

## Bratcher, Mike, EMNRD

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**From:** Tavarez, Ike [Ike.Tavarez@tetratech.com]  
**Sent:** Wednesday, January 12, 2011 2:00 PM  
**To:** Bratcher, Mike, EMNRD; Terry Gregston (terry\_gregston@nm.blm.gov)  
**Cc:** Pat Ellis; Joshua Russo; James Amos (james\_amos@nm.blm.gov)  
**Subject:** RE: Beech Federal Confirmation Sampling and Closure Request  
**Attachments:** COG - Beech Federal #2 TB Work Plan .pdf; COG - Beech Federal TB Confirmation Sampling .pdf

COG Operating

Beech Federal #2 Tank Battery

Section 25, T17S, R27E

Eddy County, New Mexico

32.80212 104.22891

2RP-453

Mike and Terry,

Please find enclosed the confirmation samples collected at the Beech Federal Tank Battery. The excavated areas and depths are shown in the attached Table and Figure. In summary, confirmation samples were collected in the areas of AH-2 (CS-2) and AH-3 (CS-1) and the area outside the berm on the north end (CS-3). All the excavations were left open. As discussed in the work plan, the area of AH-1 was excavated to the appropriate depth and proposed to install a backhoe test trench (T-1) to better define the chloride impact in this area. Referring to Table 1, CS-1, CS-2 and CS-3 showed bottom hole chlorides of 368 mg/kg, <200 mg/kg and <200 mg/kg, respectively. T-1 bottom holes showed a chloride of 1,700 mg/kg at 4' below surface and increased at 8' to 3,660 mg/kg and declined to 445 at 12' below surface.

The background samples (BG) did show a chloride high of 508 mg/kg at 2-2.5' and the groundwater depth is estimated to be around 125' below surface. Please review data and let me know if the concentrations in T-1 would be acceptable for closure. If needed, the area of AH-3 (T-1) can be capped with a 40 mil liner and backfilled. The area is approximately 30' x 30' and has been excavated 4' below surface. Please let me know so we can proceed with the closure activities or call me if you have any questions. Once completed, a closure report will be submitted for you files, thanks

Ike Tavarez, PG | Senior Project Manager

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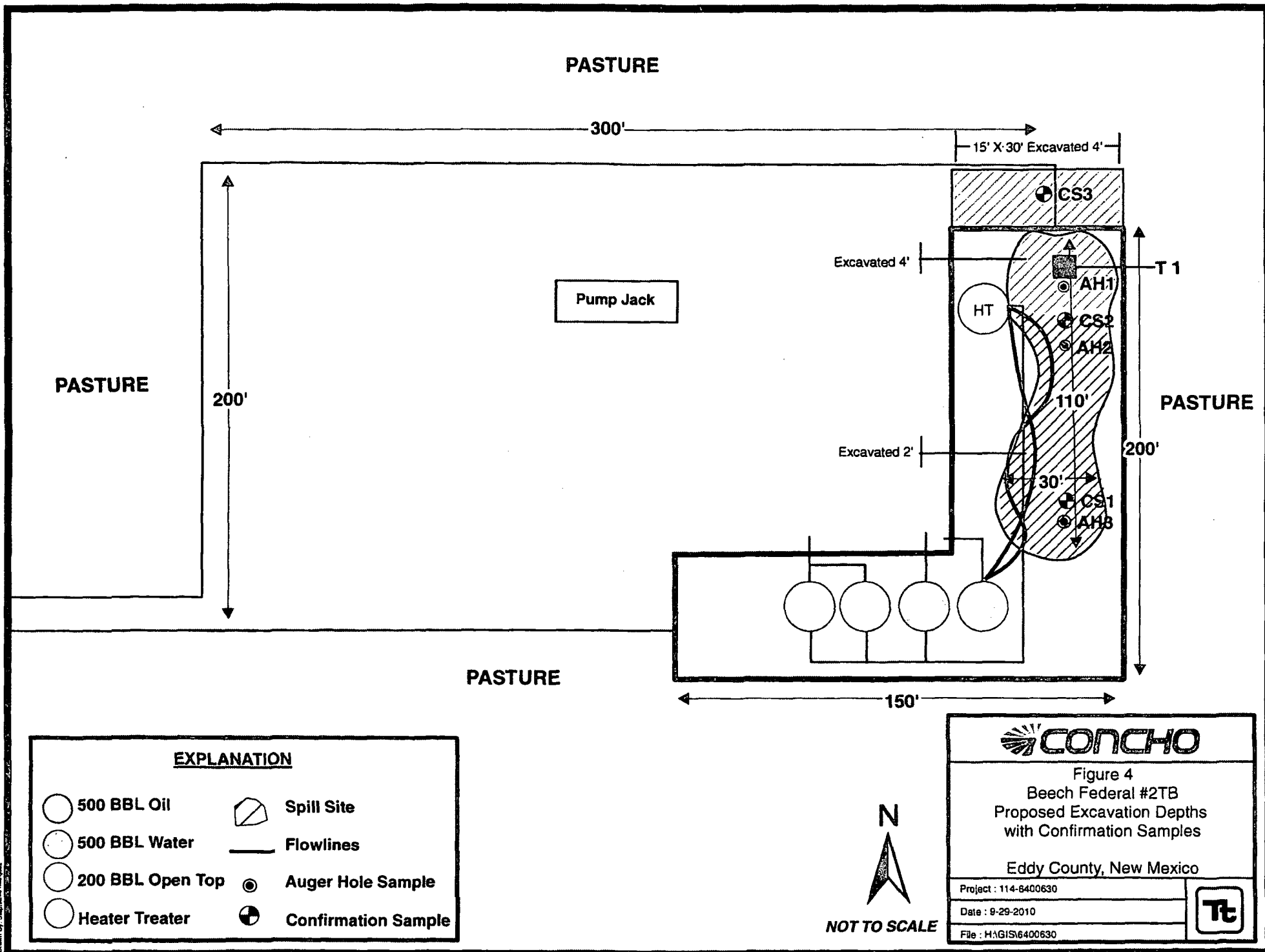
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**Table 1**  
**COG Operating LLC.**  
**BEECH FEDERAL #2 TANK BATTERY**  
**EDDY COUNTY, NEW MEXICO**

