

## **INFORMATION ONLY**

# Mitigation Deferment Request

Same report for 1RP-4262.

ConocoPhillips Buck Federal CTB (RP-4431)

### Deferment letter

#### Ms. Yu

ConocoPhillips (CoP) has been evaluating the Spill site on our Buck Federal Tank Battery for remediation and have conclude that to perform this remediation fully would take more work and resources then the impact to the environment. Therefore, we would like to request a deferment of remediation until abandonment of the site.

#### Background

On Tuesday the 6th, 2016 at 12:00 am, a release of produced water occurred due to a faulty T joint resulting in the release of 240 BBLs of produced water with 235 BBLs of water recovered. Immediate action was to shut down and replace the T joint. NMOCD was notified of the release on September 6, 2016, and an initial C-141 was submitted.

#### Justification of Deferment

After following the CAP for the remediation efforts on this site the lab results came back higher then recommended. This resulted in further testing for the depths below grade inside the secondary containment. Sampling took place at 4', 5', and 7' below grade to get a representative of the ground penetration of the spill. At 4' the chloride levels are at 148, at 5' the chloride levels are at 320, and at 7' the chloride levels are at 213. At 7 feet below grade the chloride levels are just above what the minimal acceptable level is for the soil at 250 ppm.

After determining the possible depth of the remediation this spill would take to remediate we looked at ground water depth. The New Mexico Office of the State Engineering determined that the average depth of water to be 240 feet below grade. After verifying the water depth, we have ruled out any potential ground water contamination from this spill.

Once determining that ground water was not in danger of contamination a work plan was estimated of what the cost and impact the remediation would entail for the site vs environmental impact. All infrastructure inside the secondary containment would need to be removed and facility shut down. Once infrastructure was moved line finding would need to take place with excavation following to below 8 or 9 feet. Once soil was removed new soil will need to be brought on site and compacted to strength levels for infrastructure. Infrastructure will be set back in place and facility will have to go through retesting and start up fazes. This project will take roughly 2 weeks to complete if all goes according to plan.

Cost estimates of this Project will be determined by loss of production, heavy equipment usage, soil cost, technical testing, and man power. Cost of the project if the site goes until abandonment will be significantly reduced and the impact to the environment will be the same as if we remediate now.

Thank you for considering this request,

Joseph McLaughlin ConocoPhillips HSE Specialist Office: 1(432) 688-9062 Cell: (806) 567-2790



### **Original CAP**

Mr. Keyes:

ConocoPhillips (CoP) has prepared this Corrective Action Plan (CAP) to address potential environmental concerns at the above-referenced site.

#### **Background and Previous Work**

On Tuesday the 6th, 2016 at 12:00 am, a release of produced water occurred due to a faulty T joint resulting in the release of 240 BBLs of produced water with 235 BBLs of water recovered. Immediate action was to shut down and replace the T joint. NMOCD was notified of the release on September 6, 2016, and an initial C-141 was submitted (Appendix A).

COP personnel were on site to visually assess the release on September 6th. The release was mapped and photographed (Appendix B). Based on the assessment, the release will be excavated down 6 inches bgs. Once the excavation is completed, discrete samples will be taken and field tested for chlorides and organic vapors. If the field data indicates that the composite will not achieve chloride, Gasoline Range Organics (GRO), Diesel Range Organics (DRO) and BTEX readings below regulatory standards, the excavation will be deepened until field testing indicates that all constituents from bottom discrete samples will return values below regulatory standards. 5 discrete samples will be collected in total. 4 surface samples will be collected just outside the berm on all four sides. The 5<sup>th</sup> will be from the center of the spill and will go down as deep as the spill penetrated. The samples will then be taken to a commercial laboratory to confirm that chloride, GRO, DRO and BTEX readings are below regulatory standards.

All excavated soils will be taken to a NMOCD approved facility for disposal. Clean soil will be imported to the site to serve as backfill and contoured to the surrounding location

Once these activities have been completed, a report will be sent to NMOCD requesting 'remediation termination' and site closure.

