

SPILL DATA FORM

Rev 03-04-13

Date:

Discovered By:

Well Name & No (Location):

Distance Traveled:

Confined:**

Yes

No

**Spill stays on CVX property associated with that piece of equipment on Right of Way or in Containment

IMS #

48045

CVX #

MSRT #

D71

Start Time:

2:30

End Time

2:35

REGULATORY NOTIFICATION

CONTACT US FOR ANY SPILLS REQUIRING VERBAL NOTIFICATION

COGCC
CDPHE
B-100
B-100
B-100

Name: Alex Estro Date: 1/22 Time: 16:45 LVM
Name: HOTLINE Date: 1/22 Time: 16:48 LVM
Name: ANN Date: 1/23 Time: 2:30 spoke w/ANN
Name: Date: Time: Rpt#

Facility Type (Back Page)

Injection Well

Crest

North Loop

DRA South

WH-Prod

Flow Line

Contained within Berm

X

Loop

NW Line

DRA East

WH-Inj

Inj Line

Contained on Location

X

West

DRA West

East Trunk

LP Gas

CS Vessel

Ground Water Impacted

X

NW Trunk

DRA North

Prod. Water

HP Gas

CO2

Surface Water Impacted

X

Equipment Type (Back Page)

Process Piping

Pipe Size

3"

Steel

Fiberglass

Stainless

Exterior coatings

Bare

Coated & Wrapped

Tape Wrapped

Interior Coatings

Bare

Cement Lined

Coated

Plastic Lined

CP Installed?

Yes

No

CP Adjusted?

Yes

No

API No:

05-103-06163

S - T - R

21-2N-102W

Latitude

Longitude

40.133986, -108.84596

Map Location

G-24 / QTRQTR NWNE

CT Fee Land

NOT BLM

Location of files (drive path)

Non Fee

Private Land

Equipment Component (Back Pg)

Pipe Body

Cause (Back Pg)

INTERNAL Corrosion

Description: A leak occurred on a 3" inch pipe approximately 25 feet N of well UP 54-21. Approximately 5.725 bbls of brine water and 0 crude oil bbls were released.

Immediate Corrective Action: The line was shut in immediately upon detection. Vacuum trucks removed all of the free fluid, estimated recovery is approximately 4 bbls of brine water and 0 bbls of crude oil. The fluids that were picked up, were taken to the truck unloading facility at the Main Water Plant for recycling. Any impacted soil was excavated and taken to the land farm.

Future Preventive Measure:

Replace

Oil Bbls Spilled

Water Bbls Spilled

5.7257

Secondary Containment

Secondary Containment

5.7257

COGCC Reportable

=> 1 Bbl outside berm

=> 5 Bbls Spill to Land

Oil Bbls Rec

Water Bbls Rec

4.0

Volume Lost

Volume Lost

1.7257

=> 1 Bbl oil / => 5 Bbls water

Is spill in Named Drainage / No Name Drainage / Erosion Channel Yes X No

List Name

Notify Surface Owners

Name:

Date:

Time:

Date of Last Hydro Test

CO2 Plant Leak Form Yes No X

Weather Conditions 20 Degrees F Sunny-Cloudy-Raining-Snowing

Picture of Failure Yes No

Area and vertical extent of spill

x 894'

Picture of Leak (Yes) No

Company Involved in Clean Up

Name of Water Trucking Company

Name of HES Person Contacted

Name of Supervisor Notified

Time: 2:30

Time: 2:30

Describe any emergency pits constructed:

Soil Sampling Date or N/A

IF LESS THAN A MILE, report distance IN FEET to nearest

Surface Water

Wetlands

Buildings

Livestock

Water Wells

Depth to shallowest ground water

Distribution: Upon Completion Distribute to V. Kurrash

F:\SFH\Forms\Spill Data Form Rev 09-17-13.xls

Report # COPHE 2014-0050

Spill 2147490

Location ID 311799

Document 2496379

MCA Spill Calculations Worksheet

Only Change Values in Columns B, C & D !

