



RECEIVED
1/7/2013

SUNDRY NOTICE
Submit original plus one copy. This form is to be used for general, technical and environmental sundry information. For proposed or completed operations, describe in full on Technical Information Page (Page 2 of this form) identify well or other facility by API Number or by OGCC Facility ID. Operator shall send an informational copy of all sundry notices for wells located in High Density Areas to the Local Government Designee (Rule 603b).

1. OGCC Operator Number: 100263	4. Contact Name Hershal Ferguson	Complete the Attachment Checklist OP OGCC
2. Name of Operator: Matagorda Production Company	Phone: 713.334.1238	
3. Address: 675 Bering Dr. Suite 850 City: Houston State: TX Zip: 77057	Fax: 713.781.1460	
5. API Number: 05-081-07116	OGCC Facility ID Number: Location ID	Survey Plat
6. Well/Facility Name: Morgan Creek Fee	7. Well/Facility Number: #1-43	Directional Survey
8. Location (Ob/Oil, Sec, Twp, Rng, Meridian): SESE 1 8N 92W 6PM		Surface Equip Diagram
9. County: Moffat	10. Field Name: Wildcat	Technical Info Page <input checked="" type="checkbox"/>
11. Federal, Indian or State Lease Number:		Other

392495

General Notice

CHANGE OF LOCATION: Attach New Survey Plat (a change of surface boundary is substantive and requires a new permit)

Change of Surface Footage from Exterior Section Lines:	FIL/FSL	FEL/FWL
Change of Surface Footage to Exterior Section Lines:		
Change of Bottomhole Footage from Exterior Section Lines:		
Change of Bottomhole Footage to Exterior Section Lines:		

Bottomhole location Ob/Oil, Sec, Twp, Rng, Mer

Latitude _____ Distance to nearest property line _____ Distance to nearest bldg, public rd, utility or RR _____

Longitude _____ Distance to nearest lease line _____ Is location in a High Density Area (rule 603b)? Yes/No _____

Ground Elevation _____ Distance to nearest well same formation _____ Surface owner consultation date: _____

GPS DATA:
Date of Measurement _____ PDOP Reading _____ Instrument Operator's Name _____

CHANGE SPACING UNIT
Formation _____ Formation Code _____ Spacing order number _____ Unit Acreage _____ Unit configuration _____

Remove from surface bond
Signed surface use agreement attached

CHANGE OF OPERATOR (prior to drilling):
Effective Date: _____
Plugging Bond: Blanket Individual

CHANGE WELL NAME: NUMBER
From: _____
To: _____
Effective Date: _____

ABANDONED LOCATION:
Was location ever built? Yes No
Is site ready for inspection? Yes No
Date Ready for Inspection: _____

NOTICE OF CONTINUED SHUT IN STATUS
Does well shut in or temporarily abandoned:
Has Production Equipment been removed from site? Yes No
MIT required if shut in longer than two years. Date of last MIT: _____

SPUD DATE: _____ **REQUEST FOR CONFIDENTIAL STATUS** (6 mos from date casing set)

SUBSEQUENT REPORT OF STAGE, SQUEEZE OR REMEDIAL CEMENT WORK *submit cbl and cement job summaries

Method used	Cementing tool setting/pep depth	Cement volume	Cement top	Cement bottom	Date

RECLAMATION: Attach technical page describing final reclamation procedures per Rule 1004.
Final reclamation will commence on approximately _____ Final reclamation is completed and site is ready for inspection.

Technical Engineering/Environmental Notice

Notice of Intent
Approximate Start Date: _____

Report of Work Done
Date Work Completed: _____

Details of work must be described in full on Technical Information Page (Page 2 must be submitted.)

<input type="checkbox"/> Intent to Recomplete (submit form 2)	<input type="checkbox"/> Request to Vent or Flare	<input type="checkbox"/> E&P Waste Disposal
<input type="checkbox"/> Change Drilling Plans	<input type="checkbox"/> Repair Well	<input type="checkbox"/> Beneficial Reuse of E&P Waste
<input type="checkbox"/> Gross Interval Changed?	<input type="checkbox"/> Rule 502 variance requested	<input checked="" type="checkbox"/> Status Update/Change of Remediation Plans for Spills and Releases
<input type="checkbox"/> Casing/Cementing Program Change	<input type="checkbox"/> Other: _____	

I hereby certify that the statements made in this form are, to the best of my knowledge, true, correct and complete.

Signed: H.C. Ferguson Date: 1/2/2013 Email: hcferguson@ogcc.com
Print Name: H.C. Ferguson Title: PRESIDENT

COGCC Approved: [Signature] Title: Env. Supv. Date: 1/25/13

CONDITIONS OF APPROVAL, IF ANY:

See attached Form 27 for supplemental information.
OR 1/25/13

TECHNICAL INFORMATION PAGE



FOR OGCC USE ONLY

1. OGCC Operator Number: 100263 API Number: 05-081-07116
 2. Name of Operator: Matagorga Production Company OGCC Facility ID # _____
 3. Well/Facility Name: Morgan Creek Fee Well/Facility Number: #1-43
 4. Location (QtrQtr, Sec, Twp, Rng, Meridian): SESE 1 8N 92W 6PM

This form is to be completed whenever a Sundry Notice is submitted requiring detailed report of work to be performed or completed. This form shall be transmitted within 30 days of work completed as a "subsequent" report and must accompany Form 4, page 1.

5. DESCRIBE PROPOSED OR COMPLETED OPERATIONS

This COGCC Form 4 is being submitted as a request to meet the background concentration levels for arsenic at Morgan Creek Fee #1-43 well pad relative to the pit closure closure at the subject facility; in accordance with footnote 1 to the COGCC Table 910-1.

The request is based on the analytical results presented below.

Five (5) grab samples were collected from locations within the pit footprint to ascertain the arsenic concentrations of the facility.

- Pit Bottom - 3.2
- Pit West - 1.9
- Pit North - 2.5
- Pit South - 2.6
- Pit East - 4.5

The average concentration was 2.94 mg/kg.

Five (5) grab samples were collected from nearby non-impacted, native soil to establish background arsenic concentrations.

- Background01 - 3.2
- Background02 - 1.3
- Background03 - 1.8
- Background04 - 1.5
- Background05 - 1.9

The average concentration was 1.94 mg/kg.

Matagorda is requesting this approval in order to proceed with closure and reclamation of the pit located on the Morgan Fee #1-43 well pad.

FORM
27
Rev 6/99

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

OGCC Employee

Spill Complaint
 Inspection NOAV

Tracking No:

SITE INVESTIGATION AND REMEDIATION WORKPLAN

This form shall be submitted to the Director for approval prior to the initiation of site investigation and remediation activities. Form 27 is intended to be used whenever possible. Additional documentation will be required when large volumes of soil and groundwater have been impacted or involve large facilities with multiple source areas. See Rule 910. Attach as many pages as needed to fully describe the proposed work.

CAUSE OF CONDITION BEING INVESTIGATED AND REMEDIATED

Spill or Release Plug & Abandon Central Facility Closure Site/Facility Closure Other (describe): Pit Closure

OGCC Operator Number: <u>100263</u>	Contact Name and Telephone: <u>Hershal Ferguson</u>
Name of Operator: <u>Matagorda Production Company</u>	No: <u>713.334.1238</u>
Address: <u>675 Bering Dr. Suite 850</u>	Fax: <u>713.781.1460</u>
City: <u>Houston</u> State: <u>TX</u> Zip: <u>77057</u>	
API Number: <u>05-081-07116</u> County: <u>Moffat</u>	
Facility Name: _____ Facility Number: <u>Location ID 392495</u>	
Well Name: <u>Morgan Creek Fee</u> Well Number: <u>#1-43</u>	
Location: (QtrQtr, Sec, Twp, Rng, Meridian): <u>SESE 1 8N 92W 6PM</u> Latitude: <u>40.667706</u> Longitude: <u>-107.662894</u>	

TECHNICAL CONDITIONS

Type of Waste Causing Impact (crude oil, condensate, produced water, etc): No impacts identified

Site Conditions: Is location within a sensitive area (according to Rule 901e)? Y N If yes, attach evaluation.

Adjacent land use (cultivated, irrigated, dry land farming, industrial, residential, etc.): Rangeland

Soil type, if not previously identified on Form 2A or Federal Surface Use Plan: _____

Potential receptors (water wells within 1/4 mi, surface waters, etc.): Morgan Creek

Description of Impact (if previously provided, refer to that form or document):

Impacted Media (check):	Extent of Impact:	How Determined:
<input type="checkbox"/> Soils	_____	_____
<input type="checkbox"/> Vegetation	_____	_____
<input type="checkbox"/> Groundwater	_____	_____
<input type="checkbox"/> Surface Water	_____	_____

REMEDIALTION WORKPLAN

Describe initial action taken (if previously provided, refer to that form or document):

Discrete soil samples were collected from the pit bottom and four (4) sidewalls. In addition, samples were collected from the pit cuttings remaining in the pit and from five (5) undisturbed locations around the site for background comparisons. Samples were submitted for laboratory analytical. See attached for additional information. ✓

Describe how source is to be removed:

Drill cuttings will be removed and disposed of in accordance with applicable regulations.

Describe how remediation of existing impacts is to be accomplished, including removal and disposal at an injection well or licensed facility, land treatment on site, removal of impacted groundwater, insitu bioremediation, burning of oily vegetation, etc.:

Based on analytical results, no remediation is necessary.

Submit Page 2 with Page 1

FORM
27
Rev 6/99

State of Colorado
Oil and Gas Conservation Commission
1120 Lincoln Street, Suite 801, Denver, Colorado 80203
(303)894-2100 Fax: (303)894-2109



Tracking Number: _____
Name of Operator: _____
OGCC Operator No: _____
Received Date: _____
Well Name & No: _____
Facility Name & No: _____

Page 2
REMEDIATION WORKPLAN (Cont.)

OGCC Employee: _____

If groundwater has been impacted, describe proposed monitoring plan (# of wells or sample points, sampling schedule, analytical methods, etc.):

Analytical results indicate no impact to groundwater

Describe reclamation plan. Discuss existing and new grade recontouring; method and testing of compaction alleviation; and reseeding program, including location of new seed, seed mix and noxious weed prevention. Attach diagram or drawing. Use additional sheet for description if required.

Analytical results indicate no remediation to the pit is needed. As described in the attached plan, the drill cuttings and pit liner will be removed and disposed of in accordance with applicable regulations. The pit will then be reclaimed in accordance with COGCC regulations.

Attach samples and analytical results taken to verify remediation of impacts. Show locations of samples on an onsite schematic or drawing.

Is further site investigation required? Y N If yes, describe:

Final disposition of E&P waste (landtreated and disposed onsite, name of licensed disposal facility, recycling, reuse, etc.):

E&P waste will be disposed of in accordance with applicable regulations.

IMPLEMENTATION SCHEDULE

Date Site Investigation Began: 11/7/2012 Date Site Investigation Completed: 11/7/2012 Date Remediation Plan Submitted: _____
Remediation Start Date: _____ Anticipated Completion Date: _____ Actual Completion Date: _____

I hereby certify that the statements made in this form are, to the best of my knowledge, true, correct, and complete.

Print Name: H.C. FERGUSON, JR. Signed: [Signature]

Title: President Date: 12/26/2012

OGCC Approved: [Signature] Title: Env. Secy. Date: 1/28/13

Informant Jan 27.
SP 1/28/13



InterTech

December, 2012

REMEDIATION WORK PLAN

**MORGAN CREEK FEE #1-43
SESE T8N R92W Section 1
40.667706, -107.662894
Moffat, Colorado**

Prepared By:



InterTech

**InterTech Environmental & Engineering, LLC
743 Horizon Court, Suite 102
Grand Junction, Colorado 81506**

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1.0 - INTRODUCTION

On November 7, 2012, activities associated with the evaluation of the Morgan Creek Fee #1-43, API 05-081-07116 drill reserve pit were initiated. Banko Petroleum Management, Inc. (Banko) on behalf of Matagorda Production Company (Matagorda) contacted InterTech Environmental & Engineering, LLC (InterTech) to investigate the pit and surrounding area for any impact from the pit's contents. The inspection was in response to a violation identified during an August 9, 2012 inspection, Document Number 668500125.

InterTech personnel conducted a visual inspection of the pit liner, the pit bottom and sidewalls and drill cuttings. InterTech also collected Photoionization Detector (PID) readings from the pit using a 10 foot grid pattern. All areas were found to be 0.0 ppm.

Soil samples were collected from each of the four (4) side walls and the bottom of the pit to determine if contamination existed. Five (5) background samples were also collected from undisturbed areas around the pad site for comparison purposes. In addition, two (2) samples were collected from the drill cuttings remaining in the pit for disposal characterization. Samples were submitted to ALS Laboratories for analysis of Colorado Oil & Gas Conservation Commission (COGCC) Table 910-1 analytes.

This guidance document outlines the steps necessary for Matagorda and its contractors to properly close the pit in compliance with current COGCC regulations (900 and 1000 series) and Colorado Department of Public Health and Environment (CDPHE).

1.1 - Regulations and Definitions

The COGCC regulations stipulate that pits not used exclusively for drilling operations, buried or partially buried produced water vessels, and emergency pits shall be closed in accordance with an approved Site Investigation and Remediation Work Plan, Form 27 (Appendix B). Drilling pits, as defined below, do not require submittal of a Form 27; however, one may be developed and presented at the request of the COGCC Director.

Definitions of the different types of pits associated with well installation and production, as defined by the COGCC Rules and Regulations 100 Series Definitions, are as follows:

Drilling Pits are defined as those pits used during drilling operations and initial completion of a well. Included are:

- Ancillary pits: Pits used to contain fluids during drilling operations and initial completion procedures, such as circulation pits and water storage pits.
- Completion pits: Pits used to contain fluids and solids produced during initial completion procedures, and not originally constructed for use in drilling operations.
- Flowback pits: Pits used to contain fluids and solids produced during initial completion procedures.
- Reserve pits: Pits used to store drilling fluids for use in drilling operations or to contain Exploration & Production (E&P) waste generated during drilling operations and initial completion procedures.

Production Pits are defined as those pits used after drilling operations and initial completion of a well, including pits at natural gas gathering, processing and storage facilities, which constitute:

- Skimming/settling pits: Pits used to provide retention time for settling of solids and separation of residual oil for the purposes of recovering the oil or fluid.
- Produced water pits: Pits used to temporarily store produced water prior to injection for enhanced recovery or disposal, off-site transport, or surface-water discharge.
- Percolation pits: Pits used to dispose of produced water by percolation and evaporation through the bottom or sides of the pits into surrounding soils.
- Evaporation pits: Pits used to contain produced waters which evaporate into the atmosphere by natural thermal forces.

Multi-Well Pits are defined as pits used for treatment, storage, recycling, reuse, or disposal of E&P wastes generated from more than one (1) well that do not constitute a centralized E&P waste management facility and that will be in use for no more than three (3) years.

Special Purpose Pits are defined as pits used in oil and gas operations, including pits at natural gas gathering, processing and storage facilities, which constitute:

- Blowdown pits: Pits used to collect material resulting from, including but not limited to, the emptying or depressurizing of wells, vessels, or gas gathering systems.
- Flare pits: Pits used exclusively for flaring gas.
- Emergency pits: Pits used to contain liquids during an initial phase of emergency response operations related to a spill/release or process upset conditions.
- Basic sediment/tank bottom pits: Pits used to temporarily store or treat the extraneous materials in crude oil which may settle to the bottoms of tanks or production vessels and which may contain residual oil.
- Workover pits: Pits used to contain liquids during the performance of remedial operations on a producing well in an effort to increase production.
- Plugging pits: Pits used for containment of fluids encountered during the plugging process.

Rules pertaining to pit closures are dependent upon type and location of the pit, the location's sensitivity (i.e., proximity to the Roan Plateau rim or other sensitive receptors), and surrounding land use. The procedures listed below should be followed to ensure that the closure procedures complies with applicable standards, procedures and limits set forth in the COGCC 900 and 1000-series Rules, digressively Table 910-1.

Table 1 - Table 910-1: COGCC Concentrations Levels¹

Contaminant of Concern	Concentrations
Organic Compounds in Soil	
TPH (total volatile and extractable petroleum hydrocarbons)	500 mg/kg
Benzene	0.17 mg/kg ²
Toluene	85 mg/kg ²
Ethylbenzene	100 mg/kg ²
Xylenes (total)	175 mg/kg ²
Acenaphthene	1,000 mg/kg ²
Anthracene	1,000 mg/kg ²
Benzo(A)anthracene	0.22 mg/kg ²
Benzo(B)fluoranthene	0.22 mg/kg ²
Benzo(K)fluoranthene	2.2 mg/kg ²
Benzo(A)pyrene	0.022 mg/kg ²
Chrysene	22 mg/kg ²
Dibenzo(A,H)anthracene	0.022 mg/kg ²
Fluoranthene	1,000 mg/kg ²
Fluorene	1,000 mg/kg ²
Indeno(1,2,3,C,D)pyrene	0.22 mg/kg ²
Napthalene	23 mg/kg ²
Pyrene	1,000 mg/kg ²
Organic Compounds in Ground Water	
Benzene	5 µg/l ³
Toluene	560 to 1,000 µg/l ³
Ethylbenzene	700 µg/l ³
Xylenes (Total)	1,400 to 10,000 µg/l ³
Inorganics in Soils	
Electrical Conductivity (EC)	<4 mmhos/cm or 2 x
Sodium Adsorption Ratio (SAR)	<125
pH	6-9
Inorganics in Ground Water	
Total Dissolved Solids (TDS)	<1.25 x background ³
Chlorides	<1.25 x background ³
Sulfates	<1.25 x background ³
Metals in Soils	
Arsenic	0.39 mg/kg ²
Barium (LDNR True Total Barium)	15,000 mg/kg ²
Boron (Hot Water Soluble)	2 mg/l ³
Cadmium	70 mg/kg ^{3,6}
Chromium (III)	120,000 mg/kg ²
Chromium (VI)	23 mg/kg ^{2,6}
Copper	3,100 mg/kg ²
Lead (inorganic)	400 mg/kg ²

Mercury	23 mg/kg ²
Nickel (soluble salts)	1,600 mg/kg ^{2,6}
Selenium	390 mg/kg ^{2,6}
Silver	390 mg/kg ²
Zinc	23,000 mg/kg ^{2,6}
Liquid Hydrocarbons in Soils and Ground Water	
Liquid hydrocarbons including condensate and oil	Below detection level

COGCC recommends that the latest version of Environmental Protection Agency (EPA) SW 846 analytical methods be used where possible and that analyses of samples be performed by laboratories that maintain state or national accreditation programs.

1 Consideration shall be given to background levels in native soils and ground water.

2 Concentrations taken from CDPHE-HMWMD Table 1 Colorado Soil Evaluation Values (December 2007).

3 Concentrations taken from CDPHE-WQCC Regulation 41 - The Basic Standards for Ground Water.

4 For this range of standards, the first number in the range is a strictly health-based value, based on the Water Quality Control Commission's (WQCC's) established methodology for human health-based standards. The second number in the range is a Maximum Contaminant Level (MCL), established under the Federal Safe Drinking Water Act which has been determined to be an acceptable level of this chemical in public water supplies, taking treatability and laboratory detection limits into account. The WQCC intends that control requirements for this chemical be implemented to attain a level of ambient water quality that is at least equal to the first number in the range except as follows: 1) where ground water quality exceeds the first number in the range due to a release of contaminants that occurred prior to September 14, 2004 (regardless of the date of discovery or subsequent migration of such contaminants) clean-up levels for the entire contaminant plume shall be no more restrictive than the second number in the range or the ground water quality resulting from such release, whichever is more protective, and 2) whenever the WQCC has adopted alternative, site-specific standards for the chemical, the site-specific standards shall apply instead of these statewide standards.

5 Analysis by U.S. Department of Agriculture (USDA) Agricultural Handbook 60 method (20B) with soluble cations determined by method (2). Method (20B) = estimation of exchangeable sodium percentage and exchangeable potassium percentage from soluble cations. Method (2) = saturated paste method (note: each analysis requires a unique sample of at least 500 grams). If soils are saturated, USDA Agricultural Handbook 60 with soluble cations determined by method (3A) saturation extraction method.

6 The table value for these inorganic constituents is taken from the CDPHE-HMWMD Table 1 Colorado Soil Evaluation Values (December 2007). However, because these values are high, it is possible that site-specific geochemical conditions may exist that could allow these constituents to migrate into ground water at levels exceeding ground water standards even though the concentrations are below the table values. Therefore, when these constituents are present as contaminants, a secondary evaluation of their leachability must be performed to ensure ground water protection.