Please call me if you have any questions or wish to discuss the site. Sincerely,

Joseph McLaughlin HSE Specialist (806) 567-2790





11420 W. County Rd 33 Midland, Texas 79710

#### ANALYTICAL REPORT FORM

CLIENT: ConocoPhillips

SITE: Buck Federal CTB

ANALYST: Derek Robinson

CONTACT # \_\_\_\_\_432-438-9534

SAMPLE DATE	DEPTH	Chlorides/ppm	SAMPLE NOTE
4-26-2017	12"	956	
	18"	1192	
4-26-2017	12"	1192	
	18"	1192	
4-26-2017	12"	+2512	
	18"	2324	
4-26-2017	12"	+2512	
	18"	+2512	
4-26-2017	12"	1108	
	18"	1028	
4-26-2017	12"	+2512	
	18"	340	
	4-26-2017 4-26-2017 4-26-2017 4-26-2017	18"         4-26-2017       12"         18"         4-26-2017       12"         18"         4-26-2017       12"         4-26-2017       12"         18"         4-26-2017       12"         18"         4-26-2017       12"         18"         4-26-2017       12"         18"         1200         18" <tr tr=""> <tr tr=""></tr></tr>	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$

ANALYST NOTES:



### Lab results

TP1.5       7E03004-01       Soil       05/02/17 10:00       05-02-2017         TP2.4       7E03004-03       Soil       05/02/17 10:10       05-02-2017         TP3.7       TP33004-03       Soil       05/02/17 10:10       05-02-2017         TP3.7       TP33004-03       Soil       05/02/17 10:48       05-02-2017         TP2.4'       TE33004-02       Soil       05/02/17 10:48       05-02-2017         TP2.4'       TE33004-02 (Soil)       05/02/17 10:48       05-02-2017         Analyte       Result       Reporting       Dilution       Batch       Prepared       Analyzed       Method       1         Choride       148       1.12       mgAg dry       1       P7E0904       05/05/17       05/05/17       % calculation         TP1 5'       TE03004-01 (Soil)       TP1 5'       TE03004-01 (Soil)       E       2         Analyte       Reparting       Linui       Dilution       Batch       Prepared       Analyzed       Method       2         Analyte       Result       Reparting       Linui       Dilution       Batch       Prepared       Analyzed       Method       2         Choride       320       1.14       mgKg dry       1       P7E																
Midland TEXA S, 9707       Project Manager:       Von Norman         AXALYTICAL KEPORT SAUFLES         Sample ID       Attention in the Sample ID       Date	Stingray Environmental & Construction		Proj	ect: Conche	o Phillips E	Buck Federal	CTB		Fa	x:						
ANALYTICAL REPORT FOR SAMPLES           Sample ID         Laboratory ID         Matrix         Date Sampled         Date Recei           TP1 5'         7E03004-01         Soil         05/02/17/10/00         05-02-2017           TP2 4'         7E03004-02         Soil         05/02/17/10/00         05-02-2017           TP3 7'         7E03004-02         Soil         05/02/17/10/18         05-02-2017           TP2 4'           TP2 4' <td colspan<="" th=""><th>-</th><th></th><th></th><th></th><th>-</th><th>Buck Federal</th><th>CTB</th><th></th><th></th><th></th></td>	<th>-</th> <th></th> <th></th> <th></th> <th>-</th> <th>Buck Federal</th> <th>CTB</th> <th></th> <th></th> <th></th>	-				-	Buck Federal	CTB								
Sample ID         Laboratory ID         Matrix         Date Sample ID         Object Sample ID <th>Midland TEXAS, 79707</th> <th></th> <th>Project Mana</th> <th>ger: Von N</th> <th>orman</th> <th></th> <th></th> <th></th> <th></th> <th></th>	Midland TEXAS, 79707		Project Mana	ger: Von N	orman											
TP1 5'       7E03004-01       Soil       05.02/17 10:00       05-02-2017         TP2 4'       7E03004-02       Soil       05/02/17 10:00       05-02-2017         TP3 7'       7E03004-03       Soil       05/02/17 10:00       05-02-2017         TP2 4'         TP3 5'         TP2 5'         TP2 5'         TP2 5'         TP2 5'		ANALYI	ICAL REPO	ORT FOR	SAMPLE	s										
TP2.4'       TE03004-02       Soil       05/02/17 10/10       05-02-207         TP3 7'       TP2.4'       TP2.4'       05/02/17 10/10       05-02-207         TP2 4'         TP1 5'         TP1 5'         TP2 5'         TP2 5'	Sample ID		]	Laboratory I	D I	Matrix		Date Sampled	D	Date Received						
TP3 7       TP3 70	TP1 5'		2	7E03004-01	Ś	Soil		05/02/17 10:0	0 05-0	02-2017 17:0						
TP2 4' TE03004-02 (Soll)           Analyte         Result         Reporting Limit         Units         Dilution         Batch         Prepared         Analyzed         Method         2           Analyte         Result         Colspan="6">Colspan="6">Colspan="6"           Permian Basin Euvironmental Lab, L.P.           Colspan="6">Colspan="6"           Analyzed Methods           TP1 5' TE03004-01 (Soil)           Colspan="6">Colspan="6">Colspan="6"           Analyzed Methods           Colspan="6"           Colspan= 6           Colspan="6" </td <td>TP2 4'</td> <td></td> <td>2</td> <td>7E03004-02</td> <td>5</td> <td>Soil</td> <td></td> <td>05/02/17 10:1</td> <td>0 05-0</td> <td colspan="7">05-02-2017 17:0</td>	TP2 4'		2	7E03004-02	5	Soil		05/02/17 10:1	0 05-0	05-02-2017 17:0						
TE03004-02 (Soil)AnalyteReporting LimitDilutionBatchPreparedAnalyzedMethodPermian Basin Environmental Lab, L.P.General Chemistry Parameters by EPA / Standard MethodsTP1 5'TP1 5'TP2 300.0Soisoi TO Soisoi TO Soiso	TP3 7'			7E03004-03	\$	Soil		05/02/17 10:4	8 05-0	02-2017 17:0						
