

TECHNICAL MEMORANDUM

То:	Nevada Environmental Response Trust
Cc:	Nevada Division of Environmental Protection
From:	David Bohmann and Bounkheana Chhun
Date:	July 30, 2018
Subject:	AP-5 Operation and Maintenance Summary – June 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 June 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 June 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 June 2018.

SOLIDS WASHING AND DECANT WATER TRANSFER

Throughout June 2018, routine procedures for washing the solids and transferring decant water were followed. A total of approximately 49,982 gallons of AP-5 wash water was decanted from the Process Tanks and transferred to the Day Tank in June 2018. A summary of daily AP-5 wash water volumes that were decanted from the Process Tanks and transferred to the Day Tank in June 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 in June 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.

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 June 2018, ETI adjusted the dilution parameters to achieve a lower concentration in the Receiving Tank as a conservative measure to control influent concentrations to the FBRs while residual solids are removed from the AP-5 Pond and added to the Process Tanks. The AP-5 wash water was diluted to an average batch concentration of 1.4%.

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 June 21, 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 the residual solids removal portion of the closure activities are completed. The single-point monthly tank samples were used to develop an estimate of the perchlorate mass added in June 2018 as part of final closure activities (Table 4). Table 3 and Figure 1 updates will resume following completion of the residual solids transfer activities and sampling of the Process Tanks to establish 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.

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 the residual solids removal portion of the 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 the residual solids removal portion of the 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 will not be provided until the residual solids removal portion of the pond closure activities are completed.

ROUTINE INSPECTIONS

Routine inspections were conducted throughout June 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 June 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 June 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 determined to be within typical limits. The noise from vibrations appeared to increase in April and an additional inspection was completed. 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 being scheduled and is expected to be completed in August 2018 following completion of residual solids transfer from the pond to the Process Tanks.

MONTHLY INSPECTION

The monthly inspection was conducted on June 29, 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 June 2018. In June 2018, the pond was discovered to be approximately 1 foot deeper on the north side than was shown in the design drawings. As such, the cemented/calcified layer at the north end of the pond is thicker than expected since the actual depth of the pond couldn't be determined until the layer was partially removed. Previous measurements hadn't detected this discrepancy in the constructed depth of the pond, and additional time will be required to safely remove this layer of additional material.

As of the end of June 2018, approximately 90% of the residual solids and 60% 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 middle to end of July 2018, weather permitting, and inclusive of removal of the additional cemented/calcified material in the north end of the pond described above.

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. It is anticipated that the sampling will be performed in late July 2018 and the data will be received and processed for inclusion in the August 2018 monthly O&M report.

TRUST CERTIFICATION

AP-5 Operation and Maintenance Summary – June 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 in his representative Signature: capacity as President of the Nevada Environmental Response Trust Trustee

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

Title: Solely as President and not individually

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

7/30/18 Date:

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 June 2018.

Hyled. Hansen

July 30, 2018

Date

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

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

Tables

Table 1. Monthly AP-5 Wash Water Decant Records

Dete	T-201	T-202	T-203	Daily Total
Date	(Gallons)	(Gallons)	(Gallons)	(Gallons)
1-Jun	-	-	-	-
2-Jun	-	-	-	-
3-Jun	-	-	-	-
4-Jun	-	-	-	-
5-Jun	-	-	-	-
6-Jun	-	-	-	-
7-Jun	25,628	-	-	25,628
8-Jun	-	-	-	-
9-Jun	-	-	-	-
10-Jun	-	-	-	-
11-Jun	-	-	-	-
12-Jun	-	-	-	-
13-Jun	-	-	-	-
14-Jun	-	-	-	-
15-Jun	-	-	-	-
16-Jun	-	-	-	-
17-Jun	-	-	-	-
18-Jun	24,354	-	-	24,354
19-Jun	-	-	-	-
20-Jun	-	-	-	-
21-Jun	-	-	-	-
22-Jun	-	-	-	-
23-Jun	-	-	-	-
24-Jun	-	-	-	-
25-Jun	-	-	-	-
26-Jun	-	-	-	-
27-Jun	-	-	-	-
28-Jun	-	-	-	-
29-Jun	-	-	-	-
30-Jun	-	-	-	-
Total	49,982	-	-	49,982

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
June 2018	49,982	-	-	49,982
Cumulative Total	607,248	461,945	431,589	1,500,782

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
June 2018	860	-	-	860
Cumulative Total	307,665	388,707	305,180	1,001,552

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 P	erchlorate Mass ¹	168,055	247,579	185,745		601,380			
	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			
poved	November 2017	10,605	32,571	40,418	83,594	410,284			
Approx.Mass Removed	December 2017	41,090	16,693	28,582	86,365	323,919			
x.Mas	January 2018	36,195	25,360	19,639	81,195	242,724			
Appro	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								
	June 2018	INDIVIDUAL F	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 Transfer
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		Estimated Monthly Mass Added (lbs) ³	Total Monthly Mass Removed (lbs)	Total Perchlorate Mass In Process Tanks (lbs)
Initial F	Perchlorate Mass ¹			601,380
	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
ioved	November 2017		74,231	446,933
s Rem	December 2017		73,066	373,867
x.Mas	January 2018		69,363	304,504
Approx.Mass Removed	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
	June 2018	227,250	9,337	556,770
Ending	Perchlorate Mass			556,770

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

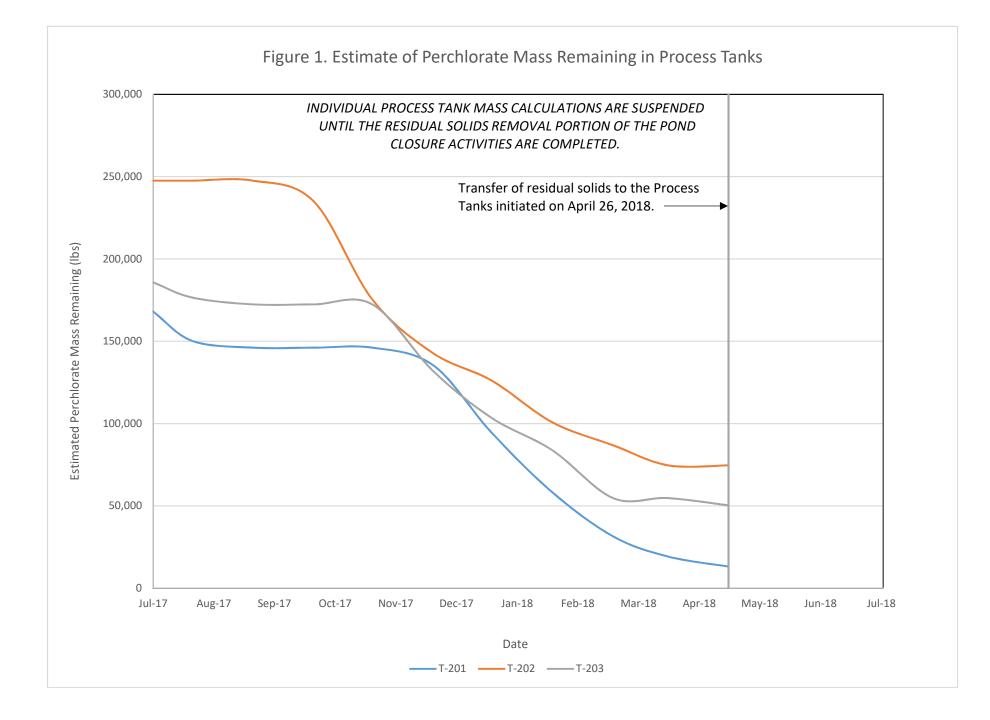
		Mass in T-201 (lbs)	Mass in T-202 (Ibs)	Mass in T-203 (Ibs)	Total Monthly Mass Removed (lbs)	Total Ammonia Mass In Process Tanks (lbs)			
Initial A	mmonia Mass ¹	18,217	22,343	20,277		60,837			
	November 2017	1,323	3,979	4,490	9,792	51,045			
	December 2017	3,974	1,778	2,659	8,411	42,634			
	January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