01-22-14 UP 54-21

Sheet 1

Rectangular spill				Formulas Cells are Protected!!		Conversion	Table
All dimensions in feet !							
	Length	Width	Depth	Total Volume of Fluid in Bbls		Conversions	Feet
Average total depth				0.000000	Fluid total	1 inch	0.0833
Use oil depth or skim thickness				0.000000	Oil volume	2 inches	0.1667
				0.000000	Water Volume	3 inches	0.2500
						4 inches	0.3333
Circular Spill						5 inches	0.4167
All dimensions in feet !						6 inches	0.5000
	Diameter	Depth		Total Volume of Fluid in Bbls.		7 inches	0.5833
Average total depth				0.000000	Fluid total	8 inches	0.6667
Use oil depth or skim thickness				0.000000	Oil volume	9 inches	0.7500
				0.000000	Water Volume	10 inches	0.8333
						11 inches	0.9167
Fluid in Soil Rectangular Spill *						1/256 inch	0.000326
All dimensions in feet !						1/128 inch	0.000651
	Length	Width	Depth-Soil Penetration	Total Volume of Fluid in Soil Pore Space (5%) in Bbls		1/64 inch	0.0013
Average total depth	70	15	0.0833	0.778907	Fluid total	1/32 inch	0.0026
						1/16 inch	0.0052
Fluid in Soil Circular Spill *						1/8 inch	0.0104
All dimensions in feet !						1/4 inch	0.0208
	Diameter	Depth-Soil Penetration		Total Volume of Fluid in Soil Pore Space (5%) in Bbls		3/8 inch	0.0313
Average total depth				0.000000	Fluid total	1/2 inch	0.0417
* Based on 5% in soil pore space. Adjust up or down based upon site-specific conditions (sand vs. clay, soil dry or wet prior to event, etc.), local knowledge and judgment.						5/8 inch	0.0521
						3/4 inch	0.0625
						7/8 inch	0.0729

0.7789
0.4005
0.3293
0.2146

1.7253

4.0

5.7253 BBLs TOTAL

4 BBLs Pumped

MCA Spill Calculations Worksheet

Only Change Values in Columns B, C & D !

01-22-14 UP 54-21

Sheet 2

Rectangular spill				Formulas Cells are Protected!!		Conversion	Table
All dimensions in feet !							
	Length	Width	Depth	Total Volume of Fluid in Bbls		Conversions	Feet
Average total depth				0.000000	Fluid total	1 inch	0.0833
Use oil depth or skim thickness				0.000000	Oil volume	2 inches	0.1667
				0.000000	Water Volume	3 inches	0.2500
						4 inches	0.3333
Circular Spill						5 inches	0.4167
All dimensions in feet !						6 inches	0.5000
	Diameter	Depth		Total Volume of Fluid in Bbls.		7 inches	0.5833
Average total depth				0.000000	Fluid total	8 inches	0.6667
Use oil depth or skim thickness				0.000000	Oil volume	9 inches	0.7500
				0.000000	Water Volume	10 inches	0.8333
						11 inches	0.9167
Fluid in Soil Rectangular Spill *						1/256 inch	0.000326
All dimensions in feet !						1/128 inch	0.000651
	Length	Width	Depth-Soil Penetration	Total Volume of Fluid in Soil Pore Space (5%) in Bbls		1/64 inch	0.0013
Average total depth	90	6	0.0833	0.400581	Fluid total	1/32 inch	0.0026
						1/16 inch	0.0052
Fluid in Soil Circular Spill *						1/8 inch	0.0104
All dimensions in feet !						1/4 inch	0.0208
	Diameter	Depth-Soil Penetration		Total Volume of Fluid in Soil Pore Space (5%) in Bbls		3/8 inch	0.0313
Average total depth				0.000000	Fluid total	1/2 inch	0.0417
* Based on 5% in soil pore space. Adjust up or down based upon site-specific conditions (sand vs. clay, soil dry or wet prior to event, etc.), local knowledge and judgment.						5/8 inch	0.0521
						3/4 inch	0.0625
						7/8 inch	0.0729

MCA Spill Calculations Worksheet

Only Change Values in Columns B, C & D !

