

RECEIVED

1910 N. Big Spring Midland, Texas 79705 (432) 686-8081

9123

approved by Heaffrey Laking Environmental Engineer NMOCD-Hobby

August 20, 2010

SEP 2/3 2010 HOBBSOCD

Justin Wright ConocoPhillips Company Buckeye, NM HC60 Box 66 Lovington, NM 88260

Northwest Crosby Well #1 Findings Report

Lea County, New Mexico Unit N, Sec. 7, T25S, R37E NMOCD 1RP 2584

Dear Mr. Wright:

Tetra Tech submits this findings report for a subsurface investigation at ConocoPhillips' Northwest Crosby Well #1 (Site; Figure 1). This work is in support of ConocoPhillips efforts to delineate and remediate a recent 40 barrel crude release after a failure of a 3-inch ball valve (C141 attached). The Site is located approximately 1.3 miles northwest of Jal, New Mexico in Lea County, New Mexico (32.13903° N, 103.20306° W). The State is the land administrator.

The Site is located in the Eunice Plain¹. The area is underlain by hard caliche layer and is almost entirely covered by reddish-brown dune sand. In the immediate vicinity of the Site, topography is nearly level to moderately undulating. The Largo-Pajarito sandy loam soil complex was formed on alluvial fans and plains and on foot slopes having outcrops of Triassic red-bed material.² Parent material was calcareous sandy alluvium and mixed sandy eolian deposits derived from sedimentary rock.

Exposure Pathway Analyses

Depth to water in the vicinity of the Site is estimated at 50 feet below ground surface (fbgs). This interpretation is based a water well (320730103114801) located approximately 3,700 feet southeast of the Site and identified in the New Mexico Office of State Engineer's database.³ There are no playas, located within a 1,000 feet radius of the Site.

Following the ranking criteria presented in "Guidelines for Remediation of Leaks, Spills, and Releases" promulgated on August 13, 1993 by the New Mexico Oil Conservation Division (NMOCD), this Site has the following score:

RE:

Nicholson Jr., A. and A. Clebsch, 1961. Geology and Ground-Water Conditions in Southern Lea County, New Mexico. USGS, GW Rpt 6, Socorro, NM. pp. 123.

² U.S. Department of Agriculture, Natural Resources Conservation Services. Webb Soil Survey Database.

³ New Mexico Office of State Engineer, W.A.T.E.R.S. Database.

<u>Criteria</u>		Ranking <u>Score</u>
Depth to groundwater	<50 feet	20
Distance from water source	>1,000 feet	0
Distance from domestic water source	>200 feet	0
Distance from surface water body	>1,000 feet	<u>0</u>
Total Ranking Score		20

The remediation action level for a ranking score greater than 19 is 10 parts per million (ppm) for benzene, 50 ppm for total benzene, toluene, ethylbenzene, and total xylenes (BTEX), and 100 ppm for total petroleum hydrocarbons (TPH).

In the event of oil/gas releases to the environment, the NMOCD uses the New Mexico Water Quality Control Commission's (NMWQCC) maximum contaminate level of 250 ppm for chloride (20.6.2.3103 NMAC, Subsection A) for delineation.

Scope of Work

The lateral extent of the mixed crude oil affected area was defined by the stained soil. To delineate the vertical extent of the affected area, Tetra Tech used a mobile air rotary drilling unit to bore one exploratory hole into the affected area. A split spoon was used to collect soil samples. A photo-ionization detector (PID) was used to screen for volatile organic hydrocarbons (VOC). VOC field analysis was used to determine the clean boundary of < 50 ppm VOC. Each boring was logged so observations concerning soil types, lithologic changes, and the environmental condition of the encountered soils were noted (see Boring Log).

Samples from the soil boring were submitted to a laboratory for confirmation analyses. The samples were placed into glass sample jars, sealed with Teflon-lined lids, and placed on ice for transportation to an analytical laboratory where they were analyzed for chloride (USEPA Method 300.0A), Diesel and gasoline range TPH (TPH_{DRO} and TPH_{GRO}, Method 8015), and benzene and BTEX (Method 8021). These analyses were used to confirm clean boundaries have been identified.

The boring was backfilled from bottom to top with bentonite.

Findings

The soils encountered during boring activity at the Site consisted of fine sandy soils at 0-25 fbgs with clay or sandstone stringers.

Laboratory analyses of the soil boring samples are presented in Table 1 and in the Appendix.

Mr. Justin Wright August 20, 2010 Page 3

Table 1 ConocoPhillips NW Crosby Well #1 Lea County New Mexico Soil Boring Results July 15, 2010

		Petroleum Hydrocarbons			Volatile Organic Hydrocarbons				
Sample Depth	Chloride	GRO	DRO	Total	Benzene	Ethyl benzene	Toluene	Total Xylenes	втех
(ft)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)
3	6.13	2,000	550	2,550	ND	17	34	158	209
5	7.25	2,300	700	3,000	ND	11	16	109	136
10	5.18	0.2	ND	0.2	ND	ND	ND	ND	ND
15	ND	ND				!			

TPH_{GRO} =Gasoline range petroleum hydrocarbons

TPH_{DRO} =Diesel range petroleum hydrocarbons

ft = Feet

mg/Kg = Milligrams per kilogram

ND = Analyte not detected at or above laboratory detection limits

Blank cell = Constituent not analyzed

Laboratory analyses indicated TPH and BTEX concentrations decreased with depth and were below NMOCD remedial action levels at 10 fbgs. Benzene was not detected in any of the soil samples.

Laboratory analysis indicated chloride concentrations ranged from 6.13 to 7.25 mg/Kg.

Conclusions

Exposure pathway analysis indicated a ranking score of "20." Therefore, the site-specific remediation levels are 100 mg/kg for TPH, 50 mg/kg for BTEX and 10 mg/kg for benzene. According to laboratory analyses of soils collected during this investigation, only TPH and BTEX were reported in the soil boring above NMOCD's remedial action level down to the 5 fbgs depth.

Recommendations

Tetra Tech recommends the following actions be taken at NW Crosby Well #1:

- Soil in affected area will be excavated to a depth of approximately 8-10 feet and hauled to a State approved disposal location.
- Aliquot soil samples will be collected in a "W" pattern, composited into one sample for each sidewall and floor in the excavation, and field analyzed using PID determine that remediation levels have been achieved (< 50 ppm). Companion composite samples will also be submitted to a laboratory for TPH_{GRO}, TPH_{DRO}, and BTEX analyses to confirm that these constituents have been removed to concentrations below remediation guidelines.
- Tetra Tech will supervise and direct all subcontractor activities, and following the

