)	Yes*	(No)	Yes*	(No)	Yes*	(No)
All decant valves and transfer valves locked out?**	Yes	(No*)	Yes	(No*)	(Yes)	No*	NA	NA
Are transfer pumps ready for service?	(Yes)	No*	(Yes)	No*	(Yes)	No*	NA	NA

8. Visual inspection from top of each Process Tank:

	T-201		T-202		T-203	
Visible oil leaks from gear box?	Yes*	(No)	Yes*	(No)	Yes*	(No)
Has routine wash down of precipitate/crystals on tank sides and mixer impeller been completed?	(Yes)	No	(Yes)	No	(Yes)	No
Mixer off as part of sediment washing process? If Yes, draw an "X" through answers to next question.	(Yes)	No	(Yes)	No	Yes	(No)
Mixer running and turbulence/vortex observed?**	Yes	(No*)	Yes	(No*)	(Yes)	No*
Are used oil containers labelled and stored appropriately, in accordance with the Site Waste Management Plan?	(Yes)	No*	(Yes)	No*	(Yes)	No*
Ambient air temperature 76 Oil temperature	78 °F		94 °F		80 °F	

K05 PHASE III O&M ROUTINE INSPECTION FORM

Date: 5/3/18 Time: _____ Inspector Initials: KSH

NOTES:

* - Notify Site Implementation Manager immediately if any of these conditions are observed and thoroughly document on this form and through photographs.

** - Active sediment washing requires occasional shutdown of mixers and opening of decant valves. Notify Site Implementation Manager immediately if this condition is observed and active washing is not occurring.

Initiate procedures to mobilize and connect portable generators to power the mixers in the event of a power loss greater than six hours to prevent solids from consolidating in the bottom of the Process Tanks.

COMMENTS:

(Describe all "yes" answers, any observed damage, any areas that could not be inspected and the reason, etc.)

T-201 off due to gear issues
T-202 decanting for soil washing operations

Operator Signature: Kyle Hansen

EMERGENCY CONTACTS:

Title	Name	Phone #	Comments
Site Implementation Manager	Brad Maynard	(907) 723-2646	
Field Operations Manager	Kyle Hansen	(801) 949-6663	
Project Manager	David Bohmann	(303) 704-9527	
Program Manager	Dan Pastor	(303) 588-0901	
Site Health & Safety	Karen Luna	(702) 217-8173	
Corporate Health & Safety	Michelle Gillie	(610) 348-7197	
Process Engineer	Courtney Flores	(770) 845-6281	
Emergency Generator (United Rentals)	Heath Barnard	(702) 538 2292	Reference Quote # 142770051 Reference Customer # 1439334

K05 PHASE III O&M ROUTINE INSPECTION FORM

Date: 5/4/18 Time: 0950 Inspector Initials: KSH

PROCESS PIPING INSPECTION

1. Observe piping between Process Tank secondary containment and FBR secondary containment.
   Any leaks, punctures, damage, bulges visible? Yes* (No)
2. Observe piping in Process Tank secondary containment area.
   Any leaks, punctures, damage, bulges visible? Yes* (No)
3. Record reading on Stabilized Lake Mead Water (SLMW) flowmeter east of Process Tanks.
   Flowmeter: 1,996,500 (gallons)

SECONDARY CONTAINMENT INSPECTION

4. Perform 360 perimeter walk to observe liner system for potential wear and tear.
   Any leaks, punctures, or other damage visible? Yes (No)
5. Is there storm water accumulation greater than 1 foot? Yes (No)
   If Yes, pump storm water into one of the Process Tanks.
6. Is there storm water accumulation in equipment pad sumps?: Yes (No)
   If Yes, pump storm water into one of the process tanks.

PROCESS TANKS AND DAY TANK INSPECTION

7. Perform 360 degree walk around of each tank to inspect for damage or leaks and lock out of valves:

	T-201		T-202		T-203		T-204	
Visible damage or leaks/stains? (inspect all welds and nozzles/valves)	Yes*	(No)	Yes*	(No)	Yes*	(No)	Yes*	(No)
All decant valves and transfer valves locked out?**	Yes	(No*)	Yes	(No*)	(Yes)	No*	NA	NA
Are transfer pumps ready for service?	(Yes)	No*	(Yes)	No*	(Yes)	No*	NA	NA

8. Visual inspection from top of each Process Tank:

	T-201		T-202		T-203	
Visible oil leaks from gear box?	Yes*	(No)	Yes*	(No)	Yes*	(No)
Has routine wash down of precipitate/crystals on tank sides and mixer impeller been completed?	(Yes)	No	(Yes)	No	(Yes)	No
Mixer off as part of sediment washing process? If Yes, draw an "X" through answers to next question.	(Yes)	No	(Yes)	No	Yes	(No)
Mixer running and turbulence/vortex observed?**	Yes	No*	Yes	No*	Yes	No*
Are used oil containers labelled and stored appropriately, in accordance with the Site Waste Management Plan?	(Yes)	No*	(Yes)	No*	(Yes)	No*
Ambient air temperature 76 Oil temperature	78 °F		84 °F		85 °F	

K05 PHASE III O&M ROUTINE INSPECTION FORM

Date: 5/4/18 Time: _____ Inspector Initials: KSH

NOTES:

* - Notify Site Implementation Manager immediately if any of these conditions are observed and thoroughly document on this form and through photographs.

** - Active sediment washing requires occasional shutdown of mixers and opening of decant valves. Notify Site Implementation Manager immediately if this condition is observed and active washing is not occurring.

Initiate procedures to mobilize and connect portable generators to power the mixers in the event of a power loss greater than six hours to prevent solids from consolidating in the bottom of the Process Tanks.

COMMENTS:

(Describe all "yes" answers, any observed damage, any areas that could not be inspected and the reason, etc.)

T-201 off for decant & vibration issues
T-202 off for decant

Operator Signature: Kyle S. Hansen

EMERGENCY CONTACTS:

Title	Name	Phone #	Comments
Site Implementation Manager	Brad Maynard	(907) 723-2646	
Field Operations Manager	Kyle Hansen	(801) 949-6663	
Project Manager	David Bohmann	(303) 704-9527	
Program Manager	Dan Pastor	(303) 588-0901	
Site Health & Safety	Karen Luna	(702) 217-8173	
Corporate Health & Safety	Michelle Gillie	(610) 348-7197	
Process Engineer	Courtney Flores	(770) 845-6281	
Emergency Generator (United Rentals)	Heath Barnard	(702) 538 2292	Reference Quote # 142770051 Reference Customer # 1439334

K05 PHASE III O&M ROUTINE INSPECTION FORM

Date: 5/5/18 Time: 1000 Inspector Initials: KSH

PROCESS PIPING INSPECTION

1. Observe piping between Process Tank secondary containment and FBR secondary containment.
   Any leaks, punctures, damage, bulges visible? Yes* (No)
2. Observe piping in Process Tank secondary containment area.
   Any leaks, punctures, damage, bulges visible? Yes* (No)
3. Record reading on Stabilized Lake Mead Water (SLMW) flowmeter east of Process Tanks.
   Flowmeter: 1,997,705 (gallons)

SECONDARY CONTAINMENT INSPECTION

4. Perform 360 perimeter walk to observe liner system for potential wear and tear.
   Any leaks, punctures, or other damage visible? Yes (No)
5. Is there storm water accumulation greater than 1 foot? Yes (No)
   If Yes, pump storm water into one of the Process Tanks.
6. Is there storm water accumulation in equipment pad sumps?: Yes (No)
   If Yes, pump storm water into one of the process tanks.

PROCESS TANKS AND DAY TANK INSPECTION

7. Perform 360 degree walk around of each tank to inspect for damage or leaks and lock out of valves:

	T-201		T-202		T-203		T-204	
Visible damage or leaks/stains? (inspect all welds and nozzles/valves)	Yes*	(No)	Yes*	(No)	Yes*	(No)	Yes*	(No)
All decant valves and transfer valves locked out?**	(Yes)	No*	(Yes)	No*	(Yes)	No*	NA	NA
Are transfer pumps ready for service?	(Yes)	No*	(Yes)	No*	(Yes)	No*	NA	NA

8. Visual inspection from top of each Process Tank:

	T-201		T-202		T-203	
Visible oil leaks from gear box?	Yes*	(No)	Yes*	(No)	Yes*	(No)
Has routine wash down of precipitate/crystals on tank sides and mixer impeller been completed?	(Yes)	No	(Yes)	No	(Yes)	No
Mixer off as part of sediment washing process? If Yes, draw an "X" through answers to next question.	Yes	(No)	Yes	(No)	Yes	(No)
Mixer running and turbulence/vortex observed?**	Yes	(No*)	(Yes)	No*	(Yes)	No*
Are used oil containers labelled and stored appropriately, in accordance with the Site Waste Management Plan?	(Yes)	No*	(Yes)	No*	(Yes)	No*
Ambient air temperature 92 Oil temperature	84 °F		125 °F		124 °F	

K05 PHASE III O&M ROUTINE INSPECTION FORM

Date: 5/5/18 **Time:** _____ **Inspector Initials:** KSH

NOTES:

* - Notify Site Implementation Manager immediately if any of these conditions are observed and thoroughly document on this form and through photographs.

** - Active sediment washing requires occasional shutdown of mixers and opening of decant valves. Notify Site Implementation Manager immediately if this condition is observed and active washing is not occurring.

Initiate procedures to mobilize and connect portable generators to power the mixers in the event of a power loss greater than six hours to prevent solids from consolidating in the bottom of the Process Tanks.

COMMENTS:

(Describe all "yes" answers, any observed damage, any areas that could not be inspected and the reason, etc.)

T-201 off due to vibration issues

Operator Signature: Kyle D. Hansen

EMERGENCY CONTACTS:

Title	Name	Phone #	Comments
Site Implementation Manager	Brad Maynard	(907) 723-2646	
Field Operations Manager	Kyle Hansen	(801) 949-6663	
Project Manager	David Bohmann	(303) 704-9527	
Program Manager	Dan Pastor	(303) 588-0901	
Site Health & Safety	Karen Luna	(702) 217-8173	
Corporate Health & Safety	Michelle Gillie	(610) 348-7197	
Process Engineer	Courtney Flores	(770) 845-6281	
Emergency Generator (United Rentals)	Heath Barnard	(702) 538 2292	Reference Quote # 142770051 Reference Customer # 1439334

K05 PHASE III O&M ROUTINE INSPECTION FORM

Date: 5/6/18 Time: 0925 Inspector Initials: KSH

PROCESS PIPING INSPECTION

1. Observe piping between Process Tank secondary containment and FBR secondary containment.
   Any leaks, punctures, damage, bulges visible? Yes* (No)
2. Observe piping in Process Tank secondary containment area.
   Any leaks, punctures, damage, bulges visible? Yes* (No)
3. Record reading on Stabilized Lake Mead Water (SLMW) flowmeter east of Process Tanks.
   Flowmeter: 1,997,715 (gallons)

SECONDARY CONTAINMENT INSPECTION

4. Perform 360 perimeter walk to observe liner system for potential wear and tear.
   Any leaks, punctures, or other damage visible? Yes (No)
5. Is there storm water accumulation greater than 1 foot? Yes (No)
   If Yes, pump storm water into one of the Process Tanks.
6. Is there storm water accumulation in equipment pad sumps?: Yes (No)
   If Yes, pump storm water into one of the process tanks.

PROCESS TANKS AND DAY TANK INSPECTION

7. Perform 360 degree walk around of each tank to inspect for damage or leaks and lock out of valves:

	T-201		T-202		T-203		T-204	
Visible damage or leaks/stains? (inspect all welds and nozzles/valves)	Yes*	(No)	Yes*	(No)	Yes*	(No)	Yes*	(No)
All decant valves and transfer valves locked out?**	(Yes)	No*	(Yes)	No*	(Yes)	No*	NA	NA
Are transfer pumps ready for service?	(Yes)	No*	(Yes)	No*	(Yes)	No*	NA	NA

8. Visual inspection from top of each Process Tank:

	T-201		T-202		T-203	
Visible oil leaks from gear box?	Yes*	(No)	Yes*	(No)	Yes*	(No)
Has routine wash down of precipitate/crystals on tank sides and mixer impeller been completed?	(Yes)	No	(Yes)	No	(Yes)	No
Mixer off as part of sediment washing process? If Yes, draw an "X" through answers to next question.	(Yes)	No	Yes	(No)	Yes	(No)
Mixer running and turbulence/vortex observed?**	Yes	(No*)	(Yes)	No*	(Yes)	No*
Are used oil containers labelled and stored appropriately, in accordance with the Site Waste Management Plan?	(Yes)	No*	(Yes)	No*	(Yes)	No*
Ambient air temperature 82 Oil temperature	84 °F		125 °F		124 °F	

K05 PHASE III O&M ROUTINE INSPECTION FORM

Date: 5/6/18 Time: _____ Inspector Initials: KSH

NOTES:

* - Notify Site Implementation Manager immediately if any of these conditions are observed and thoroughly document on this form and through photographs.

** - Active sediment washing requires occasional shutdown of mixers and opening of decant valves. Notify Site Implementation Manager immediately if this condition is observed and active washing is not occurring.

Initiate procedures to mobilize and connect portable generators to power the mixers in the event of a power loss greater than six hours to prevent solids from consolidating in the bottom of the Process Tanks.

COMMENTS:

(Describe all "yes" answers, any observed damage, any areas that could not be inspected and the reason, etc.)

T-201 down due to vibration issues.

Operator Signature: Kyle S. Hansen

EMERGENCY CONTACTS:

Title	Name	Phone #	Comments
Site Implementation Manager	Brad Maynard	(907) 723-2646	
Field Operations Manager	Kyle Hansen	(801) 949-6663	
Project Manager	David Bohmann	(303) 704-9527	
Program Manager	Dan Pastor	(303) 588-0901	
Site Health & Safety	Karen Luna	(702) 217-8173	
Corporate Health & Safety	Michelle Gillie	(610) 348-7197	
Process Engineer	Courtney Flores	(770) 845-6281	
Emergency Generator (United Rentals)	Heath Barnard	(702) 538 2292	Reference Quote # 142770051 Reference Customer # 1439334

K05 PHASE III O&M ROUTINE INSPECTION FORM

Date: 5/7/18 Time: 0825 Inspector Initials: KSH

PROCESS PIPING INSPECTION

1. Observe piping between Process Tank secondary containment and FBR secondary containment.
   Any leaks, punctures, damage, bulges visible? Yes* (No)
2. Observe piping in Process Tank secondary containment area.
   Any leaks, punctures, damage, bulges visible? Yes* (No)
3. Record reading on Stabilized Lake Mead Water (SLMW) flowmeter east of Process Tanks.
   Flowmeter: 1,998,030 (gallons)

SECONDARY CONTAINMENT INSPECTION

4. Perform 360 perimeter walk to observe liner system for potential wear and tear.
   Any leaks, punctures, or other damage visible? Yes (No)
5. Is there storm water accumulation greater than 1 foot? Yes (No)
   If Yes, pump storm water into one of the Process Tanks.
6. Is there storm water accumulation in equipment pad sumps?: Yes (No)
   If Yes, pump storm water into one of the process tanks.