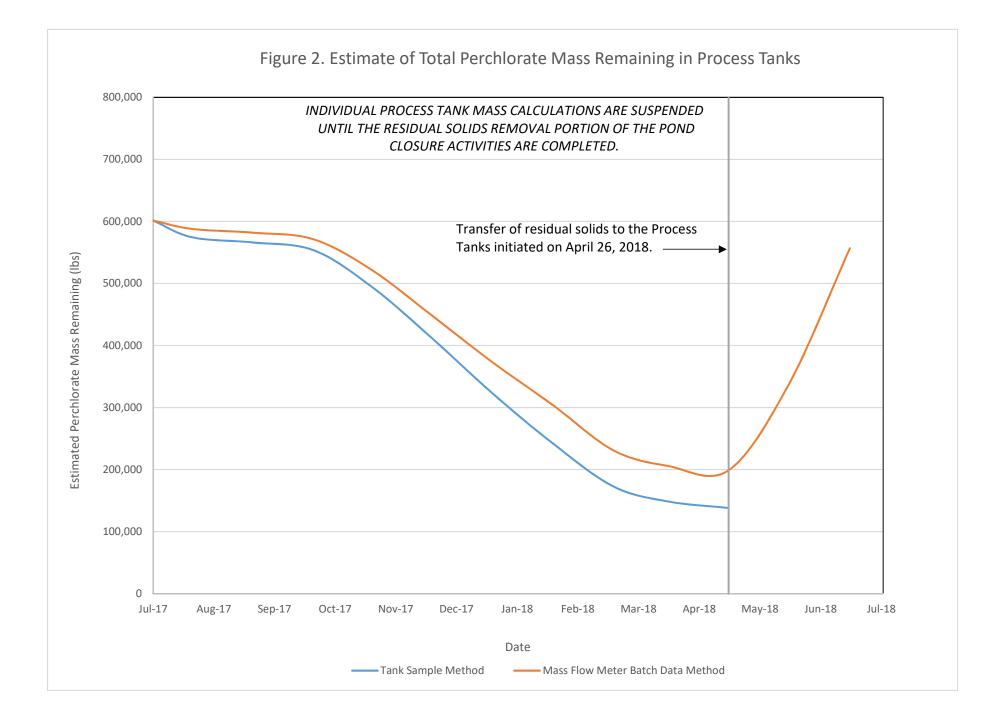
Notes:

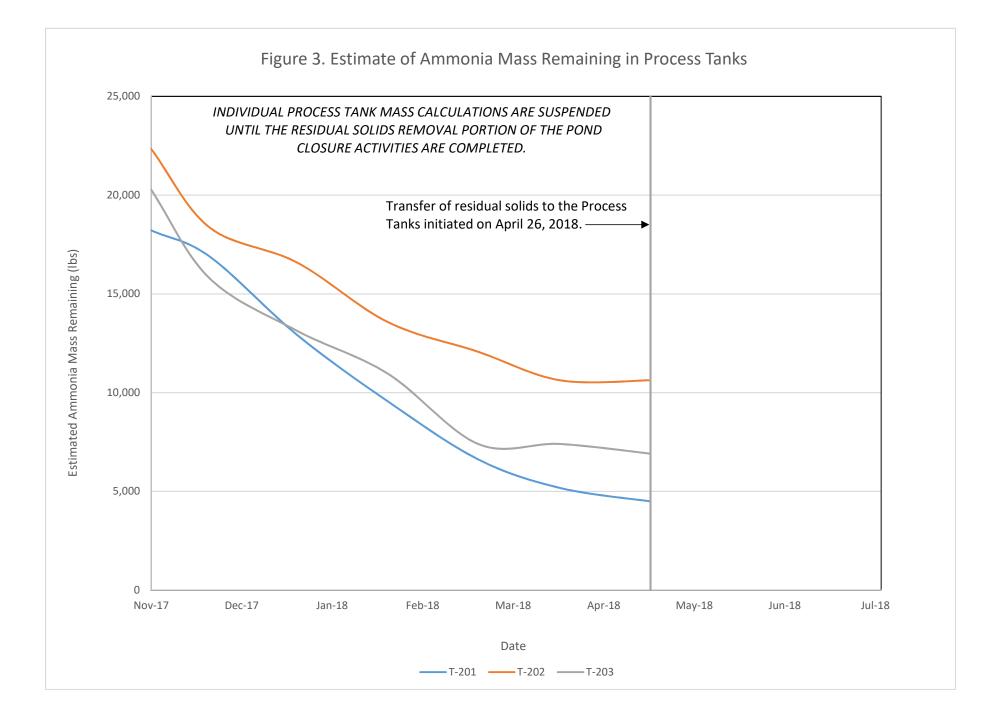
1 - The initial ammonia mass estimate presented is based on an average of laboratory results for slurry and accumulated solids samples collected on November 1, 2017. Ammonia mass estimates are not available prior to this date.

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







Attachment A Phase III O&M Routine Inspection Forms

Date:	61	11	18	
	1	-1		

Time: 0715 Inspector Initials: KGH

Yes*

No

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?
- 3. Record reading on Stabilized Lake Mead Water (SLMW) flowmeter east of Process Tanks. Flowmeter: 2,042,620 (gallons)

SECONDARY CONTAINMENT INSPECTION

4.	Perform 360 perimeter walk to observe liner system for potential we	ear and tear.	0
	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:

v	T-201		Т-2	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-2	201	T-2	202	T-2	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*	res	No*
Ambient air temperature Oil temperature	8	4 °F	76	۴	76	°F

k05 Phase III Inspection Form_17011_05

Date:

Time:

Inspector Initials: K44

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.)

atto to Apris pand closure admitics ane **Operator Signature: EMERGENCY CONTACTS:** Title Name Phone # Comments Site Implementation Manager **Brad Maynard** (907) 723-2646 **Field Operations Manager Kyle Hansen** (801) 949-6663 David Bohmann Project Manager (303) 704-9527 Program Manager Dan Pastor (303) 588-0901 Site Health & Safety (702) 217-8173 Karen Luna

(610) 348-7197

(770) 845-6281

(702) 538 2292

Corporate Health & Safety

Process Engineer

(United Rentals)

Emergency Generator

Michelle Gillie

Courtney Flores

Heath Barnard

Reference Quote # 142770051

Reference Customer # 1439334

Da	te: $\frac{b/z}{18}$ Time: $\frac{0.810}{2}$	Inspector Initials:	451	
PR	OCESS PIPING INSPECTION			
1.	Observe piping between Process Tank secondary containme	ent and FBR secondary conta	inment.	
	Any leaks, punctures, damage, bulges visible?	Yes*	NO	
2.	Observe piping in Process Tank secondary containment are	a	and they	
	Any leaks, punctures, damage, bulges visible?	Yes*	No	
3.	Record reading on Stabilized Lake Mead Water (SLMW) flow	vineter east of Process Tanks	i.	
	Flowmeter: 2,045, 370 (gallons)			
SEC	ONDARY CONTAINMENT INSPECTION			
4.	Perform 360 perimeter walk to observe liner system for pot	ential wear and tear.	2322	
	Any leaks, punctures, or other damage visible?	Yes	No	
5.	Is there storm water accumulation greater than 1 foot?	Yes	No	

6. Is there storm water accumulation in equipment pad sumps?: Yes If Yes, pump storm water into one of the process tanks.