01-22-14 UP 54-21

Sheet 3

Rectangular spill				Formulas Cells are Protected!!	Conversion	Table
All dimensions in feet !						
	Length	Width	Depth	Total Volume of Fluid in Bbls		Conversions Feet
Average total depth				0.000000	Fluid total	1 inch 0.0833
Use oil depth or skim thickness				0.000000	Oil volume	2 inches 0.1667
				0.000000	Water Volume	3 inches 0.2500
						4 inches 0.3333
Circular Spill						
All dimensions in feet !						
	Diameter	Depth		Total Volume of Fluid in Bbls.		5 inches 0.4167
Average total depth				0.000000	Fluid total	6 inches 0.5000
Use oil depth or skim thickness				0.000000	Oil volume	7 inches 0.5833
				0.000000	Water Volume	8 inches 0.6667
						9 inches 0.7500
						10 inches 0.8333
						11 inches 0.9167
Fluid in Soil Rectangular Spill *						
All dimensions in feet !						
	Length	Width	Depth-Soil Penetration	Total Volume of Fluid in Soil Pore Space (5%) in Bbls		1/256 inch 0.000326
Average total depth	444	1	0.0833	0.329366	Fluid total	1/128 inch 0.000651
						1/64 inch 0.0013
						1/32 inch 0.0026
						1/16 inch 0.0052
Fluid in Soil Circular Spill *						
All dimensions in feet !						
	Diameter	Depth-Soil Penetration		Total Volume of Fluid in Soil Pore Space (5%) in Bbls		1/8 inch 0.0104
Average total depth				0.000000	Fluid total	1/4 inch 0.0208
						3/8 inch 0.0313
						1/2 inch 0.0417
						5/8 inch 0.0521
						3/4 inch 0.0625
						7/8 inch 0.0729

* Based on 5% in soil pore space. Adjust up or down based upon site-specific conditions (sand vs. clay, soil dry or wet prior to event, etc.), local knowledge and judgment.

Pumped - 4 Bbls 3.4

0.7789
0.4005
0.3293
0.2146

5.7253 TOTAL

MCA Spill Calculations Worksheet

Only Change Values in Columns B, C & D !

01-22-14 UP 54-21

Sheet 4

Rectangular spill				Formulas Cells are Protected!!	Conversion	Table
All dimensions in feet !						
	Length	Width	Depth	Total Volume of Fluid in Bbls		Conversions Feet
Average total depth				0.000000	Fluid total	1 inch 0.0833
Use oil depth or skim thickness				0.000000	Oil volume	2 inches 0.1667
				0.000000	Water Volume	3 inches 0.2500
						4 inches 0.3333
						5 inches 0.4167
						6 inches 0.5000
Circular Spill						
All dimensions in feet !						
	Diameter	Depth		Total Volume of Fluid in Bbls.		7 inches 0.5833
Average total depth				0.000000	Fluid total	8 inches 0.6667
Use oil depth or skim thickness				0.000000	Oil volume	9 inches 0.7500
				0.000000	Water Volume	10 inches 0.8333
						11 inches 0.9167
Fluid in Soil Rectangular Spill *						1/256 inch 0.000326
All dimensions in feet !						1/128 inch 0.000651
	Length	Width	Depth-Soil Penetration	Total Volume of Fluid in Soil Pore Space (5%) in Bbls		1/64 inch 0.0013
Average total depth	292	1	0.0833	0.216610	Fluid total	1/32 inch 0.0026
						1/16 inch 0.0052
Fluid in Soil Circular Spill *						1/8 inch 0.0104
All dimensions in feet !						1/4 inch 0.0208
	Diameter	Depth-Soil Penetration		Total Volume of Fluid in Soil Pore Space (5%) in Bbls		3/8 inch 0.0313
Average total depth				0.000000	Fluid total	1/2 inch 0.0417
* Based on 5% in soil pore space. Adjust up or down based upon site-specific conditions (sand vs. clay, soil dry or wet prior to event, etc.), local knowledge and judgment.						5/8 inch 0.0521
						3/4 inch 0.0625
						7/8 inch 0.0729

State of Colorado
Oil and Gas Conservation Commission



1120 Lincoln Street, Suite 801, Denver, Colorado 80203 (303)894-2100 Fax:(303)894-2109

FOR OGCC USE ONLY

SPILL/RELEASE REPORT

This form is to be submitted by the party responsible for the oil and gas spill or release. Any spill or release which may impact waters of the State must be reported as soon as practicable; any spill over 20 bbls must be reported within 24 hours and all spills over five bbls must be reported within ten days. Submit a Site Investigation and Remediation Workplan (Form 27) when requested by the Director.