PROCESS TANKS AND DAY TANK INSPECTION

7. Perform 360 degree walk around of each tank to inspect for damage or leaks and lock out of valves:

	T-201		T-202		T-203		T-204	
Visible damage or leaks/stains? (inspect all welds and nozzles/valves)	Yes*	(No)	Yes*	(No)	Yes*	(No)	Yes*	(No)
All decant valves and transfer valves locked out?**	Yes	(No*)	Yes	(No*)	(Yes)	No*	NA	NA
Are transfer pumps ready for service?	(Yes)	No*	(Yes)	No*	(Yes)	No*	NA	NA

8. Visual inspection from top of each Process Tank:

	T-201		T-202		T-203	
Visible oil leaks from gear box?	Yes*	(No)	Yes*	(No)	Yes*	(No)
Has routine wash down of precipitate/crystals on tank sides and mixer impeller been completed?	(Yes)	No	(Yes)	No	(Yes)	No
Mixer off as part of sediment washing process? If Yes, draw an "X" through answers to next question.	(Yes)	No	(Yes)	No	Yes	(No)
Mixer running and turbulence/vortex observed?**	Yes	(No*)	Yes	(No*)	(Yes)	No*
Are used oil containers labelled and stored appropriately, in accordance with the Site Waste Management Plan?	(Yes)	No*	(Yes)	No*	(Yes)	No*
Ambient air temperature 82 Oil temperature	93 °F		105 °F		124 °F	

K05 PHASE III O&M ROUTINE INSPECTION FORM

Date: 5/7/18 **Time:** _____ **Inspector Initials:** KSH

NOTES:

* - Notify Site Implementation Manager immediately if any of these conditions are observed and thoroughly document on this form and through photographs.

** - Active sediment washing requires occasional shutdown of mixers and opening of decant valves. Notify Site Implementation Manager immediately if this condition is observed and active washing is not occurring.

Initiate procedures to mobilize and connect portable generators to power the mixers in the event of a power loss greater than six hours to prevent solids from consolidating in the bottom of the Process Tanks.

COMMENTS:

(Describe all "yes" answers, any observed damage, any areas that could not be inspected and the reason, etc.)

T-201 & T-202 - decanting back to AP-5 pond

Operator Signature: Kyle S. Hansen

EMERGENCY CONTACTS:

Title	Name	Phone #	Comments
Site Implementation Manager	Brad Maynard	(907) 723-2646	
Field Operations Manager	Kyle Hansen	(801) 949-6663	
Project Manager	David Bohmann	(303) 704-9527	
Program Manager	Dan Pastor	(303) 588-0901	
Site Health & Safety	Karen Luna	(702) 217-8173	
Corporate Health & Safety	Michelle Gillie	(610) 348-7197	
Process Engineer	Courtney Flores	(770) 845-6281	
Emergency Generator (United Rentals)	Heath Barnard	(702) 538 2292	Reference Quote # 142770051 Reference Customer # 1439334

K05 PHASE III O&M ROUTINE INSPECTION FORM

Date: 5/8/18 **Time:** 0635 **Inspector Initials:** KSH

PROCESS PIPING INSPECTION

1. Observe piping between Process Tank secondary containment and FBR secondary containment.
   Any leaks, punctures, damage, bulges visible? Yes* (No)
2. Observe piping in Process Tank secondary containment area.
   Any leaks, punctures, damage, bulges visible? Yes* (No)
3. Record reading on Stabilized Lake Mead Water (SLMW) flowmeter east of Process Tanks.
   Flowmeter: 1,999,996 (gallons)

SECONDARY CONTAINMENT INSPECTION

4. Perform 360 perimeter walk to observe liner system for potential wear and tear.
   Any leaks, punctures, or other damage visible? Yes (No)
5. Is there storm water accumulation greater than 1 foot? Yes (No)
   If Yes, pump storm water into one of the Process Tanks.
6. Is there storm water accumulation in equipment pad sumps?: Yes (No)
   If Yes, pump storm water into one of the process tanks.

PROCESS TANKS AND DAY TANK INSPECTION

7. Perform 360 degree walk around of each tank to inspect for damage or leaks and lock out of valves:

	T-201		T-202		T-203		T-204	
Visible damage or leaks/stains? (inspect all welds and nozzles/valves)	Yes*	(No)	Yes*	(No)	Yes*	(No)	Yes*	(No)
All decant valves and transfer valves locked out?**	Yes	(No*)	Yes	(No*)	Yes	(No*)	NA	NA
Are transfer pumps ready for service?	(Yes)	No*	(Yes)	No*	(Yes)	No*	NA	NA

8. Visual inspection from top of each Process Tank:

	T-201		T-202		T-203	
Visible oil leaks from gear box?	Yes*	(No)	Yes*	(No)	Yes*	(No)
Has routine wash down of precipitate/crystals on tank sides and mixer impeller been completed?	(Yes)	No	(Yes)	No	(Yes)	No
Mixer off as part of sediment washing process? If Yes, draw an "X" through answers to next question.	(Yes)	No	(Yes)	No	(Yes)	No
Mixer running and turbulence/vortex observed?**	Yes	(No*)	Yes	(No*)	Yes	(No*)
Are used oil containers labelled and stored appropriately, in accordance with the Site Waste Management Plan?	(Yes)	No*	(Yes)	No*	(Yes)	No*
Ambient air temperature 74 Oil temperature	74 °F		74 °F		115 °F	

K05 PHASE III O&M ROUTINE INSPECTION FORM

Date: 5/8/18 **Time:** _____ **Inspector Initials:** KSH

NOTES:

* - Notify Site Implementation Manager immediately if any of these conditions are observed and thoroughly document on this form and through photographs.

** - Active sediment washing requires occasional shutdown of mixers and opening of decant valves. Notify Site Implementation Manager immediately if this condition is observed and active washing is not occurring.

Initiate procedures to mobilize and connect portable generators to power the mixers in the event of a power loss greater than six hours to prevent solids from consolidating in the bottom of the Process Tanks.

COMMENTS:

(Describe all "yes" answers, any observed damage, any areas that could not be inspected and the reason, etc.)

- Decanting from all three tanks

Operator Signature: Kyle S. Hansen

EMERGENCY CONTACTS:

Title	Name	Phone #	Comments
Site Implementation Manager	Brad Maynard	(907) 723-2646	
Field Operations Manager	Kyle Hansen	(801) 949-6663	
Project Manager	David Bohmann	(303) 704-9527	
Program Manager	Dan Pastor	(303) 588-0901	
Site Health & Safety	Karen Luna	(702) 217-8173	
Corporate Health & Safety	Michelle Gillie	(610) 348-7197	
Process Engineer	Courtney Flores	(770) 845-6281	
Emergency Generator (United Rentals)	Heath Barnard	(702) 538 2292	Reference Quote # 142770051 Reference Customer # 1439334

K05 PHASE III O&M ROUTINE INSPECTION FORM

Date: 5/9/18 **Time:** 1435 **Inspector Initials:** KSH

PROCESS PIPING INSPECTION

1. Observe piping between Process Tank secondary containment and FBR secondary containment.
   Any leaks, punctures, damage, bulges visible? Yes* (No)
2. Observe piping in Process Tank secondary containment area.
   Any leaks, punctures, damage, bulges visible? Yes* (No)
3. Record reading on Stabilized Lake Mead Water (SLMW) flowmeter east of Process Tanks.
   Flowmeter: 2,003,710 (gallons)

SECONDARY CONTAINMENT INSPECTION

4. Perform 360 perimeter walk to observe liner system for potential wear and tear.
   Any leaks, punctures, or other damage visible? Yes (No)
5. Is there storm water accumulation greater than 1 foot? Yes (No)
   If Yes, pump storm water into one of the Process Tanks.
6. Is there storm water accumulation in equipment pad sumps?: Yes (No)
   If Yes, pump storm water into one of the process tanks.

PROCESS TANKS AND DAY TANK INSPECTION

7. Perform 360 degree walk around of each tank to inspect for damage or leaks and lock out of valves:

	T-201		T-202		T-203		T-204	
Visible damage or leaks/stains? (inspect all welds and nozzles/valves)	Yes*	(No)	Yes*	(No)	Yes*	(No)	Yes*	No
All decant valves and transfer valves locked out?**	Yes	(No*)	Yes	(No*)	Yes	(No*)	NA	NA
Are transfer pumps ready for service?	(Yes)	No*	(Yes)	No*	(Yes)	No*	NA	NA

8. Visual inspection from top of each Process Tank:

	T-201		T-202		T-203	
Visible oil leaks from gear box?	Yes*	(No)	Yes*	(No)	Yes*	(No)
Has routine wash down of precipitate/crystals on tank sides and mixer impeller been completed?	(Yes)	No	(Yes)	No	(Yes)	No
Mixer off as part of sediment washing process? If Yes, draw an "X" through answers to next question.	(Yes)	No	(Yes)	No	(Yes)	No
Mixer running and turbulence/vortex observed?**	Yes	(No*)	Yes	(No*)	Yes	(No*)
Are used oil containers labelled and stored appropriately, in accordance with the Site Waste Management Plan?	(Yes)	No*	(Yes)	No*	(Yes)	No*
Ambient air temperature 105 Oil temperature	103 °F		104 °F		103 °F	

K05 PHASE III O&M ROUTINE INSPECTION FORM

Date: 5/9/18 Time: _____ Inspector Initials: KSH

NOTES:

* - Notify Site Implementation Manager immediately if any of these conditions are observed and thoroughly document on this form and through photographs.

** - Active sediment washing requires occasional shutdown of mixers and opening of decant valves. Notify Site Implementation Manager immediately if this condition is observed and active washing is not occurring.

Initiate procedures to mobilize and connect portable generators to power the mixers in the event of a power loss greater than six hours to prevent solids from consolidating in the bottom of the Process Tanks.

COMMENTS:

(Describe all "yes" answers, any observed damage, any areas that could not be inspected and the reason, etc.)

- All 3 tanks off during pond closure activities

Operator Signature: Kyle D. Hansen

EMERGENCY CONTACTS:

Title	Name	Phone #	Comments
Site Implementation Manager	Brad Maynard	(907) 723-2646	
Field Operations Manager	Kyle Hansen	(801) 949-6663	
Project Manager	David Bohmann	(303) 704-9527	
Program Manager	Dan Pastor	(303) 588-0901	
Site Health & Safety	Karen Luna	(702) 217-8173	
Corporate Health & Safety	Michelle Gillie	(610) 348-7197	
Process Engineer	Courtney Flores	(770) 845-6281	
Emergency Generator (United Rentals)	Heath Barnard	(702) 538 2292	Reference Quote # 142770051 Reference Customer # 1439334

K05 PHASE III O&M ROUTINE INSPECTION FORM

Date: 5/10/18 Time: 0926 Inspector Initials: KSH

PROCESS PIPING INSPECTION

1. Observe piping between Process Tank secondary containment and FBR secondary containment.
   Any leaks, punctures, damage, bulges visible? Yes* (No)
2. Observe piping in Process Tank secondary containment area.
   Any leaks, punctures, damage, bulges visible? Yes* (No)
3. Record reading on Stabilized Lake Mead Water (SLMW) flowmeter east of Process Tanks.
   Flowmeter: 2,006,005 (gallons)

SECONDARY CONTAINMENT INSPECTION

4. Perform 360 perimeter walk to observe liner system for potential wear and tear.
   Any leaks, punctures, or other damage visible? Yes (No)
5. Is there storm water accumulation greater than 1 foot? Yes (No)
   If Yes, pump storm water into one of the Process Tanks.
6. Is there storm water accumulation in equipment pad sumps?: Yes (No)
   If Yes, pump storm water into one of the process tanks.

PROCESS TANKS AND DAY TANK INSPECTION

7. Perform 360 degree walk around of each tank to inspect for damage or leaks and lock out of valves:

	T-201		T-202		T-203		T-204	
Visible damage or leaks/stains? (inspect all welds and nozzles/valves)	Yes*	(No)	Yes*	(No)	Yes*	(No)	Yes*	(No)
All decant valves and transfer valves locked out?**	Yes	(No*)	Yes	(No*)	Yes	(No*)	NA	NA
Are transfer pumps ready for service?	(Yes)	No*	(Yes)	No*	(Yes)	No*	NA	NA

8. Visual inspection from top of each Process Tank:

	T-201		T-202		T-203	
Visible oil leaks from gear box?	Yes*	(No)	Yes*	(No)	Yes*	(No)
Has routine wash down of precipitate/crystals on tank sides and mixer impeller been completed?	(Yes)	No	(Yes)	No	(Yes)	No
Mixer off as part of sediment washing process? If Yes, draw an "X" through answers to next question.	(Yes)	No	(Yes)	No	(Yes)	No
Mixer running and turbulence/vortex observed?**	Yes	(No*)	Yes	(No*)	Yes	(No*)
Are used oil containers labelled and stored appropriately, in accordance with the Site Waste Management Plan?	(Yes)	No*	(Yes)	No*	(Yes)	No*
Ambient air temperature 88 Oil temperature	97 °F		100 °F		91 °F	

K05 PHASE III O&M ROUTINE INSPECTION FORM

Date: 5/10/18 Time: _____ Inspector Initials: KSH

NOTES:

* - Notify Site Implementation Manager immediately if any of these conditions are observed and thoroughly document on this form and through photographs.

** - Active sediment washing requires occasional shutdown of mixers and opening of decant valves. Notify Site Implementation Manager immediately if this condition is observed and active washing is not occurring.

Initiate procedures to mobilize and connect portable generators to power the mixers in the event of a power loss greater than six hours to prevent solids from consolidating in the bottom of the Process Tanks.