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*	ves	No*	NA	NA
Are transfer pumps ready for service?	Yes	No*	es	No*	Yes	No*	NA	NA

8. Visual inspection from top of each Process Tank:

discussion of the	T-2	201	T-2	202	T-2	203
Visible oil leaks from gear box?	Yes*	No	Yes*	Mo	Yes*	No
Has routine wash down of precipitate/crystals on tank sides and mixer impeller been completed?	Yes	No	yes	No	For	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	Nox	Yes	Not	Yes	Nax
Are used oil containers labelled and stored appropriately, in accordance with the Site Waste Management Plan?		No*	Yes	No*	Yes	No*
Ambient air temperature <u>63</u> Oil temperature	89	°F	8	7°F	91	°F

K05 Phase III Inspection Form_17011_05

No

Date:

Time:

Inspector Initials:

LGFI

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.)

osure activities

Operator Signature:

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	22
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

Date: 0/3/18 Time: 0700	Inspector Initials:	KGU
PROCESS PIPING INSPECTION		
1. Observe piping between Process Tank secondary containme Any leaks, punctures, damage, bulges visible?	ent and FBR secondary cont Yes*	ainment.
2. Observe piping in Process Tank secondary containment area Any leaks, punctures, damage, bulges visible?	a. Yes*	No
3. Record reading on Stabilized Lake Mead Water (SLMW) flov Flowmeter: <u>2,049,650</u> (gallons)	vmeter east of Process Tank	S.
SECONDARY CONTAINMENT INSPECTION		
4. Perform 360 perimeter walk to observe liner system for pot Any leaks, punctures, or other damage visible?	ential wear and tear. Yes	()
any reads, punctures, or other demage visible;	169	

5.	is there storm water accumulation greater than 1 foot?	Yes
	If Yes, pump storm water into one of the Process Tanks.	
6.	Is there storm water accumulation in equipment pad sumps?:	Yes

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*	RO
All decant valves and transfer valves locked out?**	Ves	No*	Yes	No*	es	No*	NA	NA
Are transfer pumps ready for service?	Yes	No*	Yes	No*	Teg	No*	NA	NA

8. Visual inspection from top of each Process Tank:

s falle allow	Т-2	201	Т-2	202	Т-2	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	res	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	(ef	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 Waster Management Plan?	Yes	No*	Yes	No*	Yes	No*
Ambient air temperature Oil temperature	Ŕ	7 °F	84	۴	80	🤉 °F

k05 Phase III Inspection Form_17011_05

Na

3/4 Date:

Time: ___

Inspector Initials: _____ Kest

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.)

pour closure advisiter off during AIN mixers

Operator Signature:

l.J.Z

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

Date:	6/4/	18
	11	

Time: <u>1455</u>

Inspector Initials: K41

PROCESS PIPING INSPECTION

- 1. Observe piping between Process Tank secondary containment and FBR secondary containment.

 Any leaks, punctures, damage, bulges visible?
 Yes*
- 2. Observe piping in Process Tank secondary containment area. Any leaks, punctures, damage, bulges visible? Yes*
- 3. Record reading on Stabilized Lake Mead Water (SLMW) flowmeter east of Process Tanks. Flowmeter: 2,049,460 (gallons)

SECONDARY CONTAINMENT INSPECTION

 Perform 360 perimeter walk to observe liner system for potential wear and tear. Any leaks, punctures, or other damage visible? Yes
 Is there storm water accumulation greater than 1 foot? Yes
 If Yes, pump storm water into one of the Process Tanks.
 Is there storm water accumulation in equipment pad sumps?: Yes

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*	io)
All decant valves and transfer valves locked out?**	Nes	No*	Yes	No*	res	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-2	201	Т-2	202	Т-2	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	kes l	No
Mixer running and turbulence/vortex observed?**	Yes	No*	Yes	No	Yes	Not
Are used oil containers labelled and stored appropriately, in accordance with the Site Waste MA. Management Plan?	Yes	No*	Yes	No*	Yes	No*
Ambient air temperature 107 Oil temperature	l	7 ⁰ғ	10	8 °F	10	¶ °F

Date:	i	14	114	

Time: _____ Inspector Initials: ____ ILG 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.)

Torned T-202 \$ T-203 to dizivilute redinunda for 30 min. **Operator Signature: EMERGENCY CONTACTS:** Title Name Phone # Comments Site Implementation Manager Brad Maynard (907) 723-2646 Field Operations Manager Kyle Hansen (801) 949-6663 **David Bohmann** Project Manager (303) 704-9527 Dan Pastor Program Manager (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 Reference Quote # 142770051 Heath Barnard (702) 538 2292 (United Rentals) Reference Customer # 1439334

Date:	6	15	118	
	,		1	

Time: 1515 Inspector Initials: KGH

Yes*

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?
- 3. Record reading on Stabilized Lake Mead Water (SLMW) flowmeter east of Process Tanks. Flowmeter: 2,051, 9/10 (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 5. Is there storm water accumulation greater than 1 foot? Yes If Yes, pump storm water into one of the Process Tanks. 6. Is there storm water accumulation in equipment pad sumps?: Yes
 - 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*	es	No*	NA	NA
Are transfer pumps ready for service?	ves	No*	Yes	No*	Yes	No*	NA	NA

8. Visual inspection from top of each Process Tank:

	T-2	201	Т-2	202	T-2	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	(Per	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 //A Management Plan?	Yes	No*	Yes	No*	Yes	No*
Ambient air temperature 02 Oil temperature	10	₽ ₽ ₽ ₽	10	{ °F	10	¶ °F

K05 Phase III Inspection Form 17011 05

Date: 6/5

Time:

Inspector Initials: KSH

NOTES:

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** - 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.)

during paral cloque activities off yel. Hanse **Operator Signature: 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

Date:	6	16	118	
		1		

Time: 1440 Inspector Initials: KSH

Yes*

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?
- 3. Record reading on Stabilized Lake Mead Water (SLMW) flowmeter east of Process Tanks. Flowmeter: 2052, 460 (gallons)

SECONDARY CONTAINMENT INSPECTION

4.	Perform 360 perimeter walk to observe liner system for potential we	ear and tear.	
	Any leaks, punctures, or other damage visible?	Yes	No
5.	Is there storm water accumulation greater than 1 foot?	Yes	Nð
	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	A101	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:

	Т-2	201	Т-2	202	Т-2	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.	fes	No	Yes	No	Yes	No
Mixer running and turbulence/vortex observed?**	Yes	No*	Yes	No*	Yes	Nd*
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 00 Oil temperature	10	U °F	10	Z°F	99	°F

Date:

Time:

Inspector Initials: Kut

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.)

winers are CEF For pour closure adjudices.

