Bratcher, Mike, EMNRD

From: Andrew Parker <andrew@rthicksconsult.com>
Sent: Monday, December 17, 2012 10:39 AM
To: Bratcher, Mike, EMNRD
Cc: Van Curen, Jennifer E; David_Luna@xtoenergy.com
Subject: XTO Nash Unit #29 Closure Plan
Attachments: Closure Report for C-144 Nash Draw 29 Poseidon Tank.pdf

Mike:

Attached is the C-144 Closure Plan for Nash Unit #29 Modular Impoundment located in Section 13 T23S R29E Eddy County NM (API # 30-015-29434). Per the Pit Rule, we are only submitting the closure plan at the District level. As appropriate, we will let you determine whether it is necessary to forward the closure plan to Santa Fe.

Please contact us with any questions or comments.

Andrew Parker
RT Hicks Consultants
Cell: 505-350-5535 (Preferred)
Office: 505-266-5004

R. T. HICKS CONSULTANTS, LTD.

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December 17, 2012

Mr. Mike Bratcher
NMOCD District 2
811 South First Street
Artesia, New Mexico 88210
Via E-mail

RE: C-144 Closure Report for the Poseidon Modular Impoundment.
Operator: XTO Energy. API #: 30-015-29434.
Unit Letter J Section 13 T23S R29E.

Dear Mr. Bratcher:

R.T. Hicks consultants is pleased to submit this Closure Report for the above referenced location on the behalf of XTO Energy. Closure activities were performed in accordance with the approved C-144 application *"Nash Draw Unit #29 modular impoundment (Atlantis system) for temporary storage of treated produced water"* dated June 13, 2012. The location of the modular impoundment is on Plate 1. Plate 2 is a plat of the location.

On June 20th, 2012, XTO Energy began sending treated water from Halliburton's CleanWave system, located at Nash Unit #53 SWD, to the Poseidon Modular Impoundment (Poseidon tank). On June 25, 2012, the first well, Nash Unit 39H, was fractured using treated water from the Poseidon tank. On September 26 th, 2012, the last well, Nash Unit 49, was fractured using treated water from the Poseidon tank. The transfer completion date, in lieu of rig release date, was October 5, 2012 as noted on Form C-105 per approved C-144 plan.

CLOSURE NOTIFICATIONS

Closure activities for the Poseidon tank began on October 15, 2012. Notification of closure activities were sent to Mr. Bratcher and Mr. Jones of NMOCD and Mr. Jim Amos of the BLM via email on October 12, 2012. Closure notification to the surface owner (BLM) was sent via certified mail. A copy of the receipt is presented in Appendix A.

MODULAR IMPOUND CLOSURE

On October 15, 2012 Poseidon Concepts began the disassembly of the Poseidon tank. Due to the oily nature of remaining fluid in the Poseidon tank, the fluid was removed using a vacuum truck and transported to R360 (formerly CRI) in Carlsbad, NM. The closure plan originally stated that remaining fluid would be injected into the Nash Unit 53 SWD (API#: 3001539400) well.

Poseidon Concepts transported all reusable pipes, pumps, and tank walls to their field yard. The tank liner was deposited into four 20-cu. yrd. roll-offs (Figure 1) and transported to R360 for proper disposal.

Figure 1: One of the four roll-offs containing liner material that was transported to R360.

Operation Logs

Operation logs for the Poseidon tank and the CleanWave system is presented in Appendix B. As noted in Tables B-1 and B-2, on August 27th, 2012 the Poseidon tank liner seam split slightly 1-foot from the top of the tank and approximately 3 barrels of fluid escaped. Mr. Randy Green of XTO Energy mobilized water haul trucks to the site and lowered the water level to prevent further leakage. The water was transferred to Nash Draw 49 H and Nash Draw Unit # 57 H. Water levels in the tank were kept below the split and the seam was repaired to prevent further leakage.

Soil Sampling

On November 13, 2012, Andrew Parker of Hicks Consultants collected two 5-point soil samples to determine if a reportable release occurred. The locations of the samples are presented on Plate 1: the "Tank Composite" sample was obtained below the tank footprint and the "BG Composite" sample established background conditions on the production pad. The discrete samples for the composite samples were collected two inches below the caliche pad/soil interface. Within the area of the Poseidon tank location, we observed no wet; discolored; or evidence of a release. Sampling indicates the leakage from the liner split described above is de-minimus.

We collected an on-site background sample (BG Composite) for comparative analysis as naturally high chlorides are expected in the area due to the 1) basal beds commonly containing brine saturated with sodium chloride and 2) the proximity to the salt lake/tailing pond located 1,400 feet west of the location.

The table of results, below, shows that all petroleum hydrocarbon constituents of concern are below laboratory practical quantification limits (PQL). The laboratory certificate of analysis is located in Appendix C.