Mr. Justin Wright August 20, 2010 Page 4

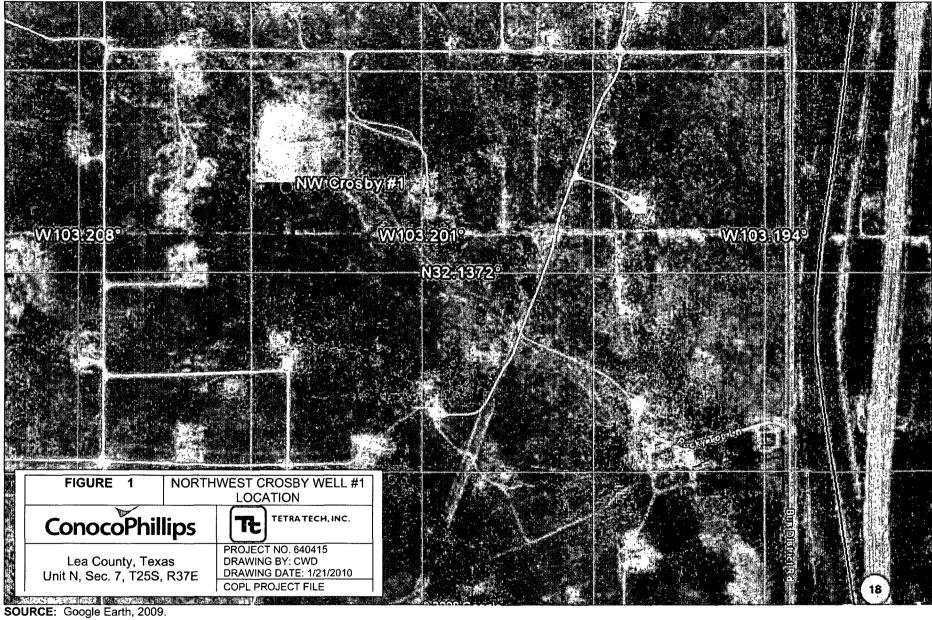
construction activities, prepare a report describing and documenting what was done for closure activities at the Site, including a site map. This report on activities and results will be submitted for NMOCD's review and ultimate closure of this voluntary remediation.

Tetra Tech suggests ConocoPhillips submit this findings report to the NMOCD for approval on the recommended remediation action. If you have any questions concerning this report please call me

Sincerely,

Tetra Tech, Inc.

Charles Durrett Senior Project Manager





			> T (4 (5 (5 (5)	-			(300 to C 300)	4191232423				
ا بود	POD NUME						OSE FILE NUM	mrv(9)				
Õ	NW CR											
Y.	WELL OW						PHONE (OPTIO	ONAL)				
č	CONOC											
LL			NG ADDRESS	.=			CITY STATE				21P	
WE	29 VAC	OM CC	OMPLEX LAN	lE			LOVING	ON	NM	8	8260	
N.	WELL		· · · · · · · · · · · · · · · · · · ·	DEGREES	MINUTES SECO	NDS						
LA	LOCATI		.ATITUDE	32	8 2	2.00 N	* ACCURACY	REQUIRED: ONE TEN	TH OF A SEC	COND		
SRA	(FROM C	(PS)	ONGITUDE	103	12 1	4.00 W	* DATUM REQUIRED: WGS 84					
GENERAL AND WELL LOCATION	DESCRIPT				SS AND COMMON LANDA	***************************************	den and the	**************************************	A CONTRACTOR OF THE PARTY OF TH		Commence of the control of the contr	
1.6							TURN L G	O . 2 MILE TO	LEASE			
FROM HWY 128 & 3RD ST IN JAL GO N TO LEASE RD GO W .5 MI TURN L GO . 2 MILE TO LEASE												
,	(2.5 ACF	RE)	(10 ACRE) .	(40 ACRE)	(160 ACRE)	SECTION		TOWNSHIP	NORTH	RANGE	☐ EAST	
7	1,	/a	1/4	1/4	1/4			t	SOUTH		□ west	
Ö	SUBDIVISION NAME LOT NO							BLOCK NUMBER		UNIT/TRA	CT'	
2. OPTIONAL												
2. 0	HYDROGRAPHIC SURVEY							MAP NUMBER		TRACT N	JMBER	
	LICENSE N	UMBER	NAME OF LICE	ENSED DRILLER			NAME OF WELL DR	ILLING CON	(PANY			
	WD1478 EDWARD BRYAN							STRAUB COF	RPORAT	ION		
	DRILLING	STARTED	DRILLING ENI	DED DEPTH OF COM	PLETED WELL (FT)	BOREHOI	E DEPTH (FT)	DEPTH WATER FIR	ST ENCOUN	TERED (FT)		
Z	7-1	5-10	7-15-10)	0		5		N/A			
TIO						1		STATIC WATER LEV	EL IN COM	PLETED WE	LL (FT)	
MA	COMPLETE	ED WELL IS	S: ARTESIAN	DRY HOLE	✓ DRY HOLE SHALLOW (UNCONFINED)				N/A			
DRILLING INFORMATION	DRILLING	EL LIED.	✓ AIR	Пмир	ADDITIVES - SPE	CUEY						
Z			✓ ROTARY				IER - SPECIFY;					
ING	DRILLING			HAMMER	CABLE TOOL	OTHE	K - SPECIFT;					
171		H (FT)	BORE HOL	1	CASING	1	ECTION .	INSIDE DIA. CASING (IN)	1	G WALL IESS (IN)	SLOT SIZE (IN)	
	FROM	TO	DIA. (IN)	IVI.	ATERIAL	ļ	(CASING)	` ` `				
3.	0	5	5		N/A		N/A "	N/A	IN	/A	N/A	
	-						· · · · · · · · · · · · · · · · · · ·					
									L			
¥		H (FT)	THICKNES (FT)	SS FO	ORMATION DESCRIP						YIELD (GPM)	
AT.	FROM	TQ	(11)		(INCLUDE WATER	-BEAKING	CAVITIES OF	R FRACTURE ZON	100)		(01141)	
STRAT							······································			*		
NG												
K		<u> </u>							····	* ,		
BEARING						······································						
ER									~			
WATER	METHOD U	SED TO ES	STIMATE YIELD OF	WATER-BEARING STRA	NTA .			TOTAL ESTIMATED	WELL YIEL	D (GPM)		
4. V												
								1				

FOR OSE INTERNAL USE	WELL RECORD & LOG (Version 6/9/08)			
FILE NUMBER	POD NUMBER	TRN NUMBER	P	
LOCATION			PAGE LOF 2	

								-		
MP	TYPE O	F PUMP:	☐ SUBMEF		☐ JET	——————————————————————————————————————				
SEAL AND PUMP		FROM TO DIA (IN) MATERIAL TYPE AND SIZE (CUE		AMOUNT (CUBIC FT)	METH PLACE					
Z	ANNI SEAL	JLAR AND	2	5	5	4 BAGS OF 3/8 PLUG		TOPL	OAD	
5. SE	GRAVE		0	2	5	.5 BAG OF CONCRETE		TOPL		
					1					
	DEPT FROM	H (FT)	THICK (F			COLOR AND TYPE OF MATERIAL ENCOUNT IDE WATER-BEARING CAVITIES OR FRACTI		WA BEAR		
ı	0	2	2	<u> </u>		BROWN FINE SAND - WITH CLA	Y	☐ YES	☑ NO	
l	2	7	5			REDDISH TAN FINE SAND	***************************************	☐ YES	☑ NO	
Ì	7	16	9)		TAN FINE SAND		☐ YES	☑ NO	
1	16	20	4			TAN FINE SAND - SANDSTONE		YES	☑ NO	
,	20	23	3	3 RED FINE SAND						
	23	25	2	☐ YES	Ø NO					
	TD		25							
								☐ YES	□ NO	
20 23 3 RED FINE 23 25 2 TAN FINE SANDSTONE TD 25								YES	□NÓ	
								YES	□NO	
-								☐ YES	□NO	
								YES	□NO	
								YES	□ NO	
								☐ YES	□ NO	
								☐ YES	□NO	
Ì								☐ YES	□ NO	
				 				☐ YES	□ NO	
			ATTACH	ADDITION	NAL PAGES AS NE	EDED TO FULLY DESCRIBE THE GEOLOGIC	LOG OF THE WELL	<u> </u>		
Ţ	***************************************		METHOD:	BAILI	ER PUMP	☐ AIR LIFT ☐ OTHER – SPECIFY:				
ייייייייייייייייייייייייייייייייייייייי	WELL	. TEST				ATA COLLECTED DURING WELL TESTING, IND DRAWDOWN OVER THE TESTING PERIO		IME, END TI	ME,	
5	ADDITION	ALSTATE	MENTS OR EXPL	ANATIONS:	A the Control of the					
וממט	SOIL B	ORING	ONLY- SO	IL BORIN	IG WAS PLUG	GED AND ABANDONED UPON CO	MPLETION OF SA	AMPLING		
3	•						•			
3										
/. FE31					•			3		
								• .		
LICHE	CORREC	T RECOR	D OF THE AB	OVE DESC	RIBED HOLE AND	ST OF HIS OR HER KNOWLEDGE AND BELIE THAT HE OR SHE WILL FILE THIS WELL RE ON OF WELL DRILLING:				
SIGNATURE		511	_ 1 6	6.	,	7/21/2				
0.0		1101-	SIGNATUR	C. J.	LED	- 12/10				
			SIGNATUR	E OF LOKIL	PEK	DATE				