Operator Signature:

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	p.
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

Date:	6	17	18	
			27	_

Time: (000)

Inspector Initials: 144H

PROCESS PIPING INSPECTION

- Any leaks, punctures, damage, bulges visible?
 Yes*
- 2. Observe piping in Process Tank secondary containment area. Any leaks, punctures, damage, bulges visible? Yes*
- 3. Record reading on Stabilized Lake Mead Water (SLMW) flowmeter east of Process Tanks. Flowmeter: 2,054,670 (gallons)

SECONDARY CONTAINMENT INSPECTION

- Perform 360 perimeter walk to observe liner system for potential wear and tear. Any leaks, punctures, or other damage visible? Yes
 Is there storm water accumulation greater than 1 foot? Yes If Yes, pump storm water into one of the Process Tanks.
 Is there storm water accumulation in equipment pad sumps?: Yes
 - 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*	(e)	No*	NA	NA
Are transfer pumps ready for service?	Yes	No*	Yee	No*	Yes	No*	NA	NA

8. Visual inspection from top of each Process Tank:

		T-201		T-202		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	es	No	Tes	No
Mixer off as part of sediment washing process? If Yes, draw an "X" through answers to next question.		No	Nes	No	Pes	No
Mixer running and turbulence/vortex observed?**		No*	Yes	Not	Yes	No*
Are used oil containers labelled and stored appropriately, in accordance with the Site Waste MA Management Plan?		No*	Yes	No*	Yes	No*
Ambient air temperature 00 Oil temperature	100	°F,	10	(°F	10	∂ °F

Date:

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.)

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Operator Signature:

Reled. Farmen

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

Date:	101	81
	- 1	

Time: 0720

Yes*

Inspector Initials: K4H

PROCESS PIPING INSPECTION

18

- 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?
- 3. Record reading on Stabilized Lake Mead Water (SLMW) flowmeter east of Process Tanks. Flowmeter: 2,055, (10 (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 5. Is there storm water accumulation greater than 1 foot? Yes If Yes, pump storm water into one of the Process Tanks. 6. Is there storm water accumulation in equipment pad sumps?: Yes

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:

	Т-2	201	T-2	202	T-2	203	T-2	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:

	Т-2	201	T-2	202	T-2	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?	es	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?**		No*	Yes	No*)	Yes	No*
Are used oil containers labelled and stored appropriately, in accordance with the Site Waste Management Plan?		No*	Yes	No*	Yes	No*
Ambient air temperature <u><u></u>90</u> Oil temperature	9	°F	8	∠°F	R	⊢ °F

54620

Date:

Time:

Inspector Initials: K4A

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.)

pour closure activities Mixers off derina

Operator Signature:

Riled Hansin

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	20
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

Date:	6/9	/18
	-1	

Time: 0730

Inspector Initials: KG4

Yes*

PROCESS PIPING INSPECTION

- 1. Observe piping between Process Tank secondary containment and FBR secondary containment.

 Any leaks, punctures, damage, bulges visible?
 Yes*
- Observe piping in Process Tank secondary containment area.
 Any leaks, punctures, damage, bulges visible?
- 3. Record reading on Stabilized Lake Mead Water (SLMW) flowmeter east of Process Tanks.

Flowmeter:	2	059	120	(gallons)
				(B==/

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
 5. Is there storm water accumulation greater than 1 foot? Yes If Yes, pump storm water into one of the Process Tanks.
 6. Is there storm water accumulation in equipment pad sumps?: Yes
 - 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-2	201	T-2	02	Т-2	203	T-2	204
Visible damage or leaks/stains? (inspect all welds and nozzles/valves)	Yes*	No	Yes*	No	Yes*	No	Yes*	A
All decant valves and transfer valves locked out?**	Yes	No*	tes	No*	ves	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		03
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?		No	Yes	No	es	No
Mixer off as part of sediment washing process? If Yes, draw an "X" through answers to next question.		No	Yes	No	es	No
Mixer running and turbulence/vortex observed?**		No*	Yes	No*	Yes	No*
Are used oil containers labelled and stored appropriately, in accordance with the Site Waste Management Plan?		No*	Yes	No*	Yes	No*
Ambient air temperature <u>90</u> Oil temperature	91	۴	ેલ્ટ	5 °₽	8') °F

Date:

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.

Time: 🔄

** - 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.)

off activities Mixers Dara locine Univa

Operator Signature:

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

Date:	61	10/	18	-35
2	1	1	1	

Time: 1406

Inspector Initials: KGH

Yes*

PROCESS PIPING INSPECTION

- Any leaks, punctures, damage, bulges visible?
 Yes*
- Observe piping in Process Tank secondary containment area.
 Any leaks, punctures, damage, bulges visible?
- 3. Record reading on Stabilized Lake Mead Water (SLMW) flowmeter east of Process Tanks.

Flowmeter:	7	0	5	9,	120	(gallons)

SECONDARY CONTAINMENT INSPECTION

4.	Perform 360 perimeter walk to observe liner system for potential we	ear and tear.	A
	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.	23	0
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*	fes	No*	NA	NA
Are transfer pumps ready for service?	Yes	No*	es	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?	es	No	Yes	No	M	No
Mixer off as part of sediment washing process? If Yes, draw an "X" through answers to next question.	Yes	No	Yes	No	ves	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 MA Management Plan?	Yes	No*	Yes	No*	Yes	No*
Ambient air temperature Oil temperature	98	°F	10	<mark>₿</mark> °F	97	7 °F

k05 Phase III Inspection Form_17011_05 Pa

Date:

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.)

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Operator Signature:

1-Hansen

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

Date:	6	14	118	
	1		ļ	

Time: 1450

Yes*

Inspector Initials: _____ICGH

Νa

PROCESS PIPING INSPECTION

1.	Observe piping between Process Tank secondary containment and F	BR secondary	containment
	Observe piping between Process Tank secondary containment and F Any leaks, punctures, damage, bulges visible?	Yes*	No

- 2. Observe piping in Process Tank secondary containment area. Any leaks, punctures, damage, bulges visible?
- 3. Record reading on Stabilized Lake Mead Water (SLMW) flowmeter east of Process Tanks. 181

Flowmeter:	2,060	625	(gallons)
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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 5. Is there storm water accumulation greater than 1 foot? Yes If Yes, pump storm water into one of the Process Tanks. 6. Is there storm water accumulation in equipment pad sumps?: Yes

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-2	201	T-2	202	Т-2	203	T-2	204
Visible damage or leaks/stains? (inspect all welds and nozzles/valves)	Yes*	No	Yes*	No	Yes*	Nà	Yes*	(NG
All decant valves and transfer valves locked out?**	Yes	No*	(es	No*	Yes	No*	NA	NA
Are transfer pumps ready for service?	Yes	No*	Ye	No*	Yes	No*	NA	NA

	Т-2	201	T-2	202	T-2	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	Tes	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	10	2°F	114	S °₽	10	7 °F

Date:

Time:

Inspector Initials: 444

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.)