1.2 - Closure of Drilling Pits

Drilling pit closures do not require completion of a COGCC Form 27 prior to work startup. In general, the process will consist of:

- Sample collection of surrounding soils under the liner and documentation of visual, field and analytical investigation with excavation of any impacted soil;
- Potential use of the pit content material for backfill, if the material meets criteria set forth in Table 1 or is otherwise able to obtain approval for burial (i.e., Sundry Form 4, Appendix C); and
- Treatment or disposal of pit content material that fails to meet the Analytical List criteria.

If the Analytical List exceedances are limited to physical parameters (EC, SAR, pH) or arsenic, special approval issued by the COGCC will be pursued, via a Sundry Form 4 (Appendix C), to allow Matagorda to leave the materials in place below the root zone. Consideration will be given to background levels in native soils. Background samples will be collected, analyzed for appropriate Table 910-1 constituents Volatile Organic Compounds (VOCs), metals, physical parameters, and TPH), and the CDPHE Background Data Evaluation Method B may be used to determine appropriate clean-up concentrations for each site.

2.0 - SITE DESCRIPTION

The Morgan Creek Fee #1-43 well site is located in the southeast quarter of the southeast quarter of Section 1 of Township 8 North and Range 92 West in Moffat County, Colorado. The coordinates for the site are:

API/FACILITY ID	NORTHING*	EASTING*
05-081-07116	4505279	274913

*UTMs plotted in Zone 13

The well pad is situated approximately 7,073 feet above sea level on non-crop rangelands and Berlake-Maysprings complex soils with low to moderate erosion potential. Receiving waters include an unnamed stream that is a tributary to Big Gulch. No flow was observed during the pit closure process. The estimated distance to the receiving waters is approximately 252 feet. Vegetation consists of sage brush and grassland communities. See Figure 1 for a Site Vicinity map.

3.0 - PIT CONTENTS SAMPLING AND REMOVAL

3.1 - Pit Contents Sampling Procedures

Two (2) samples were collected from the drill cuttings within the pit. Each sample was labeled with a unique sample identification, sampler's name, date collected, and the time of collection. Appropriate sample preservation procedures were followed. Samples were shipped to the laboratory following Chain-of-Custody protocols.

All pertinent site and sampling activity information will be recorded, in print, in a dedicated field notebook. Site conditions and sampling locations were recorded on a site plan, plotted relative to coordinates obtained from a handheld Global Positioning System (GPS) device, and were photographed (Appendix A).

Each sample was analyzed for the constituents within COGCC Table 910-1. A summary of those constituent exceeding regulator standards are presented in Table 2 below:

Table 2 - Drill Cutting Analytical Exceedances Summary

Sample ID	Arsenic	pH	Benzo(a)pyrene
Drill Cuttings-01	7.0	8.00	0.040
Drill Cutting-02	6.2	9.31	0.061

3.2 - Pit Contents Removal

The pit contents are currently in solid or semi-solid state. Heavy equipment will be used to remove the material. The material will be trucked to an approved disposal site, remediated on site, or, if approved, used in the backfilling process.

4.0 - PIT LINER MANAGEMENT

The pit liner was observed and appeared to be severely weathered and was no longer remaining throughout the entire pit. In general, the liner was only present in places along the sidewalls and the northwest end of the pit. The following describes the procedures established for the liner removal.

4.1 - Liner Removal Procedures

During the liner removal process, the utmost care will be used to ensure that any liquid or sludge, should they be present at the time, is not released from the liner system to the surrounding environment.

A track hoe will be used to remove the liner. When possible, the excavation contractor will secure the corners of the liner and then maneuvered in a manner to fold the liner back onto itself within the pit. This allows any residual liquids or sludge to be extracted prior to the liners' removal and prevents any of the remaining pit contents from impacting the sub-liner soils. The liner will be placed in a lined and bermed secondary containment located on the pad site.

5.0 - SOILS INVESTIGATION

As described above, the liner is severely weathered and not present over most of the pit. Therefore, an initial investigation of the pit bottom sidewalls was conducted on November 7, 2012. Another visual and PID investigation will be completed after removal of the pit liner to ensure that the sub-liner soils are consistent.

5.1 - Visual and Olfactory Observation

Visual and olfactory observations of the pit showed no discoloration or hydrocarbon odors associated with the pit soils.

5.2 - PID Screening

Using a RAE Systems PID, the side walls and pit bottom soils were screened for organic volatile compounds. Table 3 summarizes the readings. See Figure 2 for a site drawing depicting the PID locations.

Table 3 - Pit PID Readings

LOCATION	EASTING	NORTHING	PID READING
Pit Bottom	0274915	4505309	0.0
Pit West	0274902	4505319	0.0
Pit North	0274920	455312	0.0
Pit South	0274913	4505302	0.0
Pit East	0274931	4505295	0.0

5.3 - Sample Collection

Initial soil samples were collected from the pit on November 7, 2012. Samples were collected from each of the four (4) pit side walls as well as the bottom of the pit. Five (5) samples were also collected from undisturbed native topsoil to create a comprehensive database of local soil characteristics.

The sampled material was placed directly into laboratory specified sample containers and labeled in accordance with the relevant COGCC Table 910-1 analytes. The samples were then placed into a cooler with blue ice to cool to 4° C to preserve sample integrity. Samples were submitted to ALS Laboratories via overnight courier for analysis of specific contaminants listed

in COGCC Table 910-1. The sample names and locations are shown in Table 4 and also located in Figure 3.

Table 4 - Sample Locations

SAMPLE ID	SAMPLE LOCATION	EASTING	NORTHING
Pit Bottom	Pit Bottom	0274915	4505309
Pit West	West Sidewall	0274902	4505319
Pit North	North Sidewall	0274920	455312
Pit East	East Sidewall	0274931	4505295
Pit South	South Sidewall	0274921	4505298
Background-01	Background	0274861	4505245
Background-02	Background	0274817	4505334
Background-03	Background	0274944	4505347
Background-04	Background	0274988	4505311
Background-05	Background	027500	4505256

6.0 - MANAGEMENT OF IMPACTED SOILS

6.1 - Excavation Procedures

Based on visual/olfactory observations and analytical data, it was surmised that the pit soils were not impacted above COGCC standards. Therefore, no excavation of the pit is proposed.

7.0 - ANALYTICAL INTERPRETATION

Analytical results were received from ALS Laboratories in a report dated November 16, 2012 (Appendix D).

7.1 - Background

A summary of Table 910-1 parameters for the background samples collected on November 7, 2012, are shown in Table 5.

Table 5 - Background Sample Analytical Summary

PARAMETER	UNITS	STANDARD	BACKGROUND				
			1	2	3	4	5
Arsenic	mg/kg	0.39	3.2	1.3	1.8	1.5	1.9
Sodium Adsorption Ratio	ratio	12	0.080	0.110	0.057	0.041	0.034
Specific Conductivity	umhos/cm	4000	1.50	0.84	1.50	1.50	1.90
pH	su	6-9	7.01	7.18	6.90	6.83	6.73

7.2 - Pit Sampling

Initial analytical samples showed all pit sidewall and bottom samples to be within Table 910-1 standards with the exception of arsenic. A summary of Table 910-1 parameters for the initial sidewall and pit bottom samples collected on November 7, 2012 is in Table 6.

Table 6 - Pit Sample Analytical

PARAMETER	UNITS	STANDARD	SIDEWALLS				BOTTOM
			W	N	S	E	
TPH-GRO (C6-C10)	mg/kg	500	ND	ND	ND	ND	ND
TPH-DRO (C10-C28)			ND	ND	ND	ND	170
Benzene	ug/kg	170	ND	ND	ND	ND	ND
Toluene	ug/kg	85000	ND	ND	ND	ND	ND
Ethylbenzene	ug/kg	100000	ND	ND	ND	ND	ND
Xylene	ug/kg	175000	ND	ND	ND	ND	ND
Naphthalene	ug/kg	23000	ND	ND	ND	ND	0.15
Arsenic	mg/kg	0.39	1.9	2.5	2.6	4.5	3.2
Barium	mg/kg	15000	56	77	350	990	1800
Cadmium	mg/kg	70	ND	0.20	ND	0.29	0.26
Chromium, Hexavalent	mg/kg	23	ND	ND	ND	ND	ND
Chromium, Trivalent	mg/kg	120000	8.8	7.0	6.0	9.9	11
Copper	mg/kg	3100	4.6	4.5	4.9	11	19
Lead	mg/kg	400	7.6	6.7	9.8	150	25
Mercury	mg/kg	23	0.028	0.034	0.065	0.060	0.054
Nickel	mg/kg	1600	4.3	10	4.5	11	120.75
Senium	mg/kg	390	0.75	0.68	0.72	1.0	1.6
Silver	mg/kg	390	ND	ND	ND	ND	ND
Zinc	mg/kg	23000	24	22	23	56	100
Sodium Adsorption Ratio	ratio	12	0.60	1.8	5.5	0.16	17
Specific Conductivity	umhos/cm	4000	1.1	20	1.3	2.1	6.7
pH	su	6-9	8.31	8.51	8.96	8.39	8.54

8.0 - REMEDIATION AND RECLAMATION

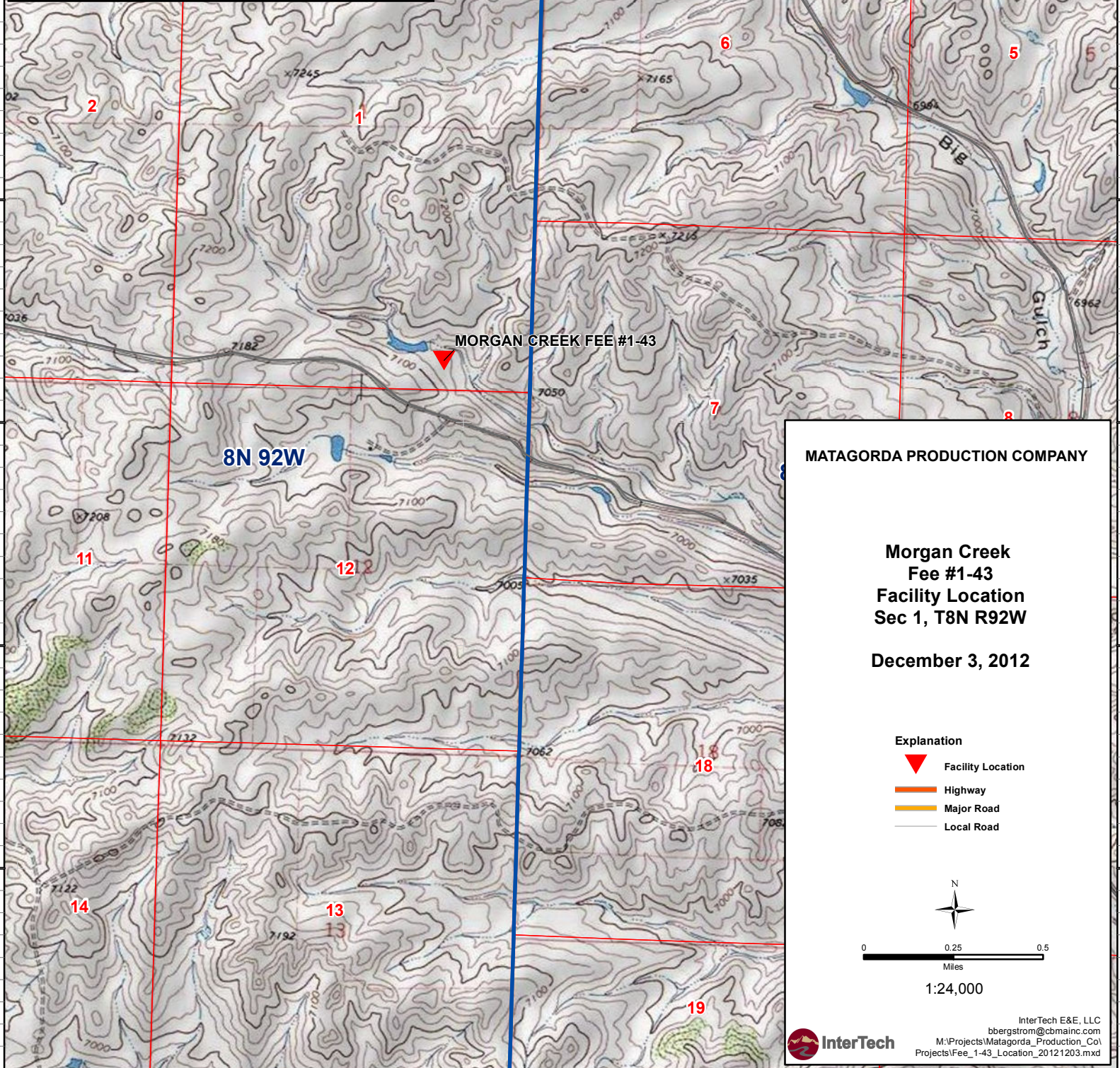
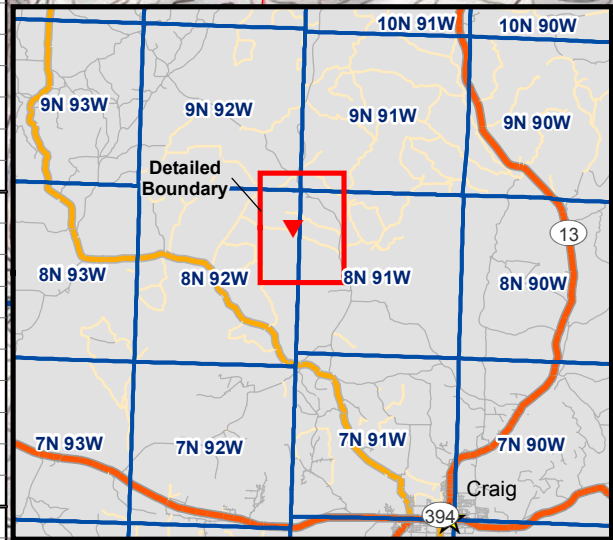
Based on analytical results from the initial sampling, no remediation of the pit is required. After removal of the drill cuttings, the pit footprint will be backfilled. The top three (3) feet of the pit will be backfilled with native soils only. The pit will be reclaimed in accordance with COGCC Rules 909 and 1000 Series.



InterTech







FIGURES

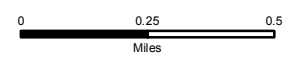


MATAGORDA PRODUCTION COMPANY

**Morgan Creek
Fee #1-43
Facility Location
Sec 1, T8N R92W**

December 3, 2012

- Explanation**
-  Facility Location
 -  Highway
 -  Major Road
 -  Local Road



1:24,000



InterTech E&E, LLC
bbergstrom@cbmainc.com
M:\Projects\Matagorda_Production_Co\Projects\Fee_1-43_Location_20121203.mxd

Morgan Creek
Fee #1-43
PID Values
Sec 1, T8N R92W

December 3, 2012



Explanation

● Pit Sample With PID Value

⊕ Well Location

□ Pit Perimeter



0 50 100




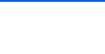
Feet

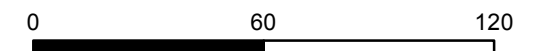
1:500

**Morgan Creek
Fee #1-43
Sample Locations
Sec 1, T8N R92W**

December 3, 2012

Explanation

-  Pit Sample
-  Background Sample
-  Well Location
-  Pit Perimeter



Feet
1:600





InterTech



APPENDICES



InterTech



APPENDIX A

***FORM 27 SITE INVESTIGATION
AND REMEDIATION WORKPLAN***

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

SITE INVESTIGATION AND REMEDIATION WORKPLAN

This form shall be submitted to the Director for approval prior to the initiation of site investigation and remediation activities. Form 27 is intended to be used whenever possible. Additional documentation will be required when large volumes of soil and groundwater have been impacted or involve large facilities with multiple source areas. See Rule 910. Attach as many pages as needed to fully describe the proposed work.

OGCC Employee:
 Spill Complaint
 Inspection NOAV
 Tracking No: _____

CAUSE OF CONDITION BEING INVESTIGATED AND REMEDIATED

Spill or Release Plug & Abandon Central Facility Closure Site/Facility Closure Other (describe): _____

OGCC Operator Number: _____	Contact Name and Telephone: _____
Name of Operator: _____	_____
Address: _____	No: _____
City: _____ State: _____ Zip: _____	Fax: _____

API Number: _____	County: _____
Facility Name: _____	Facility Number: _____
Well Name: _____	Well Number: _____
Location: (QtrQtr, Sec, Twp, Rng, Meridian): _____	Latitude: _____ Longitude: _____

TECHNICAL CONDITIONS

Type of Waste Causing Impact (crude oil, condensate, produced water, etc.): _____

Site Conditions: Is location within a sensitive area (according to Rule 901e)? Y N If yes, attach evaluation.

Adjacent land use (cultivated, irrigated, dry land farming, industrial, residential, etc.): _____

Soil type, if not previously identified on Form 2A or Federal Surface Use Plan: _____

Potential receptors (water wells within 1/4 mi, surface waters, etc.): _____

Description of Impact (if previously provided, refer to that form or document):

Impacted Media (check):	Extent of Impact:	How Determined:
<input type="checkbox"/> Soils	_____	_____
<input type="checkbox"/> Vegetation	_____	_____
<input type="checkbox"/> Groundwater	_____	_____
<input type="checkbox"/> Surface Water	_____	_____

REMEDIALTION WORKPLAN

Describe initial action taken (if previously provided, refer to that form or document):

Describe how source is to be removed:

Describe how remediation of existing impacts is to be accomplished, including removal and disposal at an injection well or licensed facility, land treatment on site, removal of impacted groundwater, insitu bioremediation, burning of oily vegetation, etc.:



Tracking Number: _____
Name of Operator: _____
OGCC Operator No: _____
Received Date: _____
Well Name & No: _____
Facility Name & No: _____

REMEDIATION WORKPLAN (Cont.)

OGCC Employee: _____

If groundwater has been impacted, describe proposed monitoring plan (# of wells or sample points, sampling schedule, analytical methods, etc.):

Describe reclamation plan. Discuss existing and new grade recontouring; method and testing of compaction alleviation; and reseeding program, including location of new seed, seed mix and noxious weed prevention. Attach diagram or drawing. Use additional sheet for description if required.

Attach samples and analytical results taken to verify remediation of impacts. Show locations of samples on an onsite schematic or drawing.

Is further site investigation required? Y N If yes, describe:

Final disposition of E&P waste (landtreated and disposed onsite, name of licensed disposal facility, recycling, reuse, etc.):

IMPLEMENTATION SCHEDULE

Date Site Investigation Began: _____ Date Site Investigation Completed: _____ Date Remediation Plan Submitted: _____
Remediation Start Date: _____ Anticipated Completion Date: _____ Actual Completion Date: _____

I hereby certify that the statements made in this form are, to the best of my knowledge, true, correct, and complete.

Print Name: _____ Signed: _____

Title: _____ Date: _____

OGCC Approved: _____ Title: _____ Date: _____



InterTech



APPENDIX B

FORM 4 SUNDRY NOTICE (ARSENIC)



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

DE	ET	DC	ES

SUNDRY NOTICE

Submit original plus one copy. This form is to be used for general, technical and environmental sundry information. For proposed or completed operations, describe in full on Technical Information Page (Page 2 of this form.) Identify well or other facility by API Number or by OGCC Facility ID. Operator shall send an informational copy of all sundry notices for wells located in High Density Areas to the Local Government Designee (Rule 603b.)