FOR OSE INTERNAL USE	WELL RECORD & LOG (Version 6/9/08)			
FILE NUMBER	POD NUMBER	TRN NUMBER		
LOCATION	•		PAGE 2 OF 2	

ŧ

APPENDIX

Laboratory Report



Phone: (713) 660-0901 Fax: (713) 660-8975

Certificate of Analysis

August 4, 2010

Workorder: H10070447

Charles Durrett Tetra Tech 1703 W Industrial Avenue Midland, TX 79701 Project: Crosby Well #1

Project Number: Crosby Well #1 / 114-6400-415

Site: Lea Co, NM

PO Number: Non RM&R

NELAC Cert. No.: T104704205-09-1

This Report Contains A Total Of 23 Pages

Excluding Any Attachments

Report ID: H10070447_6319



Phone: (713) 660-0901 Fax: (713) 660-8975

Certificate of Analysis

August 4, 2010

Workorder: H10070447

Charles Durrett Tetra Tech 1703 W Industrial Avenue Midland, TX 79701

Project: Crosby Well #1

Project Number: Crosby Well #1 / 114-6400-415

Site: Lea Co, NM

PO Number: Non RM&R

NELAC Cert. No.: T104704205-09-1

I. SAMPLE RECEIPT:

All samples were received intact. The internal ice chest temperatures were measured on receipt and are recorded on the attached Sample Receipt Checklist.

II: ANALYSES AND EXCEPTIONS:

Per the Conoco Phillips TSM Revision 0, a copy of the internal chain of custody is to be included in final data package. However, due to LIMS limitations, this cannot be provided at this time.

There were no exceptions noted.

III. GENERAL REPORTING COMMENTS:

Results are reported on a wet weight basis unless dry-weight correction is denoted in the units field on the analytical report (" mg\kg-dry " or " ug\kg-dry ").

Matrix spike (MS) and matrix spike duplicate (MSD) samples are chosen and tested at random from an analytical batch of "like" matrix to check for possible matrix effect. The MS and MSD will provide site specific matrix data only for those samples which are spiked by the laboratory. Since the MS and MSD are chosen at random from an analytical batch, the sample chosen for spike purposes may or may not have been a sample submitted in this sample delivery group. The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The Laboratory Control Sample (LCS) and the Method Blank (MB) are processed with the samples and the MS/MSD to ensure method criteria are achieved throughout the entire analytical process.

Some of the percent recoveries and RPD's on the QC report for the MS/MSD may be different than the calculated recoveries and RPD's using the sample result and the MS/MSD results that appear on the report because, the actual raw result is used to perform the calculations for percent recovery and RPD.

Any other exceptions associated with this report will be footnoted in the analytical result page(s) or the quality control summary page(s).

Please do not hesitate to contact us if you have any questions or comments pertaining to this data report. Please reference the above Certificate of Analysis Number.

Report ID: H10070447_6319

08/04/2010 15:35

Page 2 of 23

Printed:



Phone: (713) 660-0901 Fax: (713) 660-8975

Certificate of Analysis

August 4, 2010

Workorder: H10070447

Charles Durrett Tetra Tech 1703 W Industrial Avenue Midland, TX 79701

Project: Crosby Well #1

Project Number: Crosby Well #1 / 114-6400-415

Site: Lea Co, NM

PO Number: Non RM&R

NELAC Cert. No.: T104704205-09-1

This report shall not be reproduced except in full, without the written approval of the laboratory. The reported results are only representative of the samples submitted for testing.

SPL, Inc. is pleased to be of service to you. We anticipate working with you in fulfilling all your current and future analytical needs.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or by his designee, as verified by the following signature.

Erica Cardenas, Senior Project Manager

Enclosures

Report ID: H10070447_6319

Page 3 of 23 Printed: 08/04/2010 15:35



Phone: (713) 660-0901 Fax: (713) 660-8975

SAMPLE SUMMARY

Workorder: H10070447 : Crosby Well #1

Project Number: Crosby Well #1 / 114-6400-415

Lab ID	Sample ID	Matrix	COC ID	Date/Time Collected	Date/Time Received
H10070447001	SB-1 (3')	Soil		7/15/2010 13:30	7/17/2010 10:15
H10070447002	SB-1 (5')	Soil		7/15/2010 13:38	7/17/2010 10:15
H10070447003	SB-1 (10')	Soil		7/15/2010 13:43	7/17/2010 10:15
H10070447004	SB-1 (15')	Soil		7/15/2010 13:50	7/17/2010 10:15
H10070447005	SB-1 (20')	Soil		7/15/2010 14:00	7/17/2010 10:15
H10070447006	Trip Blank	Soil		7/15/2010 10:15	7/17/2010 14:20

Report ID: H10070447_6319



Phone: (713) 660-0901 Fax: (713) 660-8975

ANALYTICAL RESULTS

Workorder: H10070447: Crosby Well #1

Project Number: Crosby Well #1 / 114-6400-415

Lab ID:

H10070447001

Date/Time Received: 7/17/2010 10:15

Matrix:

Soil

Sample ID: SB-1 (3')

Date/Time Collected: 7/15/2010 13:30

WET CHEMISTRY

Analysis Desc: EPA 300.0

Preparation Batches:

Wet Weight Basis

Batch: 1616 Soil Leachage (IC) on 07/19/2010 00:00 by WETC

Analytical Batches:

Batch: 1381 EPA 300.0 on 07/20/2010 21:13 by CFS

	Results	Results				Batch Information		
Parameters	mg/kg Qual	Report Limit	MDL	DF	RegLmt	Prep	Analysis	
Chloride	6.13	5.00	0.328	1		1616	1381	

VOLATILES

Analysis Desc: SW-846 8260B

Preparation Batches:

Wet Weight Basis

Batch: 2236 SW-846 5030 MeOH Prep on 07/17/2010 16:22 by LKL

Analytical Batches:

Batch: 2237 SW-846 8260B on 07/23/2010 14:46 by LKL

	Results				Batch Informatio		
Parameters	ug/kg Qual	Report Limit	MDL	DF	RegLmt	Prep	Analysis
Benzene	ND	500	50	500		2236	2237
Ethylbenzene	17000	500	76	500		2236	2237
Toluene	34000	500	140	500		2236	2237
m,p-Xylene	120000	500	92	500		2236	2237
o-Xylene	38000	500	65	500		2236	2237
Xylenes, Total	158000	500	65	500		2236	2237
4-Bromofluorobenzene (S)	108 %	62-130		500		2236	2237
1,2-Dichloroethane-d4 (S)	96.9 %	64-130		500		2236	2237
Toluene-d8 (S)	104 %	70-140		500		2236	2237

Gasoline Range Organics (GRO)

Analysis Desc: SW-846 8015B GRO

Wet Weight Basis

Preparation Batches:

Batch: 1454 SW-846 5030 on 07/17/2010 16:23 by GCV

Analytical Batches:

Batch: 1455 SW-846 8015B GRO on 07/20/2010 17:53 by WLV

Parameters	Results mg/kg	Qual	Report Limit	MDL	DF	RegLmt	Batch In Prep	formation Analysis
Gasoline Range Organics	2000		50	15	500		1454	1455
4-Bromofluorobenzene (S)	359 %	MI*	50-159		500		1454	1455
1,4-Difluorobenzene (S)	120 %		63-142		500		1454	1455

SEMIVOLATILE HYDROCARBONS

Report ID: H10070447_6319

Page 5 of 23



Phone: (713) 660-0901 Fax: (713) 660-8975

ANALYTICAL RESULTS

Workorder: H10070447 : Crosby Well #1

Project Number: Crosby Well #1 / 114-6400-415

Lab ID:

H10070447001

Date/Time Received: 7/17/2010 10:15

Matrix:

Soil

Sample ID: SB-1 (3')

Date/Time Collected: 7/15/2010 13:30

Analysis Desc: SW-846 8015B DRO

Wet Weight Basis

Preparation Batches:

Batch: 1998 SW-846 3550B on 07/22/2010 09:08 by A_G

Analytical Batches:

Batch: 1760 SW-846 8015B DRO on 07/29/2010 21:19 by NDW

Parameters	Results mg/kg	Qual	Report Limit	MDL	DF RegLmt	Batch Info Prep	
Diesel Range Organics(C10-C28)	550		120	26	25	1998	1760
n-Pentacosane (S)	0 %	D*	20-154		25	1998	1760

Report ID: H10070447_6319



8880 Interchange Drive Houston, TX 77054

Phone: (713) 660-0901 Fax: (713) 660-8975

ANALYTICAL RESULTS

Workorder: H10070447: Crosby Well #1

Project Number: Crosby Well #1 / 114-6400-415

Lab ID:

H10070447002

Date/Time Received: 7/17/2010 10:15

Matrix:

Soil

Sample ID: SB-1 (5')

Date/Time Collected: 7/15/2010 13:38

WET CHEMISTRY

Analysis Desc. EPA 300.0

Preparation Batches:

Wet Weight Basis

Batch: 1616 Soil Leachage (IC) on 07/19/2010 00:00 by WETC

Analytical Batches:

Batch: 1381 EPA 300.0 on 07/20/2010 21:29 by CFS

	Results						Batch Information		
Parameters		mg/kg Qual	Report Limit	MDL	DF	RegLmt	Prep	Analysis	
Chloride		7.25	5.00	0.328	1	·	1616	1381	

VOLATILES

Analysis Desc: SW-846 8260B

Preparation Batches:

Wet Weight Basis

Batch: 2236 SW-846 5030 MeOH Prep on 07/17/2010 16:23 by LKL

Analytical Batches:

Batch: 2237 SW-846 8260B on 07/23/2010 13:23 by LKL

	Results	•				Batch Information			
Parameters	ug/kg ^{Qા}	ual Report Limit	MDL	DF	RegLmt	Prep	Analysis		
Benzene	ND	500	50	500		2236	2237		
Ethylbenzene	11000	500	76	500		2236	2237		
Toluene	16000	500	140	500		2236	2237		
m,p-Xylene	83000	500	92	500		2236	2237		
o-Xylene	26000	500	65	500		2236	2237		
Xylenes, Total	109000	500	65	500		2236	2237		
4-Bromofluorobenzene (S)	105 %	62-130		500		2236	2237		
1,2-Dichloroethane-d4 (S)	103 %	64-130		500		2236	2237		
Toluene-d8 (S)	102 %	70-140		500		2236	2237		

Gasoline Range Organics (GRO)

Analysis Desc: SW-846 8015B GRO

Preparation Batches:

Wet Weight Basis

Batch: 1454 SW-846 5030 on 07/17/2010 16:24 by GCV

Analytical Batches:

Batch: 1455 SW-846 8015B GRO on 07/20/2010 18:22 by WLV

	Results						Batch In	formation
Parameters	mg/kg	Qual	Report Limit	MDL	DF.	RegLmt	Prep	Analysis
Gasoline Range Organics	2300		50	15	500		1454	1455
4-Bromofluorobenzene (S)	423 %	MI*	50-159		500		1454	1455
1,4-Difluorobenzene (S)	109 %		63-142		500		1454	1455

SEMIVOLATILE HYDROCARBONS

Report ID: H10070447_6319

Page 7 of 23



Phone: (713) 660-0901 Fax: (713) 660-8975

ANALYTICAL RESULTS

Workorder: H10070447: Crosby Well #1

Project Number: Crosby Well #1 / 114-6400-415

Lab ID:

H10070447002

Date/Time Received: 7/17/2010 10:15

Matrix: Soil

Sample ID: SB-1 (5')

Date/Time Collected: 7/15/2010 13:38

Wet Weight Basis

Analysis Desc: SW-846 8015B DRO

Preparation Batches:

Batch: 1998 SW-846 3550B on 07/22/2010 09:08 by A_G

Analytical Batches:

Batch: 1760 SW-846 8015B DRO on 07/29/2010 22:20 by NDW

Parameters	Results mg/kg	Qual	Report Limit	MDL	DF	RegLmt	Batch Info	ormation Analysis
Diesel Range Organics(C10-C28)	700		120	26	25		1998	1760
n-Pentacosane (S)	0 %	D*	20-154		25		1998	1760

Report ID: H10070447_6319



Phone: (713) 660-0901 Fax: (713) 660-8975

ANALYTICAL RESULTS

Workorder: H10070447: Crosby Well #1

Project Number: Crosby Well #1 / 114-6400-415

Lab ID:

H10070447003

Date/Time Received: 7/17/2010 10:15

Matrix:

Soil

Sample ID: SB-1 (10')

Date/Time Collected: 7/15/2010 13:43

WET CHEMISTRY

Analysis Desc: EPA 300.0

Preparation Batches:

Wet Weight Basis

Batch: 1616 Soil Leachage (IC) on 07/19/2010 00:00 by WETC

Analytical Batches:

Batch: 1381 EPA 300.0 on 07/20/2010 21:46 by CFS

		•	Results				*		Batch In	formation
Parameters			mg/kg Qu	ıal F	eport Limit	MDL	DF	RegLmt	Prep	Analysis
Chloride	<u>.</u>		5.18		5.00	0.328	1		1616	1381

VOLATILES

Analysis Desc: SW-846 8260B

Preparation Batches:

Wet Weight Basis

Batch: 2232 SW-846 5035 on 07/17/2010 16:24 by TLE

Analytical Batches:

Batch: 2233 SW-846 8260B on 07/22/2010 14:31 by TLE

•	Results						Batch In	formation 🙏
Parameters	ug/kg	Qual	Report Limit	MDL	DF	RegLmt	Prep	Analysis
Benzene	ND		5.0	0.78	1		2232	2233
Ethylbenzene	ND		5.0	0.84	1		2232	2233
Toluene	ND		5.0	0.76	1		2232	2233
m,p-Xylene	ND		5.0	1.6	1		2232	2233
o-Xylene	ND		5.0	0.76	1		2232	2233
Xylenes, Total	ND		5.0	0.76	1		2232	2233
4-Bromofluorobenzene (S)	92.9 %		62-130		1		2232	2233
1,2-Dichloroethane-d4 (S)	112 %		64-130		1		2232	2233
Toluene-d8 (S)	92.7 %		70-140		1		2232	2233

Gasoline Range Organics (GRO)

Analysis Desc: SW-846 8015B GRO

Preparation Batches:

Wet Weight Basis

Batch: 1454 SW-846 5030 on 07/17/2010 16:25 by GCV

Analytical Batches:

Batch: 1455 SW-846 8015B GRO on 07/20/2010 18:50 by WLV

	Results		•			Batch Ir	nformation
Parameters	mg/kg	Qual Report Limit	MDL	DF	RegLmt	Prep	Analysis
Gasoline Range Organics	0.20	0.10	0.030	1		1454	1455
4-Bromofluorobenzene (S)	116 %	50-159		1		1454	1455
1,4-Difluorobenzene (S)	97.1 %	63-142		1		1454	1455

SEMIVOLATILE HYDROCARBONS

Report ID: H10070447_6319

Page 9 of 23



Phone: (713) 660-0901 Fax: (713) 660-8975

ANALYTICAL RESULTS

Workorder: H10070447: Crosby Well #1

Analysis Desc: SW-846 8015B DRO

Project Number: Crosby Well #1 / 114-6400-415

Lab ID: H10070447003 Date/Time Received: 7/17/2010 10:15

Date/Time Collected: 7/15/2010 13:43

Soil

Matrix:

Sample ID: SB-1 (10')

Preparation Batches:

Wet Weight Basis

Batch: 1998 SW-846 3550B on 07/22/2010 09:08 by A_G

Analytical Batches:

Batch: 1760 SW-846 8015B DRO on 07/29/2010 22:40 by NDW

	Results					Batch In	formation
Parameters	mg/kg Qual	Report Limit	MDL	DF	RegLmt	Prep	Analysis
Diesel Range Organics(C10-C28)	ND	5.0	1.1	1		1998	1760
n-Pentacosane (S)	107 %	20-154		1		1998	1760

Report ID: H10070447_6319



Phone: (713) 660-0901 Fax: (713) 660-8975

ANALYTICAL RESULTS

Workorder: H10070447: Crosby Well #1

Project Number: Crosby Well #1 / 114-6400-415

Lab ID:

H10070447004

Date/Time Received: 7/17/2010 10:15

Matrix:

Soil

Sample ID: SB-1 (15')

Date/Time Collected: 7/15/2010 13:50

WET CHEMISTRY

Analysis Desc: EPA 300.0

Preparation Batches:

Wet Weight Basis

Batch: 1616 Soil Leachage (IC) on 07/19/2010 00:00 by WETC

Analytical Batches:

Batch: 1381 EPA 300.0 on 07/20/2010 22:02 by CFS

Results **Batch Information Parameters** mg/kg Report Limit MDL DF RegLmt Prep Analysis Chloride ND 5.00 0.328 1616 1381

Gasoline Range Organics (GRO)

Analysis Desc: SW-846 8015B GRO

Preparation Batches:

Wet Weight Basis

Batch: 1454 SW-846 5030 on 07/17/2010 16:26 by GCV

Analytical Batches:

Batch: 1455 SW-846 8015B GRO on 07/20/2010 16:27 by WLV

-	Results					nformation
Parameters	mg/kg Qual	Report Limit	MDL	DF RegLmt	Prep	Analysis
Gasoline Range Organics	ND	0.10	0.030	1	1454	1455
4-Bromofluorobenzene (S)	99.5 %	50-159		1	1454	1455
1,4-Difluorobenzene (S)	95.1 %	63-142		1	1454	1455

Report ID: H10070447_6319



Phone: (713) 660-0901 Fax: (713) 660-8975

ANALYTICAL RESULTS

Workorder: H10070447 : Crosby Well #1 / 114-6400-415

Lab ID: H10070447005 Date/Time Received: 7/17/2010 10:15 Matrix: Soil

Sample ID: SB-1 (20') Date/Time Collected: 7/15/2010 14:00

WET CHEMISTRY

Analysis Desc: EPA 300.0 Preparation Batches:

Wet Weight Basis Batch: 1616 Soil Leachage (IC) on 07/19/2010 00:00 by WETC

Analytical Batches:

Batch: 1381 EPA 300.0 on 07/20/2010 22:18 by CFS

Results Batch Information mg/kg Report Limit MDL DF Analysis **Parameters** Qual RegLmt Prep 1 Chloride ND 1381 5.00 0.328 1616

Report ID: H10070447_6319



Phone: (713) 660-0901 Fax: (713) 660-8975

QUALITY CONTROL DATA

Workorder: H10070447 : Crosby Well #1

Project Number: Crosby Well #1 / 114-6400-415

QC Batch:

WETP/1616

Analysis Method:

EPA 300.0

QC Batch Method:

Soil Leachage (IC)

Preparation:

07/19/2010 00:00 by WETC

Associated Lab Samples:

H10070447001

H10070447002 F

H10070447003 H

H10070447004

H10070447005

METHOD BLANK: 57646

Analysis Date/Time Analyst:

07/20/2010 17:26 CFS

Blank

Reporting

Parameter

Units

Result Qualifiers

Limit

Chloride

mg/kg

ND

5.00

LABORATORY CONTROL SAMPLE: 57647

Analysis Date/Time Analyst:

07/20/2010 17:42 CFS

Parameter

Units

Spike

LCS

LCS % Rec % Rec

Chloride

mg/kg

Conc.

Result 103.0

103

Limits 80-120

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 57648

57649

Original: H10070447005

MS Analysis Date/Time Analyst:

07/20/2010 22:34 CFS

MSD Analysis Date/Time Analyst:

07/20/2010 22:50 CFS

		Original	Spike	MS	MSD	MS	MSD	% Rec	Max
Parameter	Units	Result	Conc.	Result	Result	% Rec	% Rec	Limit RPD	RPD
Chloride	mg/kg	3.98	100	88.97	91.12	85.0	87.1	75-125 2.4	20

QC results presented in the QC Control Data have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules. Also, MS/MSD % recoveries are calculated by the SPL LIMS using any detected value greater than the MDL.



