

KERR-McGEE OIL & GAS ONSHORE, LP  
2014 ANNUAL PROJECT SUMMARY TABLE  
Tasman Geosciences, LLC

Incident Date	Remediation No.	Site Name	API / Facility ID	Status	NFA Proposed	NFA Approved Date	2014 Site Summary (monitoring/remediation/wells installed or destroyed)	Wells Sampled (Last Quarter) 2014	Wells Exceeding 5 µg/L Benzene (Last Quarter Sampled 2014)	Benzene Range (µg/L) (Last Quarter Sampled 2014)	POC Established	2015 Recommendations	Well Reduction Request
3/25/2013	N/A	Helgoth Heirs #1	05-123-10041	Monitoring / Remediation	No	N/A	Quarterly monitoring since June 2013/ Development of remedial strategy / LNAPL Recovery	SB07, SB10, SB13, SB18, SB19, SB24, SB26	SB13, SB18, SB19	ND - 2,410	No	On-going LNAPL recovery / Continue quarterly monitoring / Continued implementation of remedial strategy	N/A

received 09/15/2015  
Spill 2232617  
Document 2525950

**Table 1**  
**2014 Groundwater Sample Results Summary Table**  
**Helgoth Heirs #1**  
**Weld County, Colorado**  
**Kerr-McGee Oil and Gas Onshore LP**

Sample ID	Date Sampled	Benzene (ug/L)	Toulene (ug/L)	Ethylbenzene (ug/L)	Total Xylenes (ug/L)
<b>COGCC Standards for groundwater (ug/L)<sup>(1)</sup></b>		<b>5</b>	<b>560</b>	<b>700</b>	<b>1,400</b>
SB07	1/13/2014	15.3	<4.0	<4.0	54.2
SB07	4/29/2014	11.0	<1.0	<1.0	33.5
SB07	7/28/2014	12.2	<1.0	<1.0	22
SB07	10/16/2014	3.9	<1.0	<1.0	2.7
SB08	1/13/2014	NS	NS	NS	NS
SB08	4/29/2014	NS	NS	NS	NS
SB08	7/28/2014	NS	NS	NS	NS
SB08	10/16/2014	NS	NS	NS	NS
SB10	1/13/2014	<4.0	<4.0	<4.0	<4.0
SB10	4/29/2014	<1.0	<1.0	<1.0	<1.0
SB10	7/28/2014	<1.0	<1.0	<1.0	3.7
SB10	10/16/2014	<1.0	<1.0	<1.0	<1.0
SB11	1/13/2014	NS	NS	NS	NS
SB11	4/29/2014	NS	NS	NS	NS
SB11	7/28/2014	NS	NS	NS	NS
SB11	10/16/2014	NS	NS	NS	NS
SB13	1/13/2014	28.7	<4.0	<4.0	<4.0
SB13	4/29/2014	13.4	<1.0	<1.0	<1.0
SB13	7/28/2014	46.1	4.8	<1.0	4.8
SB13	10/16/2014	135	9.2	2.9	14.3
SB17	1/13/2014	NS	NS	NS	NS
SB17	4/29/2014	NS	NS	NS	NS
SB17	7/28/2014	NS	NS	NS	NS
SB17	10/16/2014	NS	NS	NS	NS
SB18	1/13/2014	8.2	<4.0	41.7	35.3
SB18	4/29/2014	114	<4.0	404	95.8
SB18	7/28/2014	108	<1.0	511	327
SB18	10/16/2014	22.3	2.3	186	44.3
SB19	1/13/2014	2400	483	344	6420
SB19	4/29/2014	NS	NS	NS	NS
SB19	7/28/2014	2450	580	1150	12600
SB19	10/16/2014	2410	908	1210	13100
SB20	1/13/2014	489	250	102	886
SB20	4/29/2014	LNAPL			