1. OGCC Operator Number: _____	4. Contact Name _____	Complete the Attachment Checklist OP OGCC
2. Name of Operator: _____	Phone: _____	
3. Address: _____ City: _____ State: _____ Zip: _____	Fax: _____	
5. API Number 05- _____	OGCC Facility ID Number _____	Survey Plat _____
6. Well/Facility Name: _____	7. Well/Facility Number _____	Directional Survey _____
8. Location (QtrQtr, Sec, Twp, Rng, Meridian): _____		Surface Eqpmt Diagram _____
9. County: _____	10. Field Name: _____	Technical Info Page _____
11. Federal, Indian or State Lease Number: _____		Other _____

General Notice

<input type="checkbox"/> CHANGE OF LOCATION: Attach New Survey Plat (a change of surface qtr/qtr is substantive and requires a new permit)													
Change of Surface Footage from Exterior Section Lines:	<table border="1"> <tr> <td></td> <td>FNL/FSL</td> <td>FEL/FWL</td> </tr> <tr> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> </table>		FNL/FSL	FEL/FWL	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>						
	FNL/FSL	FEL/FWL											
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>											
Change of Surface Footage to Exterior Section Lines:	<input type="checkbox"/>												
Change of Bottomhole Footage from Exterior Section Lines:	<input type="checkbox"/>												
Change of Bottomhole Footage to Exterior Section Lines:	<input type="checkbox"/> attach directional survey												
Bottomhole location Qtr/Qtr, Sec, Twp, Rng, Mer _____													
Latitude _____	Distance to nearest property line _____												
Longitude _____	Distance to nearest bldg, public rd, utility or RR _____												
Ground Elevation _____	Distance to nearest lease line _____												
	Is location in a High Density Area (rule 603b)? Yes/No <input type="checkbox"/>												
	Distance to nearest well same formation _____												
	Surface owner consultation date: _____												
GPS DATA:													
Date of Measurement _____	PDOP Reading _____ Instrument Operator's Name _____												
<input type="checkbox"/> CHANGE SPACING UNIT													
Formation _____	Formation Code _____ Spacing order number _____ Unit Acreage _____ Unit configuration _____												
<input type="checkbox"/> Remove from surface bond Signed surface use agreement attached													
<input type="checkbox"/> CHANGE OF OPERATOR (prior to drilling): Effective Date: _____ Plugging Bond: <input type="checkbox"/> Blanket <input type="checkbox"/> Individual	<input type="checkbox"/> CHANGE WELL NAME NUMBER From: _____ To: _____ Effective Date: _____												
<input type="checkbox"/> ABANDONED LOCATION: Was location ever built? <input type="checkbox"/> Yes <input type="checkbox"/> No Is site ready for inspection? <input type="checkbox"/> Yes <input type="checkbox"/> No Date Ready for Inspection: _____	<input type="checkbox"/> NOTICE OF CONTINUED SHUT IN STATUS Date well shut in or temporarily abandoned: _____ Has Production Equipment been removed from site? <input type="checkbox"/> Yes <input type="checkbox"/> No MIT required if shut in longer than two years. Date of last MIT _____												
<input type="checkbox"/> SPUD DATE: _____	<input type="checkbox"/> REQUEST FOR CONFIDENTIAL STATUS (6 mos from date casing set)												
<input type="checkbox"/> SUBSEQUENT REPORT OF STAGE, SQUEEZE OR REMEDIAL CEMENT WORK *submit cbl and cement job summaries <table border="1"> <tr> <td>Method used</td> <td>Cementing tool setting/perf depth</td> <td>Cement volume</td> <td>Cement top</td> <td>Cement bottom</td> <td>Date</td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>		Method used	Cementing tool setting/perf depth	Cement volume	Cement top	Cement bottom	Date						
Method used	Cementing tool setting/perf depth	Cement volume	Cement top	Cement bottom	Date								
<input type="checkbox"/> RECLAMATION: Attach technical page describing final reclamation procedures per Rule 1004. Final reclamation will commence on approximately _____ <input type="checkbox"/> Final reclamation is completed and site is ready for inspection.													

Technical Engineering/Environmental Notice

<input type="checkbox"/> Notice of Intent Approximate Start Date: _____	<input type="checkbox"/> Report of Work Done Date Work Completed: _____
Details of work must be described in full on Technical Information Page (Page 2 must be submitted.)	
<input type="checkbox"/> Intent to Recomplete (submit form 2) <input type="checkbox"/> Change Drilling Plans <input type="checkbox"/> Gross Interval Changed? <input type="checkbox"/> Casing/Cementing Program Change	<input type="checkbox"/> Request to Vent or Flare <input type="checkbox"/> Repair Well <input type="checkbox"/> Rule 502 variance requested <input type="checkbox"/> Other: _____
<input type="checkbox"/> E&P Waste Disposal <input type="checkbox"/> Beneficial Reuse of E&P Waste <input type="checkbox"/> Status Update/Change of Remediation Plans for Spills and Releases	

I hereby certify that the statements made in this form are, to the best of my knowledge, true, correct and complete.

Signed: _____ Date: _____ Email: _____
 Print Name: _____ Title: _____

COGCC Approved: _____ Title: _____ Date: _____

CONDITIONS OF APPROVAL, IF ANY:

TECHNICAL INFORMATION PAGE



FOR OGCC USE ONLY

1. OGCC Operator Number: _____ API Number: _____
2. Name of Operator: _____ OGCC Facility ID # _____
3. Well/Facility Name: _____ Well/Facility Number: _____
4. Location (QtrQtr, Sec, Twp, Rng, Meridian): _____

This form is to be completed whenever a Sundry Notice is submitted requiring detailed report of work to be performed or completed. This form shall be transmitted within 30 days of work completed as a "subsequent" report and must accompany Form 4, page 1.

5. DESCRIBE PROPOSED OR COMPLETED OPERATIONS



InterTech



APPENDIX C

LABORATORY ANALYTICAL REPORT



16-Nov-2012

Jana Sanders
InterTech
743 Horizon Court, Suite 110
Grand Junction, CO 81506

Re: **BPM Matagorda 044.1211.00 11/7/12**

Work Order: **1211284**

Dear Jana,

ALS Environmental received 12 samples on 09-Nov-2012 10:00 AM for the analyses presented in the following report.

The analytical data provided relates directly to the samples received by ALS Environmental and for only the analyses requested.

QC sample results for this data met laboratory specifications. Any exceptions are noted in the Case Narrative, or noted with qualifiers in the report or QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained from ALS Environmental. Samples will be disposed in 30 days unless storage arrangements are made.

The total number of pages in this report is 53.

If you have any questions regarding this report, please feel free to contact me.

Sincerely,

A handwritten signature in blue ink that reads "Ann Preston".

Electronically approved by: Ann Preston

Ann Preston
Project Manager



Certificate No: MN331938

ADDRESS 3352 128th Avenue Holland, Michigan 49424-9263 | PHONE (616) 399-6070 | FAX (616) 399-6185

ALS GROUP USA, CORP Part of the ALS Laboratory Group A Campbell Brothers Limited Company

Environmental

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

Client: InterTech
Project: BPM Matagorda 044.1211.00 11/7/12
Work Order: 1211284

Work Order Sample Summary

<u>Lab Samp ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Tag Number</u>	<u>Collection Date</u>	<u>Date Received</u>	<u>Hold</u>
1211284-01	Background -01	Soil		11/7/2012 15:00	11/9/2012 10:00	<input type="checkbox"/>
1211284-02	Background-02	Soil		11/7/2012 15:10	11/9/2012 10:00	<input type="checkbox"/>
1211284-03	Background-03	Soil		11/7/2012 15:15	11/9/2012 10:00	<input type="checkbox"/>
1211284-04	Background-04	Soil		11/7/2012 15:20	11/9/2012 10:00	<input type="checkbox"/>
1211284-05	Background-05	Soil		11/7/2012 15:45	11/9/2012 10:00	<input type="checkbox"/>
1211284-06	Drill Cuttings-01	Soil		11/7/2012 13:30	11/9/2012 10:00	<input type="checkbox"/>
1211284-07	Drill Cutting-02	Soil		11/7/2012 13:45	11/9/2012 10:00	<input type="checkbox"/>
1211284-08	Pit Bottom	Soil		11/7/2012 14:00	11/9/2012 10:00	<input type="checkbox"/>
1211284-09	Pit West	Soil		11/7/2012 14:15	11/9/2012 10:00	<input type="checkbox"/>
1211284-10	Pit North	Soil		11/7/2012 14:20	11/9/2012 10:00	<input type="checkbox"/>
1211284-11	Pit South	Soil		11/7/2012 14:30	11/9/2012 10:00	<input type="checkbox"/>
1211284-12	Pit East	Soil		11/6/2012 14:30	11/9/2012 10:00	<input type="checkbox"/>

Client: InterTech
Project: BPM Matagorda 044.1211.00 11/7/12
Work Order: 1211284

Case Narrative

Batch 44691 sample Drill Cuttings-01 MS/MSD recoveries for Hexavalent Chromium were below the control limit. The corresponding reporting limit in the parent sample may be biased low.

Batch 44701 sample 1211284-07 DRO surrogate recovery was above the upper control limits. The sample results may be biased high for DRO.

Batch 44736 MS/MSD data for Mercury is not related to this project's samples. No data requires qualification.

Batch 44739 MS/MSD data for Metals is not related to this project's samples. No data requires qualification.

Batch 44741 sample Pit North MS/MSD recoveries for Copper and Nickel and MS recovery for Barium were below the control limits. The corresponding result for Copper and Nickel in the parent sample may be biased low. The result for Barium in the parent sample was greater than 4x the spiked amount. No qualification is required for Barium. The MSD recoveries for Arsenic and Zinc were below control limits. Both the MS recoveries and RPDs met quality control criteria. No data requires qualification.

Client: InterTech
Project: BPM Matagorda 044.1211.00 11/7/12
WorkOrder: 1211284

**QUALIFIERS,
ACRONYMS, UNITS**

<u>Qualifier</u>	<u>Description</u>
*	Value exceeds Regulatory Limit
a	Not accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
J	Analyte detected below quantitation limit
n	Not offered for accreditation
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL

<u>Acronym</u>	<u>Description</u>
DUP	Method Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
MBLK	Method Blank
MDL	Method Detection Limit
MQL	Method Quantitation Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PDS	Post Digestion Spike
PQL	Practical Quantitation Limit
RPD	Relative Percent Difference
SD	Serial Dilution
TDL	Target Detection Limit

<u>Units Reported</u>	<u>Description</u>
% of sample	Percent of Sample
mg/Kg-dry	Milligrams per Kilogram Dry Weight
mhos/cm @25°	
none	
s.u.	Standard Units

ALS Group USA, Corp

Date: 16-Nov-12

Client: InterTech

Project: BPM Matagorda 044.1211.00 11/7/12

Work Order: 1211284

Sample ID: Background -01

Lab ID: 1211284-01

Collection Date: 11/7/2012 03:00 PM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
METALS BY ICP-MS						
Arsenic	3.2		SW6020A 0.45	mg/Kg-dry	Prep Date: 11/14/2012 1	Analyst: RH 11/15/2012 03:09 PM
SOLUBLE CATIONS FOR SAR						
Calcium	320		SW6020A 5.6	mg/L-dry	Prep Date: 11/14/2012 10	Analyst: RH 11/14/2012 04:20 PM
Magnesium	63		2.2	mg/L-dry	10	11/14/2012 04:20 PM
Sodium	6.3		2.2	mg/L-dry	10	11/14/2012 04:20 PM
SODIUM ADSORPTION RATIO						
Sodium Adsorption Ratio	0.080		USDA H60 METHO 0.010	none	Prep Date: 11/14/2012 1	Analyst: RH 11/15/2012
ELECTRICAL CONDUCTIVITY (SAR)						
Electrical Conductivity @ Saturation	1.5		USDA H60 METHO 0.025	mmhos/cm @25	Prep Date: 11/14/2012 5	Analyst: JB 11/15/2012 02:00 PM
MOISTURE						
Moisture	11		A2540 G 0.050	% of sample	1	Analyst: LR 11/14/2012 03:30 PM
PH						
pH	7.01		SW9045D	s.u.	1	Analyst: KF 11/9/2012 08:30 AM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 16-Nov-12

Client: InterTech

Project: BPM Matagorda 044.1211.00 11/7/12

Work Order: 1211284

Sample ID: Background-02

Lab ID: 1211284-02

Collection Date: 11/7/2012 03:10 PM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
METALS BY ICP-MS						
Arsenic	1.3		SW6020A 0.40	mg/Kg-dry	Prep Date: 11/14/2012 1	Analyst: RH 11/15/2012 04:35 PM
SOLUBLE CATIONS FOR SAR						
Calcium	92		SW6020A 5.4	mg/L-dry	Prep Date: 11/14/2012 10	Analyst: RH 11/14/2012 04:25 PM
Magnesium	21		2.2	mg/L-dry	10	11/14/2012 04:25 PM
Sodium	4.7		2.2	mg/L-dry	10	11/14/2012 04:25 PM
SODIUM ADSORPTION RATIO						
Sodium Adsorption Ratio	0.11		USDA H60 METHO 0.010	none	Prep Date: 11/14/2012 1	Analyst: RH 11/15/2012
ELECTRICAL CONDUCTIVITY (SAR)						
Electrical Conductivity @ Saturation	0.84		USDA H60 METHO 0.050	mmhos/cm @25	Prep Date: 11/14/2012 10	Analyst: JB 11/15/2012 02:00 PM
MOISTURE						
Moisture	7.0		A2540 G 0.050	% of sample	1	Analyst: LR 11/14/2012 03:30 PM
PH						
pH	7.18		SW9045D	s.u.	1	Analyst: KF 11/9/2012 08:30 AM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 16-Nov-12

Client: InterTech

Project: BPM Matagorda 044.1211.00 11/7/12

Work Order: 1211284

Sample ID: Background-03

Lab ID: 1211284-03

Collection Date: 11/7/2012 03:15 PM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
METALS BY ICP-MS						
Arsenic	1.8		SW6020A 0.42	mg/Kg-dry	Prep Date: 11/14/2012 1	Analyst: RH 11/15/2012 04:41 PM
SOLUBLE CATIONS FOR SAR						
Calcium	200		SW6020A 5.4	mg/L-dry	Prep Date: 11/14/2012 10	Analyst: RH 11/14/2012 04:30 PM
Magnesium	43		2.2	mg/L-dry	10	11/14/2012 04:30 PM
Sodium	3.5		2.2	mg/L-dry	10	11/14/2012 04:30 PM
SODIUM ADSORPTION RATIO						
Sodium Adsorption Ratio	0.057		USDA H60 METHO 0.010	none	Prep Date: 11/14/2012 1	Analyst: RH 11/15/2012
ELECTRICAL CONDUCTIVITY (SAR)						
Electrical Conductivity @ Saturation	1.5		USDA H60 METHO 0.050	mmhos/cm @25	Prep Date: 11/14/2012 10	Analyst: JB 11/15/2012 02:00 PM
MOISTURE						
Moisture	7.5		A2540 G 0.050	% of sample	1	Analyst: LR 11/14/2012 03:30 PM
PH						
pH	6.90		SW9045D	s.u.	1	Analyst: KF 11/9/2012 08:30 AM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 16-Nov-12

Client: InterTech

Project: BPM Matagorda 044.1211.00 11/7/12

Work Order: 1211284

Sample ID: Background-04

Lab ID: 1211284-04

Collection Date: 11/7/2012 03:20 PM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
METALS BY ICP-MS			SW6020A		Prep Date: 11/14/2012	Analyst: RH
Arsenic	1.5		0.38	mg/Kg-dry	1	11/15/2012 04:47 PM
SOLUBLE CATIONS FOR SAR			SW6020A		Prep Date: 11/14/2012	Analyst: RH
Calcium	190		5.5	mg/L-dry	10	11/14/2012 04:35 PM
Magnesium	41		2.2	mg/L-dry	10	11/14/2012 04:35 PM
Sodium	2.5		2.2	mg/L-dry	10	11/14/2012 04:35 PM
SODIUM ADSORPTION RATIO			USDA H60 METHO		Prep Date: 11/14/2012	Analyst: RH
Sodium Adsorption Ratio	0.041		0.010	none	1	11/15/2012
ELECTRICAL CONDUCTIVITY (SAR)			USDA H60 METHO		Prep Date: 11/14/2012	Analyst: JB
Electrical Conductivity @ Saturation	1.5		0.025	mmhos/cm @25	5	11/15/2012 02:00 PM
MOISTURE			A2540 G			Analyst: LR
Moisture	9.6		0.050	% of sample	1	11/14/2012 03:30 PM
PH			SW9045D			Analyst: KF
pH	6.83			s.u.	1	11/9/2012 08:30 AM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 16-Nov-12

Client: InterTech

Project: BPM Matagorda 044.1211.00 11/7/12

Work Order: 1211284

Sample ID: Background-05

Lab ID: 1211284-05

Collection Date: 11/7/2012 03:45 PM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
METALS BY ICP-MS						
Arsenic	1.9		SW6020A 0.41	mg/Kg-dry	Prep Date: 11/14/2012 1	Analyst: RH 11/15/2012 04:53 PM
SOLUBLE CATIONS FOR SAR						
Calcium	290		SW6020A 5.7	mg/L-dry	Prep Date: 11/14/2012 10	Analyst: RH 11/14/2012 04:40 PM
Magnesium	52		2.3	mg/L-dry	10	11/14/2012 04:40 PM
Sodium	2.5		2.3	mg/L-dry	10	11/14/2012 04:40 PM
SODIUM ADSORPTION RATIO						
Sodium Adsorption Ratio	0.034		USDA H60 METHO 0.010	none	Prep Date: 11/14/2012 1	Analyst: RH 11/15/2012
ELECTRICAL CONDUCTIVITY (SAR)						
Electrical Conductivity @ Saturation	1.9		USDA H60 METHO 0.025	mmhos/cm @25	Prep Date: 11/14/2012 5	Analyst: JB 11/15/2012 02:00 PM
MOISTURE						
Moisture	13		A2540 G 0.050	% of sample	1	Analyst: LR 11/14/2012 03:30 PM
PH						
pH	6.73		SW9045D	s.u.	1	Analyst: KF 11/9/2012 08:30 AM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 16-Nov-12

Client: InterTech

Project: BPM Matagorda 044.1211.00 11/7/12

Work Order: 1211284

Sample ID: Drill Cuttings-01

Lab ID: 1211284-06

Collection Date: 11/7/2012 01:30 PM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID			SW8015M		Prep Date: 11/13/2012	Analyst: CW
DRO (C10-C28)	98		4.6	mg/Kg-dry	1	11/14/2012 09:22 AM
<i>Surr: 4-Terphenyl-d14</i>	<i>103</i>		<i>39-115</i>	<i>%REC</i>	1	11/14/2012 09:22 AM
GASOLINE RANGE ORGANICS BY GC-FID			SW8015			Analyst: CW
GRO (C6-C10)	ND		2.8	mg/Kg-dry	50	11/12/2012 07:43 PM
<i>Surr: Toluene-d8</i>	<i>108</i>		<i>50-150</i>	<i>%REC</i>	50	11/12/2012 07:43 PM
MERCURY BY CVAA			SW7471		Prep Date: 11/14/2012	Analyst: LR
Mercury	0.41		0.034	mg/Kg-dry	2	11/15/2012 02:34 PM
METALS BY ICP-MS			SW6020A		Prep Date: 11/14/2012	Analyst: RH
Arsenic	7.0		0.42	mg/Kg-dry	1	11/15/2012 03:20 PM
Barium	210		4.2	mg/Kg-dry	10	11/15/2012 03:14 PM
Cadmium	1.1		0.17	mg/Kg-dry	1	11/15/2012 03:20 PM
Chromium	12		0.42	mg/Kg-dry	1	11/15/2012 03:20 PM
Copper	28		0.42	mg/Kg-dry	1	11/15/2012 03:20 PM
Lead	24		0.42	mg/Kg-dry	1	11/15/2012 03:20 PM
Nickel	18		0.42	mg/Kg-dry	1	11/15/2012 03:20 PM
Selenium	2.8		0.42	mg/Kg-dry	1	11/15/2012 03:20 PM
Silver	ND		0.42	mg/Kg-dry	1	11/15/2012 03:20 PM
Zinc	100		0.85	mg/Kg-dry	1	11/15/2012 03:20 PM
SOLUBLE CATIONS FOR SAR			SW6020A		Prep Date: 11/14/2012	Analyst: RH
Calcium	610		5.6	mg/L-dry	10	11/14/2012 04:45 PM
Magnesium	150		2.2	mg/L-dry	10	11/14/2012 04:45 PM
Sodium	400		2.2	mg/L-dry	10	11/14/2012 04:45 PM
SODIUM ADSORPTION RATIO			USDA H60 METHO		Prep Date: 11/14/2012	Analyst: RH
Sodium Adsorption Ratio	3.6		0.010	none	1	11/15/2012
SEMI-VOLATILE ORGANIC COMPOUNDS			SW8270		Prep Date: 11/13/2012	Analyst: RM
Acenaphthene	ND		0.016	mg/Kg-dry	1	11/14/2012 03:40 PM
Anthracene	ND		0.016	mg/Kg-dry	1	11/14/2012 03:40 PM
Benzo(a)anthracene	0.041		0.022	mg/Kg-dry	1	11/14/2012 03:40 PM
Benzo(a)pyrene	0.040		0.022	mg/Kg-dry	1	11/14/2012 03:40 PM
Benzo(b)fluoranthene	0.051		0.022	mg/Kg-dry	1	11/14/2012 03:40 PM
Benzo(k)fluoranthene	0.033		0.033	mg/Kg-dry	1	11/14/2012 03:40 PM
Chrysene	0.052		0.016	mg/Kg-dry	1	11/14/2012 03:40 PM
Dibenzo(a,h)anthracene	ND		0.020	mg/Kg-dry	1	11/14/2012 03:40 PM
Fluoranthene	0.067		0.016	mg/Kg-dry	1	11/14/2012 03:40 PM
Fluorene	0.038		0.016	mg/Kg-dry	1	11/14/2012 03:40 PM
Indeno(1,2,3-cd)pyrene	0.039		0.022	mg/Kg-dry	1	11/14/2012 03:40 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 16-Nov-12