COMMENTS:

(Describe all "yes" answers, any observed damage, any areas that could not be inspected and the reason, etc.)

*All 3 tanks involved in decant.

Operator Signature: Kyle Hansen

EMERGENCY CONTACTS:

Title	Name	Phone #	Comments
Site Implementation Manager	Brad Maynard	(907) 723-2646	
Field Operations Manager	Kyle Hansen	(801) 949-6663	
Project Manager	David Bohmann	(303) 704-9527	
Program Manager	Dan Pastor	(303) 588-0901	
Site Health & Safety	Karen Luna	(702) 217-8173	
Corporate Health & Safety	Michelle Gillie	(610) 348-7197	
Process Engineer	Courtney Flores	(770) 845-6281	
Emergency Generator (United Rentals)	Heath Barnard	(702) 538 2292	Reference Quote # 142770051 Reference Customer # 1439334

K05 PHASE III O&M ROUTINE INSPECTION FORM

Date: 5/11/18 Time: 0835 Inspector Initials: KSH

PROCESS PIPING INSPECTION

1. Observe piping between Process Tank secondary containment and FBR secondary containment.
   Any leaks, punctures, damage, bulges visible? Yes* (No)
2. Observe piping in Process Tank secondary containment area.
   Any leaks, punctures, damage, bulges visible? Yes* (No)
3. Record reading on Stabilized Lake Mead Water (SLMW) flowmeter east of Process Tanks.
   Flowmeter: 2,008,020 (gallons)

SECONDARY CONTAINMENT INSPECTION

4. Perform 360 perimeter walk to observe liner system for potential wear and tear.
   Any leaks, punctures, or other damage visible? Yes (No)
5. Is there storm water accumulation greater than 1 foot? Yes (No)
   If Yes, pump storm water into one of the Process Tanks.
6. Is there storm water accumulation in equipment pad sumps?: Yes (No)
   If Yes, pump storm water into one of the process tanks.

PROCESS TANKS AND DAY TANK INSPECTION

7. Perform 360 degree walk around of each tank to inspect for damage or leaks and lock out of valves:

	T-201		T-202		T-203		T-204	
Visible damage or leaks/stains? (inspect all welds and nozzles/valves)	Yes*	(No)	Yes*	(No)	Yes*	(No)	Yes*	(No)
All decant valves and transfer valves locked out?**	Yes	(No*)	Yes	(No*)	Yes	(No*)	NA	NA
Are transfer pumps ready for service?	(Yes)	No*	(Yes)	No*	(Yes)	No*	NA	NA

8. Visual inspection from top of each Process Tank:

	T-201		T-202		T-203	
Visible oil leaks from gear box?	Yes*	(No)	Yes*	(No)	Yes*	(No)
Has routine wash down of precipitate/crystals on tank sides and mixer impeller been completed?	(Yes)	No	(Yes)	No	(Yes)	No
Mixer off as part of sediment washing process? If Yes, draw an "X" through answers to next question.	(Yes)	No	(Yes)	No	(Yes)	No
Mixer running and turbulence/vortex observed?**	Yes	(No*)	Yes	(No*)	Yes	(No*)
Are used oil containers labelled and stored appropriately, in accordance with the Site Waste Management Plan?	(Yes)	No*	(Yes)	No*	(Yes)	No*
Ambient air temperature 80 Oil temperature	85 °F		87 °F		86 °F	

K05 PHASE III O&M ROUTINE INSPECTION FORM

Date: 5/16/18 Time: _____ Inspector Initials: KSH

NOTES:

* - Notify Site Implementation Manager immediately if any of these conditions are observed and thoroughly document on this form and through photographs.

** - Active sediment washing requires occasional shutdown of mixers and opening of decant valves. Notify Site Implementation Manager immediately if this condition is observed and active washing is not occurring.

Initiate procedures to mobilize and connect portable generators to power the mixers in the event of a power loss greater than six hours to prevent solids from consolidating in the bottom of the Process Tanks.

COMMENTS:

(Describe all "yes" answers, any observed damage, any areas that could not be inspected and the reason, etc.)

- All 3 tanks off during pond closure activities

Operator Signature: Kyle S. Hansen

EMERGENCY CONTACTS:

Title	Name	Phone #	Comments
Site Implementation Manager	Brad Maynard	(907) 723-2646	
Field Operations Manager	Kyle Hansen	(801) 949-6663	
Project Manager	David Bohmann	(303) 704-9527	
Program Manager	Dan Pastor	(303) 588-0901	
Site Health & Safety	Karen Luna	(702) 217-8173	
Corporate Health & Safety	Michelle Gillie	(610) 348-7197	
Process Engineer	Courtney Flores	(770) 845-6281	
Emergency Generator (United Rentals)	Heath Barnard	(702) 538 2292	Reference Quote # 142770051 Reference Customer # 1439334

K05 PHASE III O&M ROUTINE INSPECTION FORM

Date: 5/12/18 Time: 1205 Inspector Initials: KSH

PROCESS PIPING INSPECTION

1. Observe piping between Process Tank secondary containment and FBR secondary containment.
   Any leaks, punctures, damage, bulges visible? Yes* (No)
2. Observe piping in Process Tank secondary containment area.
   Any leaks, punctures, damage, bulges visible? Yes* (No)
3. Record reading on Stabilized Lake Mead Water (SLMW) flowmeter east of Process Tanks.
   Flowmeter: 2008,460 (gallons)

SECONDARY CONTAINMENT INSPECTION

4. Perform 360 perimeter walk to observe liner system for potential wear and tear.
   Any leaks, punctures, or other damage visible? Yes (No)
5. Is there storm water accumulation greater than 1 foot? Yes (No)
   If Yes, pump storm water into one of the Process Tanks.
6. Is there storm water accumulation in equipment pad sumps?: Yes (No)
   If Yes, pump storm water into one of the process tanks.

PROCESS TANKS AND DAY TANK INSPECTION

7. Perform 360 degree walk around of each tank to inspect for damage or leaks and lock out of valves:

	T-201		T-202		T-203		T-204	
Visible damage or leaks/stains? (inspect all welds and nozzles/valves)	Yes*	(No)	Yes*	(No)	Yes*	(No)	Yes*	(No)
All decant valves and transfer valves locked out?**	(Yes)	No*	(Yes)	No*	(Yes)	No*	NA	NA
Are transfer pumps ready for service?	(Yes)	No*	(Yes)	No*	(Yes)	No*	NA	NA

8. Visual inspection from top of each Process Tank:

	T-201		T-202		T-203	
Visible oil leaks from gear box?	Yes*	(No)	Yes*	(No)	Yes*	(No)
Has routine wash down of precipitate/crystals on tank sides and mixer impeller been completed?	(Yes)	No	(Yes)	No	(Yes)	No
Mixer off as part of sediment washing process? If Yes, draw an "X" through answers to next question.	Yes	(No)	Yes	(No)	Yes	(No)
Mixer running and turbulence/vortex observed?**	Yes	(No*)	(Yes)	No*	(Yes)	No*
Are used oil containers labelled and stored appropriately, in accordance with the Site Waste Management Plan?	(Yes)	No*	(Yes)	No*	(Yes)	No*
Ambient air temperature 78 Oil temperature	95 °F		114 °F		120 °F	

K05 PHASE III O&M ROUTINE INSPECTION FORM

Date: 5/12/18 Time: _____ Inspector Initials: KGH

NOTES:

* - Notify Site Implementation Manager immediately if any of these conditions are observed and thoroughly document on this form and through photographs.

** - Active sediment washing requires occasional shutdown of mixers and opening of decant valves. Notify Site Implementation Manager immediately if this condition is observed and active washing is not occurring.

Initiate procedures to mobilize and connect portable generators to power the mixers in the event of a power loss greater than six hours to prevent solids from consolidating in the bottom of the Process Tanks.

COMMENTS:

(Describe all "yes" answers, any observed damage, any areas that could not be inspected and the reason, etc.)

T-201 off due to vibration from gear box

Operator Signature: Kyle D. Hansen

EMERGENCY CONTACTS:

Title	Name	Phone #	Comments
Site Implementation Manager	Brad Maynard	(907) 723-2646	
Field Operations Manager	Kyle Hansen	(801) 949-6663	
Project Manager	David Bohmann	(303) 704-9527	
Program Manager	Dan Pastor	(303) 588-0901	
Site Health & Safety	Karen Luna	(702) 217-8173	
Corporate Health & Safety	Michelle Gillie	(610) 348-7197	
Process Engineer	Courtney Flores	(770) 845-6281	
Emergency Generator (United Rentals)	Heath Barnard	(702) 538 2292	Reference Quote # 142770051 Reference Customer # 1439334

K05 PHASE III O&M ROUTINE INSPECTION FORM

Date: 5/13/2018 Time: 1015 Inspector Initials: KSH

PROCESS PIPING INSPECTION

1. Observe piping between Process Tank secondary containment and FBR secondary containment.
   Any leaks, punctures, damage, bulges visible? Yes* (No)
2. Observe piping in Process Tank secondary containment area.
   Any leaks, punctures, damage, bulges visible? Yes* (No)
3. Record reading on Stabilized Lake Mead Water (SLMW) flowmeter east of Process Tanks.
   Flowmeter: 2,009,280 (gallons)

SECONDARY CONTAINMENT INSPECTION

4. Perform 360 perimeter walk to observe liner system for potential wear and tear.
   Any leaks, punctures, or other damage visible? Yes (No)
5. Is there storm water accumulation greater than 1 foot? Yes (No)
   If Yes, pump storm water into one of the Process Tanks.
6. Is there storm water accumulation in equipment pad sumps?: Yes (No)
   If Yes, pump storm water into one of the process tanks.

PROCESS TANKS AND DAY TANK INSPECTION

7. Perform 360 degree walk around of each tank to inspect for damage or leaks and lock out of valves:

	T-201		T-202		T-203		T-204	
Visible damage or leaks/stains? (inspect all welds and nozzles/valves)	Yes*	(No)	Yes*	(No)	Yes*	(No)	Yes*	(No)
All decant valves and transfer valves locked out?**	(Yes)	No*	(Yes)	No*	(Yes)	No*	NA	NA
Are transfer pumps ready for service?	(Yes)	No*	(Yes)	No*	(Yes)	No*	NA	NA

8. Visual inspection from top of each Process Tank:

	T-201		T-202		T-203	
Visible oil leaks from gear box?	Yes*	(No)	Yes*	(No)	Yes*	(No)
Has routine wash down of precipitate/crystals on tank sides and mixer impeller been completed?	(Yes)	No	(Yes)	No	(Yes)	No
Mixer off as part of sediment washing process? If Yes, draw an "X" through answers to next question.	(Yes)	No	(Yes)	No	(Yes)	No
Mixer running and turbulence/vortex observed?**	Yes	(No*)	Yes	(No*)	Yes	(No*)
Are used oil containers labelled and stored appropriately, in accordance with the Site Waste Management Plan?	(Yes)	No*	(Yes)	No*	(Yes)	No*
Ambient air temperature 84 Oil temperature	85 °F		85 °F		84 °F	

K05 PHASE III O&M ROUTINE INSPECTION FORM

Date: 5/13/18 **Time:** _____ **Inspector Initials:** KSH

NOTES:

* - Notify Site Implementation Manager immediately if any of these conditions are observed and thoroughly document on this form and through photographs.

** - Active sediment washing requires occasional shutdown of mixers and opening of decant valves. Notify Site Implementation Manager immediately if this condition is observed and active washing is not occurring.

Initiate procedures to mobilize and connect portable generators to power the mixers in the event of a power loss greater than six hours to prevent solids from consolidating in the bottom of the Process Tanks.

COMMENTS:

(Describe all "yes" answers, any observed damage, any areas that could not be inspected and the reason, etc.)

- Mixers off in prep. for decant.

Operator Signature: Kyle S. Hansen

EMERGENCY CONTACTS:

Title	Name	Phone #	Comments
Site Implementation Manager	Brad Maynard	(907) 723-2646	
Field Operations Manager	Kyle Hansen	(801) 949-6663	
Project Manager	David Bohmann	(303) 704-9527	
Program Manager	Dan Pastor	(303) 588-0901	
Site Health & Safety	Karen Luna	(702) 217-8173	
Corporate Health & Safety	Michelle Gillie	(610) 348-7197	
Process Engineer	Courtney Flores	(770) 845-6281	
Emergency Generator (United Rentals)	Heath Barnard	(702) 538 2292	Reference Quote # 142770051 Reference Customer # 1439334

K05 PHASE III O&M ROUTINE INSPECTION FORM

Date: 5/14/18 Time: 1125 Inspector Initials: KSH

PROCESS PIPING INSPECTION

1. Observe piping between Process Tank secondary containment and FBR secondary containment.
   Any leaks, punctures, damage, bulges visible? Yes* (No)
2. Observe piping in Process Tank secondary containment area.
   Any leaks, punctures, damage, bulges visible? Yes* (No)
3. Record reading on Stabilized Lake Mead Water (SLMW) flowmeter east of Process Tanks.
   Flowmeter: 2,009,780 (gallons)

SECONDARY CONTAINMENT INSPECTION

4. Perform 360 perimeter walk to observe liner system for potential wear and tear.
   Any leaks, punctures, or other damage visible? Yes (No)
5. Is there storm water accumulation greater than 1 foot? Yes (No)
   If Yes, pump storm water into one of the Process Tanks.
6. Is there storm water accumulation in equipment pad sumps?: Yes (No)
   If Yes, pump storm water into one of the process tanks.

PROCESS TANKS AND DAY TANK INSPECTION

7. Perform 360 degree walk around of each tank to inspect for damage or leaks and lock out of valves:

	T-201		T-202		T-203		T-204	
Visible damage or leaks/stains? (inspect all welds and nozzles/valves)	Yes*	(No)	Yes*	(No)	Yes*	(No)	Yes*	(No)
All decant valves and transfer valves locked out?**	Yes	(No*)	Yes	(No*)	Yes	(No*)	NA	NA
Are transfer pumps ready for service?	(Yes)	No*	(Yes)	No*	(Yes)	No*	NA	NA

8. Visual inspection from top of each Process Tank:

	T-201		T-202		T-203	
Visible oil leaks from gear box?	Yes*	(No)	Yes*	(No)	Yes*	(No)
Has routine wash down of precipitate/crystals on tank sides and mixer impeller been completed?	(Yes)	No	(Yes)	No	(Yes)	No
Mixer off as part of sediment washing process? If Yes, draw an "X" through answers to next question.	(Yes)	No	(Yes)	No	(Yes)	No
Mixer running and turbulence/vortex observed?**	Yes	(No*)	Yes	(No*)	Yes	(No*)
Are used oil containers labelled and stored appropriately, in accordance with the Site Waste Management Plan?	(Yes)	No*	(Yes)	No*	(Yes)	No*
Ambient air temperature 76 Oil temperature	75 °F		79 °F		77 °F	

K05 PHASE III O&M ROUTINE INSPECTION FORM

Date: 5/14/18 Time: _____ Inspector Initials: KSH

NOTES:

* - Notify Site Implementation Manager immediately if any of these conditions are observed and thoroughly document on this form and through photographs.

