

Wickham, Jerry, Env. Health

From: jmonroe@raboohherconsulting.com
Sent: Tuesday, December 08, 2015 2:32 PM
To: Wickham, Jerry, Env. Health
Cc: Jennifer Brady
Subject: E&B's GIG Facility Excavation Activities
Attachments: E&B GIG 1&2 - Excavation and Sample Map12-5-15.jpg; 1531061_draftreport_ebresources.pdf

Jerry,

I would like to update you on our excavation activities on Patterson Pass Road, Livermore. Attached is a draft map of the final excavation limits and the latest TPH results from the last western most excavation activities. We have stopped excavation activities at this point due to the proximity of the power pole and electrical panel for the facility. Please note that the only samples that indicate residual oil impact is a lense in the very southwest corner where our power drop is presently located. Note that sample ID SW44-d16.0 was collected both as a bottom and sidewall sample to show the lense is relatively shallow and does not continue vertically.

We are proposing, and asking for your approval, to place a visqueen barrier between the excavation wall where the residual oil was detected and backfill the remainder of the excavation prior to the next rain. E&B is currently reviewing our Work Plan for installing 3 groundwater monitoring wells and I expect to send that to you within the next day or so.

If you have any questions please feel free to call me at 530-237-6628.

Regards,

Jeff Monroe

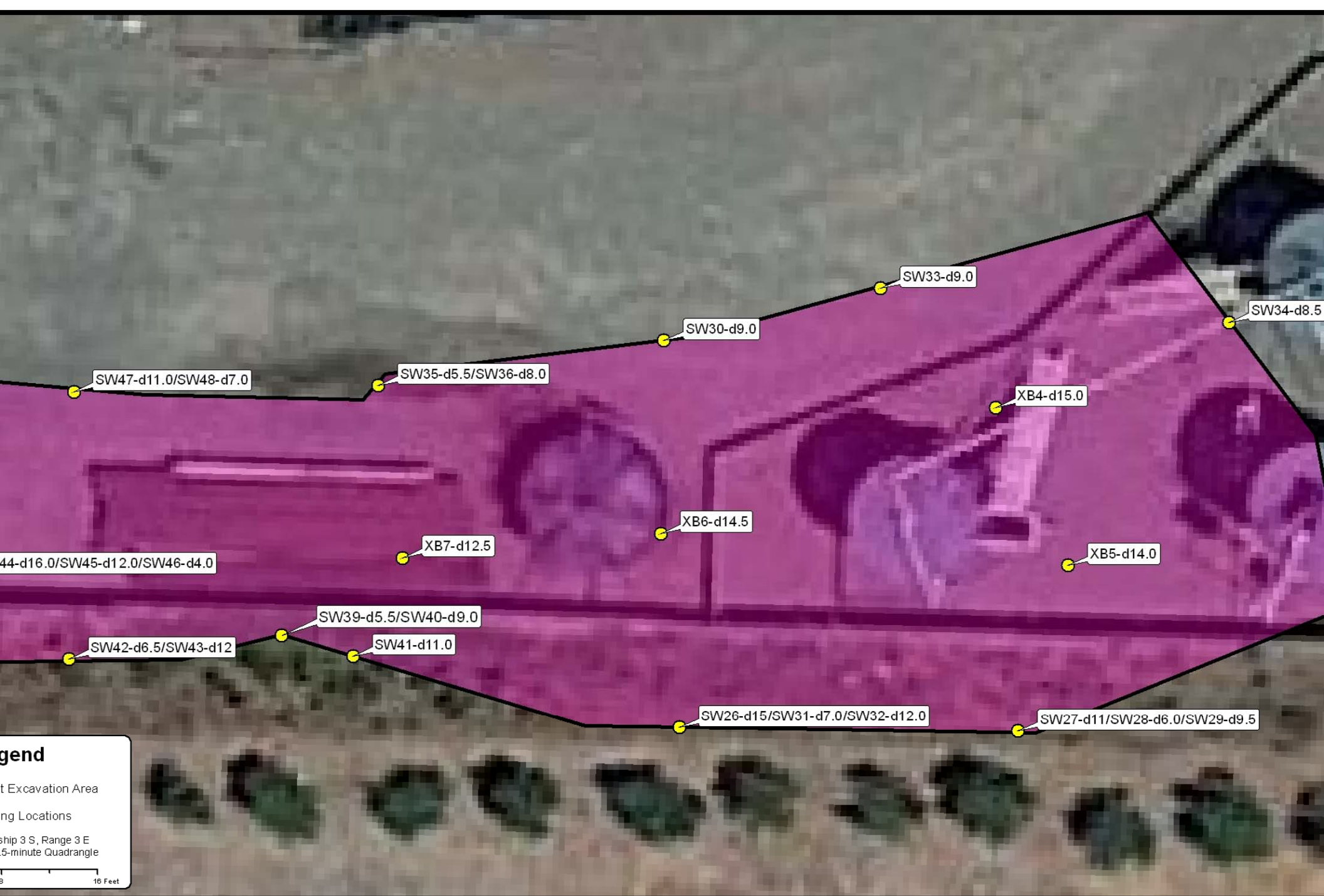


FIGURE 4
Former GIG Tank Facility Excavation and Sample Locations

Robert A. Booher Consulting
 Environmental Planning & Management
 3287 Congressional Court
 Fairfield, California 94534
 Telephone (707) 399-7835

E&B Natural Resources Management Co.
 GIG 1&2 Site Address:
 8477 Patterson Pass Road
 Livermore, California 94550



Date of Report: 12/08/2015

Jennifer Brady

E & B Natural Resources Management Corp.
1600 Norris Road
Bakersfield, CA 93308

Client Project: GIG Excavation

BCL Project: GIG

BCL Work Order: 1531061

Invoice ID:

Enclosed are the results of analyses for samples received by the laboratory on 12/7/2015. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Contact Person: Kerrie Vaughan