Analyte     Result     Reporting Limit     Units     Dilution     Batch     Prepared     Analyzed     Method     Dilution       Permian Basin Environmental Lab, L.P.       General Chemistry Parameters by EPA / Standard Methods       Chloride     148     1.12     mg/kg day     1     P7E0904     05/05/17     05/09/17     EPA 300.0       % Moisture     11.0     0.1     %     1     P7E0503     05/05/17     05/05/17     % Go/05/17     % Go/01/17     % Go/01/17 <td></td> <td></td> <td></td> <td>TP2 4'</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>				TP2 4'												
Analyte         Result         Limit         Units         Dilution         Batch         Prepared         Analyzed         Method         2           Permian Basin Environmental Lab, L.P.           General Chemistry Parameters by EPA / Standard Methods           Chloride         148         1.12         mg/kg dry         1         P7E0300         05/05/17         05/05/17         EPA 300.0           % Moisture         11.0         0.1         %         1         P7E030         05/05/17         05/05/17         % calculation           TP1 5'           TP1 5'           TP203004-01 (Soil)           Analyze         Method         2           Analyze <t< td=""><td></td><td></td><td>7E03</td><td>004-02 (So</td><td>il)</td><td></td><td></td><td></td><td></td><td></td></t<>			7E03	004-02 (So	il)											
Permian Basin Environmental Lab, L.P.           General Chemistry Parameters by EPA / Standard Methods           Chloride         11.0         0.1         % Moisture         1         PFA / Standard Methods           TP1 5'           TP1 5'           TP1 5'           TP1 5'           TP23004-01 (Soil)           Analyte         Reporting Limit         Dilution         Batch         Prepared         Analyzed         Method         P           General Chemistry Parameters by EPA / Standard Methods         Chloride         320         1.14         mg/kg dry         1         P/E0904         05/05/17         05/09/17         EPA 300.0           Of Total Soil         TP3 7'           TP3 7'           TE03004-03 (Soil)           Analyzed         Method           Analyze         Reporting           Limit         Units         Dilution         TP3 7'      <			Reporting													
General Chemistry Parameters by EPA / Standard Methods           Chloride % Moisture         148         1.12         mg/kg dry         1         P7E0904         05/05/17         05/09/17         EPA 300.0           TP1 5' TE03004-01 (Soil)           TP1 5' TE03004-01 (Soil)           Analyze         Method         2           Permian Basin Environmental Lab, L.P.           General Chemistry Parameters by EPA / Standard Methods           Chloride         320         1.14 mg/kg dry         1         Prepared         Analyzed         Method         2           Moisture         Cloride         Standard Methods           TP3 7'         TE03004-03 (Soil)         EPA 300.0           Moisture         1         Prepared         Analyzed         Method         2           Analyze         Method         2           Moisture         1         Prepared         Analyzed         Method           Analyze         Method         2	Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes						
General Chemistry Parameters by EPA / Standard Methods           Chloride         148         1.12         mg/kg dry         1         P7E0904         05/05/17         05/09/17         EPA 300.0           % Moisture         11.0         0.1         %         1         P7E0903         05/05/17         05/05/17         % calculation           TP1 5'           TE03004-01 (Soil)           Permiam Basin Environmental Lab, L.P.           General Chemistry Parameters by EPA / Standard Methods         1         P7E0904         05/05/17         05/09/17         EPA 300.0           Official and the tods           Chloride         320         1.14         mg/kg dry         1         P7E0904         05/05/17         05/09/17         EPA 300.0           % Moisture         1         97         1         P7E0904         05/05/17         05/09/17         EPA 300.0           % Moisture         12.0         0.1         %         1         P7E0904         05/05/17         05/05/17         % calculation           TP3 7'           TE03004-03 (Soil)           Analyzed Methods           Limit         Daino		Peri	nian Basin F	Invironme	ntal Lab.	L.P.										
Chloride         148         1.12         mg/kg dry         1         P7E0904         05/05/17         05/09/17         EPA 300.0           % Moisture         11.0         0.1         %         1         P7E0503         05/05/17         05/09/17         %         alculation           FP1 5'           TE03004-01 (Soil)           Manalyte         Result         Reporting Limit         Dilution         Batch         Prepared         Analyzed         Method         2           Chloride         Siture         TEVISION           Basin Environmental Lab, L.P.           General Chemistry Parameters by EPA / Standard Methods           Chloride         320         1.14         mg/kg dry         1         P7E0904         05/05/17         05/05/17         % calculation           TP3 7'           TP3 7'           TE03004-03 (Soil)           Analyzed Methods           Chloride         Result         Reporting         Dilution         Batch         Prepared         Analyzed         Method         1           TP303004-03 (Soil)         Dilution <td></td> <td></td> <td></td> <td></td> <td>2,</td> <td></td> <td></td> <td></td> <td></td> <td></td>					2,											