** - Active sediment washing requires occasional shutdown of mixers and opening of decant valves. Notify Site Implementation Manager immediately if this condition is observed and active washing is not occurring.

Initiate procedures to mobilize and connect portable generators to power the mixers in the event of a power loss greater than six hours to prevent solids from consolidating in the bottom of the Process Tanks.

COMMENTS:

(Describe all "yes" answers, any observed damage, any areas that could not be inspected and the reason, etc.)

- Mixers off during pond closure activities

Operator Signature: Kyle Hansen

EMERGENCY CONTACTS:

Title	Name	Phone #	Comments
Site Implementation Manager	Brad Maynard	(907) 723-2646	
Field Operations Manager	Kyle Hansen	(801) 949-6663	
Project Manager	David Bohmann	(303) 704-9527	
Program Manager	Dan Pastor	(303) 588-0901	
Site Health & Safety	Karen Luna	(702) 217-8173	
Corporate Health & Safety	Michelle Gillie	(610) 348-7197	
Process Engineer	Courtney Flores	(770) 845-6281	
Emergency Generator (United Rentals)	Heath Barnard	(702) 538 2292	Reference Quote # 142770051 Reference Customer # 1439334

K05 PHASE III O&M ROUTINE INSPECTION FORM

Date: 9/15/14 Time: 0920 Inspector Initials: KSH

PROCESS PIPING INSPECTION

1. Observe piping between Process Tank secondary containment and FBR secondary containment.
   Any leaks, punctures, damage, bulges visible? Yes* (No)
2. Observe piping in Process Tank secondary containment area.
   Any leaks, punctures, damage, bulges visible? Yes* (No)
3. Record reading on Stabilized Lake Mead Water (SLMW) flowmeter east of Process Tanks.
   Flowmeter: 2,011,005 (gallons)

SECONDARY CONTAINMENT INSPECTION

4. Perform 360 perimeter walk to observe liner system for potential wear and tear.
   Any leaks, punctures, or other damage visible? Yes (No)
5. Is there storm water accumulation greater than 1 foot? Yes (No)
   If Yes, pump storm water into one of the Process Tanks.
6. Is there storm water accumulation in equipment pad sumps?: Yes (No)
   If Yes, pump storm water into one of the process tanks.

PROCESS TANKS AND DAY TANK INSPECTION

7. Perform 360 degree walk around of each tank to inspect for damage or leaks and lock out of valves:

	T-201		T-202		T-203		T-204	
Visible damage or leaks/stains? (inspect all welds and nozzles/valves)	Yes*	(No)	Yes*	(No)	Yes*	(No)	Yes*	(No)
All decant valves and transfer valves locked out?**	Yes	(No*)	Yes	(No*)	Yes	(No*)	NA	NA
Are transfer pumps ready for service?	(Yes)	No*	(Yes)	No*	(Yes)	No*	NA	NA

8. Visual inspection from top of each Process Tank:

	T-201		T-202		T-203	
Visible oil leaks from gear box?	Yes*	(No)	Yes*	(No)	Yes*	(No)
Has routine wash down of precipitate/crystals on tank sides and mixer impeller been completed?	(Yes)	No	(Yes)	No	(Yes)	No
Mixer off as part of sediment washing process? If Yes, draw an "X" through answers to next question.	(Yes)	No	(Yes)	No	(Yes)	No
Mixer running and turbulence/vortex observed?**	Yes	(No*)	Yes	(No*)	Yes	(No*)
Are used oil containers labelled and stored appropriately, in accordance with the Site Waste Management Plan?	(Yes)	No*	(Yes)	No*	(Yes)	No*
Ambient air temperature 78 Oil temperature	110 °F		119 °F		97 °F	

K05 PHASE III O&M ROUTINE INSPECTION FORM

Date: 5/15/18 Time: _____ Inspector Initials: KSH

NOTES:

* - Notify Site Implementation Manager immediately if any of these conditions are observed and thoroughly document on this form and through photographs.

** - Active sediment washing requires occasional shutdown of mixers and opening of decant valves. Notify Site Implementation Manager immediately if this condition is observed and active washing is not occurring.

Initiate procedures to mobilize and connect portable generators to power the mixers in the event of a power loss greater than six hours to prevent solids from consolidating in the bottom of the Process Tanks.

COMMENTS:

(Describe all "yes" answers, any observed damage, any areas that could not be inspected and the reason, etc.)

- Mixers off during pond closure activities.

Operator Signature: Kyle D. Hansen

EMERGENCY CONTACTS:

Title	Name	Phone #	Comments
Site Implementation Manager	Brad Maynard	(907) 723-2646	
Field Operations Manager	Kyle Hansen	(801) 949-6663	
Project Manager	David Bohmann	(303) 704-9527	
Program Manager	Dan Pastor	(303) 588-0901	
Site Health & Safety	Karen Luna	(702) 217-8173	
Corporate Health & Safety	Michelle Gillie	(610) 348-7197	
Process Engineer	Courtney Flores	(770) 845-6281	
Emergency Generator (United Rentals)	Heath Barnard	(702) 538 2292	Reference Quote # 142770051 Reference Customer # 1439334

K05 PHASE III O&M ROUTINE INSPECTION FORM

Date: 5/16/18 Time: 1040 Inspector Initials: KSH

PROCESS PIPING INSPECTION

1. Observe piping between Process Tank secondary containment and FBR secondary containment.
   Any leaks, punctures, damage, bulges visible? Yes* (No)
2. Observe piping in Process Tank secondary containment area.
   Any leaks, punctures, damage, bulges visible? Yes* (No)
3. Record reading on Stabilized Lake Mead Water (SLMW) flowmeter east of Process Tanks.
   Flowmeter: 2,012,780 (gallons)

SECONDARY CONTAINMENT INSPECTION

4. Perform 360 perimeter walk to observe liner system for potential wear and tear.
   Any leaks, punctures, or other damage visible? Yes (No)
5. Is there storm water accumulation greater than 1 foot? Yes (No)
   If Yes, pump storm water into one of the Process Tanks.
6. Is there storm water accumulation in equipment pad sumps?: Yes (No)
   If Yes, pump storm water into one of the process tanks.

PROCESS TANKS AND DAY TANK INSPECTION

7. Perform 360 degree walk around of each tank to inspect for damage or leaks and lock out of valves:

	T-201		T-202		T-203		T-204	
Visible damage or leaks/stains? (inspect all welds and nozzles/valves)	Yes*	(No)	Yes*	(No)	Yes*	(No)	Yes*	(No)
All decant valves and transfer valves locked out?**	Yes	(No*)	Yes	(No*)	Yes	(No*)	NA	NA
Are transfer pumps ready for service?	(Yes)	No*	(Yes)	No*	(Yes)	No*	NA	NA

8. Visual inspection from top of each Process Tank:

	T-201		T-202		T-203	
Visible oil leaks from gear box?	Yes*	(No)	Yes*	(No)	Yes*	(No)
Has routine wash down of precipitate/crystals on tank sides and mixer impeller been completed?	(Yes)	No	(Yes)	No	(Yes)	No
Mixer off as part of sediment washing process? If Yes, draw an "X" through answers to next question.	(Yes)	No	(Yes)	No	(Yes)	No
Mixer running and turbulence/vortex observed?**	Yes	(No*)	Yes	(No*)	Yes	(No*)
Are used oil containers labelled and stored appropriately, in accordance with the Site Waste Management Plan?	(Yes)	No*	(Yes)	No*	(Yes)	No*
Ambient air temperature 82 Oil temperature	84 °F		85 °F		85 °F	

K05 PHASE III O&M ROUTINE INSPECTION FORM

Date: 5/10/18 Time: _____ Inspector Initials: KSH

NOTES:

* - Notify Site Implementation Manager immediately if any of these conditions are observed and thoroughly document on this form and through photographs.

** - Active sediment washing requires occasional shutdown of mixers and opening of decant valves. Notify Site Implementation Manager immediately if this condition is observed and active washing is not occurring.

Initiate procedures to mobilize and connect portable generators to power the mixers in the event of a power loss greater than six hours to prevent solids from consolidating in the bottom of the Process Tanks.

COMMENTS:

(Describe all "yes" answers, any observed damage, any areas that could not be inspected and the reason, etc.)

- All mixers off during water transfers during pond closure activities

Operator Signature: Kyle S. Hansen

EMERGENCY CONTACTS:

Title	Name	Phone #	Comments
Site Implementation Manager	Brad Maynard	(907) 723-2646	
Field Operations Manager	Kyle Hansen	(801) 949-6663	
Project Manager	David Bohmann	(303) 704-9527	
Program Manager	Dan Pastor	(303) 588-0901	
Site Health & Safety	Karen Luna	(702) 217-8173	
Corporate Health & Safety	Michelle Gillie	(610) 348-7197	
Process Engineer	Courtney Flores	(770) 845-6281	
Emergency Generator (United Rentals)	Heath Barnard	(702) 538 2292	Reference Quote # 142770051 Reference Customer # 1439334

K05 PHASE III O&M ROUTINE INSPECTION FORM

Date: 5/17/18 Time: 1815 Inspector Initials: KSH

PROCESS PIPING INSPECTION

1. Observe piping between Process Tank secondary containment and FBR secondary containment.
   Any leaks, punctures, damage, bulges visible? Yes* (No)
2. Observe piping in Process Tank secondary containment area.
   Any leaks, punctures, damage, bulges visible? Yes* (No)
3. Record reading on Stabilized Lake Mead Water (SLMW) flowmeter east of Process Tanks.
   Flowmeter: 2,016,160 (gallons)

SECONDARY CONTAINMENT INSPECTION

4. Perform 360 perimeter walk to observe liner system for potential wear and tear.
   Any leaks, punctures, or other damage visible? Yes (No)
5. Is there storm water accumulation greater than 1 foot? Yes (No)
   If Yes, pump storm water into one of the Process Tanks.
6. Is there storm water accumulation in equipment pad sumps?: Yes (No)
   If Yes, pump storm water into one of the process tanks.

PROCESS TANKS AND DAY TANK INSPECTION

7. Perform 360 degree walk around of each tank to inspect for damage or leaks and lock out of valves:

	T-201		T-202		T-203		T-204	
Visible damage or leaks/stains? (inspect all welds and nozzles/valves)	Yes*	(No)	Yes*	(No)	Yes*	(No)	Yes*	(No)
All decant valves and transfer valves locked out?**	(Yes)	No*	(Yes)	No*	(Yes)	No*	NA	NA
Are transfer pumps ready for service?	(Yes)	No*	(Yes)	No*	(Yes)	No*	NA	NA

8. Visual inspection from top of each Process Tank:

	T-201		T-202		T-203	
Visible oil leaks from gear box?	Yes*	(No)	Yes*	(No)	Yes*	(No)
Has routine wash down of precipitate/crystals on tank sides and mixer impeller been completed?	(Yes)	No	(Yes)	No	(Yes)	No
Mixer off as part of sediment washing process? If Yes, draw an "X" through answers to next question.	(Yes)	No	(Yes)	No	(Yes)	No
Mixer running and turbulence/vortex observed?**	Yes	(No*)	Yes	(No*)	Yes	(No*)
Are used oil containers labelled and stored appropriately, in accordance with the Site Waste Management Plan?	(Yes)	No*	(Yes)	No*	(Yes)	No*
Ambient air temperature 87 Oil temperature	87 °F		88 °F		86 °F	

K05 PHASE III O&M ROUTINE INSPECTION FORM

Date: 5/17 **Time:** _____ **Inspector Initials:** KSH

NOTES:

* - Notify Site Implementation Manager immediately if any of these conditions are observed and thoroughly document on this form and through photographs.

** - Active sediment washing requires occasional shutdown of mixers and opening of decant valves. Notify Site Implementation Manager immediately if this condition is observed and active washing is not occurring.

Initiate procedures to mobilize and connect portable generators to power the mixers in the event of a power loss greater than six hours to prevent solids from consolidating in the bottom of the Process Tanks.

COMMENTS:

(Describe all "yes" answers, any observed damage, any areas that could not be inspected and the reason, etc.)

- All tanks off during pond closure activities

Operator Signature: Kyle D. Hansen

EMERGENCY CONTACTS:

Title	Name	Phone #	Comments
Site Implementation Manager	Brad Maynard	(907) 723-2646	
Field Operations Manager	Kyle Hansen	(801) 949-6663	
Project Manager	David Bohmann	(303) 704-9527	
Program Manager	Dan Pastor	(303) 588-0901	
Site Health & Safety	Karen Luna	(702) 217-8173	
Corporate Health & Safety	Michelle Gillie	(610) 348-7197	
Process Engineer	Courtney Flores	(770) 845-6281	
Emergency Generator (United Rentals)	Heath Barnard	(702) 538 2292	Reference Quote # 142770051 Reference Customer # 1439334

K05 PHASE III O&M ROUTINE INSPECTION FORM

Date: 5/18/18 Time: 1923 Inspector Initials: KGH

PROCESS PIPING INSPECTION

1. Observe piping between Process Tank secondary containment and FBR secondary containment.
   Any leaks, punctures, damage, bulges visible? Yes* (No)
2. Observe piping in Process Tank secondary containment area.
   Any leaks, punctures, damage, bulges visible? Yes* (No)
3. Record reading on Stabilized Lake Mead Water (SLMW) flowmeter east of Process Tanks.
   Flowmeter: 2,018,575 (gallons)

SECONDARY CONTAINMENT INSPECTION

4. Perform 360 perimeter walk to observe liner system for potential wear and tear.
   Any leaks, punctures, or other damage visible? Yes (No)
5. Is there storm water accumulation greater than 1 foot? Yes (No)
   If Yes, pump storm water into one of the Process Tanks.
6. Is there storm water accumulation in equipment pad sumps?: Yes (No)
   If Yes, pump storm water into one of the process tanks.