Client: InterTech

Project: BPM Matagorda 044.1211.00 11/7/12

Work Order: 1211284

Sample ID: Drill Cuttings-01

Lab ID: 1211284-06

Collection Date: 11/7/2012 01:30 PM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Naphthalene	0.28		0.016	mg/Kg-dry	1	11/14/2012 03:40 PM
Pyrene	0.11		0.016	mg/Kg-dry	1	11/14/2012 03:40 PM
Surr: 2-Fluorobiphenyl	68.0		12-100	%REC	1	11/14/2012 03:40 PM
Surr: 4-Terphenyl-d14	94.5		25-137	%REC	1	11/14/2012 03:40 PM
Surr: Nitrobenzene-d5	73.8		37-107	%REC	1	11/14/2012 03:40 PM
VOLATILE ORGANIC COMPOUNDS			SW8260		Prep Date: 11/9/2012	Analyst: RS
Benzene	ND		0.034	mg/Kg-dry	1	11/13/2012 05:45 AM
Ethylbenzene	ND		0.034	mg/Kg-dry	1	11/13/2012 05:45 AM
m,p-Xylene	ND		0.067	mg/Kg-dry	1	11/13/2012 05:45 AM
o-Xylene	ND		0.034	mg/Kg-dry	1	11/13/2012 05:45 AM
Toluene	ND		0.034	mg/Kg-dry	1	11/13/2012 05:45 AM
Xylenes, Total	ND		0.10	mg/Kg-dry	1	11/13/2012 05:45 AM
Surr: 1,2-Dichloroethane-d4	94.4		70-130	%REC	1	11/13/2012 05:45 AM
Surr: 4-Bromofluorobenzene	95.4		70-130	%REC	1	11/13/2012 05:45 AM
Surr: Dibromofluoromethane	91.8		70-130	%REC	1	11/13/2012 05:45 AM
Surr: Toluene-d8	100		70-130	%REC	1	11/13/2012 05:45 AM
ELECTRICAL CONDUCTIVITY (SAR)			USDA H60 METHO		Prep Date: 11/14/2012	Analyst: JB
Electrical Conductivity @ Saturation	6.2		0.050	mmhos/cm @25	10	11/15/2012 02:00 PM
CHROMIUM, TRIVALENT			CALCULATION			Analyst: JJG
Chromium, Trivalent	12		0.56	mg/Kg-dry	1	11/16/2012 07:58 AM
CHROMIUM, HEXAVALENT			SW7196A		Prep Date: 11/12/2012	Analyst: MB
Chromium, Hexavalent	ND		0.56	mg/Kg-dry	1	11/14/2012 03:30 PM
MOISTURE			A2540 G			Analyst: LR
Moisture	11		0.050	% of sample	1	11/12/2012 06:15 PM
PH			SW9045D			Analyst: KF
pH	8.00			s.u.	1	11/9/2012 08:30 AM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 16-Nov-12

Client: InterTech

Project: BPM Matagorda 044.1211.00 11/7/12

Work Order: 1211284

Sample ID: Drill Cutting-02

Lab ID: 1211284-07

Collection Date: 11/7/2012 01:45 PM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID			SW8015M		Prep Date: 11/13/2012	Analyst: CW
DRO (C10-C28)	200		4.6	mg/Kg-dry	1	11/14/2012 09:49 AM
Surr: 4-Terphenyl-d14	152	S	39-115	%REC	1	11/14/2012 09:49 AM
GASOLINE RANGE ORGANICS BY GC-FID			SW8015			Analyst: CW
GRO (C6-C10)	11		2.8	mg/Kg-dry	50	11/12/2012 08:08 PM
Surr: Toluene-d8	100		50-150	%REC	50	11/12/2012 08:08 PM
MERCURY BY CVAA			SW7471		Prep Date: 11/14/2012	Analyst: LR
Mercury	0.078		0.021	mg/Kg-dry	1	11/14/2012 03:16 PM
METALS BY ICP-MS			SW6020A		Prep Date: 11/14/2012	Analyst: RH
Arsenic	6.2		0.44	mg/Kg-dry	1	11/15/2012 03:31 PM
Barium	330		4.4	mg/Kg-dry	10	11/15/2012 03:26 PM
Cadmium	0.74		0.18	mg/Kg-dry	1	11/15/2012 03:31 PM
Chromium	9.1		0.44	mg/Kg-dry	1	11/15/2012 03:31 PM
Copper	24		0.44	mg/Kg-dry	1	11/15/2012 03:31 PM
Lead	22		0.44	mg/Kg-dry	1	11/15/2012 03:31 PM
Nickel	17		0.44	mg/Kg-dry	1	11/15/2012 03:31 PM
Selenium	2.2		0.44	mg/Kg-dry	1	11/15/2012 03:31 PM
Silver	ND		0.44	mg/Kg-dry	1	11/15/2012 03:31 PM
Zinc	100		0.88	mg/Kg-dry	1	11/15/2012 03:31 PM
SOLUBLE CATIONS FOR SAR			SW6020A		Prep Date: 11/14/2012	Analyst: RH
Calcium	170		5.6	mg/L-dry	10	11/14/2012 04:50 PM
Magnesium	76		2.2	mg/L-dry	10	11/14/2012 04:50 PM
Sodium	890		2.2	mg/L-dry	10	11/14/2012 04:50 PM
SODIUM ADSORPTION RATIO			USDA H60 METHO		Prep Date: 11/14/2012	Analyst: RH
Sodium Adsorption Ratio	13		0.010	none	1	11/15/2012
SEMI-VOLATILE ORGANIC COMPOUNDS			SW8270		Prep Date: 11/13/2012	Analyst: RM
Acenaphthene	0.042		0.017	mg/Kg-dry	1	11/14/2012 04:05 PM
Anthracene	0.059		0.017	mg/Kg-dry	1	11/14/2012 04:05 PM
Benzo(a)anthracene	0.11		0.022	mg/Kg-dry	1	11/14/2012 04:05 PM
Benzo(a)pyrene	0.061		0.022	mg/Kg-dry	1	11/14/2012 04:05 PM
Benzo(b)fluoranthene	0.068		0.022	mg/Kg-dry	1	11/14/2012 04:05 PM
Benzo(k)fluoranthene	0.061		0.033	mg/Kg-dry	1	11/14/2012 04:05 PM
Chrysene	0.19		0.017	mg/Kg-dry	1	11/14/2012 04:05 PM
Dibenzo(a,h)anthracene	ND		0.020	mg/Kg-dry	1	11/14/2012 04:05 PM
Fluoranthene	0.12		0.017	mg/Kg-dry	1	11/14/2012 04:05 PM
Fluorene	0.13		0.017	mg/Kg-dry	1	11/14/2012 04:05 PM
Indeno(1,2,3-cd)pyrene	0.034		0.022	mg/Kg-dry	1	11/14/2012 04:05 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 16-Nov-12

Client: InterTech

Project: BPM Matagorda 044.1211.00 11/7/12

Work Order: 1211284

Sample ID: Drill Cutting-02

Lab ID: 1211284-07

Collection Date: 11/7/2012 01:45 PM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Naphthalene	1.6		0.017	mg/Kg-dry	1	11/14/2012 04:05 PM
Pyrene	0.17		0.017	mg/Kg-dry	1	11/14/2012 04:05 PM
Surr: 2-Fluorobiphenyl	70.8		12-100	%REC	1	11/14/2012 04:05 PM
Surr: 4-Terphenyl-d14	85.9		25-137	%REC	1	11/14/2012 04:05 PM
Surr: Nitrobenzene-d5	75.9		37-107	%REC	1	11/14/2012 04:05 PM
VOLATILE ORGANIC COMPOUNDS			SW8260		Prep Date: 11/9/2012	Analyst: RS
Benzene	ND		0.034	mg/Kg-dry	1	11/13/2012 06:09 AM
Ethylbenzene	0.058		0.034	mg/Kg-dry	1	11/13/2012 06:09 AM
m,p-Xylene	0.56		0.067	mg/Kg-dry	1	11/13/2012 06:09 AM
o-Xylene	0.24		0.034	mg/Kg-dry	1	11/13/2012 06:09 AM
Toluene	0.19		0.034	mg/Kg-dry	1	11/13/2012 06:09 AM
Xylenes, Total	0.81		0.10	mg/Kg-dry	1	11/13/2012 06:09 AM
Surr: 1,2-Dichloroethane-d4	99.6		70-130	%REC	1	11/13/2012 06:09 AM
Surr: 4-Bromofluorobenzene	102		70-130	%REC	1	11/13/2012 06:09 AM
Surr: Dibromofluoromethane	97.0		70-130	%REC	1	11/13/2012 06:09 AM
Surr: Toluene-d8	101		70-130	%REC	1	11/13/2012 06:09 AM
ELECTRICAL CONDUCTIVITY (SAR)			USDA H60 METHO		Prep Date: 11/14/2012	Analyst: JB
Electrical Conductivity @ Saturation	6.1		0.10	mmhos/cm @25	20	11/15/2012 02:00 PM
CHROMIUM, TRIVALENT			CALCULATION			Analyst: JYG
Chromium, Trivalent	9.1		0.56	mg/Kg-dry	1	11/16/2012 07:58 AM
CHROMIUM, HEXAVALENT			SW7196A		Prep Date: 11/12/2012	Analyst: MB
Chromium, Hexavalent	ND		0.55	mg/Kg-dry	1	11/14/2012 03:30 PM
MOISTURE			A2540 G			Analyst: LR
Moisture	11		0.050	% of sample	1	11/12/2012 06:15 PM
PH			SW9045D			Analyst: KF
pH	9.31			s.u.	1	11/9/2012 08:30 AM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 16-Nov-12

Client: InterTech

Project: BPM Matagorda 044.1211.00 11/7/12

Work Order: 1211284

Sample ID: Pit Bottom

Lab ID: 1211284-08

Collection Date: 11/7/2012 02:00 PM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID			SW8015M		Prep Date: 11/13/2012	Analyst: CW
DRO (C10-C28)	170		5.1	mg/Kg-dry	1	11/14/2012 10:42 AM
Surr: 4-Terphenyl-d14	76.7		39-115	%REC	1	11/14/2012 10:42 AM
GASOLINE RANGE ORGANICS BY GC-FID			SW8015			Analyst: CW
GRO (C6-C10)	ND		3.1	mg/Kg-dry	50	11/12/2012 08:33 PM
Surr: Toluene-d8	109		50-150	%REC	50	11/12/2012 08:33 PM
MERCURY BY CVAA			SW7471		Prep Date: 11/14/2012	Analyst: LR
Mercury	0.054		0.019	mg/Kg-dry	1	11/14/2012 03:18 PM
METALS BY ICP-MS			SW6020A		Prep Date: 11/14/2012	Analyst: RH
Arsenic	3.2		0.41	mg/Kg-dry	1	11/15/2012 03:43 PM
Barium	1,800		41	mg/Kg-dry	100	11/15/2012 03:37 PM
Cadmium	0.26		0.16	mg/Kg-dry	1	11/15/2012 03:43 PM
Chromium	11		0.41	mg/Kg-dry	1	11/15/2012 03:43 PM
Copper	19		0.41	mg/Kg-dry	1	11/15/2012 03:43 PM
Lead	25		0.41	mg/Kg-dry	1	11/15/2012 03:43 PM
Nickel	12		0.41	mg/Kg-dry	1	11/15/2012 03:43 PM
Selenium	1.6		0.41	mg/Kg-dry	1	11/15/2012 03:43 PM
Silver	ND		0.41	mg/Kg-dry	1	11/15/2012 03:43 PM
Zinc	100		0.82	mg/Kg-dry	1	11/15/2012 03:43 PM
SOLUBLE CATIONS FOR SAR			SW6020A		Prep Date: 11/14/2012	Analyst: RH
Calcium	230		6.3	mg/L-dry	10	11/14/2012 04:55 PM
Magnesium	23		2.5	mg/L-dry	10	11/14/2012 04:55 PM
Sodium	1,100		2.5	mg/L-dry	10	11/14/2012 04:55 PM
SODIUM ADSORPTION RATIO			USDA H60 METHO		Prep Date: 11/14/2012	Analyst: RH
Sodium Adsorption Ratio	17		0.010	none	1	11/15/2012
SEMI-VOLATILE ORGANIC COMPOUNDS			SW8270		Prep Date: 11/13/2012	Analyst: RM
Naphthalene	0.15		0.018	mg/Kg-dry	1	11/14/2012 04:30 PM
Surr: 2-Fluorobiphenyl	70.2		12-100	%REC	1	11/14/2012 04:30 PM
Surr: 4-Terphenyl-d14	101		25-137	%REC	1	11/14/2012 04:30 PM
Surr: Nitrobenzene-d5	81.3		37-107	%REC	1	11/14/2012 04:30 PM
VOLATILE ORGANIC COMPOUNDS			SW8260		Prep Date: 11/9/2012	Analyst: RS
Benzene	ND		0.038	mg/Kg-dry	1	11/13/2012 02:32 AM
Ethylbenzene	ND		0.038	mg/Kg-dry	1	11/13/2012 02:32 AM
m,p-Xylene	ND		0.075	mg/Kg-dry	1	11/13/2012 02:32 AM
o-Xylene	ND		0.038	mg/Kg-dry	1	11/13/2012 02:32 AM
Toluene	ND		0.038	mg/Kg-dry	1	11/13/2012 02:32 AM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 16-Nov-12

Client: InterTech
Project: BPM Matagorda 044.1211.00 11/7/12
Sample ID: Pit Bottom
Collection Date: 11/7/2012 02:00 PM

Work Order: 1211284
Lab ID: 1211284-08
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Xylenes, Total	ND		0.11	mg/Kg-dry	1	11/13/2012 02:32 AM
Surr: 1,2-Dichloroethane-d4	104		70-130	%REC	1	11/13/2012 02:32 AM
Surr: 4-Bromofluorobenzene	93.0		70-130	%REC	1	11/13/2012 02:32 AM
Surr: Dibromofluoromethane	88.2		70-130	%REC	1	11/13/2012 02:32 AM
Surr: Toluene-d8	98.0		70-130	%REC	1	11/13/2012 02:32 AM
ELECTRICAL CONDUCTIVITY (SAR)			USDA H60 METHO		Prep Date: 11/14/2012	Analyst: JB
Electrical Conductivity @ Saturation	6.7		0.25	mmhos/cm @25	50	11/15/2012 02:00 PM
CHROMIUM, TRIVALENT			CALCULATION			Analyst: JJG
Chromium, Trivalent	11		0.63	mg/Kg-dry	1	11/16/2012 07:58 AM
CHROMIUM, HEXAVALENT			SW7196A		Prep Date: 11/12/2012	Analyst: MB
Chromium, Hexavalent	ND		0.62	mg/Kg-dry	1	11/14/2012 03:30 PM
MOISTURE			A2540 G			Analyst: LR
Moisture	20		0.050	% of sample	1	11/12/2012 06:15 PM
PH			SW9045D			Analyst: KF
pH	8.54			s.u.	1	11/9/2012 08:30 AM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 16-Nov-12

Client: InterTech

Project: BPM Matagorda 044.1211.00 11/7/12

Work Order: 1211284

Sample ID: Pit West

Lab ID: 1211284-09

Collection Date: 11/7/2012 02:15 PM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID			SW8015M		Prep Date: 11/13/2012	Analyst: CW
DRO (C10-C28)	ND		4.5	mg/Kg-dry	1	11/14/2012 11:09 AM
Surr: 4-Terphenyl-d14	69.6		39-115	%REC	1	11/14/2012 11:09 AM
GASOLINE RANGE ORGANICS BY GC-FID			SW8015			Analyst: CW
GRO (C6-C10)	ND		2.7	mg/Kg-dry	50	11/12/2012 08:58 PM
Surr: Toluene-d8	111		50-150	%REC	50	11/12/2012 08:58 PM
MERCURY BY CVAA			SW7471		Prep Date: 11/14/2012	Analyst: LR
Mercury	0.028		0.020	mg/Kg-dry	1	11/14/2012 03:20 PM
METALS BY ICP-MS			SW6020A		Prep Date: 11/14/2012	Analyst: RH
Arsenic	1.9		0.40	mg/Kg-dry	1	11/15/2012 03:49 PM
Barium	56		0.40	mg/Kg-dry	1	11/15/2012 03:49 PM
Cadmium	ND		0.16	mg/Kg-dry	1	11/15/2012 03:49 PM
Chromium	8.8		0.40	mg/Kg-dry	1	11/15/2012 03:49 PM
Copper	4.6		0.40	mg/Kg-dry	1	11/15/2012 03:49 PM
Lead	7.6		0.40	mg/Kg-dry	1	11/15/2012 03:49 PM
Nickel	4.3		0.40	mg/Kg-dry	1	11/15/2012 03:49 PM
Selenium	0.75		0.40	mg/Kg-dry	1	11/15/2012 03:49 PM
Silver	ND		0.40	mg/Kg-dry	1	11/15/2012 03:49 PM
Zinc	24		0.80	mg/Kg-dry	1	11/15/2012 03:49 PM
SOLUBLE CATIONS FOR SAR			SW6020A		Prep Date: 11/14/2012	Analyst: RH
Calcium	99		5.5	mg/L-dry	10	11/14/2012 05:15 PM
Magnesium	43		2.2	mg/L-dry	10	11/14/2012 05:15 PM
Sodium	30		2.2	mg/L-dry	10	11/14/2012 05:15 PM
SODIUM ADSORPTION RATIO			USDA H60 METHO		Prep Date: 11/14/2012	Analyst: RH
Sodium Adsorption Ratio	0.60		0.010	none	1	11/15/2012
SEMI-VOLATILE ORGANIC COMPOUNDS			SW8270		Prep Date: 11/13/2012	Analyst: RM
Naphthalene	ND		0.016	mg/Kg-dry	1	11/14/2012 04:55 PM
Surr: 2-Fluorobiphenyl	66.1		12-100	%REC	1	11/14/2012 04:55 PM
Surr: 4-Terphenyl-d14	95.4		25-137	%REC	1	11/14/2012 04:55 PM
Surr: Nitrobenzene-d5	75.5		37-107	%REC	1	11/14/2012 04:55 PM
VOLATILE ORGANIC COMPOUNDS			SW8260		Prep Date: 11/9/2012	Analyst: RS
Benzene	ND		0.033	mg/Kg-dry	1	11/13/2012 02:57 AM
Ethylbenzene	ND		0.033	mg/Kg-dry	1	11/13/2012 02:57 AM
m,p-Xylene	ND		0.066	mg/Kg-dry	1	11/13/2012 02:57 AM
o-Xylene	ND		0.033	mg/Kg-dry	1	11/13/2012 02:57 AM
Toluene	ND		0.033	mg/Kg-dry	1	11/13/2012 02:57 AM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 16-Nov-12

Client: InterTech

Project: BPM Matagorda 044.1211.00 11/7/12

Work Order: 1211284

Sample ID: Pit West

Lab ID: 1211284-09

Collection Date: 11/7/2012 02:15 PM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Xylenes, Total	ND		0.098	mg/Kg-dry	1	11/13/2012 02:57 AM
Surr: 1,2-Dichloroethane-d4	104		70-130	%REC	1	11/13/2012 02:57 AM
Surr: 4-Bromofluorobenzene	93.2		70-130	%REC	1	11/13/2012 02:57 AM
Surr: Dibromofluoromethane	90.4		70-130	%REC	1	11/13/2012 02:57 AM
Surr: Toluene-d8	97.2		70-130	%REC	1	11/13/2012 02:57 AM
ELECTRICAL CONDUCTIVITY (SAR)			USDA H60 METHO		Prep Date: 11/14/2012	Analyst: JB
Electrical Conductivity @ Saturation	1.1		0.025	mmhos/cm @25	5	11/15/2012 02:00 PM
CHROMIUM, TRIVALENT			CALCULATION			Analyst: JJG
Chromium, Trivalent	8.8		0.55	mg/Kg-dry	1	11/16/2012 07:58 AM
CHROMIUM, HEXAVALENT			SW7196A		Prep Date: 11/12/2012	Analyst: MB
Chromium, Hexavalent	ND		0.55	mg/Kg-dry	1	11/14/2012 03:30 PM
MOISTURE			A2540 G			Analyst: LR
Moisture	8.6		0.050	% of sample	1	11/12/2012 06:15 PM
PH			SW9045D			Analyst: KF
pH	8.31			s.u.	1	11/9/2012 08:30 AM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 16-Nov-12