Charlot     The     The     The     The     The     The     The     The       % Moisture     11.0     0.1     %     1     P7E0503     05/05/17     05/05/17     % calculation       TP1 5'       TE03004-01 (Soil)       TP1 5'       TE03004-01 (Soil)       Analyte     Reporting       Analyte     Reporting       Permian Basin Environmental Lab, L.P.       General Chemistry Parameters by EPA / Standard Methods       Chloride     320     1.14 mg/kg dry     PTE0904     05/05/17     05/05/17     EPA 300.0       TP3 7'       TE03004-03 (Soil)       Permian Basin Environmental Lab, L.P.       Analyte     Reporting     Environmental Lab, L.P.       Permian Basin Environmental Lab, L.P.     TE03004-03 (Soil)       Analyte     Reporting     Environmental Lab, L.P.       General Chemistry Parameters by EPA / Standard Methods       Chloride     213       0/10     mits     Dilution     Batch     Prepared     Analyzed     Method     1       Genera				mg/kg dry	1	P7E0904	05/05/17	05/00/17	EPA 300.0							
Analyte     Result     Image Stress     Responsible Stress     Stress       Analyte     Result     Image Stress     Stress     Analyzed     Method     Nethod																
TE03004-01 (Soil)AnalyteResultReporting LimitDilutionBatchPreparedAnalyzedMethod2Permian Basin Environmental Lab, L.P.General Chemistry Parameters by EPA / Standard MethodsTOloride3201.14mg/kg dry1P7E090405/05/1705/09/17EPA 300.0% Moisture12.00.1%1P7E050305/05/1705/05/17% calculationTP3 7' TE03004-03 (Soil)Permian LimitUnitsDilutionBatchPreparedAnalyzedMethod1AnalyzedMethod1P7E050305/05/1705/05/17% calculationChloride ResultResultResultUnitsDilutionBatchPreparedAnalyzedMethod1Chloride Somer2131.16mg/kg dry1P7E090405/05/1705/09/17EPA 300.0% Moisture11.6mg/kg dry1P7E090405/05/1705/09/17EPA 300.0% Moisture11.6mg/kg dry1P7E090405/05/1705/09/17EPA 300.0	/ Wolstare	11.0	0.1				05/05/17	05/05/17								
Analyte     Result     Imit     Units     Dilution     Batch     Prepared     Analyzed     Method     Perhad       Permian Basin Environmental Lab, L.P.       General Chemistry Parameters by EPA / Standard Methods       Chloride       320     1.14     mg/kg dry     1     P7E0904     05/05/17     05/09/17     EPA 300.0       % Moisture     12.0     0.1     %     1     P7E0503     05/05/17     05/05/17     % calculation       TP3 7'       TEO3004-03 (Soil)       Analyzed Method       Permina Basin Environmental Lab, L.P.       General Chemistry Parameters by EPA / Standard Methods       Chloride       Permina Basin Environmental Lab, L.P.       General Chemistry Parameters by EPA / Standard Methods       Chloride       213     1.16     mg/kg dry     1     P7E0904     05/05/17     05/05/17     EPA 300.0       % Moisture       0				TP1 5'												
AnalyteResultLimitUnitsDilutionBatchPreparedAnalyzedMethodNPermian Basin Environmental Lab, L.P.General Chemistry Parameters by EPA / Standard MethodsChloride3201.14mg/kg dry1P7E090405/05/1705/09/17EPA 300.0% Moisture12.00.1%1P7E050305/05/1705/05/17% calculationTP3 7' TE03004-03 (Soil)AnalyzedMethodPermian Basin Environmental Lab, L.P.General Chemistry Parameters by EPA / Standard MethodsChlorideResultResultUnitsDilutionBatchPreparedAnalyzedMethodMethodPermian Basin Environmental Lab, L.P.General Chemistry Parameters by EPA / Standard MethodsChloride2131.16mg/kg dry1P7E090405/05/1705/09/17EPA 300.0% Moisture11.16mg/kg dry1P7E090405/05/1705/09/17EPA 300.0% Moisture11.16mg/kg dry1P7E090405/05/1705/09/17EPA 300.0% Moisture11.16mg/kg dry1P7E090405/05/1705/05/17% calculation% Moisture10.1%1P7E090405/05/1705/05/17% calculation			7E03	004-01 (So	il)											
Permian Basin Environmental Lab, L.P.           General Chemistry Parameters by EPA / Standard Methods           Chloride         320         1.14 mg/kg dry         PTE0904         05/05/17         05/09/17         EPA 300.0           Official of the standard Methods           Chloride         320         1.14 mg/kg dry         PTE0904         05/05/17         05/09/17         EPA 300.0         % Moisture         12.0         0.1         % Moisture         TP3 7'           Analyte         Reporting Limit         Dilution         Batch         Prepared         Analyzed         Method           Chloride         Result         Dilution         Batch         Prepared         Analyzed         Method           Chloride         Parameters by EPA / Standard Methods           Chloride         213         1.16 mg/kg dry         PTE0904         05/05/17         05/05/17         PFA 300.0           Official	1		Reporting													
General Chemistry Parameters by EPA / Standard Methods           Chloride         320         1.14         mg/kg dry         1         P7E0904         05/05/17         05/09/17         EPA 300.0           % Moisture         12.0         0.1         %         1         P7E0903         05/05/17         05/05/17         %         calculation           TP3 7'           TE03/04-03 (Soil)           Analyzed         Method         2           Analyzed         Method         2           Permian Basin Environmental Lab, L.P.           General Chemistry Parameters by EPA / Standard Methods           Chloride         213         1.16         mg/kg dry         1         P7E0904         05/05/17         05/09/17         EPA 300.0           Object for the standard Methods           Chloride         213         1.16         mg/kg dry         1         P7E0904         05/05/17         05/09/17         EPA 300.0           0         213         1.16         mg/kg dry																