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Operator Signature:

1. Aane

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	2
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	5 E
Emergency Generator (United Rentals)	Heath Barnard	(702) 538 2292	Reference Quote # 142770051 Reference Customer # 1439334

Dat	te: <u>6/12/18</u> Time: <u>7630</u> Inspecto	or Initials: KG[
PR	DCESS PIPING INSPECTION		
1.	Observe piping between Process Tank secondary containment and FE Any leaks, punctures, damage, bulges visible?	BR secondary containment. Yes*	
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 ea Flowmeter: <u>206, 420</u> (gallons)	ast of Process Tanks.	
SEC	CONDARY CONTAINMENT INSPECTION		
4.	Perform 360 perimeter walk to observe liner system for potential we Any leaks, punctures, or other damage visible?	ar and tear. Yes)
5.	Is there storm water accumulation greater than 1 foot? If Yes, pump storm water into one of the Process Tanks.	Yes No	
6.	Is there storm water accumulation in equipment pad sumps?: If Yes, pump storm water into one of the process tanks.	Yes No	

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-2	201	T-2	202	T-2	203	T-2	.04
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*	es	No*	Yes	No*	NA	NA
Are transfer pumps ready for service?	es	No*	es	No*	Yes	No*	NA	NA

-	T-2	201	T-2	202	T-2	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?	res	No	res	No	Yes	No
Mixer off as part of sediment washing process? If Yes, draw an "X" through answers to next question.	es	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 temperatureO Oil temperature	10	7 °F	11-	7 °F	[0	9 °F

Date: 0/12/18

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.)

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Operator Signature:

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

Da	te: <u>6/13/18</u> Time: <u>1610</u> Inspector	Initials:	KGH
PR	OCESS PIPING INSPECTION		
1,	Observe piping between Process Tank secondary containment and FB	R secondary con	tainment
	Any leaks, punctures, damage, bulges visible?	Yes*	(No)
2.	Observe piping in Process Tank secondary containment area.		à
	Any leaks, punctures, damage, bulges visible?	Yes*	No
3.	Record reading on Stabilized Lake Mead Water (SLMW) flowmeter eas Flowmeter: <u>2,063,830</u> (gallons)	t of Process Tar	ıks.
SE	CONDARY CONTAINMENT INSPECTION		
4.	Perform 360 perimeter walk to observe liner system for potential wea	r and tear.	\wedge
	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 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*	es	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?		No	Yes	No	yes	No
Mixer off as part of sediment washing process? If Yes, draw an "X" through answers to next question.		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 MA Management Plan?		No*	Yes	No*	Yes	No*
Ambient air temperature Oil temperature	10	¶°F	- []	(∕ °F	10	°₽

Nø

Date:

Time: 1610

Inspector Initials: ___K4 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.)

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les. Hann

Operator Signature:

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	D2 10 0
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	(C 162 10 ² 11
Emergency Generator (United Rentals)	Heath Barnard	(702) 538 2292	Reference Quote # 142770051 Reference Customer # 1439334

Dat	e: <u>6/14/08</u> Time: <u>1530</u> Inspector Initia	als:K	SH
PRO	DCESS PIPING INSPECTION		
1.	Observe piping between Process Tank secondary containment and FBR second	ondary contain	iment
	Any leaks, punctures, damage, bulges visible?	Yes*	No
2.	Observe piping in Process Tank secondary containment area. Any leaks, punctures, damage, bulges visible?	Yes*	(Na
3.	Record reading on Stabilized Lake Mead Water (SLMW) flowmeter east of P Flowmeter: $2064,430$ (gallons)	rocess Tanks.	
SEC	ONDARY CONTAINMENT INSPECTION		
4.	Perform 360 perimeter walk to observe liner system for potential wear and	tear.	0
	Any leaks, punctures, or other damage visible?	Yes	NQ
5.	Is there storm water accumulation greater than 1 foot?	Yes	NO
	If Yes, pump storm water into one of the Process Tanks.		0
6.	Is there storm water accumulation in equipment pad sumps?:	Yes	No

PROCESS TANKS AND DAY TANK INSPECTION

If Yes, pump storm water into one of the process tanks.

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*	Ves	No*	Yes	No*	NA	NA
Are transfer pumps ready for service?	Ves	No*	Yes	No*	Tes	No*	NA	NA

	T-2	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?		No	tes	No	()	No
Mixer off as part of sediment washing process? If Yes, draw an "X" through answers to next question.		No	Ales .	No	Yes	No
Mixer running and turbulence/vortex observed?**	Yes	Not	Yes	Not	Yes	No*
Are used oil containers labelled and stored appropriately, in accordance with the Site Waste MA Management Plan?		No*	Yes	No*	Yes	No*
Ambient air temperature Oú	10	27 °F		°F	11) <i>8</i> °F

(8) Date:

Time: _____

Inspector Initials: _____K4/

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.)

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Operator Signature:

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

Da	Date: 6/15/18 Time: 1520 Inspector Initials: K	<u>s 11</u>
PR	PROCESS PIPING INSPECTION	
1.	. Observe piping between Process Tank secondary containment and FBR secondary contai	nment,
	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: <u>2067, 940</u> (gallons)	
SEG	ECONDARY CONTAINMENT INSPECTION	
4.	. Perform 360 perimeter walk to observe liner system for potential wear and tear.	m
	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.	Y

6. Is there storm water accumulation in equipment pad sumps?: Yes 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?	fes	No*	res	No*	Yes	No*	NA	NA

	Т-2	201	T-2	202	T-2	
Visible oil leaks from gear box?	Yes*	No	Yes*	No	Yes*	Nø
Has routine wash down of precipitate/crystals on tank sides and mixer impeller been completed?		No	Yes	No	Yes	No
Mixer off as part of sediment washing process? If Yes, draw an "X" through answers to next question.		No	Yes	No	Yes	No
Mixer running and turbulence/vortex observed?**	Yes	Not	(Yes)	No*	Yes	No*
Are used oil containers labelled and stored appropriately, in accordance with the Site Waste MA Management Plan?		No*	Yes	No*	Yes	No*
Ambient air temperatureO		2°F	10	℃¢°F	16	4 °F

Date: _____

Inspector Initials:

NOTES:

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

Time:_____

** - 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.)

Operator Signature: _____

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 Time: 1205 Inspector Initials: KSH Date: 6/16/18 **PROCESS PIPING INSPECTION** 1. Observe piping between Process Tank secondary containment and FBR secondary containment. Yes* No Any leaks, punctures, damage, bulges visible? 2. Observe piping in Process Tank secondary containment area. Yes* Any leaks, punctures, damage, bulges visible? 3. Record reading on Stabilized Lake Mead Water (SLMW) flowmeter east of Process Tanks. Flowmeter: 2067, 935 (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 5. Is there storm water accumulation greater than 1 foot? Yes If Yes, pump storm water into one of the Process Tanks.

6. Is there storm water accumulation in equipment pad sumps?: Yes 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*	Nð
All decant valves and transfer valves locked out?**	Yes	No*	Yes	No*	Yes	No*	NA	NA
Are transfer pumps ready for service?	Yes	No*	res	No*	es	No*	NA	NA

	T-2	201	T-2	202	Т-2	203
Visible oil leaks from gear box?	Yes*	No)	Yes*	No	Yes* –	64
Has routine wash down of precipitate/crystals on tank sides and mixer impeller been completed?	Yes	No	Yes	No	es	No
Mixer off as part of sediment washing process? If Yes, draw an "X" through answers to next question.		No	Yes	No	Yes	Na
Mixer running and turbulence/vortex observed?**	Yes	No*	Tes	No*	es	No*
Are used oil containers labelled and stored appropriately, in accordance with the Site Waste MA Management Plan?		No*	Yes	No*	Yes	No*
Ambient air temperature <u>92</u> Oil temperature	93	2°F	- 11	(, °F	110	¢ °F

Date: 6/16/18

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.)