Client: InterTech

Project: BPM Matagorda 044.1211.00 11/7/12

Work Order: 1211284

Sample ID: Pit North

Lab ID: 1211284-10

Collection Date: 11/7/2012 02:20 PM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID			SW8015M		Prep Date: 11/13/2012	Analyst: CW
DRO (C10-C28)	ND		4.3	mg/Kg-dry	1	11/14/2012 07:34 AM
Surr: 4-Terphenyl-d14	71.6		39-115	%REC	1	11/14/2012 07:34 AM
GASOLINE RANGE ORGANICS BY GC-FID			SW8015			Analyst: CW
GRO (C6-C10)	ND		2.6	mg/Kg-dry	50	11/12/2012 09:23 PM
Surr: Toluene-d8	109		50-150	%REC	50	11/12/2012 09:23 PM
MERCURY BY CVAA			SW7471		Prep Date: 11/15/2012	Analyst: LR
Mercury	0.034		0.016	mg/Kg-dry	1	11/15/2012 01:39 PM
METALS BY ICP-MS			SW6020A		Prep Date: 11/14/2012	Analyst: CES
Arsenic	2.5		0.39	mg/Kg-dry	1	11/14/2012 03:12 PM
Barium	77		0.39	mg/Kg-dry	1	11/14/2012 03:12 PM
Cadmium	0.20		0.16	mg/Kg-dry	1	11/14/2012 03:12 PM
Chromium	7.0		0.39	mg/Kg-dry	1	11/14/2012 03:12 PM
Copper	4.5		0.39	mg/Kg-dry	1	11/14/2012 03:12 PM
Lead	6.7		0.39	mg/Kg-dry	1	11/14/2012 03:12 PM
Nickel	10		0.39	mg/Kg-dry	1	11/14/2012 03:12 PM
Selenium	0.68		0.39	mg/Kg-dry	1	11/14/2012 03:12 PM
Silver	ND		0.39	mg/Kg-dry	1	11/14/2012 03:12 PM
Zinc	22		0.78	mg/Kg-dry	1	11/14/2012 03:12 PM
SOLUBLE CATIONS FOR SAR			SW6020A		Prep Date: 11/14/2012	Analyst: RH
Calcium	170		5.3	mg/L-dry	10	11/14/2012 05:20 PM
Magnesium	56		2.1	mg/L-dry	10	11/14/2012 05:20 PM
Sodium	110		2.1	mg/L-dry	10	11/14/2012 05:20 PM
SODIUM ADSORPTION RATIO			USDA H60 METHO		Prep Date: 11/14/2012	Analyst: RH
Sodium Adsorption Ratio	1.8		0.010	none	1	11/15/2012
SEMI-VOLATILE ORGANIC COMPOUNDS			SW8270		Prep Date: 11/13/2012	Analyst: RM
Naphthalene	ND		0.016	mg/Kg-dry	1	11/14/2012 05:20 PM
Surr: 2-Fluorobiphenyl	71.6		12-100	%REC	1	11/14/2012 05:20 PM
Surr: 4-Terphenyl-d14	97.9		25-137	%REC	1	11/14/2012 05:20 PM
Surr: Nitrobenzene-d5	81.8		37-107	%REC	1	11/14/2012 05:20 PM
VOLATILE ORGANIC COMPOUNDS			SW8260		Prep Date: 11/9/2012	Analyst: RS
Benzene	ND		0.032	mg/Kg-dry	1	11/13/2012 03:23 AM
Ethylbenzene	ND		0.032	mg/Kg-dry	1	11/13/2012 03:23 AM
m,p-Xylene	ND		0.063	mg/Kg-dry	1	11/13/2012 03:23 AM
o-Xylene	ND		0.032	mg/Kg-dry	1	11/13/2012 03:23 AM
Toluene	ND		0.032	mg/Kg-dry	1	11/13/2012 03:23 AM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 16-Nov-12

Client: InterTech

Project: BPM Matagorda 044.1211.00 11/7/12

Work Order: 1211284

Sample ID: Pit North

Lab ID: 1211284-10

Collection Date: 11/7/2012 02:20 PM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Xylenes, Total	ND		0.095	mg/Kg-dry	1	11/13/2012 03:23 AM
Surr: 1,2-Dichloroethane-d4	106		70-130	%REC	1	11/13/2012 03:23 AM
Surr: 4-Bromofluorobenzene	93.2		70-130	%REC	1	11/13/2012 03:23 AM
Surr: Dibromofluoromethane	88.4		70-130	%REC	1	11/13/2012 03:23 AM
Surr: Toluene-d8	98.4		70-130	%REC	1	11/13/2012 03:23 AM
ELECTRICAL CONDUCTIVITY (SAR)			USDA H60 METHO		Prep Date: 11/14/2012	Analyst: JB
Electrical Conductivity @ Saturation	2.0		0.025	mmhos/cm @25	5	11/15/2012 02:00 PM
CHROMIUM, TRIVALENT			CALCULATION			Analyst: JJG
Chromium, Trivalent	7.0		0.53	mg/Kg-dry	1	11/16/2012 03:48 PM
CHROMIUM, HEXAVALENT			SW7196A		Prep Date: 11/12/2012	Analyst: MB
Chromium, Hexavalent	ND		0.52	mg/Kg-dry	1	11/14/2012 03:30 PM
MOISTURE			A2540 G			Analyst: LR
Moisture	4.8		0.050	% of sample	1	11/12/2012 06:15 PM
PH			SW9045D			Analyst: KF
pH	8.51			s.u.	1	11/9/2012 08:30 AM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 16-Nov-12

Client: InterTech

Project: BPM Matagorda 044.1211.00 11/7/12

Work Order: 1211284

Sample ID: Pit South

Lab ID: 1211284-11

Collection Date: 11/7/2012 02:30 PM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID			SW8015M		Prep Date: 11/13/2012	Analyst: CW
DRO (C10-C28)	23		4.4	mg/Kg-dry	1	11/14/2012 11:36 AM
<i>Surr: 4-Terphenyl-d14</i>	<i>54.1</i>		<i>39-115</i>	<i>%REC</i>	1	11/14/2012 11:36 AM
GASOLINE RANGE ORGANICS BY GC-FID			SW8015			Analyst: CW
GRO (C6-C10)	ND		2.7	mg/Kg-dry	50	11/12/2012 09:47 PM
<i>Surr: Toluene-d8</i>	<i>106</i>		<i>50-150</i>	<i>%REC</i>	50	11/12/2012 09:47 PM
MERCURY BY CVAA			SW7471		Prep Date: 11/15/2012	Analyst: LR
Mercury	0.065		0.017	mg/Kg-dry	1	11/15/2012 01:41 PM
METALS BY ICP-MS			SW6020A		Prep Date: 11/14/2012	Analyst: CES
Arsenic	2.6		0.37	mg/Kg-dry	1	11/15/2012 01:57 AM
Barium	350		3.7	mg/Kg-dry	10	11/15/2012 03:54 PM
Cadmium	ND		0.15	mg/Kg-dry	1	11/15/2012 01:57 AM
Chromium	6.0		0.37	mg/Kg-dry	1	11/15/2012 01:57 AM
Copper	4.9		0.37	mg/Kg-dry	1	11/15/2012 01:57 AM
Lead	9.8		0.37	mg/Kg-dry	1	11/15/2012 01:57 AM
Nickel	4.5		0.37	mg/Kg-dry	1	11/15/2012 01:57 AM
Selenium	0.72		0.37	mg/Kg-dry	1	11/15/2012 01:57 AM
Silver	ND		0.37	mg/Kg-dry	1	11/15/2012 01:57 AM
Zinc	23		0.74	mg/Kg-dry	1	11/15/2012 01:57 AM
SOLUBLE CATIONS FOR SAR			SW6020A		Prep Date: 11/14/2012	Analyst: RH
Calcium	52		5.5	mg/L-dry	10	11/14/2012 05:25 PM
Magnesium	17		2.2	mg/L-dry	10	11/14/2012 05:25 PM
Sodium	190		2.2	mg/L-dry	10	11/14/2012 05:25 PM
SODIUM ADSORPTION RATIO			USDA H60 METHO		Prep Date: 11/14/2012	Analyst: RH
Sodium Adsorption Ratio	5.5		0.010	none	1	11/15/2012
SEMI-VOLATILE ORGANIC COMPOUNDS			SW8270		Prep Date: 11/13/2012	Analyst: RM
Naphthalene	ND		0.016	mg/Kg-dry	1	11/14/2012 05:45 PM
<i>Surr: 2-Fluorobiphenyl</i>	<i>64.0</i>		<i>12-100</i>	<i>%REC</i>	1	11/14/2012 05:45 PM
<i>Surr: 4-Terphenyl-d14</i>	<i>75.9</i>		<i>25-137</i>	<i>%REC</i>	1	11/14/2012 05:45 PM
<i>Surr: Nitrobenzene-d5</i>	<i>73.6</i>		<i>37-107</i>	<i>%REC</i>	1	11/14/2012 05:45 PM
VOLATILE ORGANIC COMPOUNDS			SW8260		Prep Date: 11/10/2012	Analyst: RS
Benzene	ND		0.033	mg/Kg-dry	1	11/13/2012 03:48 AM
Ethylbenzene	ND		0.033	mg/Kg-dry	1	11/13/2012 03:48 AM
m,p-Xylene	ND		0.065	mg/Kg-dry	1	11/13/2012 03:48 AM
o-Xylene	ND		0.033	mg/Kg-dry	1	11/13/2012 03:48 AM
Toluene	ND		0.033	mg/Kg-dry	1	11/13/2012 03:48 AM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 16-Nov-12

Client: InterTech

Project: BPM Matagorda 044.1211.00 11/7/12

Work Order: 1211284

Sample ID: Pit South

Lab ID: 1211284-11

Collection Date: 11/7/2012 02:30 PM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Xylenes, Total	ND		0.098	mg/Kg-dry	1	11/13/2012 03:48 AM
Surr: 1,2-Dichloroethane-d4	106		70-130	%REC	1	11/13/2012 03:48 AM
Surr: 4-Bromofluorobenzene	92.6		70-130	%REC	1	11/13/2012 03:48 AM
Surr: Dibromofluoromethane	88.8		70-130	%REC	1	11/13/2012 03:48 AM
Surr: Toluene-d8	98.0		70-130	%REC	1	11/13/2012 03:48 AM
ELECTRICAL CONDUCTIVITY (SAR)			USDA H60 METHO		Prep Date: 11/14/2012	Analyst: JB
Electrical Conductivity @ Saturation	1.3		0.050	mmhos/cm	@25 10	11/15/2012 02:00 PM
CHROMIUM, TRIVALENT			CALCULATION			Analyst: JJG
Chromium, Trivalent	6.0		0.55	mg/Kg-dry	1	11/15/2012 04:05 PM
CHROMIUM, HEXAVALENT			SW7196A		Prep Date: 11/12/2012	Analyst: MB
Chromium, Hexavalent	ND		0.55	mg/Kg-dry	1	11/14/2012 03:30 PM
MOISTURE			A2540 G			Analyst: LR
Moisture	8.3		0.050	% of sample	1	11/12/2012 06:15 PM
PH			SW9045D			Analyst: KF
pH	8.96			s.u.	1	11/9/2012 08:30 AM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 16-Nov-12

Client: InterTech

Project: BPM Matagorda 044.1211.00 11/7/12

Work Order: 1211284

Sample ID: Pit East

Lab ID: 1211284-12

Collection Date: 11/6/2012 02:30 PM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID			SW8015M		Prep Date: 11/13/2012	Analyst: CW
DRO (C10-C28)	46		4.8	mg/Kg-dry	1	11/14/2012 12:03 PM
<i>Surr: 4-Terphenyl-d14</i>	58.8		39-115	%REC	1	11/14/2012 12:03 PM
GASOLINE RANGE ORGANICS BY GC-FID			SW8015			Analyst: CW
GRO (C6-C10)	ND		2.9	mg/Kg-dry	50	11/12/2012 10:12 PM
<i>Surr: Toluene-d8</i>	108		50-150	%REC	50	11/12/2012 10:12 PM
MERCURY BY CVAA			SW7471		Prep Date: 11/15/2012	Analyst: LR
Mercury	0.060		0.018	mg/Kg-dry	1	11/15/2012 01:43 PM
METALS BY ICP-MS			SW6020A		Prep Date: 11/14/2012	Analyst: CES
Arsenic	4.5		0.38	mg/Kg-dry	1	11/15/2012 02:03 AM
Barium	990		3.8	mg/Kg-dry	10	11/15/2012 04:30 PM
Cadmium	0.29		0.15	mg/Kg-dry	1	11/15/2012 02:03 AM
Chromium	9.9		0.38	mg/Kg-dry	1	11/15/2012 02:03 AM
Copper	11		0.38	mg/Kg-dry	1	11/15/2012 02:03 AM
Lead	150		3.8	mg/Kg-dry	10	11/15/2012 04:30 PM
Nickel	11		0.38	mg/Kg-dry	1	11/15/2012 02:03 AM
Selenium	1.0		0.38	mg/Kg-dry	1	11/15/2012 02:03 AM
Silver	ND		0.38	mg/Kg-dry	1	11/15/2012 02:03 AM
Zinc	56		0.77	mg/Kg-dry	1	11/15/2012 02:03 AM
SOLUBLE CATIONS FOR SAR			SW6020A		Prep Date: 11/14/2012	Analyst: RH
Calcium	280		5.8	mg/L-dry	10	11/14/2012 05:30 PM
Magnesium	55		2.3	mg/L-dry	10	11/14/2012 05:30 PM
Sodium	12		2.3	mg/L-dry	10	11/14/2012 05:30 PM
SODIUM ADSORPTION RATIO			USDA H60 METHO		Prep Date: 11/14/2012	Analyst: RH
Sodium Adsorption Ratio	0.16		0.010	none	1	11/15/2012
SEMI-VOLATILE ORGANIC COMPOUNDS			SW8270		Prep Date: 11/13/2012	Analyst: RM
Naphthalene	ND		0.017	mg/Kg-dry	1	11/14/2012 06:10 PM
<i>Surr: 2-Fluorobiphenyl</i>	62.0		12-100	%REC	1	11/14/2012 06:10 PM
<i>Surr: 4-Terphenyl-d14</i>	82.8		25-137	%REC	1	11/14/2012 06:10 PM
<i>Surr: Nitrobenzene-d5</i>	70.0		37-107	%REC	1	11/14/2012 06:10 PM
VOLATILE ORGANIC COMPOUNDS			SW8260		Prep Date: 11/10/2012	Analyst: RS
Benzene	ND		0.035	mg/Kg-dry	1	11/13/2012 04:14 AM
Ethylbenzene	ND		0.035	mg/Kg-dry	1	11/13/2012 04:14 AM
m,p-Xylene	ND		0.070	mg/Kg-dry	1	11/13/2012 04:14 AM
o-Xylene	ND		0.035	mg/Kg-dry	1	11/13/2012 04:14 AM
Toluene	ND		0.035	mg/Kg-dry	1	11/13/2012 04:14 AM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 16-Nov-12

Client: InterTech

Project: BPM Matagorda 044.1211.00 11/7/12

Work Order: 1211284

Sample ID: Pit East

Lab ID: 1211284-12

Collection Date: 11/6/2012 02:30 PM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Xylenes, Total	ND		0.10	mg/Kg-dry	1	11/13/2012 04:14 AM
Surr: 1,2-Dichloroethane-d4	104		70-130	%REC	1	11/13/2012 04:14 AM
Surr: 4-Bromofluorobenzene	92.5		70-130	%REC	1	11/13/2012 04:14 AM
Surr: Dibromofluoromethane	87.5		70-130	%REC	1	11/13/2012 04:14 AM
Surr: Toluene-d8	97.0		70-130	%REC	1	11/13/2012 04:14 AM
ELECTRICAL CONDUCTIVITY (SAR)			USDA H60 METHO	Prep Date: 11/14/2012	Analyst: JB	
Electrical Conductivity @ Saturation	2.1		0.050	mmhos/cm @25	10	11/15/2012 02:00 PM
CHROMIUM, TRIVALENT			CALCULATION		Analyst: JJG	
Chromium, Trivalent	9.9		0.58	mg/Kg-dry	1	11/15/2012 04:05 PM
CHROMIUM, HEXAVALENT			SW7196A	Prep Date: 11/12/2012	Analyst: MB	
Chromium, Hexavalent	ND		0.58	mg/Kg-dry	1	11/14/2012 03:30 PM
MOISTURE			A2540 G		Analyst: LR	
Moisture	14		0.050	% of sample	1	11/12/2012 06:15 PM
PH			SW9045D		Analyst: KF	
pH	8.39			s.u.	1	11/9/2012 08:30 AM

Note: See Qualifiers page for a list of qualifiers and their definitions.

Client: InterTech

QC BATCH REPORT

Work Order: 1211284

Project: BPM Matagorda 044.1211.00 11/7/12

Batch ID: 44701

Instrument ID GC8

Method: SW8015M

MBLK		Sample ID: DBLKS1-44701-44701				Units: mg/Kg		Analysis Date: 11/14/2012 05:46 AM			
Client ID:		Run ID: GC8_121113B				SeqNo: 2139385		Prep Date: 11/13/2012		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
DRO (C10-C28)	ND	4.2									
<i>Surr: 4-Terphenyl-d14</i>	1.215	0	1.667	0	72.9	39-115	0				

LCS		Sample ID: DLCSS1-44701-44701				Units: mg/Kg		Analysis Date: 11/14/2012 06:13 AM			
Client ID:		Run ID: GC8_121113B				SeqNo: 2139386		Prep Date: 11/13/2012		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
DRO (C10-C28)	108	4.2	166.7	0	64.8	49-124	0				
<i>Surr: 4-Terphenyl-d14</i>	1.536	0	1.667	0	92.2	39-115	0				

MS		Sample ID: 1211284-10B MS				Units: mg/Kg		Analysis Date: 11/14/2012 06:40 AM			
Client ID: Pit North		Run ID: GC8_121113B				SeqNo: 2139387		Prep Date: 11/13/2012		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
DRO (C10-C28)	198.5	7.9	315.5	0	62.9	49-130	0				
<i>Surr: 4-Terphenyl-d14</i>	2.831	0	3.155	0	89.7	39-115	0				

MSD		Sample ID: 1211284-10B MSD				Units: mg/Kg		Analysis Date: 11/14/2012 07:07 AM			
Client ID: Pit North		Run ID: GC8_121113B				SeqNo: 2139388		Prep Date: 11/13/2012		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
DRO (C10-C28)	208.7	8.2	329.1	0	63.4	49-130	198.5	5.04	30		
<i>Surr: 4-Terphenyl-d14</i>	2.994	0	3.291	0	91	39-115	2.831	5.61	30		

The following samples were analyzed in this batch:

1211284-06B	1211284-07B	1211284-08B
1211284-09B	1211284-10B	1211284-11B
1211284-12B		

Client: InterTech
 Work Order: 1211284
 Project: BPM Matagorda 044.1211.00 11/7/12

QC BATCH REPORT

Batch ID: **R112449** Instrument ID **GC10** Method: **SW8015**

MBLK		Sample ID: GBLK1-121112-R112449				Units: µg/L		Analysis Date: 11/12/2012 02:20 PM		
Client ID:		Run ID: GC10_121112A				SeqNo: 2137267		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	ND	200								
<i>Surr: Toluene-d8</i>	117.9	0	100	0	118	70-130	0			

LCS		Sample ID: GLCS1-121112-R112449				Units: µg/L		Analysis Date: 11/12/2012 11:51 PM		
Client ID:		Run ID: GC10_121112A				SeqNo: 2137268		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	9386	200	10000	0	93.9	70-130	0			
<i>Surr: Toluene-d8</i>	102.6	0	100	0	103	70-130	0			

MS		Sample ID: 1211283-01A MS				Units: µg/Kg		Analysis Date: 11/12/2012 11:01 PM		
Client ID:		Run ID: GC10_121112A				SeqNo: 2137290		Prep Date:		DF: 50
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	549200	2,500	500000	16860	106	70-130	0			
<i>Surr: Toluene-d8</i>	5117	0	5000	0	102	50-150	0			

MSD		Sample ID: 1211283-01A MSD				Units: µg/Kg		Analysis Date: 11/12/2012 11:26 PM		
Client ID:		Run ID: GC10_121112A				SeqNo: 2137291		Prep Date:		DF: 50
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	535500	2,500	500000	16860	104	70-130	549200	2.52	30	
<i>Surr: Toluene-d8</i>	5336	0	5000	0	107	50-150	5117	4.19	30	

The following samples were analyzed in this batch:

1211284-06A	1211284-07A	1211284-08A
1211284-09A	1211284-10A	1211284-11A
1211284-12A		

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: InterTech
 Work Order: 1211284
 Project: BPM Matagorda 044.1211.00 11/7/12

QC BATCH REPORT

Batch ID: **44736** Instrument ID **HG1** Method: **SW7471**

MBLK		Sample ID: MBLK-44736-44736				Units: mg/Kg		Analysis Date: 11/14/2012 02:05 PM		
Client ID:		Run ID: HG1_121114A		SeqNo: 2139413		Prep Date: 11/14/2012		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.006667	0.020								J