PROCESS TANKS AND DAY TANK INSPECTION

7. Perform 360 degree walk around of each tank to inspect for damage or leaks and lock out of valves:

	T-201		T-202		T-203		T-204	
Visible damage or leaks/stains? (inspect all welds and nozzles/valves)	Yes*	(No)	Yes*	(No)	Yes*	(No)	Yes*	(No)
All decant valves and transfer valves locked out?**	(Yes)	No*	(Yes)	No*	(Yes)	No*	NA	NA
Are transfer pumps ready for service?	(Yes)	No*	(Yes)	No*	(Yes)	No*	NA	NA

8. Visual inspection from top of each Process Tank:

	T-201		T-202		T-203	
Visible oil leaks from gear box?	Yes*	(No)	Yes*	(No)	Yes*	(No)
Has routine wash down of precipitate/crystals on tank sides and mixer impeller been completed?	(Yes)	No	(Yes)	No	(Yes)	No
Mixer off as part of sediment washing process? If Yes, draw an "X" through answers to next question.	Yes	(No)	Yes	(No)	Yes	(No)
Mixer running and turbulence/vortex observed?**	(Yes)	No*	(Yes)	No*	(Yes)	No*
Are used oil containers labelled and stored appropriately, in accordance with the Site Waste Management Plan?	(Yes)	No*	(Yes)	No*	(Yes)	No*
Ambient air temperature 90 Oil temperature	86 °F		87 °F		87 °F	

K05 PHASE III O&M ROUTINE INSPECTION FORM

Date: 5/18/18 Time: _____ Inspector Initials: KSH

NOTES:

* - Notify Site Implementation Manager immediately if any of these conditions are observed and thoroughly document on this form and through photographs.

** - Active sediment washing requires occasional shutdown of mixers and opening of decant valves. Notify Site Implementation Manager immediately if this condition is observed and active washing is not occurring.

Initiate procedures to mobilize and connect portable generators to power the mixers in the event of a power loss greater than six hours to prevent solids from consolidating in the bottom of the Process Tanks.

COMMENTS:

(Describe all "yes" answers, any observed damage, any areas that could not be inspected and the reason, etc.)

- Ran T-201 for a short period to redistribute sediment.

Operator Signature: Kyle A. Hansen

EMERGENCY CONTACTS:

Title	Name	Phone #	Comments
Site Implementation Manager	Brad Maynard	(907) 723-2646	
Field Operations Manager	Kyle Hansen	(801) 949-6663	
Project Manager	David Bohmann	(303) 704-9527	
Program Manager	Dan Pastor	(303) 588-0901	
Site Health & Safety	Karen Luna	(702) 217-8173	
Corporate Health & Safety	Michelle Gillie	(610) 348-7197	
Process Engineer	Courtney Flores	(770) 845-6281	
Emergency Generator (United Rentals)	Heath Barnard	(702) 538 2292	Reference Quote # 142770051 Reference Customer # 1439334

K05 PHASE III O&M ROUTINE INSPECTION FORM

Date: 5/19/18 Time: 1200 Inspector Initials: KSH

PROCESS PIPING INSPECTION

1. Observe piping between Process Tank secondary containment and FBR secondary containment.
   Any leaks, punctures, damage, bulges visible? Yes* (No)
2. Observe piping in Process Tank secondary containment area.
   Any leaks, punctures, damage, bulges visible? Yes* (No)
3. Record reading on Stabilized Lake Mead Water (SLMW) flowmeter east of Process Tanks.
   Flowmeter: 2,019,309 (gallons)

SECONDARY CONTAINMENT INSPECTION

4. Perform 360 perimeter walk to observe liner system for potential wear and tear.
   Any leaks, punctures, or other damage visible? Yes (No)
5. Is there storm water accumulation greater than 1 foot? Yes (No)
   If Yes, pump storm water into one of the Process Tanks.
6. Is there storm water accumulation in equipment pad sumps?: Yes (No)
   If Yes, pump storm water into one of the process tanks.

PROCESS TANKS AND DAY TANK INSPECTION

7. Perform 360 degree walk around of each tank to inspect for damage or leaks and lock out of valves:

	T-201		T-202		T-203		T-204	
Visible damage or leaks/stains? (inspect all welds and nozzles/valves)	Yes*	(No)	Yes*	(No)	Yes*	(No)	Yes*	(No)
All decant valves and transfer valves locked out?**	(Yes)	No*	(Yes)	No*	(Yes)	No*	NA	NA
Are transfer pumps ready for service?	(Yes)	No*	(Yes)	No*	(Yes)	No*	NA	NA

8. Visual inspection from top of each Process Tank:

	T-201		T-202		T-203	
Visible oil leaks from gear box?	Yes*	(No)	Yes*	(No)	Yes*	(No)
Has routine wash down of precipitate/crystals on tank sides and mixer impeller been completed?	(Yes)	No	(Yes)	No	(Yes)	No
Mixer off as part of sediment washing process? If Yes, draw an "X" through answers to next question.	Yes	(No)	Yes	(No)	Yes	(No)
Mixer running and turbulence/vortex observed?**	(Yes)	No*	(Yes)	No*	(Yes)	No*
Are used oil containers labelled and stored appropriately, in accordance with the Site Waste Management Plan?	(Yes)	No*	(Yes)	No*	(Yes)	No*
Ambient air temperature 88 Oil temperature	87 °F		86 °F		85 °F	

K05 PHASE III O&M ROUTINE INSPECTION FORM

Date: 5/19/16 **Time:** _____ **Inspector Initials:** KSH

NOTES:

* - Notify Site Implementation Manager immediately if any of these conditions are observed and thoroughly document on this form and through photographs.

** - Active sediment washing requires occasional shutdown of mixers and opening of decant valves. Notify Site Implementation Manager immediately if this condition is observed and active washing is not occurring.

Initiate procedures to mobilize and connect portable generators to power the mixers in the event of a power loss greater than six hours to prevent solids from consolidating in the bottom of the Process Tanks.

COMMENTS:

(Describe all "yes" answers, any observed damage, any areas that could not be inspected and the reason, etc.)

- All mixers turned on to agitate water column for 30 minutes.

Operator Signature: Kyle S. Hansen

EMERGENCY CONTACTS:

Title	Name	Phone #	Comments
Site Implementation Manager	Brad Maynard	(907) 723-2646	
Field Operations Manager	Kyle Hansen	(801) 949-6663	
Project Manager	David Bohmann	(303) 704-9527	
Program Manager	Dan Pastor	(303) 588-0901	
Site Health & Safety	Karen Luna	(702) 217-8173	
Corporate Health & Safety	Michelle Gillie	(610) 348-7197	
Process Engineer	Courtney Flores	(770) 845-6281	
Emergency Generator (United Rentals)	Heath Barnard	(702) 538 2292	Reference Quote # 142770051 Reference Customer # 1439334

K05 PHASE III O&M ROUTINE INSPECTION FORM

Date: 5/20/18 Time: 1633 Inspector Initials: KSH

PROCESS PIPING INSPECTION

1. Observe piping between Process Tank secondary containment and FBR secondary containment.
   Any leaks, punctures, damage, bulges visible? Yes* (No)
2. Observe piping in Process Tank secondary containment area.
   Any leaks, punctures, damage, bulges visible? Yes* (No)
3. Record reading on Stabilized Lake Mead Water (SLMW) flowmeter east of Process Tanks.
   Flowmeter: 2,019,309 (gallons)

SECONDARY CONTAINMENT INSPECTION

4. Perform 360 perimeter walk to observe liner system for potential wear and tear.
   Any leaks, punctures, or other damage visible? Yes (No)
5. Is there storm water accumulation greater than 1 foot? Yes (No)
   If Yes, pump storm water into one of the Process Tanks.
6. Is there storm water accumulation in equipment pad sumps?: Yes (No)
   If Yes, pump storm water into one of the process tanks.

PROCESS TANKS AND DAY TANK INSPECTION

7. Perform 360 degree walk around of each tank to inspect for damage or leaks and lock out of valves:

	T-201		T-202		T-203		T-204	
Visible damage or leaks/stains? (inspect all welds and nozzles/valves)	Yes*	(No)	Yes*	(No)	Yes*	(No)	Yes*	(No)
All decant valves and transfer valves locked out?**	(Yes)	No*	(Yes)	No*	(Yes)	No*	NA	NA
Are transfer pumps ready for service?	(Yes)	No*	(Yes)	No*	(Yes)	No*	NA	NA

8. Visual inspection from top of each Process Tank:

	T-201		T-202		T-203	
Visible oil leaks from gear box?	Yes*	(No)	Yes*	(No)	Yes*	(No)
Has routine wash down of precipitate/crystals on tank sides and mixer impeller been completed?	(Yes)	No	(Yes)	No	(Yes)	No
Mixer off as part of sediment washing process? If Yes, draw an "X" through answers to next question.	(Yes)	No	(Yes)	No	(Yes)	No
Mixer running and turbulence/vortex observed?**	Yes	(No*)	Yes	(No*)	Yes	(No*)
Are used oil containers labelled and stored appropriately, in accordance with the Site Waste Management Plan?	(Yes)	No*	(Yes)	No*	(Yes)	No*
Ambient air temperature 93 Oil temperature	87 °F		86 °F		89 °F	

K05 PHASE III O&M ROUTINE INSPECTION FORM

Date: 5/20/18 **Time:** _____ **Inspector Initials:** KSH

NOTES:

* - Notify Site Implementation Manager immediately if any of these conditions are observed and thoroughly document on this form and through photographs.

** - Active sediment washing requires occasional shutdown of mixers and opening of decant valves. Notify Site Implementation Manager immediately if this condition is observed and active washing is not occurring.

Initiate procedures to mobilize and connect portable generators to power the mixers in the event of a power loss greater than six hours to prevent solids from consolidating in the bottom of the Process Tanks.

COMMENTS:

(Describe all "yes" answers, any observed damage, any areas that could not be inspected and the reason, etc.)

- All mixers off prior to decant.

Operator Signature: Kyle J. Hansen

EMERGENCY CONTACTS:

Title	Name	Phone #	Comments
Site Implementation Manager	Brad Maynard	(907) 723-2646	
Field Operations Manager	Kyle Hansen	(801) 949-6663	
Project Manager	David Bohmann	(303) 704-9527	
Program Manager	Dan Pastor	(303) 588-0901	
Site Health & Safety	Karen Luna	(702) 217-8173	
Corporate Health & Safety	Michelle Gillie	(610) 348-7197	
Process Engineer	Courtney Flores	(770) 845-6281	
Emergency Generator (United Rentals)	Heath Barnard	(702) 538 2292	Reference Quote # 142770051 Reference Customer # 1439334

K05 PHASE III O&M ROUTINE INSPECTION FORM

Date: 5/21/18 **Time:** 1310 **Inspector Initials:** KSH

PROCESS PIPING INSPECTION

1. Observe piping between Process Tank secondary containment and FBR secondary containment.
   Any leaks, punctures, damage, bulges visible? Yes* (No)
2. Observe piping in Process Tank secondary containment area.
   Any leaks, punctures, damage, bulges visible? Yes* (No)
3. Record reading on Stabilized Lake Mead Water (SLMW) flowmeter east of Process Tanks.
   Flowmeter: 2,021,610 (gallons)

SECONDARY CONTAINMENT INSPECTION

4. Perform 360 perimeter walk to observe liner system for potential wear and tear.
   Any leaks, punctures, or other damage visible? Yes (No)
5. Is there storm water accumulation greater than 1 foot? Yes (No)
   If Yes, pump storm water into one of the Process Tanks.
6. Is there storm water accumulation in equipment pad sumps?: Yes (No)
   If Yes, pump storm water into one of the process tanks.

PROCESS TANKS AND DAY TANK INSPECTION

7. Perform 360 degree walk around of each tank to inspect for damage or leaks and lock out of valves:

	T-201		T-202		T-203		T-204	
Visible damage or leaks/stains? (inspect all welds and nozzles/valves)	Yes*	(No)	Yes*	(No)	Yes*	(No)	Yes*	(No)
All decant valves and transfer valves locked out?**	(Yes)	No*	(Yes)	No*	(Yes)	No*	NA	NA
Are transfer pumps ready for service?	(Yes)	No*	(Yes)	No*	(Yes)	No*	NA	NA

8. Visual inspection from top of each Process Tank:

	T-201		T-202		T-203	
Visible oil leaks from gear box?	Yes*	(No)	Yes*	(No)	Yes*	(No)
Has routine wash down of precipitate/crystals on tank sides and mixer impeller been completed?	(Yes)	No	(Yes)	No	(Yes)	No
Mixer off as part of sediment washing process? If Yes, draw an "X" through answers to next question.	(Yes)	No	(Yes)	No	(Yes)	No
Mixer running and turbulence/vortex observed?**	Yes	(No*)	Yes	(No*)	Yes	(No*)
Are used oil containers labelled and stored appropriately, in accordance with the Site Waste Management Plan?	(Yes)	No*	(Yes)	No*	(Yes)	No*
Ambient air temperature 86 Oil temperature	85 °F		86 °F		86 °F	

K05 PHASE III O&M ROUTINE INSPECTION FORM

Date: 5/21/19 **Time:** _____ **Inspector Initials:** KSH

NOTES:

* - Notify Site Implementation Manager immediately if any of these conditions are observed and thoroughly document on this form and through photographs.

** - Active sediment washing requires occasional shutdown of mixers and opening of decant valves. Notify Site Implementation Manager immediately if this condition is observed and active washing is not occurring.

Initiate procedures to mobilize and connect portable generators to power the mixers in the event of a power loss greater than six hours to prevent solids from consolidating in the bottom of the Process Tanks.

COMMENTS:

(Describe all "yes" answers, any observed damage, any areas that could not be inspected and the reason, etc.)

- All mixers off during decant processes.