Sample ID	Benzene mg/kg	BTEX mg/kg	TPH mg/kg	GRO/DRO mg/kg	Chloride mg/kg
NMAC 19.15.17.13.B(1).b	0.2	50	2,500	500	500 or background
Tank Composite	<0.049	<0.097	<20	<10	7,500
BG Composite	<0.049	<0.097	<20	<10	3,000

As shown in the above table, the BG Composite sample shows a background chloride concentration of 3,000 mg/kg. The Tank Composite sample that was collected from underneath the tank shows a chloride concentration of 7,500 mg/kg. The chloride concentration in the BG Composite sample indicates that elevated chloride concentrations existed in the surrounding soil prior to the operation of the Poseidon tank. If a reportable release did occur from the Poseidon tank, chloride concentration on an order of magnitude or higher would be expected as chloride concentration of the treated water from the CleanWave system was approximately 191,000 mg/L.

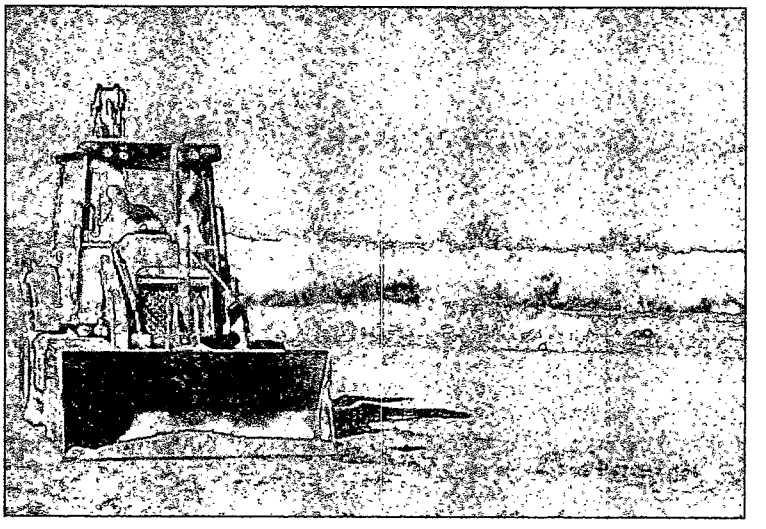


Figure 2: Backfilling a "Y" shaped trench with caliche.

RECLAMATION

Reclamation of the location consisted of grading the tank area to pre-existing conditions. The location is currently an active well site. To reclaim to pre-existing conditions, three "Y" shaped trenches were backfilled with caliche (Figure 2) and graded even with the existing production pad (Figure 3).

Figure 3: Location reclaimed to pre-existing conditions graded even with the active production pad.