LCS		Sample ID: LCS-44736-44736				Units: mg/Kg		Analysis Date: 11/14/2012 02:07 PM		
Client ID:		Run ID: HG1_121114A		SeqNo: 2139414		Prep Date: 11/14/2012		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.1625	0.020	0.1665	0	97.6	80-120	0			

MS		Sample ID: 1211266-09BMS				Units: mg/Kg		Analysis Date: 11/14/2012 02:20 PM		
Client ID:		Run ID: HG1_121114A		SeqNo: 2139420		Prep Date: 11/14/2012		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.1599	0.018	0.1493	0.02557	89.9	75-125	0			

MS		Sample ID: 1211266-16BMS				Units: mg/Kg		Analysis Date: 11/14/2012 03:08 PM		
Client ID:		Run ID: HG1_121114A		SeqNo: 2139441		Prep Date: 11/14/2012		DF: 2		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.3223	0.035	0.1439	0.1004	154	75-125	0			S

MSD		Sample ID: 1211266-09BMSD				Units: mg/Kg		Analysis Date: 11/14/2012 02:22 PM		
Client ID:		Run ID: HG1_121114A		SeqNo: 2139421		Prep Date: 11/14/2012		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.1798	0.018	0.1537	0.02557	100	75-125	0.1599	11.8	35	

MSD		Sample ID: 1211266-16BMSD				Units: mg/Kg		Analysis Date: 11/14/2012 03:10 PM		
Client ID:		Run ID: HG1_121114A		SeqNo: 2139442		Prep Date: 11/14/2012		DF: 2		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.3541	0.036	0.1509	0.1004	168	75-125	0.3223	9.39	35	S

The following samples were analyzed in this batch:

1211284-06B	1211284-07B	1211284-08B
1211284-09B		

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: InterTech
 Work Order: 1211284
 Project: BPM Matagorda 044.1211.00 11/7/12

QC BATCH REPORT

Batch ID: 44757 Instrument ID HG1 Method: SW7471

MBLK		Sample ID: MBLK-44757-44757				Units: mg/Kg			Analysis Date: 11/15/2012 01:35 PM		
Client ID:		Run ID: HG1_121115A				SeqNo: 2140591			Prep Date: 11/15/2012		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Mercury	0.005583	0.020								J	

LCS		Sample ID: LCS-44757-44757				Units: mg/Kg			Analysis Date: 11/15/2012 01:37 PM		
Client ID:		Run ID: HG1_121115A				SeqNo: 2140592			Prep Date: 11/15/2012		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Mercury	0.1772	0.020	0.1665		0	106	80-120	0			

MS		Sample ID: 1211372-06AMS				Units: mg/Kg			Analysis Date: 11/15/2012 02:18 PM		
Client ID:		Run ID: HG1_121115A				SeqNo: 2140612			Prep Date: 11/15/2012		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Mercury	0.1423	0.016	0.1325	0.002442	106	75-125		0			

MSD		Sample ID: 1211372-06AMSD				Units: mg/Kg			Analysis Date: 11/15/2012 02:20 PM		
Client ID:		Run ID: HG1_121115A				SeqNo: 2140613			Prep Date: 11/15/2012		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Mercury	0.1314	0.015	0.1253	0.002442	103	75-125	0.1423	7.99	35		

The following samples were analyzed in this batch: 1211284-10B 1211284-11B 1211284-12B

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: InterTech
 Work Order: 1211284
 Project: BPM Matagorda 044.1211.00 11/7/12

QC BATCH REPORT

Batch ID: **44720** Instrument ID **ICPMS2** Method: **SW6020A (Dissolve)**

DUP		Sample ID: 1211286-01C DUP				Units: mg/L		Analysis Date: 11/14/2012 05:35 PM		
Client ID:		Run ID: ICPMS2_121114A			SeqNo: 2139767		Prep Date: 11/14/2012		DF: 10	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Calcium	314.4	5.0	0	0	0	0-0	0			
Magnesium	118.7	2.0	0	0	0	0-0	0			
Sodium	1369	2.0	0	0	0	0-0	0			

DUP		Sample ID: 1211286-01C DUP				Units: none		Analysis Date: 11/15/2012		
Client ID:		Run ID: SAR_121115A			SeqNo: 2140407		Prep Date: 11/14/2012		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Sodium Adsorption Ratio	16.69	0.010	0	0	0		16.99	1.75	50	

The following samples were analyzed in this batch:

1211284-01C	1211284-02C	1211284-03C
1211284-04C	1211284-05C	1211284-06C
1211284-07C	1211284-08C	1211284-09C
1211284-10C	1211284-11C	1211284-12C

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: InterTech
 Work Order: 1211284
 Project: BPM Matagorda 044.1211.00 11/7/12

QC BATCH REPORT

Batch ID: 44739 Instrument ID ICPMS1 Method: SW6020A

MBLK		Sample ID: MBLK-44739-44739				Units: mg/Kg		Analysis Date: 11/14/2012 06:42 PM			
Client ID:		Run ID: ICPMS1_121114A			SeqNo: 2139915		Prep Date: 11/14/2012		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Arsenic	ND	0.25									
Barium	ND	0.25									
Cadmium	ND	0.10									
Chromium	0.009595	0.25								J	
Copper	0.06465	0.25								J	
Lead	ND	0.25									
Nickel	0.003487	0.25								J	
Selenium	ND	0.25									
Silver	ND	0.25									
Zinc	ND	0.50									

LCS		Sample ID: LCS-44739-44739				Units: mg/Kg		Analysis Date: 11/14/2012 06:48 PM			
Client ID:		Run ID: ICPMS1_121114A			SeqNo: 2139916		Prep Date: 11/14/2012		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Arsenic	4.417	0.25	5	0	88.3	80-120	0				
Barium	4.636	0.25	5	0	92.7	80-120	0				
Cadmium	4.936	0.10	5	0	98.7	80-120	0				
Chromium	4.702	0.25	5	0	94	80-120	0				
Copper	4.615	0.25	5	0	92.3	80-120	0				
Lead	4.888	0.25	5	0	97.8	80-120	0				
Nickel	4.59	0.25	5	0	91.8	80-120	0				
Selenium	4.268	0.25	5	0	85.4	80-120	0				
Silver	4.648	0.25	5	0	93	80-120	0				
Zinc	4.473	0.50	5	0	89.5	80-120	0				

MS		Sample ID: 1211266-09BMS				Units: mg/Kg		Analysis Date: 11/14/2012 07:17 PM			
Client ID:		Run ID: ICPMS1_121114A			SeqNo: 2139921		Prep Date: 11/14/2012		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Arsenic	7.012	0.36	7.205	0.1993	94.6	75-125	0				
Barium	33.35	0.36	7.205	25.12	114	75-125	0				
Cadmium	7.334	0.14	7.205	0.1514	99.7	75-125	0				
Chromium	7.947	0.36	7.205	1.1	95	75-125	0				
Copper	8.112	0.36	7.205	1.825	87.3	75-125	0				
Lead	13.9	0.36	7.205	6.169	107	75-125	0				
Nickel	7.55	0.36	7.205	1.24	87.6	75-125	0				
Selenium	6.573	0.36	7.205	0.1525	89.1	75-125	0				
Silver	5.866	0.36	7.205	0.007817	81.3	75-125	0				
Zinc	35.49	0.72	7.205	27.97	104	75-125	0				

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: InterTech
 Work Order: 1211284
 Project: BPM Matagorda 044.1211.00 11/7/12

QC BATCH REPORT

Batch ID: 44739 Instrument ID ICPMS1 Method: SW6020A

MS		Sample ID: 1211266-16BMS				Units: mg/Kg		Analysis Date: 11/15/2012 05:45 PM		
Client ID:		Run ID: ICPMS1_121115A				SeqNo: 2141294		Prep Date: 11/14/2012		DF: 5
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	10.26	1.6	6.545	3.341	106	75-125	0			
Barium	68.16	1.6	6.545	49.9	279	75-125	0			SO
Cadmium	7.52	0.65	6.545	1.175	96.9	75-125	0			
Chromium	8.786	1.6	6.545	2.551	95.3	75-125	0			
Copper	12.17	1.6	6.545	6.203	91.2	75-125	0			
Lead	93	1.6	6.545	59.21	516	75-125	0			SO
Nickel	7.637	1.6	6.545	2.109	84.5	75-125	0			
Selenium	6.525	1.6	6.545	0.2953	95.2	75-125	0			
Silver	5.566	1.6	6.545	0.03149	84.6	75-125	0			
Zinc	276	3.3	6.545	224.2	792	75-125	0			SO

MSD		Sample ID: 1211266-09BMSD				Units: mg/Kg		Analysis Date: 11/14/2012 07:22 PM		
Client ID:		Run ID: ICPMS1_121114A				SeqNo: 2139922		Prep Date: 11/14/2012		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	7.167	0.38	7.634	0.1993	91.3	75-125	7.012	2.2	25	
Barium	33.56	0.38	7.634	25.12	111	75-125	33.35	0.642	25	
Cadmium	7.756	0.15	7.634	0.1514	99.6	75-125	7.334	5.59	25	
Chromium	8.26	0.38	7.634	1.1	93.8	75-125	7.947	3.86	25	
Copper	8.237	0.38	7.634	1.825	84	75-125	8.112	1.52	25	
Lead	13.99	0.38	7.634	6.169	102	75-125	13.9	0.627	25	
Nickel	7.824	0.38	7.634	1.24	86.2	75-125	7.55	3.56	25	
Selenium	6.747	0.38	7.634	0.1525	86.4	75-125	6.573	2.61	25	
Silver	6.11	0.38	7.634	0.007817	79.9	75-125	5.866	4.07	25	
Zinc	35.01	0.76	7.634	27.97	92.2	75-125	35.49	1.37	25	

MSD		Sample ID: 1211266-16BMSD				Units: mg/Kg		Analysis Date: 11/15/2012 05:50 PM		
Client ID:		Run ID: ICPMS1_121115A				SeqNo: 2141295		Prep Date: 11/14/2012		DF: 5
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	10.89	1.7	6.831	3.341	111	75-125	10.26	5.95	25	
Barium	130.8	1.7	6.831	49.9	1180	75-125	68.16	62.9	25	SRO
Cadmium	8.371	0.68	6.831	1.175	105	75-125	7.52	10.7	25	
Chromium	10.37	1.7	6.831	2.551	114	75-125	8.786	16.5	25	
Copper	17.41	1.7	6.831	6.203	164	75-125	12.17	35.4	25	SR
Lead	552.6	1.7	6.831	59.21	7220	75-125	93	142	25	SRO
Nickel	9.443	1.7	6.831	2.109	107	75-125	7.637	21.1	25	
Selenium	6.445	1.7	6.831	0.2953	90	75-125	6.525	1.24	25	
Silver	5.765	1.7	6.831	0.03149	83.9	75-125	5.566	3.51	25	
Zinc	340.8	3.4	6.831	224.2	1710	75-125	276	21	25	SO

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: InterTech
Work Order: 1211284
Project: BPM Matagorda 044.1211.00 11/7/12

QC BATCH REPORT

Batch ID: **44739** Instrument ID **ICPMS1** Method: **SW6020A**

The following samples were analyzed in this batch:

1211284-01B	1211284-02B	1211284-03B
1211284-04B	1211284-05B	1211284-06B

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: InterTech
 Work Order: 1211284
 Project: BPM Matagorda 044.1211.00 11/7/12

QC BATCH REPORT

Batch ID: 44741 Instrument ID ICPMS1 Method: SW6020A

MBLK		Sample ID: MBLK-44741-44741				Units: mg/Kg		Analysis Date: 11/14/2012 03:00 PM		
Client ID:		Run ID: ICPMS1_121114A			SeqNo: 2139487		Prep Date: 11/14/2012		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	ND	0.25								
Barium	ND	0.25								
Cadmium	ND	0.10								
Chromium	ND	0.25								
Copper	ND	0.25								
Lead	ND	0.25								
Nickel	ND	0.25								
Selenium	ND	0.25								
Silver	ND	0.25								
Zinc	ND	0.50								

LCS		Sample ID: LCS-44741-44741				Units: mg/Kg		Analysis Date: 11/14/2012 03:06 PM		
Client ID:		Run ID: ICPMS1_121114A			SeqNo: 2139488		Prep Date: 11/14/2012		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	4.2	0.25	5	0	84	80-120	0			
Barium	4.42	0.25	5	0	88.4	80-120	0			
Cadmium	4.386	0.10	5	0	87.7	80-120	0			
Chromium	4.614	0.25	5	0	92.3	80-120	0			
Copper	4.432	0.25	5	0	88.6	80-120	0			
Lead	4.73	0.25	5	0	94.6	80-120	0			
Nickel	4.366	0.25	5	0	87.3	80-120	0			
Selenium	4.213	0.25	5	0	84.3	80-120	0			
Silver	4.405	0.25	5	0	88.1	80-120	0			
Zinc	4.405	0.50	5	0	88.1	80-120	0			

MS		Sample ID: 1211284-10BMS				Units: mg/Kg		Analysis Date: 11/14/2012 03:18 PM		
Client ID: Pit North		Run ID: ICPMS1_121114A			SeqNo: 2139490		Prep Date: 11/14/2012		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	8.295	0.38	7.576	2.359	78.4	75-125	0			
Barium	75.98	0.38	7.576	73.57	31.8	75-125	0			SO
Cadmium	6.639	0.15	7.576	0.1913	85.1	75-125	0			
Chromium	14.96	0.38	7.576	6.656	110	75-125	0			
Copper	9.939	0.38	7.576	4.327	74.1	75-125	0			S
Lead	13.76	0.38	7.576	6.4	97.1	75-125	0			
Nickel	14.36	0.38	7.576	9.631	62.4	75-125	0			S
Selenium	6.65	0.38	7.576	0.6478	79.2	75-125	0			
Silver	5.997	0.38	7.576	0.0261	78.8	75-125	0			
Zinc	27.02	0.76	7.576	20.5	86.1	75-125	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: InterTech
Work Order: 1211284
Project: BPM Matagorda 044.1211.00 11/7/12

QC BATCH REPORT

Batch ID: **44741** Instrument ID **ICPMS1** Method: **SW6020A**

MSD		Sample ID: 1211284-10BMSD				Units: mg/Kg		Analysis Date: 11/14/2012 03:24 PM			
Client ID: Pit North		Run ID: ICPMS1_121114A				SeqNo: 2139491		Prep Date: 11/14/2012		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Arsenic	7.687	0.36	7.205	2.359	74	75-125	8.295	7.61	25	S	
Barium	80.91	0.36	7.205	73.57	102	75-125	75.98	6.28	25	O	
Cadmium	6.134	0.14	7.205	0.1913	82.5	75-125	6.639	7.9	25		
Chromium	14.19	0.36	7.205	6.656	105	75-125	14.96	5.28	25		
Copper	9.705	0.36	7.205	4.327	74.6	75-125	9.939	2.39	25	S	
Lead	12.94	0.36	7.205	6.4	90.8	75-125	13.76	6.13	25		
Nickel	13.77	0.36	7.205	9.631	57.4	75-125	14.36	4.18	25	S	
Selenium	6.185	0.36	7.205	0.6478	76.9	75-125	6.65	7.24	25		
Silver	5.58	0.36	7.205	0.0261	77.1	75-125	5.997	7.2	25		
Zinc	25.32	0.72	7.205	20.5	66.8	75-125	27.02	6.52	25	S	

The following samples were analyzed in this batch:

1211284-07B	1211284-08B	1211284-09B
1211284-10B	1211284-11B	1211284-12B

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: InterTech
 Work Order: 1211284
 Project: BPM Matagorda 044.1211.00 11/7/12

QC BATCH REPORT

Batch ID: **44700** Instrument ID **SVMS4** Method: **SW8270**

MBLK		Sample ID: SBLKS1-44700-44700				Units: µg/Kg		Analysis Date: 11/14/2012 11:07 AM			
Client ID:		Run ID: SVMS4_121114A				SeqNo: 2139095		Prep Date: 11/13/2012		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Acenaphthene	ND	30									
Anthracene	ND	30									
Benzo(a)anthracene	ND	30									
Benzo(a)pyrene	ND	30									
Benzo(b)fluoranthene	ND	30									
Benzo(k)fluoranthene	ND	30									
Chrysene	ND	30									
Dibenzo(a,h)anthracene	ND	30									
Fluoranthene	ND	30									
Fluorene	ND	30									
Indeno(1,2,3-cd)pyrene	ND	30									
Naphthalene	ND	30									
Pyrene	ND	30									
<i>Surr: 2-Fluorobiphenyl</i>	1149	0	1667	0	68.9	12-100	0				
<i>Surr: 4-Terphenyl-d14</i>	1929	0	1667	0	116	25-137	0				
<i>Surr: Nitrobenzene-d5</i>	1371	0	1667	0	82.3	37-107	0				

LCS		Sample ID: SLCSS1-44700-44700				Units: µg/Kg		Analysis Date: 11/14/2012 09:33 AM			
Client ID:		Run ID: SVMS4_121114A				SeqNo: 2139088		Prep Date: 11/13/2012		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Acenaphthene	512.3	30	666.7	0	76.8	45-110	0				
Anthracene	521	30	666.7	0	78.1	55-105	0				
Benzo(a)anthracene	567.3	30	666.7	0	85.1	50-110	0				
Benzo(a)pyrene	630.7	30	666.7	0	94.6	50-110	0				
Benzo(b)fluoranthene	656.7	30	666.7	0	98.5	45-115	0				
Benzo(k)fluoranthene	648.3	30	666.7	0	97.2	45-115	0				
Chrysene	600	30	666.7	0	90	55-110	0				
Dibenzo(a,h)anthracene	590	30	666.7	0	88.5	40-125	0				
Fluoranthene	553	30	666.7	0	82.9	55-115	0				
Fluorene	477	30	666.7	0	71.5	50-110	0				
Indeno(1,2,3-cd)pyrene	657.3	30	666.7	0	98.6	40-120	0				
Naphthalene	498.7	30	666.7	0	74.8	40-105	0				
Pyrene	599.3	30	666.7	0	89.9	45-125	0				
<i>Surr: 2-Fluorobiphenyl</i>	1160	0	1667	0	69.6	12-100	0				
<i>Surr: 4-Terphenyl-d14</i>	1928	0	1667	0	116	25-137	0				
<i>Surr: Nitrobenzene-d5</i>	1320	0	1667	0	79.2	37-107	0				

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: InterTech
 Work Order: 1211284
 Project: BPM Matagorda 044.1211.00 11/7/12

QC BATCH REPORT

Batch ID: 44700 Instrument ID SVMS4 Method: SW8270

MS				Sample ID: 1211266-09B MS				Units: µg/Kg		Analysis Date: 11/14/2012 01:25 PM			
Client ID:				Run ID: SVMS4_121114A				SeqNo: 2139831		Prep Date: 11/13/2012		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual			
Acenaphthene	962.1	57	1273	0	75.5	45-110	0						
Anthracene	880.6	57	1273	0	69.1	55-105	0						
Benzo(a)anthracene	1011	57	1273	0	79.4	50-110	0						
Benzo(a)pyrene	1038	57	1273	0	81.5	50-110	0						
Benzo(b)fluoranthene	1160	57	1273	0	91.1	45-115	0						
Benzo(k)fluoranthene	1108	57	1273	0	87	45-115	0						
Chrysene	1008	57	1273	0	79.1	55-110	0						
Dibenzo(a,h)anthracene	964	57	1273	0	75.7	40-125	0						
Fluoranthene	888.8	57	1273	0	69.8	55-115	0						
Fluorene	910.5	57	1273	0	71.5	50-110	0						
Indeno(1,2,3-cd)pyrene	1044	57	1273	0	81.9	40-120	0						
Naphthalene	907.9	57	1273	0	71.3	40-105	0						
Pyrene	964.6	57	1273	0	75.7	45-125	0						
Surr: 2-Fluorobiphenyl	2184	0	3184	0	68.6	12-100	0						
Surr: 4-Terphenyl-d14	3136	0	3184	0	98.5	25-137	0						
Surr: Nitrobenzene-d5	2349	0	3184	0	73.8	37-107	0						