Operator Signature: Kyle D. Hansen

EMERGENCY CONTACTS:

Title	Name	Phone #	Comments
Site Implementation Manager	Brad Maynard	(907) 723-2646	
Field Operations Manager	Kyle Hansen	(801) 949-6663	
Project Manager	David Bohmann	(303) 704-9527	
Program Manager	Dan Pastor	(303) 588-0901	
Site Health & Safety	Karen Luna	(702) 217-8173	
Corporate Health & Safety	Michelle Gillie	(610) 348-7197	
Process Engineer	Courtney Flores	(770) 845-6281	
Emergency Generator (United Rentals)	Heath Barnard	(702) 538 2292	Reference Quote # 142770051 Reference Customer # 1439334

K05 PHASE III O&M ROUTINE INSPECTION FORM

Date: 5/22/18 **Time:** 1445 **Inspector Initials:** KSH

PROCESS PIPING INSPECTION

1. Observe piping between Process Tank secondary containment and FBR secondary containment.
   Any leaks, punctures, damage, bulges visible? Yes* (No)
2. Observe piping in Process Tank secondary containment area.
   Any leaks, punctures, damage, bulges visible? Yes* (No)
3. Record reading on Stabilized Lake Mead Water (SLMW) flowmeter east of Process Tanks.
   Flowmeter: 2,072,480 (gallons)

SECONDARY CONTAINMENT INSPECTION

4. Perform 360 perimeter walk to observe liner system for potential wear and tear.
   Any leaks, punctures, or other damage visible? Yes (No)
5. Is there storm water accumulation greater than 1 foot? Yes (No)
   If Yes, pump storm water into one of the Process Tanks.
6. Is there storm water accumulation in equipment pad sumps?: Yes (No)
   If Yes, pump storm water into one of the process tanks.

PROCESS TANKS AND DAY TANK INSPECTION

7. Perform 360 degree walk around of each tank to inspect for damage or leaks and lock out of valves:

	T-201		T-202		T-203		T-204	
Visible damage or leaks/stains? (inspect all welds and nozzles/valves)	Yes*	(No)	Yes*	(No)	Yes*	(No)	Yes*	(No)
All decant valves and transfer valves locked out?**	Yes	(No*)	Yes	(No*)	Yes	(No*)	NA	NA
Are transfer pumps ready for service?	(Yes)	No*	(Yes)	No*	(Yes)	No*	NA	NA

8. Visual inspection from top of each Process Tank:

	T-201		T-202		T-203	
Visible oil leaks from gear box?	Yes*	(No)	Yes*	(No)	Yes*	(No)
Has routine wash down of precipitate/crystals on tank sides and mixer impeller been completed?	(Yes)	No	(Yes)	No	(Yes)	No
Mixer off as part of sediment washing process? If Yes, draw an "X" through answers to next question.	(Yes)	No	(Yes)	No	(Yes)	No
Mixer running and turbulence/vortex observed?**	Yes	(No*)	Yes	(No*)	Yes	(No*)
Are used oil containers labelled and stored appropriately, in accordance with the Site Waste Management Plan?	(Yes)	No*	(Yes)	No*	(Yes)	No*
Ambient air temperature 87 Oil temperature	90 °F		89 °F		90 °F	

K05 PHASE III O&M ROUTINE INSPECTION FORM

Date: 5/22/18 **Time:** _____ **Inspector Initials:** KSA

NOTES:

* - Notify Site Implementation Manager immediately if any of these conditions are observed and thoroughly document on this form and through photographs.

** - Active sediment washing requires occasional shutdown of mixers and opening of decant valves. Notify Site Implementation Manager immediately if this condition is observed and active washing is not occurring.

Initiate procedures to mobilize and connect portable generators to power the mixers in the event of a power loss greater than six hours to prevent solids from consolidating in the bottom of the Process Tanks.

COMMENTS:

(Describe all "yes" answers, any observed damage, any areas that could not be inspected and the reason, etc.)

- All tanks off during process water transfers

Operator Signature: Kyle S. Hansen

EMERGENCY CONTACTS:

Title	Name	Phone #	Comments
Site Implementation Manager	Brad Maynard	(907) 723-2646	
Field Operations Manager	Kyle Hansen	(801) 949-6663	
Project Manager	David Bohmann	(303) 704-9527	
Program Manager	Dan Pastor	(303) 588-0901	
Site Health & Safety	Karen Luna	(702) 217-8173	
Corporate Health & Safety	Michelle Gillie	(610) 348-7197	
Process Engineer	Courtney Flores	(770) 845-6281	
Emergency Generator (United Rentals)	Heath Barnard	(702) 538 2292	Reference Quote # 142770051 Reference Customer # 1439334

K05 PHASE III O&M ROUTINE INSPECTION FORM

Date: 5/23/18 Time: 1425 Inspector Initials: KGH

PROCESS PIPING INSPECTION

1. Observe piping between Process Tank secondary containment and FBR secondary containment.
   Any leaks, punctures, damage, bulges visible? Yes* (No)
2. Observe piping in Process Tank secondary containment area.
   Any leaks, punctures, damage, bulges visible? Yes* (No)
3. Record reading on Stabilized Lake Mead Water (SLMW) flowmeter east of Process Tanks.
   Flowmeter: 2,676,740 (gallons)

SECONDARY CONTAINMENT INSPECTION

4. Perform 360 perimeter walk to observe liner system for potential wear and tear.
   Any leaks, punctures, or other damage visible? Yes (No)
5. Is there storm water accumulation greater than 1 foot? Yes (No)
   If Yes, pump storm water into one of the Process Tanks.
6. Is there storm water accumulation in equipment pad sumps?: Yes (No)
   If Yes, pump storm water into one of the process tanks.

PROCESS TANKS AND DAY TANK INSPECTION

7. Perform 360 degree walk around of each tank to inspect for damage or leaks and lock out of valves:

	T-201		T-202		T-203		T-204	
Visible damage or leaks/stains? (inspect all welds and nozzles/valves)	Yes*	(No)	Yes*	(No)	Yes*	(No)	Yes*	(No)
All decant valves and transfer valves locked out?**	(Yes)	No*	Yes	(No*)	(Yes)	(No*)	NA	NA
Are transfer pumps ready for service?	(Yes)	No*	(Yes)	No*	(Yes)	No*	NA	NA

8. Visual inspection from top of each Process Tank:

	T-201		T-202		T-203	
Visible oil leaks from gear box?	Yes*	(No)	Yes*	(No)	Yes*	(No)
Has routine wash down of precipitate/crystals on tank sides and mixer impeller been completed?	(Yes)	No	(Yes)	No	(Yes)	No
Mixer off as part of sediment washing process? If Yes, draw an "X" through answers to next question.	(Yes)	No	(Yes)	No	(Yes)	No
Mixer running and turbulence/vortex observed?**	Yes	(No*)	Yes	(No*)	Yes	(No*)
Are used oil containers labelled and stored appropriately, in accordance with the Site Waste Management Plan?	(Yes)	No*	(Yes)	No*	(Yes)	No*
Ambient air temperature 87 Oil temperature	90 °F		87 °F		89 °F	

K05 PHASE III O&M ROUTINE INSPECTION FORM

Date: 5/23/18 **Time:** _____ **Inspector Initials:** KG H

NOTES:

* - Notify Site Implementation Manager immediately if any of these conditions are observed and thoroughly document on this form and through photographs.

** - Active sediment washing requires occasional shutdown of mixers and opening of decant valves. Notify Site Implementation Manager immediately if this condition is observed and active washing is not occurring.

Initiate procedures to mobilize and connect portable generators to power the mixers in the event of a power loss greater than six hours to prevent solids from consolidating in the bottom of the Process Tanks.

COMMENTS:

(Describe all "yes" answers, any observed damage, any areas that could not be inspected and the reason, etc.)

- Tanks off during water transfers.

Operator Signature: Kyle S. Hansen

EMERGENCY CONTACTS:

Title	Name	Phone #	Comments
Site Implementation Manager	Brad Maynard	(907) 723-2646	
Field Operations Manager	Kyle Hansen	(801) 949-6663	
Project Manager	David Bohmann	(303) 704-9527	
Program Manager	Dan Pastor	(303) 588-0901	
Site Health & Safety	Karen Luna	(702) 217-8173	
Corporate Health & Safety	Michelle Gillie	(610) 348-7197	
Process Engineer	Courtney Flores	(770) 845-6281	
Emergency Generator (United Rentals)	Heath Barnard	(702) 538 2292	Reference Quote # 142770051 Reference Customer # 1439334

K05 PHASE III O&M ROUTINE INSPECTION FORM

Date: 5/24/18 **Time:** 1500 **Inspector Initials:** KSH

PROCESS PIPING INSPECTION

1. Observe piping between Process Tank secondary containment and FBR secondary containment.
   Any leaks, punctures, damage, bulges visible? Yes* (No)
2. Observe piping in Process Tank secondary containment area.
   Any leaks, punctures, damage, bulges visible? Yes* (No)
3. Record reading on Stabilized Lake Mead Water (SLMW) flowmeter east of Process Tanks.
   Flowmeter: 2,028,180 (gallons)

SECONDARY CONTAINMENT INSPECTION

4. Perform 360 perimeter walk to observe liner system for potential wear and tear.
   Any leaks, punctures, or other damage visible? Yes (No)
5. Is there storm water accumulation greater than 1 foot? Yes (No)
   If Yes, pump storm water into one of the Process Tanks.
6. Is there storm water accumulation in equipment pad sumps?: Yes (No)
   If Yes, pump storm water into one of the process tanks.

PROCESS TANKS AND DAY TANK INSPECTION

7. Perform 360 degree walk around of each tank to inspect for damage or leaks and lock out of valves:

	T-201		T-202		T-203		T-204	
Visible damage or leaks/stains? (inspect all welds and nozzles/valves)	Yes*	(No)	Yes*	(No)	Yes*	(No)	Yes*	(No)
All decant valves and transfer valves locked out?**	(Yes)	No*	Yes	(No*)	Yes	(No*)	NA	NA
Are transfer pumps ready for service?	(Yes)	No*	(Yes)	No*	(Yes)	No*	NA	NA

8. Visual inspection from top of each Process Tank:

	T-201		T-202		T-203	
Visible oil leaks from gear box?	Yes*	(No)	Yes*	(No)	Yes*	(No)
Has routine wash down of precipitate/crystals on tank sides and mixer impeller been completed?	(Yes)	No	(Yes)	No	(Yes)	No
Mixer off as part of sediment washing process? If Yes, draw an "X" through answers to next question.	Yes	(No)	(Yes)	No	(Yes)	No
Mixer running and turbulence/vortex observed?**	Yes	(No*)	Yes	(No*)	Yes	(No*)
Are used oil containers labelled and stored appropriately, in accordance with the Site Waste Management Plan?	(Yes)	No*	(Yes)	No*	(Yes)	No*
Ambient air temperature 94 Oil temperature	105 °F		101 °F		104 °F	

K05 PHASE III O&M ROUTINE INSPECTION FORM

Date: 5/24/18 **Time:** _____ **Inspector Initials:** KSH

NOTES:

* - Notify Site Implementation Manager immediately if any of these conditions are observed and thoroughly document on this form and through photographs.

** - Active sediment washing requires occasional shutdown of mixers and opening of decant valves. Notify Site Implementation Manager immediately if this condition is observed and active washing is not occurring.

Initiate procedures to mobilize and connect portable generators to power the mixers in the event of a power loss greater than six hours to prevent solids from consolidating in the bottom of the Process Tanks.

COMMENTS:

(Describe all "yes" answers, any observed damage, any areas that could not be inspected and the reason, etc.)

- Mixers off due to sediment washing T-202 - T-203
- T-201 mixer operating under limited use

Operator Signature: Kyle S. Hansen

EMERGENCY CONTACTS:

Title	Name	Phone #	Comments
Site Implementation Manager	Brad Maynard	(907) 723-2646	
Field Operations Manager	Kyle Hansen	(801) 949-6663	
Project Manager	David Bohmann	(303) 704-9527	
Program Manager	Dan Pastor	(303) 588-0901	
Site Health & Safety	Karen Luna	(702) 217-8173	
Corporate Health & Safety	Michelle Gillie	(610) 348-7197	
Process Engineer	Courtney Flores	(770) 845-6281	
Emergency Generator (United Rentals)	Heath Barnard	(702) 538 2292	Reference Quote # 142770051 Reference Customer # 1439334

K05 PHASE III O&M ROUTINE INSPECTION FORM

Date: 5/25/18 Time: 0930 Inspector Initials: KSH

PROCESS PIPING INSPECTION

1. Observe piping between Process Tank secondary containment and FBR secondary containment.
   Any leaks, punctures, damage, bulges visible? Yes* (No)
2. Observe piping in Process Tank secondary containment area.
   Any leaks, punctures, damage, bulges visible? Yes* (No)
3. Record reading on Stabilized Lake Mead Water (SLMW) flowmeter east of Process Tanks.
   Flowmeter: 2,029,340 (gallons)

SECONDARY CONTAINMENT INSPECTION

4. Perform 360 perimeter walk to observe liner system for potential wear and tear.
   Any leaks, punctures, or other damage visible? Yes (No)
5. Is there storm water accumulation greater than 1 foot? Yes (No)
   If Yes, pump storm water into one of the Process Tanks.
6. Is there storm water accumulation in equipment pad sumps?: Yes (No)
   If Yes, pump storm water into one of the process tanks.

PROCESS TANKS AND DAY TANK INSPECTION

7. Perform 360 degree walk around of each tank to inspect for damage or leaks and lock out of valves:

	T-201		T-202		T-203		T-204	
Visible damage or leaks/stains? (inspect all welds and nozzles/valves)	Yes*	(No)	Yes*	(No)	Yes*	(No)	Yes*	No
All decant valves and transfer valves locked out?**	(Yes)	No*	Yes	(No*)	Yes	(No*)	NA	NA
Are transfer pumps ready for service?	(Yes)	No*	(Yes)	No*	(Yes)	No*	NA	NA

8. Visual inspection from top of each Process Tank:

	T-201		T-202		T-203	
Visible oil leaks from gear box?	Yes*	(No)	Yes*	(No)	Yes*	(No)
Has routine wash down of precipitate/crystals on tank sides and mixer impeller been completed?	(Yes)	No	(Yes)	No	(Yes)	No
Mixer off as part of sediment washing process? If Yes, draw an "X" through answers to next question.	(Yes)	No	(Yes)	No	(Yes)	No
Mixer running and turbulence/vortex observed?**	Yes	(No*)	Yes	(No*)	Yes	(No*)
Are used oil containers labelled and stored appropriately, in accordance with the Site Waste Management Plan?	(Yes)	No*	(Yes)	No*	(Yes)	No*
Ambient air temperature 83 Oil temperature	85 °F		83 °F		84 °F	

K05 PHASE III O&M ROUTINE INSPECTION FORM

Date: 5/25/18 Time: 0930 Inspector Initials: KSH

NOTES:

* - Notify Site Implementation Manager immediately if any of these conditions are observed and thoroughly document on this form and through photographs.