- Mixer T-201 off due to vibration issues

Operator Signature:

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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

Da	te: <u>6/17/18</u> Time: <u>0715</u> Ins	spector Initials:	KSH
PR	OCESS PIPING INSPECTION		
1.	Observe piping between Process Tank secondary containment a Any leaks, punctures, damage, bulges visible?	and FBR secondary c Yes*	ontainment.
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) flowme Flowmeter: <u>7070,890</u> (gallons)	ter east of Process T	anks.
SEC	CONDARY CONTAINMENT INSPECTION		
4.	Perform 360 perimeter walk to observe liner system for potenti	ial wear and tear.	-
	Any leaks, punctures, or other damage visible?	Yes	Na
5.	Is there storm water accumulation greater than 1 foot? If Yes, pump storm water into one of the Process Tanks.	Yes	NO
6.	Is there storm water accumulation in equipment pad sumps?: If Yes, pump storm water into one of the process tanks.	Yes	(No

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*	Ø
All decant valves and transfer valves locked out?**	res	No*	res	No*	(es)	No*	NA	NA
Are transfer pumps ready for service?	es	No*	es	No*	(es)	No*	NA	NA

	T-201		T-202		T-2	03
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?		No	(es)	No	(e)	No
Mixer off as part of sediment washing process? If Yes, draw an "X" through answers to next question.		No	les	No	YGS	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 ///A Management Plan?		No*	Yes	No*	Yes	No*
Ambient air temperature 78 Oil temperature	8	ス °F	78	۴	80	٦°

6/17/18 Date:

Time: ___

Inspector Initials: KSK

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.)

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Operator Signature:

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

Dat	re: <u>6/18/18</u> Time: <u>1230</u> Inspecto	or Initials:	KSH	
PRO	DCESS PIPING INSPECTION			
1.	Observe piping between Process Tank secondary containment and Ff	BR secondary	containment.	
	Any leaks, punctures, damage, bulges visible?	Yes*	(NG)	
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 ea	ast of Process	Tanks.	
	Flowmeter: $2,071,050$ (gallons)			
SEC	ONDARY CONTAINMENT INSPECTION			
4.	Perform 360 perimeter walk to observe liner system for potential we	ar 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*	R
All decant valves and transfer valves locked out?**	Ves	No*	Yes	No*	Yes	No*	NA	NA
Are transfer pumps ready for service?	res	No*	yes	No*	Ves	No*	NA	NA

	T-201		T-2	202	T-2	203 ~
Visible oil leaks from gear box?	Yes*	No	Yes*	Ng	Yes*	NO
Has routine wash down of precipitate/crystals on tank sides and mixer impeller been completed?	Yes	No	es	No	Ves	No
Mixer off as part of sediment washing process? If Yes, draw an "X" through answers to next question.	Ves	No	res	No	(er	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?		No*	Yes	No*	Yes	No*
Ambient air temperature <u>94</u> Oil temperature	9	73°F	9.	5°₽,	9-	γ}°F

Date: 6/18/18

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.)

Mixers off during poud closure activities

gle d'Hann

Operator Signature:

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

Dat	te: <u>6/17/18</u> Time: <u>1445</u> Inspector	Initials:	K411
PR	DCESS PIPING INSPECTION		
1.	Observe piping between Process Tank secondary containment and FBR	secondary co	ontainment,
	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 Flowmeter: 2,071,580 (gallons)	t of Process T	anks.
SEC	CONDARY CONTAINMENT INSPECTION		
4.	Perform 360 perimeter walk to observe liner system for potential wear	and tear.	ß
	Any leaks, punctures, or other damage visible?	Yes	(No)
5.	Is there storm water accumulation greater than 1 foot?	Yes	(V)

- If Yes, pump storm water into one of the Process Tanks. 6. Is there storm water accumulation in equipment pad sumps?: Yes
 - 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?**	ves	No*	ves	No*	Yes	No*	NA	NA
Are transfer pumps ready for service?	Yes	No*	es	No*	Ves	No*	NA	NA

	T-2	201	— Т-2	202	T-2	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	Ves	No	es	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 MA Management Plan?	Yes	No*	Yes	No*	Yes	No*
Ambient air temperature Oil temperature	9	7°F	9	¶ °F	94	< ℃F

18 Date:

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.

Time: _____

** - 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.)

during pour closure activities ixers off

Operator Signature:

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

Dat	e: <u>6/20/18</u> Time: <u>1435</u> Ins	spector Initials:	1244
PRO	DCESS PIPING INSPECTION		
1.	Observe piping between Process Tank secondary containment	and FBR secondary c	ontainment.
	Any leaks, punctures, damage, bulges visible?	Yes*	NO
2.	Observe piping in Process Tank secondary containment area.		73
	Any leaks, punctures, damage, bulges visible?	Yes*	No
3.	Record reading on Stabilized Lake Mead Water (SLMW) flowme Flowmeter: <u>2073, 120</u> (gallons)	eter east of Process T	anks.
SEC	ONDARY CONTAINMENT INSPECTION		
4.	Perform 360 perimeter walk to observe liner system for potent	ial 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?: If Yes, pump storm water into one of the process tanks.	Yes	No

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*	Ng	Yes*	No	Yes*	No
All decant valves and transfer valves locked out?**	Yes	No*	Yes	No*	es	No*	NA	NA
Are transfer pumps ready for service?	es	No*	Ves	No*	Yes	No*	NA	NA

	T-2	201	T-2	202	Т-2	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?		No	Yes	No	es	No
Mixer off as part of sediment washing process? If Yes, draw an "X" through answers to next question.		No	Yes	No	Yes	No
Mixer running and turbulence/vortex observed?**	Yes	No*	Yes)	No*	es	No*
Are used oil containers labelled and stored appropriately, in accordance with the Site Waste MA Management Plan?		No*	Yes	No*	Yes	No*
Ambient air temperature 0 G Oil temperature	104	-/ °F	13	<i>\$6</i> °₽	110	> °F

20/18 Date:

Time:

Inspector Initials: _____Kg / J

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.)

off due to gear issuec Mixer T-201

l.J. Hansu

Operator Signature:

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

Dat	te: <u> </u>	ls: <u>K9 /</u>		
PRO	DCESS PIPING INSPECTION			
1.	Observe piping between Process Tank secondary containment and FBR seco	ndary contain	ment.	
	Any leaks, punctures, damage, bulges visible?	Yes*	(N6)	
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 Pr Flowmeter: <u>2077, 340</u> (gallons)	rocess Tanks.	0	
SEC	CONDARY CONTAINMENT INSPECTION			
4.	Perform 360 perimeter walk to observe liner system for potential wear and	tear.	$\hat{\mathbf{O}}$	
	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.		$\overline{\langle}$	

6. Is there storm water accumulation in equipment pad sumps?: Yes 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*	
All decant valves and transfer valves locked out?**	Tes	No*	es	No*	es	No*	NA	NA
Are transfer pumps ready for service?	Yes	No*	Ves	No*	Yes	No*	NA	NA

8. Visual inspection from top of each Process Tank:

	Т-2	201	Т-2	202	Т-2	203
Visible oil leaks from gear box?	Yes*	No	Yes*	No	Yes*	(Ng)
Has routine wash down of precipitate/crystals on tank sides and mixer impeller been completed?	Yes	No	ves	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 Oil temperature	<u> </u>	3°F	11	le °F	11) °F

(No)

Date: _____

Time: _____ Inspector Initials: _____

NOTES:

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** - 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.)