Sample ID	Sample Date	Sample Depth (ft)	Depth (BEB)	Soil Status		TPH (mg/kg)			Benzene (mg/kg)	Toluene (mg/kg)	Ethlybenzene (mg/kg)	Xylene (mg/kg)	Chloride (mg/kg)
				In-Situ	Removed	GRO	DRO	Total					
AH-1	8/10/2010	0-1'			X	<2.00	<50.0	<50.0	<0.0200	<0.0200	<0.0200	<0.0200	10,100
	"	1-1.5'			X	-	-	-	-	-	-	-	10,500
	"	2-2.5'			X	-	-	-	-	-	-	-	9,380
	"	3-3.5'			X	-	-	-	-	-	-	-	1,300
T-1	11/10/2010	0-1'	4' bottom	X									1,700
		-	6'	X									1,070
		-	8'	X									3,660
		-	10'	X									730
		-	12'	X									445
AH-2	8/10/2010	0-1'			X	<2.00	<50.0	<50.0	<0.0200	<0.0200	<0.0200	<0.0200	9,970
	"	1-1.5'			X	-	-	-	-	-	-	-	4,350
	"	2-2.5'		X		-	-	-	-	-	-	-	368
	"	3-3.5'		X		-	-	-	-	-	-	-	259
	"	4-4.5'		X		-	-	-	-	-	-	-	353
	"	5-5.5'		X		-	-	-	-	-	-	-	244
CS-2	11/10/2010	0-1'	2' bottom	X		-	-	-	-	-	-	-	<200
AH-3	8/10/2010	0-1'			X	<2.00	<50.0	<50.0	-	-	-	-	7,520
	"	1-1.5'			X	-	-	-	-	-	-	-	4,010
	"	2-2.5'		X		-	-	-	-	-	-	-	407
CS-1	11/10/2010	0-1'	2' bottom	X		-	-	-	-	-	-	-	368
CS-3	11/10/2010	0-1'	3' bottom	X		-	-	-	-	-	-	-	<200
BG	8/10/2010	0-1'		X		<2.00	<50.0	<50.0	-	-	-	-	212
	"	1-1.5'		X		-	-	-	-	-	-	-	317
	"	2-2.5'		X		-	-	-	-	-	-	-	508
	"	3-3.5'		X		-	-	-	-	-	-	-	328

BEB Below Excavation Bottom  
 (-) Not Analyzed  
☐ Excavation Depths

BG Background Sample  
 CS Confirmation Samples  
 T-1 Backhoe Test Trench

## Summary Report

Ike Tavaréz  
Tetra Tech  
1910 N. Big Spring Street  
Midland, TX 79705

Report Date: November 23, 2010

Work Order: 10111929



Project Location: Eddy County, NM  
Project Name: COG/Beech Fed. #2 TB  
Project Number: 114-6400630

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
251022	CS-1 0-1 (2' BEB)	soil	2010-11-10	00:00	2010-11-19
251023	CS-2 0-1 (2' BEB)	soil	2010-11-10	00:00	2010-11-19
251024	CS-3 0-1 (3' BEB)	soil	2010-11-10	00:00	2010-11-19
251025	T-1 4' bottom hole	soil	2010-11-10	00:00	2010-11-19
251026	T-1 6'	soil	2010-11-10	00:00	2010-11-19
251027	T-1 8'	soil	2010-11-10	00:00	2010-11-19
251028	T-1 10'	soil	2010-11-10	00:00	2010-11-19

**Sample: 251022 - CS-1 0-1 (2' BEB)**

Param	Flag	Result	Units	RL
Chloride		368	mg/Kg	4.00

**Sample: 251023 - CS-2 0-1 (2' BEB)**

Param	Flag	Result	Units	RL
Chloride		<200	mg/Kg	4.00

**Sample: 251024 - CS-3 0-1 (3' BEB)**

Param	Flag	Result	Units	RL
Chloride		<200	mg/Kg	4.00

**Sample: 251025 - T-1 4' bottom hole**

Param	Flag	Result	Units	RL
Chloride		1700	mg/Kg	4.00

**Sample: 251026 - T-1 6'**

Param	Flag	Result	Units	RL
Chloride		1070	mg/Kg	4.00

**Sample: 251027 - T-1 8'**

Param	Flag	Result	Units	RL
Chloride		3660	mg/Kg	4.00

**Sample: 251028 - T-1 10'**

Param	Flag	Result	Units	RL
Chloride		730	mg/Kg	4.00

## Summary Report

Ike Tavarez  
Tetra Tech  
1910 N. Big Spring Street  
Midland, TX 79705

Report Date: December 2, 2010

Work Order: 10111929



Project Location: Eddy County, NM  
Project Name: COG/Beech Fed. #2 TB  
Project Number: 114-6400630

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
251029	T-1 12'	soil	2010-11-10	00:00	2010-11-19

**Sample: 251029 - T-1 12'**

Param	Flag	Result	Units	RL
Chloride		445	mg/Kg	4.00