** - Active sediment washing requires occasional shutdown of mixers and opening of decant valves. Notify Site Implementation Manager immediately if this condition is observed and active washing is not occurring.

Initiate procedures to mobilize and connect portable generators to power the mixers in the event of a power loss greater than six hours to prevent solids from consolidating in the bottom of the Process Tanks.

COMMENTS:

(Describe all "yes" answers, any observed damage, any areas that could not be inspected and the reason, etc.)

- Mixers 202 & 203 off due to sediment transfer
- T-201 - has limited use due to vibration from gearbox

Operator Signature: Kyle Hansen

EMERGENCY CONTACTS:

Title	Name	Phone #	Comments
Site Implementation Manager	Brad Maynard	(907) 723-2646	
Field Operations Manager	Kyle Hansen	(801) 949-6663	
Project Manager	David Bohmann	(303) 704-9527	
Program Manager	Dan Pastor	(303) 588-0901	
Site Health & Safety	Karen Luna	(702) 217-8173	
Corporate Health & Safety	Michelle Gillie	(610) 348-7197	
Process Engineer	Courtney Flores	(770) 845-6281	
Emergency Generator (United Rentals)	Heath Barnard	(702) 538 2292	Reference Quote # 142770051 Reference Customer # 1439334

K05 PHASE III O&M ROUTINE INSPECTION FORM

Date: 5/26/18 Time: 0730 Inspector Initials: KSH

PROCESS PIPING INSPECTION

1. Observe piping between Process Tank secondary containment and FBR secondary containment.
   Any leaks, punctures, damage, bulges visible? Yes* (No)
2. Observe piping in Process Tank secondary containment area.
   Any leaks, punctures, damage, bulges visible? Yes* (No)
3. Record reading on Stabilized Lake Mead Water (SLMW) flowmeter east of Process Tanks.
   Flowmeter: 2032,390 (gallons)

SECONDARY CONTAINMENT INSPECTION

4. Perform 360 perimeter walk to observe liner system for potential wear and tear.
   Any leaks, punctures, or other damage visible? Yes (No)
5. Is there storm water accumulation greater than 1 foot? Yes (No)
   If Yes, pump storm water into one of the Process Tanks.
6. Is there storm water accumulation in equipment pad sumps?: Yes (No)
   If Yes, pump storm water into one of the process tanks.

PROCESS TANKS AND DAY TANK INSPECTION

7. Perform 360 degree walk around of each tank to inspect for damage or leaks and lock out of valves:

	T-201		T-202		T-203		T-204	
Visible damage or leaks/stains? (inspect all welds and nozzles/valves)	Yes*	(No)	Yes*	(No)	Yes*	(No)	Yes*	(No)
All decant valves and transfer valves locked out?**	(Yes)	No*	(Yes)	No*	(Yes)	No*	NA	NA
Are transfer pumps ready for service?	(Yes)	No*	(Yes)	No*	(Yes)	No*	NA	NA

8. Visual inspection from top of each Process Tank:

	T-201		T-202		T-203	
Visible oil leaks from gear box?	Yes*	(No)	Yes*	(No)	Yes*	(No)
Has routine wash down of precipitate/crystals on tank sides and mixer impeller been completed?	(Yes)	No	(Yes)	No	(Yes)	No
Mixer off as part of sediment washing process? If Yes, draw an "X" through answers to next question.	Yes	(No)	Yes	(No)	Yes	(No)
Mixer running and turbulence/vortex observed?**	Yes	(No*)	(Yes)	No*	(Yes)	No*
Are used oil containers labelled and stored appropriately, in accordance with the Site Waste Management Plan?	(Yes)	No*	(Yes)	No*	(Yes)	No*
Ambient air temperature 66 Oil temperature	81 °F		66 °F		68 °F	

K05 PHASE III O&M ROUTINE INSPECTION FORM

Date: 5/26/18 Time: _____ Inspector Initials: KSH

NOTES:

* - Notify Site Implementation Manager immediately if any of these conditions are observed and thoroughly document on this form and through photographs.

** - Active sediment washing requires occasional shutdown of mixers and opening of decant valves. Notify Site Implementation Manager immediately if this condition is observed and active washing is not occurring.

Initiate procedures to mobilize and connect portable generators to power the mixers in the event of a power loss greater than six hours to prevent solids from consolidating in the bottom of the Process Tanks.

COMMENTS:

(Describe all "yes" answers, any observed damage, any areas that could not be inspected and the reason, etc.)

- T-201 has gear box issues off

Operator Signature: Kyle Hansen

EMERGENCY CONTACTS:

Title	Name	Phone #	Comments
Site Implementation Manager	Brad Maynard	(907) 723-2646	
Field Operations Manager	Kyle Hansen	(801) 949-6663	
Project Manager	David Bohmann	(303) 704-9527	
Program Manager	Dan Pastor	(303) 588-0901	
Site Health & Safety	Karen Luna	(702) 217-8173	
Corporate Health & Safety	Michelle Gillie	(610) 348-7197	
Process Engineer	Courtney Flores	(770) 845-6281	
Emergency Generator (United Rentals)	Heath Barnard	(702) 538 2292	Reference Quote # 142770051 Reference Customer # 1439334

K05 PHASE III O&M ROUTINE INSPECTION FORM

Date: 5/27/18 **Time:** 1325 **Inspector Initials:** KSH

PROCESS PIPING INSPECTION

1. Observe piping between Process Tank secondary containment and FBR secondary containment.
   Any leaks, punctures, damage, bulges visible? Yes* (No)
2. Observe piping in Process Tank secondary containment area.
   Any leaks, punctures, damage, bulges visible? Yes* (No)
3. Record reading on Stabilized Lake Mead Water (SLMW) flowmeter east of Process Tanks.
   Flowmeter: 2032,390 (gallons)

SECONDARY CONTAINMENT INSPECTION

4. Perform 360 perimeter walk to observe liner system for potential wear and tear.
   Any leaks, punctures, or other damage visible? Yes (No)
5. Is there storm water accumulation greater than 1 foot? Yes (No)
   If Yes, pump storm water into one of the Process Tanks.
6. Is there storm water accumulation in equipment pad sumps?: Yes (No)
   If Yes, pump storm water into one of the process tanks.

PROCESS TANKS AND DAY TANK INSPECTION

7. Perform 360 degree walk around of each tank to inspect for damage or leaks and lock out of valves:

	T-201		T-202		T-203		T-204	
Visible damage or leaks/stains? (inspect all welds and nozzles/valves)	Yes*	(No)	Yes*	(No)	Yes*	(No)	Yes*	(No)
All decant valves and transfer valves locked out?**	(Yes)	No*	(Yes)	No*	(Yes)	No*	NA	NA
Are transfer pumps ready for service?	(Yes)	No*	(Yes)	No*	(Yes)	No*	NA	NA

8. Visual inspection from top of each Process Tank:

	T-201		T-202		T-203	
Visible oil leaks from gear box?	Yes*	(No)	Yes*	(No)	Yes*	(No)
Has routine wash down of precipitate/crystals on tank sides and mixer impeller been completed?	(Yes)	No	(Yes)	No	(Yes)	No
Mixer off as part of sediment washing process? If Yes, draw an "X" through answers to next question.	(Yes)	No	Yes	(No)	Yes	(No)
Mixer running and turbulence/vortex observed?**	Yes	(No*)	(Yes)	No*	(Yes)	No*
Are used oil containers labelled and stored appropriately, in accordance with the Site Waste Management Plan?	(Yes)	No*	(Yes)	No*	(Yes)	No*
Ambient air temperature 93 Oil temperature	87 °F		86 °F		85 °F	

K05 PHASE III O&M ROUTINE INSPECTION FORM

Date: 5/27/18 **Time:** _____ **Inspector Initials:** KSH

NOTES:

* - Notify Site Implementation Manager immediately if any of these conditions are observed and thoroughly document on this form and through photographs.

** - Active sediment washing requires occasional shutdown of mixers and opening of decant valves. Notify Site Implementation Manager immediately if this condition is observed and active washing is not occurring.

Initiate procedures to mobilize and connect portable generators to power the mixers in the event of a power loss greater than six hours to prevent solids from consolidating in the bottom of the Process Tanks.

COMMENTS:

(Describe all "yes" answers, any observed damage, any areas that could not be inspected and the reason, etc.)

- T-201 off due to vibration issues in gear box

Operator Signature: Kyle A. Hansen

EMERGENCY CONTACTS:

Title	Name	Phone #	Comments
Site Implementation Manager	Brad Maynard	(907) 723-2646	
Field Operations Manager	Kyle Hansen	(801) 949-6663	
Project Manager	David Bohmann	(303) 704-9527	
Program Manager	Dan Pastor	(303) 588-0901	
Site Health & Safety	Karen Luna	(702) 217-8173	
Corporate Health & Safety	Michelle Gillie	(610) 348-7197	
Process Engineer	Courtney Flores	(770) 845-6281	
Emergency Generator (United Rentals)	Heath Barnard	(702) 538 2292	Reference Quote # 142770051 Reference Customer # 1439334

K05 PHASE III O&M ROUTINE INSPECTION FORM

Date: 5/28/18 Time: 0945 Inspector Initials: KSH

PROCESS PIPING INSPECTION

1. Observe piping between Process Tank secondary containment and FBR secondary containment.
   Any leaks, punctures, damage, bulges visible? Yes* (No)
2. Observe piping in Process Tank secondary containment area.
   Any leaks, punctures, damage, bulges visible? Yes* (No)
3. Record reading on Stabilized Lake Mead Water (SLMW) flowmeter east of Process Tanks.
   Flowmeter: 2,035,900 (gallons)

SECONDARY CONTAINMENT INSPECTION

4. Perform 360 perimeter walk to observe liner system for potential wear and tear.
   Any leaks, punctures, or other damage visible? Yes (No)
5. Is there storm water accumulation greater than 1 foot? Yes (No)
   If Yes, pump storm water into one of the Process Tanks.
6. Is there storm water accumulation in equipment pad sumps?: Yes (No)
   If Yes, pump storm water into one of the process tanks.

PROCESS TANKS AND DAY TANK INSPECTION

7. Perform 360 degree walk around of each tank to inspect for damage or leaks and lock out of valves:

	T-201		T-202		T-203		T-204	
Visible damage or leaks/stains? (inspect all welds and nozzles/valves)	Yes*	(No)	Yes*	(No)	Yes*	(No)	Yes*	(No)
All decant valves and transfer valves locked out?**	(Yes)	No*	(Yes)	No*	(Yes)	No*	NA	NA
Are transfer pumps ready for service?	(Yes)	No*	(Yes)	No*	(Yes)	No*	NA	NA

8. Visual inspection from top of each Process Tank:

	T-201		T-202		T-203	
Visible oil leaks from gear box?	Yes*	(No)	Yes*	(No)	Yes*	(No)
Has routine wash down of precipitate/crystals on tank sides and mixer impeller been completed?	(Yes)	No	(Yes)	No	(Yes)	No
Mixer off as part of sediment washing process? If Yes, draw an "X" through answers to next question.	(Yes)	No	(Yes)	No	(Yes)	No
Mixer running and turbulence/vortex observed?**	Yes	(No*)	Yes	(No*)	Yes	(No*)
Are used oil containers labelled and stored appropriately, in accordance with the Site Waste Management Plan?	(Yes)	No*	(Yes)	No*	(Yes)	No*
Ambient air temperature 84 Oil temperature	86 °F		89 °F		85 °F	

K05 PHASE III O&M ROUTINE INSPECTION FORM

Date: 5/28/18 Time: _____ Inspector Initials: KSH

NOTES:

* - Notify Site Implementation Manager immediately if any of these conditions are observed and thoroughly document on this form and through photographs.

** - Active sediment washing requires occasional shutdown of mixers and opening of decant valves. Notify Site Implementation Manager immediately if this condition is observed and active washing is not occurring.

Initiate procedures to mobilize and connect portable generators to power the mixers in the event of a power loss greater than six hours to prevent solids from consolidating in the bottom of the Process Tanks.

COMMENTS:

(Describe all "yes" answers, any observed damage, any areas that could not be inspected and the reason, etc.)

All tanks of in preparation for decant tomorrow

Operator Signature: Kyle Hansen

EMERGENCY CONTACTS:

Title	Name	Phone #	Comments
Site Implementation Manager	Brad Maynard	(907) 723-2646	
Field Operations Manager	Kyle Hansen	(801) 949-6663	
Project Manager	David Bohmann	(303) 704-9527	
Program Manager	Dan Pastor	(303) 588-0901	
Site Health & Safety	Karen Luna	(702) 217-8173	
Corporate Health & Safety	Michelle Gillie	(610) 348-7197	
Process Engineer	Courtney Flores	(770) 845-6281	
Emergency Generator (United Rentals)	Heath Barnard	(702) 538 2292	Reference Quote # 142770051 Reference Customer # 1439334

K05 PHASE III O&M ROUTINE INSPECTION FORM

Date: 5/29/18 Time: 1400 Inspector Initials: KSH

PROCESS PIPING INSPECTION

1. Observe piping between Process Tank secondary containment and FBR secondary containment.
   Any leaks, punctures, damage, bulges visible? Yes* (No)
2. Observe piping in Process Tank secondary containment area.
   Any leaks, punctures, damage, bulges visible? Yes* (No)
3. Record reading on Stabilized Lake Mead Water (SLMW) flowmeter east of Process Tanks.
   Flowmeter: 2,037,450 (gallons)

SECONDARY CONTAINMENT INSPECTION

4. Perform 360 perimeter walk to observe liner system for potential wear and tear.
   Any leaks, punctures, or other damage visible? Yes (No)
5. Is there storm water accumulation greater than 1 foot? Yes (No)
   If Yes, pump storm water into one of the Process Tanks.
6. Is there storm water accumulation in equipment pad sumps?: Yes (No)
   If Yes, pump storm water into one of the process tanks.