Sample ID	Date Sampled	Benzene (ug/L)	Toulene (ug/L)	Ethylbenzene (ug/L)	Total Xylenes (ug/L)
<b>COGCC Standards for groundwater (ug/L)<sup>(1)</sup></b>		<b>5</b>	<b>560</b>	<b>700</b>	<b>1,400</b>
SB20	7/28/2014	LNAPL			
SB20	10/16/2014	LNAPL			
SB21	1/13/2014	<b>1600</b>	<b>4370</b>	342	617
SB21	4/29/2014	LNAPL			
SB21	7/28/2014	LNAPL			
SB21	10/16/2014	LNAPL			
SB22	1/13/2014	LNAPL			
SB22	4/29/2014	LNAPL			
SB22	7/28/2014	LNAPL			
SB22	10/16/2014	LNAPL			
SB23	1/13/2014	LNAPL			
SB23	4/29/2014	LNAPL			
SB23	7/28/2014	LNAPL			
SB23	10/16/2014	LNAPL			
SB24	1/13/2014	<4.0	<4.0	6.5	39.9
SB24	4/29/2014	<1.0	<1.0	<1.0	<1.0
SB24	7/28/2014	<1.0	<1.0	<1.0	<1.0
SB24	10/16/2014	<1.0	1.0	1.0	8.7
SB25	1/13/2014	NS	NS	NS	NS
SB25	4/29/2014	LNAPL			
SB25	7/28/2014	LNAPL			
SB25	10/16/2014	LNAPL			
SB26	1/13/2014	NS	NS	NS	NS
SB26	4/29/2014	NS	NS	NS	NS
SB26	7/28/2014	<1.0	<1.0	<1.0	<1.0
SB26	10/16/2014	4.2	2.4	2.0	15.2

**Notes:**

1. Standards for groundwater are taken from 2 CCR 404-1, Table 910-1, effective February 1, 2014.

COGCC = Colorado Oil and Gas Conservation Commission

(<) = Analytical result is less than the indicated laboratory reporting limit.

ug/L = Micrograms per liter.

**Bold** = Analytical result is in exceedance of COGCC Table 910-1 soil standards.

LNAPL = Light Non-Aqueous Phase Liquid

NS = Not Sampled



SB26	
Compound	10/16/2014 (ug/L)
Benzene	4.2
Toluene	2.4
Ethylbenzene	2
Total Xylenes	15.2

SB13	
Compound	10/16/2014 (ug/L)
Benzene	135
Toluene	9.2
Ethylbenzene	2.9
Total Xylenes	14.3

SB19	
Compound	10/16/2014 (ug/L)
Benzene	2410
Toluene	908
Ethylbenzene	1210
Total Xylenes	13100

SB24	
Compound	10/16/2014 (ug/L)
Benzene	<1.0
Toluene	1
Ethylbenzene	1
Total Xylenes	8.7

SB10	
Compound	10/16/2014 (ug/L)
Benzene	<1.0
Toluene	<1.0
Ethylbenzene	<1.0
Total Xylenes	<1.0

SB18	
Compound	10/16/2014 (ug/L)
Benzene	22.3
Toluene	2.3
Ethylbenzene	186
Total Xylenes	44.3

SB07	
Compound	10/16/2014 (ug/L)
Benzene	3.9
Toluene	<1.0
Ethylbenzene	<1.0
Total Xylenes	2.7

Separator

SB11

SB10

SB21

SB20

SB19

Water Sump

Oil Tank

SB23

SB24

SB07

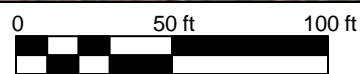
SB25

SB08

SB17

Abandoned Sales Line

Groundwater Flow Direction



Notes:

Tank Battery Equipment No longer Present on Site.

During 4Q2014 Sampling Event:

LNAPL Encountered in:

- SB20
- SB21
- SB25

Insufficient Water:

- SB08
- SB17

Passive LNAPL Recovery Bailers Present:

- SB21
- SB22

Spillbuster in Place:

- SB23

### Facility Diagram

Kerr McGee Oil and Gas Onshore, LP  
Helgoth Heirs #1  
SWSW S24 T2N R66W  
Weld County, CO



6899 Pecos Street, Unit C  
Denver, CO 80221

### LEGEND

- Earthen Berm
- Remedial Treatment Well
- Monitoring Well Location
- Excavation Areas
- Horizontal Well Location
- Flowline

Figure 1