Client Services

Authorized Signature

Certifications: CA ELAP #1186; NV #CA00014; OR ELAP #4032-001; AK UST101

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E & B Natural Resources Management Corp.
1600 Norris Road
Bakersfield, CA 93308

Reported: 12/08/2015 13:35
Project: GIG
Project Number: GIG Excavation
Project Manager: Jennifer Brady

Laboratory / Client Sample Cross Reference

Laboratory ID	Client Sample Information			Receive Date:	
1531061-01	COC Number:	---		12/07/2015 08:08	
	Project Number:	---		Sampling Date:	12/05/2015 16:40
	Sampling Location:	---		Sample Depth:	---
	Sampling Point:	SW42-d6.5		Lab Matrix:	Solids
	Sampled By:	Jeff Monroe		Sample Type:	Soil
1531061-02	COC Number:	---		12/07/2015 08:08	
	Project Number:	---		Sampling Date:	12/05/2015 16:41
	Sampling Location:	---		Sample Depth:	---
	Sampling Point:	SW43-d12.0		Lab Matrix:	Solids
	Sampled By:	Jeff Monroe		Sample Type:	Soil
1531061-03	COC Number:	---		12/07/2015 08:08	
	Project Number:	---		Sampling Date:	12/05/2015 16:49
	Sampling Location:	---		Sample Depth:	---
	Sampling Point:	SW44-d16.0		Lab Matrix:	Solids
	Sampled By:	Jeff Monroe		Sample Type:	Soil
1531061-04	COC Number:	---		12/07/2015 08:08	
	Project Number:	---		Sampling Date:	12/05/2015 16:51
	Sampling Location:	---		Sample Depth:	---
	Sampling Point:	SW45-d12.0		Lab Matrix:	Solids
	Sampled By:	Jeff Monroe		Sample Type:	Soil
1531061-05	COC Number:	---		12/07/2015 08:08	
	Project Number:	---		Sampling Date:	12/05/2015 16:52
	Sampling Location:	---		Sample Depth:	---
	Sampling Point:	SW46-d4.0		Lab Matrix:	Solids
	Sampled By:	Jeff Monroe		Sample Type:	Soil
1531061-06	COC Number:	---		12/07/2015 08:08	
	Project Number:	---		Sampling Date:	12/05/2015 16:56
	Sampling Location:	---		Sample Depth:	---
	Sampling Point:	SW47-d11.0		Lab Matrix:	Solids
	Sampled By:	Jeff Monroe		Sample Type:	Soil
1531061-07	COC Number:	---		12/07/2015 08:08	
	Project Number:	---		Sampling Date:	12/05/2015 16:59
	Sampling Location:	---		Sample Depth:	---
	Sampling Point:	SW48-d7.0		Lab Matrix:	Solids
	Sampled By:	Jeff Monroe		Sample Type:	Soil