ConocoPhillips

### Water Depth



#### New Mexico Office of the State Engineer Water Column/Average Depth to Water

(A CLW###### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.)	(R=POD has been replaced O=orphaned, C=the file is closed)							2=NE 3	9=SW 4=8 gest) (	SE) NAD83 UTM	in me	eters)		in feet)	
POD Number	POD Sub- Code basin (	Count		Q 16		Sec	Tws	Rng	3	< *		Distance			Water
C 02271	R	LE		2	3	21	265	32E	62444	9 3544111*	-	2700	150	125	25
C 03595 POD 1	CUB	LE	4	2	з	21	265	32E	62442	3 3544045	÷	2770	280	180	100
C 02271 POD2	CUB	LE	з	2	з	21	265	32E	62434	8 3544010*	-	2830	270	250	20
C 02323	с	LE	3	2	3	21	265	32E	62434	8 3544010*	-	2830	405	405	0
C 03537 POD1	с	LE	3	2	3	21	265	32E	62425	0 3543985	-	2888	850		
										Average Depth to Wa				er: 240 feet	
												Minimum	Depth:	125	feet
												Maximum	Depth:	405	feet
Record Count: 5															
<b>Basin/County Search</b>															
County: Lea UTMNAD83 Radius Se	earch (in mete	rs):													

Easting (X): 625335.24

Northing (Y): 3546662.24

Radius: 5000

### Well C 02271 indicates a depth to water of 150 feet and then 250 feet in replacement POD number C 02271 POD2.

#### Well C 03595 POD1 indicates depth to water at 180 feet.

#### Well 02323 indicates a depth to water at 405 feet.

The minimum depth to water is 125 feet.

The average depth to water is 240 feet.

\*UTM location was derived from PLSS - see Help

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

5/10/17 10:24 AM

Page 1 of 1

WATER COLUMN/ AVERAGE DEPTH TO WATER



### Site Picture