Spill report taken by:

FACILITY ID:

OPERATOR INFORMATION

Name of Operator: <u>Chevron Production</u>	OGCC Operator No: <u>16700</u>	Phone Numbers
Address: <u>100 Chevron Road</u>		No: <u>970-675-3705</u>
City: <u>Rangely</u>	State: <u>CO</u> Zip: <u>81648</u>	Fax: <u>970-675-3809</u>
Contact Person: <u>Tammie Lee Crossen - HE Specialist</u>		E-Mail: <u>tvzf@chevron.com</u>

DESCRIPTION OF SPILL OR RELEASE

Date of Incident: <u>01-22-2014</u>	Facility Name & No.: <u>Rangely Weber Sand Unit</u>	County: <u>Rio Blanco</u>
Type of Facility (well, tank battery, flow line, pit): <u>Injection Line</u>		QtrQtr: <u>NWNE</u> Section: <u>21</u>
Well Name and Number: <u>Union Pacific 54-21</u>		Township: <u>2N</u> Range: <u>102W</u>
API Number: <u>05-103-06163</u>		Meridian: <u>6 PM</u>
Specify volume spilled and recovered (in bbls) for the following materials:		
Oil spilled: <u>0</u>	Oil recov'd: <u>0</u>	Water spilled: <u>5</u>
		Water recov'd: <u>4</u>
		Other spilled: <u>0</u>
		Other recov'd: <u>0</u>
Ground Water impacted? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Surface Water impacted? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Contained within berm? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Area and vertical extent of spill: <u>1.5</u> x <u>896</u>	
Current land use: <u>Non Crop Land</u>	Weather conditions: <u>20 Degrees and sunny</u>	
Soil/geology description: <u>Silty Clay</u>		
IF LESS THAN A MILE, report distance IN FEET to nearest.... Surface water: <u>> 1 Mile</u> wetlands: <u>> 1 Mile</u> buildings: <u>> 1 Mile</u>		
Livestock: <u>> 1 Mile</u> water wells: <u>> 1 Mile</u> Depth to shallowest ground water: <u>N/A</u>		
Cause of spill (e.g., equipment failure, human error, etc.): <u>Internal Corrosion</u>		
Detailed description of the spill/release incident: At approximately 02:30PM, January 22, 2014, a leak occurred on a 3" steel line 25 feet north of Injection Well Union Pacific 54-21. (API 05-103-06163). Approximately 5 BBLs of brine water was released. The cause of the leak was internal corrosion. Fluids traveled approximately 896 feet, 292 traveling into an unnamed erosion channel. A dirt berm was used to contain the leak.		

CORRECTIVE ACTION

Describe immediate response (how stopped, contained and recovered):
The line was shut in immediately upon detection. Vacuum trucks removed all of the free fluid; estimated recovery is approximately 4 BBLs of brine water was recovered. The fluids that were picked up were taken to the truck unloading facility at the Main Water Plant for recycling.

Describe any emergency pits constructed:
N/A

How was the extent of contamination determined:
Visual Inspection. Chevron MCA Spill Calculation Worksheet.

Further remediation activities proposed (attach separate sheet if needed):
Remediation by fresh water washing and soil samples will be taken.

Describe measures taken to prevent problem from reoccurring:
This section of pipe will totally be replaced and returned to service.

OTHER NOTIFICATIONS

List the parties and agencies notified (County, BLM, EPA, DOT, Local Emergency Planning Coordinator or other).

Date	Agency	Contact	Phone	Response
01-22-2014	COGCC	Alex Fischer	303-894-2100 X5138	1645 LVM
01-22-2014	CDPHE	Reporting Hotline	1-877-518-5608	1648 LVM

Spill/Release Tracking No: 2147490