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E & B Natural Resources Management Corp.
1600 Norris Road
Bakersfield, CA 93308

Reported: 12/08/2015 13:35
Project: GIG
Project Number: GIG Excavation
Project Manager: Jennifer Brady

Draft: Total Petroleum Hydrocarbons

BCL Sample ID: 1531061-01	Client Sample Name: SW42-d6.5, 12/5/2015 4:40:00PM, Jeff Monroe							
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Gasoline	ND	mg/kg	20	5.0	EPA-8015B/FFP	ND		1
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	EPA-8015B/FFP	ND		1
TPH - Motor Oil	ND	mg/kg	20	6.5	EPA-8015B/FFP	ND		1
Tetracosane (Surrogate)	69.3	%	20 - 145 (LCL - UCL)		EPA-8015B/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B/FFP	12/07/15	12/07/15 16:56	MWB	GC-13	0.990	BYL0631

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Reported: 12/08/2015 13:35
Project: GIG
Project Number: GIG Excavation
Project Manager: Jennifer Brady

Draft: Total Petroleum Hydrocarbons

BCL Sample ID: 1531061-02	Client Sample Name: SW43-d12.0, 12/5/2015 4:41:00PM, Jeff Monroe							
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Gasoline	ND	mg/kg	200	50	EPA-8015B/FFP	ND	A01	1
TPH - Diesel (FFP)	200	mg/kg	100	12	EPA-8015B/FFP	ND	A01,A52	1
TPH - Motor Oil	1000	mg/kg	200	65	EPA-8015B/FFP	ND	A01	1
Tetracosane (Surrogate)	61.4	%	20 - 145 (LCL - UCL)		EPA-8015B/FFP		A01	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B/FFP	12/07/15	12/07/15 15:04	MWB	GC-13	10.101	BYL0631

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Project: GIG
Project Number: GIG Excavation
Project Manager: Jennifer Brady

Draft: Total Petroleum Hydrocarbons

BCL Sample ID: 1531061-03	Client Sample Name: SW44-d16.0, 12/5/2015 4:49:00PM, Jeff Monroe							
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Gasoline	ND	mg/kg	20	5.0	EPA-8015B/FFP	ND		1
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	EPA-8015B/FFP	ND		1
TPH - Motor Oil	ND	mg/kg	20	6.5	EPA-8015B/FFP	ND		1
Tetracosane (Surrogate)	69.7	%	20 - 145 (LCL - UCL)		EPA-8015B/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B/FFP	12/07/15	12/07/15 17:19	MWB	GC-13	1	BYL0631

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1600 Norris Road
Bakersfield, CA 93308

Reported: 12/08/2015 13:35
Project: GIG
Project Number: GIG Excavation
Project Manager: Jennifer Brady

Draft: Total Petroleum Hydrocarbons

BCL Sample ID: 1531061-04	Client Sample Name: SW45-d12.0, 12/5/2015 4:51:00PM, Jeff Monroe							
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Gasoline	ND	mg/kg	400	100	EPA-8015B/FFP	ND	A01	1
TPH - Diesel (FFP)	1800	mg/kg	200	24	EPA-8015B/FFP	ND	A01	1
TPH - Motor Oil	1300	mg/kg	400	130	EPA-8015B/FFP	ND	A01	1
Tetracosane (Surrogate)	0	%	20 - 145 (LCL - UCL)		EPA-8015B/FFP		A01,A17	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B/FFP	12/07/15	12/07/15 15:26	MWB	GC-13	20	BYL0631

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1600 Norris Road
Bakersfield, CA 93308

Reported: 12/08/2015 13:35
Project: GIG
Project Number: GIG Excavation
Project Manager: Jennifer Brady