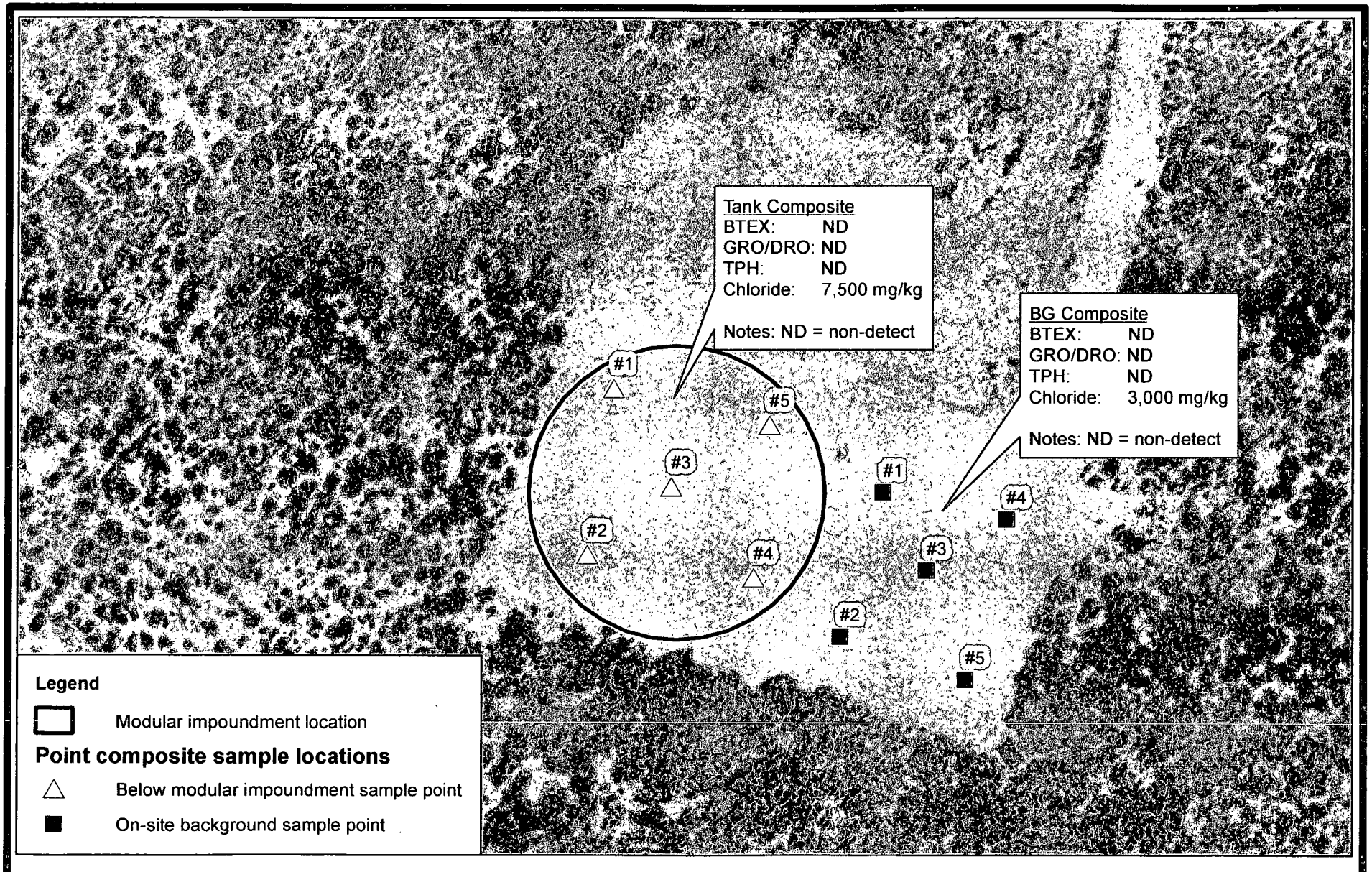
The BLM has requested interim reclamation for the location that reduces the well pad size and reclaim the reserve pit. XTO Energy will submit an interim reclamation plan to the BLM with a copy to NMOCD.

Please contact us at 505-266-5004 if you have any questions or comments.

Sincerely,
R.T. Hicks Consultants

Andrew Parker

Copy: David Luna, XTO Energy
Jennifer Van Curen, BLM - Carlsbad



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Point Sample Locations for Composite Sample

XTO Energy: Nash Unit 29
C-144 closure for modular impoundment

Plate 1

December 2012

7/1/12: ARRIVED ON LOCATION AT 3:00 PM REVEIWED JSA.. DAVID LUNA CALLED ME AROUND 12:00 AM SAID THAT DIRTY TANKS WERE FULL AND WE NEEDED TO RUN WATER TO GET TANKS DOWN. AFTER INVESTIGATING , FOUND OUT THAT A VALVE WAS LEAKING AND WAS GOING INTO THE DIRTY TANKS... WE GOT THE DIRTY TANKS DOWN TO 9' AND LARRY ONEAL SAID THAT WOULD HOLD THEM OVER UNTIL BO JACKSON GETS BACK TO FIX VALVE. EVERYTHING WENT WELL WITH MINOR ADJUSTMENTS TO CHEMICAL.

7/12/12: ARRIVED ON LOCATION AT 6:00 AM REVEIWED JSA..STARTED PROCESSING WATER AT 7:00 AM WE FILLED CLEAN TANKS AND HAD SOME BACK PRESSURE ON SAND FILTERS BECAUSE THE SMALL PUMPE WENT DOWN ONXTO TRANFER PUMP WENT DOWN WE HAD TO WAIT FOR CLEAN TANKS TO GO DOWN TO KEEP FILLING. THERE WAS TO MUCH BACK PRESSURE ON SAND FILTERS AND BLEW SOME OF THE GASKETS.. WE HAD TO REPAIR THEM...XTO COMPANY MAN WAS CALLED AND THEY ARE GOING TO GET A BIGGER PUMP TO TRANSFER WATER. THE SINGLE PUMP ON XTO SIDE IS TOO SMALL TO KEEP UP WITH US.OTHER THAN THE WAITING AND REPAIRS EVERYTHING ELSE WENT WELL AND WE MADE MINOR ADJUSTMENTS TO CHEMICALS.

7/15/12: ARRIVED ON LOCATION AT 6:00 AM REVEIWED JSA..STARTED PROCESSING WATER AT 6:15 AM... WE HAD TO WAIT SEVERAL HOURS FOR PUMP TO TRANFER WATER FROM CLEAN TANKS TO PIT TANK... FILLED CLEAN TANKS AND SHUT DOWN FOR PUMP TO CATCH UP....EVERYTHING ELSE WENT WELL WITH MINOR ADJUSTMENTS TO CHEMICALS .... POISIDEN TANK HAS APPROX.35,000 BBLS. IN IT AS OF TODAY.