Operator Signature: _____

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

Date	e: 10/22/18 Time: 1434	Inspector Initials:	KGH
PRO	CESS PIPING INSPECTION		
1.	Observe piping between Process Tank secondary containme	ent and FBR secondary co	ntainment
	Any leaks, punctures, damage, bulges visible?	Yes*	No
2. (Observe piping in Process Tank secondary containment area	а.	
	Any leaks, punctures, damage, bulges visible?	Yes*	No
3. 1	Record reading on Stabilized Lake Mead Water (SLMW) flov Flowmeter: <u>ス, 079, 910</u> (gallons)	vmeter east of Process Ta	nks.
SECO	ONDARY CONTAINMENT INSPECTION		
4. 1	Perform 360 perimeter walk to observe liner system for pot	ential wear and tear.	
	Any leaks, punctures, or other damage visible?	Yes	No
5. I	s there storm water accumulation greater than 1 foot?	Yes	No
	If Yes, pump storm water into one of the Process Tanks.		0

6. Is there storm water accumulation in equipment pad sumps?: Yes 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:

			1					
	T-2	201	T-2	202	T-2	203	T-2	.04
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*	ves	No*	Nes	No*	NA	NA
Are transfer pumps ready for service?	es	No*	YES	No*	res	No*	NA	NA

8. Visual inspection from top of each Process Tank:

	Т-2	201	T-2	202	T-2	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?		No	Yes	No	es	No
Mixer off as part of sediment washing process? If Yes, draw an "X" through answers to next question.	Yes	No	es	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 107 Oil temperature	1	05°F	10	9 °F	10	4°F

Nó)

Date: _____

Inspector Initials:

NOTES:

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

Time: _____

** - 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.)

Operator Signature: _____

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 Time: 0815 Inspector Initials: KGH Date: 4/23 **PROCESS PIPING INSPECTION** 1. Observe piping between Process Tank secondary containment and FBR secondary containment. Any leaks, punctures, damage, bulges visible? Yes* 2. Observe piping in Process Tank secondary containment area. Any leaks, punctures, damage, bulges visible? Yes* 3. Record reading on Stabilized Lake Mead Water (SLMW) flowmeter east of Process Tanks. Flowmeter: 2079,910 (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 5. Is there storm water accumulation greater than 1 foot? Yes If Yes, pump storm water into one of the Process Tanks. 6. Is there storm water accumulation in equipment pad sumps?: Yes

PROCESS TANKS AND DAY TANK INSPECTION

If Yes, pump storm water into one of the process tanks.

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

	T-201		T-2	T-202		T-203		T -20 4	
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*	ŃA	NA	
Are transfer pumps ready for service?	Yes	No*	Yes	No*	Yes	No*	NA	NĂ	

1.0	T-2	.01	· T-2	202	T-2	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?		No	Yes	No	Yes	No
Mixer off as part of sediment washing process? If Yes, draw an "X" through answers to next question.		No	Yes	No	Yes	No
Mixer running and turbulence/vortex observed?**	Yes	No*	Yes	No*	Yes	Not
Are used oil containers labelled and stored appropriately, in accordance with the Site Waste MA Management Plan?		No*	Yes	No*	Yes	No*
Ambient air temperature <u>15</u> Oil temperature	90	(°F	9	3°F	9	₿°F

23/18 Date:

Time: _____

Inspector Initials: ____/24/

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.)

port of the oftpoul Marces 24 closure activity

Operator Signature:

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

Dat	e: <u>6/24/(8</u> Time: <u>0645</u> Inspector Initials: <u>KSH</u>
PR	DCESS 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*
3.	Record reading on Stabilized Lake Mead Water (SLMW) flowmeter east of Process Tanks. Flowmeter: <u>2082, 380</u> (gallons)
SEC	ONDARY CONTAINMENT INSPECTION
4.	Perform 360 perimeter walk to observe liner system for potential wear and tear.
	Any leaks, punctures, or other damage visible? Yes
5.	Is there storm water accumulation greater than 1 foot? Yes

6. Is there storm water accumulation in equipment pad sumps?: Yes If Yes, pump storm water into one of the process tanks.

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-2	T-202 T-20		203	03 T-2	
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-2	201	T-2	T-202		203
Visible oil leaks from gear box?	Yes*	No	Yes*	(1)	Yes*	(NK)
Has routine wash down of precipitate/crystals on tank sides and mixer impeller been completed?		No	Yes	No	Yes	No
Mixer off as part of sediment washing process? If Yes, draw an "X" through answers to next question.		No	Yes	No	Yes	No
Mixer running and turbulence/vortex observed?**	Yes	No*	Yes	Not	Yes	NO*
Are used oil containers labelled and stored appropriately, in accordance with the Site Waste Management Plan?		No*	Yes	No*	Yes	No*
Ambient air temperature <u>87</u> Oil temperature	88	}°F	86	°₽	4)	7 °F

No

24/18 Date:

Time: ____

Inspector Initials: _____K&A

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.)

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Operator Signature:

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

1. Hanse

Dat	te: $\frac{6/25/18}{19}$ Time: <u>1440</u> Inspector Initia	ls: <u>Ks</u>	6
PR	DCESS PIPING INSPECTION		
1.	Observe piping between Process Tank secondary containment and FBR second	ndary containm	ient.
	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 P Flowmeter: <u>2033,380</u> (gallons)	rocess Tanks.	
SEC	CONDARY CONTAINMENT INSPECTION		
4.	Perform 360 perimeter walk to observe liner system for potential wear and Any leaks, punctures, or other damage visible?	tear. Yes	No
5.	Is there storm water accumulation greater than 1 foot? If Yes, pump storm water into one of the Process Tanks.	Yes	10
6.	Is there storm water accumulation in equipment pad sumps?:	Yes	Ng

PROCESS TANKS AND DAY TANK INSPECTION

If Yes, pump storm water into one of the process tanks.

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

	T-2	201	T-2	202	T-2	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?		No	Yes	No	Tes	No
Mixer off as part of sediment washing process? If Yes, draw an "X" through answers to next question.		No	Nes	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?		No*	Yes	No*	Yes	No*
Ambient air temperatureO Oil temperature	10	9°F	- 17	3 °F	10	?9 °F

Date:

....

Time:

Inspector Initials: KG Id

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.)