Draft: Total Petroleum Hydrocarbons

BCL Sample ID: 1531061-05	Client Sample Name: SW46-d4.0, 12/5/2015 4:52:00PM, Jeff Monroe							
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Gasoline	ND	mg/kg	20	5.0	EPA-8015B/FFP	ND		1
TPH - Diesel (FFP)	49	mg/kg	10	1.2	EPA-8015B/FFP	ND	A52	1
TPH - Motor Oil	240	mg/kg	20	6.5	EPA-8015B/FFP	ND		1
Tetracosane (Surrogate)	71.5	%	20 - 145 (LCL - UCL)		EPA-8015B/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B/FFP	12/07/15	12/07/15 15:49	MWB	GC-13	1	BYL0631

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Reported: 12/08/2015 13:35
Project: GIG
Project Number: GIG Excavation
Project Manager: Jennifer Brady

Draft: Total Petroleum Hydrocarbons

BCL Sample ID: 1531061-06	Client Sample Name: SW47-d11.0, 12/5/2015 4:56:00PM, Jeff Monroe							
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Gasoline	ND	mg/kg	20	5.0	EPA-8015B/FFP	ND		1
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	EPA-8015B/FFP	ND		1
TPH - Motor Oil	ND	mg/kg	20	6.5	EPA-8015B/FFP	ND		1
Tetracosane (Surrogate)	74.8	%	20 - 145 (LCL - UCL)		EPA-8015B/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B/FFP	12/07/15	12/07/15 17:42	MWB	GC-13	0.984	BYL0631

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Reported: 12/08/2015 13:35
Project: GIG
Project Number: GIG Excavation
Project Manager: Jennifer Brady

Draft: Total Petroleum Hydrocarbons

BCL Sample ID: 1531061-07	Client Sample Name: SW48-d7.0, 12/5/2015 4:59:00PM, Jeff Monroe							
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Gasoline	ND	mg/kg	20	5.0	EPA-8015B/FFP	ND		1
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	EPA-8015B/FFP	ND		1
TPH - Motor Oil	ND	mg/kg	20	6.5	EPA-8015B/FFP	ND		1
Tetracosane (Surrogate)	68.9	%	20 - 145 (LCL - UCL)		EPA-8015B/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B/FFP	12/07/15	12/07/15 18:05	MWB	GC-13	0.997	BYL0631

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Reported: 12/08/2015 13:35
Project: GIG
Project Number: GIG Excavation
Project Manager: Jennifer Brady

Draft: Total Petroleum Hydrocarbons

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BYL0631						
TPH - Gasoline	BYL0631-BLK1	ND	mg/kg	20	5.0	
TPH - Diesel (FFP)	BYL0631-BLK1	ND	mg/kg	10	1.2	
TPH - Motor Oil	BYL0631-BLK1	ND	mg/kg	20	6.5	
Tetracosane (Surrogate)	BYL0631-BLK1	72.2	%	20 - 145 (LCL - UCL)		

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Project: GIG
Project Number: GIG Excavation
Project Manager: Jennifer Brady

Draft: Total Petroleum Hydrocarbons

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits		Lab
								Percent Recovery	RPD	
QC Batch ID: BYL0631										
TPH - Diesel (FFP)	BYL0631-BS1	LCS	71.555	83.056	mg/kg	86.2		64	124	
Tetracosane (Surrogate)	BYL0631-BS1	LCS	2.7661	3.3223	mg/kg	83.3		20	145	

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Reported: 12/08/2015 13:35
Project: GIG
Project Number: GIG Excavation
Project Manager: Jennifer Brady

Draft: Total Petroleum Hydrocarbons
Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent		Lab Quals	
								Recovery	RPD		Recovery
QC Batch ID: BYL0631		Used client sample: N									
TPH - Diesel (FFP)	MS	1528561-62	ND	69.625	83.333	mg/kg		83.6		52 - 131	
	MSD	1528561-62	ND	77.690	84.459	mg/kg	10.9	92.0	30	52 - 131	
Tetracosane (Surrogate)	MS	1528561-62	ND	2.6195	3.3333	mg/kg		78.6		20 - 145	
	MSD	1528561-62	ND	2.9963	3.3784	mg/kg	13.4	88.7		20 - 145	

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Notes And Definitions

- MDL Method Detection Limit
- ND Analyte Not Detected
- PQL Practical Quantitation Limit
- A01 Detection and quantitation limits are raised due to sample dilution.
- A17 Surrogate not reportable due to sample dilution.
- A52 Chromatogram not typical of diesel.