7/16/12: ARRIVED ON LOCATION AT 6:00 AM REVEIWED JSA..STARTED PROCESSING WATER AT 6:30 AM... ... FILLED CLEAN TANKS AND SHUT DOWN FOR PUMP TO CATCH UP....EVERYTHING ELSE WENT WELL WITH MINOR ADJUSTMENTS TO CHEMICALS .... POISIDEN TANK HAS APPROX.35,000 BBLS. IN IT AS OF TODAY.

7/17/12: ARRIVED ON LOCATION AT 6:00 AM REVEIWED JSA..STARTED PROCESSING WATER AT 6:30 AM... ... FILLED CLEAN TANKS AND SHUT DOWN FOR PUMP TO CATCH UP.... POSIEDEN TANK IS 14" FROM THE TOP AND SHOULD HAVE AROUND 37,280 BBLS... CALLED THE MANUFACTURER FOR TANK HE RECOMMENDED WE STAY AROUND 12" FROM THE TOP... EVERYTHING ELSE WENT WELL WITH MINOR ADJUSTMENTS TO CHEMICAL

7/18/12: WAITING ON FRAC TO START.....POSIEDEN TANK IS 14" FROM THE TOP AND SHOULD HAVE AROUND 37,280 BBLS...THE MANUFACTURER FOR TANK HE RECOMMENDED WE STAY AROUND 12" FROM THE TOP...

*7/19/12: GOT A CALL FROM BO JACKSON THAT THE DIRTY TANKS WERE FULL AND I TOLD HIM WE WOULD BE OUT TO GET THEM EMPTY...WE ARRIVED ON LOCATION AROUND 4 PM AND GOT TANKS DOWN **SO THEY WOULD NOT OVER FLOW ANYMORE**.EVERYTHING WENT WELL.*

7/20/12: CONTINUE PROCESSING DIRTY WATER TO GET TANKS LOW ENOUGH TO SWAP OUT SOME VALVES THAT LEAK...WE ARRIVED ON LOCATION AROUND 6 AM AND GOT TANKS DOWN SO THEY WOULD NOT OVER FLOW ANYMORE. EVERYTHING WENT WELL..... GOT TANKS DOWN TO 5 FOOT AND CALLED BO JACKSON TO LET HIM KNOW THAT WE WERE GETTING TO THE OIL.HE SAID FOR US TO STOP THERE.

8/24/12: Fixed 4" line for system one on Brown Bear. Spoke with Mr. Bo Jackson, about how Oil got into Poseidon tank. He is not for sure, but do know that there was 3 rd party trucks taking water from XTO Nash Draw Unit # 47 H and unloading it in Poseidon tank. Do not know if those trucks was clean before doing this. Took samples of influent and enfluent, took to Hobbs Yard to be sent to Houston. Poseidon tank is at 136.5" at this time. Recommend to not suck Poseidon tank no lower than 10 inches for frac job.

8/27/12: Did not run today all equipment is filled. Water in weir tanks is clear. Still to get a pressure washer to clean out Brown Bear. Poseidon tank has started leaking from seams. Mr. Randy Green, is going to have some of the water transferred to XTO Nash Draw 49 H and some to XTO Nash Draw Unit # 57 H.

8/28/12: Were there any abnormal operational issues onsite?
Poseidon tank off location developed 2 leaks. Operation has been on standby until leaks can be repaired

8/28/12: Did not process water today. All tanks are full. Poseidon tank under repair with 2 leaks So complete repairs 8/30/12.

8/29/12: Were there any abnormal operational issues onsite?
Poseidon tank off location developed 2 leaks. Operation has been on standby until leaks can be repaired

8/29/12: Did not process water today. All tanks are full. Poseidon tank under repair with 2 leaks So complete repairs 8/31/12. Mr. Jackson advised we should be able to start cleaning water on Friday 31st Day Of August 2012, sometime that evening.

8/30/12: Were there any abnormal operational issues onsite?
Poseidon tank off location developed 2 leaks. Operation has been on standby until leaks can be repaired

8/30/12: Did not process water today. All tanks are full. Poseidon tank under repair with 2 leaks So complete repairs 8/31/12. Mr. Jackson advised we should be able to start cleaning water on Friday 31st Day Of August 2012, sometime that evening.

8/31/12: Poseidon tank has been repaired. We started running water today, there are no issues at this time. We will run through out the night or till dirty tanks level is down to 4 inches.

10/5/12: Ooeration Completed. Rig down Equipment
NOTE: Assume "Operation" intended here