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le S. Hann

Operator Signature:

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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	- 1
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

Dat	te: <u>6/26/18</u> Time: <u>1500</u> Insp	ector Initials:K	SH
PRO	DCESS PIPING INSPECTION		
1.	Observe piping between Process Tank secondary containment an	d FBR secondary conta	inment
	Any leaks, punctures, damage, bulges visible?	Yes*	No
2.	Observe piping in Process Tank secondary containment area.		
	Any leaks, punctures, damage, bulges visible?	Yes*	Ng
3.	Record reading on Stabilized Lake Mead Water (SLMW) flowmeter Flowmeter: <u>2094, 210</u> (gallons)	r east of Process Tanks	s.
SEC	ONDARY CONTAINMENT INSPECTION		
4.	Perform 360 perimeter walk to observe liner system for potential	wear and tear.	0
	Any leaks, punctures, or other damage visible?	Yes	(NO)
5.	Is there storm water accumulation greater than 1 foot? If Yes, pump storm water into one of the Process Tanks.	Yes	No
6.	Is there storm water accumulation in equipment pad sumps?: If Yes, pump storm water into one of the process tanks.	Yes	No

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-2	201	T-2	202	T-2	203	T-2	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*	Ves	No*	Yes	No*	NA	NA
Are transfer pumps ready for service?	res	No*	Yes	No*	Yes	No*	NA	NA

	T-2	T-201		202	T-2	.03
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?		No	Yes	No	Yes	No
Mixer off as part of sediment washing process? If Yes, draw an "X" through answers to next question.		No	Yes	No	es	No
Mixer running and turbulence/vortex observed?**	Yes	No*	Yes	No*	Yes	Not
Are used oil containers labelled and stored appropriately, in accordance with the Site Waste Management Plan?		No*	Yes	No*	Yes	No*
Ambient air temperatureO Oil temperature	- (1	U) °F.	10	°F ₿	10	7 °F

Date:

Time: _____

Inspector Initials: ____ /4 5 /d

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.)

pour cloque activities Mixers off as a

rle J. Hane

Operator Signature:

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 Time: 1435 Inspector Initials: KGH Date: 6/27/18 **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: LOG8 (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 5. Is there storm water accumulation greater than 1 foot? Yes If Yes, pump storm water into one of the Process Tanks. 6. Is there storm water accumulation in equipment pad sumps?: Yes

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:

	Т-2	201	T-2	202	T-2	03	T-2	204
Visible damage or leaks/stains? (inspect all welds and nozzles/valves)	Yes*	No	Yes*	No	Yes*	No	Yes*	(Northernolder)
All decant valves and transfer valves locked out?**	Yes	No*	es	No*	Ves	No*	NA	NA
Are transfer pumps ready for service?	Yes	No*	Veg	No*	Yes	No*	NA	NA

	Т-2	T-201		202	T-2	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	es	No Solution
Mixer running and turbulence/vortex observed?**	Yes	Not	Yes	No*	Yes	(Jo)
Are used oil containers labelled and stored appropriately, in accordance with the Site Waste Management Plan?		No*	Yes	No*	Yes	No*
Ambient air temperatureOOil temperature	10	7 °F	- 11	(°F	10	9°₽

Date: 6/27/18

Time: _____ Inspector Initials: _____KG(d

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.)

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Operator Signature:

R.J. Hanken

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

Da	ate: <u>6/28/(%</u> Time: <u>1640</u> Ins	spector Initials: <u> </u>	_
PR	ROCESS PIPING INSPECTION		
1.	Observe piping between Process Tank secondary containment a	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) flowme Flowmeter: <u>2090, 450</u> (gallons)	ter east of Process Tanks.	
SEC	CONDARY CONTAINMENT INSPECTION		
4.	Perform 360 perimeter walk to observe liner system for potenti	al wear and tear.	
	Any leaks, punctures, or other damage visible?	Yes Ng	

- 5. Is there storm water accumulation greater than 1 foot? Yes If Yes, pump storm water into one of the Process Tanks.
- 6. Is there storm water accumulation in equipment pad sumps?: Yes 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-2	202	T-203		T-204	
Visible damage or leaks/stains? (inspect all welds and nozzles/valves)	Yes*	No	Yes*	No	Yes*	No	Yes*	N
All decant valves and transfer valves locked out?**	Yes	No*	Yes	No*	Yes	No*	NA	NA
Are transfer pumps ready for service?	es	No*	Tes	No*	es	No*	NA	NA

8. Visual inspection from top of each Process Tank:

	T-2	201	T-2	202	T-2	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?		No	es	No	Kes	No
Mixer off as part of sediment washing process? If Yes, draw an "X" through answers to next question.		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 MA Management Plan?		No*	Yes	No*	Yes	No*
Ambient air temperatureO U Oil temperature	0	7 °F	11	() °F	10	°F

en 157

Date: 6) 28

Time: _____

Inspector Initials: KS//

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.)

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Operator Signature:

C.S. Hansen

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	104
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

Da	te: 6/29/18 Time: 1230 Inspecto	r Initials:	2	
PR	OCESS PIPING INSPECTION			
1.	Observe piping between Process Tank secondary containment and FE	BR secondary con	tainment.	
	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 ea	ist of Process Tan	ks.	
	Flowmeter: <u>2090, 700</u> (gallons)			
SE	CONDARY CONTAINMENT INSPECTION			
4.	Perform 360 perimeter walk to observe liner system for potential we	ar 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

	T-201		T-202		T-2	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 <u>100</u> Oil temperature	98	°F	10	ذF	101	°F

6/29/18 Time: /よろの Date:

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 during water All transt closure Pond

Operator Signature:

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 Time: 0610 Inspector Initials: KSH 18 Date: _ **PROCESS PIPING INSPECTION** 1. Observe piping between Process Tank secondary containment and FBR secondary containment. Yes* Any leaks, punctures, damage, bulges visible? 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: 2,094,010 (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 5. Is there storm water accumulation greater than 1 foot? Yes If Yes, pump storm water into one of the Process Tanks.

6. Is there storm water accumulation in equipment pad sumps?: Yes 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*	(es)	No*	NA	NA

	Т-2	201	Т-2	202	T-2	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	Ves	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	tes	No
Mixer running and turbulence/vortex observed?**	Yes	No*	Yes	Not	Yes	Not
Are used oil containers labelled and stored appropriately, in accordance with the Site Waste MA Management Plan?	Yes	No*	Yes	No*	Yes	No*
Ambient air temperature <u><u><u></u></u> <u></u>Oil temperature</u>	- 46) °F	85	°F	87	°F

Date:

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.)

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Operator Signature:

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

		К05	PHASE I	II O&M MOI	NTHLY INSPECTION FOR	M	
Da	te: _	6/29/18	Time: _	1230	Inspector Initials:	JR	
IN:	5PEC	T MATERIALS AND P	ARTS				
1.	Are	e all spare parts prese	nt?:			Yes	No
		If no, list which parts	need to be	ordered and in	form Site Implementation Ma	nager:	
2.	Are	all safety materials, i	resources, a	nd supplies to p	erform work present?	Yes	No
		If no, list what needs	to be orde	red 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	$\overline{\checkmark}$	
P-202	\checkmark	
P-203	\checkmark	
P-204	V	
P-205	\checkmark	
P-206	\checkmark	

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?	Ves	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: 6/29/19

Time: 1230

Inspector Initials: ________

INSPECT PROCESS TANK MIXERS

5. Visual inspection from top of each Process Tank:

	T-201		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	9564	⁷ , 7 hrs	9601.	/ 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:

Date of Next	
•	
<u>Maintenance</u>	Comments
8/1/2018	
\$11/2018	
12/15/2018	
8/1/2018	
10/16/2018	
1/26/2019	
10/18/2018	
12/21/2018	
	Replacement or Maintenance 8/1/2018 4/1/2018 12/15/2018 12/15/2018 10/16/2018 1/26/2019

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.)

1KK p **Operator Signature:**

K05 PHASE III O&M MONTHLY INSPECTION FORM

Date: 6/29/18

Time: 1230 Inspector Initials: JR

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