PROCESS TANKS AND DAY TANK INSPECTION

7. Perform 360 degree walk around of each tank to inspect for damage or leaks and lock out of valves:

	T-201		T-202		T-203		T-204	
Visible damage or leaks/stains? (inspect all welds and nozzles/valves)	Yes*	(No)	Yes*	(No)	Yes*	(No)	Yes*	No
All decant valves and transfer valves locked out?**	(Yes)	No*	(Yes)	No*	(Yes)	No*	NA	NA
Are transfer pumps ready for service?	(Yes)	No*	(Yes)	No*	(Yes)	No*	NA	NA

8. Visual inspection from top of each Process Tank:

	T-201		T-202		T-203	
Visible oil leaks from gear box?	Yes*	(No)	Yes*	(No)	Yes*	(No)
Has routine wash down of precipitate/crystals on tank sides and mixer impeller been completed?	(Yes)	No	(Yes)	No	(Yes)	No
Mixer off as part of sediment washing process? If Yes, draw an "X" through answers to next question.	Yes	(No)	(Yes)	No	(Yes)	No
Mixer running and turbulence/vortex observed?**	Yes	(No*)	Yes	(No*)	Yes	(No*)
Are used oil containers labelled and stored appropriately, in accordance with the Site Waste Management Plan?	(Yes)	No*	(Yes)	No*	(Yes)	No*
Ambient air temperature 96 Oil temperature	98 °F		97 °F		98 °F	

K05 PHASE III O&M ROUTINE INSPECTION FORM

Date: 5/29/18 **Time:** _____ **Inspector Initials:** KSH

NOTES:

* - Notify Site Implementation Manager immediately if any of these conditions are observed and thoroughly document on this form and through photographs.

** - Active sediment washing requires occasional shutdown of mixers and opening of decant valves. Notify Site Implementation Manager immediately if this condition is observed and active washing is not occurring.

Initiate procedures to mobilize and connect portable generators to power the mixers in the event of a power loss greater than six hours to prevent solids from consolidating in the bottom of the Process Tanks.

COMMENTS:

(Describe all "yes" answers, any observed damage, any areas that could not be inspected and the reason, etc.)

- Mixers off for pond closure activities

Operator Signature: Kyle A. Hansen

EMERGENCY CONTACTS:

Title	Name	Phone #	Comments
Site Implementation Manager	Brad Maynard	(907) 723-2646	
Field Operations Manager	Kyle Hansen	(801) 949-6663	
Project Manager	David Bohmann	(303) 704-9527	
Program Manager	Dan Pastor	(303) 588-0901	
Site Health & Safety	Karen Luna	(702) 217-8173	
Corporate Health & Safety	Michelle Gillie	(610) 348-7197	
Process Engineer	Courtney Flores	(770) 845-6281	
Emergency Generator (United Rentals)	Heath Barnard	(702) 538 2292	Reference Quote # 142770051 Reference Customer # 1439334

K05 PHASE III O&M ROUTINE INSPECTION FORM

Date: 5/30/18 Time: 1410 Inspector Initials: RSH

PROCESS PIPING INSPECTION

1. Observe piping between Process Tank secondary containment and FBR secondary containment.
   Any leaks, punctures, damage, bulges visible? Yes* (No)
2. Observe piping in Process Tank secondary containment area.
   Any leaks, punctures, damage, bulges visible? Yes* (No)
3. Record reading on Stabilized Lake Mead Water (SLMW) flowmeter east of Process Tanks.
   Flowmeter: 2038, 945 (gallons)

SECONDARY CONTAINMENT INSPECTION

4. Perform 360 perimeter walk to observe liner system for potential wear and tear.
   Any leaks, punctures, or other damage visible? Yes (No)
5. Is there storm water accumulation greater than 1 foot? Yes (No)
   If Yes, pump storm water into one of the Process Tanks.
6. Is there storm water accumulation in equipment pad sumps?: Yes (No)
   If Yes, pump storm water into one of the process tanks.

PROCESS TANKS AND DAY TANK INSPECTION

7. Perform 360 degree walk around of each tank to inspect for damage or leaks and lock out of valves:

	T-201		T-202		T-203		T-204	
Visible damage or leaks/stains? (inspect all welds and nozzles/valves)	Yes*	(No)	Yes*	(No)	Yes*	(No)	Yes*	(No)
All decant valves and transfer valves locked out?**	(Yes)	No*	Yes	(No*)	Yes	(No*)	NA	NA
Are transfer pumps ready for service?	(Yes)	No*	(Yes)	No*	(Yes)	No*	NA	NA

8. Visual inspection from top of each Process Tank:

	T-201		T-202		T-203	
Visible oil leaks from gear box?	Yes*	(No)	Yes*	(No)	Yes*	(No)
Has routine wash down of precipitate/crystals on tank sides and mixer impeller been completed?	(Yes)	No	(Yes)	No	(Yes)	No
Mixer off as part of sediment washing process? If Yes, draw an "X" through answers to next question.	(Yes)	No	(Yes)	No	(Yes)	No
Mixer running and turbulence/vortex observed?**	Yes	(No*)	Yes	(No*)	Yes	(No*)
Are used oil containers labelled and stored appropriately, in accordance with the Site Waste Management Plan?	(Yes)	No*	(Yes)	No*	(Yes)	No*
Ambient air temperature 100 Oil temperature	105 °F		101 °F		107 °F	

K05 PHASE III O&M ROUTINE INSPECTION FORM

Date: 5/30/18 **Time:** _____ **Inspector Initials:** KSH

NOTES:

* - Notify Site Implementation Manager immediately if any of these conditions are observed and thoroughly document on this form and through photographs.

** - Active sediment washing requires occasional shutdown of mixers and opening of decant valves. Notify Site Implementation Manager immediately if this condition is observed and active washing is not occurring.

Initiate procedures to mobilize and connect portable generators to power the mixers in the event of a power loss greater than six hours to prevent solids from consolidating in the bottom of the Process Tanks.

COMMENTS:

(Describe all "yes" answers, any observed damage, any areas that could not be inspected and the reason, etc.)

All tanks involved in water transfers

Operator Signature: Kyle D. Hansen

EMERGENCY CONTACTS:

Title	Name	Phone #	Comments
Site Implementation Manager	Brad Maynard	(907) 723-2646	
Field Operations Manager	Kyle Hansen	(801) 949-6663	
Project Manager	David Bohmann	(303) 704-9527	
Program Manager	Dan Pastor	(303) 588-0901	
Site Health & Safety	Karen Luna	(702) 217-8173	
Corporate Health & Safety	Michelle Gillie	(610) 348-7197	
Process Engineer	Courtney Flores	(770) 845-6281	
Emergency Generator (United Rentals)	Heath Barnard	(702) 538 2292	Reference Quote # 142770051 Reference Customer # 1439334

K05 PHASE III O&M ROUTINE INSPECTION FORM

Date: 5/31/18 **Time:** 0700 **Inspector Initials:** JR

PROCESS PIPING INSPECTION

1. Observe piping between Process Tank secondary containment and FBR secondary containment.
   Any leaks, punctures, damage, bulges visible? Yes* (No)
2. Observe piping in Process Tank secondary containment area.
   Any leaks, punctures, damage, bulges visible? Yes* (No)
3. Record reading on Stabilized Lake Mead Water (SLMW) flowmeter east of Process Tanks.
   Flowmeter: 2040355 (gallons)

SECONDARY CONTAINMENT INSPECTION

4. Perform 360 perimeter walk to observe liner system for potential wear and tear.
   Any leaks, punctures, or other damage visible? Yes (No)
5. Is there storm water accumulation greater than 1 foot? Yes (No)
   If Yes, pump storm water into one of the Process Tanks.
6. Is there storm water accumulation in equipment pad sumps?: Yes (No)
   If Yes, pump storm water into one of the process tanks.

PROCESS TANKS AND DAY TANK INSPECTION

7. Perform 360 degree walk around of each tank to inspect for damage or leaks and lock out of valves:

	T-201		T-202		T-203		T-204	
Visible damage or leaks/stains? (inspect all welds and nozzles/valves)	Yes*	(No)	Yes*	(No)	Yes*	(No)	Yes*	(No)
All decant valves and transfer valves locked out?**	(Yes)	No*	(Yes)	No*	(Yes)	No*	NA	NA
Are transfer pumps ready for service?	(Yes)	No*	(Yes)	No*	(Yes)	No*	NA	NA

8. Visual inspection from top of each Process Tank:

	T-201		T-202		T-203	
Visible oil leaks from gear box?	Yes*	(No)	Yes*	(No)	Yes*	(No)
Has routine wash down of precipitate/crystals on tank sides and mixer impeller been completed?	(Yes)	No	(Yes)	No	(Yes)	No
Mixer off as part of sediment washing process? If Yes, draw an "X" through answers to next question.	Yes	(No)	(Yes)	No	(Yes)	No
Mixer running and turbulence/vortex observed?**	Yes	(No*)	Yes	(No*)	Yes	(No*)
Are used oil containers labelled and stored appropriately, in accordance with the Site Waste Management Plan?	(Yes)	No*	(Yes)	No*	(Yes)	No*
Ambient air temperature 77 Oil temperature	87 °F		80 °F		81 °F	

K05 PHASE III O&M ROUTINE INSPECTION FORM

Date: 5/31/18 **Time:** 0700 **Inspector Initials:** JR

NOTES:

* - Notify Site Implementation Manager immediately if any of these conditions are observed and thoroughly document on this form and through photographs.

** - Active sediment washing requires occasional shutdown of mixers and opening of decant valves. Notify Site Implementation Manager immediately if this condition is observed and active washing is not occurring.

Initiate procedures to mobilize and connect portable generators to power the mixers in the event of a power loss greater than six hours to prevent solids from consolidating in the bottom of the Process Tanks.

COMMENTS:

(Describe all "yes" answers, any observed damage, any areas that could not be inspected and the reason, etc.)

- Mixers off for pond closure activities
- T-201 off due to vibration issues in gear box

Operator Signature: JR

EMERGENCY CONTACTS:

Title	Name	Phone #	Comments
Site Implementation Manager	Brad Maynard	(907) 723-2646	
Field Operations Manager	Kyle Hansen	(801) 949-6663	
Project Manager	David Bohmann	(303) 704-9527	
Program Manager	Dan Pastor	(303) 588-0901	
Site Health & Safety	Karen Luna	(702) 217-8173	
Corporate Health & Safety	Michelle Gillie	(610) 348-7197	
Process Engineer	Courtney Flores	(770) 845-6281	
Emergency Generator (United Rentals)	Heath Barnard	(702) 538 2292	Reference Quote # 142770051 Reference Customer # 1439334

Attachment B
Phase III O&M Monthly Inspection Forms

K05 PHASE III O&M MONTHLY INSPECTION FORM

Date: 5/31/19 **Time:** 0700 **Inspector Initials:** JR

INSPECT MATERIALS AND PARTS

1. Are all spare parts present?: (Yes) No
   If no, list which parts need to be ordered and inform Site Implementation Manager: _____
   _____
   _____
2. Are all safety materials, resources, and supplies to perform work present? (Yes) No
   If no, list what needs to be ordered and inform Site Implementation Manager: _____
   _____
   _____

PUMP OPERATION INSPECTION

3. Check if all AODD transfer pumps are in good condition and working order. Provide notes and contact the Site Implementation Manager if any repairs are required:

P-201	✓	
P-202	✓	
P-203	✓	
P-204	✓	
P-205	✓	
P-206	✓	

HIGH-HIGH LEVEL ALARMS INSPECTIONS

4. Check if the high-high level warning alarm system is in good condition for each tank. Provide notes and contact the Site Implementation Manager if any repairs are required:

	T-201		T-202		T-203		T-204	
Check what level the High-High alarm signals – is it consistent with the set points?	(Yes)	No*	(Yes)	No*	(Yes)	No*	(Yes)	No*
Test reset procedure – were there any issues?	Yes*	(No)	Yes*	(No)	Yes*	(No)	Yes*	(No)
Are all alarm status lights in good working order?	(Yes)	No*	(Yes)	No*	(Yes)	No*	(Yes)	No*
Are the shut-off devices in good working order?	(Yes)	No*	(Yes)	No*	(Yes)	No*	(Yes)	No*
Visible damages to the alarm cords and cables?	Yes*	(No)	Yes*	(No)	Yes*	(No)	Yes*	(No)

Notes: _____
_____
_____
_____

K05 PHASE III O&M MONTHLY INSPECTION FORM

Date: 5/31/18 **Time:** 0700 **Inspector Initials:** JR

INSPECT PROCESS TANK MIXERS

5. Visual inspection from top of each Process Tank:

	T-201		T-202		T-203	
Is there adequate oil in Process Tank mixer motors?	(Yes)	No*	(Yes)	No*	(Yes)	No*
Control panel mixer run time**	9248.4 hrs		9523.4 hrs		9565.5 hrs	

INSPECT MAINTENANCE ITEMS

6. Check if equipment requiring maintenance is in good condition and working order. Provide the date of next required maintenance and contact the Site Implementation if anything is in need of maintenance:

Activity	Date of Next Replacement or Maintenance	Comments
Replace 3" decant transfer hoses	5/1/2018	
Replace 3" solid transfer hoses	9/1/2018	
Replace 1.5" SLMW flush hose	12/15/2018	
Replace 3" stainless steel doublesphere expansion joints	5/1/2018	
Replace air compressor filter element	10/16/2018	
Service air compressor	1/26/2019	
Change process tank mixer gear box oil**	10/18/2018	
Grease gear seals on process tank mixer	6/21/2018	

NOTES:

* - Notify Site Implementation Manager immediately if any of these conditions are observed and thoroughly document on this form and through photographs.

** - Date of next oil change is approximate. The timing for process tank mixer gear box oil change is based on actual run time (10,000 hours). Each mixer ran for the following hours after the last oil change and prior to control panel set up, and these hours need to be added to the control panel readings to arrive at the total run time for the mixers:

M-201 = 8,987 hours, M-202 = 8,882 hours, M-203 = 8,952 hours

COMMENTS:

(Describe all "yes" answers, any observed damage, any areas that could not be inspected and the reason, etc.)

Operator Signature:

K05 PHASE III O&M MONTHLY INSPECTION FORM

Date: 5/31/18 **Time:** 0700 **Inspector Initials:** JR

EMERGENCY CONTACTS:

Title	Name	Phone #	Comments
Site Implementation Manager	Brad Maynard	(907) 723-2646	
Field Operations Manager	Kyle Hansen	(801) 949-6663	
Project Manager	David Bohmann	(303) 704-9527	
Program Manager	Dan Pastor	(303) 588-0901	
Site Health & Safety	Karen Luna	(702) 217-8173	
Corporate Health & Safety	Michelle Gillie	(610) 348-7197	
Process Engineer	Courtney Flores	(770) 845-6281	
Emergency Generator (United Rentals)	Heath Barnard	(702) 538 2292	Reference Quote # 142770051 Reference Customer # 1439334