MSD				Sample ID: 1211266-09B MSD				Units: µg/Kg		Analysis Date: 11/14/2012 01:56 PM			
Client ID:				Run ID: SVMS4_121114A				SeqNo: 2139834		Prep Date: 11/13/2012		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual			
Acenaphthene	1042	59	1313	0	79.4	45-110	962.1	8	30				
Anthracene	983.2	59	1313	0	74.9	55-105	880.6	11	30				
Benzo(a)anthracene	1103	59	1313	0	84	50-110	1011	8.72	30				
Benzo(a)pyrene	1164	59	1313	0	88.7	50-110	1038	11.4	30				
Benzo(b)fluoranthene	1256	59	1313	0	95.7	45-115	1160	7.96	30				
Benzo(k)fluoranthene	1299	59	1313	0	98.9	45-115	1108	15.8	30				
Chrysene	1154	59	1313	0	87.9	55-110	1008	13.5	30				
Dibenzo(a,h)anthracene	1020	59	1313	0	77.7	40-125	964	5.64	30				
Fluoranthene	1025	59	1313	0	78.1	55-115	888.8	14.2	30				
Fluorene	978.6	59	1313	0	74.5	50-110	910.5	7.21	30				
Indeno(1,2,3-cd)pyrene	1100	59	1313	0	83.8	40-120	1044	5.27	30				
Naphthalene	1011	59	1313	0	77	40-105	907.9	10.8	30				
Pyrene	991.7	59	1313	0	75.5	45-125	964.6	2.77	30				
Surr: 2-Fluorobiphenyl	2392	0	3282	0	72.9	12-100	2184	9.11	40				
Surr: 4-Terphenyl-d14	3356	0	3282	0	102	25-137	3136	6.76	40				
Surr: Nitrobenzene-d5	2577	0	3282	0	78.5	37-107	2349	9.26	40				

The following samples were analyzed in this batch:

1211284-06B	1211284-07B	1211284-08B
1211284-09B	1211284-10B	1211284-11B
1211284-12B		

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: InterTech
 Work Order: 1211284
 Project: BPM Matagorda 044.1211.00 11/7/12

QC BATCH REPORT

Batch ID: 44647 Instrument ID VMS9 Method: SW8260

MBLK		Sample ID: MBLK-44647-44647			Units: µg/Kg			Analysis Date: 11/9/2012 11:11 PM		
Client ID:		Run ID: VMS9_121109A			SeqNo: 2135948		Prep Date: 11/9/2012		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	ND	30								
Ethylbenzene	ND	30								
m,p-Xylene	ND	60								
o-Xylene	ND	30								
Toluene	ND	30								
Xylenes, Total	ND	90								
Surr: 1,2-Dichloroethane-d4	998.5	0	1000	0	99.8	70-130	0			
Surr: 4-Bromofluorobenzene	945.5	0	1000	0	94.6	70-130	0			
Surr: Dibromofluoromethane	940	0	1000	0	94	70-130	0			
Surr: Toluene-d8	1011	0	1000	0	101	70-130	0			

MBLK		Sample ID: MBLK-44647-44647			Units: µg/Kg			Analysis Date: 11/10/2012 10:38 PM		
Client ID:		Run ID: VMS9_121110A			SeqNo: 2136639		Prep Date: 11/9/2012		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	ND	30								
Ethylbenzene	ND	30								
m,p-Xylene	ND	60								
o-Xylene	ND	30								
Toluene	ND	30								
Xylenes, Total	ND	90								
Surr: 1,2-Dichloroethane-d4	1000	0	1000	0	100	70-130	0			
Surr: 4-Bromofluorobenzene	943	0	1000	0	94.3	70-130	0			
Surr: Dibromofluoromethane	923.5	0	1000	0	92.4	70-130	0			
Surr: Toluene-d8	974	0	1000	0	97.4	70-130	0			

MBLK		Sample ID: MBLK-44647-44647			Units: µg/Kg			Analysis Date: 11/12/2012 12:52 PM		
Client ID:		Run ID: VMS9_121112A			SeqNo: 2137462		Prep Date: 11/9/2012		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	ND	30								
Ethylbenzene	ND	30								
m,p-Xylene	ND	60								
o-Xylene	ND	30								
Toluene	ND	30								
Xylenes, Total	ND	90								
Surr: 1,2-Dichloroethane-d4	1047	0	1000	0	105	70-130	0			
Surr: 4-Bromofluorobenzene	916	0	1000	0	91.6	70-130	0			
Surr: Dibromofluoromethane	944.5	0	1000	0	94.4	70-130	0			
Surr: Toluene-d8	979.5	0	1000	0	98	70-130	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: InterTech
 Work Order: 1211284
 Project: BPM Matagorda 044.1211.00 11/7/12

QC BATCH REPORT

Batch ID: **44647** Instrument ID **VMS9** Method: **SW8260**

MBLK		Sample ID: MBLK-44647-44647			Units: µg/Kg			Analysis Date: 11/13/2012 01:15 AM		
Client ID:		Run ID: VMS9_121112B			SeqNo: 2137878		Prep Date: 11/9/2012		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	ND	30								
Ethylbenzene	ND	30								
m,p-Xylene	ND	60								
o-Xylene	ND	30								
Toluene	ND	30								
Xylenes, Total	ND	90								
<i>Surr: 1,2-Dichloroethane-d4</i>	1048	0	1000	0	105	70-130	0			
<i>Surr: 4-Bromofluorobenzene</i>	926	0	1000	0	92.6	70-130	0			
<i>Surr: Dibromofluoromethane</i>	923.5	0	1000	0	92.4	70-130	0			
<i>Surr: Toluene-d8</i>	966	0	1000	0	96.6	70-130	0			

MBLK		Sample ID: MBLK-44647-44647			Units: µg/Kg			Analysis Date: 11/13/2012 04:10 AM		
Client ID:		Run ID: VMS8_121112B			SeqNo: 2138039		Prep Date: 11/9/2012		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	ND	30								
Ethylbenzene	ND	30								
m,p-Xylene	ND	60								
o-Xylene	ND	30								
Toluene	ND	30								
Xylenes, Total	ND	90								
<i>Surr: 1,2-Dichloroethane-d4</i>	972.5	0	1000	0	97.2	70-130	0			
<i>Surr: 4-Bromofluorobenzene</i>	990.5	0	1000	0	99	70-130	0			
<i>Surr: Dibromofluoromethane</i>	974.5	0	1000	0	97.4	70-130	0			
<i>Surr: Toluene-d8</i>	1032	0	1000	0	103	70-130	0			

LCS		Sample ID: LCS-44647-44647			Units: µg/Kg			Analysis Date: 11/9/2012 09:54 PM		
Client ID:		Run ID: VMS9_121109A			SeqNo: 2135947		Prep Date: 11/9/2012		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	1091	30	1000	0	109	75-125	0			
Ethylbenzene	1024	30	1000	0	102	75-125	0			
m,p-Xylene	2041	60	2000	0	102	80-125	0			
o-Xylene	1002	30	1000	0	100	75-125	0			
Toluene	1110	30	1000	0	111	70-125	0			
Xylenes, Total	3044	90	3000	0	101	75-125	0			
<i>Surr: 1,2-Dichloroethane-d4</i>	998	0	1000	0	99.8	70-130	0			
<i>Surr: 4-Bromofluorobenzene</i>	998	0	1000	0	99.8	70-130	0			
<i>Surr: Dibromofluoromethane</i>	981	0	1000	0	98.1	70-130	0			
<i>Surr: Toluene-d8</i>	1002	0	1000	0	100	70-130	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: InterTech
 Work Order: 1211284
 Project: BPM Matagorda 044.1211.00 11/7/12

QC BATCH REPORT

Batch ID: 44647 Instrument ID VMS9 Method: SW8260

LCS		Sample ID: LCS-44647-44647			Units: µg/Kg			Analysis Date: 11/10/2012 09:21 PM		
Client ID:		Run ID: VMS9_121110A			SeqNo: 2136637		Prep Date: 11/9/2012		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	1008	30	1000	0	101	75-125		0		
Ethylbenzene	1038	30	1000	0	104	75-125		0		
m,p-Xylene	2068	60	2000	0	103	80-125		0		
o-Xylene	1036	30	1000	0	104	75-125		0		
Toluene	1011	30	1000	0	101	70-125		0		
Xylenes, Total	3104	90	3000	0	103	75-125		0		
Surr: 1,2-Dichloroethane-d4	1013	0	1000	0	101	70-130		0		
Surr: 4-Bromofluorobenzene	1001	0	1000	0	100	70-130		0		
Surr: Dibromofluoromethane	1034	0	1000	0	103	70-130		0		
Surr: Toluene-d8	999	0	1000	0	99.9	70-130		0		

LCS		Sample ID: LCS-44647-44647			Units: µg/Kg			Analysis Date: 11/12/2012 11:35 AM		
Client ID:		Run ID: VMS9_121112A			SeqNo: 2137460		Prep Date: 11/9/2012		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	902.5	30	1000	0	90.2	75-125		0		
Ethylbenzene	921.5	30	1000	0	92.2	75-125		0		
m,p-Xylene	1844	60	2000	0	92.2	80-125		0		
o-Xylene	912.5	30	1000	0	91.2	75-125		0		
Toluene	905	30	1000	0	90.5	70-125		0		
Xylenes, Total	2756	90	3000	0	91.9	75-125		0		
Surr: 1,2-Dichloroethane-d4	1039	0	1000	0	104	70-130		0		
Surr: 4-Bromofluorobenzene	999.5	0	1000	0	100	70-130		0		
Surr: Dibromofluoromethane	1040	0	1000	0	104	70-130		0		
Surr: Toluene-d8	1019	0	1000	0	102	70-130		0		

LCS		Sample ID: LCS-44647-44647			Units: µg/Kg			Analysis Date: 11/12/2012 11:58 PM		
Client ID:		Run ID: VMS9_121112B			SeqNo: 2137877		Prep Date: 11/9/2012		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	1026	30	1000	0	103	75-125		0		
Ethylbenzene	1025	30	1000	0	102	75-125		0		
m,p-Xylene	2048	60	2000	0	102	80-125		0		
o-Xylene	1019	30	1000	0	102	75-125		0		
Toluene	1006	30	1000	0	101	70-125		0		
Xylenes, Total	3068	90	3000	0	102	75-125		0		
Surr: 1,2-Dichloroethane-d4	1046	0	1000	0	105	70-130		0		
Surr: 4-Bromofluorobenzene	969.5	0	1000	0	97	70-130		0		
Surr: Dibromofluoromethane	1056	0	1000	0	106	70-130		0		
Surr: Toluene-d8	1004	0	1000	0	100	70-130		0		

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: InterTech
 Work Order: 1211284
 Project: BPM Matagorda 044.1211.00 11/7/12

QC BATCH REPORT

Batch ID: **44647** Instrument ID **VMS9** Method: **SW8260**

LCS		Sample ID: LCS-44647-44647			Units: µg/Kg			Analysis Date: 11/13/2012 02:59 AM		
Client ID:		Run ID: VMS8_121112B			SeqNo: 2138038		Prep Date: 11/9/2012		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	986.5	30	1000	0	98.6	75-125	0			
Ethylbenzene	983.5	30	1000	0	98.4	75-125	0			
m,p-Xylene	1970	60	2000	0	98.5	80-125	0			
o-Xylene	988	30	1000	0	98.8	75-125	0			
Toluene	961.5	30	1000	0	96.2	70-125	0			
Xylenes, Total	2958	90	3000	0	98.6	75-125	0			
Surr: 1,2-Dichloroethane-d4	974	0	1000	0	97.4	70-130	0			
Surr: 4-Bromofluorobenzene	999	0	1000	0	99.9	70-130	0			
Surr: Dibromofluoromethane	992	0	1000	0	99.2	70-130	0			
Surr: Toluene-d8	1028	0	1000	0	103	70-130	0			

MS		Sample ID: 1211266-16A MS			Units: µg/Kg			Analysis Date: 11/12/2012 09:24 PM		
Client ID:		Run ID: VMS9_121112A			SeqNo: 2137436		Prep Date: 11/9/2012		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	2001	62	2079	0	96.2	75-125	0			
Ethylbenzene	2004	62	2079	0	96.4	75-125	0			
m,p-Xylene	4065	120	4158	34.97	96.9	80-125	0			
o-Xylene	2022	62	2079	0	97.2	75-125	0			
Toluene	1910	62	2079	0	91.8	70-125	0			
Xylenes, Total	6087	190	6237	34.97	97	75-125	0			
Surr: 1,2-Dichloroethane-d4	2184	0	2079	0	105	70-130	0			
Surr: 4-Bromofluorobenzene	2106	0	2079	0	101	70-130	0			
Surr: Dibromofluoromethane	2035	0	2079	0	97.9	70-130	0			
Surr: Toluene-d8	2017	0	2079	0	97	70-130	0			

MSD		Sample ID: 1211266-16A MSD			Units: µg/Kg			Analysis Date: 11/12/2012 09:50 PM		
Client ID:		Run ID: VMS9_121112A			SeqNo: 2137437		Prep Date: 11/9/2012		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	2059	62	2079	0	99	75-125	2001	2.87	30	
Ethylbenzene	2073	62	2079	0	99.7	75-125	2004	3.37	30	
m,p-Xylene	4231	120	4158	34.97	101	80-125	4065	3.98	30	
o-Xylene	2104	62	2079	0	101	75-125	2022	3.98	30	
Toluene	1971	62	2079	0	94.8	70-125	1910	3.16	30	
Xylenes, Total	6335	190	6237	34.97	101	75-125	6087	3.98	30	
Surr: 1,2-Dichloroethane-d4	2121	0	2079	0	102	70-130	2184	2.95	30	
Surr: 4-Bromofluorobenzene	2082	0	2079	0	100	70-130	2106	1.14	30	
Surr: Dibromofluoromethane	2055	0	2079	0	98.8	70-130	2035	0.966	30	
Surr: Toluene-d8	2032	0	2079	0	97.8	70-130	2017	0.77	30	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: InterTech
Work Order: 1211284
Project: BPM Matagorda 044.1211.00 11/7/12

QC BATCH REPORT

Batch ID: **44647** Instrument ID **VMS9** Method: **SW8260**

The following samples were analyzed in this batch:

1211284-06A	1211284-07A	1211284-08A
1211284-09A	1211284-10A	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: InterTech
 Work Order: 1211284
 Project: BPM Matagorda 044.1211.00 11/7/12

QC BATCH REPORT

Batch ID: **44661** Instrument ID **VMS9** Method: **SW8260**

MBLK		Sample ID: MBLK-44661-44661			Units: µg/Kg			Analysis Date: 11/12/2012 12:52 PM		
Client ID:		Run ID: VMS9_121112A			SeqNo: 2137453		Prep Date: 11/10/2012		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	ND	30								
Ethylbenzene	ND	30								
m,p-Xylene	ND	60								
o-Xylene	ND	30								
Toluene	ND	30								
Xylenes, Total	ND	90								
Surr: 1,2-Dichloroethane-d4	1047	0	1000	0	105	70-130	0			
Surr: 4-Bromofluorobenzene	916	0	1000	0	91.6	70-130	0			
Surr: Dibromofluoromethane	944.5	0	1000	0	94.4	70-130	0			
Surr: Toluene-d8	979.5	0	1000	0	98	70-130	0			

MBLK		Sample ID: MBLK-44661-44661			Units: µg/Kg			Analysis Date: 11/12/2012 04:13 PM		
Client ID:		Run ID: VMS8_121112A			SeqNo: 2137785		Prep Date: 11/10/2012		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	ND	30								
Ethylbenzene	ND	30								
m,p-Xylene	ND	60								
o-Xylene	ND	30								
Toluene	ND	30								
Xylenes, Total	ND	90								
Surr: 1,2-Dichloroethane-d4	976.5	0	1000	0	97.6	70-130	0			
Surr: 4-Bromofluorobenzene	1026	0	1000	0	103	70-130	0			
Surr: Dibromofluoromethane	985	0	1000	0	98.5	70-130	0			
Surr: Toluene-d8	977.5	0	1000	0	97.8	70-130	0			

MBLK		Sample ID: MBLK-44661-44661			Units: µg/Kg			Analysis Date: 11/13/2012 01:15 AM		
Client ID:		Run ID: VMS9_121112B			SeqNo: 2137860		Prep Date: 11/10/2012		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	ND	30								
Ethylbenzene	ND	30								
m,p-Xylene	ND	60								
o-Xylene	ND	30								
Toluene	ND	30								
Xylenes, Total	ND	90								
Surr: 1,2-Dichloroethane-d4	1048	0	1000	0	105	70-130	0			
Surr: 4-Bromofluorobenzene	926	0	1000	0	92.6	70-130	0			
Surr: Dibromofluoromethane	923.5	0	1000	0	92.4	70-130	0			
Surr: Toluene-d8	966	0	1000	0	96.6	70-130	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: InterTech
 Work Order: 1211284
 Project: BPM Matagorda 044.1211.00 11/7/12

QC BATCH REPORT

Batch ID: **44661** Instrument ID **VMS9** Method: **SW8260**

MBLK		Sample ID: MBLK-44661-44661				Units: µg/Kg		Analysis Date: 11/14/2012 12:13 PM		
Client ID:		Run ID: VMS6_121114A			SeqNo: 2140075		Prep Date: 11/10/2012		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	ND	30								
Ethylbenzene	ND	30								
m,p-Xylene	ND	60								
o-Xylene	ND	30								
Toluene	ND	30								
Xylenes, Total	ND	90								
Surr: 1,2-Dichloroethane-d4	1023	0	1000	0	102	70-130	0			
Surr: 4-Bromofluorobenzene	953.5	0	1000	0	95.4	70-130	0			
Surr: Dibromofluoromethane	997	0	1000	0	99.7	70-130	0			
Surr: Toluene-d8	991	0	1000	0	99.1	70-130	0			

LCS		Sample ID: LCS-44661-44661				Units: µg/Kg		Analysis Date: 11/12/2012 11:35 AM		
Client ID:		Run ID: VMS9_121112A			SeqNo: 2137450		Prep Date: 11/10/2012		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	902.5	30	1000	0	90.2	75-125	0			
Ethylbenzene	921.5	30	1000	0	92.2	75-125	0			
m,p-Xylene	1844	60	2000	0	92.2	80-125	0			
o-Xylene	912.5	30	1000	0	91.2	75-125	0			
Toluene	905	30	1000	0	90.5	70-125	0			
Xylenes, Total	2756	90	3000	0	91.9	75-125	0			
Surr: 1,2-Dichloroethane-d4	1039	0	1000	0	104	70-130	0			
Surr: 4-Bromofluorobenzene	999.5	0	1000	0	100	70-130	0			
Surr: Dibromofluoromethane	1040	0	1000	0	104	70-130	0			
Surr: Toluene-d8	1019	0	1000	0	102	70-130	0			

LCS		Sample ID: LCS-44661-44661				Units: µg/Kg		Analysis Date: 11/12/2012 03:02 PM		
Client ID:		Run ID: VMS8_121112A			SeqNo: 2137784		Prep Date: 11/10/2012		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	938.5	30	1000	0	93.8	75-125	0			
Ethylbenzene	975	30	1000	0	97.5	75-125	0			
m,p-Xylene	1936	60	2000	0	96.8	80-125	0			
o-Xylene	948	30	1000	0	94.8	75-125	0			
Toluene	934.5	30	1000	0	93.4	70-125	0			
Xylenes, Total	2884	90	3000	0	96.1	75-125	0			
Surr: 1,2-Dichloroethane-d4	969	0	1000	0	96.9	70-130	0			
Surr: 4-Bromofluorobenzene	999	0	1000	0	99.9	70-130	0			
Surr: Dibromofluoromethane	1041	0	1000	0	104	70-130	0			
Surr: Toluene-d8	1039	0	1000	0	104	70-130	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: InterTech
 Work Order: 1211284
 Project: BPM Matagorda 044.1211.00 11/7/12

QC BATCH REPORT

Batch ID: **44661** Instrument ID **VMS9** Method: **SW8260**

LCS		Sample ID: LCS-44661-44661			Units: µg/Kg		Analysis Date: 11/12/2012 11:58 PM			
Client ID:		Run ID: VMS9_121112B			SeqNo: 2137858		Prep Date: 11/10/2012		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	1026	30	1000	0	103	75-125		0		
Ethylbenzene	1025	30	1000	0	102	75-125		0		
m,p-Xylene	2048	60	2000	0	102	80-125		0		
o-Xylene	1019	30	1000	0	102	75-125		0		
Toluene	1006	30	1000	0	101	70-125		0		
Xylenes, Total	3068	90	3000	0	102	75-125		0		
<i>Surr: 1,2-Dichloroethane-d4</i>	1046	0	1000	0	105	70-130		0		
<i>Surr: 4-Bromofluorobenzene</i>	969.5	0	1000	0	97	70-130		0		
<i>Surr: Dibromofluoromethane</i>	1056	0	1000	0	106	70-130		0		
<i>Surr: Toluene-d8</i>	1004	0	1000	0	100	70-130		0		