Phone: (713) 660-0901 Fax: (713) 660-8975

QUALITY CONTROL DATA

Workorder: H10070447; Crosby Well #1

Project Number: Crosby Well #1 / 114-6400-415

QC Batch:

EXTO/1998

Analysis Method:

SW-846 8015B DRO

QC Batch Method:

SW-846 3550B

Preparation:

07/22/2010 09:07 by A_G

Associated Lab Samples:

H10070447001

H10070447002

METHOD BLANK: 57922

Analysis Date/Time Analyst:

H10070447003

07/29/2010 20:39 NDW

Parameter Units

Blank Result Qualifiers Reporting Limit

Diesel Range Organics(C10-C28) n-Pentacosane (S)

mg/kg %

ND 95.9

5.0 20-154

LABORATORY CONTROL SAMPLE: 57923

Analysis Date/Time Analyst:

07/29/2010 20:59 NDW

Spike LCS LCS % Rec Parameter Units Conc. Result % Rec Limits Diesel Range Organics(C10-33 30.5 mg/kg 91.6 50-150 C28) n-Pentacosane (S) % 96.8 20-154

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 57924

57925

Original: H10070447001

MS Analysis Date/Time Analyst:

07/29/2010 21:39 NDW

MSD Analysis Date/Time Analyst:

07/29/2010 21:59 NDW

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD
Diesel Range Organics(C10-C28)	mg/kg	550	33	652	886	NC	NC	21-175	NC	50
n-Pentacosane (S)	%	ND				0.0 *	0.0 *	20-154		30

QC results presented in the QC Control Data have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules. Also, MS/MSD % recoveries are calculated by the SPL LIMS using any detected value greater than the MDL.

Report ID: H10070447_6319



Phone: (713) 660-0901 Fax: (713) 660-8975

QUALITY CONTROL DATA

Workorder: H10070447: Crosby Well #1

Project Number: Crosby Well #1 / 114-6400-415

QC Batch:

MSV/2232

Analysis Method:

H10070544001

SW-846 8260B

QC Batch Method:

SW-846 5030

Preparation:

07/22/2010 00:00 by TLE

Associated Lab Samples:

H10070447003

H10070541001

H10070544002

H10070544003

H10070544005

METHOD BLANK: 58286

Analysis Date/Time Analyst:

07/22/2010 12:53 TLE

Parameter	Units	Blank Result Qualifiers	Reporting Limit
Benzene	ug/kg	ND	5.0
Ethylbenzene	ug/kg	ND	5.0
Toluene	ug/kg	ND	5.0
m,p-Xylene	ug/kg	ND	5.0
o-Xylene	ug/kg	ND .	5.0
Xylenes, Total	ug/kg	ND	5.0
4-Bromofluorobenzene (S)	%	85.5	62-130
1,2-Dichloroethane-d4 (S)	%	108	64-130
Toluene-d8 (S)	%	91.4	70-140

LABORATORY CONTROL SAMPLE: 58287

Analysis Date/Time Analyst:

07/22/2010 11:49 TLE

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	
Benzene	ug/kg	20	18.5	92.4	66-142	
Ethylbenzene	ug/kg	20	19.3	96.6	35-175	
Toluene	ug/kg	20	18.3	91.6	59-139	
m,p-Xylene	ug/kg	40	40.7	102	35-175	
o-Xylene	ug/kg	20	21.2	106	35-175	
Xylenes, Total	ug/kg	60	61.86	103	35-175	
4-Bromofluorobenzene (S)	%			98.1	62-130	
1,2-Dichloroethane-d4 (S)	%			106	64-130	
Toluene-d8 (S)	%			92.2	70-140	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 58342

58343

Original: H10070447003

MS Analysis Date/Time Analyst:

07/22/2010 14:52 TLE

MSD Analysis Date/Time Analyst:

07/22/2010 15:14 TLE

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD
Benzene	ug/kg	ND	20	17.7	17.9	88.7	89.3	66-142	0.7	21
Ethylbenzene	ug/kg	ND	20	18.1	18.5	90.5	92.7	35-175	2.3	30
Toluene	ug/kg	ND	20	17.4	17.3	87.0	86.3	59-139	0.8	21
m,p-Xylene	ug/kg	ND	40	38.7	38.7	96.7	96.8	35-175	0.2	30

QC results presented in the QC Control Data have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules. Also, MS/MSD % recoveries are calculated by the SPL LIMS using any detected value greater than the MDL.

Report ID: H10070447_6319

Printed: 08/04/2010 15:35

Page 15 of 23



Phone: (713) 660-0901 Fax: (713) 660-8975

QUALITY CONTROL DATA

Workorder: H10070447 : Crosby Well #1

Project Number: Crosby Well #1 / 114-6400-415

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 58342

58343

Original: H10070447003

MS Analysis Date/Time Analyst:

07/22/2010 14:52 TLE

MSD Analysis Date/Time Analyst:

07/22/2010 15:14 TLE

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD
o-Xylene	ug/kg	ND	20	19.6	19.3	97.8	96.7	35-175	1.1	30
Xylenes, Total	ug/kg	ND	60	58.22	58.07	97.0	96.8	35-175	0.2	30
4-Bromofluorobenzene (S)	%	92.9				98.3	98.6	62-130		
1,2-Dichloroethane-d4 (S)	%	112				104	103	64-130		
Toluene-d8 (S)	%	92.7				93.0	92.4	70-140		

QC results presented in the QC Control Data have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules. Also, MS/MSD % recoveries are calculated by the SPL LIMS using any detected value greater than the MDL.

Report ID: H10070447_6319



Phone: (713) 660-0901 Fax: (713) 660-8975

QUALITY CONTROL DATA

Workorder: H10070447: Crosby Well #1

Project Number: Crosby Well #1 / 114-6400-415

QC Batch:

GCVS/1454

Analysis Method: SW-846 8015B GRO

QC Batch Method:

SW-846 5030

Preparation:

07/21/2010 10:47 by GCV

Associated Lab Samples:

H10070447001

H10070447003 H10070447002

H10070447004

METHOD BLANK: 58298

Analysis Date/Time Analyst:

07/20/2010 15:30 WLV

Parameter	Units	Blank Result Qualifiers	Reporting Limit	
Gasoline Range Organics	mg/kg	ND	0.10	
4-Bromofluorobenzene (S)	%	95.8	50-159	
1.4-Difluorobenzene (S)	%	96.7	63-142	

LABORATORY CONTROL SAMPLE: 58299

Analysis Date/Time Analyst:

07/20/2010 15:01 WLV

		Spike	LCS	LCS	% Rec
Parameter	Units	Conc.	Result	% Rec	Limits
Gasoline Range Organics	mg/kg	1.0	0.944	94.4	53-137
4-Bromofluorobenzene (S)	%			101	50-159
1,4-Difluorobenzene (S)	%			102	63-142

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 58300

58301

Original: H10070447004

MS Analysis Date/Time Analyst:

07/20/2010 16:56 WLV

MSD Analysis Date/Time Analyst:

07/20/2010 17:24 WLV

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit RPD	Max RPD
Gasoline Range Organics	mg/kg	ND	1.0	0.761	0.839	76.1	83.9	36-163 9.7	50
4-Bromofluorobenzene (S)	%	99.5				107	105	50-159	
1,4-Difluorobenzene (S)	%	95.1				113	106	63-142	

QC results presented in the QC Control Data have been rounded. RPD and percent recovery values calculated by the SPL LIMS system. are derived from QC data prior to the application of rounding rules. Also, MS/MSD % recoveries are calculated by the SPL LIMS using any detected value greater than the MDL.