LCS		Sample ID: LCS-44661-44661			Units: µg/Kg		Analysis Date: 11/14/2012 11:01 AM			
Client ID:		Run ID: VMS6_121114A			SeqNo: 2140073		Prep Date: 11/10/2012		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	850.5	30	1000	0	85	75-125		0		
Ethylbenzene	820.5	30	1000	0	82	75-125		0		
m,p-Xylene	1676	60	2000	0	83.8	80-125		0		
o-Xylene	847.5	30	1000	0	84.8	75-125		0		
Toluene	830.5	30	1000	0	83	70-125		0		
Xylenes, Total	2524	90	3000	0	84.1	75-125		0		
<i>Surr: 1,2-Dichloroethane-d4</i>	1031	0	1000	0	103	70-130		0		
<i>Surr: 4-Bromofluorobenzene</i>	988.5	0	1000	0	98.8	70-130		0		
<i>Surr: Dibromofluoromethane</i>	1041	0	1000	0	104	70-130		0		
<i>Surr: Toluene-d8</i>	983.5	0	1000	0	98.4	70-130		0		

MS		Sample ID: 1211314-01B MS			Units: µg/Kg		Analysis Date: 11/14/2012 09:05 PM			
Client ID:		Run ID: VMS6_121114A			SeqNo: 2140080		Prep Date: 11/10/2012		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	854	30	1010	0	84.6	75-125		0		
Ethylbenzene	848.5	30	1010	0	84	75-125		0		
m,p-Xylene	1726	61	2020	0	85.4	80-125		0		
o-Xylene	878.8	30	1010	0	87	75-125		0		
Toluene	864.1	30	1010	0	85.6	70-125		0		
Xylenes, Total	2605	91	3030	0	86	75-125		0		
<i>Surr: 1,2-Dichloroethane-d4</i>	988.4	0	1010	0	97.8	70-130		0		
<i>Surr: 4-Bromofluorobenzene</i>	987.4	0	1010	0	97.8	70-130		0		
<i>Surr: Dibromofluoromethane</i>	1003	0	1010	0	99.2	70-130		0		
<i>Surr: Toluene-d8</i>	1013	0	1010	0	100	70-130		0		

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: InterTech
 Work Order: 1211284
 Project: BPM Matagorda 044.1211.00 11/7/12

QC BATCH REPORT

Batch ID: 44661 Instrument ID VMS9 Method: SW8260

MSD		Sample ID: 1211314-01B MSD				Units: µg/Kg		Analysis Date: 11/14/2012 09:29 PM		
Client ID:		Run ID: VMS6_121114A			SeqNo: 2140082		Prep Date: 11/10/2012		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	881.8	30	1010	0	87.3	75-125	854	3.2	30	
Ethylbenzene	863.6	30	1010	0	85.5	75-125	848.5	1.77	30	
m,p-Xylene	1732	61	2020	0	85.7	80-125	1726	0.321	30	
o-Xylene	880.8	30	1010	0	87.2	75-125	878.8	0.23	30	
Toluene	860.1	30	1010	0	85.2	70-125	864.1	0.469	30	
Xylenes, Total	2613	91	3030	0	86.2	75-125	2605	0.29	30	
Surr: 1,2-Dichloroethane-d4	992.4	0	1010	0	98.2	70-130	988.4	0.408	30	
Surr: 4-Bromofluorobenzene	984.8	0	1010	0	97.5	70-130	987.4	0.256	30	
Surr: Dibromofluoromethane	1006	0	1010	0	99.6	70-130	1003	0.352	30	
Surr: Toluene-d8	991.9	0	1010	0	98.2	70-130	1013	2.07	30	

The following samples were analyzed in this batch: | 1211284-11A | 1211284-12A |

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: InterTech
 Work Order: 1211284
 Project: BPM Matagorda 044.1211.00 11/7/12

QC BATCH REPORT

Batch ID: **44691** Instrument ID **WETCHEM** Method: **SW7196A**

MBLK	Sample ID: MBLK-44691-44691	Units: mg/Kg				Analysis Date: 11/14/2012 03:30 PM				
Client ID:	Run ID: WETCHEM_121114I	SeqNo: 2139460		Prep Date: 11/12/2012		DF: 1				
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent ND 0.50

LCS	Sample ID: LCS-44691-44691	Units: mg/Kg				Analysis Date: 11/14/2012 03:30 PM				
Client ID:	Run ID: WETCHEM_121114I	SeqNo: 2139461		Prep Date: 11/12/2012		DF: 1				
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent 1.853 0.50 1.992 0 93 75-110 0

MS	Sample ID: 1211284-06B MS	Units: mg/Kg				Analysis Date: 11/14/2012 03:30 PM				
Client ID: Drill Cuttings-01	Run ID: WETCHEM_121114I	SeqNo: 2139474		Prep Date: 11/12/2012		DF: 1				
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent 0.3068 0.50 1.992 0 15.4 60-130 0 JS

MSD	Sample ID: 1211284-06B MSD	Units: mg/Kg				Analysis Date: 11/14/2012 03:30 PM				
Client ID: Drill Cuttings-01	Run ID: WETCHEM_121114I	SeqNo: 2139475		Prep Date: 11/12/2012		DF: 1				
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent 0.261 0.50 2.008 0 13 60-130 0.3068 0 30 JS

The following samples were analyzed in this batch:

1211284-06B	1211284-07B	1211284-08B
1211284-09B	1211284-10B	1211284-11B
1211284-12B		

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: InterTech
 Work Order: 1211284
 Project: BPM Matagorda 044.1211.00 11/7/12

QC BATCH REPORT

Batch ID: **R112339** Instrument ID **WETCHEM** Method: **SW9045D**

LCS	Sample ID: LCS-R112339-R112339		Units: s.u.		Analysis Date: 11/9/2012 08:30 AM					
Client ID:	Run ID: WETCHEM_121109K		SeqNo: 2135073		Prep Date:		DF: 1			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

pH 4.17 0 4.4 0 94.8 90-110 0

DUP	Sample ID: 1211284-01B DUP		Units: s.u.		Analysis Date: 11/9/2012 08:30 AM					
Client ID: Background -01	Run ID: WETCHEM_121109K		SeqNo: 2135075		Prep Date:		DF: 1			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

pH 7.01 0 0 0 0 0-0 7.01 0 20

DUP	Sample ID: 1211286-01B DUP		Units: s.u.		Analysis Date: 11/9/2012 08:30 AM					
Client ID:	Run ID: WETCHEM_121109K		SeqNo: 2135088		Prep Date:		DF: 1			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

pH 8.45 0 0 0 0 0-0 8.45 0 20

The following samples were analyzed in this batch:

1211284-01B	1211284-02B	1211284-03B
1211284-04B	1211284-05B	1211284-06B
1211284-07B	1211284-08B	1211284-09B
1211284-10B	1211284-11B	1211284-12B

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: InterTech
 Work Order: 1211284
 Project: BPM Matagorda 044.1211.00 11/7/12

QC BATCH REPORT

Batch ID: **R112451** Instrument ID **MOIST** Method: **A2540 G**

MBLK	Sample ID: WBLKS1-R112451		Units: % of sample				Analysis Date: 11/12/2012 06:15 PM			
Client ID:	Run ID: MOIST_121112B		SeqNo: 2137348		Prep Date:		DF: 1			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture ND 0.050

LCS	Sample ID: LCS-R112451		Units: % of sample				Analysis Date: 11/12/2012 06:15 PM			
Client ID:	Run ID: MOIST_121112B		SeqNo: 2137344		Prep Date:		DF: 1			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture 100 0.050 100 0 100 99.5-100.5 0

DUP	Sample ID: 1211236-06A DUP		Units: % of sample				Analysis Date: 11/12/2012 06:15 PM			
Client ID:	Run ID: MOIST_121112B		SeqNo: 2137333		Prep Date:		DF: 1			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture 8.96 0.050 0 0 0 0-0 9.48 5.64 20

DUP	Sample ID: 1211286-01B DUP		Units: % of sample				Analysis Date: 11/12/2012 06:15 PM			
Client ID:	Run ID: MOIST_121112B		SeqNo: 2137340		Prep Date:		DF: 1			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture 11.83 0.050 0 0 0 0-0 11.82 0.0846 20

DUP	Sample ID: 1211306-02A DUP		Units: % of sample				Analysis Date: 11/12/2012 06:15 PM			
Client ID:	Run ID: MOIST_121112B		SeqNo: 2137342		Prep Date:		DF: 1			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture 18.09 0.050 0 0 0 0-0 18.48 2.13 20

The following samples were analyzed in this batch: 1211284-10B 1211284-11B

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: InterTech
 Work Order: 1211284
 Project: BPM Matagorda 044.1211.00 11/7/12

QC BATCH REPORT

Batch ID: **R112453** Instrument ID **MOIST** Method: **A2540 G**

MBLK	Sample ID: WBLKS1-R112453		Units: % of sample				Analysis Date: 11/12/2012 06:15 PM			
Client ID:	Run ID: MOIST_121112C		SeqNo: 2137379		Prep Date:		DF: 1			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture ND 0.050

LCS	Sample ID: LCS-R112453		Units: % of sample				Analysis Date: 11/12/2012 06:15 PM			
Client ID:	Run ID: MOIST_121112C		SeqNo: 2137375		Prep Date:		DF: 1			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture 99.99 0.050 100 0 100 99.5-100.5 0

DUP	Sample ID: 1211284-12B DUP		Units: % of sample				Analysis Date: 11/12/2012 06:15 PM			
Client ID: Pit East	Run ID: MOIST_121112C		SeqNo: 2137368		Prep Date:		DF: 1			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture 14.04 0.050 0 0 0 0-0 14.04 0 20

The following samples were analyzed in this batch:

1211284-06B	1211284-07B	1211284-08B
1211284-09B	1211284-12B	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: InterTech
 Work Order: 1211284
 Project: BPM Matagorda 044.1211.00 11/7/12

QC BATCH REPORT

Batch ID: **R112575** Instrument ID **MOIST** Method: **A2540 G**

MBLK	Sample ID: WBLKS1-R112575		Units: % of sample				Analysis Date: 11/14/2012 03:30 PM			
Client ID:	Run ID: MOIST_121114A		SeqNo: 2140097		Prep Date:		DF: 1			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture ND 0.050

LCS	Sample ID: LCS-R112575		Units: % of sample				Analysis Date: 11/14/2012 03:30 PM			
Client ID:	Run ID: MOIST_121114A		SeqNo: 2140093		Prep Date:		DF: 1			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture 100 0.050 100 0 100 99.5-100.5 0

DUP	Sample ID: 1211293-07A DUP		Units: % of sample				Analysis Date: 11/14/2012 03:30 PM			
Client ID:	Run ID: MOIST_121114A		SeqNo: 2140081		Prep Date:		DF: 1			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture 55.06 0.050 0 0 0 0-0 58.12 5.41 20

DUP	Sample ID: 1211314-03A DUP		Units: % of sample				Analysis Date: 11/14/2012 03:30 PM			
Client ID:	Run ID: MOIST_121114A		SeqNo: 2140087		Prep Date:		DF: 1			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture 15.16 0.050 0 0 0 0-0 14.43 4.93 20

The following samples were analyzed in this batch:

1211284-01B	1211284-02B	1211284-03B
1211284-04B	1211284-05B	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.



ALS Environmental

Chain of Custody Form

Page 1 of 2

COC ID: 00585

- Cincinnati, OH +1 513 733 5336
- Holland, MI +1 616 399 6070
- Salt Lake City, UT +1 801 266 7700
- Everett, WA +1 425 356 2600
- Houston, TX +1 281 530 5656
- Spring City, PA +1 610 948 4903
- Fort Collins, CO +1 970 490 1511
- Middletown, PA +1 717 944 5541
- York, PA +1 717 505 5280

ALS Project Manager: _____ Work Order #: 1211284

Customer Information		Project Information				Parameter/Method Request for Analysis											
Purchase Order		Project Name	BPM-MATABORDA			A	GRO										
Work Order	0441211.00	Project Number	044.1211.00			B	DRO										
Company Name	INTERTECH 2 + 2	Bill To Company	INTERTECH 2 + 2			C	BTEX										
Send Report To	JANA SANDERS	Invoice Attn.	DEANNA WESTON			D	NAPHTHALENE										
Address		Address				E	EC										
City/State/Zip	743 HORIZON CT, ST110 GIZARD JUNCTION, WY 82070	City/State/Zip	3821 BEECH STREET LARAMIE, WY 82070			F	PH										
Phone	307.399.2870	Phone	307-742-4991			G	SAR										
Fax		Fax	307.745.1582			H	TABLE 910-1 METALS										
e-Mail Address	jsanders@cpmaine.com	e-Mail Address				I	ARSENIC										
						J	TABLE 910-1 PAH										

No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
1	Background-01	11/7/12	1500	Soil	-	3					X	X	X		X		
2	Background-02	11/7/12	1510	Soil	-	3					X	X	X		X		
3	Background-03	11/7/12	1515	Soil	-	3					X	X	X		X		
4	Background-04	11/7/12	1520	Soil	-	3					X	X	X		X		
5	Background-05	11/7/12	1545	Soil	-	3					X	X	X		X		
6																	
7																	
8																	
9			1430														
10																	

Sampler(s): Please Print & Sign _____ Shipment Method: FedEx Required Turnaround Time: STD 10 Wk Days 5 Wk Days 2 Wk Days 24 Hour Other _____ Results Due Date: _____

Relinquished by: _____ Date: 11/8/12 Time: 1600 Received by: _____ Notes: _____

Relinquished by: _____ Date: _____ Time: _____ Received by (Laboratory): _____ Cooler Temp. _____ QC Package: (Check Box Below)

Logged by (Laboratory): JFS Date: 12/19/12 Time: 6:00 Checked by (Laboratory): [Signature] Cooler Temp. 40°C

Preservative Key: 1-HCL 2-HNO3 3-H2SO4 4-NaOH 5-Na2S2O3 6-NaHSO4 7-Other 8-4 degrees C 9-5035 Other: _____



Environmental

Chain of Custody Form

Page 2 of 2

COC ID: 00507

- Cincinnati, OH +1 513 733 5336
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- Everett, WA +1 425 356 2600
- Houston, TX +1 281 530 5656
- Spring City, PA +1 610 948 4903
- Fort Collins, CO +1 970 490 1511
- Middletown, PA +1 717 944 5541
- York, PA +1 717 505 5280

ALS Project Manager: _____ Work Order #: 1211284

Customer Information		Project Information		Parameter/Method Request for Analysis												
Purchase Order		Project Name	BPM - Matasorda	A	GRO											
Work Order	0441211.00	Project Number	044.1211.00	B	DRO											
Company Name	InterTech E&E	Bill To Company	InterTech E&E	C	BTEX											
Send Report To	Jana Sanders	Invoice Attn.	Deanna Weston	D	Naphthalene											
Address	743 Horizon Ct. Suite 110	Address	3821 Beech St.	E	EC											
City/State/Zip	Grand Jct, CO. 81506	City/State/Zip	Laramie, WY. 82070	F	PH											
Phone	(307) 399-2870	Phone	307-742-4991	G	SAR											
Fax		Fax	307-745-1582	H	Table 910-1 metals											
e-Mail Address	jsanders@cbmainc.com	e-Mail Address		I	Arsenic											
				J	Table 910-1 PAH											

No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
06	1 Drill Cutting-01	11/2/12	1330	soil	-	5	X	X	X		X	X	X	X		X	
07	2 Drill Cutting-02	11/7/12	1345	soil	-	5	X	X	X		X	X	X	X		X	
08	3 Pit Bottom	11/7/12	1400	soil	-	4	X	X	X	X	X	X	X	X			
09	4 Pit West	11/7/12	1415	soil	-	4	X	X	X	X	X	X	X	X			
10	5 Pit North	11/7/12	1420	soil	-	4	X	X	X	X	X	X	X	X			
11	6 Pit South	11/7/12	1430	soil	-	4	X	X	X	X	X	X	X	X			
12	7 Pit East	11/7/12	1430	soil	-	4	X	X	X	X	X	X	X	X			
8																	
9																	
10																	

Sampler(s): Please Print & Sign *Scott Gustin* Shipment Method: Fed Ex Required Turnaround Time: STD 10 Wk Days 5 Wk Days 2 Wk Days 24 Hour Results Due Date: _____

Relinquished by: *Scott Gustin* Date: 11/8/12 Time: 1600 Received by: _____ Notes: _____

Relinquished by: _____ Date: _____ Time: _____ Received by (Laboratory): _____ Cooler Temp. _____ QC Package: (Check Box Below)

Logged by (Laboratory): *DPS* Date: 11/9/12 Time: 1000 Checked by (Laboratory): *[Signature]* Cooler Temp. 4.0°C

Preservative Key: 1-HCL 2-HNO3 3-H2SO4 4-NaOH 5-Na2S2O3 6-NaHSO4 7-Other 8-4 degrees C 9-5035 Other: _____

Sample Receipt Checklist

Client Name: **INTERTECH**

Date/Time Received: **09-Nov-12 10:00**

Work Order: **1211284**

Received by: **DS**

Checklist completed by Keith Warena 09-Nov-12
eSignature Date

Reviewed by: Ann Preston 12-Nov-12
eSignature Date

Matrices: Soil
Carrier name: FedEx

Shipping container/cooler in good condition? Yes No Not Present

Custody seals intact on shipping container/cooler? Yes No Not Present

Custody seals intact on sample bottles? Yes No Not Present

Chain of custody present? Yes No

Chain of custody signed when relinquished and received? Yes No

Chain of custody agrees with sample labels? Yes No

Samples in proper container/bottle? Yes No

Sample containers intact? Yes No

Sufficient sample volume for indicated test? Yes No

All samples received within holding time? Yes No

Container/Temp Blank temperature in compliance? Yes No

Temperature(s)/Thermometer(s):

Cooler(s)/Kit(s):

Date/Time sample(s) sent to storage:

Water - VOA vials have zero headspace? Yes No No VOA vials submitted

Water - pH acceptable upon receipt? Yes No N/A

pH adjusted? Yes No N/A

pH adjusted by:

Login Notes:

Client Contacted: Date Contacted: Person Contacted:

Contacted By: Regarding:

Comments:

CorrectiveAction:

FedEx Express **NEW Pa**
US Air



ALS Environmental

3352 128th Avenue
Holland, Michigan 49424
Tel. +1 616 399 6070
Fax. +1 616 399 6185

CUSTODY SEAL

Date: 11-8-12 Time: 13:35
Name: Mathew Farris
Company: InterTech E4E

Seal Broken By:

Date:

1 From

Date 11-8-12

Sender's Name ITEE

Phone 855 687-8324

Company InterTech E4E

Address 1743 Horizon Ct. Suite 110

Dept./Floor/Suite/Room

City GRAND Jct.

State CO. ZIP 81506

2 Your Internal Billing Reference

3 To

Recipient's Name Receiving

Phone 616 399-6070

Company ALS Environmental

Address 3352 128th Av.

Dept./Floor/Suite/Room

Address Holland

State MI ZIP 49424

HOLD Weekday
FedEx location address
REQUIRED. NOT available for
FedEx First Overnight.

01

HOLD Saturday
FedEx location address
REQUIRED. Available ONLY for
FedEx Priority Overnight and
FedEx 2Day to select locations.

31

NOTE: Service order has changed. Please select carefully.

For packages up to 150 lbs.
For packages over 150 lbs., use the new
FedEx Express Freight US Airmail.

Next Business Day

FedEx First Overnight

Earliest next business morning delivery to select locations. Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

06

FedEx Priority Overnight

Next business morning.* Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

01

FedEx Standard Overnight

Next business afternoon.* Saturday Delivery NOT available.

05

//2 or 3 Business Days

49 **NEW FedEx 2Day A.M.**
Sunday business morning.*
Saturday Delivery NOT available.

03 **FedEx 2Day**
Second business afternoon.* Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

20 **FedEx Express Saver**
Third business day.*
Saturday Delivery NOT available.

5

Packaging *Declared value limit \$500.

06

FedEx Envelope* 02 FedEx Pak* 03 FedEx Box 04 FedEx Tube 01 Other

6

Special Handling and Delivery Signature Options

03

SATURDAY DELIVERY

No Signature Required
Package may be left without obtaining a signature for delivery.

10

Direct Signature
Someone at recipient's address may sign for delivery. **Fee applies.**

34

Indirect Signature
If no one is available at recipient's address, someone at a neighboring address may sign for delivery. For residential deliveries only. **Fee applies.**

Does this shipment contain dangerous goods?

One box must be checked.

No 04

Yes

As per attached Shipper's Declaration.

Yes

Shipper's Declaration not required.

06

Dry Ice

Dry Ice, 9, UN 1845

x _____ kg

Dangerous goods (including dry ice) cannot be shipped in FedEx packaging unless in a FedEx Express Drop Box.

Cargo Aircraft Only

7

Payment Bill to:

Enter FedEx Acct. No. or Credit Card No. below.

Obtain recip. Acct. No.

1

Sender's Account No. in Section 1 will bill.

2 Recipient

3 Third Party

4 Credit Card

5 Cash/Check

Total Packages

Total Weight

103 lbs.

Credit Card Auth.

Our liability is limited to \$100 unless you declare a higher value. See the current FedEx Service Guide for details.

612

Rev.

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