Report ID: H10070447_6319 Printed: 08/04/2010 15:35



Phone: (713) 660-0901 Fax: (713) 660-8975

QUALITY CONTROL DATA

Workorder: H10070447 : Crosby Well #1

Project Number: Crosby Well #1 / 114-6400-415

QC Batch:

MSV/2236

Analysis Method:

SW-846 8260B

QC Batch Method:

SW-846 5030 MeOH Prep

Preparation:

07/23/2010 00:00 by LKL

Associated Lab Samples:

H10070447001

H10070447002

H10070604001

METHOD BLANK: 58376

Analysis Date/Time Analyst:

07/23/2010 12:28 LKL

Parameter	Units	Blank Result Qualifiers	Reporting Limit
Benzene	ug/kg	ND	50
Ethylbenzene	ug/kg	ND	50
Toluene	ug/kg	ND	50
m,p-Xylene	ug/kg	ND	50
o-Xylene	ug/kg	ND	50
Xylenes, Total	ug/kg	ND	50
4-Bromofluorobenzene (S)	%	103	62-130
1,2-Dichloroethane-d4 (S)	%	97.3	64-130
Toluene-d8 (S)	%	99.1	70-140

LABORATORY CONTROL SAMPLE: 58377

Analysis Date/Time Analyst:

07/23/2010 12:02 LKL

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	
Benzene	ug/kg	20	17.5	87.6	66-142	
Ethylbenzene	ug/kg	20	16.3	81.4	35-175	
Toluene	ug/kg	20	17.4	87.1	59-139	
m,p-Xylene	ug/kg	40	32.8	82.0	35-175	
o-Xylene	ug/kg	20	16.9	84.6	35-175	
Xylenes, Total	ug/kg	60	49.75	82.9	35-175	
4-Bromofluorobenzene (S)	%			101	62-130	
1,2-Dichloroethane-d4 (S)	%			94.4	64-130	
Toluene-d8 (S)	%			98.4	70-140	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 58378

58379

Original: H10070447002

MS Analysis Date/Time Analyst:

07/23/2010 13:52 LKL

MSD Analysis Date/Time Analyst:

07/23/2010 14:18 LKL

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD
Benzene	ug/kg	130	10000	9560	9560	94.2	94.3	66-142	0.0	21
Ethylbenzene	ug/kg	11000	10000	19600	20000	89.9	93.4	35-175	1.8	30
Toluene	ug/kg	16000	10000	25100	25900	88.1	95.9	59-139	3.0	21
m,p-Xylene	ug/kg	83000	20000	96700	100000	NC	NC	35-175	NC	30

QC results presented in the QC Control Data have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules. Also, MS/MSD % recoveries are calculated by the SPL LIMS using any detected value greater than the MDL.

Report ID: H10070447_6319

Page 18 of 23



Phone: (713) 660-0901 Fax: (713) 660-8975

QUALITY CONTROL DATA

Workorder: H10070447 : Crosby Well #1

Project Number: Crosby Well #1 / 114-6400-415

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 58378

58379

Original: H10070447002

MS Analysis Date/Time Analyst:

07/23/2010 13:52 LKL

MSD Analysis Date/Time Analyst:

07/23/2010 14:18 LKL

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD
o-Xylene	ug/kg	26000	10000	33900	35000	81.5	92.3	35-175	3.1	30
Xylenes, Total	ug/kg	109000	30000	130500	135300	73.0	88.9	35-175	3.6	30
4-Bromofluorobenzene (S)	%	105				101	102	62-130		
1,2-Dichloroethane-d4 (S)	%	103				95.7	97.6	64-130		
Toluene-d8 (S)	%	102				98.2	101	70-140		

QC results presented in the QC Control Data have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules. Also, MS/MSD % recoveries are calculated by the SPL LIMS using any detected value greater than the MDL.

Report ID: H10070447_6319



Phone: (713) 660-0901 Fax: (713) 660-8975

Legend

(S) - Indicates analyte is a surrogate

Qualifier	Qualifier Description
*	Recovery/RPD value outside QC limits
+	DCS Concentration
В	Analyte detected in the Method Blank
С	MTBE results were not confirmed by GCMS
D	Recovery out of range due to dilution
E	Results exceed calibration range
Н	Exceeds holding time
I	Estimated value, between MDL and PQL (Florida)
J	Estimated value
JN	The analysis indicates the presence of an analyte
MI	Matrix Interference
N	Recovery outside of control limits
NC	Not Calculable (Sample Duplicate)
NC	Not Calculated - Sample concentration > 4 times the spike
ND	Not Detected at reporting Limits
Р	Pesticide dual column results, greater then 25%
Q	Received past holding time
TNTC	Too numerous to count
U	Not Detected at reporting Limits

Report ID: H10070447_6319



Phone: (713) 660-0901 Fax: (713) 660-8975

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: H10070447: Crosby Well #1

Project Number: Crosby Well #1 / 114-6400-415

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
H10070447001	SB-1 (3')	Soil Leachage (IC)	WETP/1616	EPA 300.0	IC/1381
H10070447002	SB-1 (5')	Soil Leachage (IC)	WETP/1616	EPA 300.0	IC/1381
H10070447003	SB-1 (10')	Soil Leachage (IC)	WETP/1616	EPA 300.0	IC/1381
H10070447004	SB-1 (15')	Soil Leachage (IC)	WETP/1616	EPA 300.0	IC/1381
H10070447005	SB-1 (20')	Soil Leachage (IC)	WETP/1616	EPA 300.0	IC/1381
H10070447001	SB-1 (3')	SW-846 3550B	EXTO/1998	SW-846 8015B DRO	GCSV/1760
H10070447002	SB-1 (5')	SW-846 3550B	EXTO/1998	SW-846 8015B DRO	GCSV/1760
H10070447003	SB-1 (10')	SW-846 3550B	EXTO/1998	SW-846 8015B DRO	GCSV/1760
H10070447003	SB-1 (10')	SW-846 5035	MSV/2232	SW-846 8260B	MSV/2233
H10070447001	SB-1 (3')	SW-846 5030	GCVS/1454	SW-846 8015B GRO	GCVS/1455
H10070447002	SB-1 (5')	SW-846 5030	GCVS/1454	SW-846 8015B GRO	GCVS/1455
H10070447003	SB-1 (10')	SW-846 5030	GCVS/1454	SW-846 8015B GRO	GCVS/1455
H10070447004	SB-1 (15')	SW-846 5030	GCVS/1454	SW-846 8015B GRO	GCVS/1455
H10070447001	SB-1 (3')	SW-846 5030 MeOH Prep	MSV/2236	SW-846 8260B	MSV/2237
H10070447002	SB-1 (5')	SW-846 5030 MeOH Prep	MSV/2236	SW-846 8260B	MSV/2237

Report ID: H10070447_6319



Phone: (713) 660-0901 Fax: (713) 660-8975

Sample Receipt Checklist

WorkOrder: H10070447 LOG Received By Date and Time 07/17/2010 10:15 Carrier Name: **FEDEXP** Temperature: 5.0°C Chilled By: Water Ice 1. Shipping container/cooler in good condition? YES 2. Custody seals intact on shipping container/cooler? Not Present 3. Custody seals intact on sample bottles? Not Present Chain of custody present? YES 5. Chain of custody signed when relinquished and received? YES 6. Chain of custody agrees with sample labels? NO 1) Received trip blanks but not listed on chain logged in on hold. 7. Samples in proper container/bottle? YES Samples containers intact? YES 9. Sufficient sample volume for indicated test? YES 10. All samples received within holding time? YES 11. Container/Temp Blank temperature in compliance? YES 12. Water - VOA vials have zero headspace? VOA Vials Not Present 13. Water - Preservation checked upon receipt(except VOA*)? Not Applicable *VOA Preservation Checked After Sample Analysis SPL Representative: Contact Date & Time:

Report ID: H10070447_6319

Client Name Contacted: Client Instructions:

_6319	15:35
Report ID: H10070447_6319	08/04/2010 15:35
∏ H:⊝	
Report	Printed:

SPL, Inc. Analysis Request & Chain of Custody Record							H10070447								A					
		hain of Custody Re	cord			matrix	bottle	size	pres.	`^; 	i .	نربر د د	Dáz	mas	ind	1 700	of_ lysis			
Client Name: Teto Teto T	- <u>nc</u>					擅			AS I	: .			Ver	lues	ieu /	A mai	1,212		r i -	
City malend		itale Ty.	Zip Z	OUT.			A=amber glass V=vial X=other	e e												
Phone/Fax: 432-681-4759		32 - 682 -3"				S=soil O=oil E=encore X=	9 X	ű ş		2	₩:							ļ ·		
Client Contact: Charles Durce	H	Email: Ch	Aller Directe	te tre tich.	win		l di la	ૻૢૻૻૣ	2=HNO3 X=other	Containers	9		ļ],		ŀ		·	
roject Name/No.: Conoco Ph.	Rigi Ti					S S	A.	9 Z	11.0	ont	3			i.	<u> </u>					
ite Name: _ Coushy Will #1						(1)		r 4=402 40=vial 16=160z X=other	3	of C	3 2	ķ	2		1	ľ				
ite Location: Land, NM		<u> </u>				=water S	asti	iter Z	1.00	per	TPH (Discress)	X				ľ		. 5		
nvoice To: SAMPLE ID	 	DATE	Ph:	comp	grab	N=1S	P=plastic G=glass	1=1 lite 8=80z	开开	Number of	Į į	- G2	1 3				,	,	1	
- Company of the second se		DATE		Comp	gran	-	-	† 					1	<u> </u>	1 2	-	17 22	-	-	
<u> 58-1 (3')</u>	- 	orbsijo	1.330	1 24,50	1	5.	G	4/8	Χ	2	1.V	V	V						<u> </u>	
SB-1 (5')		01/15/10	1338		V	S	G	4/8	X	2	/	/			<u> </u>					
SB-1 (10')		071/5110	1393		V.	5	C	4/8	χ	2	1	7	1	i .						
					1	3	6	4/8	X	2.	(2)		1		-					
Y		<u>0115110</u>	ن 135		1		-						1	-	 			_	-	
56-i. (ar)	·	01/15/10	1900	 	<u> </u>	پڌيا	6	4/8	X	2	<u>.</u>		/_		-				 	
	··-					ļ			1		· .	1							L.	
					1										1					
	•					. 1				,			,	1,		<u> </u>				
					 		-		1	· :	-			-	 	<u> </u>			-	
		7 7 1 1 1	* * * * * * * * * * * * * * * * * * * *					 			<u> </u>			,	ļ: <u>.</u>	-	ļ			
ta t						4	<u> </u>	<u>'</u>	<u> </u>		1						;)		
Tient/Consultant Remarks: * re- run row t stingle digitify TOH ** It hanged in 2 10 pp. or to- the to DIEX	OBJEX Z	SURPLY NA NAT	smyl	atory řem	. *122 * 								· ·		Intac lče? Temp		D	Y L	N	
Requested TAT	Special Ke	porting Requirem	ents- Results:	Fax 🚨	Emai) 🗀	PDF	Sı	ecial D	etection	Lim	its (spe	cify):					review	Jiniti	ial):	
1 Business Day Contract	Standard Q	C Level 3 QC	Level 4 QC	TX TRRP	J 1.4.1	RECAP					٠					ŀ	٠.			
2 Business Days Z Standard.	1. Relingu	ished by Sampler:		• • •	date	· · · · · · ·	Liv	ne	- [2	2. Rec	eived l	v;				1 .			-	
3 Business Days	3. Relingu	ished by:	·	time 4. Received by:																
Other		*			date	, 					•									
Rush TAT requires prior notice	5. Relinquished by: date time 6. Received by Laboratory:																			
8880 Interchang Houston, TX 77054 (7)		ji -		mbassac LA 7058		fery P	arkw			\int		, -	٦,	159 H	Jughe 49680	s Dri	ve 1).94	7-577	!7	



District I
1625 N French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico **Energy Minerals and Natural Resources**

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505

Submit 2 Copies to appropriate District Office in accordance with Rule 116 on back side of form

Form C-141 Revised October 10, 2003

			Rel	ease Notific	atio	n and Co	rrective A	ction								
						OPERAT	ror /		X Initi	al Report	Final Repo					
Name of Company ConocoPhillips Company						Contact Jesse A. Sosa										
Address 3300 N. "A" St., Bldg. 6 #247 Midland, TX 79705-5 Facility Name Northwest Crosby Well #1																
Facility Na	ne Northv	vest Crosby	Well #1			Facility Typ	e Well			, <u> </u>						
Surface Ow	ner NMO	CD	wner E	rBLM Lease No. 3002527085												
				LOCA	TIO	N OF REI	LEASE		_							
Unit Letter	Section	Township	Range	Feet from the	North	South Line	Feet from the	East/W	est Line	County						
N	7	25S	37E	660	South	ı	1980	West		Lea						
L			La	titude		Longitud	e		· · · · · · · · · · · · · · · · · · ·	wite '	75 - (00 '					
				NAT	URE	OF RELI	EASE									
Type of Rele	ase Conde	nsate		Volume of Release 40 BBL Volume Recovered 0 BBL												
Source of Re						e12/30/0	19a1&0011	Hour of Di	scovery 12/30/09							
Was Immedia	ite Notice (Yes [No Not Re	quired	If YES, To Rick NM(RECD 7.15.10 VIA EMALL					
By Whom? S	Sean Robi	nson				Date and H	our 12/31/09 8	3:17 am			AND EWING SY					
Was a Watercourse Reached?						If YES, Volume Impacting the Watercourse.										
		<u>. </u>	Yes 🏻	No				\								
Describe Area Affected and for approval	and crack Affected a I area app	ed causing ta and Cleanup A roximately I	ank conte	nts (condensate)	remov	red valve. Pl										
regulations all public health of should their of	operators or the envir perations h ment. In a	are required to conment. The ave failed to a ddition, NMO	report an acceptance dequately CD accept	d/or file certain rele e of a C-141 repor	lease no t by the mediate	tifications and NMOCD ma contamination	d perform correct rked as "Final Re on that pose a three the operator of r	tive action eport" doc eat to grou esponsibi	ns for rele is not reli- and water lity for co	eases which eve the ope , surface was ompliance v	may endanger erator of liability ater, human health with any other					
Signature:	(cun	Wan		OIL CONSERVATION DIVISION Approved by District SUNCEPHONNENTAL ENGINEER												
Printed Name:	Jasse A. S	Sosa	, ,		_ ^		Signific Substaled	UNIVIE:	NIAL	T (A COMPAGE	142					
Title: HSER	Lead				A	pproval Date	: 7.15.10	Ex	piration I	Date: 9	15.10					
E-mail Addres	s:Jesse.A.	Sosa@conoc	cophillips	.com	c	Conditions of A	Approval:		-	7 Attached						
Date: 01/04/2	010		Phone: ((505)391-3126	3	UBNIT FIL	ALC HIW	Decs	184 184		10.7.2584					
Attach Additi	onal Shee	s If Necessa					,,,,	1			<u>,- , ~~ ∪, </u>					